



OFFICE AND SHOP BUILDING FOR
R.L. CONSULTING, INC
 TUSCUMBIA, ALABAMA
 10-14-2019

LAMBERT EZELL DURHAM
 ARCHITECTURE, LLC
 PO BOX 934 401 EAST COLLEGE STREET FLORENCE, ALABAMA 35630
 T: 256.767.7100 www.ledarchitecture.com



SCHEDULE OF DRAWINGS

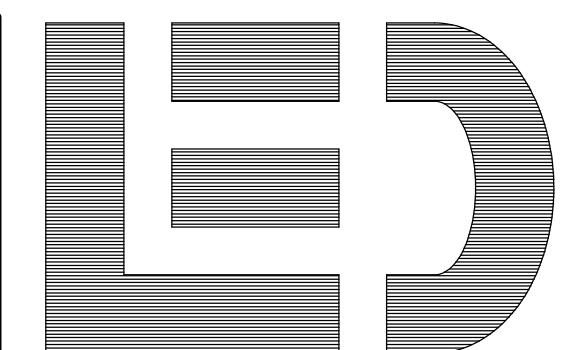
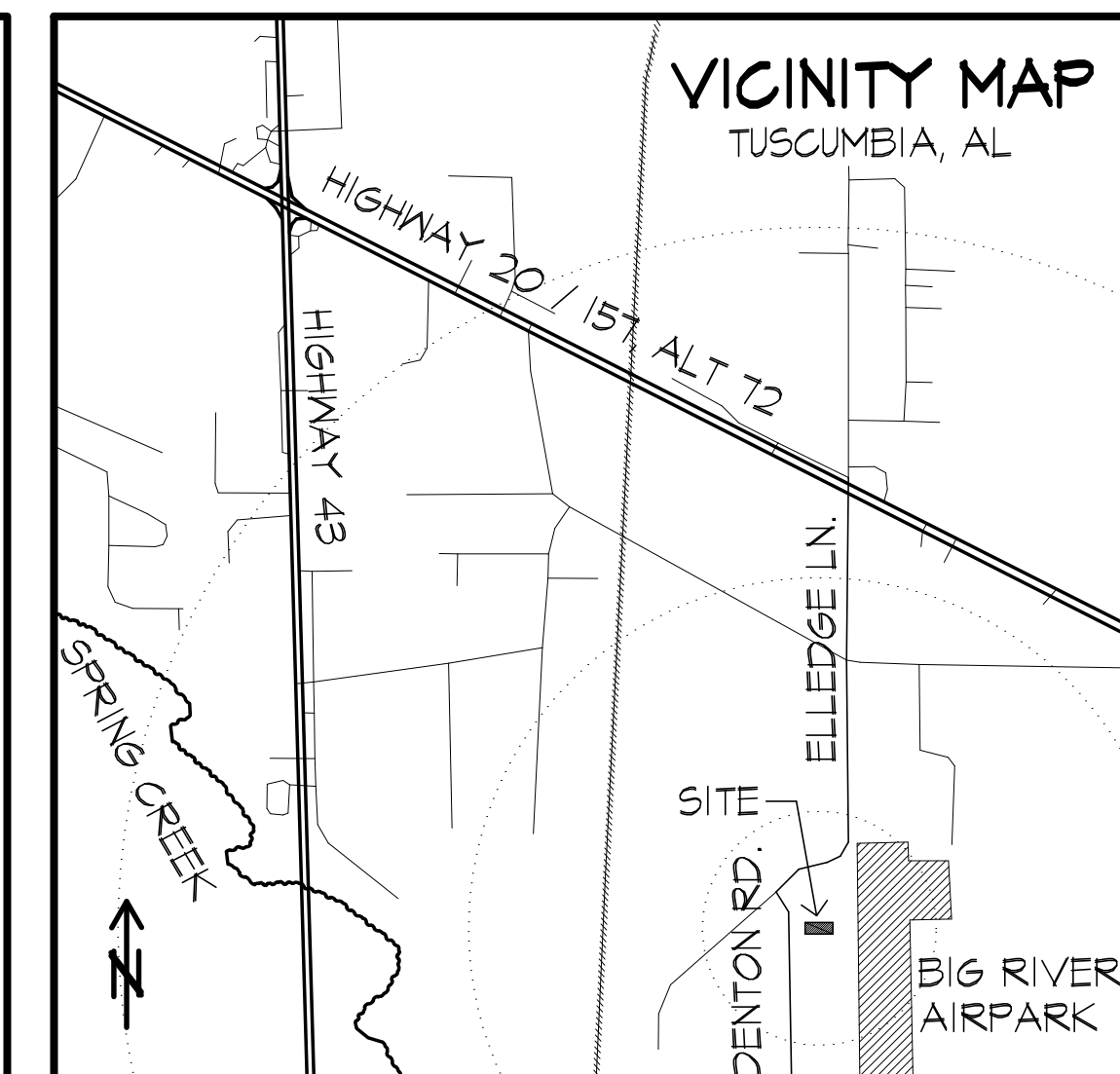
- SITE DEVELOPMENT
 - SD-1 SITE DEVELOPMENT PLAN
 - SD-2 SITE DETAILS
- ARCHITECTURAL
 - LSP-1 LIFE SAFETY PLAN
 - A-1.1 FLOOR PLAN LAYOUT
 - A-1.2 FLOOR PLAN NOTES
 - A-1.3 REFLECTED CEILING PLAN
 - A-1.4 ROOF PLAN
 - A-2.1 DOOR SCHEDULE
 - A-2.2 ROOM FINISH SCHEDULE
 - A-4.1 EXTERIOR ELEVATIONS
 - A-4.2 EXTERIOR ELEVATIONS
 - A-4.3 DOOR AND FRAME DETAILS
 - A-4.4 DOOR AND FRAME DETAILS
 - A-5.1 BUILDING CROSS SECTIONS
 - A-5.2 BUILDING CROSS SECTIONS
 - A-5.3 WALL SECTIONS
 - A-5.4 WALL SECTIONS
 - A-6.1 INTERIOR ELEVATIONS
 - A-6.2 MILLWORK DETAILS
- STRUCTURAL
 - S-1.0 FOUNDATION PLAN
 - S-1.1 CEILING FRAMING PLAN
 - S-2 GENERAL NOTES
 - S-2.1 TYPICAL DETAILS
 - S-2.2 TYPICAL DETAILS
 - S-3.0 FOUNDATION SECTIONS
 - S-3.1 FOUNDATION SECTIONS
 - S-3.2 CEILING FRAMING SECTIONS
- PLUMBING
 - P001 PLUMBING SITE PLAN
 - P101 PLUMBING FLOOR PLAN
 - P201 PLUMBING FLOOR PLAN
 - P301 RISER DIAGRAM WASTE WATER
 - P302 RISER DIAGRAM DOMESTIC WATER
 - P401 PLUMBING DETAILS
- MECHANICAL
 - M001 MECHANICAL SITE PLAN
 - M101 MECHANICAL FLOOR PLAN
 - M102 MECHANICAL FLOOR PLAN
 - M201 MECHANICAL FLOOR PLAN
 - M301 MECHANICAL SECTIONS
 - M302 MECHANICAL ISOMETRICS
 - M303 MECHANICAL ISOMETRICS
 - M401 MECHANICAL DETAILS
 - M402 MECHANICAL DETAILS
 - M501 MECHANICAL SCHEDULES
 - M502 MECHANICAL SCHEDULES
- ELECTRICAL
 - E-1 ELECTRICAL SITE PLAN
 - E-2 LIGHTING PLAN
 - E-3 POWER PLAN
 - E-4 EQUIPMENT PLAN
 - E-5 SINGLE LINE DIAGRAM AND DETAILS
 - E-6 PANEL SCHEDULE
 - E-7 FIXTURE SCHEDULE AND DETAILS
 - E-8 LEGEND AND DETAILS
 - E-9 NOTES AND DETAILS

LAMBERT · EZELL · DURHAM
 ARCHITECTURE, LLC
 P.O. BOX 934 401 EAST COLLEGE STREET
 FLORENCE, ALABAMA 35631
 TELEPHONE (256) 767-7100 WWW.LEDARCHITECTURE.COM

PRM STRUCTURAL ENGINEERS
 STRUCTURAL CONSULTANT
 120 HOLMES AVENUE, SUITE 122
 HUNTSVILLE, ALABAMA 35801
 (256) 652-6818

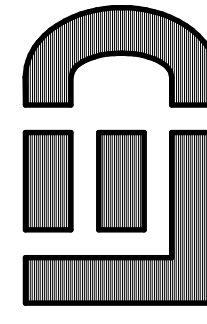
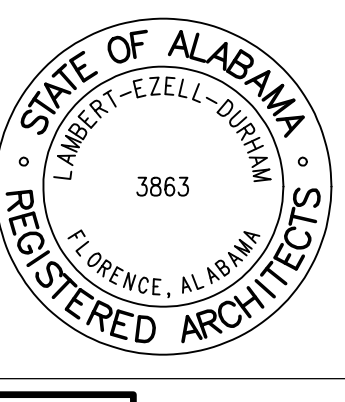
MDS ENGINEERING
 PLUMBING AND MECHANICAL CONSULTANT
 104-B JEFFERSON STREET - SOUTH
 HUNTSVILLE, ALABAMA 35801
 (256) 534-5150

SHOALS ENGINEERING, PC
 ELECTRICAL CONSULTANT
 1138 NORTH WOOD AVENUE
 FLORENCE, ALABAMA 35630
 (256) 764-0817



SET NUMBER

JOB NUMBER & NAME
 1860
 OFFICE & SHOP BUILDING FOR
 R.L. CONSULTING, INC.
 TUSCUMBIA, ALABAMA



LAMBERT-EZELL-DURHAM
ARCHITECTURE, LLC
FLORENCE, ALABAMA 36631
P.O. BOX 934 401 EAST COLLEGE ST.
TUSCUMBIA, ALABAMA 36110
TELEPHONE (256) 161-1100
WWW.LEDARCHITECTURE.COM

OFFICE AND SHOP BUILDING FOR
RL CONSULTING, INC.
TUSCUMBIA, ALABAMA

JOB NO: 1860 DATE: 10/14/19
DRAWN: ERH/JTS/JACE REVISIONS:
CHECKED: CED

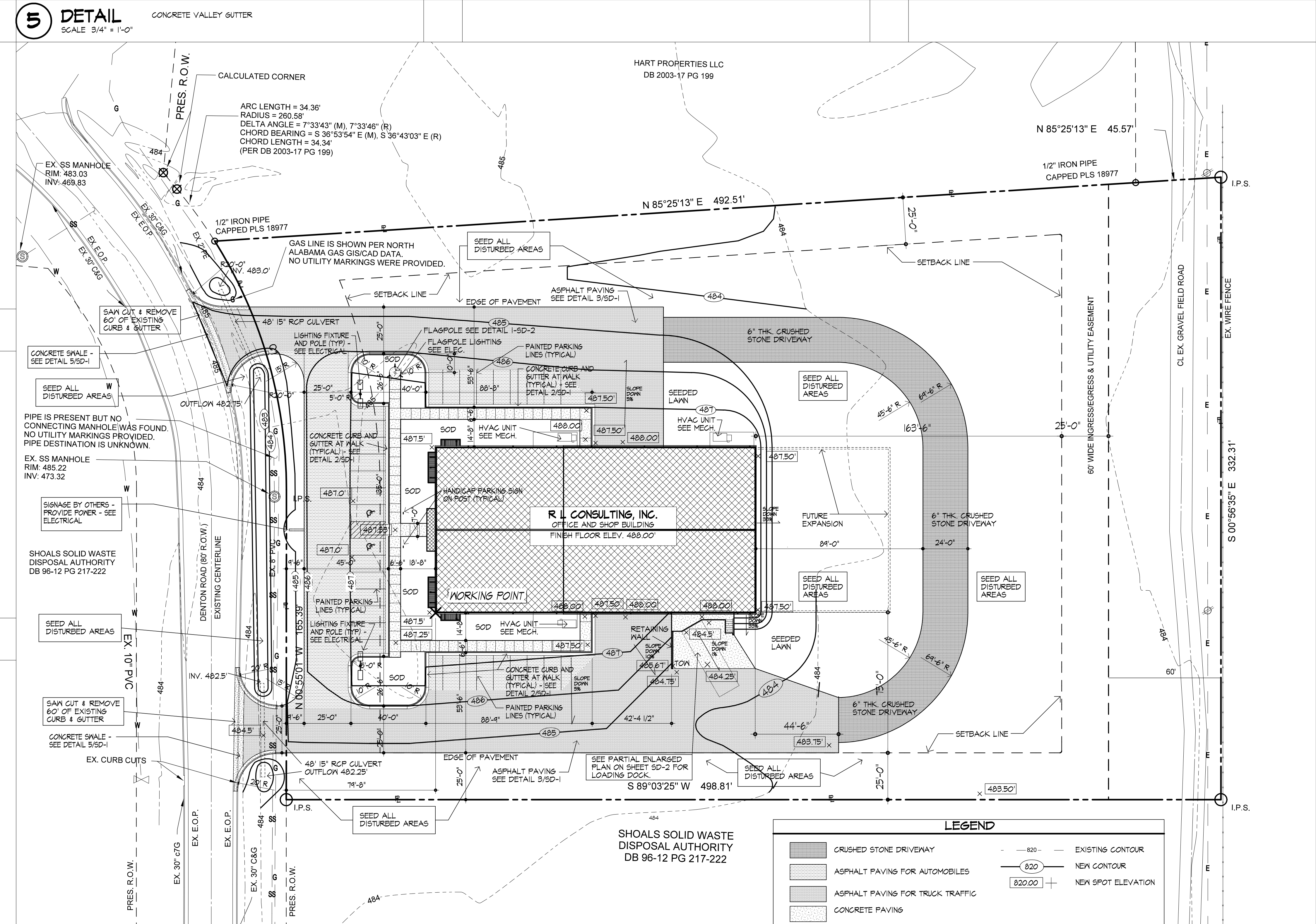
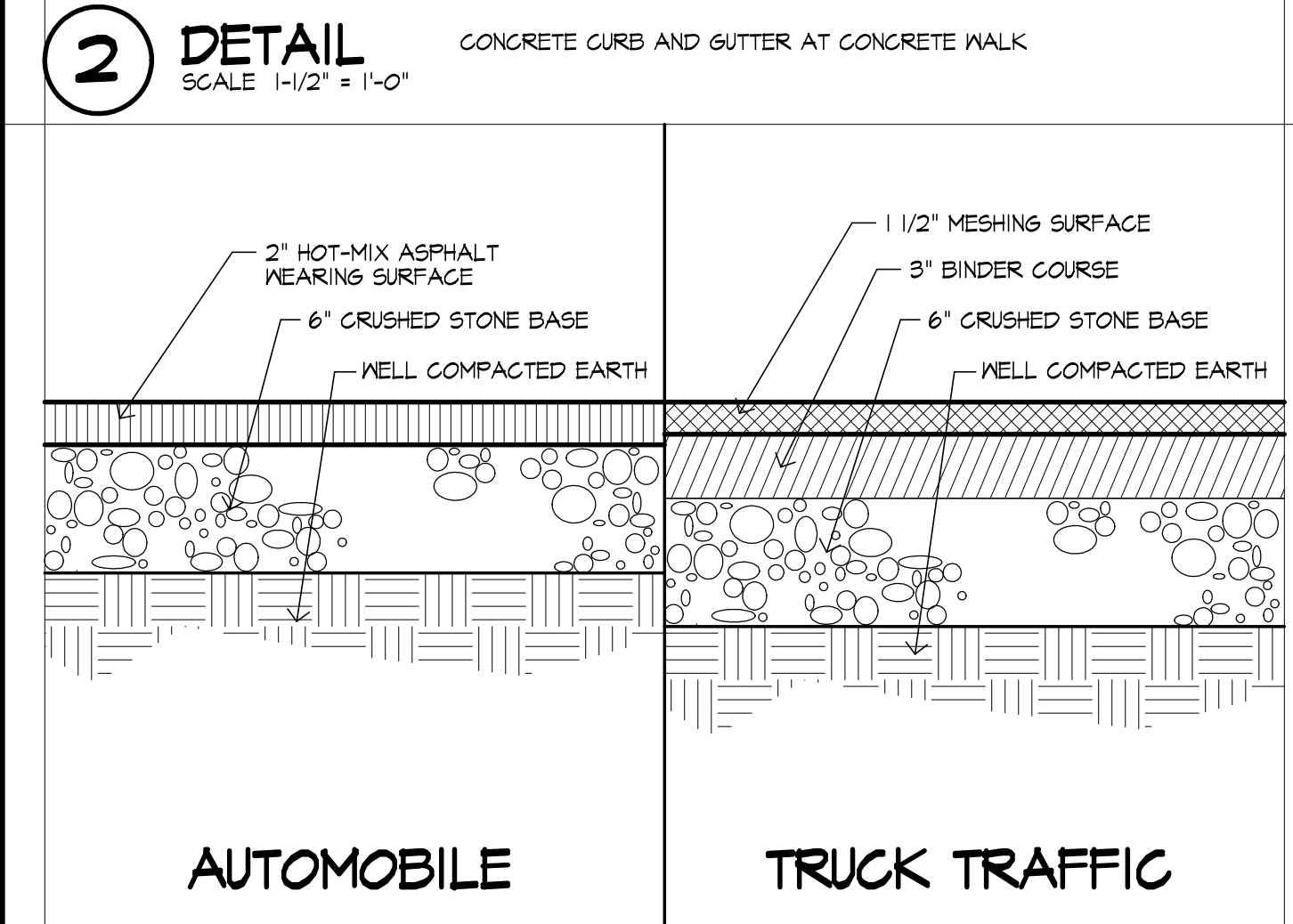
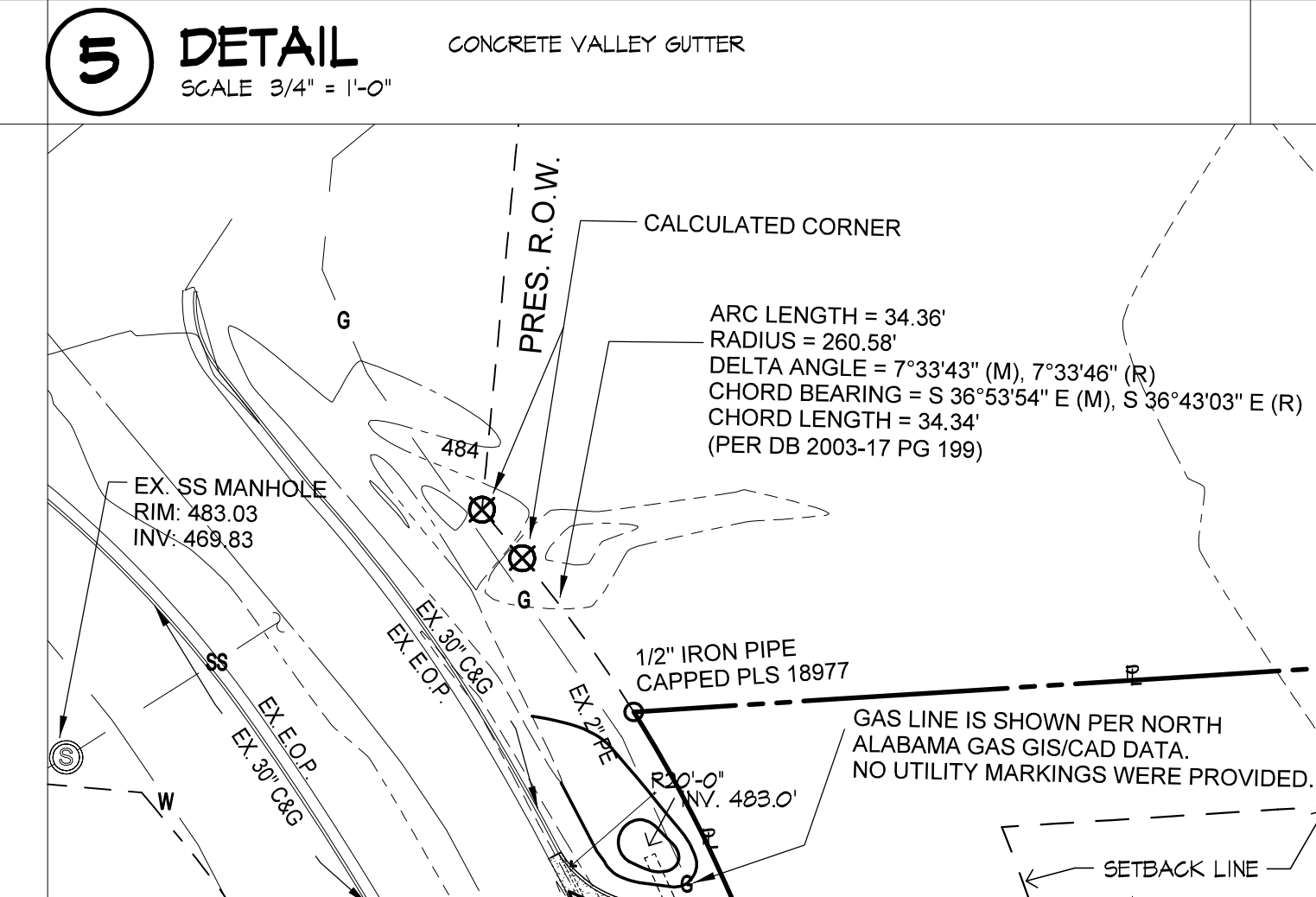
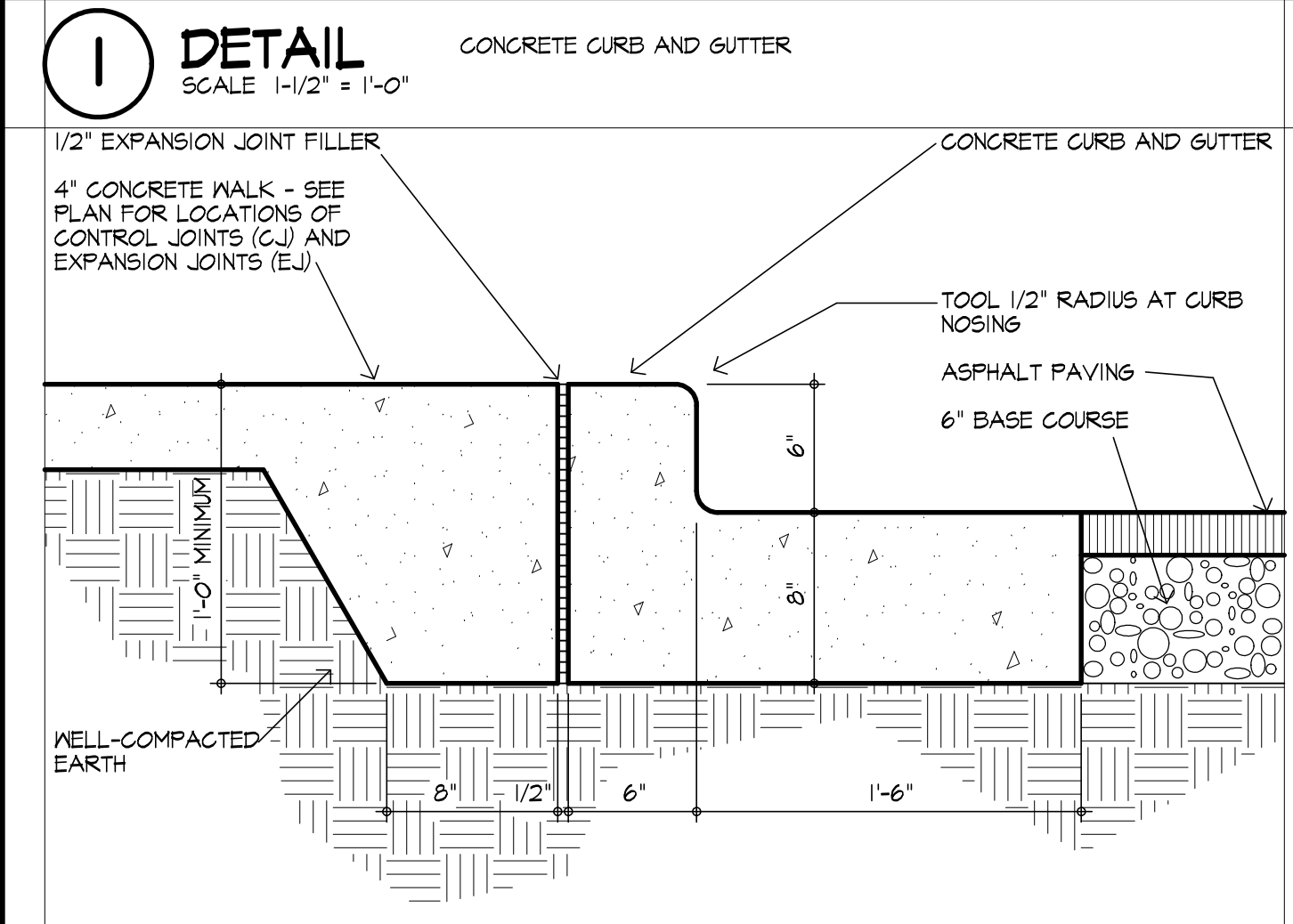
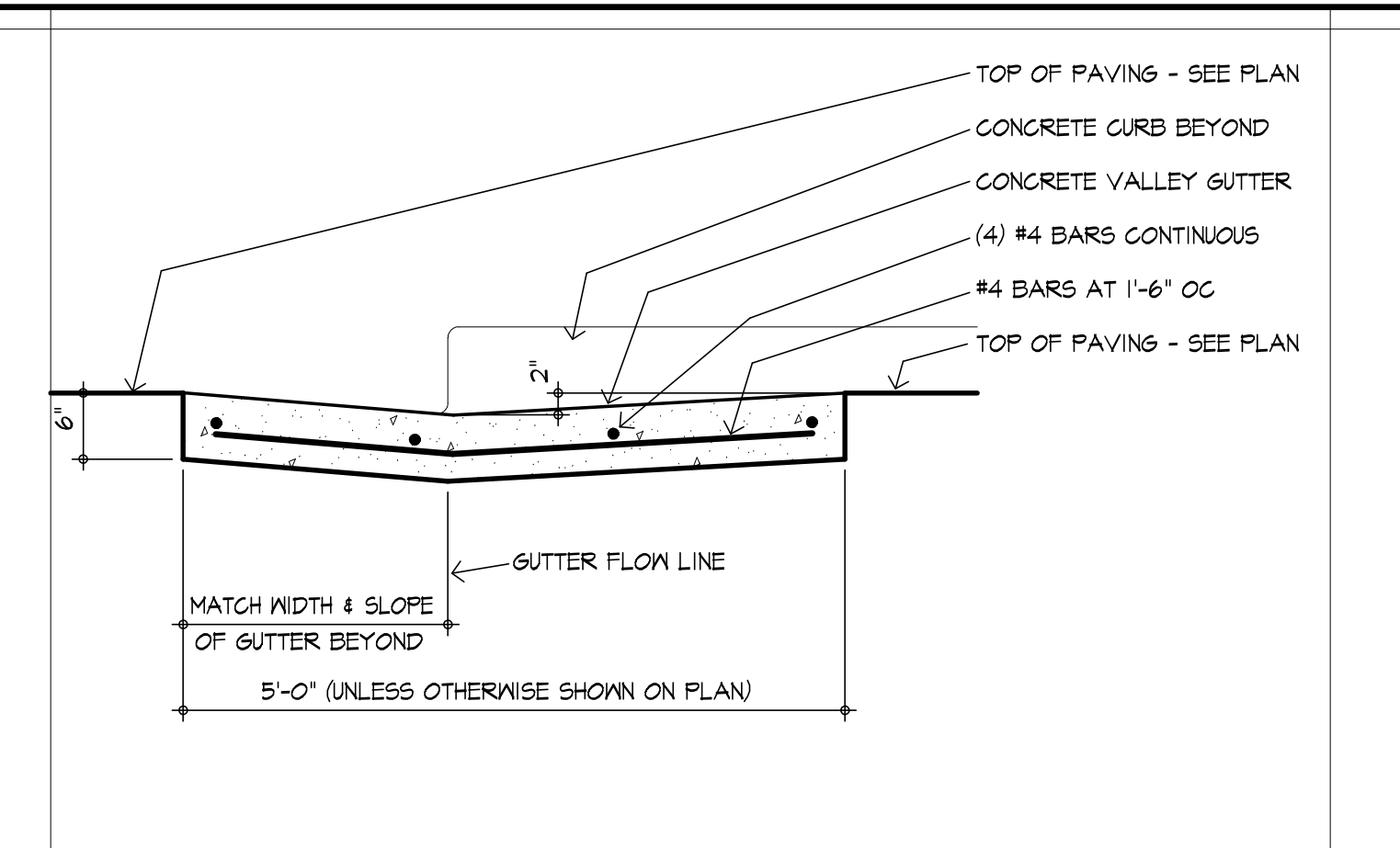
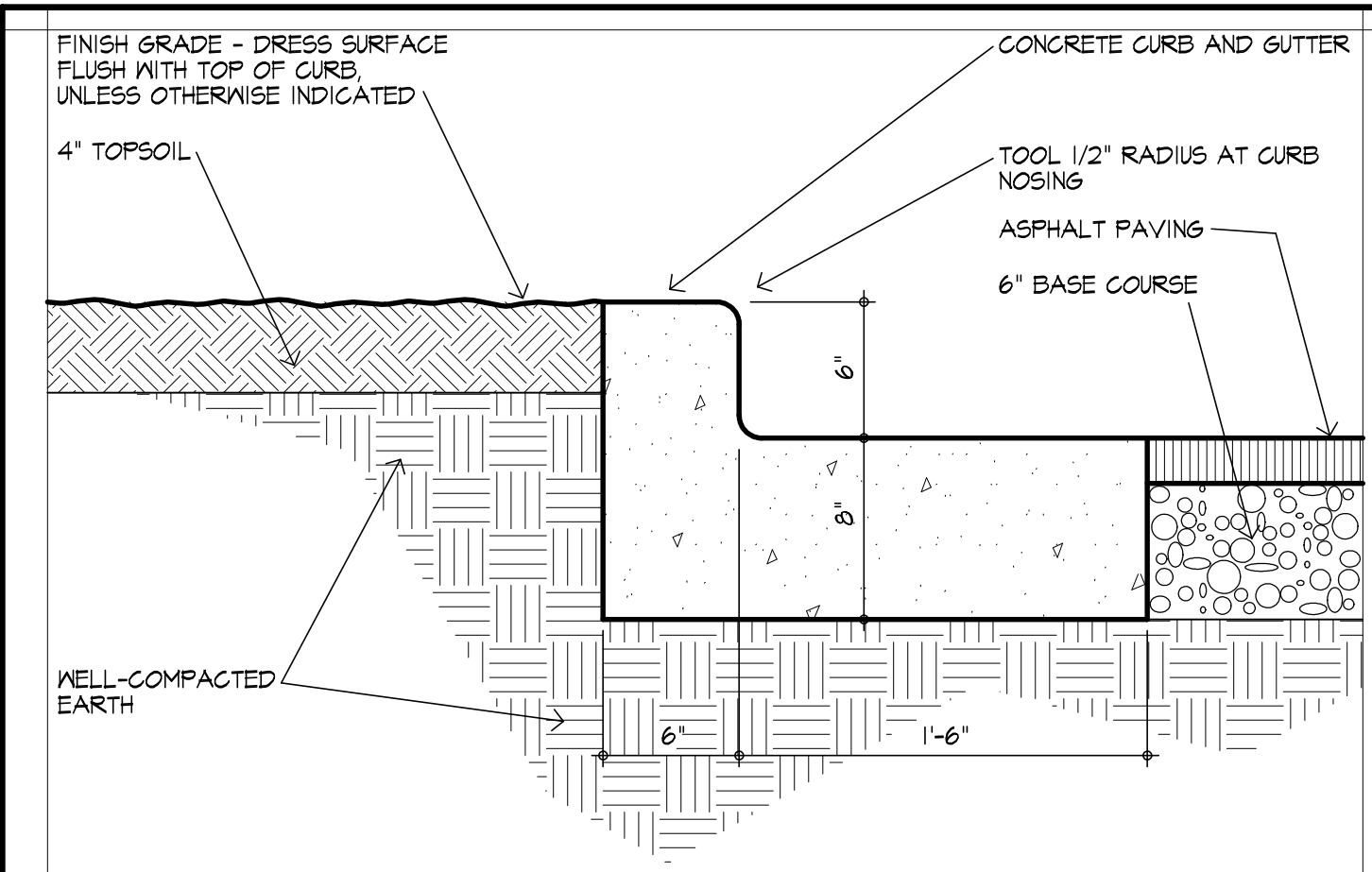
DRAWING TITLE
SITE DEVELOPMENT PLAN

DRAWING NUMBER
SD-1

NOTE:
INFORMATION FOR THIS SITE PLAN TAKEN FROM A TOPOGRAPHIC SURVEY BY CIVIL GROUP, LLC DATED FEBRUARY 25, 2019

NOTE:
CONTRACTOR SHALL LOCATE AND VERIFY EXACT LOCATIONS OF ALL EXISTING OVERHEAD AND UNDERGROUND UTILITIES PRIOR TO BEGINNING WORK.

WARNING: POWER LINES
HIGH VOLTAGE ELECTRICAL POWER LINES ARE PRESENT IN OR ADJACENT TO THE CONSTRUCTION AREA. THE CONTRACTOR SHALL COMPLY WITH STATE OF ALABAMA ACT NO. 504 WHILE WORKING OR OPERATING EQUIPMENT IN CLOSE PROXIMITY TO HIGH VOLTAGE ELECTRICAL POWER LINES.



LEGEND

| | | | |
|--|----------------------------------|--|--------------------|
| | CRUSHED STONE DRIVEWAY | | EXISTING CONTOUR |
| | ASPHALT PAVING FOR AUTOMOBILES | | NEW CONTOUR |
| | ASPHALT PAVING FOR TRUCK TRAFFIC | | NEW SPOT ELEVATION |
| | CONCRETE PAVING | | |

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

5 DETAIL
SCALE 3/4" = 1'-0"

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

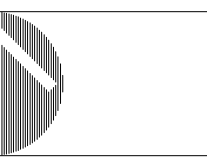
3 DETAIL
SCALE 1/2" = 1'-0"

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

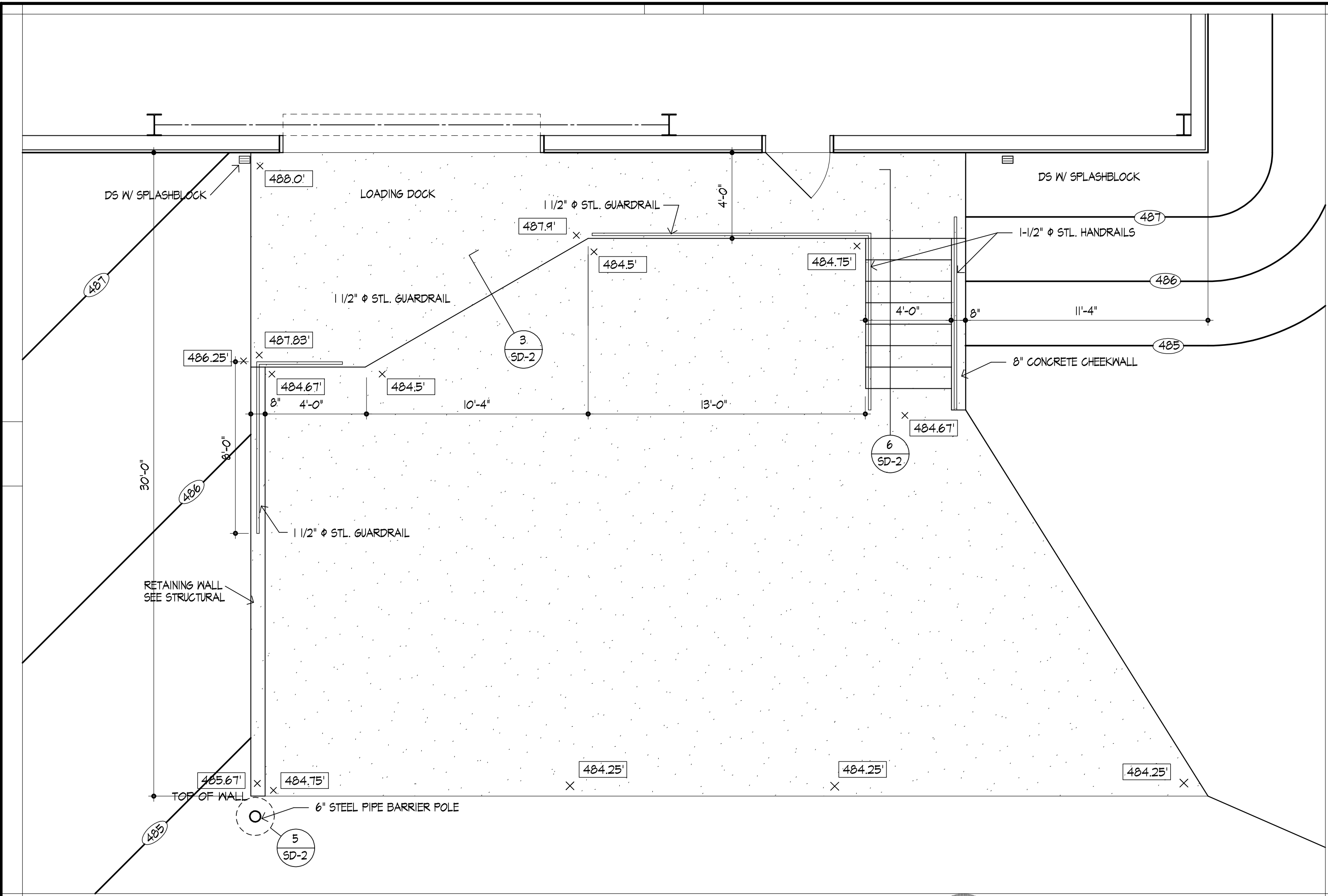
File Name: G:\2018\1860 RL CONSULTING BUILDING\1860 WD\1860 SD-1 SITE DEVELOPMENT PLAN
Plot Date: 10/17/2019 Plot Time: 7:08 PM

AUTOMOBILE **TRUCK TRAFFIC**

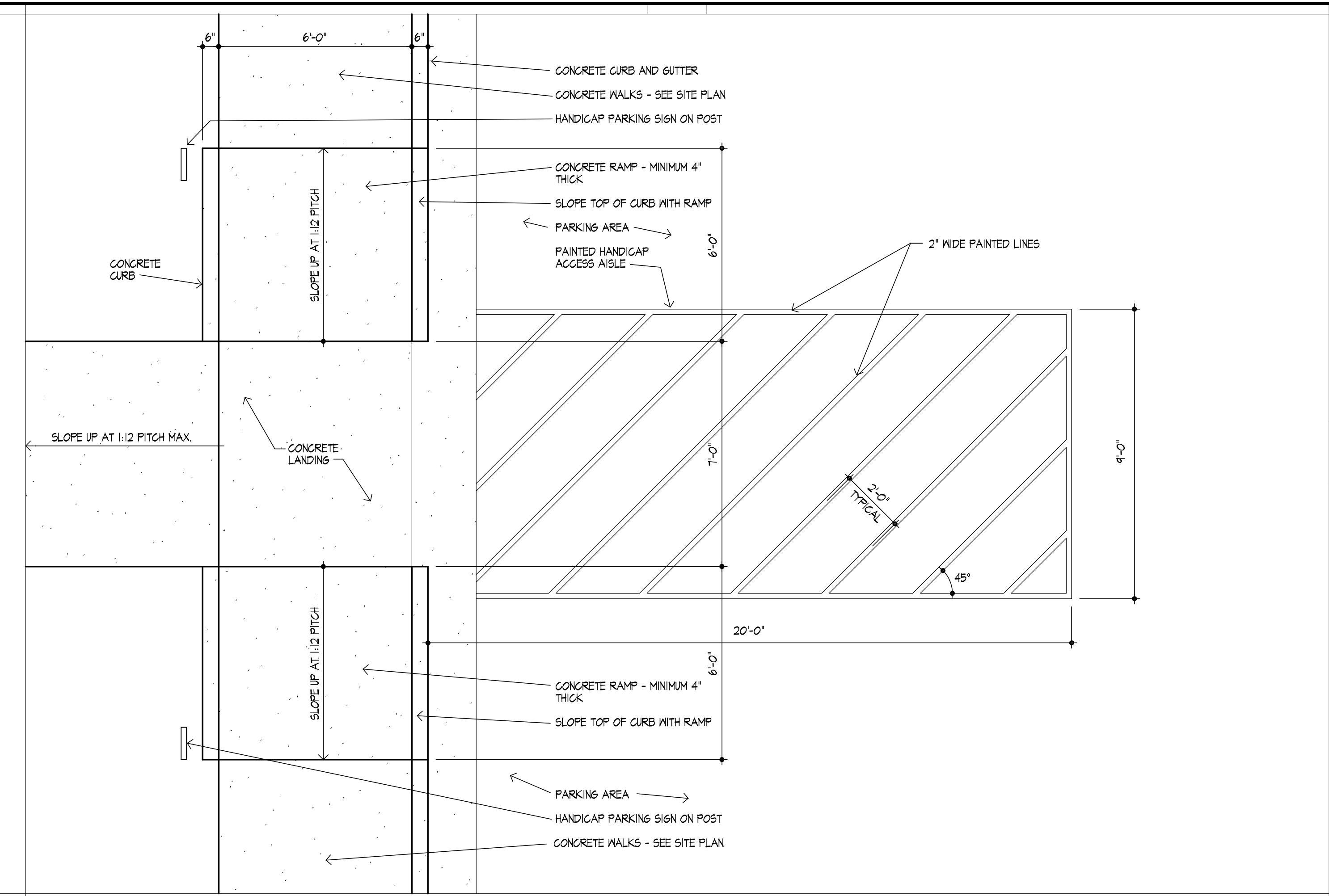
4 DETAIL
SCALE 1/2" = 1'-0"
CONTROL AND EXPANSION JOINTS AT CONCRETE WALKS



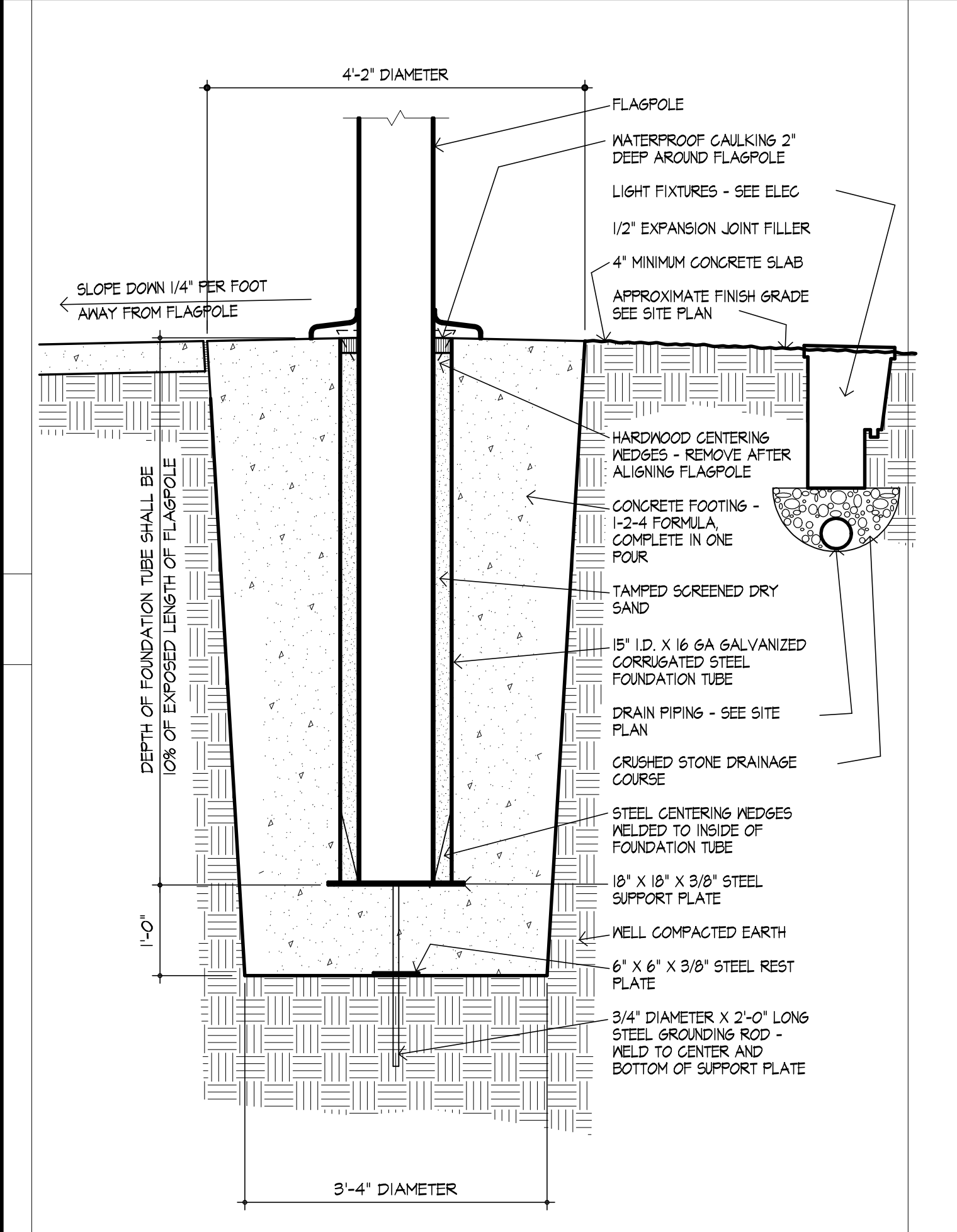
SITE DEVELOPMENT PLAN
SCALE 1" = 30'-0"



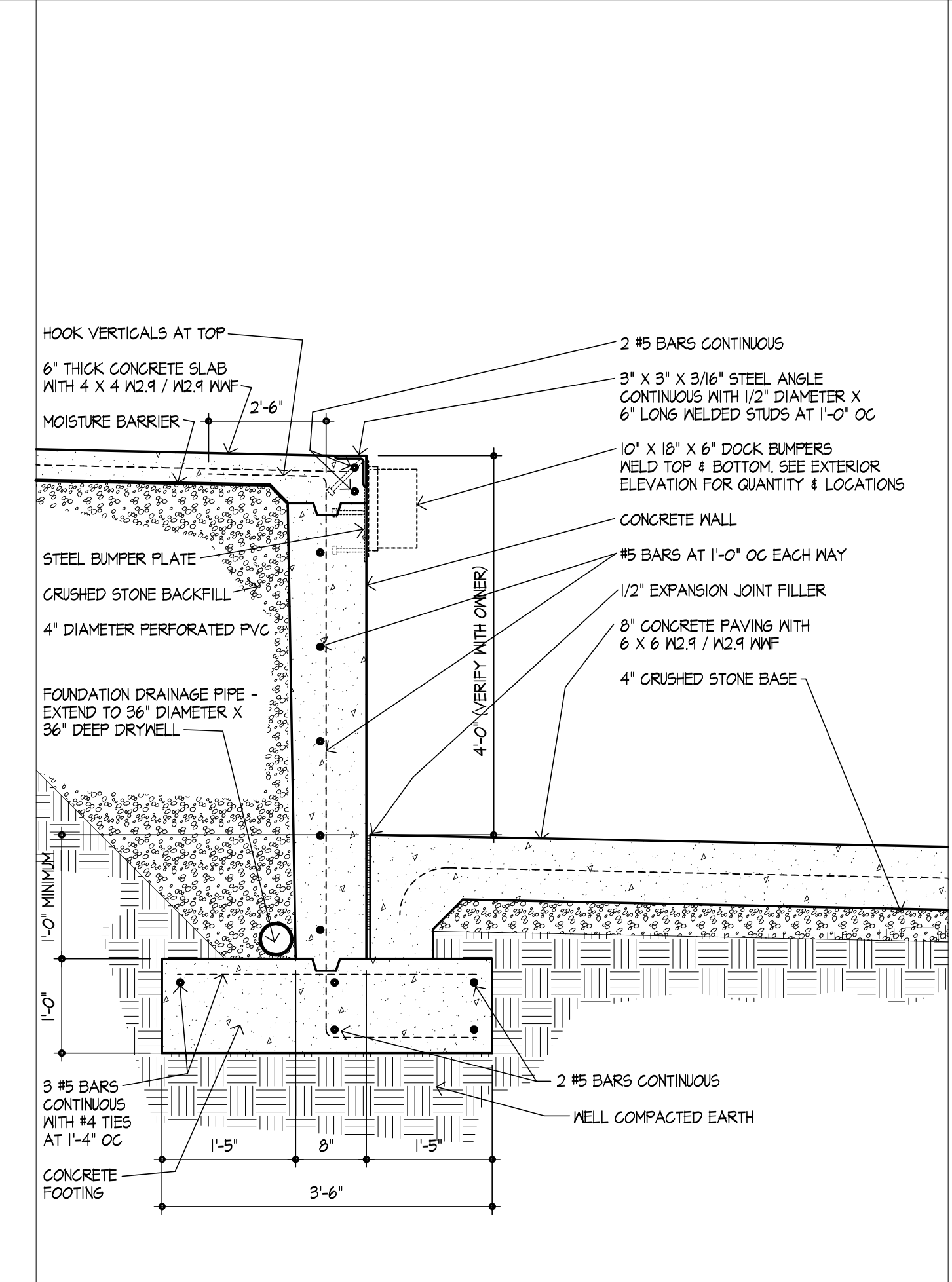
1 PARTIAL LARGE SCALE SITE PLAN
 SCALE 1/4" = 1'-0"



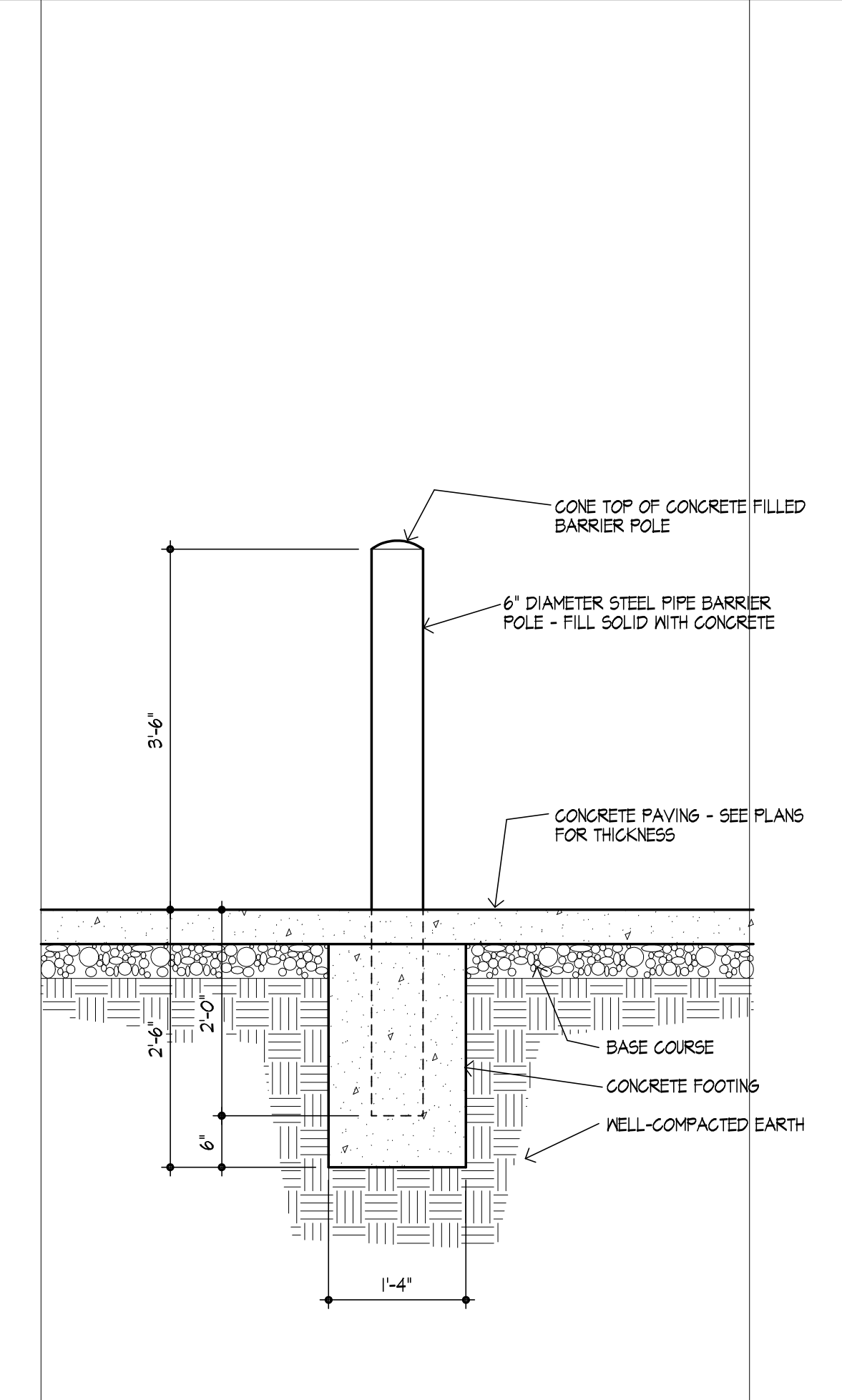
4 PLAN HANDICAP RAMP
 SCALE 3/8" = 1'-0"



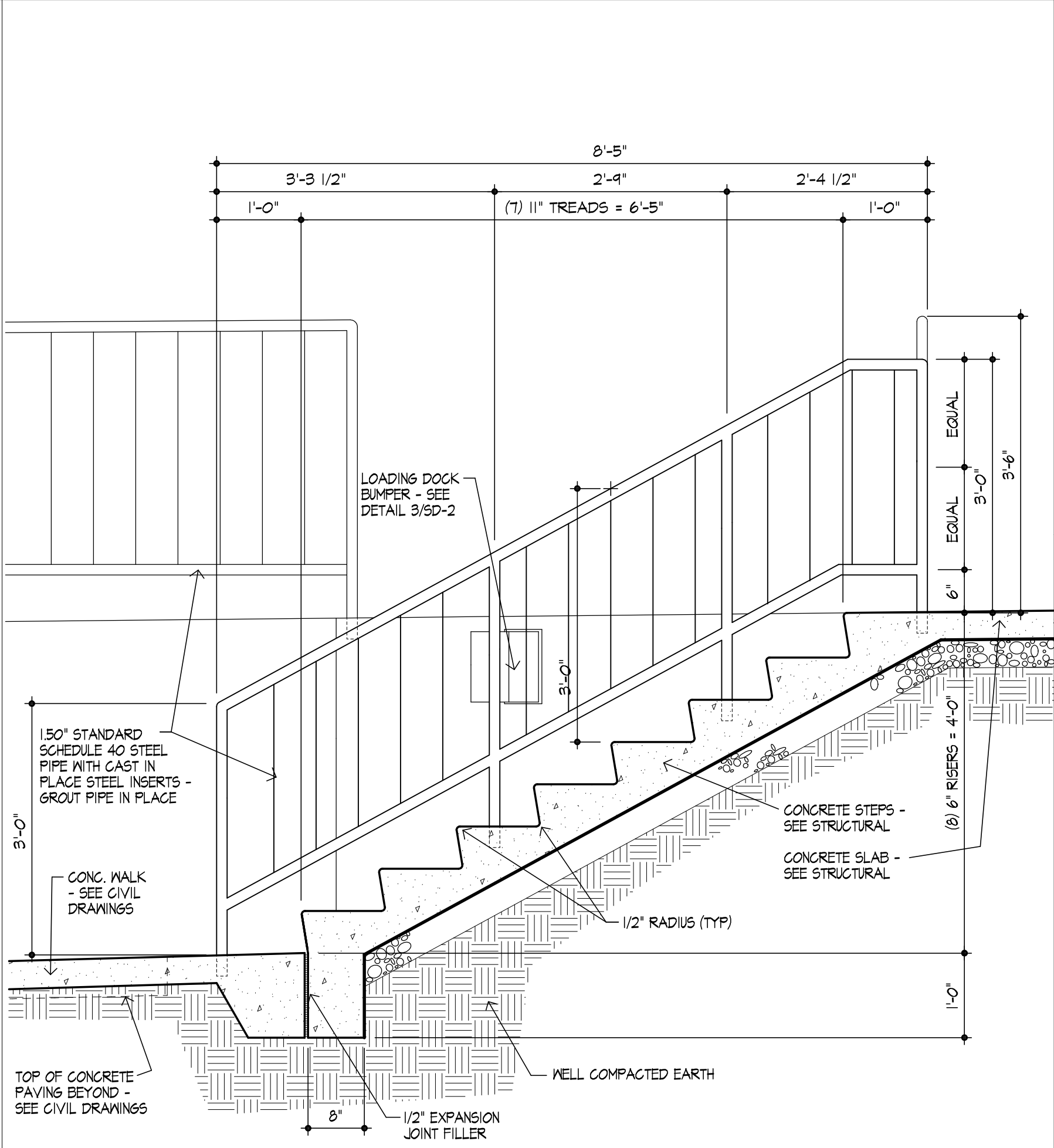
2 DETAIL FLAGPOLE
 SCALE 3/4" = 1'-0"



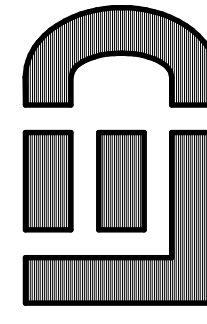
3 SECTION CONCRETE LOADING DOCK WALL AND TRENCH DRAIN
 SCALE 3/4" = 1'-0"



5 DETAIL STEEL PIPE BARRIER POLE
 SCALE 3/4" = 1'-0"



6 DETAIL CONCRETE STEPS AT LOADING DOCK
 SCALE 3/4" = 1'-0"



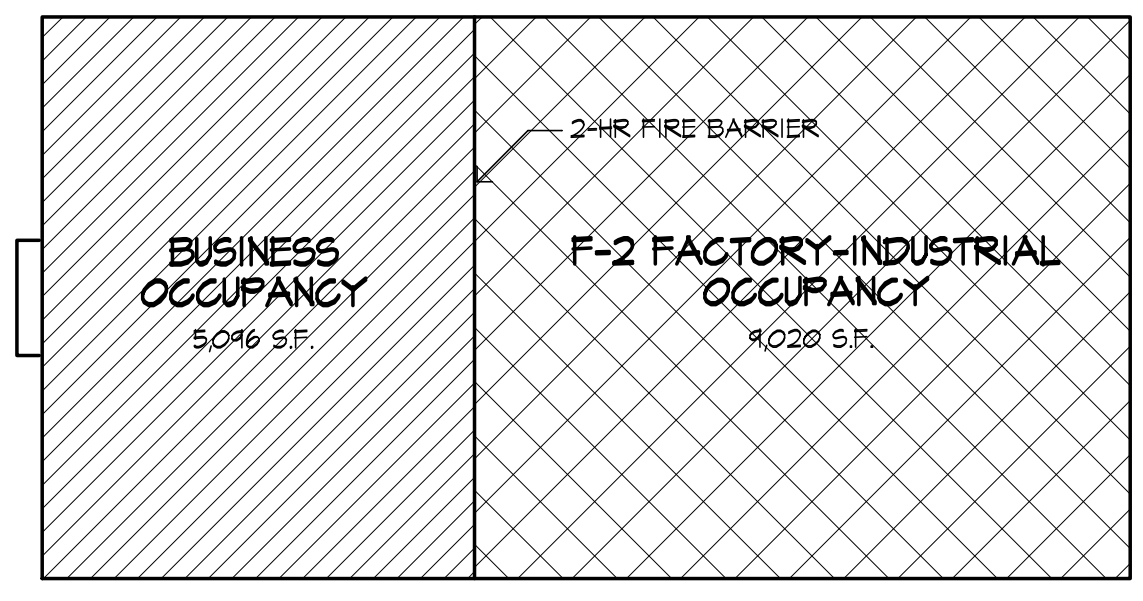
LAMBERT • EZELL • DURHAM
ARCHITECTURE, LLC
FLORENCE, ALABAMA 36631
P.O. BOX 984 401 EAST COLLEGE ST.
TUSCUMBIA, ALABAMA 36087
TELEPHONE (256) 161-1100
WWW.LEDARCHITECTURE.COM

OFFICE AND SHOP BUILDING FOR
RL CONSULTING, INC.
TUSCUMBIA, ALABAMA

JOB NO: 1860 DATE: 10/14/19
DRAWN: ERH/JTS/JACE REVISIONS:
CHECKED: CED

DRAWING TITLE
LIFE SAFETY PLAN

DRAWING NUMBER
LS-1



NON-SPRINKLERED MIXED OCCUPANCY

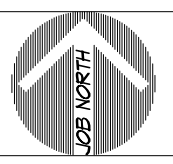
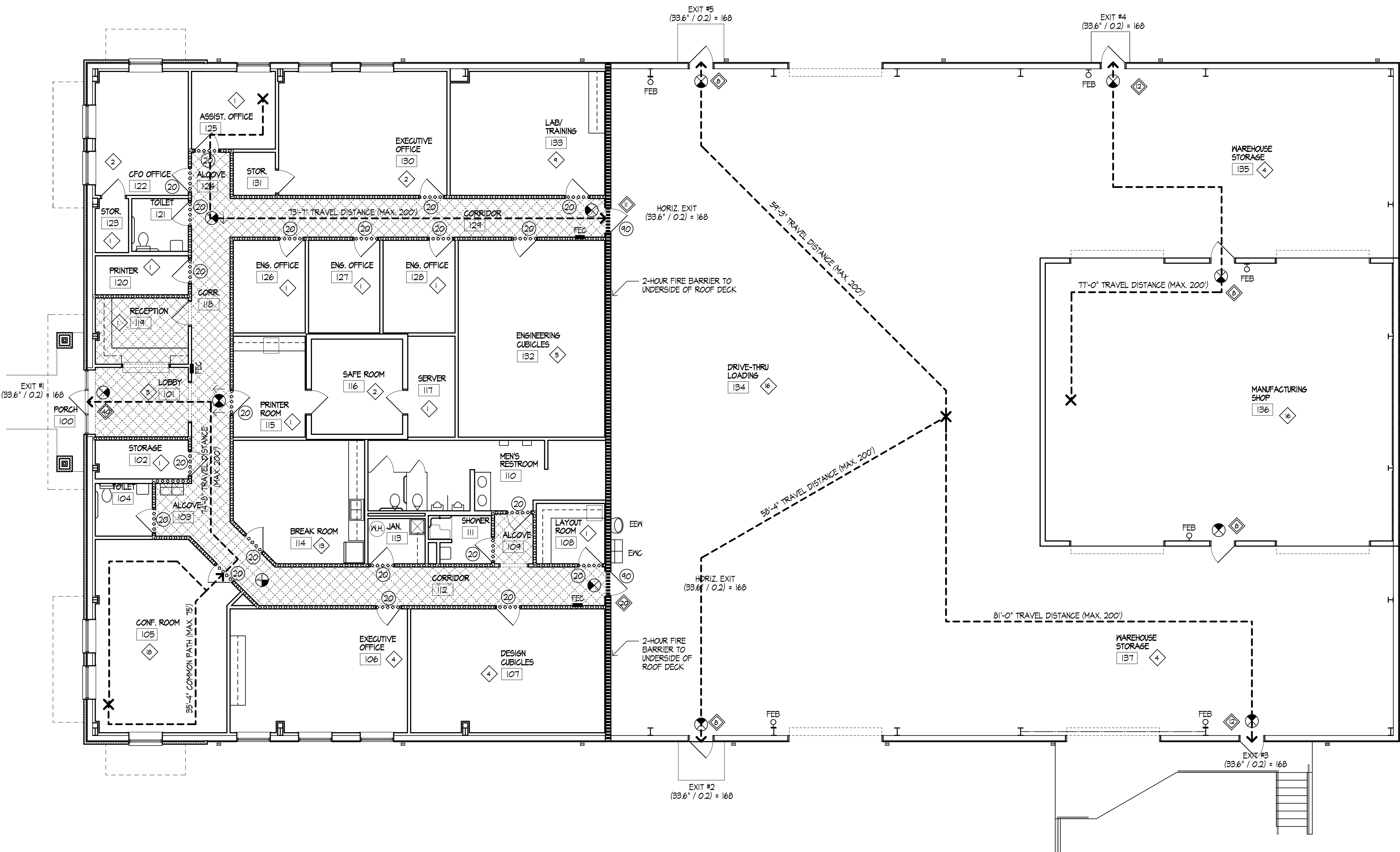
BUILDING KEYPLAN
SCALE 1" = 30'-0"

| BUILDING DATA 2003 INTERNATIONAL BUILDING CODE | |
|---|---|
| OCCUPANCY CLASSIFICATION: | MIXED OCCUPANCY, GROUP B - BUSINESS GROUP F-2 - FACTORY INDUSTRIAL |
| CONSTRUCTION TYPE: | TYPE IIB UNSPRINKLERED |
| OFFICE AREA (B-BUSINESS) | 5,046 S.F. |
| BUILDING HEIGHT (STORIES): | 1 STORY (10'-0" HIGH) |
| ALLOWABLE HEIGHT & AREA: | ALLOWABLE S.F. (PER FLR) 23,000 S.F. MAX. ALLOWABLE HEIGHT: 4 STORIES (55FT MAX) |
| SHOP AREA (F-2 - FACTORY IND.) | 9,020 S.F. |
| BUILDING HEIGHT (STORIES): | 1 STORY (31'-0" HIGH) |
| TOTAL BUILDING AREA: | 14,918 S.F. |
| ALLOWABLE HEIGHT & AREA: | ALLOWABLE S.F. (PER FLR) 23,000 S.F. MAX. ALLOWABLE HEIGHT: 3 STORIES (55FT MAX) |

| EGRESS REQUIREMENTS 2003 INTERNATIONAL BUILDING CODE | | |
|--|---------------------------------------|--------------|
| OCCUPANCY GROUP MIXED | ALLOWABLE | ACTUAL |
| TABLE 1004.1.2 OCCUPANT LOAD: | | |
| BUSINESS AREA | 5,046 S.F. / 100 S.F. GROSS = 50 OCC. | |
| INDUSTRIAL AREA | 1,620 S.F. / 100 S.F. GROSS = 16 OCC. | |
| WAREHOUSE AREA | 7,021 S.F. / 300 S.F. GROSS = 24 OCC. | |
| TOTAL OCCUPANT LOAD: | | 99 OCC. |
| 1005.1 MINIMUM EGRESS WIDTHS: | | |
| OL X .2 = 99 X .2 = 19.8" EGRESS WIDTH | 19.8" REQ'D | 165" CLR |
| MAX. COMMON PATH OF EGRESS TRAVEL DISTANCE - NON-SPRINKLERED 1019.3 | | |
| | 75 FT MAX. | 35'-4" |
| TABLE 1018.1 MIN. NUMBER OF EXITS: 1-500 | | |
| | 2 MINIMUM | 5 EXITS |
| MAX. TRAVEL DISTANCE TO EXIT NON-SPRINKLERED TABLE 1015.1 | | |
| | (B) 200 FT MAX. (F-2) 300 FT MAX. | 81'-0" |
| CORRIDOR FIRE-RESISTANCE RATINGS NON-SPRINKLERED TABLE 1016.1 | | |
| | OL < 30 NOT REQUIRED | NOT PROVIDED |
| DEAD END LIMIT - MAXIMUM CONDITION 1016.3 WHERE MORE THAN ONE EXIT IS REQUIRED | | |
| | 20 FT MAX. | 6'-6" |
| 903.2.7 FIRE PROTECTION SYSTEM REQUIREMENTS: | | |
| | NOT REQUIRED | NOT PROVIDED |
| SECTION 903 FIRE ALARM AND DETECTION SYSTEMS GROUP B & GROUP F-2 | | |
| | NOT REQUIRED | PROVIDED |
| 1008.1.9 PANIC AND FIRE EXIT HARDWARE: GROUP B & GROUP F-2 | | |
| | NOT REQUIRED | NOT PROVIDED |

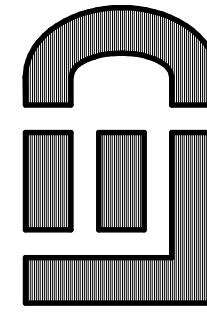
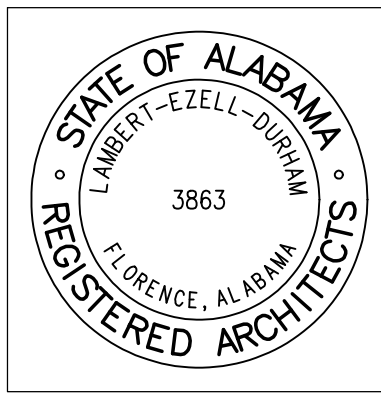
| LIFE SAFETY LEGEND | | |
|--------------------|---|--|
| | OCCUPANT LOAD (PER ROOM) | NEW INTERIOR WALL |
| | CUMULATIVE OCCUPANT LOAD | 1 HOUR FIRE PARTITION |
| | EMERGENCY LIGHT | 2 HOUR FIRE BARRIER |
| | SMOKE DETECTOR | FIRE EXTINGUISHER IN BRACKET |
| | LIGHTED EXIT SIGN | 20 MIN. RATED DOOR |
| | LIGHTED EXIT SIGN WITH DIRECTIONAL ARROW | ADA-COMPLIANT DUAL ELECTRIC WATER COOLER |
| | LIGHTED EXIT SIGN W/ EMERGENCY LIGHT SEE ELECTRICAL | FIRE EXTINGUISHER IN SEMI-RECESSED CABINET |
| | EXIT DOOR CAPACITY | EMERGENCY EYEWASH STATION |
| | START POINT TRAVEL DISTANCE TO EXIT DIRECTION OF TRAVEL | |

| PLUMBING FIXTURE COUNT | | | | | | | | | | |
|------------------------|---|------------------|--------------------|---|----------------|------------------|-------------------|-----------------------|----------------------|---------------|
| OCCUPANCY | MIN. NUMBER OF REQ'D WATERCLOSETS | WATERCLOSETS MEN | WATERCLOSETS WOMEN | MIN. NUMBER OF REQ'D LAVATORIES | LAVATORIES MEN | LAVATORIES WOMEN | MIX. SINK PER 400 | DRINK FOUNT. PER 1000 | MIX. SINK SERV. SINK | SERVICE SINKS |
| TOTAL OL = 99 | | | | | | | | | | |
| BUSINESS (54) | 1 PER 25 FOR THE FIRST 50 & 1 PER 50 FOR THE REMAINDER EXCEEDING 50 | 1.18 | 1.18 | 1 PER 40 FOR THE FIRST 30 & 1 PER 80 FOR THE REMAINDER EXCEEDING 30 | 0.75 | 0.75 | PER 100 | 0.54 | SINK | 1 |
| INDUSTRIAL (16) | 1 PER 100 | 0.08 | 0.08 | 1 PER 100 | 0.08 | 0.08 | PER 400 | 0.16 | SINK | 1 |
| WAREHOUSE (24) | 1 PER 100 | 0.12 | 0.12 | 1 PER 100 | 0.12 | 0.12 | PER 1000 | 0.24 | SINK | 1 |
| TOTAL REQ'D | | 1.38 (2) | 1.38 (2) | | 0.95 (1) | 0.95 (1) | | 0.94 (1) | | 1 |
| TOTAL PROVID' | | 4 | 2 | | 2 | 2 | | 2 | | 1 |



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

File Name: G:\2018\1860 RL CONSULTING BUILDING\1860 WD\1860 LS-1 LIFE SAFETY PLAN
Plot Date: 10/17/2019 Plot Time: 8:16 PM



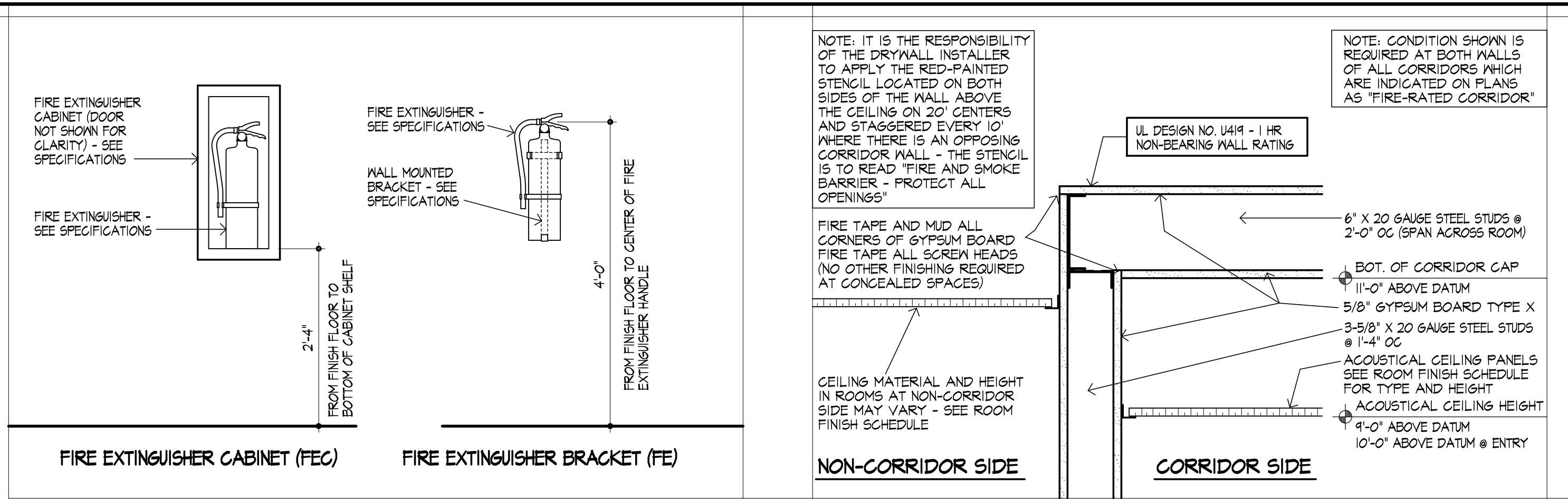
LAMBERT-EZELL-DURHAM
 ARCHITECTURE, LLC
 P.O. BOX 934 401 EAST COLLEGE ST.
 TUSCUMBIA, ALABAMA 35693
 TELEPHONE (256) 161-1100
 WWW.LEDARCHITECTURE.COM

OFFICE AND SHOP BUILDING FOR
 RL CONSULTING, INC.
 TUSCUMBIA, ALABAMA

JOB NO: 1860 DATE: 10/14/19
 DRAWN: ERH/JSJ/BJE REVISIONS:
 CHECKED: CED

DRAWING TITLE
 FLOOR PLAN LAYOUT

DRAWING NUMBER
 A-1.1



1 FIRE EXTINGUISHER MOUNTING HEIGHTS
 SCALE 3/4" = 1'-0"

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

GENERAL NOTES

THE FOLLOWING GENERAL NOTES APPLY TO ALL WORK TO BE PERFORMED, AND NOT REFERENCED TO SPECIFIC LOCATIONS.

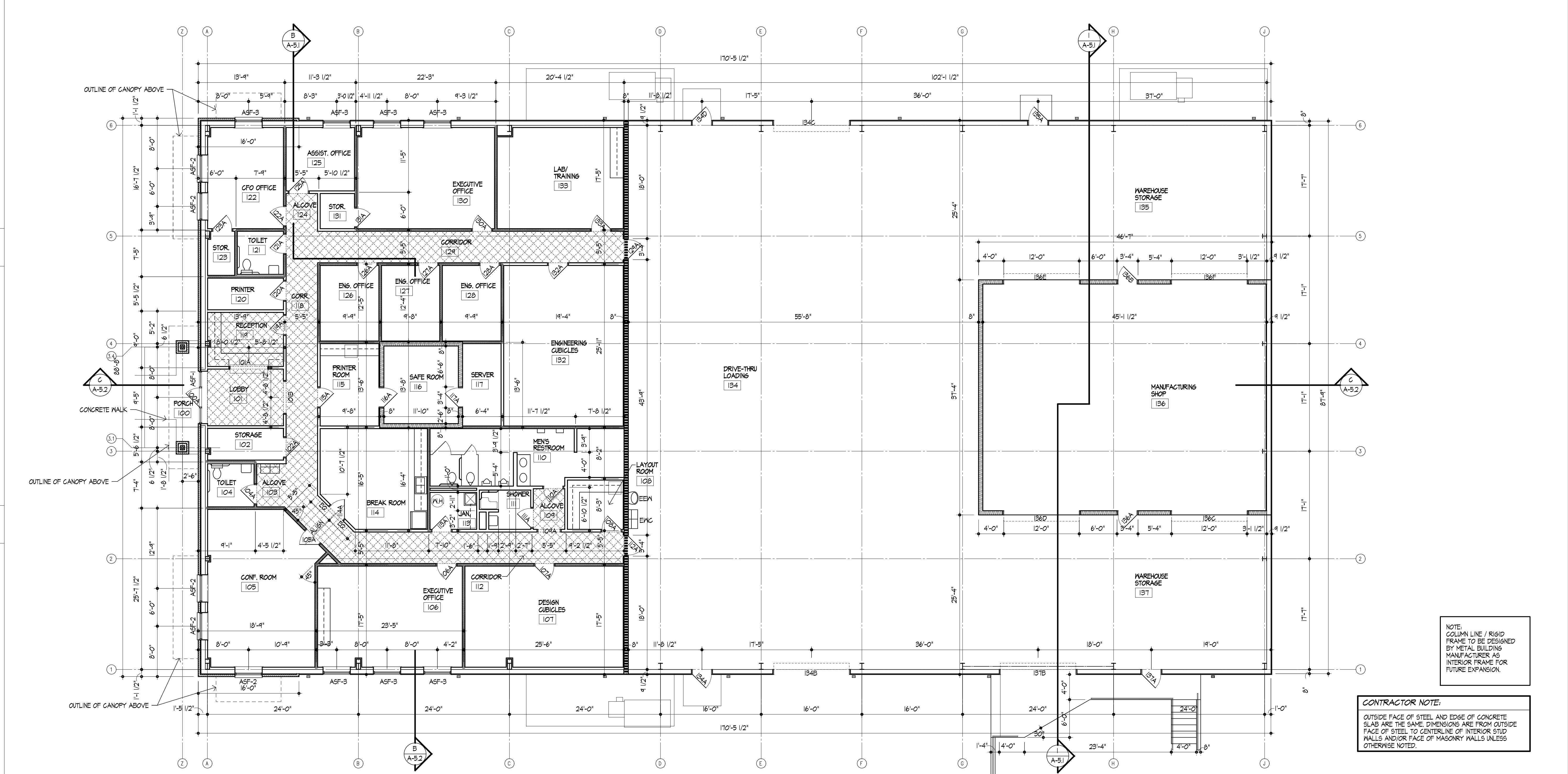
A. THE GENERAL CONTRACTOR SHALL ALSO CONSULT WITH HIS SUBCONTRACTORS TO DETERMINE THE FULL EXTENT OF MATERIALS AND WORK REQUIRED TO PROVIDE THE OWNER WITH A FINISHED PRODUCT THAT IS COMPLETE AND FULLY OPERATIONAL IN EVERY RESPECT. NO REQUESTS FOR CHANGE ORDERS WILL BE CONSIDERED FOR "EXTRA" MATERIALS OR WORK OF AN INCIDENTAL NATURE WHICH ARE REQUIRED TO PROVIDE THE INTENDED OPERATION OR FUNCTION OF THE MAJOR ELEMENTS OF WORK INDICATED ON THESE DRAWINGS.

B. IT SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO DETERMINE THE DIVISION OF WORK BETWEEN HIS OWN FORCES AND THAT OF HIS SUBCONTRACTORS. THE ARCHITECT WILL NOT ASSIST IN RESOLVING DISPUTES WHICH MAY ARISE CONCERNING EITHER THE DIVISION OF LABOR OR THE REQUIRED TOTAL EXTENT OF WORK TO BE PERFORMED.

C. ALL GYPSUM BOARD SHALL BE 5/8" THICK "TYPE X" (FIRE RATED) UNLESS OTHERWISE INDICATED.

FLOOR PLAN LEGEND

- 1 HOUR FIRE WALL AT 1 HOUR FIRE CORRIDOR - 3 5/8" METAL STUDS @ 16" O.C. W/ 5/8" TYPE X GYPSUM BOARD EACH SIDE - FIRE TAPE ALL JOINTS AND SCREW HEADS - UL DESIGN U419. SEE 2/A-1 FOR FIRE CORRIDOR DETAIL
- 3 5/8" METAL STUDS @ 16" O.C. W/ 5/8" TYPE X GYPSUM BOARD EACH SIDE W/ FULL DEPTH BATT. INSULATION FOR SOUND ATTENUATION
- 1 HOUR FIRE RATED HORIZONTAL ASSEMBLY - SEE DETAIL 2/A-1 FOR FIRE CORRIDOR DETAIL
- 8" CONCRETE BLOCK WALL - SEE STRUCTURAL
- 8" CONCRETE BLOCK WALL WITH 5/8" TYPE X GYPSUM BOARD ON 1/8" HAT CHANNEL @ 16" O.C. VERTICALLY UP TO 11'-0" - SEE STRUCTURAL
- 2 HOUR FIRE BARRIER (FIRE AREA SEPARATION) - 8" CONCRETE BLOCK WALL TO BOTTOM OF NON-COMBUSTIBLE ROOF DECK WITH 5/8" TYPE X GYPSUM BOARD ON 1/8" HAT CHANNEL @ 16" O.C. VERTICALLY UP TO 11'-0". FIRE TAPE AND MUD ALL JOINTS AND SCREW HEADS. FIRE CAULK ALL PENETRATIONS BLOCK SIDE. UL DESIGN U405 - SEE STRUCTURAL
- FEC FIRE EXTINGUISHER IN SEMI-RECESSED CABINET - SEE DETAIL 1/A-1
- FE FIRE EXTINGUISHER IN BRACKET - SEE DETAIL 1/A-1
- EP SURFACE MOUNTED ELECTRICAL PANEL - SEE ELECTRICAL
- D5/5B 4"X8" PRE-FINISHED DOWNSPOUT WITH SPLASH BLOCK - SEE CIVIL
- ENC ADA-COMPLIANT DUAL ELECTRIC WATER COOLER - SEE PLUMBING
- EEW EMERGENCY EYE WASH STATION - SEE PLUMBING
- 2 INTERIOR ELEVATION MARKER - SEE SHEET A-6.1

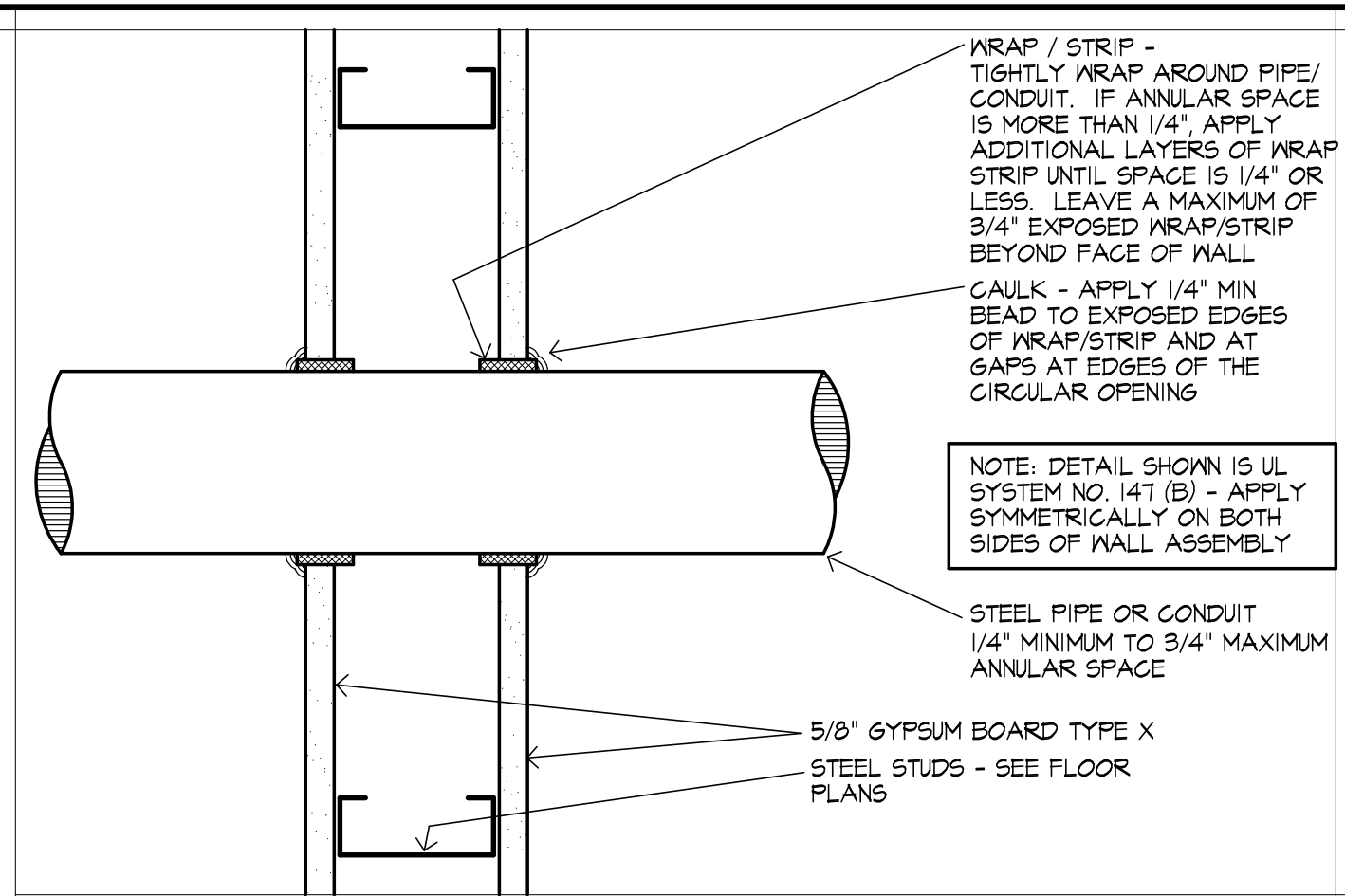


FLOOR PLAN LAYOUT
 SCALE 1/8" = 1'-0"

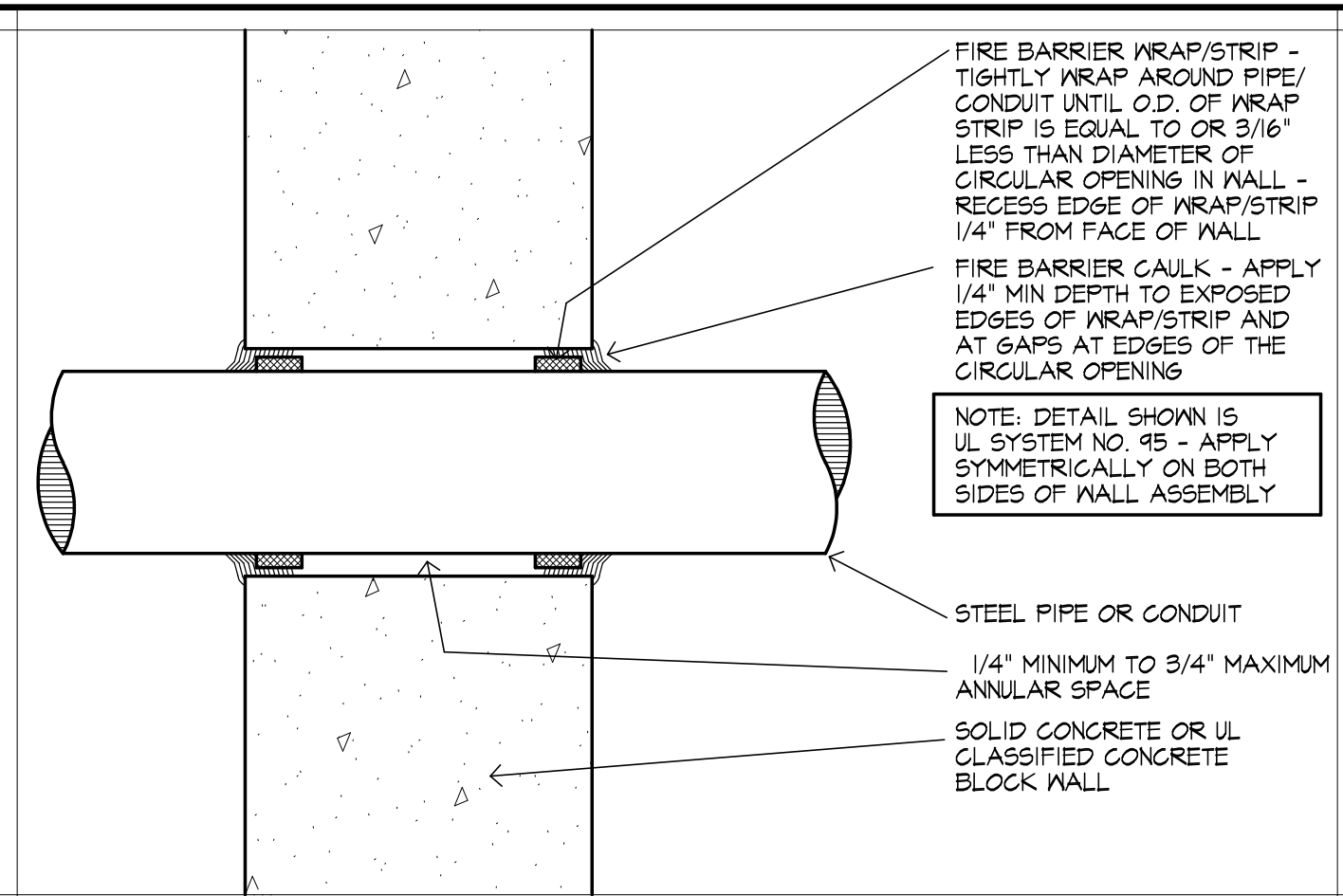
CONTRACTOR NOTE:
 OUTSIDE FACE OF STEEL AND EDGE OF CONCRETE SLAB ARE THE SAME. DIMENSIONS ARE FROM OUTSIDE FACE OF STEEL TO CENTERLINE OF INTERIOR STUD WALLS AND/OR FACE OF MASONRY WALLS UNLESS OTHERWISE NOTED.

NOTE:
 COLUMN LINE / RIGID FRAME TO BE DESIGNED BY METAL BUILDING MANUFACTURER AS INTERIOR FRAME FOR FUTURE EXPANSION.

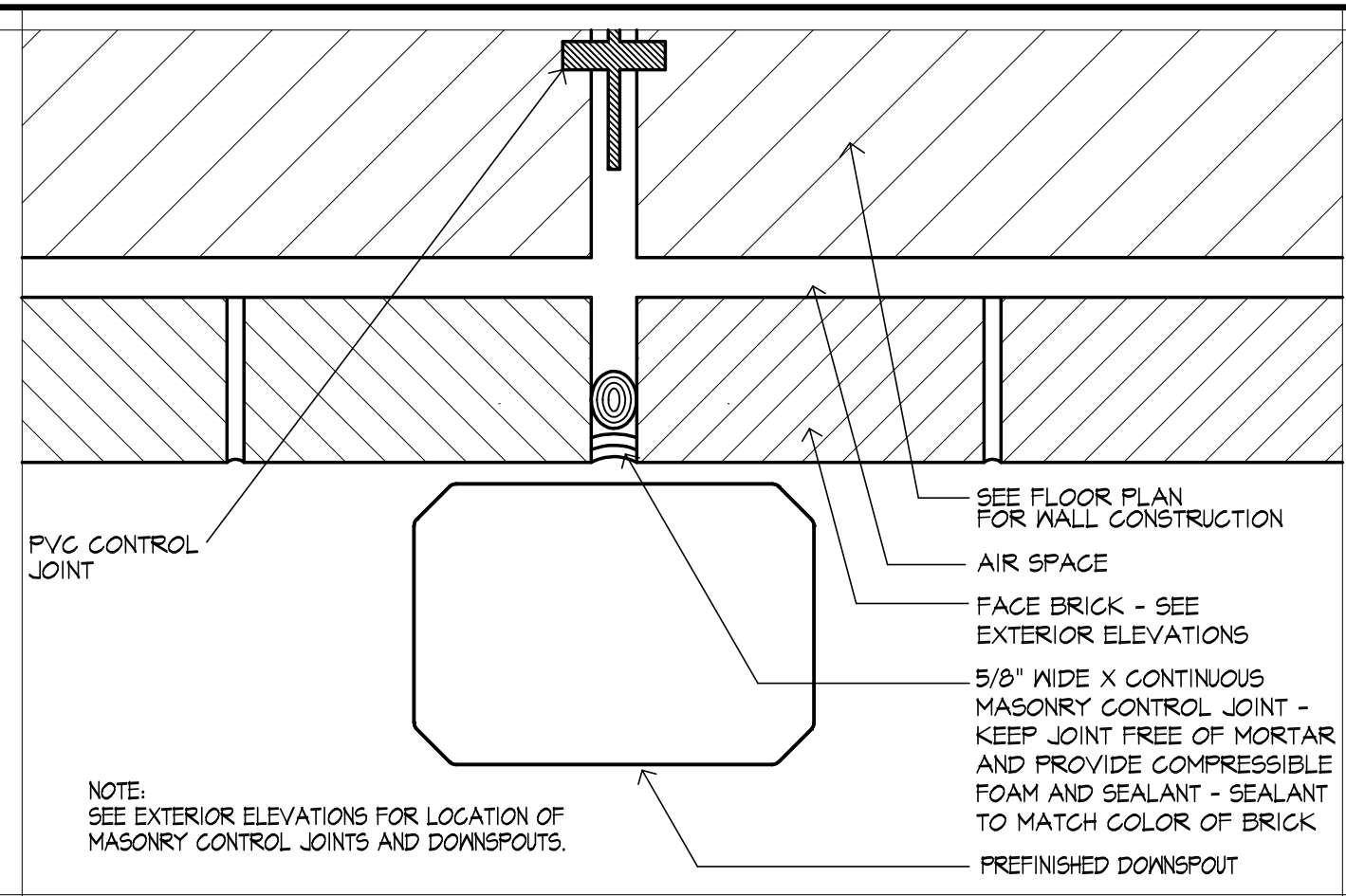
1 DETAIL
 SCALE 3" = 1'-0"



2 DETAIL
 SCALE 3" = 1'-0"

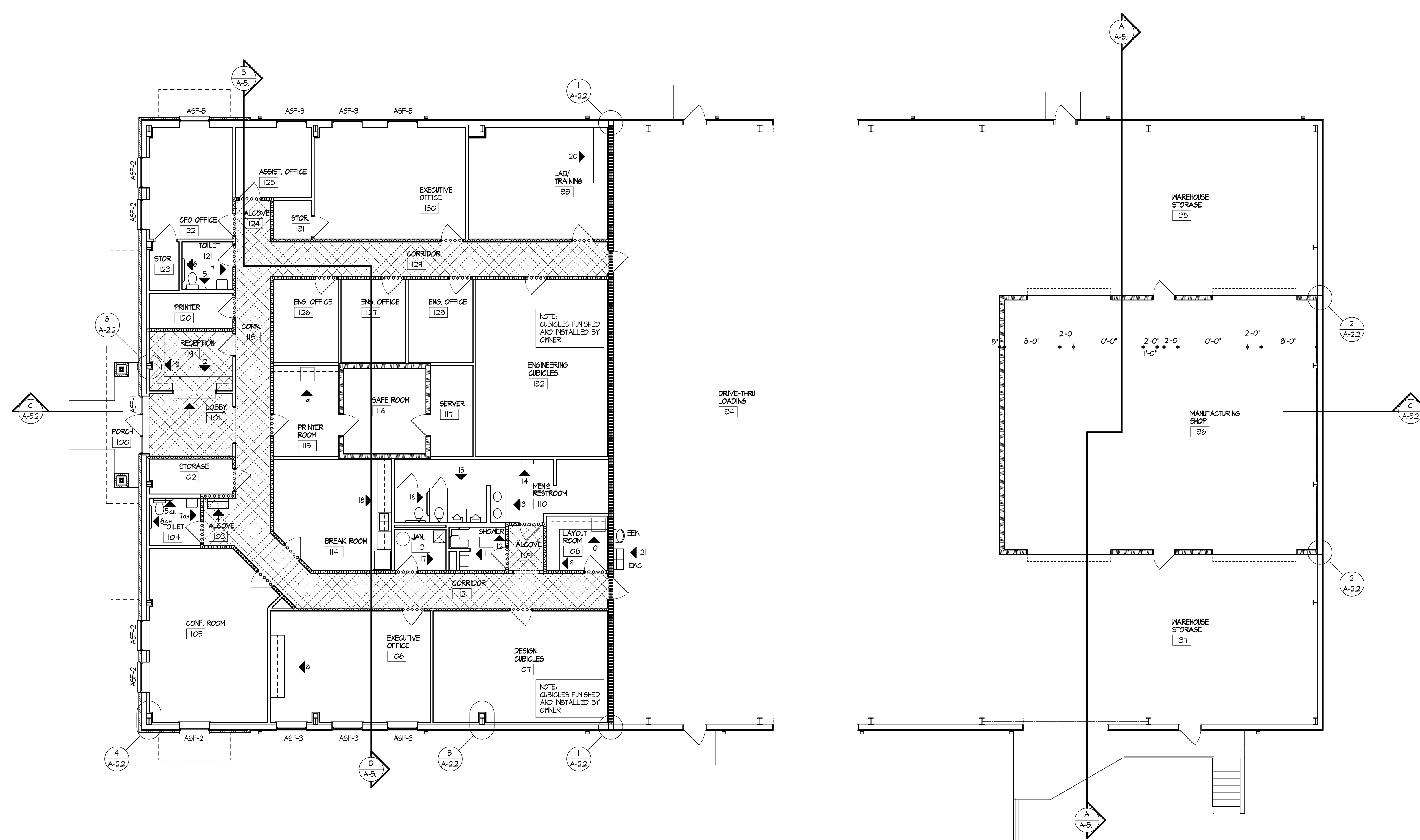


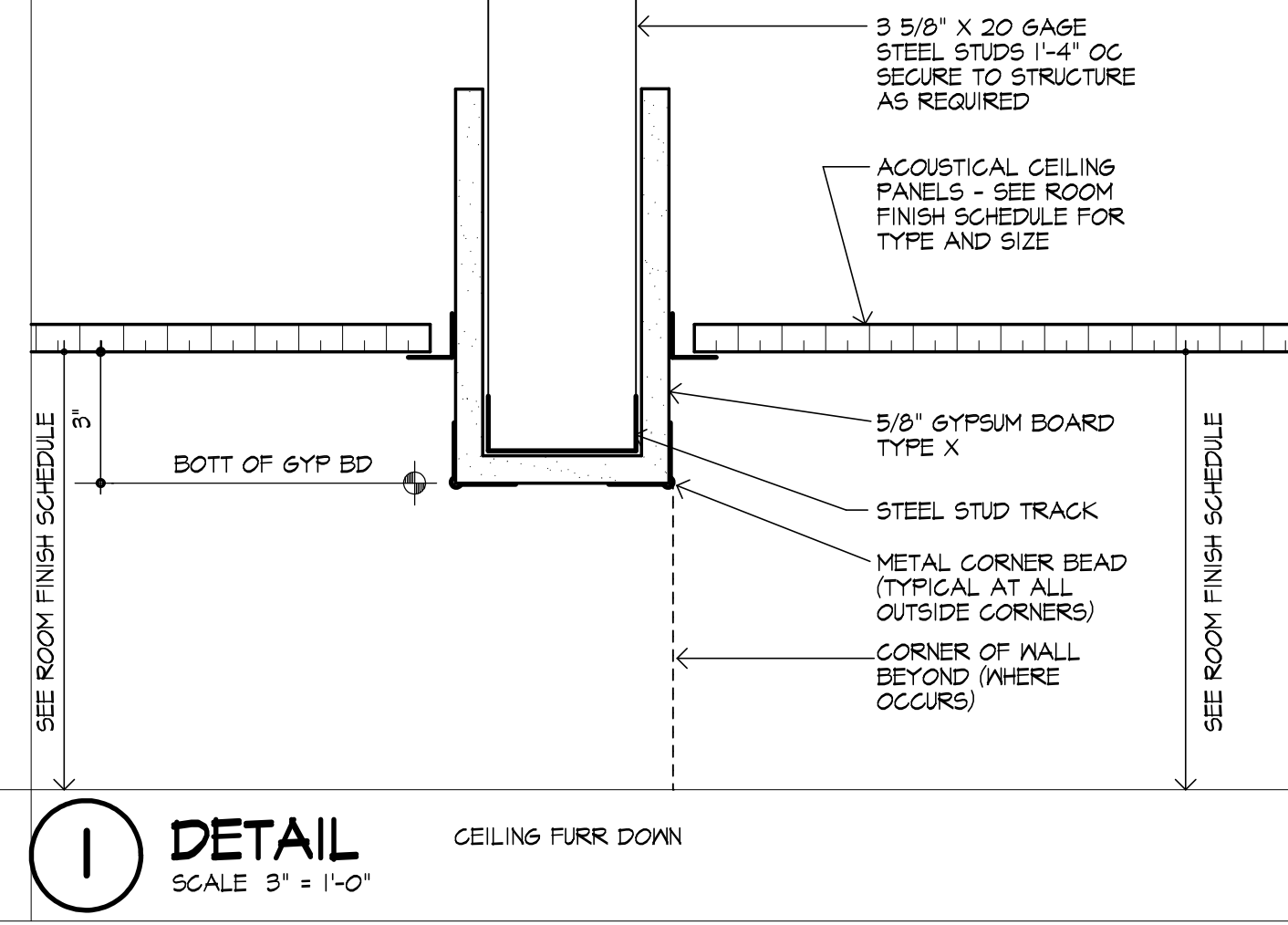
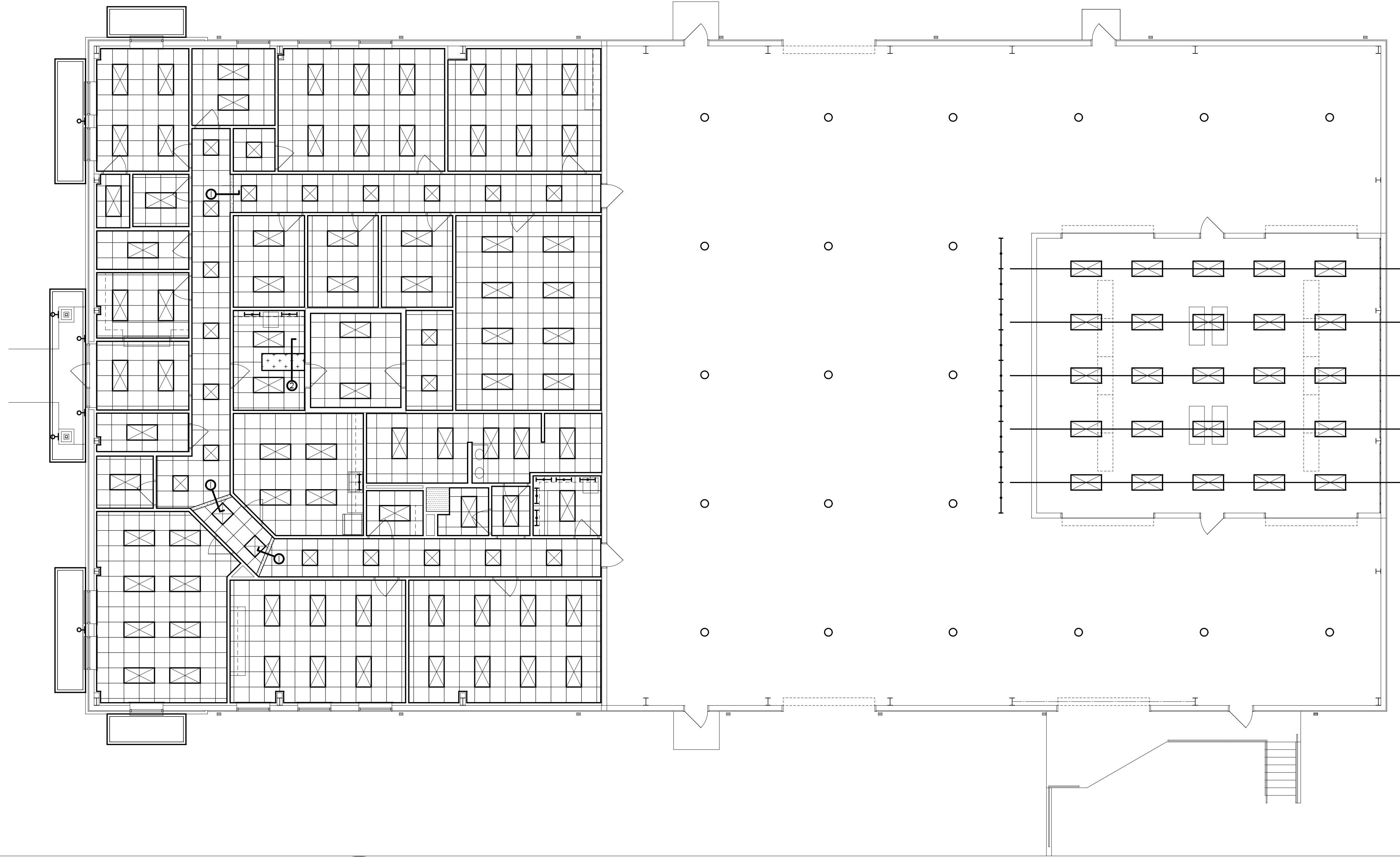
3 DETAIL
 SCALE 3" = 1'-0"



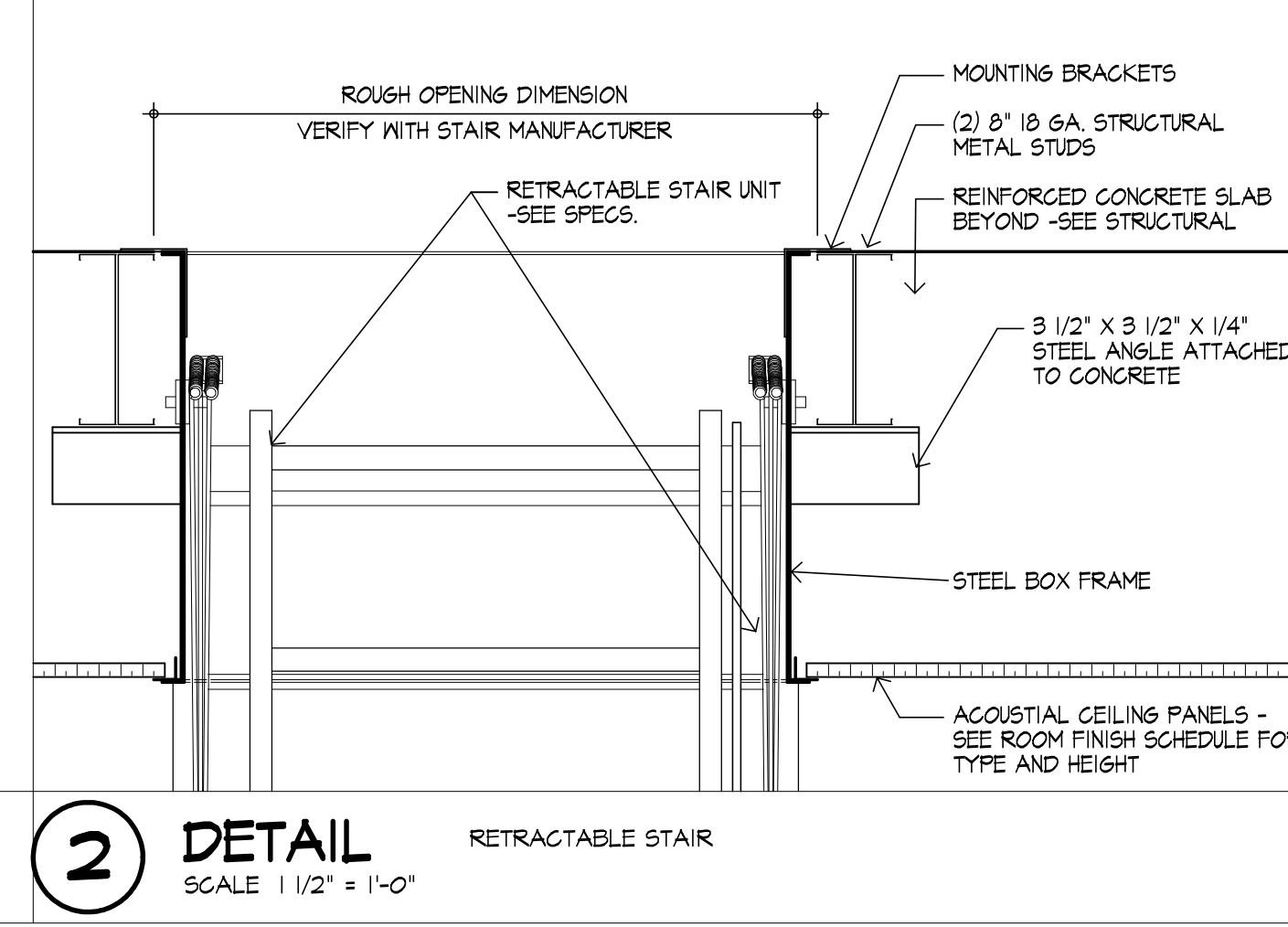
FLOOR PLAN LEGEND

| | | | |
|--|--|--|---|
| | 1 HOUR FIRE WALL AT 1 HOUR FIRE CORRIDOR - 3 5/8" METAL STUDS @ 16" O.C. W/ 5/8" TYPE X GYPSUM BOARD EACH SIDE - FIRE TAPE ALL JOINTS AND SCREW HEADS - UL DESIGN 419. SEE 2/A-1 FOR FIRE CORRIDOR DETAIL | | FIRE EXTINGUISHER IN SEMI-RECESSED CABINET - SEE DETAIL 1/A-1. |
| | 3 5/8" METAL STUDS @ 16" O.C. W/ 5/8" TYPE X GYPSUM BOARD EACH SIDE IV FULL DEPTH BATT. INSULATION FOR SOUND ATTENUATION | | FIRE EXTINGUISHER W/ BRACKET - SEE DETAIL 4/A-1. |
| | 1 HOUR FIRE RATED HORIZONTAL ASSEMBLY - SEE DETAIL 2/A-1 FOR FIRE CORRIDOR DETAIL | | SURFACE MOUNTED ELECTRICAL PANEL - SEE ELECTRICAL |
| | 8" CONCRETE BLOCK WALL - SEE STRUCTURAL | | 4" X 8" PRE-FINISHED DOWNSPOUT WITH SPLASH BLOCK TO DRAINAGE BOOT - SEE CIVIL |
| | 8" CONCRETE BLOCK WALL WITH 5/8" TYPE X GYPSUM BOARD ON 1/8" HAT CHANNEL @ 16" O.C. VERTICALLY UP TO 11'-0" - SEE STRUCTURAL | | ADA-COMPLIANT DUAL ELECTRIC WATER COOLER - SEE PLUMBING |
| | 2 HOUR FIRE BARRIER (FIRE AREA SEPARATION) - 8" CONCRETE BLOCK WALL TO BOTTOM OF NON-COMBUSTIBLE ROOF DECK WITH 5/8" TYPE X GYPSUM BOARD ON 1/8" HAT CHANNEL @ 16" O.C. VERTICALLY UP TO 11'-0". FIRE TAPE AND MUD ALL JOINTS AND SCREW HEADS. FIRE CAULK ALL PENETRATIONS BLOCK SIDE. UL DESIGN 1405 - SEE STRUCTURAL | | EMERGENCY EYE WASH STATION - SEE PLUMBING |
| | | | INTERIOR ELEVATION MARKER - SEE SHEET A-61 |



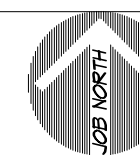


1 DETAIL
 SCALE 3\"/>

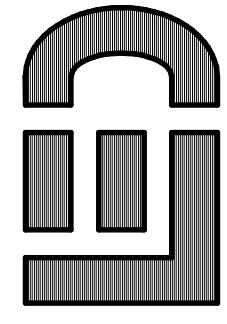
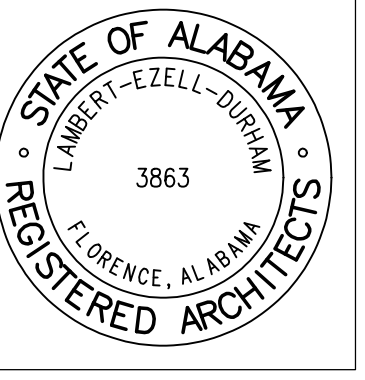


2 DETAIL
 SCALE 1 1/2\"/>

| LEGEND | | |
|---------------------------------|--|---|
| LIGHT FIXTURES - SEE ELECTRICAL | CEILING DIFFUSERS AND GRILLES - SEE MECHANICAL | CEILING TYPES |
| | | 2X2 ACOUSTICAL CEILING GRID AND TILES |
| | | 5/8\"/> |
| | | NO CEILING (EXPOSED STRUCTURE ABOVE) |
| | | MOISTURE RESISTANT GYPSUM BOARD (MRGB) CEILING ON 8\"/> |
| | | PULL DOWN STAIR. SEE 2/A-1.3 FOR MOUNTING DETAILS |
| ELECTRICAL AND MECHANICAL | EXHAUST FAN | |
| | | |



REFLECTED CEILING PLAN
 SCALE 1/8\"/>



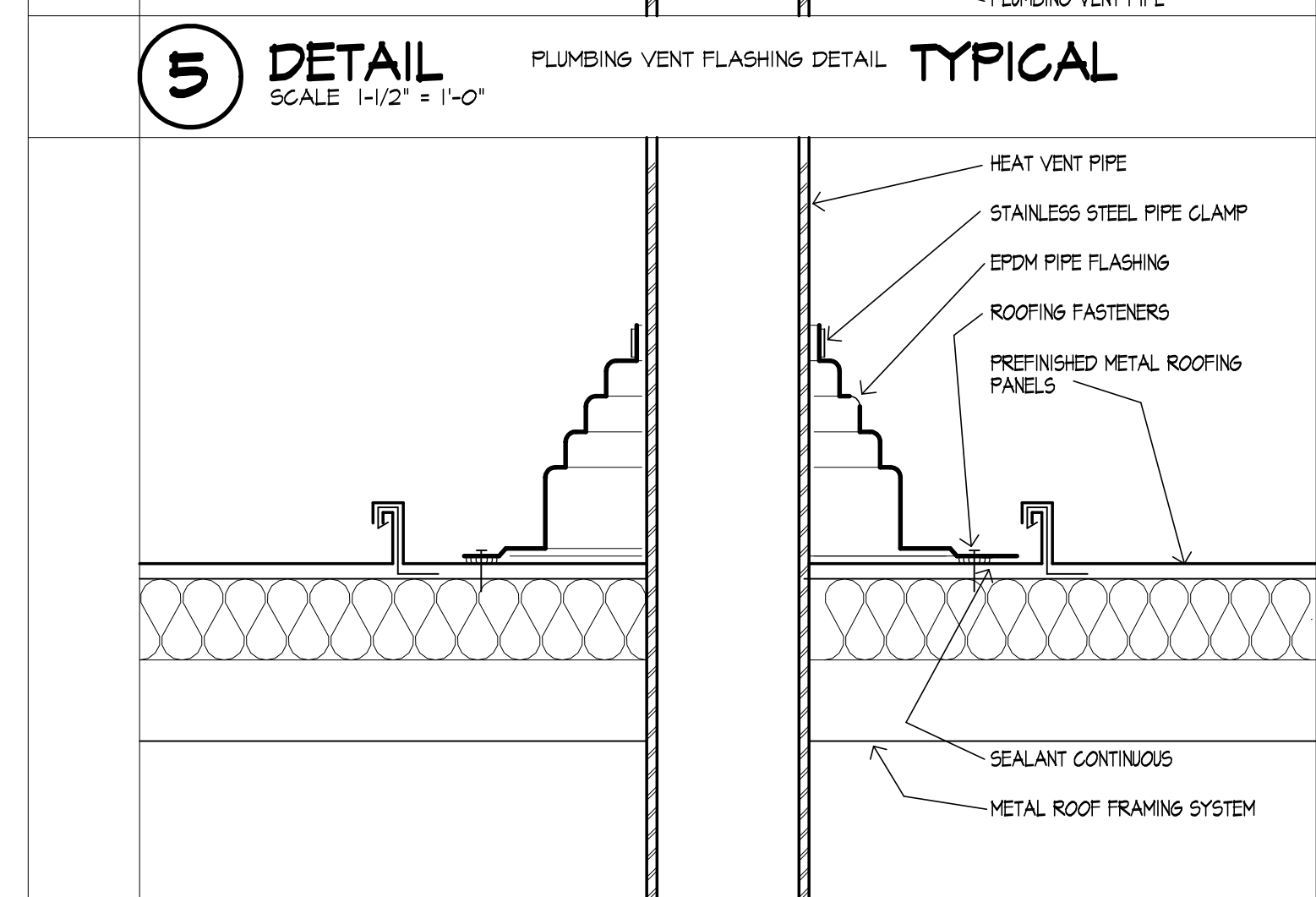
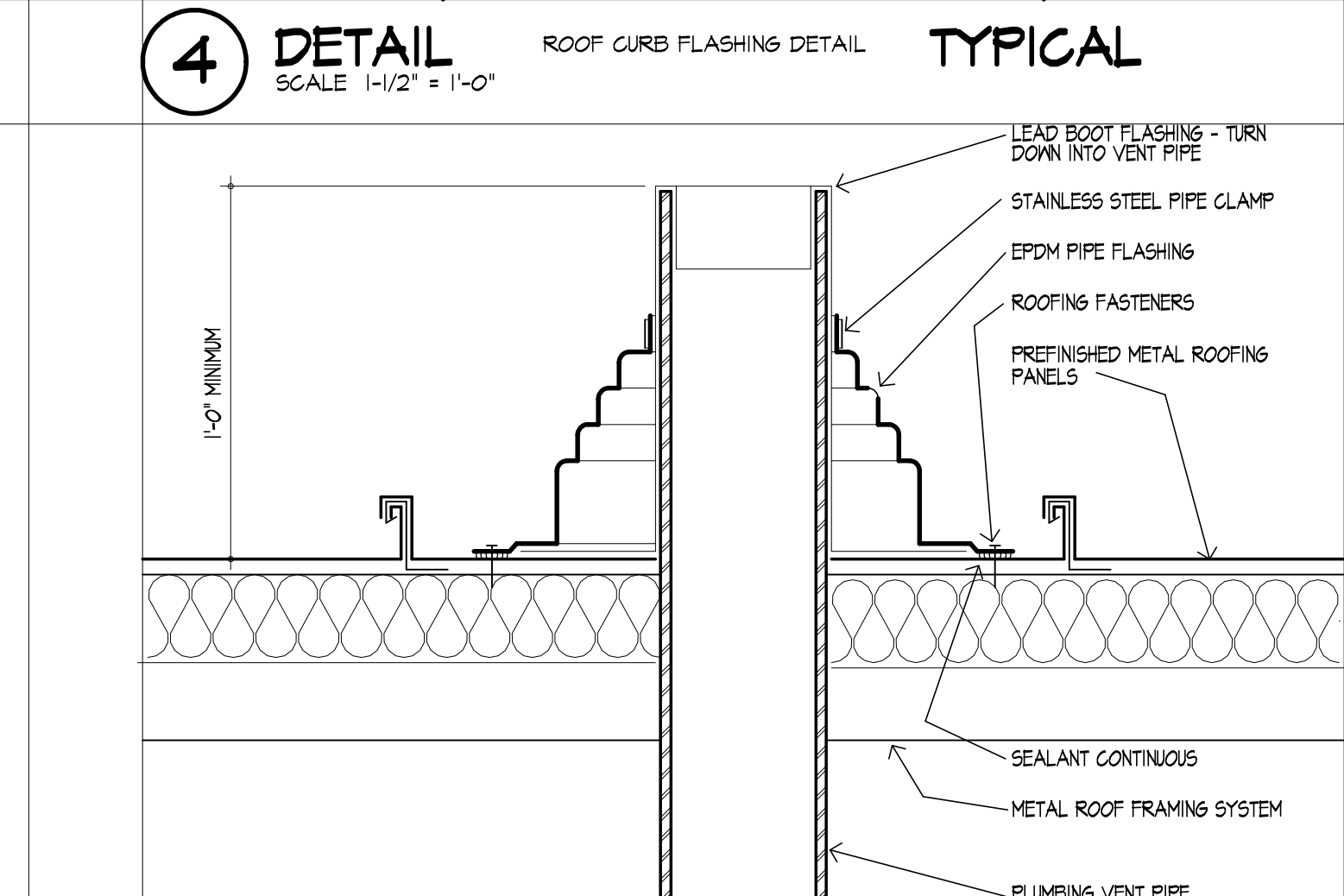
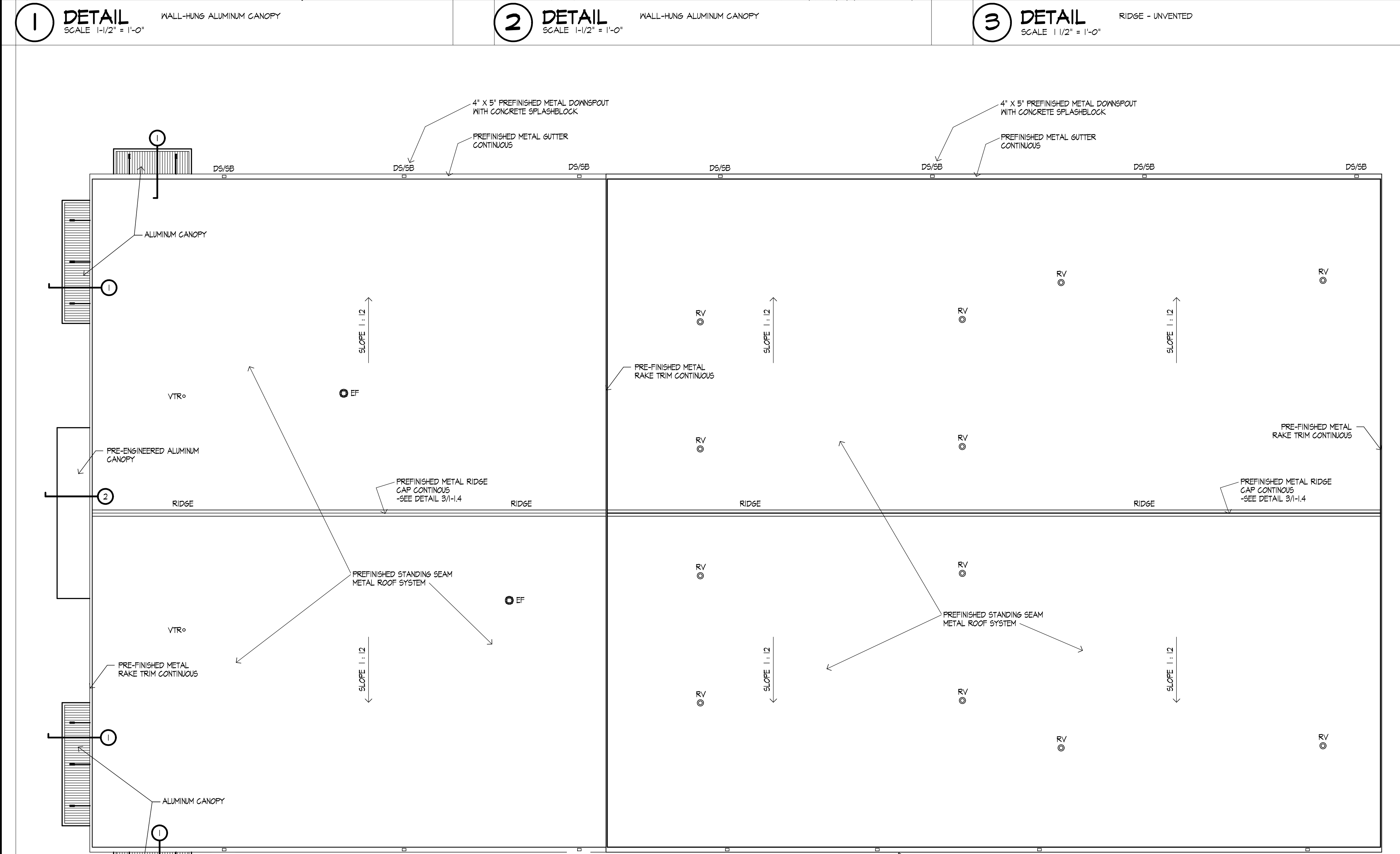
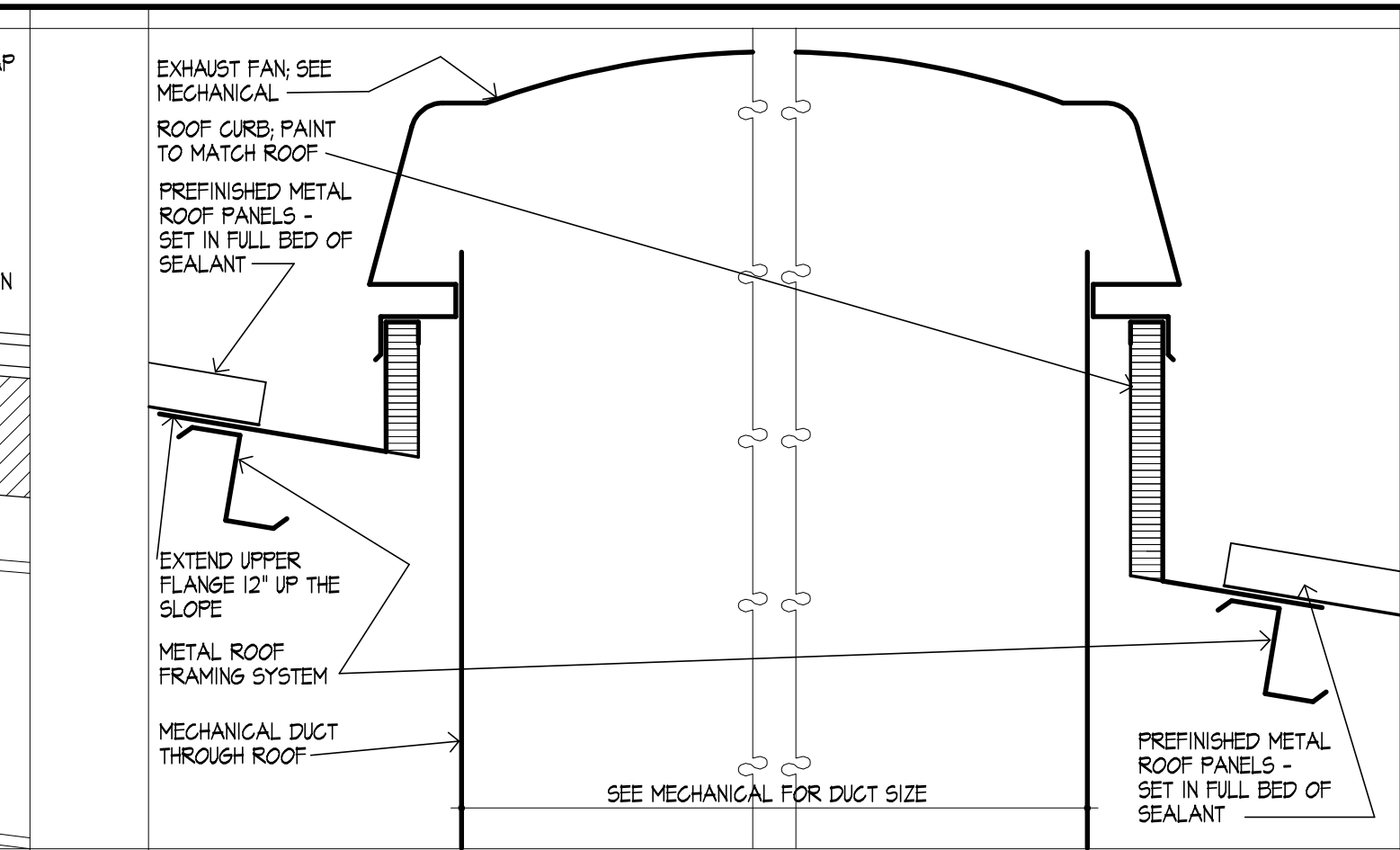
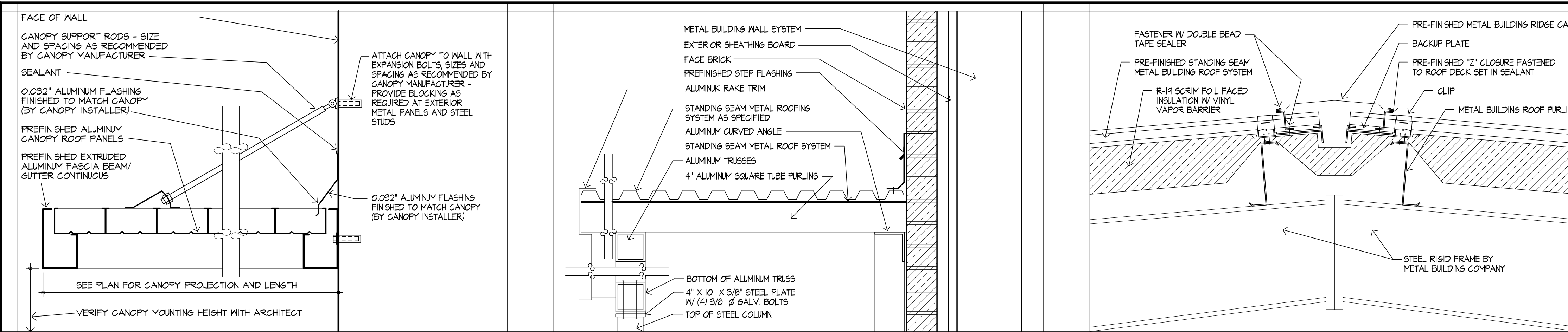
LAMBERT • EZELL • DURHAM
 ARCHITECTURE, LLC
 P.O. BOX 934 401 EAST COLLEGE ST.
 FLORENCE, ALABAMA 36631
 TELEPHONE (256) 161-1100
 WWW.LEDARCHITECTURE.COM

OFFICE AND SHOP BUILDING FOR
RL CONSULTING, INC.
 TUSCUMBIA, ALABAMA

JOB NO: 1860
 DATE: 10/14/19
 DRAWN: ERH/JTS/JACE
 CHECKED: CED
 REVISIONS: REVISION

DRAWING TITLE
REFLECTED CEILING PLAN

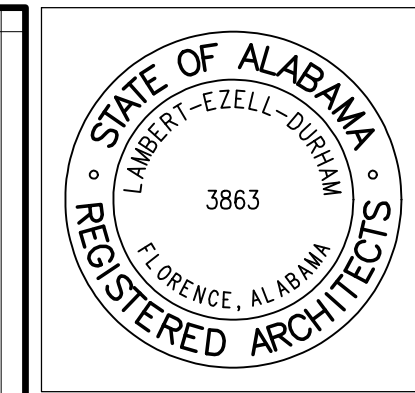
DRAWING NUMBER
A-1.3



NOTES:
 1. ALL ROOF PENETRATIONS SHALL BE PAINTED TO MATCH ROOF COLOR.
 2. ALL ROOF PENETRATIONS SHALL BE OFF-SET IN ATTIC TO AVOID SEAM IN METAL ROOFING.
 3. LOCATIONS OF EQUIPMENT ON ROOF ARE APPROXIMATE. SEE PLUMBING AND MECHANICAL.

| ROOF PLAN LEGEND | |
|------------------|--|
| ± 1:1.2 SLOPE | ROOF SLOPE DIRECTION ARROW |
| DS/SB | 4' X 5' PREFINISHED METAL DOWNSPOUTS WITH CONCRETE SPLASHBLOCK |
| EF | EXHAUST VENT; SEE DETAIL 4/A-1.4 - SEE MECHANICAL |
| RV | ROOF VENT; SEE DETAIL 6/A-1.4 - SEE MECHANICAL |
| VTR | PLUMBING VENT THRU ROOF (VTR) SEE DETAIL 5/A-1.4. SEE MECHANICAL |

ROOF PLAN - BASE BID
SCALE 1/8" = 1'-0"

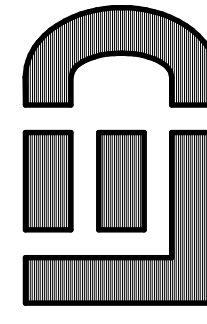


LAMBERT • EZELL • DURHAM
 ARCHITECTURE, LLC
 FLORENCE, ALABAMA 36631
 P.O. BOX 984 401 EAST COLLEGE ST.
 TUSCUMBIA, ALABAMA 36083
 TELEPHONE (256) 161-1100
 WWW.LEDARCHITECTURE.COM

OFFICE AND SHOP BUILDING FOR
RL CONSULTING, INC.
 TUSCUMBIA, ALABAMA

JOB NO: 1860
 DATE: 10/14/19
 DRAWN: ERH/JTS/JACE
 CHECKED: CED
 REVISIONS:

DRAWING TITLE
ROOF PLAN
 DRAWING NUMBER
A-1.4



LAMBERT • EZELL • DURHAM
ARCHITECTURE, LLC
FLORENCE, ALABAMA 36631
P.O. BOX 934 401 EAST COLLEGE ST.
TELEPHONE (256) 161-1100
WWW.LEDARCHITECTURE.COM

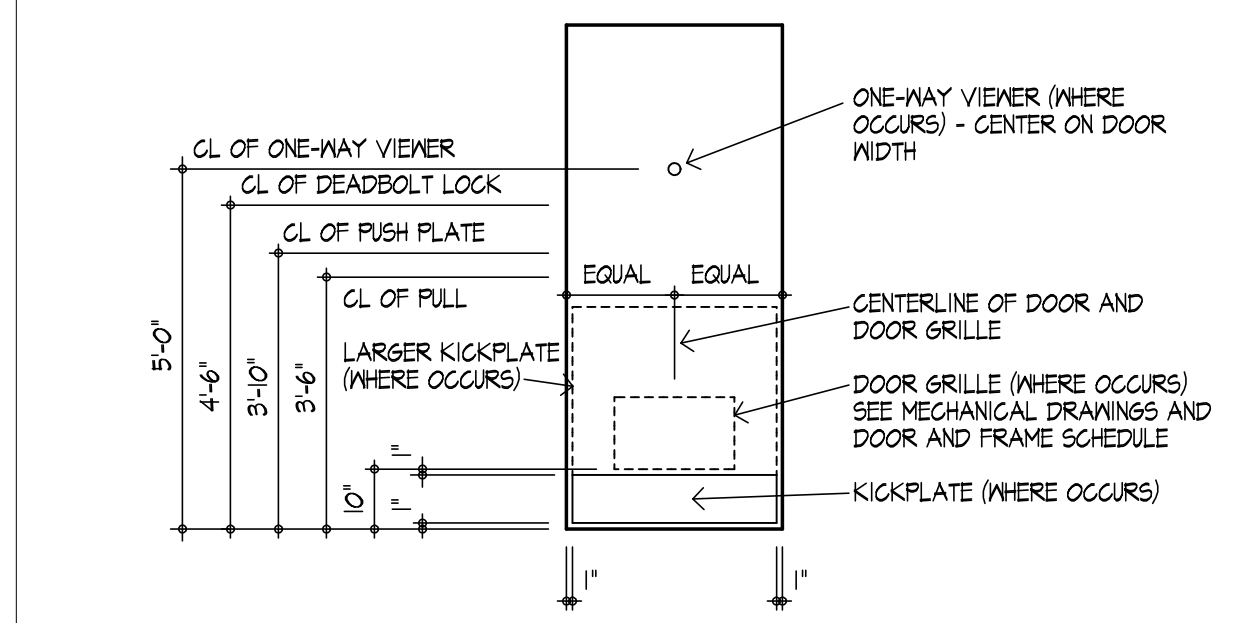
OFFICE AND SHOP BUILDING FOR
RL CONSULTING, INC.
TUSCUMBIA, ALABAMA

JOB NO: 1860 DATE: 10/14/19
DRAWN: ERH/JTS/JACE REVISIONS:
CHECKED: CED

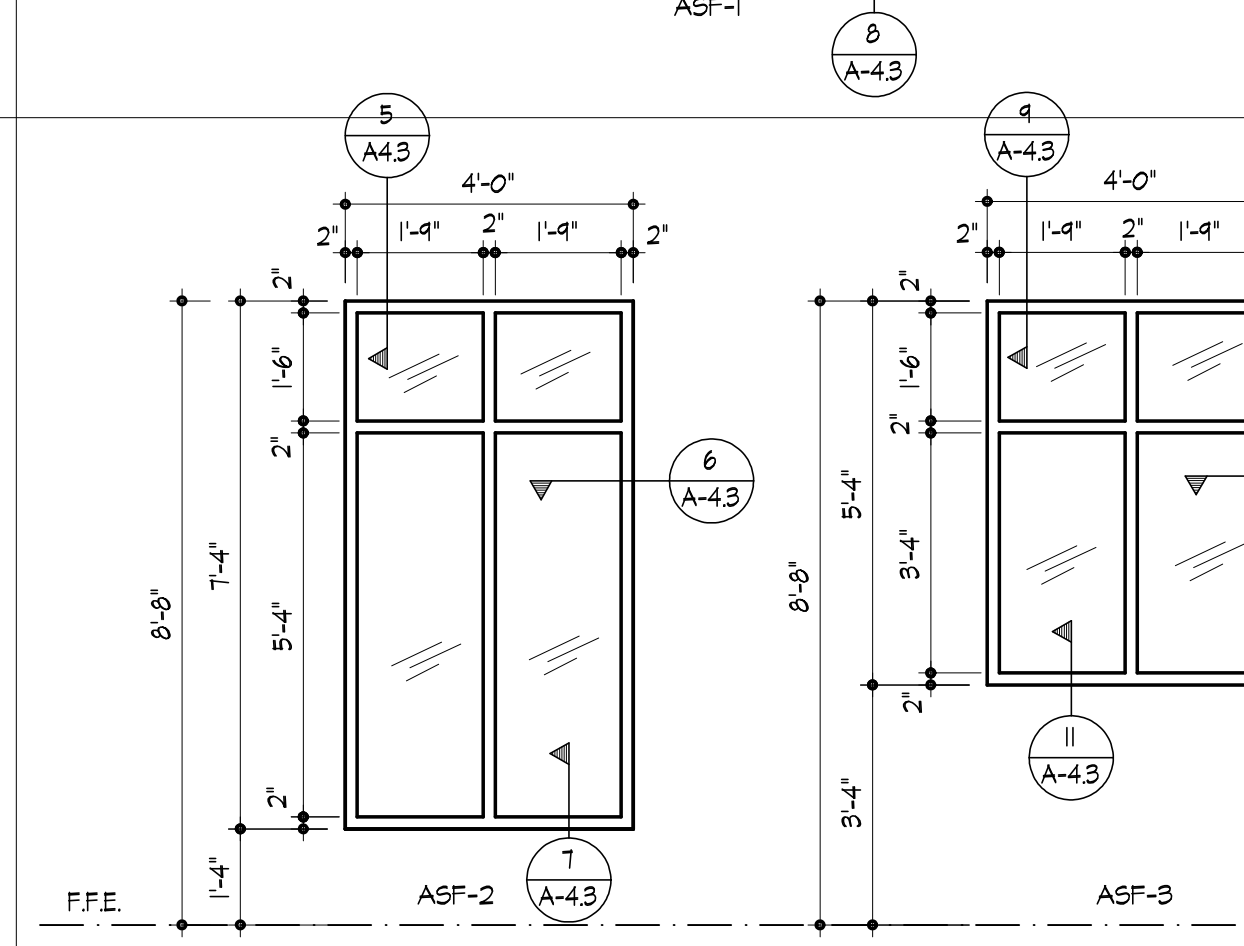
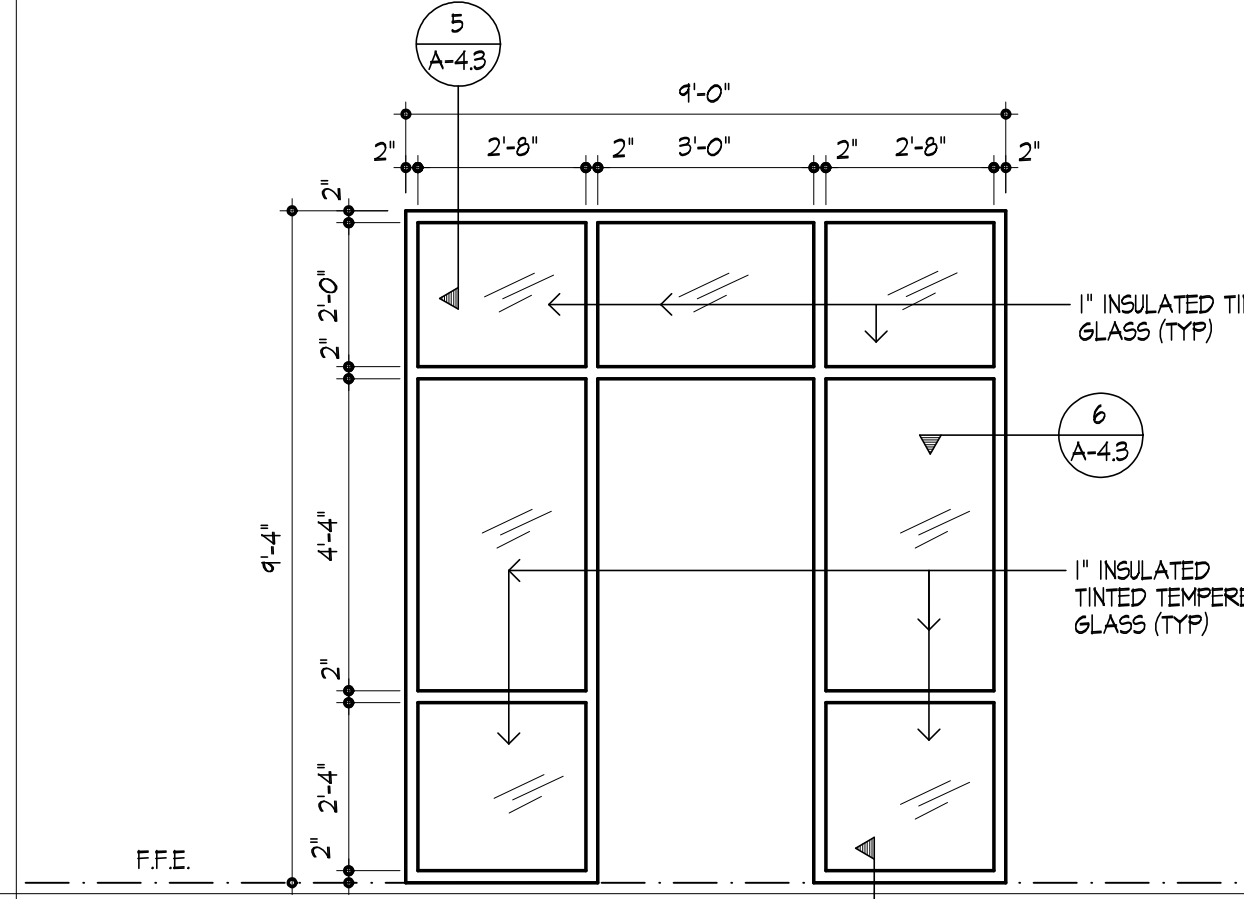
DRAWING TITLE: DOOR SCHEDULE
DRAWING NUMBER: A-2.1

DOOR AND FRAME SCHEDULE

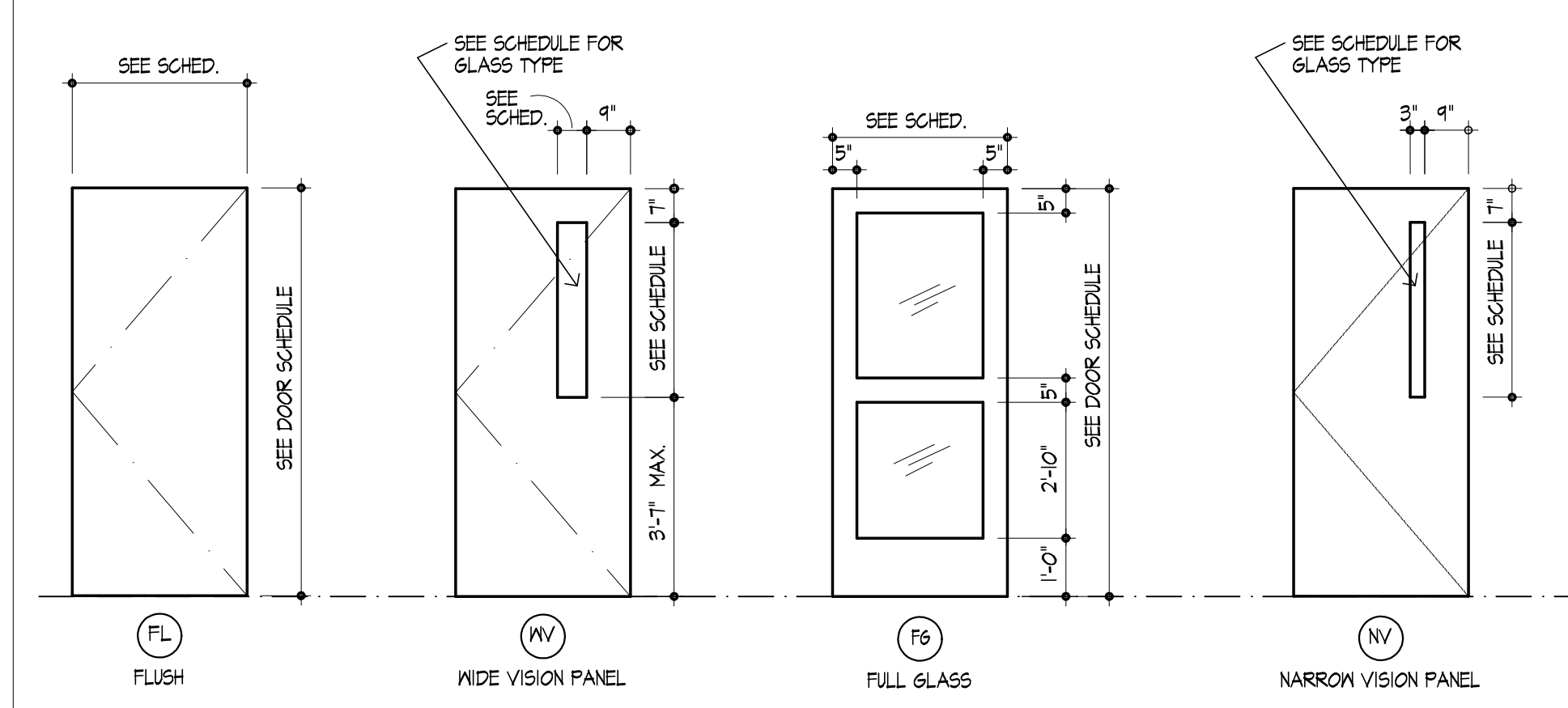
| NO. | SIZE | CONSTRUCTION | DOOR | | | | FRAME | | | | THRESHOLD | | REMARKS | | | |
|------|-----------------------------|------------------|------|-------------------|--------------------------|---------|----------------------|-----------------------|-------|--------------------|-----------------------|------------------------|---------|--|-----------|-----------|
| | | | TYPE | VISION PANEL SIZE | VISION PANEL GLASS TYPE | FINISH | ROOM SIDE DOOR COLOR | OUTSIDE RW DOOR COLOR | TYPE | DETAILS | ROOM SIDE FRAME COLOR | OUTSIDE RW FRAME COLOR | | DOOR AND FRAME ASSEMBLY FIRE RATINGS/LABEL | MATL | DETAIL |
| 100A | 3'-0" X 7'-0" X 1 3/4" | ALUMINUM / GLASS | F6 | FULL GLASS | 1" INSUL./LOW-E TEMP. | PREFIN | ---- | ---- | ASF-1 | 5, 6 / A-4.3 * | ---- | ---- | ---- | ALUMINUM | 5 / A-2.2 | * SIMILAR |
| 101A | 3'-6" X 6'-0" CASED OPENING | | ---- | ---- | | | | | SF2 | 13, 14, 15 / A-4.3 | | | | | | |
| 101B | 3'-0" X 8'-0" CASED OPENING | | ---- | ---- | | | | | SF2 | 3, 4 / A-4.3 | | | | | | |
| 102A | 3'-0" X 7'-0" X 1 3/4" | WOOD SOLID CORE | FL | ---- | | | | | SF2 | 1, 2 / A-4.3 | | | 20 MIN. | | | |
| 104A | 3'-0" X 7'-0" X 1 3/4" | WOOD SOLID CORE | FL | ---- | | | | | SF2 | 1, 2 / A-4.3 | | | 20 MIN. | MARBLE | 6 / A-2.2 | |
| 105A | 3'-0" X 7'-0" X 1 3/4" | WOOD SOLID CORE | NV | 6" X 33" | 1/4" TEMPERED FIRE RATED | STAIN | | | SF2 | 1, 2 / A-4.3 | | | 20 MIN. | | | |
| 106A | 3'-0" X 7'-0" X 1 3/4" | WOOD SOLID CORE | NV | 6" X 33" | 1/4" TEMPERED FIRE RATED | STAIN | | | SF2 | 1, 2 / A-4.3 | | | 20 MIN. | | | |
| 107A | 3'-0" X 7'-0" X 1 3/4" | WOOD SOLID CORE | NV | 6" X 33" | 1/4" TEMPERED FIRE RATED | STAIN | | | SF2 | 1, 2 / A-4.3 | | | 20 MIN. | | | |
| 108A | 3'-0" X 7'-0" X 1 3/4" | WOOD SOLID CORE | NV | 6" X 33" | 1/4" TEMPERED FIRE RATED | STAIN | | | SF2 | 1, 2 / A-4.3 | | | 20 MIN. | | | |
| 109A | 3'-0" X 7'-0" CASED OPENING | | ---- | ---- | | | | | SF2 | 3, 4 / A-4.3 | | | | | | |
| 110A | 3'-0" X 7'-0" X 1 3/4" | WOOD SOLID CORE | FL | ---- | | | | | SF2 | 1, 2 / A-4.3 | | | 20 MIN. | MARBLE | 6 / A-2.2 | |
| 111A | 3'-0" X 7'-0" X 1 3/4" | WOOD SOLID CORE | FL | ---- | | | | | SF2 | 1, 2 / A-4.3 | | | 20 MIN. | MARBLE | 6 / A-2.2 | |
| 112A | 3'-0" X 7'-0" X 1 3/4" | INSULATED STEEL | NV | 3" X 33" | 1/4" TEMPERED FIRE RATED | ENAMEL | | | SF4 | 9, 10 / A-4.4 | | | 40 MIN. | ALUMINUM | 7 / A-2.2 | |
| 113A | 3'-0" X 7'-0" X 1 3/4" | WOOD SOLID CORE | FL | ---- | | | | | SF2 | 1, 2 / A-4.3 | | | 20 MIN. | | | |
| 114A | 3'-0" X 7'-0" X 1 3/4" | WOOD SOLID CORE | NV | 6" X 33" | 1/4" TEMPERED FIRE RATED | STAIN | | | SF2 | 1, 2 / A-4.3 | | | 20 MIN. | | | |
| 115A | 3'-0" X 7'-0" X 1 3/4" | WOOD SOLID CORE | NV | 6" X 33" | 1/4" TEMPERED FIRE RATED | STAIN | | | SF2 | 1, 2 / A-4.3 | | | 20 MIN. | | | |
| 116A | 3'-0" X 7'-0" X 1 3/4" | STEEL | FL | ---- | | ENAMEL | | | SF4 | 9, 10 / A-4.4 | | | | | | |
| 117A | 3'-0" X 7'-0" X 1 3/4" | STEEL | FL | ---- | | ENAMEL | | | SF4 | 5, 6 / A-4.4 | | | | | | |
| 119A | 3'-0" X 7'-0" X 1 3/4" | WOOD SOLID CORE | NV | 6" X 33" | 1/4" TEMPERED FIRE RATED | STAIN | | | SF2 | 1, 2 / A-4.3 | | | 20 MIN. | | | |
| 120A | 3'-0" X 7'-0" X 1 3/4" | WOOD SOLID CORE | NV | 6" X 33" | 1/4" TEMPERED FIRE RATED | STAIN | | | SF2 | 1, 2 / A-4.3 | | | 20 MIN. | | | |
| 121A | 3'-0" X 7'-0" X 1 3/4" | WOOD SOLID CORE | FL | ---- | | | | | SF2 | 1, 2 / A-4.3 | | | 20 MIN. | MARBLE | 6 / A-2.2 | |
| 122A | 3'-0" X 7'-0" X 1 3/4" | WOOD SOLID CORE | NV | 6" X 33" | 1/4" TEMPERED FIRE RATED | STAIN | | | SF2 | 1, 2 / A-4.3 | | | 20 MIN. | | | |
| 123A | 3'-0" X 7'-0" X 1 3/4" | WOOD SOLID CORE | FL | ---- | | | | | SF2 | 1, 2 / A-4.3 | | | | | | |
| 125A | 3'-0" X 7'-0" X 1 3/4" | WOOD SOLID CORE | NV | 6" X 33" | 1/4" TEMPERED FIRE RATED | STAIN | | | SF2 | 1, 2 / A-4.3 | | | 20 MIN. | | | |
| 126A | 3'-0" X 7'-0" X 1 3/4" | WOOD SOLID CORE | NV | 6" X 33" | 1/4" TEMPERED FIRE RATED | STAIN | | | SF2 | 1, 2 / A-4.3 | | | 20 MIN. | | | |
| 127A | 3'-0" X 7'-0" X 1 3/4" | WOOD SOLID CORE | NV | 6" X 33" | 1/4" TEMPERED FIRE RATED | STAIN | | | SF2 | 1, 2 / A-4.3 | | | 20 MIN. | | | |
| 128A | 3'-0" X 7'-0" X 1 3/4" | WOOD SOLID CORE | NV | 6" X 33" | 1/4" TEMPERED FIRE RATED | STAIN | | | SF2 | 1, 2 / A-4.3 | | | 20 MIN. | | | |
| 129A | 3'-0" X 7'-0" X 1 3/4" | INSULATED STEEL | NV | 3" X 33" | 1/4" TEMPERED FIRE RATED | ENAMEL | | | SF4 | 9, 10 / A-4.4 | | | 40 MIN. | ALUMINUM | 7 / A-2.2 | |
| 130A | 3'-0" X 7'-0" X 1 3/4" | WOOD SOLID CORE | NV | 6" X 33" | 1/4" TEMPERED FIRE RATED | STAIN | | | SF2 | 1, 2 / A-4.3 | | | 20 MIN. | | | |
| 131A | 3'-0" X 7'-0" X 1 3/4" | WOOD SOLID CORE | FL | ---- | | | | | SF2 | 1, 2 / A-4.3 | | | | | | |
| 132A | 3'-0" X 7'-0" X 1 3/4" | WOOD SOLID CORE | NV | 6" X 33" | 1/4" TEMPERED FIRE RATED | STAIN | | | SF2 | 1, 2 / A-4.3 | | | 20 MIN. | | | |
| 133A | 3'-0" X 7'-0" X 1 3/4" | WOOD SOLID CORE | NV | 6" X 33" | 1/4" TEMPERED FIRE RATED | STAIN | | | SF2 | 1, 2 / A-4.3 | | | 20 MIN. | | | |
| 134A | 3'-0" X 7'-0" X 1 3/4" | INSULATED STEEL | FL | ---- | | ENAMEL | | | SF2 | 1, 2 / A-4.4 | | | | ALUMINUM | 5 / A-2.2 | |
| 134B | 12'-0" X 16'-0" | OVERHEAD COILING | OC | ---- | | PREFIN. | | | ---- | 3, 4 / A-4.4 | | | | CONC. | ---- | |
| 134C | 12'-0" X 16'-0" | OVERHEAD COILING | OC | ---- | | PREFIN. | | | ---- | 3, 4 / A-4.4 | | | | CONC. | ---- | |
| 134D | 3'-0" X 7'-0" X 1 3/4" | INSULATED STEEL | FL | ---- | | ENAMEL | | | SF2 | 1, 2 / A-4.4 | | | | ALUMINUM | 5 / A-2.2 | |
| 135A | 3'-0" X 7'-0" X 1 3/4" | INSULATED STEEL | FL | ---- | | ENAMEL | | | SF2 | 1, 2 / A-4.4 | | | | ALUMINUM | 5 / A-2.2 | |
| 136A | 3'-0" X 7'-0" X 1 3/4" | STEEL | NV | 6" X 33" | 1/4" TEMPERED FIRE RATED | ENAMEL | | | SF4 | 5, 6 / A-4.4 | | | | | | |
| 136B | 3'-0" X 7'-0" X 1 3/4" | STEEL | NV | 6" X 33" | 1/4" TEMPERED FIRE RATED | ENAMEL | | | SF4 | 5, 6 / A-4.4 | | | | | | |
| 136C | 12'-0" W X 16'-0" H | OVERHEAD COILING | OC | ---- | | PREFIN. | | | ---- | 7, 8 / A-4.4 | | | | | | |
| 136D | 12'-0" W X 16'-0" H | OVERHEAD COILING | OC | ---- | | PREFIN. | | | ---- | 7, 8 / A-4.4 | | | | | | |
| 136E | 12'-0" W X 12'-0" H | OVERHEAD COILING | OC | ---- | | PREFIN. | | | ---- | 7, 8 / A-4.4 | | | | | | |
| 136F | 12'-0" W X 12'-0" H | OVERHEAD COILING | OC | ---- | | PREFIN. | | | ---- | 7, 8 / A-4.4 | | | | | | |
| 137A | 3'-0" X 7'-0" X 1 3/4" | INSULATED STEEL | FL | ---- | | ENAMEL | | | SF2 | 1, 2 / A-4.4 | | | | ALUMINUM | 5 / A-2.2 | |
| 137B | 12'-0" W X 16'-0" H | OVERHEAD COILING | OC | ---- | | PREFIN. | | | ---- | 3, 4 / A-4.4 | | | | CONC. | ---- | |



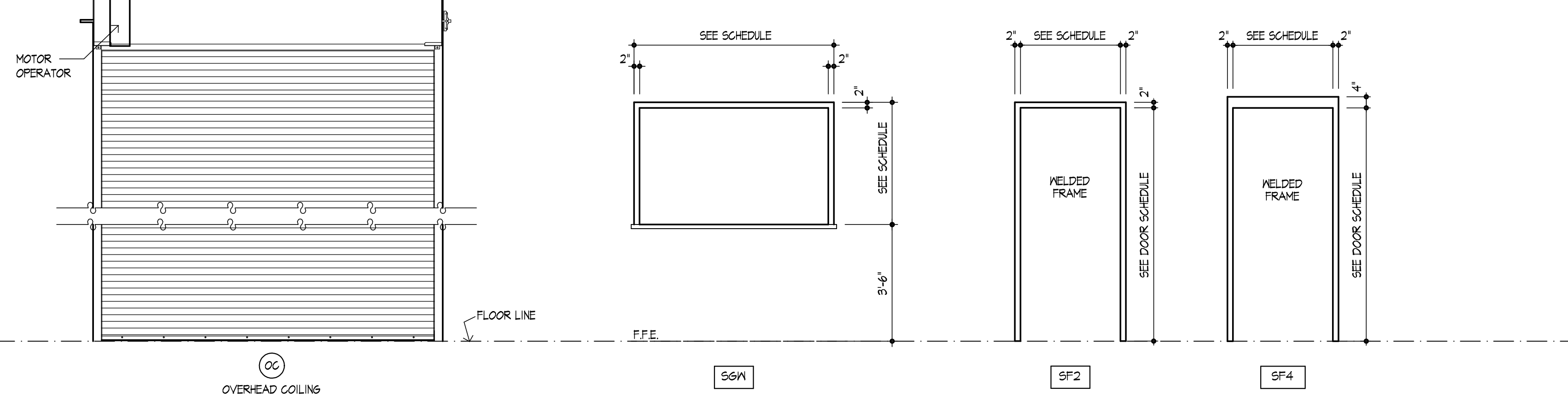
1 TYPICAL DETAIL STANDARD HARDWARE MOUNTING HEIGHTS
SCALE 3/8" = 1'-0"



ALUMINUM STOREFRONT FRAME TYPES
SCALE 3/8" = 1'-0"

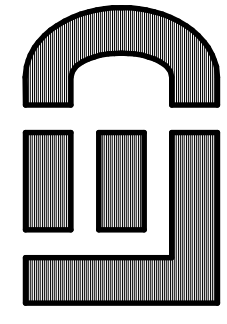
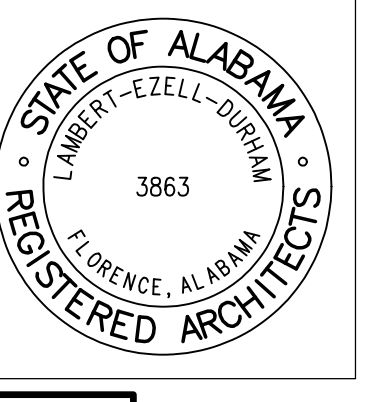


DOOR TYPES
SCALE 3/8" = 1'-0"



STEEL FRAME TYPES
SCALE 3/8" = 1'-0"

File Name: G:\2018\1860 RL CONSULTING BUILDING\1860 WD\1860 A-2.1 DOOR SCHEDULE
Plot Date: 10/17/2019 Plot Time: 8:19 PM



LAMBERT • EZELL • DURHAM
ARCHITECTURE, LLC
FLORENCE, ALABAMA 36631
P.O. BOX 984 401 EAST COLLEGE ST.
TELEPHONE (256) 161-1100
WWW.LEDARCHITECTURE.COM

OFFICE AND SHOP BUILDING FOR
RL CONSULTING, INC.
TUSCUMBIA, ALABAMA

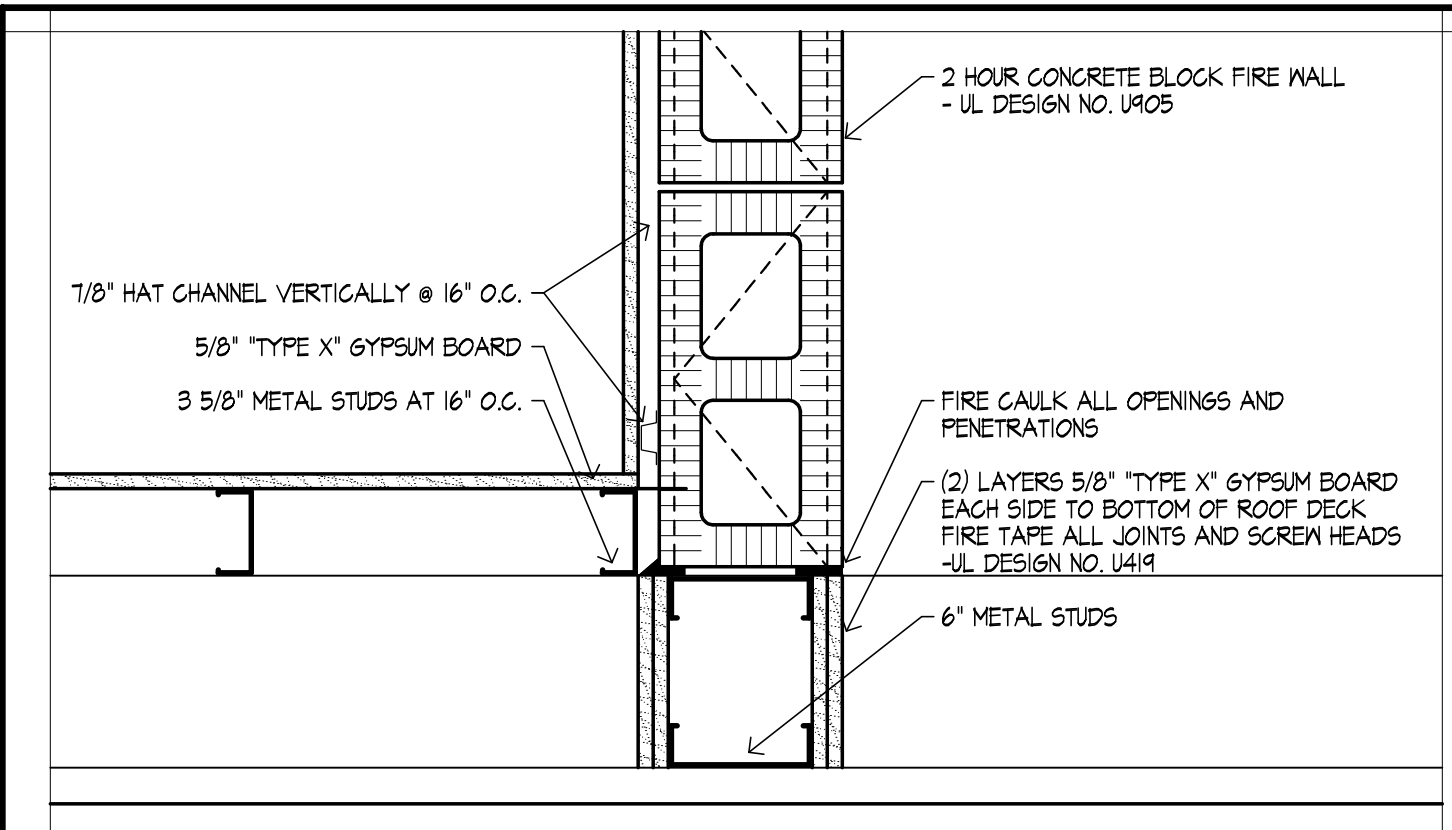
JOB NO: 1860 DATE: 10/14/19
DRAWN: ERH JTS (ACE) REVISIONS:
CHECKED: CED

DRAWING TITLE
ROOM FINISH SCHEDULE

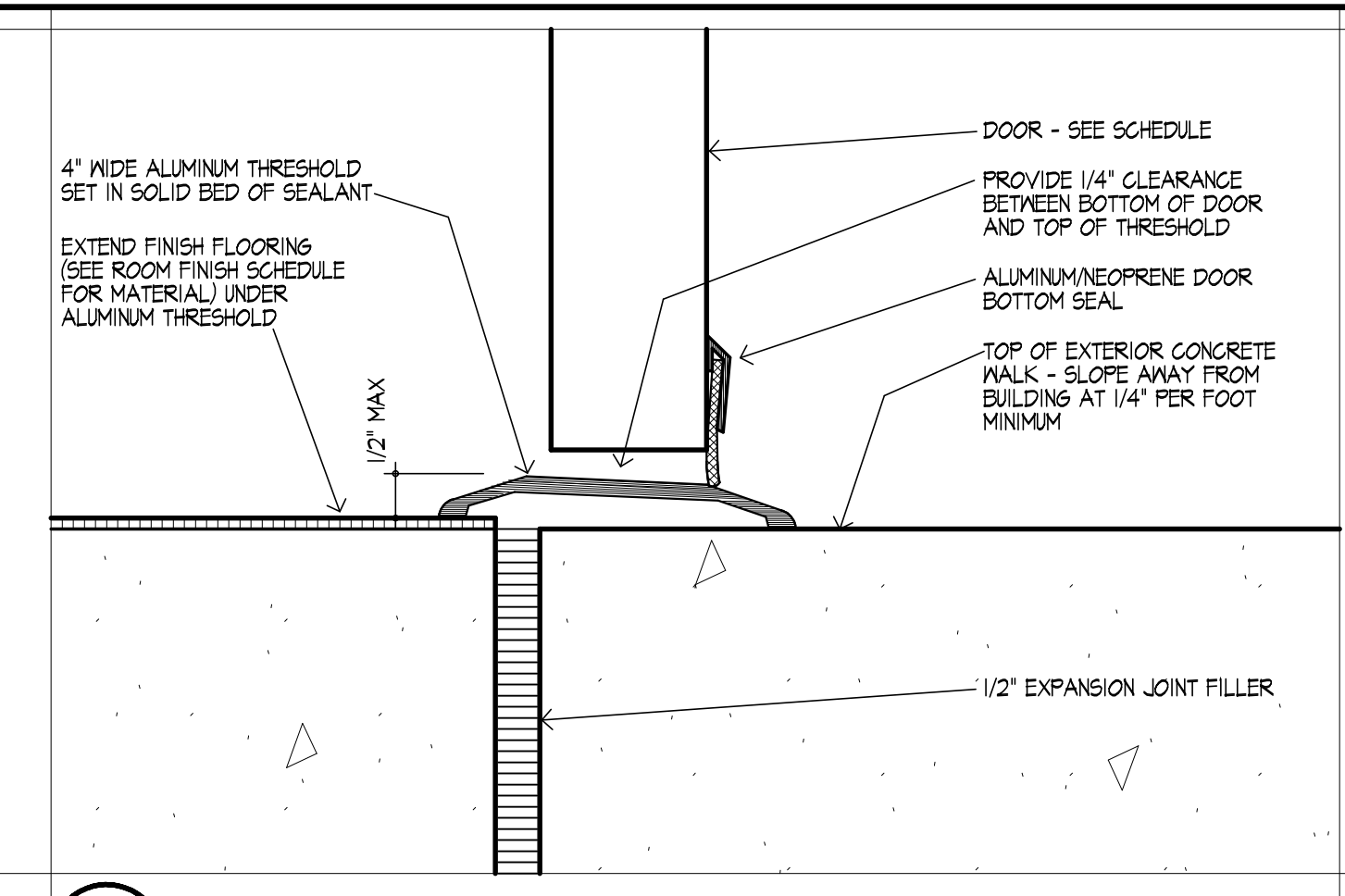
DRAWING NUMBER
A-2.2

ROOM FINISH SCHEDULE

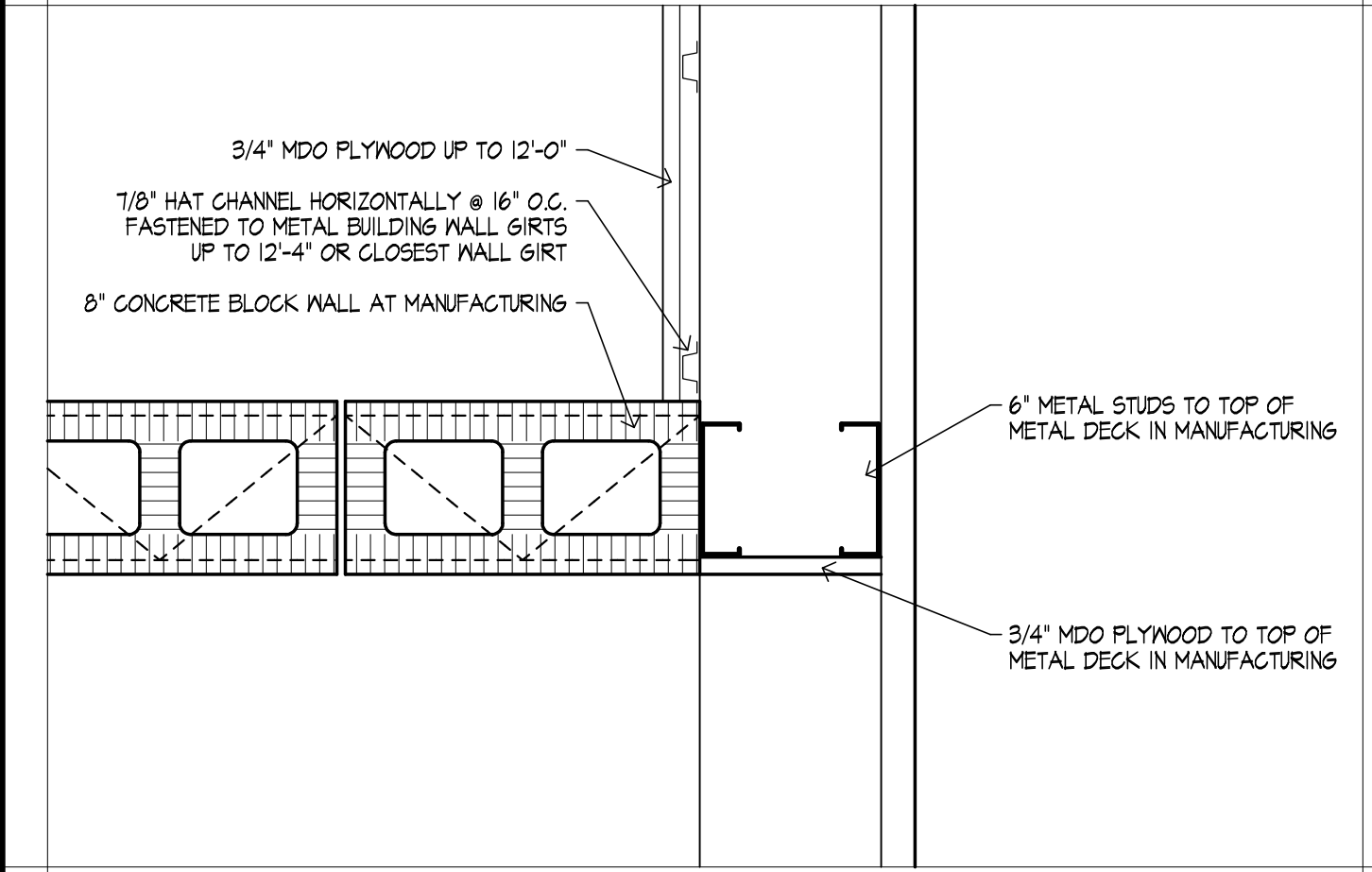
| NO. | ROOM NAME | FLOOR | | BASE | | WALLS | | | CEILING | | | REMARKS | |
|-----|----------------------|--------------|-------|--------------|-------|--------------------------------|--------------|-------|--------------------------|--------------|-------|---------|-----|
| | | MATERIAL | COLOR | MATERIAL | COLOR | SUBSTRATE | FINISH | COLOR | SUBSTRATE | FINISH | COLOR | | HT. |
| 100 | COVERED PORCH | CONCRETE | | | | | | | | | | | |
| 101 | LOBBY | SVT | | RESILIENT | | GYPSUM BOARD | ENAMEL PAINT | | ACCOUSTICAL CEILING TILE | ENAMEL PAINT | | 10'-0" | |
| 102 | STORAGE | SVT | | RESILIENT | | GYPSUM BOARD | ENAMEL PAINT | | ACCOUSTICAL CEILING TILE | ENAMEL PAINT | | 9'-0" | |
| 103 | ALCOVE | SVT | | RESILIENT | | GYPSUM BOARD | ENAMEL PAINT | | ACCOUSTICAL CEILING TILE | ENAMEL PAINT | | 9'-0" | |
| 104 | TOILET | CERAMIC TILE | | CERAMIC TILE | | GYPSUM BOARD | ENAMEL PAINT | | ACCOUSTICAL CEILING TILE | ENAMEL PAINT | | 8'-0" | |
| 105 | CONFERENCE ROOM | CARPET | | RESILIENT | | GYPSUM BOARD | ENAMEL PAINT | | ACCOUSTICAL CEILING TILE | ENAMEL PAINT | | 10'-0" | |
| 106 | EXECUTIVE OFFICE | CARPET | | RESILIENT | | GYPSUM BOARD | ENAMEL PAINT | | ACCOUSTICAL CEILING TILE | ENAMEL PAINT | | 10'-0" | |
| 107 | DESIGN CUBICLES | CARPET | | RESILIENT | | GYPSUM BOARD | ENAMEL PAINT | | ACCOUSTICAL CEILING TILE | ENAMEL PAINT | | 10'-0" | |
| 108 | LAYOUT ROOM | SVT | | RESILIENT | | GYPSUM BOARD | ENAMEL PAINT | | ACCOUSTICAL CEILING TILE | ENAMEL PAINT | | 8'-0" | |
| 109 | ALCOVE | SVT | | RESILIENT | | GYPSUM BOARD | ENAMEL PAINT | | ACCOUSTICAL CEILING TILE | ENAMEL PAINT | | 9'-0" | |
| 110 | MEN'S RESTROOM | CERAMIC TILE | | CERAMIC TILE | | GYPSUM BOARD | ENAMEL PAINT | | ACCOUSTICAL CEILING TILE | ENAMEL PAINT | | 9'-0" | |
| 111 | SHOWER | CERAMIC TILE | | CERAMIC TILE | | GYPSUM BOARD | ENAMEL PAINT | | ACCOUSTICAL CEILING TILE | ENAMEL PAINT | | 8'-0" | |
| 112 | CORRIDOR | SVT | | RESILIENT | | GYPSUM BOARD | ENAMEL PAINT | | ACCOUSTICAL CEILING TILE | ENAMEL PAINT | | 9'-0" | |
| 113 | JANITOR | VGT | | RESILIENT | | GYPSUM BOARD | ENAMEL PAINT | | ACCOUSTICAL CEILING TILE | ENAMEL PAINT | | 8'-0" | |
| 114 | BREAK ROOM | SVT | | RESILIENT | | GYPSUM BOARD | ENAMEL PAINT | | ACCOUSTICAL CEILING TILE | ENAMEL PAINT | | 9'-0" | |
| 115 | PRINTER ROOM | SVT | | RESILIENT | | GYPSUM BOARD | ENAMEL PAINT | | ACCOUSTICAL CEILING TILE | ENAMEL PAINT | | 8'-0" | |
| 116 | SAFE ROOM | SVT | | RESILIENT | | CONCRETE BLOCK | ENAMEL PAINT | | ACCOUSTICAL CEILING TILE | ENAMEL PAINT | | 8'-0" | |
| 117 | SERVER | SVT | | RESILIENT | | GYPSUM BOARD | ENAMEL PAINT | | ACCOUSTICAL CEILING TILE | ENAMEL PAINT | | 8'-0" | |
| 118 | CORRIDOR | SVT | | RESILIENT | | GYPSUM BOARD | ENAMEL PAINT | | ACCOUSTICAL CEILING TILE | ENAMEL PAINT | | 9'-0" | |
| 119 | RECEPTION | CARPET | | RESILIENT | | GYPSUM BOARD | ENAMEL PAINT | | ACCOUSTICAL CEILING TILE | ENAMEL PAINT | | 8'-0" | |
| 120 | PRINTER | SVT | | RESILIENT | | GYPSUM BOARD | ENAMEL PAINT | | ACCOUSTICAL CEILING TILE | ENAMEL PAINT | | 8'-0" | |
| 121 | TOILET | CERAMIC TILE | | CERAMIC TILE | | GYPSUM BOARD | ENAMEL PAINT | | ACCOUSTICAL CEILING TILE | ENAMEL PAINT | | 8'-0" | |
| 122 | CFO OFFICE | CARPET | | RESILIENT | | GYPSUM BOARD | ENAMEL PAINT | | ACCOUSTICAL CEILING TILE | ENAMEL PAINT | | 10'-0" | |
| 123 | STORAGE | CARPET | | RESILIENT | | GYPSUM BOARD | ENAMEL PAINT | | ACCOUSTICAL CEILING TILE | ENAMEL PAINT | | 8'-0" | |
| 124 | ALCOVE | SVT | | RESILIENT | | GYPSUM BOARD | ENAMEL PAINT | | ACCOUSTICAL CEILING TILE | ENAMEL PAINT | | 9'-0" | |
| 125 | ASSISTANCE'S OFFICE | CARPET | | RESILIENT | | GYPSUM BOARD | ENAMEL PAINT | | ACCOUSTICAL CEILING TILE | ENAMEL PAINT | | 9'-0" | |
| 126 | ENGINEER'S OFFICE | CARPET | | RESILIENT | | GYPSUM BOARD | ENAMEL PAINT | | ACCOUSTICAL CEILING TILE | ENAMEL PAINT | | 9'-0" | |
| 127 | ENGINEER'S OFFICE | CARPET | | RESILIENT | | GYPSUM BOARD | ENAMEL PAINT | | ACCOUSTICAL CEILING TILE | ENAMEL PAINT | | 9'-0" | |
| 128 | ENGINEER'S OFFICE | CARPET | | RESILIENT | | GYPSUM BOARD | ENAMEL PAINT | | ACCOUSTICAL CEILING TILE | ENAMEL PAINT | | 9'-0" | |
| 129 | CORRIDOR | SVT | | RESILIENT | | GYPSUM BOARD | ENAMEL PAINT | | ACCOUSTICAL CEILING TILE | ENAMEL PAINT | | 9'-0" | |
| 130 | EXECUTIVE OFFICE | CARPET | | RESILIENT | | GYPSUM BOARD | ENAMEL PAINT | | ACCOUSTICAL CEILING TILE | ENAMEL PAINT | | 10'-0" | |
| 131 | STORAGE | CARPET | | RESILIENT | | GYPSUM BOARD | ENAMEL PAINT | | ACCOUSTICAL CEILING TILE | ENAMEL PAINT | | 8'-0" | |
| 132 | ENGINEERING CUBICLES | CARPET | | RESILIENT | | GYPSUM BOARD | ENAMEL PAINT | | ACCOUSTICAL CEILING TILE | ENAMEL PAINT | | 10'-0" | |
| 133 | LAB/TRAINING | SVT | | RESILIENT | | GYPSUM BOARD | ENAMEL PAINT | | ACCOUSTICAL CEILING TILE | ENAMEL PAINT | | 10'-0" | |
| 134 | DRIVE-THRU LOADING | SEALED CONC. | | | | EXPOSED STRUCT./CONCRETE BLOCK | ENAMEL PAINT | | EXPOSED STRUCTURE | ENAMEL PAINT | | VARIES | |
| 135 | WAREHOUSE STORAGE | SEALED CONC. | | | | EXPOSED STRUCT./CONCRETE BLOCK | ENAMEL PAINT | | EXPOSED STRUCTURE | ENAMEL PAINT | | VARIES | |
| 136 | MANUFACTURING SHOP | SEALED CONC. | | | | CONCRETE BLOCK/MDO PLYWOOD | ENAMEL PAINT | | EXPOSED STRUCTURE | ENAMEL PAINT | | 20'-0" | |
| 137 | WAREHOUSE STORAGE | SEALED CONC. | | | | EXPOSED STRUCT./CONCRETE BLOCK | ENAMEL PAINT | | EXPOSED STRUCTURE | ENAMEL PAINT | | VARIES | |



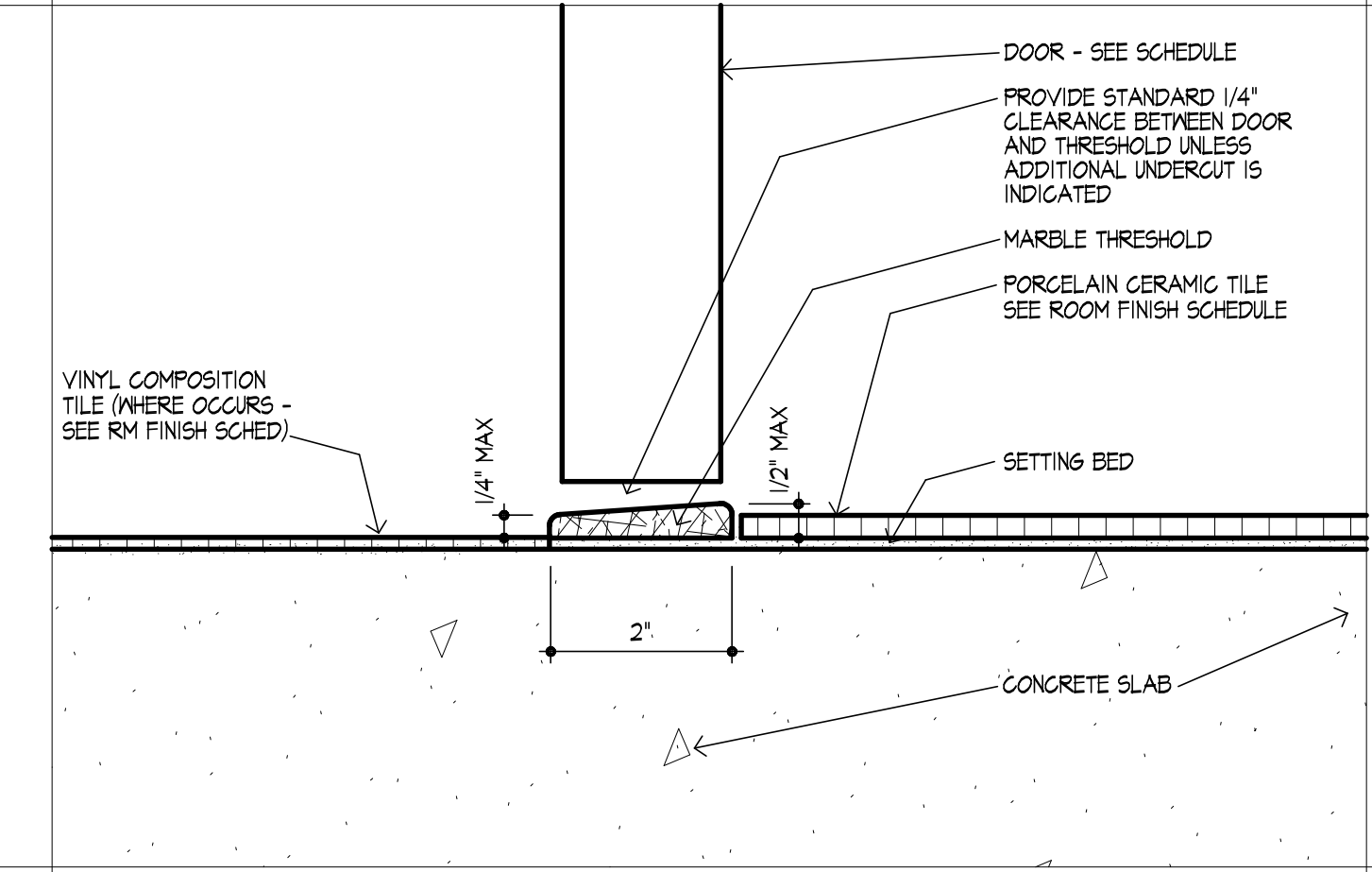
1 DETAIL
SCALE 1 1/2" = 1'-0"



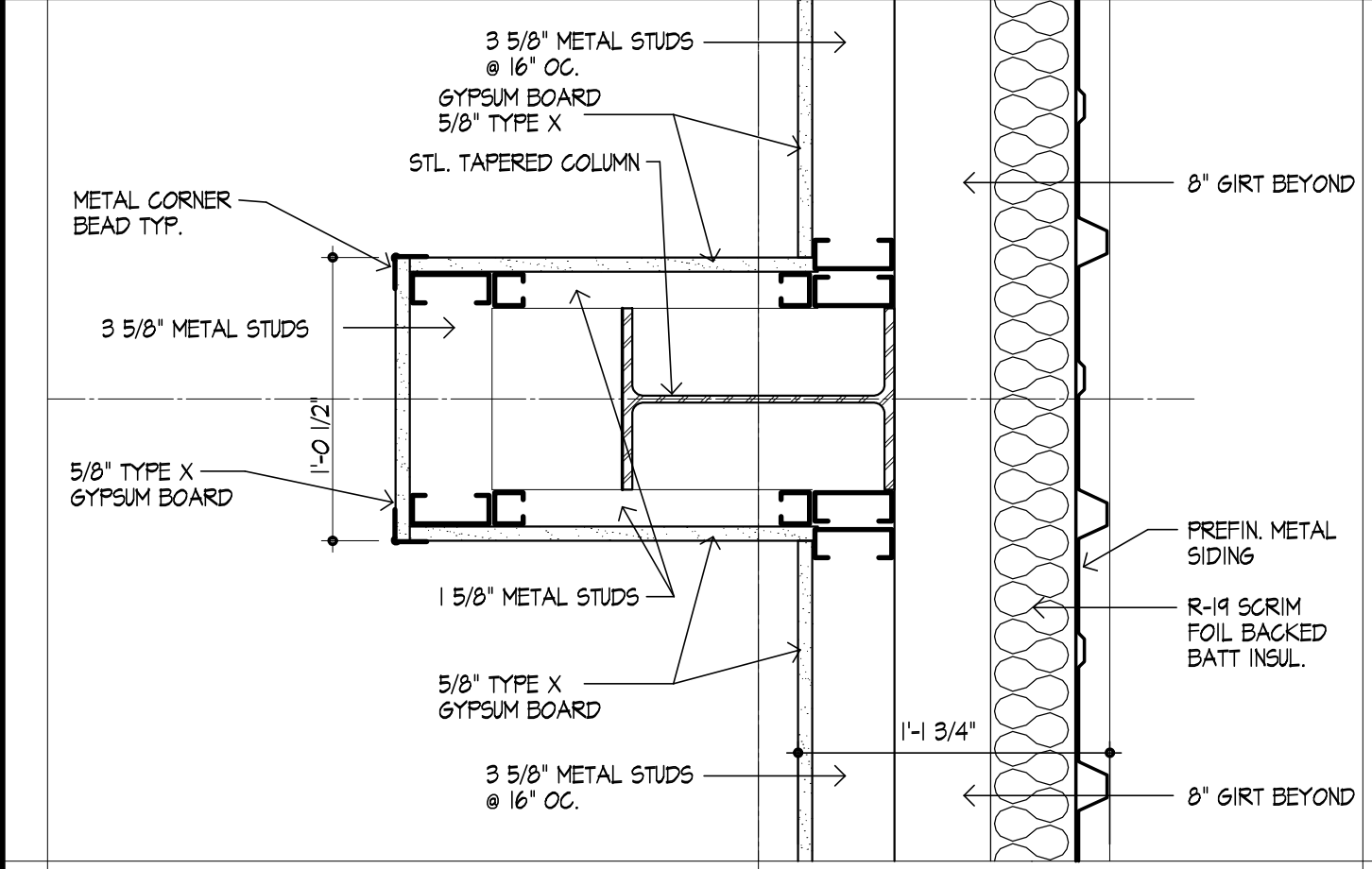
5 DETAIL
SCALE 6" = 1'-0"
ALUMINUM THRESHOLD - HANDICAPPED ACCESSIBLE DOORS



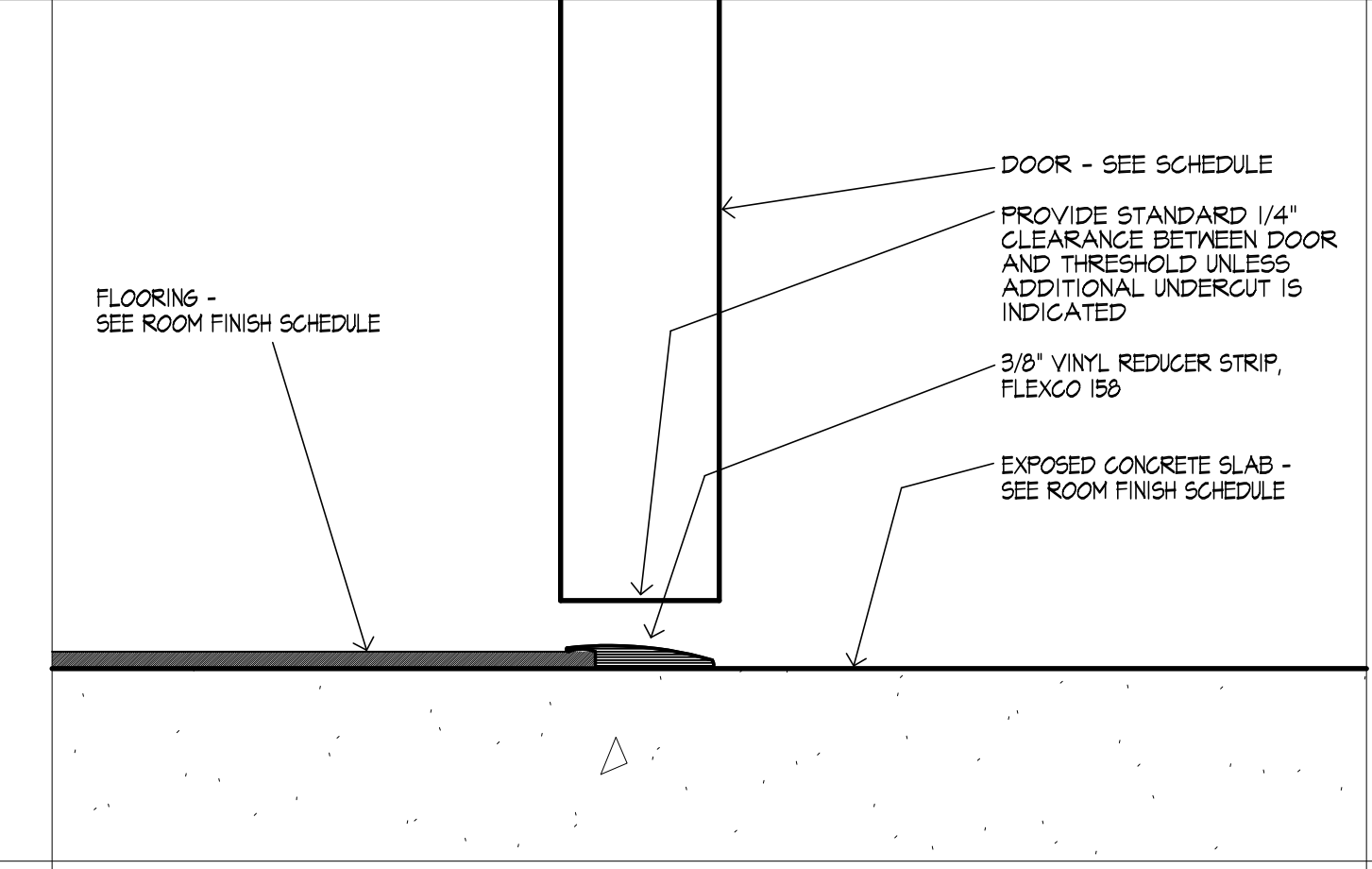
2 DETAIL
SCALE 1 1/2" = 1'-0"



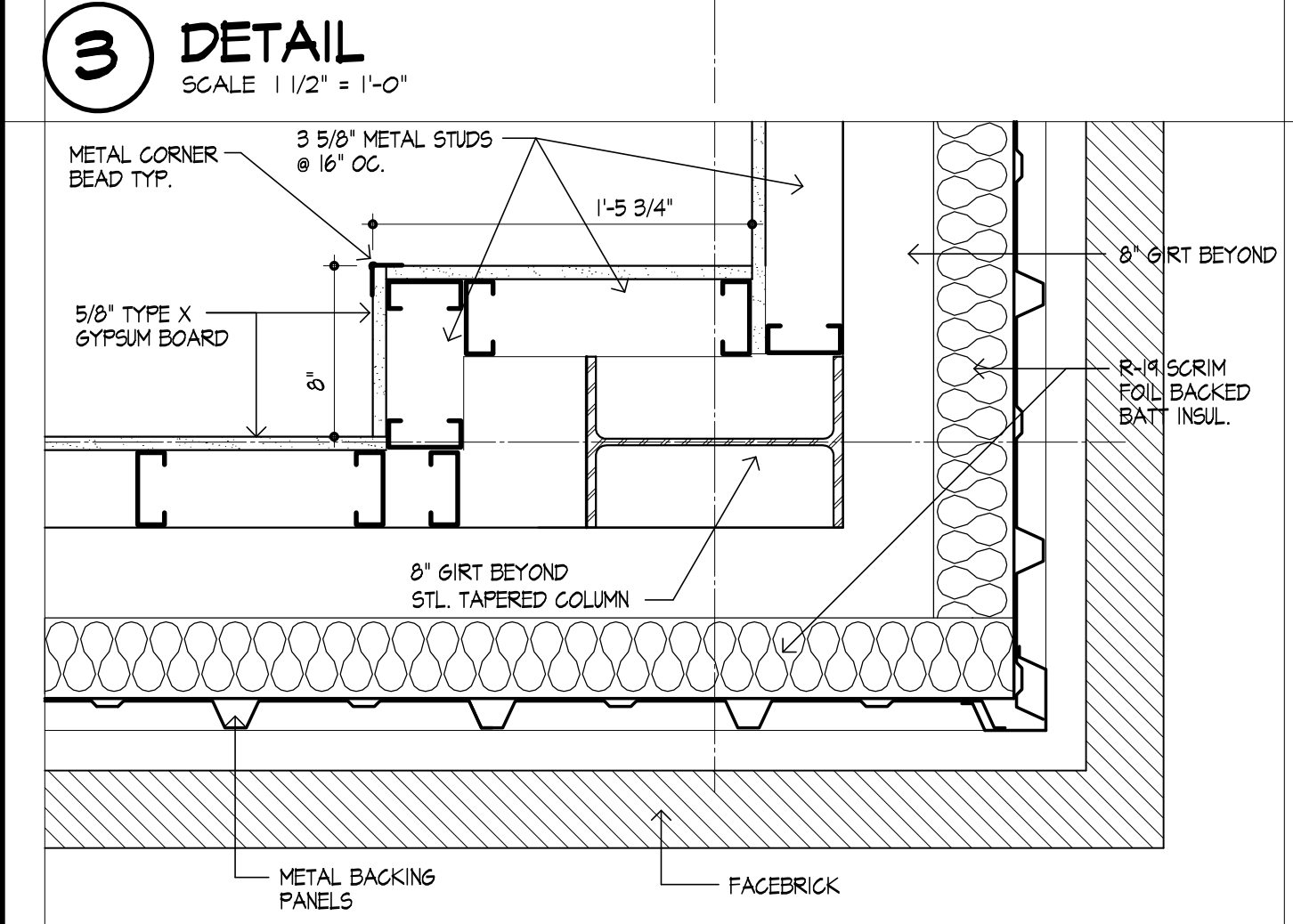
6 DETAIL
SCALE 6" = 1'-0"
MARBLE THRESHOLD - THINSET TILE FLOOR



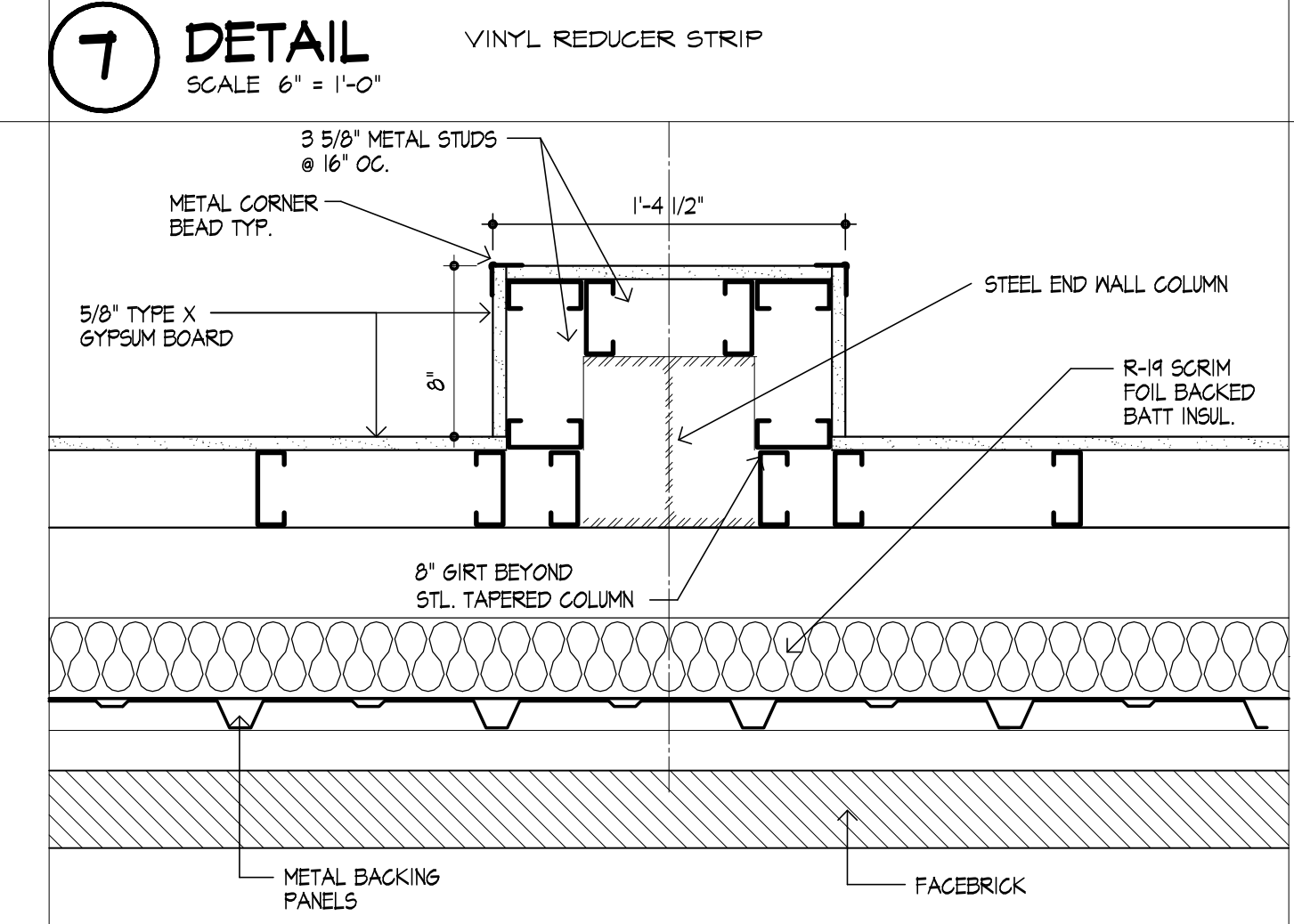
3 DETAIL
SCALE 1 1/2" = 1'-0"



7 DETAIL
SCALE 6" = 1'-0"
VINYL REDUCER STRIP

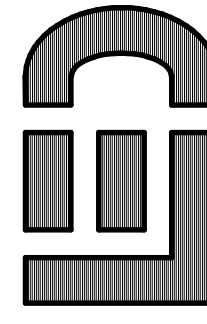


4 DETAIL
SCALE 1 1/2" = 1'-0"



8 DETAIL
SCALE 1 1/2" = 1'-0"

File Name: G:\2018\1860 RL CONSULTING BUILDING\1860 MD\1860 A-2.2 FINISH SCHEDULES
Plot Date: 10/17/2019 Plot Time: 7:21 PM



LAMBERT • EZELL • DURHAM
 ARCHITECTURE, LLC
 FLORENCE, ALABAMA 36631
 P.O. BOX 984 401 EAST COLLEGE ST.
 TUSCUMBIA, ALABAMA
 TELEPHONE (256) 161-1100
 WWW.LEDARCHITECTURE.COM

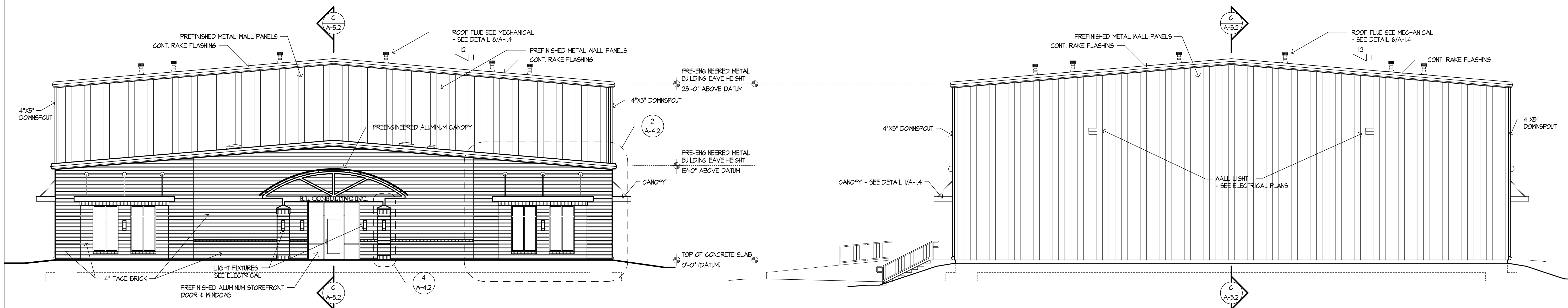
OFFICE AND SHOP BUILDING FOR
RL CONSULTING, INC.
 TUSCUMBIA, ALABAMA

JOB NO: 1860
 DATE: 10/14/19
 DRAWN: ERH/JTS/JACE
 CHECKED: CED
 REVISIONS: 5/3/19

DRAWING TITLE
EXTERIOR ELEVATIONS

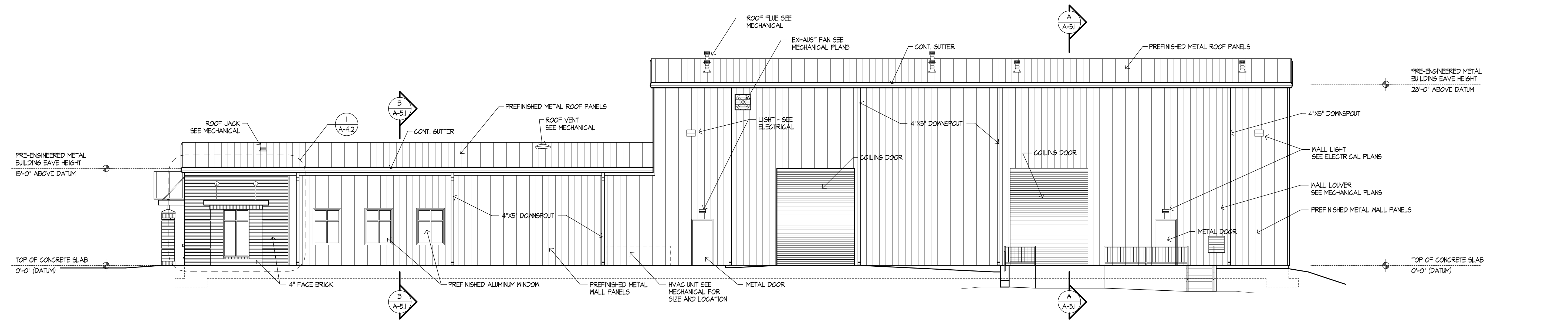
DRAWING NUMBER
A-4.1

File Name: G:\2018\1860 RL CONSULTING BUILDING\1860 WD\1860 A-4.1 EXTERIOR ELEVATIONS
 Plot Date: 10/17/2019 Plot Time: 8:20 PM

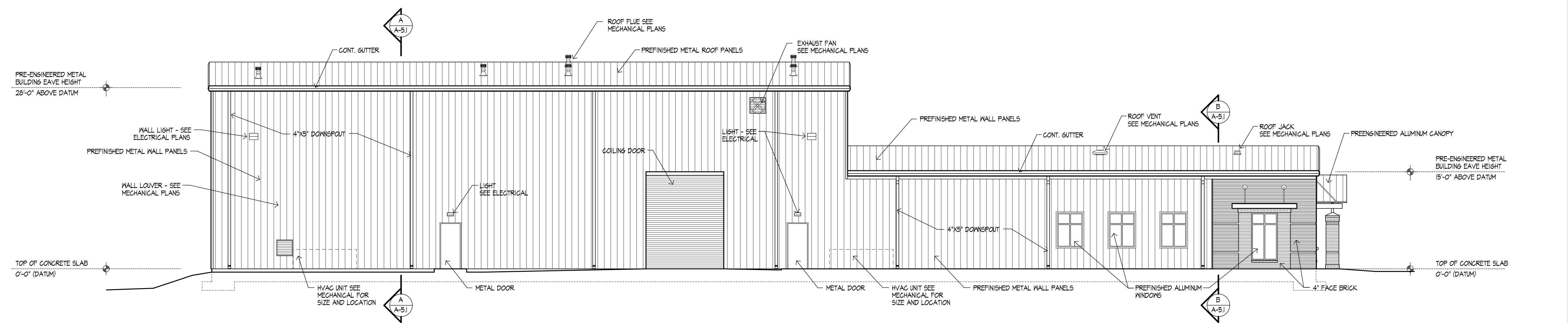


WEST ELEVATION
 SCALE 1/8" = 1'-0"

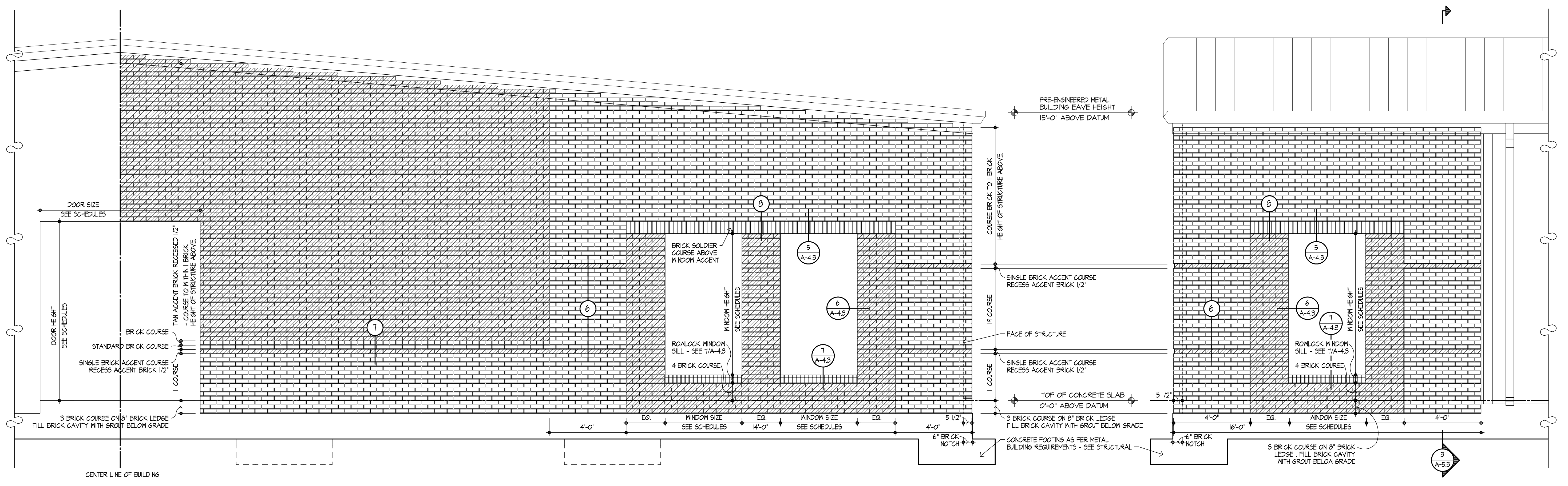
EAST ELEVATION
 SCALE 1/8" = 1'-0"



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

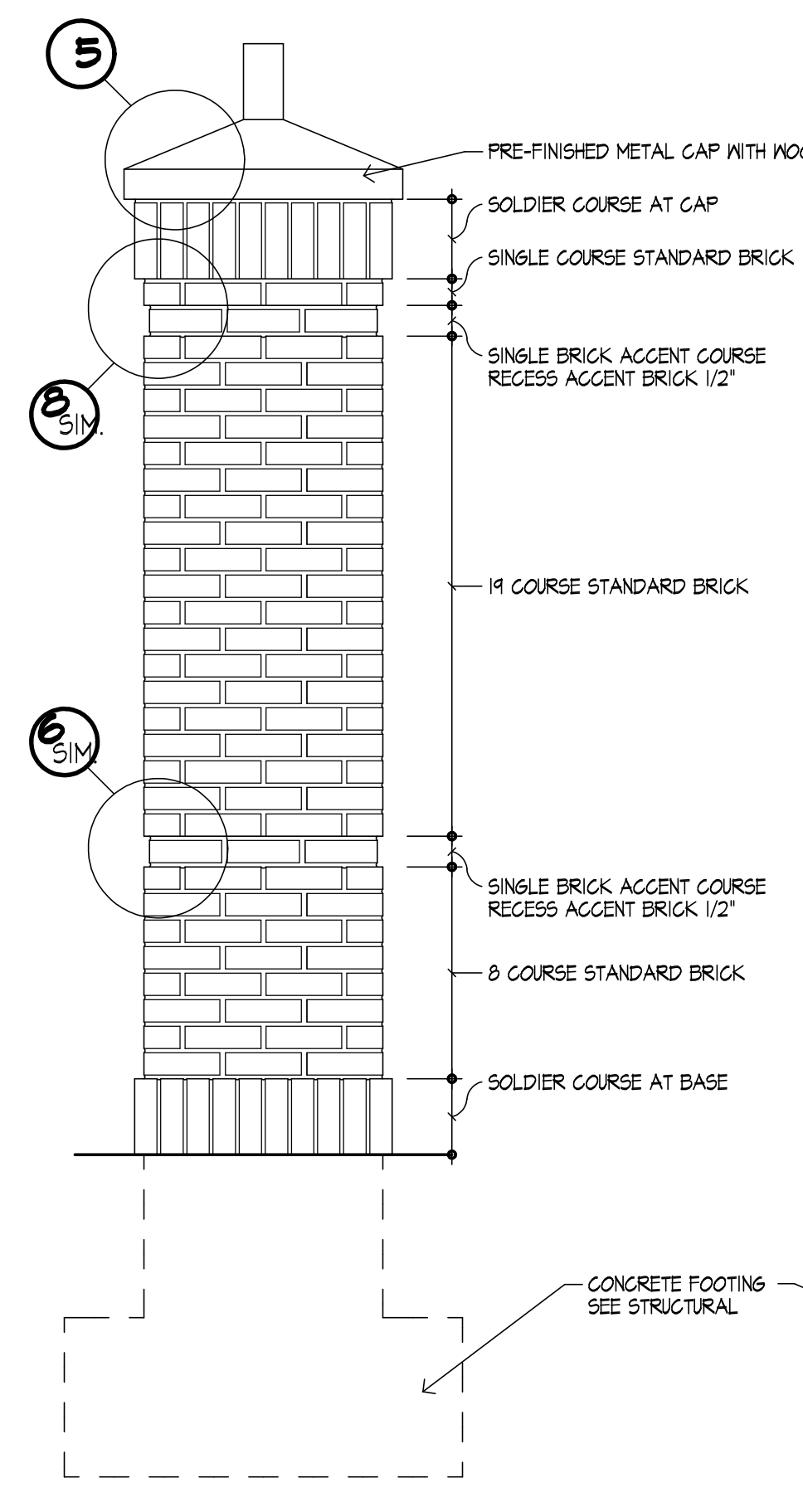


NORTH ELEVATION
 SCALE 1/8" = 1'-0"

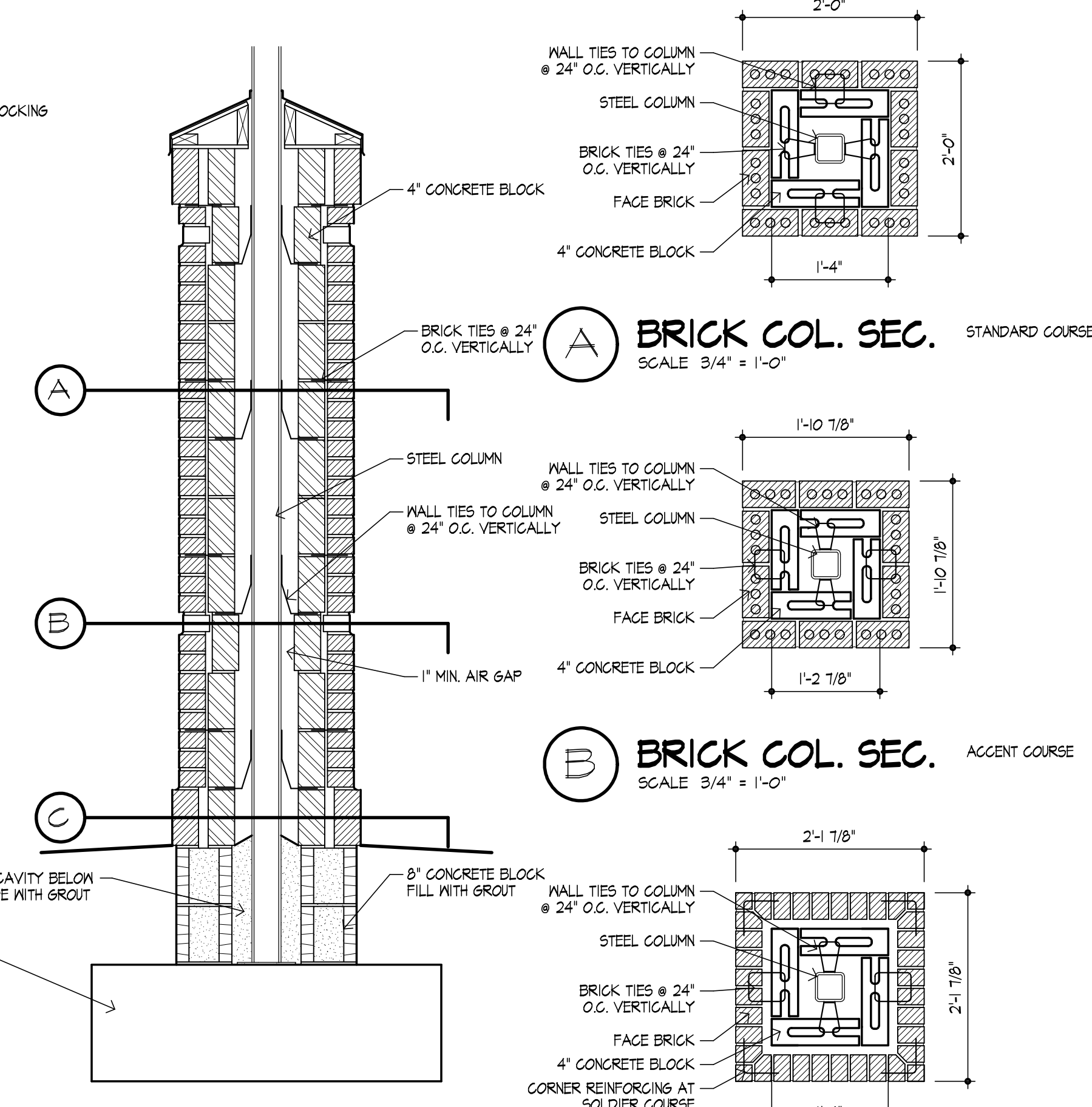


1 FRONT ELEVATION BRICK LAYOUT
SCALE 3/8" = 1'-0"

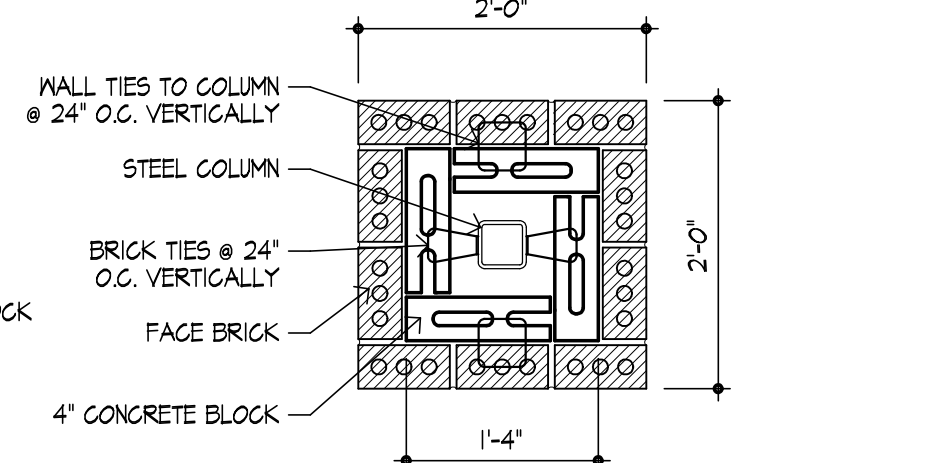
2 SIDE ELEVATION BRICK LAYOUT
SCALE 3/8" = 1'-0"



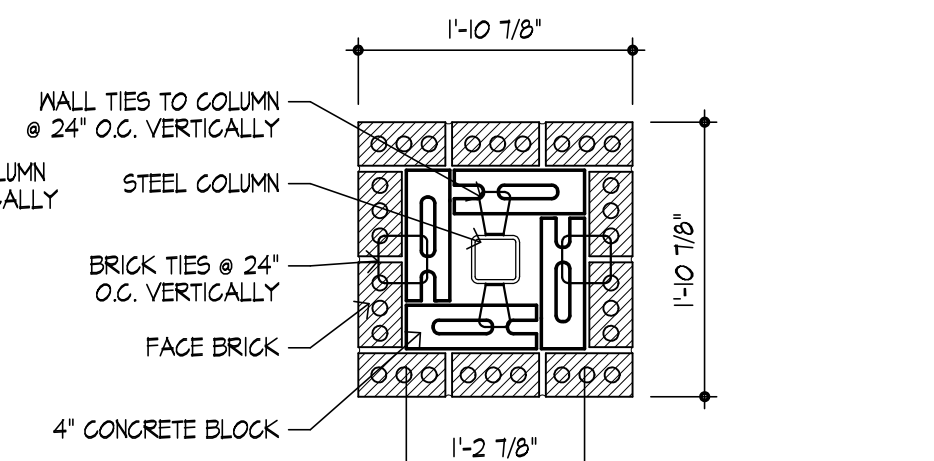
3 DETAIL
SCALE 3/4" = 1'-0"



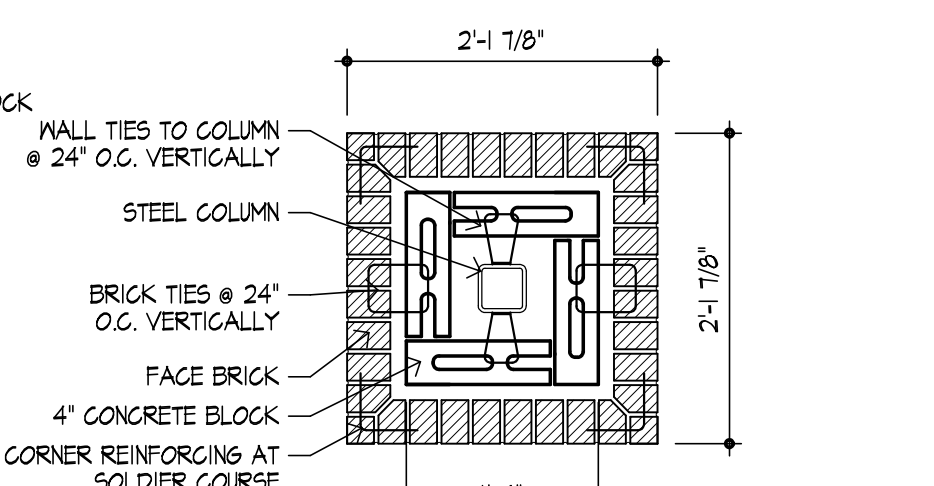
4 DETAIL
SCALE 3/4" = 1'-0"



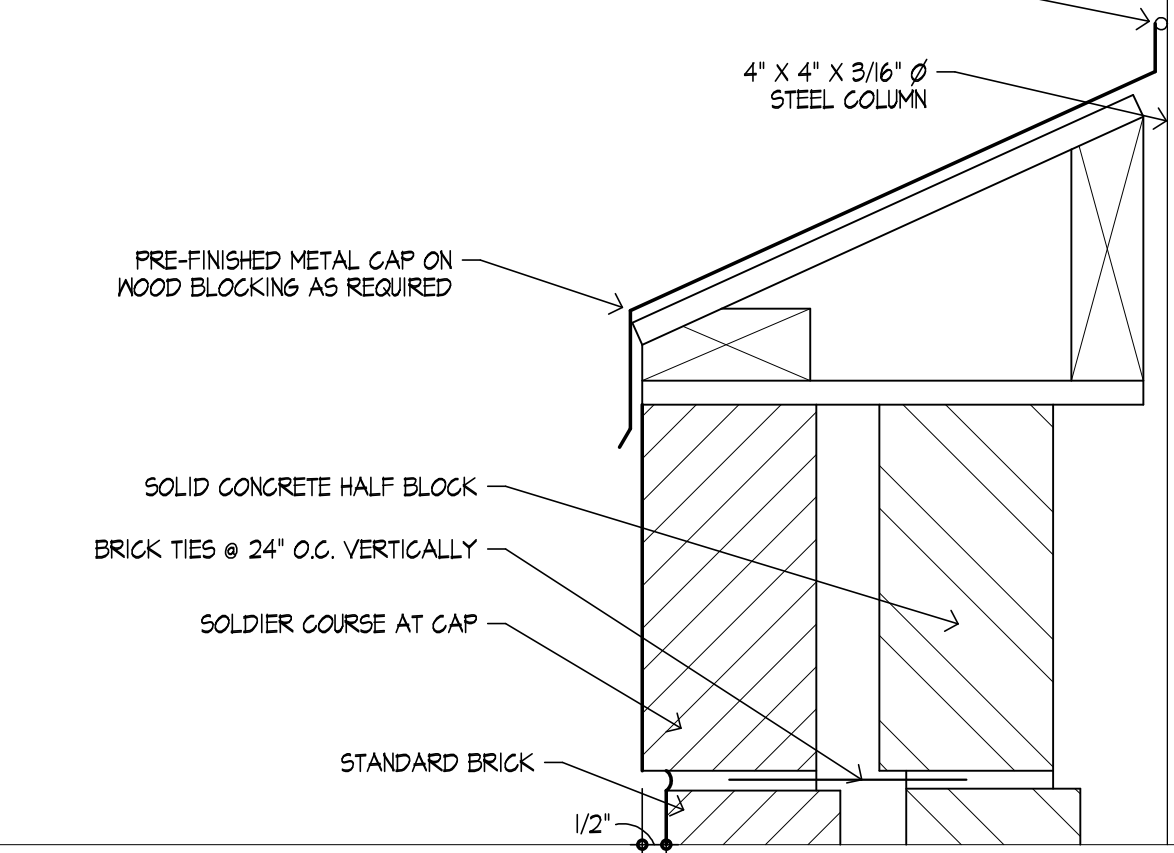
A BRICK COL. SEC. STANDARD COURSE
SCALE 3/4" = 1'-0"



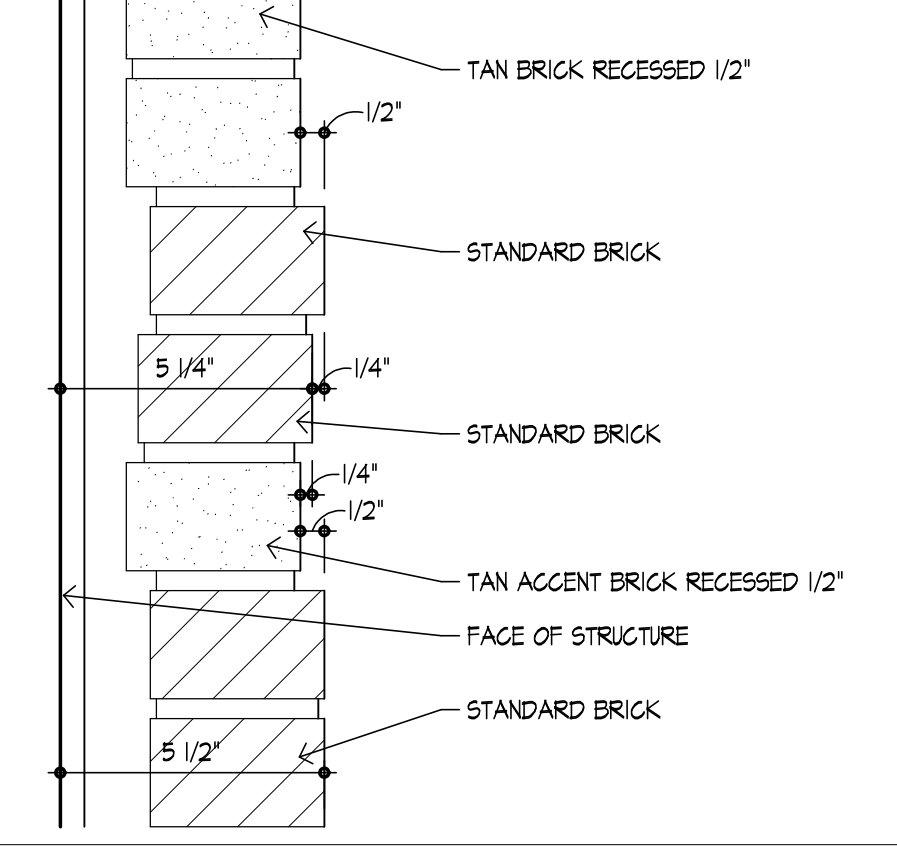
B BRICK COL. SEC. ACCENT COURSE
SCALE 3/4" = 1'-0"



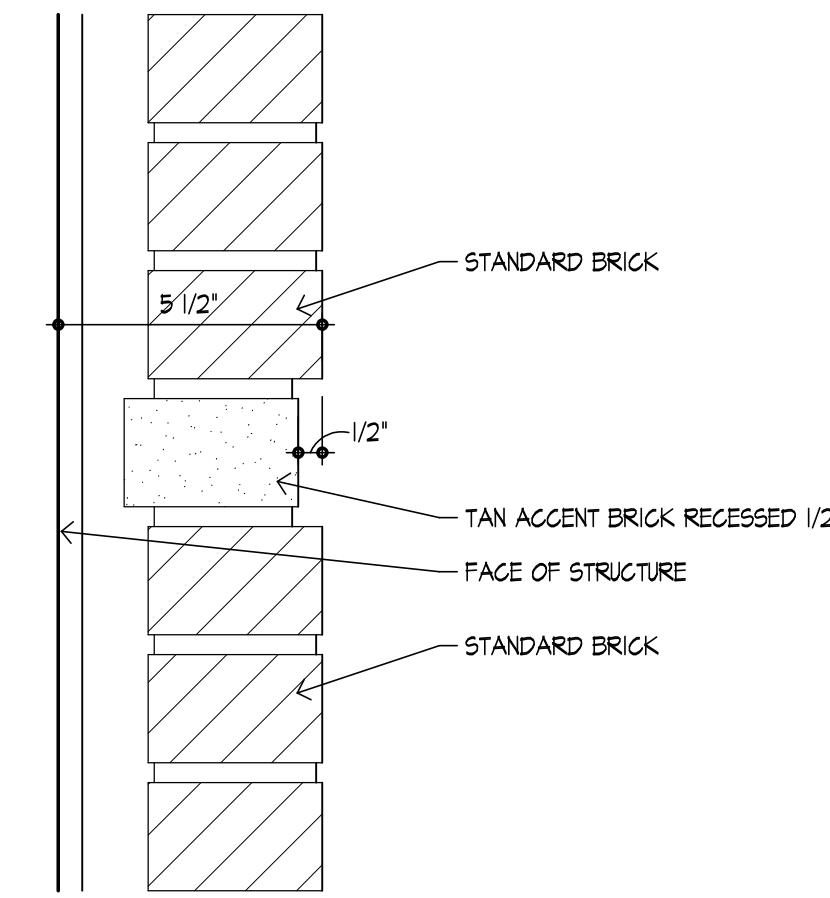
C BRICK COL. SEC. SOLDIER COURSE
SCALE 3/4" = 1'-0"



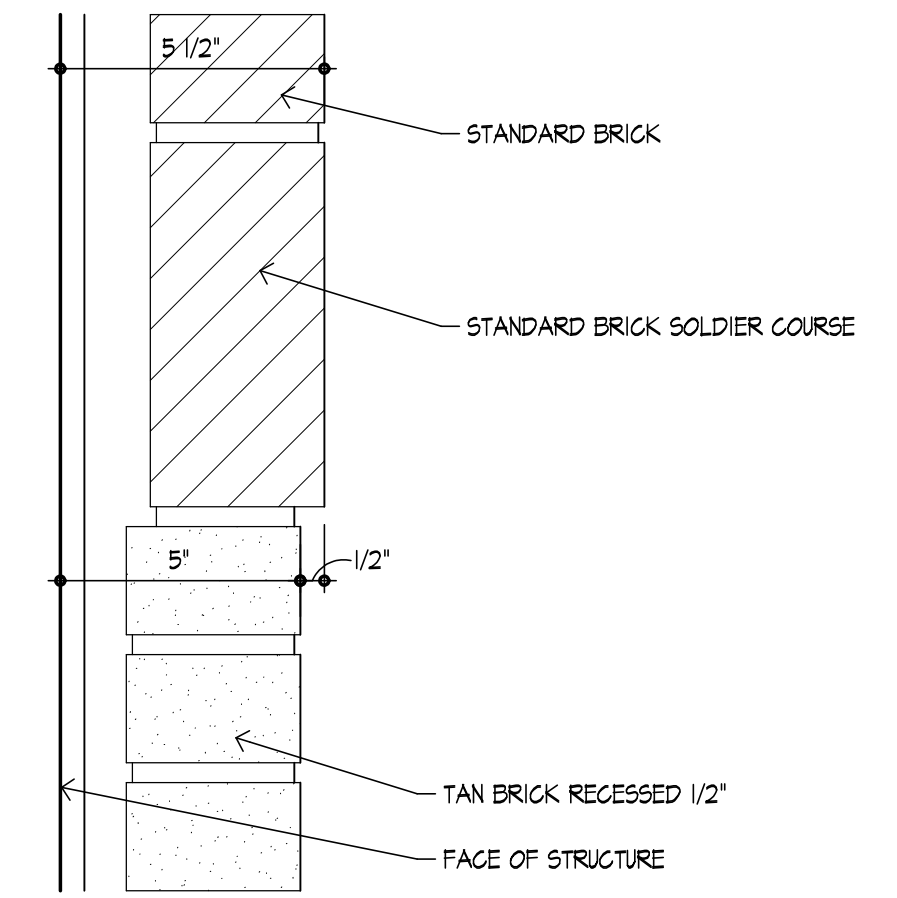
5 METAL CAP DETAIL
SCALE 3" = 1'-0"



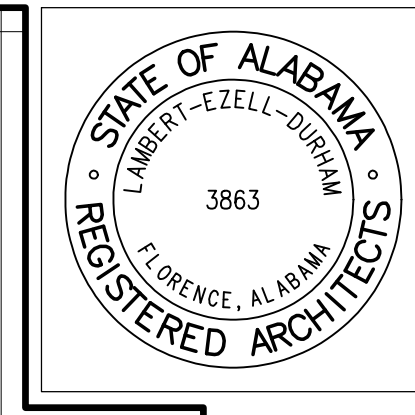
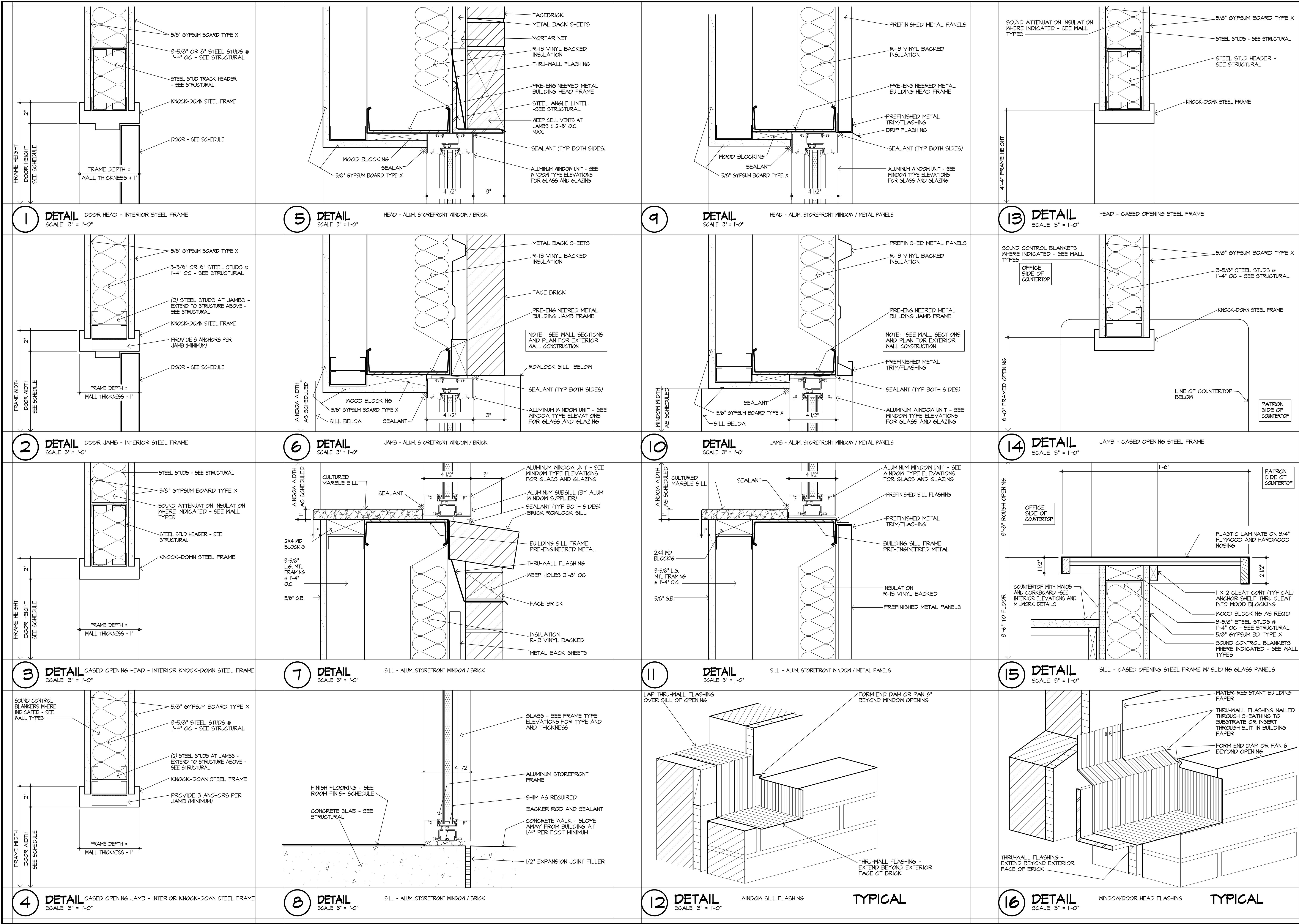
7 BRICK DETAIL
SCALE 3" = 1'-0"



6 ACCENT BRICK DETAIL
SCALE 3" = 1'-0"



8 SOLDIER COURSE BRICK DETAIL
SCALE 3" = 1'-0"



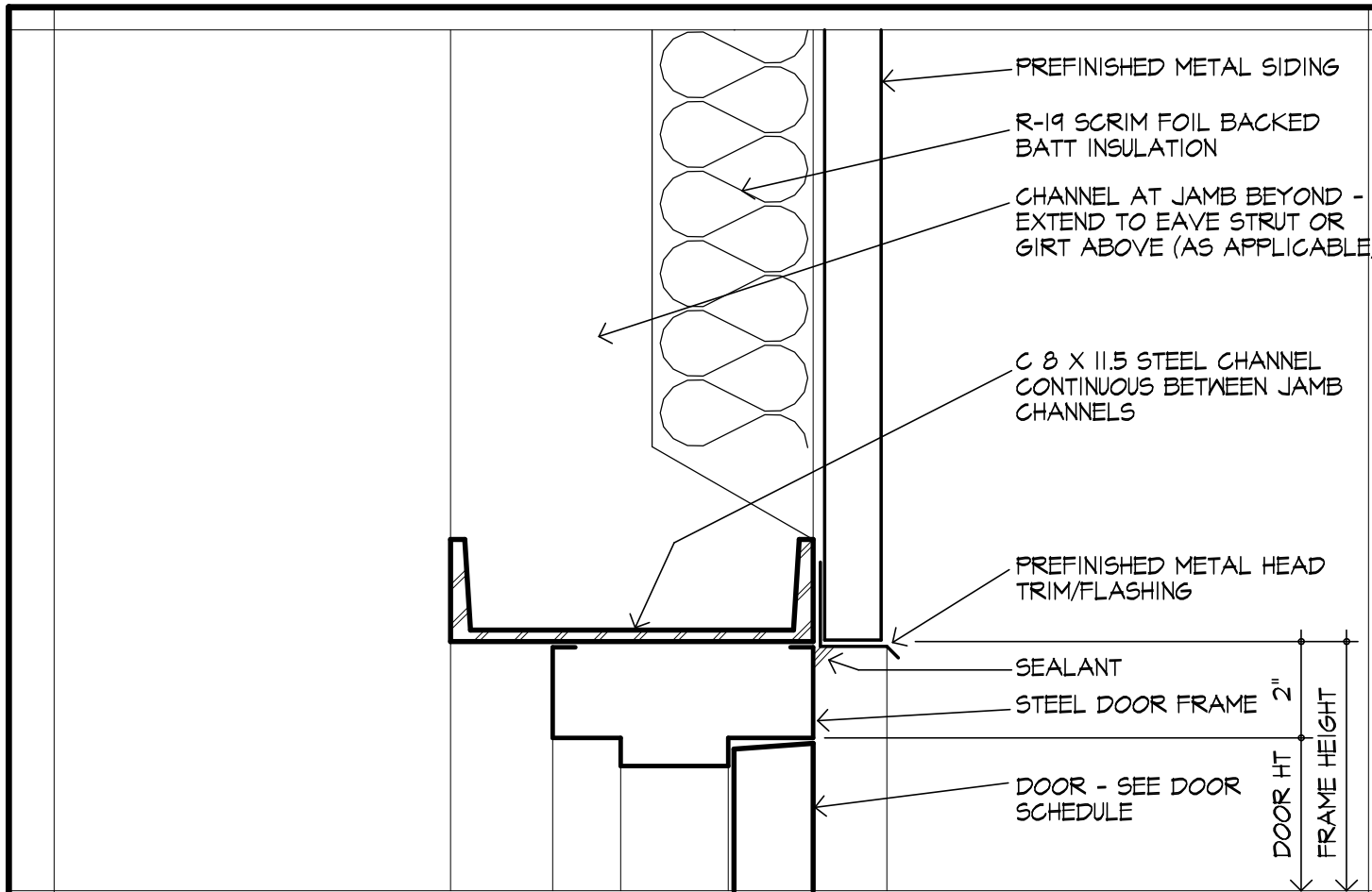
LAMBERT • EZELL • DURHAM
 ARCHITECTURE, LLC
 FLORENCE, ALABAMA 35631
 P.O. BOX 984 401 EAST COLLEGE ST.
 TELEPHONE (256) 161-1100
 WWW.LEDARCHITECTURE.COM

OFFICE AND SHOP BUILDING FOR
RL CONSULTING, INC.
 TUSCUMBIA, ALABAMA

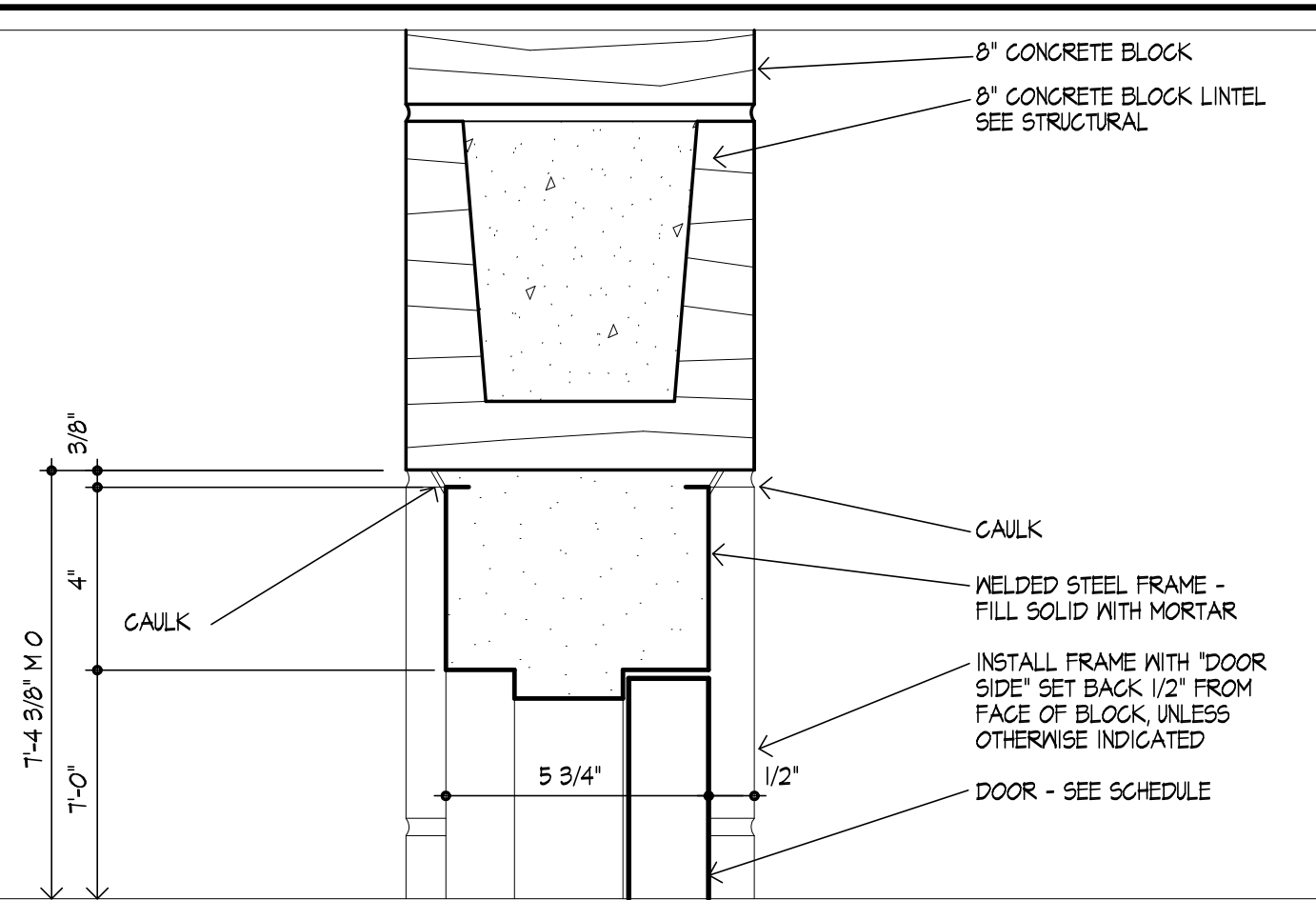
JOB NO: 1860 DATE: 10/14/19
 DRAWN: ERH/JTS/JACE REVISIONS:
 CHECKED: CED

DRAWING TITLE: DOOR AND FRAME DETAILS
 DRAWING NUMBER: **A-4.3**

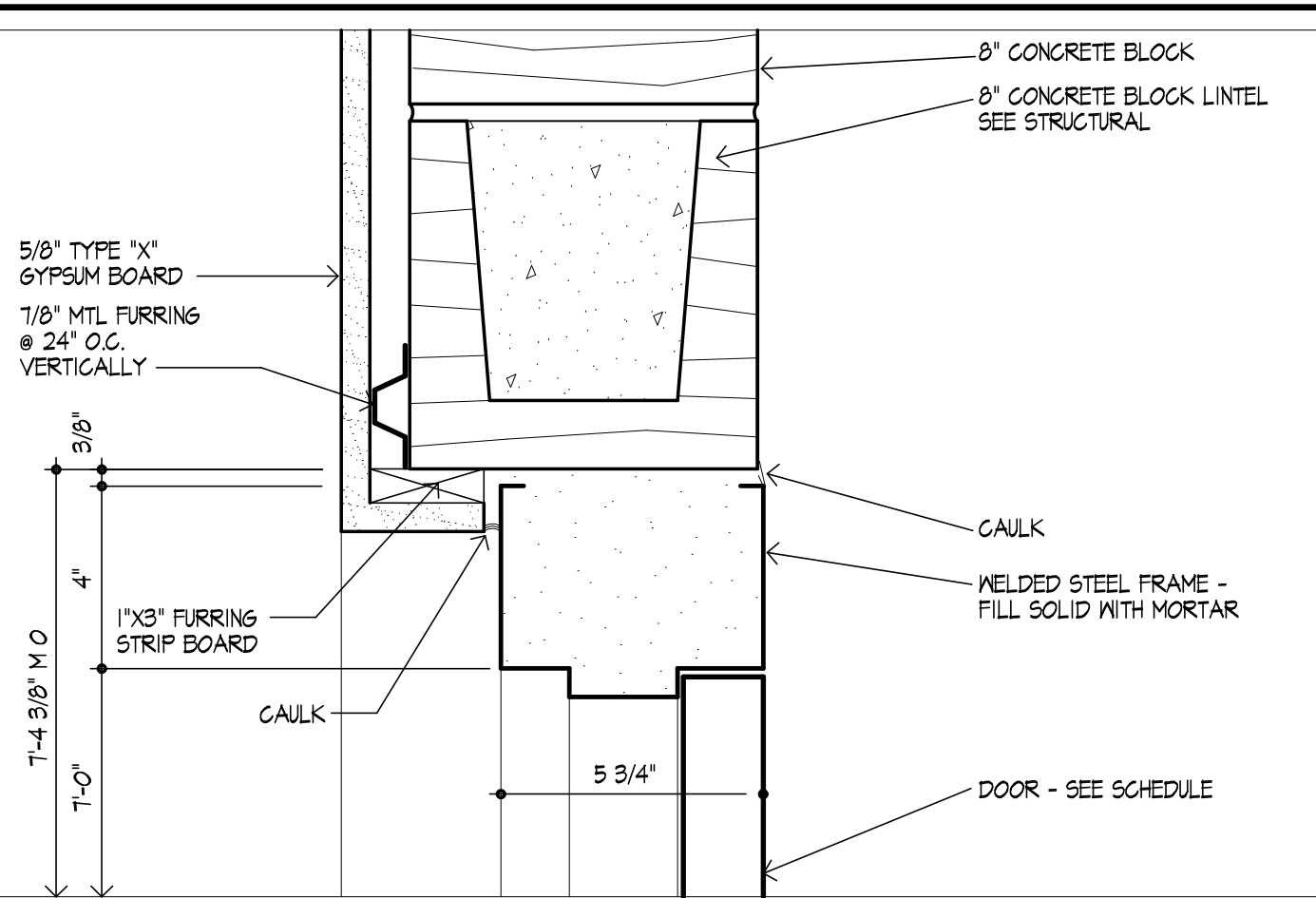
G:\2018\1860 RL CONSULTING BUILDING\1860 WD\ 1860 A-4.4 DOOR AND FRAME DETAILS
 Plot Date: 10/17/2019 Plot Time: 7:24 PM



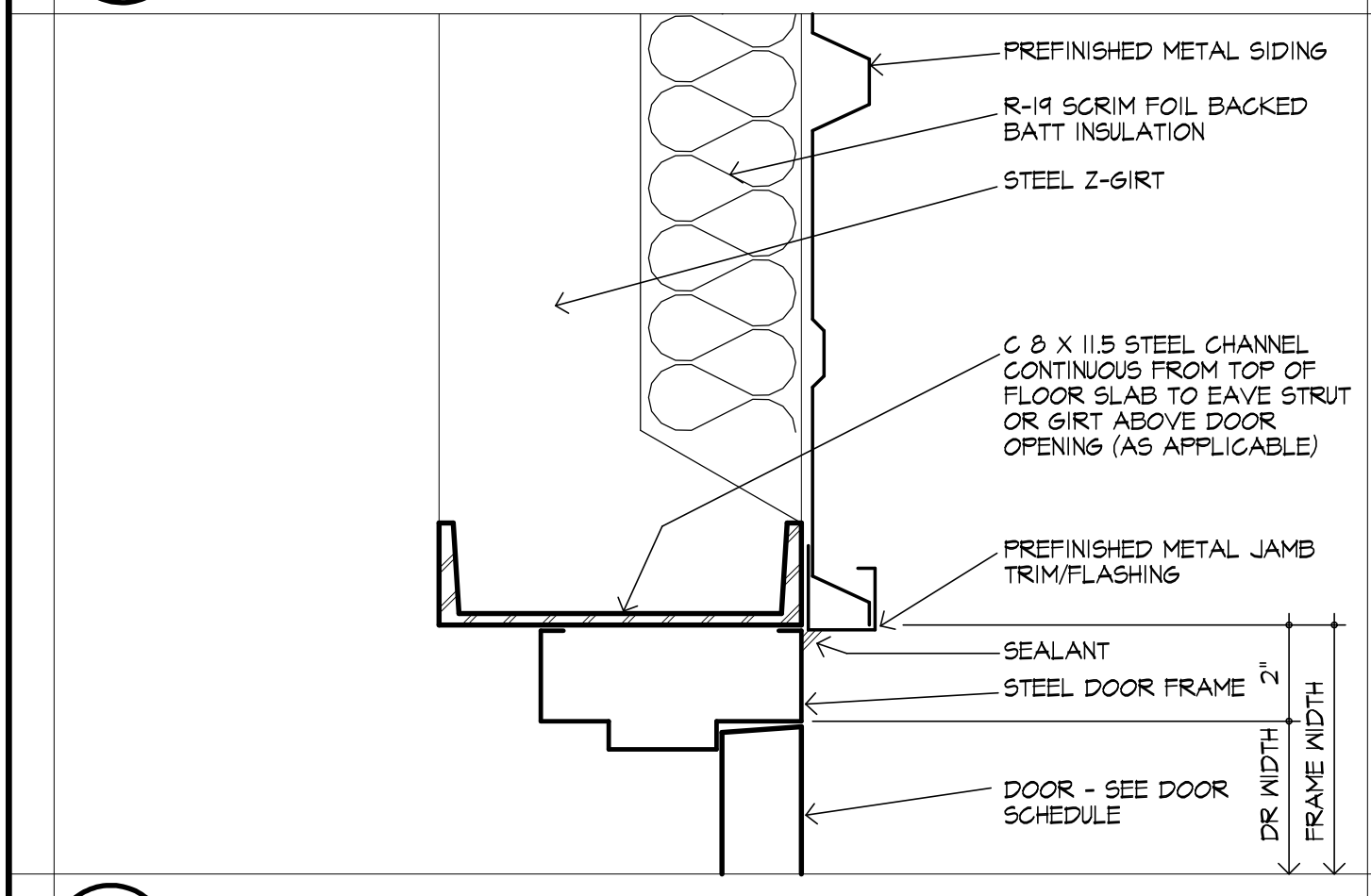
1 DETAIL
 SCALE 3" = 1'-0"
 HEAD - STEEL EXTERIOR DOOR



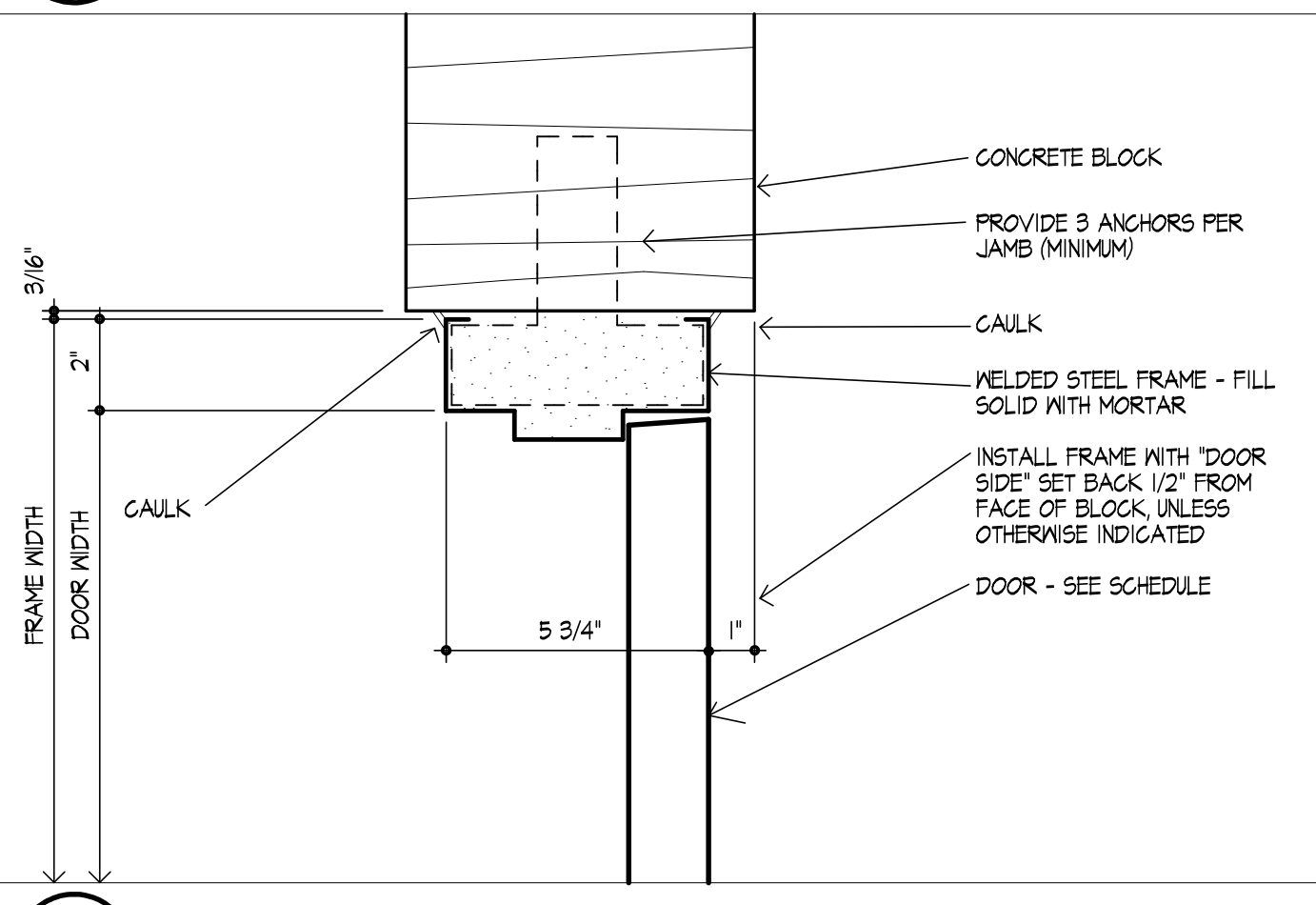
5 DETAIL
 SCALE 3" = 1'-0"
 HEAD - CONCRETE BLOCK WALL



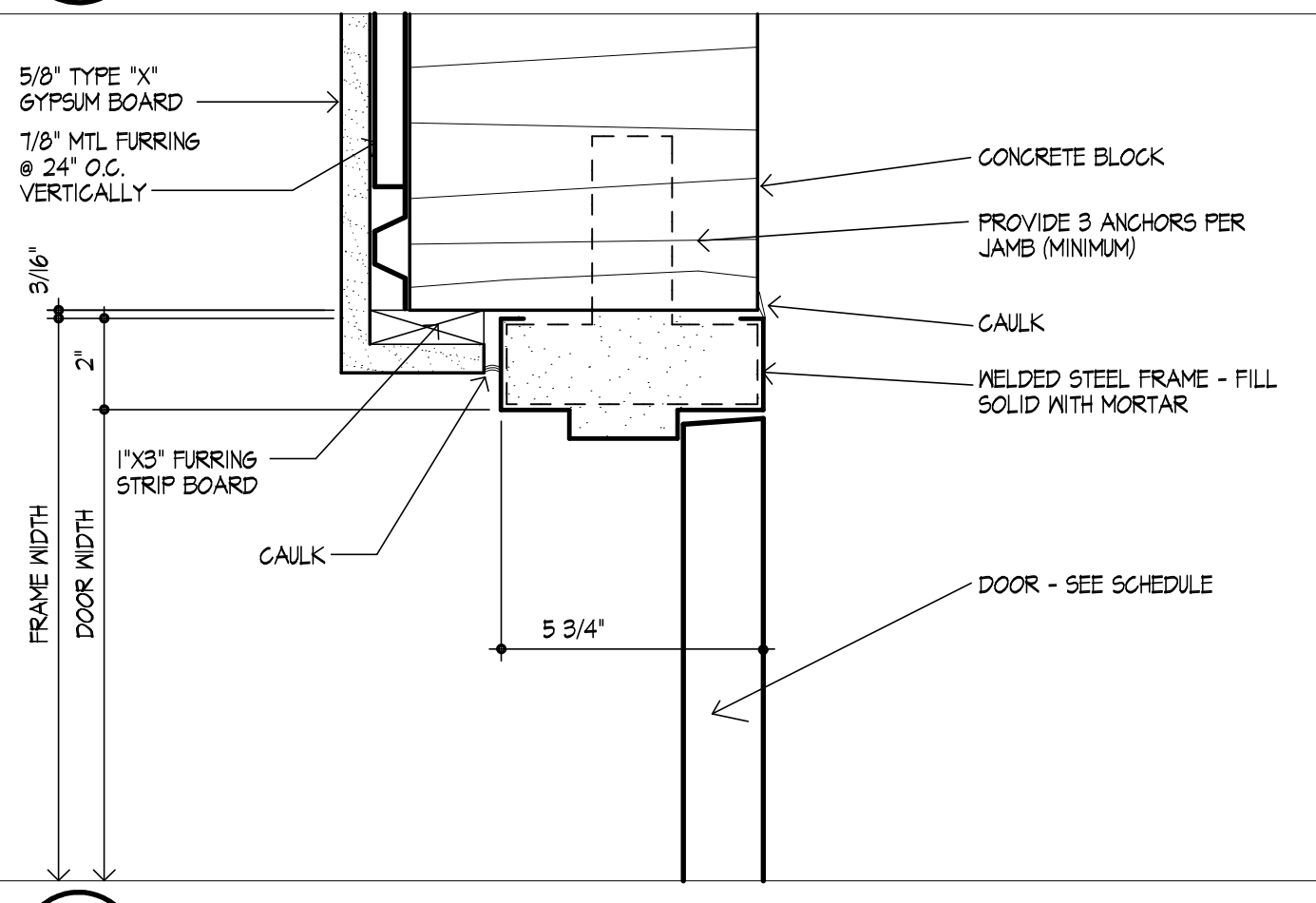
9 DETAIL
 SCALE 3" = 1'-0"
 HEAD - CONCRETE BLOCK WALL



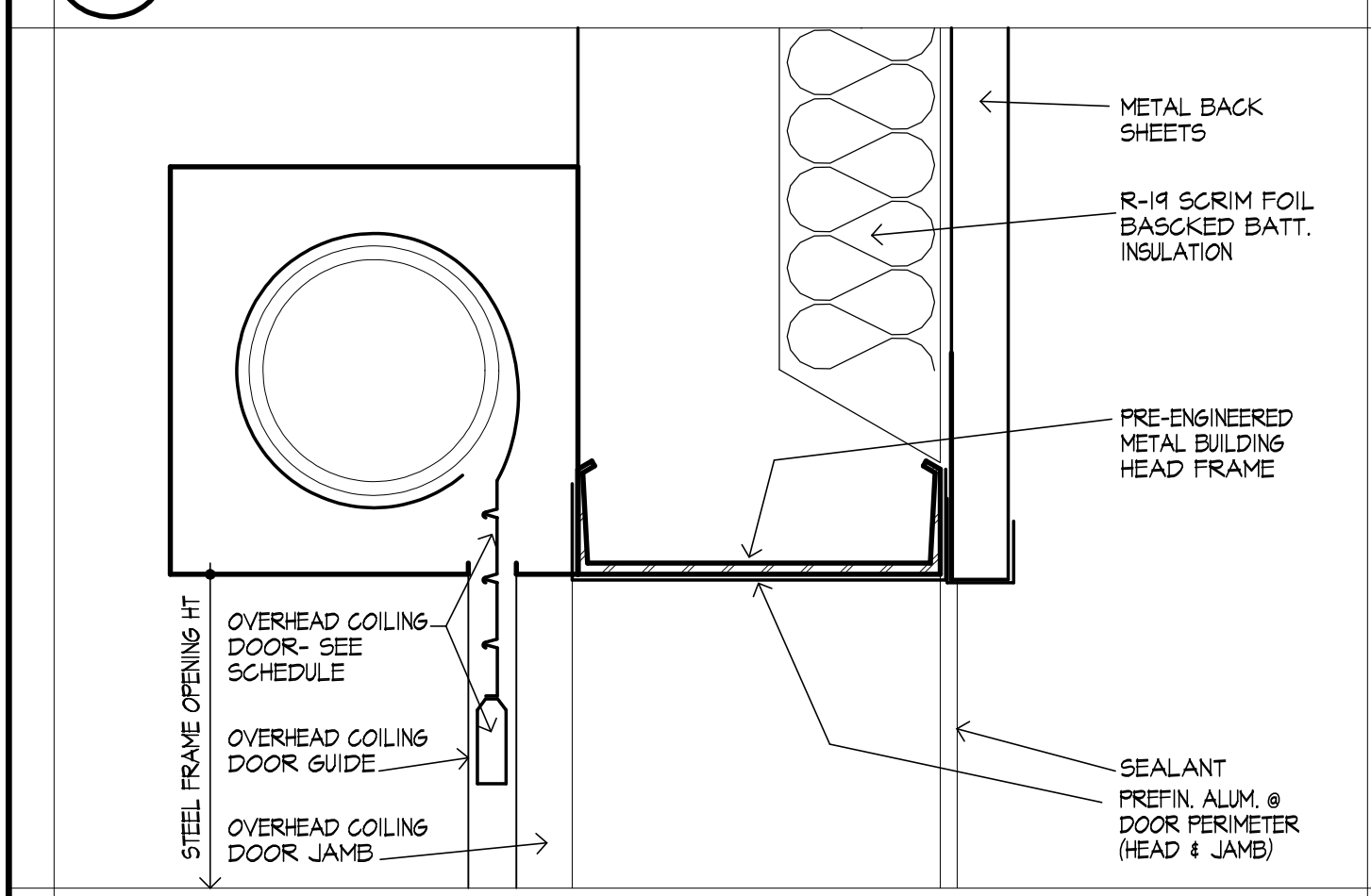
2 DETAIL
 SCALE 3" = 1'-0"
 JAMB - STEEL EXTERIOR DOOR



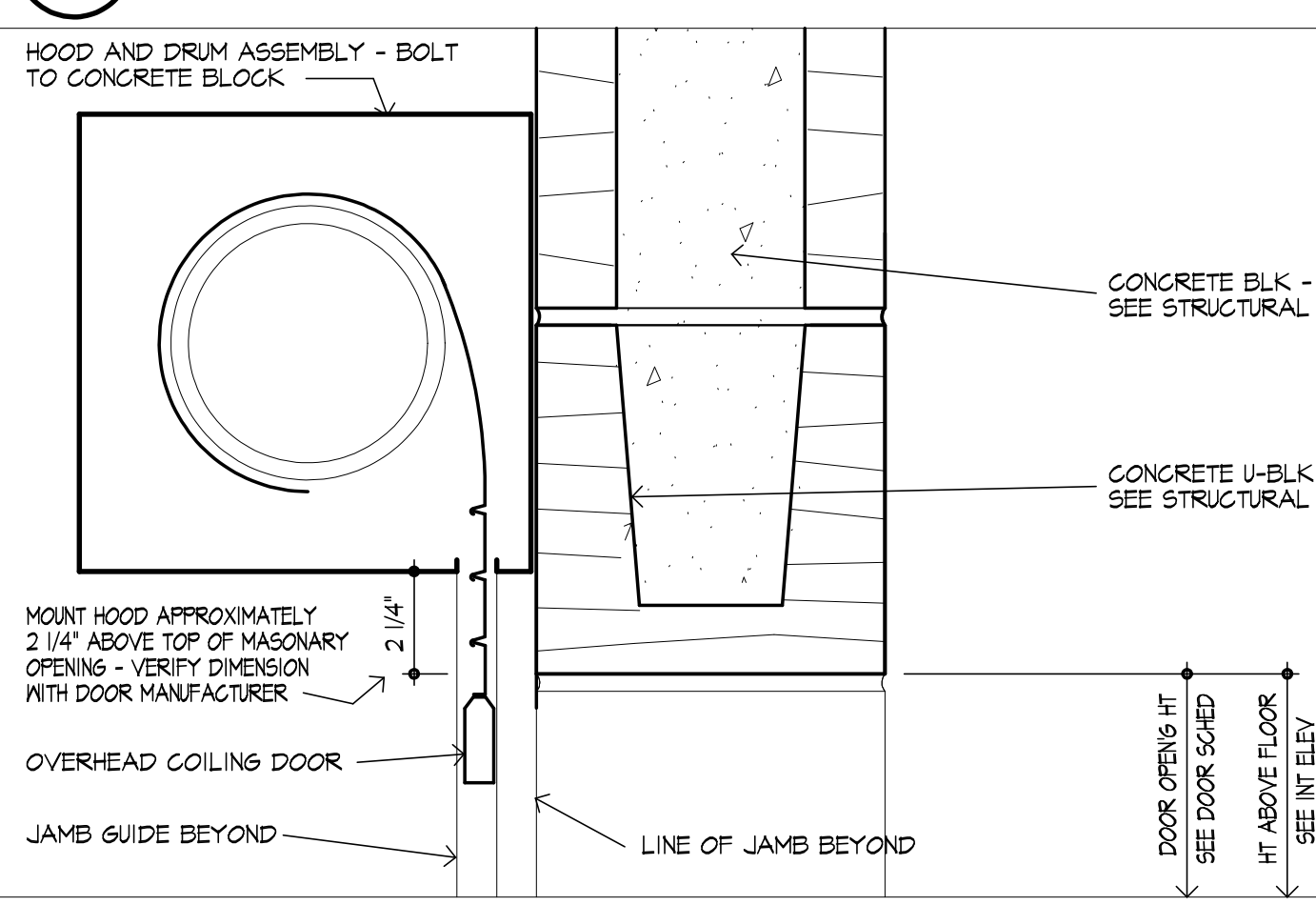
6 DETAIL
 SCALE 3" = 1'-0"
 JAMB - CONCRETE BLOCK WALL



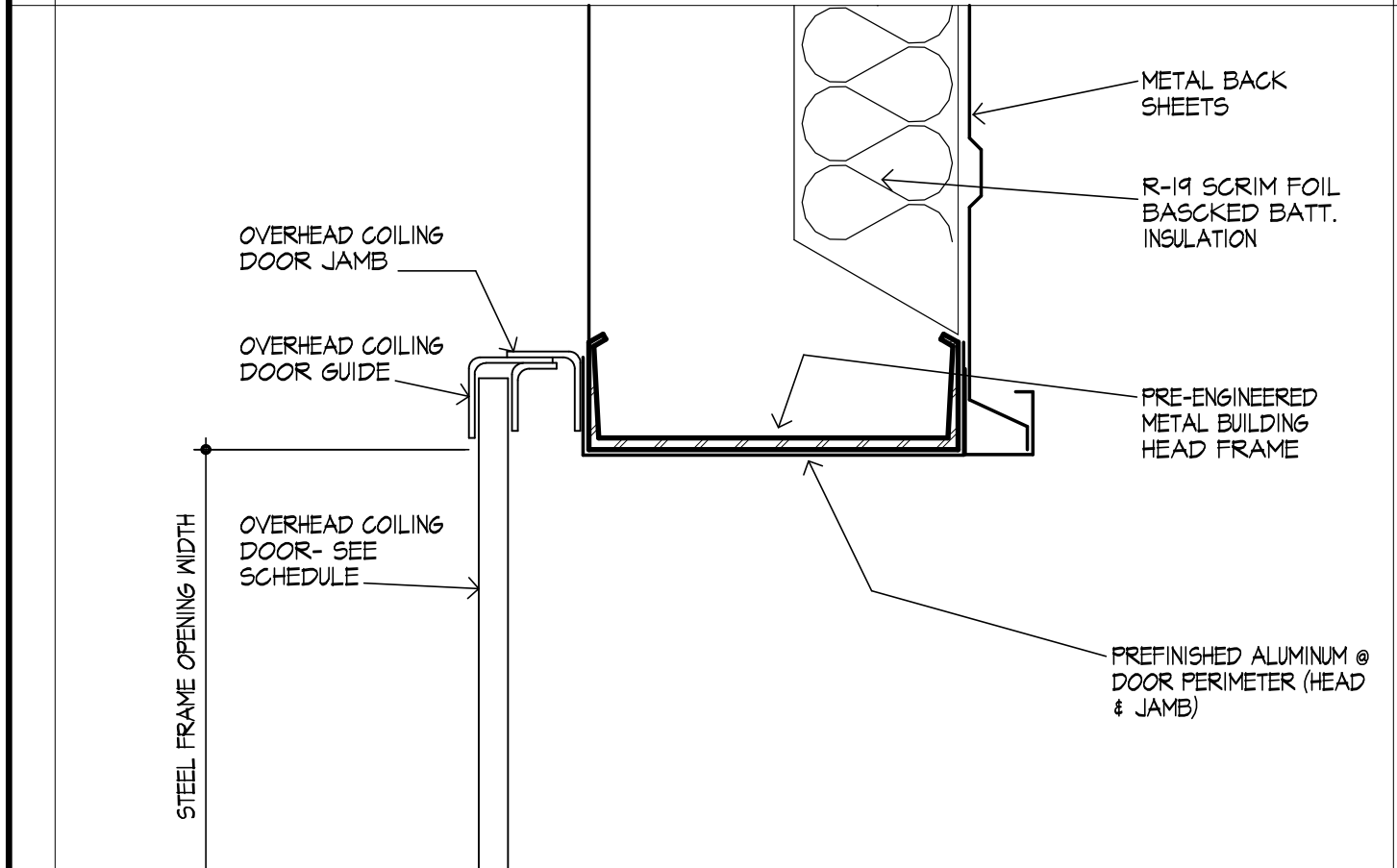
10 DETAIL
 SCALE 3" = 1'-0"
 JAMB - CONCRETE BLOCK WALL



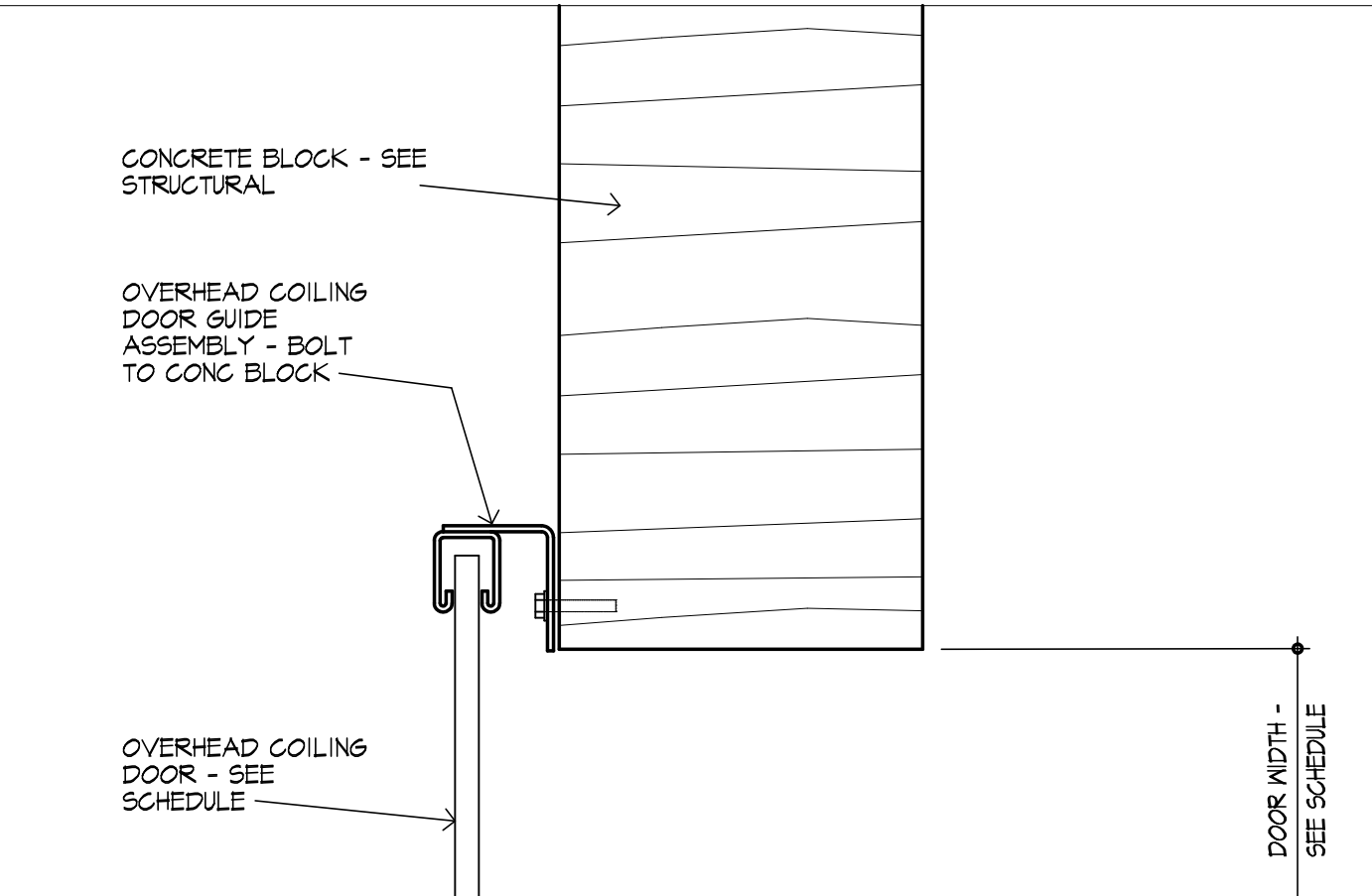
3 DETAIL
 SCALE 3" = 1'-0"
 HEAD - OVERHEAD DOOR AT PRE-ENGINEERED BUILDING



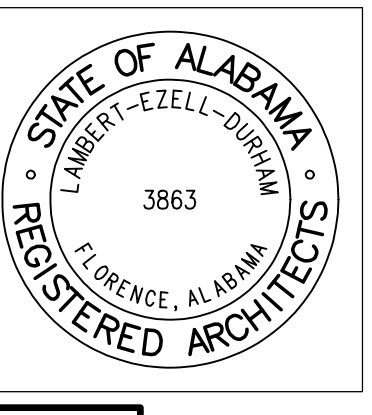
7 DETAIL
 SCALE 3" = 1'-0"
 HEAD - OVERHEAD COILING DOOR



4 DETAIL
 SCALE 3" = 1'-0"
 JAMB - OVERHEAD DOOR AT PRE-ENGINEERED BUILDING



8 DETAIL
 SCALE 3" = 1'-0"
 JAMB - OVERHEAD COILING DOOR



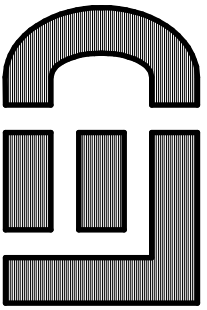
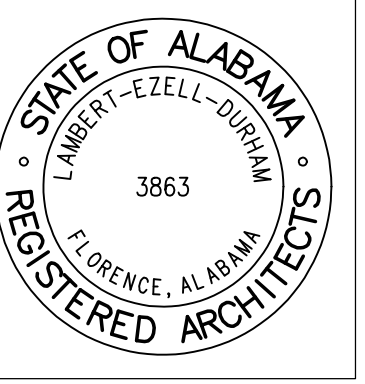
LAMBERT • EZELL • DURHAM
 ARCHITECTURE, LLC
 FLORENCE, ALABAMA 36631
 P.O. BOX 984 401 EAST COLLEGE ST.
 TUSCUMBIA, ALABAMA
 TELEPHONE (256) 161-1100
 WWW.LEDARCHITECTURE.COM

OFFICE AND SHOP BUILDING FOR
RL CONSULTING, INC.
 TUSCUMBIA, ALABAMA

JOB NO: 1860
 DATE: 10/14/19
 DRAWN: ERH/JTS/JACE
 CHECKED: CED
 REVISIONS:

DRAWING TITLE
DOOR AND FRAME DETAILS

DRAWING NUMBER
A-4.4



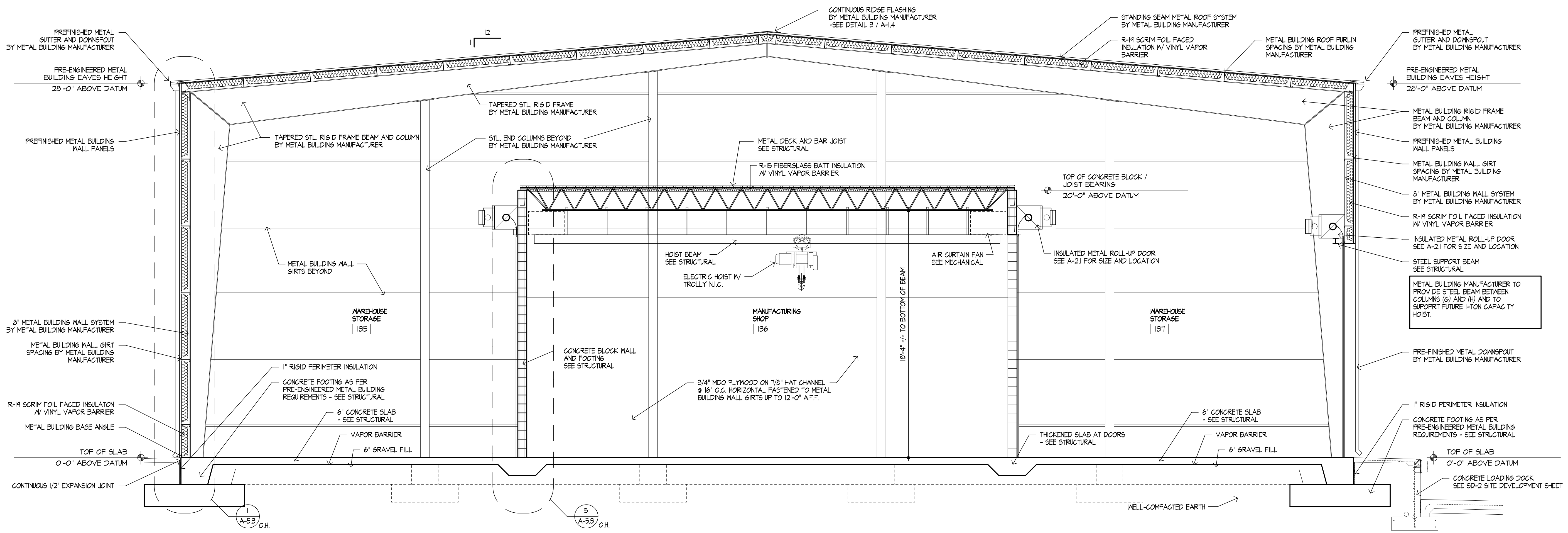
LAMBERT-EZELL-DURHAM
ARCHITECTURE, LLC
FLORENCE, ALABAMA 36631
P.O. BOX 494 401 EAST COLLEGE ST.
TUSCUMBIA, ALABAMA 36087
TELEPHONE (256) 161-1100
WWW.LEDARCHITECTURE.COM

OFFICE AND SHOP BUILDING FOR
RL CONSULTING, INC.
TUSCUMBIA, ALABAMA

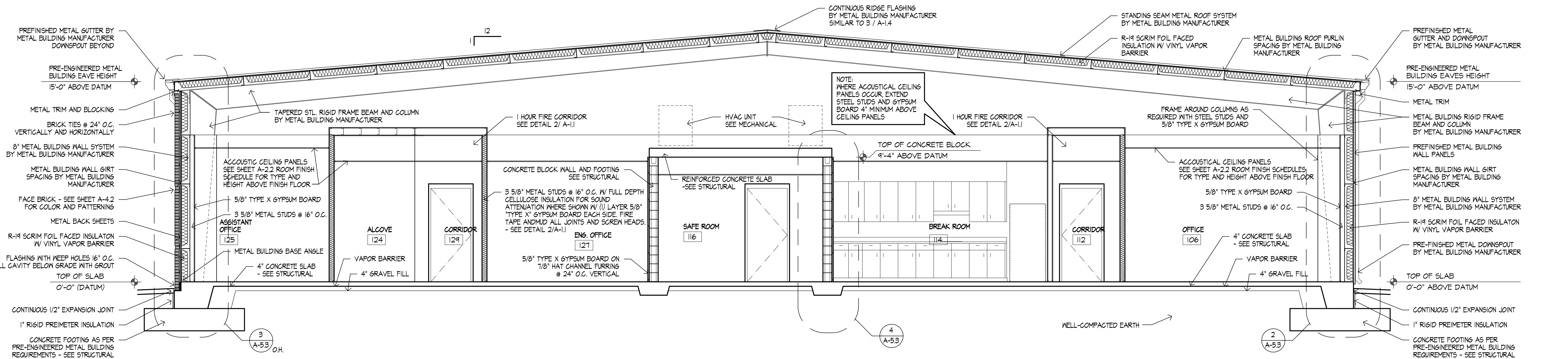
JOB NO: 1860 DATE: 10/14/19
DRAWN: ERH/JTS/JACE REVISIONS:
CHECKED: CED

DRAWING TITLE
BUILDING CROSS SECTION

DRAWING NUMBER
A-5.1

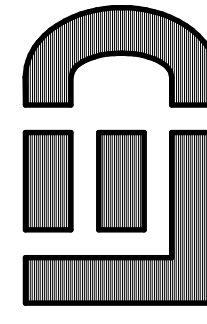


A BUILDING SECTION A-A
SCALE 1/4" = 1'-0"



B BUILDING SECTION B-B
SCALE 1/4" = 1'-0"

File Name: G:\2018\1860 RL CONSULTING BUILDING\1860 WD\1860 A-5.1 BUILDING SECTIONS
Plot Date: 10/17/2019 Plot Time: 7:25 PM

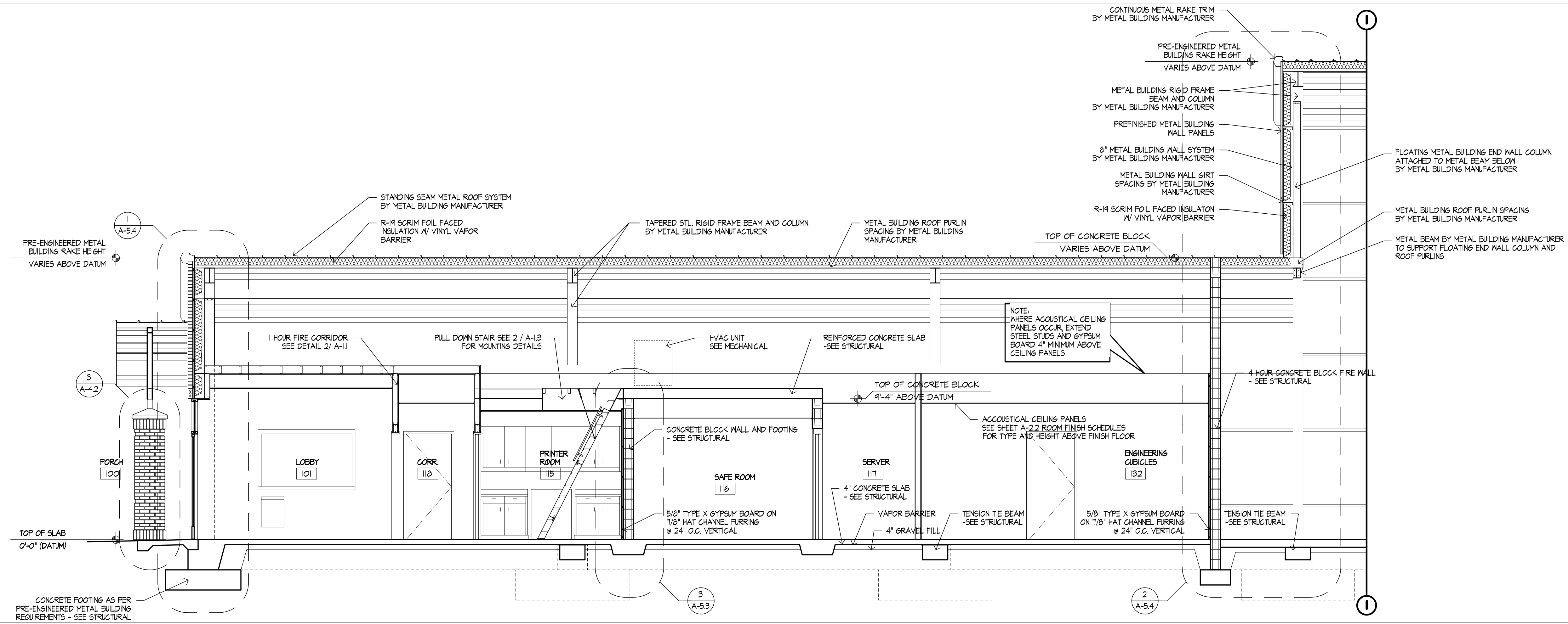


LAMBERT • EZELL • DURHAM
ARCHITECTURE, LLC
FLORENCE, ALABAMA 36631
P.O. BOX 984 401 EAST COLLEGE ST.
TELEPHONE (256) 161-1100
WWW.LEDARCHITECTURE.COM

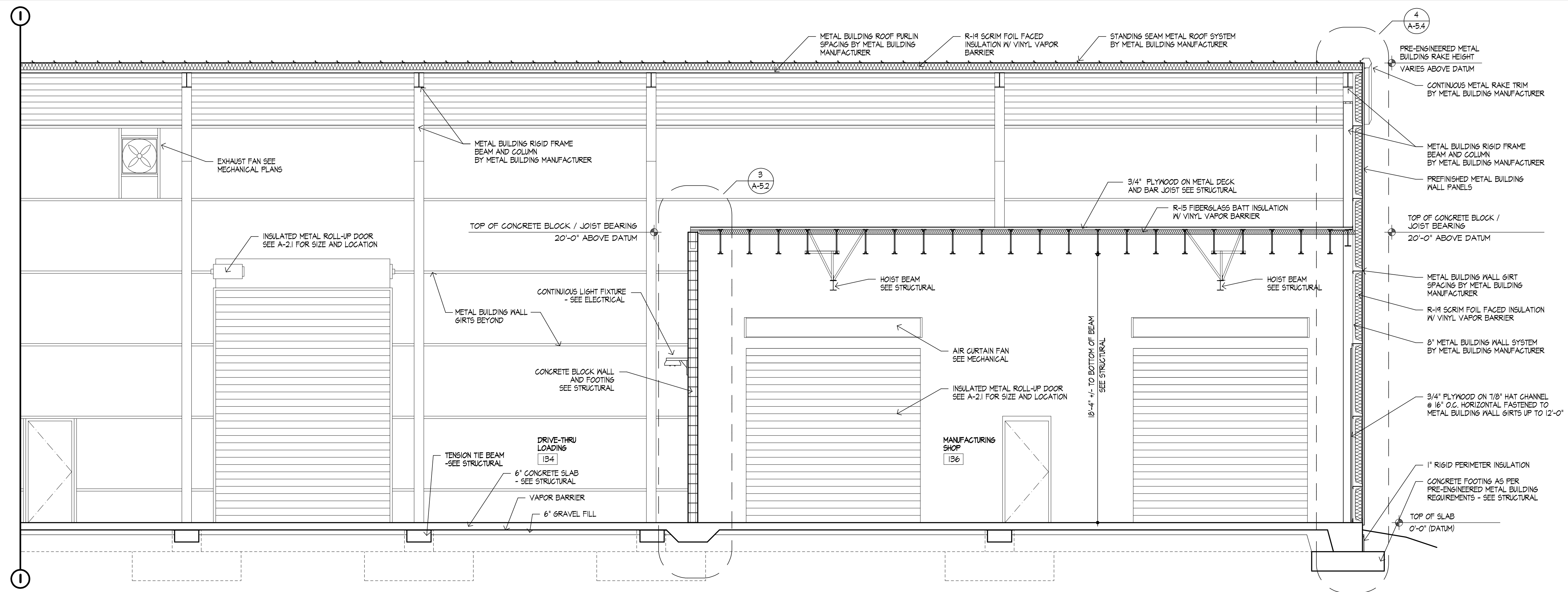
OFFICE AND SHOP BUILDING FOR
RL CONSULTING, INC.
TUSCUMBIA, ALABAMA

JOB NO: 1860 DATE: 10/14/19
DRAWN: ERH/JTS/JACE REVISIONS:
CHECKED: CED

DRAWING TITLE
BUILDING SECTION
DRAWING NUMBER
A-5.2



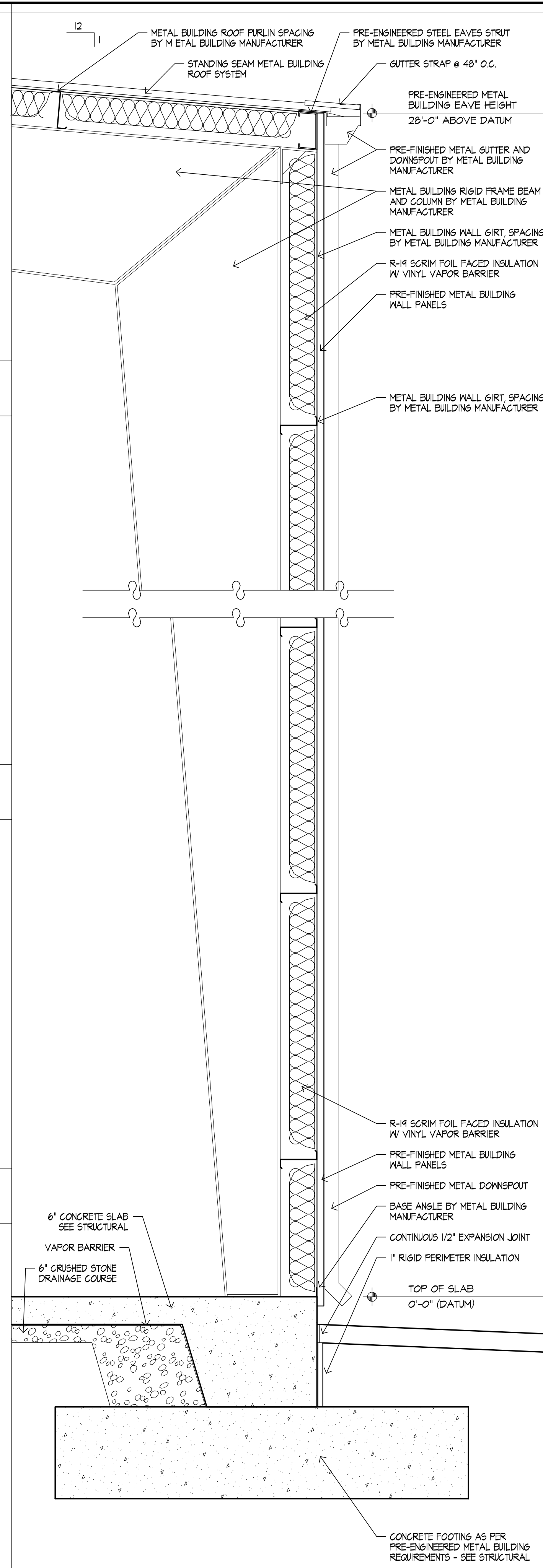
C BUILDING SECTION C-C
SCALE 1/4" = 1'-0"



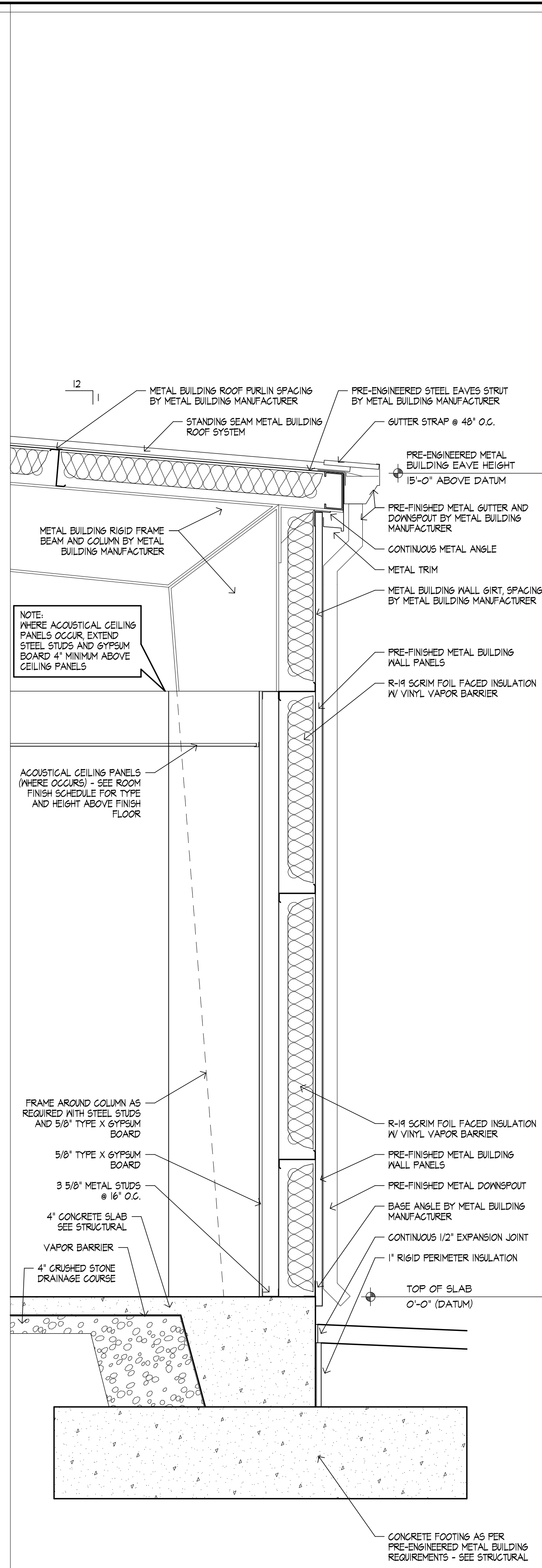
C BUILDING SECTION C-C
SCALE 1/4" = 1'-0"

File Name: G:\2018\1860 RL CONSULTING BUILDING\1860 WD\1860 A-5.2 BUILDING SECTIONS
Plot Date: 10/17/2019 Plot Time: 7:25 PM

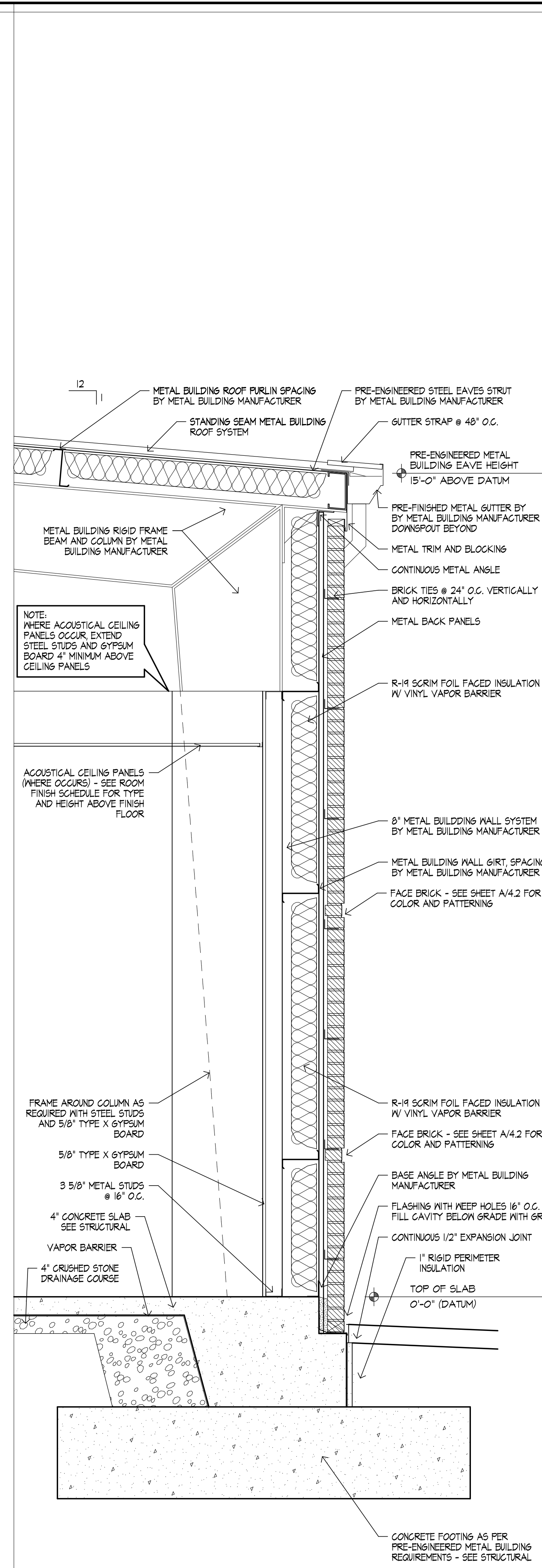
File Name: G:\2018\1860 RL CONSULTING BUILDING\1860 WD\1860 A-5.3 WALL SECTIONS AND DETAILS
 Plot Date: 10/17/2019 Plot Time: 7:26 PM



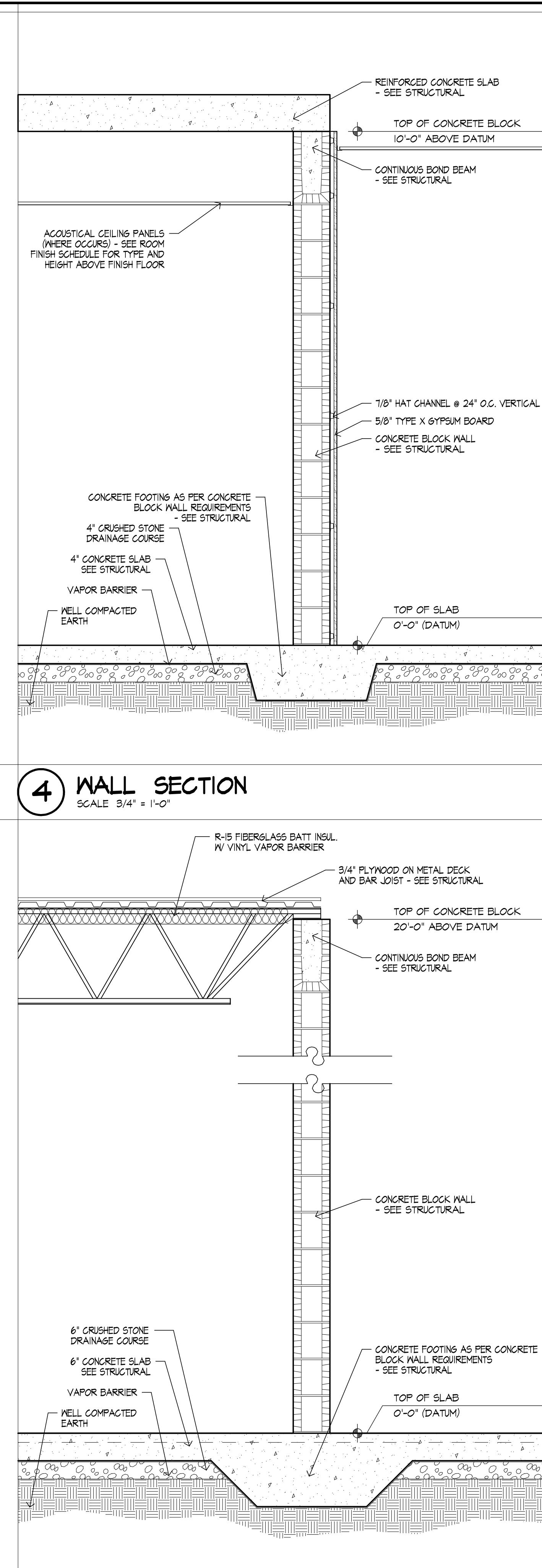
1 WALL SECTION
 SCALE 3/4" = 1'-0"



2 WALL SECTION
 SCALE 3/4" = 1'-0"

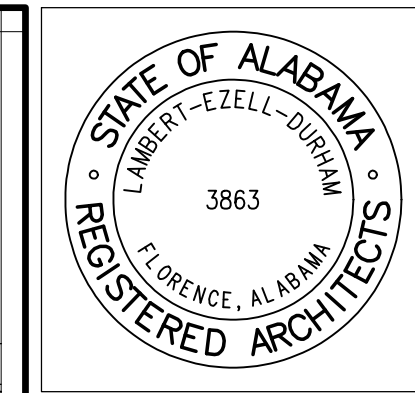


3 WALL SECTION
 SCALE 3/4" = 1'-0"



4 WALL SECTION
 SCALE 3/4" = 1'-0"

5 WALL SECTION
 SCALE 3/4" = 1'-0"



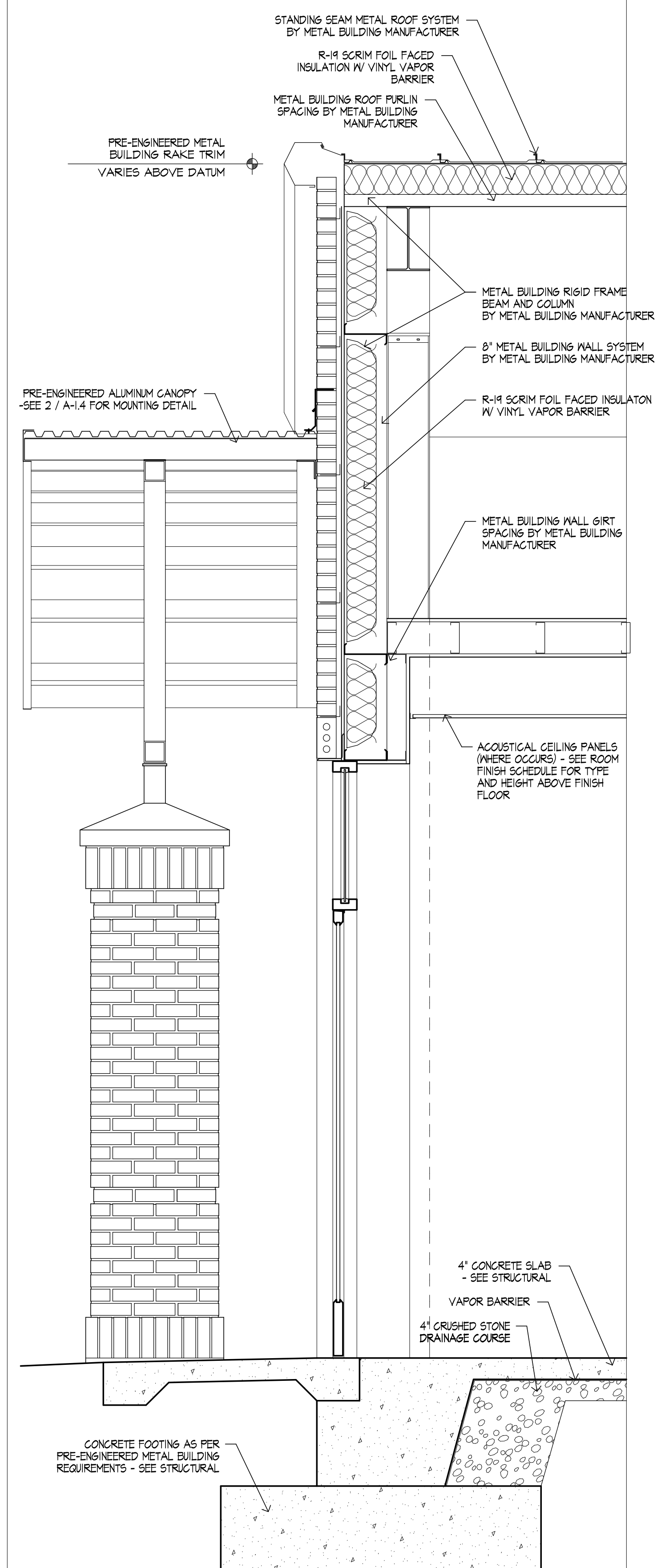
LAMBERT • EZELL • DURHAM
 ARCHITECTURE, LLC
 FLORENCE, ALABAMA 35631
 P.O. BOX 934 401 EAST COLLEGE ST.
 TUSCUMBIA, ALABAMA 35688
 TELEPHONE (256) 161-1100
 WWW.LEDARCHITECTURE.COM

OFFICE AND SHOP BUILDING FOR
RL CONSULTING, INC.
 TUSCUMBIA, ALABAMA

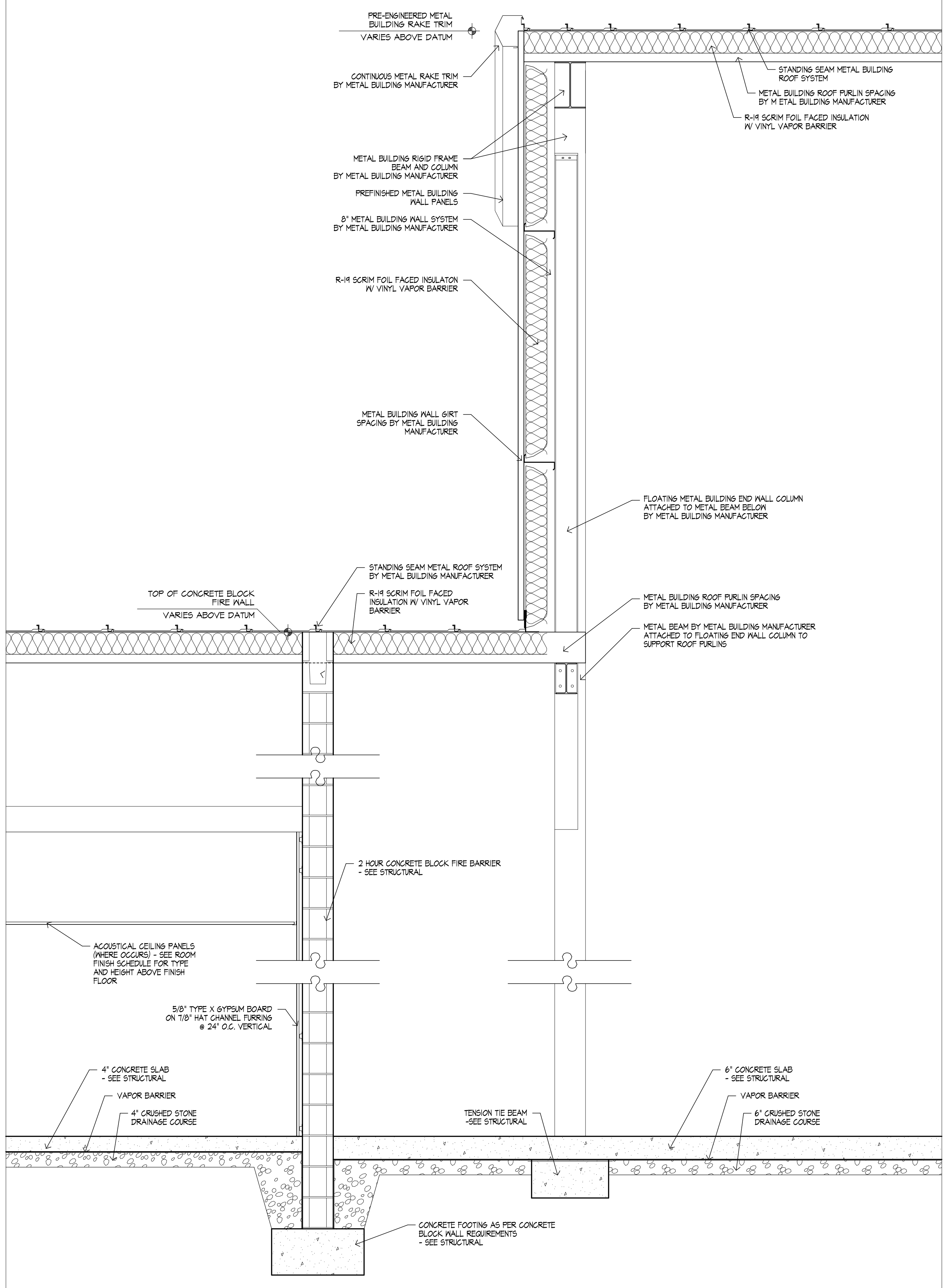
JOB NO: 1860 DATE: 10/14/19
 DRAWN: ERH/JTS/JACE REVISIONS:
 CHECKED: CED

DRAWING TITLE
WALL SECTIONS AND DETAILS
 DRAWING NUMBER
A-5.3

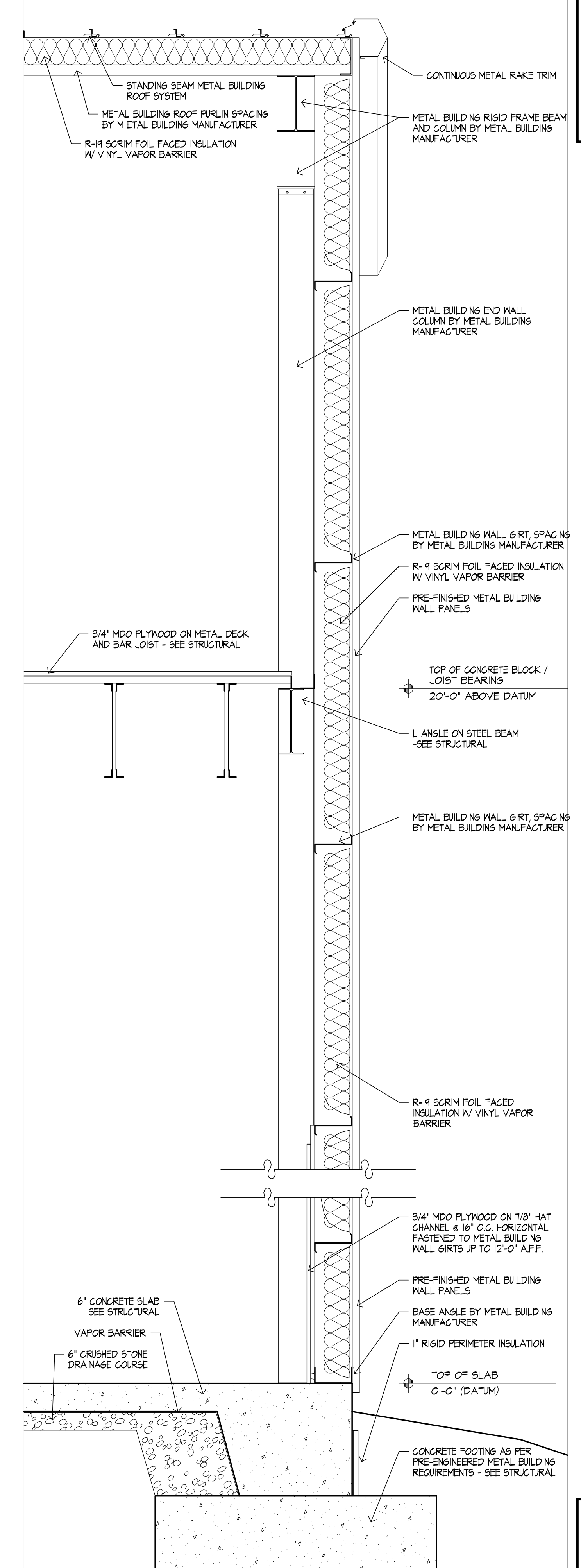
File Name: G:\2018\1860 RL CONSULTING BUILDING\1860 WD\1860 A-5.4 WALL SECTIONS AND DETAILS
 Plot Date: 10/17/2019
 Plot Time: 7:27 PM



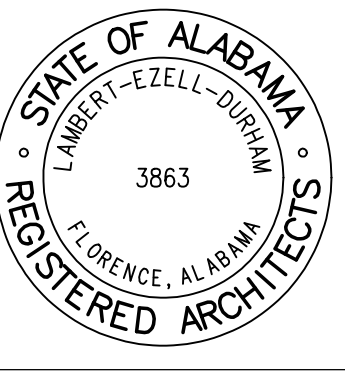
1 WALL SECTION
 SCALE 3/4" = 1'-0"
 ENDWALL AT OFFICE BUILDING



2 WALL SECTION
 SCALE 3/4" = 1'-0"
 INTERIOR 2-HR FIRE BARRIER



3 WALL SECTION
 SCALE 3/4" = 1'-0"
 END WALL SECTION AT SHOP



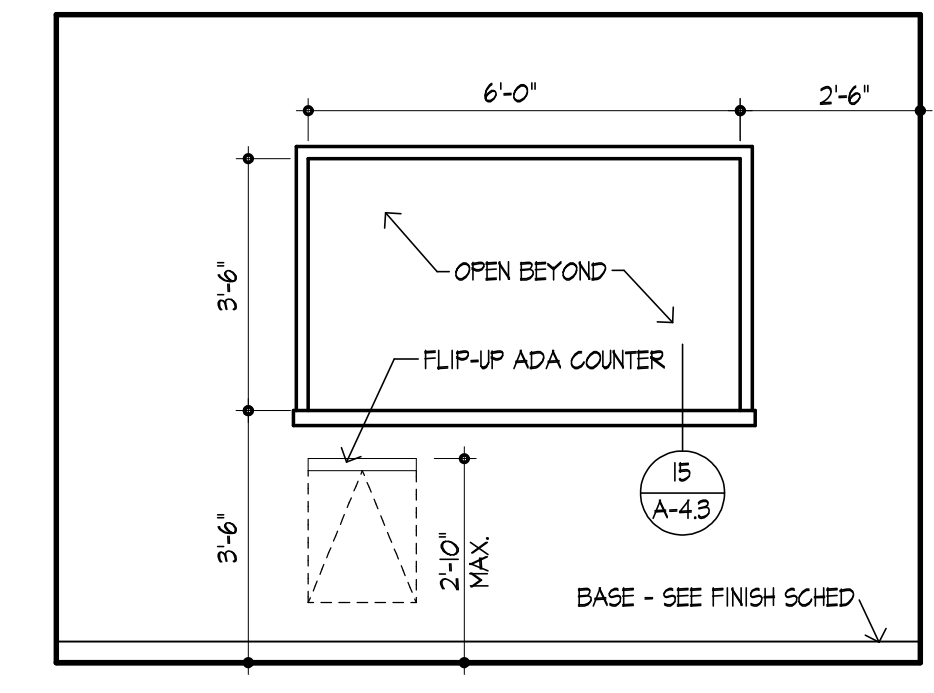
LAMBERT • EZELL • DURHAM
 ARCHITECTURE, LLC
 FLORENCE, ALABAMA 36631
 P.O. BOX 934 401 EAST COLLEGE ST.
 TUSCUMBIA, ALABAMA
 TELEPHONE (256) 161-1100
 WWW.LEDARCHITECTURE.COM

OFFICE AND SHOP BUILDING FOR
RL CONSULTING, INC.
 TUSCUMBIA, ALABAMA

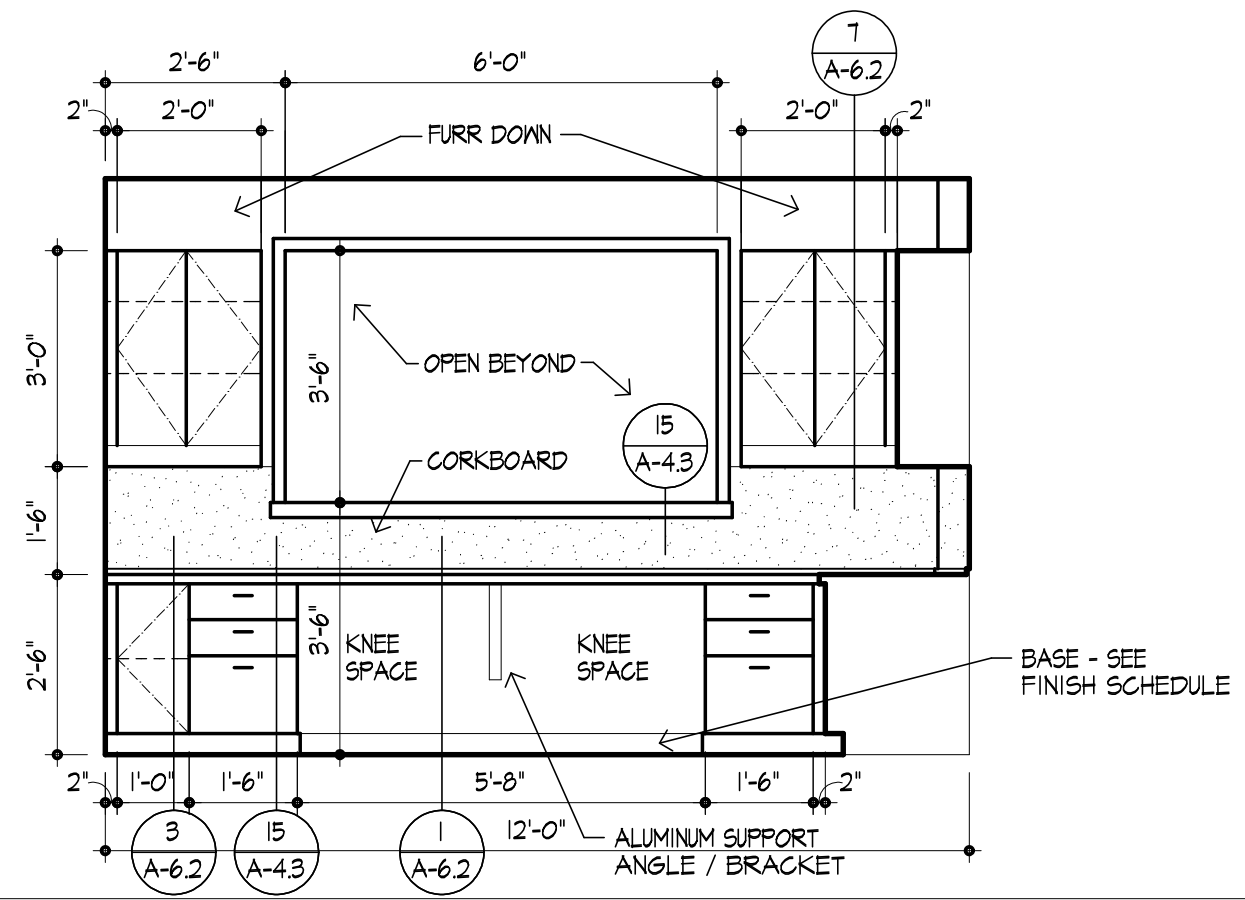
JOB NO: 1860
 DATE: 10/14/19
 DRAWN: ERH/JTS/JACE
 CHECKED: CED
 REVISIONS: REVISIONS

DRAWING TITLE
WALL SECTIONS AND DETAILS
 DRAWING NUMBER
A-5.4

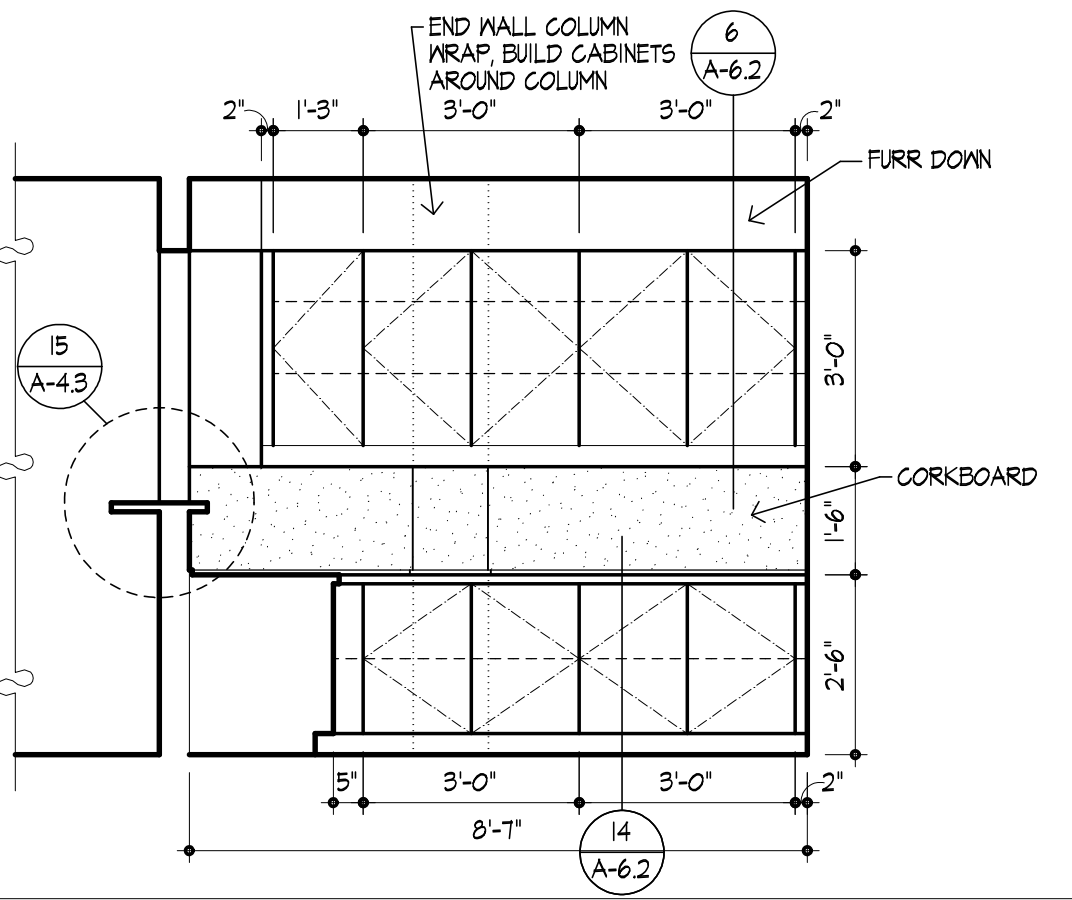
File Name: G:\2018\1860 RL CONSULTING BUILDING\1860 WD\1860 A-6.1 INTERIOR ELEVATIONS
Plot Date: 10/17/2019 Plot Time: 7:30 PM



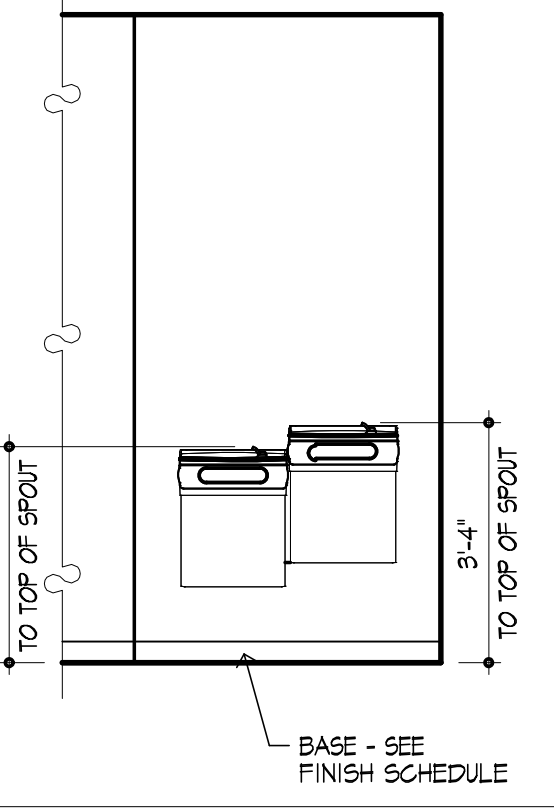
1 ELEVATION
LOBBY 101



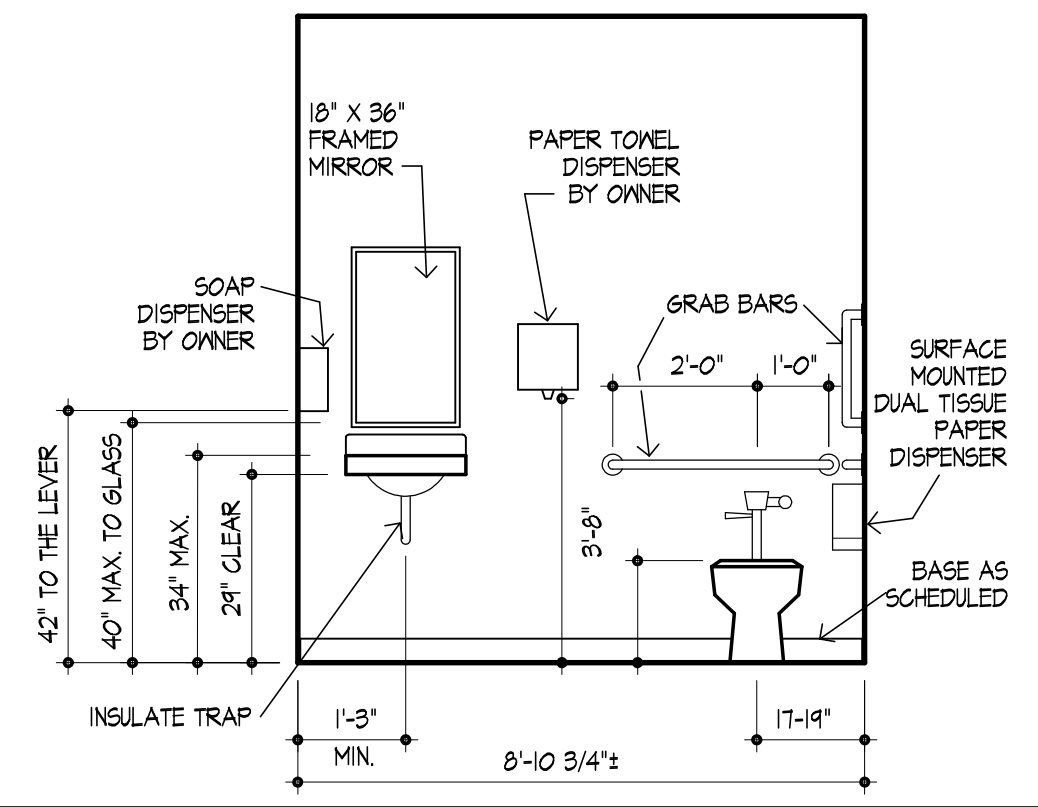
2 ELEVATION
RECEPTION 119



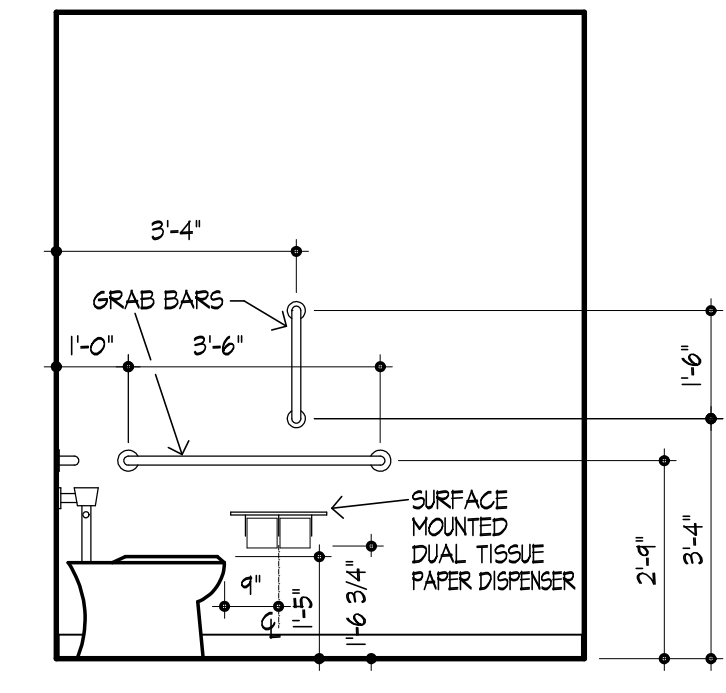
3 ELEVATION
RECEPTION 119



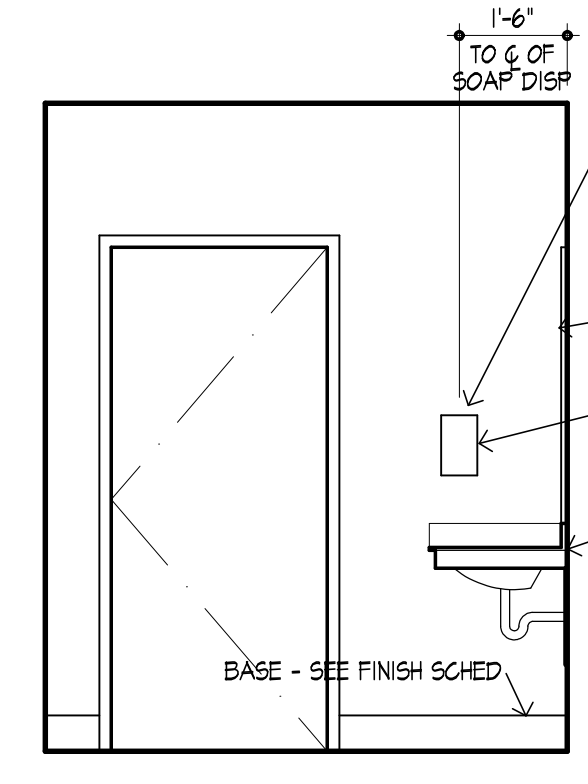
4 ELEVATION
ALCOVE 108



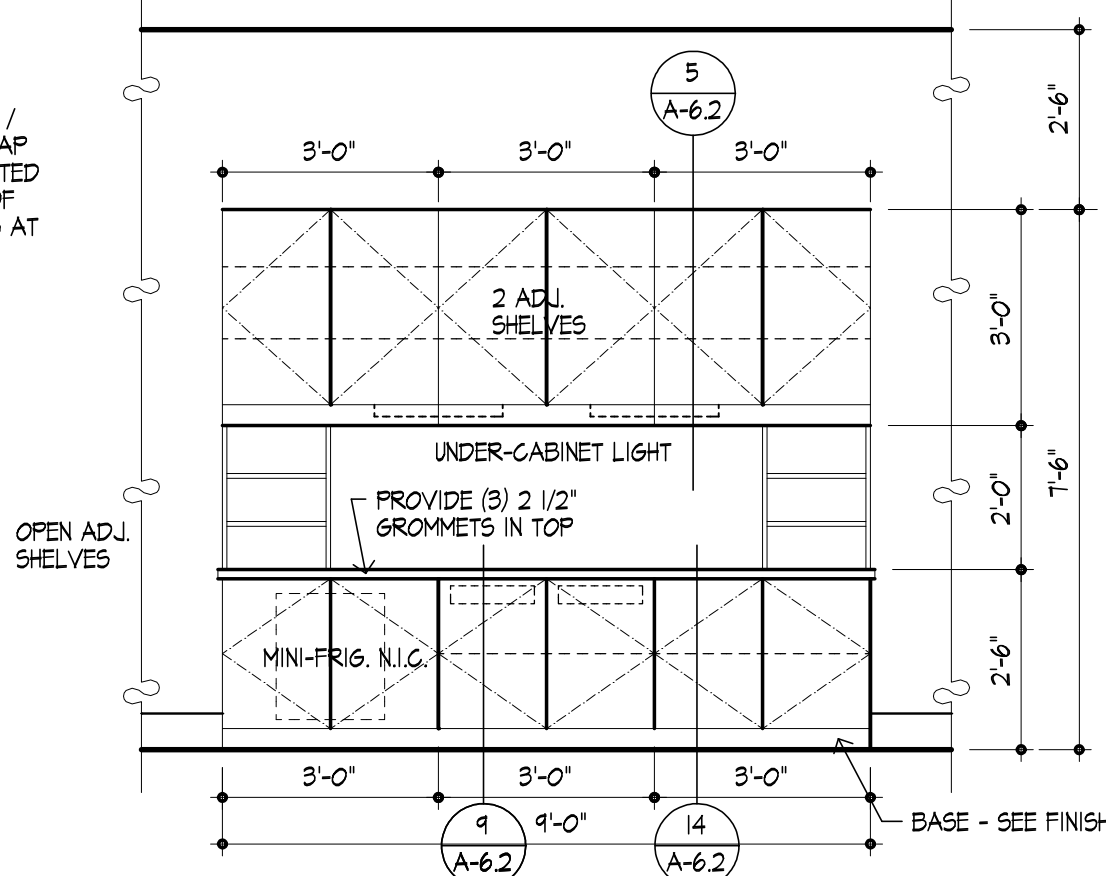
5 ELEVATION
TOILET 104, 121



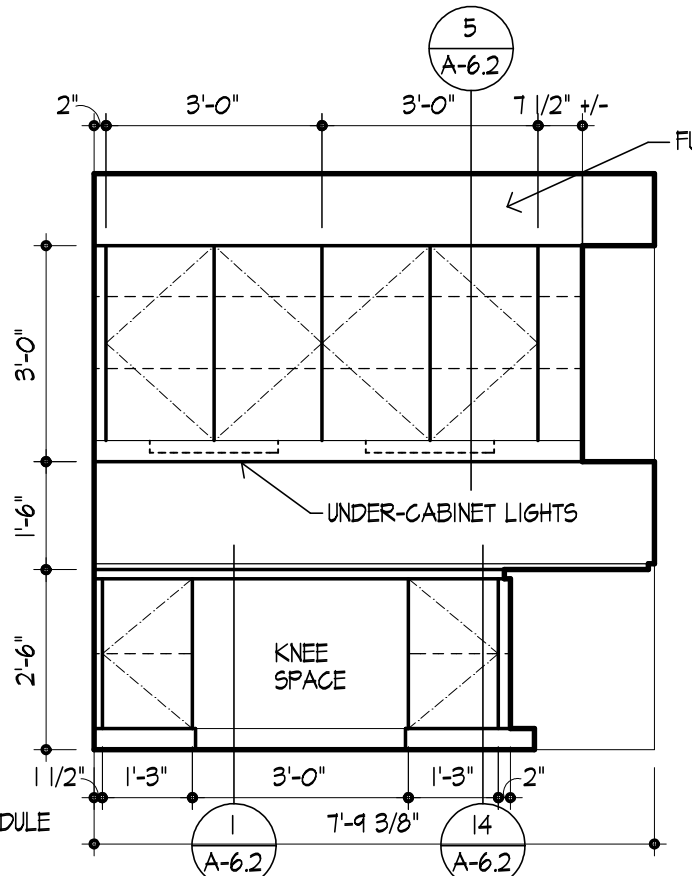
6 ELEVATION
TOILET 104, 121



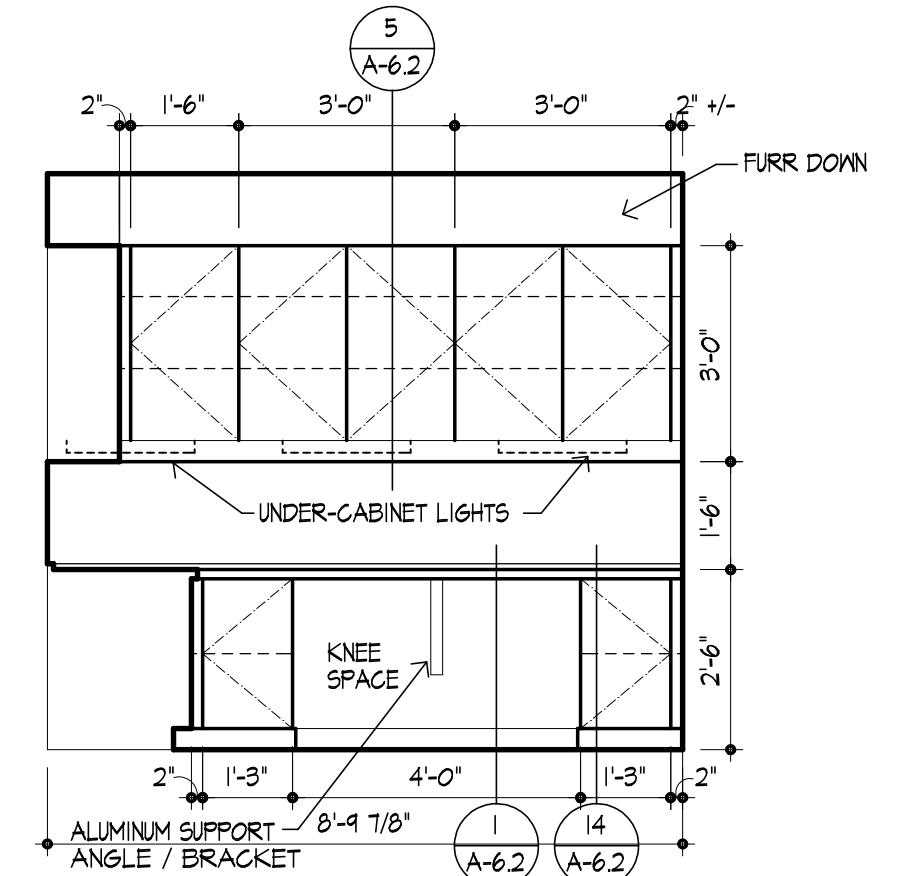
7 ELEVATION
TOILET 104



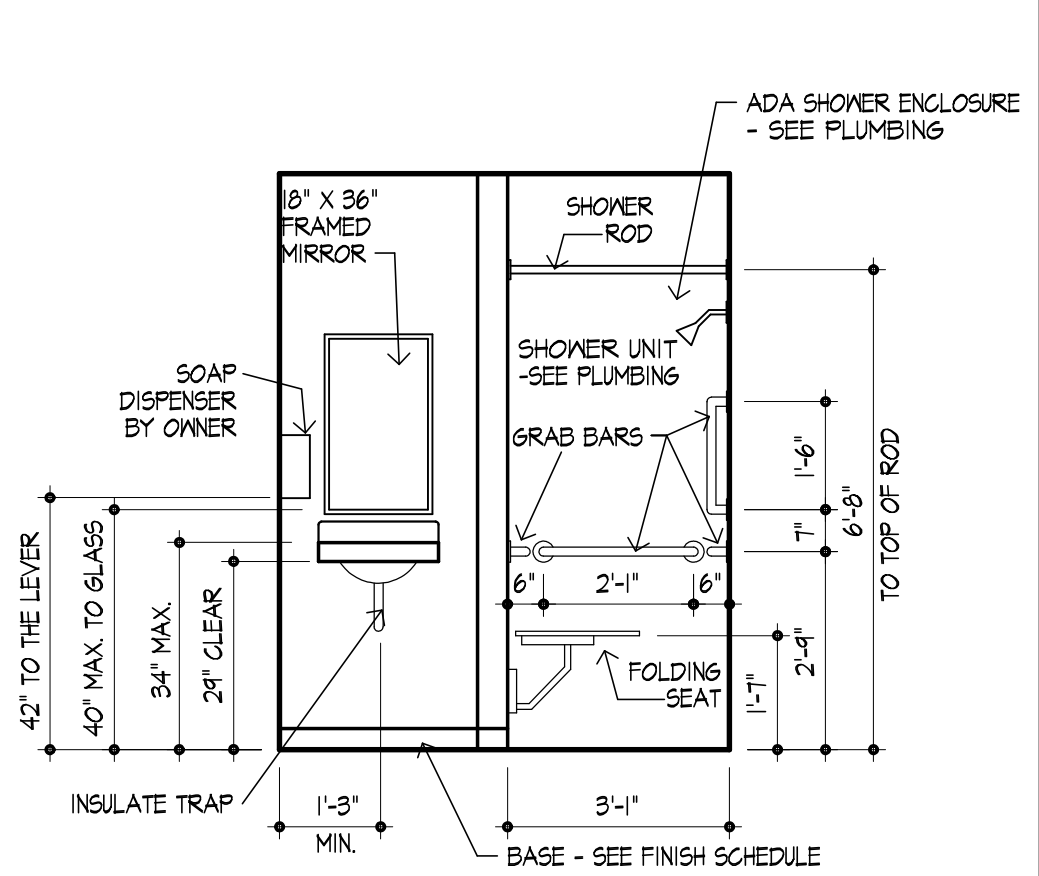
8 ELEVATION
EXECUTIVE OFFICE 106



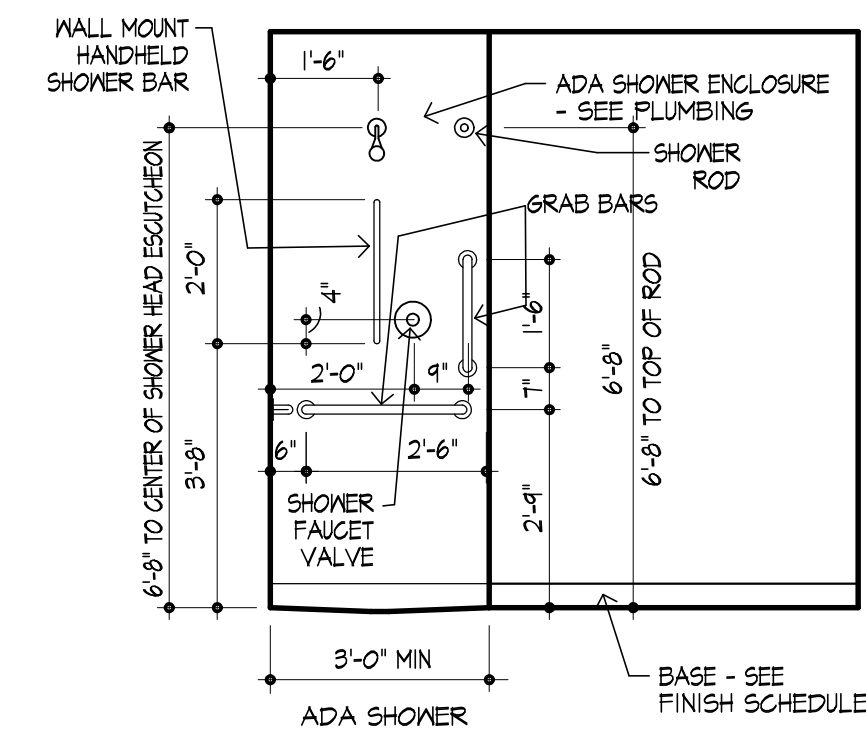
9 ELEVATION
LAYOUT ROOM 108



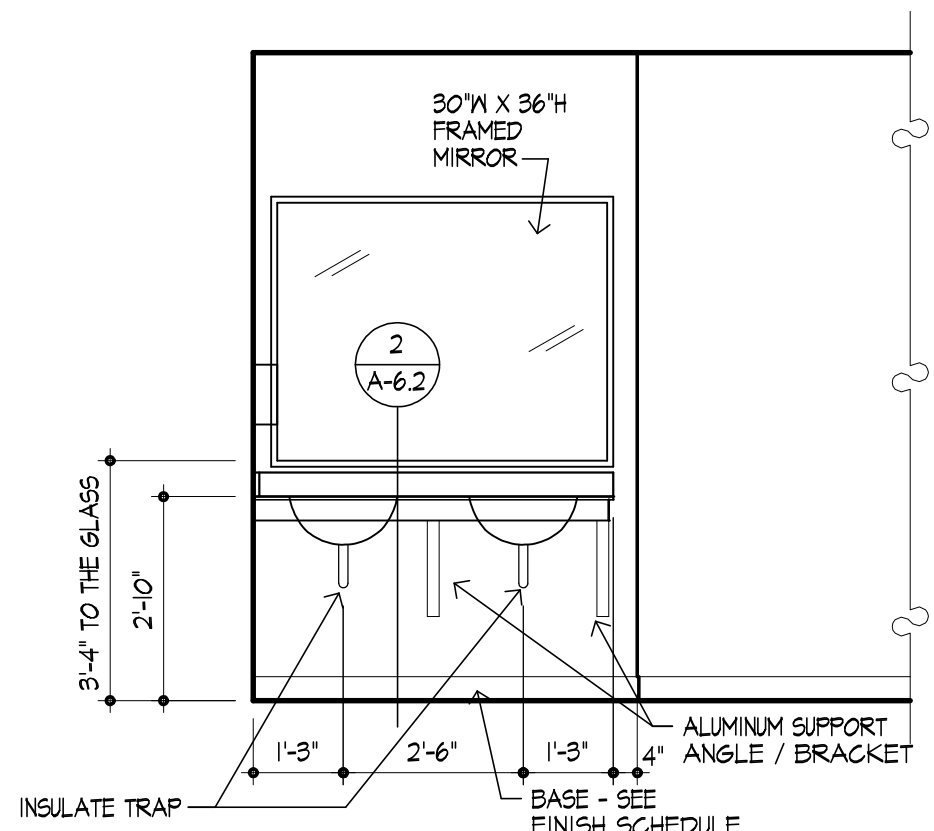
10 ELEVATION
LAYOUT ROOM 108



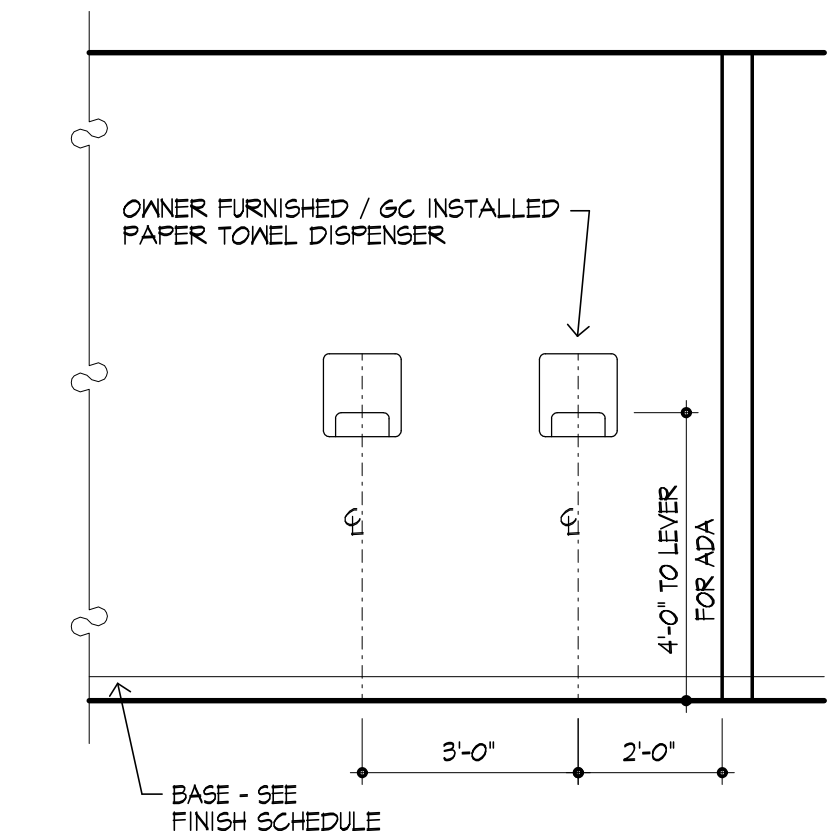
11 ELEVATION
SHOWER 113



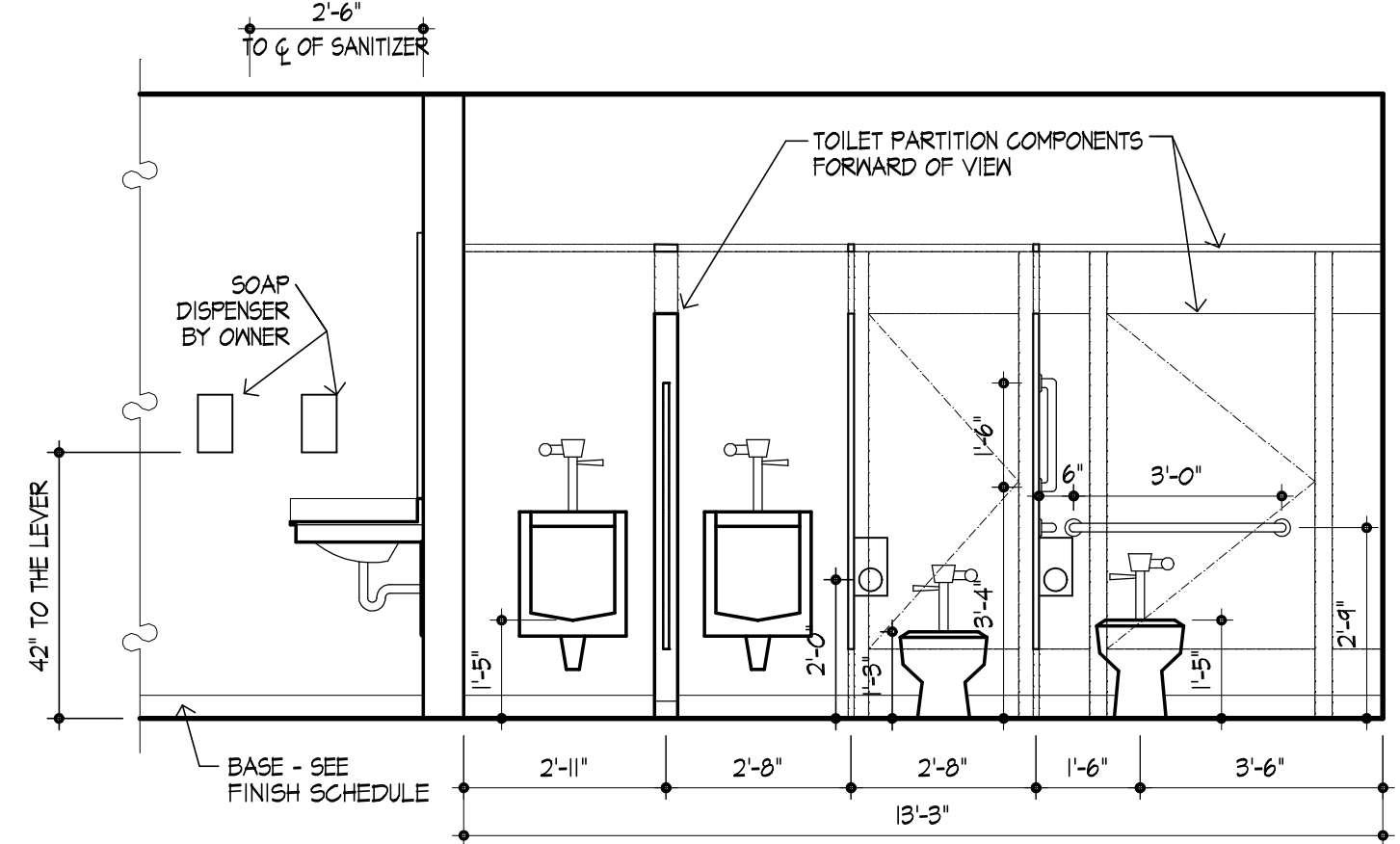
12 ELEVATION
SHOWER 113



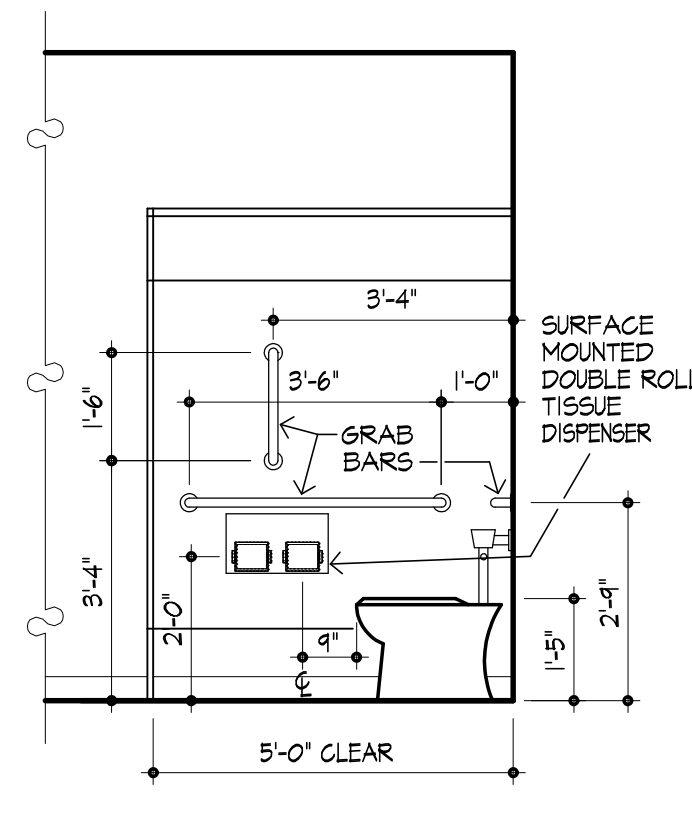
13 ELEVATION
MEN'S RESTROOM 110



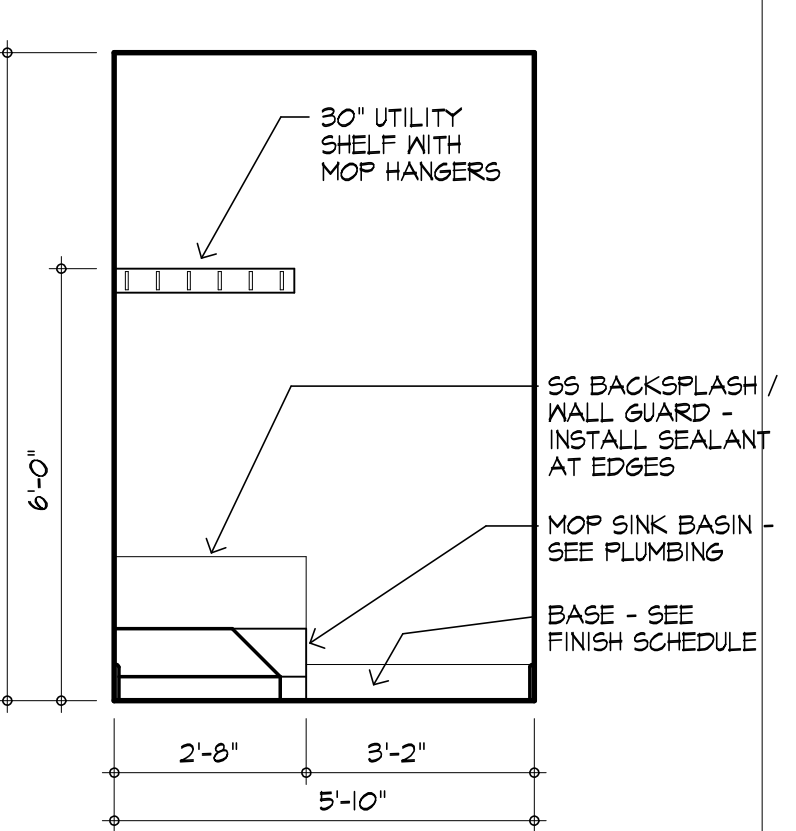
14 ELEVATION
MEN'S RESTROOM 110



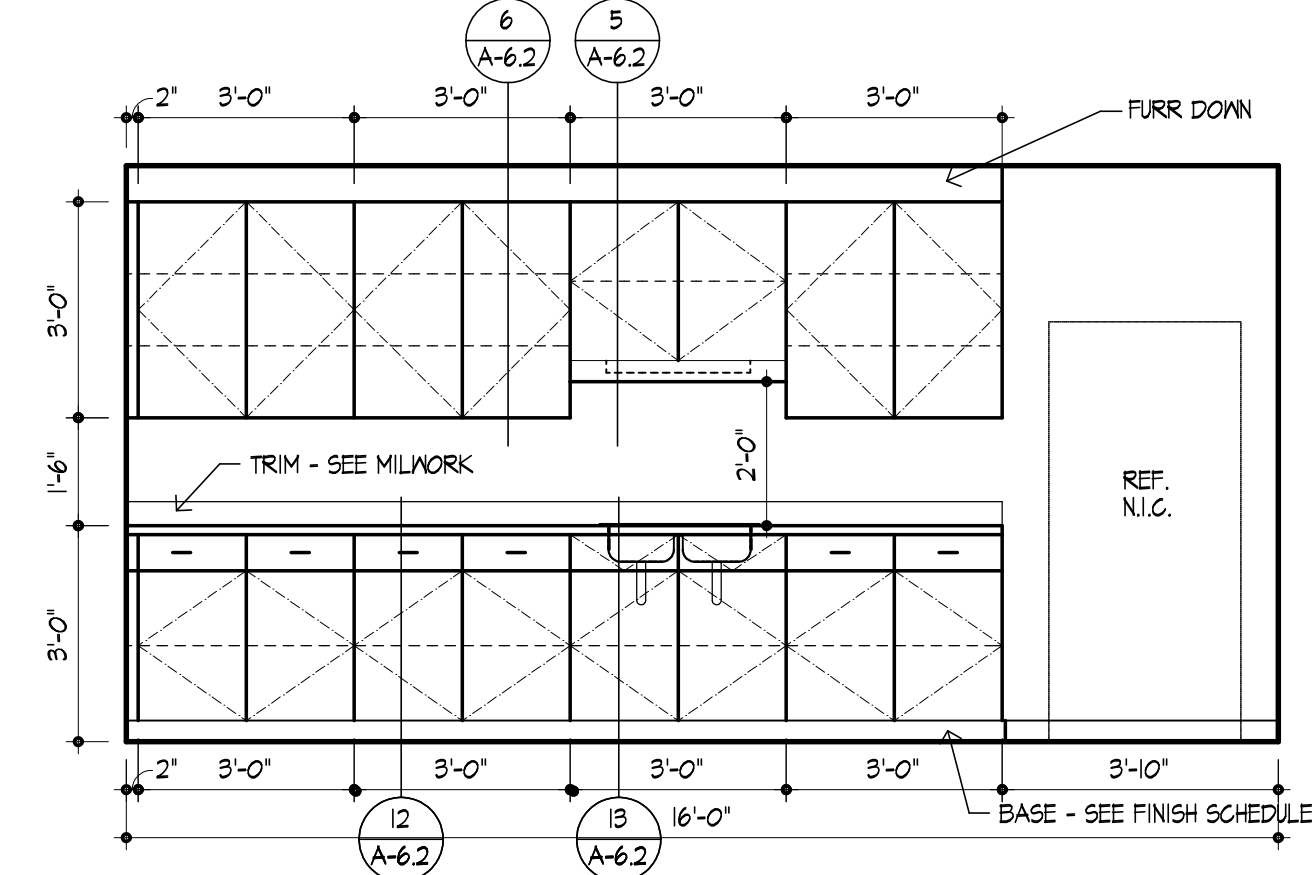
15 ELEVATION
MEN'S RESTROOM 110



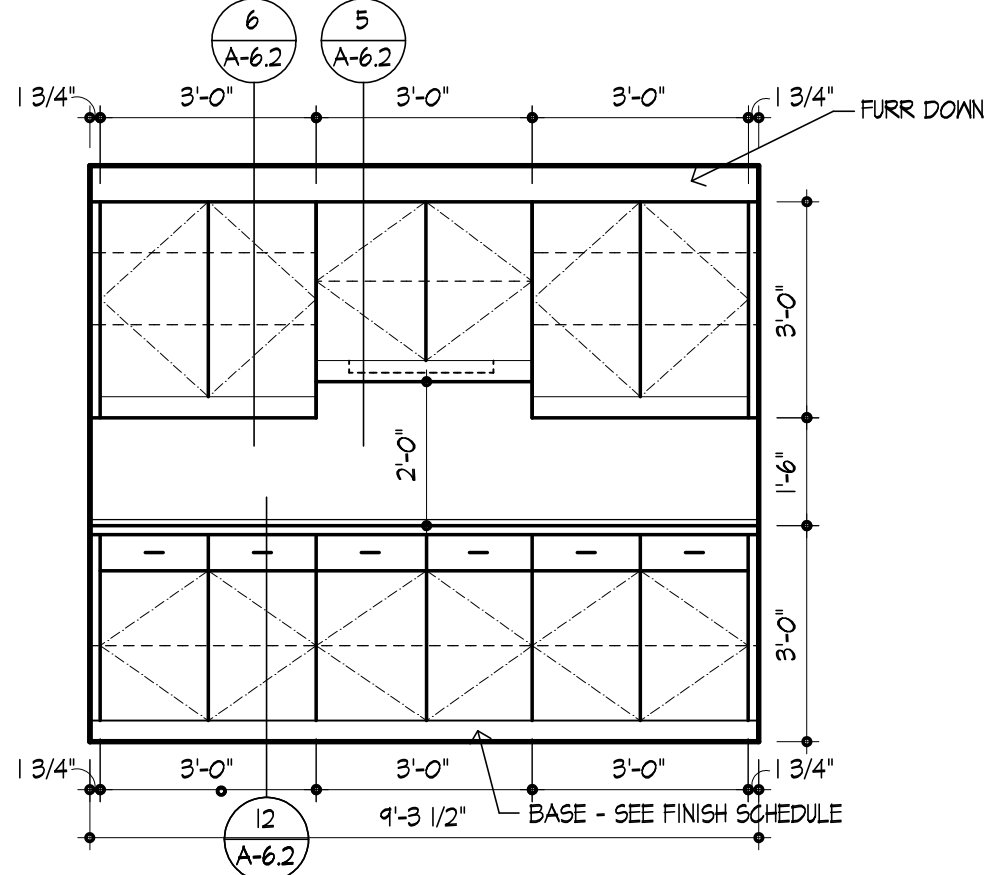
16 ELEVATION
MEN'S RESTROOM 110



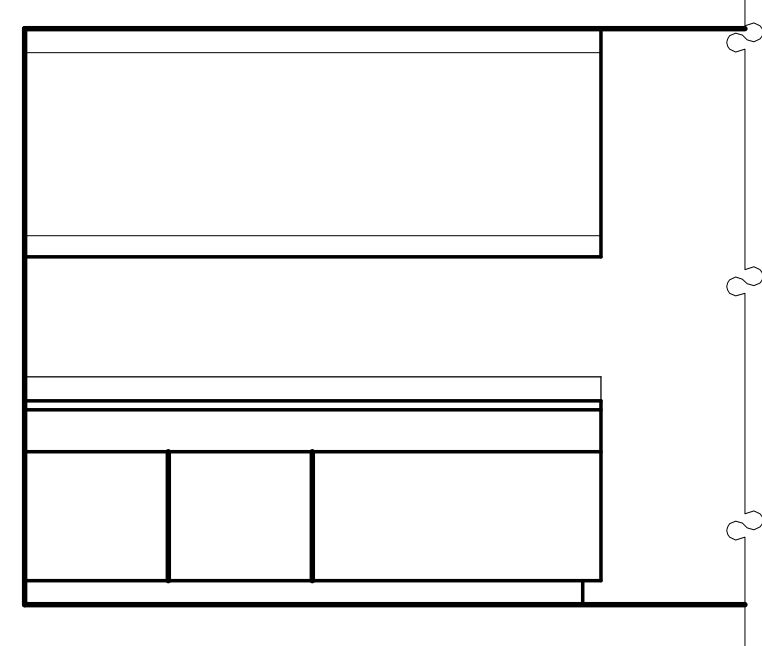
17 ELEVATION
JANITOR 113



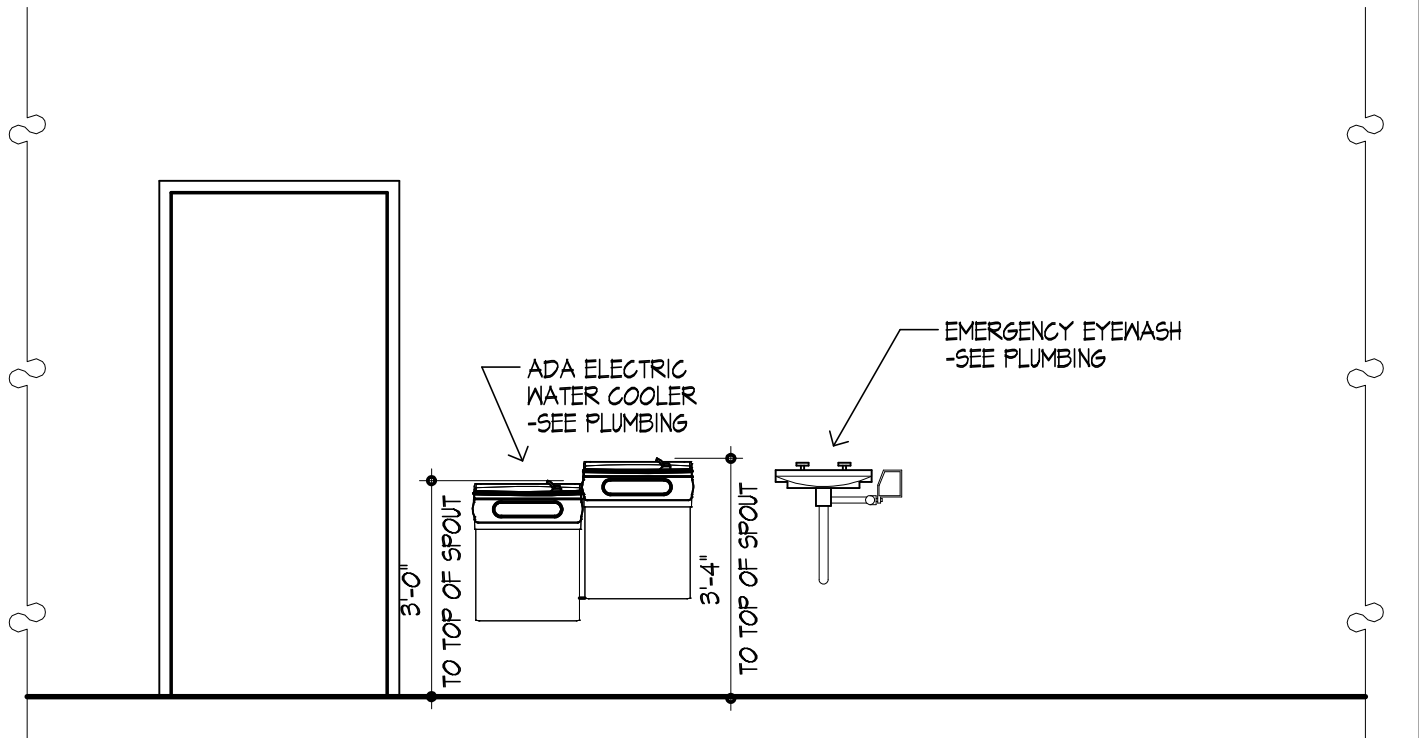
18 ELEVATION
BREAK ROOM 114



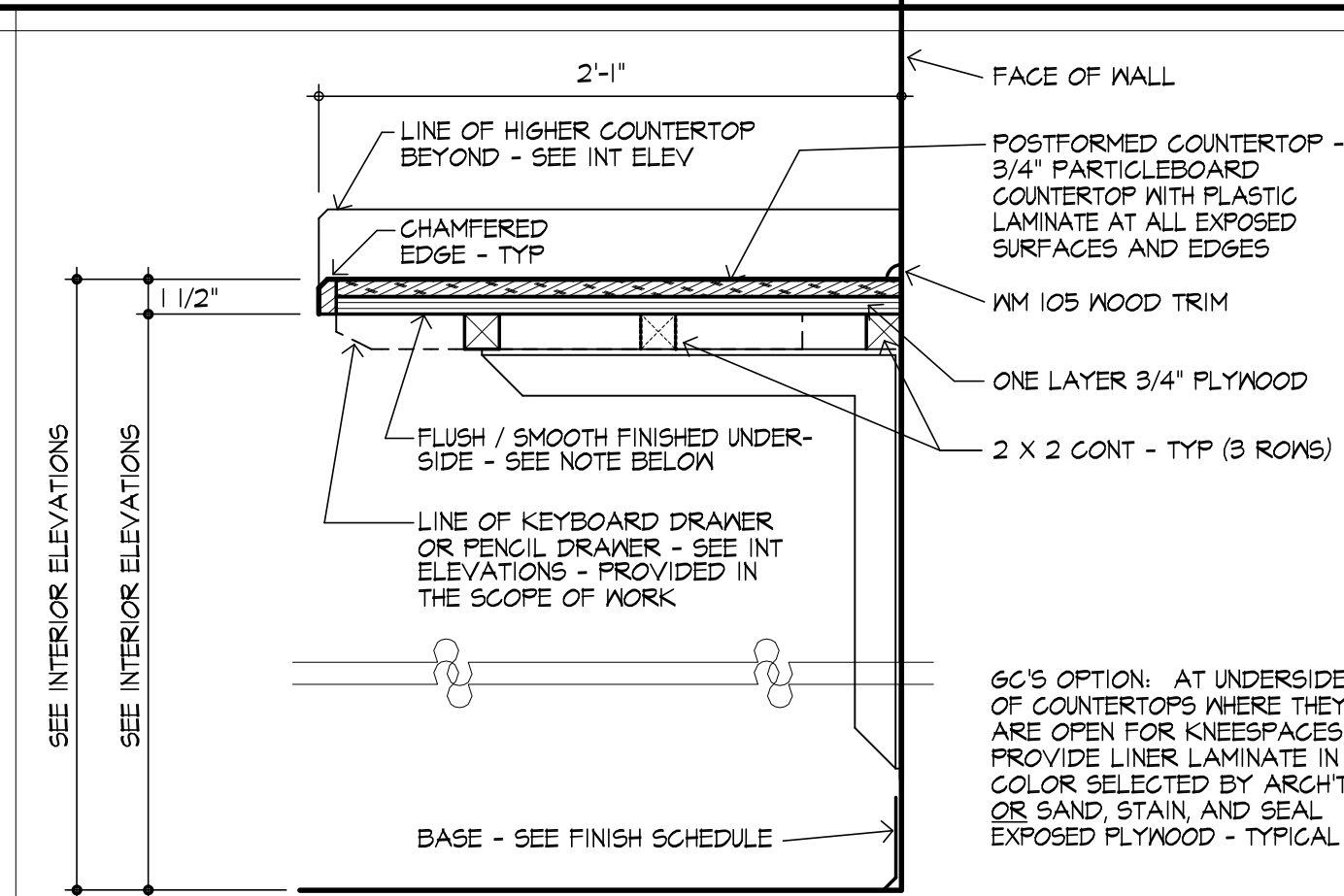
19 ELEVATION
PRINTER ROOM 115



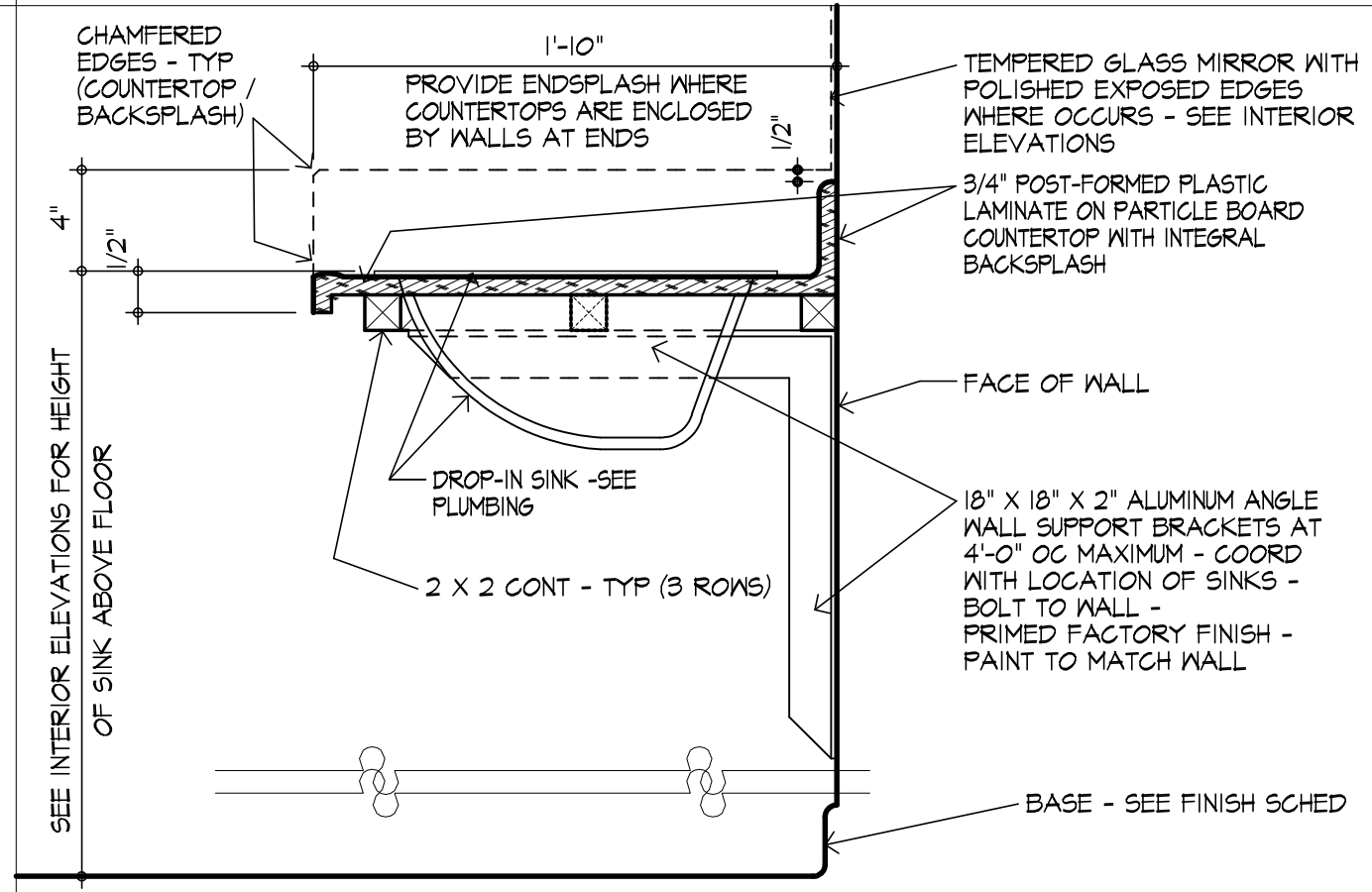
20 ELEVATION
LAB / TRAINING 133



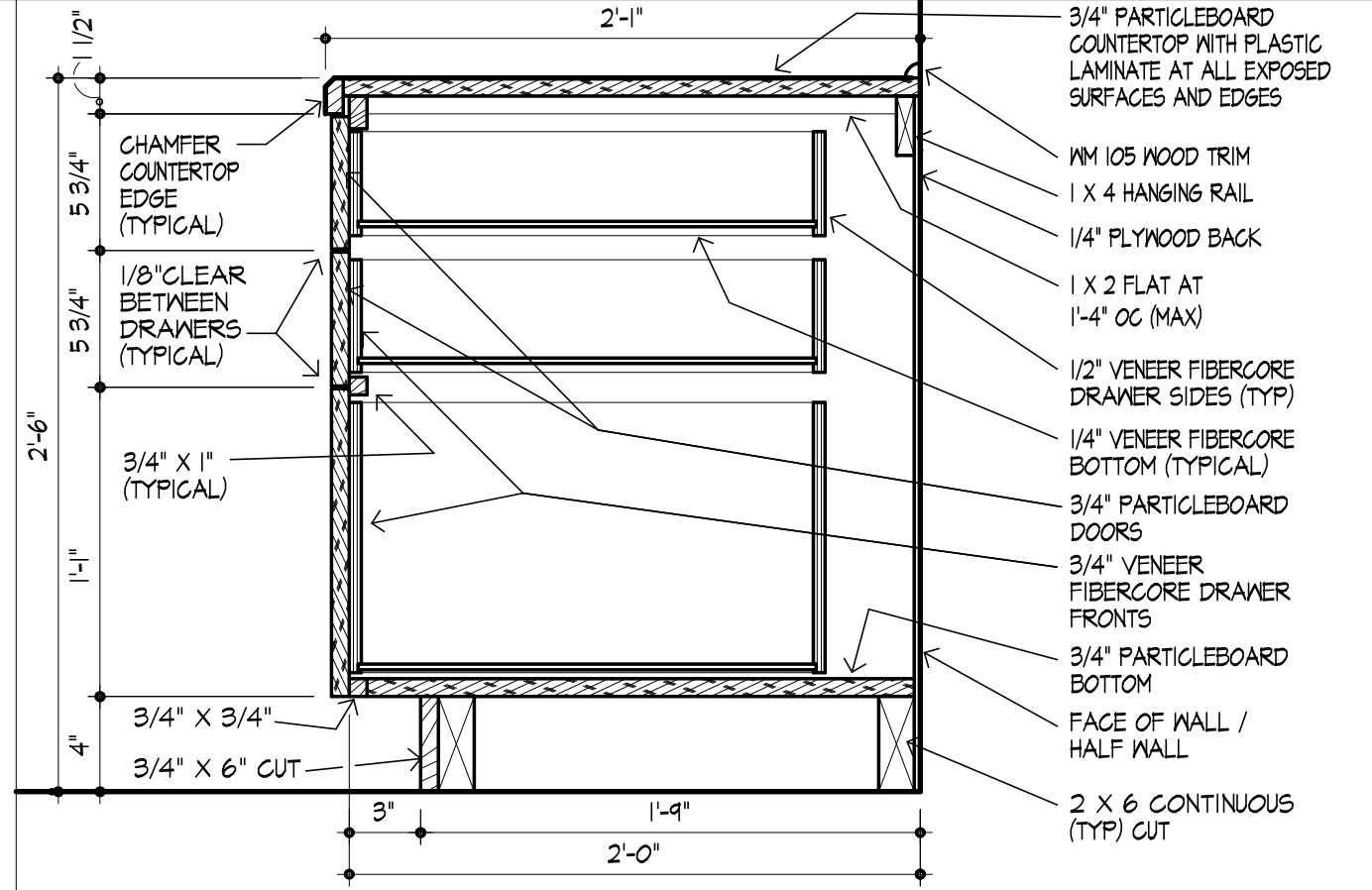
21 ELEVATION
DRIVE-THRU LOADING 134



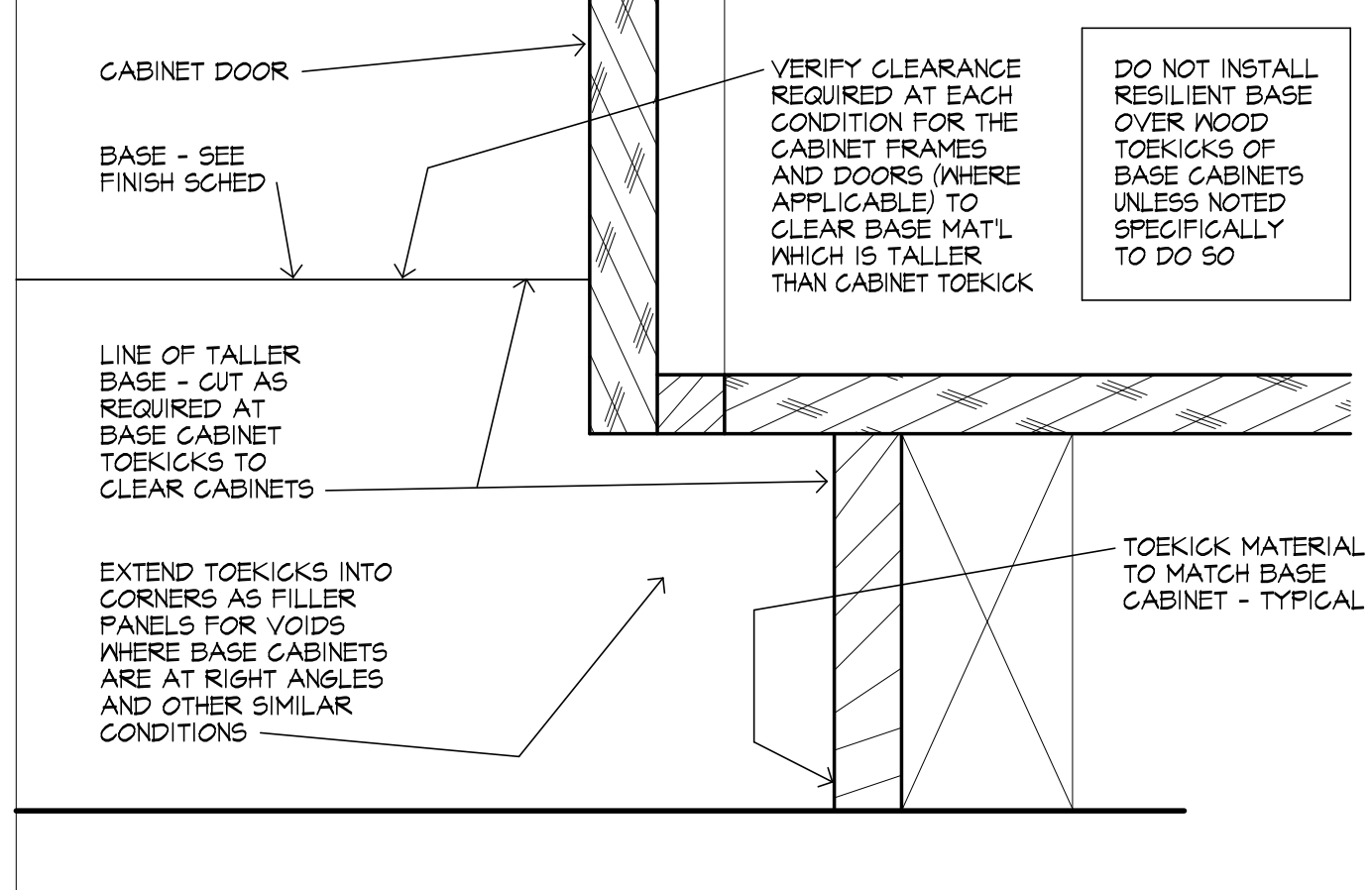
1 DETAIL
KNEESPACES AT COUNTERTOPS WITH POSTFORMED PLASTIC LAMINATE TOPS
SCALE 1 1/2" = 1'-0"



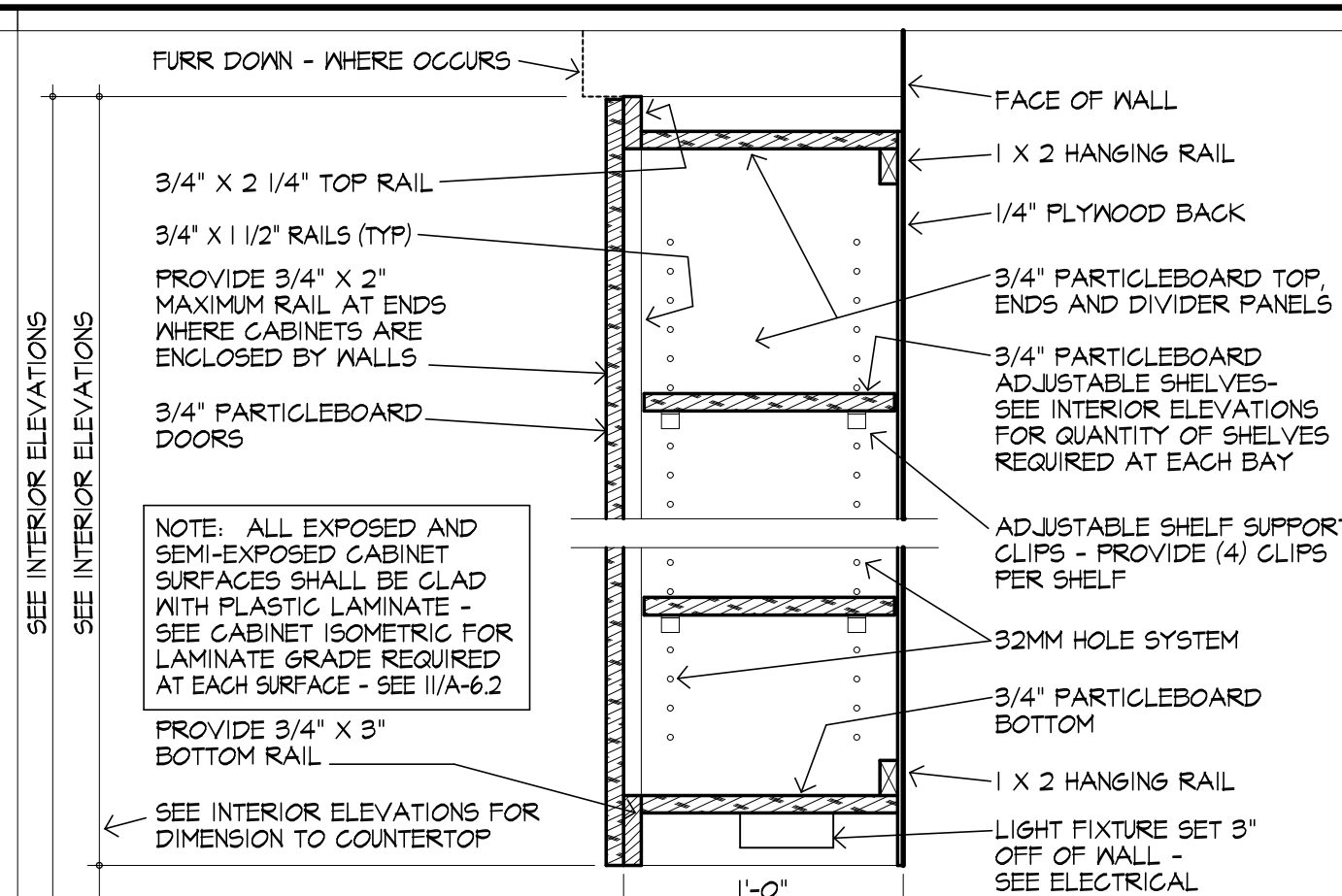
2 DETAIL
PLASTIC LAMINATE PARTICLEBOARD LAVATORY COUNTERTOP WITH EXPOSED / SURFACE MOUNTED SUPPORT BRACKETS
SCALE 1 1/2" = 1'-0"



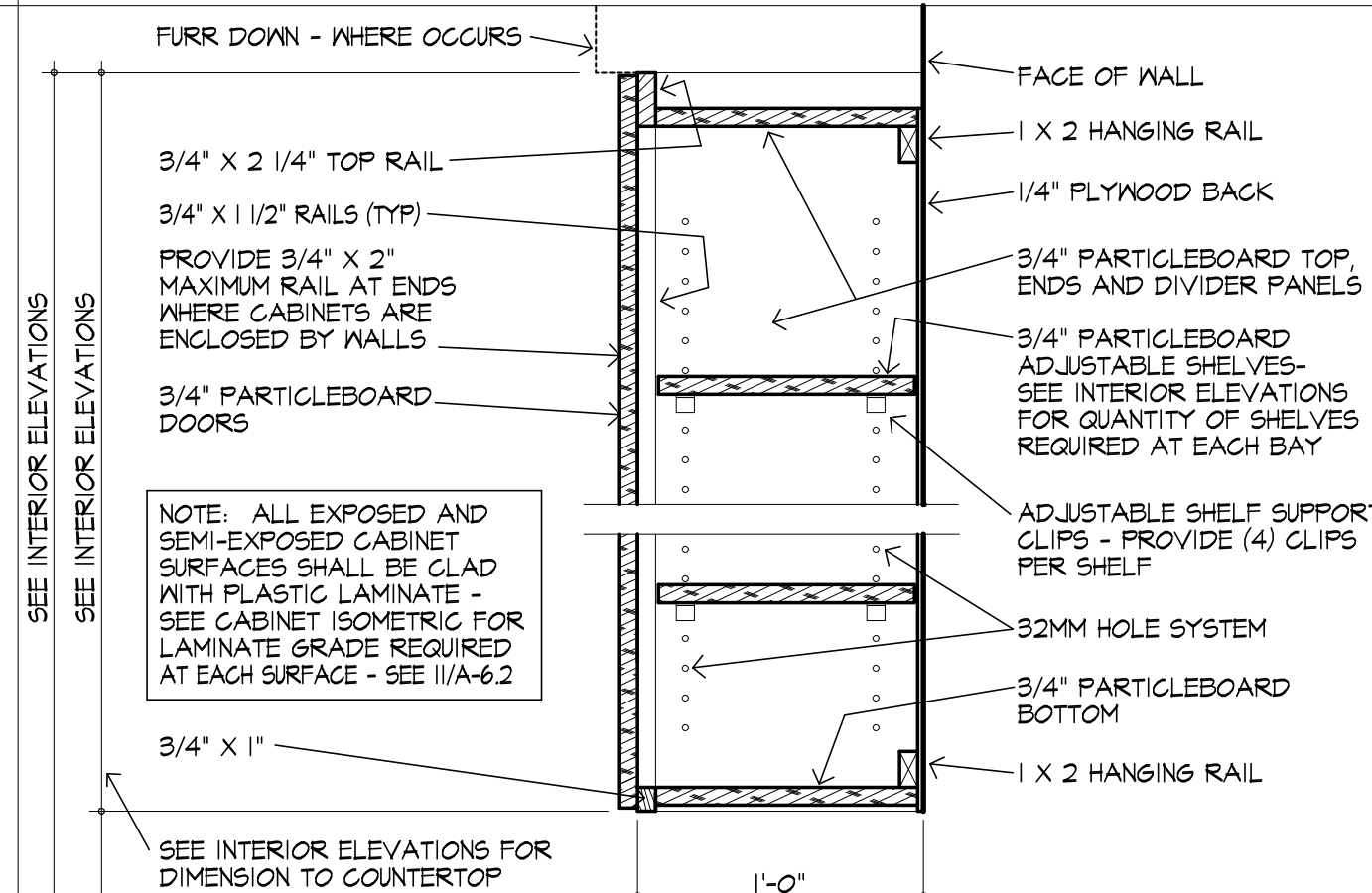
3 DETAIL
PARTICLEBOARD DRAWER BASE CABINET WITH POSTFORMED PLASTIC LAMINATE COUNTERTOP - PLASTIC LAMINATE CLAD
SCALE 1 1/2" = 1'-0"



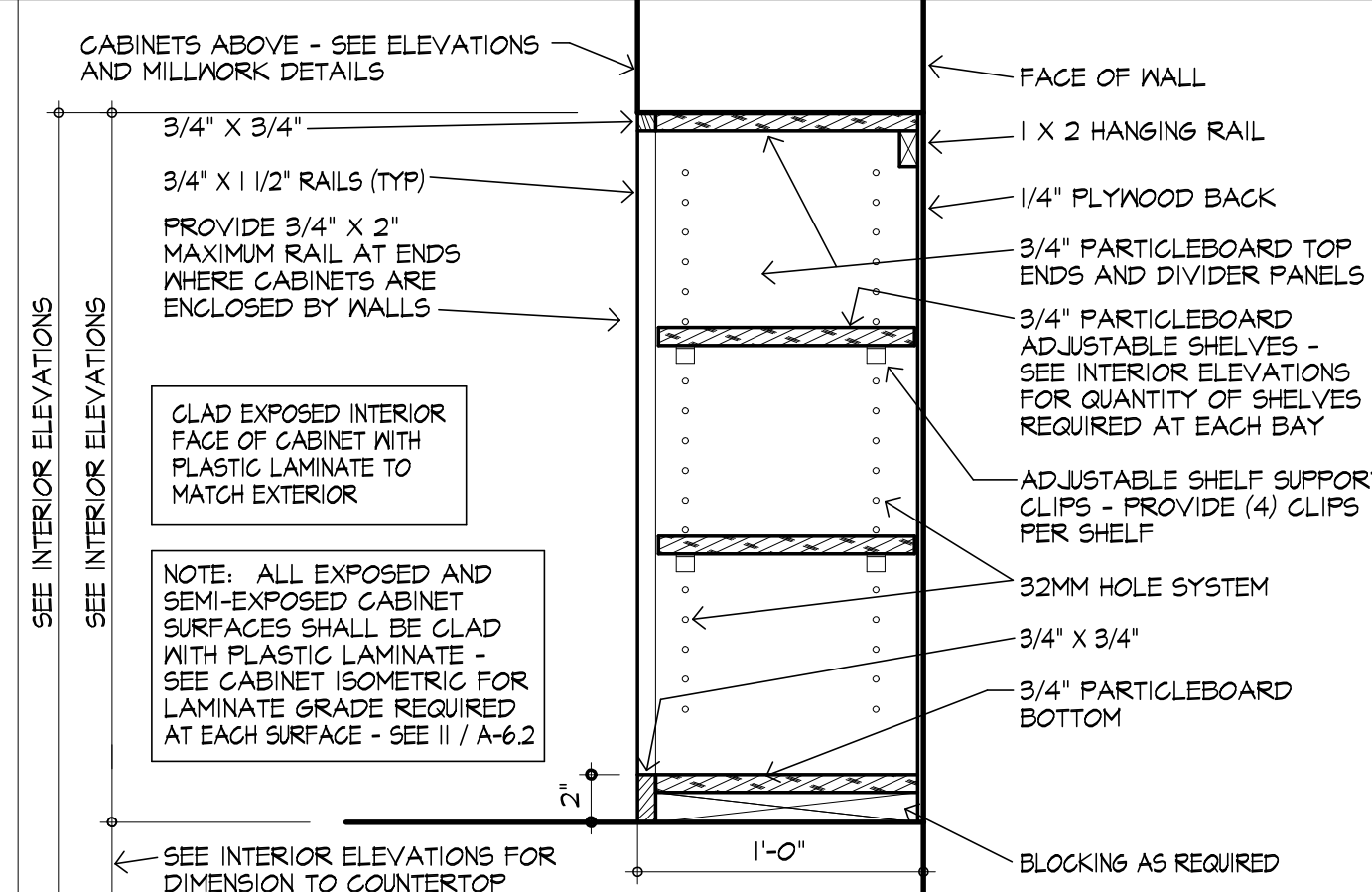
4 DETAIL
BASE MATERIAL AT CABINET TOE-KICKS - TYPICAL
SCALE NOT TO SCALE



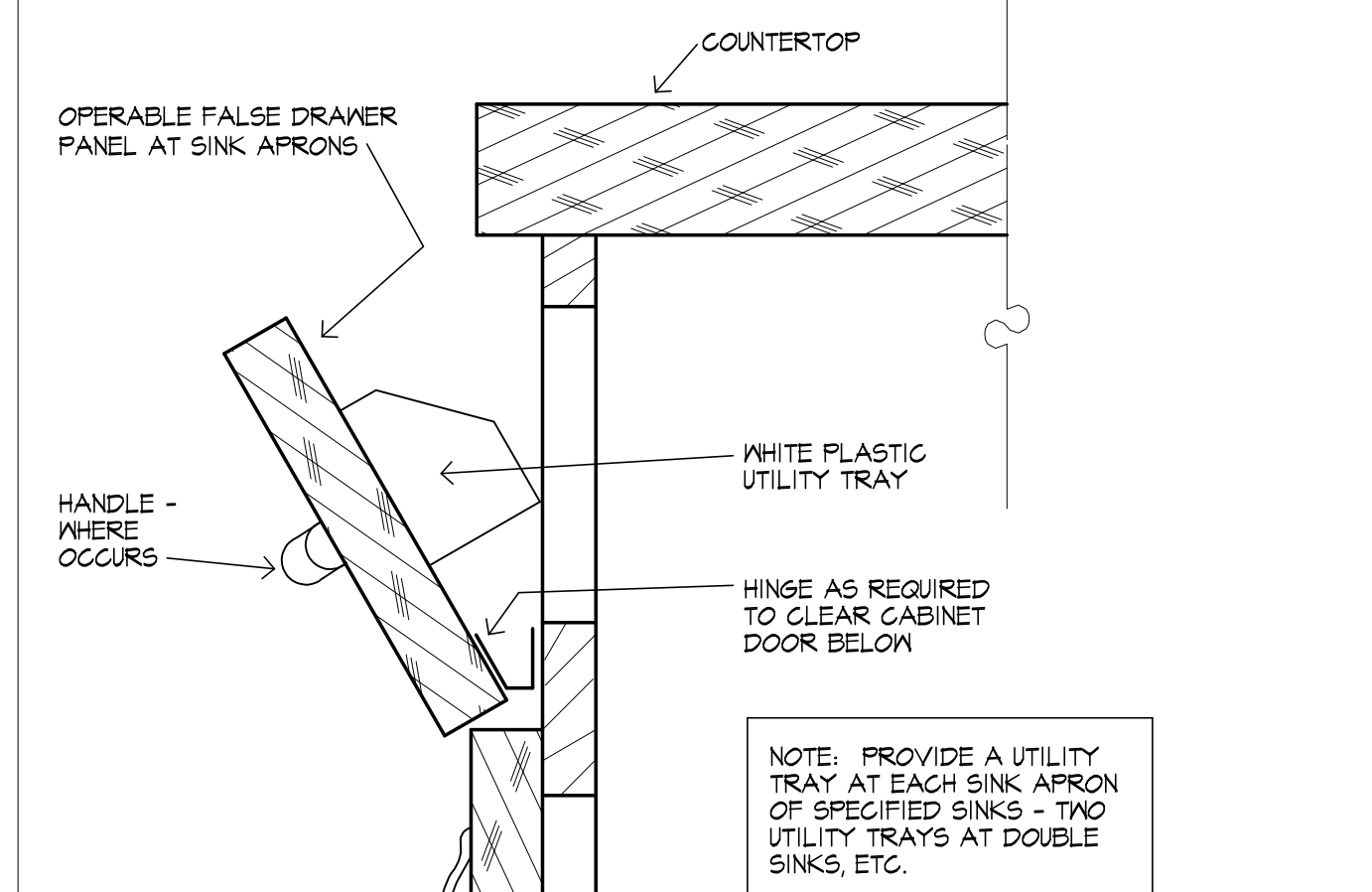
5 DETAIL
WALL CABINET WITH DOORS AND TASKLIGHT - PLASTIC LAMINATE CLAD
SCALE 1 1/2" = 1'-0"



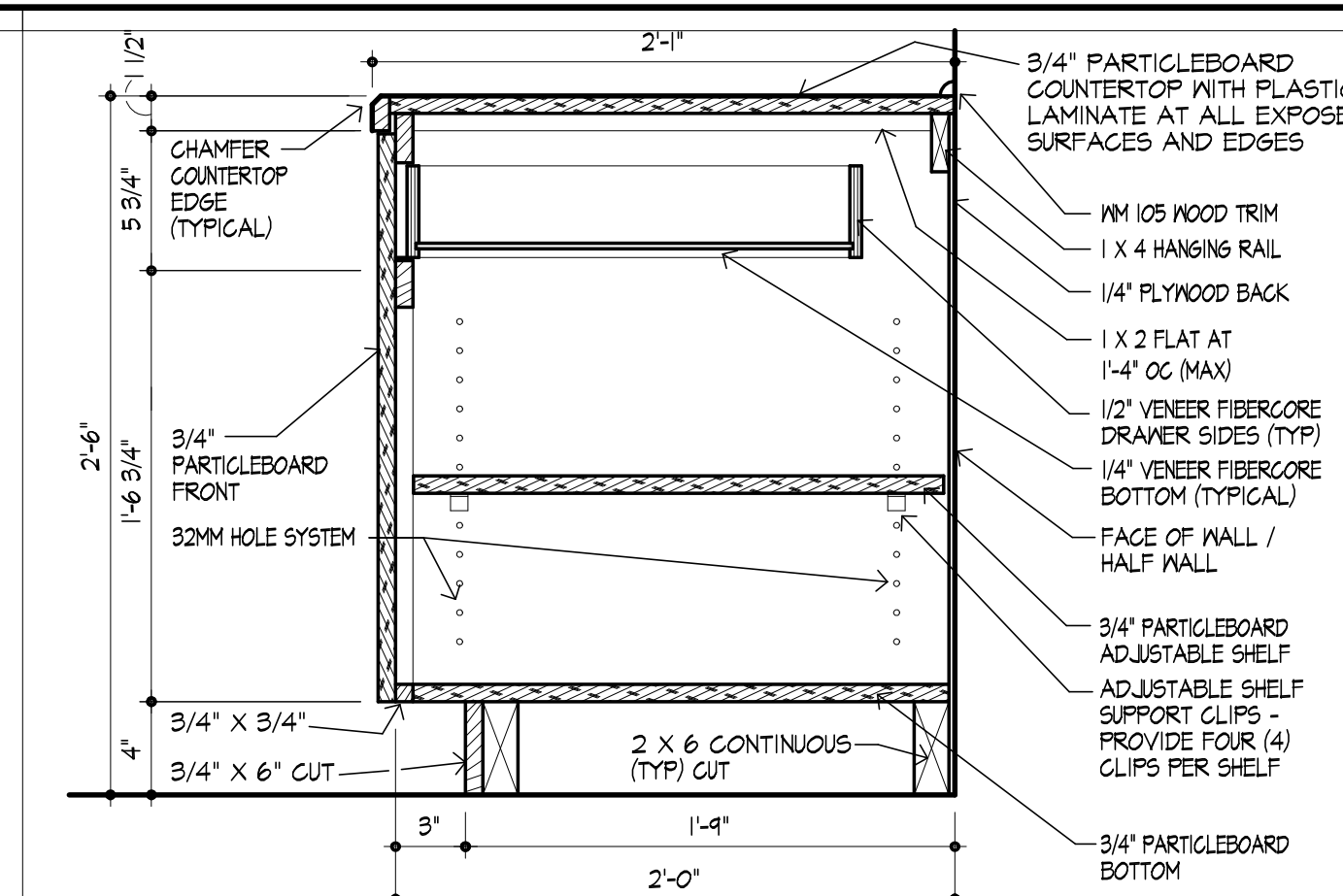
6 DETAIL
WALL CABINET WITH DOORS - PLASTIC LAMINATE CLAD
SCALE 1 1/2" = 1'-0"



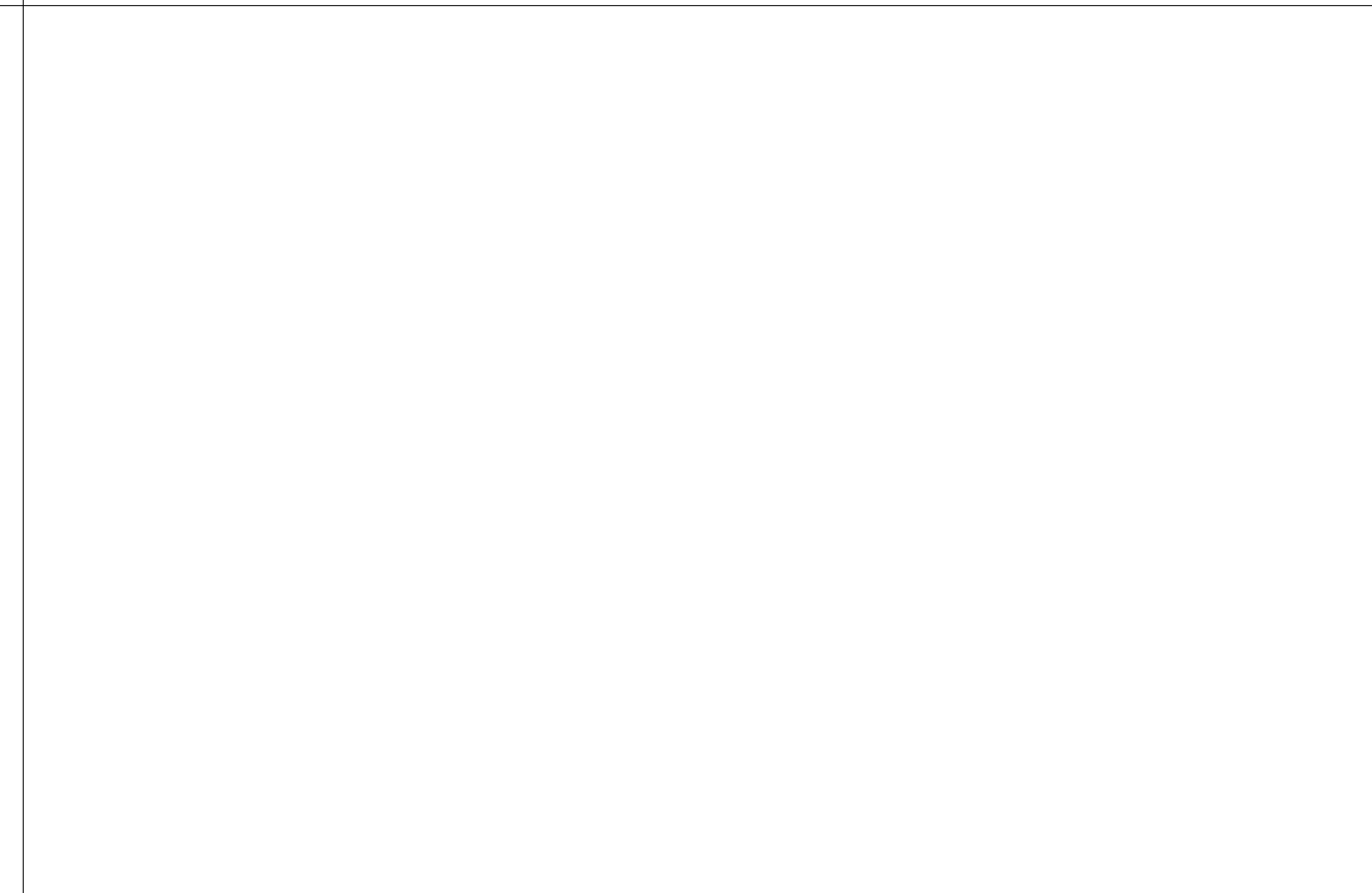
7 DETAIL
OPEN WALL CABINET - PLASTIC LAMINATE CLAD
SCALE 1 1/2" = 1'-0"



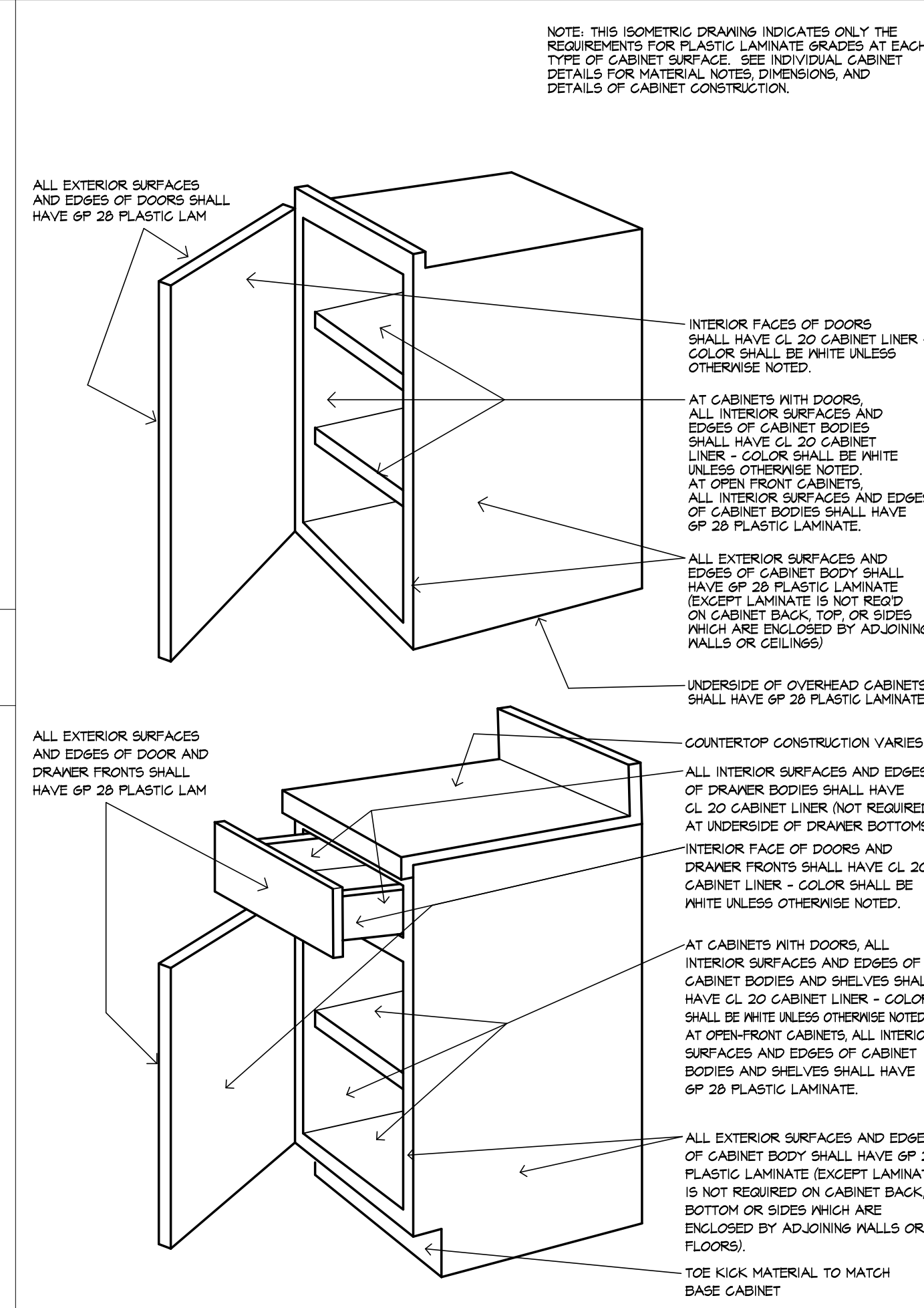
8 DETAIL
TILT OUT DRAWER PANEL AT SINK BASE CABINETS - TYPICAL
SCALE NOT TO SCALE



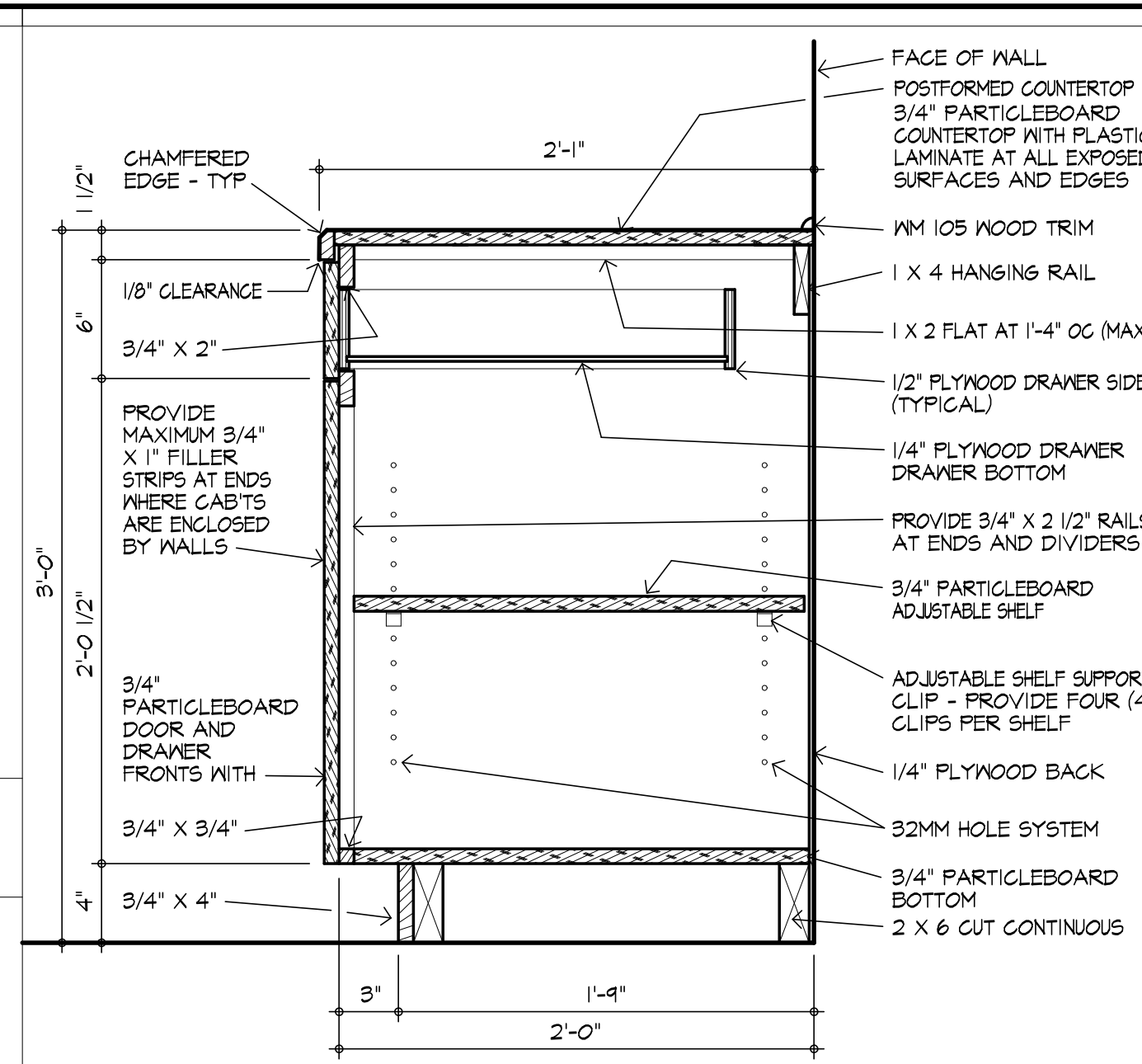
9 DETAIL
PARTICLEBOARD DRAWER BASE CABINET WITH POSTFORMED PLASTIC LAMINATE COUNTERTOP - PLASTIC LAMINATE CLAD
SCALE 1 1/2" = 1'-0"



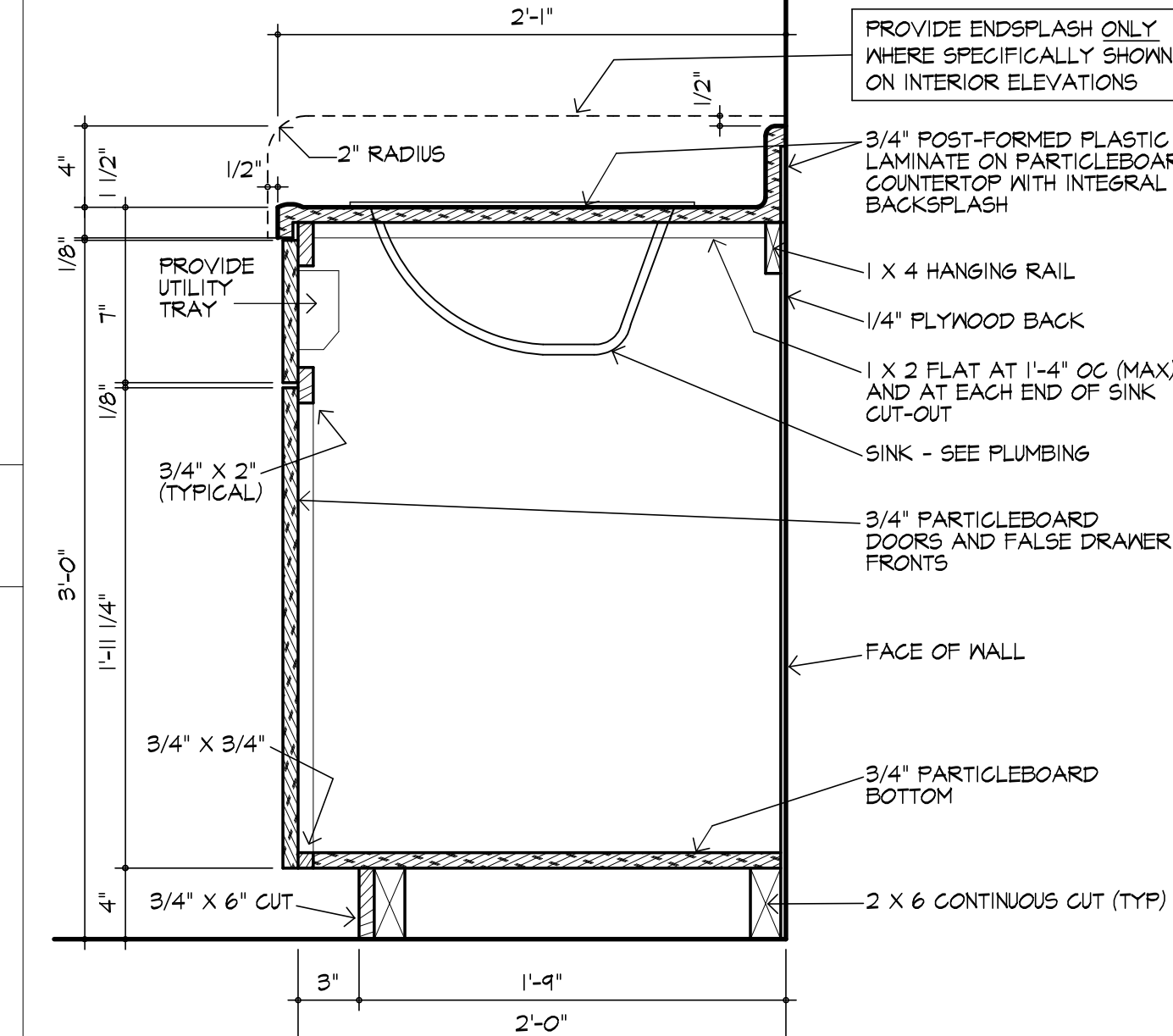
10 DETAIL
OPEN WALL CABINET - PLASTIC LAMINATE CLAD
SCALE 1 1/2" = 1'-0"



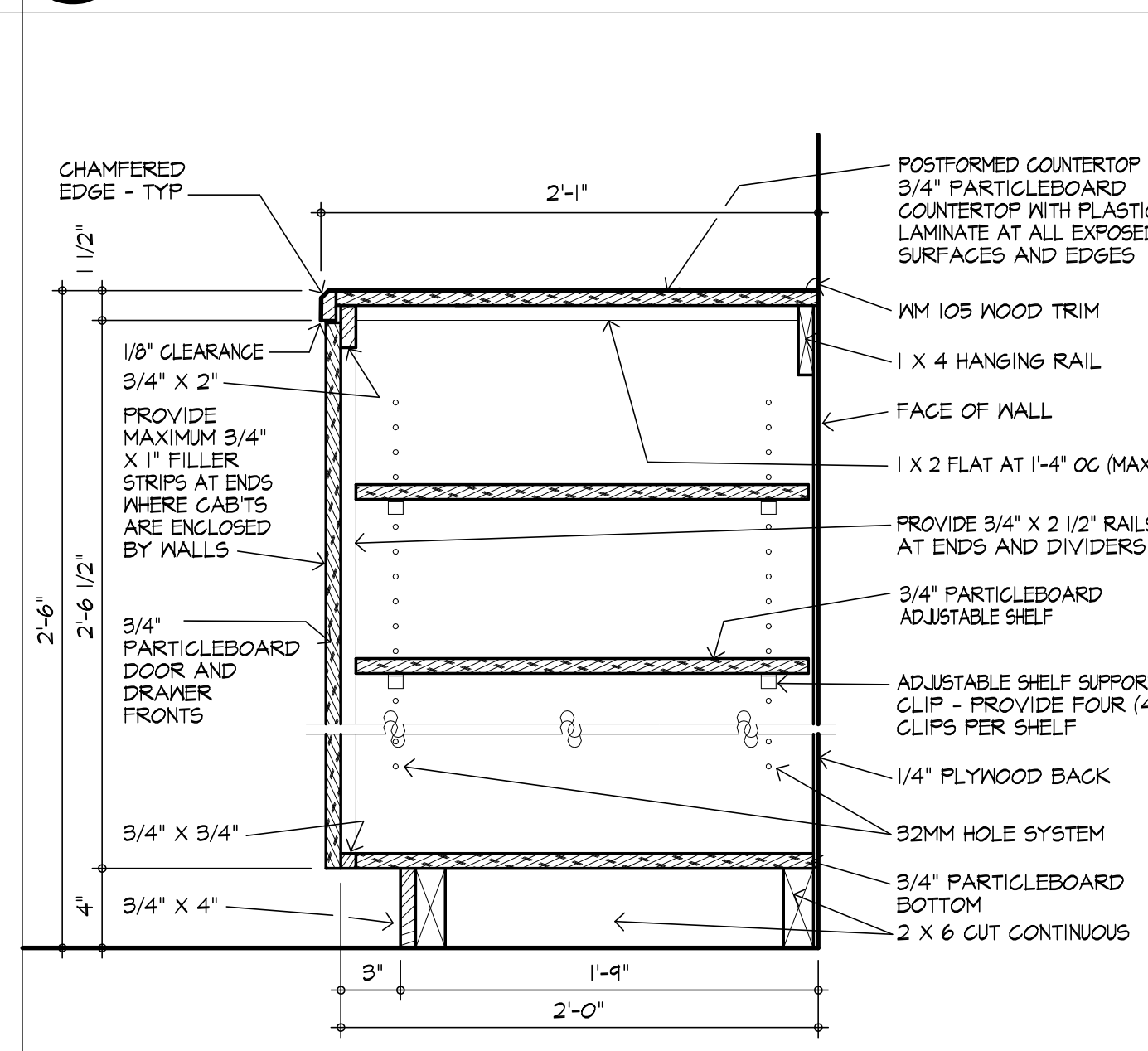
11 DETAIL
ISOMETRIC - PLASTIC LAMINATE GRADES AT EACH CABINET SURFACE
SCALE 1 1/2" = 1'-0"



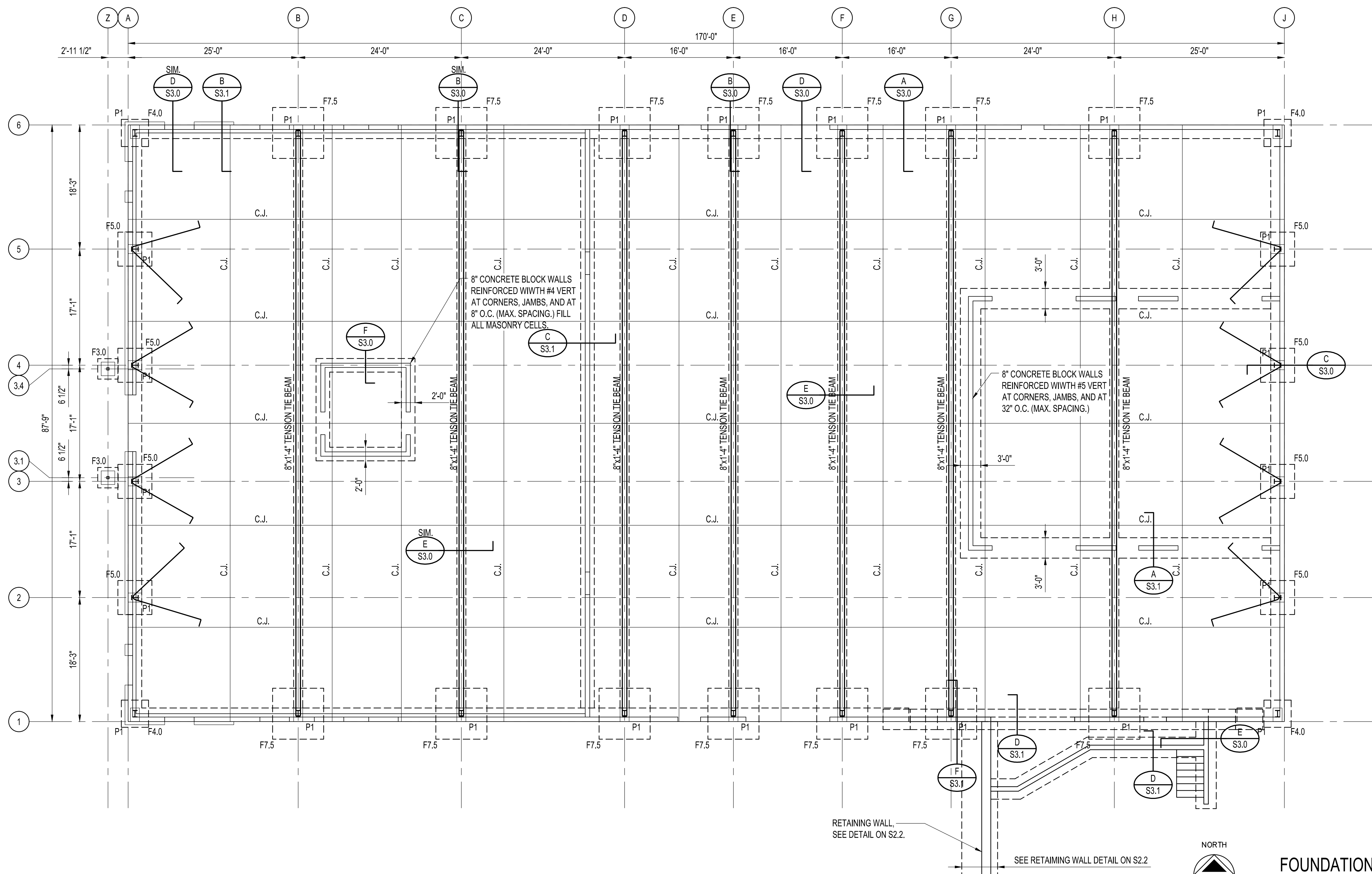
12 DETAIL
36" HIGH PARTICLEBOARD DRAWER / DOOR BASE CABINET WITH POSTFORMED PLASTIC LAMINATE COUNTERTOP - PLASTIC LAMINATE CLAD
SCALE 1 1/2" = 1'-0"



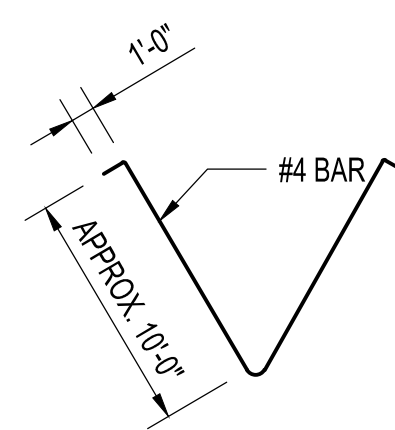
13 DETAIL
36" HIGH PARTICLEBOARD SINK BASE CABINET WITH POSTFORMED PLASTIC LAMINATE COUNTERTOP - PLASTIC LAMINATE CLAD
SCALE 1 1/2" = 1'-0"



14 DETAIL
30" HIGH PARTICLEBOARD DOOR BASE CABINET WITH POSTFORMED PLASTIC LAMINATE COUNTERTOP - PLASTIC LAMINATE CLAD
SCALE 1 1/2" = 1'-0"



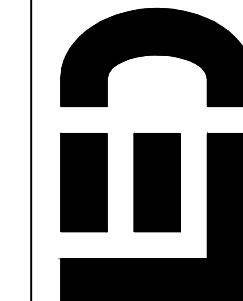
| MARK: | FOOTING SIZE: W x L x D | REINFORCING: |
|-------|-------------------------|-----------------------|
| F3.0 | 3'-0"x3'-0"x16" | 4 #5 EACH WAY, BOTTOM |
| F4.0 | 4'-0"x4'-0"x16" | 5 #5 EACH WAY, BOTTOM |
| F5.0 | 5'-0"x5'-0"x16" | 6 #5 EACH WAY, BOTTOM |
| F7.5 | 7'-6"x7'-6"x24" | 7 #6 EACH WAY, BOTTOM |



HP1 (N.T.S.)
(FABRICATE HAIRPIN FROM (1) 30'-0" LONG STICK)

PLAN NOTES:

- FINISHED FLOOR ELEVATION (0'-0") (REFERENCE ELEVATION). REFER TO ARCHITECTURAL / CIVIL DRAWINGS FOR ACTUAL ELEVATION.
- TOP OF FOOTING ELEVATION (-2'-0") OR A MINIMUM OF 12" BELOW ADJACENT FINISHED GRADE, WHICHEVER IS LOWER, UNLESS NOTED OTHERWISE ON PLAN.
- VERIFY ALL FOOTING STEP LOCATIONS WITH FINISHED GRADE ELEVATIONS AND ADJUST AS REQUIRED.
- SLAB IN OFFICE REGION TO BE 4" THICK CONCRETE. SLAB CONSTRUCTION TO BE CAST-IN-PLACE CONCRETE ON 15 MIL VAPOR BARRIER AND 4" (MIN.) POROUS FILL COMPACTED PER SITE AND FOUNDATION GENERAL NOTES. REINFORCE CONCRETE SLAB WITH 4x4 W2.9/W2.9 W.W.F. SUPPORTED ON CONTINUOUS CHAIRS. REINFORCING TO BE AT 1 1/2" CLEAR FROM TOP OF SLAB.
- SLAB IN LOADING AND MANUFACTURING AREAS TO BE 6" CONCRETE. SLAB CONSTRUCTION TO BE CAST-IN-PLACE CONCRETE ON 15 MIL VAPOR BARRIER AND 6" (MIN.) POROUS FILL COMPACTED PER SITE AND FOUNDATION GENERAL NOTES. REINFORCE CONCRETE SLAB WITH 4x4 W4/W4 W.W.F. SUPPORTED ON CONTINUOUS CHAIRS. REINFORCING TO BE AT 2" CLEAR FROM TOP OF SLAB.
- ALL GRAVEL FILL MUST BE PLACED IN 8" (MAX.) LIFTS AND COMPACTED PER SITE AND FOUNDATION GENERAL NOTES TO ENSURE PROPER SUPPORT OF SLABS-ON GRADE. SPECIAL CARE MUST BE GIVEN TO COMPACTING BACKFILL IN TRENCHES (REFER TO SITE AND FOUNDATION GENERAL NOTES).
- C.J. DENOTES CONTROL JOINT, REFER TO TYPICAL DETAIL.
- VERIFY ALL DIMENSIONS WITH METAL BUILDING MANUFACTURER'S SHOP DRAWINGS PRIOR TO COMMENCING CONSTRUCTION.
- METAL BUILDING MANUFACTURER TO DESIGN BUILDING FOR A COLLATERAL LOAD OF 10 PSF.
- COORDINATE ALL BRACING LOCATIONS WITH ARCHITECTURAL DRAWINGS AND PROVIDE PORTAL FRAMES IF INTERFERENCES DO NOT ALLOW X-BRACING.
- SLOPE FLOOR TOWARDS TRENCH DRAINS AS REQUIRED IN ARCHITECTURAL DRAWINGS.
- METAL BUILDING FRAME FOOTING SIZES ARE PRELIMINARY, AND MUST BE REASSESSED ONCE METAL BUILDING REACTIONS HAVE BEEN PROVIDED.
- BRICK LEDGE IN GRADE BEAM NOT SHOWN FOR CLARITY.



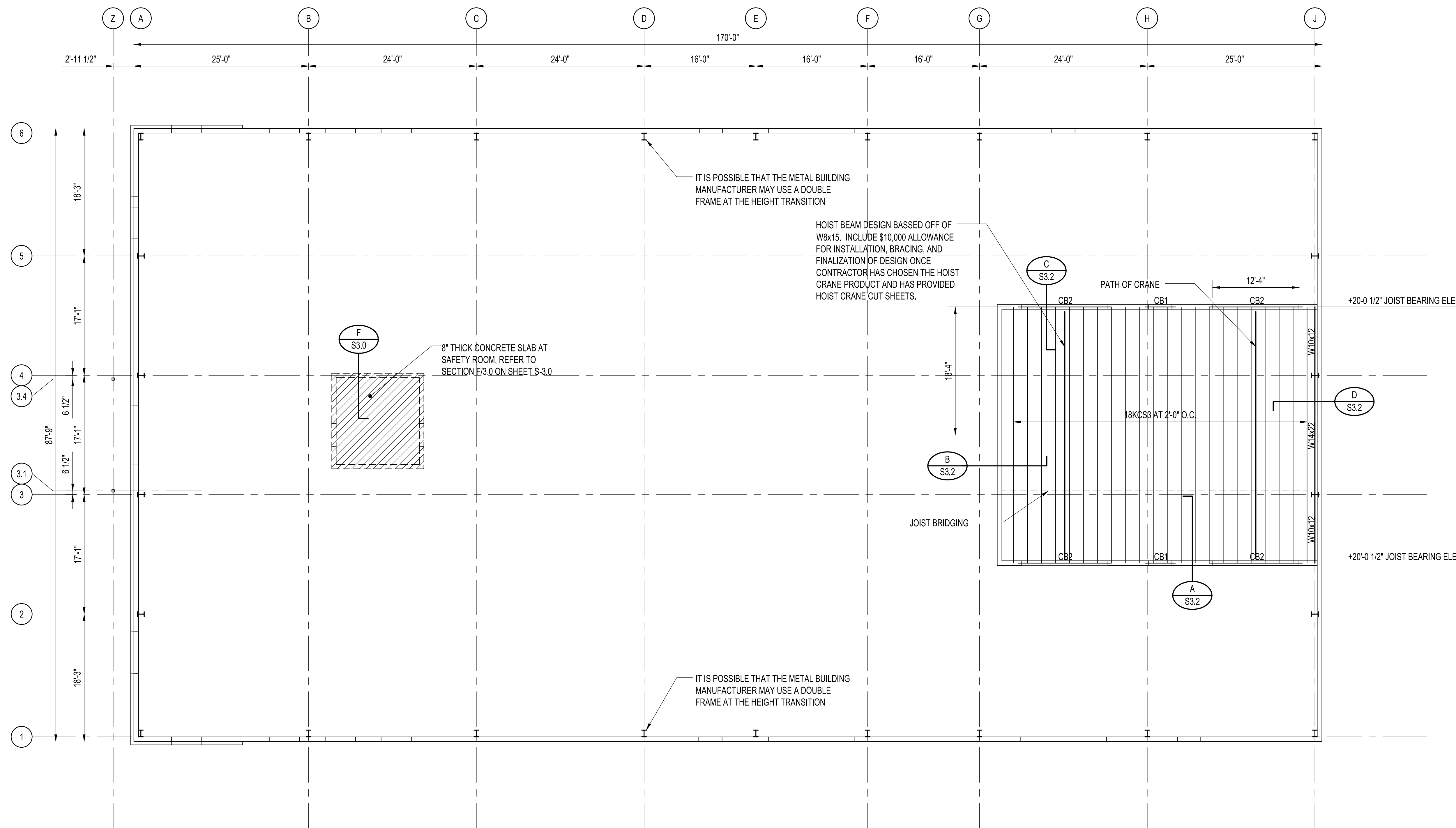
LAMBERT-EZELL-DURHAM
ARCHITECTURE, LLC
P.O. BOX 984 401 EAST COLLEGE ST.
TUSCUMBIA, ALABAMA 35663
TELEPHONE (256) 161-1100
FACSIMILE (256) 161-2908

OFFICE AND SHOP BUILDING FOR
RL CONSULTING, INC
TUSCUMBIA, ALABAMA

| | | | |
|--------------|---------------|-------------|----------|
| JOB NO. 1860 | DATE 10/14/19 | REVISION | REVISION |
| DRAWN ALM | | CHECKED PRM | |

DRAWING TITLE
FOUNDATION PLAN

DRAWING NUMBER
S1.0

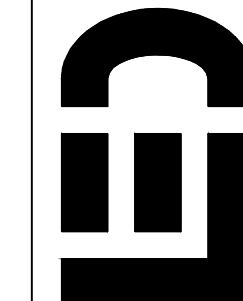


MANUFACTURING CEILING FRAMING PLAN

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

ROOF PLAN NOTES:

1. JOIST BEARING ELEVATIONS ARE NOTED ON THE PLAN.
2. CEILING FRAMING TO BE STEEL JOISTS AS INDICATED AT 2'-0" O.C., UNLESS NOTED OTHERWISE.
3. ALL CEILING DECK TO BE 1" TYPE C, 24GA GALVANIZED STEEL DECK + 3/4" PLYWOOD. CONNECT TO JOISTS WITH 5/8" PUDDLE WELDS IN A 36/7 PATTERN. SIDE LAP FASTENERS TO BE #10 TEK SCREWS. PROVIDE (5) SIDE LAP FASTENERS PER SPAN.
4. CEILING JOIST BRIDGING PER S.J.I. SPECIFICATIONS. JOIST BRIDGING SHOWN IS APPROXIMATE.
5. PROVIDE ANGLE FRAMES AT ALL ROOF TOP MECHANICAL UNITS AND AT ALL CEILING PENETRATIONS. REFER TO TYPICAL DETAIL ON S2.2.



LAMBERT, EZELL, DURHAM
ARCHITECTURE, LLC
P.O. BOX 984 401 EAST COLLEGE ST.
FLORENCE, ALABAMA 35631
TELEPHONE (256) 161-7100
FACSIMILE (256) 161-2908

OFFICE AND SHOP BUILDING FOR
RL CONSULTING, INC
TUSCUMBIA, ALABAMA

| DATE | REVISION |
|----------|----------|
| 10/14/14 | REVISED |
| 10/6/0 | ALM |
| | ALM |
| | PRM |

DRAWING TITLE
MANUFACTURING
CEILING FRAMING
PLAN
DRAWING NUMBER

S1.1

GENERAL NOTES:

- CONSTRUCTION METHODS, PROCEDURES, AND SEQUENCES ARE THE CONTRACTOR'S RESPONSIBILITY. THE CONTRACTOR SHALL TAKE ALL THE NECESSARY MEANS TO MAINTAIN AND PROTECT THE STRUCTURAL INTEGRITY OF ALL CONSTRUCTION NEW AND EXISTING, AT ALL STAGES.
- CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE SAFETY AND ERECTION REQUIREMENTS OF ALL GOVERNING PUBLIC AGENCIES DURING FABRICATION AND CONSTRUCTION.
- CONTRACTOR SHALL COORDINATE WITH ARCHITECTURAL DRAWINGS FOR DETAILING INCLUDING, BUT NOT LIMITED TO NOTCHES, STEPS, FORM TIES, REVEALS, AND CONSTRUCTION JOINTS IN EXPOSED CONCRETE AND MASONRY.
- CONTRACTOR SHALL FIELD VERIFY ALL EXISTING DIMENSIONS AND ALL DIMENSIONS FROM NEW CONSTRUCTION TO EXISTING CONSTRUCTION. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO ANY PERTINENT WORK. ALL EXISTING CONDITIONS AND DIMENSIONS SHALL BE NOTED BY THE CONTRACTOR ON THE SHOP DRAWINGS PRIOR TO SUBMITTING THOSE SHOP DRAWINGS FOR REVIEW.
- THE CONTRACTOR SHALL COORDINATE WITH ARCHITECTURAL, CIVIL, MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS AND VERIFY THE LOCATIONS AND SIZES OF CHASES, INSERTS, OPENINGS, SLEEVES, FINISHES, DEPRESSIONS, SLOPES, AND OTHER PROJECT REQUIREMENTS. USE DETAILS PROVIDED BY THE MANUFACTURER FOR INSTALLATION AND EQUIPMENT ANCHORAGE.
- ALL CONSTRUCTION JOINTS SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE INCORPORATED INTO THE STRUCTURE. ADDITIONAL CONSTRUCTION JOINTS TO FACILITATE CONSTRUCTION SHALL BE LOCATED AND DETAILED ON THE SHOP DRAWINGS FOR REVIEW.
- ALL DETAILS SHOWN ARE TYPICAL. SIMILAR DETAILS APPLY TO SIMILAR CONDITIONS, UNLESS SHOWN OTHERWISE.
- THE CONTRACTOR SHALL SUBMIT THE SHOP DRAWINGS, DETAILING ALL OPENINGS, INCLUDING ADDED REINFORCEMENT, AS SHOWN ON TYPICAL DETAILS, FOR REVIEW.
- ALL STRUCTURAL MEMBERS, AS SHOWN, HAVE BEEN DESIGNED TO CARRY IN PLACE DESIGN LOADS ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SUPPORT OF ANY ADDITIONAL LOADS AND FORCES IMPOSED DURING CONSTRUCTION, TRUCKING, ERECTING AND HANDLING.
- CONTRACTOR SHALL BRACE ALL BASEMENT TYPE WALLS RETAINING EARTH UNTIL RESTRAINING SLABS HAVE BEEN PLACED AND REACHED REQUIRED DESIGN STRENGTH.
- CONTRACTOR IS RESPONSIBLE FOR COORDINATING SPECIFIC CONNECTION AND SUPPORT REQUIREMENTS FOR EXTERIOR VENEER WITH THE ARCHITECT, STRUCTURAL ENGINEER, AND AFFECTED SUBCONTRACTOR. ADDITIONAL FRAMING AND SUPPORT MAY NEED TO BE ADDED TO MEET THE SPECIFIC REQUIREMENTS OF THE VENEER SYSTEM.

DESIGN CRITERIA:

1. BUILDING CODES AND STANDARDS:

- GENERAL BUILDING CODE: 2003 INTERNATIONAL BUILDING CODE
- CONCRETE: BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE, ACI 318
- MASONRY: BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES, ACI 530
- STRUCTURAL STEEL: SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS, AISC
- OPEN WEB STEEL JOISTS: STANDARD SPECIFICATIONS, LOAD TABLES AND WEIGHT TABLES FOR STEEL JOISTS AND JOIST GIRDERS, SJI
- STEEL DECK: STEEL DECK INSTITUTE DESIGN MANUAL FOR COMPOSITE DECKS, FORM DECKS, ROOF DECKS AND CELLULAR METAL DECK FLOOR DECK WITH ELECTRICAL DISTRIBUTION
- LIGHT-GAUGE STEEL FRAMING: SPECIFICATION FOR DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS, AISI

2. DESIGN LOADS

- DEAD LOADS: ANY CHANGE IN CONSTRUCTION MATERIALS FROM THOSE SHOWN ON THE ARCHITECTURAL OR STRUCTURAL DRAWINGS SHALL BE REPORTED BY THE GENERAL CONTRACTOR TO THE STRUCTURAL ENGINEER FOR VERIFICATION OF LOAD-CARRYING CAPACITY OF THE STRUCTURE. PARTITION DEAD LOAD OF 20 PSF HAS BEEN INCLUDED.
- LIVE LOADS (PSF):

| | |
|-----------------------|-----|
| MANUFACTURING (LIGHT) | 125 |
| OFFICE (LOBBIES) | 100 |
| OFFICES | 50 |
| ROOFS | 20 |
| STORAGE (LIGHT) | 125 |

C. SNOW LOADS:

| | |
|-----------------------|--------|
| GROUND SNOW LOAD | 10 PSF |
| IMPORTANCE FACTOR (I) | 1.0 |
| EXPOSURE FACTOR (Ce) | 1.0 |
| THERMAL FACTOR (Ct) | 1.0 |

D. WIND LOADS:

| | |
|------------------------------------|--|
| BASIC WIND SPEED | 90 MPH |
| IMPORTANCE FACTOR (I) | 1.0 |
| WIND EXPOSURE | C |
| BUILDING CLASSIFICATION | ENCLOSED |
| COMPONENTS AND CLADDING PRESSURES: | REFER TO CHART, S2.1 OR IN ACCORDANCE WITH THE INTERNATIONAL BUILDING CODE |

SHOP DRAWINGS:

- ALLOW TWO WEEKS FOR THE REVIEW OF EACH SUBMITTAL.
- THE CONTRACTOR ACKNOWLEDGES ITS RESPONSIBILITY TO SUBMIT COMPLETE SHOP DRAWINGS AND OTHER REQUIRED SUBMITTALS. INCOMPLETE SUBMITTALS WILL BE RETURNED TO THE CONTRACTOR UNREVIEWED. NO TIME EXTENSIONS OR COST INCREASES WILL BE ALLOWED FOR DELAYS CAUSED BY RETURN OF INCOMPLETE SUBMITTALS.
- THE CONTRACTOR SHALL REVIEW AND STAMP ALL SUBMITTALS PRIOR TO SUBMITTING THEM TO THE STRUCTURAL ENGINEER FOR REVIEW. QUESTIONS TO THE CONTRACTOR AND REQUESTS FOR FIELD VERIFICATION SHALL BE ANSWERED/PROVIDED PRIOR TO SUBMITTING THEM TO THE STRUCTURAL ENGINEER FOR REVIEW. SUBMITTALS THAT HAVE NOT BEEN REVIEWED BY THE GENERAL CONTRACTOR WILL BE RETURNED UNREVIEWED. NO TIME EXTENSIONS OR COST INCREASES WILL BE ALLOWED FOR DELAYS CAUSED BY RETURN OF UNREVIEWED SUBMITTALS.
- ALL SHOP DRAWINGS ARE TO BE NEWLY PREPARED. REPRODUCTIONS OF CONTRACT STRUCTURAL DRAWINGS FOR USE AS ERECTION DRAWINGS WILL NOT BE PERMITTED. SHOULD SHOP DRAWING SUBMITTALS CONTAIN ANY REPRODUCTIONS OF CONTRACT STRUCTURAL DRAWINGS, THEY WILL BE REJECTED AND RETURNED WITHOUT ENGINEER REVIEW.

SITE AND FOUNDATION:

- A GEOTECHNICAL ENGINEER, EMPLOYED BY THE GENERAL CONTRACTOR, SHALL PROVIDE COMPACTED FILL REQUIREMENTS FOR THE BUILDING PAD AND REVIEW THE FOUNDATION BEARING SURFACE TO VERIFY THE ASSUMED BEARING PRESSURE NOTED BELOW. DO NOT PLACE CONCRETE PRIOR TO GEOTECHNICAL ENGINEER'S APPROVAL.
- ASSUMED MAXIMUM BEARING PRESSURE: 2000 PSF.
- THE GENERAL CONTRACTOR SHALL OBTAIN A COPY OF THE SUBSURFACE EXPLORATION AND GEOTECHNICAL ENGINEERING STUDY (GEOTECHNICAL REPORT) FROM THE OWNER AND SHALL FOLLOW ALL REQUIREMENTS WITHIN THE RECOMMENDATIONS SECTION. THE FOUNDATION DESIGN FOR THIS PROJECT IS BASED ON THE GEOTECHNICAL REPORT BY OMI, INC. ENTITLED SUBSURFACE EXPLORATION AND GEOTECHNICAL ENGINEERING STUDY, PROJECT NO. 8844
- MAXIMUM BEARING PRESSURE, AS NOTED IN THE GEOTECHNICAL REPORT: 3000 PSF.
- MAXIMUM BEARING PRESSURES, AS NOTED IN THE GEOTECHNICAL REPORT (PSF):

| | |
|---------------------|------|
| COLUMN FOOTINGS | 2000 |
| CONT. WALL FOOTINGS | 1500 |
- ALL FOUNDATION BEARING SURFACES SHALL BE REVIEWED BY THE GEOTECHNICAL ENGINEER PRIOR TO PLACING CONCRETE

TO ENSURE THEIR COMPLIANCE WITH THE PRESSURES NOTED ABOVE. ALL BOTTOM ELEVATIONS ARE ESTIMATED AND MAY BE ADJUSTED IN THE FIELD BY THE GEOTECHNICAL ENGINEER. ALL BOTTOM ELEVATIONS THAT ARE LOWER THAN THOSE GIVEN IN THE STRUCTURAL DRAWINGS MUST BE FILLED WITH LEAN CONCRETE UP TO THE BOTTOM OF FOOTING ELEVATION.

- COMPACTED FILL WITHIN THE BUILDING AREA AND EXTENDING 10 FEET OUTSIDE THE EXTERIOR BUILDING LINE SHALL MEET THE FOLLOWING REQUIREMENTS:

| |
|---|
| PLASTICITY INDEX LESS THAN 30 |
| MAXIMUM SIZE STONE OF 4 INCHES |
| SOIL FREE OF ORGANIC MATERIAL |
| PLACE IN 8 INCH LOOSE LIFTS |
| COMPACT TO 98 PERCENT OF STANDARD PROCTOR MAXIMUM DRY DENSITY |
| FIELD DENSITY TEST FOR EACH 2500 SQUARE FEET PER FOOT OF FILL |
- STRUCTURAL FILL UNDER FLOOR SLABS: COMPACT TO 98 PERCENT OF SOIL'S STANDARD PROCTOR MAXIMUM DRY DENSITY.
- GRAVEL FILL IN TRENCHES: PLACE IN 8 INCH MAXIMUM LIFTS AND COMPACT EACH LIFT WITH VIBRATORY OR TAMPING COMPACTION EQUIPMENT.
- GRAVEL FILL UNDER CONCRETE SLAB-ON-GRADE MUST BE COMPACTED USING VIBRATORY PLATE COMPACTION EQUIPMENT OR VIBRATORY ROLLERS. SPECIAL CARE MUST BE TAKEN TO ENSURE PROPER COMPACTION OF GRAVEL AT EDGES OF SLAB AND ADJACENT TO FOUNDATION STEM WALLS WHILE MAINTAINING THE STRUCTURAL INTEGRITY OF FOUNDATION STEM WALLS.
- BACKFILL FOR FOUNDATION AND RETAINING WALLS SHALL BE A FREE DRAINING GRANULAR MATERIAL, SUCH AS #57 STONE. BACKFILL SHALL BE PLACED IN 12 INCH LIFTS AND SHALL BE COMPACTED SUFFICIENTLY TO PREVENT SUBSIDENCE OF SURFACE ADJACENT TO THE WALL. THE GRANULAR MATERIAL SHALL BE PLACED IN A 45 DEGREE WEDGE EXTENDING FROM THE OUTSIDE EDGE OF THE FOOTING.

CONCRETE

1. CONCRETE SCHEDULE:

| ITEM | 28 DAY COMPRESSIVE STRENGTH |
|----------------|---|
| FOOTINGS | 3000 PSI, NORMAL WEIGHT, AIR-ENTRAINED |
| SLAB-ON-GRADE | 3000 PSI, NORMAL WEIGHT |
| ELEVATED SLABS | 3500 PSI, NORMAL WEIGHT |
| WALLS, COLUMNS | 4000 PSI, NORMAL WEIGHT |
| MASONRY FILL | 3000 PSI, NORMAL WEIGHT, PEA-GRAVEL AGGREGATE, 8"-10" SLUMP |

2. CONCRETE COVER AROUND REINFORCING (U.N.O.)

| | |
|---|-----------|
| UNFORMED SURFACES IN CONTACT WITH EARTH | 3 IN. |
| UNFORMED SURFACES OVER VAPOR BARRIER | 2 IN. |
| FORMED SURFACES EXPOSED TO EARTH OR WEATHER: | |
| #5 AND SMALLER | 1 1/2 IN. |
| #6 AND LARGER | 2 IN. |
| FORMED SURFACES NOT EXPOSED TO EARTH OR WEATHER | 1 IN. |

3. CONCRETE CONSTRUCTION AND OPERATIONS SHALL COMPLY WITH A.C.I. STANDARDS.

- CONCRETE BEAMS, JOISTS, FOOTINGS, AND SLABS SHALL HAVE NO HORIZONTAL JOINTS. WHERE THIS IS NOT FEASIBLE, ANY STOP IN CONCRETE WORK MUST BE MADE AT CENTER OF SPAN WITH VERTICAL BULKHEAD AND SHEAR KEY, UNLESS SHOWN OTHERWISE.
- NO CONDUIT OR PIPE SHALL BE CAST IN CONCRETE WITHOUT THE WRITTEN APPROVAL OF THE STRUCTURAL ENGINEER. IF CONDUIT OR PIPE IS ALLOWED IN THE SLAB, THEY SHALL MEET THE FOLLOWING REQUIREMENTS:
 - CONDUIT AND PIPE SHALL HAVE A MINIMUM OF 3" CLEAR BETWEEN PIECES OF CONDUIT OR PIPE AND A MINIMUM SPACING OF 3 TIMES THE CONDUIT OR PIPE DIAMETER.
 - OUTER LIMITS OF CONDUIT, CROSSING CONDUIT AND COUPLERS SHALL NOT EXCEED 1/3 THE SLAB THICKNESS AND SHALL BE LOCATED WITHIN THE MIDDLE THIRD OF THE SLAB.
 - THE CONTRACTOR SHALL COORDINATE WITH THE ARCHITECT AND ELECTRICAL ENGINEER AS REQUIRED TO ENSURE THAT PANEL LAYOUTS AND ELECTRICAL ROOMS ARE LARGE ENOUGH TO ACCOMMODATE CONDUIT CLEARANCE AND SPACING REQUIREMENTS WHERE CONDUITS TURN UP/DOWN AND OUT OF THE SLAB.

6. MECHANICAL ANCHORS INTO CONCRETE SHALL BE POWERS WEDGE BOLTS, SIMPSON TITEN HD, OR EQUIVALENT.

7. EPOXY ANCHORS INTO CONCRETE SHALL BE POWERS, SIMPSON, OR HILTI INSTALLED WITH EPOXY ADHESIVES PER THE MANUFACTURER'S GUIDELINES FOR CLEANING, USE, AND INSTALLATION.

REINFORCING

- ALL REINFORCING SHALL CONFORM TO THE LATEST REVISION OF ASTM SPECIFICATION A615, GRADE 60.
- ALL REINFORCING SHALL BE DETAILED IN ACCORDANCE WITH A.C.I. STANDARD 315, LATEST REVISION.
- NO REINFORCING SHALL BE WELDED IN ANY MANNER, UNLESS SPECIFICALLY SHOWN OR NOTED ON THE DRAWINGS.
- ALL WELDED WIRE FABRIC (W.W.F.) SHALL CONFORM TO ASTM A-185. WELDED WIRE FABRIC SHALL BE LAPPED A MINIMUM OF 1'4" AND SHALL BE FURNISHED IN SHEETS ONLY (NO ROLLS). ALL WELDED WIRE FABRIC SHALL BE SUPPORTED AT THE CORRECT DEPTH.
- REINFORCING STEEL SHOWN IN SECTIONS IS A SCHEMATIC INDICATION THAT REINFORCING EXISTS. REFER TO SCHEDULES, SECTION NOTES, AND GENERAL NOTES FOR ACTUAL REINFORCING REQUIRED.
- REINFORCING BAR PLACING ACCESSORIES SHALL BE PLACED IN ACCORDANCE WITH C.R.S.I. SPECIFICATIONS, AND A.C.I. MANUAL OF STANDARD PRACTICE. WHERE CONCRETE IS EXPOSED IN FINISHED BUILDING, PROVIDE ACCESSORIES WITH RUSTPROOF LEGS.
- ALL SPLICES SHALL BE CLASS 'B' TENSION LAP SPLICES, UNLESS NOTED OTHERWISE.
- SLABS-ON-GRADE (INCLUDING EXTERIOR WALK AND DRIVE SLABS - UNLESS THESE SLABS ARE COVERED IN CIVIL DRAWINGS): 4" THICK, REINFORCED WITH 6x6 W2.1/W2.1 WELDED WIRE FABRIC, SUPPORTED AT MID-DEPTH OF SLAB, UNLESS SHOWN OTHERWISE.
- CONTINUOUS WALL FOOTINGS: 1'-0" THICK, REINFORCED WITH 3 #5 CONT. AND #3 TIES AT 48" O.C., UNLESS NOTED OTHERWISE.
- PROVIDE OUTSIDE CORNER BARS IN CONCRETE FOOTINGS TO MATCH THE SIZE AND SPACING OF THE HORIZONTAL REINFORCING. LEG LENGTH SHALL BE EQUIVALENT TO A CLASS 'A' SPlice, UNLESS NOTED OTHERWISE.
- CONCRETE WALLS: REINFORCE 8" THICK WALLS WITH #5 AT 12" O.C. EACH WAY, IN THE CENTER OF THE WALL. REINFORCE 12" THICK WALLS WITH #4 AT 12" O.C., EACH WAY, EACH FACE, UNLESS NOTED OTHERWISE.
- PEDESTAL, WALL, AND COLUMN REINFORCING: DOWEL TO FOUNDATION WITH HOOKED BARS OF SAME SIZE AND SPACING AS THE VERTICAL REINFORCING.
- AT OPENINGS LARGER THAN 12" IN CONCRETE WALLS AND FLOOR SLABS, PROVIDE 2 #4 BARS AT ALL 4 SIDES OF THE OPENING. EXTEND BARS 2'-0" BEYOND THE CORNERS OF THE OPENING.
- BEAM AND SLAB TOP BARS: EXTEND INTO SUPPORT IN ACCORDANCE WITH A.C.I. 318. WHERE SUCH EXTENSION IS NOT OBTAINABLE, TERMINATE THE BAR IN A STANDARD RECOMMENDED 90 DEGREE HOOK.
- PROVIDE #4 AT 12" O.C. TEMPERATURE REINFORCING IN ALL SOLID AND JOIST SLABS AT RIGHT ANGLES TO MAIN REINFORCING OR JOISTS, UNLESS NOTED OTHERWISE. IN JOIST SLABS, SPLICES OF TEMPERATURE REINFORCING SHALL BE MADE OVER A JOIST.
- WHERE BEAM OR GIRDER IS PARALLEL TO SLAB MAIN STEEL, PLACE #4 AT 12" O.C. IN THE TOP OF SLAB OVER AND AT RIGHT ANGLES TO THIS MEMBER. EXTEND 3'-0" INTO SLAB FROM FACE OF BEAM OR GIRDER.

CONCRETE MASONRY

- MASONRY CONSTRUCTION SHALL CONFORM TO ACI 530.1 SPECIFICATION.
- MASONRY UNIT STRENGTH (m) SHALL BE 1500 PSI AT 28 DAYS.
- GROUT COMPRESSIVE STRENGTH SHALL BE 3000 PSI AT 28 DAYS.
- MORTAR SHALL BE TYPE S OR M.
- CONTRACTOR SHALL PROVIDE ADEQUATE TEMPORARY BRACING FOR ALL MASONRY WALLS DURING CONSTRUCTION.

- MASONRY SHALL HAVE (9 GAUGE) SEISMIC TYPE HORIZONTAL JOINT REINFORCING PLACED AT A MINIMUM OF EVERY OTHER COURSE (DUR-Q-WALL OR EQUIVALENT).
- ALL CONCRETE MASONRY SHALL BE RUNNING BOND, UNLESS NOTED OTHERWISE.
- ALL BLOCK CELLS AND CAVITIES BELOW GRADE SHALL BE FILLED WITH 3000 PSI PEA-GRAVEL CONCRETE OR GROUT.
- MINIMUM REINFORCING LAP SPLICE OF 48 BAR DIAMETERS.
- COORDINATE LOCATIONS AND DETAILS OF MASONRY CONTROL JOINTS WITH ARCHITECTURAL DRAWINGS. PROVIDE MASONRY CONTROL JOINTS AT A MAXIMUM SPACING OF 30 FEET.
- WHERE MASONRY CONSTRUCTION IS REINFORCED WITH VERTICAL BAR REINFORCING, FILL CELLS OF MASONRY WITH 3000 PSI PEA-GRAVEL CONCRETE PLACED IN 4'-0" MAXIMUM LIFTS. IF CONTRACTOR DESIRES TO FILL CELLS IN TALLER LIFTS, CLEANOUTS MUST BE PROVIDED AND OBSERVED PRIOR TO FILLING CELLS.
- LINTELS AT OPENINGS IN CONCRETE MASONRY WALLS:

| | |
|-------------------------|---|
| SPANS UP TO 3'-6" | 8" DEEP CHANNEL BLOCK, REINFORCED WITH 2 #4 CONT., BOTTOM. |
| SPANS OF 3'-6" TO 5'-0" | 16" TOTAL DEPTH: 8" DEEP CHANNEL BLOCK + 8" DEEP FORM BLOCK, REINFORCED WITH 2 #5 CONT., TOP AND BOTTOM |
| SPANS OF 5'-0" TO 8'-0" | 16" TOTAL DEPTH: 8" DEEP CHANNEL BLOCK + 8" DEEP FORM BLOCK, REINFORCED WITH 2 #6 CONT., TOP AND BOTTOM |

PROVIDE 8" MINIMUM BEARING AT EACH END OF LINTEL BEAMS. BEARING CELLS SHALL BE CONCRETE FILLED.

13. AT TOP OF ALL MASONRY WALLS (BEARING OR NON-BEARING), PROVIDE 8" DEEP CONTINUOUS CONCRETE FILLED BOND BEAM, REINFORCED WITH 2 #4 CONT.

14. AT CORNERS AND INTERSECTIONS OF BOND BEAMS IN WALLS, PROVIDE BARS WITH 90 DEGREE HOOKS, 12" LONG, TO TIE WALLS TOGETHER.

15. REINFORCE EXTERIOR MASONRY CORNERS WITH 1 #5 VERTICAL. PROVIDE HOOKED DOWEL IN FOOTING. PROVIDE 90 DEGREE HOOK IN BOND BEAM AT TOP OF WALL.

STRUCTURAL STEEL

- STRUCTURAL STEEL: ASTM A992, GRADE 50 FOR W-SHAPES, ASTM A36 ELSEWHERE.
- STEEL TUBING: ASTM A500, GRADE B.
- STEEL PIPE: ASTM A53, TYPE E OR S, GRADE B.
- WELDED CONNECTIONS: E70XX ELECTRODES, MINIMUM SIZE FILLET WELD 3/16".
- BOLTED CONNECTIONS: BEARING TYPE A325IN, IN ACCORDANCE WITH AISC "SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS". BOLTS THROUGH 4" WIDE BEAM FLANGES SHALL BE 5/8" DIAMETER. ALL OTHER BOLTS SHALL BE 3/4" DIAMETER (MINIMUM).
- ANCHOR BOLTS: ASTM A449, HEADED TYPE, UNLESS NOTED OTHERWISE.
- HEADED STUDS: ASTM A108, GRADE 1015 OR 1020, COLD-FINISHED CARBON STEEL WITH DIMENSIONS COMPLYING WITH AISC.
- FABRICATE AND ERECT ALL STRUCTURAL STEEL IN ACCORDANCE WITH AISC "SPECIFICATION FOR THE DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS".
- BOLTS SHOWN IN SECTIONS AND DETAILS ARE A SCHEMATIC INDICATION THAT BOLTS MAY BE USED. ACTUAL NUMBER, UNLESS SPECIFIED, TO BE IN ACCORDANCE WITH AISC.
- ALL STRUCTURAL STEEL CONNECTIONS NOT SPECIFICALLY DETAILED ON THE DRAWINGS SHALL BE DESIGNED TO RESIST FORCES INDICATED, BY THE CONTRACTOR, UNDER THE DIRECT SUPERVISION OF A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF ALABAMA.
- ALL NON-COMPOSITE BEAM CONNECTIONS SHALL BE AISC TYPE 2 "SIMPLE FRAMING" CONNECTIONS, UNLESS NOTED OTHERWISE. WHERE BEAM REACTIONS ARE NOT SHOWN ON THE DRAWINGS, THE CONNECTIONS SHALL BE DESIGNED TO SUPPORT A REACTION EQUAL TO ONE-HALF OF THE TOTAL UNIFORM LOAD CAPACITY FROM THE MAXIMUM UNIFORM LOAD TABLES, AISC MANUAL, MULTIPLIED BY A FACTOR OF 1.2 FOR GIVEN SHAPE, SPAN, AND GRADE OF STEEL.
- ALL BEAM CONNECTIONS SHALL BE DESIGNED FOR AN AXIAL LOAD OF 5 PERCENT OF THE BEAM REACTION, U.N.O.
- WHERE STEEL BEAMS ARE CONTINUOUS OVER SUPPORTS, PROVIDE WEB STIFFENER PLATES EACH SIDE OF BEAM WEB, OF THICKNESS EQUAL TO BEAM FLANGE THICKNESS, LOCATED IN ALIGNMENT WITH COLUMN WEB OR FLANGES.
- THE STEEL FRAME IS NOT "SELF-SUPPORTING". ADEQUATE TEMPORARY SUPPORT MUST BE PROVIDED BY THE CONTRACTOR UNTIL REQUIRED CONNECTIONS OR ELEMENTS ARE IN PLACE.
- PROVIDE 3" MINIMUM CONCRETE COVER FOR ALL STEEL BELOW GRADE. ALL EXPOSED EXTERIOR STRUCTURAL STEEL SHALL BE HOT-DIP GALVANIZED (ASTM A123) UNLESS SHOWN IN THE ARCHITECTURAL DRAWINGS OR SPECIFICATIONS AS PAINTED OR STAINLESS STEEL.
- DO NOT PRIME OR PAINT TOP FLANGE SURFACES OF BEAMS WHICH ARE TO RECEIVE FIELD-WELDED CONNECTIONS OR HEADED STUDS.
- COORDINATE PRIMING OR PAINTING OF STRUCTURAL STEEL WITH FIREPROOFING REQUIREMENTS.

STEEL JOISTS

- DESIGN, FABRICATE AND ERECT STEEL JOISTS IN ACCORDANCE WITH THE STEEL JOIST INSTITUTE STANDARD SPECIFICATIONS AND LOAD TABLES.
- PROVIDE A MINIMUM END BEARING ON STEEL SUPPORTS AS REQUIRED BY THE STEEL JOIST INSTITUTE. STAGGER THE ENDS OF JOISTS IF NECESSARY. GENERAL CONTRACTOR SHALL COORDINATE METAL DECK SPLICE LOCATION TO CENTER OVER JOISTS.
- PROVIDE HORIZONTAL AND DIAGONAL BRIDGING IN ACCORDANCE WITH SJI TO PROVIDE ADEQUATE JOIST CHORD BRACING.
- AT JOISTS PARALLEL TO MASONRY WALLS, ANCHOR BRIDGING ROWS TOP AND BOTTOM BY WELDING TO A VERTICAL L3x3x1/4 INSTALLED WITH (2) 5/8" DIAM. x 4" EMBEDMENT EPOXY ANCHORS INTO FILLED CELLS.
- AT JOISTS PARALLEL TO BEAMS, ANCHOR BRIDGING ROWS BY WELDING TO BEAMS.
- DESIGN ROOF JOISTS TO RESIST A NET UPLIFT FORCE OF 10 PSF.

METAL DECK

- DECK PROPERTIES AND ATTACHMENTS SHALL BE IN ACCORDANCE WITH THE STEEL DECK INSTITUTE.
- DECK SHALL BE CONTINUED OVER THREE OR MORE SPANS.
- ROOF DECK: WIDE RIB, TYPE B, 22 GAUGE STEEL, 1 1/2" DEEP, GALVANIZED, UNLESS NOTED OTHERWISE.
- ROOF DECK SHALL BE CONNECTED TO SUPPORTING STRUCTURE WITH 5/8" PUDDLE WELDS IN A 36/7 PATTERN. SIDE LAP FASTENERS SHALL BE #10 TEK SCREWS. PROVIDE 5 SIDE LAP FASTENERS PER SPAN.
- LIGHT GAUGE STEEL FRAMING, SUSPENDED CEILINGS, LIGHT FIXTURES, AND DUCTS OR OTHER UTILITIES SHALL NOT BE SUPPORTED BY THE METAL ROOF DECK.

LIGHT GAUGE STEEL FRAMING

- STRUCTURAL PROPERTIES OF LIGHT GAUGE STEEL MEMBERS SHALL BE COMPUTED IN ACCORDANCE WITH AISI "SPECIFICATION FOR DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS".
- LOAD-BEARING STUDS SHALL BE FULLY END BEARING.
- WALL SHEATHING FASTENING, UNLESS NOTED OTHERWISE: NO. 8 x 1" BUGLE HEAD SCREWS AT 6" O.C. AT ALL FOUR PANEL EDGES AND AT 12" O.C. AT INTERMEDIATE MEMBERS. SCREWS SHALL BE PLACED A MINIMUM OF 3/8" FROM PANEL EDGES.
- PROVIDE WALL BRACING, CONNECTION DETAILS, AND WINDOW HEADERS AS RECOMMENDED BY THE LIGHT GAUGE STEEL MANUFACTURER FOR ALL LIGHT GAUGE STEEL FRAMING.
- PROVIDE PERMANENT LATERAL BRACING AT ALL LOAD-BEARING WALLS PER MANUFACTURER'S REQUIREMENTS BUT NOT GREATER THAN 48". LATERAL BRACING MUST BE SECURED BEFORE AXIAL LOAD MAY BE APPLIED.
- PROVIDE TEMPORARY LATERAL BRACING AT ALL LOAD-BEARING WALLS BEFORE AXIAL LOAD IS APPLIED. LATERAL BRACING SHALL CONSIST OF A MINIMUM OF DIAGONAL STUDS PLACED PARALLEL AND PERPENDICULAR TO THE PLANE OF THE WALL.
- BEFORE AXIAL LOAD MAY BE APPLIED, ONE FLANGE OF EACH LOAD-BEARING STUD MUST BE BRACED BY SHEATHING OR SOME FORM OF PERMANENT BRACING.

- TEMPORARY BRACING SHALL NOT IMPOSE ANY FORCE ON THE SUPPORTING STRUCTURE.
- VERTICAL STUDS INTERRUPTED BY WALL OPENINGS SHALL BE LOCATED EQUALLY ON EACH SIDE OF THE OPENING AS FULL HEIGHT STUDS ON EACH SIDE OF THE OPENING. CONNECT JAMB STUDS TOGETHER WITH 6" LONG PIECES OF TRACK OF GAUGE EQUAL TO THE STUDS AT THE JAMB STUD QUARTER POINTS. CONNECT EACH PIECE OF TRACK TO EACH STUD WITH 2 #10 SCREWS.
- PROVIDE SHOP DRAWINGS, SHOWING PLANS, ELEVATIONS AND CONNECTION DETAILS AT ALL LOAD-BEARING AND CURTAIN WALL STUD WALLS. THE SUBMITTAL FROM THE LIGHT-GAUGE CONTRACTOR MUST ALSO INCLUDE THE FOLLOWING ITEMS:
 - CONNECTION OF TRACK TO SUPPORTING SURFACES
 - CONNECTION OF STUD TO TRACK
 - CONNECTION/GANGING OF JAMB STUDS
 - CONSTRUCTION OF HEADERS TO INCLUDE FASTENER SPACING
 - CONNECTION OF HEADERS TO JAMB STUDS
 - NUMBER OF JAMB STUDS AT EACH OPENING
 - BRIDGING DESCRIPTION/CONNECTION OF BRIDGING TO STUDS

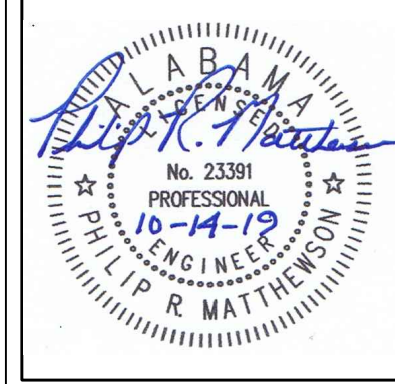
- FOR ANY MEMBER OR CONNECTION NOT SPECIFIED ON THE STRUCTURAL PLANS, SHOP DRAWINGS AND CALCULATIONS SHALL BE SUBMITTED BEARING THE SEAL OF A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF ALABAMA.
- MEMBERS DESIGNATED AS 18 AND 20 GAUGE SHALL BE 33 KSI UNLESS NOTED OTHERWISE. MEMBERS DESIGNATED AS 12, 14, AND 16 GAUGE SHALL BE 50 KSI, UNLESS NOTED OTHERWISE.

ENGINEERED METAL BUILDING

- DESIGN, FABRICATE AND ERECT ENGINEERED METAL BUILDING IN ACCORDANCE WITH NAMB STANDARDS AND THE INTERNATIONAL BUILDING CODE. METAL BUILDING SHOP DRAWINGS SHALL BEAR THE SEAL OF AN ENGINEER REGISTERED IN THE STATE OF ALABAMA.
- ANCHOR BOLT SIZE, LENGTH, AND LOCATION ARE TO BE DESIGNATED BY THE METAL BUILDING SUPPLIER. ANCHOR BOLTS ARE TO BE PURCHASED AND INSTALLED BY THE GENERAL CONTRACTOR.
- BEFORE FOOTING INSTALLATION, THE ANCHOR BOLT EMBEDMENT LENGTHS MUST BE VERIFIED. THE FOOTING DEPTH SHALL BE THE SCHEDULED DEPTH OR THE ANCHOR BOLT EMBEDMENT DEPTH PLUS 3 INCHES, WHICHEVER IS GREATER.
- HORIZONTAL FORCE TRANSFER FROM METAL BUILDING COLUMN BASE TO CONCRETE BY METAL BUILDING SUPPLIER.
- METAL BUILDING SUPPLIER TO VERIFY COLUMN LAYOUT. ANY CHANGES MUST BE SUBMITTED FOR REVIEW OF FOUNDATION DESIGN BEFORE CONSTRUCTION BEGINS.
- THE FOUNDATIONS AND DETAILS SHOWN ON THE STRUCTURAL DRAWINGS ARE BASED ON PRELIMINARY COLUMN REACTIONS AND ARE SHOWN FOR BIDDING PURPOSES ONLY.
- WHEN THE METAL BUILDING SUPPLIER HAS BEEN SELECTED AND THE FINAL METAL BUILDING DESIGN COMPLETED, THE METAL BUILDING SUPPLIER SHALL FURNISH FINAL DESIGN LOADS, BUILDING REACTIONS, AND NECESSARY DETAILS TO THE FOUNDATION ENGINEER FOR REVIEW. THE FOUNDATION DRAWINGS WILL BE MODIFIED AS REQUIRED PRIOR TO ANY CONCRETE PLACEMENT.
- BEFORE FOOTING INSTALLATION, METAL BUILDING SUPPLIER SHALL SUBMIT DESIGN LOADS AND COLUMN REACTIONS.



P.R. Matthewson & Associates Engineers, Inc.
4835 University, 5th Suite, 17 Huntsville, AL 35816
Phone: (256) 452-4818
Project No. 1965



LAMBERT • EZELL • DURHAM
ARCHITECTURE, LLC
P.O. BOX 194 • 401 EAST COLLEGE ST.
TUSCUMBIA, ALABAMA 35661
TELEPHONE (256) 164-7100
FACSIMILE (256) 167-2908

OFFICE AND SHOP BUILDING FOR
RL CONSULTING, INC
TUSCUMBIA, ALABAMA

| | | | |
|---------|----------|----------|-----|
| DATE | 10/14/14 | REVISION | |
| JOB NO. | 1965 | DRAWN | ALM |
| | | CHECKED | PRM |

DRAWING TITLE
GENERAL NOTES

DRAWING NUMBER
S2.0

| ANCHOR BOLT LENGTH SCHEDULE | | | |
|-----------------------------|----------------------|------------------------|-------------------|
| ANCHOR BOLT DIAM. (IN) | EMBEDMENT DEPTH (IN) | PROJECTION LENGTH (IN) | TOTAL LENGTH (IN) |
| 1/2 | 6 | 1.5 | 7.5 |
| 5/8 | 10 | 2 | 12 |
| 3/4 | 14 | 3 | 17 |
| 1 | 18 | 3 | 21 |

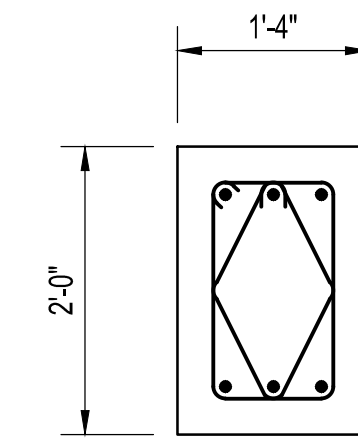
ALL ANCHOR BOLTS TO BE ASTM F1554 GR 36 UNLESS SPECIFIED OTHERWISE ON THE METAL BUILDING ANCHOR BOLT SHOP DRAWINGS. ALL 3/4" AND 1" ANCHOR BOLTS TO HAVE OVERSIZE WASHERS TACK WELDED TO THE BOLT HEAD THAT IS CAST INTO THE CONCRETE.

| BAR SIZE | f'c 3000 PSI | | | | f'c 4000 PSI | | | |
|----------|--------------|------|------------|------|--------------|------|------------|-----|
| | TOP BARS | | OTHER BARS | | TOP BARS | | OTHER BARS | |
| | A | B | A | B | A | B | A | B |
| #3 | 22" | 28" | 17" | 22" | 19" | 24" | 15" | 19" |
| #4 | 29" | 37" | 22" | 29" | 25" | 32" | 19" | 25" |
| #5 | 36" | 47" | 28" | 36" | 31" | 40" | 24" | 31" |
| #6 | 43" | 56" | 33" | 43" | 37" | 48" | 29" | 37" |
| #7 | 63" | 81" | 48" | 63" | 54" | 70" | 42" | 54" |
| #8 | 72" | 93" | 55" | 72" | 62" | 80" | 48" | 62" |
| #9 | 81" | 105" | 62" | 81" | 70" | 91" | 54" | 70" |
| #10 | 91" | 118" | 70" | 91" | 79" | 102" | 61" | 79" |
| #11 | 101" | 131" | 78" | 101" | 87" | 113" | 67" | 87" |

- 1) TOP BARS ARE HORIZONTAL REINFORCEMENT WITH MORE THAN 12" OF CONCRETE CAST BELOW THE REINFORCEMENT.
- 2) MASONRY REINFORCING LAP SPLICE LENGTHS SHALL BE 48x BAR DIAMETER.

| COMPONENT/CLADDING LOCATION | EFFECTIVE WIND AREA OF COMPONENT | | | | |
|-----------------------------|----------------------------------|---------------------|---------------------|----------------------|----------------------|
| | 10 FT. ² | 20 FT. ² | 50 FT. ² | 100 FT. ² | 200 FT. ² |
| | ROOF INTERIOR (ZONE 1) | +8 -20 | +8 -20 | +7 -19 | +7 -19 |
| ROOF EDGE (ZONE 2) | +8 -34 | +8 -31 | +7 -26 | +7 -22 | / |
| ROOF CORNERS (ZONE 3) | +8 -52 | +8 -43 | +7 -31 | +7 -22 | / |
| WALL INTERIOR (ZONE 4) | +20 -22 | +19 -21 | +18 -20 | +17 -19 | +16 -18 |
| WALL ENDS (ZONE 5) | +20 -27 | +19 -25 | +18 -23 | +17 -21 | +16 -19 |

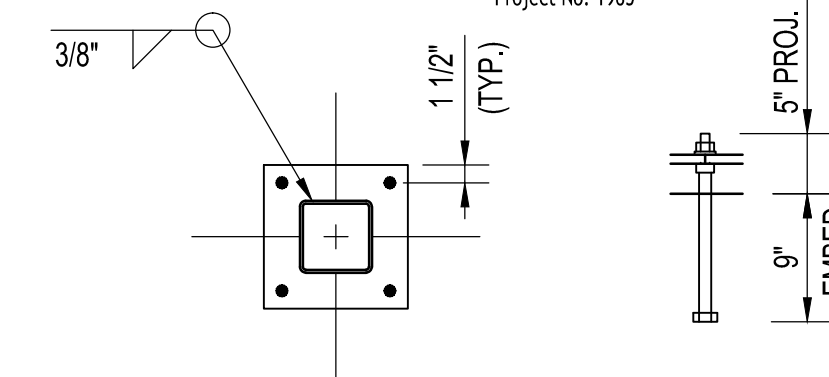
- NOTES:
1. PLUS AND MINUS SIGNS DENOTE PRESSURES ACTING TOWARD AND AWAY FROM BUILDING SURFACES.
 2. ONE-THIRD STRESS INCREASE IS NOT ALLOWED.



REINFORCE WITH (6) #7 VERTICAL, AND #4 CLOSED TIES 12"x18" PROVIDE (3) SETS AT TOP.

P1 PEDESTAL

N.T.S.

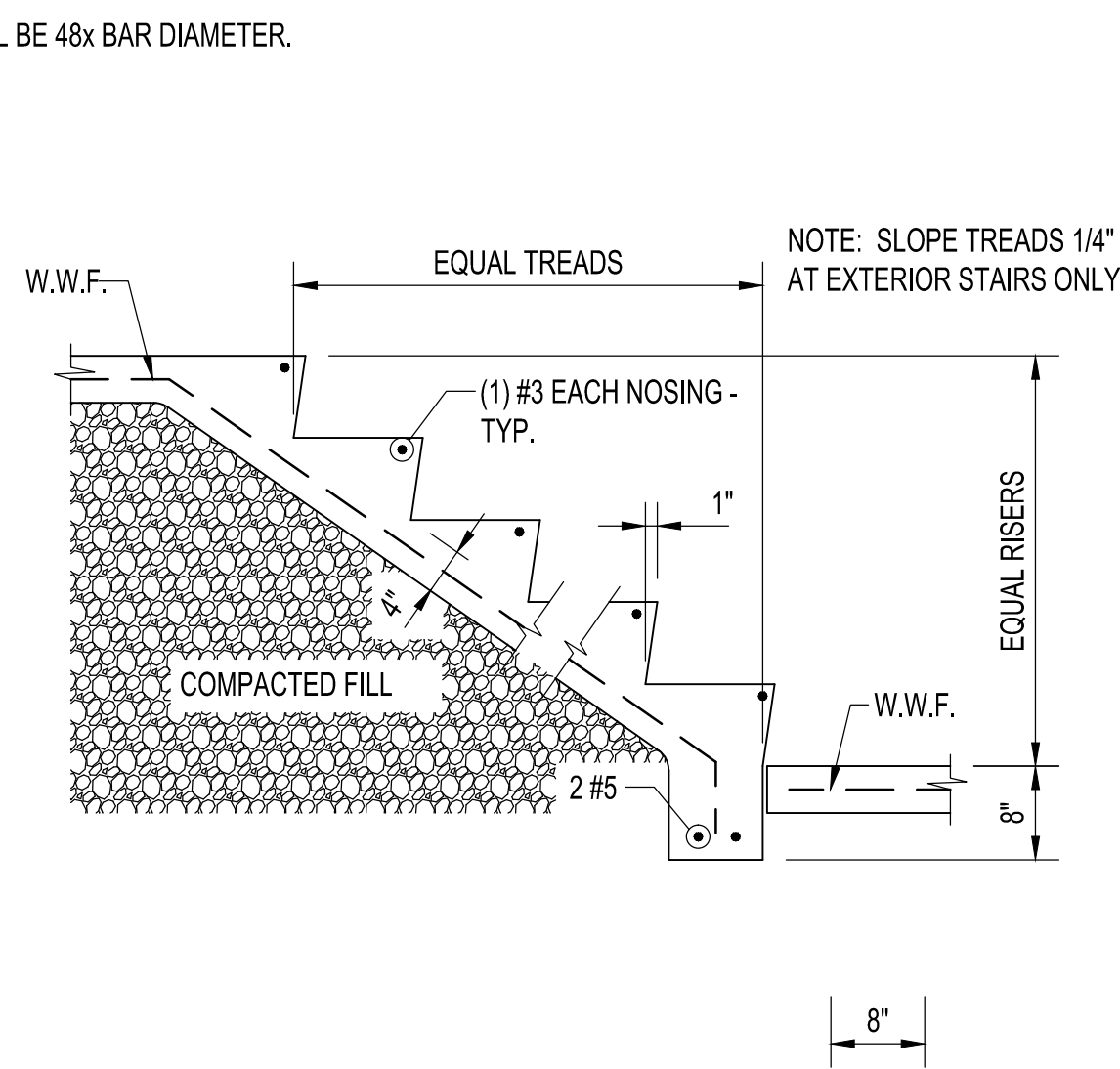


BP1

AB1

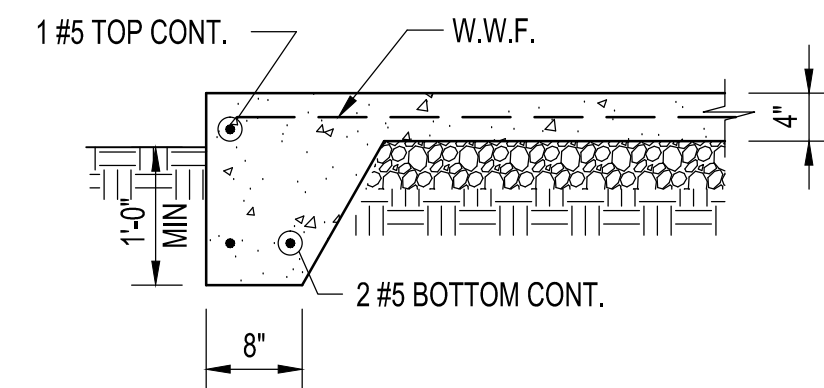
APPLIES TO ENTRANCE COLUMNS ONLY

| MINIMUM REQUIRED SUBMITTALS: | | |
|------------------------------|---------------------------|--|
| SPEC. SECTION | SPEC. SECTION TITLE | REQUIRED SUBMITTAL |
| 03200 | CONCRETE REINFORCEMENT | SHOP DRAWINGS MATERIAL CERTIFICATES WELDERS CERTIFICATES |
| 03300 | CONCRETE | PRODUCT DATA DESIGN MIXES MANUFACTURER'S INSTALLATION INSTRUCTIONS PROJECT RECORD DOCUMENTS |
| 04810 | UNIT MASONRY | PRODUCT DATA |
| 05120 | STRUCTURAL STEEL | SHOP DRAWINGS |
| 05210 | STEEL JOISTS | SHOP DRAWINGS WELDERS CERTIFICATES |
| 05310 | STEEL DECK | SHOP DRAWINGS PRODUCT DATA MANUFACTURER'S INSTALLATION INSTRUCTIONS |
| 05400 | COLD-FORMED STEEL FRAMING | PRODUCT DATA SHOP DRAWINGS |

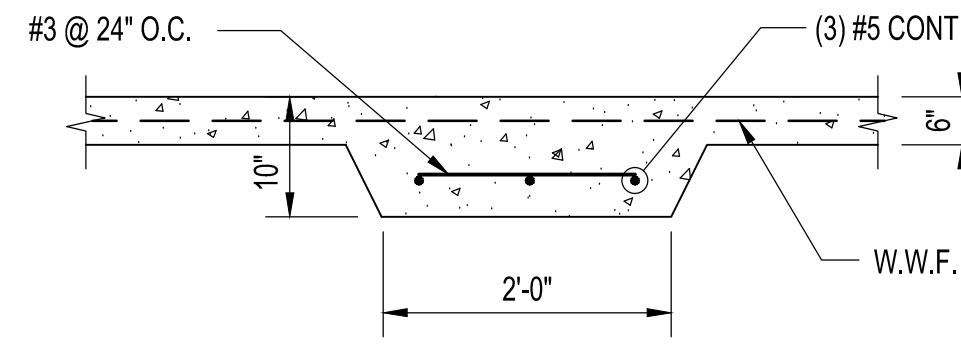


TYPICAL STEPS ON GRADE DETAIL

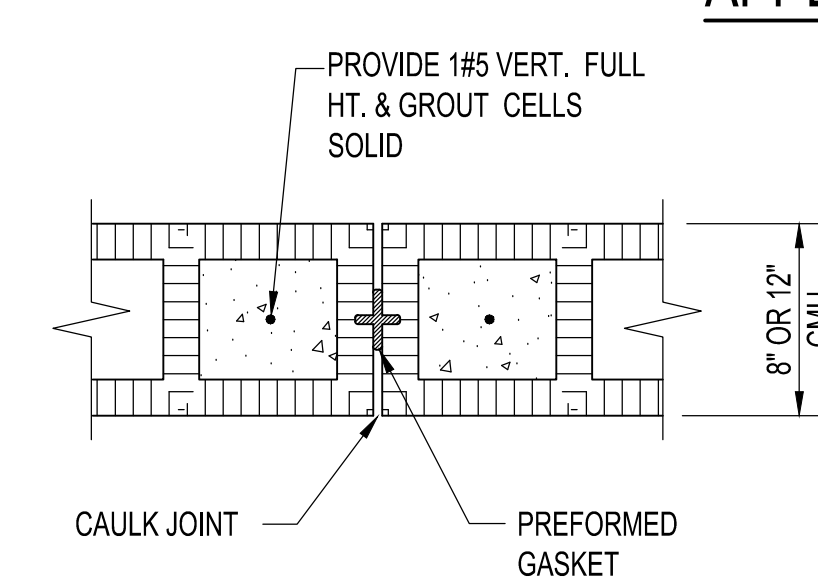
SEE ARCH. DWGS. FOR DIMENSIONS AND METAL NOSINGS IF REQ'D.



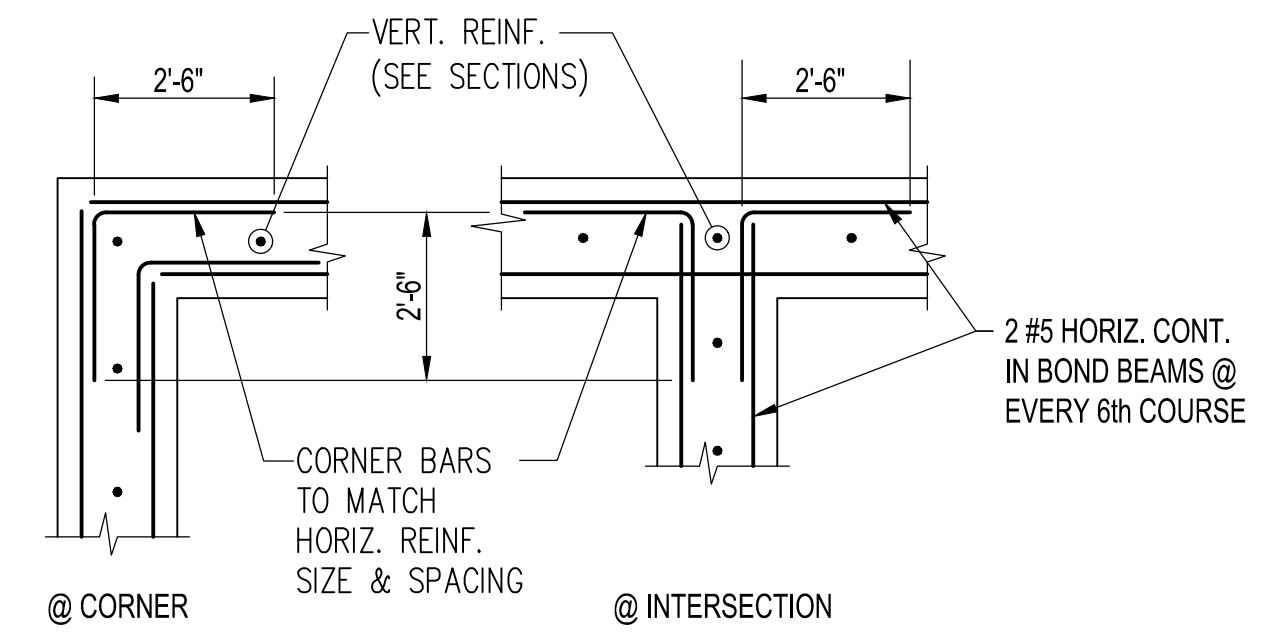
TYPICAL TURNDOWN SLAB DETAIL



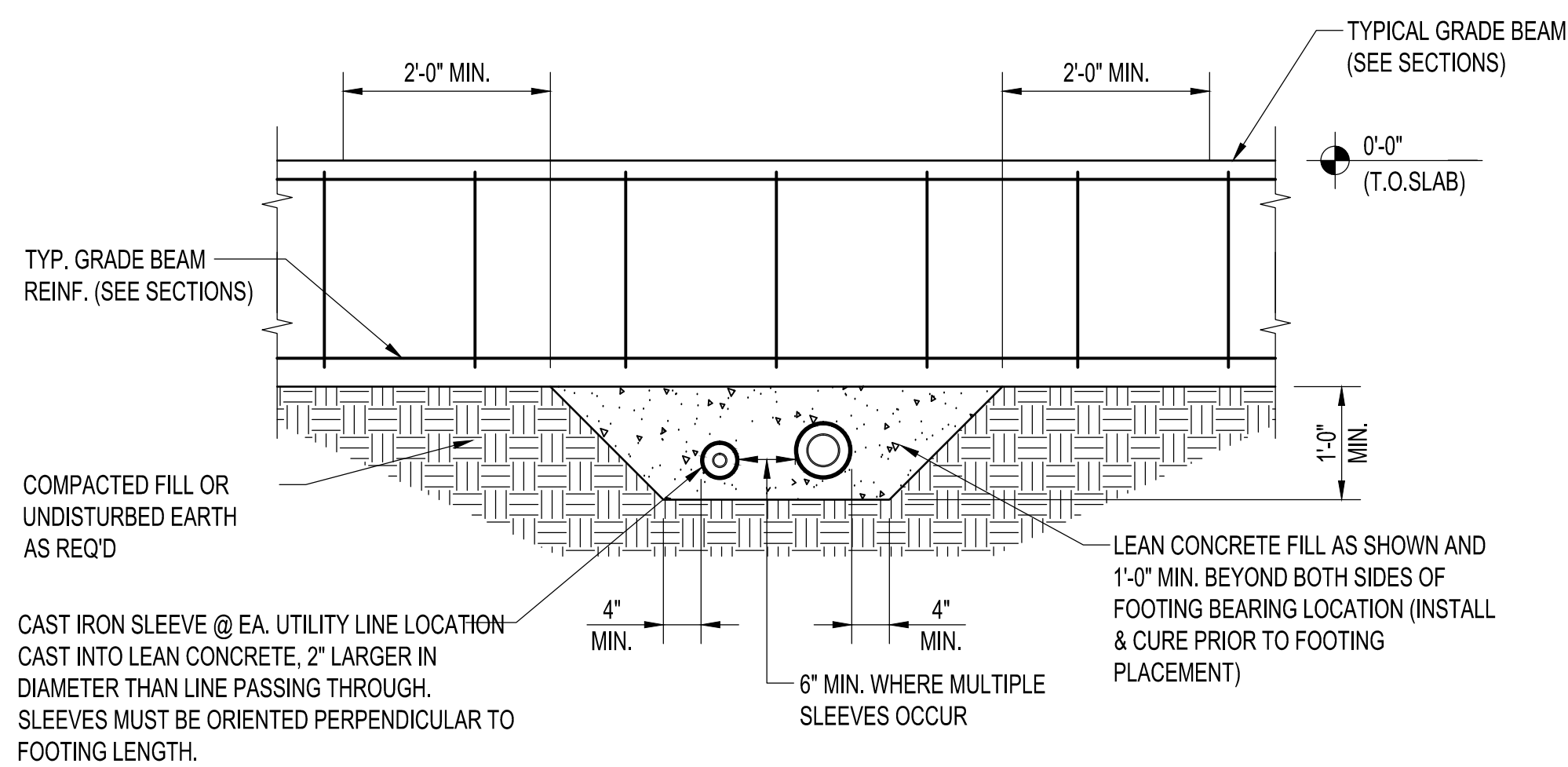
TYPICAL THICKENED SLAB DETAIL



MASONRY CONTROL JOINT DETAIL

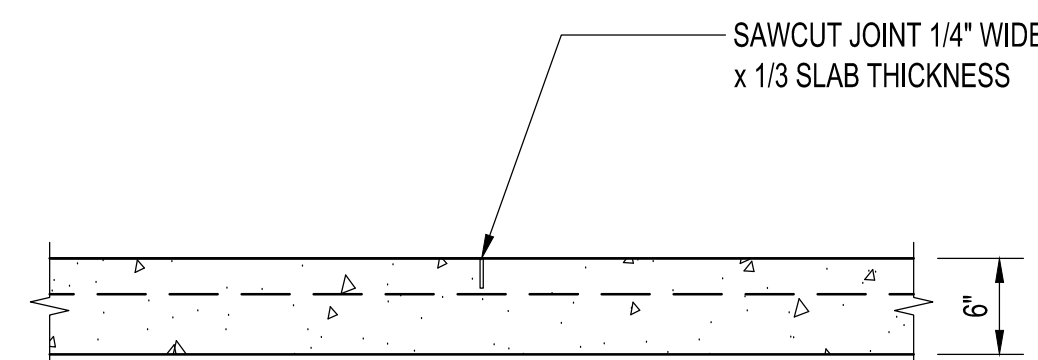


TYPICAL DETAIL OF CMU BOND BEAM CORNER REINF.



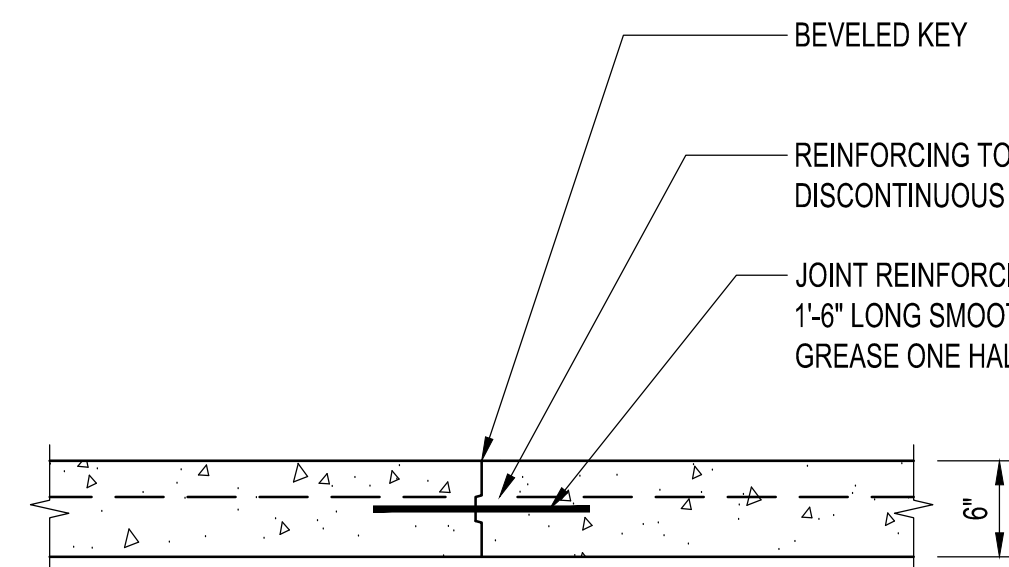
TYPICAL DETAIL FOR UTILITIES PASSING BELOW GRADE BEAMS

1. CONTRACTOR'S OPTION TO STEP FOOTINGS BELOW UTILITIES IN LIEU OF THIS DETAIL.
2. COORD. UTILITY LOCATIONS W/ CIVIL, MECHANICAL, PLUMBING, & ELECTRICAL DWGS.
3. UTILITIES SHALL NOT PASS BELOW COLUMN FOOTINGS.



SAWED CONTROL JOINT

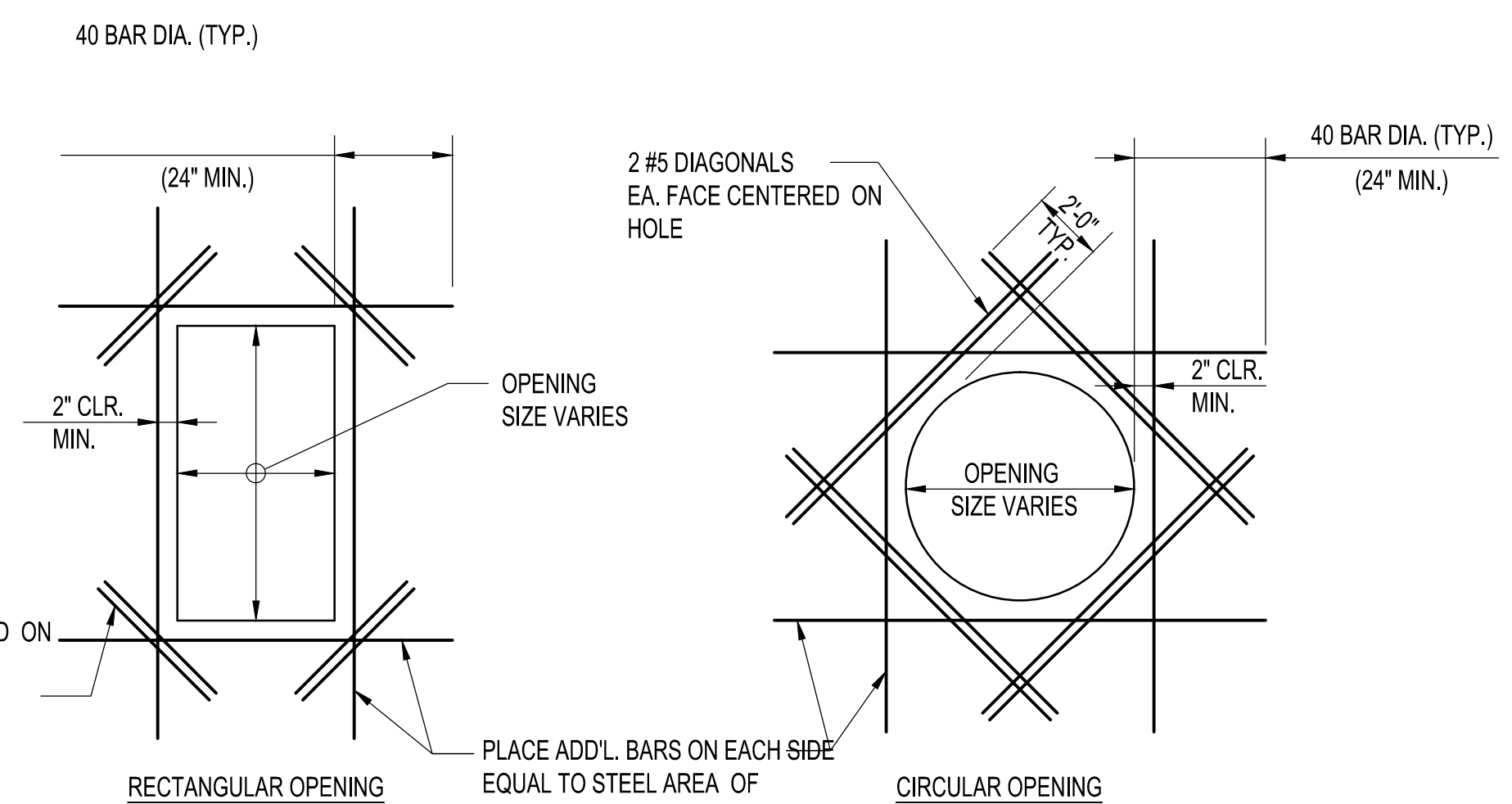
SAW JOINTS WITHIN 8 HOURS AFTER CONCRETE IS PLACED.



KEYED CONTROL JOINT

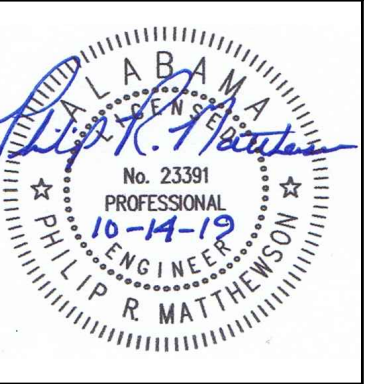
TYPICAL SLAB CONTROL JOINT DETAILS

USE EITHER KEYED OR SAWED AT CONTRACTOR'S OPTION
SEE PLAN FOR SPACING HAND-TOOL AREAS INACCESSIBLE WITH SAW



TYPICAL DETAIL OF ADD'L. REINF. AROUND OPENINGS IN CONCRETE WALLS AND SLABS

NOTE: COORD. W/ MECH. & EQUIPMENT DWGS. FOR ALL OPENING SIZES & LOCATIONS



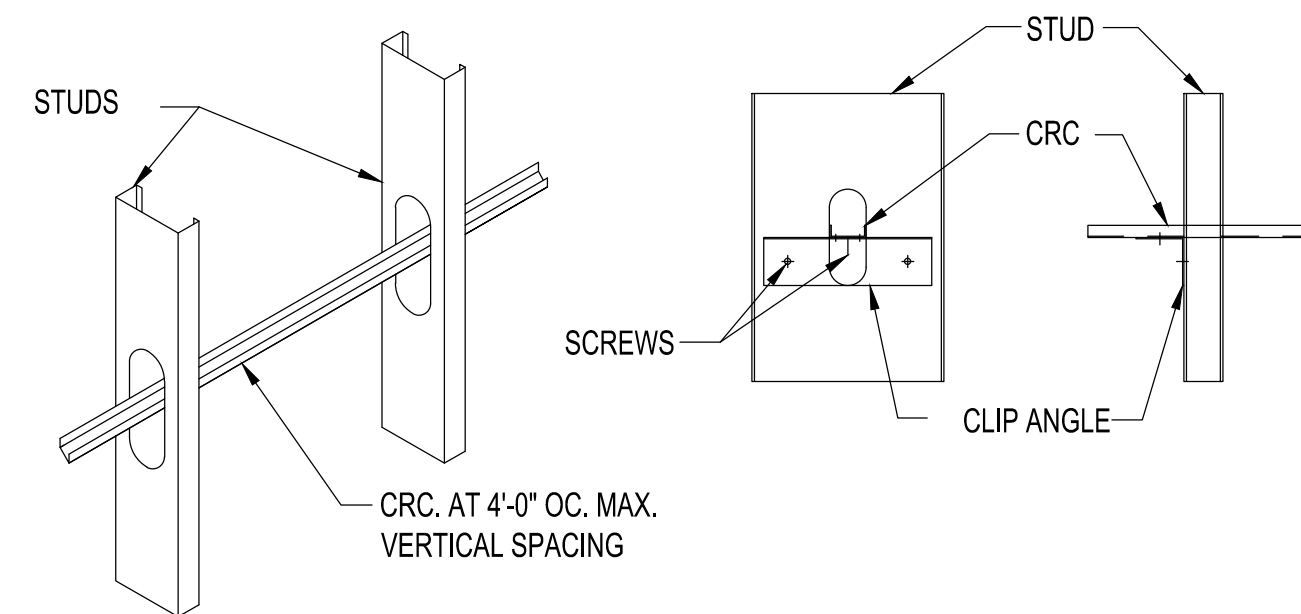
LAMBERT-EZELL-DURHAM
ARCHITECTURE, LLC
P.O. BOX 484 401 EAST COLLEGE ST.
FLORENCE, ALABAMA 36631
TELEPHONE (256) 161-1100
FACSIMILE (256) 161-2908

OFFICE AND SHOP BUILDING FOR
RL CONSULTING, INC
TUSCUMBIA, ALABAMA

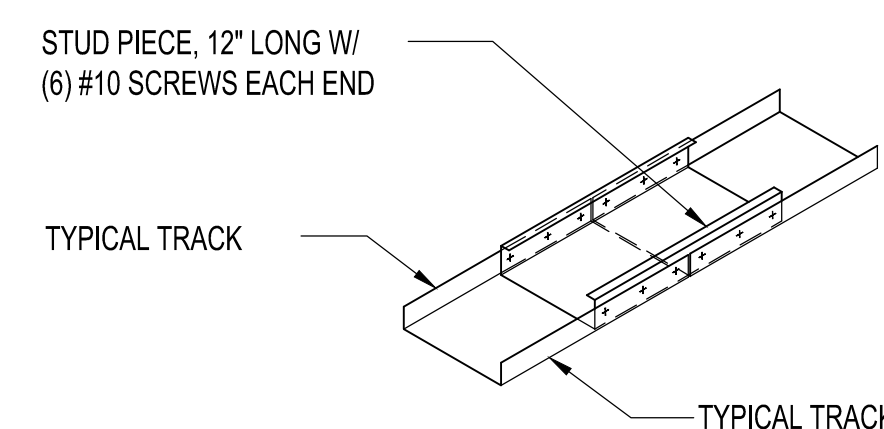
| JOB NO. | DATE | REVISION |
|---------|----------|----------|
| 1860 | 10/14/19 | REVISED |
| | | REVISED |
| DRAWN | ALM | |
| CHECKED | PRM | |

DRAWING TITLE
TYPICAL DETAILS

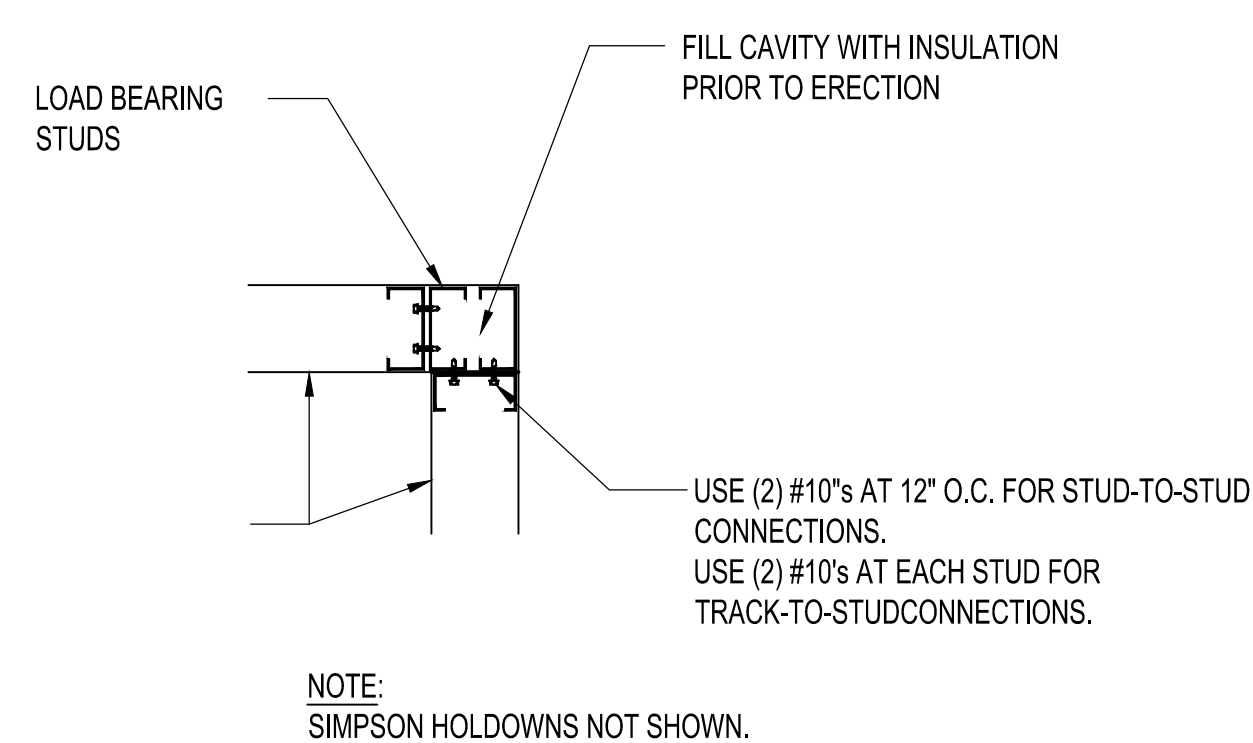
DRAWING NUMBER
S2.1



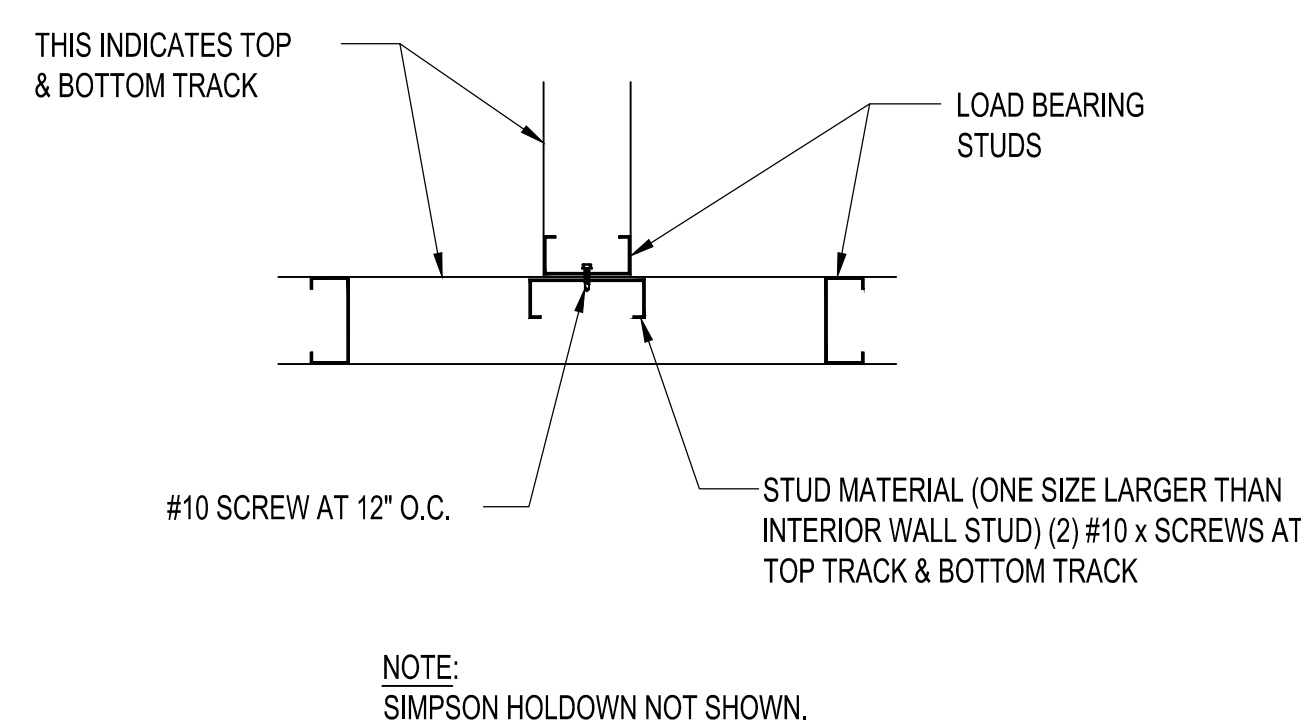
TYPICAL HORIZONTAL BRACING DETAILS AT LIGHT GAGE STUD WALLS



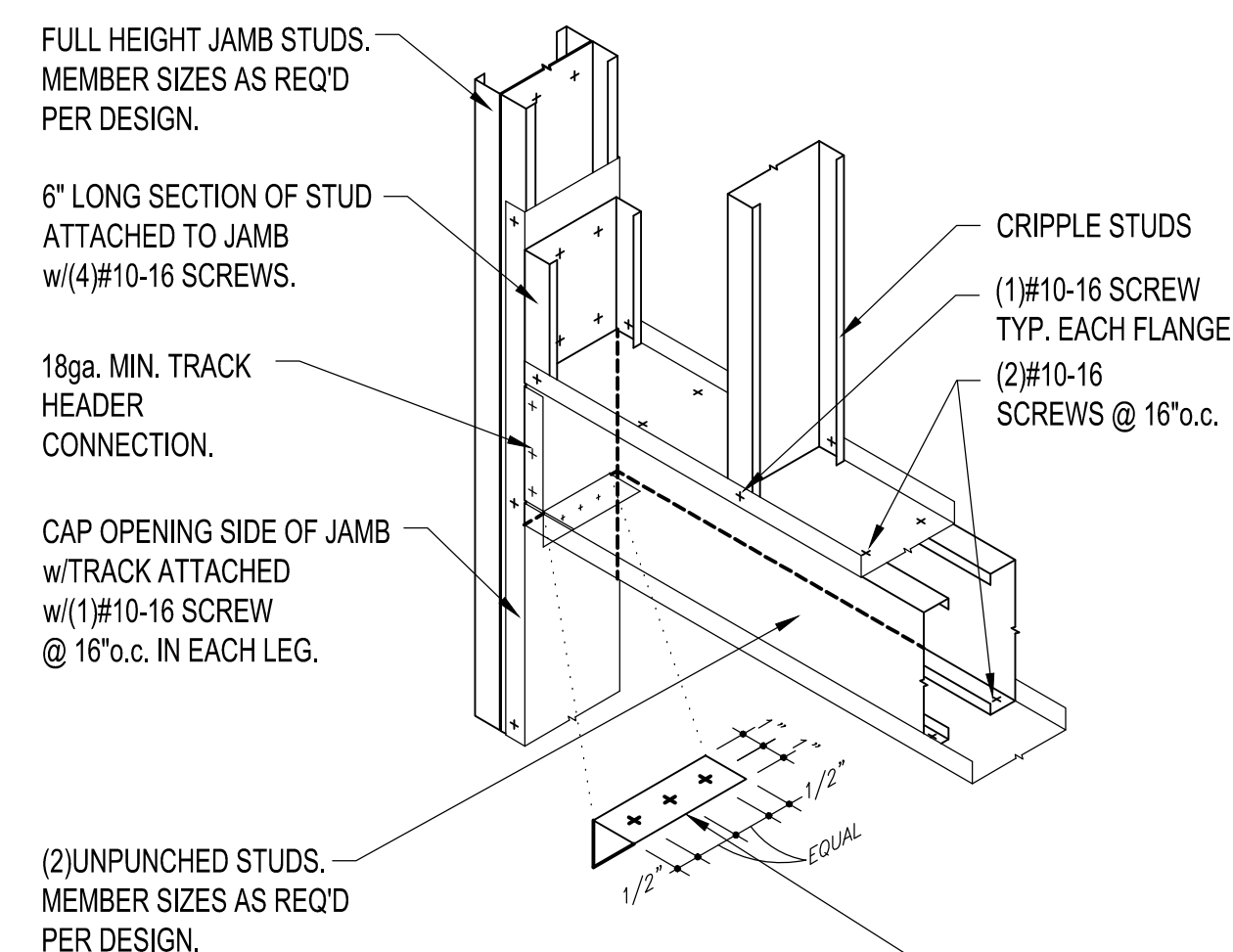
TYPICAL STUD TRACK SPLICE DETAIL
OCCURS AT TOP & BOTTOM TRACKS



TYPICAL STUD WALL CORNER DETAIL

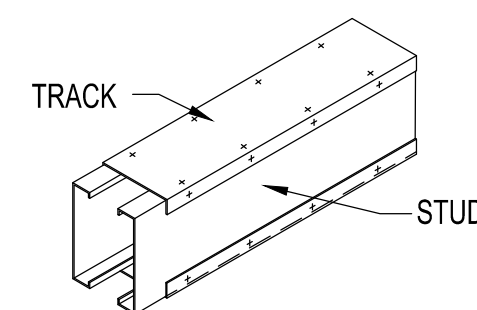


TYPICAL STUD WALL INTERSECTION DETAIL

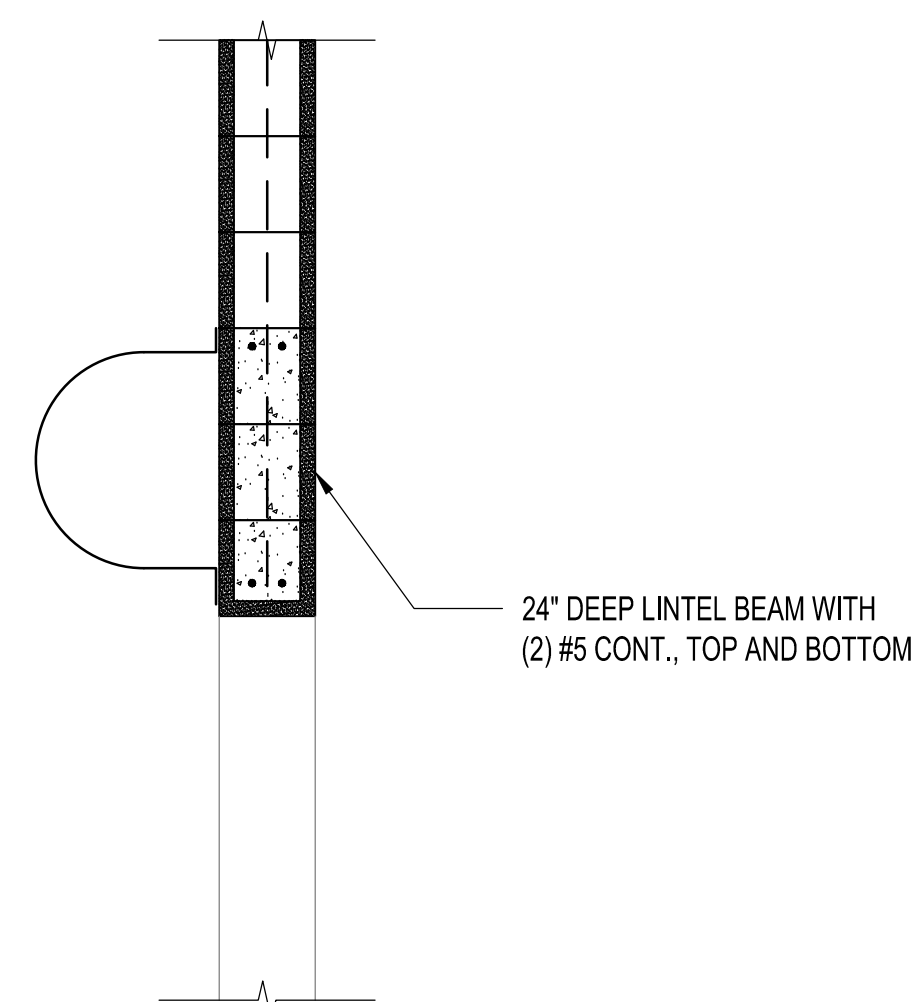


BOX HEADER DETAIL

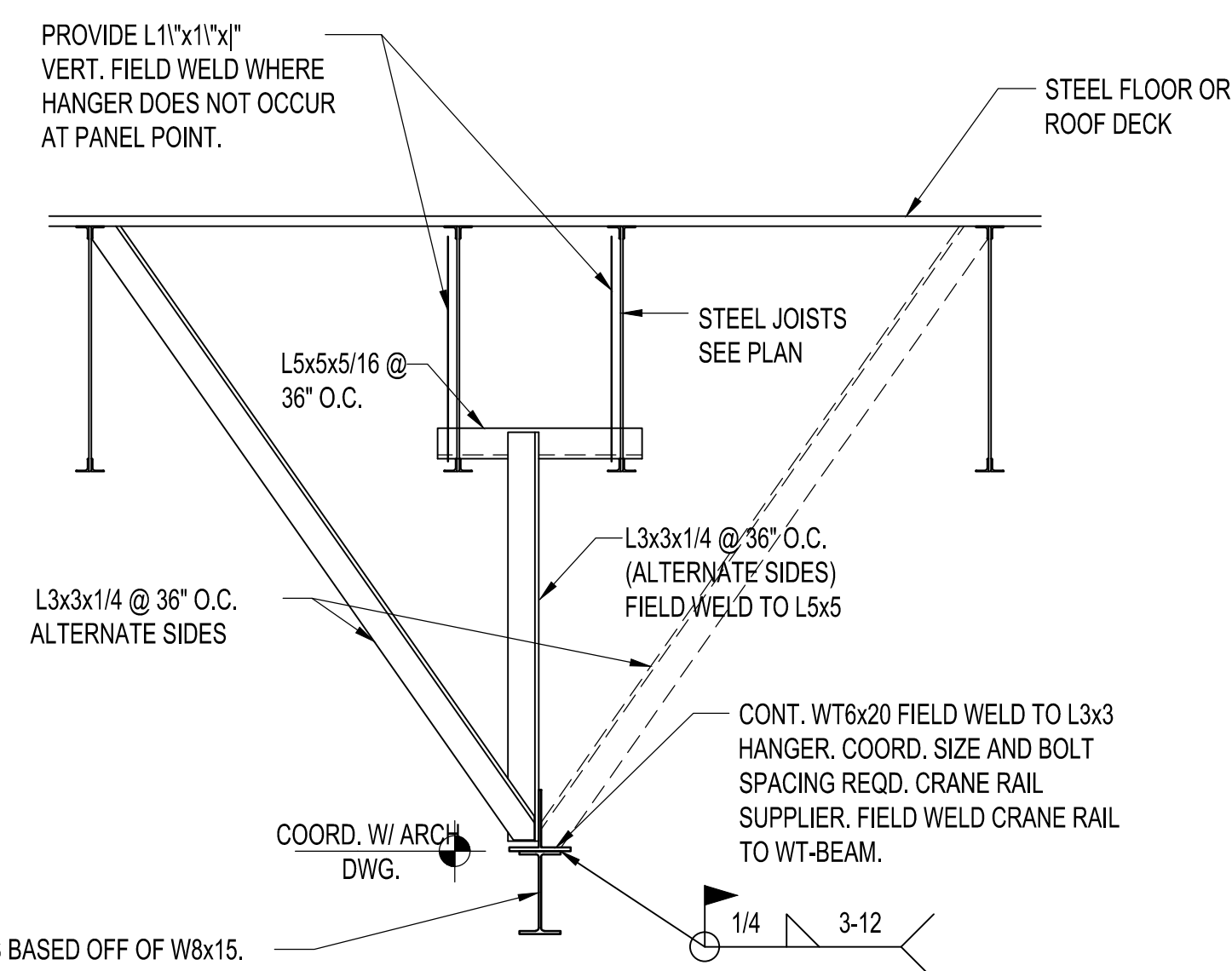
| LT-GA HEADER SCHEDULE | | | |
|-----------------------|------------|-------------|-------|
| MAX SPAN | TRACKS | STUDS | GAUGE |
| 6'-0" | 800T125-43 | 800S162-43 | 18 |
| 16'-0" | 800T150-54 | 1200S200-54 | 16 |



HEADER CONFIGURATIONS

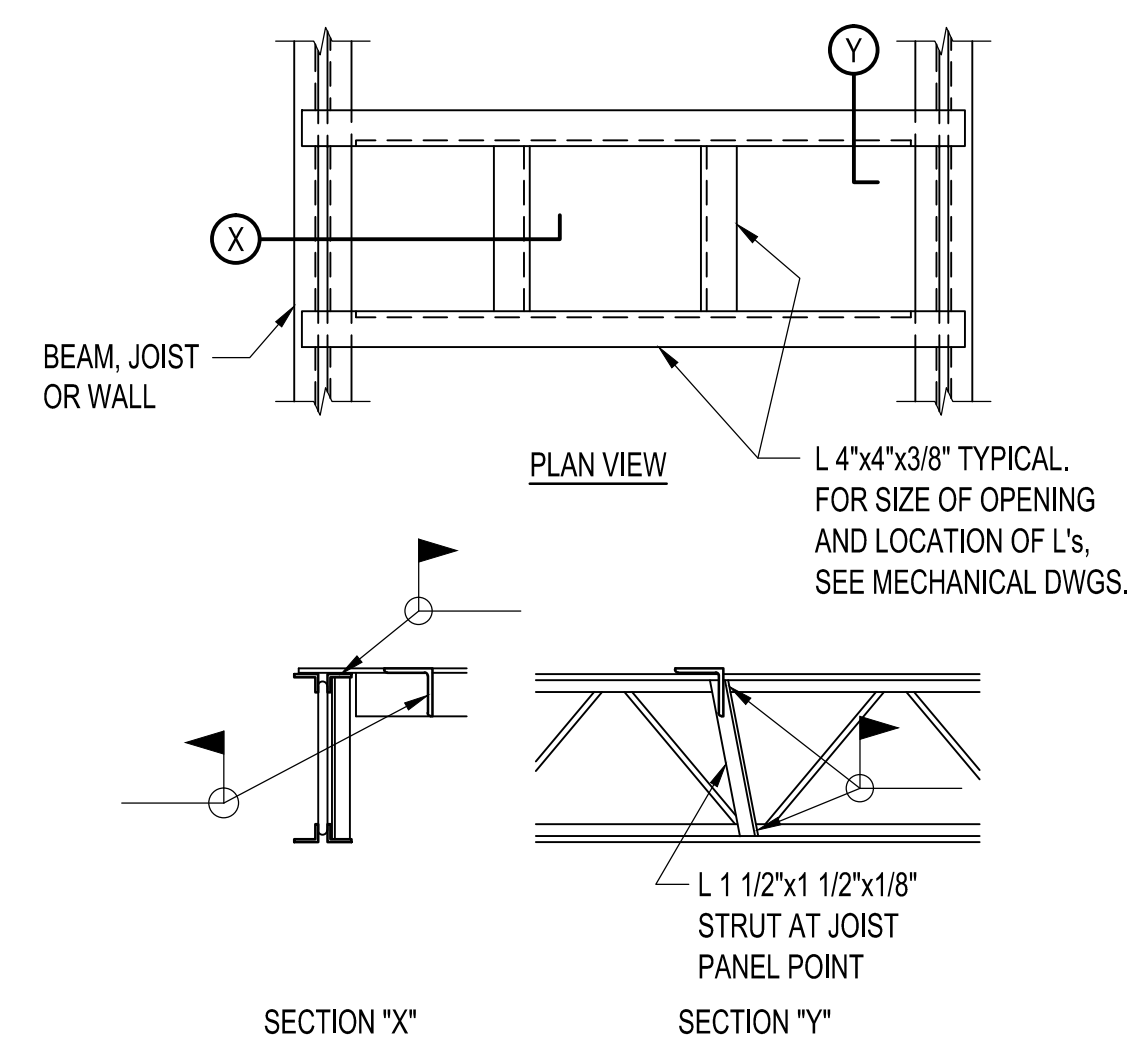


TYPICAL ROLL-UP DOOR HEADER DETAIL



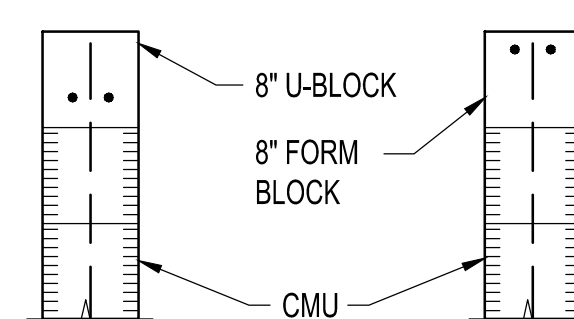
TYPICAL FOLDING PARTITION HANGER DETAILS

WHERE PARTITIONS OCCUR BELOW STEEL BEAMS, WELD L4x4x1/4 x 6" BRACKET TO BOT. FLANGE FOR ATTACHMENT OF L3x3 HANGER.



MECH. EQUIPMENT & OPENING FRAME DETAIL

REQUIRED AT OPENINGS THRU ROOF DECK WHERE OPENING IS LARGER THAN 12"x12", OR WHERE WEIGHT OF SUPPORTED EQUIPMENT IS MORE THAN 100 POUNDS.



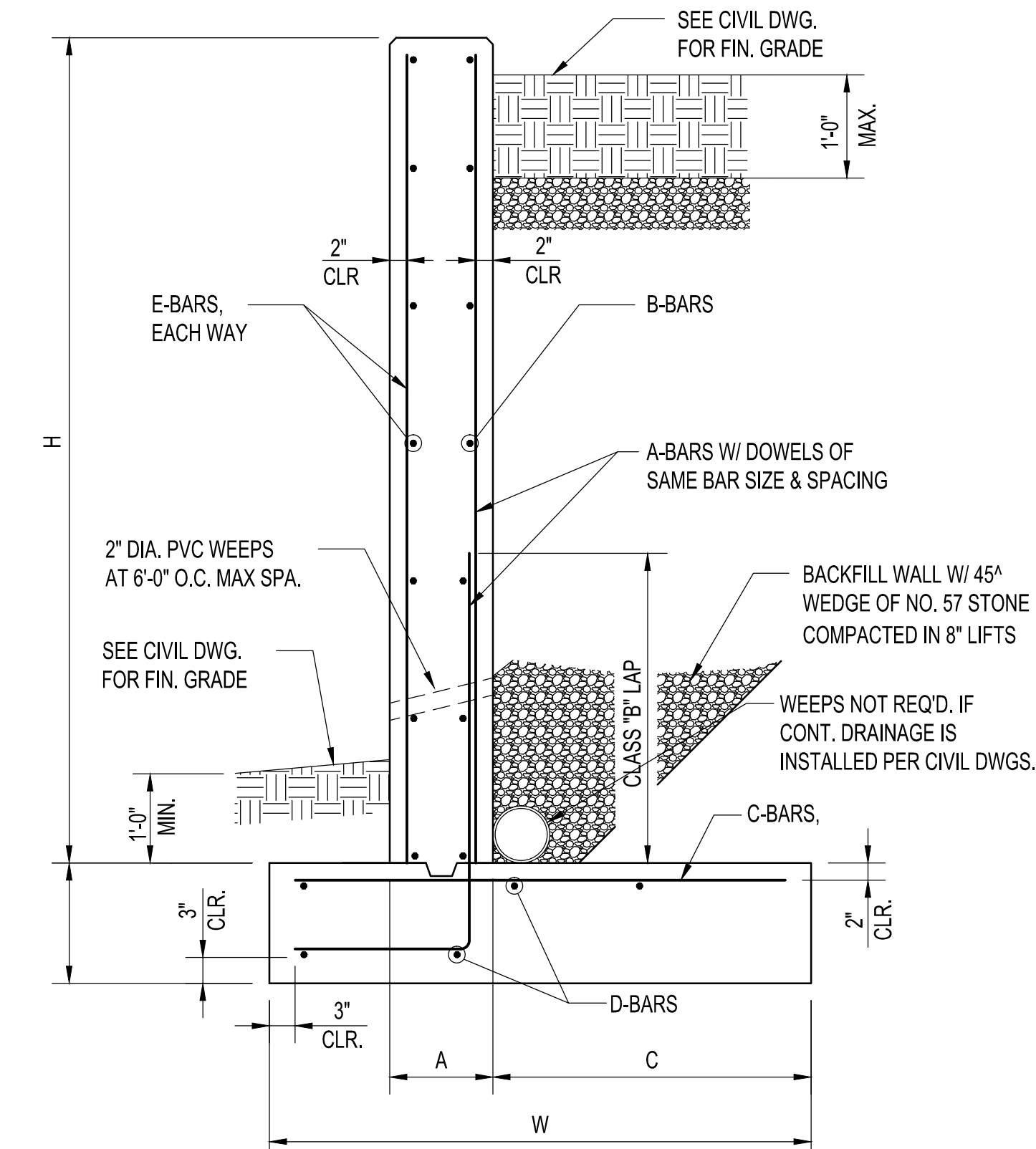
BOND BEAM DETAILS

OCCURS @ TOP OF ALL MASONRY WALLS U.N.O.

BRICK LINTEL SCHEDULE

| MAXIMUM OPENING WIDTH | STEEL FOR EACH 4" OF WALL THICKNESS |
|-----------------------|-------------------------------------|
| 4'-0" | L3 1/2x3 1/2x5/16 |
| 6'-0" | L5x3 1/2x3/8 (LLV) |
| 8'-0" | L6x3 1/2x3/8 (LLV) |
| 12'-0" | L7x4x3/8 (LLV) |

PROVIDE 8" MINIMUM BEARING EACH END FOR ALL LINTELS. PROVIDE ADDITIONAL L4x3x1/4 (LLH) ANGLE WITH LINTEL ANGLE TO COVER GAP BETWEEN WALL FRAMING AND BRICK AS REQUIRED. WELD ANGLES BACK-TO-BACK WITH 1/4"x2" LONG WELD AT 16" O.C. THIS SCHEDULE APPLIES UNLESS NOTED OTHERWISE ON PLANS OR SECTIONS. AT ARCHED OPENINGS, ROLL ANGLE TO RADIUS SHOWN ON ARCHITECTURAL DRAWINGS MITER AND WELD 8" LENGTHS OF ANGLE HORIZONTAL AT EACH END FOR BEARING.



TYPICAL CONCRETE RETAINING WALL DETAIL

COORD. W/ ARCH. & CIVIL DWGS. FOR WALL LOCATIONS & HEIGHT REQMENTS.

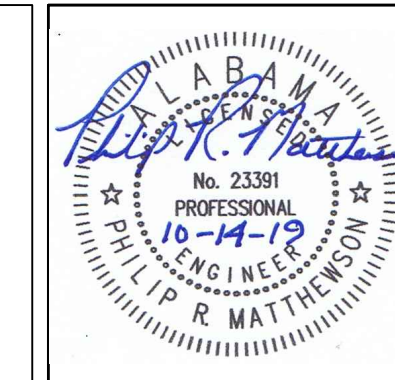
RETAINING WALL SCHEDULE

| CONCRETE DIMENSIONS | | | | | REINFORCEMENT | | | | |
|---------------------|----|-------|-------|-------|---------------|----------|----------|--------|--------|
| H | A | C | W | D | A-BARS | B-BARS | C-BARS | D-BARS | E-BARS |
| 4'-0" | 8" | 1'-7" | 2'-8" | 1'-0" | #4 @ 18" | #4 @ 12" | #4 @ 18" | 4 #4 | NONE |
| 5'-0" | 8" | 2'-2" | 3'-3" | 1'-0" | #4 @ 18" | #4 @ 12" | #4 @ 18" | 4 #4 | NONE |
| 6'-0" | 8" | 2'-5" | 3'-9" | 1'-0" | #4 @ 18" | #4 @ 12" | #4 @ 18" | 4 #4 | NONE |

DISCONTINUE HALF OF THE LONGITUDINAL BARS IN EACH FACE AT JOINTS. PROVIDE 3/4" CHAMFER AT JOINTS ON EXPOSED FACE OF WALL.



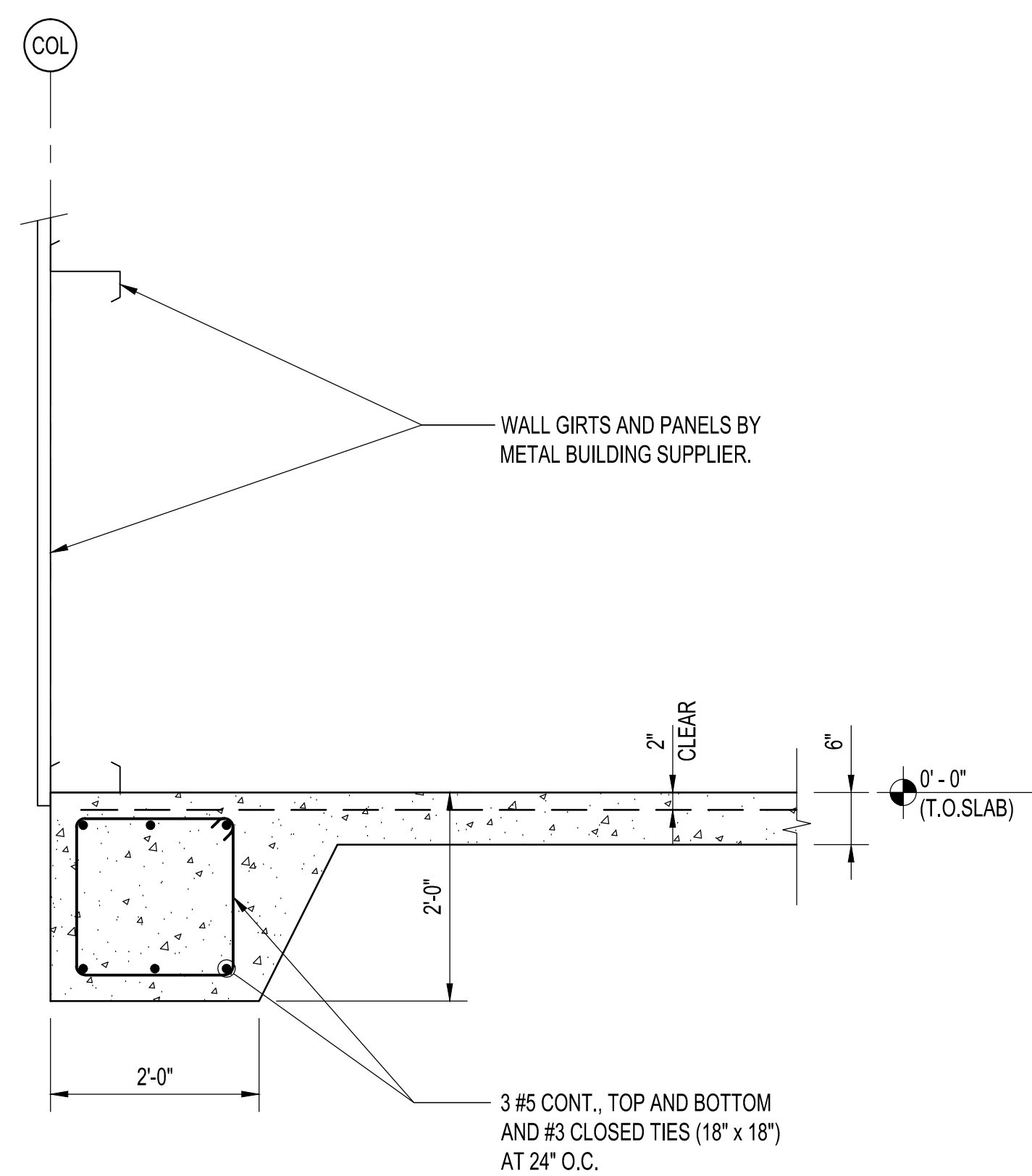
P.R. Matthewson & Associates Engineers, Inc.
 4835 University Sq Suite 17 Huntsville, AL 35816
 Phone: (256) 652-4818
 Project No. 1965



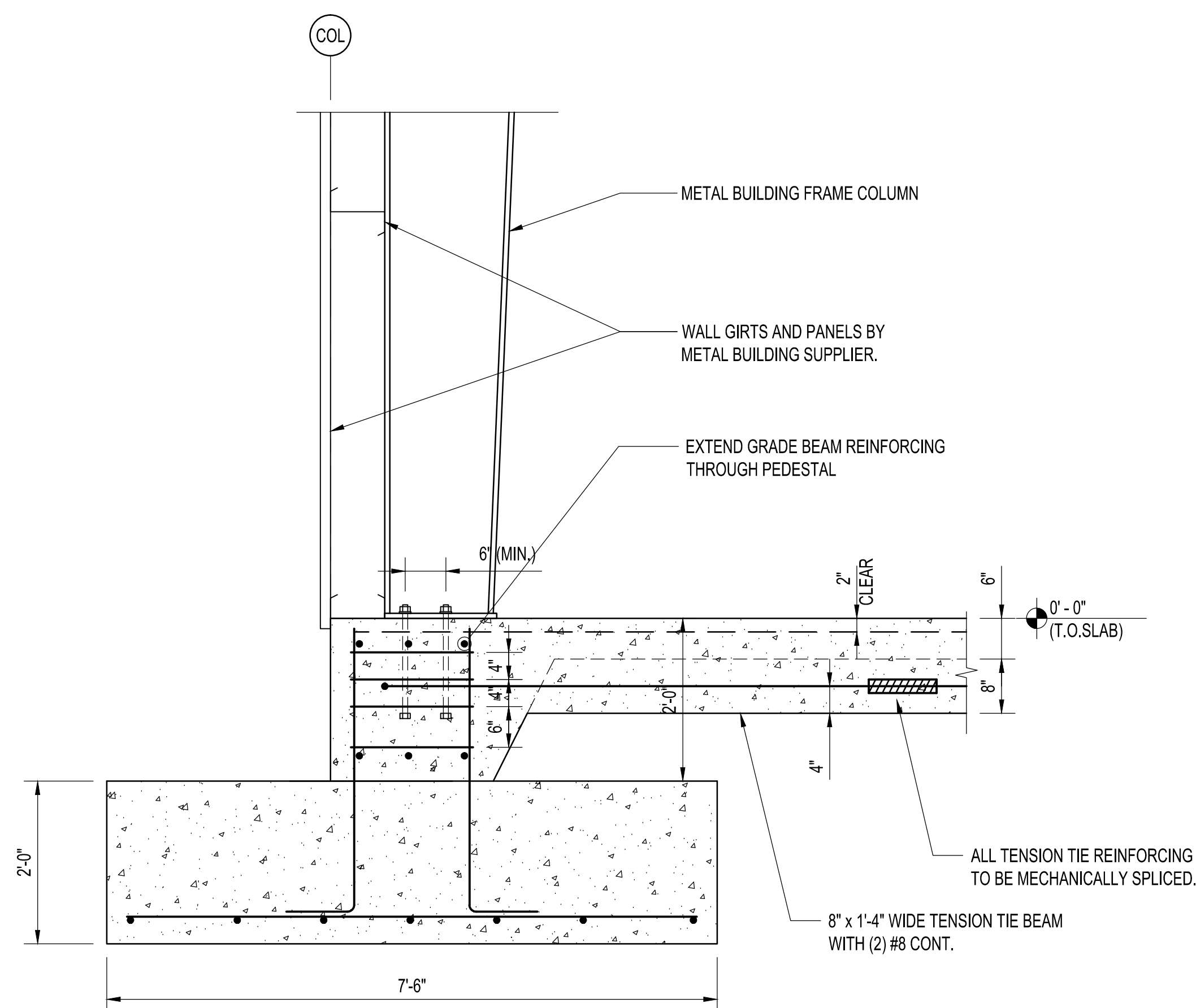
LAMBERT-EZELL-DURHAM
 ARCHITECTURE, LLC
 P.O. BOX 184 401 EAST COLLEGE ST.
 FLORENCE, ALABAMA 36631
 TELEPHONE (256) 161-1100
 FACSIMILE (256) 161-2908

OFFICE AND SHOP BUILDING FOR
 RL CONSULTING, INC
 TUSCUMBIA, ALABAMA

| | | | |
|---------|------|---------|----------|
| JOB NO. | 1860 | DATE | 10/14/19 |
| DRAWN | ALM | REVISED | |
| CHECKED | PRM | REVISED | |

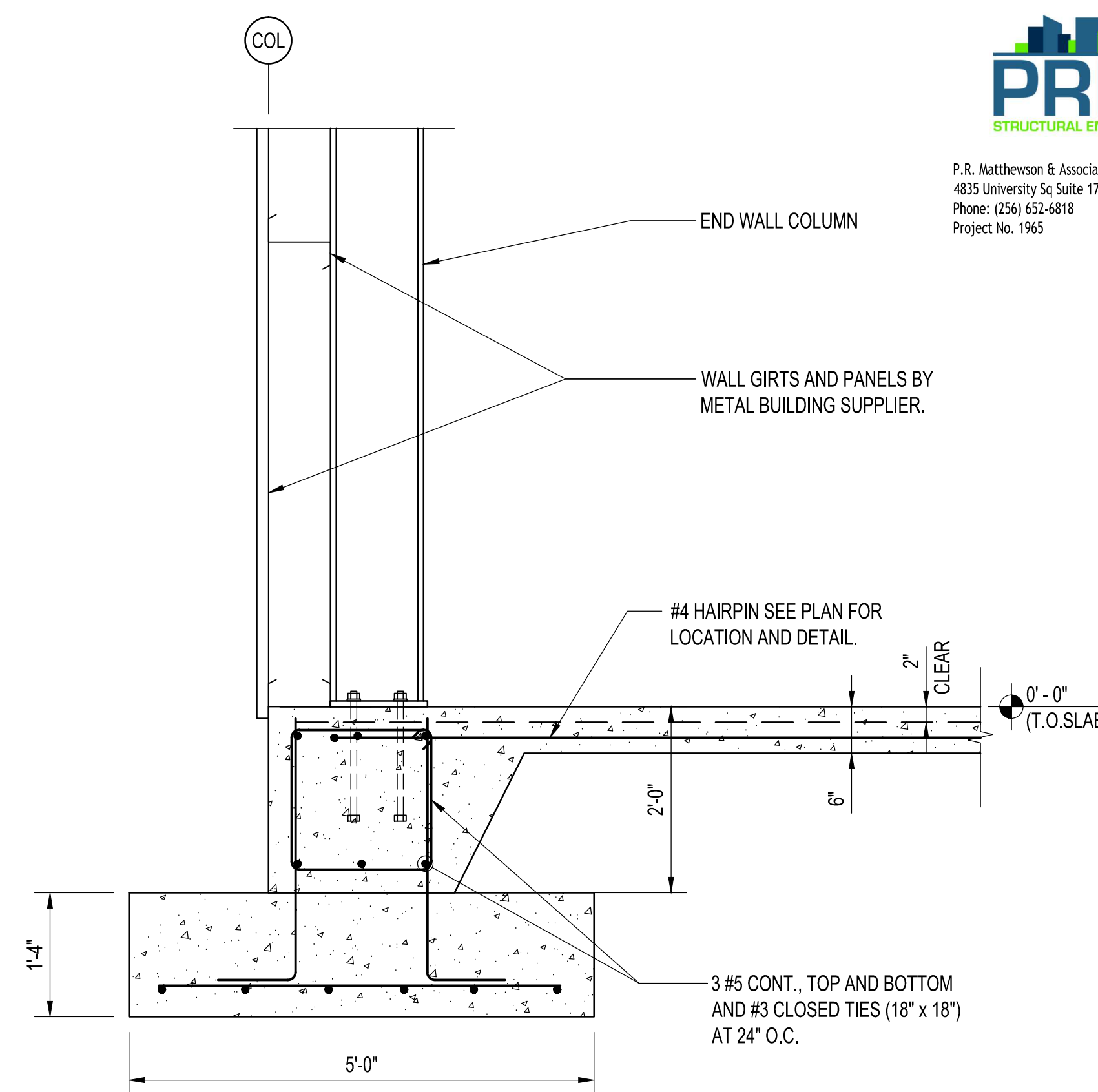


SECTION A
 SCALE 3/4" = 1'-0"
 S3.0



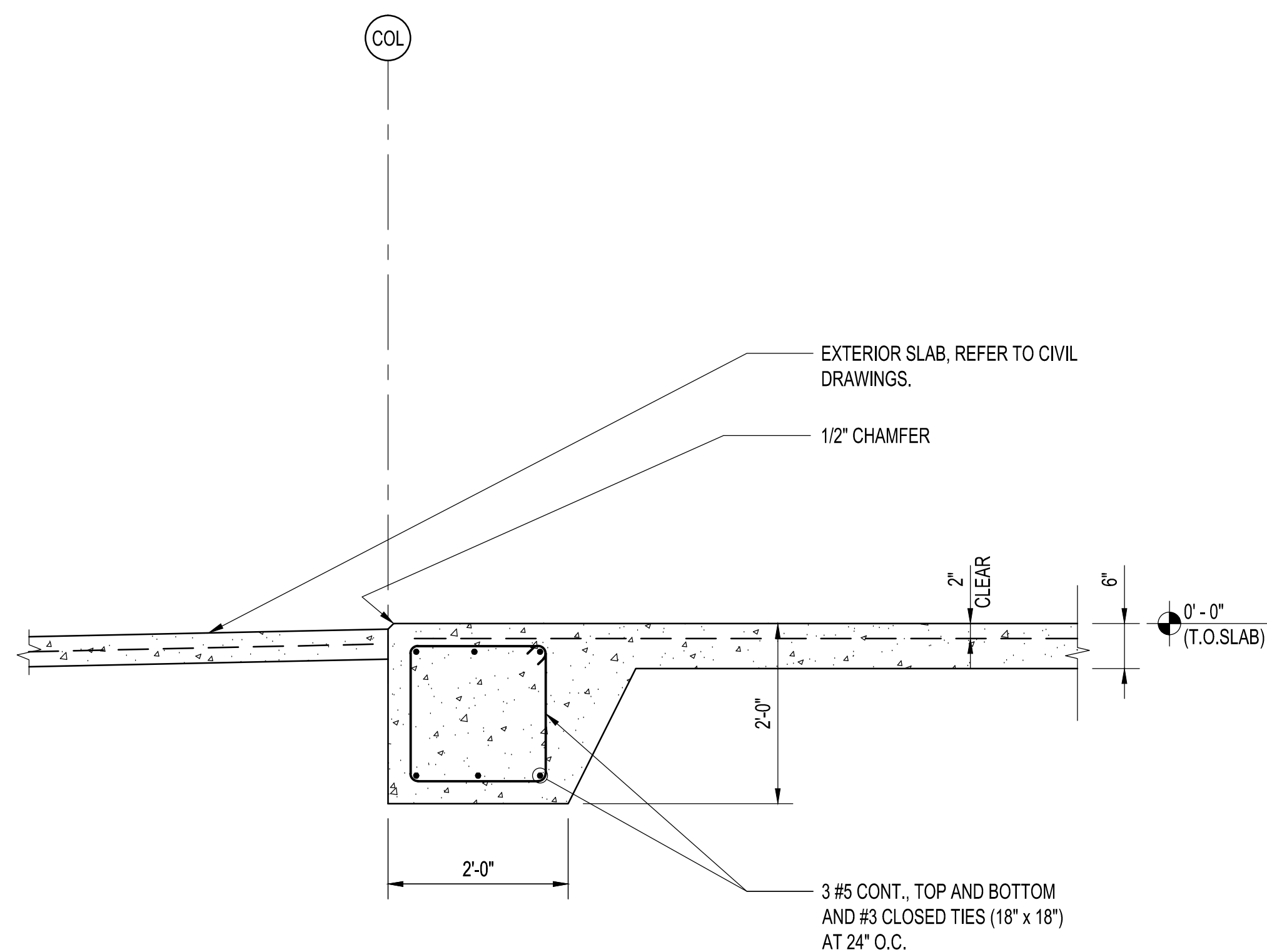
SECTION B
 SCALE 3/4" = 1'-0"
 S3.0

AT SIM. CONDITION SLAB THICKNESS TO BE 4" IN OFFICE REGION.



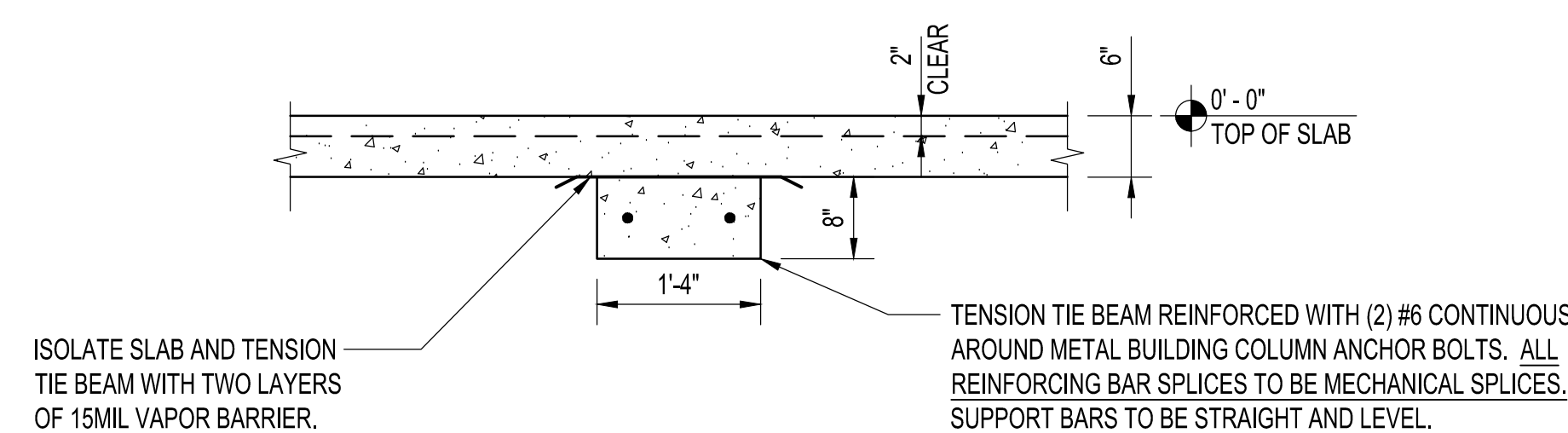
SECTION C
 SCALE 3/4" = 1'-0"
 S3.0

REINFORCE TOP SLAB WITH #4 BARS AT 1'-4" O.C. EACH WAY, ALIGN WITH VERTICAL REINFORCING IN WALLS.
 #4 L-SHAPED BARS, 2'-0"x2'-0" AT 1'-4" O.C. ALIGN WITH SLAB AND WALL REINFORCING.



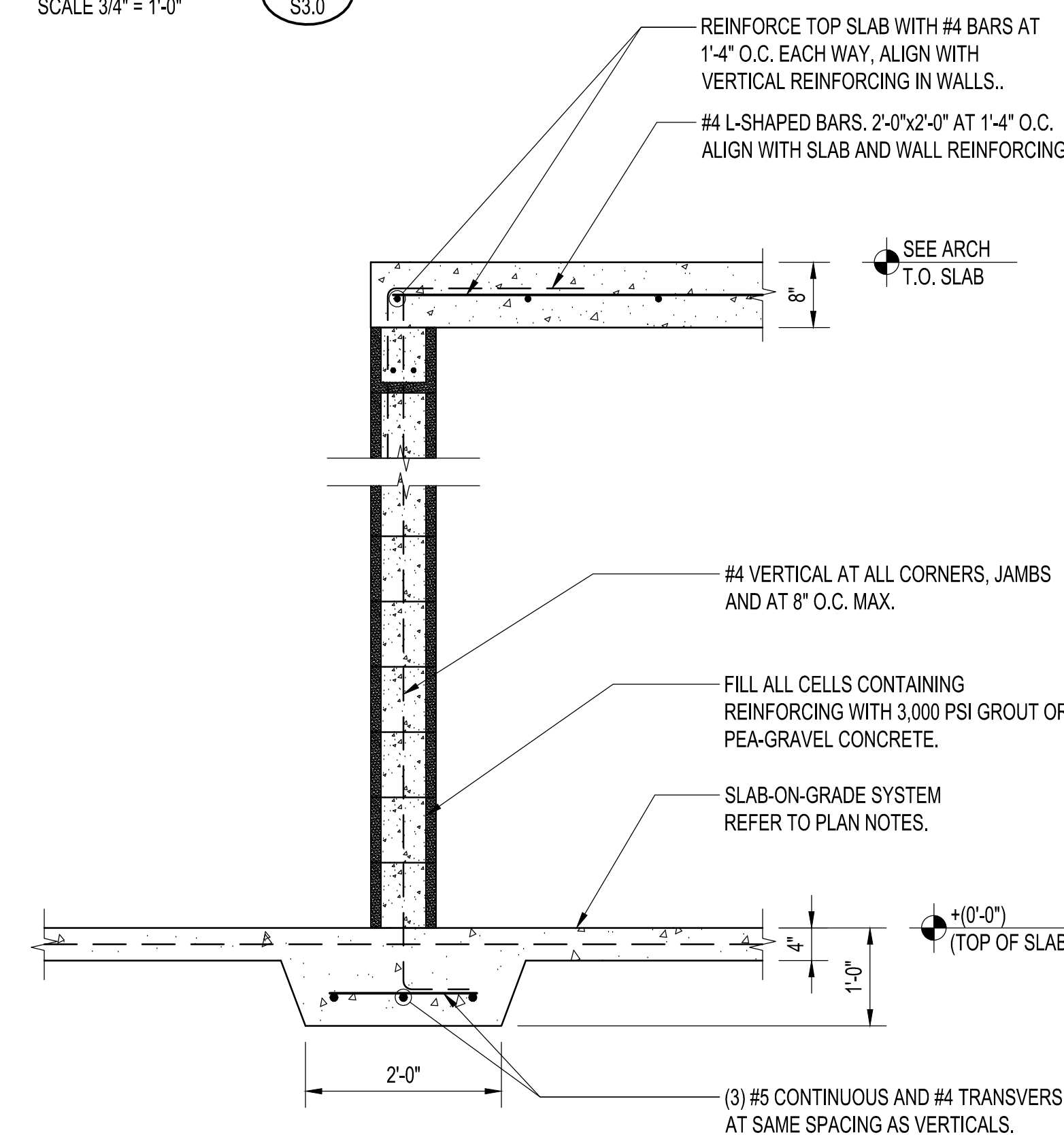
SECTION D
 SCALE 3/4" = 1'-0"
 S3.0

AT SIM. CONDITION SLAB THICKNESS TO BE 4" IN OFFICE REGION.



SECTION E
 SCALE 3/4" = 1'-0"
 S3.0

AT SIM. CONDITION SLAB THICKNESS TO BE 4" IN OFFICE REGION.

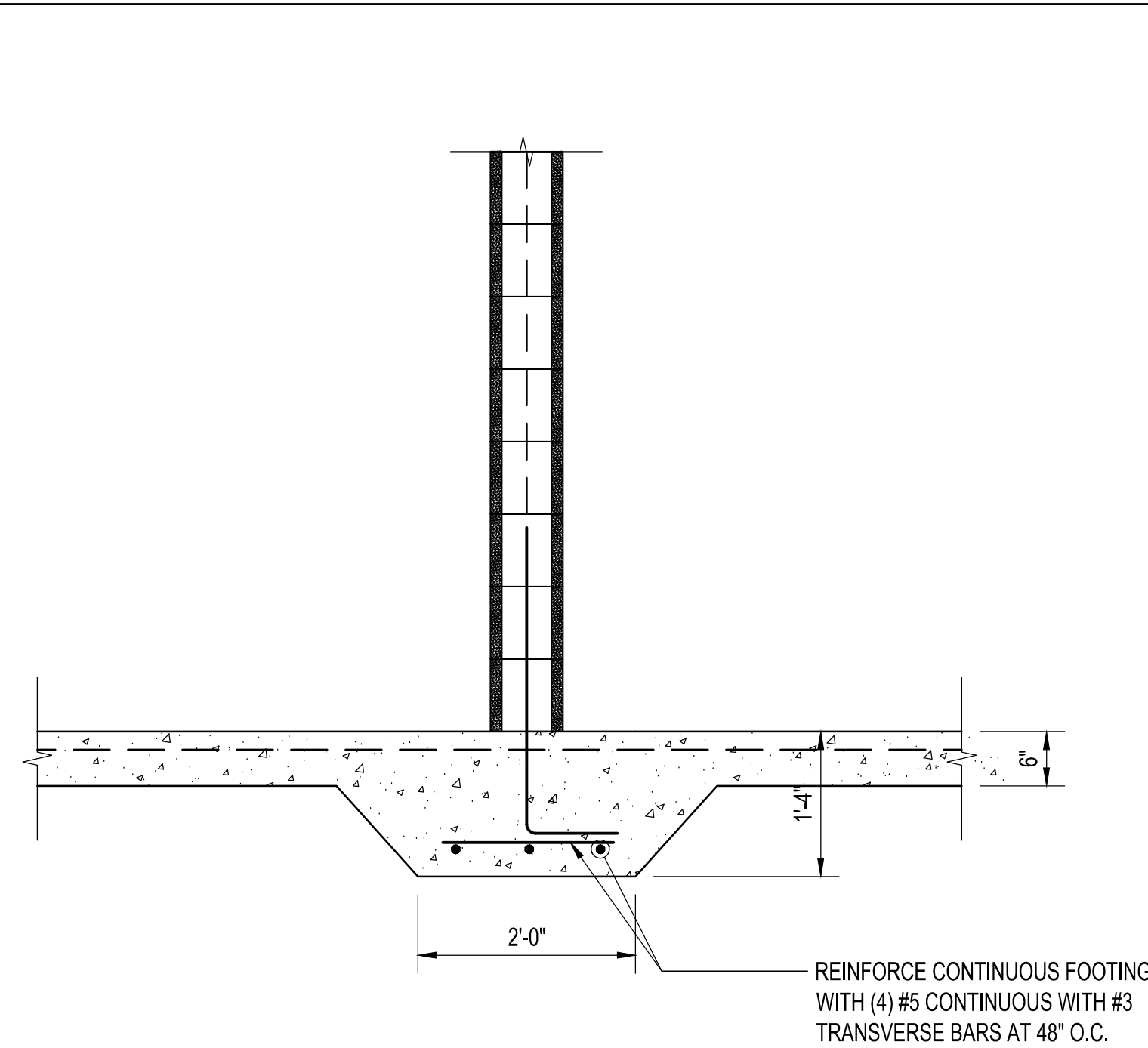
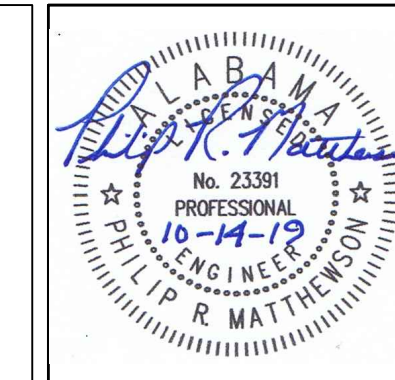


SECTION F
 SCALE 3/4" = 1'-0"
 S3.0

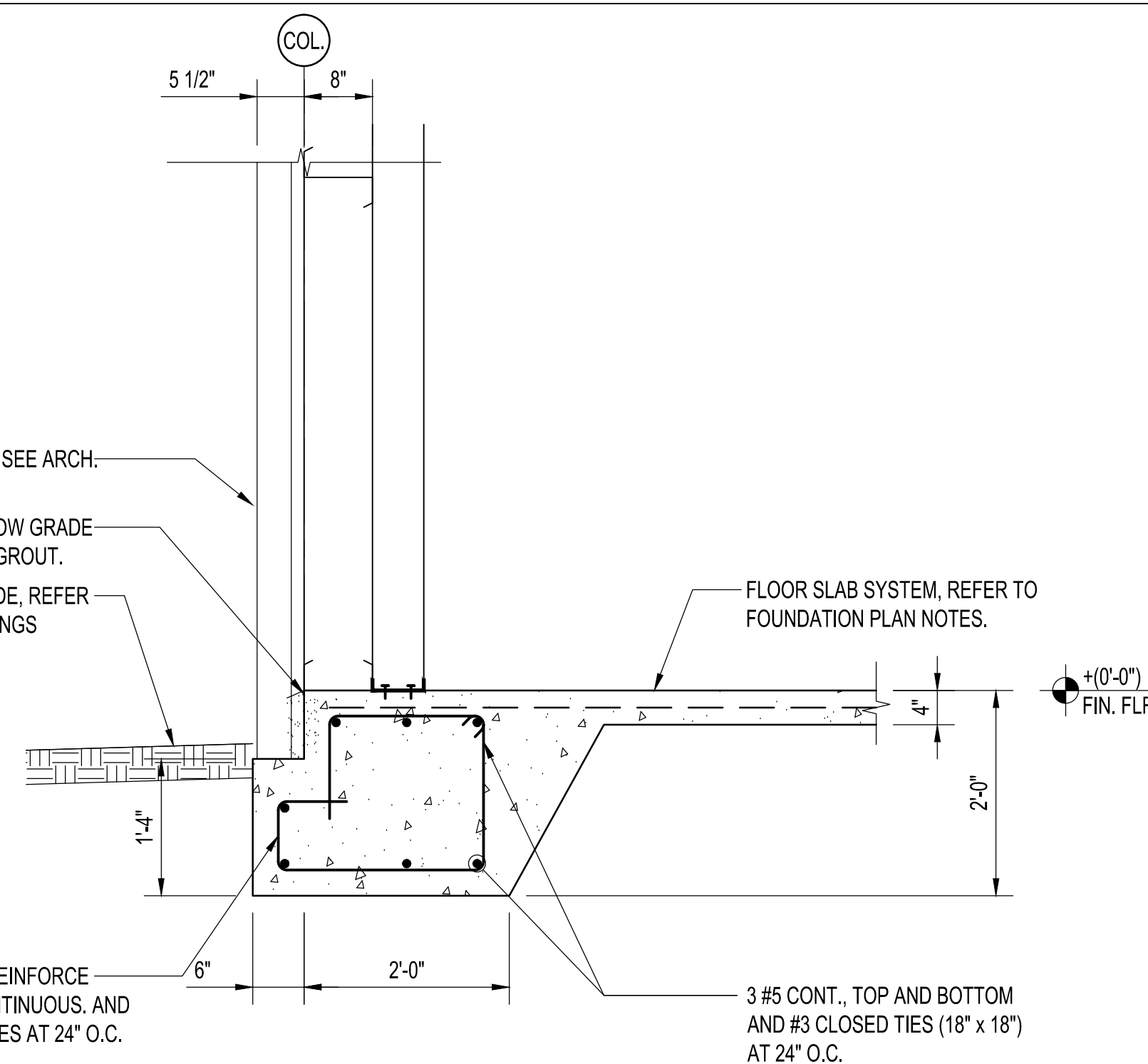
DRAWING TITLE
 FOUNDATION SECTIONS
 DRAWING NUMBER
 S3.0



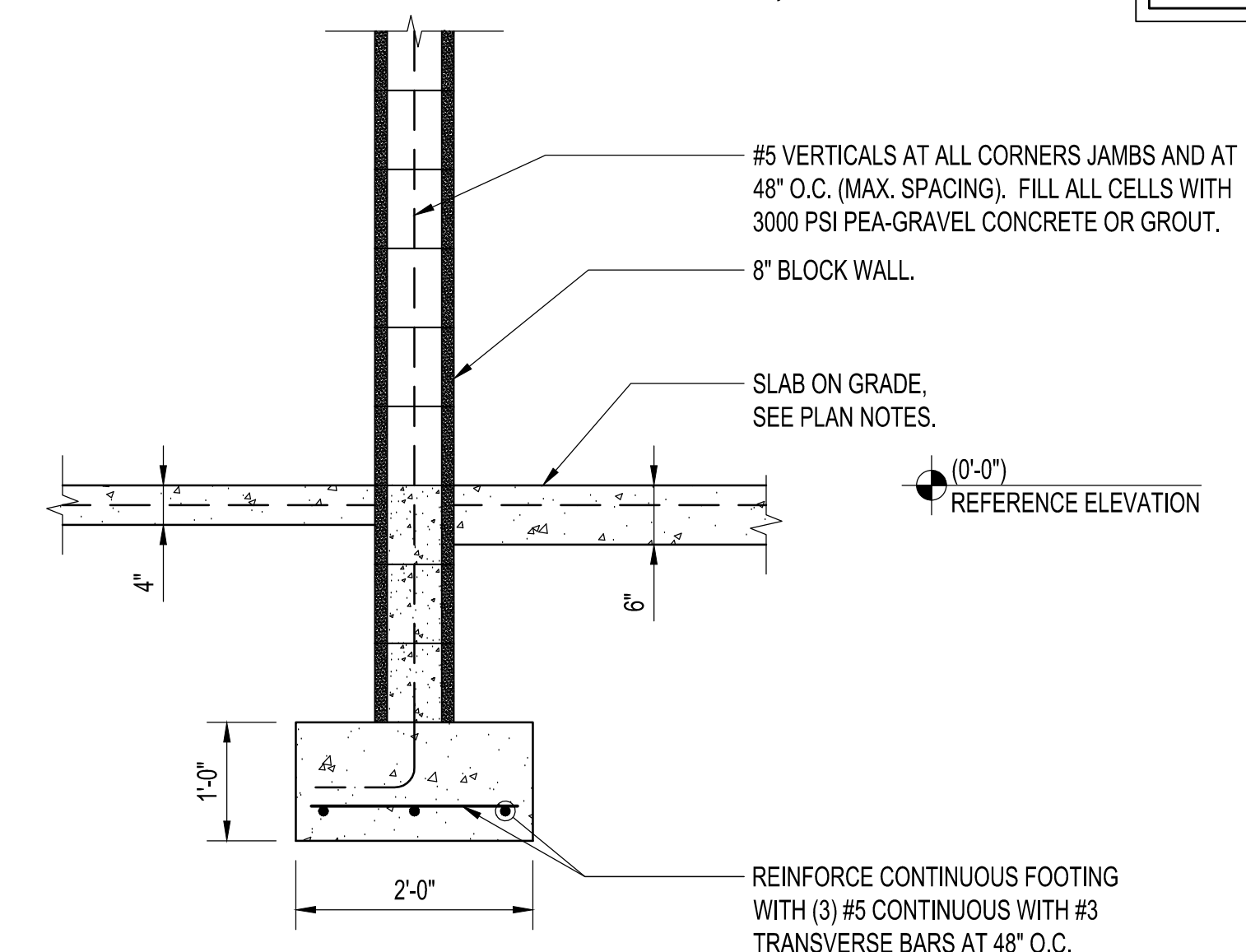
P.R. Matthewson & Associates Engineers, Inc.
 4835 University Sq Suite 177 Huntsville, AL 35816
 Phone: (256) 632-4818
 Project No. 1965



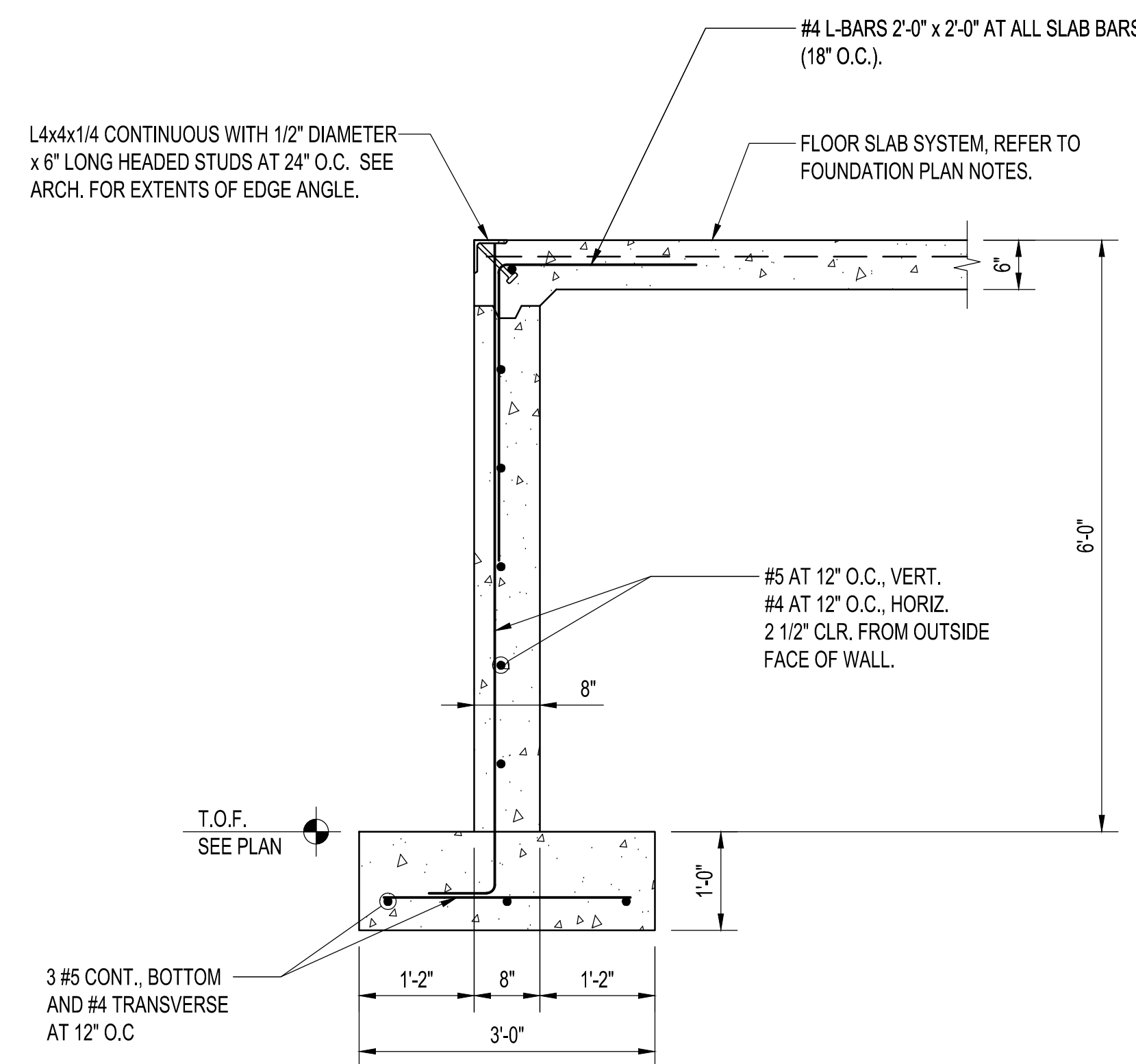
SECTION A
 SCALE 3/4" = 1'-0" S3.1



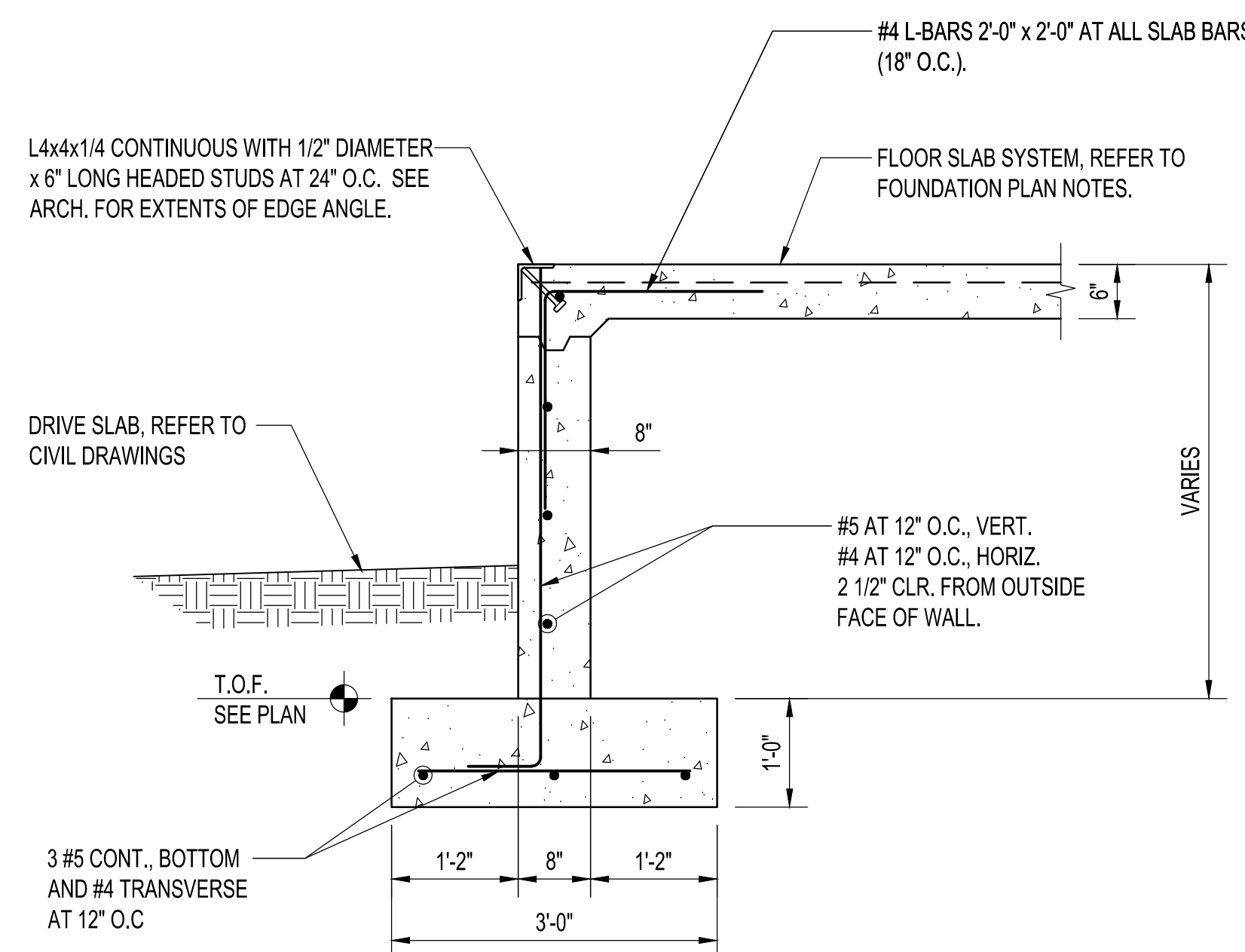
SECTION B
 SCALE 3/4" = 1'-0" S3.1



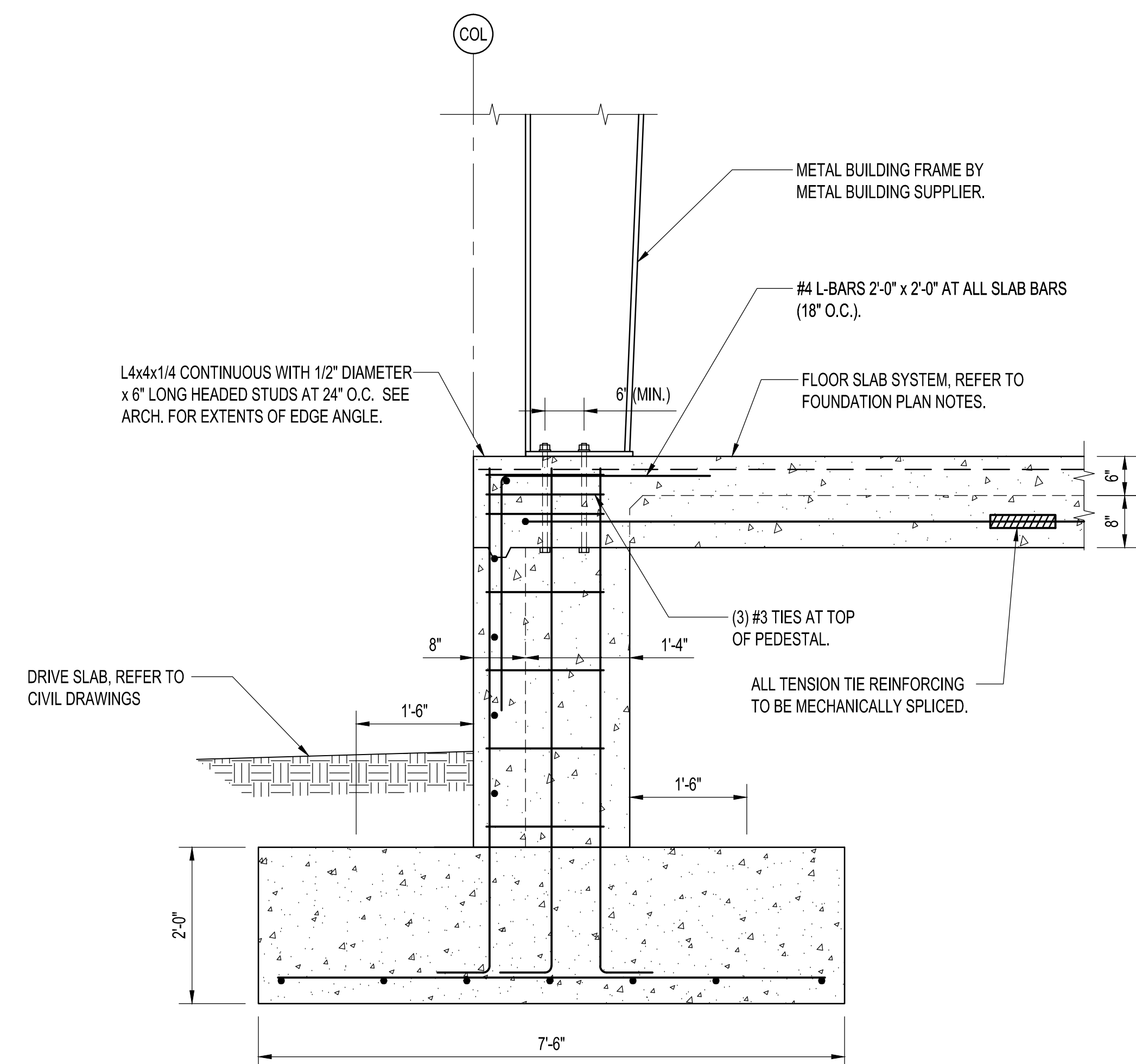
SECTION C
 SCALE 3/4" = 1'-0" S3.1



SECTION D
 SCALE 3/4" = 1'-0" S3.1



SECTION E
 SCALE 3/4" = 1'-0" S3.1



SECTION F
 SCALE 3/4" = 1'-0" S3.1

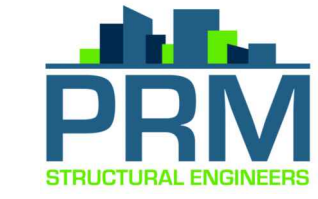


LAMBERT, EZELL, DURHAM
 ARCHITECTURE, LLC
 P.O. BOX 494 401 EAST COLLEGE ST.
 FLORENCE, ALABAMA 36631
 TELEPHONE (256) 161-1100
 FACSIMILE (256) 161-2908

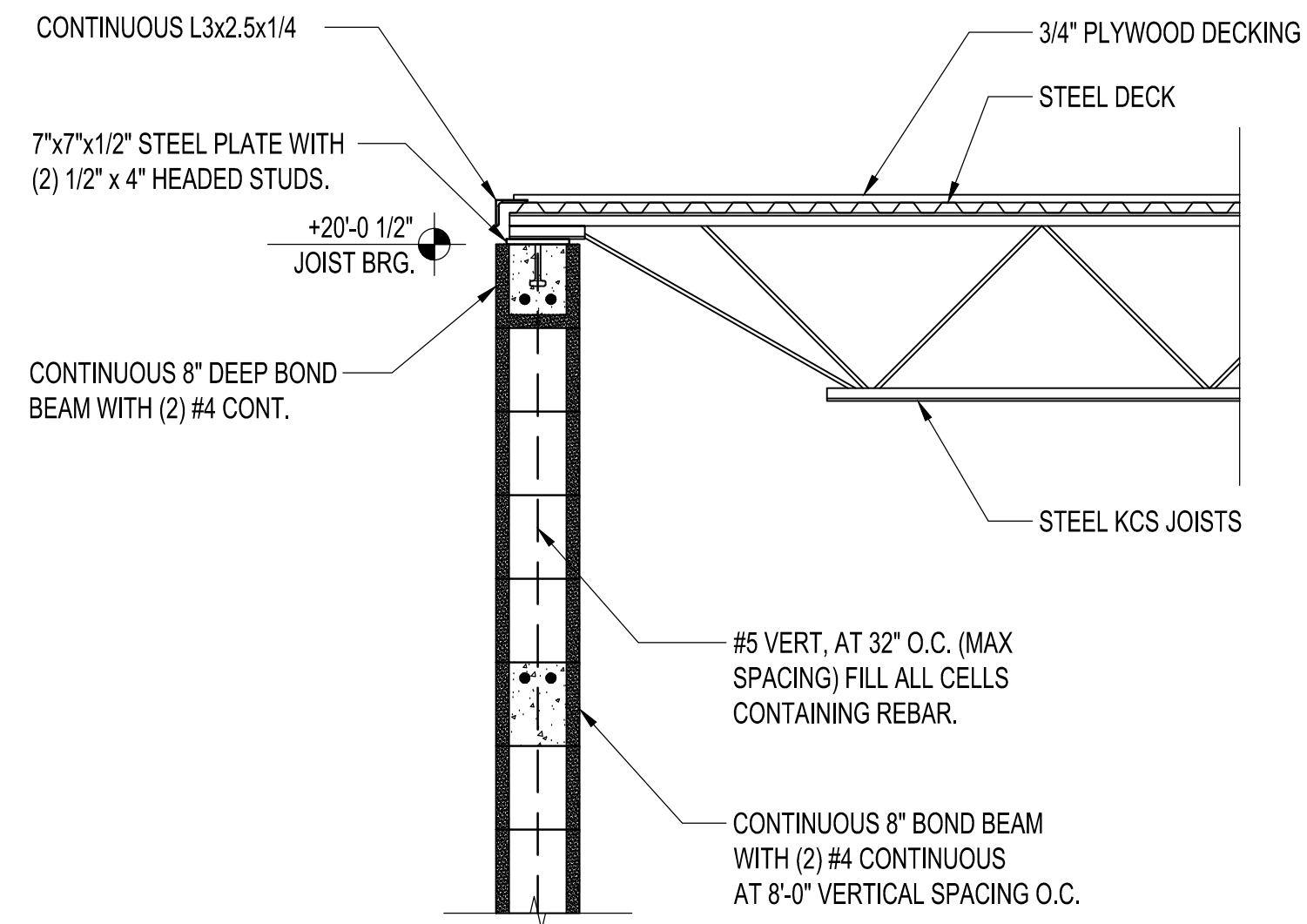
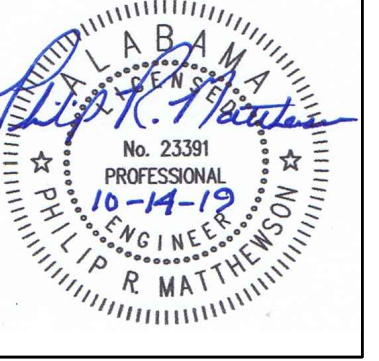
OFFICE AND SHOP BUILDING FOR
 RL CONSULTING, INC
 TUSCUMBIA, ALABAMA

| JOB NO. | DATE | REVISION | CHECKED | PREPARED |
|---------|----------|----------|---------|----------|
| 1860 | 10/14/19 | | | |
| | | | | |
| | | | | |

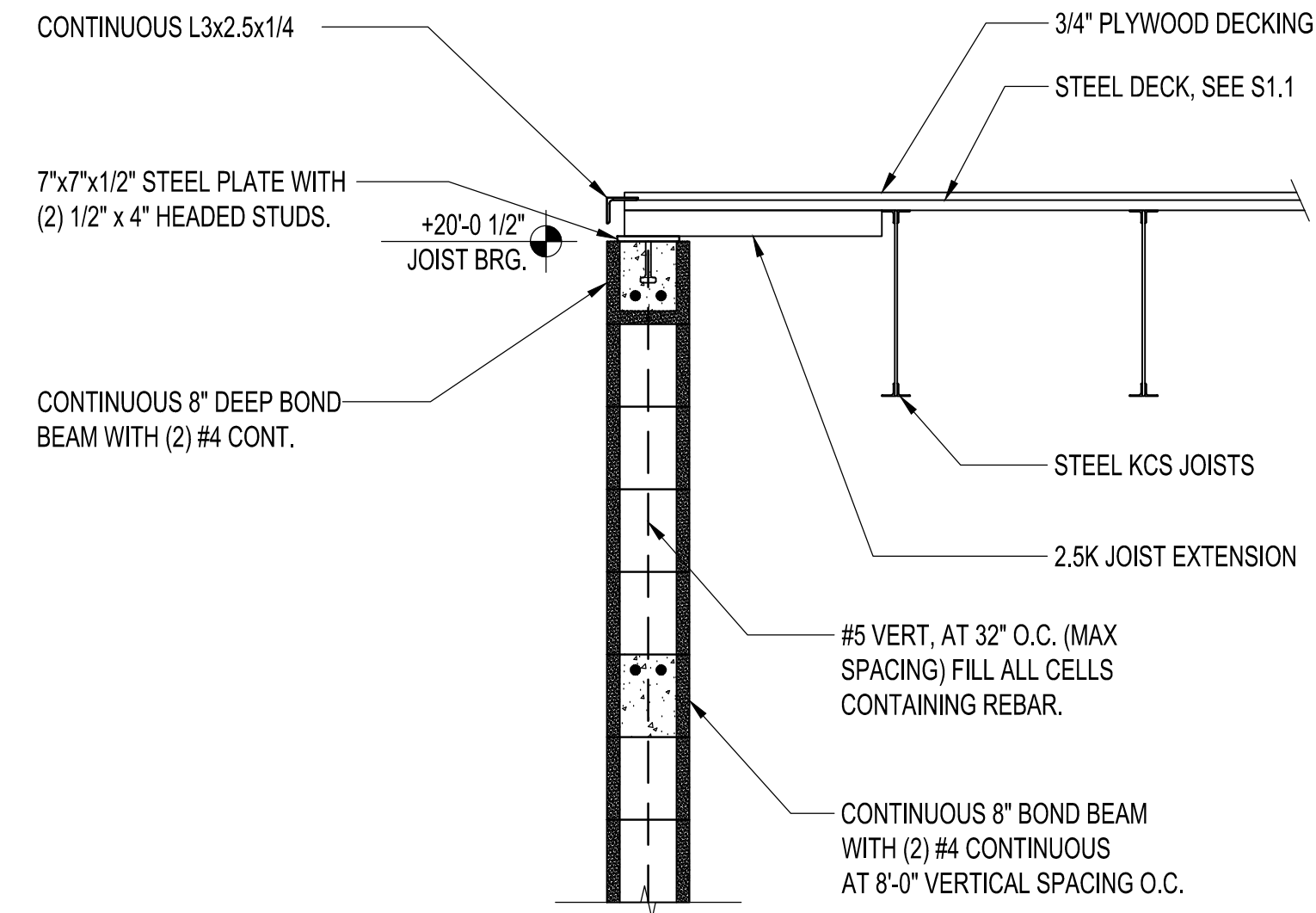
DRAWING TITLE
 FOUNDATION SECTIONS
 DRAWING NUMBER
S3.1



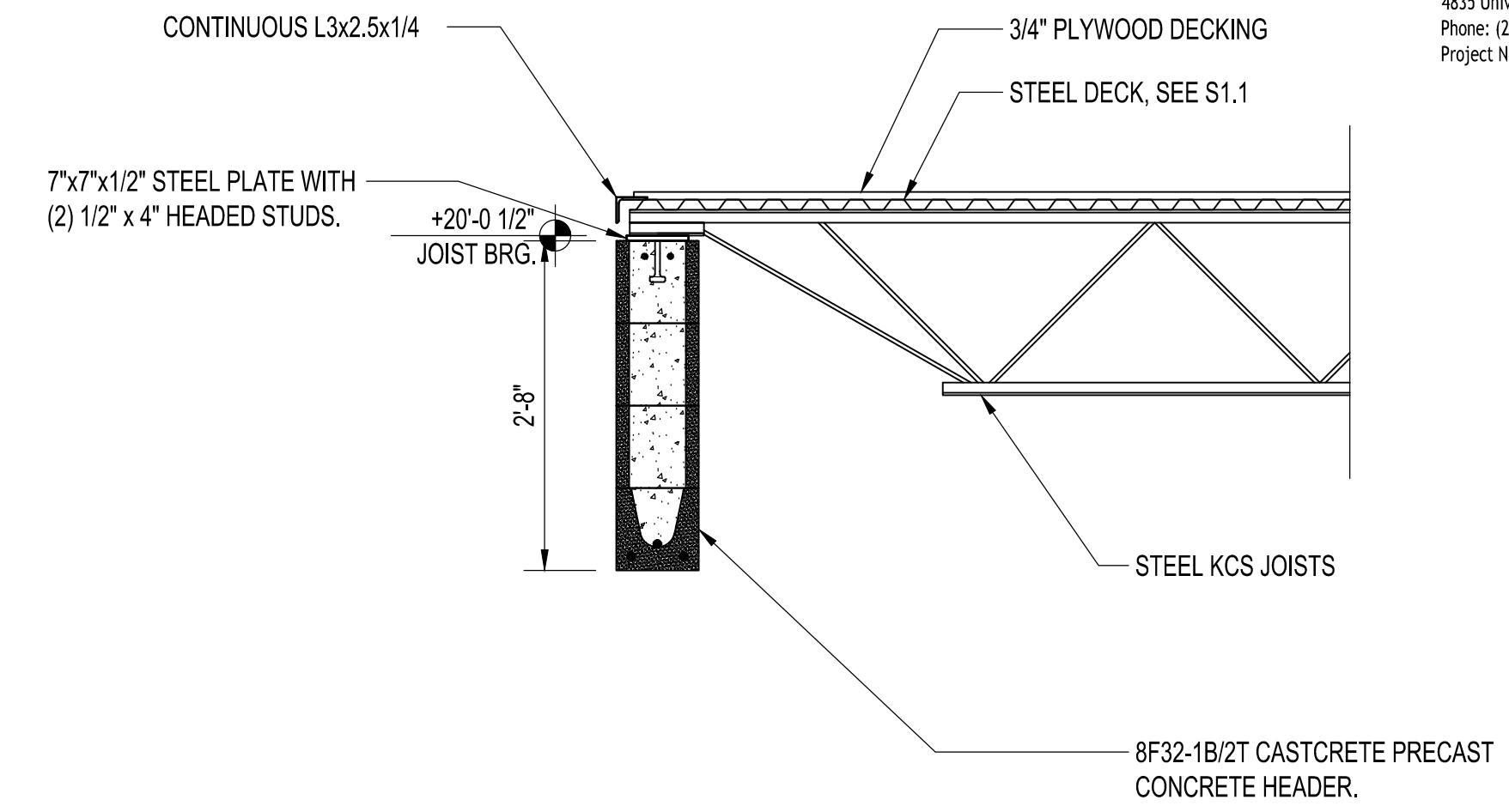
P.R. Matthewson & Associates Engineers, Inc.
 4835 University Sq Suite 177 Huntsville, AL 35816
 Phone: (256) 652-4818
 Project No. 1965



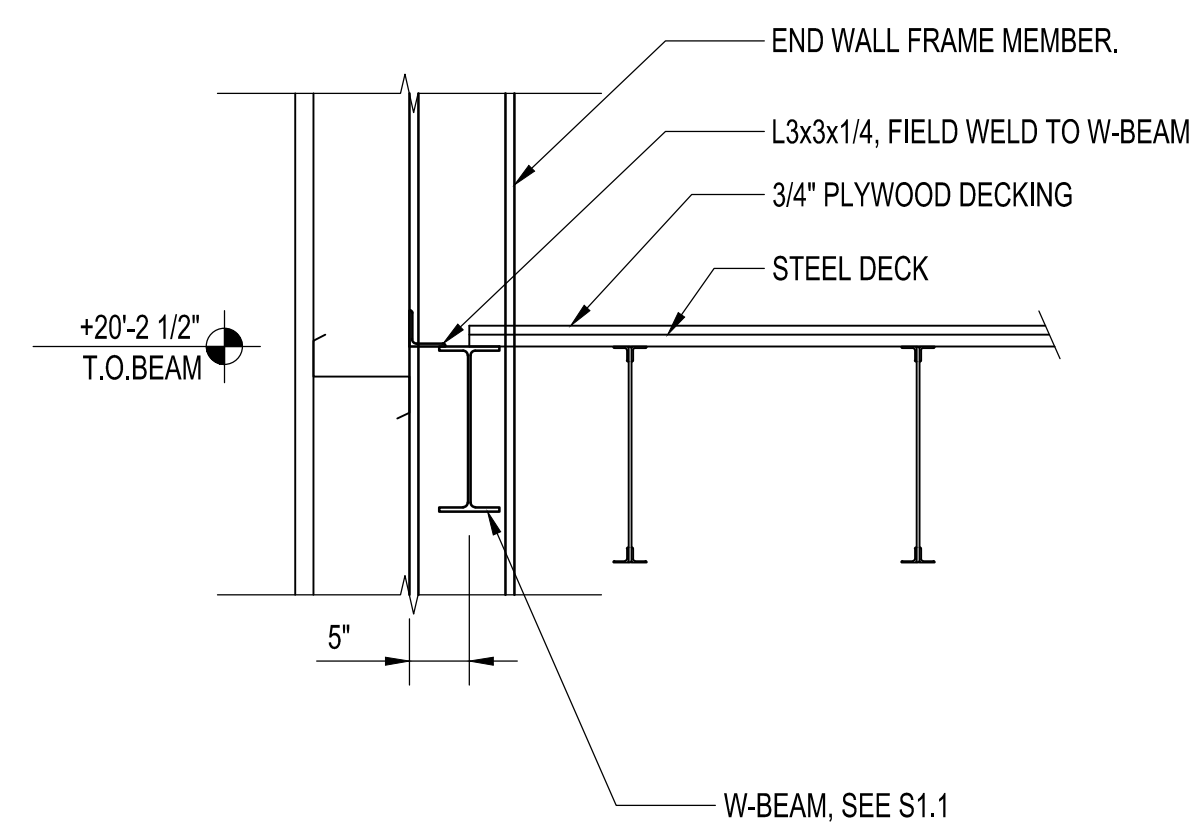
SECTION A
 SCALE 3/4" = 1'-0" S3.2



SECTION B
 SCALE 3/4" = 1'-0" S3.2



SECTION C
 SCALE 3/4" = 1'-0" S3.2



SECTION D
 SCALE 3/4" = 1'-0" S3.2

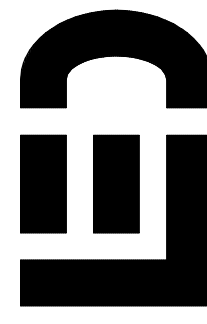


LAMBERT • EZELL • DURHAM
 ARCHITECTURE, LLC
 P.O. BOX 494 401 EAST COLLEGE ST. FLORENCE ALABAMA 36631
 TELEPHONE (256) 161-7100 FACSIMILE (256) 161-2908

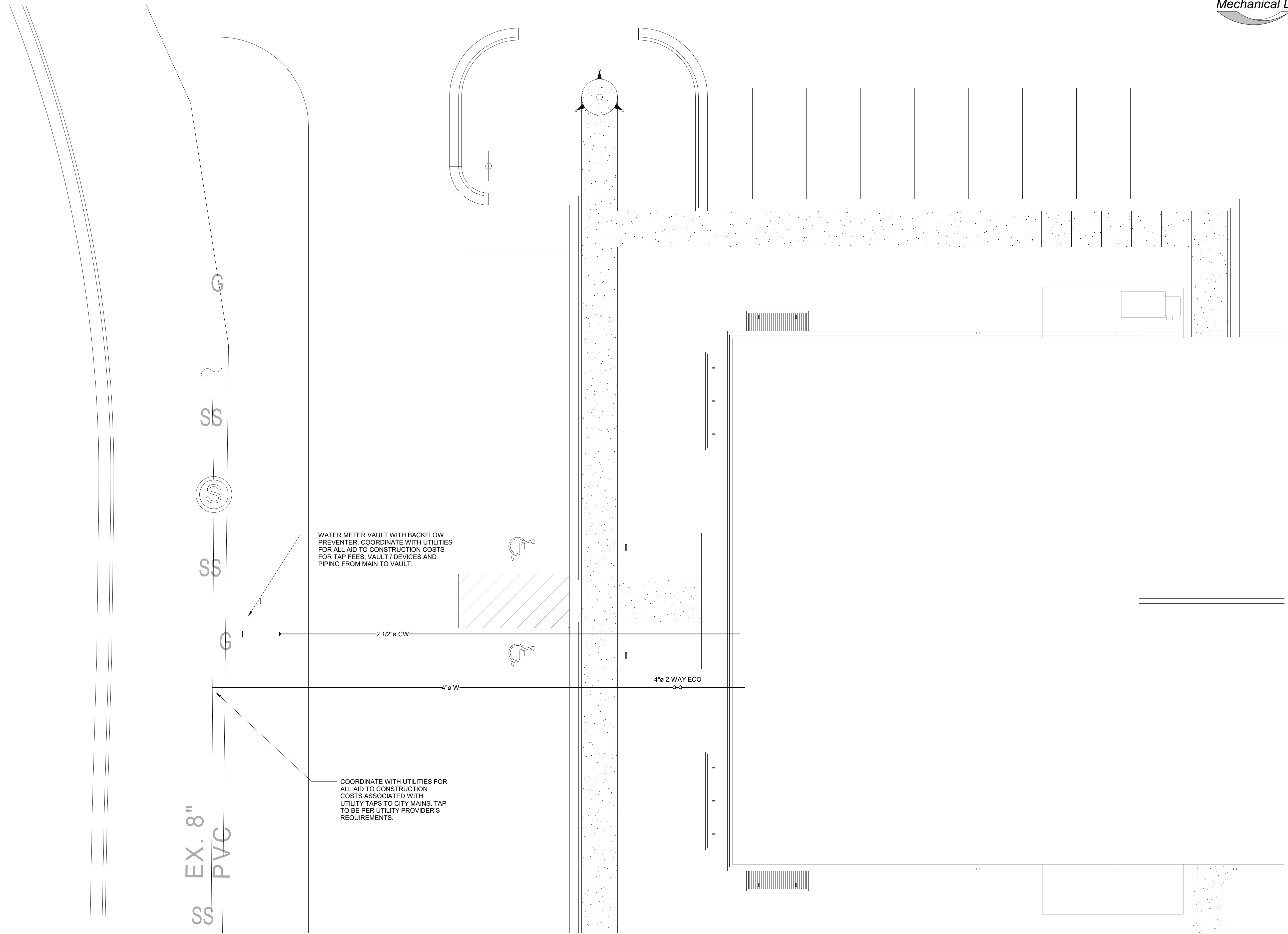
OFFICE AND SHOP BUILDING FOR
 RL CONSULTING, INC
 TUSCUMBIA, ALABAMA

| JOB NO. | DATE | REVISION | CHECKED | DRAWN |
|---------|----------|----------|---------|-------|
| 1860 | 10/14/19 | REVISED | PRM | ALM |
| | | REVISED | | |

DRAWING TITLE
 CEILING FRAMING SECTIONS
 DRAWING NUMBER
S3.2

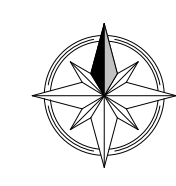


| JOB NO. | DATE | REVISION |
|---------|----------|----------|
| 1860 | 10/14/19 | |
| DRAWN | Author | Author |
| CHECKED | Checker | Checker |

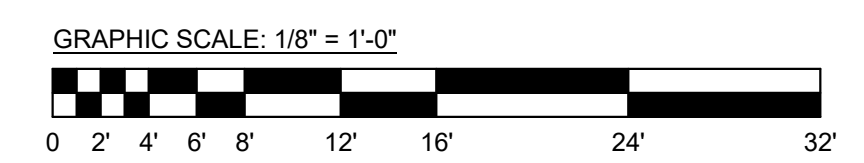


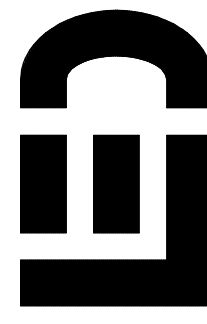
WATER METER VAULT WITH BACKFLOW PREVENTER. COORDINATE WITH UTILITIES FOR ALL AID TO CONSTRUCTION COSTS FOR TAP FEES, VAULT / DEVICES AND PIPING FROM MAIN TO VAULT.

COORDINATE WITH UTILITIES FOR ALL AID TO CONSTRUCTION COSTS ASSOCIATED WITH UTILITY TAPS TO CITY MAINS. TAP TO BE PER UTILITY PROVIDER'S REQUIREMENTS.



PLUMBING SITE PLAN
 1/8" = 1'-0"





LAMBERT-EZELL-DURHAM
 ARCHITECTURE, LLC
 FLORENCE, ALABAMA 35651
 P.O. BOX 934 401 EAST COLLEGE ST.
 TUSCALOOSA, ALABAMA 35604
 TELEPHONE (256) 767-7100
 www.lambert-ezell-durham.com

OFFICE AND SHOP BUILDING FOR
 RL CONSULTING, INC
 TUSCALOOSA, ALABAMA

JOB NO. 1860
 DATE 10/14/19
 DRAWN JDA
 CHECKED JNE
 REVISIONS:
 REVISION
 REVISION

DRAWING TITLE
 PLUMBING FLOOR PLAN
 DRAWING NUMBER
PI01

| FIXTURE TAG | TYPE OF FIXTURE | CONNECTION SIZES | | | |
|-------------|--------------------------------------|------------------|--------|--------|------|
| | | WASTE | CW | HW | HWR |
| P-1 | WATER CLOSET (ADA) | 4" | 1-1/2" | | |
| P-2 | WATER CLOSET | 4" | 1-1/2" | | |
| P-3 | URINAL | 2" | 3/4" | | |
| P-4 | LAVATORY (WALL MOUNT) | 1-1/2" | 1/2" | 1/2" | |
| P-5 | LAVATORY | 1-1/2" | 1/2" | 1/2" | |
| P-6 | ELECTRIC WATER COOLER | 1-1/2" | 1/2" | | |
| P-7 | MOP SINK | 3" | 3/4" | 3/4" | |
| P-8 | WATER HEATER 50GAL, 208V / 1, 4.5 kW | | 1-1/2" | 1-1/2" | |
| P-9 | CIRCULATION PUMP | | | | 3/4" |
| P-10 | EMERGENCY EYE WASH | 1-1/4" | 1" | 1" | |
| P-11 | SHOWER | 2" | 1/2" | 1/2" | |
| P-12 | ICE MACHINE WALL BOX | | 1/2" | | |
| P-13 | FLOOR DRAIN | 4" | | | |
| P-14 | RECESSED FLOOR DRAIN | 4" | | | |
| P-15 | EXTERIOR WALL HYDRANT | | 3/4" | | |
| P-16 | INTERIOR WALL HYDRANT | | 3/4" | | |
| P-17 | DOUBLE SINK | 1-1/2" | 1/2" | 1/2" | |

- NOTES:
- COORDINATE MOUNTING HEIGHT OF ALL WALL MOUNTED FIXTURES WITH THE ARCHITECTURAL DRAWINGS.
 - COORDINATE MOUNTING HEIGHT OF ALL SENSOR OPERATED FLUSH VALVES WITH GRAB BARS AND ACCESSORIES SO THAT SENSOR OPERATION IS NOT EMPEDED BY ANY OBSTRUCTIONS.
 - BACK TO BACK LAVATORIES, URINALS, WATER CLOSETS, ETC. SHALL BE CONNECTED WITH A COMBINATION WYE & 1/8 BEND. SANITARY TEES / CROSSES SHALL NOT BE ALLOWED.
 - FLUSH VALVE HANDLE SHALL BE INSTALLED ON THE WIDE SIDE (OPEN SIDE) OF THE TOILET STALL FOR ADA INSTALLATIONS.

PLUMBING NOTATION LEGEND

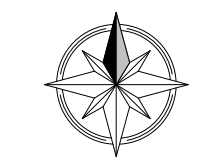
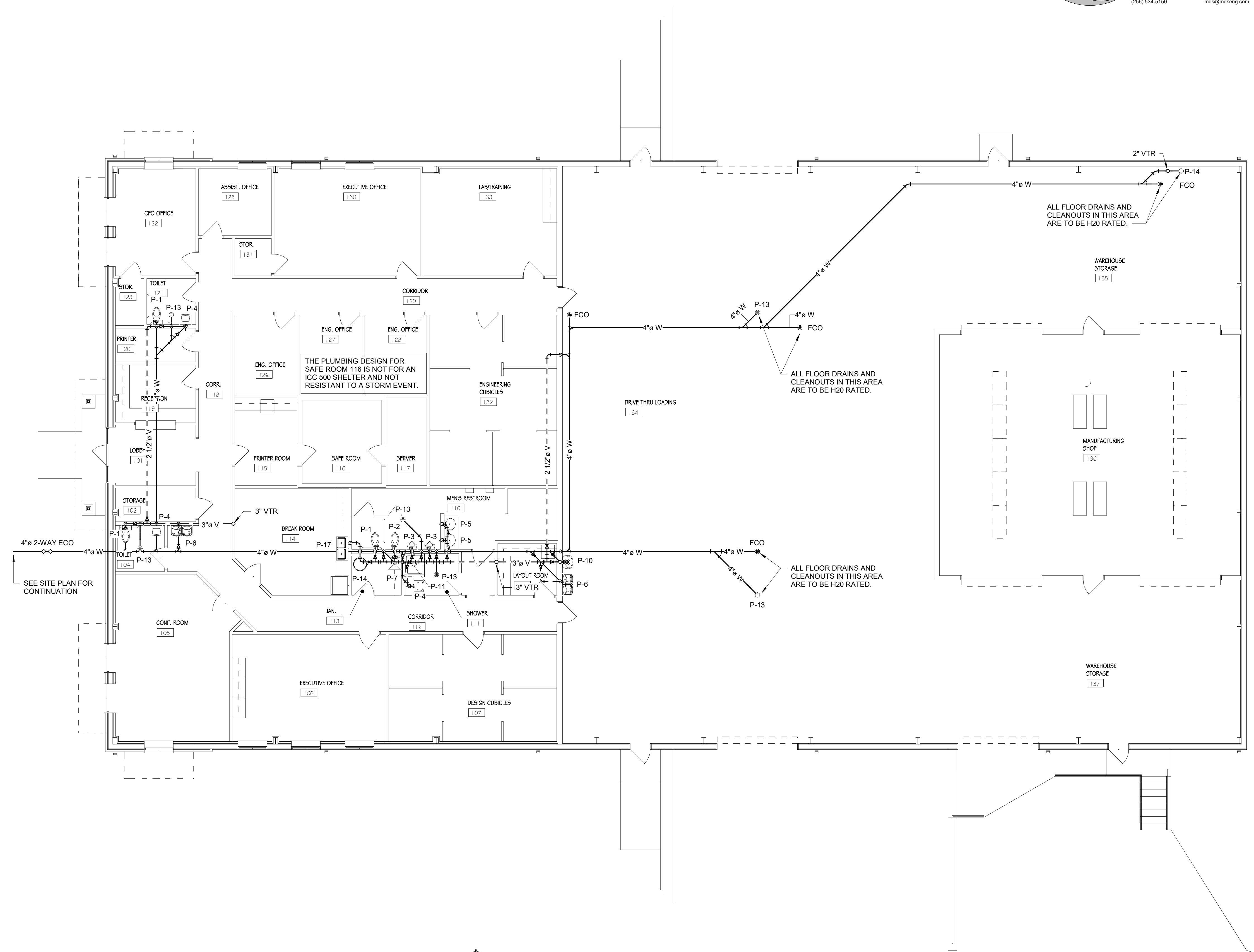
- CO = CLEAN OUT
- CW = COLD WATER
- ECO = EXTERIOR CLEANOUT
- EWL = EXTERIOR WALL HYDRANT
- FCO = FLOOR CLEANOUT
- FD = FLOOR DRAIN
- FS = FLOOR SINK
- HW = HOT WATER
- HWR = HOT WATER RETURN
- W = WASTE
- V = VENT
- VTR = VENT THRU ROOF

PLUMBING SYMBOL LEGEND

- = NEW WORK (EQUIPMENT, PIPE, ETC.)
- · — = COLD WATER PIPING ABOVE GRADE
- · · — = HOT WATER PIPING ABOVE GRADE
- · · · — = HOT WATER RETURN PIPING
- · · · · — = COLD OR HOT WATER BELOW GRADE
- · — · — = WASTE / RAIN WATER PIPING
- - - - - = VENT PIPING
- ⊕ — ⊕ = PIPE DROP / RISE

GENERAL PLUMBING NOTES

- THESE DRAWINGS ARE DIAGRAMMATICAL ONLY AND ARE AN INTERPRETATION ON HOW TO INSTALL SYSTEM COMPONENTS AS INTENDED AND SHOWN ON FLOOR PLAN DRAWINGS IN A MANNER TO ELIMINATE CONFLICTS BETWEEN OTHER TRADES AND ALLOW FOR CLEARANCES, ETC. THEY MAY BE SHIFTED AS DETERMINED BY FIELD CONDITIONS. REFER TO ALL FLOOR PLAN DRAWINGS FOR NOTATIONS, SIZES, ETC. THE DRAWINGS DO NOT SHOW ALL COMPONENTS REQUIRED FOR A COMPLETE INSTALLATION (HANGERS, INSULATION, ETC.). IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE ALL MATERIALS AND LABOR NECESSARY TO INSTALL THE FIXTURES, EQUIPMENT, PIPING, ETC. TO MEET THE INTENT OF THE DRAWINGS. REFER TO ENTIRE CONTRACT DOCUMENT SET FOR ALL COMPONENTS REQUIRED (FLOOR PLAN DRAWINGS, SPECIFICATIONS, SCHEDULES, DETAILS, ETC.).
- THIS CONTRACTOR IS RESPONSIBLE FOR REVIEWING ALL DRAWINGS AND SPECIFICATIONS OF ALL DISCIPLINES FOR ANY AND ALL WORK THAT WILL IMPACT THIS CONTRACTOR AND WILL BE THE RESPONSIBILITY OF THIS CONTRACTOR TO PROVIDE SAID WORK.
- CERTAIN AREAS WILL REQUIRE EXTENSIVE COORDINATION BETWEEN ALL TRADES. CONTRACTOR(S) SHALL COORDINATE PRIOR/DURING CONSTRUCTION TO ELIMINATE ANY CONFLICTS.
- THE BOTTOM OF ALL PIPING TO BE COORDINATED WITH ROOM FINISH SCHEDULE FOR CEILING HEIGHTS AND SHALL BE A MINIMUM OF 6" ABOVE THE CEILING GRID. ALL SERVICEABLE ITEMS SUCH AS EQUIPMENT, VALVES, CIRCUIT SETTERS, ETC. SHALL BE LOCATED NO MORE THAN 24" ABOVE THE CEILING GRID.
- SLEEVE ALL FOUNDATION WALL PENETRATIONS WITH SCH. 40 SLEEVE 2 PIPE SIZES LARGER THAN SERVICE PIPE.
- CONTRACTOR TO COORDINATE WITH GENERAL CONTRACTOR FOR REQUIRED FOOTING STEPS AS SOON AS CONTRACT HAS BEEN AWARDED TO THE GENERAL CONTRACTOR. THIS IS THE GENERAL CONTRACTOR'S RESPONSIBILITY TO COORDINATE WITH THE SUB CONTRACTOR PRIOR TO ORDERING STEEL AND DIGGING FOOTINGS.

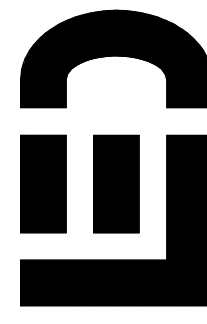


PLUMBING FLOOR PLAN - WASTE & VENT
 1/8" = 1'-0"



| PLUMBING FIXTURE CONNECTION SCHEDULE | | | | |
|--------------------------------------|--------------------------------------|------------------|--------|--------|
| FIXTURE TAG | TYPE OF FIXTURE | CONNECTION SIZES | | |
| | | WASTE | CW | HW |
| P-1 | WATER CLOSET (ADA) | 4" | 1-1/2" | |
| P-2 | WATER CLOSET | 4" | 1-1/2" | |
| P-3 | URINAL | 2" | 3/4" | |
| P-4 | LAVATORY (WALL MOUNT) | 1-1/2" | 1/2" | 1/2" |
| P-5 | LAVATORY | 1-1/2" | 1/2" | 1/2" |
| P-6 | ELECTRIC WATER COOLER | 1-1/2" | 1/2" | |
| P-7 | MOP SINK | 3" | 3/4" | 3/4" |
| P-8 | WATER HEATER 50GAL, 208V / 1, 4.5 kW | | 1-1/2" | 1-1/2" |
| P-9 | CIRCULATION PUMP | | | 3/4" |
| P-10 | EMERGENCY EYE WASH | 1-1/4" | 1" | 1" |
| P-11 | SHOWER | 2" | 1/2" | 1/2" |
| P-12 | ICE MACHINE WALL BOX | | 1/2" | |
| P-13 | FLOOR DRAIN | 4" | | |
| P-14 | RECESSED FLOOR DRAIN | 4" | | |
| P-15 | EXTERIOR WALL HYDRANT | | 3/4" | |
| P-16 | INTERIOR WALL HYDRANT | | 3/4" | |
| P-17 | DOUBLE SINK | 1-1/2" | 1/2" | 1/2" |

- NOTES:
- COORDINATE MOUNTING HEIGHT OF ALL WALL MOUNTED FIXTURES WITH THE ARCHITECTURAL DRAWINGS.
 - COORDINATE MOUNTING HEIGHT OF ALL SENSOR OPERATED FLUSH VALVES WITH GRAB BARS AND ACCESSORIES SO THAT SENSOR OPERATION IS NOT EMPEDED BY ANY OBSTRUCTIONS.
 - BACK TO BACK LAVATORIES, URINALS, WATER CLOSETS, ETC. SHALL BE CONNECTED WITH A COMBINATION WYE & 1/8" BEND. SANITARY TEES / CROSSES SHALL NOT BE ALLOWED.
 - FLUSH VALVE HANDLE SHALL BE INSTALLED ON THE WIDE SIDE (OPEN SIDE) OF THE TOILET STALL FOR ADA INSTALLATIONS.

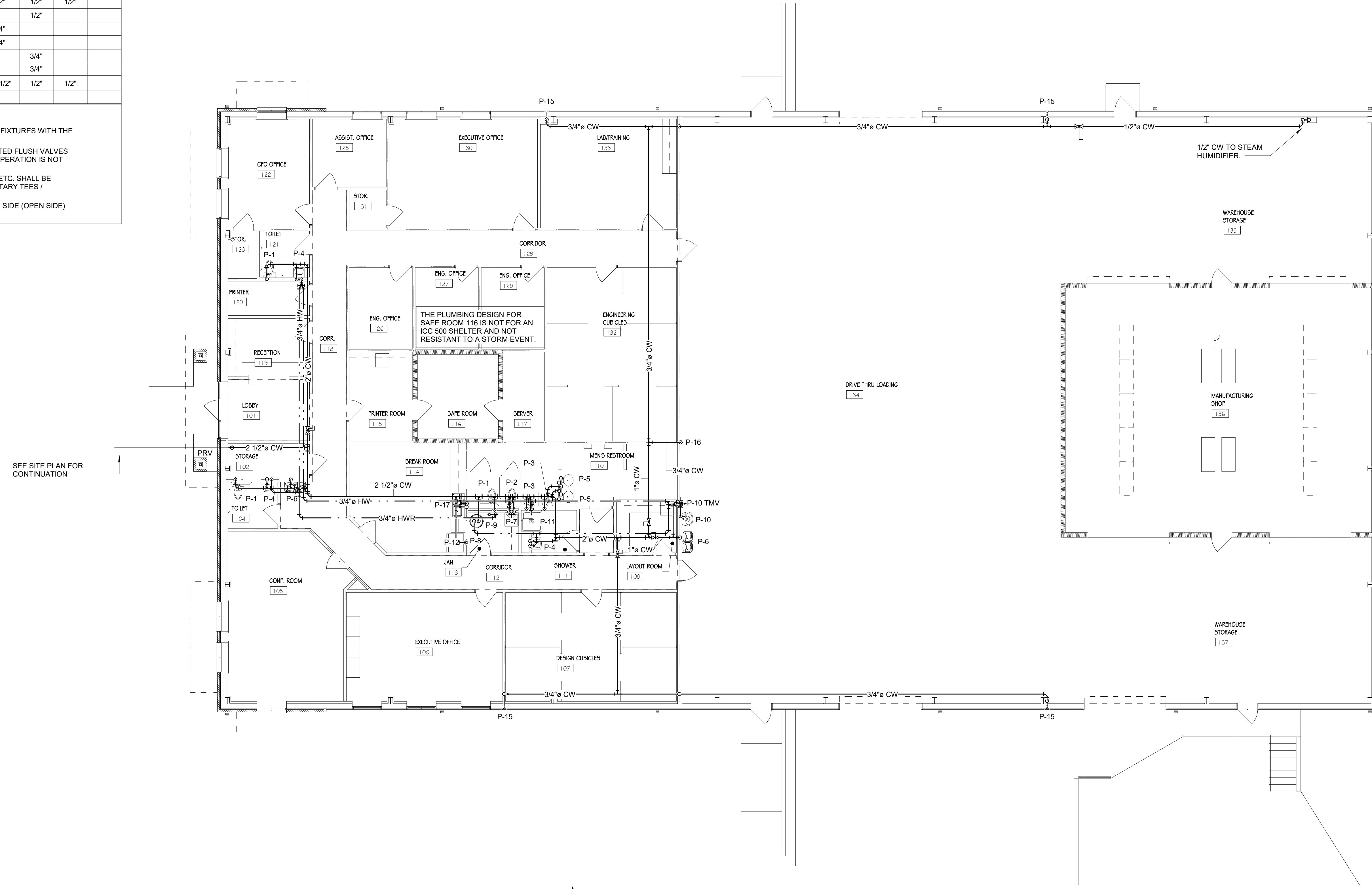


LAMBERT • EZELL • DURHAM
ARCHITECTURE, LLC
FLORENCE, ALABAMA 35651
P.O. BOX 934 401 EAST COLLEGE ST.
TELEPHONE (256) 767-7100
www.lambert-ezell-durham.com

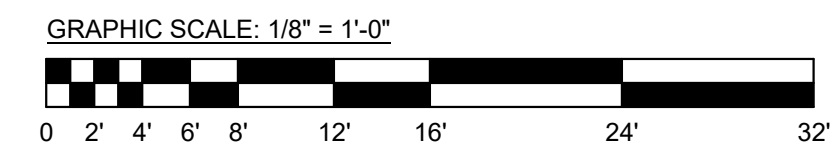
OFFICE AND SHOP BUILDING FOR
RL CONSULTING, INC
TUSCUMBIA, ALABAMA

| | | | |
|---------|------|----------|----------|
| JOB NO. | 1860 | DATE | 10/14/19 |
| DRAWN | JDA | REVISION | |
| CHECKED | JNE | REVISION | |

DRAWING TITLE
PLUMBING FLOOR PLAN
DRAWING NUMBER
P201

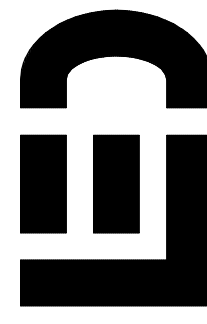
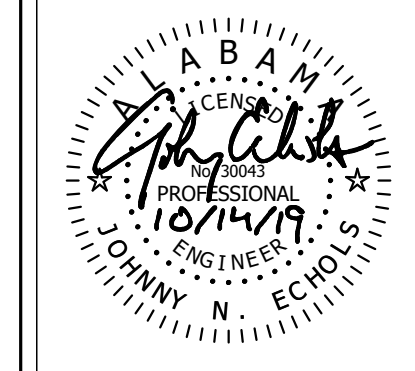


PLUMBING FLOOR PLAN - DOMESTIC WATER
1/8" = 1'-0"



| PLUMBING FIXTURE CONNECTION SCHEDULE | | | | | |
|--------------------------------------|---------------------------------------|------------------|--------|--------|------|
| FIXTURE TAG | TYPE OF FIXTURE | CONNECTION SIZES | | | |
| | | WASTE | CW | HW | HWR |
| P-1 | WATER CLOSET (ADA) | 4" | 1-1/2" | | |
| P-2 | WATER CLOSET | 4" | 1-1/2" | | |
| P-3 | URINAL | 2" | 3/4" | | |
| P-4 | LAVATORY (WALL MOUNT) | 1-1/2" | 1/2" | 1/2" | |
| P-5 | LAVATORY | 1-1/2" | 1/2" | 1/2" | |
| P-6 | ELECTRIC WATER COOLER | 1-1/2" | 1/2" | | |
| P-7 | MOP SINK | 3" | 3/4" | 3/4" | |
| P-8 | WATER HEATER 50GAL., 208V / 1, 4.5 KW | | 1-1/2" | 1-1/2" | |
| P-9 | CIRCULATION PUMP | | | | 3/4" |
| P-10 | EMERGENCY EYE WASH | 1-1/4" | 1" | 1" | |
| P-11 | SHOWER | 2" | 1/2" | 1/2" | |
| P-12 | ICE MACHINE WALL BOX | | 1/2" | | |
| P-13 | FLOOR DRAIN | 4" | | | |
| P-14 | RECESSED FLOOR DRAIN | 4" | | | |
| P-15 | EXTERIOR WALL HYDRANT | | 3/4" | | |
| P-16 | INTERIOR WALL HYDRANT | | 3/4" | | |
| P-17 | DOUBLE SINK | 1-1/2" | 1/2" | 1/2" | |

- NOTES:
- COORDINATE MOUNTING HEIGHT OF ALL WALL MOUNTED FIXTURES WITH THE ARCHITECTURAL DRAWINGS.
 - COORDINATE MOUNTING HEIGHT OF ALL SENSOR OPERATED FLUSH VALVES WITH GRAB BARS AND ACCESSORIES SO THAT SENSOR OPERATION IS NOT EMPEDED BY ANY OBSTRUCTIONS.
 - BACK TO BACK LAVATORIES, URINALS, WATER CLOSETS, ETC. SHALL BE CONNECTED WITH A COMBINATION WYE & 1/8 BEND. SANITARY TEES / CROSSES SHALL NOT BE ALLOWED.
 - FLUSH VALVE HANDLE SHALL BE INSTALLED ON THE WIDE SIDE (OPEN SIDE) OF THE TOILET STALL FOR ADA INSTALLATIONS.

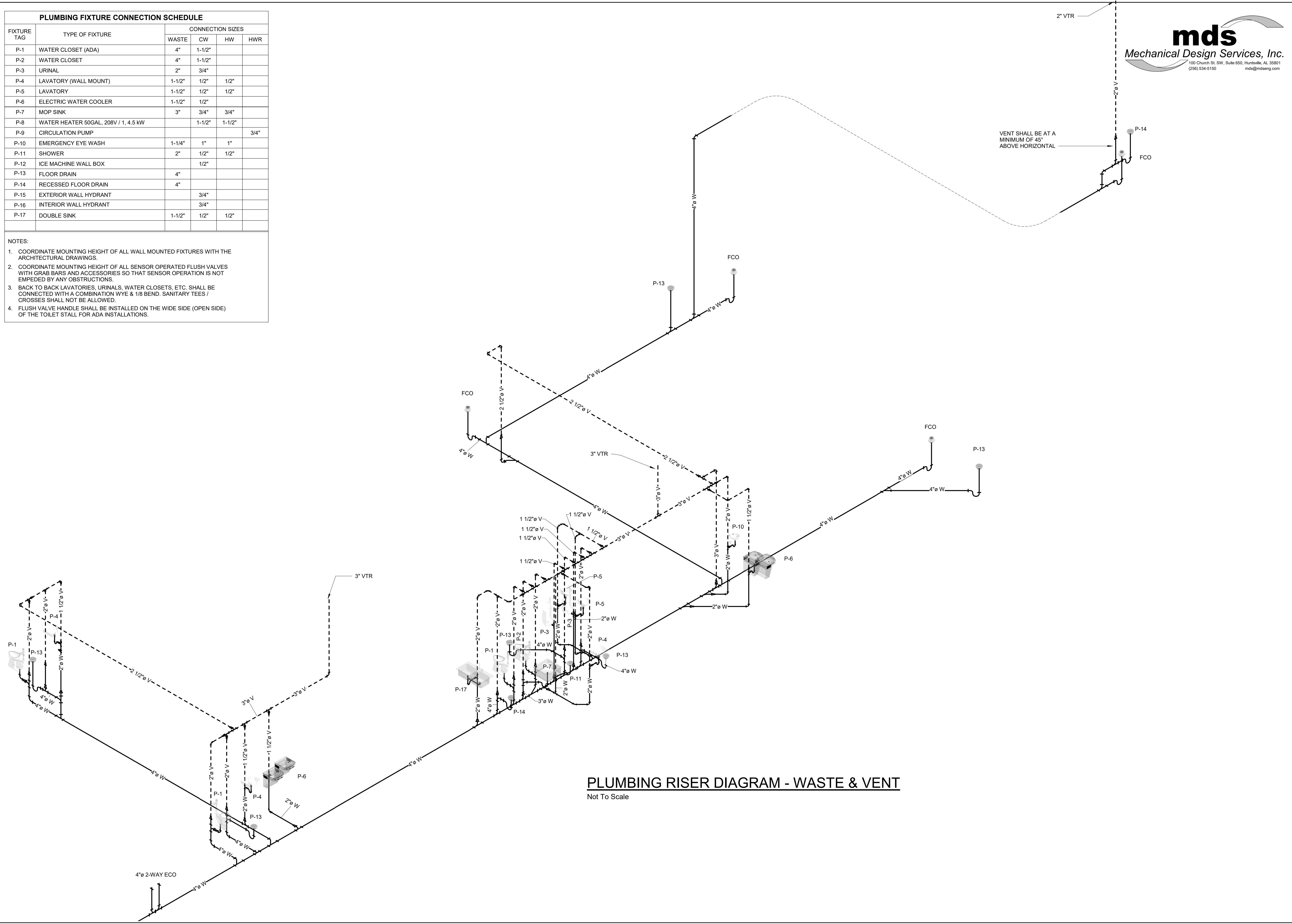


LAMBERT • EZELL • DURHAM
ARCHITECTURE, LLC
FLORENCE, ALABAMA 35651
P.O. BOX 934 401 EAST COLLEGE ST.
TUSCUMBIA, ALABAMA
TELEPHONE (256) 767-7100
www.lambert-ezell-durham.com

OFFICE AND SHOP BUILDING FOR
RL CONSULTING, INC
TUSCUMBIA, ALABAMA

| | | | |
|---------|------|--------|----------|
| JOB NO. | 1860 | DATE | 10/14/19 |
| DRAWN | JDA | REVISD | |
| CHECKED | JNE | REVISD | |

DRAWING TITLE
PLUMBING RISER
DIAGRAM
DRAWING NUMBER
P301



| WATER HAMMER ARRESTOR SCHEDULE | | | | | |
|--------------------------------|--------------|--------|------|-----------------------|-----------------|
| MARK | MANUFACTURER | SERIES | SIZE | FIXTURE UNIT CAPACITY | CONNECTION SIZE |
| A | SIoux CHIEF | 650 | 100 | 1 - 11 | 3/4" |
| B | SIoux CHIEF | 650 | 200 | 12 - 32 | 3/4" |
| C | SIoux CHIEF | 650 | 300 | 33 - 60 | 1" |
| D | SIoux CHIEF | 650 | 400 | 61 - 113 | 1" |
| E | SIoux CHIEF | 650 | 500 | 114 - 154 | 1" |
| F | SIoux CHIEF | 650 | 600 | 155 - 330 | 1" |

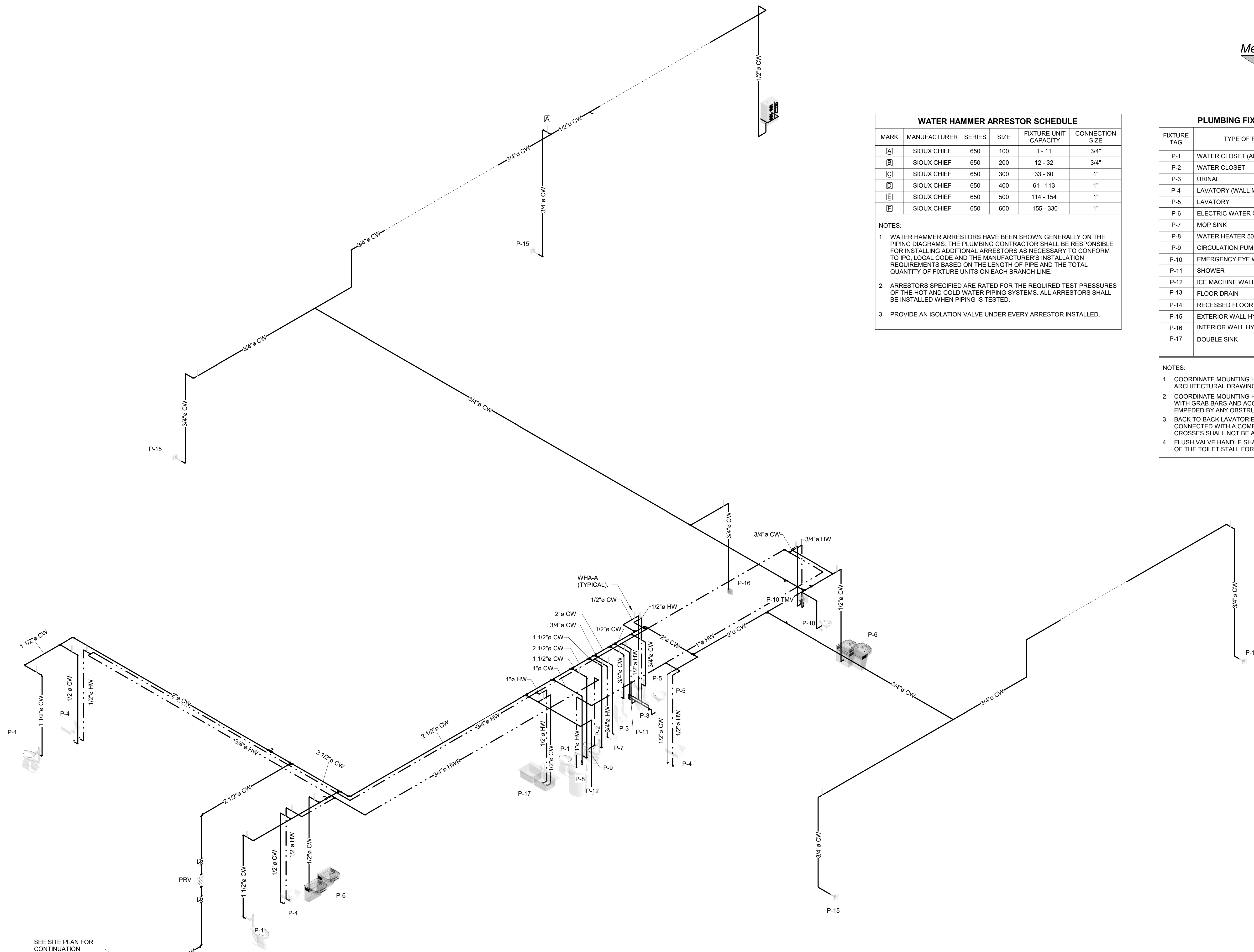
NOTES:

- WATER HAMMER ARRESTORS HAVE BEEN SHOWN GENERALLY ON THE PIPING DIAGRAMS. THE PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING ADDITIONAL ARRESTORS AS NECESSARY TO CONFORM TO IPC, LOCAL CODE AND THE MANUFACTURER'S INSTALLATION REQUIREMENTS BASED ON THE LENGTH OF PIPE AND THE TOTAL QUANTITY OF FIXTURE UNITS ON EACH BRANCH LINE.
- ARRESTORS SPECIFIED ARE RATED FOR THE REQUIRED TEST PRESSURES OF THE HOT AND COLD WATER PIPING SYSTEMS. ALL ARRESTORS SHALL BE INSTALLED WHEN PIPING IS TESTED.
- PROVIDE AN ISOLATION VALVE UNDER EVERY ARRESTOR INSTALLED.

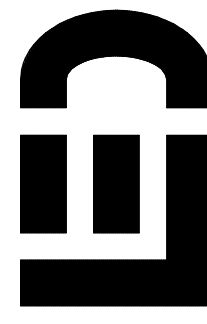
| PLUMBING FIXTURE CONNECTION SCHEDULE | | | | | |
|--------------------------------------|--------------------------------------|------------------|--------|--------|------|
| FIXTURE TAG | TYPE OF FIXTURE | CONNECTION SIZES | | | |
| | | WASTE | CW | HW | HWR |
| P-1 | WATER CLOSET (ADA) | 4" | 1-1/2" | | |
| P-2 | WATER CLOSET | 4" | 1-1/2" | | |
| P-3 | URINAL | 2" | 3/4" | | |
| P-4 | LAVATORY (WALL MOUNT) | 1-1/2" | 1/2" | 1/2" | |
| P-5 | LAVATORY | 1-1/2" | 1/2" | 1/2" | |
| P-6 | ELECTRIC WATER COOLER | 1-1/2" | 1/2" | | |
| P-7 | MOP SINK | 3" | 3/4" | 3/4" | |
| P-8 | WATER HEATER 50GAL, 208V / 1, 4.5 KW | | 1-1/2" | 1-1/2" | |
| P-9 | CIRCULATION PUMP | | | | 3/4" |
| P-10 | EMERGENCY EYE WASH | 1-1/4" | 1" | 1" | |
| P-11 | SHOWER | 2" | 1/2" | 1/2" | |
| P-12 | ICE MACHINE WALL BOX | | 1/2" | | |
| P-13 | FLOOR DRAIN | 4" | | | |
| P-14 | RECESSED FLOOR DRAIN | 4" | | | |
| P-15 | EXTERIOR WALL HYDRANT | | 3/4" | | |
| P-16 | INTERIOR WALL HYDRANT | | 3/4" | | |
| P-17 | DOUBLE SINK | 1-1/2" | 1/2" | 1/2" | |

NOTES:

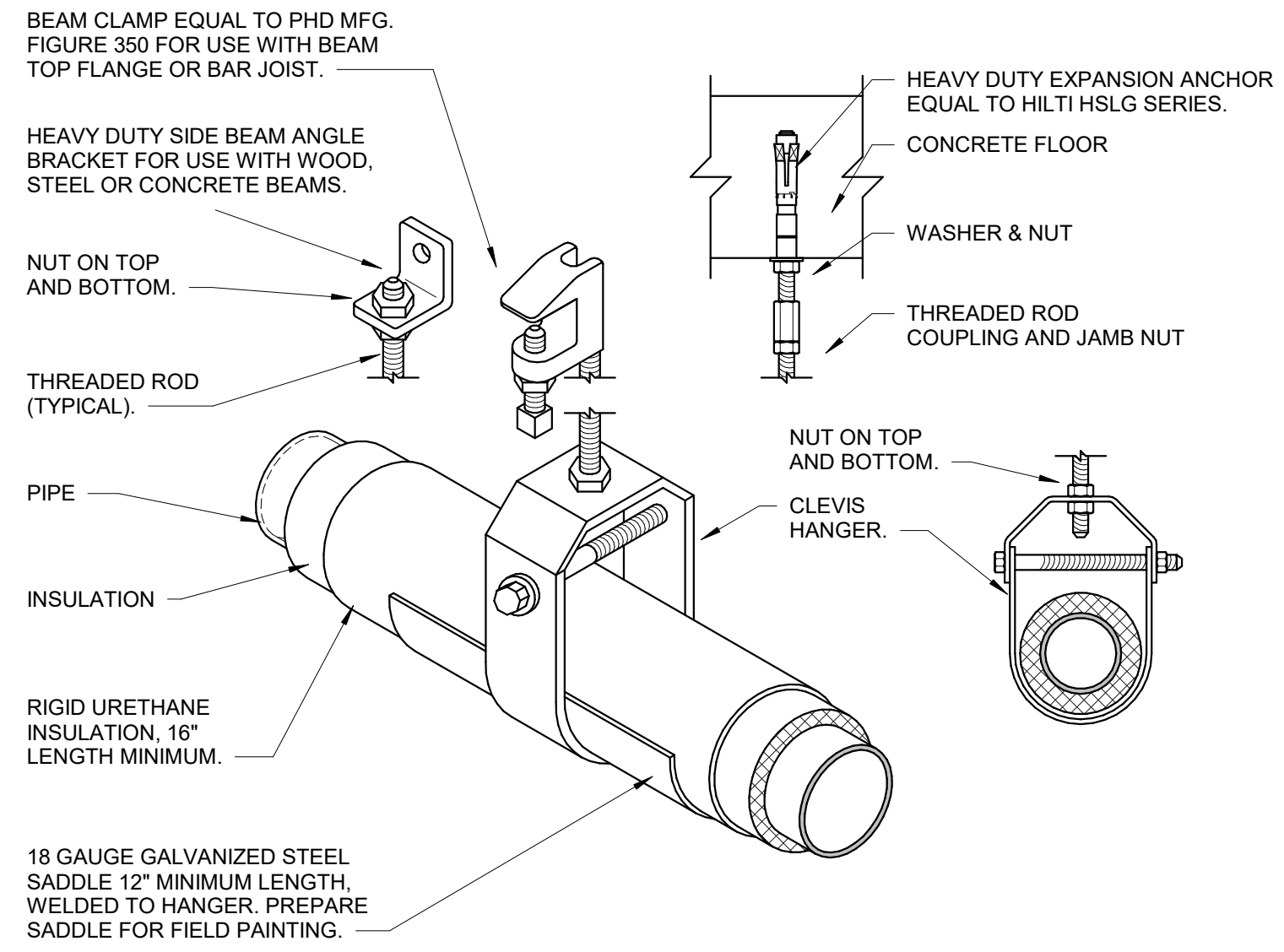
- COORDINATE MOUNTING HEIGHT OF ALL WALL MOUNTED FIXTURES WITH THE ARCHITECTURAL DRAWINGS.
- COORDINATE MOUNTING HEIGHT OF ALL SENSOR OPERATED FLUSH VALVES WITH GRAB BARS AND ACCESSORIES SO THAT SENSOR OPERATION IS NOT EMPEDED BY ANY OBSTRUCTIONS.
- BACK TO BACK LAVATORIES, URINALS, WATER CLOSETS, ETC. SHALL BE CONNECTED WITH A COMBINATION WYE & 1/8 BEND. SANITARY TEES / CROSSES SHALL NOT BE ALLOWED.
- FLUSH VALVE HANDLE SHALL BE INSTALLED ON THE WIDE SIDE (OPEN SIDE) OF THE TOILET STALL FOR ADA INSTALLATIONS.



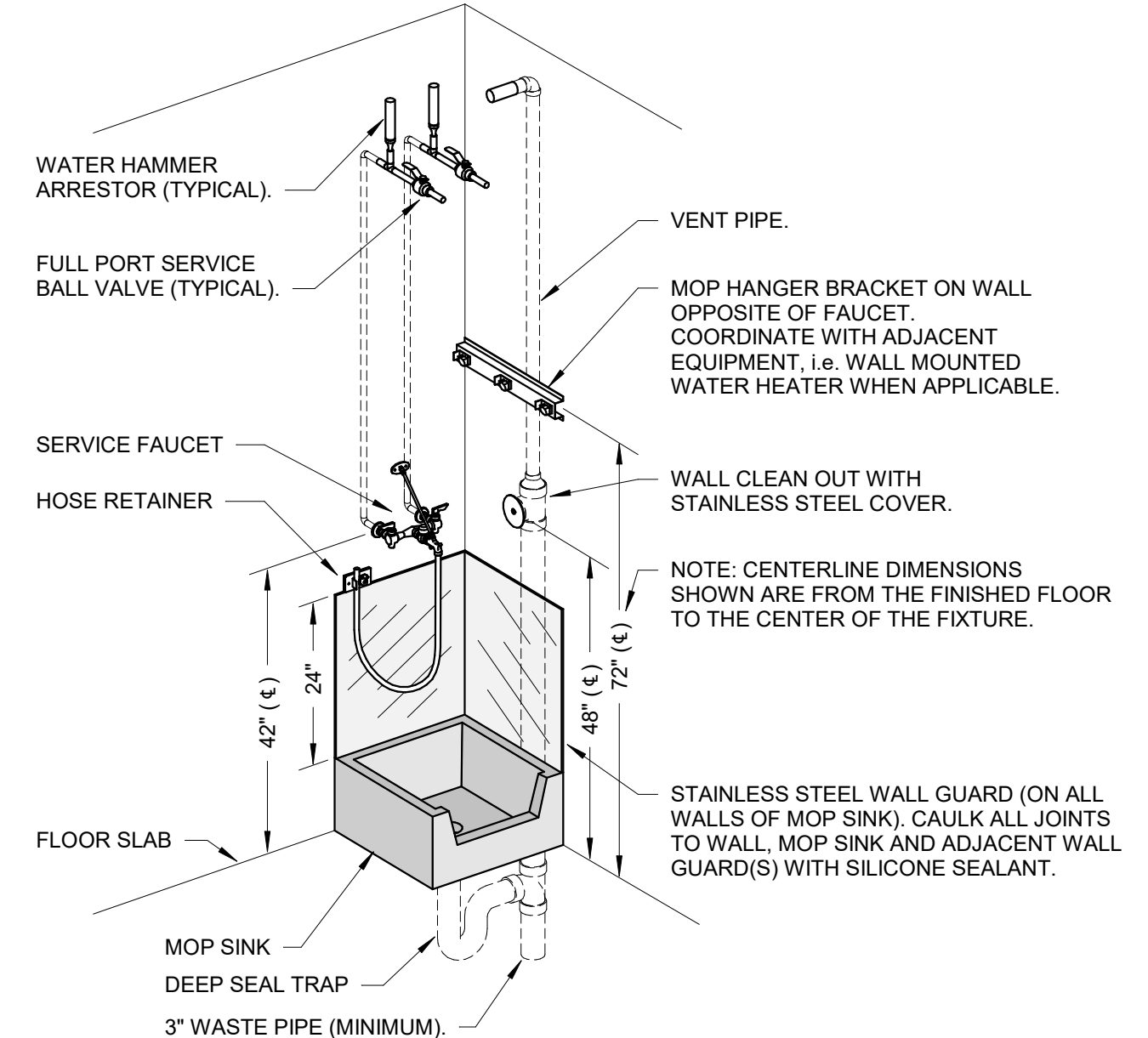
PLUMBING RISER DIAGRAM - DOMESTIC WATER
 Not To Scale



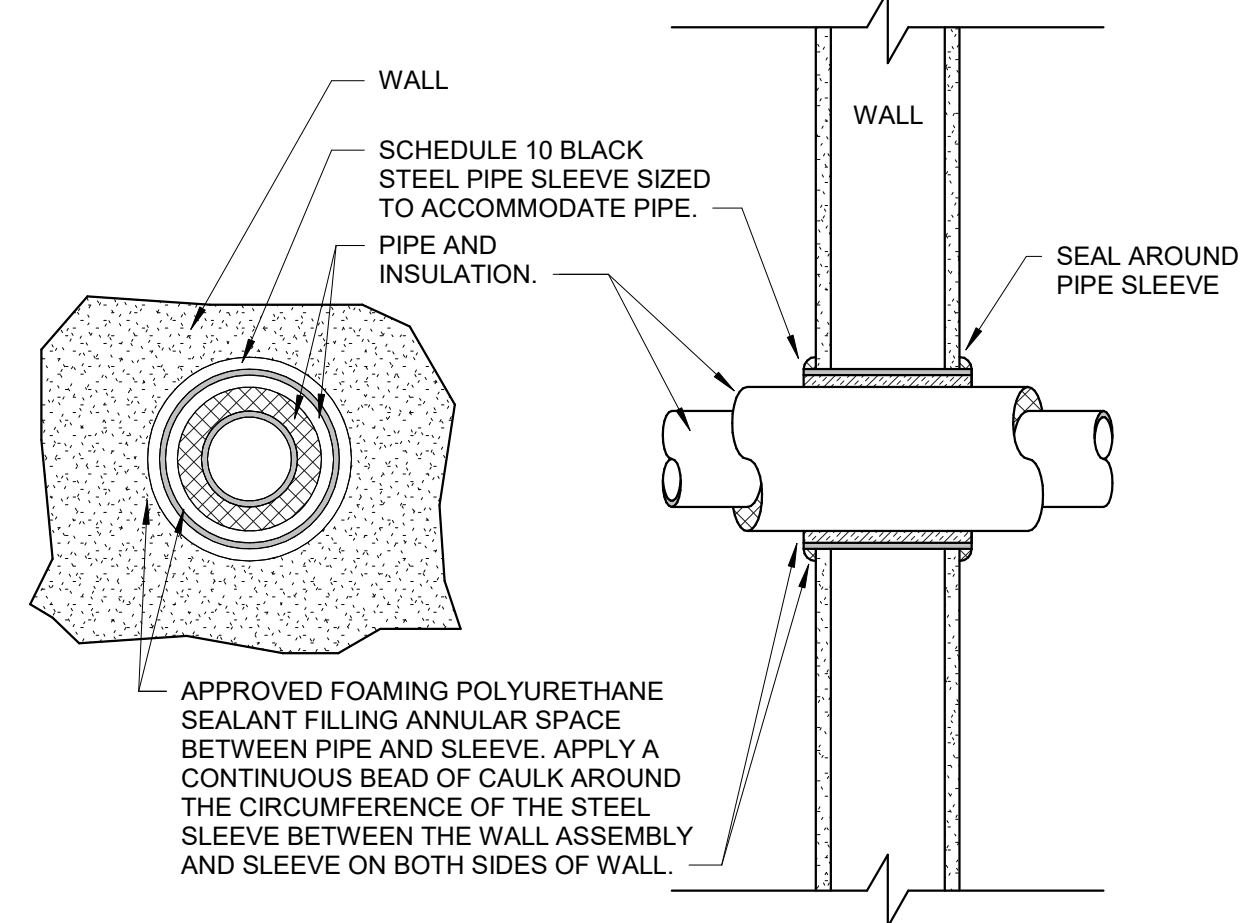
LAMBERT • EZELL • DURHAM
 ARCHITECTURE, LLC
 FLORENCE, ALABAMA 35651
 P.O. BOX 934 401 EAST COLLEGE ST.
 TELEPHONE (256) 767-7100
 www.lambert-ezell-durham.com



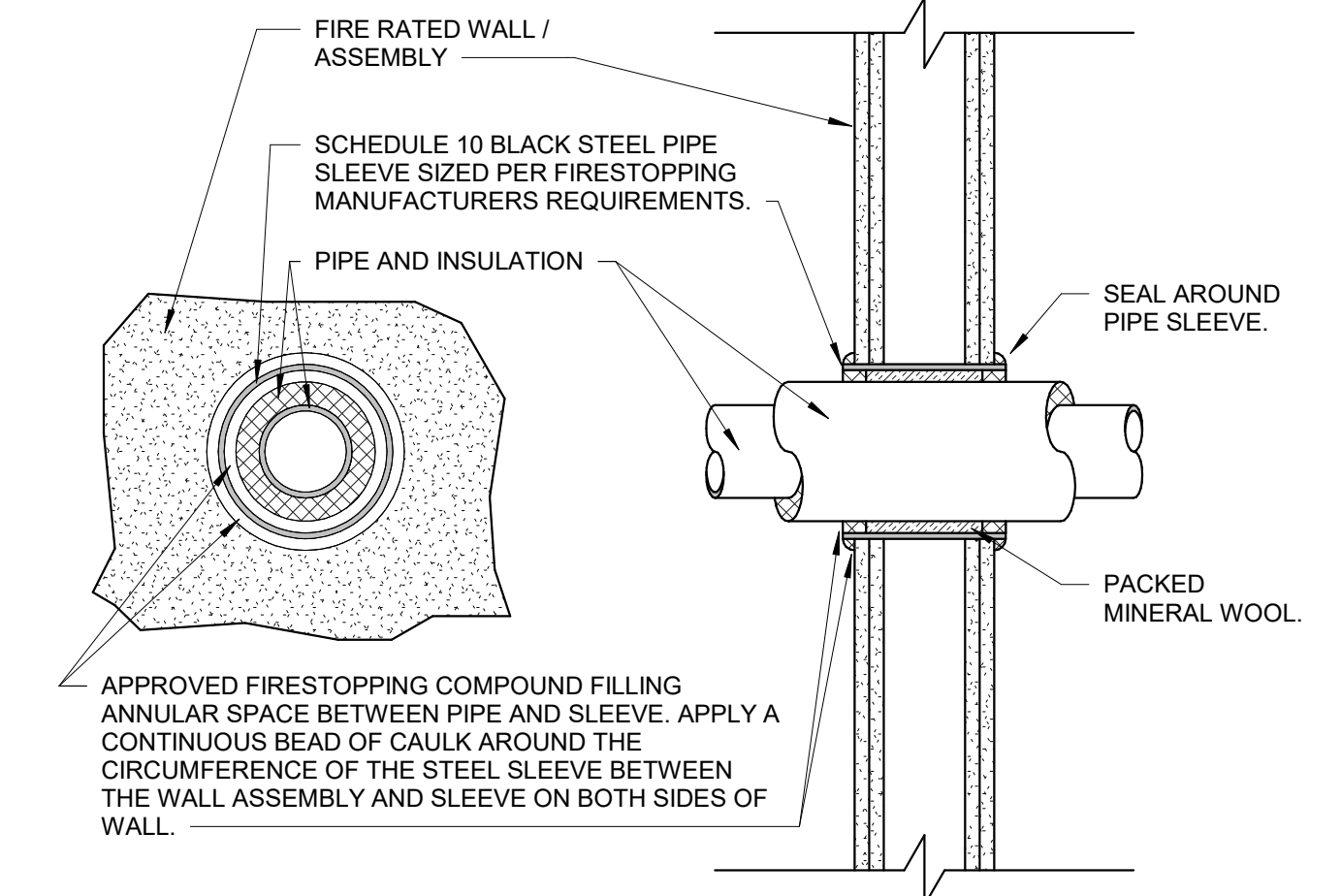
PIPE HANGER DETAIL
 NOT TO SCALE



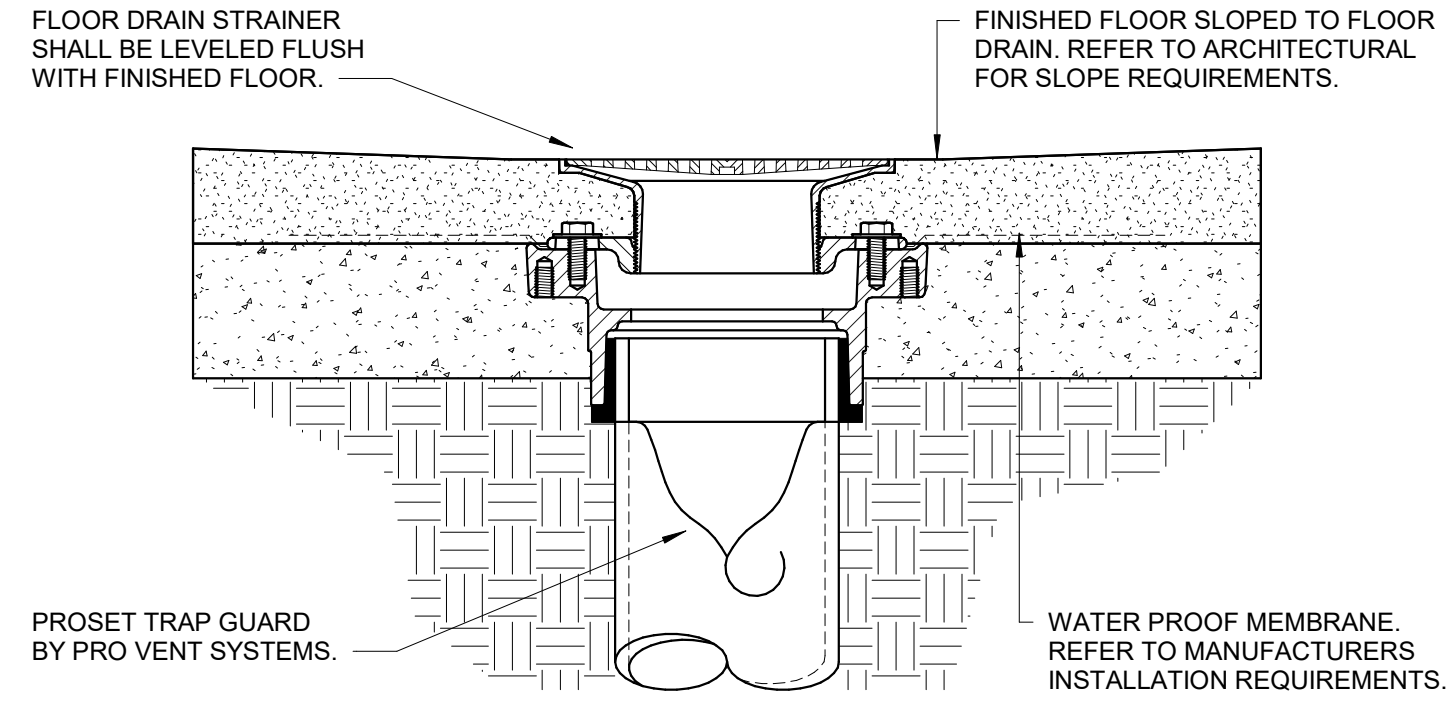
MOP SINK INSTALLATION DETAIL
 NOT TO SCALE



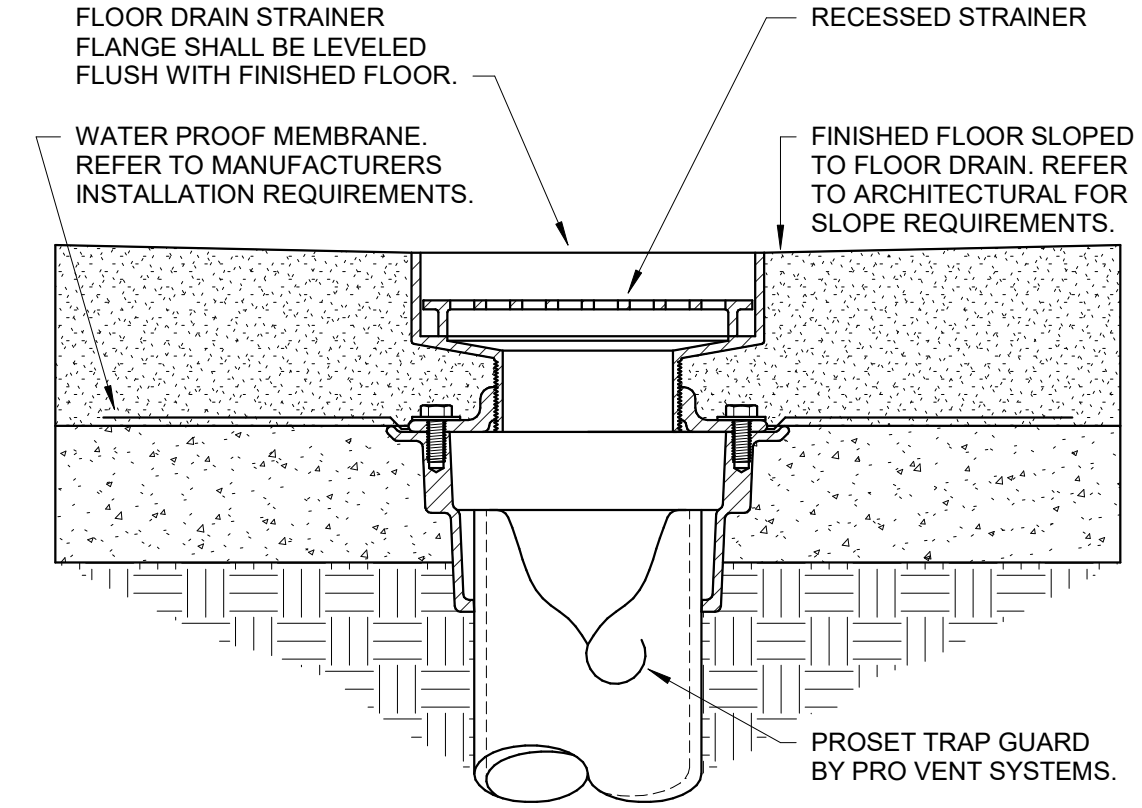
NON RATED WALL / ASSEMBLY
PIPE SLEEVE DETAIL
 NOT TO SCALE



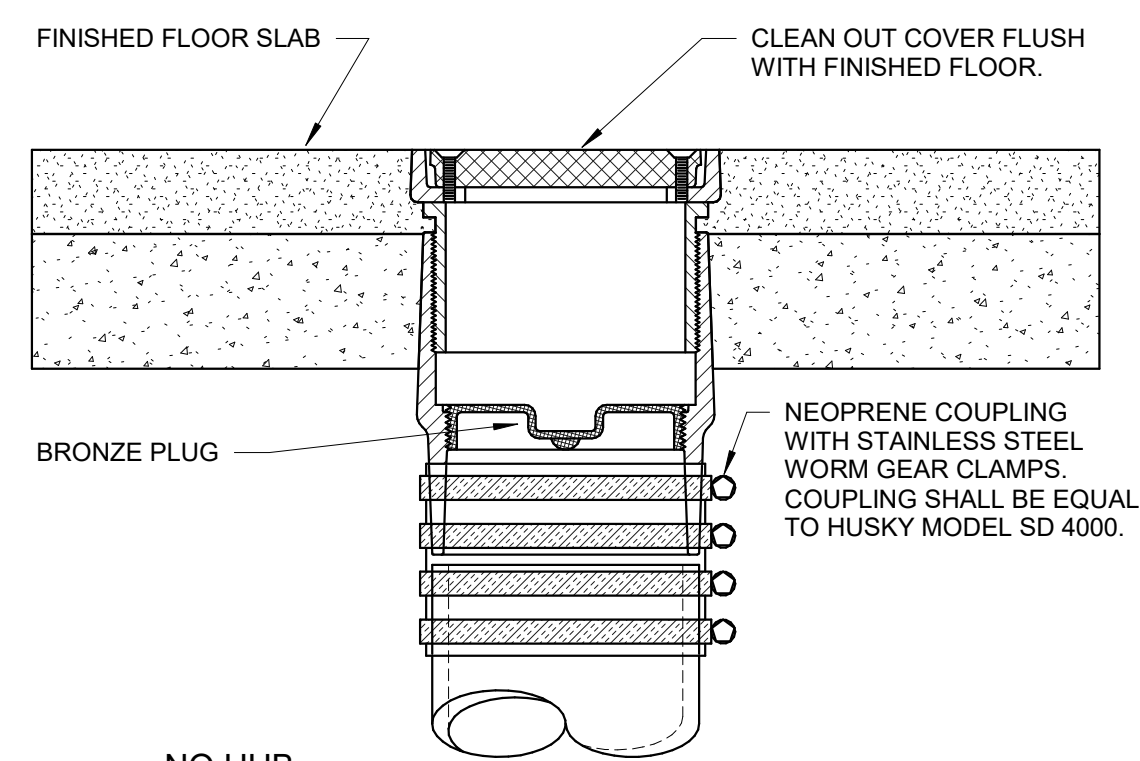
RATED U.L. LISTED WALL / ASSEMBLY
PIPE SLEEVE DETAIL
 NOT TO SCALE



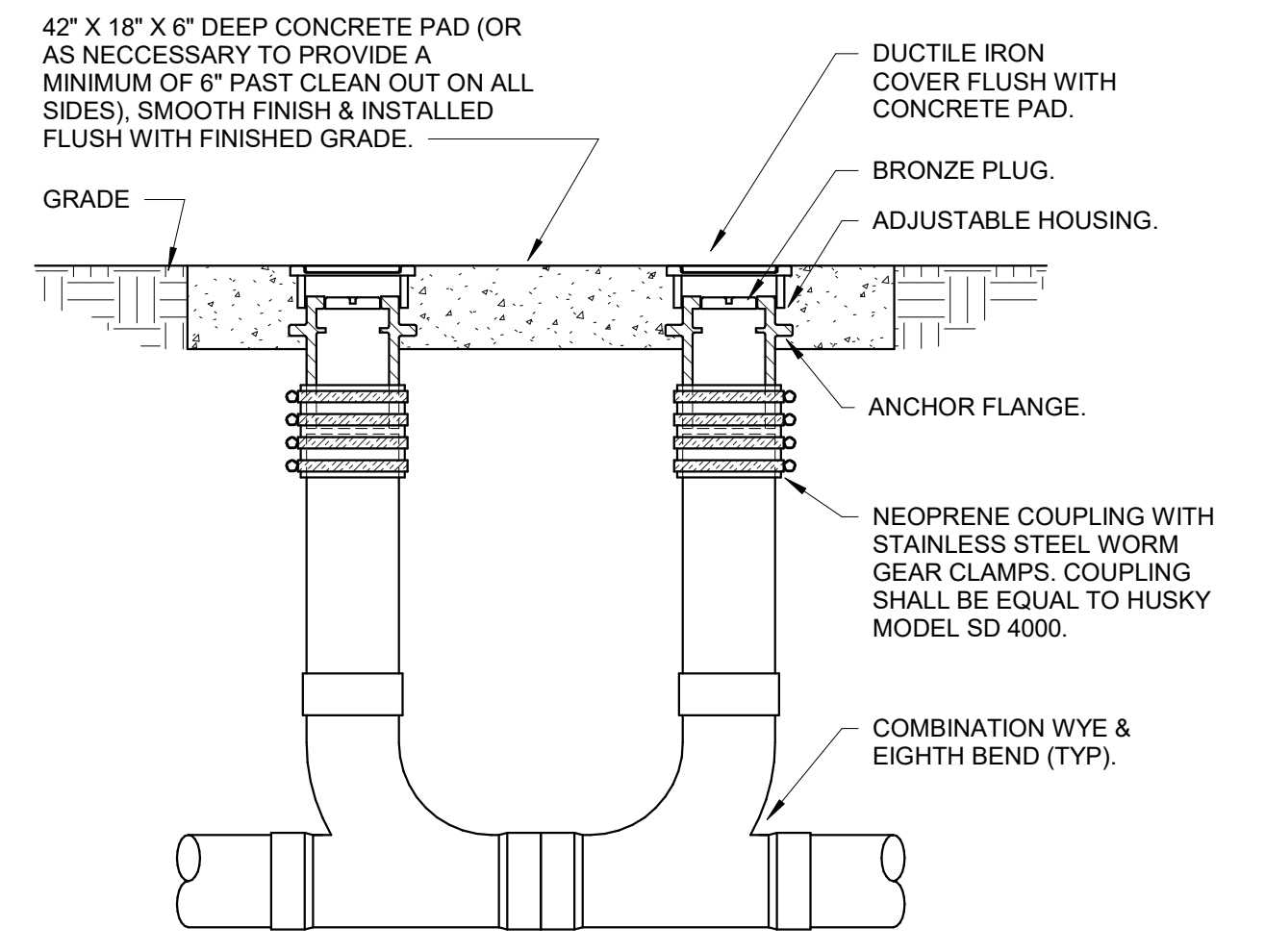
FLOOR ON GRADE
FLOOR DRAIN DETAIL
 NOT TO SCALE



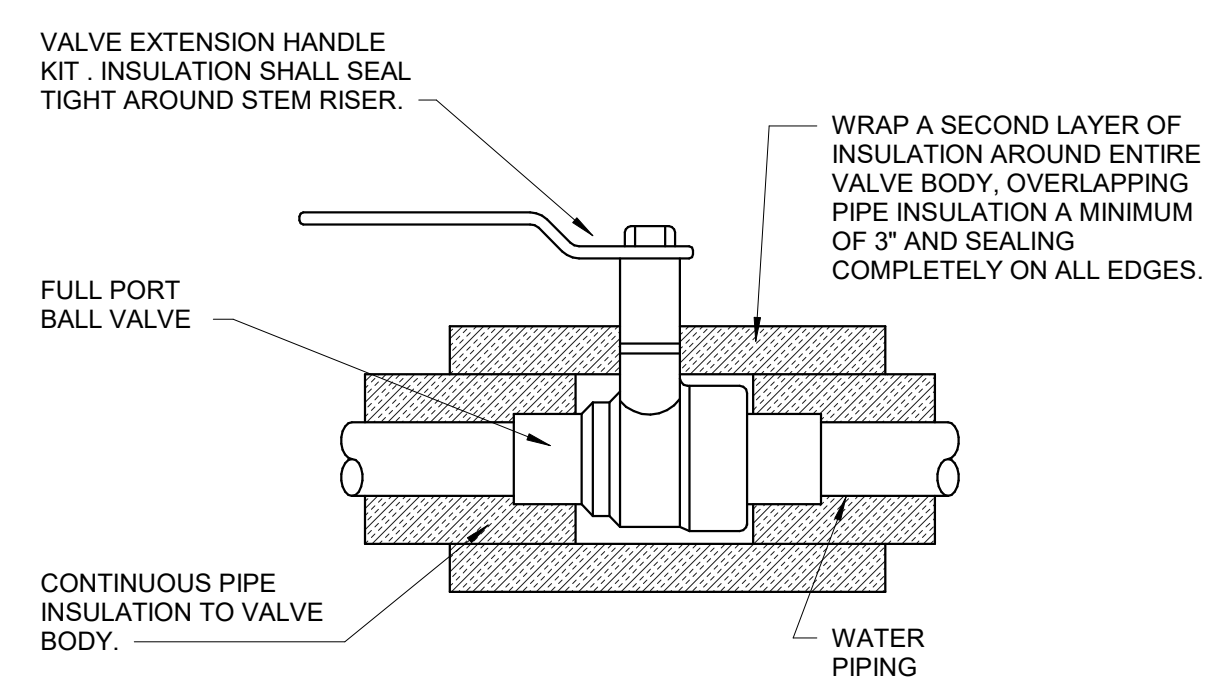
FLOOR ON GRADE - RECESSED STRAINER
FLOOR DRAIN DETAIL
 NOT TO SCALE



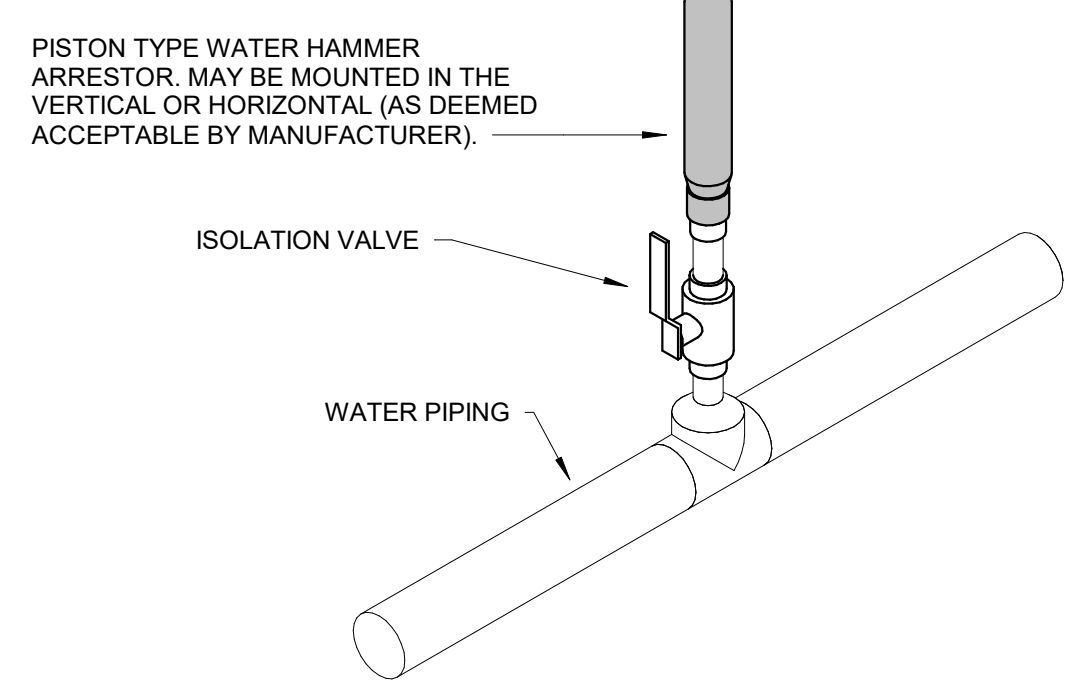
NO HUB
FLOOR CLEAN OUT DETAIL
 NOT TO SCALE



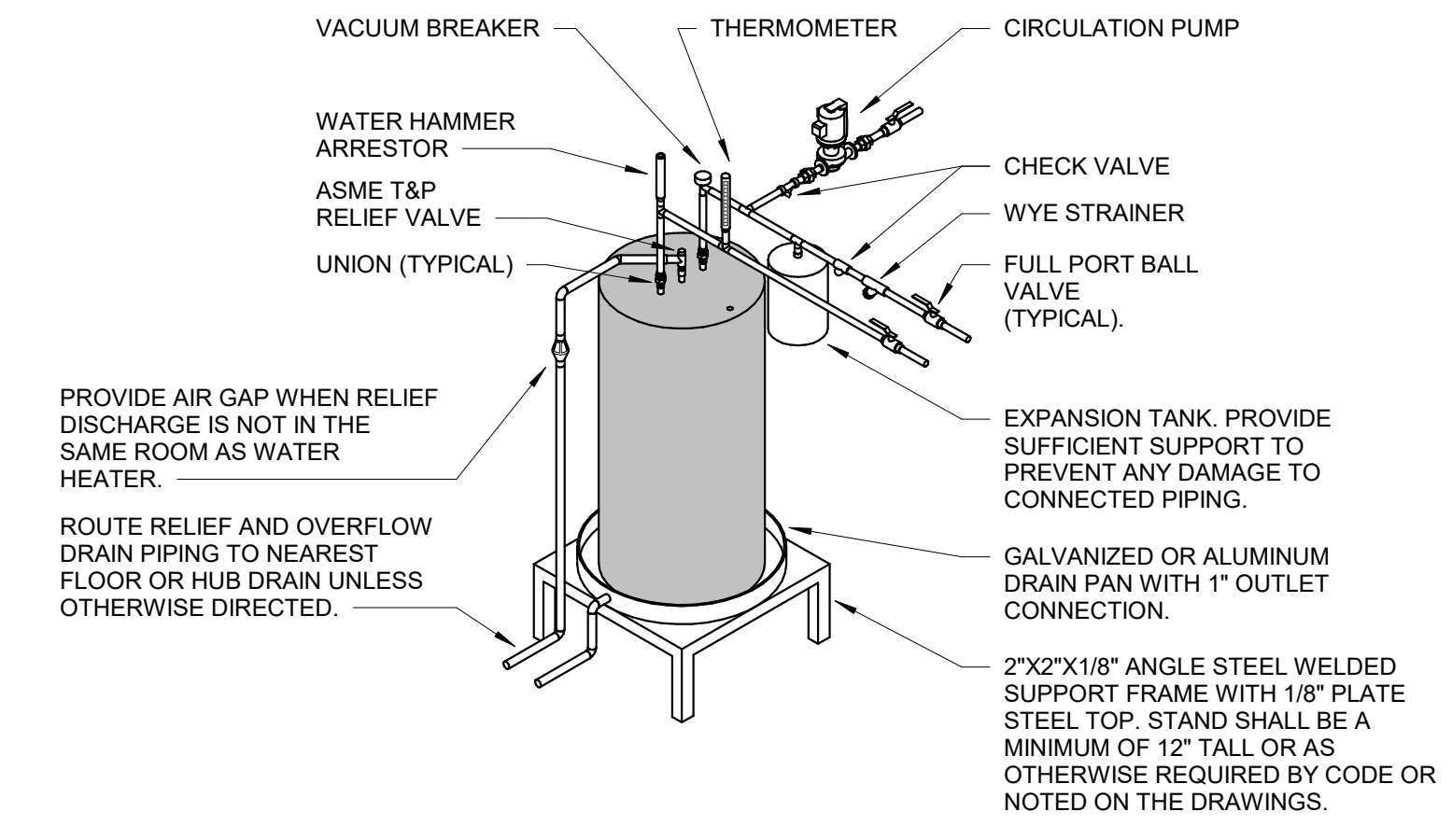
TWO WAY
EXTERIOR CLEANOUT DETAIL
 NOT TO SCALE



SERVICE VALVE DETAIL
 NOT TO SCALE



DOMESTIC WATER
WATER HAMMER ARRESTOR DETAIL
 NOT TO SCALE



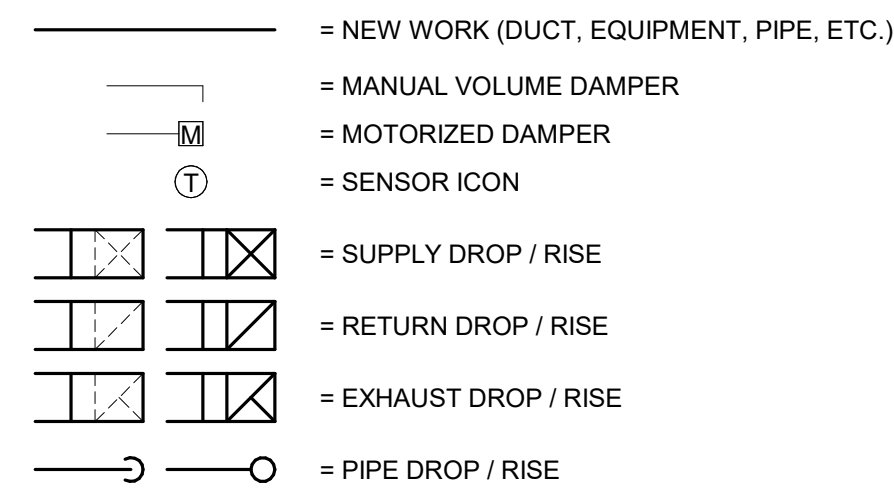
STAND MOUNT
WATER HEATER DETAIL
 NOT TO SCALE

OFFICE AND SHOP BUILDING FOR
 RL CONSULTING, INC
 TUSCUMBIA, ALABAMA

| | | | |
|---------|------|----------|----------|
| JOB NO. | 1860 | DATE | 10/14/19 |
| DRAWN | JDA | REVISION | |
| CHECKED | JNE | REVISION | |

DRAWING TITLE
PLUMBING DETAILS
 DRAWING NUMBER
P401

MECHANICAL SYMBOL LEGEND



MECHANICAL NOTATION LEGEND

DUCT SYSTEMS

EA = EXHAUST AIR
 OA = OUTSIDE AIR
 SA = SUPPLY AIR
 RA = RETURN AIR

PIPING SYSTEMS

CD = CONDENSATE DRAIN (PIPING)
 G = GAS PIPING
 SV = SERVICE VALVE
 ST = STEAM PIPING

DUCT DAMPERS & ACTUATORS

AVD = ADJUSTABLE VOLUME DAMPER
 AVE = ADJUSTABLE VOLUME EXTRACTOR
 FD = FIRE DAMPER WITH ACCESS DOOR
 FD/SD = COMBINATION FIRE/SMOKE DAMPER WITH ACCESS DOOR
 M = MOTORIZED DAMPER
 DS = DUCT SMOKE DAMPER
 VD = VOLUME DAMPER

SENSORS (INSIDE SENSOR ICON)

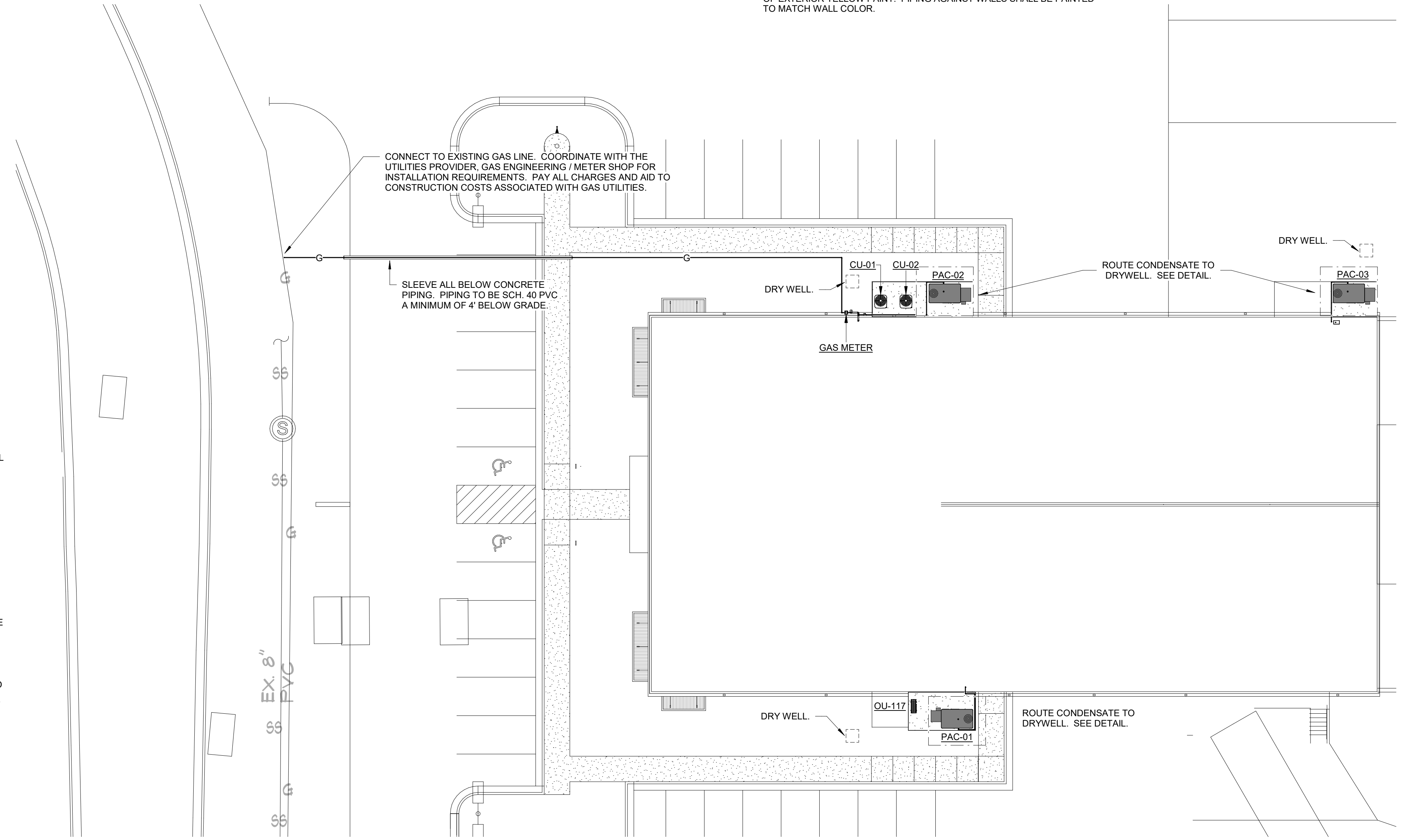
C = CARBON DIOXIDE SENSOR
 CO = CARBON MONOXIDE SENSOR
 H = HUMIDITY SENSOR
 NO = NITROGEN DIOXIDE SENSOR
 O = OCCUPANCY SENSOR
 SD = SMOKE DETECTOR
 T = THERMOSTAT
 TH = THERMOSTAT / HUMIDITY SENSOR

GENERAL MECHANICAL NOTES

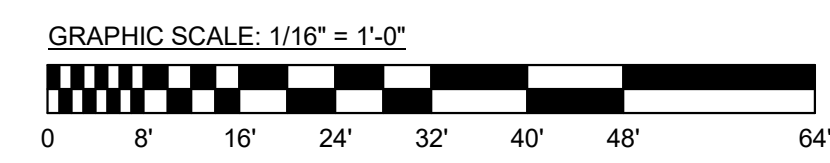
- THIS CONTRACTOR IS RESPONSIBLE FOR REVIEWING ALL DRAWINGS AND SPECIFICATIONS OF ALL DISCIPLINES FOR ANY AND ALL WORK THAT WILL IMPACT THIS CONTRACTOR AND WILL BE THE RESPONSIBILITY OF THIS CONTRACTOR TO PROVIDE SAID WORK.
- CERTAIN AREAS WILL REQUIRE EXTENSIVE COORDINATION BETWEEN ALL TRADES. CONTRACTOR(S) SHALL COORDINATE PRIOR/DURING CONSTRUCTION TO ELIMINATE ANY CONFLICTS.
- THE LOCATION OF ALL CEILING MOUNTED AIR DISTRIBUTION DEVICES SHALL BE COORDINATED WITH THE ARCHITECTURAL REFLECTED CEILING PLAN AND SHALL AVOID CONFLICT WITH ALL CEILING DEVICES, MOUNTED LIGHTS, PROJECTORS, ETC.
- ALL DUCT SIZES INDICATED ON THE DRAWINGS ARE FOR THE CLEAR INSIDE DIMENSION. CONTRACTOR SHALL INCREASE DUCT SIZE IF INTERIOR DUCT INSULATION IS CALL FOR ON THE DRAWINGS. THE SAME APPLIES FOR DOUBLE WALL SPIRAL DUCT.
- THE BOTTOM OF ALL DUCTWORK AND PIPING TO BE COORDINATED WITH ROOM FINISH SCHEDULE FOR CEILING HEIGHTS AND SHALL BE A MINIMUM OF 6" ABOVE THE CEILING GRID. ALL SERVICEABLE ITEMS SUCH AS EQUIPMENT, ACTUATORS, DAMPERS, VALVES, CONTROL DEVICES, ETC. SHALL BE LOCATED NO MORE THAN 24" ABOVE THE CEILING GRID.
- ALL DUCTS AND PIPING INDICATED ON THE DRAWINGS ARE DIAGRAMMATIC ONLY. THEY MAY BE REQUIRED TO BE SHIFTED, OFFSET OR INSTALLED HIGH IN BETWEEN THE JOISTS AS DETERMINED BY FIELD CONDITIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE ALL MATERIALS AND LABOR NECESSARY TO INSTALL THE PIPING AND DUCTS TO MEET THE INTENT OF THE DRAWINGS.
- ROUND BRANCH RUN-OUTS TO AIR DISTRIBUTION DEVICES ARE TO BE ENTIRELY SHEET METAL WITH THE EXCEPTION THAT UP TO FIVE FEET OF FLEX DUCT MAY BE USED ON EACH BRANCH UNLESS OTHERWISE INDICATED. ALL FLEX DUCT SHALL BE SUPPORTED INDEPENDENT OF THE CEILING, PIPING, CONDUITS, OTHER DUCTS, ETC. AND SHALL BE SUPPORTED IN SUCH A WAY AS TO AVOID KINKING OR OBSTRUCTION OF AIR FLOW.
- THE MECHANICAL CONTRACTOR SHALL INSTALL CONDENSATE TRAPS AND INSTALL THE CONDENSATE DRAIN LINES OVER TO THE NEAREST CONDENSATE RECESSED FLOOR DRAIN. NO PREFORMED TRAPS SHALL BE ALLOWED. PROVIDE REMOVABLE CLEAN OUT TEES AT TOP AND BOTTOM OF TRAP. CONDENSATE DRAINS SHALL BE SUPPORTED AT PROPER INTERVALS PER PVC MANUFACTURERS REQUIREMENTS AND AT ALL ELBOWS TO PREVENT SAGGING. MINIMUM CONDENSATE DRAIN SIZE SHALL BE 3/4".
- THE MECHANICAL CONTRACTOR SHALL INSTALL FIRE DAMPERS, SMOKE DAMPERS OR COMBINATION DAMPERS AT ALL FIRE RATED WALLS AND/OR SMOKE BARRIERS. REFER TO THE EXISTING ARCHITECTURAL LIFE SAFETY PLANS, IN THE OWNER'S POSSESSION, FOR THE WALL / CEILING RATINGS AND LOCATIONS.
- ALL EXPOSED DUCTS SHALL BE PAINT GRIP PAINTED PER THE ARCHITECTS DIRECTION IN THE FIELD. DUCT SHALL HAVE A MINIMUM OF ONE PRIMER COAT AND TWO FINISH COLOR COATS OF PAINT.
- THE SYSTEMS ANALYSIS FORMS SHALL BE FILLED OUT BY THE MECHANICAL CONTRACTOR FOR EVERY PIECE OF APPLICABLE EQUIPMENT. AFTER ALL SYSTEMS ANALYSIS FORMS HAVE BEEN COMPLETED, THE MECHANICAL CONTRACTOR SHALL PROVIDE A QUALIFIED TECHNICIAN AND ALL NECESSARY TOOLS AND EQUIPMENT TO ACCOMPANY THE ENGINEER TO VERIFY PIECES OF EQUIPMENT FOR FORM ACCURACY. IF AN ANALYSIS FORM IS FOUND INACCURATE, THE MECHANICAL CONTRACTOR SHALL CORRECT ALL WORK. AFTER WORK IS CORRECTED, SYSTEMS WILL BE VERIFIED BY THE ENGINEER WITH A TECHNICIAN FROM THE MECHANICAL CONTRACTOR. MECHANICAL CONTRACTOR WILL PROVIDE ALL REQUIRED TOOLS AND DEVICES AND SERVICES UNTIL ALL WORK IS CORRECT PER DRAWINGS AND MANUFACTURER'S REQUIREMENTS.
- CONTRACTOR SHALL NOT FABRICATE OR CONSTRUCT DUCTWORK, PIPING, ETC. FROM THE DRAWINGS PRIOR TO VERIFYING DUCT, PIPING, ETC. CAN BE INSTALLED IN THE FIELD WITH RESPECT TO FIELD CONDITIONS.

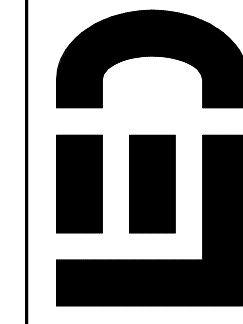
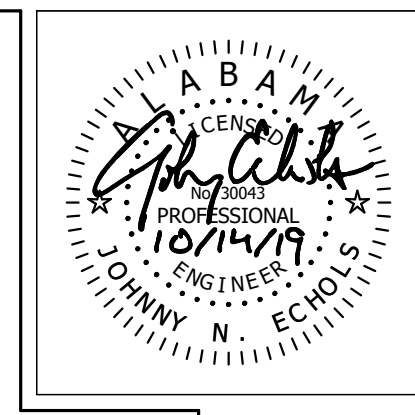
GENERAL GAS NOTES

- GAS METER TO BE INSTALLED FOR 900 CFH CONNECTED LOAD AT LOW DISCHARGE PRESSURE. COORDINATE WITH THE UTILITIES PROVIDER, GAS ENGINEERING / METER SHOP FOR INSTALLATION REQUIREMENTS. PAY ALL CHARGES AND AID TO CONSTRUCTION COSTS ASSOCIATED WITH GAS UTILITIES.
- CONTRACTOR SHALL BE REQUIRED TO OFFSET THE GAS PIPE AS NECESSARY BASED ON SITE CONDITIONS. OFFSETS SHALL BE SUPPORTED. WHERE OFFSETS ARE GREATER THAN 48", CONTRACTOR SHALL INSTALL WALL SUPPORTS. PIPE SUPPORTS SHALL NOT BE RIGIDLY CONNECTED TO THE PIPE AND PIPE SHALL BE A MINIMUM OF 4" ABOVE ROOF LINE, FINISHED FLOOR OR FINISHED GRADE.
- ALL EQUIPMENT SHALL BE CONNECTED WITH A DIRT LEG EXTENSION.
- ALL GAS PIPING SHALL BE SCHEDULE 40 BLACK STEEL PIPE AS SPECIFIED. EXTERIOR GAS PIPING SHALL BE PAINTED WITH A MINIMUM OF TWO COATS OF EXTERIOR YELLOW PAINT. PIPING AGAINST WALLS SHALL BE PAINTED TO MATCH WALL COLOR.



MECHANICAL SITE PLAN
 1/16" = 1'-0"





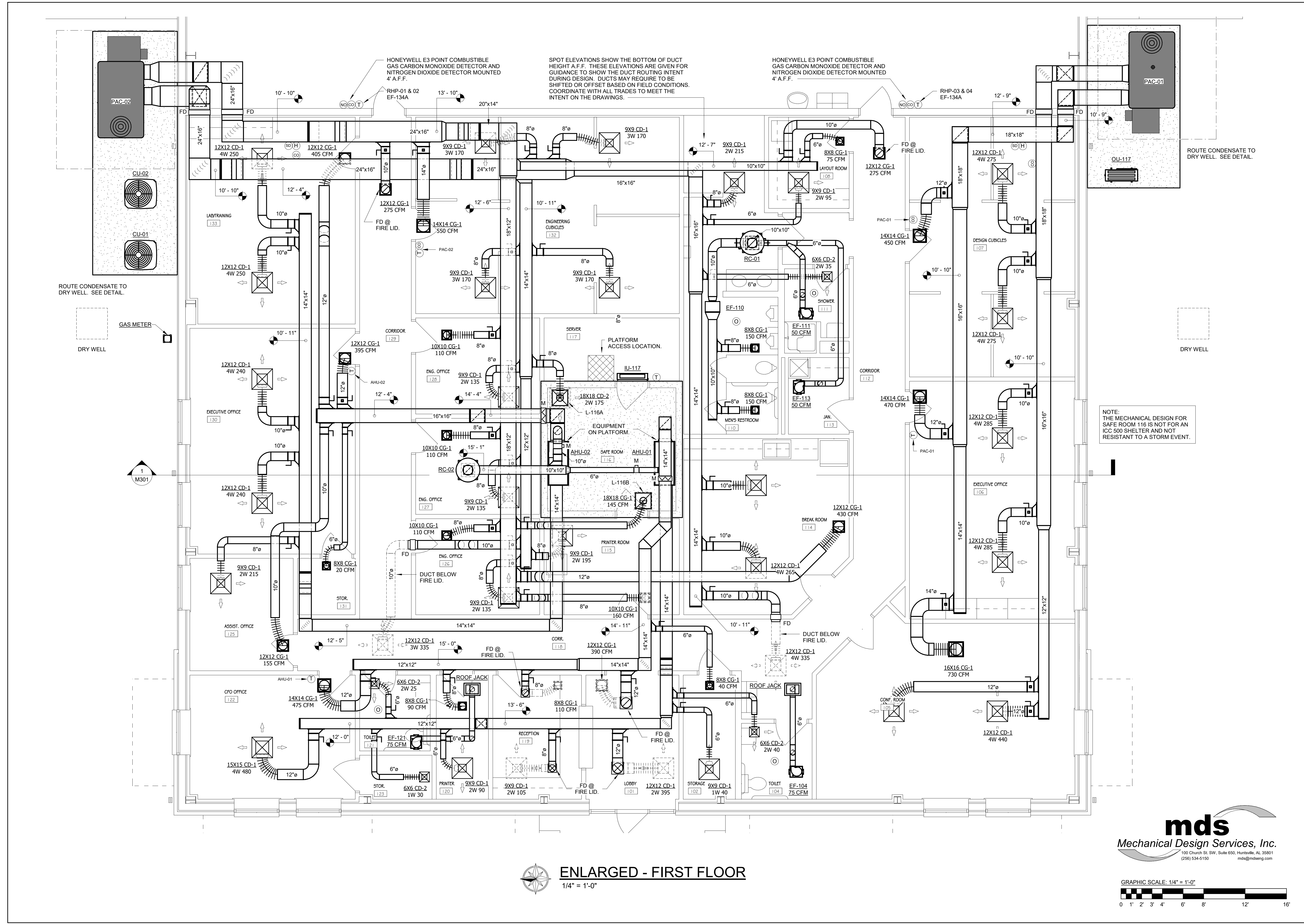
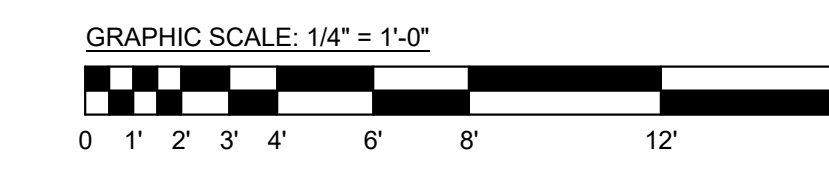
LAMBERT-EZELL-DURHAM
ARCHITECTURE, LLC
P.O. BOX 934 401 EAST COLLEGE ST.
TUSCUMBIA, ALABAMA 35651
TELEPHONE (256) 767-7100
www.lambert-ezell-durham.com

OFFICE AND SHOP BUILDING FOR
RL CONSULTING, INC
TUSCUMBIA, ALABAMA

| | | | |
|---------|------|----------|----------|
| JOB NO. | 1860 | DATE | 10/14/19 |
| DRAWN | JJP | REVISION | |
| CHECKED | JNE | REVISION | |

DRAWING TITLE
MECHANICAL FLOOR
PLAN
DRAWING NUMBER
M102

m ds
Mechanical Design Services, Inc.
100 Church St. SW, Suite 650, Huntsville, AL 35801
(256) 534-6150
mds@mdswg.com



ENLARGED - FIRST FLOOR
1/4" = 1'-0"

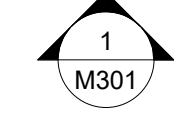
NOTE:
THE MECHANICAL DESIGN FOR
SAFE ROOM 116 IS NOT FOR AN
ICC 500 SHELTER AND NOT
RESISTANT TO A STORM EVENT.

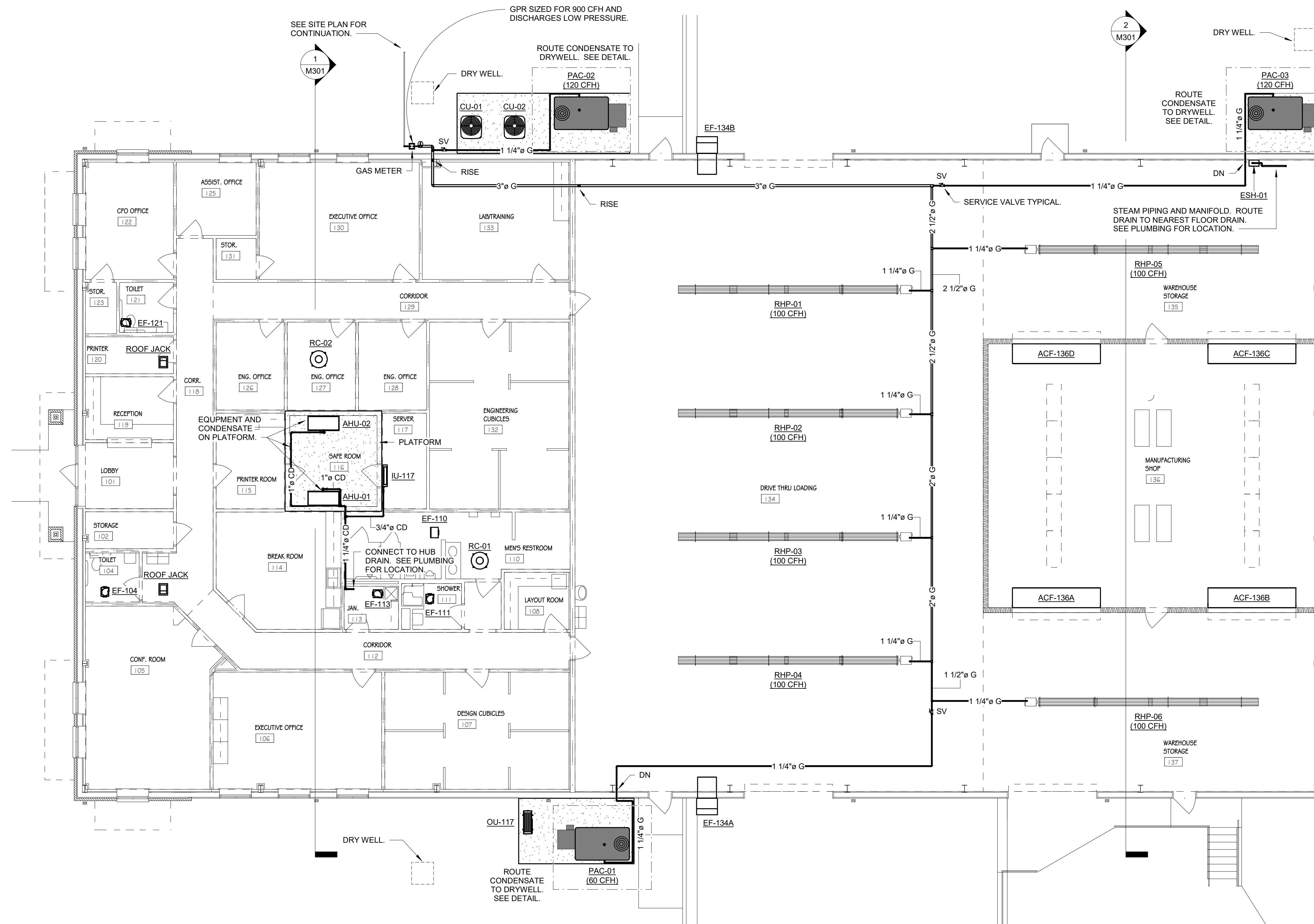
SPOT ELEVATIONS SHOW THE BOTTOM OF DUCT
HEIGHT A.F.F. THESE ELEVATIONS ARE GIVEN FOR
GUIDANCE TO SHOW THE DUCT ROUTING INTENT
DURING DESIGN. DUCTS MAY REQUIRE TO BE
SHIFTED OR OFFSET BASED ON FIELD CONDITIONS.
COORDINATE WITH ALL TRADES TO MEET THE
INTENT ON THE DRAWINGS.

HONEYWELL E3 POINT COMBUSTIBLE
GAS CARBON MONOXIDE DETECTOR AND
NITROGEN DIOXIDE DETECTOR MOUNTED
4' A.F.F.

ROUTE CONDENSATE TO
DRY WELL. SEE DETAIL.

ROUTE CONDENSATE TO
DRY WELL. SEE DETAIL.

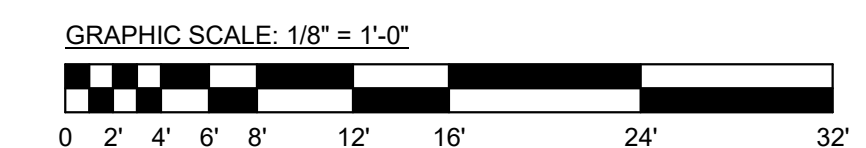




GENERAL GAS NOTES

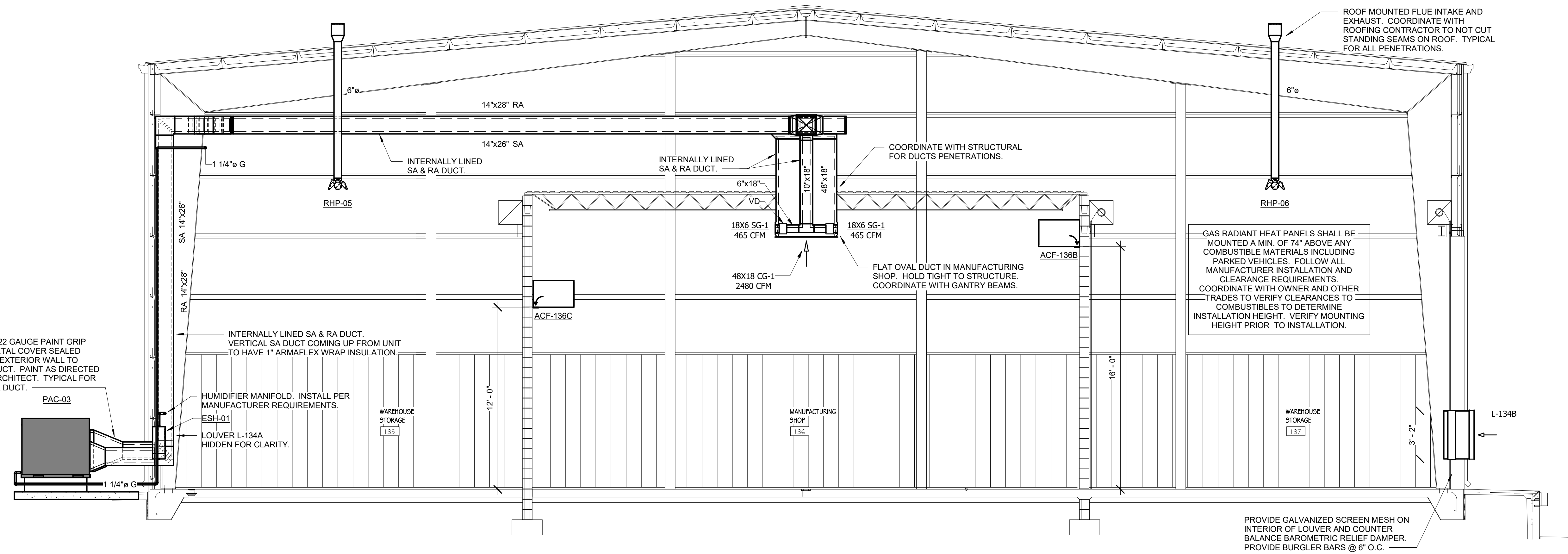
1. GAS METER TO BE INSTALLED FOR 900 CFH CONNECTED LOAD AT LOW DISCHARGE PRESSURE. COORDINATE WITH THE UTILITIES PROVIDER, GAS ENGINEERING / METER SHOP FOR INSTALLATION REQUIREMENTS. PAY ALL CHARGES AND AID TO CONSTRUCTION COSTS ASSOCIATED WITH GAS UTILITIES.
2. CONTRACTOR SHALL BE REQUIRED TO OFFSET THE GAS PIPE AS NECESSARY BASED ON SITE CONDITIONS. OFFSETS SHALL BE SUPPORTED, WHERE OFFSETS ARE GREATER THAN 48", CONTRACTOR SHALL INSTALL WALL SUPPORTS. PIPE SUPPORTS SHALL NOT BE RIGIDLY CONNECTED TO THE PIPE AND PIPE SHALL BE A MINIMUM OF 4" ABOVE ROOF LINE, FINISHED FLOOR OR FINISHED GRADE.
3. ALL EQUIPMENT SHALL BE CONNECTED WITH A DIRT LEG EXTENSION.
4. ALL GAS PIPING SHALL BE SCHEDULE 40 BLACK STEEL PIPE AS SPECIFIED. EXTERIOR GAS PIPING SHALL BE PAINTED WITH A MINIMUM OF TWO COATS OF EXTERIOR YELLOW PAINT. PIPING AGAINST WALLS SHALL BE PAINTED TO MATCH WALL COLOR.

PIPING SYSTEMS FLOOR PLAN
 1/8" = 1'-0"

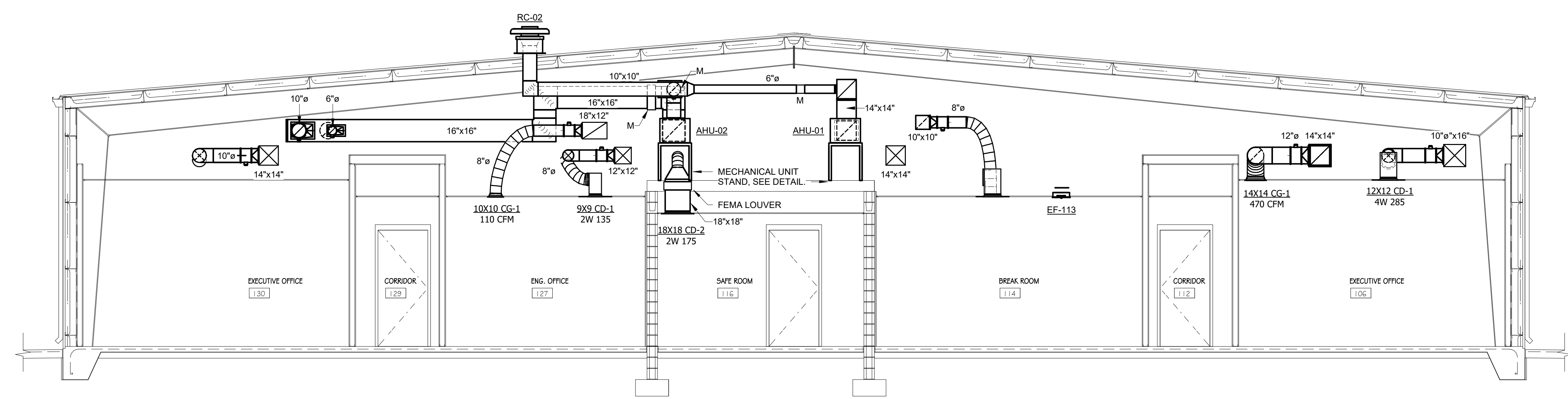


| | | | |
|---------|------|----------|----------|
| JOB NO. | 1860 | DATE | 10/14/19 |
| DRAWN | JJP | REVISION | |
| CHECKED | JNE | REVISION | |

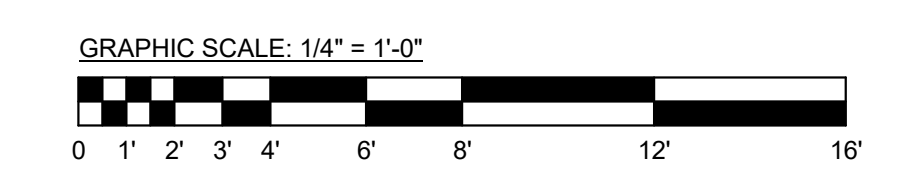
DRAWING TITLE
 MECHANICAL FLOOR PLAN
 DRAWING NUMBER
M201

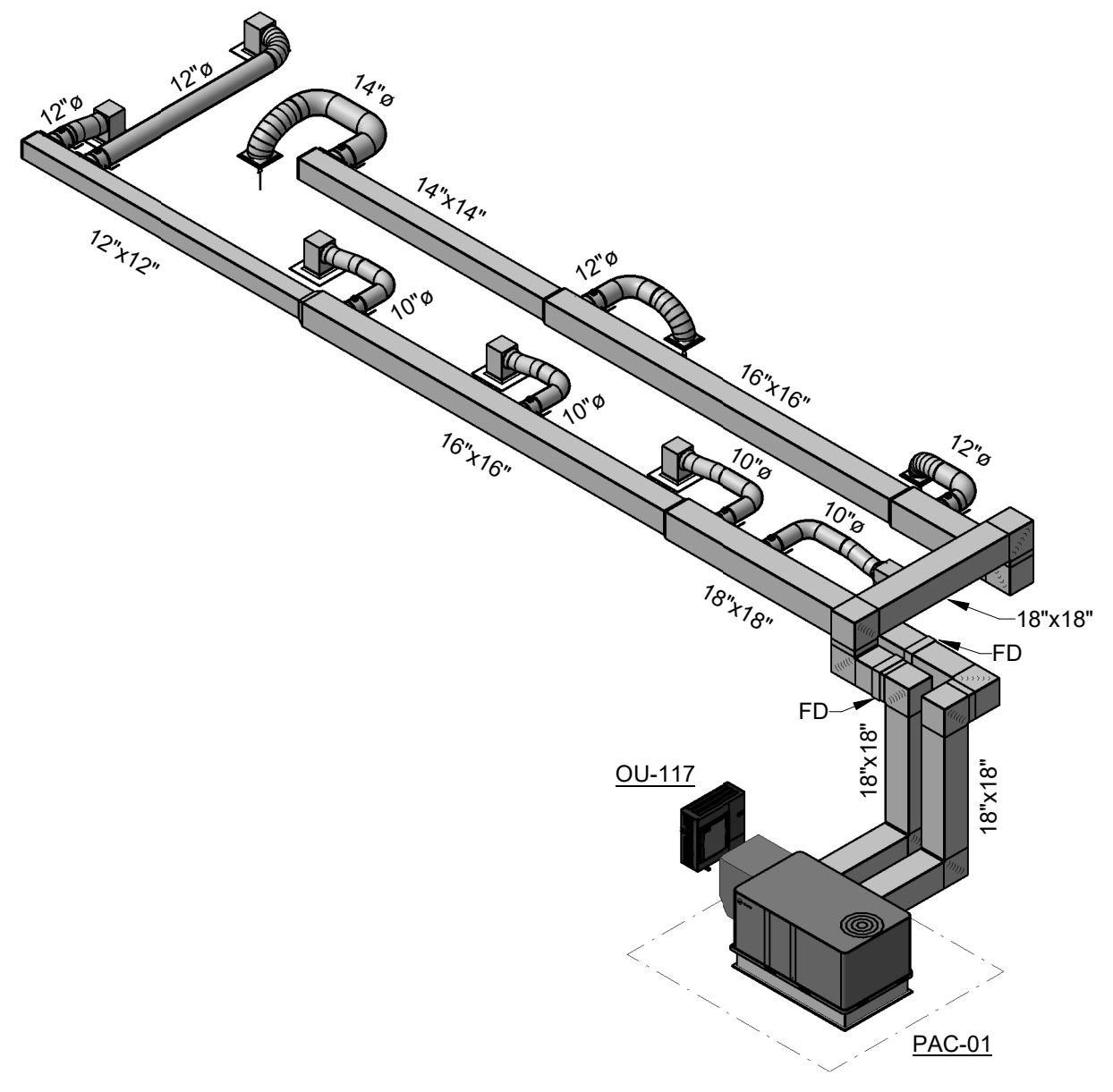


2 SECTION - SHOP AREA
 1/4" = 1'-0"

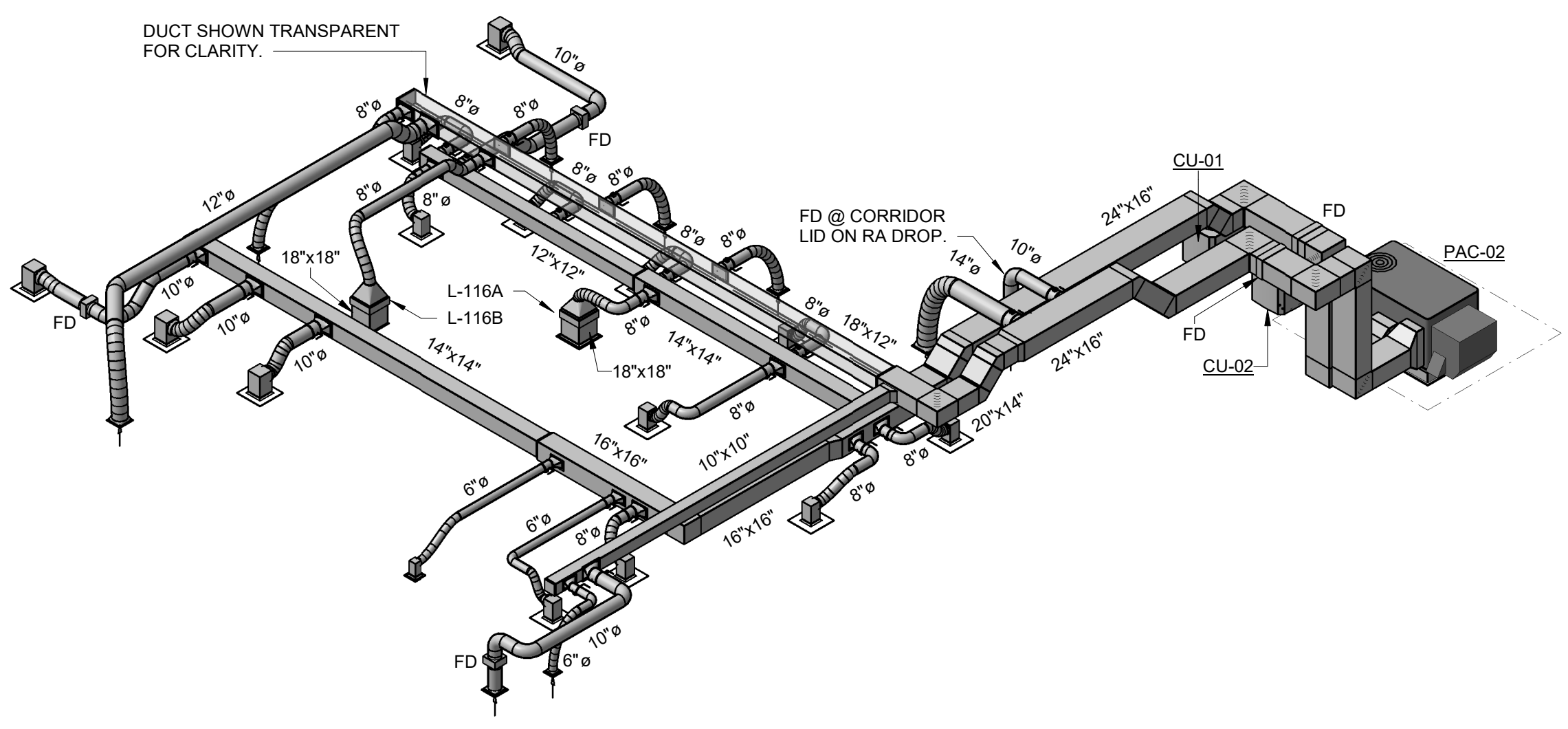


1 SECTION - OFFICE AREA
 1/4" = 1'-0"

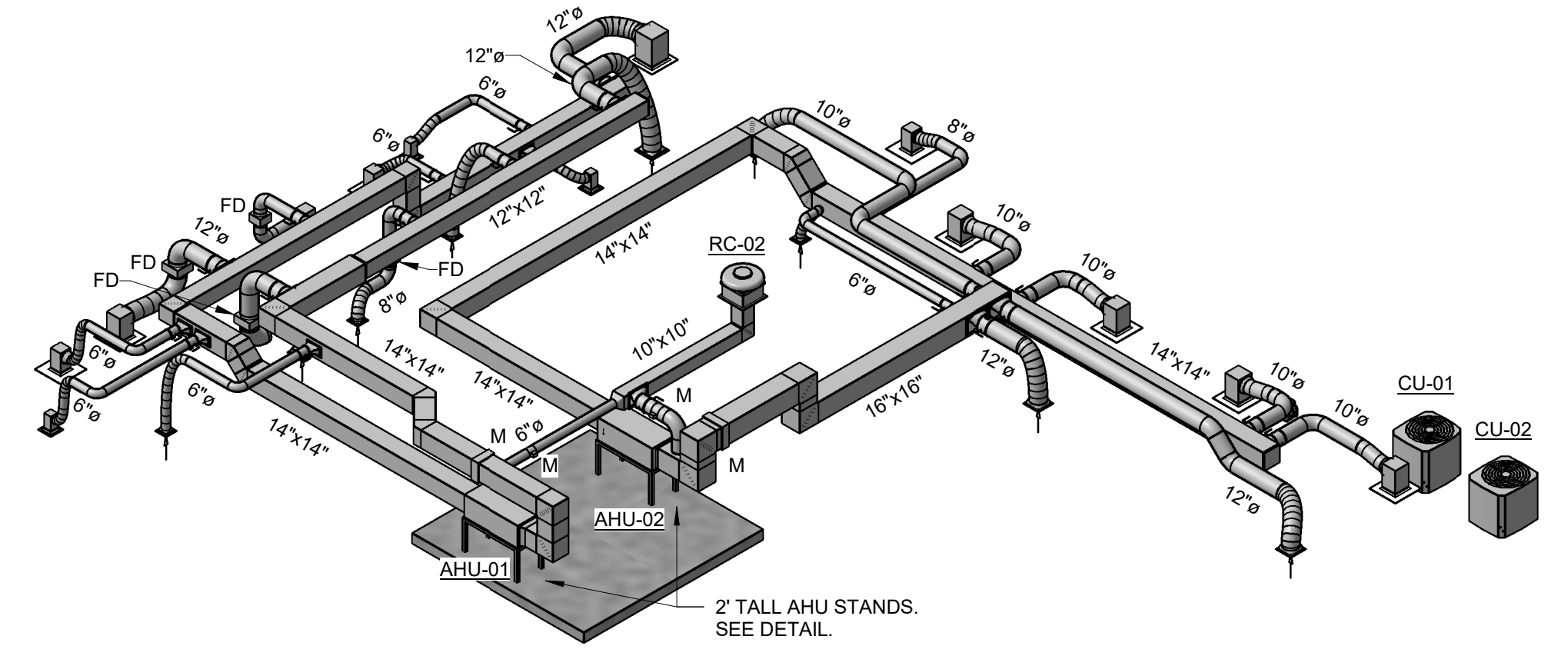




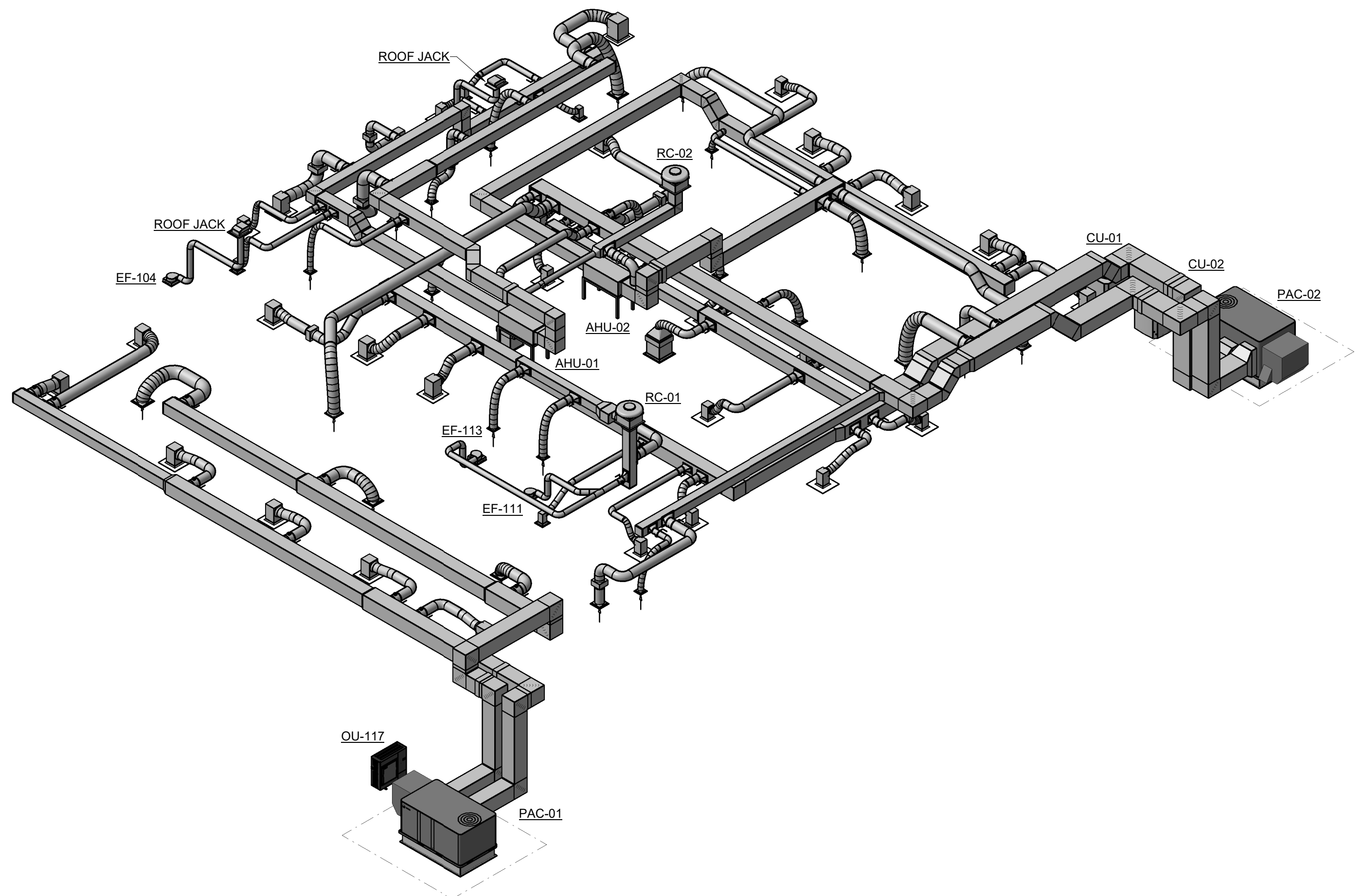
ISOMETRIC PAC-01
 Not To Scale



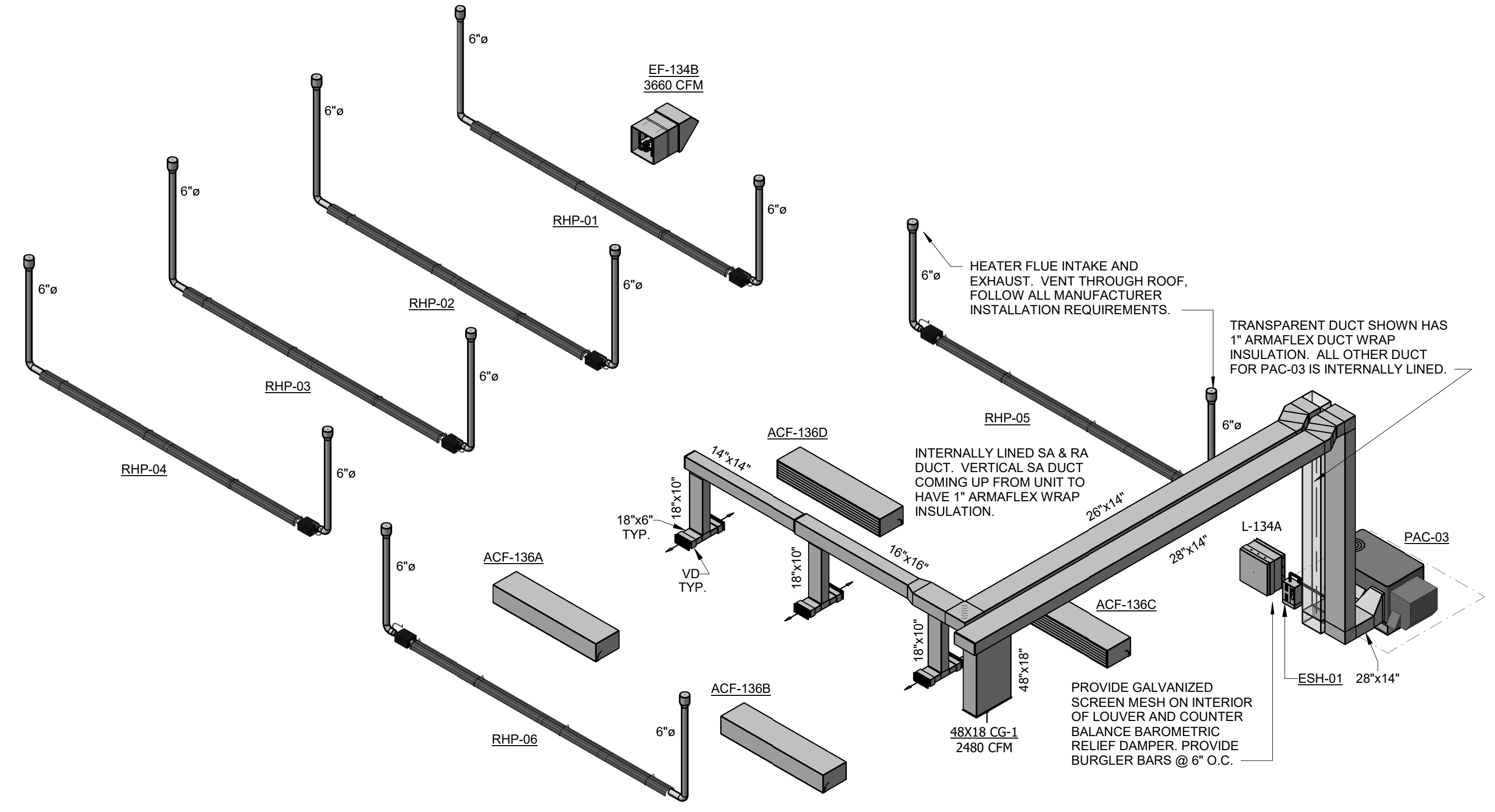
ISOMETRIC PAC-02
 Not To Scale



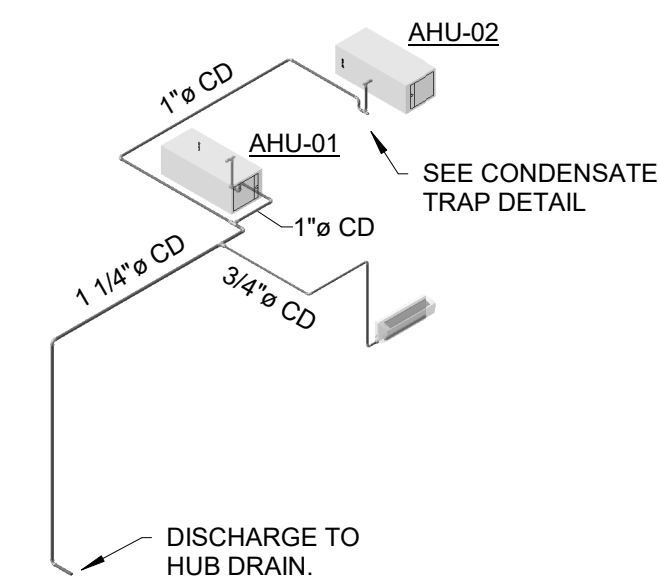
ISOMETRIC AHU-01&02
 Not To Scale



ISOMETRIC COORDINATION
 Not To Scale

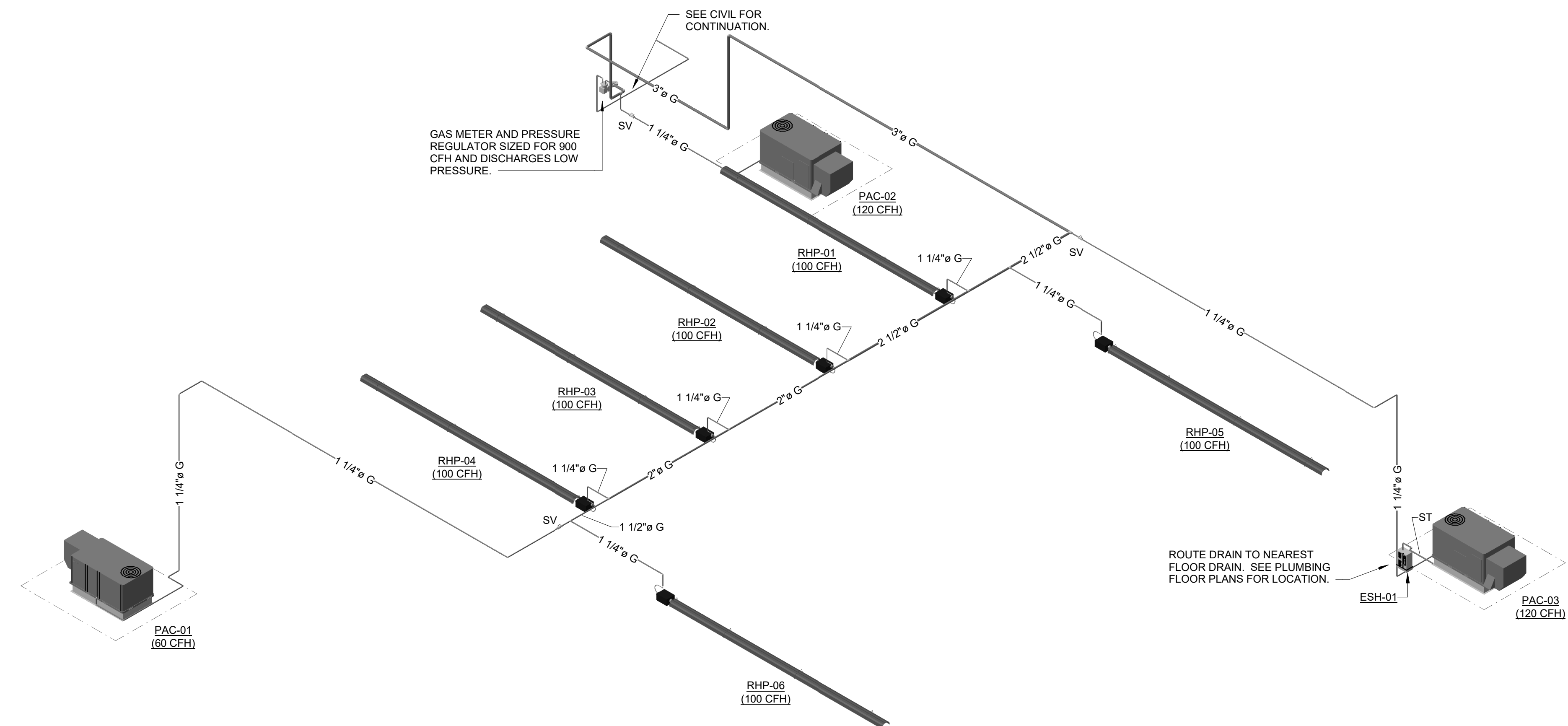


ISOMETRIC WAREHOUSE
 Not To Scale



ISOMETRIC CONDENSATE PIPING SYSTEMS

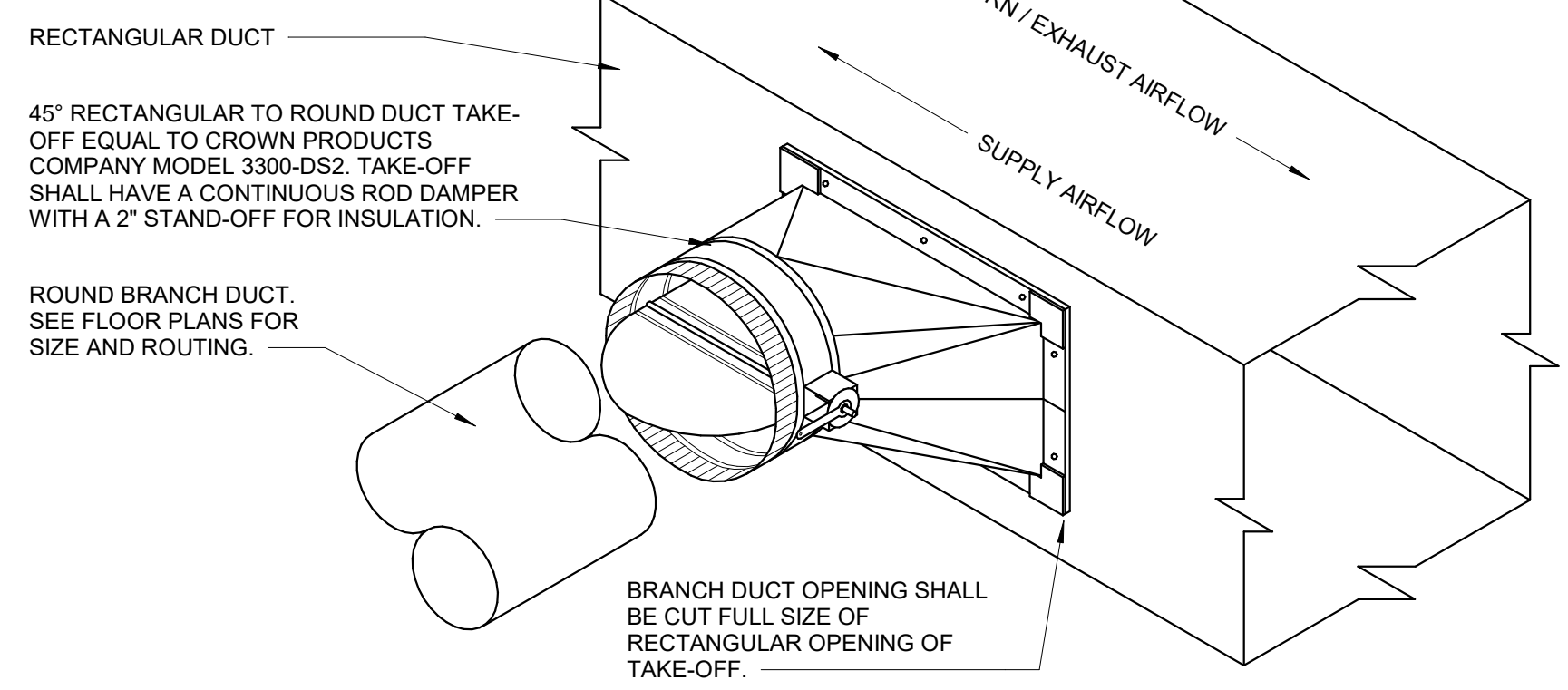
Not To Scale



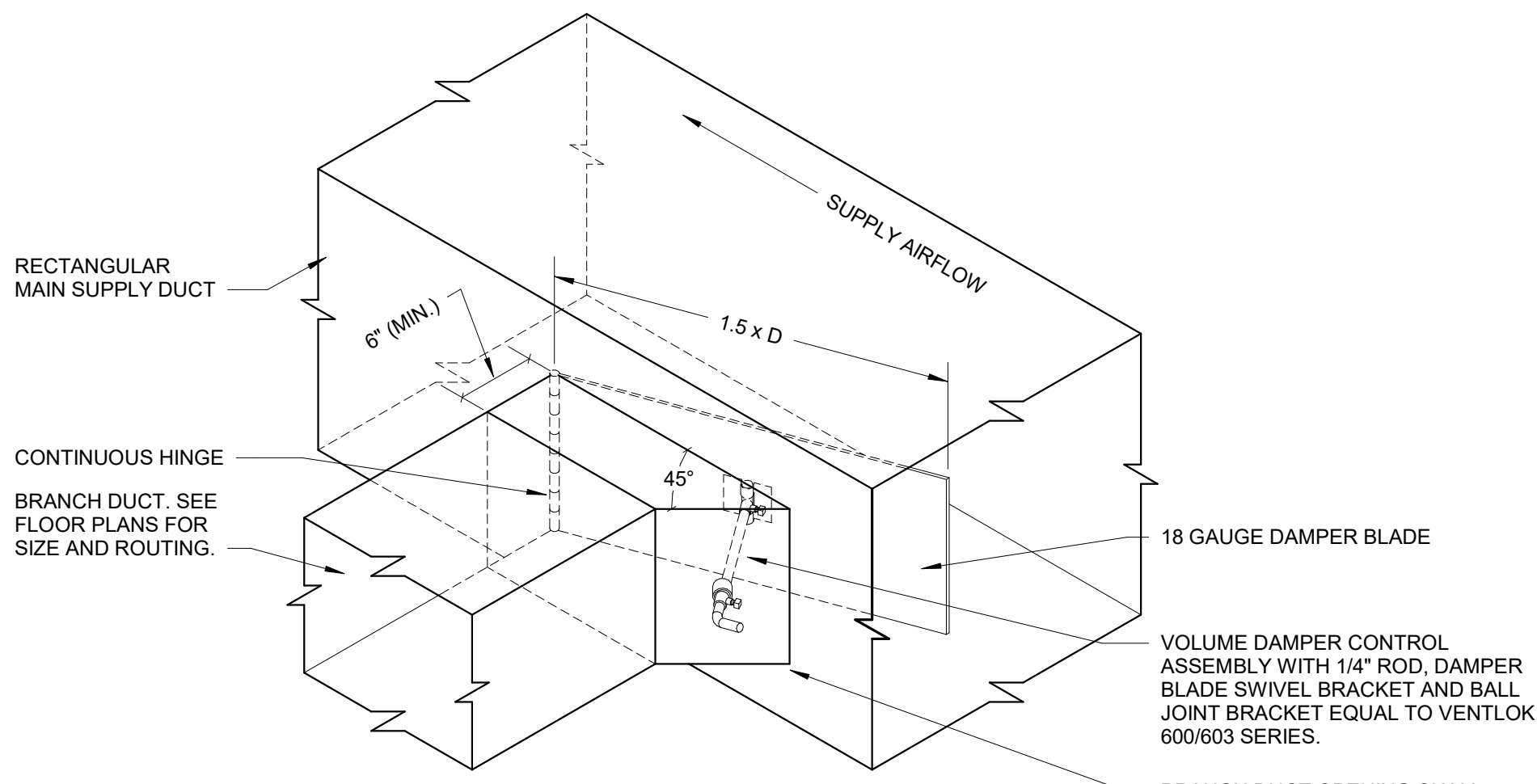
ISOMETRIC GAS PIPING SYSTEMS

Not To Scale

NOTE:
 A MINIMUM 12" OF SHEET METAL DUCT SHALL BE INSTALLED ON TAKE-OFF WHERE SHORT RUNS (5' OR LESS) OF FLEX DUCT IS USED TO MAKE GRILLE / DIFFUSER CONNECTION.

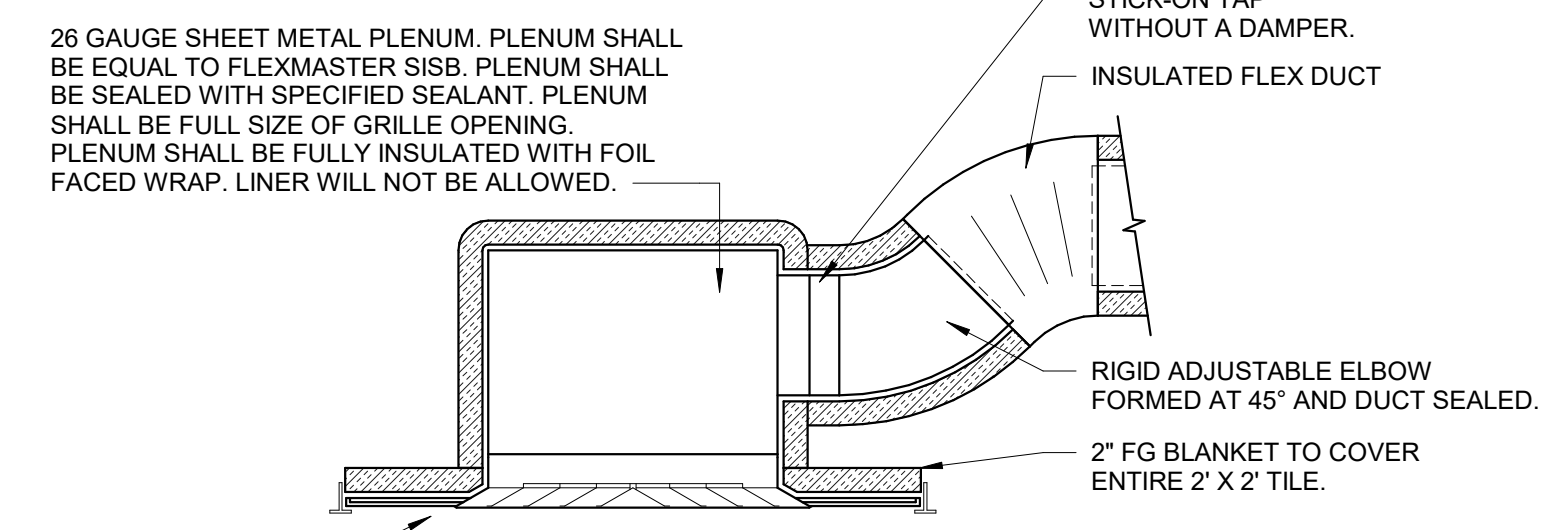


RECTANGULAR TO ROUND 45°
DUCT TAKE-OFF DETAIL
 NOT TO SCALE



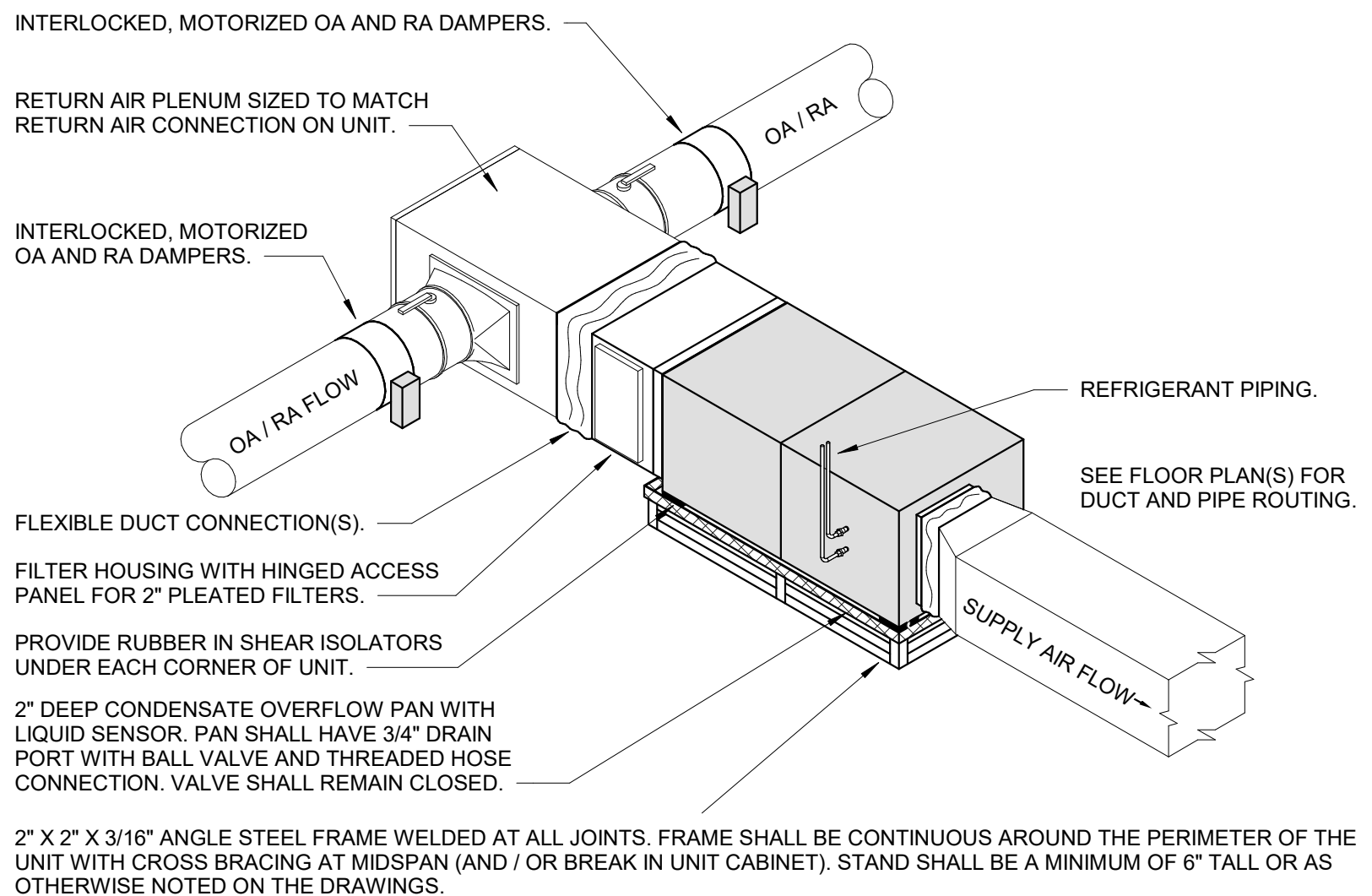
ADJUSTABLE
VOLUME DAMPER DETAIL
 NOT TO SCALE

NOTE:
 FOIL TAPE ALL INSULATION SEAMS TO PROVIDE A VAPOR BARRIER. AIR TERMINAL SHALL BE FASTENED TO STRUCTURE ABOVE WITH METAL CABLING AND FASTENERS VIA EARTHQUAKE TABS ON AIR TERMINAL.



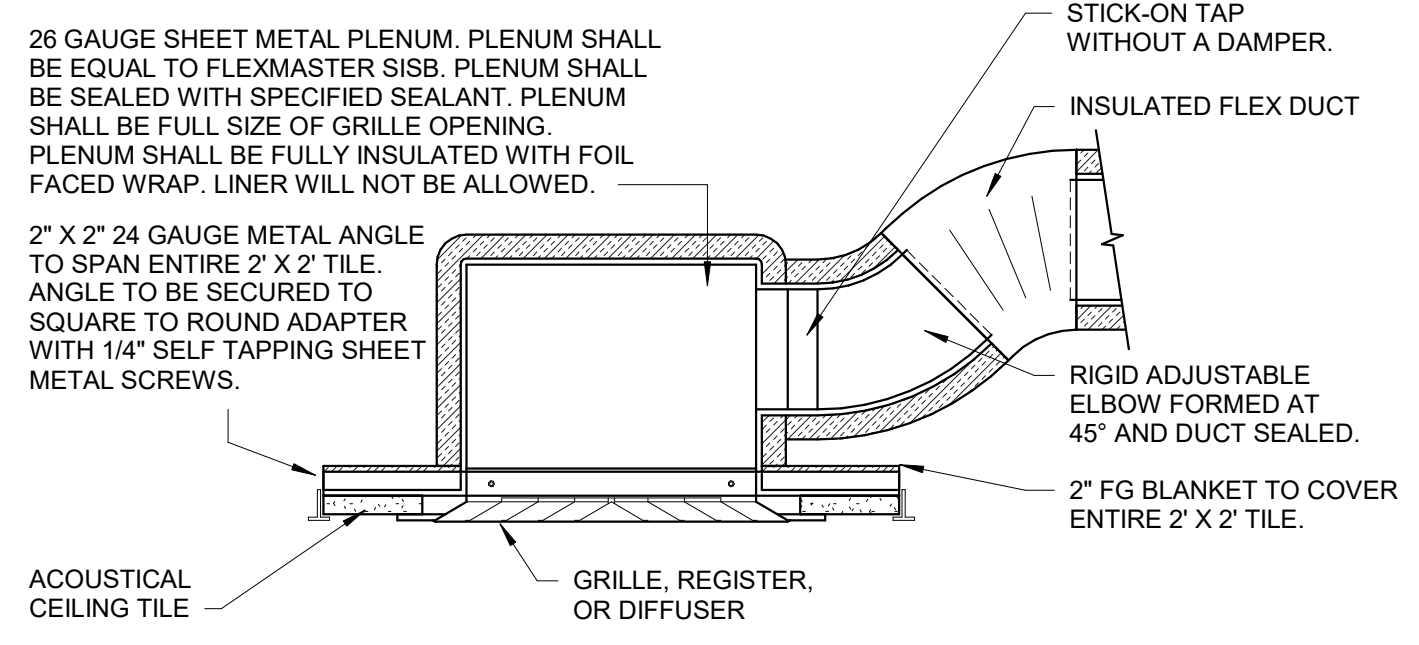
ACOUSTICAL CEILING LAY-IN
GRILLE / REGISTER / DIFFUSER DETAIL
 NOT TO SCALE

NOTE:
 ROUTE CONDENSATE DRAIN PIPING TO THE NEAREST RECESSED STRAINER FLOOR OR HUB DRAIN (OR AS OTHERWISE SHOWN ON DRAWINGS) IN A MANNER TO NOT CAUSE A TRIP HAZARD. PROVIDE CONDENSATE TRAP.



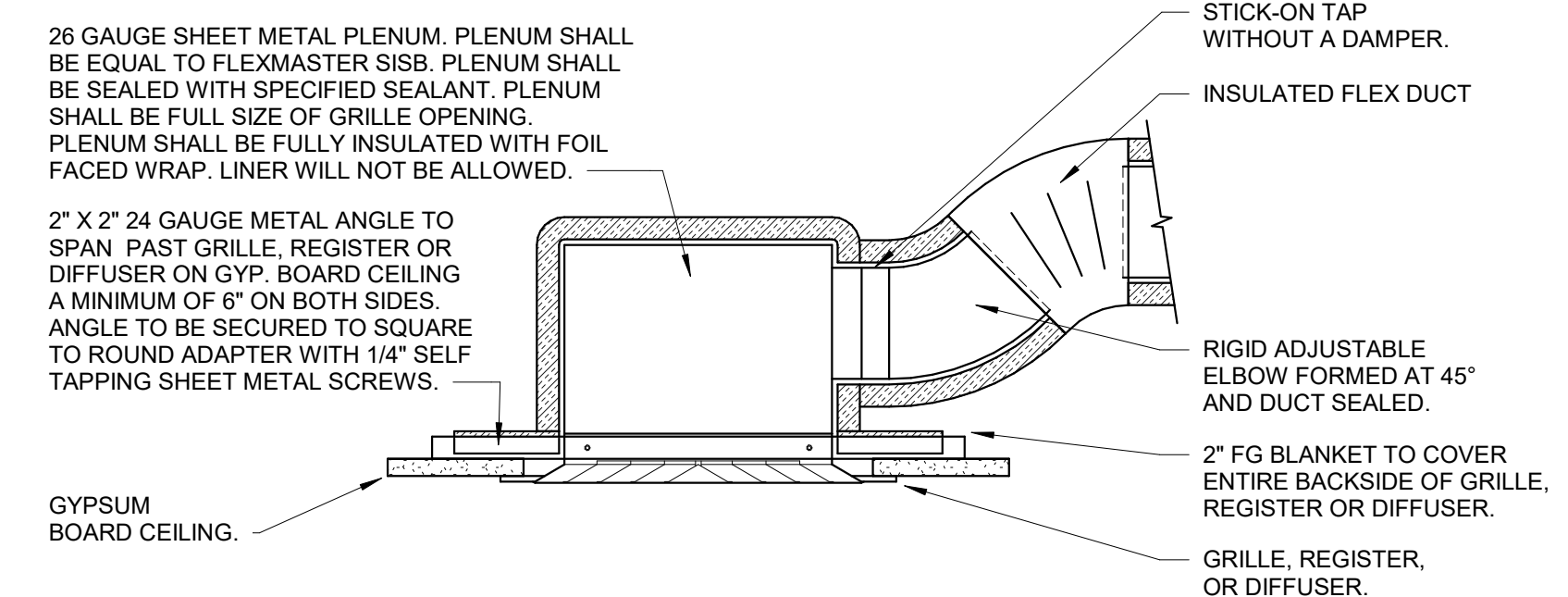
HORIZONTAL - DX SPLIT SYSTEM
AHU INSTALLATION DETAIL
 NOT TO SCALE

NOTE:
 FOIL TAPE ALL INSULATION SEAMS TO PROVIDE A VAPOR BARRIER. AIR TERMINAL SHALL BE FASTENED TO STRUCTURE ABOVE WITH METAL CABLING AND FASTENERS VIA EARTHQUAKE TABS ON AIR TERMINAL.

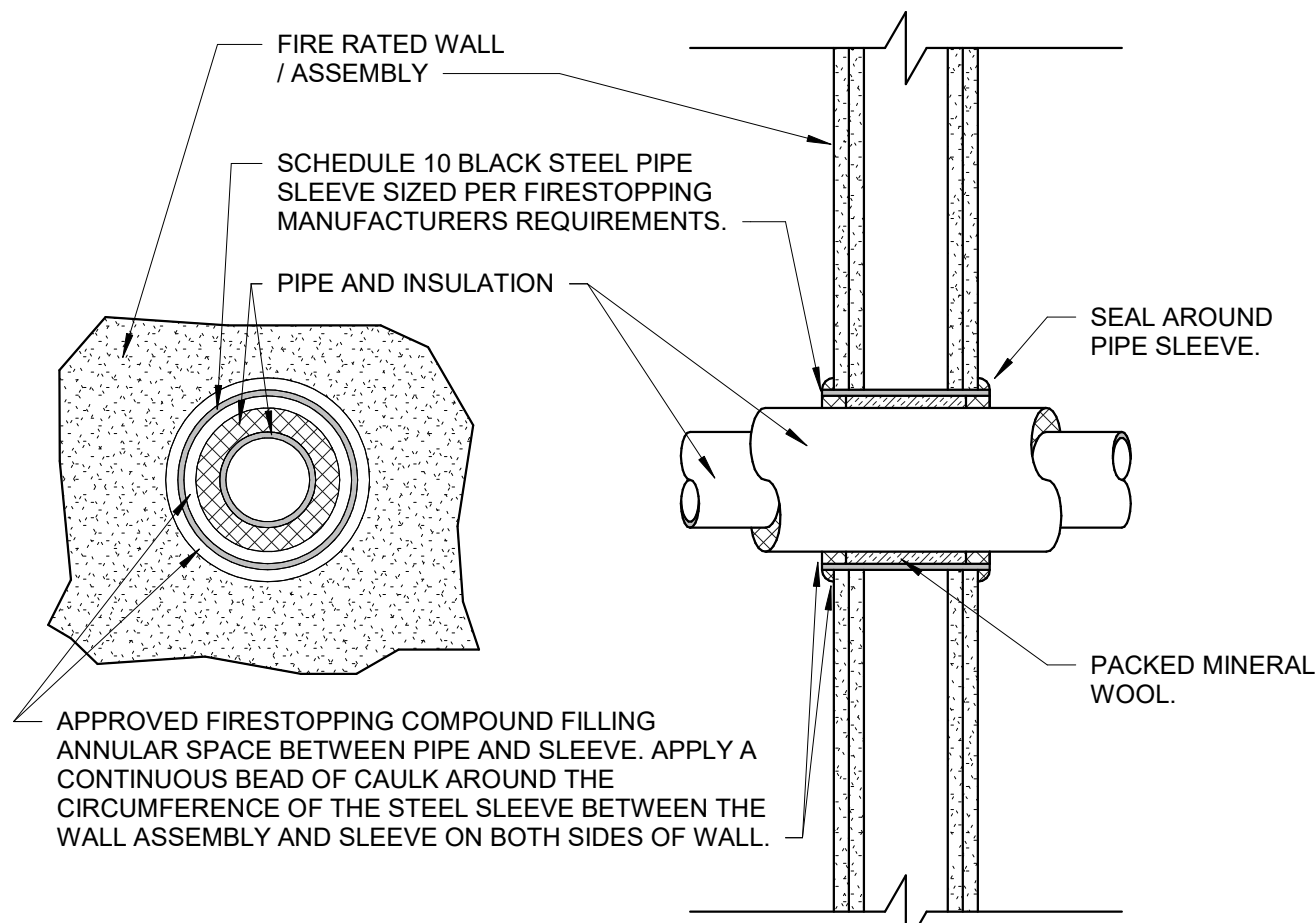


2X2 A.C.T. SURFACE MOUNTED
GRILLE / REGISTER / DIFFUSER DETAIL
 NOT TO SCALE

NOTE:
 FOIL TAPE ALL INSULATION SEAMS TO PROVIDE A VAPOR BARRIER. AIR TERMINAL SHALL BE FASTENED TO STRUCTURE ABOVE WITH METAL CABLING AND FASTENERS VIA EARTHQUAKE TABS ON AIR TERMINAL.

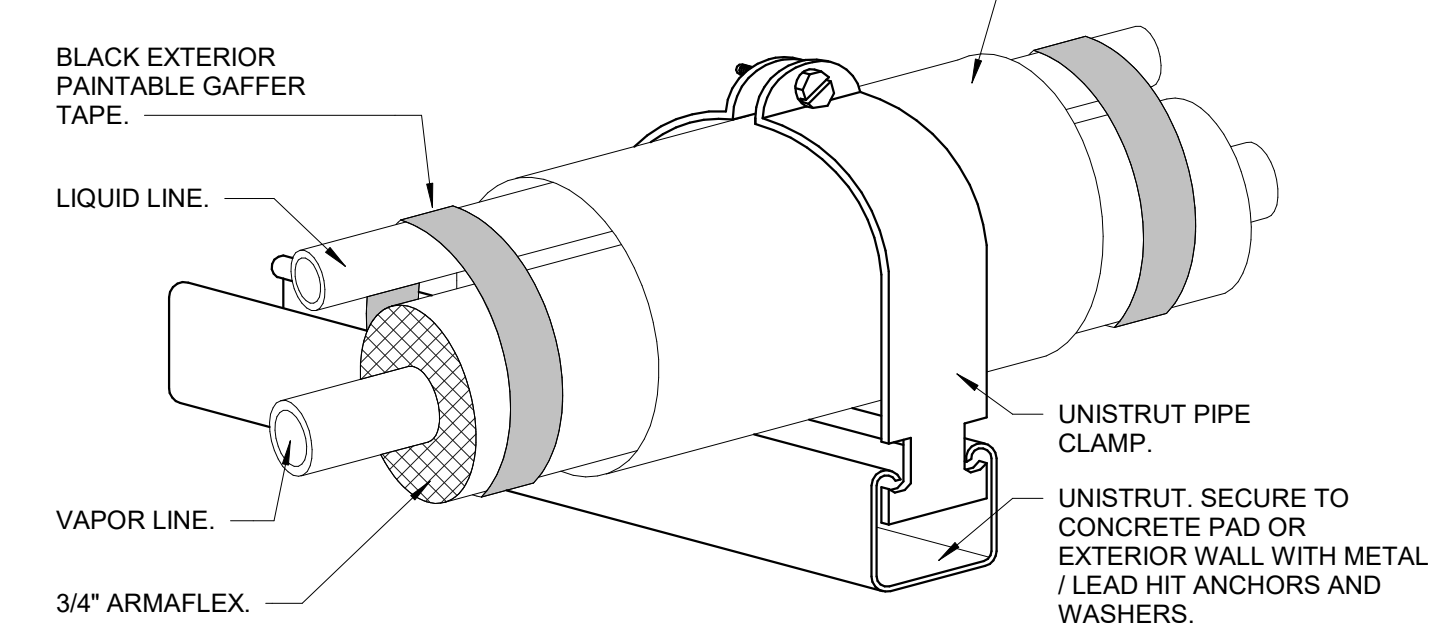


GYPSUM BOARD CEILING SURFACE MOUNTED
GRILLE / REGISTER / DIFFUSER DETAIL
 NOT TO SCALE

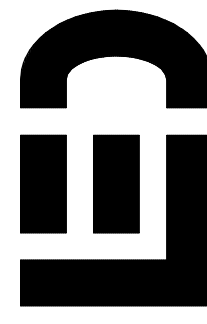


RATED U.L. LISTED WALL / ASSEMBLY
PIPE SLEEVE DETAIL
 NOT TO SCALE

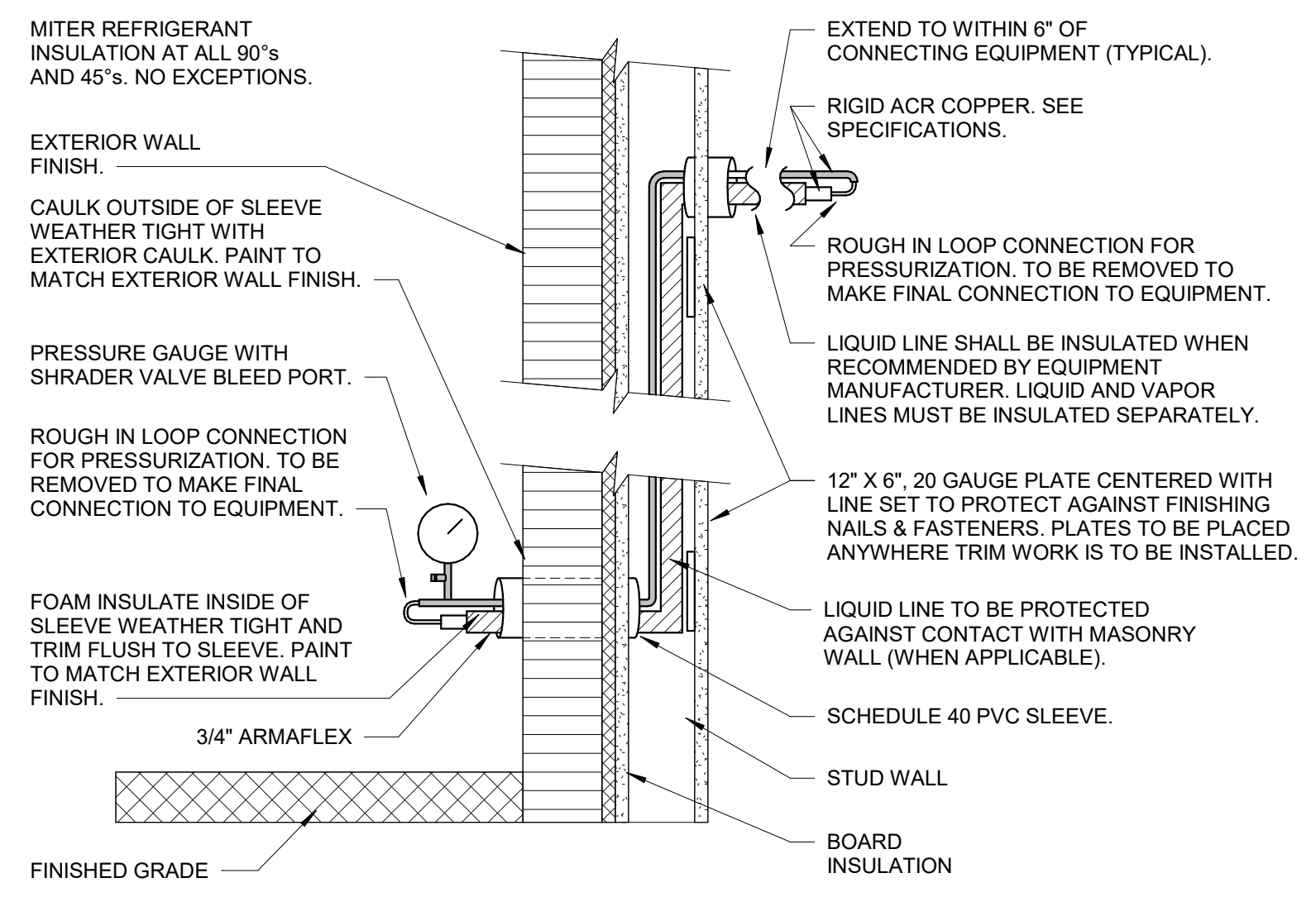
LIQUID LINE SHALL BE INSULATED WHEN RECOMMENDED BY EQUIPMENT MANUFACTURER. LIQUID AND VAPOR LINES MUST BE INSULATED SEPARATELY.



REFRIGERANT
EXTERIOR PIPE SUPPORT DETAIL
 NOT TO SCALE

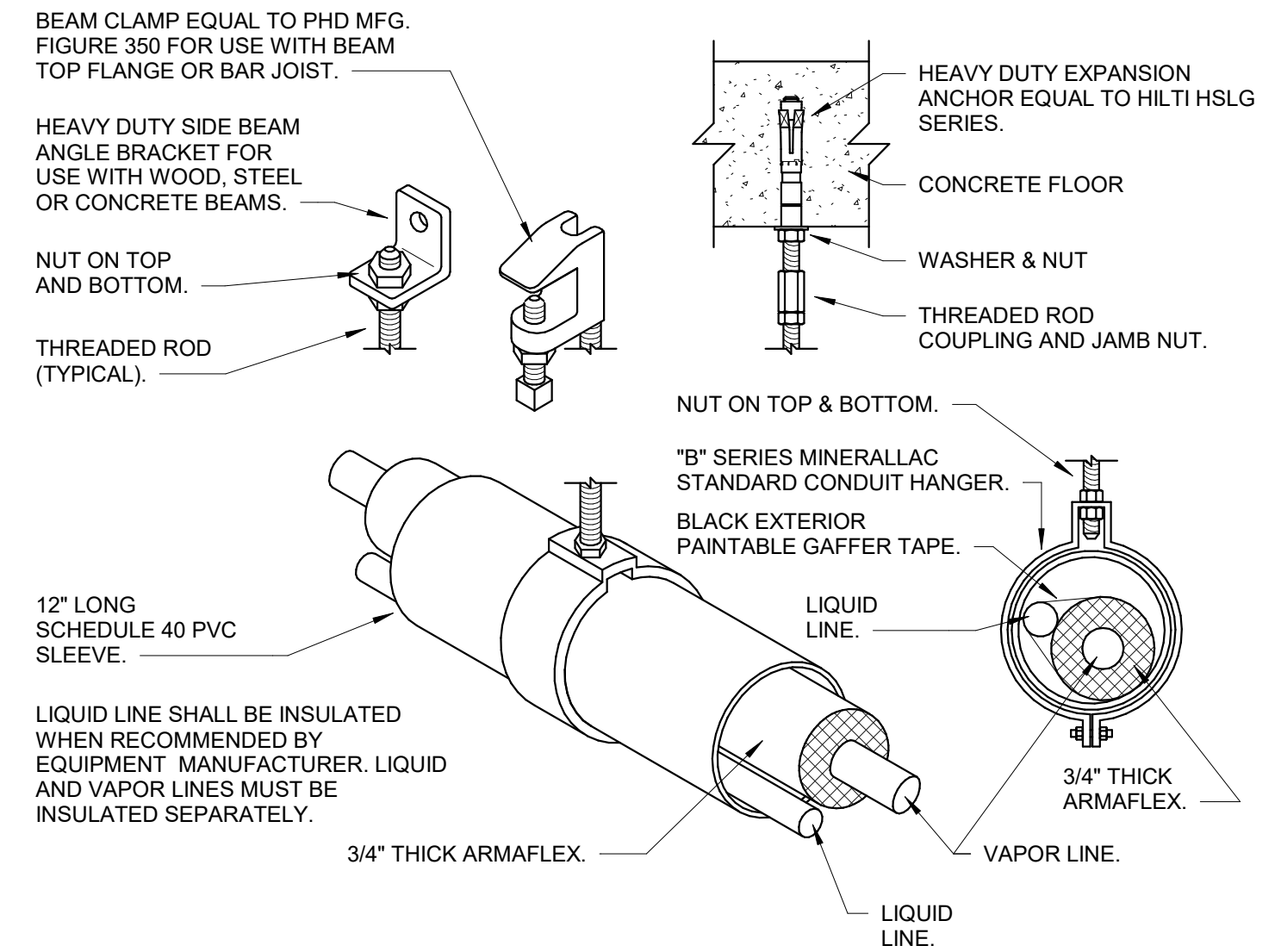


LAMBERT • EZELL • DURHAM
 ARCHITECTURE, LLC
 FLORENCE, ALABAMA 35651
 P.O. BOX 934 401 EAST COLLEGE ST.
 TELEPHONE (256) 767-7100
 www.lambert-ezell-durham.com

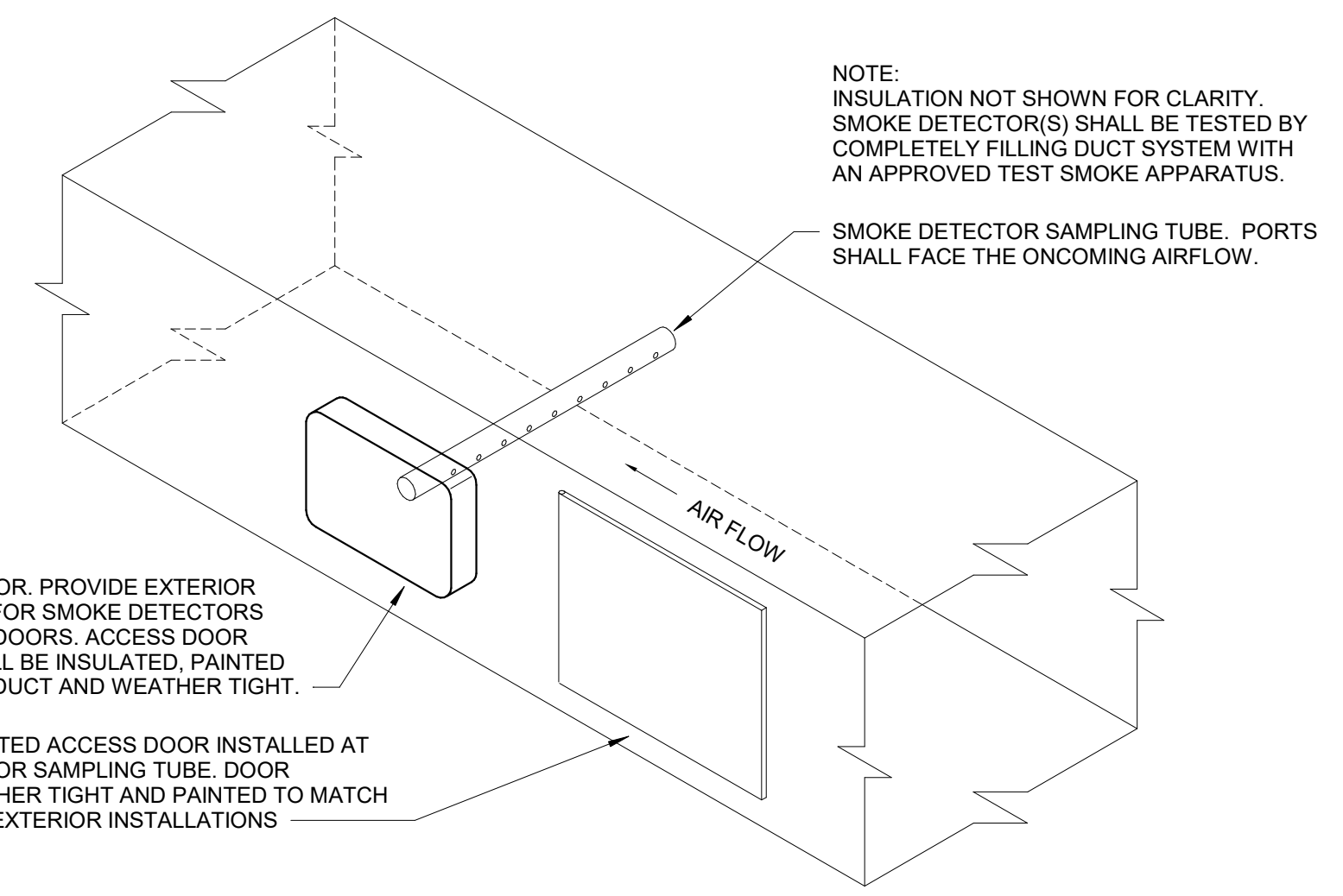


NOTE:
 LINE SET TO BE RUN WITHIN 6" OF EACH PIECE OF CONNECTING EQUIPMENT AND CHARGED WITH NITROGEN TO A STATIC PRESSURE OF 150 PSI THROUGHOUT DURATION OF CONSTRUCTION. 36 HOURS PRIOR TO THE FINAL CONNECTION TO THE EQUIPMENT, THE LINE SET WILL BE EVACUATED AND RE-CHARGED TO 150 PSI WITH NITROGEN AND GRAPHED FOR 24 HOURS. THE LINE SET INCLUDES ALL REFRIGERANT PIPING, VAPOR LINE, LIQUID LINE, HOT GAS, ETC.

STUD WALL
LINE SET ROUGH IN DETAIL
 NOT TO SCALE



REFRIGERANT
PIPE HANGER DETAIL
 NOT TO SCALE

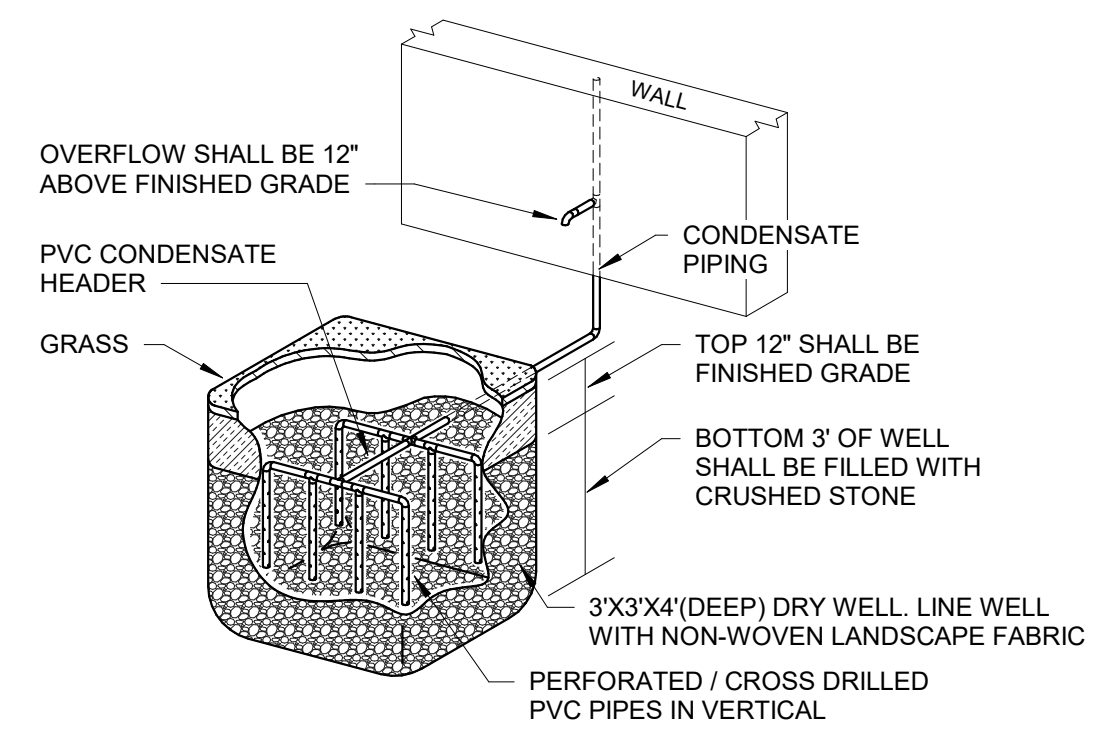


NOTE:
 INSULATION NOT SHOWN FOR CLARITY. SMOKE DETECTOR(S) SHALL BE TESTED BY COMPLETELY FILLING DUCT SYSTEM WITH AN APPROVED TEST SMOKE APPARATUS.

SMOKE DETECTOR. PROVIDE EXTERIOR ACCESS DOOR FOR SMOKE DETECTORS INSTALLED OUTDOORS. ACCESS DOOR ASSEMBLY SHALL BE INSULATED, PAINTED TO MATCH THE DUCT AND WEATHER TIGHT.

HINGED, INSULATED ACCESS DOOR INSTALLED AT SMOKE DETECTOR SAMPLING TUBE. DOOR SHALL BE WEATHER TIGHT AND PAINTED TO MATCH THE DUCT FOR EXTERIOR INSTALLATIONS

DUCT MOUNTED
SMOKE DETECTOR DETAIL
 NOT TO SCALE

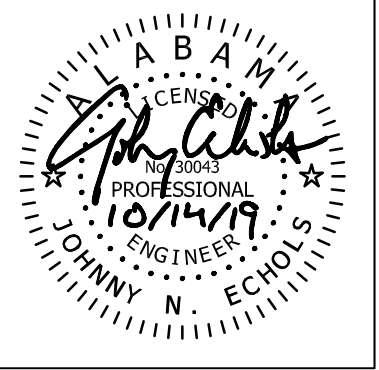


CONDENSATE
DRY WELL DETAIL
 NOT TO SCALE

| | | | |
|---------|------|---------|----------|
| JOB NO. | 1860 | DATE | 10/14/19 |
| DRAWN | JJP | REVISID | |
| CHECKED | JNE | REVISID | |

DRAWING TITLE
 MECHANICAL DETAILS

DRAWING NUMBER
M402



| LOW INTENSITY INFRARED TUBE HEATER SCHEDULE | | | | | | |
|---|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| Mark | RH-01 | RH-02 | RH-03 | RH-04 | RH-05 | RH-06 |
| Fuel | Natural Gas | Natural Gas | Natural Gas | Natural Gas | Natural Gas | Natural Gas |
| Stages of Heat | 2 | 2 | 2 | 2 | 2 | 2 |
| High Input, MBH | 100 | 100 | 100 | 100 | 100 | 100 |
| Low Input, MBH | 65 | 65 | 65 | 65 | 65 | 65 |
| Tube Length, ft. | 30 | 30 | 30 | 30 | 30 | 30 |
| Mounting Height, ft. | 20 (Field Verify) | 20 (Field Verify) | 20 (Field Verify) | 20 (Field Verify) | 20 (Field Verify) | 20 (Field Verify) |
| Volt/Phase | 120 / 1 | 120 / 1 | 120 / 1 | 120 / 1 | 120 / 1 | 120 / 1 |
| Basis of Design | | | | | | |
| Manufacturer | Reznor | Reznor | Reznor | Reznor | Reznor | Reznor |
| Model No. | VPTN100A | VPTN100A | VPTN100A | VPTN100A | VPTN100A | VPTN100A |
| Options | 1 thru 5 | 1 thru 5 | 1 thru 5 | 1 thru 5 | 1 thru 5 | 1 thru 5 |

Options:

- Provide 2 stage combination gas valve, Stainless Steel flexible gas connector and manual shutoff valve & union.
- Heater shall have a self diagnostic circuit board.
- Provide roof mounted air intake cap, Stainless Steel roof mounted flue cap, wall mounted Honeywell Touch Pro WIFI thermostat with metal lockbox and hanging chains.
- Provide Stainless Steel burner tubes and reflectors.
- Provide Factory Roof Termination Kit.

| FAN SCHEDULE | | | | | | | |
|------------------------|----------|---------------|----------|---------------|----------|------------|------------|
| Mark | EF-104 | EF-110 | EF-111 | EF-113 | EF-121 | EF-134A | EF-134B |
| Fan Type | Cabinet | Inline | Cabinet | Cabinet | Cabinet | Wall | Wall |
| Drive | Direct | Direct | Direct | Direct | Direct | Belt | Belt |
| CFM | 75 | 300 | 50 | 50 | 75 | 3660 | 3660 |
| Watts | 31 | 102 | 25 | 25 | 31 | - | - |
| Motor HP | - | - | - | - | - | 3/4 | 3/4 |
| RPM | 812 | 1385 | 675 | 675 | 812 | 1725 | 1725 |
| Static Pressure, in WC | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 |
| Sones | 1.1 | 4.0 | 0.8 | 0.8 | 1.1 | 18.2 | 18.2 |
| Volt/Phase | 120/1 | 120/1 | 120/1 | 120/1 | 120/1 | 480 / 3 | 480 / 3 |
| Basis of Design | | | | | | | |
| Manufacturer | Cook | Cook | Cook | Cook | Cook | Cook | Cook |
| Model | GC-146 | GN-542 | GC-128 | GC-128 | GC-146 | 30P6B | 30P6B |
| Accessories | 1 thru 7 | 1, 2, 3, 4, 5 | 1 thru 6 | 1, 2, 3, 5, 6 | 1 thru 7 | 3, 5, 8, 9 | 3, 5, 8, 9 |
| Notes | A | A | A | B | A | C | C |

Accessories:

- Provide speed control mounted on fan.
- Provide spring vibration isolator kit.
- Provide service disconnect switch.
- Provide occupancy sensor with 30 min. timed off delay.
- Provide backdraft damper.
- Provide deluxe aluminum grille. Color to be selected by the Architect during the submittal phase. White shall be the default grille color.
- Provide Roof Jack vent equal to Cook's RJR100, with Kynar finish, backdraft damper, and 1/4" x 1/4" SS screen mesh. Submit color chart for Architect to select color. Black shall be the default color.
- Provide factory mounted automatic belt tensioner and spare belt set.
- Provide factory 115V motorized shutter, aluminum fan construction, and weather hood with Kynar finish to match color selected by Architect during the submittal phase.

Notes:

- Fan shall be controlled by associated room's occupancy sensor.
- Fan shall be enabled to run continuously.
- Fan shall be controlled by a wall mounted thermostat (Cooling Mode), Carbon Monoxide Detector and Nitrogen Dioxide Detector.

| LOUVER SCHEDULE | | | | | | | | | | | |
|-----------------|----------|----------------|-------|-----------------|--------------------------|------------|--------|-----------------|-----------|----------|-------|
| Mark | Function | Size | CFM | Free Area, S.F. | Construction | Frame Type | Finish | Basis of Design | Model | Options | Notes |
| L-116A | Supply | 18" X 18" X 5" | 175 | 0.75 | 0.25" Extruded Aluminum | Box | Mill | Ruskin | XP500 | - | A |
| L-116B | Return | 18" X 18" X 5" | 175 | 0.75 | 0.25" Extruded Aluminum | Box | Mill | Ruskin | XP500 | - | A |
| L-134A | Intake | 38" X 38" X 4" | 3,660 | 5.21 | 0.125" Extruded Aluminum | Flanged | Kynar | Ruskin | ELF375DXH | 1 thru 5 | A |
| L-134B | Intake | 38" X 38" X 4" | 3,660 | 5.21 | 0.125" Extruded Aluminum | Flanged | Kynar | Ruskin | ELF375DXH | 1 thru 5 | A |

Options:

- Provide removable stainless steel bird screen.
- Provide Kynar finish. Submit color chart for Architect to select color.
- Provide two position motorized dampers shall be controlled with Belimo model NF24-S-US, direct coupled, 24 volt, 60 in-lb torque with 75 second run time, spring return and built in auxiliary switch. Actuators shall be factory mounted to the dampers.
- Provide extended sill and drip cap. Coordinate with GC for flashing around louver when installed in metal siding wall.
- Provide burglar bars.

Notes:

- Ruskin has been specified to establish the type and quality of louver to be installed.

| AIR CURTAIN FAN SCHEDULE | | | | |
|----------------------------|-----------------|-----------------|-----------------|-----------------|
| Mark | ACF-136A | ACF-136B | ACF-136C | ACF-136D |
| Door L x H, ft. | 12 x 16 | 12 x 16 | 12 x 12 | 12 x 12 |
| Fan Module | | | | |
| Dive | Direct | Direct | Direct | Direct |
| Nozzle Width, ft. | 12 | 12 | 12 | 12 |
| CFM | 13,062 | 13,062 | 4782 | 4782 |
| Weight, lbs | 795 | 795 | 325 | 325 |
| Sound, dB | 71 | 71 | 70 | 70 |
| Electrical | | | | |
| Volt/Phase | 480 / 3 | 480 / 3 | 480 / 3 | 480 / 3 |
| # Circuits | 1 | 1 | 1 | 1 |
| Amps Per Circuit | 11 | 11 | 4.2 | 4.2 |
| Breaker Rating Per Circuit | 25 | 25 | 15 | 15 |
| Basis of Design | | | | |
| Manufacturer | Berner | Berner | Berner | Berner |
| Model | IDC16-1144AHFCC | IDC16-1144AHFCC | IDC12-3144AHFCC | IDC12-3144AHFCC |
| Accessories | 1 thru 3 | 1 thru 3 | 1 thru 3 | 1 thru 3 |

Accessories:

- Provide service disconnect and manual override switch.
- Provide factory wired NEMA control panel and roller type activation switch.
- Provide powder-coated finish, color to be selected by the architect during the submittal phase.

| GAS HEAT PACKAGED A/C UNIT SCHEDULE | | | |
|-------------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|
| Mark | PAC-01 (SOUTH) | PAC-02 (CORE) | PAC-03 (EAST) |
| Outside Air | | | |
| Minimum | 360 | 565 | 320 |
| Maximum | 360 | 565 | 320 |
| EER (@ ARI) | 11.9 | 12.6 | 12.6 |
| Supply Fan | | | |
| CFM | 2,000 | 3,000 | 2,800 |
| ESP | 1.00 | 1.00 | 1.00 |
| Cooling | | | |
| Normal Tonnage | 5 | 7.5 | 7.5 |
| Total Capacity, MBH | 61.55 | 89.59 | 88.52 |
| Sensible Capacity, MBH | 44.79 | 65.01 | 62.48 |
| EAT DB/WB, °F | 76.6 / 64.8 | 76.7 / 64.9 | 75.2 / 63.8 |
| LAT DB/WB, °F | 58.0 / 55.2 | 58.2 / 55.5 | 56.1 / 53.7 |
| Hot Gas Reheat | | | |
| Total Capacity, MBH | 39.50 | 69.31 | 68.98 |
| EAT DB/WB, °F | 55.9 / 54.4 | 56.6 / 54.8 | 54.5 / 53.1 |
| LAT DB/WB, °F | 74.1 / 61.3 | 77.9 / 62.3 | 77.2 / 61.8 |
| Heating | | | |
| Fuel | Natural Gas | Natural Gas | Natural Gas |
| Input, MBH | 60 | 120 | 120 |
| Output, MBH | 49 | 96 | 96 |
| Efficiency | 81.7% | 80.0% | 80.0% |
| EAT / LAT, °F | 60.8 / 83.8 | 60.4 / 90.3 | 64.6 / 96.6 |
| Electrical | | | |
| Volt / Phase | 480 / 3 | 480 / 3 | 480 / 3 |
| MCA | 14.0 | 20.0 | 20.0 |
| MOCP | 20.0 | 25.0 | 25.0 |
| Basis of Design | | | |
| Manufacturer | Trane | Trane | Trane |
| Model | YHC060 | YHC092 | YHC092 |
| Weight, lbs. | 1,100 | 1,400 | 1,400 |
| Options | 1, 2, 3, 4, 5, 6, 7, 8 A, B, C | 1, 2, 3, 4, 5, 6, 7, 8 A, B, C | 1, 2, 3, 4, 5, 6, 7, 8 A, B, C |

Options:

- Provide motorized outside and return air damper mixing box (outside air dampers shall be opposed blade, low leak dampers), low ambient kit and thermostatic expansion valves. Electrical contractor to provide non fused disconnect switch and powered convenience outlet.
- Provide Low Ambient Kit, Variable Condenser Speed Control, Ball Bearing Condenser Motor & Capacitor / Relay.
- Provide staged gas heat with stainless steel heat exchanger.
- Provide staged hot gas reheat.
- Provide economizer with barometric relief.
- Provide VFD with shaft grounding ring(s).
- Provide lowered hal guards.
- Provide 1 year parts, labor & refrigerant warranty.

Notes:

- See Sequence of Control
- Equipment shall be provided by OEM sales office.
- Provide Carbon Monoxide detector equal to Honeywell E3 Point shall comply with NFPA 72 and alarm at 25 ppm of CO. The detector shall be powered by primary power. Provide battery back up power as well. The detector shall be integrated into the building's Fire Alarm system and provide a trouble / supervisory alarm to the Fire Alarm panel. The detector shall shut down the unit upon activation. Coordinate with the Fire Alarm Contractor prior to bid and during construction prior to submittals for proper integration in to the building's fire alarm. If the building does not have a building fire alarm then the signal shall activate a audio / visual alarm located in a regularly occupied area.

| SPLIT HEAT PUMP SYSTEM SCHEDULE | | |
|--------------------------------------|---------------|---------------|
| System | | |
| Outside Air CFM | | |
| Minimum | 70 | 225 |
| Maximum | 70 | 225 |
| EER | 12.5 | 12.5 |
| Total Capacity at ARI, MBH | 33.5 | 32.3 |
| Sensible Capacity at ARI, MBH | 25.7 | 24.8 |
| Cooling | | |
| EAT db./wb., °F | 74.0 / 62.8 | 76.6 / 64.8 |
| LAT db./wb., °F | 54.1 / 52.9 | 56.1 / 55.0 |
| Heating | | |
| EAT / LAT db., °F | 60.0 / 76.4 | 60.4 / 76.8 |
| Air Handling Unit | | |
| Mark | AHU-01 | AHU-02 |
| Manufacturer | TRANE | TRANE |
| Model | TEM6A0C36H31S | TEM5A0C36H31S |
| Supply Fan | | |
| Supply Air, CFM | 1,200 | 1,200 |
| External Static Pressure, in. WG | 1.0 | 1.0 |
| Motor HP | 0.5 | 0.5 |
| Volt/Phase | 480 / 3 | 480 / 3 |
| Auxiliary Electric Heat | | |
| KW | 9.6 | 9.6 |
| Volt/Phase | 480 / 3 | 480 / 3 |
| Single Point Power Connection | | |
| MCA | 17.1 | 17.1 |
| MOCP | 20.0 | 20.0 |
| Heat Pump | | |
| Mark | CU-01 | CU-02 |
| Manufacturer | TRANE | TRANE |
| Model | 4TWA4036A4 | 4TWA4036A4 |
| Heat Pump, @ 47°F MBH | 32.6 | 32.6 |
| COP | 4.0 | 4.0 |
| MCA | 6.0 | 6.0 |
| Max OCP | 15.0 | 15.0 |
| Volt/Phase | 480 / 3 | 480 / 3 |
| Options | 1 through 8 | 1 through 8 |
| Notes | A, B, C, D | A, B, C, D |

Options:

- Single point wiring connection
- Hard shut off TXV
- Provide ECM / VFD with shaft grounding rings
- Lowered Hall Guard
- Low Ambient Kit, Ball Bearing Condenser Motor & Capacitor / Relay.
- Evaporator freeze stat.
- High and Low pressure switches.
- 2" Filter housing with piano hinge and cam lock and gasketed seal.

Notes:

- See Sequence of Control
- Provide condensate overflow pan with liquid switch, 3/4" ball valve with threaded nipple and cap.

| ROOF CAP SCHEDULE | | |
|-------------------|------------------------------|------------------------------|
| Mark | RC-01 | RC-02 |
| Function | Exhaust | Intake |
| CFM | 400 | 295 |
| Throat Area, ft² | 0.852 | 0.852 |
| Face Area, ft² | 2.04 | 2.04 |
| Max. ΔP (in. WG) | 0.05 | 0.05 |
| Construction | 16 Ga. Marine Alloy Aluminum | 16 Ga. Marine Alloy Aluminum |
| Finish | Kynar | Kynar |
| Cook Model | PR-12 | PR-12 |

Notes:

- Provide prefabricated roof curb with wood nailer and thermal insulation. See Architectural Drawings for roof slope and construction. Curb shall be secured to the building's structure and not the roof deck.
- Submit color chart for Architect's selection of the Kynar finish. Finish selection shall be for the cap and roof curb.
- Provide 1/4" x 1/4" stainless steel birdsceen

| DUCTLESS SPLIT SYSTEM SCHEDULE | |
|--------------------------------|------------------|
| System | |
| SEER | 20.8 |
| Total Capacity Range, MBH | 5.8 - 12.0 |
| Sensible Capacity, MBH | 9.7 |
| Electrical | |
| Voltage / Phase | 208 / 1 |
| MCA | 13 |
| MOCP | 15 |
| Indoor Unit | |
| Mark | DSS-IJ-C224 |
| CFM Range | 290 - 380 |
| Basis of Design, Manufacturer | Mitsubishi-Trane |
| Model | PKA-A12HA7 |
| Weight, lbs | 30 |
| Outdoor Unit | |
| Mark | DSS-OJ-C224 |
| Basis of Design, Manufacturer | Mitsubishi-Trane |
| Model | PUY-A12NHA |
| Weight, lbs | 100 |
| Piping | |
| Max Length, Ft. | 100 |
| Max Height Difference, Ft. | 100 |
| Options | 1, 2 |
| Notes | A, B, C |

Options:

- Provide low ambient controls.
- Provide wired wall mounted thermostat.

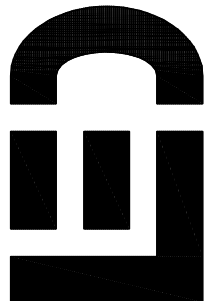
Notes:

- Indoor Unit receives power from Outdoor Unit.
- Line set and condensate piping shall be located within the wall. Exposed piping will not be allowed.
- Little Giant condensate pump VCMX-20ULS-C with anti-sweat sleeve, safety switch and wall mounting brackets.

| ELECTRIC STEAM HUMIDIFIER SCHEDULE | |
|------------------------------------|-----------|
| Unit Tag | ESH-01 |
| Unit(s) Serving | PAC-03 |
| System | |
| Actual Capacity - lbs/hr | 11 |
| Required Capacity - lbs/hr | 9.21 |
| EAT °F | 55.00 |
| EARH | 72% |
| LAT °F | 55.00 |
| LARH | 82% |
| OAT °F | 15 |
| OARH | 65% |
| Room Setpoint, °F | 72.00 |
| Room Min. RH, % | 45.00 |
| Supply Air Duct | |
| CFM | 2800 |
| FPM | 1050 |
| Duct Height, in. | 26.00 |
| Duct Width, in. | 14.00 |
| Manifold | |
| Model | D-2 |
| Quantity | 1.00 |
| Length, in. | 24.00 |
| Vapor Trail, ft. | 2.50 |
| Electrical | |
| Volt / Phase | 480 / 3 |
| KW | 3.8 |
| MCA | 4.5 |
| MOCP | 15 |
| Basis of Design | |
| Manufacturer | Armstrong |
| Model | EHU-801 |
| Weight, lbs. | 25 |
| Notes | A, B, C |

Notes:

- Provide duct pressure switch.
- Provide high limit humidistat.
- Provide modulating control.



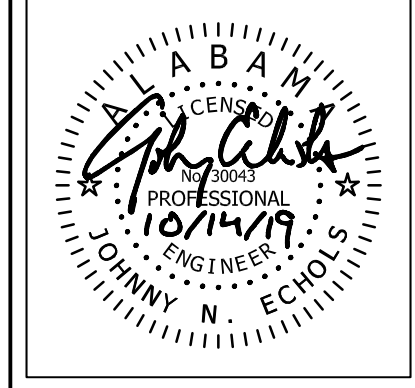
LAMBERT • EZELL • DURHAM
ARCHITECTURE, LLC
FLORENCE, ALABAMA 35631
P.O. BOX 934 401 EAST COLLEGE ST.
TELEPHONE (256) 767-7100
www.ladarchitecture.com

OFFICE AND SHOP BUILDING FOR
RL CONSULTING, INC.
TUSCUMBIA, ALABAMA

| | | | |
|---------|------|---------|----------|
| JOB NO. | 1460 | DATE | 10/14/19 |
| DRAWN | JJP | REVISED | |
| CHECKED | JNE | REVISED | |

DRAWING TITLE
MECHANICAL SCHEDULES

DRAWING NUMBER
M501



| GRILLE, REGISTER AND DIFFUSER SCHEDULE | | | | |
|--|--|--|--|--|
| Mark | CD-1 | CD-2 | CG-1 | SG-1 |
| Description | Square Louvered Face Ceiling Diffuser, Square Neck, Adjustable Discharge Pattern | Square Louvered Face Ceiling Diffuser, Square Neck, Adjustable Discharge Pattern | Square Louvered Face Ceiling Grille, Square Neck, 35° Deflection | Supply Grille, Double Deflection, 3/4" Blade Spacing |
| Mounting | Lay-in | Surface | Surface | Surface |
| Material | Aluminum | Aluminum | Aluminum | Aluminum |
| Finish | Match Ceiling Color | Match Ceiling Color | Match Ceiling / Wall Color | Match Ceiling / Wall Color |
| Titus Model | TDC-AA | TDC-AA | 350FL | 300FL |
| Border Type | Type 3 | Type 6 | Type 1 | Type 1 |
| Accessories | - | - | - | - |

- Notes:
- 1) This has been specified to establish the type and quality of air device to be installed. Prior Approved equals will be considered.
 - 2) Maximum NC Rating shall not exceed 30.
 - 3) Air devices that are ceiling out-in type shall be centered in the tile.
 - 4) Ceiling mounted louvered return / exhaust grilles shall be installed with the blades pointed toward the closest wall so that the blades form a view block.
 - 5) Wall mounted return / exhaust grilles shall be installed with the blades pointing toward the floor or ceiling, whichever is nearest, so that the blades form a view block.
 - 6) Internal portion of duct, including inlet plenum box, attached to supply, return, exhaust and transfer grilles shall be blacked out with a dull finish, non-toxic, DTM paint.
 - 7) Grille termination shall be Flexmaster SIDB or prior approved equal unless otherwise specified in schedule above or noted on drawings. See detail for duct to grille, register, diffuser connection.

| DX System Analysis Form | | | | |
|---|-----------|-----------|-----------|----------|
| Project: | | | | |
| Date: | | | | |
| Architect: | | | | |
| Mechanical Contractor: | | | | |
| System Mark | | | | |
| System Manufacturer | | | | |
| System Model Number | | | | |
| System Serial Number | | | | |
| Heating Type | Heat Pump | Gas | Hot Water | Electric |
| Reheat Type | Hot Gas | Hot Water | Electric | N/A |
| Outdoor Temperature @ Outdoor Coil | | | | |
| Outdoor Coil Leaving Temperature | | | | |
| Indoor Temperature | | | | |
| Indoor Relative Humidity | | | | |
| Mixed Air Temperature Entering Indoor Coil | | | | |
| Supply Air Temperature @ The Unit Discharge | | | | |
| Supply Air Temperature @ The Farthest Supply Grille | | | | |
| Refrigerant Type | | | | |
| Suction Pressure | | | | |
| Suction Line Temperature @ Compressor | | | | |
| Discharge Pressure | | | | |
| Discharge Line Temperature @ Compressor | | | | |
| Liquid Line Pressure | | | | |
| Liquid Line Temperature @ Condenser | | | | |
| Superheat | | | | |
| Subcooling | | | | |
| Discharge Superheat | | | | |
| Heating Entering and Leaving Air Temperature | | | | |
| Inlet Gas Pressure | | | | |
| Manifold Gas Pressure | | | | |
| Electric Heat kW | | | | |
| Amps per Heating Element | | | | |
| Total Electric Heat Amps | | | | |
| Discharge Air Temperature with Reheat Operational | | | | |
| Supply Air CFM | | | | |
| Return Air CFM (Occ, UnOcc) | | | | |
| Outside Air CFM (Occ, UnOcc) | | | | |
| This shall be filled out in heating, cooling & dehumidification modes for every piece of DX equipment. Outdoor ambient shall be 80°F minimum for cooling readings and 50°F or below for heating readings. | | | | |

SEQUENCE OF CONTROL

Provide all necessary equipment, materials, labor, devices, etc. to satisfy the intent of this Sequence of Control.

The Contractor shall ensure that the Electrical Contractor provides sufficient sources of power for all damper actuators, etc. The Contractor shall provide all relays (RIBs) and transformers and coordinate with the Electrical Contractor for the installation of the transformers.

All controls wiring shall be in EMT conduit with MC flex whips (interior) Seal tight (exterior) no longer than 60" to all devices, equipment, etc. The Electrical Contractor shall furnish and install all wall boxes and EMT conduit, with pull string, for all controls wiring including drops to thermostats, sensors and other wall mounted devices. Controls contractor shall coordinate with Electrical contractor prior to rough-in. Low voltage devices can reside in cable tray. See Electrical Drawings for cable tray location(s).

Fully modulating dampers shall be controlled with Belimo model NF24-SR-S-US, direct coupled, 24 volt, 60 in-lb. torque, spring return and built in auxiliary switch. Two-position dampers shall be controlled with Belimo model NF24-S-US, direct coupled, 24 volt, 60 in-lb. torque with 75 second run time, spring return and built in auxiliary switch.

Smoke detectors shall be installed by the Mechanical Contractor and shall be wired by the Fire Alarm Contractor. Contractors must review the Contract Documents and coordinate, prior to bid, to clarify which Contractor is responsible for providing smoke detectors.

Heating set points shall be 71°F during Occupied periods and 60°F during Unoccupied periods with a +/- 3°F adjustment. Cooling set points shall be 73°F during Occupied periods and 80°F during Unoccupied periods with a +/- 3°F adjustment. All set points shall be adjustable. Thermostat to be equipped with a faceplate lockout function.

At a minimum this Contractor to provide Honeywell T8000 Touch Pro Wi-Fi thermostats and a separate RH sensor for all new systems plus any additional relays (RIBs), transformers, remote sensors, CO sensors, warehouse heating & ventilation fan thermostats, etc.

Packaged A/C (PAC)

Occupied mode
 The unit shall be enabled during occupied periods as determined by the Honeywell 8000 Touch Pro Wi-Fi thermostat. During occupied periods, the unit fan shall be enabled, the outside air damper shall open to its minimum set point position and the system shall change modes as required to satisfy space temperature and humidity set points whenever there is a need for heating, cooling or de-humidification. The system shall maintain the zone temperature and humidity set point (adjustable; 73°F cooling, 50% RH / 71°F heating). The outside air damper shall be fully closed when the fan is disabled. The occupancy contacts in the Honeywell 8000 Touch Pro thermostat shall be used as a pilot relay to enable a power duty relay to enable and disable return and outside air dampers. Provide a separate relative humidity sensor as required. Contractor to provide all necessary relays and transformers. The unit's transformer shall not be used to power the return and outside air dampers. Coordinate with electrical for required 120v power sources. Provide a separate RH sensor for humidification and dehumidification control.

Unoccupied mode
 The thermostat shall also enable the unit during unoccupied periods in the setback mode. The unit shall be enabled in the cooling mode whenever the space temperature exceeds 80°F to maintain the space temperature set point. The unit shall be enabled in the heating mode whenever the space temperature falls below 60°F to maintain the space temperature set point. When the unit is enabled in the night/setback mode, the fan shall be enabled when the unit is either heating or cooling and the outside air damper shall be fully closed at all times in unoccupied mode. Whenever the unit is disabled, the outside air damper shall be fully closed.

De-humidification
 De-humidification algorithms and controllers shall be inherent to the equipment's controls and shall accept an input for dehumidification control via the space temperature and humidity sensor enabling the hot gas reheat coil with the cooling coil active. Dehumidification shall only be active when the space temperature is satisfied and the RH% exceeds the space set point. Dehumidification shall be disabled whenever there is a call for cooling or heating.

Economizer Control
 The RTU shall go into economizer mode whenever the outdoor temperature is 55°F or below. A mixed air temperature sensor shall be installed and shall modulate the return and outside air dampers to maintain a mixed air temperature of 55°F. The outside air damper shall fully close anytime the mixed air temperature falls below 40°F. The economizer hood shall be equipped with a barometric relief damper from the equipment manufacturer.

For systems 2,000 CFM or greater, the unit shall be disabled whenever the duct mounted smoke detector senses products of combustion.

The unit shall be disabled whenever the condensate overflow sensor is activated.

Split Heat Pump (AHU / CU)

The unit shall be enabled during occupied periods as determined by the Honeywell 8000 Touch Pro Wi-Fi thermostat. During occupied periods, the unit fan shall be enabled, the outside air damper shall open to its minimum set point position and the system shall change modes as required to satisfy space temperature and humidity set points whenever there is a need for heating, cooling or de-humidification. The system shall maintain the zone temperature and humidity set point (adjustable; 73°F cooling, 50% RH / 71°F heating). The outside air damper shall be fully closed when the fan is disabled. The occupancy contacts in the Honeywell 8000 Touch Pro thermostat shall be used as a pilot relay to enable a power duty relay to enable and disable return and outside air dampers. Contractor to provide all necessary relays and transformers. The unit's transformer shall not be used to power the return and outside air dampers. Coordinate with electrical for required 120v power sources.

During unoccupied periods, the unit shall be enabled in the cooling mode whenever the space temperature sensor exceeds 80°F. The unit shall be enabled in the heating mode whenever the space temperature falls below 65°F. When the unit is enabled in the unoccupied mode, the fan shall only be enabled when the unit is either heating or cooling and the outside air damper shall remain fully closed.

Whenever the unit is disabled, the outside air damper shall go to its fully closed position.

The unit shall be disabled whenever the condensate overflow sensor is activated.

Exhaust Fan (EF-104, 110, 111 & 121)

Fan shall be controlled by a space occupancy sensor with a 30 min. timed off delay.

Exhaust Fan (EF-113)

Fan shall be enabled to run continuous 24/7.

Exhaust Fan (EF-134A & B)

Fans shall run via 120V wall mounted thermostat (Cooling Mode), Honeywell E3 Point Nitrogen Dioxide (NO2) monitor, and E3 Point Carbon Monoxide (CO) detector. Provide transformer and power duty relay as required to interlock with motor starters.

Low Intensity Infrared Tube Heaters (RHP)

Heaters shall be controlled via wall mounted thermostat to maintain an adjustable minimum temperature of 72°F.

Humidifier (ESH)

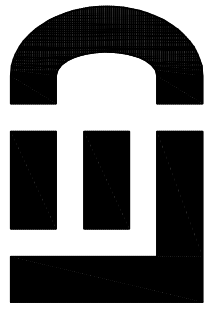
The electric steam humidifier shall be enabled whenever the space RH falls to 45%. The humidifier must be integrated into PAC-03.

Ductless Split System (IU/OU)

The DSS unit shall be controlled by the equipment manufacturer's wall mounted temperature sensor. Units condensate pump overflow switch shall disable the equipment.

Carbon Monoxide, Nitrogen Dioxide

Detectors to be Honeywell E3 Point and integrated into the fire alarm to enable a supervisory signal and shut down the respective system / enable the respective ventilation system. Detector shall be hardwired and have a battery backup.



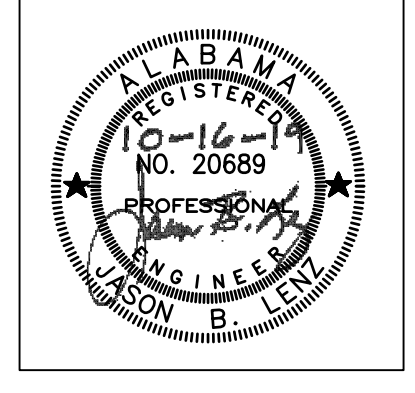
LAMBERT • EZELL • DURHAM
 ARCHITECTURE, LLC
 FLORENCE, ALABAMA 35631
 P.O. BOX 934 401 EAST COLLEGE ST.
 TUSCUMBIA, ALABAMA
 TELEPHONE (256) 767-7100
 www.ladarchitecture.com

OFFICE AND SHOP BUILDING FOR
RL CONSULTING, INC.
 TUSCUMBIA, ALABAMA

| JOB NO. | DATE | DATE | DATE |
|---------|----------|----------|------|
| 1460 | 10/14/19 | | |
| DRAWN | JJP | REV/USED | |
| CHECKED | JNE | REV/USED | |

DRAWING TITLE
MECHANICAL SCHEDULES

DRAWING NUMBER
M502



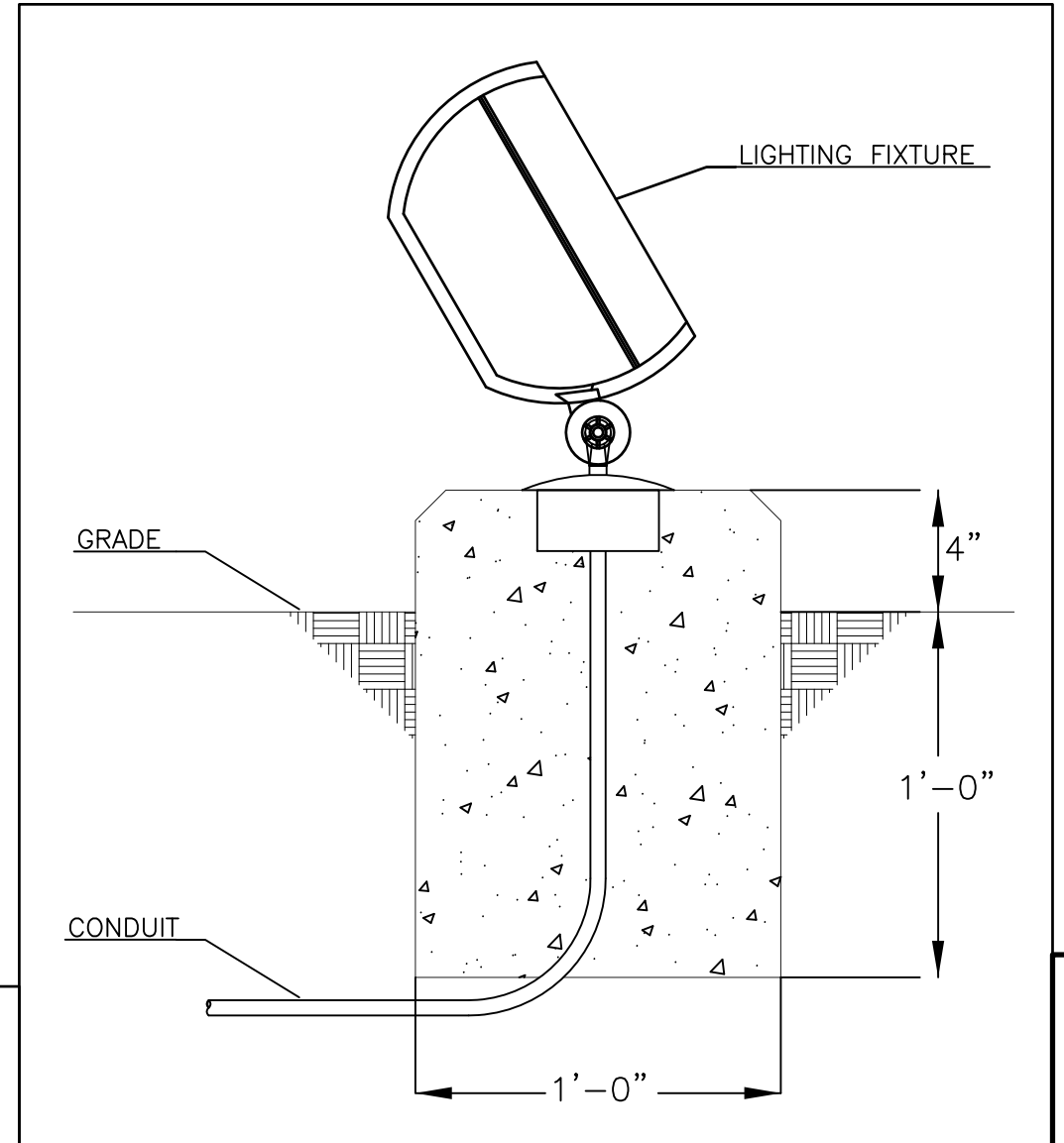
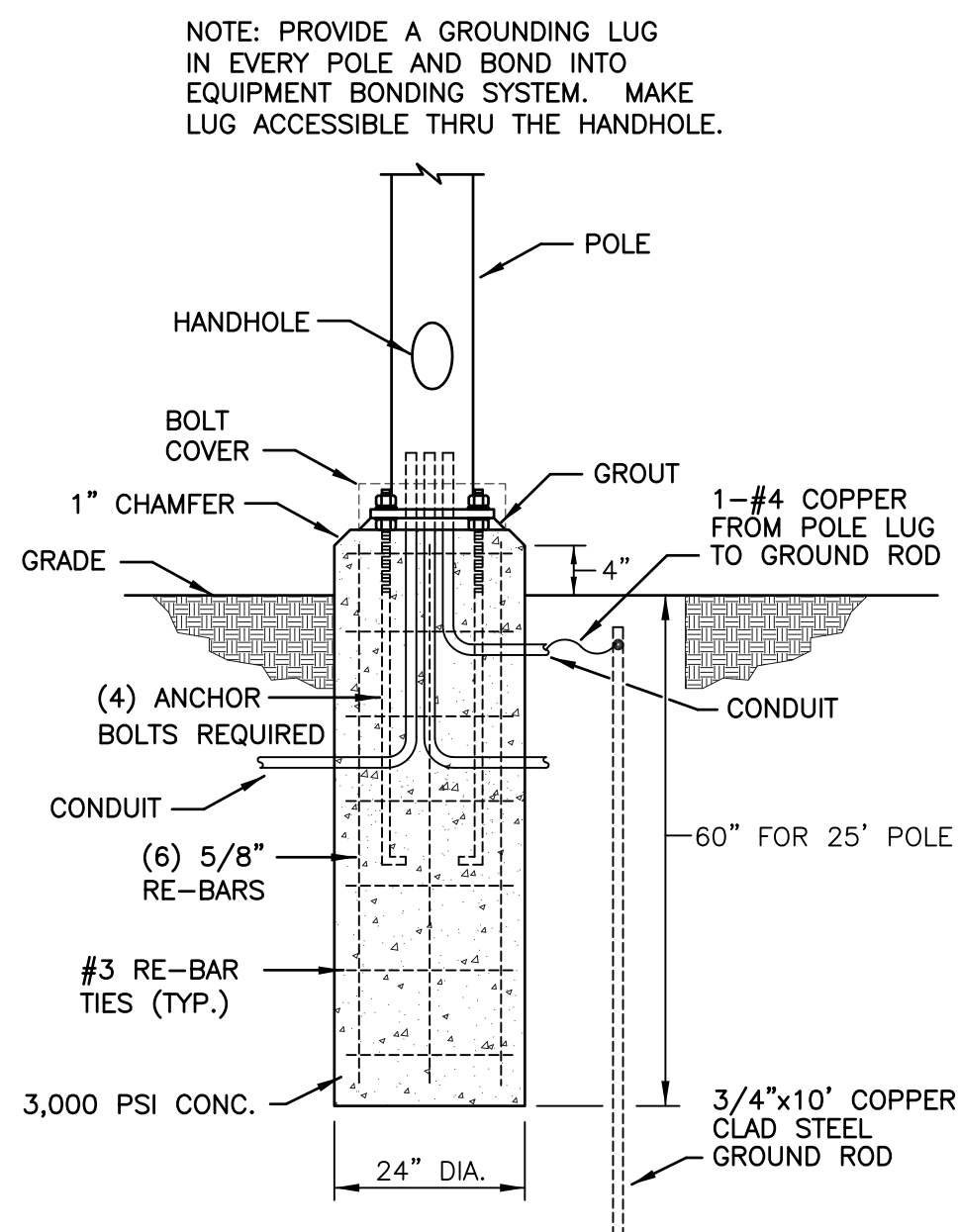
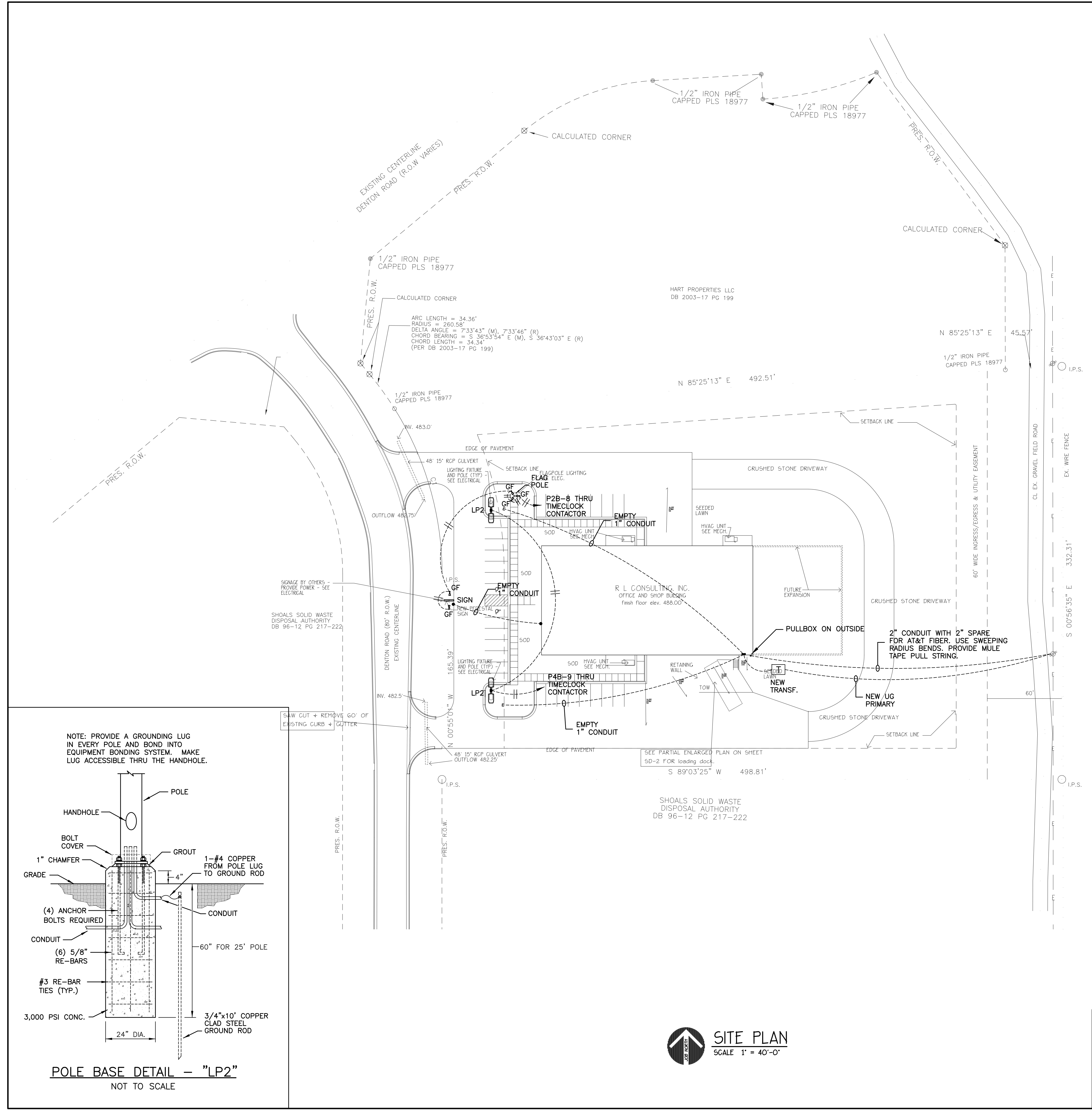
Minimum Cover Requirements, 0 to 600 Volts, Nominal, Burial in Inches

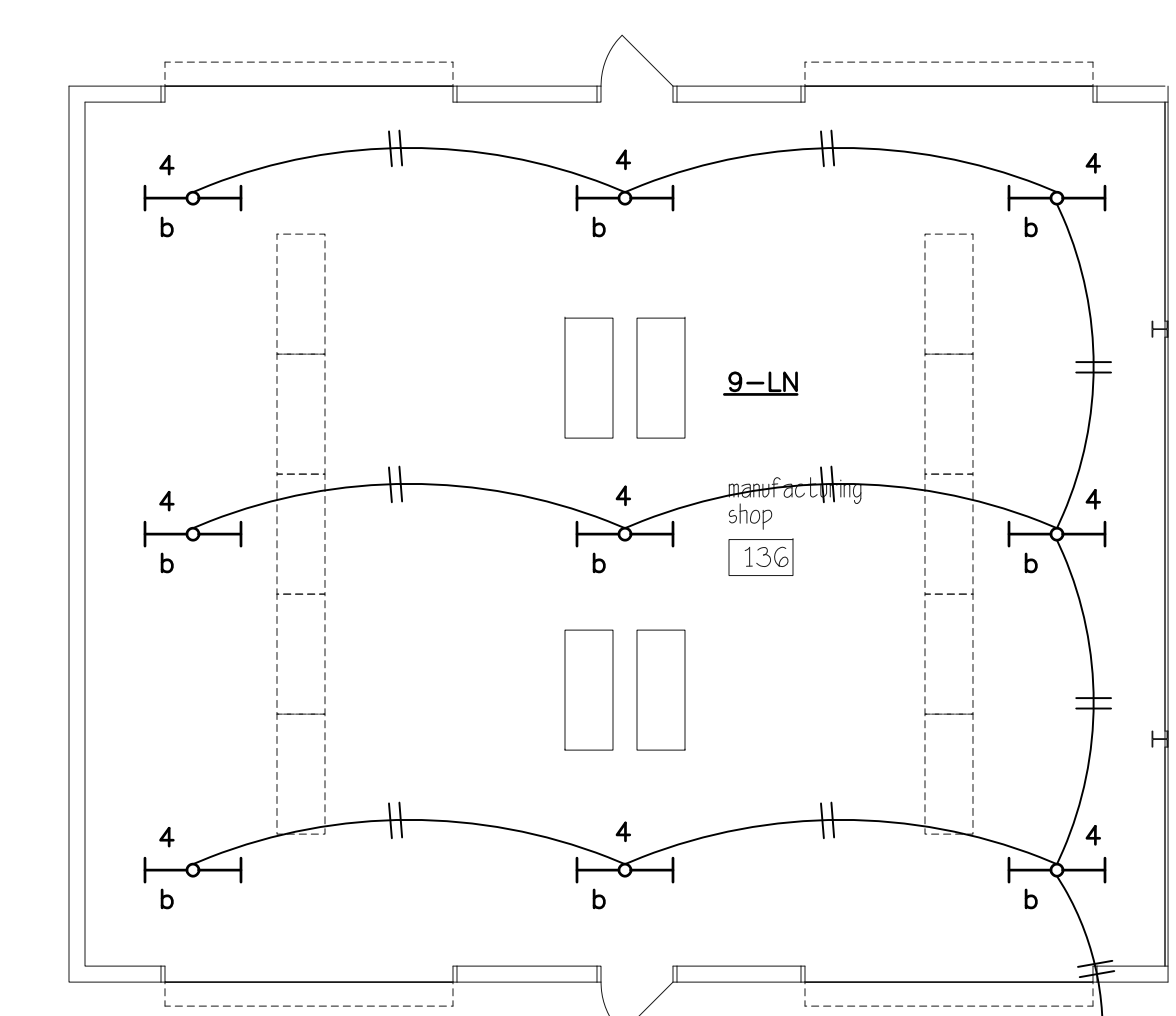
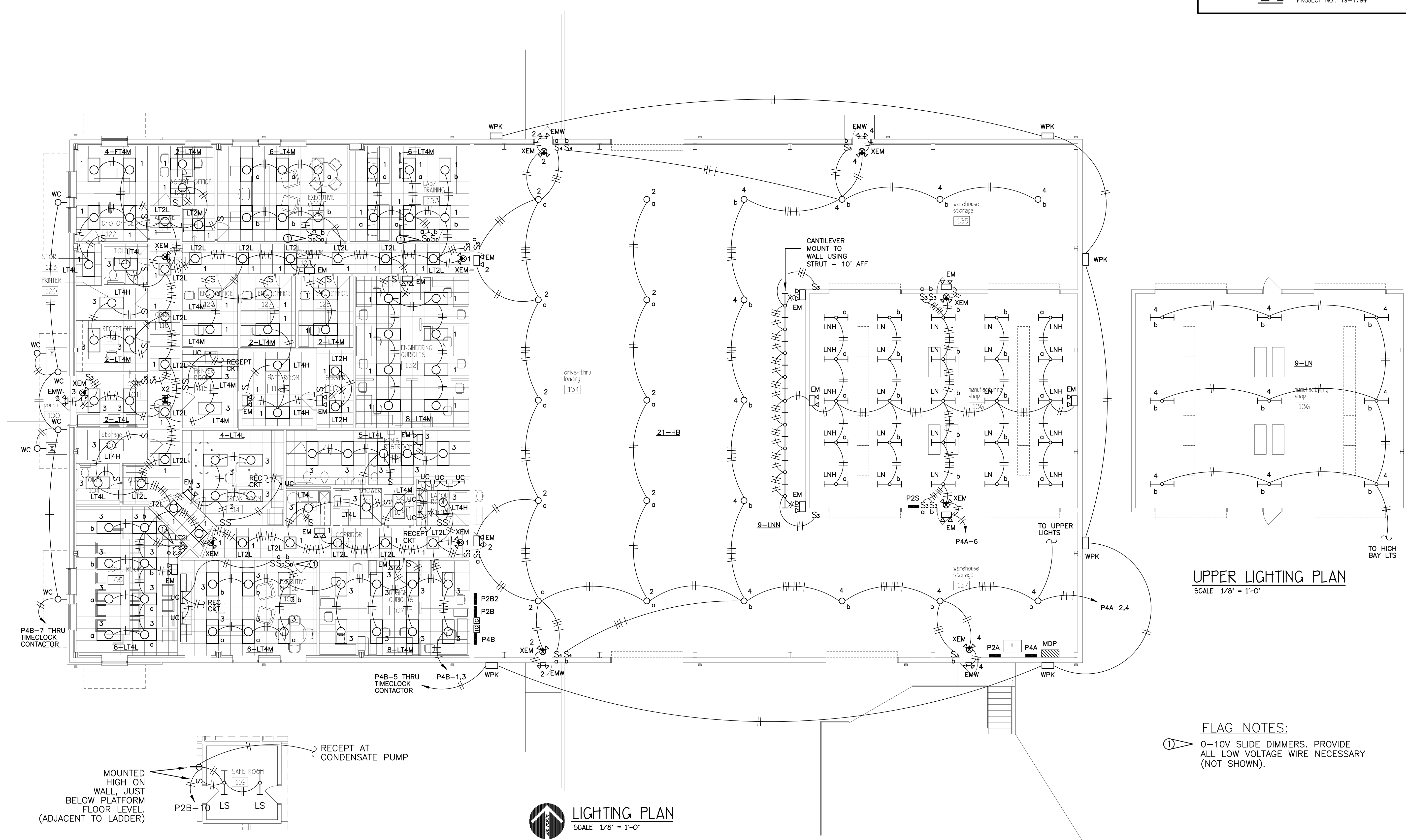
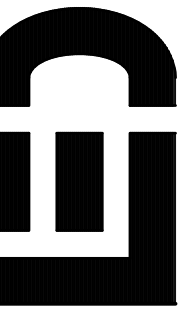
| Location of Wiring Method or Circuit | Type of Wiring Method or Circuit | | | | |
|--|--|---|--|---|--|
| | Column 1 Direct Burial Cables or Conductors | Column 2 Rigid Metal Conduit or Intermediate Metal Conduit | Column 3 Nonmetallic Raceways Listed for Direct Burial Without Concrete Encasement or Other Approved Raceways | Column 4 Residential Branch Circuits Rated 120 Volts or Less With GFCI Protection and Maximum Protection of 20 Amperes | Column 5 Circuits for Control of Irrigation and Landscape Lighting Limited to Not More Than 30 Volts and Installed with Type UF or in Other Identified Cable or Raceway |
| All Locations not Specified Below | 24 | 6 | 18 | 12 | 6 |
| In Trench Below 2" Thick Concrete or Equivalent | 18 | 6 | 12 | 6 | 6 |
| Under Building | 0 (In Raceway Only) | 0 | 0 | 0 (In Raceway Only) | 0 (In Raceway Only) |
| Under Minimum of 4" Thick Concrete Exterior Slab With No Vehicular Traffic and the Slab Extending Not Less Than 6" Beyond the Underground Installation | 18 | 4 | 4 | 6 (Direct Burial) 4 (In Raceway) | 6 |
| Under Streets, Highways, Roads, Alleys, Driveways, and Parking Lots | 24 | 24 | 24 | 24 | 24 |
| One- and Two-Family Dwelling Driveways and Outdoor Parking Areas, and Used Only for Dwelling-Related Purposes | 18 | 18 | 18 | 12 | 18 |
| In or Under Airport Runways, Including Adjacent Areas Where Trespassing is Prohibited | 18 | 18 | 18 | 18 | 18 |

Notes:

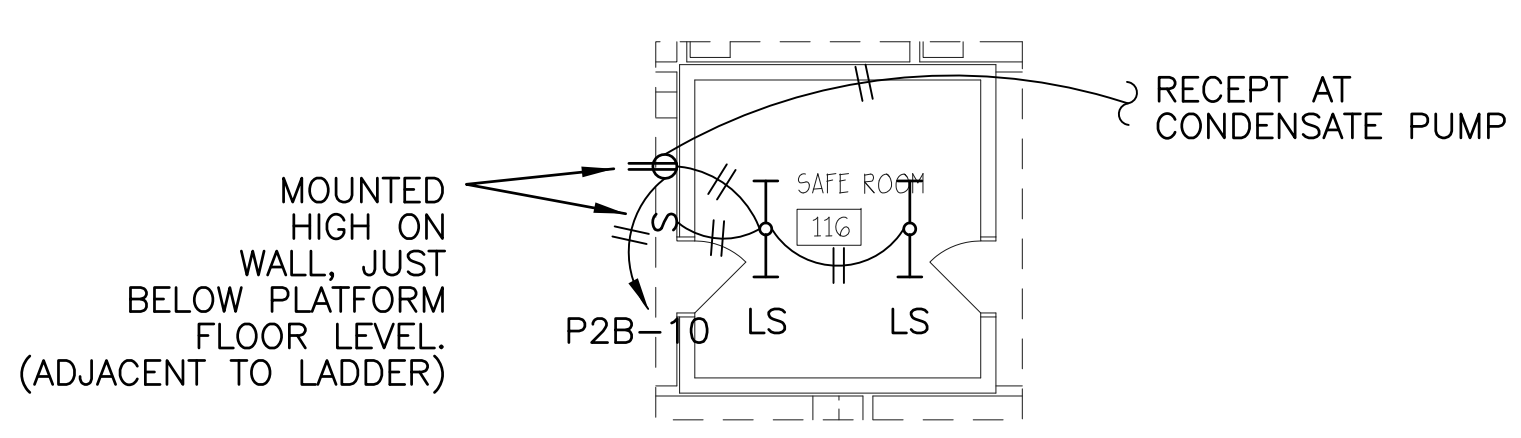
- Cover is defined as the shortest distance in inches measured between a point on the top surface of any direct-buried conductor, cable, conduit, or other raceway and the top surface of finished grade, concrete, or similar cover.
- Raceways approved for burial only where concrete encased shall require concrete envelope not less than 2" thick.
- Lesser depths shall be permitted where cables and conductors rise for termination's or splices or where access is otherwise required.
- Where one of the wiring method types listed in Columns 1-3 is used for one of the circuit types in Column 4 and 5, the shallower depth of burial shall be permitted.
- Where solid rock prevents compliance with the cover depths specified in this table, the wiring shall be installed in metal or nonmetallic raceway permitted for direct burial. The raceways shall be covered by a minimum of 2" of concrete extending down to rock.

NATIONAL ELECTRICAL CODE 2017 EDITION





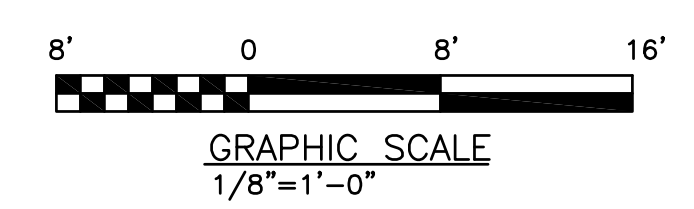
UPPER LIGHTING PLAN
SCALE 1/8" = 1'-0"



MECHANICAL PLATFORM PLAN
SCALE 1/8" = 1'-0"

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

FLAG NOTES:
① 0-10V SLIDE DIMMERS. PROVIDE ALL LOW VOLTAGE WIRE NECESSARY (NOT SHOWN).



T

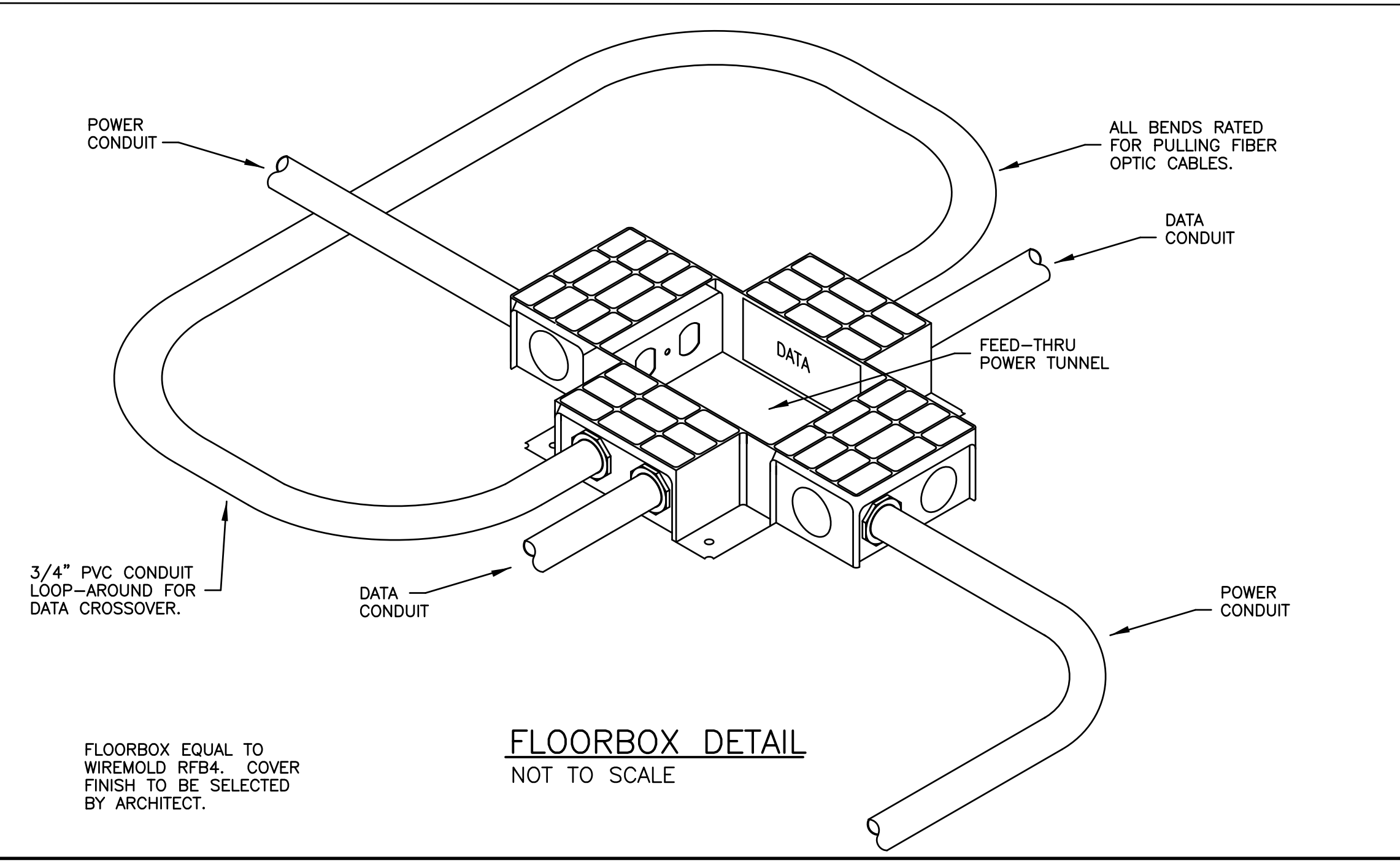
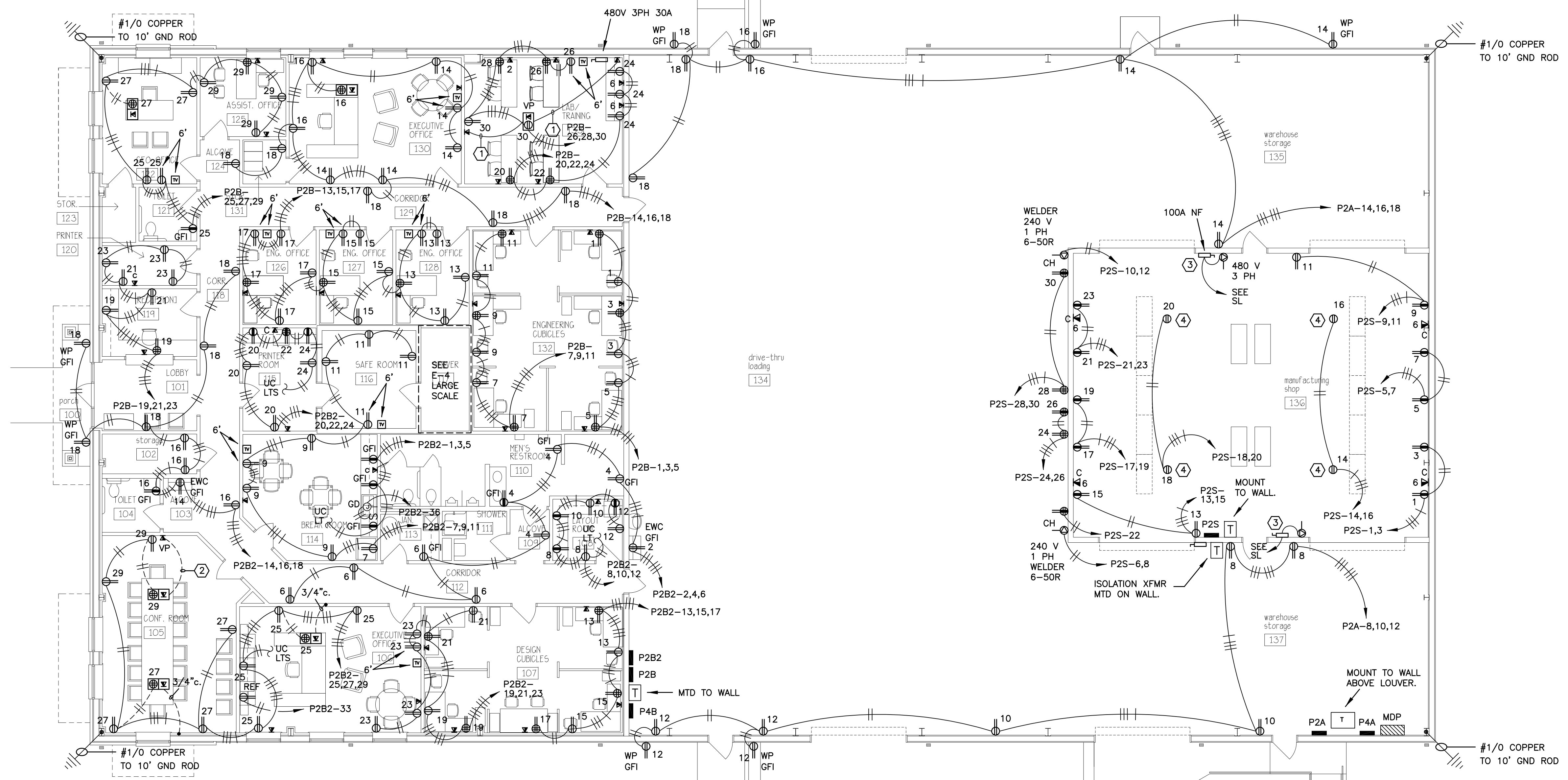
T

T

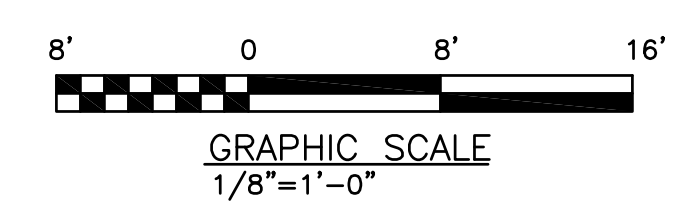
L



- ① VGA & HDMI CABLES FOR VIDEO PROJECTOR CONTROL
- ② VGA, HDMI, & ETHERNET
- ③ 100A PIN & SLEEVE DISC/ RECEPT, HUBBELL HBL4100M17W
- ④ FOR CORD REELS



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

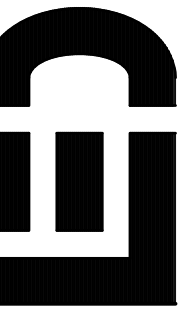


Drawing Title
POWER PLAN
 Drawing Number
E-3
 Of 9

LAMBERT • EZELL • DURHAM
 ARCHITECTURE, LLC
 P.O. Box 934 401 East College St.
 Florence, Alabama 35631
 Telephone (256) 767-7100
 WWW.LAMBERTARCHITECTURE.COM

OFFICE AND SHOP BUILDING FOR
RL CONSULTING, INC.
 TUSCUMBIA, ALABAMA

Job No. 1860
 Date 10/14/2019
 Drawn MAM
 Checked JBL
 Revised
 Revised



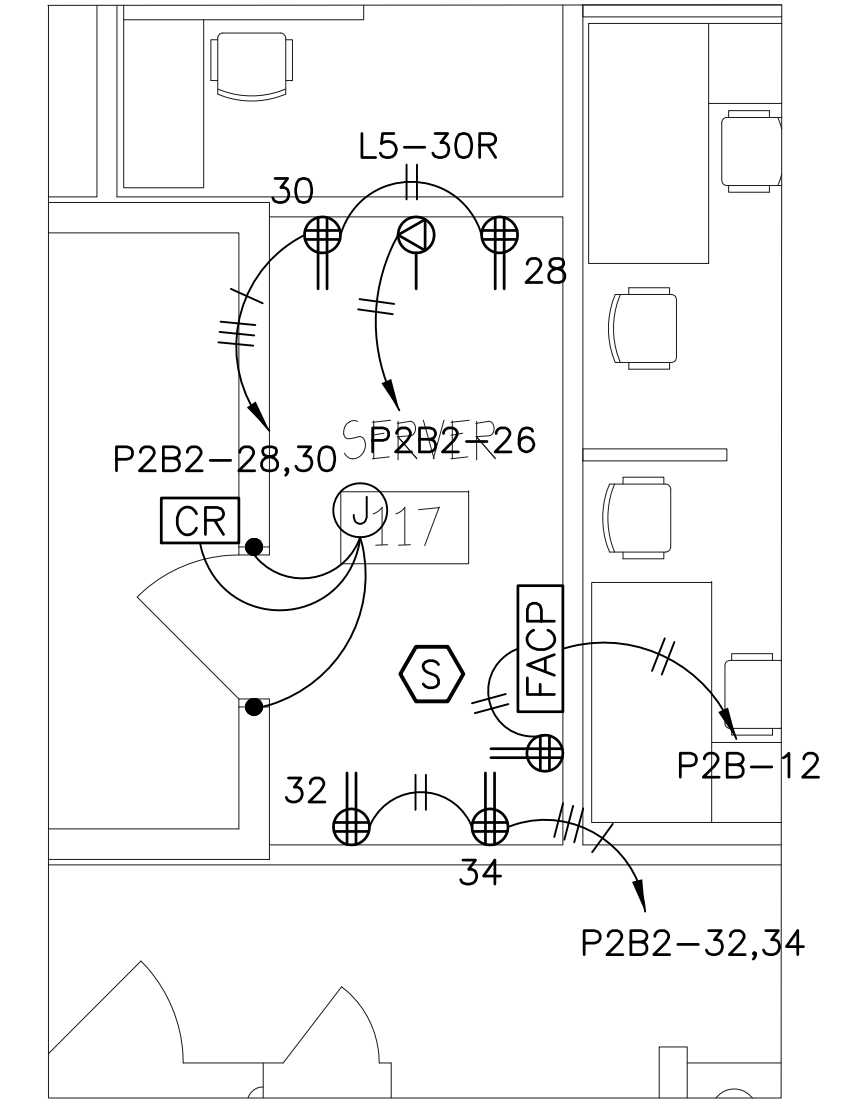
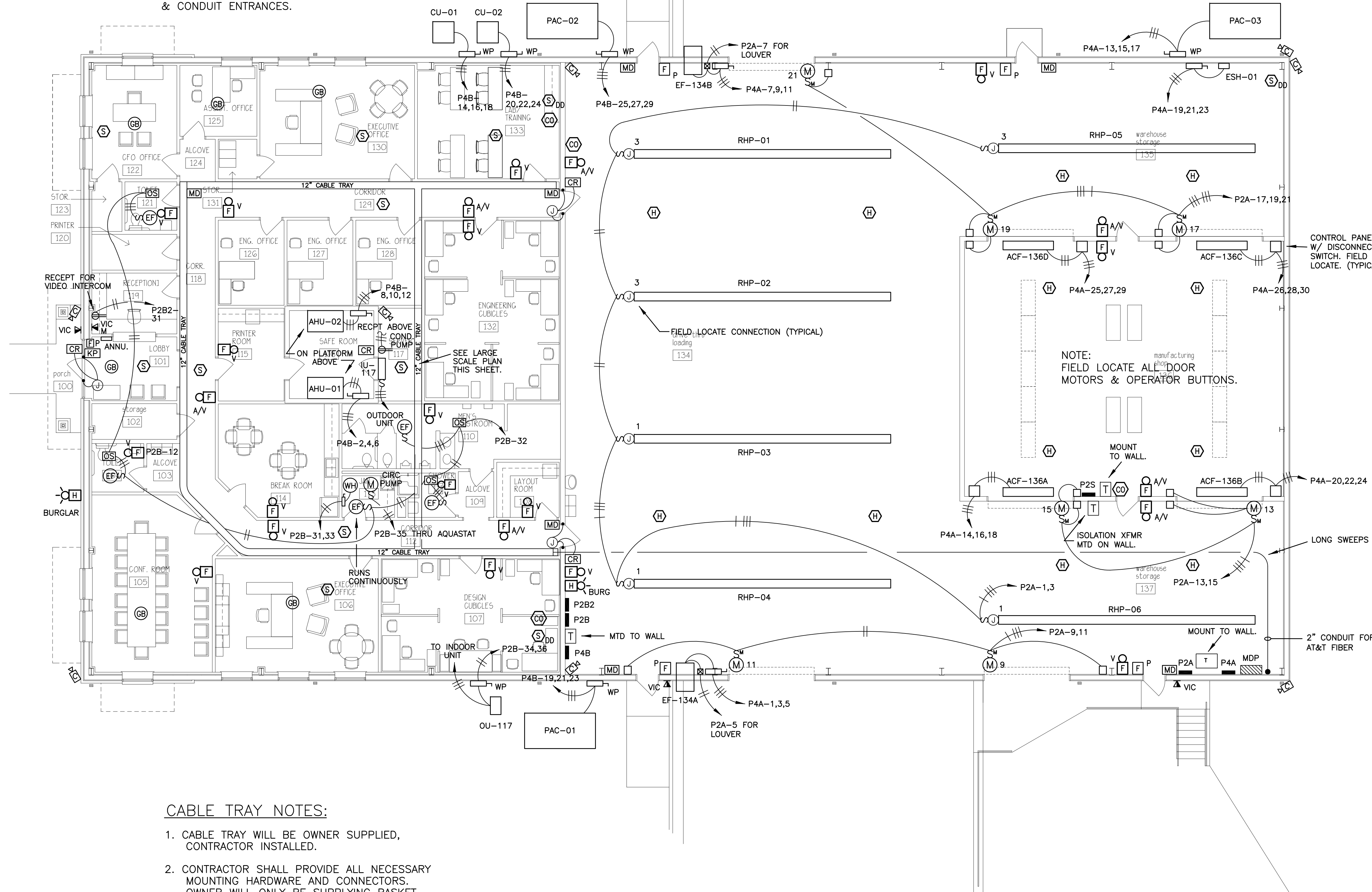
LAMBERT • EZELL • DURHAM
ARCHITECTURE, LLC
Florencia, Alabama 35631
P.O. Box 934 401 East College St.
Telephone (256) 767-7100 WWW.LEDARCHITECTURE.COM

OFFICE AND SHOP BUILDING FOR
RL CONSULTING, INC.
TUSCUMBIA, ALABAMA

Job No. 1860
Date 10/14/2019
Drawn MAM
Checked JBL
Revised
Revised

Drawing Title
EQUIPMENT PLAN
Drawing Number
E-4
Of 9

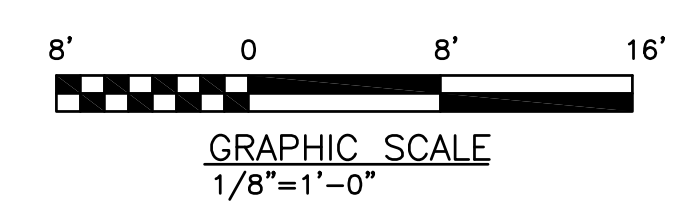
NOTE:
FIELD LOCATE ALL HVAC DISCONNECTS
& CONDUIT ENTRANCES.



LARGE SCALE SERVER ROOM
SCALE 1/4" = 1'-0"

- CABLE TRAY NOTES:**
1. CABLE TRAY WILL BE OWNER SUPPLIED, CONTRACTOR INSTALLED.
 2. CONTRACTOR SHALL PROVIDE ALL NECESSARY MOUNTING HARDWARE AND CONNECTORS. OWNER WILL ONLY BE SUPPLYING BASKET TRAY.
 3. FIELD CUT TRAY FOR BENDS & INTERSECTIONS.

EQUIPMENT PLAN
SCALE 1/8" = 1'-0"



T

T

T

L

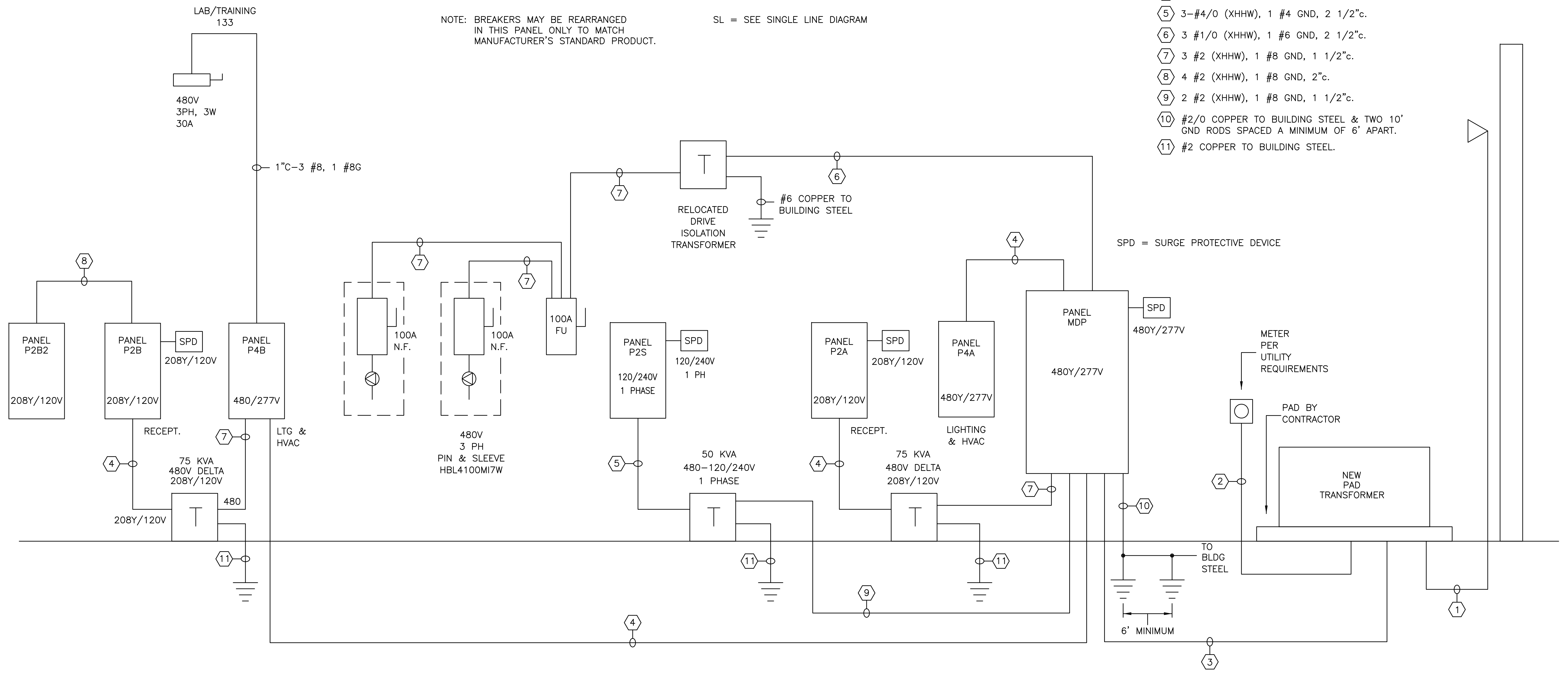


| PANELBOARD SCHEDULE | | | | | | | | | | | | NAMEPLATE | | |
|--------------------------|------|--------------------------------|-------|--|------|----------------------|--------------|----------------------|--------------|------|-------|--------------------|---------|-----------|
| PANEL NAME: MDP | | VOLTS: 480Y/277 | | MAIN BREAKER | | MDP | | | | | | | | |
| LOCATION: REAR WAREHOUSE | | PHASE: 3 | | AMPS: 800 | | 480Y/277V, 3Ø, 4W | | | | | | | | |
| | | WIRE: 4 | | POLES: 3 | | FED FROM UTILITY | | | | | | | | |
| | | MINIMUM K.A.I.C.: 65 | | REMARKS: GND BUS, S.E. LABEL, SCREW NAMEPLATES | | | | | | | | | | |
| CONDUIT | WIRE | ROOM NOS/REMARKS | CIR # | BREAKERS AMP | POLE | AMPS PER PHASE A B C | PHASES A B C | AMPS PER PHASE A B C | BREAKERS AMP | POLE | CIR # | ROOM NOS / REMARKS | CONDUIT | WIRE |
| SL | SL | ISOLATION TRANSFORMER (93 KVA) | 1 | 125 | 3 | 80 | | | | 30 | 3 | 2 | 3/4 | 10+10+10C |
| | | | 3 | | | 80 | | | | | | 4 | | 10 |
| | | | 5 | | | 80 | | | | | | 6 | | 10 |
| SL | SL | PANEL P2S XFMR (1 PH) | 7 | 100 | 3 | 25.5 | | 15 | | 100 | 3 | 8 | SL | SL |
| | | (TWO LEGS USED) | 9 | | | | | 18 | | | | 10 | | SL |
| | | | 11 | | | | | | | | | 12 | | SL |
| | | SPACE ONLY (PROVISION) | 13 | 100 | 3 | 0 | | 0 | | 100 | 3 | 14 | | SL |
| | | | 15 | | | 0 | | 0 | | | | 16 | | |
| | | | 17 | | | 0 | | 0 | | | | 18 | | |
| SL | SL | PANEL P4B (OFFICE) | 19 | 225 | 3 | 132.2 | | 78.5 | | 225 | 3 | 20 | SL | SL |
| | | | 21 | | | 137.5 | | | | | | 22 | | SL |
| | | | 23 | | | | | 80 | | | | 24 | | SL |
| | | SPACE ONLY (PROVISION) | 25 | 225 | 3 | 0 | | 0 | | 225 | 3 | 26 | | |
| | | | 27 | | | 0 | | 0 | | | | 28 | | |
| | | | 29 | | | 0 | | 0 | | | | 30 | | |
| | | SPACE ONLY (PROVISION) | 31 | 225 | 3 | 0 | | 0 | | 225 | 3 | 32 | | |
| | | | 33 | | | 0 | | 0 | | | | 34 | | |
| | | | 35 | | | 0 | | 0 | | | | 36 | | |
| | | SPACE ONLY (PROVISION) | 37 | 225 | 3 | 0 | | 0 | | 225 | 3 | 38 | | |
| | | | 39 | | | 0 | | 0 | | | | 40 | | |
| | | | 41 | | | 0 | | 0 | | | | 42 | | |
| | | CONNECTED LOAD (AMPS) - | | | | | 331.2 | 315.9 | 323.8 | | | | | |

NOTE: BREAKERS MAY BE REARRANGED IN THIS PANEL ONLY TO MATCH MANUFACTURER'S STANDARD PRODUCT. SL = SEE SINGLE LINE DIAGRAM

FEEDER WIRE SCHEDULE

- 1 TWO 4" CONDUITS WITH RIGID GALVANIZED 90'S AS REQUIRED BY THE UTILITY. CONTRACTOR SHALL INCLUDE \$5/LINEAR FOOT AID-TO CONSTRUCTION COST IN BID PRICE.
- 2 CONDUIT FOR C.T. METER PER UTILITY REQUIREMENTS.
- 3 TWO PARALLEL RUNS, EACH WITH 4 #350 (XHHW), 2-3 1/2" CONDUITS.
- 4 4-#4/0 (XHHW), 1 #4 GND, 2 1/2" c.
- 5 3-#4/0 (XHHW), 1 #4 GND, 2 1/2" c.
- 6 3 #1/0 (XHHW), 1 #6 GND, 2 1/2" c.
- 7 3 #2 (XHHW), 1 #8 GND, 1 1/2" c.
- 8 4 #2 (XHHW), 1 #8 GND, 2" c.
- 9 2 #2 (XHHW), 1 #8 GND, 1 1/2" c.
- 10 #2/0 COPPER TO BUILDING STEEL & TWO 10' GND RODS SPACED A MINIMUM OF 6' APART.
- 11 #2 COPPER TO BUILDING STEEL.



SINGLE LINE DIAGRAM
NO SCALE

LAMBERT • EZELL • DURHAM
ARCHITECTURE, LLC
F.O. Box 934 401 East College St. Florence, Alabama 35631
Telephone (256) 767-7100 WWW.LAMBERTARCHITECTURE.COM

OFFICE AND SHOP BUILDING FOR
RL CONSULTING, INC.
TUSCUMBIA, ALABAMA

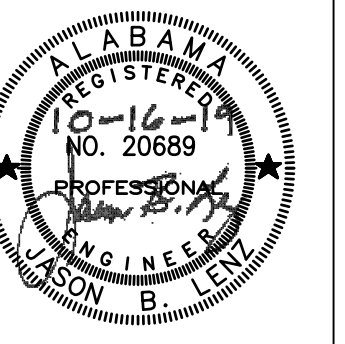
Job No. 1860
Date 10/14/2019
Drawn MAM
Checked JBL
Revised
Revised

Drawing Title
SINGLE LINE DIAGRAM
+ DETAILS
Drawing Number
E-5
OF 9

| | |
|-----|------|
| P4A | P4B |
| P2A | P2B |
| P2S | P2B2 |

SHOALS ENGINEERING, PC

1138 N. WOOD AVE.
FLORENCE, ALABAMA, 35630
TEL: (256) 764-0817
www.shoalseng.com
PROJECT NO.: 19-1794



NAMEPLATE

| PANELBOARD SCHEDULE | | VOLTS: 480Y/277 | | MAIN: LUGS | | MOUNT: SURFACE | | P4A | | | | |
|--------------------------|--------|--|-------|-------------------|----------------------|----------------|----------------------|-------------------|-------|--------------------------|---------|--------|
| PANEL NAME: P4A | | PHASE: 3 | | AMPS: 225 | | | | 480Y/277V, 3ø, 4W | | | | |
| LOCATION: REAR WAREHOUSE | | WIRE: 4 | | POLES: 3 | | | | FED FROM "MDP" | | | | |
| MINIMUM K.A.I.C.: 35 | | REMARKS: GND BUS, PERM CKT NO'S, SCREW NAMEPLATE | | | | | | | | | | |
| CONDUIT | WIRE | ROOM NOS/REMARKS | CIR # | BREAKERS AMP POLE | AMPS PER PHASE A B C | PHASES A B C | AMPS PER PHASE A B C | BREAKERS AMP POLE | CIR # | ROOM NOS / REMARKS | CONDUIT | WIRE |
| 3/4 | 10+10G | EXH. FAN 134A 3/4 HP | 1 | 15 3 | 2 | | | 20 1 | 2 | WAREHOUSE HIGH BAY LTS | 3/4 | 10+10G |
| 10 | | | 3 | | 2 | | | 20 1 | 4 | WAREHOUSE HIGH BAY LTS | | 10+10N |
| 10 | | | 5 | | 2 | | 7.5 | 20 1 | 6 | MANUF. SHOP LTS | | 12+N+G |
| 3/4 | 10+10G | EXH. FAN 134B 3/4 HP | 7 | 15 3 | 2 | | | 20 1 | 8 | SPARE | 1/2 | 12+N+G |
| 10 | | | 9 | | 2 | | | 20 1 | 10 | SPARE | | 10+10G |
| 10 | | | 11 | | 2 | | | 20 1 | 12 | SPARE | | 10+10G |
| 3/4 | 10+10G | PAC-03 OUTDOOR PACKAGE UNIT | 13 | 25 3 | 20 | | | 25 3 | 14 | AIR CURTAIN FAN ACF-136A | 3/4 | 10+10G |
| 10 | | | 15 | | 20 | | | 11 | | | | 10+10G |
| 10 | | | 17 | | 20 | | | 11 | | | | 10+10G |
| 3/4 | 10+10G | ESH-01 STEAM HUMIDIFIER | 19 | 15 3 | 4.5 | | | 25 3 | 20 | AIR CURTAIN FAN ACF-136B | 3/4 | 10+10G |
| 10 | | | 21 | | 4.5 | | | 11 | | | | 10+10G |
| 10 | | | 23 | | 4.5 | | | 11 | | | | 10+10G |
| 3/4 | 10+10G | AIR CURTAIN FAN ACF-136D | 25 | 25 3 | 11 | | | 25 3 | 26 | AIR CURTAIN FAN ACF-136C | 3/4 | 10+10G |
| 10 | | | 27 | | 11 | | | 11 | | | | 10+10G |
| 10 | | | 29 | | 11 | | | 11 | | | | 10+10G |
| | | SPACE ONLY | 31 | 20 1 | 0 | | | 20 1 | 32 | SPACE ONLY | | |
| | | SPACE ONLY | 33 | 20 1 | 0 | | | 20 1 | 34 | SPACE ONLY | | |
| | | SPACE ONLY | 35 | 20 1 | 0 | | | 20 1 | 36 | SPACE ONLY | | |
| | | SPACE ONLY | 37 | 20 1 | 0 | | | 20 1 | 38 | SPACE ONLY | | |
| | | SPACE ONLY | 39 | 20 1 | 0 | | | 20 1 | 40 | SPACE ONLY | | |
| | | SPACE ONLY | 41 | 20 1 | 0 | | | 20 1 | 42 | SPACE ONLY | | |
| | | CONNECTED LOAD (AMPS) - | | | | | | | | | | |

NAMEPLATE

| PANELBOARD SCHEDULE | | VOLTS: 208Y/120 | | MAIN: BREAKER | | MOUNT: SURFACE | | P2A | | | | |
|--------------------------|------------|--|-------|-------------------|----------------------|----------------|----------------------|-------------------|-------|------------------------------------|---------|------------|
| PANEL NAME: P2A | | PHASE: 3 | | AMPS: 225 | | | | 208Y/120V, 3ø, 4W | | | | |
| LOCATION: REAR WAREHOUSE | | WIRE: 4 | | POLES: 3 | | | | MDP VIA XFMR | | | | |
| MINIMUM K.A.I.C.: 10 | | REMARKS: GND BUS, PERM CKT NO'S, SCREW NAMEPLATE | | | | | | | | | | |
| CONDUIT | WIRE | ROOM NOS/REMARKS | CIR # | BREAKERS AMP POLE | AMPS PER PHASE A B C | PHASES A B C | AMPS PER PHASE A B C | BREAKERS AMP POLE | CIR # | ROOM NOS / REMARKS | CONDUIT | WIRE |
| 3/4 | 10+10N+10G | WAREHOUSE INFRARED HEATERS | 1 | 20 1 | 6 | | | 30 3 | 2 | SURGE PROTECTIVE DEVICE | 3/4 | 10+10N+10G |
| 10+10N | | WAREHOUSE INFRARED HEATERS | 3 | 20 1 | 6 | | | | 4 | | | 10+10N |
| 3/4 | 10+10N+10G | EXH. FAN EF-134A LOUVER | 5 | 20 1 | | 3 | | | 6 | | | 10+10N |
| 3/4 | 10+10N+10G | EXH. FAN EF-134B LOUVER | 7 | 20 1 | 3 | | | 20 1 | 8 | WAREHOUSE RECEPT SOUTH OF SHOP | 1/2 | 12+N+G |
| 10+10N+10G | | ROLL-UP DOOR MOTOR | 9 | 20 1 | 9.8 | | | 20 1 | 10 | WAREHOUSE RECEPT SOUTH OF SHOP | | 12+N |
| 10+10N | | ROLL-UP DOOR MOTOR | 11 | 20 1 | | 9.8 | | 20 1 | 12 | SOUTH WAREHOUSE RECEPT NEAR OFFICE | | 12+N |
| 3/4 | 10+10N+10G | ROLL-UP DOOR MOTOR | 13 | 20 1 | 9.8 | | | 20 1 | 14 | WAREHOUSE RECEPT NORTH OF SHOP | 3/4 | 10+10N+10G |
| 10+10N | | ROLL-UP DOOR MOTOR | 15 | 20 1 | 9.8 | | | 20 1 | 16 | NORTH WAREHOUSE RECEPT | | 10+10N |
| 3/4 | 10+10N+10G | ROLL-UP DOOR MOTOR | 17 | 20 1 | 9.8 | | | 20 1 | 18 | NORTH WAREHOUSE RECEPT NEAR OFFICE | | 10+10N |
| 10+10N | | ROLL-UP DOOR MOTOR | 19 | 20 1 | 9.8 | | | 20 1 | 20 | SPARE | | |
| 10+10N | | ROLL-UP DOOR MOTOR | 21 | 20 1 | 9.8 | | | 20 1 | 22 | SPARE | | |
| | | SPACE ONLY | 23 | 20 1 | 0 | | | 20 1 | 24 | SPACE ONLY | | |
| | | SPACE ONLY | 25 | 20 1 | 0 | | | 20 1 | 26 | SPACE ONLY | | |
| | | SPACE ONLY | 27 | 20 1 | 0 | | | 20 1 | 28 | SPACE ONLY | | |
| | | SPACE ONLY | 29 | 20 1 | 0 | | | 20 1 | 30 | SPACE ONLY | | |
| | | SPACE ONLY | 31 | 20 1 | 0 | | | 20 1 | 32 | SPACE ONLY | | |
| | | SPACE ONLY | 33 | 20 1 | 0 | | | 20 1 | 34 | SPACE ONLY | | |
| | | SPACE ONLY | 35 | 20 1 | 0 | | | 20 1 | 36 | SPACE ONLY | | |
| | | SPACE ONLY | 37 | 20 1 | 0 | | | 20 1 | 38 | SPACE ONLY | | |
| | | SPACE ONLY | 39 | 20 1 | 0 | | | 20 1 | 40 | SPACE ONLY | | |
| | | SPACE ONLY | 41 | 20 1 | 0 | | | 20 1 | 42 | SPACE ONLY | | |
| | | CONNECTED LOAD (AMPS) - | | | | | | | | | | |

NAMEPLATE

| PANELBOARD SCHEDULE | | VOLTS: 120/240 | | MAIN: BREAKER | | MOUNT: SURFACE | | P2S | | | | |
|------------------------------|--------|--|-------|-------------------|--------------------|----------------|--------------------|-------------------|-------|---------------------------|---------|------------|
| PANEL NAME: P2S | | PHASE: 1 | | AMPS: 225 | | | | 120/240V, 1ø, 3W | | | | |
| LOCATION: MANUFACTURING SHOP | | WIRE: 3 | | POLES: 2 | | | | MDP VIA XFMR | | | | |
| MINIMUM K.A.I.C.: 10 | | REMARKS: GND BUS, PERM CKT NO'S, SCREW NAMEPLATE | | | | | | | | | | |
| CONDUIT | WIRE | ROOM NOS/REMARKS | CIR # | BREAKERS AMP POLE | AMPS PER PHASE A B | PHASES A B | AMPS PER PHASE A B | BREAKERS AMP POLE | CIR # | ROOM NOS / REMARKS | CONDUIT | WIRE |
| 1/2 | 12+N+G | EAST SHOP BENCH RECEPT | 1 | 20 1 | 1.5 | | | 30 2 | 2 | SURGE PROTECTIVE DEVICE | 3/4 | 10+10N+10G |
| 12+N | | EAST SHOP BENCH RECEPT | 3 | 20 1 | 1.5 | | | | 4 | | | 10+10N |
| 1/2 | 12+N+G | EAST SHOP BENCH RECEPT | 5 | 20 1 | 1.5 | | | 50 2 | 6 | WELDER RECEPTACLE | 1 | 6+10G |
| 12+N | | EAST SHOP BENCH RECEPT | 7 | 20 1 | 1.5 | | | | 8 | | | 6+10G |
| 1/2 | 12+N+G | EAST SHOP BENCH RECEPT | 9 | 20 1 | 1.5 | | | 50 2 | 10 | WELDER RECEPTACLE | 1 | 6+10G |
| 12+N | | NORTH SHOP RECEPT NEAR DOORS | 11 | 20 1 | 1.5 | | | | 12 | | | 6+10G |
| 1/2 | 12+N+G | SOUTH SHOP RECEPT NEAR DOORS | 13 | 20 1 | 1.5 | | | 20 1 | 14 | CORD REEL RECEPT | 1/2 | 12+N+G |
| 12+N | | WEST SHOP BENCH RECEPT | 15 | 20 1 | 1.5 | | | 15 20 | 16 | CORD REEL RECEPT | | 12+N |
| 1/2 | 12+N+G | WEST SHOP BENCH RECEPT | 17 | 20 1 | 1.5 | | | 20 1 | 18 | CORD REEL RECEPT | 1/2 | 12+N+G |
| 12+N | | WEST SHOP BENCH RECEPT | 19 | 20 1 | 1.5 | | | 20 1 | 20 | CORD REEL RECEPT | | 12+N |
| 1/2 | 12+N+G | WEST SHOP BENCH RECEPT | 21 | 20 1 | 1.5 | | | 20 1 | 22 | BENCH RECEPT OUTSIDE SHOP | 1/2 | 12+N+G |
| 12+N | | WEST SHOP BENCH RECEPT | 23 | 20 1 | 1.5 | | | 20 1 | 24 | BENCH RECEPT OUTSIDE SHOP | 1/2 | 12+N+G |
| | | SPACE ONLY | 25 | 20 1 | 0 | | | 20 1 | 26 | BENCH RECEPT OUTSIDE SHOP | | 12+N |
| | | SPACE ONLY | 27 | 20 1 | 0 | | | 20 1 | 28 | BENCH RECEPT OUTSIDE SHOP | 1/2 | 12+N+G |
| | | SPACE ONLY | 29 | 20 1 | 0 | | | 20 1 | 30 | BENCH RECEPT OUTSIDE SHOP | | 12+N |
| | | SPACE ONLY | 31 | 20 1 | 0 | | | 20 1 | 32 | SPACE ONLY | | |
| | | SPACE ONLY | 33 | 20 1 | 0 | | | 20 1 | 34 | SPACE ONLY | | |
| | | SPACE ONLY | 35 | 20 1 | 0 | | | 20 1 | 36 | SPACE ONLY | | |
| | | SPACE ONLY | 37 | 20 1 | 0 | | | 20 1 | 38 | SPACE ONLY | | |
| | | SPACE ONLY | 39 | 20 1 | 0 | | | 20 1 | 40 | SPACE ONLY | | |
| | | SPACE ONLY | 41 | 20 1 | 0 | | | 20 1 | 42 | SPACE ONLY | | |
| | | CONNECTED LOAD (AMPS) - | | | | | | | | | | |

NAMEPLATE

| PANELBOARD SCHEDULE | | VOLTS: 208Y/120 | | MAIN: LUGS | | MOUNT: SURFACE | | P2B2 | | | | | | |
|---------------------------------|--------|--|-------|-------------------|----------------------|----------------|----------------------|-------------------|-------|-------------------------------|----------------------------------|------------------------------|------------|--------|
| PANEL NAME: P2B2 | | PHASE: 3 | | AMPS: 100 | | | | 208Y/120V, 3ø, 4W | | | | | | |
| LOCATION: WAREHOUSE NEAR OFFICE | | WIRE: 4 | | POLES: 3 | | | | FED FROM "P2B" | | | | | | |
| MINIMUM K.A.I.C.: 10 | | REMARKS: GND BUS, PERM CKT NO'S, SCREW NAMEPLATE | | | | | | | | | | | | |
| CONDUIT | WIRE | ROOM NOS/REMARKS | CIR # | BREAKERS AMP POLE | AMPS PER PHASE A B C | PHASES A B C | AMPS PER PHASE A B C | BREAKERS AMP POLE | CIR # | ROOM NOS / REMARKS | CONDUIT | WIRE | | |
| 1/2 | 12+N+G | BREAKROOM COUNTER RECEPTACLE | 1 | 20 1 | 1.5 | | | 1.5 | 2 | ELECTRIC WATER COOLER | 1/2 | 12+N+G | | |
| 12+N | | BREAKROOM COUNTER RECEPTACLE | 3 | 20 1 | 1.5 | | | | 6 | RESTROOM, ALCOVE RECEPTACLES | | 12+N | | |
| 12+N | | BREAKROOM COUNTER RECEPTACLE | 5 | 20 1 | 1.5 | | | | 6 | JANITOR, CORRIDOR RECEPTACLES | | 12+N | | |
| 1/2 | 12+N+G | BREAKROOM REFRIGERATOR | 7 | 20 1 | 1.5 | | | 3 | 20 1 | 8 | LAYOUT ROOM RECEPTACLES | 1/2 | 12+N+G | |
| 12+N | | BREAKROOM WALL RECEPTACLES | 9 | 20 1 | 6 | | | | 3 | 20 1 | 10 | LAYOUT ROOM RECEPTACLES | | 12+N |
| 12+N | | SAFE ROOM RECEPTACLES | 11 | 20 1 | 6 | | | | 3 | 20 1 | 12 | LAYOUT ROOM RECEPTACLES | | 12+N |
| 1/2 | 12+N+G | DESIGN CUBICLE RECEPTACLES | 13 | 20 1 | 4.5 | | | 1.5 | 20 1 | 14 | ELECTRIC WATER COOLER | 1/2 | 12+N+G | |
| 12+N | | DESIGN CUBICLE RECEPTACLES | 15 | 20 1 | 4.5 | | | | 6 | 20 1 | 16 | TOILET & STORAGE RECEPTACLES | | 12+N |
| 12+N | | DESIGN CUBICLE RECEPTACLES | 17 | 20 1 | 4.5 | | | 3 | 20 1 | 18 | LOBBY, CORRIDOR, OUTDOOR RECEPT. | | 12+N | |
| 1/2 | 12+N+G | DESIGN CUBICLE RECEPTACLES | 19 | 20 1 | 4.5 | | | 4.5 | 3 | 20 1 | 20 | PRINTER ROOM RECEPTACLES | 1/2 | 12+N+G |
| 12+N | | DESIGN CUBICLE RECEPTACLES | 21 | 20 1 | 4.5 | | | | 3 | 20 1 | 22 | PRINTER ROOM RECEPTACLES | | 12+N |
| 12+N | | EXEC. OFFICE RECEPTACLES | 23 | 20 1 | 6 | | | | 3 | 20 1 | 24 | PRINTER ROOM RECEPTACLES | | 12+N |
| 1/2 | 12+N+G | EXEC. OFFICE RECEPTACLES | 25 | 20 1 | 9 | | | 10 | 30 1 | 26 | SERVER ROOM SPECIAL RECEPTACLE | 3/4 | 10+10N+10G | |
| 12+N | | CONFERENCE ROOM RECEPTACLES | 27 | 20 1 | 7.5 | | | | 3 | 20 1 | 28 | SERVER ROOM RECEPTACLES | 1/2 | 12+N+G |
| 12+N | | CONFERENCE ROOM RECEPTACLES | 29 | 20 1 | 7.5 | | | | 3 | 20 1 | 30 | SERVER ROOM RECEPTACLES | | 12+N |
| 1/2 | 12+N+G | VIDEO INTERCOM | 31 | 20 1 | 0 | | | 3 | 20 1 | 32 | SERVER ROOM RECEPTACLES | 1/2 | 12+N+G | |
| 12+N | | EXEC. OFFICE REFRIGERATOR | 33 | 20 1 | 0 | | | | 3 | 20 1 | 34 | SERVER ROOM RECEPTACLES | | 12+N |
| | | SPACE ONLY | 35 | 20 1 | 0 | | | | 0 | 20 1 | 36 | GARBAGE DISPOSAL | 1/2 | 12+N+G |
| | | SPACE ONLY | 37 | 20 1 | 0 | | | | 0 | 20 1 | 38 | SPACE ONLY | | |
| | | SPACE ONLY | 39 | 20 1 | 0 | | | | 0 | 20 1 | 40 | SPACE ONLY | | |
| | | SPACE ONLY | 41 | 20 1 | 0 | | | | 0 | 20 1 | 42 | SPACE ONLY | | |
| | | CONNECTED LOAD (AMPS) - | | | | | | | | | | | | |

NAMEPLATE

| PANELBOARD SCHEDULE | | VOLTS: 208Y/120 | | MAIN: BREAKER | | MOUNT: SURFACE | | P2B | | | | | |
|---------------------------------|--------|--|-------|-------------------|----------------------|----------------|----------------------|-------------------|-------|-------------------------|-----------------------------|------------------|------------|
| PANEL NAME: P2B | | PHASE: 3 | | AMPS: 225 | | | | 208Y/120V, 3ø, 4W | | | | | |
| LOCATION: WAREHOUSE NEAR OFFICE | | WIRE: 4 | | POLES: 3 | | | | P4B VIA XFMR | | | | | |
| MINIMUM K.A.I.C.: 10 | | REMARKS: GND BUS, PERM CKT NO'S, SCREW NAMEPLATE | | | | | | | | | | | |
| CONDUIT | WIRE | ROOM NOS/REMARKS | CIR # | BREAKERS AMP POLE | AMPS PER PHASE A B C | PHASES A B C | AMPS PER PHASE A B C | BREAKERS AMP POLE | CIR # | ROOM NOS / REMARKS | CONDUIT | WIRE | |
| 1/2 | 12+N+G | ENG. CUBICLES RECEPTACLES | 1 | 20 1 | 4.5 | | | 30 3 | 2 | SURGE PROTECTIVE DEVICE | 3/4 | 10+10N+10G | |
| 12+N | | ENG. CUBICLES RECEPTACLES | 3 | 20 1 | 4.5 | | | | 4 | | | 10+10N | |
| 12+N | | ENG. CUBICLES RECEPTACLES | 5 | 20 1 | 4.5 | | | | 6 | | | 10+10N | |
| 1/2 | 12+N+G | ENG. CUBICLES RECEPTACLES | 7 | 20 1 | 4.5 | | | 2 | 20 1 | 8 | FLAGPOLE & SIGN FLOODLIGHTS | 3/4 | 10+10N+10G |
| 12+N | | ENG. CUBICLES RECEPTACLES | 9 | 20 1 | 4.5 | | | 2.5 | 20 1 | 10 | MECH PLATFORM LTS & RECEPT | 1/2 | 12+N+G |
| 1/2 | 12+N+G | ENG. OFFICE 12B RECEPT | 13 | 20 1 | 9 | | | 7.5 | 5 | 20 1 | 12 | FIRE ALARM PANEL | 1/2 |

LIGHTING FIXTURE SCHEDULE

| SYMBOL | MANUFACTURER | CATALOG NO. | LAMPS | | | MOUNTING | HEIGHT | REMARKS |
|--------|--------------|---|-------|-------|--------|----------|-----------|---|
| | | | NO. | WATTS | TYPE | | | |
| EM | WILLIAMS | EMER/LED-WHT | 2 | 1 | L.E.D. | WALL | 8'-0" | DUAL HEAD EMERGENCY LIGHT |
| EMW | WILLIAMS | EMER/DECO-DBR-D | 2 | 3 | L.E.D. | WALL | 8'-0" | EXTERIOR EMERGENCY LIGHT, DARK BRONZE |
| GF | STONCO | FL40-NW-G1-K-FL-8-BZ | - | 39 | L.E.D. | KNUCKLE | GROUND | GROUND MOUNTED FLOODLIGHT, BRONZE, 4000K, 4433 LUMENS |
| HB | WILLIAMS | GC-L190/840-W-DIM-UNV-HK10 | - | 150 | L.E.D. | HOOK | VARIES | HIGH BAY L.E.D. FIXTURE, 19,000 LUMENS, 4000K, WIDE DIST, HOOK |
| LN | WILLIAMS | 80-4-L63/840-DIM-UNV | - | 52 | L.E.D. | CHAIN | 16' | 4' INDUSTRIAL FIXTURE, 4000K, 6,300 LUMENS, PAF |
| LNH | WILLIAMS | 82-4-L107/840-DIM-UNV | - | 87 | L.E.D. | CHAIN | 16' | 4' INDUSTRIAL FIXTURE, 4000K, 10,700 LUMENS, PAF |
| LNN | WILLIAMS | GLN-4-L63/840-(L47)-DIM-UNV-WG11 | - | 30 | L.E.D. | STRUT | 10' | 4' NARROW INDUSTRIAL, 4000K, 4,700 LUMENS, PAF, WIREGUARD |
| LP2 | GARDCO | (2) ECF-S-48L-1A-NW-G2-AR-4-UNV-BZ SSA5-STB-25M-D2-BRP | 2 | 159 | L.E.D. | POLE | 25' | DOUBLE AREA LIGHT ON 25' POLE, 4000K, 19,000 LUMENS, TYPE 4 |
| LT2H | WILLIAMS | PT-22-L52-840-RA-DIM-UNV | - | 44 | L.E.D. | FLUSH | CEILING | 2' X 2' LED CENTER DIFFUSER TROFFER, 4000K, 5,200 LUMENS, PAF |
| LT2L | WILLIAMS | PT-22-L26-840-RA-DIM-UNV | - | 22 | L.E.D. | FLUSH | CEILING | 2' X 2' LED CENTER DIFFUSER TROFFER, 4000K, 2,600 LUMENS, PAF |
| LT2M | WILLIAMS | PT-22-L43-840-RA-DIM-UNV | - | 35 | L.E.D. | FLUSH | CEILING | 2' X 2' LED CENTER DIFFUSER TROFFER, 4000K, 4,300 LUMENS, PAF |
| LT4H | WILLIAMS | PT-24-L61-840-RA-DIM-UNV | - | 49 | L.E.D. | FLUSH | CEILING | 2' X 4' LED CENTER DIFFUSER TROFFER, 4000K, 6,100 LUMENS, PAF |
| LT4L | WILLIAMS | PT-24-L38-840-RA-DIM-UNV | - | 32 | L.E.D. | FLUSH | CEILING | 2' X 4' LED CENTER DIFFUSER TROFFER, 4000K, 3,800 LUMENS, PAF |
| LT4M | WILLIAMS | PT-24-L49-840-RA-DIM-UNV | - | 38 | L.E.D. | FLUSH | CEILING | 2' X 4' LED CENTER DIFFUSER TROFFER, 4000K, 4,900 LUMENS, PAF |
| LS | WILLIAMS | 75R-4-L50/840-DIM-UNV-WG75 | - | 42 | L.E.D. | CHAIN | VERIFY | 4' STRIP WITH WIREGUARD, 4000K, 5,000 LUMENS, PAF |
| UC | WILLIAMS | 1SF-2-L12/840-AF12125-DIM-UNV | - | 14 | L.E.D. | SURFACE | UNDER CAB | 2' UNDER CABINET LIGHT, 1,200 LUMENS, 4000K, PAF |
| WC | CONTECH | CYL6340KMVDUDXMCLR-BZ | - | 40 | L.E.D. | WALL | VERIFY | WALL MOUNTED EXTERIOR UP/DOWN CYLINDER, 4000K, 2000 LUMENS UP, 2000 LUMENS DOWN |
| WPK | WILLIAMS | WPCL-L200/840-BZ-DIM-UNV | - | 188 | L.E.D. | - | - | EXTERIOR WALL PACK, 4000K, 20,000 LUMENS |
| X | WILLIAMS | EXIT-G-EM-WHT | - | - | L.E.D. | SURFACE | WALL/CEIL | EXIT LIGHT, WHITE HOUSING, GREEN LETTERS |
| X2 | WILLIAMS | EXIT-G-EM-WHT | - | - | L.E.D. | SURFACE | WALL/CEIL | DOUBLE FACE EXIT LIGHT |
| XEM | WILLIAMS | EXIT/EM/LED-G-WHT | 2 | 1 | L.E.D. | SURFACE | WALL/CEIL | COMBINATION EXIT/EMERGENCY LIGHT, WHITE FACE, GREEN LETTERS |

FIXTURE SCHEDULE NOTES:

1. FIXTURES SHALL BE FURNISHED COMPLETE WITH ALL LAMPS AND MOUNTING HARDWARE.
2. SEE ARCHITECTURAL FINISH SCHEDULE FOR CEILING TYPES. COORDINATE FIXTURE MOUNTINGS WITH CEILING TYPES.

3. EQUAL, IDENTICAL FIXTURES WILL BE CONSIDERED. LUMEN LEVELS OF SUBSTITUTED FIXTURES SHALL BE BETWEEN 95% & 110% OF SPECIFIED FIXTURES. WATTAGE OF SUBSTITUTED FIXTURES SHALL NOT EXCEED 10% OVER SPECIFIED FIXTURES.

"EQUAL" IS INTENDED TO MEAN THAT A PROPOSED SUBSTITUTE FIXTURE PERFORMS IN THE SAME MANNER AND IS CONSTRUCTED AS WELL OR BETTER THAN THE SPECIFIED FIXTURE.

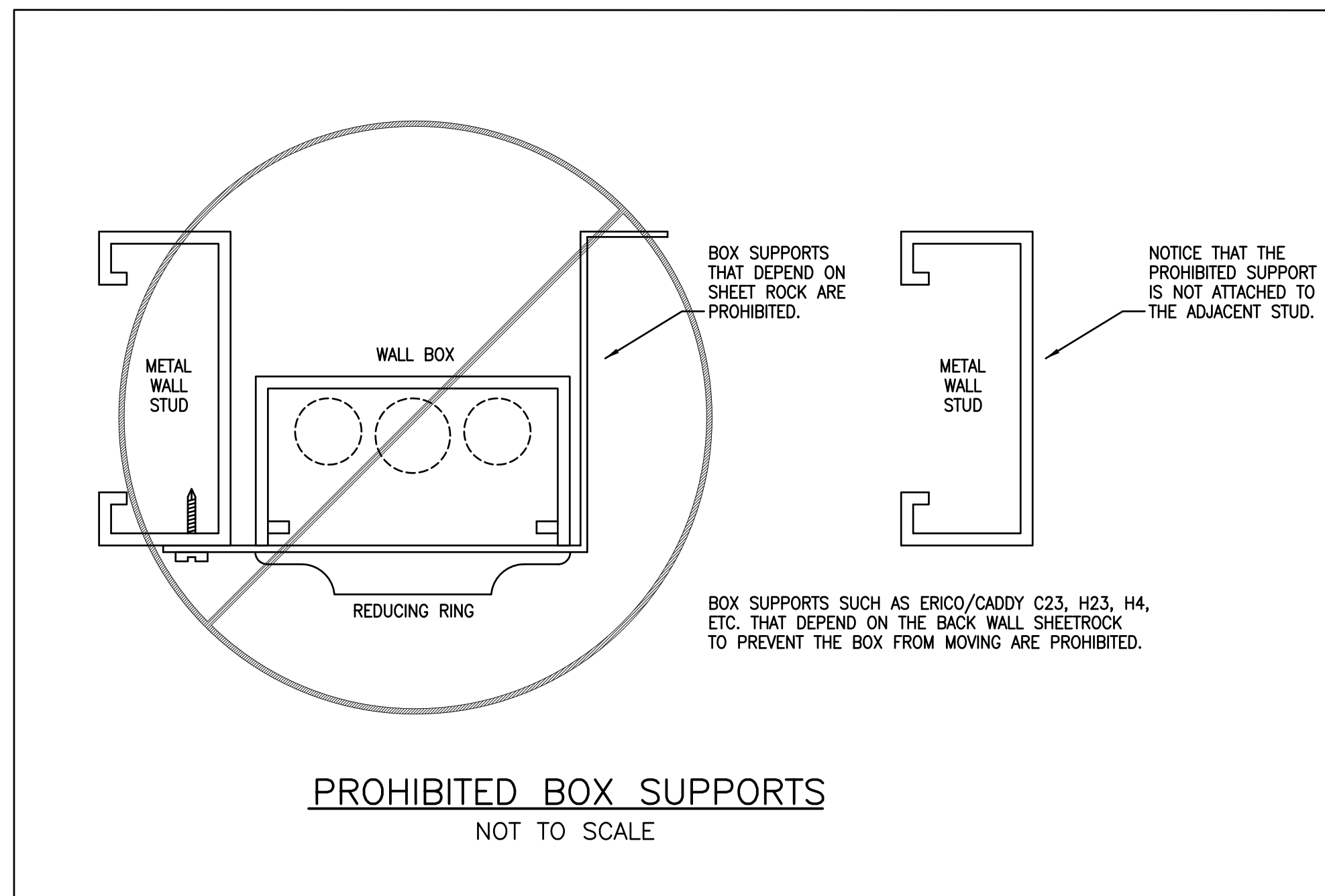
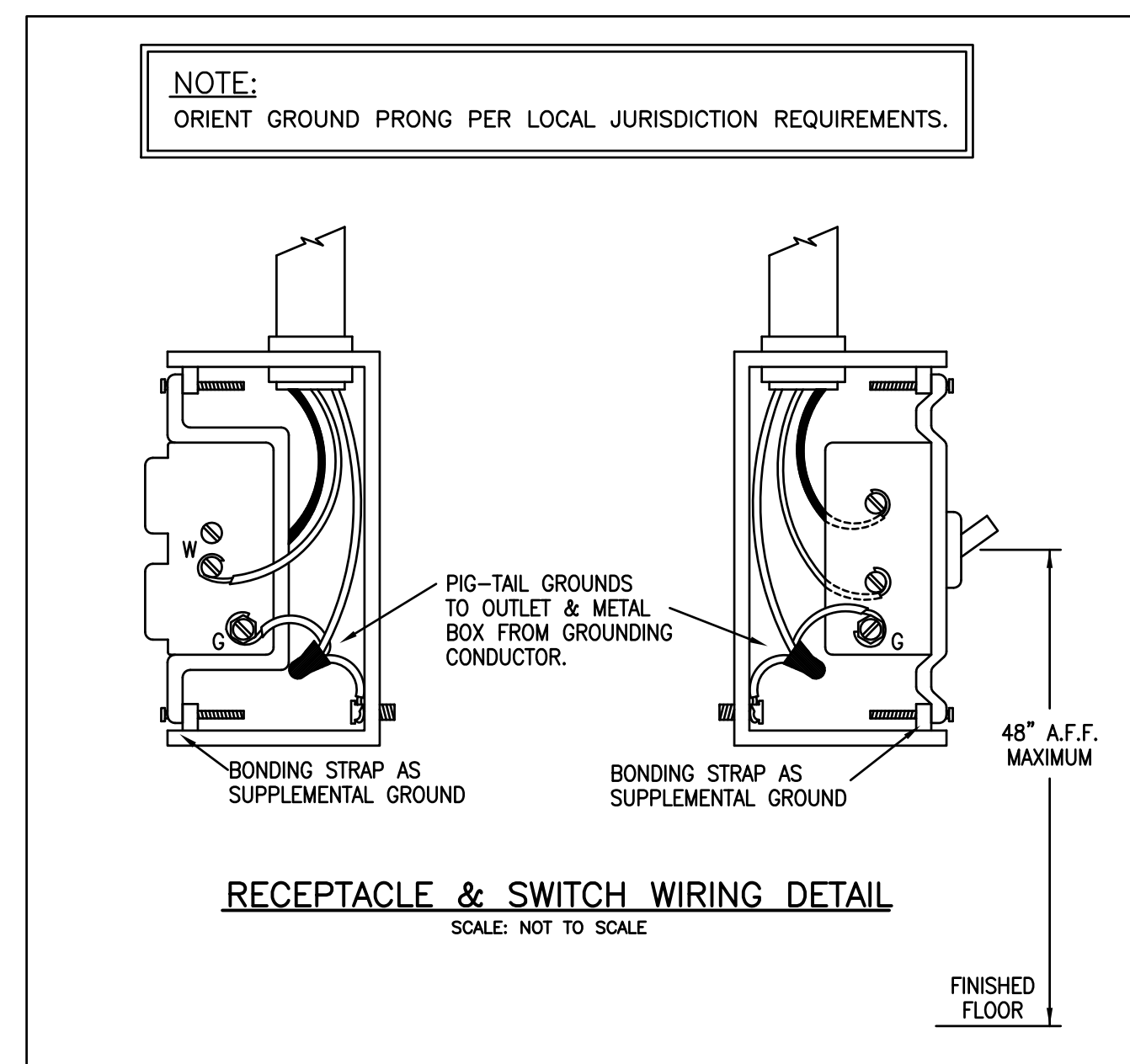
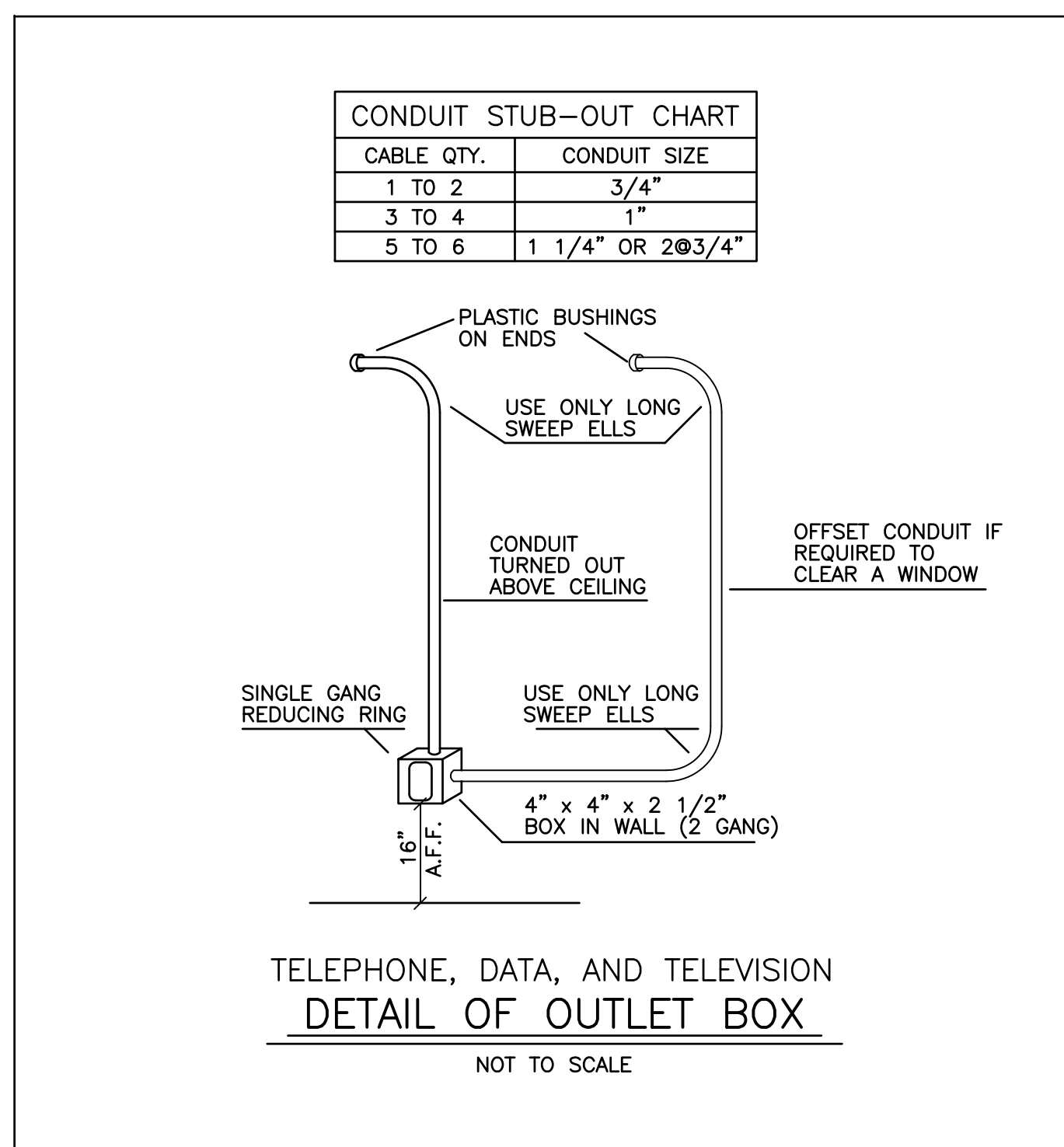
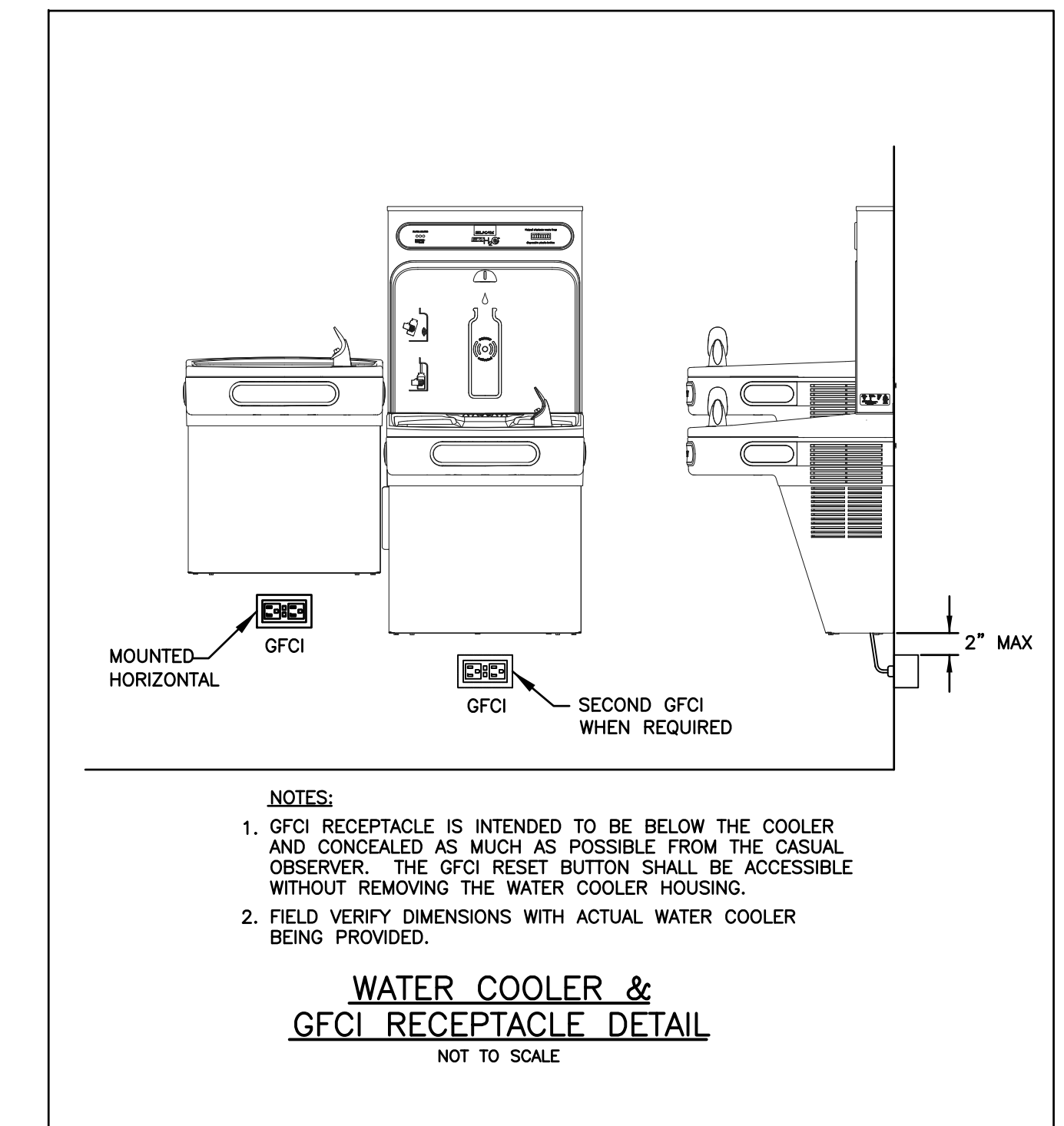
"IDENTICAL" IS INTENDED TO MEAN THAT THE SPECIFIED FIXTURE AND THE PROPOSED FIXTURE HAVE AN APPEARANCE THAT WOULD BE CONSIDERED MATCHING BY A DISCERNING ARCHITECT.

SHOALS ENGINEERING, PC

1138 N. WOOD AVE.
FLORENCE, ALABAMA, 35630
TEL: (256) 764-0817
www.shoalseng.com
PROJECT NO.: 19-1794



LAMBERT • EZELL • DURHAM
ARCHITECTURE, LLC
Florencia, Alabama 35631
P.O. Box 4934 401 East College St.
Telephone (256) 767-7100
WWW.LEDARCHITECTURE.COM

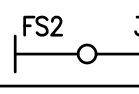
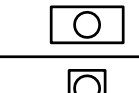
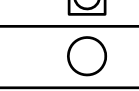
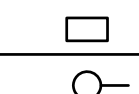
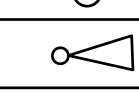
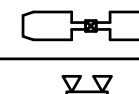
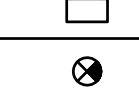
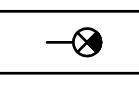

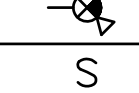
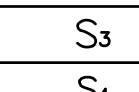
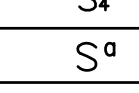
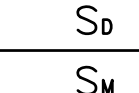
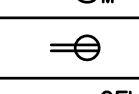
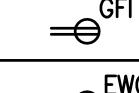
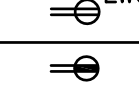
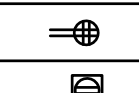

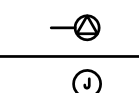
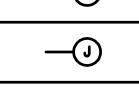

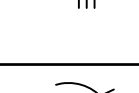

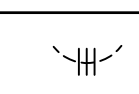
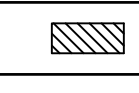
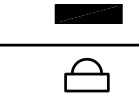
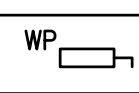


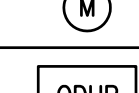
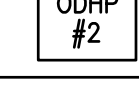



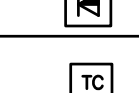
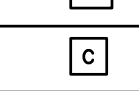

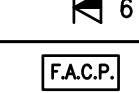

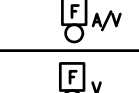
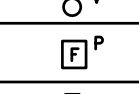
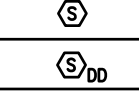
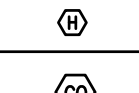
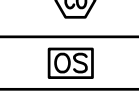
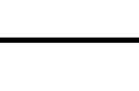




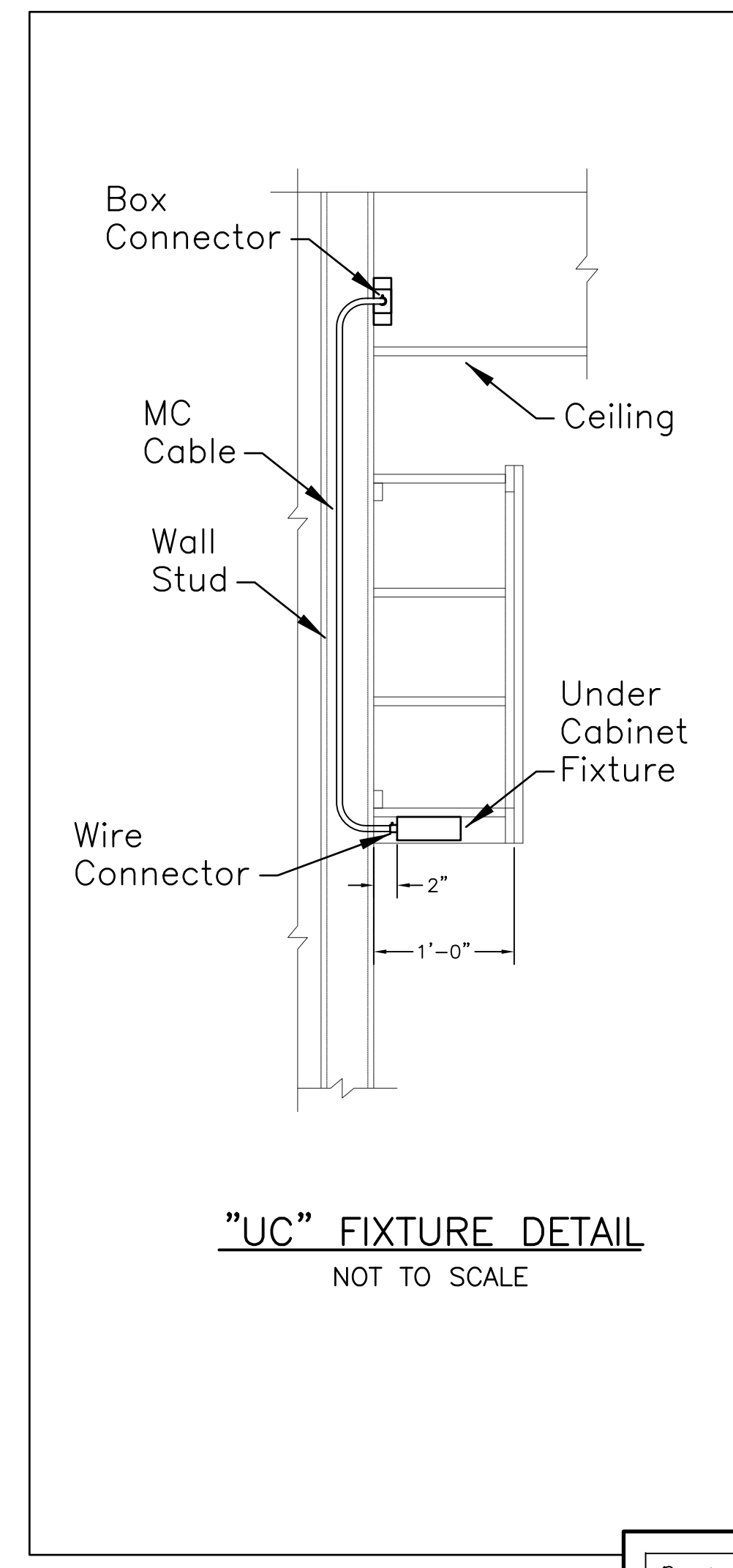
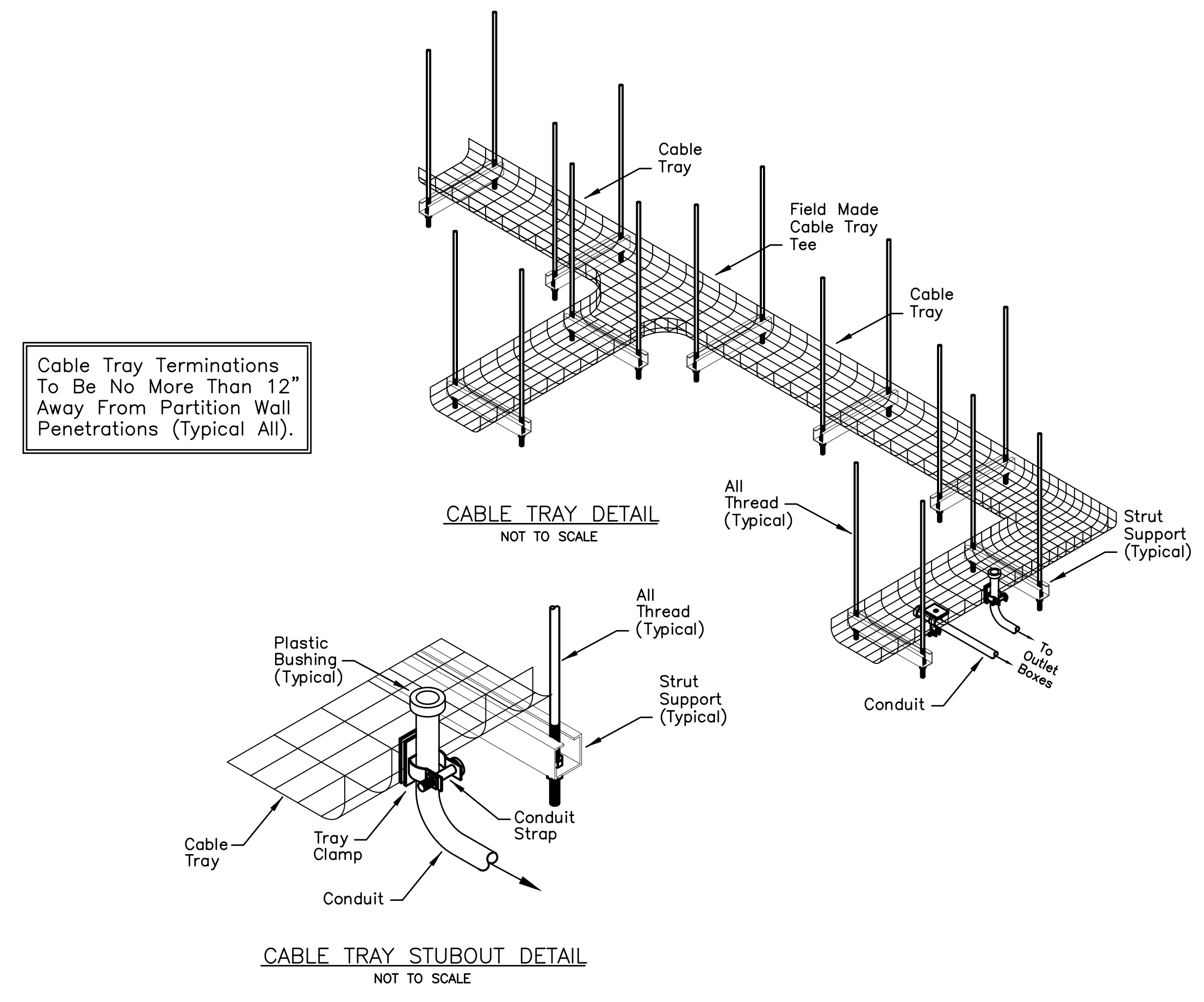
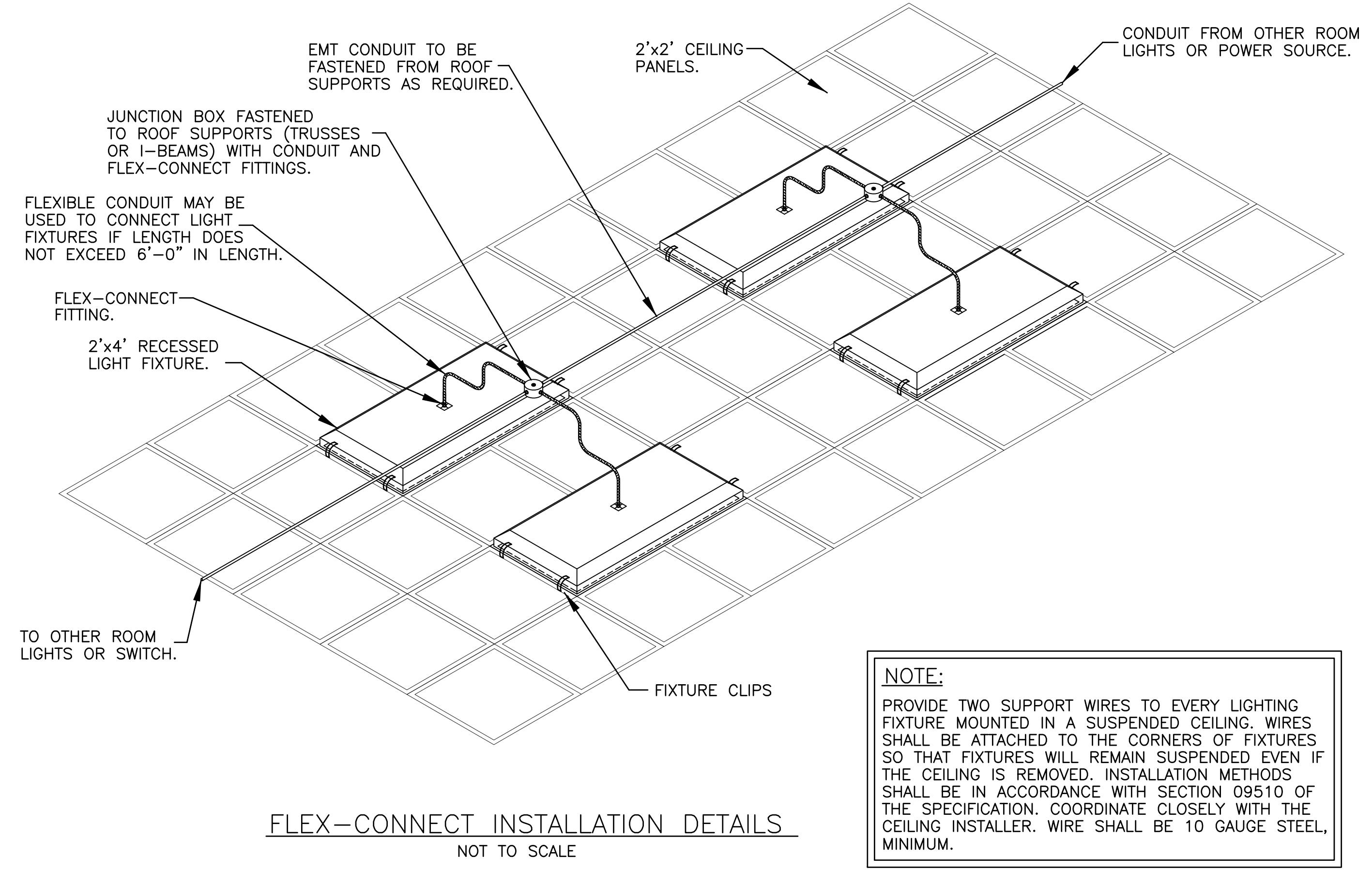
OFFICE AND SHOP BUILDING FOR
RL CONSULTING, INC.
TUSCUMBIA, ALABAMA

Job No. 1860
Date 10/14/2019
Drawn MAM
Checked JBL
Revised
Revised

Drawing Title
**FIXTURE SCHEDULE
+ DETAILS**
Drawing Number
E-7
OF 9



| ELECTRICAL LEGEND | |
|---|---|
|  | STRIP OR SURFACE FIXTURE, "FS2" DESIGNATES FIXTURE SYMBOL, "3" INDICATES CIRCUIT NUMBER |
|  | 2' X 4' L.E.D. TROFFER |
|  | 2' X 2' L.E.D. TROFFER |
|  | HIGH BAY FIXTURE |
|  | WALL PACK FIXTURE |
|  | DECORATIVE WALL LANTERN |
|  | GROUND FLOODLIGHT |
|  | AREA LIGHT POLE |
|  | DUAL HEAD EMERGENCY FIXTURE |
|  | CEILING MOUNTED EXIT FIXTURE, FACE AS SHOWN DARKENED |
|  | WALL MOUNTED EXIT FIXTURE, FACE AS SHOWN DARKENED |
|  | DOUBLE FACE CEILING MOUNTED EXIT FIXTURE, FACE AS SHOWN DARKENED, ARROWS INDICATE DIRECTION |
|  | WALL MOUNTED EMERGENCY/EXIT COMBO FIXTURE |
|  | S SINGLE POLE, 20A 120/277V SILENT TYPE TOGGLE SWITCH |
|  | S ₃ THREE WAY, 20A 120/277V SILENT TYPE TOGGLE SWITCH |
|  | S ₄ FOUR WAY, 20A 120/277V SILENT TYPE TOGGLE SWITCH |
|  | S ^a SWITCH NUMBER "a" |
|  | S _D SLIDE DIMMER SWITCH, 600W, COMPATIBLE WITH L.E.D. DIMMING 0-10% |
|  | S _M MANUAL MOTOR STARTER WITH THERMAL OVERLOADS |
|  | 20A, 125V DUPLEX RECEPTACLE, SPECIFICATION GRADE |
|  | GFI DUPLEX RECEPTACLE WITH GROUND FAULT CIRCUIT INTERRUPTING (WEATHERPROOF WHERE INDICATED) |
|  | EWC ELECTRIC WATER COOLER RECEPTACLE CONCEALED BELOW COOLER |
|  | DUPLEX RECEPTACLE MOUNTED ABOVE COUNTER TOP |
|  | DOUBLE DUPLEX RECEPTACLE, SPECIFICATION GRADE |
|  | DUPLEX RECEPTACLE IN FLOOR BOX |
|  | DUPLEX RECEPTACLE IN CEILING |
|  | SPECIAL OUTLET - CONFIGURATION AS SHOWN |
|  | CEILING MOUNTED JUNCTION BOX |
|  | WALL OR EQUIPMENT MOUNTED JUNCTION BOX |
|  | BRANCH CIRCUIT RUN IN CEILING OR WALLS. PROVIDE GROUND WIRE IN EACH CONDUIT. NUMBER OF WIRES AS SHOWN (THREE SHOWN HERE PLUS GROUND [IMPLIED]). CONDUIT SHALL BE 1/2" MINIMUM. WIRE SHALL BE #12 COPPER MINIMUM. WIRE FILL PER N.E.C. |
|  | P2A-61.63 HOMERUN TO PANELBOARD. SEE SCHEDULE FOR BREAKER SIZE. |
|  | CIRCUIT ROUTED UNDERGROUND OR UNDER CONCRETE SLAB |
|  | DISTRIBUTION PANELBOARD, SURFACE MOUNTED |
|  | LIGHTING & APPLIANCE PANELBOARD, SURFACE MOUNTED |
|  | METER CONNECTION |
|  | WP FUSIBLE, HEAVY DUTY, WEATHERPROOF DISCONNECT, 600 VOLT, SIZED WITH BREAKER |
|  | EF EXHAUST FAN CONNECTION |
|  | WH WATER HEATER CONNECTION |
|  | M ELECTRICAL CONNECTION TO MOTOR |
|  | ODHP #2 OUTDOOR HEAT PUMP UNIT CONNECTION |
|  | IDHP #2 INDOOR HEAT PUMP UNIT CONNECTION |
|  | TELEPHONE/DATA OUTLET BOX (COUNTER HEIGHT WHEN INDICATED "C") |
|  | W WALL MOUNTED TELEPHONE OUTLET BOX (VERIFY HEIGHT) |
|  | F FLOOR MOUNTED TELE/DATA OUTLET BOX |
|  | TC TIMECLOCK |
|  | C LIGHTING CONTACTOR |
|  | STARTER |
| | 6 TELE/DATA OUTLET WITH 6 JACKS |
| | FACP FIRE ALARM SYSTEM CONTROL PANEL |
| | ANNL FIRE ALARM SYSTEM ANNUNCIATOR |
| | FV FIRE ALARM SYSTEM STROBE/HORN COMBINATION |
| | FV FIRE ALARM SYSTEM STROBE ONLY |
| | FV FIRE ALARM SYSTEM PULL STATION |
| | S FIRE ALARM SYSTEM SMOKE DETECTOR |
| | SD FIRE ALARM SYSTEM DUCT SMOKE DETECTOR |
| | H FIRE ALARM HEAT DETECTOR |
| | CO FIRE ALARM POWER & MONITOR OF CARBON MONOXIDE DETECTOR |
| | OS OCCUPANCY SENSOR |





TELE/DATA/TELEVISION SYSTEM NOTES:

- A. OUTLET BOXES & CONDUIT STUB-UPS SHALL BE PROVIDED BY THE CONTRACTOR.
- B. CABLING & DEVICES WILL BE PROVIDED BY THE OWNER UNDER SEPARATE CONTRACT.
- C. PROVIDE PLASTIC BUSHINGS ON CONDUIT ENDS THAT DO NOT TERMINATE INTO BOXES.
- D. CONDUIT SHALL BE 3/4" EMT MINIMUM.

ALARM SYSTEM NOTES:

1. ELECTRICAL CONTRACTOR SHALL PROVIDE ALL ROUGH-IN AS INDICATED OR NEEDED.
2. CABLING, DEVICES, AND WIRE TERMINATIONS TO BE PROVIDED BE CERTIFIED ALARM COMPANY.
3. SYSTEMS TO BE PROVIDED BY CERTIFIED ALARM COMPANY:
 - FIRE ALARM / INTRUSION DETECTION.
 - VIDEO SURVEILLANCE SYSTEM
 - ACCESS CONTROL
 - VIDEO INTERCOM

GENERAL ELECTRICAL NOTES

1. ELECTRIC WATER COOLER RECEPTACLES INDICATED BY "EWC" SHALL BE LOCATED AS REQUIRED TO CONCEAL THE RECEPTACLE BEHIND THE WATER COOLER ASSEMBLY. COORDINATE WITH PLUMBING TRADE.
2. FLEXIBLE CONDUIT INSTALLED OUT-OF-DOORS OR IN ANY NORMALLY WET AREAS SHALL BE LIQUID TIGHT FLEXIBLE METAL WITH SUITABLE FITTINGS.
3. DO NOT MOUNT OUTLETS BACK-TO-BACK. THEY MUST BE IN SEPARATE STUD SPACES.
4. CONDUITS SHALL PASS THROUGH WALLS AT 90 DEGREE ANGLES AND SHALL BE RUN PARALLEL OR PERPENDICULAR TO WALLS.
5. BRANCH CIRCUITS AND HOMERUNS SHALL BE #12 WIRE AND 1/2" CONDUIT MINIMUM. EVERY CONDUIT SHALL HAVE A GROUND WIRE (#12 MINIMUM). THIS INCLUDES RECEPTACLE, SWITCH, LIGHT FIXTURE, AND HVAC CIRCUITS.
6. NO MORE THAN 3 PHASE CONDUCTORS MAY BE INSTALLED IN ONE CONDUIT UNLESS NOTED OTHERWISE.
7. ALL RECEPTACLES, SWITCHES, ETC. SHALL BE IVORY WITH STAINLESS STEEL PLATES UNLESS NOTED OTHERWISE. VERIFY WITH ARCHITECT.
8. MOUNTING HEIGHTS OF WALL OUTLETS ABOVE FINISHED FLOOR SHALL BE AS INDICATED IN THE LEGEND AND IN THE FOLLOWING TABLE UNLESS NOTED OTHERWISE ON THE PLANS, ELEVATIONS, OR AS OTHERWISE DIRECTED BY THE ARCHITECT TO CLEAR EQUIPMENT, ETC. (MOUNTING HEIGHTS ARE TO CENTERLINE OF DEVICE):

| | |
|-----------------------|------------|
| SWITCHES (GENERAL) | -----4'-0" |
| RECEPTACLES (GENERAL) | -----1'-6" |
| TELEPHONE OUTLETS | -----1'-6" |
9. MAINTAIN N.E.C. MINIMUM CLEARANCE IN FRONT OF ALL PANELBOARDS.
10. ALL UNDERGROUND CONDUIT RUNS ENTERING THE BUILDING SHALL BE SEALED TO PREVENT THE ENTRANCE OF MOISTURE AND GASES.
11. CONDUIT FOR RECEPTACLE CIRCUITS SHALL BE RUN OVERHEAD UNLESS NOTED OTHERWISE.
12. PROVIDE CONDUIT AND OUTLET BOXES AS REQUIRED FOR THERMOSTATS. THERMOSTATS ARE SHOWN ON MECHANICAL DRAWINGS.
13. CONTRACTOR SHALL RE-ARRANGE PANELBOARDS TO MATCH DRAWING PANEL SCHEDULES. CIRCUIT NUMBERS SHALL MATCH THAT SHOWN ON PLANS.
14. VERIFY ALL DOOR SWINGS AND CASEWORK LOCATIONS (INCLUDING INTERIOR ELEVATIONS) BEFORE ROUGHING IN LIGHT SWITCHES, UNDERCABINET LIGHTING OR OUTLETS. WHERE A CONFLICT OCCURS, CONTACT ARCHITECT TO RESOLVE.
15. VERIFY EXACT LOCATION OF ALL MOTORS AND EQUIPMENT BEFORE ROUGHING IN.
16. ALL CONDUIT SHALL BE CONCEALED, UNLESS SPECIFICALLY SHOWN EXPOSED.
17. CONTRACTOR SHALL CHECK ALL LIGHTING FIXTURES FOR EXACT TYPE MOUNTING AND SPACE REQUIRED BEFORE ROUGHING IN.
18. ELECTRICAL CONTRACTOR SHALL WORK CLOSELY WITH GENERAL CONTRACTOR AND VERIFY EXACT TYPE OF EQUIPMENT TO BE INSTALLED AND THE DIMENSIONS WHICH MAY EFFECT THE EXACT PLACEMENT OF ELECTRICAL WORK.
19. WHERE TWO OR MORE OUTLETS OF ANY TYPE ARE INDICATED TO BE LOCATED ADJACENT TO EACH OTHER, SPACE THEM A MAXIMUM OF 8" APART ON CENTER, ADJUST PROPORTIONALLY FOR QUAD SIZE BOXES OR LARGER.
20. ARCHITECT TO APPROVE ALL OUTLET ROUGH-IN LOCATIONS (ELECTRICAL, DATA, CABLE, PHONE, FIRE ALARM, SECURITY AND OTHERS AS MAY BE REQUIRED) PRIOR TO FINAL INSTALLATION OF SAME.
21. MAINTAIN MINIMUM 6" SEPARATION BETWEEN POWER AND DATA CONDUIT AND/OR OUTLETS BOTH IN CONCEALED AREAS ABOVE CEILINGS AND IN WALLS AND IN EXPOSED AREAS ON CEILINGS AND WALLS.
22. INSTALL BLANK COVER PLATES ON ALL UNUSED OR FUTURE OUTLETS.
23. SUBMIT PLUGMOLD AND WIREMOLD SAMPLES TO ARCHITECT FOR PRODUCT VERIFICATION AND COLOR SELECTION AT EACH LOCATION WHERE APPLICABLE. MOULD, HOUSING AND ATTACHMENT PIECES TO BE SAME COLOR.

FIRE ALARM NOTES:

1. PROVIDE A NEW BOSCH FIRE ALARM SYSTEM AS SHOWN.
2. FIRE ALARM SYSTEM SHALL BE CONNECTED SUCH THAT ACTIVATION OF ANY SMOKE DETECTOR, PULL STATION, OR SPRINKLER SHALL INITIATE HORNS AND STROBES.
3. DUCT MOUNTED SMOKE DETECTORS SHALL BE PHOTOELECTRIC TYPE AND SHALL BE CONNECTED TO INITIATE A SUPERVISORY SIGNAL AND SHUT DOWN THE ASSOCIATED AIR HANDLER. REMOTE TEST AND ALARM PLATES SHALL BE PROVIDED AS NEEDED AND SPECIFIED. DUCT MOUNTED SMOKE DETECTORS AT SMOKE DAMPERS SHALL CLOSE THE ASSOCIATED DAMPER.
4. THE ENTIRE SYSTEM SHALL BE INSTALLED AND WIRED BY A TECHNICIAN EXPERIENCED IN INSTALLATION OF FIRE ALARM SYSTEMS.
5. THE CONTRACTOR SHALL FURNISH THE ARCHITECT A LETTER CERTIFYING THAT THE SYSTEM HAS BEEN PROPERLY INSTALLED, CHECKED, AND PROVEN TO BE IN PROPER ORDER.
6. THE SYSTEM SHALL BE WIRED USING PLENUM CABLE RATED FOR FIRE ALARM SYSTEM USE. CONDUIT SHALL BE INSTALLED WHERE CABLES ARE EXPOSED OR ROUTED THROUGH FIRE WALLS.
7. THE FIRE ALARM CERTIFICATION REPORT SHALL BE IN ACCORDANCE WITH NFPA 72 AND SUBMITTED AT COMPLETION OF THE PROJECT.
8. WIRING SHALL CONFORM TO NFPA 72 AND IN ACCORDANCE WITH THE MANUFACTURER'S REQUIREMENTS AS IS NECESSARY TO PERFORM THE REQUIRED FUNCTION.
9. WIRING SHALL BE COLOR CODED AND COLOR CODING SHALL BE UNIFORM THROUGHOUT PROJECT.
10. TYPICAL MOUNTING HEIGHTS:

| | |
|---------------|-------------------|
| PULL STATIONS | ---- 4'-0" A.F.F. |
| STROBE LIGHTS | ---- 6'-8" A.F.F. |
| HORN/STROBES | ---- 6'-8" A.F.F. |
11. ALL EXPOSED CONDUIT SHALL BE INSTALLED IN A NEAT MANNER. ALL CABLING IN EXPOSED LOCATIONS SHALL BE IN CONDUIT.
12. EVERY DEVICE OF THE FIRE ALARM SHALL BE NEATLY MACHINE LABELED ON A VISIBLE LOCATION TO HELP IDENTIFY DEVICES DURING TESTING. LABEL IDENTIFICATION SHALL ALSO MATCH THE DISPLAY AT THE FIRE ALARM PANEL.
13. DUCT SMOKE DETECTOR LOCATIONS SHALL BE PERMANENTLY AND CLEARLY IDENTIFIED IN ACCORDANCE WITH NFPA 72-5.16.5.4.
14. FIRE ALARM INSTALLATION SHALL BE PERFORMED BY CERTIFIED ALARM COMPANY AS A SUB-CONTRACT TO THE ELECTRICAL CONTRACTOR. ELECTRICAL CONTRACTOR SHALL PROVIDE ALL ROUGH-INS NECESSARY.

ELECTRICAL SPECIFICATIONS

- A. All Electrical work shall comply with National Electric Code and all local regulations.
- B. Conduit for branch circuit inside building and above the floor may be THIN Wall Metal (EMT).
- C. Conduit exposed to weather shall be rigid metal or weatherproof flexible metallic conduit.
- D. Conduit installed underground or in the slab shall be schedule 40 PVC.
- E. Wire #4 and larger shall be copper type XHHN/USE or XHHW. Wire smaller than #4 shall be copper type THHN/THWN.
- F. All grounding shall, as a minimum, comply with the National Electrical Code. Grounding in addition to that required by the NEC shall be completed as shown on the drawings.
- G. Scope, Work Included:
 - a. Install complete system of electrical wiring to each lighting fixture, receptacle and switch outlet.
 - b. Install all lighting fixtures and other electrical equipment covered by this section of specifications and electrical drawings.
 - c. Install empty conduit for thermostat and control circuits as required.
 - d. Install all power wiring and make electrical connections to heating, air conditioning, ventilation and other electric consuming equipment that is furnished and installed by other trades. Proper starter(s) and interior controls, including control wiring, shall be furnished with equipment with all wiring brought out to junction box or terminal block. Electrical Contractor to furnish proper disconnect switch where required as shown and make proper connections to unit.
 - e. See separate book of specifications for additional and more detailed requirements.
 - f. Provide new fire alarm system as shown.
 - g. Install the cable tray system as shown.
- H. Fees and Permits

This Contractor shall pay additional cost that may be incurred by other trades due to the installation of equipment or material, covered by this section of specifications and electrical plans, which differ from that specified.

This Contractor shall secure all licenses and permits and pay all fees required for completion of work under this section of the specifications.