



BATH TOWNSHIP ZONING

Summit County, Ohio

3864 West Bath Road - P.O. Box 1188 - Bath, Ohio - 44210-1188

Phone: 330.666.4007 - Fax: 330.666.0305

www.bathtownship.org

APPEARANCE REVIEW COMMISSION

For office use only:	ARC File No.: <u>25-23</u>	BZA File No.:
Associated permits:		

Applicant Data

Name: BATH TOWNSHIP TRUSTEES

Company Name: _____

Address: 3864 W. BATH RD. AKRON, OH 44333

Telephone No.: (330) 666-4007 Email: WFUNK@BATHTOWNSHIP.ORG

Property Data

Zoning District: (circle one) R-1 R-2 R-3 R-4 B-1 B-2 B-3 B-4 B-5

Corner Lot: ☐ Yes ☒ No Note: Corner lots are required to meet the front setback on both streets.

Property Address: 4400 EVERETT RD.

Allotment Name: _____ Parcel No.: 0406032

Owner(s): BATH TOWNSHIP TRUSTEES

Owner Address: 3864 W. BATH RD.

Telephone No.: (330) 666-4007

Type of Review (check all that apply)

- ☒ Site Plan
- ☒ Building/Elevation
- ☐ Sign
- ☐ Other (explain): _____

Required Site Plan Data and Architectural Drawings

The following items must be submitted with the application in order to be reviewed. A digital copy of site plan and plans will be required upon submission. (the application will be reviewed and placed on the agenda for review by the ARC once the application is deemed complete)

- 2 copies of site plan – must show existing structures, proposed structures, all setbacks and lot dimensions, driveway access location, all easements, septic system and well location (if applicable), and any unusual topography (include streams, lakes, ponds, ravines, steep slopes, etc.)
- 2 copies of elevations, signs, landscaping, lighting, parking, etc.
- Digital copy of all required documents (i.e. .pdf file)

Fee – Due at time of application (make check payable to Bath Township Trustees)

- For Site Plan - \$100.00

Applicant Signature: _____

Date: _____

10/2/25

Peninsula

www.pa-architects.com

1775 Main Street
Peninsula, Ohio 44264
T 330.657.2800

**PROGRESS
NOT FOR
CONSTRUCTION**

3/10/2025

PROJECT TEAM

ARCHITECT:

**PENINSULA
ARCHITECTS**

330.657.2800

CIVIL ENGINEER:

LEWIS LAND PROFESSIONALS
Civil Engineering & Land Surveying
330.355.6232

STRUCTURAL ENGINEER:

TTR Engineers
330.733.8332

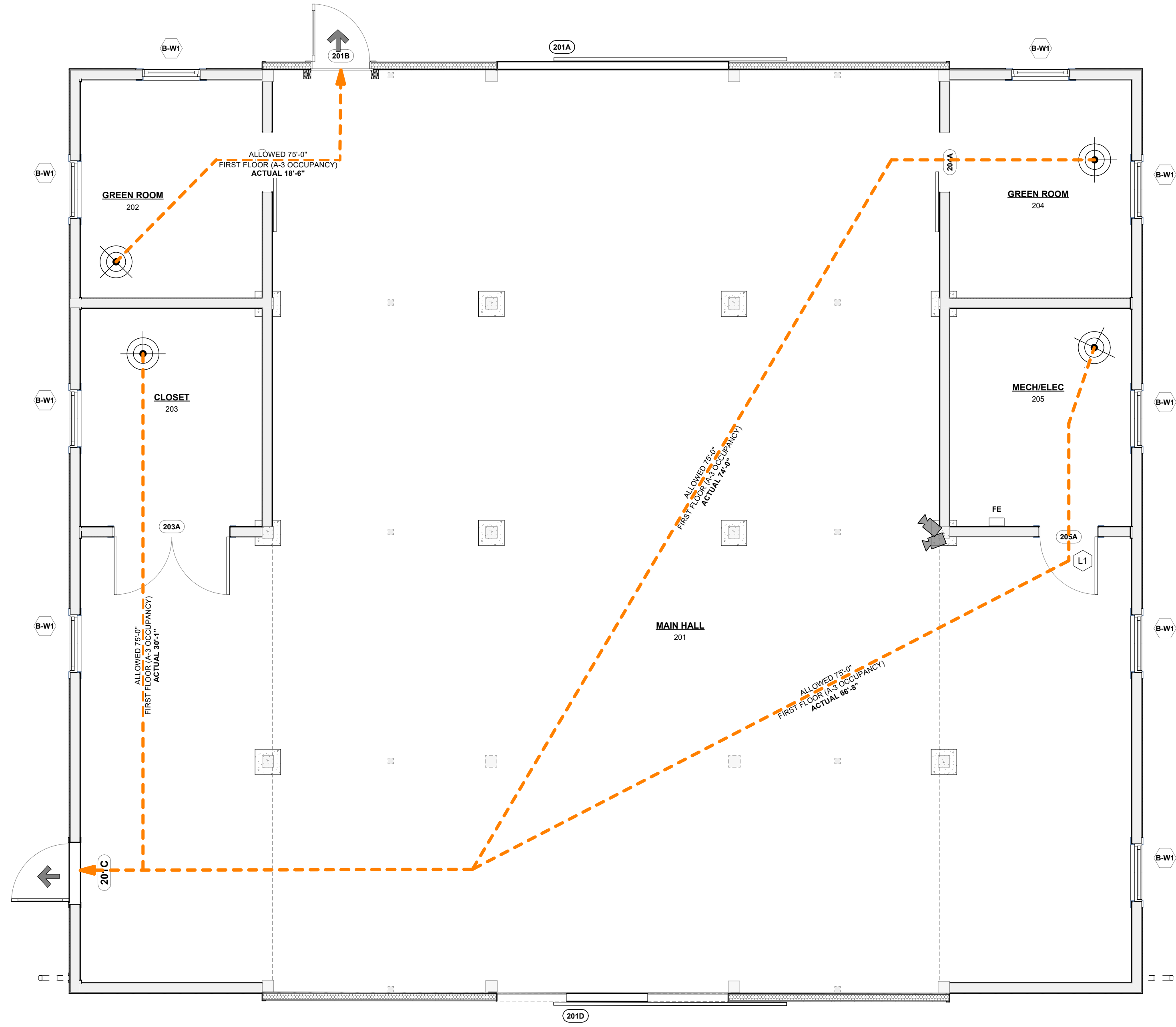
MEP ENGINEER:

CDENK ASSOCIATES
CONSULTING ENGINEERS
216.513.8880



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1 BARN LIFE SAFETY PLAN
SCALE: 1/4" = 1'-0"

CODE INFORMATION

APPLICABLE CODES

BUILDING: 2024 OHIO BUILDING CODE (IBC 2024)
MECHANICAL: 2024 OHIO MECHANICAL CODE (IMC 2024)
PLUMBING: 2024 OHIO PLUMBING CODE (IPC 2021)
ELECTRICAL: 2023 NATIONAL ELECTRICAL CODE (NFPA 70-23)
FIRE: 2017 OHIO FIRE CODE (IFC 2021)
ENERGY: 2023 INTERNATIONAL ENERGY CONSERVATION CODE (IECC-21) OR ASHRAE 90.1 2019
ACCESSIBILITY: 2010 INTERNATIONAL STANDARDS FOR ACCESSIBLE DESIGN (ICC A117.1-20) ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES
FIRE: 2021 OHIO FIRE CODE (IFC 21)

PROJECT SUMMARY:

IBC CHAPTER 3 | USE & CLASSIFICATION

SECTION 303.4 | A-3 ASSEMBLY

IBC CHAPTER 5 | GENERAL BUILDING HEIGHTS & AREAS

ALLOWABLE HEIGHT AND STORES:
TABLES 504.3 AND 504.4 (NONSPRINKLERED)
A-3: 1 STORY, 32'-2"

AREA:
TABLE 506.2 (NS, NONSPRINKLERED SINGLE-STORY)
A-3: 6,000 SF

IBC CHAPTER 6 | TYPES OF CONSTRUCTION

SECTION 602 CONSTRUCTION TYPE: TYPE 5-B

TYPE 5-B CONSTRUCTION IS THAT TYPE OF CONSTRUCTION IN WHICH THE STRUCTURAL ELEMENTS, EXTERIOR WALLS, AND INTERIOR WALLS ARE OF ANY MATERIALS PERMITTED BY THIS CODE.

IBC CHAPTER 8 | INTERIOR FINISHES

WALL AND CEILING FINISHES REQUIRED PER TABLE 803.11

IBC CHAPTER 10 | MEANS OF EGRESS

SECTION 1017.2: EXIT ACCESS TRAVEL DISTANCE FOR OCCUPANCY A-3 IS 200'-0" FOR BUILDINGS EQUIPPED WITHOUT AN AUTOMATIC SPRINKLER SYSTEM

SECTION 1020.4: WHERE MORE THAN ONE EXIT OR EXIT ACCESS DOORWAY IS REQUIRED, THE EXIT ACCESS SHALL BE ARRANGED SUCH THAT THERE ARE NOT DEAD-END CORRIDORS MORE THAN 20'-0" IN LENGTH

TABLE 1004.5: MAXIMUM FLOOR AREA ALLOWANCES PER OCCUPANT

FUNCTION OF SPACE	OCCUPANT LOAD FACTOR
ASSEMBLY WITHOUT FIXED SEATING	7 NET
CONCENTRATED (CHAIRS ONLY - NOT FIXED)	9 NET
STANDING SPACE	15 NET
UNCONCENTRATED (TABLES AND CHAIRS)	15 NET

OCCUPANCY SCHEDULE

ID	ROOM NAME	GROSS AREA	NET AREA	FUNCTION	CALCULATED OCCUPANT LOAD	ACT OCCUPANCY
201	MAIN HALL	2,189	1,750	ASSEMBLY	145	9
202	GREEN ROOM	112	83	ASSEMBLY	6	2
203	CLOSET	112	83	ACCESSORY STORAGE	1	4
204	GREEN ROOM	104	83	ASSEMBLY	6	4
205	MECH/ELEC	107	83	ACCESSORY EQUIPMENT	1	1
		2,624 ft ²				9

LIFE SAFETY PLAN CODED NOTES

NOTE: ALL CODED NOTES MAY NOT OCCUR ON EVERY SHEET

L1 PROVIDE SIGNAGE INDICATING AUTHORIZED PERSONNEL ONLY.

LIFE SAFETY WALL LEGEND

FIRE EXTINGUISHER: VERIFY LOCATIONS OF FIRE EXTINGUISHERS WITH LOCAL FIRE DEPARTMENT OFFICIAL AND REFER TO SPECIFICATIONS FOR TYPE INFORMATION AND ADDITIONAL DETAILS.

LIFE SAFETY PLAN SYMBOLS

EXIT

W = ACTUAL CLEAR WIDTH OF LIMITING COMPONENT (INCHES)

X = OCCUPANTS USING EXIT

Y = EXIT CAPACITY

Z = EGRESS WIDTH PER OCCUPANT (INCHES/OCCUPANT)

MOST REMOTE POINT TO DETERMINE EXIT ACCESS TRAVEL DISTANCE

FEC FIRE EXTINGUISHER CABINET

FA FIRE ALARM PULL STATION

VS FIRE ALARM VISUAL/STROBE

FAV FIRE ALARM AUDIO AND VISUAL

FAR FIRE ALARM REMOTE ANNUNCIATOR

SECURITY CAMERA WITH 360 DEGREE LENSE

OCCUPANCY SIGNAGE

XX OCCUPANTS
MAXIMUM OCCUPANCY

NOTE: "XX" TO BE REPLACED WITH INDICATED OCCUPANCY CAPACITY PER OCCUPANCY SCHEDULE ON G10.1. WHERE OCCUPANCY NUMBERS ARE TO BE POSTED IN ROOMS ADJACENT AND OPEN TO ANOTHER ROOM, COMBINED OCCUPANCY FOR CONNECTED SPACES MAY BE POSTED AT ALL REQUIRED LOCATIONS. INDICATED NUMBER NOT TO EXCEED SUM OF INDIVIDUAL ROOMS INDICATED PER OCCUPANCY SCHEDULE.

TYPICAL ADA DETAILS (ICC A117.1-2009)

(A) ELEVATION

(B) PLAN

(C) ELEVATION

(D) PLAN

(E) TURNING RADIUS

MANEUVERING CLEARANCES AT MANUAL SWING DOORS (ADA 404.2.4.1)

PUSH SIDE

PULL SIDE

PUSH SIDE

PULL SIDE

PULL SIDE

PULL SIDE

GENERAL NOTES:
1. INSTALL BLOCKING AS REQUIRED FOR INSTALLATION OF GRAB BARS AND ACCESSORIES.

NOTE: Y=48" IF THE DOOR HAS BOTH A LATCH & A CLOSER

NOTE: Y=12" IF THE DOOR HAS BOTH A LATCH & A CLOSER

NOTE: Y=48" MIN FOR ROOMS OTHER THAN POWDER ROOMS WITH DIMENSIONS LESS THAN 5'-0" x 4'-0" x 5'-0" MIN IF THE DOOR HAS A CLOSER

NOTE: X=36" MIN IF Y=60"
X=42" MIN IF Y=54"

NOTE: Y=48" MIN FOR ROOMS OTHER THAN POWDER ROOMS WITH DIMENSIONS LESS THAN 5'-0" x 4'-0" x 5'-0" MIN IF THE DOOR HAS A CLOSER

Peninsula

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1775 Main Street
Peninsula, Ohio 44264
T 330.657.2800

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ARCHITECT:
PENINSULA
ARCHITECTS
330.657.2800

CIVIL ENGINEER:
LEWIS LAND PROFESSIONALS
Civil Engineering & Land Surveying
330.335.8222

STRUCTURAL ENGINEER:
TTR Engineers
330.733.8332

MEP ENGINEER:
DENK ASSOCIATES
CORPORATE DESIGN ENGINEERS
216.531.8880

BATH TOWNSHIP

III

NORTH FORK PRESERVE BARN RENOVATION

4400 EVERETT ROAD, AKRON, OH 44333

PROJECT # 2324

ISSUE:

SD REVIEW 11-08-2024

DD REVIEW 12-20-2024

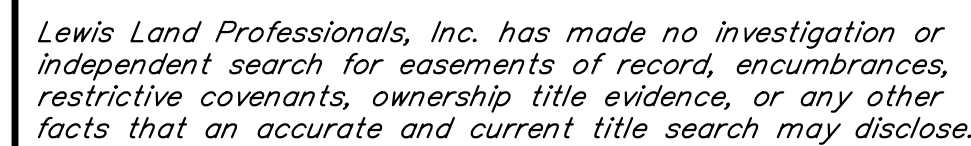
DD REVIEW 02-04-2025

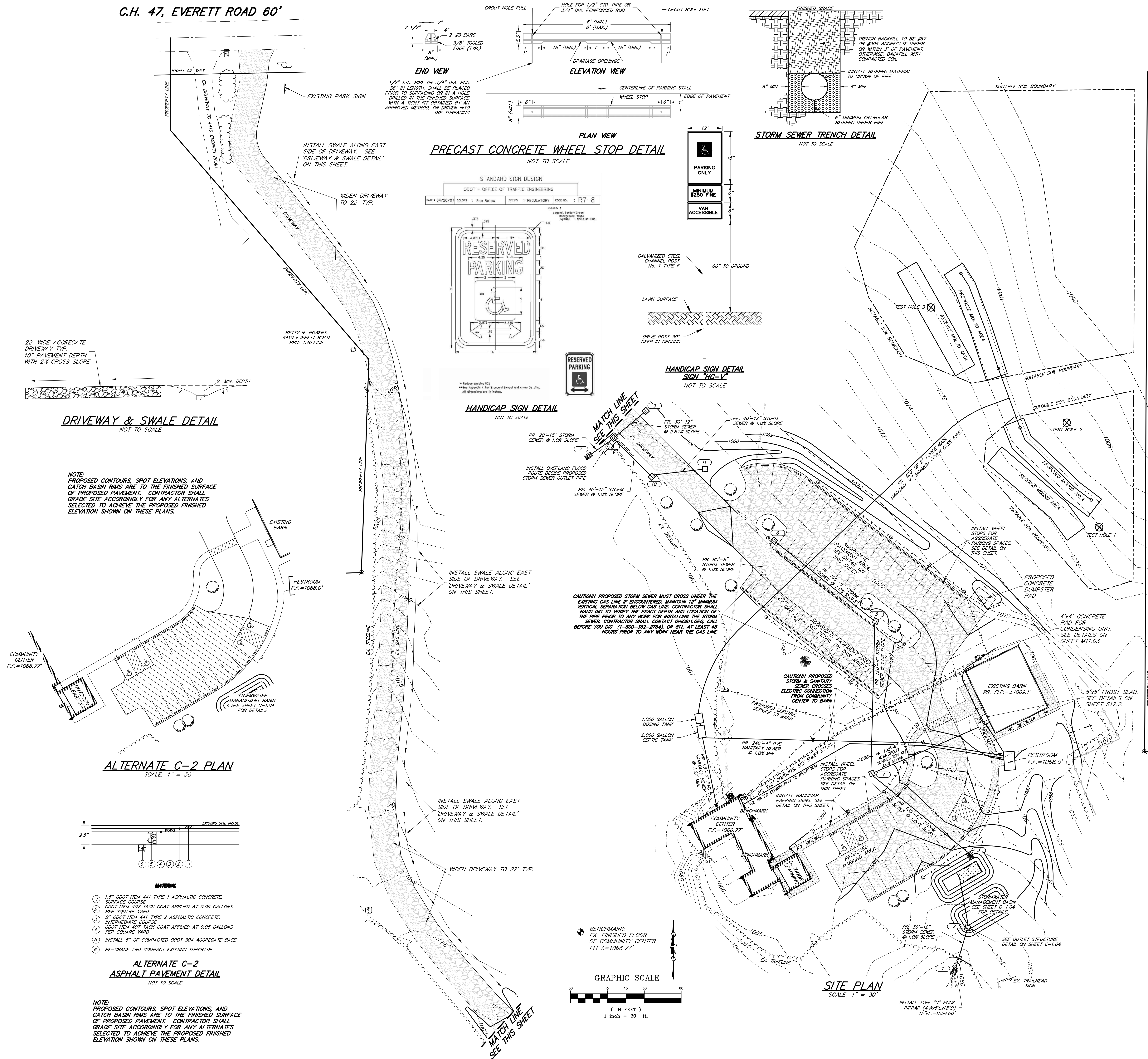
FINAL REVIEW 03-07-2025

CODE, LIFE SAFETY

G10.2

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PROJECT TEAM

ARCHITECT:
PENINSULA
ARCHITECTS
330.657.2800

CIVIL ENGINEER:
LEWIS LAND PROFESSIONALS
Civil Engineering & Land Surveying
330.355.8222

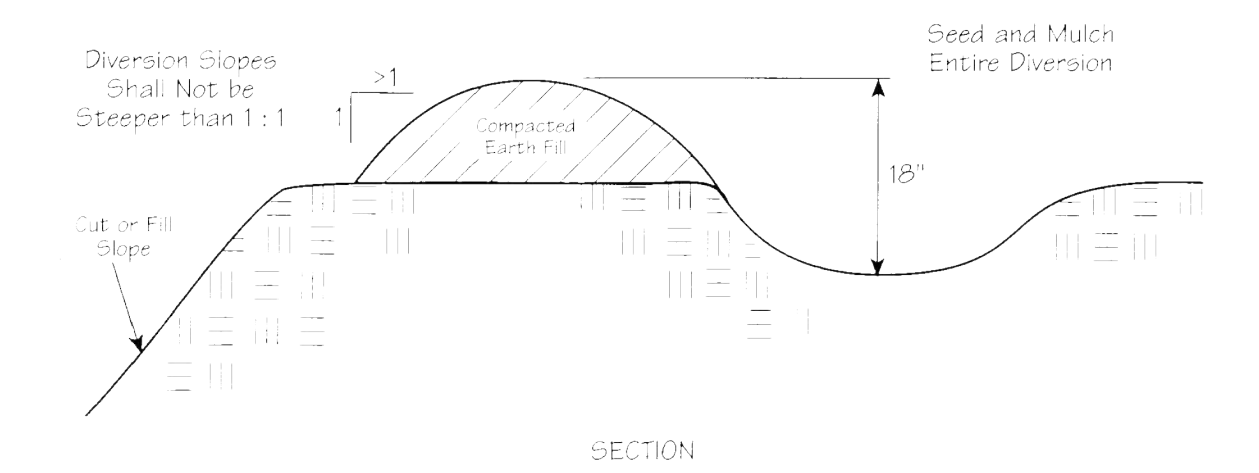
STRUCTURAL ENGINEER:
TTR Engineers
330.733.8332

MEP ENGINEER:
DENK ASSOCIATES
330.216.531.8880

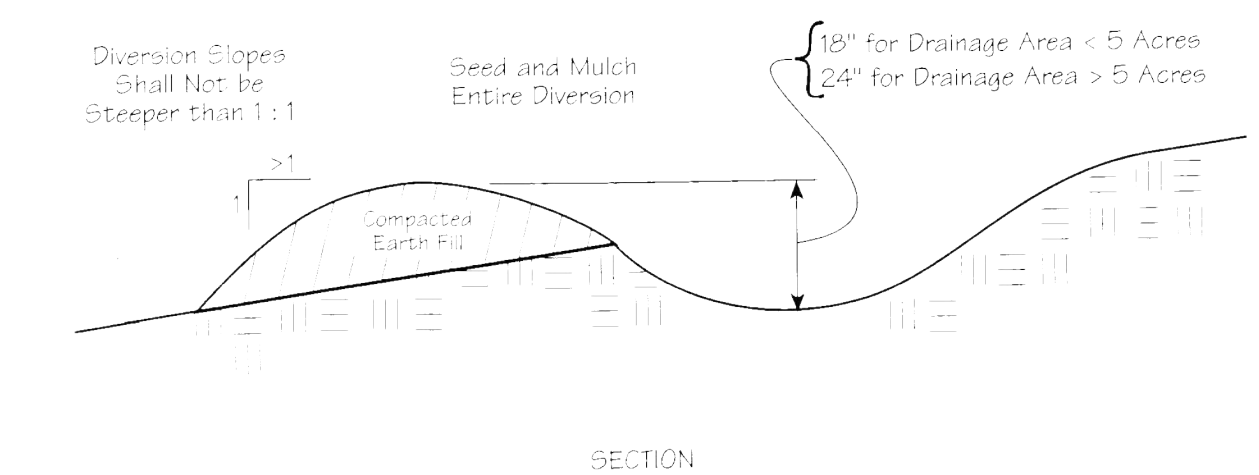


PROJECT # 2324	
ISSUE:	
SD REVIEW	11-08-2024
DD REVIEW	12-20-2024
DO REVIEW	02-04-2025
FINAL REVIEW	03-07-2025

Specifications
for
Temporary Diversion Above Steep Slopes



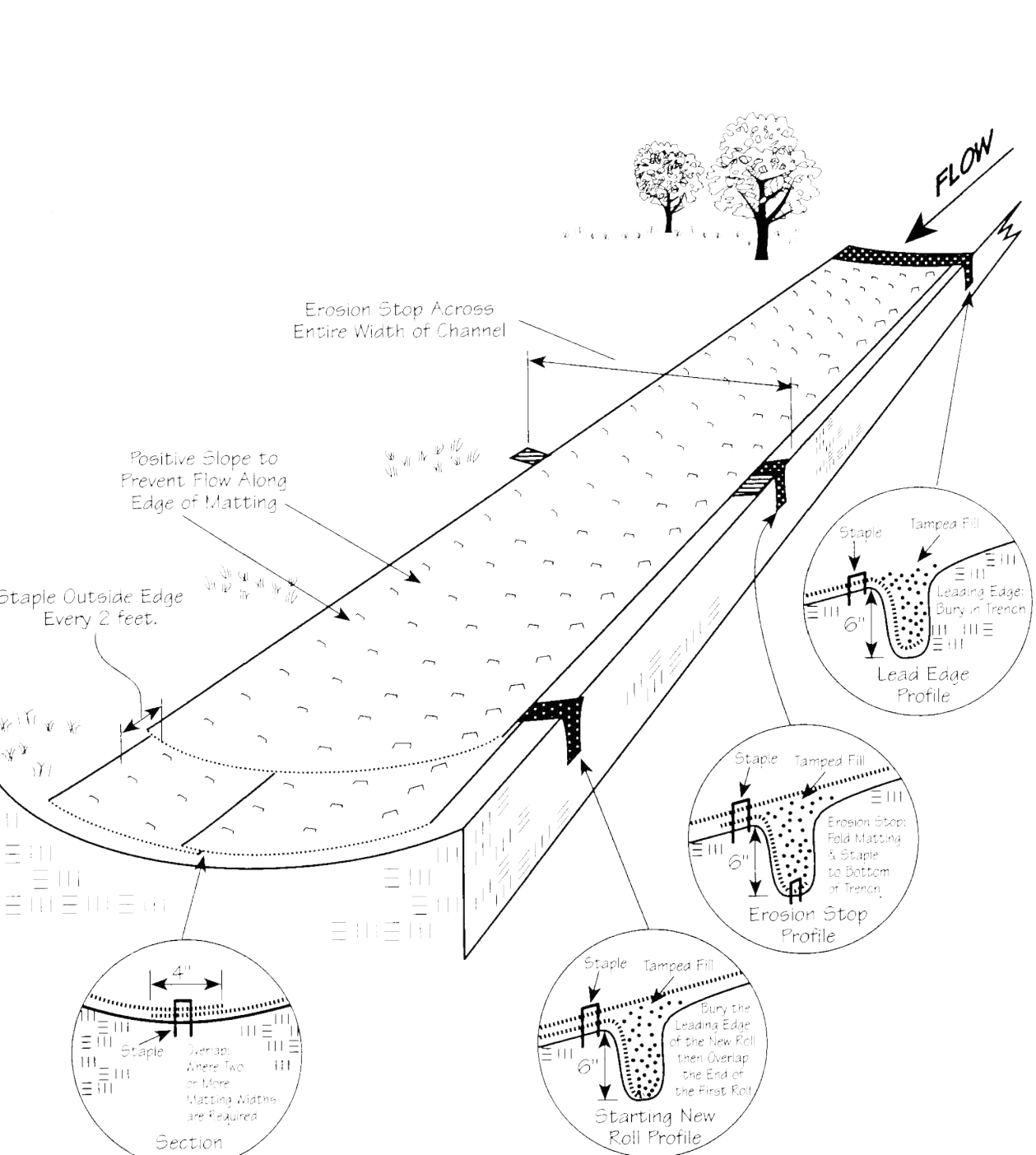
Specifications
for
Temporary Diversion



Specifications for Temporary Diversion

1. Diversion shall be compacted by traversing with tracked earth-moving equipment.
 2. Diversion shall be breached or lowered to allow construction traffic to cross. Instead the top width may be made wider and side slopes made flatter than specified above.
 3. Diversion shall be stabilized with vegetation and check dams or the following treatments:
- | Temporary Diversion Stabilization Treatment | Diversion Slope | < 2 ac. | 2 – 5 ac. | 5 – 10 ac. |
|---|-----------------|----------------|----------------|----------------|
| 0–3% | Seed and Straw | Seed and Straw | Seed and Straw | Seed and Straw |
| 3–5% | Seed and Straw | Seed and Straw | Matting | Matting |
| 5–8% | Seed and Straw | Seed and Straw | Matting | Matting |
| 8–20% | Seed and Straw | Seed and Straw | Matting | Engineered |
- Notes: Diversion with steeper slopes or greater drainage areas are beyond the scope of this standard and must be designed for stability. Seed, straw and matting used shall meet the Specifications for Temporary Seeding, Mulching and Matting.

Specifications
for
Matting



Specifications for Matting

1. Material — Excelsior matting shall be 48 in. wide and weigh an average of 0.75 lb./sq. yd. or greater. Jute matting shall be 48 in. wide and weigh an average of 1.2 lb./yd. or greater. Matting made of other material and providing equal or greater stabilization than the above may be substituted.
2. Site Preparation—After the site has been shaped and graded, a seeded shall be prepared that is relatively free of foreign material, clods or rocks that are greater than 1.5 in. in diameter. The site shall be prepared to ensure that the matting has good soil contact and the matting will not "bridge" or "tent" over obstructions.
3. Matting shall be held in place as recommended by the manufacturer as adequate for the site conditions or with sod staples. Sod staples are U-shaped wire staples used for fastening sod, jute or excelsior matting and other erosion-control materials to the soil surface. Sod staples shall be No. 11 gauge or heavier and be 6–10 in. in length. In loose or sandy soils longer staples shall be used.
4. Planting—Lime and fertilizer shall be used according to the recommendation of a soil test or the seeding plan. Seed according to the matting manufacturer's recommendations or, for excelsior matting, seed area to be protected before installation; or, when using jute matting, apply half the seed before and half the seed after installation.
5. Matting shall be installed as specified by the manufacturer as appropriate for the site conditions or the following procedure may be used:
 - * After the site is prepared and erosion stops are installed, start laying the mat from the top of the slope or channel and unroll the matting allowing 4–6 in. overlaps at the edges.
 - * Secure the matting by burying the top ends in a trench 6 in. deep and staple the folded ends to the bottom of the trench. Backfill and tamp firmly to the established grade.
 - * Slope matting every 12 in. across the width beginning at the edges and every
6. Erosion stops shall extend beyond the channel line to the full design width of the channel, this will check any rills that might form outside or along the edge of the channel lining.
7. Erosion stops shall be constructed with 6 in. deep trench, stapled to the bottom of the trench, backfilled and tamped firmly to conform with the cross section of the channel.
8. If seeding has been done prior to installation of erosion stops, reseed disturbed areas prior to placement of channel liner.

Specifications
for
Temporary Seeding

Table 7.6.1 Temporary Seeding Species Selection

Seeding Dates	Species	Lb./1,000 sq. ft.	Lb./acre
March 1 to August 15	Cuts	3	120 (4 Bushel)
	Tall Fescue	1	40
	Annual Ryegrass	1	40
	Perennial Ryegrass	1	40
	Tall Fescue	1	40
August 16th to November	Annual Ryegrass	1.25	50
	Perennial Ryegrass	3.25	142
	Crested Red Fescue	0.4	17
	Kentucky Bluegrass	0.4	17
	Oats	3	120 (3 bushel)
November 1 to Feb. 29	Tall Fescue	1	40
	Annual Ryegrass	1	40
	Rye	3	112 (2 bushel)
	Tall Fescue	1	40
	Annual Ryegrass	1	40
Use much only or dormant seeding	Wheat	3	120 (2 bushel)
	Tall Fescue	1	40
	Annual Ryegrass	1	40
	Perennial Rye	1	40
	Tall Fescue	1	40
Use much only or dormant seeding	Annual Ryegrass	1.25	40
	Perennial Ryegrass	3.25	40
	Crested Red Fescue	0.4	40
	Kentucky Bluegrass	0.4	40

Note: Other approved species may be substituted.

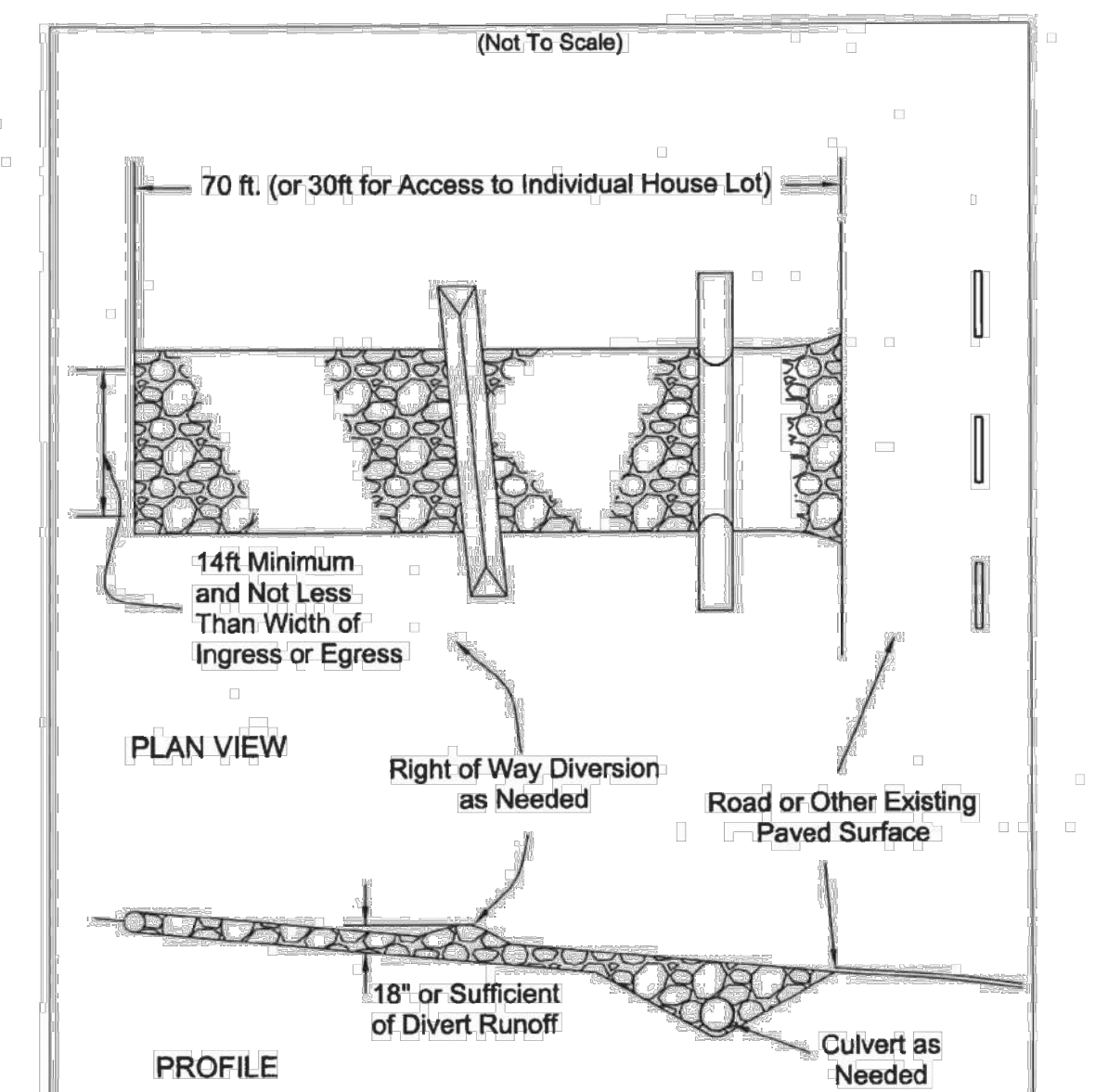
1. Structural erosion and sediment control practices such as diversions and sediment traps shall be installed and stabilized with temporary seeding prior to grading the rest of the construction site.
2. Temporary seed shall be applied between construction operations on soil that will not be graded or reseeded for 21 days or greater. These site areas shall be seeded within 7 days after grading.
3. The seeded should be pulverized and loose to ensure the success of establishing vegetation. Temporary seeding should not be postponed if ideal seeding preparation is not possible.
4. Soil Amendments—Temporary vegetation seeding rates shall establish adequate stands of vegetation, which may require the use of soil amendments. Base rates for lime and fertilizer shall be used.
5. Seeding Method—Seed shall be applied uniformly with a cyclone spreader, drill, cultipacker seeder, or hydroseeder. When feasible, seed that has been broadcast shall be covered by raking or dragging and then lightly tamped into place using a roller or cultipacker. If hydroseeding is used, the seed and fertilizer will be mixed on-site and the seeding shall be done immediately and without interruption.

Specifications
for
Temporary Seeding

Mulching Temporary Seeding

1. Applications of temporary seeding shall include mulch, which shall be applied during immediately after seeding. Seedlings made during optimum seeding dates on favorable, very flat soil conditions may not need mulch to achieve adequate stabilization.
2. Materials:
 - Straw—If straw is used, it shall be unrotted small-grain straw applied at a rate of 2 tons per acre or 90 lbs./1,000 sq. ft. (2-3 bales).
 - Hydroseeders—If wood cellulose fiber is used, it shall be used at 2,000 lbs./ac. or 46 lb./1,000-sq.-ft.
 - Other—Other acceptable mulches include mulch matting applied according to manufacturer's recommendations or wood chips applied at 6 tons/ac.
3. Straw Mulch shall be anchored immediately to minimize loss by wind or water. Anchoring methods:
 - Mechanical—A disk, crimper, or similar type tool shall be set straight to punch or anchor the mulch material into the soil. Straw mechanically anchored shall not be finely chopped but left to a length of approximately 6 inches.
 - Mulch Netting—Netting shall be used according to the manufacturer's recommendations. Netting may be necessary to hold mulch in place in areas of concentrated runoff and on critical slopes.
 - Synthetic Binders—Synthetic binders such as Acrylic DLR (Aqri-Tack, DCA-70, Petrosol, Terra Tack or equivalent) may be used at rates recommended by the manufacturer.
 - Wood-Cellulose Fiber—Wood-cellulose fiber binder shall be applied at a net dry weight of 750 pounds per acre. The wood-cellulose fiber shall be mixed with water and the mixture shall contain a maximum of 50 lb./100 gal.

Specifications
for
Construction Entrance



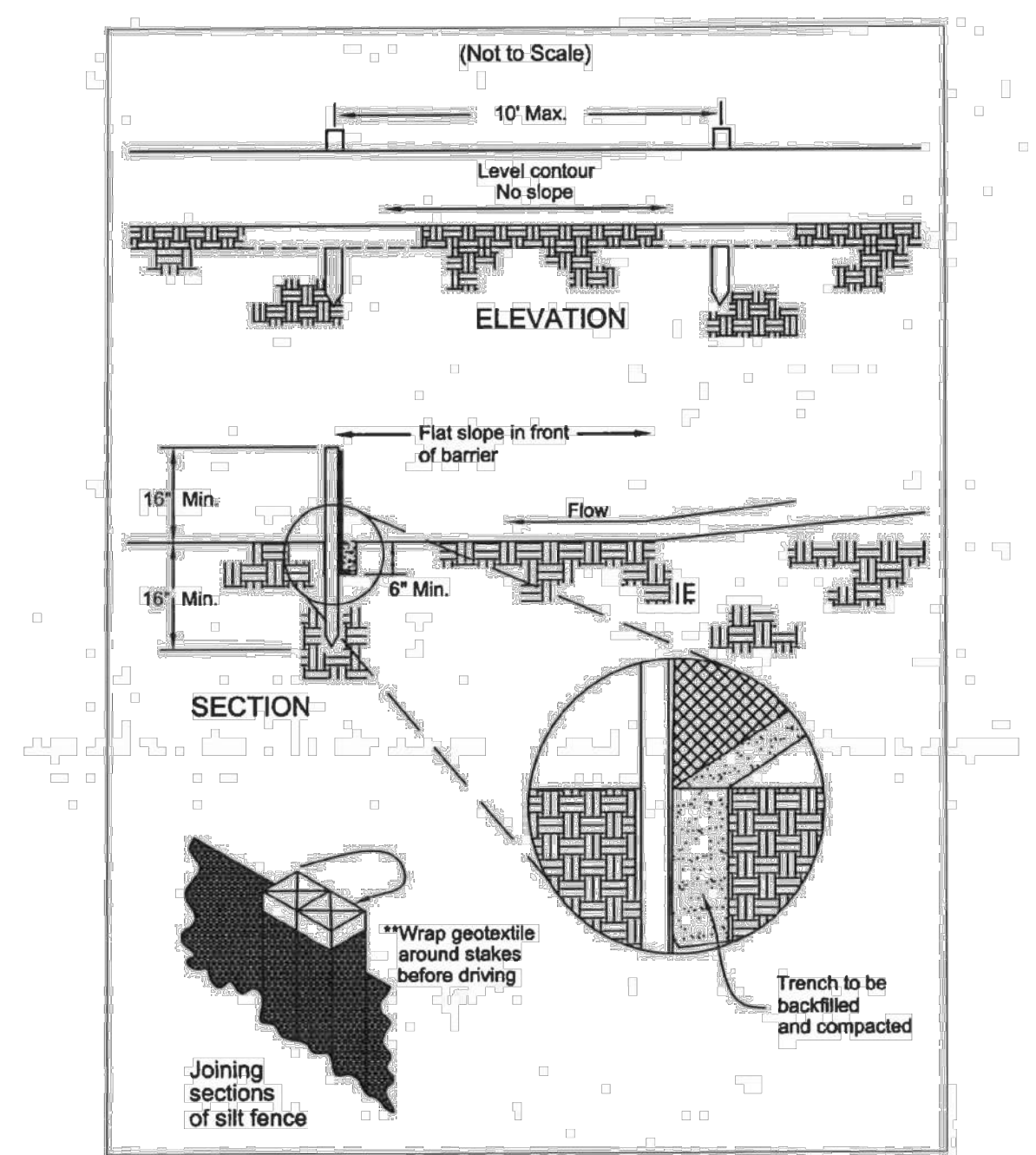
Specifications
for
Construction Entrance

1. Stone Size—#200 2" (1.5-2.5 inch) stone shall be used, or recycled concrete equivalent.
2. Length—The construction entrance shall be as long as required to stabilize high traffic areas but not less than 70 ft. (exception: apply 30 ft. minimum to single residence lots).
3. Thickness—The stone layer shall be at least 6 inches thick for light duty entrances or at least 10 inches for heavy duty use.
4. Width—The entrance shall be at least 14 feet wide, but not less than the full width at points where ingress or egress occurs.
5. Geotextile—A geotextile shall be laid over the entire area prior to placing stone. It shall be composed of strong rot-proof polymeric fibers and meet the following specifications:
6. Timing—The construction entrance shall be installed as soon as is practicable before major grading activities.
7. Culvert—A pipe or culvert shall be constructed under the entrance if needed to prevent surface water from flowing across the entrance or to prevent runoff from being directed out onto paved surfaces.
8. Water Bar—A water bar shall be constructed as part of the construction entrance if needed to prevent surface runoff from flowing the length of the construction entrance and out onto paved surfaces.
9. Maintenance—Top dressing of additional stone shall be applied as conditions demand. Mud spilled, dropped, washed or tracked onto public roads, or any surface where runoff is not checked by sediment controls, shall be removed immediately. Removal shall be accomplished by scraping or sweeping.
10. Construction entrances shall not be relied upon to remove mud from vehicles and prevent off-site tracking. Vehicles that enter and leave the construction site shall be restricted from muddy areas.
11. Removal—the entrance shall remain in place until the disturbed area is stabilized or replaced with a permanent roadway or entrance.

Figure 7.4.1

Geotextile Specification for Construction Entrance		
Minimum Tensile Strength	200 lbs.	
Minimum Puncture Strength	80 psi.	
Minimum Tear Strength	50 lbs.	
Minimum Burst Strength	220 psi.	
Minimum Elongation	20%	
Equivalent Opening Size	EDS < 0.6 mm.	
Permeability	1×10-3 cm/sec.	

Specifications
for
Silt Fence



Specifications
for
Silt Fence

1. Silt fence shall be constructed before upslope land disturbance begins.
2. All silt fence shall be placed close to the contour as possible so that water will not concentrate at low points in the fence and so that small swales or depressions that may carry small concentrated flows to the silt fence are dissipated along its length.
3. Ends of the silt fences shall be brought upslope slightly so that water ponded by the silt fence will be prevented from flowing around the ends.
4. Silt fence shall be placed on the flattest area available.
5. Where possible, vegetation shall be preserved for 5 feet (or as much as possible) upslope from the silt fence. If vegetation is removed, it shall be reestablished within 7 days from the installation of the silt fence.
6. The height of the silt fence shall be a minimum of 16 inches above the original ground surface.
7. The silt fence shall be placed in an excavated or sliced trench cut a minimum of 6 inches deep. The trench shall be made with a trencher, cable laying machine, ditching machine, or other suitable device that will ensure an adequately uniform trench depth.
8. The silt fence shall be placed with the stakes on the downslope side of the geotextile. A minimum of 8 inches of geotextile must be below the ground surface. Excess material shall lay on the bottom of the 6-inch deep trench. The trench shall be backfilled and compacted on both sides of the fabric.
9. Seams between sections of silt fence shall be spliced together only at a support post with a minimum 6-in. overlap prior to driving into the ground. (see details).
10. Maintenance—Silt fence shall allow runoff to pass only as diffuse flow through the geotextile. If runoff overtops the silt fence, flows under the fabric or around the fence ends, or in any other way allows a concentrated flow discharge, one of the following shall be performed, as appropriate: 1) the layout of the silt fence shall be changed; 2) accumulated sediment shall be removed; or 3) other practices shall be installed.

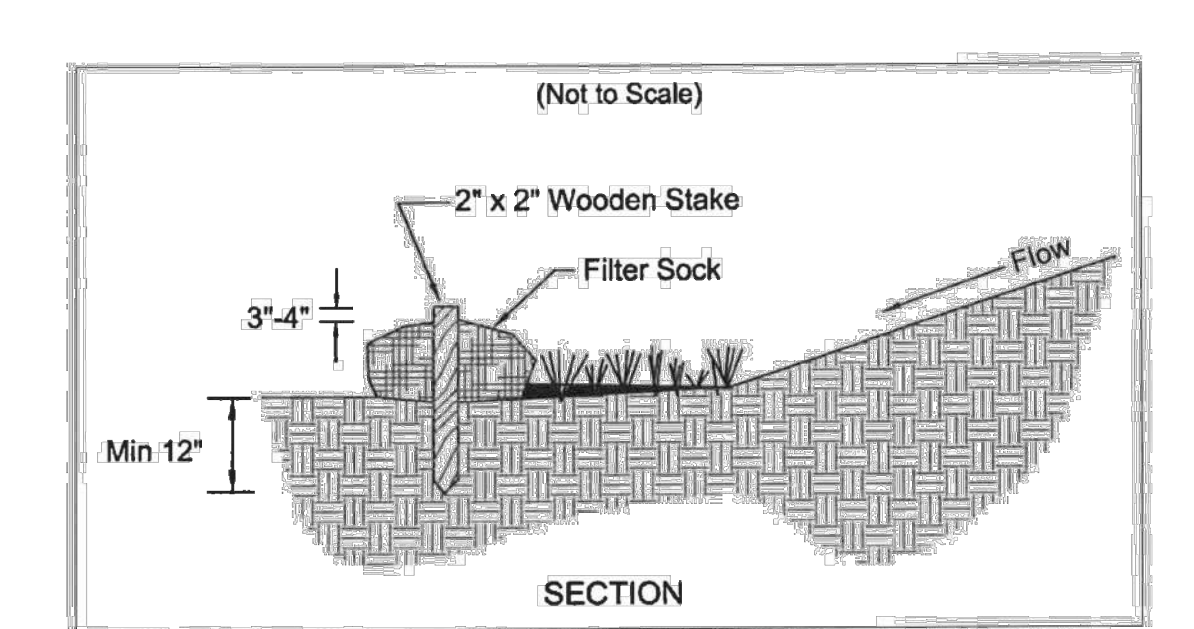
Sediment deposits shall be routinely removed when the deposit reaches approximately one-half of the height of the silt fence.
Silt fences shall be inspected after each rainfall and at least daily during a prolonged rainfall. The location of existing silt fence shall be reviewed daily to ensure its proper location and effectiveness. If damaged, the silt fence shall be repaired immediately.

1. Fence post—The length shall be a minimum of 32 inches. Wood posts will be 2-by-2-in. nominal dimensioned hardwood of sound quality. They shall be free of knots, splits and other visible imperfections, that will weaken the posts. The maximum spacing between posts shall be 10 ft. Posts shall be driven a minimum 16 inches into the ground, where possible. If not possible, the posts shall be adequately secured to prevent overturning of the fence due to sediment/water loading.
2. Silt fence fabric—See chart below.

Table 6.3.2 Minimum criteria for Silt Fence Fabric (DOT, 2002)

FABRIC PROPERTIES	VALUES	TEST METHOD
Minimum Tensile Strength	120 lbs. (335 N)	ASTM D 4632
Maximum Elongation at 60 lbs	50%	ASTM D 4632
Minimum Puncture Strength	50 lbs (220 N)	ASTM D 4633
Minimum Tear Strength	40 lbs (180 N)	ASTM D 4593
Apparent Opening Size	<0.6 mm	ASTM D 4753
Minimum Permeability	1X10-3 sec-1	ASTM D 4481
UV Exposure Strength Retention	70%	ASTM G 455

Specifications
for
Filter Sock



1. Materials—Compost used for filter socks shall be weed, pathogen and insect free and free of any refuse, contaminants or other materials toxic to plant growth. They shall be derived from a well-decomposed source of organic matter and consist of a particles ranging from 3/8" to 2".
2. Filter Socks shall be 3 or 5 mil continuous, tubular, HDPE 3/8" knitted mesh netting material, filled with compost possessing the above specifications for compost products.
3. Filter socks will be placed on a level line across slopes, generally parallel to the base of the slope or other affected area. On slopes approaching 2:1, additional socks shall be provided at the top and as needed mid-slope.
4. Filter socks intended to be left as a permanent filter or part of the natural landscape, shall be seeded with type of installation for establishment of permanent vegetation.
5. Filter Socks are not to be used in concentrated flow situations or in runoff channels.
6. Routinely inspect filter socks after each significant rain, maintaining filter socks in a functional condition at all times.
7. Remove sediments collected at the base of the filter socks when they reach 1/3 of the exposed height of the practice.
8. Where the filter sock deteriorates or fails, it will be repaired or replaced with a more effective alternative.
9. Removal—Filter socks will be dispersed on site when no longer required in such as way as to facilitate and not obstruct seeding.

MAINTENANCE:
6. Routinely inspect filter socks after each significant rain, maintaining filter socks in a functional condition at all times.
7. Remove sediments collected at the base of the filter socks when they reach 1/3 of the exposed height of the practice.
8. Where the filter sock deteriorates or fails, it will be repaired or replaced with a more effective alternative.
9. Removal—Filter socks will be dispersed on site when no longer required in such as way as to facilitate and not obstruct seeding.

1. Stone Size—#200 2" (1.5-2.5 inch) stone shall be used, or recycled concrete equivalent.
2. Length—The construction entrance shall be as long as required to stabilize high traffic areas but not less than 70 ft. (exception: apply 30 ft. minimum to single residence lots).
3. Thickness—The stone layer shall be at least 6 inches thick for light duty entrances or at least 10 inches for heavy duty use.
4. Width—The entrance shall be at least 14 feet wide, but not less than the full width at points where ingress or egress occurs.
5. Geotextile—A geotextile shall be laid over the entire area prior to placing stone. It shall be composed of strong rot-proof polymeric fibers and meet the following specifications:
6. Timing—The construction entrance shall be installed as soon as is practicable before major grading activities.
7. Culvert—A pipe or culvert shall be constructed under the entrance if needed to prevent surface water from flowing across the entrance or to prevent runoff from being directed out onto paved surfaces.
8. Water Bar—A water bar shall be constructed as part of the construction entrance if needed to prevent surface runoff from flowing the length of the construction entrance and out onto paved surfaces.
9. Maintenance—Top dressing of additional stone shall be applied as conditions demand. Mud spilled, dropped, washed or tracked onto public roads, or any surface where runoff is not checked by sediment controls, shall be removed immediately. Removal shall be accomplished by scraping or sweeping.
10. Construction entrances shall not be relied upon to remove mud from vehicles and prevent off-site tracking. Vehicles that enter and leave the construction site shall be restricted from muddy areas.
11. Removal—the entrance shall remain in place until the disturbed area is stabilized or replaced with a permanent roadway or entrance.

PROJECT TEAM

ARCHITECT:



330.657.2800

CIVIL ENGINEER:



STRUCTURAL ENGINEER:



MEP ENGINEER:



PROJECT # 2324

ISSUE:

SD REVIEW	11-08-2024
DD REVIEW	12-20-2024
DD REVIEW	02-04-2025
FINAL REVIEW	03-07-2025

SPECIAL INSPECTIONS

SPECIAL INSPECTIONS

1. SPECIAL INSPECTION IS TO BE PROVIDED IN ADDITION TO THE INSPECTIONS CONDUCTED BY THE DEPARTMENT OF BUILDING SAFETY AND SHALL NOT BE CONSTRUED TO RELIEVE THE OWNER OR HIS AUTHORIZED AGENT FROM REQUESTING THE PERIODIC AND CALLED INSPECTIONS REQUIRED BY THE BUILDING CODE. SPECIAL INSPECTION SHALL BE PAID BY OWNER.

REQUIRED SPECIAL INSPECTIONS

1. IN ADDITION TO THE REGULAR INSPECTIONS, THE FOLLOWING ITEMS WILL ALSO REQUIRE SPECIAL INSPECTION ACCORDANCE WITH THE BUILDING CODE.

A. STRUCTURAL STEEL ELEMENTS OF BUILDINGS AND STRUCTURES AS REQUIRED BY OBC SECTION 1705.2 AND TABLE 1705.2.3, EXCEPT AS ALLOWED IN OBC SECTION 1704.2.

B. CONCRETE CONSTRUCTION AS REQUIRED BY OBC SECTION 1705.3 AND TABLE 1705.3, EXCEPT AS ALLOWED IN OBC SECTION 1704.2.

C. MASONRY CONSTRUCTION AS REQUIRED BY OBC SECTION 1704.5, LEVEL 1 SPECIAL INSPECTION, EXCEPT ALLOWED IN OBC SECTION 1704.2.

D. SPECIAL INSPECTION FOR EXISTING SITE SOIL CONDITIONS, DURING SITE PREPARATION AND FILL PLACEMENT. TO ENSURE LOAD-BEARING REQUIREMENTS IN COMPLIANCE WITH OBC SECTION 1705.6 EXCEPT AS ALLOWED IN OBC SECTION 1704.2.

E. SPRAYED FIRE-RESISTANT MATERIALS AS REQUIRED BY SECTION 1705.15.

F. EFIS SYSTEM AS PER SECTION 1705.17.

G. SPECIAL CASES AS DEEMED NECESSARY BY BUILDING OFFICIAL IN COMPLIANCE WITH OBC SECTION 1705.1.1.

2. SPECIAL INSPECTOR SHALL MEET THE QUALIFICATIONS AS STATED IN THE BUILDING CODE AND SHALL PERFORM THE DUTIES AND RESPONSIBILITIES AS OUTLINED IN THE BUILDING CODE.

3. SPECIAL INSPECTION SHALL MEET THE REQUIREMENTS OF OBC SECTION 1704. SPECIAL INSPECTOR(S) SHALL BE HIRED BY THE OWNER TO PERFORM THE REQUIRED SPECIAL INSPECTIONS. THE NAMES OF PERSONS OR FIRMS WHO ARE TO PERFORM THE SPECIAL INSPECTIONS SHALL BE FORWARDED TO THE BUILDING OFFICIAL FOR APPROVAL. THE SPECIAL INSPECTOR(S) SHALL COMPLETE AND SUBMIT ALL FORMS REQUIRED BY THE BUILDING DEPARTMENT HAVING JURISDICTION.

4. THE SPECIAL INSPECTOR(S) SHALL:

A. OBSERVE THE WORK ASSIGNED FOR CONFORMANCE TO THE APPROVED DRAWING AND SPECIFICATIONS.

B. FURNISH INSPECTION REPORTS TO THE ENGINEER OF RECORD AND BUILDING DEPARTMENT. DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION. THEN IF NOT CORRECTED, TO THE ENGINEER AND THE BUILDING DEPARTMENT.

C. SUBMIT TO THE ENGINEER OF RECORD AND THE BUILDING DEPARTMENT A SIGNED FINAL REPORT STATING THAT THE WORK WAS IN CONFORMANCE WITH THE APPROVED DRAWINGS AND SPECIFICATIONS AND THE APPLICABLE WORKMANSHIP PROVISIONS OF THE OBC.

5. SPECIAL INSPECTION NOTES:

A. CONTINUOUS SPECIAL INSPECTION IS ALWAYS REQUIRED DURING THE PERFORMANCE OF THE WORK UNLESS SPECIFICALLY NOTED BELOW.

B. WHERE FABRICATION OF STRUCTURAL LOAD-BEARING MEMBERS AND ASSEMBLIES IS BEING PERFORMED ON THE PREMISES OF A FABRICATOR'S SHOP, CONTINUOUS SPECIAL INSPECTION IS REQUIRED DURING THE PERFORMANCE OF THE WORK EXCEPT AS ALLOWED IN OBC SECTION 1704.2.5.1 AND UNLESS SPECIFICALLY NOTED BELOW.

C. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE THE SPECIAL INSPECTOR(S) WITH ADVANCE NOTICE, NO LESS THAN ONE WORKING DAY, OF THE INITIATION OF ANY WORK REQUIRED TO HAVE SPECIAL INSPECTIONS. ALL WORK PERFORMED WITHOUT REQUIRED SPECIAL INSPECTION WILL BE SUBJECT TO REMOVAL.

STRUCTURAL SPECIAL INSPECTION SCHEDULE: SOILS

VERIFICATION AND INSPECTION TASK	APPLICABLE TO THIS PROJECT?	FREQUENCY		REFERENCED STANDARD	CODE REFERENCE
		CONTINUOUS	PERIODIC		
VERIFY MATERIALS BELOW FOOTINGS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY.	X	-	X	-	1704.7
VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL.	X	-	X	-	1704.7
PERFORM CLASSIFICATION AND TESTING OF CONTROLLED FILL MATERIALS.	X	-	X	-	1704.7
DURING FILL PLACEMENT, VERIFY USE OF PROPER MATERIALS AND PROCEDURES IN ACCORDANCE WITH THE PROVISIONS OF THE APPROVED GEOTECHNICAL REPORT. VERIFY DENSITIES AND LIFT THICKNESS DURING PLACEMENT AND COMPACTION OF CONTROLLED FILL.	X	X	-	-	1704.7
PRIOR TO PLACEMENT OF CONTROLLED FILL, OBSERVE SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY.	X	-	X	-	1704.7

STRUCTURAL SPECIAL INSPECTION SCHEDULE: CONCRETE CONSTRUCTION

VERIFICATION AND INSPECTION TASK	APPLICABLE TO THIS PROJECT?	FREQUENCY		REFERENCED STANDARD	CODE REFERENCE
		CONTINUOUS	PERIODIC		
1. INSPECT REINFORCEMENT, INCLUDING PRESTRESSING TENDONS, AND VERIFY PLACEMENT.	X	-	X	ACI 318 Ch. 20, 25.2, 25.3, 26.6.1-26.6.3	-
2. REINFORCING BAR WELDING:	-	-	-	AWS D1.4 ACI 318: 26.6.4	-
a. VERIFY WELDABILITY OF REINFORCING BARS OTHER THAN ASTM A706	-	-	X		
b. INSPECT SINGLE-PASS FILLET WELDS, MAXIMUM $\frac{1}{8}"$	-	-	X		
c. INSPECT ALL OTHER WELDS	-	X	-		
3. INSPECT ANCHORS CAST IN CONCRETE	X	-	X	ACI 318 Ch. 17.8.2	-
4. INSPECT ANCHORS POST-INSTALLED IN HARDENED CONCRETE MEMBERS	-	-	-	-	-
a. ADHESIVE ANCHORS INSTALLED IN HORIZONTALLY OR UPWARDLY INCLINED ORIENTATIONS TO RESIST SUSTAINED TENSION LOADS	-	X	-	ACI 318 Ch. 17.8.2.4	-
b. MECHANICAL ANCHORS AND ADHESIVE ANCHORS NOT DEFINED IN 4.a.	X	-	X	ACI 318 Ch. 17.8.2	-
5. VERIFY USE OF REQUIRED DESIGN MIX.	X	X	-	ACI 318 Ch. 19, 26.4.3, 26.4.4	1904.1, 1904.2
6. PRIOR TO CONCRETE PLACEMENT, FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE CONCRETE	X	X	-	ASTM C31, C172 ACI 318: 26.5, 26.12	-
7. INSPECT CONCRETE AND SHOTCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES	X	X	-	ACI 318 Ch. 26.5.3-26.5.5	-
8. VERIFY MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES	X	-	X	ACI 318 Ch. 26.5.3-26.5.5	-
9. INSPECT PRESTRESSED CONCRETE FOR:	-	-	-	ACI 318 Ch. 26.10	-
a. APPLICATION OF PRESTESSING FORCES	-	X	-		
b. GROUTING OF BONDED PRESTRESSING TENDONS	-	X	-		
10. INSPECT ERECTION OF PRECAST CONCRETE MEMBERS	-	-	X	ACI 318 Ch. 26.9	-
11. FOR PRECAST CONCRETE DIAPHRAGM CONNECTIONS OR REINFORCEMENT AT JOINTS CLASSIFIED AS MODERATE OR HIGH DEFORMABILITY ELEMENTS (MDE OR HDE) IN STRUCTURES ASSIGNED TO SEISMIC DESIGN CATEGORY C, D, E, OR F, INSPECT SUCH CONNECTIONS AND REINFORCEMENT IN THE FIELD FOR:	-	-	-	ACI 318 Ch. 26.13.1.3	-
A. INSTALLATION OF THE EMBEDDED PARTS	-	X	-	ACI 318 Ch. 26.13.1.3	-
B. COMPLETION OF THE CONTINUITY OF REINFORCEMENT ACROSS JOINTS	-	X	-		
C. COMPLETION OF CONNECTIONS IN THE FIELD	-	X	-		
12. INSPECT INSTALLATION TOLLERANCES OF PRECAST CONCRETE DIAPHRAGM CONNECTIONS FOR COMPLIANCE WITH ACI 550.5	-	-	X	ACI 318 Ch. 26.13.1.3	-
13. VERIFY IN-SITU CONCRETE STRENGTH, PRIOR TO STRESSING OF TENDONS IN POST-TENSIONED CONCRETE AND PRIOR TO REMOVAL OF SHORES AND FORMS FROM BEAMS AND STRUCTURAL SLABS	-	-	X	ACI 318 Ch. 26.11.2	-
14. INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED.	X	-	X	ACI 318 Ch. 26.11.1.2(b)	-

REQUIRED VERIFICATION & INSPECTION OF WOOD FRAMING

APPLICABLE TO THIS PROJECT	VERIFICATION AND INSPECTION TASK	CONTINUOUS	PERIODIC
X	1. VERIFY LUMBER GRADE - VISUAL	--	X
X	2. SHEAR WALL NAILING PATTERNS - VISUAL	--	X
X	3. LIGHT GAGE METAL CONNECTIONS - VISUAL	--	X
X	4. SHEAR WALL HOLD DOWN ANCHORS - VISUAL	X	--

MINIMUM VERIFICATION REQUIREMENTS

MINIMUM VERIFICATION	REQUIRED FOR QUALITY ASSURANCE			TMS 602
	LEVEL 1	LEVEL 2	LEVEL 3	
1. PRIOR TO CONSTRUCTION, VERIFICATION OF COMPLIANCE OF SUBMITTALS.	X	X	X	ART. 1.5
2. PRIOR TO CONSTRUCTION, VERIFICATION OF $f_{m'}$ AND $f_{m'ac}$ EXCEPT WHERE SPECIFICALLY EXEMPTED BY THIS CODE.	-	X	X	ART. 1.4 B
3. DURING CONSTRUCTION, VERIFICATION OF SLUMP FLOW AND VISUAL STABILITY INDEX (VSI) WHEN SELF-CONSOLIDATING GROUT IS DELIVERED TO THE PROJECT SITE.	-	X	X	ART. 1.5, 1.6.3
2. DURING CONSTRUCTION, VERIFICATION OF $f_{m'}$ AND $f_{m'ac}$ FOR EVERY 5,000 SQ. FT. (465 SQ. M)	-	-	X	ART. 1.4 B
3. DURING CONSTRUCTION, VERIFICATION OF PROPORTIONS OF MATERIALS AS DELIVERED TO THE PROJECT SITE FOR PREMIXED OR PREBLENDED MORTAR, PRESTRESSING GROUT, ANDGROUT OTHER THAN SELF-CONSOLIDATING GROUT.	-	-	X	ART. 1.4 B

STRUCTURAL SPECIAL INSPECTION SCHEDULE: MASONRY CONSTRUCTION

VERIFICATION AND INSPECTION TASK	APPLICABLE TO THIS PROJECT?	FREQUENCY ^(A)			TMS 402	TMS 602
		LEVEL 1	LEVEL 2	LEVEL 3		
4. AS MASONRY CONSTRUCTION BEGINS, THE FOLLOWING SHALL BE VERIFIED TO ENSURE COMPLIANCE:						
A. PROPORTIONS OF SITE PREPARED MORTAR	-	-	P	P		ART. 2.1, 2.6 A, 2.6 C
B. GRADE AND SIZE OF PRESTRESSING TENDONS AND ANCHORAGES.	-	-	P	P		ART. 2.4 B, 2.4 H
C. GRADE, TYPE, AND SIZE OF REINFORCEMENT, CONNECTORS, ANCHOR BOLTS, AND PRESTRESSING TENDONS AND ANCHORAGES.	X	-	P	P		ART. 3.4, 3.6 A
D. PRESTRESSING TECHNIQUE.	-	-	P	P		ART. 3.6 B
E. PROPERTIES OF THIN-BED MORTAR FOR AAC MASONRY	-	-	C ^(B) /P ^(C)	C		ART. 2.1 C.1
F. SAMPLE PANEL CONSTRUCTION	-	-	P	C		ART. 1.6 D
2. PRIOR TO GROUTING, VERIFY THAT THE FOLLOWING ARE IN COMPLIANCE:						
A. GROUT SPACE	X	-	P	C		ART. 3.2 D, 3.2 F
B. PLACEMENT OF PRESTRESSING TENDONS AND ANCHORAGES	-	-	P	P	SEC. 10.8, 10.9	ART. 2.4, 3.6
C. PLACEMENT OF REINFORCEMENT, CONNECTORS, AND ANCHOR BOLTS	X	-	P	C	SEC. 6.1, 6.3.1, 6.3.6, 6.3.7	ART. 3.2 E, 3.4
D. PROPORTIONS OF SITE-PREPARED GROUT AND PRESTRESSING GROUT FOR BONDED TENDONS	-	-	P	P		ART. 2.6 B, 2.4 G.1.b
3. VERIFY COMPLIANCE OF THE FOLLOWING DURING CONSTRUCTION:						
A. MATERIALS AND PROCEDURES WITH THE APPROVED SUBMITTALS	X	-	P	P		ART. 1.5
B. PLACEMENT OF MASONRY UNITS AND MORTAR JOINT CONSTRUCTION	X	-	P	P		ART. 3.3 B
C. SIZE AND LOCATION OF STRUCTURAL MEMBERS	X	-	P	P		ART. 3.3 F
D. TYPE, SIZE, AND LOCATION OF ANCHORS, INCLUDING OTHER DETAILS OF ANCHORAGE OF MASONRY TO STRUCTURAL MEMBERS, FRAMES, OR OTHER CONSTRUCTION	X	-	P	C	SEC. 1.2.1(e), 6.2.1, 6.3.1	
E. WELDING OF REINFORCEMENT	-	-	C	C	SEC. 6.1.6.1.2	
F. PREPARATION, CONSTRUCTION, AND PROTECTION OF MASONRY DURING COLD WEATHER (TEMPERATURE BELOW 40° F (4.4° C)) OR HOT WEATHER (TEMPERATURE ABOVE 90° F (32.2° C))	-	-	P	P		ART. 1.8 C, 1.8 D
G. APPLICATION AND MEASURING OF PRESTRESSING FORCE	-	-	C	C		ART. 3.6 B
H. PLACEMENT OF GROUT AND PRESTRESSING GROUT FOR BONDED TENDONS IS IN COMPLIANCE	-	-	C	C		ART. 3.5, 3.6 C
I. PLACEMENT OF AAC MASONRY UNITS AND CONSTRUCTION OF THIN-BED MORTAR JOINTS	-	-	C ^(B) /P ^(C)	C		ART. 3.3 B.9, 3.3 F.1.b
4. OBSERVE PREPARATION OF GROUT SPECIMENS, MORTAR SPECIMENS, AND/OR PRISMS	-	-	P	C		ART. 1.4 B.2.a.3, 1.4 B.2.b.3, 1.4 B.2.c.3, 1.4 B.3, 1.4 B.4

(A) FREQUENCY REFERS TO THE FREQUENCY OF INSPECTION, WHICH MAY BE CONTINUOUS DURING THE LISTED TASK OR PERIODICALLY DURING THE LISTED TASK, AS DEFINED IN THE TABLE.

- = NOT REQUIRED, P = PERIODIC, C = CONTINUOUS

(B) REQUIRED FOR THE FIRST 5000 SQUARE FEET (465 SQUARE METERS) OF AAC MASONRY

(C) REQUIRED AFTER THE FIRST 5000 SQUARE FEET (465 SQUARE METERS) OF AAC MASONRY

PROGRESS
NOT FOR
CONSTRUCTION
3/10/2025

PROJECT TEAM

ARCHITECT:



330.657.2800

CIVIL ENGINEER:



STRUCTURAL ENGINEER:



330.733.8332

MEP ENGINEER:



216.531.8880



NORTH FORK PRESERVE BARN RENOVATION

4400 EVERETT ROAD, AKRON, OH 44333

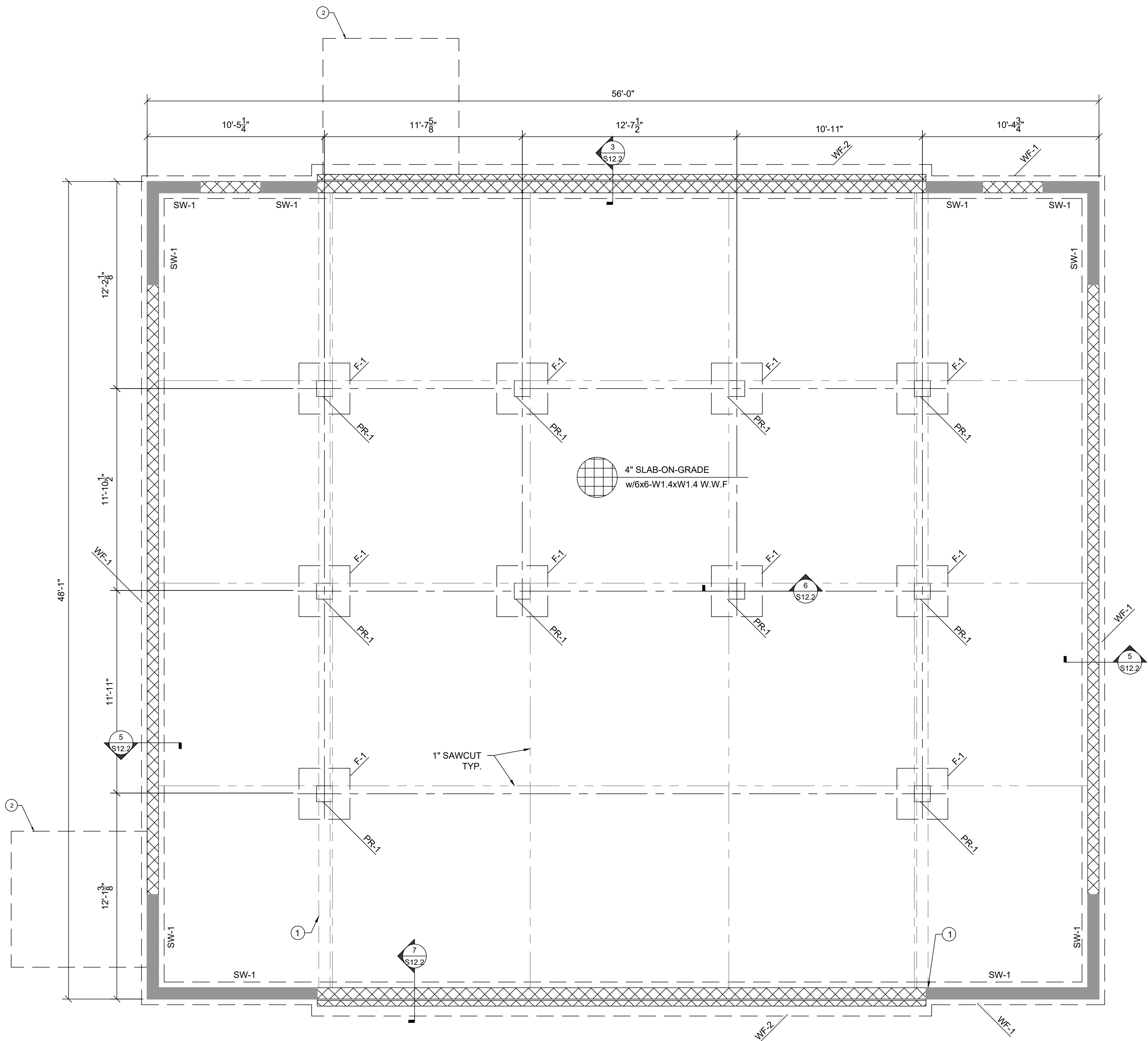
PROJECT # 2324

ISSUE:

SD REVIEW	11-08-2024
DD REVIEW	12-20-2024
DD REVIEW	02-04-2025
FINAL REVIEW	03-07-2025

FOUNDATION PLAN

S11.1



1 FOUNDATION PLAN
S11.1
1/4" = 1'-0"

FOUNDATION NOTES:

- CONTRACTOR SHALL COORDINATE ALL DIMENSIONS AND ELEVATIONS w/ ARCHITECTURAL DRAWINGS PRIOR TO CONSTRUCTION.
 - DIMENSIONS SHOWN ARE TO OUTSIDE FACE OF MASONRY
 - FOR ADDITIONAL INFORMATION AND REQUIREMENTS, SEE TYPICAL DETAILS AND GENERAL NOTES.
 - SAWCUT JOINTS IN SLAB-ON-GRADE SHALL BE MADE AFTER CONCRETE HAS TAKEN INITIAL SET BEFORE CONCRETE SHRINKAGE STRESSES ARE INCURRED. SAWCUTS SHALL BE PLACED @ MAX. 12'-0" o/c SPACING.
 - ELEVATIONS MEASURED FROM FINISHED FLOOR = 0'-0"
 - CONTRACTOR TO FIELD VERIFY DIMENSIONS. CONTRACTOR IS RESPONSIBLE FOR ALL SHORING NECESSARY FOR RAISING AND SETTING BARN ON NEW FOUNDATIONS. CONTRACTOR RESPONSIBLE FOR RAISING STRUCTURE SHALL COORDINATE WITH FOUNDATION CONTRACTOR ON ALL FINAL DIMENSIONS
- ① EXISTING FOOTING AND FOUNDATION WALL MAY REMAIN IN PLACE BELOW LEVEL OF COMPACTED BACKFILL FOR SLAB.
- ② INDICATES LOCATION OF NEW FROST SLAB.
- TOP OF INT. FTG = -0'-8" UNO
TOP OF PIER = +1'-8" UNO
TOP OF EXT. FTG = -3'-0" UNO



HEADER SCHEDULE			
MARK	HEADER SIZE	JACK STUDS	KING STUDS
H-1	(3)-2x6	1	1

1. FRAMING NOTES:
2. SEE S10 I1.8 S10 I2 FOR STRUCTURAL NOTES & SPECIAL INSPECTIONS
3. COORDINATE ALL OPENINGS WITH ARCHITECTURAL AND MECHANICAL DRAWINGS.
4. SEE S12 I.1, S12 I.2 & S13 I.1 FOR TYPICAL DETAILS & SECTIONS.
5. PROVIDE SIMPSON H1E TIE ON ALL RAFTERS TO PREVENT WIND UPLIFT.
6. SEE ARCHITECTURAL DRAWINGS FOR ROOF ELEVATIONS AND SLOPES.
7. ELEVATIONS MEASURED FROM FINISHED FLOOR = 0'-0" DIMS MARKED 1/2" TO FIELD VERIFIED BY CONTRACTOR
8. EXISTING 4X8 TIMBERS WHICH ARE TO BE REMOVED DURING DEMOLITION MAY BE SALVAGED AND RE-USED. RE-USED TIMBERS MUST BE FREE OF STRUCTURAL DEFECTS OR DAMAGE.
9. RAFTER BEARING ELEVATION
10. STRAP SHEAR WALL TO EXISTING BARN. SEE DTL 10/S13.1



PROGRESS
NOT FOR
CONSTRUCTION
3/10/2025

PROJECT TEAM

ARCHITECT:



CIVIL ENGINEER:



STRUCTURAL ENGINEER:



MEP ENGINEER:



NORTH FORK PRESERVE BARN RENOVATION

4400 EVERETT ROAD, AKRON, OH 44333

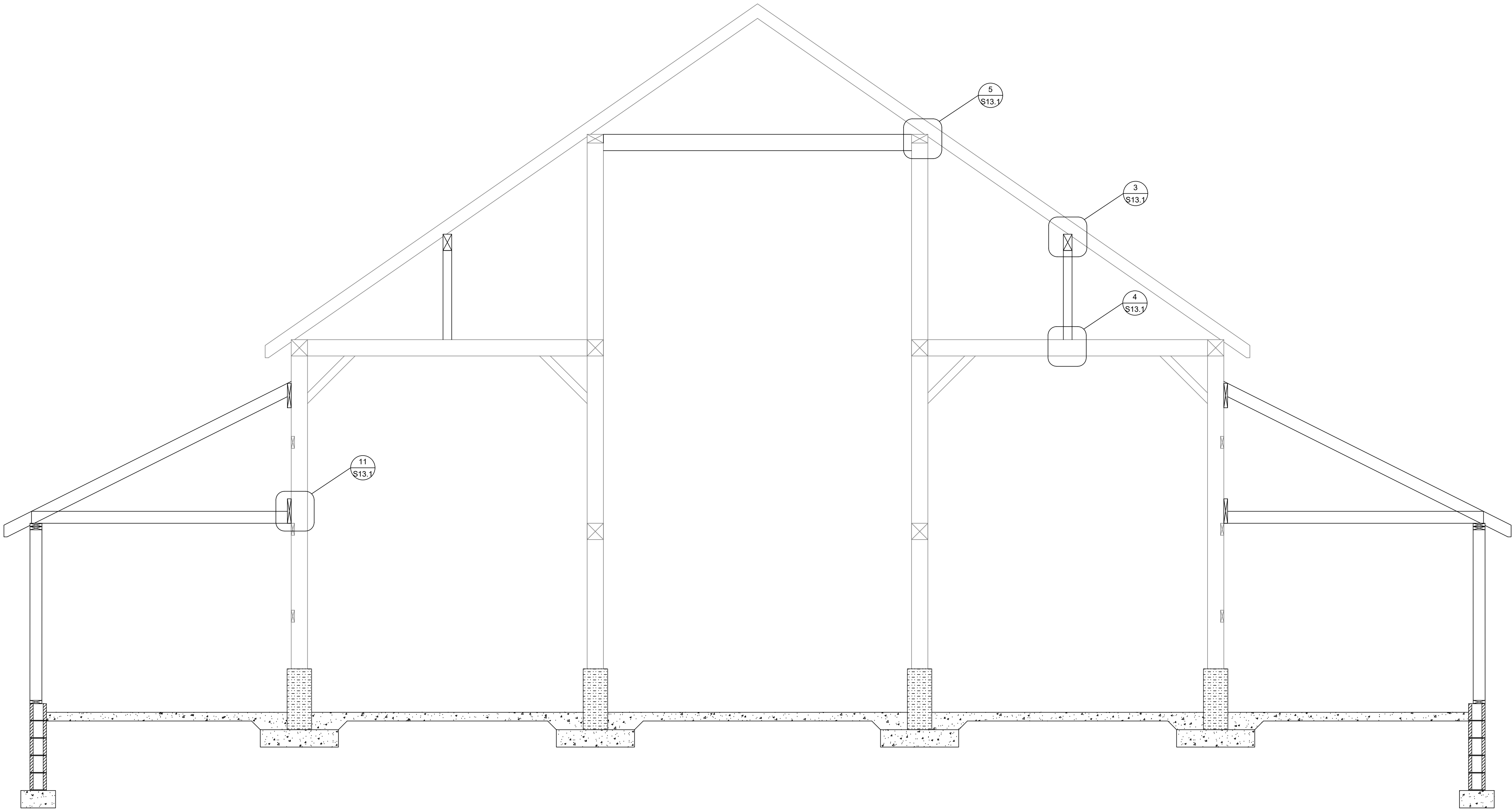
PROJECT # 2324

ISSUE:

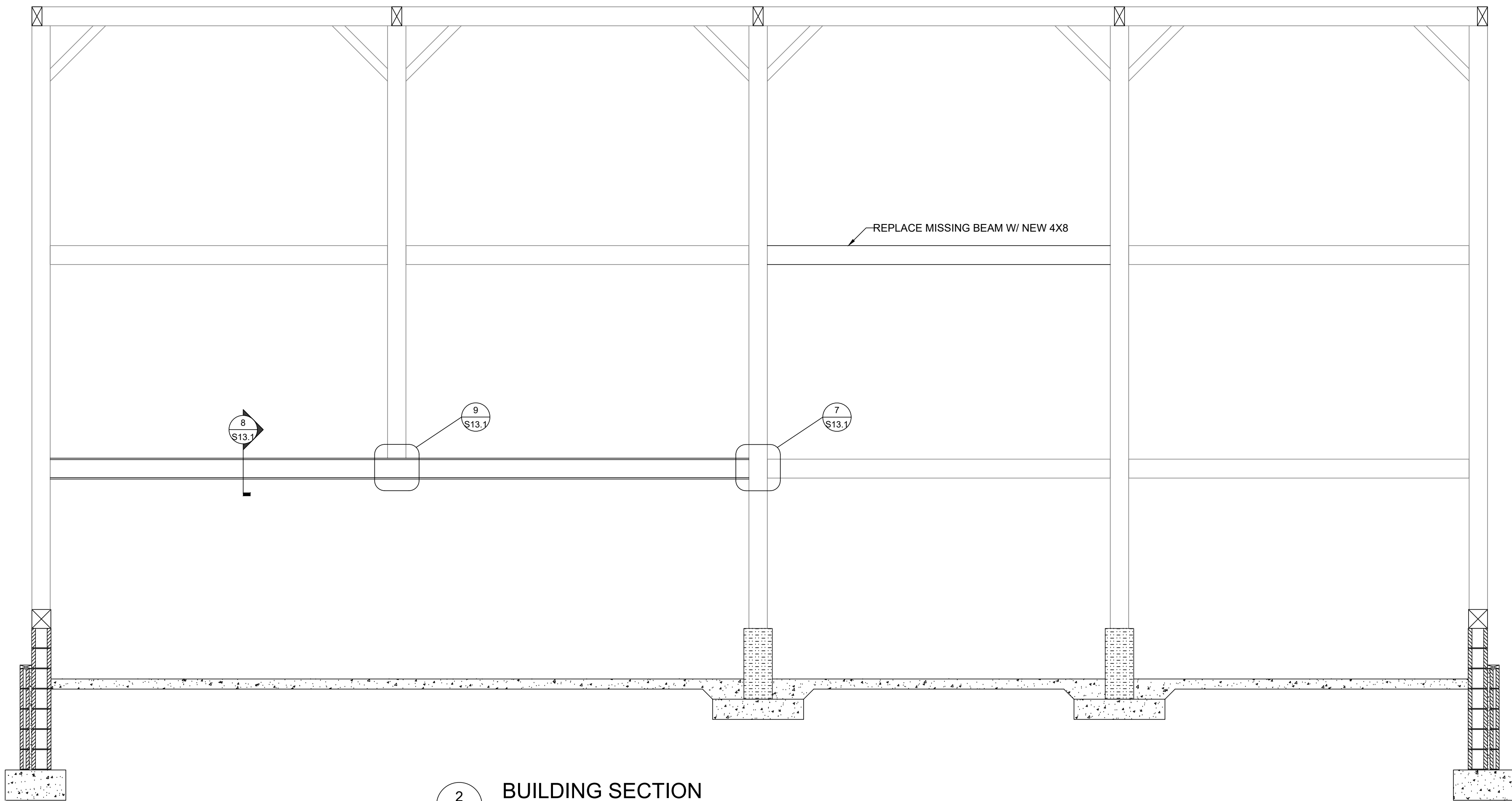
SD REVIEW	11-08-2024
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BUILDING SECTIONS

S12.1



1
S12.1
BUILDING SECTION
3/8" = 1'-0"



2
S12.1
BUILDING SECTION
3/8" = 1'-0"

PROJECT TEAM

ARCHITECT:



330.657.2800

CIVIL ENGINEER:



330.335.8222

STRUCTURAL ENGINEER:



330.733.8332

MEP ENGINEER:



216.531.8880



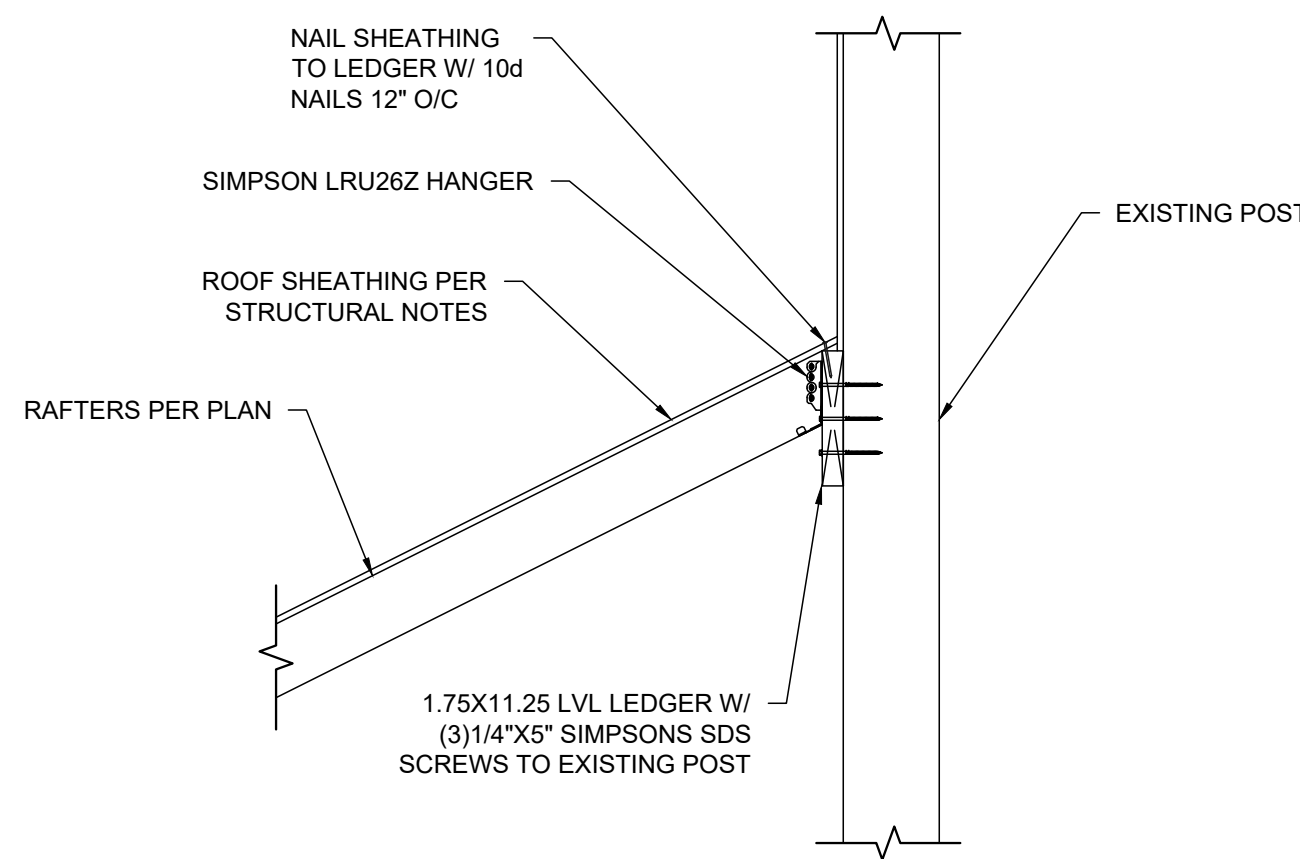
PROJECT # 2324

ISSUE:

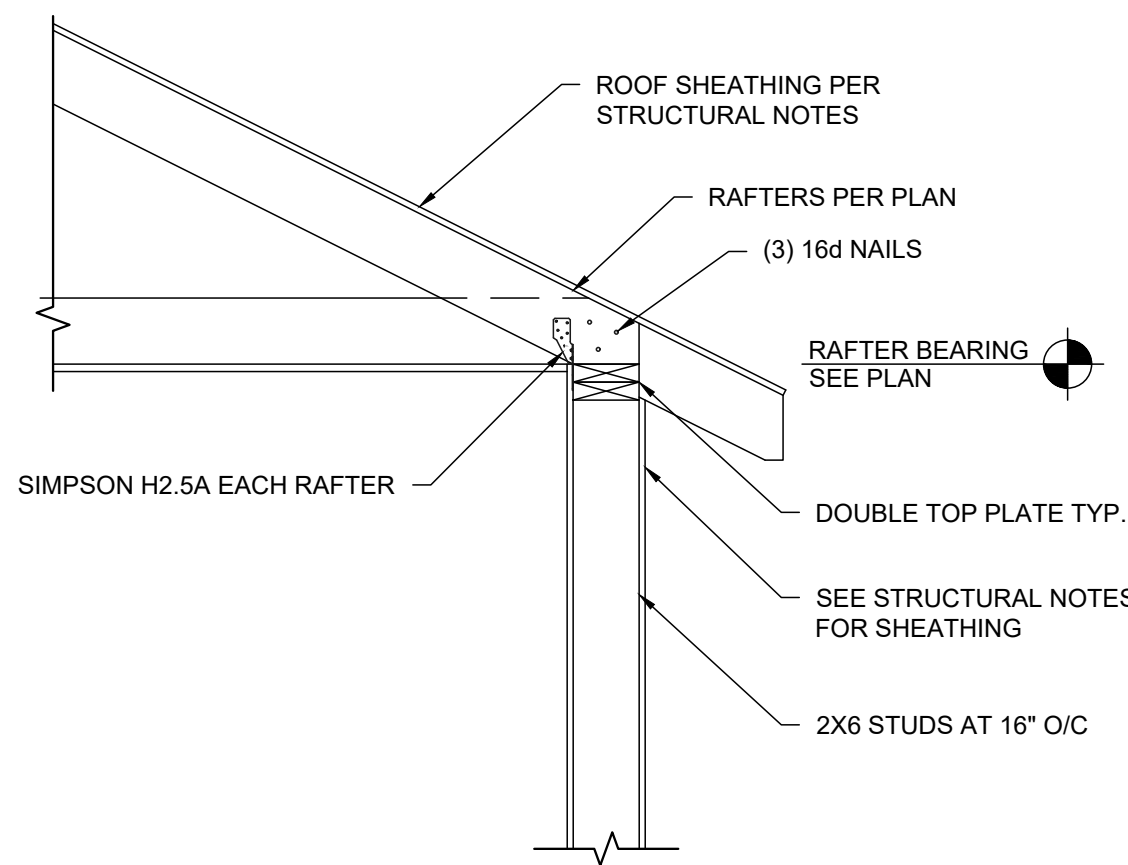
SD REVIEW	11-08-2024
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FRAMING DETAILS

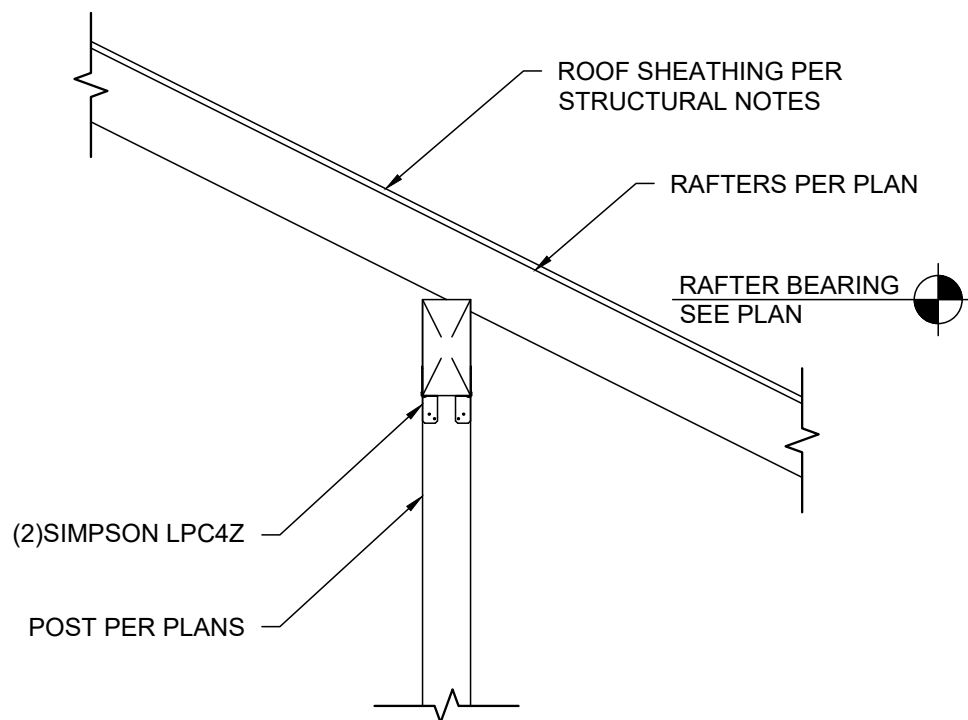
S13.1



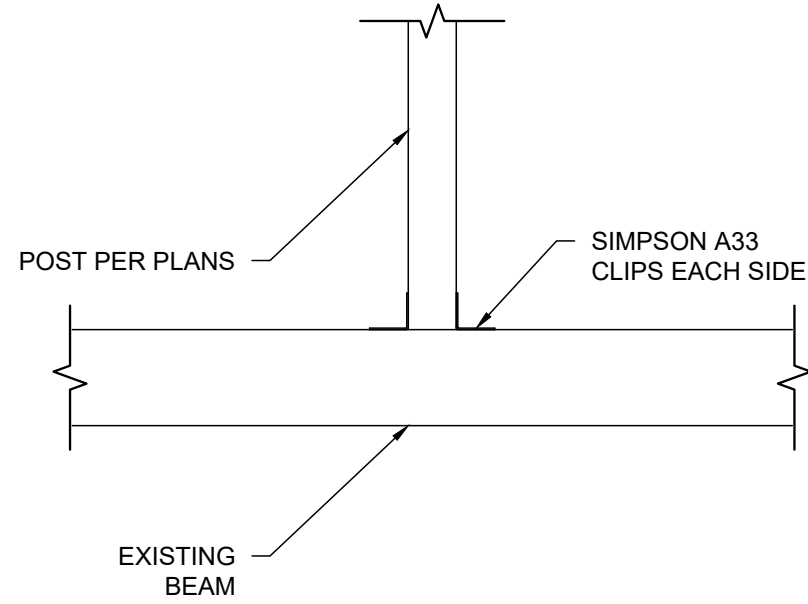
1 FRAMING DETAIL
S13.1 3/4" = 1'-0"



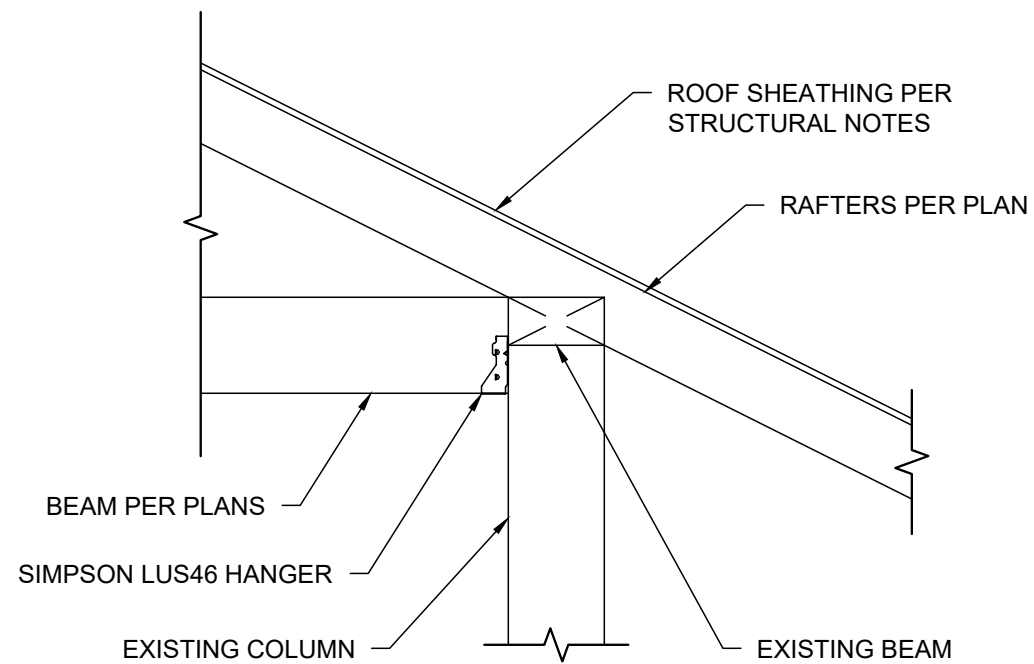
2 FRAMING DETAIL
S13.1 3/4" = 1'-0"



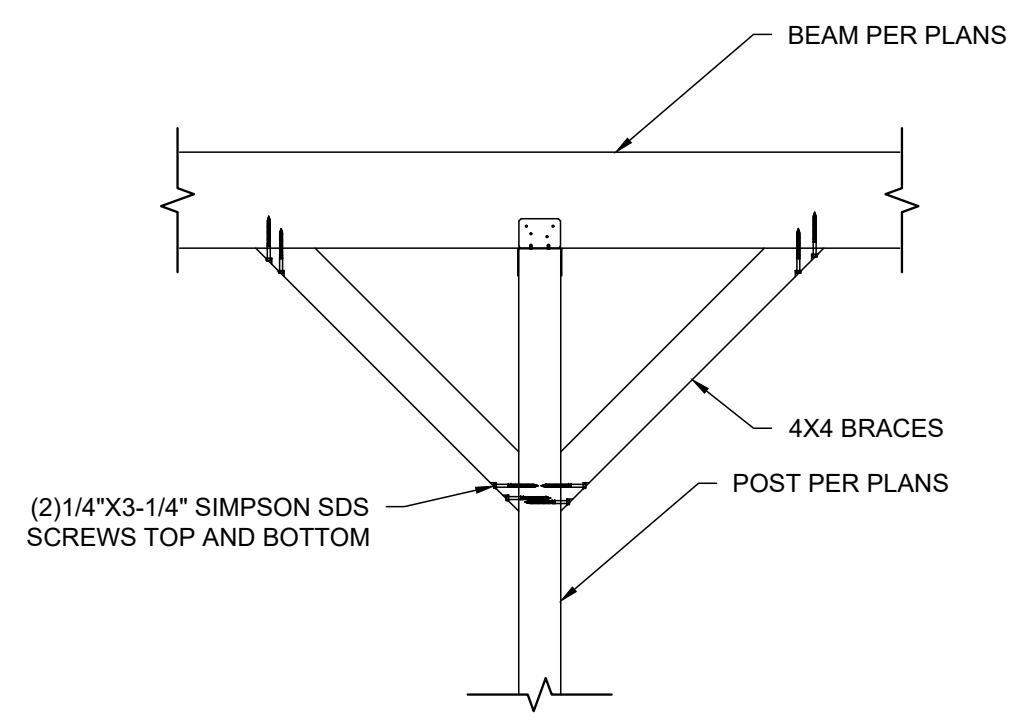
3 FRAMING DETAIL
S13.1 3/4" = 1'-0"



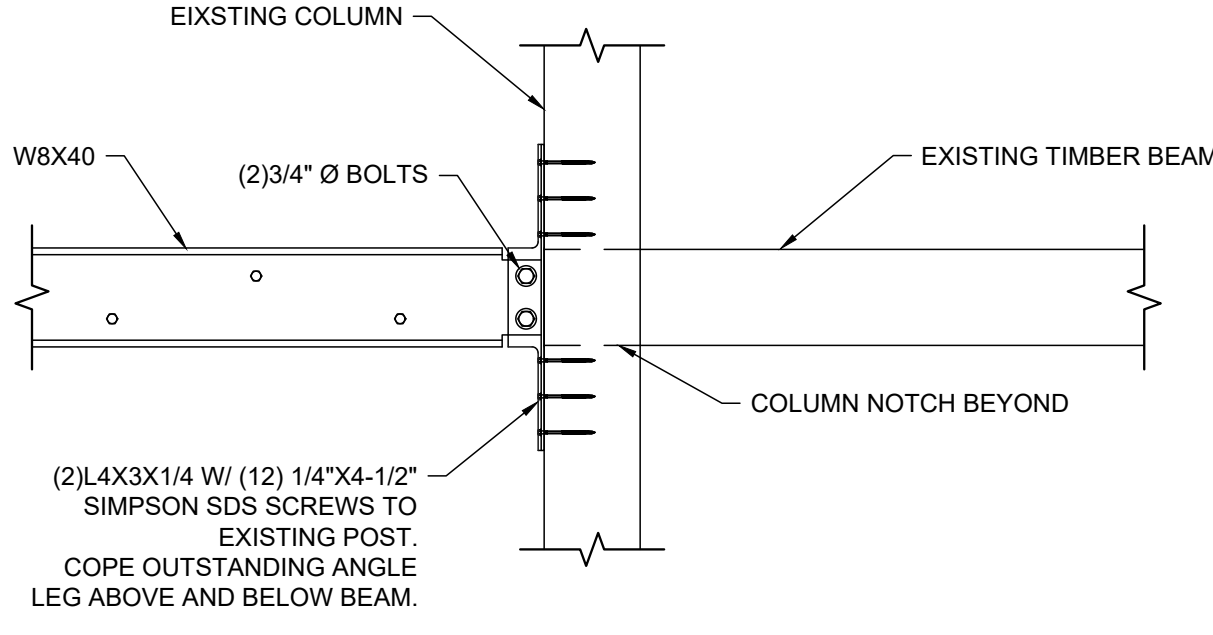
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S13.1 3/4" = 1'-0"



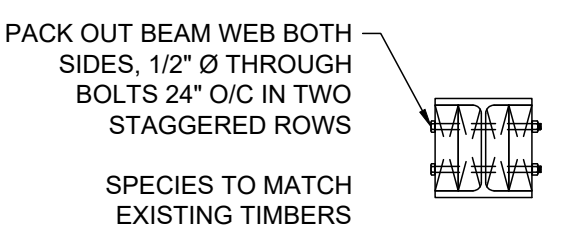
5 FRAMING DETAIL
S13.1 3/4" = 1'-0"



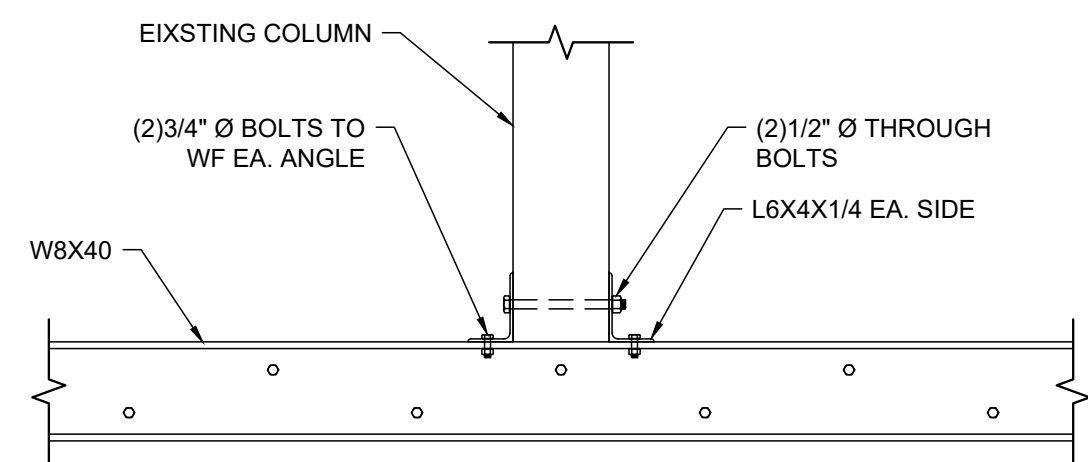
6 FRAMING DETAIL
S13.1 3/4" = 1'-0"



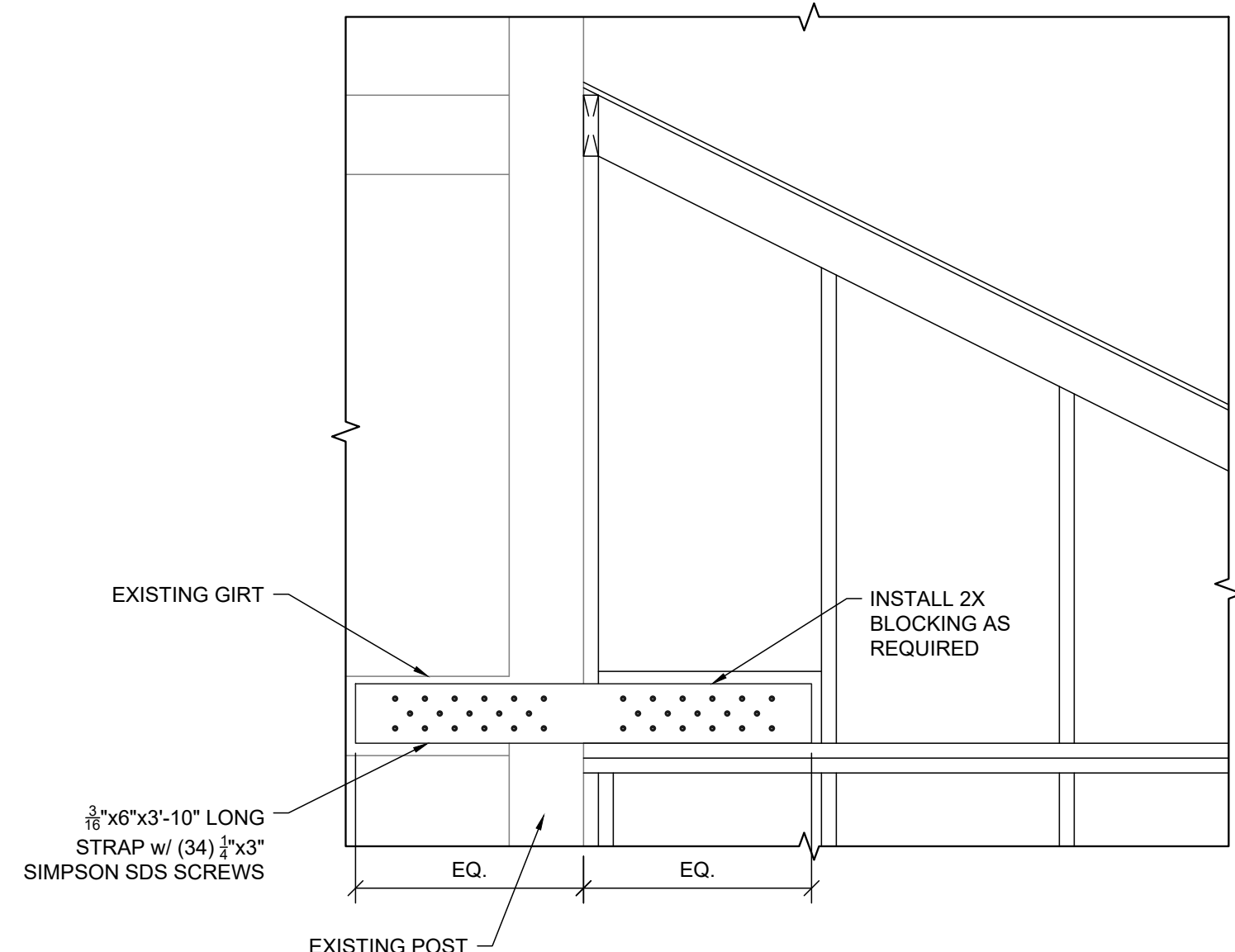
7 FRAMING DETAIL
S13.1 3/4" = 1'-0"



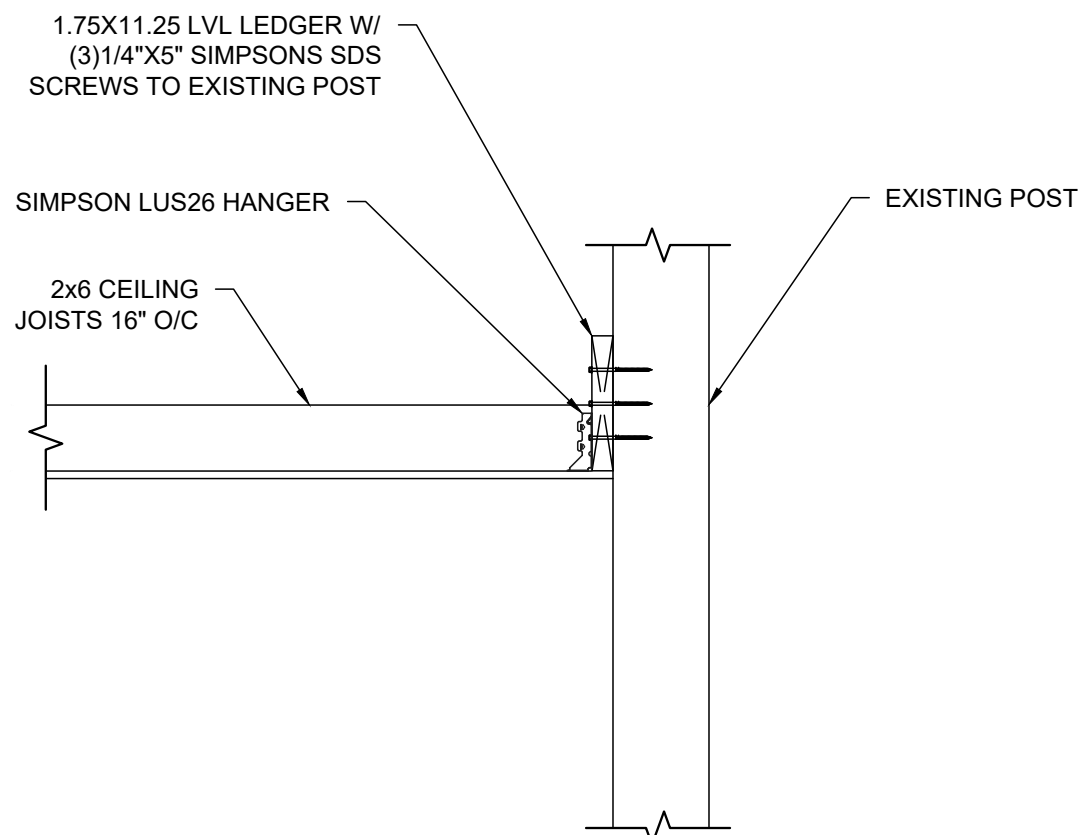
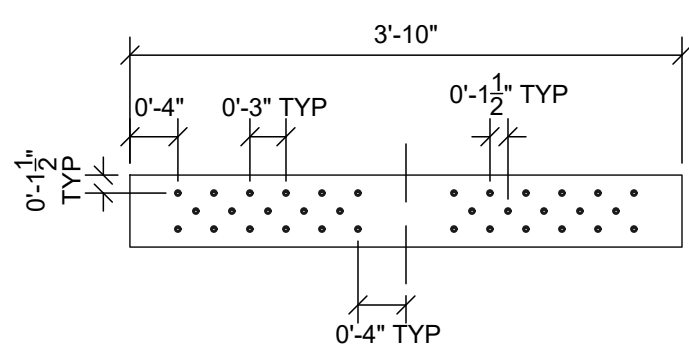
8 FRAMING DETAIL
S13.1 3/4" = 1'-0"



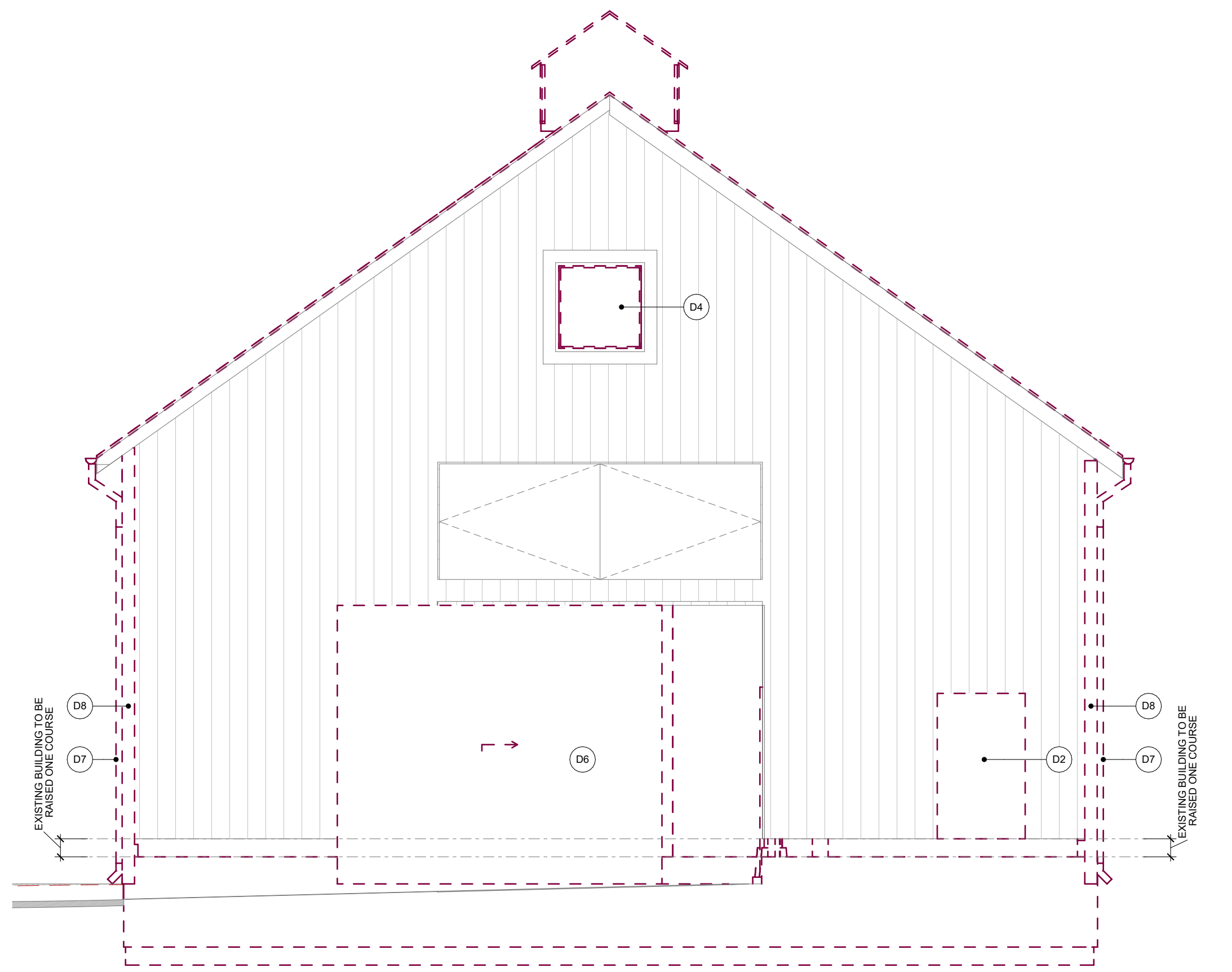
9 FRAMING DETAIL
S13.1 3/4" = 1'-0"



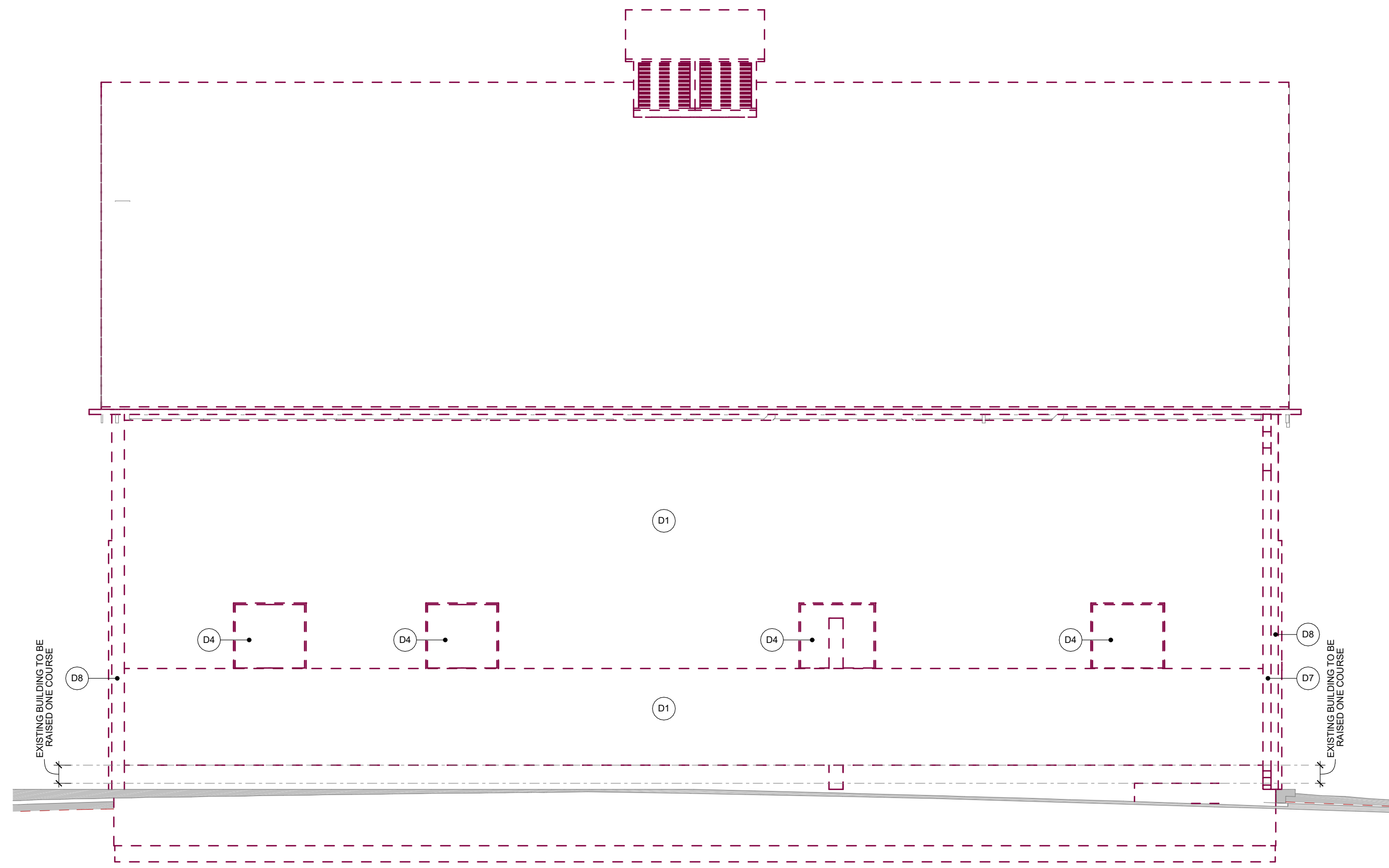
10 FRAMING DETAIL
S13.1 3/4" = 1'-0"



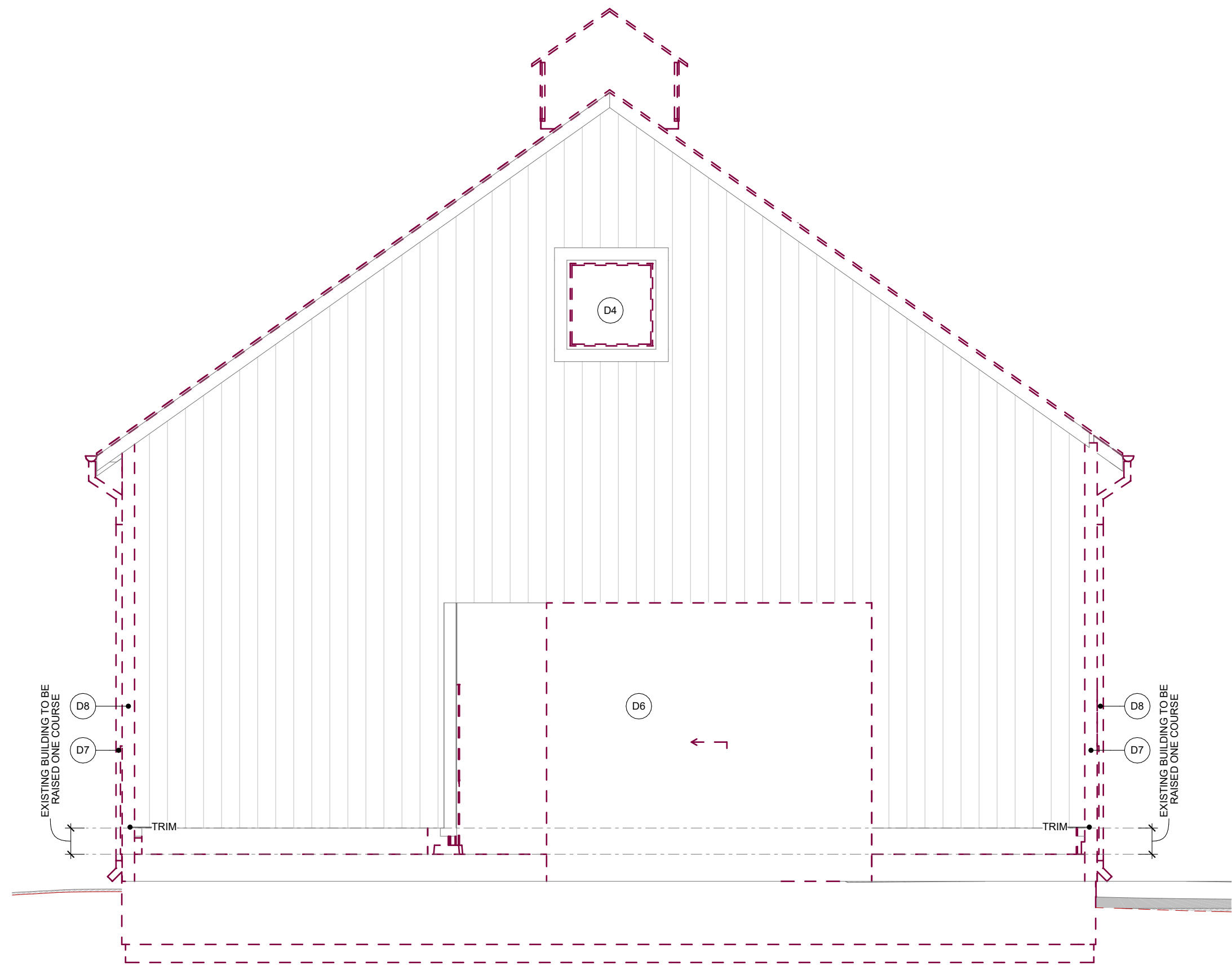
11 FRAMING DETAIL
S13.1 3/4" = 1'-0"



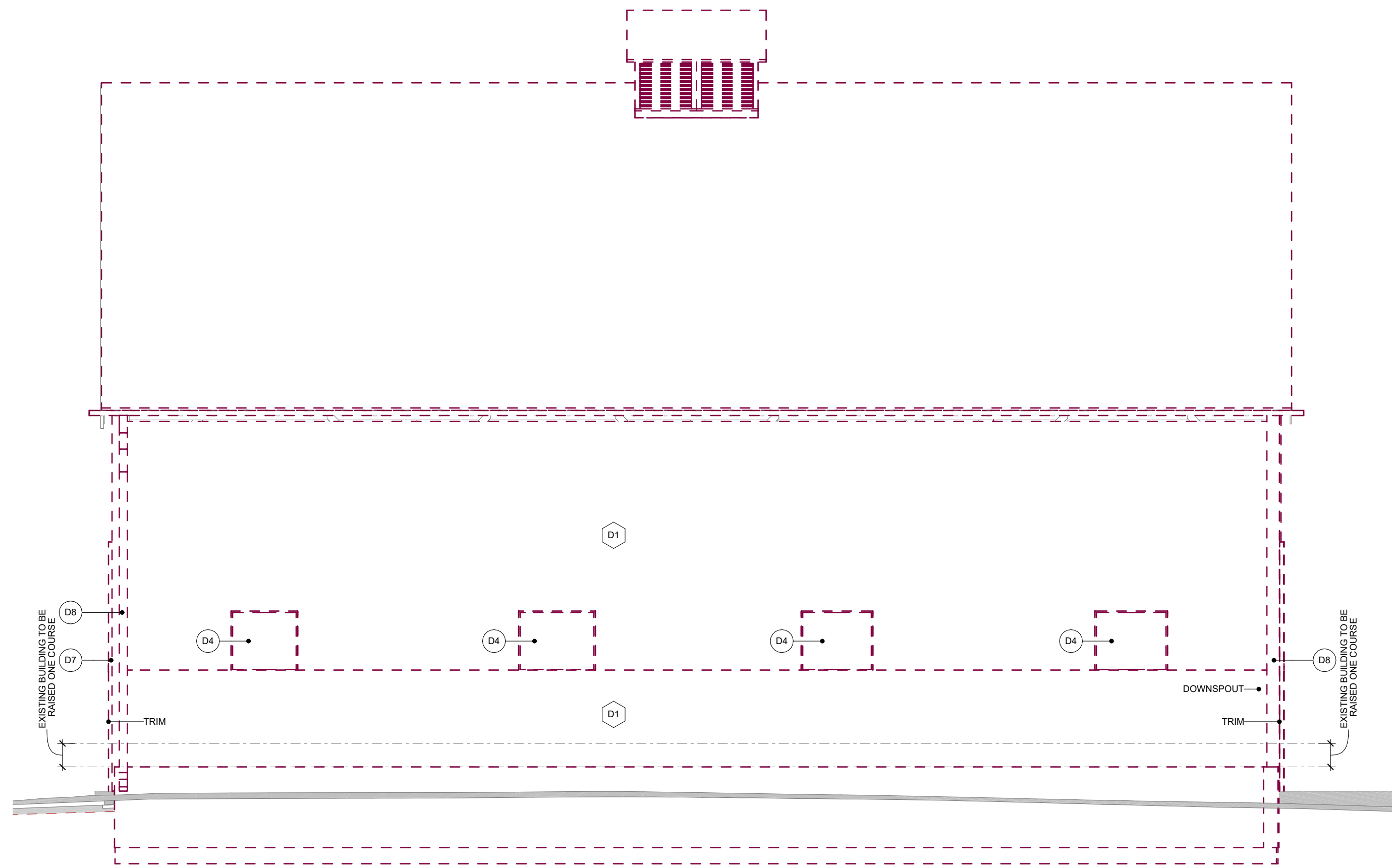
1 WEST DEMOLITION ELEVATION (FRONT OF BARN)
SCALE: 1/4" = 1'-0"



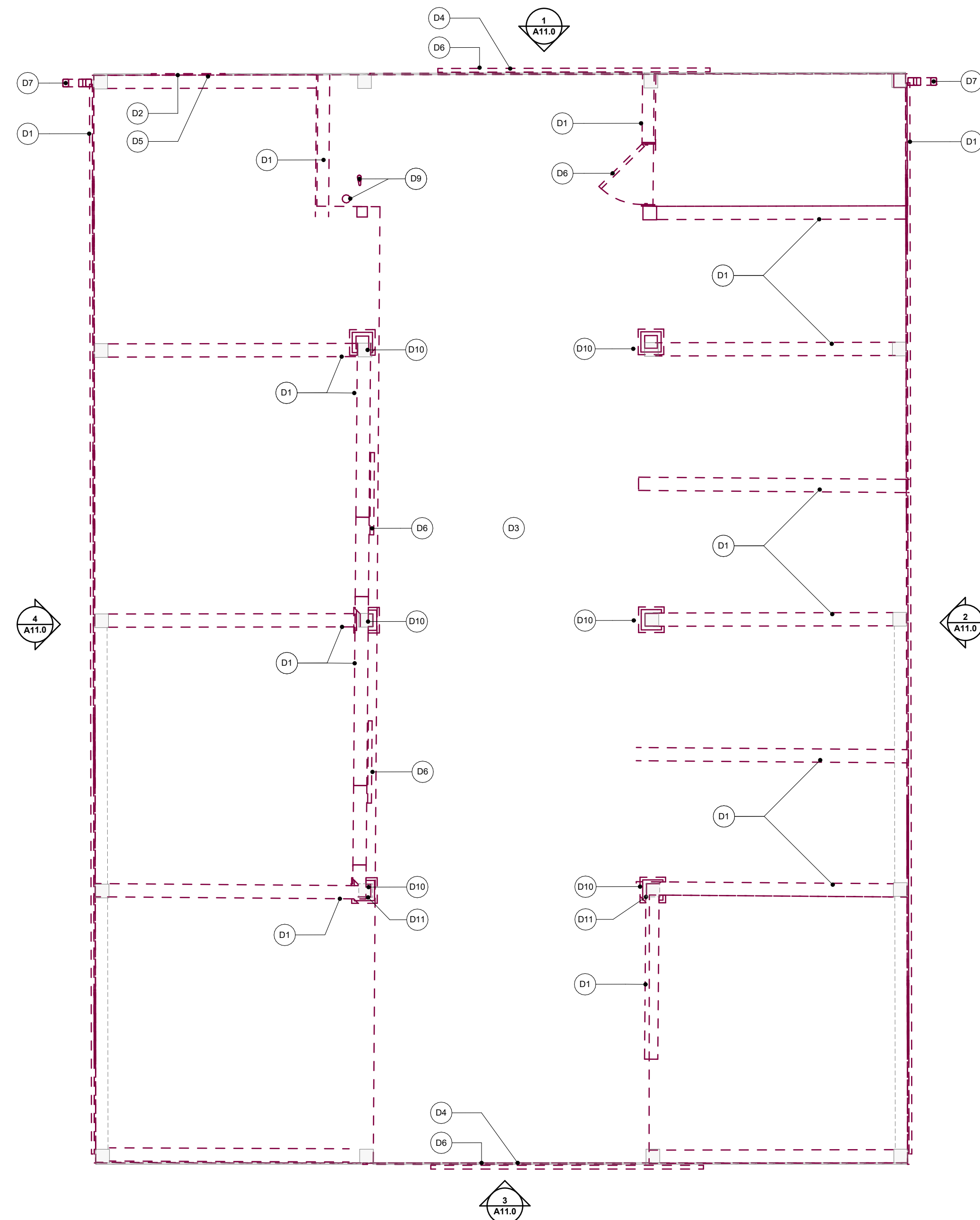
2 NORTH DEMOLITION ELEVATION (SIDE OF BARN)
SCALE: 1/4" = 1'-0"



3 EAST DEMOLITION ELEVATION (BACK OF BARN)
SCALE: 1/4" = 1'-0"



4 SOUTH DEMOLITION ELEVATION (SIDE OF BARN)
SCALE: 1/4" = 1'-0"



5 BARN - DEMOLITION PLAN
SCALE: 1/4" = 1'-0"

DEMOLITION GENERAL NOTES

1. THE BUILDING IS TO BE LIFTED OFF THE EXISTING FOUNDATION. REMOVE EXISTING FOUNDATION WALLS AND FOOTER. ADJUST TRIMMER FRAME AND WALLS TO SQUARE THE BUILDING. USE ADJUSTED FRAME WALLS TO ESTABLISH FINAL LAYOUT OF NEW FOUNDATION.
2. IN DEMOLITION AREAS, REMOVE ALL MISCELLANEOUS ITEMS ON WALLS.
3. FILL AND LEVEL ALL HOLES IN FLOORS AND WALLS AFTER REMOVAL OR ADDITION OF PIPES, CONDUITS, AND OTHER PENETRATING ITEMS.
4. REFER TO MECHANICAL AND ELECTRICAL DRAWINGS FOR REQUIRED DEMOLITION AND RELATED WORK.
5. TAKE ALL NECESSARY PRECAUTIONS TO PREVENT DAMAGE TO ADJACENT AREAS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DAMAGE INCURRED.
6. ALL DEMOLITION ACTIVITIES SHALL BE COORDINATE WITH THE OWNER.
7. PATCH ALL EXISTING ADJACENT INTERIOR FINISHES TO REMAIN AS UNDISTURBED BY THE DEMOLITION TO MATCH ADJACENT SURFACES.
8. ALL DEMOLISHED ITEMS ARE TO REMAIN THE PROPERTY OF THE OWNER AT THEIR DISCRETION.
9. ALL STRUCTURAL MEMBERS ARE TO REMAIN AND BE PROTECTED UNLESS OTHERWISE NOTED. SOFT/SODA BLAST AND PREPARE FOR NEW PAINT.
10. NOTIFY ARCHITECT PRIOR TO DEMOLITION IF ITEM INDICATED TO BE REMOVED IS SUSPECTED TO BE A STRUCTURAL ELEMENT.
11. ALL EXISTING SIDING IS TO SOFT/SODA BLASTED AND PREPARED FOR NEW PAINT.
12. REMOVE ALL EXISTING FIXTURES AND FINISHES. COORDINATE WITH OWNER AND SALVAGE FOR REUSE.
13. REMOVE EXISTING FLOOR AND ALL ASSOCIATED PLUMBING EQUIPMENT COMPLETELY. PREP AND CLEAN AREA TO RECEIVE NEW FLOORING.
14. REMOVE ALL EXISTING CONDUIT AND LIGHT FIXTURES.
15. REMOVE ENTIRE WALL TO UNDERSIDE OF DECK UNLESS NOTED OTHERWISE.
16. THE EXISTING METAL ROOF IS TO BE REMOVED AND SALVAGED FOR REINSTALLATION. PROVIDE SIPS OVER EXISTING RAFTERS.

DEMOLITION CODED NOTES

NOTE: NOT ALL CODED NOTES OCCUR EVERY SHEET

- (D1) REMOVE WALL IN ITS ENTIRETY. REMOVAL OF WALL SHALL BE DONE IN SUCH MANNER AS TO NOT DAMAGE EXISTING ADJOINING WALLS.
- (D2) REMOVE PORTION OF WALL TO ACCOMMODATE NEW DOOR OR CASED OPENING. REFER TO PLANS AND DOOR SCHEDULE FOR ADDITIONAL INFORMATION.
- (D3) EXAMINE EXISTING CONDITION OF BEAMS. PATCH WOOD WITH WOOD PUTTY, SAND, AND STAIN BEAMS.
- (D4) REMOVE WINDOW IN ITS ENTIRETY.
- (D5) REMOVE SIDING TO EXISTING POST. SALVAGE FOR REUSE. REMOVE SECONDARY HORIZONTAL FRAMING.
- (D6) REMOVE DOOR, FRAME AND ANCHORS IN THEIR ENTIRETY. THE REMOVAL OF DOOR, FRAME AND ANCHORS SHALL BE DONE IN SUCH MANNER AS TO NOT DAMAGE EXISTING ADJOINING WALLS. PREP AND CLEAN EXISTING WALL OPENING FOR NEW DOOR OR WINDOW INSTALLATION OR FILL TO MATCH EXISTING.
- (D7) REMOVE EXISTING DOWNSPOUTS.
- (D8) REMOVE EXISTING TRIM.
- (D9) REMOVE EXISTING YARD HYDRANT AND ASSOCIATED PLUMBING.
- (D10) REMOVE EXISTING STONE COLUMN BASE AND FOUNDATION. PREP AREA FOR NEW FOOTING AND STONE BASE. REFER TO STRUCTURAL DRAWINGS.
- (D11) COLUMN TO BE CUT. REFER TO STRUCTURAL DRAWINGS.

DEMOLITION LEGEND

- EXISTING TO REMAIN
- ELEMENTS TO BE REMOVED

PROJECT TEAM

ARCHITECT:



CIVIL ENGINEER:



STRUCTURAL ENGINEER:



MEP ENGINEER:



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DEMOLITION DRAWINGS

PROJECT TEAM

ARCHITECT:



CIVIL ENGINEER:



STRUCTURAL ENGINEER:



MEP ENGINEER:



NORTH FORK PRESERVE BARN RENOVATION

4400 EVERETT ROAD, AKRON, OH 44333



PROJECT # 2324

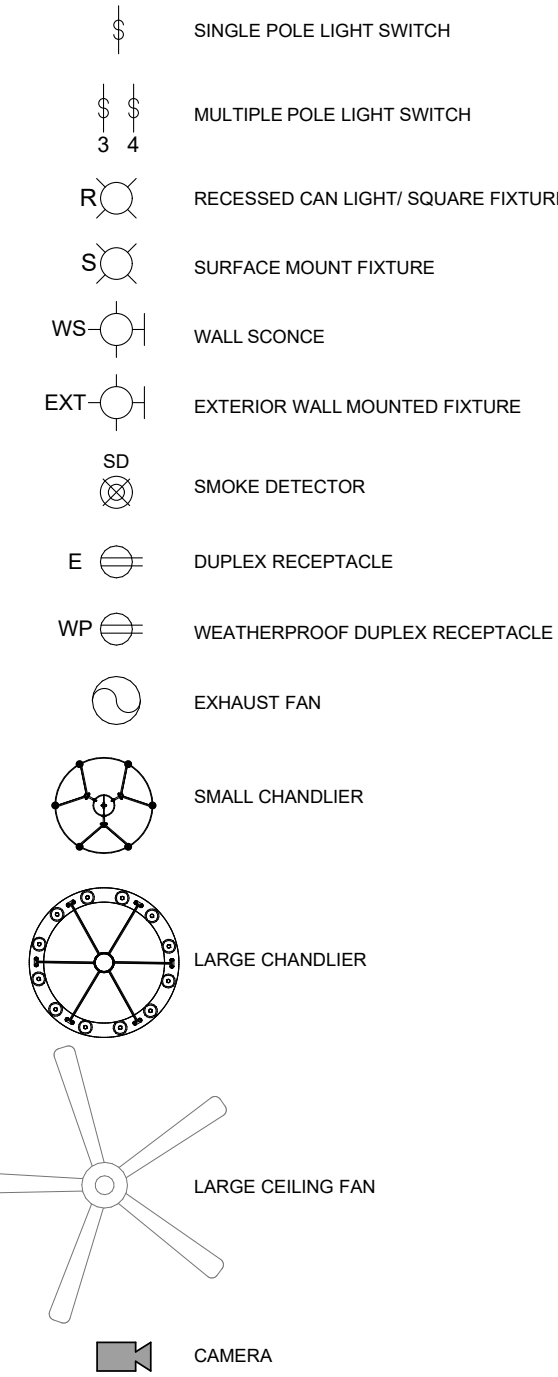
ISSUE:

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FINAL REVIEW	03-07-2025

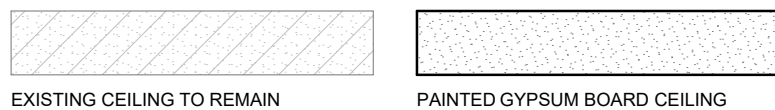
REFLECTED CEILING
PLAN

A11.2

ELECTRICAL INFORMATION LEGEND



CEILING TYPE LEGEND



CEILING PLAN NOTES

OUTLET SPACING & LOCATIONS
APPLIANCE RECEPTACLE OUTLETS FOR SPECIFIC APPLIANCES SHALL BE INSTALLED WITHIN 6 FT OF THE INTENDED LOCATION OF THE APPLIANCE.
RECEPTACLE OUTLETS SHALL BE INSTALLED SO THAT NO POINT ALONG THE WALL LINE IS MORE THAN 24 INCHES MEASURED HORIZONTALLY FROM A RECEPTACLE OUTLET IN THAT SPACE.

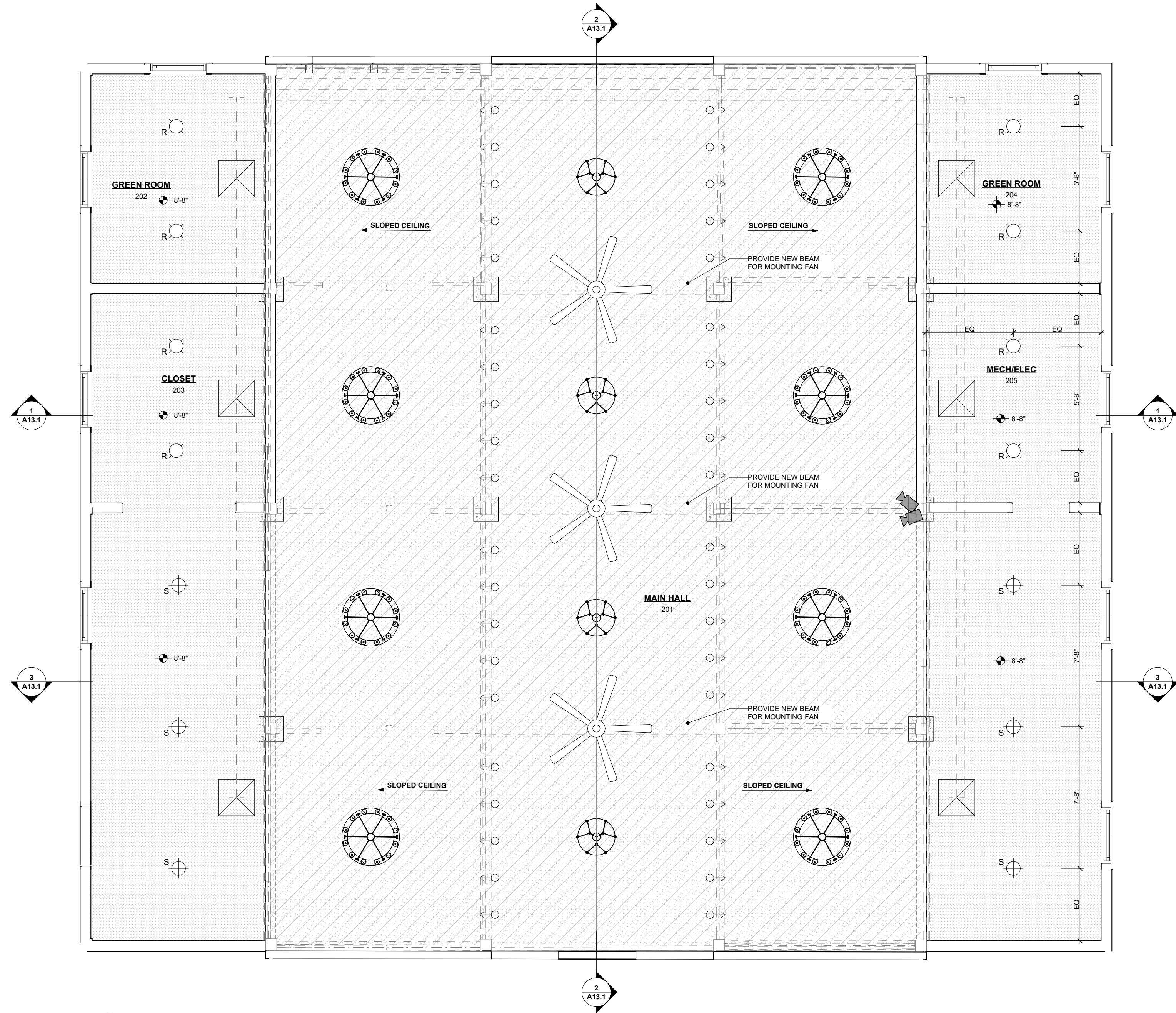
PER NEC 210.8, THE FOLLOWING LOCATIONS SHALL HAVE GROUND-FAULT CIRCUIT INTERRUPTER PROTECTION: 1) BATHROOMS; 2) GARAGES & ACCESSORY BUILDINGS THAT HAVE A FLOOR LOCATED AT OR BELOW GRADE LEVEL, NOT INTENDED AS HABITABLE ROOMS AND LIMITED TO STORAGE AREAS, WORK AREAS, AND AREAS OF SIMILAR USE; 3) OUTDOORS; 4) CRAWL SPACES; 5) BASEMENTS; 6) KITCHENS; 7) SINKS; 8) BATH TUBS; 9) BATH TUBS OR SHOWER STALLS; 10) LAUNDRY AREAS. FOR ADDITIONAL ELECTRICAL INFORMATION CONSULT NEC.

VERIFY LOCATION, NUMBER, AND SWITCHING OF FIXTURES WITH OWNER

LIGHTING LAYOUT FOR REFERENCE ONLY. LIGHTING LAYOUT TO BE FINALIZED PRIOR TO INSTALLATION.

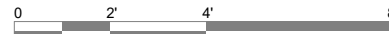
CEILING PLAN NOTES

- CEILING MOUNTED FIXTURES INCLUDING, BUT NOT LIMITED TO, LIGHTS, DIFFUSERS, EXIT SIGNS, FIRE ALARM STROBES, SMOKE DETECTORS TO BE CENTERED IN AREA IN WHICH THEY OCCUR UNLESS NOTED OTHERWISE.
- EXIT SIGNS INDICATED ABOVE EXCESS DOORS TO BE LOCATED ON CENTERLINE OF DOOR SWING.
- ARCHITECTURAL REFLECTED CEILING PLAN DISPLAYS GENERAL LOCATION AND LAYOUT SCHEME OF CEILING AND CEILING MOUNTED FIXTURES. CONSULTANT DRAWINGS SHOULD BE UTILIZED FOR FIXTURE TYPE AND QUANTITIES. WHERE MAJOR DISCREPANCIES EXIST BETWEEN ARCHITECTURAL AND CONSULTANT DOCUMENTS RELATING TO LOCATION OF CEILING MOUNTED ITEMS, ARCHITECTURAL REFLECTED CEILING PLAN SHOULD GOVERN. FOR MAJOR DISCREPANCIES (GREATER THAN 2'), NOTIFY ARCHITECT PRIOR TO PROCEEDING WITH WORK. FINAL LOCATION TO BE VERIFIED PRIOR TO INSTALLATION.
- ALL GYPSUM BOARD CEILINGS AND SOFFITS SHALL BE PAINTED UNLESS NOTED OTHERWISE. REFERENCE FINISH DRAWING AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.
- EXISTING LIGHT FIXTURES TO BE REMOVED. PATCH/AND REPAIR AREAS AFFECTED BY CONSTRUCTION.
- PATCH/AND REPAIR EXISTING BEAM IN LOCATION WHERE EXISTING LIGHT FIXTURE WAS REMOVED.
- PATCH/AND REPAIR EXISTING BEAM IN LOCATIONS WHERE EXISTING CROSS JOIST WAS REMOVED.
- PAINT EXISTING BEAMS, COLOR TO BE SELECTED BY ARCHITECT.



1 REFELCTED CEILING PLAN

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



PROJECT TEAM

ARCHITECT:

P PENINSULA
ARCHITECTS
330.657.2800

CIVIL ENGINEER:

LEWIS LAND PROFESSIONALS
Civil Engineering & Land Surveying
330.335.8222

STRUCTURAL ENGINEER:

TTR Engineers
330.733.8332

MEP ENGINEER:

DENK ASSOCIATES
CORPORATE PROJECT ENGINEERS
216.531.8880



NORTH FORK PRESERVE BARN RENOVATION

4400 EVERETT ROAD, AKRON, OH 44333

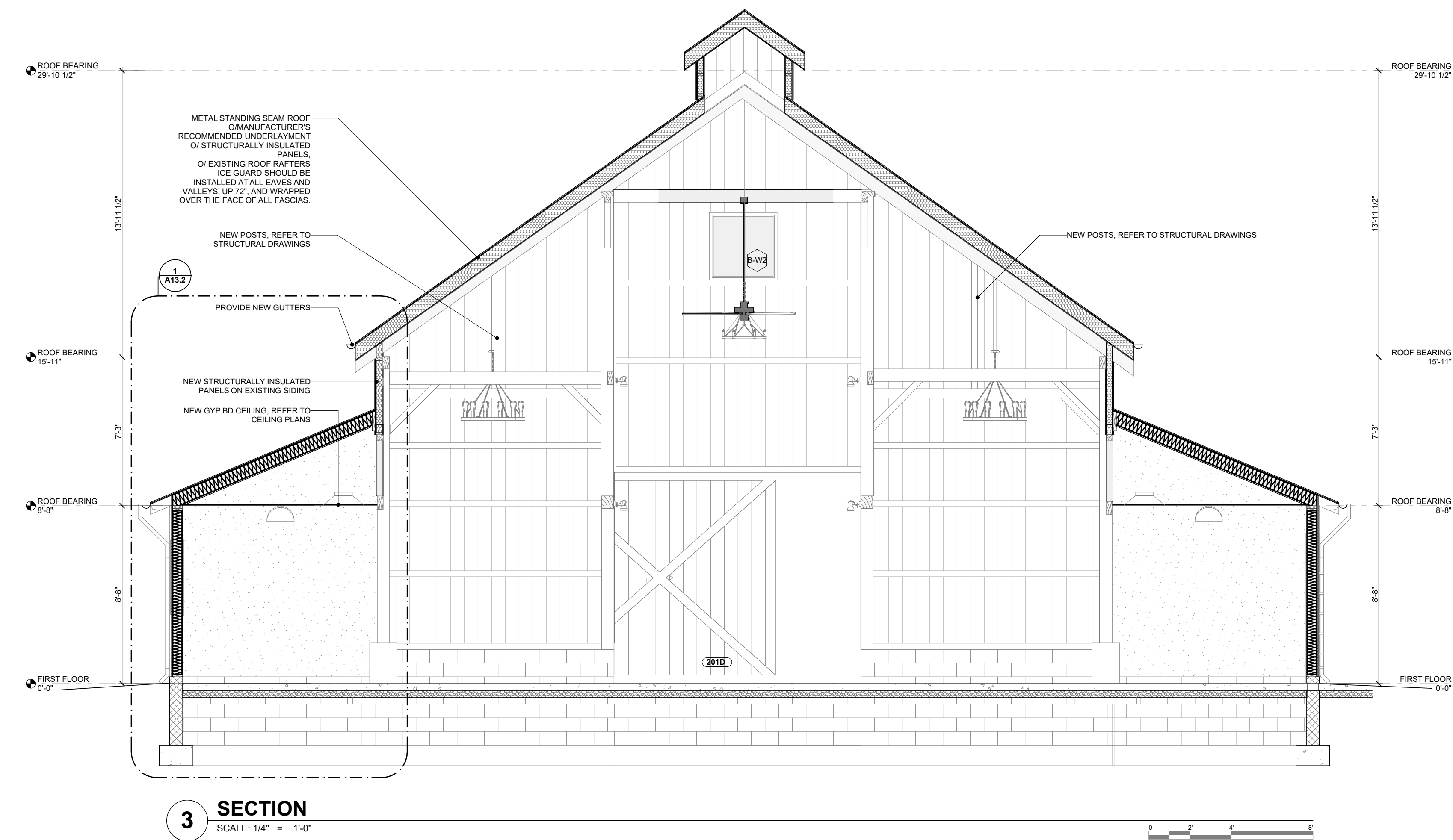
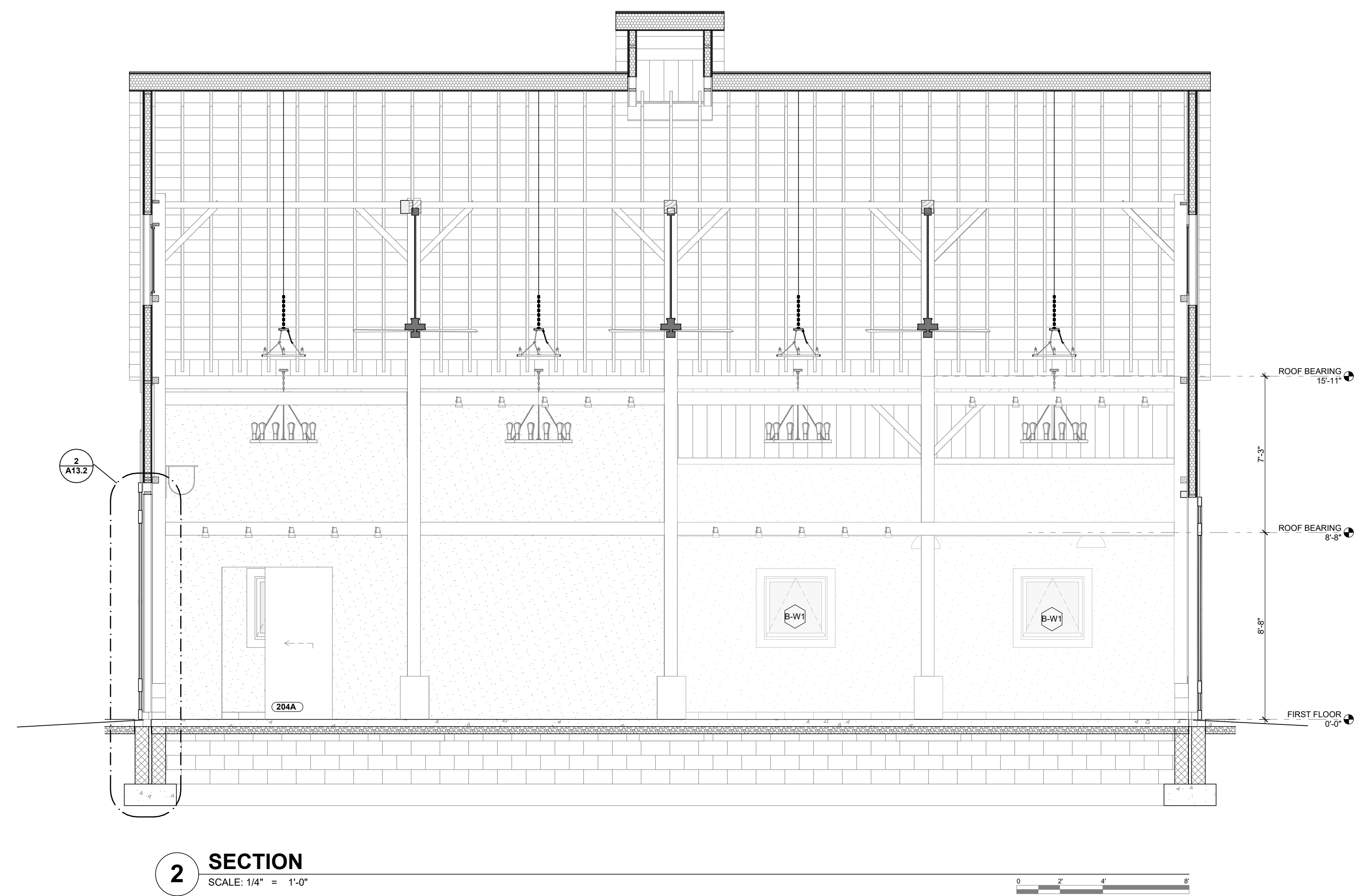
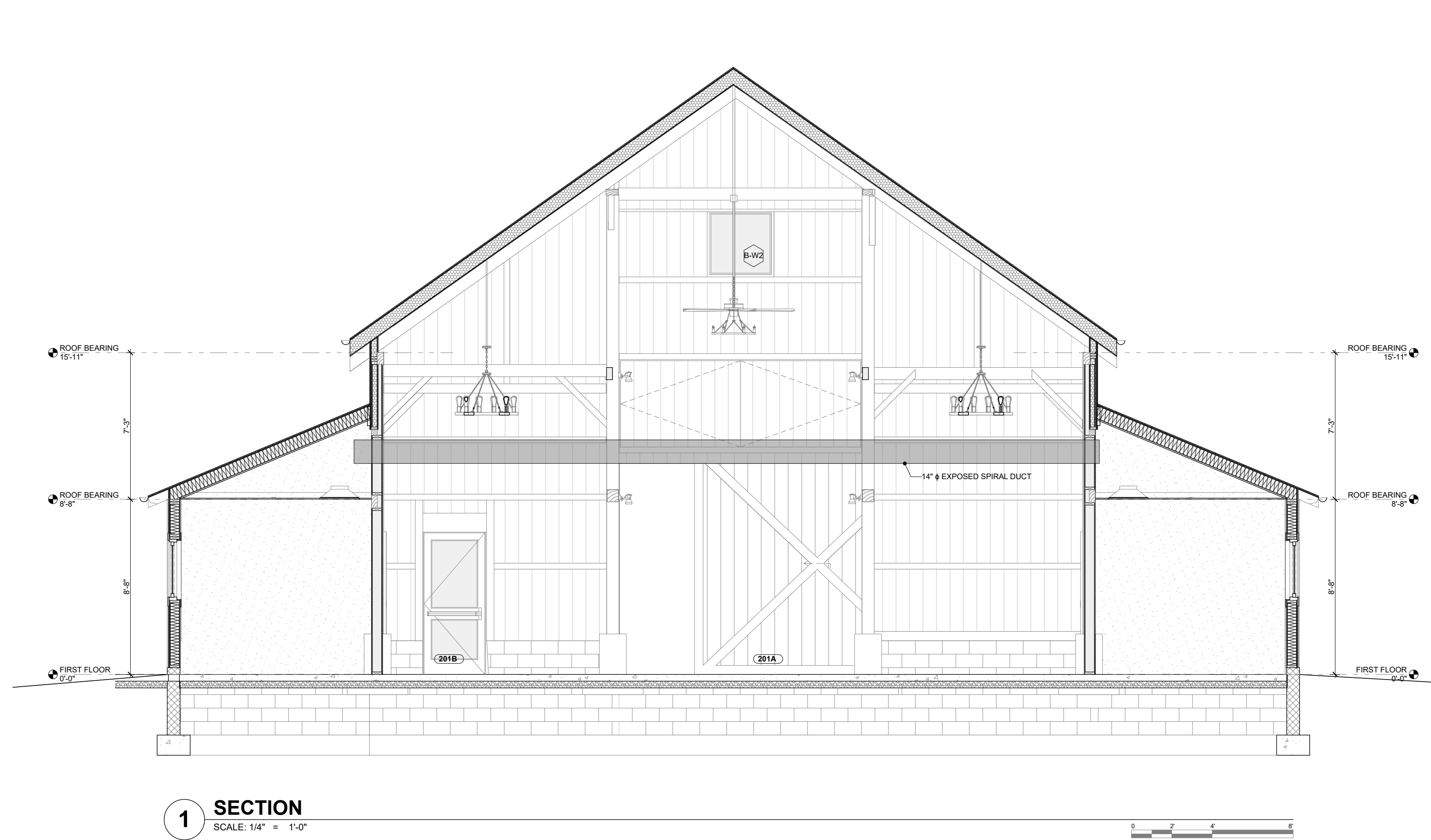
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BUILDING SECTIONS

A13.1



PROJECT TEAM

ARCHITECT:



CIVIL ENGINEER:



STRUCTURAL ENGINEER:



MEP ENGINEER:



NORTH FORK PRESERVE BARN RENOVATION

4400 EVERETT ROAD, AKRON, OH 44333

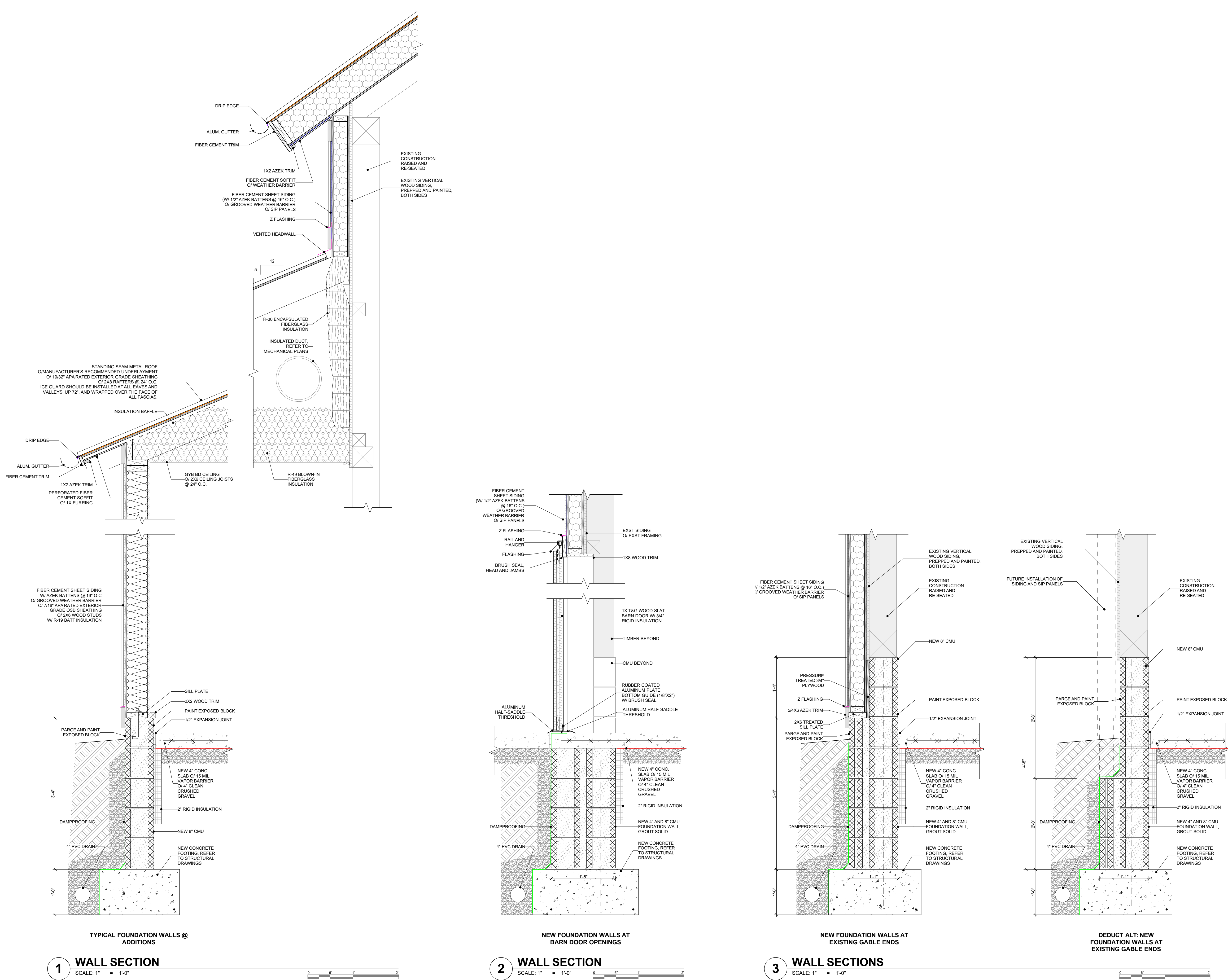
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WALL SECTIONS

A13.2



PROJECT TEAM

ARCHITECT:



330.657.2800

CIVIL ENGINEER:



STRUCTURAL ENGINEER:



330.733.8332

MEP ENGINEER:



216.531.8880



PROJECT # 2324

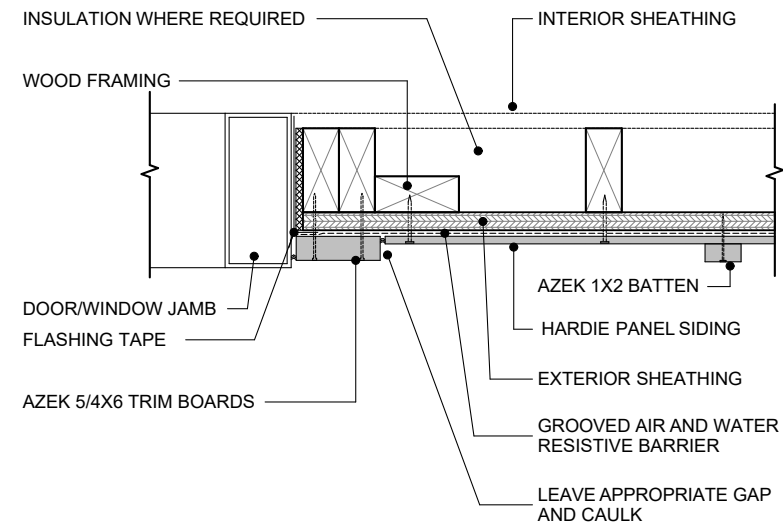
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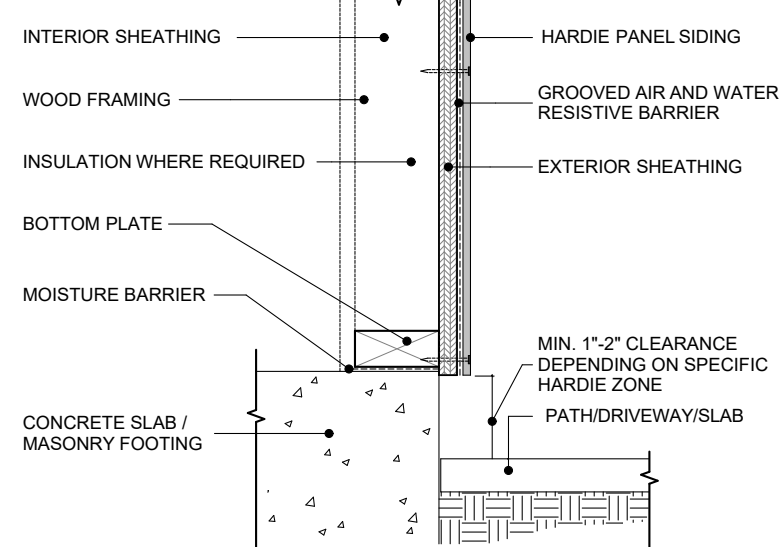
DETAILS

A13.3

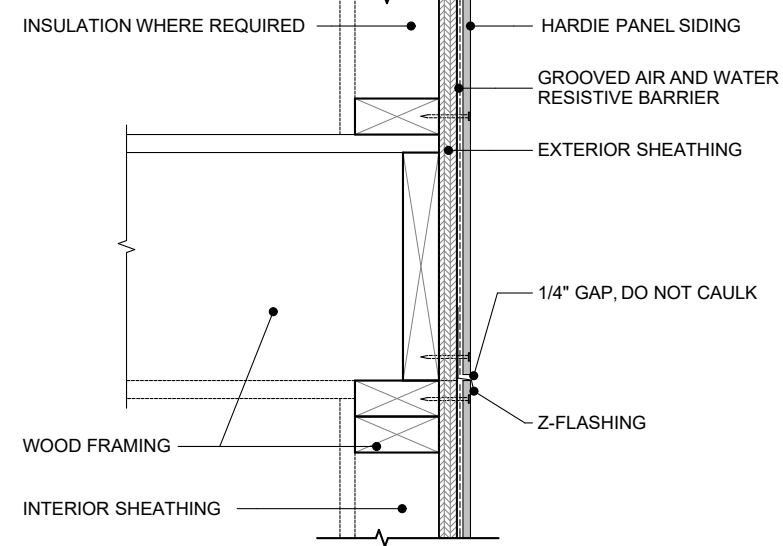
DOOR/WINDOW JAMB



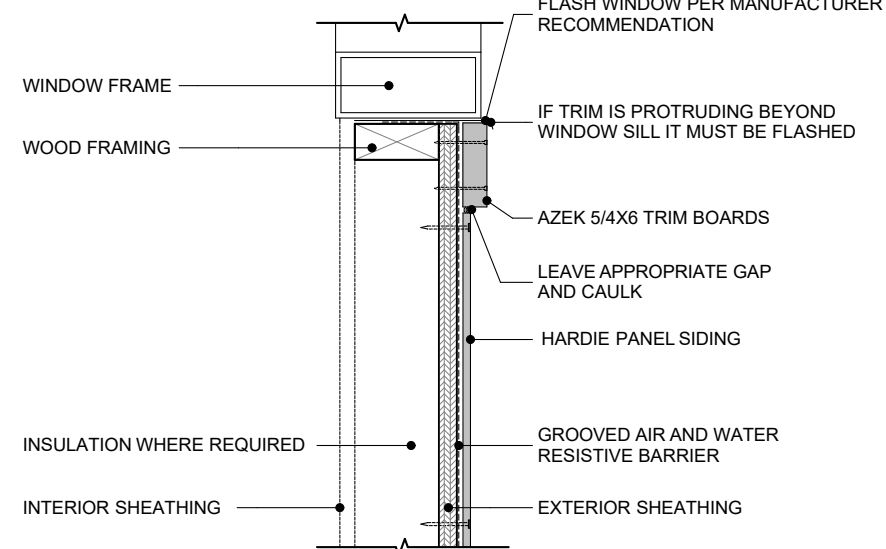
HARDSCAPE CLEARANCES, DECKS, PORCHES, PATIOS, WALKWAYS, ROOFS, ETC.



HORIZONTAL JOINT



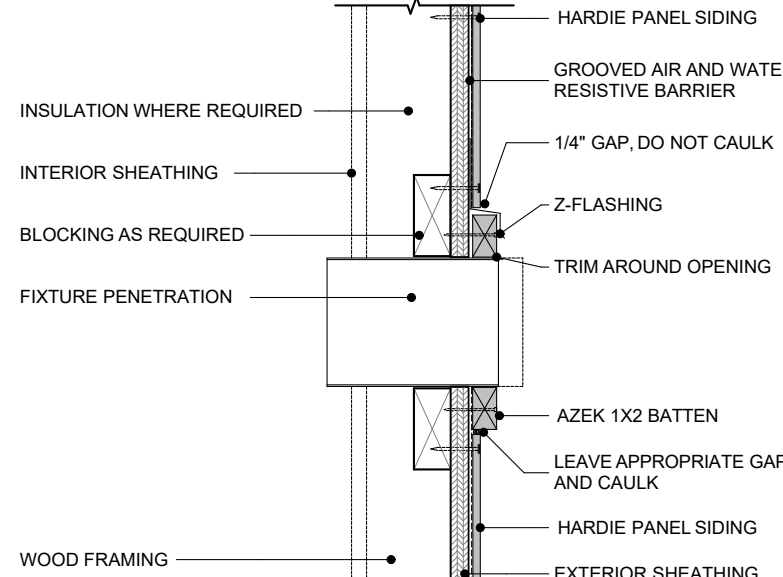
WINDOW SILL



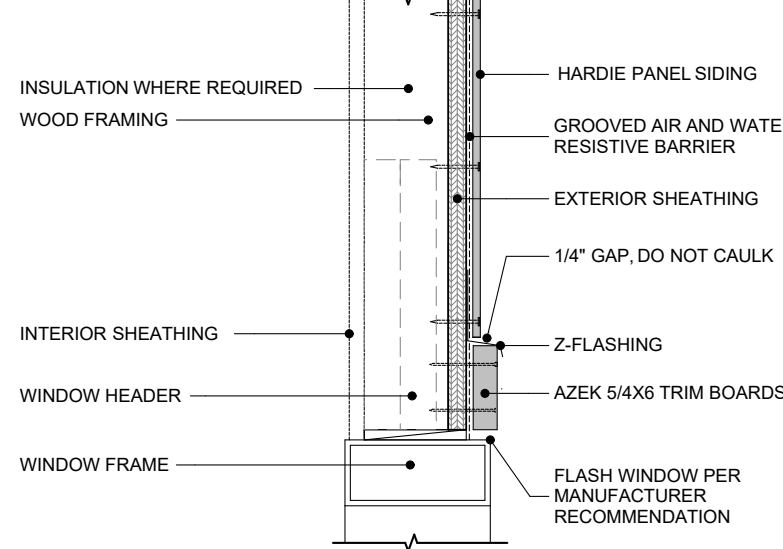
1 TYPICAL SIDING DETAILS

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

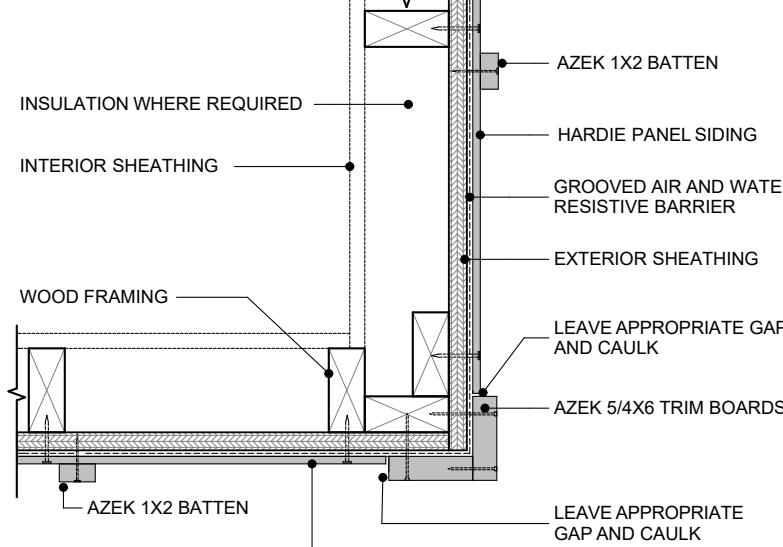
FIXTURE PENETRATION



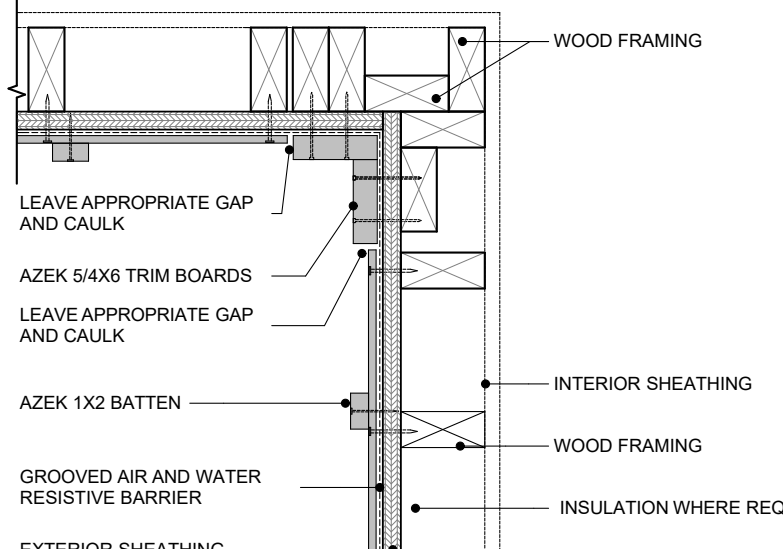
WINDOW/DOOR HEAD



OUTSIDE CORNER



INSIDE CORNER

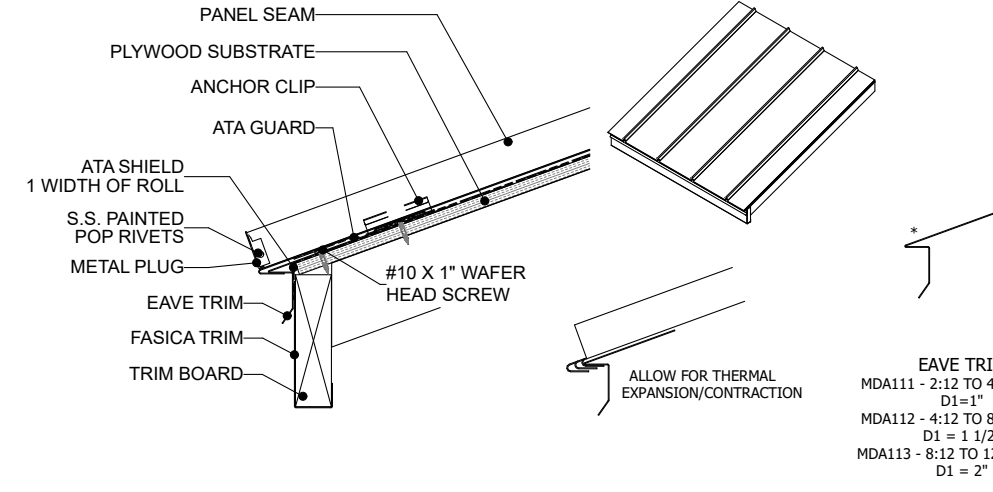


BASIS OF DESIGN:

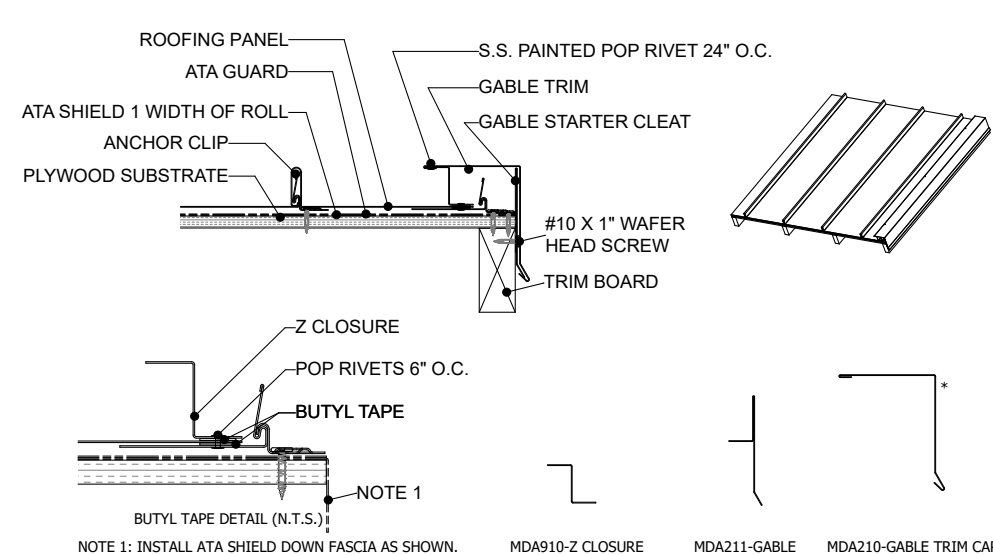
ATAS INTERNATIONAL "DUTCH SEAM" - ALUMINUM

- A. THICKNESS: 0.040 ALUMINUM
- B. WIDTH: 15"
- C. SEAM HEIGHT: 1 1/2"
- D. TEXTURE: SMOOTH (NO STIFFENING RIBS)
- E. MINIMUM SLOPE: 2:12

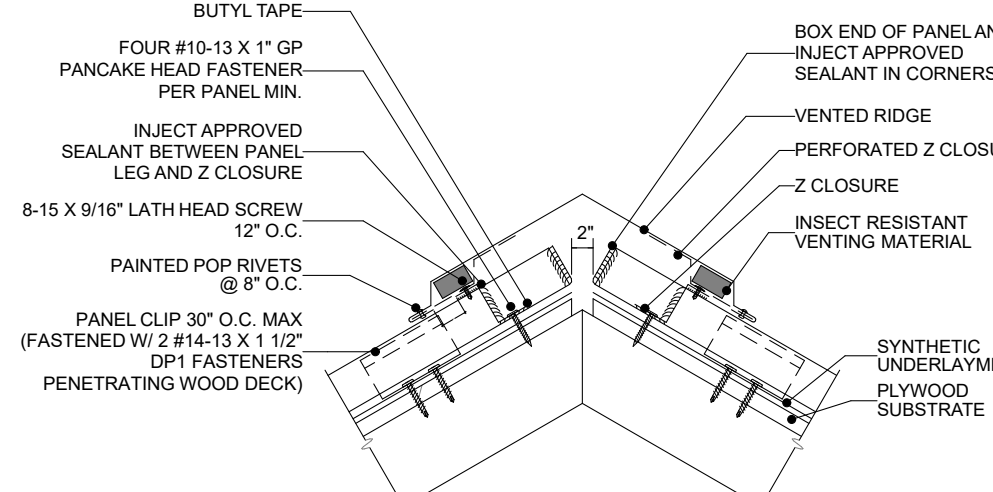
EAVE



GABLE



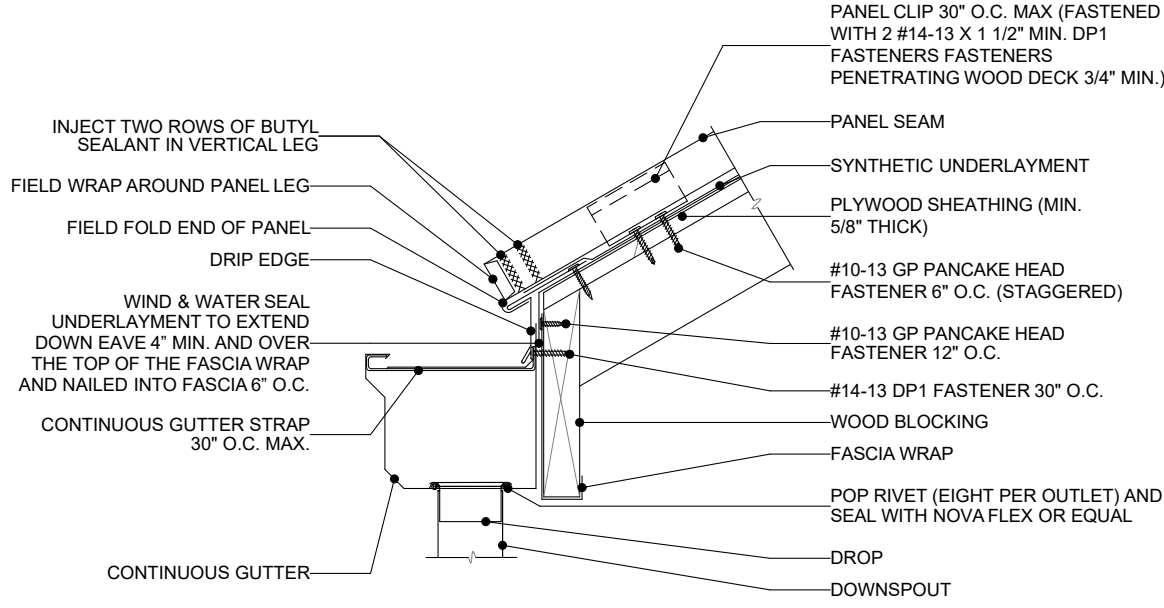
VENTED RIDGE



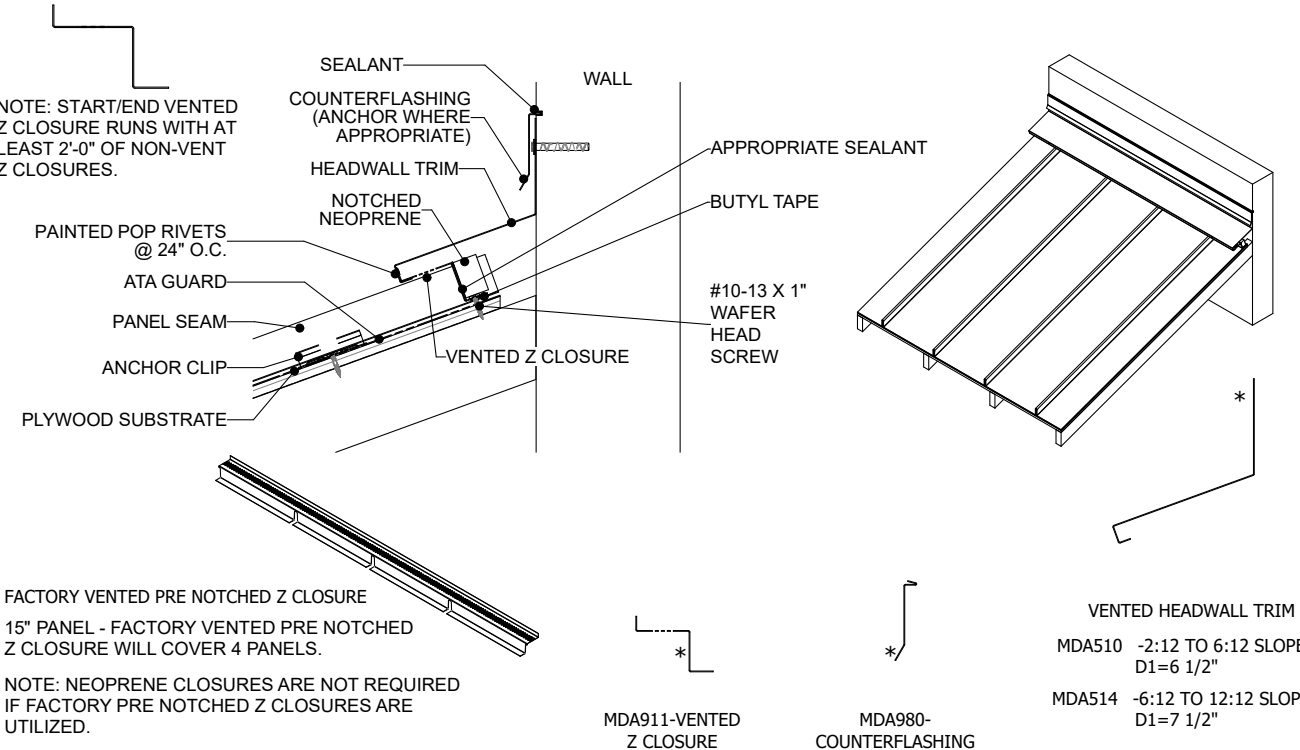
2 TYPICAL METAL ROOF DETAILS

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

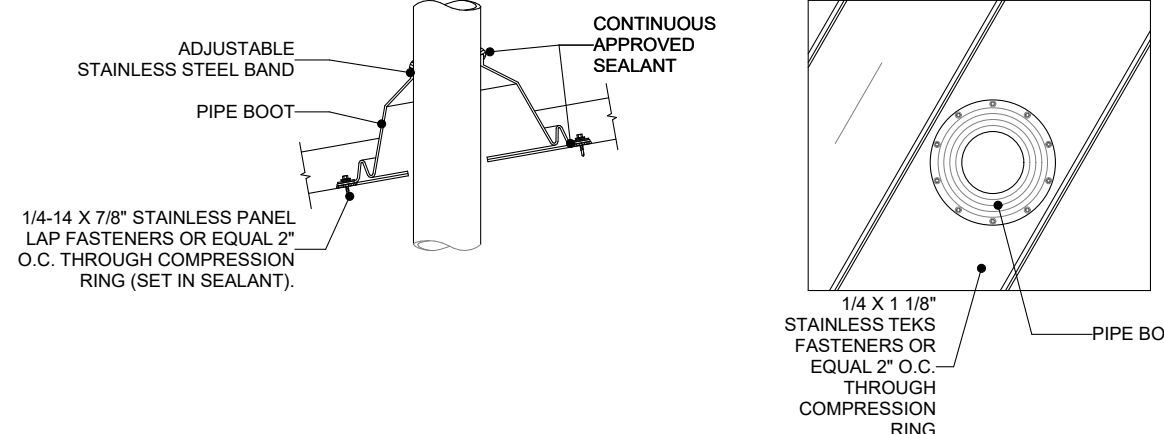
EAVE W/ GUTTER



VENTED HEADWALL



PIPE PENETRATION



4. Quantity: In addition to one extra key blank for each lock, provide three cylinder change keys and five master keys.
- 2.9 OPERATING TRIM
- A. Standard: BHMA A156.6.
- B. Materials: Fabricate from stainless steel, unless otherwise indicated.

- 2.10 CLOSERS
- A. Accessibility Requirements: Comply with the following maximum opening-force requirements:
1. Interior, Non-Fire-Rated Hinged Doors: 5 lb applied perpendicular to door.
2. Sliding or Folding Doors: 5 lb applied parallel to door at latch.
3. Fire Doors: Minimum opening force allowable by authorities having jurisdiction.
- B. Door Closers for Means of Egress Doors: Comply with NFPA 101. Door closers shall not require more than 30 lb ft to set in motion and not more than 15 lb ft to open door to minimum required width.

- C. Size of Units: Unless otherwise indicated, comply with manufacturer's written recommendations for size of door closers depending on size of door, exposure to weather, and anticipated frequency of use. Provide factory-size door closers, adjustable to meet field conditions and requirements for opening force.
- D. Surface Coatings: BHMA A156.4, Grade 1. Provide type of am required for closer to be located on non-public side of door, unless otherwise indicated.
1. Available Manufacturers:
- a. Corbin Russwin Architectural Hardware
- b. DORMA Architectural Hardware
- c. LCN Closers
- d. Norton Door Controls
- e. Rixson Specialty Door Controls
- f. SARGENT Manufacturing Company
- g. Yale Commercial Locks and Hardware

- 2.11 PROTECTIVE TRIM UNITS (W/O SPECIAL FINISHES)
- A. Size: 1/2-inch thick less than door width on push side and 1/2 inch less than door width on pull side, by height specified in door hardware sets.
- B. Metal Protective Trim Units: BHMA A156.6; beveled top and 2 sides; fabricated from the following materials:
1. Material: 0.050-inch-thick stainless steel.

- 2.12 STOPS AND HOLDERS
- A. Stops and Bumpers: BHMA A156.6, Grade 1.
1. Provide floor stops for doors unless other or type stops are scheduled or indicated.
2. Do not mount floor stops where they will impede traffic. Where floor or wall stops are not appropriate, provide overhead holders.
- B. Stoppers for Double Doors: BHMA A156.6, Grade 1; neoprene or rubber, fabricated for full-height application to frame.

- 2.13 DOOR GASKETING
- A. Standard: BHMA A156.22.
- B. General: Provide continuous weather-strip gasketing on exterior doors and provide smoke, light, or sound gasketing on interior doors where indicated or scheduled. Provide non-toxic fasteners for exterior applications and elsewhere as indicated.
1. Perimeter Gasketing: Apply to head and jamb, forming seal between door and frame.
2. Meeting Seal Gasketing: Fasten to meeting stile, forming seal between door and jamb.
3. Door Bottoms: Apply to bottom of door, forming seal with threshold when door is closed.
- C. Smoke-Labelled Gasketing: Assemblies complying with NFPA 105 that are listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction, for smoke control ratings indicated, based on testing according to UL 1784.
1. Provide smoke-labeled gasketing on 20-minute-rated doors and on smoke-labeled doors.
- D. Sound-Rated Gasketing: Assemblies that are listed and labeled by a testing and inspecting agency, for sound ratings indicated, based on testing according to ASTM E 90.
- E. Replaceable Seal Strips: Provide only those units where resilient or flexible seal strips are easily replaceable and readily available from stocks maintained by manufacturer.
- F. Gasketing Materials: ASTM D 2000 and AAMA 701/702.

- 2.14 THRESHOLDS
- A. Standard: BHMA A156.21.
- B. Accessibility Requirements: Bevel raised thresholds with a slope of not more than 1:2. Provide thresholds not more than 1/2 inch high.
- C. Thresholds for Means of Egress Doors: Comply with NFPA 101. Maximum 1/2 inch high.
- 2.15 MISCELLANEOUS DOOR HARDWARE
- A. Auxiliary Hardware: BHMA A156.16, Grade 1.
- A. Base Metals: Produce door hardware units of base metal, fabricated by forming method indicated, using manufacturer's standard metal alloy, composition, temper, and hardness. Furnish metals of a quality equal to or greater than that of specified door hardware units and BHMA A156.16. Do not furnish manufacturer's standard materials or forming methods if otherwise specified.
- B. Fasteners: Provide screws according to commercially recognized industry standards for application indicated, except aluminum fasteners are not permitted. Provide Phillips flat-head screws with finished heads for use on interior hardware, unless otherwise indicated.
2. Comply with NFPA 80 for fasteners of door hardware in fire-rated applications.
- C. Finishes: BHMA A156.18. All finishes shall be black unless noted otherwise.

- 3.2 EXECUTION
- 3.1 INSTALLATION
- A. Mounting Heights: Mount door hardware units at heights indicated as follows unless otherwise indicated or required to comply with governing regulations.
1. Standard Steel Doors and Frames: DHA's "Recommended Locations for Architectural Hardware for Standard Steel Doors and Frames"
2. Wood Doors: DHI WDH-3.3 "Recommended Locations for Architectural Hardware for Wood Flush Doors"
- B. Install each door hardware item to comply with manufacturer's written instructions. Where cutting and fitting are required to install door hardware onto or into surfaces that are letter to be painted or finished in another way, coordinate removal, storage, and reinstallation of surface protective trim units with finishing work specified in Division 09 Sections. Do not install surface-mounted items until finishes have been completed on surfaces involved.
- C. Thresholds: Set thresholds for exterior and acoustical doors in full bed of sealant complying with requirements specified in Division 07 Section "Joint Sealants."
- D. Adjustment: Adjust and check each operating item of door hardware and each door to ensure proper operation or function of every unit. Replace units that cannot be adjusted and operate as intended. Adjust door control devices to compensate for final operation of heating and ventilating equipment and to comply with referenced accessibility requirements.
1. Spring Hinges: Adjust to achieve positive latching when door is allowed to close freely from an open position of 30 degrees.
2. Door Closers: Unless otherwise required by authorities having jurisdiction, adjust sweep period so that, from an open position of 70 degrees, the door will take at least 3 seconds to move to a point 3 inches from the latch, measured to the leading edge of the door.

- 3.2 DOOR HARDWARE SETS
- A. The door hardware sets are described in the hardware schedule on the Drawings. The hardware supplier shall develop a complete hardware schedule that fully describes the actual model, manufacturer, and finish. Factory-assembled units consisting of sealed lists of glass separated by a delineated interspace, qualified according to ASTM E 2190, and complying with other requirements specified.
- B. Finishes: All finishes shall be antique brass or oil rubbed bronze, as selected by Architect from manufacturer's full range of finishes.
- C. Provide cushioned wall of floor mount door stop (to suit door location) for each door leaf.

- SECTION 09 20 00 - GLAZING
- PART 1 - GENERAL
- 1.1 RELATED DOCUMENTS
- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.
- 1.2 SUMMARY
- A. Section includes glazing for products specified in other Sections where glazing requirements are specified by reference to this Section:
1. Windows
2. Doors
- 1.3 DEFINITIONS
- A. Glass Manufacturers: Firms that produce primary glass, fabricated glass, or both, as defined in referenced glazing publications.
- B. Glass Thicknesses: Indicated by thickness designations in millimeters according to ASTM C 1036.
- C. IBC: International Building Code.
- 1.4 COORDINATION
- A. Coordinate glazing channel dimensions to provide necessary bite on glass, minimum edge and face clearances, and adequate sealant thicknesses, with reasonable tolerances.
- 1.5 PERFORMANCE REQUIREMENTS
- 1.6 SUBMITTALS
- A. Product Data: For each glass product and glazing material indicated.
- B. Glass Samples: For each type of glass product other than clear monolithic vision glass, 12 inches square.
- C. Glazing Schedule: List glass types and thicknesses for each size opening and location. Use same designations indicated on Drawings.
- D. Product Certificates: For glass.
- E. Product Test Reports: For insulating glass and glazing sealants, for tests performed by a qualified testing agency.
1. For glazing sealants, provide test reports based on testing current sealant formulations within previous 36-month period.
- F. Preconstruction adhesion and compatibility test report.
- G. Sample Warranties: For special warranties

- 1.7 QUALITY ASSURANCE
- A. Glazing Publications: Comply with published recommendations of glass product manufacturers and organizations below, unless more stringent requirements are indicated. Refer to these publications for glazing terms not otherwise defined in this Section or in referenced standards.
1. CANA Publications
2. AAMA Publications
3. IGMA/IGMAC Publications
- B. Safety Glazing Labeling: Where safety glazing labeling is indicated, permanently mark glazing with certification label of the SGSC or another certification agency acceptable to authorities having jurisdiction or the manufacturer. Label shall indicate manufacturer's name, type of glass, thickness, and safety glazing standard with which glass complies.
- C. Insulated glass products are to be permanently marked either on spacers or at least one insulating unit component with appropriate certification label of Insulating Glass Certification Council (IGCC).

- 1.8 PRECONSTRUCTION TESTING
- A. Preconstruction Adhesion and Compatibility Testing: For insulated or laminated glass units installed with glazing sealants, test each glass product, tape sealant, gasket, glazing accessory, and glass-framing member for adhesion to and compatibility with elastomeric glazing sealants.
- a. Testing is not required if data are submitted based on previous testing of current sealant products and glazing materials matching those submitted.
- b. Use ASTM C 1087 to determine whether priming and other specific joint-preparation techniques are required to achieve adhesion of glazing sealants to glass, tape sealants, gaskets, and glazing channel substrates.
- c. Test no fewer than eight samples of each type of material, including joint substrates, sealant, glass, tape sealants, gaskets, and miscellaneous materials.
- d. Schedule enough time for testing and analyzing results to prevent delaying the Work.

- e. For materials failing tests, submit sealant manufacturer's written instructions for corrective measures including the use of specially formulated primers.
- 1.9 DELIVERY, STORAGE, AND HANDLING
- A. Protect glazing materials according to manufacturer's written instructions. Prevent damage to glass and glazing materials from condensation, temperature changes, direct exposure to sun, or other causes.
- 2.10 FIELD CONDITIONS
- A. Environmental Limitations: Do not proceed with glazing when ambient and substrate temperature conditions are outside limits permitted by glazing material manufacturers and when glazing channels are outside limits permitted by glazing material manufacturers and when glazing channels are outside limits permitted by glazing material manufacturers.
- a. Do not install glazing sealants when ambient and substrate temperature conditions are outside limits permitted by glazing manufacturer or are below 40 deg F.

- 1.11 WARRANTY
- A. Manufacturer's Special Warranty for Coated-Glass Products: Manufacturer agrees to replace coated-glass units that deteriorate within specified warranty period. Deterioration of coated glass is defined as defects developed from normal use that are not attributed to glass breakage or to maintaining and cleaning coated glass contrary to manufacturer's written instructions. Defects include peeling, cracking, and other indications of deterioration in coating.
- a. Warranty Period: 10 years from date of Substantial Completion.
- B. Manufacturer's Special Warranty for Laminated Glass: Manufacturer agrees to replace laminated-glass units that deteriorate within specified warranty period. Deterioration of laminated glass is defined as defects developed from normal use that are not attributed to glass breakage or to maintaining and cleaning laminated glass contrary to manufacturer's written instructions. Defects include delamination and material obstructing vision through glass, and blisters exceeding those allowed by referenced laminated-glass standard.
- a. Warranty Period: Five years from date of Substantial Completion.
- C. Manufacturer's Special Warranty for Insulating Glass: Manufacturer agrees to replace insulating-glass units that deteriorate within specified warranty period. Deterioration of insulating glass is defined as a failure of hermetic seal under normal use that is not attributed to glass breakage or to maintaining and cleaning insulating glass contrary to manufacturer's written instructions. Evidence of failure is the obstruction of vision by dust, moisture, or film on interior surfaces of glass.
- a. Warranty Period: 10 years from date of Substantial Completion.

- PART 2 - PERFORMANCE REQUIREMENTS
- A. General: Installed glazing systems shall withstand normal thermal movement and wind and impact loads (where applicable) without failure, including loss of glass or glass breakage attributable to the following: defective design, defective materials, defective workmanship, or defective glass to remain water-tight and airtight; deterioration of glazing material; or other defects in construction.
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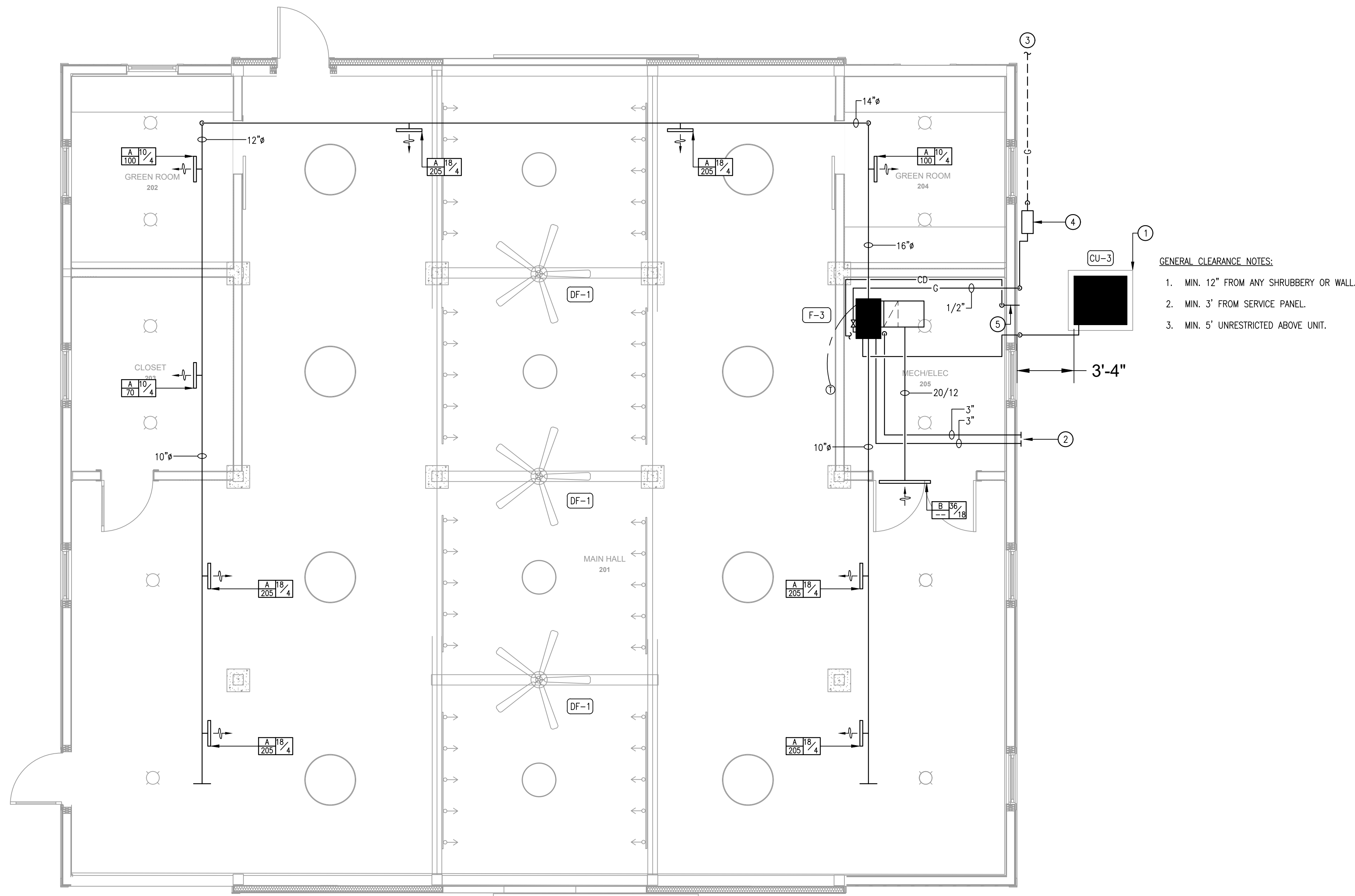
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- iii. Glazing in panels adjacent to door openings within 24 inches of the opening edge up to 60 inches above the floor.
- iv. Glazing in panels with all of the following: bottom edge below 18 inches above the floor, top edge 3

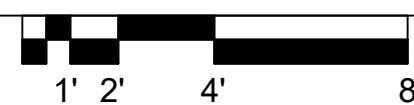


PROJECT # 2324	
ISSUE:	
SD REVIEW	11-08-2024
DD REVIEW	12-20-2024
DD REVIEW	02-04-2025
FINAL REVIEW	03-07-2025



1 BARN MECHANICAL PLAN
Scale: 1/4" = 1'-0"

- CODED NOTES:
- 1 SET CONDENSING UNIT ON 4" CONCRETE PAD.
 - 2 DIRECT VENT FURNACE FLUE AND INTAKE.
 - 3 NEW NATURAL GAS SERVICE LINE FROM SITE.
 - 4 PROVIDE NEW NATURAL GAS METER SET.
 - 5 3/4" CONDENSATE PIPE SHALL BE DAYLIGHTED.



ABBREVIATIONS			
Ø	ROUND	LVR	LOUVER
ABV	ABOVE	LWT	LEAVING WATER TEMPERATURE
AC	AIR CONDITIONING	M/A	MIXED AIR
AD	AREA DRAIN	MAX	MAXIMUM
ADD	ADDENDUM	MBH	ONE THOUSAND BTU PER HOUR
AFT	ABOVE FINISHED FLOOR	MD	ONE THOUSAND CUBIC FEET
AFUE	ANNUAL FUEL UTILIZATION EFFICIENCY	MD	MOTORIZED DAMPER
ALT	ALTERNATE	MECH	MECHANICAL
AP	ACCESS PANEL	MFR	MANUFACTURER
ARCH	ARCHITECT/ARCHITECTURAL	MIN	MINIMUM
BFF	BELOW FINISHED FLOOR	MISC	MISCELLANEOUS
BLW	BELOW	MTR	MOTOR
BTU	BRITISH THERMAL UNITS	MUA	MAKE-UP AIR
BTUH	BRITISH THERMAL UNITS PER HOUR	NC	NOISE CRITERIA
CAP	CAPACITY	NC	NORMALLY CLOSED
CB	CATCH BASIN	NIC	NOT IN CONTRACT
CFM	CUBIC FEET PER MINUTE	NO	NUMBER
CLG	CEILING	NO	NORMALLY OPEN
CO	CLEAN OUT	NTS	NOT TO SCALE
CW	COLD WATER	O	OXYGEN
D	DEGREE	O/A	OUTSIDE AIR
DB	DRY BULB	ORD	OVERFLOW ROOF DRAIN
DIA	DIAMETER	PD	PRESSURE DROP
DN	DOWN	PIV	POST INDICATOR VALVE
DW	DISTILLED WATER	PLBG	PLUMBING
EA	EACH	PRESS	PRESSURE
EAT	ENTERING AIR TEMPERATURE	PRV	PRESSURE REDUCING VALVE
ELEC	ELECTRICAL	PSI	POUNDS PER SQUARE INCH
EQUIP	EQUIPMENT	PSIG	POUNDS PER SQUARE INCH GAUGE
EWC	ELECTRIC WATER COOLER	PWR	POWER
EWI	ENTERING WATER TEMPERATURE	R	DUCT RISER
E/A	EXHAUST AIR	R/A	RETURN AIR
EXIST	EXISTING	RCP	RADIANT CEILING PANEL
F	DEGREES FAHRENHEIT	RD	ROOF DRAIN
FCO	FLOOR CLEAN OUT	REC	RECESSED
FD	FLOOR DRAIN	RED	REDUCER
FD	FIRE DAMPER	RH	RELATIVE HUMIDITY
FDV	FIRE DEPARTMENT VALVE	R/LA	RELIEF AIR
FL	FLOOR	RM	ROOM
FO	FUEL OIL	RPM	REVOLUTIONS PER MINUTE
FOV	FUEL OIL VENT	R/W	RAIN WATER
FOR	FUEL OIL RETURN	SF	SQUARE FOOT
FOS	FUEL OIL SUPPLY	S/A	SUPPLY AIR
FPW	FEET PER MINUTE	SAN	SANITARY
FS	FLOOR SINK	SF	SQUARE FOOT
FT	FOOT/FEET	SD	SMOKE DAMPER
FTR	FIN TUBE RADIATION	SM	SURFACE MOUNT
GAL	GALLON	SP	STANDPIPE
GC	GENERAL CONTRACTOR	SP	STATIC PRESSURE
GPM	GALLONS PER MINUTE	STM	STEAM
GW	GREASE WASTE	STM	THERMOSTAT
HB	HOSE BIB	T	TEMPERATURE DROP
HP	HORSE POWER	TDR	TRENCH DRAIN
HTG	HEATING	TEMP	TEMPERATURE
HTG	HEATER	TYP	TYPICAL
HW	HOT WATER	UG	UNDERGROUND
HYD	HYDRANT	VAC	VACUUM
ID	INDIRECT	V	VENT
IN	INCH	VAV	VARIABLE AIR VOLUME
INV	INVERT	VENT	VENTILATION
LBR	POUNDS PER HOUR	W	WENT THROUGH ROOF
LAT	LEAVING AIR TEMPERATURE	WB	WET BULB
LP	LOW PRESSURE	WCO	WALL CLEAN OUT
LPG	LIQUEFIED PETROLEUM GAS	WH	WALL HYDRANT

HVAC GENERAL NOTES	
HVAC GENERAL NOTES:	
1.	ALL MECHANICAL EQUIPMENT AND INSTALLATIONS SHALL CONFORM WITH THE REQUIREMENTS OF THE OHIO BUILDING CODE, OHIO MECHANICAL CODE, OHIO PLUMBING CODE, THE STATE ENERGY CODE NFPA 90A, 101, AND ALL APPLICABLE CODES AND ORDINANCES.
2.	CONTRACTOR SHALL COORDINATE ELECTRICAL CHARACTERISTICS AND REQUIREMENTS OF ALL MECHANICAL EQUIPMENT WITH ELECTRICAL DRAWINGS PRIOR TO ORDERING EQUIPMENT OR SUBMITTING SHOP DRAWINGS, AND SHALL FURNISH EQUIPMENT WIRED FOR THE VOLTAGES SHOWN THEREIN.
3.	ALL MECHANICAL EQUIPMENT REQUIRING ELECTRICAL POWER SHALL BE INSTALLED WITH DISCONNECT SWITCHES AT EACH PIECE OF EQUIPMENT. COORDINATE SWITCH TYPE (FUSED OR NON-FUSED) WITH EQUIPMENT CHARACTERISTICS, MANUFACTURERS RECOMMENDATIONS AND ELECTRICAL DRAWINGS. MECHANICAL CONTRACTOR SHALL PURCHASE ALL DISCONNECTS.
4.	ALL REQUIRED CONTROL WIRING NOT SHOWN ON THE ELECTRICAL DRAWINGS SHALL BE INCLUDED AS PART OF THE MECHANICAL WORK.
5.	UNLESS NOTED OTHERWISE, STARTERS, SMOKE DETECTORS, TRANSFORMERS, CONTROLS AND CONTROL WIRING REQUIRED FOR ALL MECHANICAL SYSTEMS SHALL BE FURNISHED AND INSTALLED BY THE MECHANICAL CONTRACTOR.
6.	ALL MECHANICAL EQUIPMENT SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
7.	DUCT SHALL BE SIZED AT 0.1"100 FT STATIC PRESSURE DROP WHERE A SIZE IS NOT NOTED ON DRAWINGS. FLEXIBLE DUCTWORK SHALL BE INSTALLED AS STRAIGHT AS POSSIBLE, AND SHALL BE ROUTED AND SUPPORTED WITHOUT FORMING CRIMPS OR OTHER AIR FLOW RESTRICTIONS. PROVIDE SQUARE TO ROUND ADAPTERS OR BOOTS TO CONNECT TO AIR DEVICE NECK, WHEN REQUIRED.
8.	ROUND AND FLEXIBLE DUCTWORK SHALL BE CONNECTED TO MAIN DUCTS WITH SPIN-IN FITTINGS WITH BALANCING DAMPERS.
9.	ALL WORK SHALL BE COORDINATED AND PERFORMED WITH PRIOR APPROVAL FROM THE OWNER TO SUIT HIS OPERATING CONDITIONS.
10.	CONTRACTOR SHALL COORDINATE THE INSTALLATION OF ALL MECHANICAL EQUIPMENT, DUCTWORK, ETC. TO FIT WITHIN THE SPACE ALLOWED BY THE ARCHITECTURAL AND STRUCTURAL CONDITIONS. CUTTING OR OTHERWISE ALTERING ANY STRUCTURAL MEMBERS SHALL NOT BE PERMITTED WITHOUT WRITTEN PERMISSION FROM THE ARCHITECT. IN GENERAL, DUCTWORK SHALL BE ROUTED AS HIGH AS POSSIBLE. PROVIDE ALL OFFSETS IS REQUIRED TO MAINTAIN ARCHITECTURAL CEILING HEIGHTS AND OPEN SPACE CLEARANCES. THIS INCLUDES ANY OFFSETS NOT SPECIFICALLY SHOWN ON THE DRAWINGS. OFFSETS SHOWN ARE DIAGRAMMATIC AND ARE NOT MEANT TO INDICATE THE ONLY OFFSETS REQUIRED.
11.	MOUNT THERMOSTATS 4" - 4" AFT UNLESS NOTED OTHERWISE. PROVIDE SPACE TEMPERATURE SENSORS FOR THERMOSTATS LOCATED IN CORRIDORS.
12.	LOCATIONS OF GRILLES, REGISTERS, & DIFFUSERS SHOWN ON THE DRAWINGS ARE APPROXIMATE. COORDINATE EXACT LOCATIONS WITH LIGHTS, CEILING GRID, ETC.
13.	PROVIDE ACCESS PANELS IN NON-ACCESSIBLE CEILINGS AND IN WALL STRUCTURE TO ALLOW ADEQUATE ROOM FOR MAINTENANCE OF EQUIPMENT AND BALANCING OF SYSTEM.
14.	ACCESS DOORS IN CEILINGS/WALLS SHALL BE A MINIMUM OF 12x12, HINGED, AND FIRE RATED TO MATCH CEILING/WALL RATING. DUCT ACCESS DOORS SHALL BE DOUBLE WALL IF INSTALLED ON SUPPLY DUCT, AND PROVIDED WITH THUMB LATCHES FOR AN AIR TIGHT FIT.
15.	PROVIDE MVDs AT TAKE-OFFS, WHERE ACCESSIBLE CEILING (LAY-IN) IS PROVIDED, OF RUNOUTS TO DIFFUSERS AND WHERE SHOWN ON PLANS. WHERE BALANCING DAMPERS ARE ALSO PROVIDED AT THE SUPPLY GRILLE/DIFFUSER (SEE SCHEDULE), BALANCE THE SYSTEM WITH THE DAMPER AT THE TAKE-OFF (NOT AT GRILLE), GRILLE DAMPER SHOULD BE 100% OPEN AFTER TEST AND BALANCE.
16.	DUCT ROUTING, OFFSETS AND LOCATIONS ARE DIAGRAMMATIC. EXACT LOCATIONS, ELEVATIONS, AND OFFSETS SHALL BE DETERMINED FROM COORDINATION DRAWINGS PRODUCED FROM A COMPOSITE OF ARCHITECTURAL, STRUCTURAL AND OTHER TRADE'S DRAWINGS. ROUTE DUCT HIGH AS POSSIBLE. SEE SPECIFICATIONS FOR COMPLETE MULTI TRADE COORDINATION DRAWING REQUIREMENTS.
17.	PROVIDE FIRE DAMPERS AND FIRE/SMOKE DAMPERS IN RATED WALLS AS REQUIRED BY THE OHIO BUILDING CODE AND OHIO MECHANICAL CODE.

HVAC SYMBOLS	
	SQUARE DUCT SIZE TAG (WIDTH x HEIGHT)
	OVAL DUCT SIZE TAG (WIDTH / HEIGHT)
	ROUND DUCT SIZE TAG (DIAMETER)
	EXISTING DUCT TAG
	DUCT BEING DEMOLISHED
	SUPPLY AIR
	CONDITIONED OUTSIDE AIR
	OUTSIDE AIR
	RETURN AIR
	TRANSFER AIR
	EXHAUST AIR
	RELIEF AIR
	GREASE EXHAUST AIR
	SMOKE EXHAUST AIR
	EXHAUST GAS FLUE
	COMBUSTION AIR
	RECTANGULAR SUPPLY/OUTSIDE AIR DUCT RISE
	ROUND SUPPLY/OUTSIDE AIR DUCT RISE
	RECTANGULAR RETURN/TRANSFER AIR DUCT RISE
	ROUND RETURN/TRANSFER AIR DUCT RISE
	RECTANGULAR EXHAUST/RELIEF AIR DUCT RISE
	ROUND EXHAUST/RELIEF AIR DUCT RISE
GRILLES, REGISTERS & DIFFUSERS TAG	
TYPE (SEE SCHEDULE)	
GRILLE, REGISTER OR DIFFUSER (GRD)	
NECK SIZE / MODULE SIZE	
CFM	
MECHANICAL EQUIPMENT TAGS	
	HEATING COIL FLOW
	VAV BOX
	BOTTOM OF EQUIPMENT ELEVATION
	EXISTING EQUIPMENT TO REMAIN
	EQUIPMENT BY OTHERS (REFER TO OTHER DISCIPLINE FOR ADDITIONAL INFORMATION)
	OPERATING WEIGHT NOT INCLUDING CURB
	NOMINAL COOLING CAPACITY
	FUEL INPUT GAS PIPE FLOW
	ROOFTOP UNIT
	TEMPERATURE & HUMIDITY SENSOR
	TEMPERATURE SENSOR
	THERMOSTAT
	MANUAL SWITCH
	SENSOR
DAMPER TAGS	
	FIRE DAMPER
	SMOKE DAMPER
	MOTORIZED DAMPER
	MANUAL BALANCING DAMPER
	BACKDRAFT DAMPER
	COMBINATION FIRE/SMOKE DAMPER

EQUIPMENT ABBREVIATIONS			
AC	AIR CONDITIONING UNIT	EW	ELECTRIC WATER HEATER
ACC	AIR COOLED CONDENSER	FCU	FAN COIL UNIT
ACCU	AIR COOLING CONDENSING UNIT	FP	FIRE PUMP
AHU	AIR HANDLING UNIT	GI	GREASE INTERCEPTOR
AS	AIR SEPARATOR	GRV	GRAVITY ROOF VENTILATOR
B	BOILER	HWP	HEATING WATER PUMP
CH	CHILLER	HX	HEAT EXCHANGER
CT	COOLING TOWER	HUR	HEAT RECOVERY UNIT
CJA	CABINET UNIT HEATER	HRU	POWER ROOF VENTILATOR
CWP	CONDENSER WATER PUMP	RE	RETURN/EXHAUST FAN
CHWP	CHILLED WATER PUMP	RTU	ROOFTOP UNIT
DSP	DOMESTIC WATER BOOSTER PUMP	SEP	SEWAGE EJECTOR PUMP
DC	DUCT MOUNTED COIL	SF	SUPPLY FAN
DCP	DOMESTIC WATER CIRCULATING PUMP	SP	SUMP PUMP
EF	EXHAUST FAN	UH	UNIT HEATER
EDC	ELECTRIC DUCT COIL	WH	WATER HEATER
ET	EXPANSION TANK		

NOTE	
ALL OF GENERAL NOTES ON THIS SHEET ARE TO BE APPLIED TO ALL OTHER DRAWINGS IN THIS SET. THE SYMBOLS AND ABBREVIATIONS SHOWN ON THIS SHEET MAY OR MAY NOT BE USED IN THIS SET OF DRAWINGS.	

PLUMBING PIPING SYMBOLS	
	DOMESTIC COLD WATER
	HARD COLD WATER
	SOFT COLD WATER
	FILTERED COLD WATER
	REVERSE OSMOSIS WATER
	HOT WATER
	HOT WATER 140°
	HOT WATER RECIRCULATION
	HOT WATER RECIRCULATION 140°
	GREASE VENT
	GREASE WASTE
	INDIRECT WASTE
	OIL VENT
	OIL WASTE
	PUMP DISCHARGE
	SANITARY VENT
	SANITARY SEWER
	SOLAR HOT WATER RETURN
	SOLAR HOT WATER SUPPLY
	STORM DRAINAGE
	OVERFLOW STORM DRAINAGE
	CONDENSATE DRAINAGE
	NATURAL GAS
	PROPANE GAS
	COMBINATION WASTE & VENT
	COMPRESSED AIR
PIPE ACCESSORY TAGS	
	DOMESTIC WATER METER
	BALANCING VALVE
	SHUTOFF
	CHECK VALVE
	3-WAY MIXING VALVE
	2" M-CNTRL. MOTORIZED CONTROL VALVE
	2" 3-WAY CNTRL. 3 WAY MOTORIZED CONTROL VALVE
	2" PRV. PRESSURE REDUCING VALVE
	3/8" SOLENOID REFRIGERANT SOLENOID VALVE
	2" BUTTERFLY BUTTERFLY VALVE
DRAIN TAGS	
	4" FD - TYPE (SEE SCHEDULE)
	4" FD-1P - "P" INDICATES PRIMER CONNECTION
	4" FS-1 - FLOOR SINK
	8 WFU - HUB DRAIN
	4" AD-1 - AREA DRAIN
	4" DD-1 - DECK DRAIN
	4" RD-1 - FLOW CONTROL DRAIN
	4" RD-1 - STORM DRAIN
	6" SD-1 - COMBINATION DRAINS
PLUMBING FIXTURE TAGS	
TYPE (SEE SCHEDULE)	
P-2A	

GENERAL MECHANICAL SYMBOLS	
	REVISION NUMBER - SHOWN ON PLANS
	POINT WHERE NEW CONNECTS TO EXISTING
	NUMBER OF DETAIL ON SHEET
	NUMBER OF SHEET WHERE DETAIL APPEARS
	CODED NOTE
	CONTINUATION SYMBOL
	ROOM NAME AND NUMBER
	ITEM TO BE DEMOLISHED
	AREA NOT IN CONTRACT
	PIPE SIZE TAG (DIAMETER)
	ABOVE GROUND PIPING
	PIPE SLOPE TAG
	BELOW GROUND PIPING
	PIPE INVERT ELEVATION TAG
	EXISTING PIPE TAG
	PIPING BEING DEMOLISHED

FURNACE AND CONDENSING UNIT SCHEDULE																					
MARK	SERVICE	INDOOR													OUTDOOR					REMARKS	
		FAN				COOLING		HEATING			ELECTRICAL			MANUFACTURER MODEL	MARK	ELECTRICAL			MANUFACTURER MODEL		
		CFM	OA	ESP	HP	TOTAL	SENSIBLE	SEER	INPUT MBH	OUTPUT MBH	EFFICIENCY	VOLTAGE	MCA			MOOP	VOLTAGE	MCA			MOOP
F-3	BARN	--	N/A	--	--	--	--	--	--	--	96%	--	--	--	TRANE	CU-3	--	--	--	TRANE	1-5

REMARKS:
1. EC, MULTISPEED FAN MOTOR.
2. DIRECT VENT APPLIANCE WITH CPVC VENT.
3. ONE STAGE HEATING.
4. GALVANIZED STEEL CABINET.
5. SELF-DIAGNOSTIC INTEGRATED FURNACE CONTROL BOARD.

NOTE: EQUIVALENT UNITS BY CARRIER, LENNOX, YORK.

DESTRATIFICATION FAN SCHEDULE						
MARK	LOCATION	BLADE SWEEP	ELECTRICAL	POWER	RPM	MANUFACTURER MODEL
DF-1	BARN	8'	120V-10	1 HP	156 RPM	HUNTER XP HVLS

REMARKS:
1. 104 LBS. HANGING WEIGHT.
2. BRUSHLESS MOTOR.
3. SERIES 500 CONTROLLER (1 CONTROLLER FOR ALL 3 FANS), INSTALLED BY THE EC.

GRILLE & DIFFUSER SCHEDULE								
MARK	MANUFACTURER MODEL	DAMPER NUMBER	FRAME/ BORDER	CFM	MODULE SIZE	PATTERN	FINISH	REMARKS
A	PRICE SDG	--	DUCT MOUNTED	AS NOTED	AS NOTED	FIXED DEFLECTION	WHITE	--
B	PRICE 530	--	SURFACE	--	AS NOTED	--	WHITE	--

NOTE: EQUIVALENT BY TITUS, KRUEGER.



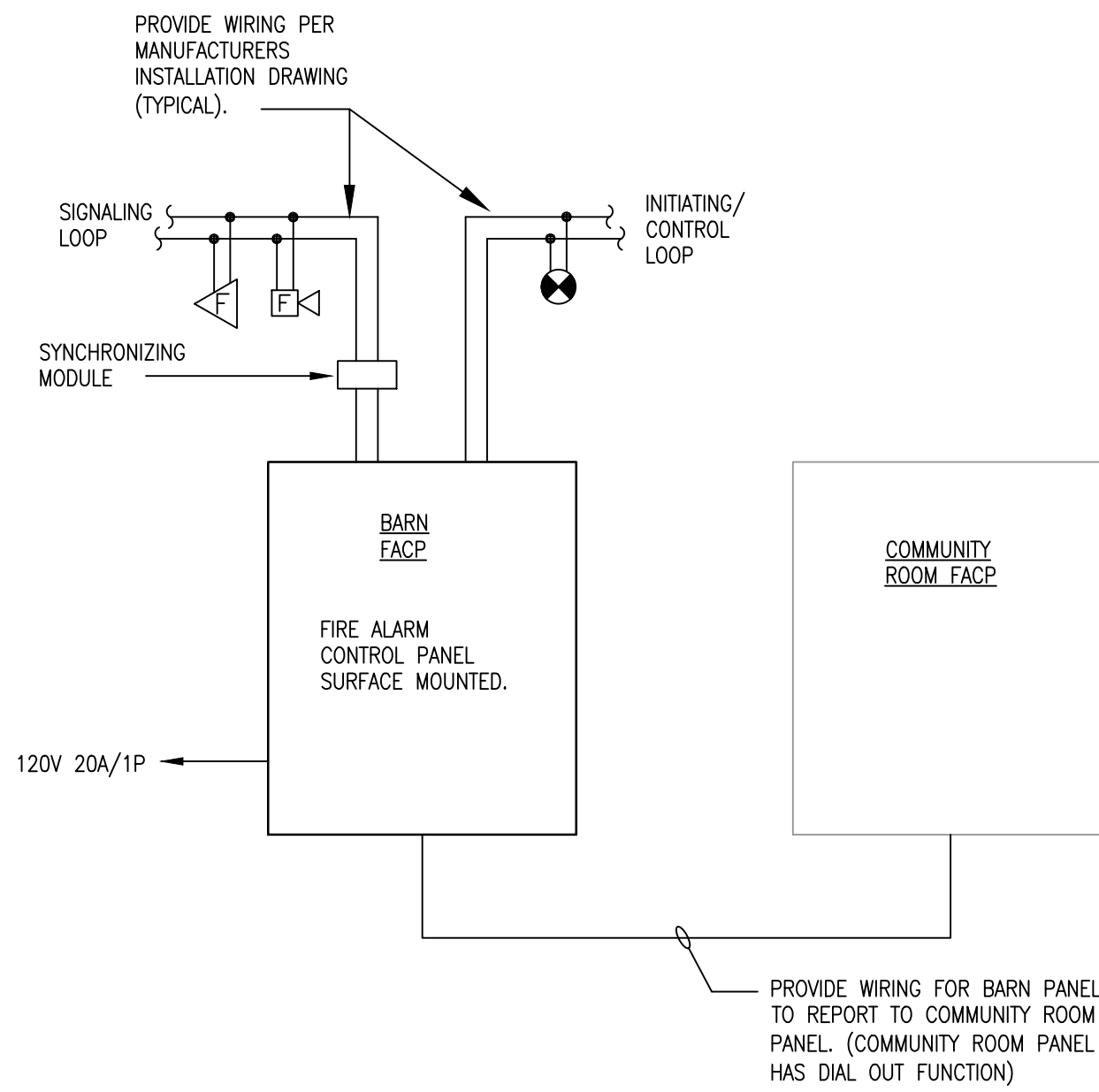


NORTH FORK PRESERVE BARN RENOVATION

4400 EVERETT ROAD, AKRON, OH 44333



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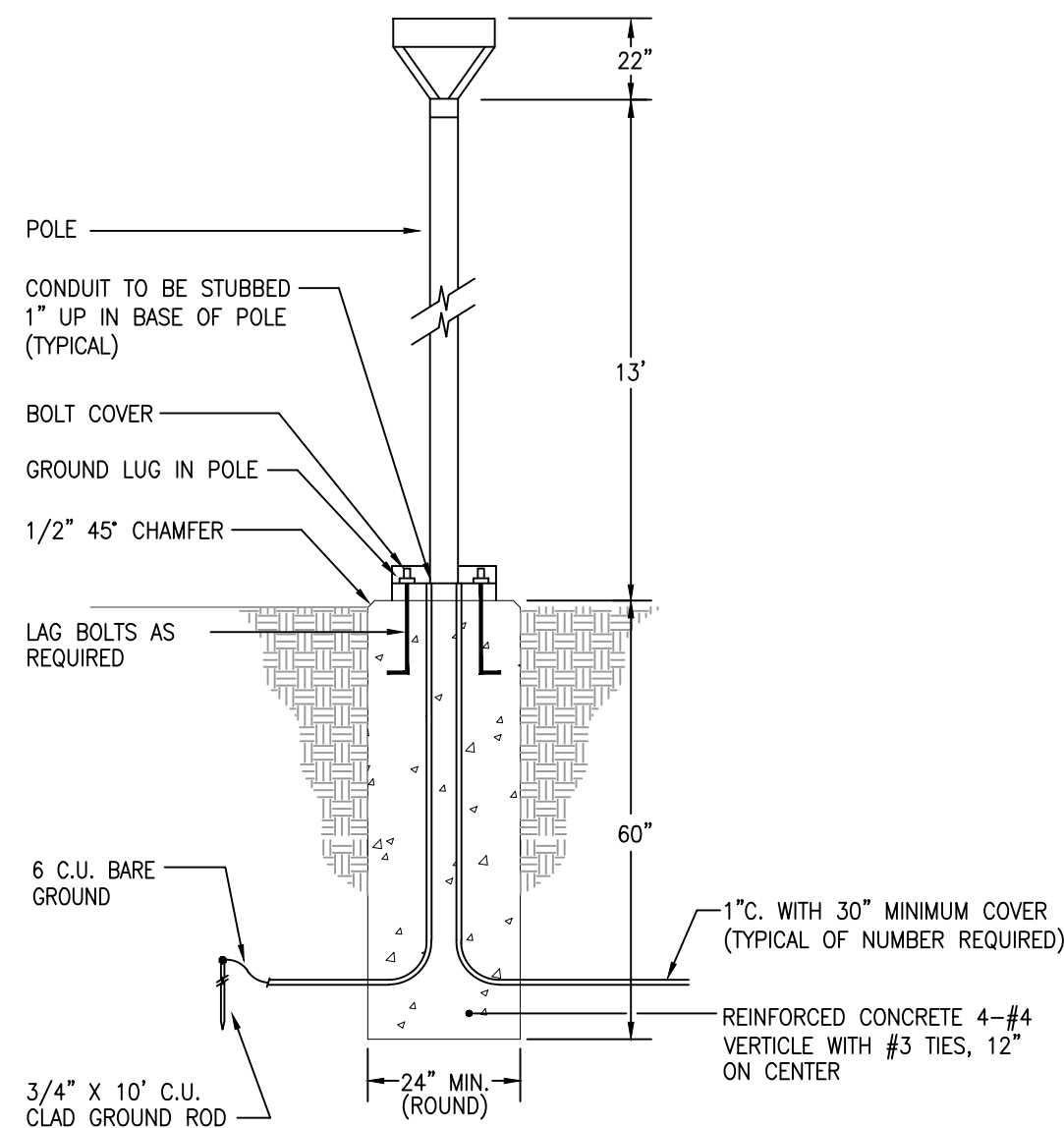


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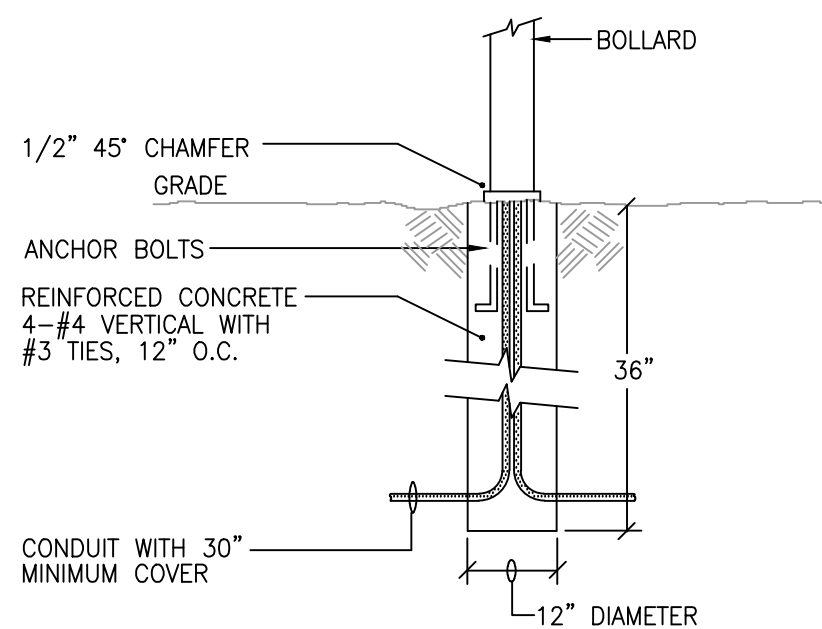
1. THIS RISER REPRESENTS A TYPICAL SYSTEM AND IS NOT INTENDED FOR INSTALLATION. SYSTEM SUPPLIER SHALL PROVIDE INSTALLATION DRAWINGS AND SCHEMATIC WIRING DIAGRAMS. EXACT SYSTEM REQUIREMENTS SHALL BE COORDINATED WITH THE SYSTEM SUPPLIER. SYSTEM INSTALLER SHALL BE NICET CERTIFIED, IF REQUIRED BY LOCAL AUTHORITY HAVING JURISDICTION.
2. SYSTEM SUPPLIER SHALL SUPERVISE INSTALLATION, PROGRAM AND TEST SYSTEM AND INSTRUCT OWNER OF SYSTEM OPERATION.
3. ALL FIRE ALARM WIRING SHALL BE INSTALLED IN CONDUIT.
4. ALL CONTROL CABINETS SHALL BE GROUNDED PER NEC REQUIREMENTS AND PER SPECIFICATIONS.
5. FIRE ALARM SYSTEM DESIGNER SHALL BE RESPONSIBLE FOR ALL SHOP DRAWINGS, COORDINATION WITH OTHER TRADES AND INSTALLATION, SUBMIT PLANS FOR CITY TO REVIEW. PLANS SHALL INCLUDE DEVICE LOCATIONS ON SCALED FLOOR PLANS, WIRING INFORMATION AND DIAGRAMS, AND BATTERY CALCULATIONS.
6. ALL STROBES SHALL BE SYNCHRONIZED WITHIN LINE OF SIGHT. COORDINATE SCOPE IN THE FIELD AND WITH THE GENERAL CONTRACTOR.
7. FIRE ALARM SYSTEM SHALL BE THE SAME MANUFACTURER AS THE COMMUNITY CENTER.

SITE LIGHTING FIXTURE SCHEDULE				
TYPE	WATTAGE		DESCRIPTION	CATALOG #
	LAMP	FIXTURE		
S1	LED 3000K 9000L	80W	LED ROUND POST TOP FIXTURE MOUNTED ON 13" ROUND STEEL POLE	E-CONOUGHT C-LITE #C-AR- A-PA-S9-SOCT- UL-BZ POLE: RSS-13
S2	LED 3000K 4000L	37W	LED 36" TALL BOLLARD WITH 8" ROUND BASE AND DOME TOP	E-CONOUGHT C-LITE #C-BD- GRND-DOME-SSL- SOCT-UL-BZ

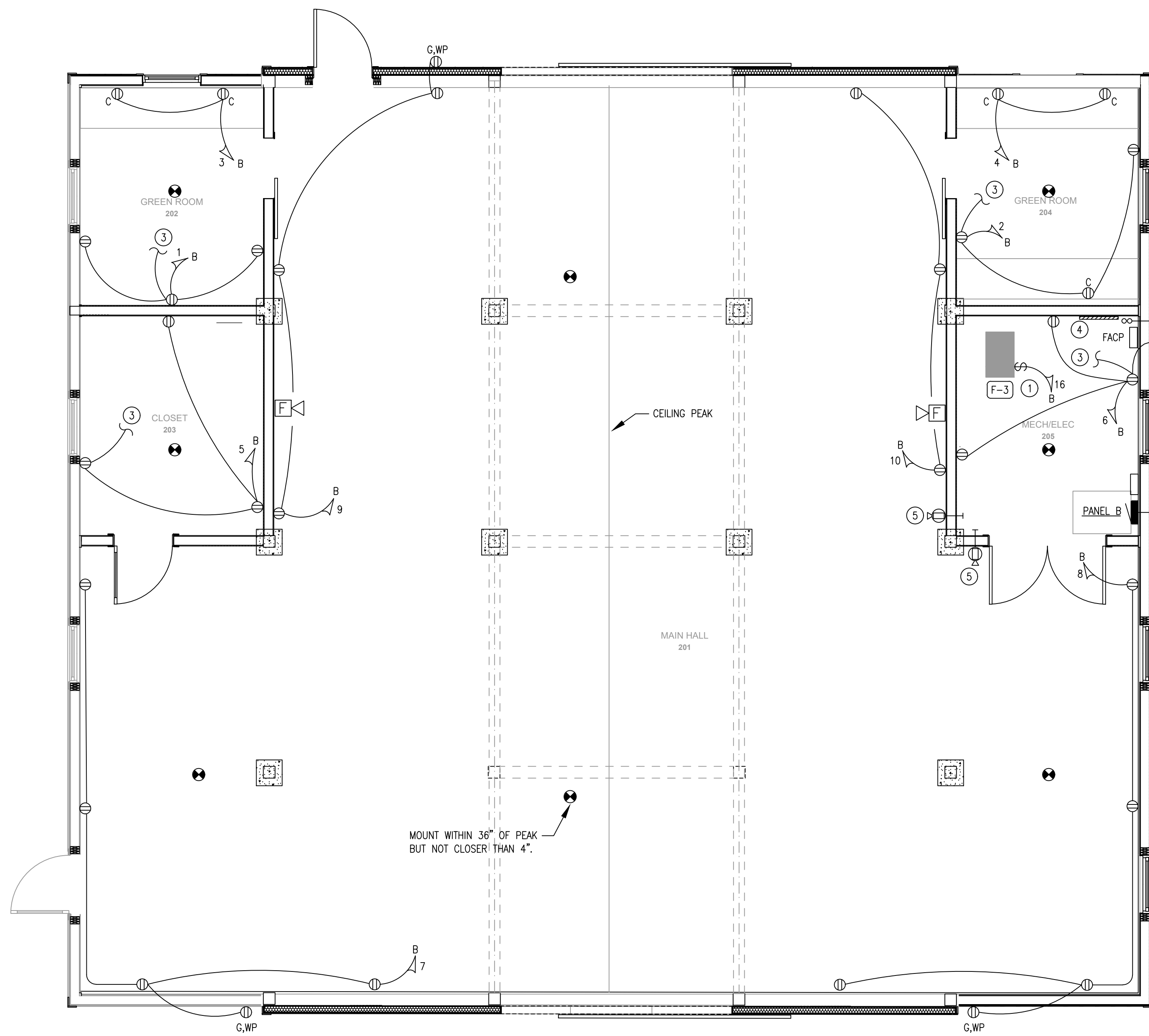
- ① 2#10, 1#10G, 3/4" PVC CONDUIT. 18" BELOW GRADE MINIMUM. ROUTE THROUGH SITE LIGHTING TIMECLOCK.
- ② PROVIDE 2 CIRCUIT TIMECLOCK WITH PHOTOCELL FOR PARKING LOT LIGHT CIRCUITS. PHOTOCELL ON/TIMECLOCK OFF. SYSTEM SHALL BE CAPABLE INDEPENDENT TIME SETTINGS FOR EACH CIRCUIT.



SCALE: NONE



SCALE: NONE



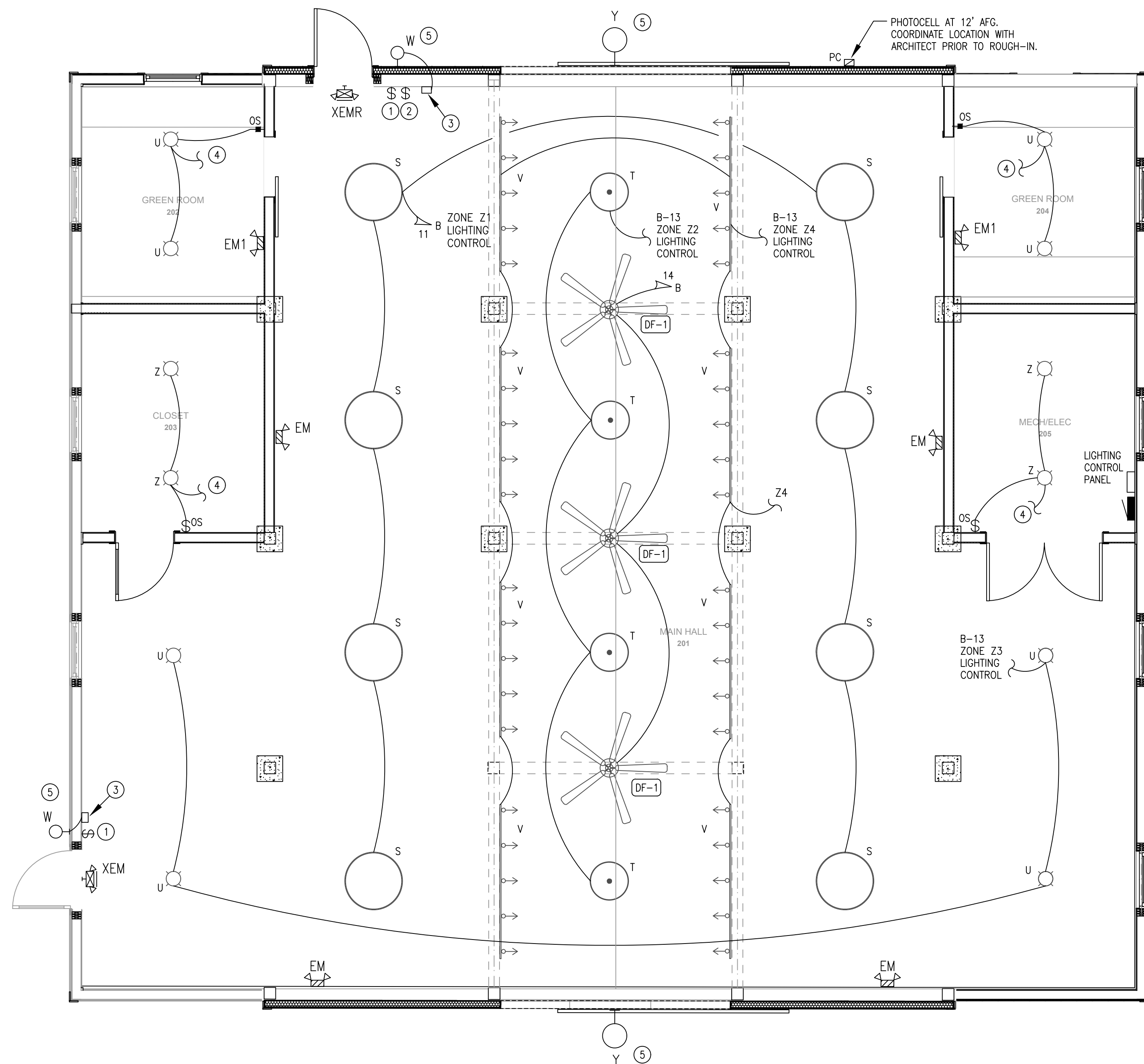
1 BARN POWER PLAN
Scale: 1/4" = 1'-0"

BARN POWER GENERAL NOTES:

1. ALL CONDUIT AND WIRING SHALL BE INSTALLED CONCEALED IN NEW WALLS AND CEILING. COORDINATE ANY LOCATIONS THAT MAY REQUIRE SURFACE CONDUIT WITH THE ARCHITECT.

BARN POWER PLAN CODED NOTES:

- ① FURNACE: 1.3 KW, 120V-1Ø
- ② CONDENSING UNIT: 6.0 KW, 240V-1Ø. WIRE WITH 2ØB, 1Ø10G, 3/4" CONDUIT.
- ③ EXTEND BRANCH CIRCUIT TO ROOM LIGHTING FIXTURES.
- ④ FURNISH AND INSTALL 2" X 4" X 3/4" THICK FIRE RATED PLYWOOD BACKBOARD FOR LOW VOLTAGE EQUIPMENT
- ⑤ PROVIDE MOUNTING DEVICE BOX AND 3/4" CONDUIT ABOVE THE CEILING TO THE LOW VOLTAGE BACK BOARD. COORDINATE MOUNTING HEIGHT AND BOX REQUIREMENTS WITH SECURITY CAMERA INSTALLER.



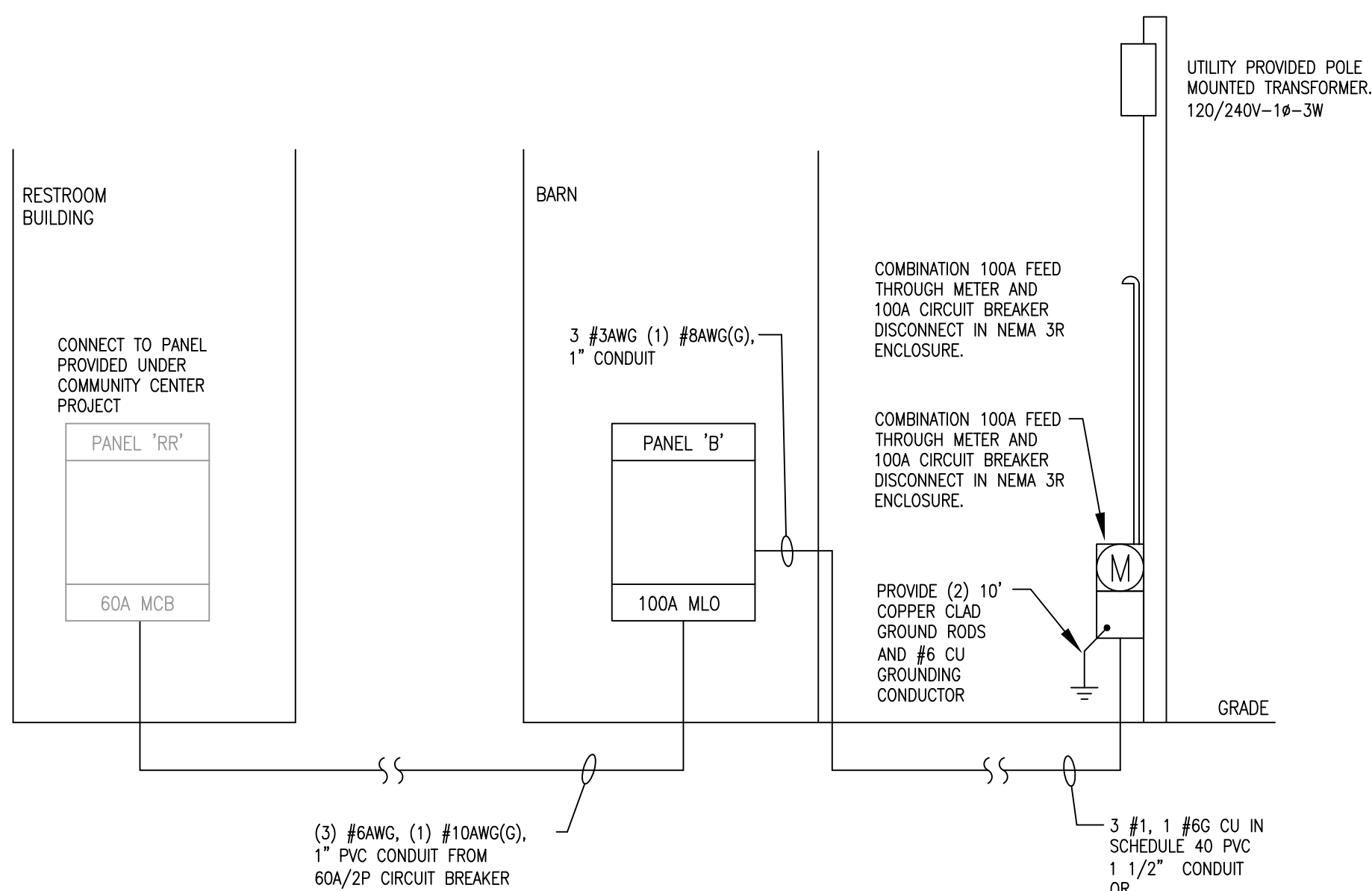
2 BARN LIGHTING PLAN
Scale: 1/4" = 1'-0"

BARN LIGHTING GENERAL NOTES:

1. ALL CONDUIT AND WIRING SHALL BE INSTALLED CONCEALED IN NEW CEILING. PROVIDE SURFACE CONDUIT FOR TRACK LIGHTING AND FANS SURFACE MOUNTED TO THE WOOD BEAMS.

BARN LIGHTING PLAN CODED NOTES:

- ① 6 BUTTON SCENE CONTROLLER.
- ② FAN CONTROLLER, PROVIDED BY THE MC, INSTALLED AND WIRED BY THE EC. PROVIDE CATEGORY 5 CABLE FROM CONTROLLER, DASH CHAINED TO EACH FAN.
- ③ REMOTE MOUNTED EMERGENCY BATTERY PACK. PROVIDE BRANCH CIRCUIT WIRING AHEAD OF LIGHTING CONTROL (PHOTOCELL) FOR SENSING CIRCUIT.
- ④ EXTEND ROOM RECEPTACLE BRANCH CIRCUIT.
- ⑤ CIRCUIT EXTERIOR LIGHTING TO PANEL B, CIRCUIT #12 THROUGH LINE VOLTAGE PHOTOCELL FOR DUSK TO DAWN OPERATION.



BARN ONE LINE RISER DIAGRAM
NO SCALE

NEW PANELBOARD "B" SCHEDULE													
VOLTAGE: 120/240V-1PH-3W MAINS 100A/2P MCB MOUNTING SURFACE REMARKS:													
BUS SIZE: 100 AMP TOTAL LOAD 25.2 KVA													
No.	SERVES	LTG	RCPT	MTR	A/C	HTG	MSC	BRKR	TRIP	P	PH	BRKR	LOAD (KVA)
1	RM 202 RECEPT/LTG	0.1	0.6					20	1	1	20	1	0.6
3	RM 202 RECEPT		0.4					20	1	1	20	1	0.4
5	RM 203 RECEPT/LTG	0.1	0.6					20	1	1	20	1	0.6
7	RM 201 SE RECEPT		1.2					20	1	1	20	1	1.2
9	RM 201 SW RECEPT		0.8					20	1	1	20	1	0.8
11	TYPE S LTG	1.2						20	1	1	20	1	1.2
13	TYPE T, U & V LTG	1.0						20	1	1	20	1	1.0
15	FIRE ALARM						0.4	20	1	1	20	1	0.4
17	SPARE							20	1	1	20	1	
19	SPARE							20	1	1	20	1	
21	SPARE							20	1	1	20	1	
23	SPARE							-	-	-	-	-	0.6
25	SPARE							-	-	-	-	-	0.6
27	SPARE							-	-	-	-	-	3.0
29	SPARE							-	-	-	-	-	3.0
CONNECTED KVA													25.2
DEMAND KVA													24.0

LIGHTING CONTROL SCHEDULE				
ZONE	DESCRIPTION	DIMMING	WATTAGE	PANEL/CKT
Z1	TYPE 'S'	TRIAC DIMMING	1152W	B - 11
Z2	TYPE 'T'	TRIAC DIMMING	384W	B - 13
Z3	TYPE 'U'	TRIAC DIMMING	960W	B - 15
Z4	TYPE 'V'	TRIAC DIMMING	100W	B - 13

1. SYSTEM SHALL BE CAPABLE OF PRESET SCENES
2. PROGRAM 6 BUTTON SCENE CONTROLLERS FOR ALL ON/OFF AND 4 PRE-SET SCENES. PROVIDE ON SITE PROGRAMMING WITH OWNER FOR 4 DESIRED SCENE SETTING.
3. PROVIDE OWNER TRAINING ON SYSTEM USE AND PROGRAMMING.

LIGHTING FIXTURE SCHEDULE				
TYPE	WATTAGE	DESCRIPTION		CATALOG #
	LAMP	FIXTURE		
S	(12) E26 LED 2800K ST64 STYLE	144W	36" DIAMETER 12-LIGHT FARMHOUSE CHANDELIER WITH BLACK FINISH. CHAIN MOUNTED TO 12'-6" AFF TO BOTTOM OF THE FIXTURE. PROVIDE (8) 100 WATT LED EQUIVALENT EDISON STYLE ST64 LAMPS.	BED BATH & BEYOND.COM #37288514
T	(8) E26 LED 2800K ST64 STYLE	96W	24" DIAMETER 8-LIGHT FARMHOUSE CHANDELIER WITH BLACK FINISH. CHAIN MOUNTED TO 12'-6" AFF TO BOTTOM OF THE FIXTURE. PROVIDE (8) 100 WATT LED EQUIVALENT EDISON STYLE ST64 LAMPS.	BED BATH & BEYOND.COM #44630705
U	(3) E26 LED 2800K ST64 STYLE	36	DECORATIVE 10" DIAMETER SURFACE MOUNTED LIGHT FIXTURE WITH GLASS SHADE AND DECORATIVE BLACK STEEL HOUSING	BED BATH & BEYOND.COM #41647907
V	LED 2800K 900L/HEAD	50W	8' TRACK SINGLE CIRCUIT WITH (5) TRACK HEADS INDICATED. INSTALL ON VERTICAL SIDE OF BEAM. PROVIDE WITH IN-FEED, END CAP, AND ALL MOUNTING ACCESSORIES.	WAC LIGHTING TRACK: H-BK-B' HEAD: H-5010-CS-BK
W	LED 2800K 1250L	10W	10" DIAMETER LED GOOSENECK RLM WALL SCONCE WITH BLACK SHADE AND DEDICATED LED	HI LITE H-15010-91/HL-D-91/DC/WGR-118-10LED427WBCM
Y	LED 2800K 3000L	23W	SAME AS TYPE W, EXCEPT 16" DIAMETER AND HIGHER OUTPUT.	HI LITE H-15116-91/HL-D-91/DC/WGR-118-23LED427WBCM
Z	LED 2800K 1100L	11W	LED 6" SURFACE MOUNT DOWNLIGHT.	PRESCOLITE LBSES-6RD-CS9-WH
EM	LED	6W	HIGH CAPACITY 2 HEAD EMERGENCY LIGHTING UNIT WITH INTEGRAL BATTERY AND CHARGER MOUNTED AT 15' AFF	DUAL LITE EVC6-WH
EM1	LED	3W	2 HEAD EMERGENCY LIGHTING UNIT WITH INTEGRAL BATTERY AND CHARGER MOUNTED AT 8' AFF	DUAL LITE EV2
XEM	LED	3W	LED UNIVERSAL MOUNT EXIT SIGN WITH WHITE HOUSING AND RED LETTERS AND INTEGRAL DUAL HEADS	DUAL-LITE EVC-URW

PROJECT TEAM

ARCHITECT:

PENINSULA
ARCHITECTS

330.657.2800

CIVIL ENGINEER:

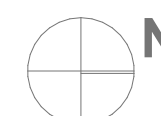
LEWIS LAND PROFESSIONALS
Civil Engineering & Land Surveying
330.355.8222

STRUCTURAL ENGINEER:

TTR Engineers
330.733.8332

MEP ENGINEER:

DENK ASSOCIATES
ARCHITECTURAL ENGINEERING
216.531.8880



PROJECT # 2324

ISSUE:

SD REVIEW	11-08-2024
DD REVIEW	12-20-2024
DD REVIEW	02-04-2025
FINAL REVIEW	03-07-2025

ELECTRICAL SPECIFICATIONS

SECTION 16010

PART 1 – GENERAL

1.01 GENERAL

A. The provisions of the Instructions to Bidders, General Conditions, Supplementary Conditions, Alternates, Addenda, and Division 1 are a part of this Specification. A requirement occurring in one as well as in another as though occurring in all. They are intended to be complementary and to describe and provide for a complete work. Contractors and Sub-contractors shall examine same as well as other Divisions of the Specifications which affect work under this Division.

B. Material or labor which is not indicated on the Drawings or Specifications, but which is obviously necessary to complete the work (and is usually included in similar work), shall be provided. Drawings and Specifications are to be considered as supplementing each other, and neither shall be indicated, or indicated but not specified, shall be provided as though mentioned in both Specifications and Drawings.

C. These Specifications establish quality standards of materials and equipment to be provided. Specific items are identified by Manufacturer, Trade Name or Catalog Designation. The Contractor shall submit his base bid price based upon specified equipment described herein and as detailed on drawings and associated contract documents

D. Definitions

- "Contractor" as used within the Electrical Specifications shall refer to the Electrical Contractor.
- "Equal" or "Equivalent" shall be understood to mean of the same quantity, size, number, value, degree, intensity and the items are similar in all respects. The Engineer will make the final decision of acceptance of these items.
- "Contract Documents" shall be understood to encompass drawings and specifications for architectural, structural, civil, mechanical, electrical and all other pertinent disciplines.
- "Provide" shall be interpreted to mean the Contractor shall furnish all labor, materials, equipment and supplies including tests and inspections necessary to install, connect, apply, erect, construct, and place in operating condition.
- "Furnish" shall be interpreted to mean the Contractor shall supply and deliver to the job site specified material, equipment, and supplies.
- "Install" shall be interpreted to mean assembling, placing, erecting, wiring and to make fully operational.

E. The Contractor shall furnish all materials and do all work in accordance with these specifications, and any supplementary documents provided by the Architect. The work shall include everything shown on the drawings and/or required by the specifications as interpreted by the Architect, regardless of where such information is indicated (Architectural, HVAC, Plumbing, Fire Protection, etc.), All work and materials furnished and installed shall be new and of the best quality and workmanship. The Contractor shall cooperate with the Architect so that no other liabilities that the Contractor may have by law or by other provisions of the Contract Documents shall cause defective materials to be used or poor workmanship to be performed.

F. Visit the site of the work and become familiar with conditions affecting the installation. The contractor shall ascertain the location of existing structures, utilities, equipment, etc. that may affect contract work and advise the engineer no later than five (5) working days prior to bid due date. Submission of a proposal shall presuppose knowledge of such conditions and no additional compensation shall be allowed where extra labor or materials are required because of ignorance of these conditions.

G. The contractor shall advise the architect and/or engineer of any code violations occurring in the Contract Documents prior to award of contract. In case of conflict between the Contract Documents and the requirements of any Code or Authorities having jurisdiction, the most stringent requirements of the aforementioned shall govern.

1.02 WORK INCLUDES

A. Include all labor, material, equipment, services, permits and certificates of inspection necessary for the proper completion of all electrical work. Items omitted, but necessary to make the electrical system complete and workable, shall be understood to form part of the work.

B. It is the purpose of the Electrical Drawings to indicate the approximate location of all equipment, outlets, etc.. Ascertain exact locations and arrange work accordingly. The right is reserved to effect reasonable changes in the location of outlets up to the time of roughing-in with out additional cost to the Owner. Changes in location of outlets or equipment necessitated by interference with the work of other trades shall be made only with the consent of the Architect's or Owner's representative and at no additional cost.

C. Work shall include, but not be limited to, the following general systems and equipment:

- Lighting and controls
- Power and lighting conduit/wiring
- Receptacles
- Panelboards
- Disconnect switches
- Fire alarm system
- New utility service and power distribution system
- Extension/modification of the existing power distribution system
- Temporary lighting and power distribution equipment for construction
- Telecommunications conduit system complete with pull wires
- Connections to Owner furnished equipment

D. All materials and workmanship shall comply with all applicable Codes, Specifications, Local and State Ordinances, Industry Standards, and Utility Company regulations. In the latest editions of the following: National Electrical Building Codes, State Laws, Local Ordinances, and the Contract Documents, the Contractor shall promptly notify the Architect in writing of any such difference.

E. The Electrical Design is based on the National Electrical Code. Work shall be installed in accordance with the Code as amended by the authority having jurisdiction, as well as any further modifications or regulations of local or state authorities. The Contractor shall include in his bid the cost of providing materials and equipment necessary to satisfy local or regional codes.

F. Provisions of the latest revisions to the Federal Occupational Safety and Health Act (OSHA) shall be satisfied.

G. Secure and pay for all permits and inspections required electrical work. Turn over all certificates of approval, by governing agencies, to the Architect for transmittal to Owner before payment is made for the work.

H. Give the proper authorities notices as required by law relative to the work in his charge. Comply with the regulations regarding temporary enclosures, obstructions or excavations and pay all legal fees involved.

I. The Electrical Contractor shall provide temporary electrical services adequate in size and characteristics, for use by all trades on site during project construction.

1.03 TESTS & DEMONSTRATION OF SYSTEMS

A. After installation but prior to energization, perform tests for grounds, short circuits and proper function. Faults in the installation shall be corrected.

B. Insulation resistance tests shall be made on the electrical system with not less than 1000V D.C. for 30 seconds using an approved megohmmeter (Biddle Megger or equal). Also, complete resistance/continuity tests on the grounding system.

C. The Contractor shall torque down all accessible bolts and proper rotation tests for all distribution and utilization equipment

D. At each test site, the Contractor shall provide any test control power necessary to perform these tests.

E. Conduct such tests and adjustments of the equipment as required by the Architect as necessary to verify performance requirements. Submit data to the Architect.

F. Before final payment, demonstrate to the Owner's satisfaction the proper operation of each of the systems comprising this Contract.

G. Instruct the Owner's maintenance personnel in the operation and maintenance of all electrical equipment and controls.

1.04 CLEANING AND FINISHING

A. After all tests have been completed, clean all equipment leaving everything in working order at the completion of this work.

B. All debris created by the execution of this work shall be removed.

1.05 CUTTING, PATCHING AND PAINTING

A. Avoid cutting into the work of others by using sleeves, inserts, chases and similar items necessary for the installation.

B. Except where otherwise specified or noted on drawings, do all cutting and

patching of the building as required to install sleeves, inserts, conduits and electrical equipment. Patching shall be done by mechanics skilled in the various trades. Work shall match the general construction work. All cutting shall be done in a manner to retain the structural integrity of the unit being cut. Where existing equipment is removed or relocated, patch to match the existing building finishes (walls, ceilings, floors, etc.).

C. Painting shall be provided under other Divisions of this Specification unless otherwise specified.

1.06 COORDINATION WITH OTHER TRADES

A. The Contract Drawings are diagrammatic only intending to show general runs and locations of conduit, equipment, terminals and specialties and not necessarily showing all required offsets, details and accessories and equipment to be considered. Take all field measurements necessary and assume responsibility for their accuracy. All work shall be accurately laid out with other Trades to avoid conflicts and to obtain a neat and workmanlike installation which will afford maximum accessibility for operation, maintenance and headroom.

B. Keep fully informed of the progress of the general construction. Install work that is to be concealed within the building construction in sufficient time to secure proper location without delay to the work of other trades. All conduit and outlet boxes concealed in masonry construction shall be installed during wall construction. Attend electrical work during the progress of building-in to prevent misalignments and damages to the electrical work.

C. The Contractor shall be responsible for coordinating with other trades (mechanical, plumbing, etc.), and shall verify any equipment and device voltage, phase and ampacity specifications. They shall furnish and install all necessary wiring, protective devices, etc., as recommended by the manufacturer and as required for the correct and proper operation of the installed equipment.

D. Examine the work of other trades when their work comes in contact with or is covered by this work. Do not attach to, cover up, or finish against any defective work, or install work in a manner which will prevent proper installation of the work of other trades.

E. All outlets, switches and receptacles shall be centered with respect to paneling, trim equipment, etc., and shall line up with other bottom or top of masonry courses.

F. Locate all electrical equipment, devices, equipment, etc., in the field in conjunction with drawings and building engineering. Coordinate routing of all feeders, conduit runs, pullboxes, etc. to avoid conflicts with existing ductwork, plumbing, and structural components.

1.07 GUARANTEE AND WORKMANSHIP

A. All materials and workmanship provided under the contract shall carry the standard warranty against all defects in material and workmanship. Any fault due to defective or improper material, equipment, workmanship or design which may develop shall be made good, forthwith, by and at the expense of the Contractor for the full term of the contract. The Contractor shall be responsible for any damage done to areas, materials and other systems resulting from this failure.

B. Manufacturers shall provide their standard guarantees for work under the Electrical Trades. However, such guarantees shall be in addition to and not in lieu of all other liabilities that the manufacturer and the Contractor may have by law or by other provisions of the Contract Documents.

C. Workmanship shall be in accordance with the best practices of the trade. Journeymen electricians under the supervision of a competent foreman shall install electrical work.

1.08 SUBMITTALS

A. Submit drawings and wiring diagrams in accordance with Division 1 on all items of equipment provided for review by the Engineer. These shall include, but not be limited to, the following:

- Lighting and controls
- Disconnect switches
- Panelboards and transformer
- Fire alarm devices

B. The submittals will be reviewed only for general compliance and not for dimensions, quantities, etc. The submittals that are returned shall be used for procurement. The responsibility of correct procurement remains solely with the Contractor. The submittal review shall not relieve the Contractor of responsibility for errors or omissions and deviations from the contract requirements.

C. The Contractor shall insure submittals bear the Contractors' dated approval stamp and indicate all options. If the submittal shows variations from the requirements of the contract documents, for any reason, the Contractor shall make specific mention of such variation in his letter of transmittal. The Contractor shall note in red on the submittal any change in design or dimension on the item submitted including changes made by the manufacturer that may differ from catalog information.

D. Acceptance or rejection of the proposed submittals shall be subject to approval by the Architect and Engineer. If requested, the Contractor shall submit (at their cost) inspection samples of both the specified and the proposed substitute items for review by the Engineer.

E. Contractor further agrees that if deviations, discrepancies, or conflicts between shop drawing submittals and the contract documents in the form of design drawings and specifications are discovered either prior to or after shop drawing submittals are processed by the Engineer, the design drawings and specifications shall control and shall be followed.

1.09 RECORD DRAWINGS

A. Each Contractor or Sub-contractor for Electrical work shall keep one complete set of the contract working drawings on the job site on which he shall record any deviations or changes from such contract drawings made during construction.

B. These Drawings shall be kept clean and undamaged, and shall not be used for any purpose other than recording deviations from working drawings and exact locations of concealed work.

1.10 LAYOUT DRAWINGS

A. Layouts for conduit runs, floor holes and sleeves must be made to coordinate with the General Contractor, Mechanical Contractor, Plumbing Contractor and all other trades and reviewed by the Architect.

1.11 OPERATING, MAINTENANCE AND SERVICE MANUALS

A. The Contractor shall thoroughly instruct the representative of the Owner, to the complete satisfaction of the Architect, in the proper operation of all systems and equipment provided by him. The Contractor shall make arrangements, via the Architect, as to whom the instructions are to be given in the operation of the basic and auxiliary systems and the period of time in which they are to be given. The Architect shall be completely satisfied that the representative of the Owner has been thoroughly and completely instructed in the proper operation of all systems and equipment before final payment is made. If the Architect determines that complete and thorough instructions have not been given by the Contractor to the Owner's representative, then the Contractor shall be directed by the Architect to provide whatever instructions are necessary until the intent of this paragraph of the specification has been complied with.

B. Deliver to the Owner all keys, special tools and appurtenances for proper operation and maintenance of the equipment. Provide complete bound set of operating and maintenance instructions for all electrical equipment and controls.

PART 2 – PRODUCTS

2.01 EQUIPMENT AND MATERIALS

A. Equipment and materials used on this job shall be new, U.L. labeled, and O.S.H.A. approved.

B. Equipment and materials shall be protected and be the responsibility of this Contractor until formally accepted by the Owner.

C. Material and equipment built into the work for which examination service is provided shall bear the Underwriter's Label.

D. Materials and equipment provided under this Contract shall be new and of the quality herein specified. Each class of materials shall be of the same type and make throughout the building.

E. All manufacturers of electrical equipment shall demonstrate to the satisfaction of the Contractor and Engineer that their equipment will function properly under the conditions of use as indicated on the drawings and as specified herein. Dimensions, weights, operating characteristics and all other related appurtenances shall be verified before submittal of shop drawings.

F. All equipment of one type (such as cable, panelboards, wiring devices, etc.) shall be the product of one manufacturer.

G. Fire Stopping

- In addition to the requirements specified herein, refer to Division 1 Specifications for fire stopping guidelines.

- All openings in fire rated floors, shafts, and walls accommodating penetrating items such as cables, conduits, raceways, cable trays, or bunnys shall be fire stopped.

- a. Provide fire stopping for steel electrical outlet boxes that exceed

16 square inches in area and/or when the aggregate surface of the boxes exceeds 100 square inches in any 100 square foot of wall area. In addition, provide fire stopping for steel electrical outlet boxes on opposite sides of the wall that are not separated by a horizontal distance of 24 inches.

b. Provide fire stopping where a penetration occurs through a structural floor or roof and a space would otherwise remain open between the surface of the penetration and the edge of the adjoining structural floor or roof.

c. Provide fire stopping to completely fill spaces around penetrations where penetrations occur at fire rated shafts and walls of hollow-type construction.

3. The installation of fire stopping materials shall conform to the latest Fire Resistance Directory as published by U.L.

4. Fire stopping shall be performed by a contractor trained or approved by the fire stopping manufacturer. Equipment used shall be in accordance with the fire stopping manufacturer's written installation instructions.

5. Acceptable Manufacturers: Specified Technologies, Inc.; Tremco, Inc.; 3M; and Hill.

PART 3 – EXECUTION

3.01 EQUIPMENT CONNECTIONS

A. Serve and connect equipment being installed during the construction period, but provide facilities only for serving equipment that will be moved in, set and connected later by the Owner. Provide cords and caps where required and fusion fusion in switches left for future equipment connections.

3.02 SERVICE SHUTDOWNS

A. Prior to any shutdown of systems, shutdowns or demolition the Contractor shall provide necessary investigation and notify the facilities Engineering/Maintenance personnel of work to be performed so as to avoid any detrimental shutdown of systems to adjacent spaces.

B. Maintain existing electrical systems in service until the new systems are complete and ready for service. Disable the systems only to make switchovers and connections. Any service shutdowns that may be required shall be scheduled with and approved by the Owner. All shutdowns shall be scheduled with and approved by the Owner. A minimum of a one-week notice shall be given prior to any service shutdown. No additional compensation shall be allowed for these shutdown periods even though overtime work may be required.

END OF SECTION

SECTION 16020 – ELECTRICAL DEMOLITION

PART 1 – GENERAL

1.01 WORK INCLUDES

A. The information indicated on the Demolition Drawings is a composite of information obtained from readily accessible field conditions and/or existing drawings. The Demolition Drawings may not show every existing receptacle, luminare, switch, conduit, etc. and shall therefore be considered approximate. Field verification of all existing devices and systems will be required to be made by the Contractor prior to commencement of work. Note that electrical or electronic circuit tracers were not used to verify these plans.

B. Include all costs and labor, materials, equipment, services, and permits necessary for completion of the demolition work. Provide protection for all personnel and adjacent areas before, during, and after execution of the demolition work.

C. Electrical equipment indicated on the Demolition Drawings is shown to indicate the extent of demolition only, and is not intended to be a record drawing of the existing conditions. The Drawings and Specifications establish the minimum standards for workmanship and materials.

PART 2 – PRODUCTS

2.01 MATERIALS

A. Provide materials and equipment for completion of the demolition work as described within the Specifications and on the Drawings.

PART 3 – EXECUTION

3.01 GENERAL DEMOLITION WORK

A. The Contractor shall remove and/or relocate all of the existing electrical work made necessary because of project alterations as indicated or implied on the Contract Documents of all trades. All existing electrical equipment and systems not affected by these changes shall remain and shall be protected where shown on the Drawings or not. The Contractor shall maintain existing circuit continuity as described in the Specifications and on the Drawings, or as required for continued operation of the electrical equipment and systems.

B. Where required, resupport existing conduits and cabling above ceilings being removed. Electrically disconnect equipment to be removed at the point of power supply. Remove conduit and wiring from equipment to be removed complete to the point of power supply. Existing panelboards being modified/utilized shall be provided with new typewritten directories to reflect any changes made during this demolition.

C. All wiring (Branch Circuit, Fire alarm, etc.) that is to be demolished shall be removed completely back to source including all conduit, supports, conductors, etc. Do not abandon any materials above ceilings or in walls. The associated circuit breakers shall be turned off and marked as spare if not reused for the new construction.

D. Where building systems or circuits are interrupted because of the demolition work, they shall be rerouted or relocated, modified and reconnected to provide a continuous system.

E. All cutting, patching, finishing, etc., for removal and relocating electrical equipment shall be included as part of the Electrical Work unless otherwise noted. All damage caused by the demolition work shall be properly patched with suitable material to match existing surfaces. All abandoned electrical conduits or other openings made by removal of existing electrical components shall be fire stopped with approved U.L. rated mineral wool and/or fire caulk. U.L. approved fire stop method/material shall match the existing and/or new rated assembly.

F. All equipment to be salvaged by the Owner shall be carefully removed and securely stored on site by the Contractor for salvage by the Owner. All other materials, equipment and debris shall become the property of the Contractor and shall be removed from the site.

G. Where existing electrical equipment is indicated on the Drawings to remain, the existing wiring shall remain, along with the related conduit system, unless otherwise shown or noted on the Drawings. Clean, repair, and refurbish existing materials and equipment that are to remain.

H. In all cases where existing branch circuit conduit and wiring is to be re-used or extended within the remodelled area, the Contractor shall test for grounding continuity and shall test the existing branch circuit wiring as though new, in accordance with the testing procedures outlined elsewhere in these Specifications.

I. Existing light outlet boxes may be reused if at proper height, location and in good condition. Existing concealed raceways may be reused if in good condition.

J. Cap existing empty conduits and plug open knockouts in existing electrical equipment.

K. In all existing or new areas specified or shown to be painted, the Contractor shall remove all electrical items as required including but not limited to luminaires, device plates, devices, etc. Reinstall after completion of painting. Any item not removed and painted over shall be suitably cleaned or replaced with a new item by the Contractor.

END OF SECTION

SECTION 16050 – BASIC MATERIALS AND METHODS

PART 1 – GENERAL

1.01 GENERAL

A. Work Includes

- Conduits
- Wire and Cable
- Wiring Devices
- Supporting Devices

B. Related Work Specified Elsewhere

Section 16010 – General Electrical Provisions
Section 16060 – Grounding and Bonding

C. Products

- Material and equipment built into the work for which examination service

is provided shall bear the Underwriter's Label.

2. Materials and equipment provided under this Contract shall be new and of the quality herein specified. Each class of materials shall be of the same type and make throughout the building.

PART 2 – PRODUCTS AND EXECUTION

2.01 CONDUITS

A. Materials

1. Conduit shall be rigid galvanized or intermediate grade in exterior masonry walls, masonry walls below grade, concrete floors, walls or slabs; damp or wet locations; or exposed below 8 feet above finished grade. Use P.V.C. in ground applications. All other interior conduits may be EMT or MC as approved by the NEC.

2. Rigid conduit fittings shall be threaded fittings. Rigid conduit couplings and hubs to have no less than five (5) threads of conduit engaged and screwed up tight.

3. All conduits that pass through the roof shall be in pipe ports.

4. All conduits that cross expansion joints shall have expansion seismic couplings.

5. All conduits that are indicated on the drawings to be run exposed on the building roof shall be supplied with pipe roller supports.

6. Exterior underground conduit shall be P.V.C. schedule 40, and must be encased in 6" of concrete under drives or roadways. The transition to rigid conduit must be made before the conduit enters the building.

B. Execution

1. Conduits shall be continuous and be secured to all boxes in a manner that each system shall be electrically continuous from point of service to all outlets. Terminals of all conduits shall be provided with locknuts and bushings. Plug ends of each conduit with an approved cap or disc to prevent the entrance of foreign materials during construction.

2. Conduits run in floor slab or concrete work shall have a minimum of one (1") inch of concrete cover and clean threads.

3. All conduit terminating in sheet steel enclosures shall have double locknuts and a bushing. Locknuts shall be of a type which will "bite" into the metal of the box. All bushings shall be of the insulating type.

4. Conduit shall be run concealed in finished areas. The routing of all surface mounted/exposed conduit in finished areas shall be coordinated with, and shall be approved by the architect prior to installation.

5. Where conduits passing through openings are exposed in finished rooms, finishes of filling materials shall match and be flush with adjoining floor, ceiling and wall finishes.

6. Conduits shall not be run on the exterior of the building or on the roof unless specifically indicated on the drawings. The routing of such conduits shall be approved by the Architect.

7. Home runs to panels shall be 3/4" minimum.

8. Conduit in ground floor shall be run under the slab, but may not be run in slaps.

9. Exterior underground conduits shall be 30" below grade, minimum.

10. Conduit passing through exterior walls for entry into building and floors below grade shall be made watertight with caulking compound and pipe sleeves with wall collar extending 8" all around the conduit. Collar shall be 1/8" thick steel welded to sleeve. Coordinate material requirements with the Contractor. Underground joints shall be sealed.

11. Where conduits pass through masonry or concrete walls, foundations or floors, the Electrical Contractor shall set such sleeves as are necessary for passage of the conduits. Sleeves shall be of sufficient size to provide air space around the conduit passing through for fireproofing. The Electrical Contractor shall be responsible for the exact location of sleeves provided under his Contract.

12. Conduit supporting systems shall be attached to the deck, slab, or structural framing only and not to any other appurtenances at the ceiling such as mechanical ducts, pipes and suspended ceiling hanger wires or framing members.

13. Conduits or other raceway systems that penetrate fire or smoke rated walls, ceilings, decks, partitions, etc. shall be constructed so as to maintain the integrity of the fire or smoke rated areas.

14. A separate ground must be run in all P.V.C. conduit. Conduit size shall be increased to accept ground when required. Vertical transitions shall be made with rigid steel elts.

2.02 WIRE AND CABLE

A. Materials

1. Wire and cable for lighting feeders shall be 600 volt type THHN/THWN or XHHW copper. Aluminum wiring is an acceptable alternate for feeders 100 amperes or larger.

2. Wire and cable for power and lighting branch circuits shall be TW/UF copper for #8 and smaller and THHN or XHHW copper for #6 and larger. Wire sizes shall be based on the 60°C ampacities for wire sizes #14 through #14AWG, and 75°C ampacities for wire sizes #10 AWG and larger.

3. Minimum wire size for power and lighting circuits shall be #12. Wire sizes #12 and smaller shall be solid. Wire sizes #10 and larger shall be stranded.

4. Where size is not indicated, Conductor size #12 minimum shall be used for circuits less than 120 feet and size #10 minimum shall be used for circuits greater than 120 feet.

5. Joints in #10 and smaller wire shall be made with Minnesota Mining and Manufacturing Co. insulated "Scotch Locks", Ideal Co. "Wing-Nut", T & B Co. "Piggy" connectors, or with mechanically crimped sleeves as manufactured by T & B Co., or Ideal Co. Connector sleeves shall be insulated with pressure sensitive electrical tape equal to Minnesota Mining and Manufacturing Co. Scotch No. 33 "plus" or Raychem Corp. heat shrinkable tape.

6. Joints in #8 and larger shall be made with pressure type mechanical connectors and insulated with electrical tape to 150% of the insulating value of the conductor insulation.

7. Color code wire and cable for circuits as called for in the National Electrical Code.

8. All mechanical wire & cable terminations shall be torque-tightened with torque wrench or torque screwdriver to manufacturer's recommended torque values.

2.03 WIRING DEVICES

A. Materials

1. Local light switches shall be back and side wired, 20 ampere, 120/277 volts, dry-type, hickey switch. The following manufacturers indicated are acceptable: Hubbell, Legrand, Leviton, Bryant.

2. Convenience outlets for 120 volt general use shall be duplex 20 ampere, 125 volt, 3 wire, grounding type. The top shall be of high impact thermoplastic such as nylon. The strap shall be heavy duty steel that wraps around the device. Ground contacts shall be brass and riveted to the strap. Automatic ground clip shall be provided. Manufacturers and their catalog numbers listed are acceptable.

Hubbell 5362
Legrand 5362
Leviton 5362
Bryant 5362

3. All switch and convenience outlet plates shall be smooth finish, UV-resistant, thermoplastic material such as nylon to suit outlets provided. To insure uniform color, plates and devices shall be of one manufacturer. In unfinished areas, use of cadmium plated round corner steel cover plates is permitted.

4. All 15- and 20-ampere, 120-volt nonlocking type receptacles in the areas specified in NEC 406.12(1) through (7) shall be listed tamper resistant.

5. Ground fault circuit interrupter (G.F.C.I.) receptacles, where required by local code, shall be Hubbell #AFGF15TR.

6. Weatherproof receptacles shall be Hubbell #HBL5262WR duplex outlet with Hubbell #HBL5221 polycarbonate gray plate, box mount.

B. Execution

1. Provide receptacles and switches as indicated. Colors of device and plates shall be selected by the Architect. Verify before installation.

2. Adjunct devices shall be mounted in ganged boxes.

3. Junction boxes shall not be installed above gypsum ceilings, due to

inaccessibility.

2.04 DISCONNECT SWITCHES

A. Disconnect switches, unfused or fused, single throw, shall be installed where indicated on the Drawings and/or where required by Code. Switches shall be heavy duty for indoors or outdoors as required and manufactured by Square D, General Electric, Siemens or Cutler-Hammer.

B. If double lighting or oversized wires are required, provide a wye or splice box.

C. The means of disconnect/control for all equipment and disconnects shall be installed in a readily accessible location and shall have proper working space as defined in NEC Article 100 and 110.

2.05 SUPPORTING DEVICES

A. All hardware, supports, hangers, angle iron, channels, rods, clamps necessary to install electrical equipment and lighting fixtures shall be supplied to suit conditions and application. The use of perforated straps will not be permitted.

B. Supporting devices shall be galvanized or aluminum material.

2.06 EQUIPMENT MOUNTING

A. All equipment mounted on exterior walls shall be attached to 3/4" plywood boards furred out 1" from wall. Provide painting of plywood boards _ finish as selected by the Architect.

