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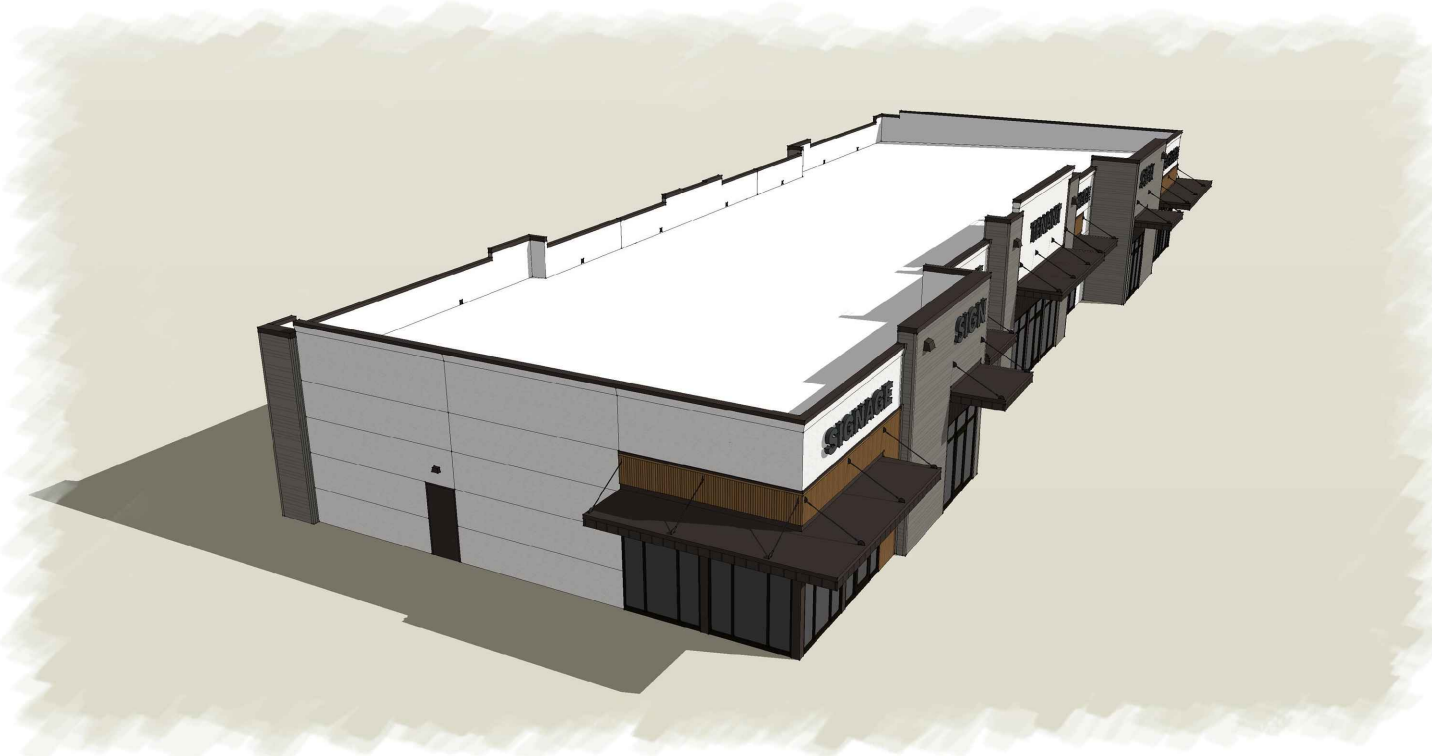
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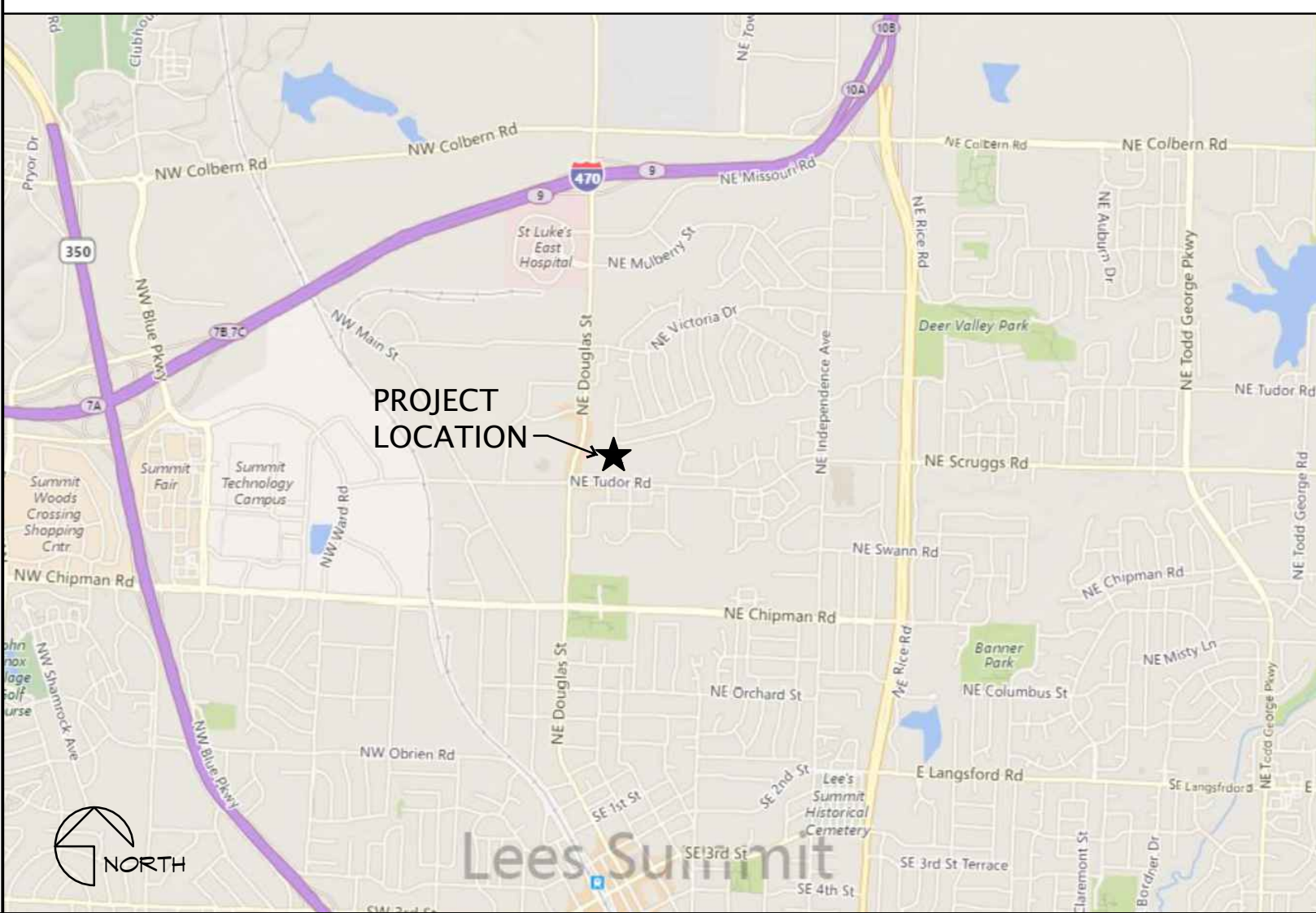
DOUGLAS

CORNER

LOT 1B, LEES SUMMIT, MISSOURI 64086



AREA MAP



General Project Information

- 1)Project Information:
- 1.A)

Name: Douglas Corner
- 1.B)

Legal Description: Lot 1B, Lees Summit, Missouri 64086
- 2)Building Information:
- 2.A)

Gross Floor Area: 7,820 sqft
- 2.B)

Number of stories: 1 story
- 2.C)

Height: 24'-0"

International Building Code Review

- 3)Codes: (As amended by the City of Lees Summit, Missouri)
- 3.A)

2018 International Building Code
- 3.B)

2018 International Plumbing Code
- 3.C)

2018 International Mechanical Code
- 3.D)

2018 International Fuel Gas Code
- 3.E)

2018 International Residential Code
- 3.F)

2018 International Fire Code
- 3.G)

2017 National Electrical Code
- 3.H)

ICC/ANSI A117.1-2009, Accessible and Usable Buildings and Facilities
- 4)Use / Occupancy Classification: (Chapter 3)
- 4.A)

Restaurant / A-2 Assembly
- 4.B)

Office / B – Business
- 4.C)

Retail / M – Mercantile
- 5)Nonseparated Occupancies (508.3):
- 5.A)

Allowable building area, height and number of stories (508.3.2): They shall be based on the most restrictive allowances for the occupancy groups under consideration. A-2 Assembly Group is the most restrictive
- 5.B)

Separation (508.3.3): No separation is required between nonseparated occupancies
- 6)Fire Protection Systems: (Chapter 9)
- 6.A)

An automatic sprinkler system will be provided throughout in accordance with NFPA 13.
- 6.B)

Sprinkler system supervision and alarms (903.4): All valves controlling the water supply for automatic sprinklers systems, pumps, tanks, water levels and temperatures, critical air pressures and water flow switches on all sprinkler systems shall be electrically supervised by a listed fire alarm control unit.
- 6.C)

A manual fire alarm system that activates the occupant notification system in accordance with Section 907.5 shall be installed in Group A occupancies where the occupant load due to the assembly occupancy is 300 or more, or where the Group A occupant load is more than 100 persons above or below the lowest level of exit discharge. Group A occupancies not separated from one another in accordance with Section 707.3.10 shall be considered as a single occupancy for the purposes of applying this section. It is not anticipated that tenant finish projects will exceed these conditions. A manual fire alarm system will not be provided.
- 6.D)

Group B (907.2.2): A manual fire alarm system is required when: 1. The combined Group B occupant load of all floors is 500 or more persons, 2. The group M occupant load is more than 100 persons above or below the lowest level of exit discharge, or 3. The fire area contains an ambulatory care facility. It is not anticipated that tenant finish projects will exceed these conditions. A manual fire alarm system will not be provided.
- 6.E)

Group M (907.2.7): A manual fire alarm system is required when: 1. The combined Group M occupant load of all floors is 500 or more persons, and 2. The group M occupant load is more than 100 persons above or below the lowest level of exit discharge. It is not anticipated that tenant finish projects will exceed these conditions. A manual fire alarm system will not be provided.
- 7)Type of Construction: (Chapter 6)
- 7.A)

Type VB
- 8)Allowable Building Heights and Areas: (IBC Chapter 5)
- 8.A)

Allowable Building Height in feet above grade Plane (Table 504.3): A, S = 60ft
- 8.B)

Allowable Number of Stories Above Grade Plane (Table 504.4): A-2, S = 2 stories
- 8.C)

Allowable Area Factor (Table 506.2): A-2, S1 = 24,000 sqft
- 9)Fire-Resistance Rating Requirements for Building Elements: (Table 601)
- 9.A)

Structural Frames: 0 hours
- 9.B)

Bearing Walls Exterior: 0 hours but not less than per Table 602
- 9.C)

Bearing Walls Interior: 0 hours
- 9.D)

Nonbearing Walls and Partitions Exterior: per Table 602
- 9.E)

Nonbearing Walls and Partitions Interior: 0 hours
- 9.F)

Floor Construction and associated secondary members: 0 hours
- 9.G)

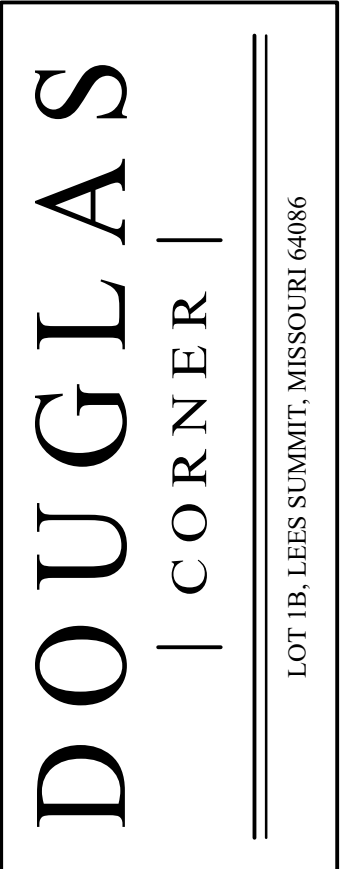
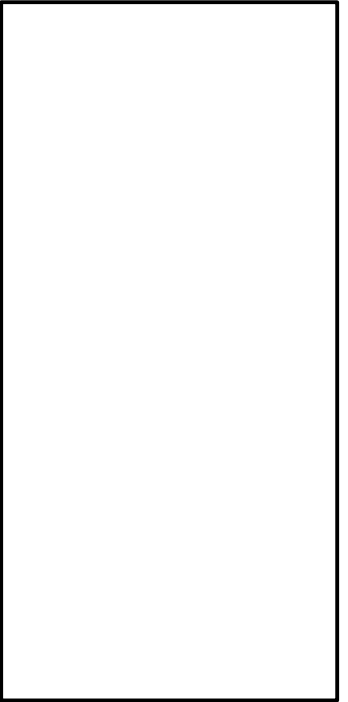
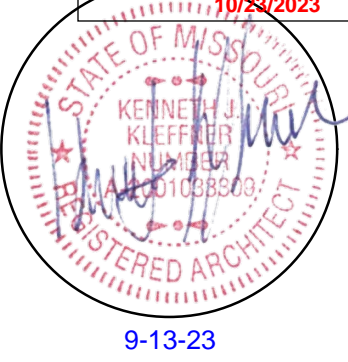
Roof Construction and associated secondary members: 0 hours
- 10)Fire-Resistance Rating Requirements for Exterior Walls Based on Fire Separation Distance (FSD): (Table 602)
- 10.A)

FSD = 10' and greater for group A = 0 hour
- 11)Exterior Wall Openings: Maximum Area of Exterior Wall Openings Based on Fire Separation Distance (FSD) and Degree of Opening Protection (Table 705.8): FSD = 20' and greater = No limit
- 12)Means of Egress: (IBC Chapter 10)
- 12.A)

Occupant load (Table 1004.1.2): To be analyzed under each separate tenant finish package. Assumed occupant load for shell based on occupancy group M - Mercantile = 7,820 sqft / 30 = 260.67 = 261 occupants
- 13)Plumbing Requirements: (Table 2902.1)
- 13.A)

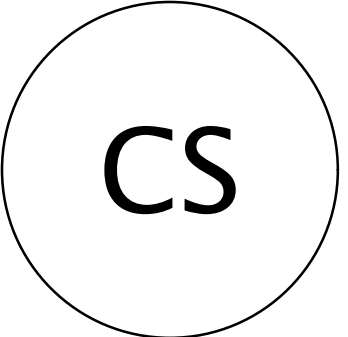
To be analyzed under each separate tenant finish package.

ASSEMBLY OCCUPANCY
CORRECTED TO A-2



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REV	DATE	DESCRIPTION	CITY COMMENTS
1	08-11-2023	ASSEMBLY OCCUPANCY CORRECTED TO A-2	
PROJECT# 23012			





NEW WALL OF 5/8" GYPSUM BOARD ON BOTH SIDES OF 2X4 FRAMING AT 16" O.C. INFILL ALL CAVITIES WITH SOUND BATT INSULATION. EXTEND WALL FROM FLOOR TO BOTTOM CHORD OF ROOF TRUSSES ABOVE.

----- PROPOSED LOCATION OF FUTURE DEMISING WALL. NO WORK UNDER THIS CONTRACT.

FLOOR PLAN NOTES

- [illegible]

Figure 1: Elevation A2 - Door Options. The diagrams show various door configurations for Elevation A2, including dimensions and notes on door opening options.

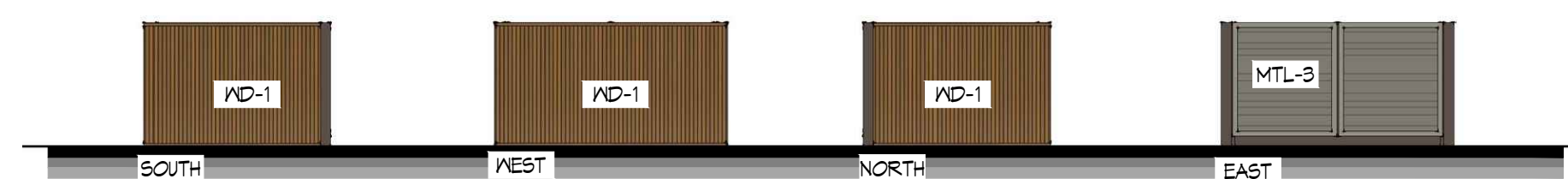
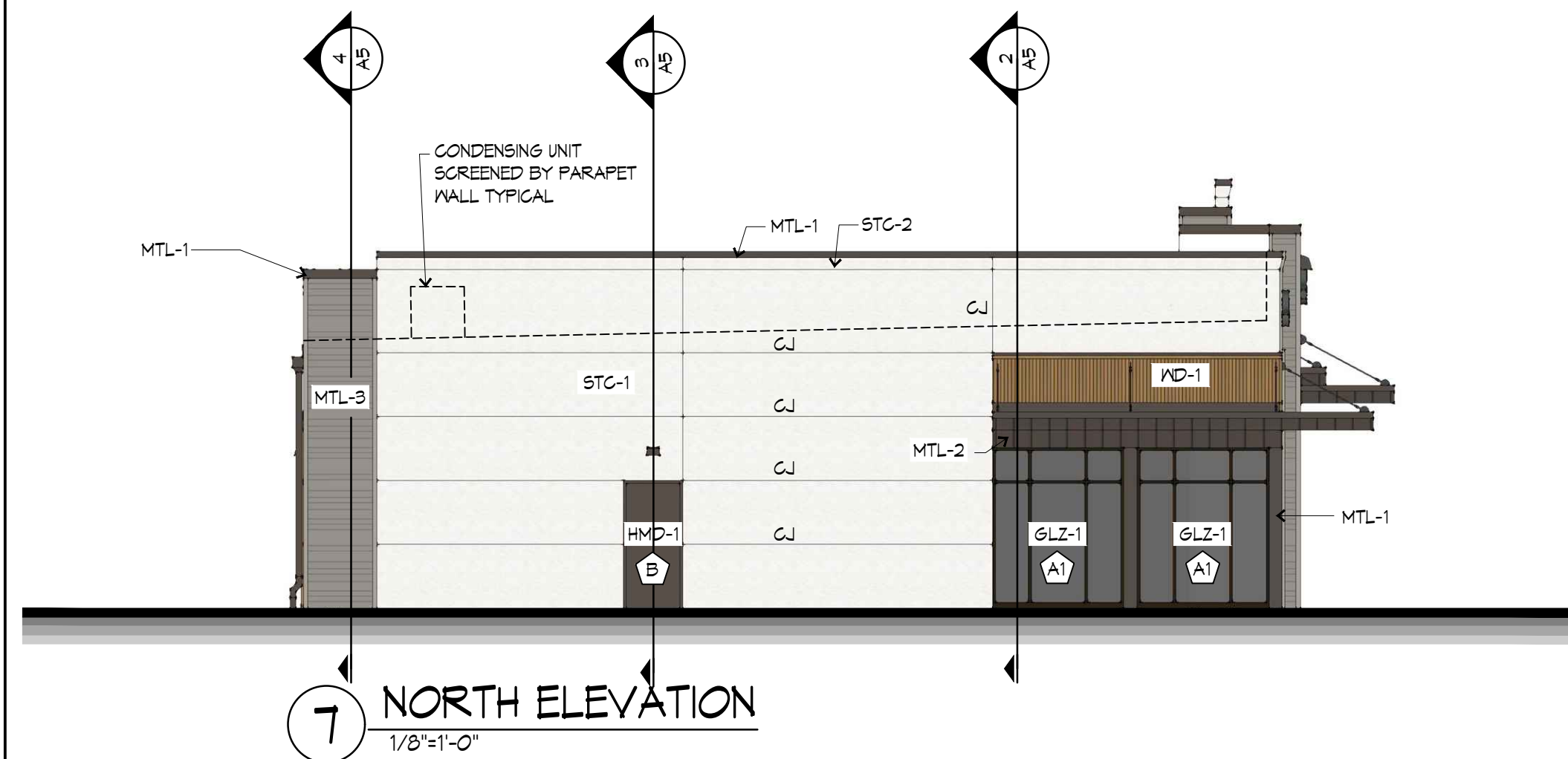
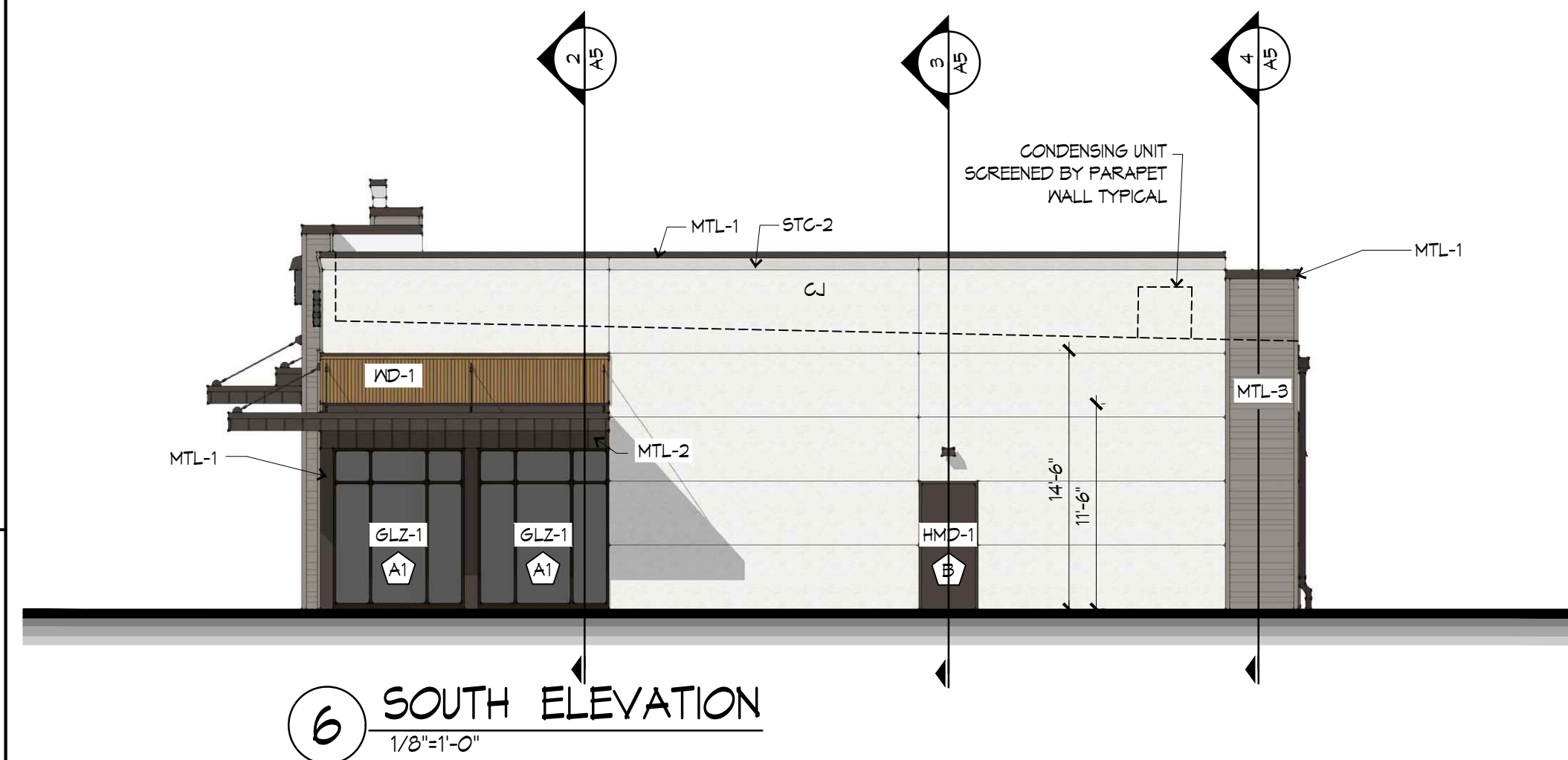
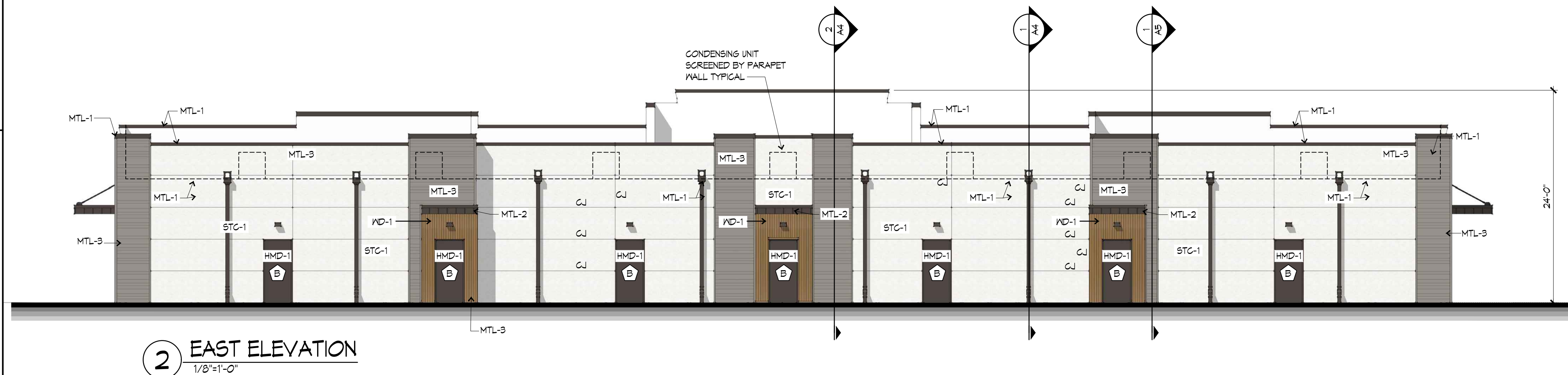
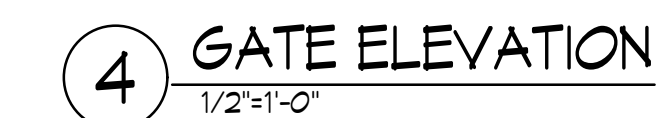
- Option 1 (A1):** Aluminum storefront. Dimensions: 7'-4" wide, 6'-0" high. Notes: Center opening to be configured to allow owner option to provide door to match A2 elevation. Door opening to be configured to allow owner option to provide door to match A2 elevation.
- Option 2 (A2):** Aluminum storefront. Dimensions: 7'-4" wide, 6'-0" high. Notes: Door opening to be configured to allow owner option to provide door to match A2 elevation. Door opening to be configured to allow owner option to provide door to match A2 elevation.
- Option 3 (A3):** Aluminum storefront. Dimensions: 9'-0" wide, 6'-0" high. Notes: Door opening to be configured to allow owner option to provide door to match A2 elevation. Door opening to be configured to allow owner option to provide door to match A2 elevation.
- Option 4 (A4):** Aluminum storefront. Dimensions: 9'-0" wide, 6'-0" high. Notes: Door opening to be configured to allow owner option to provide door to match A2 elevation. Door opening to be configured to allow owner option to provide door to match A2 elevation.
- Option 5 (A5):** Aluminum storefront. Dimensions: 6'-6" wide, 6'-0" high. Notes: Right opening to be configured to allow owner option to provide door to match A6 elevation. Right opening to be configured to allow owner option to provide door to match A6 elevation.
- Option 6 (A6):** Aluminum storefront. Dimensions: 6'-6" wide, 6'-0" high. Notes: Door opening to be configured to allow owner option to provide door to match A2 elevation. Door opening to be configured to allow owner option to provide door to match A2 elevation.
- Option 7 (B):** Welded exterior metal frame and insulated hollow metal door. Dimensions: 3'-4" wide, 6'-0" high. Notes: Provide address number typical at all doors. Address numbers shall be Arabic numerals or alphabet letters. Numbers shall be a minimum of 4-inches (102 mm) high with a minimum stroke width of 0.3 inch (12.1 mm).

<p>GZI ALL EXTERIOR GLAZING TO BE INSULATED GLAZING UNITS WITH LIGHT BRONZE TINTED LOW-E TEMPERED SAFETY GLASS</p>	<p><u>HW SET: A2, A3, A4 AND A6 ALUMINUM STOREFRONT DOORS</u></p> <p>EACH TO HAVE:</p> <p>1 SET PIVOT BY DOOR SUPPLIER.</p> <p>1 EA INTERMEDIATE PIVOT</p>
--	--

VERIFY STYLE AND FINISH OF

HW SET: B
EACH TO HAVE:
3 EA HINGE 5BB1 4.5 X 4.5 652 IVE
1 EA MORISE ENTRANCE L9453 SAT
626 SCH WITH L503-363 EZ TURN
ADA THUMBTURN
1 EA CLOSER 4031EDA 689 LCN
1 SET SEALS 5050C BLK NGP
1 EA THRESHOLD 2009APK PEMKO
1 EA FLOOR STOP FS186 IVE
1 EA DRIP STRIP 16A NGP - FIELD
PAINT TO MATCH DOOR

REV#	DATE	DESCRIPTION
1	4-13-23	CITY COMMENTS
DATE: 08-11-2023		
PROJECT# 23012		



8 TRASH ENCLOSURE ELEVATIONS
1/8"=1'-0"

STC-1 CEMENTITIOUS STUCCO SYSTEM (COLOR = OFF WHITE)

STC-2 CEMENTITIOUS STUCCO SYSTEM WITH PROJECTED FOAM SHAPE (COLOR = OFF WHITE)

CJ STUCCO CONTROL JOINT.

MTL-1 BREAK METAL FLASHINGS, SCUPPER HEADS AND DOWNSPOUTS (COLOR = DARK BRONZE)

MTL-2 FLUSH CONCEALED FASTNER METAL WALL PANEL - PER GLAZ 12"X 1" DP FLUSH PANELS (COLOR = DARK BRONZE)

MTL-3 ARCHITECTURAL METAL PANEL - ELEVATE (FORMERLY FIRESTONE) DELTA CFP-12 (50%), CFP-12B(25%), and CFP-12T(25%) INSTALLED IN A RANDOM MANNER TO PROVIDED VARIEGATED SPAGNS. (COLOR = SLATE GRAY)

AWN-1 BREAK METAL FACED CANOPY PER DETAIL 19/A6 (COLOR = DARK BRONZE)

GLZ-1 ALUMINUM STOREFRONT AND ENTRY SYSTEM (COLOR = BLACK ANODIZED) WITH DOUBLE PANE INSULATED GLASS (COLOR = GRAY TINT)

GLZ-2 WOOD CASEMENT WINDOW WITH EXTERIOR ALUMINUM GLASSING AND 1" GRILLS. (COLOR = BLACK) WITH DOUBLE PANE INSULATED GLASS (COLOR = GRAY TINT)

HMD-1 HOLLOW METAL DOOR AND FRAME. PAINT (COLOR = DARK BRONZE TO MATCH MTL-1)

IND-1 COMPOSITE WOOD PANEL SYSTEM. NEXTECHWOOD EUROPEAN STYLE SIDING UHSB BELGIAN BOARD (COLOR = FERLUVIAN TEAK)

S&N-1 WALL SIGN. TO BE SUBMITTED UNDER SEPERATE SIGN PERMIT

REV#	DATE	DESCRIPTION
01	6-12-23	CITY COMMENTS
02	6-26-23	TRASH ENCLOSURE

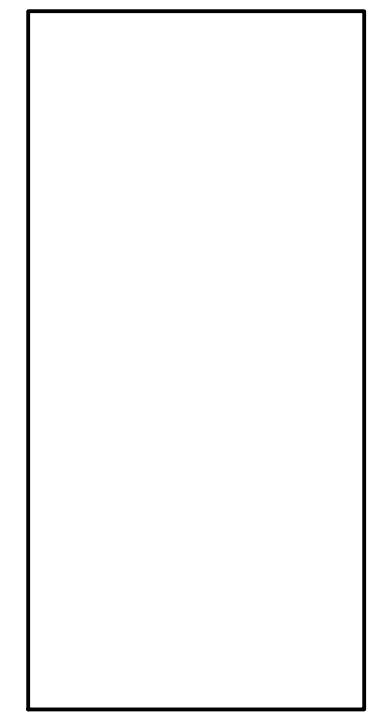
DATE: 08-11-2023

PROJECT# 23012



**GUY GRONBERG
ARCHITECTS, P.C.**
113 SE 24th St.
Lees Summit, MO 64063
Phone: 816.524.0970
Fax: 816.524.0570

G²



**DOUGLAS
| CORNER |**

LOT 1B, LEES SUMMIT, MISSOURI 64086

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REV#	DATE	DESCRIPTION	CITY COMMENTS
1	9-15-23		
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DATE: 08-11-2023
PROJECT# 23012

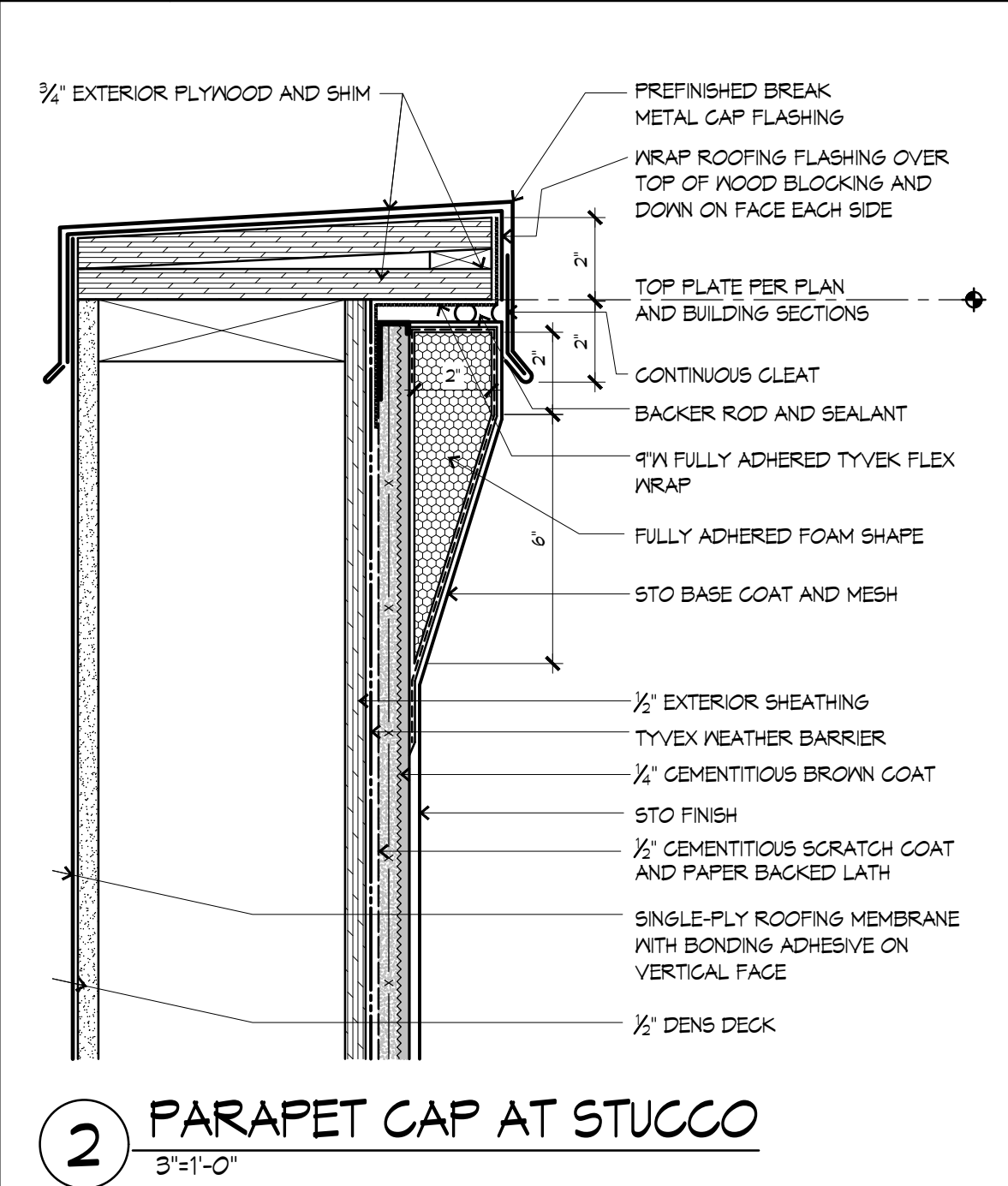
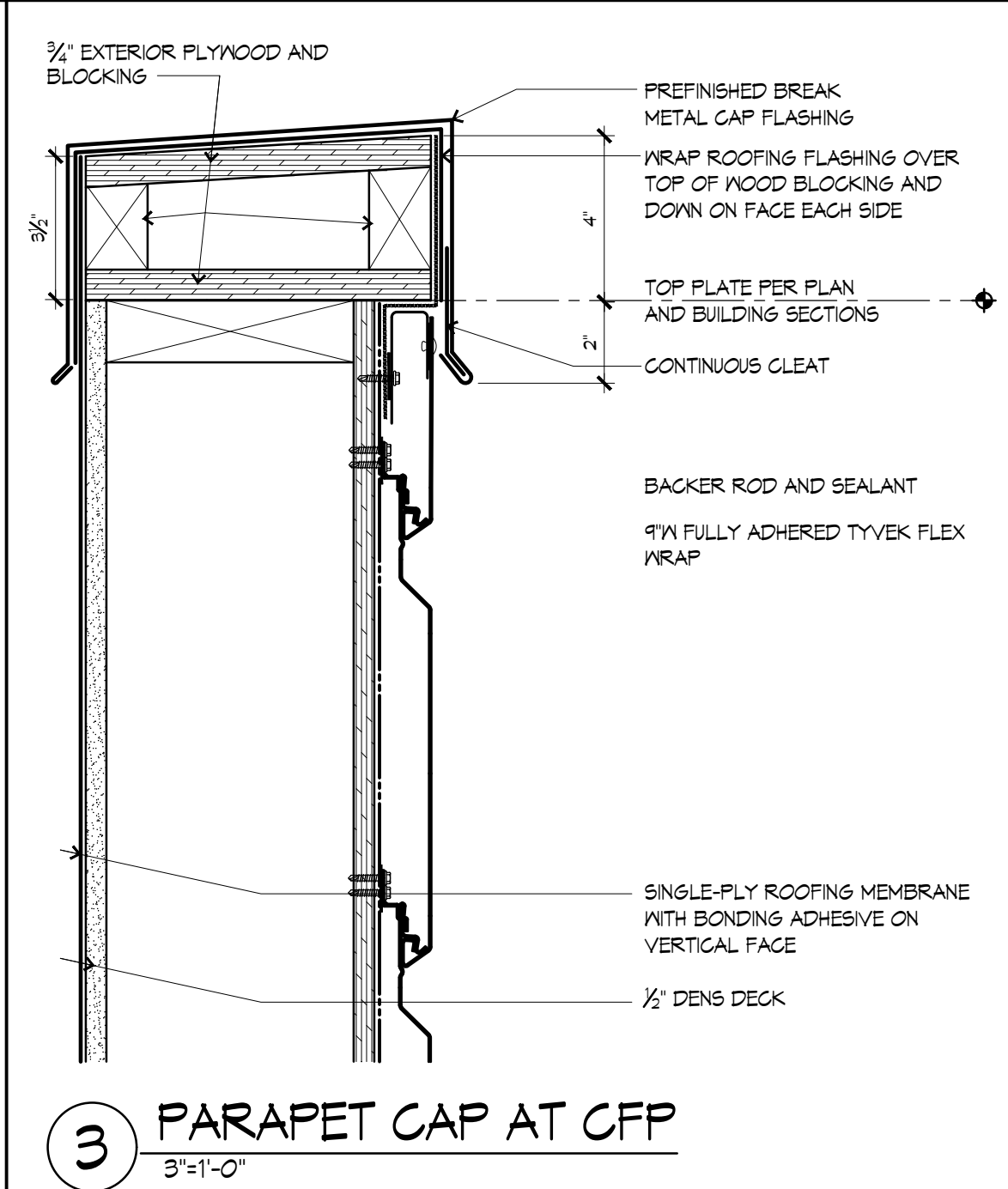
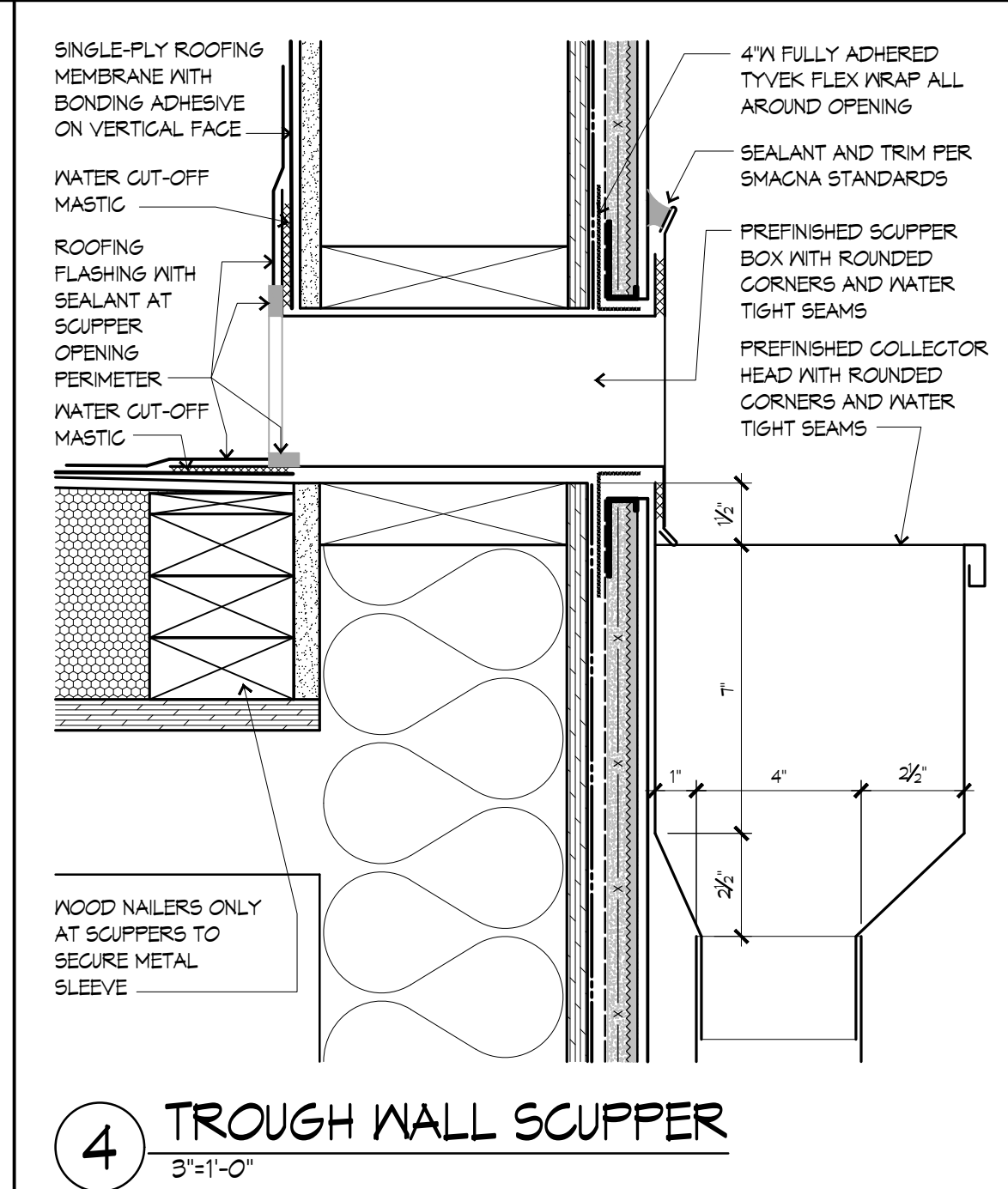
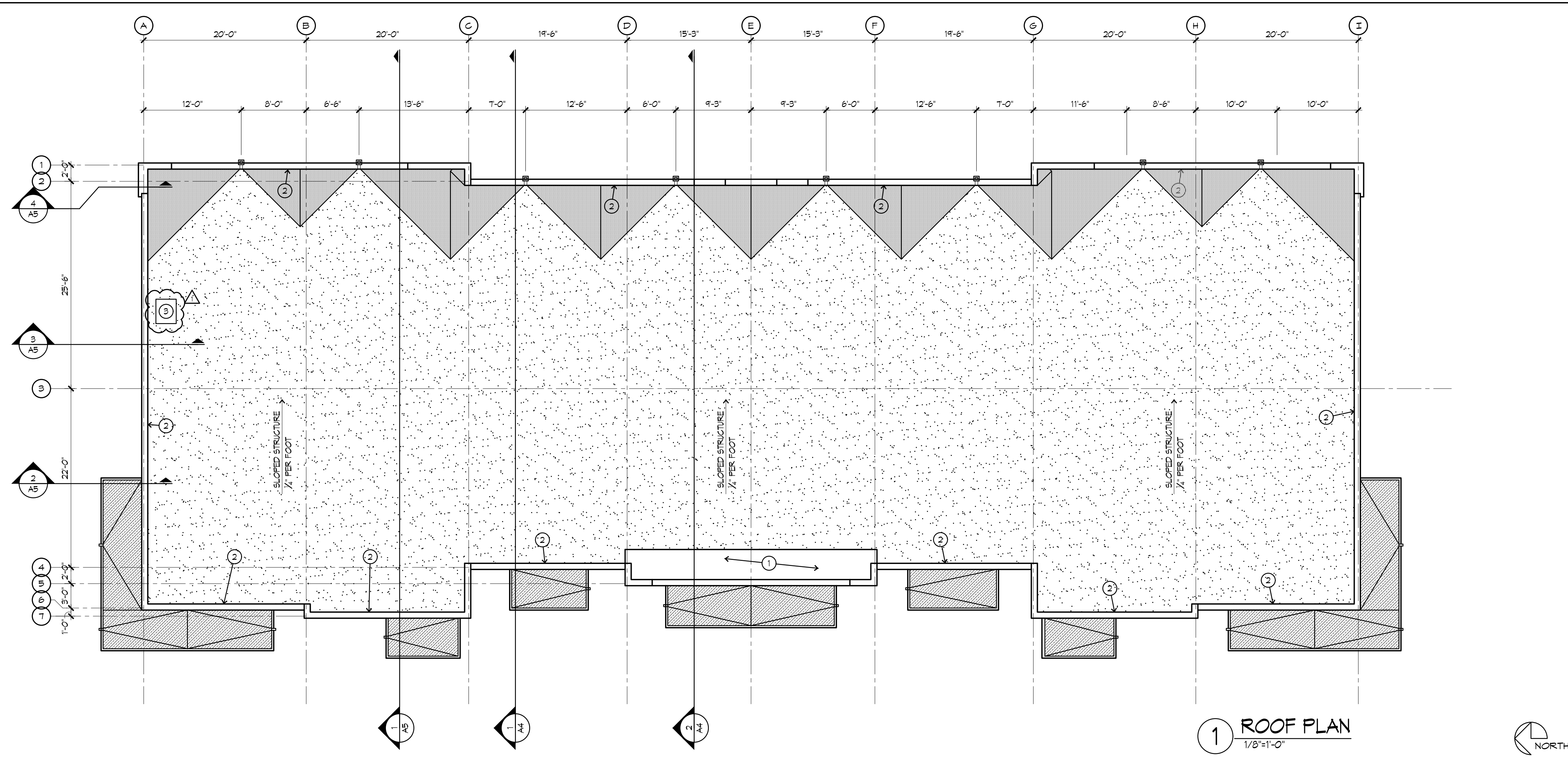
A3

ROOF PLAN LEGEND

- SINGLE PLY ROOFING OVER 1/4" DENS DECK OVER TWO LAYERS OF 2 1/2" RIGID INSULATION WITH JOINTS STAGGERED
- SINGLE PLY ROOFING OVER 1/4" DENS DECK OVER TAPERED INSULATION TO SLOPE ROOF AT 1/4" PER FOOT TO THROUGH WALL SCUPPER OVER TWO LAYERS OF 2 1/2" RIGID INSULATION WITH JOINTS STAGGERED.
- SINGLE PLY ROOFING OVER TAPERED INSULATION TO SLOPE ROOF TO ROOF EDGE SCUPPER. INSULATION TO BE 3/4" THICK AT PERIMETER OF ROOF AND 1/2" THICK AT SCUPPER.

FLOOR PLAN NOTES

- CONTINUE ROOFING AND INSULATION ON ANGLED SUPPORT BRACKETS PER SECTION 2/A4.
- ON INTERIOR FACE OF PARAPET PROVIDE SINGLE PLY MEMBRANE WITH BONDING ADHESIVE ON VERTICAL FACE OF 1/2" DENS DECK BOARD. TYP. WRAP ROOFING OVER TOP OF PARAPET. REFER TO DETAILS 2 AND 3 ON THIS SHEET.
- BILCO 30"x36" TYPE S-40 ROOF HATCH. PROVIDE BILCO BIL-GUARD 2.0 HATCH RAIL SYSTEM RL2-S



1881

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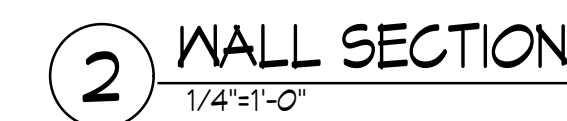
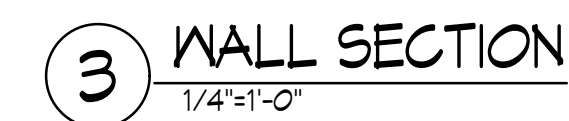
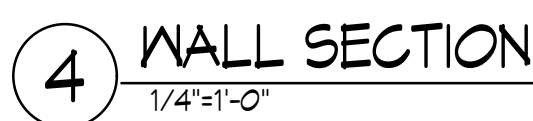
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A4



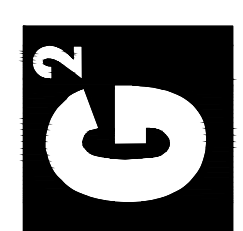
- 1) 4" CONCRETE SLAB ON VAPOR BARRIER ON 4" GRANULAR LEVELING COURSE. REFER STRUCT. DRAWINGS
- 2) CONCRETE TRENCH FOOTING - REFER STRUCT. DRAWINGS
- 3) 2" RIGID PERIMETER INSULATION
- 4) PRE-ENGINEERED WOOD ROOF TRUSSES AT 24" O.C. TOP CHORD TO SLOPE AT 1/4" PER FOOT. REFER TO STRUCT. DRAWINGS
- 5) INSTALL 61/2" FSK BATT INSULATION BETWEEN JOISTS.
- 6) 2X6 LOAD BEARING WALL - REFER TO STRUCT. DRAWINGS. PROVIDE BATT INSULATION PER SPECIFICATIONS.
- 7) NOT USED
- 8) SINGLE PLY ROOF MEMBRANE PER SPECIFICATION OVER 1/2" DENS DECK BOARD, OVER TWO LAYERS OF 2X6" RIGID INSULATION WITH JOINTS STAGGERED OVER PLYWOOD ROOF DECKING PER STRUCTURAL DRAWINGS
- 9) SINGLE PLY ROOF MEMBRANE PER SPECIFICATION OVER TAPERED CRICKETS OVER PLYWOOD ROOF DECKING PER STRUCTURAL DRAWINGS
- 10) 2X6 WOOD JOISTS AT 24" O.C. REFER TO STRUCTURAL DRAWINGS.
- 11) AT CONTRACTOR OPTION PROVIDE GYPSUM BOARD OVER FRAMING - REFER TO SPEC. FOR TYPE AND THICKNESS OF GYPSUM BOARD
- 12) TYPICAL AT BACKSIDE OF PARAPETS INSTALL SINGLE-PLY ROOFING MEMBRANE WITH BONDING ADHESIVE ON VERTICAL FACE OVER 1/2" DENS DECK
- 13) CONCEALED FASTENER METAL WALL PANEL SYSTEM - MTL-3 WITH END CLOSURES, FLASHING, HANGER CLIPS ECT. PER MFGR STANDARDS. INSTALL OVER WEATHER BARRIER OVER EXTERIOR SHEATHING PER SPECIFICATION.
- 14) CONCEALED FASTENER METAL WALL PANEL SYSTEM - MTL-3 WITH END CLOSURES, FLASHING, HANGER CLIPS ECT. PER MFGR STANDARDS. INSTALL OVER WEATHER BARRIER OVER EXTERIOR SHEATHING PER SPECIFICATION.
- 15) GEMENTHITOUS STUCCO SYSTEM - STG-1 INSTALL OVER WEATHER BARRIER OVER EXTERIOR SHEATHING PER SPECIFICATION.
- 16) COMPOSITE WOOD PANEL SIDING SYSTEM - WD-1 WITH TRIMS AND FASTENERS PER MFGR. STANDARDS. INSTALL OVER WEATHER BARRIER OVER EXTERIOR SHEATHING PER SPECIFICATION.
- 17) ALUMINUM STOREFRONT AND ENTRY SYSTEM (COLOR = BLACK ANODIZED) WITH DOUBLE PANEL INSULATED GLASS (COLOR = GRAY TINT)
- 18) HOLLOW METAL DOOR AND FRAME. PAINT
- 19) INSTALL DIRECT APPLIED EXTERIOR FINISH SYSTEM OVER EXTERIOR GYPSUM BOARD.



- # SECTION NOTES
- 1' 4" CONCRETE SLAB ON VAPOR BARRIER ON 4" GRANULAR LEVELING COURSE - REFER STRUCT. DRAWINGS
 - 2' CONCRETE TRENCH FOOTING - REFER STRUCT. DRAWINGS
 - 3' 2" RIGID PERIMETER INSULATION
 - 4' PRE-ENGINEERED WOOD ROOF TRUSSES AT 24" O.C. TOP CHORD TO SLOPE AT 1/4" PER FOOT. REFER TO STRUCT. DRAWINGS
 - 5' INSTALL 61/2" FSK BATT INSULATION BETWEEN JOISTS.
 - 6' 2X6 LAD BEARING WALL - REFER TO STRUCT. DRAWINGS. PROVIDE BATT INSULATION PER SPECIFICATIONS.
 - 7' NOT USED
 - 8' SINGLE PLY ROOF MEMBRANE PER SPECIFICATION OVER 3/4" DENS DECK BOARDS OVER TWO LAYERS OF 21/2" RIGID INSULATION WITH JOISTS STAGGERED OVER PLYWOOD ROOF DECKING PER STRUCTURAL DRAWINGS
 - 9' SINGLE PLY ROOF MEMBRANE PER SPECIFICATION OVER TAPERED CRICKETS OVER PLYWOOD ROOF DECKING PER STRUCTURAL DRAWINGS.
 - 10' 2X6 WOOD JOISTS AT 24" O.C. REFER TO STRUCTURAL DRAWINGS.
 - 11' AT CONTRACTOR OPTION PROVIDE GYPSUM BOARD OVER FRAMING - REFER TO SPEC. FOR TYPE AND THICKNESS OF GYPSUM BOARD
 - 12' TYPICAL AT BACKSIDE OF PARAPETS INSTALL SINGLE-PLY ROOFING MEMBRANE WITH BONDING ADHESIVE ON VERTICAL FACE OVER 1/2" DENS DECK
 - 13' CONCEALED FASTENER METAL WALL PANEL SYSTEM - MTL-3 WITH END CLOSURES, FLASHING, HANGER CLIPS ECT. PER MFR'S STANDARDS. INSTALL OVER WEATHER BARRIER OVER EXTERIOR SHEATHING PER SPECIFICATION.
 - 14' CONCEALED FASTENER METAL WALL PANEL SYSTEM - MTL-2 WITH END CLOSURES, FLASHING, HANGER CLIPS ECT. PER MFR'S STANDARDS. INSTALL OVER WEATHER BARRIER OVER EXTERIOR SHEATHING PER SPECIFICATION.
 - 15' CEMENTITIOUS STUCCO SYSTEM - STG-1 INSTALL OVER WEATHER BARRIER OVER EXTERIOR SHEATHING PER SPECIFICATION.
 - 16' COMPOSITE METAL PANEL SIDING SYSTEM - IND-1 WITH TRIMS AND FASTENERS PER MFR'S STANDARDS. INSTALL OVER WEATHER BARRIER OVER EXTERIOR SHEATHING PER SPECIFICATION.
 - 17' ALUMINUM STOREFRONT AND ENTRY SYSTEM (COLOR = BLACK ANODIZED) WITH DOUBLE PANEL INSULATED GLASS (COLOR = GRAY TINT)
 - 18' HOLLOW METAL DOOR AND FRAME. PAINT
 - 19' INSTALL DIRECT APPLIED EXTERIOR FINISH SYSTEM OVER EXTERIOR GYPSUM BOARD



**GUY GRONBERG
ARCHITECTS, P.C.**
113 SE 3rd St.



LOT 1B, LEES SUMMIT, MISSOURI 64086

DOUGLAS

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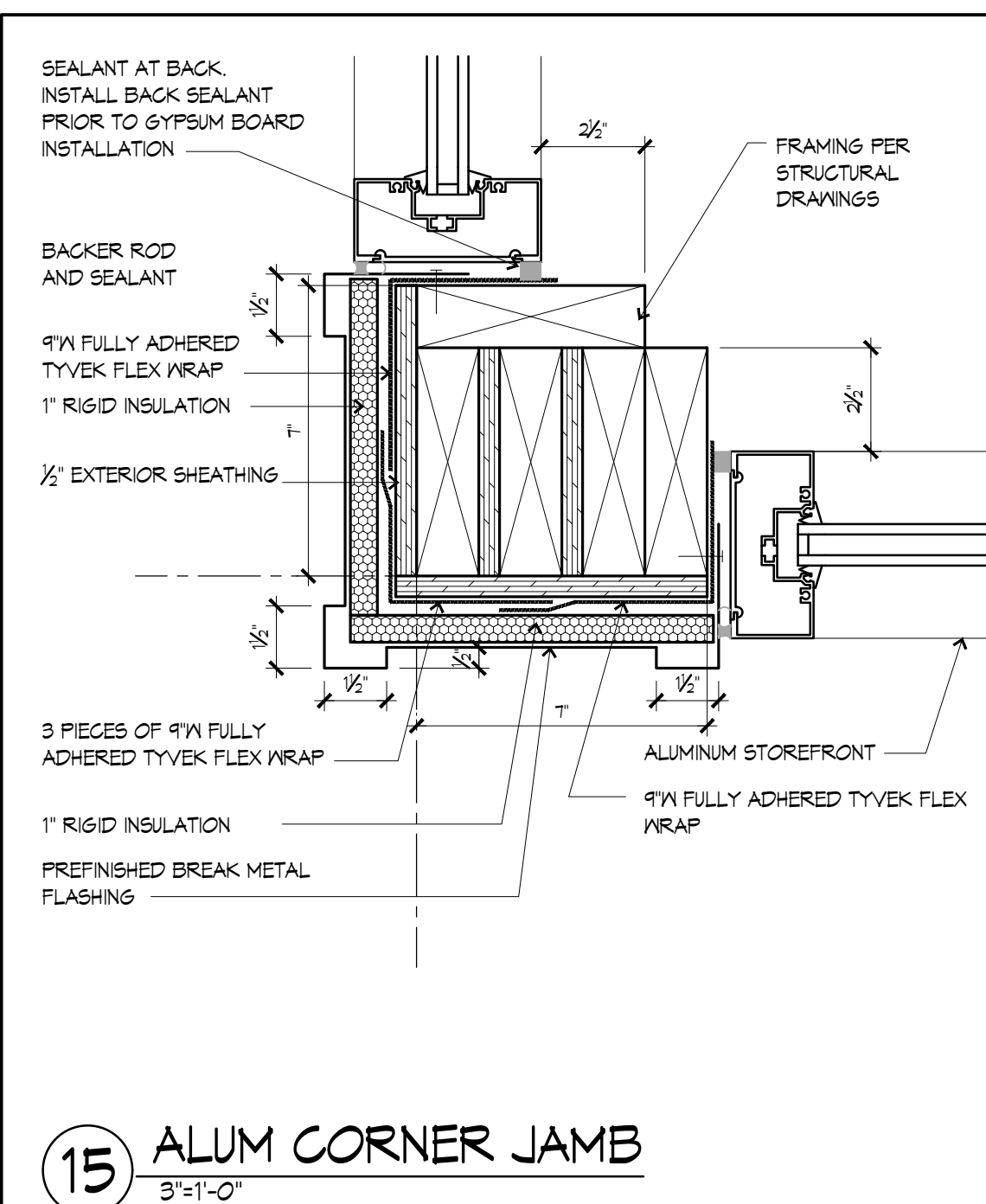
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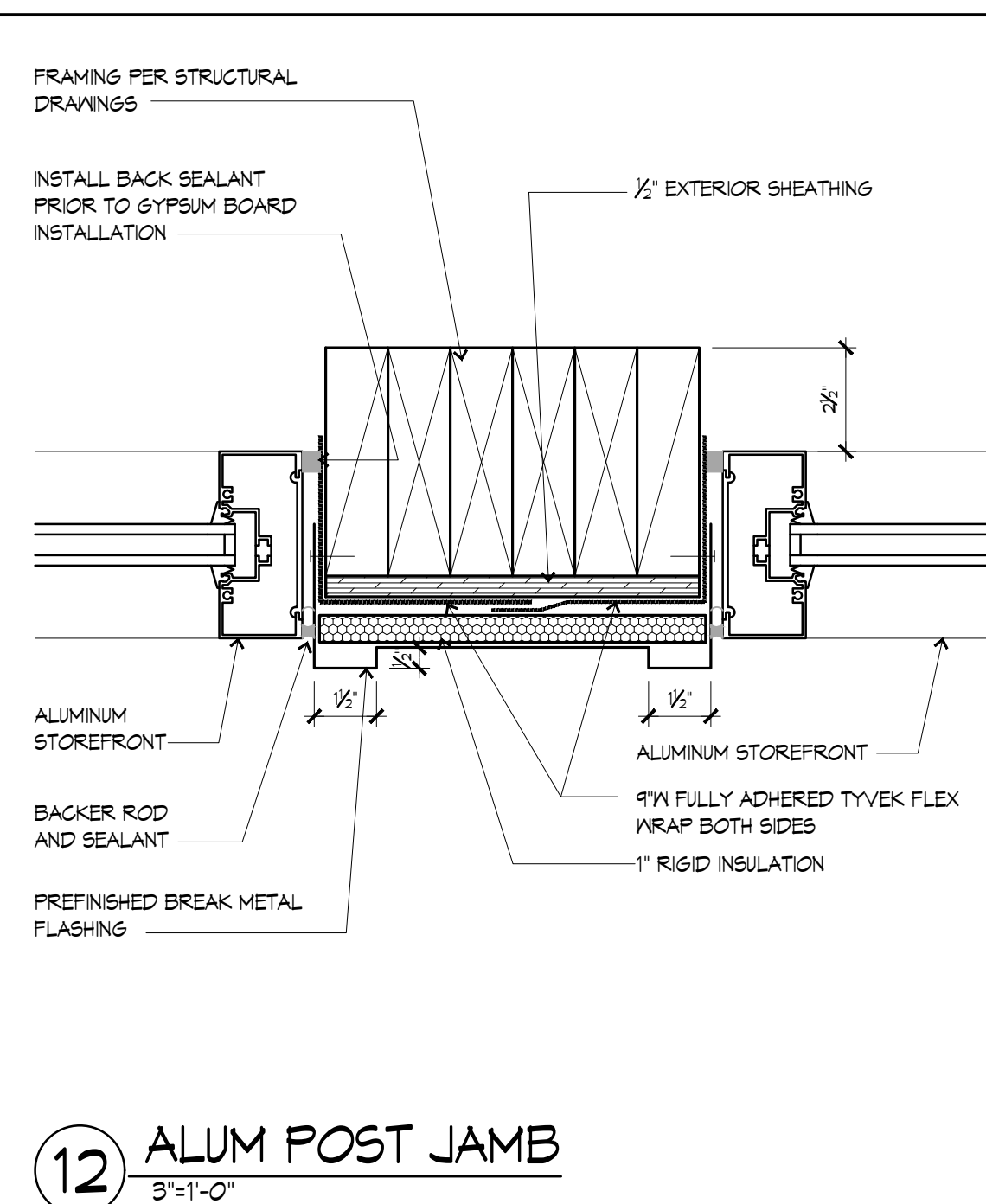
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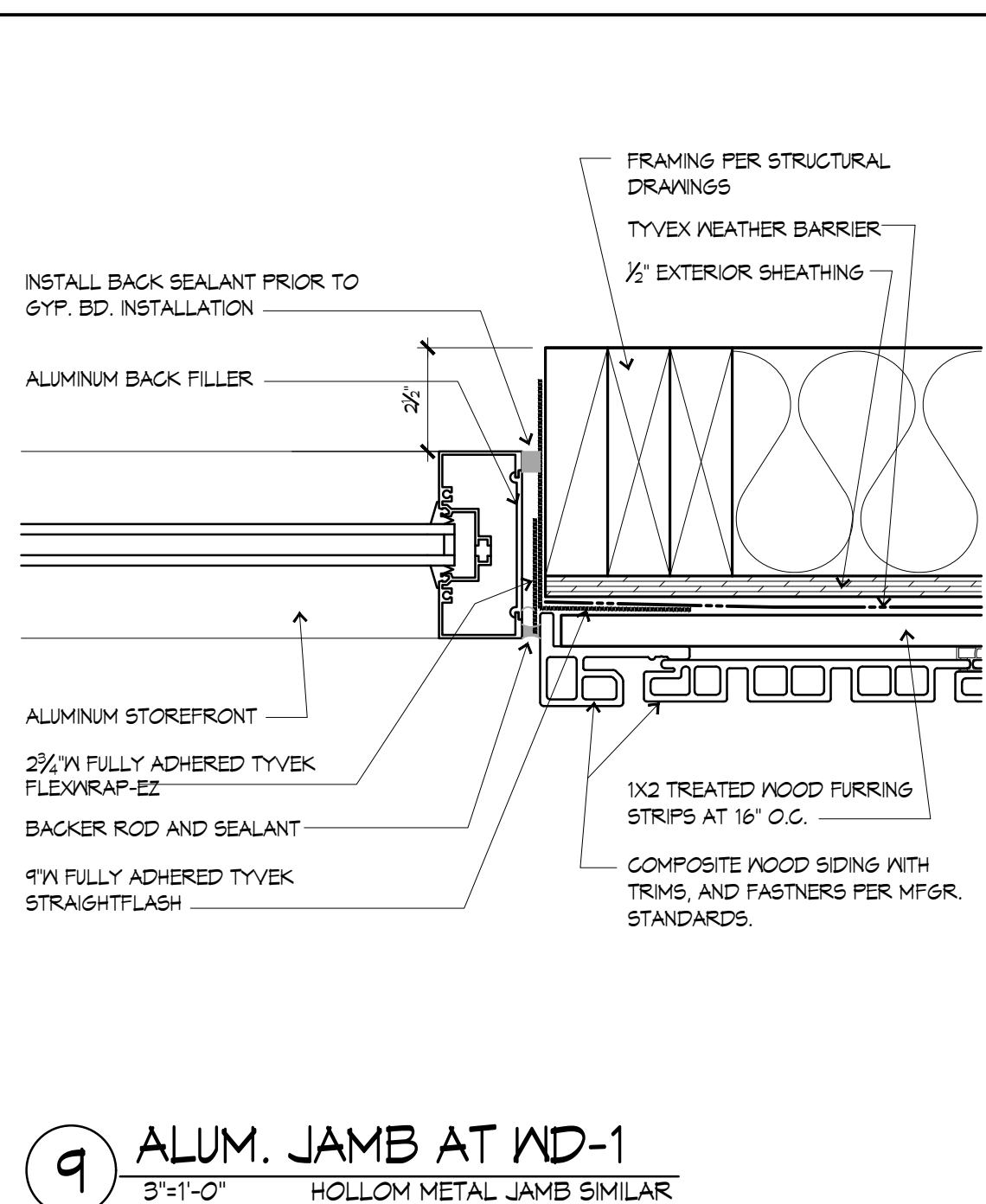
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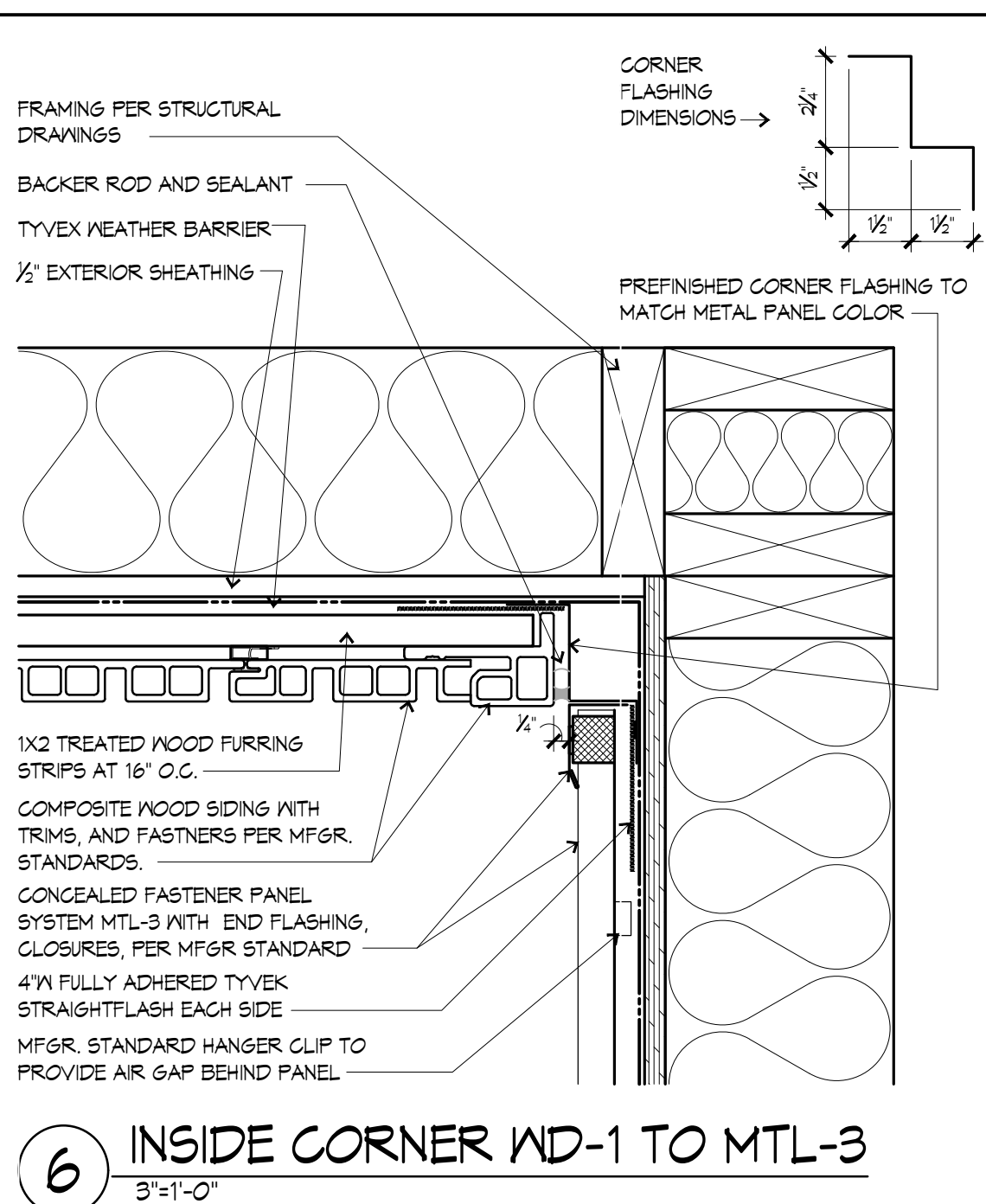
15 ALUM CORNER JAMB
3"=1'-0"



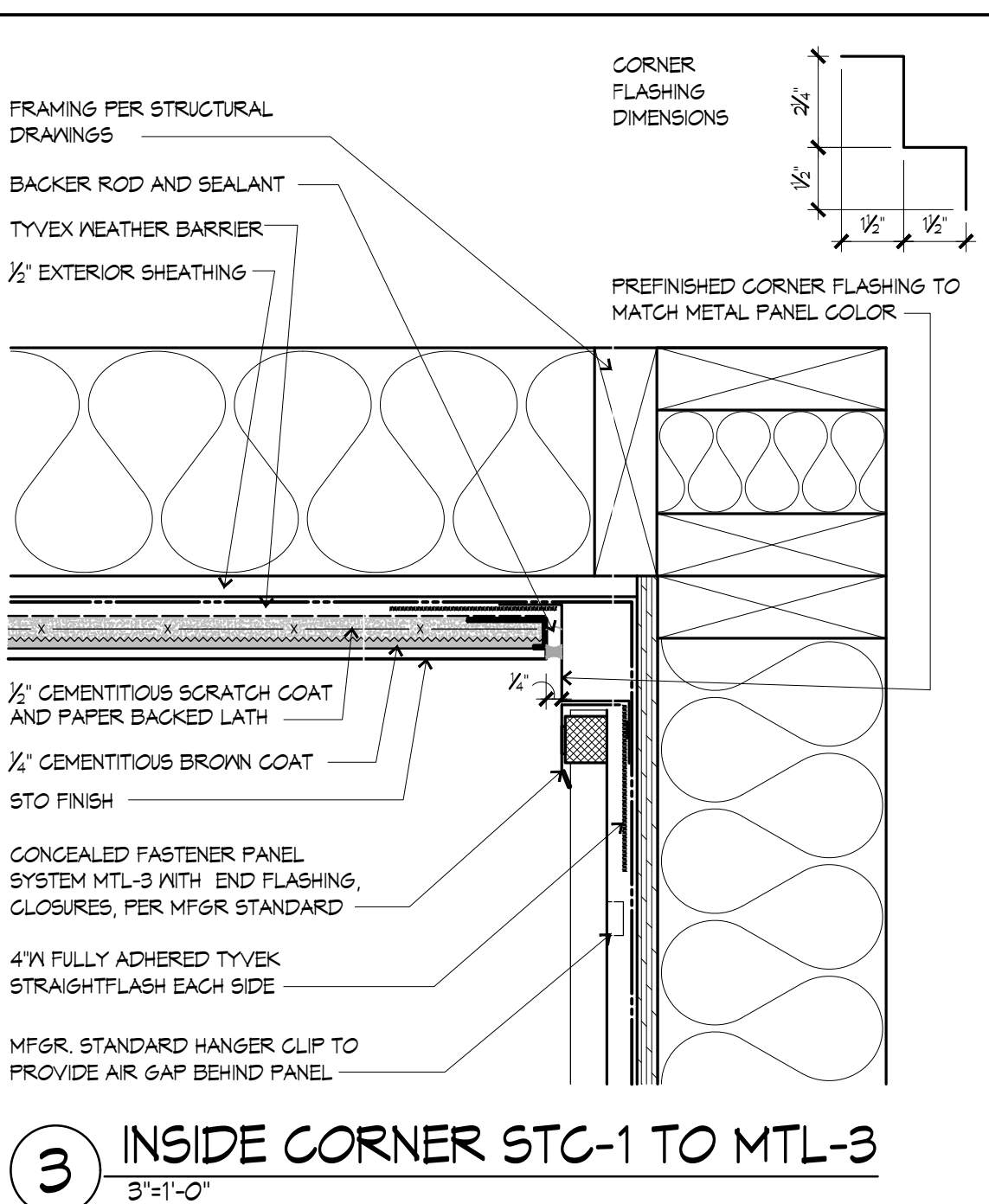
12 ALUM POST JAMB
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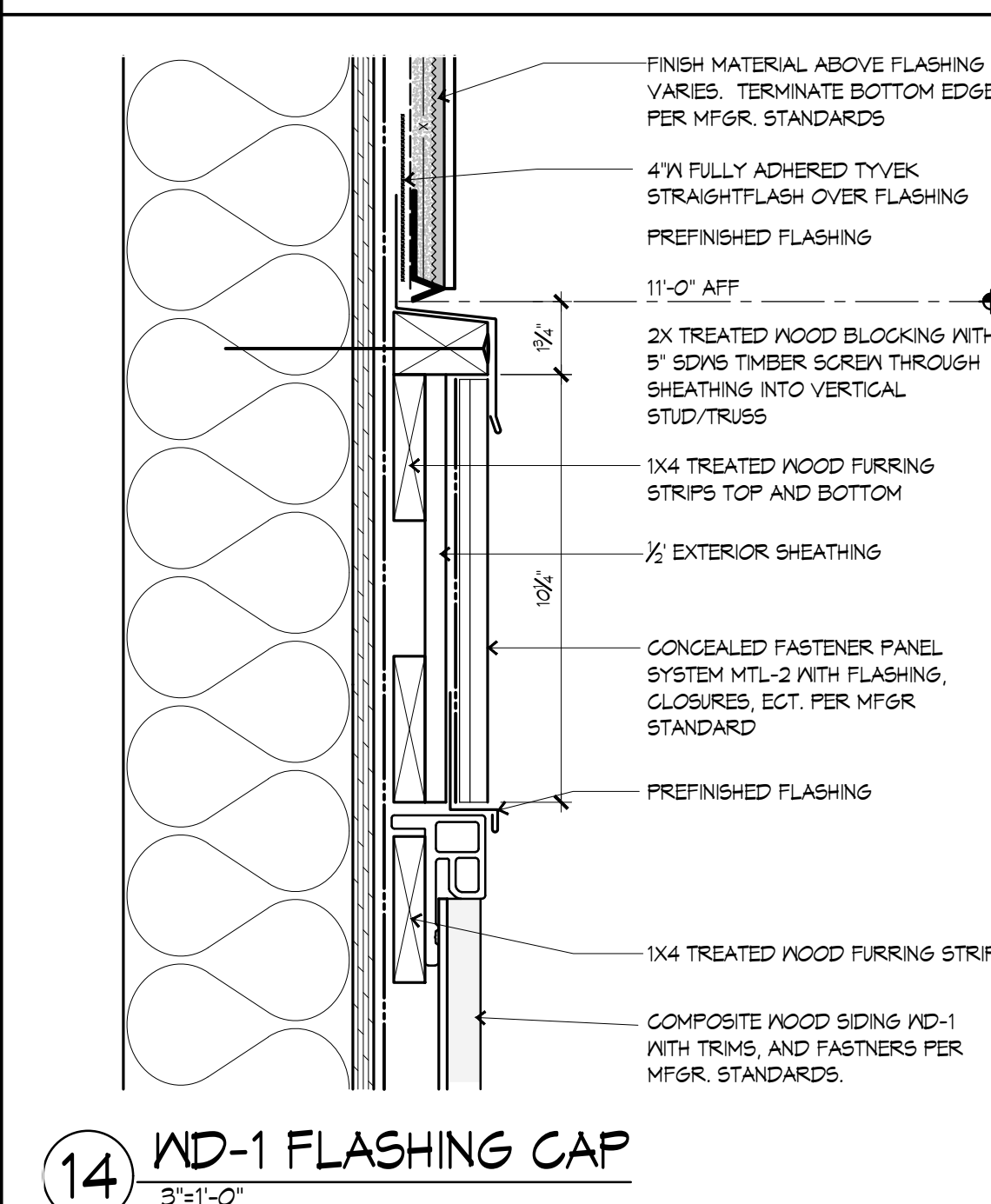
9 ALUM. JAMB AT WD-1
3"-1'-0" HOLLUM METAL JAMB SIMILAR



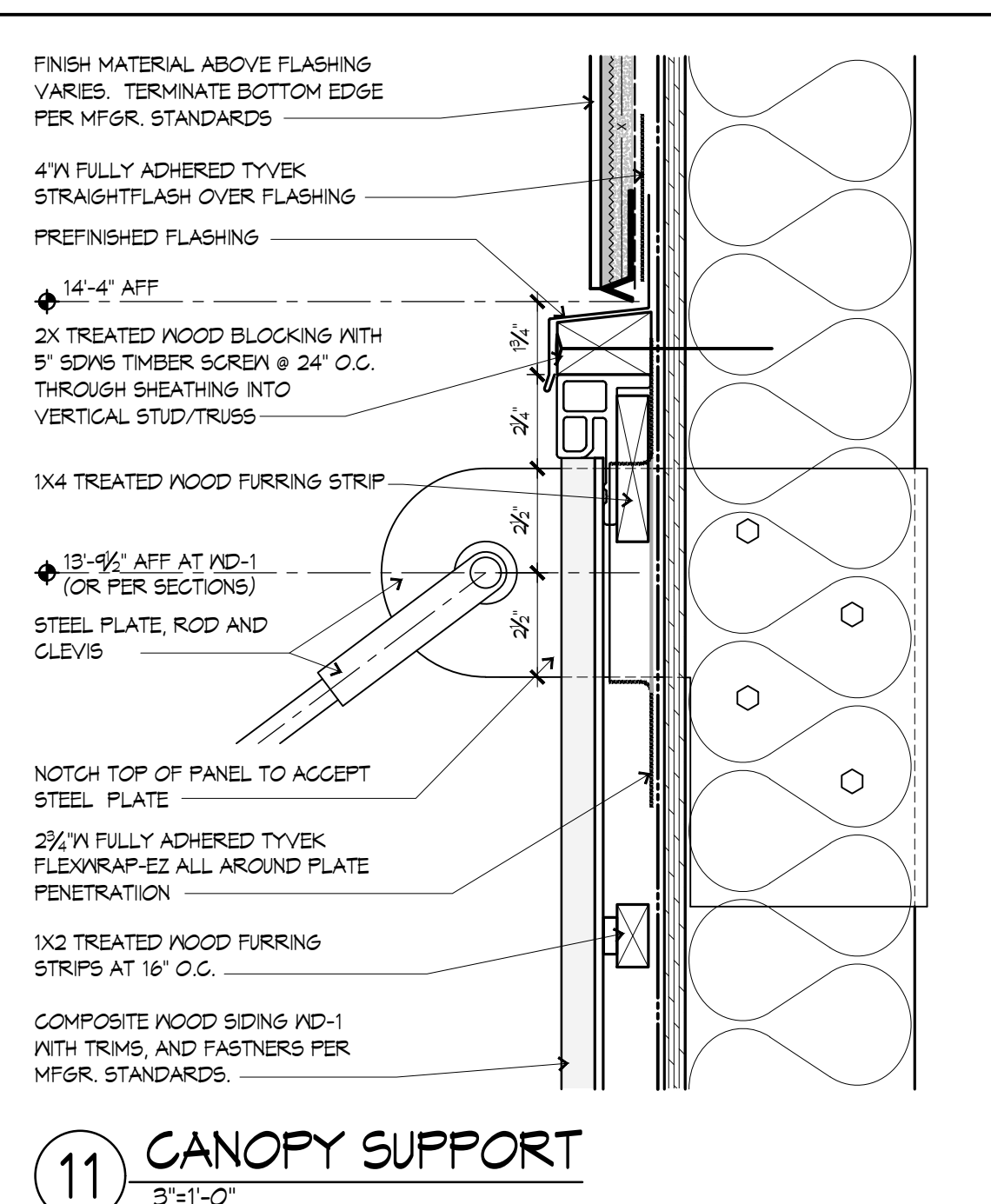
6 INSIDE CORNER WD-1 TO MTL-3
3"-1'-0"



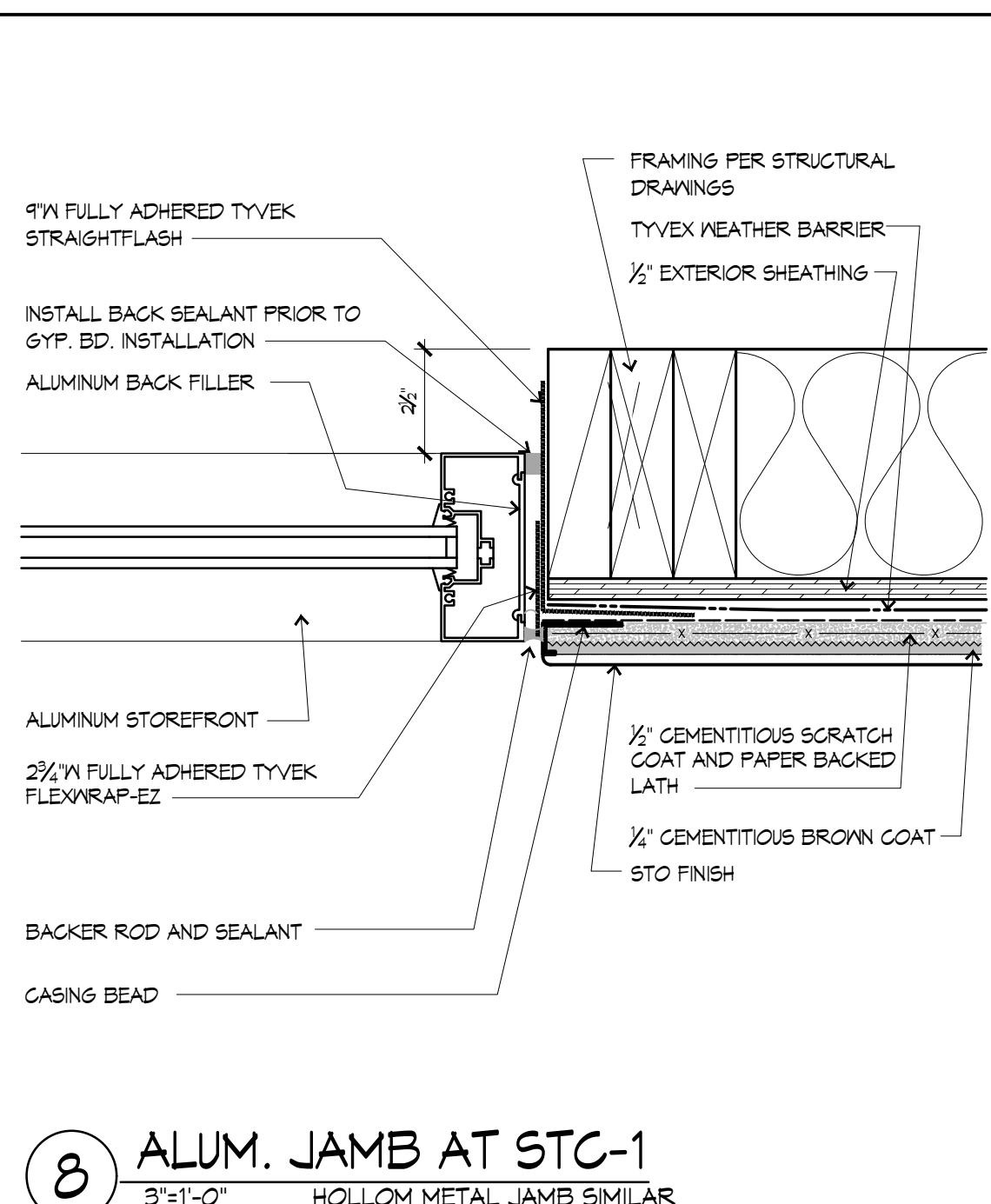
3 INSIDE CORNER STC-1 TO MTL-3
3"=1'-0"



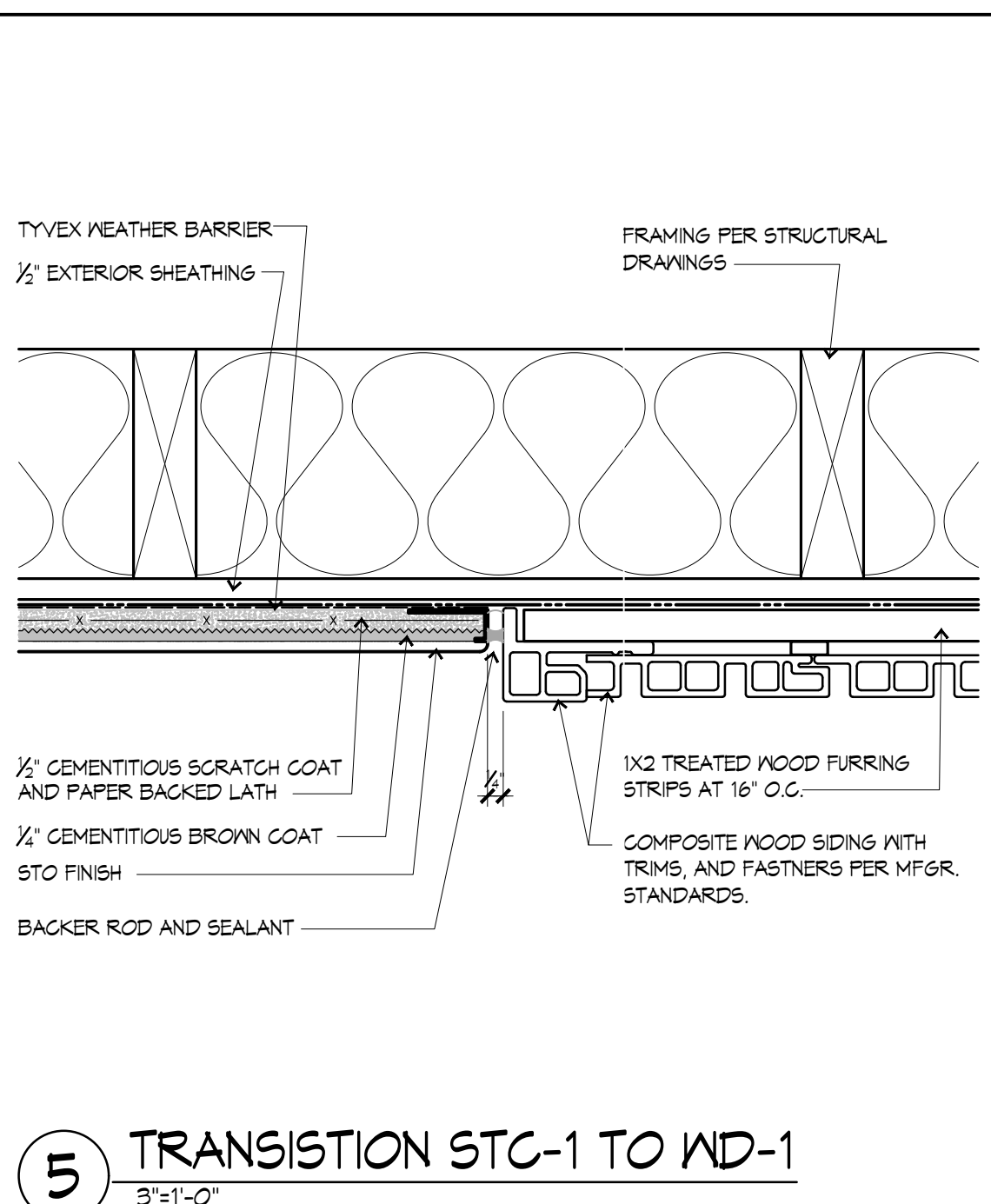
14 WD-1 FLASHING CAP
3"=1'-0"



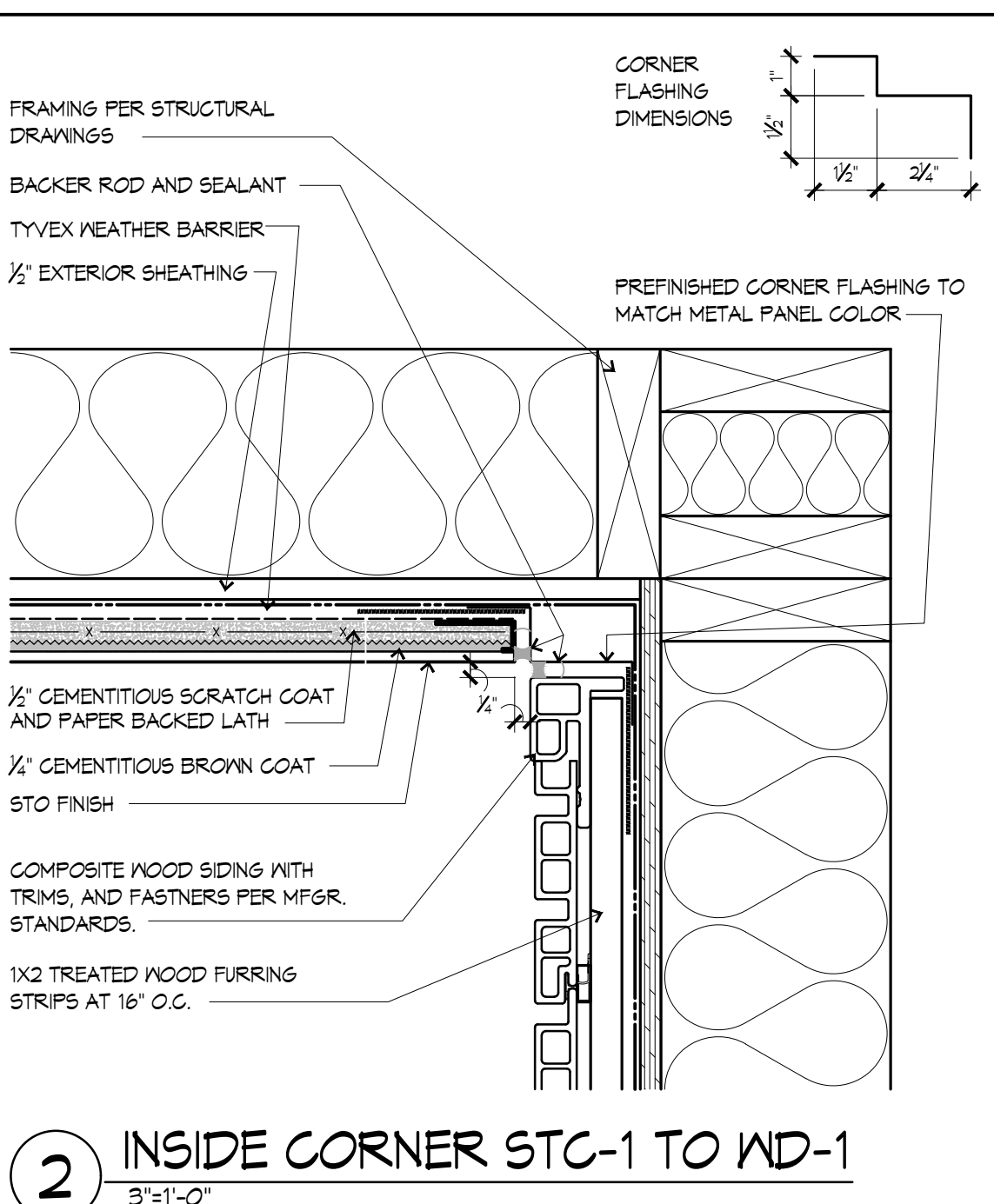
11 CANOPY SUPPORT
3"=1'-0"



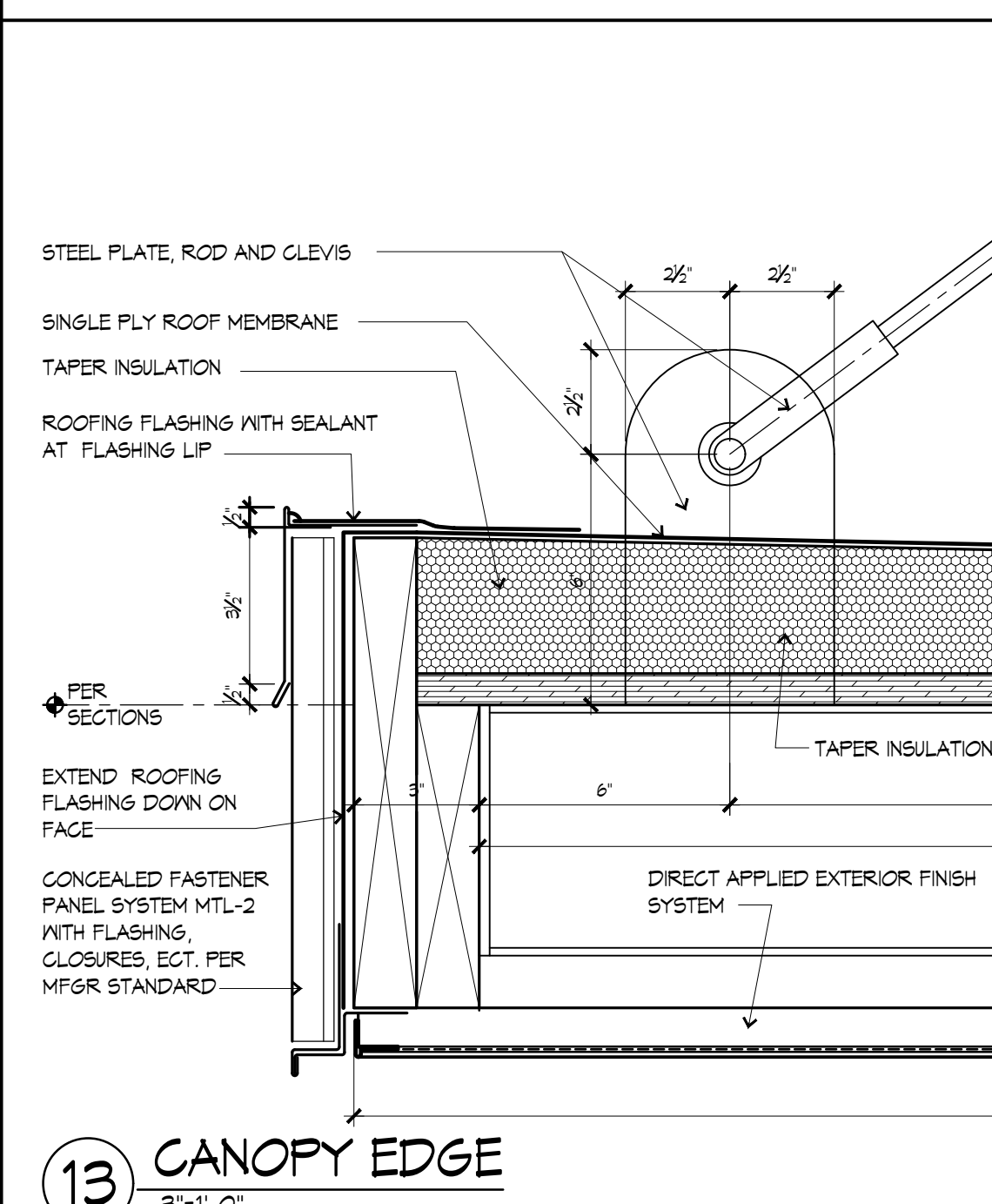
8 ALUM. JAMB AT STC-1
3"=1'-0" HOLLOW METAL JAMB SIMILAR



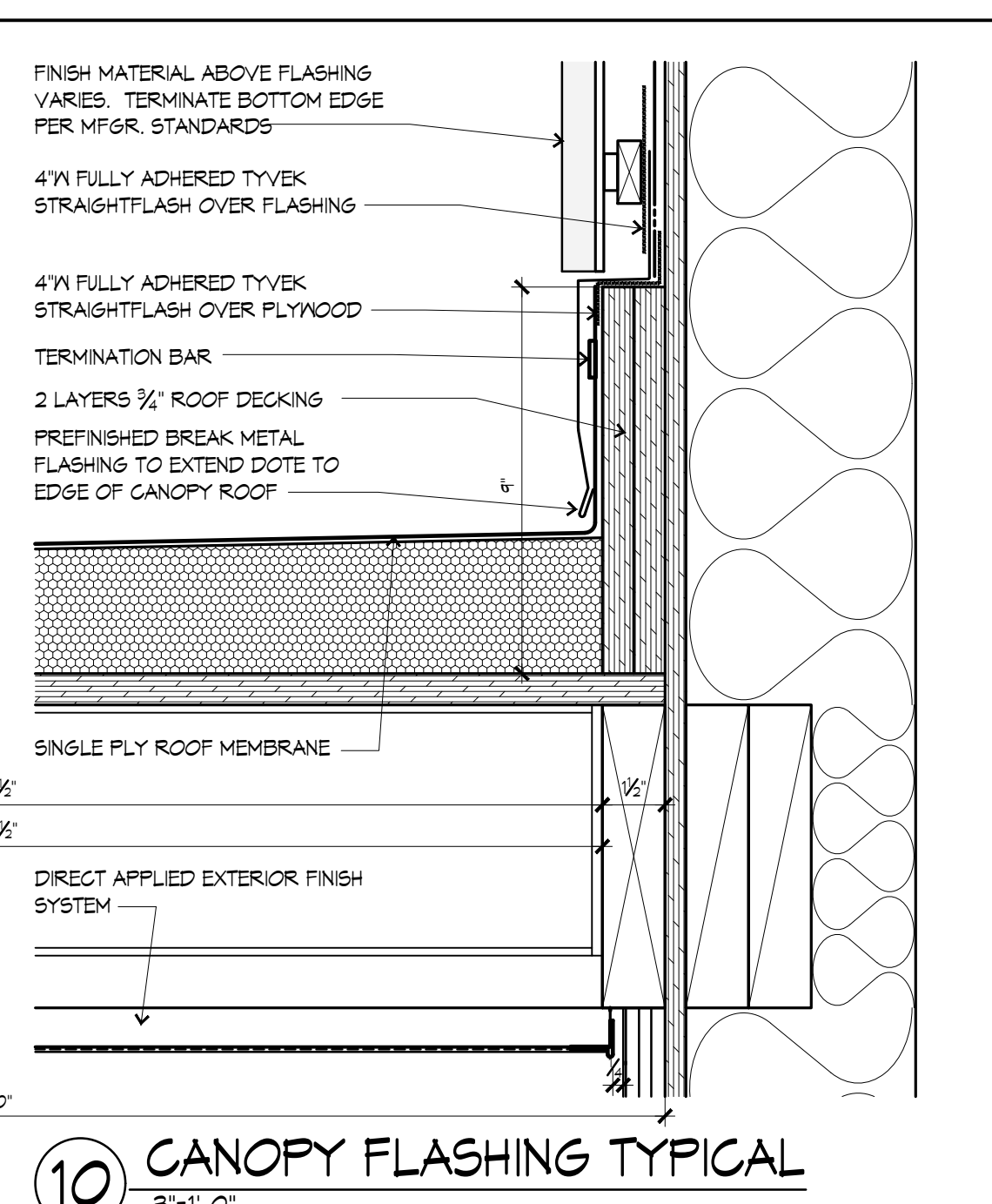
5 TRANSITION STC-1 TO WD-1
3"=1'-0"



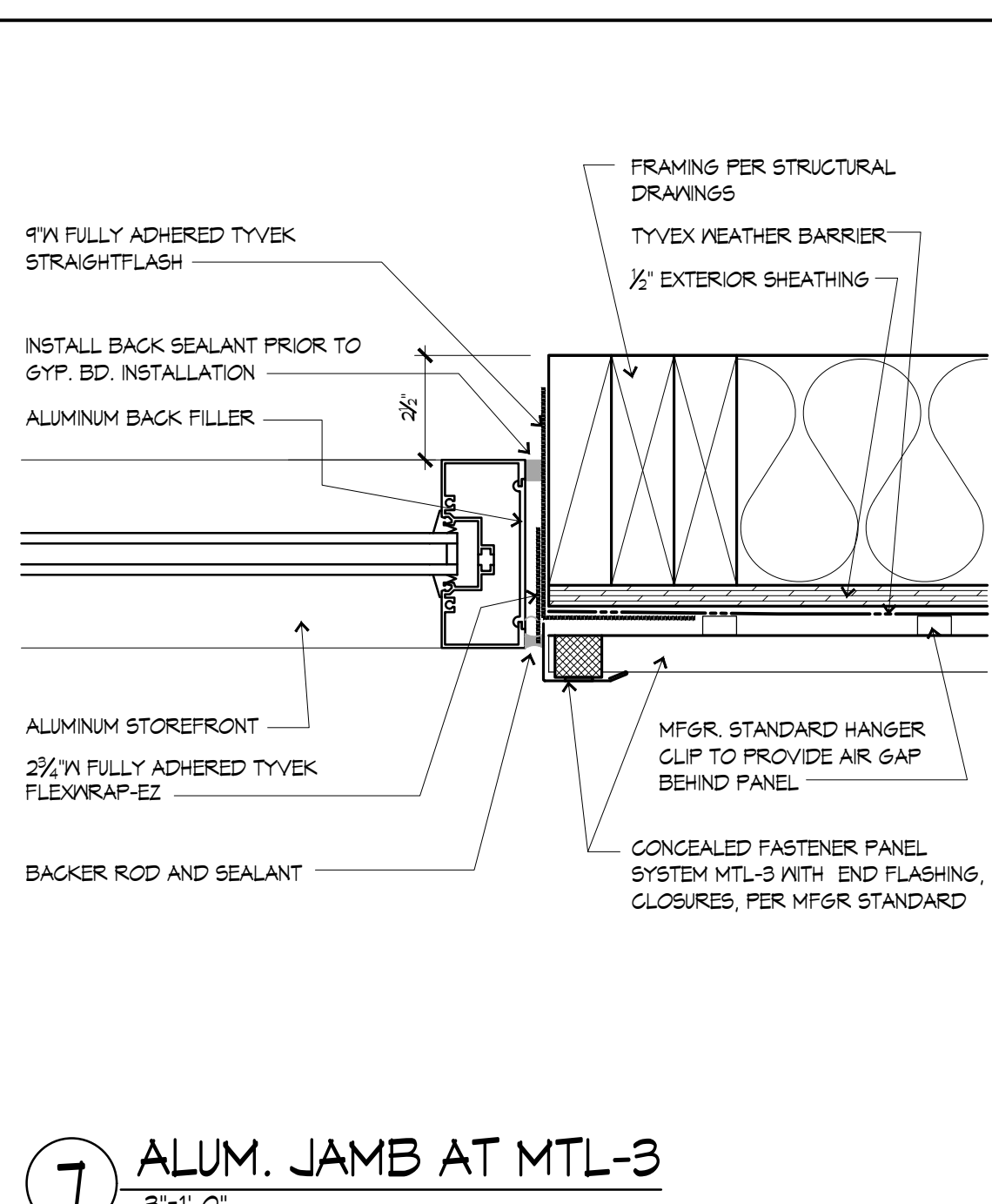
② INSIDE CORNER STC-1 TO WD-1
3"±1'-0"



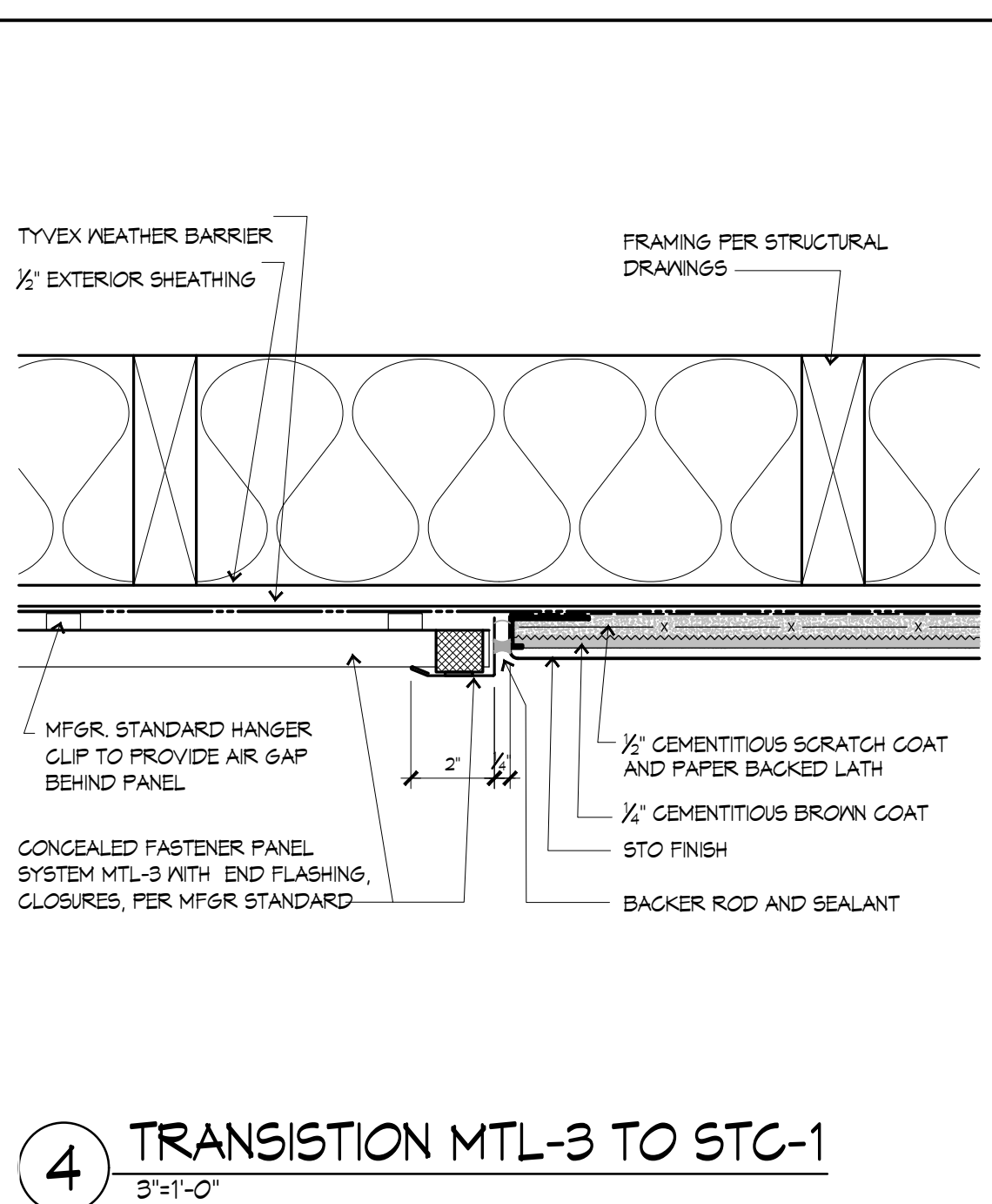
13 CANOPY EDGE



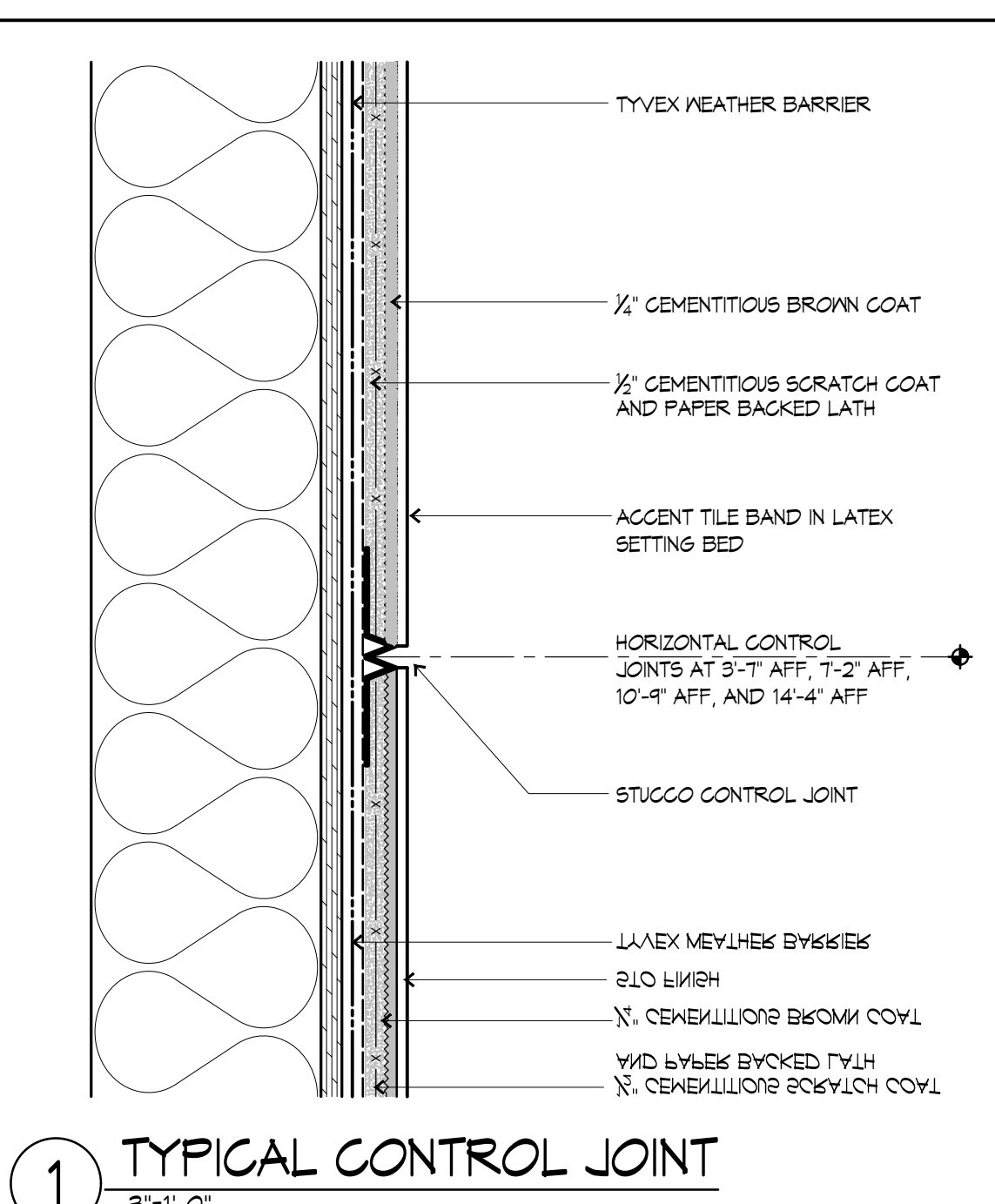
10 CANOPY FLASHING TYPICAL




7 ALUM. JAMB AT MTL-3



4 TRANSITION MTL-3 TO STC-1
3"=1'-0"



① TYPICAL CONTROL JOINT



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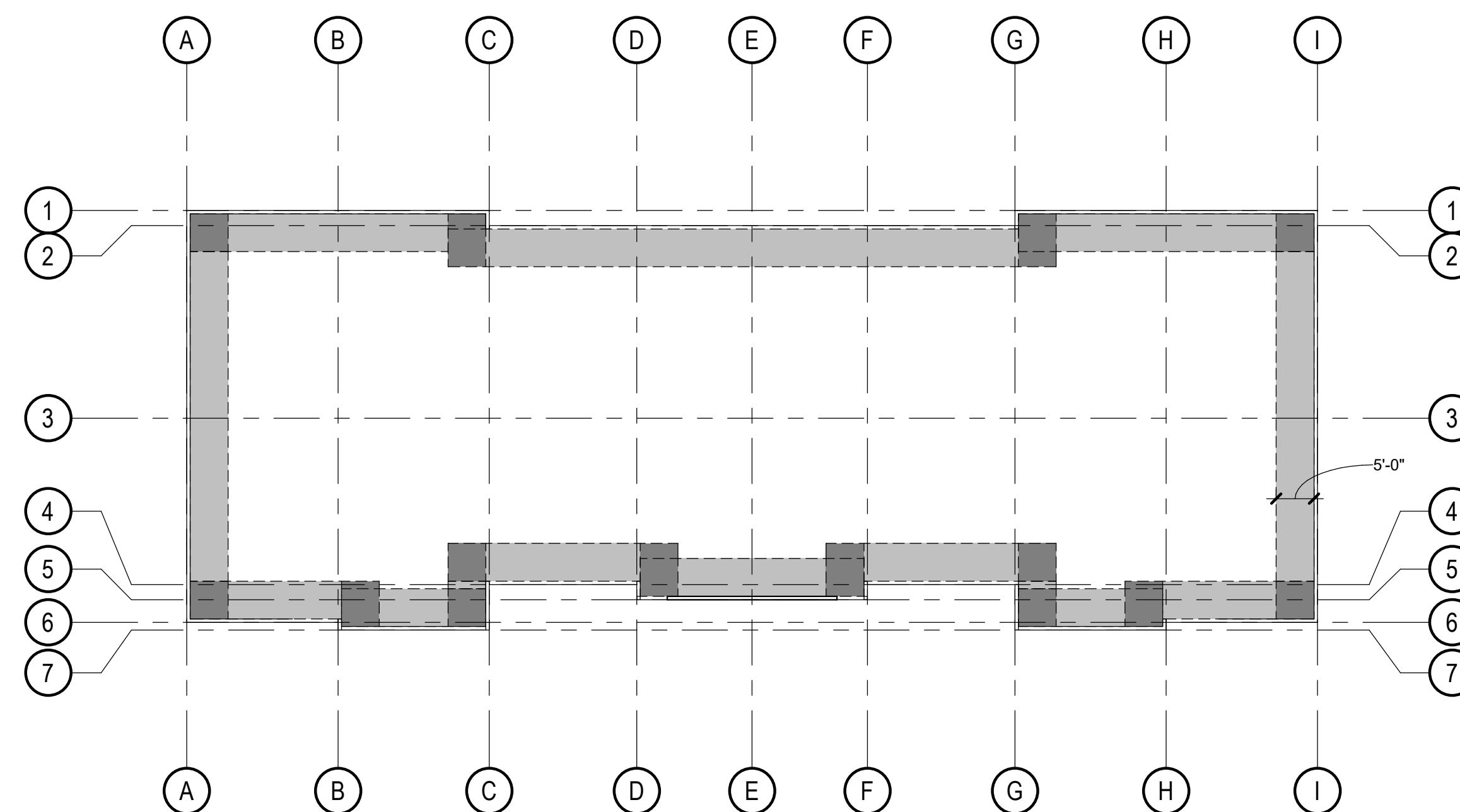
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1. CONTRACTOR TO VERIFY ALL FOUNDATION ELEVATIONS AND STEPS PER SITE CONDITIONS.
2. TOP OF SLAB ELEVATION SHOWN IN PLAN IS FOR REFERENCE ONLY.
3. REFERENCE ARCHITECTURAL DRAWINGS FOR WALL OPENING DIMENSIONS, EXTERIOR FINISHES AND ADDITIONAL NOTES.
4. REFERENCE GENERAL NOTES SHEET FOR ADDITIONAL FOUNDATION SPECIFICATIONS.
5. CONTRACTOR TO CONTACT APEX ENGINEERS, INC AT LEAST 48 HRS IN ADVANCE OF ANY CONCRETE POUR.

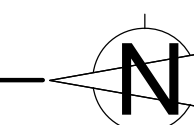
SCHEDULE - CONTINUOUS FOOTINGS				
MARK	WIDTH	DEPTH	LONG BARS	TRANS BARS
CF16	1' - 4"	36"	(4) #5 BARS [(2) AT T&B]	#3 TIES AT 18" OC

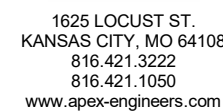

NOTES:				
1. PROVIDE CONTROL JOINTS (1/4 SLAB THICKNESS) SPACED AT 30xSLAB THICKNESS OC BOTH WAYS, NOT SHOWN FOR CLARITY.				
MARK	SLAB THICKNESS	WEIGHT CLASS	SLAB REINFORCING	ADDITIONAL REQUIREMENTS
SG4	4"	NW	#3 AT 18" OC (C) EA WAY OR 6X6 W2.9XW2.9 WWF	15 MIL. VAPOR BARRIER ON 4" OF 3/4" CLEAN, GRADED ROCK

NOTES:

1. PROVIDE #5/8" FILLET WELD AT COLUMN TO BASE PLATE CONNECTION.
2. CAST-IN PLACE ANCHORS TO BE HEX-HEAD ASTM F1554 (6 KS) UNF.
3. POST INSTALLED EPOXY ANCHORS TO THE STEEL ROD IN EXPOSED PER MATERIAL SPECIFICATIONS. UNO.
4. POST INSTALLED HUI-SUZ-2 ANCHORS TO BE INSTALLED PER MFR SPECIFICATIONS.
5. BASE PLATE WITH LESS THAN (4) ANCHORS REQUIRE COLUMNS BE DESIGNATED AS POSTS AND BRACED TEMPORARILY BY BRACING UNDER ERUCTION PER OSHA PART 1926. BY OTHERS, BRACING MAY BE REMOVED ONCE ATTACHMENTS TO MAIN STRUCTURE ARE COMPLETE.
6. MAX SIZES OF ANCHOR-ROD HOLES IN BASE PLATES SHALL FOLLOW TABLE 4.2 OF THE AISC MANUAL. AN ADEQUATE WRASHER SHOULD BE PROVIDED FOR EACH ANCHOR ROD.
7. MOMENT FRAME BRACED COLUMNS (I.E. BRACED TO TOP OR BOTTOM CONDITIONS) (I.E. MOMENT FRAME AND BRACED FRAME COLUMNS), PROVIDE 1/4" FILLET WELD ALL AROUND.

<p>SHAPE A</p>	<p><i>*REF FOOTNOTE 5</i></p> <p>SHAPE B</p>
<p>SHAPE E</p>	





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PROJECT# 23012

1. ROOF SHEATHING THICKNESS AND SPAN RATING MAY BE INCREASED FOR ROOFING MATERIAL REQUIREMENTS AND WARRANTIES. SHEATHING THICKNESS INCREASE SHALL BE COORDINATOR WITH ARCHITECT.
2. CONTRACTOR SHALL PROVIDE ADDITIONAL SOLID BLOCKING AS REQUIRED FOR DIAPHRAGM WALLING REQUIREMENTS. SOLID BLOCKING SHALL BE OF MIN NOMINAL 2x4 IN SIZE AND SHALL BE MIN #3 GRADE MATERIAL.
3. SOLID BLOCKING SHALL BE CUT TIGHT TO ADJACENT MEMBERS TO ENSURE ADEQUATE LOAD TRANSFER.
4. NAIL TYPE USED IN FLOOR/ROOF SHEATHING SHALL BE COMMON OR GALVANIZED BOX NAIL. COOLER NAILS, ETC ARE NOT PERMITTED AT THESE APPLICATIONS.
5. NAILS USED FOR FLOOR/ROOF SHEATHING SHALL HAVE FULL HEADS. CLUMPED NAILS ARE NOT PERMITTED IN THESE APPLICATIONS.

- - - - -	= DIAPHRAGM BOUNDARY NAILING: 10d NAILS AT 6" OC, CONTRACTOR SHALL ADD BLOCKING AS REQUIRED.
- - - - -	= DIAPHRAGM BOUNDARY NAILING: 10d NAILS AT 4" OC, CONTRACTOR SHALL ADD BLOCKING AS REQUIRED.
- . - . -	= DIAPHRAGM BOUNDARY NAILING: 10d NAILS AT 3" OC STAGGERED, CONTRACTOR SHALL ADD BLOCKING AS REQUIRED.
- . . . -	= DIAPHRAGM BOUNDARY NAILING: 10d NAILS AT 2" OC STAGGERED, CONTRACTOR SHALL ADD BLOCKING AS REQUIRED.
/// ///	= BLOCKED DIAPHRAGM WITH PANEL EDGE FASTENING 6" OC EDGES, 12" OC FIELD.
- - - - -	= SIMPSON LSTA12 STRAP, ATTACH WITH (10) 10d NAILS EACH TRUSS. ATTACH TO 2x6 CONT. BLOCKING BETWEEN TRUSSES. INSTALL STRAP PER SIMPSON SPECIFICATIONS.
- - - - -	= SIMPSON CS14 COIL STRAP, INSTALLED DIRECTLY OVER SHEATHING (ALT. TO CS19P18 COIL STRAPS). INSTALL (2) PILES OF BLOCKING AS REQUIRED.

NOTES:

1. EMBEDMENT DEPTH IS FROM TOP OF FOOTING. INCREASE ANCHOR LENGTH AS REQUIRED FOR SLAB THICKNESS.
2. FOR HDU14 OR GREATER USE HEAVY HEX NUT.
3. HD19 REQUIRES OF END STUDS AND HD EMBED PLATE.
4. GC TO VERIFY LOCATION OF ANCHOR BOLTS PRIOR TO FOUNDATION WALL REBAR INSPECTION.
5. ALL HOLDDOWNS ARE SIMPSON PRODUCTS UNO.
6. FOR POST-INSTALLED ANCHORS REF MATERIAL SPECIFICATIONS FOR EPOXY AND ANCHOR ROD REQUIREMENTS.

MARK	HOLDDOWN	ANCHOR BOLT DIAMETER	MIN EMBEDMENT
HDU2	HDU2-SDS2.5	5/8"	5"
HDU5	HDU5-SDS2.5	5/8"	5"
HDU8	HDU8-SDS2.5	7/8"	7"
HDU11	HDU11-SDS2.5	1"	9"
HDU14	HDU14-SDS2.5	1 1/4"	11"
HD19	HD19 ³	1 1/4"	HDEP #1

NOTES:

1. WSP = WOOD STRUCTURAL PANEL, PLYWOOD OR OSB.
2. NAIL SIZES GIVEN ARE FOR COMMON NAILS OR GALVANIZED (HOT-DIPPED OR TUMBLED) BOX NAILS. SINKER NAILS, COOLER NAILS, ETC. SHALL NOT BE USED FOR WSP SHEAR WALLS.
3. SHEAR WALL NAILS SHALL HAVE FULL HEADS, CLIPPED NAILS ARE NOT ALLOWED.
4. ALL NAILS SHALL BE DRIVEN SUCH THAT THE HEAD IS FLUSH WITH FACE OF SHEATHING. DO NOT OVERDRIVE NAILS.
5. SOLE PLATE NAILS SHALL BE INSTALLED SUCH THAT THE NAILS FULLY ENGAGE THE RIM BOARD BELOW (IF APPLICABLE). REF TYP DETAILS.
6. PROVIDE INTERMEDIATE NAILING (FIELD) AT 12" OC, TYP.
7. PROVIDE (2) TOTAL RIMBOARDS OR A LAYER OF BLOCKING IN ADDITION TO THE RIMBOARD WHERE SOLE PLATE NAILING REQUIRES 2 ROWS OF FASTENERS PER SCHEDULE.
8. SILL ANCHORS MAY BE CAST-IN-PLACE J-BOLTS WITH 8" EMBED OR SIMPSON TITEN HD SCREW ANCHORS WITH 6" EMBED. REF SCHEDULE FOR BOLT DIA. BOTH BOLT TYPES REQUIRE 0.229x3"x3" PLAT W/ASHER WITH EDGE OF PLATE LOCATED WITHIN 1/2" OF SHEAR WALL SHEATHING.
9. SHEAR WALL CLIPS TO BE AS31TYP, REF PLAN FOR NUMBER OF CLIPS PER SHEAR WALL, 48" OC MAX UND.
10. AT WALLS DESIGNED AS FORMER TRANSFER SHEAR WALLS, PROVIDE SIMPSON STRAP ABOVE AND BELOW ALL OPENINGS PER SHEAR WALL DETAIL.
11. END STUDS MUST CONTINUE DOWN TO FOUNDATION WALL UNLESS INTERRUPTED BY TRANSFER BEAM.
12. JACK STUDS FOR OPENINGS DO NOT COUNT TOWARDS THE REQUIRED NUMBER OF END STUDS IN A SHEAR WALL.
13. PROVIDE DOUBLE STUDS AND BLOCKING NAILED TOGETHER WITH (2) 16d NAILS AT 6" OC OR 3" NOMINAL STUDS AND BLOCKING AT THE FOLLOWING CONDITIONS:
 - i. 2" OC EDGE NAIL SPACING
 - ii. 16d NAILS AT 3" OC OR SMALLER EDGE NAIL SPACING
 - iii. DOUBLE SIDED SHEAR WALL WHERE PANEL JOINTS ALIGN TO THE SAME STUD.
14. HOLD-DOWNS AND STRAPS OCCUR AT THE BOT OF WF WALLS. HOLD-DOWNS AND STRAPS BETWEEN FLOORS ARE CONTROLLED BY THE WALL ABOVE.
15. HOLD-DOWN DEVICES SHALL BE INSTALLED PER MFR SPECIFICATIONS
16. REF SHEAR WALL DETAILS FOR ADDITIONAL INFORMATION AND REQUIREMENTS

MARK	BLOCKED	SHEATHING		PLACEMENT	EDGE NAILS		SILL PLATE ATTACHMENT	
		TYPE	THICKNESS		SIZE	SPACING	NAILING	1/2" DIA ANCHOR BOLT SPACING
S2-B	YES	WSP-SHEATHING	15/32"	ONE-SIDE	10d	4"	16d AT 4" OC	16"
S3-B	YES	WSP-SHEATHING	15/32"	ONE-SIDE	10d	3"	16d AT 3" OC STAGGERED	12"

$$1/8" = 1'-0"$$


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S210

1. REFERENCE "LOADING DIAGRAMS" SHEET FOR DESIGN LOADS.
2. WOOD COLUMNS AND STUD PAKS TO BE CONTINUOUS DOWN TO FOUNDATION OR STEEL FRAMING. PROVIDE BLOCKING AS REQUIRED TO MAINTAIN CONTINUITY.
3. REF PLANS FOR TOP OF STEEL BEAM ELEVATIONS.
4. ROOF CONSTRUCTION: REFERENCE ARCHITECTURAL DRAWINGS FOR DIMENSIONS, ROOF MATERIAL, ROOF SLOPE, WATERPROOFING MEMBRANE, AND INSULATION.
5. REFERENCE MECHANICAL DRAWINGS FOR ADDITIONAL RUT INFORMATION.
6. CONTRACTOR SHALL COORDINATE SIZE AND LOCATION OF OPENINGS WITH MECHANICAL, ELECTRICAL AND STRUCTURAL DRAWINGS.
7. REFERENCE GENERAL NOTES AND SPECIFICATIONS FOR ABBREVIATIONS, SYMBOLS, AND ADDITIONAL SPECIFICATIONS.

NOTES:

1. WALL SOLE PLATE ATTACHMENT, UNO: 1/2" DIA CAST-IN-PLACE ANCHORS WITH 7" EMBED AT 32" OC ATTACHMENT TO CONCRETE OR (2) ROWS OF 6B 16ALS AT 16" OC STAGGERED WHEN FASTENING TO WOOD.
2. TYPICAL WALL SHEATHING, UNO: 1532" APA RATED WSP, EX: 1, 24 P S/N SPACING, PANEL EDGES FASTENED WITH 8d 16ALS AT 6" OC EDGE AND 12" OC IN THE FIELD.
3. REFERENCE SHEAR WALL SCHEDULE FOR ADDITIONAL NAILING REQUIREMENTS.
4. LATERAL CLIP REQUIRED: PROVIDE SIMPSON 3AS CLIP AT EACH STUD ABOVE HEADER.

REFERENCE TYPICAL DETAILS FOR CLIP LOCATION.

MARK	MATERIAL	WALL STUDS	BLOCKING
DFL6	DF-L No. 2	2x6 AT 16"	AT SHEATHING PANEL EDGES (4" O/C MAX)
DFL6	DF-L No. 2	2x6 AT 16"	AT SHEATHING PANEL EDGES (4" O/C MAX)

MARK	TRUSSES	SPACING	COMMENTS
T1	ROOF TRUSS	24"	COORDINATE PLACEMENT WITH CANOPY ROD ATTACHMENT

MARK	JOISTS	SPACING	COMMENTS
J1	2x8	16"	

NOTES:		
1. JAMB AND SILL STUDS TO MATCH TYPICAL WALL STUDS UNO.		
MARK	HEADER	COMMENTS
H2-9.25	(2) 1½"x9½" LVL	
H2-10	(2) 2x10	
H2-11	(2) 1½"x11½" LVL	
H3-10	(3) 2x10	

MARK	BEAM SIZE	COMMENTS
B1	C6X8.2	COORDINATE PLACEMENT WITH CANOPY ROD ATTACHMENT
B2	(1) 2x8+(1) 2x12	2x12 FORMING CANOPY CURB

NOTES:

1. BOLT SIZE NOTE: FOR BEAMS WITH A FLANGE WIDTH LESS THAN 5", 5/8" BOLTS MAY BE USED FOR DETAILING TOLERANCES.
2. bf = WIDTH OF BEAM FLANGE.
3. D = VARIES, COORDINATE WITH BEAM FLANGE WELD.
4. W = JOIST GIRDER SEAT WIDTH PLUS 1" FOR FILLET WELD CONNECTION. VERIFY SEAT WIDTH WITH JOIST SUPPLIER PRIOR TO FABRICATION.
5. VERIFY BOLT PLACEMENT WITH JOIST SUPPLIER.

PLATE TYPE	SHAPE	PLATE THICKNESS	BOLT SIZE
A	1	1/4"	3/4"
B	2	1/4"	3/4"

SHAPE - 1

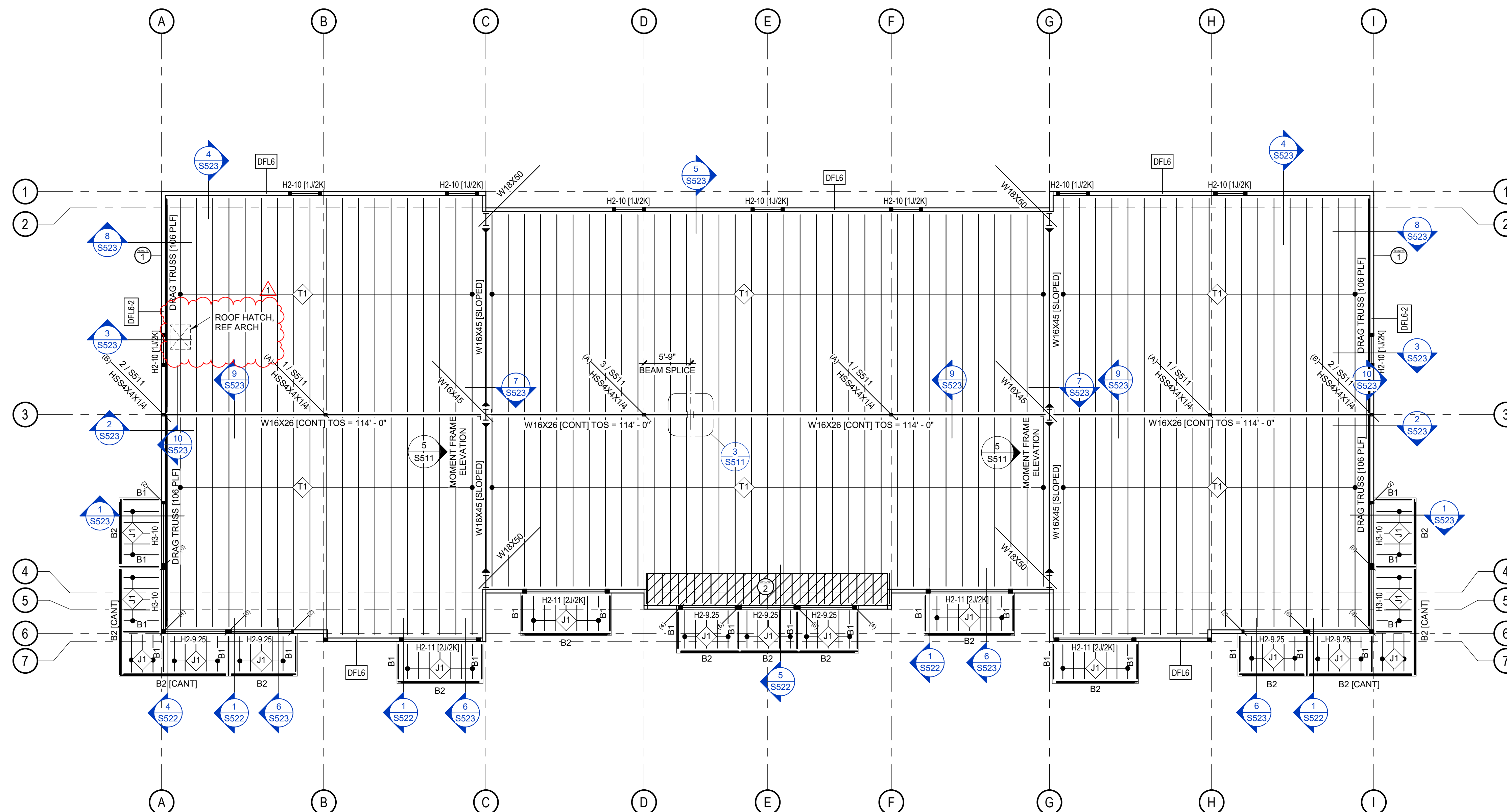
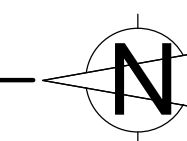
SEE NOTE 3

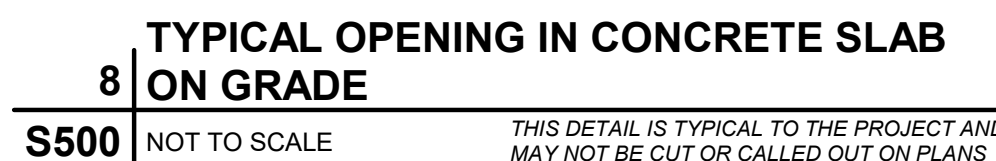
SHAPE - 2

SEE NOTE 3

MARK	SHEATHING TYPE	SUPPORT ATTACHMENT [EDGE / FIELD]	BLOCKED
ROOF	5/8" (NOMINAL) APA RATED SHEATHING, EXPOSURE 1, 48/24 SPAN RATING	10d [6" OC / 12" OC]	No

KEYNOTE	COMMENT
1	BALLOON FRAMED WALL
2	SPF STUD GRADE OR BETTER 2x6 KICKERS AT EACH TRUSS PARAPET


$$1/8'' = 1'-0''$$




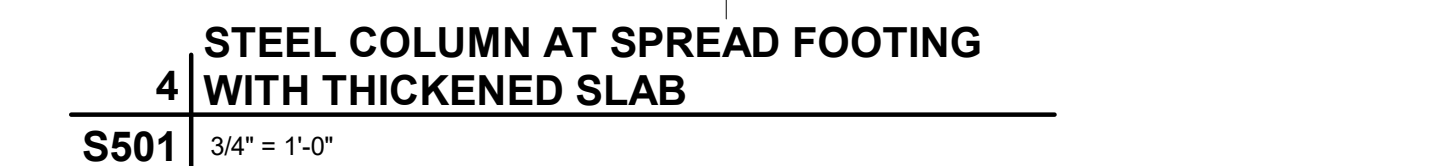

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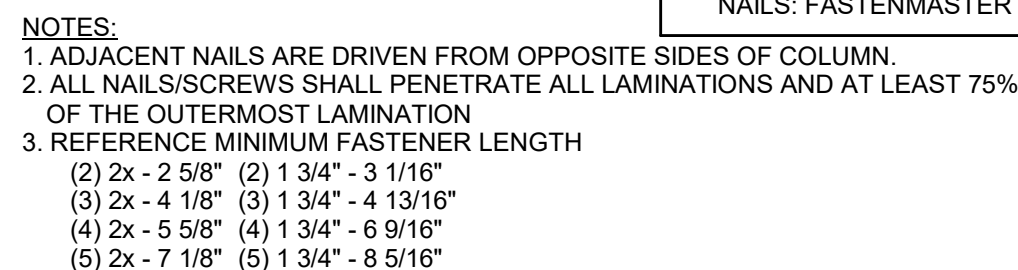
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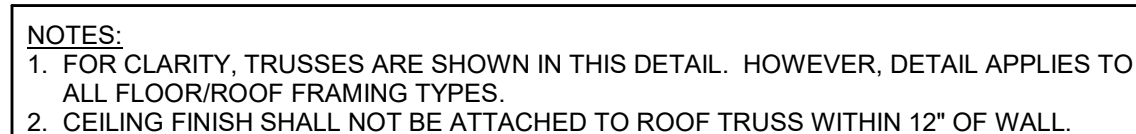


6 | TYPICAL BUILT-UP STUD COLUMN

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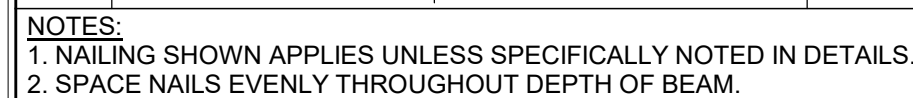


13 | ARCHITECTURAL WALL CONNECTION

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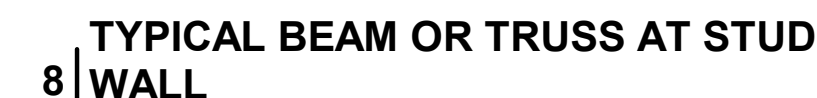


5 | TYPICAL BUILT UP WOOD BEAM

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7 | TYPICAL JAMB DETAIL

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
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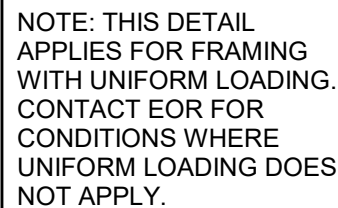


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ROOF FRAMING , TYPE

OMIT ROOF SHEATHING PANEL IN EACH COURSE. INSTALL "FILL-IN" PANEL AS ROOFING IS APPLIED. (LATERALLY BRACE ROOF FRAMING.)

S521

NOT TO SCALE

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S521

NOTES-

1. NAILS TO BE COMMON NAILS OR GALVANIZED (HOT-DIPPED OR TUMBLED) BOX NAILS. SINKER NAILS, COOLER NAILS, CLIPPED NAILS, OR NAILS THAT DO NOT MEET THE FOLLOWING REQUIREMENTS ARE NOT ALLOWED.
2. NAILS SHALL HAVE FULL HEADS, ETTED NAILS ARE NOT ALLOWED.
3. PANELS SHALL NOT BE LESS THAN 4'-0"X8'-0" EXCEPT WHERE SPECIFIED AND CHANGES IN FRAMING, WHERE MINIMUM PANEL DIMENSIONS SHALL BE 24" UNLESS SUPPORTED BY AND FASTENED TO FRAMING MEMBERS.
4. ALL NAILS SHALL BE DRIVEN SUCH THAT THE HEAD IS FLUSH WITH FACE OF SHEATHING. **DO NOT OVERDRIVE NAILS.**
5. NAILING SHALL BE DONE AT LEAST 3" FROM EDGE OF PANELS.
6. THE WIDTH OF THE NAILED FACE OF FRAMING MEMBERS AND BLOCKING SHALL BE MINIMUM 1-1/2" UNLESS SPECIFIED. PANEL EDGES EXCEPT THAT A 3" NOMINAL OR GREATER WIDTH AT ADJOINING PANEL EDGES AND STAGGERED NAILING AT ALL PANEL EDGES WITH MINIMUM 1-1/2" OF 2-1/2" OC OR LESS IS SPECIFIED, OR 10D COMMON NAILS HAVING PENETRATION INTO FRAMING MEMBERS AND BLOCKING OF 1-1/2" TO 1-11/16" SPECIFIED AT 3" OC OR LESS EDGE NAILING.

PANEL FIELD EDGE
FASTENING, REF PLAN
SHEATHING, REF PLAN

PANEL EDGE FASTENING,
REF PLAN

PREMANUFACTURED TRUSS
BY OTHERS, REF PLAN

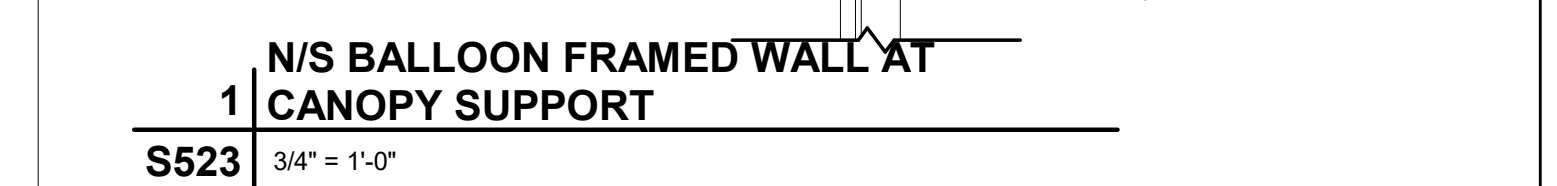
BLOCKING AS REQUIRED
REF PLAN; HIGHLIGHTED
GRAY FOR CLARITY

21

NOT TO SCALE

THIS DETAIL IS TYPICAL TO THE PROJECT AND
MAY NOT BE CUT OR CALLED OUT ON PLANS






APEX
ENGINEERS, INC.

1625 LOCUST ST.
KANSAS CITY, MO 64108
816.421.3222
816.421.1050
www.apex-engineers.com

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S530



**GUY GRONBERG
ARCHITECTS, P.C.**
1113 SE 3rd St.
Lee's Summit, MO 64063
Phone 816.524.0878
Fax 816.524.8578

MO COA NO. 20120568 / KS COA NO. E2818
1925 CENTRAL STREET, SUITE 201
KANSAS CITY, MO 64108
phone: (816) 272-5289
email: jsmothers@jcsengineering.com

JSC
ENGINEERS

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REV#	DATE	DESCRIPTION
1	09/07/23	CITY COMMENTS

PERMIT SET: 08-11-20
JSC PROJECT# 18-142

MECHANICAL
PLAN

M1



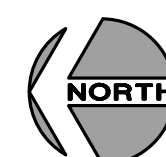
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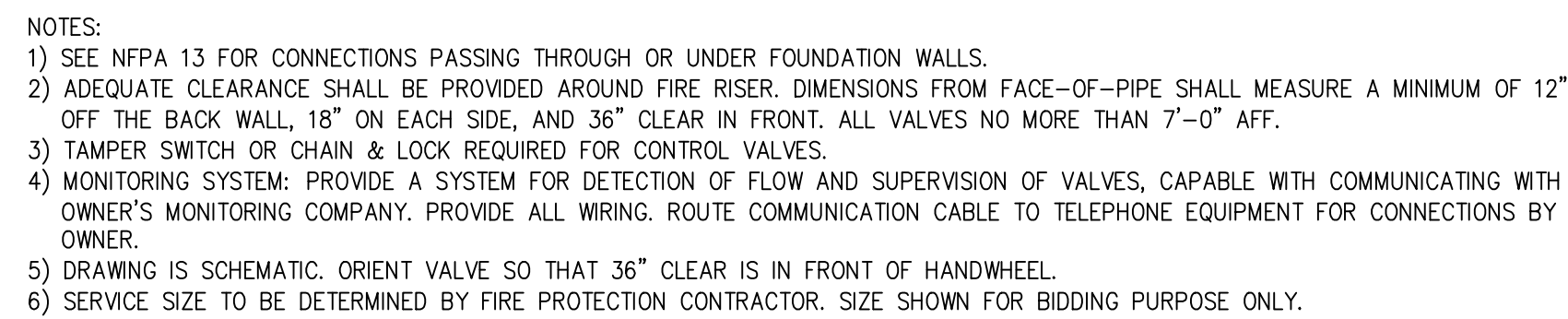
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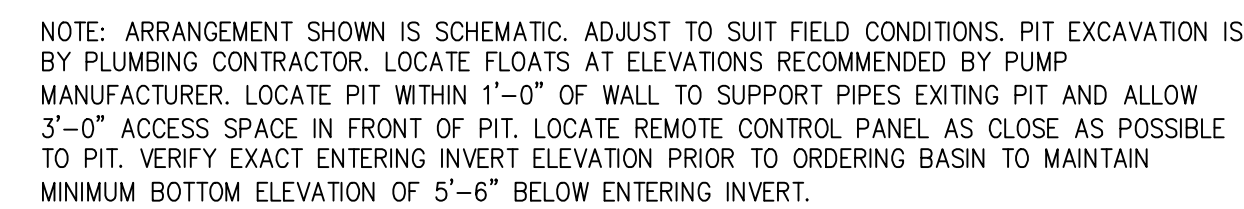
- A. ROUTE PIPING AS HIGH AND AS TIGHT TO STRUCTURE AS POSSIBLE. COORDINATE ROUTING WITH ALL EXISTING CONDITIONS, EQUIPMENT, STRUCTURAL ELEMENTS, DUCTWORK, ETC.
- B. COORDINATE PIPE ROUTING AWAY FROM ELECTRICAL PANELS. DO NOT ROUTE PIPING OVER ELECTRICAL PANELS.

1. 1-1/4" SANITARY FORCED MAIN TO UTILITY SERVICE. REFER TO CIVIL PLANS FOR CONTINUATION.
2. 1-1/2" DOMESTIC COLD WATER TO UTILITY SERVICE. CONTRACTOR SHALL WORK WITH THE WATER COMPANY AND BEAR ALL COSTS FOR THE INSTALLATION OF A NEW WATER MAIN ENTRANCE, INCLUDING TAP, METER, METER PIT, PIPING, ETC. FOR A COMPLETE INSTALLATION.
3. 2" VENT FROM UNDERGROUND UP TO CEILING SPACE.
4. GAS PIPING TO UTILITY MAIN. TOTAL ESTIMATED GAS LOAD FOR BUILDING = 1,200 MBH. REFER TO CIVIL PLANS FOR CONTINUATION. CONTRACTOR TO COORDINATE WITH GAS UTILITY FOR INSTALLATION.
5. COORDINATE WITH GAS COMPANY FOR INSTALLATION OF (1) ONE INITIAL METER AND A METER BANK WITH CAPACITY FOR (6) TOTAL METERS. COORDINATE SPACE REQUIREMENTS WITH UTILITY. INITIAL GAS DEMAND IS 200CFH @ 7"W.C.
6. 4" VENT THRU ROOF. LOCATE MINIMUM 3'-0" FROM EDGE OF ROOF. COORDINATE PIPE PENETRATION WITH ROOFING CONTRACTOR SO NOT TO VOID ROOF WARRANTY. SEAL ROOF PENETRATION WEATHERTIGHT.
7. INSTALL 4" SANITARY SEWER SHUT-OUT AND CAP FOR FUTURE TENANT CONNECTION. EXTEND 4" PVC UP 6" ABOVE FINISHED FLOOR.
8. 1" GAS TO FURNACE. PROVIDE SHUT-OFF VALVE AND DIRT LEG PRIOR TO FINAL CONNECTION.
9. 1-1/2" VALVE AND 1-1/2" RPZ BACKFLOW PREVENTER APPROVED FOR DOMESTIC WATER SERVICE. INSTALL BACKFLOW PREVENTER 24" ABOVE FINISHED FLOOR (CENTERLINE ELEVATION) AS REQUIRED PER LOCAL A.H.J. PROVIDE MINIMUM 12" CLEARANCE FRONT AND BACK. PROVIDE DRAIN FROM BFP TO FLOOR DRAIN AND DISCHARGE WITH AIR GAP. PROVIDE PRESSURE REDUCING VALVE IF SERVICE PRESSURE AT DOMESTIC WATER ENTRY EXCEEDS 75 P.S.I. DOWNSTREAM OF REDUCED PRESSURE BACKFLOW PREVENTER. SEE INSTALLATION DETAIL.
10. 3/4" CW DOWN IN WALL TO FREEZE PROOF WALL HYDRANT. LOCATE SHUT OFF VALVE IN CEILING OF CLOSET.
11. PROVIDE 3/4" VALVED AND CAPPED COLD WATER LINE FOR FUTURE CONNECTION.
12. INSTALL 3" VENT PIPE IN CEILING ALONG BACK OF TENANT SPACE TO ALLOW FOR FUTURE TENANT CONNECTIONS.
13. 6" FIRE SERVICE TO MAIN. REFER TO CIVIL DRAWINGS FOR CONTINUATION. FIRE SPRINKLER CONTRACTOR TO CONFIRM SERVICE SIZE ONCE CALCULATIONS ARE PERFORMED.



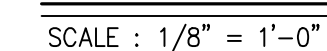
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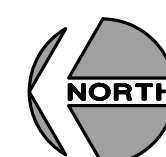


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3



1



LOT 1B LEE SUMMIT MISSOURI 64086

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REV#	DATE	DESCRIPTION
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PERMIT SET: 08-11-2023

JSC PROJECT# 18-142

PLUMBING PLAN

P1



**GUY GRONBERG
ARCHITECTS, P.C.**
119 SE 3rd St.
Lee's Summit, MO 64063
Phone: 816-524-0510
Fax: 816-524-0510

G²

MO CON. NO. 202008766 (KS CAN. NO. E3418)
1025 CENTRAL STREET, SUITE 201
KANSAAS CITY, MO 64108
phone: (816) 272-5289
email: jgronberg@gronbergs.com

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**DOUGLAS
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LOT 1B, LEES SUMMIT, MISSOURI 64066

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REV#	DATE	DESCRIPTION	CITY COMMENTS
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PERMIT SET: 09-11-2023			
JSC PROJECT# 18-142			

ELECTRICAL SPECIFICATIONS
AND SYMBOLS

E1

ELECTRICAL SPECIFICATIONS

PART I – GENERAL

A. GENERAL

- FURNISH AND INSTALL A COMPLETELY WIRED AND OPERATIONAL ELECTRICAL SYSTEM AS SHOWN ON THE DRAWINGS AND SPECIFIED HEREIN, INCLUDING BUT NOT LIMITED TO, THESE MAJOR ITEMS.
 - LIGHTING FIXTURES AS INDICATED AND SPECIFIED ON THE PLANS.
 - ELECTRICAL PANELS, SERVICE, CONDUIT, WIRING, ETC., FOR ALL OUTLETS AND EQUIPMENT.
 - TELEPHONE, TELEVISION, AND FIRE ALARM. OUTLETS AND CONDUIT AS INDICATED.
- OBTAIN AND REVIEW ALL OTHER DRAWINGS INCLUDING REFLECTED CEILING PLAN, INTERIOR AND EXTERIOR ELEVATIONS, FURNITURE PLANS AND ALL MILL WORK DRAWINGS. COORDINATE INSTALLATION OF ALL ELECTRICAL DEVICES AND EQUIPMENT PRIOR TO ROUGH-IN.
- OBTAIN SUBMITTAL AND SHOP DRAWINGS FROM OTHER TRADES AND EQUIPMENT TO COORDINATE INSTALLATION ACCORDINGLY.
- INSTALLATION SHALL COMPLY WITH ALL CURRENT APPLICABLE CODES AND GOVERNING AGENCIES HAVING JURISDICTION.
- FIRE ALARM SYSTEM, IF REQUIRED PER IBC, SHALL BE DESIGN-BUILD BY OWNER'S/GC'S FIRE ALARM CONTRACTOR. DESIGN SHALL BE IN ACCORDANCE WITH NFPA 72. FIRE ALARM CONTRACTOR SHALL SUBMIT STAMPED DRAWINGS TO AHJ FOR REVIEW AND APPROVAL. FIRE ALARM CONTRACTOR IS RESPONSIBLE FOR TESTING AND VERIFYING THAT THE AUDIBILITY OF THE FIRE ALARM SYSTEM MEETS A MINIMUM OF 15 DBA ABOVE AMBIENT NOISE LEVELS. ADD HORNS WHERE REQUIRED TO MAINTAIN MINIMUM LEVELS.
- PROVIDE FIRE STOP ON ALL PIPING THAT PENETRATES RATED WALLS. METHOD OF FIRE STOP SHALL MEET WALL RATING. REFER TO ARCHITECTURAL DRAWINGS FOR LOCATION OF FIRE RATED WALLS. THIS CONTRACTOR SHALL PROVIDE FIRE RATED ENCLOSURES AROUND ALL ROUGH-IN BOXES, PANELS, ETC. THAT ARE LOCATED IN FIRE RATED WALLS AND SHALL FIRE CAULK ALL OPENINGS IN RATED ASSEMBLIES.

B. RELATED WORK BY OTHERS

- THE ELECTRICAL CONTRACTOR SHALL PROVIDE CONDUIT, TRENCH, AND BACKFILL FOR ELECTRICAL SERVICE ENTRANCE FROM THE MAIN SERVICE TO UTILITY POINT OF ELECTRICAL SERVICE. ELECTRICAL CONTRACTOR SHALL COORDINATE THE INSTALLATION OF THE ELECTRICAL SERVICE ENTRANCE WITH SERVING UTILITY COMPANY.
- THE ELECTRICAL CONTRACTOR SHALL PROVIDE CONDUIT, TRENCH, AND BACKFILL FOR PRIMARY PHONE AND CATV SERVICE FROM THE TELEPHONE TERMINAL BOARD OR CABINET TO THE PHONE COMPANY AND CATV COMPANY POINT OF SERVICE COORDINATE WITH LOCAL UTILITY COMPANIES.

C. CODES, REGULATIONS, AND STANDARDS

- THE INSTALLATION SHALL COMPLY WITH APPLICABLE LOCAL AND STATE CODES AND ORDINANCES, WITH THE REGULATIONS OF THE LATEST EDITION OF THE NATIONAL ELECTRIC CODE AND WITH THE REQUIREMENTS OF THE POWER, TELEPHONE, AND CATV COMPANIES FURNISHING SERVICES TO THIS INSTALLATION.
- THE LATEST EDITIONS OF THE FOLLOWING INDUSTRY STANDARDS, SPECIFICATIONS, AND CODES ARE MINIMUM REQUIREMENTS:
 - THE NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION STANDARDS.
 - THE NATIONAL ELECTRICAL CODE, INCLUDING LOCAL AMENDMENTS.
 - UNDERWRITER LABORATORIES INCORPORATED STANDARDS.
 - AMERICAN NATIONAL STANDARDS INSTITUTE.
 - INTERNATIONAL BUILDING CODE.

D. INSPECTION OF SITE

- PRIOR TO SUBMITTING A BID FOR ELECTRICAL WORK, THE CONTRACTOR SHALL VISIT THE SITE OF THE PROPOSED CONSTRUCTION AND SHALL THOROUGHLY ACQUAINT HIMSELF WITH EXISTING UTILITIES, AND WORKING CONDITIONS TO BE ENCOUNTERED, ETC. ALLOWANCE WILL NOT BE MADE FOR NONCOMPLIANCE WITH THIS CONDITION AFTER BIDDING.
- ELECTRICAL INSTALLATION SHALL MEET THE EXISTING CONDITIONS.

E. STORAGE AND HANDLING OF MATERIAL

- DELIVER MATERIALS AND EQUIPMENT TO THE PROJECT IN THE MANUFACTURER'S ORIGINAL, UNOPENED, LABELED CONTAINERS. PROTECT AGAINST MOISTURE, TAMPERING, OR DAMAGE FROM IMPROPER HANDLING OR STORAGE. CONTRACTOR SHALL PROTECT AND BE RESPONSIBLE FOR ANY DAMAGE TO WORK OR MATERIALS UNTIL FINAL ACCEPTANCE BY THE OWNER, AND SHALL MAKE GOOD WITHOUT COST TO THE OWNER, ANY DAMAGE OR LOSS THAT MAY OCCUR DURING THIS PERIOD.
- ARRANGE FOR TIMELY DELIVERY OF MATERIALS AND EQUIPMENT TO THE JOB SITE IN ORDER TO MINIMIZE THE LENGTH OF TIME BETWEEN DELIVERY AND INSTALLATION.
- COVER AND PROTECT ANY MATERIAL WHICH MAY BE AFFECTED BY THE WEATHER WHILE IN TRANSIT OR STORED AT THE PROJECT SITE. ANY MATERIAL FOUND DEFECTIVE OR NOT INSTALLED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS MAY BE REJECTED BY THE ENGINEER.

F. CLEANUP

- KEEP THE PREMISES FREE FROM ACCUMULATION OF WASTE MATERIALS, OR RUBBISH CAUSED BY EMPLOYEES OR WORK UNDER THIS DIVISION OF THE SPECIFICATIONS. AT THE COMPLETION OF THE WORK REMOVE ALL SURPLUS MATERIALS, TOOLS, ETC., AND LEAVE THE PREMISES BROOM-CLEAN.

G. EXCAVATION, CUTTING, AND FITTING

- PERFORM ALL EXCAVATION AND BACK FILLING REQUIRED FOR WORK PERFORMED UNDER THIS DIVISION OF THE SPECIFICATIONS. USE EXCAVATED MATERIALS FOR BACKFILL UNLESS OFF SITE MATERIALS ARE DEEMED NECESSARY.
- PERFORM THE EXCAVATION, CUTTING, FITTING, REPAIRING, AND FINISHING OF THE WORK NECESSARY FOR THE INSTALLATION OF THE EQUIPMENT OF THIS SECTION. HOWEVER, NO CUTTING OF THE WORK OF OTHER TRADES OR OF ANY STRUCTURAL MEMBERS SHALL BE DONE WITHOUT THE CONSENT OF THE ARCHITECT.

H. DRAWINGS

- THE DRAWINGS INDICATE THE GENERAL ARRANGEMENT AND LOCATIONS OF THE ELECTRICAL WORK DATA PRESENTED ON THESE DRAWINGS ARE AS ACCURATE AS PLANNING CAN DETERMINE, BUT FIELD VERIFICATION OF ALL DIMENSIONS, LOCATIONS, LEVELS, ETC., TO SUIT FIELD CONDITIONS IS REQUIRED. REVIEW ALL ARCHITECTURAL, STRUCTURAL, AND MECHANICAL DRAWINGS AND ADJUST ALL WORK TO MEET THE REQUIREMENTS OF CONDITIONS SHOWN. THE ARCHITECTURAL DRAWINGS SHALL TAKE PRECEDENCE OVER ALL OTHER DRAWINGS. DISCREPANCIES BETWEEN DIFFERENT PLANS, OR BETWEEN DRAWINGS AND SPECIFICATIONS, OR REGULATIONS AND CODES GOVERNING THE INSTALLATION SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IN WRITING BEFORE THE DATE OF BID OPENING. IF DISCREPANCIES ARE NOT REPORTED, THE CONTRACTOR SHALL BID THE GREATER QUANTITY OR BETTER QUALITY, AND APPROPRIATE ADJUSTMENTS WILL BE MADE AFTER CONTRACT AWARD. CONTRACTOR SHALL BE RESPONSIBLE TO FIELD MEASURE AND CONFIRM MOUNTING HEIGHTS AND LOCATION OF ELECTRICAL EQUIPMENT WITH RESPECT TO COUNTERS, RADIATION, ETC. DO NOT SCALE DISTANCES OFF THE ELECTRICAL DRAWINGS, USE ACTUAL BUILDING DIMENSIONS.

I. COOPERATION WITH OTHER CONTRACTORS

- COOPERATE WITH THE OTHER TRADES SO THAT THE INSTALLATION OF THE ELECTRICAL OUTLETS AND EQUIPMENT WILL BE PROPERLY COORDINATED. CONDUIT, LIGHTING FIXTURES, AND OTHER EQUIPMENT LOCATIONS SHALL BE VERIFIED WITH OTHER TRADES TO AVOID CONFLICT WITH THE PIPING, DUCTWORK, STEEL, BEAMS, OR OTHER OBSTRUCTIONS.
- CAREFULLY VERIFY THE LOCATIONS OF THE OUTLET BOXES AND DETERMINE THAT THEY HAVE NOT BEEN DISTURBED DURING THE INSTALLATION OF MATERIALS OF OTHER TRADES.
- COORDINATE THE LOCATION OF THE TRENCHES AND CONDUITS FOR ELECTRICAL AND TELEPHONE UTILITY SERVICES WITH THE GENERAL CONTRACTOR.
- COORDINATE HVAC AND PLUMBING EQUIPMENT CONNECTION REQUIREMENTS WITH HVAC AND PLUMBING CONTRACTORS.

J. RECORD DRAWINGS

- THE ELECTRICAL CONTRACTOR SHALL MAINTAIN A SET OF DRAWINGS AT THE JOB SITE FOR THE EXCLUSIVE PURPOSE OF MAINTAINING A RECORD OF ALL WORK INSTALLED AND TO SHOW ANY DEVIATIONS FROM THE WORK INDICATED ON THE DRAWINGS.
- AT THE COMPLETION OF THE PROJECT, ONE SET OF REPRODUCIBLE DRAWINGS, SHOWING ALL RECORD CONDITIONS, SHALL BE DELIVERED TO THE OWNER FOR ACCEPTANCE PRIOR TO FINAL PAYMENT.

PART II – PRODUCTS AND EXECUTION

A. MATERIALS

- ALL MATERIALS SHALL BE NEW AND OF QUALITY AS SPECIFIED ON THE PLANS OR SPECIFICATIONS AND MUST CARRY THE UNDERWRITER'S LABORATORIES APPROVAL COVERING THE PURPOSE FOR WHICH THEY ARE USED, IN ADDITION TO MEETING ALL REQUIREMENTS OF THE CURRENT APPLICABLE CODES AND REGULATIONS.
 - SHOP DRAWINGS AND APPROVALS**
 - THE ITEMS SPECIFIED HEREIN AND ON DRAWINGS ARE USED AS A STANDARD OF QUALITY. ANY MATERIALS OF EQUAL QUALITY AND AESTHETIC VALUE WILL BE GIVEN CONSIDERATION AS A SUBSTITUTE FOR THE MATERIALS SPECIFIED. NO APPROVAL WILL BE GIVEN TO A SPECIFIC CATALOG NUMBER, MODEL, OR TYPE OF EQUIPMENT, PRIOR TO BIDDING. AFTER BIDDING, THE DECISION OF THE ARCHITECT AND/OR ENGINEER DETERMINING EQUAL MATERIALS WILL BE FINAL.
 - THE CONTRACTOR SHALL SUBMIT (3) IDENTICAL BOUND SETS OF SHOP DRAWINGS ON THE FOLLOWING ITEMS TO THE G.C.:
 - LIGHTING FIXTURE CUTS AND PERFORMANCE DATA.
 - OUTLINE DRAWINGS AND DATA SHEETS OF EACH PANELBOARD, LOAD CENTERS, AND DISTRIBUTION PANELS.
 - OUTLINE DRAWINGS OF ALL SWITCH GEAR COMPONENTS.
 - WIRING DEVICES AND COVERPLATES.
 - ALL CIRCUIT BREAKERS INSTALLED IN PANELBOARDS, LOAD CENTERS, AND DISTRIBUTION PANELS.

C. SYSTEM GROUNDING

- GROUNDING SHALL COMPLY WITH REQUIREMENTS OF ARTICLE 250. ALL EXPOSED NONCURRENT CARRYING METALLIC PARTS OF ELECTRICAL EQUIPMENT, METALLIC RACEWAY SYSTEMS, METALLIC CABLE ARMOR, GROUNDING CONDUCTOR OF NONMETALLIC SHEATHED CABLES, GROUNDING CONDUCTOR IN NONMETALLIC RACEWAYS, AND GROUNDED CONDUCTORS OF THE WIRING SYSTEM SHALL BE GROUNDED.
- GROUNDING CONDUCTOR (NEUTRAL) OF THE WIRING SYSTEM SHALL BE CONNECTED TO THE SYSTEM GROUNDING CONDUCTOR AT A SINGLE PLACE IN EACH SYSTEM BY REMOVABLE BONDING JUMPERS, SIZED ACCORDING TO THE APPLICABLE PROVISIONS OF THE NATIONAL ELECTRICAL CODE. THE GROUNDED CONDUCTOR (NEUTRAL) TO THE GROUNDING CONDUCTOR CONNECTION SHALL BE LOCATED IN THE ENCLOSURE FOR THE SYSTEM'S OVERCURRENT PROTECTION OR WHERE OTHERWISE INDICATED ON THE PLANS OR SPECIFICATIONS.
- A GROUND BUS SEPARATE FROM THE NEUTRAL BUS SHALL BE PROVIDED IN ALL DISTRIBUTION PANELS AND PANELBOARDS. PROPER TORQUE ON GROUND BUS SHALL BE VERIFIED, PER MANUFACTURER'S RECOMMENDATIONS, PRIOR TO ENERGIZING EQUIPMENT.
- GROUND BUSES AND NEUTRAL BUSES IN ALL DISTRIBUTION PANELS, LOAD CENTERS, PANELBOARDS, AND THOSE PROVIDED IN ANY EQUIPMENT SHALL BE ISOLATED EXCEPT WHERE REQUIRED TO BE CONNECTED AS SPECIFIED ABOVE FOR THE SERVICE ENTRANCE.
- WHEN INDICATED ON THE DRAWINGS, EQUIPMENT GROUNDING CONDUCTORS SHALL BE EXTENDED FROM THE GROUND BUS IN THE DISTRIBUTION EQUIPMENT TO THE RECEPTACLE, FIXTURE OR DEVICE LUGS WHERE THEY ARE PROVIDED. WHERE LUGS ARE NOT PROVIDED, EQUIPMENT GROUNDING CONDUCTORS SHALL BE CONNECTED TO EQUIPMENT ENCLOSURES. THE CONNECTIONS SHALL BE ARRANGED SUCH THAT REMOVAL OF THE RECEPTACLE, EQUIPMENT GROUND CONDUCTORS, OR GROUND JUMPERS FROM GROUND BUSING SHALL NOT AFFECT THE GROUND SYSTEM.
- RACEWAYS MAY NOT BE USED AS A GROUNDING CONDUCTOR FOR POWER AND LIGHTING CIRCUITS. ALL CONDUIT SHALL HAVE SEPARATE CODE SIZED GREEN GROUND WIRE INSTALLED IN THE CONDUIT TO INSURE A CONTINUOUS GROUNDING PATH.
- IN INACCESSIBLE LOCATIONS, MAKE CONNECTIONS BY EXOTHERMIC WELD PROCESS.
- IN ACCESSIBLE LOCATIONS, CONNECTIONS SHALL BE MADE WITH BOLTED THROUGH, APPROVED SOLDERLESS BRONZE GROUNDING DEVICES.

D. WIRE

- CONDUCTOR SIZES SHOWN ON THE DRAWINGS ARE BASED ON COPPER WIRE. UNLESS OTHERWISE SPECIFIED, ALL WIRE SHALL BE TYPE XHHW OR SE FOR FEEDERS OR BRANCH CIRCUIT LARGER THAN 4 AWG, TYPE THHN/THWN INSULATION FOR FEEDERS AND BRANCH CIRCUITS 4 AWG AND SMALLER. ALL BRANCH CIRCUIT WIRING SHALL BE COPPER.
 - ALUMINUM CONDUCTORS MAY BE UTILIZED FOR SERVICE ENTRANCE AND PANEL FEEDERS. CONDUCTORS SHALL BE ALUMINUM ALLOW AA-8000 SERIES.
- THE WIRES SHALL BE MARKED WITH COLOR TO SIMPLIFY CIRCUIT IDENTIFICATION. UNLESS OTHERWISE REQUIRED BY LOCAL ORDINANCES GROUND WIRES SHALL BE GREEN, NEUTRAL WIRES SHALL BE 120V-WHITE, AND LIVE WIRES 208Y/120V AND 120/240 SHALL BE BLACK (PHASE A), RED (PHASE B), AND BLUE (PHASE C). CIRCUIT SHALL BE LABELED IN EACH J-BOX.
 - ALL CONDUCTORS SHALL BE RATED 600 VOLT.
- SPLICES IN EXTERIOR PULL BOXES AND MANHOLES SHALL BE WEATHERPROOF USING "SCOTCHCAST" SPLICE KIT OR APPROVED EQUAL. SEAL ENDS OF CONDUITS AND DUCTS WITH "DUCTSEAL" OR APPROVED EQUAL.
- PROVIDE SOLID CONDUCTOR FOR 12 AWG AND SMALLER.
- NO WIRE SHALL BE INSTALLED IN THE CONDUIT SYSTEM UNTIL THE CONDUIT SYSTEM IS COMPLETE. USE MINERALAC NO. 100 OR EQUIVALENT AS A LUBRICANT TO FACILITATE THE INSTALLATION OF THE CONDUCTORS IN THE CONDUIT SYSTEM.
- MC CABLE WITH COPPER CONDUCTORS AND GROUND WIRE MAY BE USED WHERE PERMITTED.

E. CONDUIT

- MC CABLE MAY BE USED AS ALLOWED BY THE NEC.
- WHERE CONDUIT ENTERS PULL BOXES, FIXTURES OR CABINETS, FIRMLY FASTEN WITH STEEL SET SCREW, COMPRESSION CONNECTORS, OR DOUBLE LOCKNUTS FOR GRC. ALL CONNECTIONS SHALL HAVE BUSHINGS OR INSULATED THROAT CONNECTORS. FIRMLY FASTEN CONDUIT TO THE BUILDING CONSTRUCTION. RUN EXPOSED CONDUIT PARALLEL TO THE BUILDING LINES, SUPPORTED BY APPROPRIATE HANGERS (UNISTRUT, T & B OR APPLETON, OR EQUAL).
- CONDUIT PENETRATION THROUGH ROOF SHALL HAVE ROOF FLASHING WITH CAULK TYPE COUNTER FLASHING SLEEVE. INSTALLATION SHALL BE WATER TIGHT.
- CONDUITS SHALL BE ROUTED PARALLEL AND PERPENDICULAR TO THE STRUCTURE.

F. OUTLET, PULL, AND JUNCTION BOXES

- EACH SWITCH, LIGHT, RECEPTACLE OR OTHER OUTLET, SHALL BE PROVIDED WITH A CODE SIZED, STEEL OUTLET BOX. JUNCTION AND PULL BOXES SHALL BE METAL AND CODE SIZED.
- BOXES INSTALLED IN POURED CEMENT FLOORS SHALL BE FLUSH TYPE CAST IRON OR STEEL WITH WATER TIGHT GASKETED COVERS. WHERE BOXES ARE INSTALLED IN FLOORS WITH TILE OR CARPET FLOOR COVERING, COVERS SHALL BE OF THE RECESSED TYPE TO ACCOMMODATE THE FLOOR COVERING.
- BOXES INSTALLED FOR THE ALARM, COMPUTER, AND SECURITY SYSTEM SHALL BE PROVIDED WITH APPROPRIATE COVER PLATES.
- BOXES FOR TELEPHONE, COMPUTER, T.V., FIRE ALARM, SECURITY, AND SIMILAR SYSTEMS SHALL BE MINIMUM 2-1/8" DEEP.

G. WIRING DEVICES

- WALL SWITCHES SHALL BE SPECIFICATION GRADE AC SILENT TYPE SWITCHES, 20A 120/277 VOLT.
- RECEPTACLES SHALL BE SPECIFICATION GRADE, DUPLEX TYPE, NEMA5-20R, 20 AMPERE, 120VOLT GROUNDING TYPE. SPECIAL APPLICATION RECEPTACLES SHALL BE INDICATED ON PLANS. MOUNT WITH THE GROUND DOWN.
- DEVICE PLATES SHALL BE EQUAL TO SIERRA SMOOTH-LINE PLASTIC WALL PLATES. COLOR SHALL BE WHITE, UNLESS OTHERWISE NOTED.
- RECEPTACLES IN OUTDOOR AND WET LOCATIONS SHALL BE INSTALLED WITH A HINGED OUTLET COVER/ENCLOSURE CLEARLY MARKED AND U.L. LISTED SUITABLE FOR WET LOCATIONS WHILE IN USE, EQUAL TO TAYMAC SPECIFICATION GRADE.

H. PANEL BOARDS

- CIRCUIT BREAKER TYPE AS INDICATED ON DRAWINGS. UNLESS INDICATED OTHERWISE, ALL PANELS SHALL HAVE PANEL HAVE PANEL BOARD TYPE CONSTRUCTION WITH BOLT-ON CIRCUIT BREAKERS FOR 3Ø PANELS.
- MANUFACTURERS SHALL BE GENERAL ELECTRIC, SQUARE D, SIEMENS, CUTLER-HAMMER WITH VOLTAGE, SIZES, AND RATINGS AS INDICATED ON DRAWINGS.
- THE CIRCUIT BREAKERS SHALL BE OPERABLE IN ANY POSITION AND BE REMOVABLE FROM THE FRONT OF THE PANEL BOARD WITHOUT DISTURBING THE ADJACENT UNITS. BRANCH BREAKERS SHALL BE OF SUCH DESIGN THAT COMBINATION OF SINGLE-POLE, DOUBLE-POLE, AND THREE-POLE BREAKERS CAN BE ASSEMBLED ON THE SAME PANEL. EACH BRANCH CIRCUIT SHALL BE CLEARLY NUMBERED. BRANCH AND MAIN TERMINALS SHALL BE SOLDERLESS TYPE. HANDLE TIES TO FORM MULTI-POLE BREAKERS NOT ACCEPTABLE.

L. LIGHTING FIXTURES

- PROVIDE ALL LIGHTING FIXTURES, WIRED AND CONNECTED. THE DRAWINGS INDICATE THE FIXTURES FOR EACH LOCATION. PROVIDE LAMPS FOR ALL FIXTURES. THE LAMPS SHALL BE BY THE SAME MANUFACTURER. VERIFY CEILING CONSTRUCTION BEFORE ORDERING RECESSED UNITS. PROVIDE PLASTER FRAMES AND HANGERS AS REQUIRED. CEILING CONSTRUCTION, ARCHITECTURAL ACCESSORIES, VOLTAGE, AND BALLASTS TO MEET THE EXISTING CEILING CONDITION.

J. TELEPHONE AND CABLE TELEVISION SYSTEMS

- TELEPHONE WALL OUTLETS SHALL CONSIST OF STANDARD BOXES MOUNTED 18" ABOVE THE FLOOR UNLESS OTHERWISE INDICATED. PROVIDE A TERMINAL MOUNTING BOARD FOR THE INCOMING SERVICE CABLE.
- CABLE TELEVISION OUTLETS SHALL CONSIST OF STANDARD BOXES MOUNTED 18" ABOVE THE FLOOR UNLESS OTHERWISE INDICATED. PROVIDE A TERMINAL MOUNTING BOARD FOR THE INCOMING SERVICE CABLE.

K. GUARANTEE

- GUARANTEE ALL MATERIAL FURNISHED AND ALL WORKMANSHIP PERFORMED FOR A PERIOD OF ONE YEAR FROM DATE OF FINAL ACCEPTANCE OF WORK. ANY DEFECTS DEVELOPING WITHIN THIS PERIOD, TRACEABLE TO MATERIAL FURNISHED AS A PART OF THIS SECTION OR WORKMANSHIP PERFORMED HEREUNDER, SHALL BE MADE GOOD AT NO EXPENSE TO THE OWNER.

L. FIRE SEALING NOTES

- COORDINATE CONSTRUCTION OF OPENINGS AND PENETRATING ITEMS TO ENSURE THAT THROUGH-PENETRATION FIRESTOP SYSTEMS ARE INSTALLED ACCORDING TO SPECIFIED AND APPLICABLE UL REQUIREMENTS.
- COORDINATE SIZING OF SLEEVES, OPENINGS, CORE-DRILLED HOLES, OR CUT OPENINGS TO ACCOMMODATE THROUGH-PENETRATION FIRESTOP SYSTEMS.
- DO NOT COVER UP THROUGH-PENETRATION FIRESTOP SYSTEM INSTALLATIONS UNTIL EXAMINED BY INSPECTOR, IF REQUIRED BY AUTHORITIES HAVING JURISDICTION.
- COMPATIBILITY: PROVIDE THROUGH-PENETRATION FIRESTOP SYSTEMS THAT ARE COMPATIBLE WITH ONE ANOTHER, WITH THE SUBSTRATES FORMING OPENINGS; AND WITH THE ITEMS, IF ANY, PENETRATING THROUGH-PENETRATION FIRESTOP SYSTEMS, UNDER CONDITIONS OF SERVICE AND APPLICATION, AS DEMONSTRATED BY THROUGH-PENETRATION FIRESTOP SYSTEM MANUFACTURER BASED ON TESTING AND FIELD EXPERIENCE.
- PROVIDE COMPONENTS FOR EACH THROUGH-PENETRATION FIRESTOP SYSTEM THAT ARE NEEDED TO INSTALL FILL MATERIALS. USE ONLY COMPONENTS SPECIFIED BY THROUGH-PENETRATION FIRESTOP SYSTEM MANUFACTURER AND APPROVED BY QUALIFIED TESTING AND INSPECTING AGENCY FOR FIRESTOP SYSTEMS INDICATED.
- PROVIDE SLEEVES THROUGH ALL FIRE-RATED WALLS AND FILL VOIDS SURROUNDING SLEEVES AND INTERIOR TO SLEEVES AROUND PIPING WITH FIRE STOP PUTTY WITH U.L. LISTED 3 HOUR RATING INSTALLED AS PER MANUFACTURERS RECOMMENDATIONS.
- FIRE SEAL ALL PIPING, CONDUIT, CABLE, ETC PENETRATIONS ROUTED THROUGH FIRE RATED WALLS. PROVIDE FIRE RATED ENCLOSURES OR WRAPS ON LIGHT FIXTURES AND OTHER ITEMS PENETRATING FIRE RATED CEILINGS, FLOOR/CEILING/ CEILING/ROOF ASSEMBLIES TO MAINTAIN UL LISTING FOR CONSTRUCTION.

NOTE: THIS IS A MASTER LEGEND AND NOT ALL SYMBOLS, ETC, ARE NECESSARILY USED ON THE DRAWINGS.

LIGHTING FIXTURES – SYMBOL/LETTER INDICATES LIGHT FIXTURE AS INDICATED ON FIXTURE SCHEDULE

- LED FIXTURE (SEE LIGHTING FIXTURE SCHEDULE)
- FIXTURE WITH EMERGENCY BATTERY DRIVER UNIT
- TRACK LIGHT
- DOWNLIGHT FIXTURE WITH EMERGENCY BATTERY DRIVER UNIT
- WALL MOUNTED FIXTURE WITH EMERGENCY BATTERY DRIVER UNIT
- PENDANT MOUNTED FIXTURE WITH EMERGENCY BATTERY DRIVER UNIT
- DOWNLIGHT FIXTURE
- WALL MOUNTED FIXTURE
- PENDANT MOUNTED FIXTURE
- WALL WASHER
- SINGLE FACE EXIT SIGN – UNIVERSAL MOUNTED
- SINGLE FACE EXIT SIGN W/ DIRECTIONAL ARROWS – UNIVERSAL MTD
- DOUBLE FACE EXIT SIGN W/ DIRECTIONAL ARROWS – UNIVERSAL MTD
- DUAL HEADED EMERGENCY UNIT
- COMBO DUAL HEADED EMERGENCY AND EXIT SIGN UNIT

LIGHTING CONTROLS

- S SINGLE POLE SWITCH @ +48" UNLESS NOTED
- Sabc SWITCH BANK @ +48" UNLESS NOTED. LOWER CASE LETTER INDICATES FIXTURE CONTROLLED.
- S3 3-WAY SWITCH @ +48" UNLESS NOTED
- S4 4-WAY SWITCH @ +48" UNLESS NOTED
- Sd DIMMER SWITCH – SIZE AS REQUIRED @ +48" UNLESS NOTED
- Sm MANUAL MOTOR STARTER
- Sos WALL SWITCH WITH OCCUPANCY SENSOR. DIGITAL LOW VOLTAGE WALL SWITCH. SWITCH @ +48" UNLESS NOTED.
- SLvd TWO BUTTON DIGITAL LOW VOLTAGE WALL SWITCH. PROVIDES ON/OFF/0-10V DIMMING. SWITCH @ +48" UNLESS NOTED. PROVIDE EXTRA CONTROL CABLES NEEDED TO FIXTURE CONTROLLED.
- CS LIGHTING CONTROLS CEILING MOUNT OCCUPANCY SENSOR
- PC LIGHTING CONTROLS POWER PACK
- PC PHOTOCELL
- TC TIMECLOCK

POWER DISTRIBUTION

- SWITCHBOARD, MOTOR CONTROL CENTER OR DISTRIBUTION BOARD
- 277/480V, 3 PHASE, 4 WIRE PANELBOARD, UNO
- 120/208V, 3 PHASE, 4 WIRE PANELBOARD, UNO
- 120/240V, 1 PHASE, 3 WIRE PANELBOARD, UNO
- TRANSFORMER

POWER DEVICES

- SPECIAL HEAVY DUTY RECEPTACLE – SIZE AS NOTED. @ +18" UNLESS NOTED
- 1/2 SWITCHED RECEPTACLE @ +18" UNLESS NOTED
- FIRE RATED POKE THRU WITH TYPE INDICATED
- FLUSH FLOOR BOX WITH TYPE INDICATED
- SINGLE RECEPTACLE @ +18" UNLESS NOTED
- DUPLEX RECEPTACLE @ +18" UNLESS NOTED
- DOUBLE DUPLEX RECEPTACLE @ +18" UNLESS NOTED
- DUPLEX RECEPTACLE INSTALLED ABOVE COUNTERTOP
- GFCI-RATED DUPLEX RECEPTACLE
- ARC FAULT RATED DUPLEX RECEPTACLE
- TAMPER RESISTANT RATED DUPLEX RECEPTACLE
- DUPLEX RECEPTACLE WITH WEATHERPROOF COVERPLATE @ 18" UNLESS NOTED
- JUNCTION BOX
- DISCONNECT SWITCH – SIZE AND TYPE NOTED

AUXILIARY SYSTEMS

- MECHANICAL EQUIP. CONNECTION, SEE SCHED. ON MECH. PLAN
- TELEPHONE OUTLET @ +18" UNLESS NOTED
- DATA OUTLET @ +18" UNLESS NOTED
- COMBINATION TELEPHONE/DATA OUTLET @ +18" UNLESS NOTED
- TELEVISION OUTLET @ +60" UNLESS NOTED
- SMOKE DETECTOR
- HEAT DETECTOR
- DUCT SMOKE DETECTOR
- REMOTE TEST STATION WITH INDICATING LIGHT. MOUNT AT 48" AFF UNO.
- AUXILIARY SYSTEM TERMINAL CABINET
- WEATHERPROOF NOTIFICATION HORN/STROBE DEVICE FOR WATERFLOW NOTIFICATION – INSTALL PER NFPA REQUIREMENTS

GENERAL

- CONDUIT RUN CONCEALED IN WALL OR ABOVE CEILING
- CONDUIT RUN BELOW FLOOR OR GRADE

PI-3,5,7 HOMERUN TO PANELBOARD, INFORMATION AT ARROWS ARE CIRCUIT NUMBERS AND PANELBOARD FOR TERMINATION. REFER TO ASSOCIATED NOTE FOR BRANCH CIRCUIT CONDUCTOR SIZES.

INDICATES 1/2" CONDUIT CONCEALED IN CEILING OR WALL WITH (3) CONDUCTORS. (1) PHASE, (1) NEUTRAL AND (1) GROUND WIRE. ALL ARE #12 AWG UNLESS NOTED OTHERWISE.

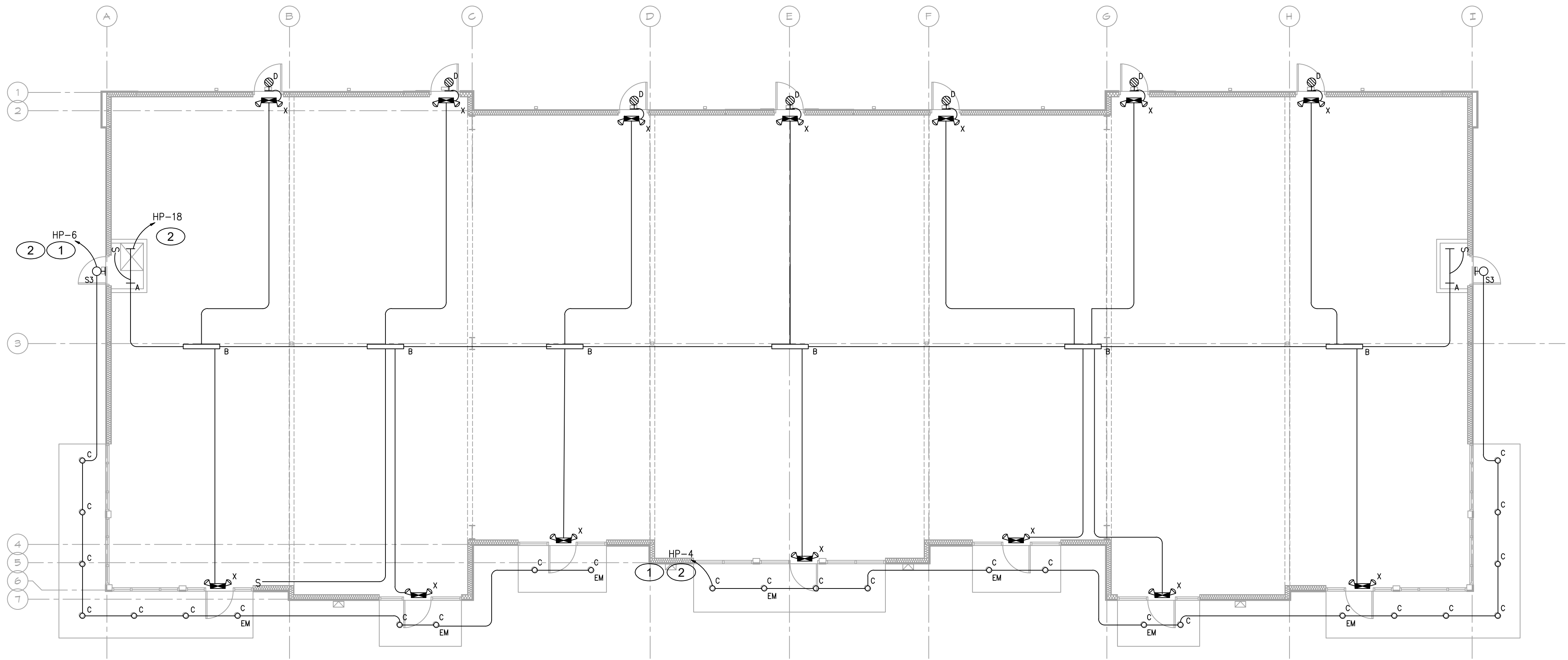
(E) OR ETR: DENOTES EXISTING ITEM/EQUIPMENT TO REMAIN

GENERAL NOTES

- A. DRAWINGS ARE DIAGRAMMATIC AND SHALL NOT BE SCALED. REFER TO ARCHITECTURAL PLANS OR FIELD MEASUREMENTS FOR DIMENSIONS.
- B. ALL WORK SHALL COMPLY WITH THE LATEST ADOPTED EDITION OF THE NATIONAL ELECTRICAL CODE (NFPA 70) AND ALL LOCAL BUILDING CODES AND AMENDMENTS.
- C. ALL ROOF AND WALL PENETRATIONS SHALL BE COORDINATED WITH THE GENERAL CONTRACTOR. PROVIDE ALL REQUIRED SLEEVES, FLASHINGS, CURBS, REINFORCED ANGLES, SUPPORTING FRAMES, ETC. UNLESS THEY ARE SPECIFICALLY CALLED OUT TO BE FURNISHED BY OTHERS.
- D. COORDINATE ALL WORK WITH OTHER TRADES AND EXISTING CONDITIONS AS REQUIRED TO PROPERLY INSTALL ALL SYSTEMS AS INTENDED, WITHIN THE CONFINES OF THE SPACE AVAILABLE, AND WITHOUT INTERFERENCES.
- E. THIS CONTRACTOR SHALL PERFORM ALL WORK INDICATED AND/OR AS REQUIRED FOR THE PROPER INSTALLATION AND OPERATION OF THE ELECTRICAL SYSTEMS.
- F. ALL WIRING SHALL BE IN APPROVED RACEWAY.
- G. WIRE SIZE SHALL BE MINIMUM #12 AWG, THWN SOLID COPPER UNLESS OTHERWISE NOTED. PROVIDE GROUND WIRE WHERE REQUIRED BY CODE. INCREASE WIRE SIZE TO COMPENSATE FOR VOLTAGE DROP WHERE TOTAL LENGTH OF ANY BRANCH EXCEEDS 100 FEET.
- H. MAXIMUM NUMBER OF UNGROUNDED WIRES IN ANY CONDUIT SHALL BE THREE. ADDITIONAL WIRES ARE ACCEPTABLE IF WIRE SIZE IS INCREASED TO ALLOW FOR DERATING PER CODE. PROVIDE ADDITIONAL WIRES FOR SWITCHING AS REQUIRED.
- I. REFER TO LIGHTING FIXTURE SCHEDULE FOR LIGHT FIXTURE TYPES AND REQUIREMENTS.
- J. LIGHT FIXTURES SHOWN WITH EM ARE EMERGENCY FIXTURES.
- K. CONNECT ALL EXIT SIGNS AND EMERGENCY LIGHTING UNITS TO THE INDICATED CIRCUIT WITH A SEPARATE AND UN-SWITCHED CONDUCTOR BYPASSING ALL CONTROLS AND CONTACTORS. REFER TO MANUFACTURER'S WRITTEN INSTRUCTIONS FOR PROPER INSTALLATION AND TESTING.

KEYED PLAN NOTES

1. CIRCUIT VIA TIMECLOCK/PHOTOCELL.
2. (1) 3/4" -2 #8 & 1 #10 GND.



LIGHTING PLAN - MAIN LEVEL

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

1

[illegible]

ELECTRICAL LIGHTING PLAN

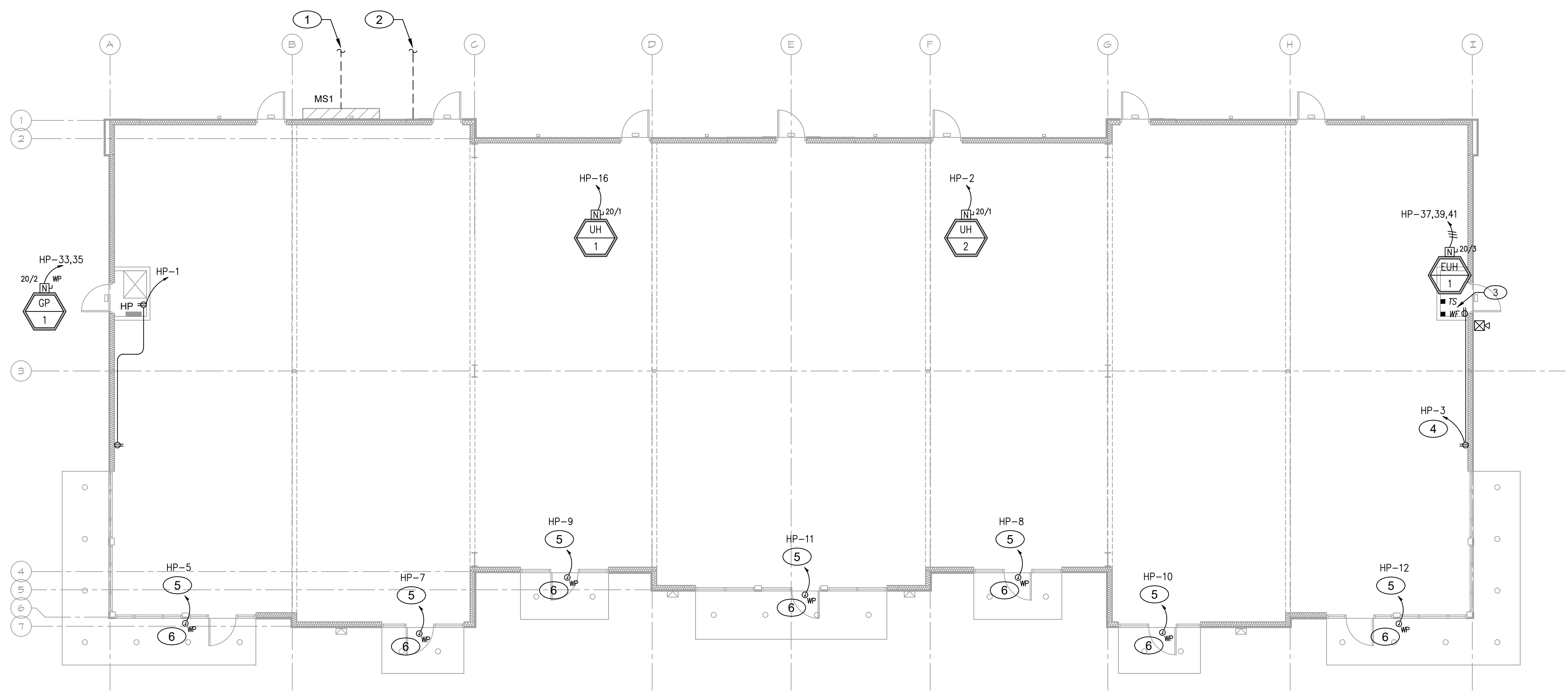
E2

GENERAL NOTES

- A. DRAWINGS ARE DIAGRAMMATIC AND SHALL NOT BE SCALED. REFER TO ARCHITECTURAL PLANS OR FIELD MEASUREMENTS FOR DIMENSIONS.
- B. ALL WORK SHALL COMPLY WITH THE LATEST ADOPTED EDITION OF THE NATIONAL ELECTRICAL CODE (NFPA 70) AND ALL LOCAL BUILDING CODES AND AMENDMENTS.
- C. ALL ROOF AND WALL PENETRATIONS SHALL BE COORDINATED WITH THE GENERAL CONTRACTOR. PROVIDE ALL REQUIRED SLEEVES, FLASHINGS, CURBS, REINFORCED ANGLES, SUPPORTING FRAMES, ETC. UNLESS THEY ARE SPECIFICALLY CALLED OUT TO BE FURNISHED BY OTHERS.
- D. COORDINATE ALL WORK WITH OTHER TRADES AND EXISTING CONDITIONS AS REQUIRED TO PROPERLY INSTALL ALL SYSTEMS AS INTENDED, WITHIN THE CONFINES OF THE SPACE AVAILABLE, AND WITHOUT INTERFERENCES.
- E. THIS CONTRACTOR SHALL PERFORM ALL WORK INDICATED AND/OR AS REQUIRED FOR THE PROPER INSTALLATION AND OPERATION OF THE ELECTRICAL SYSTEMS.
- F. THE ELECTRICAL SYSTEM DESIGN IS BASED IN PART ON THE SPECIFIED HVAC EQUIPMENT. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE THE EXACT LOCATIONS AND ELECTRICAL REQUIREMENTS OF ALL HVAC EQUIPMENTS WHEN FURNISHED. ANY CHANGES TO THE ELECTRICAL SYSTEM DUE TO HVAC EQUIPMENT SUBSTITUTIONS SHALL BE PROVIDED AT NO ADDITIONAL COST TO THE OWNER.
- G. ALL POWER WIRING SHALL BE BY THE ELECTRICAL CONTRACTOR. ALL CONTRACT WIRING SHALL BE ROUTED BY THE ELECTRICAL CONTRACTOR WITH FINAL CONTROL DEVICE (T-STATS) LANDINGS BY THE MECHANICAL CONTRACTOR.
- H. ALL WIRING SHALL BE IN APPROVED RACEWAY.
- I. WIRE SIZE SHALL BE MINIMUM #12 AWG. THINN SOLID COPPER UNLESS OTHERWISE NOTED. PROVIDE GROUND WIRE WHERE REQUIRED BY CODE. INCREASE WIRE SIZE TO COMPENSATE FOR VOLTAGE DROP WHERE TOTAL LENGTH OF ANY BRANCH EXCEEDS 100 FEET.
- J. MAXIMUM NUMBER OF UNGROUNDED WIRES IN ANY CONDUIT SHALL BE THREE. ADDITIONAL WIRES ARE ACCEPTABLE IF WIRE SIZE IS INCREASED TO ALLOW FOR DERATING PER CODE. PROVIDE ADDITIONAL WIRES FOR SWITCHING AS REQUIRED.
- K. FIRE ALARM, AUDIO/VIDEO AND SURVEILLANCE SYSTEMS BY OTHERS.
- L. ALL PORTIONS OF WORK SHALL BE DONE IN ACCORDANCE WITH APPLICABLE LOCAL, STATE, AND NATIONAL CODES, ORDINANCES, AND STANDARDS.
- M. VERIFY ALL EQUIPMENT LOCATIONS WITH OWNER PRIOR TO ROUGH-IN.

KEYED PLAN NOTES

1. CONDUIT AND FEEDERS FROM UTILITY TRANSFORMER TO BUILDING ELECTRICAL SERVICE FOR "MS1". COORDINATE ROUTE OF TRENCHING WITH CIVIL DRAWINGS PRIOR TO BID. REFER TO SHEET E4 FOR ADDITIONAL INFORMATION.
2. PROVIDE 2" TO PROPERTY LINE FOR BUILDING TELEPHONE SERVICES. TERMINATE AT LOCATION DIRECTED BY LOCAL SERVICE PROVIDER.
3. COORDINATE QUANTITY OF TAMPER/FLOW SWITCHES WITH FIRE PROTECTION CONTRACTOR.
4. (1) 3/4" - 2 #8 & 1 #10 GND.
5. CIRCUIT VIA TIMECLOCK/PHOTOCELL.
6. PROVIDE JBOX FOR TENANT SIGNAGE. COORDINATE MOUNTING HEIGHT WITH ARCHITECTURAL ELEVATIONS.



POWER PLAN - MAIN LEVEL

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

1



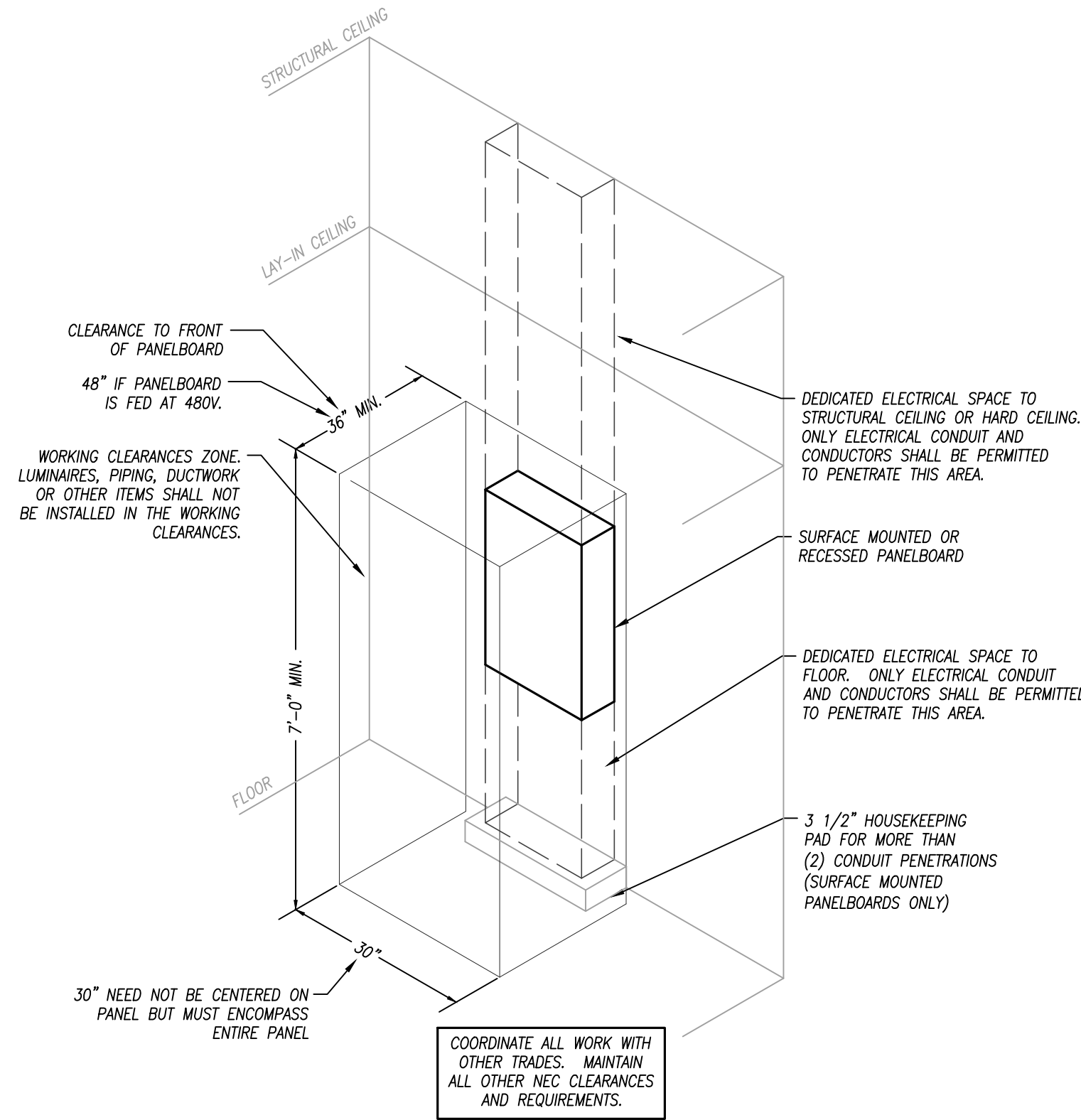
REV#	DATE	DESCRIPTION
1	09/07/23	CITY COMMENTS

PERMIT SET: 08-11-2023

JSC PROJECT# 18-142

ELECTRICAL POWER
PLAN

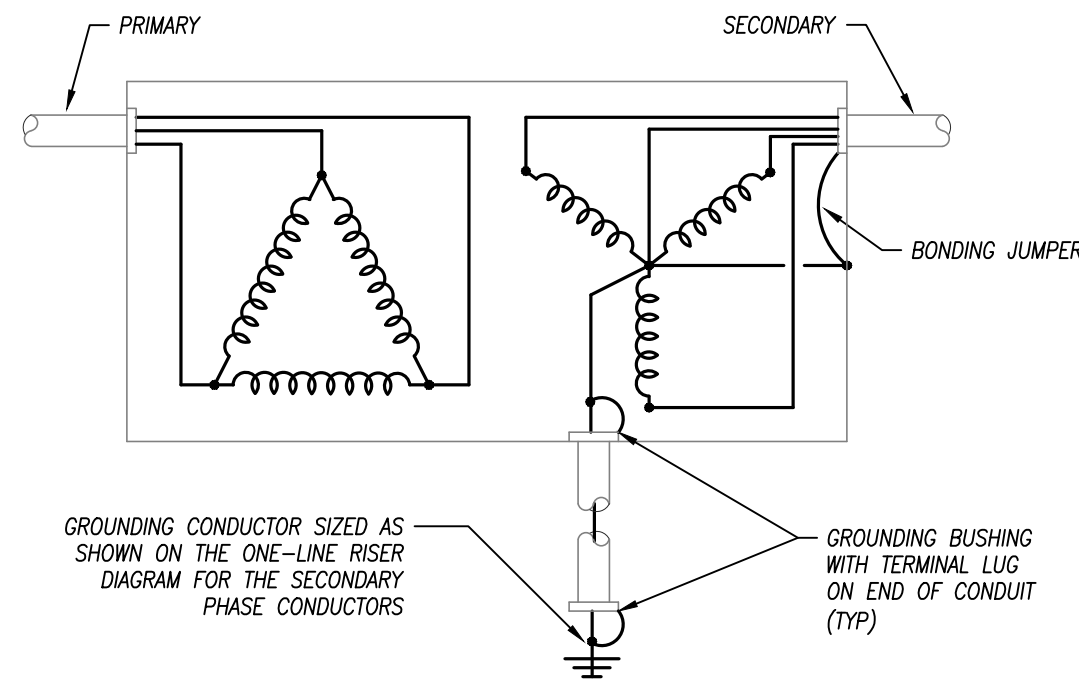
E3



TYP. PANELBOARD INSTALLATION

SCALE : NO SCALE

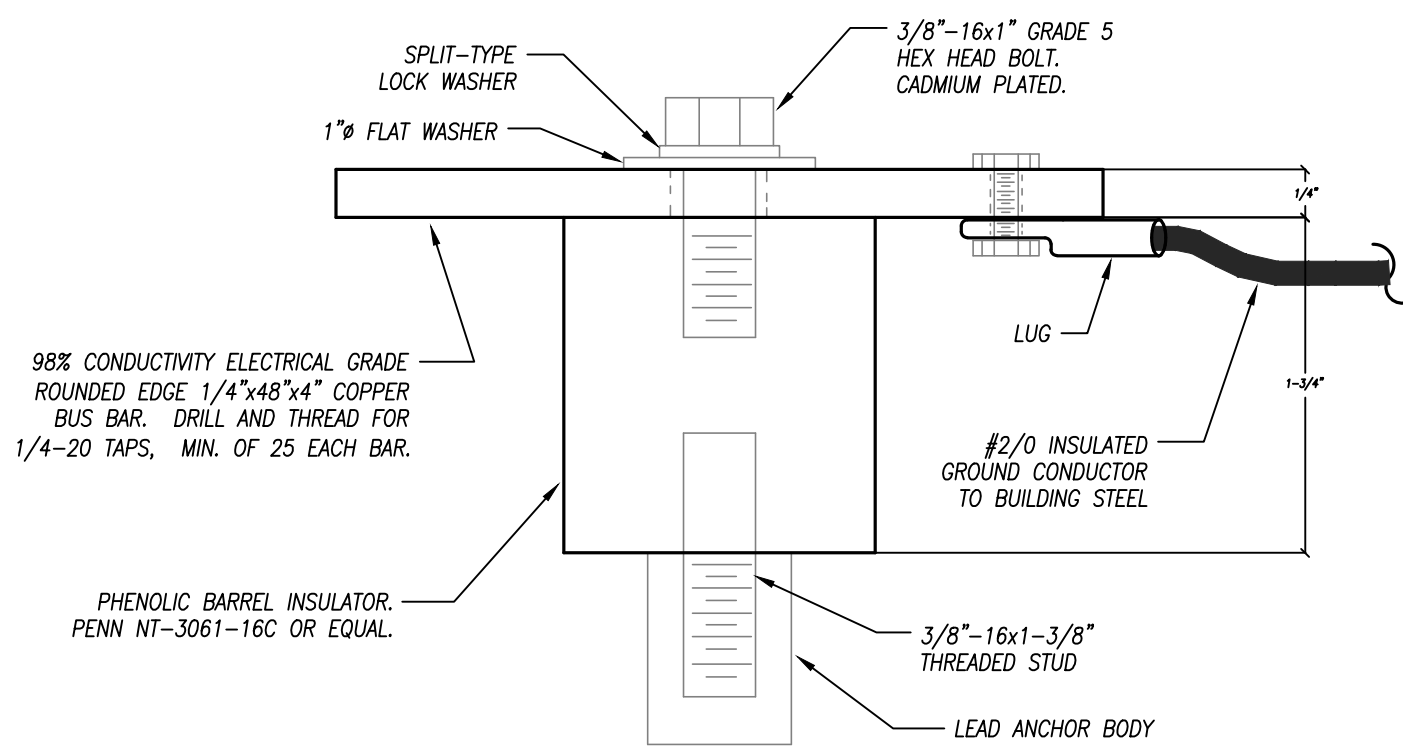
3



DRY TYPE TXFR. GROUNDING

SCALE : NO SCALE

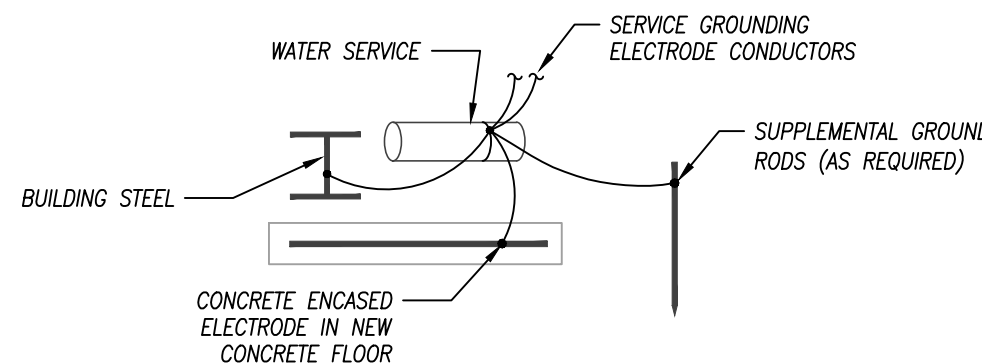
4



GROUND BUS MOUNTING DETAIL

SCALE : NO SCALE

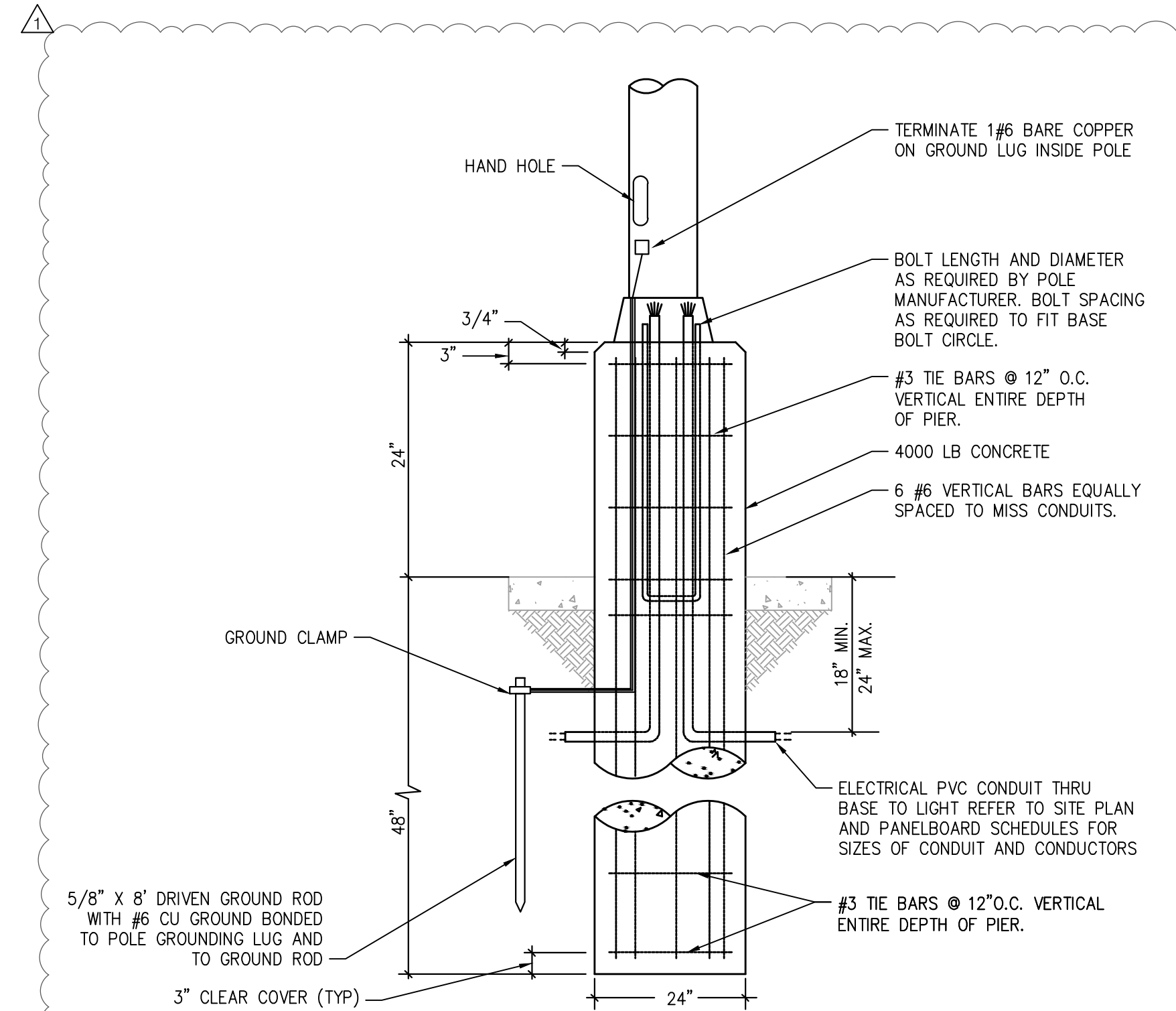
6



GROUNDING ELECTRODE SYSTEM

SCALE : NO SCALE

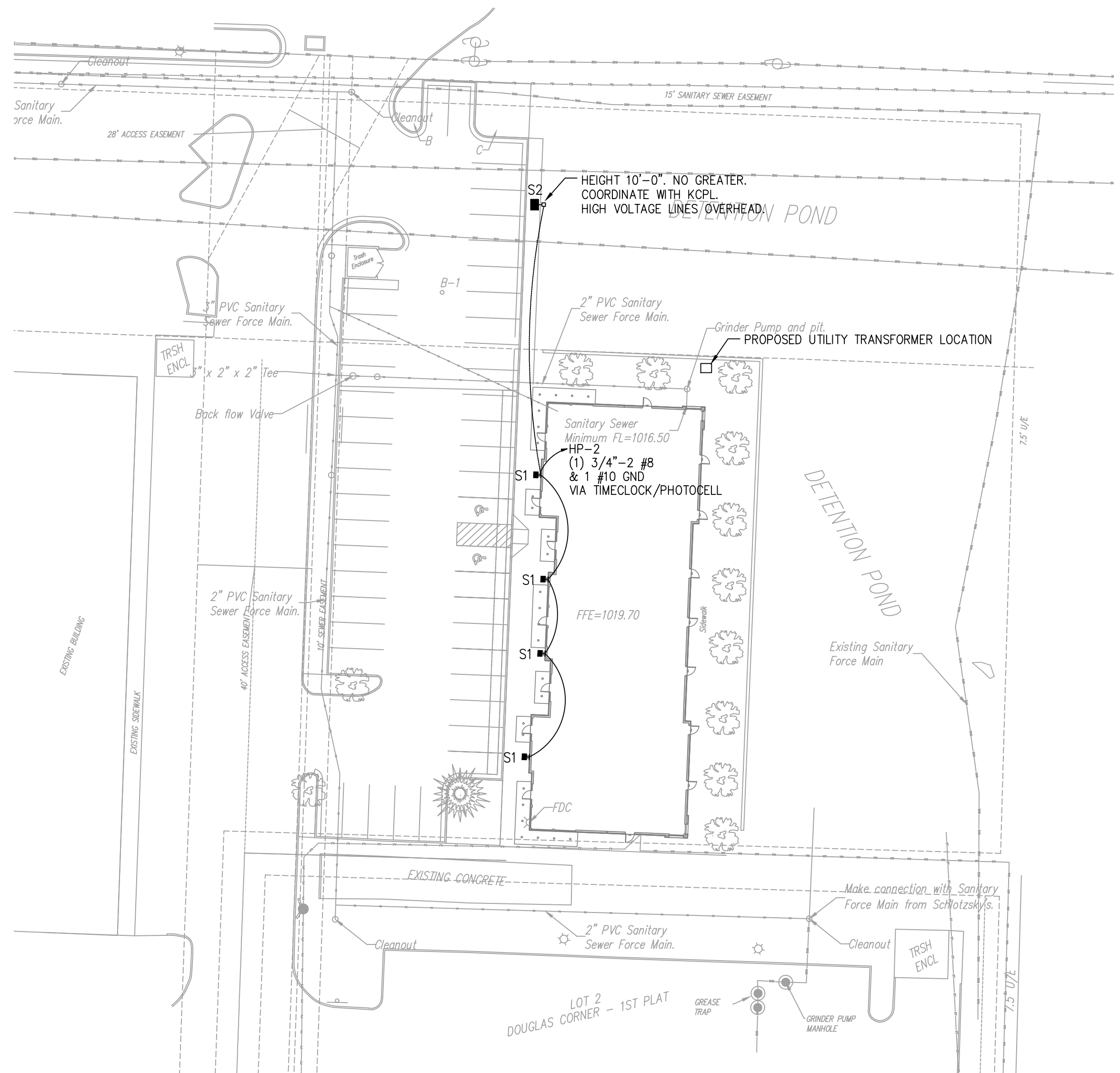
5



POLE BASE DETAIL

SCALE : NO SCALE

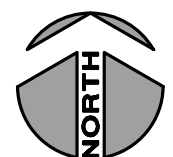
2



SITE LIGHTING PLAN

SCALE : 1/32" = 1'-0"

1



**GUY GRONBERG
ARCHITECTS, P.C.**
119 SE 3rd St.
Lee's Summit, MO 64069
Phone: 816.524.0516
Fax: 816.524.2510

G²

MO CON. NO. 201200356 (AS CAN. NO. E-5918)
1025 CENTRAL STREET, SUITE 201
KANSAS CITY, MO 64108
phone: (816) 272-5289
email: jgronberg@guygronberg.com

**JSC
ENGINEERS**

**DOUGLAS
CORNER**

LOT 1B, LEE'S SUMMIT, MISSOURI 64066

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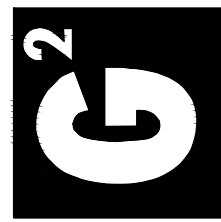
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ELECTRICAL SITE LIGHTING AND DETAILS

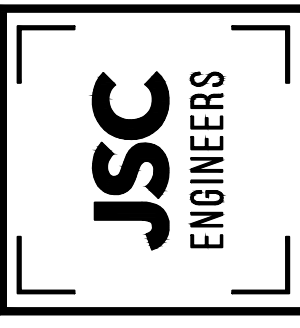
E4



GUY GRONBERG
ARCHITECTS, P.C.
Lee B Summit, MO 64083
Phone 816 524 0510
Fax 816 524 0510



MISSOURI REG. NO. 201200356 (KSCA) NO. E-918
1025 CENTRAL STREET, SUITE 201
KANSAAS CITY, MO 64108
phone (816) 272-5209
email jgronberg@guygronberg.com



DOUGLAS
| CORNER |

LOT 118, LEES SUMMIT, MISSOURI 64086

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REV#	DATE	DESCRIPTION
1	09/07/23	CITY COMMENTS
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ELECTRICAL SCHEDULES
AND SINGLE LINE DIAGRAM

E5

ELECTRICAL LIGHTING SCHEDULE (OR EQUAL. VERIFY ALL SELECTIONS AND FINISHES WITH OWNER OR ARCHITECT PRIOR TO ORDERING).

FIXTURE TYPE	MANUFACTURER		VOLT AMPS	MOUNTING	LAMP TYPE	REMARKS	VOLT	REMARKS
	NAME	CATALOG NUMBER						
A	WILLIAMS	76-4-L53/840-WG-7611-DR-120	36	SURFACE	36 WATT, 4000K, 5,300 LUMEN LED	4'-0" LONG LED STRIP FIXTURE.	120	1
B	WILLIAMS	77 SERIES	64	PENDANT	TWO (2) 32 WATT 48" T8 LINEAR FLUORESCENT.	4'-0" LONG SPECIFICATION-GRADE STRIP FIXTURE. CHAIN MOUNT FROM CEILING AT 8-6" A.F.F. ALL PARTS PAINTED WHITE AFTER FABRICATION. ELECTRONIC BALLAST.	120	1
C	WILLIAMS	H60 SERIES	72	RECESSED	L64/840 LUMEN PACKAGE, 80 CRI, 72 WATTS	6" ROUND APERTURE RECESSED LED DOWNLIGHT. SELF-FLANGED, SEMI-SPECULAR LOW IRIDESCENT ALUMINUM REFLECTOR. MEDIUM DISTRIBUTION.	120	1,2
D	DUAL-LITE	PG SERIES	5	WALL	ONE (1) 5 WATT LED ARRAY.	EMERGENCY LIGHT, WET LOCATION, LED, DIE-CAST ALUMINUM WET LOCATION LISTED EMERGENCY LIGHTING UNIT FOR INDOOR/OUTDOOR INSTALLATION FEATURING LONG-LIFE, HIGH-OUTPUT LEDS. FINISH DARK BRONZE. MAINTENANCE-FREE NICKEL-CADMIUM BATTERY FOR 90 MINUTE OPERATION OF LAMPS. FULLY AUTOMATIC, SOLID-STATE CHARGER WITH TEST SWITCH AND AC-ON LIGHT. PROVIDE BATTERY HEATER FOR COLD TEMPERATURE OPERATION.	120	1
X	DUAL-LITE	LT SERIES	5	WALL	TOTAL POWER CONSUMPTION: 5.25 WATTS. EMERGENCY: TWO (2) 5 WATT MR-16 HALOGEN. EXIT: FOUR (4) HIGH-OUTPUT LEDS.	COMBINATION EMERGENCY LIGHTING UNIT / EXIT LIGHT. UV-STABLE THERMOPLASTIC HOUSING, FINISH WHITE. ADJUSTABLE EYEBALL STYLE LIGHTING HEADS WITH GLASS LENS FOR EMERGENCY LIGHT. EXIT SIGN TO HAVE RED LETTERS WITH DIRECTIONAL ARROWS AS INDICATED ON THE PLANS. MAINTENANCE-FREE NICKEL-CADMIUM BATTERY FOR 90 MINUTE OPERATION OF LAMPS AND EXIT SIGN. FULLY AUTOMATIC, SOLID-STATE CHARGER WITH TEST SWITCH AND AC-ON LIGHT.	120	1
S1	WILLIAMS	VWVP-L60-730-TFT-CGL-CD-120	70	WALL	558 WATT, 4000K, 70 CRI LED	WALL ARM MOUNT AREA LED LIGHT. EXTRUDED ALUMINUM DRIVER ENCLOSURE THERMALLY ISOLATED FROM LED SQUARES. DIE CAST ALUMINUM END CAPS ENCLOSE HOUSING AND DIE-CAST ALUMINUM HEAT SINKS. IP66 RATED. HIGH-EFFICIENCY, INJECTION MOLDED ACCUED OPTICS. LOW TEMP STARTING BALLAST. STANDARD POWDER COAT FINISH - COORDINATE EXACT COLOR WITH ARCHITECT.	120	1
S2	EATON MCGRAW EDISON	GLEON-AF-01-LED-E1-SL4-HSS	60	POLE	279 WATT, 4000K, 70 CRI LED	POLE MOUNT AREA LED LIGHT. EXTRUDED ALUMINUM DRIVER ENCLOSURE THERMALLY ISOLATED FROM LED SQUARES. DIE CAST ALUMINUM END CAPS ENCLOSE HOUSING AND DIE-CAST ALUMINUM HEAT SINKS. IP66 RATED. HIGH-EFFICIENCY, INJECTION MOLDED ACCUED OPTICS. LOW TEMP STARTING BALLAST. 12" EXTRUDED ALUMINUM MOUNTING ARM. STANDARD POWDER COAT FINISH - COORDINATE EXACT COLOR WITH ARCHITECT. HEIGHT OF FIXTURE AND POLE TO BE NOT GRETER THAN 10'-0".	120	1,3
S3	WILLIAMS	WAVR2-1-26Q-G24Q3-RC-0-120	26	WALL	26 WATT, CFL	ROUND WALL SCONCE - COORDINATE EXACT COLOR WITH ARCHITECT.	120	1

REMARKS:

- FURNISH WITH AND INSTALL ALL NECESSARY HARDWARE AND MOUNTING BRACKETS.
- WHERE FIXTURE IS LABELED "EM", PROVIDE WITH 90 MINUTE EMERGENCY BALLAST.
- POLE SHALL BE 4" SHAFT, 0.120" WALL THICKNESS, WITH HAND HOLE, GROUND LUG AND FULL BASE COVER.

GENERAL NOTES (APPLICABLE TO ALL FIXTURES):

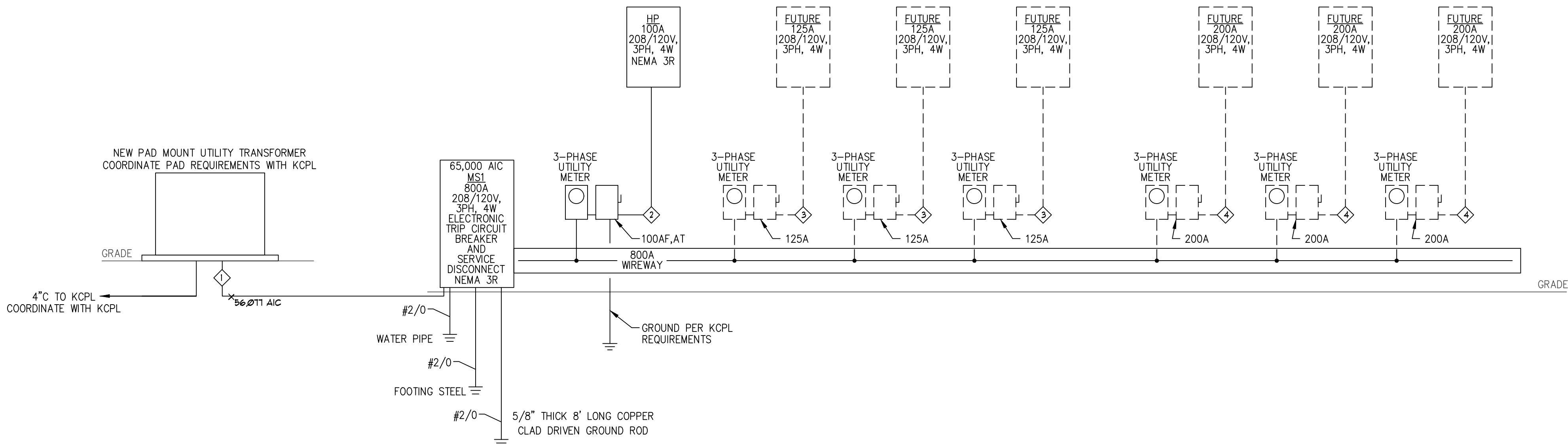
- ALL FIXTURES UTILIZING LINEAR FLUORESCENT LAMPS SHALL COMPLY WITH NEC 410.130(G) REQUIREMENTS FOR DISCONNECTING MEANS. CONTRACTOR SHALL SUPPLY SAME IF NOT STANDARD ON FIXTURE.
- ALL BALLASTS FOR FLUORESCENT FIXTURES SHALL BE ELECTRONIC PROGRAMMED START.

PANEL:			HP		VOLTAGE: 208/120V		3PH, 4W		CIRCUIT CODES:		1=(CONTINUOUS LOAD)				
LOCATION:			ELECTRICAL ROOM		BUS: 100 AMPS						2=(NON-CONTINUOUS LOAD)				
SHEET/1 LINE:			E3/ E5		MAIN: M.L.O.						3=(RECEPTACLES)				
AIC RATING:			18,000		MOUNTING: SURFACE						4=(KITCHEN EQUIPMENT)				
CKT	NO	CB	LOAD DESIGNATION	MISC	REC	LITE	LOAD			LOAD			CB	CKT	
							VA	A	B	C	VA	LITE			MISC
1	3	20	1 GENERAL OUTLETS				360	700	111111		340		1	20	1
3	3	20	1 GENERAL OUTLETS				360	111111	1538	111111	1178		1	20	4
5	2	20	1 OUTDOOR TENANT SIGN *				1000	111111	111111	1890	890		1	20	6
7	1	20	1 OUTDOOR TENANT SIGN *				1000	2000	111111	111111	1000		1	20	8
9	1	20	1 OUTDOOR TENANT SIGN *				1000	111111	2000	111111	1000		1	20	10
11	1	20	1 OUTDOOR TENANT SIGN *				1000	111111	2000	1000	1000		1	20	12
13	2		SPACE				288	111111	111111	288			1	20	14
15	2		SPACE					111111	288	111111	288		1	20	16
17	2		SPACE					111111	1417	1417			1	20	18
19	2		SPACE					0	111111	111111			1	20	20
21	2		SPACE					111111	0	111111			1	20	22
23	2		SPACE					111111	0	111111			1	20	24
25	2		SPACE					0	111111	111111			1	20	26
27	2		SPACE					111111	0	111111			1	20	28
29	2		SPACE					111111	0	111111			2		30
31	2		SPACE					0	111111	111111			2		32
33	2	20	GP-1				1560	111111	1560	111111			2		34
35	2	2	SPACE				1560	111111	111111	1560			2		36
37	2	20	EUH-1				1000	1000	111111	111111			2		38
39	2	/	/				1000	111111	1000	111111			2		40
41	2	3	/				1000	111111	111111	1000			2		42
TOTAL 3988 6386 7867											CONNECTED KVA		18.2		
* CIRCUIT VIA TIMECLOCK/PHOTOCELL TO BE PROVIDED AS PART OF THIS BID											CONNECTED KVA (CODE 1)		9.8		
											CONNECTED KVA (CODE 2)		7.7		
											CONNECTED KVA (CODE 3)		0.7		
											CONNECTED KVA (CODE 4)		0.0		
											FEEDER DEMAND KVA		20.7		
											FEEDER DEMAND AMPS		57.4		
JOB NAME:			DOUGLAS CORNER												
ISSUE DATE:			10/16/2018												

PANEL SCHEDULE

SCALE : NO SCALE

2



ELECTRICAL SINGLE LINE DIAGRAM

SCALE : NO SCALE

1

FEEDER SCHEDULE

FEEDER NUMBER	CONDUIT AND CONDUCTOR SIZES
1	(4) 4" W/4 #250MCM AL & 1 #3/0 AL GND EACH
2	(1) 1 1/4" W/4 #3 & 1 #8 GND
3	FUTURE 125A FEEDER
4	FUTURE 200A FEEDER

THE DESIGN PROFESSIONAL HAS PERFORMED ALL THE REQUIRED VOLTAGE DROP CALCULATIONS FOR ALL BRANCH CIRCUITS AND FEEDERS PER THE NATIONAL ELECTRICAL CODE, ARTICLE 210.19(A)(1) FPN NO. 4.

THE DESIGN PROFESSIONAL HAS PERFORMED ALL THE REQUIRED SHORT CIRCUIT CALCULATIONS AND THE AIC RATING INDICATED FOR EACH DEVICE IS ADEQUATE TO PROTECT THE EQUIPMENT AND THE ELECTRICAL SYSTEM.

EQUIPMENT FAULT CURRENT RATING SCHEDULE

EQUIPMENT	SCA **	SCCR	NOTES
SERVICE DISC.	50,559	65,000	1,2
PANELBOARD HP	14,053	18,000	1,2

NOTES:

- RATING BASED ON AN ASSUMED FAULT AT UTILITY CO. TRANSFORMER OF 56,077 AIC.
- EQUIPMENT MAY BE SERIES RATED.

** CALCULATIONS PERFORMED USING BUSSMANN POINT-TO-POINT METHOD.