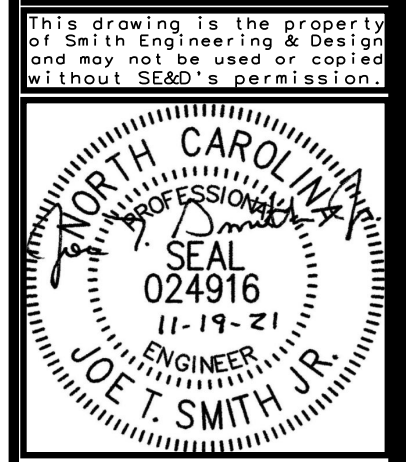




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REVISIONS

JOHN HIESTER  
CDR+J  
LILLINGTON, N.C.

PROJECT NO: 21004  
DRAWN BY: JL  
DATE: 11-19-2021

BUILDING CODE  
SUMMARY  
INDEX TO  
DRAWINGS

B-1

## BUILDING CODE SUMMARY SHEET

PROJECT NAME: JOHN HIESTER CDR+J  
ADDRESS: 940 N MAIN ST - LILLINGTON, N.C.  
PROPOSED USE: AUTO DEALERSHIP  
OWNER/CONTACT PERSON: PHONE NO: E-MAIL:  
OWNED BY:  PRIVATE  CITY/COUNTY  STATE  
CODE ENFORCEMENT JURISDICTION: LILLINGTON, N.C.

2018 EDITION OF CODE FOR:  
 NEW CONSTRUCTION  
 ADDITION  
 UPFIT  
 EXISTING BUILDING

**DESIGNER OF RECORD:**

DESIGNER:	FIRM NAME	NAME	LICENSE #	TELEPHONE #	E-MAIL
BUILDING	SMITH ENGINEERING & DESIGN	J.T. SMITH, JR	24916	(919)-736-2141	smithengineering@hotmail.com
ELECTRICAL	SMITH ENGINEERING & DESIGN	J.T. SMITH, JR	24916	(919)-736-2141	smithengineering@hotmail.com
PLUMBING	SMITH ENGINEERING & DESIGN	J.T. SMITH, JR	24916	(919)-736-2141	smithengineering@hotmail.com
MECHANICAL	SMITH ENGINEERING & DESIGN	J.T. SMITH, JR	24916	(919)-736-2141	smithengineering@hotmail.com
STRUCTURAL	BEASLEY CONSULTING ENGINEERS	DENNIS BEASLEY	9239	(252)-586-7766	beaconersb@gmail.com
SPRINKLER-STANDPIPE	NA	NA	NA	NA	NA
FIRE ALARM	SMITH ENGINEERING & DESIGN	J.T. SMITH, JR	24916	(919)-736-2141	smithengineering@hotmail.com
RETAINING WALLS	NA	NA	NA	NA	NA
CIVIL ENG	W.G. DANIELS & ASSOC.	W.G. DANIELS	7438	(919)467-9708	bdaniel@wgd.com

**BUILDING DATA:**  
OCCUPANCY: S-1 STORAGE  
CONSTRUCTION TYPE:  I-A  I-B  II-A  II-B  III-A  III-B  IV  V-A  V-B  
MIXED CONSTRUCTION?  YES  NO TYPE: NA  
SPRINKLERS:  YES  PARTIAL  NO NFPA 13  NFPA 13R  NFPA 13D  
STANDPIPES:  YES  NO CLASS:  I  II  III  IV  V  DRY  WET  OTHER  
FIRE DISTRICT:  YES  NO FLOOD HAZARD AREA:  YES  NO  
BUILDING HEIGHT: 26 FT NO. OF STORIES: 2  UNLIMITED PER  
MEZZANINE:  YES  NO  
SPECIAL INSPECTIONS:  YES  NO

**GROSS BUILDING AREA:** WE ARE ADDING A FIREWALL IN THE EXISTG SERVICE DEPARTMENT  
TOTAL AREA = 35,760 SF  
FIREWALL SEPARATES 476 SF  
CALCULATIONS DO NOT INCLUDE THIS AREA

FLOOR:	EXISTING	NEW	SUB-TOTAL
BASEMENT	NA	NA	NA
1ST FLOOR	18,471 SF	10,093 SF	28,564 SF
MEZZANINE	NA	NA	NA
2ND FLOOR	2,210 SF	NA	2,210 SF
3RD FLOOR	NA	NA	NA
TOTAL GROSS AREA:	20,681 SF	10,093 SF	30,774 SF

**ALLOWABLE AREA:**  
PRIMARY OCCUPANCY: S-1 ACCESSORY USE: % OF FLOOR AREA: \_\_\_\_\_  
INCIDENTAL USES: SPECIAL USES: SPECIAL PROVISIONS: \_\_\_\_\_  
MIXED OCCUPANCY:  NO  YES SEPARATION: 0hr EXCEPTION: \_\_\_\_\_  
 NON-SEPARATED MIXED OCCUPANCY  
 SEPARATED MIXED OCCUPANCY

STORY #	DESCRIPTION & USE	BLDG AREA PER STORY (ACTUAL)	TABLE 506.2 AREA	AREA FOR OPEN SPACE INCREASE	AREA FOR SPRINKLER INCREASE	ALLOWABLE AREA PER STORY OR UNLIMITED
1	S-1 (restrictive)	28,564 SF	17,500 SF	11,760 SF	NA	29,260 SF
2	S-1	2,210 SF	17,500 SF	11,760 SF	NA	29,260 SF
3						

Frontage area increases from 506.3:  
a. Perimeter which fronts a public way or open space having 20' min width = 891'  
b. Total Building Perimeter = 922'  
c. Ratio (F/P) = \_\_\_\_\_  
d. W = minimum width of public way = 30'  
e. Percent of frontage increase = 100(F/P - 0.25) x W/30 = 872'

**ALLOWABLE HEIGHT:**

BLDG HT IN FEET	ALLOWABLE	INCREASE FOR SPRINKLERS	SHOWN ON PLANS	CODE REFERENCE
BLDG HT IN FEET	55 FT	NA	37 FT	
BLDG HT IN STORIES	2	NA	2	

**PERCENTAGE OF WALL OPENING CALCULATIONS**

FIRE SEPARATION DIST	DEGREE OF OPENING FROM PROPERTY LINE	PROTECTION	ALLOWABLE AREA %	ACTUAL AREA %
MIN 70'	UNPROTECTED	NO LIMIT		

**LIFE SAFETY SYSTEMS REQUIREMENTS:**  
EMERGENCY LIGHTING  YES  NO EXIT LIGHTING  YES  NO FIRE ALARM  YES  NO  
SMOKE DETECTION SYSTEM  YES  NO PARTIAL CARBON MONOXIDE DETECTION  YES  NO

**LIFE SAFETY PLAN REQUIREMENTS:**  
Life Safety Plan Sheet #: B-2  
 Fire and/or smoke rated wall locations (Chapter 7)  
 Assumed and real property line locations (if not on the site plan)  
 Exterior wall opening area with respect to distance to assumed property lines (705.8)  
 Occupancy Use for each area as it relates to occupant load calculation (Table 1004.1.2)  
 Occupant loads for each area  
 Exit access travel distances (1017)  
 Common path of travel distances (Tables 1006.2.1 & 1006.3.2(1))  
 Dead end lengths (1020.4)  
 Clear exit widths for each exit door  
 Max. calculated occupant load capacity eq. exit door can accommodate based on egress width (1005.3)  
 Actual occupant load for each exit door  
 A separate schematic plan indicating where fire rated floor/ceiling and/or roof structure is provided for purposes of occupancy separation  
 Location of doors with panic hardware (1010.1.10)  
 Location of doors with delayed egress locks and the amount of delay (1010.1.9.7)  
 Location of doors with electromagnetic egress locks (1010.1.9.9)  
 Location of doors equipped with hold-open devices  
 Location of emergency escape windows (1030)  
 The square footage of each fire area (202)  
 The square footage of each smoke compartment for Occupancy Classification I-2 (407.5)  
 Note any code exceptions or table notes that may have been utilized regarding the items above

**ACCESSIBLE PARKING:** SEE SITE PLAN

TOTAL # PARKING SPACES REQUIRED	TOTAL # ACCESSIBLE SPACES PROVIDED	# ACCESSIBLE SPACES PROVIDED REGULAR	TOTAL # ACCESSIBLE PROVIDED

**STRUCTURAL DESIGN:**  
DESIGN LOADS  
IMPORTANCE FACTORS: SNOW (I<sub>s</sub>) 1.0 SEISMIC (I<sub>e</sub>) 1.0  
LIVE LOADS: ROOF 20 PSF FLOOR 600 PSF  
GROUND SNOW LOADS: 15  
WIND LOADS: ULTIMATE WIND SPEED 117 (ASCE-7) EXPOSURE CATEGORY C  
SEISMIC DESIGN CATEGORY A  B  C  D  
RISK CATEGORY (TABLE 1604.5) I  II  III  IV  
SPECTRAL RESPONSE ACCELERATION S<sub>w</sub> 0.216 S<sub>g</sub> S<sub>w</sub> 0.091 S<sub>g</sub>  
SITE CLASSIFICATION 0  Field test  Presumptive  Historical data  
BASIC STRUCTURAL SYSTEM  
 Bearing Wall  Dual w/ Special Moment Frame  
 Building Frame  Dual w/ Intermediate R/C or Special Steel  
 Moment Frame  Inverted Pendulum  
ANALYSIS PROCEDURE  Simplified  Modal  
 Equivalent Lateral Force  
ARCHITECTURAL, MECHANICAL, COMPONENTS ANCHORED?  YES  
LATERAL DESIGN CONTROL: EARTHQUAKE  WIND

**SOIL BEARING CAPACITIES:**  
FIELD TEST (provide copy of test report) NA  
PRESUMPTIVE BEARING CAPACITY 1500 PSF  
PILE SIZE, TYPE, AND CAPACITY \_\_\_\_\_

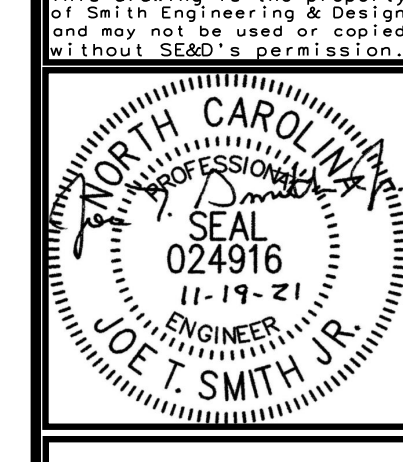
**1301.1.1 Criteria.** Buildings shall be designed and constructed in accordance with the *International Energy Conservation Code*.  
**Exception:** Per G.S. 143-138 (h18), no energy conservation code provisions shall apply to any structure for which the primary occupancy classification is Group F, S, or U. This exclusion shall apply to the entire building area.  
The effective date of this Rule is March 1, 2018.  
The Statutory authority for Rule-making is G. S. 143-136; 143-138.

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E-3	ROOF POWER PLAN
E-4	SITE POWER PLAN
E-5	ELECTRICAL PANELS / RISER
FIRE ALARM	
FA-1	FIRE ALARM PLAN



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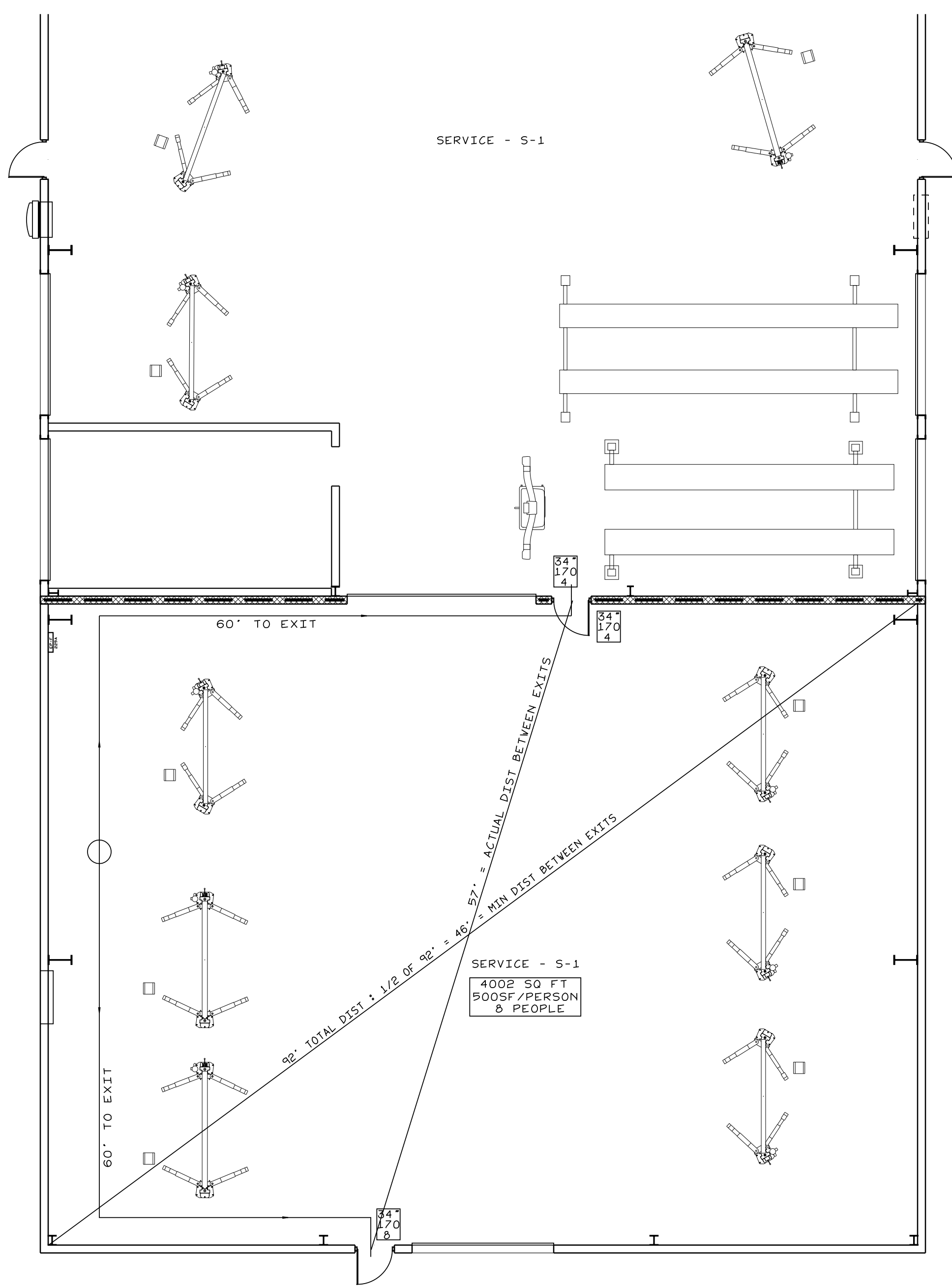
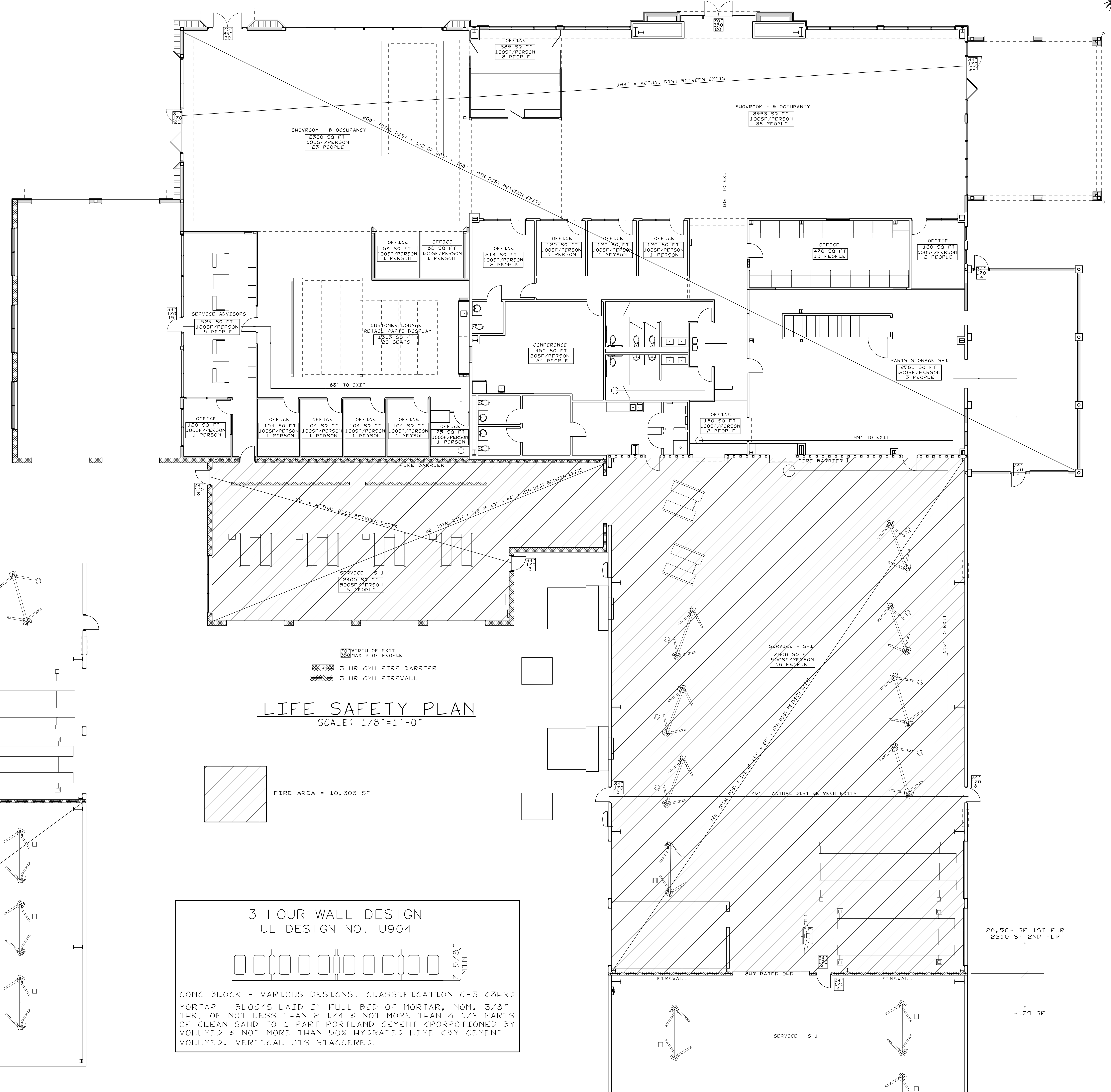
REVISIONS

PROJECT NO: 21004  
 DRAWN BY: JL  
 DATE: 11-19-2021

**JOHN HIESTER**  
**CDR+J**  
 LILLINGTON, N.C.

**LIFE SAFETY PLAN**

**B-2**



**LIFE SAFETY PLAN**  
 SCALE: 1/8"=1'-0"

70" WIDTH OF EXIT  
 90" MAX # OF PEOPLE  
 3 HR CMU FIRE BARRIER  
 3 HR CMU FIREWALL

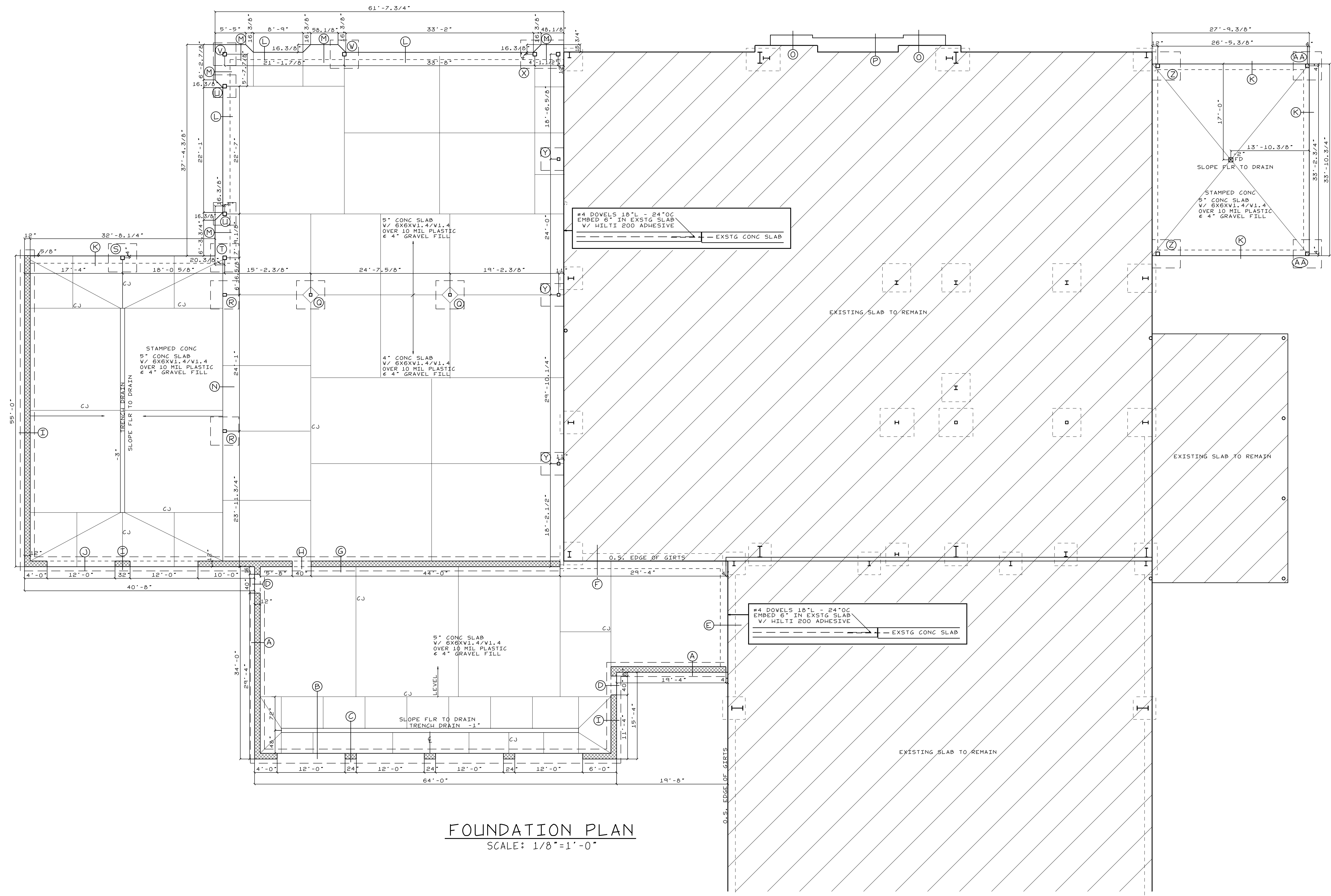
FIRE AREA = 10,306 SF

**3 HOUR WALL DESIGN**  
 UL DESIGN NO. U904

CONG BLOCK - VARIOUS DESIGNS. CLASSIFICATION C-3 (3HR)  
 MORTAR - BLOCKS LAID IN FULL BED OF MORTAR, NOM. 3/8" THK. OF NOT LESS THAN 2 1/4" & NOT MORE THAN 3 1/2" PARTS OF CLEAN SAND TO 1 PART PORTLAND CEMENT (PROPORTIONED BY VOLUME) & NOT MORE THAN 50% HYDRATED LIME (BY CEMENT VOLUME). VERTICAL JTS STAGGERED.

28,564 SF 1ST FLR  
 2210 SF 2ND FLR

4179 SF



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

**STRUCTURAL NOTES**

GENERAL	CONCRETE	REINFORCING STEEL
<ol style="list-style-type: none"> <li>THESE DRAWINGS ARE TO BE COORDINATED WITH THE GENERAL CONSTR. MECHANICAL, PLUMBING, ELECTRICAL, AND CIVIL DRAWINGS.</li> <li>THIS STRUCTURE AND ALL CONSTRUCTION SHALL CONFORM TO ALL APPLICABLE SECTIONS OF THE CURRENT BUILDING CODE.</li> </ol>	<ol style="list-style-type: none"> <li>REINFORCED CONCRETE WORK SHALL COMPLY WITH BOTH "SPECIFICATIONS FOR STRUCTURAL BUILDINGS" ACI 301 AND "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE" ACI 318</li> <li>CONCRETE SHALL BE PLACED IN ACCORDANCE WITH ACI 304R.</li> <li>DURING HOT WEATHER THE CONTROL OF CONCRETE PLACEMENT, PROTECTION AND CURING SHALL COMPLY WITH ACI 305R.</li> <li>WHEN THE MEAN DAILY TEMPERATURE IS BELOW 40 DEGREES F THE CONTROL OF PLACEMENT, PROTECTION AND CURING SHALL COMPLY W/ ACI 306R.</li> <li>CONCRETE SHALL HAVE NORMAL WEIGHT AGGREGATE AND A MINIMUM COMPRESSIVE STRENGTH (F<sub>c</sub>) AT 28 DAYS AS LISTED BELOW.               <ul style="list-style-type: none"> <li>5.1 FOOTINGS - 3000 PSI</li> <li>5.2 SLABS-ON-GRADE: SERVICE DEPT - 4000 PSI</li> <li>5.2 SLABS-ON-GRADE: ALL OTHER FLOORS - 3000 PSI</li> <li>NO FLY ASH ALLOWED IN SLAB CONCRETE</li> </ul> </li> <li>ENTRAINED AIR MUST BE USED IN ALL CONCRETE THAT WILL BE EXPOSED TO FREEZING AND THAWING AND DEICING CHEMICALS. AMOUNT OF AIR ENTRAINMENT (PERCENT) SHALL BE IN ACCORDANCE WITH THE FOLLOWING SCHEDULE WITH A RANGE OF -1 TO +2 PERCENTAGE POINTS OF THE TARGET VALUE:               <ul style="list-style-type: none"> <li>6.1 FOOTINGS 5%</li> <li>6.2 INTERIOR SLABS 0%, SEE NOTE BELOW</li> <li>6.3 EXTERIOR SLABS 5%</li> </ul>               NOTE: INTERIOR SLABS TO BE GIVEN A SMOOTH, DENSE, HARD-TROWELED FINISH NOT TO CONTAIN ENTRAINED AIR. IF THE SLAB WILL BE EXPOSED TO DEICING OR OTHER AGGRESSIVE CHEMICALS, CONTACT THE STRUCTURAL ENGINEER FOR PROPER AIR ENTRAINMENT REQUIREMENTS.             </li> <li>CONCRETE SLABS ON GRADE SHALL BE CONSTRUCTED IN ACCORDANCE W/ ACI 302.1R-96 "GUIDE FOR CONCRETE SLAB AND SLAB CONSTR"</li> <li>SEE PLAN FOR CONTROL JOINTS. FILL JOINTS IN FLRS W/ EXPOSED CONCRETE W/ 'CRETE-FILL PRO 85' BY CURECRETE.</li> </ol>	<ol style="list-style-type: none"> <li>REINFORCING STEEL SHALL COMPLY WITH ASTM A615, GRADE 60. WELDED WIRE FABRIC SHALL COMPLY WITH ASTM A185. WELDABLE REINFORCING BARS SHALL COMPLY WITH ASTM A706, GRADE 60.</li> <li>CLEAR CONCRETE COVER ON REINFORCING STEEL: BOTTOM OF FOOTINGS= 3"; SIDE AND TOP SURFACE OF FOOTINGS= 2"; BOTTOM OF SLAB ON GRADE= 2 1/2"; WALL SURFACE= 2"; TOP OR BOTTOM SURFACE OF FLOOR SLABS= 3/4"</li> <li>PROVIDE CLASS 3 BAR AND MESH SUPPORTS.</li> <li>DETAILING, FABRICATION AND PLACEMENT OF REINFORCING STEEL SHALL BE IN ACCORDANCE WITH ACI 315 (LATEST EDITION) MANUAL OF STANDARD PRACTICE FOR DETAILING CONCRETE STRUCTURES.</li> <li>HORIZONTAL FOOTING AND WALL REINFORCEMENT SHALL BE CONTINUOUS AND SHALL HAVE 90° BENDS OR CORNER BARS SHALL BE INSTALLED. THE CORNER BAR SHALL HAVE THE SAME SIZE AND SPACING AS THE HORIZONTAL REINFORCEMENT WITH A CLASS B TENSION SPLICE.</li> </ol>
<p><b>MISCELLANEOUS</b></p> <ol style="list-style-type: none"> <li>THE CONTRACTOR SHALL PROVIDE ADEQUATE TEMPORARY BRACING, SHORING, AND GUYING OF FRAMING AND WALLS AGAINST WIND, CONSTRUCTION LOADS, AND OTHER TEMPORARY FORCES UNTIL SUCH PROTECTION IS NO LONGER REQUIRED FOR THE SAFE SUPPORT OF THE FRAMING.</li> <li>THE CONTRACTOR SHALL BE RESPONSIBLE FOR REVIEWING THE DIMENSIONS OF THE STRUCTURAL DRAWINGS AND ADVISING THE ARCHITECT OF ANY DIFFERENCES IN DIMENSIONS BETWEEN THE CONSTRUCTION PLANS AND SECTIONS PRIOR TO COMMENCING CONSTRUCTION.</li> <li>CONSTRUCTION SAFETY: THESE STRUCTURAL DRAWINGS DO NOT CONTAIN NECESSARY COMPONENTS FOR SAFETY DURING CONSTRUCTION.</li> </ol>		<p><b>MASONRY CONSTRUCTION</b></p> <ol style="list-style-type: none"> <li>MASONRY UNITS SHALL CONFORM TO ASTM C-90 W/ A UNIT COMPRESSIVE STRENGTH OF 1900 PSI ON THE NET AREA. (1"m = 1500 psi)</li> <li>MORTAR SHALL BE TYPE S, PORTLAND CEMENT LIME MORTAR</li> <li>ALL CELLS CONTAINING REINFORCEMENT, CELLS BELOW GRADE AND ANY LOCATIONS NOTED ON THE PLANS SHALL BE GROUTED SOLID.</li> <li>GROUT SHALL CONFORM TO ASTM C476 AND HAVE A MIN. 28 DAY COMPRESSIVE STRENGTH OF 2000 PSI. A SLUMP OF 8" IS RECOMMENDED.</li> <li>REBAR SHALL CONFORM TO ASTM A615, GRADE 60, 3/8" MIN BAR LAPS.</li> <li>MASONRY WALLS SHOWN ON THIS PLAN TO BE CONSTRUCTED USING A LOW LIFT GROUTING CONSTRUCTION WITH A MAX. POUR HT. OF 5 FT.</li> <li>THE MASONRY WALLS SHOWN ON THIS PLAN HAVE BEEN DESIGNED IN W/ ACI 530-95 USING INSPECTED CRITERIA &amp; THEREFORE THE CONSTRUCTION PROCESS REQUIRES INSPECTION BY A QUALIFIED INDIVIDUAL OR AGENCY.</li> <li>THE INSPECTION PROCESS IS TO CONFORM TO THE REQUIREMENTS OF TABLE 1704.5.1 OF THE 2018 EDITION OF THE INT. BLDG. CODE.</li> <li>IT IS RECOMMENDED THAT ALL MASONRY WALLS HAVE VERTICAL CONTROL JOINTS. EXTERIOR WALLS SHOULD HAVE JOINTS AT 30' MAX. CENTERS.</li> <li>ALL HORIZONTAL MASONRY REINFORCING TO BE 9 GAUGE.</li> </ol>
<p><b>FOUNDATIONS</b></p> <ol style="list-style-type: none"> <li>THE FOUNDATIONS ARE BASED ON A SOIL BEARING CAPACITY OF 2000PSI. SHOULD ANY ADVERSE SOIL CONDITIONS BE ENCOUNTERED, THE STRUCTURAL ENGINEER MUST BE CONTACTED BEFORE PROCEEDING.</li> <li>THE BOTTOM OF ALL FOOTINGS SHALL EXTEND BELOW THE FROST LINE FOR THE REGION IN WHICH THE STRUCTURE IS TO BE CONSTRUCTED. HOWEVER, THE TOP SHALL BE A MINIMUM OF 8" BELOW GRADE.</li> <li>ANY FILL SHALL BE PLACED UNDER THE DIRECTION OR RECOMMENDATION OF A LICENSED PROFESSIONAL ENGINEER. THE RESULTING SOIL SHALL BE COMPACTED TO A MINIMUM OF 95% MAXIMUM DRY DENSITY.</li> </ol>		



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LILLINGTON, N.C.

REVISIONS

DATE: 11/19/2021

**FOUNDATION PLAN**

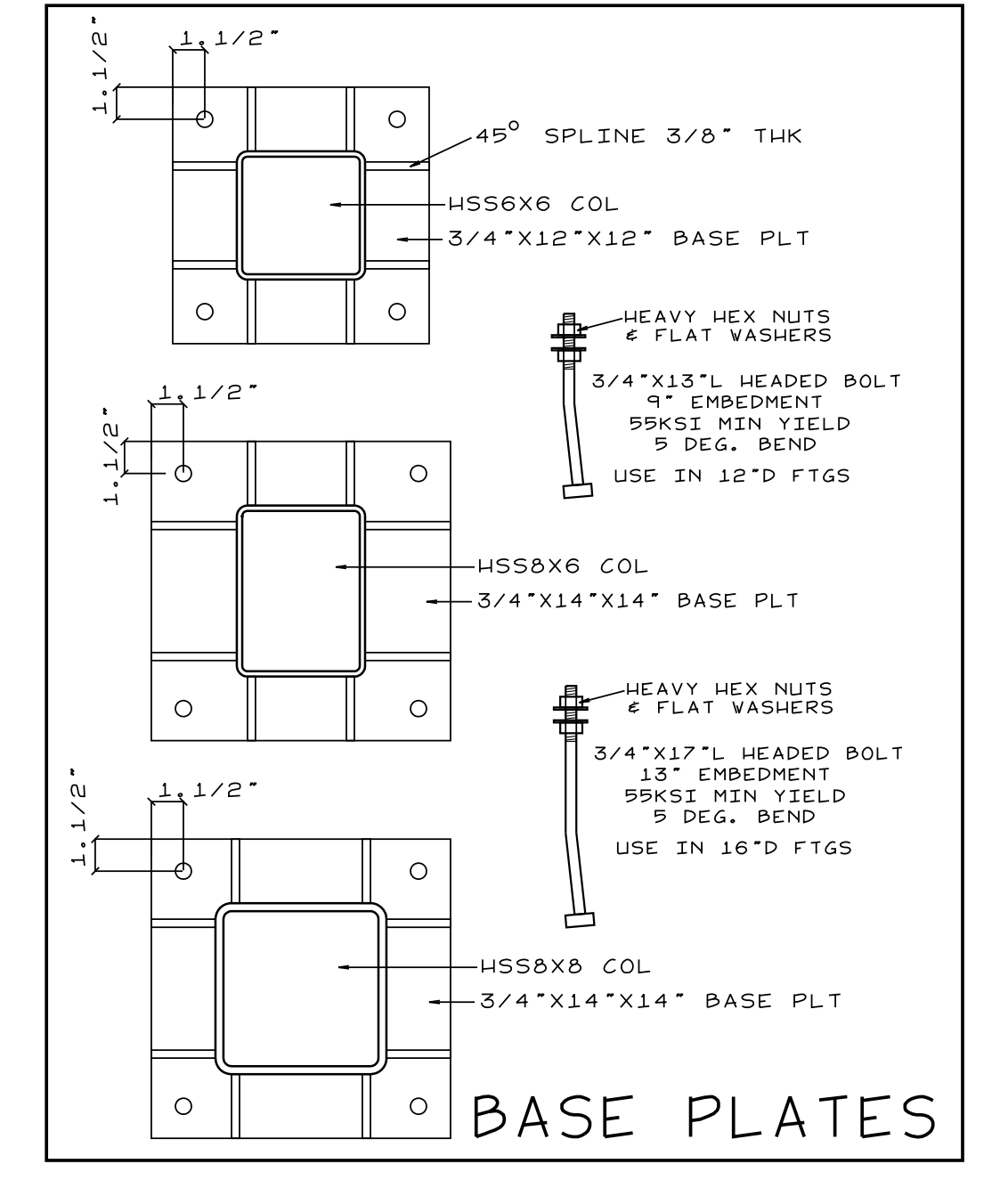
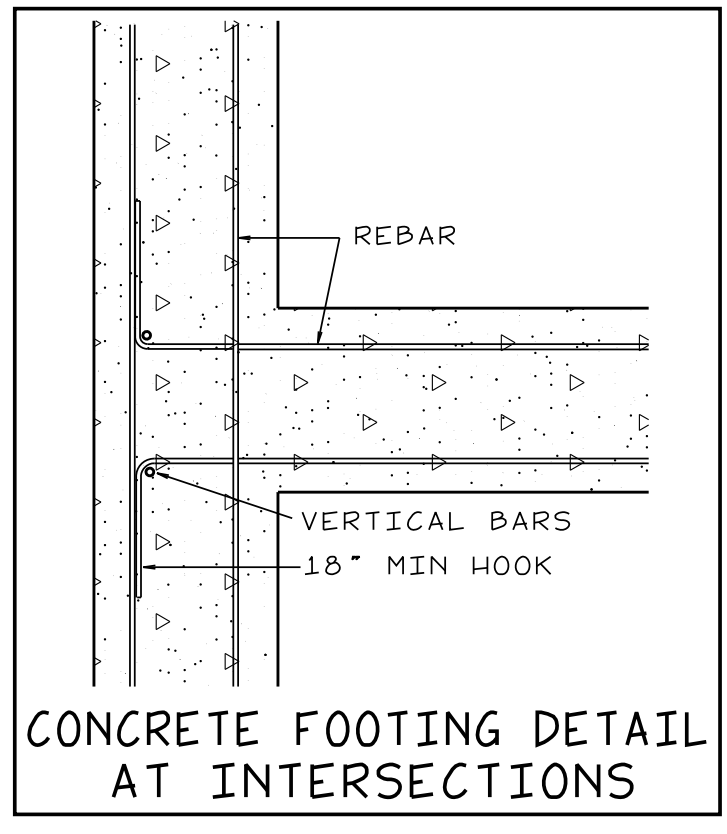
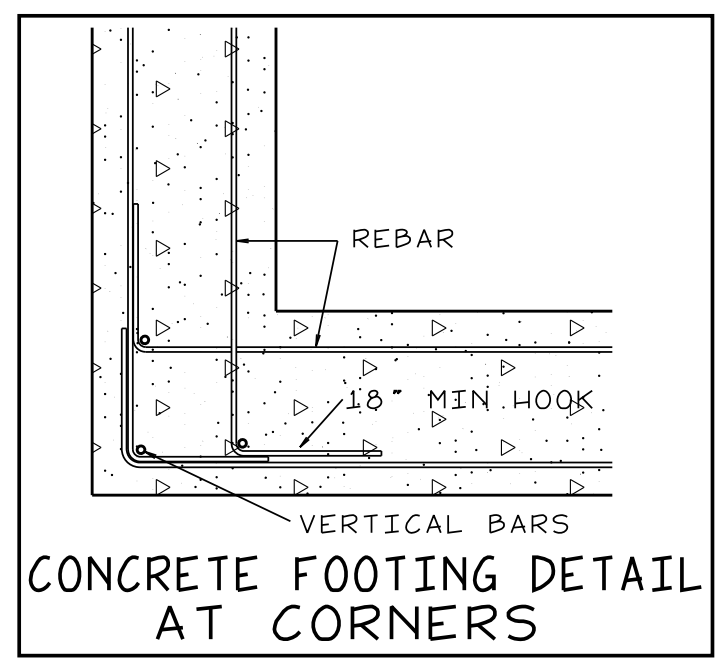
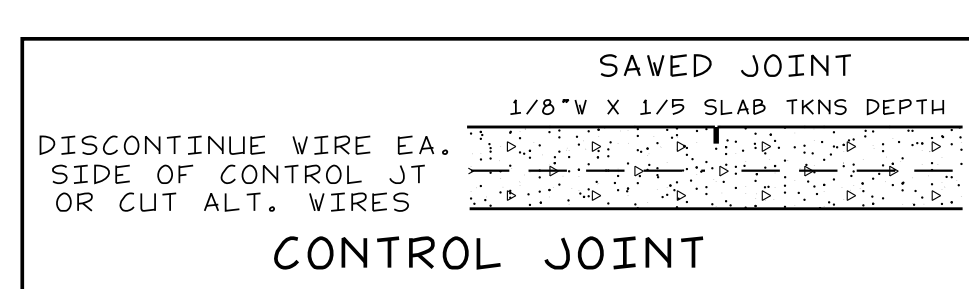
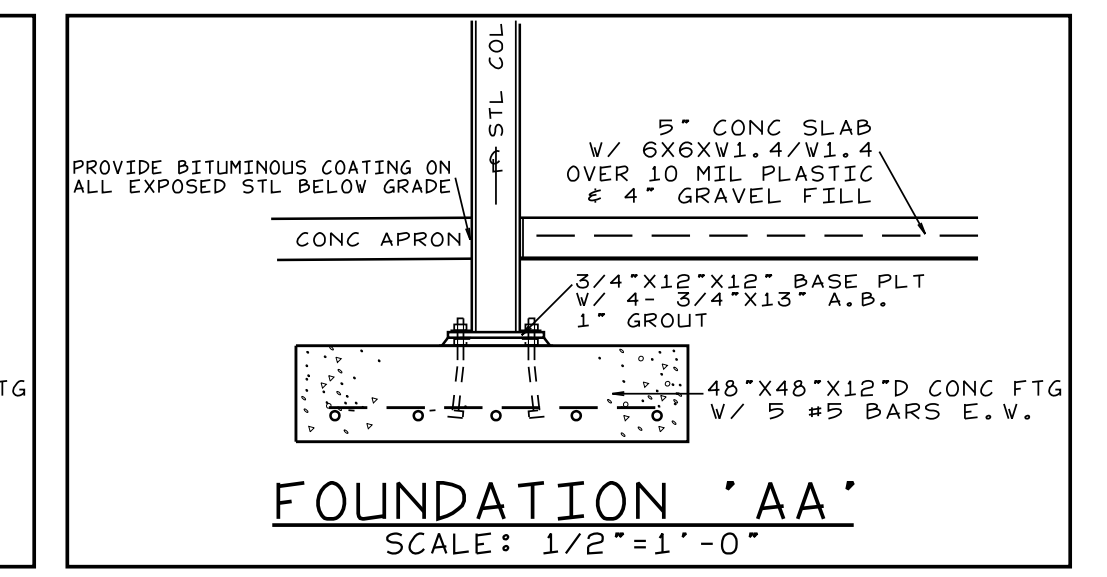
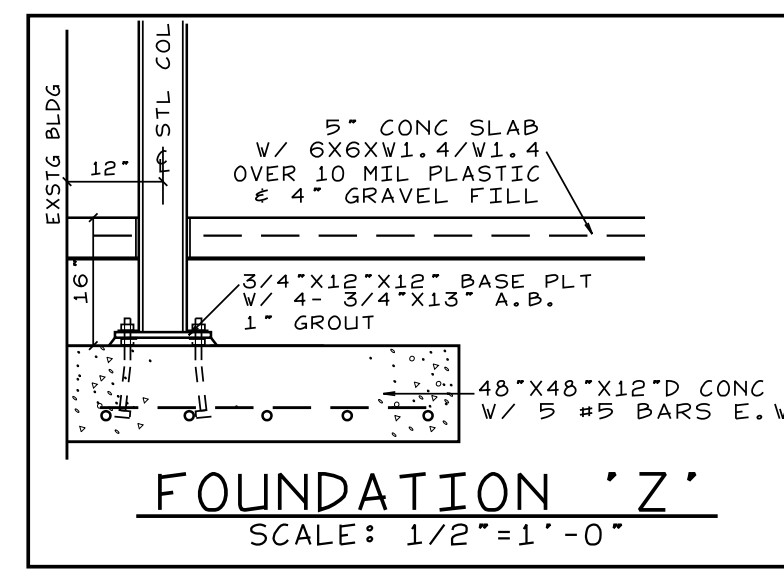
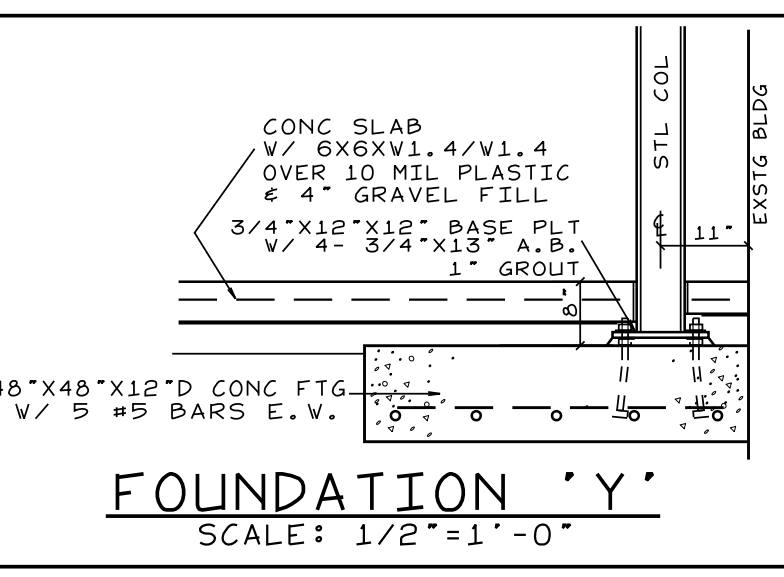
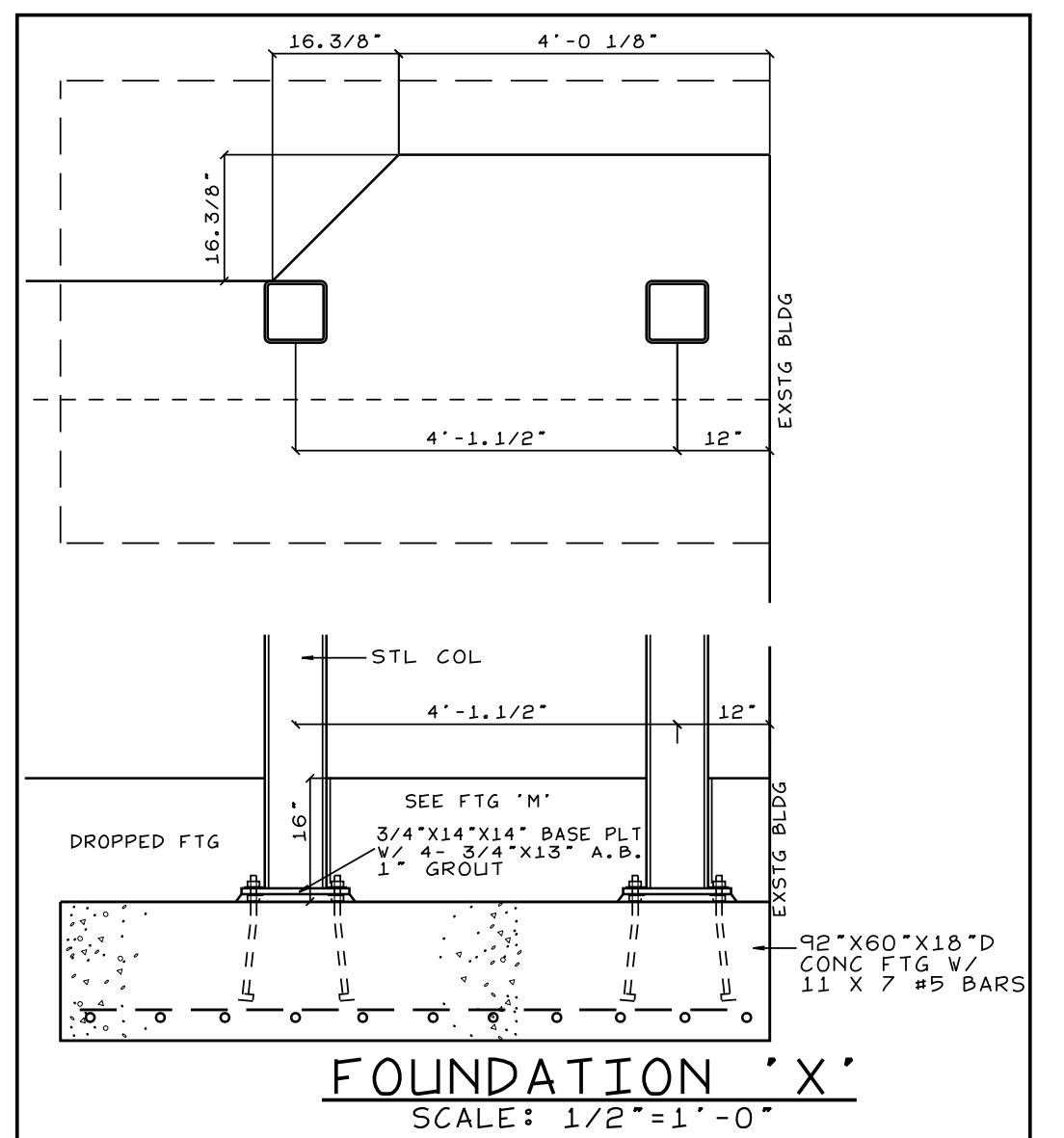
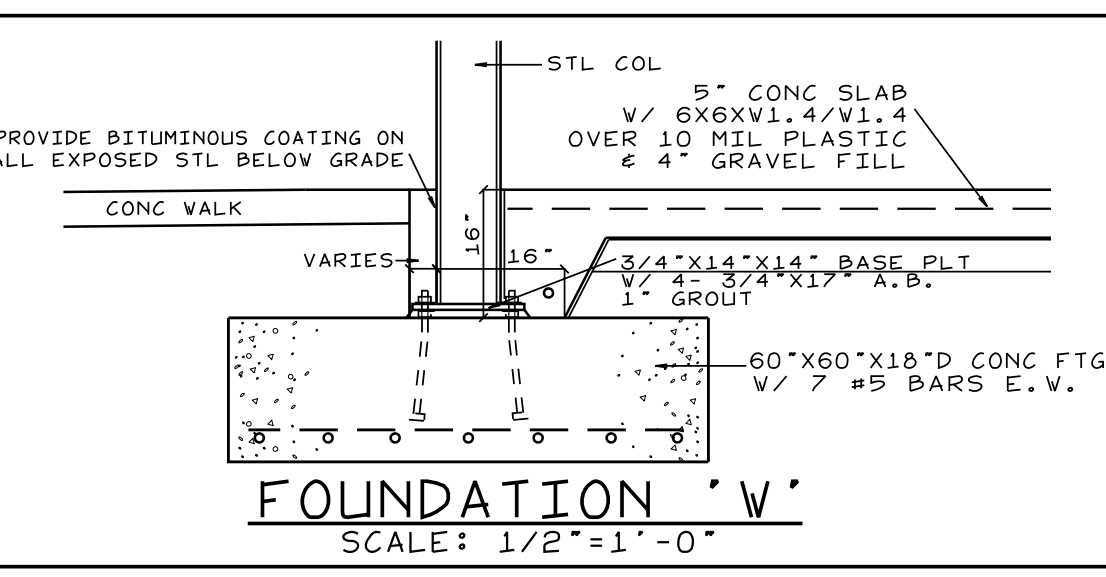
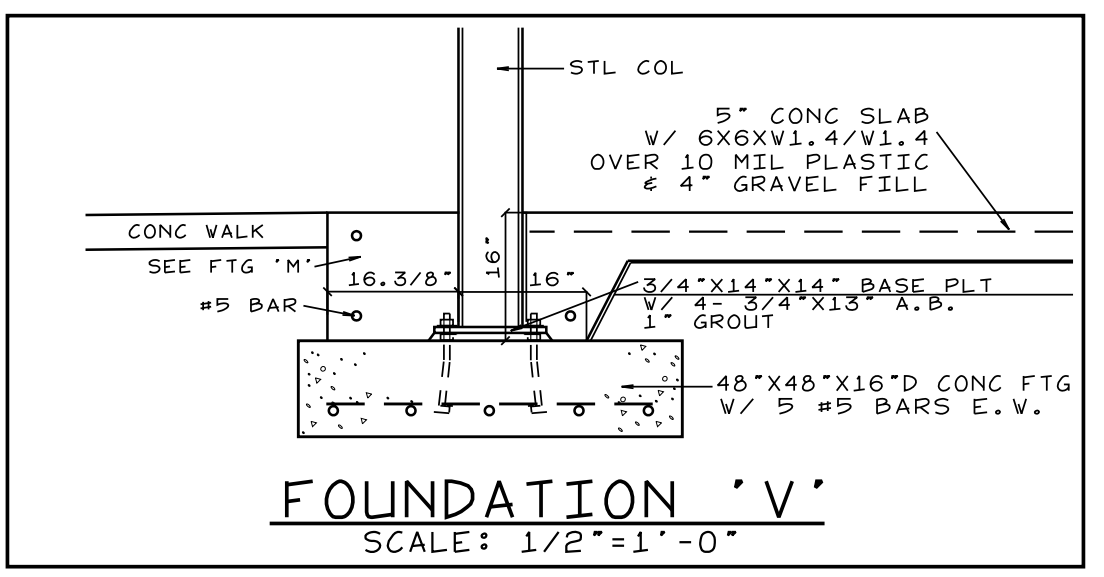
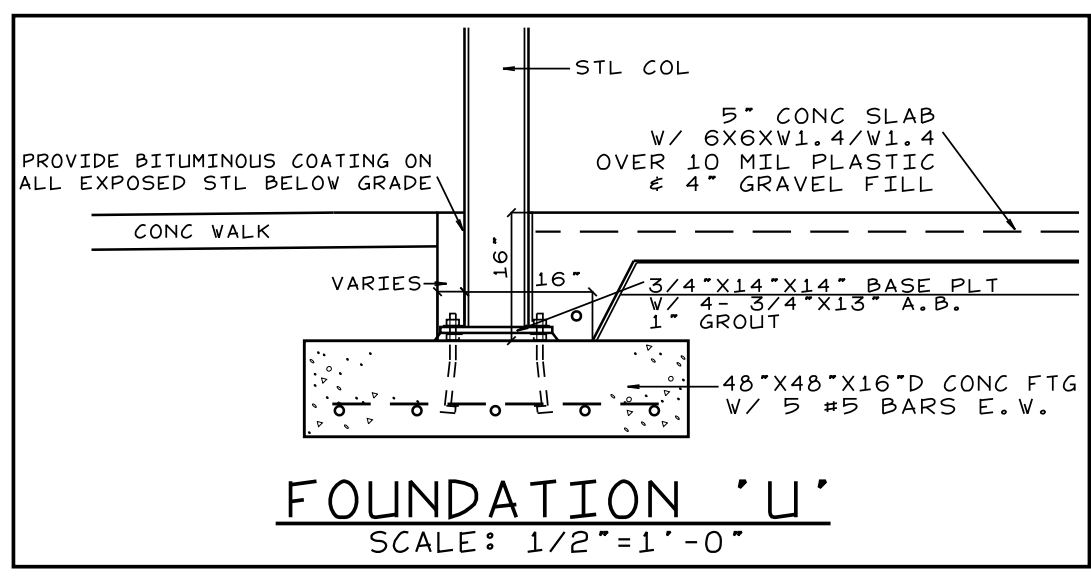
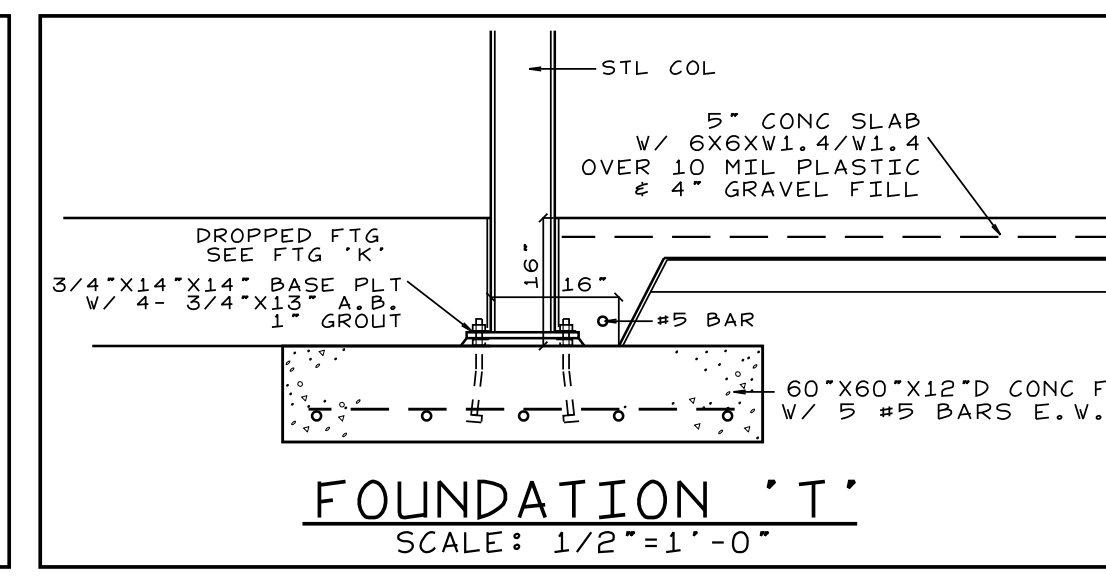
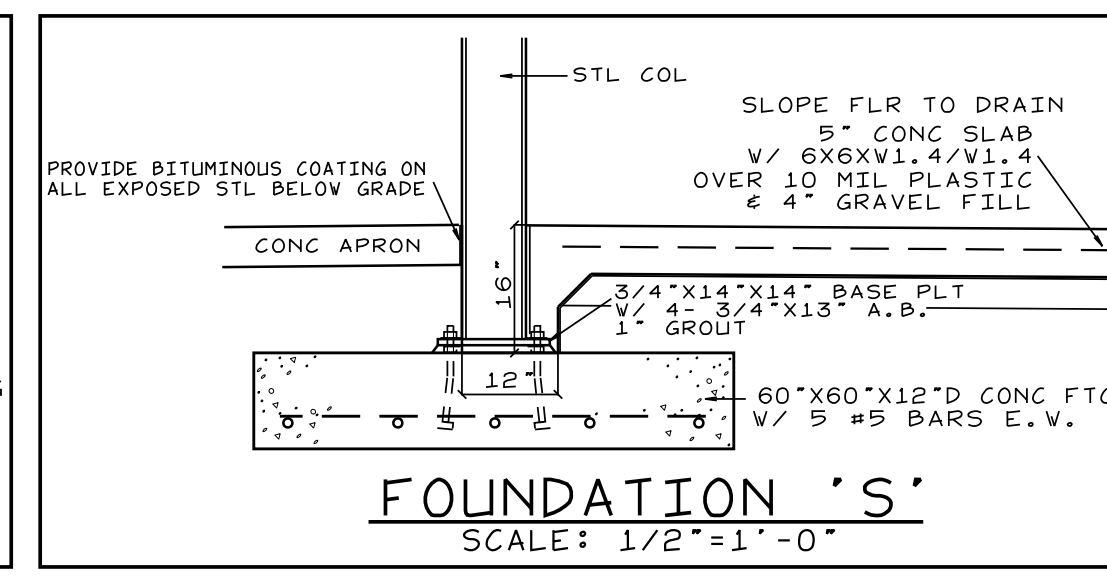
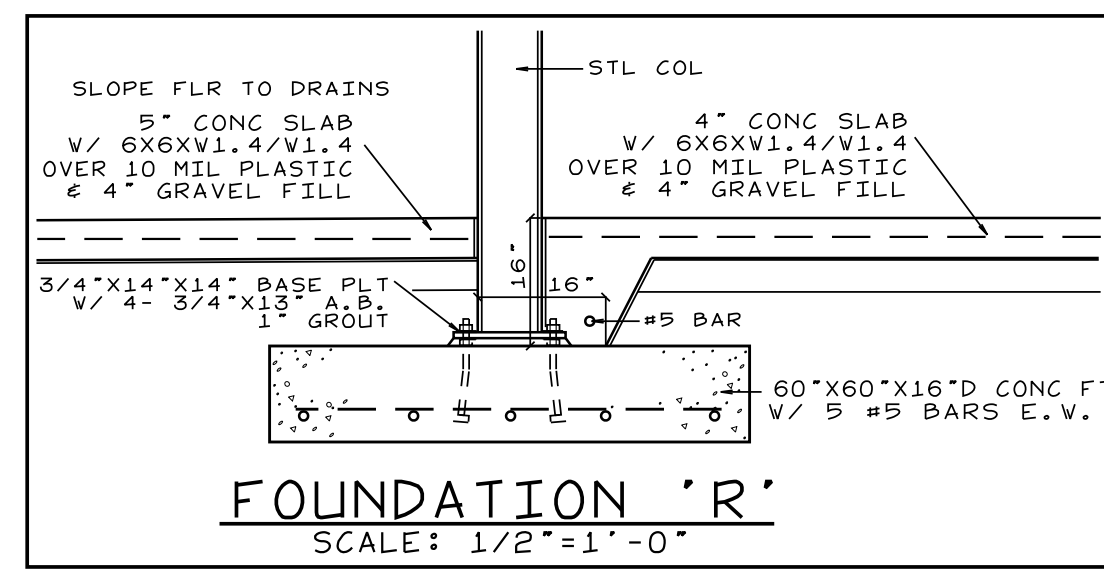
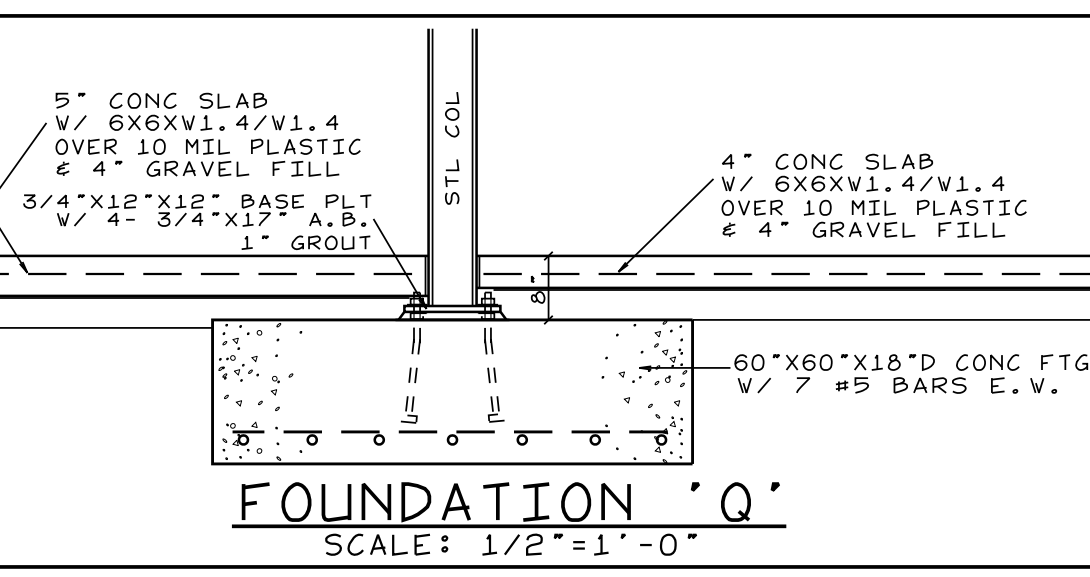
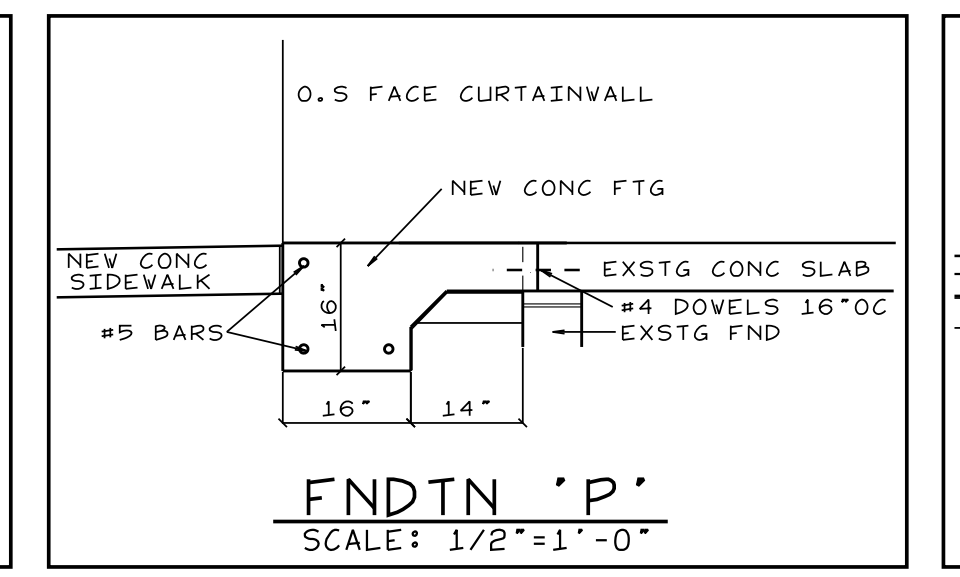
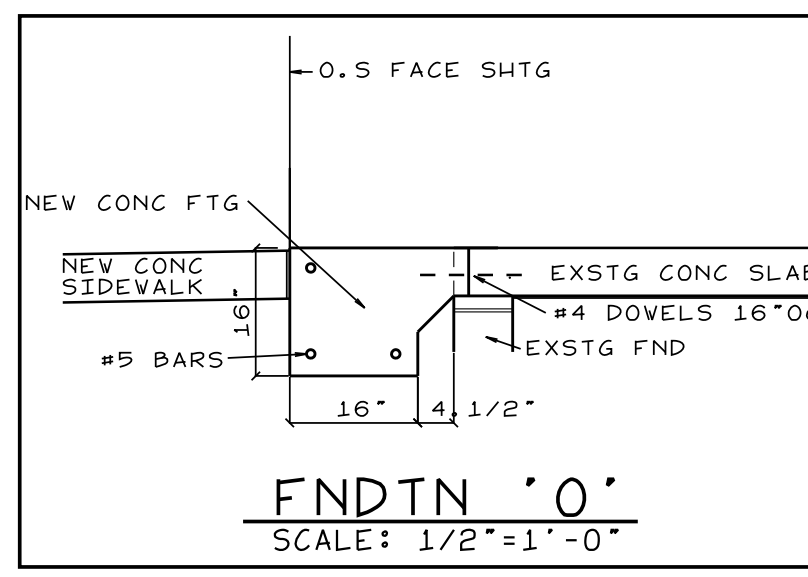
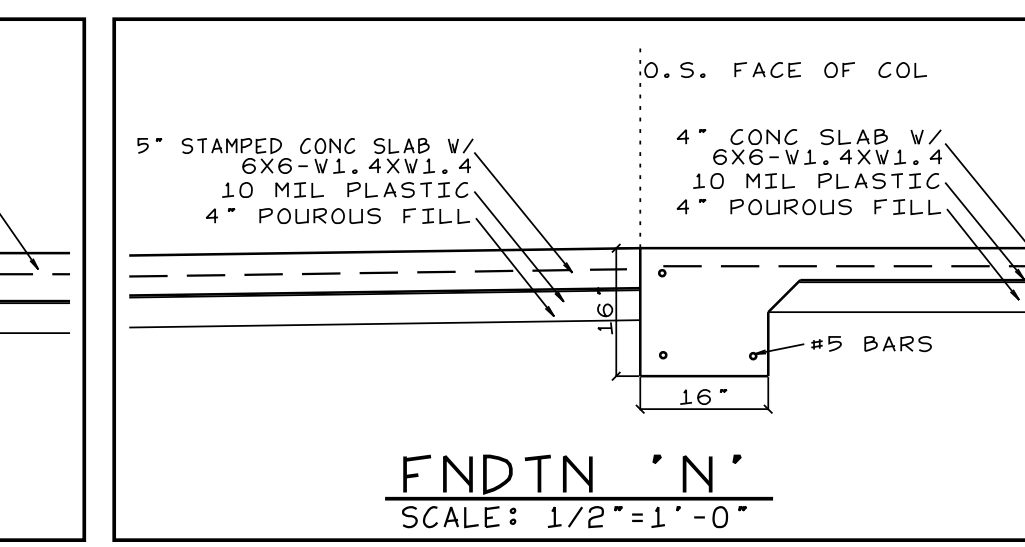
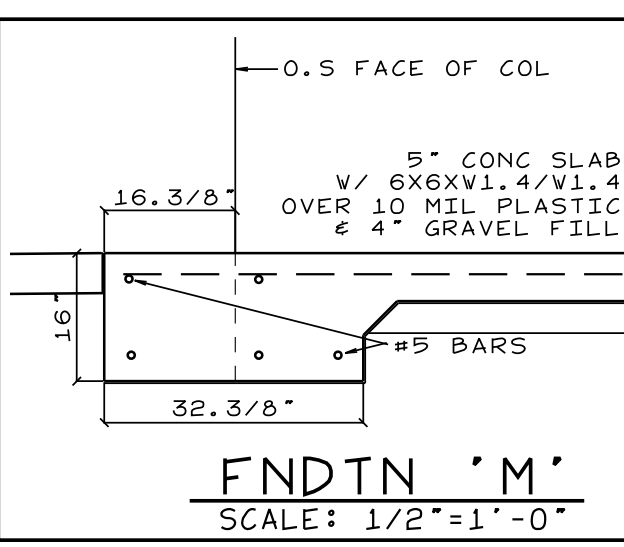
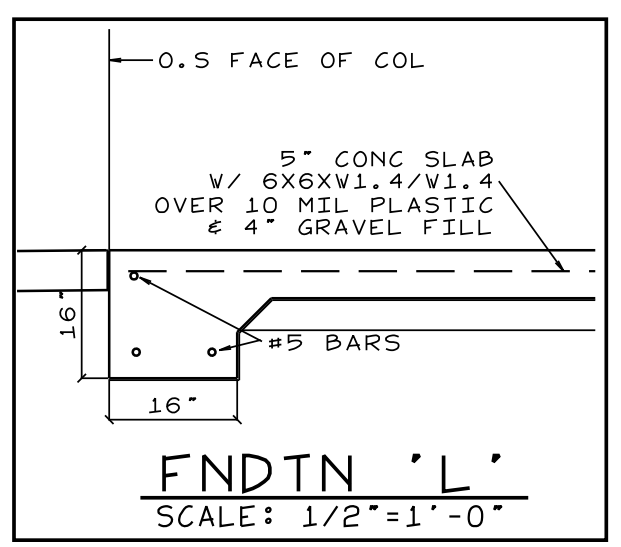
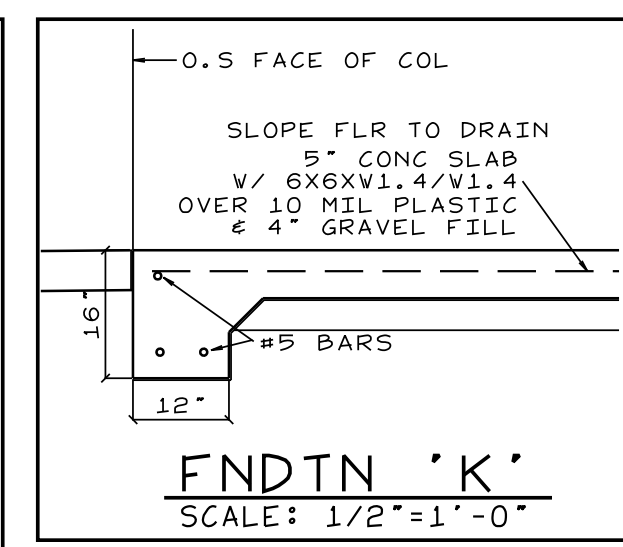
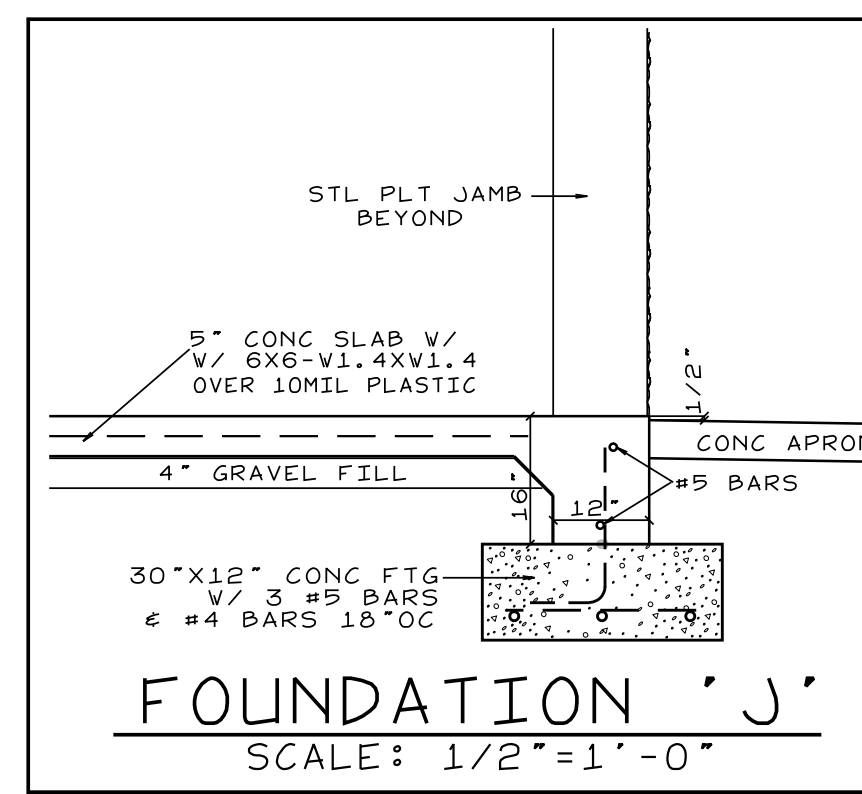
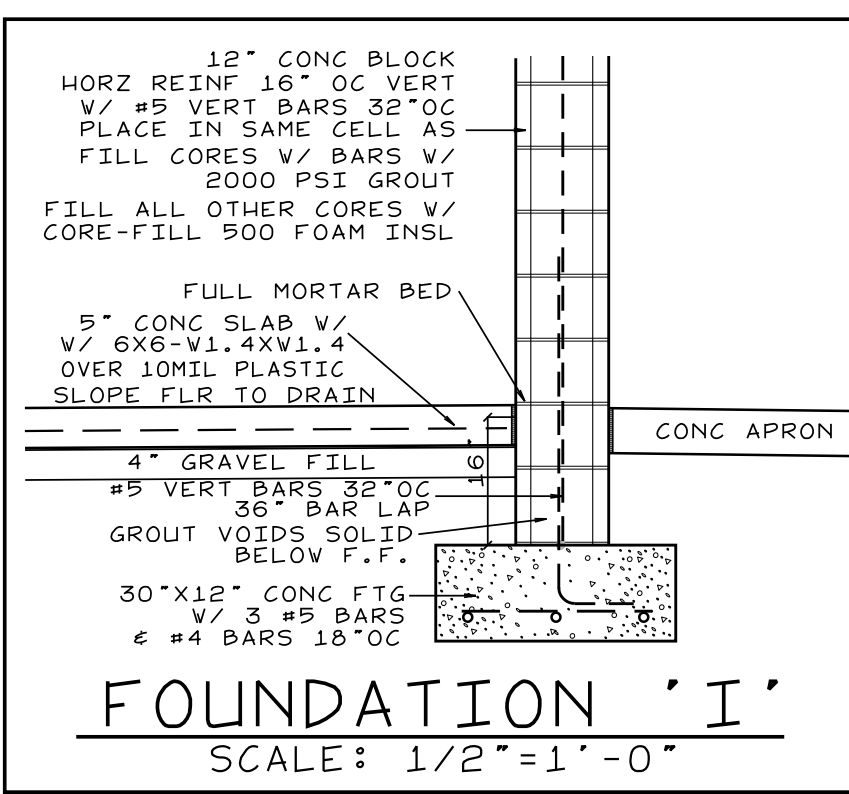
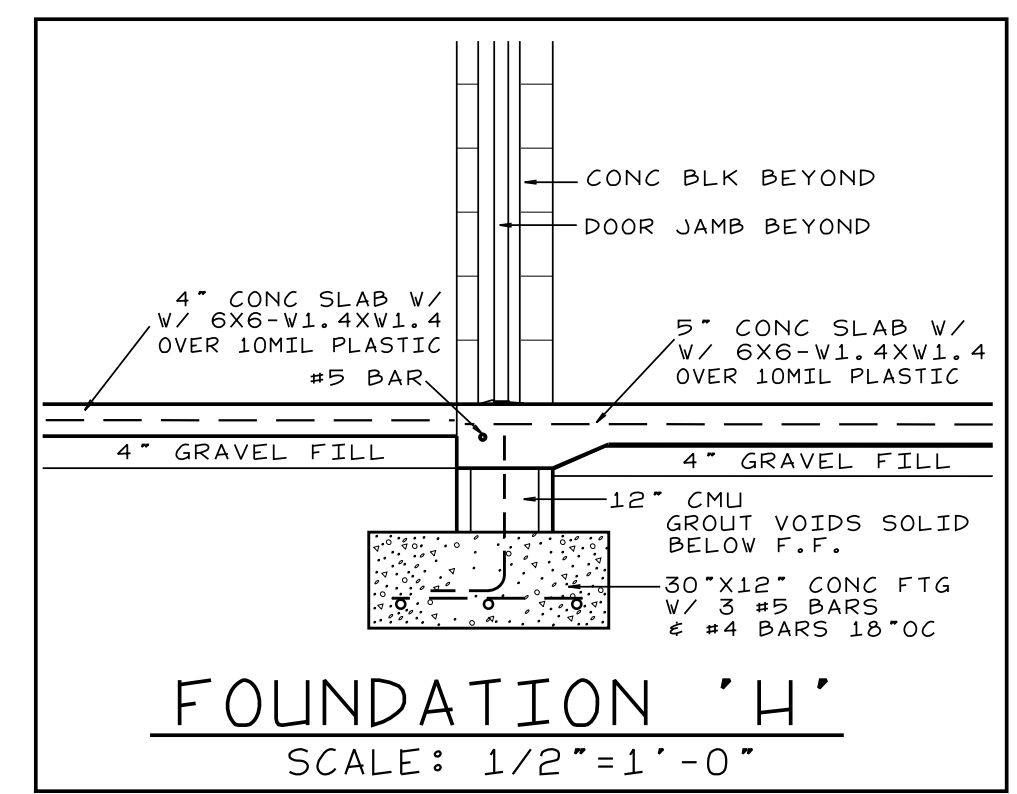
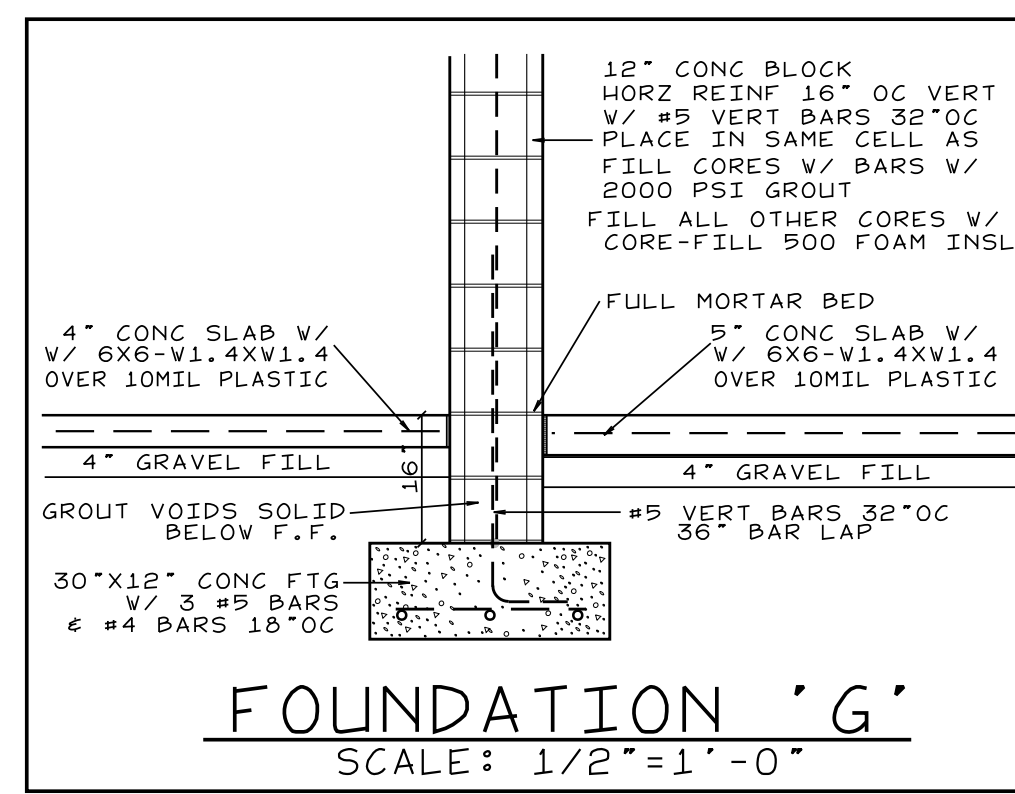
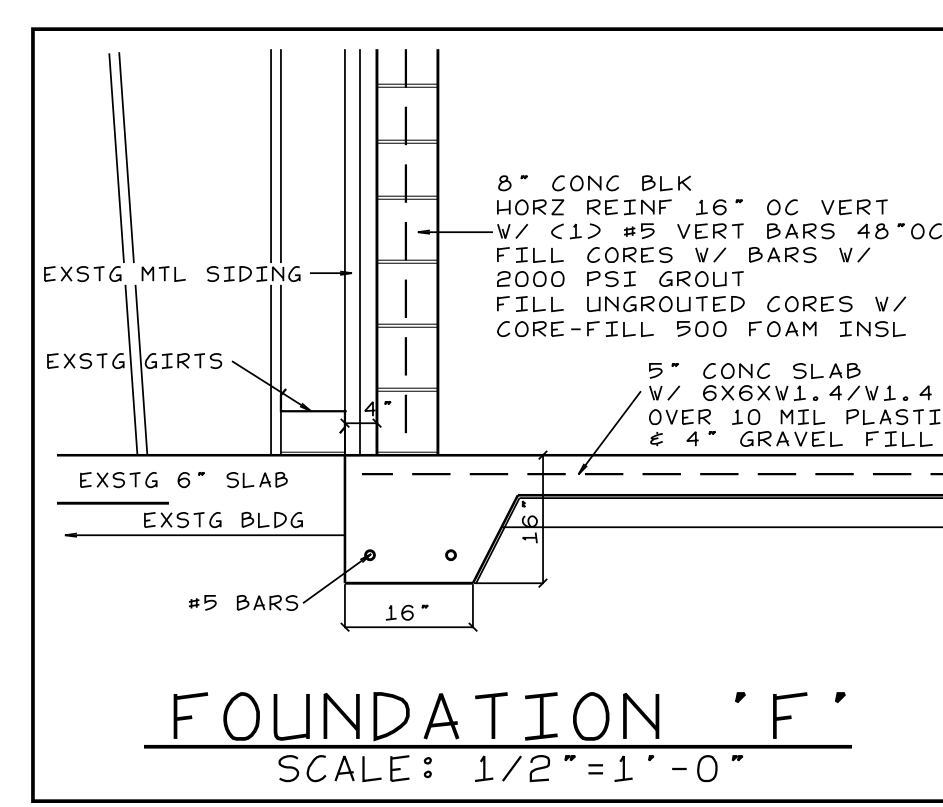
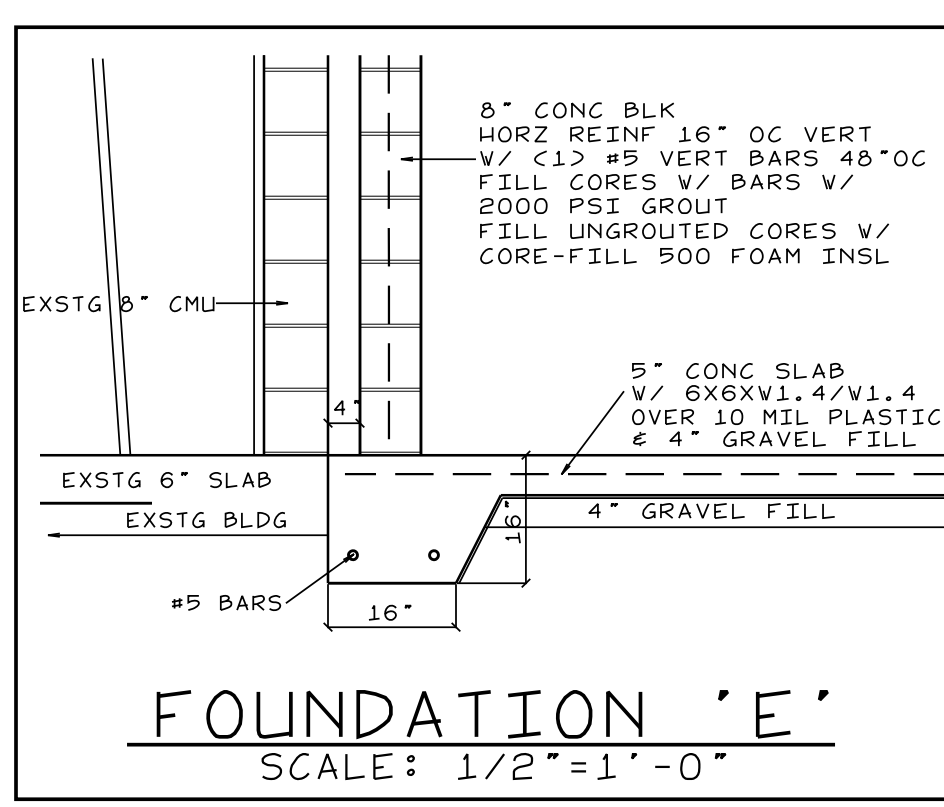
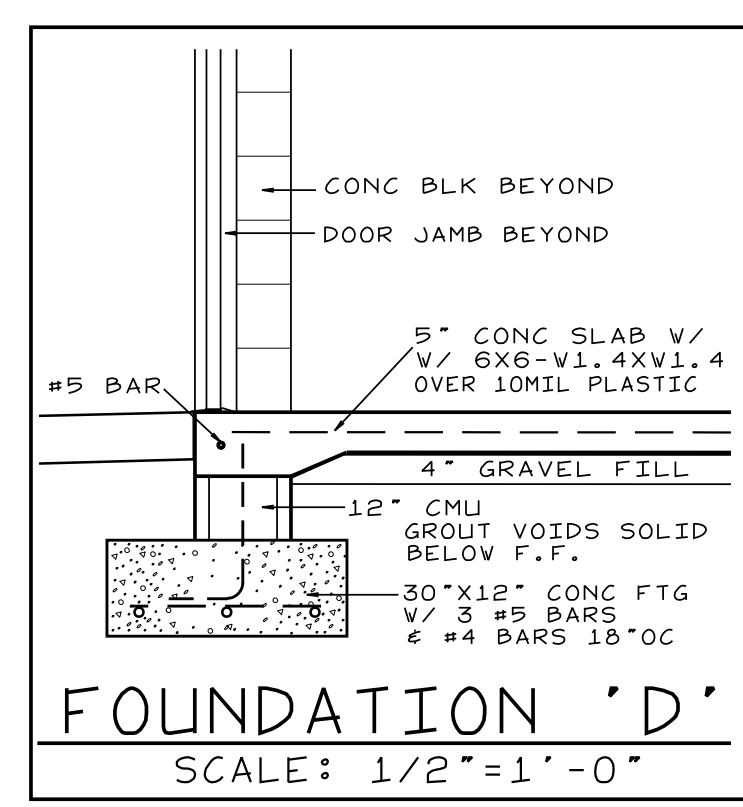
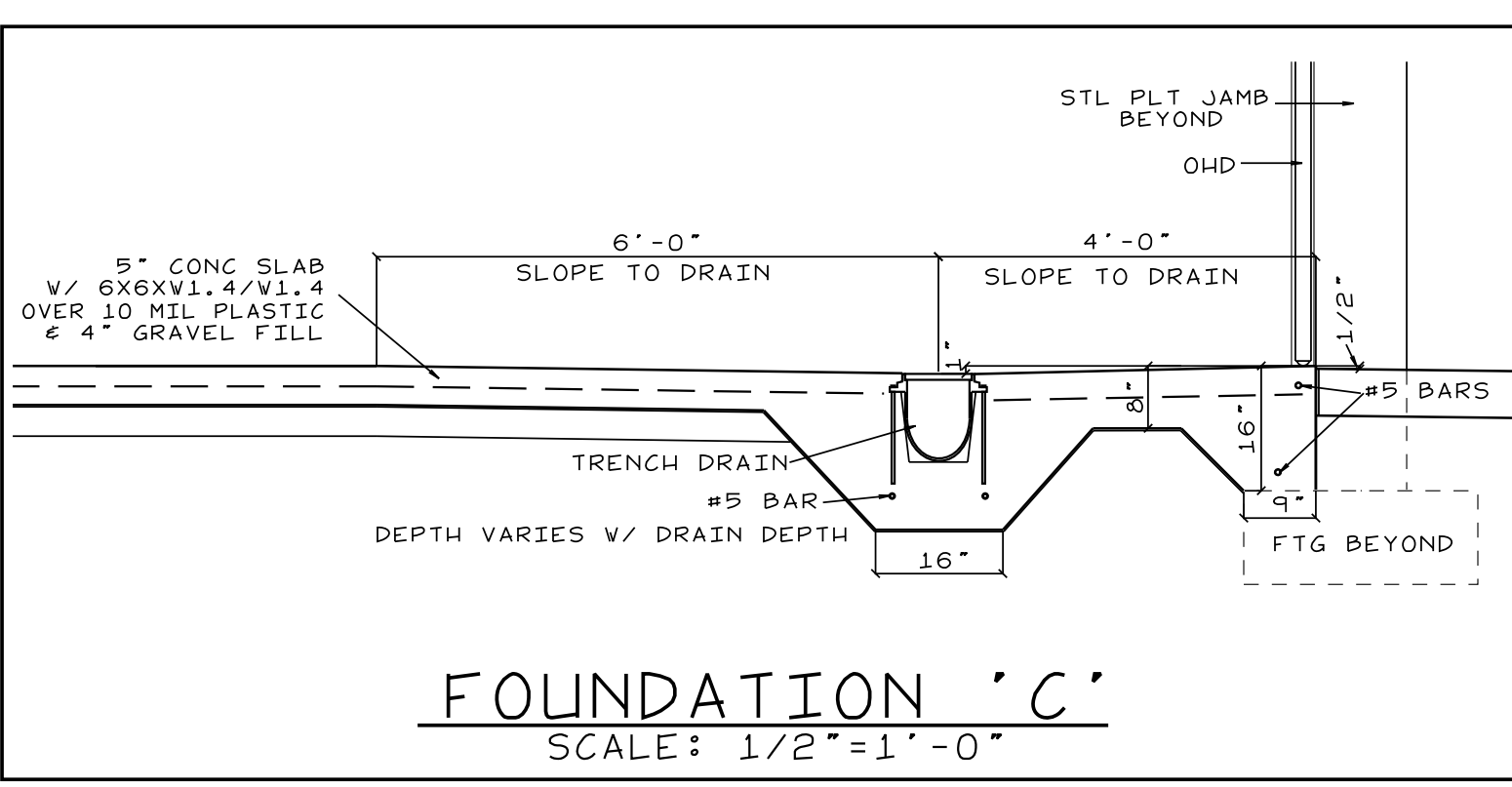
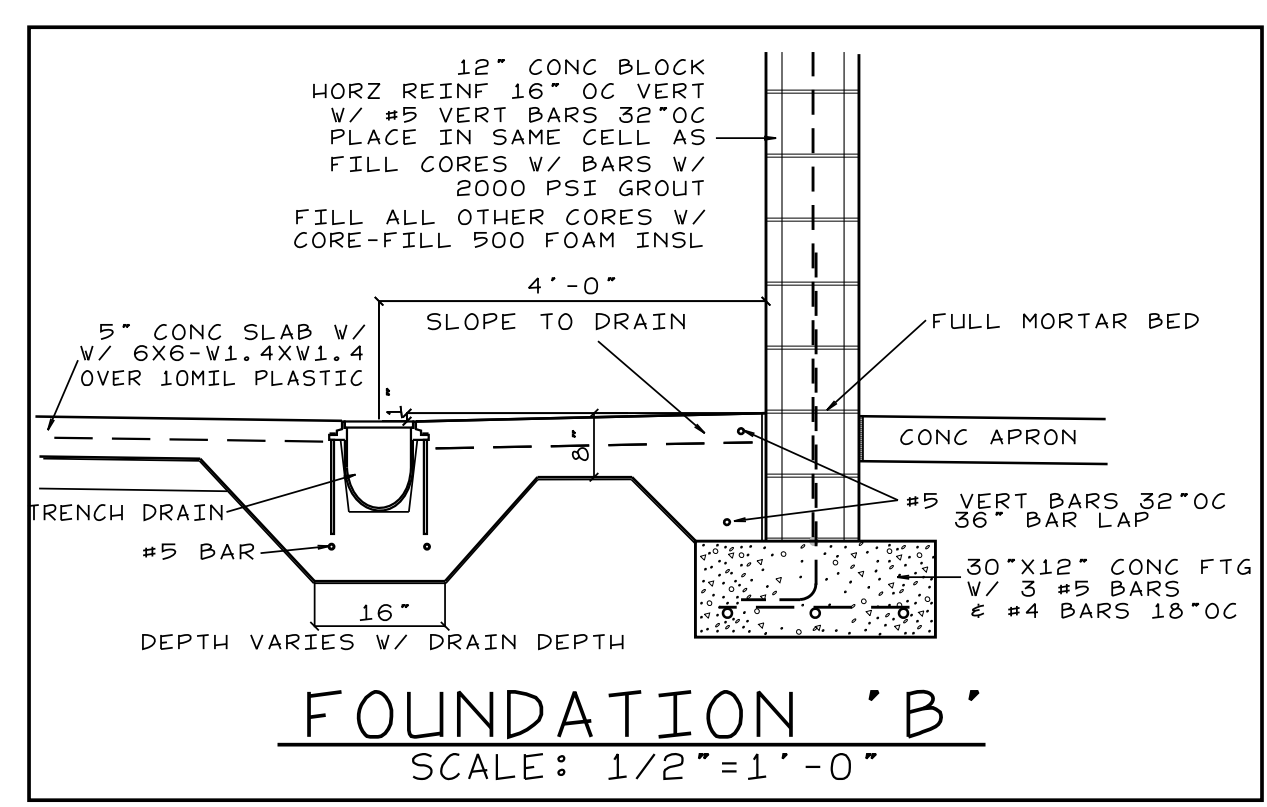
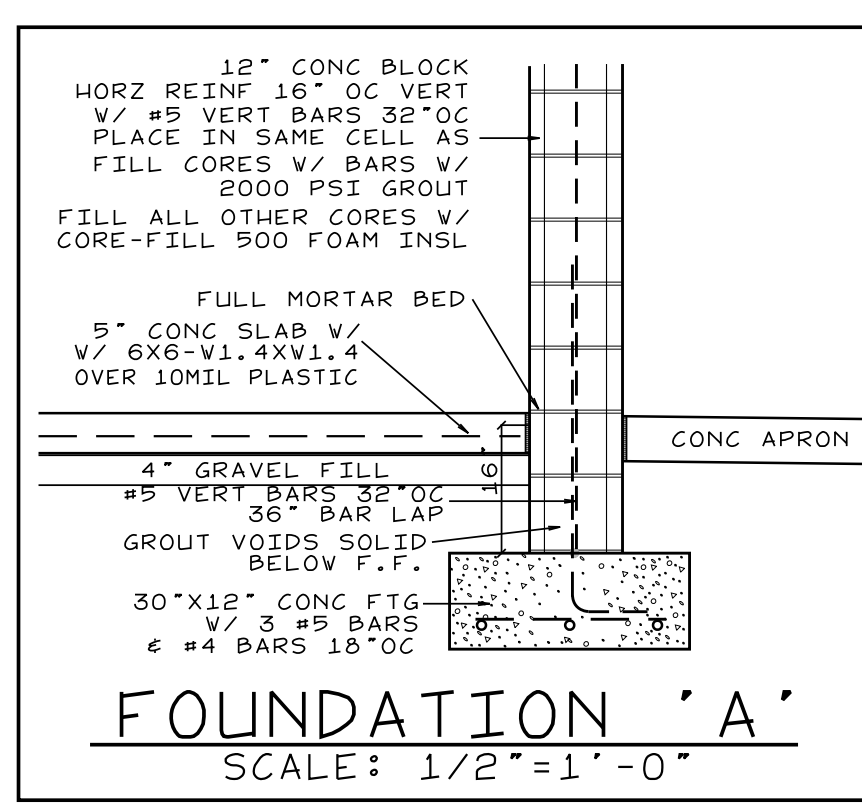
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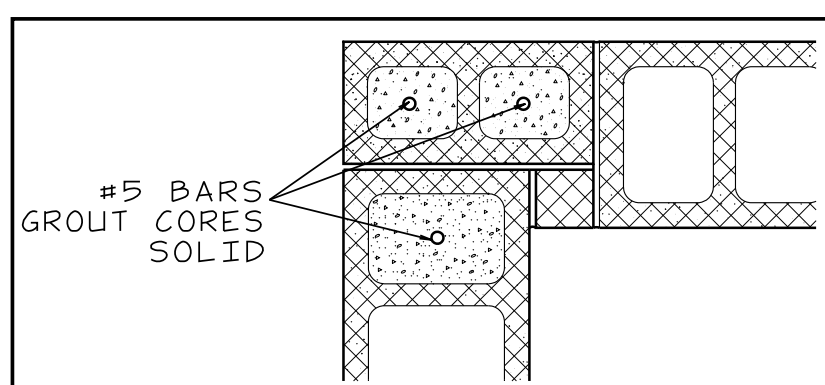


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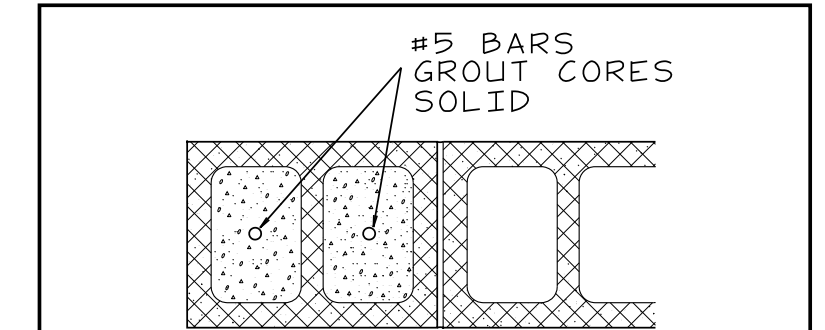
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REVISIONS  
 DATE: 11/19/2021  
 FOUNDATION DETAILS  
 S-2

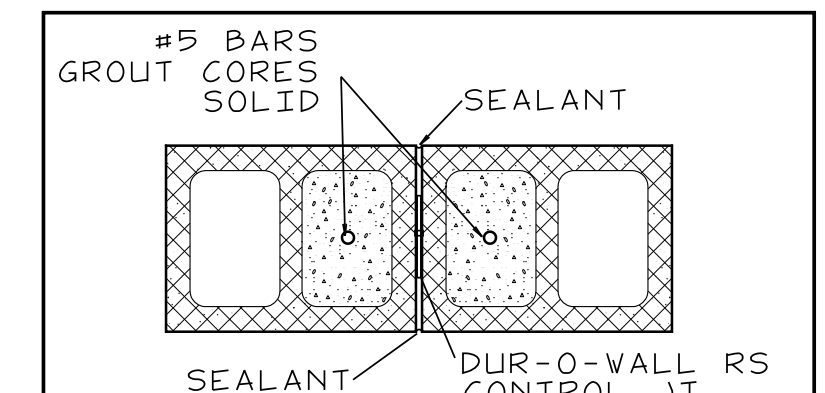




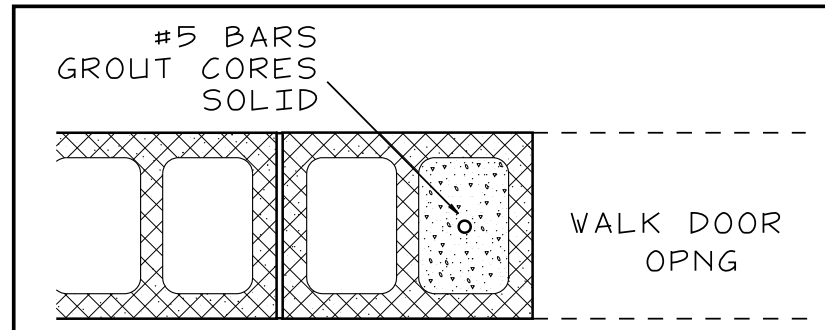
MASONRY WALL CORNER DETAIL



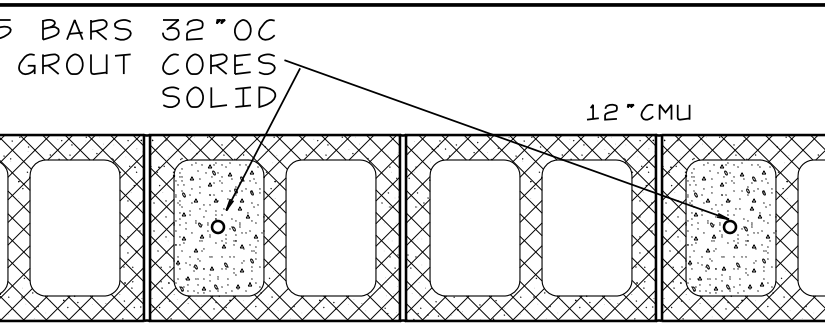
MASONRY WALL END CONDITION



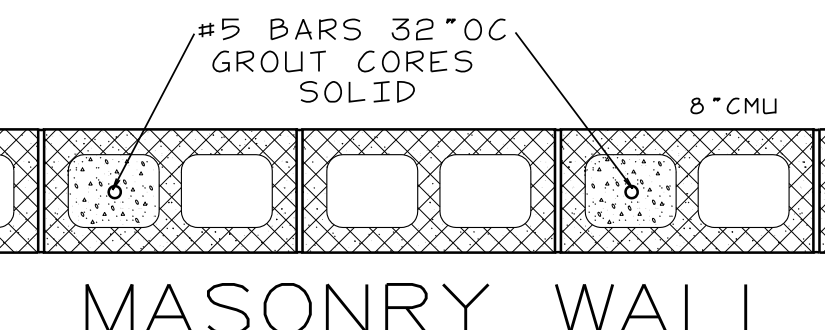
MASONRY WALL CONTROL JT.



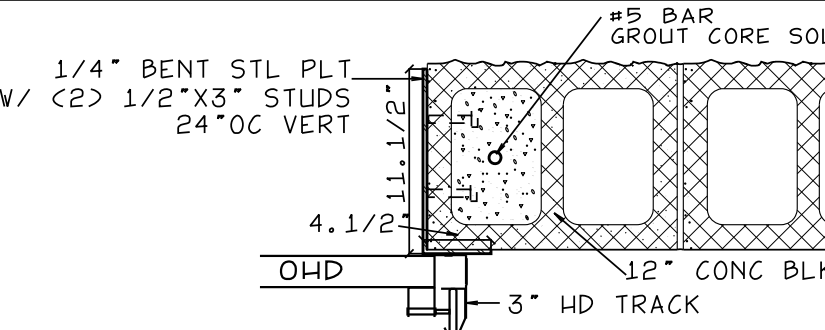
CMU JAMB DETAIL



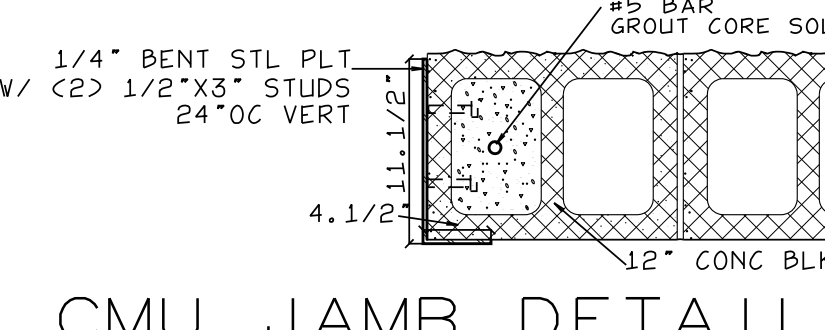
MASONRY WALL VERTICAL REINF



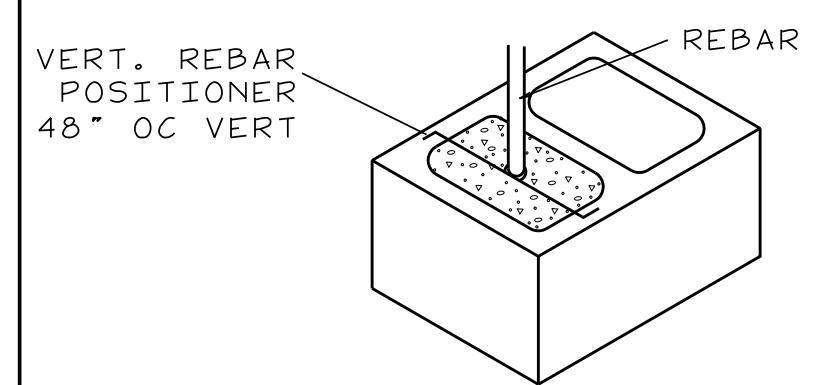
MASONRY WALL VERTICAL REINF



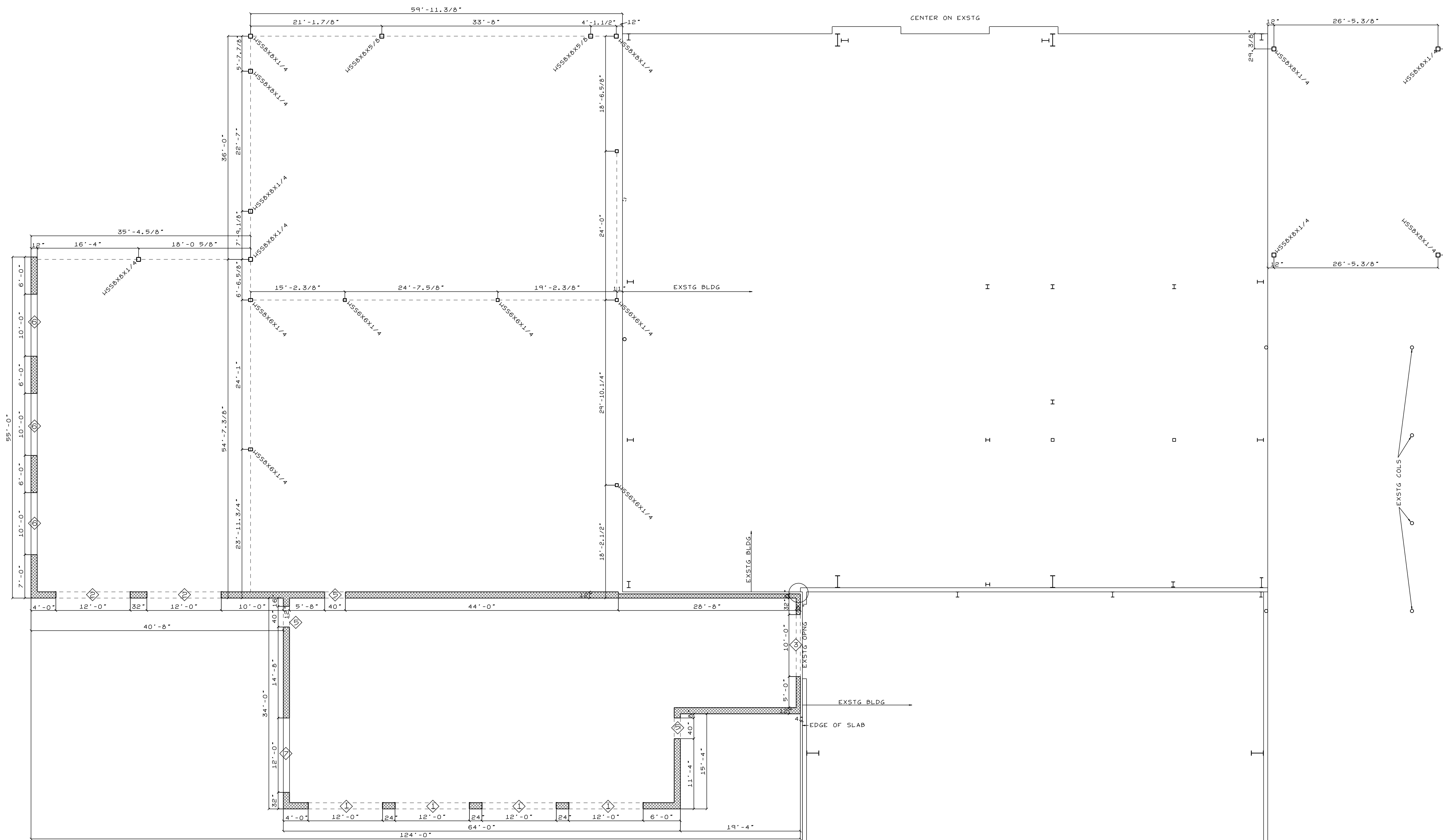
OHD JAMB DETAIL



CMU JAMB DETAIL @ SERVICE DRIVE



REBAR POSITIONER DETAIL



COLUMN LOCATION, MASONRY PLAN

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

STRUCTURAL STEEL NOTES

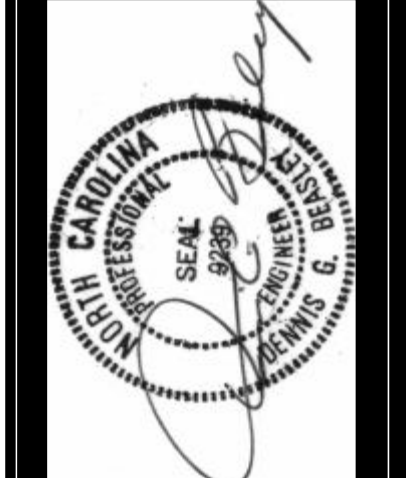
- DESIGN, FABRICATION & ERECTION OF STRUCTURAL STEEL SHALL BE IN W/ THE MANUAL OF STEEL CONSTRUCTION OF THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION - LATEST EDITION.
- MATERIAL SHALL MEET THE REQUIREMENTS OF THE FOLLOWING SPECS:  
 STRUCTURAL STEEL- ASTM A992 (Fy=50 ksi)  
 L&C SHAPES & PLATES- ASTM A36  
 ROUND STEEL PIPE- ASTM A53 GRADE B (Fy=35 ksi)  
 TUBE STEEL- ASTM A500 GRADE B (Fy=46 ksi)  
 HIGH STRENGTH BOLTS- ASTM A325-86A, 3/4" dia.  
 WELD STEEL- AWS CLASS E70  
 ANCHOR BOLTS- ASTM A3070
- ALL SHOP CONNECTIONS SHALL BE WELDED OR MADE W/ HIGH STRENGTH BOLTS UNLESS NOTED SPECIFICALLY.
- ALL STRUCTURAL STEEL BELOW GRADE SHALL BE ENCASED W/ A MIN. OF 3" COVER OR PAINTED W/ A COAL TAR.
- BAR JOISTS SHALL CONFORM W/ THE STEEL INSTITUTES STANDARDS.
- ANY LOADS 150# - 250# TO BE LOCATED AT JOIST PANEL POINTS OR PROVIDE WEB REINFORCING. ANY LOADS OVER 250# TO HAVE WEB REINFORCING.
- SUSPENSION OF ANY LOADS OVER 100# TO BE FROM TOP CHORD OF JSYS OR PROVIDE WEB REINFORCING.
- DO NOT SUSPEND ANYTHING FROM THE JOIST BRIDGING.
- NO FIELD CUTTING OF STRUCTURAL MEMBERS IS ALLOWED W/OUT PRIOR WRITTEN APPROVAL OF THE STRUCTURAL ENGINEER.
- METAL DECK TO BE FINISHED W/ GALVANIZED COATING, CONFORMING TO ASTM-A653-94, STRUCTURAL QUALITY, & FEDERAL SPEC QQ-S-775.
- METAL DECK TO BE INSTALLED W/ COVERING A MIN. 3 SPANS.
- METAL DECK SIDE LAPS TO BE FASTENED AT 12" OC W/ #12 GALV SCREWS.

MASONRY OPENINGS

- ◇ OHD - 12'-0" X 12'-0" OPNG
- ◇ OPNG - 12'-0" X 12'-0" OPNG
- ◇ OHD - 16'-0" X 12'-0" OPNG
- ◇ OPNG - 10'-0" X 10'-0" OPNG
- ◇ DOOR - 3'-4" X 7'-4" OPNG
- ◇ WINDOW - 10'-0" X 9'-8" OPNG  
SILL HT = 28" AFF
- ◇ WINDOW - 12'-0" X 4'-4" OPNG  
SILL HT = 36" AFF
- DENOTES CMU CELLS TO BE FILLED GROUTED SOLID W/ 1 #5 VERT REBAR  
THIS IS IN ADDITION TO WHAT IS CALLED OUT IN THE SECTIONS

MISCELLANEOUS

- THE CONTRACTOR SHALL PROVIDE ADEQUATE TEMPORARY BRACING, SHORING, AND GUYING OF FRAMING AND WALLS AGAINST WIND, CONSTRUCTION LOADS, AND OTHER TEMPORARY FORCES UNTIL SUCH PROTECTION IS NO LONGER REQUIRED FOR THE SAFE SUPPORT OF THE FRAMING.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR REVIEWING THE DIMENSIONS OF THE STRUCTURAL DRAWINGS AND ADVISING THE ENGINEER OF ANY DIFFERENCES IN DIMENSIONS BETWEEN THE ARCHITECTURAL PLANS AND SECTIONS PRIOR TO COMMENCING CONSTRUCTION.
- CONSTRUCTION SAFETY: THESE STRUCTURAL DRAWINGS DO NOT CONTAIN NECESSARY COMPONENTS FOR SAFETY DURING CONSTRUCTION.



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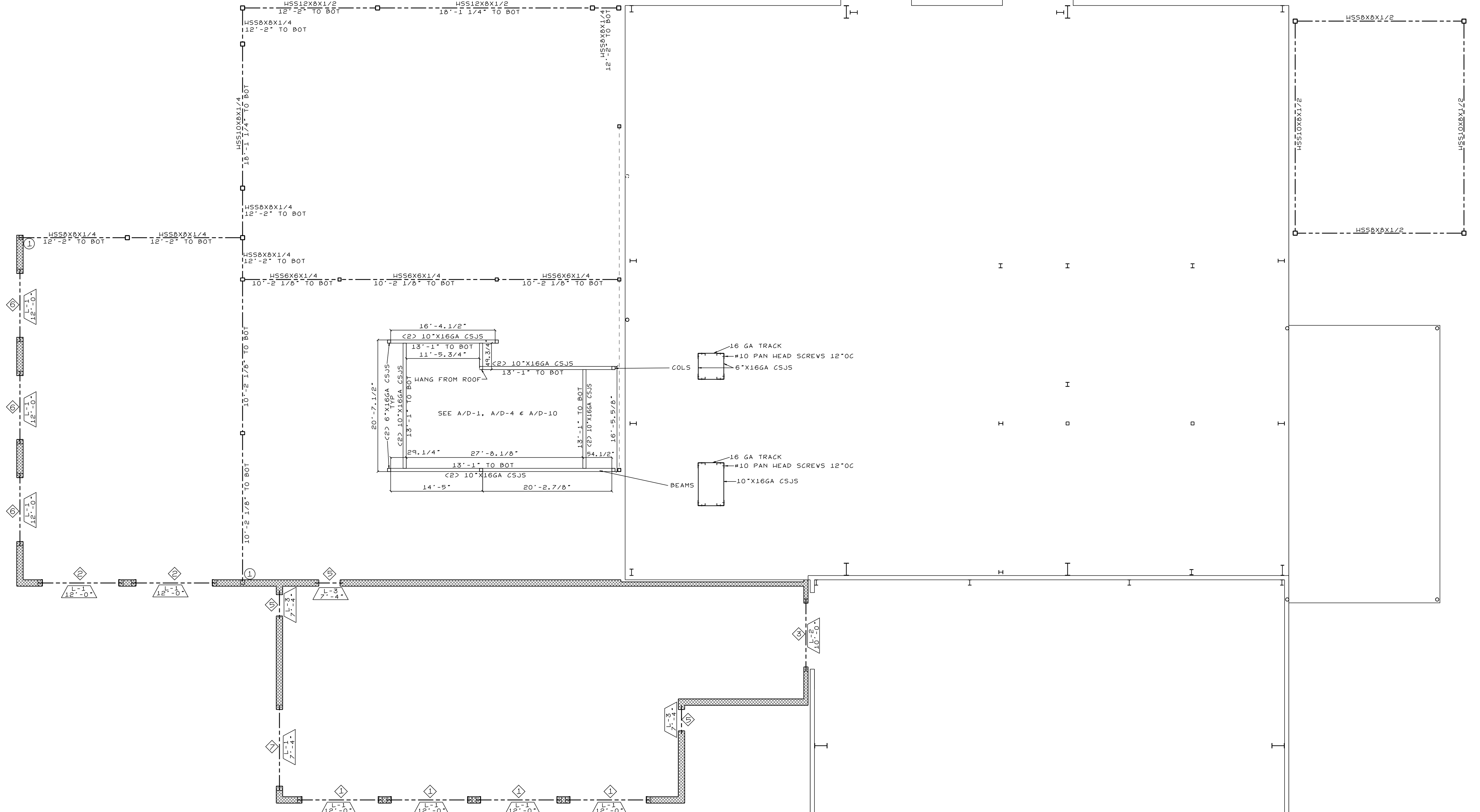
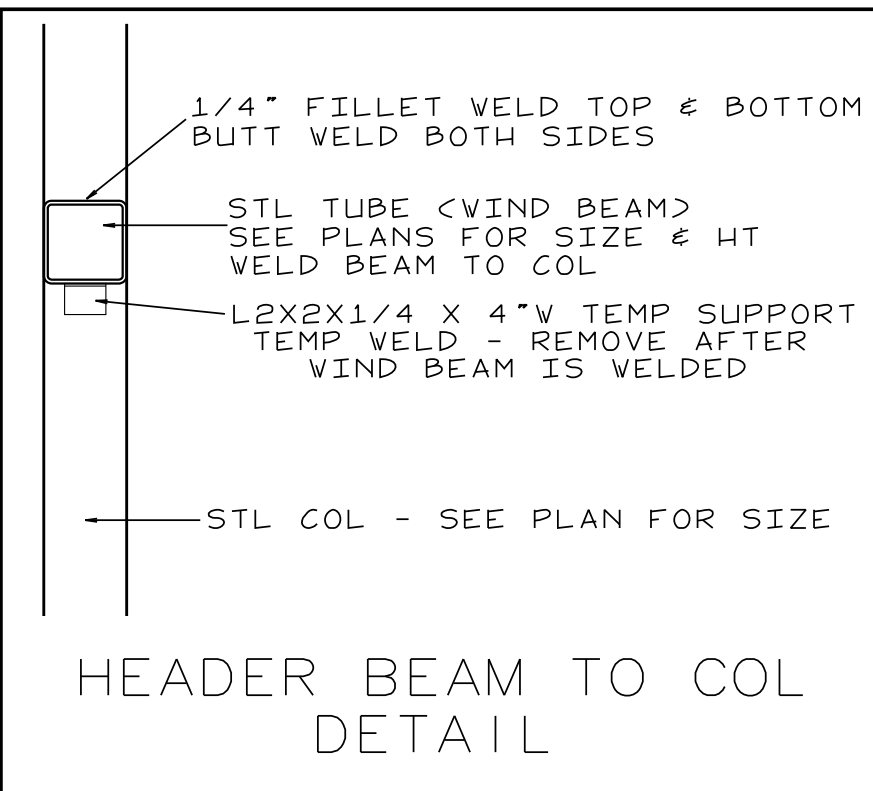
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COLUMN LOCATIONS  
 MASONRY OPNGS

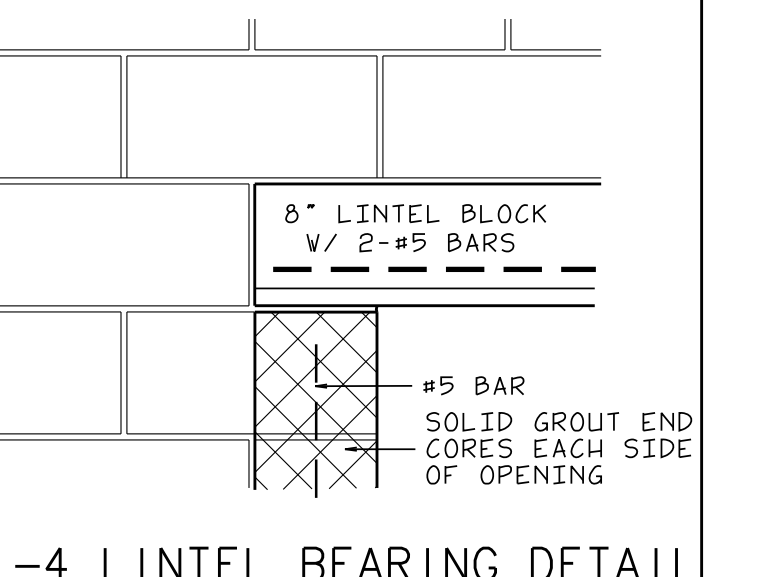
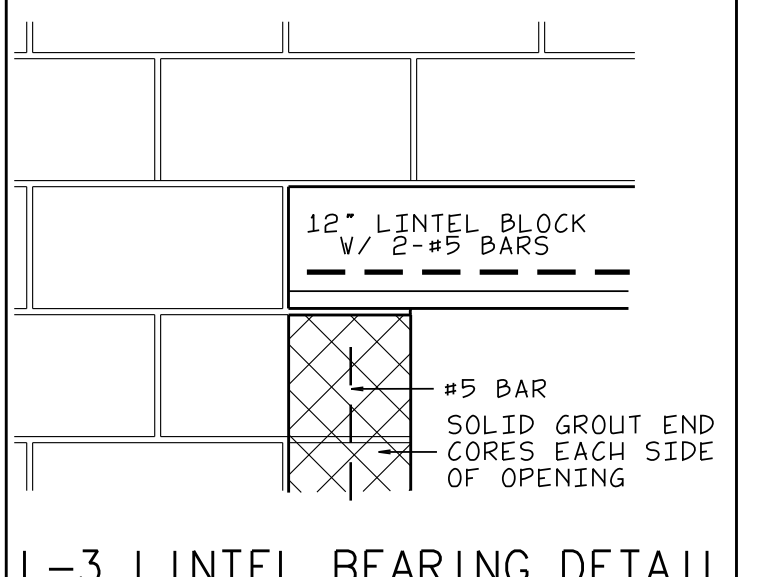
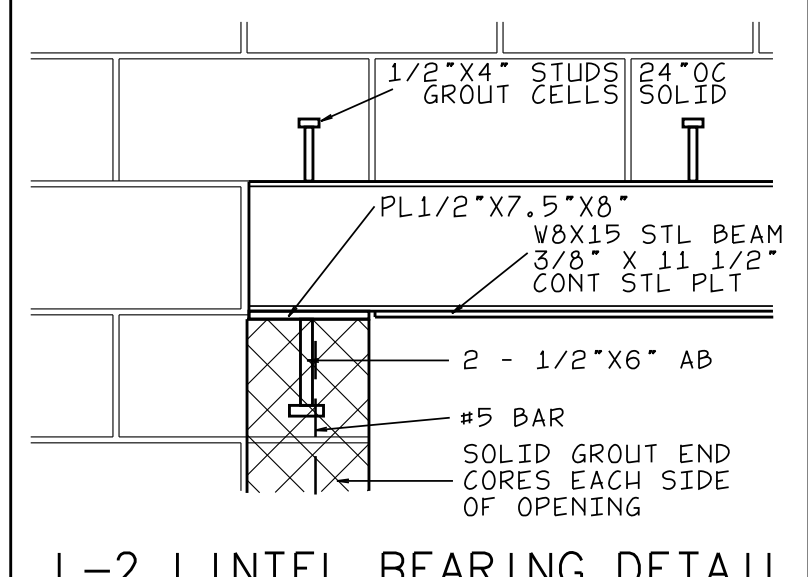
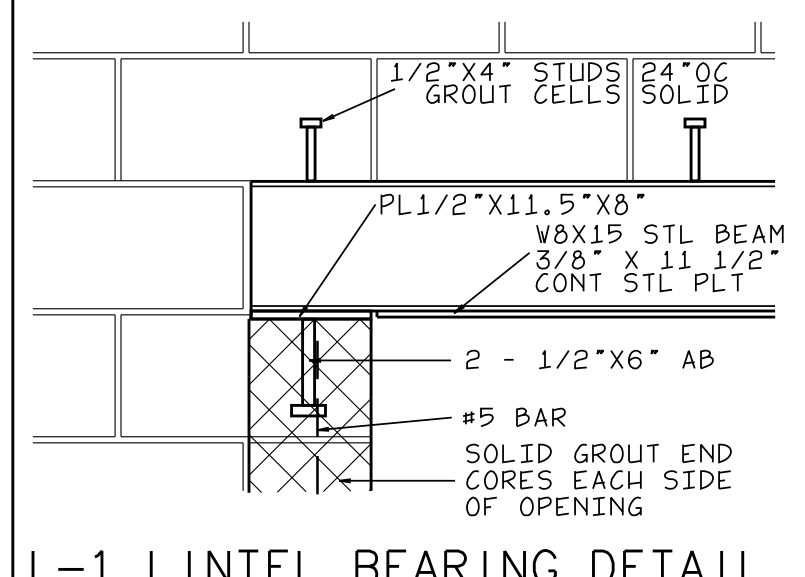
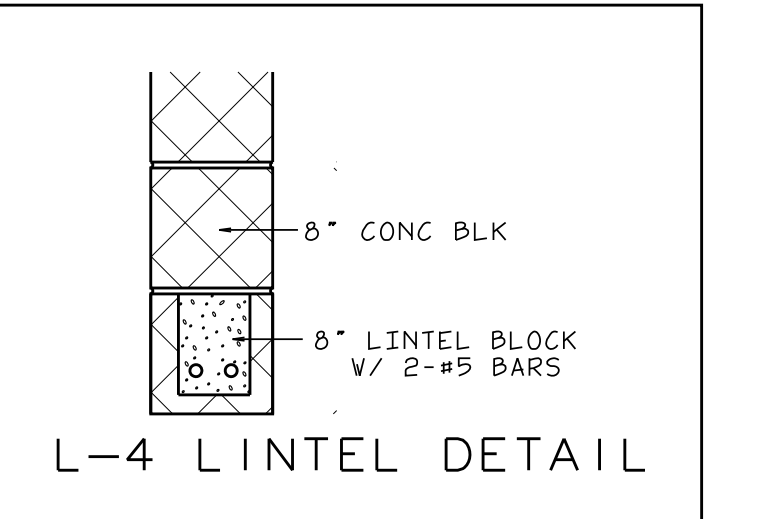
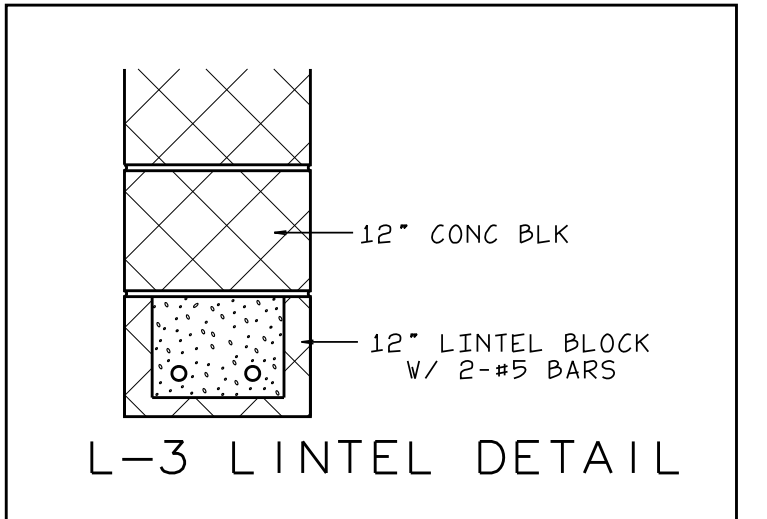
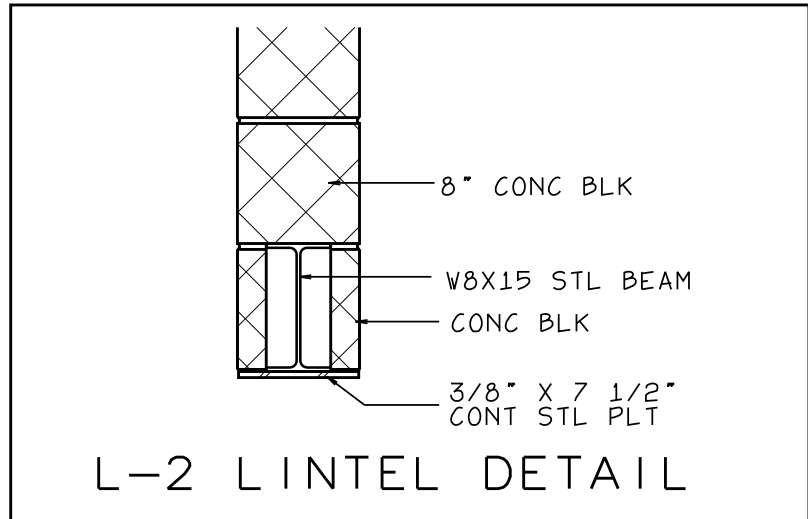
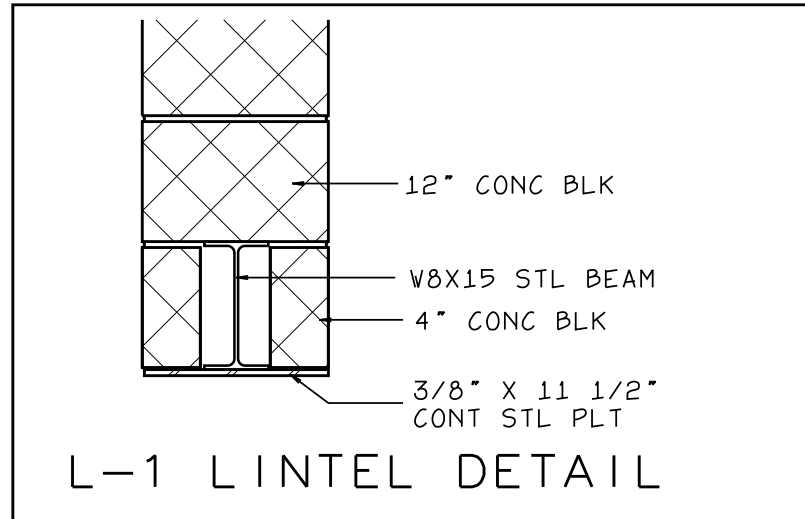


- MASONRY OPENINGS**
- ① OHD - 12'-0" X 12'-0" OPNG
  - ② OPNG - 12'-0" X 12'-0" OPNG
  - ③ OHD - 16'-0" X 12'-0" OPNG
  - ④ OPNG - 10'-0" X 10'-0" OPNG
  - ⑤ DOOR - 3'-4" X 7'-4" OPNG
  - ⑥ WINDOW - 10'-0" X 9'-8" OPNG  
SILL HT = 28" AFF
  - ⑦ WINDOW - 12'-0" X 4'-4" OPNG  
SILL HT = 36" AFF

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

**BEAM / JOIST BEARING PLATE SCHEDULE**

MARK	PLATE SIZE	ANCHORS
①	1/2" X 8" X 7 1/2"	<C2> 1/2" D X 6" STUDS



L-1 LINTEL #  
12'-0" BOT OF BEAM



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LILLINGTON, N.C.

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INTERMEDIATE FRAMING PLAN

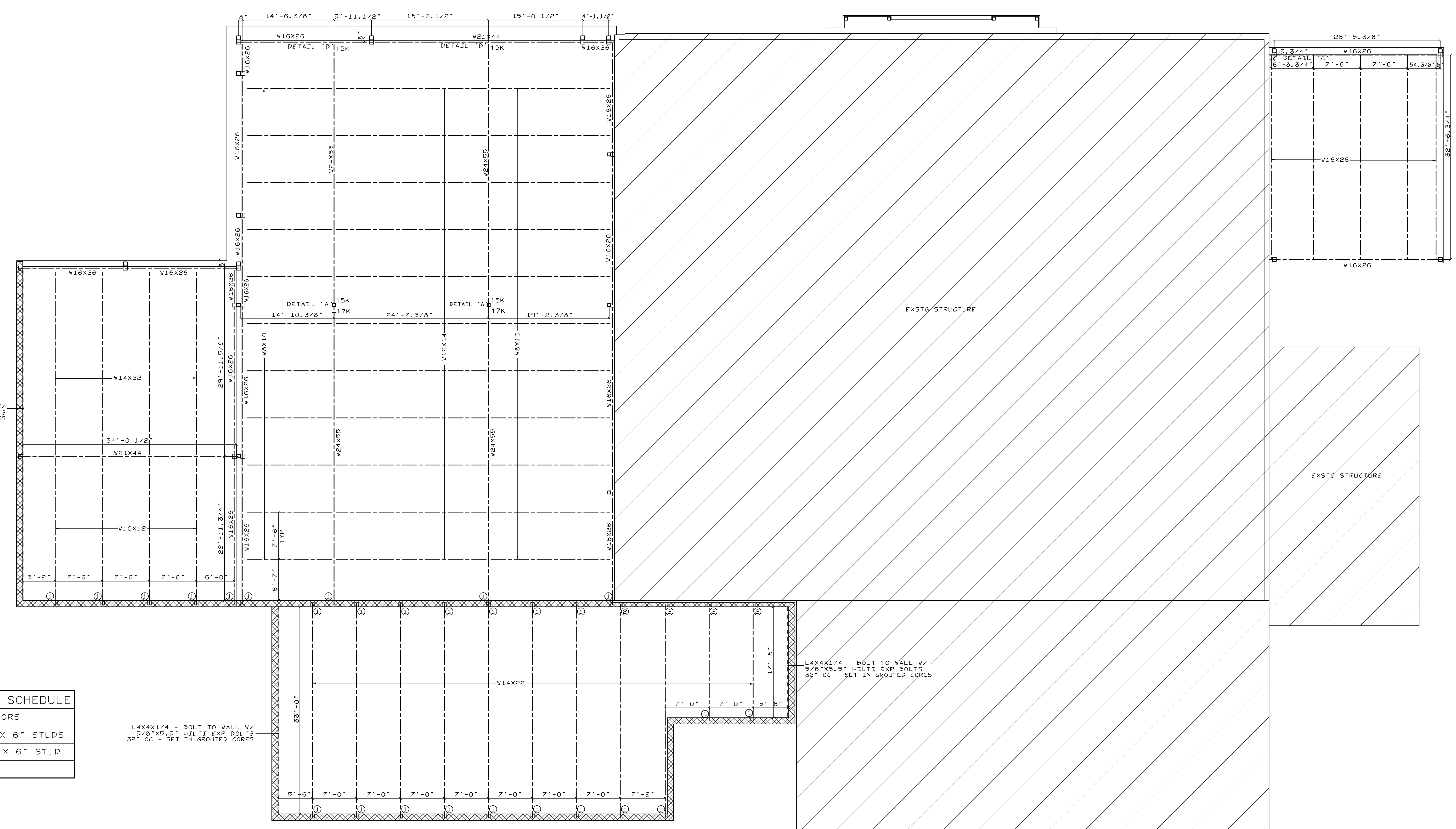
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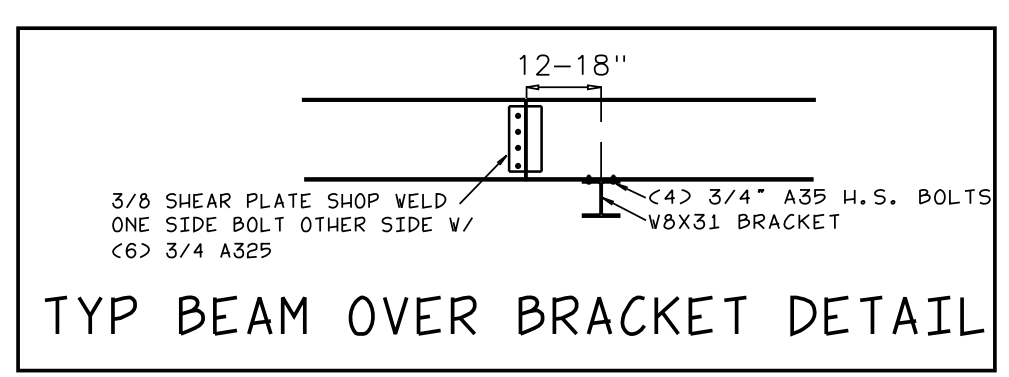
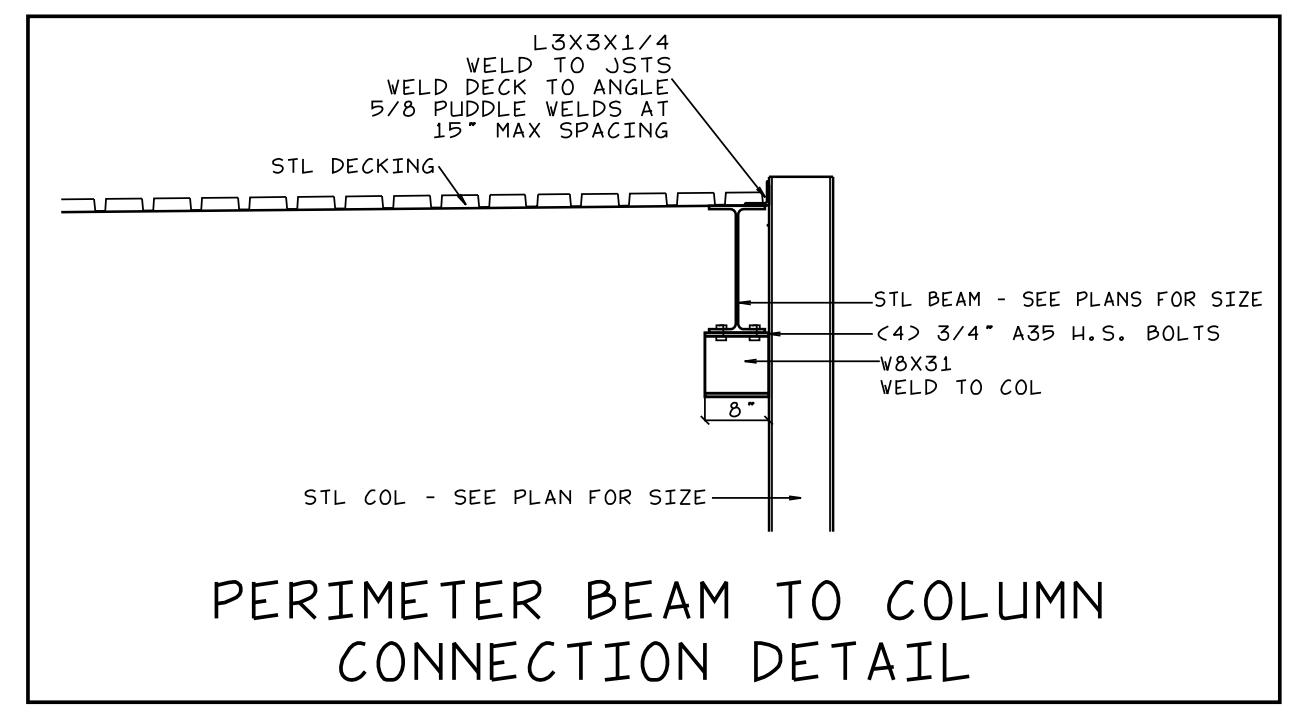
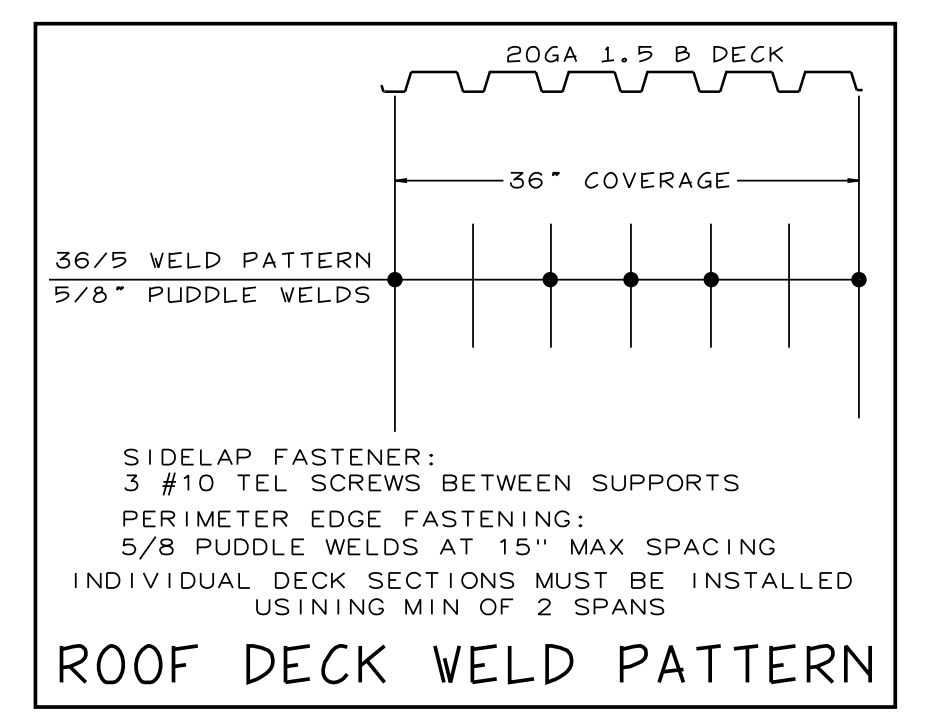
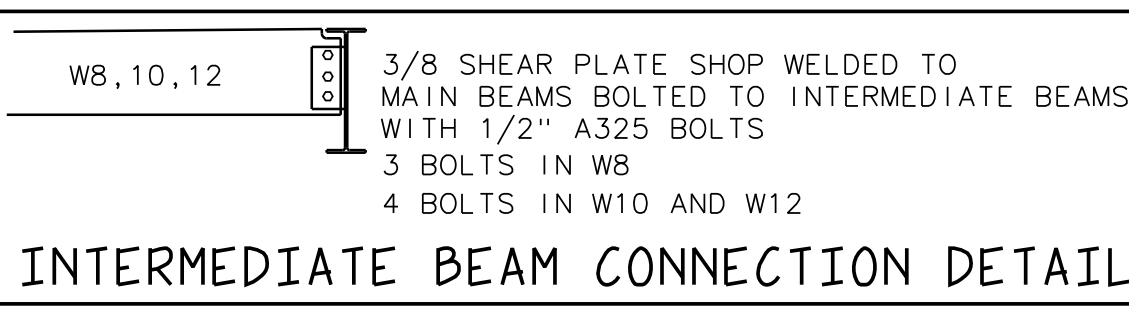
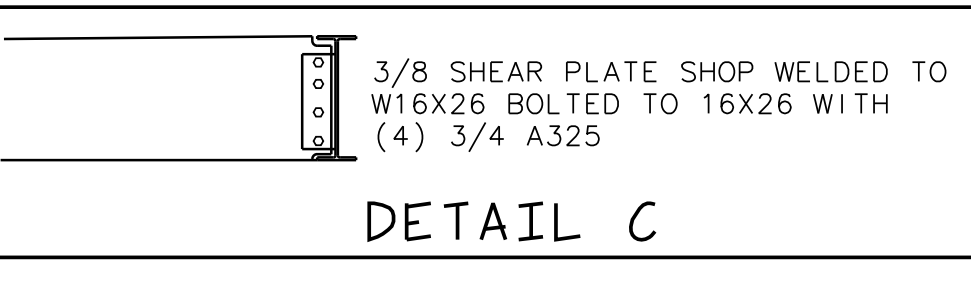
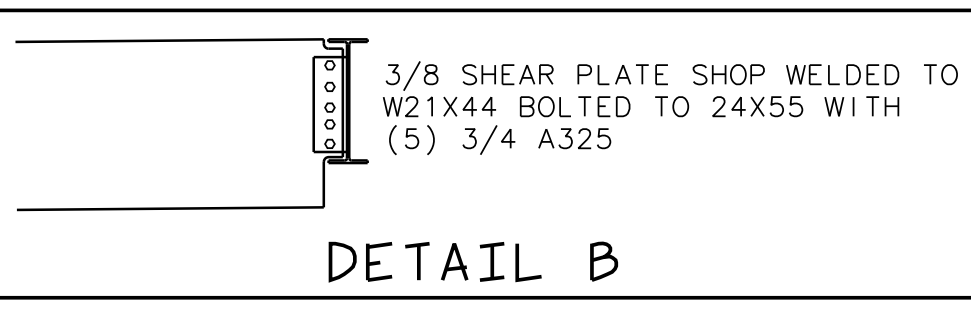
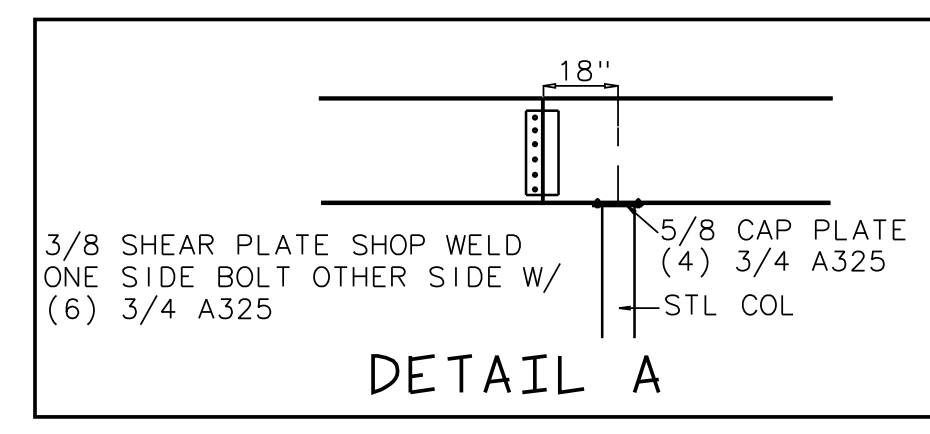
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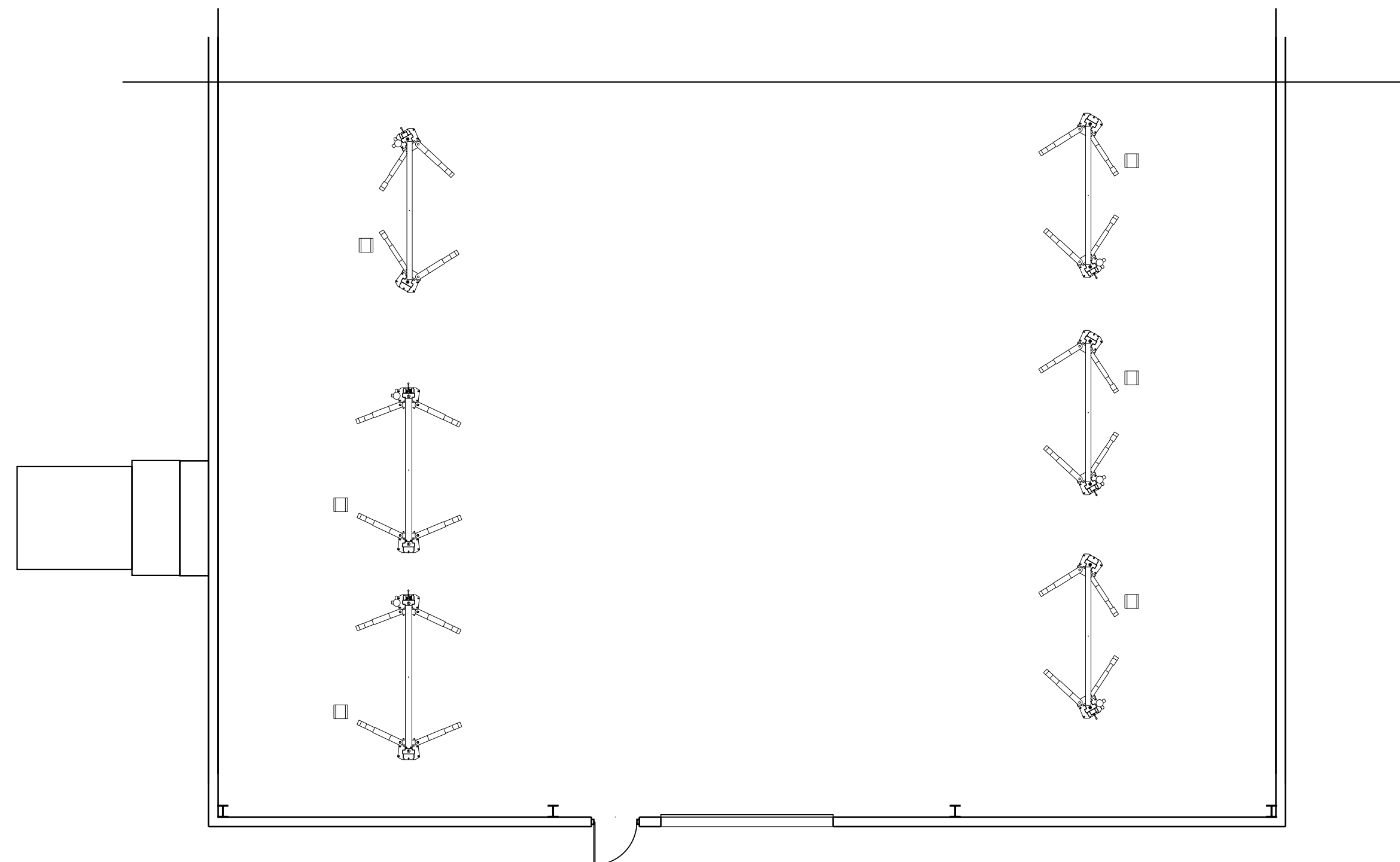
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 DATE: 11/19/2021  
 ROOF FRAMING PLAN  
 S-5



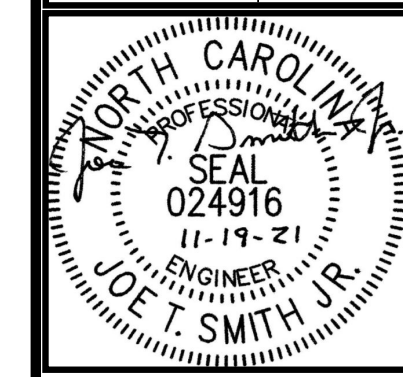
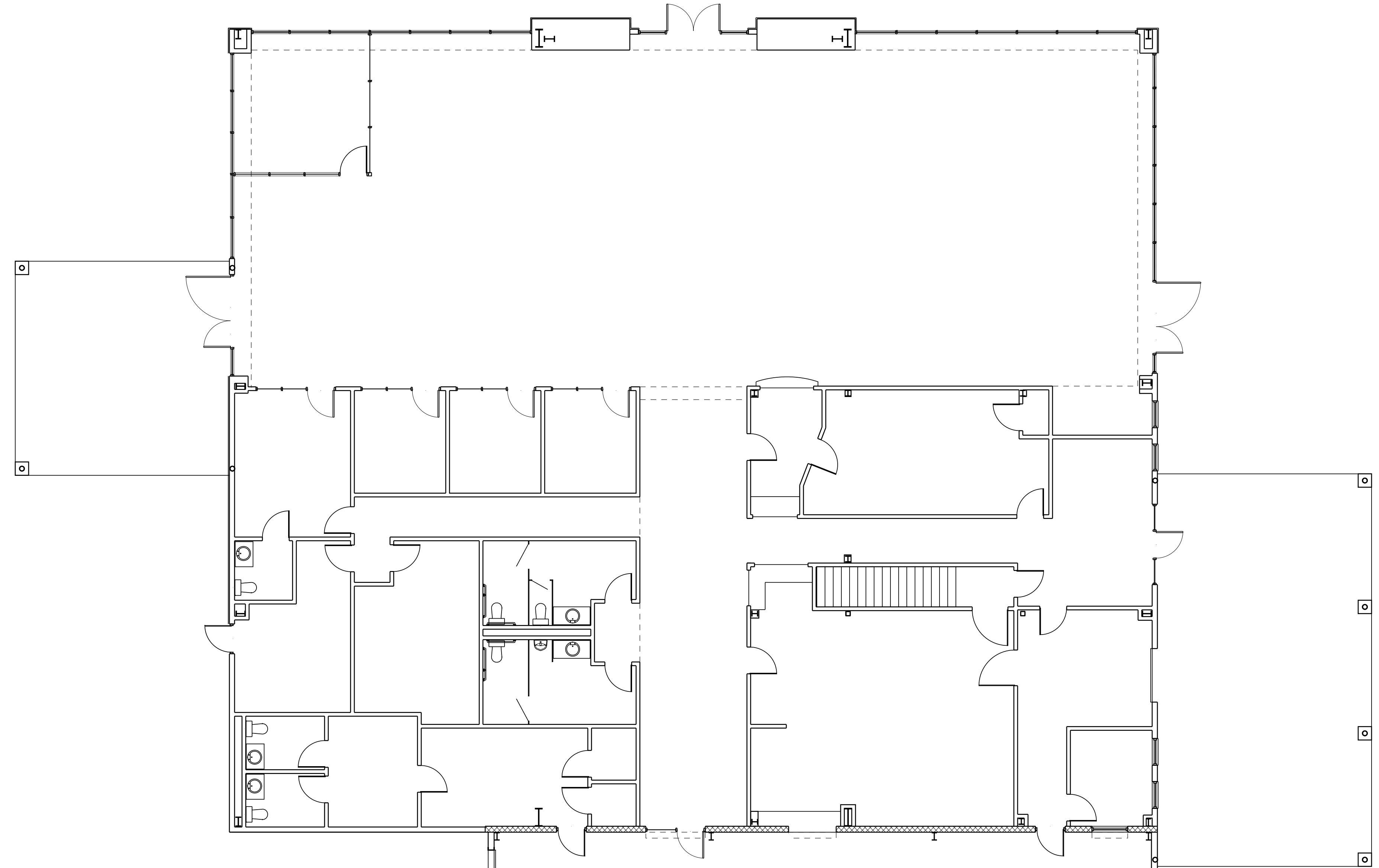
BEAM / JOIST BEARING PLATE SCHEDULE	MARK	PLATE SIZE	ANCHORS
①	1/2" X 8" X 7 1/2"	<C2> 1/2"D X 6" STUDS	
②	1/2" X 8" X 4"	<C1> 1/2"D X 6" STUD	

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





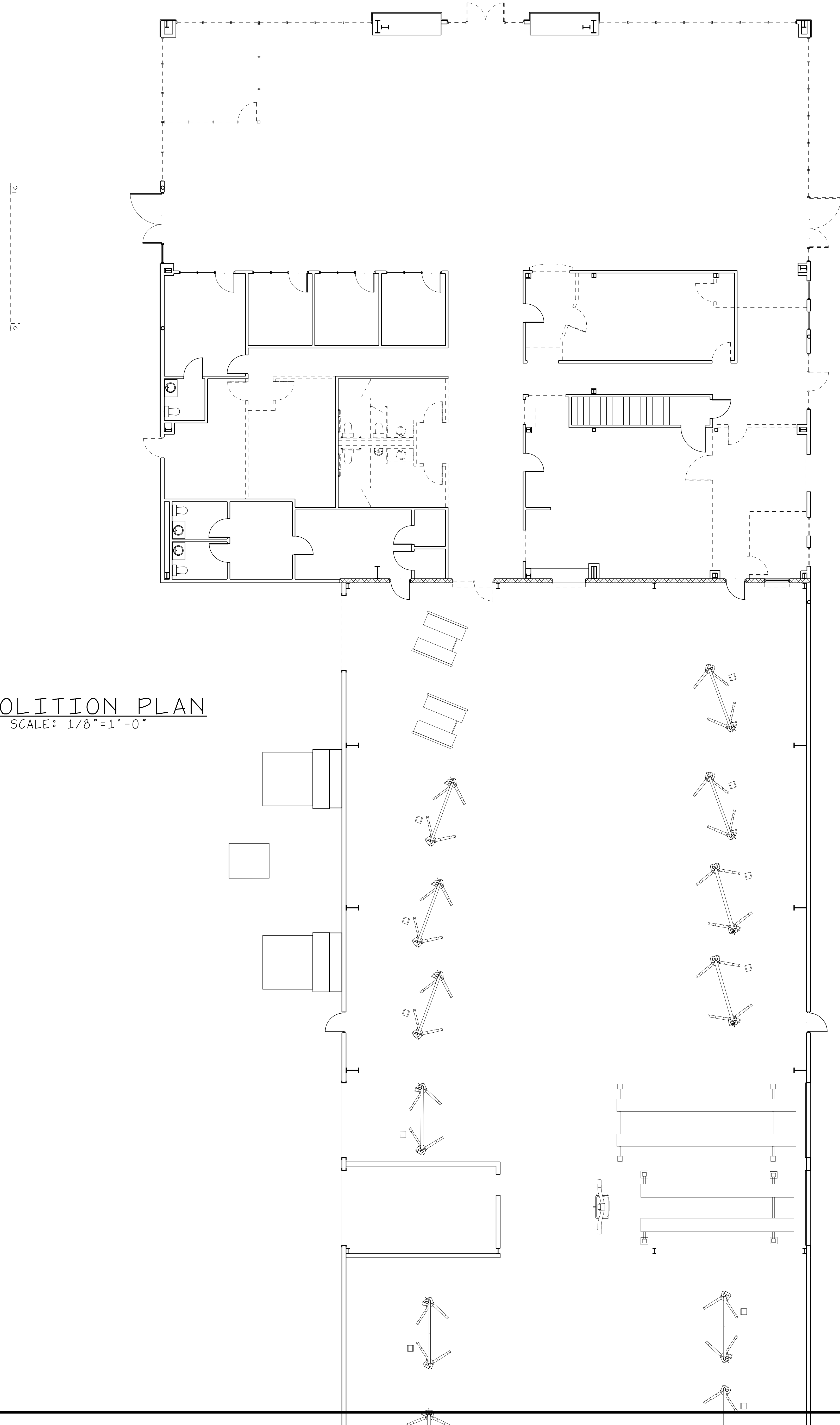
EXISTING FLOOR PLAN  
SCALE: 1/8"=1'-0"



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



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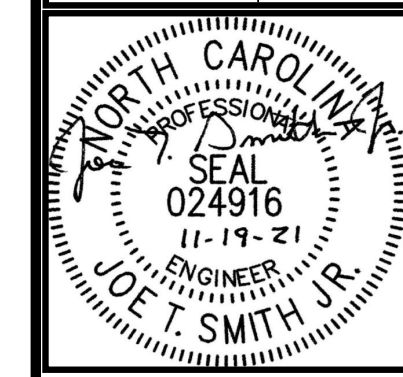
PROJECT NO: 21004  
DRAWN BY: JL  
DATE: 11-15-2021

DEMOLITION PLAN

G-2

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CDR+J  
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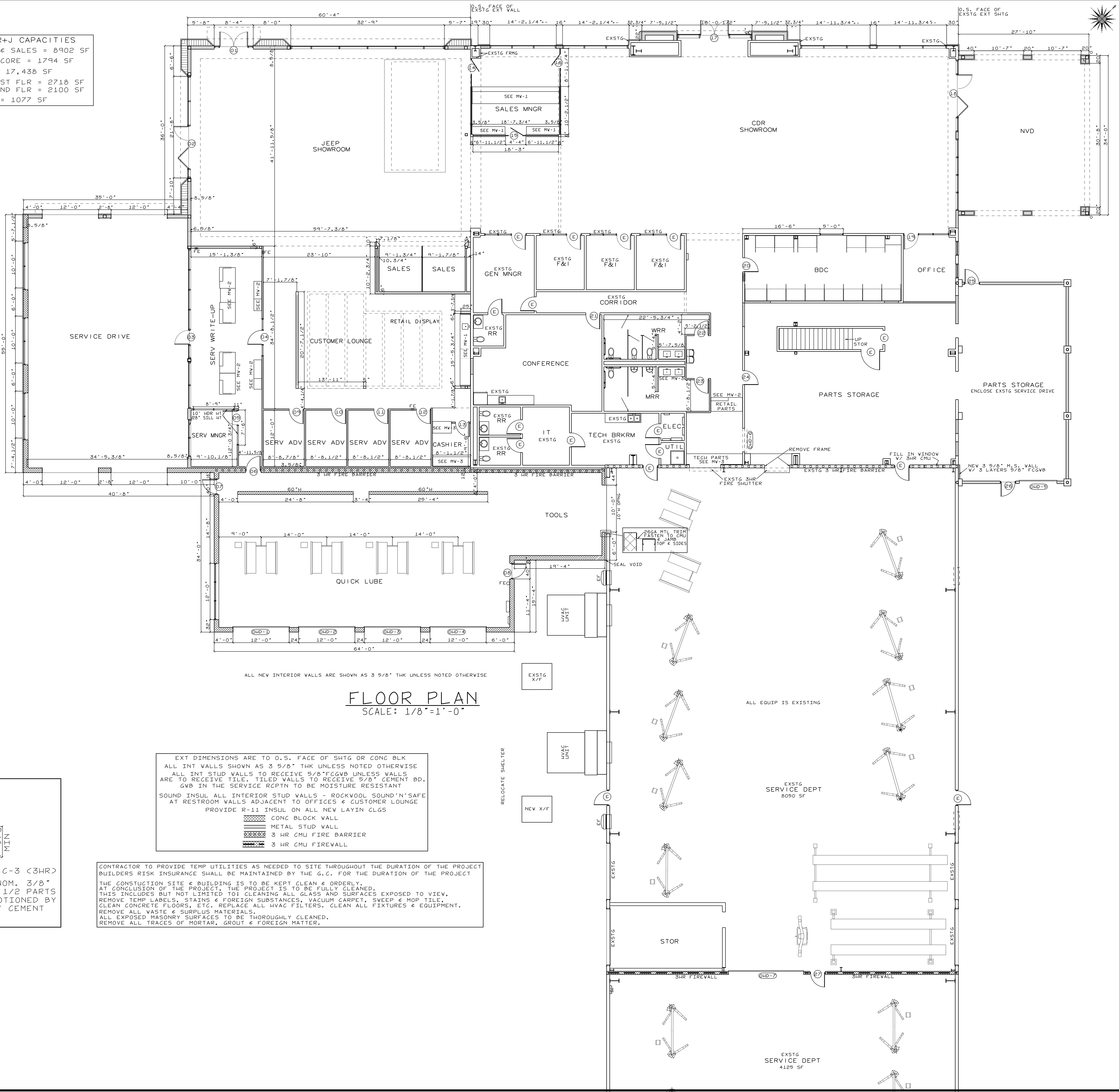


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JH-CDR+J CAPACITIES  
 SHOWROOM & SALES = 8902 SF  
 CUSTOMER CORE = 1794 SF  
 SERVICE = 17,438 SF  
 PARTS = 1ST FLR = 2718 SF  
 2ND FLR = 2100 SF  
 EMPLOYEE = 1077 SF

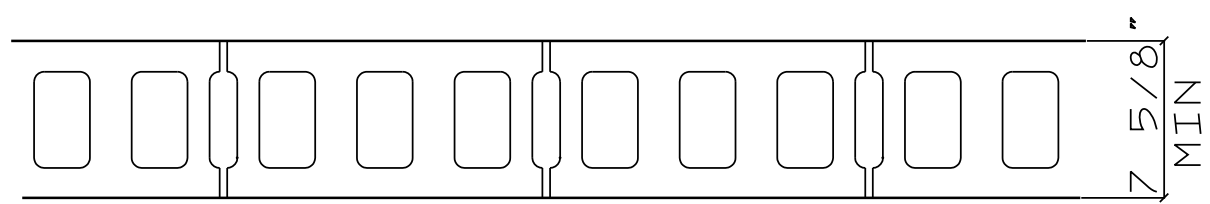


**FLOOR PLAN**  
 SCALE: 1/8"=1'-0"

EXT DIMENSIONS ARE TO O.S. FACE OF SHGT OR CONC BLK  
 ALL INT WALLS SHOWN AS 3 9/8" THK UNLESS NOTED OTHERWISE  
 ALL INT STUD WALLS TO RECEIVE 5/8" FCGVB UNLESS WALLS  
 ARE TO RECEIVE TILE. TILED WALLS TO RECEIVE 5/8" CEMENT BD.  
 GVB IN THE SERVICE RCPTN TO BE MOISTURE RESISTANT  
 SOUND INSUL ALL INTERIOR STUD WALLS - ROCKWOOL SOUND 'N' SAFE  
 AT RESTROOM WALLS ADJACENT TO OFFICES & CUSTOMER LOUNGE  
 PROVIDE R-11 INSUL ON ALL NEW LAYIN CLGS  
 CONG BLOCK WALL  
 METAL STUD WALL  
 3 HR CMU FIRE BARRIER  
 3 HR CMU FIREWALL

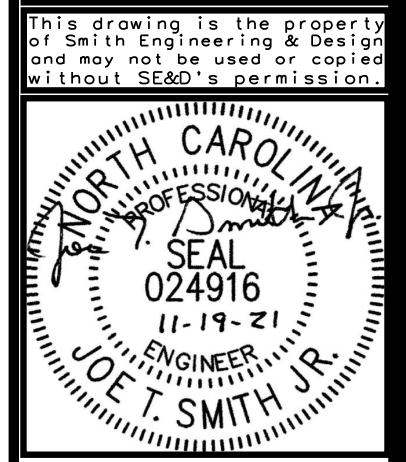
CONTRACTOR TO PROVIDE TEMP UTILITIES AS NEEDED TO SITE THROUGHOUT THE DURATION OF THE PROJECT  
 BUILDERS RISK INSURANCE SHALL BE MAINTAINED BY THE G.C. FOR THE DURATION OF THE PROJECT  
 THE CONSTRUCTION SITE & BUILDING IS TO BE KEPT CLEAN & ORDERLY.  
 AT CONCLUSION OF THE PROJECT, THE PROJECT IS TO BE FULLY CLEANED.  
 THIS INCLUDES BUT NOT LIMITED TO: CLEANING ALL GLASS AND SURFACES EXPOSED TO VIEW.  
 REMOVE TEMP LABELS, STAINS & FOREIGN SUBSTANCES, VACUUM CARPET, SWEEP & MOP TILE,  
 CLEAN CONCRETE FLOORS, ETC. REPLACE ALL HVAC FILTERS, CLEAN ALL FIXTURES & EQUIPMENT.  
 REMOVE ALL WASTE & SURPLUS MATERIALS.  
 ALL EXPOSED MASONRY SURFACES TO BE THOROUGHLY CLEANED.  
 REMOVE ALL TRACES OF MORTAR, GROUT & FOREIGN MATTER.

**3 HOUR WALL DESIGN**  
 UL DESIGN NO. U904



CONC BLOCK - VARIOUS DESIGNS. CLASSIFICATION C-3 (3HR)  
 MORTAR - BLOCKS LAID IN FULL BED OF MORTAR, NOM. 3/8" THK, OF NOT LESS THAN 2 1/4 & NOT MORE THAN 3 1/2 PARTS OF CLEAN SAND TO 1 PART PORTLAND CEMENT (PROPORTIONED BY VOLUME) & NOT MORE THAN 50% HYDRATED LIME (BY CEMENT VOLUME). VERTICAL JTS STAGGERED.

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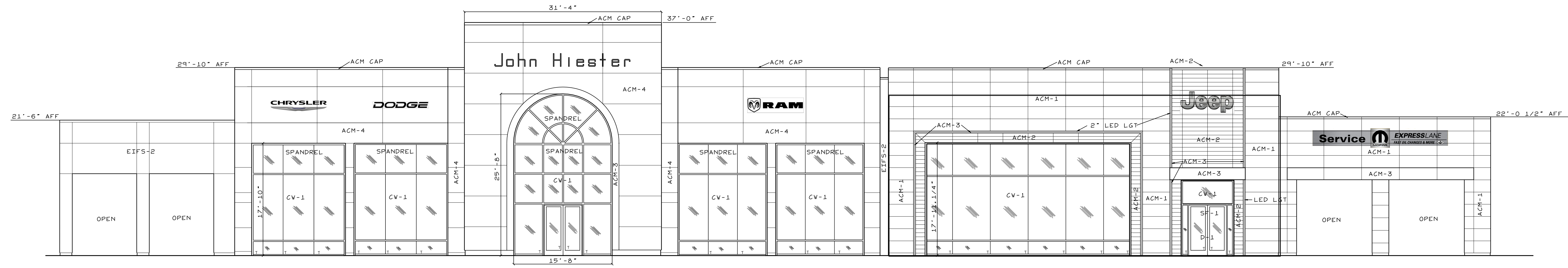
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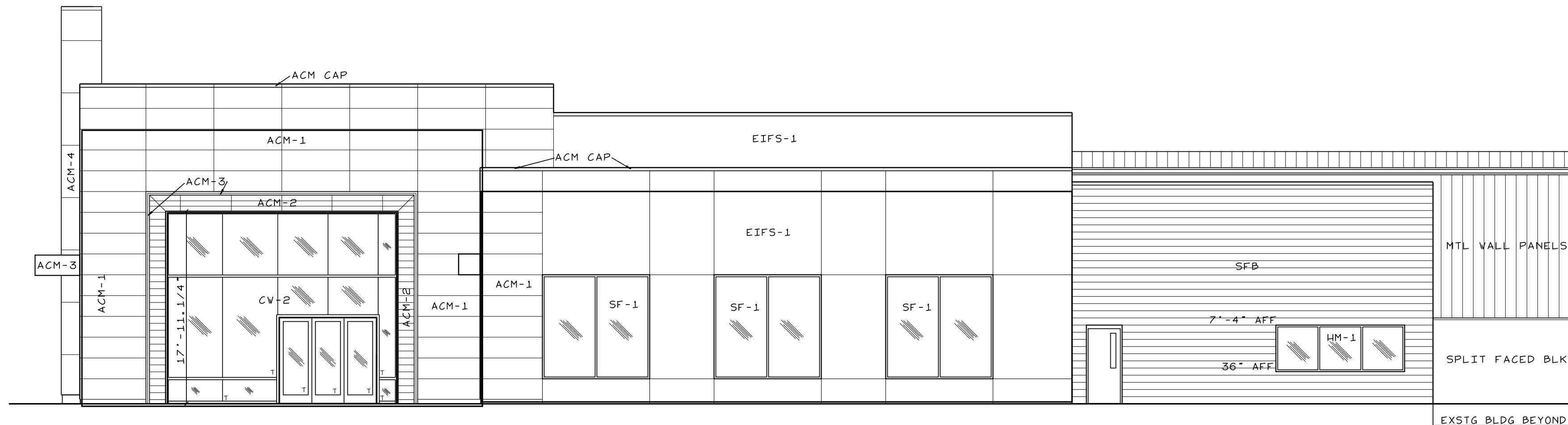
PROJECT NO: 21004  
 DRAWN BY: JL  
 DATE: 11-19-2021

FLOOR PLAN

G-3



**FRONT ELEVATION**  
SCALE: 1/8"=1'-0"



**RIGHT SIDE ELEVATION**  
SCALE: 1/8"=1'-0"

**EXTERIOR FINISH SCHEDULE**

CV-1: CLEAR I.G. <SOLARBAN 70C2> + CLEAR> W/ CLEAR ANOD ALUM FRAME  
 CV-2: I.G. <SOLARBAN SOLARCOOLC2>SOLARGRAY + SOLARBAN70C3>> W/ CLEAR ANOD ALUM FRAME  
 CV-3: INSUL GLASS W/ CLEAR ANODIZED ALUM FRAME  
 SF-1: INSUL GLASS <SOLARBAN 70C2> SOLARGRAY + CLEAR> W/ CLEAR ANOD ALUM FRAME

ALL EXTERIOR STOREFRONT/CURTAINWALL TO HAVE THERMALLY BROKEN FRAMES W/ HIGH PERFORMANCE SILL FLSHG W/ END DAMS MANUFACTURERS ENGINEERING TO BE PROVIDED SET THRESHOLDS IN CONT BED OF CAULKING ALL CAULKING TO BE 100% SILICON

ACM-1: ALPOLIC - ANTHRACITE GREY - 4MM MICA PRESSURE EQUALIZED RAIN SCREEN <DRY JT>  
 ACM-2: ALPOLIC - HARVEST TRAIL BAMBOO - 4MM OCP PRESSURE EQUALIZED RAIN SCREEN <DRY JT>  
 ACM-3: ALPOLIC - HIGH POLISHED ALUM - DM HPA - 3MM  
 ACM-4: ALPOLIC - SILVER METALLIC - MTL BSX SILVER  
 EIFS-1: MATCH SV 6991 BLACK MAGIC - FLAT  
 EIFS-2: MATCH BM 1612 PELICAN GRAY  
 SFB: APPLY BLOCKFILLER & PAINT SV 7069 CITYSCAPE - FLAT  
 D-10: DOOR: P-6 SEMI GLOSS / FRM: P-5 - INTERIOR

ALL ACM & MP TO BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS PROVIDE ALL FLASHING, CAPS, BATTENS, ETC. TO PROVIDE A COMPLETE INSTALL

ALL ATTACHMENTS TO THE BLDG <SPEAKERS, CAMERAS, LIGHTS, ETC> TO MATCH ADJACENT WALL COLOR  
 ALL SIGNAGE TO BE FURNISHED & INSTALLED BY THE OWNER. ELEC. CONNECTIONS BY E.C.



**LEFT SIDE ELEVATION**  
SCALE: 1/8"=1'-0"

**APPROVED ACM FABRICATORS & INSTALLERS**



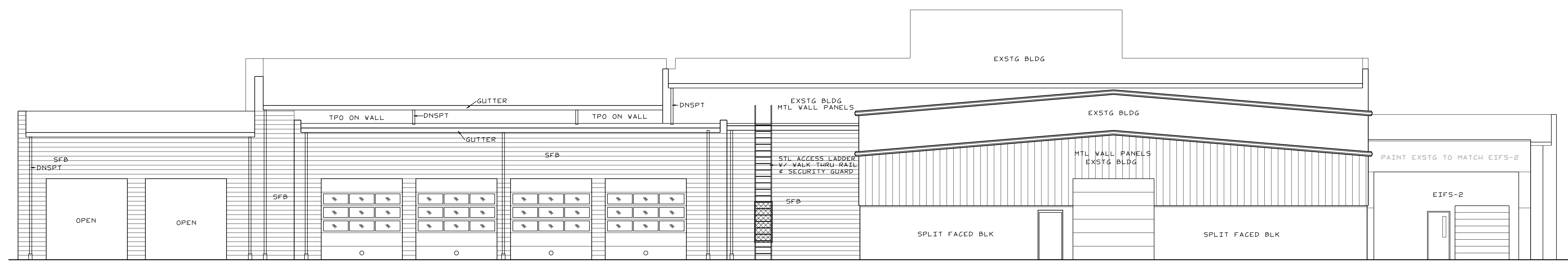
**AGI**  
Jeff Christensen  
M 865.306.4632  
O 800.877.7868 ext.3215  
jchristensen@agi.net



**METAL DESIGN SYSTEMS**  
Dan Gogel  
Ph: 319-297-6637  
Cell: 319-432-3610  
Dan.Gogel@crmdsi.com



**principle**  
GLOBAL BRAND IMPLEMENTATION  
Lisa Serpas  
DD +1 865 474 7291  
C +1 865 773 5376  
lisa.serpas@principleglobal.com



**REAR ELEVATION**  
SCALE: 1/8"=1'-0"

Smith Engineering and Design, P.A.  
 1103 Gracie Place - Suite A  
 Charlotte, NC 27534  
 Phone: 919.736.2141  
 Fax: 919.736.2142  
 Corporate license # C-2241

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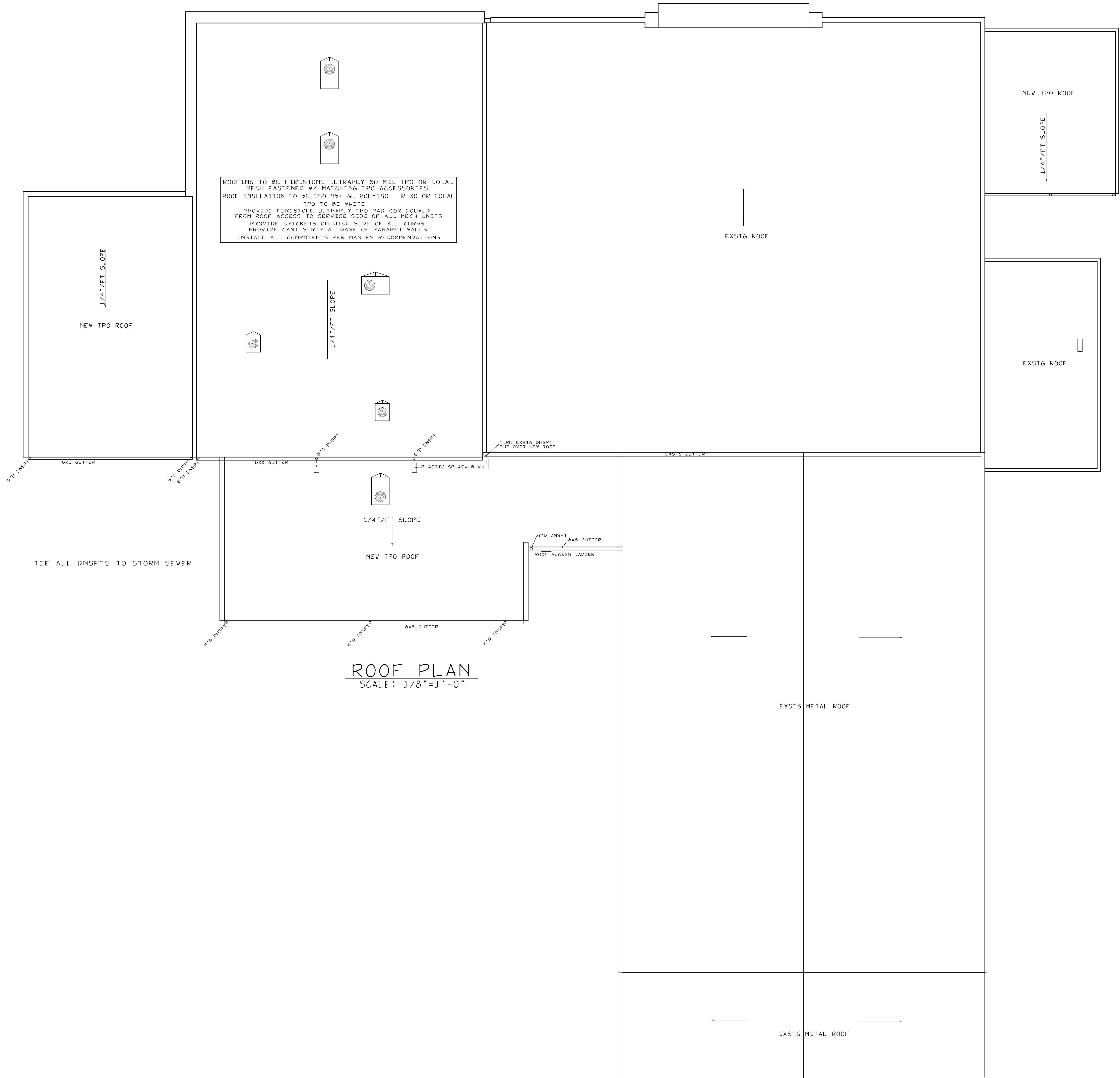
REVISIONS

JOHN HIESTER  
 CDR+J  
 LILLINGTON, N.C.  
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PROJECT NO: 21004  
 DRAWN BY: JL  
 DATE: 11-19-2021

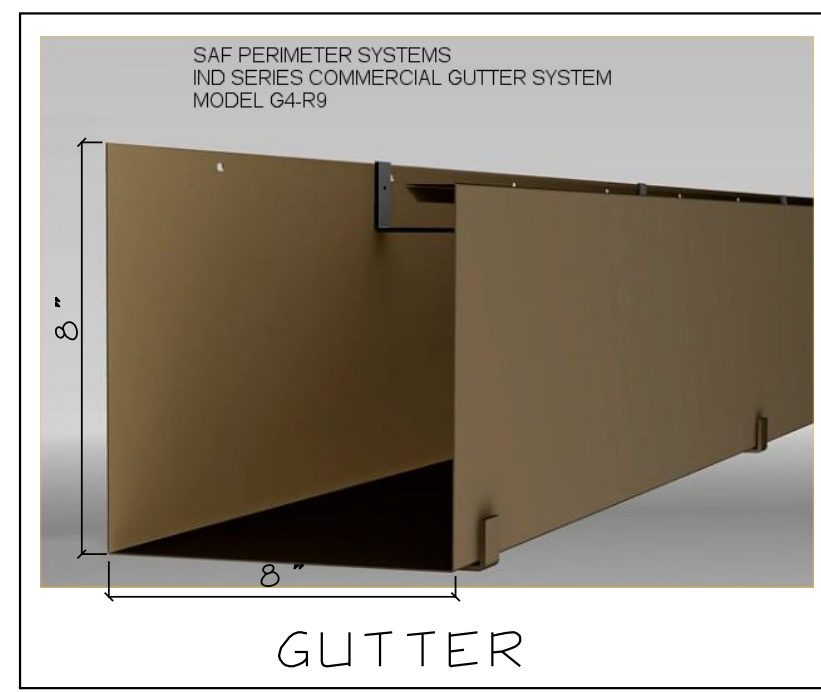
EXTERIOR ELEVATIONS

G-4

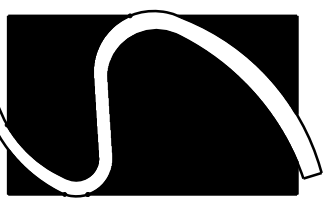


ROOFING TO BE FIRESTONE ULTRAPLY 60 MIL TPO OR EQUAL  
 MECH FASTENED W/ MATCHING TPO ACCESSORIES  
 ROOF INSULATION TO BE ISO 95+ GL POLYISO - R-30 OR EQUAL  
 TPO TO BE WHITE  
 PROVIDE FIRESTONE ULTRAPLY TPO PAD COR EQUAL  
 FROM ROOF ACCESS TO SERVICE SIDE OF ALL MECH UNITS  
 PROVIDE CRICKETS ON HIGH SIDE OF ALL CURBS  
 PROVIDE GANT STRIP AT BASE OF PARAPET WALLS  
 INSTALL ALL COMPONENTS PER MANUFS RECOMMENDATIONS

TIE ALL DNSPTS TO STORM SEWER



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



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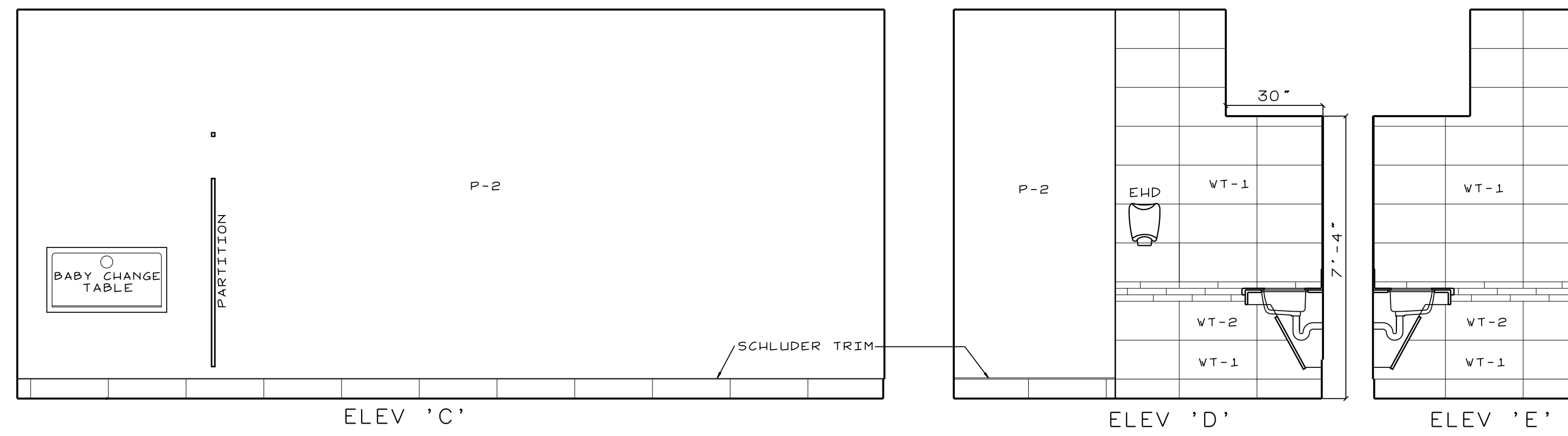
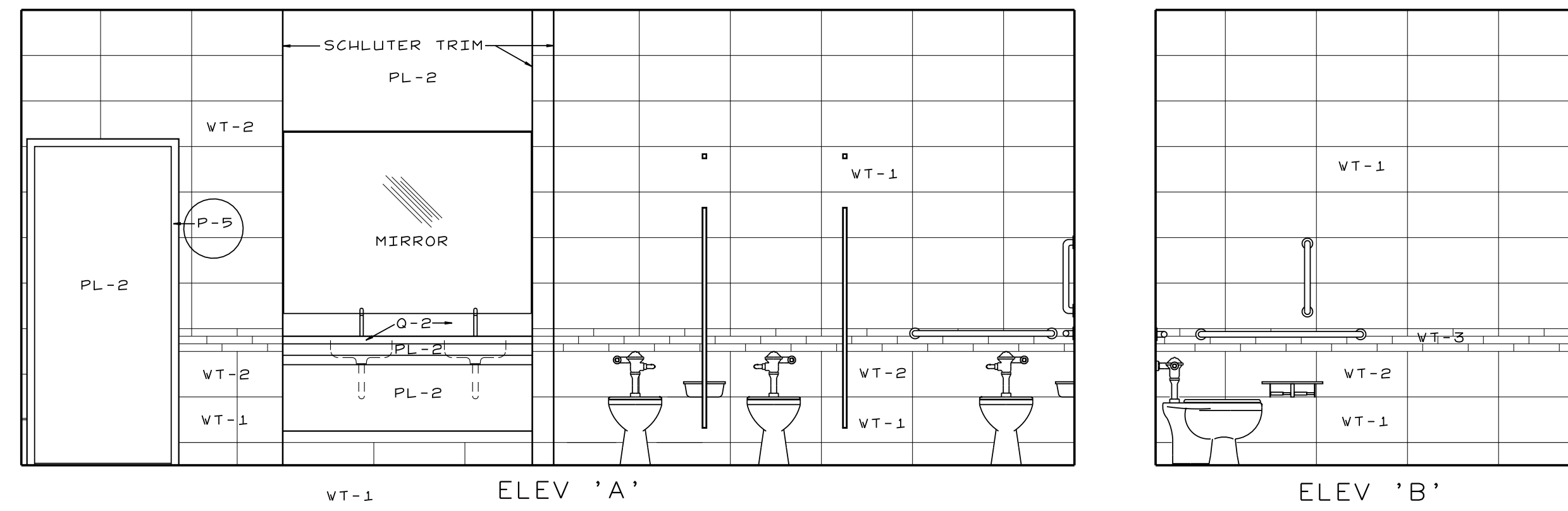
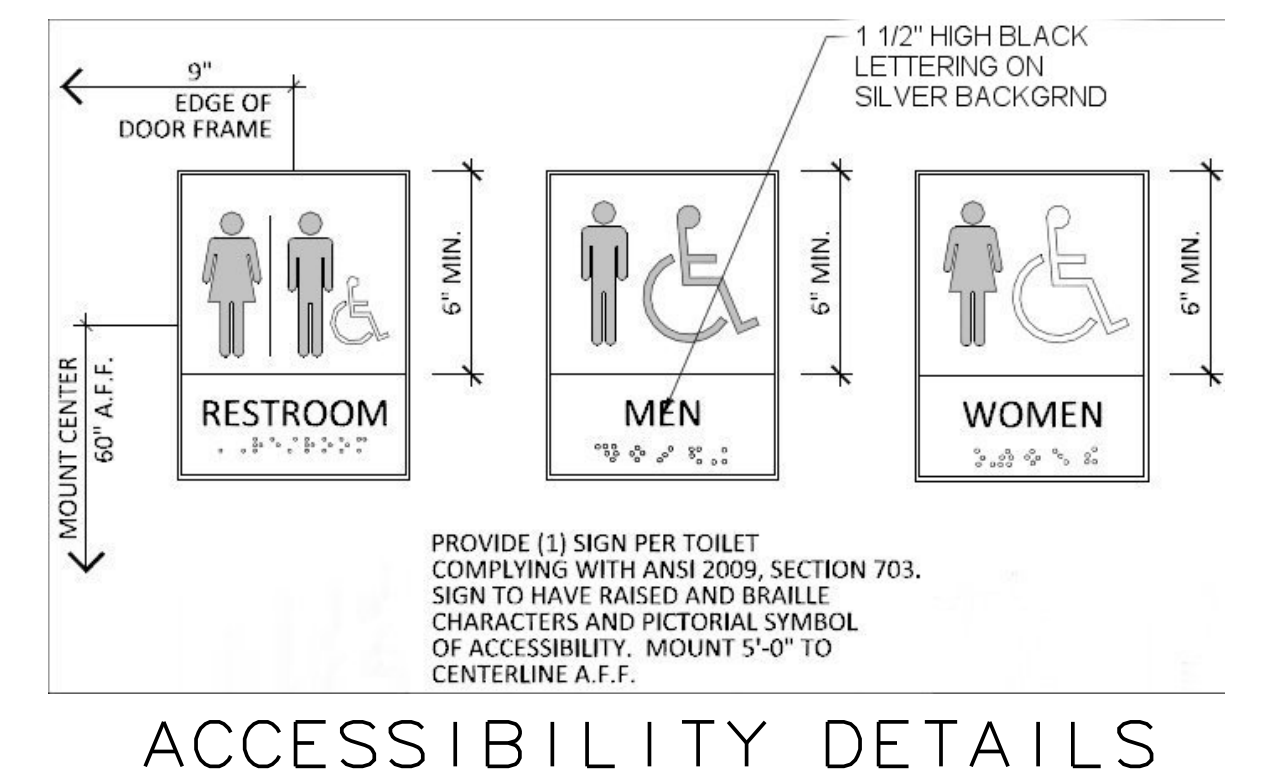
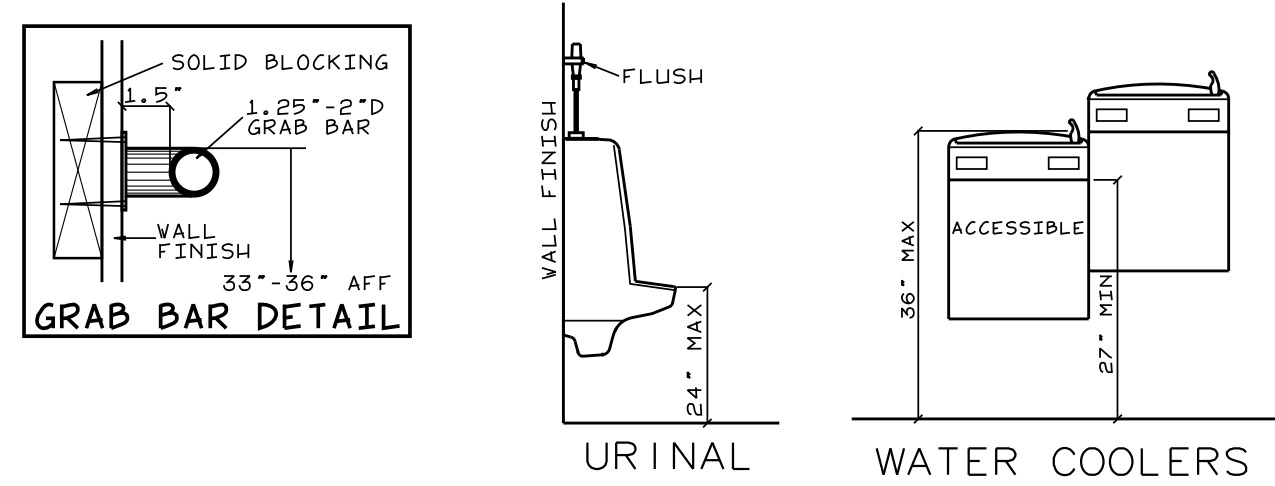
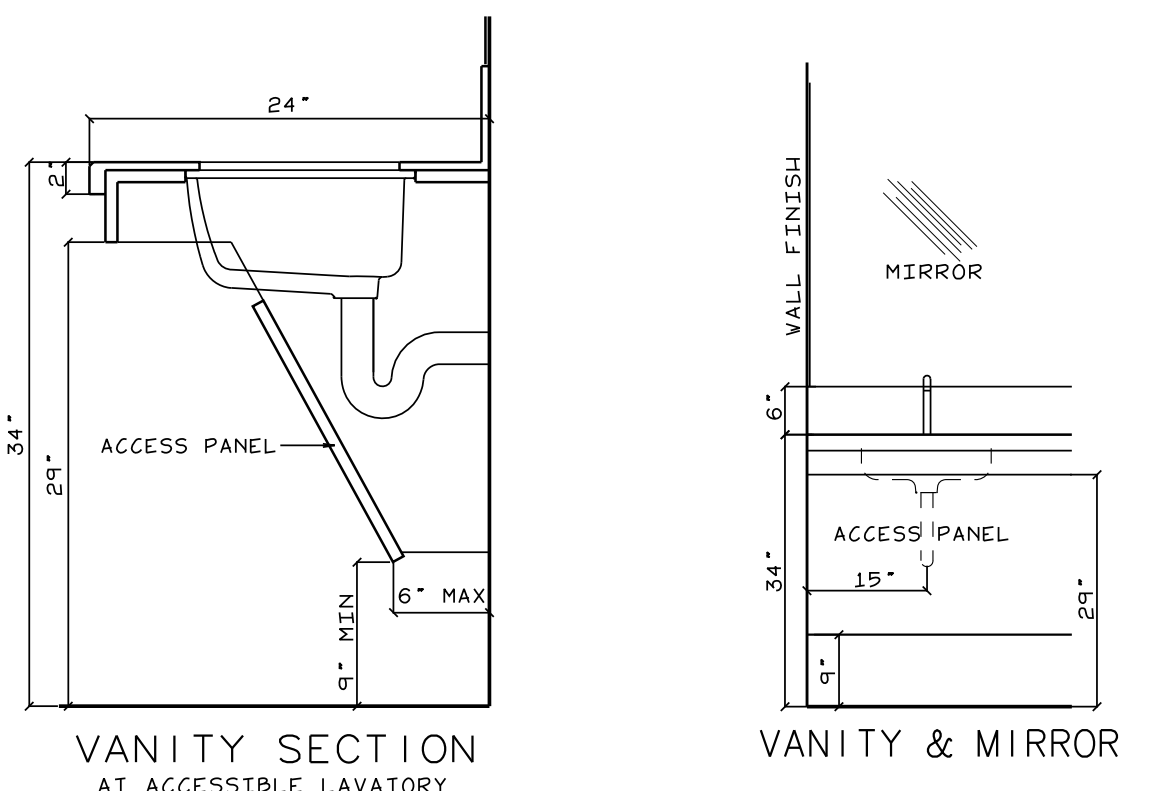
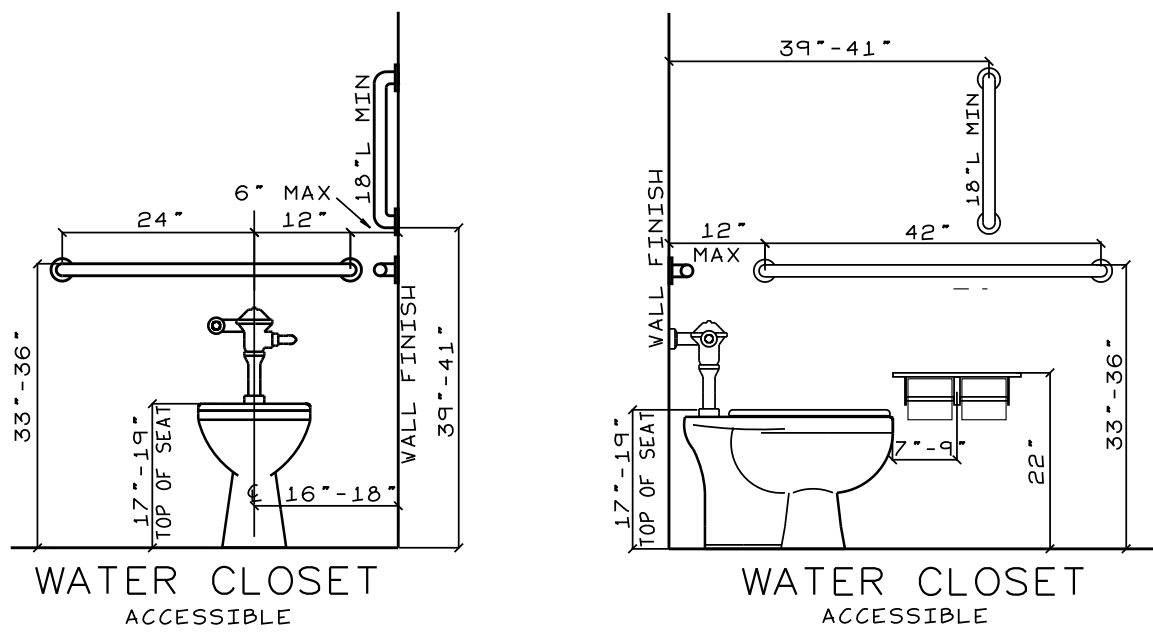
REVISIONS

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 CDR+J  
 LILLINGTON, N.C.  
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PROJECT NO: 21004  
 DRAWN BY: JL  
 DATE: 11-15-2021

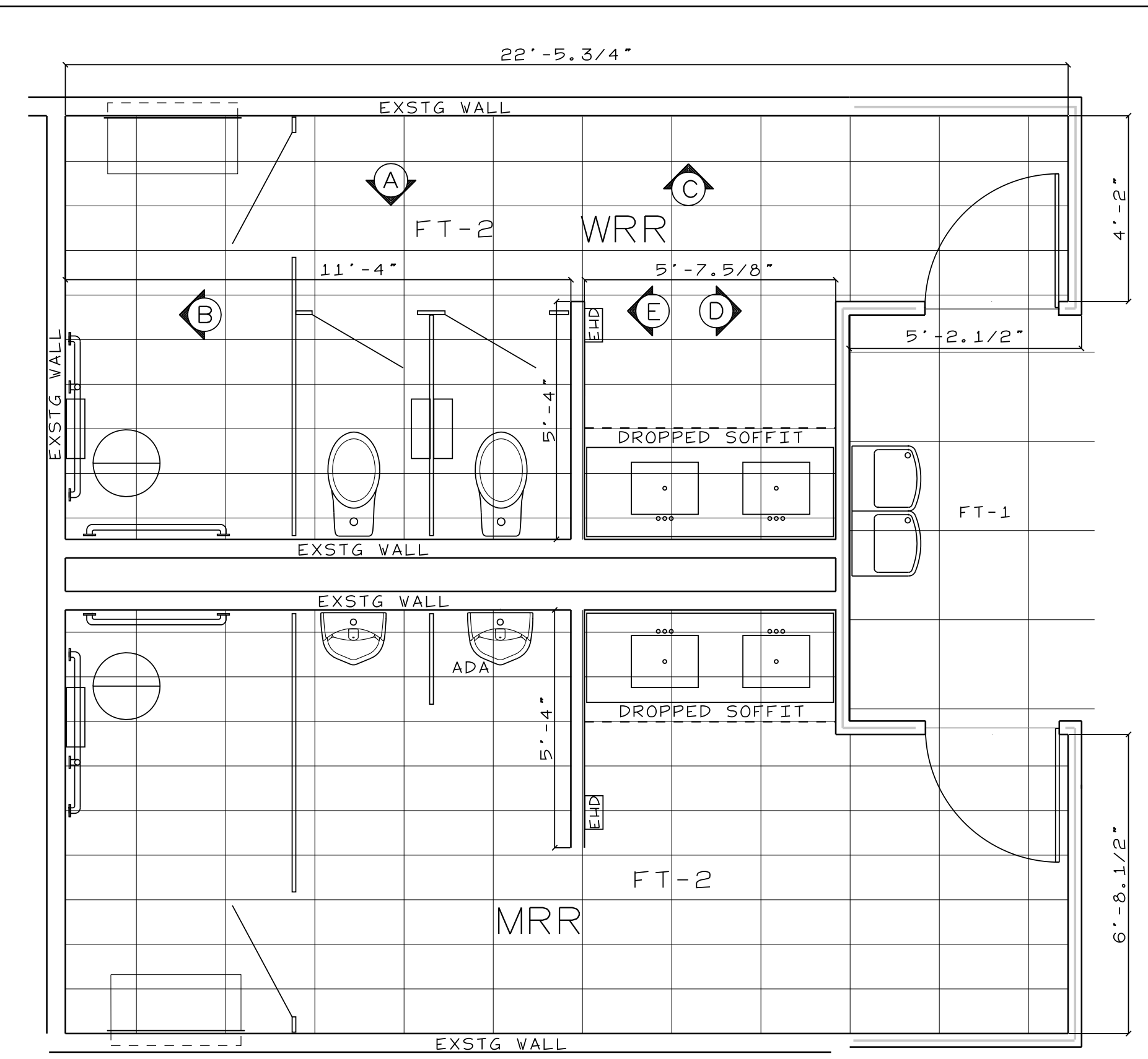
ROOF PLAN

G-5



- PUBLIC RESTROOM FINISHES**
- VT-1: ALFALUX - PEBBLE GREY, NATURAL FINISH - 12"x24" - STACKED GROUT: BOSTIK - TRUCOLOR - MISTY GRAY H144 - 3/16" JTS
  - VT-2: ALFALUX - PEBBLE GRAY, NATURAL FINISH - 12"x24" - STACKED GROUT: BOSTIK - TRUCOLOR - SHADOW H195 - 3/16" JTS
  - VT-3: ALFALUX - SILVER FROST - 2"x12" - 1/8" OFFSET GROUT: BOSTIK - TRUCOLOR - MISTY GRAY H144 - 3/16" JTS
  - P-2: BENJAMIN MOORE - SMOKE EMBERS 1466 - EGGSHELL
  - P-5: BENJAMIN MOORE - KENDALL CHARCOAL HC-165 - SEMI-GLOSS
  - O-2: WILSONART - QUARTZ - WILSONART - OBERLIN
  - PL-2: WILSONART - 335 (VERT GRAIN) 350 (HORZ GRAIN) - WILD CHERRY 7054-60

PUBLIC RESTROOMS



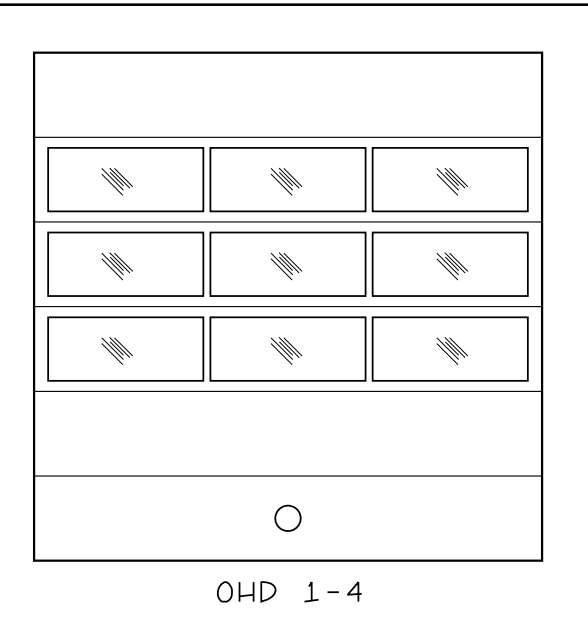
REMOVE EXSTG FIXTURES, VANITY, MIRROR & PARTITIONS  
REMOVE EXSTG TILE, CEILING & LGT FIXTURES

- RESTROOM ACCESSORIES**
- TOILET PARTITIONS: BRADLEY SENTINEL SERIES 400 STAINLESS STEEL - BRUSHED
  - ELECTRIC HAND DRYER: WORLD DRYER #L-162 SLMR1
  - TOILET PAPER HOLDER: BOBRICK B-2840
  - GRAB BARS - WATER CLOS: BOBRICK B-6806
  - BABY CHANGE TABLE: BOBRICK - KOALA K8110-SSRE
  - SOAP DISPENSER: BOBRICK B-822
  - SANITARY NAPKIN DISPOSAL: BOBRICK B-353
  - UTILITY HOOKS: BOBRICK B-212
  - INSTALL UTIL HOOKS ON ALL TOIL PARTITIONS & DOOR TO INDIVIDUAL RESTROOMS
  - ALL MIRRORS TO BE 1/4" FRAMELESS W/ POLISHED EDGES
  - EQUAL PRODUCTS BY OTHER MANUF ARE EXCEPTABLE
  - ALL COMPONENTS TO BE INSTALLED PER MANUF SPECS

**OVERHEAD DOOR SCHEDULE**

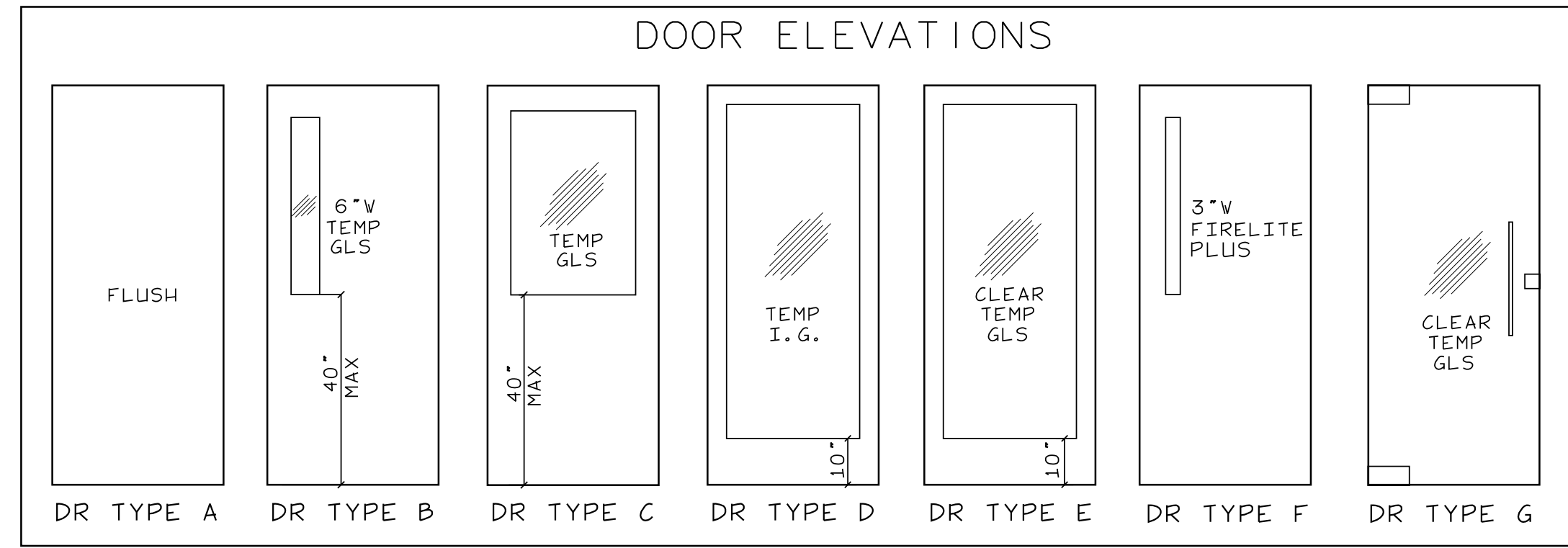
OHD-1	12'x12' OHD	CLOPLAY 3708 W/ 42'x16" WINDOWS W/ 3/4" TINTED TEMP IG
OHD-2	12'x12' OHD	CLOPLAY 3708 W/ 42'x16" WINDOWS W/ 3/4" TINTED TEMP IG
OHD-3	12'x12' OHD	CLOPLAY 3708 W/ 42'x16" WINDOWS W/ 3/4" TINTED TEMP IG
OHD-4	12'x12' OHD	CLOPLAY 3708 W/ 42'x16" WINDOWS W/ 3/4" TINTED TEMP IG
OHD-5	8'x10' OHD	CLOPLAY CESD10 - CHAIN HOIST
OHD-6	16'x12' OHD	CLOPLAY CERD10 - CHAIN HOIST - 3HR RATED
OHD-7	5'x7' OHD	CLOPLAY CESG10 - PUSH UP - ALUM

OHD-1-4 TO BE UPGRADED TO HEAVY CYCLE SPRINGS (100,000) - HEAVY DUTY 3" TRACKS  
PROVIDE 'LIFTMASTER' LOGIC 5.0 GH (1/2 HP 115/1P) ON OHDs 1-4 W/ 875301  
HOIST OPERATOR & FRICTION CLUTCH  
PROVIDE OPTICAL EDGE SENSORS ON ALL OHDs - OHDs 1-4 TO HAVE ELECTRIC SAFETY EDGE  
PROVIDE HEADER & JAMB SEALS  
PROVIDE EXHAUST PORTS FOR OHDs 1-4  
OHDs 1-7 COLOR TO BE RAL 7004  
SET OVERHEAD TRACKS AS HIGH AS POSSIBLE - COORDINATE W/ OTHER TRADES



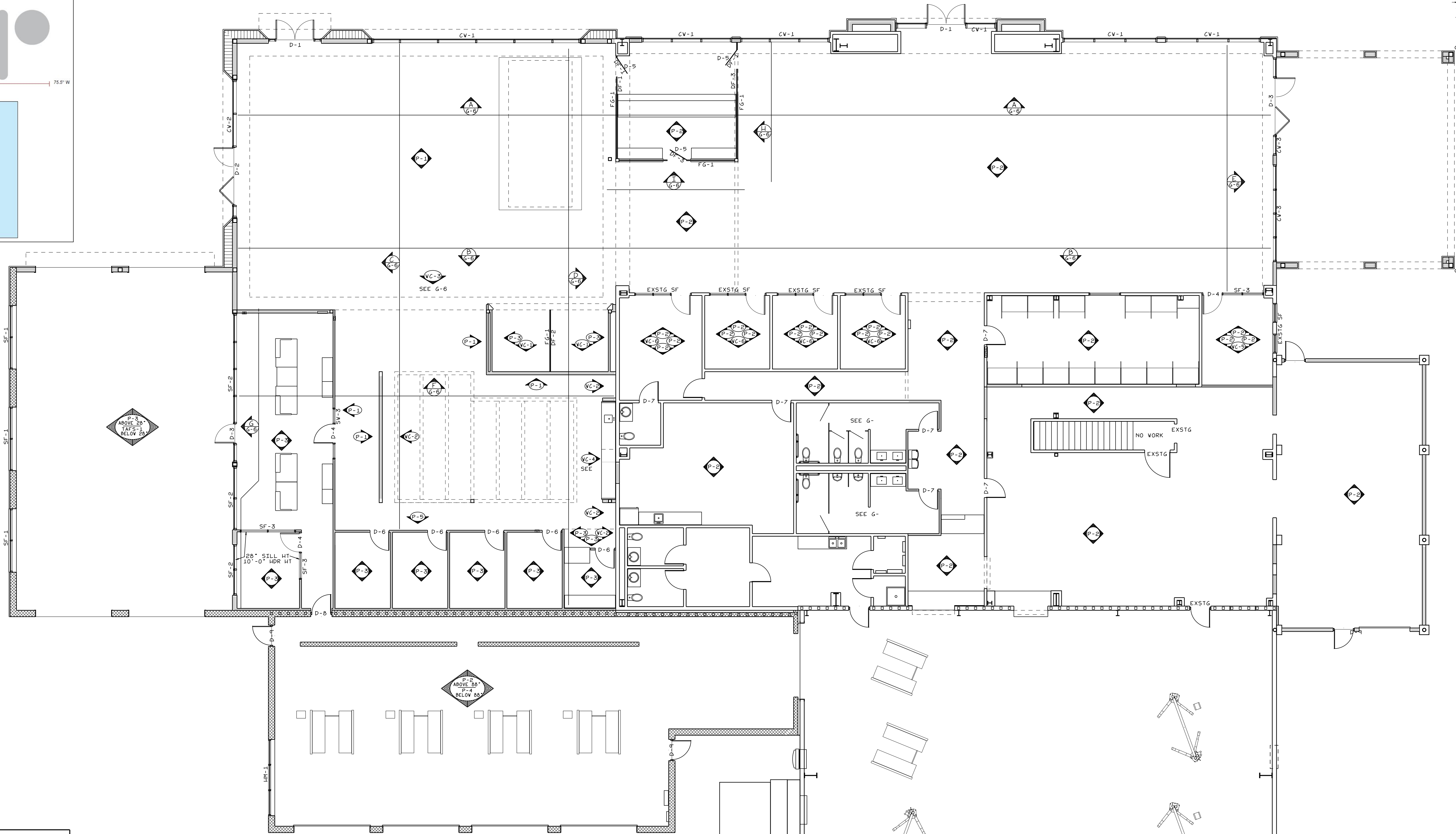
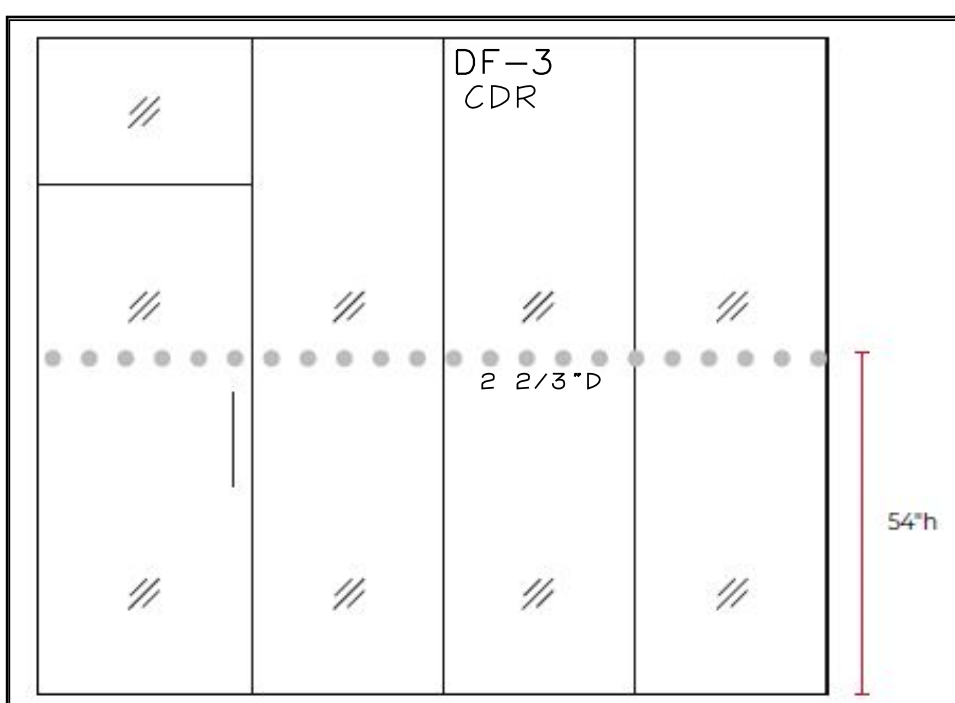
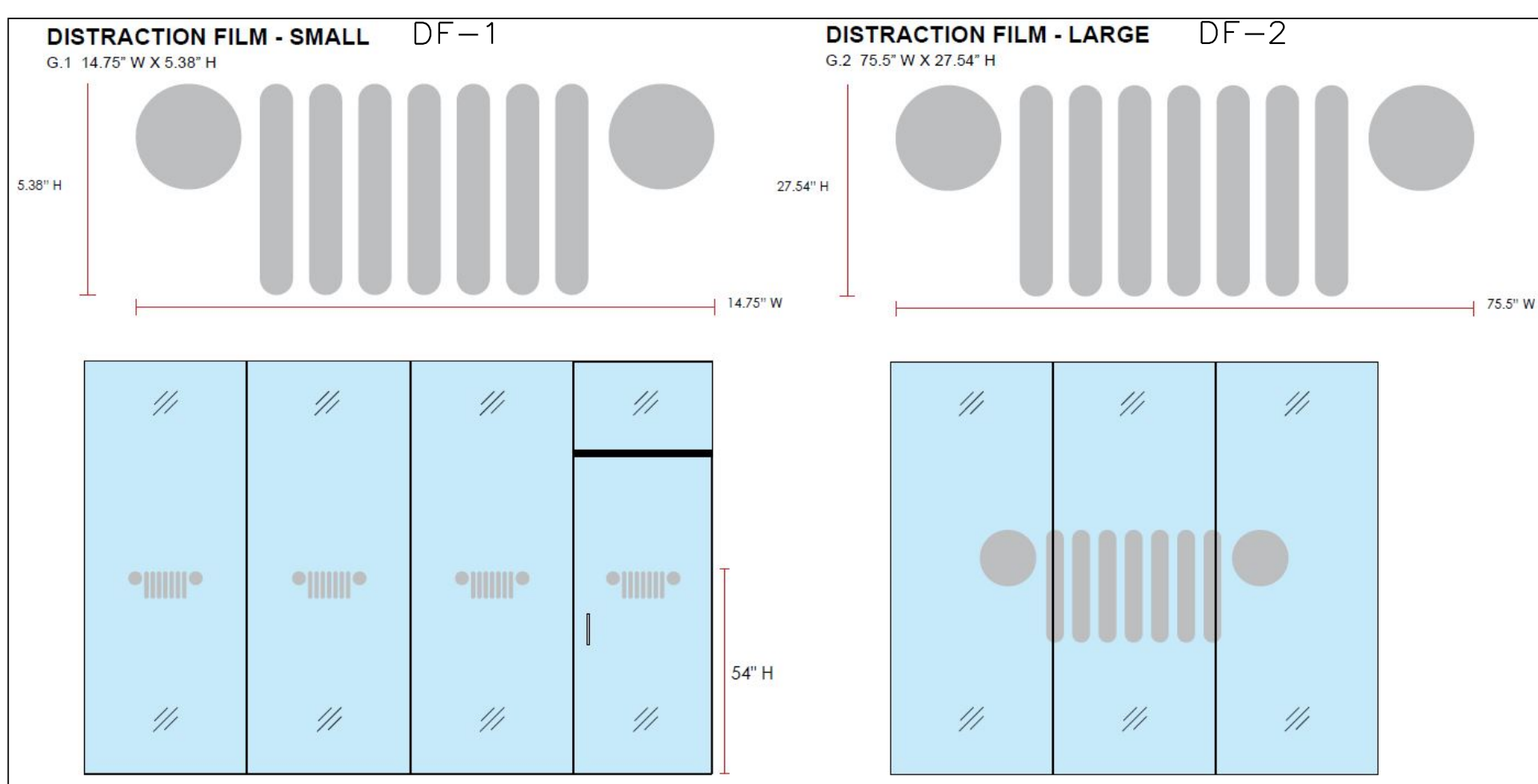
- DOOR FINISH**
- D-1: INSUL GLASS (SOLARBAN 70C2) - CLEAR W/ CLEAR ANOD ALUM FRAME - NARROW STYLE
  - D-2: INSUL GLASS (SOLARBAN SOLARCOOL2) SOLARGRAY + SOLARBAN70C3) W/ CLEAR ANOD ALUM FRAME - NARROW STYLE
  - D-3: CLEAR INSUL GLASS W/ CLEAR ANODIZED ALUM FRAME - NARROW STYLE
  - D-4: CLEAR GLASS W/ CLEAR ANODIZED ALUM FRAME - NARROW STYLE
  - D-5: FRAMELESS GLASS W/ POLISHED CHROME TRIM & HRDVR
  - D-6: SG WOOD DOOR W/ WILSONART - ASIAN AMBER 11152K-18 - WM FRAME - PAINT P-5
  - D-7: SG WOOD DOOR W/ WILSONART - WILD CHERRY 7054-60 335 (VERT GRADE) / 350 (HORZ GRADE) - WM FRAME - PAINT P-6
  - D-8: MTL DR - PAINT P-5 / MTL FRM - PAINT P-5 SHWRM SIDE MTL FRM - PAINT P-8 - SHOP SIDE
  - D-9: MTL DR - PAINT P-8 / MTL FRM - PAINT P-8 BOTH SIDES
  - D-10: MTL DR - PAINT TO MATCH EXSTG CMU WALLS
- SEE INTERIOR FINISH SCHEDULE FOR PAINT COLORS

- DOOR NOTES**
- 30X70 = 3'-0" X 7'-0"
  - ALL WOOD DOORS TO BE SOLID CORE
  - ALL HARDWARE TO MEET ADA, ANSI & NC ACCESSIBILITY CODE
  - PROVIDE BALL BEARING HINGES ON ALL DOORS W/ CLOSERS
  - PROVIDE STOPS ON ALL DOORS WHERE APPLICABLE
  - PROVIDE SILENCERS ON ALL DOORS WHERE APPLICABLE
  - PROVIDE THRESHOLDS & WEATHERSTRIPPING ON ALL EXT DOORS
  - SET ALL THRESHOLDS IN CONTINUOUS CAULK - SEAL SIDES TO JAMB SEAL JAMB TO SLAB
  - HARDWARE TO HAVE SATIN ALUM FINISH
  - HARDWARE TO COMMERCIAL GRADE 1 UNLESS NOTED OTHERWISE
  - STOREFRONT DOORS TO HAVE 1" RND PUSH/PULLS
  - ALL DEADBOLTS ON EXT DOORS TO BE KEYPED BOTH SIDES
  - ALL HEADERS TO BE 2" IN STUD WALLS
  - ALL HEADERS TO BE 4" IN CMU WALLS
  - ALL STOREFRONT DOORS TO BE NARROW STYLE
  - ALL EXTERIOR METAL DOORS TO BE INSULATED U.S. 36
  - ALL INT METAL DOORS TO BE 16GA W/ 16GA FRAMES
  - ALL EXT METAL DOORS TO BE 16GA W/ 16GA FRAMES
  - PROVIDE SWEEPS AND RAIN DIVERTERS ON ALL EXT METAL DOORS
  - COORDINATE KEYING W/ OWNER



**DOOR SCHEDULE**

NUMBER	FINISH	DOORS										FRAMES											NOTES		
		SIZE	THKNS	RATING	MTRL	TYPE	MTRL	RATING	1	2	3	4	5	6	7	8	9	10	11						
1	D-1	PR30X80	1 3/4"	---	AL	D	AL	---	2	3	4	6	8												
2	D-2	30+30+30X80	1 3/4"	---	AL	D	AL	---	2	3	4	6	8												
3	D-3	30X70	1 3/4"	---	AL	D	AL	---	2	3	4	6													
4	D-4	30X70	1 3/4"	---	AL	E	AL	---	2	3	5														
5	D-4	30X70	1 3/4"	---	AL	E	AL	---	1	2	3														
6	D-8	30X70	1 3/4"	3HR	M	F	M	3HR	1	3															FIRELITE PLUS GLS
7	D-9	30X70	1 3/4"	---	M	C	M	---	1	3															
8	D-9	30X70	1 3/4"	---	M	C	M	---	1	3															
9	D-6	30X70	1 3/4"	---	VD	B	M	---	1																
10	D-6	30X70	1 3/4"	---	VD	B	M	---	1																
11	D-6	30X70	1 3/4"	---	VD	B	M	---	1																
12	D-6	30X70	1 3/4"	---	VD	B	M	---	1																
13	D-6	30X70	1 3/4"	---	VD	B	M	---	1																
14	D-5	30X70	1/2"	---	GLS	G	FRMLS	---	1																
15	D-5	30X70	1/2"	---	GLS	G	FRMLS	---	1																
16	D-4	30X70	1/2"	---	GLS	G	FRMLS	---	1																
17	D-1	PR30X80	1 3/4"	---	AL	D	AL	---	2	4	6														
18	D-3	30+30+30X80	1 3/4"	---	AL	D	AL	---	2	4	6														
19	D-4	30X70	1 3/4"	---	AL	E	AL	---	2	3															
20	D-7	30X70	1 3/4"	---	VD	B	M	EXSTG	1	3															
21	D-7	30X70	1 3/4"	---	VD	B	M	---	1																
22	D-7	30X70	1 3/4"	---	VD	A	M	---	1	3	5														34" WX12"H PUSH SIDE
23	D-7	30X70	1 3/4"	---	VD	A	M	---	1	3	5														34" WX12"H PUSH SIDE
24	D-7	30X70	1 3/4"	---	VD	A	M	EXSTG	1	3															
25	D-9	30X70	1 3/4"	---	M	B	M	---	1	3															
26	D-9	30X70	1 3/4"	---	M	B	M	---	1	3															
27		30X70	1 3/4"	3HR	M	B	M	3HR	1	3															



**INTERIOR WALL FINISH PLAN**  
SCALE: 1/8"=1'-0"

**INTERIOR WALL FINISH**

**WALL PAINT**  
P-1: SHERVIN WILLIAMS - IRON ORE SV-7069 - EGGSHELL  
P-2: BENJAMIN MOORE - SMOKE EMBERS 1466 - EGGSHELL  
P-3: SHERVIN WILLIAMS - EXTRA WHITE SV-7006 - EGGSHELL  
P-4: SHERVIN WILLIAMS - GRAY MATTERS SV-7666 - EGGSHELL

**DOOR & FRAME PAINT**  
P-5: SHERVIN WILLIAMS - IRON ORE SV-7069 - SEMI-GLOSS  
P-6: BENJAMIN MOORE - ROCK GRAY 1615 - SEMI-GLOSS  
P-7: BENJAMIN MOORE - KENDALL CHARCOAL HC-165 - SEMI-GLOSS  
P-8: SHERVIN WILLIAMS - CITYSCAPE SV-7069 - SEMI-GLOSS

**WALLCOVERING**  
VC-1: IDEAL IMAGE, IMBRANDED OR SUPER COLOR DIGITAL - CUSTOM DESIGN  
VC-2: SHAW PPC DESIGN - JEEP SCRIPT  
VC-3: 3M - JEEP TIMELINE GRAPHIC  
VC-4: IDEAL IMAGE, IMBRANDED OR SUPER COLOR DIGITAL - CUSTOM DESIGN  
VC-5: 3M - DESIGNTEX CUSTOM DINO BAMBOO - #V1175-001  
VC-6: D.L. COUCH - ABSOLUTE - NOBLE GREY - SKU: T2-AL-10

**DISTRACTION FILM ON GLASS**  
DF-X: IMBRANDED / IDEAL IMAGE / SUPERCOLOR DIGITAL - SEE DETAIL THIS SHEET

**WALL TILE**  
VT-1: ALFALUX - PEBBLE CREME, NATURAL FINISH - 12"x24" - STACKED GROUT: BOSTIK - TRUCOLOR - MISTY GRAY H144 - 3/16" JTS  
VT-2: ALFALUX - PEBBLE GRAY, NATURAL FINISH - 12"x24" - STACKED GROUT: BOSTIK - TRUCOLOR - SHADOW H195 - 3/16" JTS  
VT-3: ALFALUX - SILVER FROST - 2"x12" - 1/3 OFFSET GROUT: BOSTIK - TRUCOLOR - MISTY GRAY H144 - 3/16" JTS

**TEXTURED ACRYLIC FINISH SYSTEM**  
TAFS-1 - DRYVIT OPTION 2 - SAND FINISH - MATCH P-4

**PLASTIC LAMINATES**  
PL-1: WILSONART - 335 CVERT GRAIN 350 CHORZ GRAIN) ASIAN AMBER 11192K-10  
PL-2: WILSONART - 335 CVERT GRAIN 350 CHORZ GRAIN) WILD CHERRY 7054-60  
PL-3: WILSONART - 335 CVERT GRAIN 350 CHORZ GRAIN) GRAPHITE NEBULA 4623-60  
PL-4: PANOLAM - NEVAMAR - WROUGHT IRON S6054T

**NOTES**  
GVB FINISH TO BE LEVEL 5 FINISH IN SHOWROOM & CUSTOMER LOUNGE & WALLS V/ WALL COVERINGS - LEVEL 4 OTHERWISE  
PROVIDE CONTROL JTS AT MAX 30" OC IN GVB WALLS - LOCATE AT DOORS & WINDOWS WHERE POSSIBLE. CONTROL JTS TO BE PLASTIC.  
ALL GVB TO RECEIVE DRYWALL PRIMER & 2 COATS PAINT  
INT WALL PAINT & PRIMER BE BM ULTRA SPEC 900 OR SV PROMAR 200 ZERO VOC LATEX  
ALL PAINTED DOORS TO RECEIVE 1 COAT PRIMER & 2 COATS PAINT  
ALL METAL DOORS TO RECEIVE 2 COATS PAINT  
ALL HM DOOR JAMBS TO RECEIVE 2 COATS PAINT  
ALL EXPOSED CONCRETE BLOCK TO RECEIVE 1 COAT SHERVIN WILLIAMS LOXON BLOCK & MASONRY PRIMER & 2 COATS PAINT

**DOOR FINISH**  
D-1: INSUL GLASS (SOLARBAN 70C2) + CLEAR) V/ CLEAR ANOD ALUM FRAME - NARROW STYLE  
D-2: INSUL GLASS (SOLARBAN SOLARCOOL2) SOLARGRAY + SOLARBAN70C3) V/ CLEAR ANOD ALUM FRAME - NARROW STYLE  
D-3: CLEAR INSUL GLASS V/ CLEAR ANODIZED ALUM FRAME - NARROW STYLE  
D-4: CLEAR GLASS V/ CLEAR ANODIZED ALUM FRAME - NARROW STYLE  
D-5: FRAMELESS GLASS V/ POLISHED CHROME TRIM & HRDVR  
D-6: SG WOOD DOOR W/ WILSONART - ASIAN AMBER 11192K-10 - 335 CVERT GRADE) / 350 CHORZ GRADE) - HM FRAME - PAINT P-5  
D-7: SG WOOD DOOR W/ WILSONART - WILD CHERRY 7054-60 335 CVERT GRADE) / 350 CHORZ GRADE) - HM FRAME - PAINT P-6  
D-8: MTL DR - PAINT P-5 / MTL FRM - PAINT P-5 SHWRM SIDE MTL FRM - PAINT P-8 - SHOP SIDE  
D-9: MTL DR - PAINT P-8 / MTL FRM - PAINT P-8 BOTH SIDES  
SEE INTERIOR FINISH SCHEDULE FOR PAINT COLORS

**GLASS & FRAMES**  
CV-1: INSUL GLASS (SOLARBAN 70C2) + CLEAR) V/ CLEAR ANOD ALUM FRAME  
CV-2: INSUL GLASS (SOLARBAN SOLARCOOL2) SOLARGRAY + SOLARBAN70C3) V/ CLEAR ANOD ALUM FRAME - 7 1/2"D  
CV-3: CLEAR INSUL GLASS V/ CLEAR ANODIZED ALUM FRAME - 6"D  
SF-1: INSUL GLASS (SOLARBAN SOLARCOOL2) SOLARGRAY + SOLARBAN70C3) V/ CLEAR ANOD ALUM FRAME  
SF-2: INSUL CLEAR GLASS V/ CLEAR ANODIZED ALUM FRAME  
SF-3: CLEAR GLASS V/ CLEAR ANODIZED ALUM FRAME  
FG-1: 1/2" CLEAR GLASS FRAMELESS V/ ANOD ALUM CHANNELS  
HM-1: INSUL GLASS (SOLARBAN 70C2) + CLEAR) V/ HM FRAME PAINT FRAME P-8 - INT & EXT

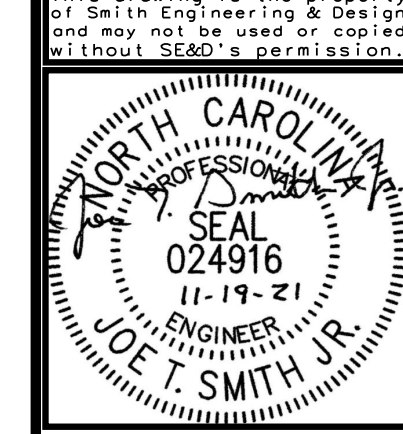
**WALLCOVERING VENDORS**  
IDEAL IMAGE: AARON PAUGH - 937-832-1660 X 2106 aaron.paugh@idealimageinc.com  
IMBRANDED: KRISTIE SHEPARD - 248.537.8557 kshepard@imbranded.com  
SUPERCOLOR DIGITAL: CURTIS SLATER - 414-277-6312 curtiss@supercolor.com  
3M: TANYA ROMANELLI - 819-444-8797 t.romanelli@designtex.com  
SHAW: ROB MURAVSKI - 248-348-7755 X 319 rmurawski@showppcdesign.com  
D.L. COUCH: BRANDT WEISS - 800-433-0790 X 1109 bweiss@dlcouch.com

**TILE VENDORS**  
ALFALUX: DWYER - CHAD ROBAR - 248-476-4944 chad.robar@dwyermarble.com

**DISTRACTION FILM VENDORS**  
IMBRANDED: KRISTIE SHEPARD - 248.537.8557 kshepard@imbranded.com  
IDEAL IMAGE: AARON PAUGH - 937-832-1660 X 2106 aaron.paugh@idealimageinc.com  
SUPERCOLOR DIGITAL: CURTIS SLATER - 414-277-6312 curtiss@supercolor.com

Color and material swatches for the project, including paint colors (Smoke Embers, Rock Gray, Kendall Charcoal) and wallcovering options (P-1 through P-8).

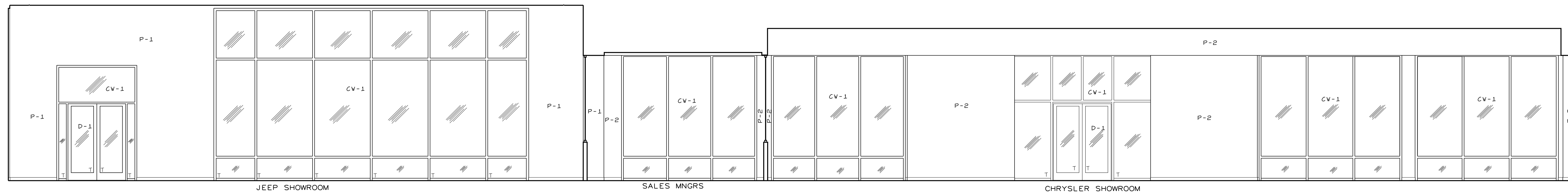
**Smith Engineering and Design, P.A.**  
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Fax: 919-736-2142  
Corporate License # C-2241



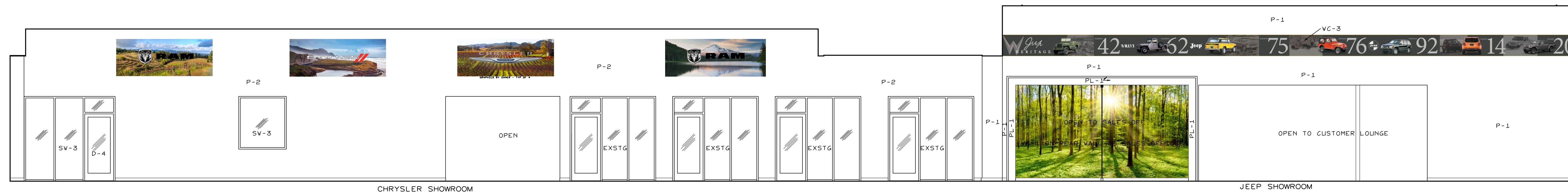
REVISIONS

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LILLINGTON, N.C.

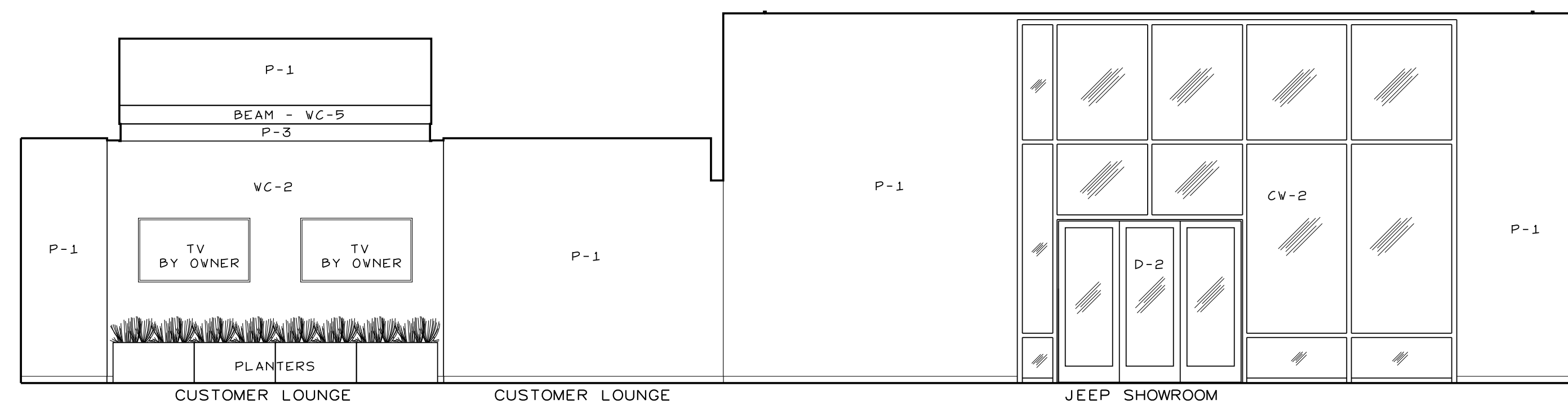
PROJECT NO: 21004  
DRAWN BY: JL  
DATE: 11-19-2023



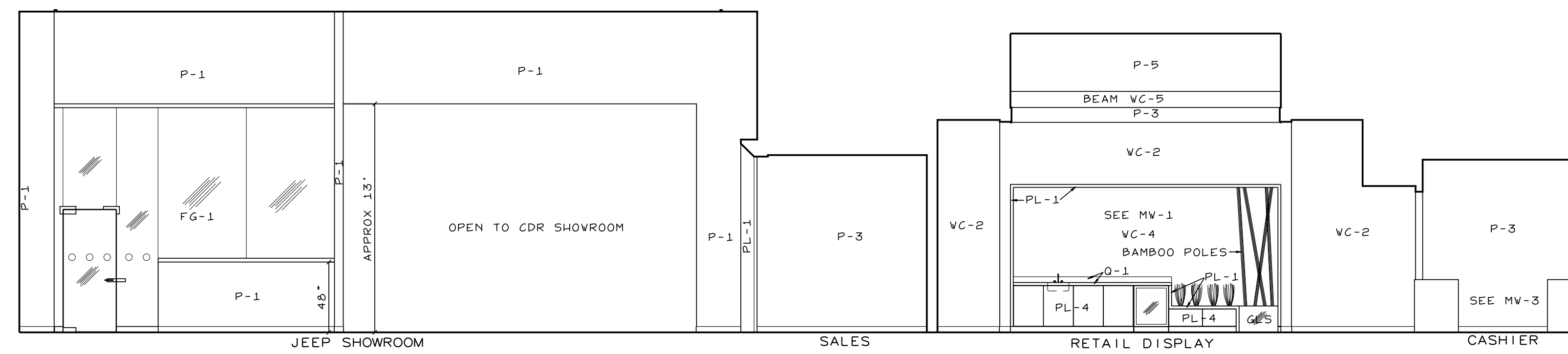
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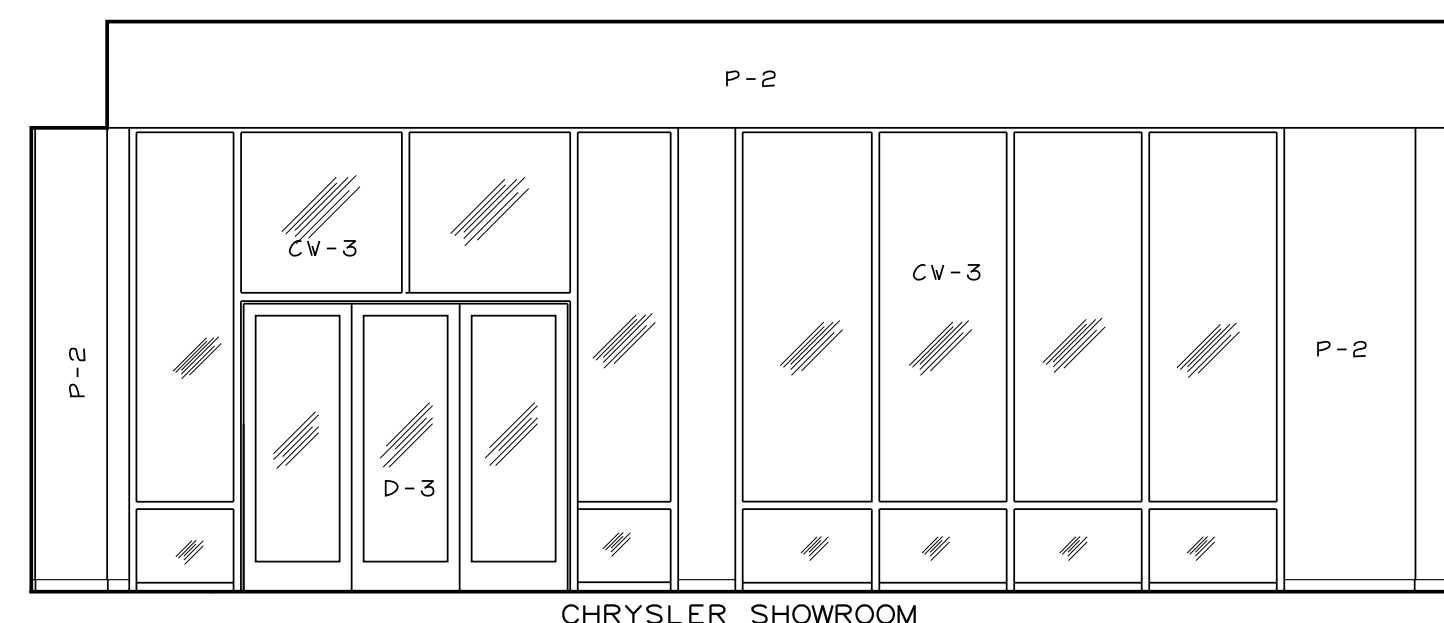
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SCALE: 3/16"=1'-0"



INTERIOR ELEVATION 'C'  
SCALE: 3/16"=1'-0"

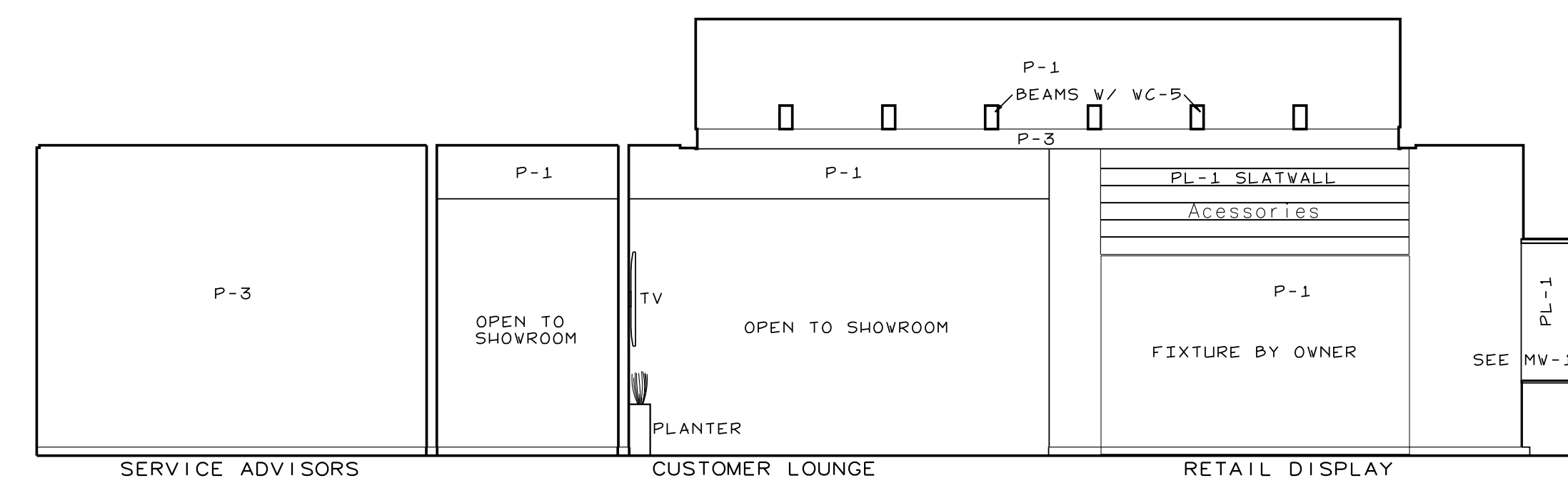


INTERIOR ELEVATION 'D'  
SCALE: 3/16"=1'-0"

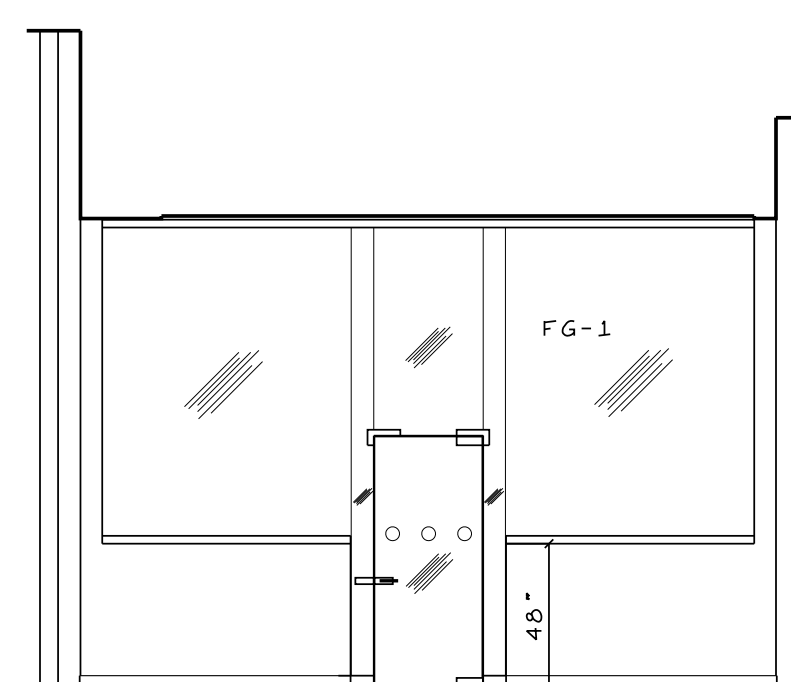


INTERIOR ELEVATION 'E'  
SCALE: 3/16"=1'-0"

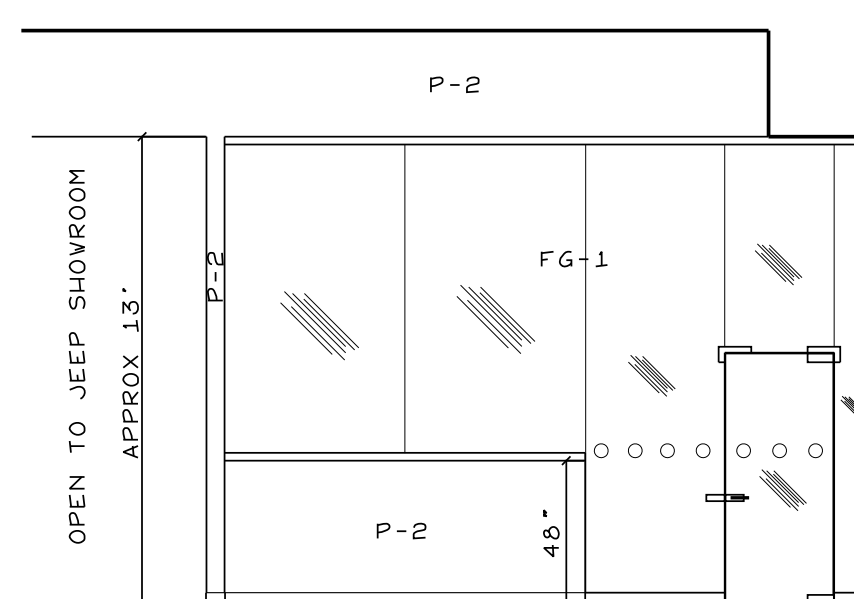
SEE G-5 FOR ELEVATION LOCATIONS  
& MATERIAL SCHEDULE



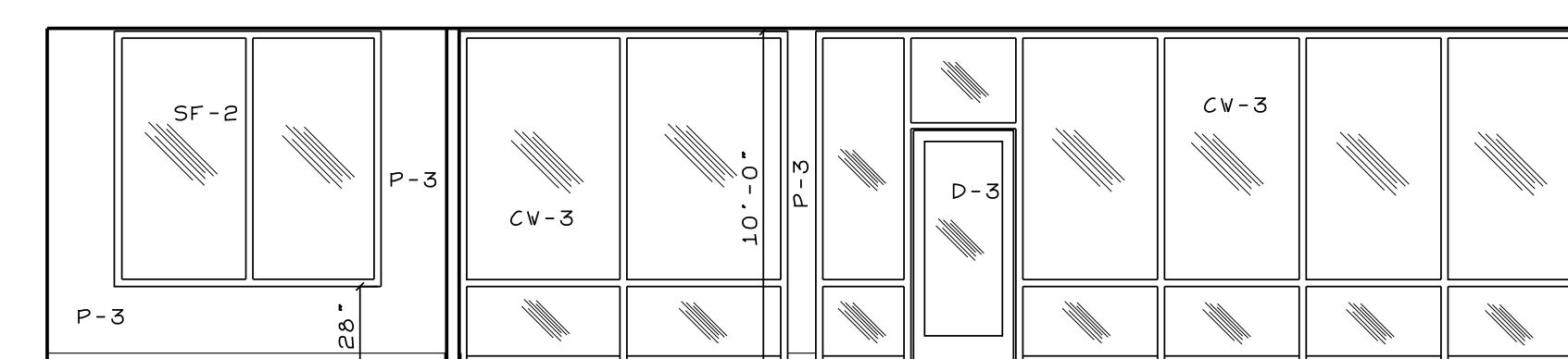
INTERIOR ELEVATION 'F'  
SCALE: 3/16"=1'-0"



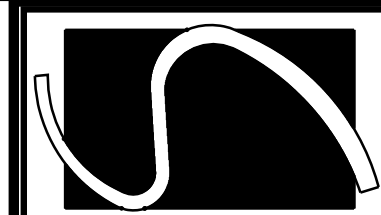
INTERIOR ELEVATION 'I'  
SCALE: 3/16"=1'-0"



INTERIOR ELEVATION 'H'  
SCALE: 3/16"=1'-0"

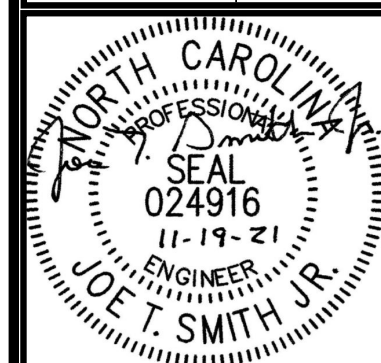


INTERIOR ELEVATION 'G'  
SCALE: 3/16"=1'-0"



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DRAWN BY: JL  
DATE: 11-19-2021

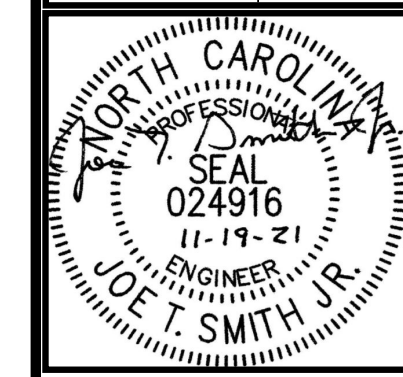
INTERIOR  
ELEVATIONS

G-8



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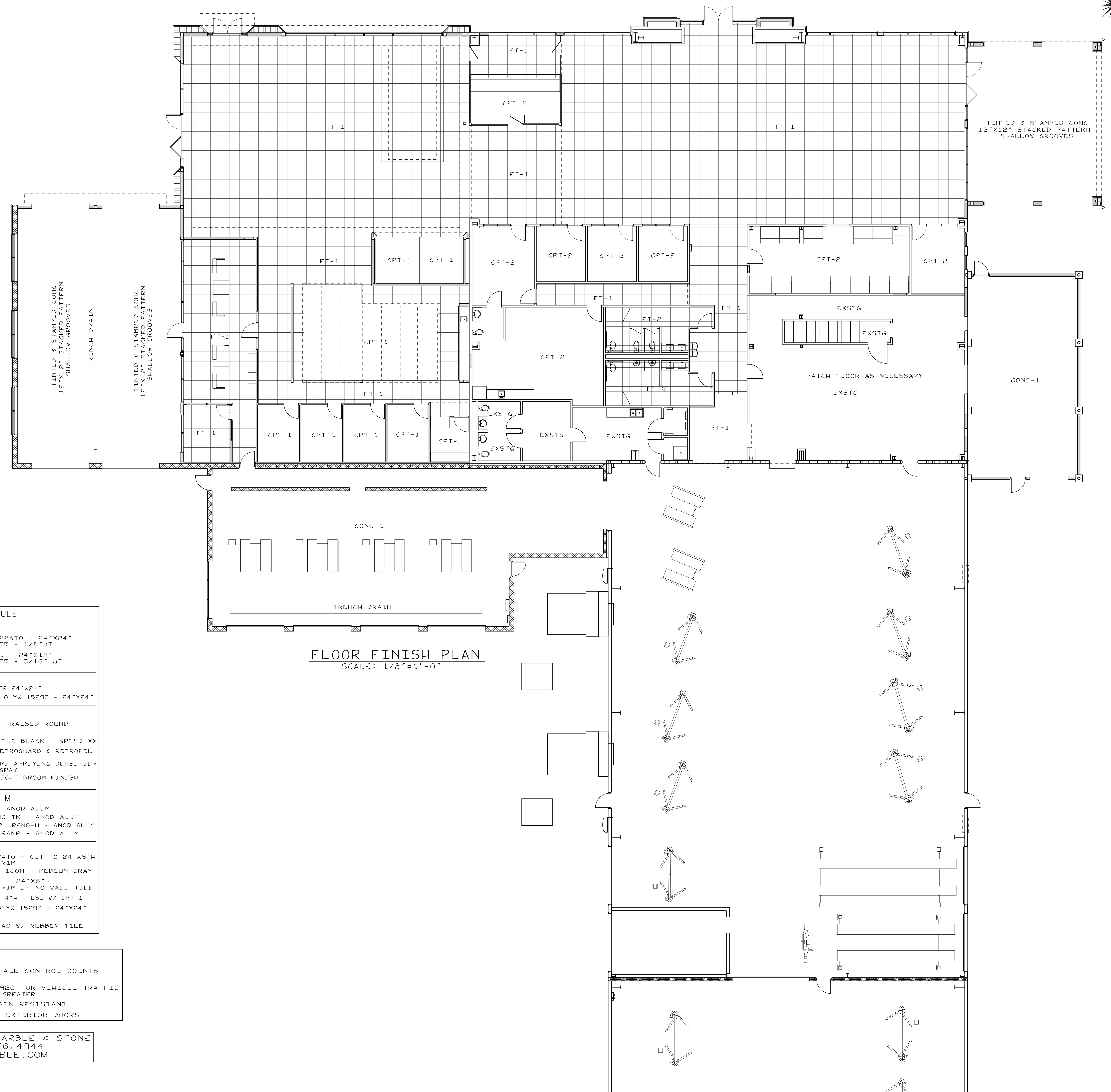
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PROJECT NO: 21004  
 DRAWN BY: JL  
 DATE: 11-19-2021

FLOOR FINISH PLAN

G-9



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

FLOOR FINISH SCHEDULE	
<b>FLOOR TILE</b>	
FT-1:	ALFALUX - CANVAS TITANIUM - LAPPATO - 24"x24"
GROUT:	BOSTIK - TRUGOLOR - SHADOW H195 - 1/8" JT
FT-2:	ALFALUX - PEBBLE GRAY - NATURAL - 24"x12"
GROUT:	BOSTIK - TRUGOLOR - SHADOW H195 - 3/16" JT
<b>CARPET</b>	
CPT-1:	BENTLEY - TROUBADOUR - 499337 ROVER 24"x24"
CPT-2:	MANNINGTON COMMERCIAL - BOUGLE - ONYX 15297 - 24"x24"
<b>MISC</b>	
RT-1:	TARKETT - DEFIANT RUBBER TILE - RAISED ROUND - 40 BLACK
VCT-1:	JOHNSONITE - GRANIT SD 713 KETTLE BLACK - GRISD-XX
CONC-1:	ASHFORD FORMULAR DENSIFIER + RETROGUARD & RETROPEL BURNISH W/ BLACK PAD POLISH TO 400 GRIT FINISH BEFORE APPLYING DENSIFIER CONCRETE TO BE STAINED MEDIUM GRAY
CONC-2:	ASHFORD FORMULAR DENSIFIER - LIGHT BROOM FINISH
<b>FLOOR TRANSITION TRIM</b>	
FTS-1:	TILE TO TILE: SCHLUTER DECO - ANOD ALUM
FTS-2:	CARPET TO TILE: SCHLUTER RENO-TK - ANOD ALUM
FTS-3:	TILE TO VCT/LVT/RF/WF: SCHLUTER RENO-U - ANOD ALUM
FTS-4:	TILE TO CONC: SCHLUTER RENO-RAMP - ANOD ALUM
<b>BASE</b>	
B-1:	ALFALUX - CANVAS TITANIUM - LAPPATO - CUT TO 24"x6" H USE W/ FT-1 - CAP W/ SCHLUTER TRIM ALTERNATE: FLEXCO BASE SCULPTURES - ICON - MEDIUM GRAY
B-2:	ALFALUX - PEBBLE GRAY - NATURAL - 24"x6" H USE W/ FT-2 - CAP W/ SCHLUTER TRIM IF NO WALL TILE
B-3:	BENTLEY - TROUBADOUR - 499337 ROVER 4" H - USE W/ CPT-1
B-4:	MANNINGTON COMMERCIAL - BOUGLE - ONYX 15297 - 24"x24" H USE W/ CPT-2
PROVIDE BLACK RUBBER BASE IN ALL AREAS W/ RUBBER TILE	

**NOTES**

USE MERKRETE FRACTURE GUARD 7000 OVER ALL CONTROL JOINTS UNDER HARD TILE

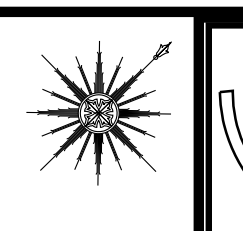
MOVEMENT JOINT CAULKING TO MEET ASTM C920 FOR VEHICLE TRAFFIC W/ A SHORE HARDNESS OF 35 OR GREATER

ALL GROUT TO BE PREMIUM - STAIN RESISTANT

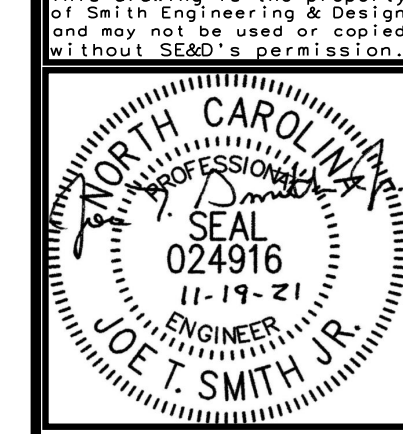
COORDINATE TILE & THRESHOLDS AT EXTERIOR DOORS

TILE DISTRIBUTER: DWYER MARBLE & STONE  
 CHAD ROBAR - 248.476.4944  
 CHAD.ROBAR@DWYERMARBLE.COM





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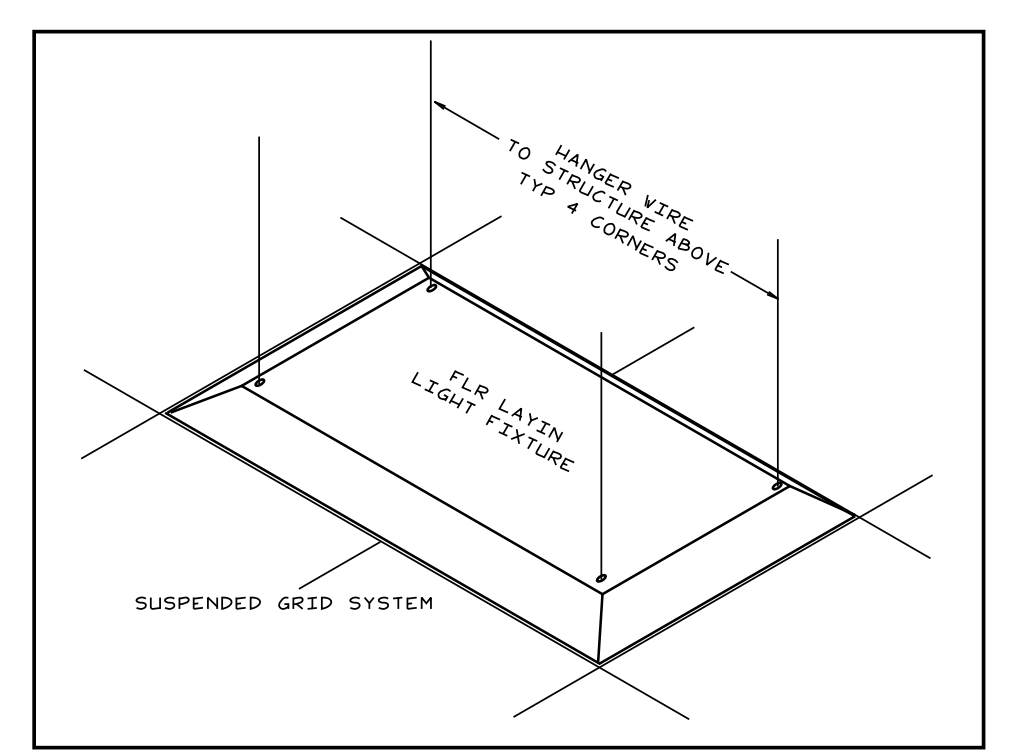
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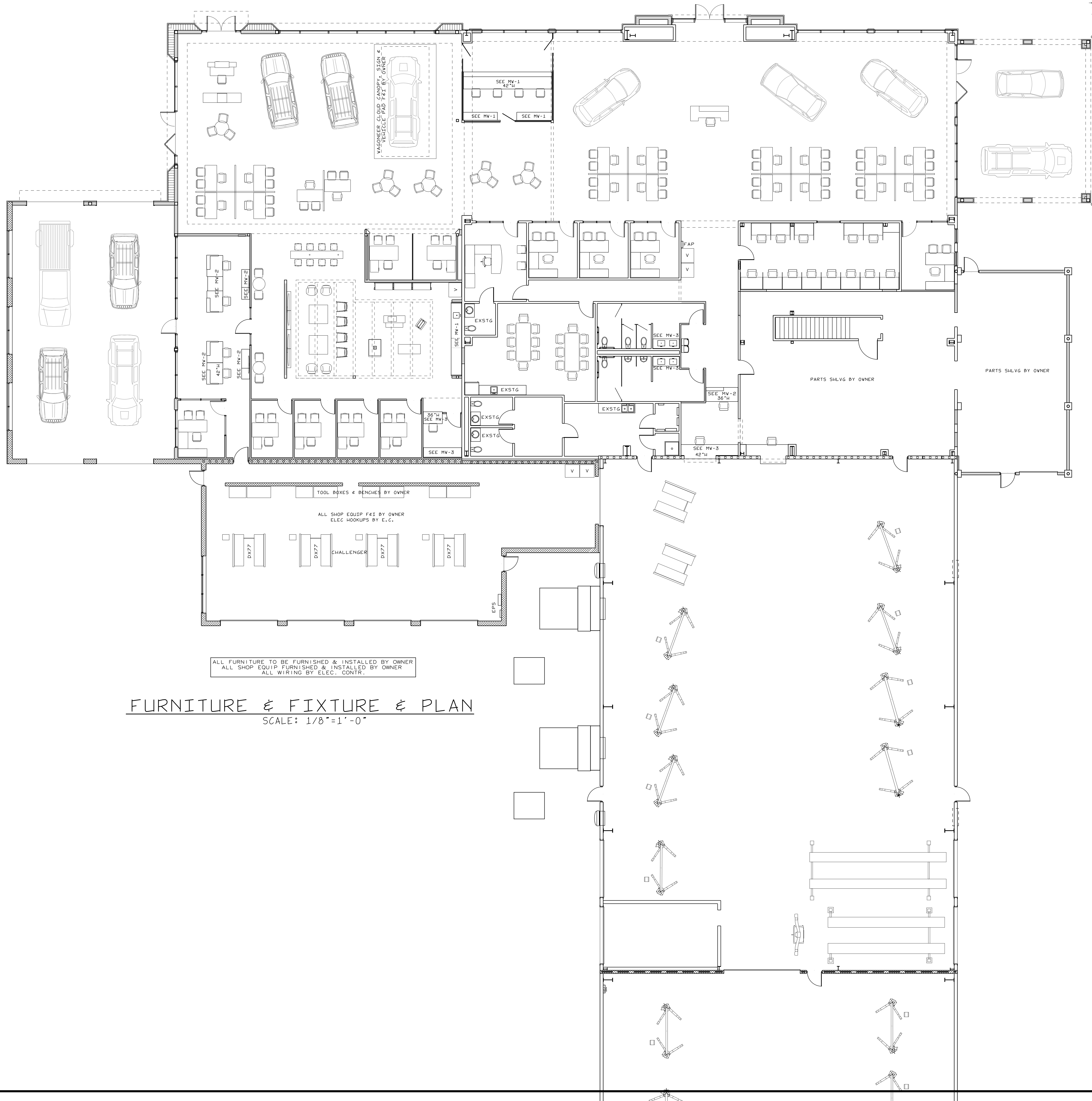
REFLECTED CLG PLAN

G-10



**REFLECTED CEILING PLAN**  
 SCALE: 1/8"=1'-0"

- P-9: SHERVIN WILLIAMS - EXTRA WHITE SW-7008 - SATIN
- VC-1: 3M - DESIGNTEX, CUSTOM DINOC BAMBOO - #V1175-001
- ACP-1 - USG - HALCYON PANELS - 2X4X3/4" - 9/16" WHITE GRID
- ACP-2 - USG - HALCYON PANELS - 2X2X3/4" - 9/16" WHITE GRID
- ACP-3 - USG - HALCYON PANELS - 2X2X3/4" - PAINT CLG & GRID P-4



ALL FURNITURE TO BE FURNISHED & INSTALLED BY OWNER  
 ALL SHOP EQUIP FURNISHED & INSTALLED BY OWNER  
 ALL WIRING BY ELEC. CONTR.

**FURNITURE & FIXTURE & PLAN**  
 SCALE: 1/8"=1'-0"

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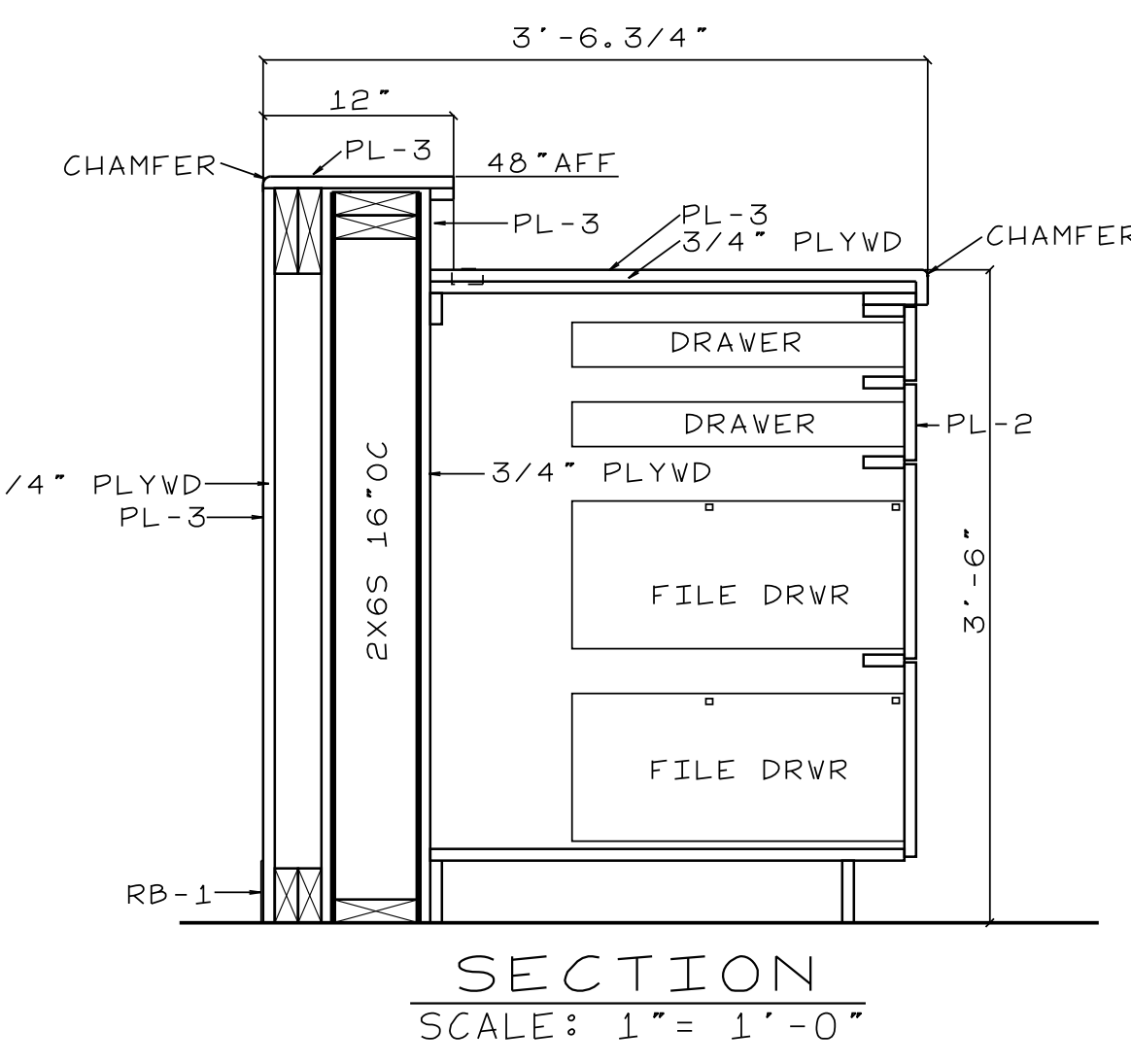
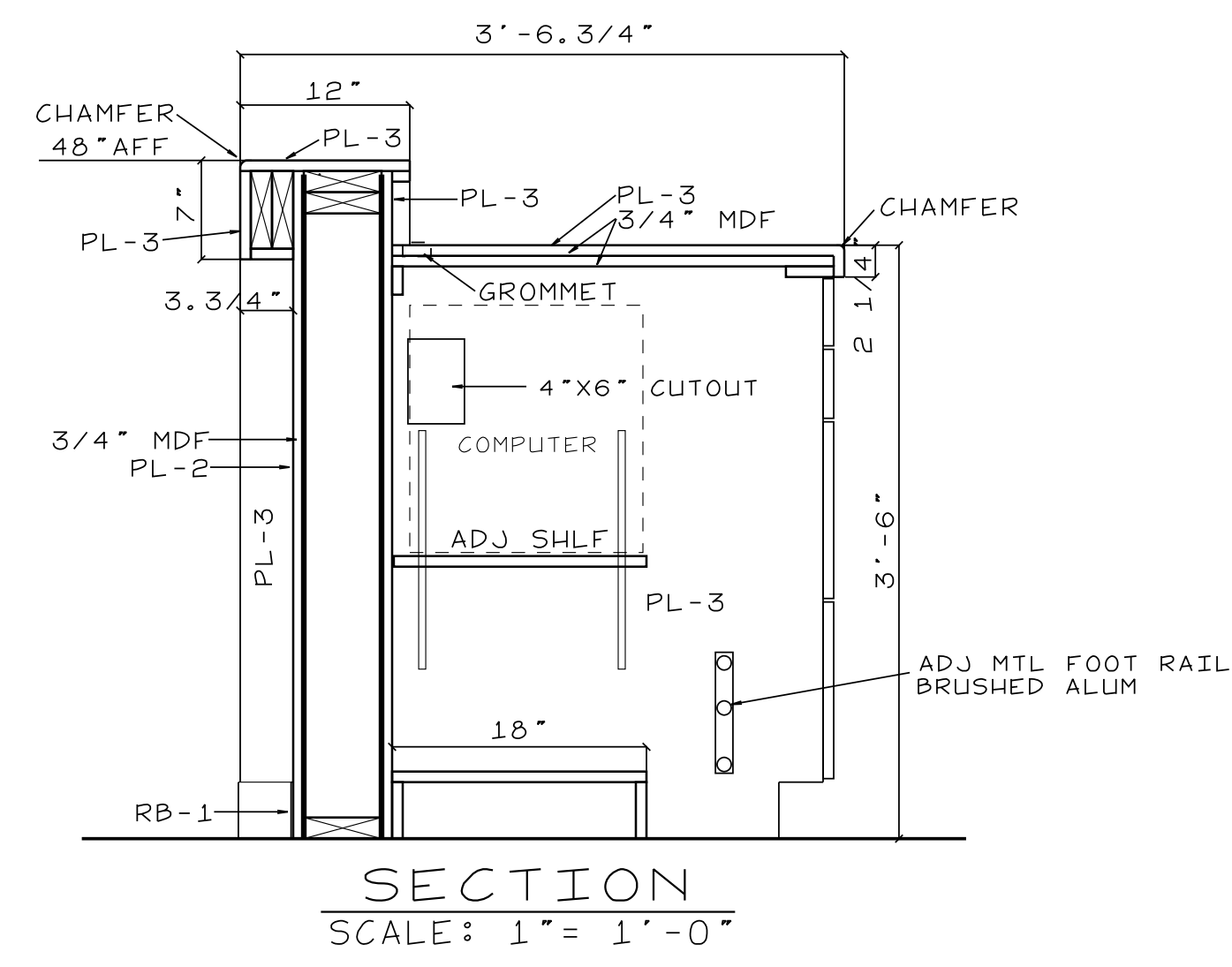
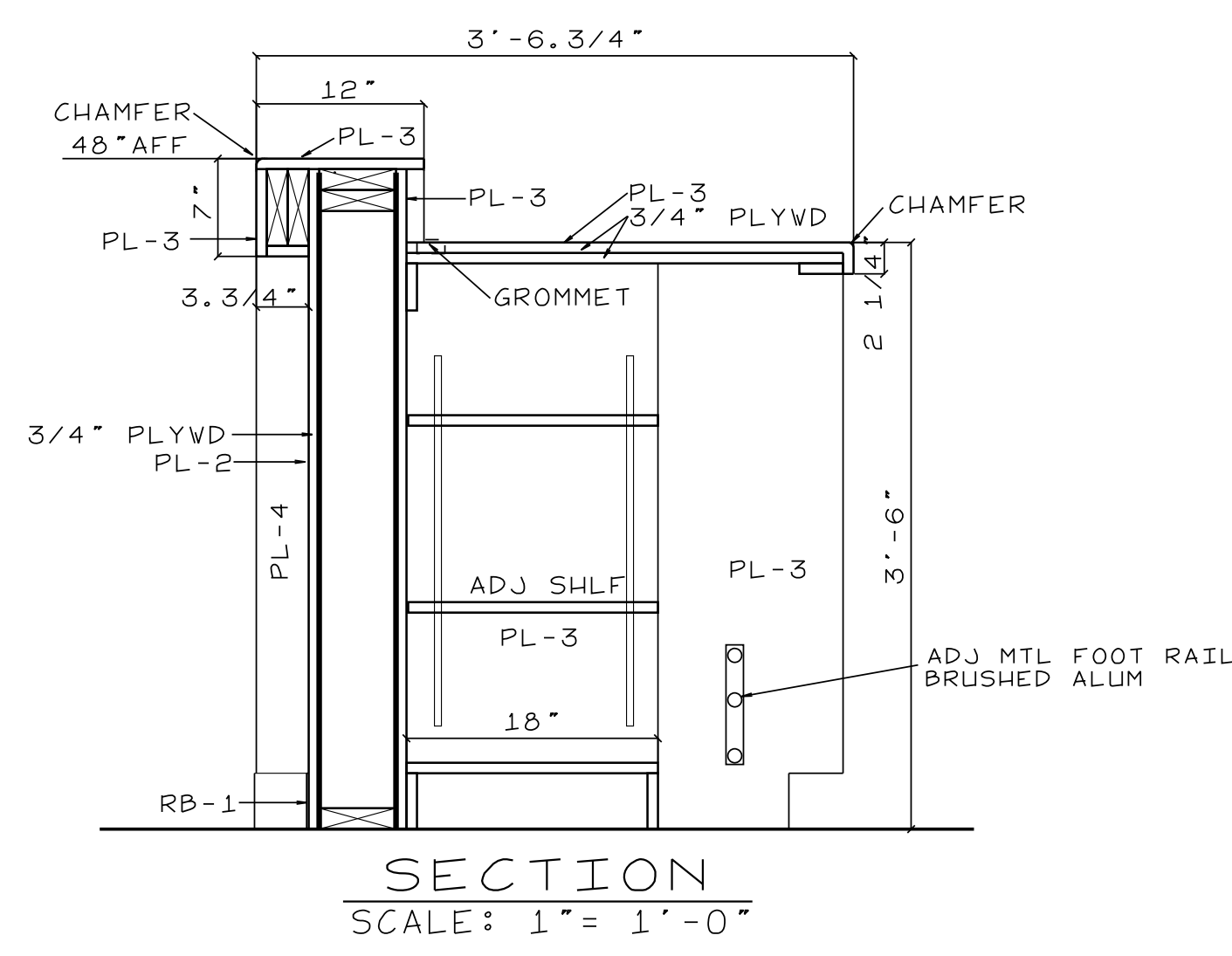
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PROJECT NO: 21004  
 DRAWN BY: JL  
 DATE: 11-15-2021

**FURNITURE  
 & FIXTURE  
 PLAN**

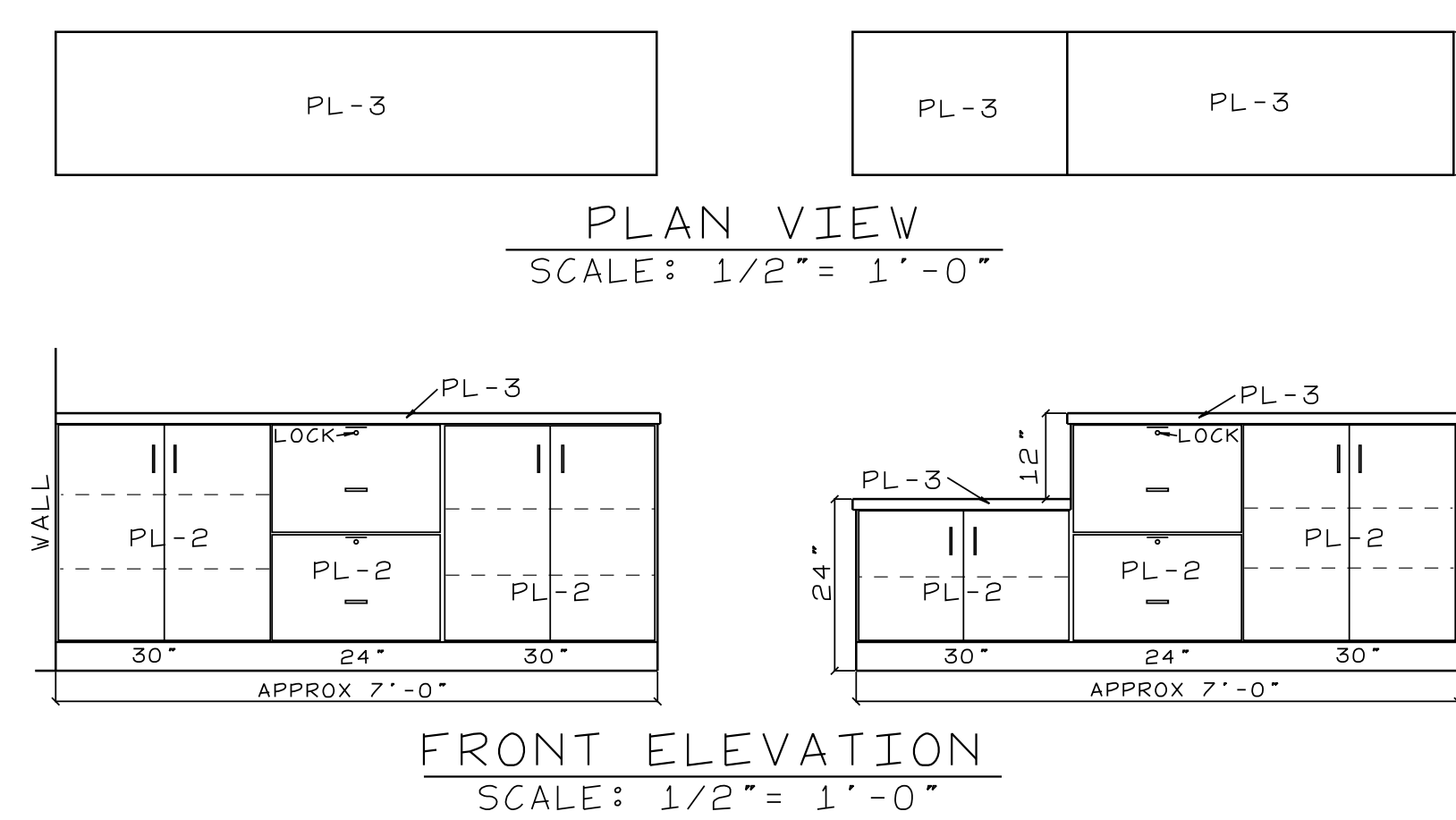
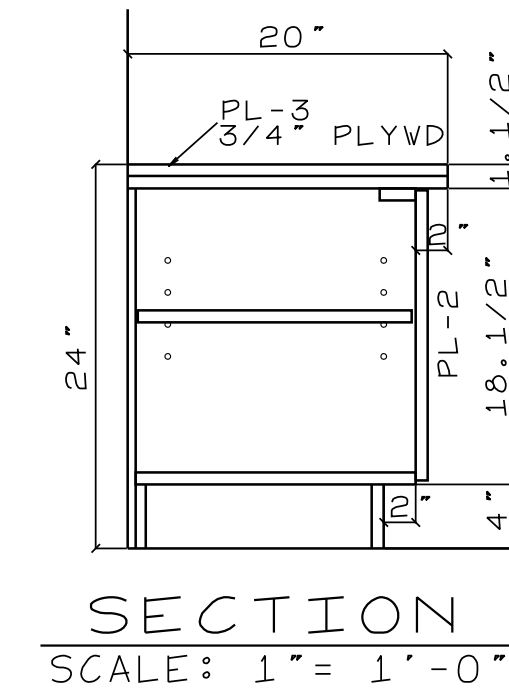
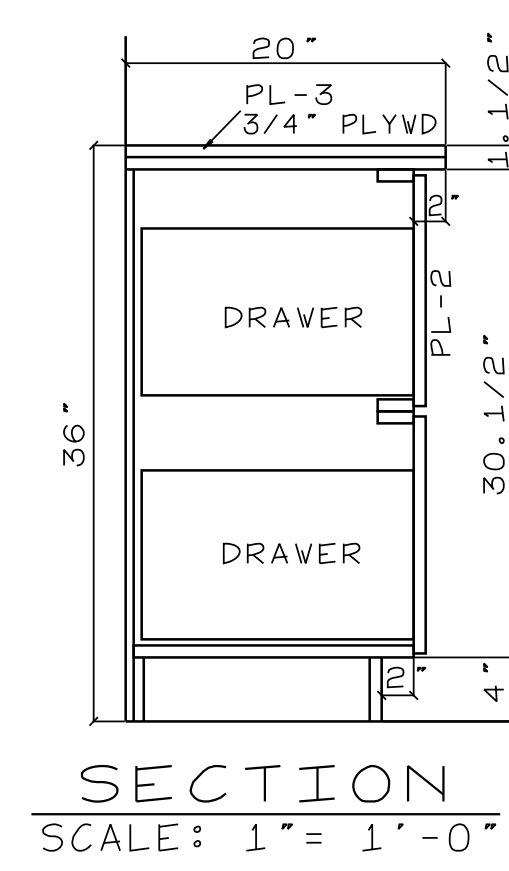
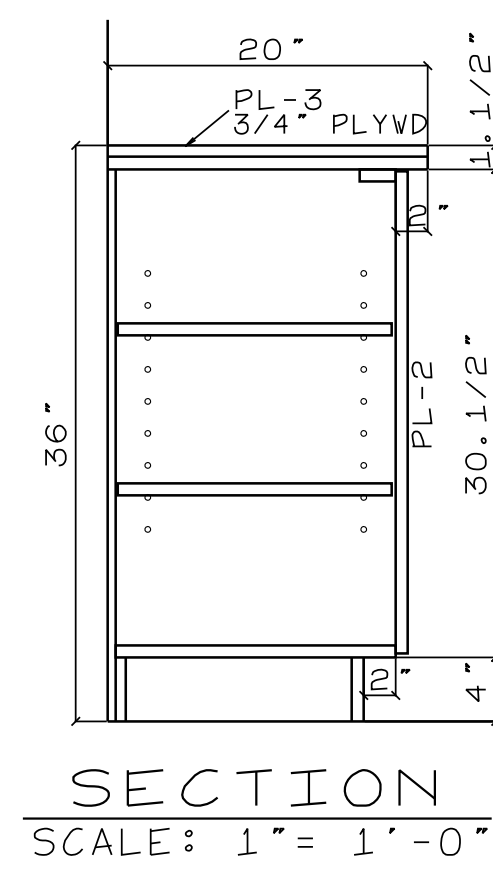
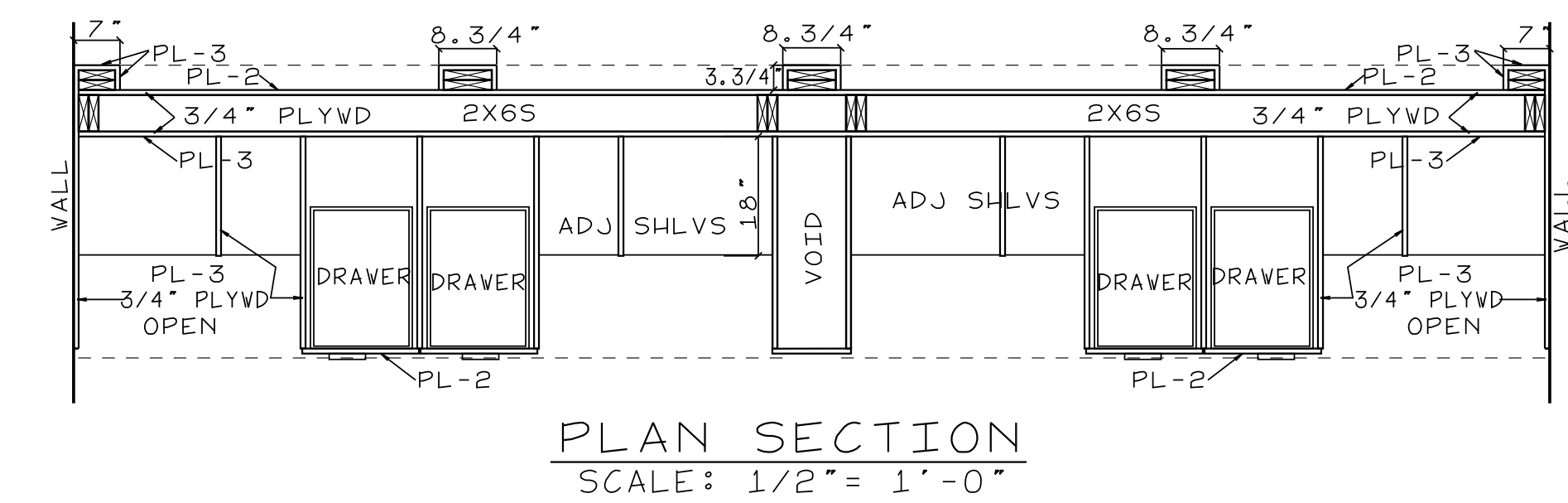
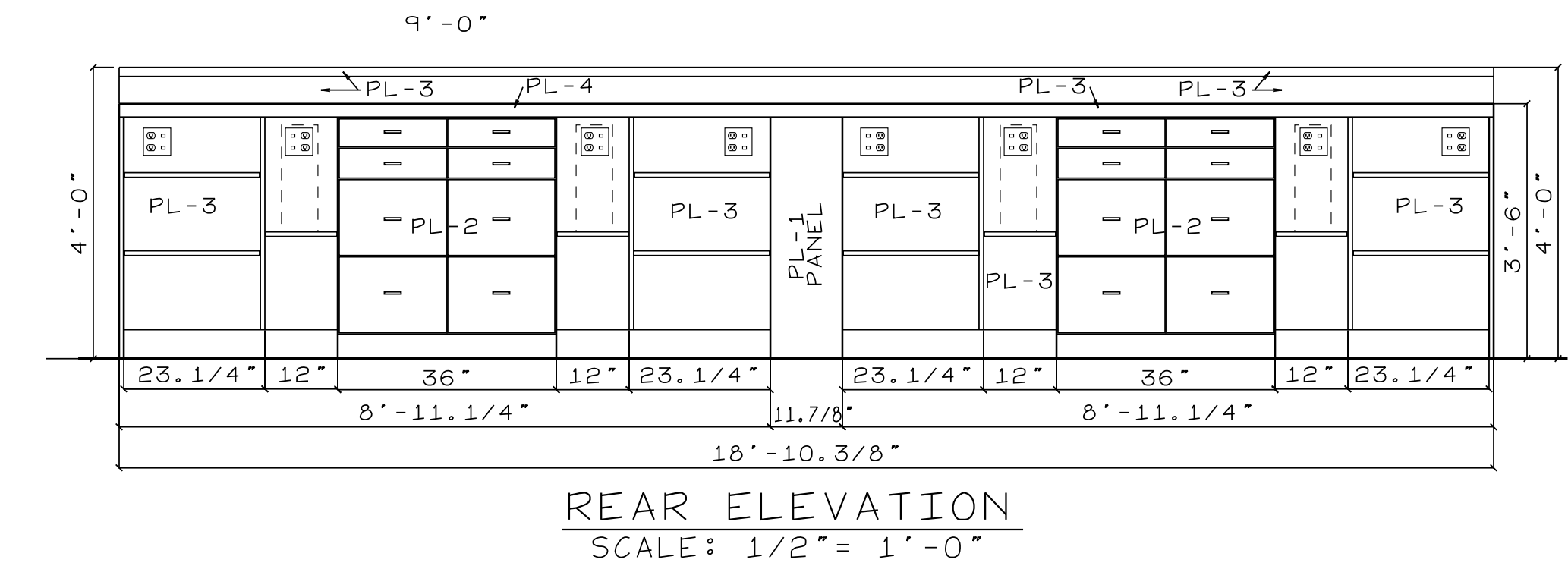
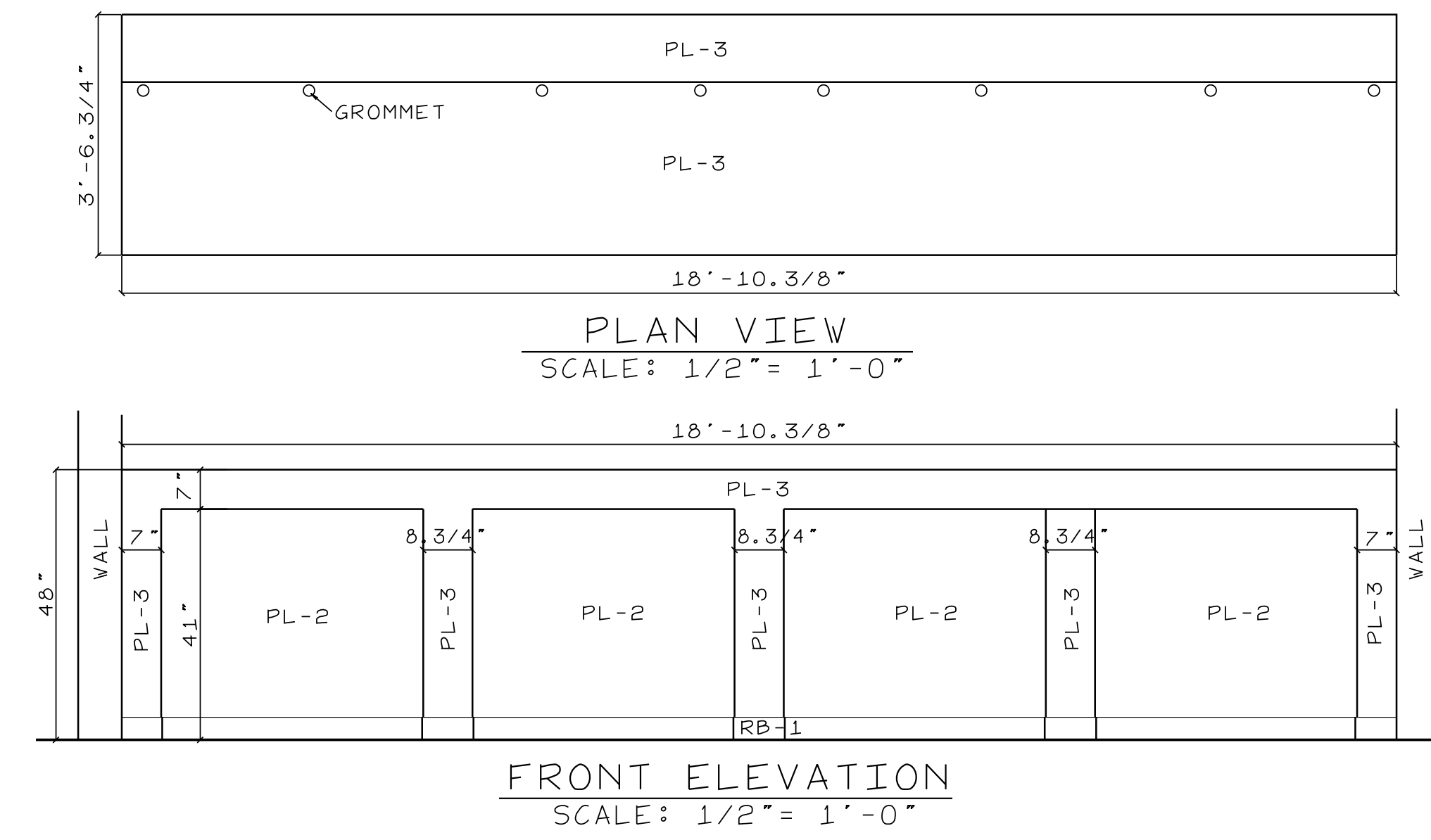
G-11



COORDINATE POWER & DATA W/ ELEC CONTRACTOR

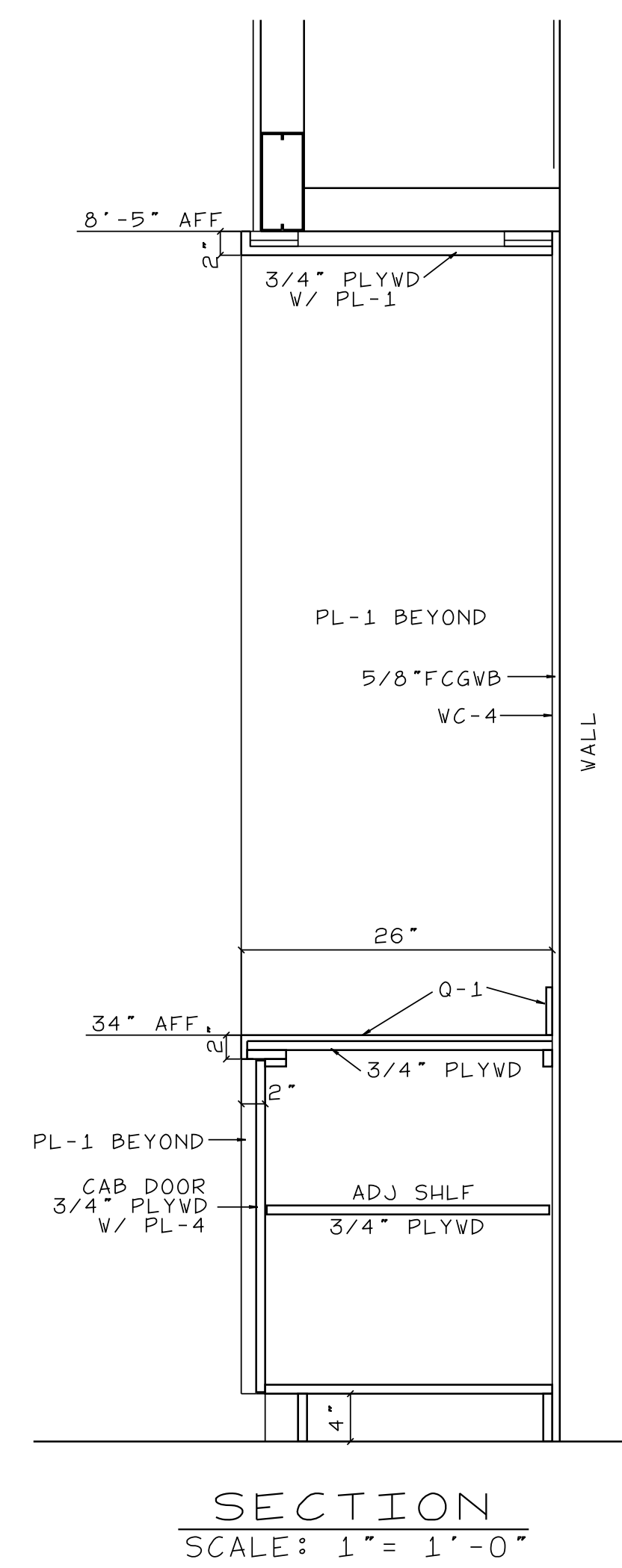
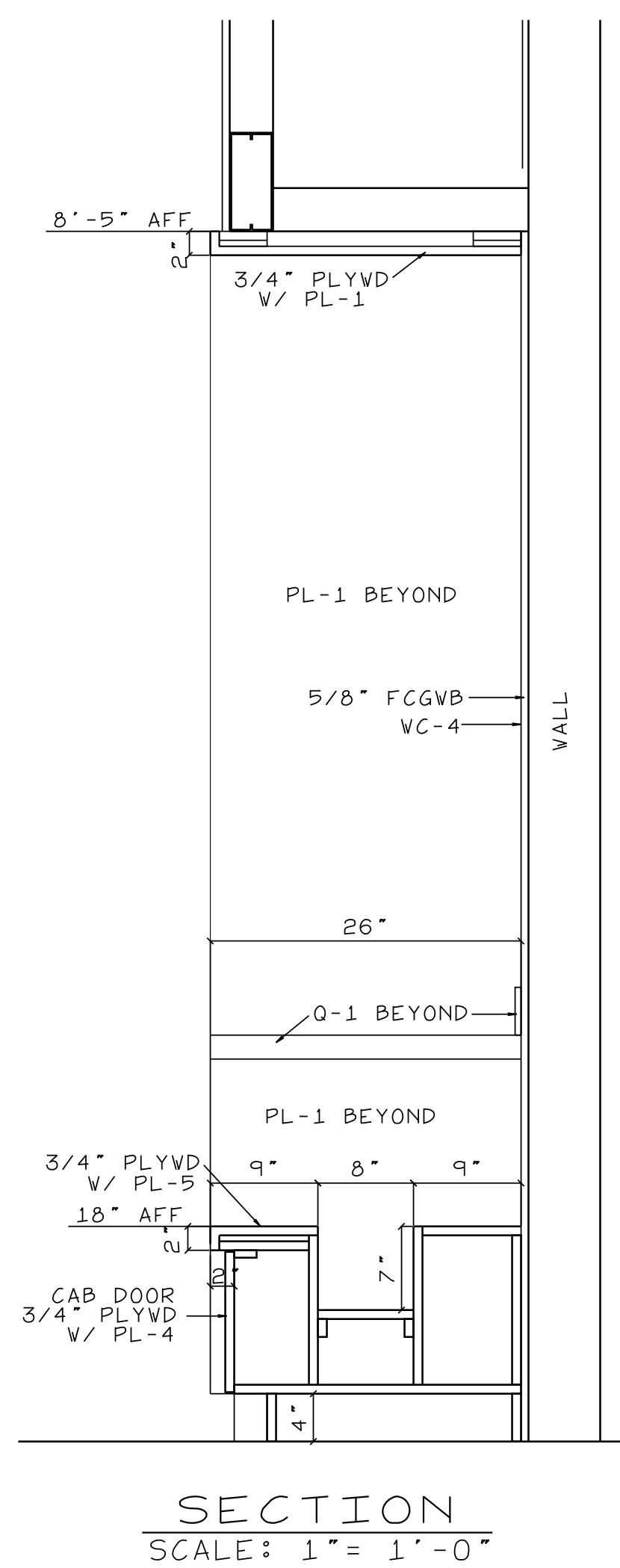
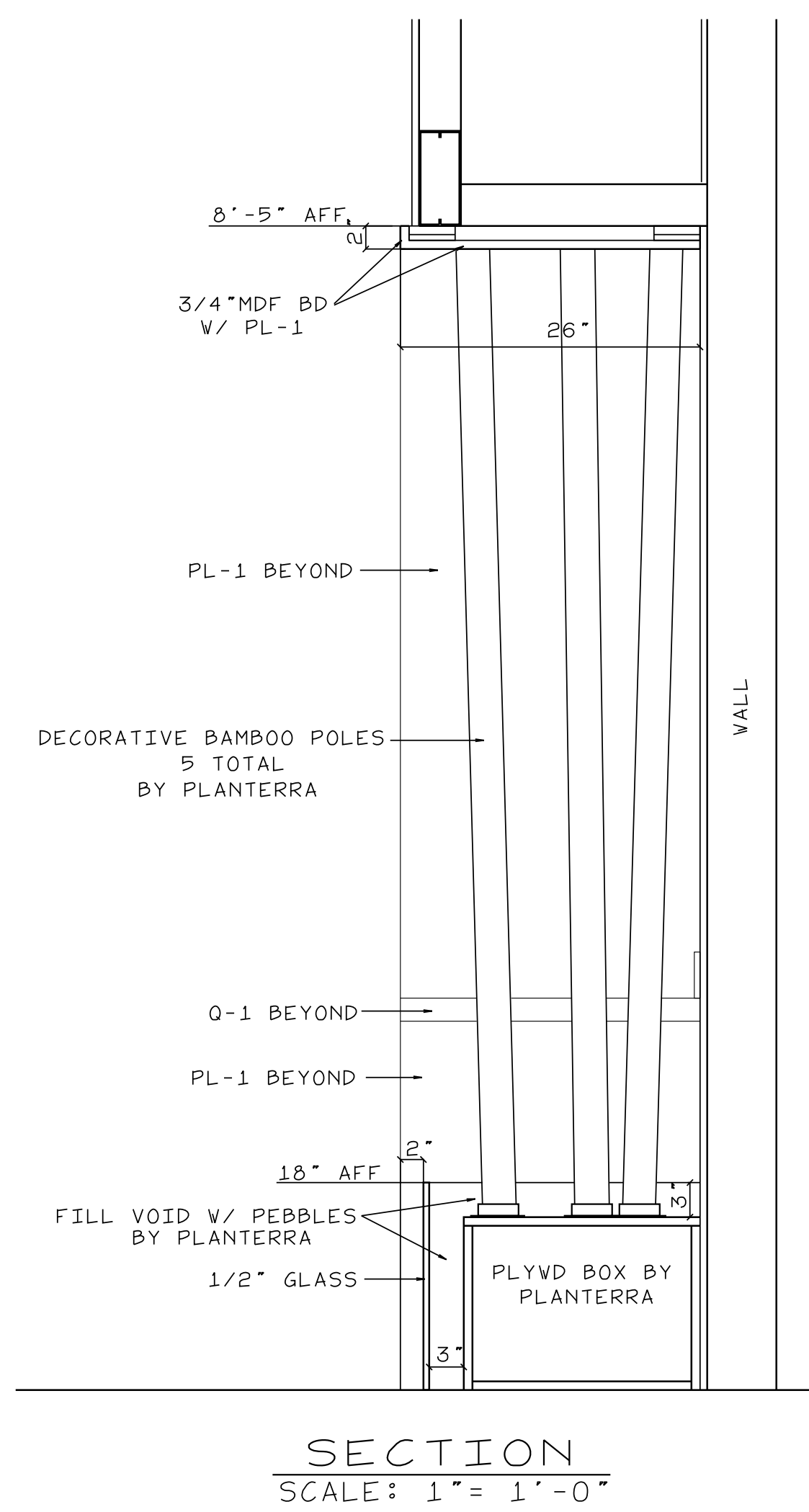
PL-2: WILSONART - 335 <VERT GRAIN> 350 <HORZ GRAIN> - WILD CHERRY 7054-60  
 PL-3: WILSONART - 335 <VERT GRAIN> 350 <HORZ GRAIN> - GRAPHITE NEBULA 4623-60  
 WHITE MELAMINE INTERIORS

SALES MANAGERS DESK



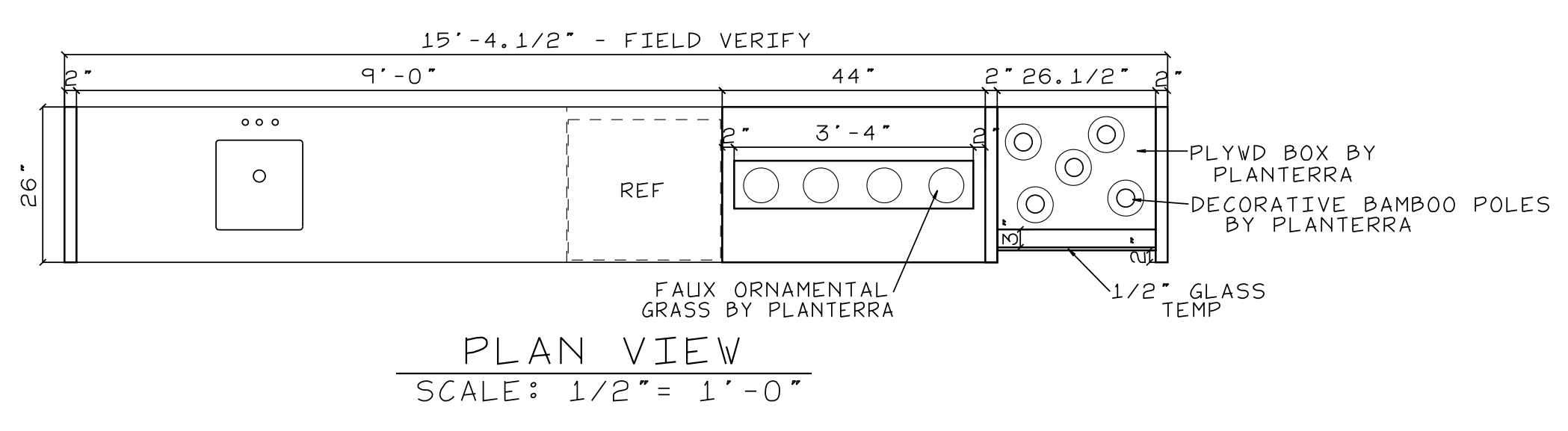
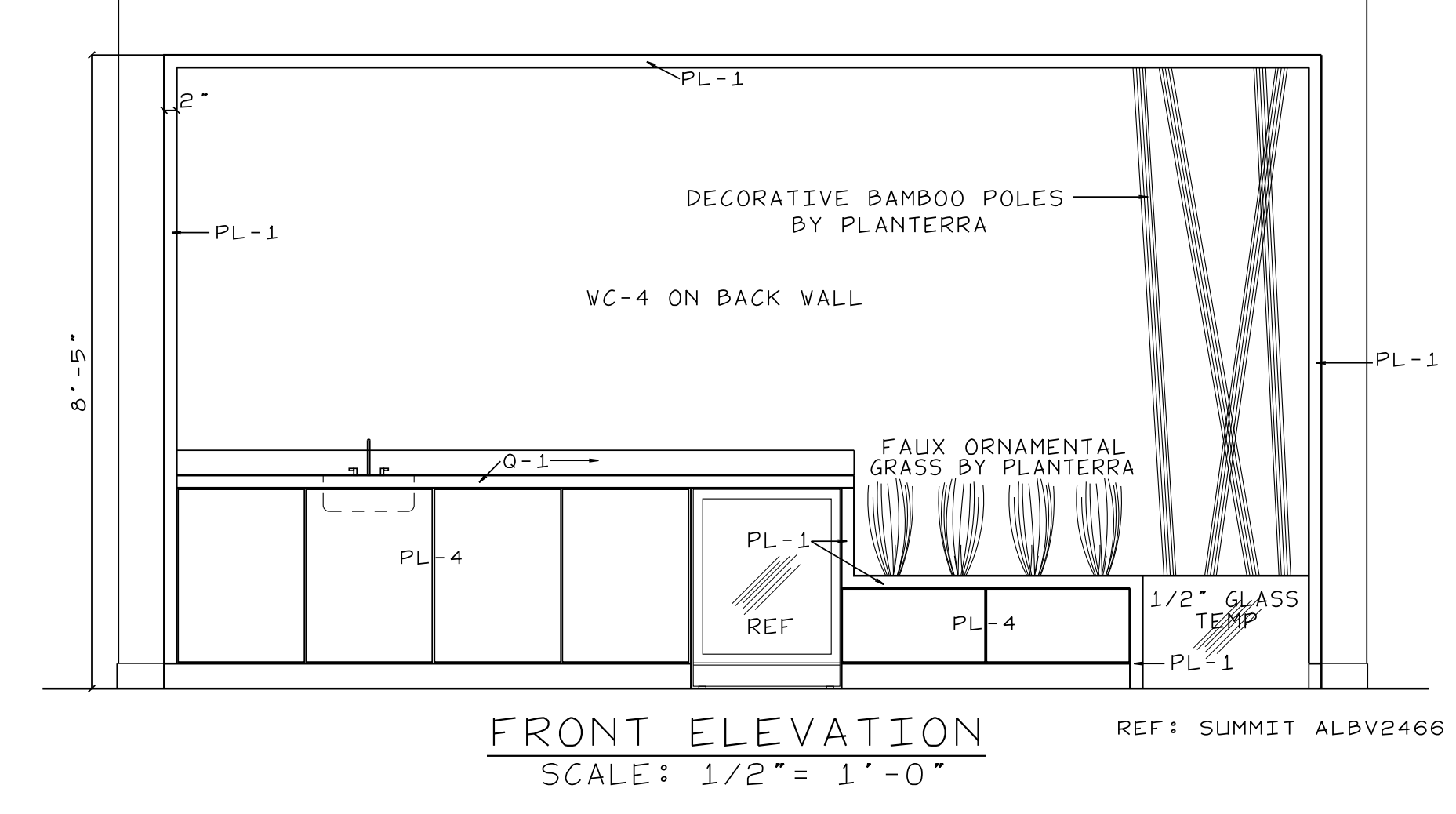
SALES MANAGERS BACKCOUNTER

REFRESHMENT COUNTER



PL-1: WILSONART - 335 <VERT GRAIN> 350 <HORZ GRAIN> - ASIAN AMBER 11192K-18  
 PL-4: PANOLAM - NEVAMAR - WROUGHT IRON S6054T  
 Q-1: WILSONART - QUARTZ LORRAINE - Q1012  
 WHITE MELAMINE INTERIORS

Bamboo pole cut to length and slipped over 3/4" pipe.  
 12" long 3/4" threaded steel pipe screwed in to 3/4" flange.  
 3/4" flange screwed to top of plywood box.  
 Washers stacked beneath (2) flange bolt holes to create angle of bamboo pole.  
 Bamboo bolted to top of plywood box with flanges (see detail on next page).  
 Plywood Staging Box 42" x 24" w x 14" h  
 Poly River Stones  
 REF: SUMMIT ALBV2466



CONTACT  
 SARAH STALKER  
 248.310.9479  
 sstalker@planterra.com  
 248.661.1515  
 www.planterra.com

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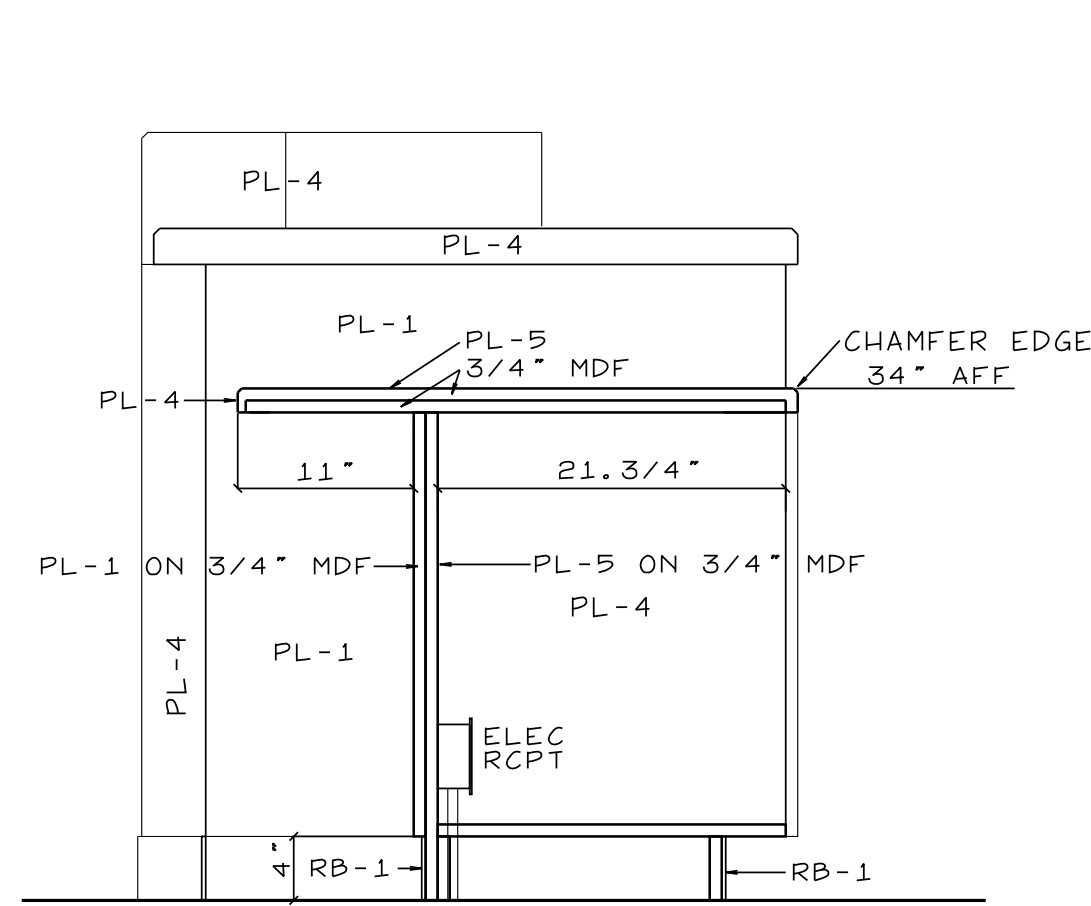
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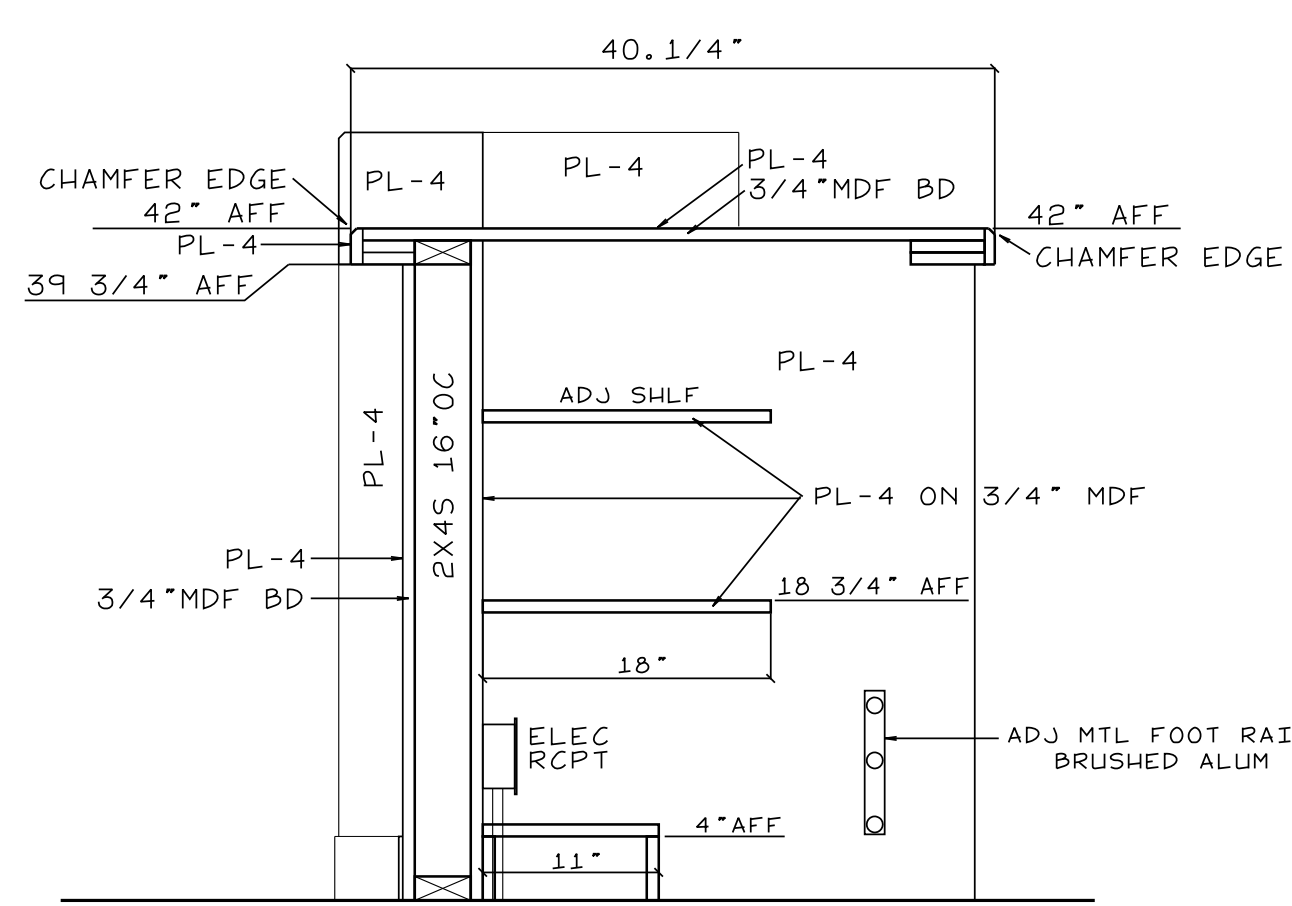
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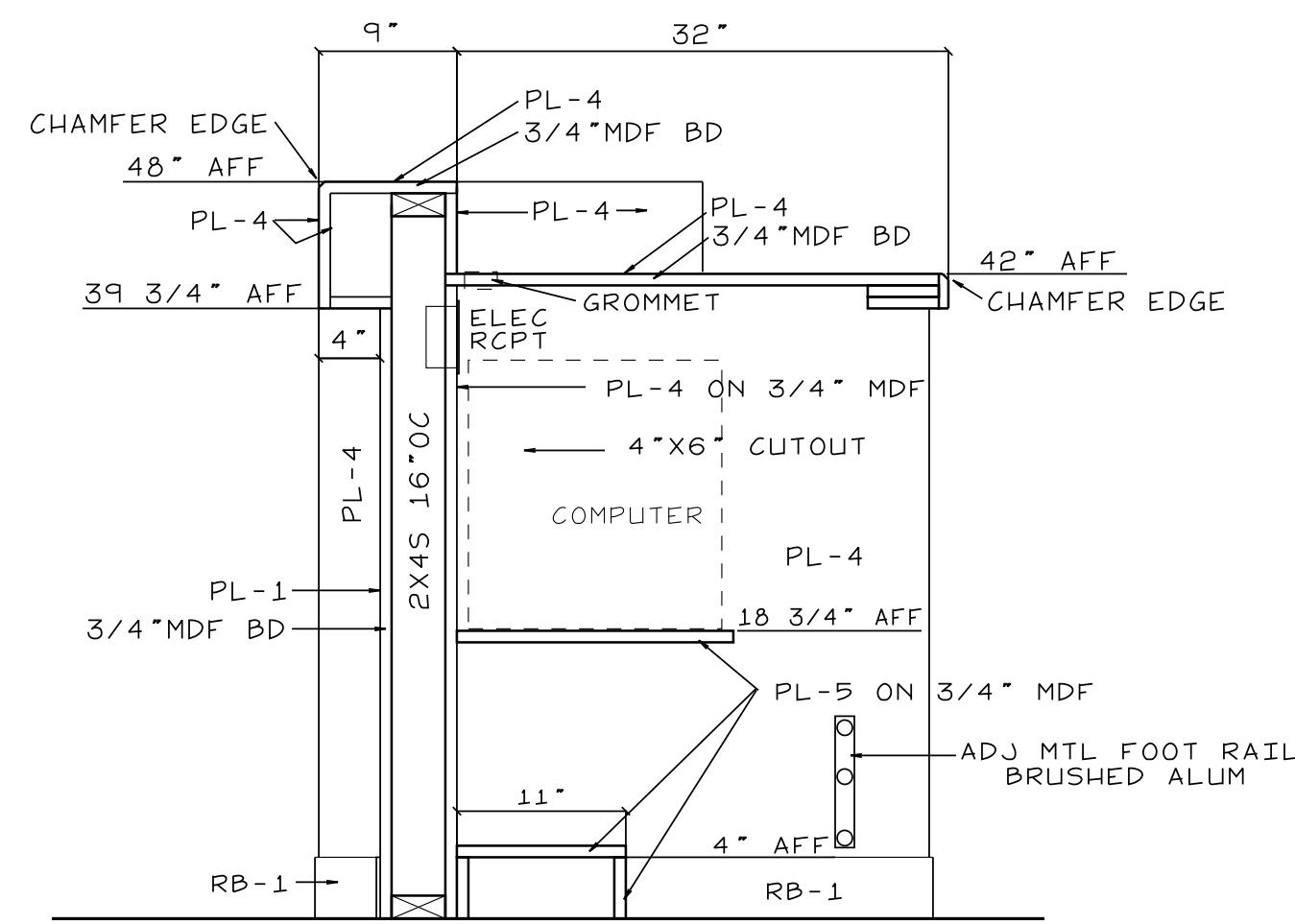
MILLWORK  
 MW-1



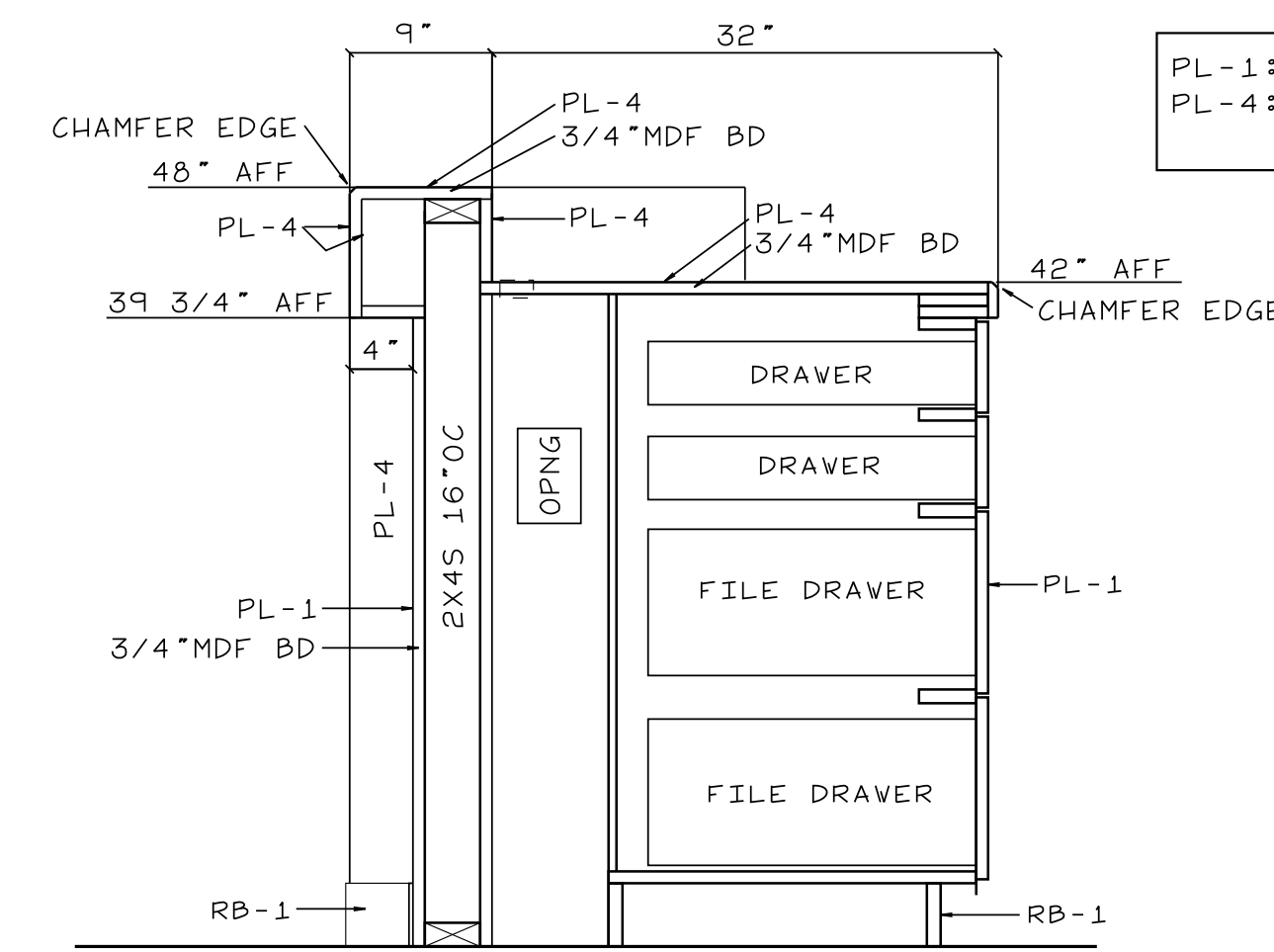
SECTION  
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SECTION  
SCALE: 1" = 1'-0"

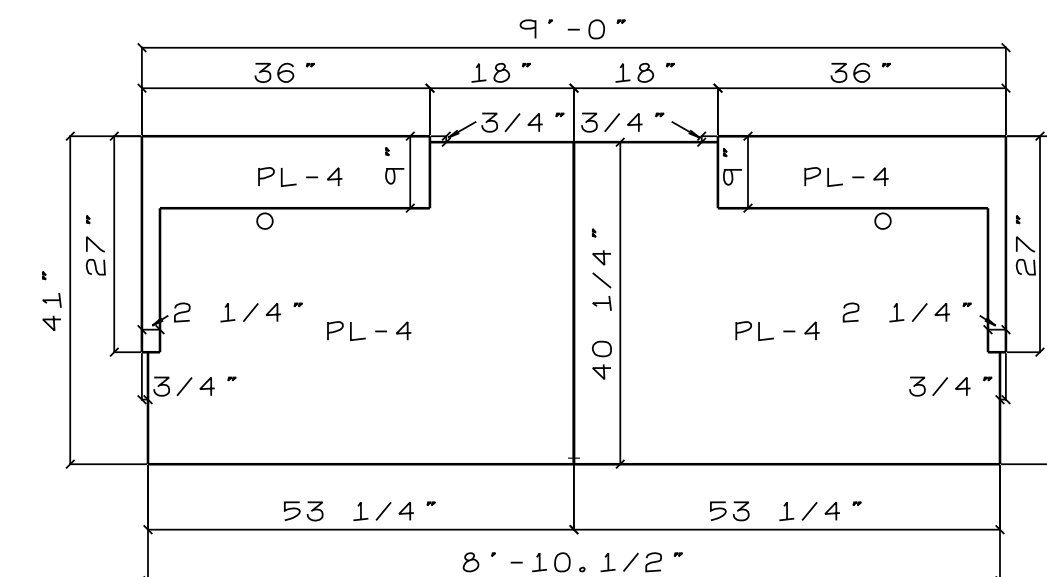


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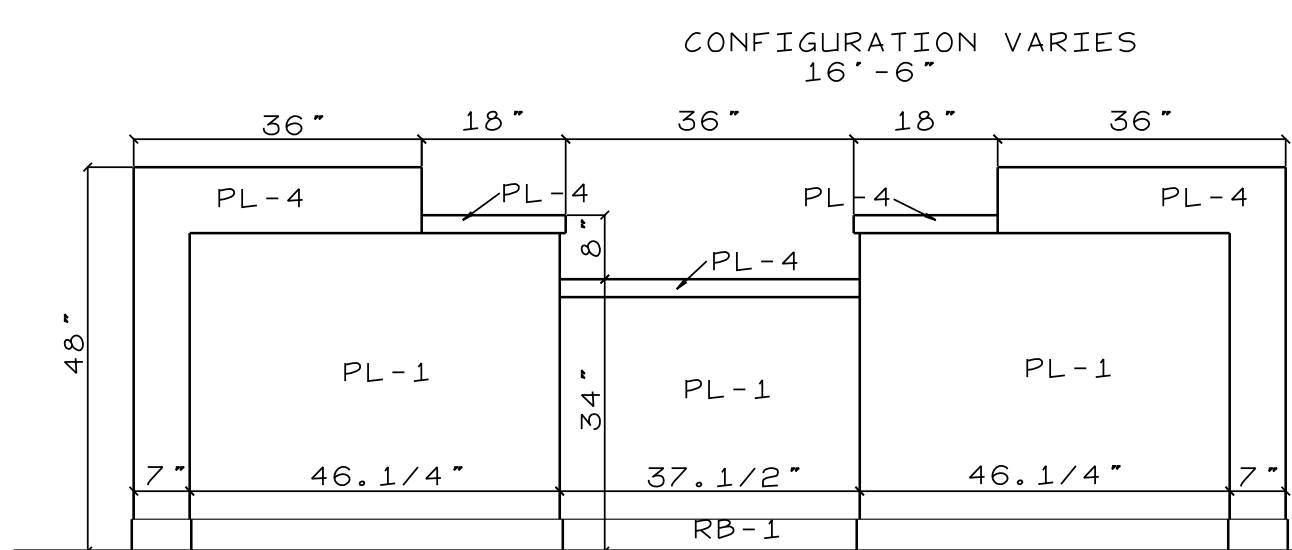


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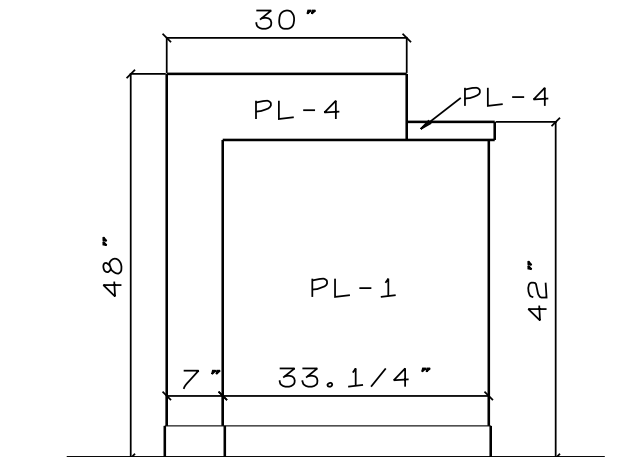
PL-1: WILSONART - 335 (VERT GRAIN) 350 (HORZ GRAIN) - ASIAN AMBER 11152K-18  
PL-4: PANOLAM - NEVAMAR - WROUGHT IRON S6094T  
WHITE MELAMINE INTERIORS



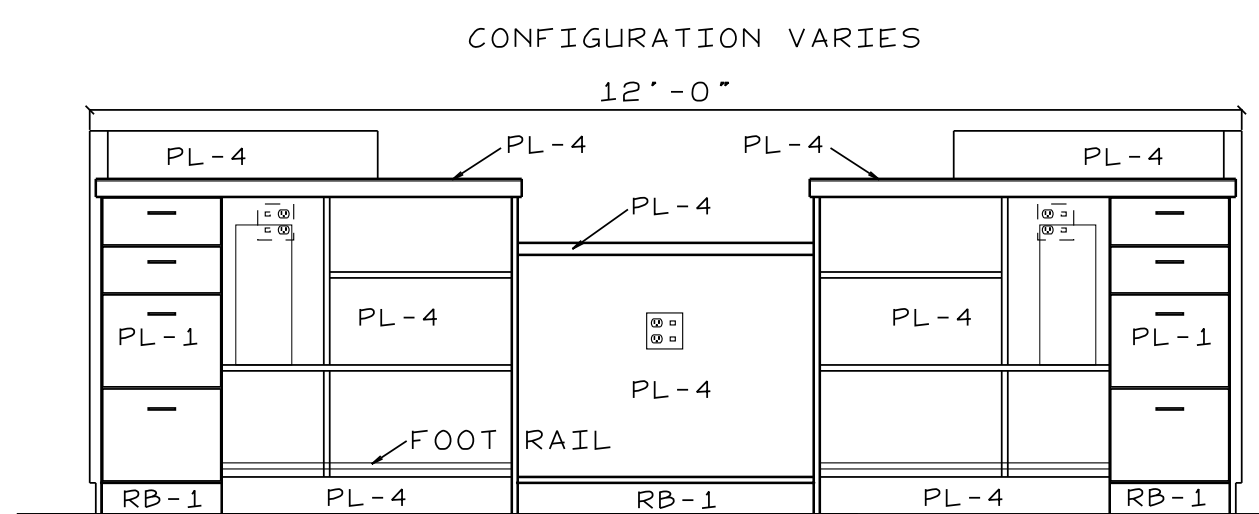
PLAN VIEW  
SCALE: 1/2" = 1'-0"



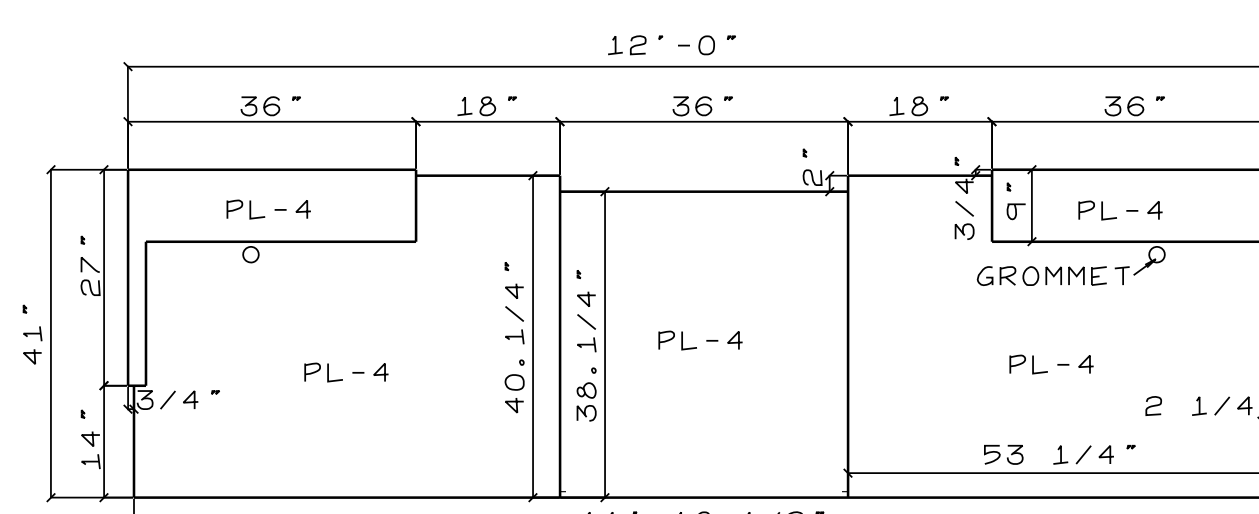
FRONT ELEVATION  
SCALE: 1/2" = 1'-0"



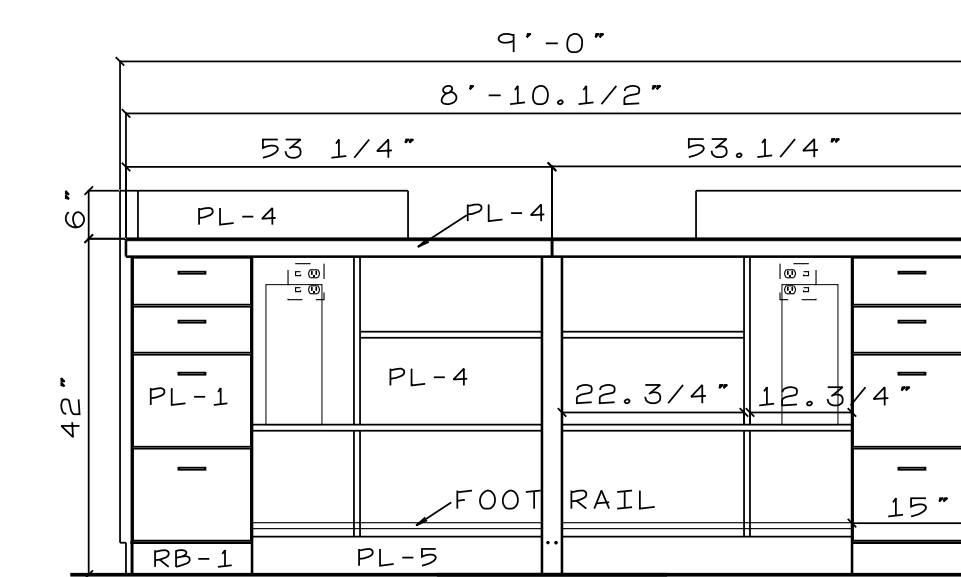
SIDE ELEVATION  
SCALE: 1/2" = 1'-0"



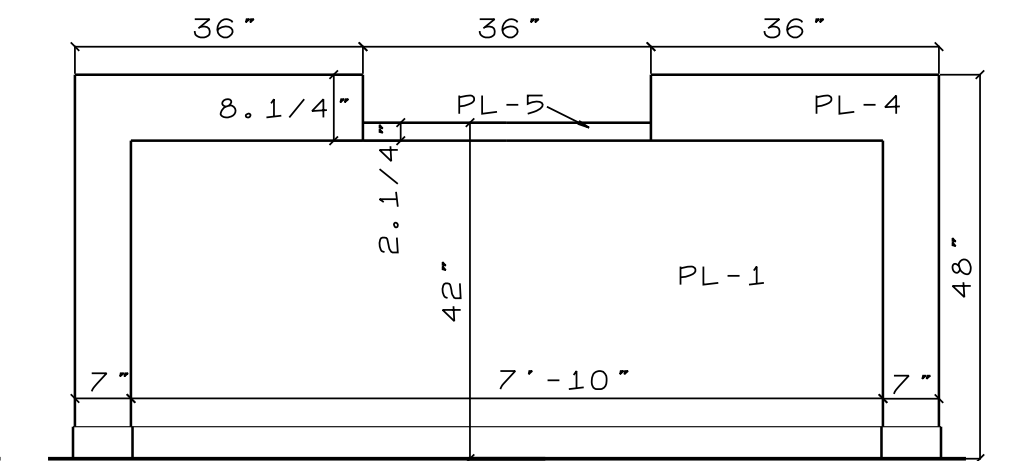
REAR ELEVATION  
SCALE: 1/2" = 1'-0"



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



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



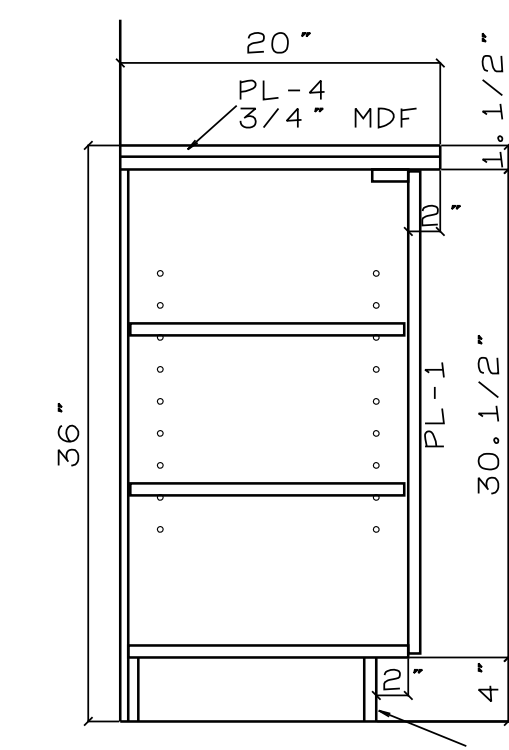
FRONT ELEVATION  
SCALE: 1/2" = 1'-0"

COORDINATE POWER & DATA W/ ELEC CONTRACTOR

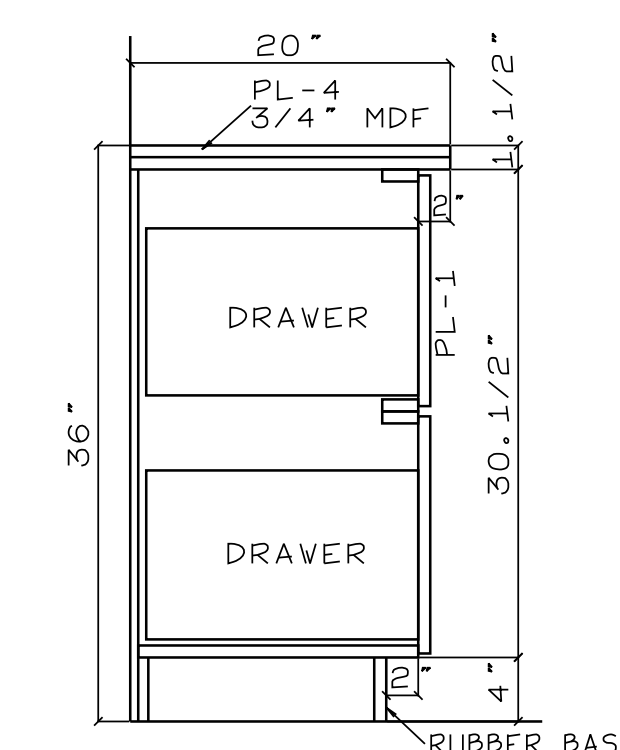
ALL EXPOSED CABINET HRDWR TO BE BRUSHED ALUM OR ST. STL.  
ALL HINGES TO BE EUROPEAN STYLE CONCEALED - TIOMOS 160  
SCREW ON OVERLAY HINGE - SELF CLOSING OR EQUAL.  
DRAWERS TO USE TANDEM 563 SOFT CLOSE SLIDES BY BLUM OR EQ.  
PULLS TO BE 5/16"x4" ALUM - BACK MTD  
GROMMETS TO BE 2" MOLDED BLACK PLASTIC W/ CAPS W/ SLOTS.

ALL CABINETS ARE TO BE CUSTOM GRADE  
AS SPECIFIED BY AVI.  
PROVIDE BLOCKING FOR ALL WALL CABINETS

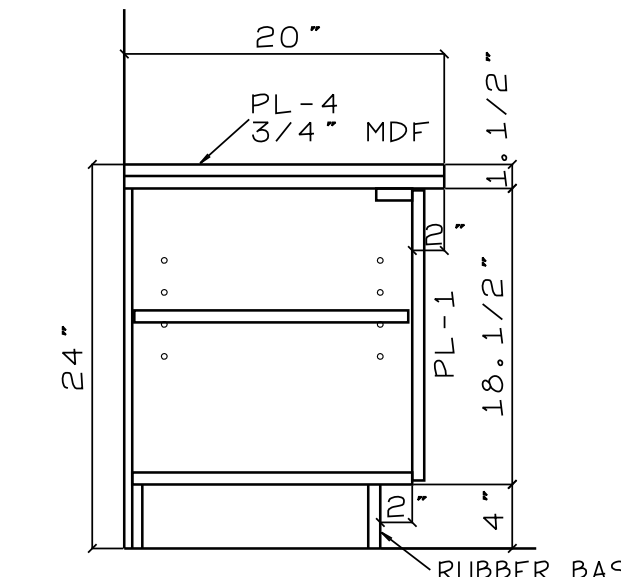
ALL BEVELED EDGES TO BE MIN. 1/4"  
OPTION: 1/4" ROUND EDGE



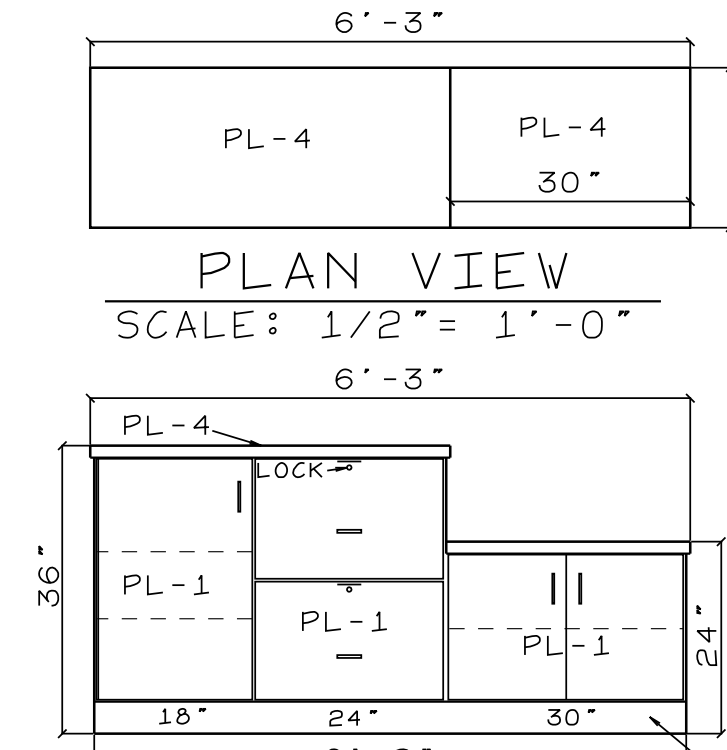
SECTION  
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SECTION  
SCALE: 1" = 1'-0"

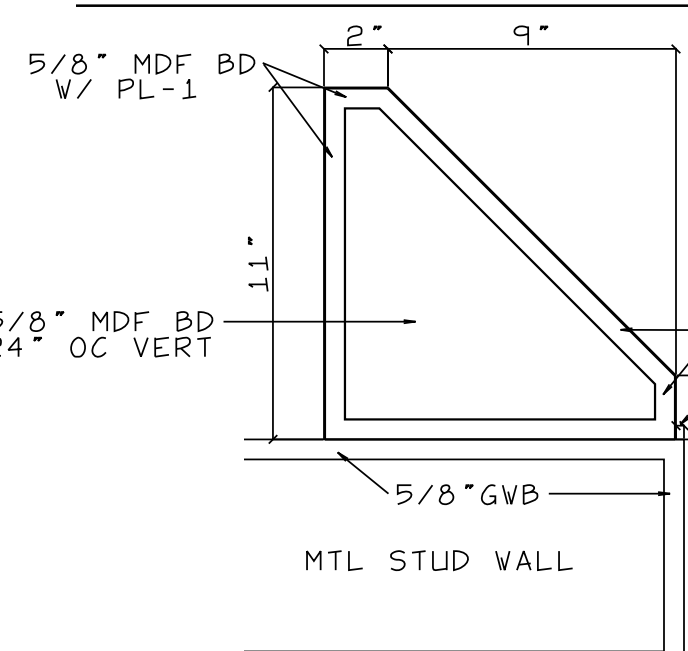


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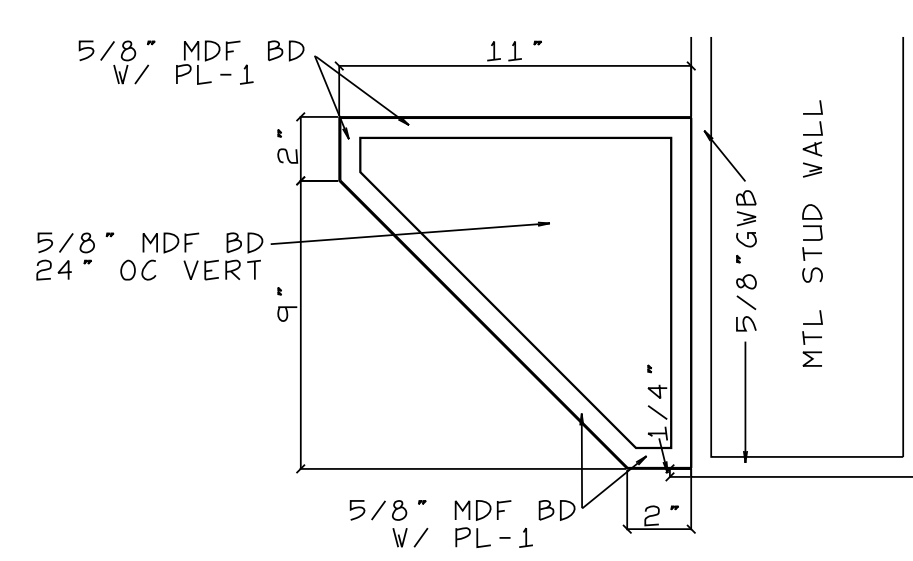


FRONT ELEVATION  
SCALE: 1/2" = 1'-0"

SERVICE ADVISORS BACKCOUNTER

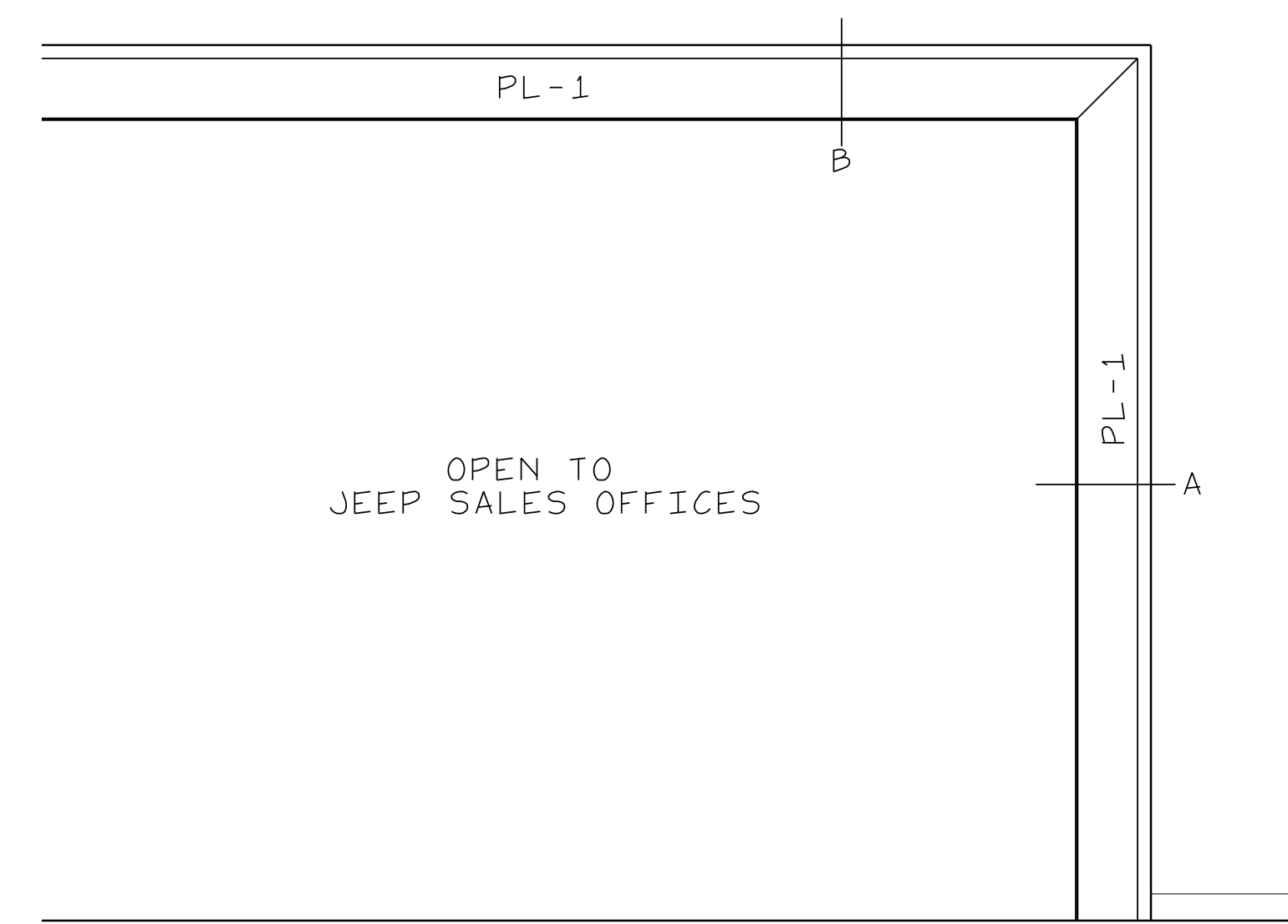


SECTION A  
SCALE: 2" = 1'-0"



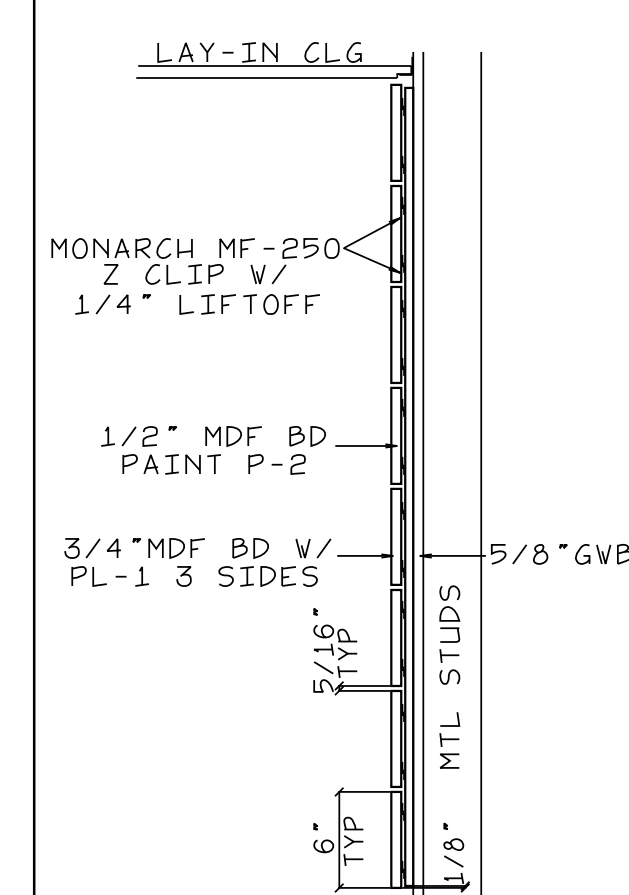
SECTION B  
SCALE: 2" = 1'-0"

PL-1: WILSONART - 335 (VERT GRAIN) 350 (HORZ GRAIN) - ASIAN AMBER 11152K-18

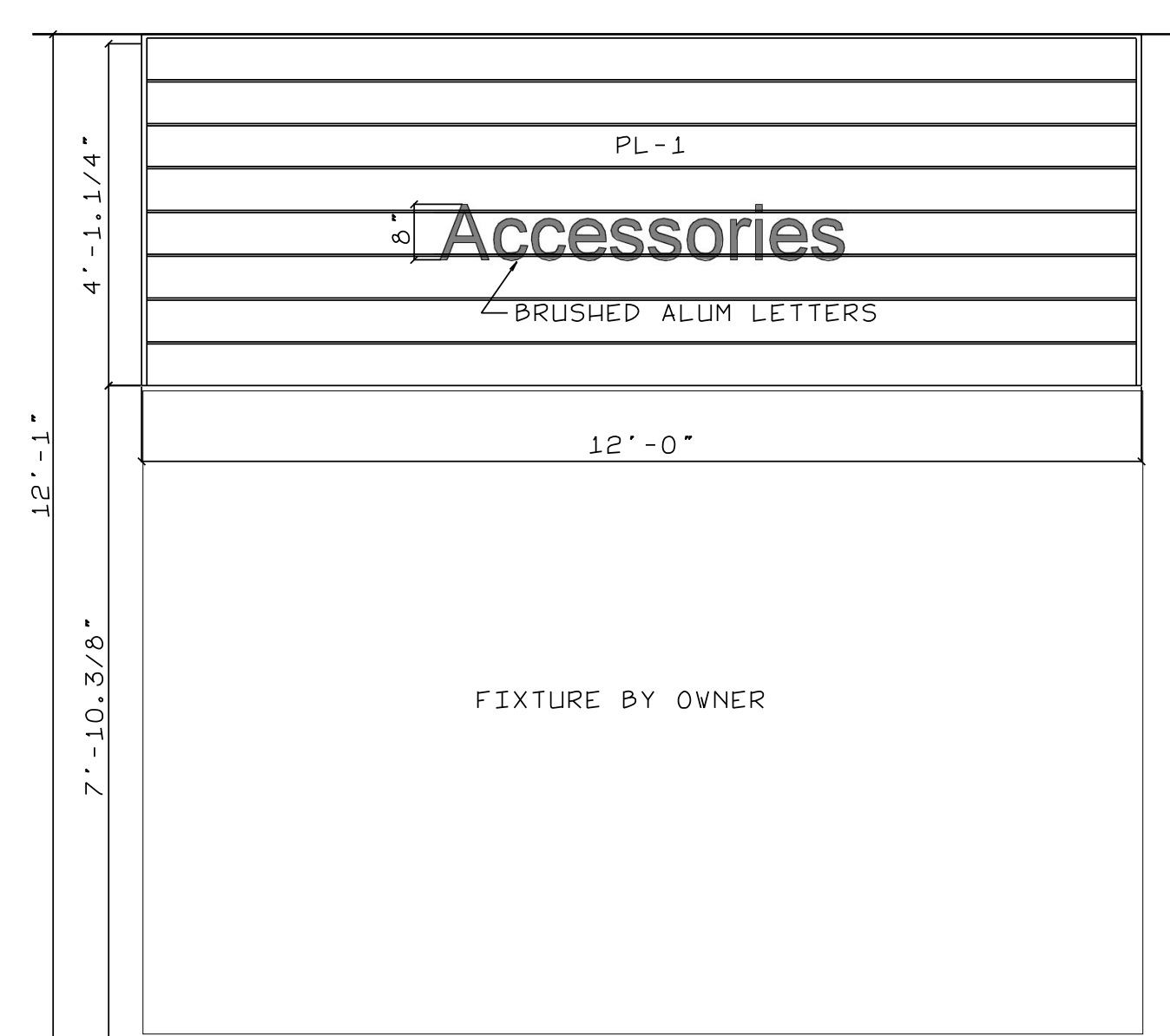


ELEVATION  
SCALE: 1/2" = 1'-0"

OPEN TO  
JEEP SALES OFFICES



SECTION  
SCALE: 1" = 1'-0"

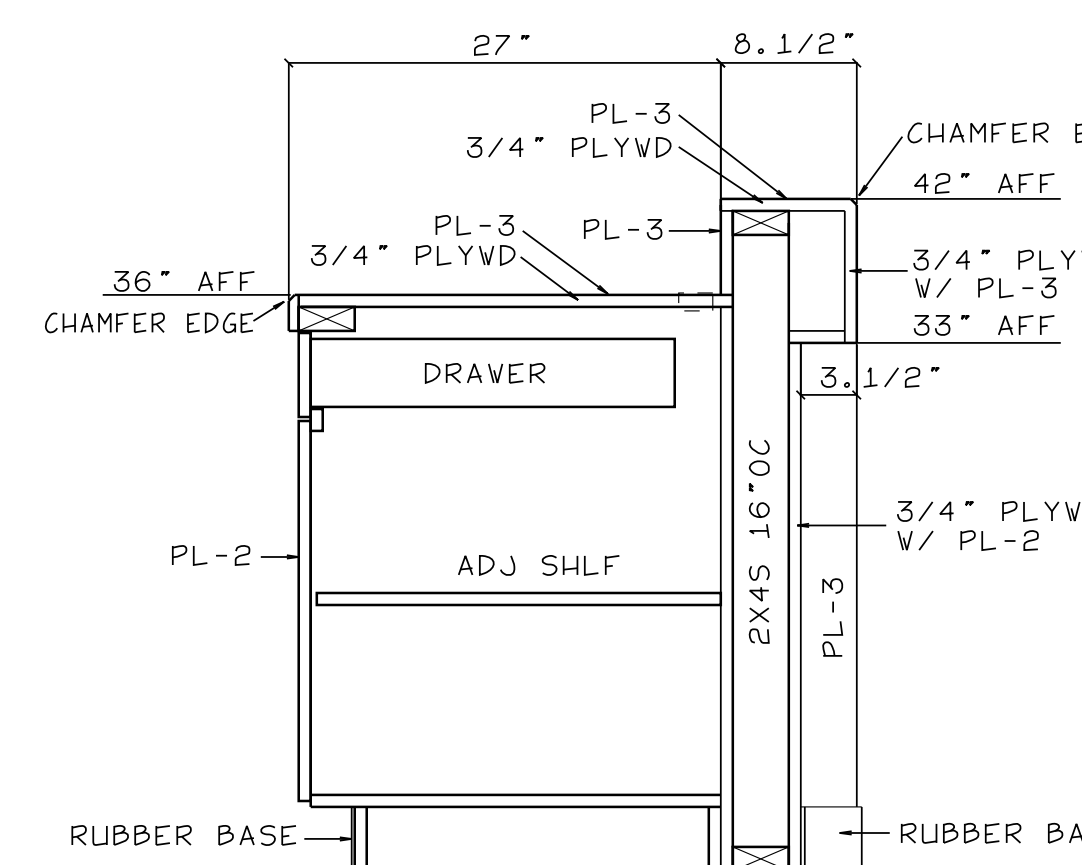


ELEVATION  
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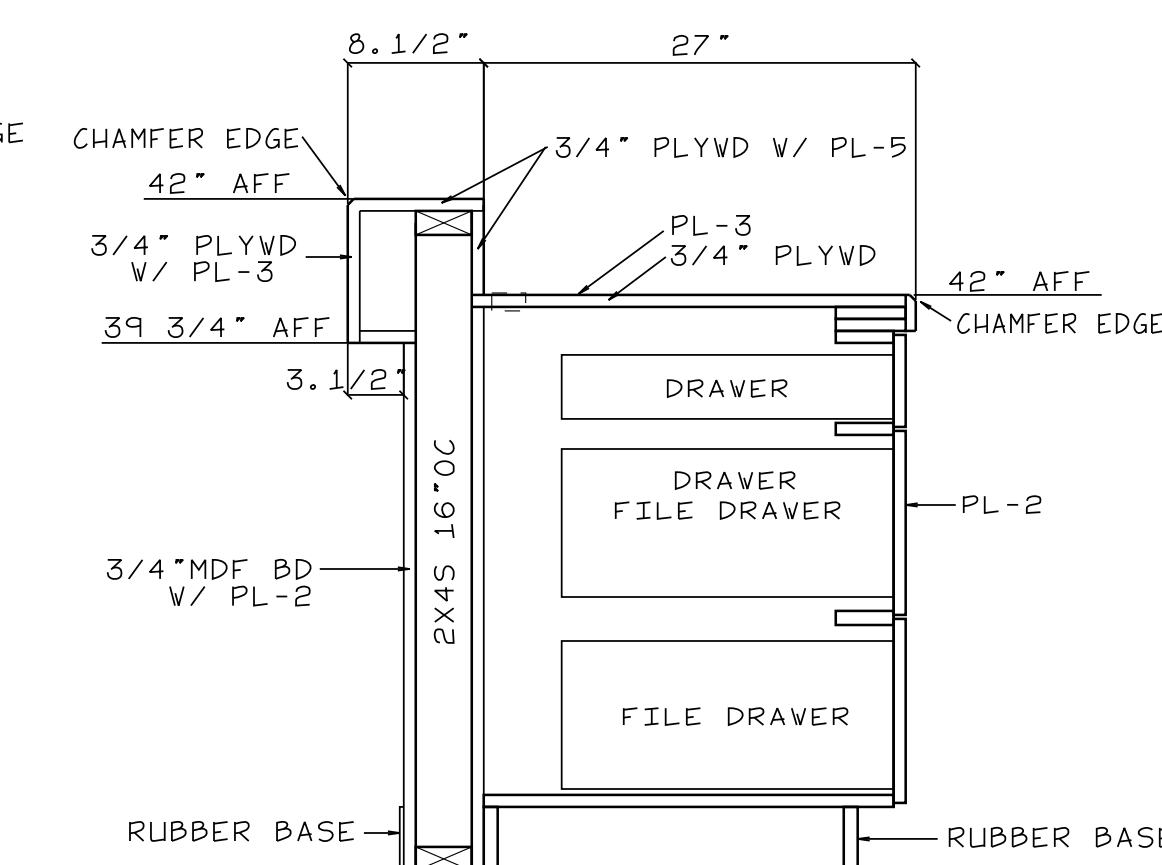
PLAN VIEW  
SCALE: 1" = 1'-0"

PL-1: WILSONART - 335 (VERT GRAIN) 350 (HORZ GRAIN) - ASIAN AMBER 11152K-18  
P-5: SHERVIN WILLIAMS - IRON ORE SW-7069 - EGGSHELL

RETAIL PARTS ACCESSORY WALL

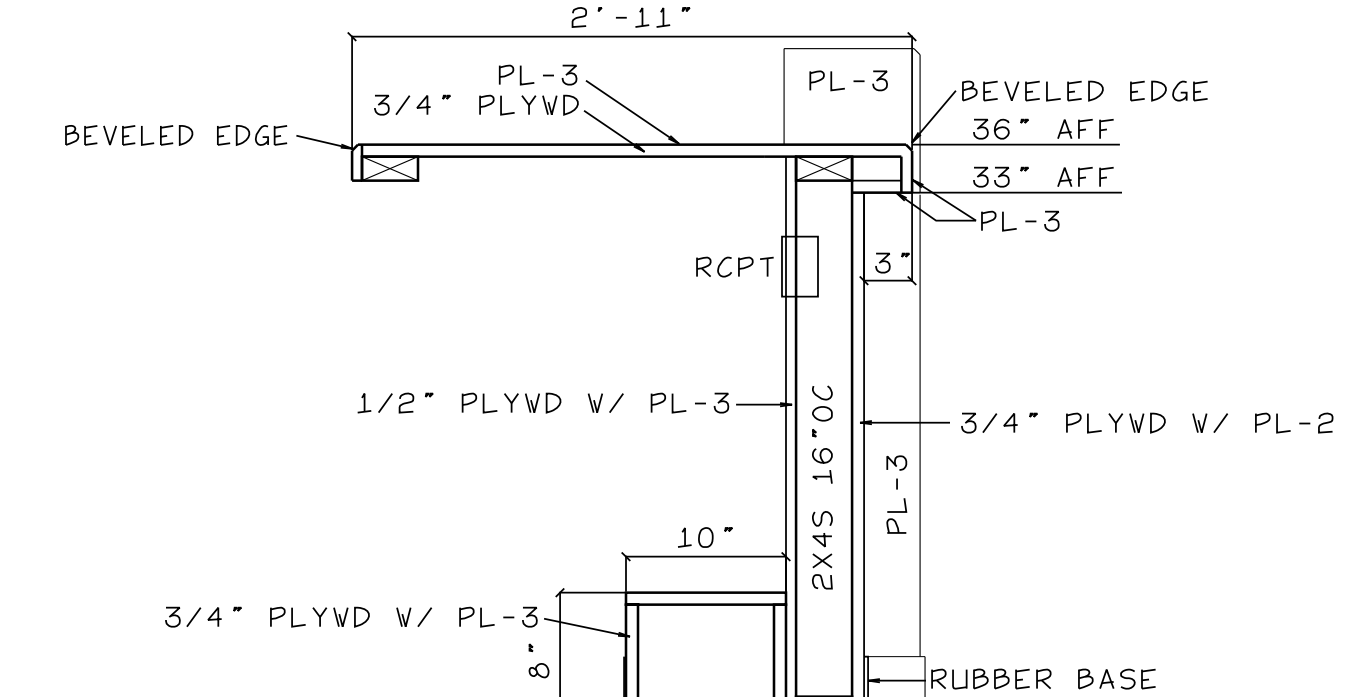


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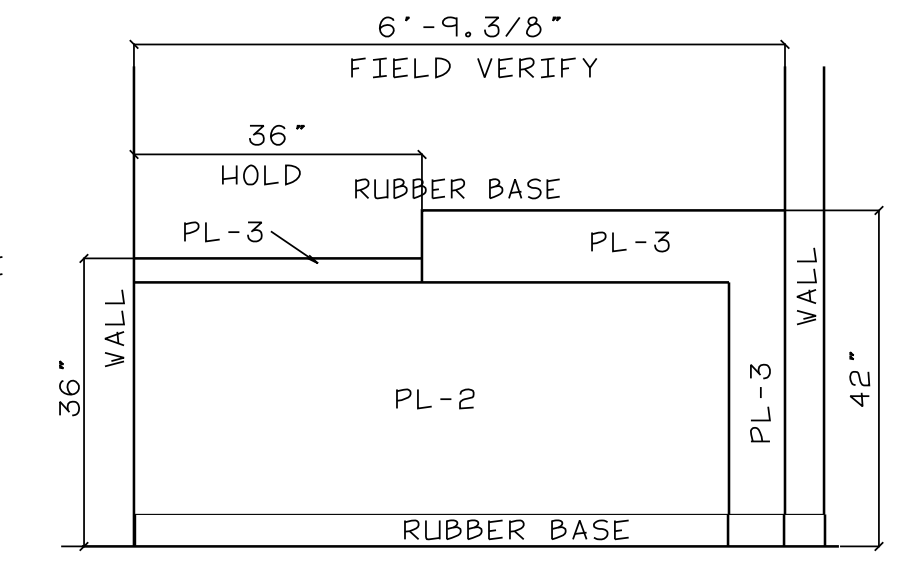


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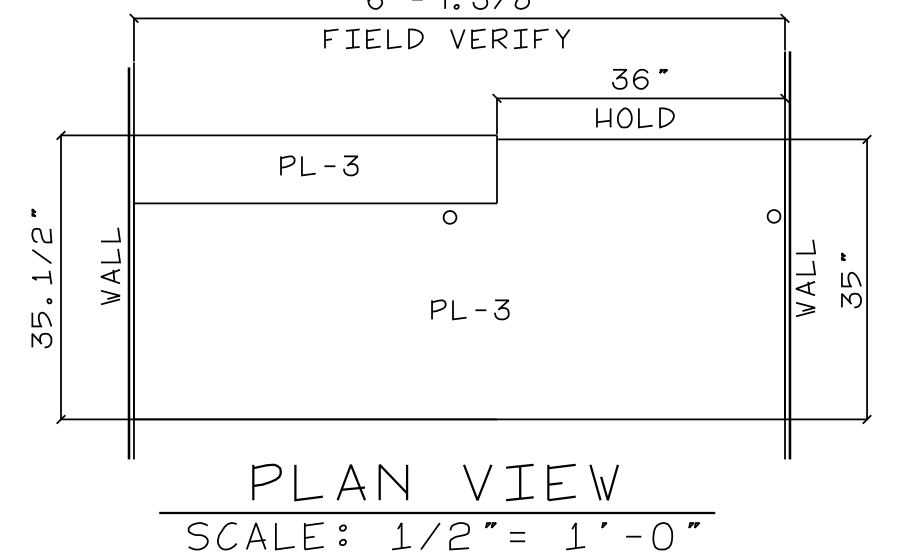
PL-2: WILSONART - 335 (VERT GRAIN) 350 (HORZ GRAIN) - WILD CHERRY 7054-60  
PL-3: WILSONART - 335 (VERT GRAIN) 350 (HORZ GRAIN) - GRAPHITE NEBULA 4623-60  
WHITE MELAMINE INTERIORS



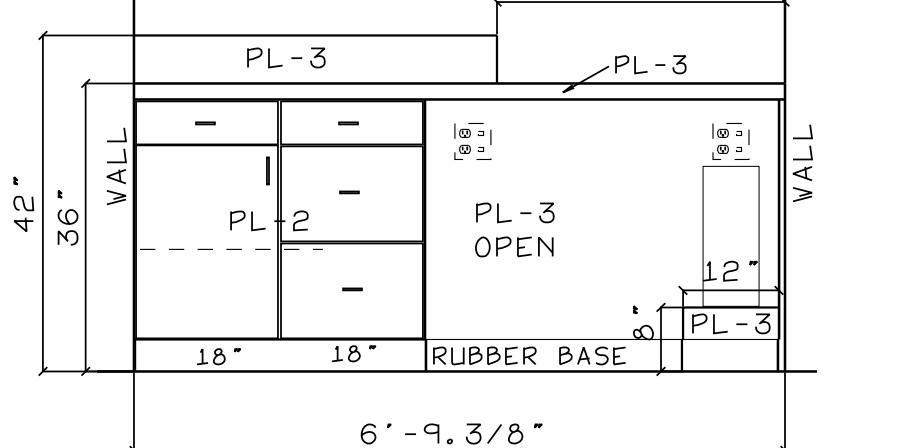
SECTION  
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FRONT VIEW  
SCALE: 1/2" = 1'-0"



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



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

RETAIL PARTS COUNTER

JEEP OFFICE CAMBER DETAIL

Smith Engineering and Design, P.A.  
1103 Grovie Place, Suite A  
Greenville, NC 27534  
Phone: 819.736.2141  
Fax: 819.736.2142  
Corporate License # C-2241

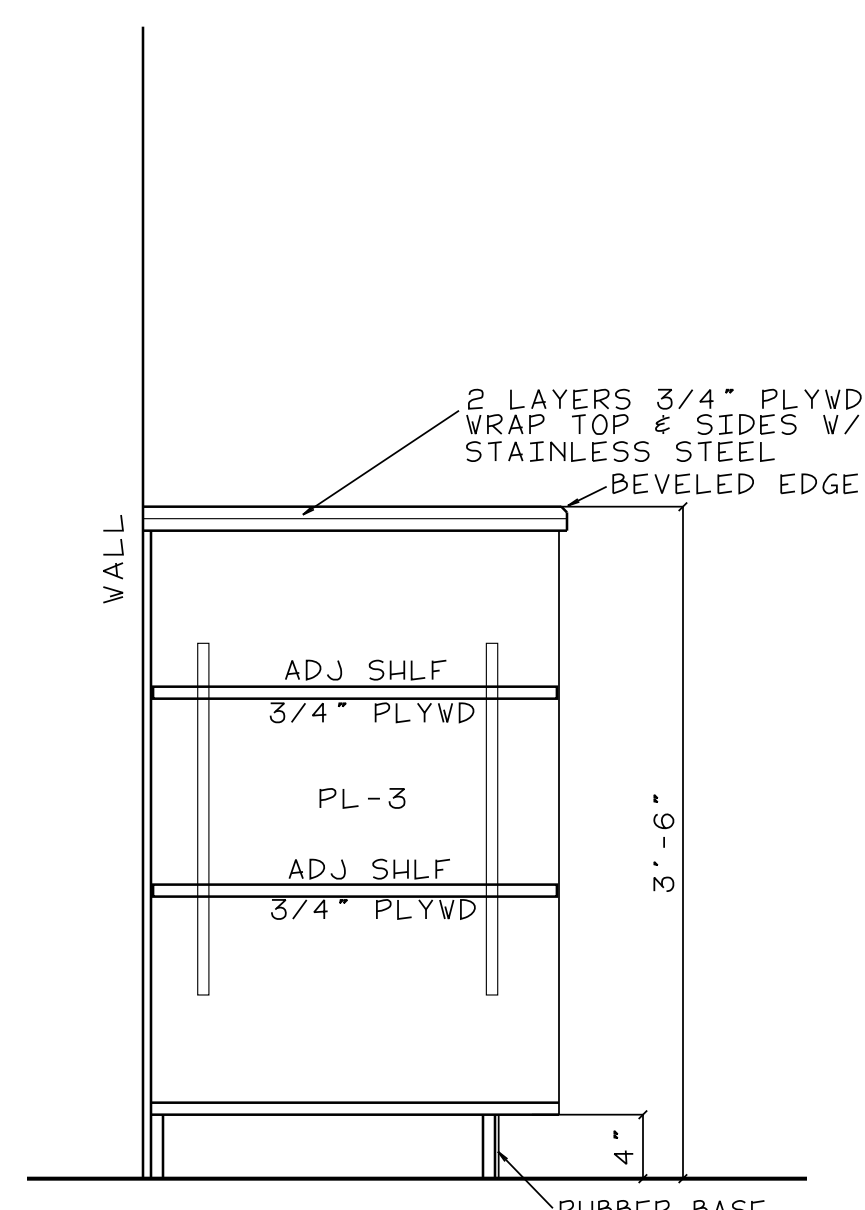
SEAL  
024916  
11-19-21  
JOE T. SMITH  
REGISTERED PROFESSIONAL ENGINEER  
STATE OF NORTH CAROLINA

JOHN HIESTER  
CDR+J  
LILLINGTON, N.C.

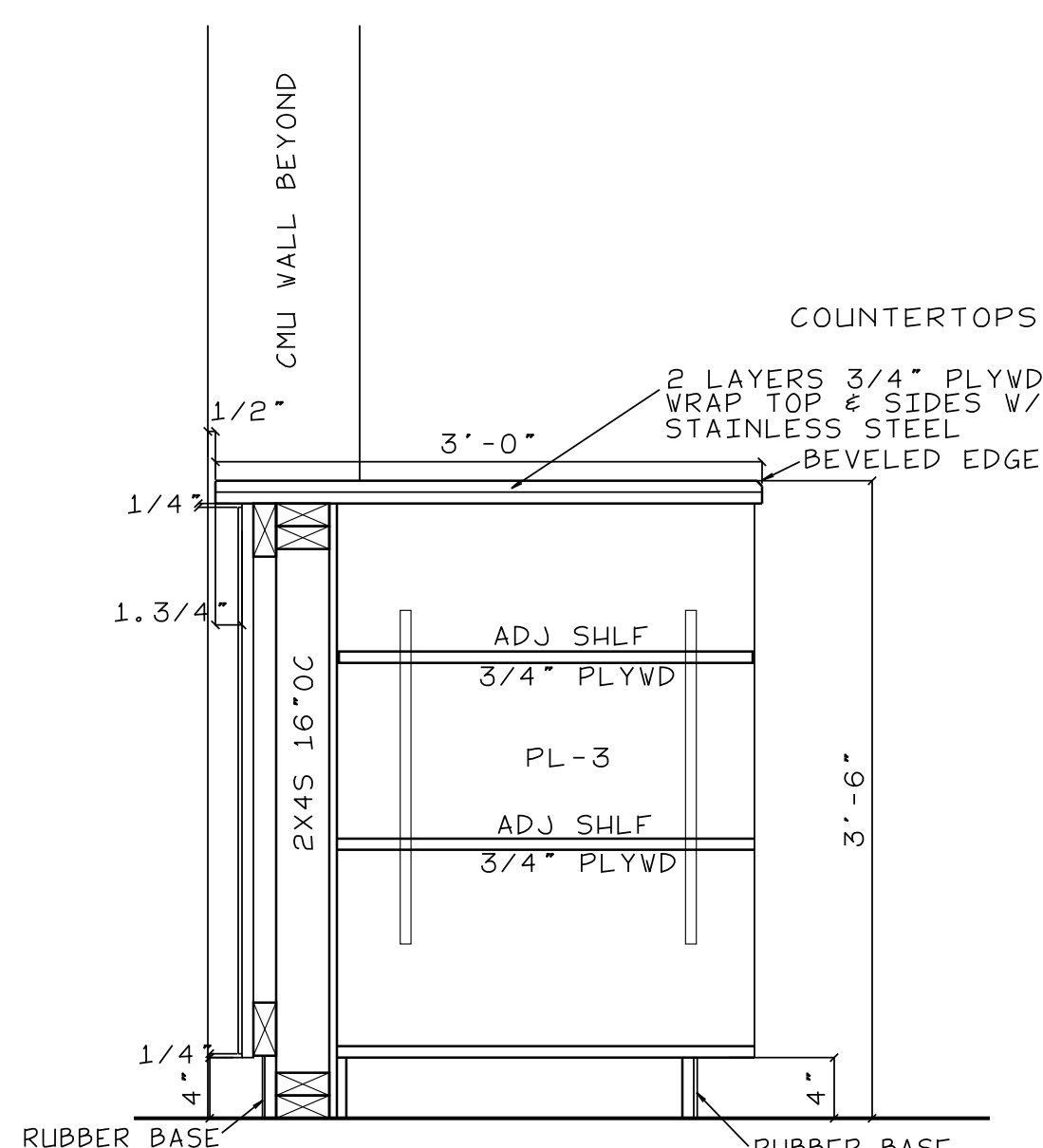
PROJECT NO: 21004  
DRAWN BY: JL  
DATE: 11-19-2021

MILLWORK

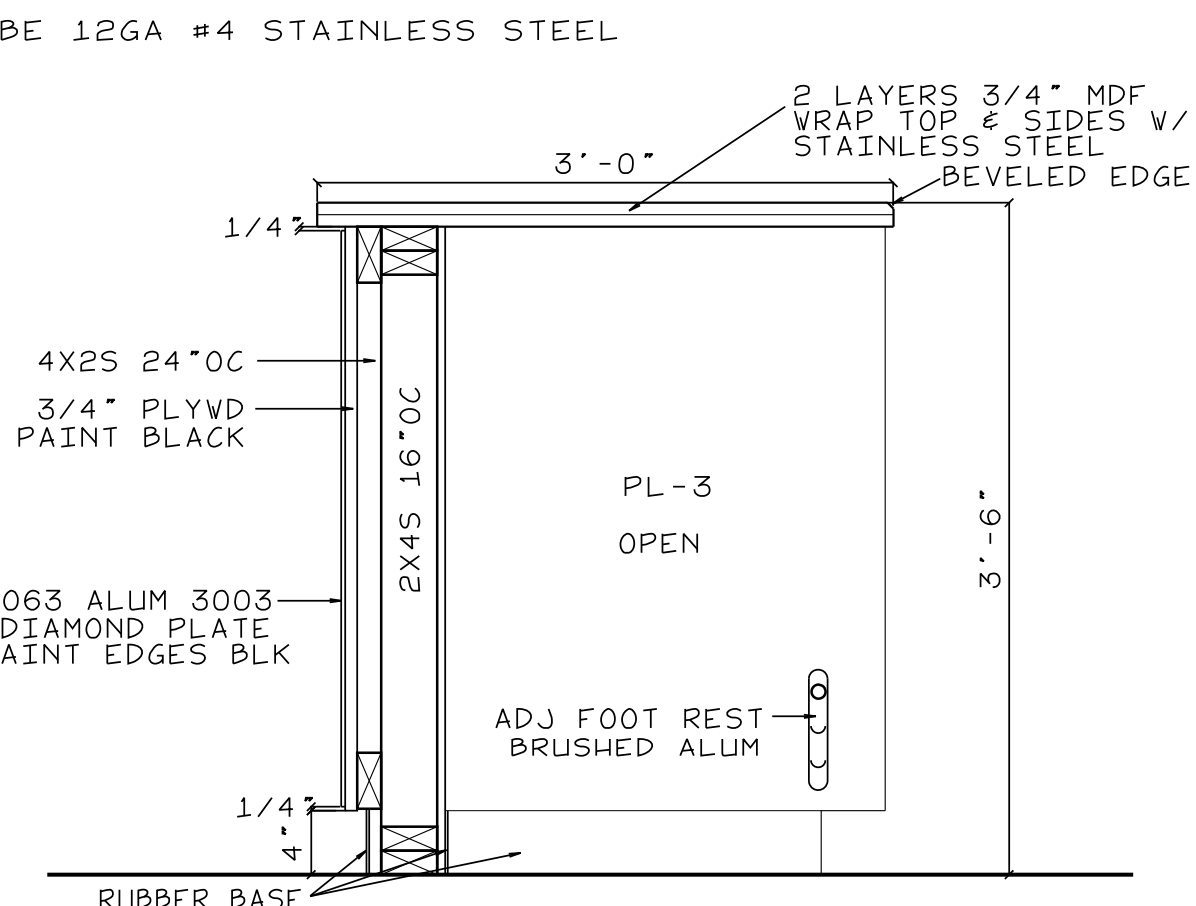
MW-2



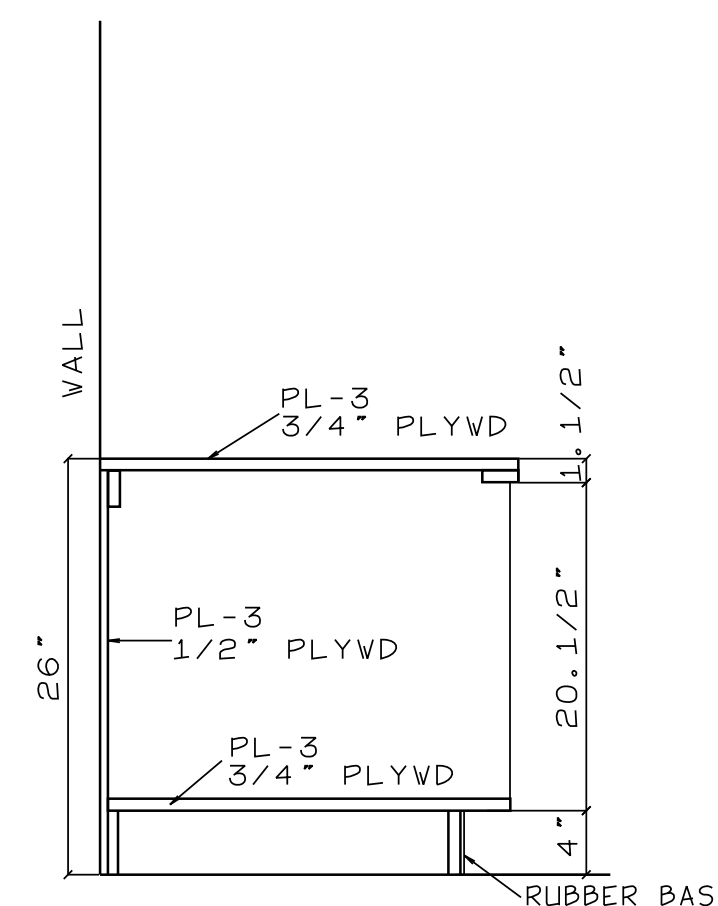
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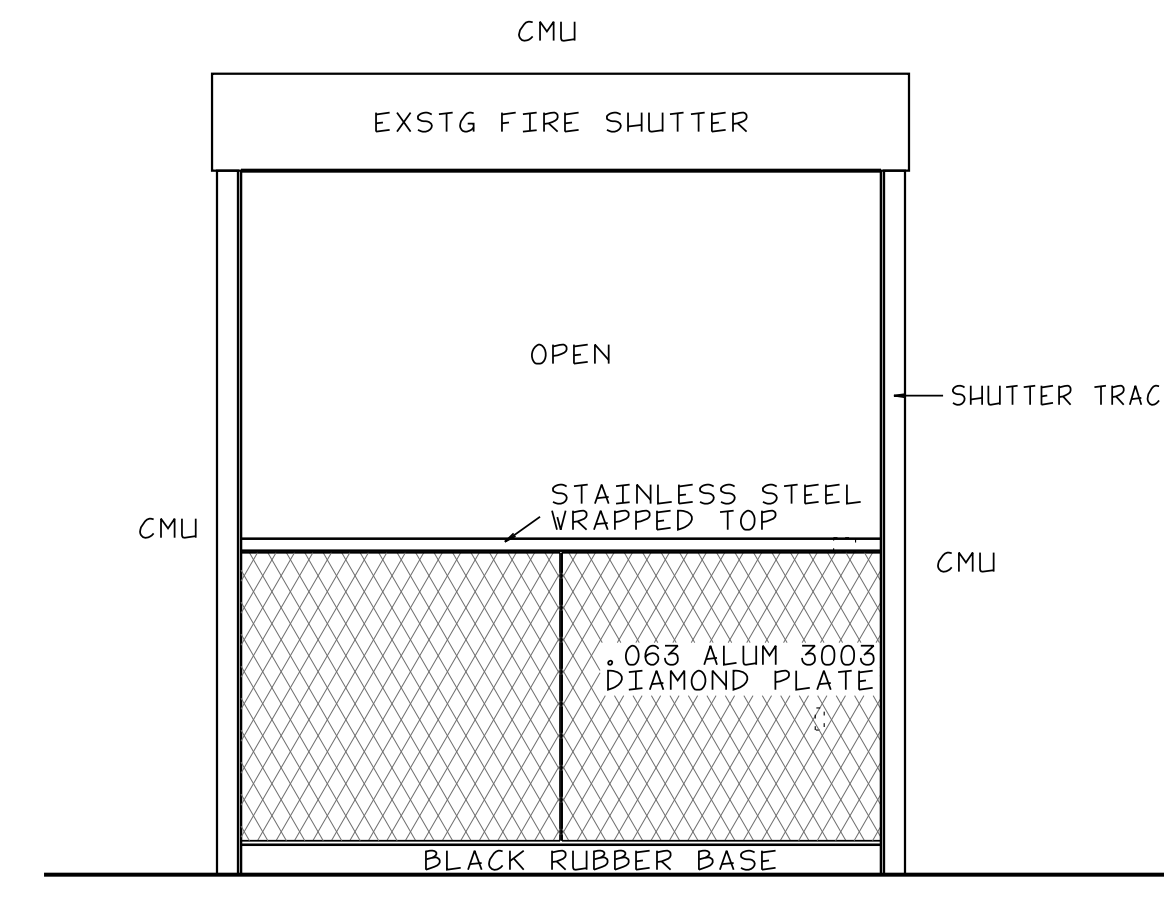
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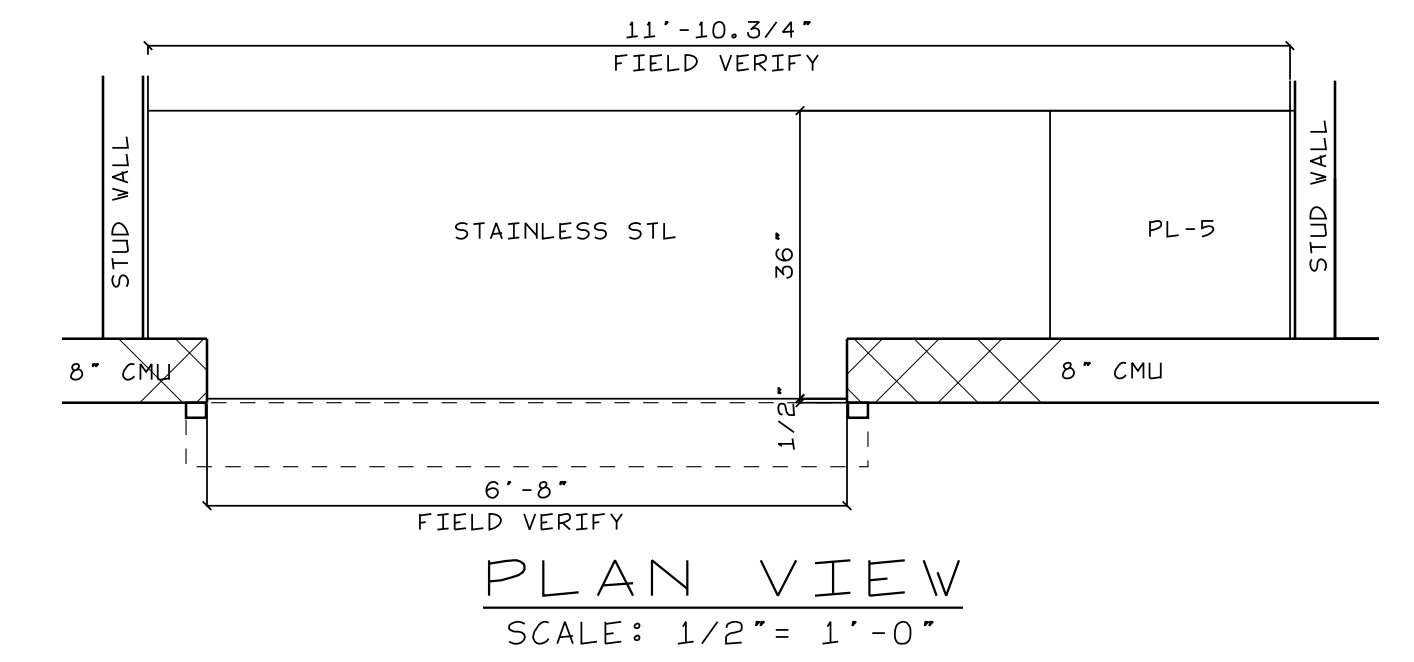
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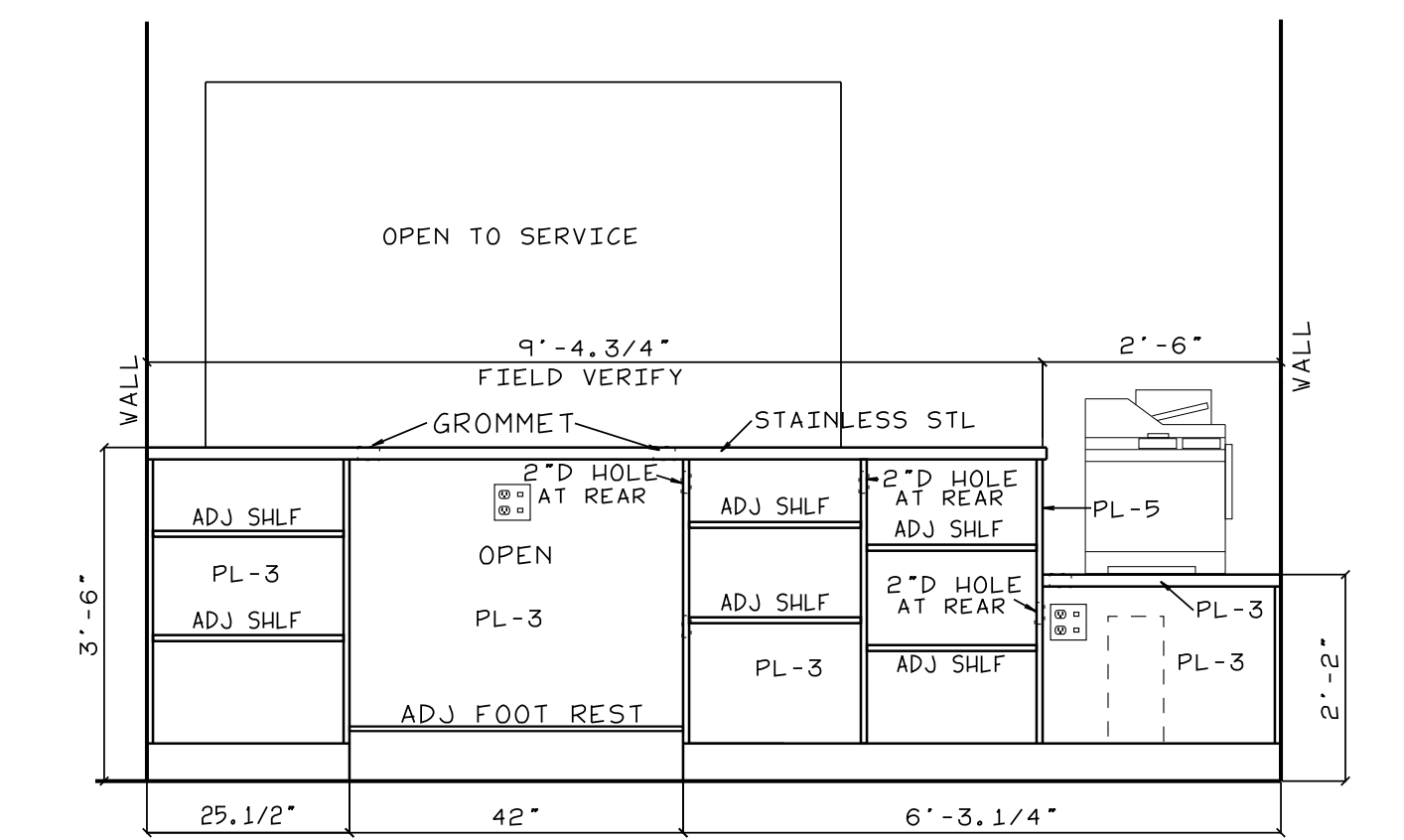
SECTION  
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FRONT VIEW  
SCALE: 1/2" = 1'-0"



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

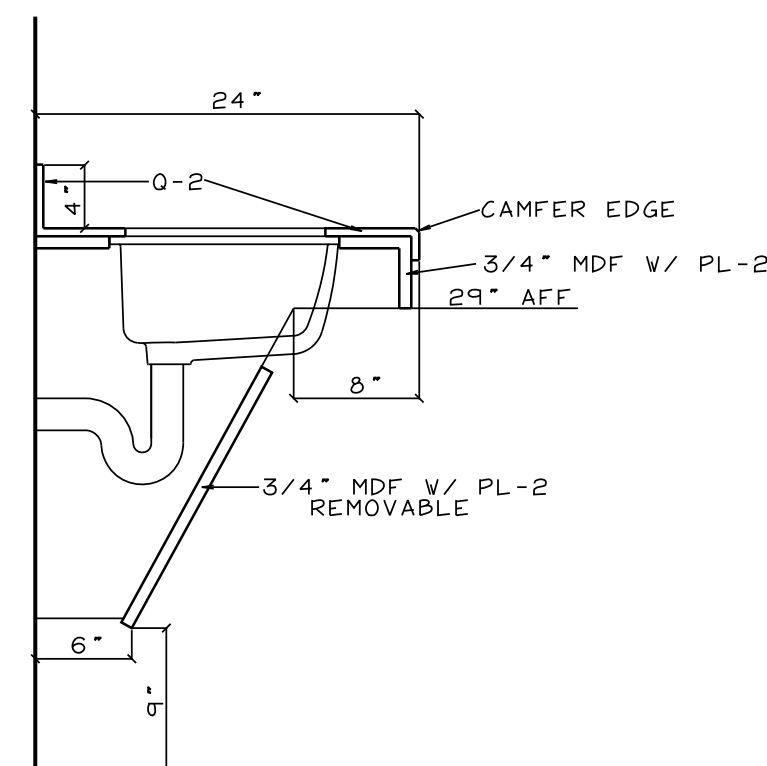


REAR VIEW  
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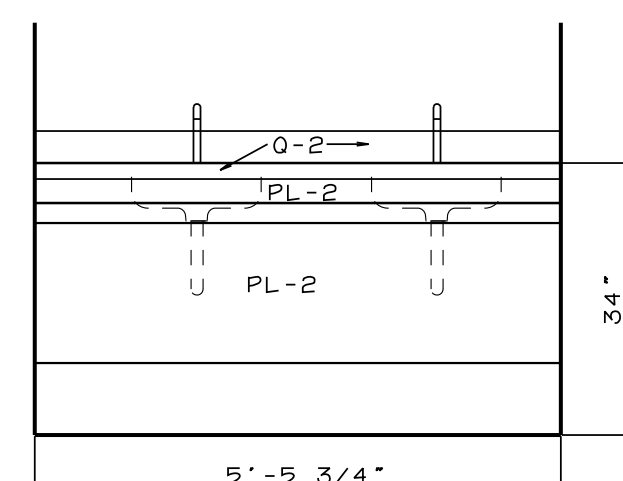
COORDINATE POWER & DATA W/ ELEC CONTRACTOR  
PL-3: WILSONART - 335 (VERT GRAIN) 350 (HORZ GRAIN) - GRAPHITE NEBULA 4623-60

TECH COUNTER

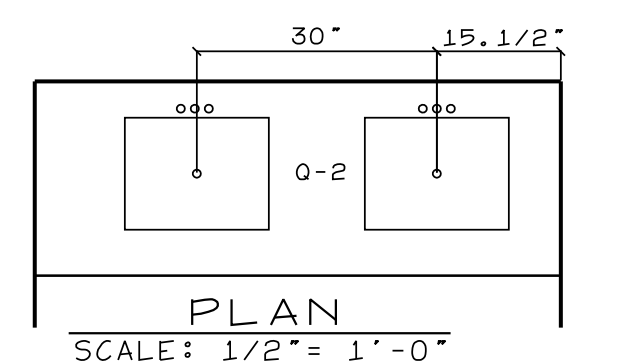
PUBLIC RESTROOM VANITY



SECTION  
SCALE: 1" = 1'-0"

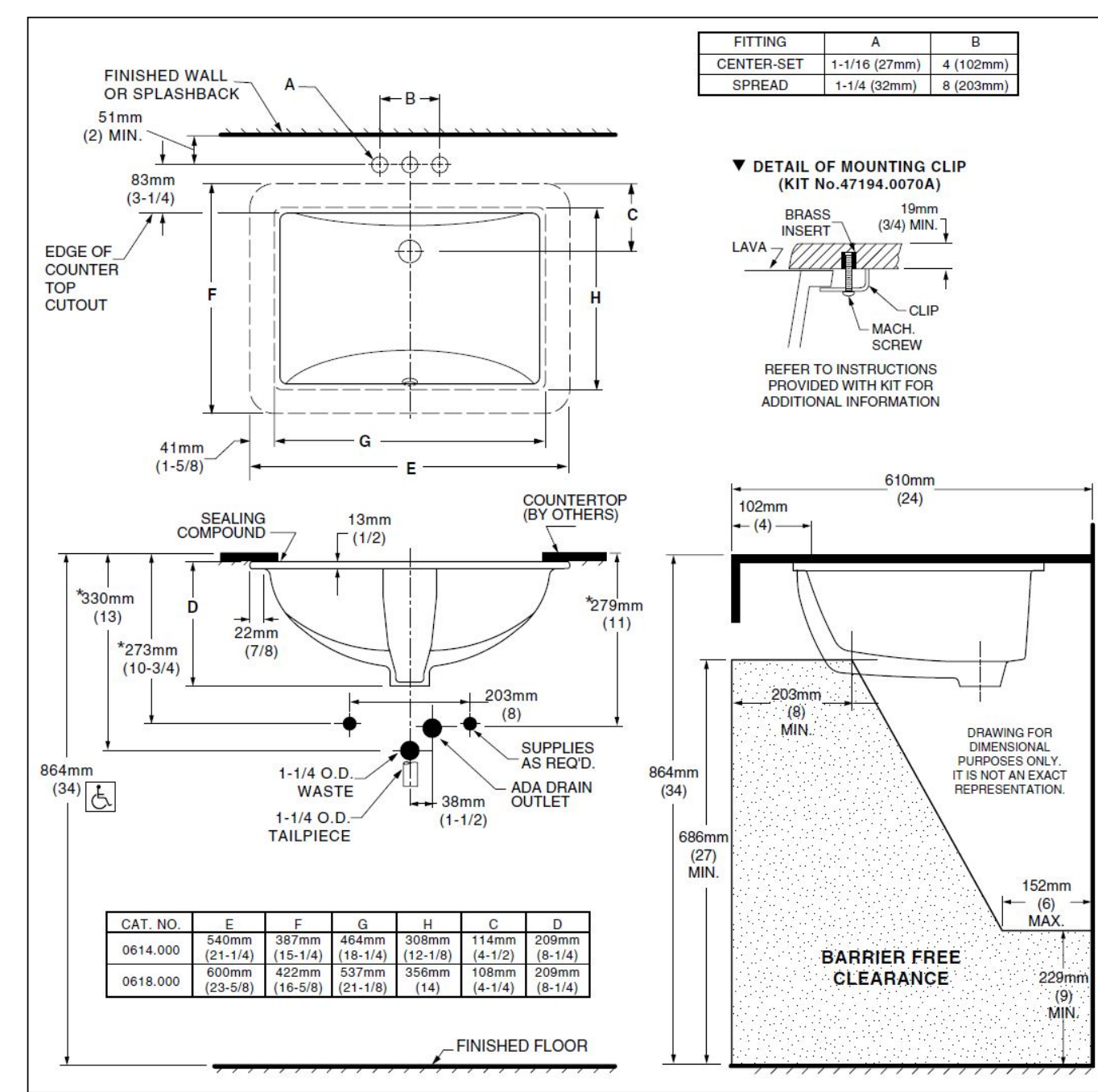


ELEVATION  
SCALE: 1/2" = 1'-0"



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

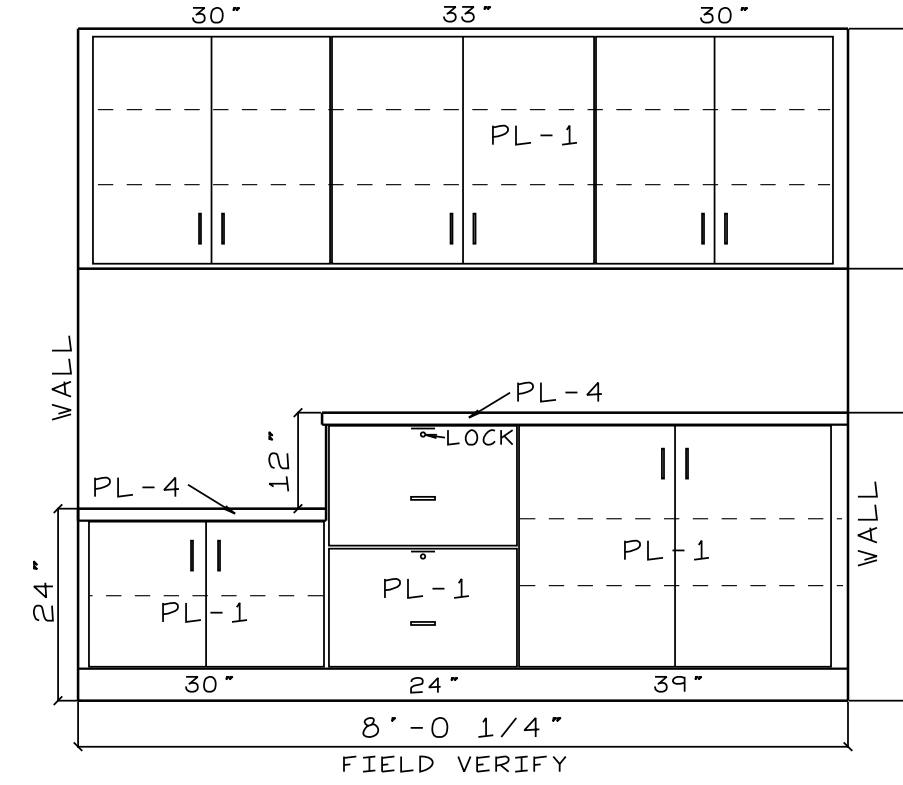
0-2: WILSONART - QUARTZ - WILSONART - OBERLIN  
PL-2: WILSONART - 335 (VERT GRAIN) 350 (HORZ GRAIN) - WILD CHERRY 7054-60



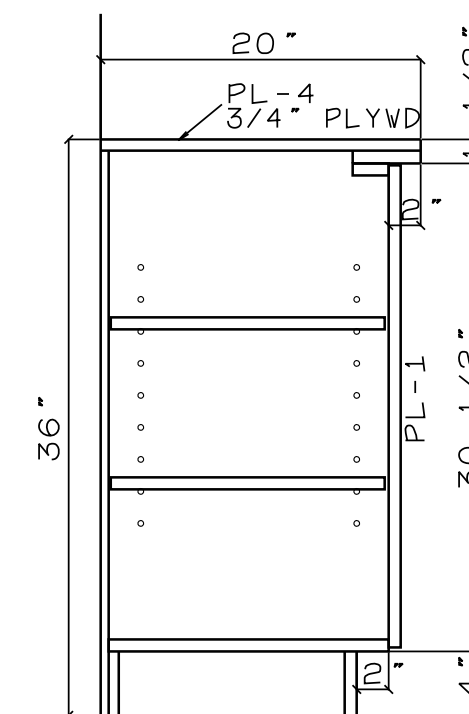
COORDINATE POWER & DATA W/ ELEC CONTRACTOR

PL-1: WILSONART - 335 (VERT GRAIN) 350 (HORZ GRAIN) - ASIAN AMBER 11152K-18  
PL-4: PANOLAM - NEVAMAR - WROUGHT IRON S6054T  
WHITE MELAMINE INTERIORS

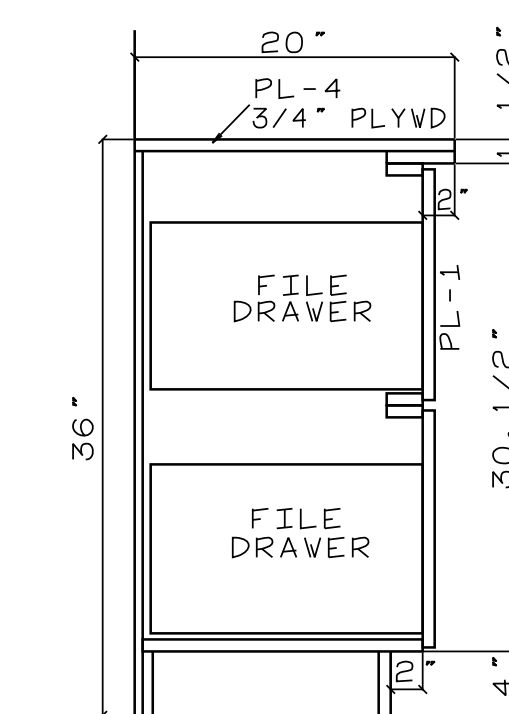
CASHIER REAR CABINETS



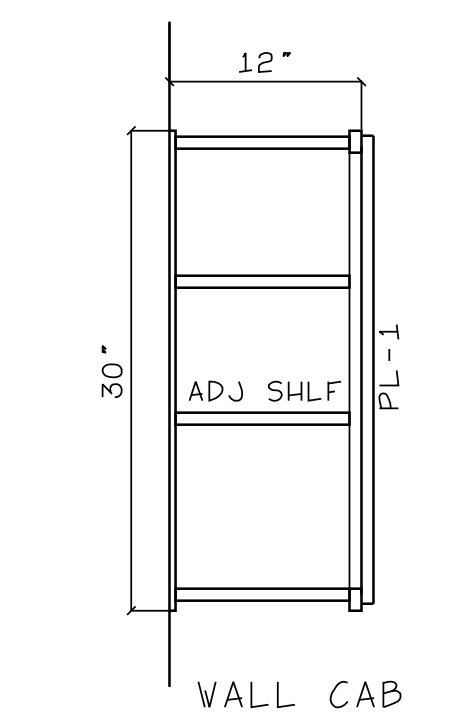
FRONT ELEVATION  
SCALE: 1/2" = 1'-0"



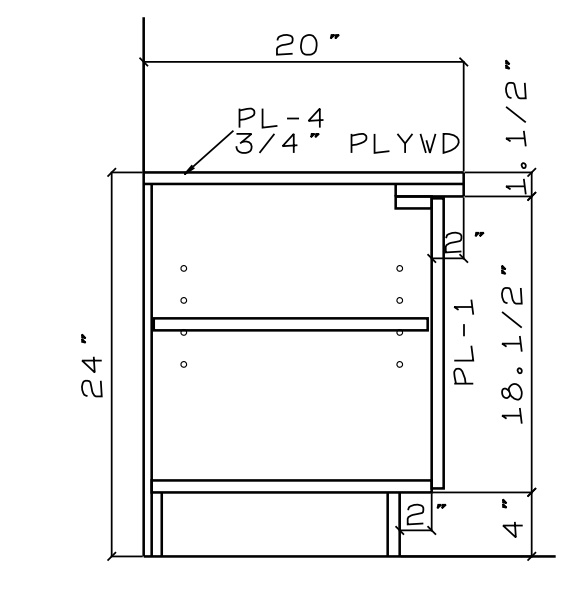
SECTION  
SCALE: 1" = 1'-0"



SECTION  
SCALE: 1" = 1'-0"

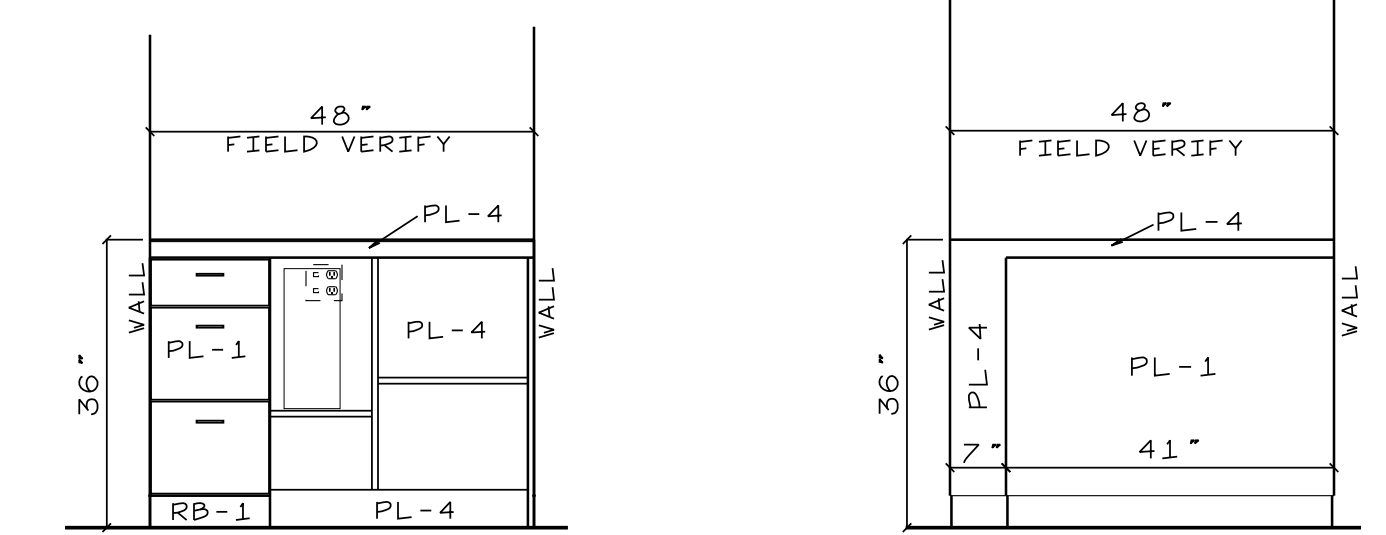


SECTION  
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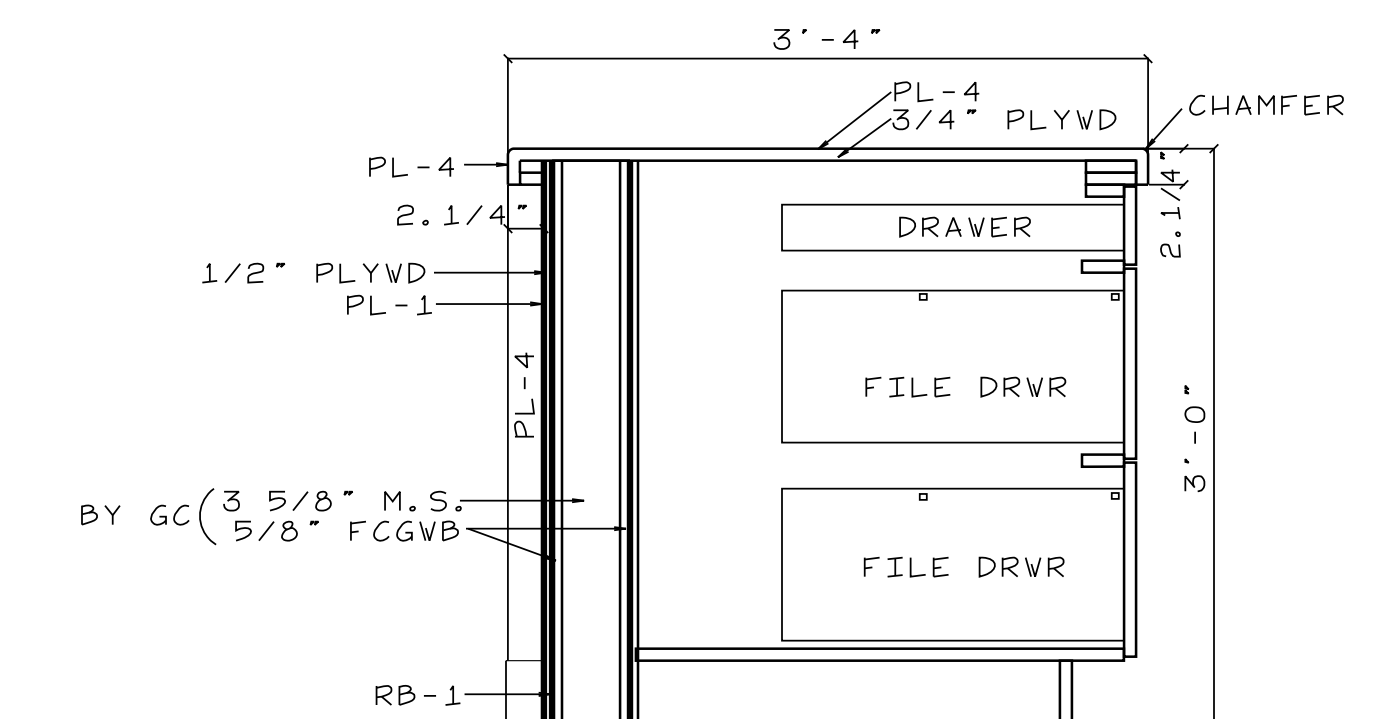
SECTION  
SCALE: 1" = 1'-0"

CASHIER FRONT COUNTER

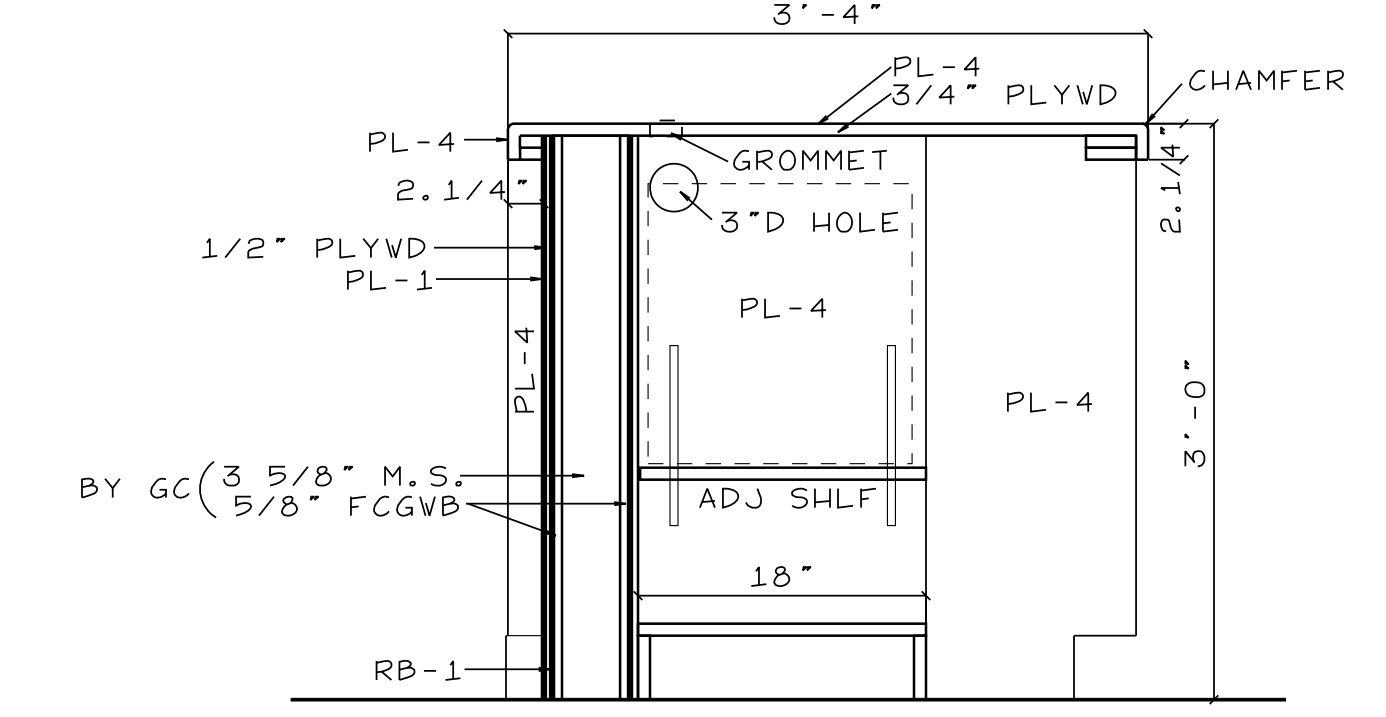


REAR ELEVATION  
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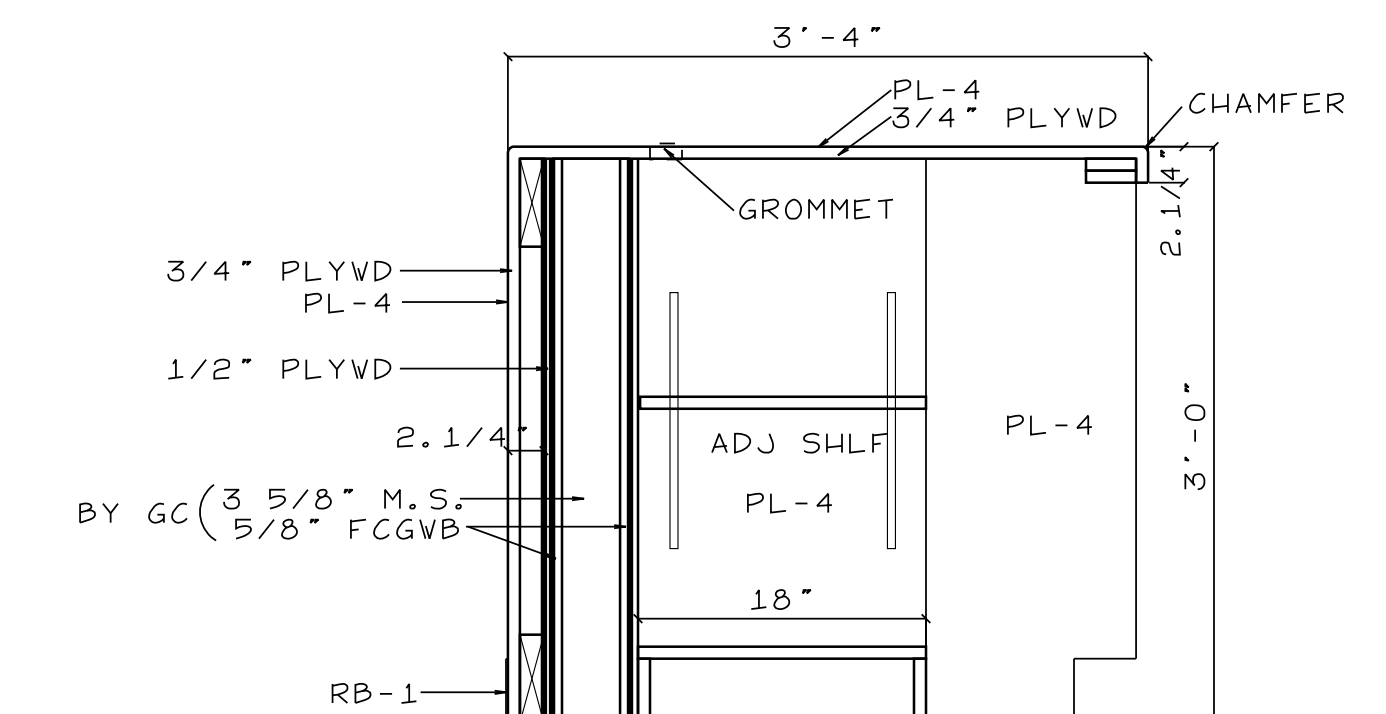
FRONT ELEVATION  
SCALE: 1/2" = 1'-0"



SECTION  
SCALE: 1" = 1'-0"



SECTION  
SCALE: 1" = 1'-0"



SECTION  
SCALE: 1" = 1'-0"

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Professional Seal: JOHN T. SMITH, ENGINEER, No. 024916, State of North Carolina, expires 11-19-21.

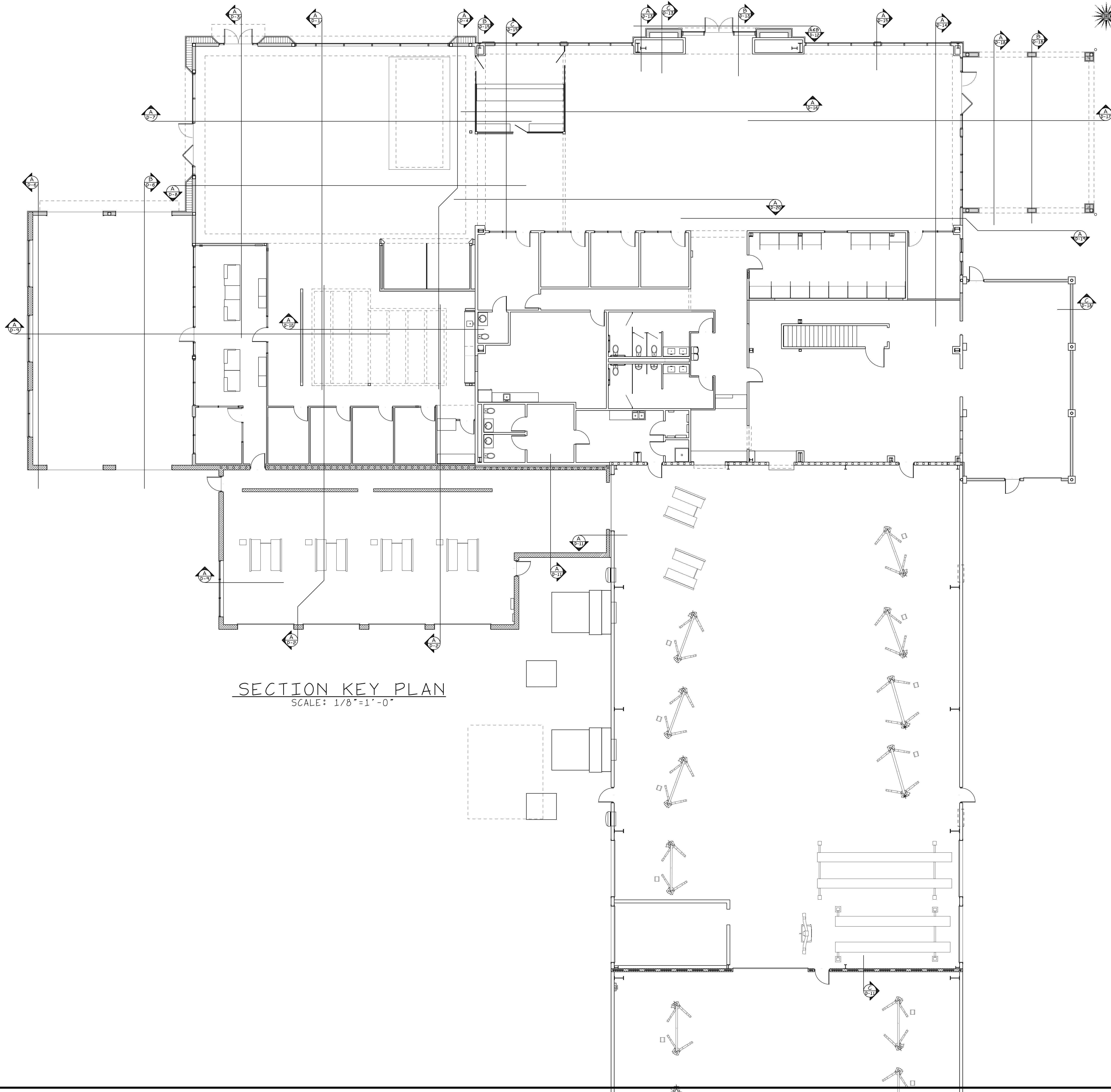
REVISIONS

JOHN HIESTER  
CDR+J  
LILLINGTON, N.C.

PROJECT NO: 21004  
DRAWN BY: JL  
DATE: 11-19-2021

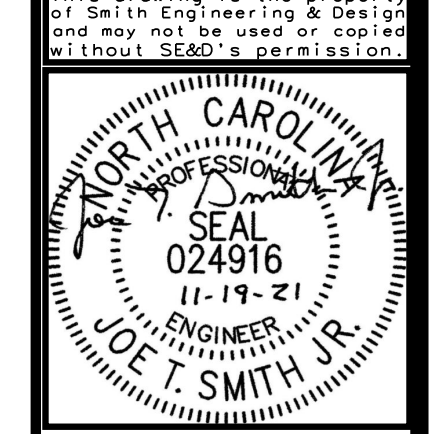
MILLWORK

MW-3



SECTION KEY PLAN  
SCALE: 1/8"=1'-0"

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and Design, P.A.  
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Charlotte, N.C. 27534  
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Fax: 919.736.2142  
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REVISIONS

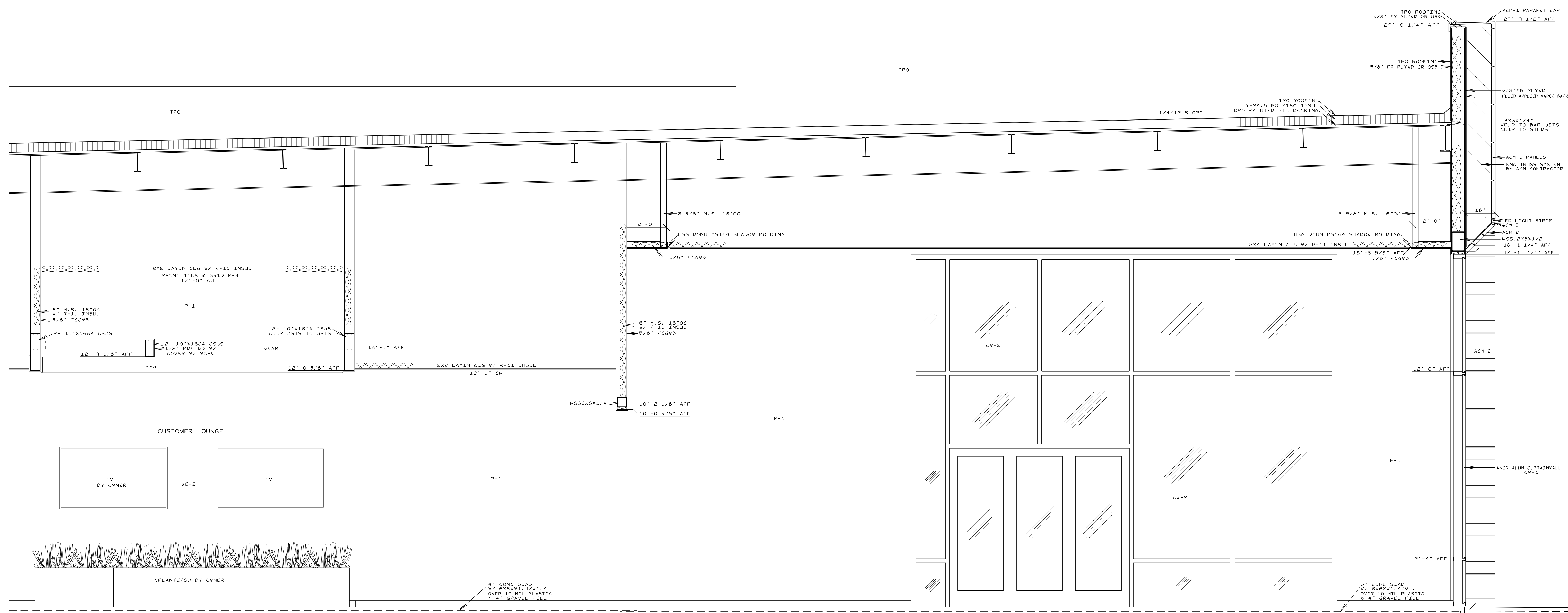
NO.	DESCRIPTION

PROJECT NO: 21004  
DRAWN BY: JL  
DATE: 11-19-2021

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CDR+J  
LILLINGTON, N.C.  
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SECTION  
KEY PLAN

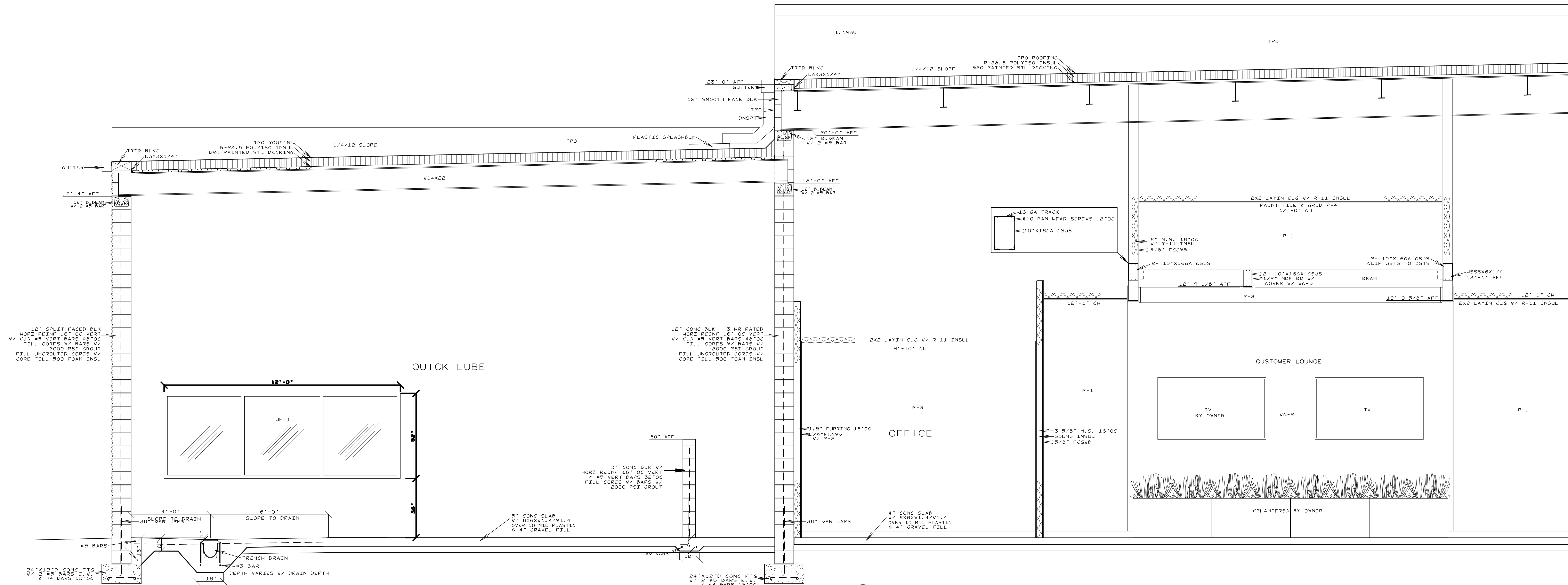
D-0



**A SECTION**  
 D-1 SCALE: 1/2"=1'-0"

<p>Smith Engineering and Design, P.A.        1103 Gracie Place - Suite A        Goldsboro, N.C. 27534        Phone: 919.736.2141        Fax: 919.736.2142        Corporate license # C-2241</p>		REVISIONS	<p><b>JOHN HIESTER</b>        CDR+J        LILLINGTON, N.C.</p>	<p>JOB #21004        DRAWN BY: JL        DATE: 11/19/2021</p>
				<p>SECTIONS        D-1</p>

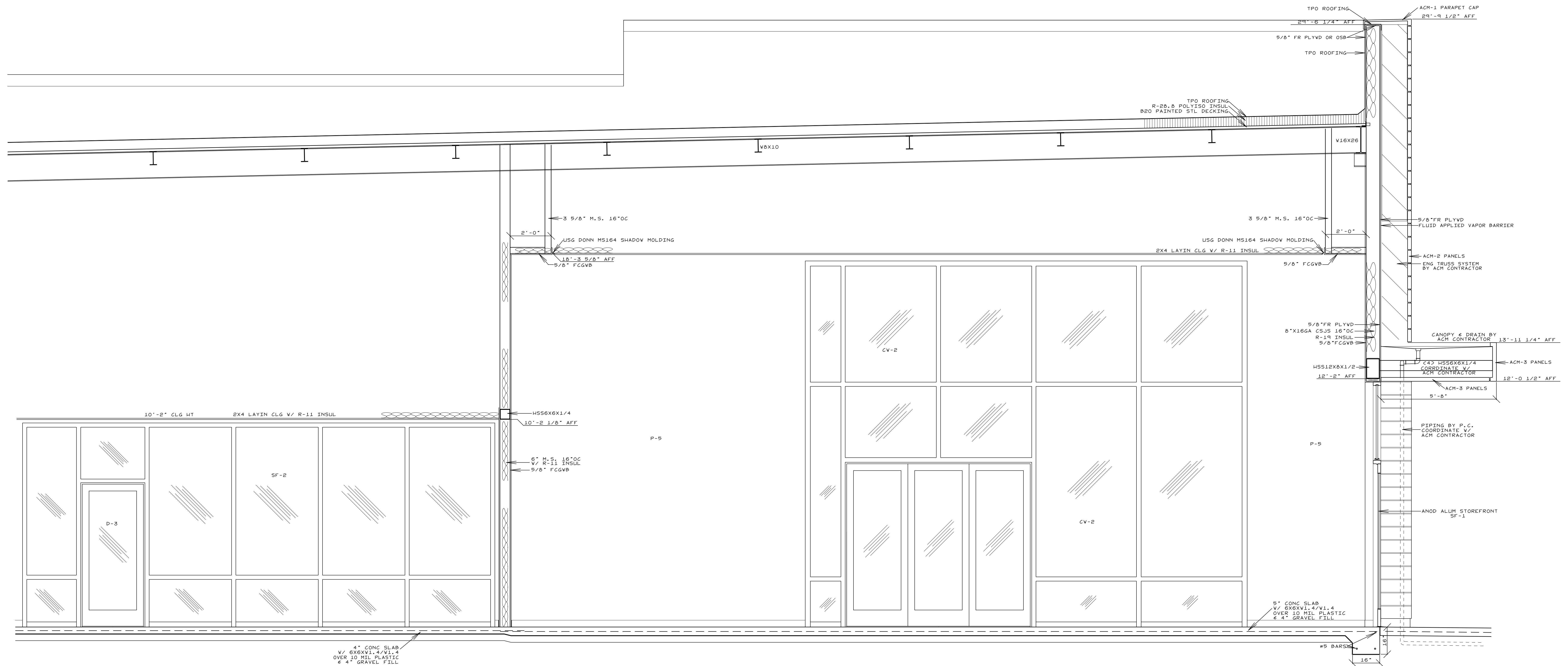
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**A SECTION**  
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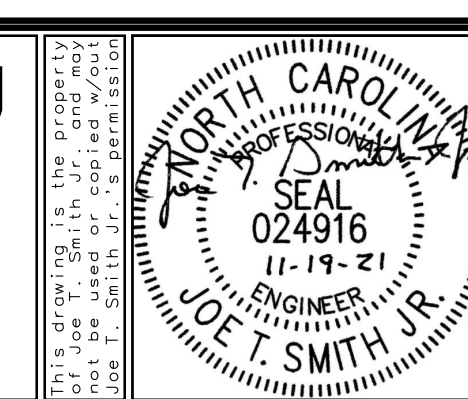
<p>Smith Engineering and Design, P.A.          1103 Gracie Place - Suite A          Goldsboro, N.C. 27534          Phone: 919.736.2141          Fax: 919.736.2142          Corporate license # C-2241</p>		REVISIONS	<p><b>JOHN HIESTER</b>          CDR+J          LILLINGTON, N.C.</p>	JOB #21004 DRAWN BY: JL DATE: 11/19/2021
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**A**  
SECTION  
D-3 SCALE: 1/2"=1'-0"

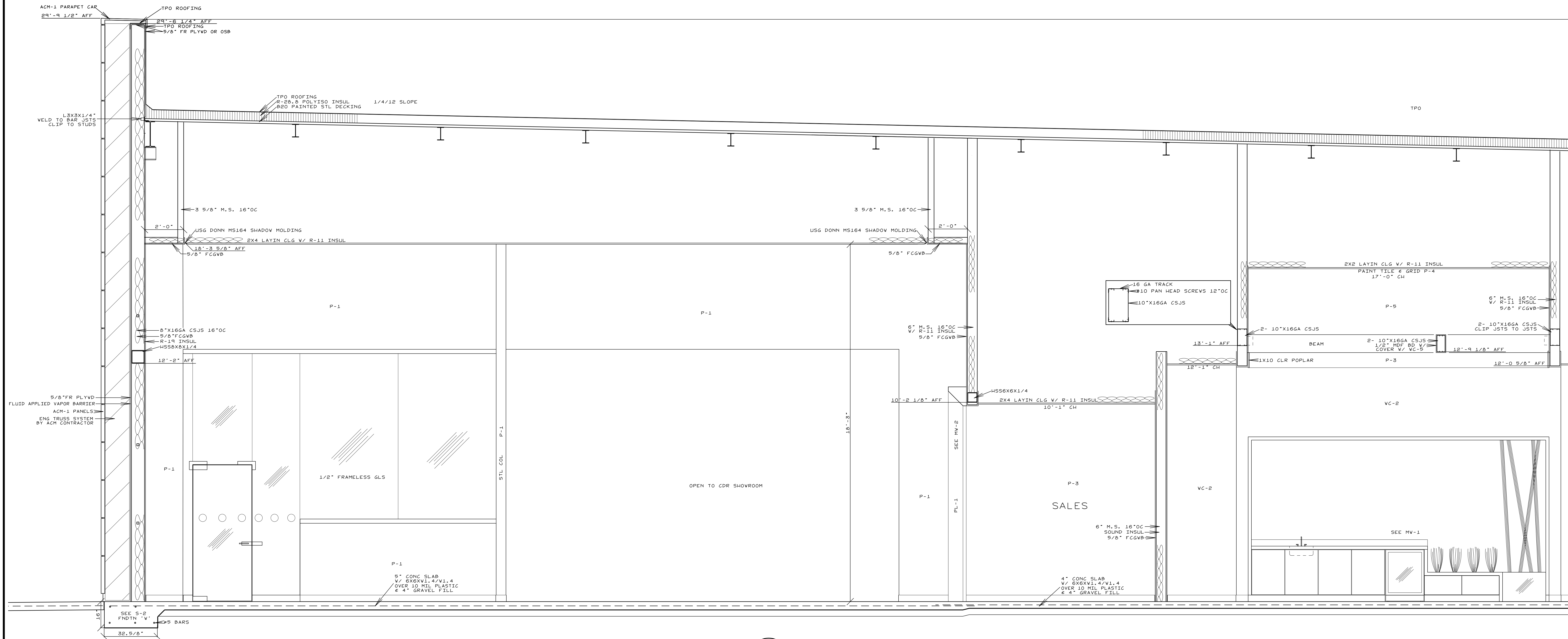
**Smith Engineering and Design, P.A.**  
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 Goldsboro, N.C. 27534  
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 Fax: 919.736.2142  
 Corporate license # C-2241



NO.	REVISIONS

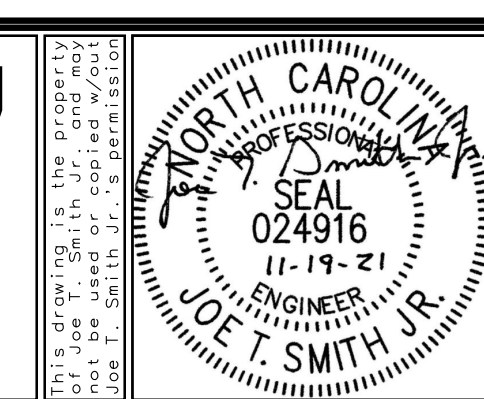
**JOHN HIESTER**  
 CDR+J  
 LILLINGTON, N.C.

JOB #21004  
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 DATE: 11/19/2021  
 SECTIONS  
 D-3



**A** SECTION  
D-4 SCALE: 1/2"=1'-0"

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Goldsboro, N.C. 27534  
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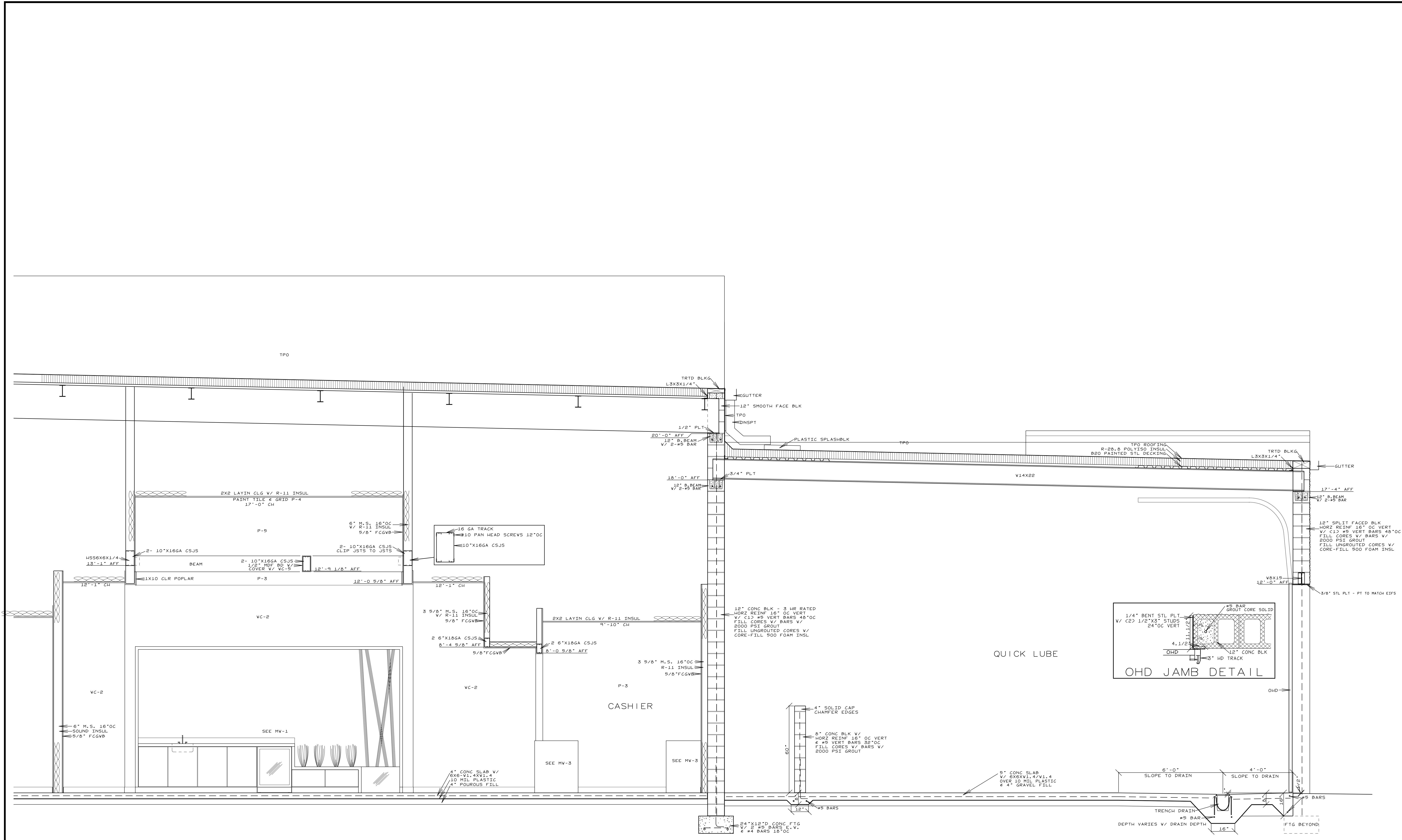
REVISIONS

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CDR+J  
LILLINGTON, N.C.

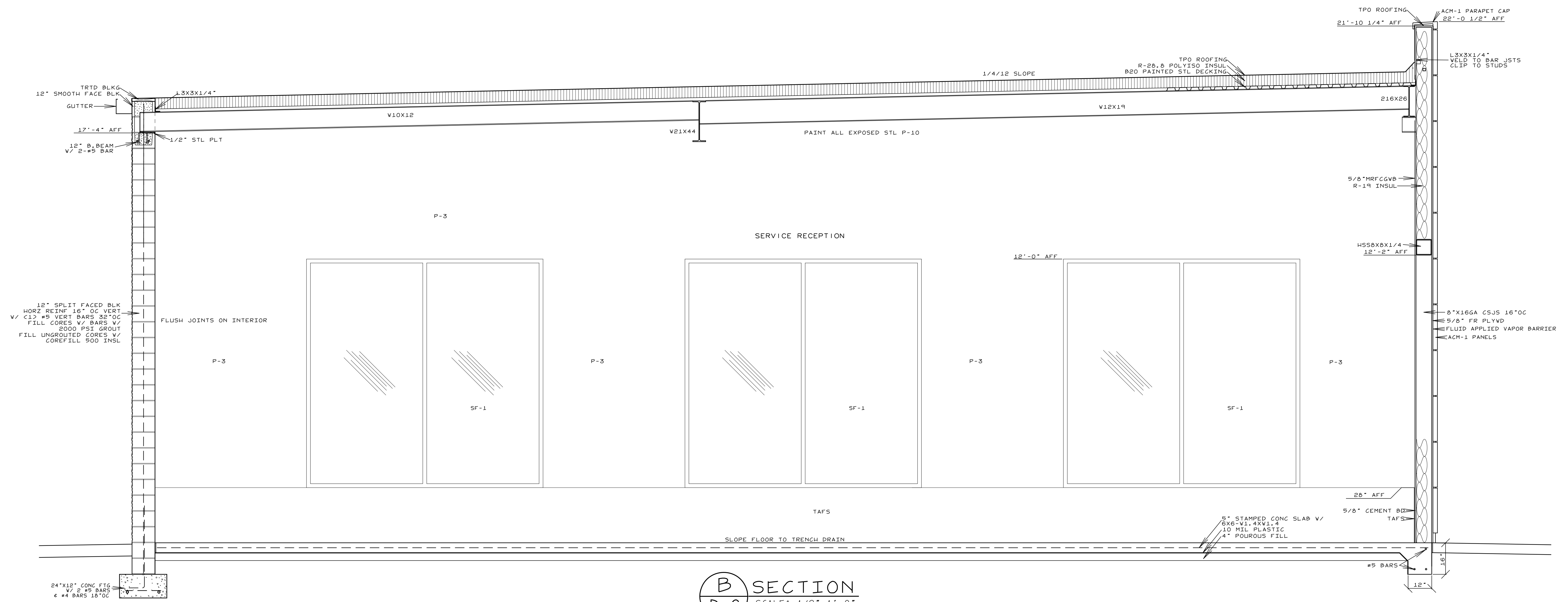
JOB #21004  
DRAWN BY: JL  
DATE: 11/19/2021

SECTIONS  
D-4

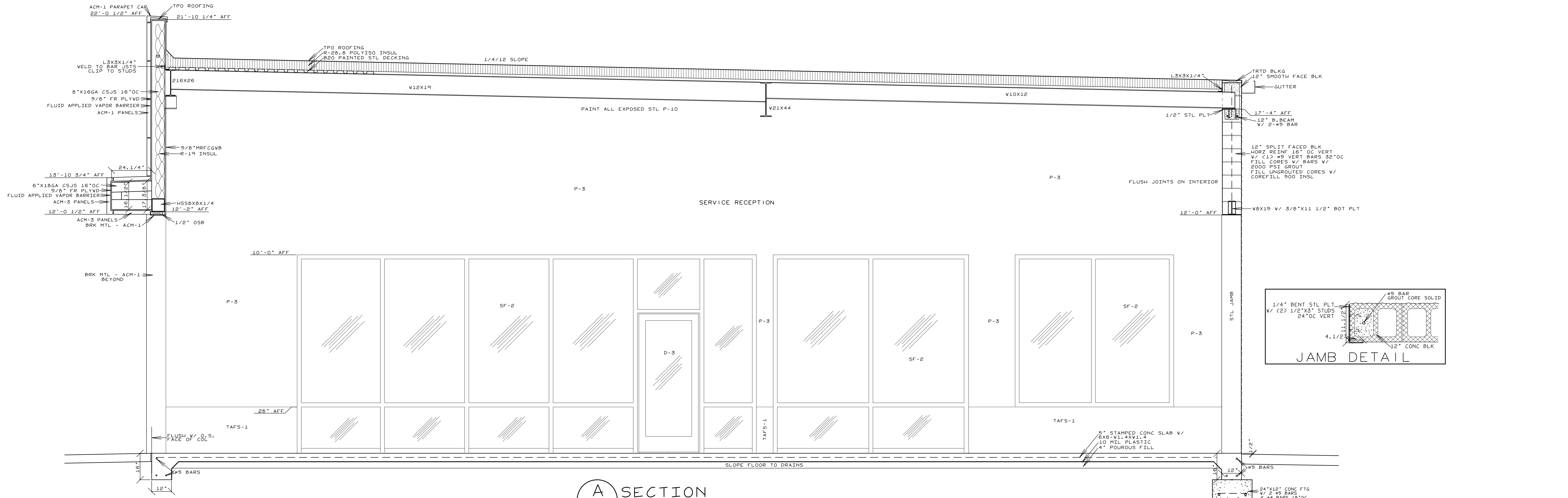


A SECTION  
D-5 SCALE: 1/2"=1'-0"

<p>Smith Engineering and Design, P.A. 1103 Gracie Place - Suite A Goldsboro, N.C. 27534 Phone: 919.736.2141 Fax: 919.736.2142 Corporate license # C-2241</p>		REVISIONS	<p>JOHN HIESTER CDR+J LILLINGTON, N.C.</p>	<p>JOB #21004 DRAWN BY: JL DATE: 11/19/2021</p>
		<p>SECTION D-5</p>		<p>COPYRIGHT 2021 © SMITH ENGINEERING AND DESIGN, P.A. - ALL RIGHTS RESERVED</p>



**B**  
D-6 SECTION  
SCALE: 1/2"=1'-0"



**A**  
D-6 SECTION  
SCALE: 1/2"=1'-0"

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Goldsboro, N.C. 27534  
Phone: 919.736.2141  
Fax: 919.736.2142  
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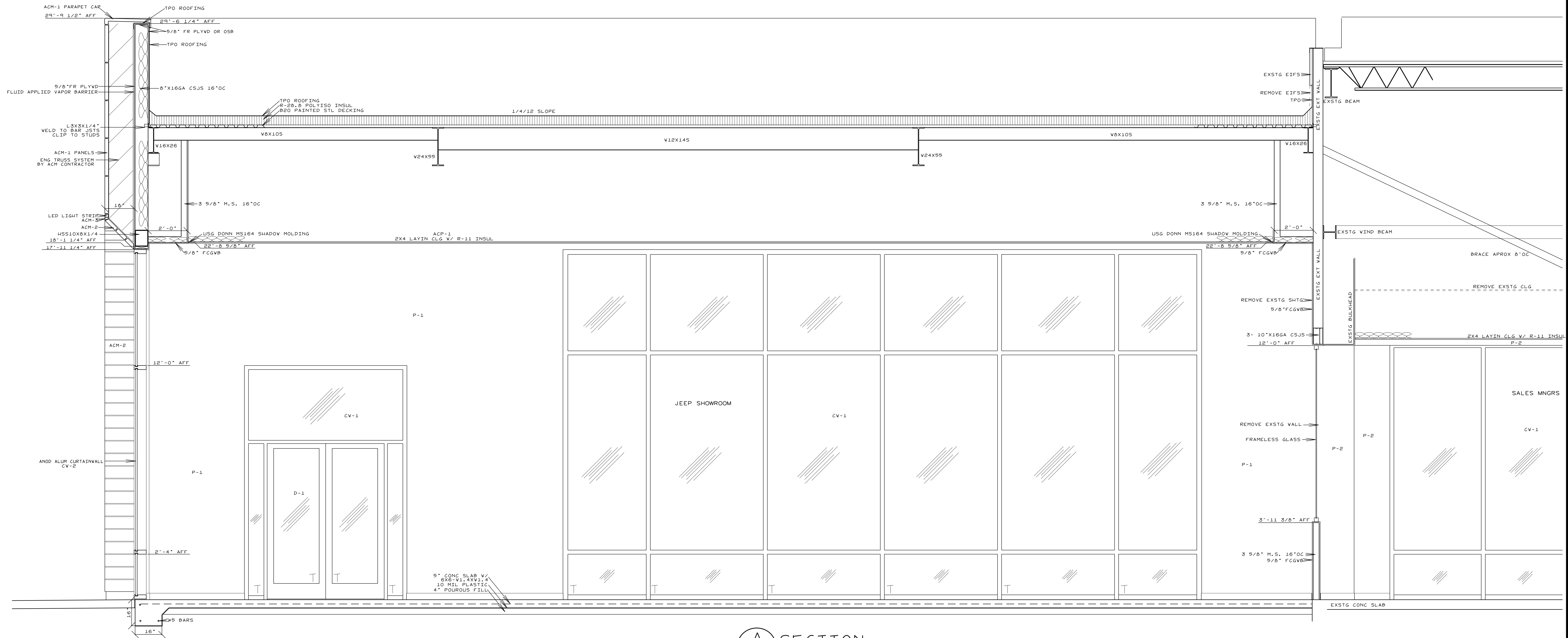
Professional Engineer Seal for North Carolina, No. 024916, dated 11-19-21, signed by Joe T. Smith, Jr.

REVISIONS

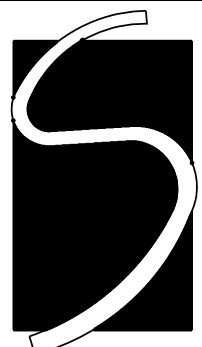
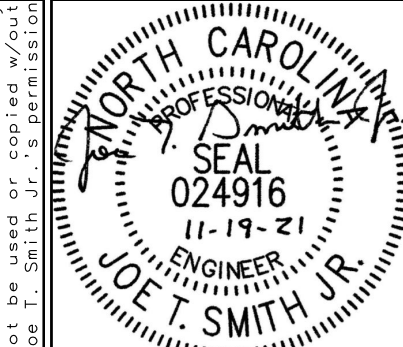

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JOB #21004  
DRAWN BY: JL  
DATE: 11/19/2021  
SECTIONS  
D-6

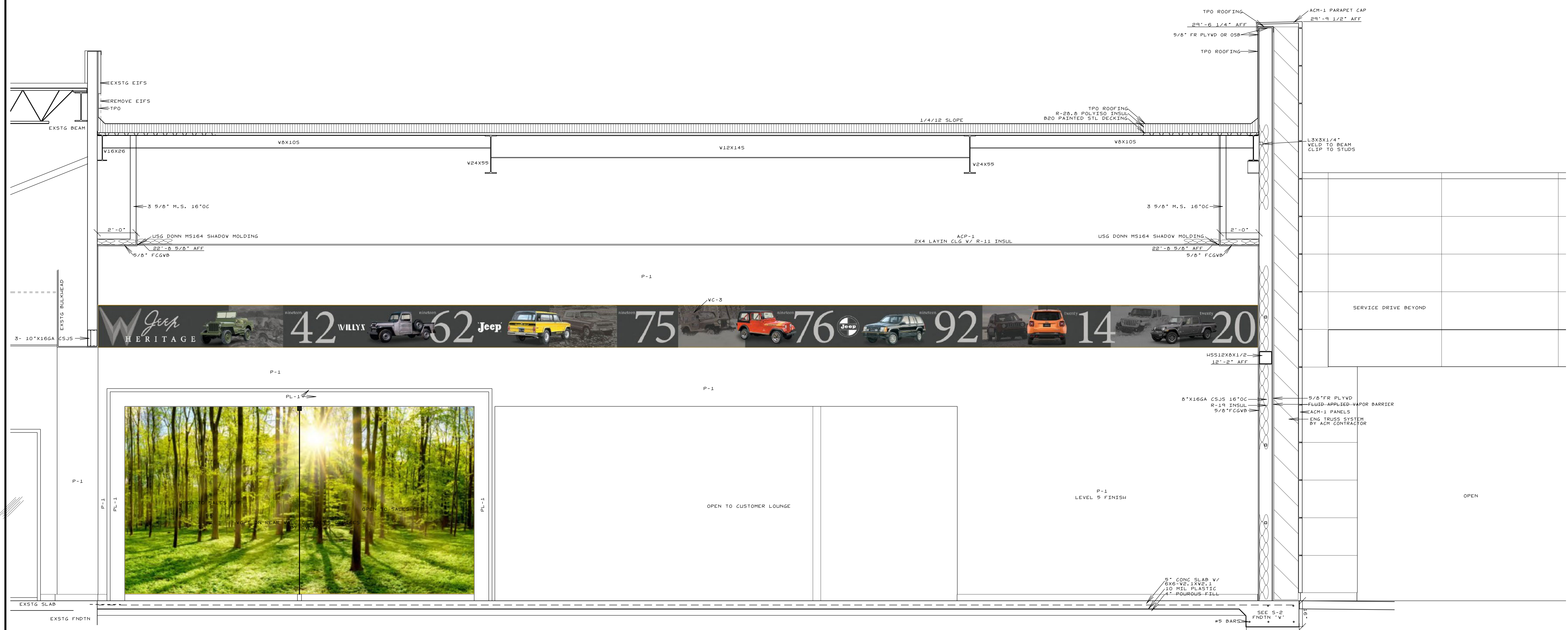
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**A** SECTION  
**D-7** SCALE: 1/8"=1'-0"

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				SECTIONS <b>D-7</b>

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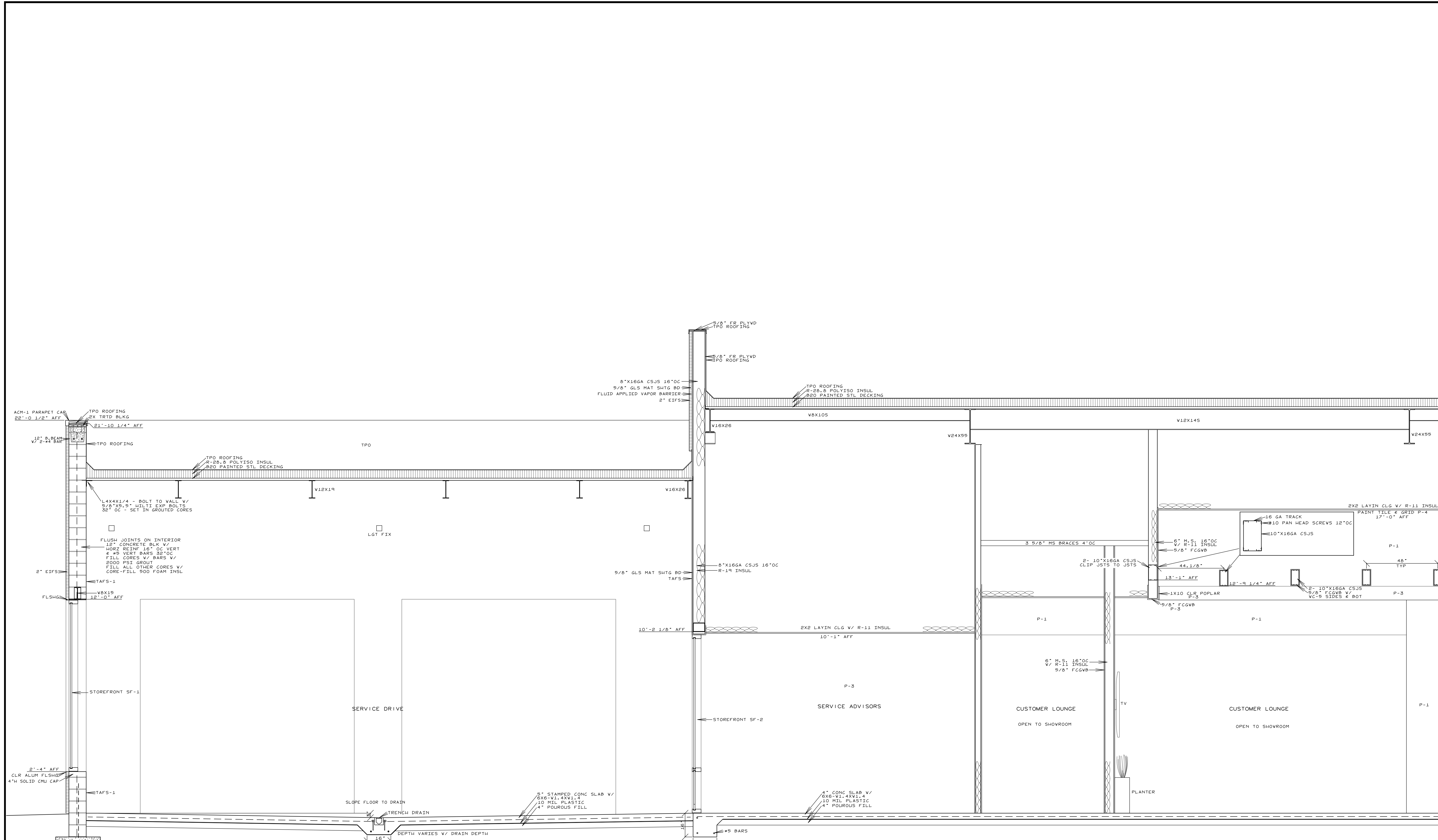


#4 DOWELS 18" L - 24" OC  
EMBED 8" IN EXSTG SLAB  
W/ HILTI 200 ADHESIVE

**A** SECTION  
D-8 SCALE: 1/2"=1'-0"

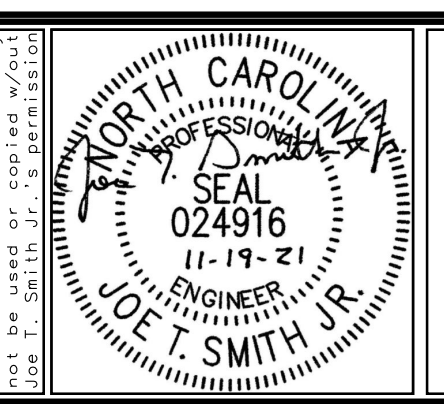
<p>Smith Engineering and Design, P.A. 1103 Gracie Place - Suite A Goldsboro, N.C. 27534 Phone: 919.736.2141 Fax: 919.736.2142 Corporate license # C-2241</p>		REVISIONS	<p><b>JOHN HIESTER</b> CDR+J LILLINGTON, N.C.</p>	<p>JOB #21004 DRAWN BY: JL DATE: 11/19/2021</p>
				<p>SECTIONS D-8</p>

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**A SECTION**  
 D-9 SCALE: 1/2"=1'-0"

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 Fax: 919.736.2142  
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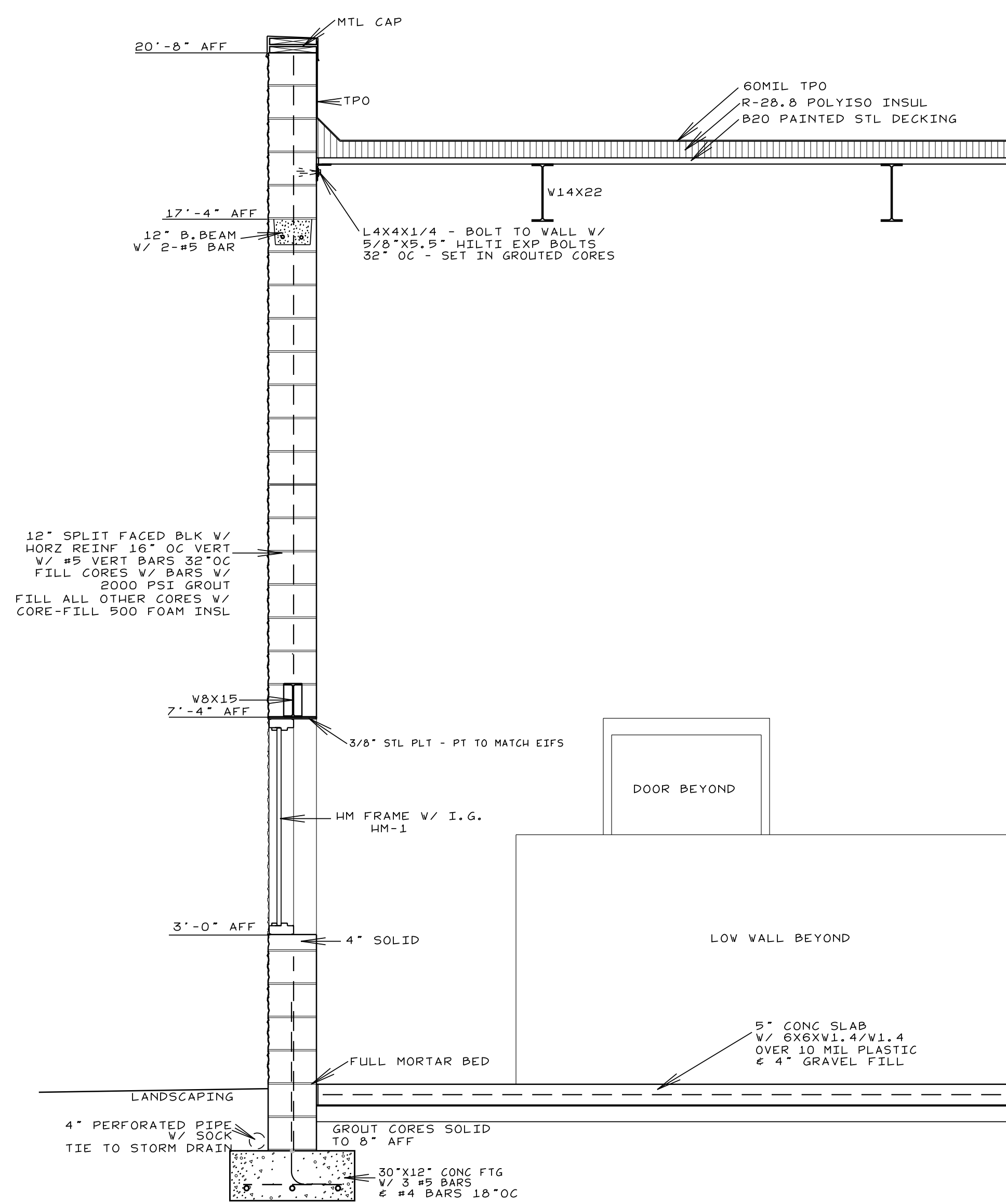
REVISIONS

NO.	DESCRIPTION

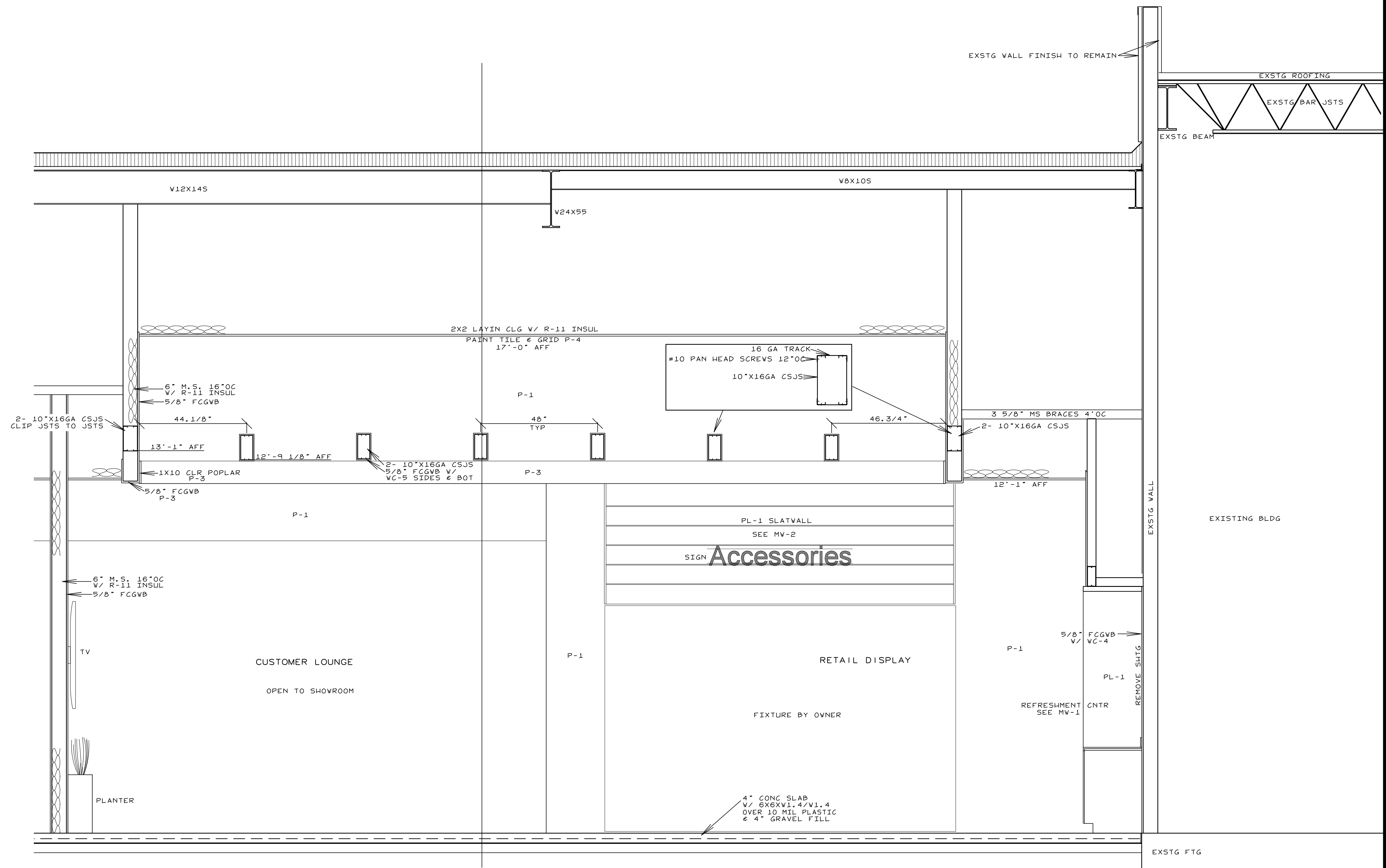
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JOB #21004  
 DRAWN BY: JL  
 DATE: 11/19/2021

SECTIONS
D-9



**B**  
SECTION  
D-10 SCALE: 1/2"=1'-0"

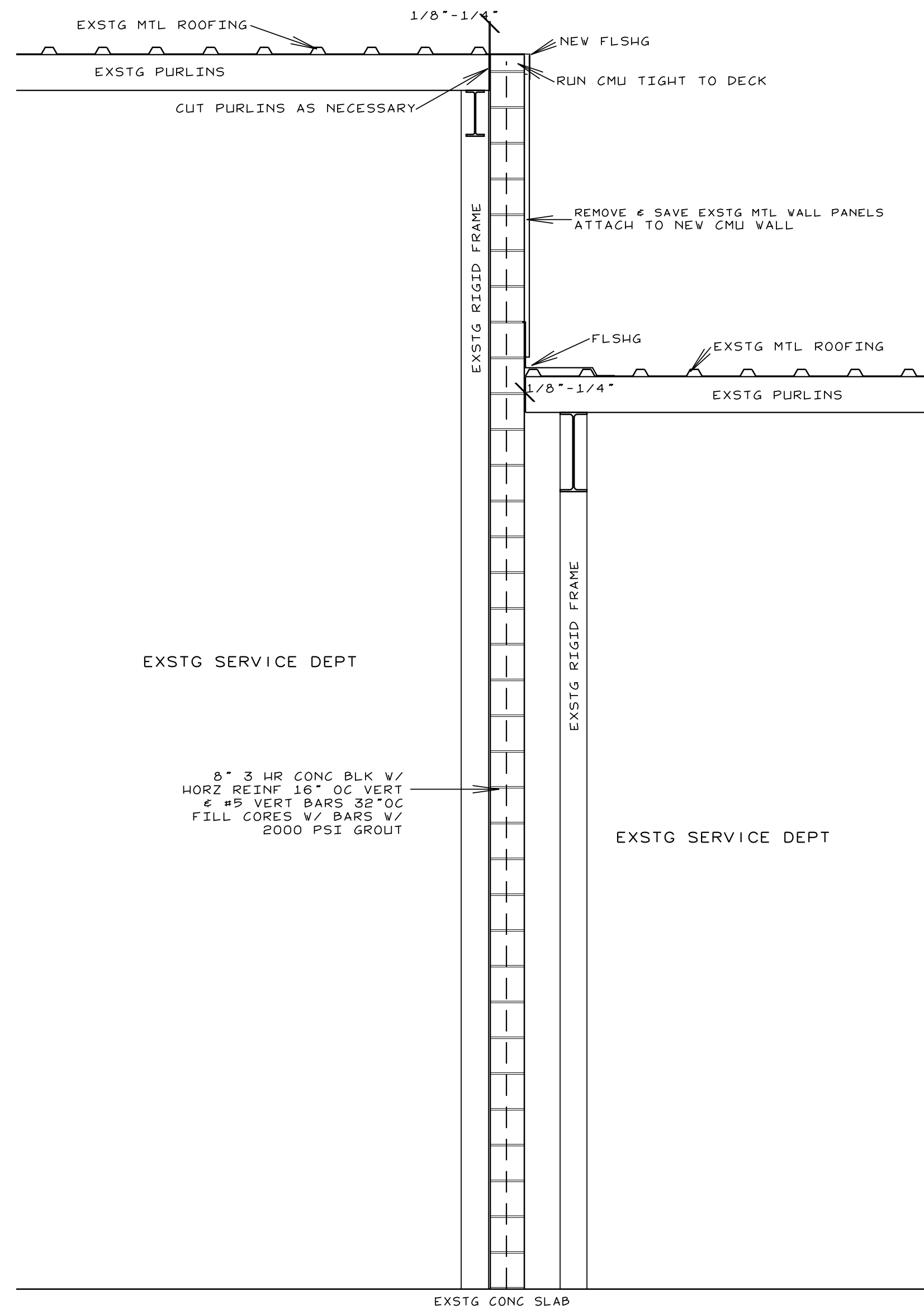


**A**  
SECTION  
D-10 SCALE: 1/2"=1'-0"

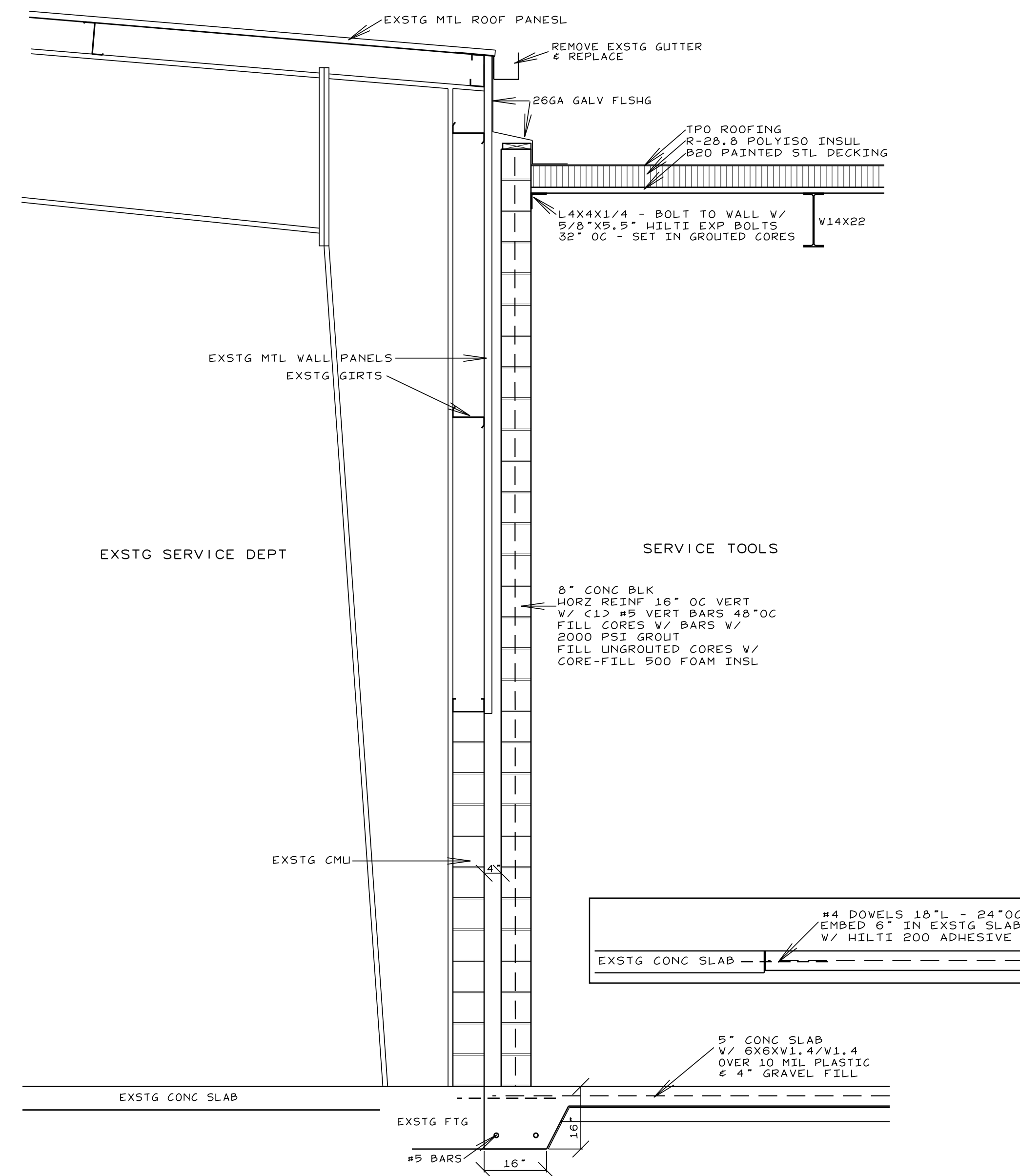
<p>Smith Engineering and Design, P.A. 1103 Gracie Place - Suite A Goldsboro, N.C. 27534 Phone: 919.736.2141 Fax: 919.736.2142 Corporate license # C-2241</p>		REVISIONS	<p><b>JOHN HIESTER</b> CDR+J LILLINGTON, N.C.</p>	<p>JOB #21004 DRAWN BY: JL DATE: 11/19/2021</p>
				<p>SECTIONS <b>D-10</b></p>

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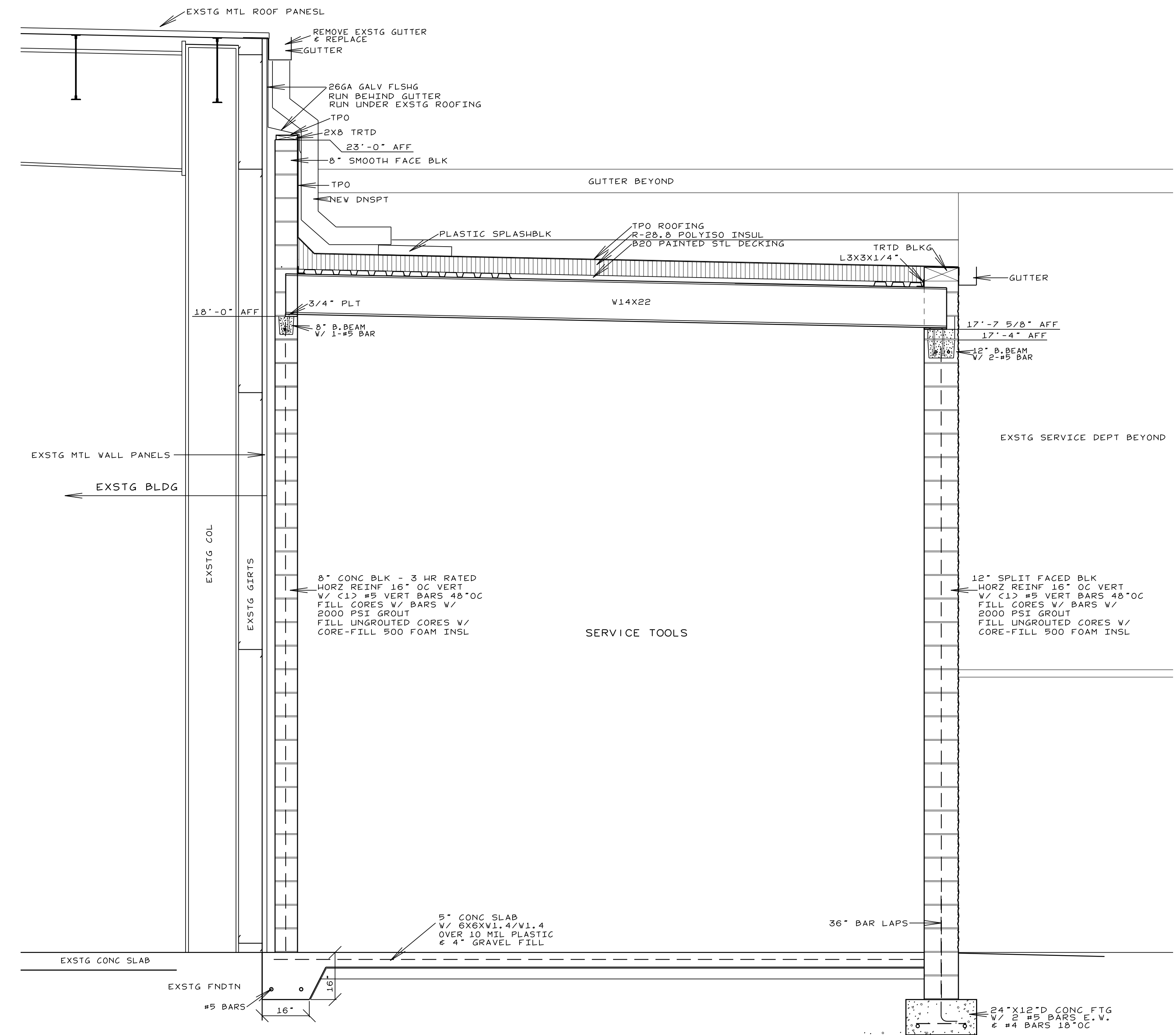




**C** SECTION  
D-11 SCALE: 1/2"=1'-0"

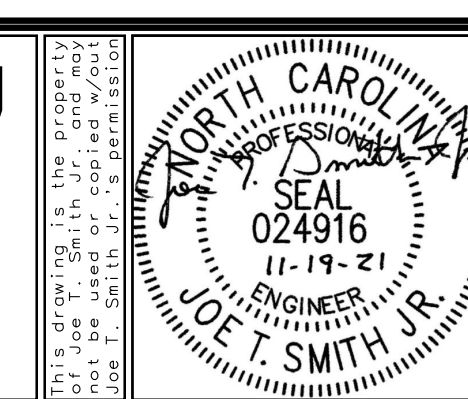


**B** SECTION  
D-11 SCALE: 1/2"=1'-0"



**A** SECTION  
D-11 SCALE: 1/2"=1'-0"

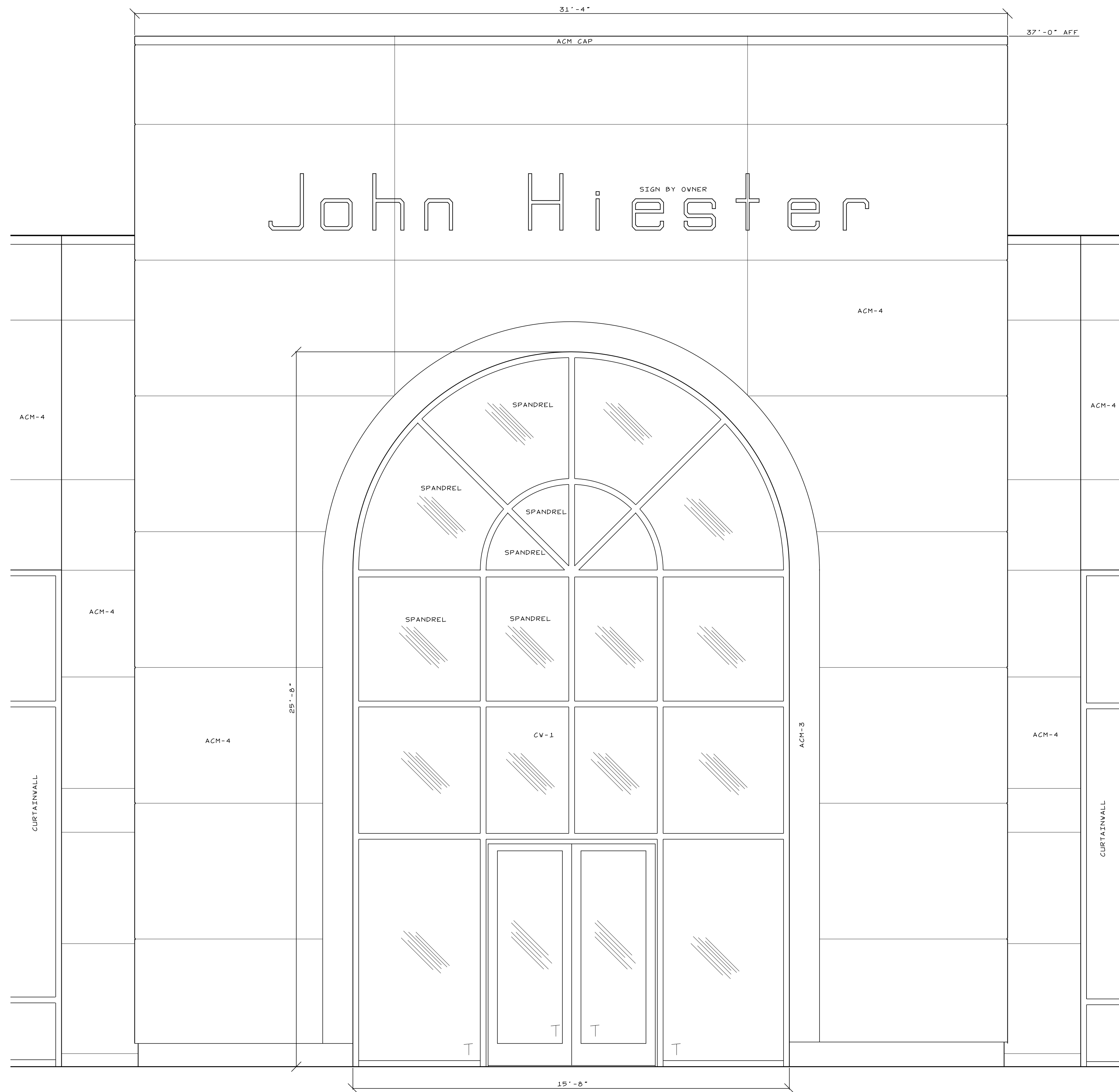
**Smith Engineering and Design, P.A.**  
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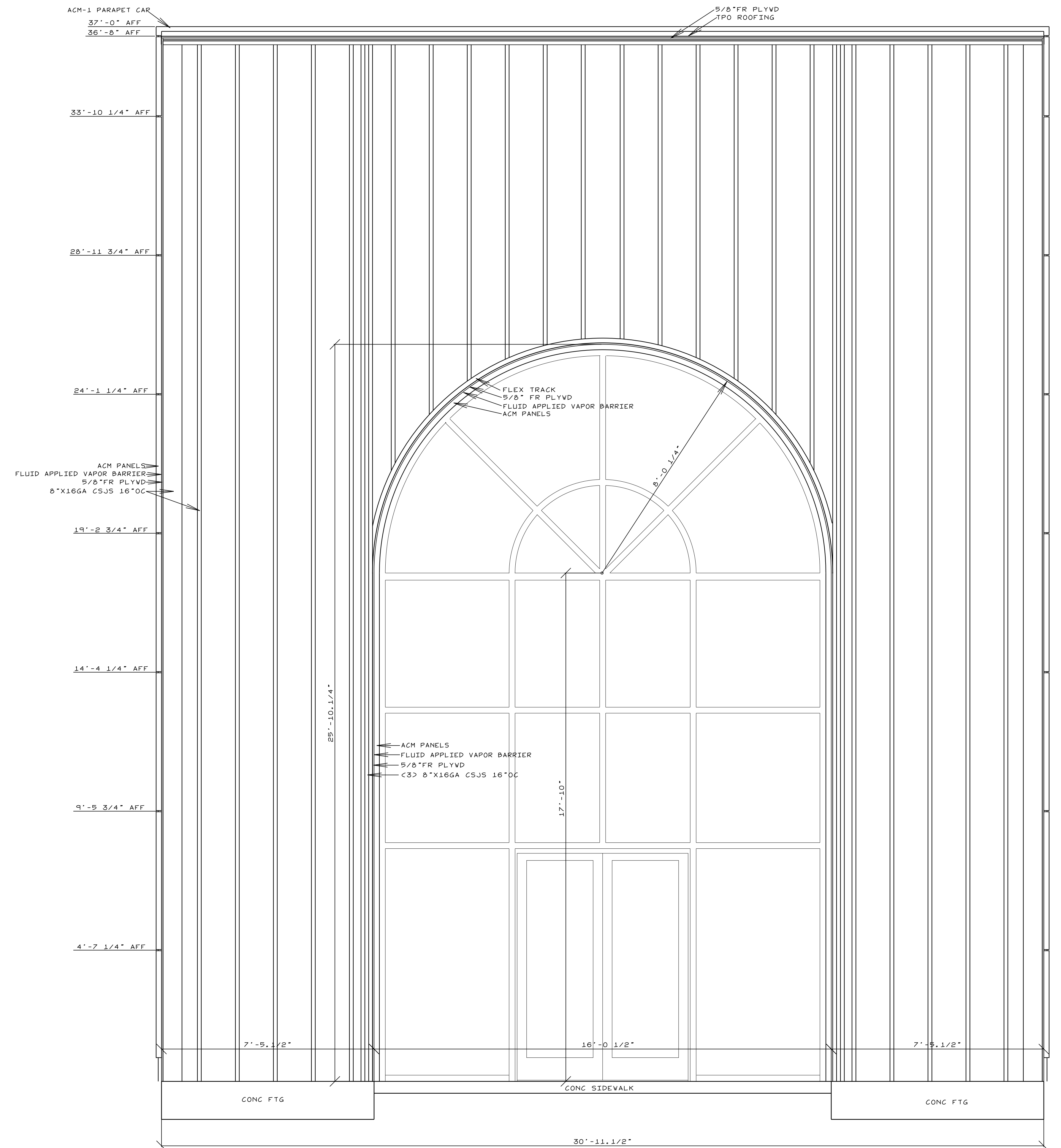
NO.	REVISIONS

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CDR+J  
LILLINGTON, N.C.

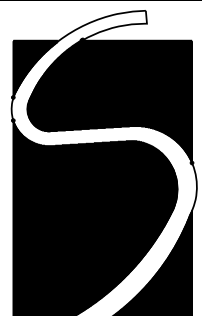
JOB #21004  
DRAWN BY: JL  
DATE: 11/19/2021  
SECTIONS  
D-11

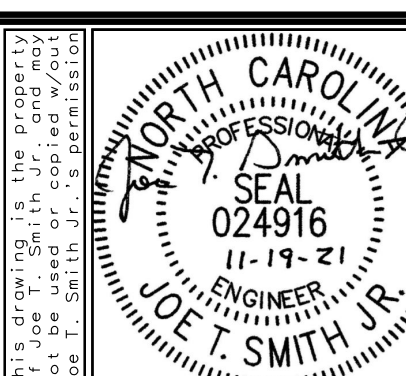


**B** ELEVATION  
D-12 SCALE: 1/2"=1'-0"



**A** EXTERIOR FRAMING ELEVATION  
D-12 SCALE: 1/2"=1'-0"

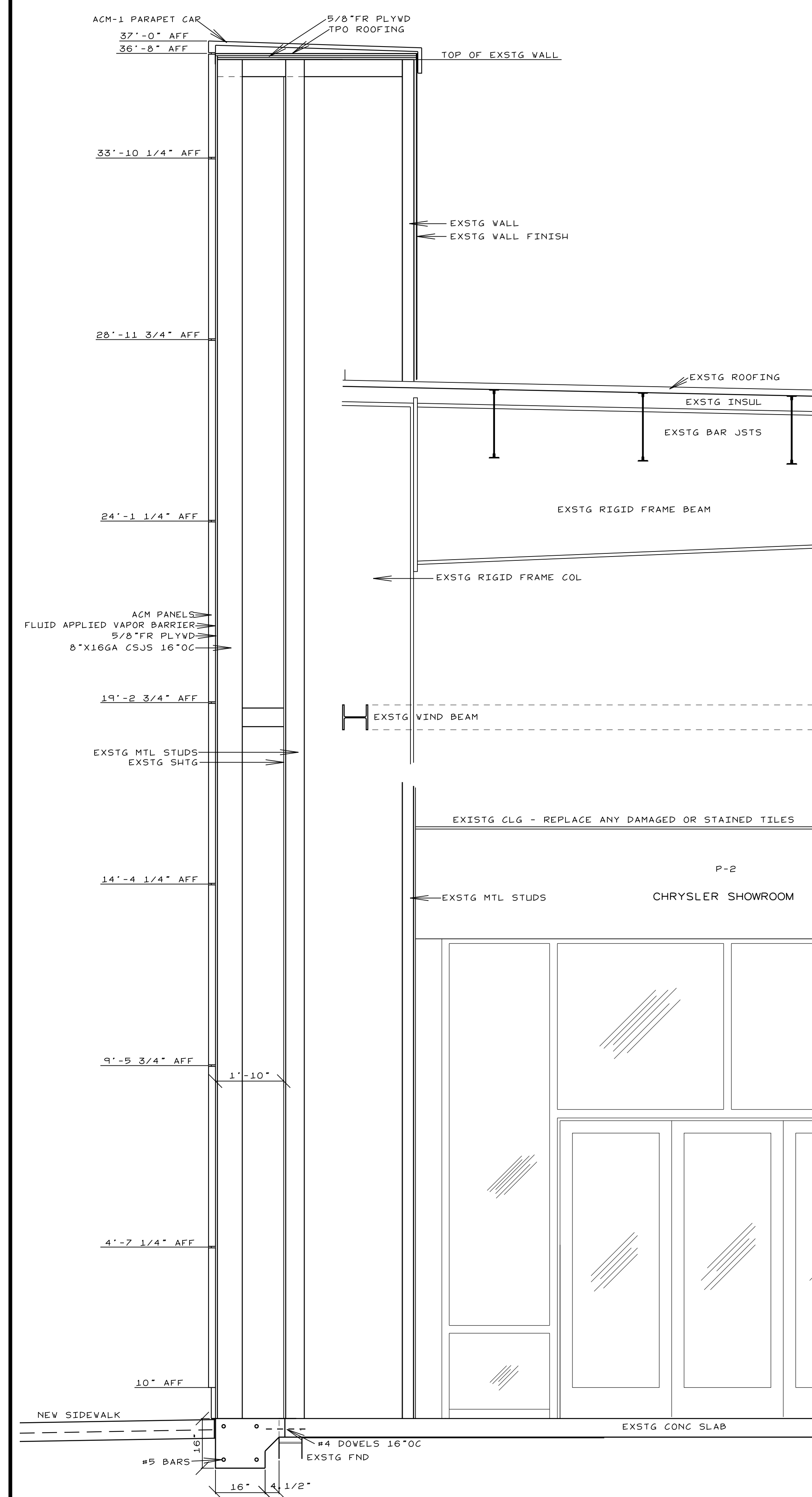

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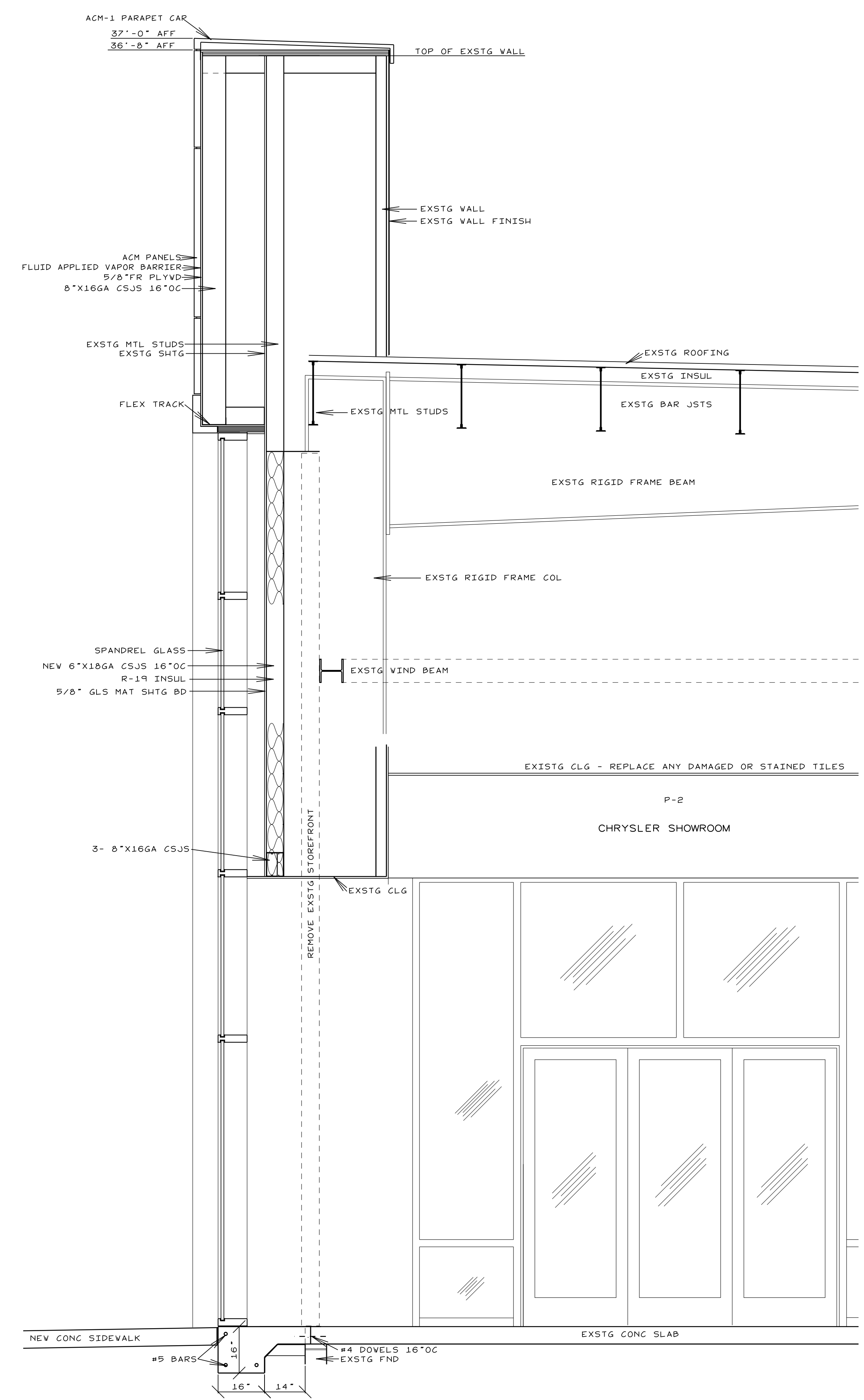
NO.	REVISIONS

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**CDR+J**  
 LILLINGTON, N.C.

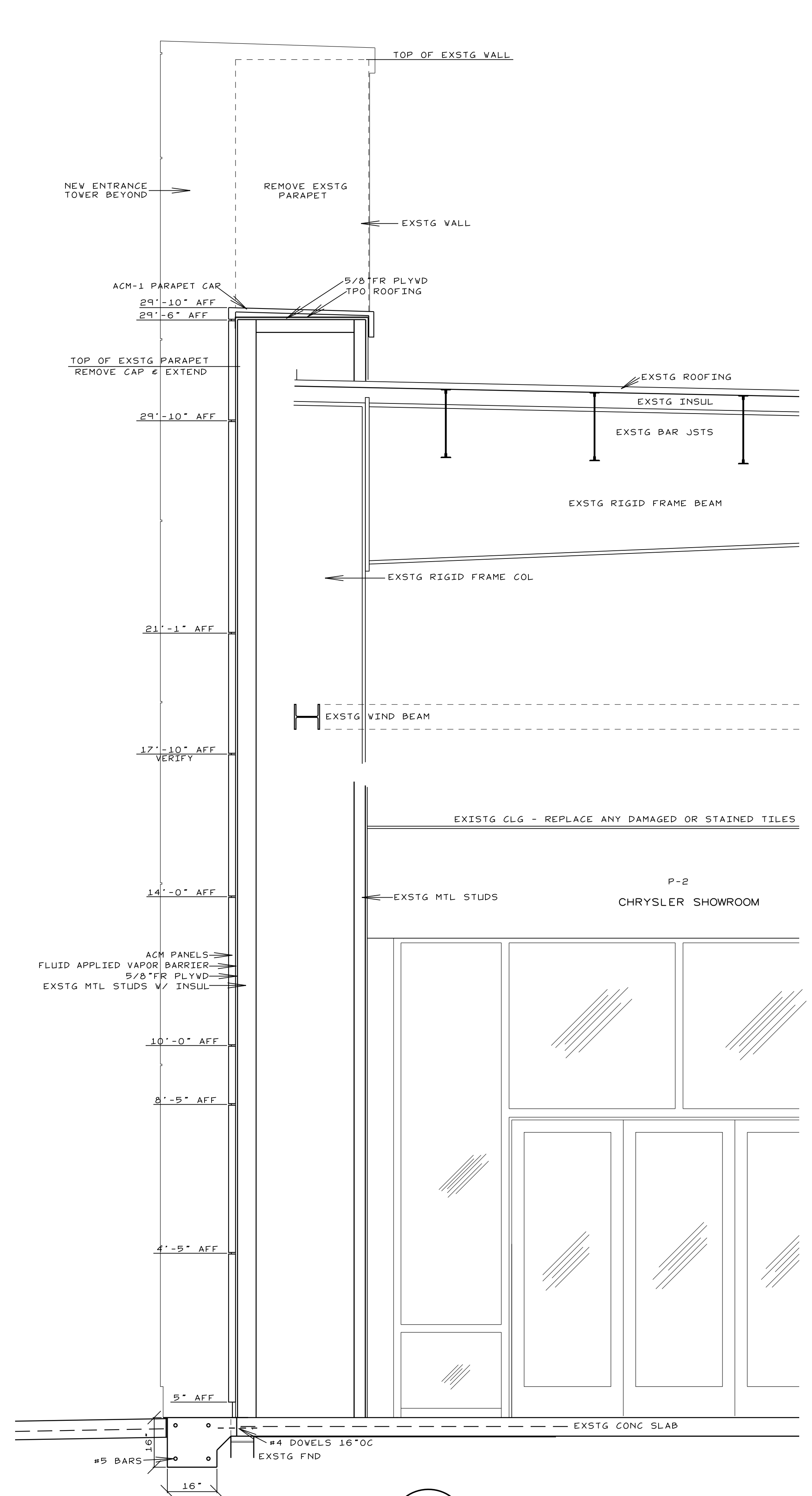
JOB #21004  
 DRAWN BY: JL  
 DATE: 11/19/2021  
 SECTIONS  
**D-12**



**C SECTION**  
D-13 SCALE: 1/2"=1'-0"

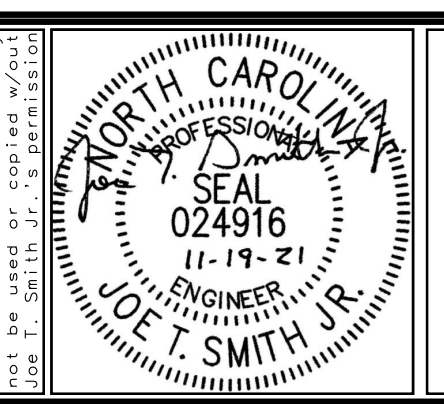


**B SECTION**  
D-13 SCALE: 1/2"=1'-0"



**A SECTION**  
D-13 SCALE: 1/2"=1'-0"

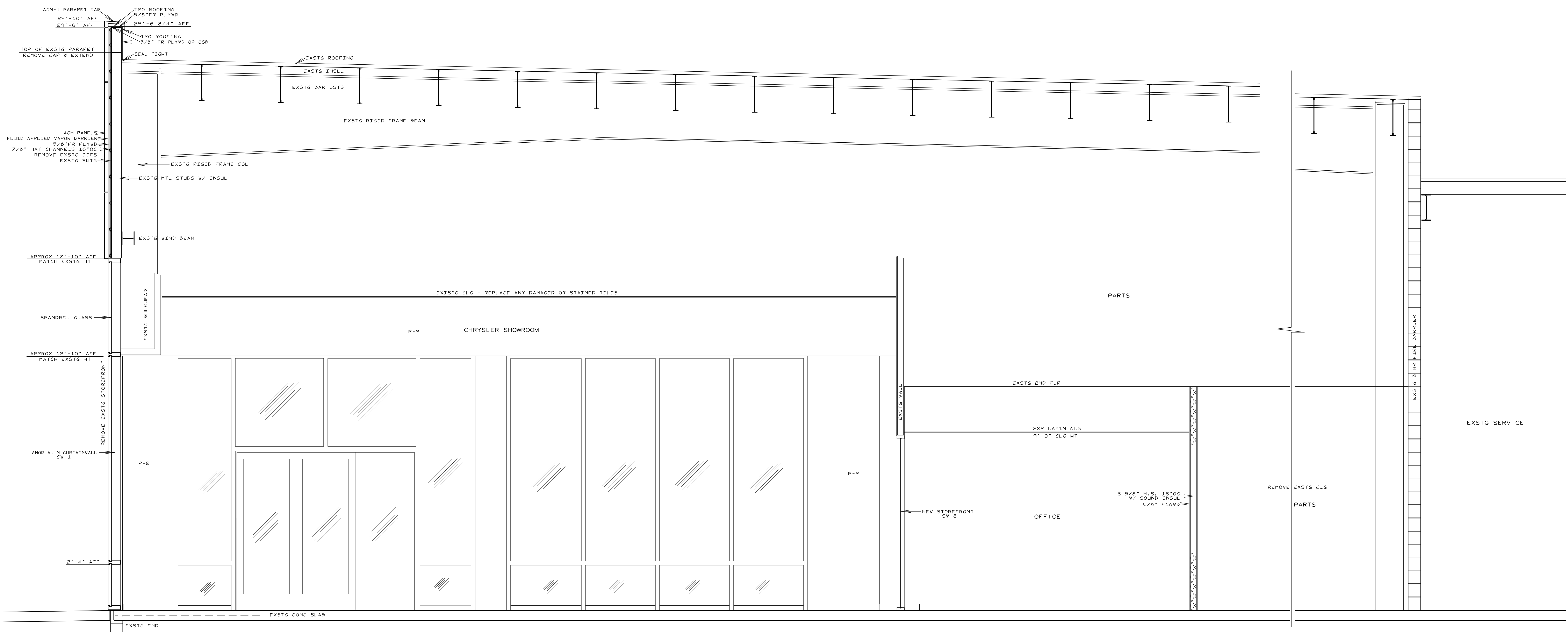
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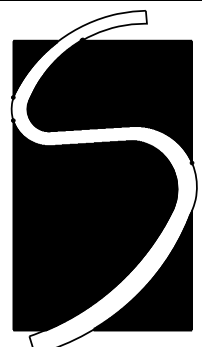
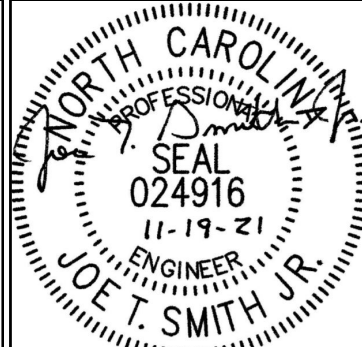
REVISIONS

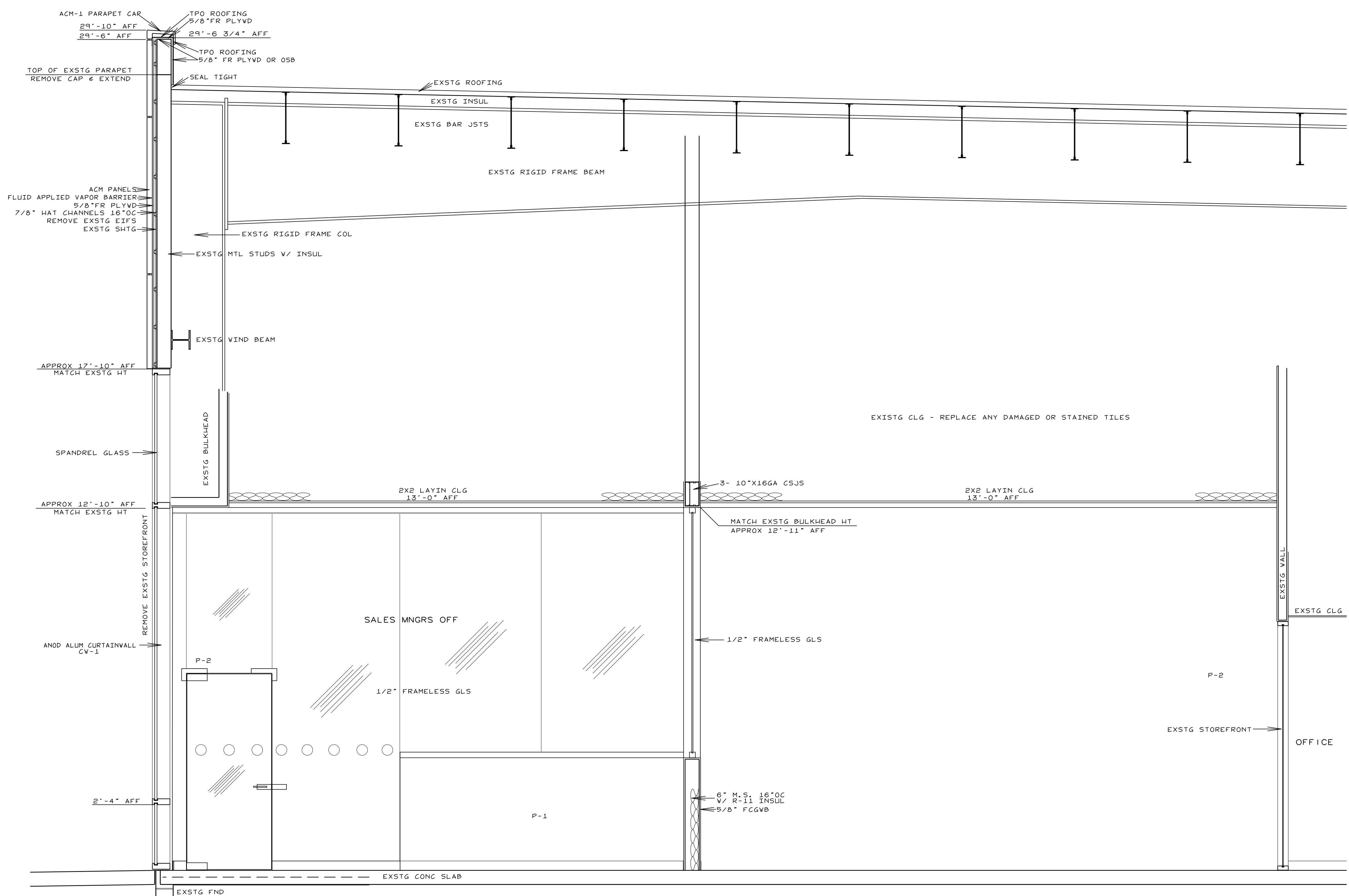

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CDR+J  
LILLINGTON, N.C.

JOB #21004  
DRAWN BY: JL  
DATE: 11/19/2021  
SECTIONS  
D-13

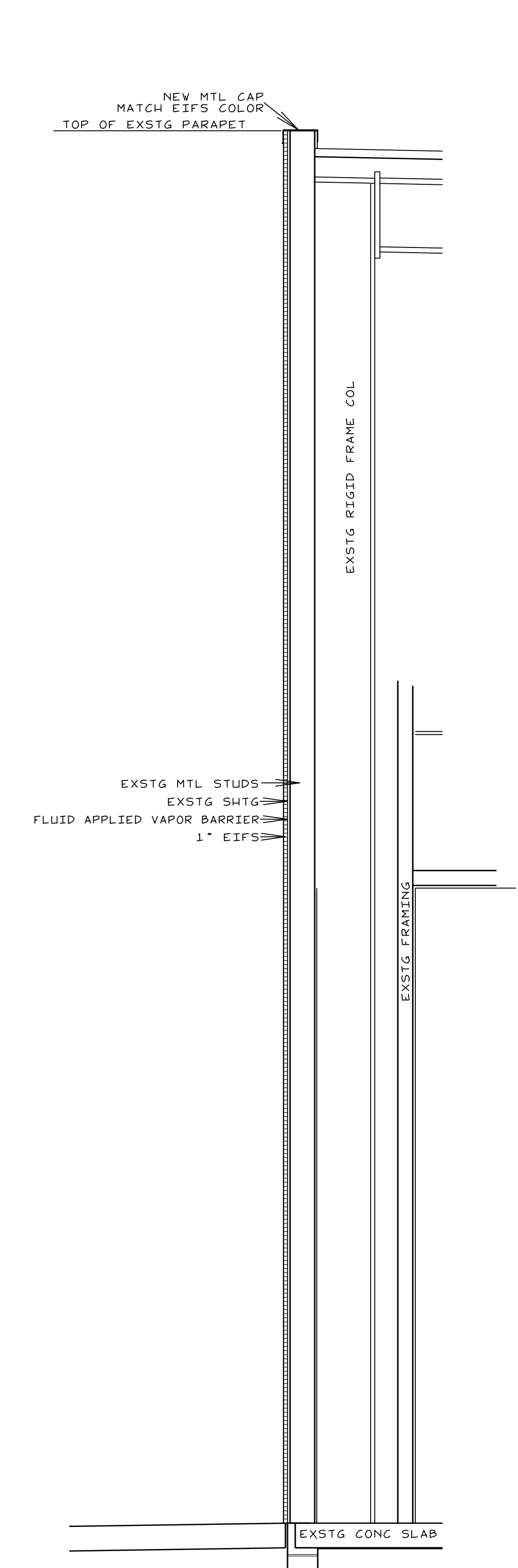


**A** SECTION  
 D-14 SCALE: 1/2"=1'-0"

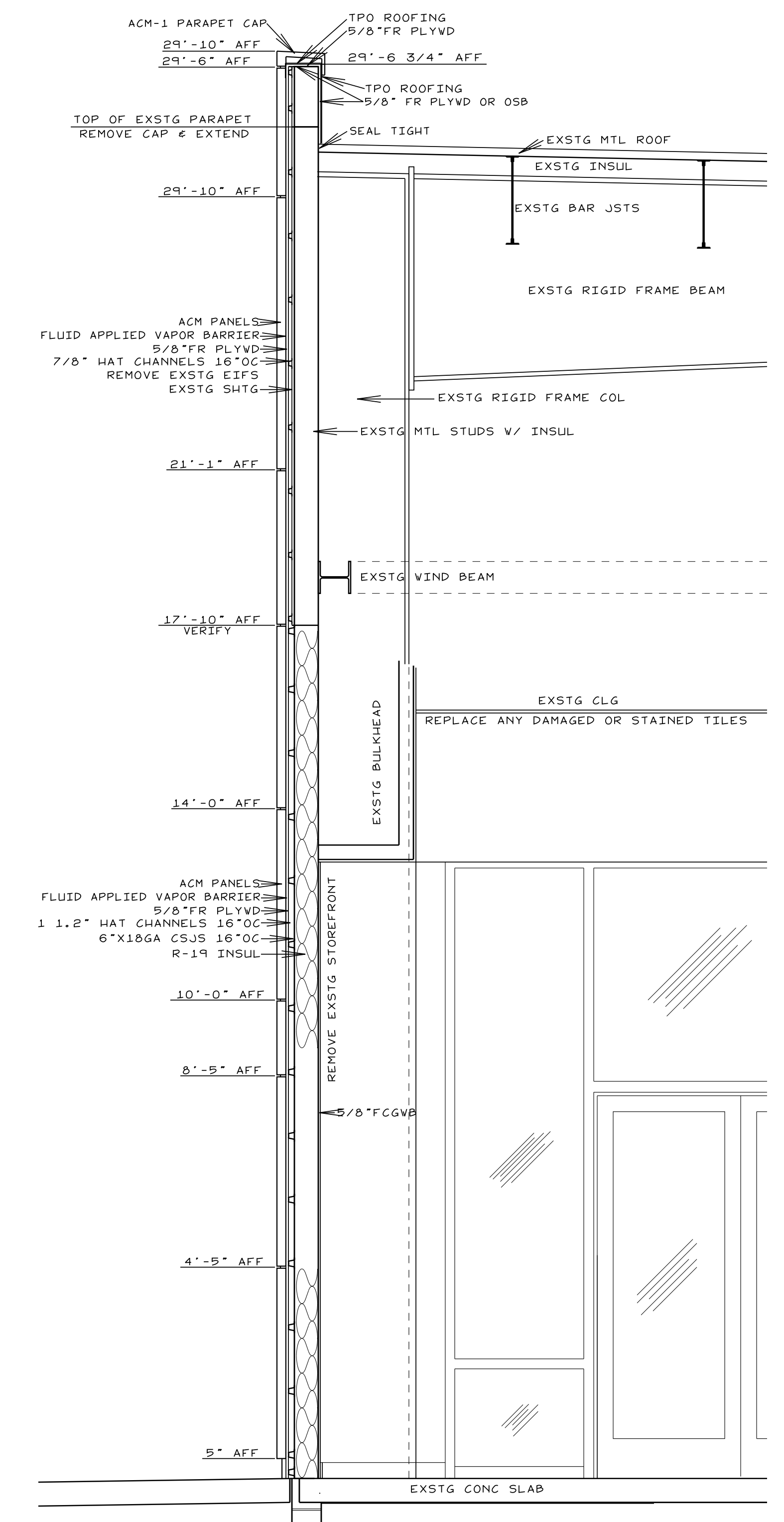
 <p>Smith Engineering and Design, P.A.          1103 Gracie Place - Suite A          Goldsboro, N.C. 27534          Phone: 919.736.2141          Fax: 919.736.2142          Corporate license # C-2241</p>		REVISIONS	<p><b>JOHN HIESTER</b>          CDR+J          LILLINGTON, N.C.</p>	JOB #21004 DRAWN BY: JL DATE: 11/19/2021
				SECTIONS <b>D-14</b>



**C SECTION**  
 D-15 SCALE: 1/2"=1'-0"



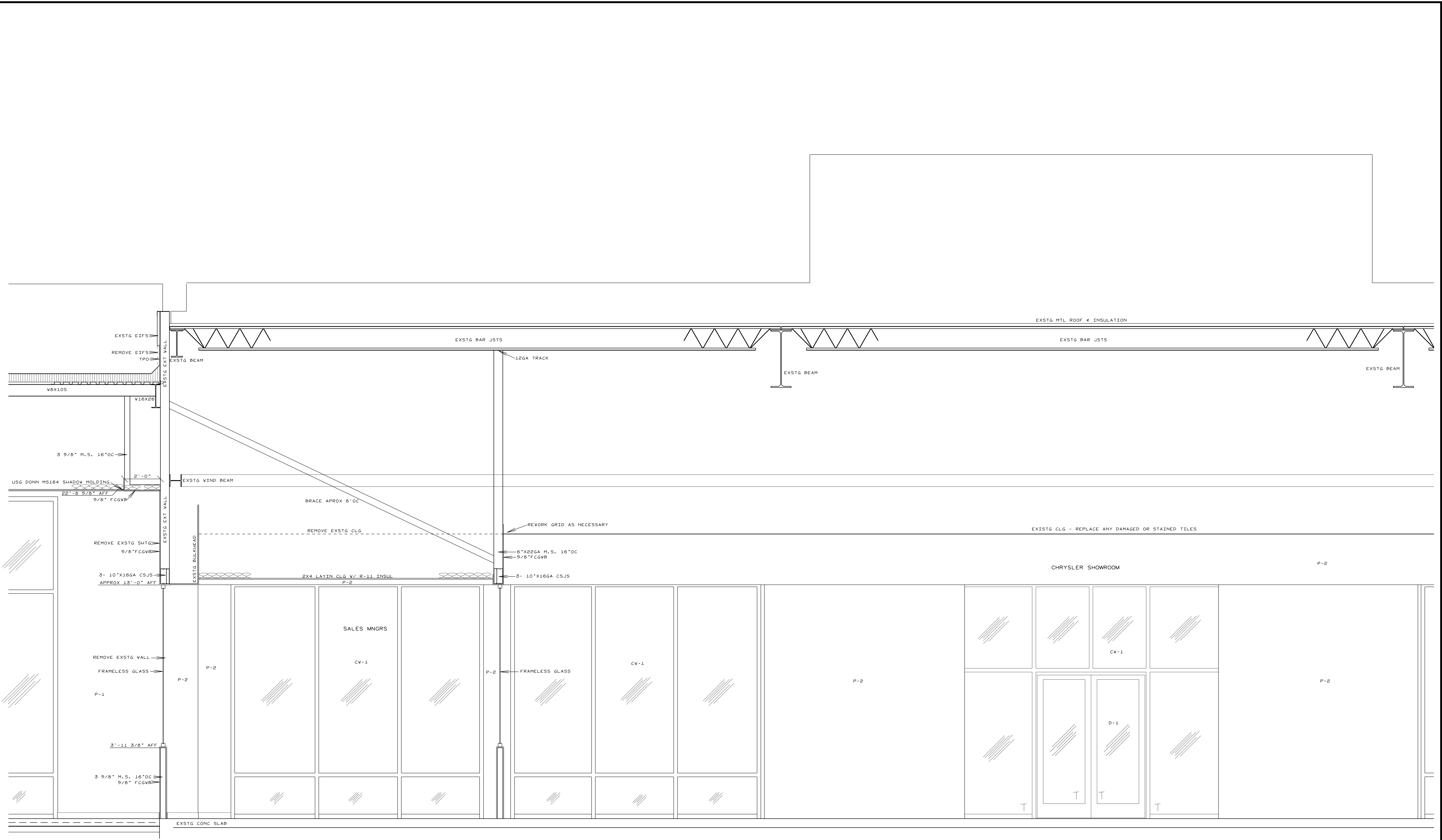
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 D-15 SCALE: 1/2"=1'-0"



**A SECTION**  
 D-15 SCALE: 1/2"=1'-0"

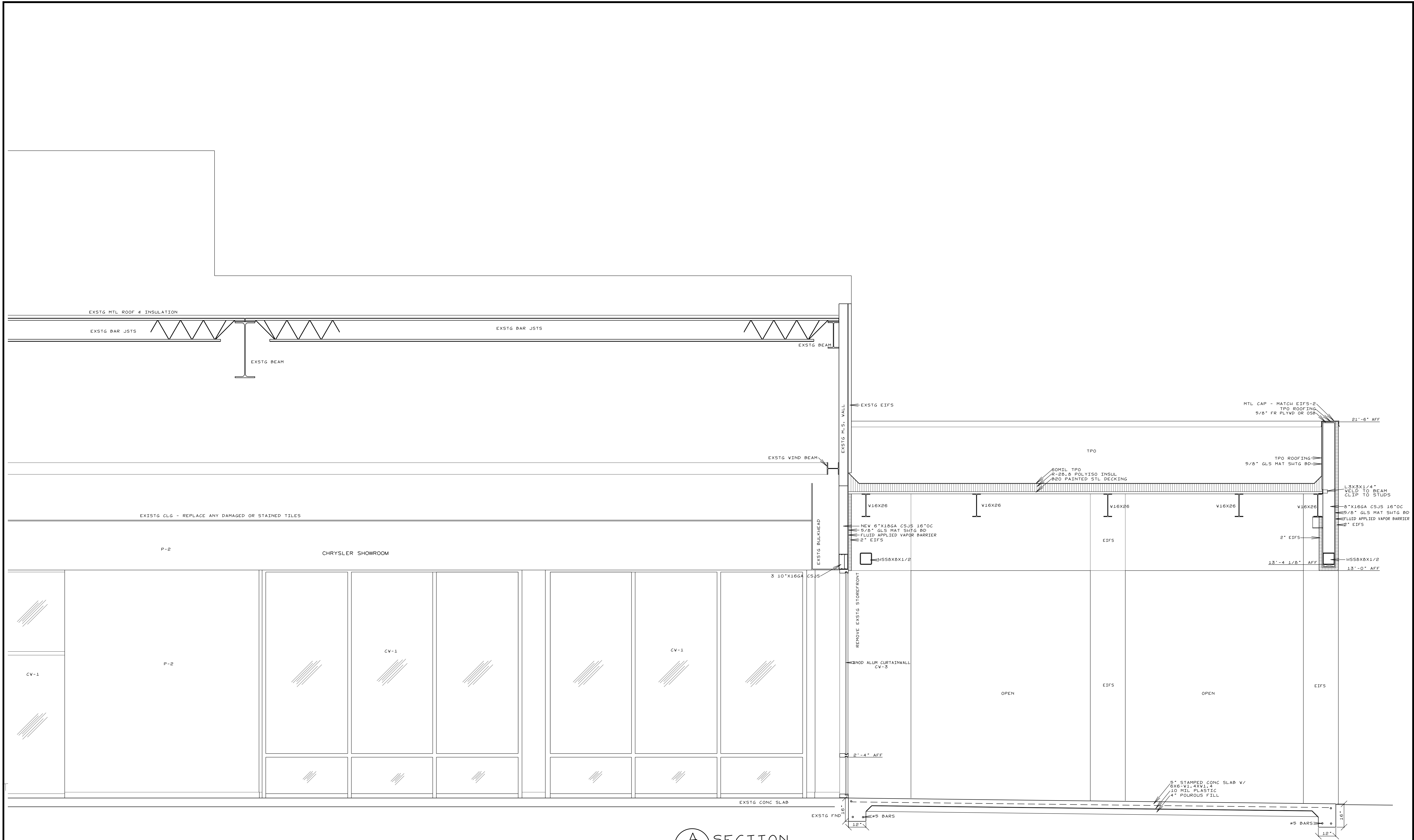
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				SECTIONS <b>D-15</b>

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A SECTION  
D-16 SCALE: 1/2"=1'-0"

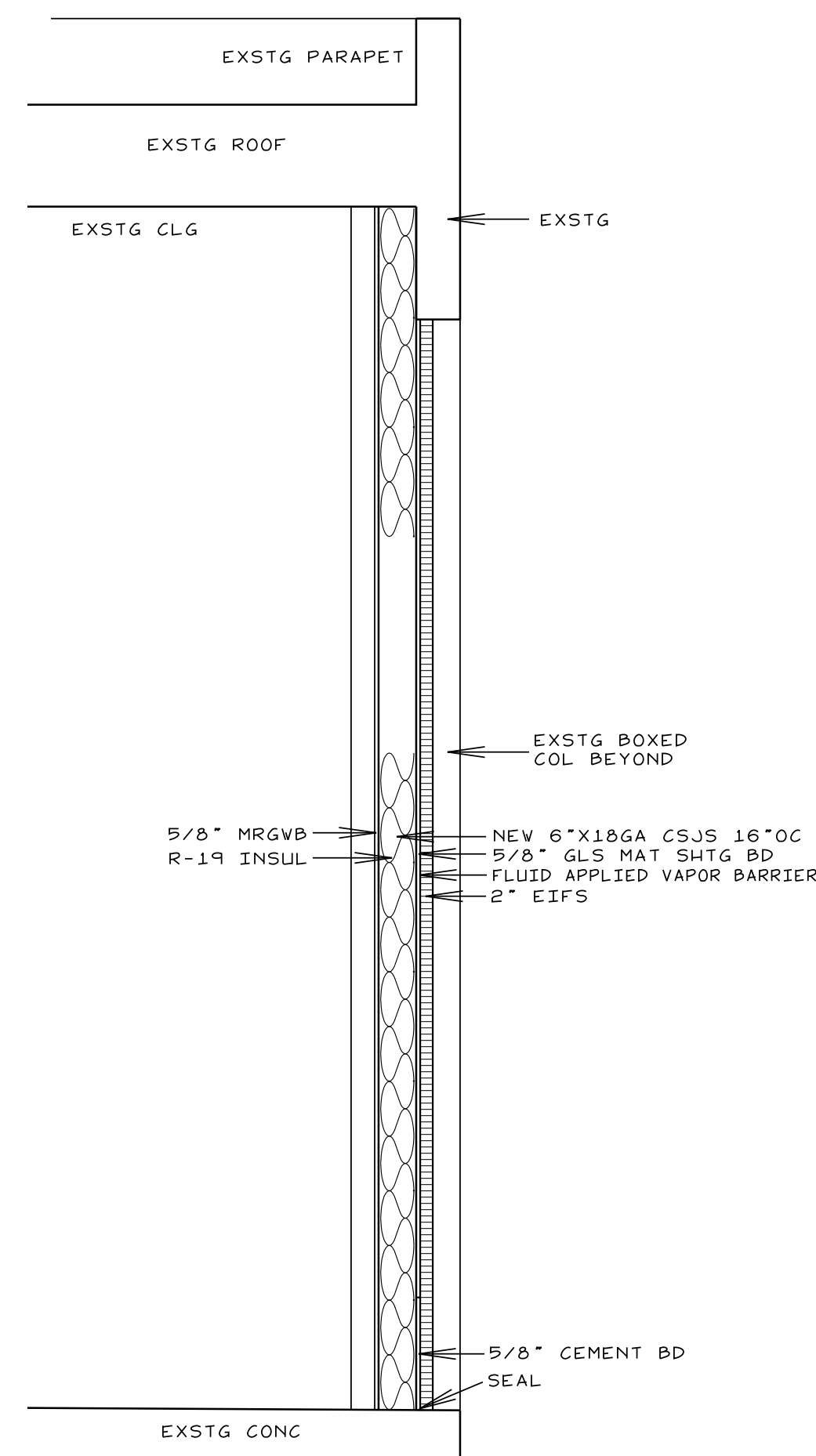
<p> <b>Smith Engineering and Design, P.A.</b>        1103 Gracie Place - Suite A        Goldsboro, N.C. 27534        Phone: 919.736.2141        Fax: 919.736.2142        Corporate license # C-2241     </p>		<p>REVISIONS</p>	<p> <b>JOHN HIESTER</b>  <b>CDR+J</b>        LILLINGTON, N.C.     </p>	<p>       JOB #21004        DRAWN BY: JL        DATE: 11/19/2021        SECTIONS  <b>D-16</b> </p>
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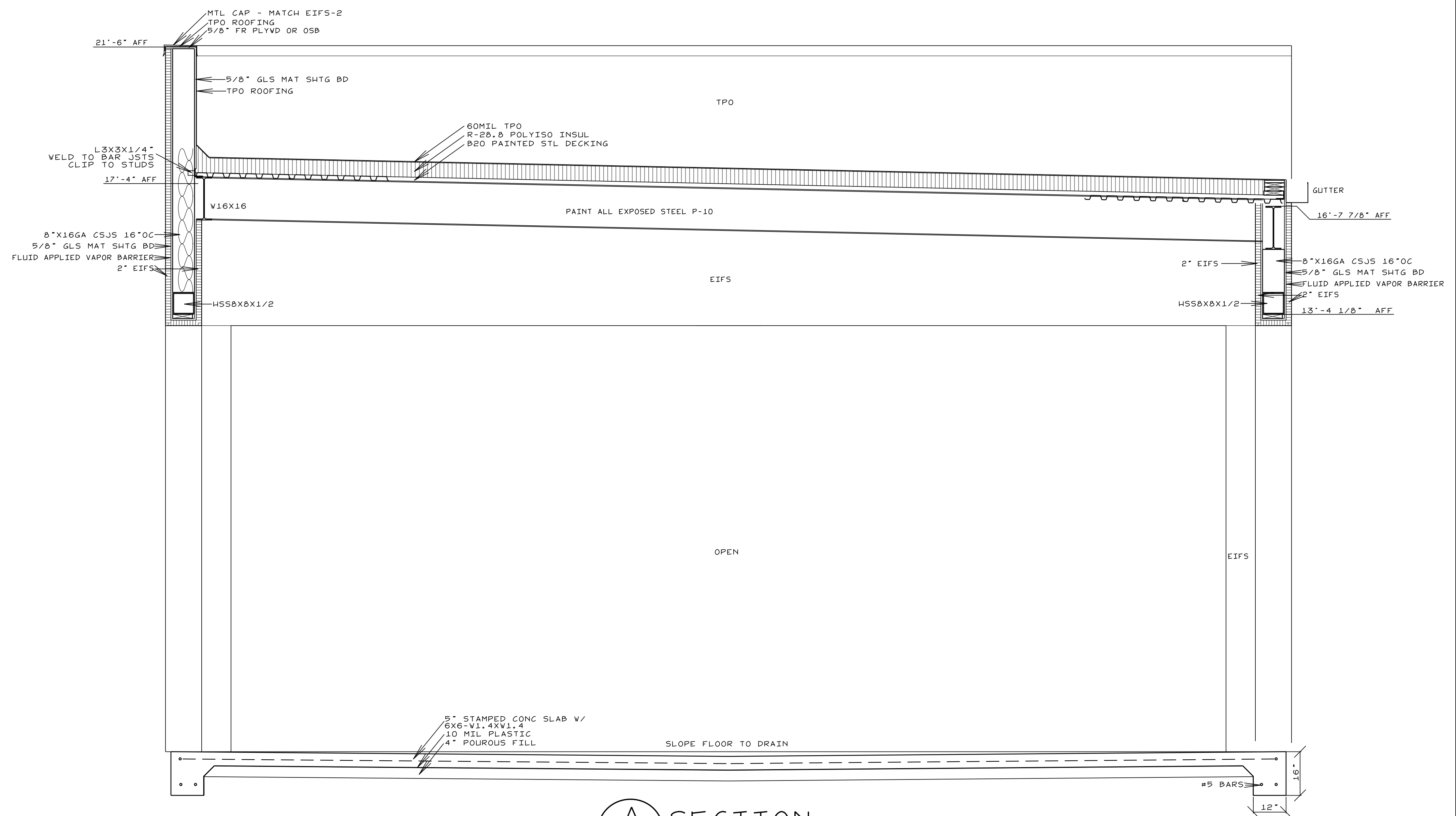
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				SECTIONS <b>D-17</b>

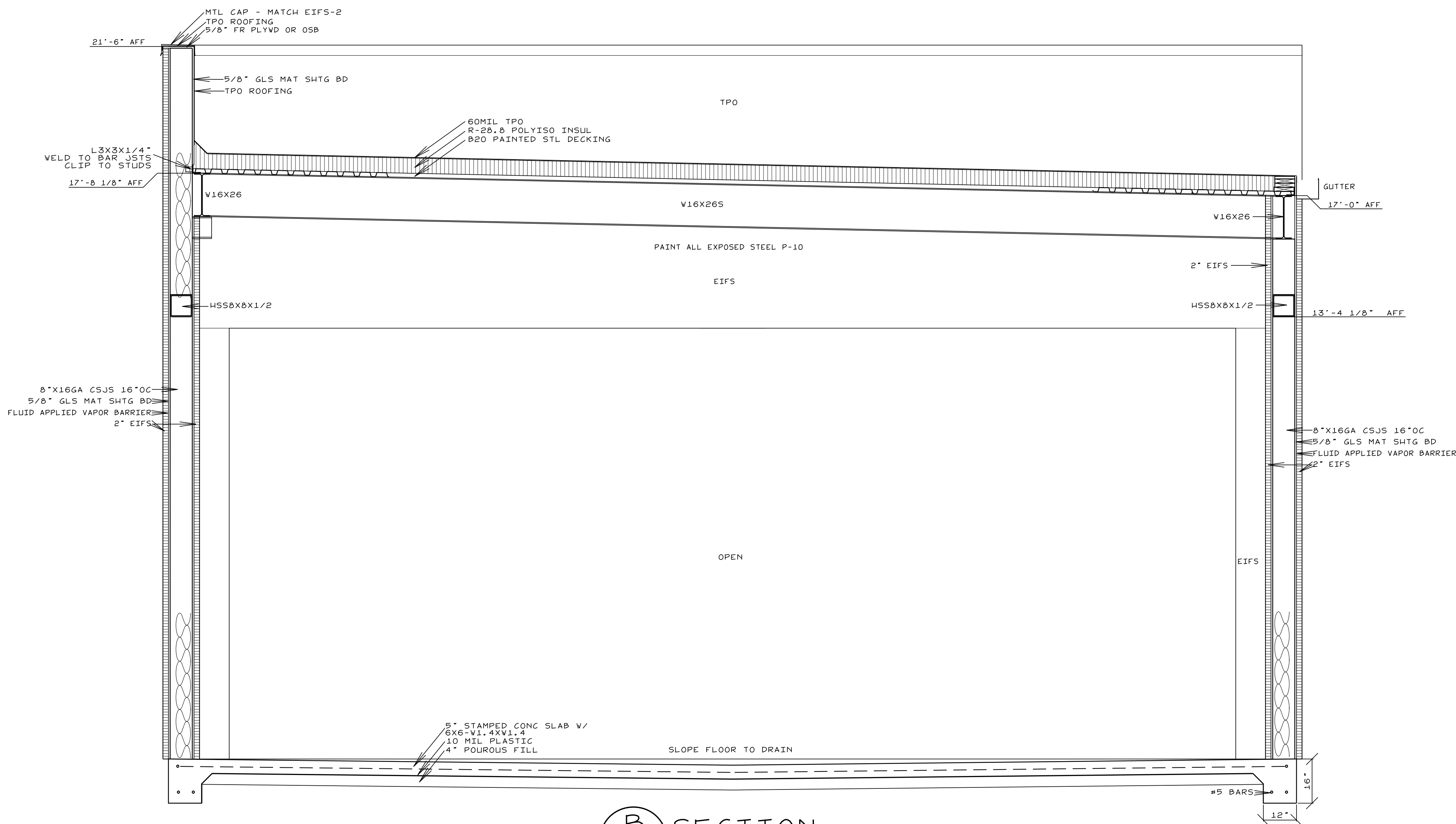
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**C SECTION**  
D-18 SCALE: 1/2"=1'-0"

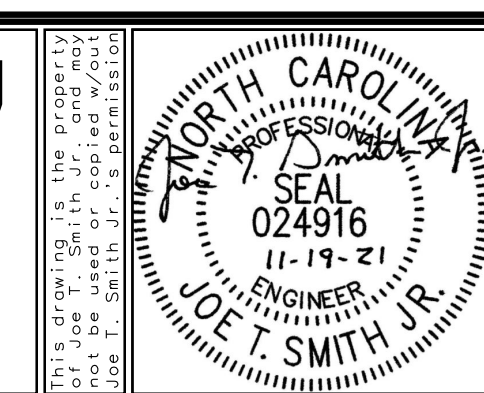


**A SECTION**  
D-18 SCALE: 1/2"=1'-0"



**B SECTION**  
D-18 SCALE: 1/2"=1'-0"

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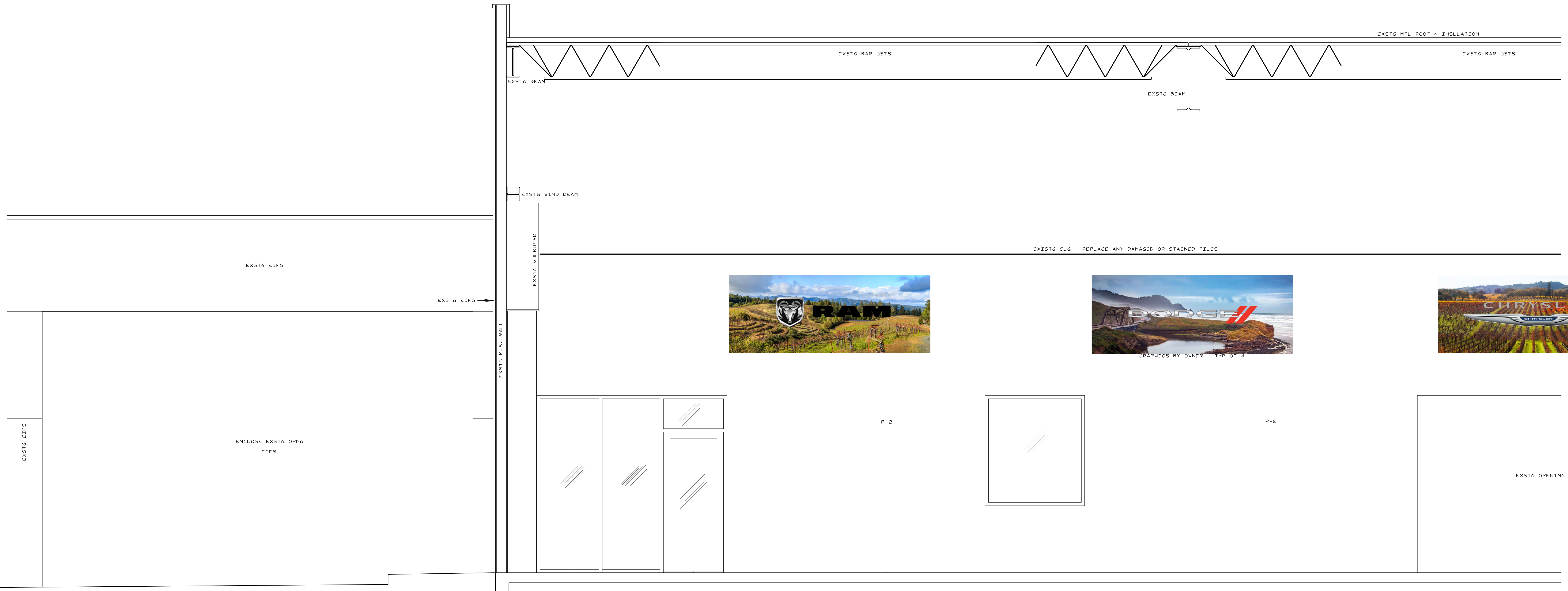


NO.	REVISIONS

**JOHN HIESTER**  
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LILLINGTON, N.C.

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SECTIONS  
D-18  
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**A** SECTION  
 D-19 SCALE: 1/2"=1'-0"

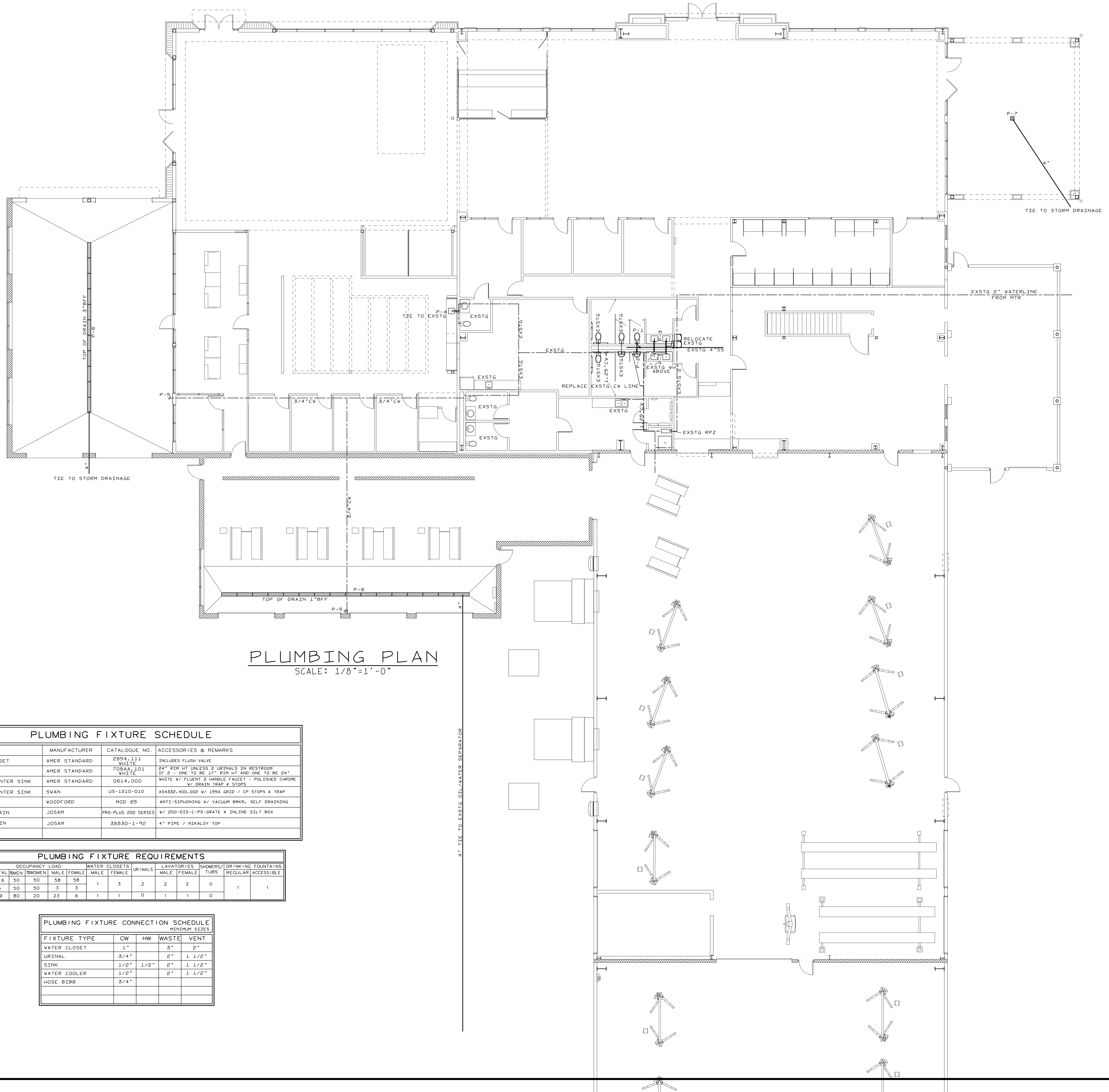
<p>Smith Engineering and Design, P.A.          1103 Gracie Place - Suite A          Goldsboro, N.C. 27534          Phone: 919.736.2141          Fax: 919.736.2142          Corporate license # C-2241</p>		REVISIONS	<p><b>JOHN HIESTER</b>          CDR+J          LILLINGTON, N.C.</p>	<p>JOB #21004          DRAWN BY: JL          DATE: 11/19/2021</p>
				<p>SECTIONS          D-19</p>

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**PLUMBING NOTES**

- PLUMBING PLANS ARE INTENDED TO PROVIDE INFORMATION FOR INSTALLATION OF A COMPLETE PLUMBING SYSTEM. PROVIDE ALL ESSENTIAL LABOR, MATERIALS & SERVICES REQUIRED TO PRODUCE A QUALITY END PRODUCT. ALL WORK TO MEET 2018 VA PLMBC CODE.
- CONTRACTOR SHALL REVIEW & BECOME FAMILIAR WITH THE WORK OF ALL TRADES FOR PURPOSES OF COORDINATION AND ROUTING. CONTRACTOR SHALL PROVIDE REQUIRED PLANNING, COORDINATION AND SEQUENCING OF PLUMBING INSTALLATION WITH BUILDING COMPONENTS AND OTHER TRADES.
- COORDINATE CONNECTION OF PLUMBING SYSTEMS WITH SITE UTILITIES AND SERVICES. P.C. SHALL EXTEND WATER SUPPLY LINE 5-FEET OUTSIDE OF BUILDING AND EXTEND BUILDING DRAIN 10-FEET OUTSIDE OF BUILDING & PROVIDE 2-WAY CLEANOUT.
- COORDINATE ROOF VENT LOCATIONS WITH OUTSIDE AIR INTAKES OF HVAC UNITS TO MAINTAIN A MINIMUM CLEARANCE OF 10 FEET.
- COORDINATE INSTALLATION OF PLUMBING LINES WITH BLOCK WALLS SO THAT ALL LINES ARE PLACED WITHIN WALLS DURING WALL CONSTRUCTION. CUTTING AND PATCHING OF WALLS IN PLACE IS NOT PERMITTED.
- ALL WORK SHALL COMPLY WITH LOCAL, STATE & ADA CODES. WORKMANSHIP SHALL MEET OR EXCEED INDUSTRY STANDARDS.
- PROTECT ALL NEW MATERIALS FROM THE WEATHER IN STORAGE TRAILERS OR PROVIDE SUITABLE COVERING.
- DRAIN, WASTE & VENT (DWV) PIPING SHALL BE ASTM D 1784, SOLID-WALL, SCHEDULE 40 PVC WITH SOCKET TYPE FITTINGS AND SOLVENT-WELDED JOINTS. FOAM CORE PIPING IS NOT ACCEPTABLE.
- ABOVE GRADE WATER PIPING SHALL BE ASTM F 877 CROSS-LINKED POLYETHYLENE (PEX) PLASTIC TUBING.
- WATER SERVICE PIPING SHALL BE ASTM D 1784 PRESSURE-RATED SCHEDULE 40 PVC WITH PVC FITTINGS AND SOLVENT-WELDED JOINTS.
- INDIVIDUAL SUPPLY AND DRAIN CONNECTIONS SIZES ARE NOT INDICATED ON PLANS FOR CLARITY. SIZE EACH TO SUIT RESPECTIVE FIXTURE.
- WATER PIPING INSTALLED IN UNCONDITIONED SPACE SHALL BE INSULATED WITH FIBERGLASS INSULATION WITH A MINIMUM R VALUE OF 6.5.
- DOMESTIC HOT WATER, HOT WATER RETURN & COLD WATER PIPING SHALL BE INSULATED WITH FIBERGLASS AND FOIL & PAPER JACKET AS FOLLOWS:  
 RUNOUTS 3/4" OR LESS: 1/2" THICK  
 PIPING 3/4" TO 2": 1" THICK  
 PIPING 2 1/2" & LARGER: 1 1/2" THICK  
 ALL HW PIPING: 1" THICK
- WATER PIPING ON OUTSIDE WALLS AND IN CEILING SHALL BE LOCATED BETWEEN BUILDING INSULATION AND CONDITIONED SPACE.
- PROVIDE SHUTOFF VALVES AT EACH MAIN BRANCH LINE. VALVES SHALL BE INSTALLED IN A READILY ACCESSIBLE LOCATION. PROVIDE CEILING ACCESS DOORS WHERE REQUIRED TO ACCESS SERVICABLE VALVES LOCATED ABOVE GYPOBOARD CEILINGS.
- PIPING PASSING THROUGH CONCRETE/MASONRY WALLS OR FLOORS SHALL BE PROTECTED AGAINST EXTERNAL CORROSION BY PROTECTIVE SHEATHING OR WRAPPING.
- INSTALL SCHEDULE 40 PIPE SLEEVE TWO SIZES LARGER AT PENETRATIONS THROUGH FOUNDATION WALLS. SEAL SLEEVE TIGHT TO FOUNDATION WALL.
- INSTALL UL LISTED FIRE SEAL AT PENETRATIONS THROUGH FIRE-RATED WALLS, FLOORS AND CEILINGS.
- PROVIDE INSULATION EQUAL TO MCMUIR PROWRAP ON P-TRAP ASSEMBLIES AND HOT & COLD WATER PIPING FOR LAVATORIES WITH EXPOSED PIPING.
- VERIFY FINAL LOCATIONS FOR ROUGH-INS WITH FIELD MEASUREMENTS AND WITH THE REQUIREMENTS OF THE ACTUAL EQUIPMENT TO BE CONNECTED.
- INSTALL PLUMBING FIXTURES AND EQUIPMENT LEVEL & PLUMB. ROUTE PIPING PARALLEL & PERPENDICULAR TO OTHER BUILDING SYSTEMS AND COMPONENTS.
- INSTALL EQUIPMENT TO FACILITATE SERVICING, MAINTENANCE & REPAIR IN ACCORDANCE WITH MFG'S WRITTEN INSTALLATION INSTRUCTIONS AS WELL AS SPECIFIC INSTRUCTIONS ON PLANS.
- ALL FIXTURES & EXPOSED SURFACES SHALL BE WASHED & CLEANED AND PAINTED SURFACES SHALL BE TOUCHED UP TO MATCH FACTORY APPLIED FINISHES.
- DWV AND WATER DISTRIBUTION PIPING SHALL BE TESTED IN ACCORDANCE WITH VA PLUMBING CODE.
- ALL PENETRATIONS OF EXTERIOR WALLS, ROOFS & CEILINGS SHALL BE SEALED TO PREVENT AIR INFILTRATION.
- PROVIDE P-TRAPS AN ALL FLOOR DRAINS.
- GUARANTEE ALL EQUIPMENT, MATERIALS AND INSTALLATION FREE OF DEFECTS FOR A PERIOD OF 1-YEAR AFTER DATE OF ACCEPTANCE.
- THE INTENT OF THESE PLANS AND SPECIFICATIONS IS TO PROVIDE A COMPLETE OPERABLE WATER & SEWER SYSTEM. THE PLUMBING CONTRACTOR SHALL CONTACT THE ENGINEER PRIOR TO BIDDING IF UNABLE TO PROVIDE A COMPLETE SYSTEM DUE TO CONFLICTS, ERRORS, OR OMISSIONS. FURTHER, IF THERE ARE CONFLICTS W/ LOCAL, STATE OR NATIONAL CODES, SUCH CODES SHALL HAVE PRECEDENCE OVER THE PLANS & SPECS, AND THE PLUMBING CONTRACTOR SHALL NOTIFY ENGINEER PRIOR TO BIDDING. ALL NOTIFICATIONS IN WRITING.



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

**PLUMBING FIXTURE SCHEDULE**

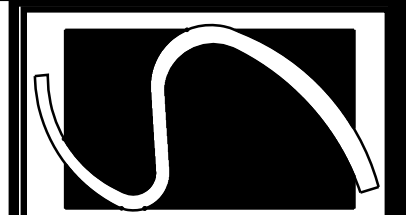
MARK	FIXTURE	MANUFACTURER	CATALOGUE NO.	ACCESSORIES & REMARKS
P-1	WATER CLOSET	AMER STANDARD	2094-111 WHITE	INCLUDES FLUSH VALVE
P-2	URINAL	AMER STANDARD	7058A-101 WHITE	24" RIM HT UNLESS 2 URINALS IN RESTROOM IF 2 - ONE TO BE 17" RIM HT AND ONE TO BE 24"
P-3	UNDER-COUNTER SINK	AMER STANDARD	0614-000	WHITE V/ FLUENT 2 HANDLE FAUCET - POLISHED CHROME W/ DRAIN TRAP & STOPS
P-4	UNDER-COUNTER SINK	SVAN	US-1210-010	454326-400-002 V/ 195A GRID / CP STOPS & TRAP
P-5	HOSE BIBB	WOODFORD	MOD 69	ANTI-SIPHONING V/ VACUUM BRKR, SELF DRAINING
P-6	TRENCH DRAIN	JOSAM	PRO-PLUS 200 SERIES	V/ 200-D55-C-PS-GRATE & INLINE SILT BOX
P-7	FLOOR DRAIN	JOSAM	38630-1-92	4" PIPE / NEKALLOY TOP
P-8				

**PLUMBING FIXTURE REQUIREMENTS**

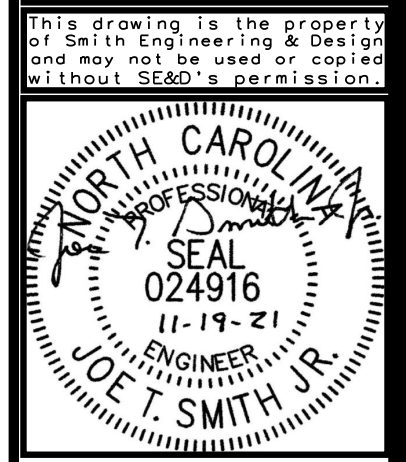
OCCUPANCY	OCCUPANCY LOAD				WATER CLOSETS		URINALS	LAVATORIES		SHOWERS/ TUBS	DRINKING FOUNTAINS	
	TOTAL	MEN	WOMEN	MALE	FEMALE	MALE		FEMALE	MALE		FEMALE	REGULAR
BUSINESS	116	50	50	58	58	1	3	2	2	0	1	1
STORAGE	5	50	50	3	3							
SHOP	29	80	20	23	6	1	1	0	1	1	0	

**PLUMBING FIXTURE CONNECTION SCHEDULE**  
MINIMUM SIZES

FIXTURE TYPE	CW	HW	WASTE	VENT
WATER CLOSET	1"		3"	2"
URINAL	3/4"		2"	1 1/2"
SINK	1/2"	1/2"	2"	1 1/2"
WATER COOLER	1/2"		2"	1 1/2"
HOSE BIBB	3/4"			



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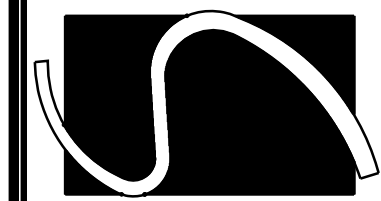
REVISIONS

**JOHN HIESTER**  
CDR+J  
LILLINGTON, N.C.

PROJECT NO: 21004  
DRAWN BY: JL  
DATE: 11-19-2021

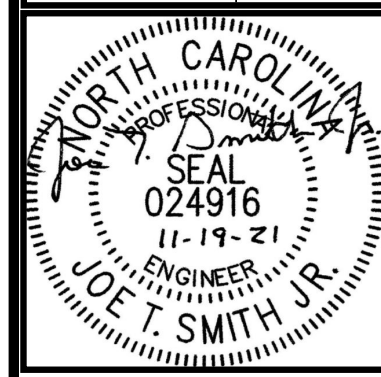
**PLUMBING PLAN**

**P-1**



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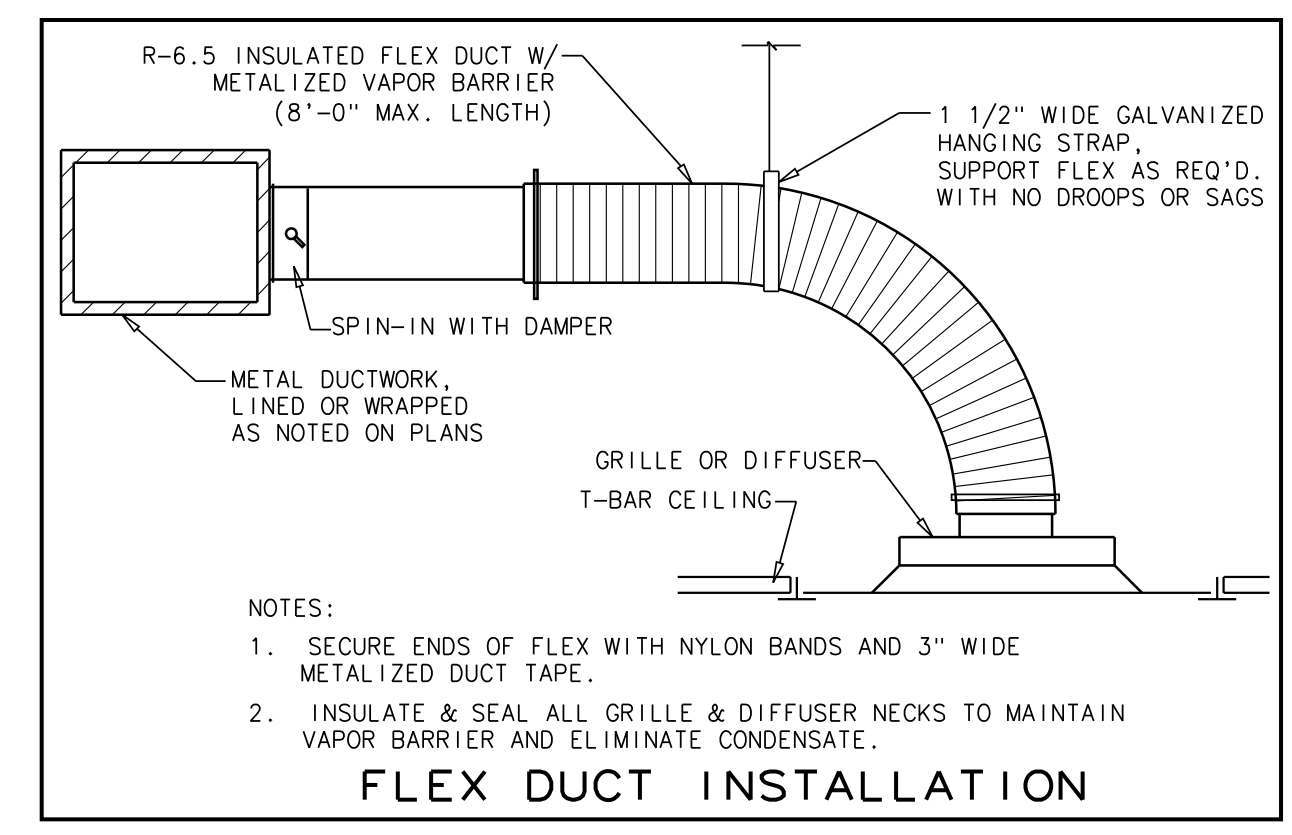
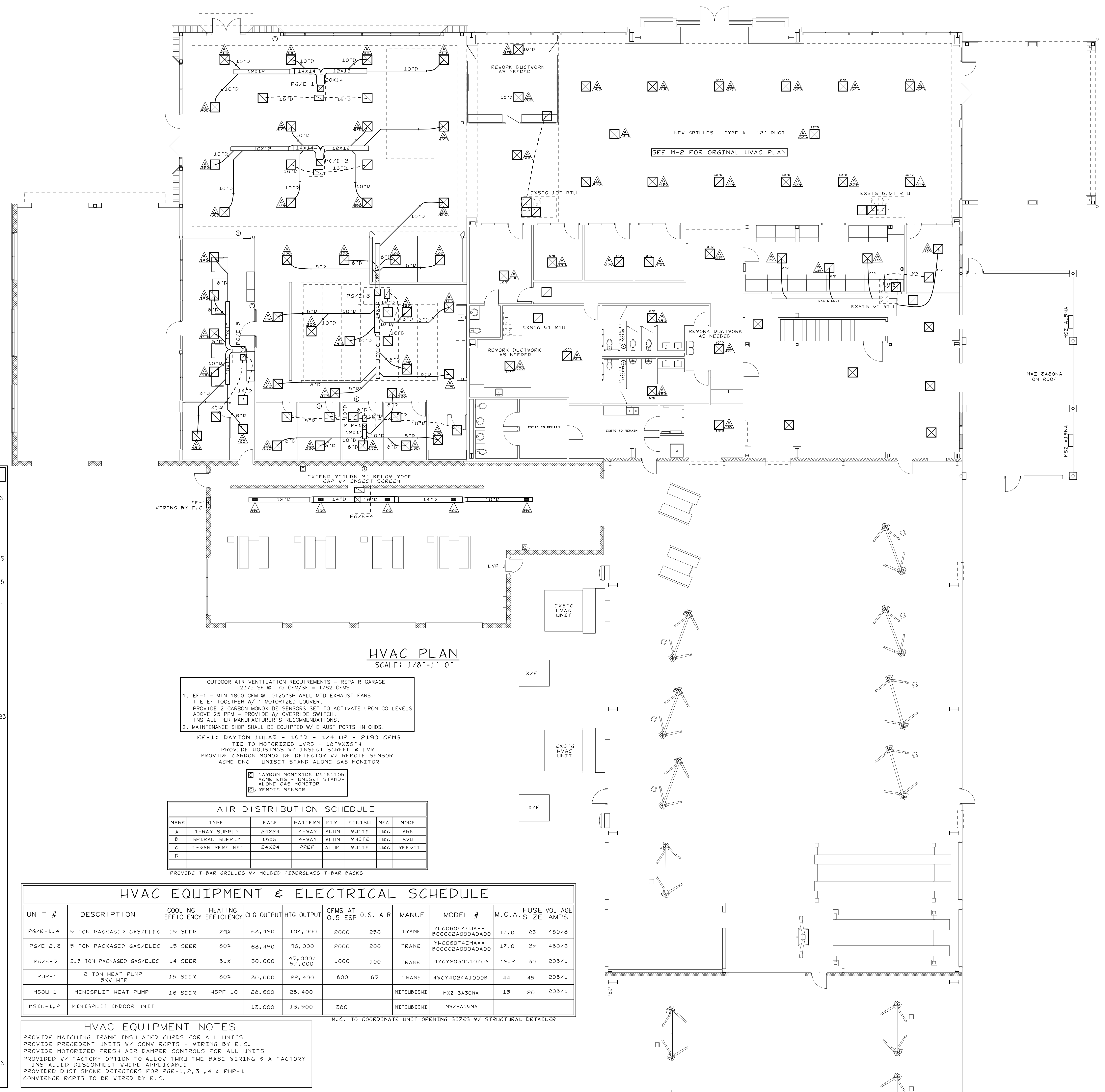
REVISIONS

JOHN HIESTER  
 CDR+J  
 LILLINGTON, N.C.

PROJECT NO: 21004  
 DRAWN BY: JL  
 DATE: 11-19-2021

HVAC PLAN

M-1



NOTES:  
 1. SECURE ENDS OF FLEX WITH NYLON BANDS AND 3\"/>

MECHANICAL NOTES

- MECHANICAL PLANS ARE INTENDED TO PROVIDE INFORMATION FOR INSTALLATION OF A COMPLETE OPERATING MECHANICAL SYSTEM. PROVIDE ALL ESSENTIAL LABOR, MATERIALS & DEVICES REQUIRED TO PRODUCE A QUALITY END PRODUCT.
- CONTRACTOR SHALL REVIEW & BECOME FAMILIAR WITH THE WORK OF ALL TRADES FOR PURPOSES OF COORDINATION AND ROUTING. CONTRACTOR SHALL PROVIDE REQUIRED PLANNING, COORDINATION AND SEQUENCING OF HVAC INSTALLATION WITH BUILDING COMPONENTS AND OTHER TRADES.
- ALL WORK SHALL COMPLY WITH LOCAL, STATE & NATIONAL CODES. WORKMANSHIP SHALL MEET OR EXCEED INDUSTRY STANDARDS.
- THE M.C. IS RESPONSIBLE FOR COORDINATION OF ALL COMPONENTS OF THE SYSTEMS W/ ALL TRADES & BUILDING COMPONENTS. PROVIDE ALL BENDS, OFFSETS, ELBOWS ETC. AS REQUIRED.
- FABRICATE AND INSTALL DUCT PER SMACNA STANDARDS FOR 2-INCH WC WITH GALVANIZED METAL (26 GAUGE MINIMUM). ALL RADIUS ELBOWS & TEES SHALL HAVE CENTERLINE RADIUS OF 1.5 X DUCT WIDTH. ALL SQUARE ELBOWS & TEES SHALL HAVE TURNING VANES. PRIOR TO FABRICATION, MECHANICAL CONTRACTOR SHALL FIELD VERIFY STRUCTURAL OBSTRUCTIONS & CEILING SPACE LIMITATIONS AND MAKE NECESSARY DUCT MODIFICATIONS INCLUDING CHANGING OF ASPECT RATIOS, ADDING OFFSETS, AND SHIFTING LOCATIONS. PROTECT DUCT BY STORING IN A CLEAN AND DRY ENVIRONMENT PRIOR TO INSTALLATION. COVER ENDS OF EXPOSED WORK AT THE END OF EVERY SHIFT.
- ALL DUCT JOINTS, SEAMS & BRANCH TAKEOFFS SHALL BE SEALED AIR-TIGHT WITH DUCT SEALANT EQUAL TO HARDCAST IRON-GRIP OR FOIL-GRIP TAPE EQUAL TO HARDCAST AFG-1402.
- ROUND RUNOUTS SHALL HAVE SPIN-INS WITH DAMPERS, RECTANGULAR BRANCH DUCTS SHALL HAVE 45 DEGREE TAPS WITH AIR EXTRACTORS AND ALL TEES SHALL HAVE SPLITTER DAMPERS. PROVIDE ANY OTHER DEVICES REQUIRED TO BALANCE AIR SYSTEM.
- FLEX DUCT SHALL HAVE METALIZED VAPOR BARRIER WITH MIN. R-VALUE OF 6.5. BOTH ENDS SHALL BE SECURED WITH NYLON BANDS AND METALIZED DUCT TAPE PER MFG'S RECOMMENDATIONS & IN ACCORDANCE WITH U.L. 181B. ALL BENDS ARE TO BE GREATER OR EQUAL TO ONE DUCT DIAMETER. PROVIDE 1.5\"/>
- RIGID ROUND AND RECTANGULAR DUCT SHALL BE EXTERNALLY INSULATED WITH 2-INCH THICK 3/4 LB. DENSITY FIBERGLASS BLANKET WITH FSK VAPOR BARRIER AND A MIN. R-VALUE OF 6.5. STAPLE AND SEAL ALL JOINTS WITH 4-INCH WIDE METALIZED DUCT TAPE EQUAL TO SHURFLEX SF-683
- EXPOSED DUCTWORK TO BE INSULATED DOUBLE WALL SPIRAL DUCT W/ PAINT GRIP - PAINT WHITE
- INSULATE & SEAL ALL GRILLE & DIFFUSER NECKS TO MAINTAIN VAPOR BARRIER AND ELIMINATE CONDENSATION.
- CONDENSATE TRAPS FOR ALL AC UNITS SHALL BE SIZED AS RECOMMENDED BY UNIT MFG. CONDENSATE PIPING AND TRAPS SHALL BE SCHEDULE 40 PVC ROUTED TO DRYWELL OR STORM DRAIN. INSULATE INTERIOR PIPING WITH 1/2 INCH THICK UNICELLULAR INSULATION.
- REFRIGERANT PIPING SHALL BE TYPE ACR COPPER WITH SILVER SOLDERED JOINTS. INSTALL PER EQUIPMENT INSTALLATION INSTRUCTIONS. INSULATION SHALL BE 1-INCH THICK MINIMUM.
- ALL PIPING SHALL BE SUPPORTED & SECURED WITH SUITABLE HANGERS, STRAPS OR PIPE STANDS. SUPPORT WITH NO DROOPS OR SAGS. ALL HANGERS AND ATTACHMENTS SHALL BE PLATED, GALVANIZED OR PAINTED. PROVIDE ISOLATION ON PIPING OF DISSIMILAR MATERIALS.
- PIPE INSULATION SHALL BE FIBERGLASS WITH FOIL AND PAPER JACKET. INSULATION ON PIPING 1\"/>
- POWER WIRING, DISCONNECTS & STARTERS NOT FURNISHED WITH HVAC EQUIPMENT AND FINAL CONNECTIONS SHALL BE BY THE E.C.
- CONTROL WIRING, RELAYS AND INTERLOCKING DEVICES SHALL BE PROVIDED BY THE M.C.
- UL LISTED DUCT SMOKE DETECTORS SHALL BE FURNISHED, INSTALLED & TESTED BY THE M.C. THE E.C. SHALL PROVIDE 120V POWER TO EACH DUCT SMOKE DETECTOR WHERE REQUIRED. THE M.C. SHALL PROVIDE REMOTE ALARM/TEST STATIONS FOR EACH DUCT SMOKE DETECTOR.
- PROVIDE HVAC UNITS W/ HONEYWELL TH8320R1003 VISIONPRO HEAT/COOL DIGITAL THERMOSTAT.
- INSTALL EQUIPMENT TO FACILITATE SERVICING, MAINTENANCE & REPAIR IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS AS WELL AS SPECIFIC INSTRUCTIONS ON PLANS.
- PROVIDE FLEX CONNECTORS AT ALL DUCT TO EQUIPMENT CONNECTIONS NOT HAVING INTERNALLY ISOLATED FANS.
- PROVIDE ROOF CURBS FOR ALL ROOFTOP MOUNTED EQUIPMENT. BASE OF CURB TO FIT SLOPE OF ROOF. COORDINATE LOCATION W/ G.C.
- CONTRACTOR SHALL BALANCE AIR SYSTEM TO QUANTITIES INDICATED ON PLANS AND PROVIDE TYPE WRITTEN REPORT WITH O&M MANUALS.
- ALL EQUIPMENT & SYSTEMS SHALL BE WASHED, MECHANICAL AREAS CLEANED AND PAINTED SURFACES TOUCHED UP TO MATCH FACTORY APPLIED FINISHES. ALL DUCT SYSTEMS AND AIR HANDLERS SHALL BE VACUUM AND WIPED CLEAN ON THE INSIDE PRIOR TO TURNING THE PROJECT OVER TO THE OWNER. SYSTEMS THAT HAVE NOT BEEN ADEQUATELY PROTECTED DURING INSTALLATION WILL REQUIRE CLEANING AGAIN AT THE END OF THE PROJECT.
- CONTRACTOR SHALL INSTALL A NEW SET OF PLEATED FILTERS BEFORE TURNING BUILDING OVER TO OWNER.
- CONTRACTOR SHALL PROVIDE BUILDING OWNER WITH A COMPLETE OPERATING & MAINTENANCE MANUAL INCLUDING EQUIPMENT BASIC DATA, CONTROL INFORMATION, ROUTINE MAINTENANCE ACTIONS AND SERVICE AGENCIES NAME, PHONE NUMBER & ADDRESS.
- GUARANTEE ALL EQUIPMENT, MATERIALS AND INSTALLATION FREE OF DEFECTS FOR A PERIOD OF 1-YEAR AFTER DATE OF ACCEPTANCE. EXTENDED GUARANTEES ON EQUIPMENT SHALL BE AS PUBLISHED ON MANUFACTURER'S EXTENDED WARRANTIES.
- THE INTENT OF THESE PLANS AND SPECIFICATIONS IS TO PROVIDE A COMPLETE OPERABLE HVAC SYSTEM. THE HVAC CONTRACTOR SHALL NOTIFY THE ENGINEER PRIOR TO BIDDING IF UNABLE TO PROVIDE A COMPLETE SYSTEM DUE TO CONFLICTS, ERRORS, OR OMISSIONS. IF THERE ARE CONFLICTS W/ LOCAL, STATE OR NATIONAL CODES, SUCH CODES SHALL HAVE PRECEDENCE OVER THE PLANS & SPECS & THE HVAC CONTRACTOR SHALL NOTIFY THE ENGINEER PRIOR TO BIDDING. ALL NOTIFICATIONS IN WRITING.

OUTDOOR AIR VENTILATION REQUIREMENTS - REPAIR GARAGE  
 2375 SF @ .75 CFM/SF = 1782 CFMS  
 1. EF-1 - MIN 1800 CFM @ .0125\"/>

EF-1: DAYTON 14L4S - 18\"/>

- CARBON MONOXIDE DETECTOR
- ACME ENG - UNISET STAND-ALONE GAS MONITOR
- REMOTE SENSOR

AIR DISTRIBUTION SCHEDULE						
MARK	TYPE	FACE	PATTERN	MTRL	FINISH	MFG
A	T-BAR SUPPLY	24X24	4-VAY	ALUM	WHITE	HEC ARE
B	SPIRAL SUPPLY	18X8	4-VAY	ALUM	WHITE	HEC SVL
C	T-BAR PERF RET	24X24	PREF	ALUM	WHITE	HEC REFBII
D						

HVAC EQUIPMENT & ELECTRICAL SCHEDULE										
UNIT #	DESCRIPTION	COOLING EFFICIENCY	HEATING EFFICIENCY	CLG OUTPUT	HTG OUTPUT	CFMS AT O.S ESP	O.S. AIR	MANUF	MODEL #	M.C.A. FUSE SIZE VOLTAGE AMPS
PG/E-1,4	5 TON PACKAGED GAS/ELEC	15 SEER	79%	63,490	104,000	2000	250	TRANE	YHC080F4EHA** 8000C2A000A0A00	17.0 25 480/3
PG/E-2,3	5 TON PACKAGED GAS/ELEC	15 SEER	80%	63,490	96,000	2000	200	TRANE	YHC080F4EHA** 8000C2A000A0A00	17.0 25 480/3
PG/E-5	2.5 TON PACKAGED GAS/ELEC	14 SEER	81%	30,000	45,000/ 57,000	1000	100	TRANE	4YCY2030C1070A	19.2 30 208/1
PHP-1	2 TON HEAT PUMP SKV HTR	15 SEER	80%	30,000	22,400	800	65	TRANE	4VCY40B4A1000B	44 45 208/1
MSOP-1	MINISPLIT HEAT PUMP	16 SEER	HSPF 10	28,600	28,400			DAIKIN	MXZ-3A30NA	15 20 208/1
MSIU-1,2	MINISPLIT INDOOR UNIT			13,000	13,900	380		DAIKIN	MSZ-A19NA	

HVAC EQUIPMENT NOTES  
 PROVIDE MATCHING TRANE INSULATED CURBS FOR ALL UNITS  
 PROVIDE PRECEDENT UNITS V/ CONV RCPTS - WIRING BY E.C.  
 PROVIDE MOTORIZED FRESH AIR DAMPER CONTROLS FOR ALL UNITS  
 PROVIDE V/ FACTORY OPTION TO ALLOW THRU THE BASE WIRING & A FACTORY INSTALLED DISCONNECT WHERE APPLICABLE  
 PROVIDED DUCT SMOKE DETECTORS FOR PGE-1,2,3,4 & PHP-1  
 CONVENIENCE RCPTS TO BE WIRED BY E.C.

M.C. TO COORDINATE UNIT OPENING SIZES W/ STRUCTURAL DETAILER



**ELECTRICAL NOTES**

- ELECTRICAL PLANS ARE INTENDED TO PROVIDE INFORMATION FOR INSTALLATION OF A COMPLETE ELECTRICAL SYSTEM. PROVIDE ALL ESSENTIAL LABOR, MATERIALS & DEVICES REQUIRED TO PRODUCE A QUALITY END PRODUCT.
- CONTRACTOR SHALL REVIEW & BECOME FAMILIAR WITH THE WORK OF ALL TRADES FOR PURPOSES OF COORDINATION AND SEQUENCING. CONTRACTOR SHALL PROVIDE REQUIRED PLANNING, COORDINATION AND SEQUENCING OF ELECTRICAL INSTALLATION WITH BUILDING COMPONENTS AND OTHER TRADES.
- ALL WORK SHALL COMPLY WITH THE NATIONAL ELECTRICAL CODE (NEC). WORKMANSHIP SHALL MEET OR EXCEED INDUSTRY STANDARDS.
- ELECTRICAL CONTRACTOR SHALL PROVIDE ALL DISCONNECTS, STARTERS, DEVICES AND ELECTRICAL COMPONENTS UNLESS SPECIFICALLY NOTED AS PROVIDED BY OTHERS.
- ELECTRICAL CONTRACTOR SHALL PROVIDE ALL LINE AND LOAD SIDE WIRING INCLUDING ALL TERMINATIONS TO EQUIPMENT PROVIDED UNDER OTHER TRADES. POWER WIRING TO CONTROL DEVICES SHALL BE PROVIDED BY E.C. INTERLOCK WIRING SHALL BE PROVIDED BY THE CONTRACTOR INSTALLING THE CONTROL DEVICE.
- ALL WIRING, PANELBOARDS, DEVICES AND OTHER LINE MATERIALS SHALL BE UL LISTED & LABELED. ALL MATERIALS SHALL MEET THE NEC FOR THE INTENDED USE AND INSTALLED IN ACCORDANCE WITH THE NEC.
- PROVIDE 110V/70V COPPER WIRE. PROVIDE A MINIMUM WIRE SIZE OF #12. ALL WIRE 80 AND LARGER SHALL BE STRANDED. CONDUCTORS AND CONDUIT ON PLANS AND SCHEDULES REFLECT AMPACITIES PER NEC 310-16 75C RATING. CONTRACTOR SHALL VERIFY ALL TERMINATIONS, LUGS, ETC. ARE RATED FOR USE PER NEC 110-4C. OTHERWISE PROVIDE CONDUCTOR AND CONDUIT SIZED PER LOWEST TEMPERATURE RATING OF ANY TERMINATION WITHIN A CIRCUIT. A SEPARATE, INSULATED EQUIPMENT GROUNDING CONDUCTOR SHALL BE PROVIDED FOR ALL CIRCUITS. MC CABLE PERMITTED IN CONCEALED SPACES.
- PROVIDE 3/4-INCH EMPTY CONDUITS EXTENDING ABOVE CEILING FOR ALL TELEPHONE AND DATA OUTLETS SHOWN ON PLANS. PROVIDE PROTECTIVE BUSHINGS ON ENDS OF CONDUIT. ALL CABLING IS PROVIDED BY OTHERS.
- PROVIDE 3/4-INCH EMPTY CONDUITS TERMINATING ABOVE THE CEILING FOR ALL HVAC THERMOSTATS. JUNCTION BOXES SHALL MATCH ORIENTATION OF THERMOSTATS PROVIDED BY M.C. MOUNT JUNCTION BOXES 48-INCHES & 1 FT. UNLESS NOTED OTHERWISE. PROVIDE PROTECTIVE BUSHINGS ON ENDS OF CONDUIT. ALSO PROVIDE DOUBLE GANG BOX AT 84" AFF OVER THERMOSTATS OR WHERE SHOWN ON PLANS FOR REMOTE ALARM/TEST STATIONS OF HVAC DUCT SMOKE DETECTORS (NOT REQUIRED IF CENTRAL FIRE ALARM SYSTEM EXISTS).
- PANELBOARDS FOR SERVICE ENTRANCE SHALL BE SERVICE ENTRANCE RATED. PROVIDE NEMA 3R PANELBOARDS WHERE LOCATED OUTSIDE. PROVIDE NEUTRAL AND GROUNDING BARS IN ALL PANELBOARDS UNLESS NOTED OTHERWISE. GROUND ALL SERVICE ENTRANCE PANELS IN ACCORDANCE WITH THE NEC. PROVIDE BOLT-IN BREAKERS UNLESS NOTED OTHERWISE.
- PROVIDE TYPE WRITTEN PANEL SCHEDULES IN EACH PANEL INDICATING THE LOAD DESCRIPTION FOR EACH BREAKER. LABEL PANELS ON PANEL FACE WITH PHENOLIC LABELS INDICATING PANEL NUMBER OR LETTER DESIGNATION, VOLTAGE AND PHASE.
- PROVIDE HEAVY DUTY FUSED AND NON-FUSED DISCONNECT SWITCHES AS INDICATED ON PLANS. DISCONNECTS LOCATED OUTSIDE SHALL BE NEMA-3R. PROVIDE REJECTION CLIPS IN FUSED DISCONNECTS.
- PROVIDE LIGHTING AS SCHEDULED IN THE FIXTURE SCHEDULE OR OTHERWISE NOTED ON PLANS. LIGHTING INSTALLED IN SUSPENDED CEILING SHALL BE SUPPORTED INDEPENDENTLY OF THE CEILING GRID SYSTEM. PROVIDE EMERGENCY AND EXIT LIGHTS AS SHOWN ON PLANS. POWER SHALL BE PROVIDED FROM LIGHTING CIRCUITS ON THE UNMOTICED LEG OF THE CIRCUIT SUCH THAT POWER TO THE EMERGENCY AND EXIT LIGHTS IS NOT DISCONNECTED WHEN NORMAL LIGHTING IS OFF. EXIT/EMERGENCY LIGHTS SHALL BE WIRED SUCH THAT PHOTOCELL AND/OR TIME CLOCK OPERATION DOES NOT DISCONNECT POWER TO BATTERIES.
- RECEPTACLES SHALL BE 20 AMP, 120V UNLESS NOTED OTHERWISE.
- RECEPTACLES ABOVE COUNTERTOPS AND ADJACENT TO SINKS, LAVATORIES & EWPS SHALL BE GROUND FAULT. KITCHEN, SERV DEPT, WASH BAYS & SERV DRIVE THRU RECEPTACLES SHALL BE GROUND FAULT.
- RECEPTACLES INSTALLED OUTSIDE SHALL BE GROUND FAULT WITH "IN USE" WEATHERPROOF COVERS.
- PROVIDE STANDARD SIZE WALL PLATES FOR ALL DEVICES AND BLANK WALL PLATES FOR JUNCTION BOXES. ALL DEVICE PLATES TO BE BRUSHED ALUMINUM FINISH.
- UL LISTED DUCT SMOKE DETECTORS SHALL BE FURNISHED, INSTALLED & TESTED BY THE M.C. THE E.C. SHALL PROVIDE 120V POWER TO EACH DUCT SMOKE DETECTOR WHERE REQUIRED. THE M.C. SHALL PROVIDE REMOTE ALARM/TEST STATIONS FOR EACH DUCT SMOKE DETECTOR.
- ALL ELECTRICAL COMPONENTS AND FIXTURES SHALL BE CLEANED & POLISHED. PAINTED SURFACES SHALL BE TOUCHED UP TO MATCH FACTORY APPLIED FINISHES.
- RACEWAYS SHALL BE CONCEALED IN WALL CONSTRUCTION, ABOVE CEILING OR BELOW FLOORS TO THE GREATEST EXTENT POSSIBLE. WHERE EXPOSED MINIMIZE VERTICAL & HORIZONTAL RUNS. SET NEAT & ORDERLY.
- ALL EXPOSED WIRING TO BE IN MC, RMC OR EMT. ALL WIRING TO BE IN MC, RMC, EMT OR MC FLEX.
- PROVIDE PULL WIRES IN ALL EMPTY CONDUITS.
- PROVIDE ADJUSTABLE LENGTH BARS FOR MOUNTING RECEPTACLES & DATA BOXES IN METAL STUD WALLS.
- 2 OR MORE ADJACENT POWER OR COMMUNICATION REPTS ARE TO BE GANGED W/ A COMMON FACEPLATE - IF NOT APPLICABLE, INSTALL AS CLOSE TOGETHER AS POSSIBLE.
- ALL PENETRATIONS OF EXTERIOR WALLS, ROOFS & CEILING SHALL BE SEALED TO PREVENT AIR INFILTRATION
- GUARANTEE ALL EQUIPMENT, MATERIALS AND INSTALLATION FREE OF DEFECTS FOR A PERIOD OF 1-YEAR AFTER DATE OF ACCEPTANCE.
- E.C. TO PROVIDE ELECTRICAL HOOKUPS FOR ALL 120V OR GREATER EQUIPMENT & FIXTURES REGARDLESS OF WHO FURNISHES THE EQUIPMENT OR FIXTURES.
- THE INTENT OF THESE PLANS AND SPECIFICATIONS IS TO PROVIDE A COMPLETE OPERABLE ELECTRICAL DISTRIBUTION SYSTEM. THE ELECTRICAL CONTRACTOR SHALL CONTACT THE ENGINEER PRIOR TO BIDDING IF UNABLE TO PROVIDE A COMPLETE SYSTEM DUE TO CONFLICTS, ERRORS OR OMISSIONS. FURTHER, IF THERE ARE CONFLICTS W/ LOCAL, STATE OR NATIONAL CODES, SUCH CODES SHALL HAVE PRECEDENCE OVER THE PLANS & SPECS. AND THE ELECTRICAL CONTRACTOR SHALL NOTIFY ENGINEER PRIOR TO BIDDING. ALL NOTIFICATIONS IN WRITING.

**LEGEND**

- DUPLEX RECEPT
- EXSTG DUPLEX RECEPT
- GFI DUPLEX RECEPT
- GFI DUPLEX RECEPT WITH GROUND FAULT
- WEATHERPROOF COVER
- 240V-208V RECEPT
- JUNCTION BOX
- STUB UP W/ WHIP POWER & DATA
- HOMERUN TO PANEL
- DISCONNECT
- MOTOR DISC SWITCH
- CARBON MONOXIDE SENSOR
- DATA / TELEPHONE
- CABLE T.V.
- SWITCH
- 3 WAY SWITCH
- OCCUPANCY SENSOR
- \*STUB 3/4" CONDUIT FROM BOX TO ABOVE CEILING

- SIGN - COORDINATE V/ SIGN MANUF. PROVIDE POWER TO EA. LETTER PROVIDE V.P. DISCONNECT
- COORDINATE POWER & DATA V/ MILLVORK CONTRACTOR
- COORDINATE POWER & DATA FOR DESKS/FIXTURE COORDINATE V/ SUPPLIER
- PROVIDE 120V POWER FOR CHORD REEL COORDINATE V/ EQ SUPPLIER

PROVIDE 12 FLUSH V.P. JUNCTION BOXES ON EXT. OF BLDG. FOR SECURITY CAMERAS. PROVIDE 3/4" COND. FROM BOX & STUB OUT 3" BELOW ROOF. COORDINATE LOCATIONS V/ OWNER.

PROVIDE 12 FLUSH V.P. JUNCTION BOXES ON EXT. OF BLDG. FOR SPEAKERS. PROVIDE 3/4" COND. FROM BOX & STUB OUT 3" BELOW ROOF. COORDINATE LOCATIONS V/ OWNER.

ALL SWITCHES, RECEPTACLES, DATA PORTS & OCCUPANCY SENSORS TO BE WHITE.

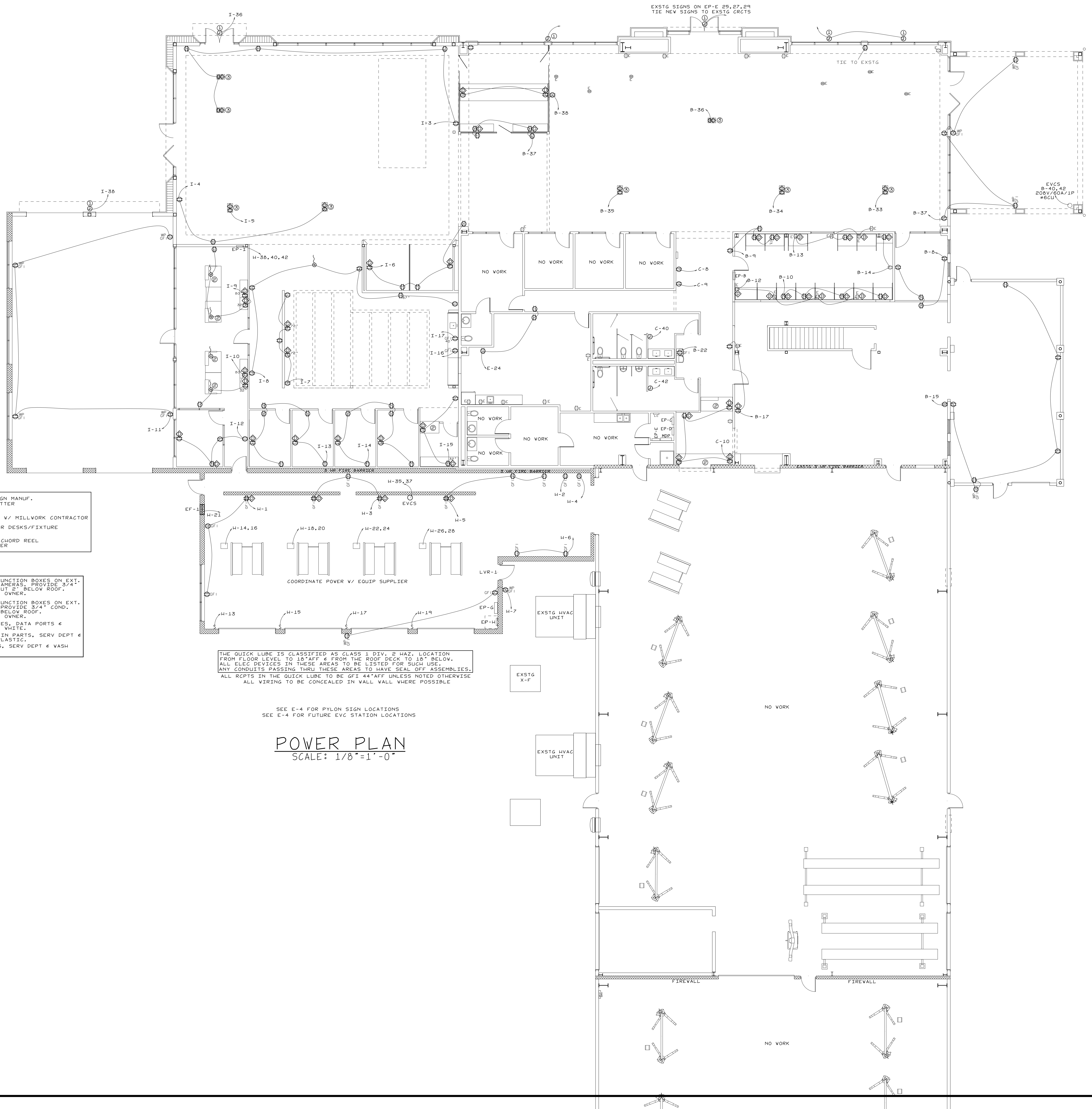
ALL WALL PLATES EXCEPT IN PARTS, SERV DEPT & WASH BAYS TO BE WHITE PLASTIC.

ALL WALL PLATES IN PARTS, SERV DEPT & WASH BAYS TO BE GREY PLASTIC.

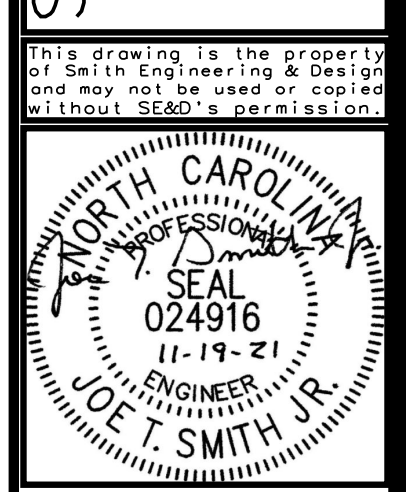
THE QUICK LUBE IS CLASSIFIED AS CLASS 1 DIV. 2 HAZ. LOCATION FROM FLOOR LEVEL TO 18" AFF & FROM THE ROOF DECK TO 18" BELOW. ALL ELEC DEVICES IN THESE AREAS TO BE LISTED FOR SUCH USE. ANY CONDUITS PASSING THRU THESE AREAS TO HAVE SEAL OFF ASSEMBLIES. ALL REPTS IN THE QUICK LUBE TO BE GFI 44" AFF UNLESS NOTED OTHERWISE. ALL WIRING TO BE CONCEALED IN WALL WALL WHERE POSSIBLE.

SEE E-4 FOR PYLON SIGN LOCATIONS  
SEE E-4 FOR FUTURE EVG STATION LOCATIONS

**POWER PLAN**  
SCALE: 1/8"=1'-0"



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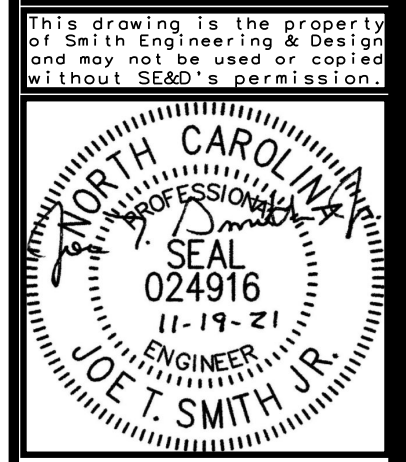
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**JOHN HIESTER**  
CDR+J  
LILLINGTON, N.C.

PROJECT NO: 21004  
DRAWN BY: JL  
DATE: 11-19-2021

POWER PLAN

E-1

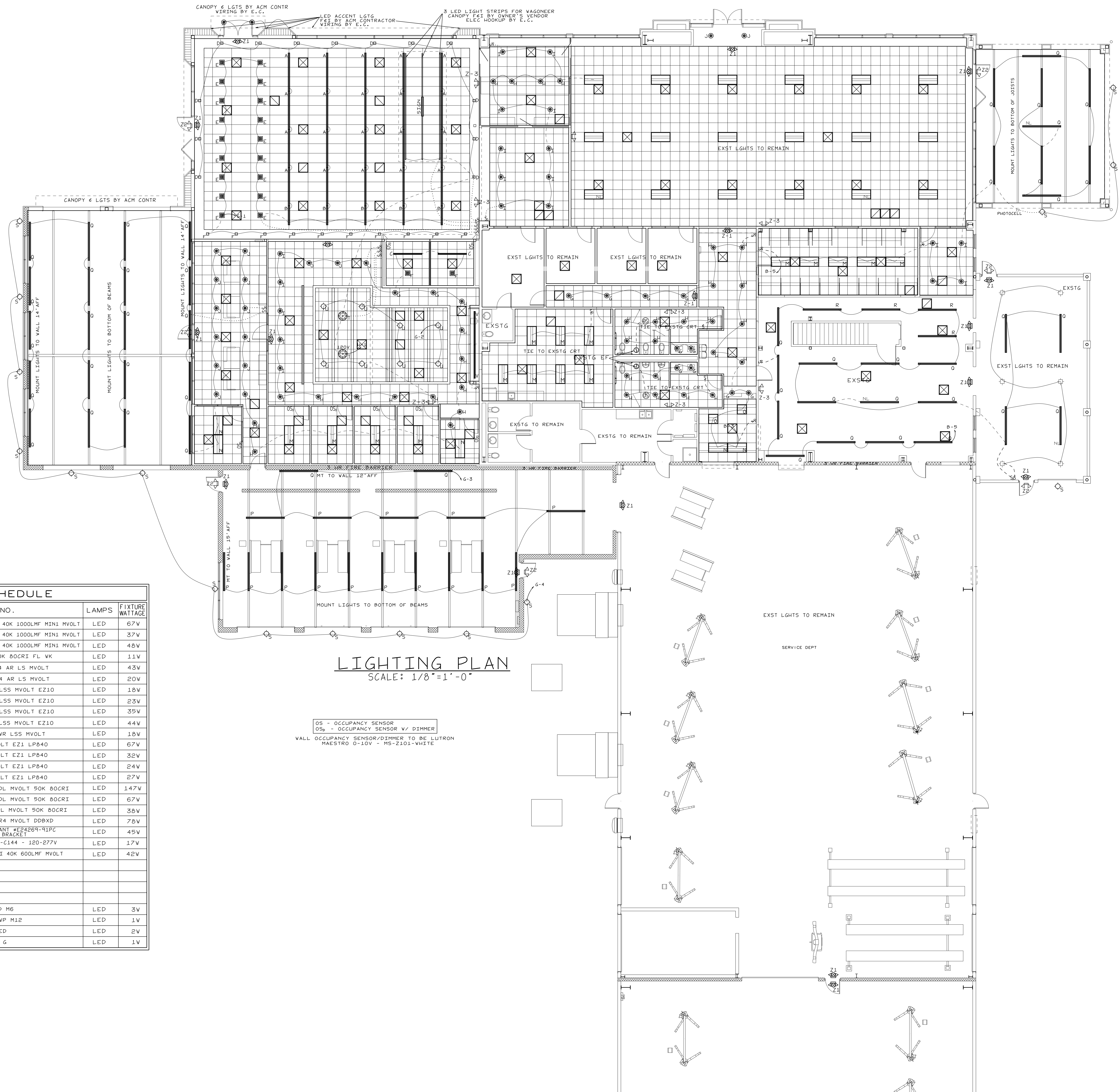


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LIGHTING PLAN  
 E-2



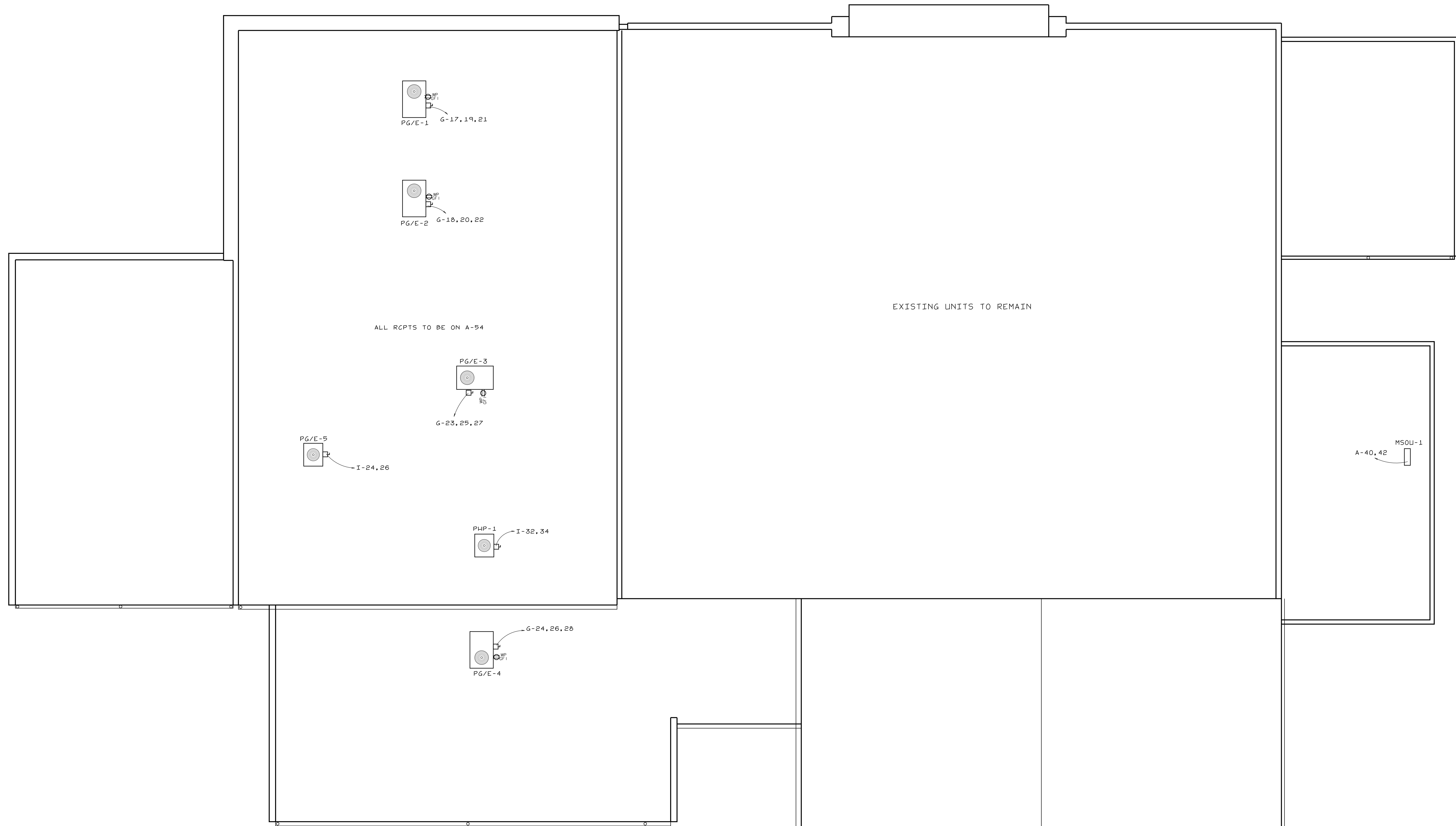
LIGHTING PLAN  
 SCALE: 1/8"=1'-0"

OS - OCCUPANCY SENSOR  
 OS5 - OCCUPANCY SENSOR V/ DIMMER  
 WALL OCCUPANCY SENSOR/DIMMER TO BE LUTRON MAESTRO 0-10V - MS-2101-WHITE

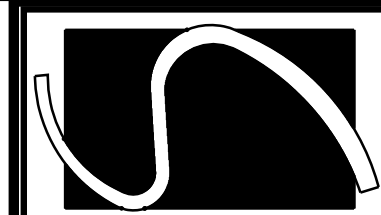
LIGHTING FIXTURE SCHEDULE					
TYPE	DESCRIPTION	MANUF	CATALOG NO.	LAMPS	FIXTURE WATTAGE
A	8' LED STRIP - PENDANT	MARK	S4LD LOP 8FT FLP TG 80CRI 40K 1000LMF MINI MVOLT	LED	67W
B	4' LED STRIP - PENDANT 14" AFF	MARK	S4LD LOP 4FT FLP TG 80CRI 40K 1000LMF MINI MVOLT	LED	37W
C	6' LED STRIP - PENDANT 9" AFF	MARK	S4LD LOP 6FT FLP TG 80CRI 40K 1000LMF MINI MVOLT	LED	48W
D	TRACK LIGHTING	JUNO	T261L HTECK G3 40K 80CRI FL VK	LED	11W
E	RECESSED 4" SO LED	LITHONIA	LDN450 40/40 LS4 AR LS MVOLT	LED	43W
F	RECESSED 4" SO LED WALLWASH	LITHONIA	LDN450 40/15 LS4 AR LS MVOLT	LED	20W
G	RECESSED 6" RND LED	LITHONIA	LDN6 40/15 L06 VR L55 MVOLT EZ10	LED	18W
H	RECESSED 6" RND LED	LITHONIA	LDN6 40/20 L06 VR L55 MVOLT EZ10	LED	23W
I	RECESSED 6" RND LED	LITHONIA	LDN6 40/30 L06 VR L55 MVOLT EZ10	LED	35W
J	RECESSED 6" RND LED	LITHONIA	LDN6 40/40 L06 VR L55 MVOLT EZ10	LED	44W
K	RECESSED 4" RND LED	LITHONIA	LDN4 40/15 L06 VR L55 MVOLT	LED	18W
L	2X4 LAY-IN LED	LITHONIA	2BLT4 72L ADP MVOLT E21 LP840	LED	67W
M	2X4 LAY-IN LED	LITHONIA	2BLT4 40L ADP MVOLT E21 LP840	LED	32W
N	2X4 LAY-IN LED	LITHONIA	2BLT4 30L ADP MVOLT E21 LP840	LED	24W
O	2X2 LAY-IN LED	LITHONIA	2BLT2 20L ADP MVOLT E21 LP840	LED	27W
P	8' LED STRIP	LITHONIA	CLX L96 20000LM SEF RDL MVOLT 50K 80CRI	LED	147W
Q	8' LED STRIP	LITHONIA	CLX L96 10000LM SEF RDL MVOLT 50K 80CRI	LED	67W
R	8' LED STRIP	LITHONIA	CLX L96 6000LM SEF RDL MVOLT 50K 80CRI	LED	38W
S	LED VALL PACK	LITHONIA	KAXV LED P3 50K R4 MVOLT DDBXD	LED	78W
T	DECORATIVE PENDANTS	ET2 CONTEMPORARY LIGHTING	ORB II LIGHT PENDANT #E24269-91PC V/ LAYIN GLG BRACKET	LED	45W
U	PENDANT CYLINDER	INTENSE LIGHTING	SS464C-L3-408-5V-HZ-C144 - 120-277V	LED	17W
V	LINEAR RECESSED LED	MARK	SL4L LOP 7' FLP 80CRI 40K 600LMF MVOLT	LED	42W
W					
X					
Y					
Z1	EMER/EXIT LGT	LITHONIA	ECB6 LED M6	LED	3W
Z2	EXT EMER LGT - REMOTE HEAD	LITHONIA	ELA LED T WP M12	LED	1W
Z3	EMERGENCY LIGHT	LITHONIA	ELM2 LED	LED	2W
Z3	EXIT LGT	LITHONIA	LOMS V G	LED	1W

\* ORDER AS S4LD LOP 32FT - 8'x8'x8'  
 ALL EXT LIGHTING & SIGNS TO BE CONTROLLED BY PHOTOCELL & TIMECLOCK (V/ BAT. BACKUP) PROVIDE CONTACTORS

APPROVED LIGHTING VENDORS  
 IKON: KEVIN TOMCZAK - 616.328.8520  
 KTONCZAK@IKONEFS.COM  
 GE: JOHN KOSTER - 216.577.9673  
 JOHN.KOSTER@GECURRENT.COM  
 LSI:

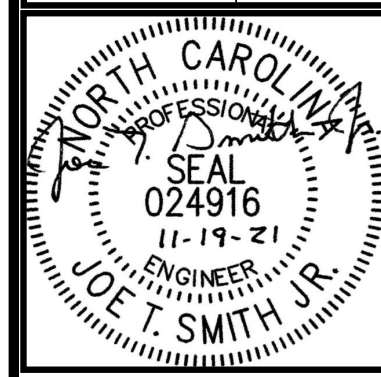


ROOF POWER PLAN  
SCALE: 1/8" = 1'-0"



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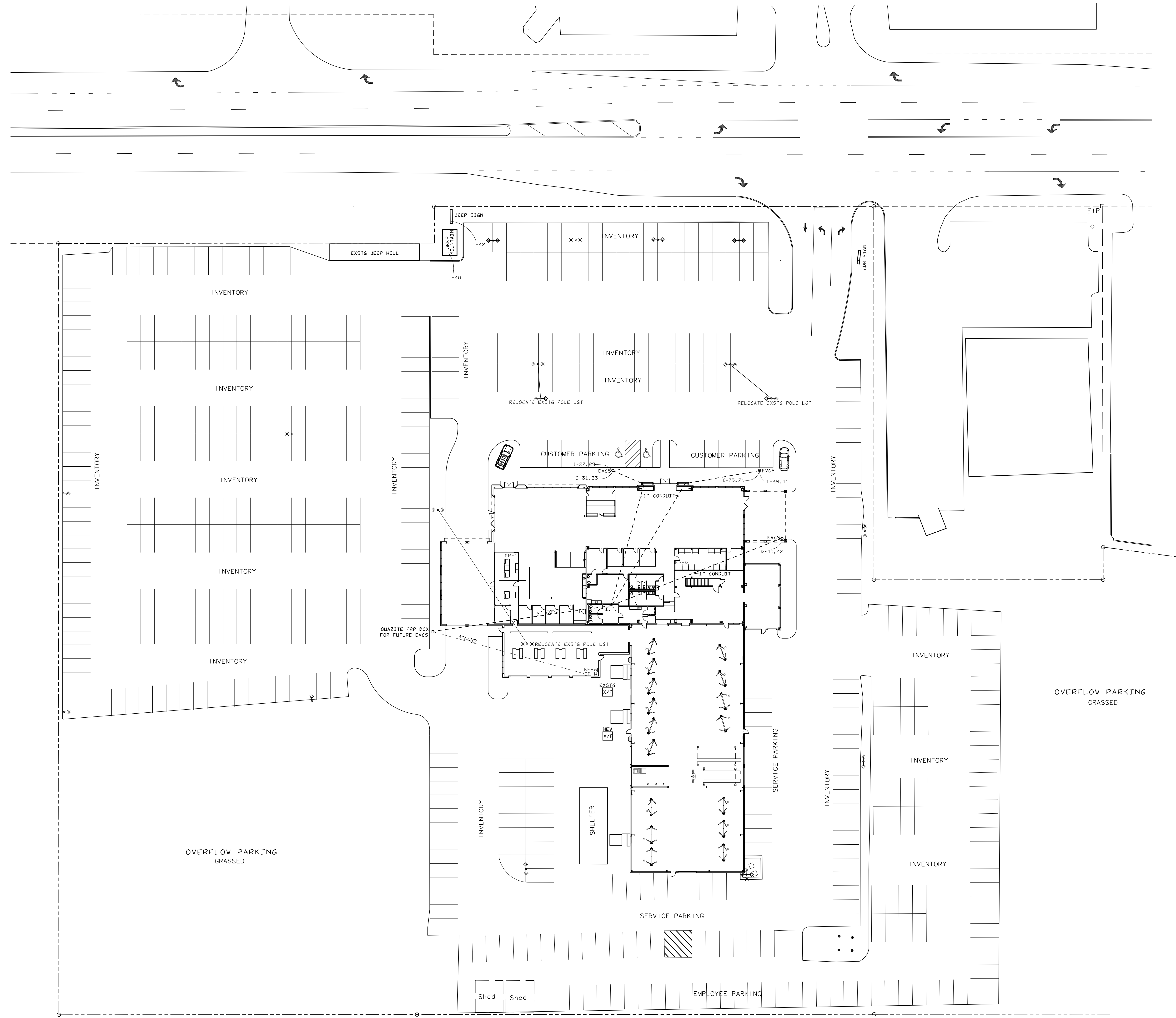
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CDR+J  
LILLINGTON, N.C.

PROJECT NO: 21004  
DRAWN BY: JL  
DATE: 11-15-2021

ROOF POWER  
PLAN

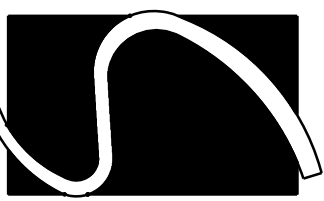
E-3





**SITE POWER PLAN**  
SCALE: 1"=30'-0"

EXISTING PARKING LOT LIGHTING TO REMAIN



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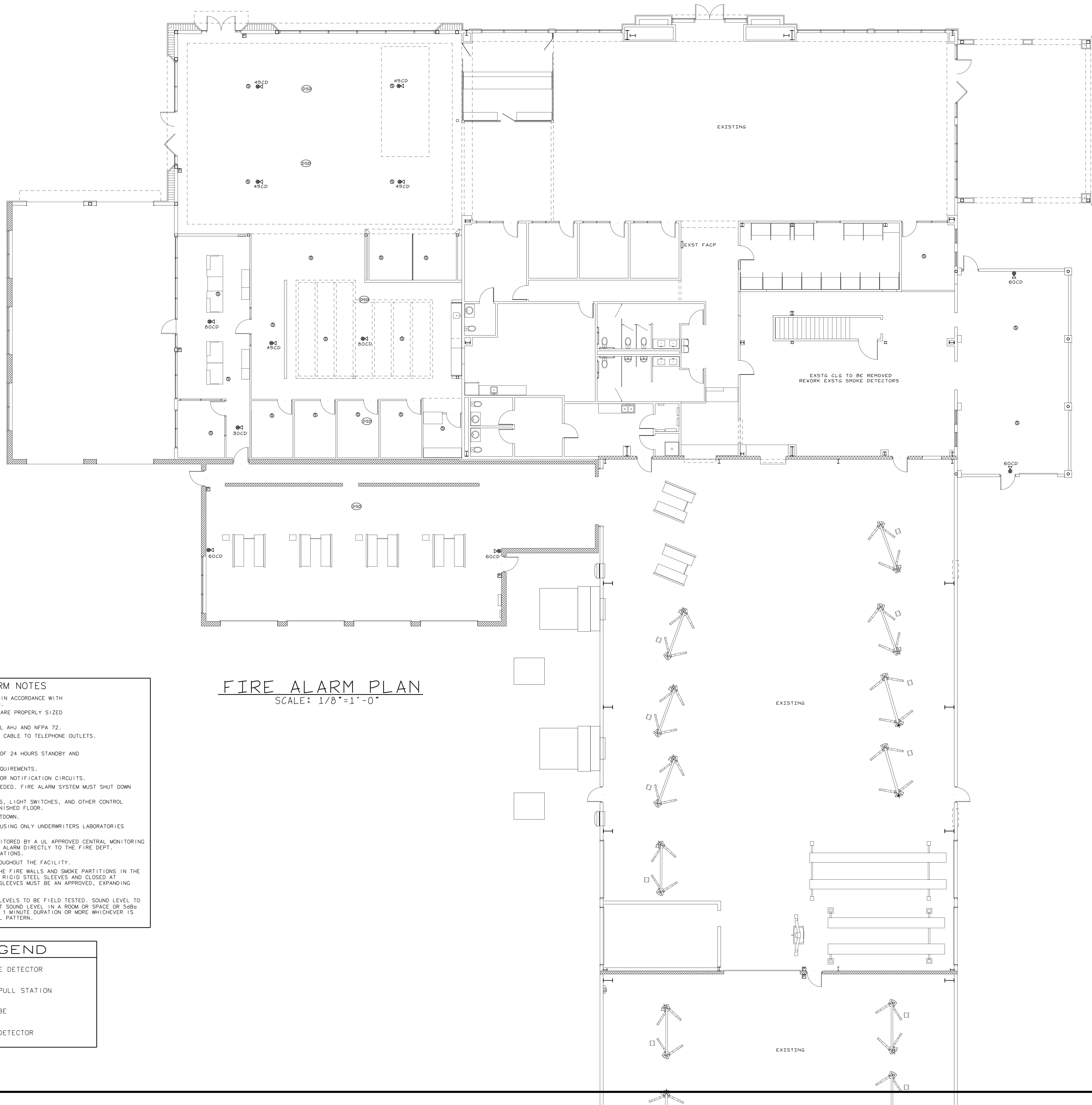
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SITE POWER PLAN





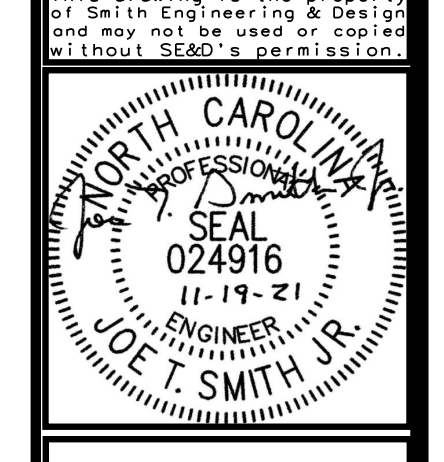
**FIRE ALARM PLAN**  
SCALE: 1/8"=1'-0"

- FIRE ALARM NOTES**
1. FIRE ALARM SYSTEM TO BE INSTALLED IN ACCORDANCE WITH NCSBC, NEC, AND NFPA 72A & NFPA-70.
  2. CONTRACTOR TO ENSURE ALL CIRCUITS ARE PROPERLY SIZED (MINIMUM CONDUCTOR SIZES SHOWN).
  3. ALL TESTING SHALL BE DONE (AW LOCAL AHJ AND NFPA 72).
  4. CONTRACTOR SHALL INSTALL TELEPHONE CABLE TO TELEPHONE OUTLETS.
  5. ALL CONDUIT SHALL BE 3/4" MINIMUM.
  6. BATTERY BACKUP TO PROVIDE MINIMUM OF 24 HOURS STANDBY AND FIVE MINUTES OF ALARM.
  7. PROVIDE SYNCHRONIZATION PER ADA REQUIREMENTS.
  8. PROVIDE VOLTAGE DROP CALCULATION FOR NOTIFICATION CIRCUITS.
  9. PROVIDE BOOSTER POWER SUPPLY AS NEEDED. FIRE ALARM SYSTEM MUST SHUT DOWN HVAC SYSTEM FANS, WHEN ACTIVATED.
  10. ALL FIRE PULL SWITCHES, THERMOSTATS, LIGHT SWITCHES, AND OTHER CONTROL DEVICES TO BE MOUNTED 48" ABOVE FINISHED FLOOR.
  11. PROVIDE CONTROL MODULE FOR AHJ SHUTDOWN.
  12. FIRE ALARM SYSTEM TO BE INSTALLED USING ONLY UNDERWRITERS LABORATORIES LABELED COMPONENTS.
  13. THE FIRE ALARM SYSTEM SHALL BE MONITORED BY A UL APPROVED CENTRAL MONITORING STATION. SYSTEM NOT TO TRANSMIT AN ALARM DIRECTLY TO THE FIRE DEPT. METHOD APPROVED BY THE LOCAL REGULATIONS.
  14. THE FIRE ALARM MUST BE AUDIBLE THROUGHOUT THE FACILITY.
  15. WHERE WIRES AND CABLES PASS THRU THE FIRE WALLS AND SMOKE PARTITIONS IN THE ATTIC, SUCH PASSAGES SHALL BE THRU RIGID STEEL SLEEVES AND CLOSED AT EACH END. THE SEALANT FOR CONDUIT SLEEVES MUST BE AN APPROVED, EXPANDING FIRE STOP MATERIAL.
  16. AUDIBLE NOTIFICATION DEVICE SOUND LEVELS TO BE FIELD TESTED. SOUND LEVEL TO BE A MIN OF 60dBa ABOVE THE AMBIENT SOUND LEVEL IN A ROOM OR SPACE OR 54dBa ABOVE THE MAX SOUND LEVEL HAVING A 1 MINUTE DURATION OR MORE WHICHEVER IS LOUDER. SOUND TO BE 3 BEAT TEMPORAL PATTERN.

**LEGEND**

(S)	521BXT SMOKE DETECTOR
(P)	FIRE ALARM PULL STATION
@	HORN / STROBE
(DSD)	DUCT SMOKE DETECTOR

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**FIRE ALARM PLAN**

**FA-1**