



NOTICE TO ALL BIDDERS

**ADDENDUM NO. 3
TO
TUCSON AIRPORT AUTHORITY
TUCSON INTERNATIONAL AIRPORT
10119007 CBP RELOCATION**

February 13, 2020

In accordance with the Bid Documents, Bidders on the above-referenced project are hereby notified that the following Addendum, dated February 06, 2020 shall be made a part of the Bid Documents. The Bidder shall acknowledge receipt of this addendum on the Bid Form.

GENERAL

1. Responses to Bidder questions dated, February 13, 2020.
2. Revised drawings dated February 13, 2020 .
3. Revised/added specifications dated February 13, 2020.

CLARIFICATIONS

QUESTIONS (updates to Addendum 02 Questions):

Question #6

The Access Control Reader 'HID 6171 AKT0000' located in spec section 28 1300 - 8 is discontinued and no longer available. Please provide a valid reader part number.

Response: See attached revised spec pages.

Updated Response: Manufacturers, system description, and component/parts are updated in attached specification pages.

Question #8

Are security device to integrate into access control system or be stand alone?

Response: See attached spec 283200.

Updated Response: System is standalone.

Question #10

In section 26-2300, item 1.2 B, Video surveillance system shall integrate with existing monitoring and control system. What is the existing system, and does it have camera licenses and room for new cameras? Also, where is the system located and how will we connect new cameras into the existing system?

Response: See attached revised spec page.

Updated Response: Scope of this work has been revised. See attached updated specifications and drawings.

Question #11

In section 26-2300 page 8, item 2.8 and 2.9, IP video system: Are we installing a new video recording head end system, and workstations? Please provide recording specs and storage requirements.

Response: See attached revised spec page.

Updated Response: Scope of this work has been revised. See attached updated specifications and drawings.

QUESTIONS (Addendum 03):

Question #1

Are there NEW bullet resistant walls?? If so where??

Response: All bullet resistant walls in the project are new. There are no existing bullet resistant walls in the building. Refer to plan for wall types/locations.

Question #2

DR#126 does not call out a frame or door. This is located in a bullet resistant wall. Do you want a bullet resistant door and frame?

Response: This door and frame need to be UL 752 Type III resistant. Door type added to Sheet A9.1. Schedule updated.

Question #3

DR# 105 and 106 are mis labeled on the door swing floor plan.

Response: Labels are correct on the plans.

Question #4

DR#105 is that receiving a standard mortise lock like hardware set says? Or are you using the detention deadbolt mortise with mogul keys on both side like you should be? If so what kind and manufacturer and part number?

Response: Door hardware updated on sheet A9.1.

Question #5

DR#118 - no door type called out. What type frame?

Response: Doors 118A and 118B to have HM-1 frames and door type B-B-01. Schedule updated.

Question #6

DR#129 - no hardware set called out. What is that set?

Response: No hardware set. Function covered in comments on schedule.

Question #7

DR#143 No hardware set called out. What hardware set it required.

Response: Door to receive Hardware set 1. Schedule updated.

Question #7

DR#107 no door type or frame type. What are the door and frame type for this opening? The opening also calls for a 15 ¼ jamb depth is this correct?

Response: Frame depth incorrect depth can be 5-3/4" set in masonry wall. Door type is 'B' and frame type is '1'. Schedule updated.

Question #8

DR#111 is calling for an STC rating. Your wall details show an STC rating but no number of rating?

Response: Per CBP standards these are STC 50 min rated. Door schedule updated. Wall types call out STC rating under wall type 05 base number. 05H only modifies the framing size.

Question #9

Solid surface countertop specifications call IceStone USA or approved equal (see spec below). IceStone USA – is a 100% recycled glass and concrete countertop – **not** homogenous solid sheets of filled plastic resin, similar to Corian. Please provide additional information on an approved equal.

Response: IceStone is removed from the spec and replaced with Corian as basis of design.

Question #10

Response to question #13 on Addendum No. 2 dated February 6, 2020 states lockers and mirrors are to be CFCI. Response to question #16 states keynote updated. lockers are existing to be relocated from existing CBP facility. They will be owner OFOI? Please clarify

Response: As stated before the lockers will be OFOI regardless of whether they are existing or not.

Question #11

Will saw cut trenched for underground utilities (approximately 2' wide) be required to have dowels installed? If so, will it be every 12" O.C alternating directions with 6" minimum embeds?

Response: Correct, all concrete patching will require tie-ins as noted above.

Question #12

Will existing power/data trenches require additional saw cutting on each end to remove any steel plates/supports prior to infill?

Response: Unknown at this time, trenches will need to be removed in their entirety including any and all saw-cutting, etc.

Question #13

The traffic spikes specified were recently also discontinued by Lift Master. I have attached a cut sheet and information on a similar system. This system requires a concrete pad to attach the spikes to. The concrete pad would be something I would "not" include in my proposal, so you would need to have a concrete contractor involved. Please advise if this product is acceptable?

Response: Not accepted. An alternate has been included in the spec that does not require concrete and can be attached to either concrete or asphalt drives.

Question #14

Does the 9' permanent AOA chain link fence have the reinforcement cable?

Response: Yes, per the TAA fencing standards.

Question #15

Does the 6' chain link fence at the parking lot have barbed wire, twist ties, and reinforcement cable? Please advise.

Response: No.

Question #16

At the Cashier / Reception 142, keynote 12 is calling this as a workstation - most of the millwork scope can be recognized via (keynote 10/A1.1). Is this office furniture, or FFE?? There's no elevation for this area . . . which is why I'm inquiring as to whether this is millwork. Please advise

Response: This is millwork. Elevations added to A2.1.

Question #17

In the same Reception 142 area, keynote 11 calls out for a stainless steel deal tray (among other ballistic items listed) which is recessed into a countertop – see (52/A9.1). What type of material is this countertop at this pass thru area? Is this the SS1 "IceStone" as seen throughout the rest of this project?

Again, no elevation to go by. Please advise.

Response: See response to Question 9 on solid surface (No IceStone). The deal tray is part of the transaction window and not in the millwork counter. Similar to Open Office 126.

Question #18

Any Specs on the barrier arm operator?

Response: Spec update provided in Addendum 02.

Question #19

Any Specs on the fencing separating the parking areas?

Response: No spec section. See information in Addendum 02 on Site Plan AS1.1.

Question #20

What access control do they want for the barrier arm?

Response: Card reader already listed on drawings and specs.

Question #21

Is the road where the spikes will be located asphalt or concrete?

Response: Asphalt.

SPECIFICATIONS

ITEM NO. 1 SPEC SECTION

- A. Delete Page 4 of Spec Section 00 0110 and substitute new spec section page per Bid Addendum – 03, dated February 13, 2020

ITEM NO. 2 SPEC SECTION

- A. Delete Page 3 of Spec Section 12 1316 and substitute new spec section page per Bid Addendum – 03, dated February 13, 2020

ITEM NO. 3 SPEC SECTION

- A. Delete Spec Section 34 7100 and substitute new Spec Section per Bid Addendum – 03, dated February 13, 2020

ITEM NO. 4 SPEC SECTION

- A. Delete Pages 5 and 6 of Spec Section 28 1300 and substitute new Spec Section pages per Bid Addendum – 03, dated February 13, 2020

ITEM NO. 5 SPEC SECTION

- A. Delete Spec Section 28 2300 and substitute new Spec Section per Bid Addendum – 03, dated February 13, 2020.

DRAWINGS

ITEM NO. 1 DRAWING A1.1 – FLOOR PLANS

- A. Delete sheet A1.1 and substitute new sheet per Bid Addendum – 03, dated February 13, 2020

ITEM NO. 2 DRAWING A2.1 – LARGE SCALE PLANS

- A. Delete sheet A2.1 and substitute new sheet per Bid Addendum – 03, dated February 13, 2020

ITEM NO. 3 DRAWING A4.1 – ROOF PLAN

- A. Delete sheet A4.1 and substitute new sheet per Bid Addendum – 03, dated February 13, 2020

ITEM NO. 4 DRAWING A9.1 – DOOR AND FRAME SCHEDULE

- A. Delete sheet A9.1 and substitute new sheet per Bid Addendum – 03, dated February 13, 2020

ITEM NO. 5 DRAWING A9.2 – DOOR OPERATION DIAGRAM

- A. Delete sheet A9.2 and substitute new sheet per Bid Addendum – 03, dated February 13, 2020

ITEM NO. 6 DRAWING A11.1 – CASEWORK ELEVATIONS

- A. Delete sheet A1.1 and substitute new sheet per Bid Addendum – 03, dated February 13, 2020

ITEM NO. 7 DRAWING E0.0 – ELECTRICAL SYMBOL LEGEND, NOTES, & ABBREVIATIONS

- A. Delete sheet E0.0 and substitute new sheet per Bid Addendum – 03, dated February 13, 2020

ITEM NO. 8 DRAWING ED1 – LIGHTING DEMOLITION PLANS

- A. Delete sheet ED1 and substitute new sheet per Bid Addendum – 03, dated February 13, 2020

ITEM NO. 9 DRAWING E2.1 – SPECIAL SYSTEMS PLANS

- A. Delete sheet E2.1 and substitute new sheet per Bid Addendum – 03, dated February 13, 2020

ITEM NO. 10 DRAWING E2.2 – CAMERA LAYOUT PLANS

- A. Delete sheet E2.2 and substitute new sheet per Bid Addendum – 03, dated February 13, 2020

ITEM NO. 11 DRAWING E2.3 – ACCESS CONTROL PLANS

- A. Delete sheet E2.3 and substitute new sheet per Bid Addendum – 03, dated February 13, 2020

ITEM NO. 12 DRAWING E3.1 – LIGHTING PLANS

- A. Delete sheet E3.1 and substitute new sheet per Bid Addendum – 03, dated February 13, 2020

ITEM NO. 13 DRAWING E7.0 – ELECTRICAL LIGHT FIXTURE SCHEDULE

- A. Delete sheet E7.0 and substitute new sheet per Bid Addendum – 03, dated February 13, 2020

ITEM NO. 14 DRAWING T2.0 – TELECOM AND PAGING RISER DIAGRAM

- A. Delete sheet T2.0 and substitute new sheet per Bid Addendum – 03, dated February 13, 2020

END OF Bid **ADD-03**

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

FLOOR PLAN, BASEMENT LEVEL
SCALE: 1/8" = 1'-0"

LEGEND NOTES

GENERAL NOTES
1. ALL FURNITURE, SYSTEMS FURNITURE, WIRE RACKS, IT EQUIPMENT RACKS, COMPUTERS, PHONES, REFRIGERATORS, WORKOUT EQUIPMENT, TELEVISIONS, ETC. ARE TO BE OWNER FURNISHED. OWNER INSTALLED.

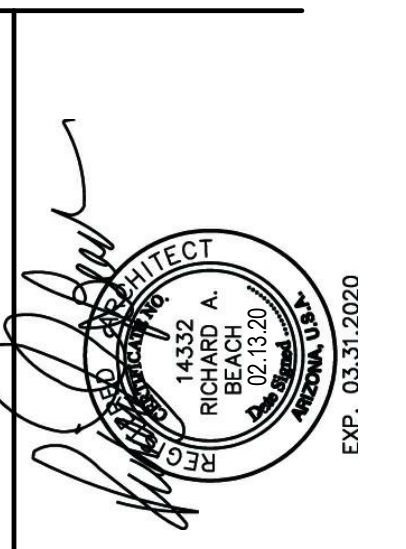
WALL LEGEND
--- NEW WALL CONSTRUCTION
--- EXISTING WALL TO REMAIN

- KEYNOTES**
- EXISTING DOOR SEALED IN PLACE
 - EXISTING DOOR WITH NEW HARDWARE
 - EXISTING COLUMN TO REMAIN
 - WALL MOUNTED SINK
 - TOILET
 - SHOWER UNIT WITH SEAT
 - EXISTING DRINKING FOUNTAIN TO REMAIN. DISPOSABLE CUPS TO BE PROVIDED AT DRINKING FOUNTAIN MOUNTED AT 48" MAX. A.F.F. FOR ADA ACCESSIBILITY
 - FLOOR MOUNT TOILET PARTITIONS
 - REFRIGERATOR
 - MILLWORK
 - 36" X 36" LEVEL 3 BULLET RESISTANT TRANSACTION WINDOW W/ STAINLESS STEEL TRANSACTION TRAY. WINDOW SILL TRAY ELEVATION 34" A.F.F.
 - WORKSTATION (CPU, PRINTER AND PHONE)
 - FURNITURE, OFOI
 - IT RACK
 - FULL FUNCTION COPIER, PRINTER, SCANNER AND FAX MACHINE. OFOI
 - WALL MOUNTED TELEVISION ON SATELLITE SYSTEM
 - FUME HOOD, CFOI
 - WALL MOUNTED DRINKING FOUNTAIN. DISPOSABLE CUPS TO BE PROVIDED AT DRINKING FOUNTAIN MOUNTED AT 48" MAX. A.F.F. FOR ADA ACCESSIBILITY
 - PROCESSING BOOTH
 - VENDING MACHINE, OFOI
 - EYE WASH/SHOWER
 - EXISTING ELEVATOR TO REMAIN
 - EXISTING STAIRS TO REMAIN
 - RELOCATED STAINLESS STEEL BENCH FROM EXISTING HOLD SEARCH ROOM. PROVIDE ALL NECESSARY HARDWARE AND BACKING IN WALL TO MEET DETENTION GRADE INSTALLATION.
 - RELOCATED STAINLESS STEEL TABLE FROM EXISTING SEARCH ROOM. PROVIDE ALL NECESSARY HARDWARE AND BACKING IN WALL TO MEET DETENTION GRADE INSTALLATION.
 - EXISTING LOCKERS RELOCATED FROM CURRENT FACILITY. CFOI
 - STORAGE RACKS, CFOI
 - NO WORK IN THIS ROOM/AREA UNLESS NOTED OTHERWISE.
 - STAINLESS STEEL COUNTER MOUNTED SINK
 - URINAL
 - INFILL FLOOR OPENING TO MATCH ADJACENT SLAB THICKNESS
 - STAINLESS STEEL SINK WITH DISPOSAL - PROVIDE STAINLESS STEEL SHELF ABOVE
 - STAINLESS STEEL COUNTERTOP
 - FORNIX HOLDER/COUNTER
 - RAIN LEADER FROM EXISTING DRAIN BOX TO REMAIN ABOVE DOOR
 - FULL HEIGHT MIRRORS ALONG THIS WALL. CFOI
 - WALL HOOKS. PROVIDE BACKING IN WALL
 - 42" HIGH STEEL BOLLARD AT EXISTING SLEEVE IN PLACE. WELD BOLLARD TO EXISTING SLEEVE.
 - 42" HIGH STEEL BOLLARD, CAST-IN-PLACE 36" MIN. EMBED. 4" THICK 3,000 PSI CONCRETE SIDEWALK ON 4" ABC. MATCH EXISTING SIDEWALK GRADES.
 - INTERIOR STOREFRONT SEPARATION WALL PROVIDE DECORATIVE FILM ON 1/4" LAMINATED GLAZING
 - FINAL WALL LOCATION MAY CHANGE DEPENDING ON EXISTING PLUMBING LOCATION WITHIN WALLS.
 - PROVIDE 24" X 24" DETENTION GRADE LOCKABLE ACCESS PANEL IN WALL TO PROVIDE ACCESS TO EXISTING TOWER GROUNDING CABLES IN WALL TO REMAIN. FINAL LOCATION TO BE COORDINATED IN FIELD.
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 - EXISTING ELECTRICAL PANEL TO REMAIN.
 - NEW ELECTRICAL PANEL
 - RELOCATED MONITOR AND DECODER FOR TAA SHARED VIEWS
 - RELOCATED MONITOR AND CPU FOR TAA SHARED VIEWS
 - MONITOR AND CPU FOR INTERNAL CBP VIEWS
 - RELOCATED RADIO REPEATER DESKTOP UNIT
 - MOVEABLE BENCH, OFOI
 - NETWORK PRINTER, OFOI
 - SERVICE SINK. REFER TO PLUMBING DRAWINGS
 - RECESSED PAPER TOWEL DISPENSER/WASTE RECEPTACLE COMBO UNIT (PTW)
 - AREAS TO BE OPENED FOR CONTRACTOR OFFICES. ALL EXISTING WINDOWS THAT FACE THE ADA MUST BE SECURED/PROTECTED WITH 1/2" WOOD EDGE DURATION OF CONSTRUCTION.
 - PATCH CONCRETE WHERE TRENCH IS REMOVED. CONCRETE TO BE TIED BACK TO EXISTING SLAB WITH EPOXY SET #3 REBAR AT 12" O.C. ALTERNATING DIRECTIONS WITH 6" MIN. EMBED.
 - REPLACEMENT WINDOW. 2' x 4'-1/2" CENTER GLAZED ALUMINUM STOREFRONT WITH 1" INSULATED GLAZING UNITS WITH TINTED EXTERIOR PANEL. SOLAR RAY 60 MIN. COLORED TINT TO BE DETERMINED. INSTALLED IN EXISTING WALL OPENING. APPROX. SIZE 3'-6" X 4'-0" FIELD VERIFY EXACT DIMENSIONS.
 - ROOF ACCESS LADDER. SEE DETAILS ON A1.1
 - PATCH EXISTING WALLS IN THIS ROOM/AREA WHERE CIVIL REMOVED DURING ABATEMENT.

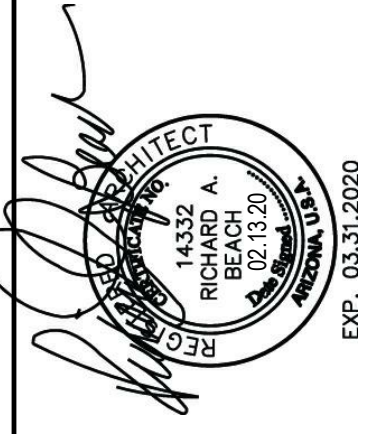
FLOOR PLANS
TAA Executive Terminal
CBP Relocation TAA project #10219007

A1.1
30-18307-00
12/21/2018
Revision 1: 03/15/19 Background 02
2 03/15/19 REVISIONS
ADD 3 02/03/20 REVISIONS
ADD 1 02/03/20 REVISIONS

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LARGE SCALE PLANS
TAA Executive Terminal
CBP Relocation TAA project #10219007

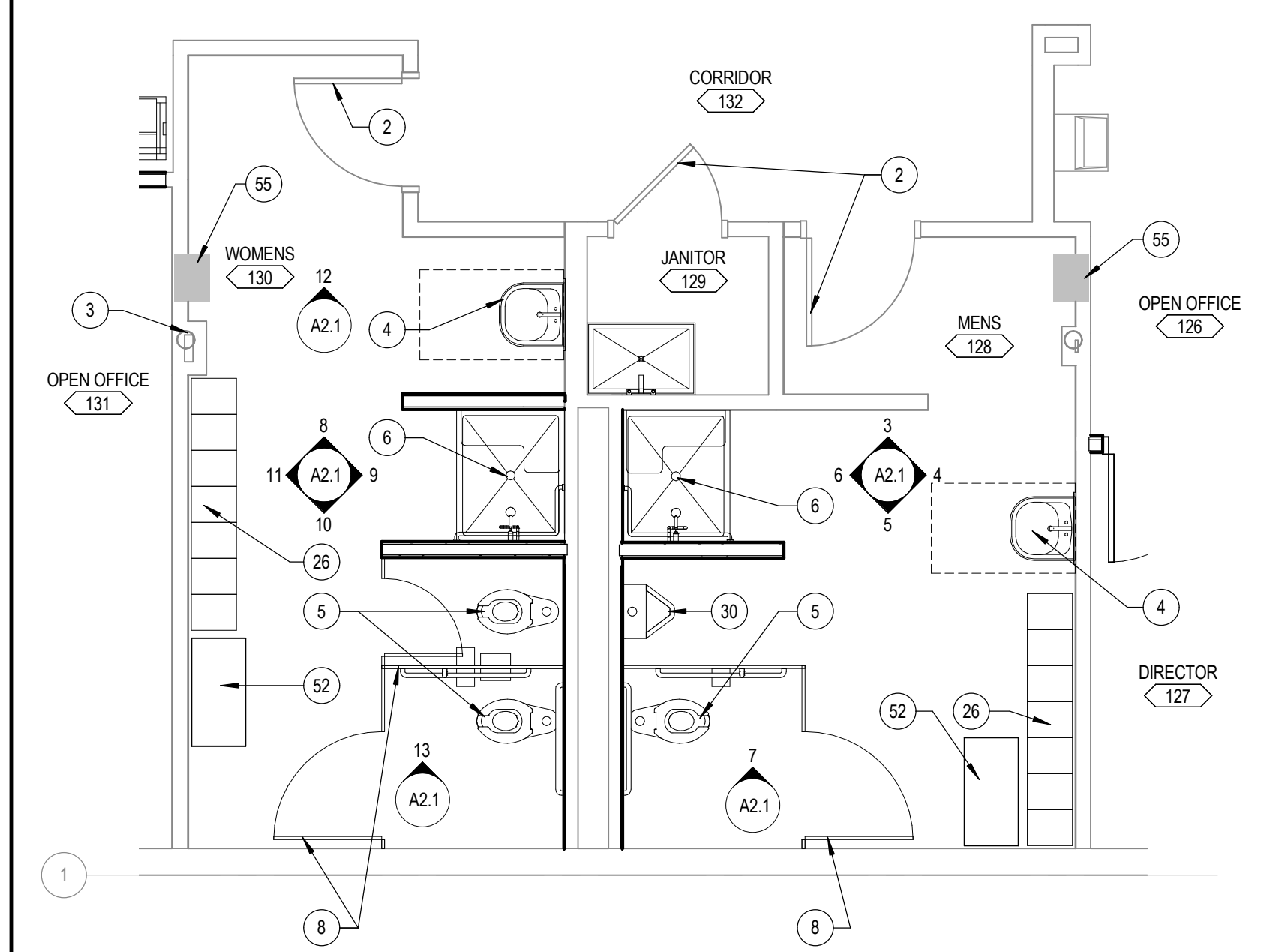
A2.1
30-18307-00
12/21/2018
Revised: 12/19/18 Bland/AB/02
ADD-3 02/13/20 Bland/AB/03

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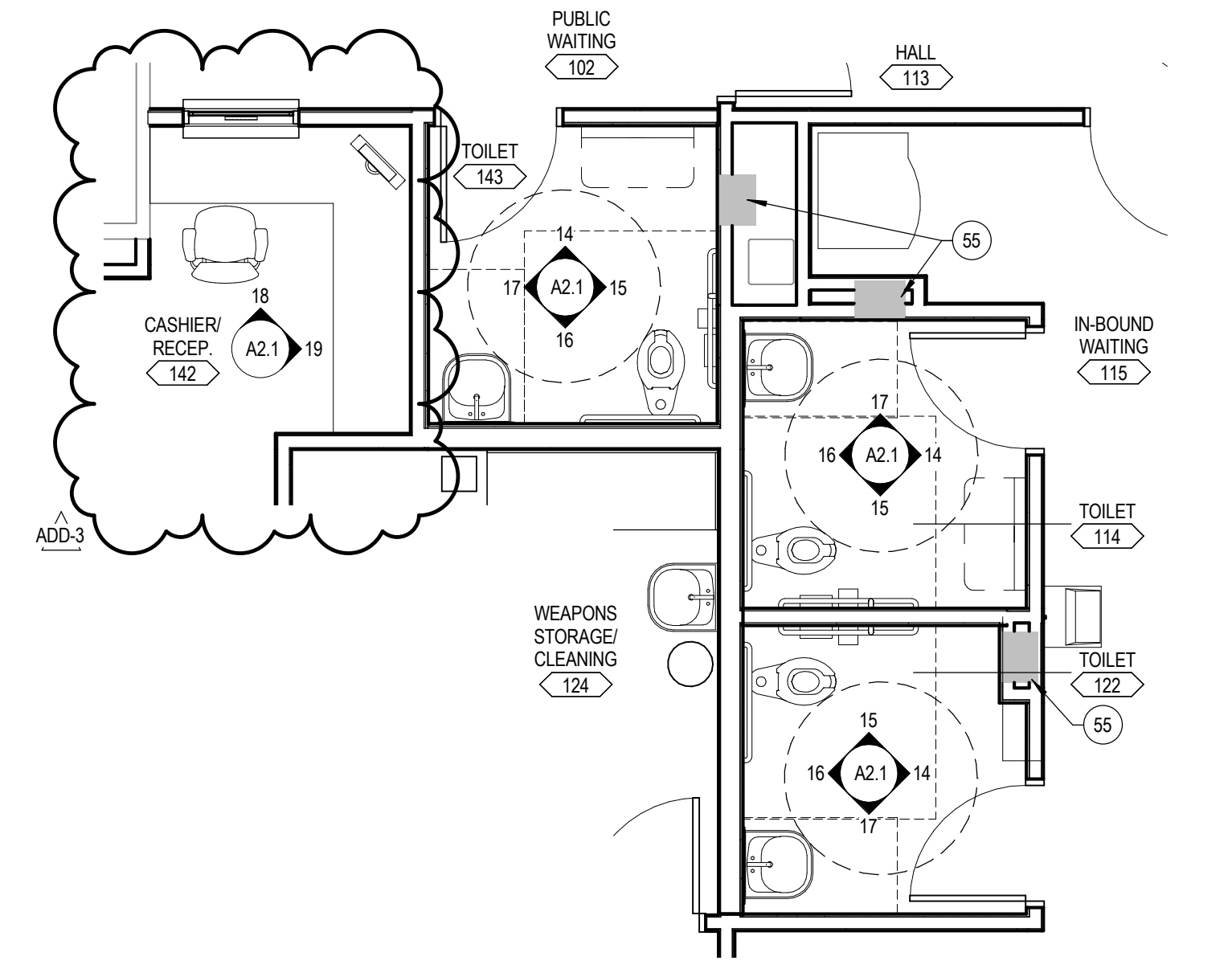
LEGEND NOTES

LEGEND NOTES ARE COMMON TO ALL SHEETS. SOME NOTES MAY NOT APPLY TO THIS SHEET.

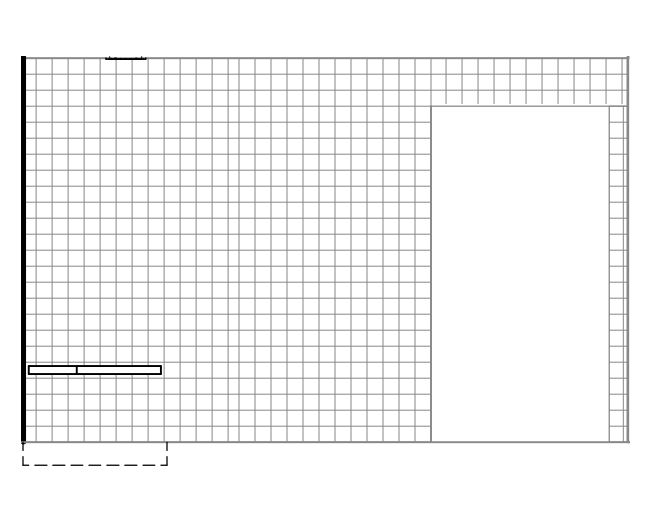
- KEYNOTES**
- EXISTING DOOR SEALED IN PLACE
 - EXISTING DOOR WITH NEW HARDWARE
 - EXISTING COLUMN TO REMAIN
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 - FLOOR MOUNT TOILET PARTITIONS
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 - NO WORK IN THIS ROOM/AREA UNLESS NOTED OTHERWISE.
 - STAINLESS STEEL COUNTER MOUNTED SINK
 - STAINLESS STEEL COUNTERTOP
 - FORMS HOLDER/COUNTER
 - RAIN LEADER FROM EXISTING DRAIN BOX TO REMAIN ABOVE DOOR
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 - EXISTING ELECTRICAL PANEL TO REMAIN
 - NEW ELECTRICAL PANEL
 - RELOCATED MONITOR AND DECODER FOR TAA SHARED VIEWS
 - NEW 32" MONITOR AND DECODER FOR TAA SHARED VIEWS
 - RELOCATED MONITOR AND CPU FOR TAA SHARED VIEWS
 - MONITOR AND CPU FOR INTERNAL CBP VIEWS
 - RELOCATED RADIO REPEATER DESKTOP UNIT
 - MOVEABLE BENCH, O.F.O.I.
 - NETWORK PRINTER, O.F.O.I.
 - LIQUID SOAP DISPENSER
 - SHOWER CURTAIN ROD
 - RECESSED PAPER TOWEL DISPENSER/WASTE RECEPTACLE
 - COMBO UNIT (PTWR)
 - ROBE HOOK
 - SEAT COVER DISPENSER
 - LIQUID SOAP DISPENSER
 - SHOWER CURTAIN ROD
 - SANITARY NAPKIN DISPOSAL
 - SURFACE MOUNTED TOILET PAPER DISPENSER
 - AREAS TO BE OPENED FOR CONTRACTOR OFFICES. ALL EXISTING WINDOWS THAT FACE THE ADA MUST BE SECURED/PROTECTED WITH PLYWOOD FOR DURATION OF CONSTRUCTION.
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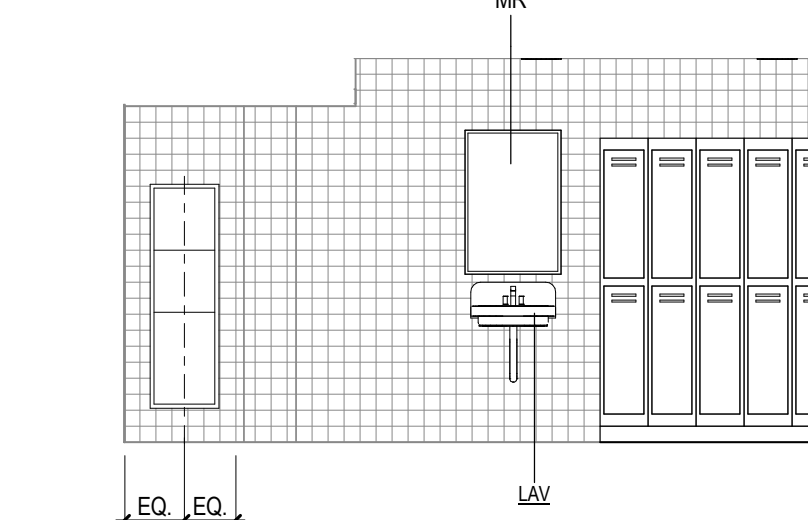
1 MENS 128 / WOMENS 130
SCALE: 1/4" = 1'-0"



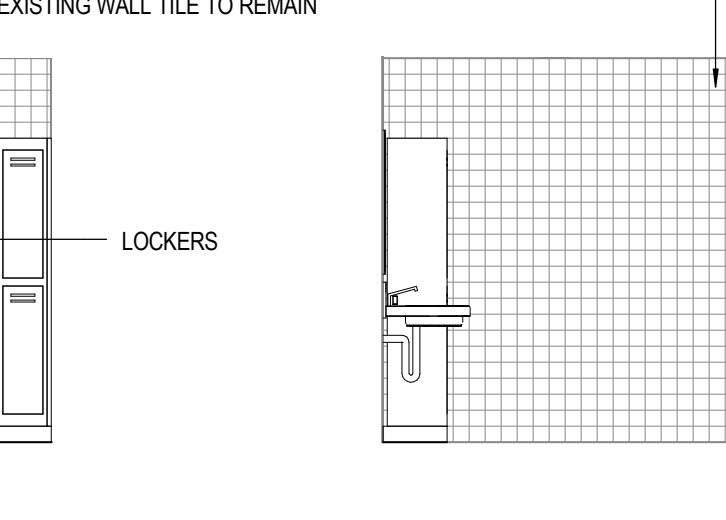
2 TOILET ROOMS 114, 122 AND 143
SCALE: 1/4" = 1'-0"



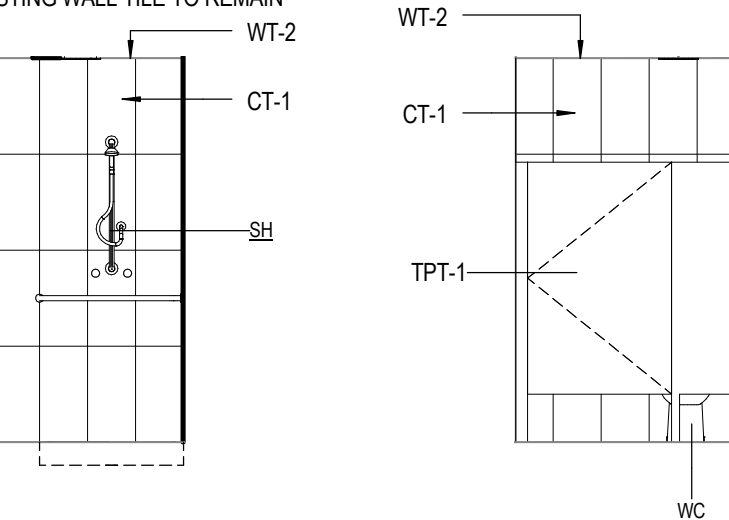
3 MENS 128
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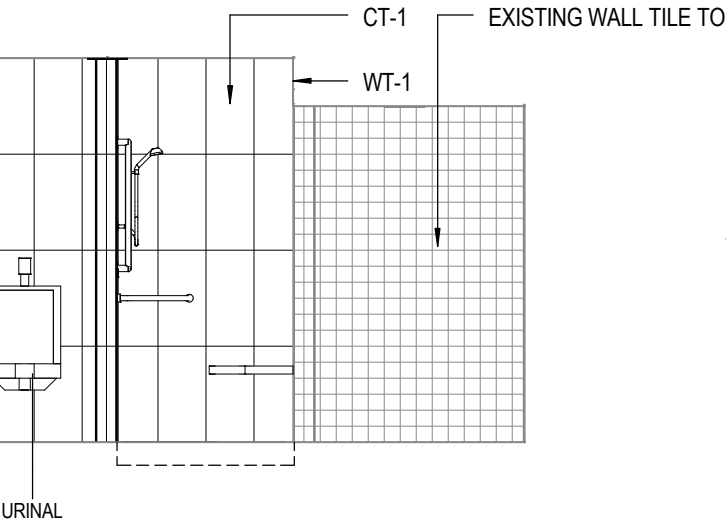
4 MENS 128
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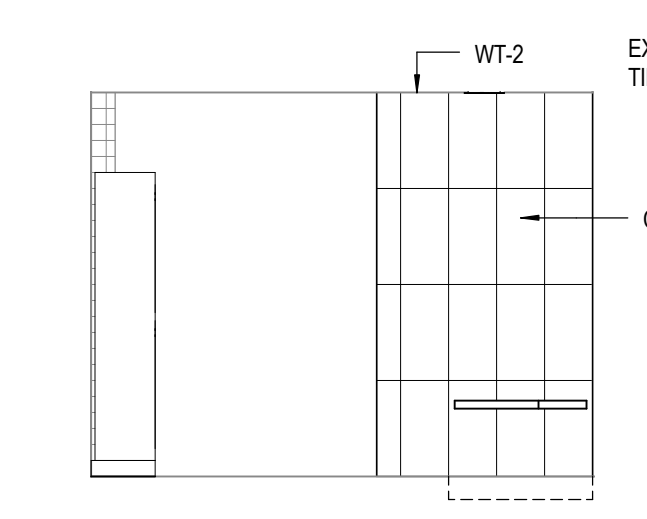
5 MENS 128
SCALE: 1/4" = 1'-0"



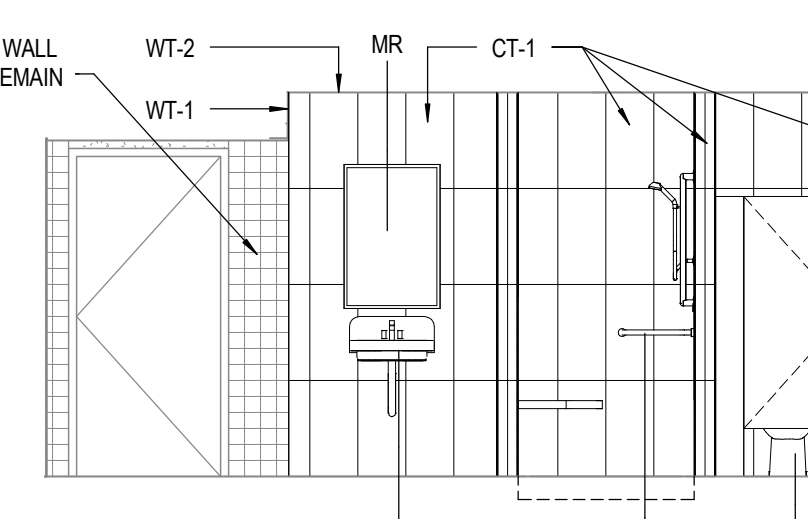
6 MENS 128
SCALE: 1/4" = 1'-0"



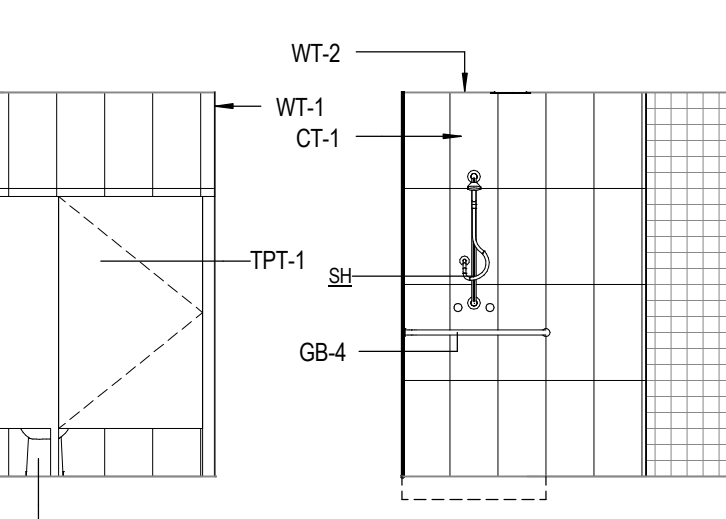
7 MENS 128
SCALE: 1/4" = 1'-0"



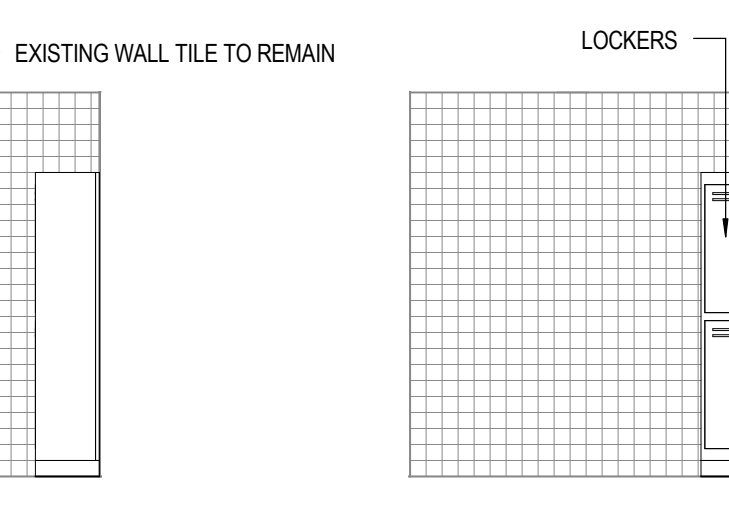
8 WOMENS 130
SCALE: 1/4" = 1'-0"



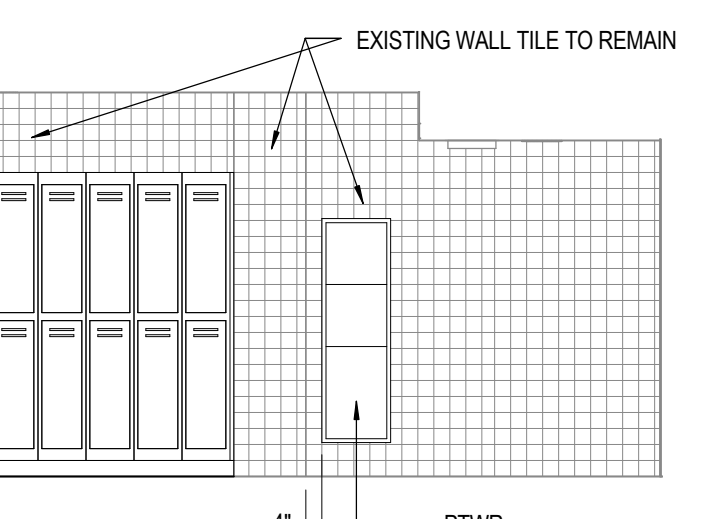
9 WOMENS 130
SCALE: 1/4" = 1'-0"



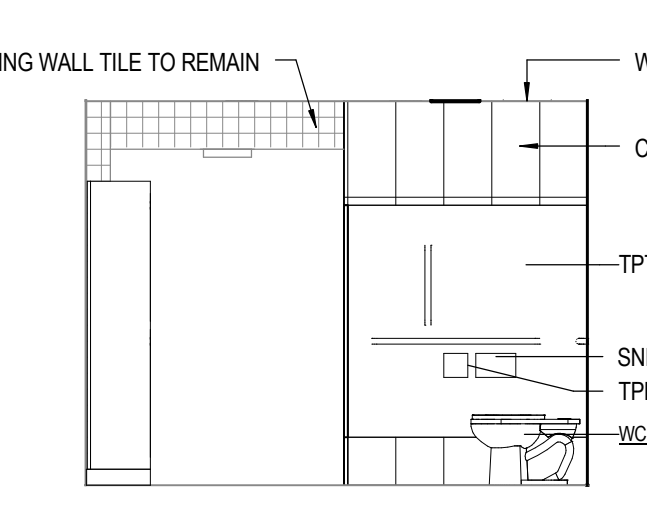
10 WOMENS 130
SCALE: 1/4" = 1'-0"



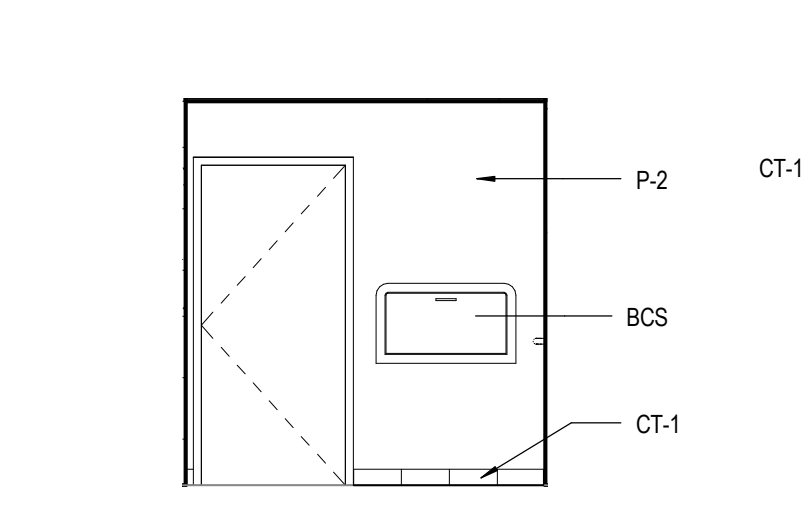
11 WOMENS 130
SCALE: 1/4" = 1'-0"



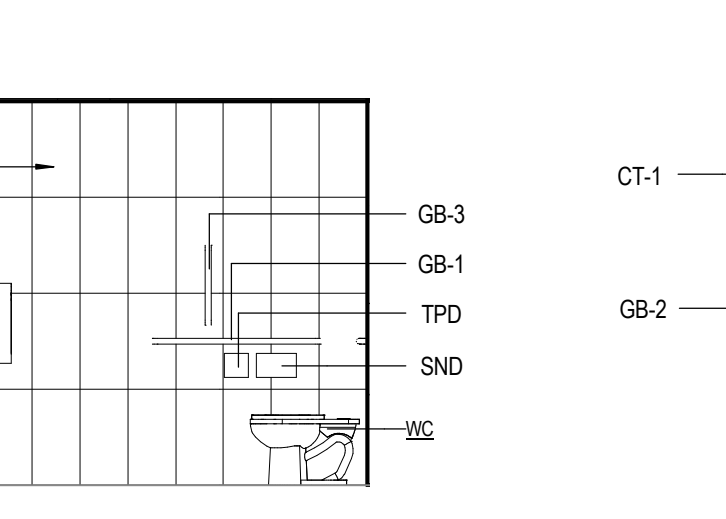
12 WOMENS 130
SCALE: 1/4" = 1'-0"



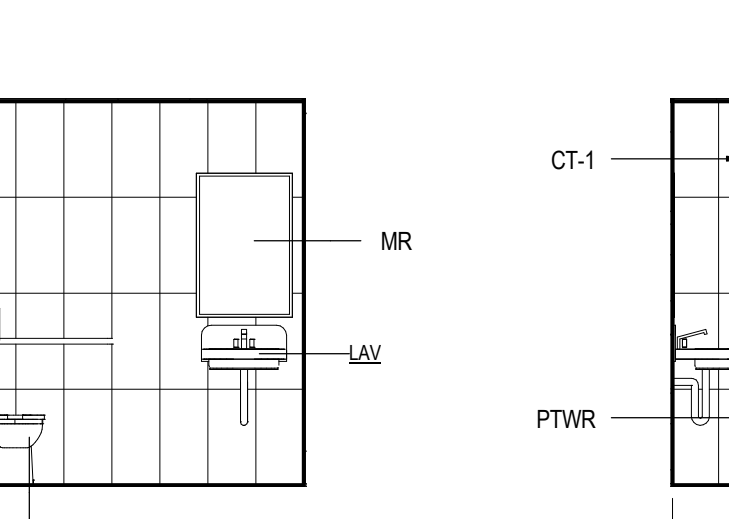
13 WOMENS 130
SCALE: 1/4" = 1'-0"



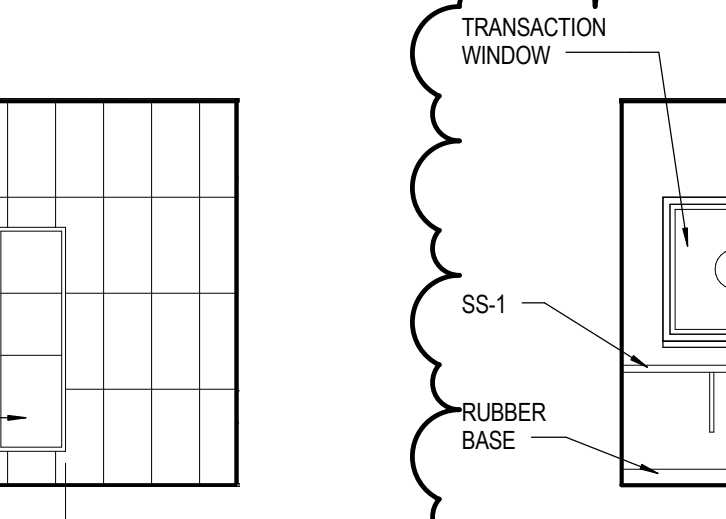
14 TOILET 114, 143 (122 O.H.)
SCALE: 1/4" = 1'-0"



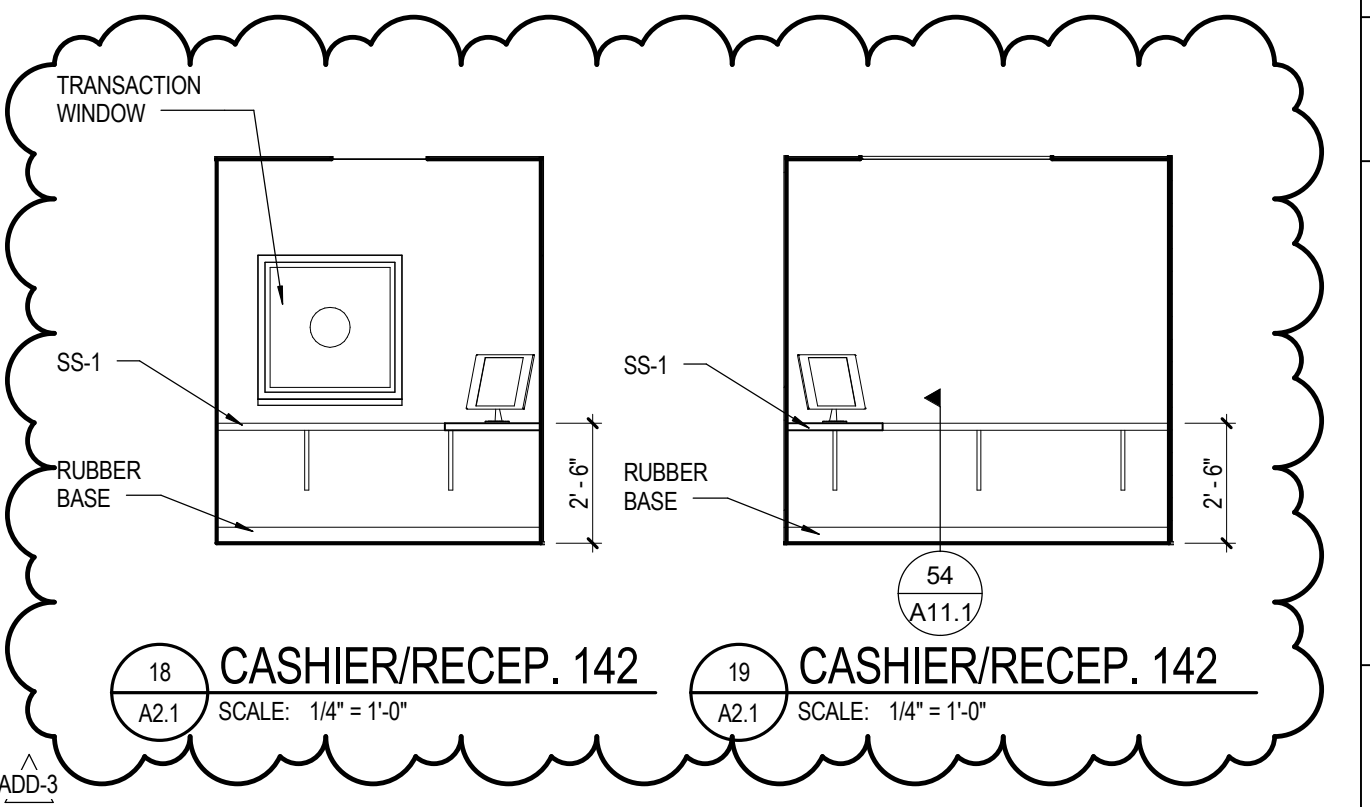
15 TOILET 114, 143 (122 O.H.)
SCALE: 1/4" = 1'-0"



16 TOILET 114, 143 (122 O.H.)
SCALE: 1/4" = 1'-0"



17 TOILET 114, 143 (122 O.H.)
SCALE: 1/4" = 1'-0"



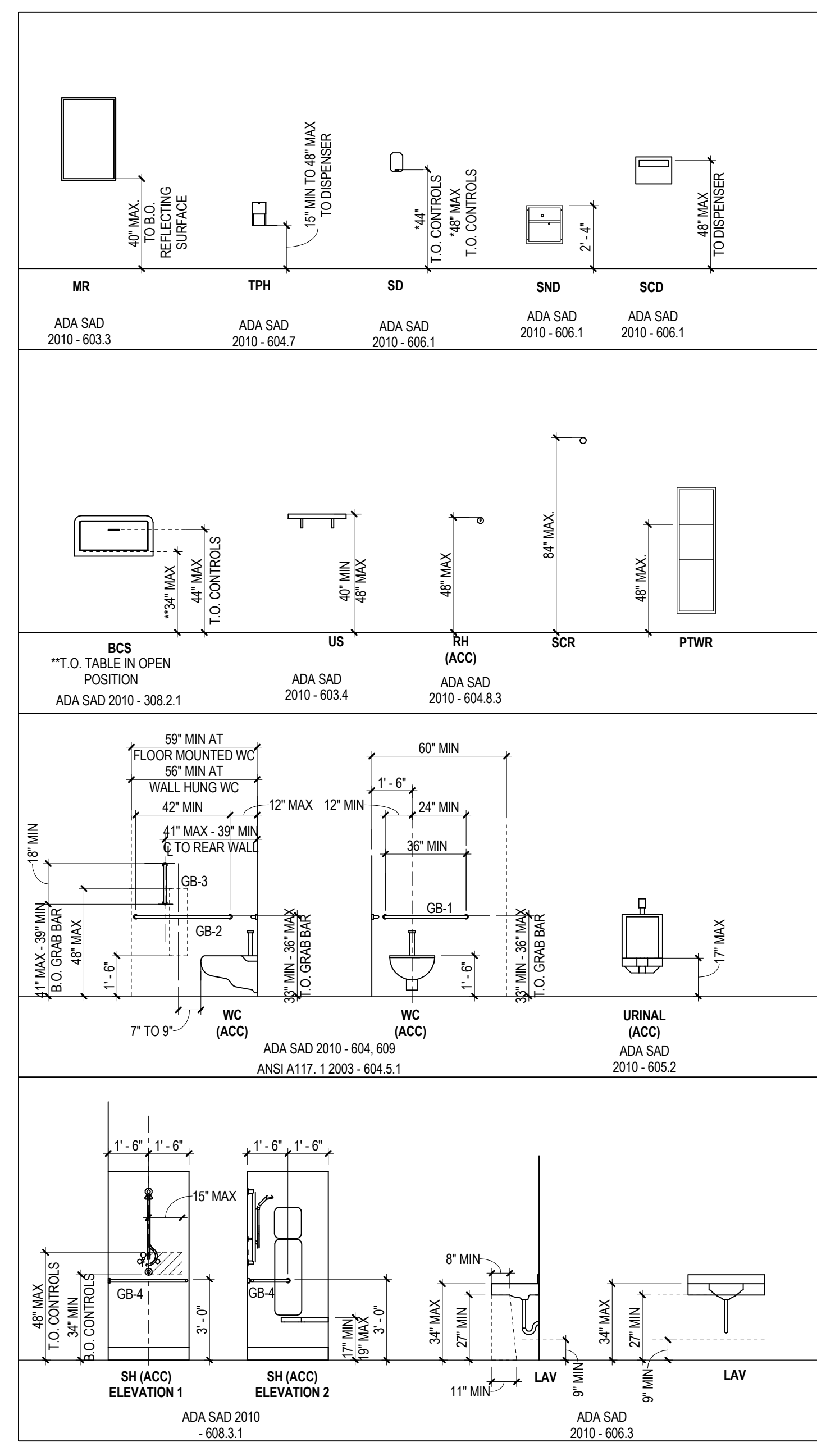
18 CASHIER/RECEP. 142
SCALE: 1/4" = 1'-0"

19 CASHIER/RECEP. 142
SCALE: 1/4" = 1'-0"

TOILET ACCESSORIES SCHEDULE

ABBREV.	DESCRIPTION
BCS	BABY CHANGING STATION
GB-1	GRAB BAR (SIDE WALL)
GB-2	GRAB BAR (BACK WALL)
GB-3	GRAB BAR (VERTICAL)
GB-4	GRAB BAR (SHOWER)
ACC	ADA ACCESSIBLE HEIGHT
MR	MIRROR
PTWR	RECESSED PAPER TOWEL DISPENSER/WASTE RECEPTACLE
COMB	COMBO UNIT
RH	ROBE HOOK
SCD	SEAT COVER DISPENSER
SD	LIQUID SOAP DISPENSER
SCR	SHOWER CURTAIN ROD
SND	SANITARY NAPKIN DISPOSAL
TTD	SURFACE MOUNTED TOILET PAPER DISPENSER

ADULT MOUNTING HEIGHTS

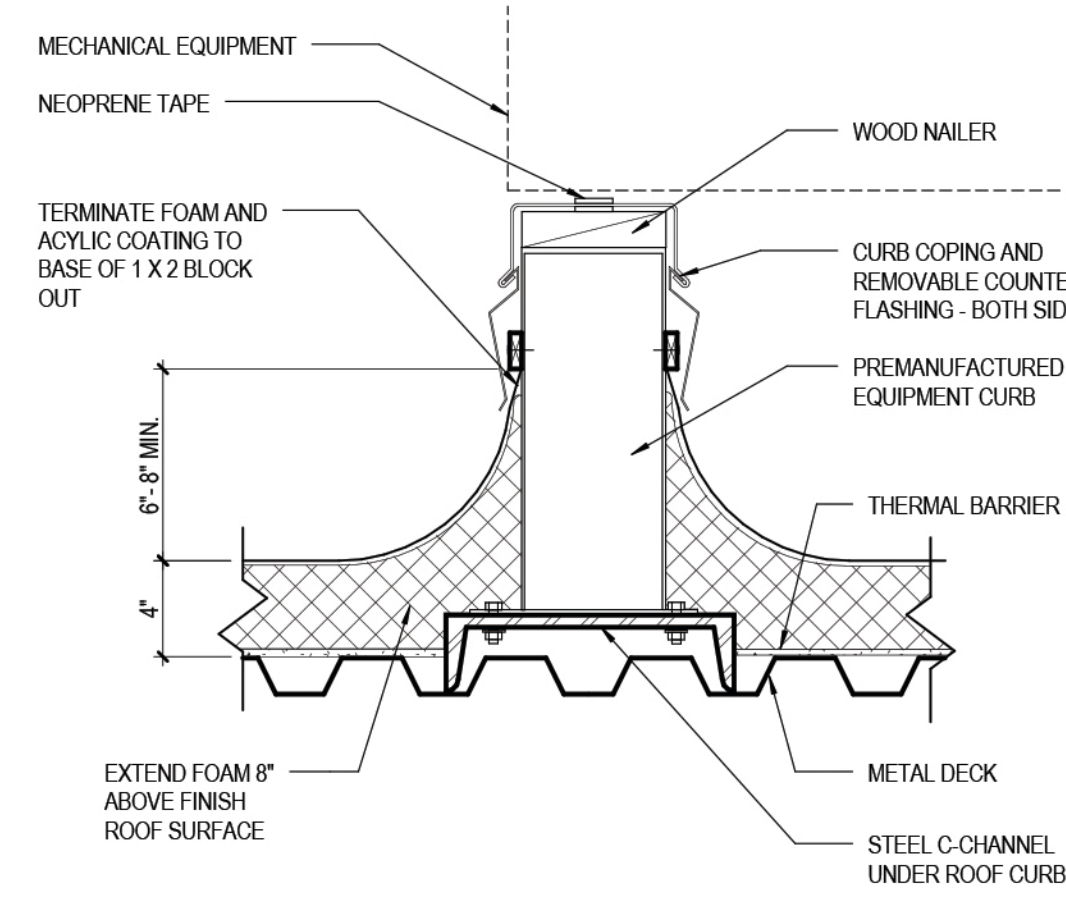


GENERAL NOTES FOR ACCESSIBILITY

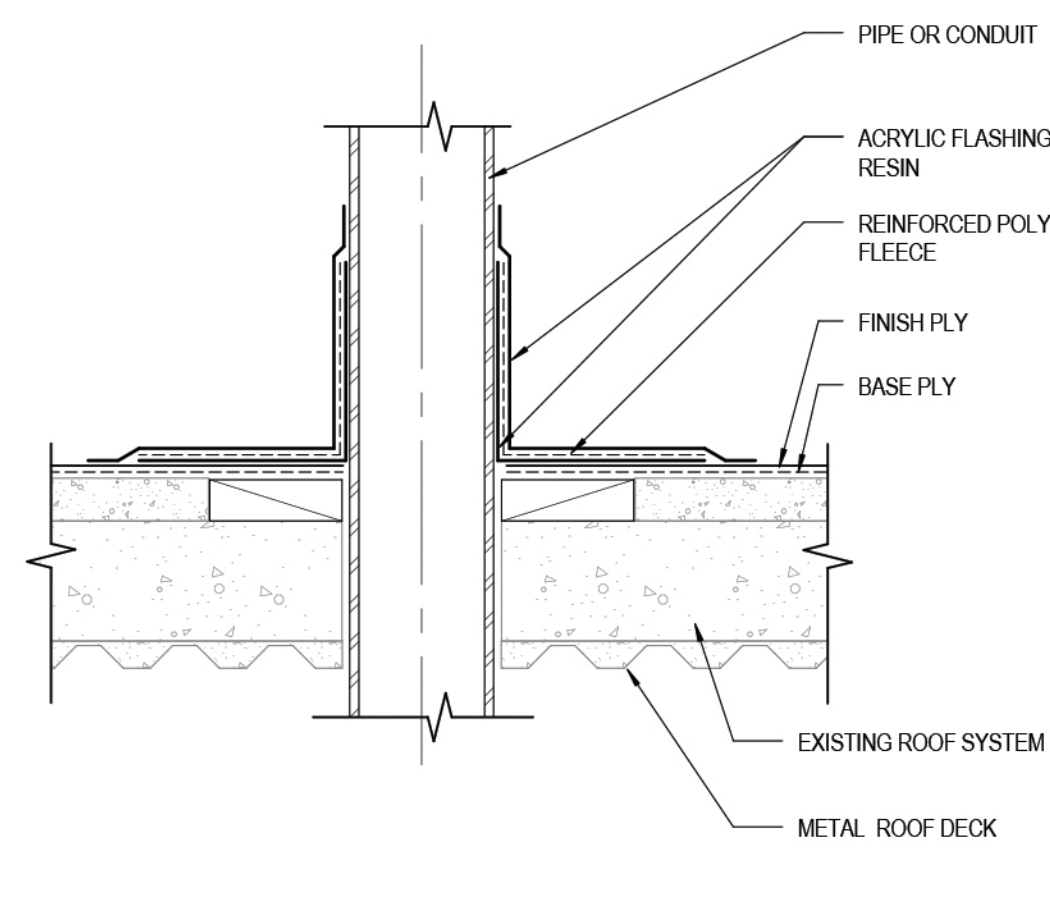
- ACCESSIBLE URINAL SHALL PROVIDE CLEAR FLOOR SPACE PER ADA SAD 2010 - 605.3.
- ACCESSIBLE WATER CLOSETS SHALL PROVIDE CLEAR FLOOR SPACE PER ADA SAD 2010 - 604.3.1.
- ACCESSIBLE LAVATORIES AND SINKS SHALL PROVIDE CLEAR FLOOR SPACE PER ADA SAD 2010 - 606.2.
- ACCESSIBLE TOILET ROOMS SHALL PROVIDE A TURNING SPACE OF 60 INCHES IN DIAMETER PER ADA SAD 2010 - 304.3.1.
- ACCESSIBLE WATER FOUNTAINS SHALL PROVIDE CLEAR FLOOR SPACE PER ADA SAD 2010 - 602.2.
- ACCESSIBLE TOILET PARTITION SHALL COMPLY WITH ADA SAD 2010 - 604.8.
- EXPOSED PIPES AND SURFACES UNDER LAVATORIES AND SINKS SHALL BE INSULATED PER ADA SAD 2010 - 606.5.

FINISH LEGEND

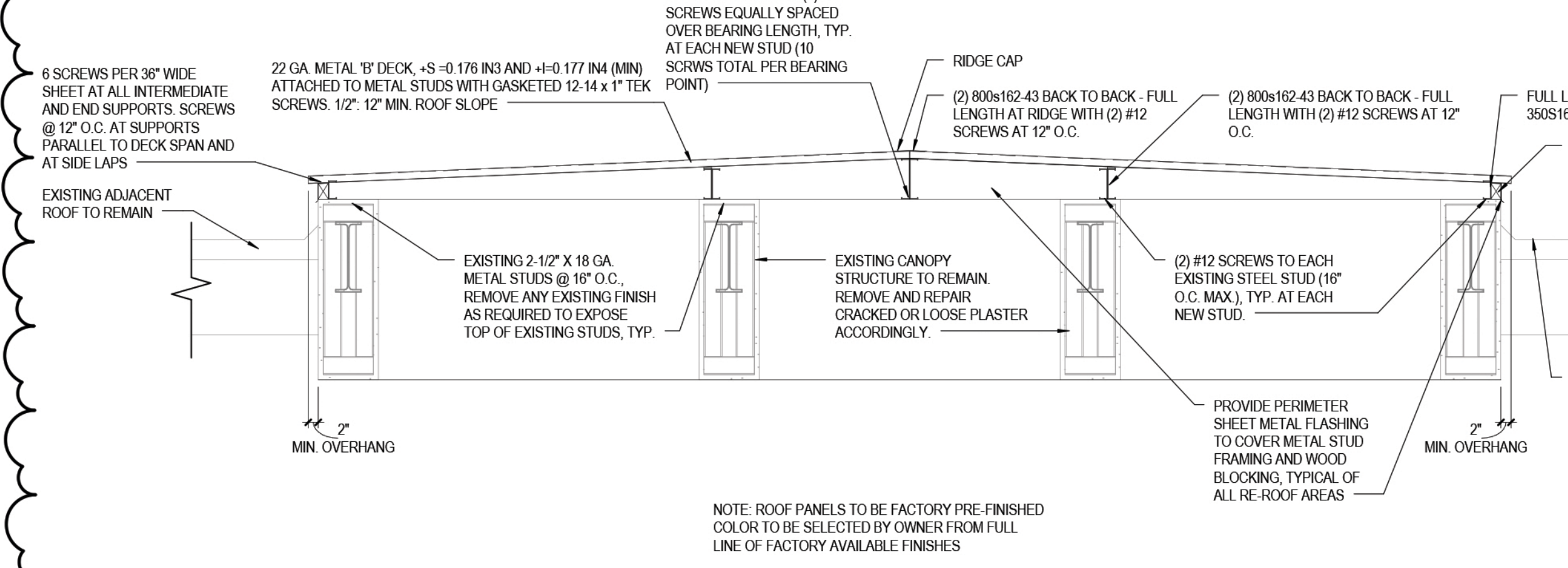
- CT-02 - 12" X 24" CERAMIC WALL TILE
- P-2 - SEMI-GLOSS EPOXY PAINT AT GWS SURFACES (CEILING AND WALLS)
- TPT-1 - SOLID PHENOLIC CORE TOILET PARTITIONS, FLOOR MOUNTED WITH CEILING BRACE.
- WT-1 - WALL TRIM - PROVIDE SCHLUTER WALL TRIM AT CORNERS BETWEEN NEW AND EXISTING TILE.
- WT-2 - WALL TRIM - PROVIDE WALL TRIM BETWEEN NEW WALL TILE AND CEILING TO REMAIN.



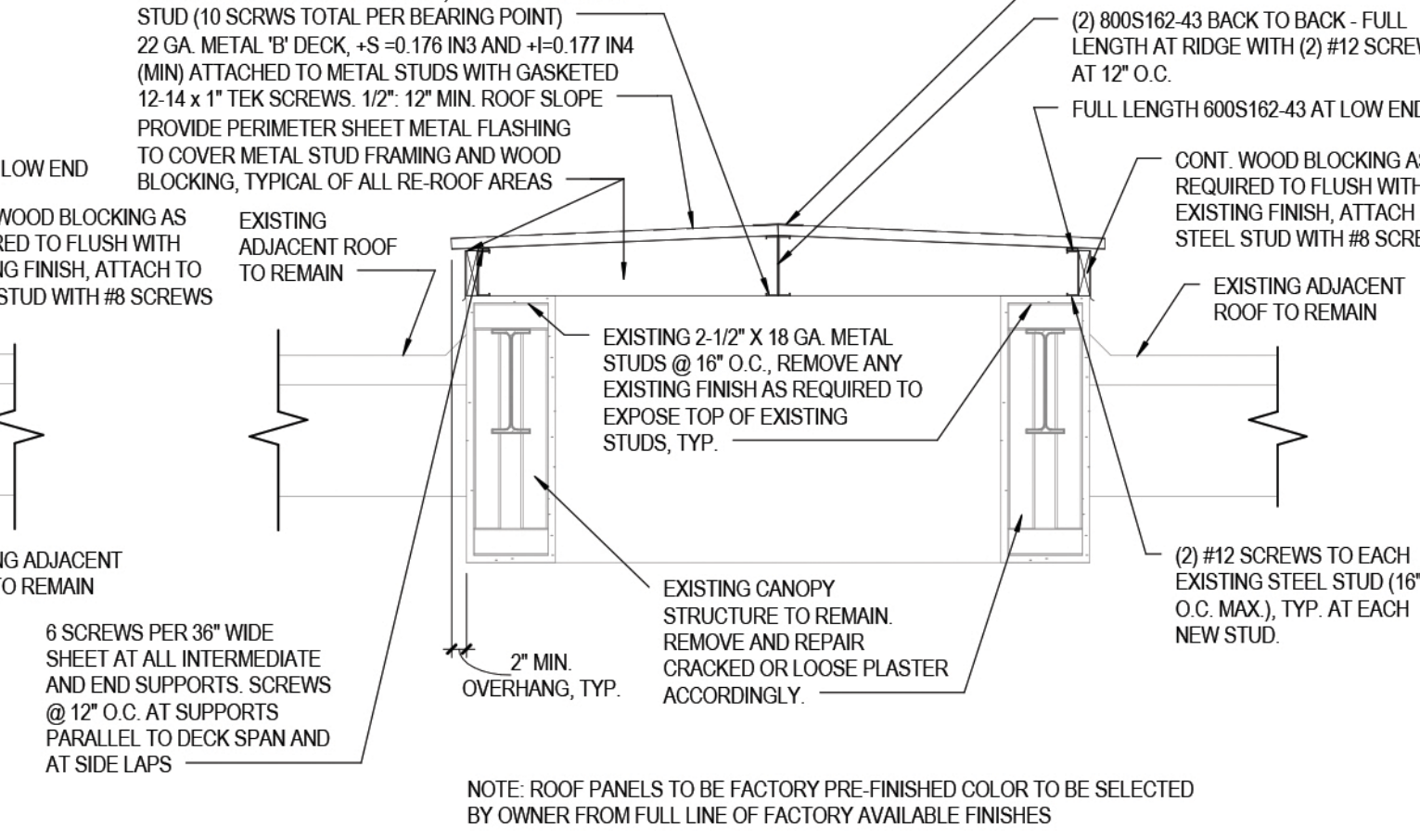
11 TYPICAL EQUIPMENT CURB DETAIL
SCALE: 1/2" = 1'-0"



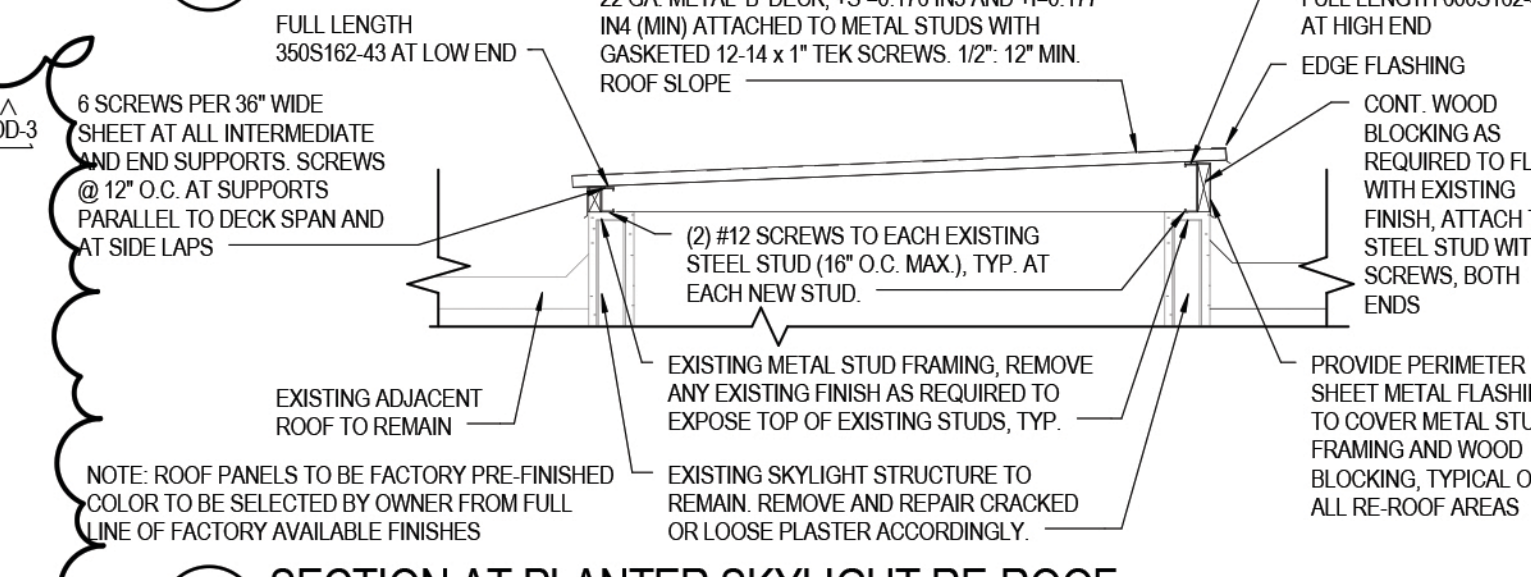
12 ROOF PENETRATION DETAIL
SCALE: 1/2" = 1'-0"



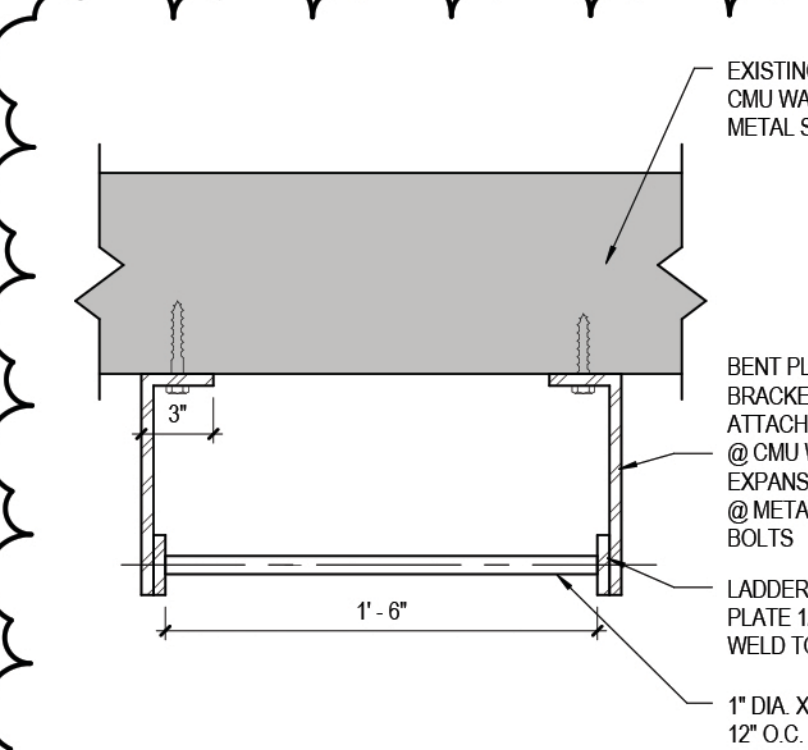
13 SECTION AT ENTRY CANOPY RE-ROOF
SCALE: 1/2" = 1'-0"



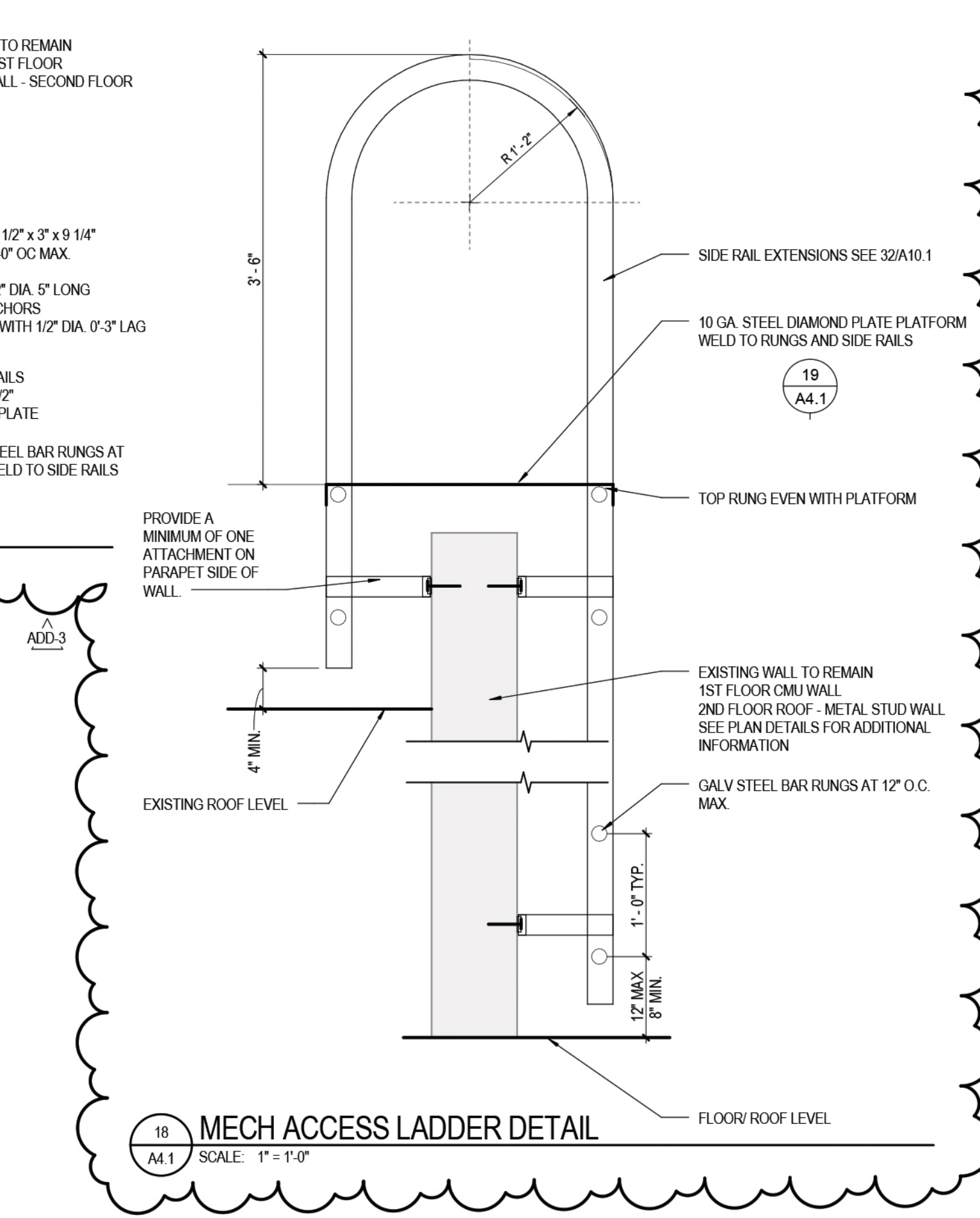
14 SECTION AT AIRSIDE CANOPY RE-ROOF
SCALE: 1/2" = 1'-0"



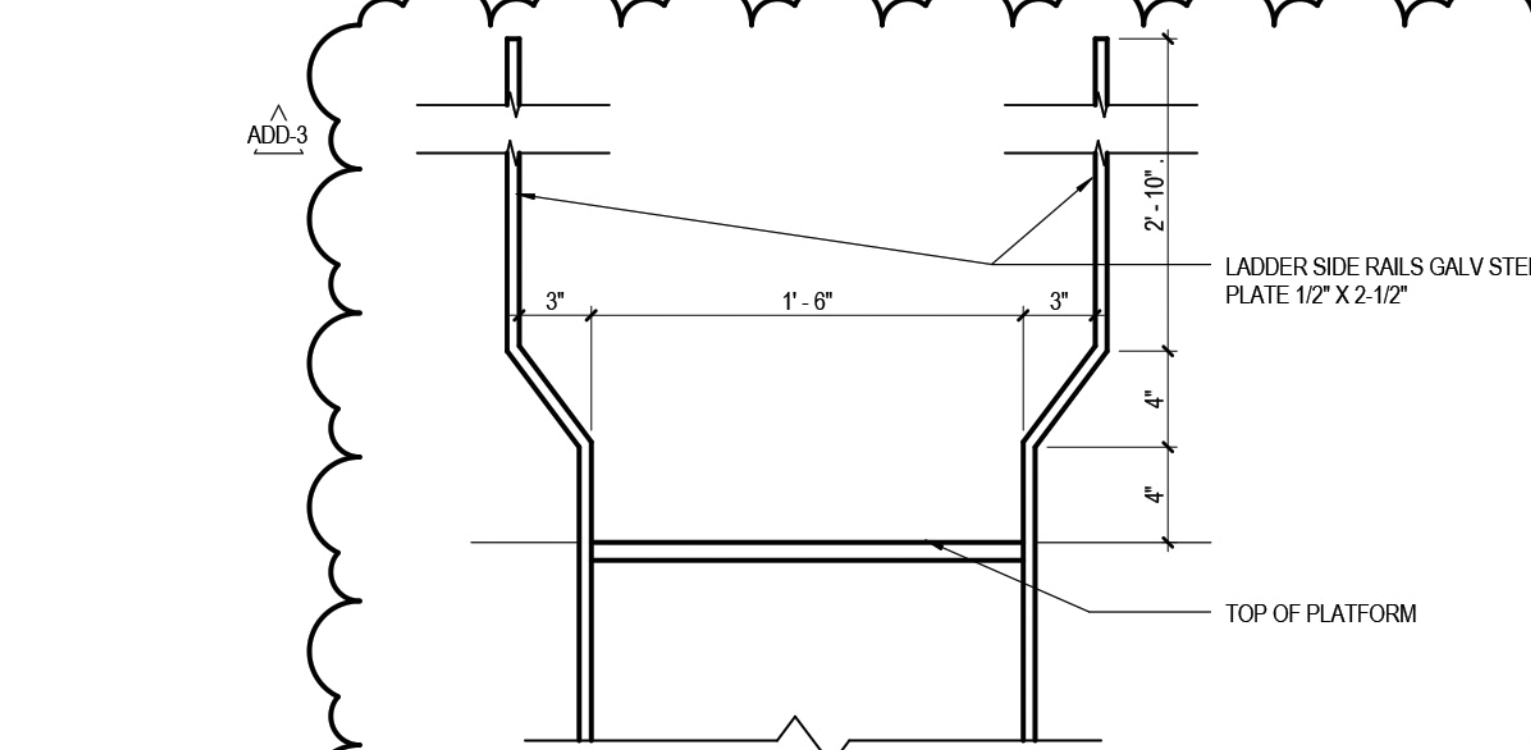
15 SECTION AT PLANTER SKYLIGHT RE-ROOF
SCALE: 1/2" = 1'-0"



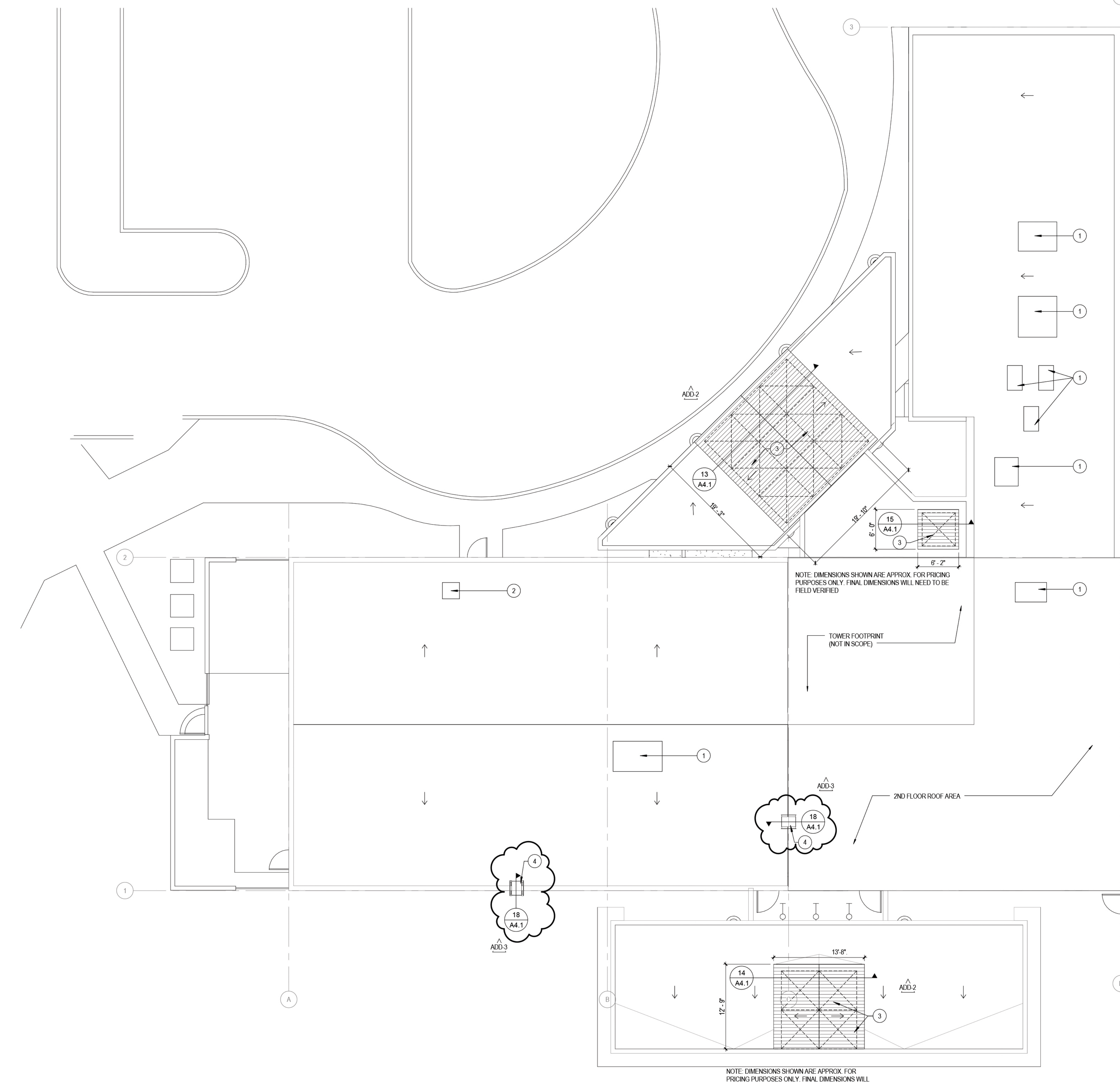
17 ROOF ACCESS LADDER PLAN
SCALE: 1/2" = 1'-0"



18 MECH ACCESS LADDER DETAIL
SCALE: 1" = 1'-0"

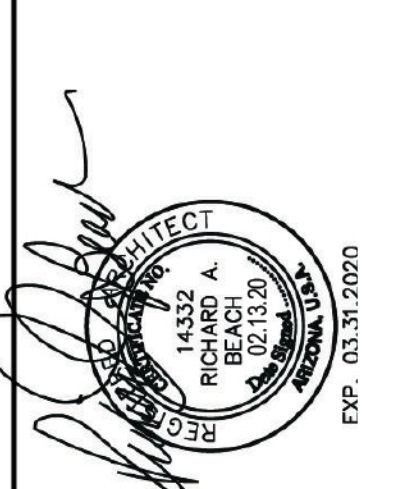


19 MECH ACCESS LADDER EXTENSION
SCALE: 1/2" = 1'-0"



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

- LEGEND NOTES**
- ROOF TOP MECHANICAL UNIT
 - NEW OUTSIDE AIR INTAKE, DEMO AND PATCH ROOF AS REQUIRED
 - ADD ALTERNATE - 01 REMOVE EXISTING SKYLIGHT ASSEMBLIES INCLUDING ALL WOOD BLOCKING FROM EXTERIOR CANOPIES. REPLACE WITH 1/2" DECK METAL ROOF AS DETAILED.



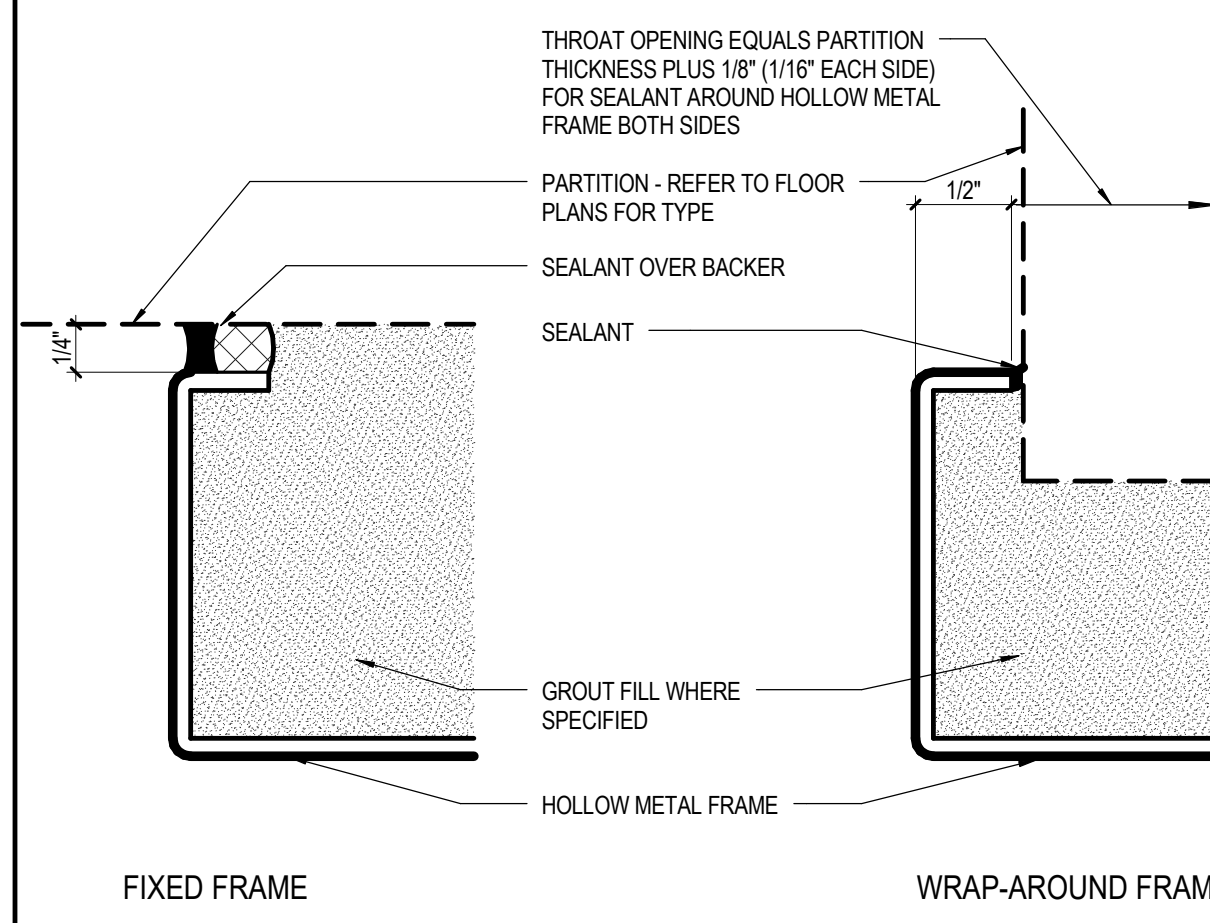
7081 S. Plummer Ave
Tucson, AZ 85756

ROOF PLAN AND DETAILS
TAA Executive Terminal
CBP Relocation TAA project #10219007

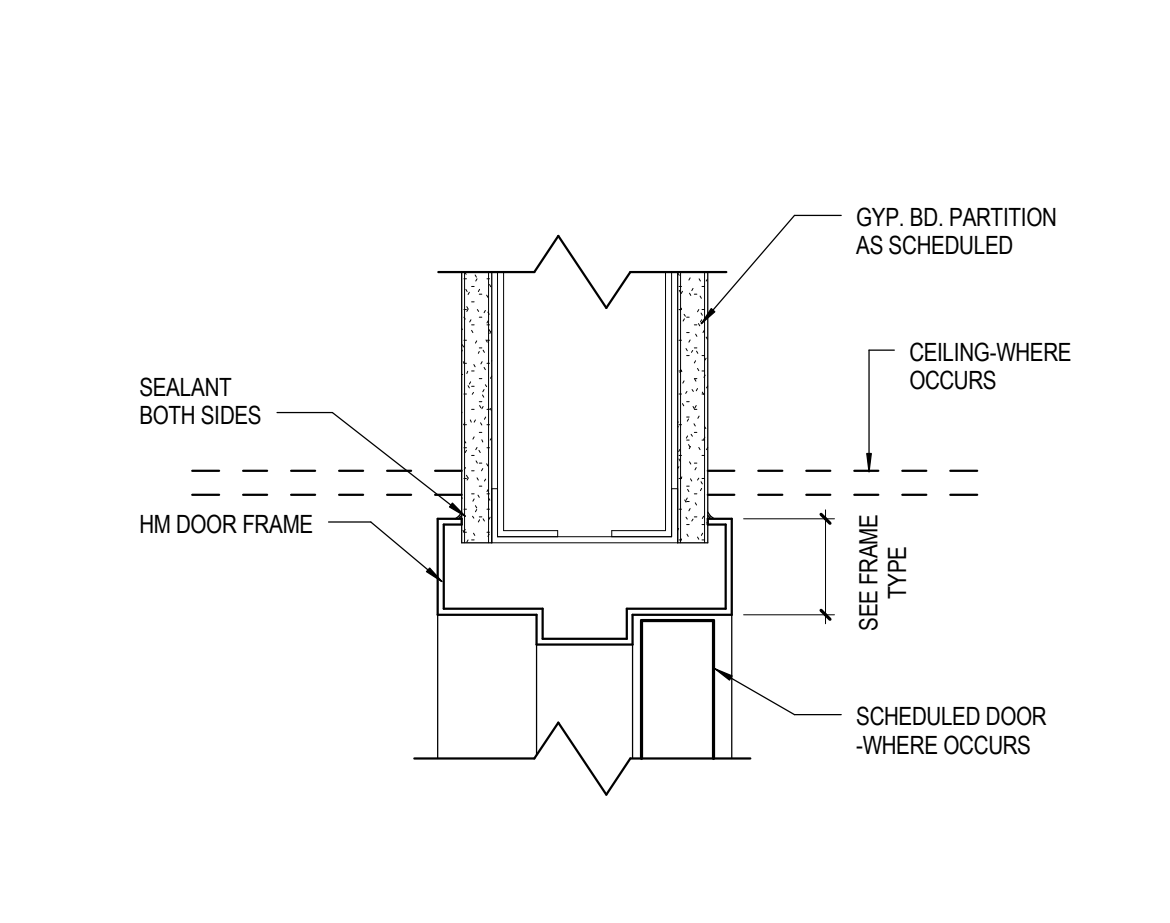
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12/21/2018
Revised: 08/20/2018
ADD 3 08/20/2018

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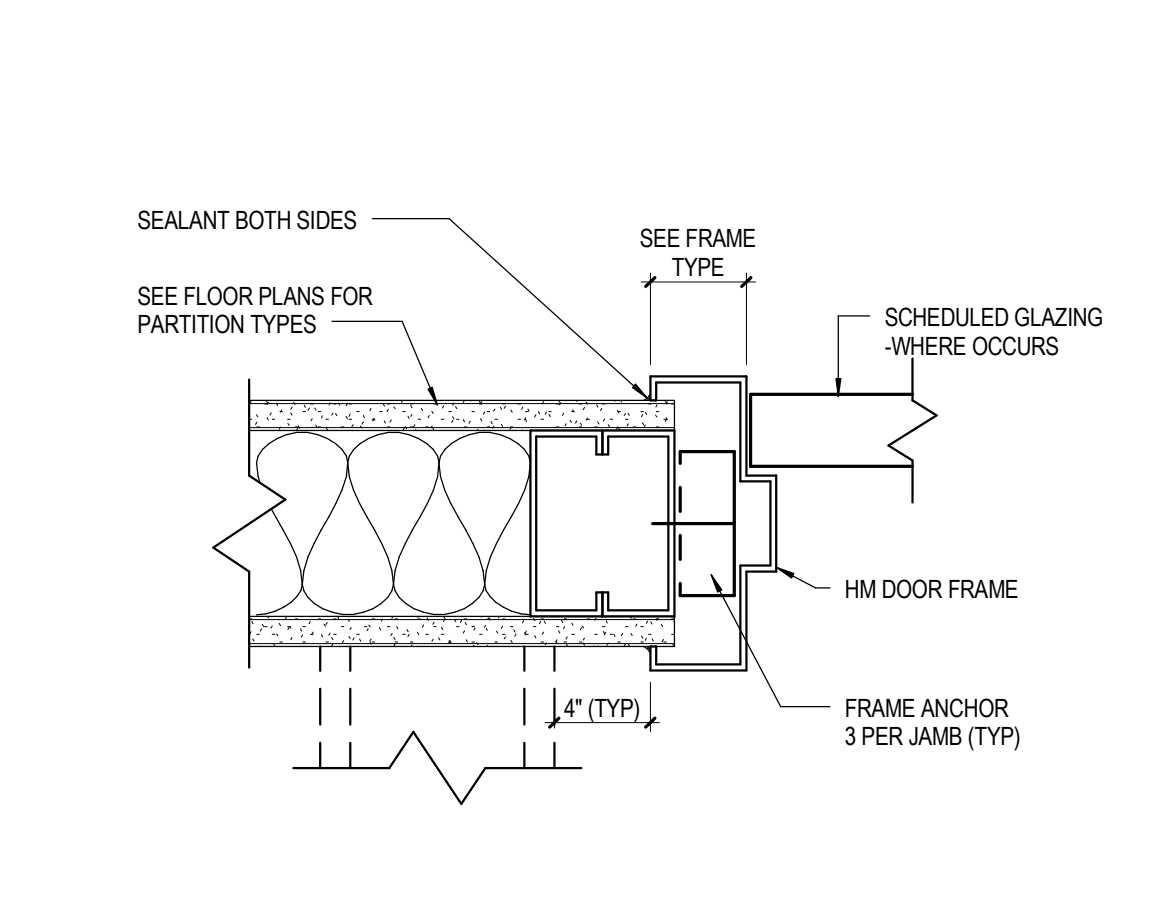
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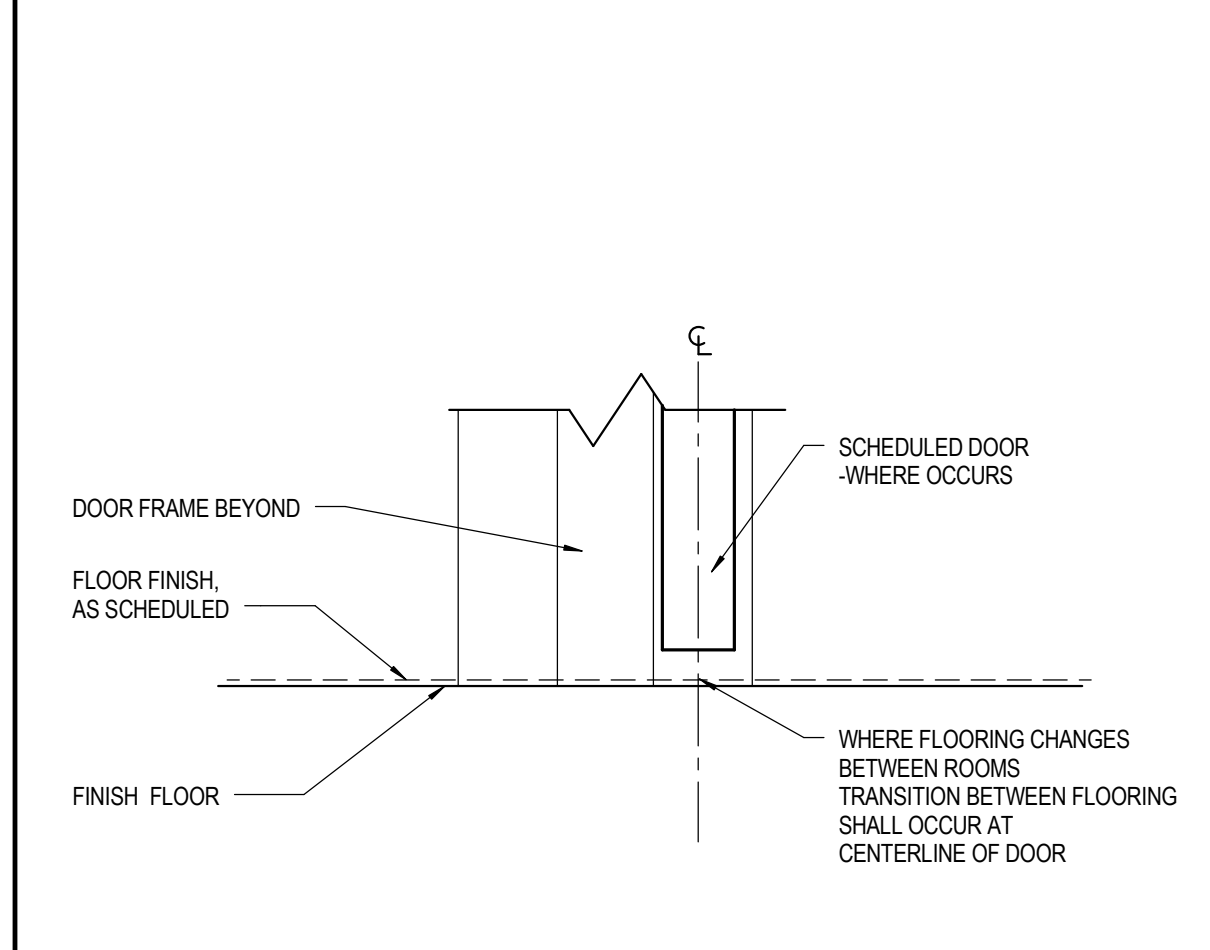
11 HOLLOW METAL FRAME EDGE
SCALE: 1" = 1'-0"



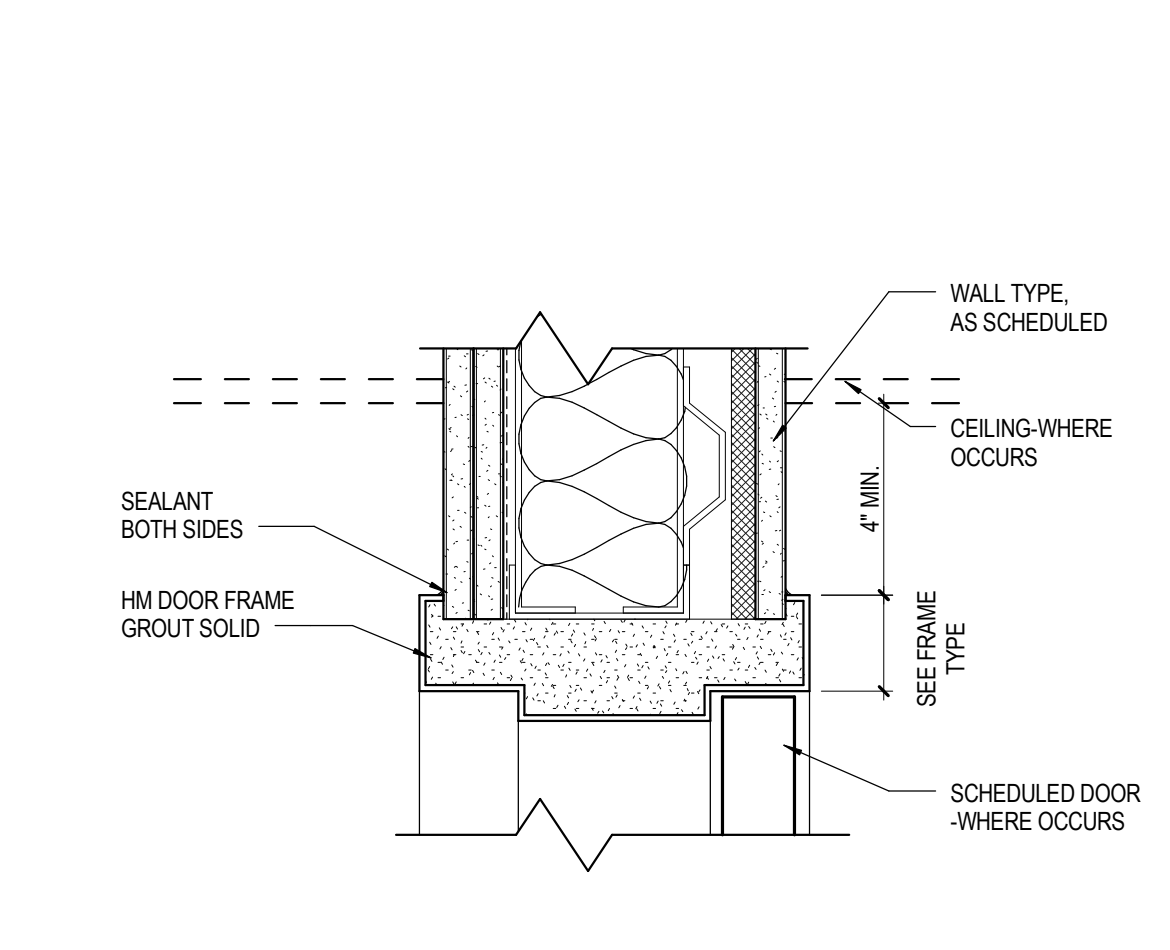
12 HM FRAME AT GYP. BD. (HEAD)
SCALE: 3" = 1'-0"



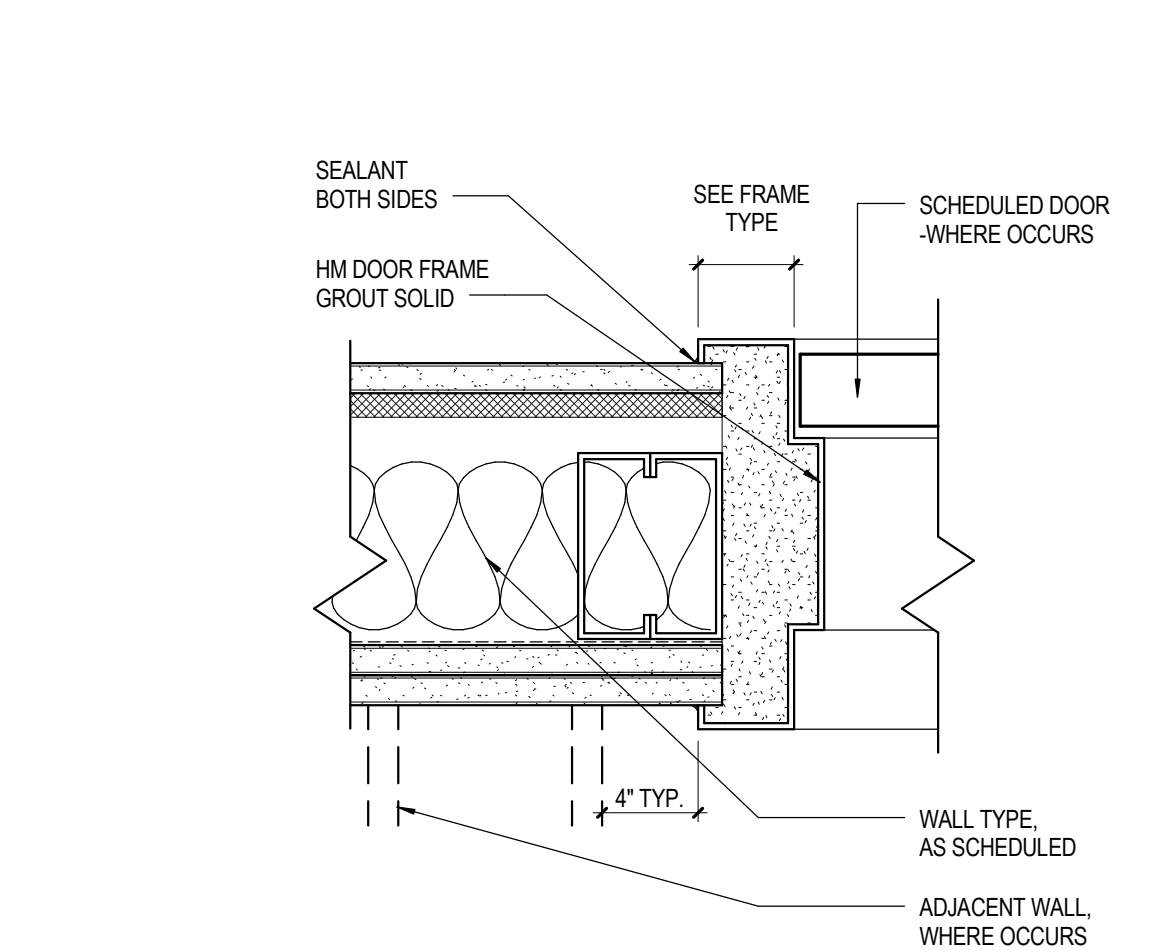
13 HM FRAME AT GYP. BD. (JAMB)
SCALE: 3" = 1'-0"



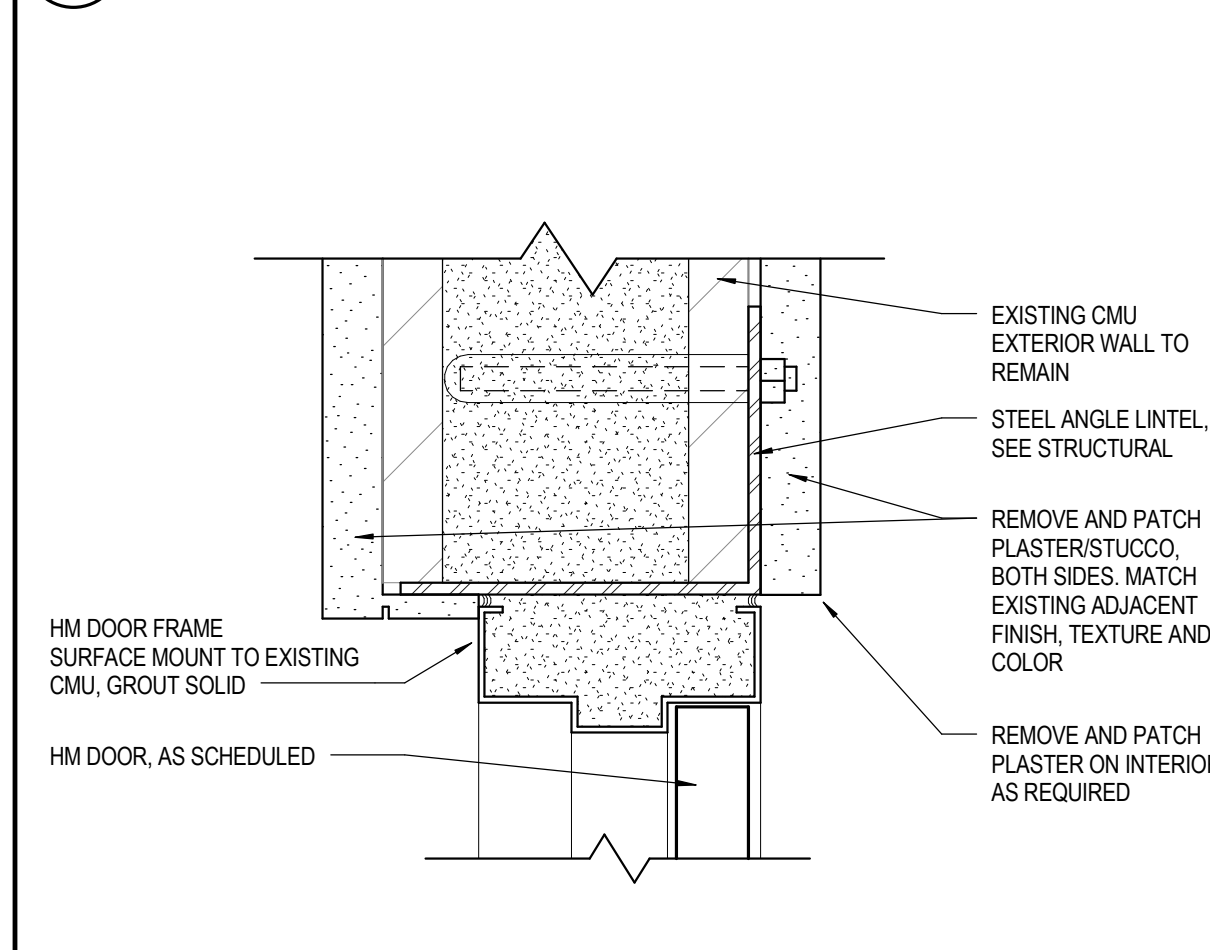
21 HM FRAME DOOR SILL, TYP.
SCALE: 3" = 1'-0"



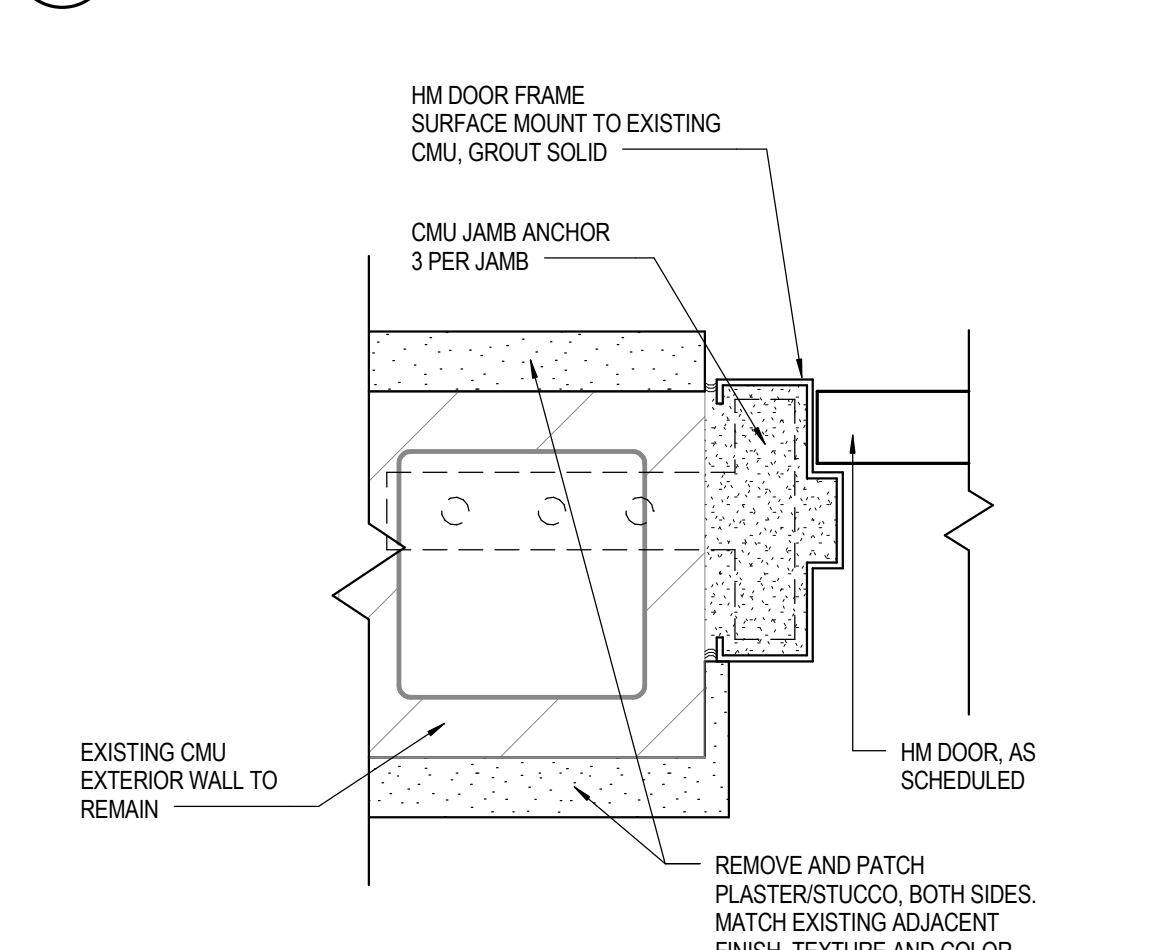
22 HM FRAME AT BULLET RESISTANT WALL (HEAD)
SCALE: 3" = 1'-0"



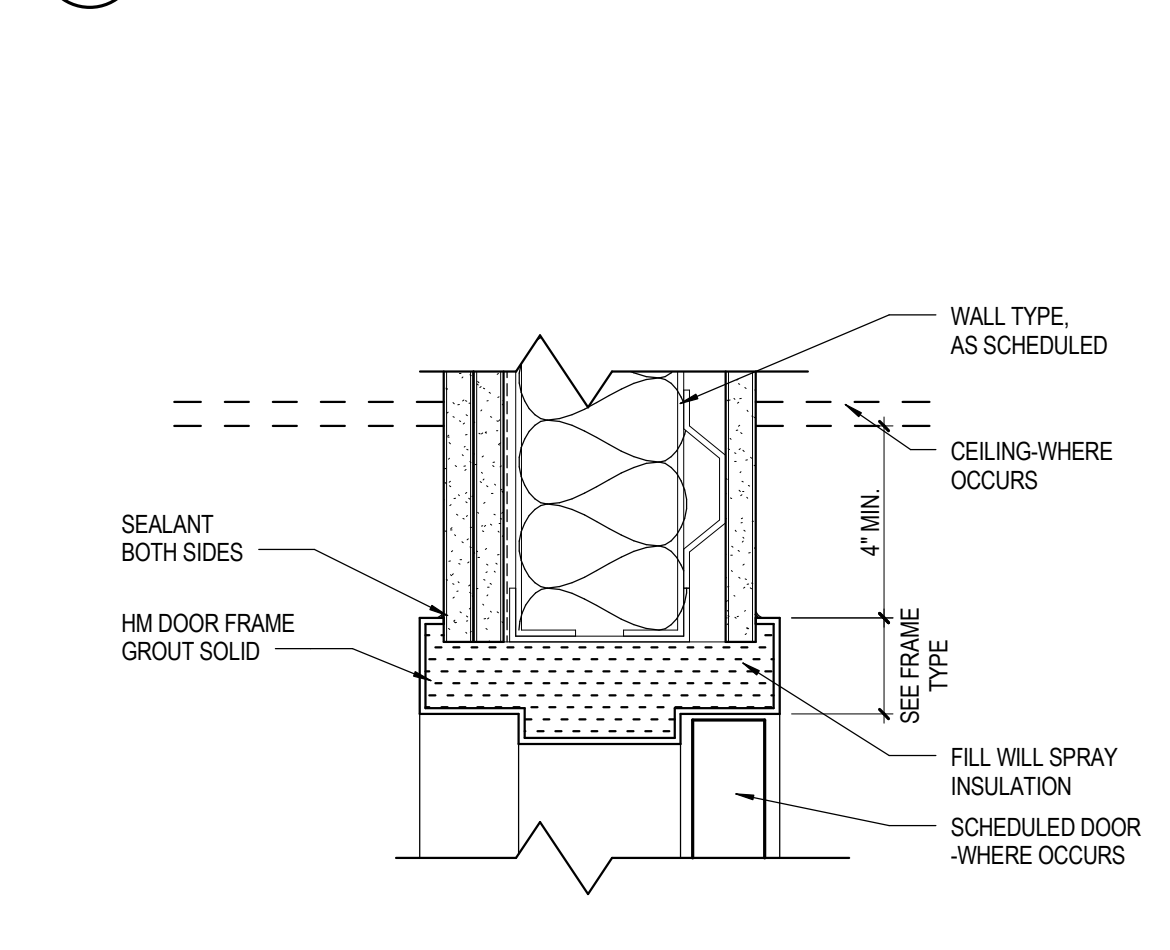
23 HM FRAME AT BULLET RESISTANT WALL (JAMB)
SCALE: 3" = 1'-0"



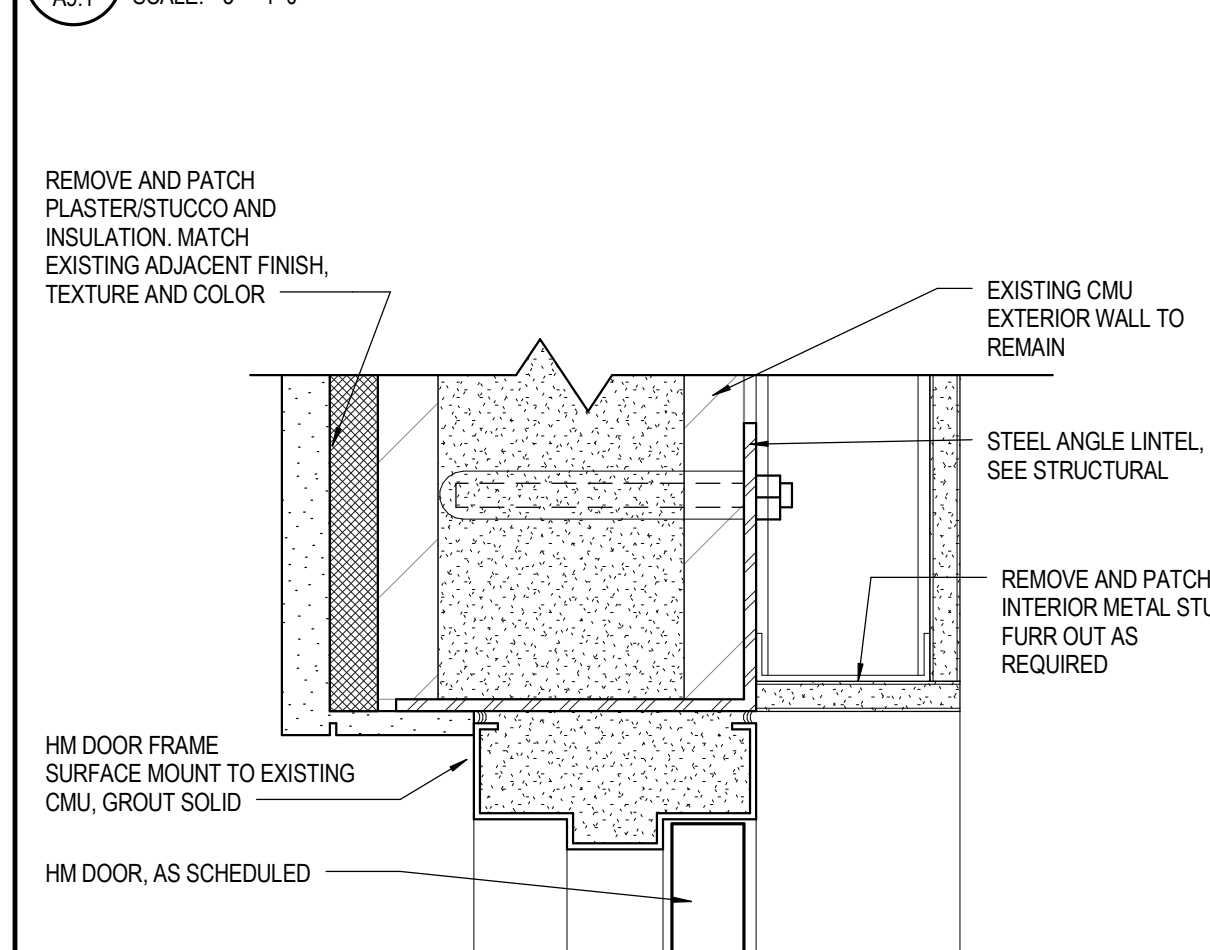
31 HM FRAME AT (E) CMU (HEAD)
SCALE: 3" = 1'-0"



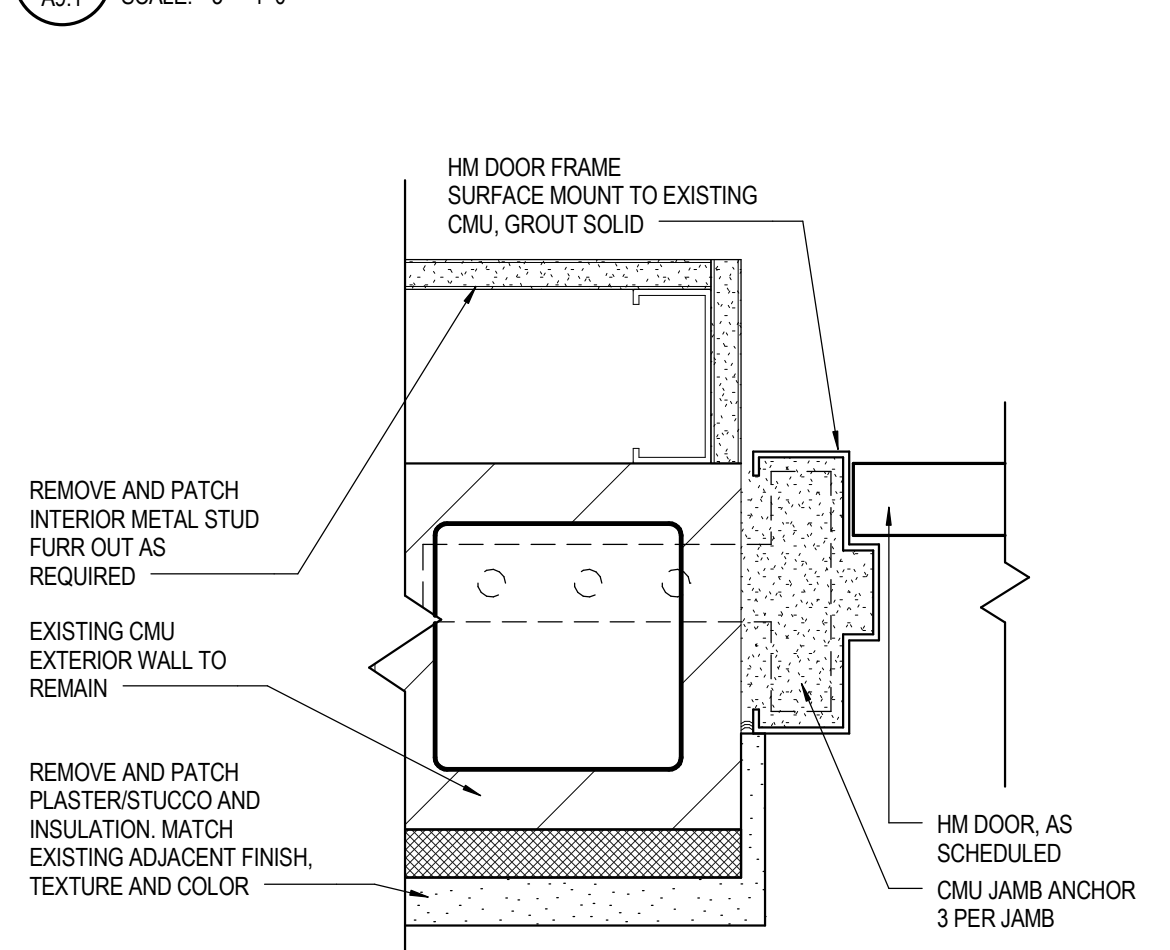
32 HM FRAME AT (E) CMU (JAMB)
SCALE: 3" = 1'-0"



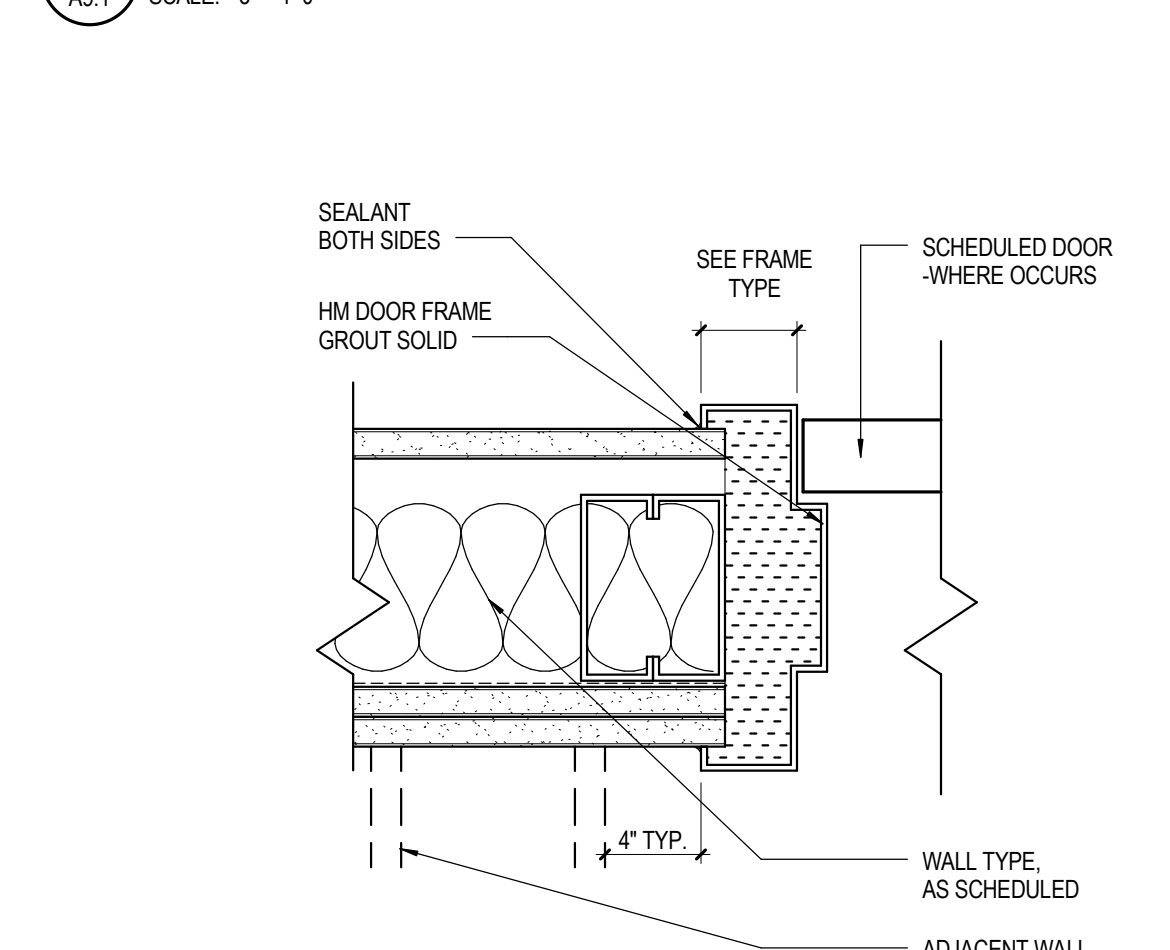
33 HM FRAME AT STC RATED WALL (HEAD)
SCALE: 3" = 1'-0"



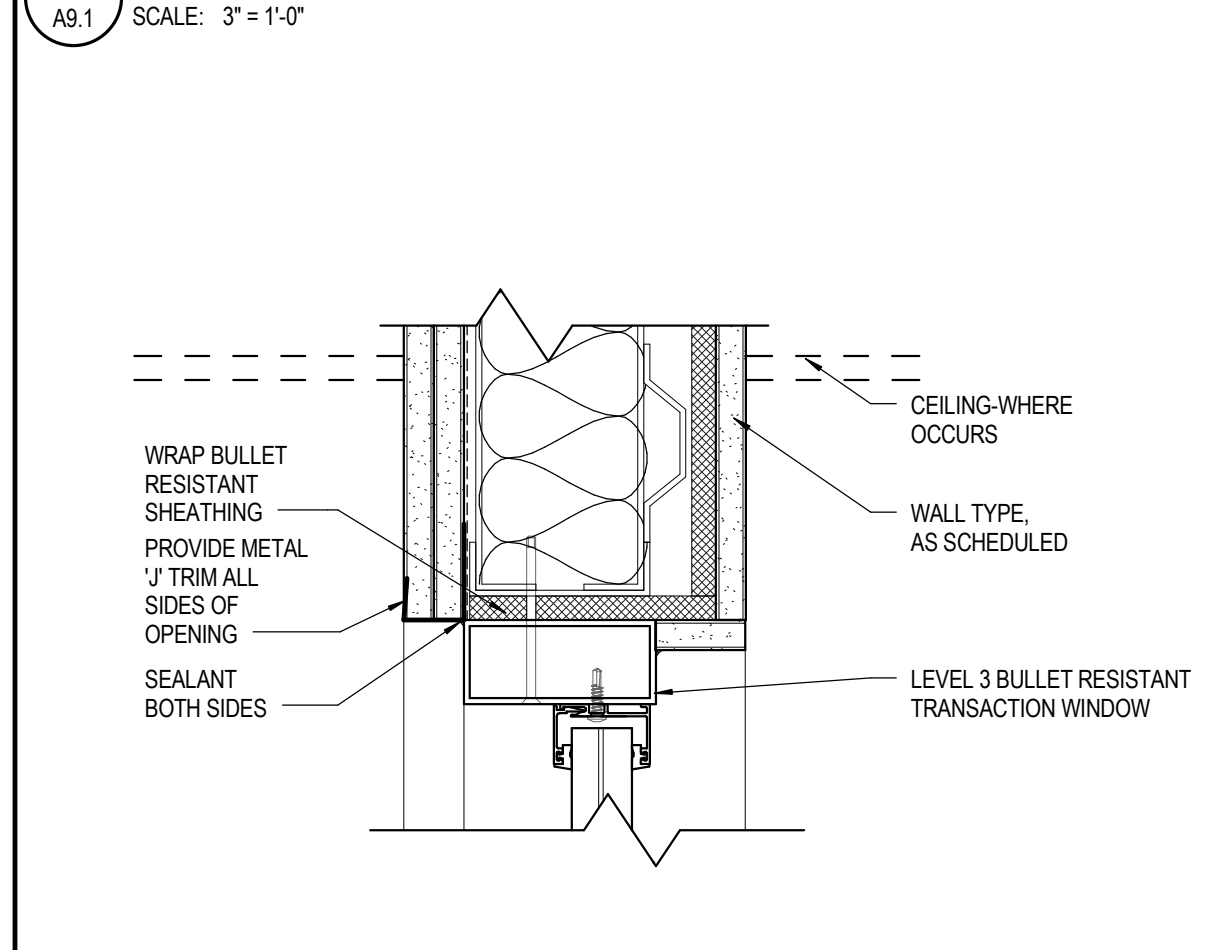
41 HM FRAME AT (E) CMU (HEAD)
SCALE: 3" = 1'-0"



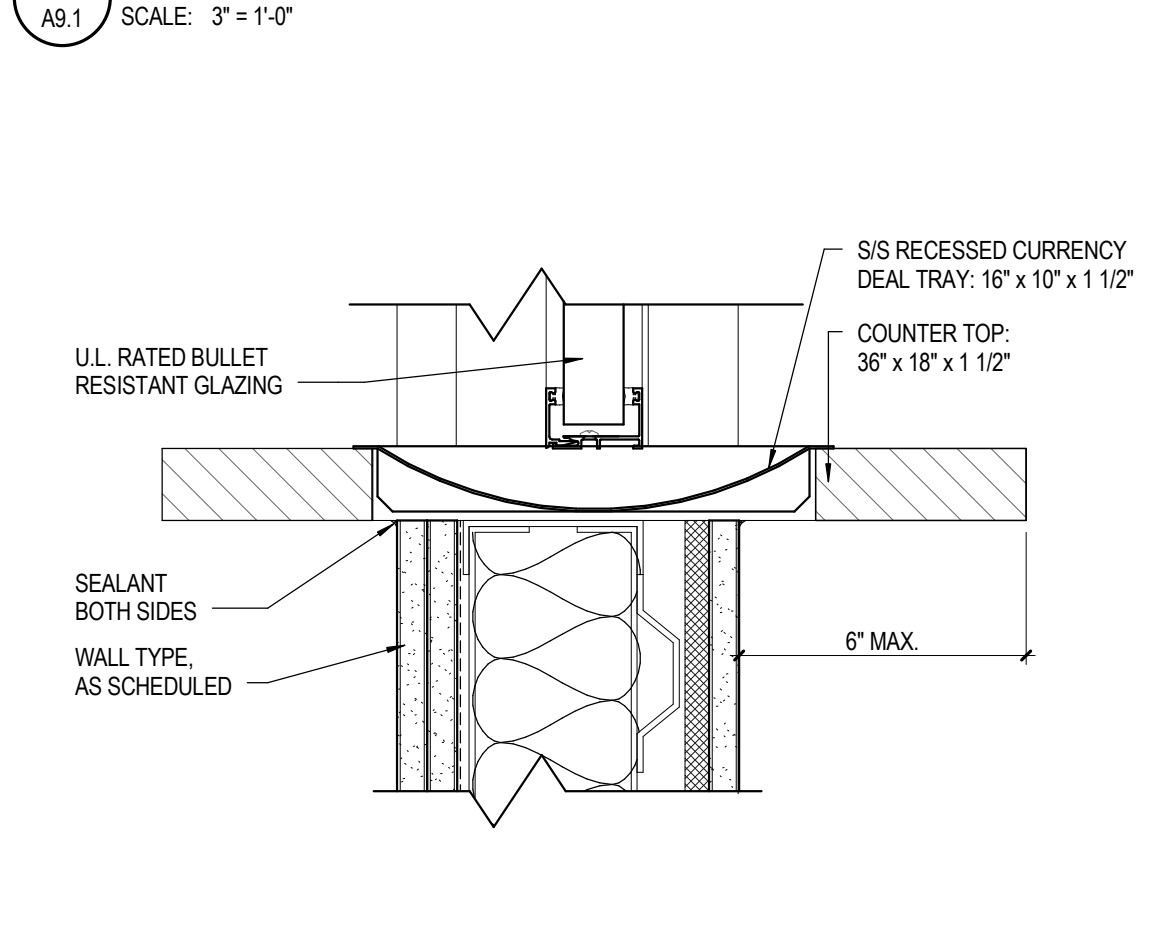
42 HM FRAME AT (E) CMU (JAMB)
SCALE: 3" = 1'-0"



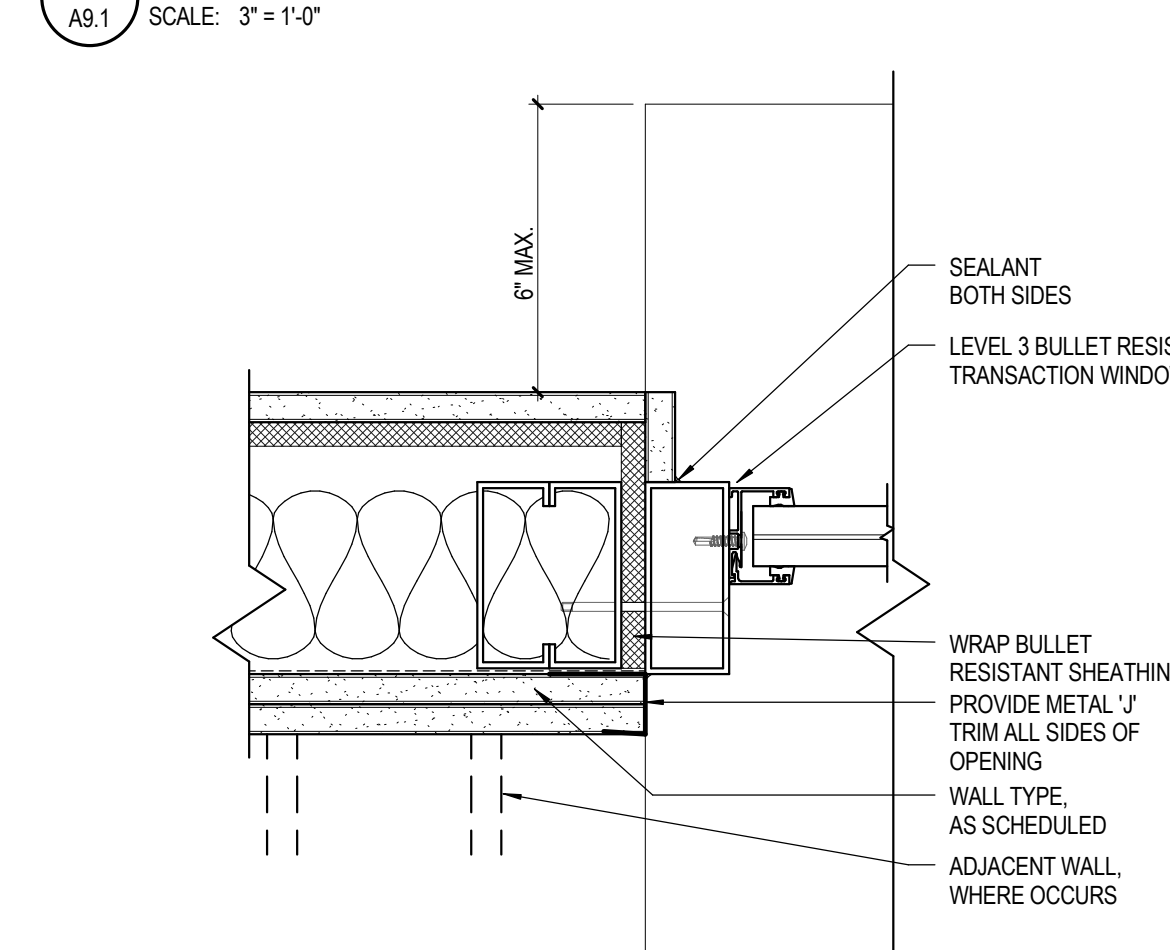
43 HM FRAME AT STC RATED WALL (JAMB)
SCALE: 3" = 1'-0"



51 PASSTHROUGH AT BULLET RESISTANT WALL (HEAD)
SCALE: 3" = 1'-0"

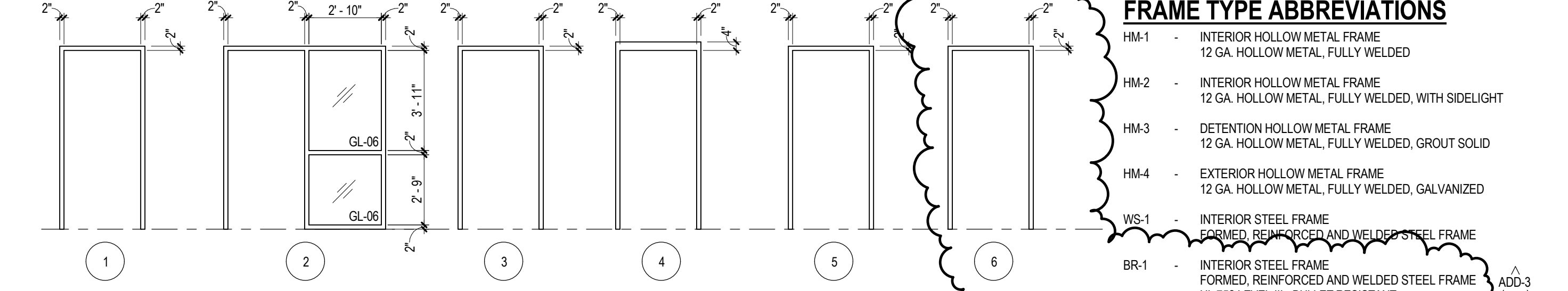


52 PASSTHROUGH AT BULLET RESISTANT WALL (SILL)
SCALE: 3" = 1'-0"

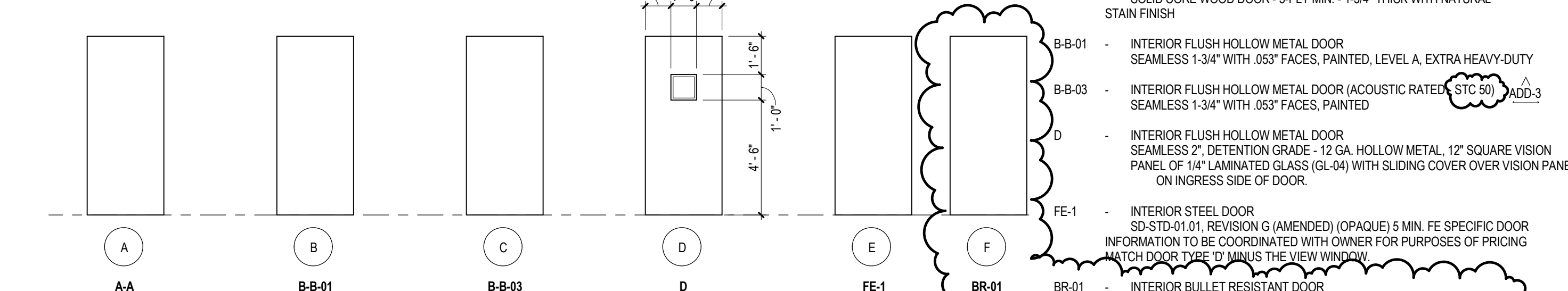


53 PASSTHROUGH AT BULLET RESISTANT WALL (JAMB)
SCALE: 3" = 1'-0"

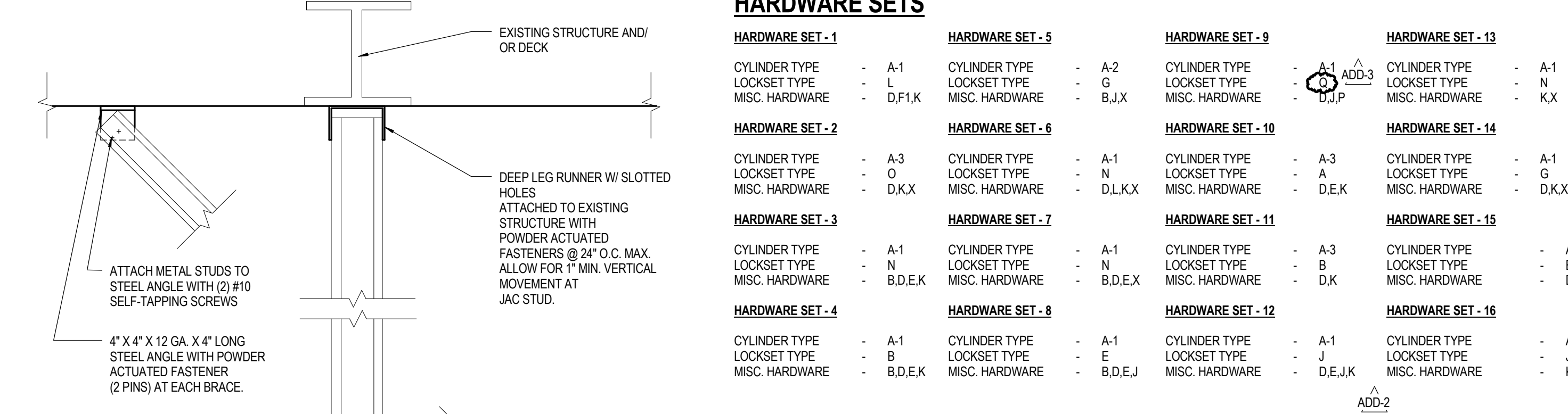
DOOR AND FRAME SCHEDULE																			
NUMBER	NO. OF PANELS	WIDTH	HEIGHT	THICKNESS	DOOR PANEL			FRAME			DETAILS, THIS SHEET U.N.O.								
					MATERIAL	GLAZING	TYPE	DEPTH	MATERIAL	TYPE	FIRE RATING	HARDWARE SET	HEAD	JAMB LEFT	JAMB RIGHT	SILL			
100A	2	2'-10 1/2"	7'-0"	2"	ALUM			4 1/2"	ALUM										EXISTING DOOR TO REMAIN. ACCESS CONTROL FROM CASHIER RECEPTION
100AA	2	2'-8"	7'-0"	1 3/4"	WD			5 3/4"	HM										EXISTING DOOR TO REMAIN.
100B	2	3'-0"	2"		GLASS (1)			4 1/2"	ALUM										EXISTING DOOR TO REMAIN.
104	1	3'-0"	6'-8"	1 3/4"	HM		B	5 3/4"	HM	1		6	22 SIM.	23 SIM.	23 SIM.	21			
105	1	3'-0"	6'-8"	2"	HM		D	5 3/4"	HM	3		9	22 SIM.	23 SIM.	23 SIM.	21			
106	1	3'-0"	6'-8"	1 3/4"	HM			5 3/4"	HM			10	12	13	13	21			
107	1	3'-0"	6'-8"	1 3/4"	HM			1'-3 3/4"	HM	1		14	41	42	42	55			
108	1	3'-0"	6'-8"	1 3/4"	WD			5 3/4"	HM			11	12	13	13	21			
109A	1	3'-0"	6'-8"	1 3/4"	HM		B	5 3/4"	HM	1		4	12	13	13	21			
110	1	3'-0"	7'-0"	1 3/4"	HM			5 3/4"	HM										EXISTING DOOR TO REMAIN DOOR TO RECEIVE NEW STORAGE LOCKSET FREE ACCESS FROM 110 - NO ACCESS OR HANDLE FROM DOOR TO BE RATED STC 50
111	1	3'-0"	6'-8"	1 3/4"	HM		C	5 3/4"	HM	1		8	22 SIM.	23 SIM.	23 SIM.	21			
112	1	3'-0"	7'-0"	1 3/4"	WD		B	5 3/4"	HM	2		7	22 SIM.	23 SIM.	23 SIM.	21			
113	1	3'-0"	6'-8"	1 3/4"	HM		B	5 3/4"	HM	1		14	22 SIM.	23 SIM.	23 SIM.	21			
114	1	3'-0"	6'-8"	1 3/4"	HM		B	5 3/4"	HM	1		1	12	13	13	21			
115A	1	3'-0"	6'-8"	1 3/4"	HM		B	8 1/4"	HM	1		12							EXISTING DOOR TO REMAIN, REMOVE AND REPLACE HARDWARE
115B	1	3'-0"	6'-8"	1 3/4"	HM		B	5 3/4"	HM	1		14	22 SIM.	23 SIM.	23 SIM.	21			
116	1	3'-0"	6'-8"	1 3/4"	HM		B	5 3/4"	HM	1		4	33	43	43	21			
117	1	3'-0"	6'-8"	1 3/4"	HM		B	5 3/4"	HM	1		4	33	43	43	21			
118A	1	2'-8"	6'-8"	1 3/4"	WD			5 3/4"	HM			13	31	32	32	55			EXISTING DOOR TO REMAIN, REMOVE AND REPLACE HARDWARE
118B	1	3'-0"	6'-8"	1 3/4"	HM			9 7/8"	HM			12							EXISTING DOOR TO REMAIN.
119	1	3'-0"	6'-8"	1 3/4"	HM		B	9 7/8"	HM	1									EXISTING DOOR TO REMAIN, REMOVE AND REPLACE HARDWARE
121	1	3'-0"	6'-8"	1 3/4"	HM		B	8 1/4"	HM	1		12							EXISTING DOOR TO REMAIN.
122	1	3'-0"	6'-8"	1 3/4"	HM		B	5 3/4"	HM	1		1	12	13	13	21			
123	1	3'-0"	6'-8"	1 3/4"	HM		B	5 3/4"	HM	1		14	22 SIM.	23 SIM.	23 SIM.	21			
124	1	3'-0"	6'-8"	2"	HM		B	5 3/4"	HM	1		5	22 SIM.	23 SIM.	23 SIM.	21			
125A	1	3'-4"	7'-0"	1 3/4"	HM			5 3/4"	HM										EXISTING DOOR TO REMAIN.
125B	1	7'-0"	1 3/4"	HM				5 3/4"	HM										EXISTING DOOR TO REMAIN.
126	1	3'-0"	7'-0"	1 3/4"	HM		F	5 3/4"	HM	6		4	22	23	23	21			
127	1	3'-0"	6'-8"	1 3/4"	HM		B	5 3/4"	HM	1		3	33	43	43	21			
128	1	3'-0"	6'-8"	1 3/4"	HM		B	5 3/4"	HM	1		15							EXISTING DOOR TO REMAIN, REMOVE AND REPLACE HARDWARE WITH SARGENT 6 PIN LARGE FORMAT TAA KEY #847 COORDINATE WITH TAA FACILITIES.
129	1	3'-0"	6'-8"	1 3/4"	HM		B	5 3/4"	HM	1									EXISTING DOOR TO REMAIN, REMOVE AND REPLACE HARDWARE WITH SARGENT 6 PIN LARGE FORMAT TAA KEY #847 COORDINATE WITH TAA FACILITIES.
130	1	3'-0"	6'-8"	1 3/4"	HM		B	5 3/4"	HM	1		15							EXISTING DOOR TO REMAIN, REMOVE AND REPLACE HARDWARE
131A	1	3'-0"	7'-0"	1 3/4"	HM		B	5 3/4"	HM	1		12							EXISTING DOOR TO REMAIN.
132	1	3'-0"	7'-0"	1 3/4"	GLASS			4 1/2"	ALUM			12							EXISTING DOOR TO REMAIN, REMOVE AND REPLACE HARDWARE
132A	0	4'-0"	7'-0"	1 3/4"	STL			5 3/4"	STL			16							EXISTING GATE TO REMAIN, PROVIDE NEW HARDWARE AS REQUIRED BY HARDWARE SET
133	1	3'-0"	6'-8"	1 3/4"	HM		B	5 3/4"	HM	1		3							EXISTING DOOR TO REMAIN, REMOVE AND REPLACE HARDWARE
134	1	3'-0"	7'-0"	1 3/4"	HM		B	5 3/4"	HM	1									EXISTING DOOR TO REMAIN, REMOVE AND REPLACE HARDWARE
135	1	3'-0"	6'-8"	1 3/4"	WD		A	5 3/4"	HM	1		15	12	13	13	21			
138	1	3'-0"	6'-8"	1 3/4"	WD		A	5 3/4"	HM	2		7	33	43	43	21			
139	1	3'-0"	6'-8"	1 3/4"	WD		A	5 3/4"	HM	2		7	33	43	43	21			
143	1	3'-0"	6'-8"	1 3/4"	HM		B	5 3/4"	HM	1		12	33	43	43	21			
B109	1	2'-8"	6'-8"	1 3/4"	WD		B	5 3/4"	HM	1		12							EXISTING DOOR TO REMAIN, REMOVE AND REPLACE HARDWARE
B114	1	2'-8"	6'-8"	1 3/4"	WD		B	5 3/4"	HM	1		12							EXISTING DOOR TO REMAIN, REMOVE AND REPLACE HARDWARE
B115	1	3'-0"	6'-8"	1 3/4"	HM		B	5 3/4"	HM	1		12							EXISTING DOOR TO REMAIN, REMOVE AND REPLACE HARDWARE
B116A	1	3'-0"	6'-8"	1 3/4"	HM		B	5 3/4"	HM	1									DOOR TO BE PERMANENTLY CLOSED IN PLACE
B116B	1	3'-0"	7'-0"	1 3/4"	HM		B	5 3/4"	HM	1									EXISTING DOOR TO BECOME ADA DOOR - REMOVE AND REPLACE DOOR LOCK HARDWARE REPLACE WITH KEY ACCESS SARGENT 6 PIN 440 ON OUTSIDE - FREE ACCESS TO EXTERIOR FROM INSIDE - BALANCE OF HARDWARE TO REMAIN.
S1A	1	3'-0"	7'-0"	1 3/4"	HM			5 3/4"	HM			12							EXISTING DOOR TO REMAIN, REMOVE AND REPLACE HARDWARE



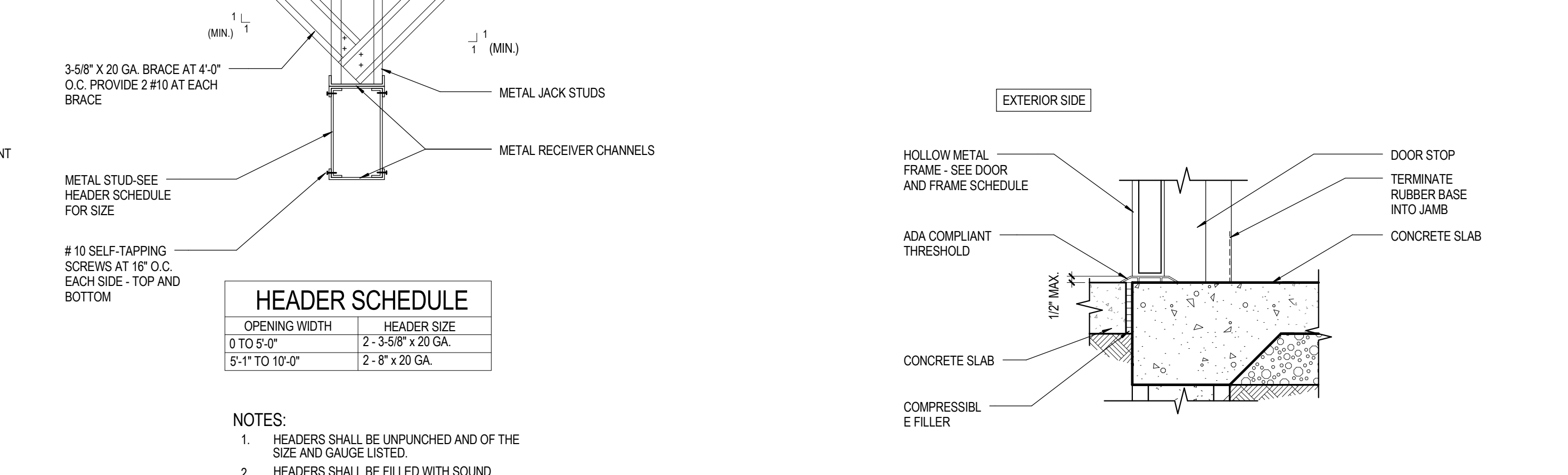
1 FRAME TYPES
SCALE: 1/4" = 1'-0"



2 DOOR TYPES
SCALE: 1/4" = 1'-0"



3 HARDWARE SETS



4 HEADER SCHEDULE

LEGEND NOTES

LEGEND NOTES COMMON TO ALL SHEETS. SOME NOTES MAY NOT APPLY TO THIS SHEET.

GENERAL NOTES

- ALL ABBREVIATIONS FOR DOORS, FRAMES, GLAZING, HARDWARE, ETC. CORRELATE TO THE CBP AT STANDARDS. NOT ALL TYPES LISTED IN STANDARDS WILL BE USED ON THE PROJECT.

DOOR SCHEDULE ABBREVIATIONS

- ALUM - ALUMINUM
- GLASS - GLAZING
- HM - HOLLOW METAL
- WD - SOLID CORE WOOD

GLAZING TYPES

- GL-03 - BULLET RESISTANT; LEVEL BULLET RESISTANT POLYCARBONATE PANEL
- GL-04 - VISION; PANEL OF 1/4\"/>

HARDWARE SET ABBREVIATIONS

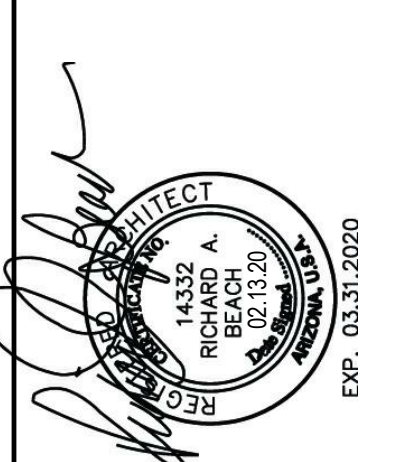
- A-1 - CYLINDER, KEYPED INDIVIDUALLY UNDER A CBP MASTER
- A-2 - CYLINDER, KEYPED INDIVIDUALLY NOT UNDER A CBP MASTER
- A-3 - CYLINDER, KEYPED UNDER A CBP MASTER (FOR TOILET ROOMS AND PHYSICAL TRAINING ROOMS)

LOCKSET TYPES

- A - MORTISE LEVER LOCKSET, CLASSROOM FUNCTION
- B - MORTISE LEVEL LOCKSET WITH THUMB TURN, ENTRANCE FUNCTION
- E - HIGH SECURITY MORTISE INSTITUTIONAL DEADBOLT LEVEL LOCK (DOUBLE CYLINDER)
- G - FF-L 2800B RATED HIGH SECURITY ELECTROMECHANICAL LOCK (X-10 OR EQ.)
- J - UL GROUP 1 MECHANICAL COMBINATION LOCK
- L - STANDARD LEVEL LOCKSET, PRIVACY
- N - ELECTRIFIED MORTISE LOCK WITH LEVER SET AND BUILT-IN REX FUNCTION AND KEY OVERRIDE
- O - ELECTRIFIED MORTISE LOCK WITH BUILT-IN EXIT TRIM FUNCTION AND KEY OVERRIDE
- Q - DETENTION DEAD BOLT, HEAVY DUTY, MORTISED (MOGL, KEY ON ONE SIDE)

MISCELLANEOUS HARDWARE

- B - AUTOMATIC DOOR BOTTOM
- D - DOOR STOP (WALL OR FLOOR MOUNTED)
- E - DOOR THRESHOLD, COORDINATE WITH FLOOR TRANSITIONS
- F1 - ELECTRIC STRIKE, DEADBOLT LOCK, 12V OR 24V, CENTRALLY POWERED, FAIL SECURE
- J - NON-REMOVABLE HINGES (OUTSWING) REQUIRED AT ALL PERIMETER AND OUTSWING DOORS
- K - AUTOMATIC DOOR CLOSER, COMMERCIAL GRADE, REQUIRED AT ALL PERIMETER AND CARD READER DOORS
- L - ANTI-PRY STRIP (INSWING), REQUIRED AT ALL PERIMETER DOORS
- P - DOOR PULL, OUTSIDE, STAINLESS STEEL
- X - POWER TRANSFER HINGE



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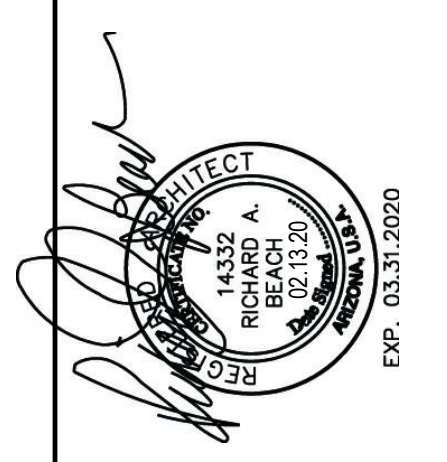
DOOR AND FRAME SCHEDULE
TAA Executive Terminal
CBP Relocation TAA project #10219007

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30-1807-00
12/21/2018

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LEGEND NOTES

LEGEND NOTES ARE COMMON TO ALL SHEETS
SOME NOTES MAY NOT APPLY TO THIS SHEET

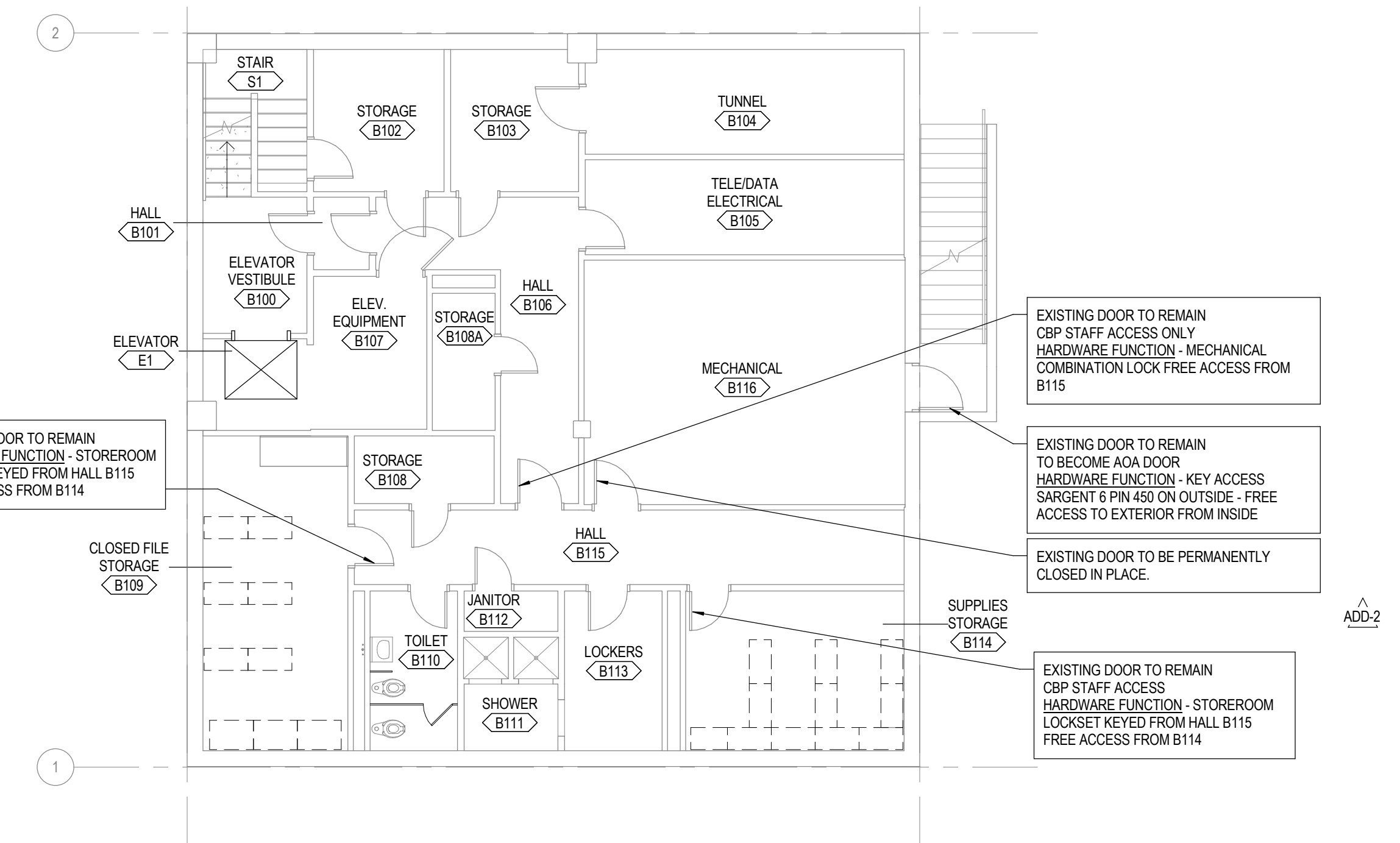


7081 S. Plummer Ave
Tucson, AZ 85756

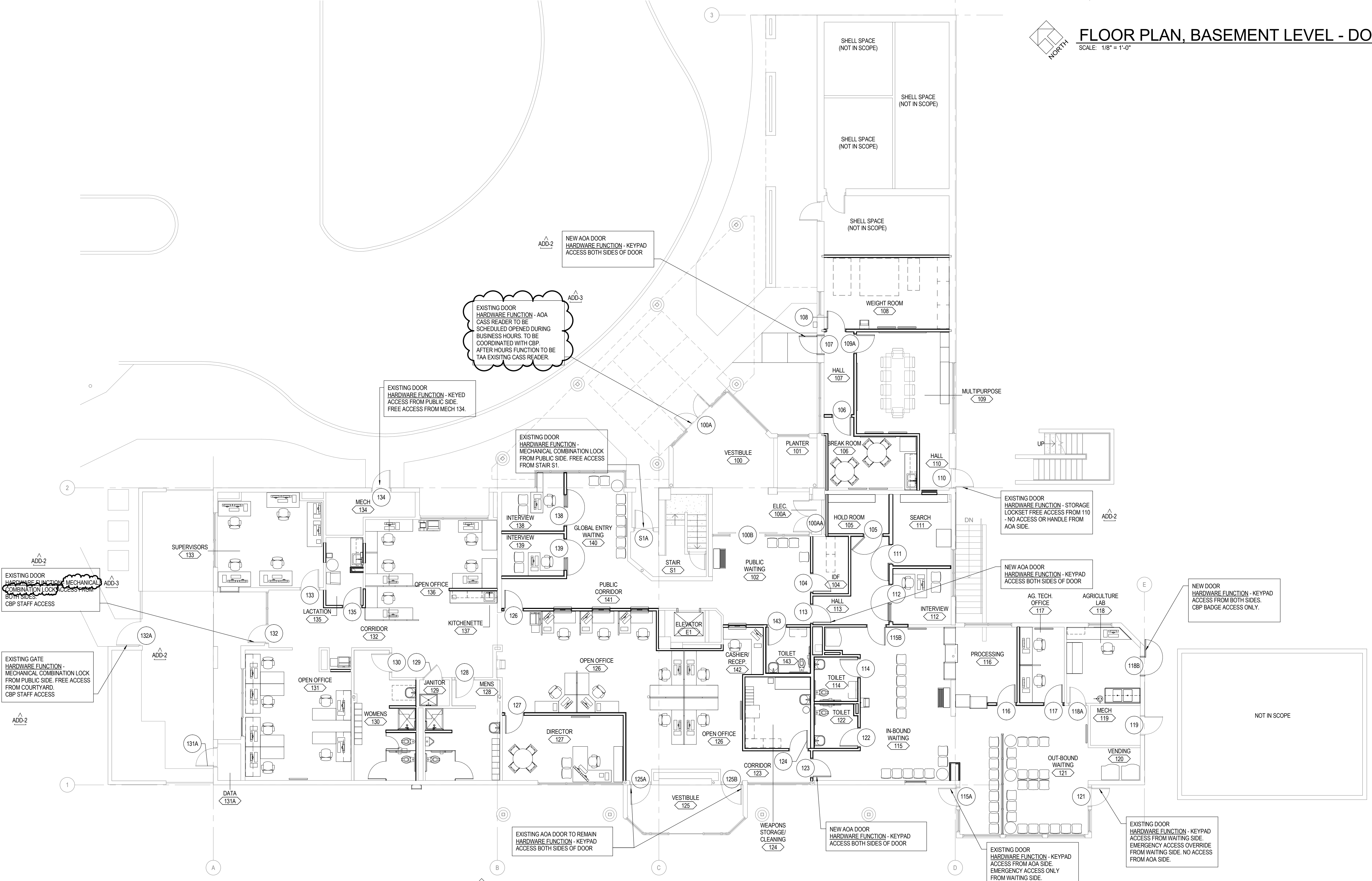
DOOR OPERATION DIAGRAM
TAA Executive Terminal
CBP Relocation TAA project #10219007

A9.2
30-16307-00
12/21/2018
Revision: 03/20/2018 Blumenthal 02
ADD-3 02/12/2018 Blumenthal 03

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FLOOR PLAN, BASEMENT LEVEL - DOOR OPERATION DIAGRAM
SCALE: 1/8" = 1'-0"

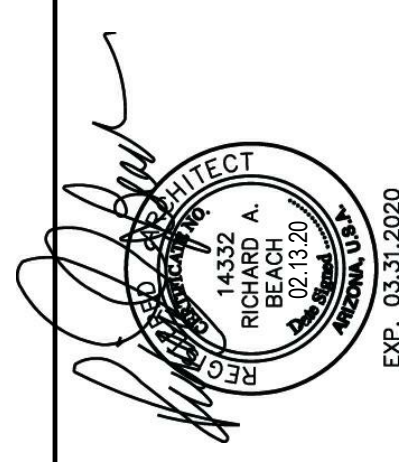


FLOOR PLAN, FIRST LEVEL - DOOR OPERATION DIAGRAM
SCALE: 1/8" = 1'-0"

LEGEND NOTES

CASEWORK ABBREVIATIONS

- PL-1 - PLASTIC LAMINATE VERTICAL CASEWORK
HIGH PRESSURE DECORATIVE LAMINATE
COLOR TO BE DETERMINED
- SS-1 - SOLID SURFACE COUNTERTOP
EASED FRONT EDGE WITH 4" BACKSPLASH UNLESS
NOTED OTHERWISE
- SST-1 - STAINLESS STEEL COUNTERTOP - NO BACKSPLASH

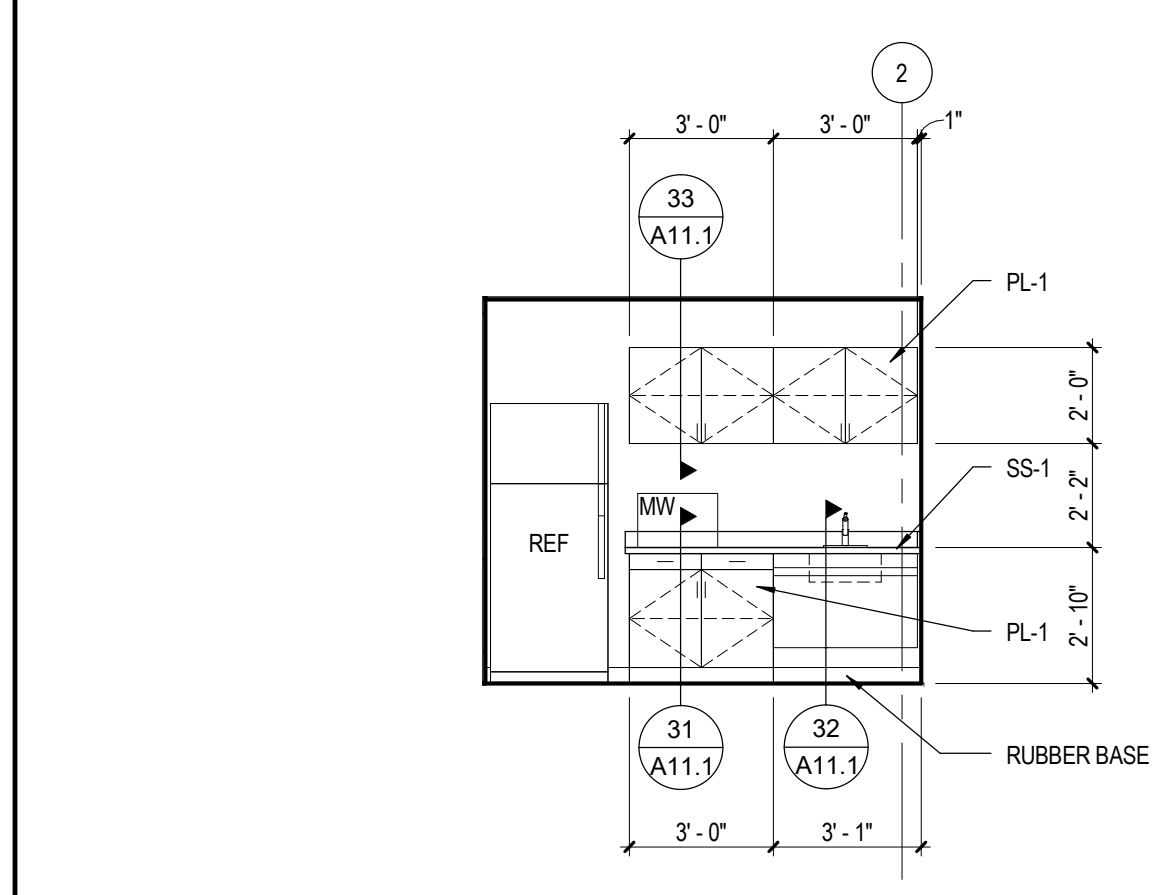


7081 S. Plummer Ave
Tucson, AZ 85756

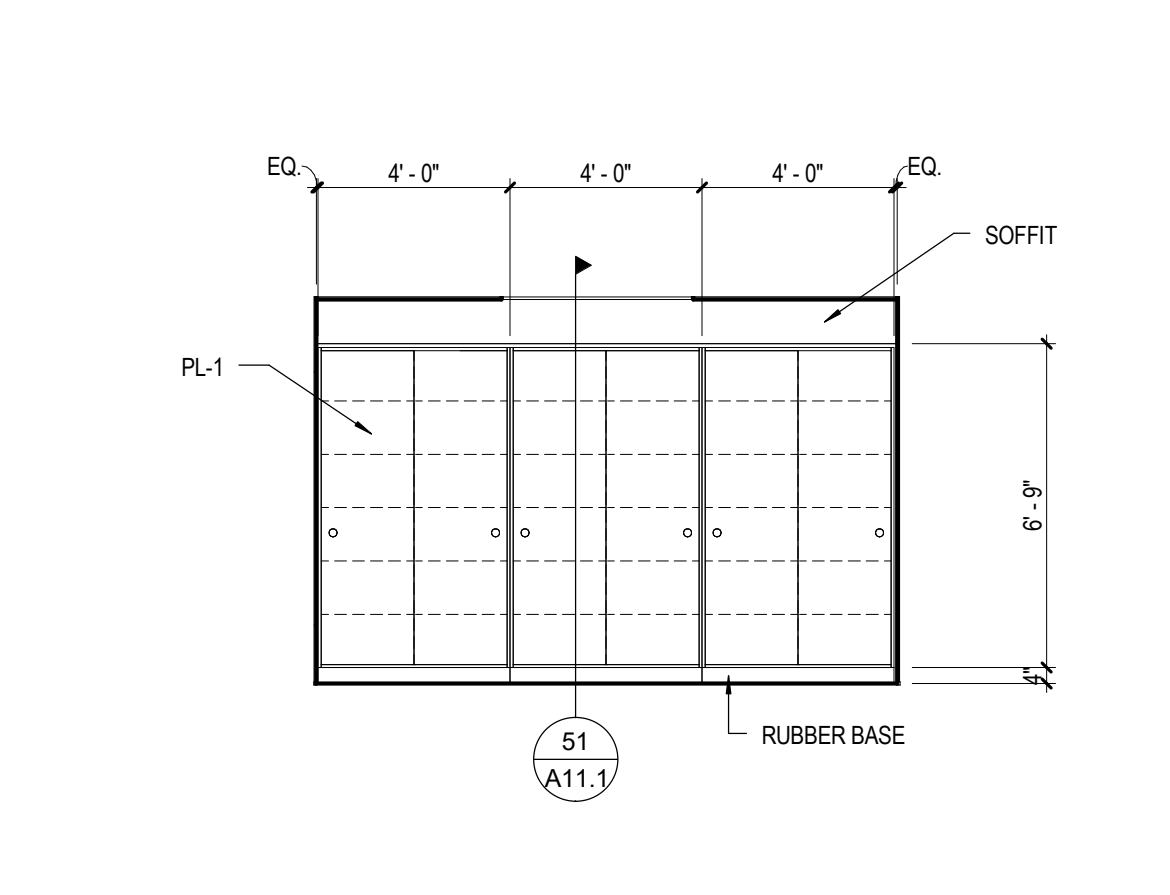
CASEWORK ELEVATIONS
TAA Executive Terminal
CBP Relocation TAA project #10219007

A11.1
30-18307-00
12/21/2018
Revised
ADD 10/20/2018 (Richard M.)

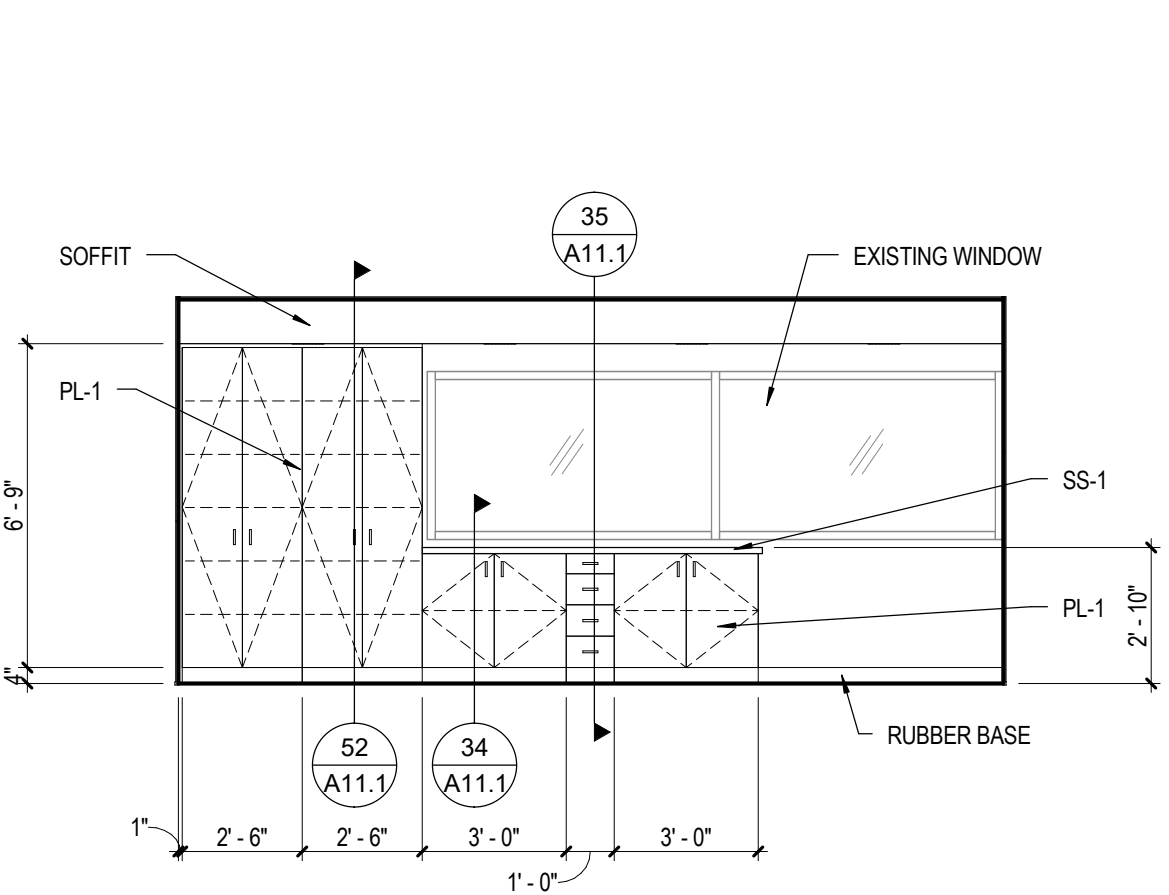
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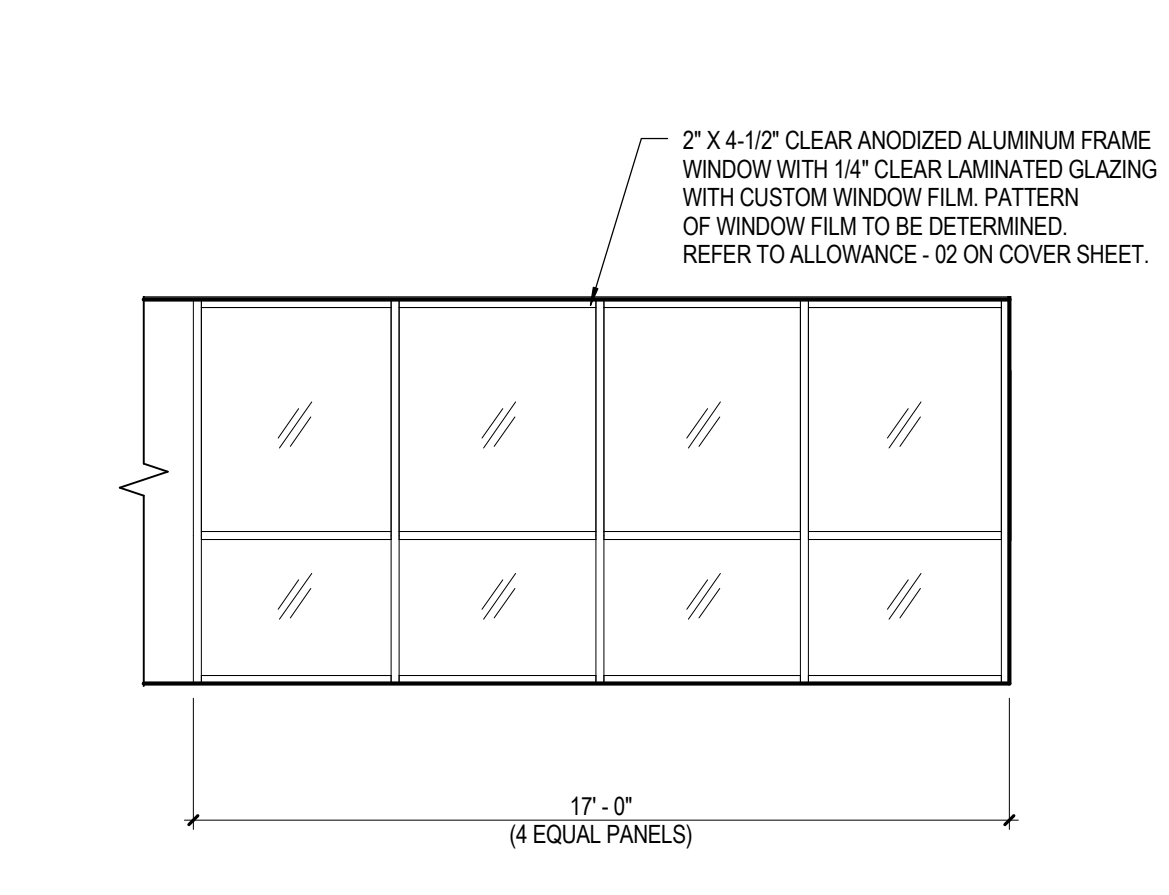
11 BREAK ROOM 106
SCALE: 1/4" = 1'-0"



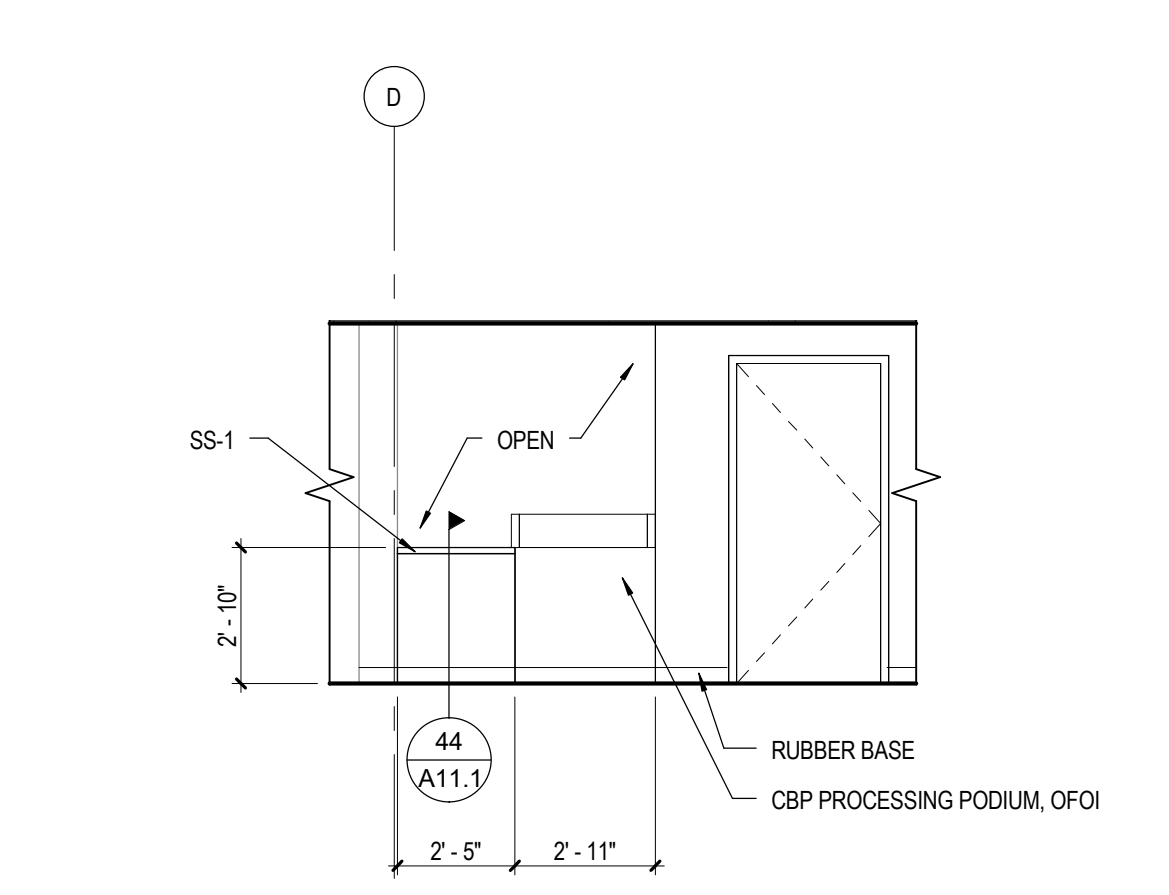
12 WEIGHT ROOM 108
SCALE: 1/4" = 1'-0"



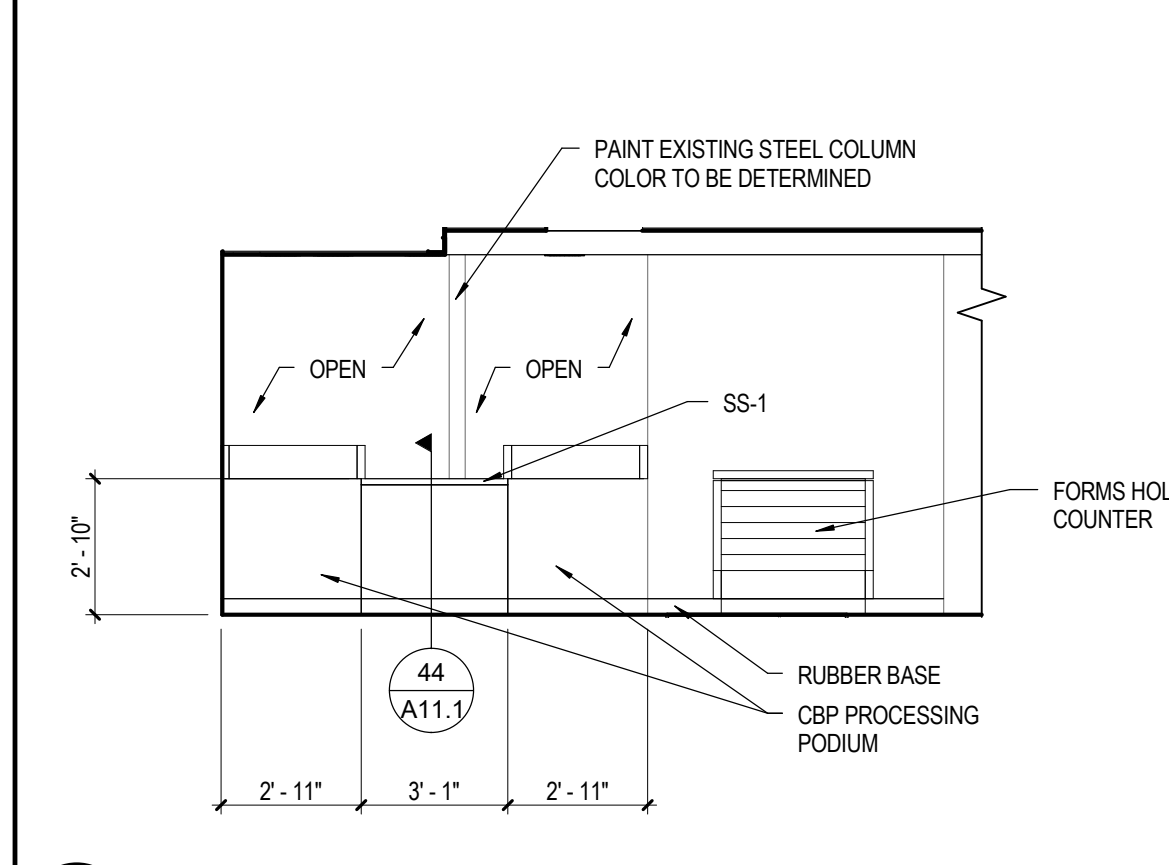
13 MULTIPURPOSE 109
SCALE: 1/4" = 1'-0"



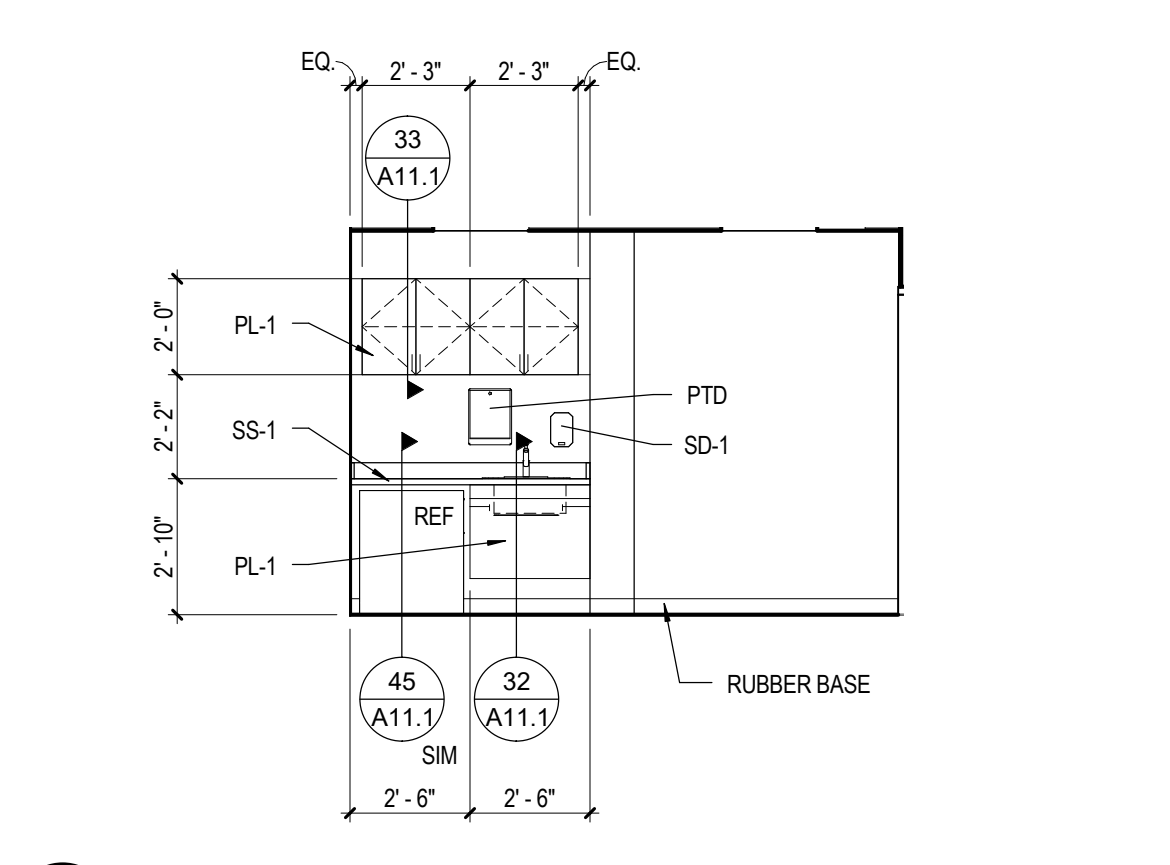
14 IN-BOUND WAITING 115
SCALE: 1/4" = 1'-0"



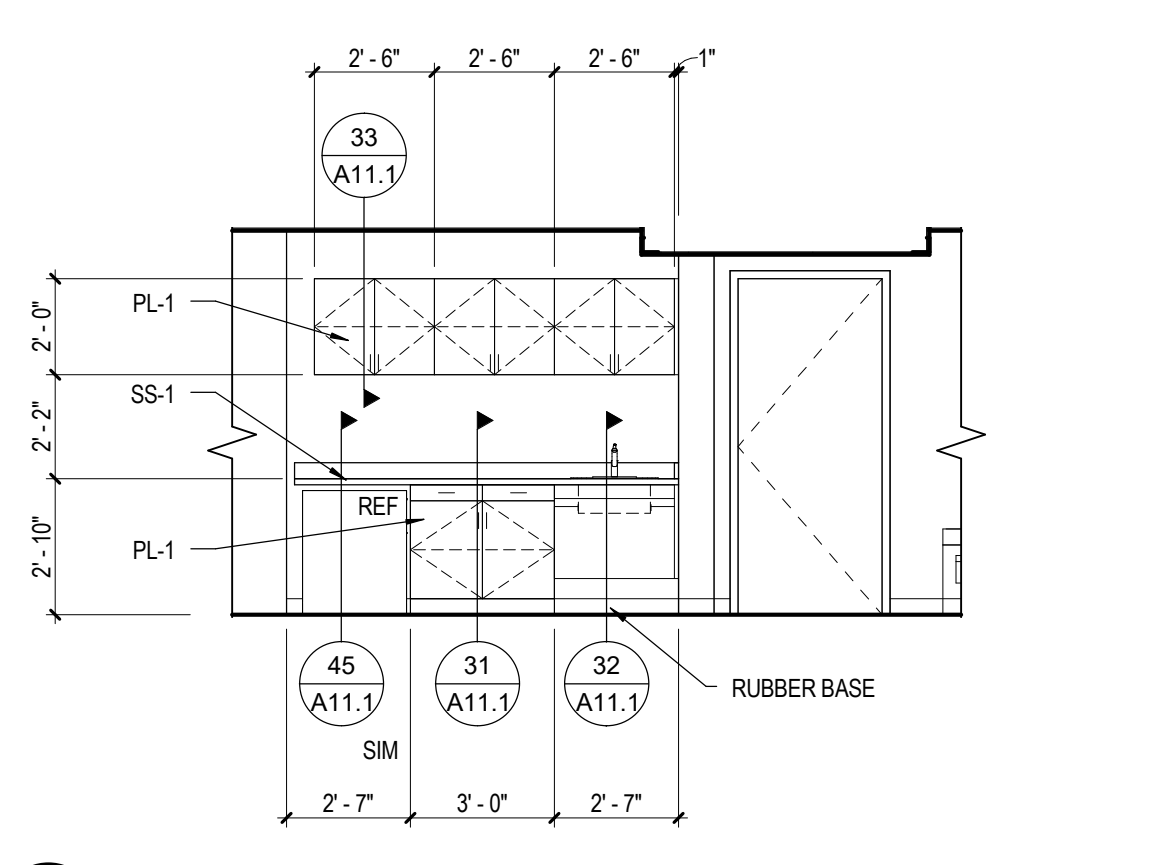
15 PROCESSING 116
SCALE: 1/4" = 1'-0"



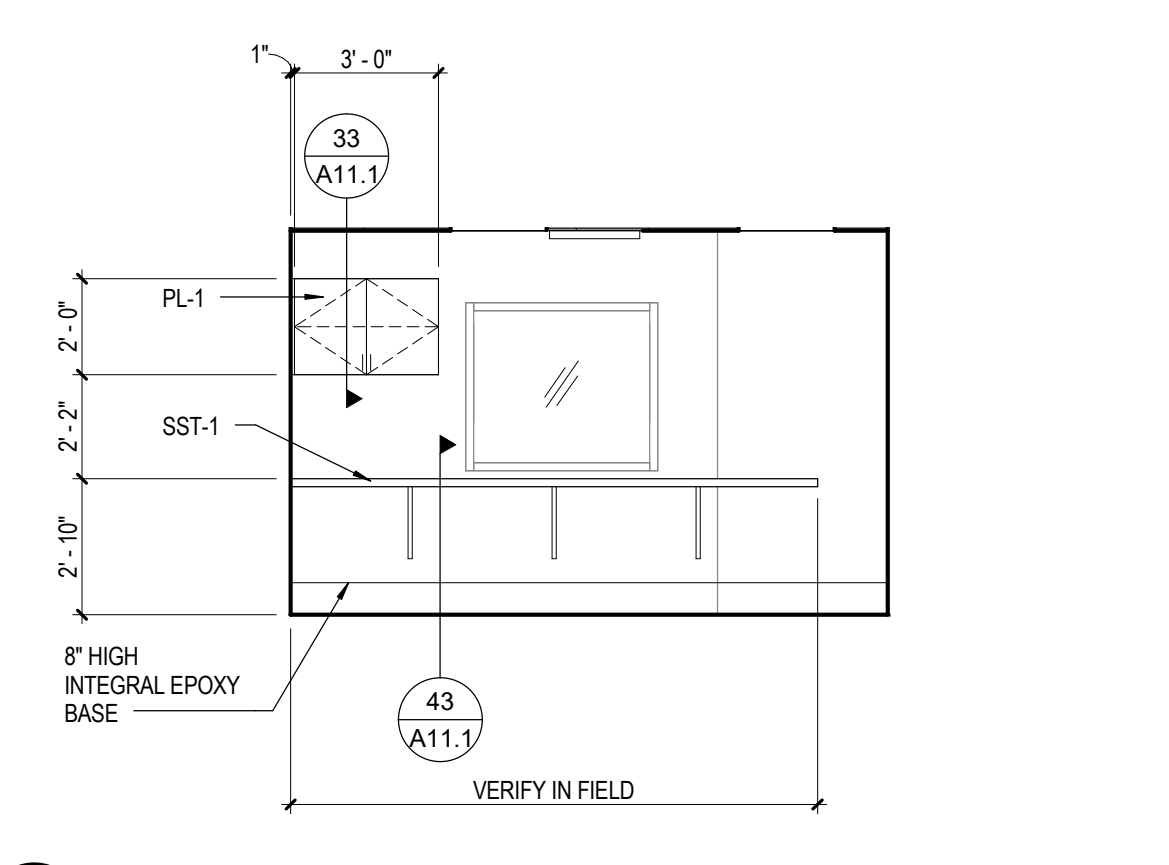
21 PROCESSING 116
SCALE: 1/4" = 1'-0"



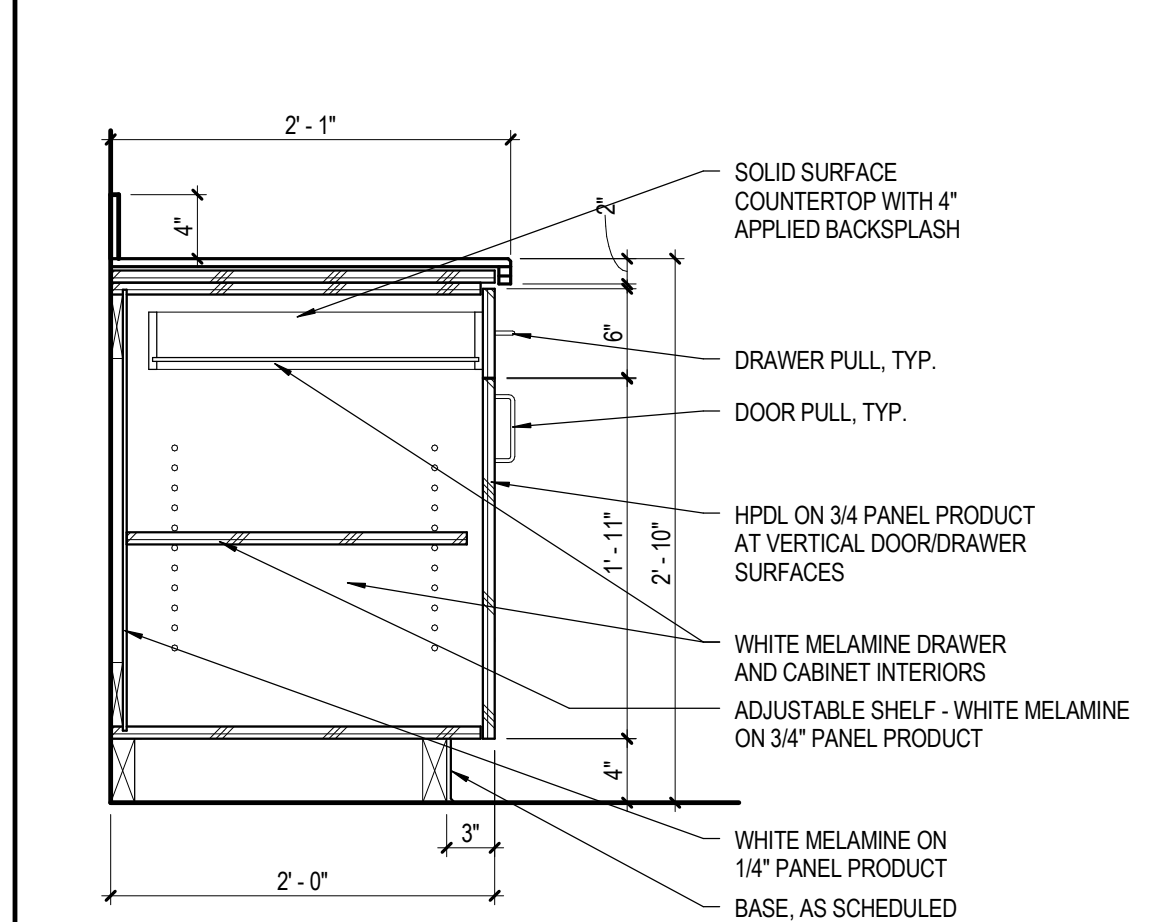
22 LACTATION 135
SCALE: 1/4" = 1'-0"



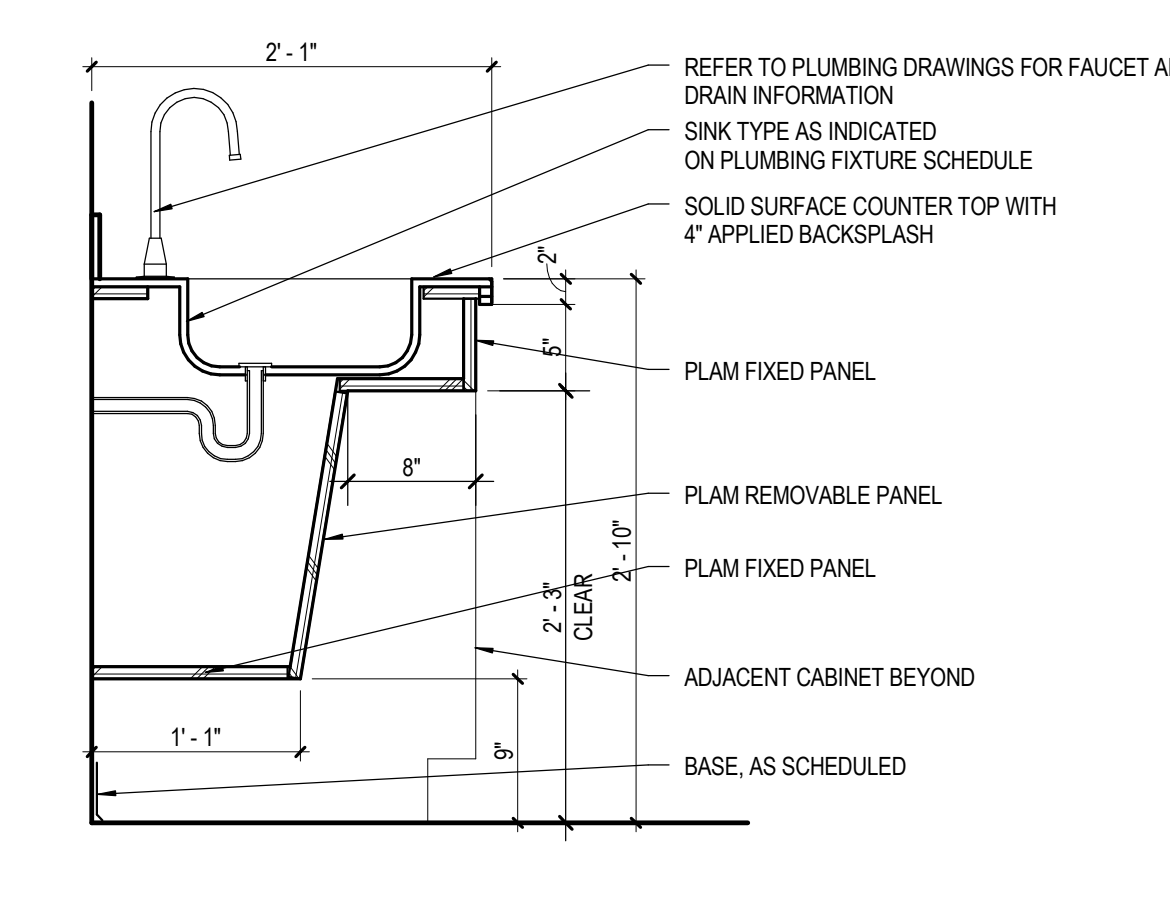
23 KITCHENETTE 137
SCALE: 1/4" = 1'-0"



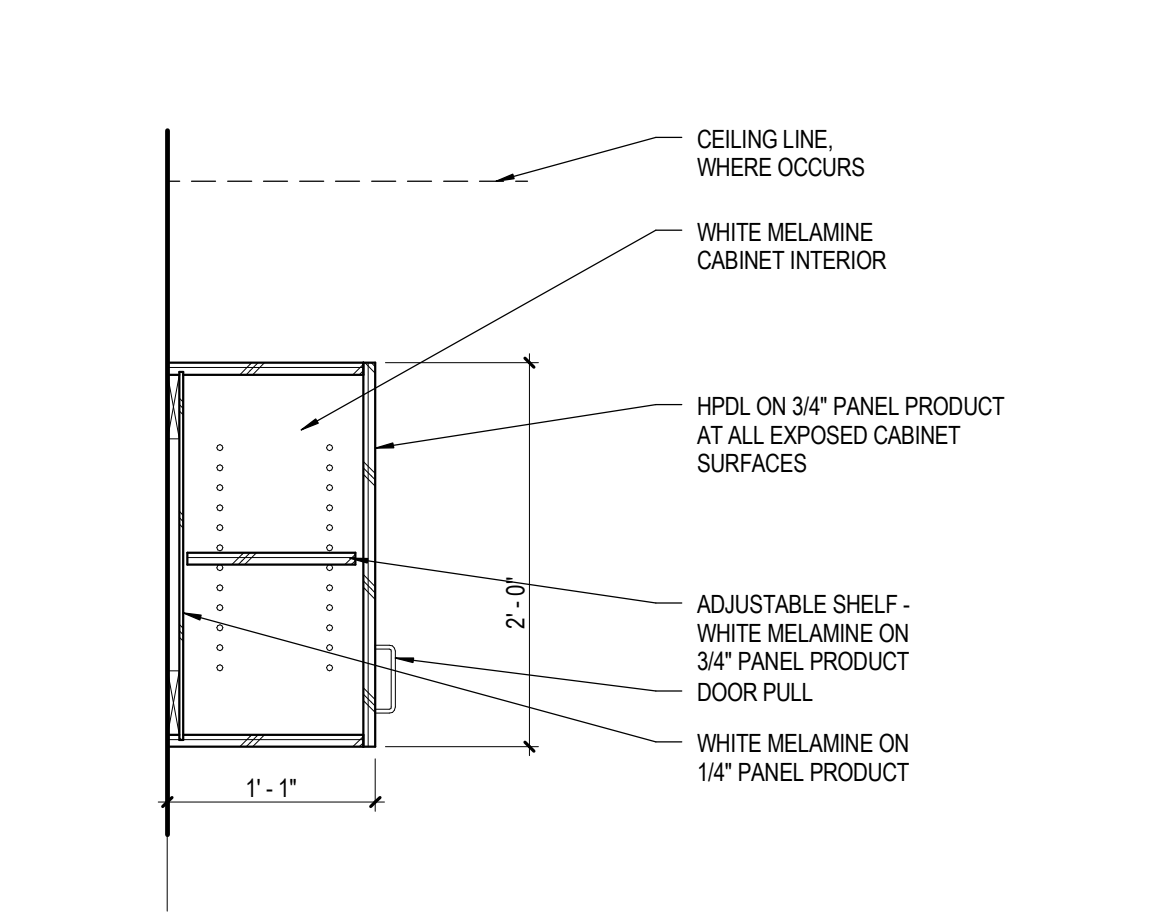
24 AGRICULTURAL LAB 118
SCALE: 1/4" = 1'-0"



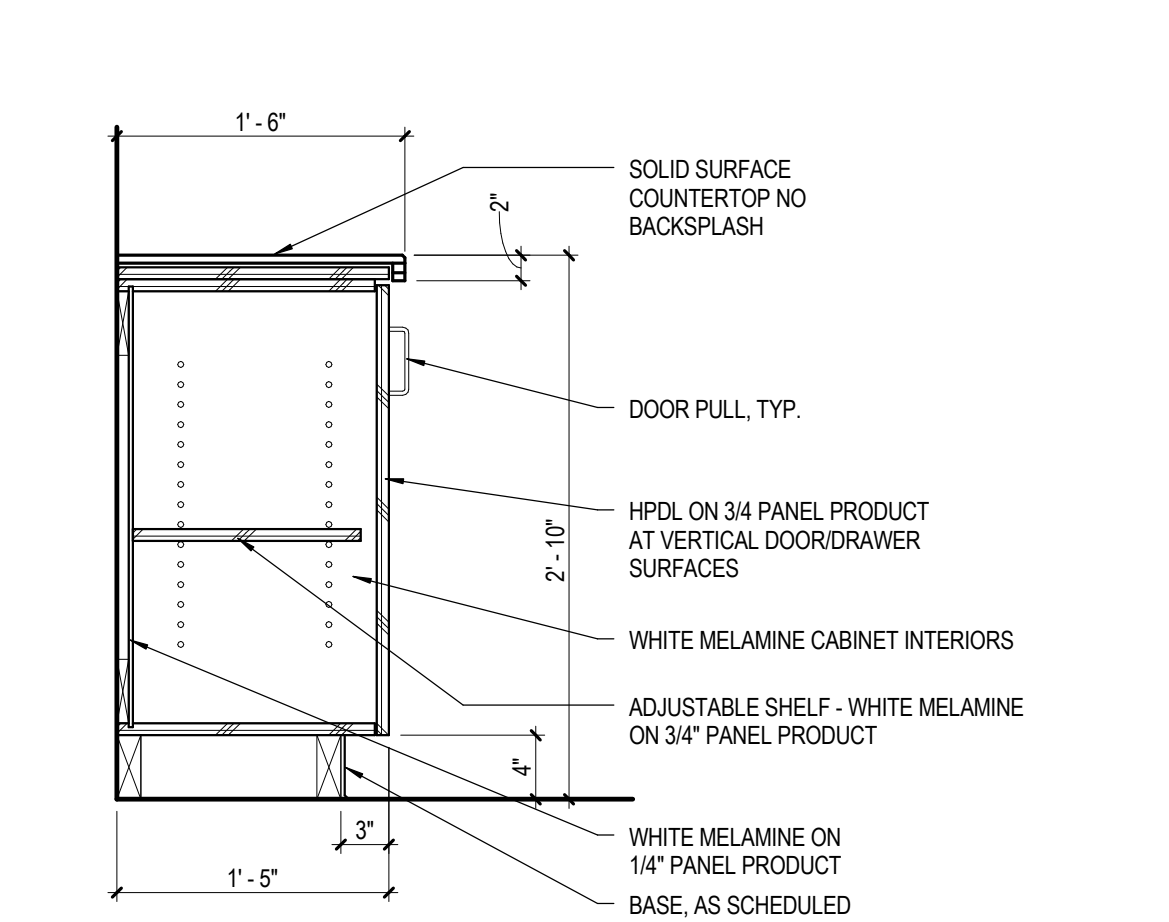
31 BASE CABINET - 34" SOLID SURFACE - DWR/DOOR
SCALE: 1" = 1'-0"



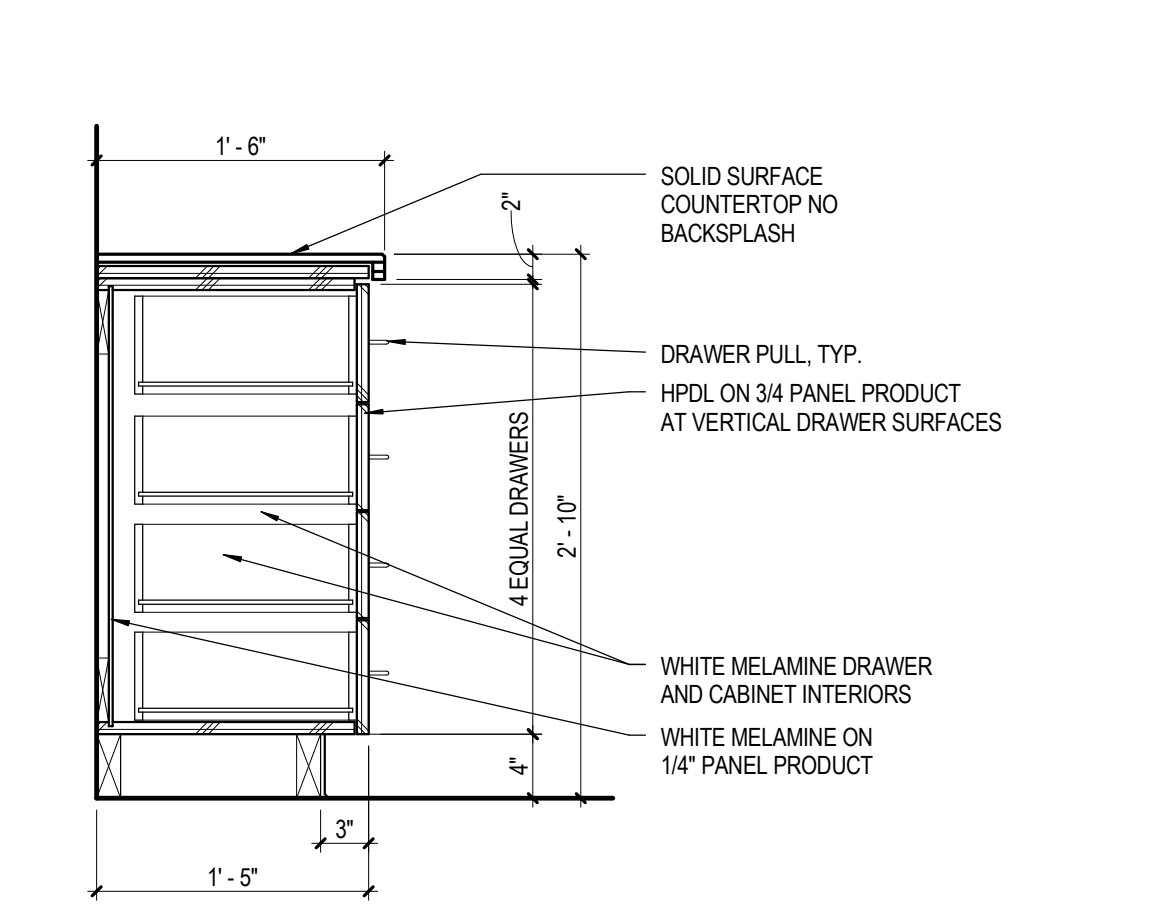
32 34" SOLID SURFACE - PLAM ADA SINK APRON
SCALE: 1" = 1'-0"



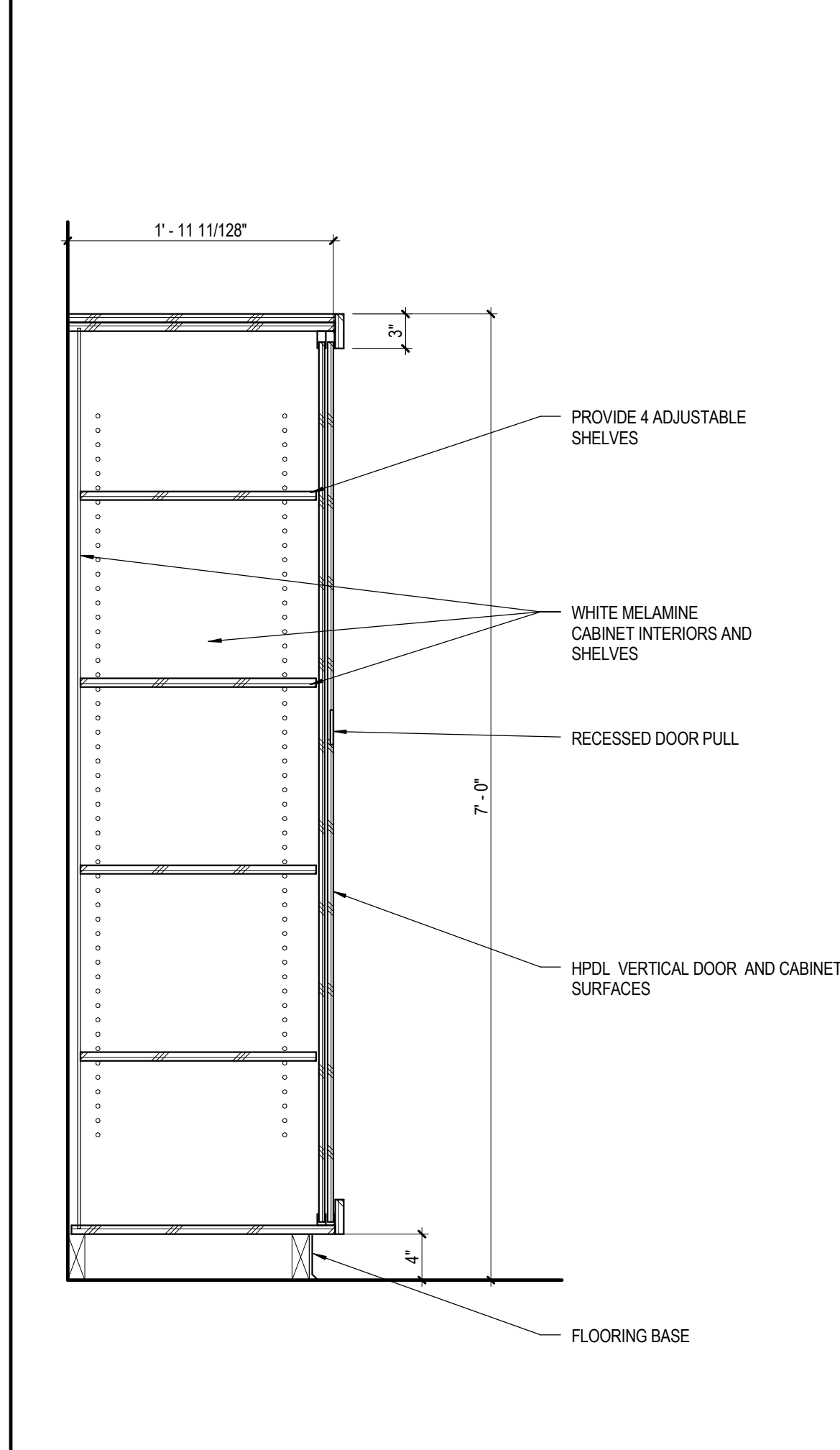
33 30" UPPER CABINET
SCALE: 1" = 1'-0"



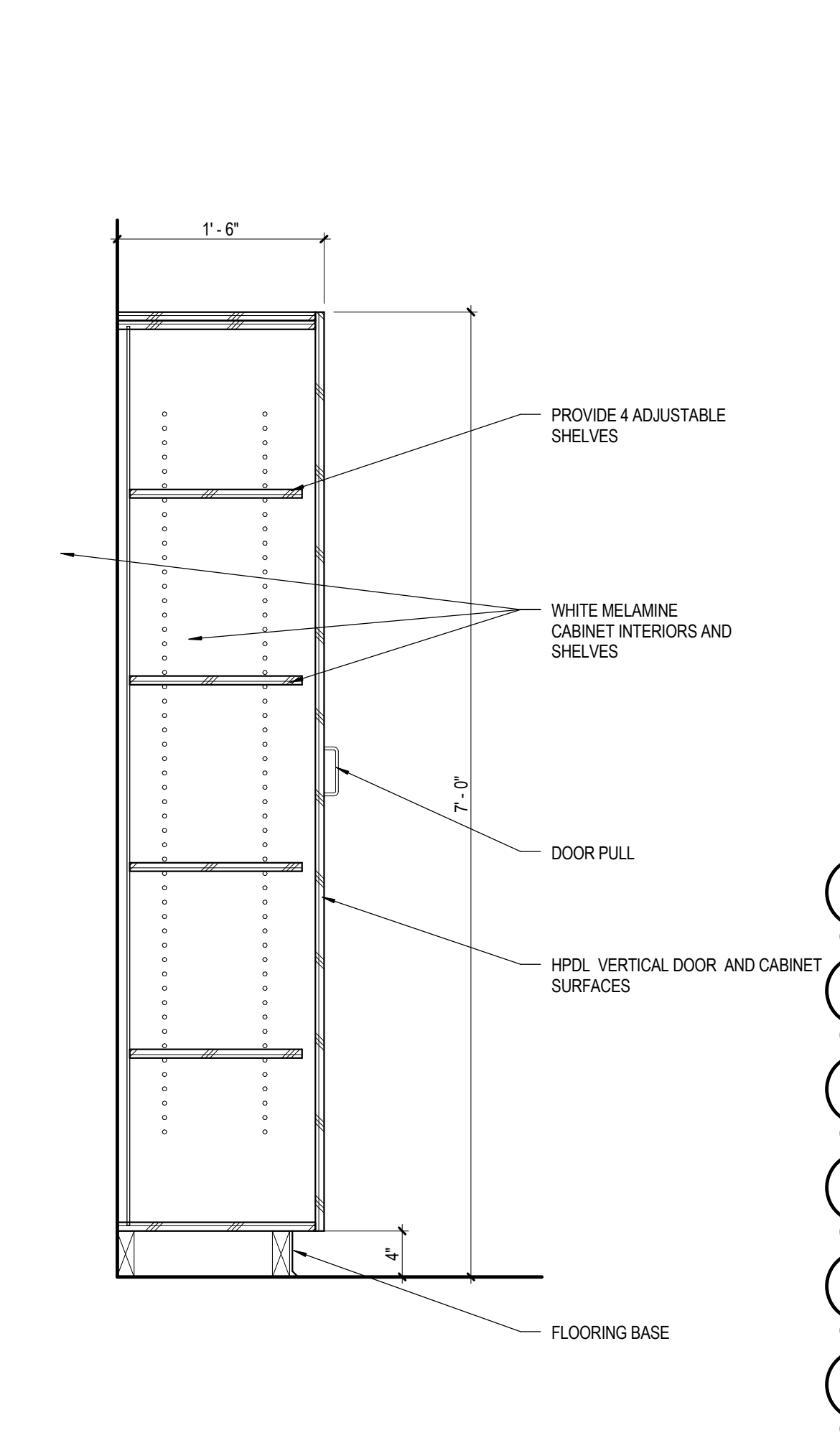
34 BASE CABINET - 34" SOLID SURFACE - DWR/DOOR
SCALE: 1" = 1'-0"



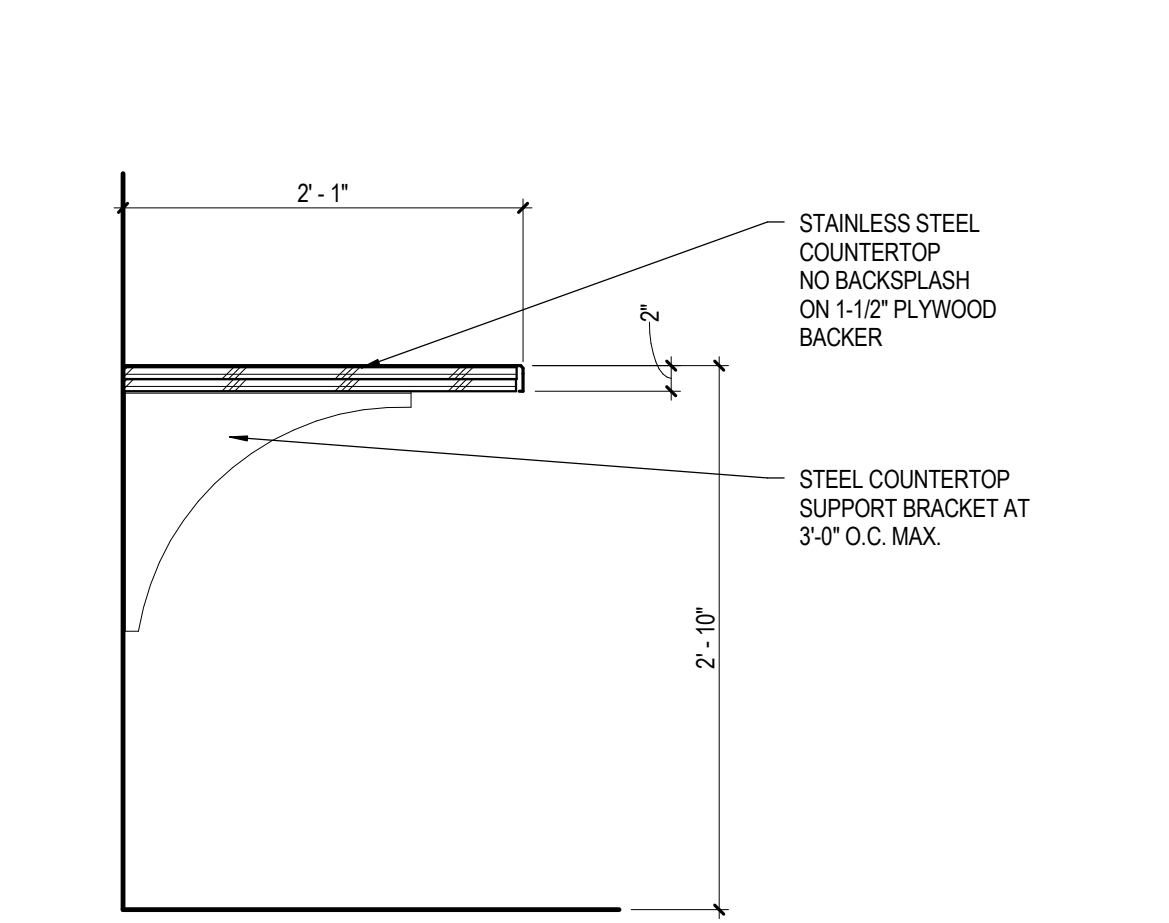
35 BASE CABINET - 30" SOLID SURFACE - 2 DWR/FILE
SCALE: 1" = 1'-0"



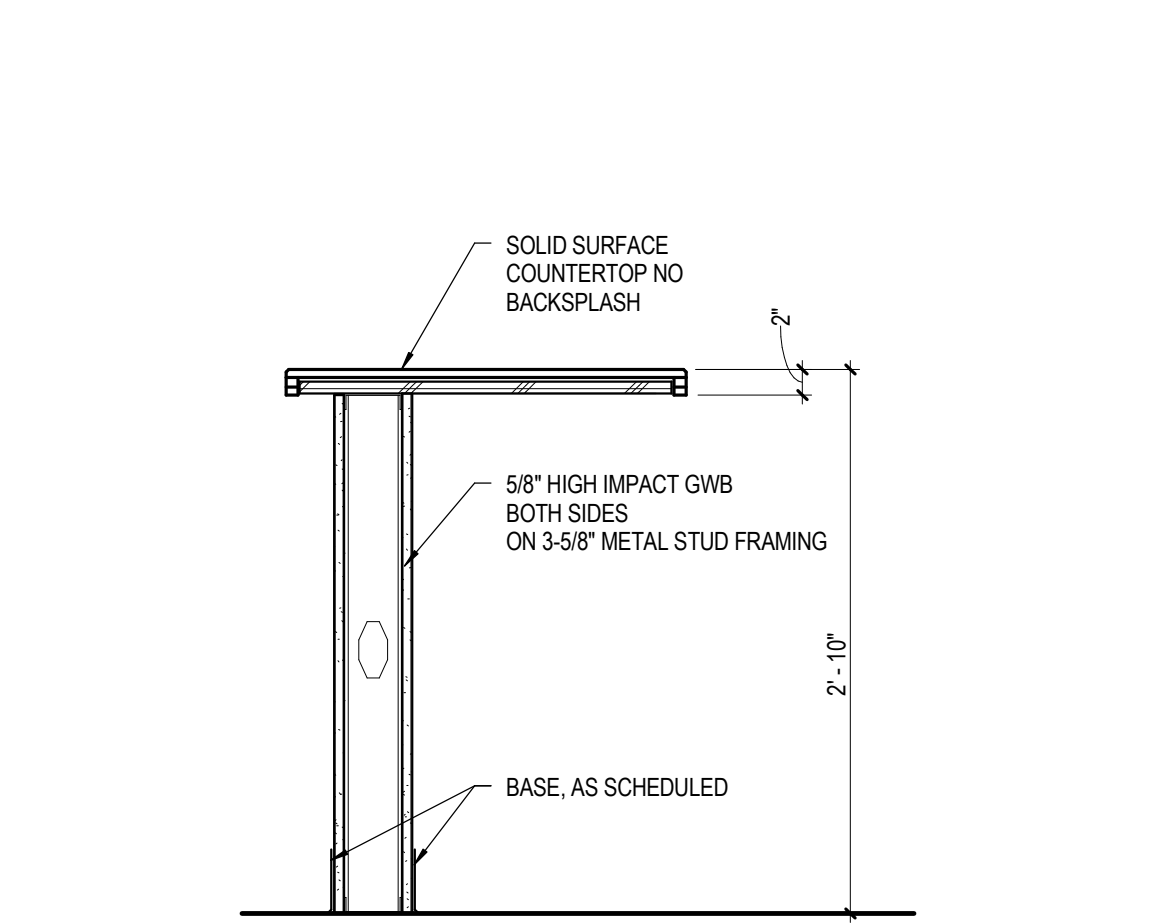
51 TALL CABINET - 2 SLIDERS 24" DEEP
SCALE: 1" = 1'-0"



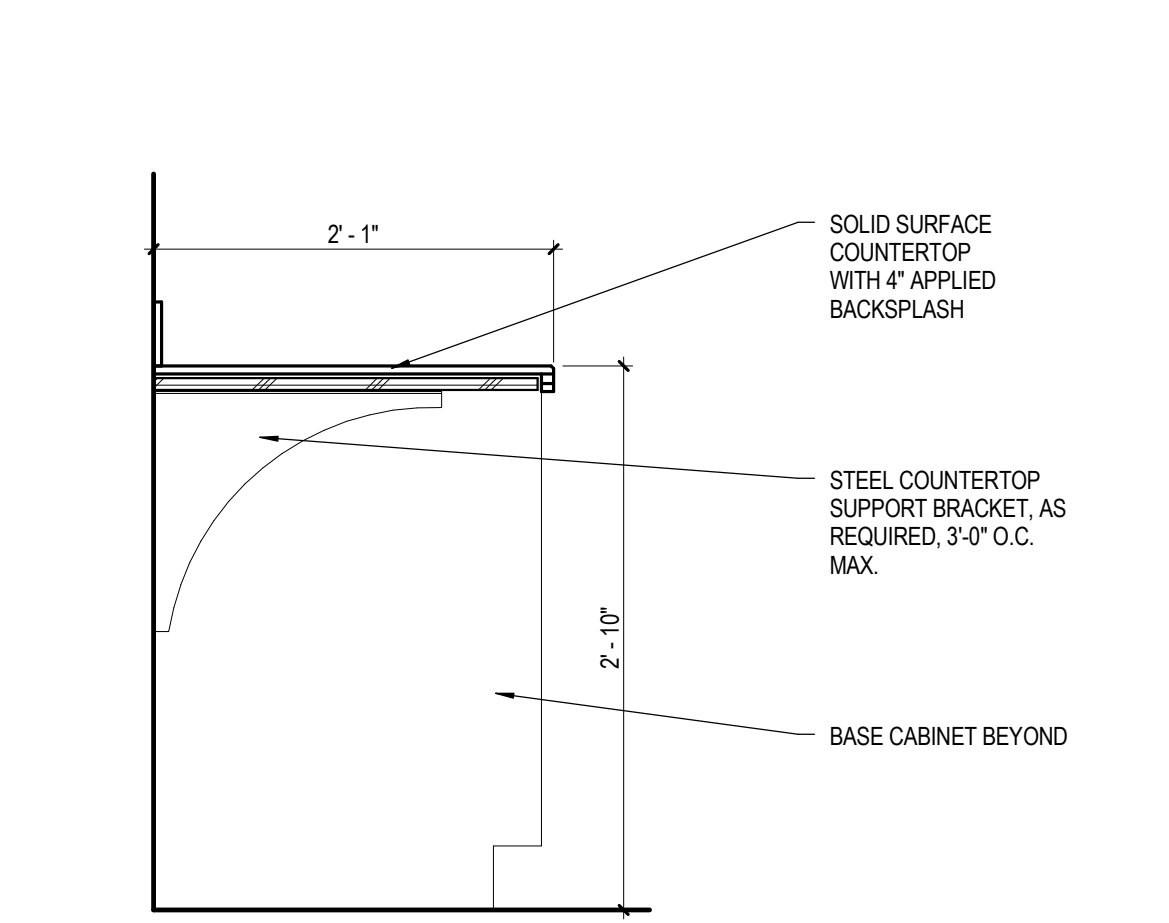
52 TALL CABINET - 2 DR. 18" DEEP
SCALE: 1" = 1'-0"



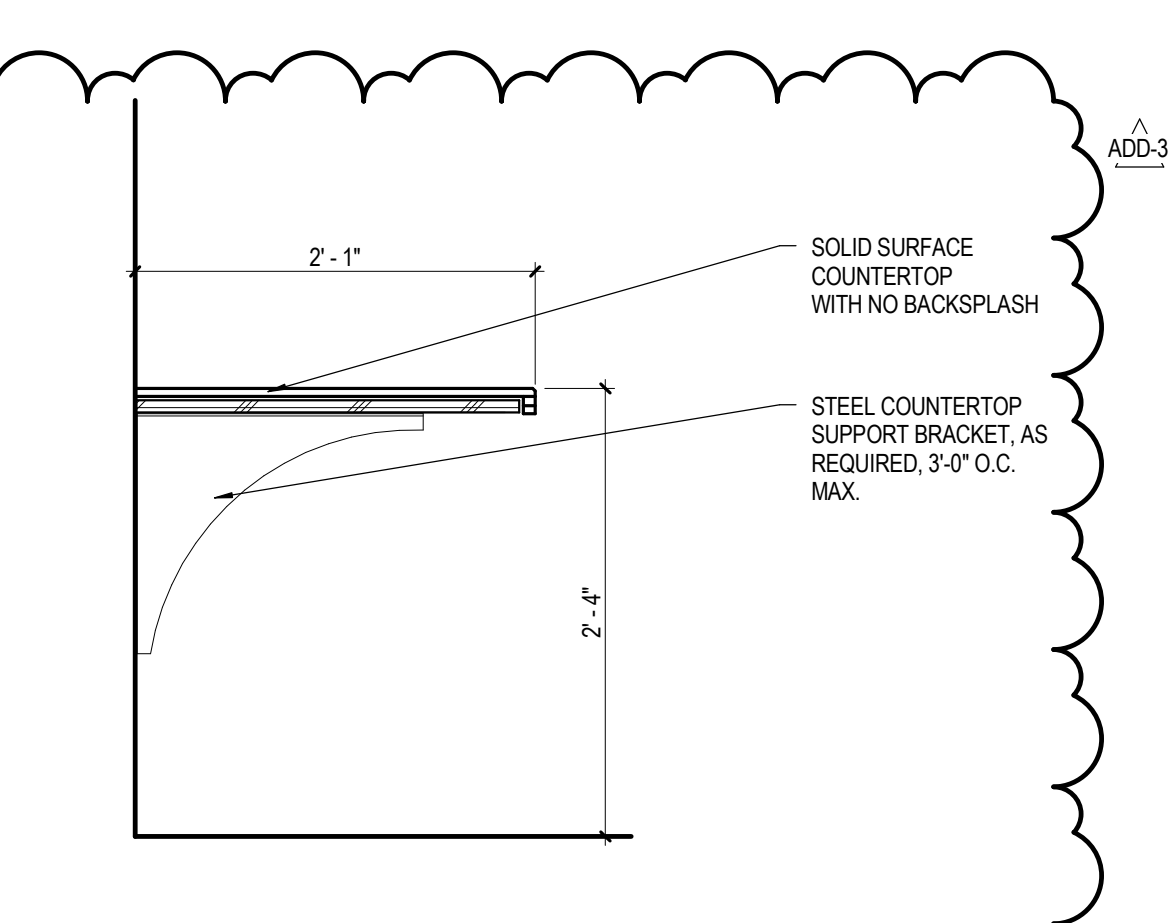
43 34" STAINLESS STEEL COUNTERTOP
SCALE: 1" = 1'-0"



44 34" SOLID SURFACE COUNTERTOP - PROCESSING
SCALE: 1" = 1'-0"



45 34" SOLID SURFACE COUNTERTOP
SCALE: 1" = 1'-0"



54 30" SOLID SURFACE COUNTERTOP
SCALE: 1" = 1'-0"

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ELECTRICAL SYMBOL LEGEND –NOT ALL SYMBOLS ARE USED ON THIS PROJECT.

<p>— RACEWAY CONCEALED IN WALL OR CEILING, (2) #12, (1) #12 GRD. IN 3/4" C. U.N.O.</p> <p>--- RACEWAY CONCEALED IN FLOOR, UNDER FLOOR, OR UNDERGROUND. 2# 12, 1 #12 GRD. IN 3/4" C. U.N.O.</p> <p>HA-1,3 HOMERUN TO PANEL "HA", CIRCUITS 1 AND 3. NUMBER OF HASH MARKS INDICATE NUMBER OF CONDUCTORS, NOT INCLUDING GROUND CONDUCTOR, IN RACEWAY. REFER TO PANEL SCHEDULES FOR RACEWAY AND CONDUCTOR SIZES.</p> <p>— GROUND, SIZED ACCORDING TO CODE, U.N.O.</p> <p>— CONDUIT STUBBED OUT, CAPPED, AND MARKED WITH METALLIC LOCATOR. DIMENSION LOCATION ON AS-BUILT DRAWINGS.</p> <p>— FLEXIBLE STEEL CONDUIT. REFER TO SPECIFICATIONS FOR TYPES.</p> <p>○ LIGHT FIXTURE DESIGNATION, REFER TO LIGHT FIXTURE SCHEDULE.</p> <p>□ ○ CEILING SURFACE OR RECESSED MOUNTED LIGHT FIXTURE AND OUTLET.</p> <p>○ WALL SURFACE OR RECESSED MOUNTED LIGHT FIXTURE AND OUTLET.</p> <p>□ LED OR FLUORESCENT FIXTURE AND OUTLET.</p> <p>— STRIP LED OR FLUORESCENT FIXTURE AND OUTLET.</p> <p>● LIGHTING FIXTURE CONNECTED TO NIGHTLIGHT AND/OR EMERGENCY SYSTEMS.</p> <p>☉ EXIT LIGHT FIXTURE AND OUTLET. PROVIDE FACES AND DIRECTIONAL ARROWS AS REQUIRED. BACK MOUNT TO WALL WHEREVER POSSIBLE.</p> <p>⊕ (LC-3) DIGITAL DUAL TECHNOLOGY PIR AND ULTRASONIC PRESENCE SENSOR FOR CONTROL OF LIGHTING UNITS MINIMUM 1,000 SQ. FT. COVERAGE PATTERN PER SENSOR. PROVIDE COMPLETE IN PLACE WITH POWER PACK. EXACT LOCATION AND COVERAGE PATTERN PER MFR. SUBMIT PROJECT SPECIFIC LAYOUT DRAWINGS FOR APPROVAL PRIOR TO START OF WORK. PROVIDE HIGHWAY SENSORS WHERE SHOWN, MIN. 2,000 SQ. FT. COVERAGE AREA.</p> <p>⊕ (LC-1) TOGGLE/ROCKER TYPE AT +42" A.F.F., 120V/277V RATED, 20A, COMPLY WITH NEMA WD1, UL20, AND FS-W-S-896.</p> <p>⊕ (LC-2) 0-10V DIMMER SLIDE RAISE/LOWER QUIET ON/OFF AT +42" A.F.F. LCD OR HUBBELL. PROVIDE 3-WAY DEVICES WHERE SHOWN.</p> <p>⊕ (LC-4) COMBINATION ROCKER TYPE WALL SWITCH WITH OCCUPANCY SENSOR AT +42" A.F.F., DUAL TECHNOLOGY TYPE, ADJUSTABLE TIME DELAY OVER A MINIMUM RANGE OF 1-15 MINUTES, LCD OR HUBBELL.</p> <p>⊕ (LC-5) COMBINATION WALL SWITCH WITH DUAL TECHNOLOGY OCCUPANCY SENSOR AND 0-10V DIMMER AT +42" A.F.F., U.N.O. LCD OR HUBBELL.</p> <p>⊕ LIGHTED HANDLE SPST TOGGLE SWITCH AT +42" A.F.F., U.N.O., WIRE SUCH THAT LIGHT IS ON WHEN SWITCH HANDLE IS LIT.</p> <p>⊕ 20A 120/277 VOLT SPST TOGGLE SWITCH MOUNTED ON INDUSTRIAL BOX COVER PLATE. UTILIZE FOR EQUIPMENT DISCONNECTING MEANS. SUBSCRIPT NUMBER "2" INDICATES DPST DEVICE.</p> <p>⊕ TOGGLE SWITCH MOTOR CONTROLLER WITH THERMAL OVERLOAD RELAYS</p> <p>⊕ WALL MOUNTED DUPLEX CONVENIENCE RECEPTACLE AT +18" A.F.F., U.N.O. WHERE NOTED "WP", PROVIDE WEATHER RESISTANT GFCI TYPE AT +18" WITH DEEP LOCKABLE WEATHERPROOF COVER, WET LOCATION LISTED WHILE IN USE. WP RECEPTACLES ON ROOF NEED NOT HAVE LOCKABLE COVER. LOCKABLE COVERS SHALL HAVE HASP FOR OWNER FURNISHED PADLOCK. WHERE NOTED "EWC", PROVIDE RECEPTACLE, LOCATED PER EWC INSTALLATION DRAWINGS.</p> <p>⊕ WP WALL MOUNTED WP GFCI DUPLEX CONVENIENCE RECEPTACLE AT +18" A.F.F., U.N.O.</p> <p>⊕ WALL MOUNTED GFCI DUPLEX CONVENIENCE RECEPTACLE AT +6" ABOVE BACKSPLASH AT COUNTERTOP U.N.O. REFER TO ARCH. ELEVATIONS FOR EXACT LOCATIONS.</p> <p>⊕ IDF RACK MOUNTED 30A/208V SIMPLEX CONVENIENCE RECEPTACLE U.N.O. VERIFY NEMA CONFIGURATION WITH OWNER.</p> <p>⊕ CLG. FLUSH-IN CEILING MOUNTED SPD DUPLEX RECEPTACLE (HUBBELL HBL SNAP5362S OR EQUAL WITH SNAPRA PIGTAIL).</p> <p>⊕ WALL MOUNTED SPD DUPLEX RECEPTACLE +18" A.F.F., U.N.O., BLUE FINISH (HUBBELL HBL SNAP5362S OR EQUAL WITH SNAPRA PIGTAIL).</p> <p>⊕ WALL MOUNTED DOUBLE DUPLEX CONVENIENCE RECEPTACLE AT +18" A.F.F., U.N.O.</p> <p>⊕ WALL MOUNTED DOUBLE DUPLEX CONVENIENCE RECEPTACLE AT +6" ABOVE BACKSPLASH AT COUNTERTOP U.N.O. REFER TO ARCH. ELEVATIONS FOR EXACT LOCATIONS.</p> <p>⊕ PENDENT MOUNTED DUPLEX GFCI RECEPTACLE WITH S.O. CORD AND KELLUMS GRIP CABLE STRAIN RELIEF FITTINGS. SUSPEND TO 84" A.F.F.</p> <p>⊕ SPECIAL WALL MOUNTED RECEPTACLE, AS NOTED, AT +18" A.F.F., U.N.O. VERIFY NEMA CONFIGURATION. ALL DRYER RECEPTACLES SHALL BE FOUR-PRONG WITH BRANCH CIRCUITRY CONSISTING OF TWO #10 PHASE CONDUCTORS, ONE #10 NEUTRAL AND ONE #10 GROUNDING CONDUCTOR.</p> <p>⊕ WALL MOUNTED DUPLEX RECEPTACLE WITH (2) 3.1AMP USB CHARGING PORTS 18" A.F.F., U.N.O.</p> <p>⊕ SURFACE UNDER CARPET "FCC" ASSEMBLY FLAT CABLE WIRED FLOOR BOX WITH CARPET TRIM WITH (2) DUPLEX RECEPTACLES AND (2) CAT 6A JACKS IN 106 STYLE PLATES.</p> <p>⊕ 16' TELE-POWER POLE WITH CAT 6A JACKS AND CABLE AS NOTED, (2) DUPLEX RECEPTACLES, SPACE FOR (2) FUTURE DUPLEX RECEPTACLES.</p>	<p>☐ DISCONNECT SWITCH, NON-FUSED, SIZE TO SUIT LOAD, ENCLOSURE TO SUIT LOCATION.</p> <p>☑ DISCONNECT SWITCH, FUSED, SIZE TO SUIT LOAD, ENCLOSURE TO SUIT LOCATION.</p> <p>☑ COMBINATION FUSED DISCONNECT SWITCH AND MAGNETIC MOTOR STARTER, AS NOTED. SIZE TO SUIT EQUIPMENT HORSEPOWER, ENCLOSURE TO SUIT LOCATION. REFER TO MECHANICAL DRAWINGS FOR COORDINATION OF EQUIPMENT REQUIREMENTS.</p> <p>☑ VARIABLE FREQUENCY DRIVE, REFER TO MECHANICAL SPECIFICATIONS.</p> <p>☑ MAGNETIC MOTOR STARTER, SIZE TO SUIT LOAD, ENCLOSURE TO SUIT LOCATION.</p> <p>☑ TRANSFORMER, AS NOTED.</p> <p>☑ PANELBOARD, REFER TO PANEL SCHEDULE.</p> <p>☑ ELECTRICAL SERVICE ENTRANCE EQUIPMENT, REFER TO SINGLE LINE DIAGRAM.</p> <p>⊙ METER SOCKET.</p> <p>☑ FUSED DISCONNECT SWITCH IN SWITCHBOARD.</p> <p>☑ SURGE PROTECTION DEVICE (SPD), AS NOTED.</p> <p>☑ MOTOR OUTLET AND MOTOR CONNECTION.</p> <p>⊙ JUNCTION BOX, SIZED ACCORDING TO CODE, 4-11/16" SQUARE MINIMUM.</p> <p>⊙ ELECTRICAL CONNECTION.</p> <p>☑ ELECTRICAL PULLBOX, SIZED ACCORDING TO CODE, U.N.O.</p>
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ELECTRICAL WORK NOTES

- VERIFY EXACT LOCATIONS AND MOUNTING HEIGHTS OF ALL OUTLETS AND LIGHT FIXTURES PRIOR TO ROUGH IN. CAREFULLY REVIEW ARCHITECTURAL, FURNITURE AND MILLWORK DRAWINGS, BUILDING ELEVATIONS, AND REFLECTED CEILING PLANS TO AVOID CONFLICTS. WHERE MILLWORK OCCURS, LOCATE ASSOCIATED OUTLETS WITHIN KNEE SPACES UNLESS NOTED OTHERWISE.
- VERIFY ELECTRICAL RATINGS AND LOCATIONS OF HVAC EQUIPMENT AND CONFIRM ALL REQUIRED CLEARANCES WITH DIVISION 23 CONTRACTOR PRIOR TO START OF WORK. COMPLETELY CONNECT ALL EQUIPMENT FOR A COMPLETE FUNCTIONAL INSTALLATION.
- LOCATE ALL ELECTRICAL DEVICES/FIXTURES IN CEILINGS ACCORDING TO THE ARCHITECTURAL REFLECTED CEILING PLANS INCLUDING LOCATION/PLACEMENT DETAILS.
- DEVICES MOUNTED IN THE WALLS SHALL ALIGN VERTICALLY WITH ANY OTHER ELECTRICAL DEVICE WITHIN 2' HORIZONTALLY ON SAME WALL AND SHALL ALIGN HORIZONTALLY WHENEVER POSSIBLE.
- PROVIDE 120 VOLT POWER SUPPLY CIRCUITRY TO VAV UNITS, CAV UNITS, EMCS EQUIPMENT, VARIOUS CONTROLS, ETC. AS REQUIRED. COORDINATE ALL WORK REQUIREMENTS PRIOR TO BID.
- ALL PIPING AND CONDUIT SHALL BE COORDINATED WITH DUCTWORK ROUTING PRIOR TO THE START OF ANY WORK. PIPING OR CONDUIT SHALL RUN PARALLEL TO DUCTWORK WHERE REQUIRED BY SPACE LIMITATIONS. PIPING OR CONDUIT RUNNING PERPENDICULAR TO DUCTWORK SHALL CROSS DUCTWORK HIGH BETWEEN JOISTS WHERE REQUIRED BY SPACE LIMITATIONS.
- ALL RACEWAYS SHALL BE CONCEALED WHEREVER POSSIBLE. ALL EXPOSED RACEWAYS, FITTINGS, EQUIPMENT AND SUPPORTS SHALL BE PAINTED AS DIRECTED IN ACCORDANCE WITH THE SPECIFICATIONS. VERIFY THE PROJECT SPECIFIC REQUIREMENTS (ACCESSIBLE VERSUS INACCESSIBLE CEILINGS AND WALLS, ETC.) FOR SURFACE OR CONCEALED WIRING METHODS AT EACH SITE PRIOR TO BID AND MAKE SUCH ACCOMMODATIONS IN THE BID.
- ALL ROOFTOP ELECTRICAL EQUIPMENT AND BOXES SHALL BE RIGIDLY SUPPORTED BY RIGID STEEL CONDUIT RACKS OR STRUT ASSEMBLIES DESIGNED AND FABRICATED FOR THE PURPOSE. DO NOT SUPPORT ANY ELECTRICAL WORK FROM HVAC EQUIPMENT OR DUCTWORK. VERTICAL SUPPORTS TO AND THROUGH ROOFS SHALL BE MIN. ONE-INCH CIRCULAR RIGID STEEL CONDUIT TO ALLOW FOR PROPER FLASHING AND SEALING PER PROJECT MANUAL.
- ALL PENETRATIONS THROUGH EXTERIOR WALL AND ROOFS SHALL BE SLEEVED, FLASHED AND SEALED WATERPROOF. REFER TO PROJECT MANUAL FOR ADDITIONAL INFORMATION. PROVIDE ESCUTCHEON PLATES WHERE WALL PENETRATIONS ARE EXPOSED.
- ALL SCREW COVER JUNCTION BOXES WHICH ARE ACCESSIBLE FROM GRADE LEVEL SHALL UTILIZE TORX HEAD SCREWS.
- ALL 120V RECEPTACLES ON ROOFS, IN KITCHENS, CONCESSIONS, IN FLOOR BOXES, IN SERVERY, LOCKERS, JANITOR CLOSETS, RESTROOMS OR WHEREVER WITHIN 6 FEET OF SINKS SHALL BE GFCI TYPE.
- ALL EXTERIOR RECEPTACLES SHALL HAVE NEC COMPLIANT WEATHER RESISTANT GFCI FEATURE.
- ALL WEATHER PROOF COVER PLATES SHALL BE METALLIC. PLASTIC COVERS WILL BE REJECTED IF INSTALLED..
- PROVIDE NEUTRAL CONDUCTOR TO ALL LINE VOLTAGE WALL MOUNTED SWITCH BOXES. CONNECT TO SENSOR, WHERE OCCURRING.
- ALL LIGHTING CONTROL SYSTEMS, WALL OR CEILING MOUNTED LIGHTING CONTROLS, PHOTOCELLS AND TIMERS SHALL BE PROGRAMMED AND ADJUSTED AS DIRECTED BY ENGINEER PRIOR TO PROJECT CLOSEOUT. ADJUSTMENTS AND PROGRAMMING SHALL INCLUDE, BUT NOT LIMITED TO: MOTION SENSITIVITY, TIME ON/TIME OFF DURATIONS, PHOTOSENSITIVITY, ETC. THE CONTACTOR SHALL ALLOW FOR (2) COMPREHENSIVE SITE VISITS DURING THE FIRST 12 MONTHS AFTER SUBSTANTIAL COMPLETION TO MAKE ADJUSTMENTS TO THE VARIOUS LIGHTING CONTROL SYSTEMS AND DEVICES INSTALLED AS PART OF THIS PROJECT. THE CONTRACTOR SHALL PROVIDE A COMPREHENSIVE 8 HOUR TRAINING SESSION FOR OWNER'S STAFF TO DEMONSTRATE ALL LIGHTING CONTROL SYSTEM AND CONTROL DEVICE FEATURES, SEQUENCES OF OPERATION, ADJUSTABILITY, OPERATION, AND MAINTENANCE PROTOCOL.
- REFER TO PROJECT MANUAL AND PHASING PLANS FOR BID ALTERNATES.
- REFER TO HVAC SCHEDULES FOR ALL REQUIRED INTERLOCKS.
- PROVIDE GANGED TOILET ROOM LIGHTING OCCUPANCY SENSORS WITH AUXILIARY CONTACT FOR USE BY EMCS CONTACTOR TO ASSIST WITH EXHAUST FAN CONTROL.
- ALL OPEN CABLING SHALL BE PLENUM RATED FOR USE WITH NEW RETURN AIR PLENUM.

DEMOLITION NOTES

- EXISTING ELECTRICAL AND SPECIAL SYSTEMS SHALL BE MADE SAFE PRIOR TO BEGINNING OF DEMOLITION ACTIVITIES.
- THE NATURE AND AGE OF THIS FACILITY WILL LIKELY RESULT IN DISCREPANCIES AND/OR CONCEALED CONDITIONS THAT REQUIRE SUPPLEMENTAL DIRECTION FROM THE ARCHITECT/ENGINEER (A/E) AS DEMOLITION PROGRESSES. THE A/E SHALL BE NOTIFIED IN WRITING UPON THE DISCOVERY OF CONDITIONS WHICH THE CONTRACT DOCUMENTS DO NOT ADEQUATELY ADDRESS.
- WHERE REMOVALS ARE INDICATED, ALL ASSOCIATED EQUIPMENT, CONDUIT, WIRE, DEVICES, ETC. SHALL BE REMOVED BACK TO SOURCE UNLESS EXISTING SYSTEMS TO REMAIN ARE AFFECTED. IN ALL CASES, CONTINUITY OF SYSTEMS THAT ARE EXISTING TO REMAIN FOR SERVICE TO UNDISTURBED SPACES SHALL BE MAINTAINED, INCLUDING FIRE ALARM AND CASS SYSTEM.
- REFER TO PROJECT MANUAL FOR A LISTING OF EQUIPMENT THAT IS REQUIRED TO BE DELIVERED TO OWNER UPON ITS REMOVAL DURING PROJECT DEMOLITION PHASES.
- ALL CONSTRUCTION PHASING, OUTAGES, AND CUTOVERS OF ALL SYSTEMS SHALL BE COORDINATED IN ADVANCE PER DIVISION 1 SPECIFICATIONS.
- PROVIDE TEMPORARY POWER, GENERATORS, LIGHTING, CABLING, JUMPERS, ETC. TO MAINTAIN FUNCTION OF CRITICAL SYSTEMS DURING DEMOLITION AND CONSTRUCTION PHASES. ALL SUCH TEMPORARY FACILITIES SHALL BE REMOVED PRIOR TO PROJECT CLOSEOUT.
- OBTAIN ALL NECESSARY INTERIM INSPECTIONS OF CRITICAL SYSTEMS DURING DEMOLITION PHASES TO ASSURE PROPER FUNCTIONALITY OF SAID SYSTEMS TO SATISFACTION OF OWNER.
- DEMOLITION CONTRACTOR SHALL BE AWARE OF OLD LIGHTING SYSTEM EQUIPMENT. FLUORESCENT LIGHT BALLASTS MANUFACTURED THROUGH 1979 MAY CONTAIN PCBs. IF FOUND, CONTRACTOR SHALL ADHERE TO ALL REGULATORY REQUIREMENTS FOR PROPER DISPOSAL.
- EXISTING CIRCUITRY AND CIRCUIT NUMBERS SHOWN IN PLAN ARE BASED UPON RECORD DRAWING INFORMATION AND MAY DIFFER. CONTRACTOR SHALL TRACE ALL CIRCUITS PRIOR TO START OF WORK AND/OR DEMOLITION TO DEVELOP AS-BUILT PLANS AND PANEL DIRECTORIES.

ELECTRICAL SHEET INDEX

E0.0	ELECTRICAL SYMBOL LEGEND, WORK NOTES, & ABBREVIATIONS
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ED2	LIGHTING DEMOLITION PLANS
ES1.0	ELECTRICAL SITE PLAN
E1.1	ELECTRICAL POWER PLANS
E1.2	ELECTRICAL HVAC POWER PLANS
E1.3	ELECTRICAL HVAC ROOF POWER PLAN
E2.1	ELECTRICAL SPECIAL SYSTEMS PLANS
E2.2	ELECTRICAL CAMERA LAYOUT PLANS
E2.3	ELECTRICAL ACCESS CONTROL PLANS
E3.1	ELECTRICAL LIGHTING PLANS
E4.0	ELECTRICAL ONE LINE DIAGRAM & FIRE ALARM RISER DIAGRAM
E6.0	ELECTRICAL PANEL SCHEDULES
E7.0	ELECTRICAL LIGHT FIXTURE SCHEDULE
T1.1	TELECOMMUNICATION PLANS
T2.0	TELECOM RISER DIAGRAM

ABBREVIATIONS

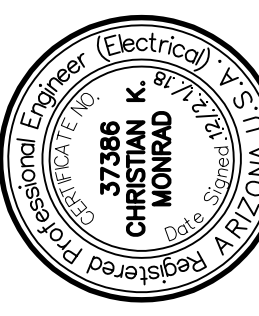
ACS	ADMINISTRATIVE CONTROL STATION
ADO	AUTOMATIC DOOR OPERATOR
A.F.F.	ABOVE FINISHED FLOOR
A.F.G.	ABOVE FINISHED GRADE
AH, AHU	AIR HANDLING UNIT
AHJ	AUTHORITY HAVING JURISDICTION
AL	ALUMINUM
BAS	BUILDING AUTOMATION SYSTEM (SEE EMCS)
CASS	CARD ACCESS SECURITY SYSTEM
C.I.P.	COMPLETE IN PLACE
CTRL	CONTROLS, CONTROLLER
CU	COPPER
DAS	DISTRIBUTED ANTENNA SYSTEM
DPST	DOUBLE POLE SINGLE THROW
DPS	DOOR POSITION SWITCH
DSS	DESIGN SPECIFICATION STANDARDS
EF, EX	EXHAUST FAN
EL	EVENING LIGHT
EM	EMERGENCY
EMCS	ENERGY MANAGEMENT CONTROL SYSTEM (SEE BAS)
ES	ENERGY SAVING
EWC	ELECTRIC WATER COOLER WITH MONOPLEX RECEPTACLE
EXT.	EXTERIOR
FA	FIRE ALARM
GFCI	GROUND FAULT CIRCUIT INTERRUPTER PROTECTED
GRD	GROUND
HPF	HIGH POWER FACTOR
ICS	INTEGRATED INTERCOM COMMUNICATION SYSTEM
IDF	INTERMEDIATE DISTRIBUTION FRAME
IPTV	I.P. VIDEO SURVEILLANCE CAMERA SYSTEM
LTFS	LIQUID TIGHT FLEXIBLE STEEL CONDUIT
LT., LTG.	LIGHT, LIGHTING
MDF	MAIN DISTRIBUTION FRAME
MNS	MASS NOTIFICATION SYSTEM
MOCP	MAXIMUM OVERCURRENT PROTECTION
NEC	NATIONAL ELECTRICAL CODE
N.I.C.	NOT IN CONTRACT
NL	NIGHT LIGHT
N.V.L.A.P.	NATIONAL VOLUNTARY LABORATORY ACCREDITATION PROGRAM
OFCI	OWNER FURNISHED, CONTRACTOR INSTALLED
OFOI	OWNER FURNISHED, OWER INSTALLED
POS	POINT OF SALE
REC.	RECEPTACLE
RECIRC.	RECIRCULATION
SPD	SURGE PROTECTION DEVICE
SPST	SINGLE POLE SINGLE THROW
TTB	TELEPHONE TERMINATION BOARD
TYP.	TYPICAL
U.N.O.	UNLESS NOTED OTHERWISE
UPS	UNINTERRUPTIBLE POWER SUPPLY
WAP	WIRELESS ACCESS POINT
WP	WEATHERPROOF
XFMR	TRANSFORMER

100% CONSTRUCTION DOCUMENTS

7081 S. Plummer Ave
Tucson, AZ 85756

ELECTRICAL SYMBOL LEGEND, NOTES, & ABBREVIATIONS
TAA Executive Terminal
CBP Relocation TAA project #10219007

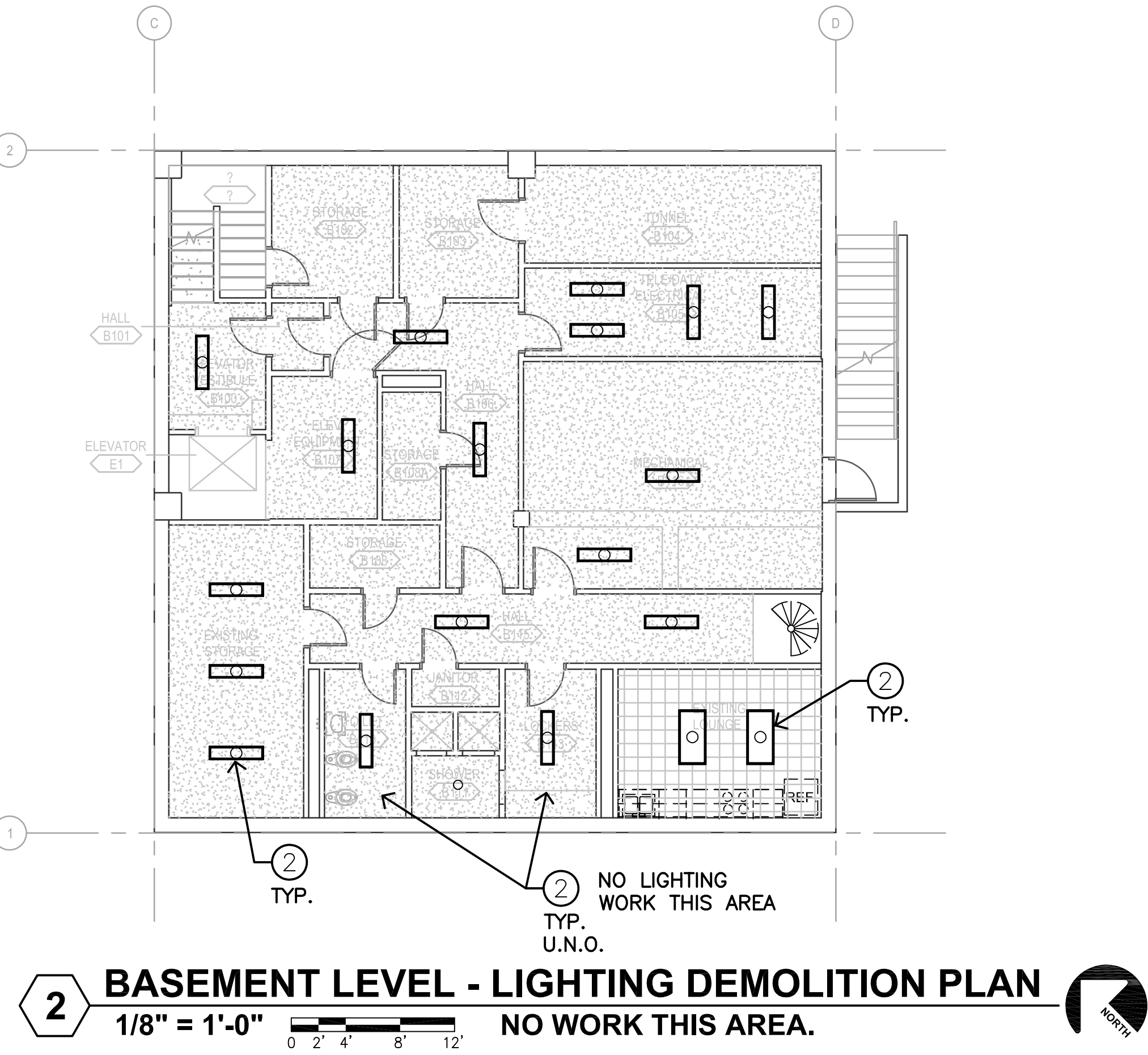
E0.0
30-18307-00
12/21/2018
Revisions
A202.3 02/12/2018 BJA/abraham@dlr.com



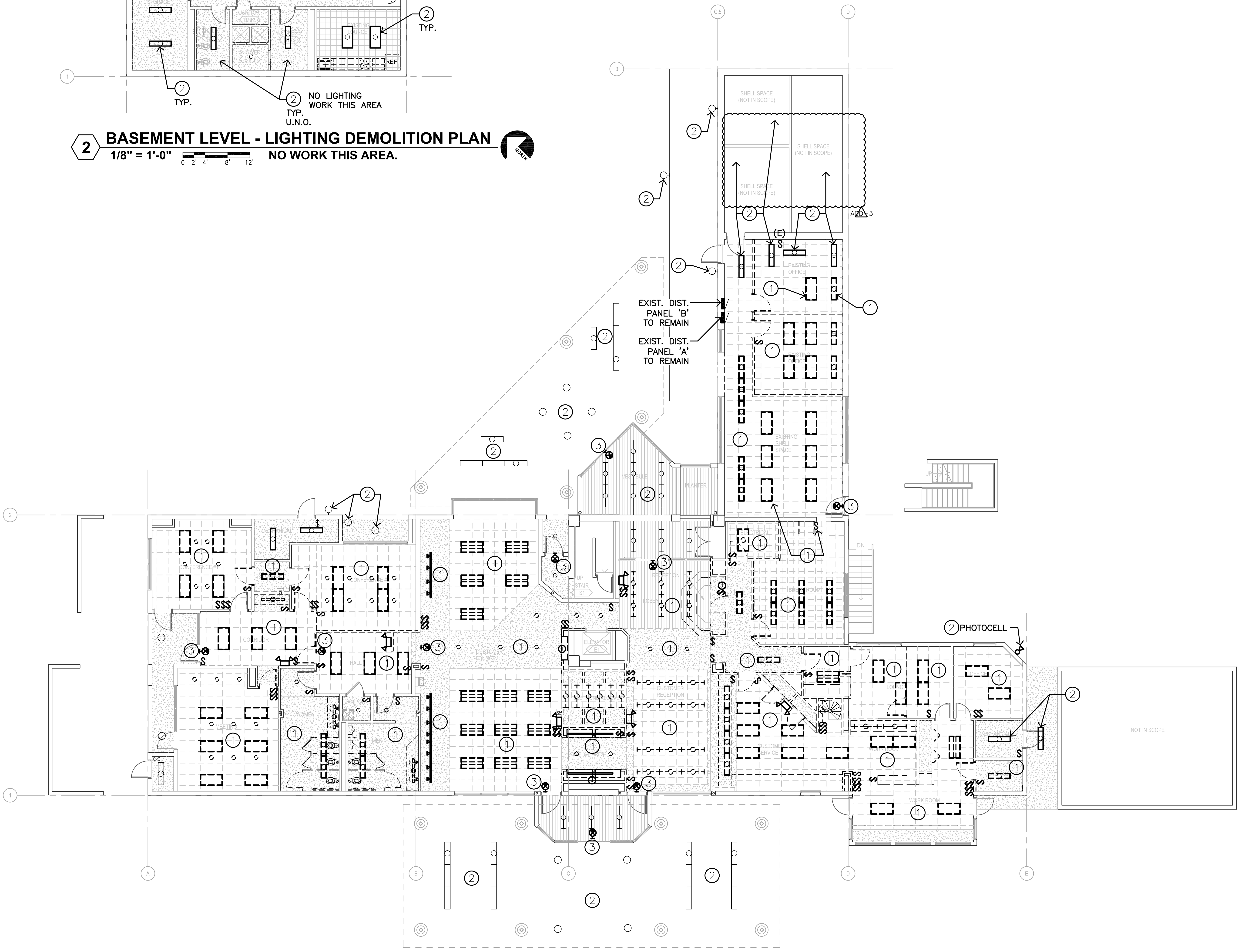
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call 1-800-782-5348 for overhead utility locations

LOCKOUT - TAGOUT - TESTOUT
MONRAD ENGINEERING INC
CONSULTING ELECTRICAL ENGINEERS
1926 East Ft. Lowell Road, Suite 200
Tucson, Arizona 85719-2391
(520) 884-0045 M18023



2 BASEMENT LEVEL - LIGHTING DEMOLITION PLAN
 1/8" = 1'-0" 0 2' 4' 8' 12'



1 FIRST LEVEL - LIGHTING DEMOLITION PLAN
 1/8" = 1'-0" 0 2' 4' 8' 12'

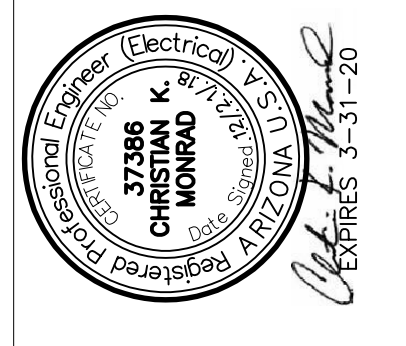
- ELECTRICAL KEYNOTES (THIS SHEET ONLY)**
1. REMOVE EXISTING LIGHTING FIXTURES, WIRE, CONDUIT, AND LIGHTING CONTROL DEVICES FROM CEILINGS AND WALLS TO BE DEMOLISHED. REFER TO ARCHITECTURAL DEMOLITION PLANS.
 2. EXISTING CEILING AND WALL MOUNTED LIGHT FIXTURES, LIGHT SWITCHES, RECEPTACLES, AND TELECOM DEVICES TO REMAIN IN PLACE AND FUNCTIONAL.
 3. REMOVE AND REPLACE ALL EXIT SIGNS.

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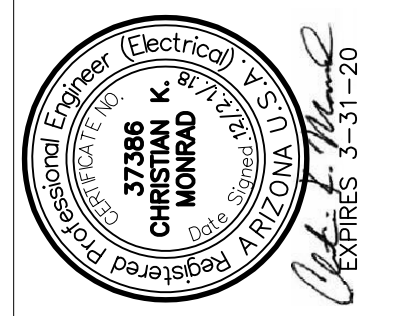
LIGHTING DEMOLITION PLANS
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ED2
 30-18307-00
 12/21/2018
 Revision: 02/20/18 BJA/AMW/CD
 A202-3 02/12/20 BJA/AMW/CD



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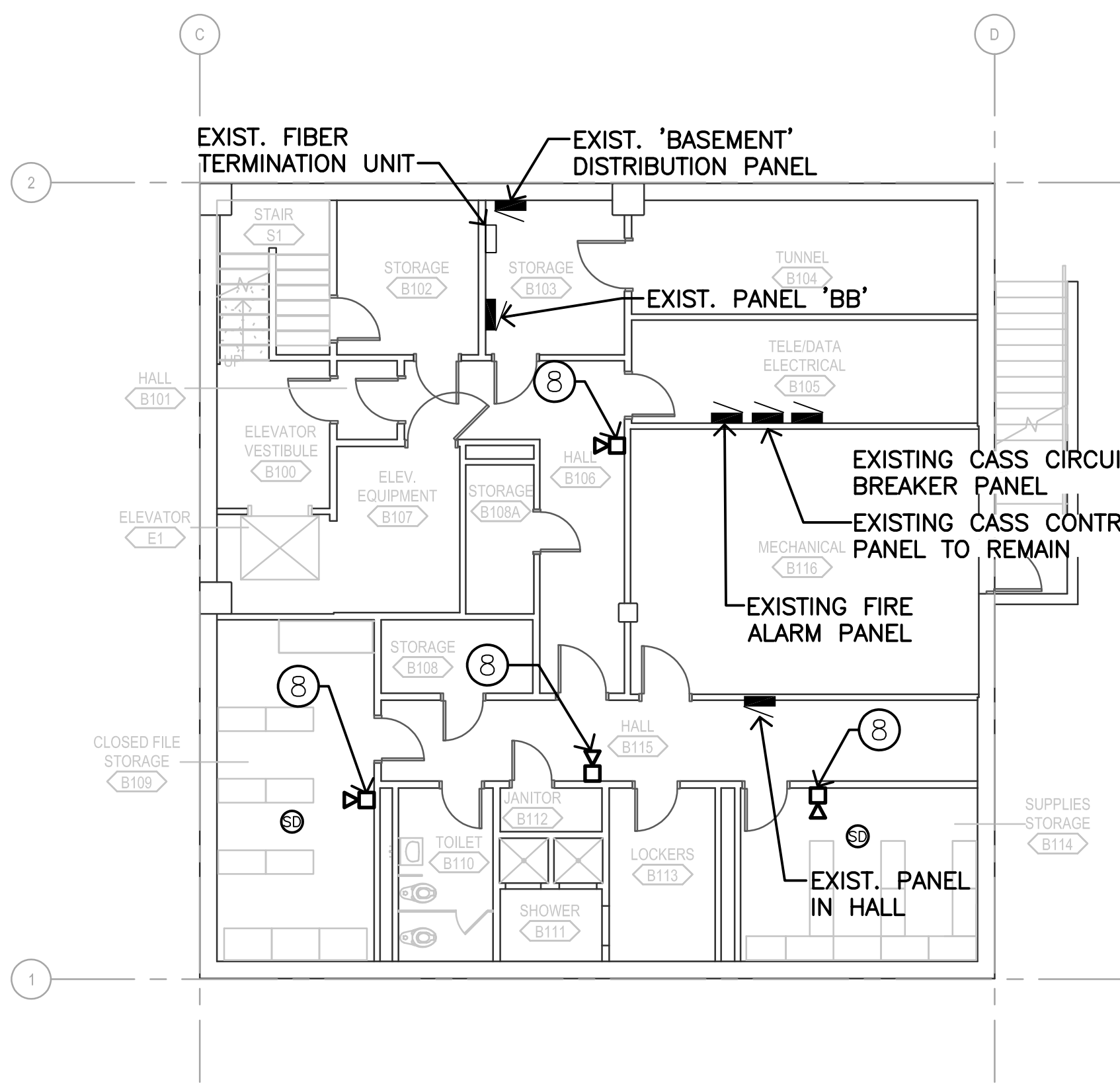


SPECIAL SYSTEMS SYMBOL LEGEND
(NOT ALL SYMBOLS USED THIS SHEET)

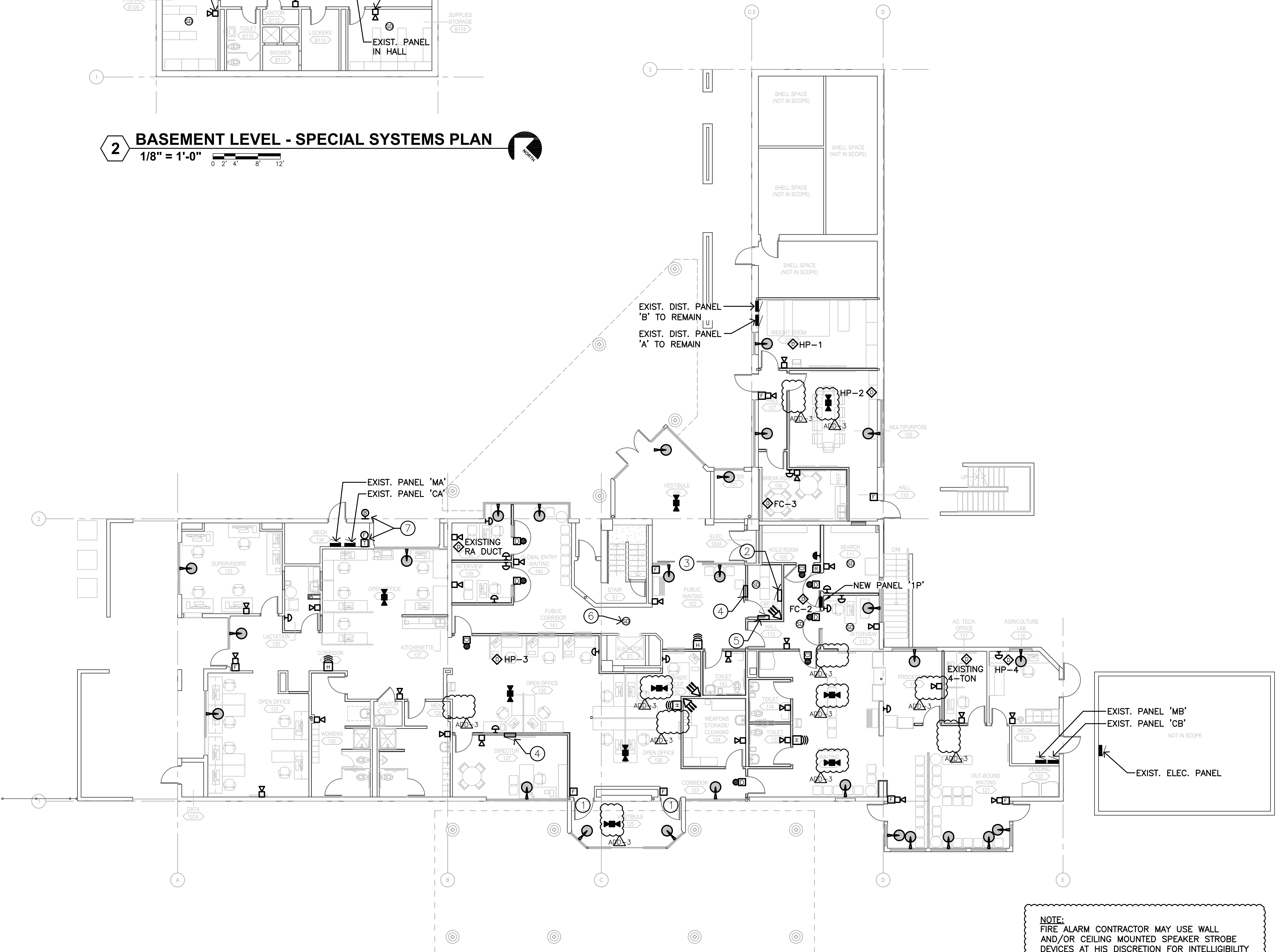
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- ☐ FIRE ALARM SPEAKER/STROBE DEVICE AT + 86" A.F.F., U.N.O.
- ▶ FIRE ALARM SPEAKER/STROBE CEILING MOUNTED DEVICE
- ☐ FIRE ALARM MONITOR MODULE UNIT.
- ☐ FIRE ALARM CONTROL MODULE UNIT.
- ☉ FIRE ALARM SPRINKLER RISER FLOW SWITCH CONNECTION AND RISER BELL CONNECTION. VERIFY EXACT REQUIREMENTS.
- ⊕ 24 VOLT DC FIRE ALARM SYSTEM POWERED SPRINKLER RISER BELL, POWERED BY FACP.
- ☐ FIRE ALARM GAS VALVE OR SPRINKLER VALVE TAMPER SWITCH CONNECTION
- ◇ FIRE ALARM SYSTEM MONITORING POINT FOR ANSUL FIRE SUPPRESSION SYSTEM.
- ⊙ FIRE ALARM AREA SMOKE DETECTOR, CEILING MOUNTED.
- ⊕ FIRE ALARM AREA SMOKE DETECTOR, WALL MOUNTED.
- ⊕ FIRE ALARM HEAT DETECTOR, CEILING MOUNTED. COMBINATION 135° F AND RATE OF RISE.
- ◇ FIRE ALARM DUCT SMOKE DETECTOR WITH REMOTE LED AND TEST STATION. WHERE DUCT SMOKE DETECTORS ARE CONCEALED ABOVE CEILING, PROVIDE TEST STATION FLUSH IN CEILING ADJACENT TO DETECTOR. PROVIDE WEATHERPROOF ENCLOSURE.
- ⊕ CONNECTION TO ARMED PANIC HARDWARE.
- ☐ PROXIMITY CARD READER OUTLET BOX AT +42" A.F.F., U.N.O.
- ☐ DOOR STRIKE POWER SUPPLY
- ☐ DOOR POSITION SWITCH OUTLET BOX.
- ☐ DOOR ELECTRIC STRIKE
- ☐ KEYPAD OUTLET AT +42" A.F.F., U.N.O.
- ⊕ MOTION SENSOR OUTLET SURFACE CEILING MOUNTED.
- ☐ TWO-WAY INTERCOM SYSTEM FOR SCREENING AND ACCESS CONTROL
- ☐ PASSIVE INFRARED (PIR) MOTION SENSOR
- ☐ INTRUSION CONTROL ALPHANUMERIC TOUCHPAD
- ☐ GLASS BREAK DETECTOR
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- ☐ DURESS BUTTON
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ELECTRICAL KEYNOTES (THIS SHEET ONLY)

1. MAINTAIN EXISTING CASS DEVICES. COORDINATE NEW EXIT PANIC BAR ALARM AND INTERFACE.
2. DOOR CONTROL AND INTRUSION DETECTION PANELS, ETC. PER PROJECT MANUAL.
3. DOOR CONTROLLER TIED TO CASHIER/RECEPTION PUSHBUTTON STATION.
4. FLUSH MOUNTED LOCKABLE MASS NOTIFICATION SYSTEM LOCAL OPERATOR'S CONSOLE AND MICROPHONE.
5. NEW MASS NOTIFICATION SYSTEM FIRE ALARM CONTROL PANEL.
6. RE-INSTALL EXISTING ELEVATOR LOBBY SMOKE DETECTOR AND MAINTAIN EXISTING LOOP WIRING TO EXISTING BASEMENT FACP.
7. MAINTAIN EXISTING FLOW AND TAMPER SWITCH SUPERVISOR VIA BASEMENT FIRE ALARM CONTROL PANEL AND LOOP WIRING.
8. CONNECT THESE NEW DEVICES TO NEW MASS NOTIFICATION LOOP ON FLOOR ABOVE.

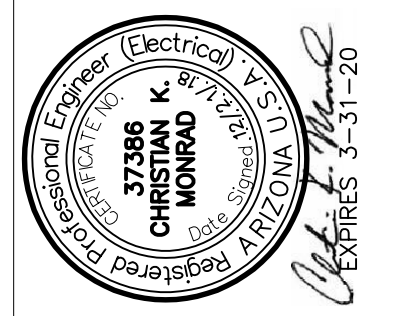


2 BASEMENT LEVEL - SPECIAL SYSTEMS PLAN
1/8" = 1'-0"
0 2' 4' 8' 12'



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0 2' 4' 8' 12'

NOTE:
FIRE ALARM CONTRACTOR MAY USE WALL AND/OR CEILING MOUNTED SPEAKER STROBE DEVICES AT HIS DISCRETION FOR INTELLIGIBILITY OR VOICE EVACUATION MESSAGING.

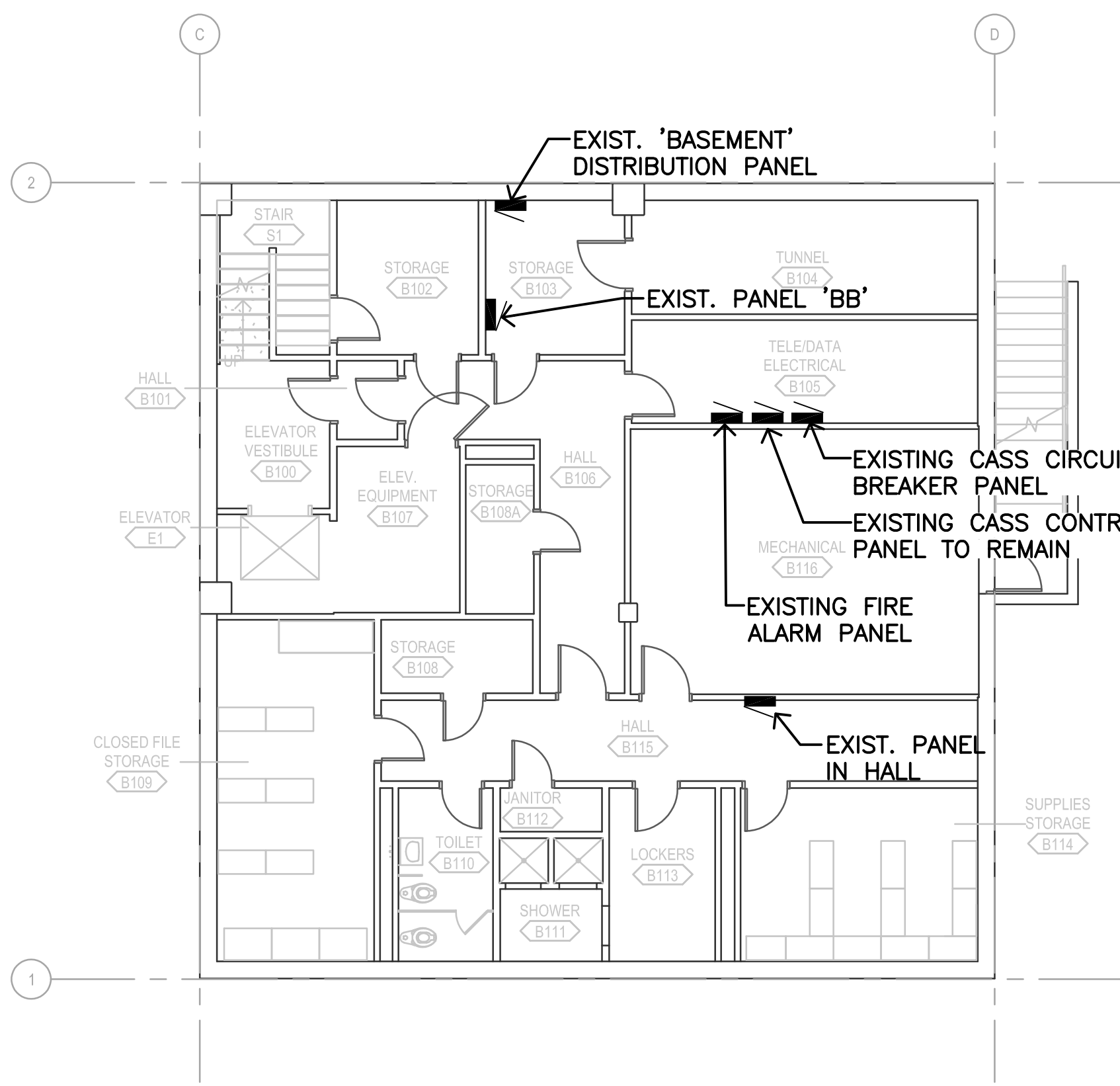


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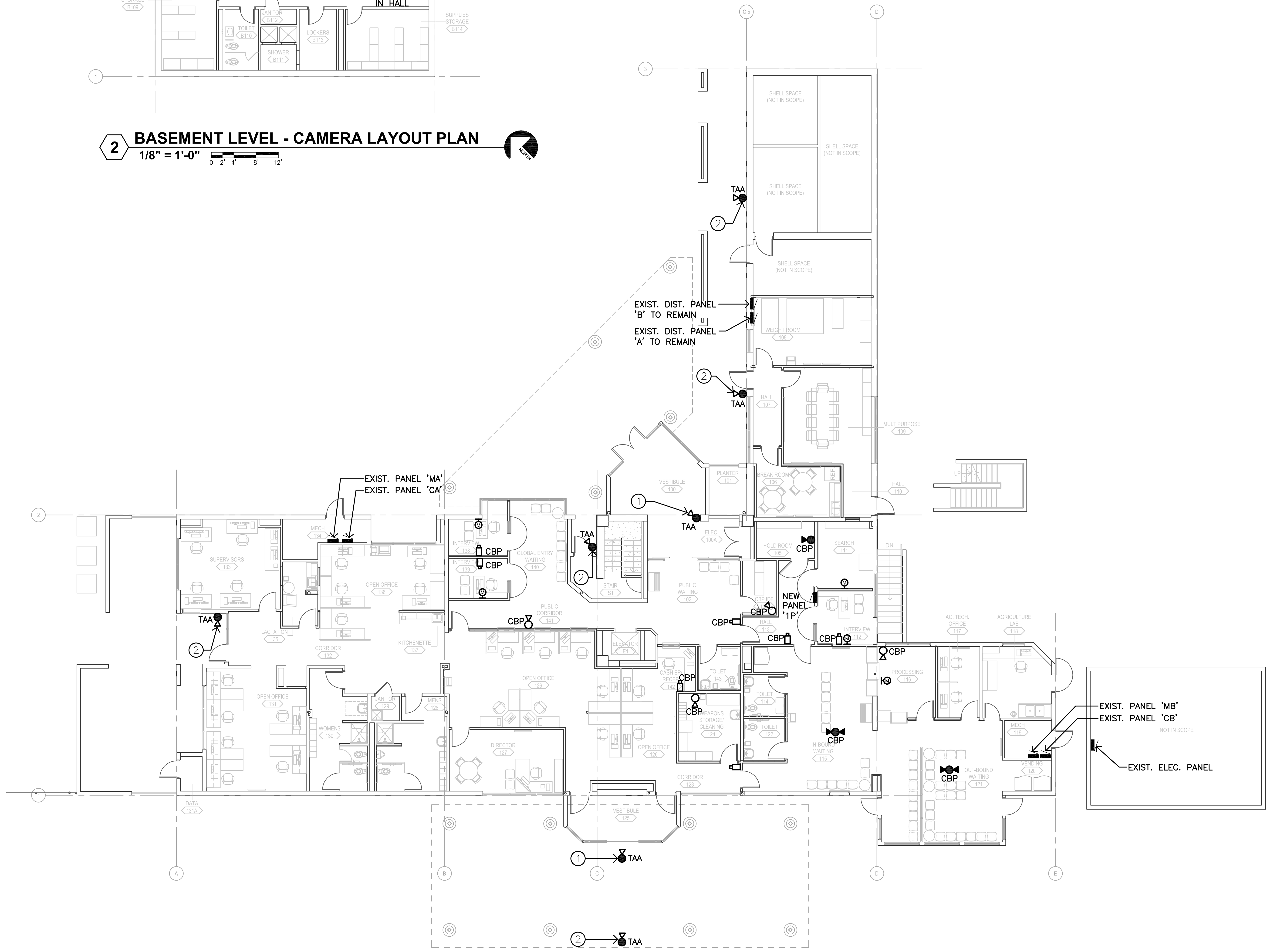
- EXISTING TAA CAMERA TO REMAIN.
- NEW TAA CAMERA WITH SHARED VIEW TO CBP.

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(NOT ALL SYMBOLS USED THIS SHEET)

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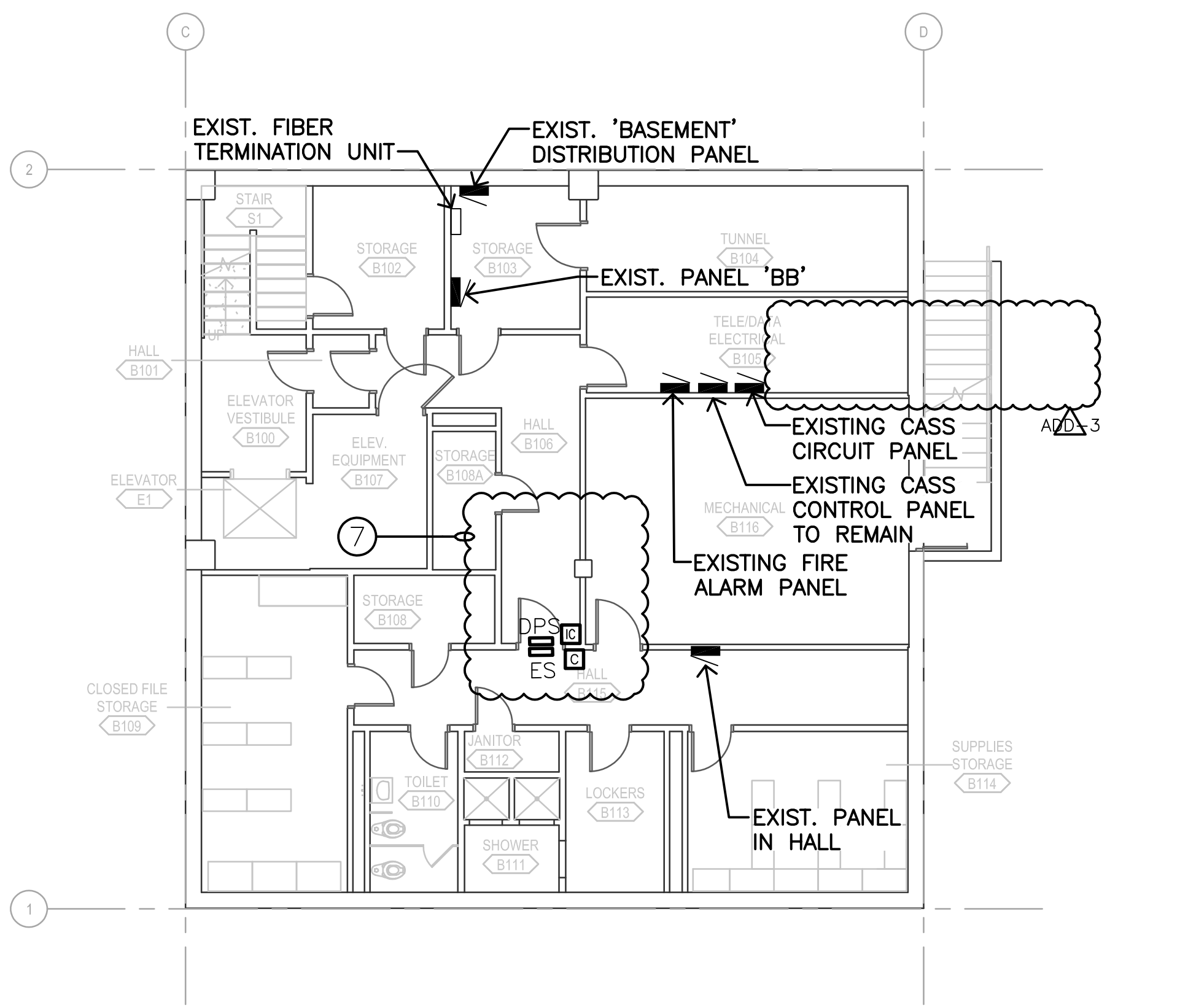
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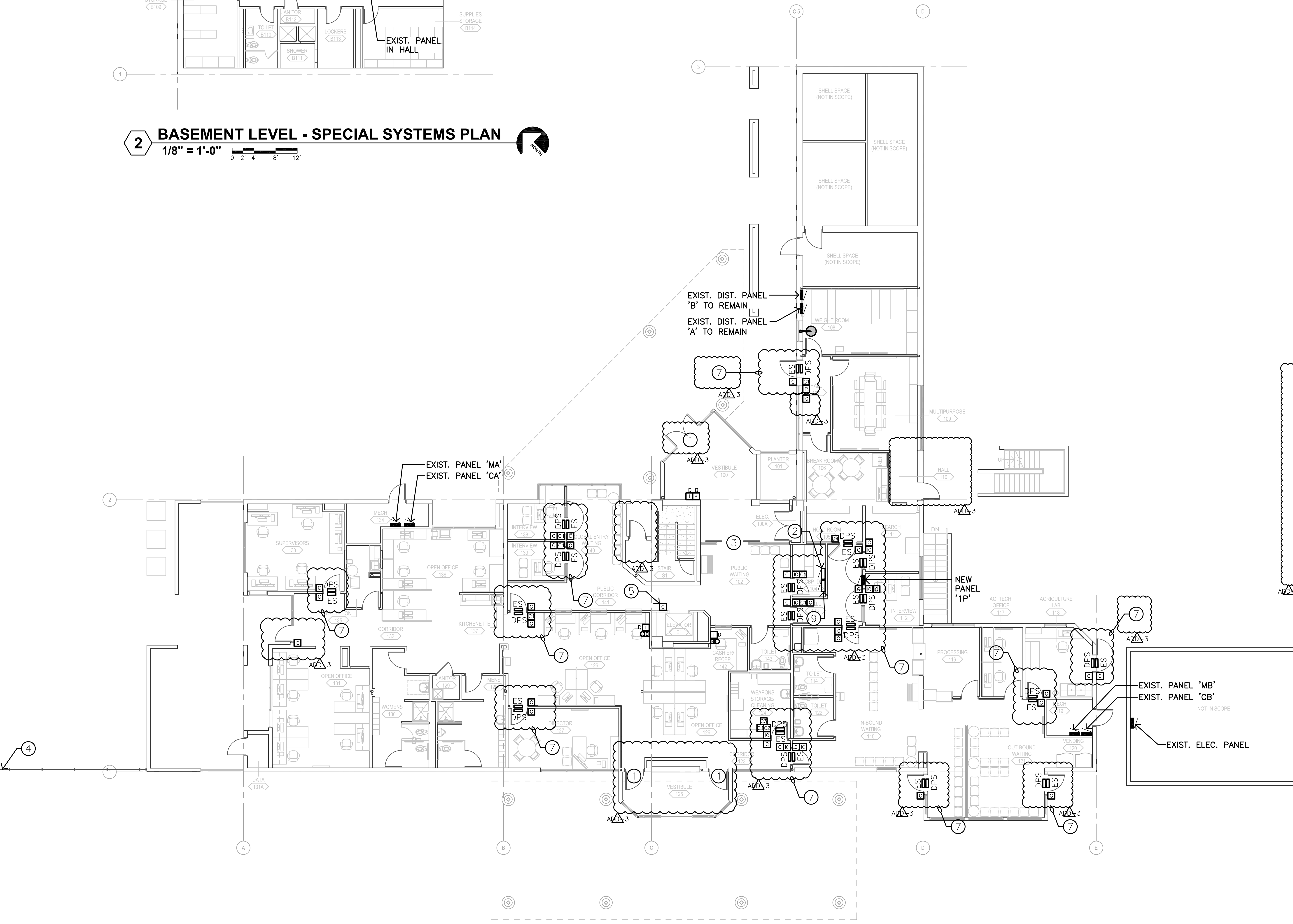
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3. DOOR CONTROLLER TIED TO CASHIER/RECEPTION PUSHBUTTON STATION.
4. MAINTAIN EXISTING VEHICLE GATE 7 CASS CONTROL WIRING IN PLACE. (VERIFY LOCATION AND ROUTING)
5. COORDINATE CONNECTION WITH ELEVATOR CONTROL EQUIPMENT.
6. NOT USED.
7. DEVICES CONNECTED TO CBP ACCESS CONTROL SYSTEM.
8. NOT USED.
9. NEW CBP ACCESS CONTROL PANEL.

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(NOT ALL SYMBOLS USED THIS SHEET)

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1/8" = 1'-0"
0 2' 4' 8' 12'



1 FIRST LEVEL - SPECIAL SYSTEMS PLAN
1/8" = 1'-0"
0 2' 4' 8' 12'

ELECTRICAL KEYNOTES (THIS SHEET ONLY)

1. EXISTING LIGHTING TO REMAIN AS-IS, U.N.O.
2. PROVIDE UNSWITCHED CIRCUIT CONNECTION TO ALL EXIT SIGNS, TYPICAL.
3. PROVIDE 0-10 VOLT CONTROL WIRING WITH 120 VOLT BRANCH CIRCUIT CONDUCTORS IN COMMON CONDUITS, TYPICAL.
4. MAINTAIN CONTINUITY AND FUNCTION OF ALL LIGHTING SYSTEMS IN SHELL SPACES TO REMAIN.

100% CONSTRUCTION DOCUMENTS

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Tucson, AZ 85756

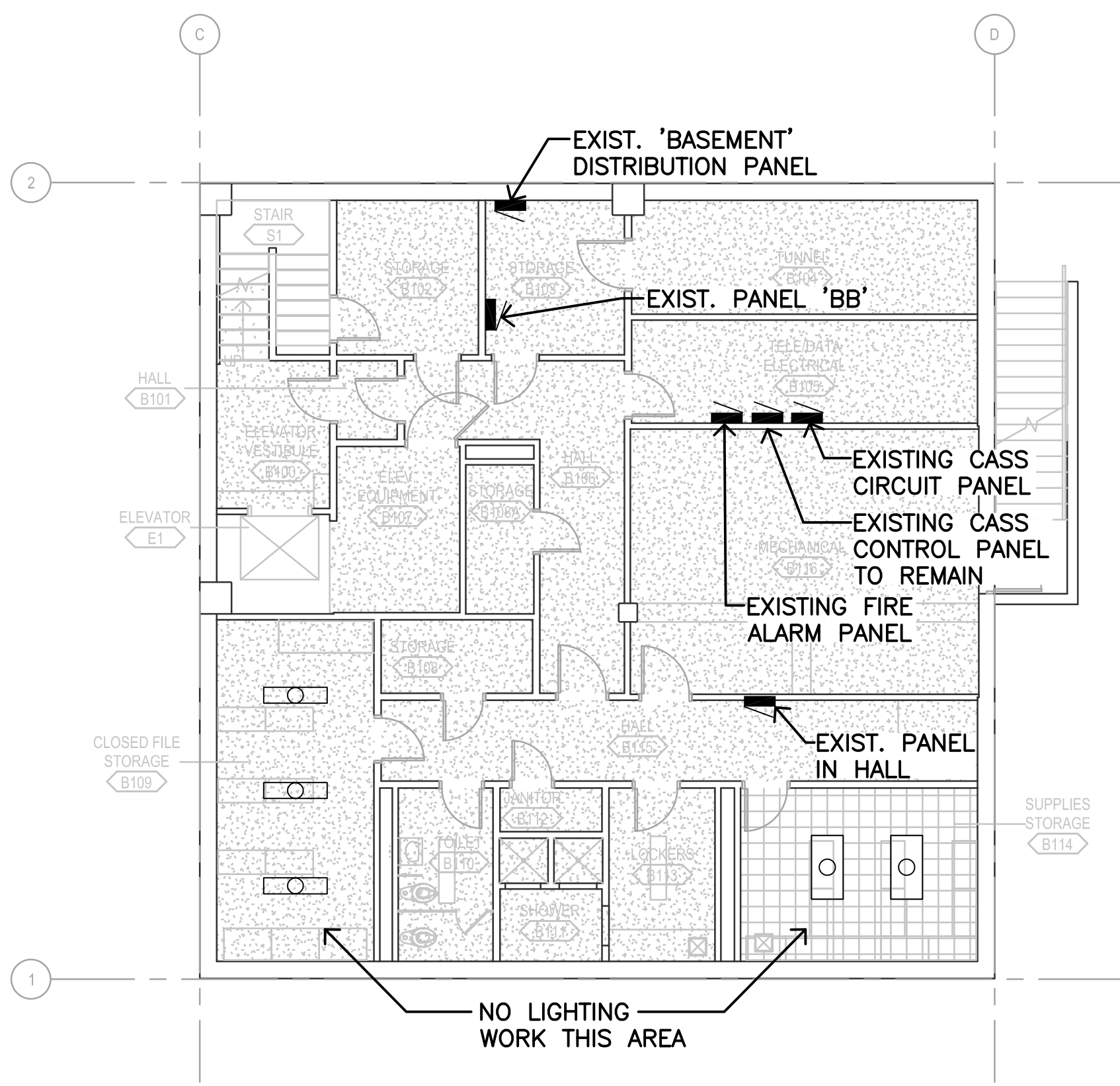
LIGHTING PLANS
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E3.1
30-18307-00
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Revised: 03/20/19 BJA/AMW/CD
ADP/3 02/12/20 BJA/AMW/CD

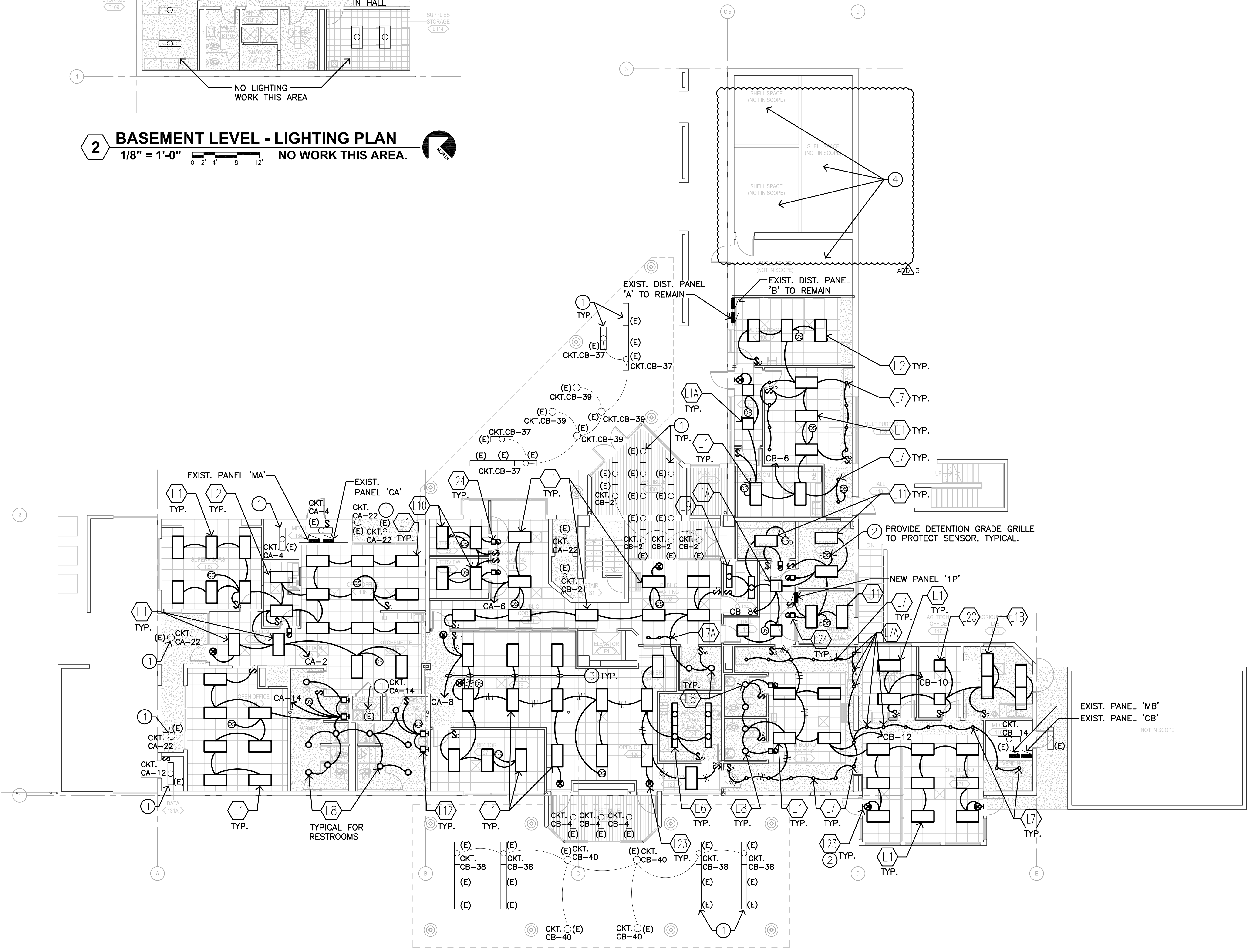


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Architecture Engineering Planning Interiors
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LOCKOUT - TAGOUT - TESTOUT
MONRAD
ENGINEERING INC.
CONSULTING ELECTRICAL ENGINEERS
1926 East Ft. Lowell Road, Suite 200
Tucson, Arizona 85719-2391
(520) 884-0045 M18023



2 BASEMENT LEVEL - LIGHTING PLAN
1/8" = 1'-0" NO WORK THIS AREA.



1 FIRST LEVEL - LIGHTING PLAN
1/8" = 1'-0"

NOTE:
ENTIRE FACILITY IS SUPPORTED BY STANDBY GENERATOR AND NO DEDICATED EMERGENCY LIGHTS ARE PROVIDED.

LIGHTING WORK NOTES:

- REFER TO ARCHITECTURAL ELEVATIONS AND REFLECTED CEILING PLANS FOR EXACT LOCATIONS OF LIGHT FIXTURES. PROVIDE METAL FRAMING CHANNEL AS NECESSARY TO SPAN BUILDING MEMBERS FOR LUMINAIRE/PENDANT/SUPPORT. ALL PENDANTS SHALL HAVE SWIVEL BALL HANGERS.
- THE CONTRACTOR SHALL AIM AND ADJUST ALL LIGHTING FIXTURES TO THE SATISFACTION OF THE ARCHITECT PRIOR TO PROJECT CLOSE OUT.
- VERIFY CEILING TYPES PRIOR TO ORDERING OF LIGHT FIXTURES. PROVIDE LIGHT FIXTURES AND MOUNTING MEANS COMPATIBLE WITH CEILING SYSTEMS AND/OR STRUCTURAL ELEMENTS.
- REFER TO SPECIFICATIONS FOR ADDITIONAL BALLAST AND LAMP INFORMATION.
- PROVIDE CONDUCTORS IN FLEX TAILS AND SWITCH LEGS AS NECESSARY FOR FUNCTIONAL SWITCHING/LIGHTING SYSTEMS INDICATED.
- ALL EXTERIOR LIGHT FIXTURES SHALL BE UL WET LOCATION LISTED.
- ALL LED FIXTURES SHALL HAVE N.V.L.A.P. ACCREDITED LABORATORY DATA SUBMITTED TO SHOW LESS THAN 30% FLICKER FACTOR FOR FREQUENCIES OF 200HZ OR BELOW, FROM 100% TO 20% LIGHT OUTPUT.
- ALL LIGHT FIXTURES, AND PENDANT, PAINT FINISHES SHALL BE AS SELECTED BY THE ARCHITECT DURING POST-BID SUBMITTAL REVIEW.
- THE DRIVERS FOR ALL LED DOWNLIGHTS SHALL FACE INTO THE APERTURE AS A FACTORY INSTALLED FEATURE TO AID IN MAINTENANCE.
- WHERE PRODUCTS OF LITHONIA ARE SPECIFIED, EQUIVALENT PRODUCTS OF COOPER OR HUBBELL LIGHTING SHALL BE ACCEPTABLE SUBJECT TO COMPLIANCE WITH ALL PROJECT SPECIFIC REQUIREMENTS.
- PROVIDE TWO TOOLS TO THE OWNER FOR EACH TYPE OF SPECIALTY FASTENER UTILIZED ON THIS PROJECT.
- ALL LUMINAIRES OF ALL TYPES SHALL HAVE MODULAR PARALLEL LINE AND NEUTRAL POWER SUPPLY/DRIVER DISCONNECT PLUGS, FACTORY INSTALLED.
- ALL TROFFERS TO HAVE MINIMUM L70 @ 60,000 HOURS.

14. ALL RECESSED TROFFERS SHALL HAVE BOTTOM ACCESS FEATURES TO ALLOW DRIVER AND LED BOARD MAINTENANCE FROM ROOM SIDE OF SPACE.

AZD-3

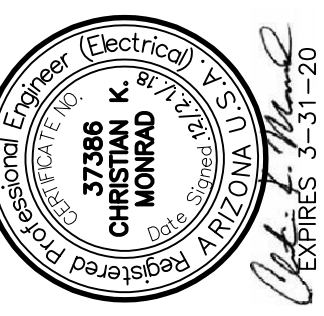
LIGHTING FIXTURE SCHEDULE			
TYPE	DESCRIPTION	WATTS	MANUFACTURER
L1	2'x4' RECESSED LED LUMINAIRE. 4800 LUMENS MIN., 3500K, 80+ CRI, L70/60,000 HRS. CURVED LINEAR DIFFUSER, 0-10V DIMMABLE POWER SUPPLY, 120-277V MVOLT,	45	LITHONIA 2BLT SERIES OR APPROVED EQUAL
L1A	2'x2' RECESSED LED LUMINAIRE. 3000 LUMENS MIN., 3500K, 80+ CRI, L70/60,000 HRS. CURVED LINEAR DIFFUSER, 0-10V DIMMABLE POWER SUPPLY, 120-277V MVOLT,	30	LITHONIA 2BLT SERIES OR APPROVED EQUAL
L1B	2'x4' RECESSED LED LUMINAIRE. 6000 LUMENS MIN., 3500K, 94+ CRI, L70/60,000 HRS. CURVED LINEAR DIFFUSER, 0-10V DIMMABLE POWER SUPPLY, 120-277V MVOLT, FLANGED FOR HARD CEILING	55	LITHONIA 2BLT SERIES OR APPROVED EQUAL
L2	2'x4' RECESSED LED LUMINAIRE. 3000 LUMENS MIN., DIMMABLE POWER SUPPLY, 120-277V MVOLT,	30	LITHONIA 2BLT SERIES OR APPROVED EQUAL
L2C	2'x2' RECESSED LED LUMINAIRE. 4800 LUMENS MIN., 3500K, 94+ CRI, L70/60,000 HRS. CURVED LINEAR DIFFUSER, 0-10V DIMMABLE POWER SUPPLY, 120-277V MVOLT,	45	LITHONIA 2BLT SERIES OR APPROVED EQUAL
L5	1'x4' RECESSED LED LUMINAIRE, FLANGED MOUNTING, 3000 LUMENS, CURVED LINEAR DIFFUSER, 3500K, 80+ CRI, 120-277V MVOLT,	35	LITHONIA BLT LED SERIES OR APPROVED EQUAL
L6	1'x4' SURFACE MOUNTED LED LUMINAIRE, 3000 LUMENS, CURVED LINEAR DIFFUSER, 3500K, 80+ CRI, 120-277V MVOLT,	35	LITHONIA BLT LED SERIES OR APPROVED EQUAL
L7	6" ROUND APERTURE/OPEN REFLECTOR RECESSED DOWNLIGHT, 800 LUMENS, 3500K, 85+ CRI, 0-10V DIMMING, HAZE REFLECTOR,	10	LITHONIA EVO SERIES OR APPROVED EQUAL
L7A	6" ROUND APERTURE/OPEN REFLECTOR RECESSED DOWNLIGHT, 800 LUMENS, 3500K, 94 CRI, 0-10V DIMMING, HAZE REFLECTOR,	10	LITHONIA EVO SERIES OR APPROVED EQUAL
L8	6" ROUND APERTURE/OPEN REFLECTOR RECESSED DOWNLIGHT, SHOWER RATED, 1000 LUMENS, 3500K, 80+ CRI, 0-10V DIMMING, HAZE REFLECTOR,	10	LITHONIA EVO SERIES OR APPROVED EQUAL
L9	4' LONG DIFFUSE LENSED LED UTILITY STRIP LIGHT, 3500K, 3000 LUMENS PER 4' LENGTH, 80+ CRI, PENDANT OR SURFACE MOUNTED	25	LITHONIA ZL1N-FST-SERIES
L10	1'x4' RECESSED MOUNTED LED LUMINAIRE, DETENTION GRADE, 4000 LUMENS, 3500K, 80+ CRI, 120-277V MVOLT, FULL LENGTH COMPLETELY CONCEALED INTERNAL PIANO HINGE, HARDENED SECURITY SCREWS, GRID MOUNTED	45	KENALL RMCA SERIES OR APPROVE EQUAL
L11	1'x4' SURFACE MOUNTED LED LUMINAIRE, DETENTION GRADE, 4000 LUMENS, 3500K, 80+ CRI, 120-277V MVOLT, FULL LENGTH CONTINUOUS HEAVY GAUGE INTERNAL PIANO HINGE, HARDENED SECURITY SCREWS, FLANGED	45	KENALL SCA SERIES OR APPROVE EQUAL
L12	VERTICAL WALL MOUNTED (LENGTH AS REQUIRED) SQUARED PROFILE LED FIXTURE, 1,500 LUMENS, 3500K, 80+ CRI, MVOLT, W/JUNCTION BOX COVER OPTION AND END CAP FINISHES PER ARCHITECT.	10	VISA LIGHTING CB5524 SHINE SERIES OR APPROVED EQUAL
L23	LED EXIT LIGHT, BRUSHED ALUMINUM HOUSING, GREEN LETTERING, SINGLE OR DOUBLE FACE AND ARROWS AS INDICATED. CEILING OR BACK MOUNTED AS INDICATED, SUPPORTED BY GENERATOR (NO BATTERY)	5	LITHONIA LES LED SERIES OR APPROVED EQUAL
L24	LED "IN-USE" LIGHT FIXTURE, ALUMINUM HOUSING, UNIVERSAL MOUNT, SIMILAR TO EXIT LIGHT "L23"		LITHONIA CUSTOM LES SERIES

100% CONSTRUCTION DOCUMENTS

7081 S. Plumer Ave
Tucson, AZ 85756

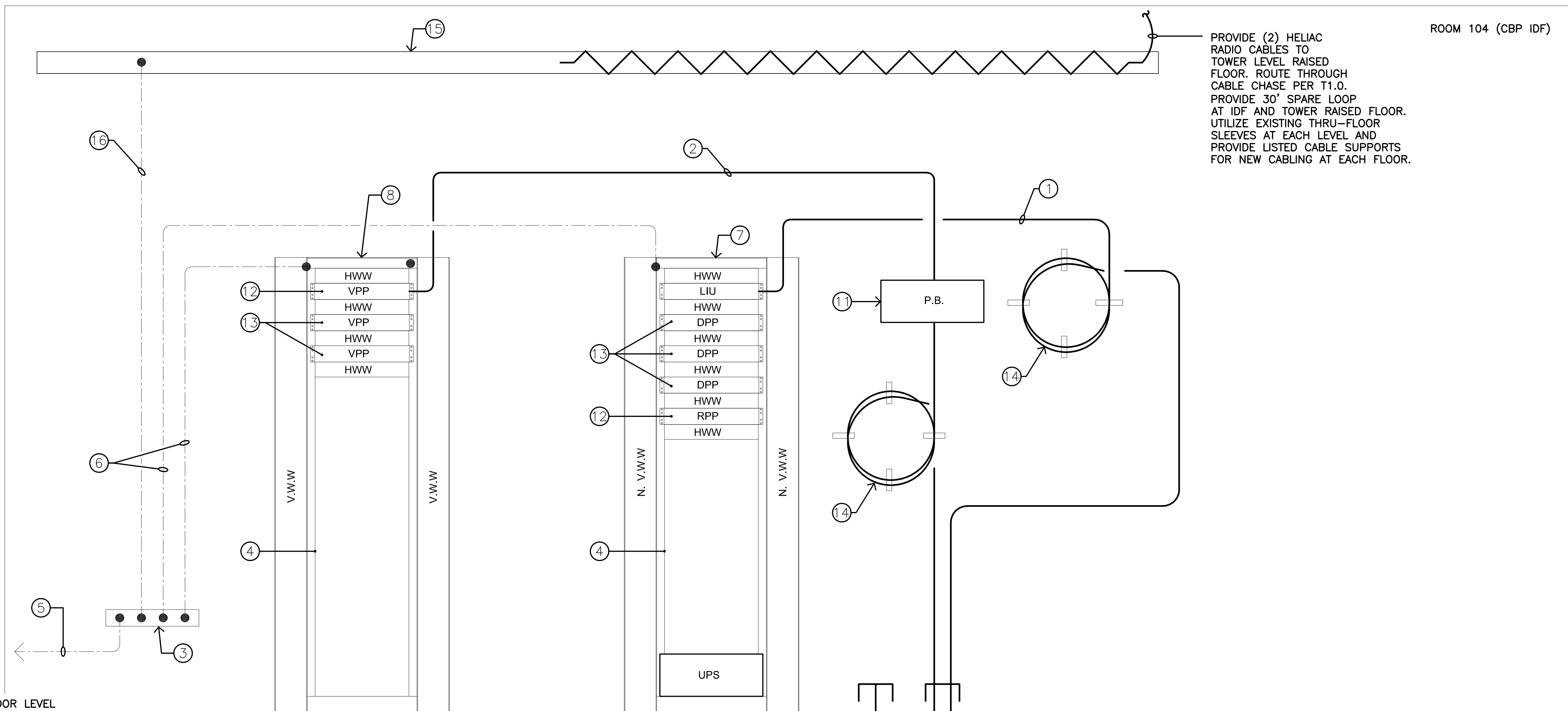
ELECTRICAL LIGHT FIXTURE SCHEDULE
TAA Executive Terminal
CBP Relocation TAA project #10219007

E7.0
30-18307-00
12/21/2018
Revisions: 03/20/2018 BJA/MS/KSD
AZD-3 03/20/2018 BJA/MS/KSD



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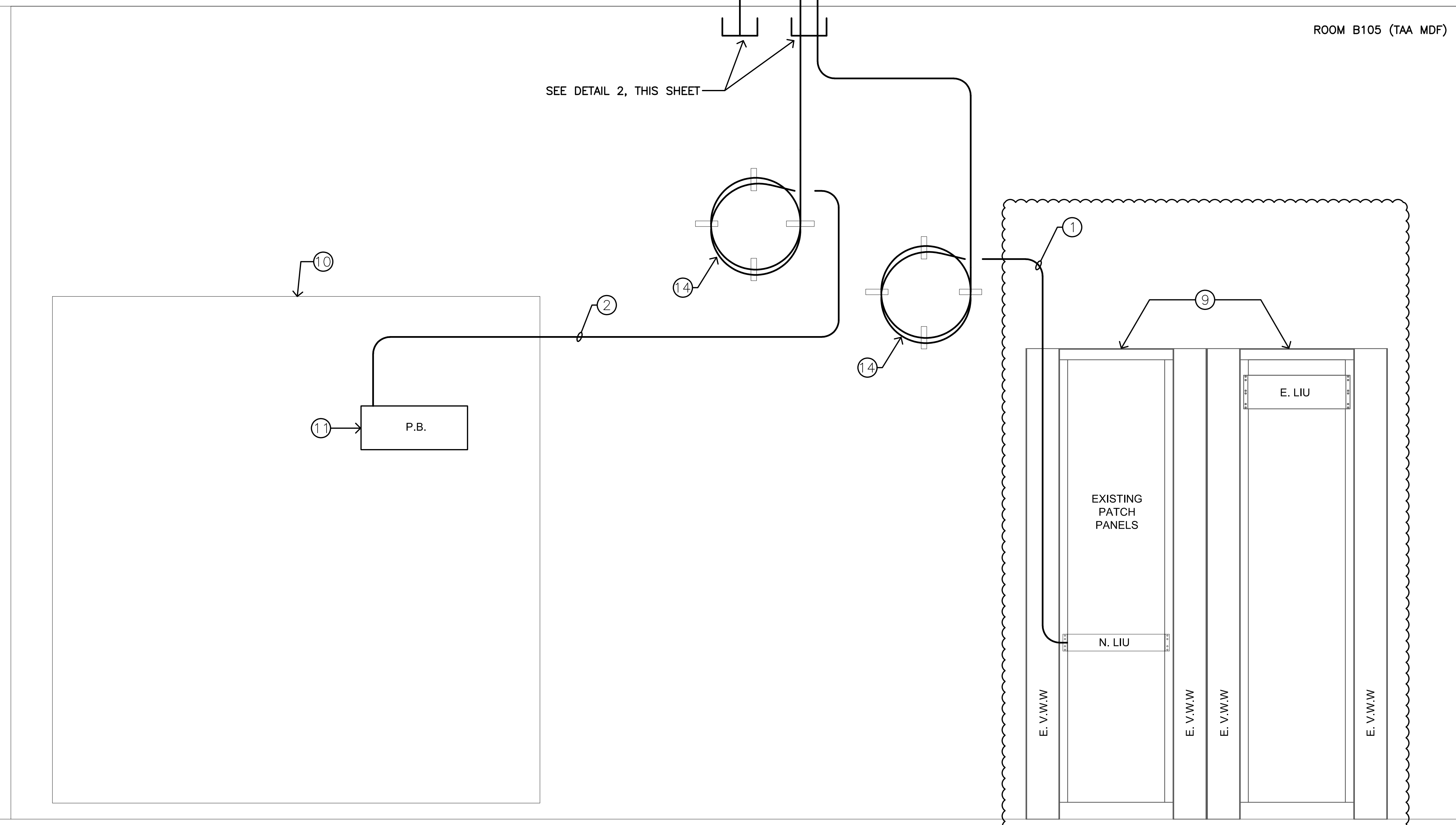
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PROVIDE (2) HELIAC RADIO CABLES TO TOWER LEVEL RAISED FLOOR. ROUTE THROUGH CABLE CHASE PER T1.0. PROVIDE 30' SPARE LOOP AT IDF AND TOWER RAISED FLOOR. UTILIZE EXISTING THRU-FLOOR SLEEVES AT EACH LEVEL AND PROVIDE LISTED CABLE SUPPORTS FOR NEW CABLING AT EACH FLOOR.

ROOM 104 (CBP IDF)

1ST FLOOR LEVEL



SEE DETAIL 2, THIS SHEET

ROOM B105 (TAA MDF)

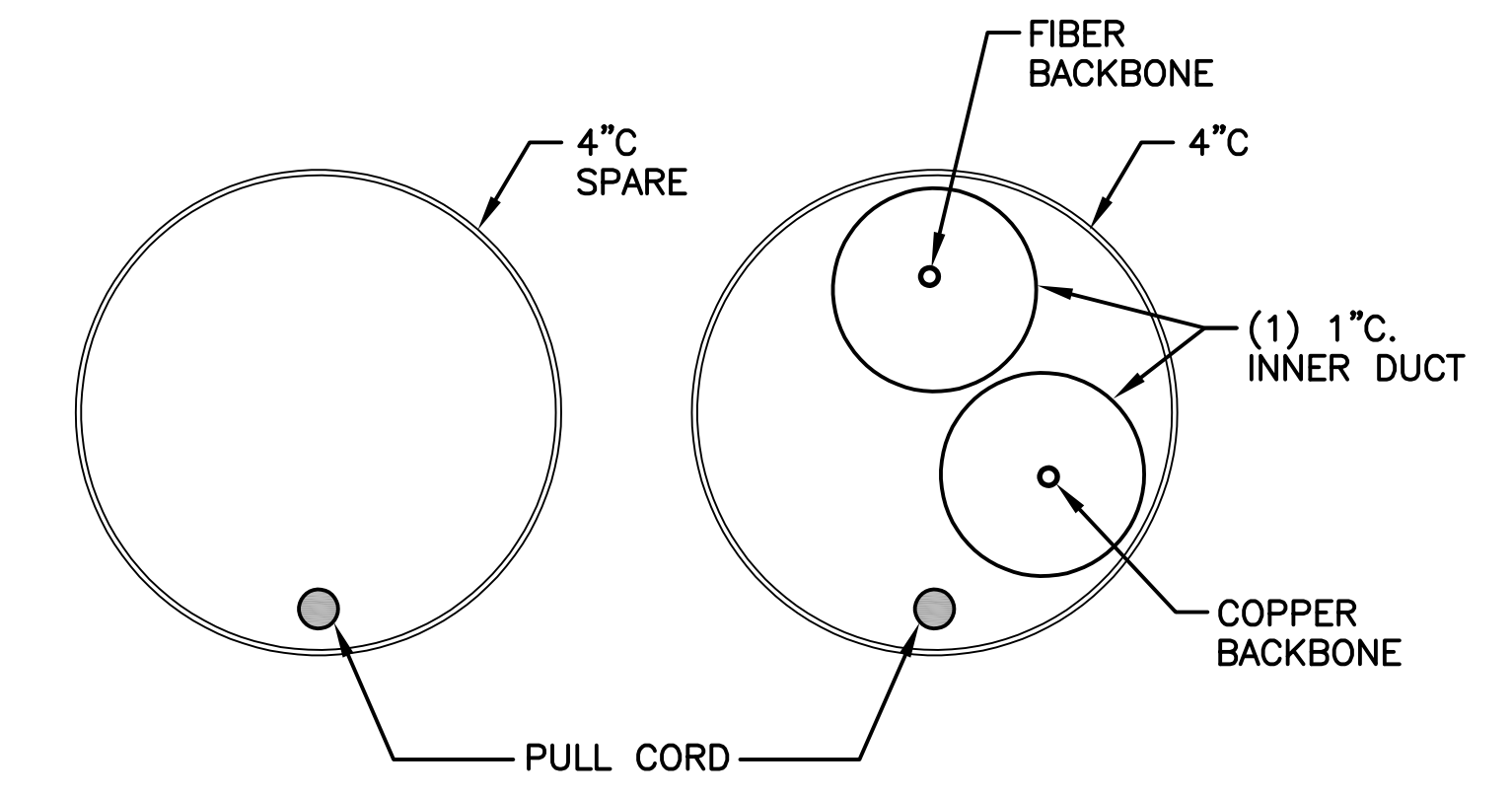
BASEMENT FLOOR LEVEL

ELECTRICAL KEYNOTES (THIS SHEET ONLY)

1. NEW 12 SM/12 MM FIBER BACKBONE CABLE IN 1" INNERDUCT.
2. NEW 25 PAIR COPPER BACKBONE CABLE.
3. NEW IDF GROUND BUS, 1/4" THICK X 4"H X 20"L.
4. NEW VERTICAL COPPER GROUND BUSS 72"H.
5. NEW #3/0 CU. GRD.
6. NEW #6 CU. GRD.
7. NEW RACK, NEW LIU, NEW PP, NEW HWW, AND NEW VWW.
8. NEW RACK, NEW PP, NEW HWW, AND NEW VWW.
9. EXISTING RACKS IN EXISTING TAA MDF ROOM.
10. EXISTING BACKBOARDS IN EXISTING TAA MDF ROOM.
11. NEW 25 PAIR 110 PUNCHDOWN BLOCK.
12. NEW 24 PORT PATCH PANEL.
13. NEW 48 PORT PATCH PANEL.
14. NEW 25' BACKBONE CABLE LOOP.
15. NEW CABLE TRAY AROUND PERIMETER OF CBP IDF ROOM 104.
16. NEW #2 CU. GRD.

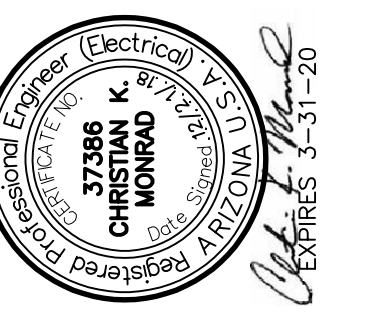
ABBREVIATIONS

E. LIU	EXISTING FIBER LIGHT INTERFACE UNIT
N. LIU	NEW FIBER LIGHT INTERFACE UNIT
P.B.	PUNCH DOWN BLOCK
DPP	DATA PATCH PANEL
VPP	VOICE PATCH PANEL
HWW	HORIZONTAL WIRE WAY
VWW	VERTICAL WIRE WAY
E. VWW	EXISTING VERTICAL WIRE WAY
SM	SINGLE MODE
MM	MULTI MODE
CU.	COPPER
GRD.	GROUND
IDF.	INTERMEDIATE DISTRIBUTION FRAME
UPS.	UNINTERRUPTIBLE POWER SUPPLY
MDF.	MAIN DISTRIBUTION FRAME
CBP.	CUSTOMS & BORDER PROTECTION
TAA.	TUCSON AIRPORT AUTHORITY



2 4" CONDUIT FILL
NOT TO SCALE

1 TELECOMMUNICATIONS RISER DIAGRAM
NOT TO SCALE



DIVISION 26 - ELECTRICAL

Section 26 0500	Common Work Results for Electrical
Section 26 0519	Low Voltage Electrical Power Conductors and Cables
Section 26 0526	Grounding and Bonding for Electrical Systems
Section 26 0529	Hangers and Supports for Electrical Systems
Section 26 0533	Raceways and Boxes for Electrical Systems
Section 26 0553	Identification for Electrical Systems
Section 26 2726	Wiring Devices
Section 26 2813	Fuses
Section 26 2816	Enclosed Switches and Circuit Breakers
Section 26 4313	Transient Voltage Suppression for Low Voltage Electrical Power
Section 26 5100	Interior Lighting
Section 26 5600	Exterior Lighting (Not included in this submittal)

DIVISION 27 - COMMUNICATIONS

Section 27 0500	Common Work Results for Communications
Section 27 0526	Grounding and Bonding for Communications Systems
Section 27 1100	Communications Equipment Room Fittings
Section 27 1300	Communications Backbone Cabling
Section 27 1500	Communications Horizontal Cabling

DIVISION 28 - ELECTRONIC SAFETY AND SECURITY

Section 28 1300	Access Control
Section 28 2300	Video Surveillance
Section 28 3100	Fire Alarm and Mass Notification System
Section 28 3200	Intrusion Detection

DIVISION 31 - EARTHWORK

Not Used

DIVISION 32 - EXTERIOR IMPROVEMENTS

Not Included in this submittal

DIVISION 33 - UTILITIES

Not Used

DIVISION 34 - SITE EQUIPMENT

Section 34 7100	Traffic Spikes
-----------------	----------------

END OF TABLE OF CONTENTS

1.8 WARRANTY

- A. The casework manufacturer shall guarantee casework materials and workmanship for five years from the date of Substantial Completion. Defects reported within the guarantee period will be corrected without charge. Accessories such as sinks, fittings, apparatus, countertops, etc., shall be guaranteed for one year from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. High Pressure Plastic Laminate:
1. Plastic laminate shall meet standard of NEMA LD3-1985, and shall be of the following thickness:
 - a. Balancing Sheet: 0.020 inch.
 - b. Horizontal Surfaces: 0.050 inch.
 - c. Vertical Surfaces: 0.028 inch.
 - d. Cabinet Liner: Pressure fused laminate bonded to substrate. Color shall be manufacturer's standard almond, gray or white as selected by Architect.
 2. Manufacturers: Products listed below are manufactured by Wilsonart. Other manufacturers listed below are also acceptable, provided that they manufacture products in color and texture to match that which is selected and specified:
 - a. Formica
 - b. Pionite.
 3. Color Selections (Pionite):
 - a. **TBD**
- B. Countertops, Solid Surfacing:
1. Solid Surfacing Material: Homogeneous solid sheets of filled plastic resin complying with material and performance requirements in ANSI Z124.3, for Type 5 or Type 6, without a precoated finish.
 - a. Products: Subject to compliance with requirements, provide one of the following:
 - 1) **Corian**
 - 2) Or approved equal
 - b. Color Selections:
 - 1) **Owner to select from full manufacturer color options.**
- C. Detailed Requirements for Cabinet Construction:
1. Sub-Base:
 - a. Cabinet Subbase: All fixed under-counter and tall units shall have an individual factory-applied base, separate and continuous (no cabinet body sides-to-floor), 3/4-inch-thick water resistant exterior grade plywood with concealed fastening to cabinet bottom. Ladder-type construction, of front, back and intermediates, to form a secure and level platform to which cabinets attach. Base is nominal 4 inches high unless shown otherwise.
 - b. No levelers are permitted.
 2. Cabinet Top and Bottom:
 - a. Base and tall cabinet bottoms to be pressure fused laminated particleboard interior side, 3/4-inch thick with phenolic neutral colored backer sheet on concealed side.

1. Store in temperature- and humidity-controlled environment in original manufacturer's sealed containers. Maintain ambient temperature between 50 and 85 deg F , and not more than 80 percent relative humidity, noncondensing.
2. Open each container; verify contents against packing list; and file copy of packing list, complete with container identification, for inclusion in operation and maintenance data.
3. Mark packing list with the same designations assigned to materials and equipment for recording in the system labeling schedules that are generated by software specified in "Cable and Asset Management Software" Article.
4. Save original manufacturer's containers and packing materials and deliver as directed under provisions covering extra materials.

1.10 PROJECT CONDITIONS

- A. Environmental Conditions: System shall be capable of withstanding the following environmental conditions without mechanical or electrical damage or degradation of operating capability:
1. Control Station: Rated for continuous operation in ambient conditions of 60 to 85 deg F and a relative humidity of 20 to 80 percent, noncondensing.
 2. Indoor, Controlled Environment: NEMA 250, Type 1 enclosure. System components, except the central-station control unit, installed in[air-conditioned indoor environments shall be rated for continuous operation in ambient conditions of 36 to 122 deg F dry bulb and 20 to 90 percent relative humidity, noncondensing.

PART 2 - PRODUCTS

2.1 MANUFACTURERS – Provide a complete standalone system consisting of all required components/parts for a fully configured and fully functional system. Components shall include servers, workstations, latest edition software, latest edition hardware, and all parts contained within this specification. System shall be Andover Continuum (latest products at time of installation). System may be an equivalent Software House or Galaxy.

- A. Altronix AL600ULMB power supplies
- B. HID 921PTNNEK001V keypad cardreader
- C. Sentrol SR 2505A-L magnetic switch
- D. **SU-INT-U-P-USB Continuum SU Software, Integrated**

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- E. NC2-R-000000000 NetController II, RS485 I/O Bus Interface**
- F. PS120/240-AC85U-A NetController power supply, with UPS Circuit**
- G. 01-2100-423 12V Battery (2 required for NetController PSU)**
- H. 01-2050-285 Male Connector for PSU/NetController**
- I. 01-0010-840 Bag of 20 female connectors for I/O Bus**
- J. AC-1 Access Control module, 1 Wiegand rdr input, 3 inputs, 2 outputs**
- K. UI-8-10-10V-S UI-8 IOU Module - 8 universal inputs, 0-10 volt input range**

2.2 DESCRIPTION

- A. Security Access System: Field-installed controllers, connected by a high-speed electronic-data transmission network.
- B. System Software: Shall be included
- C. Network(s) connecting existing PCs and controllers shall consist of one or more of the following:
 - 1. Local area, IEEE 802.3 Fast Ethernet Gigabit-Ethernet, star topology network based on TCP/IP.
 - 2. Direct-connected, RS-232 cable from the COM port of the central station to the first controller, then RS-485 cable to interconnect the remaining controllers at that Location.
 - 3. Dial-up and cable modem connection using a standard cable or dial-up telephone line.

2.3 OPERATION

- A. Security access system shall use a single database for access-control and credential-creation functions.
- B. Distributed Processing: A fully distributed processing system.
 - 1. Access-control information, including time, date, valid codes, access levels, and similar data, shall be downloaded to controllers so each controller can make access-control decisions.

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SECTION 28 23 00
VIDEO SURVEILLANCE

PART 1 - GENERAL

1.1 SUMMARY

- A. Video surveillance system consisting of cameras and data transmission wiring is by TAA vendor.
- B. Contractor shall provide conduit and boxes as indicated on drawings. Box and conduit installation shall be coordinated with TAA Vendor.
- C. Previously issued specification "262300 Video Surveillance" is deleted, renumbered and replaced with this page.

END OF SECTION 282300

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SECTION 34 7100

TRAFFIC SPIKES

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Traffic spikes of the following types:
 - 1. Low profile traffic spikes. (**Spike Systems Model CS36-SM 3'-0"**)

1.2 RELATED SECTIONS

1.3 REFERENCES

- A. Underwriters Laboratories (UL): UL 325 - Standard for Safety for Door, Drapery, Gate, Louver, and Window Operators and Systems.
- B. Underwriters Laboratories (UL): UL 991 - Standard for Tests for Safety-Related Controls Employing Solid-State Devices.

1.4 SUBMITTALS

- A. Submit under provisions of Section 01 30 00 - Administrative Requirements.
- B. Product Data: Equipment list, system description, electrical wiring diagrams for installation, and manufacturer's data sheets on each product to be used, including:
 - 1.1 Preparation instructions and recommendations.
 - 1.2 Storage and handling requirements and recommendations.
 - 1.3 Installation methods.
- C. Shop Drawings: Submit shop drawings showing layout, profiles, and product components, including anchorage, edge conditions, and accessories.
 - 1.4 Operation, installation, and maintenance manuals including wiring diagrams.
 - 1.5 Risers, layouts, and special wiring diagrams showing any changes to standard drawings.

1.5 QUALITY ASSURANCE

- A. Manufacturer Qualifications: ISO 9001 Certified Manufacturer.
- B. Installer Qualifications: Installation performed by factory authorized contractor specifically trained in gate operation systems of the type found within this section.
 - 1. Provide documentation of maintenance and repair service availability for emergency conditions.
 - 2. Provide quarterly maintenance for one year following Substantial Completion of the Project.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store, and handle materials and products in strict compliance with manufacturer's

instructions and industry standards.

- B. Store products indoors in manufacturer's original containers and packaging, with labels clearly identifying product name and manufacturer. Protect from damage.

1.7 WARRANTY

- A. Provide manufacturer's standard limited warranty:
 - 1. Warranty Period: 1 year.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturer: **Spike Systems, which is located at: 3623 7th Street; Phoenix, AZ 85040; Toll Free Tel: 602-243-0291; Fax: 630-516-8412; <https://spikesystems.com>**
- B. Requests for substitutions will be considered in accordance with provisions of Section 01 60 00 - Product Requirements.

2.2 TRAFFIC SPIKES

- A. Low Profile Traffic Spikes:
 - 1. Features:
 - a. Heavy-duty steel construction.
 - b. Counter balanced and spring loaded system.
 - c. Reliable zinc plated moving parts.
 - d. Positive stop eliminates wear.
 - e. Specially engineered curved teeth with fish-hook disabler.
 - f. Stainless steel hardware.
 - g. Built-in latch down device.
 - h. Designed top-down for easy maintenance.
 - i. Modular style for design flexibility.
 - j. Restricts tire damage to wrong way traffic.
 - k. One year limited warranty.
 - 2. Basis of Design: **Spike Systems Model CS36-SM 3'-0"**as manufactured by Spike Systems.
 - a. **Product: Spike Systems Model CS36-SM - Low Profile 3 ft (914 mm) Traffic Spike Section; Galvanized.**
 - 1. **Top Plate: 3/8 inch (9.5 mm) steel plate.**
 - 2. **Finish: Red. Hot Dipped Galvanized - ASTM A153/A 153M.**
 - 3. **Warning Signs: Reflective.**
 - b. **Product: 12320E - Low Profile End Bevel- Set of 2; Galvanized.**
 - 1. **Top Plate: 3/8 inch (9.5 mm) steel plate.**
 - 2. **Finish: Red. Hot Dipped Galvanized - ASTM A153/A 153M.**
 - 3. **Warning Signs: Reflective.**

PART 3 - EXECUTION

3.1 EXAMINATION AND PREPARATION

- A. Inspect and prepare substrates using the methods recommended by the manufacturer for

achieving best result for the substrates under project conditions.

- B. Do not proceed with installation until substrates have been prepared using the methods recommended by the manufacturer and deviations from manufacturer's recommended tolerances are corrected. Commencement of installation constitutes acceptance of conditions.
- C. If preparation is the responsibility of another installer, notify Architect in writing of deviations from manufacturer's recommended installation tolerances and conditions.

3.2 INSTALLATION

- A. Install in accordance with manufacturer's instructions, approved submittals and in proper relationship with adjacent construction. Test for proper operation and adjust until satisfactory results are obtained.

3.3 PROTECTION

- A. Protect installed products until completion of project.
- B. Touch-up, repair or replace damaged products before Substantial Completion.

END OF SECTION

TUCSON AIRPORT AUTHORITY
TIA EXECUTIVE TERMINAL CBP RELOCATION
TUCSON, ARIZONA

30-18307-00
2018-12-21
100% CONSTRUCTION DOCUMENTS