

NEW CONSTRUCTION:

# CITY OF BARDSTOWN

## PUBLIC WORKS BUILDING

PADGETT WAY  
BARDSTOWN, KY

ARCHITECT:

KEYES ARCHITECTS AND ASSOCIATES  
3005 TAYLOR BOULEVARD  
LOUISVILLE, KENTUCKY 40208  
PH: (502) 636-5113  
CONTACT: ERIC KEYES  
EMAIL: EKEYES@KEYESARCHITECTS.COM  
ARCHITECT: CHARLES J. KEYES III

ENGINEERING: MEL

E.C. ENGINEERING, INC.  
P.O. BOX 91977  
LOUISVILLE, KY 40291  
PH: (502) 494-4219  
CONTACT: ERNIE CRUSE  
EMAIL: ECRUSE@ENGLTG.COM

PLUMBING:

DOUBLE "S" DESIGNS  
3517 PIONEER TRAIL  
SHEPHERDSVILLE, KY 40165  
PH: (502) 957-2977  
CONTACT: SONNY SKIDMORE  
EMAIL: DOUBLESDESIGNSERVICE@GMAIL.COM

OWNER:

CITY OF BARDSTOWN  
220 N 5TH STREET  
BARDSTOWN, KY 40004  
PH: (502) 348-5947  
CONTACT: JESSICA FILLEATREAU

DOOR CONTROL SYSTEMS:

INTERSTATE SECURITY  
1216 N 3RD ST.  
BARDSTOWN, KY 40004  
PH: (502) 348-2106  
CONTACT: BRIAN CHESSE



PROJECT INFORMATION

APPLICABLE BUILDING CODES  
BUILDING CODE 2018 KBC  
ACCESSIBILITY CODE 2010 ADA AG 2009 ANSI 117.1  
ENERGY CODE 2010 IECC

USE AND OCCUPANCY: B BUSINESS , S-1 STORAGE  
& REPAIR

CONSTRUCTION TYPE: II-B

BUILDING INFORMATION: PRE-ENGINEERED METAL & WOOD  
FRAME STRUCTURE BUILDING

BUILDING ADDITION: 11,015 S.F.

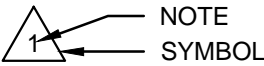
TOTAL BUILDING SIZE: 11,015 S.F.

FIRE SUPPRESSION: AUTOMATIC SPRINKLER SYSTEM  
ACCORDING TO IBC 2015 903.2.9.1

OCCUPANCY ALLOWANCE

FUNCTION OF SPACE	ALLOWANCE	AREA	OCCUPANCY
OFFICE	100 GROSS	2404	24
WAREHOUSE	500 GROSS	8135	16
TOTAL OCCUPANCY ALLOWANCE:			40

REVISIONS:

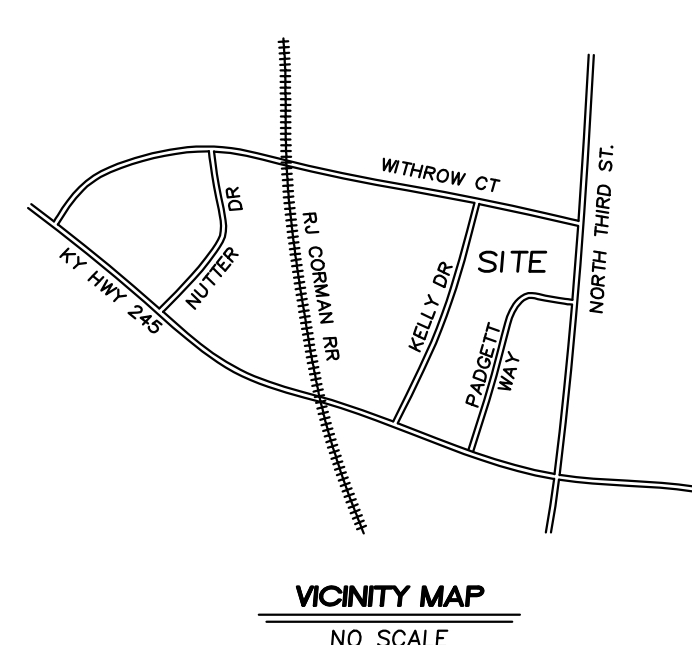
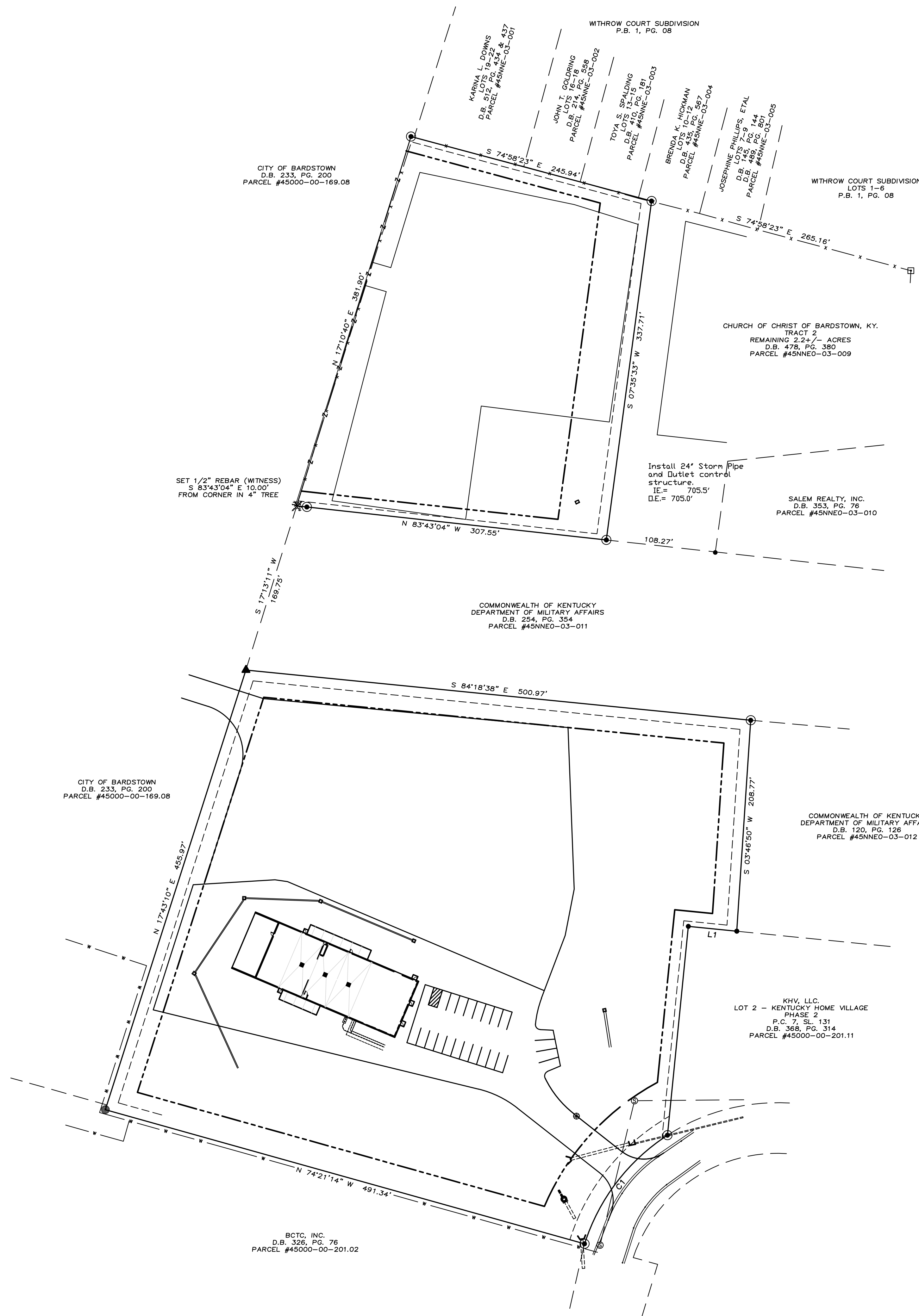


Sheet List Table

Sheet Number	Sheet Title
T1.01	Title Sheet
Civil Plans	
1 of 1	Civil Plan - For Reference Only
Foundation Plans & Details	
F1.01	Foundation Plan
F2.01	Foundation Details
F2.02	Foundation Details
Structural Plans & Details	
S1.01	Structural Framing Plan
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LS1.01	Life Safety Plan
Floor Plans	
A1.01	Overall Floor Plan
A1.02	Enlarged Floor Plans
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A2.01	Exterior Elevations
Schedules and Standards	
A3.01	Commercial ADA-Ansi Guidelines
A3.02	Accessibility Site Details
A3.03	Schedules
Schedules and Standards: Reflected Ceiling	
A4.01	Reflected Ceiling Plan
Details & Sections	
A5.01	Wall Sections and Details
A5.02	Wall Sections and Details
A5.03	Wall Sections and Details
A5.04	Wall Sections and Details
A5.05	Wall Sections and Details
A6.01	Door Details
A6.02	Window Details
Stairs & Cabinetry Plans & Details	
A7.01	Cabinetry Floor Plan
A7.02	Enlarged Cabinetry Plans
A7.03	Cabinetry Elevations
A7.04	Cabinetry Details
A8.01	Stairs & Details

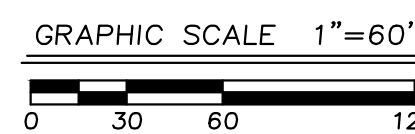
Equipment	
EQ1.01	Equipment Plan
Mechanical	
M1.01	HVAC PLAN
M2.00	HVAC Notes
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E1.00	Lighting Plan
E1.01	Power Plan
E2.00	Riser and Schedules
E3.00	Electrical Specifications
E3.01	Electrical Specifications
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P2.02	Floor Plan Air-Water-Gas
Specifications	
SP1.01	Specifications
SP1.02	Specifications
SP1.03	Specifications
SP1.04	Specifications





- LEGEND**
- PROPERTY LINE
  - ADJOINING PROPERTY LINE
  - Z— CONSOLIDATION LINE
  - X- EXISTING MEANDERING WIRE FENCE
  - ⊙ DENOTES SET 1/2" REBAR W/CAP STAMPED "WOLF 3742" UNLESS NOTED OTHERWISE
  - DENOTES FOUND 5/8" REBAR W/CAP NUMBER 3064
  - FOUND 1/2" REBAR (NO CAP)
  - FOUND WOOD POST
  - ▲ FOUND STONE
  - R/W RIGHT-OF-WAY
  - ✱ FOUND TREE
  - G.U.E. EXISTING GENERAL UTILITY EASEMENT
  - S.Y.S. SIDE YARD SETBACK
  - R.Y.S. REAR YARD SETBACK
  - ⊙ EXISTING SANITARY MANHOLE
  - S.S.E. EXISTING SANITARY SEWER EASEMENT
  - EXISTING GRAVITY SEWER LINE
  - W- APPROXIMATE LOCATION OF EXISTING WATERLINE
  - ⊙ EXISTING SINKHOLE

NORTH AND ALL BEARINGS ARE BASED ON THE KY STATE PLANE COORDINATE SYSTEM (KENTUCKY SOUTH ZONE)



**SITE PLAN FOR  
REFERENCE ONLY**

**PROPOSED SITE PLAN  
FOR  
CITY OF BARDSTOWN**

OWNER: **CITY OF BARDSTOWN**  
220 NORTH FIFTH STREET  
BARDSTOWN, KY. 40004  
(502) 348-5947

PROPERTY LOCATION: PADGETT WAY  
BARDSTOWN, KY. 40004  
TAX MAP #45000-00  
PARCELS 201 & 201.14

1104 NORTH THIRD STREET  
BARDSTOWN, KY. 40004  
TAX MAP #45NNEO-03  
PARCEL 009

ZONED: B-3/A-1      SCALE: 1"=60'  
PLAT DATE: 06/08/18      FIELDWORK: 04/16/18  
THIS SURVEY COMPLIES WITH 201 KAR 18:150

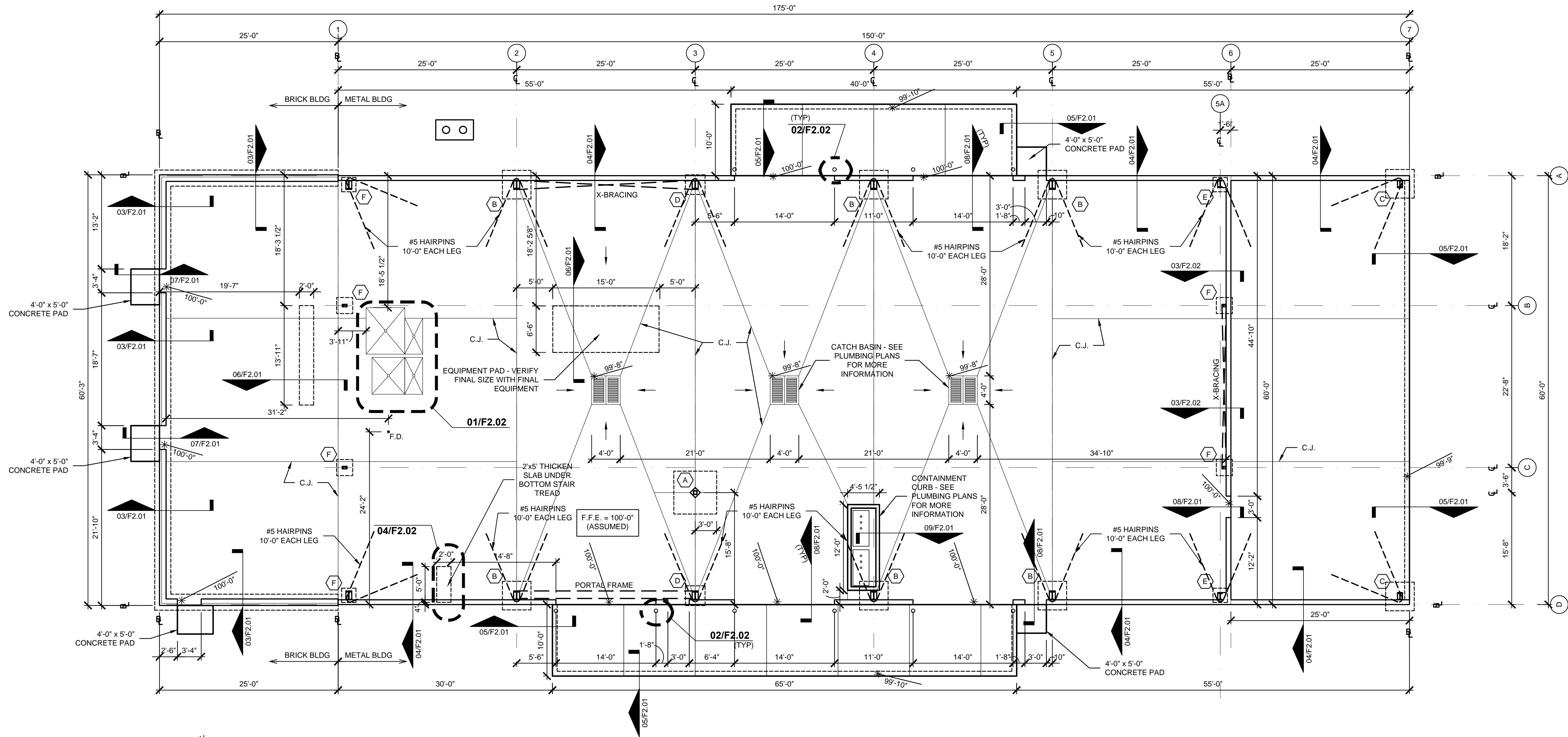
**Horizon**  
ENGINEERING, LLC  
Civil Engineering & Land Surveying

111 North Second Street  
P.O. Box 364  
Bardstown, Ky. 40004  
Phone: (502) 348-4330 - Fax: (502) 348-4340  
Email: hwolf@teamhorizoneng.com



PROJECT: CITY OF BARDSTOWN PUBLIC WORKS BUILDING - FILE: F1.01 Foundation Plan.dwg - DATE: Sep 02, 2020 8:28AM - BY: ERIC KEYES

PROJECT NO:  
19-3060  
DRAWN BY:  
NM/CSGRH  
DATE:  
05-27-2020



## 01 FOUNDATION PLAN

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

### FOUNDATION NOTES

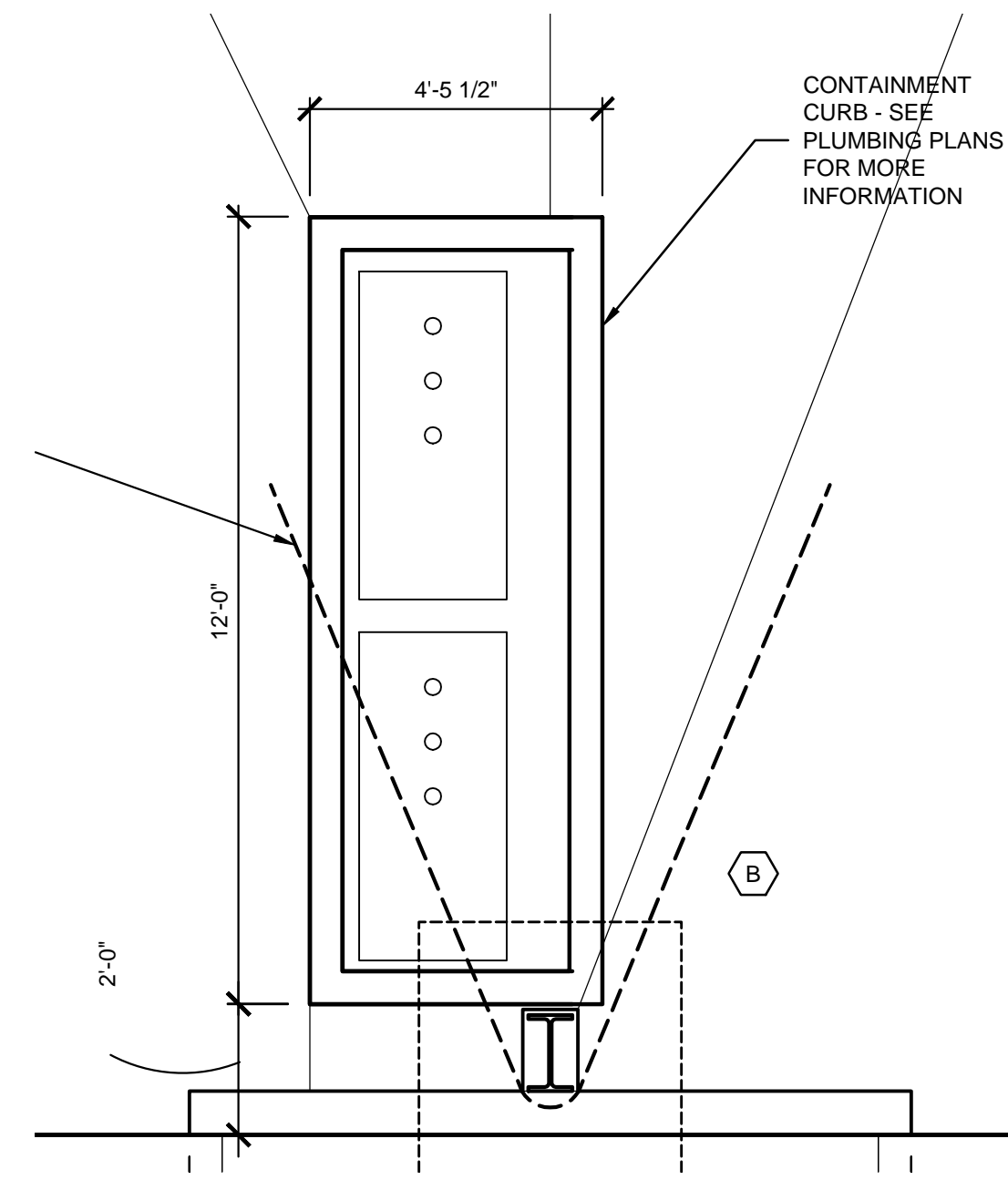
- 1) CONCRETE CONTRACTOR MUST VERIFY LOCATION, SIZES AND PLACEMENT OF ANCHOR BOLTS USING BUILDING MANUFACTURER'S DATA. CONTRACTOR MUST VERIFY IN FIELD.
- 2) ALL CONCRETE TO BE 4,000 P.S.I.
- 3) CONTRACTOR TO PROVIDE REINFORCED CONCRETE WORK REQUIRED FOR BRACED BAYS. VERIFY REQUIREMENTS WITH BUILDING MANUFACTURER.
- 4) CONTRACTOR TO SUPPLY ARCHITECT WITH BUILDING MANUFACTURER'S STAMPED ENGINEERING DRAWINGS AND BASE REACTIONS BEFORE BEGINNING CONSTRUCTION SO THAT ARCHITECT MAY VERIFY FOUNDATION DESIGN.
- 5) ALL FOOTINGS AND PIERS ARE TO BE CENTERED ON THE BUILDING COLUMNS UNLESS OTHERWISE NOTED.
- 6) COLUMN PIERS ARE TO BE PLACED INTEGRAL WITH THE GRADE BEAM OR FOUNDATION WALLS WITH REINFORCING TO BE CONTINUOUS THROUGH PIERS.
- 7) COLUMN PIERS MUST BE MIN. 12" ANY DIRECTION PLUS 1" PAST MANUF. BASE PLATES. GROUT SOLID BETWEEN PIER AND BASE PLATE. CONTRACTOR MUST COORDINATE WITH BUILDING MANUFACTURER AND VERIFY IN FIELD.
- 8) BUILDING FOUNDATIONS ARE TO REST ON UNDISTURBED SOIL AND ARE DESIGNED FOR 2,000 P.S.F. SOIL BEARING CAPACITY. VERIFY BEFORE CONSTRUCTION.
- 9) ALL ANCHOR BOLTS TO BE SET BY TEMPLATE MATCHING BUILDING MANUFACTURER'S LAYOUTS.
- 10) NO FIELD ALTERING OF BASE PLATES IS ALLOWED.
- 11) JUNCTURE OF FLOOR SLAB WITH ALL PIERS AND GRADE TO BE 1/2" WIDE EXPANSION JOINT MATERIAL.
- 12) CONTRACTOR TO SET OVERHEAD DOOR JAMB ANCHORS INTO FLOOR SLAB AS REQUIRED BY BUILDING MANUFACTURER.
- 13) FLOOR SLAB TO BE POURED THRU AT ALL DOORWAYS. SLOPE 2% TO OUTSIDE
- 14) BUILDING ANCHOR BOLTS TO BE DIAMETER DESIGNED BY BUILDING MANUFACTURER. LENGTHS TO BE 3" PROJECTION, 15" IMBEDDED W/ 3" HOOK UNLESS OTHERWISE DESIGNED BY MANUFACTURER OR HERE IN.

### FOOTING SCHEDULE

TYPE	SIZE	REINFORCING	MIN. PIER	DETAILS	REMARKS
A	6'-0" x 6'-0" x 1'-3"	(9) #5 BARS E.W. BTM.	12" x 16"	02/F2.01	1
B	4'-0" x 4'-0" x 1'-3"	(6) #5 BARS E.W. BTM.	12" x 16"	01/F2.01	
C	4'-0" x 4'-0" x 1'-3"	(5) #5 BARS E.W. BTM.	12" x 16"	01/F2.01	2
D	2'-9" x 2'-9" x 1'-3"	(4) #5 BARS E.W. BTM.	12" x 16"	01/F2.01	
E	2'-6" x 2'-6" x 1'-3"	(3) #5 BARS E.W. BTM.	12" x 16"	01/F2.01	
F	2'-3" x 2'-3" x 1'-3"	(3) #5 BARS E.W. BTM.	12" x 16"	02/F2.01	

### FOOTING REMARKS

- 1) BUILDING MANUFACTURE TO INCLUDE SUPPORTING A 2 TON JIB CRANE FROM THIS COLUMN
- 2) FOOT SIZED TO RESIST UPLIFT FROM OPEN SIDE OF BUILDING



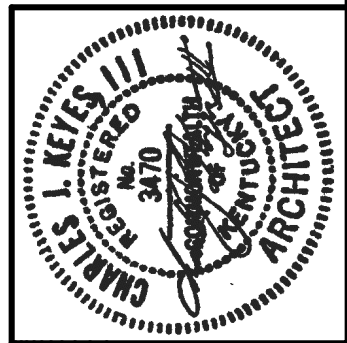
## 02 FOUNDATION PLAN

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

**NOTE:** GENERAL CONTRACTOR RESPONSIBLE FOR COORDINATION OF ALL SUB TRADES AND REQUIREMENTS BY OWNER

**NOTE:** ELECTRICAL, HVAC AND PLUMBING TO BE RELOCATED PER FEDERAL, STATE AND LOCAL CODES. GENERAL CONTRACTOR TO COORDINATE.

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4717 PRESTON HIGHWAY  
LOUISVILLE, KENTUCKY 40213 (502) 636-5113

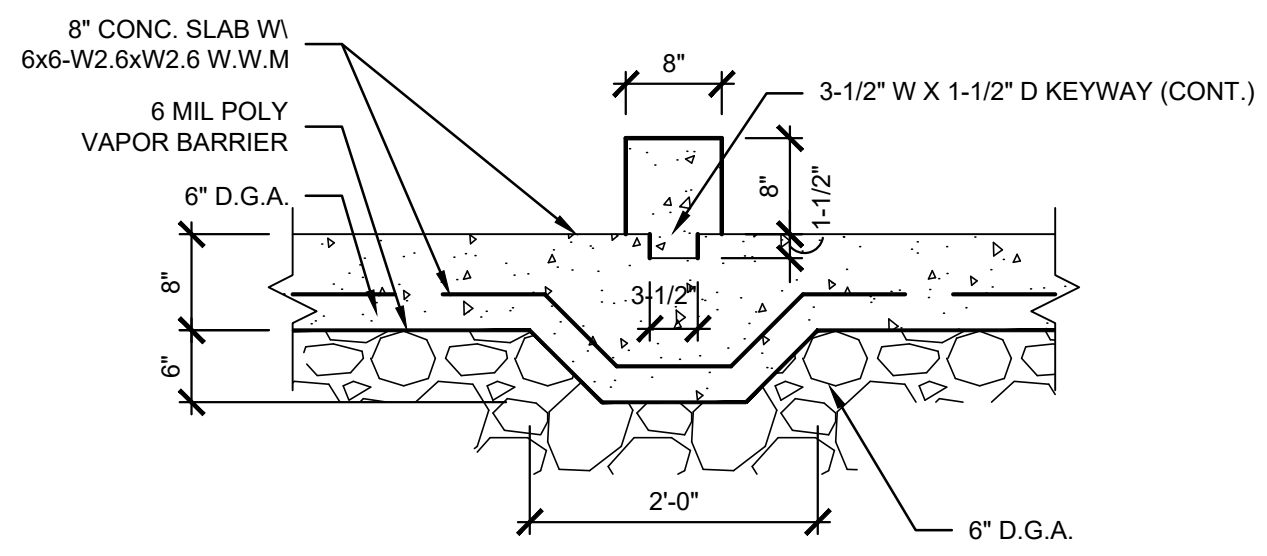
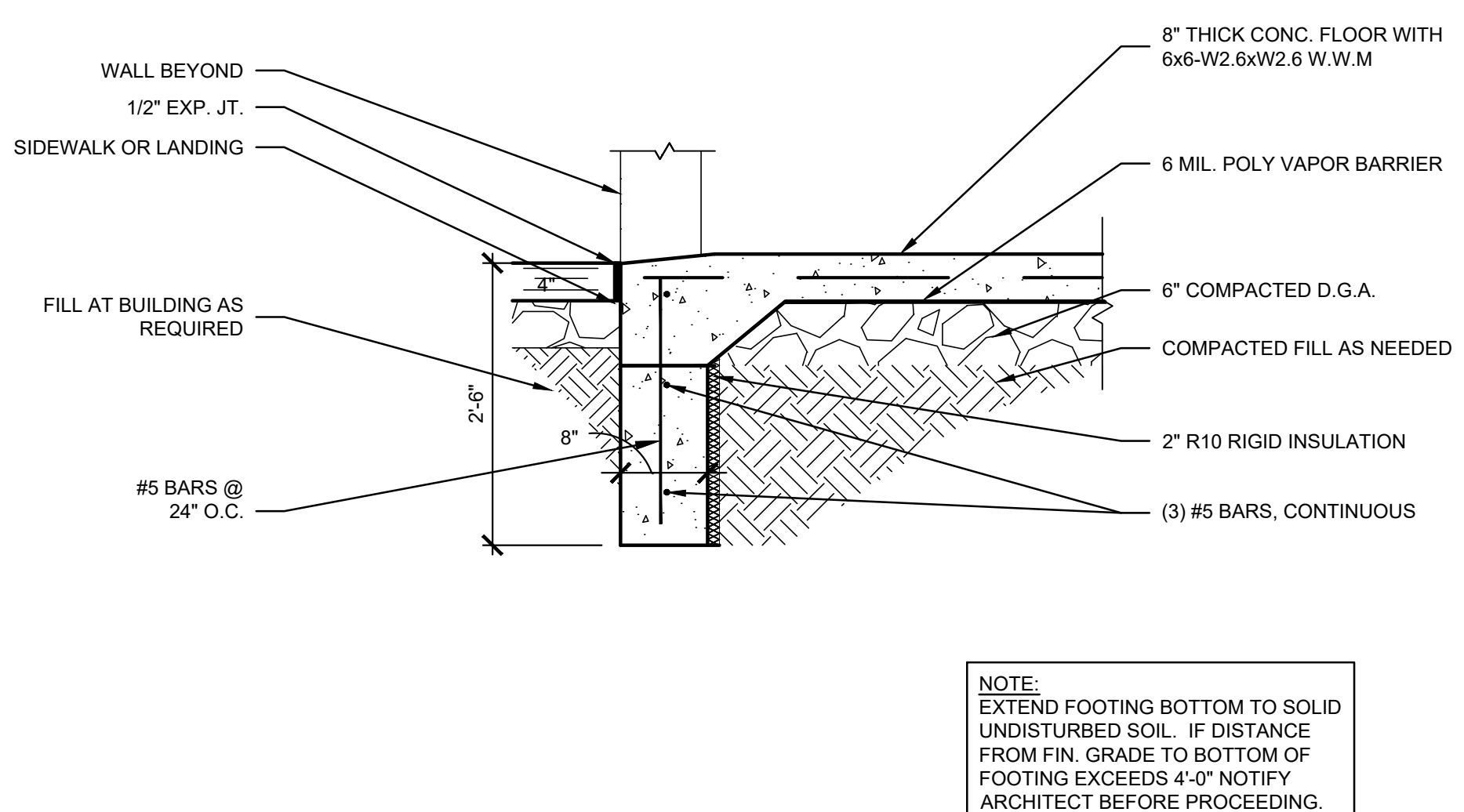
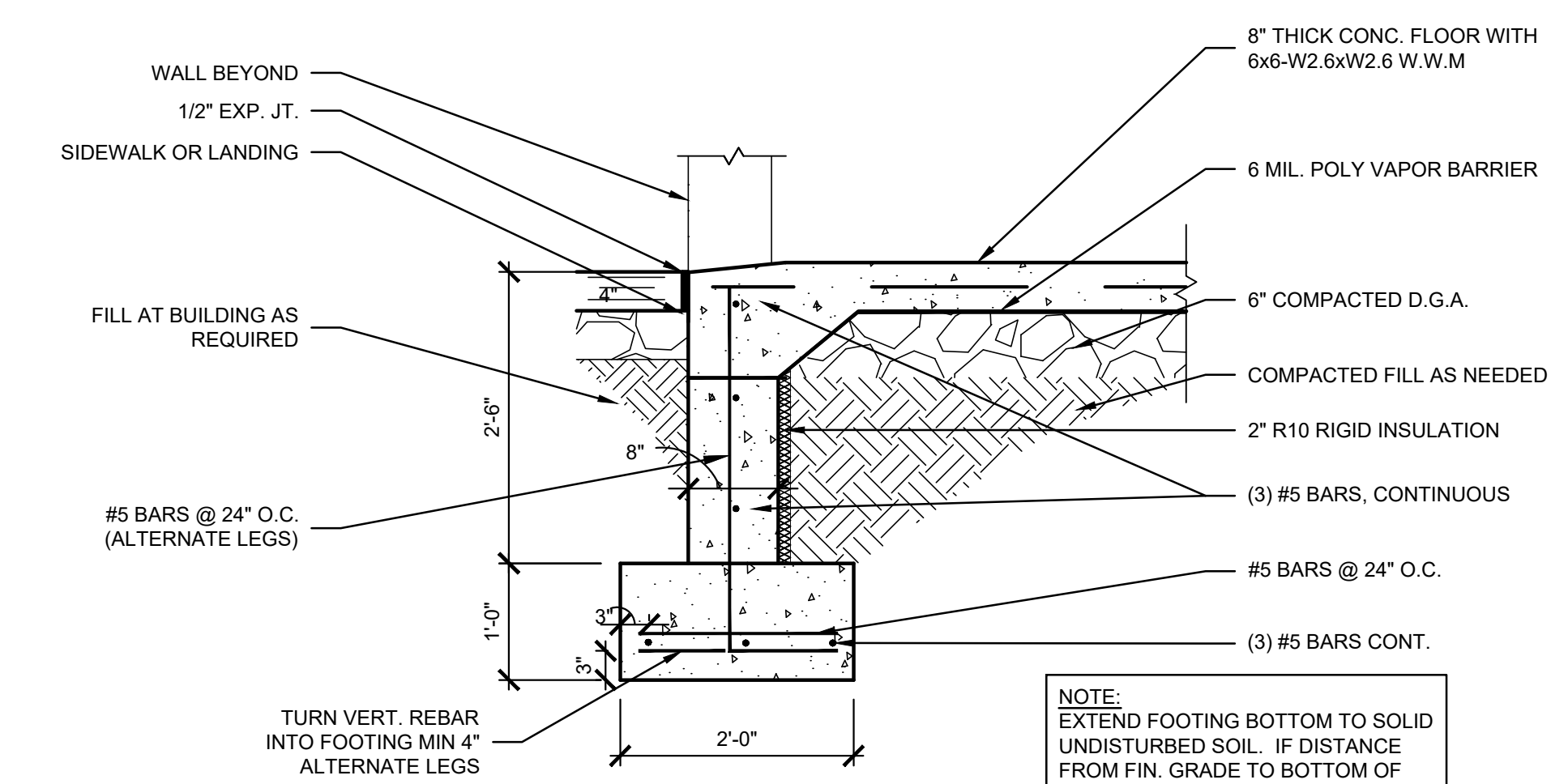
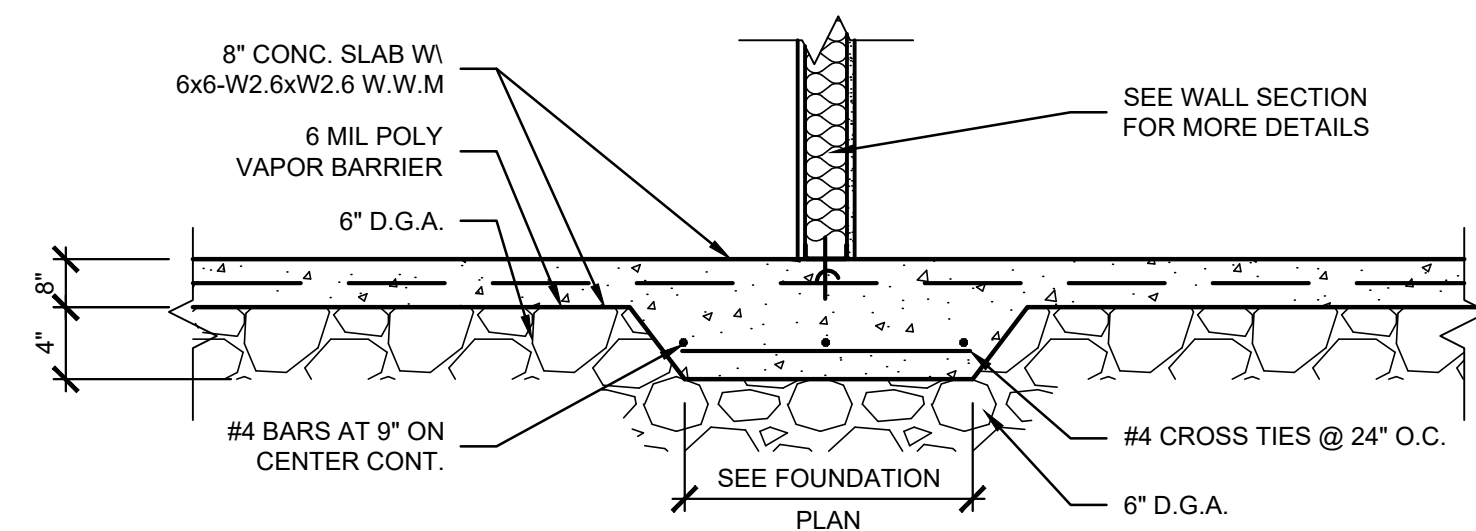
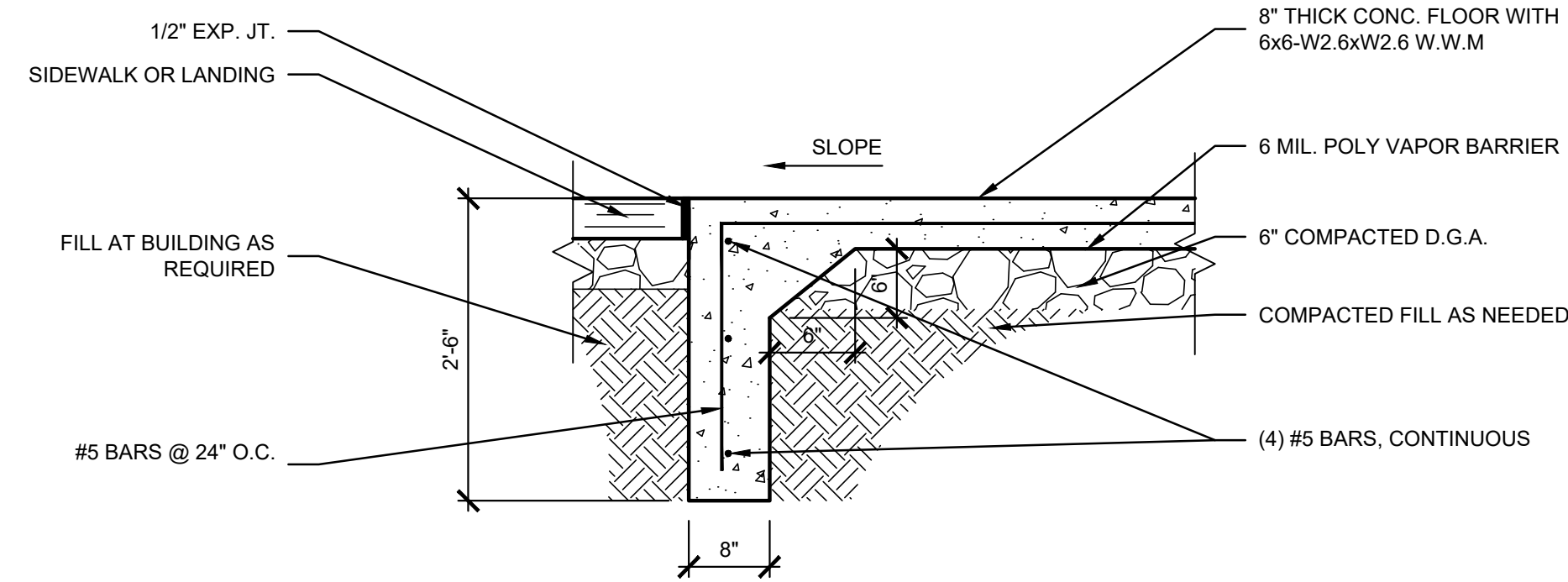
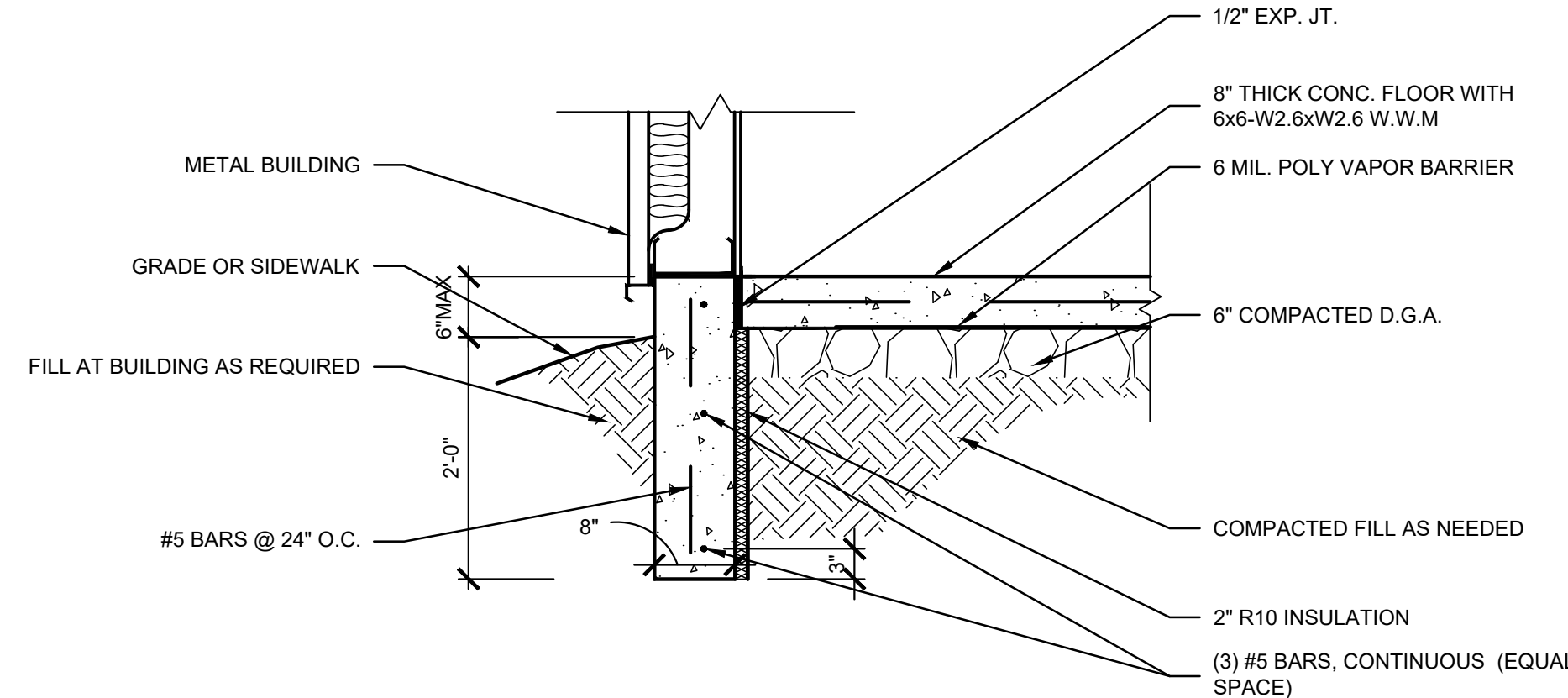
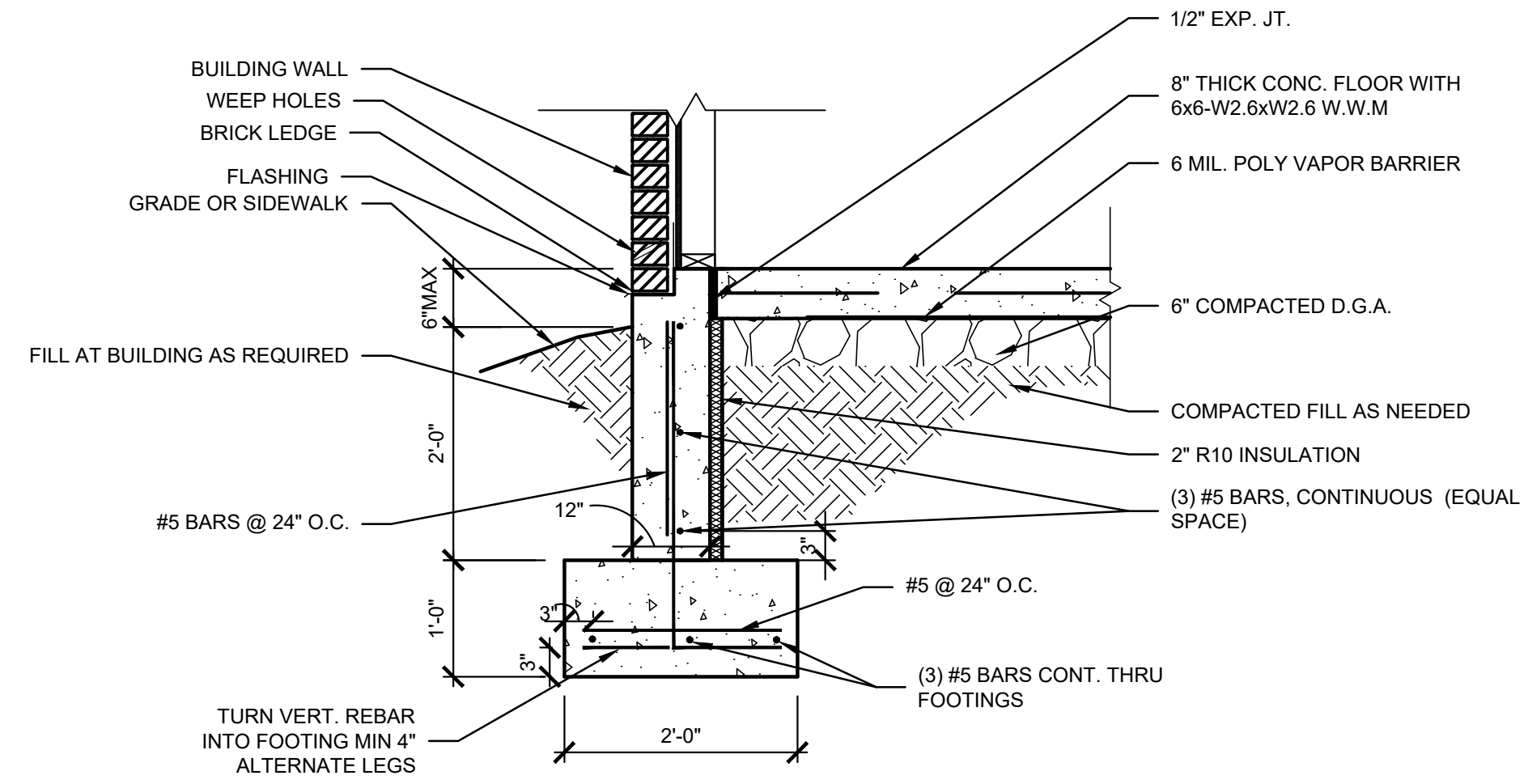
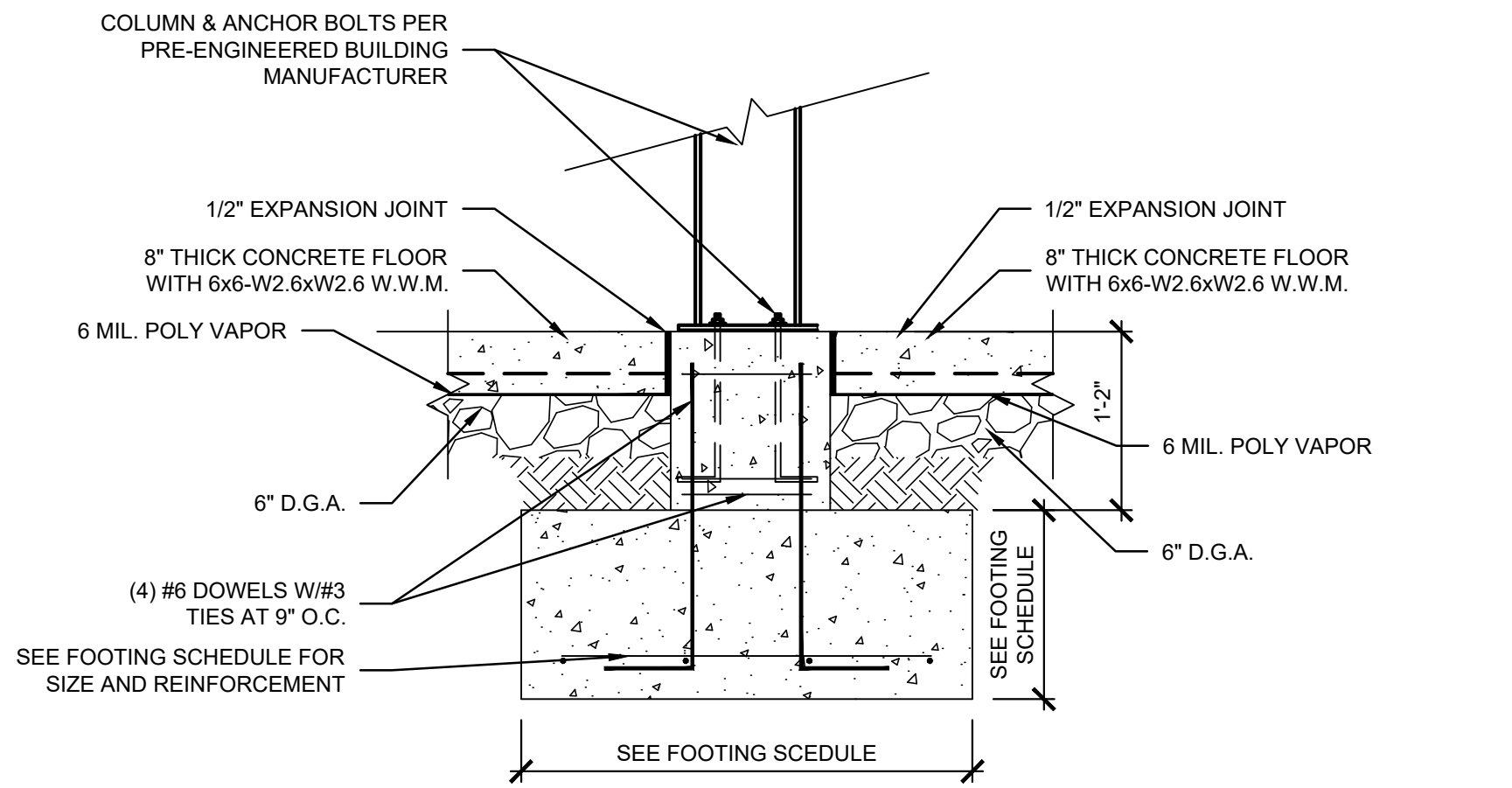
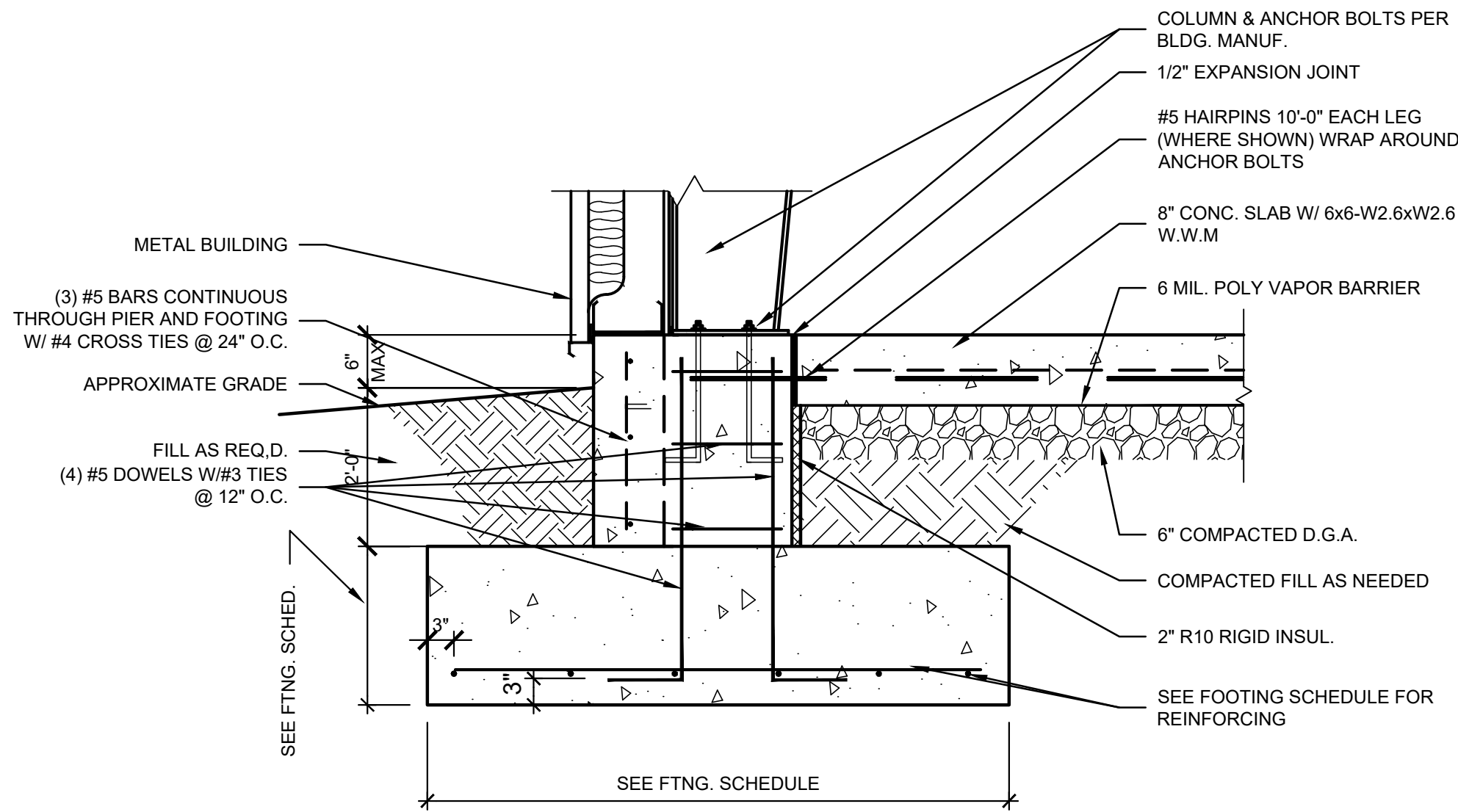
NEW CONSTRUCTION:  
**CITY OF BARDSTOWN**  
**PUBLIC WORKS BUILDING**  
PADGETT WAY  
BARDSTOWN, KY

FOUNDATION PLAN

**F1.01**



PROJECT: CITY OF BARDSTOWN PUBLIC WORKS BUILDING - FILE: F2.01 Foundation Details.dwg - DATE: Sep 01, 2020 3:53PM - BY: ERIC KEYES



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PROJECT NO:  
19-3060

DRAWN BY:  
NM/CS/GRH

DATE:  
05-27-2020

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LOUISVILLE, KENTUCKY 40213 (502) 636-5113

NEW CONSTRUCTION:

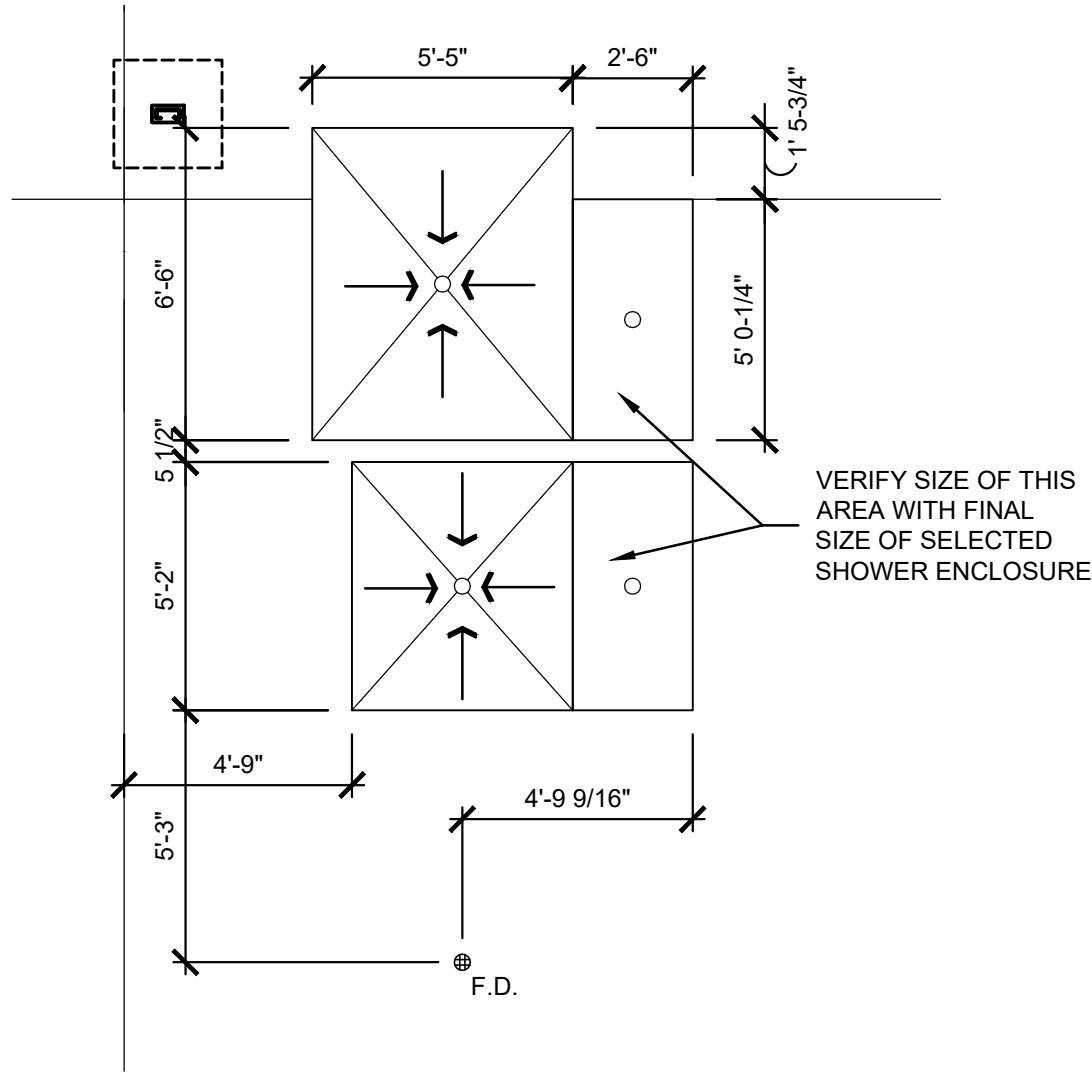
CITY OF BARDSTOWN  
PUBLIC WORKS BUILDING

PADGETT WAY  
BARDSTOWN, KY

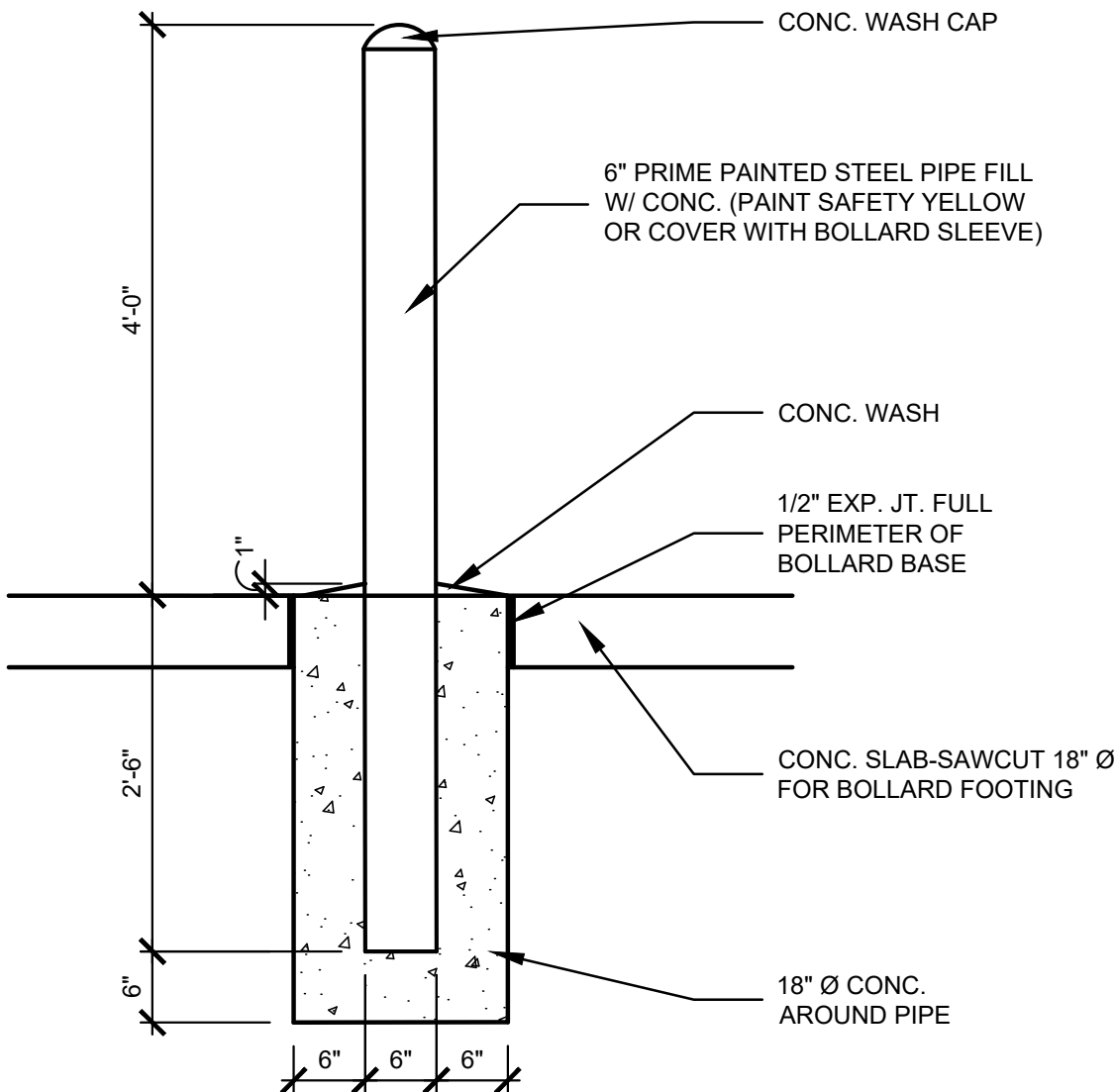
FOUNDATION DETAILS

F2.01

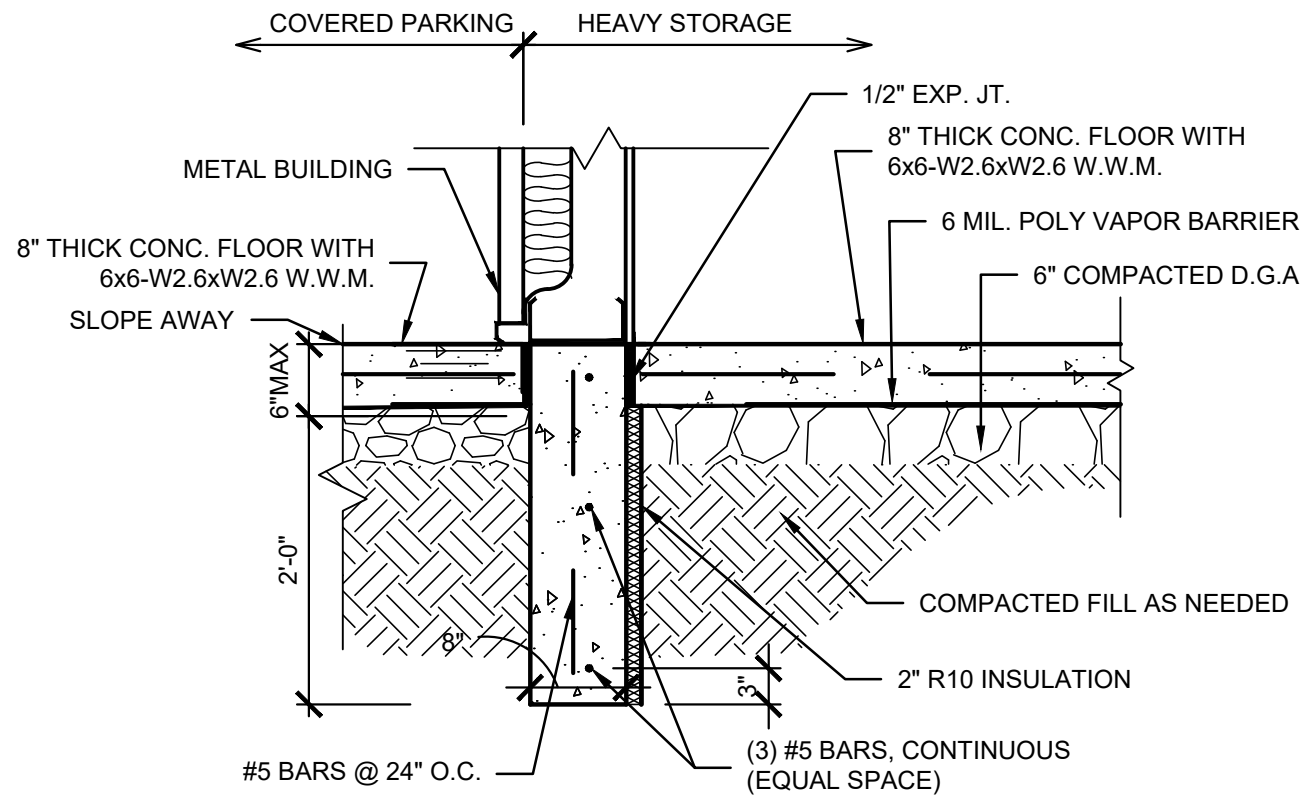




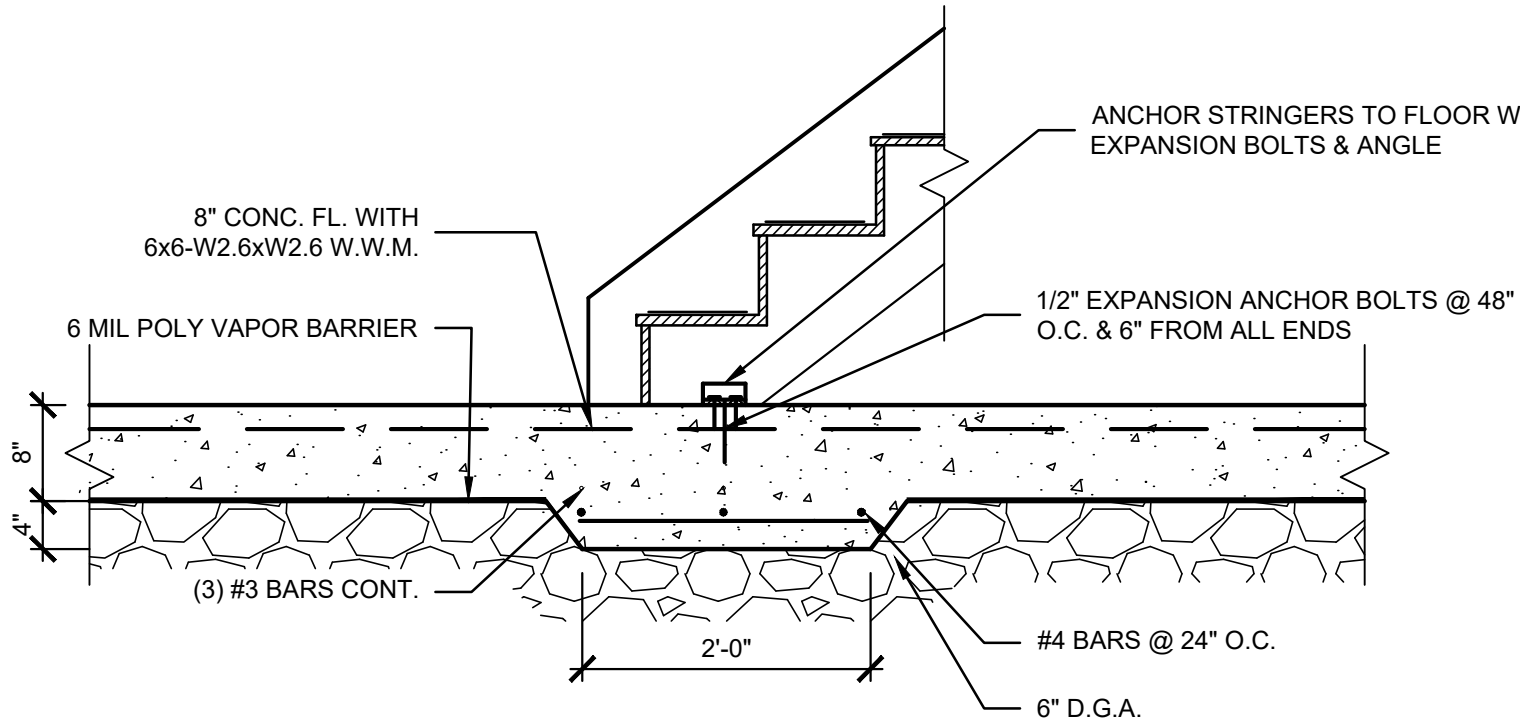
**01** ENLARGED DIMENSION PLAN  
SCALE: 1/4" = 1'-0"



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



**03** GRADE BEAM DETAIL AT CONCRETE SLAB  
SCALE: 3/4" = 1'-0"



**04** THICKENED SLAB UNDER STAIR  
SCALE: 3/4" = 1'-0"

PROJECT: CITY OF BARDSTOWN PUBLIC WORKS BUILDING - FILE: F2.02 Foundation Details.dwg - DATE: Sep 01, 2020 3:53PM - BY: ERIC KEYES

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19-3060  
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05-27-2020



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NEW CONSTRUCTION:  
**CITY OF BARDSTOWN**  
**PUBLIC WORKS BUILDING**  
PADGETT WAY  
BARDSTOWN, KY

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FOUNDATION DETAILS  
**F2.02**



PROJECT: CITY OF BARDSTOWN PUBLIC WORKS BUILDING - FILE: S1.01 Structural Framing Plan.dwg - DATE: Sep 01, 2020 3:53PM - BY: ERIC KEYES

01 LOW ROOF FRAMING PLAN

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

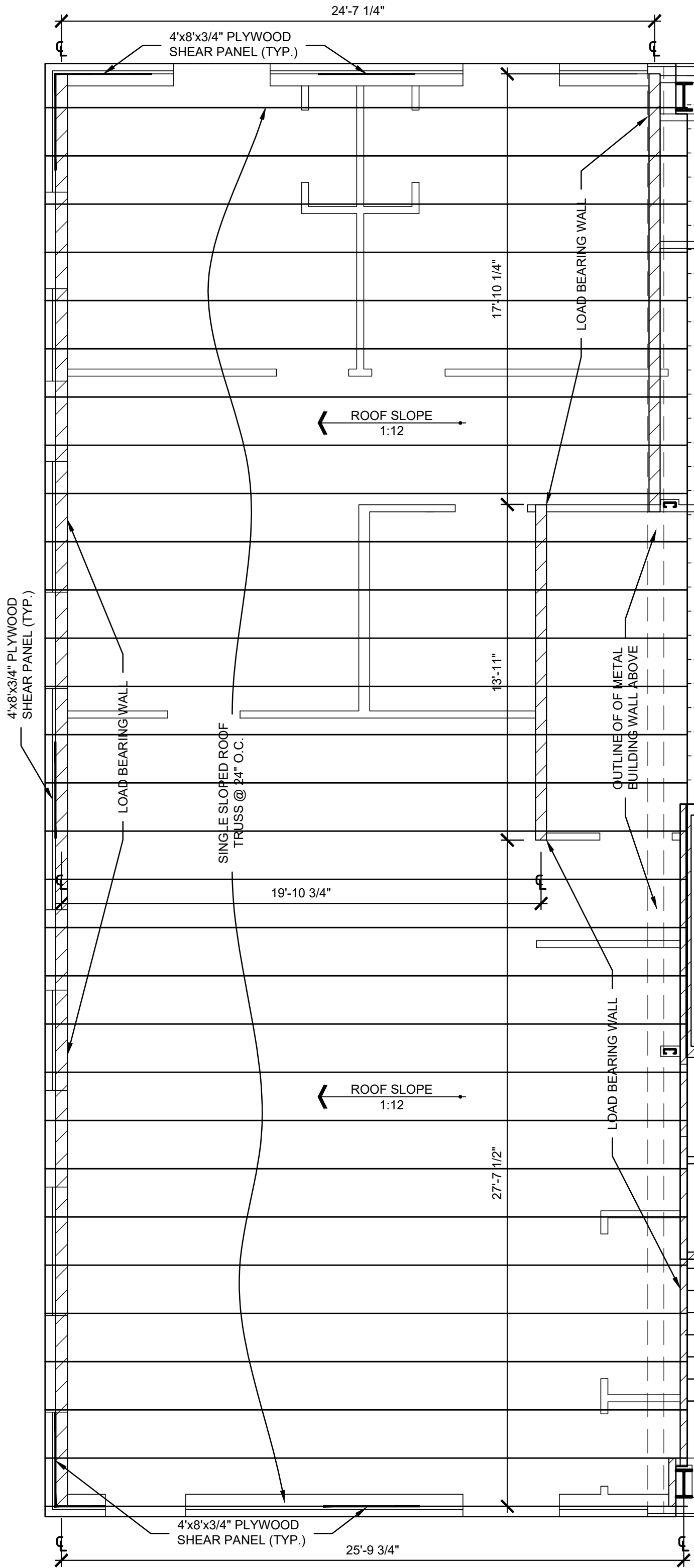
SHEET NOTES:

- 1 PROVIDE BLOCKING @ TOP + BTM OF TRUSS END TO PREVENT WARPING

NOTE  
SYMBOL

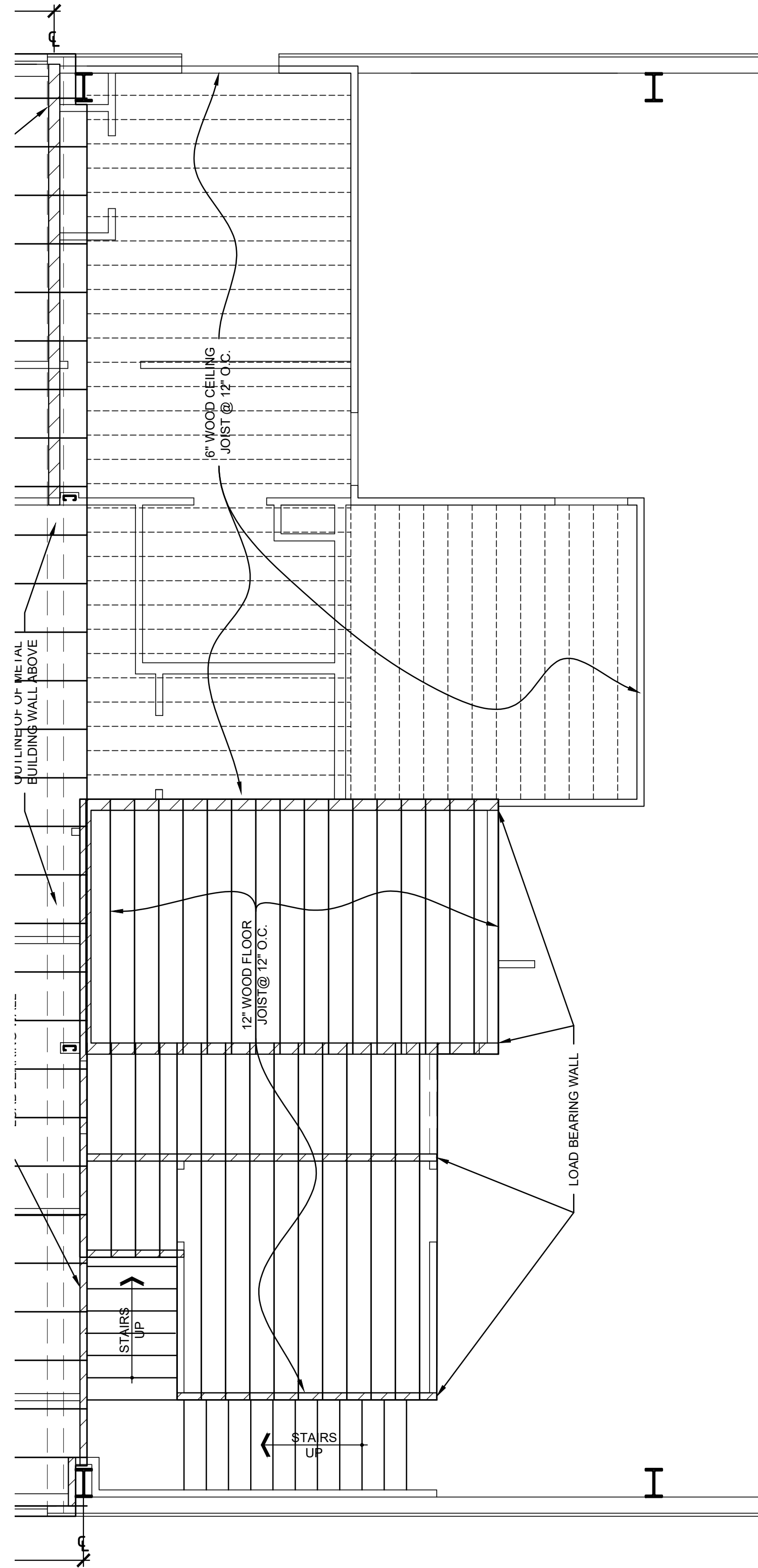
NOTE:

SEE EQUIPMENT SHEET EQ1.01 FOR  
INFORMATION ON EQUIPMENT AND LAYOUT



02 MEZZANINE FRAMING PLAN

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



NOTE: ALL DIMENSIONS ARE TO FACE OF STUD

NOTE: GENERAL CONTRACTOR RESPONSIBLE FOR  
COORDINATION OF ALL SUB TRADES AND  
REQUIREMENTS BY OWNER

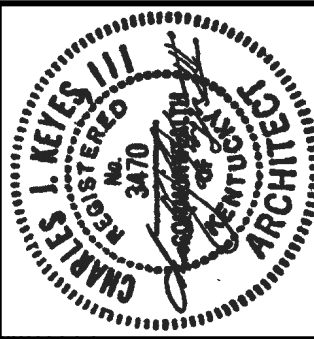
NOTE: ELECTRICAL, HVAC AND PLUMBING TO BE  
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CODES. GENERAL CONTRACTOR TO COORDINATE.

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NEW CONSTRUCTION:

CITY OF BARDSTOWN  
PUBLIC WORKS BUILDING

PADGETT WAY  
BARDSTOWN, KY



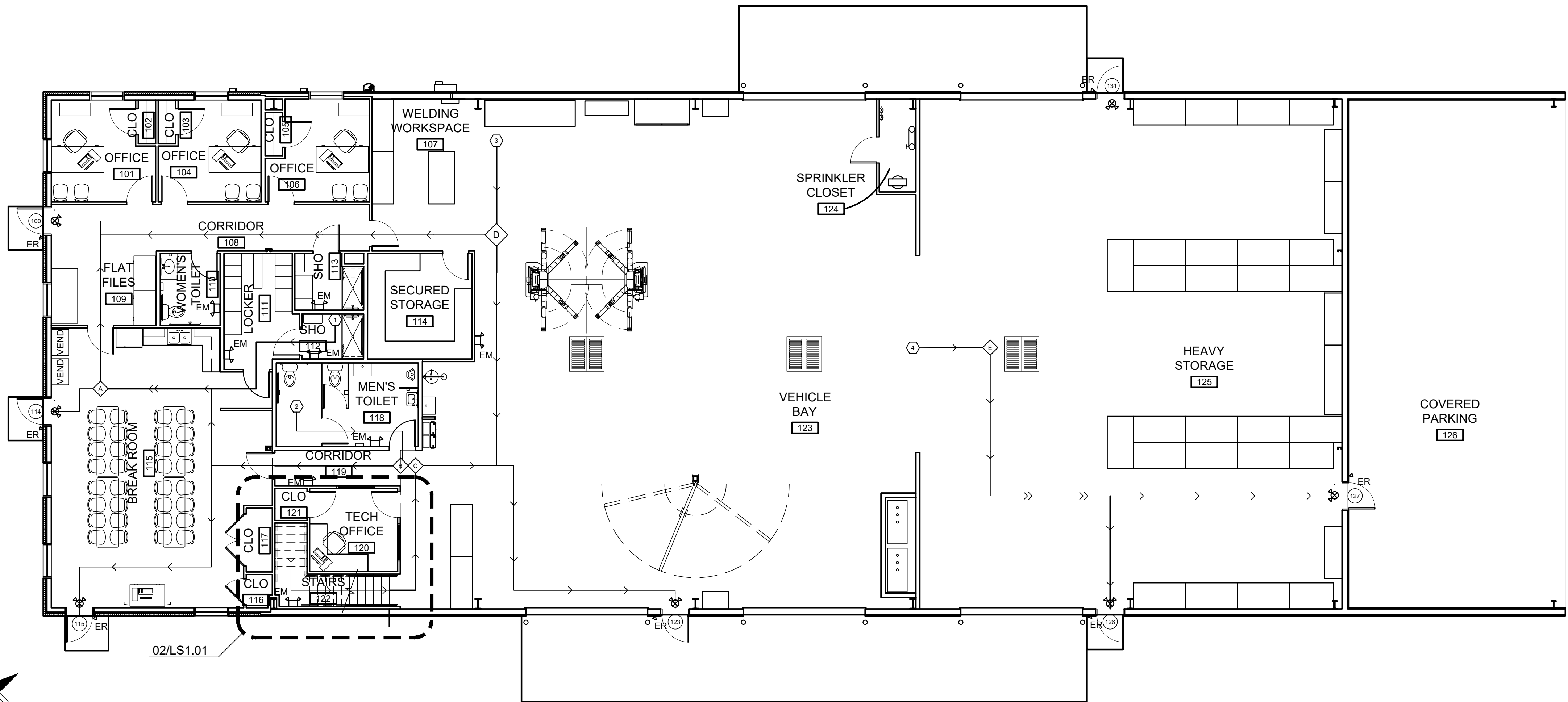
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4717 PRESTON HIGHWAY  
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STRUCTURAL FRAMING  
PLAN

S1.01

PROJECT NO:  
19-3060  
DRAWN BY:  
NM/CS/  
DATE:  
05-27-2020

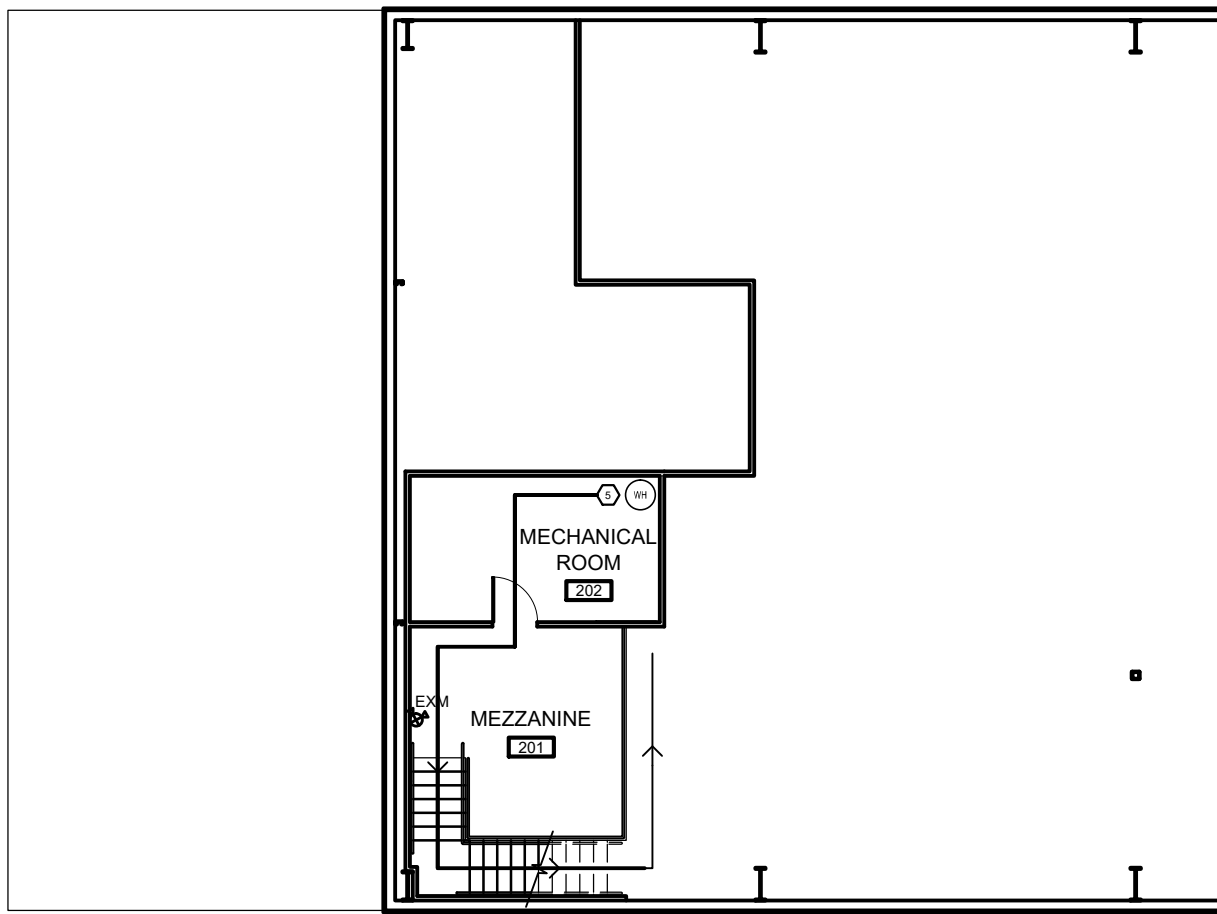




01

LIFE SAFETY PLAN

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



02

LIFE SAFETY PLAN MEZZANINE

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

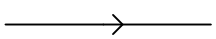
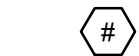
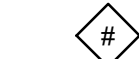
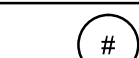


CODE ANALYSIS			
CATEGORY	CODE REFERENCE	REQUIREMENT/DESIGNATION	PROVIDED
CONSTRUCTION TYPE	TABLE 506.2		II-B
OCCUPANCY GROUPS	304.1	B- BUSINESS, S-1 STORAGE REPAIR	B, S-1
OCCUPANCY LOAD	TABLE 1004.1.2	40 TOTAL OCCUPANTS	24 BUSINESS OCCUPANTS (100 GROSS) 16 WAREHOUSE OCCUPANTS (500 GROSS)
ALLOWABLE AREA	TABLE 506.2	2 STORIES 19,600 S.F. ALLOWED W/ FRONTAGE INCREASE	1 STORY 11,014.92 S.F.
EXIT CALCULATIONS	SECTION 1006.3.2.3 TABLE 1017.2	COMMON PATH OF EGRESS TRAVEL GROUP 100 S.F. EXIT ACCESS TRAVEL DISTANCE 200 S.F.	64'-2" S.F. MAX 65'-2" S.F. MAX
NON-SEPERATED OCCUPANCIES	TABLE 508	NO SEPARATION BETWEEN GROUP AND GROUP	

EMERGENCY LIGHT FIXTURE SCHEDULE		
TYPE	DESCRIPTION	BULBS
ER ▽	EMERGENCY REMOTE HEAD	INCLUDED
EM ⌋	EMERGENCY LIGHT W/ BATTERY PACK REMOTE HEAD WHERE SHOWN	INCLUDED
EXM ⌋⊗	COMBINATION EXIT/EMERGENCY FIXTURE W/ BATTERY PACK	INCLUDED

NOTE:  
SEE ELECTRICAL FOR MORE INFORMATION. EMERGENCY EGRESS LIGHTING TO BE DESIGNED BY ELECTRICAL ENGINEER. SEE ELECTRICAL PLANS FOR FINAL LAYOUT. IF ANY CONFLICTING EMERGENCY EGRESS LIGHTING USE ELECTRICAL PLANS.

LIFE SAFETY PATHWAYS								
			TOTAL TRAVEL DISTANCE					
			DOOR NUMBER					
LOCATION	COMMON PATH		EXIT 100	EXIT 114	EXIT 115	EXIT 123	EXIT 126	EXIT 127
1	A	34'-4"	60'-2"	43'-3"	-	-	-	-
2	B	19'-0"			72'-6"	66'-6"	-	-
3	D	9'-0"	59'-10"	-	-	74'-6"	-	-
4	E	9'-0"	-	-	-	-	52'-9"	67'-10"
5	C	64'-2"	-		106'-0"	97'-0"	-	-

PATHWAY KEY PLAN:	
	: TRAVEL PATH W/ DIRECTION OF FLOW
	: TRAVEL PATH STARTING LOCATION, WHERE "#" = LOCATION COLUMN IN THIS TABLE.
	: COMMON PATH LOCATION, WHERE "#" = LOCATION COLUMN IN THIS TABLE.
	: EXIT DOOR LOCATION, WHERE "#" = DOOR IN THIS TABLE AND IN DOOR FINISH SCHEDULE.



NEW CONSTRUCTION:

CITY OF BARDSTOWN

PUBLIC WORKS BUILDING

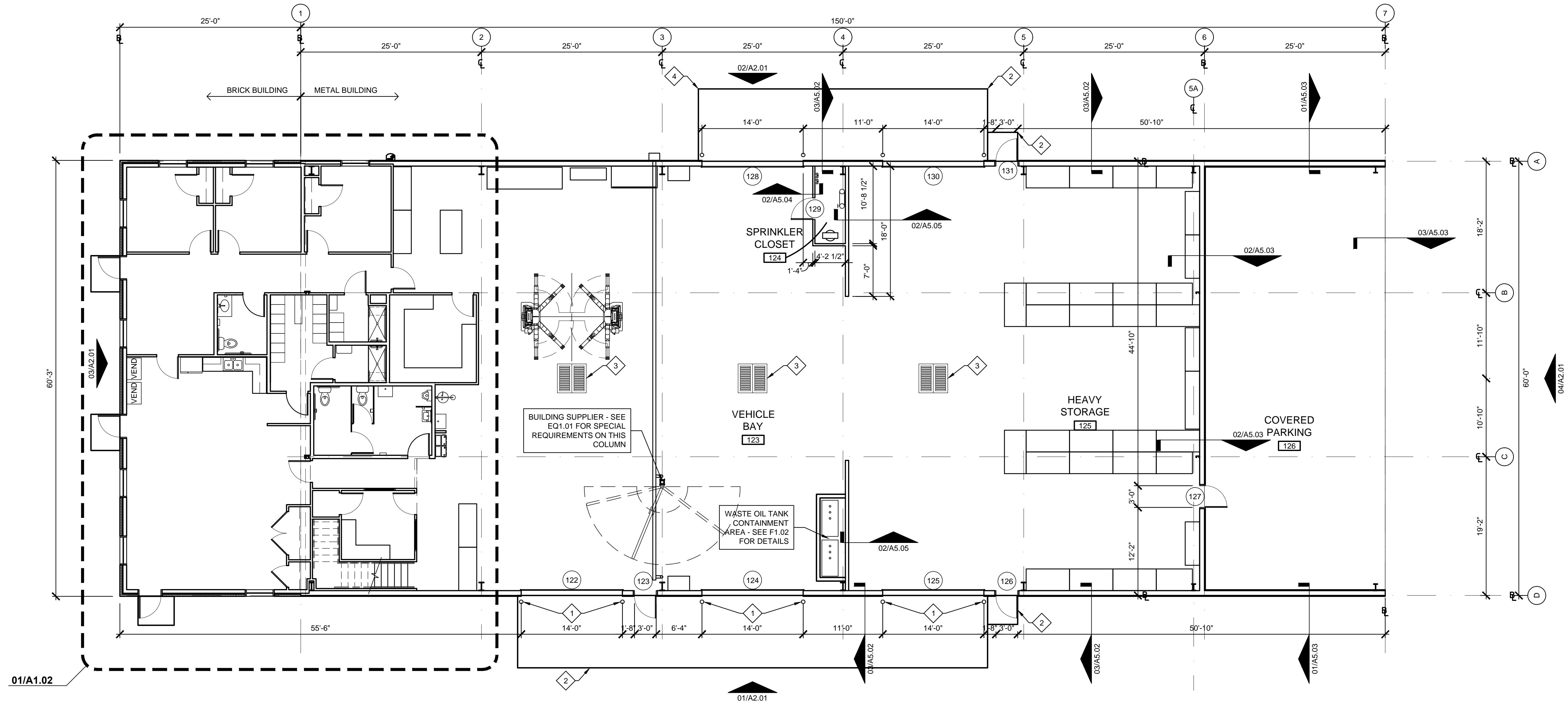
PADGETT WAY  
BARDSTOWN, KY

KEYES ARCHITECTS & ASSOCIATES  
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PROJECT: CITY OF BARDSTOWN PUBLIC WORKS BUILDING - FILE: A1.01 Overall Floor Plan.dwg - DATE: Sep 02, 2020 8:25AM - BY: ERIC KEYES

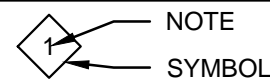


## 01 FIRST FLOOR PLAN

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

### SHEET NOTES:

- 1 PIPE BOLLARD- SEE FOUNDATION DETAILS
- 2 CONCRETE PAD- SEE FOUNDATION DETAILS
- 3 NEW CATCH BASIN- SEE FOUNDATION AND PLUMBING PLANS



NOTE  
SYMBOL

#### NOTE:

SEE EQUIPMENT SHEET EQ1.01 FOR  
INFORMATION ON EQUIPMENT AND LAYOUT

### WALL LEGEND

- 2x4 WOOD STUD WALL WITH EXTERIOR GRADE SHEATHING, AIR GAP AND BRICK VENEER
- 8" METAL BUILDING GIRTS WITH METAL SIDING
- 3 1/2" WOOD STUD WALL UNLESS OTHERWISE NOTED
- EDGE OF MEZZANINE W/ GUARD RAIL
- 8" GIRT WALL ABOVE

\*ALL MATERIALS ARE SIZES LISTED IN THIS LEGEND UNLESS OTHERWISE DIMENSIONED ON THIS PLAN OR SPECIFIED IN THE DETAILS AT A DIFFERENT SIZE

**NOTE:** ALL DIMENSIONS ARE TO FACE OF STUD

**NOTE:** GENERAL CONTRACTOR RESPONSIBLE FOR COORDINATION OF ALL SUB TRADES AND REQUIREMENTS BY OWNER

**NOTE:** ELECTRICAL, HVAC AND PLUMBING TO BE RELOCATED PER FEDERAL, STATE AND LOCAL CODES. GENERAL CONTRACTOR TO COORDINATE.

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NEW CONSTRUCTION:

CITY OF BARDSTOWN  
PUBLIC WORKS BUILDING

PADGETT WAY  
BARDSTOWN, KY



KEYES ARCHITECTS & ASSOCIATES  
4717 PRESTON HIGHWAY  
LOUISVILLE, KENTUCKY 40213 (502) 636-5113

PROJECT NO:  
19-3060

DRAWN BY:  
NM/CS----

DATE:  
05-27-2020

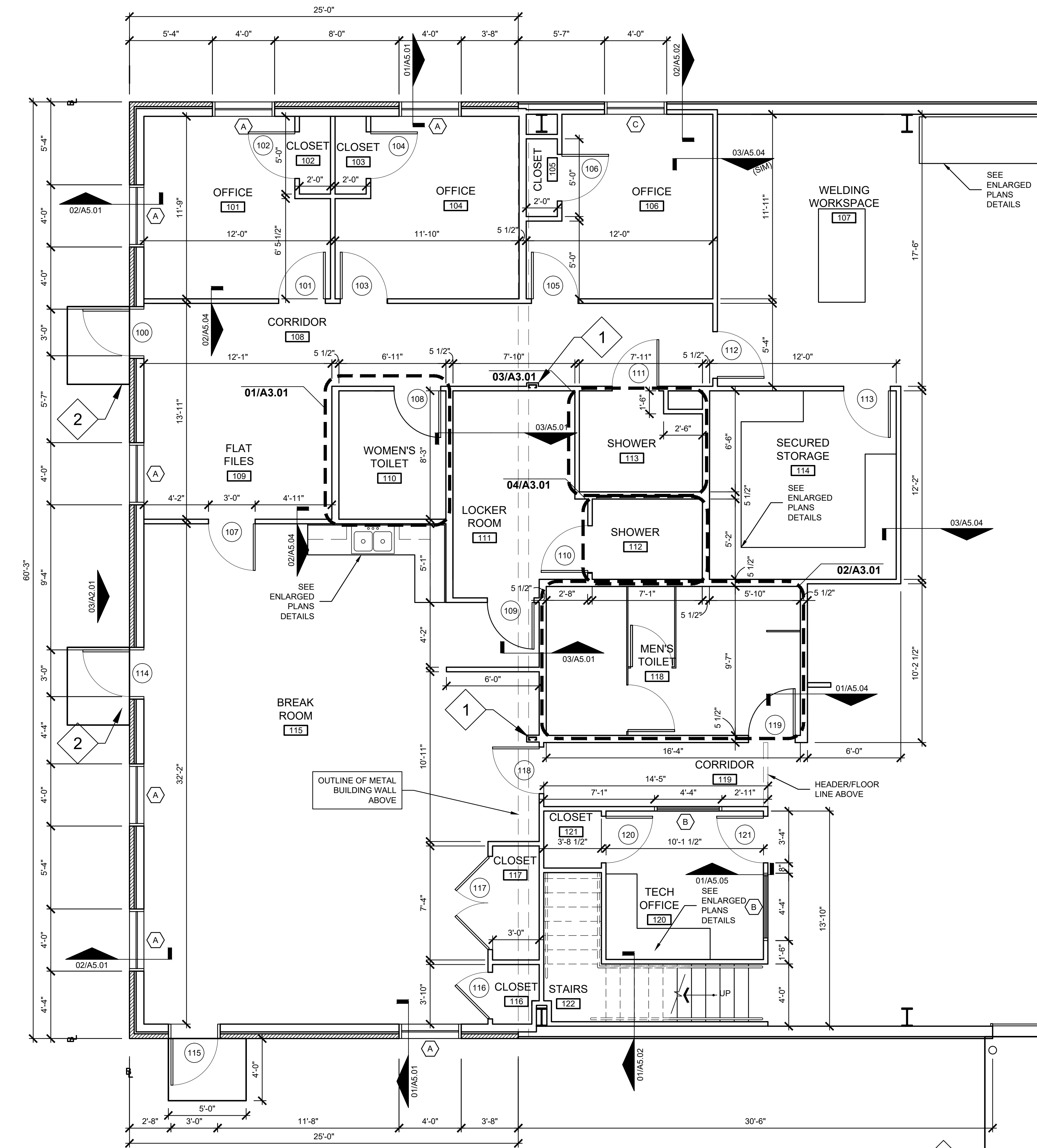
OVERALL FLOOR PLAN

A1.01



PROJECT: CITY OF BARDSTOWN PUBLIC WORKS BUILDING - FILE: A1.02 Enlarged Floor Plans.dwg - DATE: Sep 01, 2020 3:53PM - BY: ERIC KEYES

PROJECT NO:  
19-3060  
DRAWN BY:  
NM/CS/  
DATE:  
05-27-2020



### WALL LEGEND

- 2x4 WOOD STUD WALL WITH EXTERIOR GRADE SHEATHING, AIR GAP AND BRICK VENEER
- 8" METAL BUILDING GIRTS WITH METAL SIDING
- 3 1/2" WOOD STUD WALL UNLESS OTHERWISE NOTED
- EDGE OF MEZZANINE W/ 1-1/2" GUARD RAIL
- 8" GIRT WALL ABOVE

\*ALL MATERIALS ARE SIZES LISTED IN THIS LEGEND UNLESS OTHERWISE DIMENSIONED ON THIS PLAN OR SPECIFIED IN THE DETAILS AT A DIFFERENT SIZE

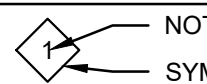


## 01 ENLARGED FLOOR PLAN

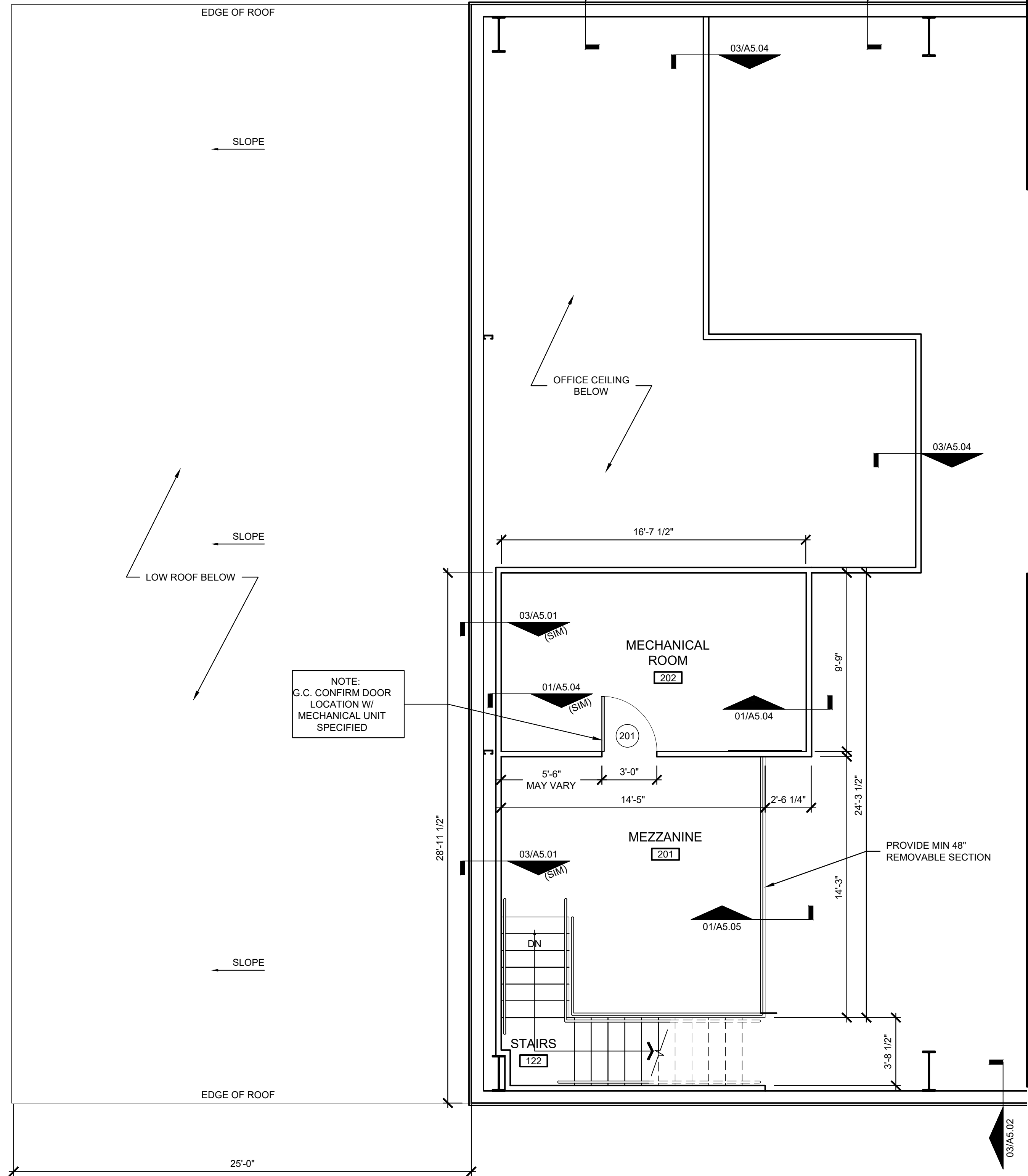
SCALE: 1/4" = 1'-0"

### SHEET NOTES:

- END WALL BLDG. COLUMN
- CONCRETE PAD- SEE FOUNDATION PLANS



NOTE  
SYMBOL



## 02 ENLARGED MEZZANINE PLAN

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



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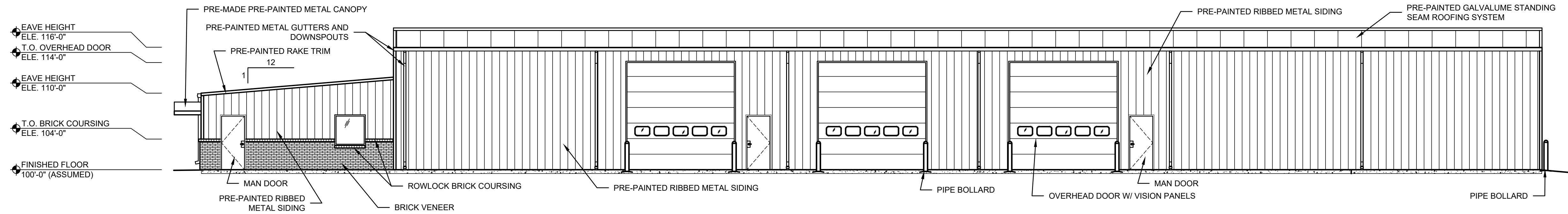
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ENLARGED FLOOR PLANS

**A1.02**

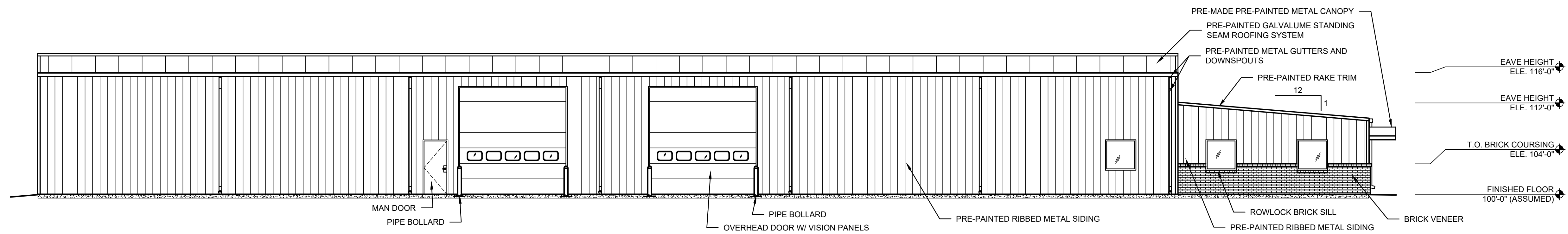


PROJECT: CITY OF BARDSTOWN PUBLIC WORKS BUILDING - FILE: A2.01 Exterior Elevations.dwg - DATE: Sep 01, 2020 3:54PM - BY: ERIC KEYES



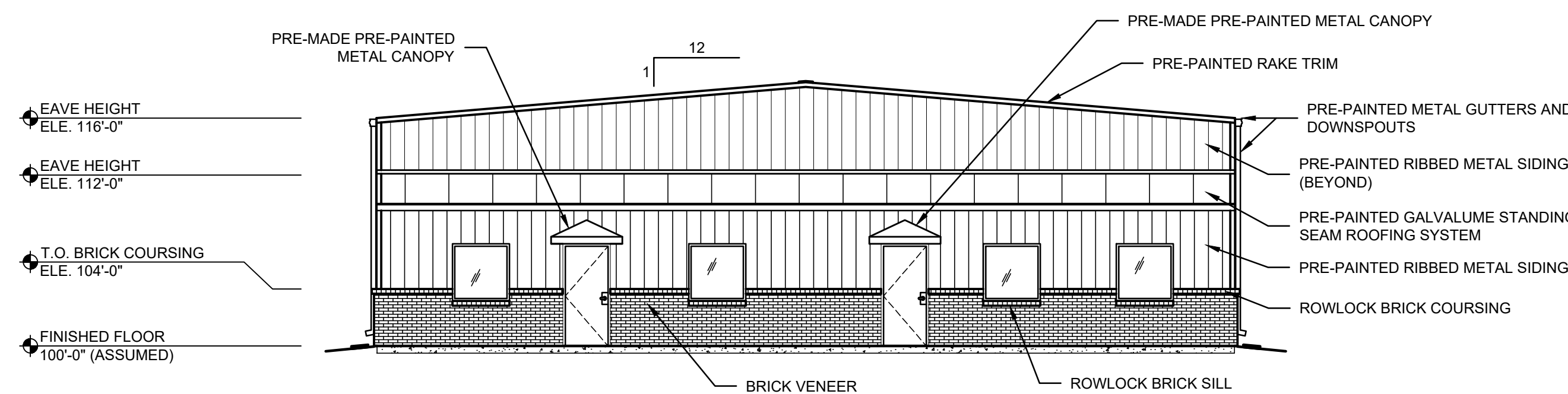
## 01 SOUTH ELEVATION

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



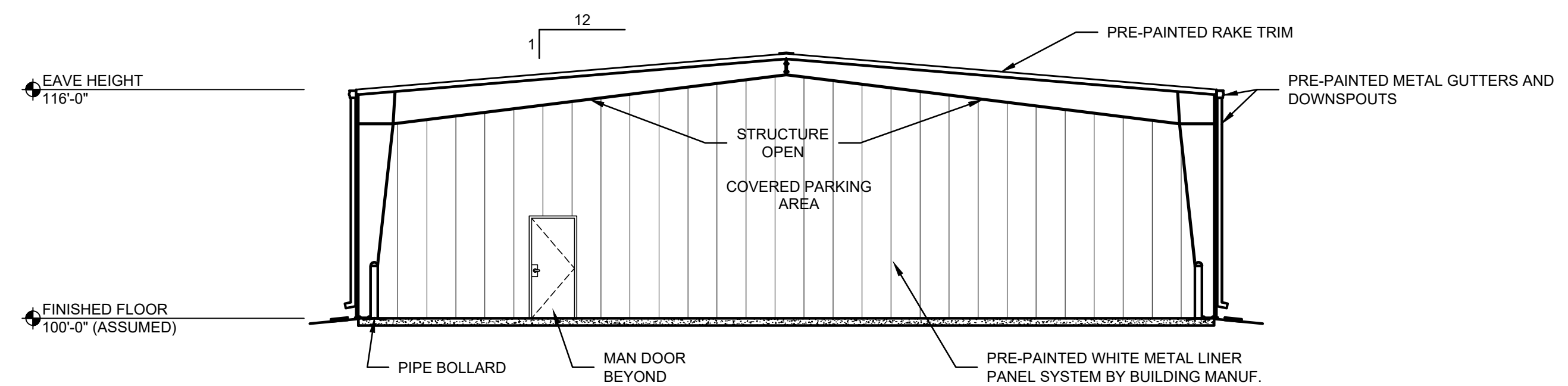
## 02 NORTH ELEVATION

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



## 03 WEST ELEVATION

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



## 04 EAST ELEVATION

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

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NEW CONSTRUCTION:  
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BARDSTOWN, KY

EXTERIOR ELEVATIONS

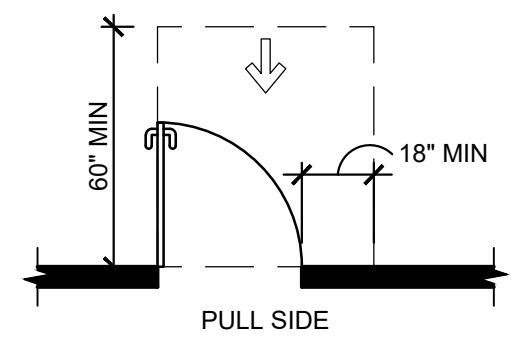
A2.01



PROJECT: CITY OF BARDSTOWN PUBLIC WORKS BUILDING - FILE: A3.01 Commercial ADA-Ansi Guidelines.dwg - DATE: Sep 01, 2020 3:54PM - BY: ERIC KEYES

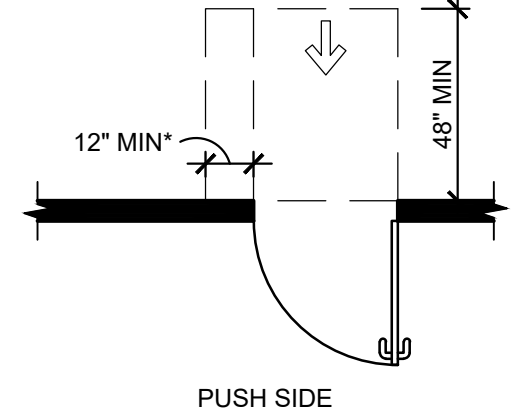
## REQUIRED DOOR ACCESSIBLE CLEAR FLOOR SPACE

### FRONT APPROACH



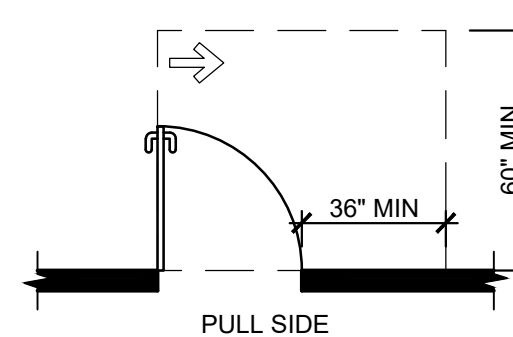
PULL SIDE

\*IF BOTH CLOSER AND LATCH ARE PROVIDED

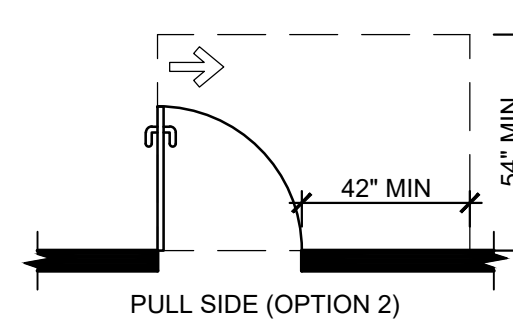


PUSH SIDE

### HINGE APPROACH

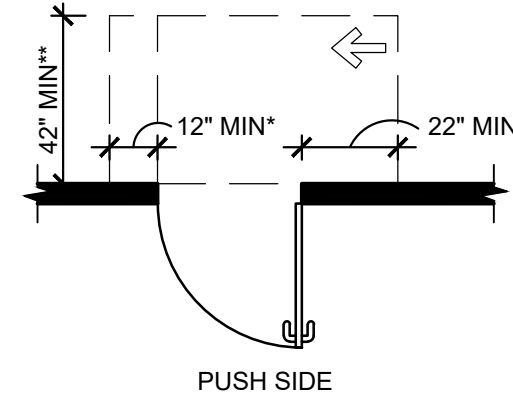


PULL SIDE



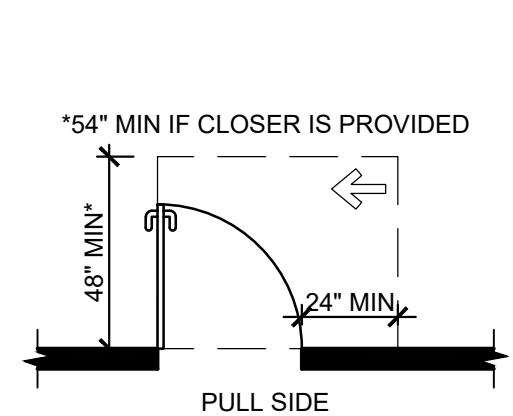
PULL SIDE (OPTION 2)

\*IF BOTH CLOSER AND LATCH ARE PROVIDED  
\*\* 48" MIN IF BOTH CLOSER AND LATCH ARE PROVIDED

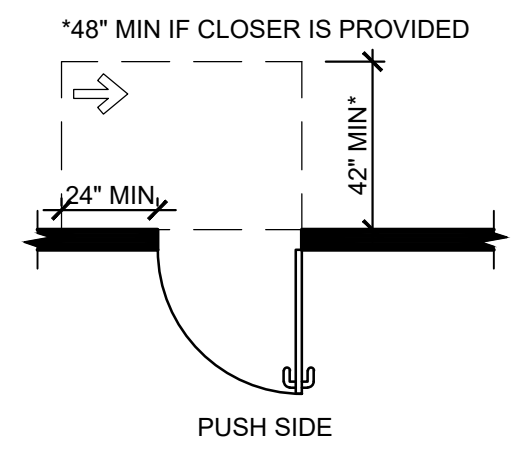


PUSH SIDE

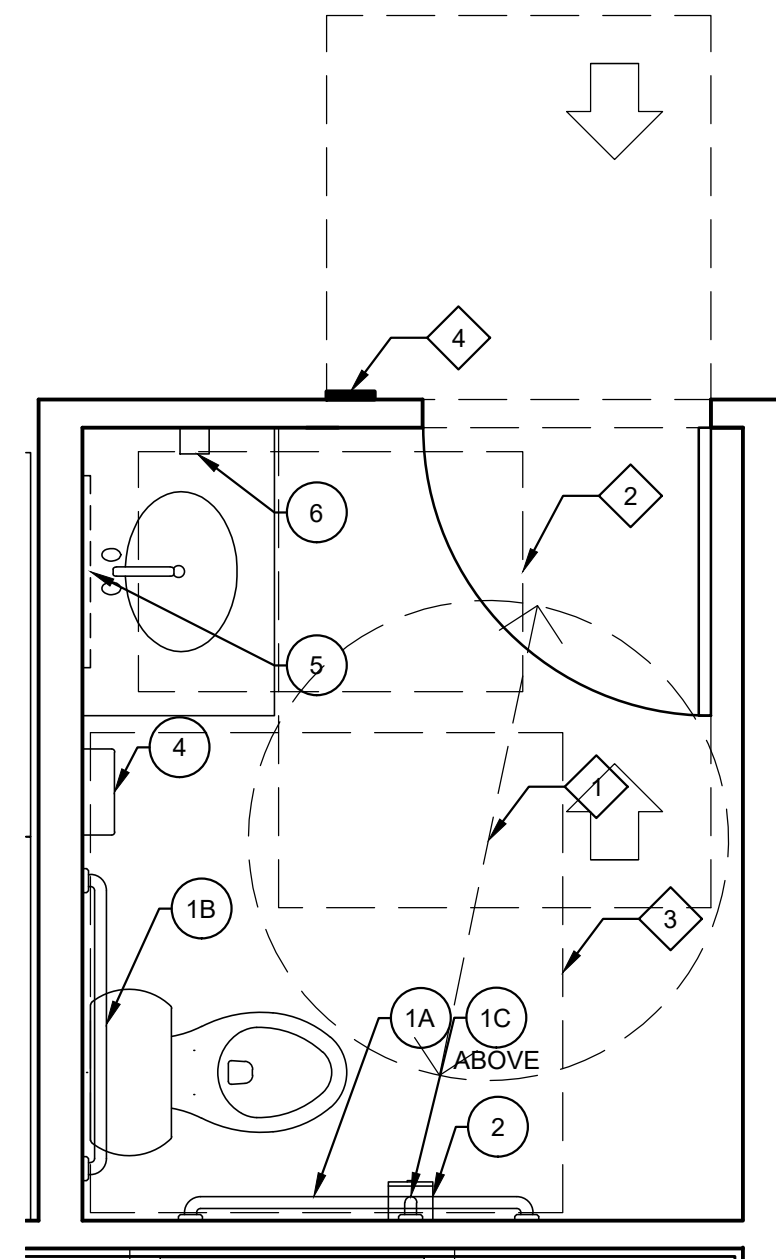
### LATCH APPROACH



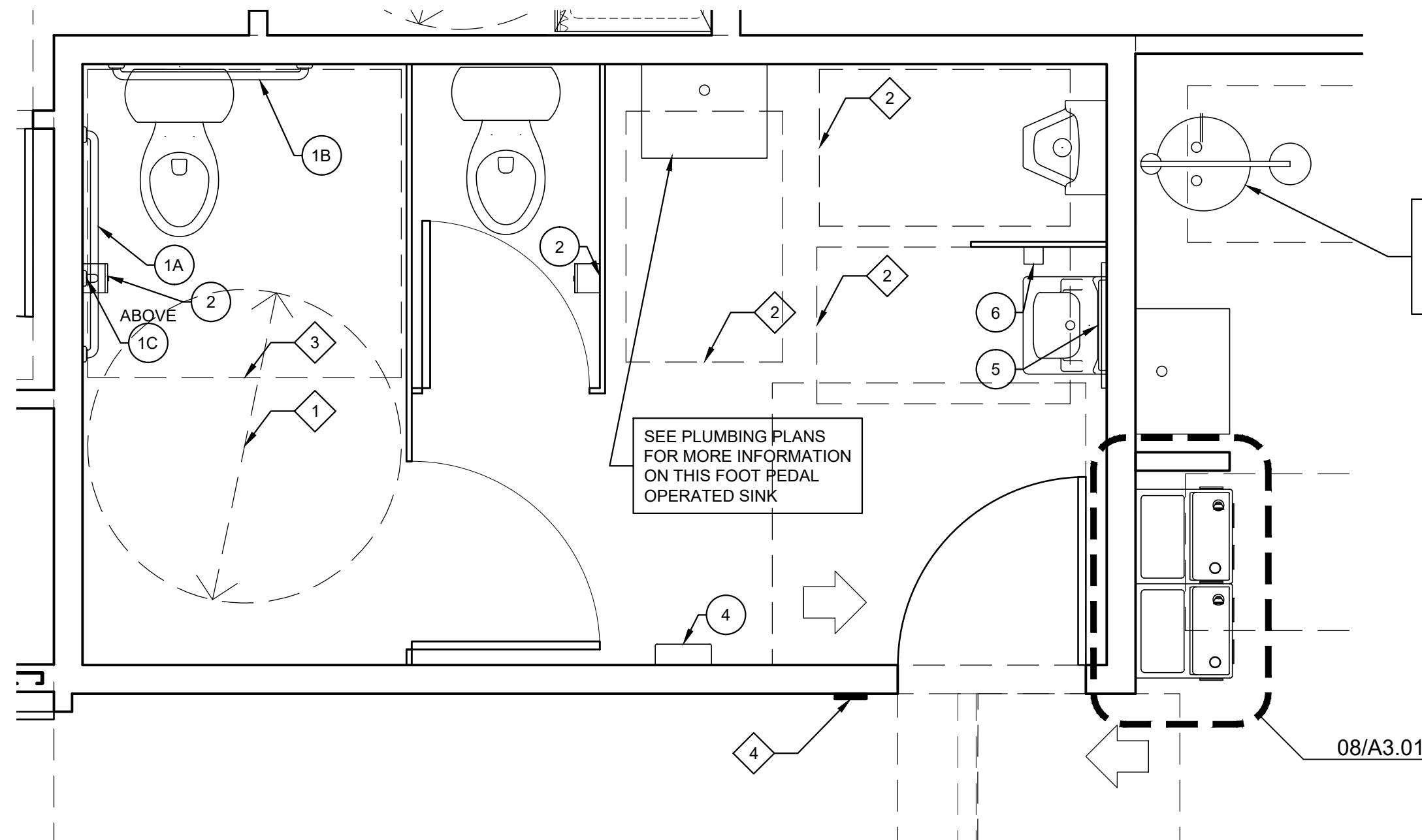
PULL SIDE



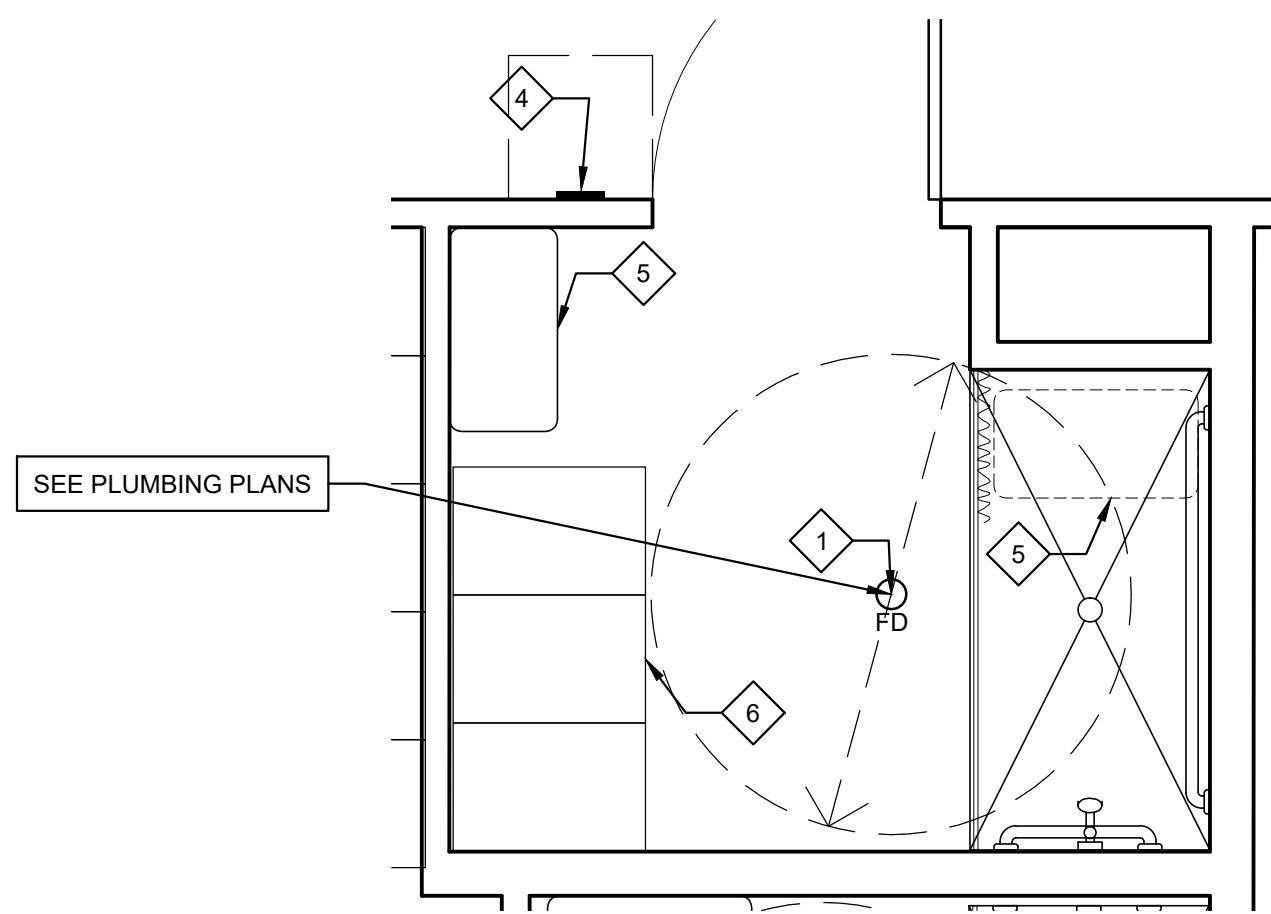
PUSH SIDE



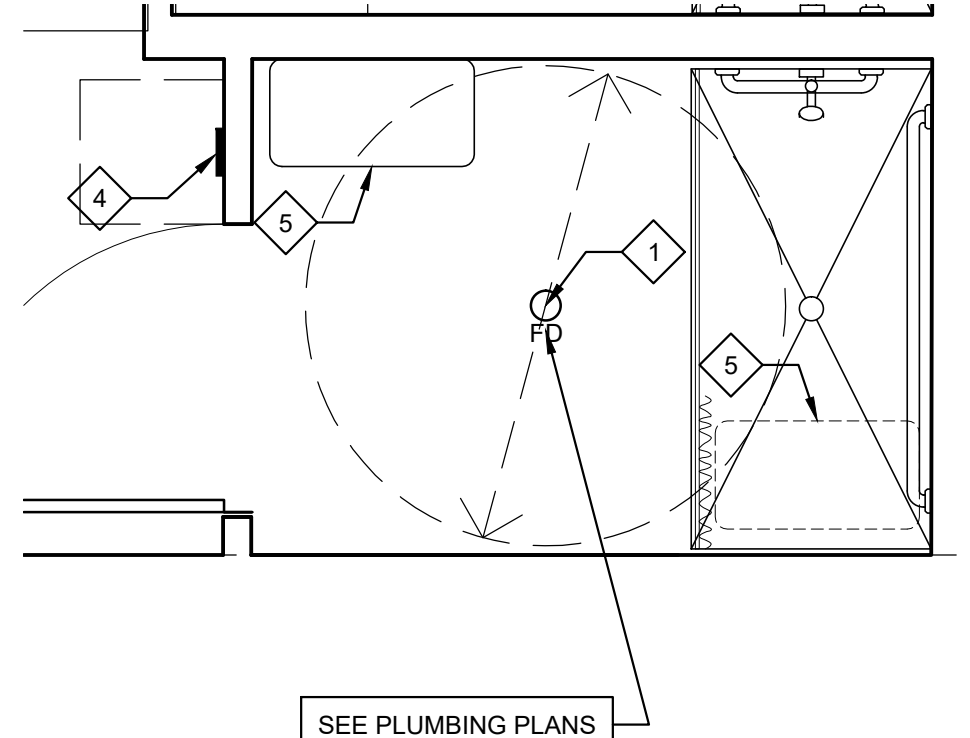
**01** **ACCESIBLE TOILET PLAN**  
SCALE: 1/2" = 1'-0"



**02** **ACCESIBLE TOILET PLAN**  
SCALE: 1/2" = 1'-0"



**03** **SHOWER PLAN**  
SCALE: 1/2" = 1'-0"



**04** **SHOWER PLAN**  
SCALE: 1/2" = 1'-0"

## REQUIRED ACCESSIBLE CLEAR FLOOR SPACE

### TYPICAL CLEAR FLOOR SPACES

1	TURNAROUND / TURNING CIRCLE: 60" DIAMETER CLEAR FLOOR SPACE (TYP.)
2	EQUIPMENT / FIXTURE: 30"x48" CLEAR FLOOR SPACE
3	TOILET IN TOILET PARTITION ROOM WITH 9" TOE CLEARANCE: 60"x60" CLEAR FLOOR SPACE
4	ACCESSIBLE SIGNAGE - SEE DETAIL 07/A3.01 FOR MORE INFORMATION
5	REMOVABLE ADA BENCH
6	LOCKER DETAIL SEE- 08/A07.04

NOTE SYMBOL

MEETS THE STRICTEST INTERPRETATION OF BOTH THE ANSI 117.1 AND 2010 FEDERAL ADA STANDARDS FOR ACCESSIBLE DESIGN

NOTE:  
NOT ALL ITEMS LISTED ON THIS SHEET WILL APPLY TO THIS PROJECT. IF THERE ARE ANY QUESTIONS OR COMMENTS CONTACT KEYES ARCHITECTS AND ASSOCIATES.

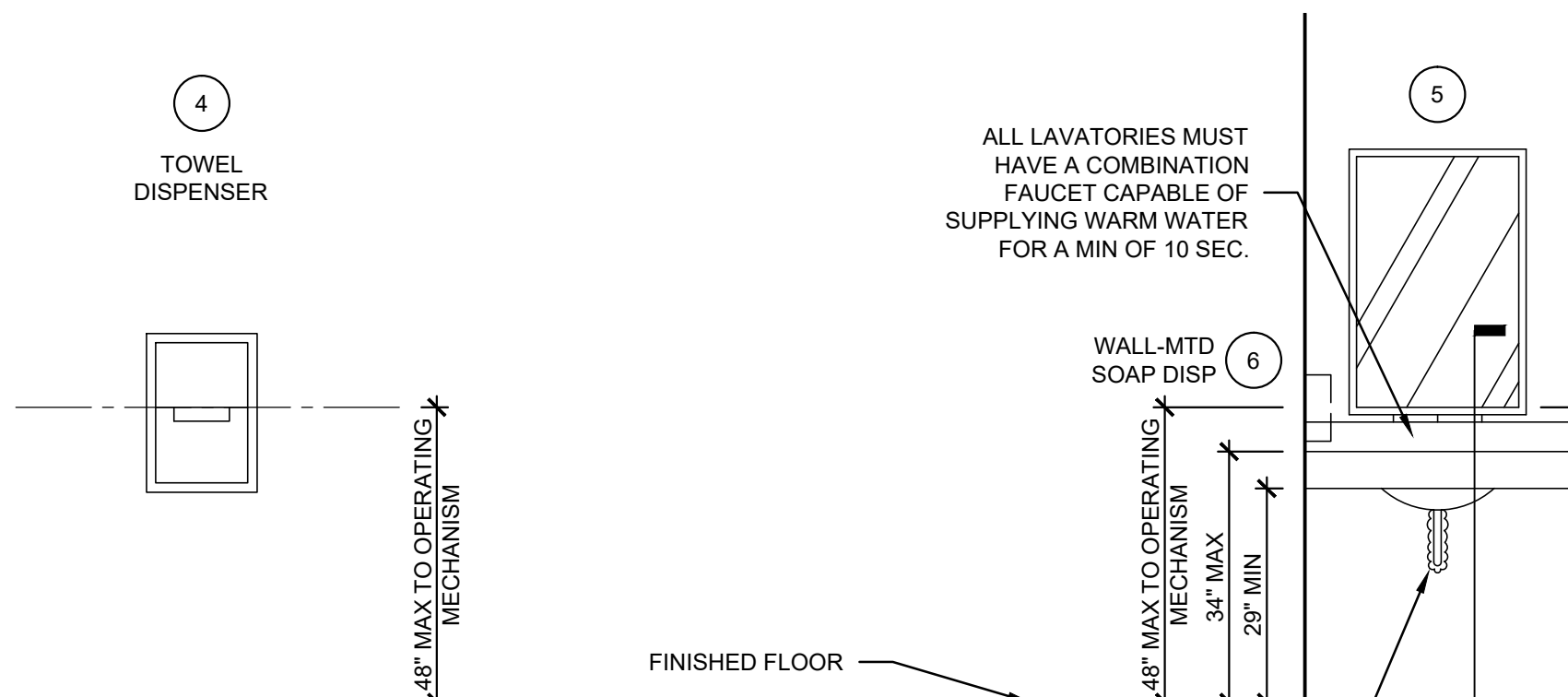
## RESTROOM ACCESSORIES SCHEDULE

	ITEM (SEE NOTE 2)	MODEL #	SUPPLIER	BACKUP SUPPORT (SEE NOTE 3)
1A	GRAB BAR 42"	SEE SPECS.	SEE SPECS. FOR RECOMMENDED MANUFACTURERS	MOUNTED PER MANUFACTURER'S RECOMMENDATIONS
1B	GRAB BAR 36"	SEE SPECS.	SEE SPECS. FOR RECOMMENDED MANUFACTURERS	MOUNTED PER MANUFACTURER'S RECOMMENDATIONS
1C	GRAB BAR 24" (18" MIN)	SEE SPECS.	SEE SPECS. FOR RECOMMENDED MANUFACTURERS	MOUNTED PER MANUFACTURER'S RECOMMENDATIONS
2	TOILET TISSUE DISPENSER, DOUBLE, SURFACE MOUNTED (SEE NOTE 4)	SEE SPECS.	SEE SPECS. FOR RECOMMENDED MANUFACTURERS	MOUNTED PER MANUFACTURER'S RECOMMENDATIONS
3	NOT USED			

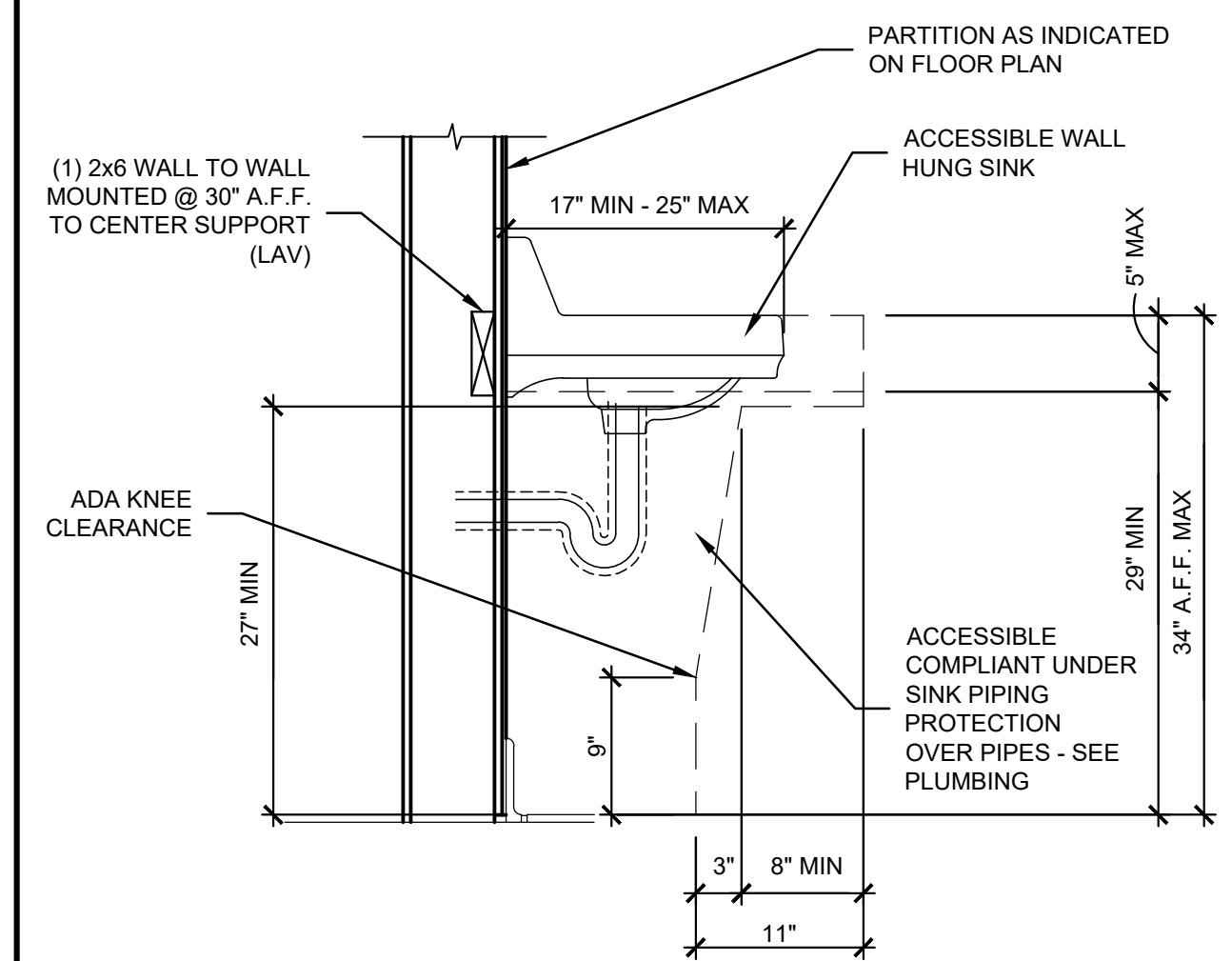
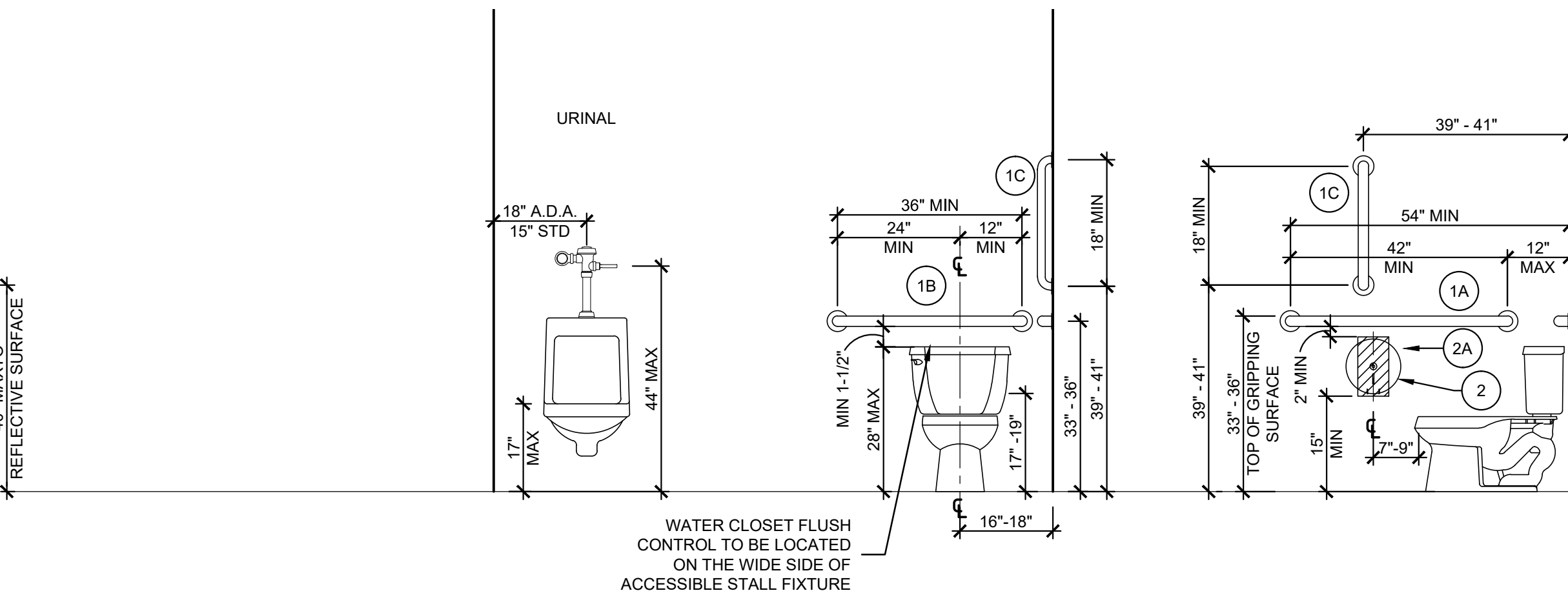
	ITEM (SEE NOTE 2)	MODEL #	SUPPLIER	BACKUP SUPPORT (SEE NOTE 3)
4	TOWEL DISPENSER & WASTE RECEPTACLE, INDIVIDUAL RECESSED (OPTIONAL)	SEE SPECS.	SEE SPECS. FOR RECOMMENDED MANUFACTURERS	MOUNTED PER MANUFACTURER'S RECOMMENDATIONS
5	MIRROR, CHANNEL FRAME	SEE SPECS.	SEE SPECS. FOR RECOMMENDED MANUFACTURERS	MOUNTED PER MANUFACTURER'S RECOMMENDATIONS
6	SOAP DISPENSER, WALL-MOUNTED	SEE SPECS.	SEE SPECS. FOR RECOMMENDED MANUFACTURERS	MOUNTED PER MANUFACTURER'S RECOMMENDATIONS

### NOTES:

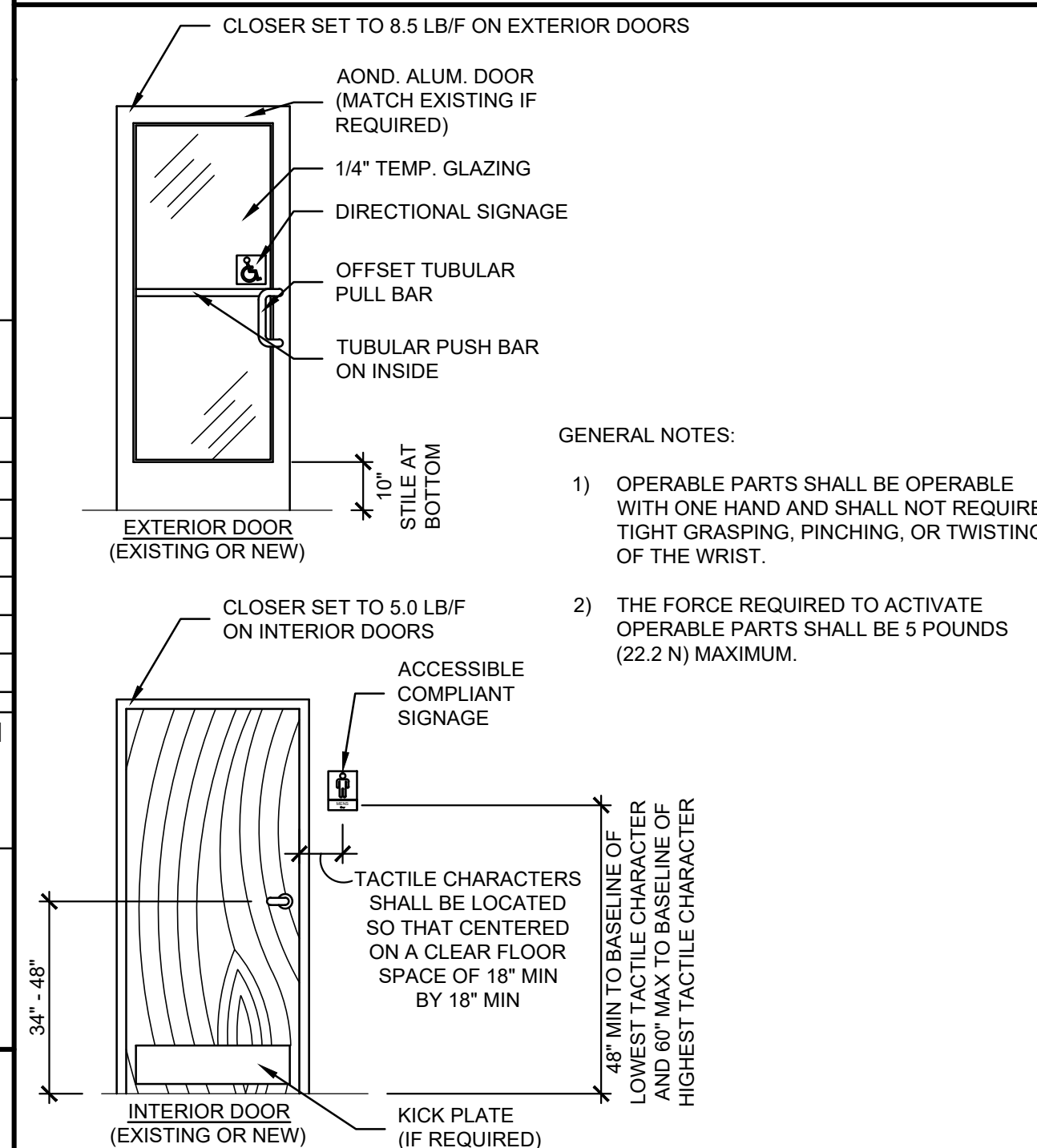
- SEE BELOW FOR ACCESSORY MOUNTING HEIGHTS
- SELECT ONE ITEM FROM ITEM GROUPS 4 & 6. VERIFY WITH OWNER.
- CUT BACK-UP SUPPORTS BETWEEN STUDS SO FACE OF SUPPORT IS FLUSH WITH WALL STUD
- HATCHED AREA SHOWN FOR MOUNTING LOCATION
- 48" MAX TO TOP OF COAT HOOK



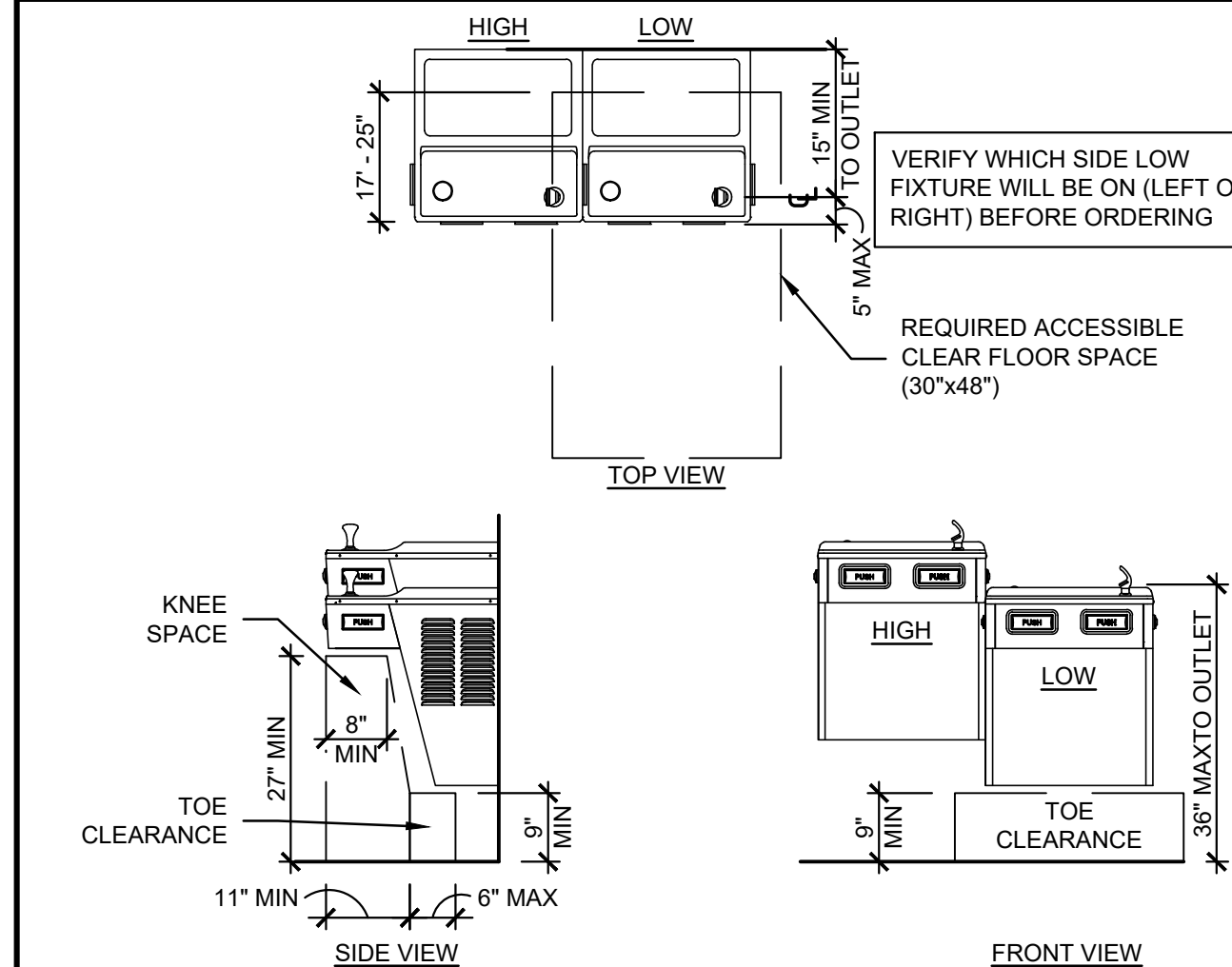
**05** **TYPICAL ACCESSIBLE RESTROOM DETAILS**  
SCALE: 1/2" = 1'-0"



**06** **LAVATORY DETAIL**  
SCALE: 1" = 1'-0"



**07** **DOOR SIGN / DOOR DETAIL**  
SCALE: 3/8" = 1'-0"



**08** **DRINKING FOUNTAIN DETAIL**  
SCALE: 1/2" = 1'-0"

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PROJECT NO:  
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**KEYES ARCHITECTS & ASSOCIATES**  
4717 PRESTON HIGHWAY  
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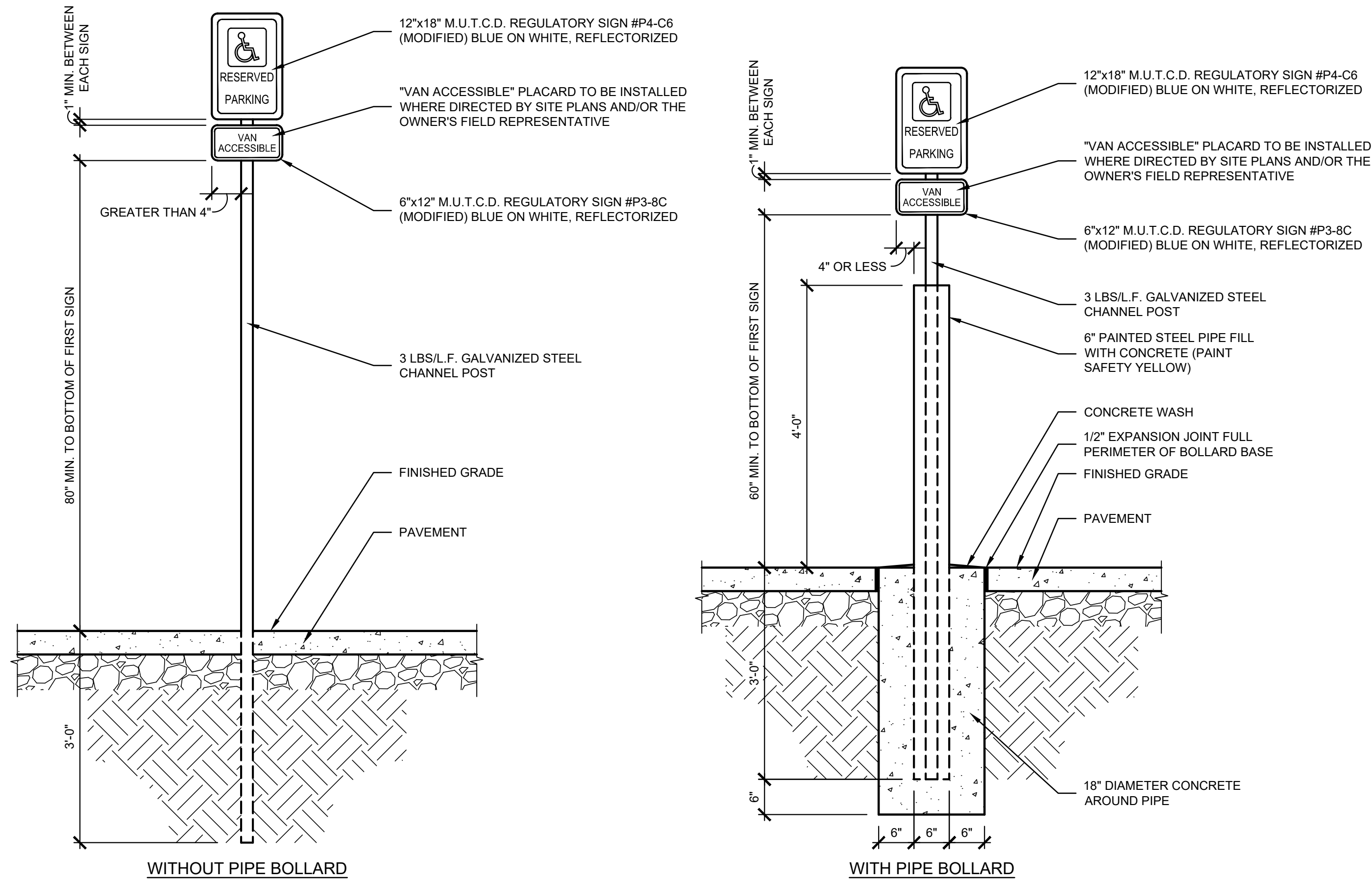
NEW CONSTRUCTION:  
**CITY OF BARDSTOWN**  
**PUBLIC WORKS BUILDING**  
PADGETT WAY  
BARDSTOWN, KY

COMMERCIAL ADA-ANSI GUIDELINES

**A3.01**



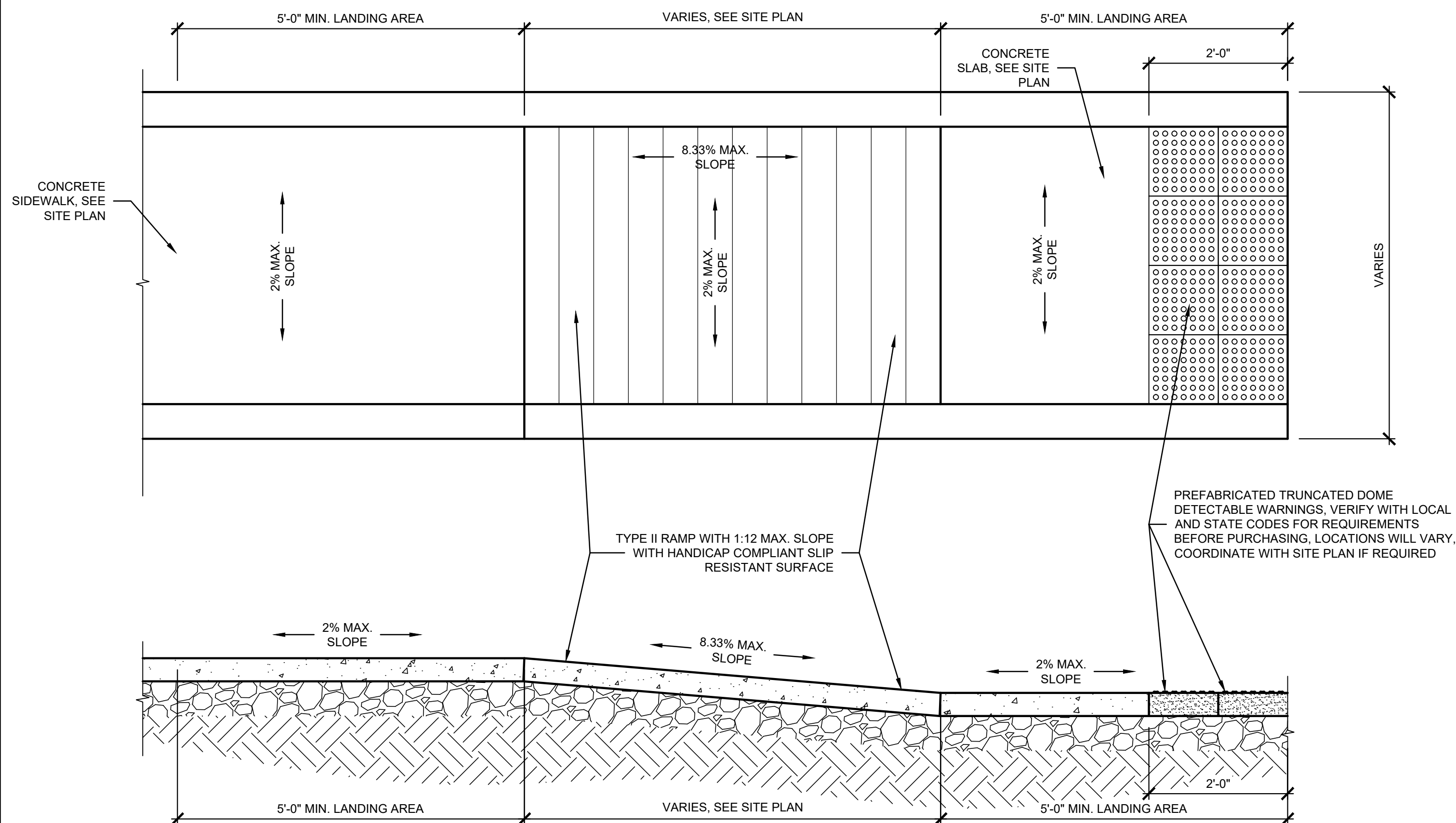
PROJECT: CITY OF BARDSTOWN PUBLIC WORKS BUILDING - FILE: A3.02 Accessibility Site Details.dwg - DATE: Sep 01, 2020 3:54PM - BY: ERIC KEYES



## 01 ACCESSIBLE PARKING SIGNAGE DETAIL

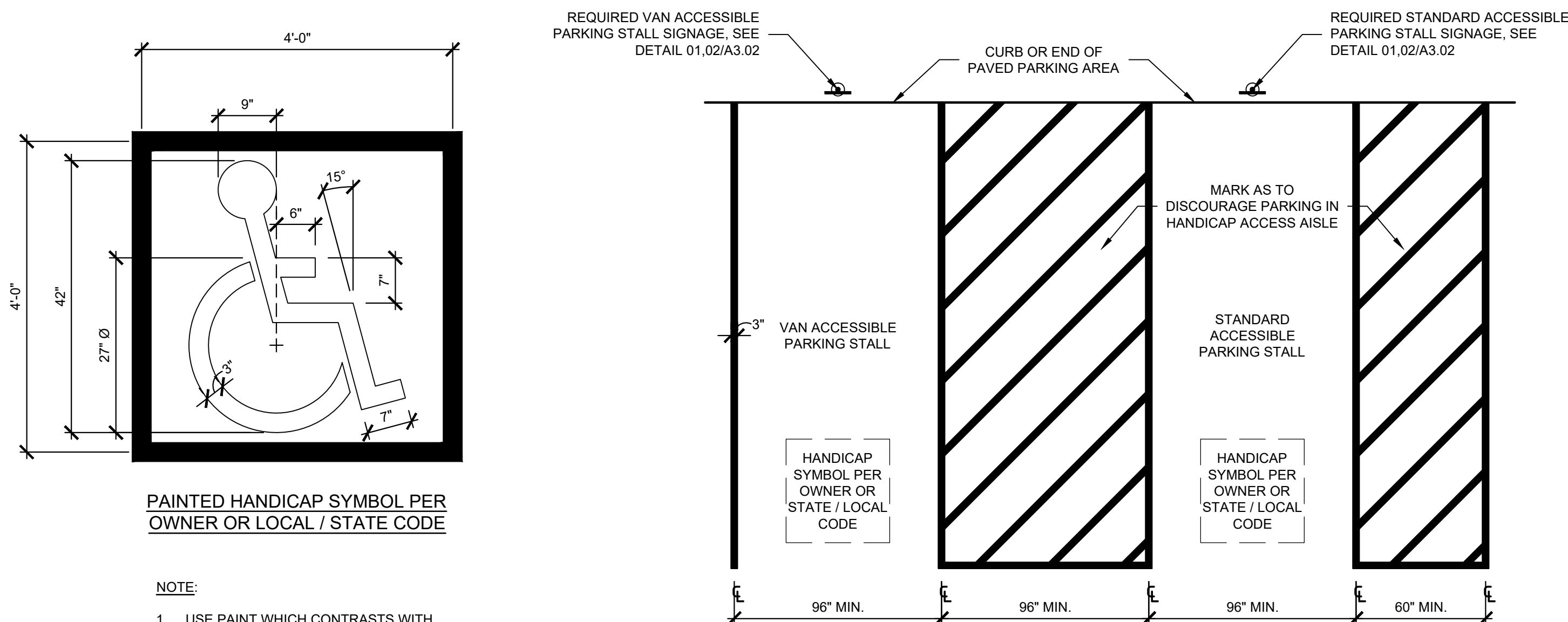
SCALE: 3/4" = 1'-0"

NOTE:  
SIGN TO BE A MIN. OF 2'-0"  
FROM FACE OF CURB (SEE  
SITE PLAN BY OTHERS)



## 02 TYPE II ACCESSIBLE RAMP

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



- NOTE:
1. USE PAINT WHICH CONTRASTS WITH BACKGROUND
  2. THIS SIGN TO BE FURNISHED AND INSTALLED BY G.C.

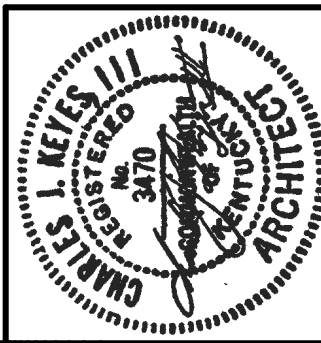
### PARKING SPACES

TOTAL NUMBER OF PARKING SPACES PROVIDED IN PARKING FACILITY	MINIMUM NUMBER OF REQUIRED ACCESSIBLE PARKING SPACES
1 TO 25	1
26 TO 50	2
51 TO 75	3
76 TO 100	4
101 TO 150	5
151 TO 200	6
201 TO 300	7
301 TO 400	8
401 TO 500	9
501 TO 1000	2 PERCENT OF TOTAL
1001 AND OVER	20, PLUS 1 FOR EACH 100, OR FRACTION THEREOF, OVER 1000

## 03 PAINTED ACCESSIBLE SYMBOL / PAINTED ACCESSIBLE PARKING

SCALE: NTS

PROJECT NO:  
19-3060  
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DATE:  
05-27-2020



KEYES ARCHITECTS & ASSOCIATES  
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NEW CONSTRUCTION:  
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ACCESSIBILITY SITE  
DETAILS

A3.02



ROOM FINISH SCHEDULE							
ROOM #	ROOM NAME	FLOOR	BASE	WALLS	CEILING MTL	CEILING HGT	REMARKS
101	OFFICE	VCT	VINYL	GYP BD	CEILING #1	9'-0"	
102	CLOSET	VCT	VINYL	GYP BD	CEILING #1	9'-0"	
103	CLOSET	VCT	VINYL	GYP BD	CEILING #1	9'-0"	
104	OFFICE	VCT	VINYL	GYP BD	CEILING #1	9'-0"	
105	CLOSET	VCT	VINYL	GYP BD	CEILING #1	9'-0"	
106	OFFICE	VCT	VINYL	GYP BD	CEILING #1	9'-0"	
107	WELDING WORKSPACE	EPOXY	-	-	-	-	
108	CORRIDOR	VCT	VINYL	GYP BD	CEILING #1	9'-0"	
109	FLAT FILES	VCT	VINYL	GYP BD	CEILING #1	9'-0"	
110	WOMEN'S TOILET	CERAMIC	CERAMIC	GYP BD	CEILING #2	8'-0"	
111	LOCKER ROOM	VCT	VINYL	GYP BD	CEILING #2	8'-0"	
112	SHOWER	CERAMIC	CERAMIC	GYP BD	CEILING #2	8'-0"	
113	SHOWER	CERAMIC	CERAMIC	GYP BD	CEILING #2	8'-0"	
114	SECURED STORAGE	EXPOSED	VINYL	GYP BD	CEILING #1	9'-0"	
115	BREAK ROOM	VCT	VINYL	GYP BD	CEILING #1	9'-0"	
116	CLOSET	VCT	VINYL	GYP BD	CEILING #1	9'-0"	
117	CLOSET	VCT	VINYL	GYP BD	CEILING #1	9'-0"	
118	MEN'S TOILET	CERAMIC	CERAMIC	GYP BD	CEILING #2	8'-0"	
119	CORRIDOR	EXPOSED	VINYL	GYP BD	CEILING #1	9'-0"	
120	TECH OFFICE	VCT	VINYL	GYP BD	CEILING #1	8'-0"	
121	CLOSET	VCT	VINYL	GYP BD	CEILING #1	8'-0"	
122	STAIRS	RUBBER	METAL	GYP BD	EXPOSED	-	
123	VEHICLE BAY	EPOXY	-	-	EXPOSED	-	
124	SPRINKLER CLOSET	EPOXY	-	GYP BD	EXPOSED	-	
125	HEAVY STORAGE	EPOXY	-	-	EXPOSED	-	
126	COVERED PARKING	EPOXY	-	LINER PANEL	EXPOSED	-	
201	MEZZANINE	EXPOSED	VINYL	GYP BD	EXPOSED	8'-0"	
202	MECHANICAL ROOM	EXPOSED	-	GYP BD	-	-	

FINISH SCHEDULE KEY		ROOM FINISH REMARKS
VCT	VINYL COMPOSITE TILE - SEE SPECIFICATIONS	
CONCRETE	SEALED CONCRETE FLOOR - SEE SPECIFICATIONS	
EPOXY	EPOXY COVERED CONCRETE FLOOR - SEE SPECS.	
CEILING #1	2'x4' LAY-IN RECESSED WHITE GRID WITH ACOUSTICAL TILE - SEE SPECIFICATIONS	
GYP BD	GYPSUM BOARD PAINTED	
RUBBER	ROPPE RUBBER STAIR TREAD LOW PROFILE RAISED CIRCULAR	
CEILING #2	2'x4' LAY-IN FLUSH WHITE GRID WITH WET AREA ACOUSTICAL TILE - SEE SPECIFICATIONS	
LINER PANEL	PRE-PAINTED WHITE METAL LINER PANEL PER BUILDING MANUFACTURER ON ALL EXPOSED INTERIOR WALLS - FULL HEIGHT	
CERAMIC	SQUARE CERAMIC TILE - SEE SPECIFICATIONS	

DOOR SCHEDULE							
NUMBER	SIZE	FIRE	MATERIAL	FRAME	HARDWARE	DETAILS	REMARKS
100	3'-0" X 7'-0"	N/A	H.M.	H.M.	1	07,08,09,10/A6.01	2,3
101	3'-0" X 7'-0"	N/A	H.M.	H.M.	4	03,04/A6.01	2
102	3'-0" X 7'-0"	N/A	H.M.	H.M.	3	03,04/A6.01	-
103	3'-0" X 7'-0"	N/A	H.M.	H.M.	4	03,04/A6.01	2
104	3'-0" X 7'-0"	N/A	H.M.	H.M.	3	03,04/A6.01	-
105	3'-0" X 7'-0"	N/A	H.M.	H.M.	4	03,04/A6.01	2
106	3'-0" X 7'-0"	N/A	H.M.	H.M.	3	03,04/A6.01	-
107	3'-0" X 7'-0"	N/A	H.M.	H.M.	3	03,04/A6.01	2
108	3'-0" X 7'-0"	N/A	H.M.	H.M.	2	03,04/A6.01	-
109	3'-0" X 7'-0"	N/A	H.M.	H.M.	7	03,04/A6.01	-
110	3'-0" X 7'-0"	N/A	H.M.	H.M.	2	03,04/A6.01	-
111	3'-0" X 7'-0"	N/A	H.M.	H.M.	2	03,04/A6.01	-
112	3'-0" X 7'-0"	N/A	H.M.	H.M.	8	03,04/A6.01	2
113	3'-0" X 7'-0"	N/A	H.M.	H.M.	9	03,04/A6.01	-
114	3'-0" X 7'-0"	N/A	H.M.	H.M.	1	07,08,09,10/A6.01	2,3
115	3'-0" X 7'-0"	N/A	H.M.	H.M.	1	07,08,09,10/A6.01	2,3
116	3'-0" X 7'-0"	N/A	H.M.	H.M.	3	03,04/A6.01	-
117	PR3'-0" X 7'-0"	N/A	H.M.	H.M.	5	03,04/A6.01	-
118	3'-0" X 7'-0"	N/A	H.M.	H.M.	8	03,04/A6.01	2
119	3'-0" X 7'-0"	N/A	H.M.	H.M.	7	03,04/A6.01	-
120	3'-0" X 7'-0"	N/A	H.M.	H.M.	3	03,04/A6.01	-
121	3'-0" X 7'-0"	N/A	H.M.	H.M.	4	03,04/A6.01	2
122	14'-0" X 14'-0"	N/A	STEEL	STEEL	6	05,06/A6.01	1
123	3'-0" X 7'-0"	N/A	H.M.	H.M.	1	01,02,10/A6.01	3
124	14'-0" X 14'-0"	N/A	STEEL	STEEL	6	05,06/A6.01	1
125	14'-0" X 14'-0"	N/A	STEEL	STEEL	6	05,06/A6.01	1
126	3'-0" X 7'-0"	N/A	H.M.	H.M.	1	01,02,10/A6.01	3
127	3'-0" X 7'-0"	N/A	H.M.	H.M.	1	01,02,10/A6.01	3
128	14'-0" X 14'-0"	N/A	STEEL	STEEL	6	05,06/A6.01	1
129	3'-0" X 7'-0"	N/A	H.M.	H.M.	9	03,04/A6.01	-
130	14'-0" X 14'-0"	N/A	STEEL	STEEL	6	05,06/A6.01	1
131	3'-0" X 7'-0"	N/A	H.M.	H.M.	1	01,02,10/A6.01	3
201	3'-0" X 7'-0"	N/A	H.M.	H.M.	3	03,04/A6.01	-

DOOR HARDWARE SCHEDULE  
\*NRP = NON-REMOVABLE PIN

- 1) 1-1/2 PR. HINGES (NRP)  
1 STOREROOM LOCKSET  
1 CLOSER  
1 WEATHERSTRIP SET  
1 THRESHOLD
- 2) 1-1/2 PR. HINGES  
1 PRIVACY SET  
1 WALL STOP
- 3) 1-1/2 PR. HINGES  
1 PASSAGE SET  
1 WALL STOP
- 4) 1-1/2 PR HINGES  
1 OFFICE SET  
1 WALL STOP
- 5) 3 PR. HINGES  
1 PASSAGE SET  
1 PR. FLUSH SET
- 6) HARDWARE BY MANUFACTURER
- 7) 1-1/2 PR. HINGES  
1 PR. PUSH/PULLS  
1 CLOSER  
1 WALL STOP  
1 PR. KICK PLATES
- 8) 1-1/2 PR HINGES  
1 PASSAGE SET  
1 CLOSER  
1 WALL STOP  
1 WEATHERSTRIP SET  
1 THRESHOLD
- 9) 1-1/2 PR HINGES  
1 STOREROOM LOCKSET  
1 WALL STOP

DOOR SCHEDULE REMARKS

- 1) SECTIONAL OVERHEAD DOOR WITH (1) ROW OF FULL GLAZED PANELS (SEE ELEVATIONS AND SPECIFICATIONS)
- 2) HALF GLAZED DOOR
- 3) DOOR TO HAVE AN ELECTRONIC STRIKE - SEE DT.01 FOR MORE INFORMATION

WINDOW SCHEDULE						
LETTER	SIZE	SILL HEIGHT	GLAZING	FRAME	DETAILS	REMARKS
A	4'-0"X 4'-0"	3'-2" A.F.F	1" INSULATED	ALUM	04,05/A6.01	
B	4'-4"X 4'-0"	3'-2" A.F.F	CLEAR GLAZING	H.M.	06,07/A6.02	-
C	4'-0" X4'-0"	3'-2" A.F.F	1" INSULATED	ALUM	01,02,03/A6.02	

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05-27-2020

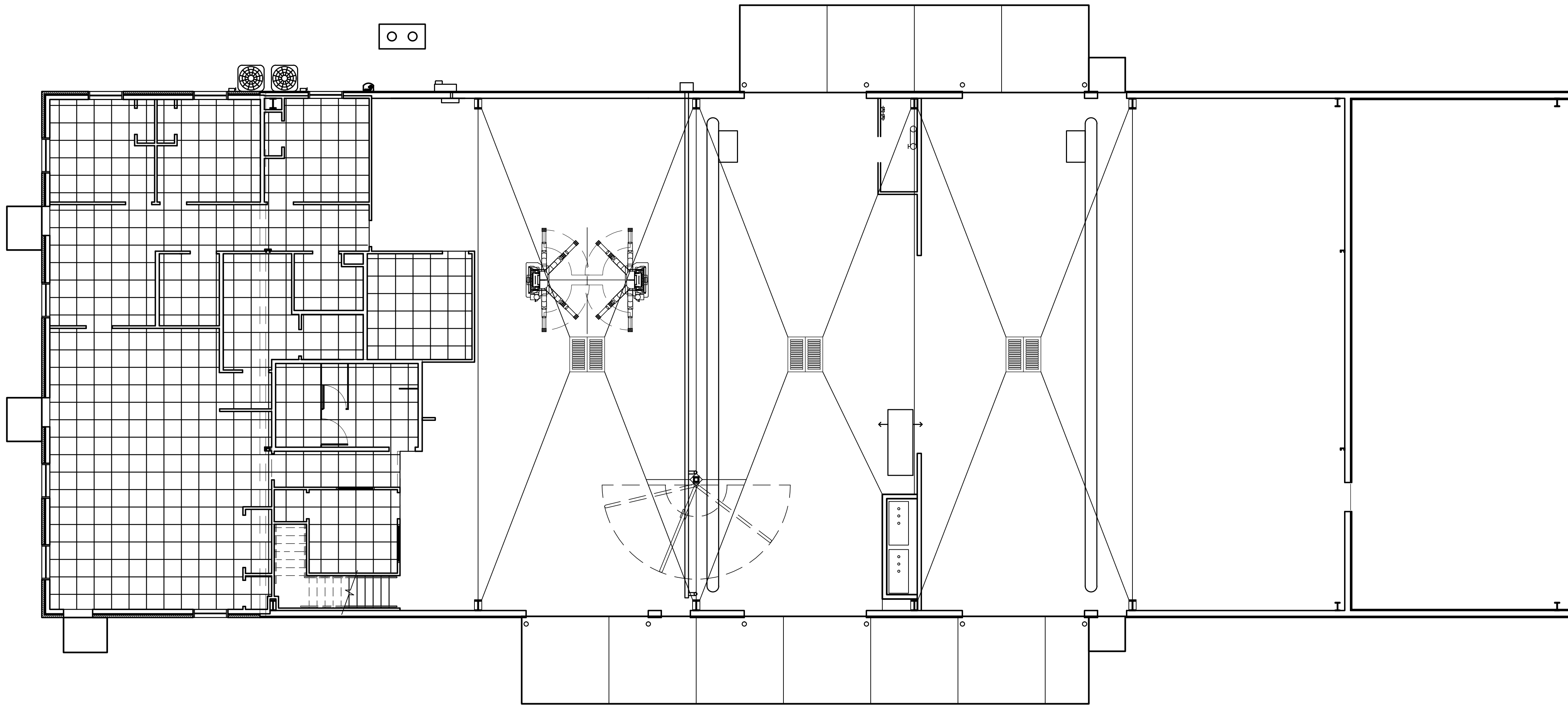


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PROJECT: CITY OF BARDSTOWN PUBLIC WORKS BUILDING - FILE: A4.01 Reflected Ceiling Plan.dwg - DATE: Sep 02, 2020 8:33AM - BY: ERIC KEYES



**01** FIRST FLOOR PLAN REFLECTED CEILING

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

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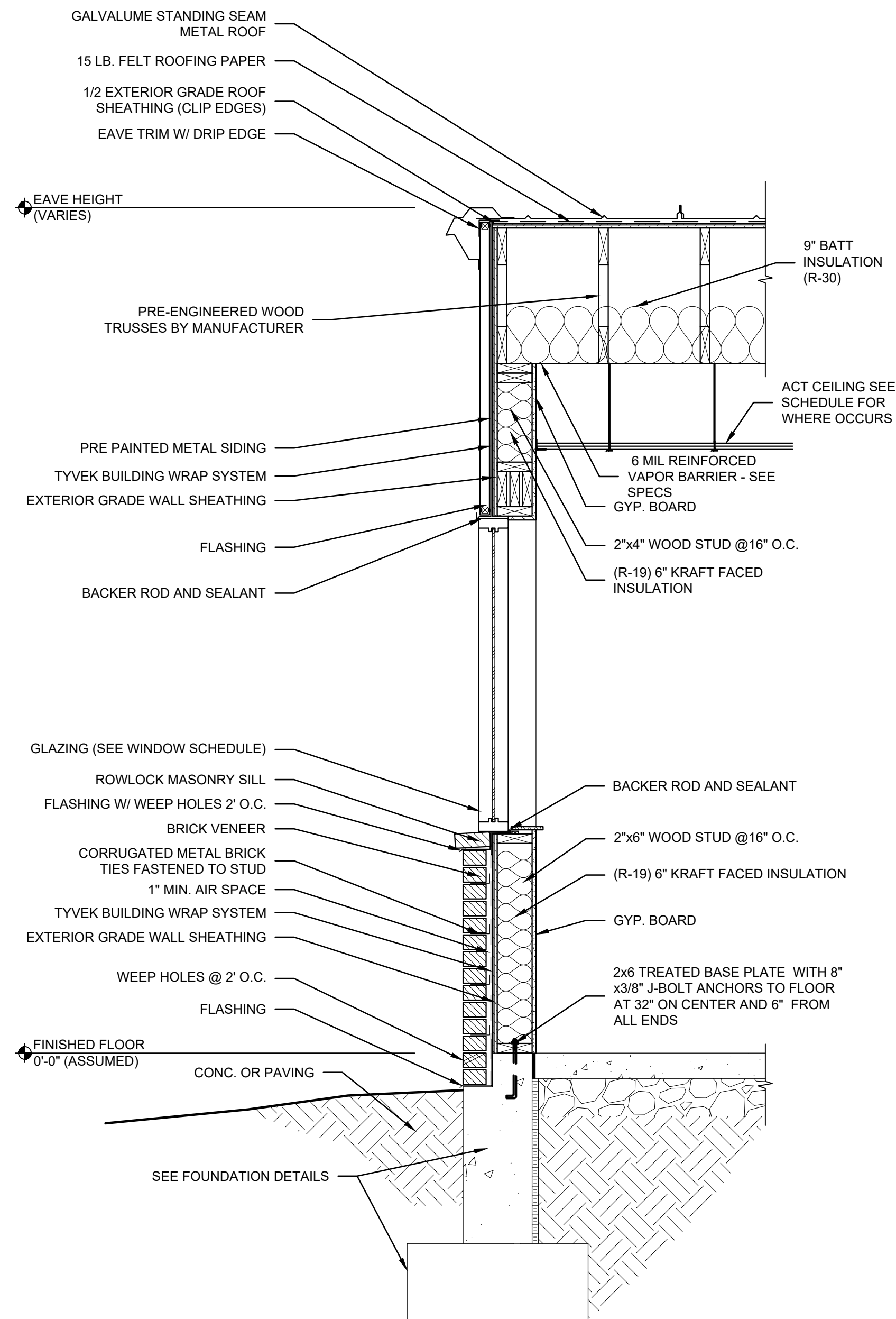
REFLECTED CEILING  
PLAN

**A4.01**

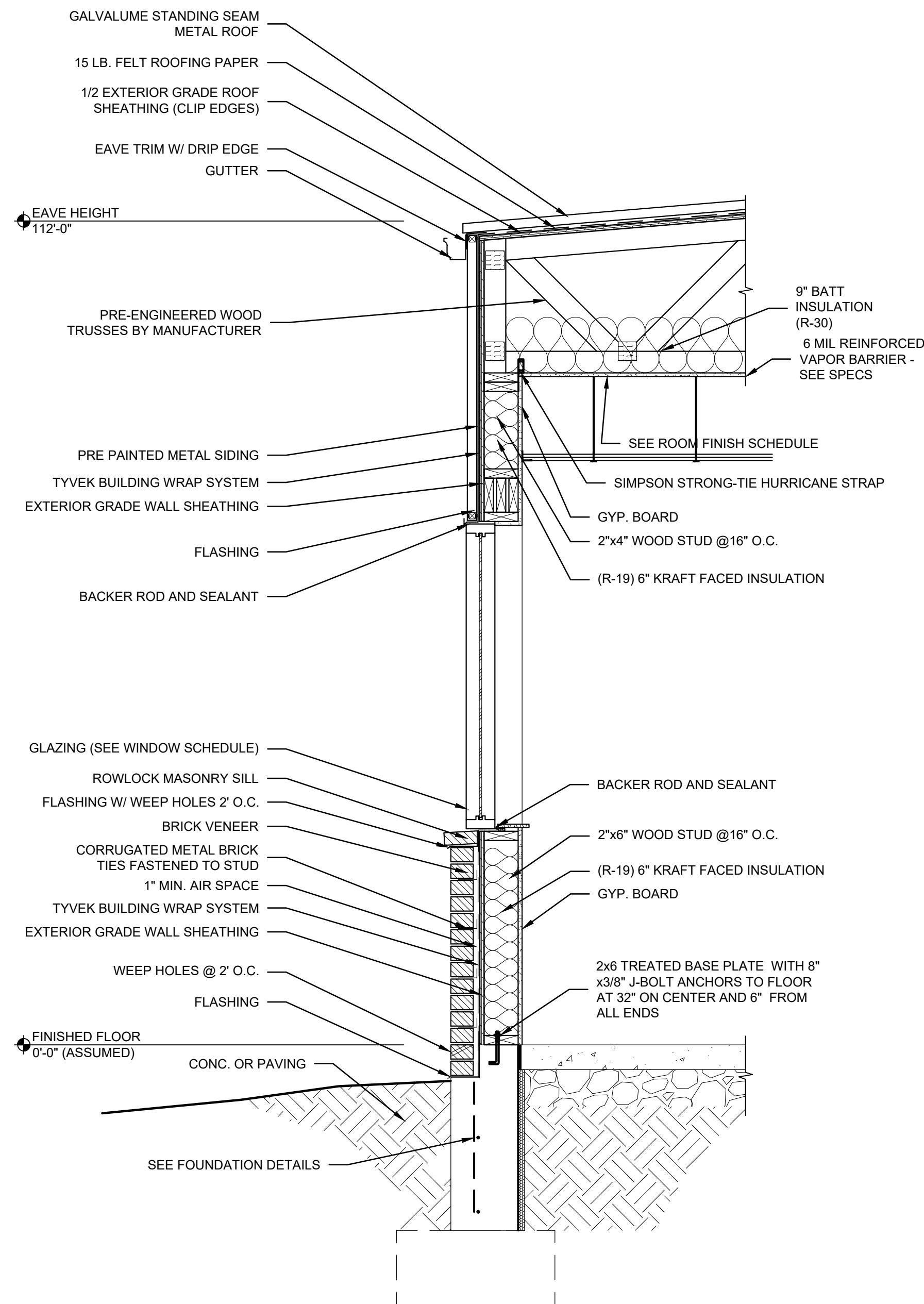
PROJECT NO:  
19-3060  
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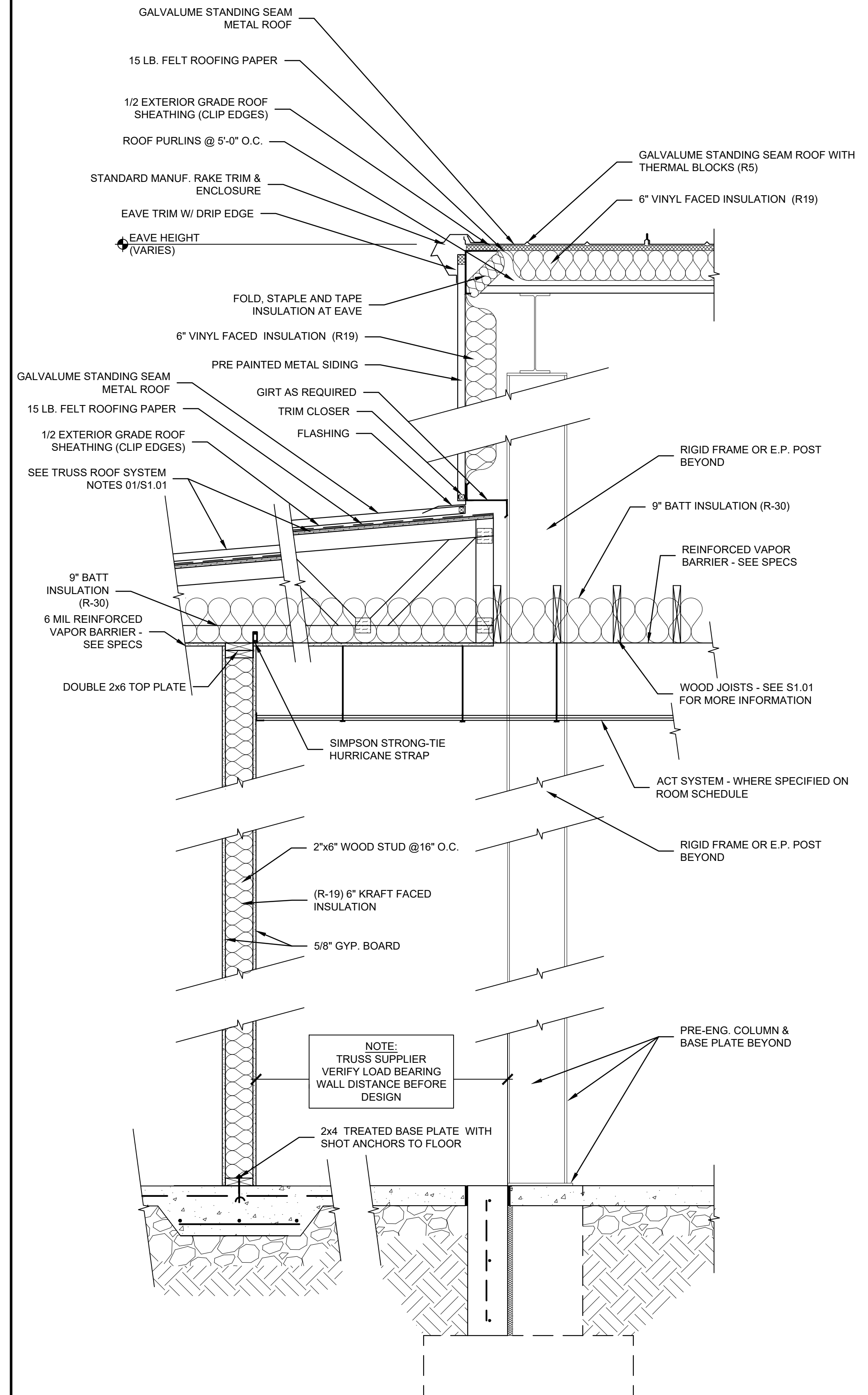
PROJECT: CITY OF BARDSTOWN PUBLIC WORKS BUILDING - FILE: A5.01 Wall Sections and Details.dwg - DATE: Sep 01, 2020 3:54PM - BY: ERIC KEYES



**01** **ENDWALL SECTION**  
SCALE: 3/4" = 1'-0"



**02** **LOW SIDE SECTION**  
SCALE: 3/4" = 1'-0"



**03** **HIGHSIDE ENDWALL CONNECTION SECTION**  
SCALE: 3/4" = 1'-0"

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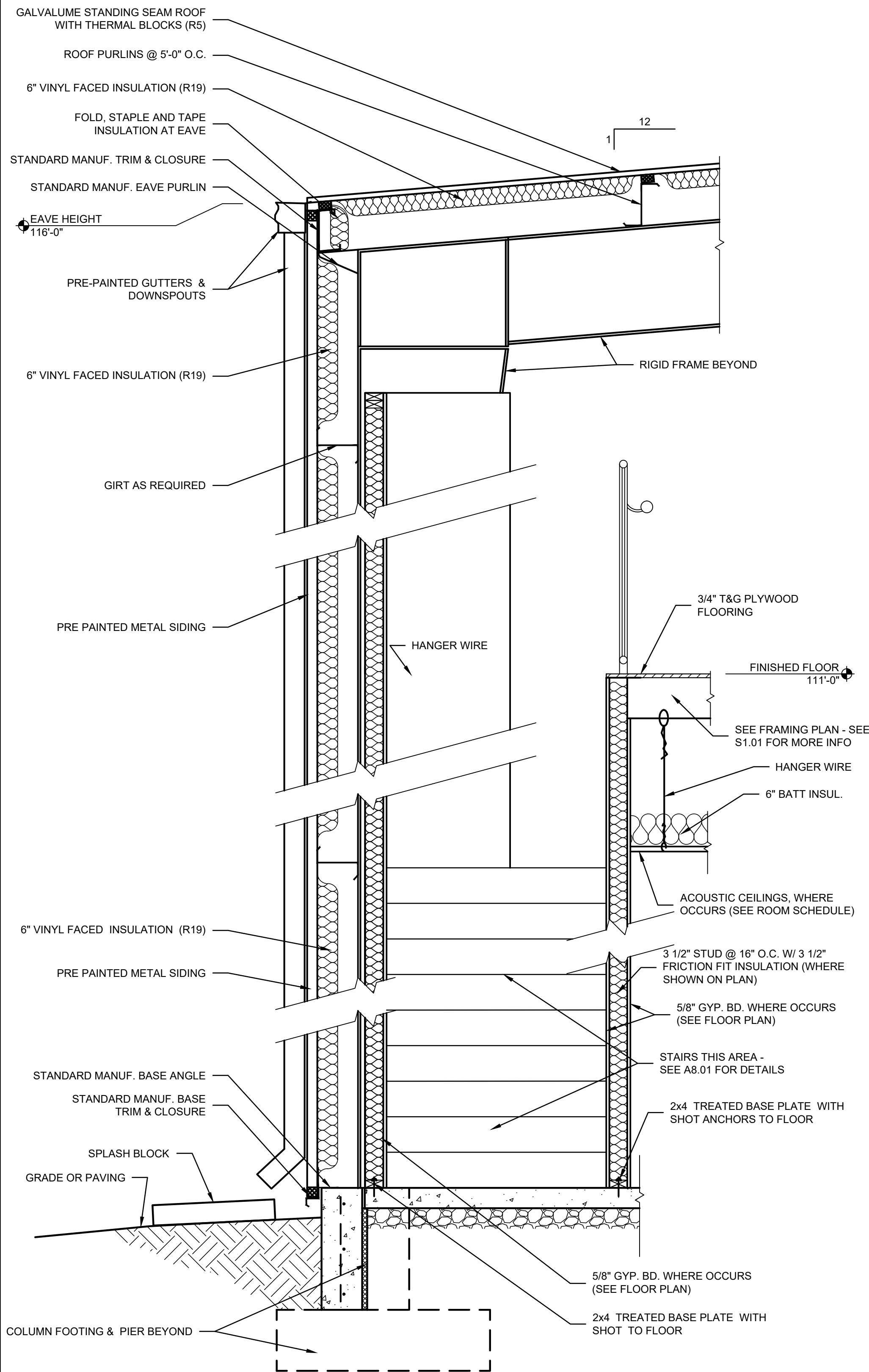
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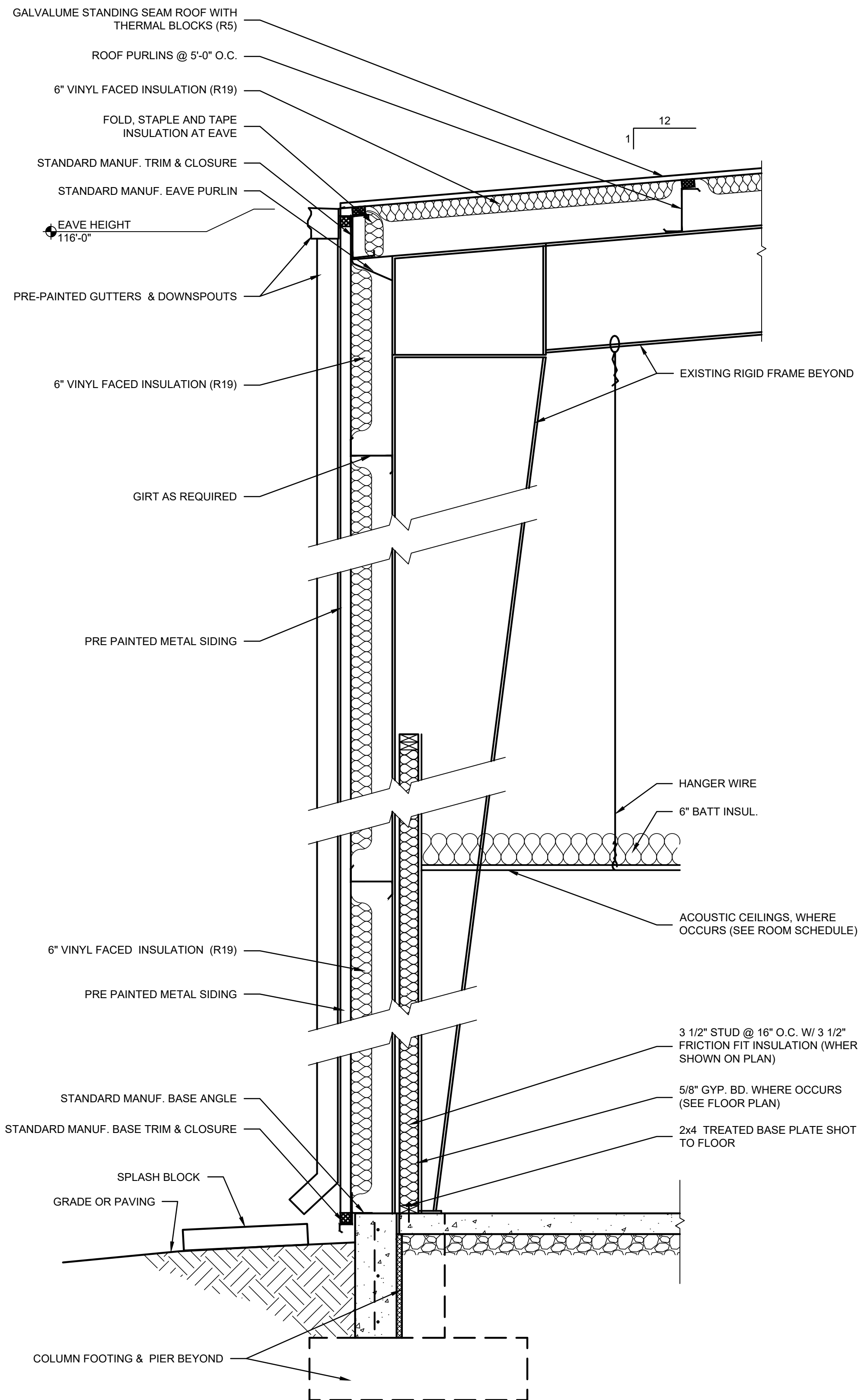
WALL SECTIONS AND  
DETAILS  
**A5.01**



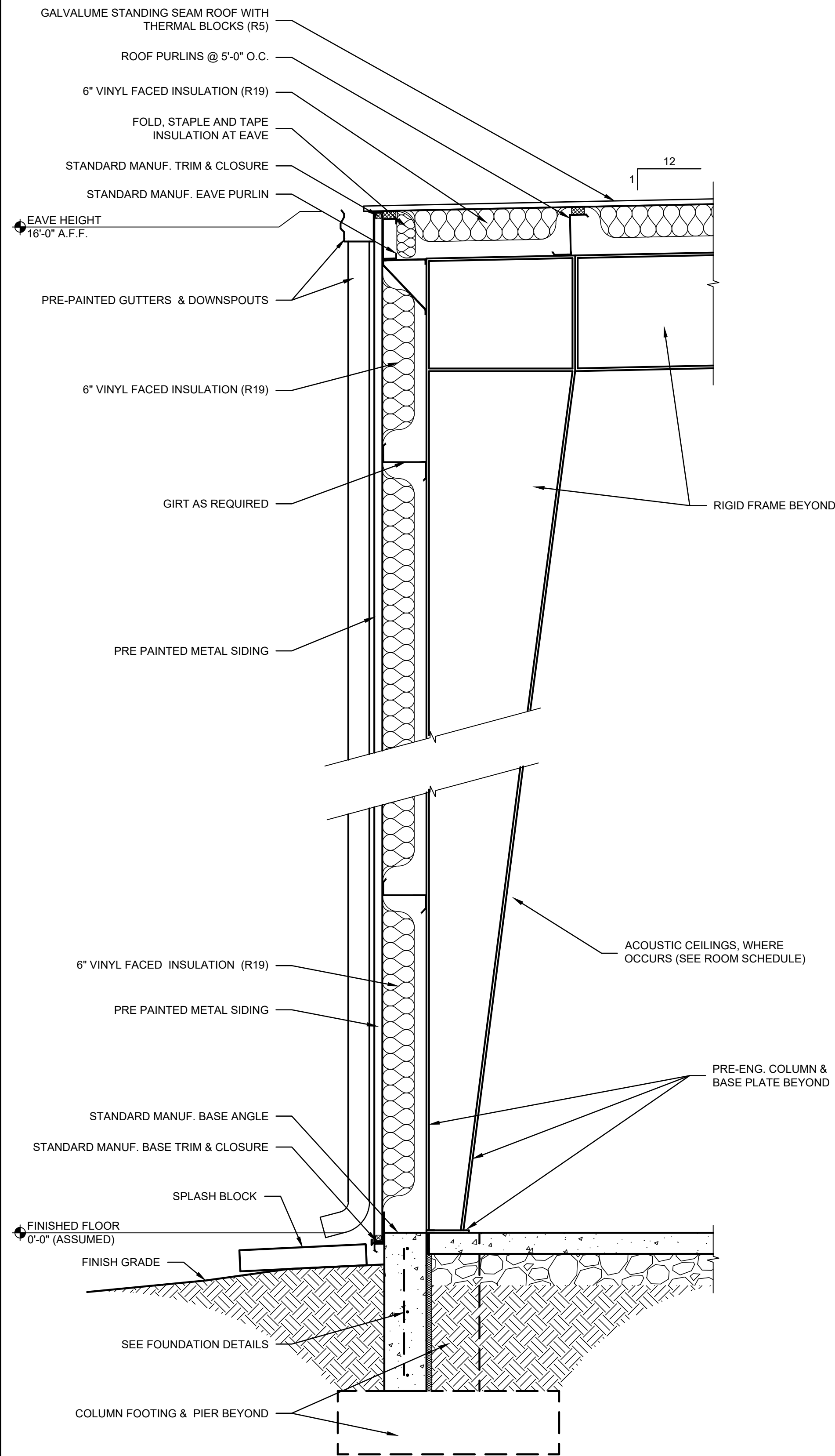
PROJECT: CITY OF BARDSTOWN PUBLIC WORKS BUILDING - FILE: A5.02 Wall Sections and Details.dwg - DATE: Sep 01, 2020 3:54PM - BY: ERIC KEYES



**01** LOW SIDEWALL SECTION AT STAIRS  
SCALE: 3/4" = 1'-0"



**02** 1 STORY LOW EAVE SECTION  
SCALE: 3/4" = 1'-0"



**03** LOW EAVE WALL SECTION  
SCALE: 3/4" = 1'-0"

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WALL SECTIONS AND DETAILS

**A5.02**



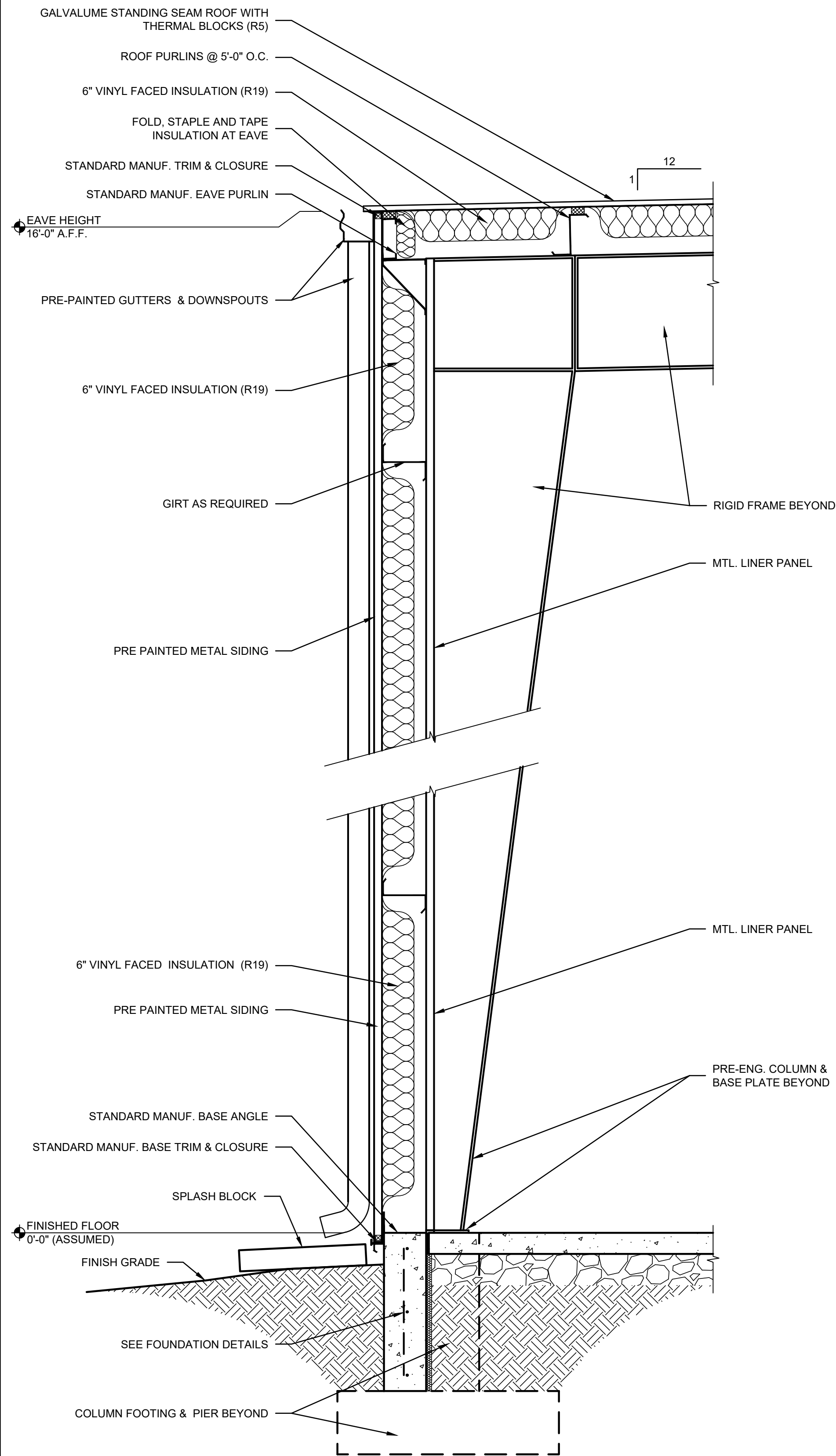
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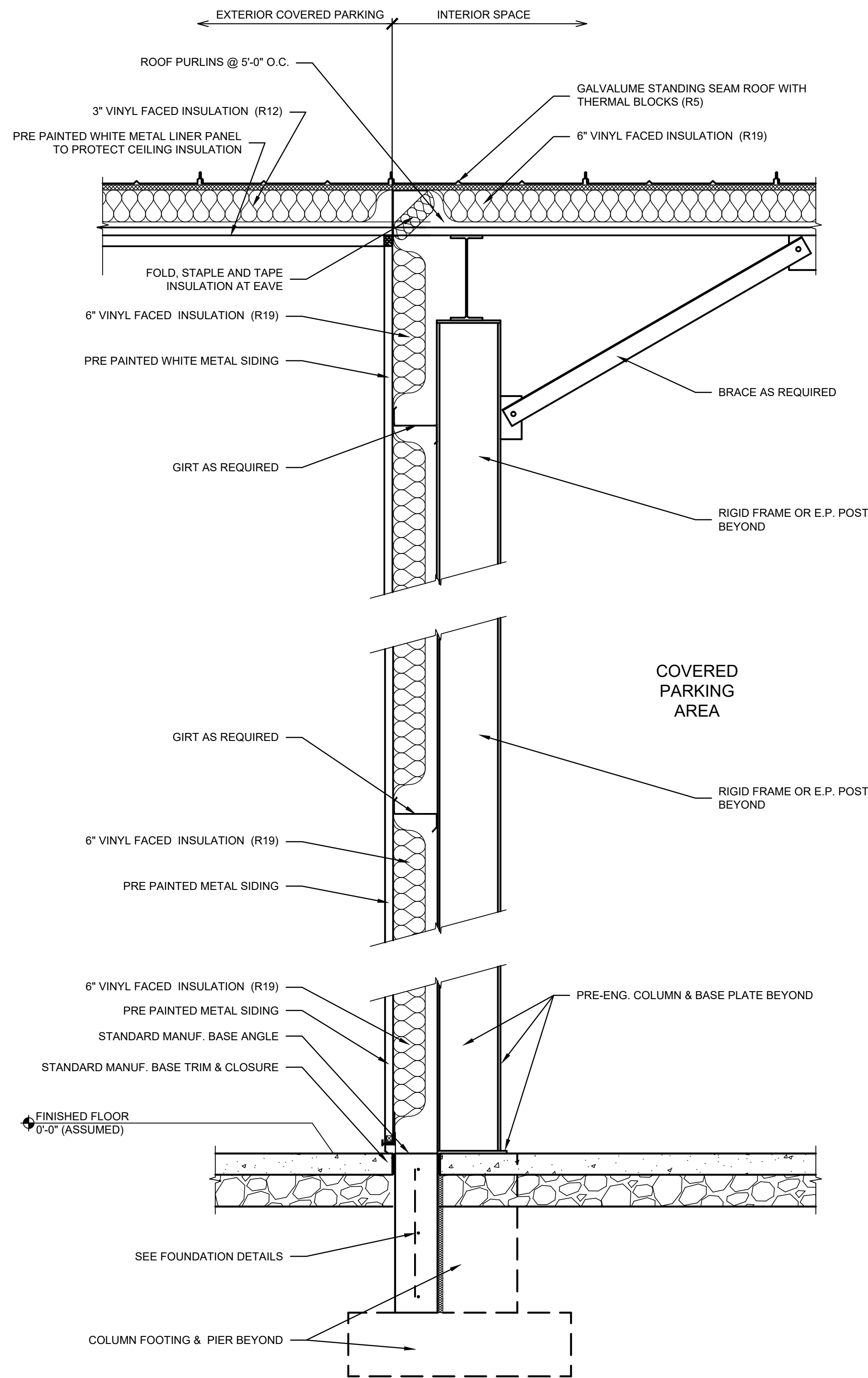
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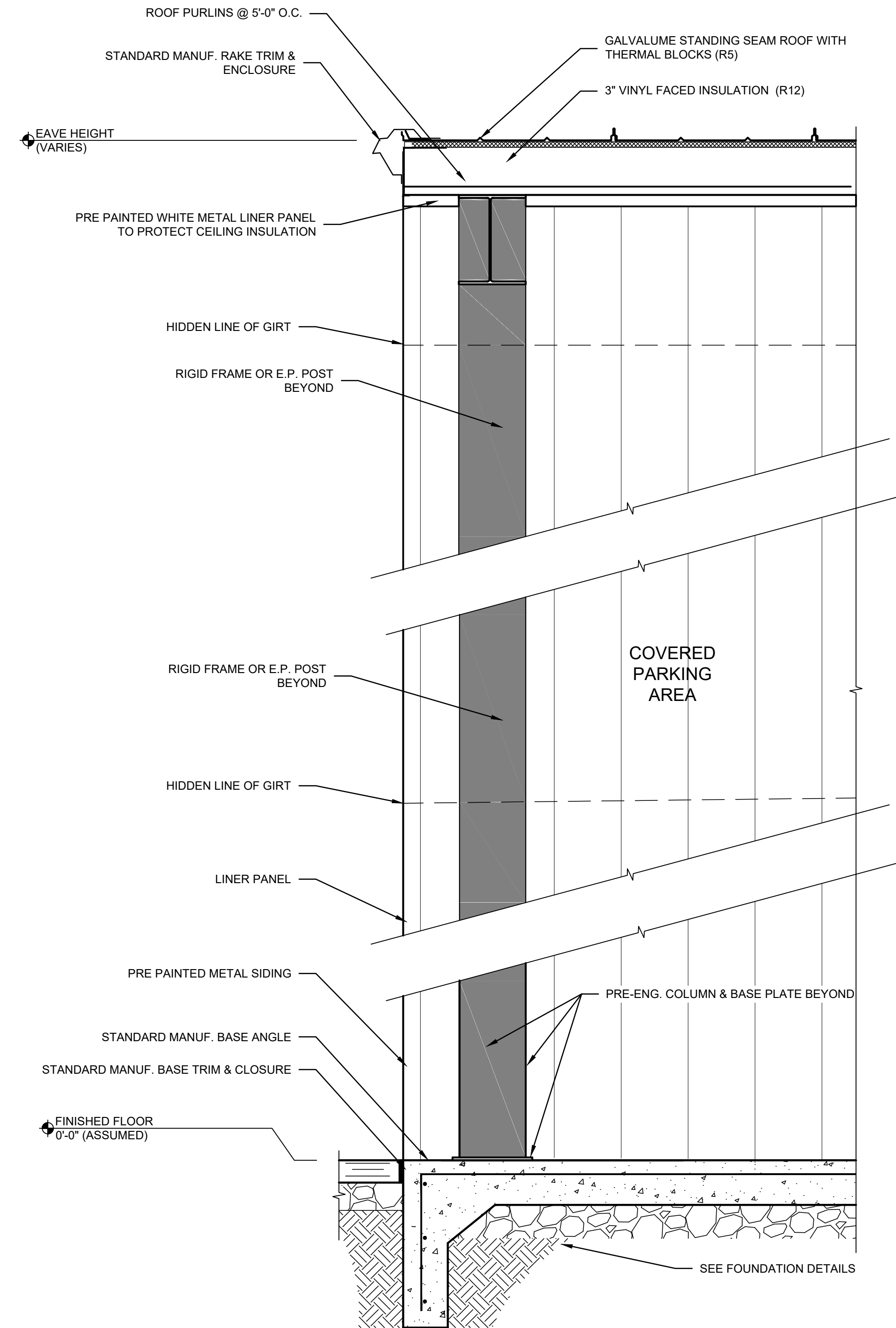
PROJECT: CITY OF BARDSTOWN PUBLIC WORKS BUILDING - FILE: A5.03 Wall Sections and Details.dwg - DATE: Sep 01, 2020 3:54PM - BY: ERIC KEYES



**01** **LOW EAVE WALL SECTION**  
SCALE: 3/4" = 1'-0"



**02** **ENDWALL SECTION @ COVERED PARKING**  
SCALE: 3/4" = 1'-0"



**03** **SECTION @ DRIVE**  
SCALE: 3/4" = 1'-0"

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WALL SECTIONS AND DETAILS

**A5.03**



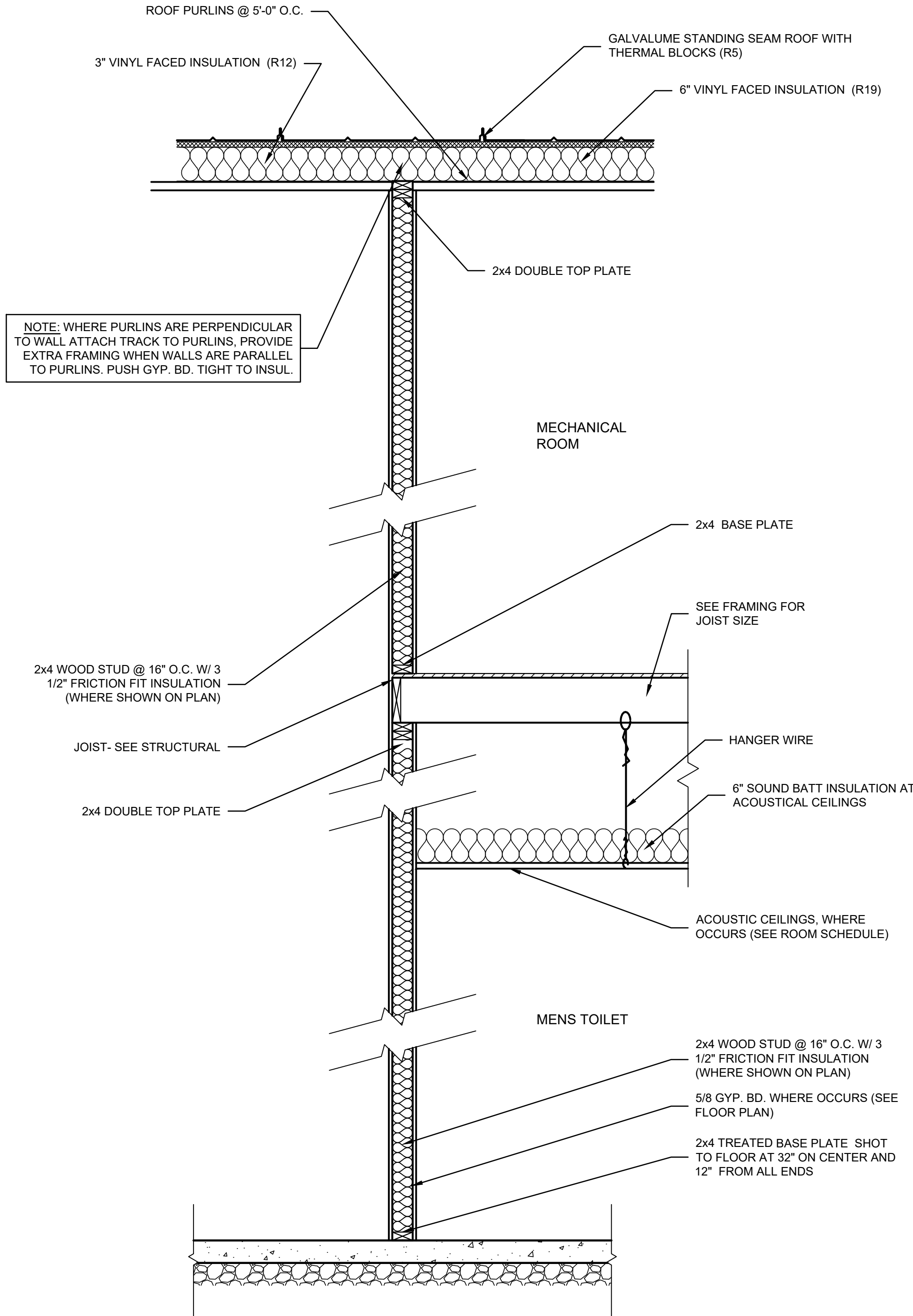
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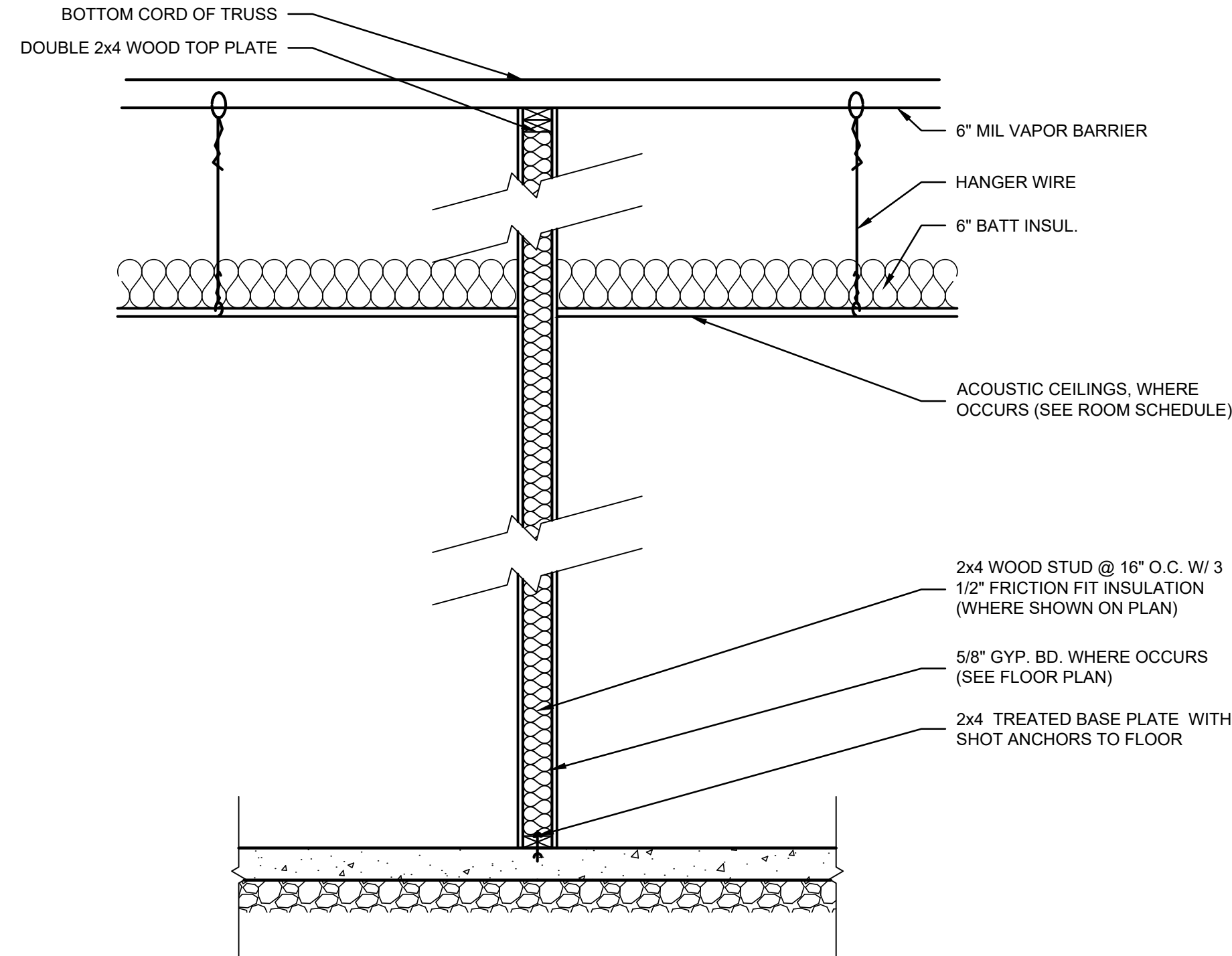
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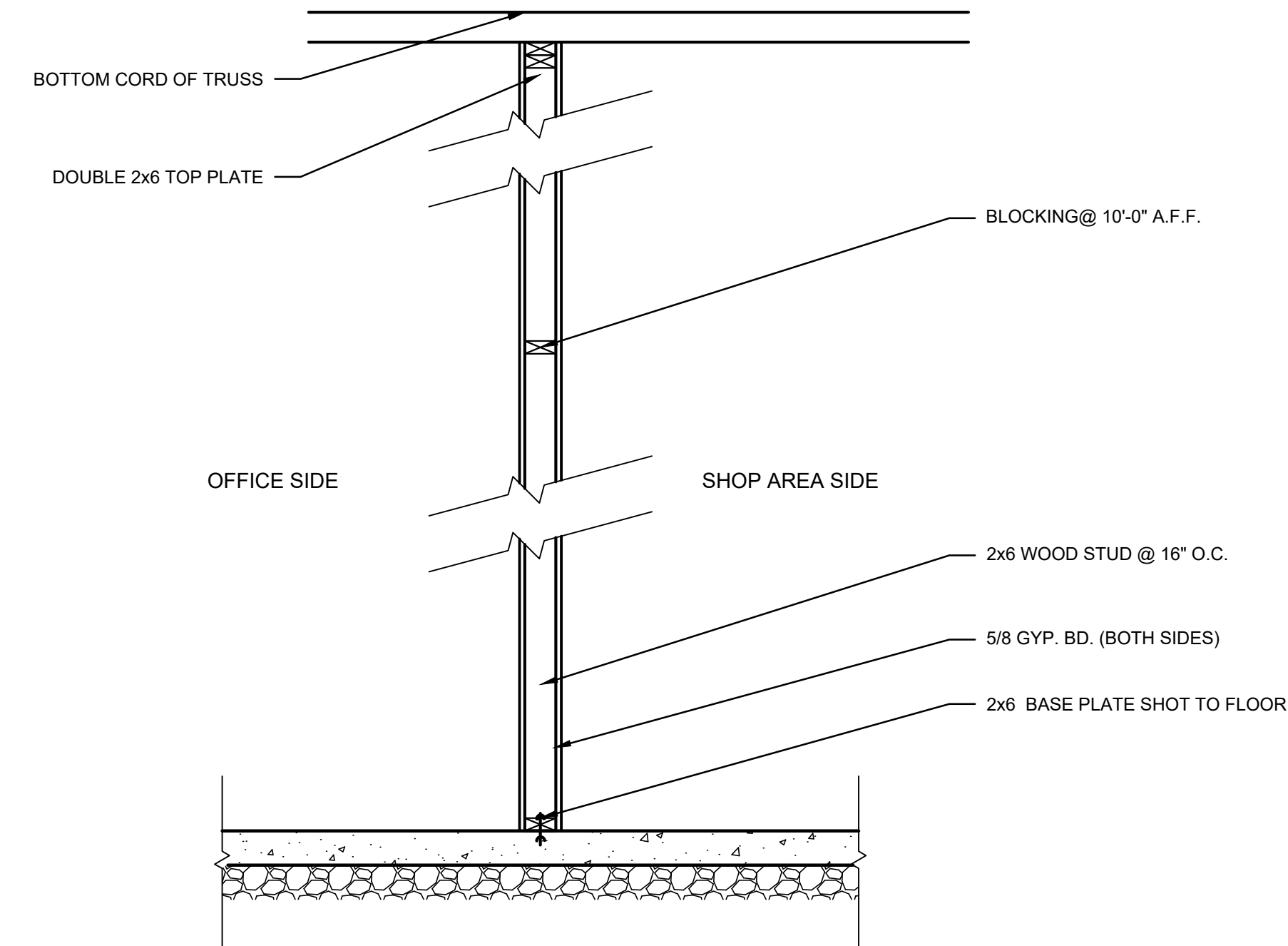
PROJECT: CITY OF BARDSTOWN PUBLIC WORKS BUILDING - FILE: A5.04 Wall Sections and Details.dwg - DATE: Sep 01, 2020 3:54PM - BY: ERIC KEYES



**01** 2 STORY WALL SECTION @ INT. WALL  
SCALE: 3/4" = 1'-0"

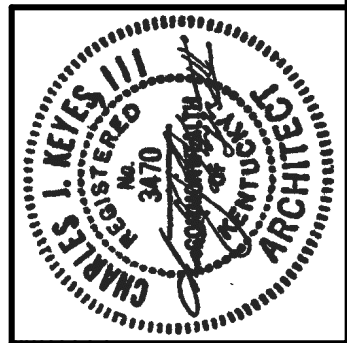


**02** TYP. INTERIOR WALL SECTION  
SCALE: 3/4" = 1'-0"



**03** INTERIOR WALL SECTION  
SCALE: 3/4" = 1'-0"

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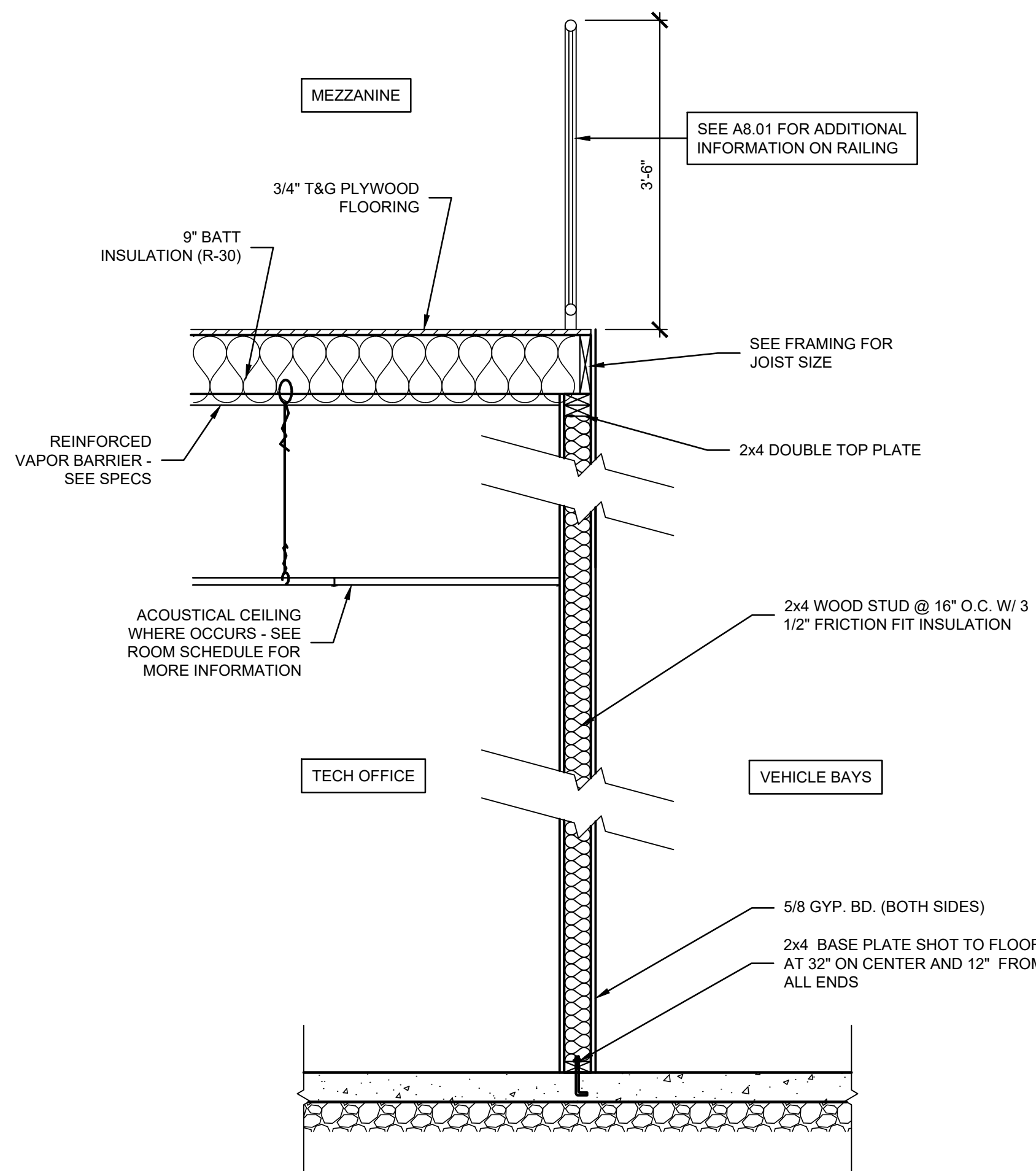
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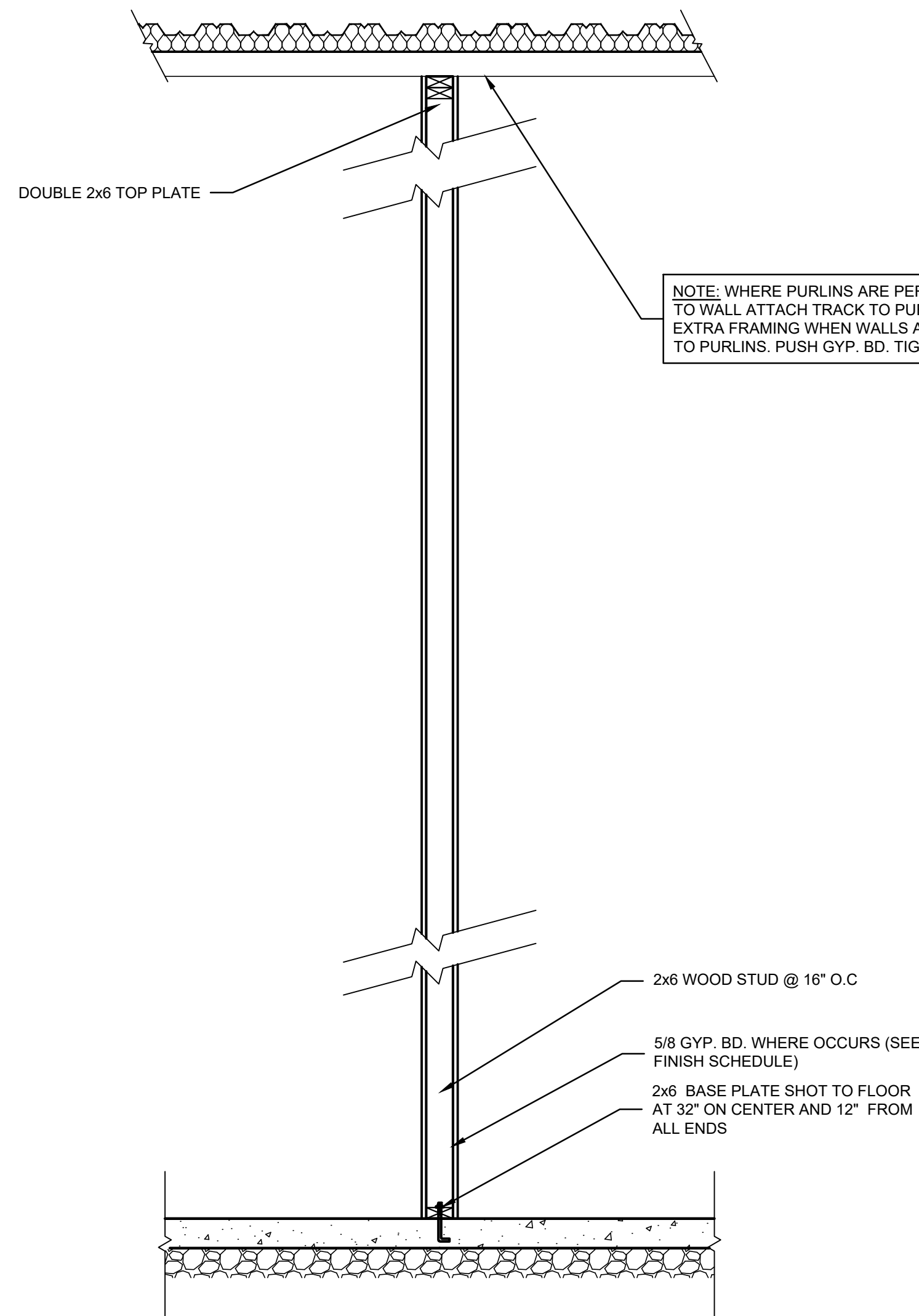
WALL SECTIONS AND  
DETAILS  
**A5.04**



PROJECT: CITY OF BARDSTOWN PUBLIC WORKS BUILDING - FILE: A5.05 Wall Sections and Details.dwg - DATE: Sep 01, 2020 3:55PM - BY: ERIC KEYES



**01** 2 STORY WALL SECTION @ MEZZANINE WITH RAILING  
SCALE: 3/4" = 1'-0"



**02** WALL SECTION IN VEHICLE BAY AREA  
SCALE: 3/4" = 1'-0"

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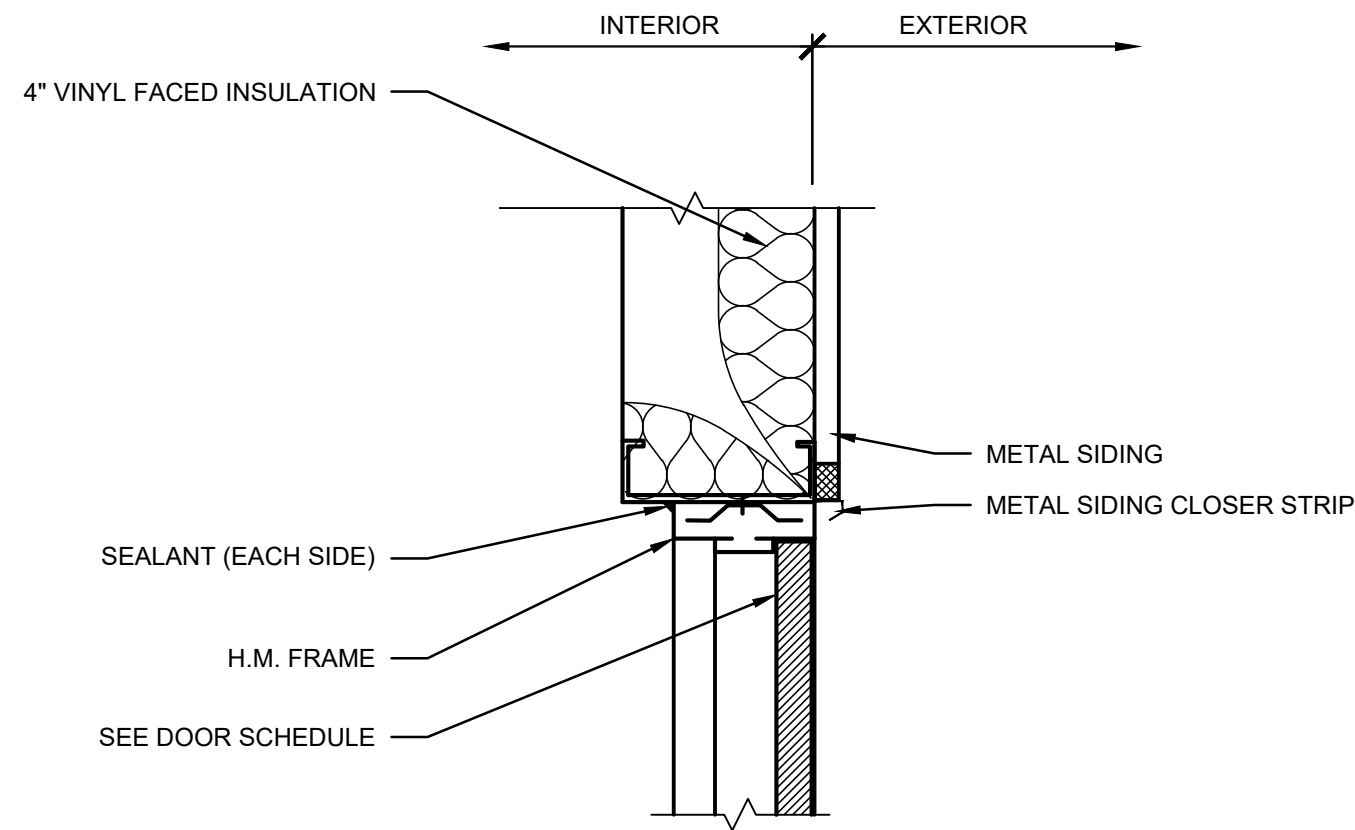
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WALL SECTIONS AND DETAILS

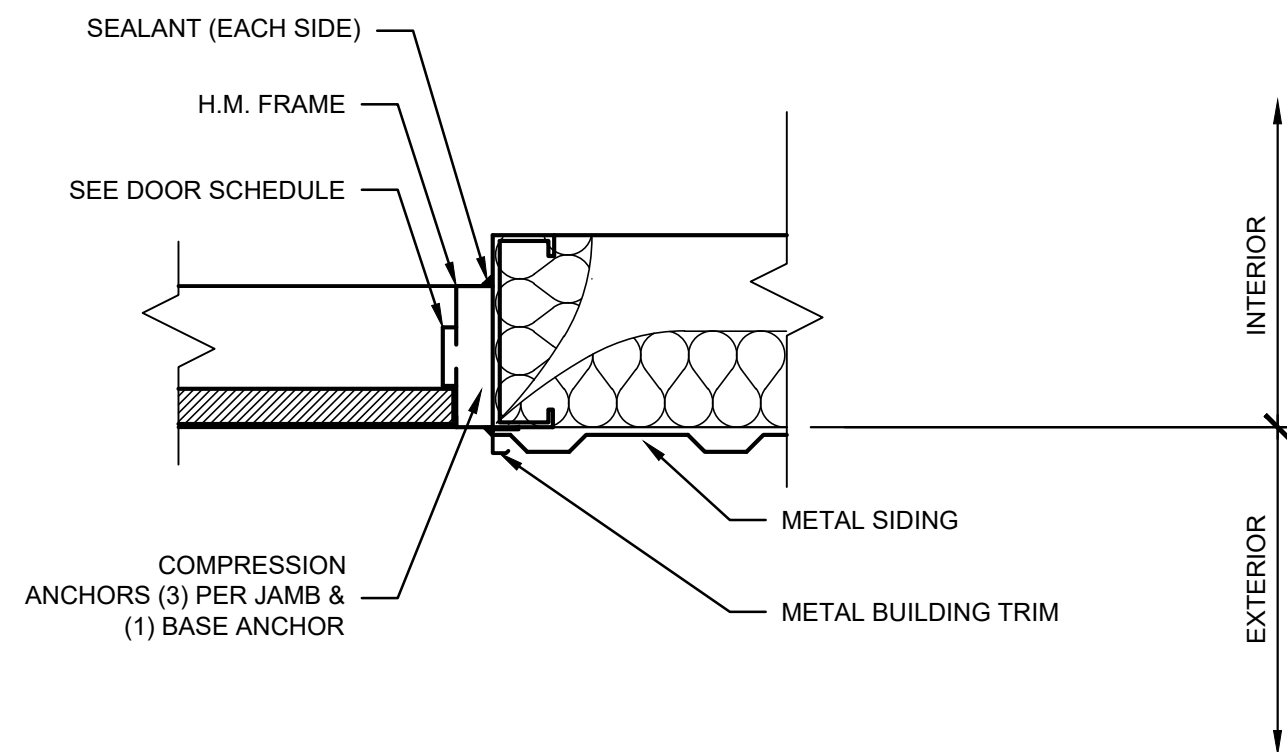
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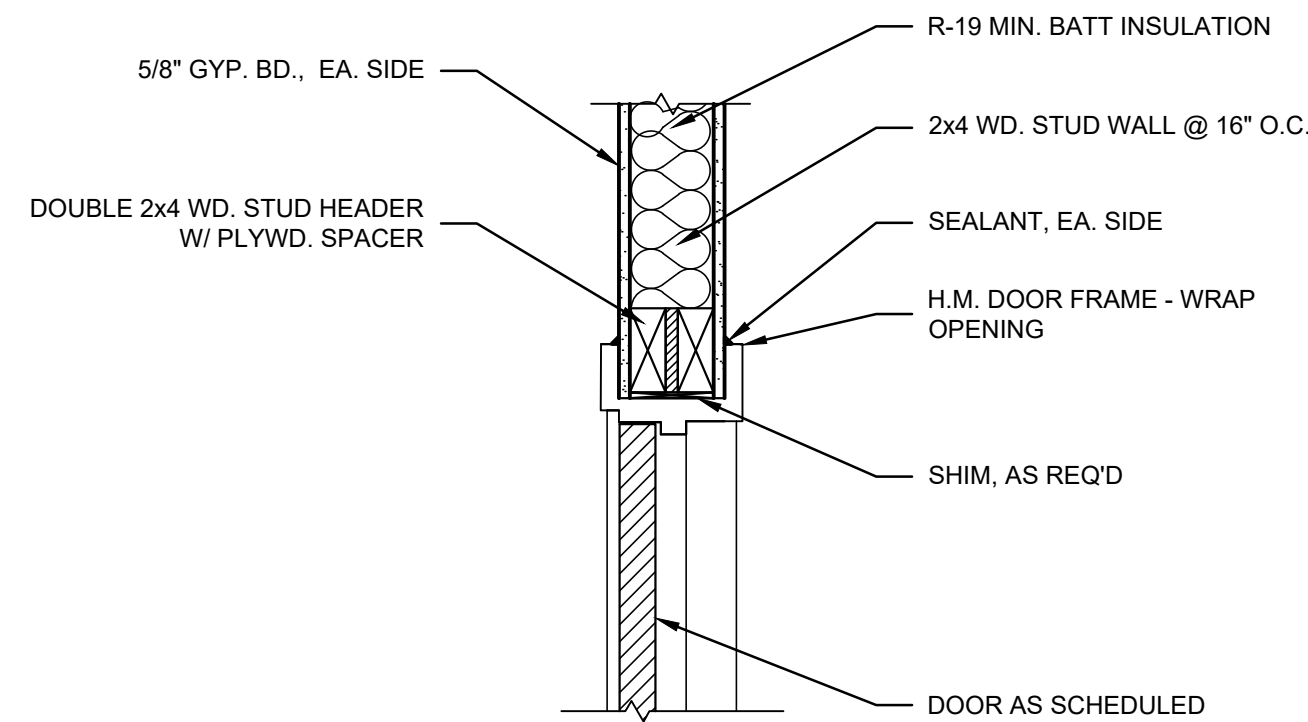
PROJECT: CITY OF BARDSTOWN PUBLIC WORKS BUILDING - FILE: A6.01 Door Details.dwg - DATE: Sep 01, 2020 3:55PM - BY: ERIC KEYES



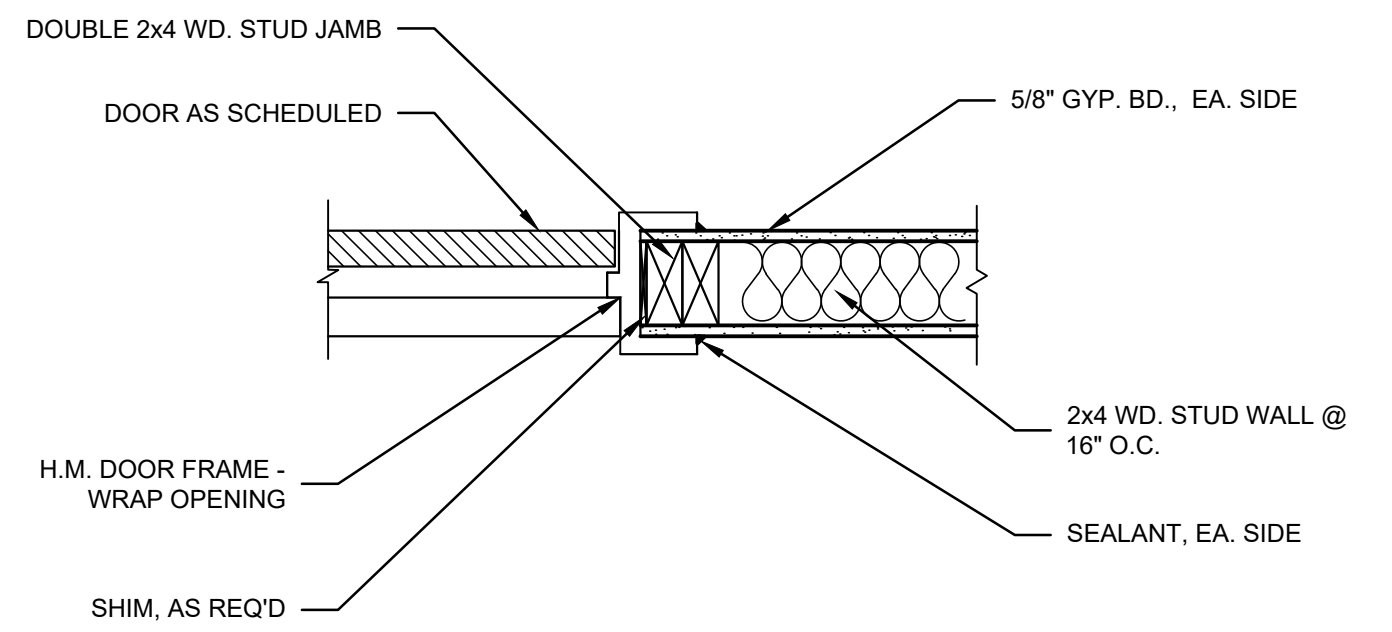
**01 HOLLOW METAL DOOR HEAD**  
SCALE: SCALE: 1-1/2" = 1'-0"



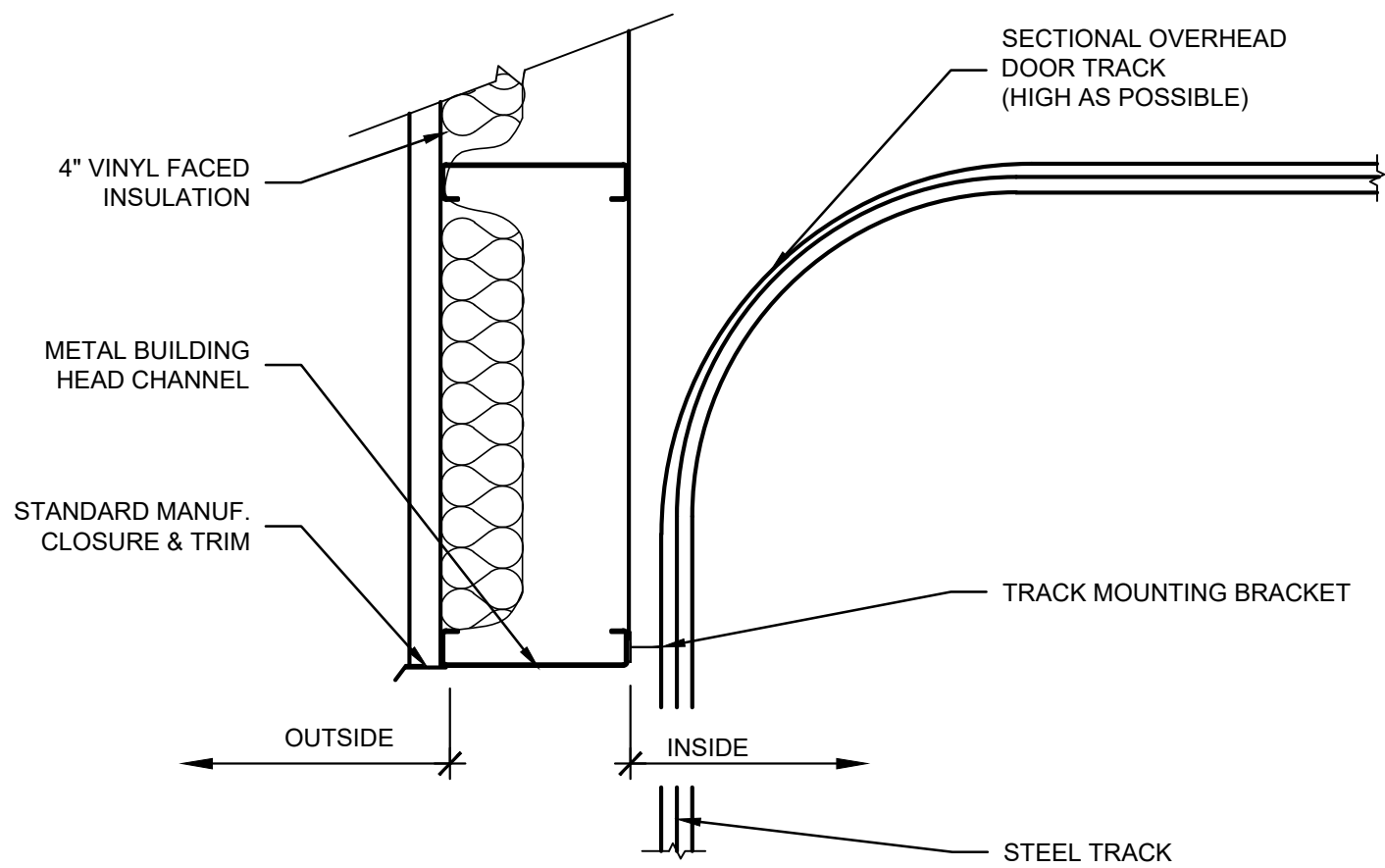
**02 HOLLOW METAL DOOR JAMB**  
SCALE: SCALE: 1-1/2" = 1'-0"



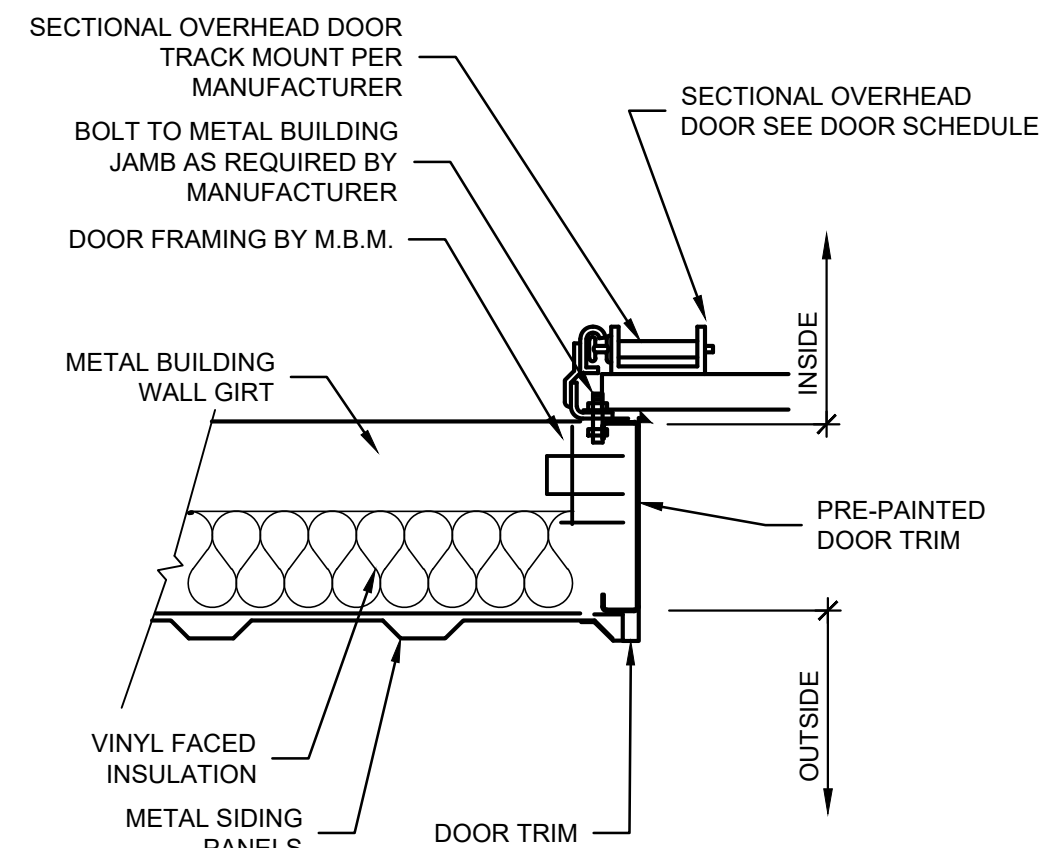
**03 HOLLOW METAL DOOR HEAD**  
SCALE: 1-1/2" = 1'-0"



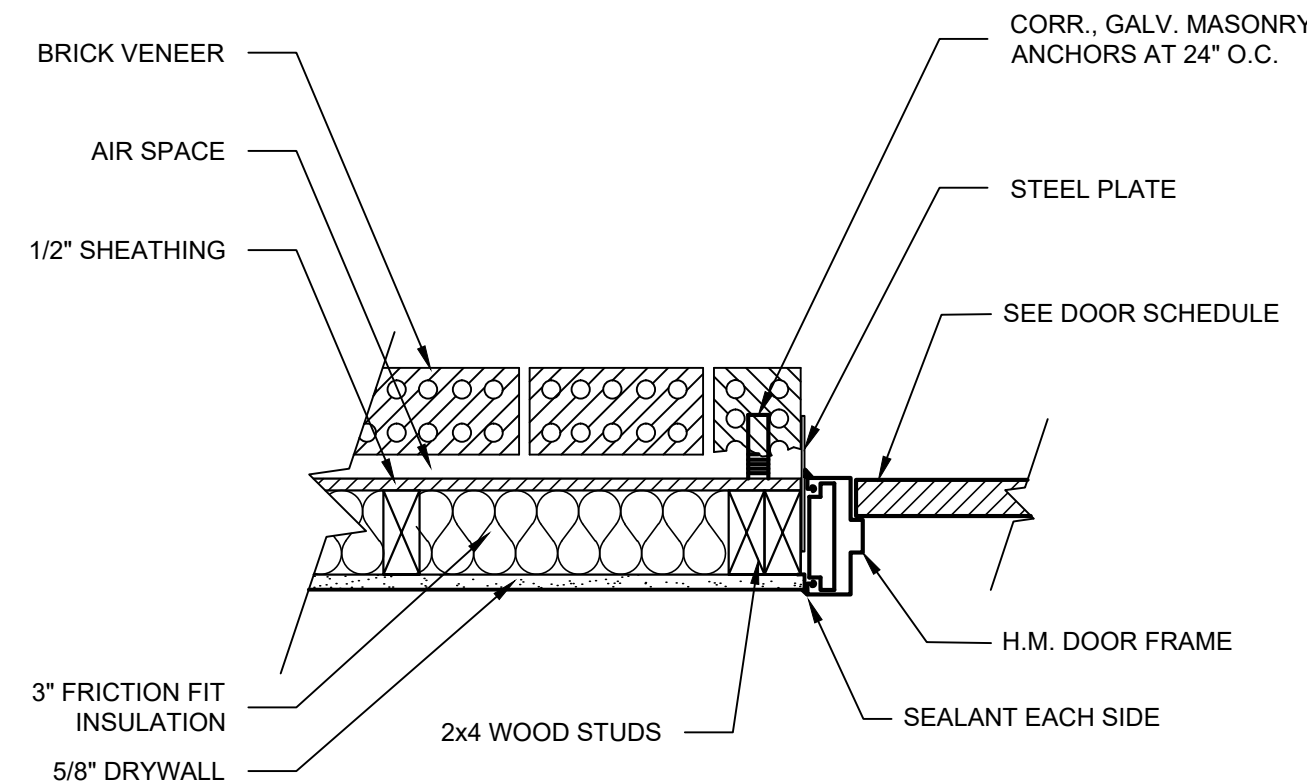
**04 HOLLOW METAL DOOR JAMB**  
SCALE: 1-1/2" = 1'-0"



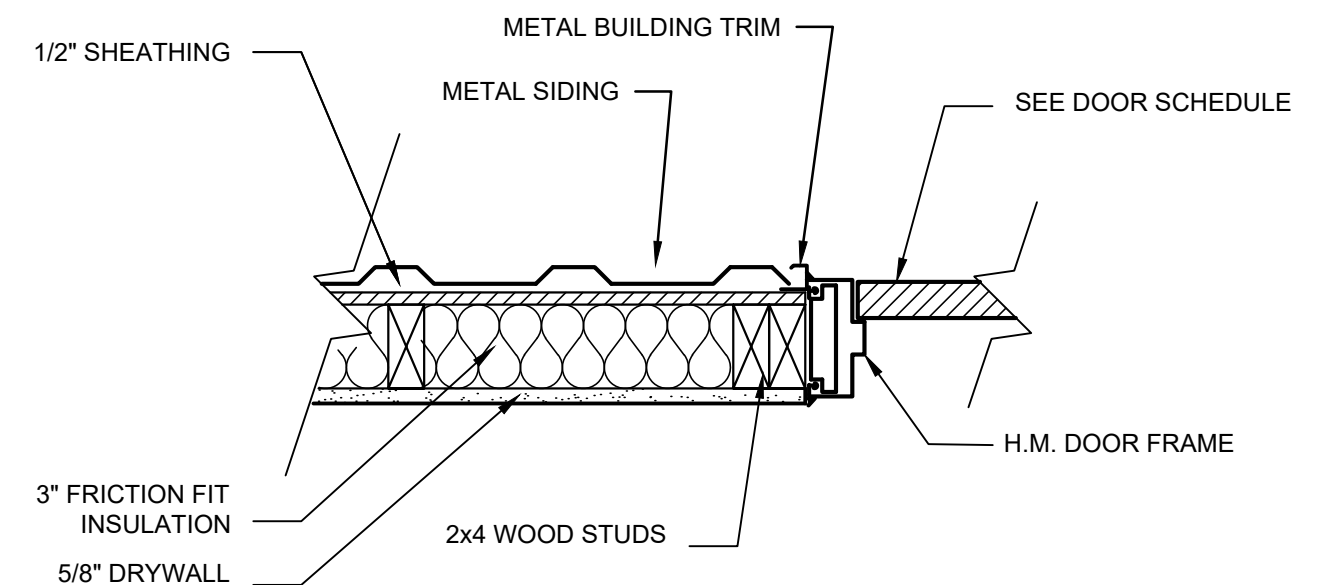
**05 OVERHEAD DOOR HEAD**  
SCALE: SCALE: 1 1/2" = 1'-0"



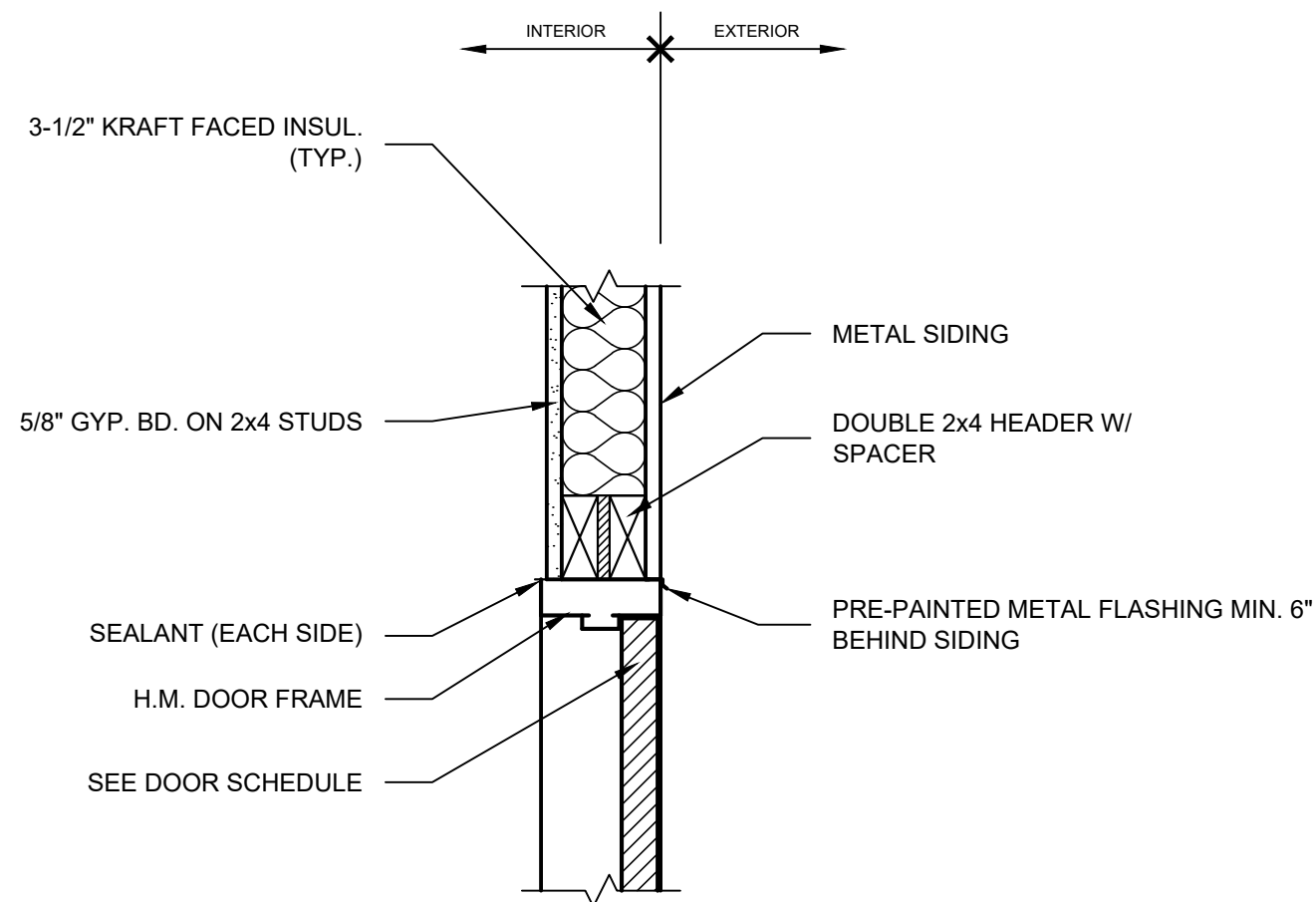
**06 OVERHEAD DOOR JAMB**  
SCALE: SCALE: 1 1/2" = 1'-0"



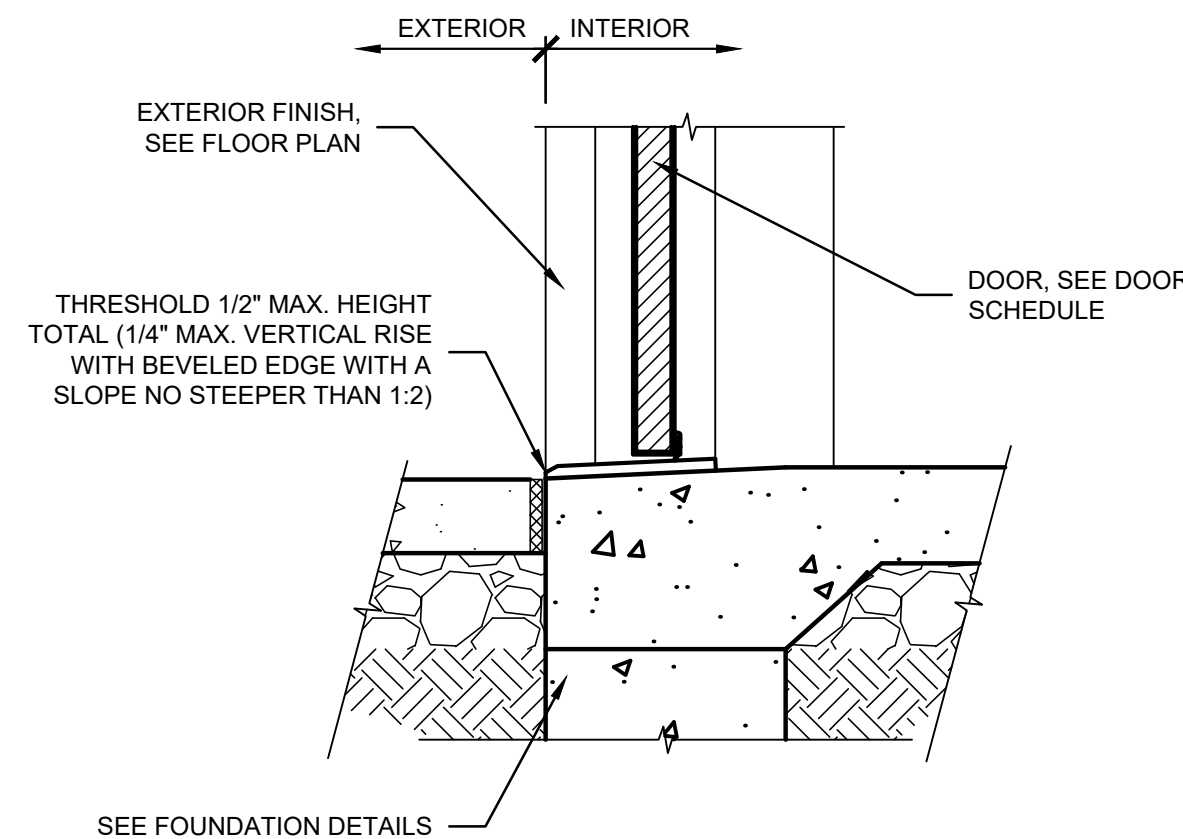
**07 HOLLOW METAL DOOR JAMB**  
SCALE: 1-1/2" = 1'-0"



**08 HOLLOW METAL DOOR JAMB**  
SCALE: 1-1/2" = 1'-0"



**09 HOLLOW METAL DOOR HEAD**  
SCALE: 1-1/2" = 1'-0"



**10 DOOR THRESHOLD**  
SCALE: 1-1/2" = 1'-0"

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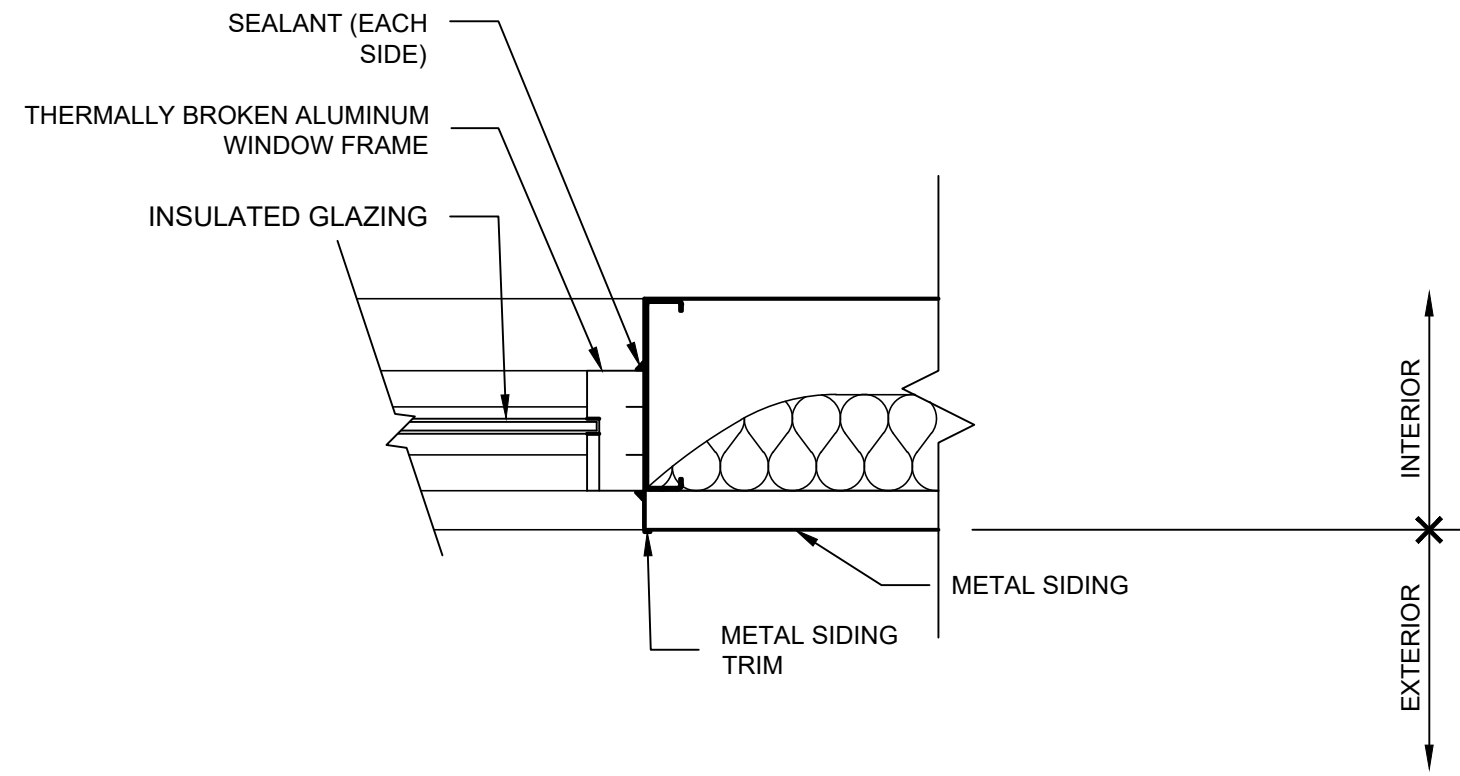
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DOOR DETAILS

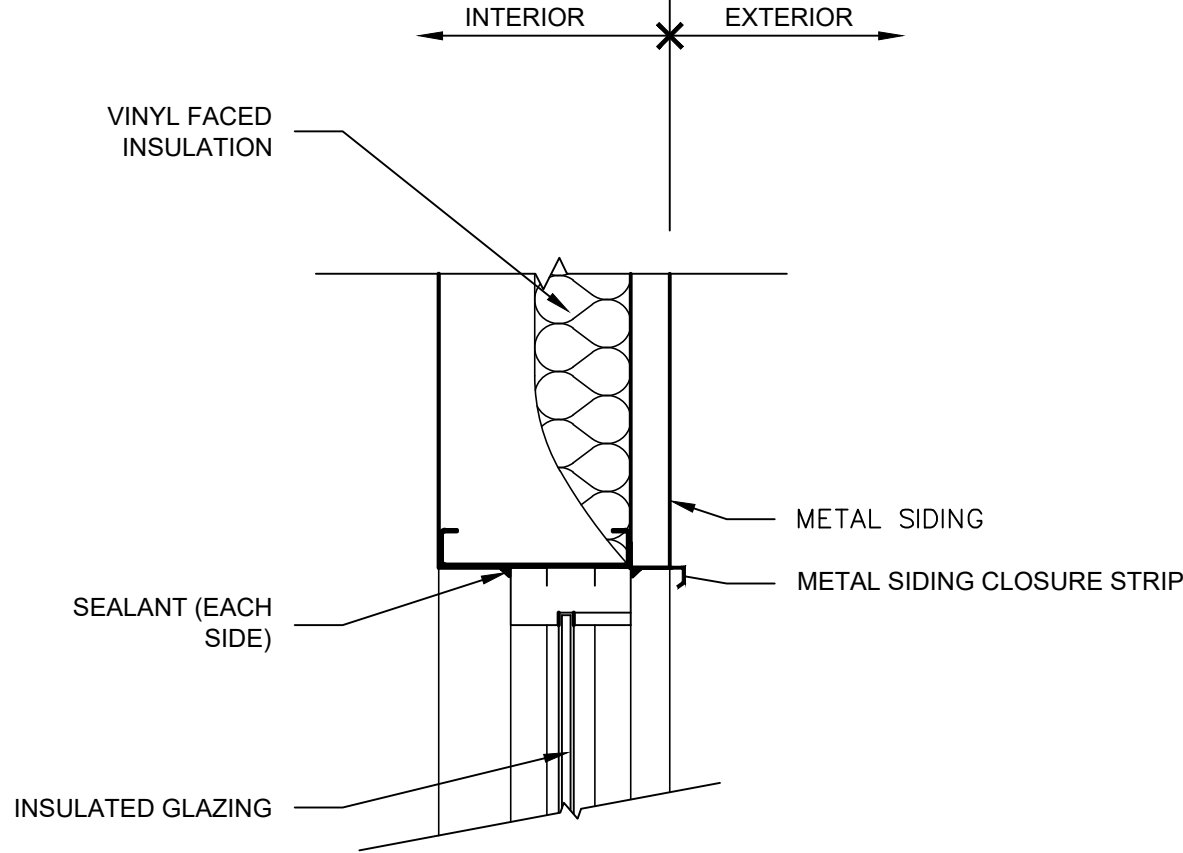
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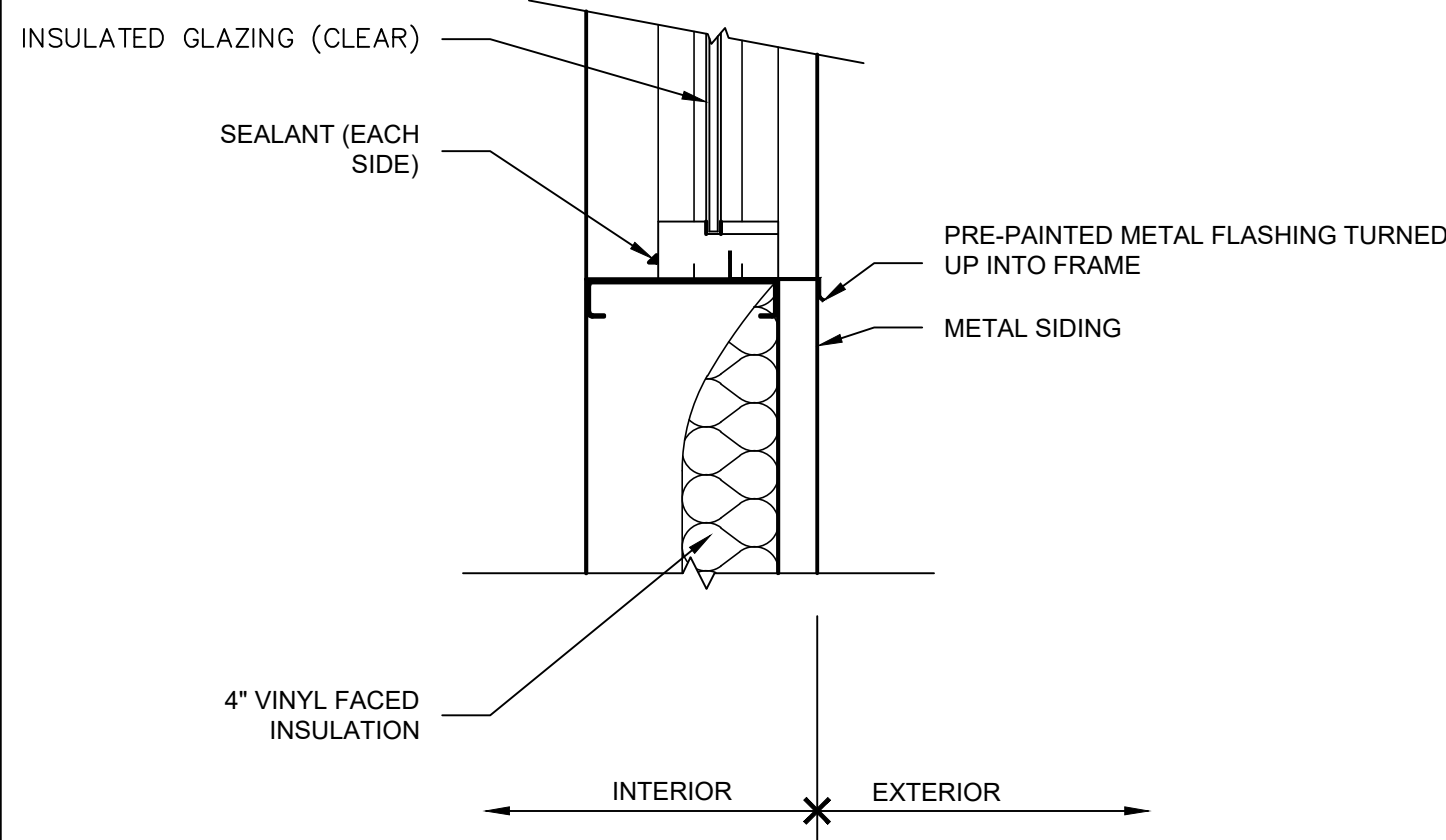
PROJECT: CITY OF BARDSTOWN PUBLIC WORKS BUILDING - FILE: A6.02 Window Details.dwg - DATE: Sep 01, 2020 3:56PM - BY: ERIC KEYES



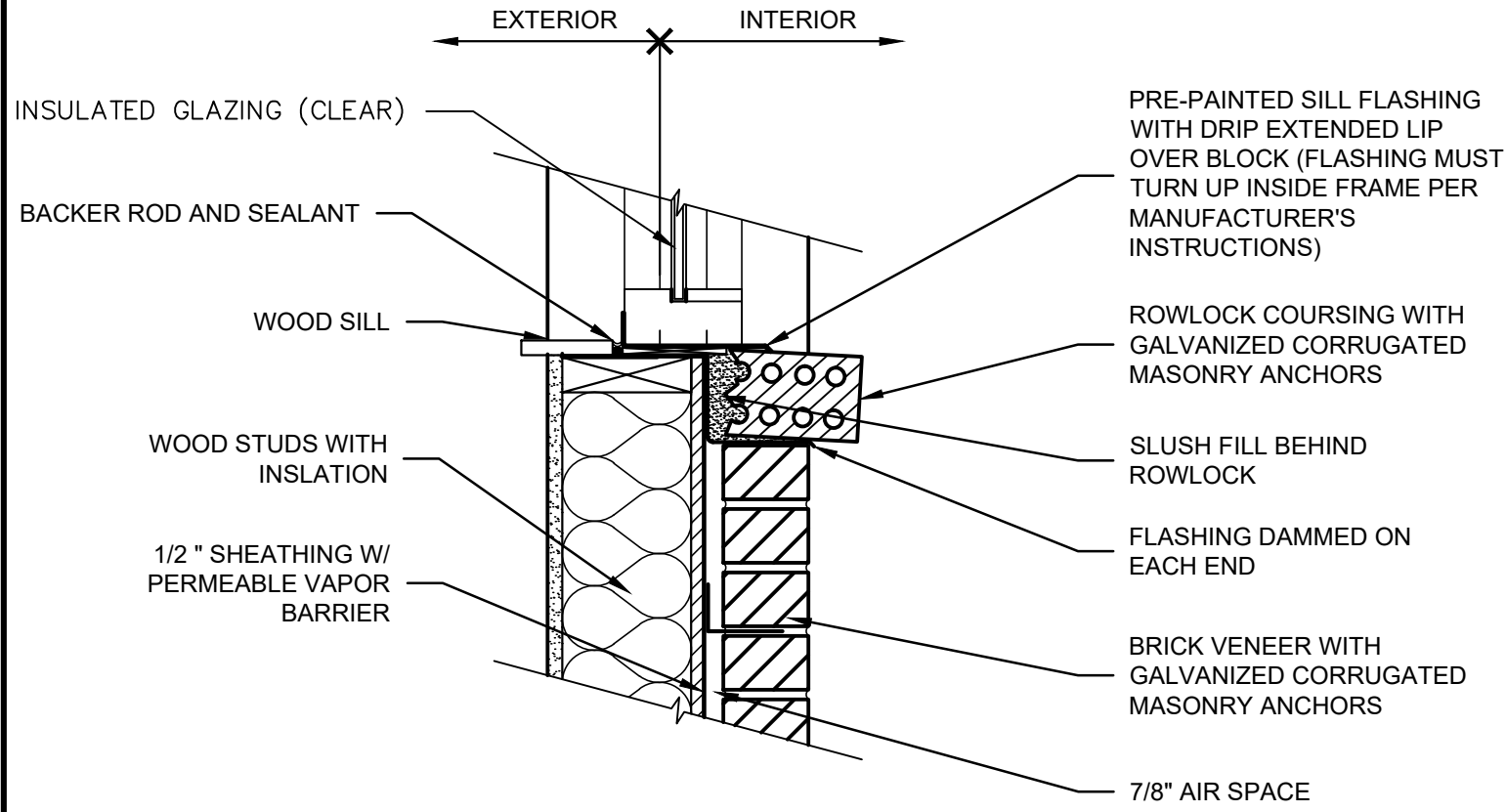
**01 ALUMINUM WINDOW JAMB**  
SCALE: 1 1/2" = 1'-0"



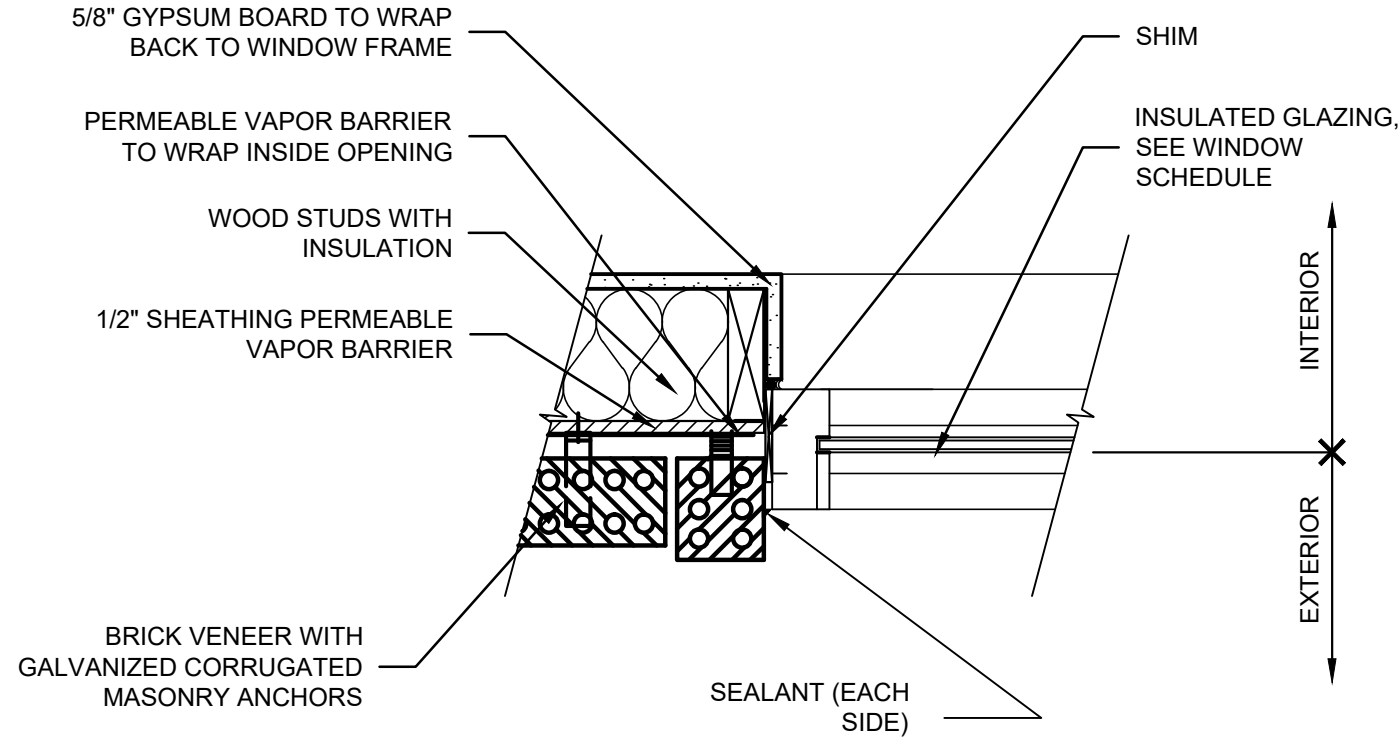
**02 ALUMINUM WINDOW HEAD**  
SCALE: 1 1/2" = 1'-0"



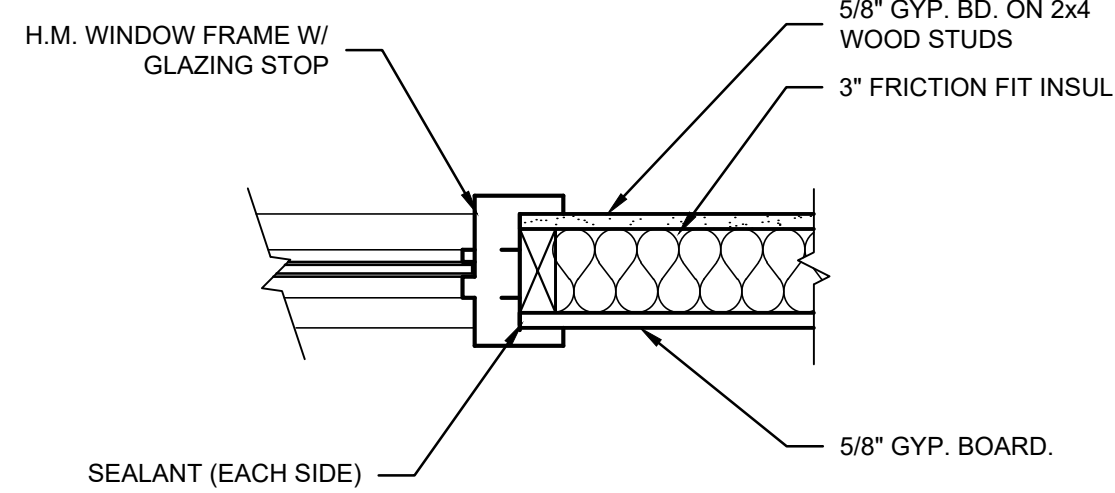
**03 ALUMINUM WINDOW SILL**  
SCALE: 1 1/2" = 1'-0"



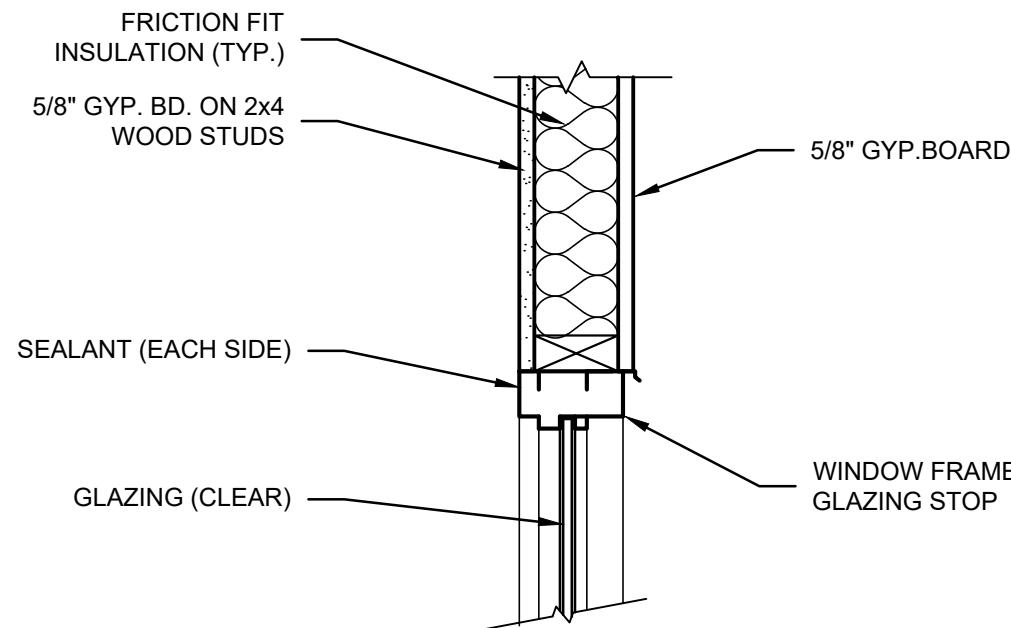
**04 ALUMINUM WINDOW SILL**  
SCALE: 1-1/2" = 1'-0"



**05 ALUMINUM WINDOW JAMB**  
SCALE: 1-1/2" = 1'-0"



**06 HOLLOW METAL WINDOW JAMB**  
SCALE: 1 1/2" = 1'-0"



**07 HOLLOW METAL WINDOW HEAD**  
SCALE: 1 1/2" = 1'-0"

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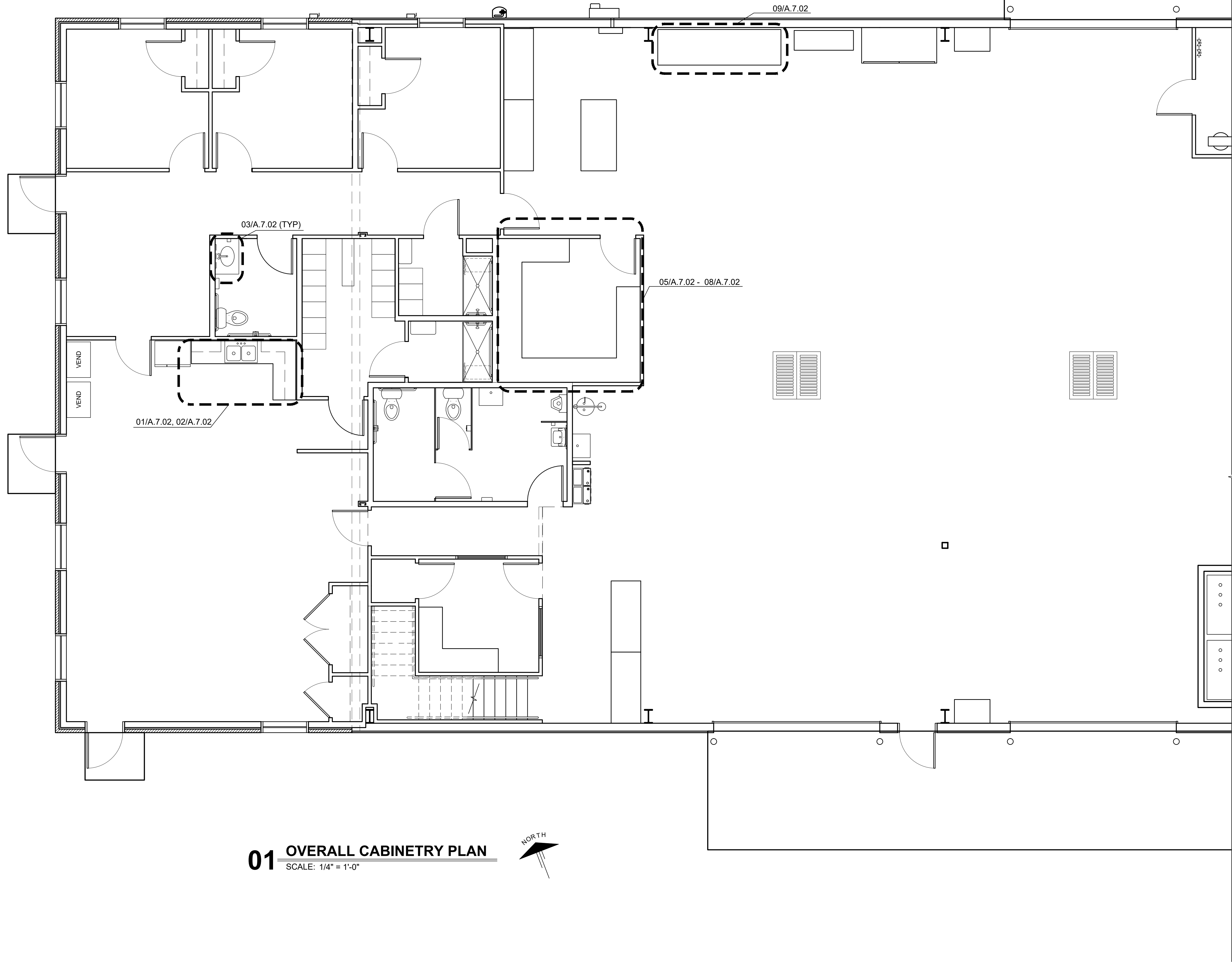
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WINDOW DETAILS

**A6.02**



PROJECT: CITY OF BARDSTOWN PUBLIC WORKS BUILDING - FILE: A7.01 Cabinetry Floor Plan.dwg - DATE: Sep 01, 2020 3:55PM - BY: ERIC KEYES



# 01 OVERALL CABINETRY PLAN

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



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CABINETRY FLOOR PLAN

A7.01

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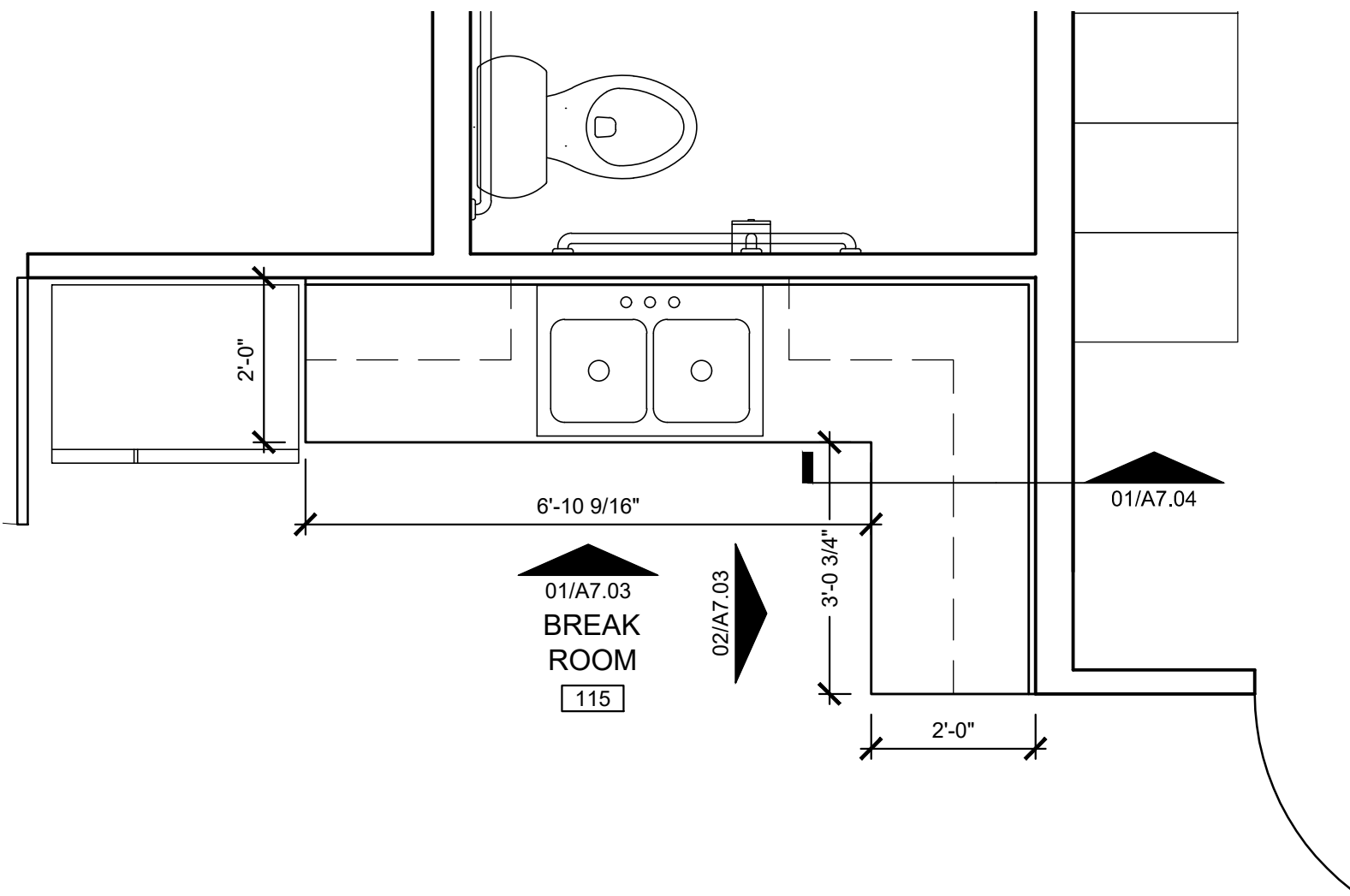
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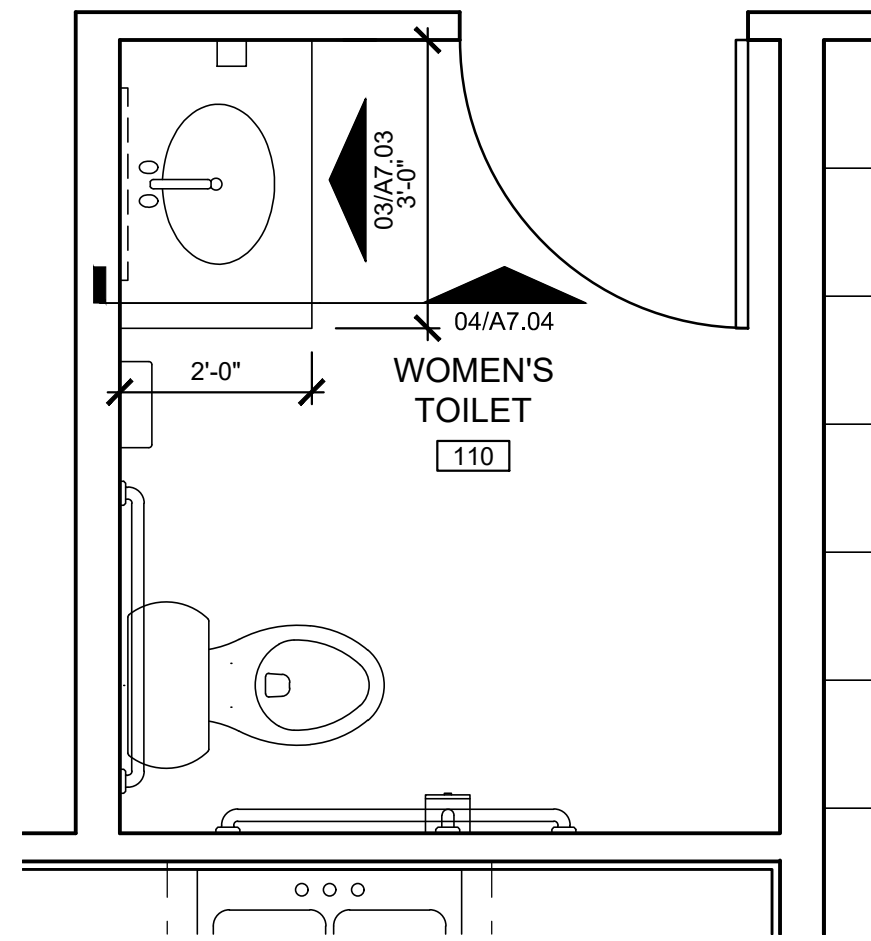


PROJECT: CITY OF BARDSTOWN PUBLIC WORKS BUILDING - FILE: A7.02 Enlarged Cabinetry Plans.dwg - DATE: Sep 01, 2020 3:55PM - BY: ERIC KEYES



**01** BREAK ROOM PLAN

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

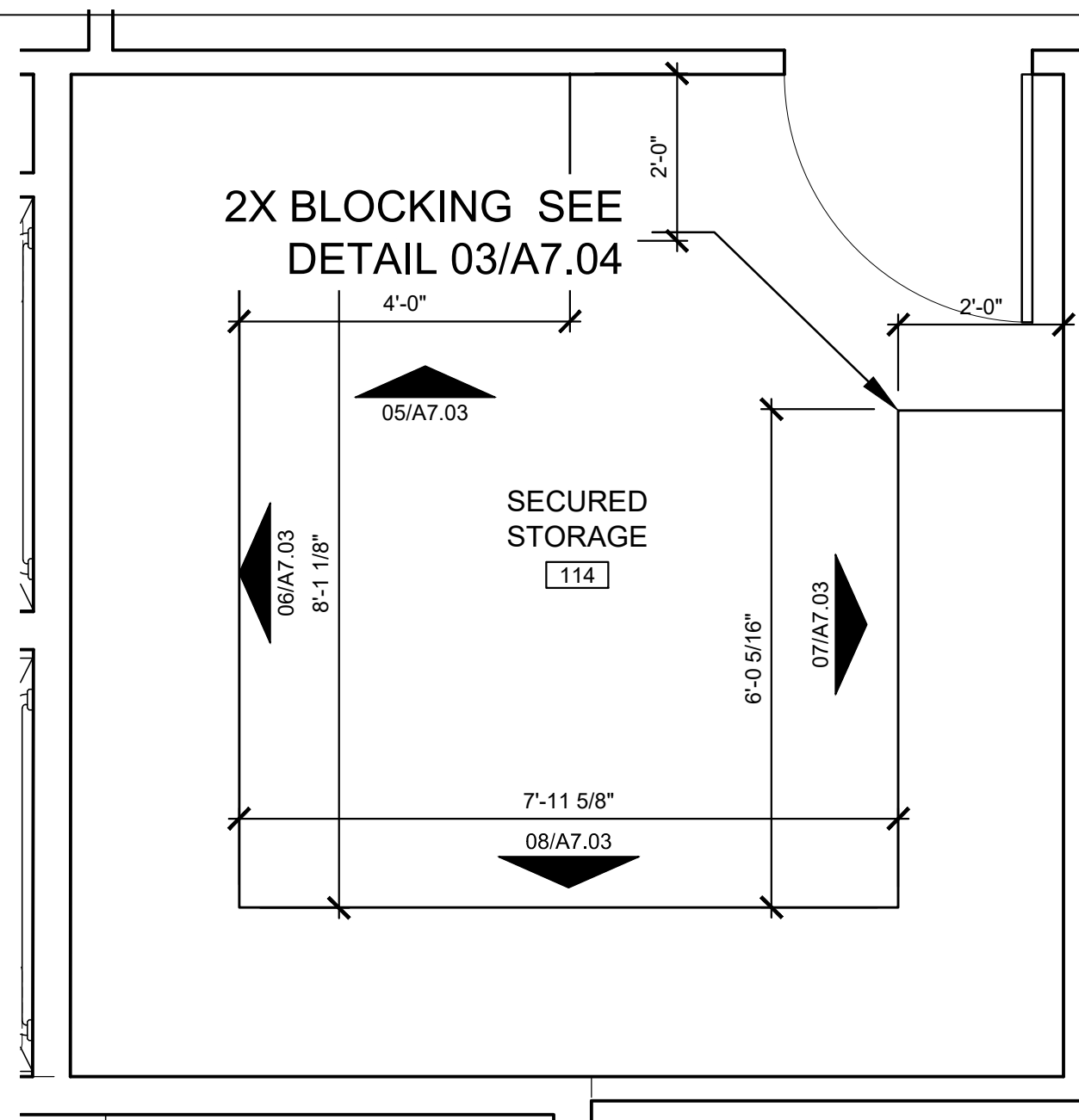


**02** WOMEN'S TOILET PLAN

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

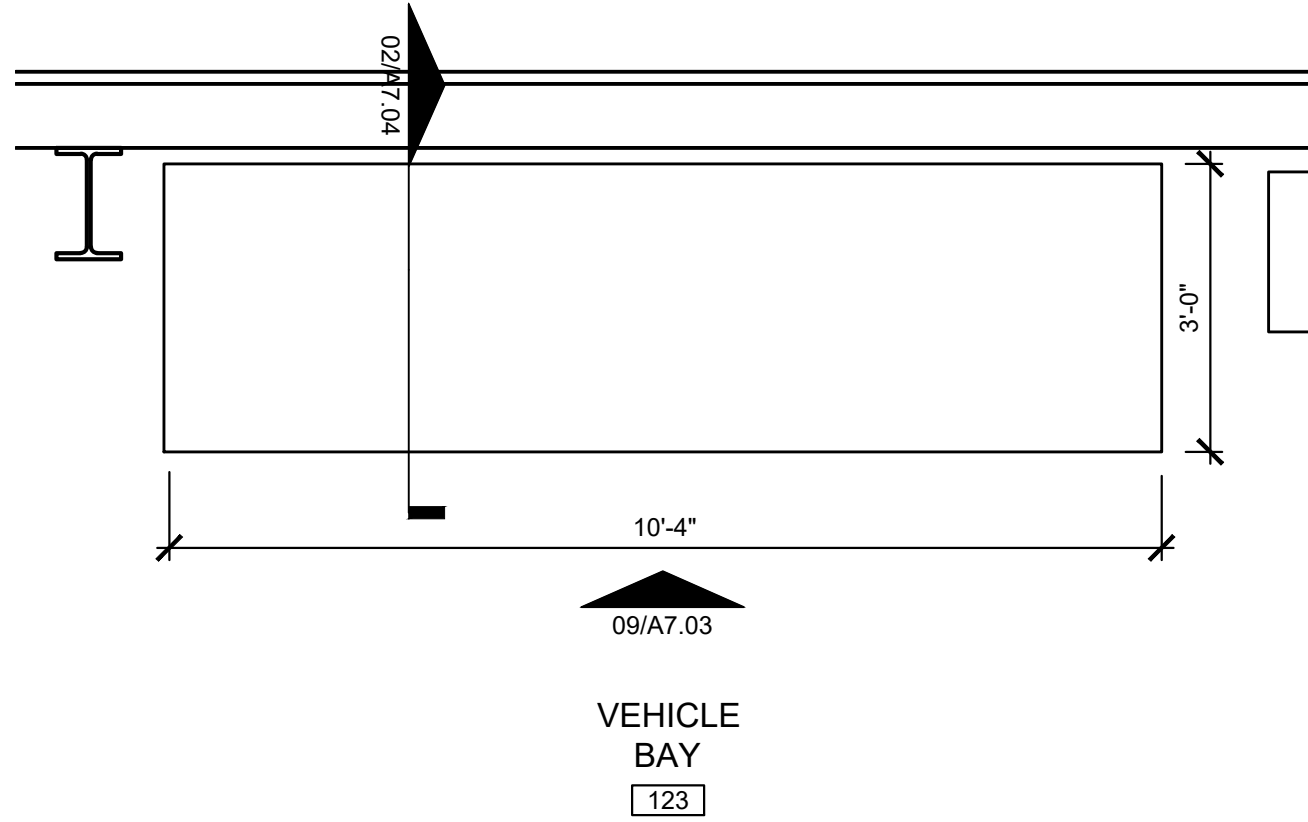
**03** NOT USED

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



**04** SECURED STORAGE PLAN

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



**05** VEHICLE BAY PLAN

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

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NEW CONSTRUCTION:  
**CITY OF BARDSTOWN**  
**PUBLIC WORKS BUILDING**  
PADGETT WAY  
BARDSTOWN, KY

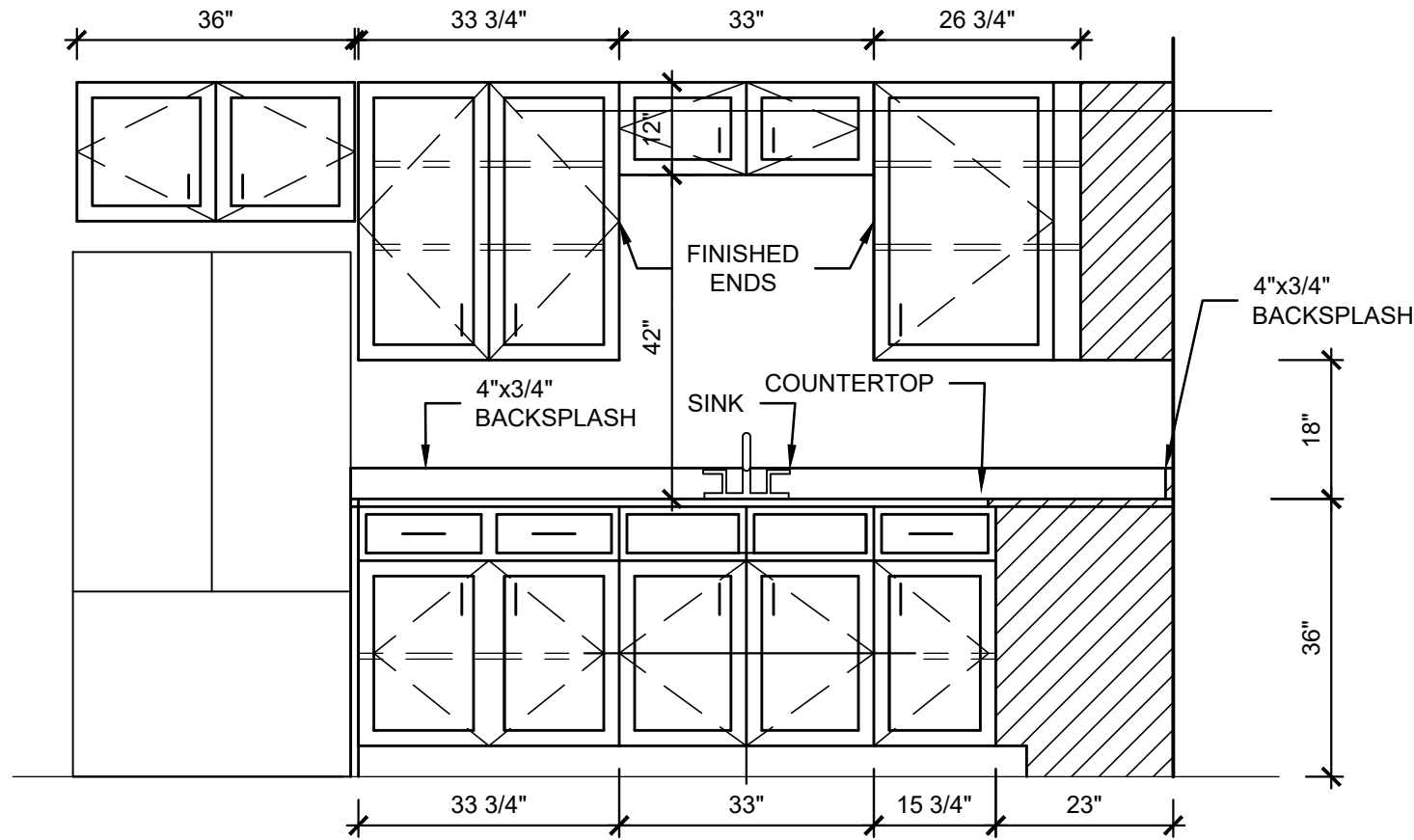
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ENLARGED CABINETRY  
PLANS

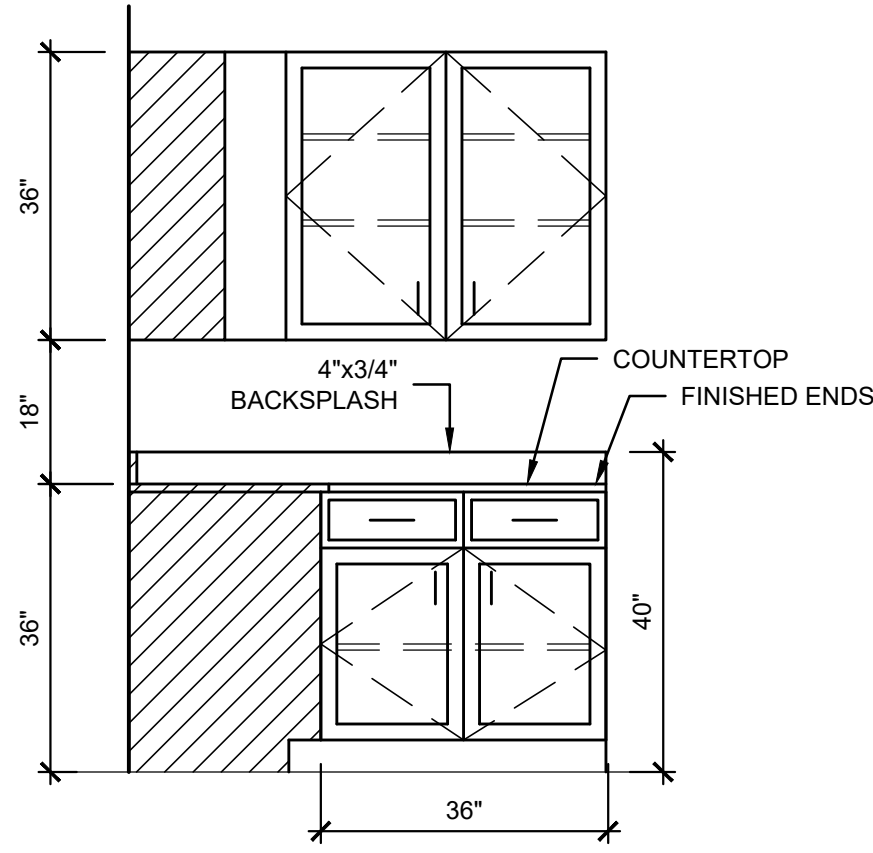
**A7.02**



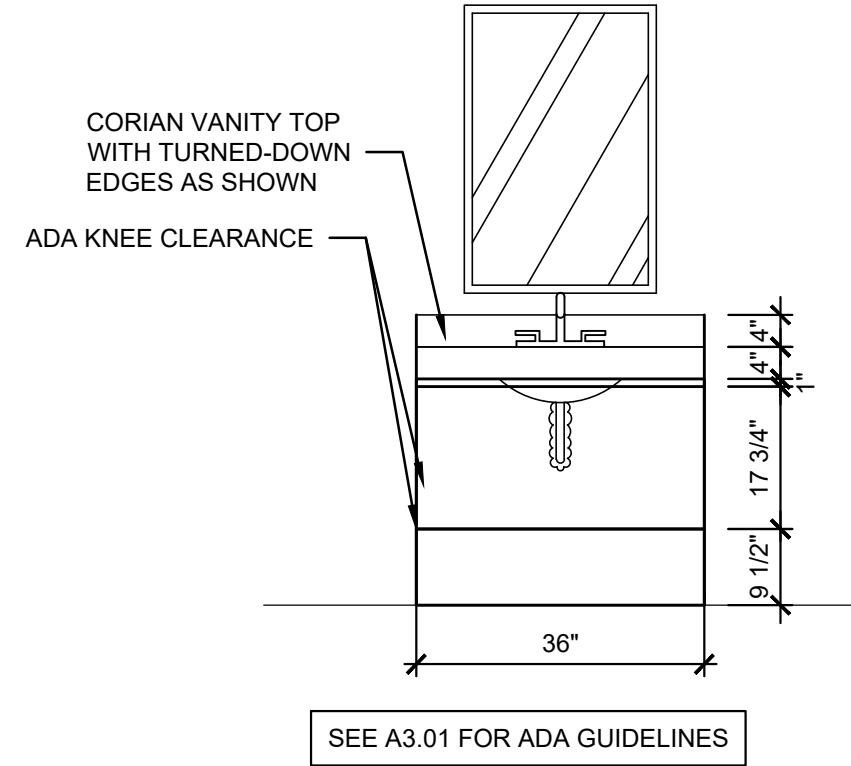
PROJECT: CITY OF BARDSTOWN PUBLIC WORKS BUILDING - FILE: A7.03 Cabinetry Elevations.dwg - DATE: Sep 01, 2020 3:55PM - BY: ERIC KEYES



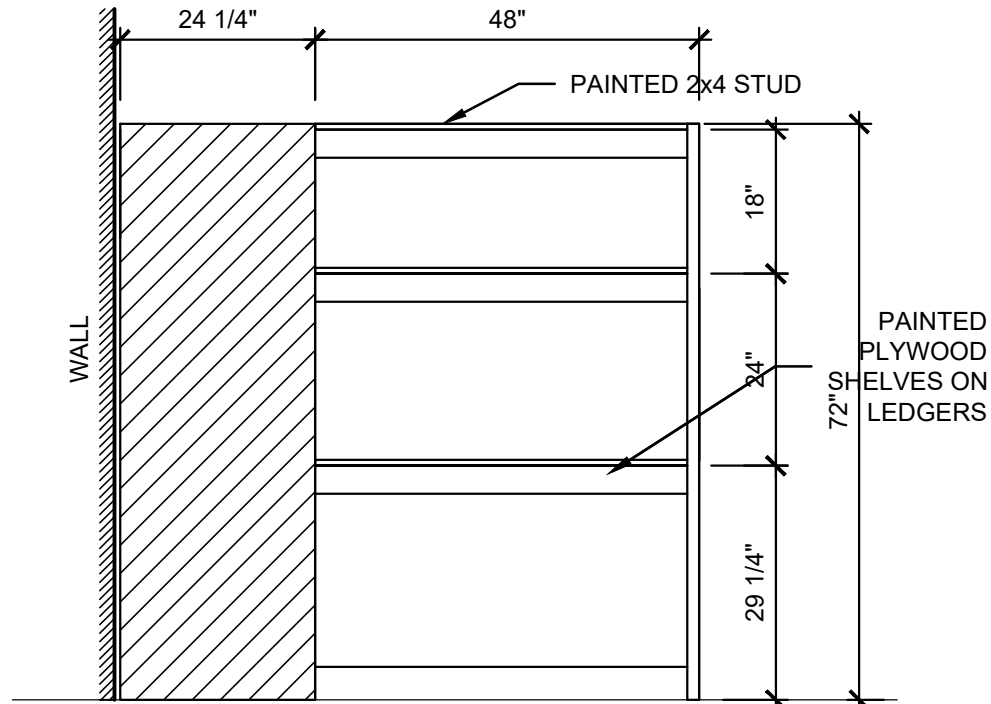
01 CABINET ELEVATION  
SCALE: 1/2" = 1'-0"



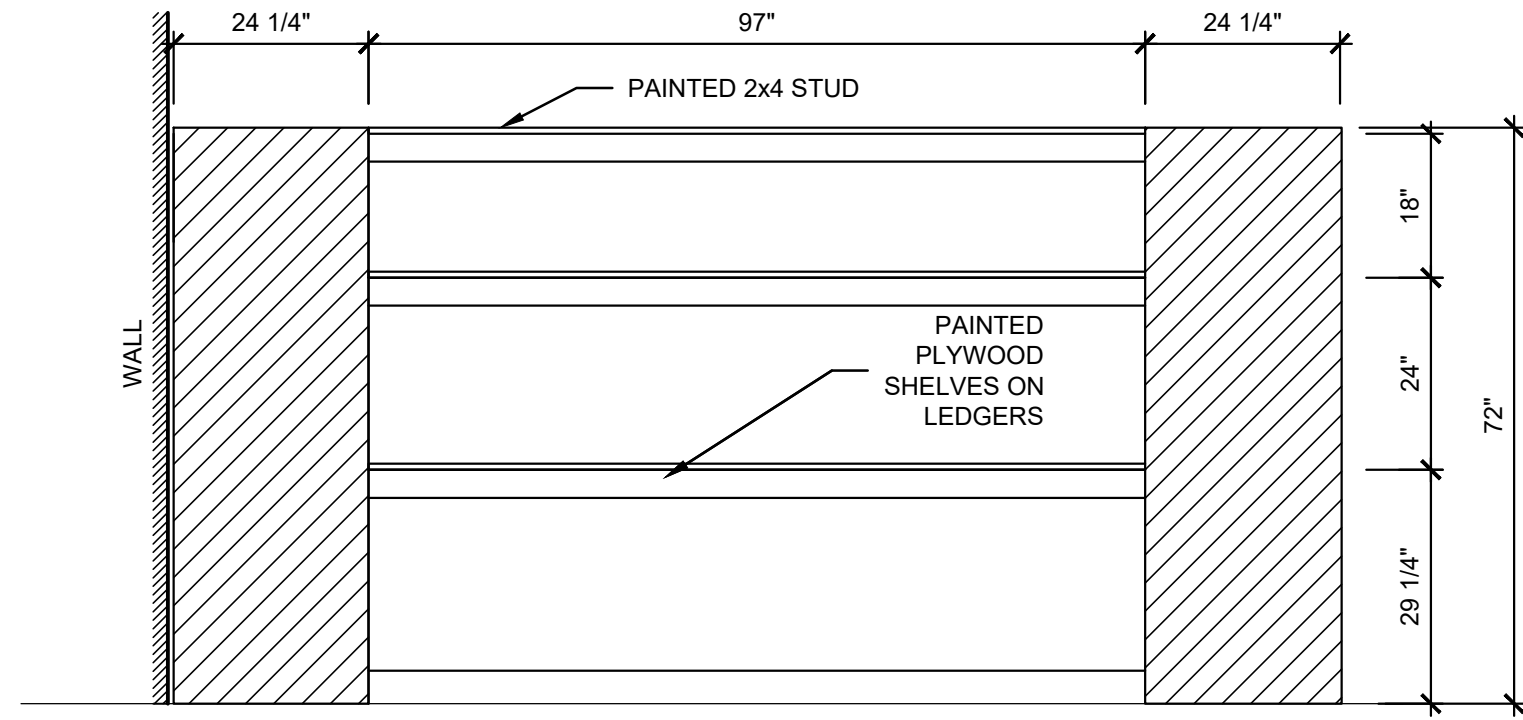
02 CABINET ELEVATION  
SCALE: 1/2" = 1'-0"



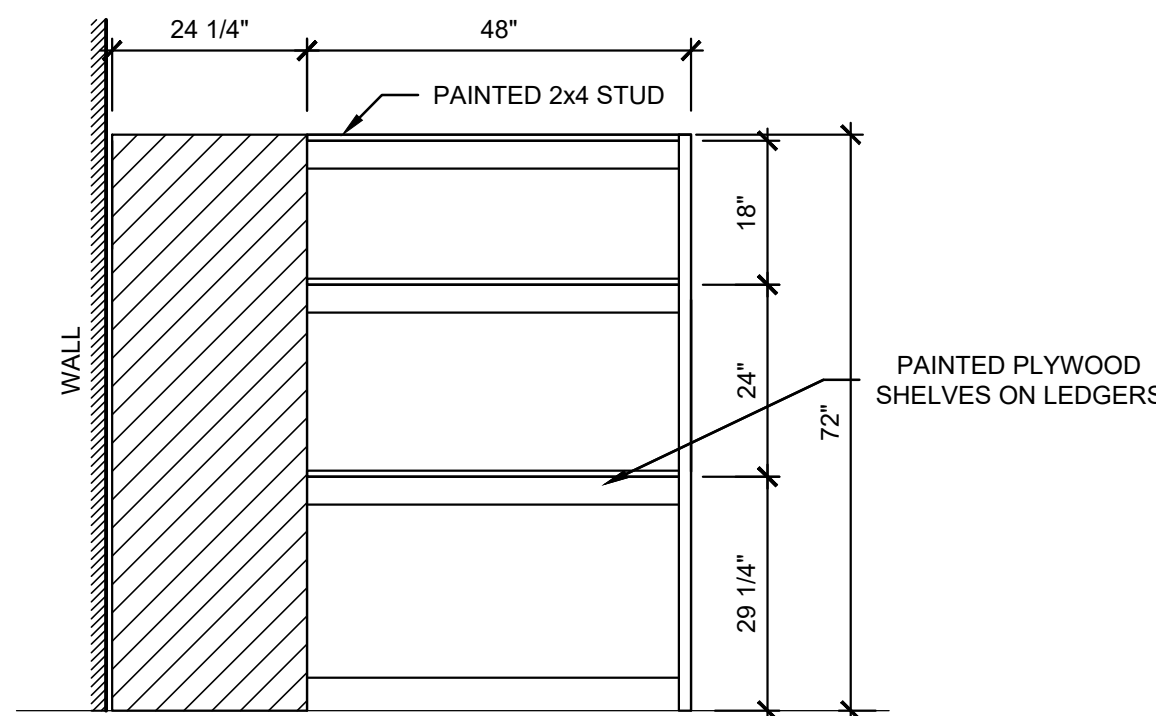
03 ADA SINK CABINET ELEVATION  
SCALE: 1/2" = 1'-0"



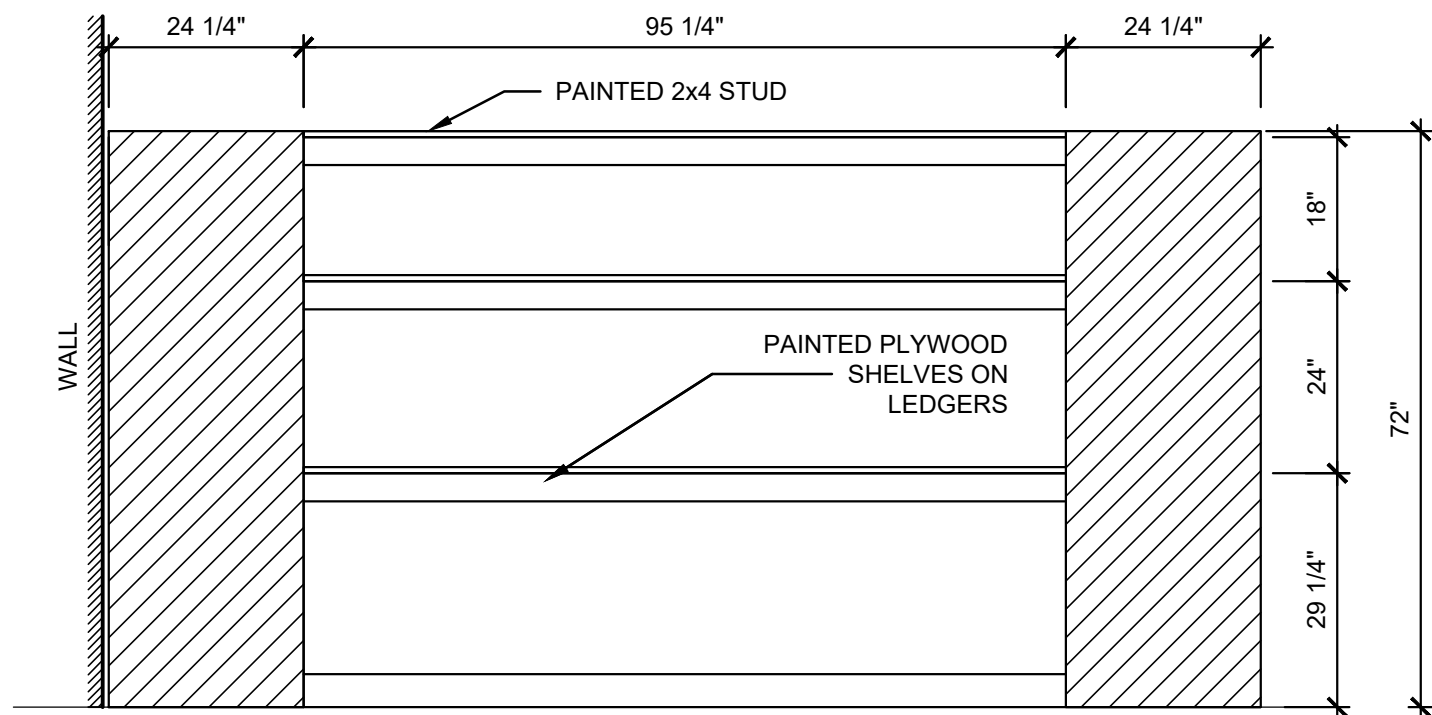
05 SECURE SHELVING ELEVATION  
SCALE: 1/2" = 1'-0"



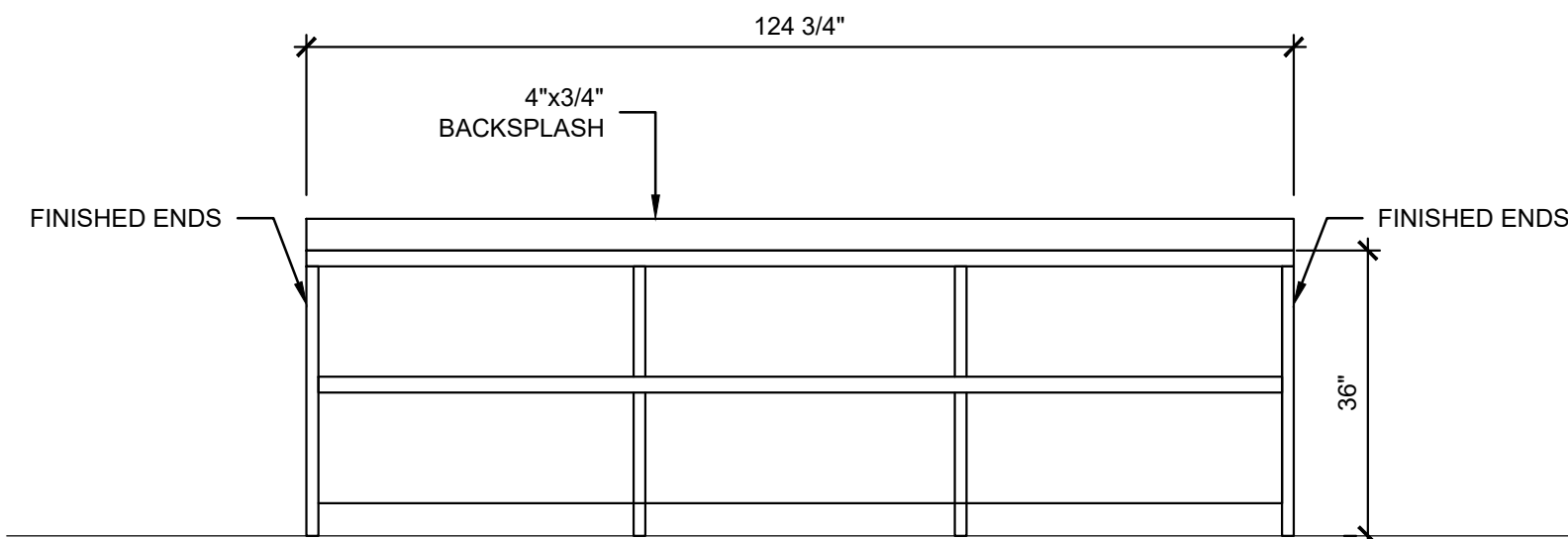
06 SECURE SHELVING ELEVATION  
SCALE: 1/2" = 1'-0"



07 SECURE SHELVING ELEVATION  
SCALE: 1/2" = 1'-0"



08 SECURE SHELVING ELEVATION  
SCALE: 1/2" = 1'-0"



09 MAINTENANCE BENCH ELEVATION  
SCALE: 1/2" = 1'-0"

NOTE: COORDINATE  
WITH OWNER

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CABINETRY ELEVATIONS

A7.03



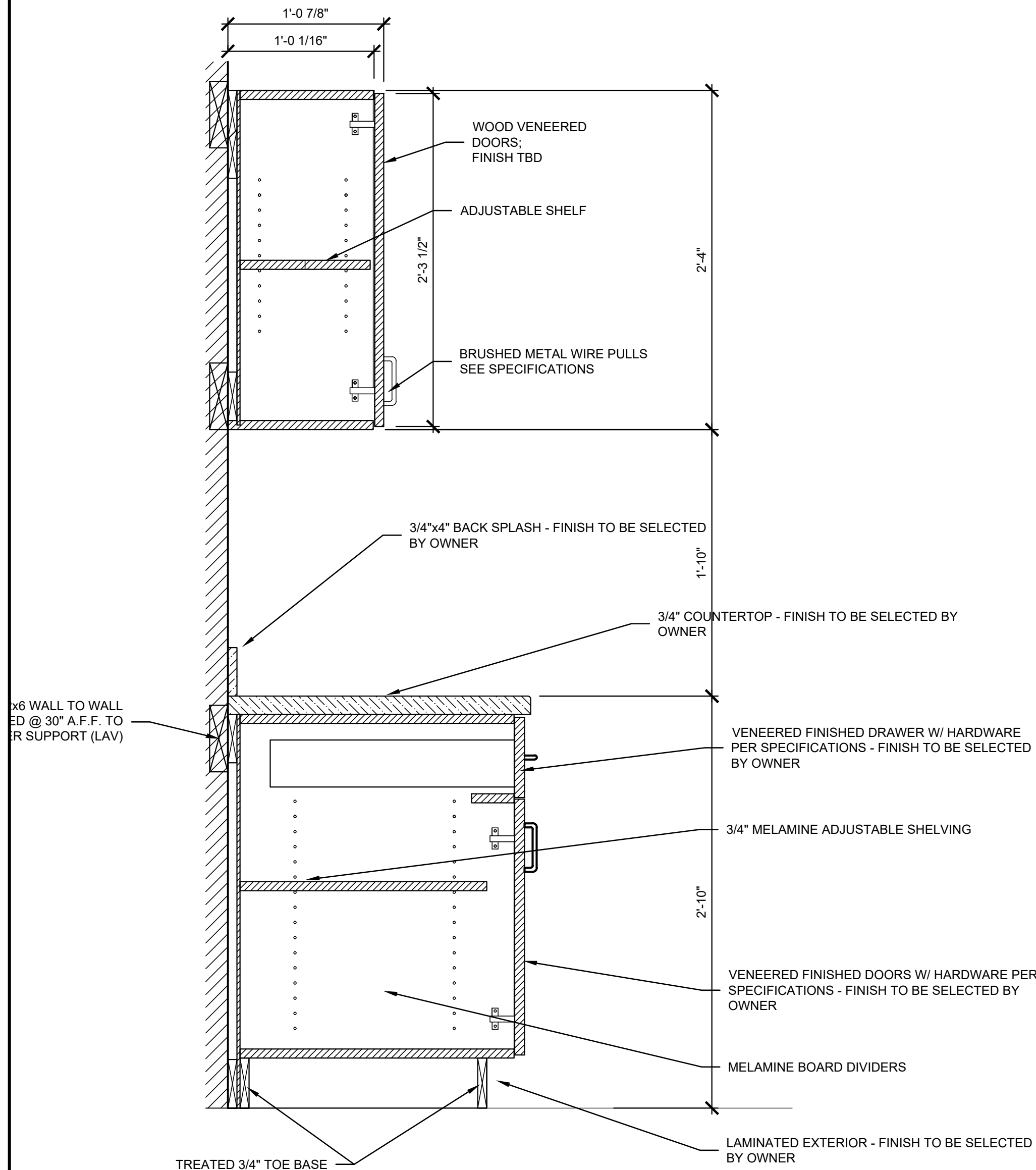
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NEW CONSTRUCTION:  
CITY OF BARDSTOWN  
PUBLIC WORKS BUILDING  
PADGETT WAY  
BARDSTOWN, KY

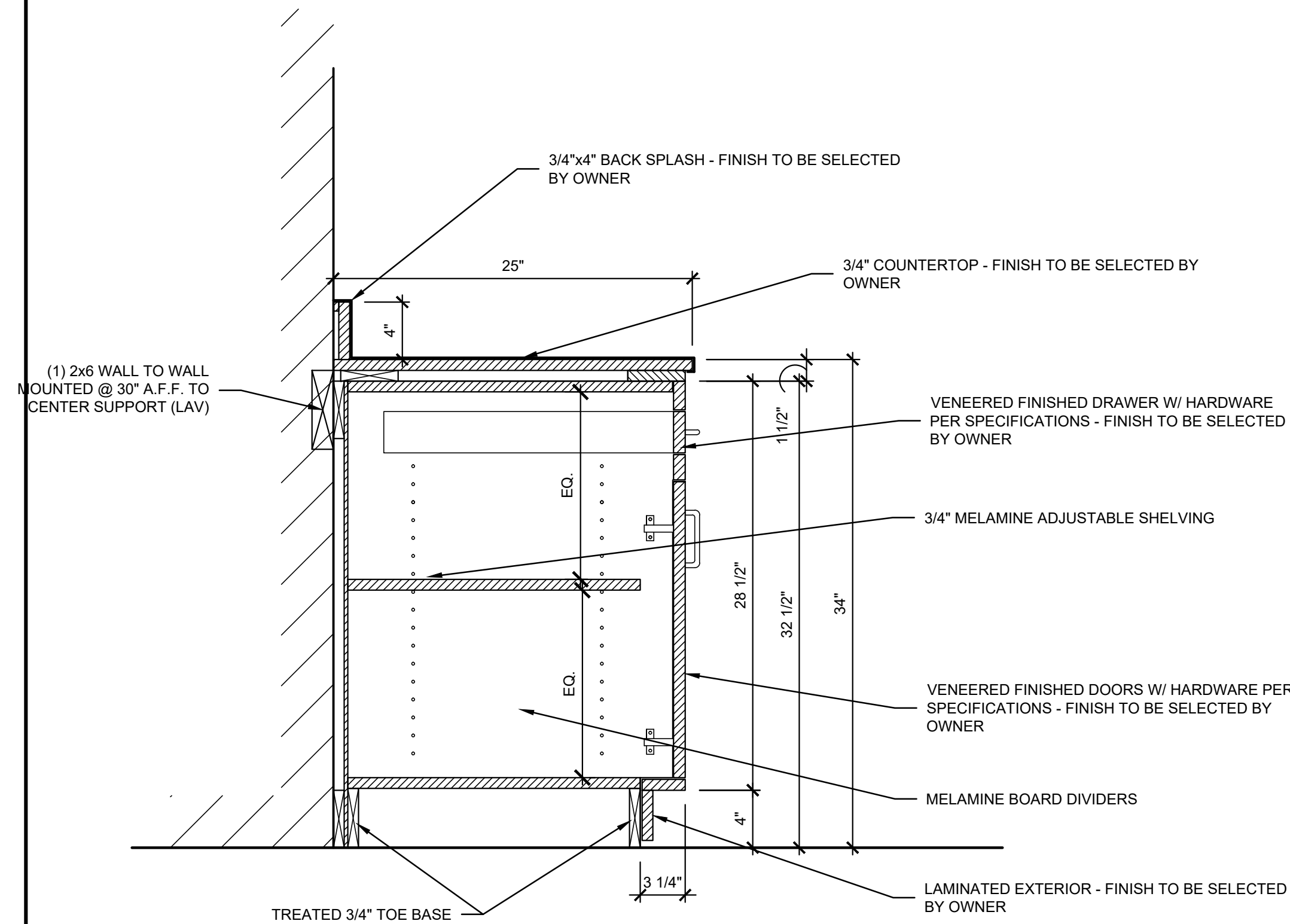
PROJECT NO:  
19-3060  
DRAWN BY:  
NM/CS/  
DATE:  
05-27-2020



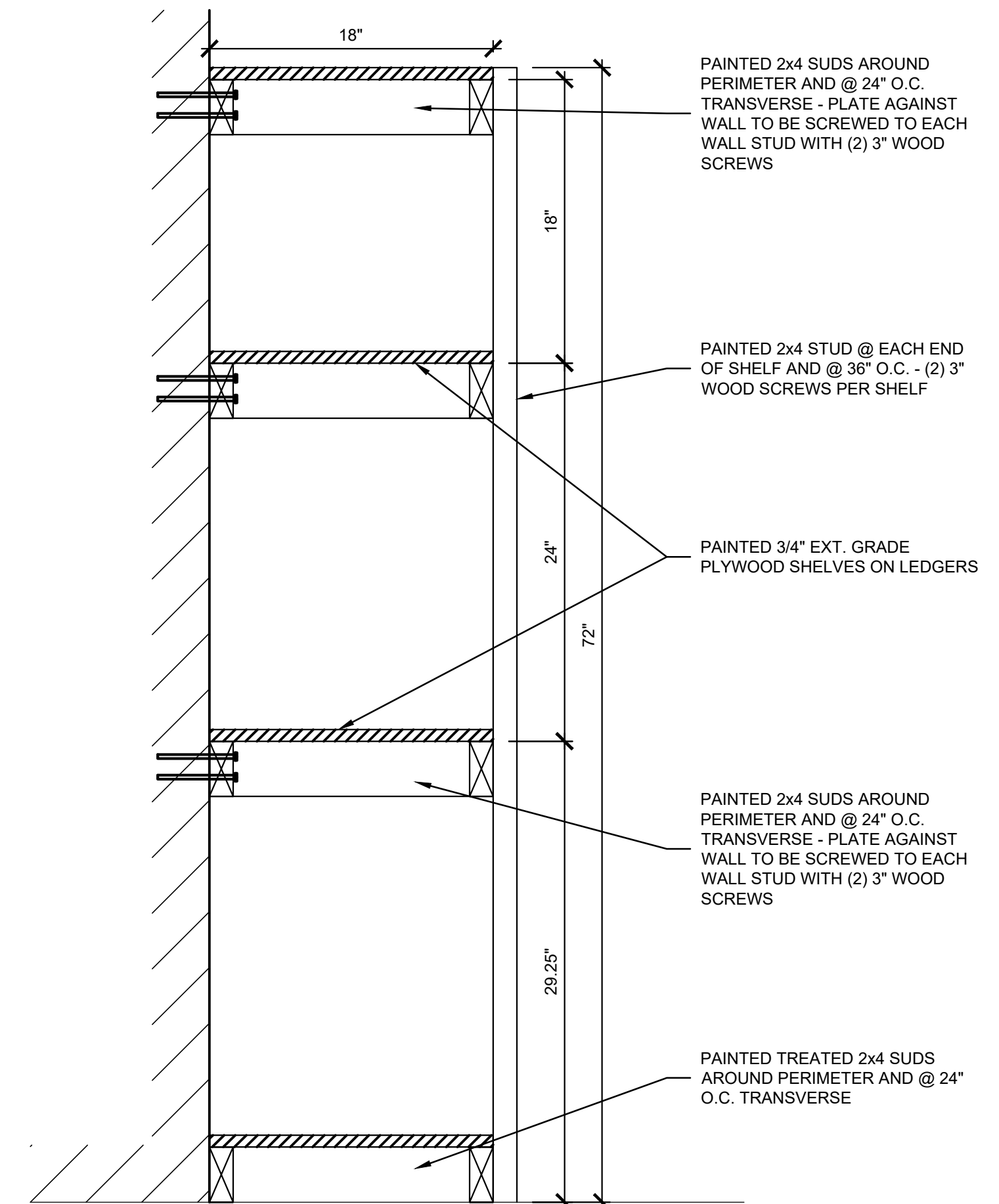
PROJECT: CITY OF BARDSTOWN PUBLIC WORKS BUILDING - FILE: A7.04 Cabinetry Details.dwg - DATE: Sep 01, 2020 3:55PM - BY: ERIC KEYES



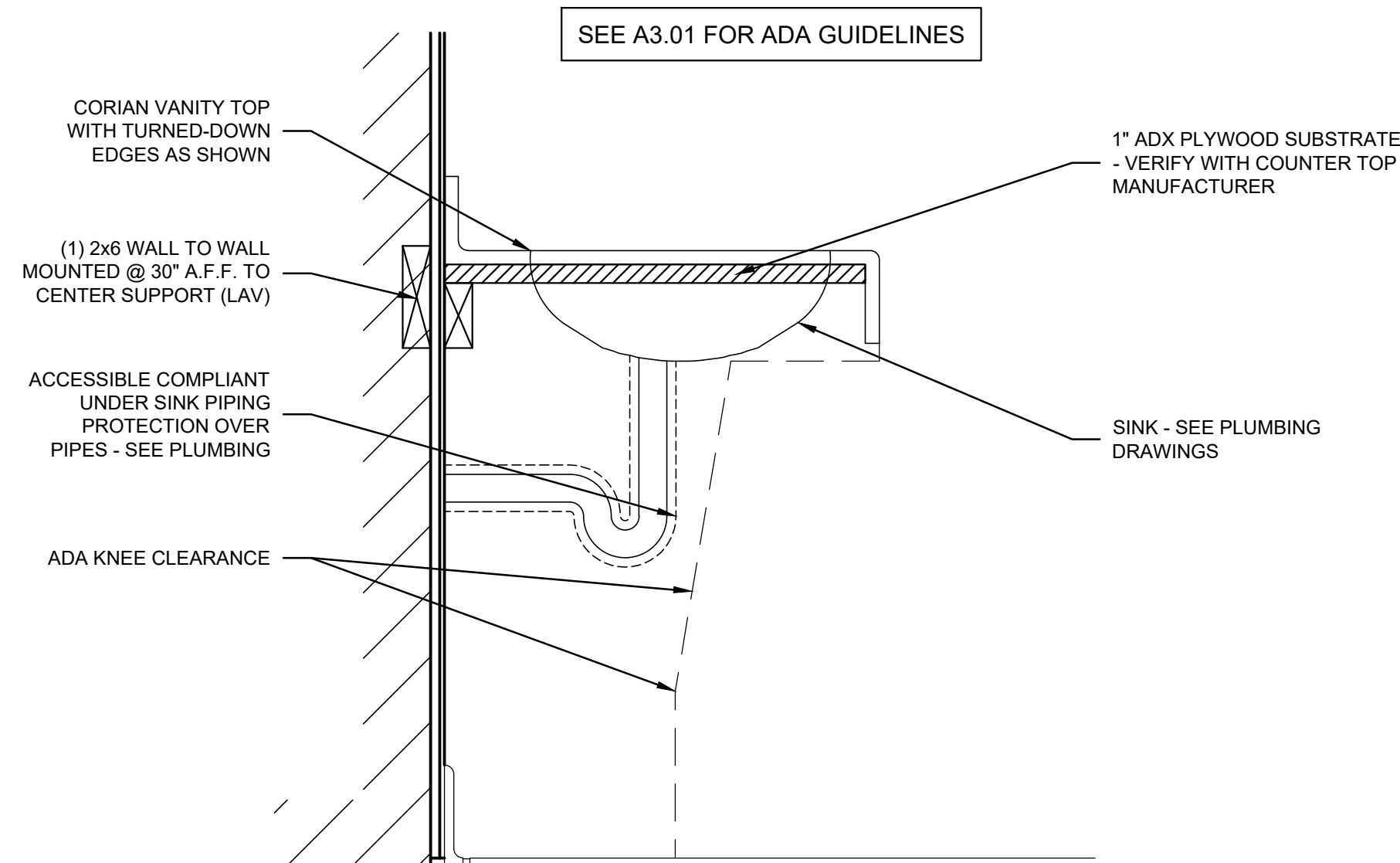
**01 TYP. CABINET SECTION**  
SCALE: 1-1/2" = 1'-0"



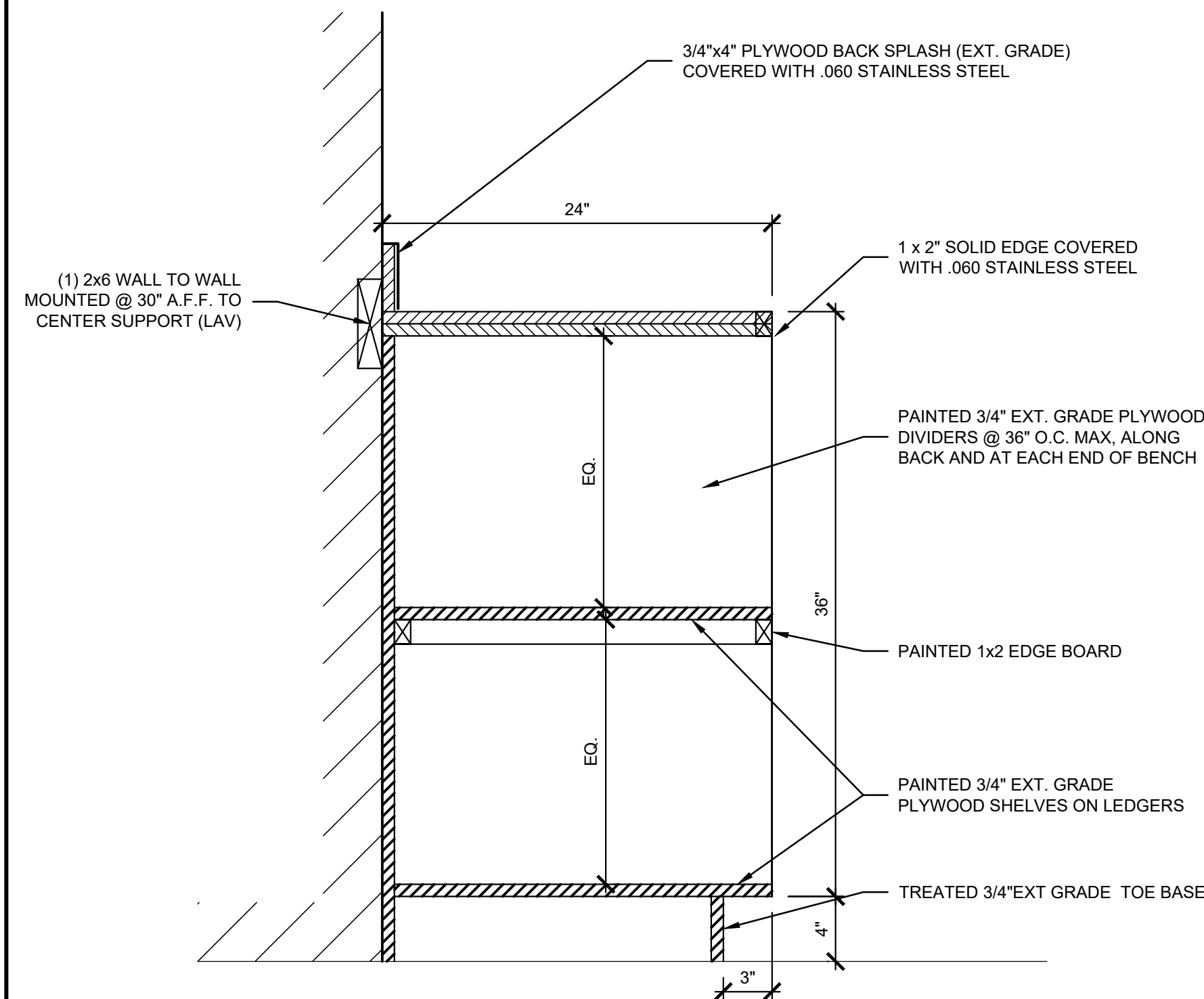
**02 CABINET SECTION - BASE**  
SCALE: 1-1/2" = 1'-0"



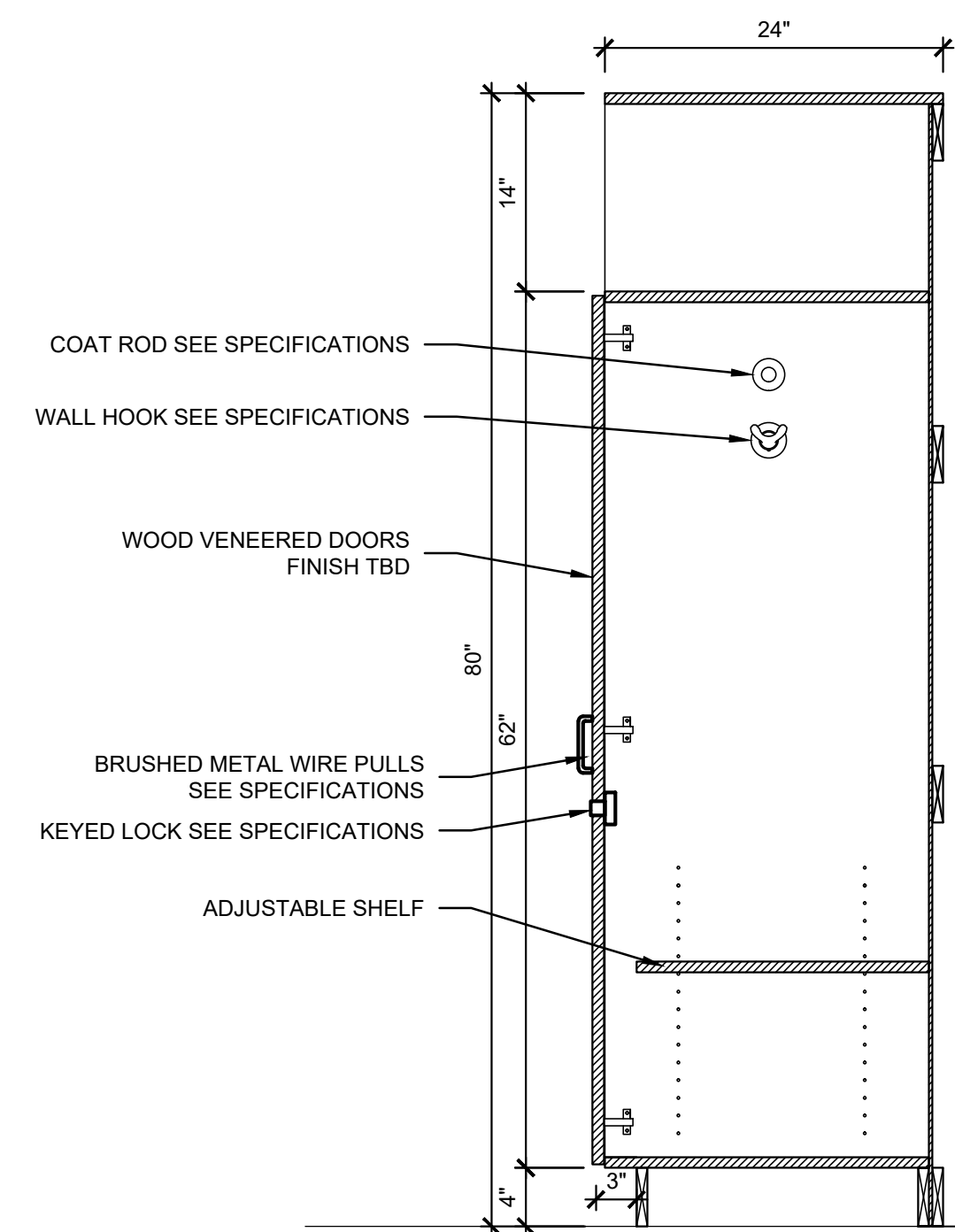
**03 SECURED STORAGE SHELVING SECTION**  
SCALE: 1-1/2" = 1'-0"



**04 ADA SINK SECTION**  
SCALE: 1-1/2" = 1'-0"



**05 MAINTENANCE BENCH SECTION**  
SCALE: 1-1/2" = 1'-0"



**08 LOCKER ELEVATION (TYP.)**  
SCALE: 1" = 1'-0"

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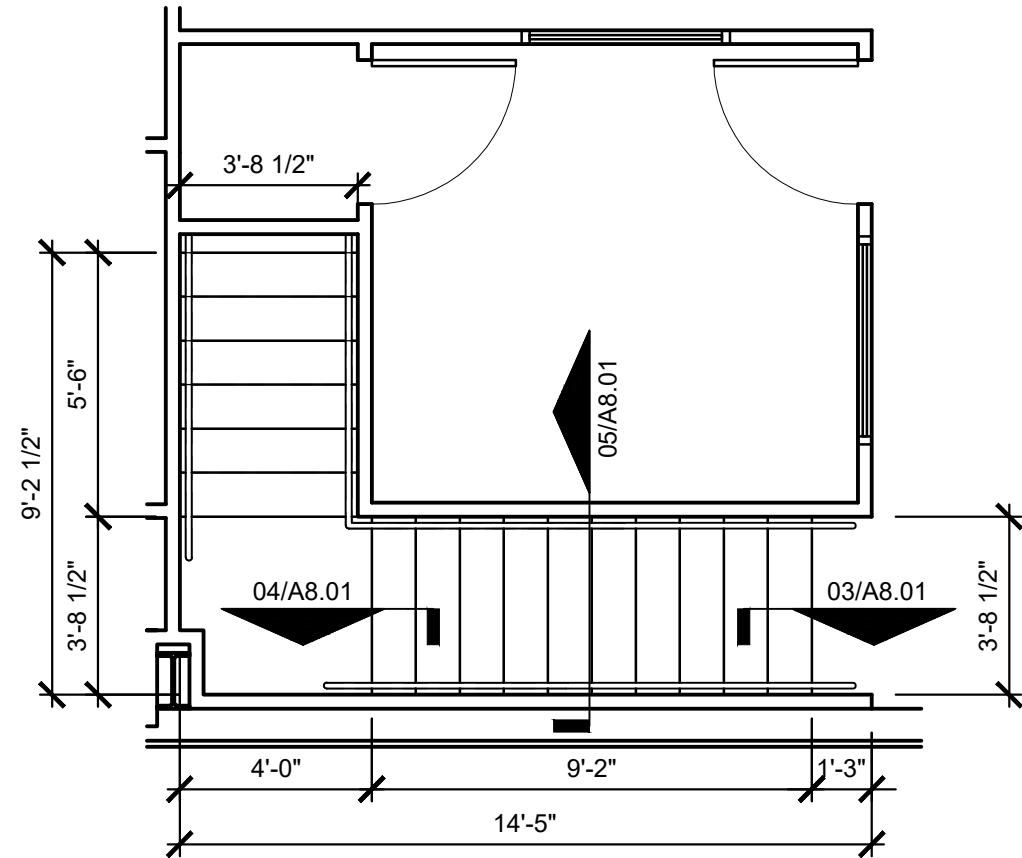
NEW CONSTRUCTION  
CITY OF BARDSTOWN  
PUBLIC WORKS BUILDING  
PADGETT WAY  
BARDSTOWN, KY

CABINERY DETAILS

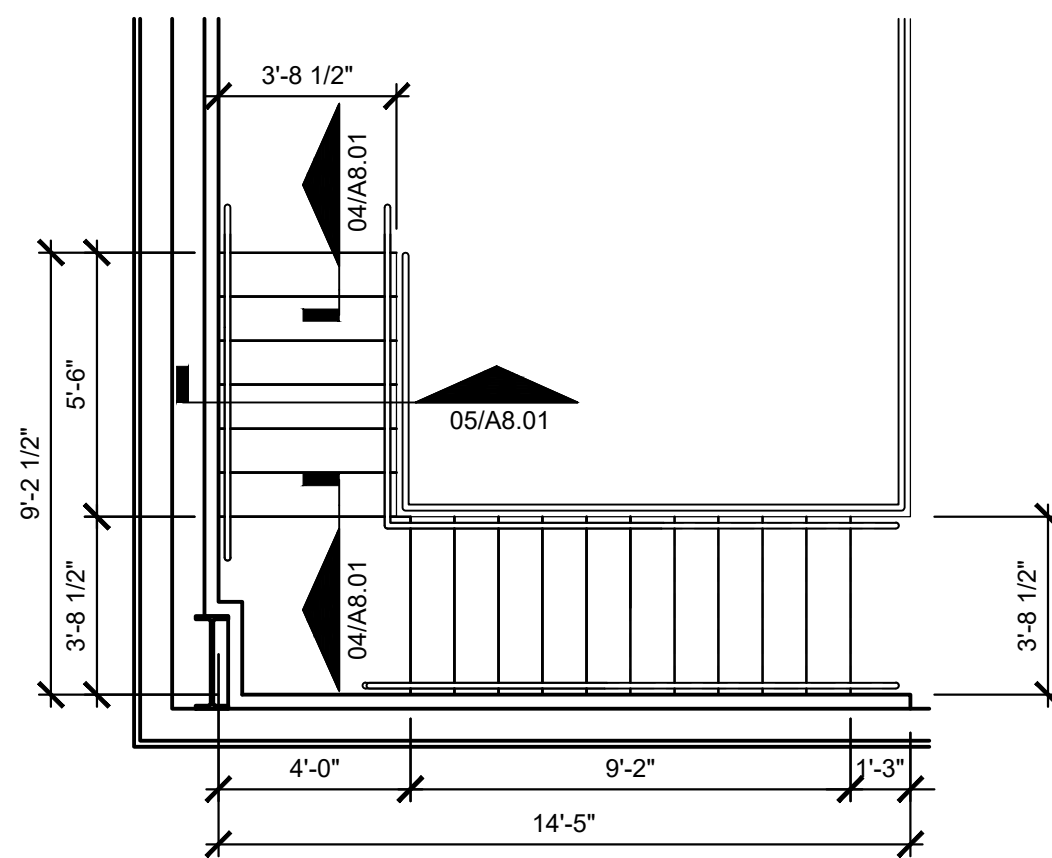
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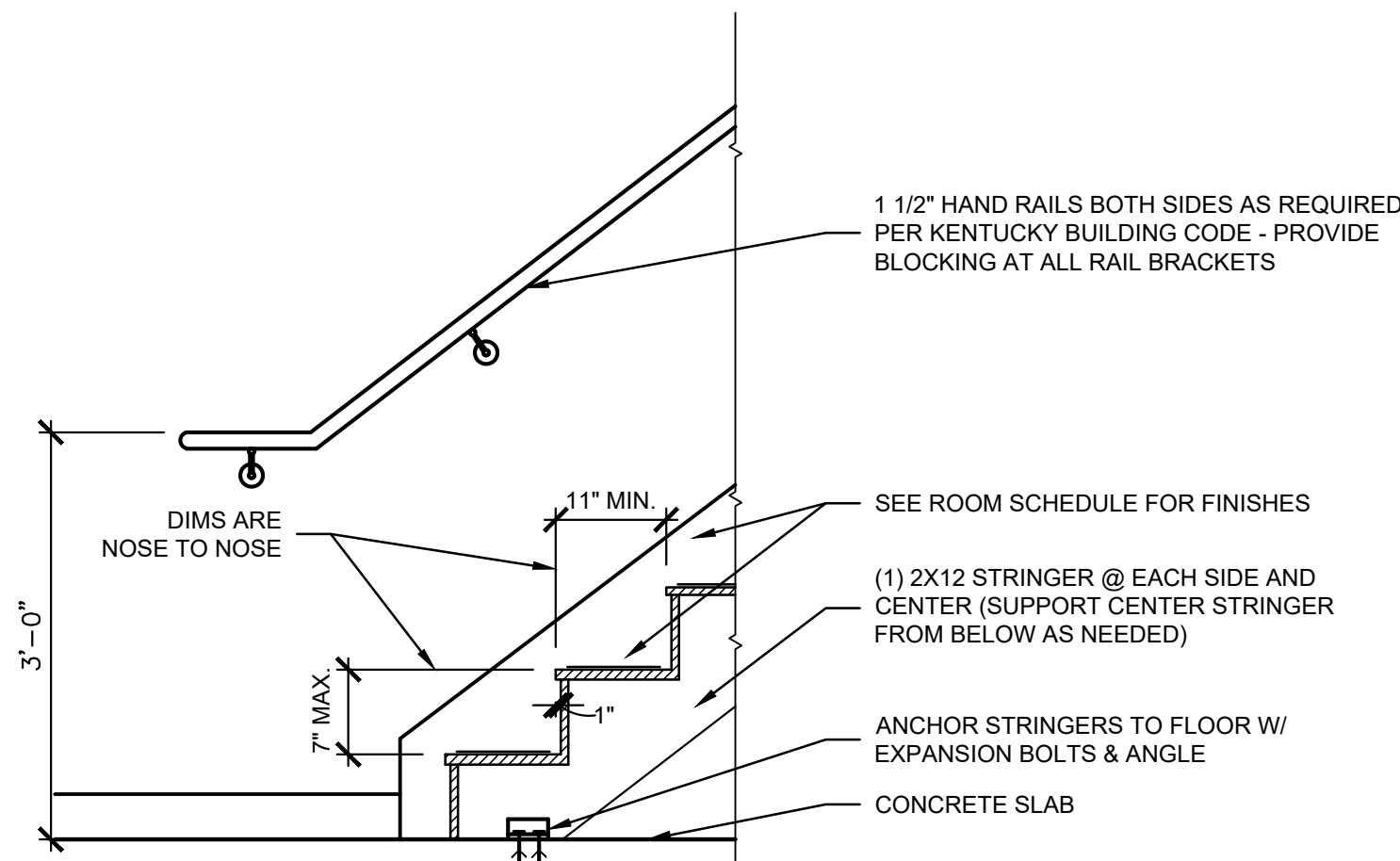
PROJECT: CITY OF BARDSTOWN PUBLIC WORKS BUILDING - FILE: A8.01 Stairs & Details.dwg - DATE: Sep 01, 2020 3:55PM - BY: ERIC KEYES



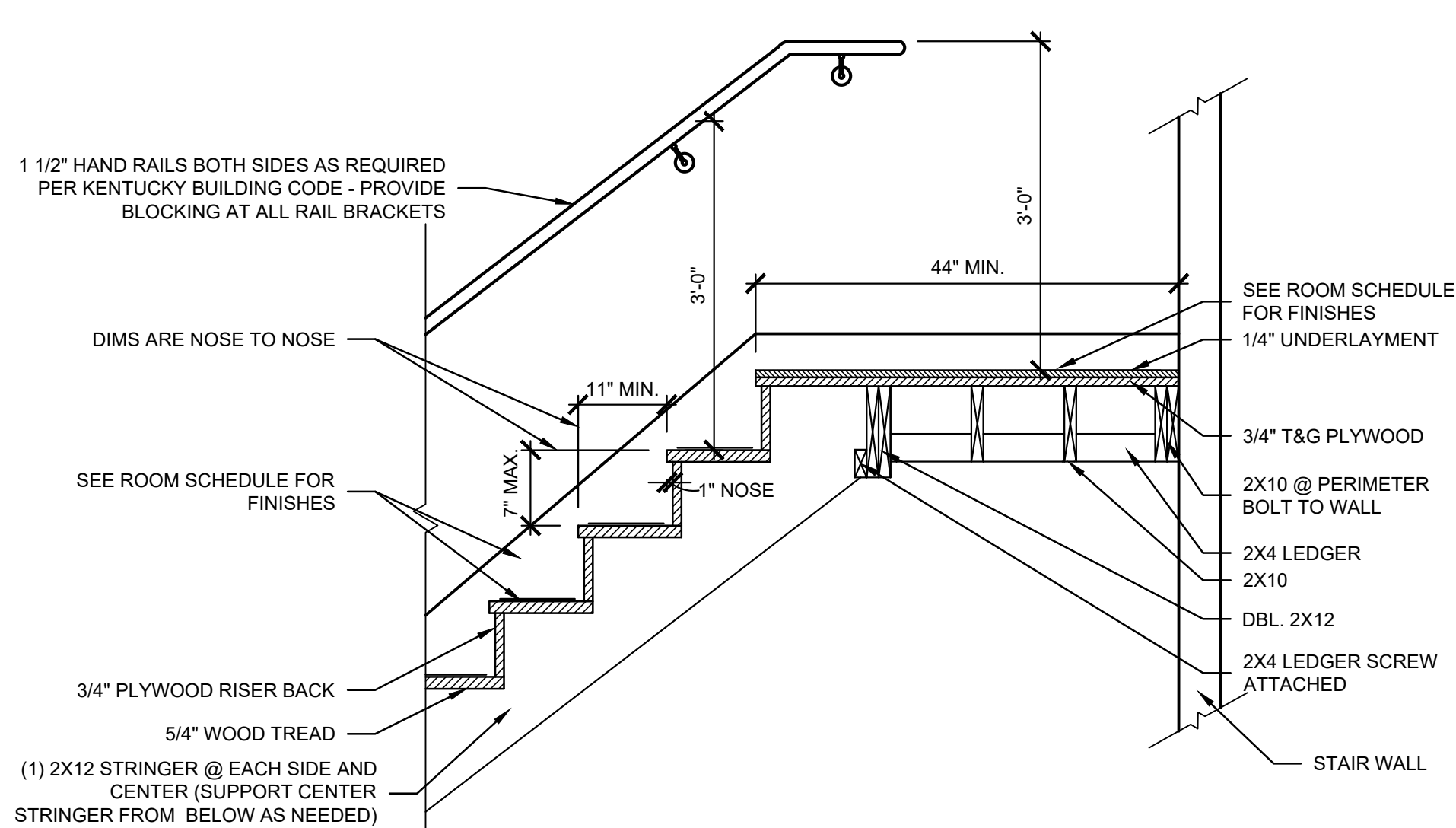
**01 1ST FLOOR STAIR PLAN**  
SCALE: 1/4" = 1'-0"



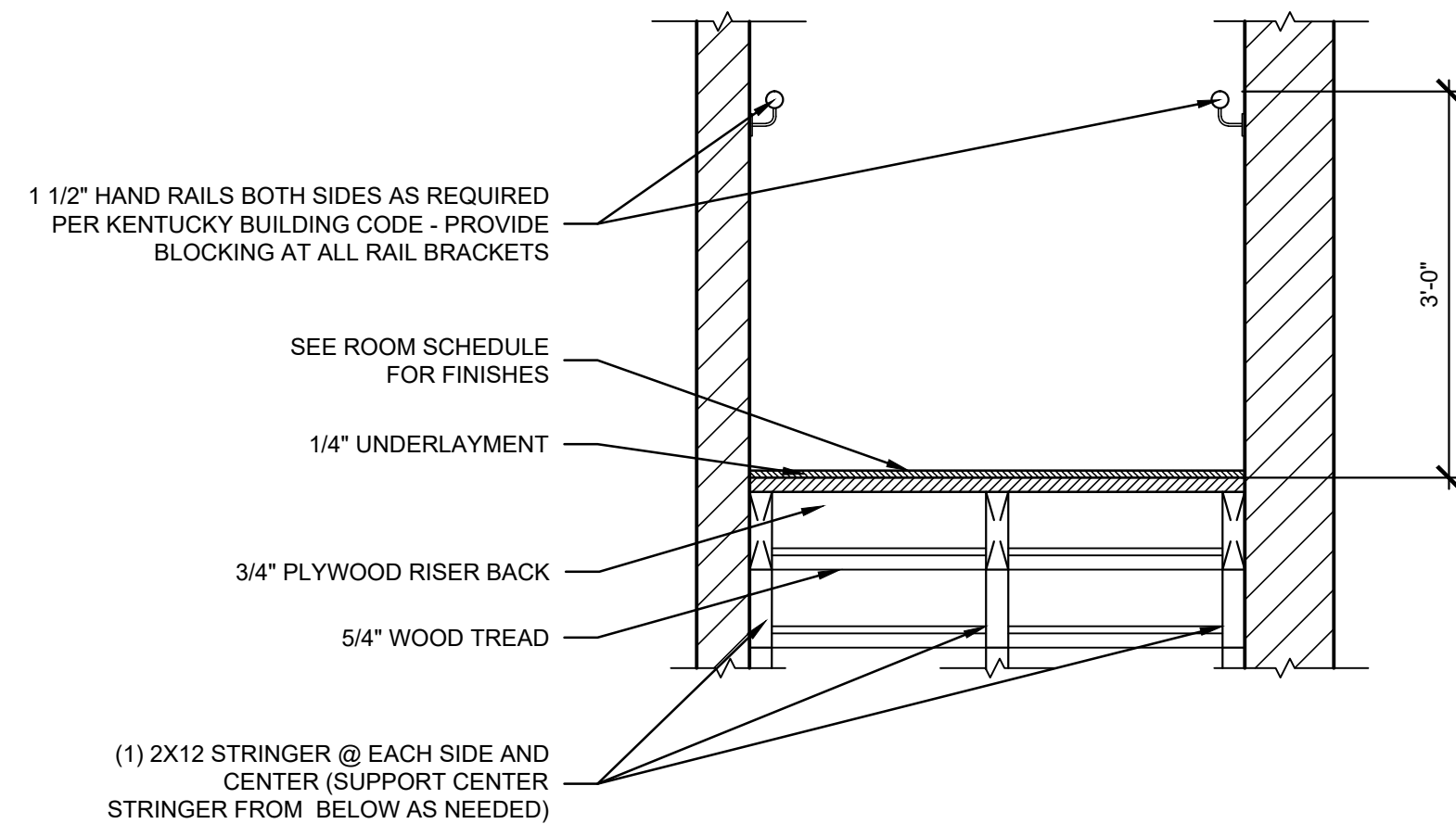
**02 MEZZ FLOOR STAIR PLAN**  
SCALE: 1/4" = 1'-0"



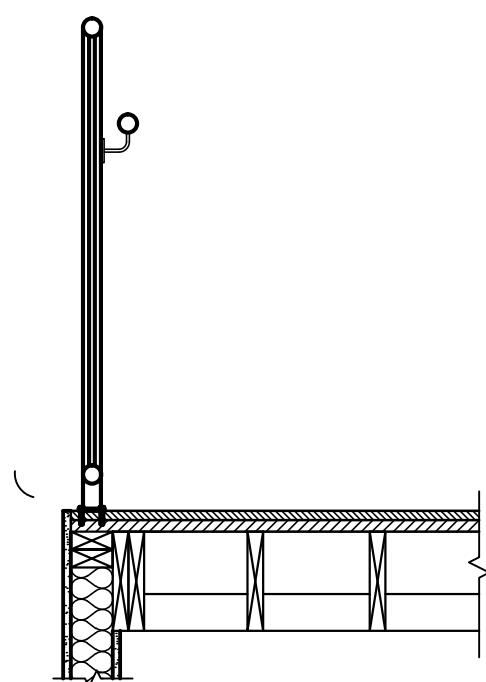
**03 STAIR DETAIL (BOTTOM LANDING)**  
SCALE: 3/4" = 1'-0"



**04 STAIR DETAIL (TOP LANDING)**  
SCALE: 3/4" = 1'-0"



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



**06 MEZZANINE RAILING DETAIL**  
SCALE: 3/4" = 1'-0"

PROJECT NO:  
19-3060  
DRAWN BY:  
NM/CS/  
DATE:  
05-27-2020



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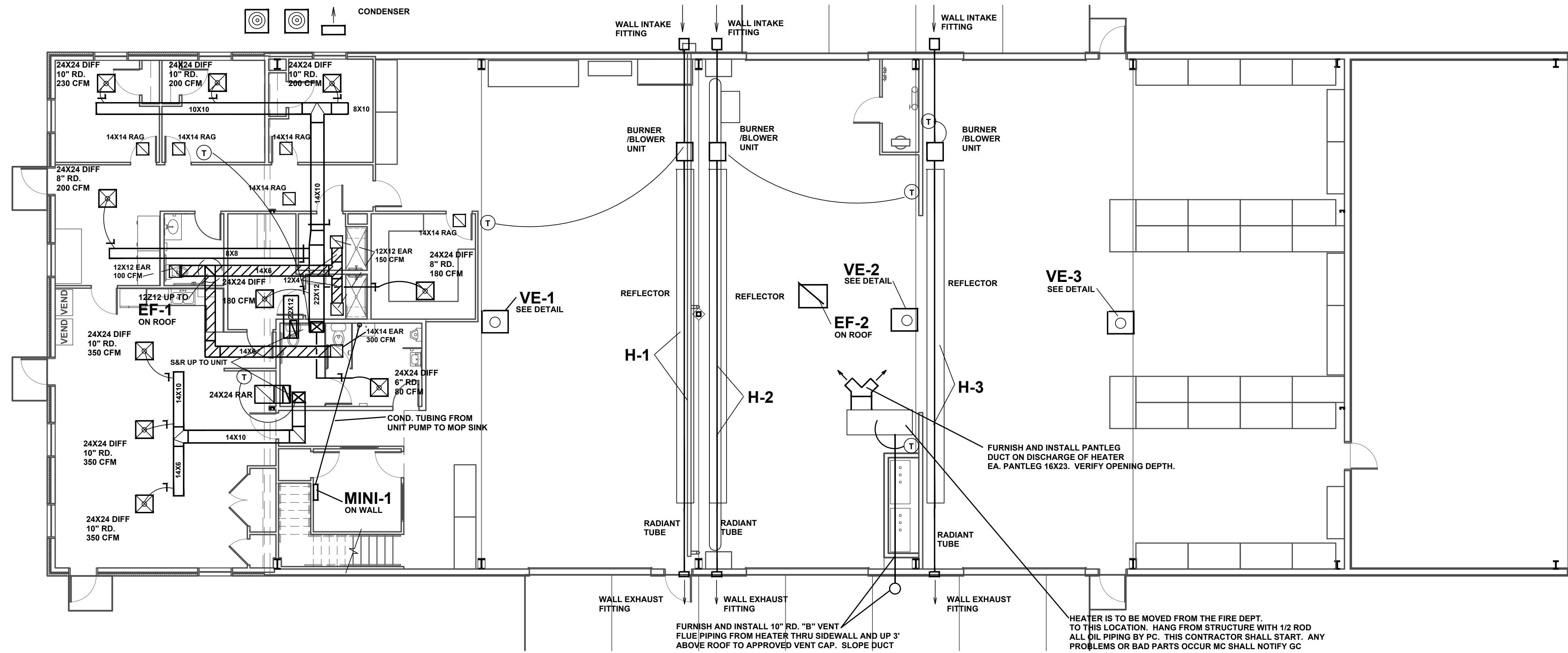
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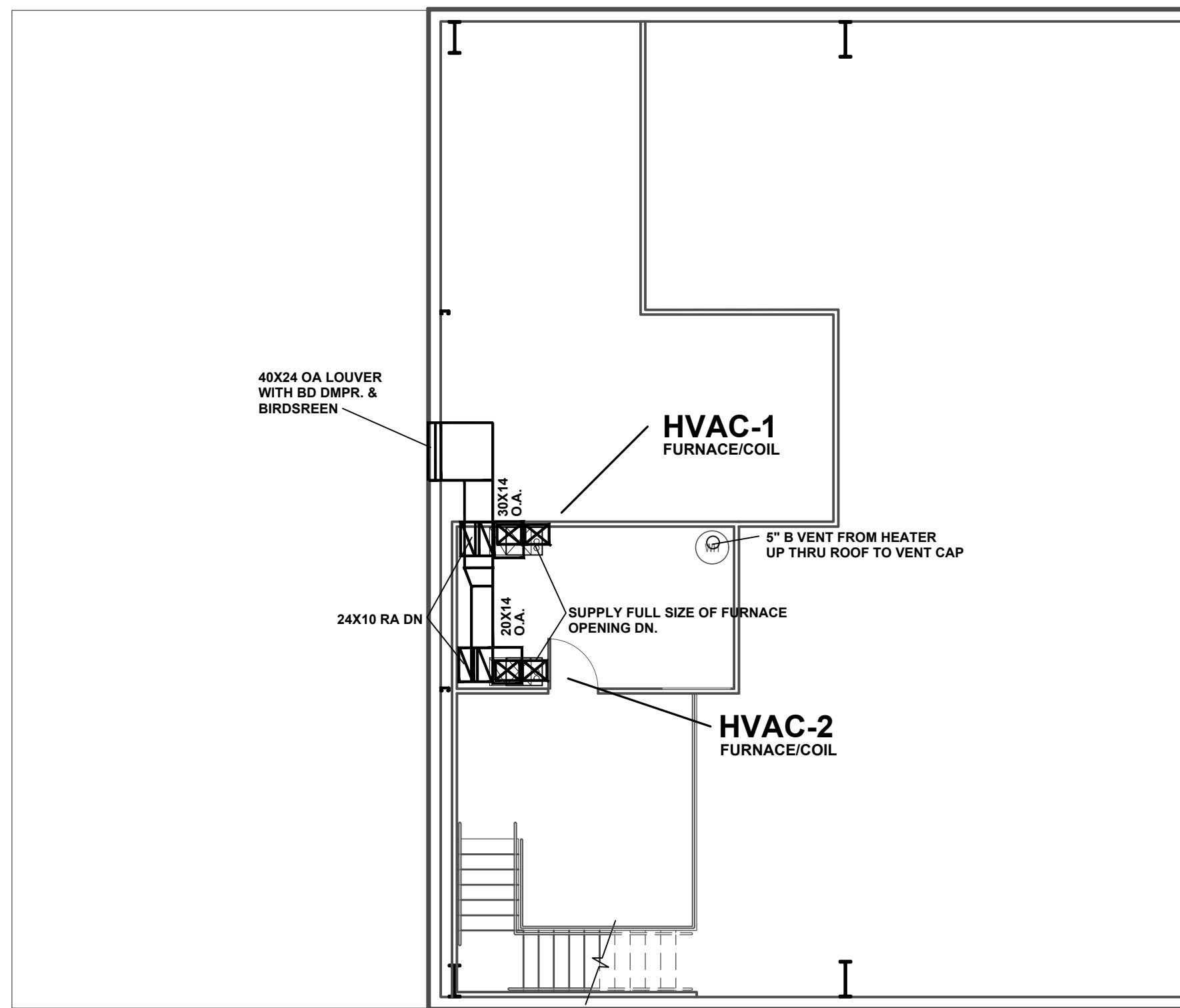
STAIRS & DETAILS

**A8.01**





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



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

EK###  
DATE: ---

**KEYES ARCHITECTS & ASSOCIATES**  
3005 TAYLOR BOULEVARD  
LOUISVILLE, KENTUCKY 40208 (502) 636-5113

NEW\_CONSTRUCTION\_FOR  
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SHEET\_TITLE

**M1.01**



					COMBUSTION CHAMBER		
		DAYTON	4" SCH. 40 BLACK IRON RADIANT PIPE & 4" PORCELAIN GLAZED TUBING		CAST IRON	NAT. GAS	DAYTON

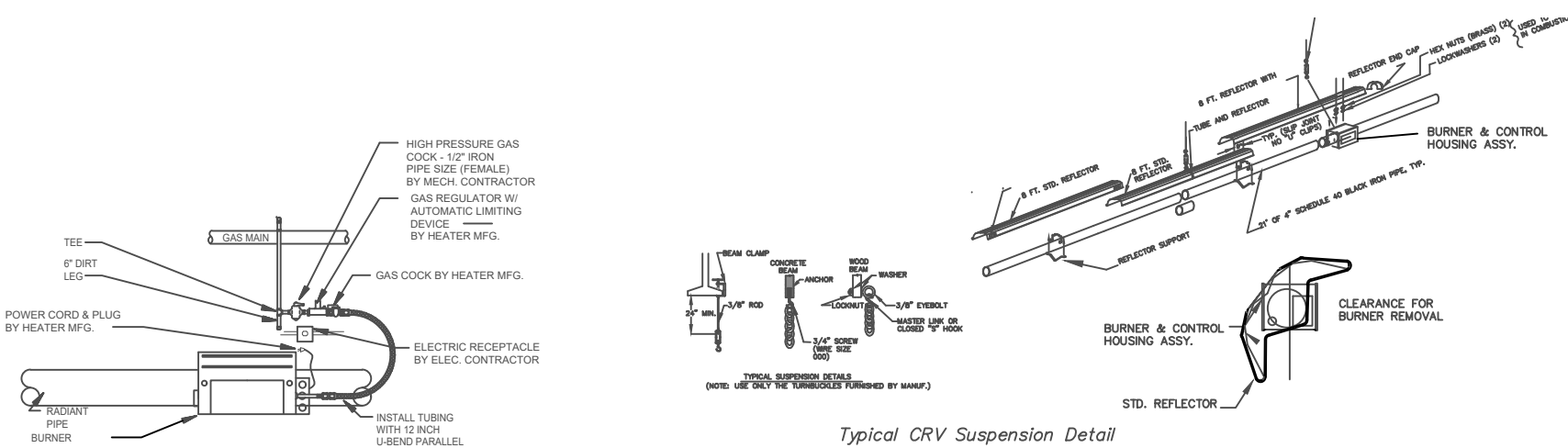
LEGEND

□ BURNER BLOWER - 100,000 BTU/HR AS INDICATED  
BLOWER CONTROL UNIT - (115-1-60) 3/4 HP

Ⓣ 110V THERMOSTAT

GENERAL NOTES

PIPE TO PITCH (TO VACUUM PUMP) AS FOLLOWS:  
RADIANT TUBING 1/4" IN 20'0"  
TAILPIPE 1/2" IN 20'0"  
GAS SERVICE REQUIRED TO EACH BURNER AT 1/2 PSI MAX  
MOUNT RELAYS AND THERMOSTATS AT 5'0" AFF





## RADIANT HEAT GAS CONNECTION

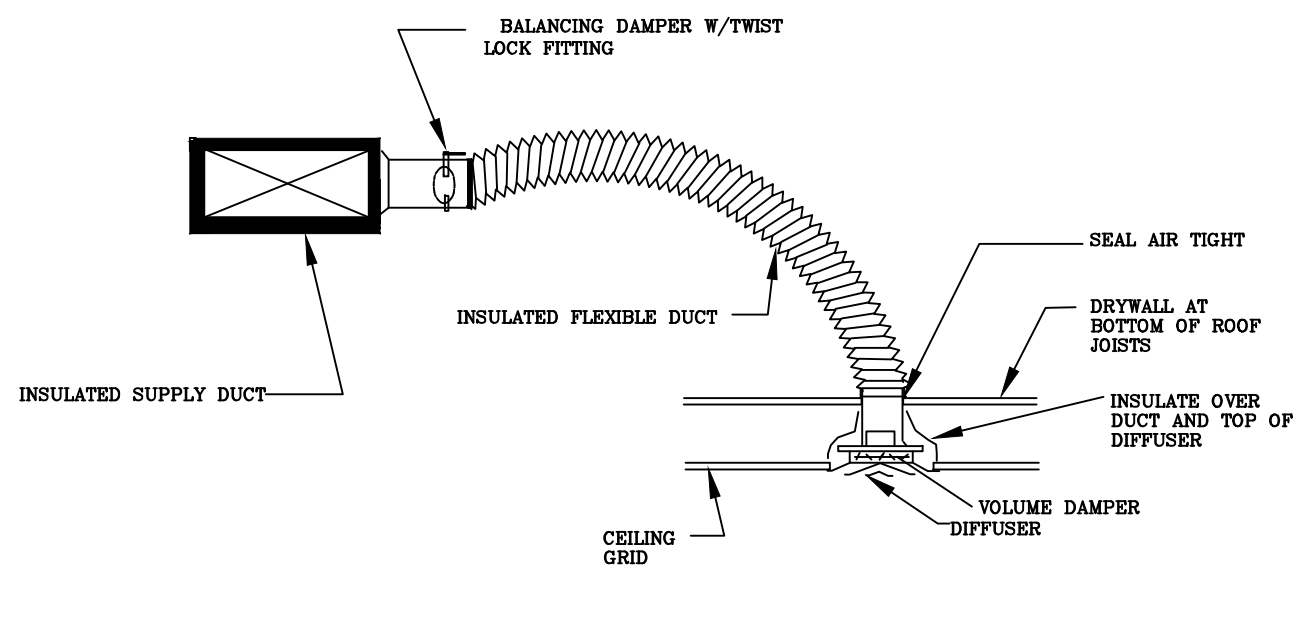
## RADIANT HEAT MOUNTING

EXHAUST FAN SCHEDULE	MARK	EF-1	EF-2
	MANUFACTURER	GREENHECK	GREENHECK
	MODEL NUMBER	RBE SERIES	RBE SERIES
	SERVICE	RESTROOM	TRUCK BAY
	TYPE	ROOF	AXIAL ROOF
	DRIVE TYPE	DIRECT	BELT
	CFM	700	5000
	STATIC PRESSURE (INCHES OF WATER)	0.50	0.125
	RPM	1250	1250
	FAN HORSEPOWER	1/4	3/4
	ELECTRICAL V/ø/Hz	115V/1/60	120V/1/60
	WALL OPENING (WALL COLLAR) - (INCHES)	-	-
	OPENING - (INCHES)	-	-
	WEIGHT (lbs.)		
OPTIONS	DISCONNECT SWITCH	YES	YES
	GRAVITY BACKDRIFT DAMPER	YES	YES
	WALL COLLAR	NO	NO
	ROOF CURB	YES	YES
	BIRDSCREEN	YES	YES
	MOTOR SIDE GUARD	NO	NO
REMARKS			

## HVAC SYSTEM SYMBOL LEGEND

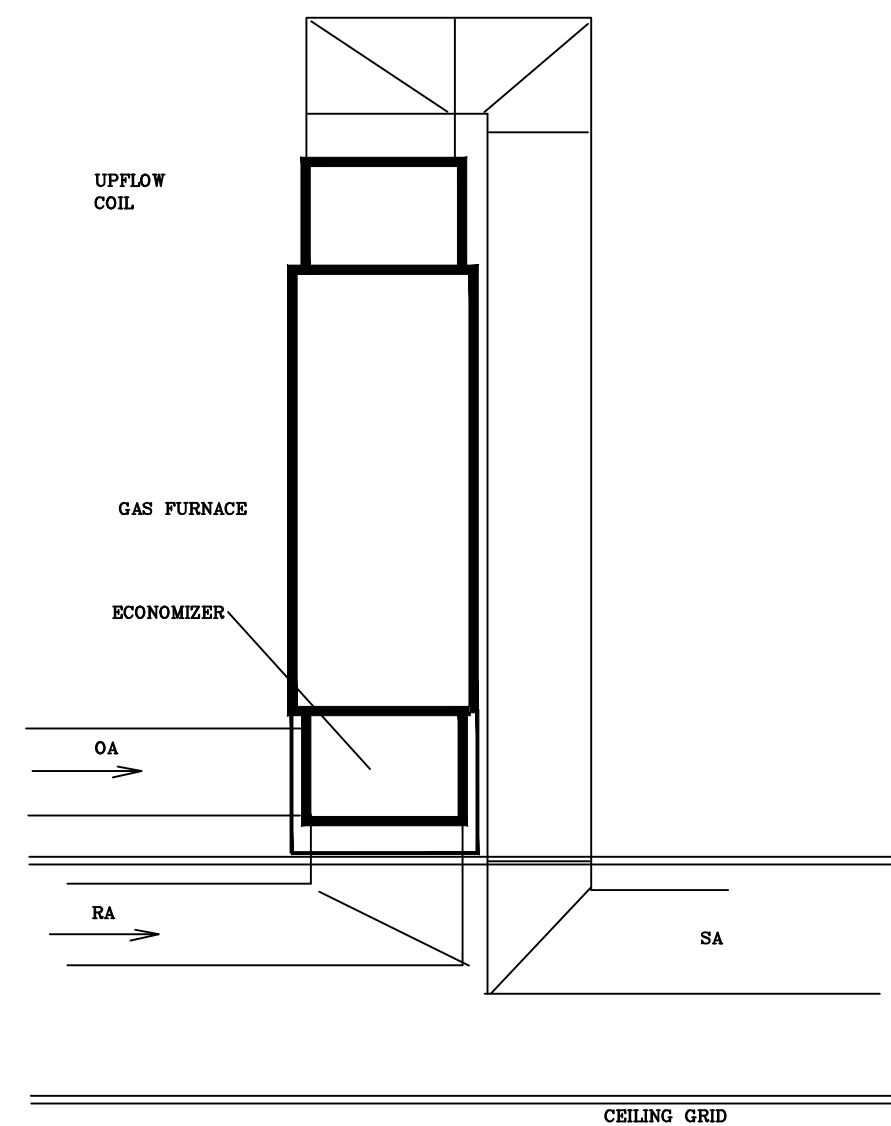
- |   |   |
|---|---|
|  | VOLUME DAMPER AT SPIN-IN.<br>SIZE PER DUCT.   |
| <input checked="" type="checkbox"/>   | SUPPLY DIFFUSER TITUS TMSA OR<br>EQUAL  |
| <input checked="" type="checkbox"/>   | RETURN GRILLE (RA) TITUS 272<br>RL OR EQUAL   |
| <input checked="" type="checkbox"/>   | EXHAUST GRILLE (EAR) TITUS 25RL<br>OR EQUAL   |
| ⓘ   | THERMOSTAT  |
| <hr/>   |   |
|  | UNLESS NOTED: ALL OUTDOOR AIR AND SUPPLY AIR<br>DUCTWORK SHALL BE EXTERNALLY WRAPPED WITH R-6<br>INSULATION BELOW ATTIC. IN ATTIC WRAP SUPPLY, RETURN,<br>AND OUTSIDE AIR DUCT TWICE WITH R-6 INSULATION FOR AN<br>R VALUE OF 12. |

NOTE: ALL DUCT SIZES ARE FREE AREA



### DETAIL OF FLEXIBLE DUCT CONNECTION

SCALE : NONE



### DETAIL OF TYPICAL FURNACE AND DUCT

SCALE : NONE

SPLIT SYSTEM HEAT PUMP SCHEDULE	MARK	HVAC-1	HVAC-2
	MANUFACTURER	CARRIER, YORK, TRANE, OR EQUAL	CARRIER, YORK, TRANE, OR EQUAL
		93% FURNACE/COIL W/3 TON COND.	93% FURNACE/COIL W/3 TON COND.
	TYPE	GAS-ELEC	GAS-ELEC
	TOTAL CFM / MIN. O.A CFM	1200/300	1050/200
	BLOWER MOTOR H.P.	3/4 HP	3/4 HP
	GAS INPUT MBH	80.0	80.0
	TOTAL COOLING CAPACITY	36.00 MBH TOTAL	36.00 MBH TOTAL
	ELECTRICAL V/ø/Hz	208/1/60	208/1/60
OUYD HP MIN. a/CIRC a	13a/20a	13a/20a	
MIN. SEER	15.0	15.0	
REMARKS	① ②	① ②	
① PROVIDE HONEYWELL PRO 8000 DIGITAL PROGRAMMABLE TOUCH SENSITIVE THERMOSTAT OR EQUAL OUTSIDE AIR SHOWN FOR E.A. SYSTEM EXCEEDS ASHRAE STANDARD 62.1 PROVIDE CONCENTRIC ROOF KIT FOR FURNACE	②	PROVIDE TAA SERIES ECONOMIZER BOX AND CONTROLS FOR THIS SYSTEM. UPFLOW FURNACE WITH ECONOMIZER MOUNTED ON FURNACE RETURN PLENUM.	

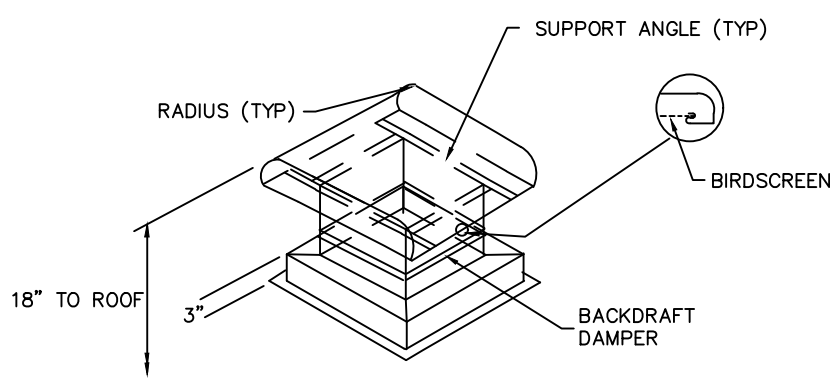
## VEHICLE EXHAUST SYSTEM SCHEDULE

VE-1&2 SHALL BE AIRFLOW SYSTEMS, INC., MODEL VES-2 OR EQUAL, EACH CONSISTING OF 1/2 HP MOTOR @ 208/3/60, 2 3"-30 FT. HEAVY DUTY HOSES, (2) STANDARD TAIL PIPE CONNECTORS, (2) HOSE BALANCERS WITH HOSE SADDLES AND ADJ. STOP COLLARS, AND "Y" ADAPTER FOR A COMPLETE WORKING EXHAUST SYSTEM. SYSTEM SHALL BE ENERGIZED WITH ON-OFF SWITCH BY E.C.

VE-3 SHALL BE AIRFLOW SYSTEMS, INC., MODEL VES-2 OR EQUAL, EACH CONSISTING OF 1.5 HP MOTOR @ 208/3/60, (2) 4.5"-30 FT. HEAVY DUTY HOSES, (2) STANDARD TAIL PIPE CONNECTORS, (2) HOSE BALANCERS WITH HOSE SADDLES AND ADJ. STOP COLLARS, AND "Y" ADAPTER FOR A COMPLETE WORKING EXHAUST SYSTEM. SYSTEM SHALL BE ENERGIZED WITH ON-OFF SWITCH BY E.C.

## HVAC SYSTEM GENERAL NOTES

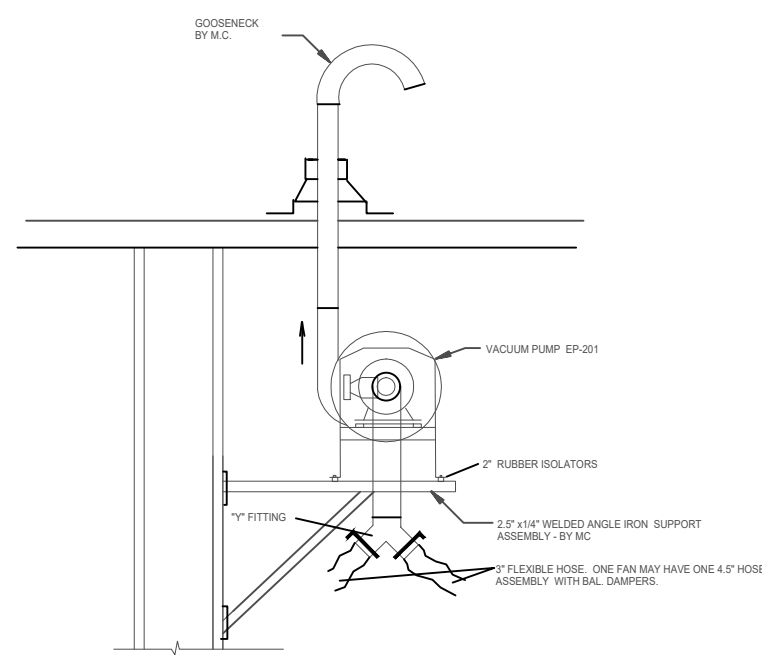
- IN GENERAL THE DRAWINGS FOR THE HEATING AND COOLING SYSTEM SHALL BE CONSIDERED DIAGRAMATIC. INSTALLATION OF THE HEATING AND COOLING SYSTEM SHALL BE IN ACCORDANCE WITH THE "GUIDE" OF THE AMERICAN SOCIETY OF HEATING, REFRIGERATING AND AIR CONDITIONING ENGINEERS.
- B. ALL WORK SHALL COMPLY WITH THE INTERNATIONAL MECHANICAL CODE, ASHRAE, SMACNA, OSHA, AND LOCAL CODE REGULATIONS. THE CONTRACTOR SHALL PERFORM ALL WORK IN CONFORMITY WITH THESE REQUIREMENTS. ALL ELBOWS SHALL HAVE TURNING VANCES
- C. INSTALLATION OF ALL MATERIALS AND EQUIPMENT SHALL CONFORM TO THE PRACTICE OF GOOD WORKMANSHIP AND IN ACCORDANCE WITH APPLICABLE REQUIREMENTS.
- D. THE HEATING AND COOLING CONTRACTOR SHALL CORRECT ANY DEFECTS, OMISSIONS AND ERRORS UPON REQUEST BY THE OWNER AND THE FINAL RESPONSIBILITY FOR CORRECT INSTALLATION AND PROPER FUNCTIONING OF THE HEATING AND COOLING SYSTEM SHALL REST WITH THE HEATING AND COOLING CONTRACTOR.
- E. THE HEATING AND COOLING CONTRACTOR SHALL BE RESPONSIBLE FOR INSPECTIONS AND APPROVAL OF HEATING AND COOLING SYSTEM, INSTALLATION OF EQUIPMENT FOR FINAL ACCEPTANCE OF THE COMPLETE HEATING AND COOLING SYSTEM INSTALLATION BY STATE AND LOCAL INSPECTORS.
- F. PROVIDE MAX. 4 FT. FLEXIBLE DUCT CONNECTIONS TO ALL HVAC UNITS.
- G. VERIFY OPENING DIMENSIONS FOR ALL DUCTWORK ROUTED IN TRUSS/JOIST BAY OR THROUGH TRUSS/JOIST OPENINGS. COORDINATE DUCT SIZES AND LAYOUT PRIOR TO FABRICATION.
- H. ALL EQUIPMENT BASES FURNISHED BY MECHANICAL CONTRACTOR UNDER FURNACE/COILS AND CONDENSING UNITS
- I. PROVIDE PROGRAMMABLE THERMOSTATS FOR HVAC SYSTEMS. MECHANICAL CONTRACTOR TO INSTALL THERMOSTAT AND WIRING. ELECTRICAL CONTRACTOR TO PROVIDE CONDUIT AND ROUGH-IN BOXES FOR THERMOSTAT INSTALLATION.
- J. PROVIDE DUCT SEALANT AND R-6 EXTERNAL INSULATION ON ALL SUPPLY AND OUTSIDE AIR DUCTWORK BELOW ATTIC. IN ATTIC PROVIDE 2 WRAPS OF R-8 INSULATION FOR A TOTAL OF R-12. ALL PENETRATIONS IN DUCT TO SP/PS SHALL BE THOROUGHLY SEALED AIR TIGHT. CONTRACTOR SHALL INSPECT ALL INSULATION PRIOR TO TURNOVER. ENGINEER SHALL REPAIR ANY FAULTS FOUND.
- K. PROVIDE 2" ANGLE IRON FRAME PLENUM COVERED WITH SHEETMETAL FOR ALL FURNACES TO SET ON. ALL FURNACES SHALL BE BOTTOM INLET RETURN. SEE DETAIL ON SHT M2.0 FOR DETAIL FOR SINGLE AND TWIN FURNACES.
- L. ALL REFRIGERANT PIPING SHALL BE SIZED PER MANUF RECOMMENDATIONS. PIPING SHALL BE AC9 COPPER, HAVE VACUUM PULLED AND CHARGED PER UNIT MANUFACTURER RECOMMENDATIONS. PROVIDE 3/4" RUBATEX OR EQUAL RUBBER CLOSED CELL INSULATION.
- M. ALL HVAC SYSTEMS SHALL HAVE A CERTIFIED AIR BALANCE WITH REPORT REVIEWED BY THE ENGINEER PRIOR TO FINAL PUNCHLIST.
- N. SEE CAPTIVE AIR DRAWINGS FOR SA AND EA CONNECTIONS ON MUA UNIT AND KITCHEN HOOD. THIS CONTRACTOR SHALL INSTALL KITCHEN HOOD EQUIPMENT COMPLETE PER THEIR DRAWINGS.



NOTE: INTAKE TO BE BUILT PER  
"SMACNA" LOW PRESSURE  
DUCT STANDARDS 5TH EDITION

### INTAKE OR RELIEF HOOD DETAIL

NO SCALE



**DETAIL NOTES:**

1. ROOF PENETRATION AND WELDING TO STRUCTURES SHALL BE MADE UNDER SUPERVISION OF METAL BUILDING MANUFACTURER.

MOUNT SUPPORT ON COLUMN OR HANG FROM CEILING.

## VEHICLE EXHAUST FAN ASSEMBLY

SCALE: NONE

HEAT PUMP MINI SYSTEM SCHEDULE	MARK	MINI-1
	MANUFACTURER	DAIKIN, SAMSUNG, ETC. OR EQUAL
	TYPE	HP UNIT, WALL HUNG UNIT, COND. PUMP
	INDOOR MODEL NO.	FTXB12AXKJ/J
	OUTDOOR MODEL NO.	RXB12AXKJ/J
	TOTAL COOLING CAPACITY	12,000 BTUH
	TOTAL HEAT	13,000 BTUH
	ELECTRICAL V/ø/Hz	220/1/60
	REMARKS	①

① MINI-1 SYSTEM SHALL CONSIST OF GROUND MOUNT HP UNIT AND INDOOR WALL MOUNT SATELLITE AT CAPACITIES SHOWN. POWER TO BE 208-230/1/60 VOLTS. WIRELESS T'STATS WITH WALL BRACKETS, AND REFRIGERANT PIPING SIZED AND DETAILED BY THE MANUF. ALL ACR REFRIG. PIPE TO BE FLARED ON SITE FOR NO LEAKS. ALL PIPING SHALL BE INSULATED WITH 3/4" RUBATEX RUBBER INSULATION. ALL SATELLITES SHALL HAVE OUTSIDE AIR SUPPLY AIR CPVC PIPING

CONDENSATE TUBING FROM SATELLITES SHALL BE HIDDEN AND EXTEND TO NEW MS BY PC SATELLITES BASED ON DAIKIN: FXMQ FOR WALL TYPES,

1 MINI-1 SYSTEM SHALL CONSIST OF GROUND MOUNT HP UNIT AND INDOOR WALL MOUNT SATELLITE AT CAPACITIES SHOWN. POWER TO BE 208-230/1/60 VOLTS. WIRELESS C/SATS WITH WALL BRACKETS, AND REFRIGERANT PIPING SIZED AND DETAILED BY THE MANUF. ALL AIR REFRIG. PIPE TO BE FLARED ON SITE FOR NO LEAKS. ALL PIPING SHALL BE INSULATED WITH 3/4" RUBEXAT RUBBER INSULATION. ALL SATELLITES SHALL HAVE OUTSIDE AIR SUPPLY AIR CPVC PIPING.

CONDENSATE TUBING FROM SATELLITES SHALL BE HIDDEN AND EXTEND TO NEW MS BY PC SATELLITES BASED ON DAIKIN: FXMQ FOR WALL TYPES,

CONDENSATE TUBING FROM SATELLITES SHALL BE HIDDEN  
SATELLITES BASED ON DAIKIN: FXMQ FOR WALL TYPES,

DATE:

1111

**KEYES ARCHITECTS & ASSOCIATES**  
3005 TAYLOR BOULEVARD  
LOUISVILLE, KENTUCKY 40208  
(502) 636-5113

NEW\_CONSTRUCTION\_FOR  
CITY OF BARDSTOWN  
PUBLIC WORKS BUILDING  
PADGETT WAY  
BARDSTOWN, KENTUCKY

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**M2.00**

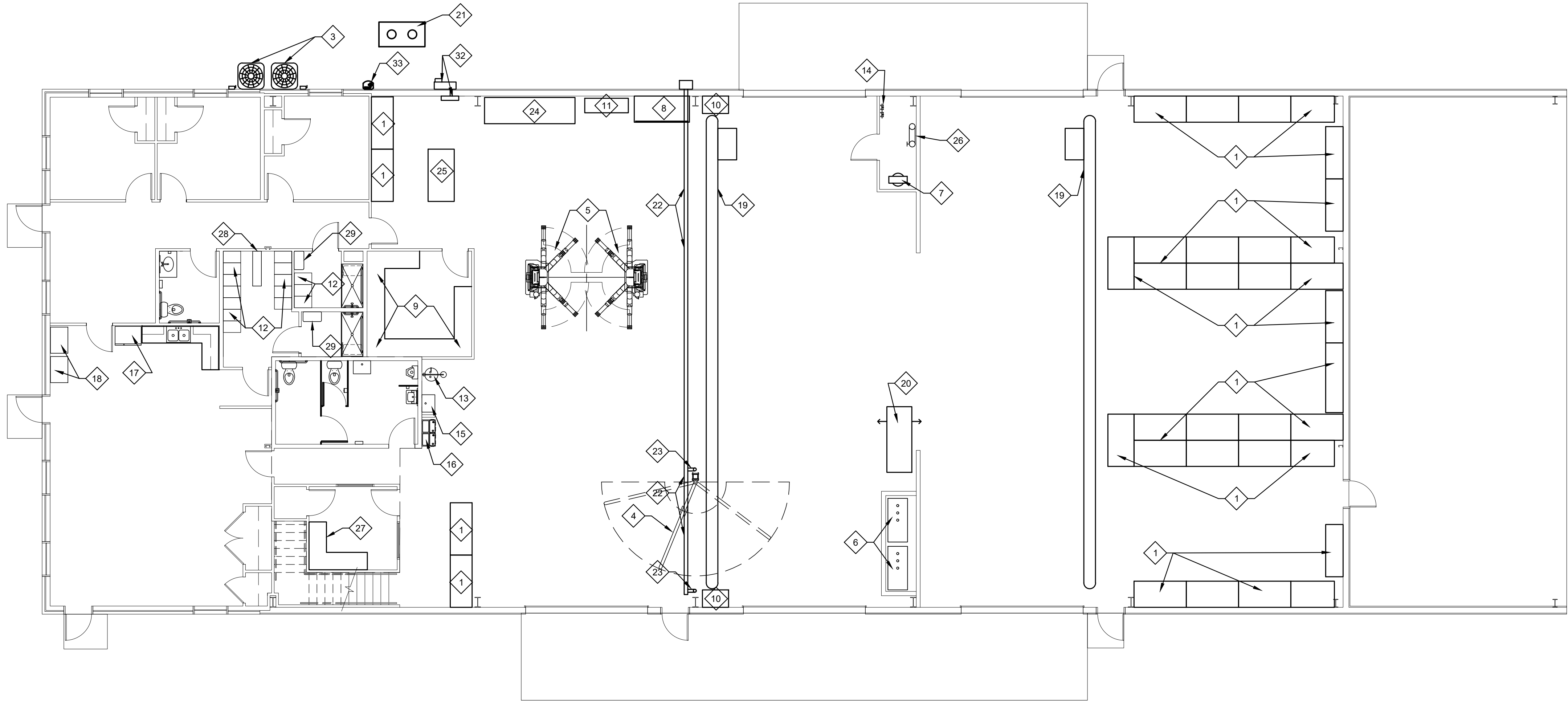


PROJECT: CITY OF BARDSTOWN PUBLIC WORKS BUILDING - FILE: EQ. 01 Equipment Plan.dwg - DATE: Sep 01, 2020 3:55PM - BY: ERIC KEYES



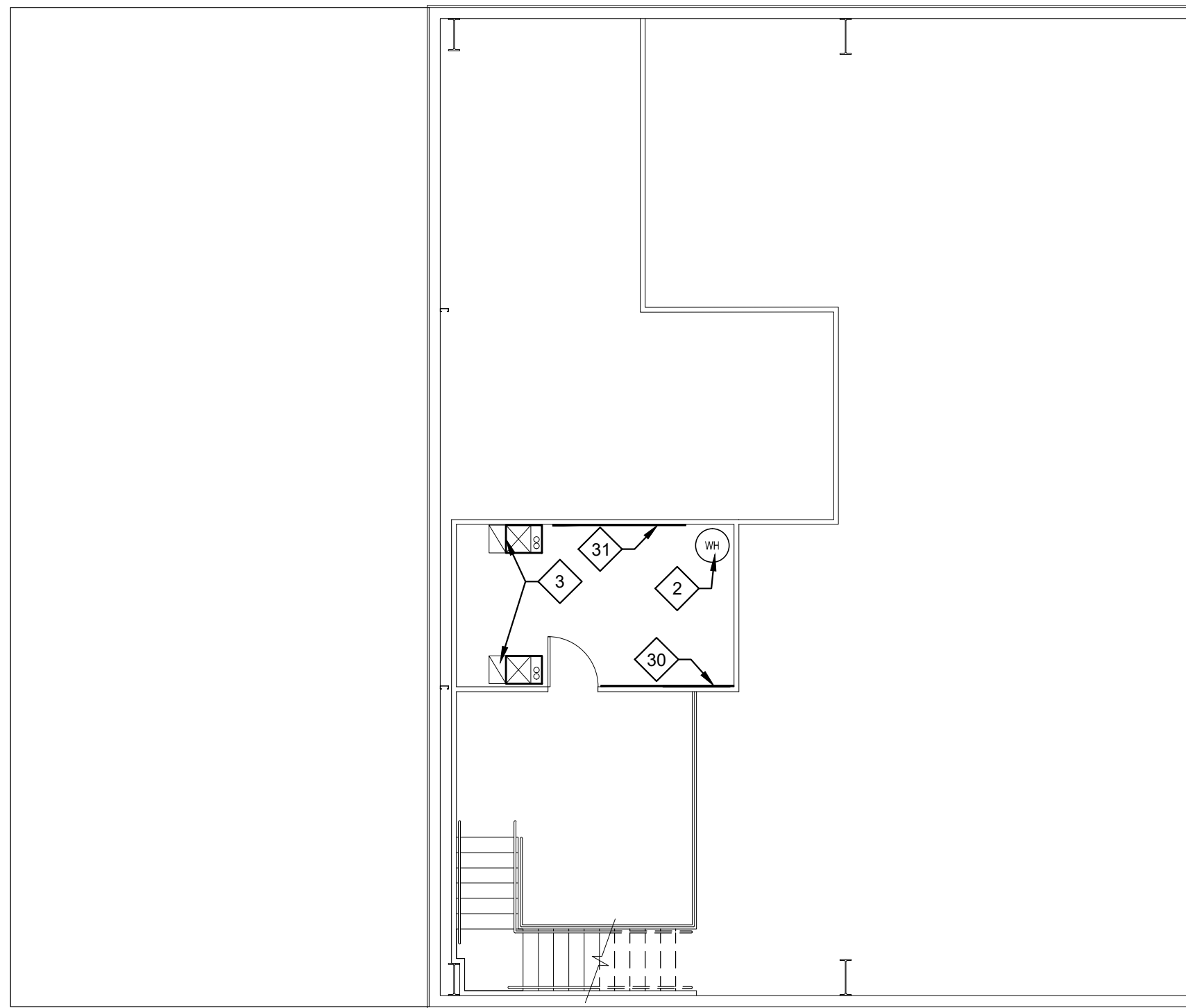
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NEW CONSTRUCTION:  
CITY OF BARDSTOWN  
PUBLIC WORKS BUILDING  
PADGETT WAY  
BARDSTOWN, KY



## 01 FIRST FLOOR PLAN EQUIPMENT & SCHEDULES

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



## 02 SECOND FLOOR PLAN EQUIPMENT & SCHEDULES

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

### EQUIPMENT SCHEDULE

SYMBOL  
NUMBER

ITEM NO.	QTY.	DESCRIPTION	SUPPLIER	INSTALLER	TRADES REQUIRED	REMARK
1	35	INDUSTRIAL 4-POST METAL STORAGE RACKS	O	GC		UNITS TO BE ANCHORED TO FLOOR W/ MIN 4 BOLTS - PER MANUF REQUIREMENTS
2	1	WATER HEATER	PC	PC	EC	SEE PLUMBING PLANS
3	2	FURNACE / AC COMPRESSOR	MC	MC	EC,PC	SEE MECHANICAL PLANS
4	1	JIB CRANE / TROLLED / HOIST	GC	GC	EC	SEE SPECIFICATIONS
5	1	2 POST HEAVY DUTY LIFT	GC	GC	EC	SEE SPECIFICATIONS
6	2	WASTE OIL STORAGE TANKS/STATION	O	GC	PC	TRANSFER FROM EXISTING FACILITIES
7	1	AIR COMPRESSOR	PC	PC	EC	SEE SPECIFICATIONS
8	1	FLAMMABLE LIQUID STORAGE	O	GC		TRANSFER FROM EXISTING FACILITIES
9	1	STORAGE SHELVING	GC	GC		SEE MILLWORK DRAWINGS FOR DETAILS
10	2	SMALL STORAGE CABINET 36" x 24"	O	GC		COORDINATE W/ OWNER
11	1	STORAGE RACK FOR TOOLS/MISC	O	GC		TRANSFER FROM EXISTING FACILITIES
12	15	LOCKERS - w/16" x d24" (EACH)	GC	GC		SEE SPECIFICATIONS
13	1	EYE WASH / SHOWER SYSTEM	PC	PC		SEE PLUMBING PLANS
14	1	RPZ VALVE SYSTEM	PC	PC		SEE PLUMBING PLANS
15	1	FLOOR MOP SINK	PC	PC		SEE PLUMBING PLANS
16	2	WATER FOUNTAIN	PC	PC	EC	SEE PLUMBING PLANS
17	1	REFRIGERATOR - SIDE BY SIDE - 3'-0" x 2'-2"	O	GC	EC,PC	COORDINATE W/ OWNER
18	2	VENDING MACHINE	O	GC	EC	COORDINATE W/ OWNER
19	2	RADIANT TUBE HEATER	MC	MC	EC,PC	SEE MECHANICAL PLANS
20	1	WASTE OIL FURNACE	O	MC	EC,PC	SEE MECHANICAL PLANS
21	1	OIL WATER SEPARATOR	PC	PC		SEE PLUMBING PLANS
22	1	VEHICLE EXHAUST SYSTEM	MC	MC	EC	SEE MECHANICAL PLANS
23	2	VEHICLE EXHAUST HOSE DROP	MC	MC		SEE MECHANICAL PLANS
24	1	WORKBENCH	GC	GC		SEE MILLWORK DRAWINGS FOR DETAILS
25	1	WELDING WORKBENCH	O	GC		TRANSFER FROM EXISTING FACILITIES
26	1	SPRINKLER RISER	FC	FC		SYSTEM TO BE DESIGNED BY FIRE SUPPRESSION SYSTEM CONTRACTOR
27	1	WALL MOUNTED WORK STATION TOP	CC	CC		SEE MILLWORK DRAWINGS FOR DETAILS
28	1	FLOOR MOUNTED BENCH	GC	GC		SEE SPECIFICATIONS
29	2	PORTABLE BENCH SEAT	O	GC		SEE SPECIFICATIONS, ADA COMPLIANT
30	1	8'x4'x3/4" PLYWOOD PHONE / DATA BOARD	GC	GC		
31	1	8'x4'x3/4" PLYWOOD DOOR CONTROL BOARD	GC	GC		
32	1	ELECTRICAL METER AND PANELS	EC	EC		SEE ELECTRICAL PLANS
33	1	GAS METER	PC	PC		SEE PLUMBING PLANS

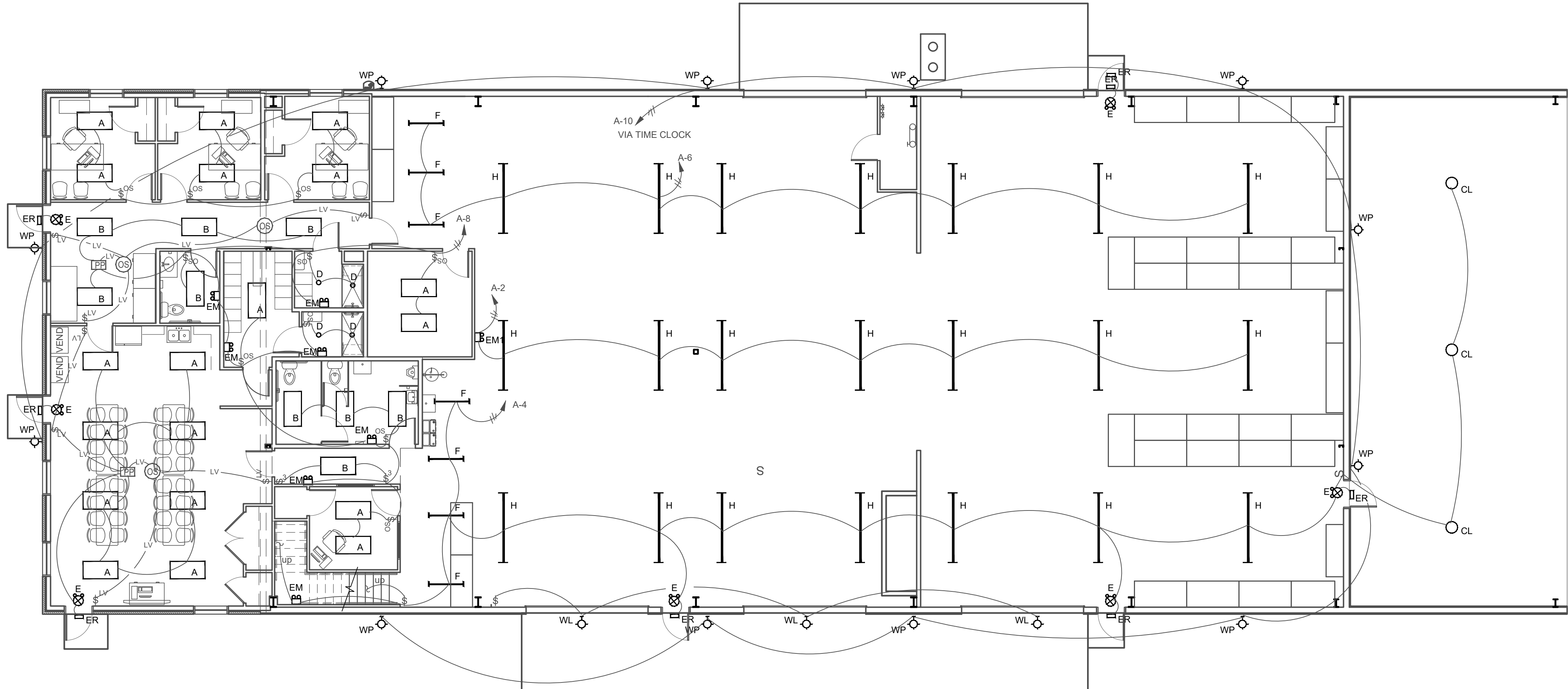
#### ABBREVIATION KEY

O - OWNER  
GC - GENERAL CONTRACTOR  
MC - MECHANICAL CONTRACTOR  
EC - ELECTRICAL CONTRACTOR  
LC - LIGHTING CONTRACTOR  
PC - PLUMBING CONTRACTOR  
FC - FIRE SUPPRESSION SYSTEM CONTRACTOR  
CC - CABINET CONTRACTOR

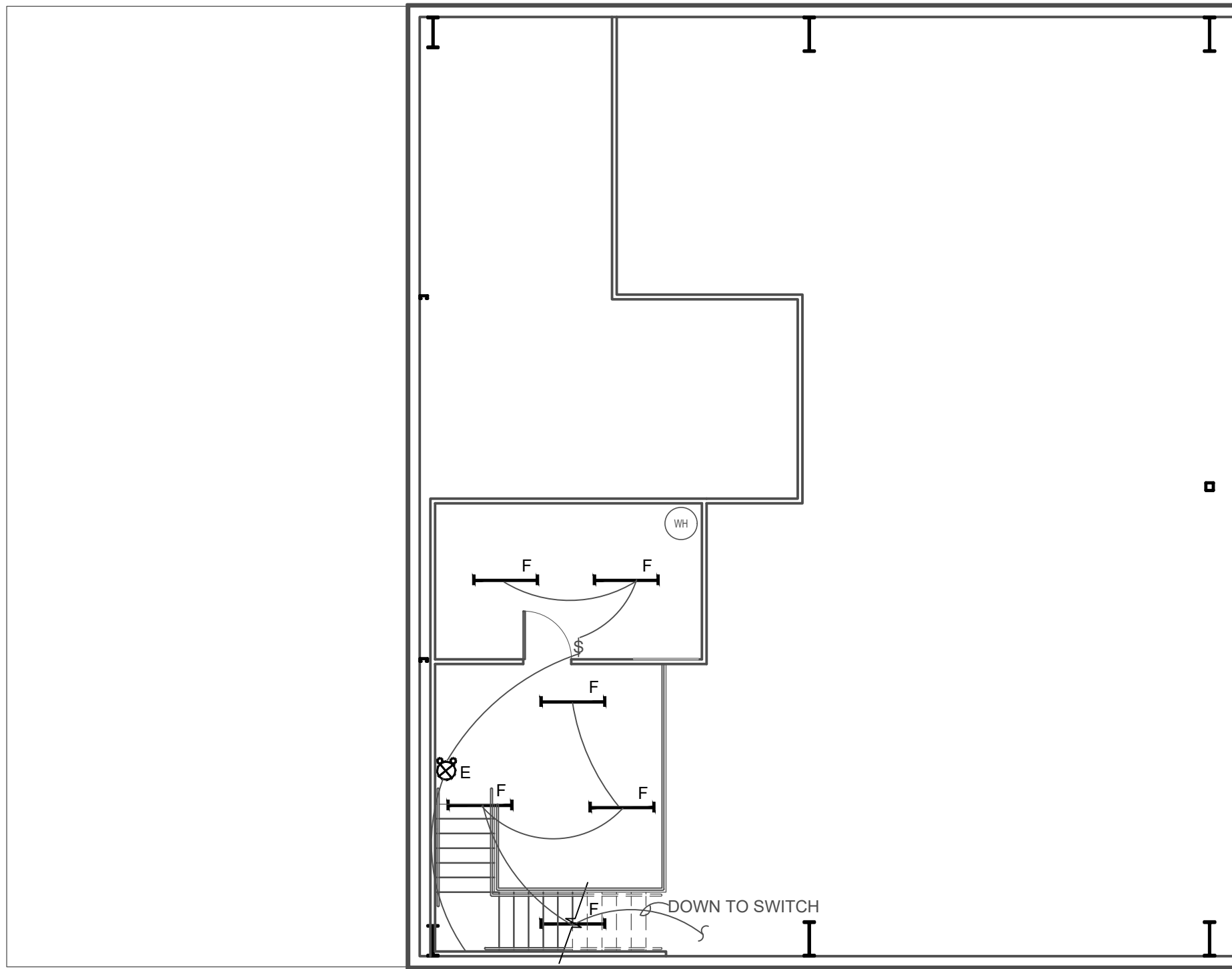
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**01** FIRST FLOOR PLAN LIGHTING  
SCALE: 1/8" = 1'-0"



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

#### LIGHTING SYMBOL LEGEND

- \$ SINGLE POLE LINE VOLTAGE SWITCH
- \$ OS LINE VOLTAGE SWITCH TYPE OCCUPANCY SENSOR
- PN NON-DIMMING SINGLE ZONE POWER PACK -WATTSTOPPER LMRC-100
- OS CEILING OCCUPANCY SENSOR - WATTSTOPPER LMDC-100
- S LV LOW VOLTAGE TWO BUTTON SWITCH - WATTSTOPPER LMSW-102
- LV CAT 5 CABLE RUN WITH RJ45 PRE-TERMINATED CONNECTORS
- 3- #12 IN 3/4" CONDUIT OR MC CABLE UNLESS NOTED OTHERWISE
- CIRCUIT HOMERUN TO ELECTRICAL PANEL WITH 3-#12 IN 3/4 EMT/MC

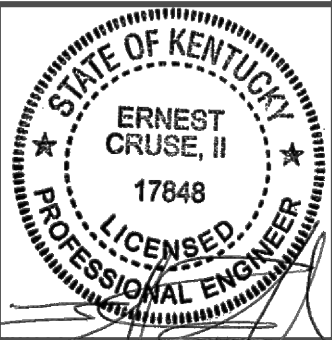
#### GENERAL LIGHTING NOTES

- ALL WORK SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE.
- WIRE ALL EMERGENCY LIGHTING FIXTURES AHEAD OF LOCAL AREA SWITCHING.
- COORDINATE EXACT FIXTURE PLACEMENT WITH OTHER EQUIPMENT IN THE CEILING SPACE.
- MINIMUM WIRE SIZE SHALL BE #12 COPPER. MAXIMUM 3 CIRCUITS PER HOME RUN EACH SHALL HAVE SEPARATE NEUTRAL.

#### LIGHT FIXTURE SCHEDULE :

TYPE	DESCRIPTION	MODEL	LUMENS/COLOR TEMP	REMARKS	
A	RECESSED 2X4 LED FLAT PANEL GRID TYPE LAY-IN FIXTURE	METALUX # 24FP4735C TGS # EQUAL LIGHTOLIER # EQUAL	4900 LUMENS 3500 KELVIN		120V
B	RECESSED 2X4 LED FLAT PANEL GRID TYPE LAY-IN FIXTURE	METALUX # 24FP3235C TGS # EQUAL LIGHTOLIER # EQUAL	3400 LUMENS 3500 KELVIN		120V
D	6" RECESSED DEAD FRONT RECESSED CAN SHOWER LIGHT	EATON # H7ICTALT560WH6935 PRESCOLITE # EQUAL LIGHTOLIER # EQUAL	1500 LUMENS 4000 KELVIN		120V
E	THERMO PLASTIC COMBINATION EXIT EMERGENCY LIGHT	COOPER # AP70R DUALITE # DQUAL EVENLITE # EQUAL	INCLUDED	WIRE FIXTURE AHEAD OF AN LOCAL AREA SWITCHING	120V
EM	MINI SURFACE LED EMERGENCY LIGHT	ALLPRO # APEL DUALITE # DQUAL EVENLITE # EQUAL	LAMPS INCLUDED	WIRE FIXTURE AHEAD OF AN LOCAL AREA SWITCHING	120V
EM1	2 HEADED SURFACE LED EMERGENCY LIGHT	SURELITES # SEL50 DUALITE # DQUAL EVENLITE # EQUAL	LAMPS INCLUDED	WIRE FIXTURE AHEAD OF AN LOCAL AREA SWITCHING	120V
ER	LINE VOLTAGE EXTERIOR WET LOCATION EGRESS LIGHT	EATON # SELW25BZ DUALITE # DQUAL EVENLITE # EQUAL	LAMPS INCLUDED	WIRE FIXTURE AHEAD OF AN LOCAL AREA SWITCHING	120V
F	SURFACE LENSED LED WRAP WITH INTEGRAL OCCUPANCY SENSOR	METALUX # 4SWLED4BSLUNVWCD1SVPD1 WILLIAMS # EQUAL LIGHTOLIER # EQUAL	4800 LUMENS 4000 KELVIN	SURFACE MOUNT TO STRUCTURE	120V
H	SUSPENDED LINEAR SIDE LIT LED 8' LENSED LINEAR LOWBAY WITH INTEGRAL STAND-ALONE OCCUPANCY SENSOR AND Y-TOGGLE HANGER WIRES	METALUX # 8WSL-LD2-130-SPS-UNV-L840-CD2-U-SVPD2-Y-TOGGLE-4' CREE # EQUAL HUBBEL # EQUAL	13000 LUMENS 4000 KELVIN	SUSPEND AT HEIGHT COORDINATED WITH ARCHITECT	120V
WP	LOW PROFILE LED WALL PACK WITH FULL CUT OFF	LUMARK # AXCLA8 CREE # EQUAL HUBBEL # EQUAL	9600 LUMENS 4000 KELVIN	VERIFY FINAL MOUNTING ELEVATION WITH ARCHITECT - DO NOT ROUGH-IN UNTIL VERIFIED WITH ARCHITECT	120V
CL	PENDANT MOUNTED CANOPY LIGHT WITH CUSTOM METAL FABRICATED CONICAL BIRD CONE SHIELD	ILP # UF0-58WLED-UNIV-40-BCS RAB # EQUAL	7170 LUMENS 4000 KELVIN	SUSPEND FROM SURFACE J-BOX- HOLD AS HIGH AS POSSIBLE TO ALLOW FOR BIRD CONE CLEARANCE	120V
WL	WALL MOUNTED LED TYPE 4 DISTRIBUTION WORK LIGHT	VISIONAIRE # VMS-T4-48LC-5-4K-UNV-WM-BZ KIM # EQUAL CREE # EQUAL	9300 LUMENS 4000 KELVIN	SURFACE MOUNT OVER RECESSED J-BOX OVER DOOR AT HEIGHT AS SPECIFIED BY ARCHITECT	120V

PROJECT NO:  
19-3060  
DRAWN BY:  
NM/  
DATE:  
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NEW CONSTRUCTION:  
**CITY OF BARDSTOWN  
PUBLIC WORKS BUILDING**  
PADGETT WAY  
BARDSTOWN, KY

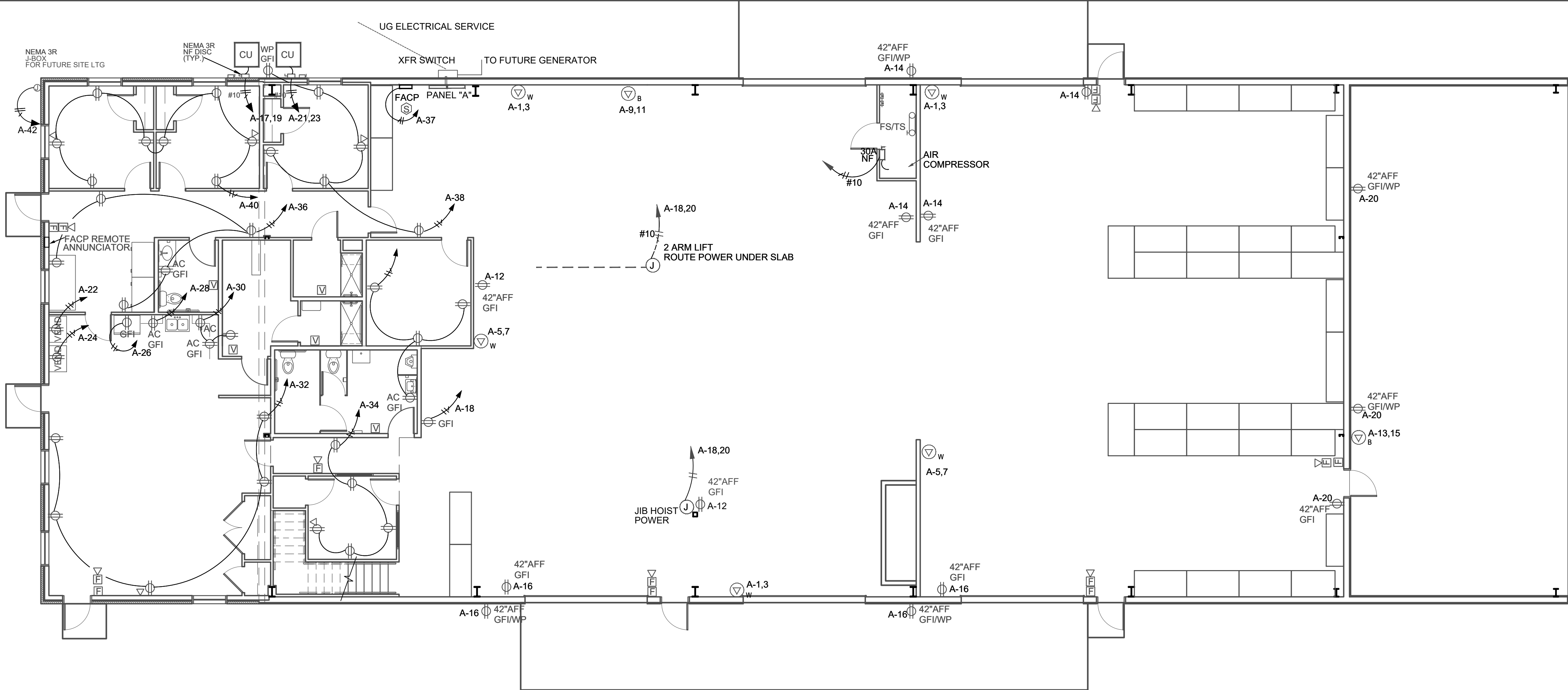
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EQUIPMENT PLAN

**E1.00**

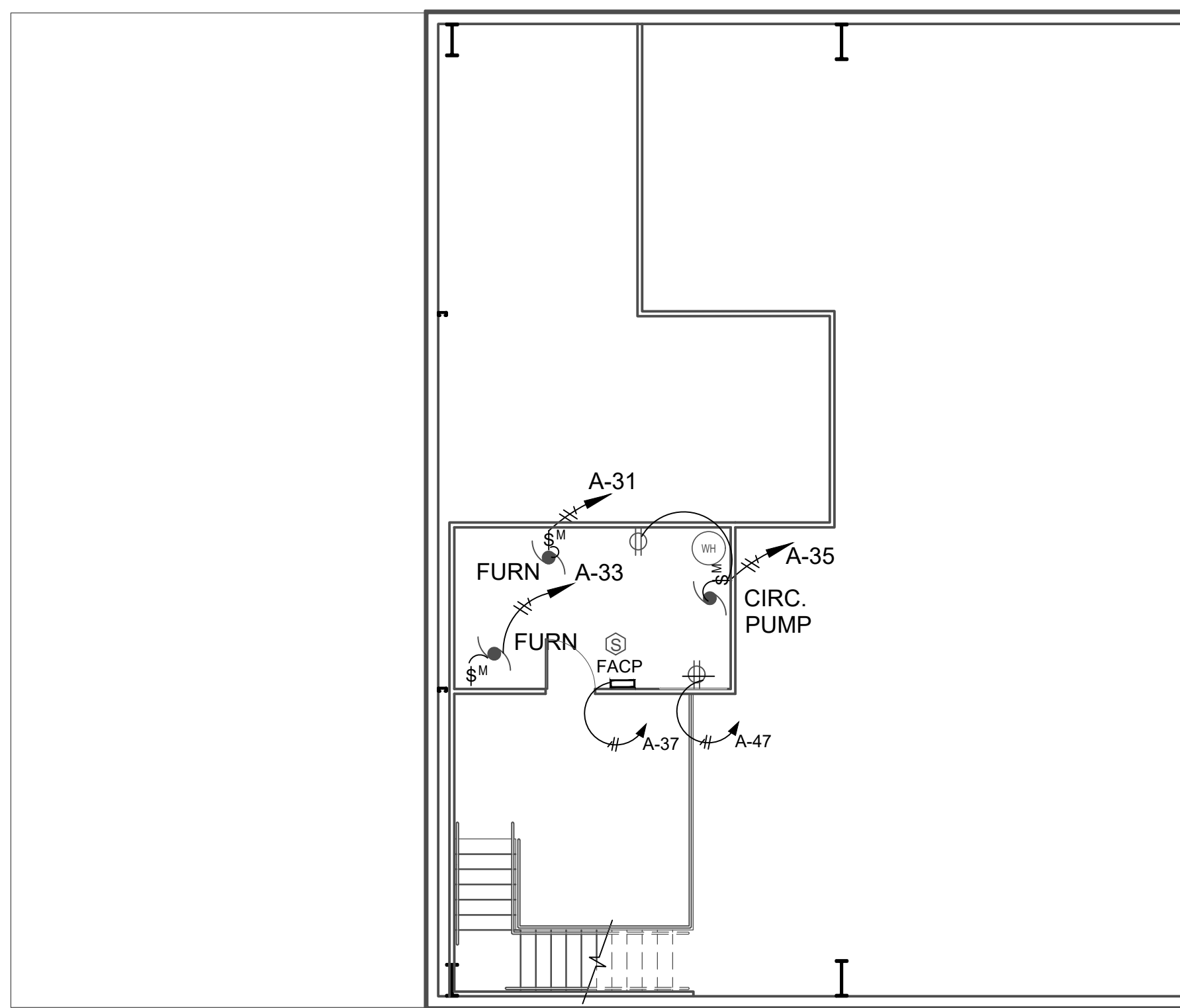


PROJECT: CITY OF BARDSTOWN PUBLIC WORKS BUILDING - FILE: 6-24--20-BARDSTOWN PUBLIC WORKS ELECTRICAL PLAN.dwg - DATE: Aug 24, 2020 8:0PM - BY: ERNIE CRUSE



## 01 FIRST FLOOR PLAN POWER

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



## 02 SECOND FLOOR PLAN POWER

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

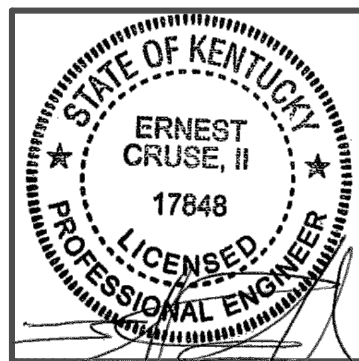
### SYMBOL LEGEND

	DUPLEX RECEPTACLE 15" A.F.F.
	EXISTING OUTLET LOCATION TO BE RE-USED & REPLACED
	SINGLE GANG DATA OUTLET WITH CONDUIT STUB TO ACCESSIBLE POINT 15" AFF
	QUAD RECEPTACLE 15" A.F.F.
	208 VOLT SINGLE PHASE WELDER RECEPTACLE - FOR PURPOSES OF BIDDING ASSUME NEMA 6-30R
	208 VOLT SINGLE PHASE BATTERY CHARGER RECEPTACLE - FOR PURPOSES OF BIDDING ASSUME NEMA 6-30R
	MOTOR SYMBOL
	GARAGE DOOR - FURNISHED BY GC - POWER BY EC. - INSTALLED BY OHD SUPPLIER
	ABOVE COUNTER
	GROUND FAULT TYPE RECEPTACLE
	WEATHER PROOF IN USE COVER
	EMT/MC RUN WITH 3-#12 IN 3/4" EMT UNLESS NOTED OTHERWISE
	CIRCUIT HOMERUN WITH 3-#12 IN 3/4" EMT UNLESS NOTED OTHERWISE
	CIRCUIT HOMERUN WITH 3-#12 IN 3/4" EMT TO ARC FAULT BREAKER
	EXHAUST FAN
	DISCONNECT SWITCH
	MOTOR DISCONNECT FRACTIONAL HORSEPOWER
	FIRE ALARM PULL STATION
	FIRE ALARM AUDIO VISUAL UNIT
	VISUAL ONLY FIRE ALARM NOTIFICATION
	CEILING SMOKE DETECTOR
	DUCT TYPE SMOKE DETECTOR
	FS/TS SPRINKLER FLOW/TAMPER SWITCHES

### GENERAL POWER NOTES

- ALL WORK SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE.
- MINIMUM WIRE SIZE SHALL BE #12 COPPER. COORDINATE WITH EQUIPMENT ACTUAL WIRE SIZES BASED ON EQUIPMENT NAME PLATE RATINGS.
- ALL EXPOSED CONDUIT BELOW 10' SHALL BE EMT TYPE. MC CABLE ALLOWED ABOVE CEILINGS AND IN STRUCTURAL AREA OF CEILINGS. SCHEDULE 40 PVC FOR U.G. CONDUIT.
- COORDINATE WITH MECHANICAL CONTRACTOR FOR REQUIRED CONTROL WIRING ASSOCIATED WITH HVAC EQUIPMENT.
- PROVIDE PANELBOARD CIRCUIT DIRECTORIES WHICH MATCH FIELD WIRING/CIRCUITING FOR EACH POWER DISTRIBUTION PANEL.
- COORDINATE WITH LOCAL UTILITY TO VERIFY AVAILABLE FAULT CURRENT AND ENSURE AIC RATINGS OF NEW POWER DISTRIBUTION EQUIPMENT EXCEEDS AVAILABLE FAULT CURRENT.
- VERIFY ALL POWER AND WIRING REQUIREMENTS WITH ACTUAL EQUIPMENT SUPPLIED TO ENSURE THAT PROPER OVER-CURRENT PROTECTION AND WIRING IS PROVIDED. THE DRAWING POWER REQUIREMENTS ARE FOR BIDDING PURPOSES ONLY.
- VERIFY NEMA CONFIGURATIONS AND REQUIRED OVERCURRENT PROTECTION FOR WELDER AND BATTERY CHARGER RECEPTACLES PRIOR TO FINALIZING PANEL BREAKERS AND WIRING REQUIREMENTS FOR THESE DEVICES.

PROJECT NO:  
19-3060  
DRAWN BY:  
NM/  
DATE:  
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PUBLIC WORKS BUILDING**  
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BARDSTOWN, KY

EQUIPMENT PLAN

E1.01

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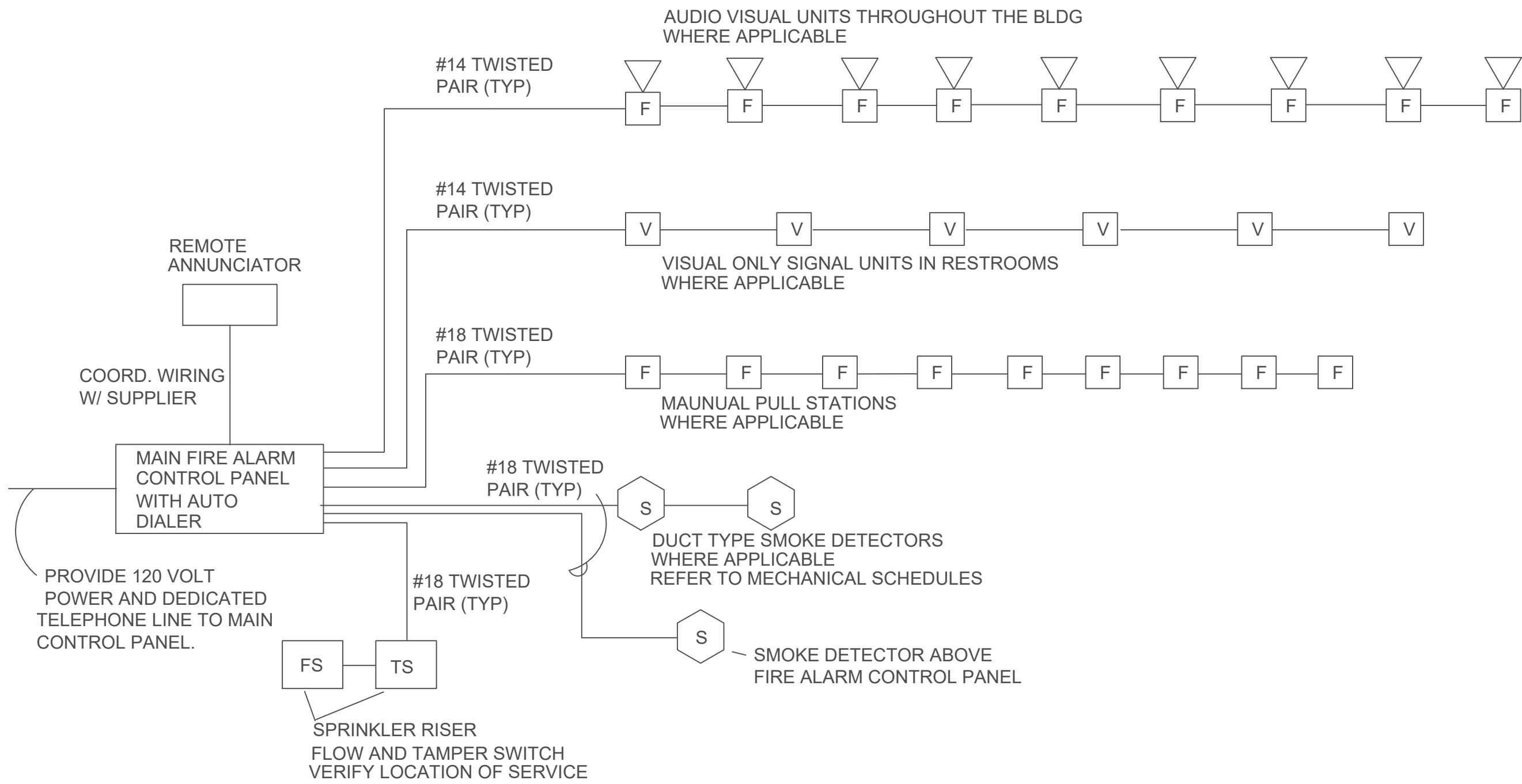
⬡ RISER NOTES

1. PROVIDE 1/0 BARE COPPER GROUND CONNECTION FROM BUS TO 10' COPPER GROUND ROD AND BOND TO BLDG STEEL AND INCOMING WATER SERVICE PER THE NEC
2. 2- 2-1/2" EMT CONDUITS EACH WITH 4 #350 MCM.
3. UNDERGROUND SECONDARY CONDUITS STUBBED OUT TO 3' BEYOND TRANSFER SWITCH. CITY OF BARDSTOWN TO PROVIDE AND INSTALL BALANCE OF SECONDARY WIRING AND CONDUIT TO UTILITY TRANSFORMER . STUB OUT 3- 2" SCH 40 PVC.
4. STUB OUT 3- 2" SCH 40 PVC TO 3' BEYOND TRANSFER SWITCH FOR FUTURE GENERATOR TO BE SUPPLIED AND INSTALLED BY CITY OF BARDSTOWN UNDER SEPARATE CONTRACT.



POWER RISER DIAGRAM

N.T.S.



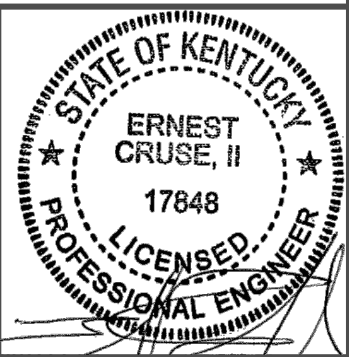
PARTIAL FIRE ALARM RISER

N.T.S.

1. RISER IS DIAGRAMMATIC ONLY AND IS NOT NECESSARILY REPRESENTATIVE OF ALL COMPONENTS REQUIRED.
2. FIRE ALARM SYSTEM SUPPLIER SHALL PROVIDE ALL REQUIRED SYSTEMS DRAWINGS FOR STATE APPROVALS.
3. FIRE ALARM SYSTEM SUPPLIER SHALL CERTIFY SYSTEM UPON COMPLETION OF INSTALLATION.
4. ALL FIRE ALARM SYSTEMS WIRING SHALL BE IN CONDUIT IN NON-ACCESSIBLE AREAS.
5. ELECTRICAL CONTRACTOR SHALL COORDINATE WITH SYSTEM SUPPLIER FOR ALL WIRING REQUIREMENTS.

A1	120/208V 3 PH 4W	#00A BUS			#00A	MB	AIC 18,000
LOAD DESCRIPTION	FEEDER	CB/ POLE	CIRC. NO.	CIRC. NO.	CB/ POLE	FEEDER	LOAD DESCRIPTION
WELDER RECEPT	#10	30 2P	1	2	20 1P	#12	SHOP LIGHTING
-----	#10	----	3	4	20 1P	#12	SHOP LIGHTING
WELDER RECEPT	#10	30 2P	5	6	20 1P	#12	SHOP LIGHTING
-----	#10	----	7	8	20 1P	#12	OFFICE LIGHTING
BATTERY CHARGER	#12	20 2P	9	10	20 1P	#12	EXTERIOR LIGHTING
-----	#12	----	11	12	20 1P	#12	BAY RECEPSTS
BATTERY CHARGER	#12	20 2P	13	14	20 1P	#12	BAY RECEPSTS
-----	#12	----	15	16	20 1P	#12	BAY RECEPSTS
AIR COMPRESSOR	#10	30 2P	17	18	20 2P	#12	JIB CRANE HOIST
-----	#10	----	19	20	----	#12	-----
COND. UNIT #1	#10	30 2P	21	22	20 1P	#12	VENDING RECEPT
-----	#10	----	23	24	20 1P	#12	VENDING RECEPT
COND. UNIT #2	#10	30 2P	25	26	20 1P	#12	FRIG RECEPT
-----	#10	----	27	28	20 1P	#12	KITCH RECEPT
CO-RAY-VAC FAN			29	30	20 1P	#12	KITCH RECEPT
FURNACE #1	#12	20 1P	31	32	20 1P	#12	BREAK RM RECEPT
FURNACE #2	#12	20 1P	33	34	20 1P	#12	OFFICE/HALL RECEPT
CIRC PUMP/ 2ND FLR PWR	#12	20 1P	35	36	20 1P	#12	OFFICE/HALL RECEPT
FACP	#12	20 1P	37	38	20 1P	#12	OFFICE RECEPT
SPARE		20 1P	39	40	20 1P	#12	OFFICE RECEPT
SPARE		20 1P	41	42	20 1P	#12	FUTURE SITE LIGHTING

A2	120/208V 3 PH 4W	#00A BUS				AIC 18,000	
LOAD DESCRIPTION	FEEDER	CB/ POLE	CIRC NO.	CIRC NO.	CB/ POLE	FEEDER	LOAD DESCRIPTION
SPARE		20 1P	1	2	200A 3P		SPARE
SPARE		20 1P	3	4	*****		*****
SPARE		20 1P	5	6	*****		*****
SPARE		20 1P	7	8			
SPARE		20 1P	9	10			
SPARE		20 1P	11	12			
SPARE		20 1P	13	14			
SPARE		20 1P	15	16			
			17	18			
			19	20			
			21	22			
			23	24			
			25	26			
			27	28			
			29	30			
			31	32			
			33	34			
			35	36			
			37	38			
			39	40			
			41	42			



KEYES ARCHITECTS & ASSOCIATES

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NEW CONSTRUCTION:

CITY OF BARDSTOWN

PUBLIC WORKS BUILDING

PADETT WAY

BARDSTOWN, KY



SECTION 16A – ELECTRICAL GENERAL REQUIREMENTS

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions, and Mechanical General Requirements apply to the work specified in this and other sections of Division 16.

1.2 WORK INCLUDED

- A. Furnish all materials, labor and equipment necessary to construct a complete and functional electrical system as further described in these specifications and on design drawings.
- B. Work under this section shall include final electrical connections to all equipment furnished under other sections of these specifications.
- C. Contractor shall furnish and install all miscellaneous equipment, material and labor which, though not specifically called for in this specification, is necessary for a complete and satisfactory operating installation. Contractor shall leave his work in operating condition.
- D. This section (Electrical General Requirements) applies equally to electrical, heating, ventilating, air conditioning, and plumbing.
- 1.3 MATERIALS, EQUIPMENT AND WORKMANSHIP
- A. Materials and equipment used throughout shall be new and the best of their respective kinds. No substitutions, other than those specified, shall be used unless approved by the Architect and Engineer. All work shall be executed with speed and consistent with safety and good workmanship. Substitutions of equal equipment will be acceptable only if approved in writing by Architect and Engineer 10-days prior to bid.
- B. All materials shall bear the UL label where such standards have been established and listed by Underwriters Laboratories, Inc.
- C. Competent workmen shall be employed on all phases of the work. Poor workmanship will be rejected and will constitute cause for removal of the individual performing the work.
- D. All material, equipment and locations of same shall at least conform with the standards of the Underwriters Laboratories, Inc. whenever applicable.
- E. Should any dispute arise as to the quality or fitness of materials, equipment or workmanship, the decision rests strictly with the Architect.

1.4 REFERENCES

- A. Utilize the following abbreviations and definitions for discernment within the Drawings and Specifications.
1. Abbreviations:
- NEC National Electrical Code.
  - OSHA Occupational Safety and Health Act.
  - ANSI American National Standards Institute.
  - NFPA National Fire Protection Association.
  - ASA American Standards Association.
  - IEEE Institute of Electrical and Electronics Engineers.
  - NEMA National Electrical Manufacturers Association.
  - UL Underwriters Laboratories, Inc.
  - ICE Insulated Cable Engineers Association.
  - ASTM American Society of Testing Materials.
  - ETL Electrical Testing Laboratories, Inc.

1.5 PERMITS, CODES AND INSPECTIONS

- A. Electrical Contractor shall obtain and pay for all permits and inspections required for electrical installation.
- B. All work shall be in accordance with the latest edition of the National Electrical Code (NEC), National Fire Protection Association (NFPA), Occupational Safety and Health Administration (OSHA) and local utility company requirements.
- C. Electrical Contractor shall furnish final inspection certification to the Owner upon completion of work. Certificate shall be from local inspection authority.
- D. Where apparent contradictions are discovered between local codes, NEC, specifications and drawings, most stringent or safest requirement will prevail. Beyond this, order of compliance shall be:
- Local Codes/Inspector
  - National Electrical Code
  - Specifications and Drawings

1.6 DRAWINGS AND SPECIFICATIONS

- A. DO NOT SCALE DRAWINGS. Scale of drawings is approximate. Exact locations, distances, levels and other conditions shall be governed by field conditions.
- B. For purposes of clearness and legibility, the drawings are essentially diagrammatic. Although size and location of the equipment is drawn to scale wherever possible.
- C. The drawings and specifications are intended to cover all work enumerated under the respective headings. The Sub-Contractors shall not take advantage of conflict or error between drawings and specifications, but shall request a clarification of such before making his proposal should this condition exist.
- D. Contractors shall obtain a set of the Architectural drawings and specifications, and consult with the Architect and General Contractor as to the general construction of the building and the order and time of placement of all electrical work.
- E. The drawings accompanying these specifications determine the general design of the equipment. Exact disposition of the equipment is subject to the requirements and construction of the manufacturer's standard, but the space occupied and general design shall correspond to that shown on the plans.
- F. Submit a complete list within fifteen (15) calendar days after award of contract, for all materials to be used. Note any deviations from specifications or proposed "equipments" and include Manufacturer's name, catalog number and descriptive literature for each.

1.7 SUBMITTALS

- A. Electrical Contractor shall refer to electrical submittal registry which is located at the end of this section. Sections identified within the registry indicate an overview of the products to be submitted. The Contractor shall reference each identified section for the specific items to be included in the submittal.
- B. Electrical Contractor shall provide submittals for review and approval on equipment and material listed in the individual technical sections of Division 16.
- C. Submittals shall clearly indicate electrical characteristics, physical dimensions and pertinent data which indicate that item meets all requirements specified on drawings and in technical specifications.
- D. Each Sub-Contractor shall submit to the General Contractor for review within thirty (30) days after the date of the contract, seven (7) sets of complete catalogue data and/or shop drawings for each item of material or piece of equipment. Catalog data shall include name of the manufacturer, catalog numbers, trade names, performance data, descriptive material (sufficient to identify each item), and specify performance of the products. Shop drawings shall include specified catalogue data and shall show equipment in detail, arrangement and disposition for this particular project design.
- E. The Architect and/or Engineer checking and reviewing of the Contractor's and Sub-Contractor's drawings and/or equipment details does not relieve the Contractor or Sub-Contractors from responsibility for errors, omissions or equipment furnished in accordance with such checked or reviewed drawings. Where such errors or omissions are later discovered, they shall be made good by the respective Sub-Contractor irrespective of any review by the Architect or Engineer.

1.8 SITE EXAMINATION

- A. Each Contractor shall, before submitting a proposal, visit and examine the site to satisfy themselves as to materials and scope of the construction, alterations and remodeling, any difficulty attending the performance of the work, storage of material, access to any and all areas, etc.
- B. The submission of a proposal will be construed as evidence that such an examination has been made. Claims made subsequent to the time of submission of the proposal for labor, equipment and material required for difficulties encountered, which could have been foreseen had an examination been made, will not be recognized.

1.9 QUALIFICATIONS

- A. Contractors must have five (5) years minimum experience, has a satisfactory work resume with comparable projects listed, has a sound financial basis, and is technically competent.
- B. Equipment Manufacturers must have five (5) years of successful experience, be technically competent, and be industrial financially stable.
- C. Owner reserves the right to review and determine if the Contractors and Manufacturers meet the above categories to his satisfaction. The Owner has the authority to reject any equipment and bids if the above standards are not met.

1.10 TEMPORARY ELECTRICAL SERVICE

- A. Electrical Contractor shall provide a complete temporary power system for use during construction by all trades.
- B. Temporary service shall be sized to handle construction equipment and temporary lighting during construction. Electrical Contractor shall coordinate connection point for electrical service with General Contractor.
- C. Electrical Contractor shall install a temporary lighting system for use during construction to maintain twenty (20) foot candles indoors during working hours and five (5) foot candles outdoors around equipment storage at night.
- D. Temporary power system shall include all circuit breakers necessary, including ground fault interrupting breakers where required by codes. System shall also include an adequate number of receptacles, meeting OSHA requirements, for use by all trades.
- E. Individual trades shall furnish any extension cords and special lighting required for their work.

1.11 FACILITY ELECTRICAL SERVICE

- A. Electrical Contractor shall be responsible for providing complete, permanent and operating electrical service to the facility at the voltage, ampacity and manner indicated on the drawings.
- B. Electrical Contractor shall be responsible for coordinating local utility requirements for primary ducts, transformer pads, service poles, metering, etc., in order to determine any requirements beyond work shown on drawings.
- C. Electrical Contractor shall be responsible for coordinating with local utility planned routing of primary ductwork, service transformer pad, service pole locations and secondary service connection requirements prior to beginning any work.
- D. Electrical Contractor shall provide Duke Energy plan showing routing of primary ductwork between point of origin and transformer pad. Plan shall provide call and bearings of duct line and be certified by Licensed Land Surveyor. Plan shall be submitted to Duke Energy and Owner in a timely fashion to prevent delay of permanent service connection.

1.11 DEBRIS, CUTTING AND PATCHING

- A. Electrical Contractor shall be responsible for removing any dirt, boxes, paper or other debris present as a result of his work.
- B. Work areas shall be maintained in a clean and orderly condition at all times.
- C. Electrical Contractor shall be responsible for all cutting and patching required for his work. All work shall be by skilled Craftsmen.
- D. No more cutting shall be done than is absolutely necessary. Cutting of a structural member or exposed surface of concrete will not be permitted without written approval of the Architect and Structural Engineer.
- E. Conduit openings in floor slabs shall be cut with core drill. Edges of trenches or openings in slabs shall be scribe cut with masonry saw.
- F. Each Sub-Contractor will be required to notify other trades in due time where he will require openings or chases in new masonry. Each Sub-Contractor shall also set all concrete inserts and sleeves for his work in new construction. Failing to do this, he shall cut openings for his work and patch as required at his own expense.
- G. All cutting and patching shall be done in a neat and workmanlike manner by men skilled in the various trades and with written permission from the Architect.

1.12 WARRANTY

- A. The Electrical Contractor shall warrant all material and labor for a period of one (1) year from the date of Owner's acceptance except where warranties for longer terms are specified herein, such longer term to apply.
- B. The Electrical Contractor shall replace defective parts or equipment promptly without any cost to the Owner and done to the Owner's satisfaction.

1.13 DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store, protect, and handle products to the project site properly identified with manufacturers identification, model number, types, grades, compliance labels, and other information needed for identification.
- B. Protect products from weather, construction traffic, dirt, water chemicals, and mechanical damage by storing in original packaging.

1.14 AS-BUILT DRAWINGS

- A. Maintain an accurate set of "as built" drawings and record any deviations from contract drawings. Submit two (2) sets of drawings (marked to show all deviations) upon completion of work to General Contractor.
- B. As-built drawings shall show all changes, additions, deletions, and deviations from contract drawings noted plainly thereon. Special emphasis is placed on recording the exact location of all underground utilities by offset distances to building corners, walls, curbs, etc.

PART 2 – PRODUCTS

2.1 MATERIALS

- A. All materials and equipment installed shall be new and free of defects and shall be the product of a reputable manufacturer and subject to approval.
- B. Applicable equipment and materials shall be listed by Underwriters Laboratories and Manufactured in accordance with ASME, NEMA, ANSI and IEEE standards, and as approved by local authorities having jurisdiction as mentioned in Division 1.
- C. If products and materials are specified or indicated on a specific item or system, use those products or materials. If products and materials are not listed in either of the above, use first class products and materials, subject to approval of Shop Drawings where Shop Drawings are required or as approved in writing where Shop Drawings are not required.

2.2 MISCELLANEOUS STEEL

- A. Provide all necessary miscellaneous steel as required for mounting, hanging or otherwise supporting panelboards, wall-mounted transformers, light fixtures, conduit, etc. installed by Electrical Contractor.
- B. Supports shall be suitably fastened to structural members as approved by Architect and Structural Engineer.

2.3 IDENTIFICATION, NAMEPLATES AND LABELING

- A. Provide typewritten circuit directories in panels with clear plastic protection shields and mounted in card holders. Indicate circuit number, devices or equipment being serviced. Final directories shall reflect final installation, reflecting all revisions made during construction and shall reflect final "as-built" conditions.
- B. Label all panels, starters, and switchboards with panel designation in one-half inch (1/2") letters and voltage in one-quarter inch (1/4") letters. Use engraved lamacoid plates with black background and white letters. Fasten plate above door on panel trim by using aluminum screws.

PART 3 – EXECUTION

3.1 ROUGH-IN

- A. Verify final locations for rough-ins with field measurements and with the shop drawing requirements of the actual equipment to be connected.

3.2 ELECTRICAL INSTALLATION

- A. Follow manufacturer instructions for installing, connecting, and adjusting all equipment. Provide a copy of such instructions at the equipment during any work on the equipment. Provide all special supports, connections, wiring, accessories, etc.
- B. General: Unless otherwise indicated, hook up all equipment requiring electrical services, whether such equipment is furnished under this Section or furnished by others. Comply with the following requirements:
- Work specified under this Section may be affected by work and materials specified under other Sections of these Specifications. The Contractor shall be responsible for coordination of work described under this Section with the other Sections.
  - Verify all dimensions by field measurements.
  - Arrange for chases, slots, and openings in other building components during progress of construction, to allow for electrical installations.
  - Coordinate the installation of required supporting devices and sleeves to be set in poured-in-place concrete and other structural components, as they are constructed.
  - Sequence, coordinate, and integrate installations of electrical materials and equipment for efficient flow of the Work.
  - Coordinate connection of electrical systems with exterior underground and overhead utilities and services. Comply with requirements of governing regulations, franchised service companies, and controlling agencies. Provide required connection for each service.
  - Install systems, materials, and equipment to conform with approved submittal data, including coordination drawings, to greatest extent possible. Conform to arrangements indicated by the Contract Documents, recognizing that portions of the Work are shown only in diagrammatic form. Where coordination requirements conflict with individual system requirements, refer conflict to the Engineer/Owner.
  - Install systems, materials, and equipment level and plumb, parallel and perpendicular to other building systems and components, where installed exposed in finished spaces.
  - Install electrical equipment to facilitate servicing, maintenance, and repair or replacement of equipment components. As much as practical, connect equipment for ease of disconnecting, with minimum of interference with other installations.

3.3 WORKMANSHIP, COOPERATION AND COORDINATION

- A. All work under this section shall be completed by Workmen skilled in their respective trades.
- B. Workmen shall be thoroughly trained and familiar with Manufacturer's recommended methods of installation.
- C. Any installation which does not present an appearance of the best trade practices shall be repaired, removed or replaced as directed by Owners Representative.
- D. Electrical Contractor shall cooperate with other trades to obtain most practical arrangement of work.
- E. Electrical Contractor shall coordinate installation with other trades to minimize interferences. "First to install" will not be justification for interferences.

3.4 CLEANING AND TESTING

- A. Clean all equipment, panels, disconnects, light fixtures, device outlets and plates, raceway systems and other electrical components after construction completion and prior to Owner's acceptance.
- B. Test complete electrical system and all components to assure proper operation. Furnish to Architect/Engineer any test results required to prove proper system operation.

3.5 EQUIPMENT CONNECTIONS

- A. Electrical Contractor shall connect all power wiring to any equipment furnished by Others, unless indicated otherwise.
- B. Mechanical Contractor shall install all relays and control interlocks required for his equipment. Mechanical Contractor shall also furnish any magnetic starters required for his equipment to Electrical Contractor for installation by Electrical Contractor.
- C. Electrical Contractor shall furnish all materials (i.e. disconnect switches, junction boxes, receptacles, cords, plugs, etc.) and labor necessary to complete final connections to all equipment.
- D. Electrical Contractor shall be responsible for making final connection to all Owner furnished equipment indicated on plans. Contractor shall check list from Owner with drawings and inform Owner of any discrepancies.
- E. Electrical Contractor shall obtain shop drawings and/or cut sheets for all equipment supplied by others which require electrical connections prior to rough-in. Electrical Contractor shall confirm that electrical services provided for equipment on drawings are correct for equipment to be installed. Inform Engineer of any discrepancies. Any work installed which does not match the specifications of the equipment to be installed shall be removed at the expense of the Electrical Contractor.
- F. Before connecting any piece of equipment, check the name plate data against the information shown on the Drawings and call to the attention of the Engineer any discrepancies thereto. Any equipment installed which does not meet the requirements of the equipment to be installed shall be removed at the expense of the Contractor.

3.6 ELECTRICAL FOR HEATING, VENTILATING AND AIR CONDITIONING EQUIPMENT

- A. The Mechanical Contractor shall furnish and install all air conditioning equipment, air handling units, exhaust fans, etc. The Mechanical Contractor shall provide starters for all HVAC equipment requiring starters, unless otherwise indicated. The Electrical Contractor shall mount and connect all starters and shall furnish all branch circuit wiring, motor disconnects, and final electrical connections as required for proper operation. Mechanical Contractor shall furnish and install all controls and control wiring, unless otherwise indicated on drawings.

3.8 PAINTING

- A. All painting of electrical system shall be by others.
- B. Contractor shall be responsible for all touch-up painting. Touch-up painting shall be per manufacturers recommendation.

END OF SECTION

SECTION 16B – GROUNDING AND BONDING

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions, Division-1 General Requirements and Specification Sections, apply to the work specified in this section.
- B. Division-16 Electrical General Requirements section applies to the work specified in this section.

1.2 SUMMARY

- A. This Section includes grounding of electrical systems and equipment. Grounding requirements specified in this Section may be supplemented by special requirements of systems described in other Sections.

1.3 SUBMITTALS

- A. Product Data: For the following:
- Ground rods.
  - Ground bus, pre-drilled.
- B. Qualification Data: For firms and persons specified in "Quality Assurance" Article.
- C. Field Test Reports: Submit written test reports to include the following:
- Test procedures used.
  - Test results that comply with requirements.
  - Results of failed tests and corrective action taken to achieve test results that comply with requirements.

1.4 QUALITY ASSURANCE

- A. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.
- Comply with UL 467.

PART 2 – PRODUCTS

2.1 MANUFACTURERS

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
- Grounding Conductors, Cables, Connectors, and Rods:
    - Apache Grounding/Erco Inc.
    - Chance/Hubbell.
    - Copperweld Corp.
    - Erco Inc.; Electrical Products Group.
    - ILSCO.
    - O-Z/Gedney Co.; a business of the EGS Electrical Group.
    - Roco, Inc.; Division of Hubbell.
    - Salsbury: W. H. Salsbury & Co.
    - Superior Grounding Systems, Inc.
    - Thomas & Betts, Electrical.

2.2 GROUNDING CONDUCTORS

- A. For insulated conductors, comply with Division 16 Section "Conductors and Cables."
- B. Material: Copper.
- C. Equipment Grounding Conductors: Insulated with green-colored insulation.
- D. Isolated Ground Conductors: Insulated with green-colored insulation with yellow stripe. On feeders with isolated ground, use colored tape, alternating bands of green and yellow tape to provide a minimum of three bands of green and two bands of yellow.
- E. Grounding Electrode Conductors: Stranded cable.
- F. Underground Conductors: Bare, tinned, stranded, unless otherwise indicated.
- G. Bare Copper Conductors: Comply with the following:
- Solid Conductors: ASTM B 3.
  - Assembly of Stranded Conductors: ASTM B 8.
  - Tinned Conductors: ASTM B 33.
  - Copper Bonding Conductors: As follows:
    - Bonding Cable: 28 kmil, 14 strands of No. 17 AWG copper conductor, 1/4 inch (6.4 mm) in diameter.
    - Bonding Conductor: No. 4 or No. 6 AWG, stranded copper conductor.
    - Bonding Jumper: Bare copper tape, bridged bare copper conductors, terminated with copper ferrules; 1-5/8 inches (42 mm) wide and 1/16 inch (1.5 mm) thick.
    - Tinned-Bonding Jumper: Tinned-copper tape, bridged copper conductors, terminated with copper ferrules; 1-5/8 inches (42 mm) wide and 1/16 inch (1.5 mm) thick.
  - Grounding Bus: Bare, annealed copper bars of rectangular 1/4" cross section, with insulators, pre-drilled.

2.3 CONNECTOR PRODUCTS

- A. Comply with IEEE 837 and UL 467, listed for use for specific types, sizes, and combinations of conductors and connected items.
- B. Bolted Connectors: Bolted-pressure-type connectors, or compression type.
- C. Welded Connectors: Exothermic-welded type, in kit form, and selected per manufacturer's written instructions.

PART 3 – EXECUTION

3.1 APPLICATION

- A. Use only copper conductors for both insulated and bare grounding conductors in direct contact with earth, concrete, masonry, crushed stone, and similar materials.
- B. In raceways, use insulated equipment grounding conductors.
- C. Exothermic-Welded Connections: Use for connections to structural steel and for underground connections, except those at test wells.
- D. Equipment Grounding Conductor Terminations: Use bolted pressure clamps.
- E. Grounding Bus: Install in Data Center Rooms, in rooms housing service equipment, and elsewhere as indicated.
- Use insulated spacer; space 1 inch (25.4 mm) from wall and support from wall 6 inches (150 mm) above finished floor, unless otherwise indicated.
  - At doors, route the bus up to the top of the door frame, across the top of the doorway, and down to the specified height above the floor.

3.2 EQUIPMENT GROUNDING CONDUCTORS

- A. Comply with NFPA 70, Article 250, for types, sizes, and quantities of equipment grounding conductors, unless specific types, larger sizes, or more conductors than required by NFPA 70 are indicated.
- B. Install equipment grounding conductors in all feeders and circuits.
- C. Install insulated equipment grounding conductor with circuit conductors for the following items, in addition to those required by NEC:
- Feeders and branch circuits.
  - Lighting circuits.
  - Receptacle circuits.
  - Single-phase motor and appliance branch circuits.
  - Three-phase motor and appliance branch circuits.
  - Flexible raceway runs.
  - Armored and metal-clad cable runs.
  - Computer Outlet Circuits: Install insulated equipment grounding conductor in branch-circuit runs from computer-area power panels or power-distribution units.
  - Signal and Communication Systems: For telephone, alarm, voice and data, and other communication systems, provide No. 4 AWG minimum insulated grounding conductor in raceway from grounding electrode system to each service location, terminal cabinet, wiring closet, and central equipment location.

- Service and Central Equipment Locations and Wiring Closets: Terminate grounding conductor on a 1/4-by-2-by-12-inch (6.4-by-50-by-300-mm) grounding bus.
- Terminal Cabinets: Terminate grounding conductor on cabinet grounding terminal.
- Cable Tray: Provide an insulated #10 awg grounding conductor along the full length of the cable tray. Band at all junctions.

3.3 INSTALLATION

- A. Bond interior metal piping systems and metal air ducts to equipment grounding conductors of associated pumps, fans, blowers, electric heaters, and air cleaners. Use braided-type bonding straps.

3.4 CONNECTIONS

- A. General: Make connections so galvanic action or electrolysis possibility is minimized. Select connectors, connection hardware, conductors, and connection methods so metals in direct contact will be galvanically compatible.
- Use electroplated or hot-innited materials to ensure high conductivity and to make contact points closer to order of galvanic series.
  - Make connections with clean, bare metal at points of contact.
  - Make aluminum-to-steel connections with stainless-steel separators and mechanical clamps.
  - Make aluminum-to-galvanized steel connections with tin-plated copper jumpers and mechanical clamps.
  - Coat and seal connections having dissimilar metals with inert material to prevent future penetration of moisture to contact surfaces.
- B. Exothermic-Welded Connections: Comply with manufacturer's written instructions. Welds that are puffed up or that show convex surfaces indicating improper cleaning are not acceptable.
- C. Equipment Grounding Conductor Terminations: For No. 8 AWG and larger, use pressure-type grounding lugs. No. 10 AWG and smaller grounding conductors may be terminated with winged pressure-type connectors.

- D. Noncontact Metal Raceway Terminations: If metallic raceways terminate at metal housings without mechanical and electrical connection to housing, terminate each conductor with a grounding bushing. Connect grounding bushings with a bare grounding conductor to grounding bus or terminal in housing. Bond electrically noncontinuous conduits at entrances and exits with grounding bushings and bare grounding conductors, unless otherwise indicated.
- E. Compression-Type Connections: Use hydraulic compression tools to provide correct circumferential pressure for compression connectors. Use tools and dies recommended by connector manufacturer. Provide embossing die code or other standard method to make a visible indication that a connector has been adequately compressed on grounding conductor.
- F. Moisture Protection: If insulated grounding conductors are connected to ground rods or grounding buses, insulate entire area of connection and seal against moisture penetration of insulation and cable.

3.5 FIELD QUALITY CONTROL

- A. Testing: Perform the following field quality-control testing:
- After installing grounding system but before permanent electrical circuitry has been energized, test for compliance with requirements.
  - Test completed grounding system at each location where a maximum ground-resistance level is specified, at service disconnect enclosure grounding terminal, and at ground test wells. Measure ground resistance not less than two full days after the last trace of precipitation, and without the soil being moistened by any means other than natural drainage or seepage and without chemical treatment or other artificial means of reducing natural ground resistance. Perform tests, by the fall-of-potential method according to IEEE 81. Electrical service ground and generator counterpoise ground shall measure 10 ohms or less.
  - Excessive Ground Resistance: If resistance to ground exceeds specified values, notify Architect promptly and include recommendations to reduce ground resistance.

END OF SECTION

SECTION 16C – LOW-VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES

PART 1 – GENERAL

1.1 SUMMARY

- A. This Section includes the following:
- Building wires and cables rated 600 V and less.
  - Connectors, splices, and terminations rated 600 V and less.
  - Sleeves and sleeve seals for cables.

1.2 SUBMITTALS

- A. Product Data: For each type of product indicated.
- B. Field quality-control test reports.

1.3 QUALITY ASSURANCE

- A. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.
- B. Comply with NFPA 70.

PART 2 – PRODUCTS

2.1 CONDUCTORS AND CABLES

- A. Copper Conductors: Comply with NEMA WC 70.
- B. Conductor Insulation: Comply with NEMA WC 70 for Types THHN-THWN.

2.2 CONNECTORS AND SPLICES

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
- AFC Cable Systems, Inc.
  - Hubbell Power Systems, Inc.
  - O-Z/Gedney; EGS Electrical Group LLC.
  - 3M Electrical Products Division.
  - Tyco Electronics Corp.
- B. Description: Factory-fabricated connectors and splices of size, ampacity rating, material, type, and class for application and service indicated.

PART 3 – EXECUTION

3.1 CONDUCTOR MATERIAL APPLICATIONS

- A. Feeders: Copper Solid for No. 10 AWG and smaller; stranded for No. 8 AWG and larger.
- B. Branch Circuits: Copper. Solid for No. 10 AWG and smaller; stranded for No. 8 AWG and larger.
- 3.2 CONDUCTOR INSULATION APPLICATIONS AND WIRING METHODS
- A. Exposed Feeders: Type THHN-THWN, single conductors in raceway.
- B. Feeders Concealed in Ceilings, Walls, Partitions, and Crawlspace: Type THHN-THWN, single conductors in raceway.
- C. Exposed Branch Circuits: Type THHN-THWN, single conductors in raceway.
- D. Branch Circuits Concealed in Ceilings, Walls, and Partitions: Type THHN-THWN, single conductors in raceway.
- E. Class 1 Control Circuits: Type THHN-THWN, in raceway.

3.3 INSTALLATION OF CONDUCTORS AND CABLES

- A. Conceal cables in finished walls, ceilings, and floors, unless otherwise indicated.
- B. Use manufacturer-approved pulling compound or lubricant where necessary; compound used must not deteriorate conductor or insulation. Do not exceed manufacturer's recommended maximum pulling tensions and sidewall pressure values.
- C. Use pulling means, including fish tape, cable, rope, and basket-weave wire/cable grips, that will not damage cables or raceway.
- D. Identify and color-code conductors and cables according to Division 26 Section "Identification for Electrical Systems."
- E. Make splices and taps that are compatible with conductor material and that possess equivalent or better mechanical strength and insulation ratings than unsliced conductors.
- F. Wiring at Outlets: Install conductor at each outlet, with at least 6 inches (150 mm) of slack.

END OF SECTION

SECTION 16D – RACEWAY AND BOXES FOR ELECTRICAL SYSTEMS

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes raceways, fittings, boxes, enclosures, and cabinets for electrical wiring.

1.3 DEFINITIONS

- A. EMT: Electrical metallic tubing.
- B. EPDM: Ethylene-propylene-diene terpolymer rubber.
- C. FMC: Flexible metal conduit.
- D. IMC: Intermediate metal conduit.
- E. LFMC: Liquidtight flexible metal conduit.
- F. LFNC: Liquidtight flexible nonmetallic conduit.
- G. NBR: Acrylonitrile-butadiene rubber.
- H. RMC: Rigid nonmetallic conduit.

1.4 SUBMITTALS

- A. Product Data: For each type of raceway, surface raceways, wireways and fittings, floor boxes, hinged-cover enclosures, and cabinets.

1.5 QUALITY ASSURANCE

- A. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.
- B. Comply with NFPA 70.

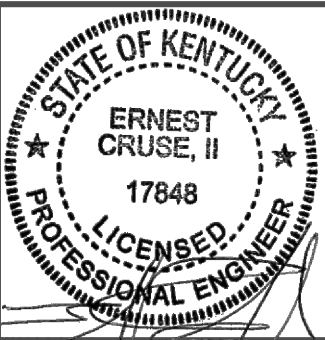
PART 2 – PRODUCTS

2.1 METAL CONDUIT AND TUBING

- A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
- AFC Cable Systems, Inc.
  - Aflex Inc.
  - Allied Tube & Conduit; A Teco International Ltd. Co.
  - Annet Electrical, Inc.; Anconada Metal Hose.
  - Electri-Flex Co.
  - Maverick Tube Corporation.
  - O-Z Gedney; a unit of General Signal.
  - Whiteland Tube Company.
- B. Rigid Steel Conduit: ANSI C80.1.
- C. IMC: ANSI C80.6.
- D. EMT: ANSI C80.3.
- E. LFMC: Flexible metal conduit with PVC jacket.
- F. Fittings for Conduit (including all Types and Flexible and Liquidtight), EMT, and Cable: NEMA FB 1; listed for type and size raceway with which used, and for application and environment in which installed.
1. Fittings for EMT: Steel set-screw or compression type.
- G. Joint Compound for Rigid Steel Conduit or IMC: Listed for use in cable connector assemblies, and compounded for use to lubricate and protect threaded raceway joints from corrosion and enhance their conductivity.

2.2 SLEEVES FOR RACEWAYS

- A. Steel Pipe Sleeves: ASTM A 53/A 53M, Type E, Grade B, Schedule 40, galvanized steel, plain ends.
- B. Cast-Iron Pipe Sleeves: Cast or fabricated "wall pipe," equivalent to ductile-iron pressure pipe, with plain ends and integral waterstop, unless otherwise indicated.
- C. Sleeves for Rectangular Openings: Galvanized sheet steel with minimum 0.052- or 0.138-inch thickness as indicated and of length to suit application.





SECTION 161 SWITCHBOARDS

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions, Division-1 General Requirements and Specification Sections, apply to the work specified in this Section.
- B. Division-16 Electrical General Requirements section applies to the work specified in this section.

1.02 SUMMARY

- A. This Section includes service and distribution switchboards rated 600 V and less.

1.03 REFERENCES

- A. General: For all reference publications listed below, refer and comply to editions currently adopted by federal, state, and local government agencies with jurisdiction over the project. For references that are not part of government codes, refer and comply to most recent editions.
- B. American National Standards Institute:
1. ANSI C12.1 - Code for Electricity Metering.
  2. ANSI C38.1 - Requirements, Electrical Analog Indicating Instruments.
- C. Institute of Electrical and Electronics Engineers:
1. IEEE C57.13 - Standard Requirements for Instrument Transformers.
  2. IEEE C52.41 - Recommended Practice on Surge Voltages in Low-Voltage AC Power Circuits.
- D. National Electrical Manufacturers Association:
1. NEMA AB 1 - Molded Case Circuit Breakers and Molded Case Switches.
  2. NEMA FU 1 - Low Voltage Cartridge Fuses.
  3. NEMA KS 3 - Enclosed and Miscellaneous Distribution Equipment Switches (600 Volts Maximum).
  4. NEMA PB 2 - Deadfront Distribution Switchboards and components to include in emergency, operation, and maintenance manuals.
  5. NEMA PB 2.1 - General Instructions for Proper Handling, Installation, Operation, and Maintenance of Deadfront Distribution Switchboards Rated 600 Volts or Less.
- E. International Electrical Testing Association:
1. IETA ATS - Acceptance Testing Specifications for Electrical Power Distribution Equipment and Systems.
- F. ANSI/NFPA 20 - National Electrical Code.

1.04 DEFINITIONS

- A. EMC: Electromagnetic interference.
- B. GFCI: Ground-fault circuit interrupter.
- C. RFI: Radio-frequency interference.
- D. RMS: Root mean square.
- E. SPD: Single pole, double throw.

1.05 SUBMITTALS

- A. Product Data: For each type of switchboard, overcurrent protective device, transient voltage suppression device, ground-fault protector, accessory, and component indicated. Include dimensions and manufacturers' technical data on features, performance, electrical characteristics, ratings, and finishes.
- B. Shop Drawings: For each switchboard and related equipment.
1. Dimensioned plans, elevations, sections, and details, including required clearances and service space around equipment. Show tabulations of installed devices, equipment features, and ratings. Include the following:
    - a. Enclosure types and details for types other than NEMA 250, Type 1.
    - b. Bus configuration, current, and voltage ratings.
    - c. Short-circuit current rating of switchboards and overcurrent protective devices.
    - d. Descriptive documentation of optional barriers provided for electrical insulation and isolation.
    - e. Utility company's metering provisions with indication of approval by utility company.
    - f. Mimic-bus diagram.
    - g. UL listing for series rating of installed devices.
    - h. Features, characteristics, ratings, and factory settings of individual overcurrent protective devices and auxiliary components.
  2. Wiring Diagrams: Power, signal, and control wiring.
  3. Samples: Representative portion of mimic bus with specified finish, for color selection.
- C. Qualification Data: For testing agency.
- D. Field quality-control test reports including the following:
1. Test procedures used.
  2. Test results that comply with requirements.
  3. Results of failed tests and corrective action taken to achieve test results that comply with requirements.
- F. Operation and Maintenance Data: For switchboards and components to include in emergency, operation, and maintenance manuals. In addition to items specified in Division 1 Section "Closeout Procedures and Operation and Maintenance Data," include the following:
1. Routine maintenance requirements for switchboards and all installed components.
  2. Manufacturer's written instructions for testing and adjusting overcurrent protective devices.
  3. Time-current curves, including selectable ranges for each type of overcurrent protective device.

1.06 QUALITY ASSURANCE

- A. Testing Agency Qualifications: An independent agency, with the experience and capability to conduct the testing indicated, that is a member company of the International Electrical Testing Association or is a nationally recognized testing laboratory (NRTL) as defined by OSHA in 29 CFR 1910.7, and that is acceptable to authorities having jurisdiction.
1. Testing Agency's Field Supervisor: Person currently certified by the International Electrical Testing Association or the National Institute for Certification in Engineering Technologies to supervise on-site testing specified in Part 3.
- B. Testing Agency Qualifications: An independent agency, with the experience and capability to conduct the testing indicated, that is a nationally recognized testing laboratory (NRTL) as defined by OSHA in 29 CFR 1910.7.
- C. Source Limitations: Obtain switchboards through one source from a single manufacturer.
- D. Product Selection for Restricted Space: Drawings indicate maximum dimensions for switchboards including clearances between switchboards and adjacent surfaces and other items. Comply with indicated maximum dimensions.
- E. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.
- F. Comply with NEMA PB 2, "Deadfront Distribution Switchboards."
- G. Comply with NFPA 70.

1.07 QUALIFICATIONS

- A. Manufacturer: Company specializing in manufacturing products specified in this section with minimum five years documented experience.

1.08 DELIVERY, STORAGE, AND HANDLING

- A. Deliver in sections or lengths that can be moved past obstructions in delivery path.
- B. Store indoors in clean dry space with uniform temperature to prevent condensation. Protect from exposure to dirt, fumes, water, corrosive substances, and physical damage.
- C. If stored in areas subjected to weather, cover switchboards to provide protection from weather, dirt, dust, corrosive substances, and physical damage. Remove loose packing and flammable materials from inside switchboards; install electric heating (250 W per section) to prevent condensation.
- D. Handle switchboards according to NEMA PB 2.1 and NECA 400.

1.09 PROJECT CONDITIONS

- A. Installation Pathway: Remove and replace access fencing, doors, lift-out panels, and structures to provide pathway for moving switchboards into place.
- B. Environmental Limitations: Rate equipment for continuous operation under the following conditions, unless otherwise indicated:
1. Ambient Temperature: Not exceeding 104 deg F (40 deg C).
  2. Altitude: Not exceeding 6600 feet (2000 m).
- C. Service Conditions: NEMA PB 2, usual service conditions, as follows:
1. Ambient temperatures within limits specified.
  2. Altitude not exceeding 6600 feet (2000 m).

1.10 COORDINATION

- A. Coordinate layout and installation of switchboards and components with other construction including conduit, piping, equipment, and adjacent surfaces. Maintain required workspace clearances and required clearances for equipment access doors and panels.
- B. Coordinate size and location of concrete bases. Cast anchor-bolt inserts into bases. Concrete, reinforcement, and formwork requirements are specified in Division 3.

1.11 WARRANTY

- A. Manufacturer warrants equipment to be free from defects in materials and workmanship for 1-year from date of Owner's acceptance.

1.12 MAINTENANCE SERVICES

- A. Furnish complete service and maintenance for switchboards for 1-year from date of substantial completion.

1.13 REGULATORY REQUIREMENTS

- A. Conform to requirements of ANSI/NFPA 70.
- B. Furnish products listed and classified by Underwriters Laboratories, Inc., as suitable for purpose specified and shown.

PART 2 - PRODUCTS

2.01 MANUFACTURERS

- A. In other Part 2 articles where titles below introduce lists, the following requirements apply to product selection:
1. Manufacturers: Subject to compliance with requirements, provide products by one of the manufacturers specified.

2.02 MANUFACTURED UNITS

- A. Manufacturers:
1. Eaton Corporation; Cutler-Hammer Products.
  2. Square D.
  3. Siemens Energy & Automation, Inc.
  4. General Electric Co.; Electrical Distribution & Protection Div.
- B. Front-Connected, Front-Accessible Switchboard: Panel-mounted main device, panel-mounted branches, and sections rear aligned.
- C. Front- and Side-Accessible Switchboard: Fixed, individually mounted main device; panel-mounted branches; and sections rear aligned.
- D. Nominal System Voltage: As indicated on drawings.
- E. Main-Bus Continuous: As indicated on drawings.
- F. Enclosures: Steel, NEMA 250, Type 1 or 3R as indicated on drawings.
- G. Enclosure Finish for Outdoor Units: Factory-applied finish in manufacturer's standard color, undersurfaces treated with corrosion-resistant undercoating.
- H. Enclosure Finish for Indoor Units: Factory-applied finish in manufacturer's standard gray finish over a rust-inhibiting primer on treated metal surface.
- I. Barriers: Between adjacent switchboard sections.

- J. Space Heaters: Factory-installed electric space heaters of sufficient wattage in each vertical section to maintain enclosure temperature above expected dew point.
1. Space-Heater Control: Thermostats to maintain temperature of each section above expected dew point.

- K. Utility Metering Compartment: Fabricated compartment and section complying with utility company's requirements. If separate vertical section is required for utility metering, match and align with basic switchboard.
- L. Bus Traction and Trailing Pull Sections: Matched and aligned with basic switchboard.
- M. Hinged Front Panels: Allow access to circuit breaker, metering, accessory, and blank compartments.
- N. Pull Box on Top of Switchboard:
1. Adequate ventilation to maintain temperature in pull box within same limits as switchboard.
  2. Set back from front to clear circuit-breaker removal mechanism.
  3. Removable covers shall form top, front, and sides. Top covers at rear shall be easily removable for drilling and cutting.
  4. Bottom shall be insulating, fire-resistant material with separate holes for cable drops into switchboard.
  5. Cable supports shall be arranged to facilitate cabling and adequate to support cables indicated, including those for future installation.
- O. Buses and Connections: Three phase, four wire, unless otherwise indicated.
1. Phase- and Neutral-Bus Material: Hard-drawn copper of 98 percent conductivity with feeder circuit-breaker line connections.
  2. Phase- and Neutral-Bus Material: Tin-plated, high-strength, electrical-grade aluminum alloy with copper- or tin-plated, aluminum circuit-breaker line connections.
  3. Phase- and Neutral-Bus Material: Hard-drawn copper of 98 percent conductivity or tin-plated, high-strength, electrical-grade aluminum alloy.
    - a. If bus is aluminum, use copper- or tin-plated aluminum for circuit-breaker line connections.
    - b. If bus is copper, use copper for feeder circuit-breaker line connections.

4. Load Terminals: Insulated, rigidly braced, silver-plated, copper runback bus extensions equipped with pressure connectors for outgoing circuit conductors. Provide load terminals for future circuit-breaker positions at full ampere rating of circuit-breaker position.
5. Ground Bus: 1/4-by-2-inch- (6-by-50-mm-) minimum-size, hard-drawn copper of 98 percent conductivity, equipped with pressure connectors for feeders for branch-circuit ground conductors. For busway feeders, extend insulated equipment grounding cable to busway ground connection and support cable at intervals in full ampere rating of circuit-breaker position.
6. Contact Surfaces of Buses: Silver plated.
7. Main Phase Buses, Neutral Buses, and Equipment Ground Buses: Uniform capacity for entire length of switchboard's main and distribution sections. Provide for future expansion from both ends.
8. Isolation Barrier Access Provisions: Permit checking of bus-bolt tightness.
9. Neutral Buses: 50 percent of the ampacity of phase buses, unless otherwise indicated, equipped with pressure connectors for outgoing circuit neutral cables. Bus extensions for busway feeder neutral bus are braced.
10. Neutral Buses: 100 percent of the ampacity of phase buses, unless otherwise indicated, equipped with pressure connectors for outgoing circuit neutral cables. Bus extensions for busway feeder neutral bus are braced.
- P. Future Devices: Equip compartments with mounting brackets, supports, bus connections, and opportunities at full rating of circuit-breaker compartment.

2.03 OVERCURRENT PROTECTIVE DEVICES

- A. Molded-Case Circuit Breaker: NEMA AB 3, with interrupting capacity to meet available fault currents.
1. Thermal-Magnetic Circuit Breaker: Inverse time-current element for low-level overloads, and instantaneous magnetic trip element for short circuits. Adjustable magnetic trip setting for circuit-breaker frame sizes 250 A and larger.
  2. Adjustable Instantaneous-Trip Circuit Breakers: Magnetic trip element with front-mounted, field-adjustable trip setting.
  3. Electronic Trip-unit circuit breakers shall have RMS sensing, field-replaceable rating plug, and the following field-adjustable settings:
    - a. Instantaneous trip.
    - b. Long- and short-time pickup levels.
    - c. Long- and short-time time adjustments.
    - d. Ground-fault pickup level, time delay, and I2t response.
  4. Current-Limiting Circuit Breakers: Frame sizes 400 A and smaller; let-through ratings less than NEMA FU 1, RK-5.
  5. Integrally Fused Circuit Breakers: Thermal-magnetic trip element with integral limiter-style fuse listed for use with circuit breaker; trip activation on fuse opening or on opening of fuse compartment door.
- B. GFCI Breakers: Single- and two-pole configurations with 5-mA trip sensitivity.
- C. Molded-Case Circuit-Breaker Features and Accessories: Standard frame sizes, trip ratings, and number of poles.
1. Lugs: Mechanical style, suitable for number, size, trip ratings, and conductor material.
  2. Application Listing: Appropriate for application; Type SWD for switching fluorescent lighting loads; Type HACR for heating, air-conditioning, and refrigerating equipment.
  3. Ground-Fault Protection: Integrally mounted relay and trip unit with adjustable pickup and time-delay settings, push-to-test feature, and ground-fault indicator.
  4. Communication Capability: Circuit-breaker-mounted communication module with functions and features compatible with power monitoring and control system, specified in Division 16 Section "Electrical Power Monitoring and Control."
  5. Shunt Trip: 120-V trip coil energized from separate circuit, set to trip at [55] [75] percent of rated voltage.
  6. Undervoltage Trip: Set to operate at 35 to 75 percent of rated voltage without intentional time delay.
  7. Auxiliary Contacts: One SPDT switch with "a" and "b" contacts; "a" contacts mimic circuit-breaker contacts, "b" contacts operate in opposite phase.
  8. Key Interlock Kit: Externally mounted to prohibit circuit-breaker operation; key shall be removable only when circuit breaker is in off position.
  9. Zone-Selective Interlocking: Integral with electronic trip unit; for interlocking ground-fault protection function.
- C. Fuses are specified in Division 16 Section "Fuses."

2.04 INSTRUMENTATION

- A. Instrument Transformers: NEMA EI 21.1, IEEE C57.13, and the following:
1. Potential Transformers: Secondary voltage rating of 120 V and NEMA accuracy class of 0.3 with burdens of W, X, and Y.
  2. Current Transformers: Ratios shall be as indicated with accuracy class and burden suitable for connected relays, meters, and instruments.
  3. Control-Power Transformers: Dry type, mounted in separate compartments for units larger than 3 kV.
  4. Current Transformers for Neutral and Ground-Fault Current Sensing: Connect secondaries to ground overcurrent relays to provide selective tripping of main and tie circuit breaker. Coordinate with feeder circuit-breaker ground-fault protection.

2.05 CONTROL POWER

- A. Control Circuit: 120 V, supplied through secondary disconnecting devices from control-power transformer.
- B. Electrically Interlocked Main and Tie Circuit Breakers: Two control-power transformers in separate compartments, with interlocking relays, connected to the primary side of each control-power transformer at the line side of the associated main circuit breaker. 120-v secondaries connected through automatic transfer relays to ensure a fail-safe automatic transfer scheme.
- C. Control-Power Fuses: Primary and secondary fuses for current-limiting and overload protection of transformer and fuses for protection of control circuits.
- D. Control Wiring: With bundling, labeling, and protection included. Provide flexible conductors for No. 8 AWG and smaller, for conductors across hinges, and for conductors for interconnections between shipping units.

2.06 IDENTIFICATION

- A. Mimic Bus: Continuously integrated mimic bus factory applied to front of switchboard. Arrange in single-line diagram format, using symbols and letter designations consistent with final mimic-bus diagram. Coordinate mimic-bus segments with devices in switchboard sections to which they are applied. Produce a concise visual presentation of electrical switchboard components and connections.
- B. Presentation Media: Painted graphics in color contrasting with background color to represent bus and components, complete with lettered designations.

PART 3 - EXECUTION

3.01 EXAMINATION

- A. Examine elements and surfaces to receive switchboards for compliance with installation tolerances and other conditions affecting performance.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.02 INSTALLATION

- A. Install switchboards and accessories according to NEMA PB 2.1 and NECA 40.
- B. Install and anchor switchboards level on concrete bases, 4-inch (100-mm) nominal thickness. Concrete base is specified in Division 16 Section "Basic Electrical Materials and Methods," and concrete materials and installation requirements are specified in Division 3.
1. Install dowel rods to connect concrete base to concrete floor. Unless otherwise indicated, install dowel rods on 18-inch (450-mm) centers around full perimeter of base.
  2. For switchboards, install epoxy-coated anchor bolts that extend through concrete base and anchor into structural concrete floor.
  3. Place and secure anchorage devices. Use setting drawings, templates, diagrams, instructions, and directions furnished with items to be embedded.
  4. Install anchor bolts to elevations required for proper attachment to switchboards.
- C. Comply with mounting and anchoring requirements specified in Division 16 Section "Seismic Controls for Electrical Work."
- D. Temporary Lifting Provisions: Remove temporary lifting eyes, channels, and brackets and temporary blocking of moving parts from switchboard units and components.
- E. Operating Instructions: Frame and mount the printed basic operating instructions for switchboards, including control and key interlocking sequences and emergency procedures. Fabricate frame of finished wood or metal and cover instructions with clear acrylic plastic. Mount on front of switchboards.
- F. Install overcurrent protective devices, transient voltage suppression devices, and instrumentation.
1. Set field-adjustable switches and circuit-breaker trip ranges.
  2. Install spare-fuse cabinet.

3.03 IDENTIFICATION

- A. Identify field-installed conductors, interconnecting wiring, and components; provide warning signs as specified in Division 16 Section "Electrical Identification."
- B. Switchboard Nameplates: Label each switchboard compartment with engraved metal or laminated-plastic nameplate mounted with corrosion-resistant screws.

3.04 FIELD QUALITY CONTROL

- A. Prepare for acceptance tests as follows:
1. Test insulation resistance for each switchboard bus, component, connecting supply, feeder, and control circuit.
  2. Test continuity of each circuit.
- B. Perform the following field tests and inspections and prepare test reports:
1. Perform each electrical test and visual and mechanical inspection stated in IETA ATS, Sections 7.1, 7.5, 7.6, 7.9, 7.10, 7.11, and 7.14 as appropriate. Certify compliance with test parameters.
  2. Correct malfunctioning units on-site, where possible, and retest to demonstrate compliance; otherwise, replace with new units and retest.

3.05 DEMONSTRATION

- A. Engage a factory-authorized service representative to train Owner's maintenance personnel to adjust, operate, and maintain switchboards, overcurrent protective devices, instrumentation, and accessories. Refer to Division 1 Section "Closeout Procedures and Demonstration and Training."

END OF SECTION

SECTION 16K - WIRING DEVICES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division D1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes the following:
1. Receptacles, receptacles with integral GFCI, and associated device plates.
  2. Snap switches.
  3. Wall-switch and ceiling occupancy sensors.
  4. Poke-through assemblies.

1.3 SUBMITTALS

- A. Product Data: For each type of product indicated.
- B. Shop Drawings: List of legends and description of materials and process used for premarking wall plates.
- C. Operation and Maintenance Data: For wiring devices to include in all manufacturers' packing label warnings and instruction manuals that include labeling conditions.

1.4 QUALITY ASSURANCE

- A. Source Limitations: Obtain each type of wiring device and associated wall plate through one source from a single manufacturer. Insofar as they are available, obtain all wiring devices and associated wall plates from a single manufacturer and one source.
- B. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.
- C. Comply with NFPA 70.

1.5 COORDINATION

- A. Receptacles for Owner-Furnished Equipment: Match plug configurations.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Manufacturers' Names: Shortened versions (shown in parentheses) of the following manufacturers' names are used in other Part 2 articles:
1. Cooper Wiring Devices, a division of Cooper Industries, Inc. (Cooper).
  2. Hubbell Incorporated; Wiring Device-Kellems (Hubbell).
  3. Pass & Seymour/Legrand; Wiring Devices & Accessories (Pass & Seymour).

2.2 STRAIGHT BLADE RECEPTACLES

- A. Convenience Receptacles, 125 V, 20 A: Comply with NEMA WD 1, NEMA WD 6 configuration 5-20R, and UL 498.
1. Products: Subject to compliance with requirements, provide one of the following:
    - a. Cooper; 5351 (single), 5352 (duplex).
    - b. Hubbell; HBL5351 (single), CR352 (duplex).
    - c. Pass & Seymour; 5381 (single), 5352 (duplex).

2.3 GFCI RECEPTACLES

- A. General Description: Straight blade, feed-through type. Comply with NEMA WD 1, NEMA WD 6, UL 498, and UL 943, Class A, and include indicator light that is lighted when device is tripped.
- B. Duplex GFCI Convenience Receptacles, 120 V, 20 A:
1. Products: Subject to compliance with requirements, provide one of the following:
    - a. Cooper; GFCI.
    - b. Pass & Seymour; 2084.
    - c. Hubbell; GFR8300.

2.4 SNAP SWITCHES

- A. Comply with NEMA WD 1 and UL 20.
- B. Switches, 120/277 V, 20 A:
1. Products: Subject to compliance with requirements, provide one of the following:
    - a. Cooper; 2221 (single pole), 2222 (two pole), 2223 (three way), 2224 (four way).
    - b. Hubbell; CS1221 (single pole), CS1222 (two pole), CS1223 (three way), CS1224 (four way).
    - c. Pass & Seymour; 20AC1 (single pole), 20AC2 (two pole), 20AC3 (three way), 20AC4 (four way).

2.5 WALL PLATES

- A. Single and combination types to match corresponding wiring devices.
1. Plate-Securing Screws: Metal with head color to match plate finish.
  2. Material for Finished Spaces: Smooth, high-impact thermoplastic.
  3. Material for Unfinished Spaces: Galvanized steel.
  4. Material for Damp Locations: Cast aluminum with spring-loaded lift cover, and listed and labeled for use in "wet locations."

2.6 SAFETY SWITCHES

- A. Characteristics:
1. Enclosure - Heavy Duty, NEMA Type 1, 12 or 3R, as indicated on drawings, fabricated from code gauge steel. Finish in gray enamel applied by baking process after steel has been thoroughly degreased. NEMA 3R switches shall have RFR rotting clearly displayed. Altered NEMA 12 switches will not be accepted as substitute for 3R rating.

2. Provide provisions for three (3) padlocks when handle is in the "OFF" position.

3. Switchblades to open in a forward position for visible indication that the switch is de-energized.

4. Rejection type fuses of the size and voltage characteristics as indicated.

- B. Approved Manufacturers: Square D, Siemens and General Electric.

2.7 MOTOR RATED SWITCHES

- A. Switches provided to serve as motor disconnects for furnace motors shall be single pole, 120 VAC, toggle switch type manual switch with heater elements. Switch shall be provided with heater elements providing Class 20 protection. Provide Allen Bradley 600-TAXX with type W heater elements or equal. Contractor shall size and submit heater elements based upon furnace full load amps.

2.8 FINISHES

- A. Color: Wiring device catalog numbers in Section Text do not designate device color.
1. Wiring Devices and associated coverplates Connected to Normal Power Systems: WHITE or As selected by Owner or Architect, unless otherwise indicated or required by NFPA 70 or device listing. Device plate color shall match device color.
  2. Wiring Devices and associated coverplates Connected to Emergency Power System shall be red.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Comply with NECA 1, including the mounting heights listed in that standard, unless otherwise noted.
- B. Coordination with Other Trades:
1. Install device boxes in brick or block walls so that the cover plate does not cross a joint unless the joint is traveled flush with the face of the wall.
  2. Install wiring devices after all wall preparation, including painting, is complete.
- C. Conductors:
1. Strip insulation evenly around the conductor using tools designed for the purpose. Avoid scoring or nicking of solid wire or cutting strands from stranded wire.
  2. The length of free conductors at outlets for devices shall meet provisions of NFPA 70, Article 300, without pigtails.

D. Device Installation:

1. Replace all devices that have been in temporary use during construction or that show signs that they were installed before building finishing operations were complete.
  2. Keep each wiring device in its package or otherwise protected until it is time to connect conductors.
  3. Do not remove surface protection, such as plastic film and smudge covers, until the last possible moment.
  4. Connect devices to branch circuits using pigtails that are not less than 6 inches (152 mm) in length.
  5. When conductors larger than No. 12 AWG are installed on 15- or 20-A circuits, splice No. 12 AWG pigtails for device connections.
  6. When mounting into metal boxes, remove the fiber or plastic washers used to hold device mounting screws in yokes, allowing metal-to-metal contact.
- E. Contractor shall coordinate exact location of poke-through assemblies with Architect and furniture supplier:
- F. Receptacle Orientation:
1. Install ground pin of vertically mounted receptacles down, and on horizontally mounted receptacles to the right.
- G. Device Plates: Do not use oversized or extra-deep plates. Repair wall finishes and remount outlet boxes when standard device plates do not fit flush or do not cover rough wall opening.

3.2 FIELD QUALITY CONTROL

- A. Tests for Convenience Receptacles:
1. Line Voltage: Acceptable range is 105 to 132 V.
  2. Ground impedance: Values of up to 2 ohms are acceptable.
  3. GFCI Trip: Test for tripping values specified in UL 1436 and UL 943.
  4. Using the test plug, verify that the device and its outlet box are securely mounted.

END OF SECTION

SECTION 16L - LIGHTING

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes the following:
1. Interior lighting fixtures, lamps, and ballasts.
  2. Exit signs.

1.2 SUBMITTALS

- A. Product Data: For each type of lighting fixture, arranged in order of fixture designation. Include data on features, dimensions, finishes, and accessories.
- B. Shop Drawings: Show details of nonstandard or custom lighting fixtures. Indicate dimensions, weights, methods of field assembly, components, features, and accessories.

1.3 QUALITY ASSURANCE

- A. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.
- B. Comply with NFPA 70.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. In Interior Lighting Fixture Schedule where titles below are column or row headings that introduce lists, the following requirements apply to product selection:
1. Manufacturers: Subject to compliance with requirements, provide products by the manufacturers specified.

2.2 LIGHTING FIXTURES AND COMPONENTS, GENERAL REQUIREMENTS

- A. Recessed Fixtures: Comply with NEMA LE 4 for ceiling compatibility for recessed fixtures.
- B. Fluorescent Fixtures: Comply with UL 1598. Where LER is specified, test according to NEMA LE 5 and NEMA LE 5A as specified.
- C. Sheet Metal Components: Steel, unless otherwise indicated. Form and support to prevent warping and sagging.
- D. Doors, Frames, and Other Internal Access: Smooth operating, free of light leakage under operating conditions and designed to permit relamping without use of tools. Designed to prevent doors, frames, lenses, diffusers, and other components from falling accidentally during relamping and when secured in operating position.
- E. Reflecting surfaces shall have minimum reflectance as follows, unless otherwise indicated:
1. White Surfaces: 85 percent.
  2. Specular Surfaces: 85 percent.
  3. Diffusing Specular Surfaces: 75 percent.
  4. Laminated Silver Metallized Film: 90 percent.

2.4 EXIT SIGNS

- A. Internally Lighted Signs: Comply with UL 924; for sign colors, visibility, luminance, and lettering size, comply with authorities having jurisdiction.
1. Lamps for AC Operation: LEDs, 70,000 hours minimum rated lamp life.

2.5 LAMPS

- A. Approved Manufacturers:
1. Osram Sylvania.
  2. Philips.
  3. General Electric.
- B. T8 Rapid-Start low-mercury Fluorescent Lamps: Rated 32 W maximum, nominal length 48 inches, 2800 initial lumens (minimum), CRI 82 (minimum), color temperature 3500 K, and average rated life 20,000 hours, unless otherwise indicated.

2.6 LIGHTING FIXTURE SUPPORT COMPONENTS

- A. Single-Stem Hangers: 1/2-inch steel tubing with swivel ball fittings and ceiling canopy. Finish same as fixture.
- B. Twin-Stem Hangers: Two, 1/2-inch steel tubes with single canopy designed to mount a single fixture. Finish same as fixture.
- C. Wire: ASTM A 641/A 641M, Class 3, soft temper, zinc-coated steel, 12 gage.
- D. Rod Hangers: 3/16-inch minimum diameter, cadmium-plated, threaded steel rod.

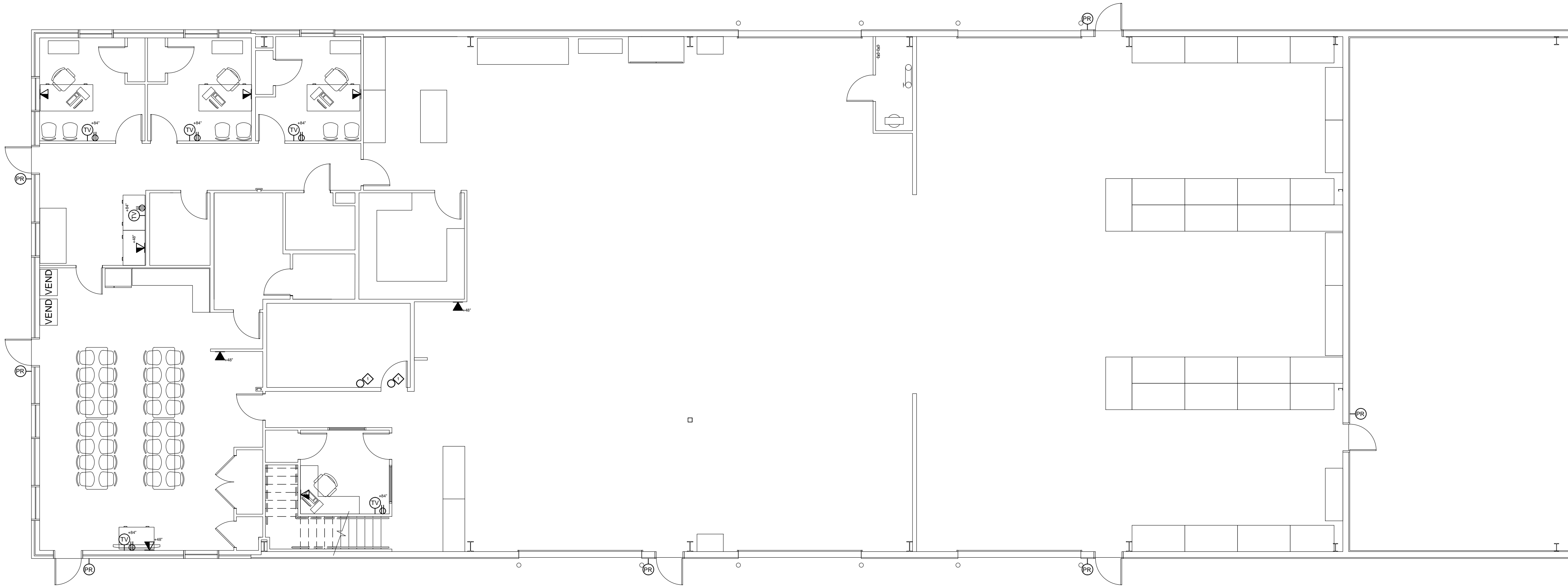
PART 3 - EXECUTION

3.1 INSTALLATION

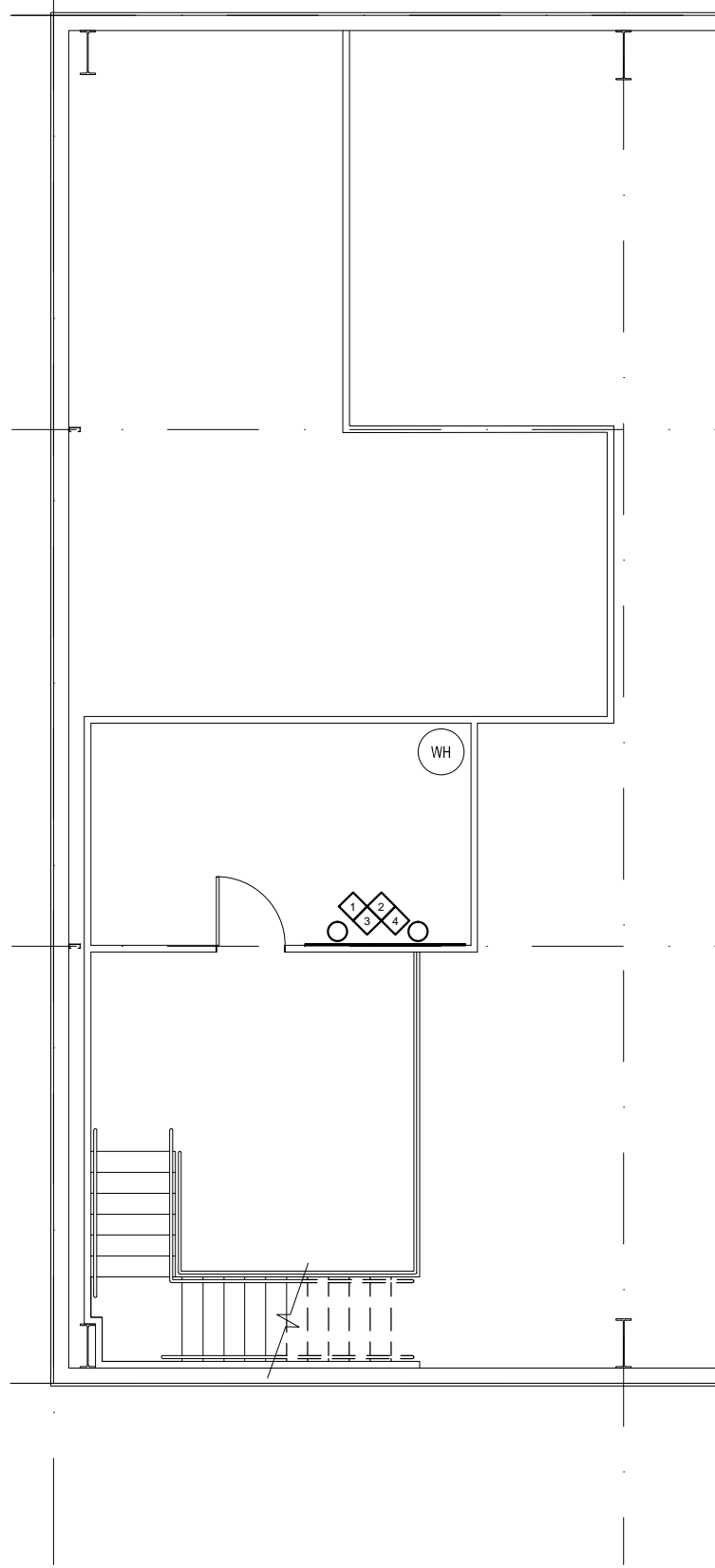
- A. All equipment, wiring and installation shall be in accordance with the National Electrical Code, applicable local codes, and accepted industry standard of care and practice, and shall be thermally protected where necessary and shall not void any UL listings or labels. This shall include the integration of lighting equipment and controls.
- B. Install light fixtures and equipment at locations and heights as indicated, in accordance with fixture manufacturer's written instructions and recommendations, applicable requirements of NEC, NECA's "Standard of Installation," NEMA standards, and with recognized industry practices to ensure that light fixtures fulfill requirements.
- C. Set light fixtures level, plumb and square with ceiling and walls.
- D. Secure all fixtures to structural support members of building. Provide all steel supports necessary for lighting fixtures in addition to those specified under general building construction.
- E. Support light fixtures independent of ceiling framing.
- F. Support surface mounted light fixtures greater than 2 feet in length at a point in addition to the outlet box fixture stud.
- G. Exposed Grid Ceilings: Support surface-mounted light fixtures on grid ceiling directly from building structure.
- H. Fasten light fixtures securely to indicated structural supports; and ensure that pendant fixtures are plumb and level. Provide individually mounted pendant fixtures longer than 2 feet with twin stem hangers. Provide stem hanger with ball signers and provisions for minimum one inch vertical adjustment. Mount continuous rows of fixtures with an additional stem



PROJECT: CITY OF BARDSTOWN PUBLIC WORKS BUILDING - FILE: DT1.01 Data and Low Voltage Wiring.dwg - DATE: Sep 02, 2020 8:17AM - BY: ERIC KEYES



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



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






FOR DOOR CONTROL SYSTEM BIDS, CONTACT:

INTERSTATE SECURITY SYSTEMS INC.  
BRIAN CHESSER  
502-348-2106  
brian.chesser@interstatesecuritysystems.com

STRUCTURED WIRING SPECIFICATIONS

- A. ALL CABLE AND OUTLET CONNECTORS SHALL MEET ALL REQUIREMENTS OF ANSI/TIA/EIA-568-C.2, ISO/IEC 11801 AND CENELEC 50173 FOR PERFORMANCE LEVEL SPECIFIED.
- B. ALL CABLING, OUTLET CONNECTORS AND FACEPLATES TO BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS AND BEST INDUSTRY PRACTICES.
- C. DATA CABLING SHALL BE UL LISTED & 3RD PARTY VERIFIED, 4-PAIR UTP CABLING WITH 23-24 AWG SOLID COPPER CONDUCTORS WITH THE FOLLOWING PERFORMANCE TESTING: CAT-5E = 200 MHZ, CAT-6 = 250 MHZ, CAT-6A = 500 MHZ, AND SHALL BE PLENUM RATED COMPLYING WITH NFPA 262.
- D. CABLES SHALL BE UNIQUELY IDENTIFIED BY A SELF-ADHESIVE LABEL ON BOTH ENDS OF THE CABLE. ALL LABELING INFORMATION SHALL BE RECORDED ON THE AS-BUILT DRAWINGS.
- E. OUTLETS SHALL BE COMMSCOPE UNIPRISE M SERIES OR EQUAL, CONSISTING OF 8-POSITION, 8 WIRE MODULAR RJ-45 JACKS WITH SUPPORT FOR TIA/EIA 568A AND 568B WIRING SCHEMES.
- F. ALL OUTLETS SHALL BE PRODUCED BY THE SAME MANUFACTURER AND SHALL BE DESIGNED TO BE FLUSH MOUNT IN THE FACEPLATE, ADAPTER PLATE OR MOUNTING STRAP.
- G. FACEPLATES SHALL WALL-MOUNTED, FRONT LOADING, MODULAR FRAMES THAT ACCEPT SNAP-IN ADAPTER HOUSINGS AND AVAILABLE TO FIT SINGLE-GANG OR DOUBLE-GANG OUTLET BOXES IN STANDARD COLORS TO MATCH ELECTRICAL PLATES WITH ADAPTER HOUSINGS, BLANK INSERTS, AND MEDIA INSERTS TO MATCH COLOR. FACEPLATE FRAME SHALL BE COMPLETELY POPULATED. FILL EMPTY SPACES WITH BLANK ADAPTER HOUSINGS. PROVIDE LABEL WITH CLEAR LABEL COVER.

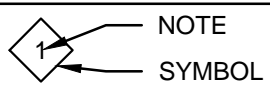
DATA & LOW VOLTAGE SCHEDULE

SYMBOL	NAME	LOCATION*	WIRE	CONNECTOR	NOTES
	PROXIMITY READER	STRIKE SIDE OF DOOR +42" - 46"	-	-	TO BE PAIRED WITH DOOR CONTROL - SEE INTERSTATE SECURITY FOR MORE INFORMATION
	PHONE JACK	+42" - 46"	BLUE CAT-6	BLUE CAT-6 JACK	
	PHONE JACK / DATA JACK COMBO	+18" - 24"	SEE PHONE JACK / DATA JACK	SEE PHONE JACK / DATA JACK	INSTALL IN SINGLE PLATE - SEE RESPECTIVE TYPE FOR INDIVIDUAL WIRING REQUIREMENTS
	DATA JACK	+36" - 42"	WHITE OR GRAY CAT-6	WHITE OR IVORY CAT-6 JACK	
	CABLE TV OUTLET	+60" - 72"	RG6 QUAD SHIELD COAXIAL CABLE	F COMPRESSION CONNECTOR	POWER OUTLET TO BE LOCATED W/ CABLE BOX - WIRE ROUTED TO MECHANICAL ROOM #203

\* FOR BOXES MOUNTED TO A WALL - UNLESS SPECIFIED ON THE FIXTURE - THIS VALUE REPRESENTS THE DISTANCE FROM FINISHED FLOOR TO THE BOTTOM OF THE BOX

SHEET NOTES:

- 10" DIA. HOLE IN MEZZANINE DECK TO EQUIPMENT ABOVE - CENTER HOLE AS BEST AS POSSIBLE UNDER EQ. WHILE MISSING FLOOR JOISTS
- DOOR CONTROL HARDWARE BY INTERSTATE SECURITY SYSTEMS - SEE CONTACT INFO.
- NETWORKING HARDWARE BY OWNER
- PHONE SYSTEM HARDWARE BY OWNER



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DATA AND LOW VOLTAGE WIRING

DT1.01

NEW CONSTRUCTION:

CITY OF BARDSTOWN  
PUBLIC WORKS BUILDING  
PADGETT WAY  
BARDSTOWN, KY

KEYES ARCHITECTS & ASSOCIATES  
4717 PRESTON HIGHWAY  
LOUISVILLE, KENTUCKY 40213 (502) 636-5113



PROJECT NO:  
19-3060  
DRAWN BY:  
NM/CS/  
DATE:  
05-27-2020







PROJECT: CITY OF BARDSTOWN PUBLIC WORKS BUILDING - FILE: P1.02 Plumbing Details.dwg - DATE: Sep 01, 2020 3:56PM - BY: ERIC KEYES



EW/SS

### S19-310 Combination Drench Shower/Eyewash Unit

- Exceeds American National Standard Z358.1 Specifications
- Galvanized Steel Protected with BradTec® Safety Yellow Coating
- Combination Units may be Top-Supplied or Mid-Supplied
- Universal Identification Sign and Inspection Tag Included
- Full, One-Year Warranty
- SpliTec® showerheads are covered by one or more of the following patents: 6113446; D594,089; D669,555; Reg. Comm. Des. 0001079560-0001. Other patents pending.
- Classified by Underwriters Laboratory Inc. to ANSI Z358.1

#### Specifications

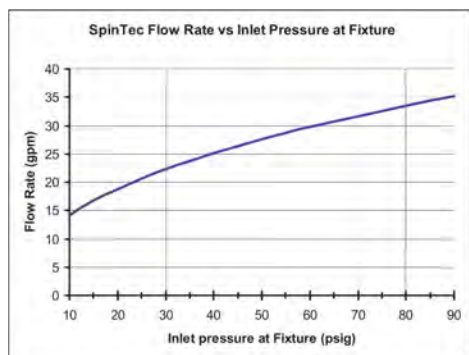
Combination Drench Shower/Eyewash Unit saves space and fits easily into any work environment. Shower valve operates quickly by a pull rod with a triangular handle. Shower provides a superior washdown with a more even spray pattern. Eyewash operated by a large, highly visible push handle. Safe, steady water flow under varying water supply conditions from 30-90 PSI is assured by integral flow control in the sprayhead assembly. NOTE: The ANSI Z358.1 standard requires an uninterrupted supply of flushing fluid at a minimum 30 PSI flowing pressure.

☒ This plumbing fixture is not intended to dispense water for human consumption through drinking or for preparation of food or beverages.

#### Standard Equipment

##### SpliTec® Showerhead

Standard showerhead is 3.1" (78.7mm) diameter highly visible yellow impact-resistant plastic. SpliTec drench showerhead features integral 22 GPM flow control, conserving water and helping to accurately size your rapid water system.



**Shower Valve**  
Chrome-plated brass 1" NPT stay-open ball valve. Operated by a stainless steel rod with triangular handle.

##### Eye Wash Bowl

10" (254mm) diameter yellow impact-resistant plastic.

##### Standard Sprayhead Assembly

Chrome-plated brass sprayhead with twin soft-flow eyewash heads and protective sprayhead covers. Safe, steady water flow under varying water supply conditions from 30-90 PSI is assured by integral flow control in the sprayhead assembly.

##### Eyewash Valve

Chrome-plated brass 1/2" NPT stay-open ball valve. Hand operated by highly visible safety yellow PVC push handle.

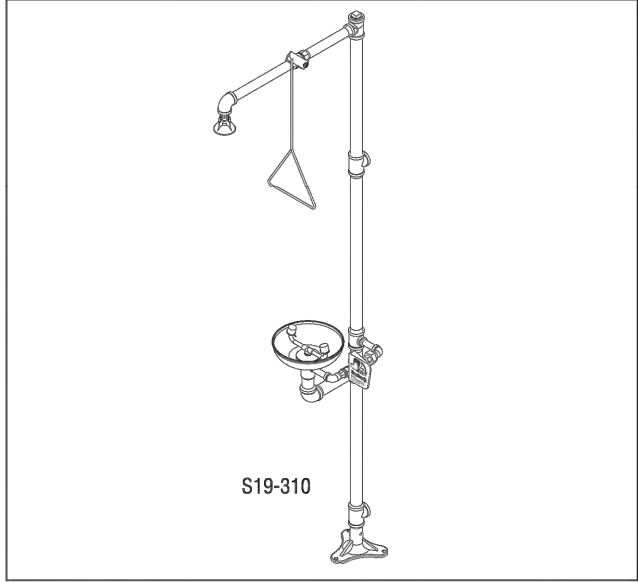
##### Pipe and Fittings

1 1/2" galvanized steel with BradTec® safety yellow coating.

##### Water Supply

1 1/4" NPT.

Page 1 of 2  
This information is subject to change without notice.  
Bradley\_SafetyCombi\_S19-310



☒ Local codes may require the installation of a backflow prevention valve to complete proper installation. Compliance with local codes is the responsibility of the installer. Valve must be tested annually to verify that it is functioning properly. Backflow prevention valves are not included with the fixture and may be supplied by the contractor or purchased from Bradley Corporation.

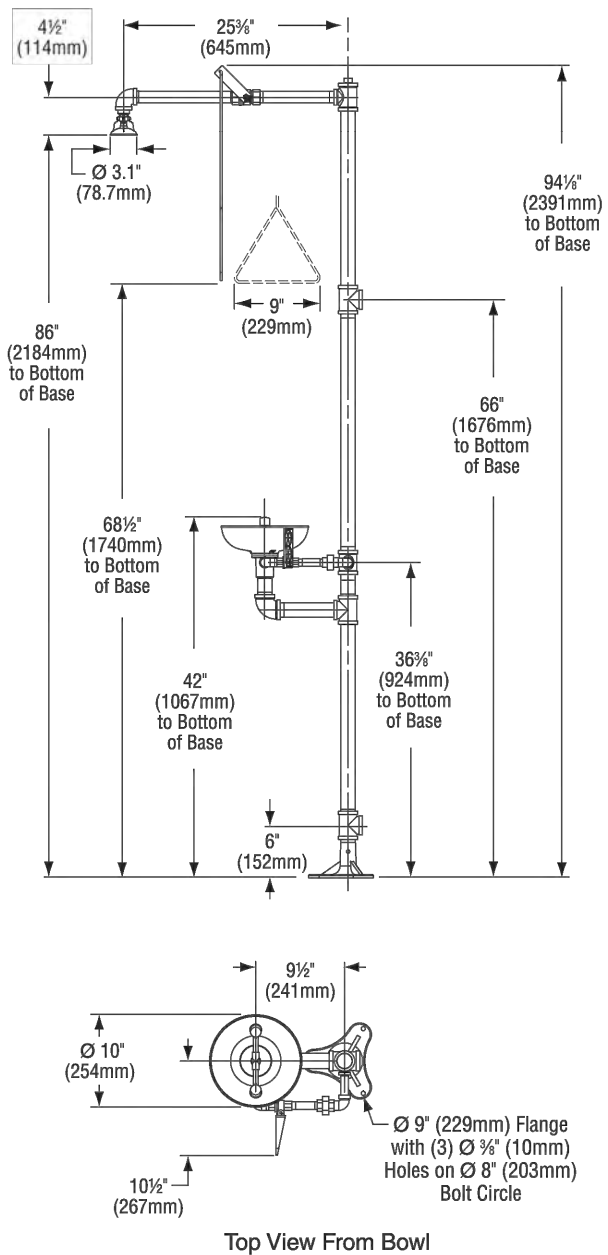
Model	Description
X S19-310	Drench Shower/Eyewash - Plastic Showerhead and Bowl
X S19-2200	Navigator EPX60 - Emergency Thermostatic Mixing Valve



© 2015 Bradley  
P.O. Box 309, Menomonee Falls, WI 53052-0309  
800 BRADLEY (800 272 3539) +1 262 251 6000  
bradleycorp.com



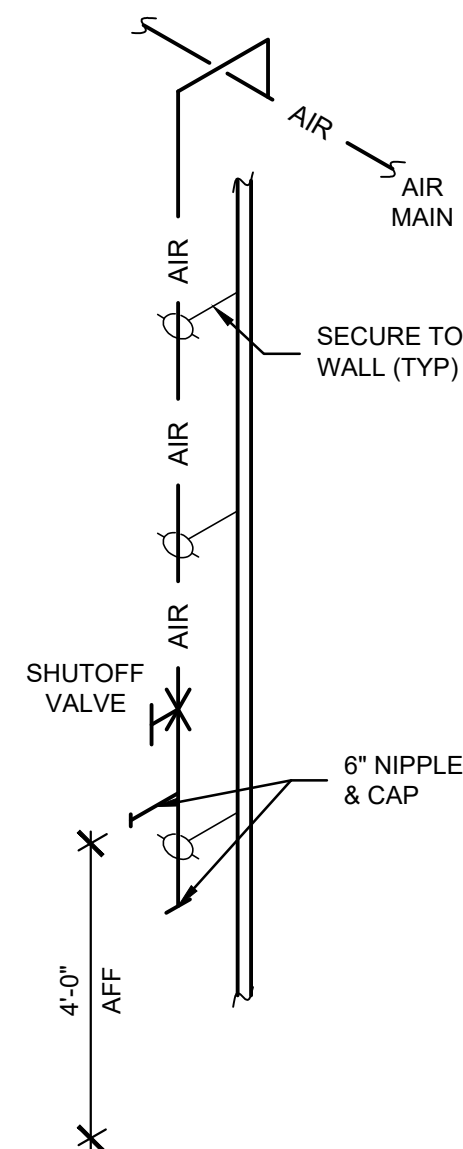
### S19-310 Combination Drench Shower/Eyewash Unit



☒ All dimensions assume standard thread engagement. Variations in manufacturing allow for 4/-1/8" (3mm) per threaded joint. To find the tolerance of a dimension, add the number of thread joints in between a dimension and multiply it by 1/8" (3mm).

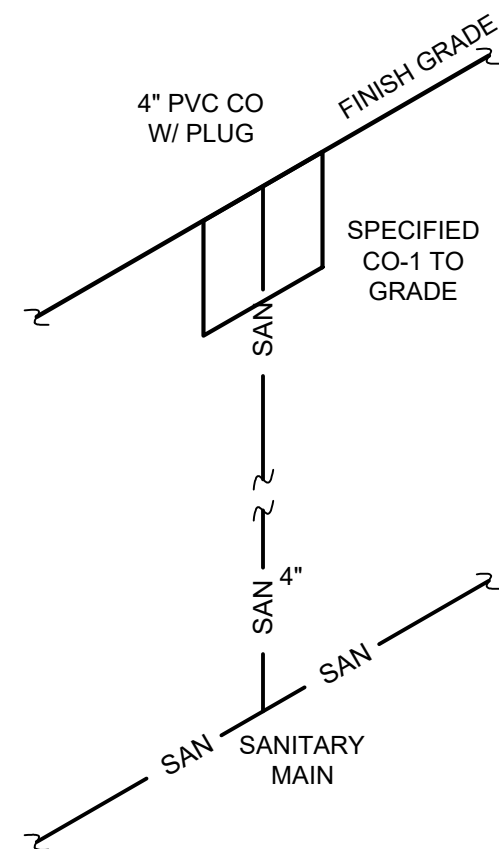
Page 2 of 2  
This information is subject to change without notice.  
Bradley\_SafetyCombi\_S19-310

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P.O. Box 309, Menomonee Falls, WI 53052-0309  
800 BRADLEY (800 272 3539) +1 262 251 6000  
bradleycorp.com



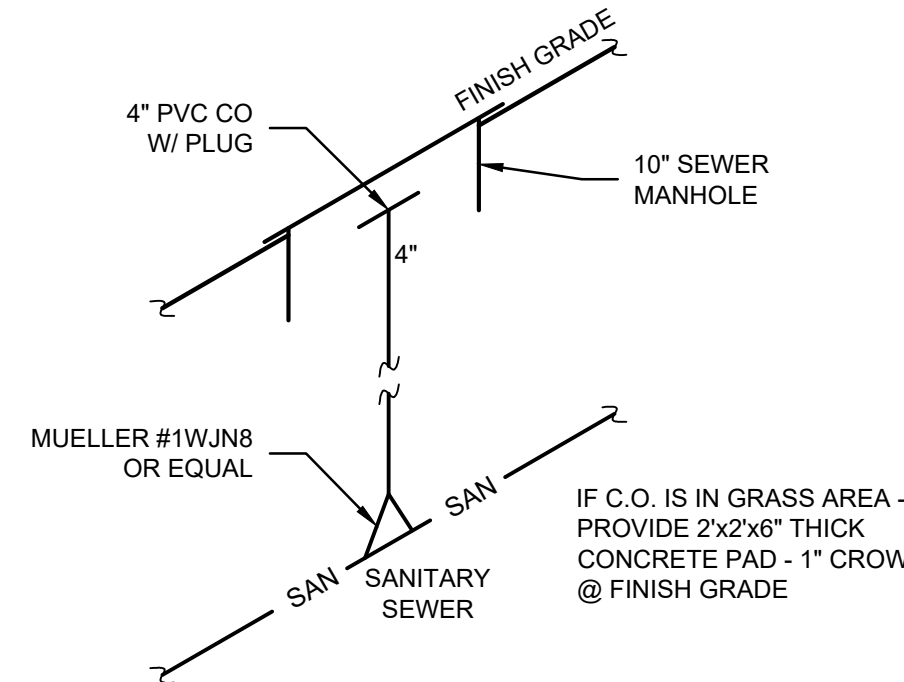
## 01 COMP AIR OUTLET DETAIL

SCALE: NTS



## 02 FCO DETAIL

SCALE: NTS



## 03 DETAIL TWCO

SCALE: NTS



KEYES ARCHITECTS & ASSOCIATES  
4717 PRESTON HIGHWAY  
LOUISVILLE, KENTUCKY 40213 (502) 636-5113

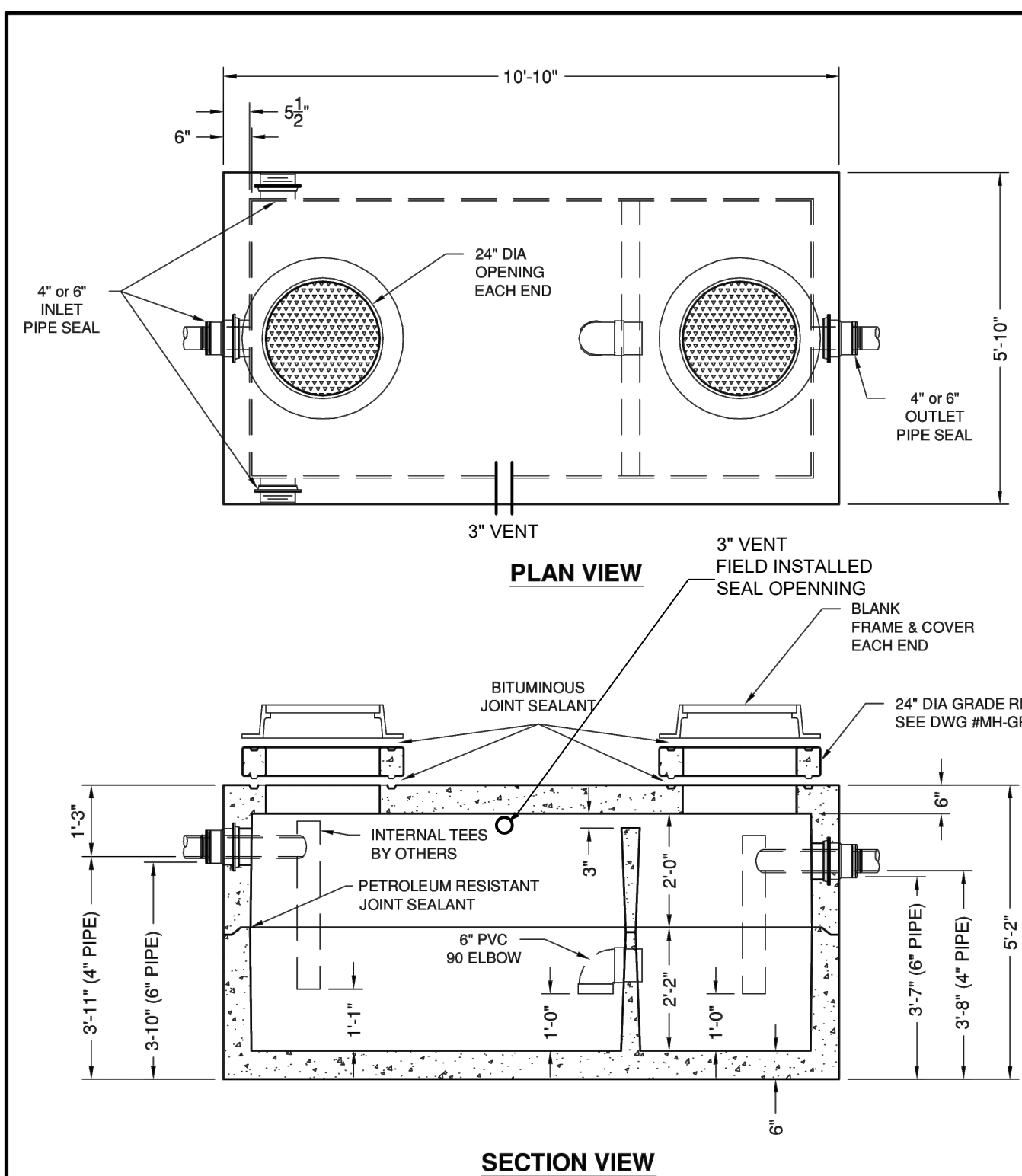
NEW CONSTRUCTION:  
CITY OF BARDSTOWN  
PUBLIC WORKS BUILDING  
PADGETT WAY  
BARDSTOWN, KY

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PLUMBING DETAILS

P1.02

OW/SEP



"NPCA" CERTIFIED PLANT  
16700 SIMA GRAY RD, HENRYVILLE, IN 47126  
Phone: (812) 246-6258 Fax: (812) 294-4862

#### SPECIFICATIONS

CONCRETE: 4500 PSI @ 28 DAYS  
REINFORCEMENT: ASTM A-615, GR 60  
LOAD DESIGN: AASHTO HS-20

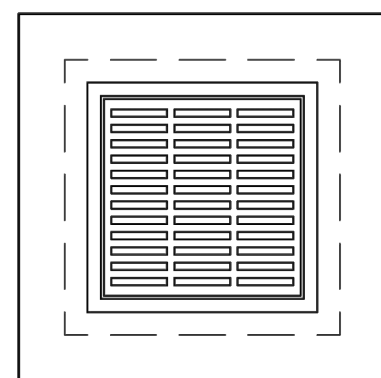
WEIGHT: BOT 9,803# TOP 9,331#

OIL WATER SEPARATOR  
1000 GALLON  
TRAFFIC

DATE: 10-17-16 DWG #GT-1000-OIL

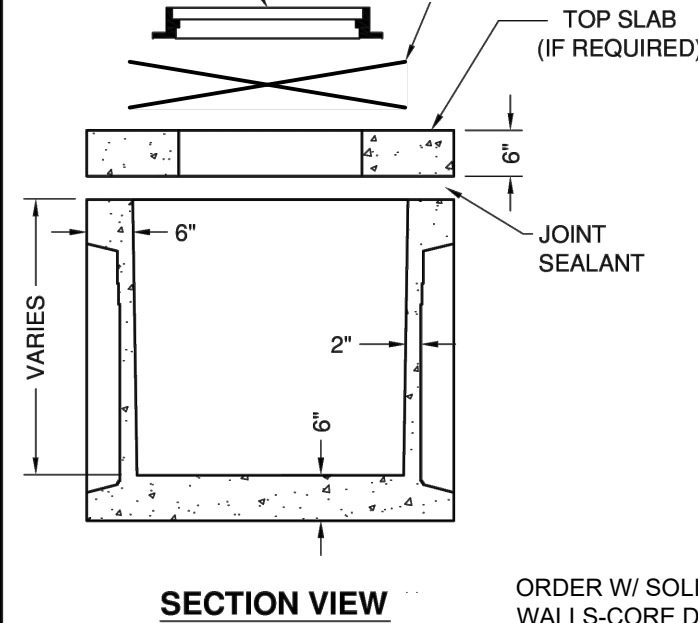
CB W/CREAT

TOP SLAB AVAILABLE  
FOR ALTERNATE  
CASTING SIZES

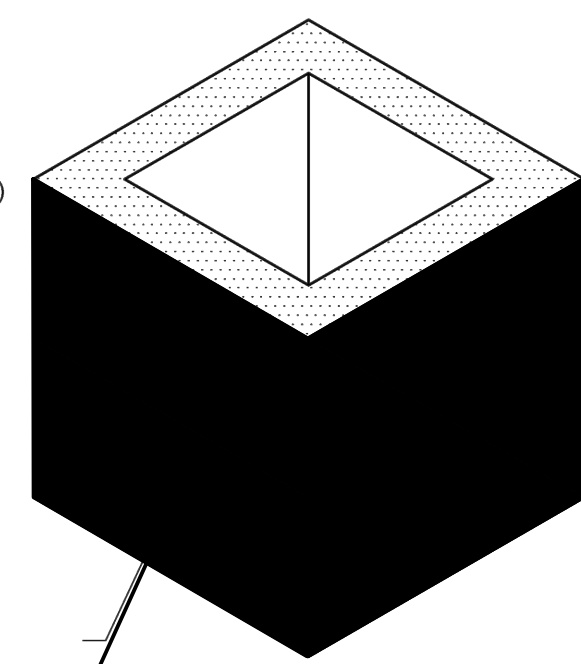


#### PLAN VIEW

3'X3' FORKLIFT CASTING



#### SECTION VIEW



#### ISOMETRIC VIEW

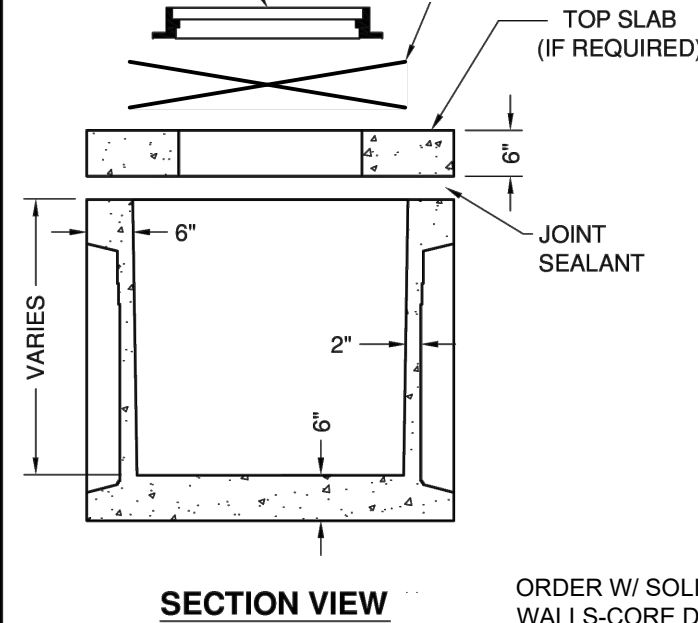
#### KNOCKOUT BOX SIZES

SIZE (ID)	BASE HEIGHT (ID)	MAX RCP PIPE SIZE	MAX HDPE PIPE SIZE	BASE WEIGHT
12" x 12"	14"	N/A	8"	252#
18" x 18"	24"	12"	15"	1,358#
2' x 2'	30"	15"	18"	2,018#
24" x 30"	36"	15"/21"	18"/24"	2,525#
2' x 3'	36"	15"/21"	18"/24"	2,781#
30" x 30"	42"	24"	30"	4,700#
3' x 3'	42"	24"	30"	3,725#
* 4' x 4'	54"	36"	36"	6,066#

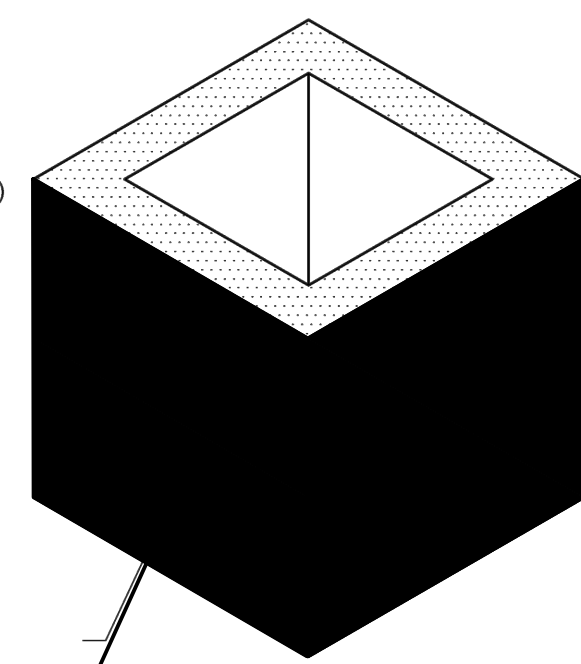
SEE INDIVIDUAL DRAWING FOR  
SPECIFIC DETAILS

#### PLAN VIEW

3'X3' FORKLIFT CASTING



#### SECTION VIEW



#### ISOMETRIC VIEW



"NPCA" CERTIFIED PLANT  
16700 SIMA GRAY RD, HENRYVILLE, IN 47126  
Phone: (812) 246-6258 Fax: (812) 294-4862

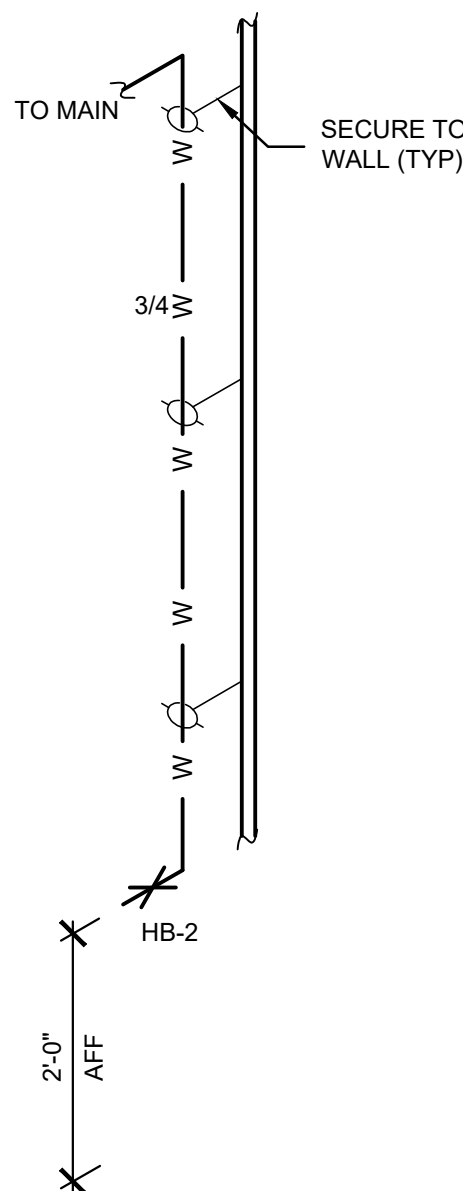
#### SPECIFICATIONS

CONCRETE: 4500 PSI @ 28 DAYS  
REINFORCEMENT: ASTM A-615, GR 60  
DESIGN LOAD: AASHTO HS-20

WEIGHT: See Chart

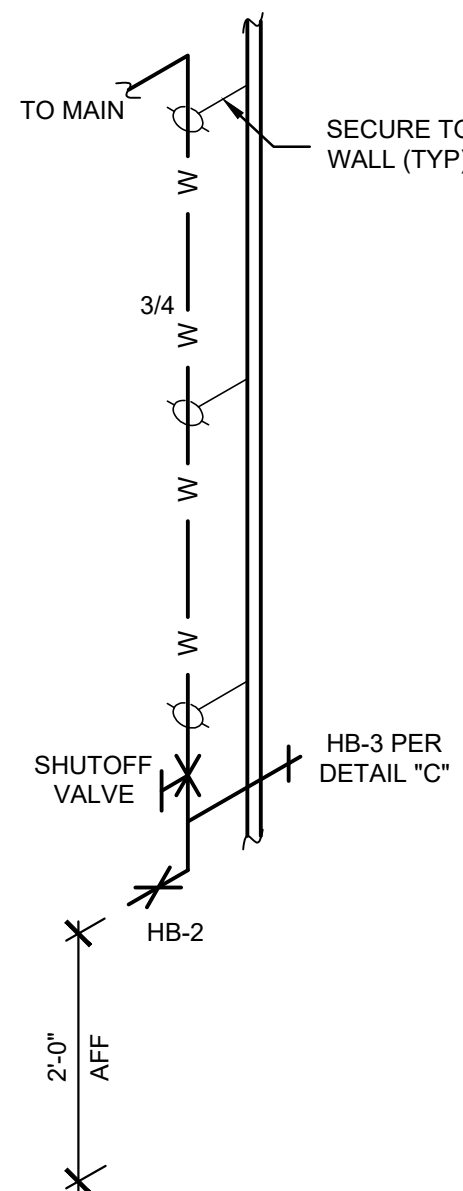
KNOCKOUT  
CATCH BASIN  
8" - 36" PIPE

DATE: 12-6-16 DWG #CB-KO-01



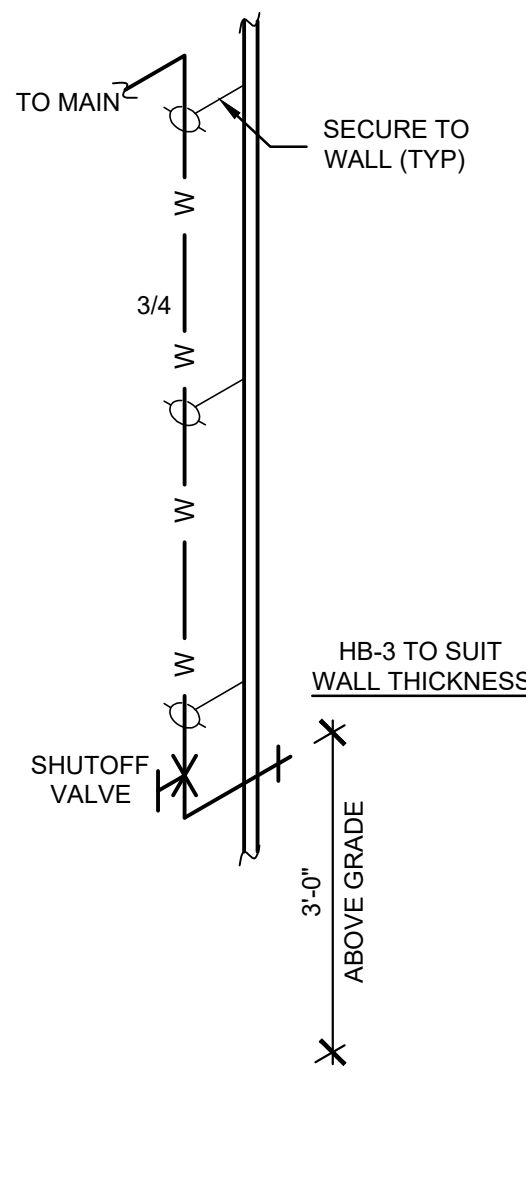
## 04 HOSE BIBB DETAIL "A"

SCALE: NTS



## 05 HOSE BIBB DETAIL "B"

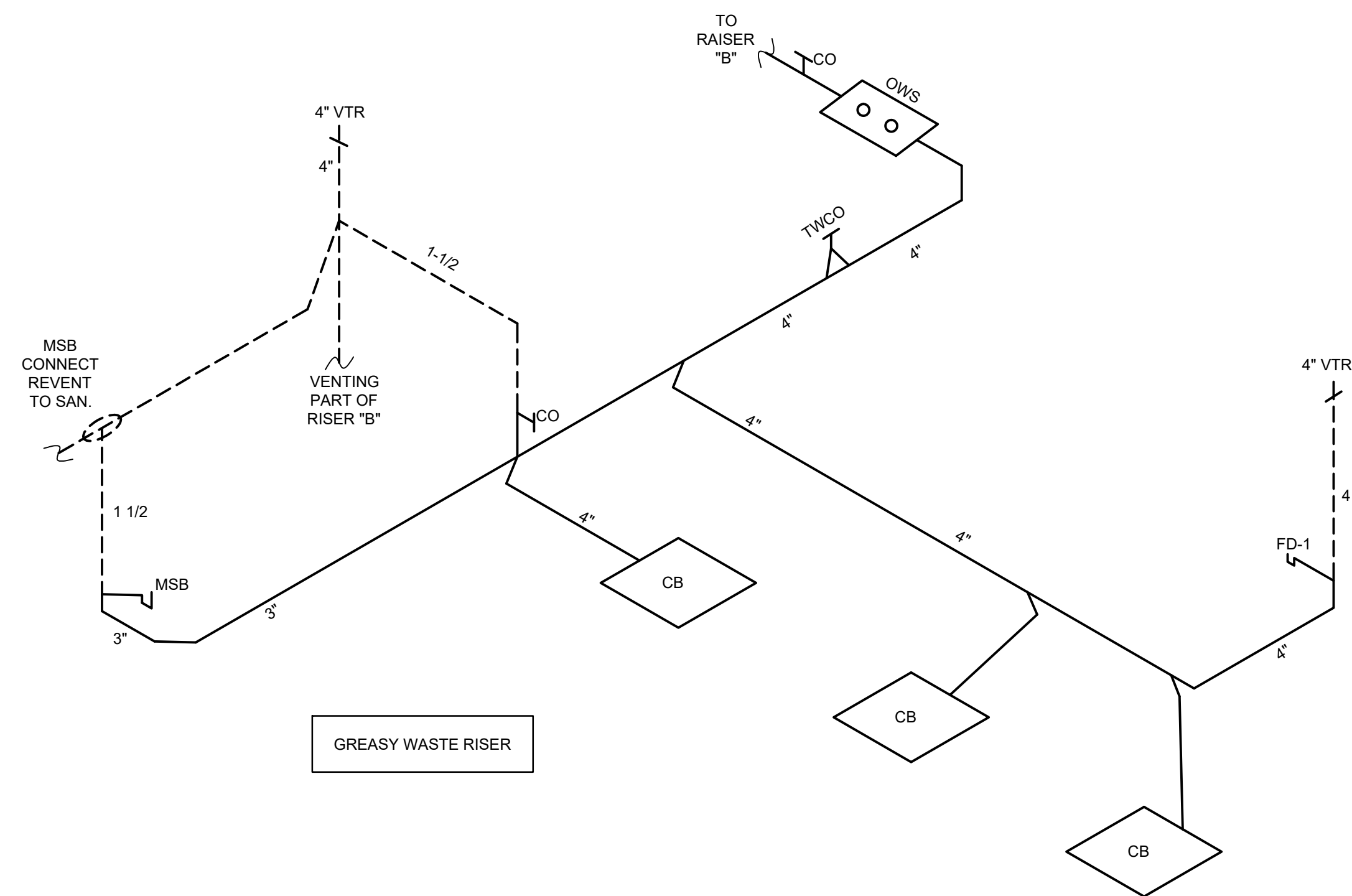
SCALE: NTS



## 06 HOSE BIBB DETAIL "C"

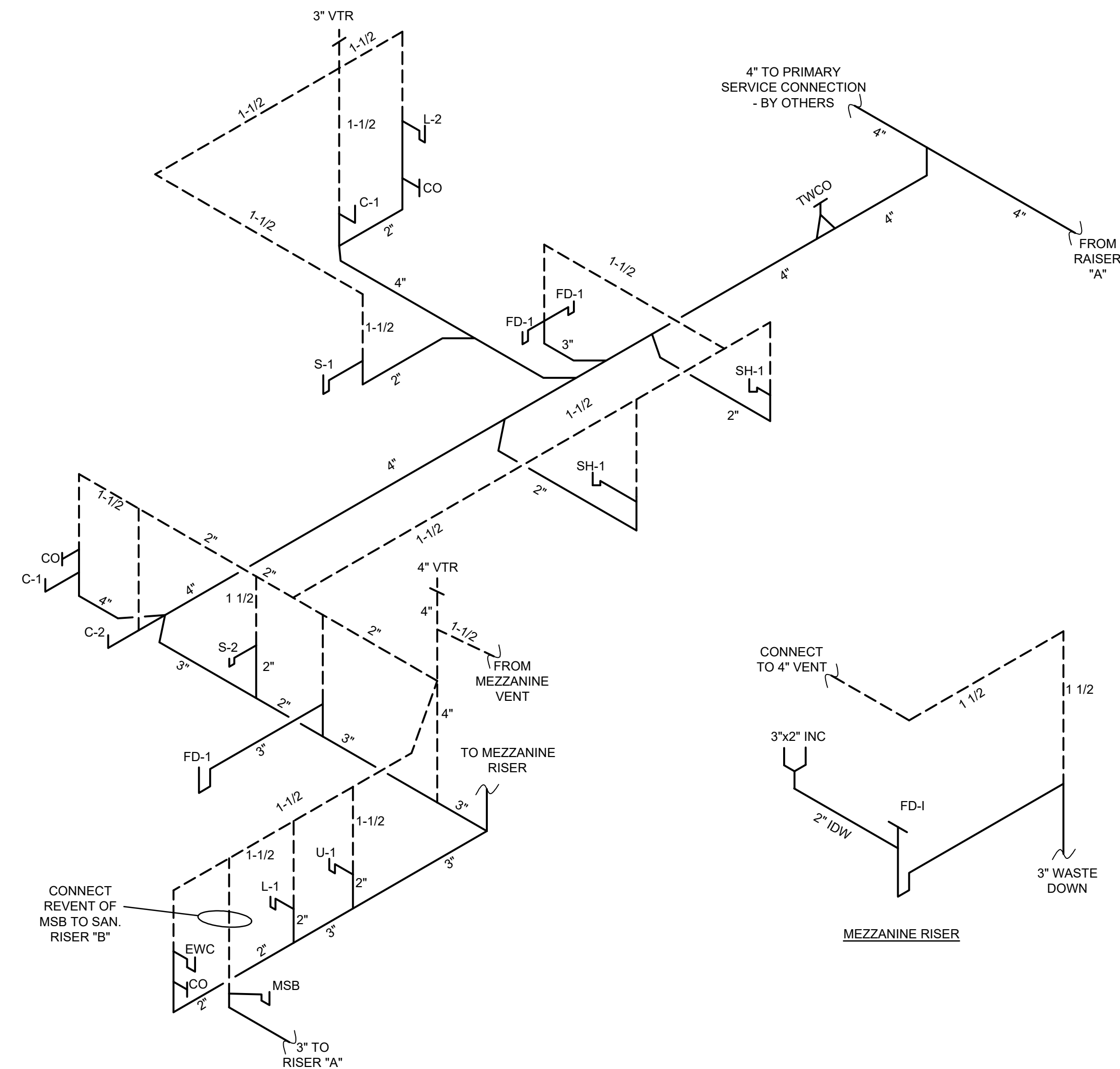
SCALE: NTS





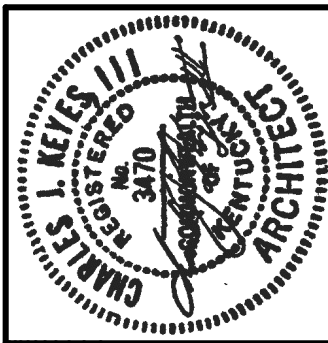
# 01 PLUMBING RISER "A"

SCALE: NTS



## 02 PLUMBING RISER "B"

SCALE: NTS



**KEYES ARCHITECTS & ASSOCIATES**  
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NEW CONSTRUCTION:  
CITY OF BARDSTOWN  
PUBLIC WORKS BUILDING  
PADGETT WAY  
BARDSTOWN, KY

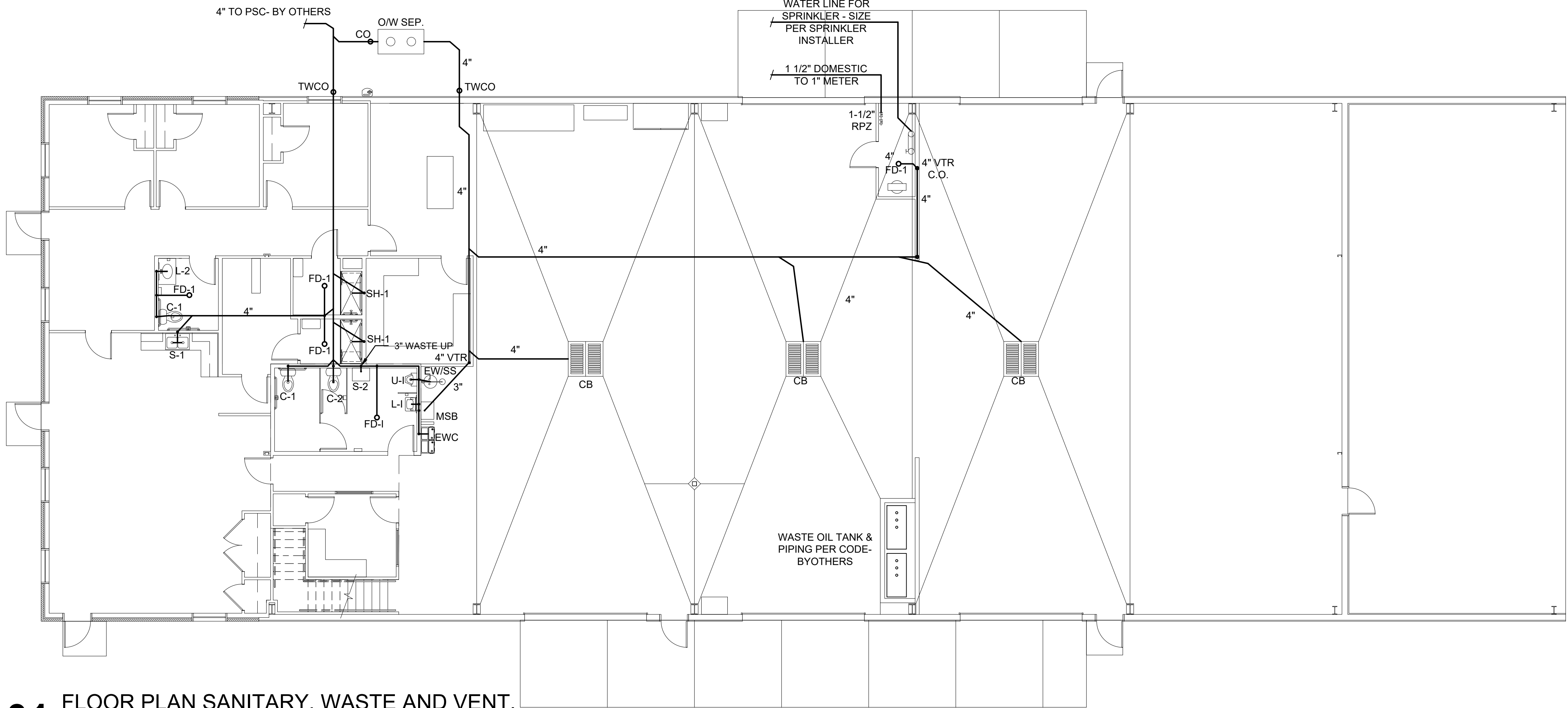
PLUMBING RISER

## P1.03

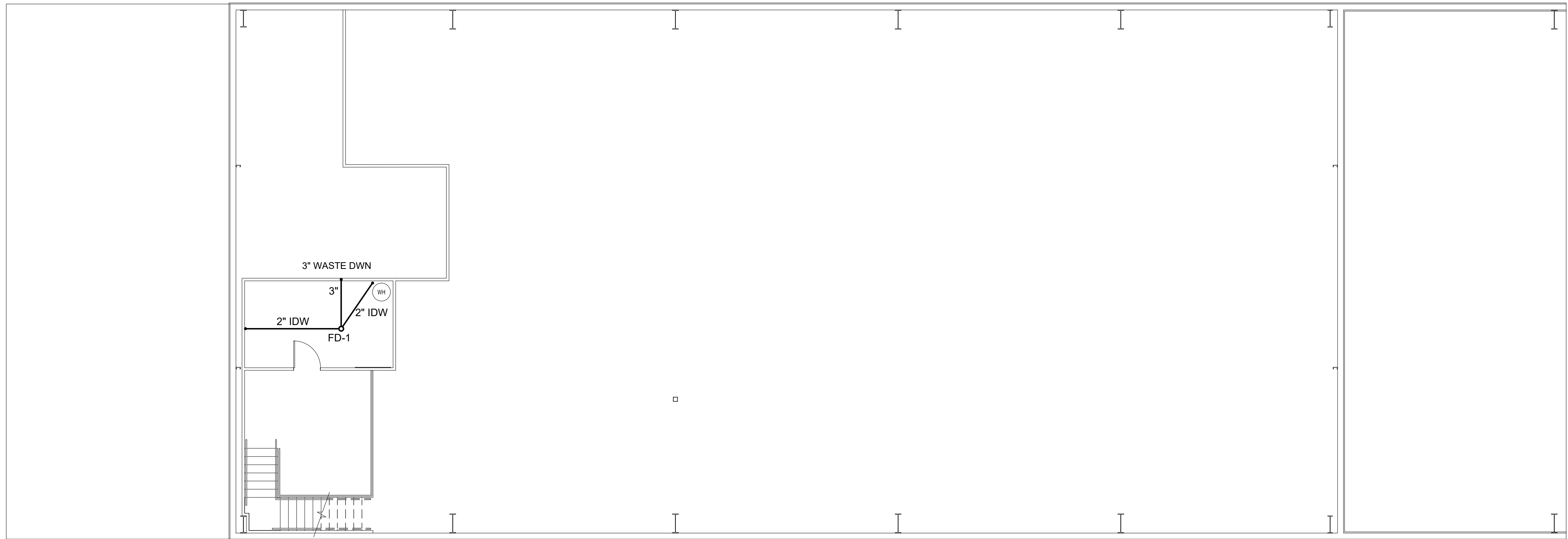
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PROJECT: CITY OF BARDSTOWN PUBLIC WORKS BUILDING - FILE: P2.01 Sanitary-Waste-Vent.dwg - DATE: Sep 01, 2020 3:56PM - BY: ERIC KEYES



**01** FLOOR PLAN SANITARY, WASTE AND VENT.  
SCALE: 1/8" = 1'-0"



**02** MEZZANINE FLOOR PLAN SANITARY, WASTE AND VENT.  
SCALE: 1/8" = 1'-0"

PROJECT NO:  
19-3060  
DRAWN BY:  
NM/CS/  
DATE:  
05-27-2020



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NEW CONSTRUCTION:  
**CITY OF BARDSTOWN**  
**PUBLIC WORKS BUILDING**  
PADGETT WAY  
BARDSTOWN, KY

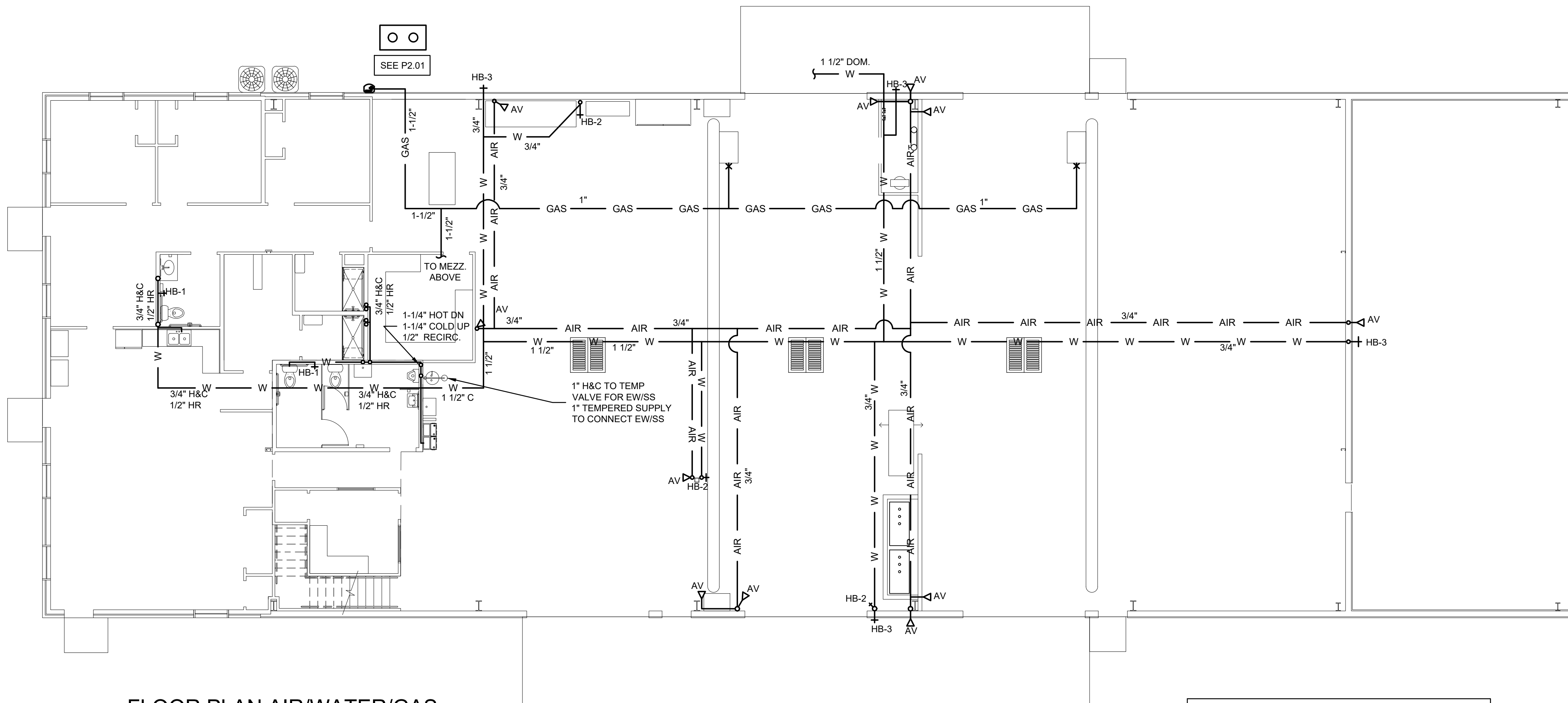
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SANITARY-WASTE-VENT

**P2.01**

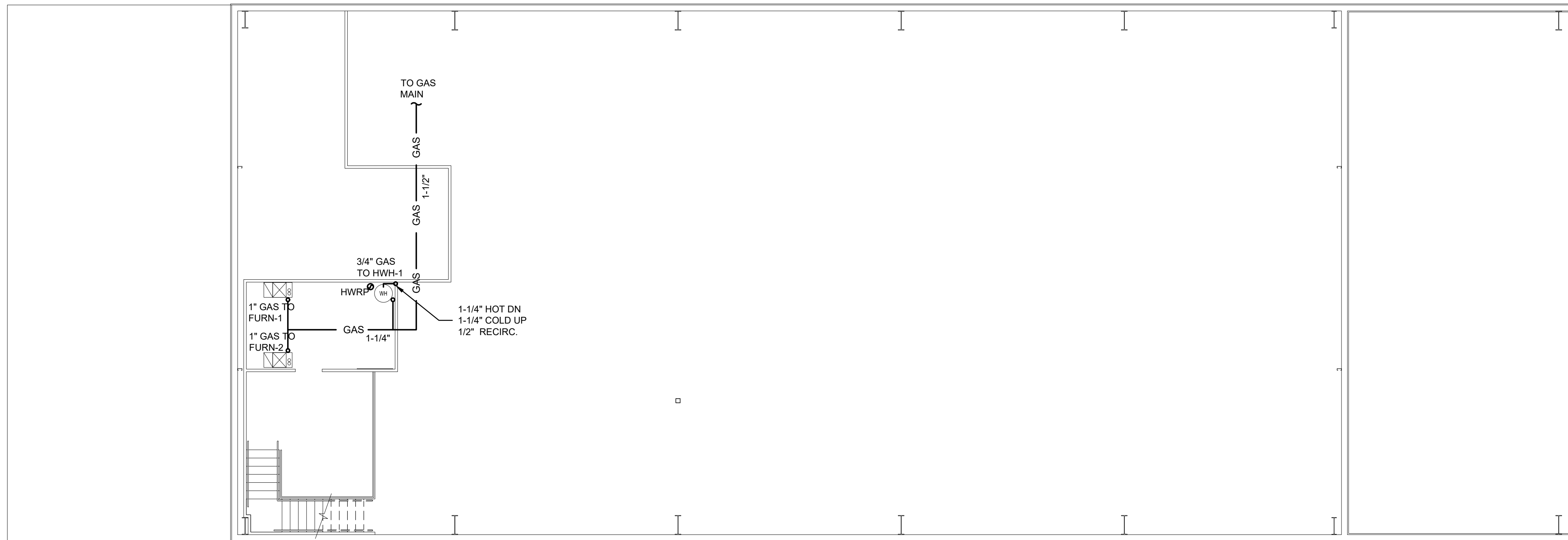


PROJECT: CITY OF BARDSTOWN PUBLIC WORKS BUILDING - FILE: P2.02 Floor Plan Air-Water-Gas.dwg - DATE: Sep 01, 2020 3:56PM - BY: ERIC KEYES



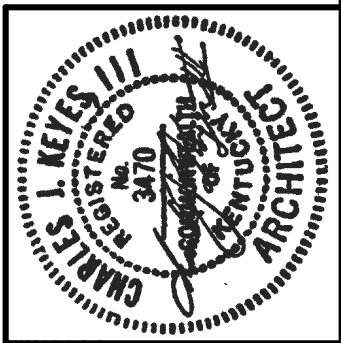
**01** FLOOR PLAN AIR/WATER/GAS  
SCALE: 1/8" = 1'-0"

NOTE: PROVIDE WATER SUPPLY  
PIPE SIZING PER CODE



**02** MEZZANINE PLAN AIR/WATER/GAS  
SCALE: 1/8" = 1'-0"

PROJECT NO:  
19-3060  
DRAWN BY:  
NM/CS/  
DATE:  
05-27-2020



**KEYES ARCHITECTS & ASSOCIATES**  
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LOUISVILLE, KENTUCKY 40213 (502) 636-5113

NEW CONSTRUCTION:  
**CITY OF BARDSTOWN**  
**PUBLIC WORKS BUILDING**  
PADGETT WAY  
BARDSTOWN, KY

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FLOOR PLAN  
AIR-WATER-GAS  
**P2.02**



PROJECT: CITY OF BARDSTOWN PUBLIC WORKS BUILDING - FILE: SP1.03 Specifications.dwg - DATE: Sep 01, 2020 3:37PM - BY: ERIC KEYES

BARDSTOWN PUBLIC WORKS

NEW BUILDING AT

PADGETT WAY, BARDSTOWN, KY 40004

THE CITY OF BARDSTOWN WILL BE ACCEPTING BIDS ON THE NEW PUBLIC WORKS BUILDING FOR THE CITY OF BARDSTOWN PUBLIC WORKS DEPARTMENT. THE BUILDING SITE WILL BE FINISHED BY THE CITY AND A BUILDING PAD WILL BE SUPPLIED FOR WORK CONTAINED IN THESE DOCUMENTS. ADDITIONAL SITE WORK MAY BE NEEDED TO COMPLETE THE PROJECT AND WILL BE THE RESPONSIBILITY OF THE TRADE INSTALLING TO COMPLETE.

THIS PROJECT WILL BE BID BY GENERAL CONTRACTORS WITH THE FOLLOWING MINIMUM SUB-CONTRACTORS WORKING UNDER THE GC (OTHER SUBCONTRACTORS MAY BE NEEDED):

PRE-ENGINEERED METAL BUILDING, MASONRY, CARPENTRY, MILLWORK, MECHANICAL, ELECTRICAL, PLUMBING, LOW VOLTAGE WIRING, STRUCTURAL STEEL, OVERHEAD DOORS, STEEL RAILING AND FOUNDATION CONCRETE

THESE CONSTRUCTION DOCUMENTS MAY BE EXAMINED AT THE FOLLOWING LOCATIONS:

KEYES ARCHITECTS & ASSOCIATES, 4717 PRESTON HIGHWAY, LOUISVILLE, KY 40212

PHONE: 502-636-5113

CITY OF BARDSTOWN, 220 N. FIFTH STREET, KENTUCKY 40004

PHONE: 502-348-5947

BID PACKAGES CONTAINING THE PROJECT DESCRIPTION, BID FORM, DRAWINGS AND SPECIFICATIONS WILL BE AVAILABLE FOR PURCHASE FROM:

ZEN REPROGRAPHICS, 648 S. 8TH STREET, LOUISVILLE, KY 40203

PHONE: 502-587-1951

WWW.ZENREPROPLANROOM.COM

PRINTED COPY: \$100.00

PDF (DOWNLOAD): \$ 25.00

PLEASE NOTE THAT ALL PRINTING AND SHIPPING COSTS ARE THE RESPONSIBILITY OF THE BIDDER AND ARE NON-REFUNDABLE. PLANS WILL ALSO BE AVAILABLE FOR VIEWING AND PURCHASE FROM PLAN ROOMS. ALL GENERAL CONTRACTORS THAT WISH TO BID THIS PROJECT ARE REQUIRED TO PURCHASE AT LEAST ONE COMPLETE SET OF BID DOCUMENTS AND REGISTER WITH KEYES ARCHITECTS TO RECEIVE ADDENDA AND INFORMATION AT:

KEYES ARCHITECTS & ASSOCIATES (502) 636-5113

GENERAL@KEYESARCHITECTS.COM SUBJECT LINE: BARDSTOWN PUBLIC WORKS BID

EACH BIDDER MUST SUBMIT A BID BOND WITH THEIR BID IN THE AMOUNT OF NOT LESS THAN 5% OF THE BASE BID. A 100% PERFORMANCE BOND WILL BE REQUIRED FOR THIS PROJECT. PROOF OF CONTRACTOR'S PERFORMANCE BOND AVAILABILITY IS REQUIRED AT BIDDING.

LIQUIDATED DAMAGES WILL BE CHARGED ON THIS PROJECT. CONTRACTORS WILL BE REQUIRED TO LIST ON THE BID FORM THE NUMBER OF CALENDAR DAYS TO COMPLETE THIS PROJECT. THE NUMBER OF CALENDAR DAYS LISTED ON THE BID DOCUMENTS WILL BE ADDED TO THE DATE OF THE NOTICE TO PRECEDE AND PERMIT IS APPROVED, TO DETERMINE THE SUBSTANTIAL COMPLETION DATE OF THE PROJECT. THE CONTRACTOR MAY HAVE 30 EXTRA DAYS FROM SUBSTANTIAL COMPLETION TO FINAL COMPLETION. ANY DAY BEYOND THE DETERMINED FINAL COMPLETION DATE WILL INCUR A \$400.00 PER CALENDAR DAY FEE UNTIL THE CITY AND ARCHITECT AGREE TO FINAL COMPLETION. ANY EXTENSIONS TO THE END DATE WILL BE MADE TO THE CITY AND ARCHITECT AT THE TIME OF THE DELAY, IN THE FORM A CHANGE ORDER REQUEST, FOR APPROVAL. ANY REQUESTS MADE AT THE END OF THE PROJECT WILL NOT BE ACCEPTED.

THE SELECTED CONTRACTOR AND ALL SUBCONTRACTORS WILL NEED TO OBTAIN A BUSINESS LICENSE WITH THE CITY OF BARDSTOWN. A CERTIFICATE OF INSURANCE NAMING THE CITY OF BARDSTOWN AS ADDITIONAL INSURED WILL REQUIRED FROM THE SELECTED GENERAL CONTRACTOR. THIS PROJECT WILL NOT REQUIRE FEDERAL/STATE PREVAILING WAGES.

PRE-BID MEETINGS ARE NOT ANTICIPATED AT THIS TIME. ALL CONTRACTORS ARE ENCOURAGED TO VISIT THE SITE TO SEE SUPPLIED SITE AND BUILDING PAD.

THE LAST DAY FOR QUESTIONS WILL BE TUESDAY, SEPTEMBER 15TH AT 5 P.M. QUESTIONS SHOULD BE DIRECTED VIA EMAIL TO GENERAL@KEYESARCHITECTS.COM SUBJECT LINE: BARDSTOWN PUBLIC WORKS BID

ALL BIDS MUST BE SUBMITTED IN TRIPLICATE ON THE SUPPLIED BID FORM AND THE SEALED ENVELOPED MARKED "NEW PUBLIC WORKS BUILDING" IN CLEAR BOLD LETTERS.

SEALED BIDS ARE DUE THURSDAY SEPTEMBER 17TH AT 10:00AM AT THE CITY OF BARDSTOWN 220 N 5TH STREET, BARDSTOWN, KY 40004. SEALED BIDS SHOULD BE TURNED INTO THE CITY CLERK TO BE DATE/TIME STAMPED AND WILL BE OPENED AND READ ALOUD AT 10:15AM VIA TELEPHONE CONFERENCE CALL. CALL-IN INFORMATION WILL BE PROVIDED TO ALL PLAN HOLDERS. BID RESULTS WILL PROMPTLY BE MADE PUBLIC VIA THE CITY'S WEBSITE, WWW.CITYOFBARDSTOWN.ORG.

NO DECISIONS WILL BE MADE AT THIS TIME. BIDS WILL BE PRESENTED TO THE CITY COUNCIL ON SEPTEMBER 22ND AT 6:00PM DURING THEIR NORMAL MONTHLY COUNCIL MEETING. THE WINNING CONTRACTOR WILL BE NOTIFIED UPON DECISION OF THE CITY COUNCIL. LATE BIDS WILL NOT BE ACCEPTED.

THE CITY OF BARDSTOWN AND KEYES ARCHITECTS & ASSOCIATES RESERVES THE RIGHT TO REJECT OR ACCEPT ANY AND ALL BIDS, OR WAIVE ANY INFORMALITY OF ANY BIDS, WHICH IT DEEMS TO BE IN THE BEST INTEREST OF THE CITY OF BARDSTOWN.

END OF PROJECT DESCRIPTION

BARDSTOWN PUBLIC WORKS BUILDING

PROJECT #: 19-3060

GENERAL NOTES AND SPECIFICATIONS

01000 GENERAL

A. THESE DRAWINGS AND SPECIFICATIONS ARE FOR GENERAL GUIDANCE, WITH THE UNDERSTANDING THAT THE OWNER WILL NEGOTIATE DIRECTLY WITH A CONTRACTOR FOR PROPER EXECUTION OF WORK TO ASSURE COMPLETENESS AND CODE COMPLIANCE.

B. ALL CONTRACTORS ARE TO GUARANTEE THEIR WORK FOR A MINIMUM OF ONE YEAR FROM DATE OF ACCEPTANCE AND TURNOVER OF A COMPLETED PROJECT. LONGER GUARANTEES ARE REQUIRED WHERE SPECIFIED ELSEWHERE IN THESE DOCUMENTS.

C. CONTRACTOR TO VERIFY THE INFORMATION CONTAINED IN THESE PLANS IN FIELD (V.I.F.) AND IMMEDIATELY NOTIFY THE ARCHITECT OF ANY DISCREPANCIES.

D. THE CONTRACTOR SHALL CAREFULLY STUDY AND COMPARE THESE CONTRACT DOCUMENTS AND SHALL AT ONCE REPORT AND DISCOVERED ITEMS TO THE OWNER AND ARCHITECT ANY ERRORS, INCONSISTENCY, OR OMISSIONS THAT CANNOT BE RESOLVED BY STANDARD INDUSTRY PRACTICES. DO NOT PROCEED WITH WORK UNTIL CLARIFICATIONS HAVE BEEN MADE BY THE ARCHITECT AND NOTIFICATION HAS BEEN GIVEN TO PROCEED.

E. KEYES ARCHITECTS & ASSOCIATES HAS A SET NUMBER OF DRAWING SETS THAT WE HAVE GUARANTEED THE OWNER / CLIENT BY CONTRACT. THESE DOCUMENTS ARE THE OWNER'S / CLIENT'S TO USE AS THEY SEE FIT BUT IT WAS INTENDED FOR THEIR USE TO CREATE ADDITIONAL DOCUMENTS AND FOR PERMITTING PURPOSES. IN ADDITION, KEYES WILL SUPPLY AT NO ADDITIONAL CHARGE A PDF SET OF THE SUPPLIED PAPER SET OF DRAWINGS TO THE OWNER / CLIENT. ANY ADDITIONAL SETS BEYOND THE SETS SUPPLIED WILL BE CONSIDERED EXTRAS AND WILL BE BILLED ACCORDINGLY BY KEYES ARCHITECTS & ASSOCIATES CURRENT RATES TABLE. IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO ACQUIRE THIS PDF SET FROM THE OWNER FOR THE PURPOSES OF MAKING ADDITIONAL SETS AND TO PAY FOR ALL NEEDED CONSTRUCTION SETS.

F. BEFORE BIDDING, GENERAL CONTRACTOR AND ALL SUBCONTRACTORS ARE RESPONSIBLE FOR OBTAINING ALL BID DOCUMENTS INCLUDING BUT NOT LIMITED TO CONSTRUCTION DOCUMENTS AND SPECIFICATIONS. CONTRACTOR IS RESPONSIBLE FOR REVIEWING OTHER TRADES WORK THAT DIRECTLY AFFECTS THEIR TRADE, TO ENSURE THAT NO CONFLICT IS PRESENT. SHOULD A CONFLICT ARISE AS A RESULT OF DESIGN DIFFERENCE WITH OTHER TRADES, SUBCONTRACTOR SHOULD USE INDUSTRY STANDARD PRACTICES TO BID AND CREATE A PRODUCT TO ACCOMPLISH THE DESIGN INTENT OF THE CONSTRUCTION DOCUMENTS AND INCLUDE IT AS PART OF THEIR BID. THEN THE GENERAL CONTRACTOR SHALL BE NOTIFIED OF THE INTENDED CHANGES IN ORDER THAT THESE CHANGES CAN BE DISCUSSED WITH THE ARCHITECT AND COORDINATED WITH OTHER TRADES THAT ARE AFFECTED.

G. WHERE DRAWINGS DO NOT SPECIFICALLY SHOW HOW WORK IS TO BE EXECUTED, THE SUBCONTRACTOR RESPONSIBLE FOR THE WORK WILL BE RESPONSIBLE FOR FIGURING OUT AND BIDDING AN ACCEPTABLE INDUSTRY STANDARD METHOD OF COMPLETING THE WORK.

H. WHERE PLANS AND SPECIFICATIONS CONFLICT, SPECIFICATIONS SHALL SUPERSEDE PLANS. WHERE PLANS AND DETAILS CONFLICT, THE MORE DETAILED (LARGER SCALED) ITEM WILL TAKE PRECEDENCE. IF IT IS UNCLEAR AS TO THE INTENT OF THE WORK DUE TO THE CONFLICT, NOTIFY THE ARCHITECT IMMEDIATELY BEFORE PROCEEDING.

I. CONTRACTORS ARE NOT TO SCALE THE PLANS FOR MISSING OR UNCLEAR INFORMATION. WHERE PLANS ARE UNCLEAR, VERIFY WITH ARCHITECT BEFORE PROCEEDING.

J. CONTRACTOR'S BIDS ARE TO BE COMPLETE AND TO INCLUDE ALL MATERIAL, LABOR, AND FACILITIES REQUIRED TO COMPLETE THE WORK SHOWN ON DRAWINGS AND SPECIFIED HEREIN.

K. ALL SUBCONTRACTOR QUESTIONS CONCERNING BIDDING, THE DRAWINGS, OR SITE VISITS SHALL BE DIRECTED TO THE GENERAL CONTRACTOR.

L. ALL SUBCONTRACTORS SHALL OBTAIN ANY SPECIFIC PERMITS AND CODE REVIEW FOR THEIR TRADE. GENERAL CONTRACTOR WILL OBTAIN OVERALL CONSTRUCTION PERMIT.

M. THE OWNERS MAY HAVE OTHER CONTRACTORS, WORKERS AND SUPPLIERS ENGAGED ON THIS PROJECT. VERIFY EXACT LIMITS OF RESPONSIBILITY DURING BIDDING AND COORDINATE WITH ALL WORK BEING CONDUCTED UNDER OTHER CONTRACTS.

N. PAYMENT OF MONTHLY DRAWS FOR WORK COMPLETED TO DATE IS BASED UPON RECEIPT OF LIEN RELEASES AND SITE INSPECTIONS. ITEMS LISTED AS COMPLETE ON THE DRAW BUT NOT COMPLETED TO THE OWNER'S AND ARCHITECT'S SATISFACTION, MUST BE COMPLETED OR REMOVED FROM THE DRAW BEFORE PAYMENT WILL BE MADE. ALL OUTSTANDING INVOICES FOR THIS PROJECT FROM ALL SUBCONTRACTORS AND SUPPLIERS WILL BE PAID AND A LIEN RELEASE ISSUED FROM THE GENERAL CONTRACTOR IN CHARGE BEFORE PAYMENT WILL BE MADE.

O. FINAL PAYMENT OF ALL PORTIONS OF THIS PROJECT IS BASED UPON RECEIPT OF LIEN RELEASES, WARRANTIES AND MAINTENANCE/OPERATIONS MANUALS FOR ALL ITEMS.

P. FOR ALL SECTIONS IN THESE DOCUMENTS WHERE MULTIPLE COLORS, FINISHES, AND/OR MATERIAL CHOICES OCCUR AND WHERE THE OWNER CAN ONLY MAKE THESE CHOICES AFTER THE CONTRACT HAS BEEN AWARDED, THIS CONTRACT IS TO INCLUDE THE MOST RESTRICTIVE AND/OR EXPENSIVE OF THE CHOICES GIVEN SO THE OWNER CAN MAKE A CHOICE AT A LATER TIME WITHOUT CHANGE ORDERS. SHOULD THE OWNER MAKE A CHOICE THAT IS LESS EXPENSIVE THAN WHAT WERE BID, THEN THE OWNER IS TO BE CREDITED BACK THE DIFFERENCE BETWEEN WHAT WAS SPECIFIED AND WHAT WAS SELECTED.

Q. VALUE ENGINEERED ITEMS AND/OR APPROVED EQUALS ARE TO BE SUBMITTED AS PART OF THE BID PACKAGE FOR APPROVAL BY THE OWNER AND ARCHITECT. DUE TO LIMITED BIDDING TIME, OWNER AND ARCHITECT CANNOT/WILL NOT REVIEW PRODUCTS DURING BIDDING FOR EQUALITY OR EQUIVALENCY TO THESE DOCUMENTS. OWNER AND ARCHITECT WILL APPROVE THESE ITEMS AS PART OF THE BID REVIEW AND MAY ASK FOR PROOF OF PRODUCT EQUALITY, PRODUCT SPECIFICATION AND CLARIFICATION, RESUBMITTAL OF ORIGINAL ITEMS, OR OTHER REQUIREMENTS AS A CONDITION OF ACCEPTANCE OF ANY AND ALL BIDS. ITEMS NOT LISTED ON BID FORMS AND SUBMITTED AS PART OF BID PACKAGE ARE ASSUMED TO BE AS SPECIFIED IN THESE DOCUMENTS AND ANY ITEM NOT MEETING THESE DOCUMENTS CAN BE ASKED TO BE REPLACED OR A CHANGE ORDER APPLIED TO THE PROJECT IN THE AMOUNT OF THE DIFFERENCE OF THE ORIGINAL ITEM SPECIFIED AT THE OWNER'S AND ARCHITECT'S DISCRETION.

01001 TAX EXEMPT PROJECT

A. THIS PROJECT IS BEING BID TO A TAX EXEMPT ORGANIZATION, HERE FORWARD KNOWN AS THE "CLIENT", WITH FEDERAL AND/OR STATE APPROVED TAX EXEMPT STATUS. THE FOLLOWING SHALL APPLY TO THE ENTIRETY OF THIS PROJECT, UNLESS OTHERWISE STATED HEREIN:

1. ALL LABOR AND MATERIALS NECESSARY TO COMPLETE THIS PROJECT ARE TO BE INCLUDED AS PART OF THIS BID PACKAGE.
2. THE TAX EXEMPTION STATUS OF THE CLIENT WILL ONLY APPLY TO MATERIAL PURCHASES MADE THROUGH A WHOLESALE OR RETAILER FOR THE USE ON THIS PROJECT. MATERIALS DIRECTLY PURCHASED BY THE GENERAL CONTRACTOR OR SUBS THROUGH THEIR OFFICES FOR USE ON THIS PROJECT WILL NOT QUALIFY FOR EXEMPTION.
3. THE AWARDED GENERAL CONTRACTOR AND THEIR SUBS WILL BE RESPONSIBLE FOR

SETTING UP THE CLIENT'S TAX EXEMPT INFORMATION WITH ALL MATERIAL SUPPLIERS.

4. ALL MATERIALS ARE TO BE INVOICED TO THE CLIENT, CARE OF THE GENERAL CONTRACTOR OR SUBS.

5. GENERAL CONTRACTOR OR SUBS TO BE RESPONSIBLE FOR THE SHIPPING, HANDLING, STORAGE AND INSTALLATION OF ALL MATERIALS FOR THE DURATION OF THE PROJECT, UNTIL THE FINAL PROJECT IS TURNED OVER TO THE CLIENT.

6. ANY DELIVERIES MADE TO ANYWHERE OTHER THAN TO THE PROJECT SITE, TO THE GENERAL CONTRACTOR OR THE SUB-CONTRACTOR RESPONSIBLE FOR THE MATERIALS, WILL BE RETURNED TO THE SHIPPER AT THE GENERAL CONTRACTOR'S EXPENSE.

7. ALL MATERIAL INVOICES ARE TO BE ROUTED THROUGH THE GENERAL CONTRACTOR AND ANY INVOICES SENT DIRECTLY TO THE CLIENT WILL BE RETURNED TO THE ISSUER. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR ANY LATE FEES OR PENALTIES THAT SHOULD BE INCURRED AS A RESULT OF THESE RETURNED INVOICES.

8. AS PART OF THEIR MONTHLY PAY APPLICATION / MONTHLY DRAW, THE GENERAL CONTRACTOR WILL SUBMIT MATERIALS INVOICES TO BE PAID ALONG WITH THEIR DRAW.

ISSUED AS PART OF THIS MONTHLY DRAW SHALL BE A LIST OF HOW MUCH MONEY IS TO BE PAID TO THE GENERAL CONTRACTOR AS WELL AS A LIST OF ALL INVOICES TO BE PAID, INCLUDING NAME OF THE PAYEE, ANY PURCHASE ORDER #S AND THE AMOUNT TO BE PAID. A SINGLE CHECK WILL BE ISSUED TO SUPPLIERS WITH MULTIPLE PO SUBMITTED AS A PART OF THIS DRAW.

A CHANGE ORDER WILL ALSO BE ISSUED REDUCING THE AMOUNT OF THE GENERAL CONTRACTOR'S PROJECT COST BY THE DOLLAR AMOUNT OF THE MATERIAL INVOICES BEING PAID AS PART OF THE CURRENT DRAW.

9. MONTHLY DRAWS WILL BE APPROVED BY THE CLIENT AND ALL ISSUED MATERIAL SUPPLIER CHECKS WILL BE GIVEN TO THE CARE OF THE GENERAL CONTRACTOR.

IT WILL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO MAKE SURE PAYMENT IS DELIVERED TO THE MATERIAL SUPPLIERS IN AN EXPEDIENT AND TIMELY MANNER.

ANY LATE FEES OR PENALTIES THAT OCCUR AS A RESULT TO DELIVER THESE CHECKS, WILL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR, UNLESS THESE FEES CAN BE DOCUMENTED AS NOT BEING INCURRED AS A FAULT OF GENERAL CONTRACTOR OR SUBS.

02000 SITE-WORK/FOUNDATIONS

A. SITE-WORK TO BE PERFORMED BY OWNER AND OWNER'S AGENTS BEFORE WORK IS TO COMMENCE ON THIS PROJECT. SITE WORK WILL BE LIMITED TO WHAT IS NECESSARY TO COMPLETE THIS PROJECT. UNLESS SPECIFIED OTHERWISE IN THESE DOCUMENTS UTILITIES ARE TO BE CONSIDERED CONNECTING 5'-0" FROM THE BUILDING.

B. PERFORM ALL EXCAVATIONS, BACKFILLING AND GRADING, REQUIRED TO COMPLETE WORK SHOWN. CONTRACTORS SHALL TAKE THIS DATA AND SUBMIT IN THEIR BID ANY CHANGES NECESSARY FOR COMPLETION OF THE PROJECT.

C. PROTECT AGAINST DAMAGE TO ANY LAWNS, SHRUBS, TREES, ROADS, WALKS, SIGNS, UNDERGROUND TANKS, ETC., AND OTHER WORK THAT IS TO REMAIN IN PLACE.

D. MATERIALS TO BE EXCAVATED ARE ASSUMED TO BE EARTH OR OTHER MATERIALS THAT CAN BE REMOVED BY POWER SHOVEL OR OTHER NORMAL EXCAVATING EQUIPMENT, BUT NOT REQUIRING THE USE OF EXPLOSIVES OR DRILLS. IF OTHER CONDITIONS ARE ENCOUNTERED WITHIN THE LIMITS OF THE EXCAVATION, NOTIFY ARCHITECT IMMEDIATELY.

E. ALL BUILDING AND COLUMN FOOTINGS SHALL BEAR DIRECTLY ON UNDISTURBED SOIL, UNLESS SPECIFICALLY DESIGNED OTHERWISE HEREIN TO BEAR ON OTHER SUBSURFACE.

F. ASSUMED BEARING CAPACITY AS INDICATED BY OWNER IS 2,000 LBS. S.F., UNLESS OTHERWISE NOTE ON THE PLANS OR BY GEOTECHNICAL REPORTING. IF THIS BEARING CAPACITY IS NOT ENCOUNTERED AT THE DEPTH SHOWN ON DRAWINGS, THE SITE CONTRACTOR SHALL NOTIFY THE GENERAL CONTRACTOR. THE GENERAL CONTRACTOR, ARCHITECT, ENGINEER, AND OTHER PARTIES WILL THEN ESTABLISH AN ADDITIONAL VOLUME OF EXCAVATION.

G. BUILDING SLAB AREAS, DRIVES, WALKS AND PARKING AREAS THAT REQUIRE UNDERCUTTING OR FILL ARE TO BE BACKFILLED WITH LEAN CLAY OR GRANULAR FILL, UNIFORMLY COMPACTED TO AT LEAST 95% STANDARD PROCTOR (ASTM D698). PERIODIC FIELD DENSITY TESTING TO BE PERFORMED DURING CONSTRUCTION IF REQUIRED AND PAID FOR BY THE OWNER.

H. FURNISH AND INSTALL ALL SITE ITEMS AS SHOWN ON THE DRAWINGS OR LIST HEREIN.

I. FURNISH AND INSTALL SOD WITHIN 3' OF ALL CONCRETE WALKS AND BUILDING AREAS. SEED AND STRAW ALL OTHER DISTURBED EARTH AREAS.

J. CONTRACTOR TO INCLUDE ALL EROSION CONTROL MEASURES NECESSARY. EROSION CONTROL MEASURES ARE TO FOLLOW THOSE POLICIES, STANDARDS AND PRACTICES AS SET FORTH BY THE CIVIL PLAN AND/OR ALL FEDERAL, STATE, AND LOCAL REQUIREMENTS. THE CONTRACTOR WILL BE RESPONSIBLE FOR MAINTAINING ALL EROSION CONTROL MEASURES AND MAINTAINING ALL DOCUMENTATION AS REQUIRED. ANY PENALTIES OCCURRED AS A RESULT OF FAILURE TO MAINTAIN THESE CONTROLS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND THE OWNER SHALL BARE NO RESPONSIBILITY FOR THESE PENALTIES UNLESS THERE IS DOCUMENTED PROOF THAT THESE PENALTIES WERE AS A RESULT OF NEGLECT FROM THE OWNER OR HIS REPRESENTATIVES.

K. ALL EXISTING EXCAVATED MATERIAL THAT CANNOT BE USED AS FILL WILL BE WASTED ON SITE IN AREAS AS DIRECTED BY OWNER. THE MATERIAL WILL BE SPREAD, COMPACTED, SMOOTHED AND DISCED. THE EXCAVATED MATERIAL WILL THEN BE SEED AND STRAW AS INDICATED ABOVE.

L. FOUNDATION EXCAVATION

1. FOLLOW OSHA AND LOCAL REQUIREMENTS FOR DETERMINING THE ANGLE OF REPOSE. NO ANGLE OF REPOSE CAN BE ASSUMED WHEN SOIL IS UNDER ADVERSE MOISTURE CONDITIONS. USE FORMS WHERE CONCRETE SURFACES ARE SHOWN VERTICAL OR STEEPER THAN THE ANGLE OF REPOSE.
2. CUT EARTH NEATLY FOR GRADE BEAMS AND FOOTINGS, EXCAVATE BY HAND IF NECESSARY, TO REMOVE ALL LOOSE MATERIAL AND DISTURBED EARTH.
3. REPLACE DISTURBED EARTH AND OVER-EXCAVATED LOCATIONS WITH FILL CONCRETE.
4. KEEP EXCAVATIONS CONSTANTLY SHORED AND DEWATERED.
5. POUR FOOTINGS ONLY AFTER EXCAVATIONS HAVE BEEN INDIVIDUALLY INSPECTED AND APPROVED.
6. AFTER INSPECTION AND APPROVAL, PLACE CONCRETE PROMPTLY BEFORE ANY CHANGE IN EXCAVATION CONDITIONS OCCUR.

M. TRENCHING AND BACKFILLING FOR DRAIN PIPES

1. COMMENCE FROM LOW POINT SO EXCAVATION AND PIPE CAN BE KEPT DRAINED AT ALL TIMES.
2. WIDTH TO BE SUFFICIENT TO MAKE JOINTS AND COMPACT BACKFILL UNDER PIPE.
3. FINAL EXCAVATION TO BE DONE BY HAND SO PIPE RESTS CONTINUOUSLY ON SLID

EARTH EXCEPT WHERE BACKFILLED WITH CEMENT STABILIZED SAND.

4. AFTER PLACING PIPE, IMMEDIATELY PLACE SOME BACKFILL TO HOLD THE PIPE; COMPACT SUFFICIENT BACKFILL UNDER THE PIPE TO HOLD IT SECURELY AGAINST ANY POSSIBLE MOVEMENT; DO NOT COVER UNTIL INSPECTED.

03000 CONCRETE

A. CONCRETE TO BE DIMENSIONS SHOWN ON DRAWINGS AND REINFORCED AS DETAILED.

B. CONCRETE SHALL DEVELOP A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS.

C. CONTRACTOR TO MAKE (3) CONCRETE CYLINDER SAMPLES FOR EVERY 150 CUBIC YARDS (OR FRACTION THEREOF) OF CONCRETE PLACED PER DAY. CONCRETE CYLINDERS ARE TO FOLLOW THE PRACTICES SET FORTH IN ASTM C31 FOR STANDARD PRACTICE FOR MAKING AND CURING CONCRETE TEST SPECIMENS IN THE FIELD AND ASTM C172 FOR STANDARD PRACTICES FOR SAMPLING FRESHLY MIXED CONCRETE. SAMPLES ARE TO BE TAKEN FROM THE MIDDLE OF A TRUCK LOAD AND NOT THE BEGINNING OR ENDING PORTIONS. ALL CYLINDERS ARE TO BE LABELED, DATED AND STORED ON SITE IN THE SAME ENVIRONMENT AS THE CONCRETE PLACED. OWNER, ARCHITECT OR CONSTRUCTION MANAGER MAY CALL FOR TESTING OF THESE SAMPLES AT ANY TIME. OWNER WILL PAY FOR TESTING AS NEEDED.

D. INTERIOR FLOOR SLABS ARE TO RECEIVE SMOOTH TROWEL FINISH.

E. EXTERIOR CONCRETE DRIVES, WALKS AND STOOPS ARE TO BE LIGHT BROOM FINISHED IN THE DIRECTION OF WATER FLOW, UNLESS NOTED OTHERWISE.

F. CONCRETE CURING AND SEALING COMPOUNDS ARE TO BE SURFACE APPLIED SOLVENT WHICH CURES, SEALS, HARDENS, AND DUSTPROOFS.

1. UNFINISHED EXPOSED INTERIOR CONCRETE FLOORS ARE TO RECEIVE "INTRASEAL" BY COMSPEC OR APPROVED EQUAL. VERIFY EXISTING CONDITIONS BEFORE STARTING WORK. APPLY PRODUCT PER MANUFACTURER'S REQUIREMENTS AND RECOMMENDATIONS.

2. ALL OTHER CONCRETE SLABS TO RECEIVE "CURE 'N SEAL" BY SAKRETE, "SEAL CURE-25" BY W. R. MEADOWS OR APPROVED EQUAL. VERIFY EXISTING CONDITIONS BEFORE STARTING WORK. APPLY PRODUCT PER MANUFACTURER'S REQUIREMENTS AND RECOMMENDATIONS. BEFORE STARTING WORK, VERIFY THAT SELECTED CURE AND SEAL PRODUCT IS COMPATIBLE WITH THE ANTICIPATED FINISHED FLOOR AND SUB FINISHES.

G. ALL CONCRETE FLOORS ARE TO HAVE A VAPOR RETARDER INSTALLED BEFORE THE CONCRETE IS PLACED. VAPOR RETARDER IS TO BE AS SPECIFIED IN THE LATEST ASTM E 1745 AND HAVE THE FOLLOWING PROPERTIES: A MINIMUM OF 0.03 PERMEABILITY, 5LB PUNCTURE RESISTANCE, AND 45.0 LB./IN TENSILE STRENGTH. RETARDER TO BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS AND SPECIFICATIONS.

H. MATERIALS AND CONSTRUCTION METHODS SHALL CONFORM TO THE LATEST REQUIREMENTS OF ACI 318-83.

I. ALL EXPOSED 90-DEGREE EDGES OF VERTICAL AND HORIZONTAL CORNERS OF CONCRETE SHALL HAVE TOOLED EDGES, UNLESS INDICATED OTHERWISE.

J. REINFORCING STEEL SHALL BE A615-83 GRADE 60. CONTRACTOR MAY USE FIBERMESH EQUIVALENT REINFORCING IN 4" SLABS ON GRADE, BUT ELEVATED SLABS MUST HAVE WIRE REINFORCING AS SHOWN.

K. WELDING OF OR TO REINFORCING BARS WITHOUT PRIOR APPROVAL OF ENGINEER IS PROHIBITED EXCEPT WHERE SPECIFIED ON THE DRAWINGS.

L. ALL REINFORCING BARS ARE TO BE SUPPORTED IN THE FORM AND SPACED WITH WIRE BARS SUPPORTS MEETING THE REQUIREMENTS OF THE ACI "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES" (ACI 315-LATEST EDITION).

M. ALL DETAILING, FABRICATION AND ERECTION OF REINFORCING BARS, UNLESS OTHERWISE NOTED, MUST FOLLOW THE ACI "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES" (ACI 315-LATEST EDITION).

N. CONCRETE WALKS SHALL HAVE MOLDED EXPANSION JOINT MATERIAL AS SHOWN. FINAL JOINT LAYOUT TO BE APPROVED BY OWNER.

O. CONTROL JOINTS (C.J.) SHALL BE SAW-CUT A MINIMUM OF 1/4 OF SLAB THICKNESS AND WITH A MAXIMUM SPACING AS SHOWN ON THE DRAWINGS.

P. ISOLATION JOINTS (I.J.) IF REQUIRED SHALL RECEIVE 1/2" THICK EXPANSION JOINT FILLER EXTENDING FROM BOTTOM OF SLAB TO 1/2" BELOW TOP OF SLAB AND THE TOP 1/2" FILLED WITH POLYURETHANE JOINT SEALANT, UNLESS OTHERWISE NOTED.

Q. CONSTRUCTION JOINTS (CONST. J.), IF REQUIRED, SHALL BE FORMED USING "KEY-LOC JOINT SYSTEM" MANUFACTURED BY FORM-A-KEY.

R. ALL DIMENSIONS AND GRADES SHALL BE VERIFIED IN THE FIELD (V.I.F.) BY THE CONTRACTOR AND ANY DISCREPANCIES OR INTERFERENCES SHALL BE REPORTED TO THE ARCHITECT BEFORE PROCEEDING WITH AFFECTED WORK.

S. WHERE SHOWN, ALL JUNCTIONS OF WALLS, PIERS AND FLOORS TO HAVE 1/2" WIDE EXPANSION JOINTS, FILLED WITH ELASTIC EXPANSION JOINT MATERIAL.

T. EXPOSED PIERS AND FOUNDATION WALLS TO HAVE RUBBED FINISH. ANY HONEYCOMBING THAT OCCURS THAT IS LESS THAN 4" IN DIAMETER IS TO BE FILLED AND FINISHED WITH A NON-EXPANDING GROUT. CONTACT THE ARCHITECT IMMEDIATELY FOR ANY HONEYCOMBING THAT IS 4" OR GREATER IN DIAMETER, FOR REVIEW OF THE CONCRETE AND RESOLUTION OF THE ISSUE.

U. CONCRETE CONTRACTOR TO PLACE ALL EXTERIOR EQUIPMENT PADS UNLESS OTHERWISE DIRECTED DURING BIDDING. COORDINATE FINAL SIZE, DETAILS AND LOCATIONS WITH THE APPLICABLE SUB-TRADES.

04000 MASONRY

A. MORTAR TO BE TYPE "M OR S" COMPLYING WITH ASTM C-90-97. IF VENEER CONTAINS AN INTEGRAL WATER REPELLENT, THEN THE MORTAR IS TO RECEIVE A WATER REPELLENT ADDITIVE AS APPROVED BY THE BLOCK / VENEER MANUFACTURER.

B. PROVIDE 3/8" THICK MORTAR JOINTS BETWEEN UNITS WITH FULL MORTAR COVERAGE ON THE VERTICAL AND HORIZONTAL FACE SHELLS ONLY, EXCEPT FOR THIS FIRST BED COURSE SHALL BE LAID IN A FULL MORTAR BED.

C. BRICK MATERIALS ALLOWANCE TO BE \$500.00 PER 1000, DELIVERED. COLOR AND STYLE TO BE SELECTED BY OWNER.

D. IN VENEER WALLS, FURNISH AND INSTALL GALVANIZED, CORRUGATED MASONRY ANCHORS AT 16" ON CENTER HORIZONTALLY, 24" ON CENTER VERTICALLY AND ON EACH SIDE OF MASONRY CONTROL JOINT AT 24" ON CENTER VERTICAL.

E. IN ALL VENEER WALLS, PROVIDE WEEP HOLES AT 24" ON CENTER AND CONTINUOUS 8" HIGH MEMBRANE FLASHING ALONG BOTTOM ROW, AT OR ABOVE GRADE.

F. MASONRY SUBCONTRACTOR TO BE RESPONSIBLE FOR WATER-TIGHTNESS OF HIS WORK.

G. WORKMANSHIP, INCLUDING JOINT REINFORCEMENT AND COLD WEATHER INSTALLATION SHALL COMPLY WITH NATIONAL MASONRY ASSOCIATIONS APPLICABLE RECOMMENDATIONS.

H. MASONRY CONTRACTOR TO BRUSH CLEAN FINAL SURFACES AND PREPARE EXTERIOR

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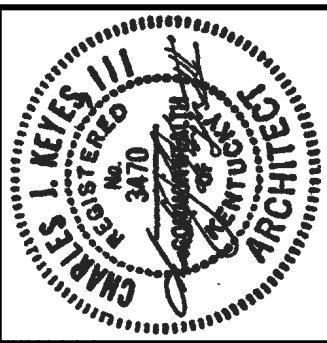
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DRAWN BY:

NM/CS/

DATE:

05-27-2020



KEYES ARCHITECTS & ASSOCIATES  
4717 PRESTON HIGHWAY  
LOUISVILLE, KENTUCKY 40213 (502) 636-5113

NEW CONSTRUCTION:  
CITY OF BARDSTOWN  
PUBLIC WORKS BUILDING  
PADGETT WAY  
BARDSTOWN, KY

SPECIFICATIONS

SP1.01



PROJECT: CITY OF BARDSTOWN PUBLIC WORKS BUILDING - FILE: SP1.03 Specifications.dwg - DATE: Sep 01, 2020 3:37PM - BY: ERIC KEYES

FACES FOR PAINT OR SEALER AS CALLED OUT.

- I. PROVIDE CONTROL JOINTS AS INDICATED ON ELEVATIONS, WITH BACKER ROD AND PAINTABLE ELASTOMERIC CAULK.

05000 METALS

- A. PROVIDE STRUCTURAL AND MISCELLANEOUS METAL ITEMS AS SHOWN ON DRAWINGS, AND AS REQUIRED TO COMPLETE THE PROJECT.

- B. FURNISH SHOP DRAWINGS TO SATISFY LOCAL CODE REQUIREMENTS, FABRICATE MATERIALS AND INSTALL ALL METAL WORK AS NEEDED. THIS SHALL INCLUDE STRUCTURAL STEEL AND MISCELLANEOUS STEEL ITEMS.

- C. TAKE FIELD MEASUREMENTS PRIOR TO FABRICATION. SUBCONTRACTOR SHALL BE RESPONSIBLE FOR THE ACCURACY OF ALL SUCH MEASUREMENTS AND THE PRECISE FITTING AND ASSEMBLY OF THE FINISHED PRODUCTS.

- D. USE MATERIALS OF SIZE AND THICKNESS INDICATED OR, IF NOT INDICATED, AS REQUIRED TO DEVELOP THE MAXIMUM LOADS IN THE MEMBER. WELD CORNERS AND SEAMS CONTINUOUSLY, COMPLYING WITH AWS RECOMMENDATIONS. PROVIDE FOR ANCHORAGE OF TYPE SHOWN, COORDINATED WITH SUPPORTING STRUCTURE. FABRICATE AND SPACE ANCHORING DEVICES TO PROVIDE ADEQUATE SUPPORT FOR INTENDED USE.

- E. CLEAN AND SHOP PAINT MISCELLANEOUS METAL WORK, EXCEPT MEMBERS OR PORTIONS OF MEMBERS TO BE EMBEDDED IN CONCRETE OR MASONRY, SURFACES AND EDGES TO BE FIELD WELDED UNLESS OTHERWISE INDICATED.

- F. FURNISH BENT OR OTHERWISE CUSTOM FABRICATED, PLATES, ANCHORS, HANGERS, DOWELS AND OTHER MISCELLANEOUS STEEL SHAPES AS REQUIRED.

- G. PROVIDE LOOSE BEARING AND LEVELING PLATES FOR STEEL ITEMS BEARING ON MASONRY, CONCRETE CONSTRUCTION, OR OTHER PORTIONS OF THE STRUCTURE AS INDICATED.

- H. PROVIDE MISCELLANEOUS STEEL ELEMENTS, FRAMING AND SUPPORTS THAT ARE NOT A PART OF STRUCTURAL STEEL FRAMEWORK, AS REQUIRED TO COMPLETE WORK.

- I. PROVIDE ANCHORAGE DEVICES AND FASTENERS WHERE NECESSARY FOR SECURING MISCELLANEOUS METAL FABRICATIONS TO IN-PLACE CONSTRUCTION; INCLUDING, THREADED FASTENERS FOR CONCRETE AND MASONRY INSERTS, TOGGLE BOLTS, THROUGH-BOLTS, LAG BOLTS, WOOD SCREWS AND OTHER CONNECTORS AS REQUIRED.

- J. PROVIDE A-325 BOLTS AS SHOWN ON THE PLANS OR AS REQUIRED TO DEVELOP THE MAXIMUM CAPACITY OF THE CONNECTION SHOWN.

- K. PERFORM CUTTING, DRILLING AND FITTING REQUIRED FOR INSTALLATION OF MISCELLANEOUS METAL FABRICATIONS.

- L. FIELD WELDING SHALL COMPLY WITH AWS CODE FOR PROCEDURES OF MANUAL SHIELDED METAL-ARC WELDING, APPEARANCE AND QUALITY OF WELDS MADE, AND METHODS USED IN CORRECTING WELDING WORK.

- M. SET LOOSE LEVELING AND BEARING PLATES ON WEDGES, OR OTHER ADJUSTABLE DEVICES. AFTER THE BEARING MEMBERS HAVE BEEN POSITIONED AND PLUMBED, TIGHTEN ANCHOR BOLTS. DO NOT REMOVE WEDGES OR SHIMS, BUT IF PROTRUDING, CUT-OFF FLUSH WITH THE EDGE OF THE BEARING PLATE BEFORE PACKING WITH GROUT. USE METALLIC NON-SHRINK GROUT IN CONCEALED LOCATIONS WHERE NOT EXPOSED TO MOISTURE; USE NON-METALLIC NON-SHRINK GROUT IN EXPOSED LOCATIONS, UNLESS OTHERWISE INDICATED. PACK GROUT SOLIDLY BETWEEN BEARING SURFACES AND PLATES TO ENSURE THAT NO VOIDS REMAIN.

- N. TOUCH-UP PAINTING IMMEDIATELY AFTER ERECTION, CLEAN FIELD WELDS, BOLTED CONNECTIONS, AND ABRADED AREAS OF SHOP PAINT, AND PAINT EXPOSED AREAS WITH SAME MATERIAL USED FOR SHOP PAINTING. APPLY BY BRUSH OR SPRAY TO PROVIDE A MINIMUM DRY FILM THICKNESS OF 2.0 MILS.

O. MISCELLANEOUS ITEMS:

1. STEEL PLATES, SHAPES AND BARS: ASTM A-36
2. COLD FORMED STEEL TUBING USE ASTM A-500
3. HOT-ROLLED STEEL TUBING USE ASTM A- 501
4. HOT-ROLLED STRUCTURAL STEEL SHEET USE ASTM A-570 . CLASS 1 OR GRADE REQUIRED FOR DESIGN LOADING.
5. COLD-ROLLED STRUCTURAL STEEL SHEET USE ASTM A-611 . CLASS 1 OR GRADE REQUIRED FOR DESIGN LOADING.
6. NON-SHRINK METALLIC GROUT TO BE PRE-MIXED, FACTORY-PACKAGED, NON- STAINING, NON-CORROSIVE, NON-GASEOUS GROUT COMPLYING WITH CE CRD-C588. PROVIDE GROUT SPECIFICALLY RECOMMENDED BY MANUFACTURER FOR INTERIOR AND EXTERIOR APPLICATIONS.
7. ZINC-COATED FASTENERS FOR EXTERIOR USE OR WHERE BUILT INTO EXTERIOR WALLS. SELECT FASTENERS FOR THE TYPE, GRADE AND CLASS REQUIRED.

06000 CARPENTRY

- A. ALL WOOD IN CONTACT WITH CONCRETE OR MASONRY OR TO BE EXPOSED ON THE EXTERIOR TO BE PRESSURE TREATED AGAINST DECAY AND INSECTS.

- B. CARPENTER SHALL FURNISH ALL NECESSARY BLOCKING AND GROUNDS FOR ALL TOPS, CABINETRY ITEMS, HANDRAILS, CASEWORK AND OTHER MISCELLANEOUS ITEMS AS NEEDED.

- C. PROVIDE SMALL AREAS OF WOOD FRAMING WHERE SHOWN FOR SHELVES OR EQUIPMENT BY OWNER.

- D. CARPENTER TO FURNISH & INSTALL ALL MOLDINGS, TRIM WORK AND FINISH HARDWARE (AT WINDOWS, DOORS, HANDRAILS, AND PLATFORM AREAS). ALSO, SHELVING, BRACKETS, RODS AND HANGERS AS SHOWN. EXPOSED WOOD TRIM AND MOLDINGS TO BE PAINT GRADE SPRUCE OR FIR, (FINGER JOINTS ALLOWED).

- E. FURNISH AND INSTALL ALL ROUGH & FINISH CARPENTRY INCLUDING ROUGH HARDWARE, FORM WORK INDICATED AND REQUIRED TO COMPLETE THE PROJECT.

- F. WOOD FRAMING IS TO FOLLOW GOOD PRACTICE AND CODE REQUIREMENTS FOR FIRE BLOCKING AND WOOD BLOCKING. VERIFY FIRE BLOCKING REQUIREMENTS WITH THE BUILDING INSPECTOR BEFORE COMPLETING THE FRAME WORK.

- G. PROVIDE BRIDGING AT ALL EXTERIOR WALLS AND INTERIOR LOAD BEARING WALLS, AT MIDPOINT OF WALLS FOR WALLS UP TO 9'-4" HIGH, AT 1/3 POINTS FOR WALLS 9' - 12' HIGH, AND AT 1/4 POINTS FOR WALLS UP TO 13'-4" HIGH. THE BRIDGING SHALL BE 2 X 6 OR 2 X 4 AS APPROPRIATE, MATCHING THE STUDS USED IN THE REMAINDER OF THE WALL.

- H. FRAMING CONTRACTOR IS RESPONSIBLE FOR BRACING REQUIRED TO RESIST SEISMIC, WIND, AND LIVE LOADS SPECIFIED AND REQUIRED BY I.B.C. PROVIDE LET-IN AND G.W.B. BRACING AS NOTED ON SHEET SET.

- I. REMOVE ALL WOOD INCLUDING FORM LUMBER, SCRAP LUMBER, SHAVINGS, AND SAWDUST IN CONTACT WITH THE GROUND. LEAVE NO WOOD BURIED IN ANY FILL.

- J. ALL LUMBER AND PLYWOOD SHALL BE GRADED AND MARKED IN ACCORDANCE WITH THE LATEST GRADING RULES OF THE MANUFACTURER'S ASSOCIATION HAVING JURISDICTION.

PLYWOOD DECKING SHALL BE TONGUE AND GROOVE OR TO BE BLOCKED AT ALL JOINTS, AND TO BE GLUED TO ALL SUPPORTING MEMBERS.

- K. ALL MATERIALS SHALL BE DELIVERED AND STORED TO INSURE PROPER PROTECTION FROM DAMAGE. ALL MATERIAL SHALL BE WELL SEASONED.

- L. FRAMING LUMBER TO BE STRESS GRADED LUMBER (1250 F. MINIMUM) #2 YELLOW PINE OR APPROVED EQUAL OF OTHER SPECIES OF THE FOLLOWING MINIMUM UNIT STRENGTHS IN #S PER SQ. IN: FB = 1,200; H = 105; C (PERPENDICULAR) = 390; (COMPRESSION PARALLEL TO GRAIN) C= 900; AND E = 1,760,000.

- M. STUDS & PLATES TO BE FURNISH AND INSTALL AS SPECIFIED, DETAILED AND REQUIRED. MATERIALS SHALL BE STRAIGHT AND WITHOUT DEFECTS THAT WILL IMPAIR THE STRENGTH OR ALIGNMENT. DOUBLE STUDS AT OPENINGS, TRIPLE AT CORNERS.

- N. DOUBLE TOP PLATES TO HAVE (2) 16D THROUGH AT EACH STUD THROUGH PLATE. SECURE UPPER MEMBER OF TOP PLATE WITH (2) 10D AT EACH END AND 16D AT 16" O.C. STAGGERED. DOUBLE MEMBERS SECURED WITH 16D AT 12" O.C. STAGGERED.

- O. EXTERIOR O.S.B. SHEATHING TO BE NAILED TO STUDS AT 12" O.C. STAGGERED.

- P. INSTALL ALL JOISTS WITH CROWN UP. DOUBLE JOUSTS AT OPENINGS, UNLESS NOTED TO BE GREATER. DOUBLE MEMBERS SECURED WITH 16 D AT 6" ON CENTER, STAGGERED. LAPS OVER SUPPORTS SECURED WITH A MINIMUM OF (4) 10D, (3) 20D THROUGH HEADER INTO JOISTS ENDS. BLOCK SOLIDLY AT PLYWOOD JOINTS.

- Q. HEADER BEAMS FOR OPENINGS IN WOOD FRAMED WALLS ARE TO BE DOUBLE MEMBERS WITH 1/2" PLYWOOD BETWEEN AS FOLLOWS: (2) 2 X 4'S FOR OPENINGS 30" WIDE OR SMALLER, (2) 2 X 6'S FROM 30" UP TO 48" WIDE, (2) 2 X 8'S FROM 48" UP TO 72" WIDE, AND (2) 2 X 10'S FROM 72" UP TO 96" WIDE. FRAMING FOR OPENINGS WIDER THAN 96" MUST BE COORDINATED WITH THE ARCHITECTS.

- R. ON EXTERIOR FRAMING USE GALVANIZED, ELECTROPLATED 16D NAILS. INTERIOR NAILS ARE TO BE COMMON COATED 16D NAILS UNLESS OTHERWISE NOTES.

06175 PRE-ENGINEERED WOOD TRUSSES AND PRE-ENGINEERED JOISTS

- A. BEFORE BIDDING, SUPPLIER / DESIGNER OF THE TRUSSES AND JOISTS IS RESPONSIBLE FOR OBTAINING ALL BID DOCUMENTS INCLUDING BUT NOT LIMITED TO CONSTRUCTION DOCUMENTS AND SPECIFICATIONS. SUPPLIER / DESIGNER IS RESPONSIBLE FOR COORDINATING FINAL DESIGN OF THIS PRODUCT WITH ALL OTHER TRADES, INCLUDING BUT NOT LIMITED TO ALL ROOF TOP LOADS, SPACING FOR DUCTWORK AND OTHER MISCELLANEOUS DESIGN LOADS. SHOULD A CONFLICT ARISE AS A RESULT OF DESIGN DIFFERENCE WITH OTHER TRADES, THIS DESIGNER SHOULD USE INDUSTRY STANDARD PRACTICES TO BID AND CREATE A PRODUCT TO ACCOMPLISH THE DESIGN INTENT OF THE CONSTRUCTION DOCUMENTS AND AS PART OF THIS BID, THEN NOTIFY GENERAL CONTRACTOR OF THE INTENDED CHANGES.

- B. TRUSSES OR PRE-ENGINEERED JOISTS ARE TO BE OF PROFILE SHOWN ON BUILDING SECTIONS AND DETAILS.

- C. NUMBER OF PANELS POINTS, MEMBER SIZING, GRADE, AND SPECIES AS DESIGNED BY THE TRUSS MANUFACTURER.

- D. THE DESIGN IS TO BE THE RESPONSIBILITY OF THE MANUFACTURER, WHO IS RESPONSIBLE FOR MEETING ALL REQUIREMENTS OF I.B.C. THIS INCLUDES THE TRUSS GIRDERS REQUIRED AT SPANS AS SHOWN ON SHEET SET.

- E. PROPER INSTALLATION AND ANCHORING OF ALL MEMBERS AND ANCHORING OF THE TRUSSES FOR ADEQUATE STRENGTH ARE THE RESPONSIBILITY OF THE FRAMING CONTRACTOR. ANCHORING TO BE AN APPROPRIATE STRAP OR TIE AS RECOMMENDED BY MANUFACTURER, AND FEDERAL, STATE AND LOCAL CODE REQUIREMENTS. SYSTEM TO BE BY SIMPSON STRONG-TIE OR EQUAL.

- F. DESIGN OF ALL TRUSSES AND JOISTS ARE TO BE BASED ON MAXIMUM DEFLECTION OF L/360.

- G. BEARING WEB MEMBERS OF FLOOR TRUSSES ARE TO BE DESIGNED TO CARRY THE AXIAL LOAD OF THE STUD WALL ABOVE.

- H. THE MANUFACTURER IS TO PROVIDE SHOP DRAWINGS AND STRUCTURAL CALCULATIONS STAMPED BY A STATE REGISTERED STRUCTURAL ENGINEER OF THE STATE WORK TO BE PERFORMED IN, BEFORE FABRICATING THE TRUSSES.

- I. DESIGN OF TRUSSES AND HANDLING AND ERECTION OF TRUSSES, INCLUDING TEMPORARY AND PERMANENT BRACING, IS TO FOLLOW THE LATEST EDITION OF THE SPECIFICATIONS OF THE TRUSS PLATE INSTITUTE. REFER TO SECTION 1000 OF THESE SPECIFICATIONS WITH REGARDS TO INCONSISTENCIES.

- J. DESIGN IS TO INCLUDE SIZING AND SPACING OF BRACING MEMBERS.

- K. TRUSSES ARE TO BE DESIGNED TO THE FOLLOWING MINIMUM LOADS:

(NOTE: GREATER SNOW LOADS REQUIRED AT VALLEYS, ROOF LEVEL CHANGES, ETC. PER I.B.C. CODE REQUIREMENTS SUPERSEDES THESE LOADS.)

ROOF TRUSSES

WIND LOAD	15 PSF
SNOW LOAD	20 PSF PLUS SNOW LOAD BUILD-UP AT VALLEYS AND ROOF LEVEL CHANGES PER I.B.C. PLUS ROOF TOP EQUIPMENT AS DIRECTED BY THE CONTRACTOR.
TOP CHORD D.L.	10 PSF
BOTTOM CHORD D.L.	5 PSF
UPLIFT	12 PSF (9 IN EXCESS OF D.L.)

06410 WOOD CASEWORK

- A. FURNISH AND INSTALL A COMPLETE SYSTEM FOR CABINETS AND CASEWORK FOLLOWING THE STANDARDS SET FORTH BY AWI AND MILLWORK BEST PRACTICES.

- B. CABINETS TO BE OAK FINISH MDF BOARD WITH OVERLAY DOORS, WIRE PULLS AND FULLY ADJUSTABLE PLYWOOD SHELVES, BY "MERILLAT" OR APPROVED EQUAL.

- C. TOPS TO BE SQUARE EDGE, PLASTIC LAMINATE COVERED WITH 4" SPLASH AT ALL WALLS, SCRIBE FIT. COLORS TO BE SELECTED BY OWNER FROM STANDARD LINES.

- D. PROVIDE ELEVATIONS AND SHOP DRAWINGS FOR REVIEW BY OWNER.

07000 MOISTURE PROTECTION

A. INSULATION:

1. ROLL GLASS FIBER INSULATION TO BE THICKNESS AND TYPE SHOWN ON DRAWINGS FOR SPECIFIC USES, TO BE "FIBERGLASS" OR "CELOTEX".
2. RIGID BELOW GRADE INSULATION AT FOUNDATION AND BASEMENT WALLS TO BE EXTRUDED, EXPANDED POLYSTYRENE 2" THICK (R-VALUE: 5), UNLESS OTHERWISE NOTED ON THE PLANS.

B. CAULKING:

1. USE SHERWIN WILLIAMS 950A SILICONIZED ACRYLIC LATEX CAULK, GE SILICONE II OR APPROVED EQUAL. COLOR TO MATCH SURROUNDING AREA BEING CAULKED. CAULK ALL

EXTERIOR JOINTS AND BOTH SIDES OF ALL DOOR AND WINDOW FRAMES.

2. ALL EQUIPMENT, MECHANICAL, PLUMBING AND ELECTRICAL CONTRACTORS SHALL SUPPLY ALL FLASHINGS AND CURBS FOR ROOF OR WALL PENETRATIONS TO THE BUILDING ERECTOR. BUILDING ERECTOR SHALL INSTALL AND FLASH ALL BUILDING PENETRATIONS AS PART OF THEIR BID PROJECT.

3. WHERE CALLED OUT ON THE DRAWINGS, FIRE CAULK TO MEET ALL ASTM REQUIREMENTS FOR FIRE AND SMOKE BARRIER. PRODUCT TO BE 3M FIRE BARRIER SEALANT CP 25WB+ OR APPROVED EQUAL .

- C. ALL EXTERIOR MASONRY TO RECEIVE STAIN OR SEALER AND PAINT AS PER FINISHES IN SECTION 9,000.

07250 WEATHER BARRIER - VAPOR BARRIER

- A. BUILDING VAPOR BARRIER TO BE COMMERCIAL GRADE WEATHER BARRIER TYVEK COMMERCIALWRAP BY DUPONT OR APPROVED EQUAL.

- B. ALL JOINTS ARE TO BE LAPPED MINIMUM 3" AND TAPED AS SPECIFIED BY MANUFACTURER.

- C. ALL PENETRATIONS ARE TO BE TAPED AROUND ENTIRE PERIMETER.

- D. TAPE TO BE 3" WIDE TYVEK TAPE FOR COMMERCIAL APPLICATIONS BY DUPONT OR APPROVED EQUAL.

- E. BARRIER TO BE ANCHORED IN WOOD WITH 1" PLASTIC CAPS FASTENERS WITH MIN 5/8" PENETRATION.

- F. BARRIER TO BE ANCHORED IN METAL WITH 1-5/8" RUST RESISTANT SCREW WITH 2" PLASTIC CAP.

07260 REINFORCED VAPOR RETARDER

- A. REINFORCED VAPOR RETARDERS FOR SUSPENDED INSULATION APPLICATIONS ARE TO BE GRIFFOLYN TYPE-65 BY REEF INDUSTRIES OR APPROVED EQUAL.

- B. RETARDER TO BE INSTALLED ON THE UNDERSIDE OF ALL ROOF TRUSSES OR FLOOR JOISTS WHERE EXPOSED TO THE ELEMENTS ABOVE AND CONDITIONED BELOW.

- C. RETARDER ONLY REQUIRED WHEN INSULATION IS NOT SUSPENDED BY GYPSUM BOARD OR OTHER APPROVED VAPOR RETARDER.

- D. ALL JOINTS ARE TO BE LAPPED MINIMUM 3" AND TAPED AS SPECIFIED BY MANUFACTURER.

- E. ALL PENETRATIONS ARE TO BE TAPED AROUND ENTIRE PERIMETER.

- F. TAPE TO BE 3" WIDE GRIFFOLYN FAB TAPE FOR COMMERCIAL APPLICATIONS BY DUPONT OR APPROVED EQUAL.

- G. BARRIER TO BE ANCHORED IN WOOD WITH 1" PLASTIC CAPS FASTENERS WITH MIN 5/8" PENETRATION.

- H. BARRIER TO BE ANCHORED IN METAL WITH 1-5/8" RUST RESISTANT SCREW WITH 2" PLASTIC CAP.

07400 METALSIDING - RIBBED AND CORRUGATED PANELS

A. METAL WALL PANELS TO BE:

1. ALUMINUM-ZINC ALLOY-COATED STEEL SHEET MEETING ASTM A 792/A 792M, AND PRE-PAINTED BY THE COIL-COATING PROCESS PER ASTM A 755/A 755M OR UNPAINTED GALVALUME PLUS COATING, AS SPECIFIED ON THE PLANS.
2. RIBBED OR CORRUGATED, EXPOSED FASTENER PANELS.
3. MINIMUM 26GA. MATERIAL, UNLESS SPECIFIED ELSEWHERE IN THESE DOCUMENTS.

- B. MANUFACTURERS TO BE MBCI, METAL SALES MANUFACTURING OR APPROVED EQUAL.

- C. PANEL SYSTEM TO BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS AND INSTRUCTIONS.

- D. FINAL FINISH TO BE SELECTED BY OWNER BEFORE ORDERING, FROM AS STANDARD SET OF MANUFACTURER'S COLORS.

07610 METAL ROOFING - STANDING SEAM (OVER DECK)

- A. METAL ROOFING TO BE A PRE-PAINTED STANDING SEAM ROOF SYSTEM OVER 15LB FELT WITH A PLYWOOD SUBSTRATE AND TO INCLUDE ALL CLOSURE STRIPS, TRIM AND FLASHING AS NEEDED TO CREATE A WATER TIGHT SYSTEM.

- B. SYSTEM TO BE SNAP-LOC 24GA BY METAL SALES MANUFACTURING OR APPROVED EQUAL. SYSTEM TO BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS, RECOMMENDATIONS AND INDUSTRY STANDARD BEST PRACTICES.

08000 DOORS AND WINDOWS

- A. DOORS, FRAMES, WINDOWS AND GLAZING TO BE AS SHOWN ON DRAWINGS. FINISH HARDWARE TO COMPLY WITH BUILDING CODE.

- B. ALL DOOR AND WINDOW GLAZING TO CONFORM TO SECTION 08800 GLAZING.

- C. EGRESS DOORS SHALL BE ABLE TO BE OPENED FROM INSIDE WITHOUT A KEY OR SPECIAL KNOWLEDGE.

- D. ALL EXTERIOR OUTWARD SWINGING HINGED DOORS ARE TO HAVE NON-REMOVABLE PIN (NRP) HINGES, UNLESS OTHERWISE SPECIFIED ON THE DRAWINGS.

- E. HOLLOW METAL FRAMES SHALL BE STANDARD PROFILE, 16GA. SHOP PRIMED. THREE (3) ANCHORS EACH SIDE, ONE (1) AT HEAD. USE WRAP AROUND FRAMES AT GYPSUM BOARD PARTITIONS.

- F. HOLLOW METAL DOORS SHALL BE FLUSH, 18 GA., 1 3/4" THICK, EXTERIOR DOORS TO BE INSULATED WITH RIGID BD. INSULATION. HEAD OF DOORS TO BE SOLID AND FLUSH. DOORS TO BE SHOP PRIMED.

- G. FINISH HARDWARE SHALL BE MEDIUM GRADE COMMERCIAL PRODUCTS BY STANLEY, SCHLAGE, VON DUPRIN, YALE OR AN APPROVED EQUAL. FINISH TO BE SELECTED BY OWNER. U.L. RATED AND HANDICAPPED ACCESSIBLE HARDWARE AS REQUIRED. SEE DOOR SCHEDULE.

08380 SECTIONAL OVERHEAD DOOR SYSTEM

- A. SECTIONAL OVERHEAD DOORS (UPWARD ACTING) TO BE BY CRAWFORD, OVERHEAD DOOR, OR APPROVED EQUAL . INSTALL DOOR PER MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS .

- B. DOOR TO HAVE AN ELECTRONIC OPERATED WITH CHAIN HOIST BACKUP.

- C. OPERATOR TO BE MEDIUM DUTY, COMMERCIAL GRADE, 3/4 H.P MOTOR, UNLESS OTHERWISE NOTED ON THE PLANS. SEE DOOR SCHEDULE FOR FINAL SIZES.

- D. PROVIDE (1) WIRED 3-BUTTON (OPEN, CLOSE AND STOP) CONTROLLER STATION TO BE

LOCATED BY OWNER.

- E. PANELS TO BE INSULATED SECTION, 2" COMPRESSED FIBERGLASS BLANKET, 24 GA GALVANIZED FRONT AND BACK PANELS. USE STANDARD STILES AND RAILS.

- F. TRACKS TO BE 2" GALVANIZED STEEL WITH STANDARD HARDWARE.

- G. VERIFY LIFT CLEARANCE BEFORE ORDERING.

- H. PROVIDE NEOPRENE OR VINYL WEATHER STRIPPING ON ENTIRE PERIMETER.

- I. DOOR TO HAVE ELECTRICALLY CONTROLLED PHOTO EYE THAT STOPS AND REVERSES IF SENSES AN OBSTRUCTION.

- J. ALL DOORS AND ACCESSORIES NOT GALVANIZED SHALL BE FACTORY PRIMED. INTERIOR AND EXTERIOR DOOR PAINT SHALL BE SELECTED LATER.

- K. GLAZING TO AS SPECIFIED ON CONSTRUCTION DOCUMENTS, WHERE LISTED AND TO CONFORM TO SECTION 08800 GLAZING.

08410 ALUMINUM STOREFRONT SYSTEM

- A. EXTERIOR FRAME ARE TO BE THERMALLY BROKEN ALUMINUM FRAMES.

- B. FRAMES TO BE BLACK, BRONZE, WHITE OR CLEAR ANODIZED (AS SELECTED BY OWNER).

- C. ALUMINUM STOREFRONT SYSTEM TO BE "KAWNEER 451T" OR APPROVED EQUAL .

- D. GLAZING CONTRACTOR SHALL BE RESPONSIBLE TO SECURELY ANCHOR UNITS TO FRAMING OR MASONRY AS NEEDED TO TRANSFER LOADS TO THE BUILDING.

- E. ALL GLAZING TO CONFORM TO SECTION 08800 GLAZING.

08800 GLAZING

- A. UNLESS SPECIFIED HEREIN, ALL GLAZING IS PER DOOR AND WINDOW SCHEDULES LOCATED ON THE CONSTRUCTION DOCUMENTS.

- B. ALL GLAZING TO COMPLY WITH SAFETY GLAZING LAWS. INSTALLER TO VERIFY REQUIREMENTS BEFORE ORDERING AND INSTALLING ALL GLAZING.

- C. ALL INSULATED GLAZING UNITS, LOW-E FINISHING AND GLAZE TINTING ARE TO CARRY A MINIMUM OF A 10 YEAR WARRANTY FROM DATE OF ACCEPTANCE OF PROJECT.

- D. WHERE GLAZING IS SPECIFIED TO BE LOW-E AND TINTED, GLAZING IS TO BE TEMPERED AS PER GLAZING TYPES BELOW.

- E. ALL GLAZING TO FOLLOW STANDARD SPECIFICATIONS FOR ASTM C 1036, ASTM C 1048 AND ASTM E 774.

- F. GLAZING TO BE BY PPG, LOF, GUARDIAN INDUSTRIES, FORD GLASS, HORDIS BROTHERS INC., OR EQUAL. PROVIDE ALL TINTED AND LOW-E GLASS FROM THE SAME MANUFACTURER FOR THE ENTIRE PROJECT.

G. GLAZING:

1. EXTERIOR GLAZING TO BE 1", DOUBLE LAYER INSULATED GLAZING.
2. INTERIOR GLAZING TO BE 1/4", SINGLE LAYER.

H. GLAZING TYPES:

1. ANNEALED: CLEAR FLOAT GLASS CONFORMING TO ASTM C 1036, TYPE I, CLASS 1, QUALITY Q3.

2. TEMPERED: AS SPECIFIED FOR CLEAR ANNEALED EXCEPT FULLY TEMPERED TO CONFORM TO ASTM C 1048, KIND FT.

3. CLEAR WIRE: 1/4 INCH (6 MM) THICK, CLEAR ROLLED GLASS CONFORMING TO ASTM C-1036, TYPE II (FLAT), CLASS I, FORM 1 (WIRED AND POLISHED BOTH FACES), WIRED WITH WELDED POLISHED WIRES, 1/2 INCH (13 MM) X 1/2 INCH (13 MM) SQUARE PATTERN, SMOOTH WIRES VERTICAL, MANUFACTURED BY HORDIS BROS., SIERRACIN/TRANSTECH, OR EQUAL.

I. GLAZING FINISH TYPES:

1. OBSCURE: CONFORMING TO ASTM C 1036, TYPE II, CLASS I, FORM 3, FINISH 1, PATTERN P3 "HAMMERED" TEXTURE GLASS.

2. LOW-E: PPG "SUNGATE 500(2)" OR EQUAL, CLEAR FLOAT GLASS WITH TRANSPARENT REFLECTIVE COATING ON INBOARD (NO. 2) SURFACE, CONFORMING TO GLASS TYPE.

3. LOW-E TINTED: PPG "SUNGATE 1000(2)" OR EQUAL, TINTED FLOAT GLASS WITH TRANSPARENT REFLECTIVE COATING ON INBOARD (NO. 2) SURFACE, CONFORMING TO TEMPERED GLASS TYPE .

4. SPANDREL: TEMPERED SPANDREL GLASS CONFORMING TO DD-G-1403, GRADE B, STYLE II, COLOR AS SHOWN OR SELECTED BY OWNER .

- J. TINT FINISH TYPES - GLARE REDUCING FLOAT GLASS TO BE: PPG "SOLARGRAY", GRAY COLOR , PPG "SOLARBRONZE", BRONZE COLOR, OR EQUAL.

- K. CONFIGURATION TO BE PER WINDOW SCHEDULE LOCATED IN THE CONSTRUCTION DOCUMENTS .

- L. GLAZING MATERIALS AND ACCESSORIES SHALL BE FULLY COMPATIBLE WITH THE MATERIALS AND FINISHES WITH WHICH THEY ARE IN CONTACT. NEOPRENE AND EPDM MATERIALS SHALL NOT COME IN CONTACT WITH SILICONE SEALANT MATERIALS. SILICONE RUBBER SPACERS, SETTING AND EDGE BLOCKS AND GASKETS SHALL BE EITHER TYPE I (DESIGNED TO PREVENT ADHESION) OR TYPE II (DESIGNED FOR ADHESION) AS PER GLAZING SYSTEM MANUFACTURER'S RECOMMENDATIONS FOR EACH CONDITION OF USE.

09000 FINISHES

- A. ALL FINISHES SHALL BE AS CALLED FOR AND SPECIFIED ON DRAWINGS.

- B. INSPECTION OF FINISHED SURFACES FOR BLEMISHES AND DEFECT AT THE END OF THE PROJECT SHALL FOLLOW THE GENERALLY ACCEPTED STANDARD - PDCA (P1-09) INDUSTRY STANDARDS FOR REVIEWING FINISHED SURFACES. "VIEWING AND INSPECTION OF FINISHED SURFACES SHALL BE AT A DISTANCE OF THIRTY-NINE (39) INCHES FROM THE SURFACE UNDER FINISHED LIGHTING OR NATURAL LIGHTING WITHOUT THE USE OF ANY OPTIC MAGNIFICATIONS OR ENHANCED LIGHTING. ANY BLEMISHES OR DEFECTS DETECTED AT THIS RANGE SHALL BE REMOVED OR REPAIRED AND PATCHED TO MATCH THE SURROUNDING."

- C. ALL GYPSUM BOARD TO BE 5/8" THICK INSTALL PER U.S. GYPSUM ASSOC. STANDARDS. USE "GREEN" BOARD IN ALL TOILET ROOMS AND WITHIN 4'-0" OF ALL SINKS. FURNISH AND INSTALL METAL CORNER BEAD AT ALL OUTSIDE CORNERS AND "J" MOLD AT ALL EXPOSED EDGES.

- D. CERAMIC TILE TO BE 12"x12"x5/16" THIN SET TILE BY STONEPEAK OR APPROVED EQUAL, WITH CAP TILE ALONG EDGES AND BASE. INSTALL WITH C-CURE GROUT, 100% EPOXY ADDITIVE. INSTALL PER MANUFACTURER'S RECOMMENDATIONS AND INSTALLATION INSTRUCTIONS. TILE AND GROUT COLORS TO BE SELECTED BY OWNER FROM STANDARD ARCHITECTURAL LINE (MAXIMUM THREE TILE COLORS).

PROJECT NO:

19-3060

DRAWN BY:

NM/CS/

DATE:

05-27-2020



KEYES ARCHITECTS & ASSOCIATES  
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CITY OF BARDSTOWN  
PUBLIC WORKS BUILDING  
NEW CONSTRUCTION:  
PADGETT WAY  
BARDSTOWN, KY

SPECIFICATIONS

SP1.02



PROJECT: CITY OF BARDSTOWN PUBLIC WORKS BUILDING - FILE: SP1.03 Specifications.dwg - DATE: Sep 01, 2020 3:37PM - BY: ERIC KEYES

E. VCT FLOOR TILE TO BE 12"x12"x1/8" AZROCK BY JOHNSONITE , OR APPROVED EQUAL. OWNER TO SELECT MAXIMUM OF THREE COLORS FROM FULL ARCHITECTURAL LINE.

F. VINYL PLANK FLOORING IS TO BE NOMINAL 0.125" THICK VINYL WITH A MINIMUM 0.02" WEAR LAYER. TILE TO BE 48" IN LENGTH, 6" TO 9" IN WIDTH, AND SHALL BE LAID IN A STRAIGHT PATTERN. OWNER TO SELECT FINAL PRODUCT FROM A STANDARD LIST OF MANUFACTURER'S PRODUCT IN A MINIMUM OF (2) COLORS. PRODUCT TO BE I.D. FREEDOM BY JOHNSONITE, CLASSICS V5000 BY J+J FLOORING OR APPROVED EQUAL. PRODUCT TO BE GLUED DOWN USING A STANDARD ADHESIVE RECOMMENDED BY MANUFACTURER.

G. VINYL BASE TO BE 4" HIGH, 1/8" THICK BY JOHNSONITE, ROPPE, OR APPROVED EQUAL. USE COVED AT VINYL FLOOR TILE AND COVELESS AT CARPET. STAIRS SHALL RECEIVE VINYL TREADS AND BACKS, TREADS SHALL HAVE REPLACEABLE SLIP RESISTANT STRIP AT NOSING. COLORS AS SELECTED BY OWNER FROM STANDARD ARCHITECTURAL LINE. INSTALLED PER MANUFACTURER'S INSTRUCTIONS.

H. FLOOR TRANSITIONS SHALL BE VINYL AS RECOMMENDED FOR THE SPECIFIC MATERIAL TRANSITIONS. MATERIAL SHALL BE BY JOHNSONITE, ROPPE OR APPROVED EQUAL SELECTED FROM FULL ARCHITECTURAL COLOR LINES.

I. COATING SCHEDULE:

1. SURFACES NOT TO BE PAINTED ARE FLOOR COVERINGS , ITEMS WITH FACTORY APPLIED FINAL FINISH , CONCEALED DUCTS , PIPES AND CONDUIT , ACOUSTICAL CEILING TILES, ITEMS WITH PRE-FINISHED SURFACES, ALUMINUM WINDOWS AND DOOR FRAMES , AND ALL ITEMS CALLED NOT TO BE PAINTED ON PLANS.

2. SURFACES TO BE PAINTED:

NOTE: CONSULT WITH OWNER FOR FINAL COLORS AND FINISHES.

a) EXPOSED INTERIOR DRYWALL:

1ST COAT: LATEX WALL PRIMER.  
2ND COAT: LATEX EGGSHELL OR ALKYD BASED ENAMEL AS CALLED FOR.  
3RD COAT: LATEX EGGSHELL OR ALKYD BASED ENAMEL AS CALLED FOR.

b) INTERIOR DRYWALL CEILINGS:

1ST COAT: LATEX WALL PRIMER  
2ND COAT: ALKYD FLAT CEILING PAINT

c) INTERIOR WOOD OR MASONITE (PAINTED):

1ST COAT: WALL AND WOOD PRIMER  
2ND COAT: SEMI-GLOSS ALKYD ENAMEL  
3RD COAT: SEMI-GLOSS ALKYD ENAMEL

d) INTERIOR METAL:

1ST COAT: METAL PRIMER  
2ND COAT: SEMI-GLOSS ALKYD  
3RD COAT: SEMI-GLOSS ALKYD

e) EXTERIOR METAL:

1ST COAT: METAL PRIMER  
2ND COAT: SEMI-GLOSS ALKYD ENAMEL  
3RD COAT: SEMI-GLOSS ALKYD ENAMEL

f) STAINED MASONRY:

1ST COAT: TRANSPARENT BLOCK STAIN (COLOR AS SELECTED)  
2ND COAT: CLEAR MASONRY SEALER  
3RD COAT: CLEAR MASONRY SEALER

g) EPOXY FLOOR:

1ST COAT (PRIMER): 10 MILS EPOXY PRIMER  
  
2ND COAT (TOP): 30 MILS EPOXY TOP COAT

09511 ACOUSTICAL CEILING TILES

A. CEILING GRIDS TO BE STANDARD 2'X4' BY DONN, ARMSTRONG , OR APPROVED EQUAL.

B. CEILING TILES TO BE 2'X4' VINYL FACED SQUARE EDGE AND STANDARD FISSURED SQUARE EDGE PANELS BY ARMSTRONG, U.S.G. , OR APPROVED EQUAL .

C. WET AREAS SUCH AS KITCHENS, RESTROOMS, AND WASH ROOMS ARE TO RECEIVE A SMOOTH TEXTURE 2'X4' WASHABLE, SCRATCH RESISTANT, AND ANTI-MICROBIAL ACOUSTICAL TILE. TILE TO BE KITCHEN ZONE - 672 BY ARMSTRONG OR APPROVED EQUAL.

D. GRID AND PANELS ARE TO BE WHITE UNLESS OTHERWISE NOTED ON THE FINISH SCHEDULE.

09627 EPOXY FLOORING

A. RESINOUS FLOORING SYSTEM TO BE SELF-LEVELING, SOLID COLOR, TEXTURED, SEAMLESS, TWO PART EPOXY BASED FLOOR COATING APPLIED BETWEEN 35 TO 40 MILS. PRODUCT TO BE RATED FOR HEAVY COMMERCIAL USE AND WITH THE COATING SCHEDULE LISTED IN THE FINISH COATING SCHEDULE ABOVE IN SECTION 09000.

B. PRODUCT TO BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS BY A PROFESSIONAL INSTALLER WITH A MINIMUM OF 5 YEARS' EXPERIENCE.

C. PRODUCT TO BE:

1. ARMORSEAL 650 SL/RC BY SHERWIN WILLIAMS  
2. MEGASEAL HSPC BY PPG PAINTS  
3. OR APPROVED EQUAL

D. PRODUCT IS TO BE WARRANTIED FOR (1) FROM DATA OF ACCEPTANCE OF THE BUILDING OR AS AGREED TO WITH THE OWNER IN WRITING.

10000 SPECIALTIES

A. STORAGE SHELVING, WHERE SHOWN ON DRAWINGS SHALL BE PLASTIC COATED WIRE SYSTEMS BY CLOSETMAID, SCHULTE, K&V, OR APPROVED EQUAL. EACH LOCATION SHALL HAVE A FULLY ADJUSTABLE TRACK SYSTEM WITH A MINIMUM OF SIX SHELVES. FINAL STYLES OF THE SUPPLIED SHELVES TO BE SELECTED (SOME AREAS MAY RECEIVE ONLY A ROD AND SHELF).

B. FIRE EXTINGUISHER AND CABINETS TO BE BY OWNER AS REQUIRED BY CODE AND BY THE FIRE INSPECTOR.

C. TOILET ACCESSORIES: THE FOLLOWING LIST OF NEW ITEMS SHALL BE FURNISHED AND INSTALLED:  
(2) FIXED STANDARD MIRROR(S) 30"X36" - BOBRICK B-165 B 3036  
(2) 18" VERTICAL GRAB BAR(S) - BOBRICK B-6806X18

(2) 36" HORIZONTAL GRAB BAR(S) - BOBRICK B-6806X36  
(2) 42" HORIZONTAL GRAB BAR(S) - BOBRICK B-6806X42  
(3) TOILET PAPER HOLDER(S) - BOBRICK B-2888  
(2) PAPER TOWEL DISPENSER(S) - BOBRICK B-262  
(2) WALL MOUNTED SOAP DISPENSER(S) - BOBRICK B-5050  
(2) SET(S) STAINLESS STEEL SHOWER CURTAIN HOOKS - BOBRICK B-204-1  
(2) HEAVY DUTY SHOWER CURTAIN ROD(S) WITH CONCEALED MOUNTING - BOBRICK B-207  
(2) SURFACE MOUNTED ROBE HOOK(S) - BOBRICK B-7671

10155 METAL TOILET PARTITIONS

A. ALL BAKED ENAMEL METAL TOILET PARTITIONS SHALL BE FLOOR SUPPORTED AS MANUFACTURED BY GENERAL PARTITIONS MFG. CORP., OR APPROVED EQUAL. PROVIDE HANDICAPPED SYSTEMS AS REQUIRED.

B. CONSTRUCTION SHALL BE 1" @ THICK WITH TWO SHEETS, OF GALVANIZED AND BONDERIZED STEEL FORMED AND, BONDED TOGETHER BEFORE ATTACHING DIE DRAWN MOLDING ON ALL FOUR SIDES OF PANELS. MITERED REINFORCEMENTS FUSED TO CORNERS FOR ADDED STRUCTURAL STRENGTH. FILLERS SHALL BE GENERALS RIBCORE SOUND-DEADENING INSULATION OR APPROVED EQUAL.

C. DOORS TO BE SAME CONSTRUCTION AS PANELS.

D. PILASTERS-SHALL BE 1-1/4" @ THICK WITH TWO SHEETS OF GALVANIZED AND BONDERIZED STEEL, BONDED BEFORE ATTACHING DIE DRAWN MOLDING TO BOTH SIDES AND TOP, MITERED REINFORCEMENTS FUSED ON BOTH CORNERS FOR ADDED STRUCTURAL STRENGTH. SAME CONSTRUCTION AS PANEL SPECIFICATION OUTLINES ABOVE. PILASTERS ARE TO BE ANCHORED TO FLOOR WITH STANDARD 3/8@ THREADED ROD, HEX NUTS, AND WASHERS TO PROVIDE VERTICAL ADJUSTMENT AND NECESSARY STRENGTH.

E. USE CONCEALED LATCH, COAT HOOKS, HINGE BRACKETS, DOORSTOP AND KEEPER, HEAVY CASTING NONFERROUS ALLOY, CHROME-PLATED. CONCEALED HINGE WORKS ON OPPOSING NYLON CAMS UNDER SPRING TENSION. TOP PIVOT PIN, MOUNTED WITHIN DOOR HAVING BEARING POINTS ABOVE AND BELOW HINGE BRACKET.

F. WALL CONNECTION BRACKETS FOR PANELS AND PILASTERS TO BE HIGH STRENGTH HEAVY CHROME PLATED. PILASTER TRIM TO BE 3" HIGH, 0.031" STAINLESS STEEL. ALL HARDWARE AND FITTINGS TO BE SECURED WITH CHROME PLATED ONE-WAY VANDAL PROOF SEX BOLTS OR NO. 14 PLATED STEEL METAL SCREWS OF PROPER LENGTHS.

10281 SHOWER ENCLOSURE

A. SHOWER ENCLOSURE(S) TO BE ONE PIECE ALL FIBERGLASS TUB AND WALL PANEL SYSTEM. SEE PLUMBING PLANS AND SPECIFICATION FOR MORE INFORMATION.

B. UNLESS NOTED OTHERWISE ON THE PLANS, ALL UNITS ARE TO BE ACCESSIBLE AND MUST MEET THE MOST CURRENT OF ALL FEDERAL, STATE AND LOCAL ACCESSIBILITY CODES. THIS INCLUDES THE MOST RESTRICTIVE REQUIREMENTS OF ADAAG, ANSI 117.1 AND LOCAL CODES.

C. UNIT TO BE COMPLETE WITH ALL COMPONENTS NEEDED TO MAKE A WORKING SYSTEM. THIS IS TO INCLUDE ALL REQUIRED HARDWARE SUCH AS BUT NOT LIMITED TO GRAB BARS, CURTAIN RODS, CURTAIN HOOKS, ACCESSIBLE SHOWER HEAD AND WAND AND ANY OTHER ITEMS LISTED IN SECTION 10000 ABOVE.

D. UNIT TO HAVE INTEGRAL ACCESSIBLE SEAT UNLESS OTHERWISE SPECIFIED BY OWNER. IF A NON-INTEGRAL SEAT IS NOT INCLUDED, A WALL MOUNTED OR FLOOR MOUNTED UNIT IS TO BE SUPPLIED THAT FITS THIS ENCLOSURE.

E. BEFORE ORDERING ENCLOSURE, VERIFY WITH PLANS AND EXISTING SITE CONDITIONS, ALL OPENING AND PENETRATION REQUIREMENTS.

F. UNIT TO BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS AND REQUIREMENTS.

10510 METAL LOCKER

A. LOCKERS TO BE FREE STANDING 15" WIDE BY 18" DEEP BY 72" HIGH, SINGLE TIER EXTRA WIDE METAL LOCKER WITH 6" LEGS.

B. UNIT TO BE SINGLE OR TRIPLE UNIT(S) WIDE AS NEEDED FOR SPACE PROVIDED ON PLANS.

C. CONSTRUCTED FROM 16 GAUGE STEEL, POWDER COATED (COLOR TO BE SELECTED BY CLIENT FROM STANDARD MANUFACTURER COLORS).

D. PROVIDE STANDARD TOP SHELF, MINIMUM (2) WALL HOOKS AND A COAT ROD.

E. UNIT TO HAVE A LIFT UP HANDLE AND RECESSED HASP THAT ACCOMMODATES SEPARATE PADLOCK (NOT PROVIDED).

F. OPTIONS TO BE INCLUDED ARE ENGRAVED NUMBER PLATES, CORNER FILLERS AND FINISHED END PANELS (AT EXPOSED ENDS).

G. LOCKERS TO BE MODEL # 51365GY-A BY SALSBURY INDUSTRIES OR APPROVED EQUAL.

10511 METAL BENCH

A. BENCH TO BE FLOOR MOUNTED 48" WIDE BY 10" DEEP BY 18" HIGH, ANODIZED ALUMINUM STRUCTURE.

B. UNIT TO HAVE MINIMUM (2) 3" DIAMETER PEDESTALS (BOLT MOUNTED).

C. BENCH TO BE SERIES 77770 ALUMINUM LOCKER BENCHES BY SALSBUY INDUSTRIES OR APPROVED EQUAL.

10530 METAL AWNINGS AND CANOPIES

D. AWNINGS AND CANOPIES TO BE SIZES SHOWN ON PLANS AND PROFILE SHOWN ON ELEVATIONS AND DETAILS. FINAL DESIGN TO BE BY FABRICATOR TO MEET ALL FEDERAL, STATE AND LOCAL CODES USING THE DESIGN INTENT ON THE PLANS.

E. AWNING TO BE COVERED IN PRE-PAINTED STANDING SEAM METAL WITH CLOSED ENDS, COLOR AS SELECTED BY OWNER.

F. SEAMS ARE TO BE PRIMARILY RF WELDED OR WEDGE WELDED WITH THERMAL BONDING TAPE. USE M1000 GORE TENARA THREAD OR APPROVED EQUAL FOR SEAMS AS NEEDED.

G. STEEL PLATES, SHAPES AND BARS ARE TO FOLLOW ASTM A36.

H. ALL FRAMES ARE TO BE 1"X1"x1/16" SQUARE 6063-T5 ALUMINUM EXTRUSION MIL FINISH.

I. PRODUCT TO BE INSTALLED USING MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS, FOLLOWING INDUSTRY STANDARD BEST PRACTICES.

11000 EQUIPMENT

A. GENERAL CONTRACTOR TO INSTALL ALL EQUIPMENT SO LISTED ON DRAWINGS, VERIFY AND COORDINATE REQUIREMENTS WITH SUPPLIERS DURING BIDDING.

B. OWNER TO SUPPLY AND INSTALL ALL EQUIPMENT NOT REQUIRED OR LISTED HEREIN. SEE EQUIPMENT SCHEDULES.

12000 FURNISHINGS

A. OWNER TO FURNISH AND INSTALL ALL FURNISHINGS NOT REQUIRED OR LISTED HEREIN.

13000 SPECIAL CONSTRUCTION: PRE-ENGINEERED BUILDING PACKAGE

A. OWNER TO FURNISH ANY SPECIAL CONSTRUCTION NOT REQUIRED OR LISTED HEREIN.

B. BUILDING PACKAGE TO BE GENERALLY AS SHOWN ON DRAWINGS TO INCLUDE PRIMARY AND SECONDARY STEEL FRAMING

C. WALLS TO BE PAINTED RIBBED SIDING UNLESS OTHERWISE NOTE ON PLANS.

D. CANOPY ROOFS TO BE PAINTED VERTICAL RIB STANDING UNLESS OTHERWISE NOTED ON PLANS.

E. MAIN ROOFS TO BE GALVANIZED STANDING SEAM ROOF WITH THERMAL BLOCKS (UNLESS OTHERWISE NOTED ON PLANS) OVER 6" (MIN.) OF VINYL FACED INSULATION, WITH RELATED FLASHING, GUTTERS, DOWNSPOUTS, SOFFITS AND OVERHANGS.

F. FULL DESIGN RESPONSIBILITY OF PACKAGE TO BE BY MANUFACTURER. ROOF LOADS TO BE 20#/S.F. PLUS 5#/S.F. FOR EQUIPMENT LOADS, PLUS DEAD LOAD AND ADDITIONAL COLLATERAL LOADS AS DESIGNED BY MANUFACTURER. MANUFACTURER TO PROVIDE ADDITIONAL REINFORCING REQUIRED FOR ANY SNOW BUILD-UP, FRAMING AT CANOPIES AND FOR ALL ROOF TOP UNITS (VERIFY WEIGHT WITH MECHANICAL CONTRACTORS). WIND LOAD OF 15#/S.F. ON WALLS AND UL 90 UPLIFT ON ROOF. BUILDING MANUFACTURER TO COMPLY WITH ALL REQUIREMENTS OF THE STATE BUILDING CODES. THIS INCLUDES ALL BRACING AND CONNECTIONS REQUIRED TO TRANSFER LOADS TO FOUNDATIONS AS SHOWN, OR REQUIRED. (NOTE: LIVE LOAD REDUCTIONS ARE NOT ALLOWED IN STEEL WEIGHTS).

G. ALL ROOF CURBS TO BE MIN. 6" HIGH, SEAMLESS WELDED UP CURB UNITS. PROFILE OF CURBS TO MATCH THE PANEL PROFILES AND COLORS OF THE ROOF IT OCCURS ON, HAVE A WATER DIVERTER ON THE TOP SIDE AND BE STITCHED INTO THE ROOF SYSTEM. UNITS TO BE MANUFACTURER BY "CUSTOM CURB" OR APPROVED EQUAL.

H. WEATHER TIGHTNESS OF PRE-ENGINEERED BUILDING COMPONENT SYSTEMS TO BE RESPONSIBILITY OF BUILDING MANUFACTURER.

14000 CONVEYING EQUIPMENT

14450 VEHICLE LIFT (2-POST)

A. VEHICLE LIFT TO BE A 2-POST FREE STANDING LIFT WITH A LIFTING CAPACITY 30,000 LBS. (30K LBS.)

B. INSTALLATIONS IN NEW FACILITIES ARE TO HAVE UNDERFLOOR CONNECTION KIT TO RUN ALL CONTROL WIRING AND CONDUITS BELOW SLAB. OVERHEAD ROUTING IS ONLY ACCEPTABLE WHERE BELOW SLAB ROUTING IS NOT POSSIBLE DUE TO SITE CONSTRAINTS OR EXISTING CONDITIONS.

C. UNIT TO BE FREEDOMLIFT MODEL SK 2-30-33 - SINGLE TELESCOPIC ARM BY STERILT-KONI OR APPROVED EQUAL. PH: 800-336-6637

D. A STANDARD ARRANGE OF VEHICLE ADAPTORS SHALL BE SUPPLIED WITH THIS INSTALLATION.

E. COORDINATE INSTALLATION WITH ALL TRADES TO ENSURE EQUIPMENT NEEDS ARE MET BY ALL SUB-TRADES, INCLUDING BUT NOT LIMITED TO STRUCTURAL, MECHANICAL, ELECTRICAL AND PLUMBING.

14650 JIB CRANE

A. JIB CRANE TO BE COLUMN MOUNTED, MOTORIZED, TIE-ROD SUPPORTED, 2 TON (4,000 LBS.)

B. CRANE TO BE DESIGNED TO CONFORM TO THE FOLLOWING STANDARDS: AISC STEEL CONSTRUCTION MANUAL, OSHA 1910.179, ANSI B30.11, AND CMAA 74.

C. UNIT TO BE DESIGN TO HAVE A WORKING SPAN EQUAL TO THE LIFT POINT LOCATED AT HALF THE WIDTH OF THE VEHICLE BAY AND A 180-DEGREE AREA OF ROTATION.

D. CONSTRUCTION: FABRICATED USING ASTM A36 STEEL SECTIONS WITH FINISHED ENDS AND SURFACES.

E. UNIT TO BE 301 SERIES JIB CRANE BY SPANCO OR APPROVED EQUAL.

F. INCLUDE WITH INSTALLATION A 2-TON MOTORIZED, SINGLE SPEED HOIST WITH A SINGLE SPEED TROLLEY. HOIST TO INCLUDE WIRED REMOTE.

G. UNIT TO BE SNER MODEL SNERM020L-L/S HOIST AND TROLLEY BY HARRINTON OR APPROVED EQUAL.

H. COORDINATE INSTALLATION WITH ALL TRADES TO ENSURE EQUIPMENT NEEDS ARE MET BY ALL SUB-TRADES, INCLUDING BUT NOT LIMITED TO STRUCTURAL, MECHANICAL, ELECTRICAL AND PLUMBING.

SPECIAL NOTE:

A. IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR AND THE MECHANICAL, ELECTRICAL, AND PLUMBING CONTRACTORS TO ENSURE THAT ALL PARTS OF THEIR WORK IS TO BE ACCESSIBLE AS PER FEDERAL ADAAG GUIDELINES AND ALL STATE / LOCAL GUIDELINES. THIS INCLUDES BUT IS NOT LIMITED TO ELECTRICAL CONTROLS SUCH AS THERMOSTATS OR LIGHTING CONTROLS, LIGHT SWITCHES, OUTLET PLUGS, HAND DRYERS, AND FAUCET CONTROLS. IF THERE ARE CONCERNS ABOUT HOW TO DETERMINE REACH RANGES, EQUIPMENT CLEARANCE OR OTHER ACCESSIBILITY ITEMS, CONTACT THE ARCHITECT IMMEDIATELY BEFORE WORK BEGINS FOR GUIDANCE.

15000 PLUMBING - SEE PLUMBING PLANS FOR BALANCE OF NOTES

A. THIS PROJECT REQUIRES NEW WASTE AND POTABLE WATER SYSTEMS, CONTRACTORS TO TIE SANITARY LINES INTO NEW/EXISTING SEPTIC SYSTEM BY OWNER OR OWNER'S REPRESENTATIVE. VERIFY LOCATION AND EXISTING CONDITIONS BEFORE STARTING WORK.

B. SUBCONTRACTOR'S BID TO BE COMPLETE, INCLUDE ALL MATERIAL, LABOR AND FACILITIES REQUIRED TO COMPLETE THE WORK SHOWN ON DRAWINGS AND SPECIFIED HEREIN TO CREATE A COMPLETE WORKING SYSTEM. WHERE DRAWINGS DO NOT SPECIFICALLY SHOW HOW WORK IS TO BE EXECUTED THE SUBCONTRACTORS RESPONSIBLE FOR THE WORK WILL FIGURE AND BID ACCEPTABLE METHOD OF COMPLETING THE WORK.

C. INCLUDED IN BID TO BE ALL PLUMBING SITE-WORK REQUIRED TO COMPLETE THE JOB, INCLUDING TAP-IN FEES AND PERMITS.

D. ALL PLUMBING SYSTEMS TO BE COMPLETE INCLUDING, BUT NOT LIMITED TO THE BACKFLOW, PREVENTERS, WASTE, VENT, COLD WATER, HOT WATER FIXTURES AND FITTINGS.

E. ALL WORK, MATERIAL, FIXTURES, DESIGN AND PRODUCTS SHALL CONFORM TO THE LATEST EDITION OF THE FEDERAL, STATE AND LOCAL PLUMBING CODES. INCLUDE ALL ITEMS REQUIRED BY CODE WHETHER SHOWN OR NOT

F. SYSTEMS TO BE SIZED FOR ALL FIXTURES AND EQUIPMENT AS SHOWN ON PLANS.

G. HANDICAPPED FIXTURES TO BE USED WHERE SHOWN ON PLANS.

H. DESIGN SUBMITTAL DRAWINGS, RISER DIAGRAM, AND OBTAINING AGENCY APPROVALS ARE RESPONSIBILITY OF THE SUBCONTRACTOR.

I. PLUMBING CONTRACTOR SHALL VISIT SITE, REVIEW ALL DRAWINGS AND CONFIRM LOCATION AND ADEQUACY OF SEWER, GAS AND WATER CONNECTIONS WITH OWNER AND LOCAL GOVERNING AUTHORITIES DURING BIDDING.

J. PLUMBING CONTRACTOR TO INCLUDE EXTENSION OF NATURAL GAS SYSTEM, PIPING, FITTING AND HOOK UPS.

K. PLUMBING CONTRACTOR TO REVIEW H.V.A.C. SHEETS FOR GAS PIPING REQUIREMENTS OF HEATING EQUIPMENT. SIZE WORK FOR THESE LOADS PLUS EXISTING LOADS AS REQUIRED AND SHOWN ON PLANS.

L. ALL CONDENSATE PIPING FOR THE H.V.A.C. SYSTEMS IS BY PLUMBING CONTRACTOR.

M. PLUMBING CONTRACTOR SHALL COORDINATE THE INSTALLATION AS NEEDED TO AVOID CONFLICT OR INTERFERENCE OF ALL OTHER TRADES.

N. PLUMBER TO INSTALL DOMESTIC WATER SUPPRESSION SYSTEM IN ALL MECHANICAL AND STORAGE ROOMS AS REQUIRED TO MEET STATE BUILDING CODE AND N.F.P.A. STANDARDS.

O. WHERE PLANS AND SPECIFICATIONS CONFLICT, PLANS WILL SUPERSEDE SPECS.

P. SEE PLANS FOR PLUMBING FIXTURE SCHEDULE.

15100 H.V.A.C. - SEE MECHANICAL PLANS FOR BALANCE OF NOTES

A. ALL CONDENSATE AND GAS PIPING BY PLUMBING CONTRACTOR.

B. SUBCONTRACTOR'S BID TO BE COMPLETE, INCLUDE ALL MATERIAL, LABOR AND FACILITIES REQUIRED TO COMPLETE THE WORK SHOWN ON DRAWINGS AND SPECIFIED HEREIN TO CREATE A COMPLETE WORKING SYSTEM. WHERE DRAWINGS DO NOT SPECIFICALLY SHOW HOW WORK IS TO BE EXECUTED THE SUBCONTRACTORS RESPONSIBLE FOR THE WORK WILL FIGURE AND BID ACCEPTABLE METHOD OF COMPLETING THE WORK.

C. FURNISH COMBUSTION AIR PER SECTION M-610, LATEST B.O.C.A. CODE.

D. FURNISH HEAT DETECTORS IN RETURN DUCTS FOR EACH UNIT IF REQUIRED PER N.F.P.A.

E. ALL WIRING ASSOCIATED WITH THE INSTALLATION SHALL CONFORM TO THE NATIONAL ELECTRIC CODE. ALL CONTROL WIRING TO BE IN EMT INSIDE; STEEL CONDUIT OUTSIDE.

F. WHERE APPLICABLE, MATERIALS USED IN THIS SYSTEM SHALL HAVE A MAXIMUM FLAME SPREAD RATING OF 25; A MAXIMUM SMOKE DEVELOPED RATING 50.

G. ALL SYSTEMS TO CONFORM TO N.F.P.A. 88B, 90A, 90B, 91 AND 101.

H. TOILET EXHAUST QUANTITIES TO CONFORM TO STATE BUILDING CODE. FURNISH AND INSTALL ROOF MOUNTED EXHAUST FANS AND OTHER SYSTEMS.

I. THIS PLAN HAS BEEN REVIEWED ONLY FOR GENERAL COMPLIANCE WITH THE BUILDING CODES. IT SHALL BE THE HEATING CONTRACTOR'S RESPONSIBILITY AND A CONDITION OF HIS CONTRACT WITH THE GENERAL CONTRACTOR TO PROPERLY INSTALL ALL SYSTEMS IN ACCORDANCE WITH THE CODES AND FOR PROPER COMFORT AND WORK ABILITY.

J. CONTRACTOR TO GATHER AND VERIFY FIELD INFORMATION REQUIRED TO DESIGN AND COMPLETE CONSTRUCTION WORK. NOTIFY OWNER OF ITEMS THAT ARE DIFFERENT FROM THAT SHOWN ON DRAWINGS. CHECK SPACE ABOVE CEILINGS BEFORE FABRICATION TO BE SURE DUCTS CAN BE INSTALLED. COORDINATE AND SCHEDULE ALL WORK SO DUCTWORK AND MAIN SYSTEMS ARE INSTALLED IN TIGHT SPACES WITH A MINIMUM OF DIFFICULTY.

K. FURNISH FULL PARTS AND LABOR WARRANTY FOR ONE YEAR STARTING AT DATE OF ACCEPTANCE OF SYSTEM BY OWNER. COMPRESSORS TO BE WARRANTED FOR FIVE YEARS.

L. BID IS TO BE BASED ON EQUIPMENT SPECIFIED. SHOW ADDS OR DEDUCTS ON BID IF ALTERNATE EQUIPMENT IS PROPOSED.

M. DUCT SIZES ARE AIR PASSAGE SIZE. ALL INTERIOR DUCTS TO HAVE 1 1/2" FOIL FACED WRAP. SEAL ALL DUCT JOINTS BEFORE WRAPPING. ALL JOINTS MUST BE SEALED. CEILING LAYOUT WILL BE FIELD ADJUSTED TO FINAL ROOM DIMENSIONS.

N. ALL TAKEOFFS TO DIFFUSERS TO HAVE SCOOP AND DAMPER. ALL ELBOWS TO HAVE TURNING VANES. MAXIMUM LENGTH OF FLEX DUCT IS 7'. SECURE FLEX DUCT WITH NYLON STRAPS. DUCT TAPE IS NOT ACCEPTABLE. DIFFUSERS TO BE SYMMETRICAL WITH CEILING AND LIGHT LAYOUT.

O. REFRIGERATION LINES TO BE INSULATED ACR COPPER WITH SILFOS JOINTS PROTECTED BY A NITROGEN PURGE DURING BRAZING. INSTALL SUCTION LINE FILTER DRIER ON COMPRESSOR AND A SIGHT GLASS WITH MOISTURE INDICATOR AT EVAPORATOR.

P. H.V.A.C. CONTRACTOR TO FURNISH FLASHINGS & CURBS FOR ALL ROOF AND WALL PENETRATIONS TO BUILDING ERECTOR.

Q. H.V.A.C. CONTRACTOR TO FURNISH DIMENSIONS AND SLEEVES OR ACTUAL ITEMS TO BE INSTALLED IN WALLS TO THE APPROPRIATE TRADES FOR INSTALLATION. IF H.V.A.C. ITEMS OR SLEEVES ARE NOT FURNISHED, APPROPRIATE TRADES WILL PERFORM THE WORK LATER & BACK CHARGE H.V.A.C. CONTRACTOR.

R. INSTALL UNDER FLOOR LINES AS SHOWN.

S. SEE MECHANICAL PLANS FOR BALANCE OF NOTES.

15200 AIR COMPRESSOR - SEE PLUMBING PLANS AND SPECIFICATIONS FOR INFORMATION

15330 AUTOMATIC SUPPRESSION SYSTEM

A. CONTRACTOR TO FURNISH AND INSTALL A COMPLETE WET PIPE SPRINKLER SYSTEM PER N.F.P.A. 13 AND FACTORY MUTUAL REQUIREMENTS. SYSTEM TO BE DESIGN TO GIVE FULL COVERAGE AS REQUIRED BY N.F.P.A. REQUIREMENTS FOR THE SPECIFIC USE AREAS OF THIS BUILDING.

B. BID TO BE COMPLETE TO PROVIDE ALL WORK REQUIRED. INCLUDE DEDICATED FIRE SUPPRESSION LINE TO THE STREET, NEW TAP AND P.I.V. OR VAULT. RISER, COMPRESSOR AND ALARM TO BE LOCATED AS SHOWN. COORDINATE FINAL LOCATIONS, POWER, COMMUNICATIONS AND SERVICE WITH ALL OTHER TRADES.

C. COORDINATE P.I.V. AND FIRE DEPARTMENT CONNECTION, LOCATION AND PIPE THREADS WITH LOCAL FIRE DEPARTMENT. SPRINKLER LINES TO BE INSTALLED SO AS NOT TO INTERFERE WITH FUTURE CRANE, PIPING SYSTEMS, MECHANICAL SYSTEMS AND ELECTRICAL SYSTEMS OR FIXTURES.

D. PROVIDE SHOP DRAWINGS FOR APPROVAL BEFORE ORDERING MATERIALS. DESIGN, STAMPED DRAWINGS AND OBTAINING AGENCY APPROVALS OF SYSTEM TO BE RESPONSIBILITY OF SPRINKLER SUBCONTRACTOR.

15768 RADIANT TUBE HEATER - GAS-FIRED

A. SYSTEM TO BE A GAS-FIRED, FULLY-VENTED, LOW-INTENSITY, RADIANT HEATING SYSTEM BY CO-RAY-VAC OR APPROVED EQUAL.

B. ALTERNATE MANUFACTURERS SHALL HAVE A MINIMUM OF 10 YEARS OF SIMILAR SERVICE.

PROJECT NO:  
19-3060  
DRAWN BY:  
NM/CS/  
DATE:  
05-27-2020



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NEW CONSTRUCTION:  
CITY OF BARDSTOWN  
PUBLIC WORKS BUILDING  
PADGETT WAY  
BARDSTOWN, KY

SPECIFICATIONS  
SP1.03



PROJECT: CITY OF BARDSTOWN PUBLIC WORKS BUILDING - FILE: SP1.03 Specifications.dwg - DATE: Sep 01, 2020 3:37PM - BY: ERIC KEYES

- UNIT SHALL MEET OR EXCEED THE STANDARDS AS PUT FORTH BY THE RECOMMENDED SYSTEM AND MANUFACTURER. IF AN ALTERNATE MANUFACTURER IS ACCEPTED, THE CONTRACTOR ASSUMES RESPONSIBILITY FOR THE DESIGN, PERFORMANCE AND EXPENSE OF THE UNIT. ADDITIONALLY THE CONTRACTOR WILL ASSUME ALL RESPONSIBILITY TO COVER ALL EXTRA WORK AS NECESSITATED BY OTHER TRADES AS A RESULT OF THIS SUBSTITUTION. THE OWNER, ARCHITECT AND ENGINEER RESERVE THE RIGHT TO REQUIRE THE CONTRACTOR TO REMOVE AND REPLACE ANY MATERIAL OR EQUIPMENT THAT DOES NOT MEET THESE SPECIFICATIONS.
- C. SYSTEM TO INCLUDE BURNER UNITS, VACUUM PUMPS, HEAT EXCHANGERS, REFLECTORS, AND CONTROLS.
- D. BID LAYOUT AS SHOWN ON PLANS. PROVIDE SHOP DRAWINGS SHOWING COMPLETE DETAILS OF INSTALLATION OF UNIT, INCLUDING LAYOUT, SUSPENSION, CONNECTIONS, VACUUM PUMPS, BURNERS, HEAT EXCHANGERS, AND CONTROLS ARE TO BE SUBMITTED PRIOR TO ORDERING UNITS.
- E. UNIT TO FOLLOW ALL FEDERAL, STATE AND LOCAL CODES. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THESE CODES AND MAKE SURE THE UNIT ADHERES TO THEM.
- F. UNIT TO HAVE AT LEAST A 5 YEAR WARRANT ON ALL MATERIALS, 25 YEAR WARRANTY ON CAST IRON VACUUM PUMP AND CONTROLS AND 5 YEARS ON ALL OTHER COMPONENTS, FROM DATE OF FINAL ACCEPTANCE OF UNIT.
- G. UNIT TO BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS AND REQUIREMENTS.
- H. PROVIDE TRAINING BY MANUFACTURER'S TECHNICAL REPRESENTATIVE TO INSTRUCT OPERATING PERSONNEL IN THE OPERATIONS AND MAINTENANCE OF UNIT.

16000 ELECTRICAL - SEE ELECTRICAL PLANS FOR BALANCE OF NOTES

- A. PROVIDE COMPLETE SUPERVISED FIRE ALARM SYSTEM AS SHOWN ON THE PLANS.
- B. SUBCONTRACTOR'S BID TO BE COMPLETE. INCLUDE ALL MATERIAL, LABOR AND FACILITIES REQUIRED TO COMPLETE THE WORK SHOWN ON DRAWINGS, SPECIFIED HEREIN AND AS REQUIRED BY FEDERAL, STATE AND LOCAL CODES TO CREATE A COMPLETE WORKING SYSTEM. WHERE DRAWINGS DO NOT SPECIFICALLY SHOW HOW WORK IS TO BE EXECUTED THE SUBCONTRACTORS RESPONSIBLE FOR THE WORK WILL FIGURE AND BID ACCEPTABLE METHOD OF COMPLETING THE WORK TO PROVIDE PROPER DESIGN AND WORK ABILITY. PROVIDE A COMPLETE ELECTRICAL SYSTEM AS INDICATED ON THE DRAWINGS AND DESCRIBED HEREIN. FURNISH "AS BUILT" DRAWINGS ON COMPLETION.
- C. ELECTRICAL WORK SHALL COMPLY WITH THE NATIONAL ELECTRIC CODE AS WELL AS STATE AND LOCAL GOVERNING CODES.
- D. PAY FOR PERMITS AND INSPECTIONS AND PROVIDE A CERTIFICATE OF INSPECTION.
- E. SYSTEMS WILL HAVE A SINGLE METER. PROVIDE REQUIRED SUBPANELS AND EQUIPMENT GROUNDING SYSTEMS. THE CONDUIT SYSTEM SHALL FORM A CONTINUOUS PATH FOR GROUND AND SHALL BE SAFELY GROUNDED AT THE DISTRIBUTION PANEL. PROVIDE GROUNDING CONDUCTORS WHERE INDICATED AS SPECIFIED.
- F. MATERIALS SHALL BE NEW WITH MANUFACTURER'S NAME PRINTED THEREON AND UNDERWRITER'S LABORATORY LISTED. THE SELECTION OF MATERIALS AND EQUIPMENT TO BE PROVIDED UNDER THIS CONTRACT SHALL BE IN STRICT ACCORDANCE WITH THE SPECIFICATIONS AND DRAWINGS. THIS CONTRACTOR SHALL SUBMIT TO THE ARCHITECT FOR APPROVAL THREE COPIES OF EQUIPMENT AS FOLLOWS: MAIN SWITCHBOARD AND DISCONNECT SWITCHES AND LIGHTING FIXTURES.
- G. IDENTIFY DISCONNECT SWITCHES WITH PERMANENT NAMEPLATES WITH 1/4" MINIMUM HEIGHT LETTERS.
- H. ELECTRICAL CONTRACTOR TO COORDINATE ALL LAYOUT, EQUIPMENT AND WORK WITH OTHER TRADES AS WILL BE REQUIRED FOR SMOOTH OPERATION AND A COMPLETE JOB. ANY CUTTING AND PATCHING OF WALLS OR FLOORS SHALL BE THE RESPONSIBILITY OF THIS CONTRACTOR TO REPAIR.
- I. DISCONNECT SWITCHES SHALL BE ITE GENERAL DUTY TYPE IN NEMA-1 ENCLOSURE. EQUIVALENT SQUARE D OR ARROW-HART IS ACCEPTABLE. SWITCHES SHALL BE QUICK-MAKE, QUICK-BREAK, EXTERNALLY OPERATED AND INTERLOCKED.
- J. SWITCHES SHALL BE HUBBELL 1221-1 SINGLE POLE OR 1223-1 THREE WAY. DUPLEX RECEPTACLES SHALL BE HUBBELL 5265-1. SIERRA, ARROW-HART AND BRYANT SHALL BE CONSIDERED AS EQUAL. GROUND FAULT INTERRUPTING RECEPTACLES SHALL BE HUBBELL 5262-GR.
- K. THE ELECTRICAL SERVICE AT THE SITE SHALL BE VERIFIED BY THIS CONTRACTOR PRIOR TO BIDDING JOB. THIS CONTRACTOR SHALL PROVIDE CONDUIT, CABLE, CONCRETE, CONNECTIONS AND OTHER EQUIPMENT REQUIRED. THIS CONTRACTOR SHALL VERIFY UTILITY REQUIREMENTS AND CHARGES PRIOR TO BIDDING AND INCLUDE SUCH IN BID.
- L. FOR SERVICE AND PANEL FEEDER WIRING, USE TYPE THW CABLE. USE THHN CABLE FOR INTERIOR BRANCH CIRCUIT WIRING EXCEPT AS NOTED. DESIGN IS BASED ON COPPER CONDUCTORS. MINIMUM #12 AWG. WIRING SHALL BE OF CONDUIT OR FLEXIBLE CABLE. SPLICE WIRES #6 AWG AND LARGER WITH APPROVED SOLDERLESS CONNECTORS SUCH AS ILSCO PROPERLY TAPED AND INSULATED. SPLICE SMALLER WIRES WITH MECHANICAL CONNECTORS SUCH AS "SCOTCHLOCK".
- M. PROVIDE HEAVY WALL CONDUIT FOR SERVICE AND PANEL FEEDER CONDUITS WHERE EXPOSED TO ELEMENTS. FITTINGS SHALL BE P.V.C. OR THREADED, SET-SCREW TYPE WITH INSULATED THROATS. FURNISH CODE-APPROVED CONDUIT FOR INTERIOR WIRING WHERE PHYSICAL DAMAGE IS NOT A CONSIDERATION. MINIMUM CONDUIT SIZE IS 1/2" EXCEPT FOR FLEXIBLE RUNOUTS TO FIXTURES, MOTORS, ETC., WHICH MAY BE 3/8". CONDUIT SHALL BE CONCEALED WHEREVER POSSIBLE AND SHALL BE RUN PARALLEL OR PERPENDICULAR TO BUILDING WALLS AND CEILINGS. CONDUIT INSTALLED IN OR BELOW FLOOR SHALL BE GALVANIZED RIGID CONDUIT.
- N. PROVIDE STRUCTURAL FRAMEWORK AND HANGING RODS WITH BRACES AND ACCESSORIES WHERE REQUIRED TO HOLD EQUIPMENT IN FINAL POSITION.
- O. PROVIDE FIXTURES AS LISTED ON DRAWINGS. PROVIDE NECESSARY MOUNTING HARDWARE FOR A COMPLETE INSTALLATION. PROVIDE LAMPS, BALLASTS AND SPECIAL CONTROLS.
- P. TELEPHONE, NETWORKING AND TELEVISION CABLING SERVICE WILL BE CONTRACTED BY THE OWNER. PROVIDE A 4"x4"x3/4" EQUIPMENT BOARD COMPLETE WITH A GROUNDING MEANS WITH LUG AND A DUPLEX RECEPTACLE. INSTALL EMPTY BOX WITH BLANK COVER PLATE AND 1/2" CONDUIT WITH PULL WIRE TO 9" ABOVE CEILING, WHERE SHOWN ON PLANS.
- Q. ELECTRICAL CONTRACTOR TO PROVIDE TEMPORARY SERVICE AS REQUIRED FOR THIS PROJECT. ALSO, COORDINATE AND PROVIDE FOR SWITCH OVER OF POWER FOR NEW BUILDING, SITE AND CANOPIES.
- R. THIS CONTRACTOR SHALL GUARANTEE WORK INSTALLED UNDER THE CONTRACT TO BE FREE FROM THE DEFECTIVE WORKMANSHIP AND MATERIALS. USUAL WEAR EXPECTED, AND SHOULD ANY DEFECTS DEVELOP WITHIN A PERIOD OF ONE YEAR AFTER ACCEPTANCE OF THE BUILDING BY THE OWNER, THIS CONTRACTOR SHALL REPAIR AND/OR REPLACE ANY DEFECTIVE ITEMS AND DAMAGE RESULTING FROM FAILURE OF THESE ITEMS AT NO EXPENSE WHATSOEVER TO THE OWNER.

END OF SPECIFICATIONS

PROJECT NO:  
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05-27-2020



**KEYES ARCHITECTS & ASSOCIATES**  
4717 PRESTON HIGHWAY  
LOUISVILLE, KENTUCKY 40213 (502) 636-5113

NEW CONSTRUCTION:  
**CITY OF BARDSTOWN**  
**PUBLIC WORKS BUILDING**  
PADGETT WAY  
BARDSTOWN, KY

SPECIFICATIONS

**SP1.04**