Addendum #: **Addendum #4**
Issue Date: **04/08/2024**

The following additions, clarifications and revisions have been made to the Contract Documents:

CLARIFICATIONS:

1. The bid date has been moved to April 25th at 11 AM CST.
2. The RFI deadline has been extended to April 15th
3. See attached RFI log.
4. Section 00 24 00 BID PACKAGES is receiving numerous changes and is expected to be re-issued with the next addenda.
5. The final addenda will be issued April 18th.
6. **The bid form will be reissued with the next addenda. Bidders shall be required to submit the revised bid form.**
7. See attached Addendum for Klinger and Associates

REVISIONS:

1. **REVISE** all references to the bid date to be "Thursday, April 25th at 11:00 AM CST"

CORE Construction Services of Illinois, Inc.

Printed on Mon Apr 8, 2024 at 11:08 am CDT

Job #: 8-22-01-011 Edgar County Jail
TBD SPRINGFIELD RD
PARIS, Illinois 61944

RFI LOG

#	Subject	Status	Responsible Contractor	Received From	Assignee	Date Initiated	RFI Manager	Due Date	Closed Date	Ball In Court	Location	Schedule Impact	Cost Code	Cost Impact
125	Kitchen Equipment Phasing	Open		None	Springer, Amanda ...	04/07/2024	Levi Bauer	04/12/2024		Bauer, Levi (CORE...				
	Q: Levi Brooke Sent Fri Apr 5, 2024 at 12:39 pm CDT Can you confirm if both phase 1 and phase 2 equipment needs to be included in my proposal? From the FSE drawing the following information is listed. kitchen equipment 2.png kitchen equipment 1.png													
	A: Amanda Springer (Klingner & Associates, P.C) Responded Mon Apr 8, 2024 at 08:47 am CDT Answered in Addendum 4													
124	Bearing Capacity for aggregate Piers	Open		None	Springer, Amanda ...	04/07/2024	Levi Bauer	04/12/2024		Springer, Amanda ...				
	Q: Levi Brooke Sent Fri Apr 5, 2024 at 09:56 am CDT It appears that all of the strip and spread footings are specified for improvement to 4000psf bearing capacity by aggregate piers. In previous budgets, the interior “F2” footings in the west portion of the building had lower load conditions (1.5kips/lf) and did not require improvement. The reduced load is reflected in the current wall footing schedule, so improvement for those interior footings with the reduced loads would not be required but the cross section in the foundation details still shows aggregate piers. Do all strip footings in the structure (F1 and F2) require ground improvement to a 4000psf contract pressure or is the detail just need to be updated?													
123	Burglar Bars Responsibility	Open		None	Bauer, Levi (CORE...	04/07/2024	Levi Bauer	04/12/2024		Bauer, Levi (CORE...				
	Q: Levi Brooke Sent Fri Apr 5, 2024 at 09:53 am CDT Who is responsible for supplying the burglar bars at skylight? (In Yellow) Glazing questions.png													
122	Skylight Responsibility	Open		None	Bauer, Levi (CORE...	04/07/2024	Levi Bauer	04/12/2024		Bauer, Levi (CORE...				
	Q: Levi Brooke Sent Fri Apr 5, 2024 at 09:51 am CDT Does the glazer need to pick up the white sheet metal liners with trims shown in green? Glazing questions.png													
121	Vesda system responsibility	Closed		None	Springer, Amanda ...	04/03/2024	Levi Bauer	04/08/2024	04/07/24					
	Q: Levi Bauer Sent Wed Apr 3, 2024 at 04:36 pm CDT Is the FP contractor to supply the Vesda System and Duct Detectors plus wiring as noted in FP notes?													
	A: Levi Bauer (CORE Construction - Peoria) Responded Sun Apr 7, 2024 at 01:52 pm CDT VESDA system complete including any necessary sample piping shall be provided by fire alarm vendor via electrical bid package. Mechanical bid package to provide all backends/adapters as necessary to tie-in dampers to system if required.													
120	Additional HVAC controls questions	Open		None	Springer, Amanda ...	04/03/2024	Levi Bauer	04/08/2024		Bauer, Levi (CORE...				

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	Q: Levi Bauer Sent Wed Apr 3, 2024 at 04:35 pm CDT 1. The RTU-2 and RTU-3 Controls Diagram and points list shows a thermostat and zone humidity sensor shall be provided for each zone (Qty.7 total). Please confirm that thermostats and humidity sensors shall be located in the return duct of their respective zones. Please confirm that setpoints shall be adjusted through the graphics. 2. Please provide quantity and locations of CO and NO2 sensors with the Vehicular Sallyport.													
	A: Amanda Springer (Klingner & Associates, P.C) Responded Mon Apr 8, 2024 at 07:38 am CDT Answered in Addendum 4													
119	Low Voltage Questions	Open		None	Springer, Amanda ...	04/03/2024	Levi Bauer	04/08/2024		Bauer, Levi (CORE...				
	Q: Levi Bauer Sent Wed Apr 3, 2024 at 04:26 pm CDT 1. TN000 Responsibility Matrix Indicates that the owner will provide and install the network switch and UPS. TN300 Plan Notes T13 and T17 indicates contractor to install these devices, which is correct? 2. How many switches and UPS's are there if contractor is installing? 3. TN000 indicates that 2D,IP has (2) cables for an inmate wall phone, TN400 (3) indicates a single position wall phone plate. Will the 2nd terminated cable be placed inside the junction box? Please advise. 4. TN101 Plan Note T10 indicates to provide a 24-port patch panel at each dispatch work station with (8) Cat 6 Cables routed to Dispatch Server141. Are these additional cables to the cables indicated on the drawings? 5. Will the patch panels at each Dispatch Workstation be wall mounted? 6. Is there any fiber or copper between the 2 closets? 7. TN300 Plan T16 says to provide optical fiber panel, see division 27 for additional information. There isn't anything about fiber, What type of fiber(single mode, multimode)? 8. How many strands of fiber? What type of connector ends for fiber(SC,LC) 9. If there is fiber needed, can TiniFiber be used since other fibers have big MOQ's? 10. TN101 Cell area says cables in this area feed back to server room 134 and land on the Encartel Rack, TN102 Mezzanine area says cables run back to server room 134. Do these cables land on the Encartel rack as well?													
	A: Amanda Springer (Klingner & Associates, P.C) Responded Mon Apr 8, 2024 at 07:32 am CDT Answered in Addendum 4													
118	Ballistic Glazing Responsibility	Open		None	Bauer, Levi (CORE...	04/03/2024	Levi Bauer	04/08/2024		Bauer, Levi (CORE...				
	Q: Levi Bauer Sent Wed Apr 3, 2024 at 04:23 pm CDT [Question from glazer] In the bid package for i) "Aluminum, Glass & Glazing" line item 16) states "Provide all bullet proof/resistant glazing and bullet films. Am I to pick up detention glazing where the inmates are housed? Usually, we just pick up the standard storefront/curtainwall framing and glazing. We aren't set up to install or provide detention rated frames/glazing.													
117	Hollow Core	Closed		None	Bauer, Levi (CORE...	04/03/2024	Levi Bauer	04/08/2024	04/03/24					
	Q: Levi Bauer Sent Wed Apr 3, 2024 at 04:11 pm CDT The scope, drawings and bid request all reference hollowcore plank but we don't see any on the drawings. Is there something I am missing somewhere													
	A: Levi Bauer (CORE Construction - Peoria) Responded Wed Apr 3, 2024 at 04:13 pm CDT Hollow core was going to be used for the mezzanine deck in previous drawing iterations but has been removed from the design.													
116	Grinder Specifications	Closed		None	Springer, Amanda ...	04/03/2024	Levi Bauer	04/08/2024	04/07/24					

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	Q: Levi Bauer Sent Wed Apr 3, 2024 at 04:07 pm CDT There are no specifications for the grinder pump in the sanitary manhole shown on P401/10. Please provide a specification.													
	A: Levi Bauer (CORE Construction - Peoria) Responded Wed Apr 3, 2024 at 04:07 pm CDT Refer to item SG on P500 addendum 2.													
115	Sign Type C and D - Quantity Confirmation	Open		None	Bauer, Levi (CORE... Springer, Amanda ...	04/03/2024	Levi Bauer	04/08/2024		Bauer, Levi (CORE...				
	Q: Logan Smith Sent Tue Apr 2, 2024 at 01:15 pm CDT Wording in drawings differ from the count tally given on A540 for Sign Types C and D. For Sign Type C, are (15) or (17) signs needed? For Sign Type D, are (58) or (26) signs needed?													
	A: Amanda Springer (Klingner & Associates, P.C) Responded Mon Apr 8, 2024 at 07:38 am CDT Answered in Addendum 4													
114	Road Patrol Room - Level 3 Ballistic Window Frame	Open		None	Springer, Amanda ...	04/03/2024	Levi Bauer	04/08/2024		Bauer, Levi (CORE...				
	Q: Logan Smith Sent Tue Apr 2, 2024 at 01:40 pm CDT There is one window in the Road Patrol room that appears to be a Level 3 ballistic type window frame. However, there is no ballistic window spec for this job. Shall I make assumption on how to bid this window using my BR window vendor? (RFI from glazing contractor)													
	A: Amanda Springer (Klingner & Associates, P.C) Responded Mon Apr 8, 2024 at 07:37 am CDT Answered in Addendum 4													
113	Kitchen Equipment	Closed		None	Springer, Amanda ...	04/03/2024	Levi Bauer	04/08/2024	04/07/24					
	Q: Logan Smith Sent Tue Apr 2, 2024 at 01:30 pm CDT Based on the General Food Service Notes on K100, please confirm if both Phase 1 and Phase 2 equipment need to be included in the equipment proposal.													
	A: Levi Bauer (CORE Construction - Peoria) Responded Sun Apr 7, 2024 at 02:26 pm CDT Refer to RFI 125													
112	Tornado Signage	Closed		None	Springer, Amanda ...	04/03/2024	Levi Bauer	04/08/2024	04/03/24					
	Q: Logan Smith Sent Tue Apr 2, 2024 at 01:11 pm CDT - What are tornado signs to be made of? Are raised borders or frames shown in drawings? - Are any tornado signs S4 needed? - Is tornado sign S5 to be single or double sided? What kind of ceiling mount hardware is needed?													
	A: Levi Bauer (CORE Construction - Peoria) Responded Wed Apr 3, 2024 at 03:13 pm CDT Refer to RFI 36													

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111	Precast - Cast-In Electrical Connections	Closed		None	Bauer, Levi (CORE...	04/03/2024	Levi Bauer	04/08/2024	04/07/24					
	Q: Logan Smith Sent Tue Apr 2, 2024 at 01:04 pm CDT We see the electrical connections are cast-in. I counted 98, but I am not an electrician, so I am not totally sure which designations need to be cast-in. Do yo have a confirmed quantity we can use for bid? (from precast supplier)													
	A: Levi Bauer (CORE Construction - Peoria) Responded Sun Apr 7, 2024 at 02:27 pm CDT Quantity survey shall be performed by bidder.													
110	Precast - Cast-In Wood Blocking	Closed		None	Bauer, Levi (CORE...	04/03/2024	Levi Bauer	04/08/2024	04/03/24					
	Q: Logan Smith Sent Tue Apr 2, 2024 at 01:01 pm CDT E12/A800: Is cast-in wood blocking required? (from precast supplier)													
	A: Levi Bauer (CORE Construction - Peoria) Responded Wed Apr 3, 2024 at 03:02 pm CDT Refer to RFI response 70													
109	Allowance - Bid Package 04 (Civil)	Open		None	Bauer, Levi (CORE...	04/03/2024	Levi Bauer	04/08/2024		Bauer, Levi (CORE...				
	Q: Logan Smith Sent Tue Apr 2, 2024 at 12:56 pm CDT In bid package 4 (Civil) the $20,000 allowance mentioned covers maintenance, regrading, and dress up of temporary and permanent access roads / laydown areas. Does this also cover the cost of additional stone that will be required due to all the construction traffic?													
	A: Levi Bauer (CORE Construction - Peoria) Responded Sun Apr 7, 2024 at 02:11 pm CDT Confirmed, this allowance is also intended to cover final regarding of the temporary roads prior to installation of permeant pavement. Refer to RFI 31 for additional information.													
108	UL-864 Listed Unit Controllers and Code Compliance	Open		None	Springer, Amanda ...	04/03/2024	Levi Bauer	04/08/2024		Springer, Amanda ...				
	Q: Levi Bauer Sent Wed Apr 3, 2024 at 02:38 pm CDT [Question from siemens] The latest addendum clarified that the unit controllers should be UL-864 listed. I contacted Greenheck (who is BOD) for the units to coordinate with them. They can't provide a UL listed controller. We discussed a means of wiring the supply and return damper and fans so that we can control them and be code compliant and they can't change to high speed actuators or it voids their ETL listing for the unit. We own York and can't bid our packaged units for the same reasons. Can you ask the engineer if anyone listed can actually do it and let me know? If the answer is yes then I will bid the controls. If the answer is no then I'm not sure if anyone will bid the project if they actually understand the requirements													
107	Masonry Clarifications	Open		None	Springer, Amanda ... Bauer, Levi (CORE...	04/02/2024	Levi Bauer	04/07/2024		Bauer, Levi (CORE...				

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	Q: Kareem Castaneda Sent Tue Apr 2, 2024 at 11:10 am CDT [Questions from masonry contractor] 1) Is code #3 detail H on A531 intended to be code #5? 2) Will we install frames, or will others install? 3) What sealant is required for this? 4) Is this steel faced masonry unit considered an embedded item supplied by others? See spec 04 2900 2.3 Detention Equipment.jpg Frames.jpg Sealant.jpg Steel Faced Masonry Unit.jpg													
	A: Levi Bauer (CORE Construction - Peoria) Responded Mon Apr 8, 2024 at 10:51 am CDT Item 2 - General trades will install all non-detention hollow metal frames. The detention package will install all detention frames. Frame installation will be removed from the masonry package. Item 4 - Steel faced masonry units will be supplied by the detention package and installed/grouted by the masonry package. The bid packages will be updated to this effect.													
	A: Levi Bauer (CORE Construction - Peoria) Responded Wed Apr 3, 2024 at 03:34 pm CDT Klinger to clarify items 1 and 3. CORE will address items 2 and 4.													
106	Interior Wall Footings	Open		None	Springer, Amanda ...	04/02/2024	Levi Bauer	04/07/2024		Bauer, Levi (CORE...				
	Q: Kareem Castaneda Sent Tue Apr 2, 2024 at 10:54 am CDT For the interior wall footings that have a TOF of 100', (F2, F3, and F4) is there any way to differentiate when these need to be poured with the floor as a thickened slab reference details 7,8,&9 on S502 or as a separate footing with a short stem wall for the block reference details 8,10, &11 S503. The provided detail cuts are minimal and only show a few locations leaving my interpretation for only the F2 to be poured with the slab and the F3 and F4 to follow the details on S503. Please advise.													
	A: Amanda Springer (Klingner & Associates, P.C) Responded Mon Apr 8, 2024 at 07:33 am CDT Answered in Addendum 4													
105	Mini-split drain sizes	Open		None	Springer, Amanda ...	03/30/2024	Levi Bauer	04/04/2024		Bauer, Levi (CORE...				
	Q: Levi Bauer Sent Sat Mar 30, 2024 at 10:26 am CDT RFI-Mini Split Drains Drawings do not indicate where to drain the indoor mini splits and drain size?													
	A: Amanda Springer (Klingner & Associates, P.C) Responded Mon Apr 8, 2024 at 07:37 am CDT Answered in Addendum 4													
104	Substitution Request - Siemens	Open		None	Springer, Amanda ...	03/30/2024	Levi Bauer	04/04/2024		Bauer, Levi (CORE...				
	Q: Levi Bauer Sent Sat Mar 30, 2024 at 10:24 am CDT Substitution Request – DDC Controls Siemans To whom this concerns, Siemens has been asked to provide a controls number for this project and we are seeking approval. Siemens would like to be an acceptable manufacture for Direct-Digital Controls in Specification section 230923, part 2.1 A. If there is a specific form required, please send it to me and I will fill it out. Thank you!													
	A: Levi Bauer (CORE Construction - Peoria) Responded Sat Mar 30, 2024 at 10:25 am CDT													

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	A substitution request form is required before this substitution request can be considered.													
103	Panel question	Open		None	Springer, Amanda ...	03/30/2024	Levi Bauer	04/04/2024		Bauer, Levi (CORE...				
	Q: Levi Bauer Sent Sat Mar 30, 2024 at 10:16 am CDT The panels below are shown on the one line diagram with a note saying fusible. The panel schedule however just shows these as either MLO or MB panels. What is meant by fusible and what type of panel will be required? LRL1 LRL2 LRUPS LRH3 LSH1 LSH2													
	A: Amanda Springer (Klingner & Associates, P.C) Responded Mon Apr 8, 2024 at 07:31 am CDT Answered in Addendum 4													
102	SS-1 spec	Open		None	Springer, Amanda ...	03/30/2024	Levi Bauer	04/04/2024		Bauer, Levi (CORE...				
	Q: Levi Bauer Sent Sat Mar 30, 2024 at 10:08 am CDT This job calls for SS-1 for the solid surface in various areas. The finish schedule doesn't have this listed out. Can you provide a specification for SS-1													
	A: Amanda Springer (Klingner & Associates, P.C) Responded Mon Apr 8, 2024 at 07:36 am CDT Answered in Addendum 4													
101	Aggregate pier loads	Open		None	Springer, Amanda ...	03/30/2024	Levi Bauer	04/04/2024		Bauer, Levi (CORE...				
	Q: Levi Bauer Sent Sat Mar 30, 2024 at 10:04 am CDT [Question from aggregate Pier provider] Are you able to provide the actual load and dead/live breakdown for the footings? Designing based off the actual loads instead of just the bearing capacity will give you a more economical price.													
	A: Amanda Springer (Klingner & Associates, P.C) Responded Mon Apr 8, 2024 at 07:35 am CDT Answered in Addendum 4													
100	Agg pier testing	Open		None	Springer, Amanda ...	03/30/2024	Levi Bauer	04/04/2024		Bauer, Levi (CORE...				
	Q: Levi Bauer Sent Sat Mar 30, 2024 at 10:03 am CDT [Question from aggregate pier provider] The specs mention a list of testing including modulus test, bottom stabilization test, cap stabilization test and uplift load test. These are not industry standard tests, and should not apply for this project, especially the uplift load test as there is no uplift requirement on this project. Please confirm that a single element modulus test following ASTM D1143 quick test procedure A is acceptable for load testing and nothing else will be required.													
	A: Amanda Springer (Klingner & Associates, P.C) Responded Mon Apr 8, 2024 at 07:35 am CDT Answered in Addendum 4													
99	predrilling for aggregate piers	Open		None	Springer, Amanda ...	03/30/2024	Levi Bauer	04/04/2024		Bauer, Levi (CORE...				

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	Q: Levi Bauer Sent Sat Mar 30, 2024 at 10:01 am CDT [question from aggregate pier provider] The specs look to be written for an old school predrill and tamping stone column setup. These are not the typical modern method of installation. In soils with loose granular layers like those present on this site it is standard practice to use vertical or horizontal vibrating probes that penetrate without predrilling, and install stone through the center of the tooling as the probes are removed. As you remove the probes and install the stone you frequently reinsert the probe down while vibrating to consolidate the stone and create the stiffness required. Furthermore, we would not expect predrilled holes to stay open in loose granular soils, so the predrilling will not benefit the installation. Please confirm this is an acceptable installation method and that the predrilling and tamping requirements mentioned in the specs are not required.												
	A: Amanda Springer (Klingner & Associates, P.C) Responded Mon Apr 8, 2024 at 07:36 am CDT Answered in Addendum 4												
98	Aggregate pier replacement ratio	Open		None	Springer, Amanda ...	03/30/2024	Levi Bauer	04/04/2024		Bauer, Levi (CORE...				
	Q: Levi Bauer Sent Sat Mar 30, 2024 at 09:59 am CDT [question from aggregate pier provider] The specs mention a minimum area replacement ratio of 30%. This is much higher than what is required for design, and what is realistic to install. At ARR above 20% you start to get interference between the columns and ground heave. Since the stone columns are design build and we are in control of the design, please remove this spec requirement.												
	A: Amanda Springer (Klingner & Associates, P.C) Responded Mon Apr 8, 2024 at 07:34 am CDT Answered in Addendum 4												
97	Pier installation elevation	Closed		None	Bauer, Levi (CORE...	03/30/2024	Levi Bauer	04/04/2024	04/07/24					
	Q: Levi Bauer Sent Sat Mar 30, 2024 at 09:57 am CDT [question from aggregate pier provider] Existing grade varies from 716’-720’, should we assume we will be installing from around 718’ -719’?												
	A: Levi Bauer (CORE Construction - Peoria) Responded Sun Apr 7, 2024 at 02:07 pm CDT Aggregate pier installer will be installing piers at approximately -12" below finish floor elevation. Subgrade elevation varies. Refer to RFI 3.												
96	Overhead door material	Open		None	Springer, Amanda ...	03/30/2024	Levi Bauer	04/04/2024		Bauer, Levi (CORE...				
	Q: Levi Bauer Sent Sat Mar 30, 2024 at 09:45 am CDT 83323-2 2.1 A spec calls for insulated aluminum - 18ga drawing A430-A2 describes steel coiling door - please verify aluminum or steel?												
	A: Amanda Springer (Klingner & Associates, P.C) Responded Mon Apr 8, 2024 at 07:34 am CDT Answered in Addendum 4												
95	Overhead doors screens	Open		None	Springer, Amanda ...	03/30/2024	Levi Bauer	04/04/2024		Bauer, Levi (CORE...				
	Q: Levi Bauer Sent Sat Mar 30, 2024 at 09:43 am CDT [question from OH door contractor] 83323-3 2.2 F and G what is meant by security screen and insect screen for these doors? Drawing A801-C12 shows a separate security and insect screen (not part of service door). Drawing A801-A12 our intention is to provide the door and installation of associated material provided by the manufacturer of the door. Security screen, bug screen and all sill plate material BY OTHER.												

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	A: Amanda Springer (Klingner & Associates, P.C) Responded Mon Apr 8, 2024 at 07:35 am CDT Answered in Addendum 4													
94	Truss Height	Open		None	Springer, Amanda ...	03/30/2024	Levi Bauer	04/04/2024		Bauer, Levi (CORE...				
	Q: Levi Bauer Sent Sat Mar 30, 2024 at 09:40 am CDT Drawing A400 section thru - please verify bottom of truss height AFF at lowest point to the south.													
	A: Amanda Springer (Klingner & Associates, P.C) Responded Mon Apr 8, 2024 at 07:34 am CDT Answered in Addendum 4													
93	Overhead door finish	Open		None	Springer, Amanda ...	03/30/2024	Levi Bauer	04/04/2024		Bauer, Levi (CORE...				
	Q: Levi Bauer Sent Sat Mar 30, 2024 at 09:39 am CDT 83613-2 2.2-A-1-c hot dip galvanized called for - This is not available. Standard finish per 2.2-A-2 will be provided													
	A: Amanda Springer (Klingner & Associates, P.C) Responded Mon Apr 8, 2024 at 07:35 am CDT Answered in Addendum 4													
	A: Levi Bauer (CORE Construction - Peoria) Responded Sat Mar 30, 2024 at 09:39 am CDT Klinger to clarify if alternate finish is acceptable.													
92	Overhead door electrical	Open		None	Bauer, Levi (CORE...	03/30/2024	Levi Bauer	04/04/2024		Bauer, Levi (CORE...				
	Q: Levi Bauer Sent Sat Mar 30, 2024 at 09:38 am CDT 83613-3 2.3L2 - calls for provide remotes and all wiring. Need verification on remote quantities (per door)? Intense is to provide mechanical installation of doors ONLY, No Electrical. All electrical include low voltage and this work by ELECTRICIAN. Please confirm or present an alternate consideration for start/stop points between trades.													
91	Substitution Request - Security Automation	Closed		None	Springer, Amanda ...	03/26/2024	Levi Bauer	03/31/2024	04/07/24					
	Q: Levi Bauer Sent Tue Mar 26, 2024 at 08:27 am CDT Please see attached substitution request submitted on behalf of Security Automation Systems S2 Substitution.pdf Hoffman Substitution.pdf Cyber Security Insurance _ SAS.pdf Qualifications.docx													
	A: Amanda Springer (Klingner & Associates, P.C) Responded Fri Mar 29, 2024 at 10:35 am CDT Approved in Addendum 3													
90	Vesda System and Duct Decectors	Closed		None	Springer, Amanda ...	03/25/2024	Levi Bauer	03/30/2024	04/07/24					
	Q: Levi Brooke Sent Fri Mar 22, 2024 at 11:12 am CDT Is the FP contractor to supply the Vesda System and Duct Detectors plus wiring as noted in FP notes?													
	A: Levi Bauer (CORE Construction - Peoria) Responded Sun Apr 7, 2024 at 01:52 pm CDT VESDA system complete including any necessary sample piping shall be provided by fire alarm vendor via electrical bid package.													

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	Mechanical bid package to provide all backends/adapters as necessary to tie-in dampers to system if required.													
	A: Amanda Springer (Klingner & Associates, P.C) Responded Fri Mar 29, 2024 at 10:35 am CDT CLARIFY: Duct Detectors and VESDA system are part of the fire alarm system. They are required to be installed. The engineer believes these would be provided/installed by the fire protection/fire alarm subcontractor. Scope assignment is the responsibility of the Construction Manager. Contractors shall coordinate scope assignment with the Construction Manager. (Addendum 3)													
89	Precast Panel FInish	Closed		None	Springer, Amanda ...	03/25/2024	Levi Bauer	03/30/2024	04/07/24					
	Q: Levi Brooke Sent Fri Mar 22, 2024 at 09:20 am CDT There are multiple walls called out with a sandblast finish on both sides of the panels. This is an untypical detail as both sides will still not look the same. (Down in form vs top in form faces). Is it the architect's intent for both sides to look exactly the same? Will we be the exposed final finish on the interior of the building?													
	A: Amanda Springer (Klingner & Associates, P.C) Responded Fri Mar 29, 2024 at 10:37 am CDT See Architect response for RFI 68													
88	Water Management System	Open		None	Springer, Amanda ...	03/25/2024	Levi Bauer	03/30/2024		Bauer, Levi (CORE...				
	Q: Levi Brooke Sent Fri Mar 22, 2024 at 09:17 am CDT The written specs (224600-4 thru 8) mention a water management system but the fixtures specified on the schedule are specified with manual hot and cold metering valves which will not work with a Water Management system. The FFD is the only fixture that is specified with an electronic valve that would be compatible with the Water Management system (CVC's). Is a water management system required for Cu-1,2,3, SV-2 and SV-3 and FFC?													
	A: Amanda Springer (Klingner & Associates, P.C) Responded Mon Apr 8, 2024 at 07:32 am CDT Answered in Addendum 4													
87	C8 Flange	Closed		None	Springer, Amanda ...	03/25/2024	Levi Bauer	03/30/2024	04/07/24					
	Q: Levi Brooke Sent Fri Mar 22, 2024 at 09:15 am CDT Also in detail 7/S401 at the bottom of the detail it shows that the underside of the C8 flange could be flush with the bottom of the deck Just wanted to bring up that the bottom of the deck will not be flush with the bottom of the C8 (see sketch I drew below detail 7) as long as the deck is to extend 'into' the C8 If it had to be flush the deck will have to stop at the edge of the flange and maybe a PL added (by EOR) so that C8 can be mounted to the top of the deck unless C8 can be put attached into a form when concrete is poured ? WSS Scan_20240321_172004.pdf													
	A: Levi Bauer (CORE Construction - Peoria) Responded Sun Apr 7, 2024 at 01:38 pm CDT Pick proof caulking to be provided by General Trades via sealant provider.													
	A: Amanda Springer (Klingner & Associates, P.C) Responded Fri Mar 29, 2024 at 10:38 am CDT CLARIFY: The metal deck may bear on the bottom flange of the C8. Any gap will need to be filled flush to the end of the C8 flange with pick proof caulking. At the slab edge at the C8 the total thickness of the slab on metal deck may be 7 1/2" thick. (ADD 3)													
86	HSS Framing	Closed		None	Bauer, Levi (CORE...	03/25/2024	Levi Bauer	03/30/2024	04/07/24					
	Q: Levi Brooke Sent Fri Mar 22, 2024 at 09:14 am CDT Steel HSS 2 X 2 framing is shown on detail 7/S401 Detail A10/A530 shows additional 3/4" X 3/4" vert bars between the HSS 2 X 2 I assume that we would need to include the 3/4" bars but just want to confirm that they are not part of the detention equipment scope ?													

#	Subject	Status	Responsible Contractor	Received From	Assignee	Date Initiated	RFI Manager	Due Date	Closed Date	Ball In Court	Location	Schedule Impact	Cost Code	Cost Impact
	WSS Scan_20240321_172004.pdf													
	A: Levi Bauer (CORE Construction - Peoria) Responded Sun Apr 7, 2024 at 01:36 pm CDT Confirmed, steel provide via general trades bid package shall provide all mezzanine guardrail components shown on S401/7 and A530/A10.													
85	Rail Bends	Closed		None	Springer, Amanda ...	03/25/2024	Levi Bauer	03/30/2024	04/07/24					
	Q: Levi Brooke Sent Fri Mar 22, 2024 at 09:12 am CDT On A5/A530 the detail for the front of the bent checker PL tread shows a return bend at the bottom (circled in orange on attached) Please confirm if the return bend can be eliminated so that front of nosing will be similar to back of tread except it will not be vertical ? The return bend seems to me to leave sort of a 'shelf' where something could be hidden which from what I have seen in other jails is something to be avoided ? WSS Scan_20240321_184427.pdf													
	A: Amanda Springer (Klingner & Associates, P.C) Responded Fri Mar 29, 2024 at 10:38 am CDT CLARIFY: Stair tread to be built as detailed in A5/A530 and 3/S401. Front of tread to be angled (ADD 3)													
84	Rails	Closed		None	Springer, Amanda ...	03/25/2024	Levi Bauer	03/30/2024	04/07/24					
	Q: Levi Brooke Sent Fri Mar 22, 2024 at 09:11 am CDT Rails shown on A400 & A431 show the typical 2 line rail with pickets between But on A530 they do not show the pickets going directly to the stringer (I highlighted in yellow where the missing bottom HSS 2 X 2 would go) Please confirm that we should figure a 2 line rail w/ picket infill w/ only the main posts being field welded to the stringers ? WSS Scan_20240321_184427.pdf													
	A: Amanda Springer (Klingner & Associates, P.C) Responded Fri Mar 29, 2024 at 10:38 am CDT CLARIFY: Build stair railing as detailed in A5 and A7/A530 and structural details 1, 3 and 4/S401. No secondary 2x2 tube steel. The larger details supersede the overall building sections. (ADD 3)													
83	Asphalt Mix Design	Closed		None	Springer, Amanda ...	03/25/2024	Levi Bauer	03/30/2024	04/07/24					
	Q: Levi Brooke Sent Fri Mar 22, 2024 at 09:08 am CDT I've attached the details. Will this mix be acceptable or does it have to be a N50 N70 Mix Design.pdf													
	A: Amanda Springer (Klingner & Associates, P.C) Responded Fri Mar 29, 2024 at 10:37 am CDT Clarify: N70 mix design is NOT an acceptable substitution for N50 mix design. (Addendum 3)													
82	Interior Bollards	Closed		None	Bauer, Levi (CORE...	03/25/2024	Levi Bauer	03/30/2024	03/25/24					
	Q: Levi Brooke Sent Fri Mar 22, 2024 at 09:04 am CDT I found a detail for interior bollards per A8/A531 We were not able to locate any interior bollards yet WSS Scan_20240321_182514.pdf													
	A: Levi Bauer (CORE Construction - Peoria) Responded Mon Mar 25, 2024 at 04:13 pm CDT Refer to A131 keynote 9 and A131 A7 keynote 9. These appear to be located at the inmate showers under the mezzanines (SA1 and SF1)													
81	Bollard Responsibility	Closed		None	Bauer, Levi (CORE...	03/25/2024	Levi Bauer	03/30/2024	04/07/24					
	Q: Levi Brooke Sent Fri Mar 22, 2024 at 09:02 am CDT													

#	Subject	Status	Responsible Contractor	Received From	Assignee	Date Initiated	RFI Manager	Due Date	Closed Date	Ball In Court	Location	Schedule Impact	Cost Code	Cost Impact
	Per scope we are to include bollards But per Civil plans C112 & C110 they are a buy out item from Chem Tube (see attached) I think made of plastic ? Please confirm that the 'bollards' would then just be by concrete contractor WSS Scan_20240321_182514.pdf													
	A: Levi Bauer (CORE Construction - Peoria) Responded Sun Apr 7, 2024 at 01:28 pm CDT Bollards to be furnished and installed by site concrete bid package. Bid packages will be revised.													
80	Controls for RTUs	Closed		None	Springer, Amanda ...	03/21/2024	Levi Bauer	03/26/2024	04/07/24					
	Q: Levi Bauer Sent Thu Mar 21, 2024 at 03:08 pm CDT I have the following RFI question pertaining to the controls for this project: RTU's 1,2,3,& ERV1 are specified to have packaged controls. Since these are part of the smoke control sequence will these controllers be UL-864 listed for code compliance?													
	A: Amanda Springer (Klingner & Associates, P.C) Responded Fri Mar 29, 2024 at 10:39 am CDT CLARIFY: RTU's 1,2,3,& ERV1 are specified to have packaged controls. Since this equipment is part of the smoke control sequence, these controllers shall be UL-864 listed for code compliance. (ADD 3)													
79	Precast Questions	Closed		None	Springer, Amanda ...	03/21/2024	Levi Bauer	03/26/2024	04/07/24					
	Q: Levi Bauer Sent Thu Mar 21, 2024 at 01:32 pm CDT **Specification 03-4500** **Precast units General** Section 2.2 – B This section references the PCI Color and Texture Guide to match sample indicated. There is not a plate number listed. **Concrete Materials** Section 2.8 – C Reference is made to a sample in office of Architect. Is this sample available for viewing? Is there a mix design available? Who made this sample? **Form Liners** Reference is made to form liner Drawings show exterior finish imparted by form liner. Is there a specific manufacturer and a model number?													
	A: Levi Bauer (CORE Construction - Peoria) Responded Sun Apr 7, 2024 at 01:24 pm CDT Refer to RFI responses 69, 64, and 14													
	A: Amanda Springer (Klingner & Associates, P.C) Responded Fri Mar 29, 2024 at 10:39 am CDT ADD: Sheet A444 Precast Concrete Panel Patterns. The pattern shall be created using wood boards nailed down in the form bed. (ADD 3)													
78	Precast Hauling Permit	Closed		None	Bauer, Levi (CORE...	03/21/2024	Levi Bauer	03/26/2024	04/08/24					
	Q: Levi Bauer Sent Thu Mar 21, 2024 at 01:28 pm CDT Precast SCOPE OF WORK Item E We are to include all hauling permits ……													

#	Subject	Status	Responsible Contractor	Received From	Assignee	Date Initiated	RFI Manager	Due Date	Closed Date	Ball In Court	Location	Schedule Impact	Cost Code	Cost Impact
	Access to construction site for delivery of precast panels will be on 950th Rd. Is this a city street or a county road and are there over size permits required and at what cost?													
	A: Levi Bauer (CORE Construction - Peoria) Responded Mon Apr 8, 2024 at 08:44 am CDT The west portion of 950th rd is a county road where the deliveries would be coming in Per direction from the county, the county does not require any permits outside of the required state permits. All bid packages shall include all necessary permitting and associated fees.													
77	drywall grid in lieu of stud framing for drywall ceilings.	Closed		None	Springer, Amanda ...	03/21/2024	Levi Bauer	03/26/2024	04/07/24					
	Q: Levi Bauer Sent Thu Mar 21, 2024 at 01:08 pm CDT Is it acceptable to request the use of drywall grid in place of stud framing for all GB ceiling systems where applicably noted on the RCP (A200)? Bulkheads would remain stud framing as detailed													
	A: Amanda Springer (Klingner & Associates, P.C) Responded Fri Mar 29, 2024 at 10:45 am CDT REVISE: Gypsum board ceiling systems can use a drywall grid in place of stud framing where applicably noted and detailed. The reflected ceiling plan details on sheet A200 will remain unchanged to show intent/basis of design. All bulkheads and soffits shall be stud framed as shown in the details. (ADD 3)													
76	Payment for stored materials	Closed		None	Bauer, Levi (CORE...	03/21/2024	Levi Bauer	03/26/2024	04/07/24					
	Q: Levi Bauer Sent Thu Mar 21, 2024 at 12:47 pm CDT 1.6 – Please confirm payment for Stored Materials.													
	A: Levi Bauer (CORE Construction - Peoria) Responded Sun Apr 7, 2024 at 01:18 pm CDT Confirmed provided they are billed in accordance with 01 2900 - payment procedures. All trade packages shall coordinate with the CM for the timely procurement of materials and avoidance of unnecessary stored material charges.													
75	Liquidated Damages	Closed		None	Bauer, Levi (CORE...	03/21/2024	Levi Bauer	03/26/2024	04/07/24					
	Q: Levi Bauer Sent Thu Mar 21, 2024 at 12:47 pm CDT Standard Subcontract Agreement references Liquidated Damages, but makes not mention if there any and what they may be or if there is a cap? Please advise.													
	A: Levi Bauer (CORE Construction - Peoria) Responded Sun Apr 7, 2024 at 01:11 pm CDT Per AIA A133-2019 SFA 6.1.6 provided with addendum 2, Liquidated Damages are not applicable,													
74	Precast panel finish	Closed		None	Springer, Amanda ...	03/21/2024	Levi Bauer	03/26/2024	04/07/24					
	Q: Levi Bauer Sent Thu Mar 21, 2024 at 12:46 pm CDT A440 refers to several different types of panels, the majority of which are indicating an architectural sandblast finish (F-1) on BOTH sides of the panel. Without getting into each manufacturer's means and methods, this request is extremely costly and not common to the industry, especially if the interior is painted per Note 4 on A440-A442. The face mix (exterior wythe) is typically different than the back mix (interior wythe), which will result in 2 different actual finishes between the exterior and interior wythes. A smooth-trowel finish (F-2 or F-3) is typical for the interior finish. Please advise the actual intent of Panel Types A, B, D, E and F.													
	A: Amanda Springer (Klingner & Associates, P.C) Responded Fri Mar 29, 2024 at 10:44 am CDT REVISE: The Precast Finish Legend shall be revised as follows. All precast panels on the exterior of the building shall have the following surface finishes. The exterior side of the precast panel will have a steel form finish with a light sandblast. The interior side will have a smooth steel trowel finish. All precast panels located within the building detention area shall have a steel form finish with a light sandblast on one side and a smooth steel trowel finish on the other side. The surface finishes of the two sides of the interior panels do not need to match. (ADD 3)													

#	Subject	Status	Responsible Contractor	Received From	Assignee	Date Initiated	RFI Manager	Due Date	Closed Date	Ball In Court	Location	Schedule Impact	Cost Code	Cost Impact
73	Precast Bid Package Questions	Open		None	Bauer, Levi (CORE...	03/21/2024	Levi Bauer	03/26/2024		Bauer, Levi (CORE...				

Q: Levi Bauer Sent Thu Mar 21, 2024 at 12:45 pm CDT
• 5i.) This item refers to including all of these items, but are we to include the “coordination of” all of these items with these trades? We feel those words are missing from the request.
• 5p.) How many electrical conduit, boxes, fixtures and devices is the precast supplier to include?
• 5r.) How many embedded items are there to be installed by the precast supplier?
• 5x.) How many additional months of brace rental besides the typical one month is to be included with the bid?
• 5nn.) With the Site Logistics showing crane and truck pathway around the entire building, what additional crane pads will be needed? Will there be access provided by others and allowed inside the footprint to erect the “common” wall between the jail and sheriff’s office?

A: Levi Bauer (CORE Construction - Peoria) Responded Mon Apr 8, 2024 at 08:21 am CDT
5nn.) Access into the footprint of the building will be allowed to erect the interior precast panels. Access points are shown on the site logistics plan. The precast bidder will be responsible for providing, installing, and removing any additional crane pads.

A: Levi Bauer (CORE Construction - Peoria) Responded Sun Apr 7, 2024 at 01:08 pm CDT
5i.) correct, this is intended to be coordination of those items.
5p.) refer to RFI 70, CORE is still looking into this.
5r.) precast supplier shall review the structural drawings and determine their own quantity survey.
5x.) Refer to schedule (00 31 13a) included with addendum 1 for sequencing and activity durations. Temporary bracing is required until permanent connections/support are completed including completion of erection structural steel.
5nn.) CORE is reviewing this

#	Subject	Status	Responsible Contractor	Received From	Assignee	Date Initiated	RFI Manager	Due Date	Closed Date	Ball In Court	Location	Schedule Impact	Cost Code	Cost Impact
72	Security Electronics Responsibility	Open		None	Bauer, Levi (CORE...	03/21/2024	Levi Bauer	03/26/2024		Bauer, Levi (CORE...				

Q: Levi Bauer Sent Thu Mar 21, 2024 at 12:37 pm CDT
Section 011200, Letter L, #5, letter “a” states that (the electrical contractor) “This contractor shall furnish and install power, new service, lighting, panels, outlets, devices, feeders, relay panels, inverters, security, and data rough-in, feeders, site lighting, lighting controls, wire mold, power and final connections to devices and equipment supplied by others for a complete electrical scope of work”. Does this mean Bid Package #15 is responsible for the installation of all security electronics system equipment?

#	Subject	Status	Responsible Contractor	Received From	Assignee	Date Initiated	RFI Manager	Due Date	Closed Date	Ball In Court	Location	Schedule Impact	Cost Code	Cost Impact
71	Fire alarm responsibility	Closed		None	Bauer, Levi (CORE...	03/21/2024	Levi Bauer	03/26/2024	04/07/24					

Q: Levi Bauer Sent Thu Mar 21, 2024 at 12:36 pm CDT
Section 011200, Letter L, #2, letter “v” lists that the Division 11 bid package is to include section 284600 (Fire Detection and Alarm), but 011200, Letter P, #5, letter “f” states that the Electrical contractor (Bid Package 15) is to “provide a complete fire alarm system……” Which is correct?

A: Levi Bauer (CORE Construction - Peoria) Responded Sun Apr 7, 2024 at 12:50 pm CDT
All fire alarm work shall be provided by the electrical bid package.
Bid packages shall be corrected.

#	Subject	Status	Responsible Contractor	Received From	Assignee	Date Initiated	RFI Manager	Due Date	Closed Date	Ball In Court	Location	Schedule Impact	Cost Code	Cost Impact
70	Conduit/Blocking in Precast	Closed		None	Springer, Amanda ... Bauer, Levi (CORE...	03/21/2024	Levi Bauer	03/26/2024	04/08/24					

#	Subject	Status	Responsible Contractor	Received From	Assignee	Date Initiated	RFI Manager	Due Date	Closed Date	Ball In Court	Location	Schedule Impact	Cost Code	Cost Impact

Q: Levi Bauer Sent Thu Mar 21, 2024 at 12:30 pm CDT
[question from precast bidder] Are the electrical connections cast-in or field mounted? We prefer to have them field mounted, but if they need to be cast-in we can include price for that. Is there a quantity that we can put in our bid?
NOTE: Electrician will need to be at our plant during production to assist in electric connection location, but Electricians will not be allowed on our production beds, for Liability reasons. All cast-in electrical connections will need to be properly marked and delivered to the our plant, prior to start of production.

E12/A800 and similar. Cast-in wood blocking. we do not recommend this detail, as it promotes warping and cracking. Do we need to include pricing for cast-in wood blocking in our proposal?

A: Levi Bauer (CORE Construction - Peoria) Responded Mon Apr 8, 2024 at 11:06 am CDT
The electrician bid package shall include furnishing all cast-in electrical components and installation at the precast providers plant. This has not been an issue for any precast project CORE has provided with cast-in electrical components via other precast providers.
If the precast provider takes exception to the electrician being on their production beds, a credit will be requested from the electrical bid package and an add provided to the precast provider prior to the commencement of work.

The electrical bid package shall note all electrical boxes on the precast shop drawings.
The electrical bid package shall have all cast-in electrical fixtures prepared in advance before panel production. The electrical bid package can put the fixtures together in their shop and bring them to the plant for production, or assemble them at the plant at their option.
The electrical bid package shall ensure all electrical boxes are completely duct taped and marked on the tape each piece# that they go into.
The electrical bid package shall include 5% extra material on hand in during production in the event that during casting some changes have to be made to avoid any interference with other items in the panel.
The electrical bid package shall be at the precast plant during production of the panels to inspect them and make sure that the electrical boxes are located correctly in the panel.
All electrical materials shall be delivered to the precast plant a couple of days before the production by the electrical bid package.

Precast bid package shall furnish and install all cast-in wood blocking as shown.

A: Amanda Springer (Klingner & Associates, P.C) Responded Fri Mar 29, 2024 at 10:44 am CDT
CLARIFY: The electrical rough-in's shall be cast in the precast panels, particularly for items on the exterior of the building and in the jail area. Items in the mechanical/electrical utility spaces may be surface mounted. The Precast Panel manufacturer shall coordinate with the electrical contractor. (ADD 3)

#	Subject	Status	Responsible Contractor	Received From	Assignee	Date Initiated	RFI Manager	Due Date	Closed Date	Ball In Court	Location	Schedule Impact	Cost Code	Cost Impact
69	Form Liner Spec	Closed		None	Springer, Amanda ...	03/21/2024	Levi Bauer	03/26/2024	04/07/24					

Q: Levi Bauer Sent Thu Mar 21, 2024 at 12:29 pm CDT
Is there a spec for the type of form liner on the precast panels? I did not see one.

A: Levi Bauer (CORE Construction - Peoria) Responded Sun Apr 7, 2024 at 12:37 pm CDT
precast bid package shall provide all framing, boards, etc. as required to provide specified panel patterns.
Bid packages to be revised to this affect

A: Amanda Springer (Klingner & Associates, P.C) Responded Fri Mar 29, 2024 at 10:44 am CDT
ADD: Sheet A444 Precast Concrete Panel Patterns. The pattern shall be created using wood boards nailed down in the form bed (ADD 3)

#	Subject	Status	Responsible Contractor	Received From	Assignee	Date Initiated	RFI Manager	Due Date	Closed Date	Ball In Court	Location	Schedule Impact	Cost Code	Cost Impact
68	Precast finish for exterior precast panels	Closed		None	Springer, Amanda ...	03/21/2024	Levi Bauer	03/26/2024	04/07/24					

Q: Levi Bauer Sent Thu Mar 21, 2024 at 12:28 pm CDT
F6/A440. Steel trowel finish on both sides. Panel exterior will have steel form finish and panel Interior will have Steel trowel finish. We cannot steel trowel the down side (Exterior), as we have to pour it on something.

A: Amanda Springer (Klingner & Associates, P.C) Responded Fri Mar 29, 2024 at 10:58 am CDT
REVISE: All precast panels on the exterior of the building shall the following surface finishes. The exterior side of the precast panel will have a steel form finish with a light sandblast (F-1 as defined in the Precast Finish Legend/A440).
REVISE: The panels located entirely within the building interior will have a light sandblast finish (F-1 as defined in the Precast Finish Legend/A440) on one side. The other side of interior precast panels shall have a smooth steel trowel finish (F-2 as Defined in the Precast FInish Legend/A440) on the other side. ADD: All precast panel surfaces within the detention areas and areas where inmates have access shall have all holes and voids larger than 1/8" filled solid to create a smooth surface free of pitting.

Original Response is for RFI 66.

#	Subject	Status	Responsible Contractor	Received From	Assignee	Date Initiated	RFI Manager	Due Date	Closed Date	Ball In Court	Location	Schedule Impact	Cost Code	Cost Impact
	A: Amanda Springer (Klingner & Associates, P.C) Responded Fri Mar 29, 2024 at 10:43 am CDT CLARIFY: The partition designations are on sheet A101. For Partition Types, refer to sheet G130. The exterior precast panels are 12" thick with continuous insulation. The precast panels located entirely within the building have either a solid 8" thickness (Partition Type P8) and 10" thickness with continuus insulation (Partition Type P10). P10 is found around the Exercise Room. Details D4 and F4/A850 have been updated with revised notes. (ADD 3)													
67	Pick Proof Caulk	Open		None	Springer, Amanda ... Bauer, Levi (CORE...	03/21/2024	Levi Bauer	03/26/2024		Bauer, Levi (CORE...				
	Q: Levi Bauer Sent Thu Mar 21, 2024 at 12:26 pm CDT Precast Panel Type P8 and P10 on G130 calls for “Pick Proof Caulk” on Inmate side at top of panel. Is that also required for the vertical panel to panel joints? Is there a spec for that? I asked one of my suppliers and he said Sikadur 51 NS.													
	A: Levi Bauer (CORE Construction - Peoria) Responded Thu Mar 21, 2024 at 12:27 pm CDT Pick proof caulk shall be provided by general trades contractor. Klinger to clarify specification and confirm vertical panel to panel joints require pick proof caulk.													
66	Precast wall sizes	Closed		None	Springer, Amanda ...	03/21/2024	Levi Bauer	03/26/2024	04/04/24					
	Q: Levi Bauer Sent Thu Mar 21, 2024 at 12:25 pm CDT Drawings show 8” solid Interior walls, 10” insulated Interior walls, and 12” insulated exterior walls. Is that correct? D4/A850 looks like a 10” solid panel.													
	A: Levi Bauer (CORE Construction - Peoria) Responded Thu Apr 4, 2024 at 04:47 pm CDT Refer to Addendum 3													
	A: Amanda Springer (Klingner & Associates, P.C) Responded Fri Mar 29, 2024 at 10:51 am CDT CLARIFY: The partition designations are on sheet A101. For Partition Types, refer to sheet G130. The exterior precast panels are 12" thick with continuous insulation. The precast panels located entirely within the building have either a solid 8" thickness (Partition Type P8) and 10" thickness with continuus insulation (Partition Type P10). P10 is found around the Exercise Room. Details D4 and F4/A850 have been updated with revised notes.													
65	Precast Continious Insulation	Closed		None	Springer, Amanda ...	03/21/2024	Levi Bauer	03/26/2024	04/04/24					
	Q: Levi Bauer Sent Thu Mar 21, 2024 at 12:24 pm CDT [regarding precast] Continuous insulation. We typically would provide 6” solid at top and bottom of panel and around all openings. Is that acceptable or do we need to price in the continuous insulation?													
	A: Amanda Springer (Klingner & Associates, P.C) Responded Fri Mar 29, 2024 at 10:43 am CDT CLARIFY: The precast concrete panel manufacturere shall provide continuous insulation in precast walls as detailed in wall sections and to follow the 2018 energy code. (ADD 3)													
64	Precast Mockup/sample	Open		None	Springer, Amanda ...	03/21/2024	Levi Bauer	03/26/2024		Bauer, Levi (CORE...				
	Q: Levi Bauer Sent Thu Mar 21, 2024 at 12:22 pm CDT Precast Spec asks for (2) 4’-0” x 4’-0” samples and (2) 6’-0” x 5’-0” mock-ups, and disposal of all four when the job is complete. Do you require both samples and mockups?													
	A: Amanda Springer (Klingner & Associates, P.C) Responded Mon Apr 8, 2024 at 07:38 am CDT Answered in Addendum 4													
63	Precast embed material	Closed		None	Springer, Amanda ...	03/21/2024	Levi Bauer	03/26/2024	04/04/24					
	Q: Levi Bauer Sent Thu Mar 21, 2024 at 12:22 pm CDT I see notes in the precast spec and on the drawings that refer to both stainless steel embeds and galvanized embeds. Which one is required?													
	A: Amanda Springer (Klingner & Associates, P.C) Responded Fri Mar 29, 2024 at 10:42 am CDT													

#	Subject	Status	Responsible Contractor	Received From	Assignee	Date Initiated	RFI Manager	Due Date	Closed Date	Ball In Court	Location	Schedule Impact	Cost Code	Cost Impact
	REVISE: All precast embeds shown in details and specifications shall be galvanized. (ADD 3)													
62	precast interior panel finish	Closed		None	Springer, Amanda ...	03/21/2024	Levi Bauer	03/26/2024	04/04/24					
	Q: Levi Bauer Sent Thu Mar 21, 2024 at 12:21 pm CDT I see notes that show some of the Interior precast panels will be sandblast finish on both sides. We can do this, but they will not look the same, as one side is form finish and one side is trowel finish. Is this required?													
	A: Amanda Springer (Klingner & Associates, P.C) Responded Fri Mar 29, 2024 at 10:42 am CDT See response to RFI 68													
61	Fire/Smoke Dampers	Closed		None	Springer, Amanda ...	03/21/2024	Levi Bauer	03/26/2024	04/04/24					
	Q: Levi Bauer Sent Thu Mar 21, 2024 at 12:15 pm CDT Situation: Sheets M101.A & M101.B show approximately (20) fire-smoke dampers and (12) smoke dampers in Area A & B. I don't see any area smoke detectors or duct smoke detectors associated with the dampers on FP-101. Question: Are duct smoke detectors to be located within 5'-0" of all fire-smoke and smoke dampers?													
	A: Levi Bauer (CORE Construction - Peoria) Responded Thu Apr 4, 2024 at 04:22 pm CDT VESDA system complete including any necessary sample piping shall be provided by fire alarm vendor via electrical bid package. Mechanical bid package to provide all backends/adapters as necessary to tie-in dampers to system if required.													
	A: Amanda Springer (Klingner & Associates, P.C) Responded Fri Mar 29, 2024 at 10:41 am CDT CLARIFY: In Area A & B, the fire-smoke dampers and smoke dampers are controlled by the VESDA activated smoke control system and do not require smoke detectors or duct smoke detectors associated with these dampers. CLARIFY: Areas of the building where the VESDA activated smoke control system is not sampling, the contractor shall provide area smoke detectors and duct smoke detectors to be utilized and located within 5’ of the dampers they serve. ADD 3													
60	Downspout Boot Detail	Closed		None	Springer, Amanda ...	03/20/2024	Levi Bauer	03/25/2024	04/04/24					
	Q: Levi Bauer Sent Wed Mar 20, 2024 at 05:29 pm CDT Can you provide a downspout boot detail? The only detail I'm able to locate is A430/A4 but there's no enlarged detail for the boot connection.													
	A: Levi Bauer (CORE Construction - Peoria) Responded Thu Apr 4, 2024 at 03:45 pm CDT The civil bid package shall provide the cast iron downspout boots and all storm pipe leading up to it. The roofing bid package shall provide downspouts and connect to the downspout boot.													
	A: Amanda Springer (Klingner & Associates, P.C) Responded Fri Mar 29, 2024 at 10:41 am CDT ADD: See clouded Revision #3 in Addendum #3 on Sheet C125 for added downspout boot details. (ADD 3)													
59	Sallyport pedestal mounting	Closed		None	Springer, Amanda ...	03/20/2024	Levi Bauer	03/25/2024	04/04/24					
	Q: Levi Bauer Sent Wed Mar 20, 2024 at 04:31 pm CDT Can you clarify what the mounting detail for the access control pedestals at the sallyports is? Are these just bolted to the sidewalk or do they require a concrete foundation?													

#	Subject	Status	Responsible Contractor	Received From	Assignee	Date Initiated	RFI Manager	Due Date	Closed Date	Ball In Court	Location	Schedule Impact	Cost Code	Cost Impact
	A: Levi Bauer (CORE Construction - Peoria) Responded Thu Apr 4, 2024 at 03:38 pm CDT Site concrete bid package to provide pedestal foundation. Detention Equipment package shall provide and mount pedestal.													
	A: Amanda Springer (Klingner & Associates, P.C) Responded Fri Mar 29, 2024 at 10:41 am CDT ADD: Detail #9, pedestal detail for the access control pedestal at the vehicle sally port.(ADD 3)													
58	Power to Access Control Pedestals	Closed		None	Springer, Amanda ...	03/20/2024	Levi Bauer	03/25/2024	04/04/24					
	Q: Levi Bauer Sent Wed Mar 20, 2024 at 04:27 pm CDT Can you confirm power is required to the access control pedestals at the sally ports? No power appears to be noted on the electrical site plan E100													
	A: Amanda Springer (Klingner & Associates, P.C) Responded Fri Mar 29, 2024 at 10:40 am CDT CLARIFY: The access control pedestals at the vehicle sally port do not require a seperate power feed. The power for the camera comes through the Cat 5/6 cable. The intercom does not need power. (ADD 3)													
57	Concrete foundation for do not enter site signage	Closed		None	Springer, Amanda ...	03/20/2024	Levi Bauer	03/25/2024	04/04/24					
	Q: Levi Bauer Sent Wed Mar 20, 2024 at 04:24 pm CDT Is a concrete foundation or bollard required for the signs noted by site keynote 19 on C110 or is the post directly buried?													
	A: Amanda Springer (Klingner & Associates, P.C) Responded Fri Mar 29, 2024 at 10:40 am CDT CLARIFY: Signs denoted by keynote 19 on C110 shall be Metal Posts - Type B per Section 729 of the IDOT Standard Specifications for Road & Bridge Construction and driven to a depth of 4.0'. A concrete foundation and/or bollard will not be required. (ADD 3)													
56	Temporary Partitions	Closed		None	Springer, Amanda ...	03/20/2024	Levi Bauer	03/25/2024	04/04/24					
	Q: Levi Bauer Sent Wed Mar 20, 2024 at 10:41 am CDT Can you confirm G130 partition Type T rated and unrated is not applicable for this project?													
	A: Amanda Springer (Klingner & Associates, P.C) Responded Fri Mar 29, 2024 at 10:39 am CDT REVISE: On sheet G130, Temporary partitions, Type T, are not used on this project. Omit from project (ADD 3)													
55	Substitution Request - Elite Storage Products - Lockers	Closed		None	Springer, Amanda ...	03/19/2024	Levi Bauer	03/24/2024	04/04/24					
	Q: Levi Brooke Sent Tue Mar 19, 2024 at 03:33 pm CDT Please see attached substitution request form submitted on behalf of Elite Storage Products Substitution Request - Elite Storage Products - Lockers.pdf													
	A: Amanda Springer (Klingner & Associates, P.C) Responded Fri Mar 29, 2024 at 10:53 am CDT ADD 2 approved													
	A: Amanda Springer (Klingner & Associates, P.C) Responded Thu Mar 21, 2024 at 10:54 am CDT ADD: Elite Storage Products is an Architect approved manufacturer (ADDENDUM 2)													
54	addendum 1, page 7, paragraph 2.21 Design Professional Compensation	Closed		None	Bauer, Levi (CORE...	03/19/2024	Levi Bauer	03/24/2024	04/04/24					
	Q: Levi Brooke Sent Tue Mar 19, 2024 at 02:26 pm CDT In addendum 1, page 7, paragraph 2.21 Design Professional Compensation. Can you comment more on this language and when you think RFI's, submitalls, and inspections are considered to be "multiple" or costs charged back to													

#	Subject	Status	Responsible Contractor	Received From	Assignee	Date Initiated	RFI Manager	Due Date	Closed Date	Ball In Court	Location	Schedule Impact	Cost Code	Cost Impact
	the sub-contractor or contractor ?													
	Levi Bauer (CORE Construction - Peoria) Responded Thu Apr 4, 2024 at 03:26 pm CDT It appears this question is in regard to the sample subcontract included with addendum 1 (page 17 of the addendum 10 CORE assumes a basic level of competency and industry standard of care from our trade partners when they send in submittals, RFIs, or complete items prior to inspections. It is assumed that (sub)contractors will review the contract documents for pertinent information prior to submitting RFIs and they will provide submittals in accordance with the procedures listed section 01 33 00 Submittal Procedure CORE's intent is to provide support and training as required to comply with the required procedures. Willful negligence or the unwilful inability to correct these issues will result in back charges and will be determined at the sole discretion of the Construction Manager.													
53	Water/Sewer Permits	Closed		None	Bauer, Levi (CORE...	03/19/2024	Levi Bauer	03/24/2024	04/04/24					
	Q: Levi Brooke Sent Tue Mar 19, 2024 at 02:25 pm CDT What permits or tap fees are required for Edgar County with regards to Sewer, Water and Storm Drainage ?													
	A: Levi Bauer (CORE Construction - Peoria) Responded Thu Apr 4, 2024 at 04:41 pm CDT Per direction from the city of Paris, sanitary, water and storm connections have to be made by city crews and they charge charge T&M An allowance will be added to the general trade package to address these connections. Civil bid package bidders shall provide all other trade specific permits and coordinate with the authorities having jurisdiction.													
52	Ground Water	Closed		None	Bauer, Levi (CORE...	03/19/2024	Levi Bauer	03/24/2024	04/04/24					
	Q: Levi Brooke Sent Tue Mar 19, 2024 at 02:23 pm CDT In the Geotech report there are discussions regarding ground water. On 6.0, Ground water observations, there is some language that dewatering plans MAY be needed for excavations below 5'. Normally we include simple sump pumps to pump out rain water from excavations.. Do you think the geotech directs us to provide more than that ? Such as well points, underground pumping, etc. ?													
	A: Levi Bauer (CORE Construction - Peoria) Responded Thu Apr 4, 2024 at 03:10 pm CDT Well points and underground pumping will not be required. Refer to RFI response 41.													
51	As Built Requirements	Closed		None	Bauer, Levi (CORE...	03/19/2024	Levi Bauer	03/24/2024	04/04/24					
	Q: Levi Brooke Sent Tue Mar 19, 2024 at 02:21 pm CDT Regarding the weekly and monthly requirement to provide "as builts", can this just be a had written notes on site drawings or do you want more ?													
	A: Levi Bauer (CORE Construction - Peoria) Responded Thu Apr 4, 2024 at 03:09 pm CDT Refer to section 01 78 39 Project Record Documents for requirements													
50	Bid Extension	Closed		None	Bauer, Levi (CORE...	03/19/2024	Levi Bauer	03/24/2024	04/04/24					
	Q: Levi Brooke Sent Tue Mar 19, 2024 at 02:19 pm CDT CEI has requested a bid extension from 4/2 to 4/5 since Easter is the weekend before and most of our estimators will be gone for the holiday. Please advise if this extension is approved.													
	A: Levi Bauer (CORE Construction - Peoria) Responded Thu Apr 4, 2024 at 03:04 pm CDT Bid date was moved to 4/9 via addendum 3.													
49	Planting Soil location	Closed		None	Springer, Amanda ...	03/19/2024	Levi Bauer	03/24/2024	04/04/24					

#	Subject	Status	Responsible Contractor	Received From	Assignee	Date Initiated	RFI Manager	Due Date	Closed Date	Ball In Court	Location	Schedule Impact	Cost Code	Cost Impact
	Q: Levi Brooke Sent Tue Mar 19, 2024 at 02:15 pm CDT I'm guessing the planting soil is only that around trees and shrubs. Is that correct ?													
	A: Levi Bauer (CORE Construction - Peoria) Responded Thu Apr 4, 2024 at 03:02 pm CDT see RFI 48 response													
	A: Amanda Springer (Klingner & Associates, P.C) Responded Fri Mar 29, 2024 at 10:53 am CDT ADD 2													
	A: Amanda Springer (Klingner & Associates, P.C) Responded Thu Mar 21, 2024 at 10:51 am CDT CHANGE Details 1 &2/L501 planting soil mix note to to reference specification section 2.10 Planting Soil Mix on plan sheet L001. ADD note "The planting soil mix is only required around trees and shrubs." (ADDENDUM 2)													
48	Planting soil requirements	Closed		None	Springer, Amanda ...	03/19/2024	Levi Bauer	03/24/2024	04/04/24					
	Q: Levi Brooke Sent Tue Mar 19, 2024 at 02:11 pm CDT I noticed on the written specs for landscaping there is a requirement for planting soil. This is also mentioned on the landscape detail pages.. The detail page and the written spec page do not agree on the peat/topsoil ratio. Which one would you like to use ?													
	A: Levi Bauer (CORE Construction - Peoria) Responded Thu Apr 4, 2024 at 03:01 pm CDT Landscaper via general trades bidder shall over dig and provide all planting soil and remove excess spoils													
	A: Amanda Springer (Klingner & Associates, P.C) Responded Fri Mar 29, 2024 at 10:53 am CDT ADD 2													
	A: Amanda Springer (Klingner & Associates, P.C) Responded Thu Mar 21, 2024 at 10:52 am CDT CLARIFY: The planting soil mix shall be in accordance with Specification section 2.10 Planting Soil Mix on plan sheet L001. (ADDENDUM 2)													
47	Coring excavation to install aggregate base at walkways.	Closed		None	Bauer, Levi (CORE...	03/19/2024	Levi Bauer	03/24/2024	04/04/24					
	Q: Levi Brooke Sent Tue Mar 19, 2024 at 02:09 pm CDT On scope item 22: Coring excavation to install aggregate base at walkways. I'm not sure what you mean here. I think we would just install the aggregate base first, then the site concrete package would do the concrete work. Not sure where the coring comes in ?													
	A: Levi Bauer (CORE Construction - Peoria) Responded Thu Apr 4, 2024 at 02:58 pm CDT Coring refers to excavation for walks around lawn areas, typically the subgrade of lawn areas is higher than what's needed for the walks but the lawn area subgrade is just established with a scraper so you have to come back with a loader and "core" those areas out. The civil package is responsible for their own quantity survey and providing temporary roads. The civil bid package is responsible for establishing all subgrade elevations and providing aggregate base for walks. Provide all excavation necessary if lawn areas surrounding walks have a higher subgrade elevation than the subgrade at lawn areas.													
46	Division 28 Spec	Closed		None	Springer, Amanda ...	03/19/2024	Levi Bauer	03/24/2024	04/04/24					
	Q: Levi Brooke Sent Tue Mar 19, 2024 at 02:08 pm CDT In downloading and reviewing the project. There is NO DIVISION 28 Specifications for the Touchscreen Door Control System, Cameras, Video Management System, etc....only Fire alarm.													
	A: Amanda Springer (Klingner & Associates, P.C) Responded Fri Mar 29, 2024 at 10:55 am CDT ADD 2													

#	Subject	Status	Responsible Contractor	Received From	Assignee	Date Initiated	RFI Manager	Due Date	Closed Date	Ball In Court	Location	Schedule Impact	Cost Code	Cost Impact
	A: Amanda Springer (Klingner & Associates, P.C) Responded Thu Mar 21, 2024 at 10:52 am CDT See Addendum 2 for added sheets													
45	Dewatering Treatment	Closed		None	Bauer, Levi (CORE...	03/19/2024	Levi Bauer	03/24/2024	04/04/24					
	Q: Levi Brooke Sent Tue Mar 19, 2024 at 02:04 pm CDT When pumping water off site through an NOI permit, does the water have to be clean or treated in any way ?													
	A: Levi Bauer (CORE Construction - Peoria) Responded Thu Apr 4, 2024 at 02:49 pm CDT Dewatering activities must include appropriate controls as indicated in NPDES Permit ILR10 Refer to page 6 of the attached for additional information. Permit ILR10.pdf													
44	Protecting Graded Areas	Closed		None	Bauer, Levi (CORE...	03/19/2024	Levi Bauer	03/24/2024	04/04/24					
	Q: Levi Brooke Sent Tue Mar 19, 2024 at 02:04 pm CDT [regarding 312000 earthwork] 3.18 A & B - Protecting graded areas and reconstructing language. AGAIN, how much of this should be expect ? Can all of this be included through an allowance to be used as needed only ?													
	A: Levi Bauer (CORE Construction - Peoria) Responded Thu Apr 4, 2024 at 02:47 pm CDT Refer to RFI response 44, Damage to graded areas outside the temporary road areas shall be corrected at the expense of the trade package that incurred the damage.													
43	Damaged subgrade due to weather	Closed		None	Bauer, Levi (CORE...	03/19/2024	Levi Bauer	03/24/2024	04/04/24					
	Q: Levi Brooke Sent Tue Mar 19, 2024 at 02:03 pm CDT [regarding 312000 earthwork] 3.7 E. Reconstruct damaged subgrades caused by weather or others with NO additional compensation. How much and to what extent damage and weather should we expect ?													
	A: Levi Bauer (CORE Construction - Peoria) Responded Thu Apr 4, 2024 at 02:46 pm CDT Repair to damage subgrades will be addressed via the winter conditions and temporary road allowance. Temporary roads will be provided in most subgrade areas and will be needed for construction traffic. Refer to site logistics plan.													
42	Subgrade protection from damage	Closed		None	Bauer, Levi (CORE... Springer, Amanda ...	03/19/2024	Levi Bauer	03/24/2024	04/04/24					
	Q: Levi Brooke Sent Tue Mar 19, 2024 at 02:02 pm CDT [regarding 312000 earthwork] 3.2 C Protect subgrades from softening, undermining, washout and damage by rain or water. How do you do this ?													
	A: Amanda Springer (Klingner & Associates, P.C) Responded Fri Mar 29, 2024 at 10:56 am CDT ADD 2													
	A: Amanda Springer (Klingner & Associates, P.C) Responded Thu Mar 21, 2024 at 10:53 am CDT CLARIFY: Subgrades shall be protected using BMP's to help protect against undermining and washout damage in the event of a rain event. Excavation shall be maintained so that positive drainage is provided at all times.													

#	Subject	Status	Responsible Contractor	Received From	Assignee	Date Initiated	RFI Manager	Due Date	Closed Date	Ball In Court	Location	Schedule Impact	Cost Code	Cost Impact
	(ADDENDUM 2)													
41	Dewatering	Closed		None	Bauer, Levi (CORE... Bauer, Levi (CORE...	03/19/2024	Levi Bauer	03/24/2024	04/04/24					
	Q: Levi Brooke Sent Tue Mar 19, 2024 at 02:01 pm CDT [regarding 312000 earthwork] 3.2 Dewatering: We have no idea how much underground dewatering may be needed. This is a large expense with specialty contractors. Can these items be covered by an allowance as needed ?													
	A: Levi Bauer (CORE Construction - Peoria) Responded Thu Apr 4, 2024 at 02:42 pm CDT Major dewatering such as well points will not be required upon review of the geotechnical report. The civil bid package and all other bid packages shall provide dewatering of their excavations with a sump pump.													
40	Subgrade winter protection	Closed		None	Springer, Amanda ...	03/19/2024	Levi Bauer	03/24/2024	04/04/24					
	Q: Levi Brooke Sent Tue Mar 19, 2024 at 02:00 pm CDT On 312000-3 3.1 C. Protect subgrades from freezing temps... We have 6-7 acres on this site. Not feasible to do this really													
	A: Levi Bauer (CORE Construction - Peoria) Responded Thu Apr 4, 2024 at 02:39 pm CDT Costs associated protecting the subgrade from freezing will be addressed via the winter conditions allowance in the general trades.													
	A: Amanda Springer (Klingner & Associates, P.C) Responded Fri Mar 29, 2024 at 10:56 am CDT ADD 2													
	A: Amanda Springer (Klingner & Associates, P.C) Responded Thu Mar 21, 2024 at 10:53 am CDT CLARIFY: For this item, subgrade preparation shall meet Section 301 of the IDOT Standard Specifications for Road & Bridge Construction. (ADDENDUM 2)													
39	Asphalt Pavement markings	Closed		None	Springer, Amanda ...	03/19/2024	Levi Bauer	03/24/2024	04/04/24					
	Q: Levi Brooke Sent Tue Mar 19, 2024 at 01:58 pm CDT Will the asphalt contractor need to provide the pavement markings?													
	A: Levi Bauer (CORE Construction - Peoria) Responded Thu Apr 4, 2024 at 02:24 pm CDT Pavement markings will be provided by the site concrete bid package per 01 1200 site concrete bid package scope of work item r.													
	A: Amanda Springer (Klingner & Associates, P.C) Responded Fri Mar 29, 2024 at 10:55 am CDT ADD 2													
	A: Amanda Springer (Klingner & Associates, P.C) Responded Thu Mar 21, 2024 at 10:53 am CDT CLARIFY: Either the parking lot pavement contractor will need to provide the pavement markings, or a pavement marking subcontractor will need to be consulted. Coordinate bids with Construction Manager. (ADDENDUM 2)													
38	Type E Medallion	Closed		None	Springer, Amanda ...	03/19/2024	Levi Bauer	03/24/2024	04/04/24					
	Q: Levi Brooke Sent Tue Mar 19, 2024 at 01:49 pm CDT Type E Medallion sign: our understanding is that the back panel is 48” diameter x ¼” flat aluminum with additional panel of 3/8” (or deeper as required for Halo Lighting) with an etched OR painted detail for the letters and badge/rope); and a third panel, 10” diameter etched state seal; 2 of these required for exterior use.													
	A: Amanda Springer (Klingner & Associates, P.C) Responded Fri Mar 29, 2024 at 10:46 am CDT CLARIFY: THe Type E Medallion sign has the following pieces as shown in the detail. Back panel is 48” diameter x ¼” flat aluminum with additional panel of 3/8” (or deeper as required for Halo Lighting) with an etched OR painted detail for the letters and badge/rope); and a third panel, 10” diameter etched state seal; 2 of these signs required for exterior use. (ADD 3)													

#	Subject	Status	Responsible Contractor	Received From	Assignee	Date Initiated	RFI Manager	Due Date	Closed Date	Ball In Court	Location	Schedule Impact	Cost Code	Cost Impact
37	Type D Lettering on A540	Closed		None	Springer, Amanda ...	03/19/2024	Levi Bauer	03/24/2024	04/04/24					
	Q: Levi Brooke Sent Tue Mar 19, 2024 at 01:47 pm CDT Type D Lettering on A540: listed “quantity” is 24 Characters; however, each of 2 locations as shown on A300 will require 29 letters for a total of 58 letters this type; please confirm 58 letters and NOT 24.													
	A: Amanda Springer (Klingner & Associates, P.C) Responded Fri Mar 29, 2024 at 10:45 am CDT REVISE: Type D lettering is a total of 58 letters, per building elevations on sheet A300. Type D sign/A540 is revised. (ADD 3)													
36	G101 Tornado Safe Room Sign	Open		None	Springer, Amanda ...	03/19/2024	Levi Bauer	03/24/2024		Bauer, Levi (CORE...				
	Q: Levi Brooke Sent Tue Mar 19, 2024 at 01:47 pm CDT G101 Tornado Safe Room Signage: confirm type S4 not used; provide details for ceiling mounting of S5; we plan to price these to match the other interior signs. – ¼” acrylic panels, is that acceptable?													
	A: Amanda Springer (Klingner & Associates, P.C) Responded Mon Apr 8, 2024 at 07:33 am CDT Answered in Addendum 4													
	A: Levi Bauer (CORE Construction - Peoria) Responded Wed Apr 3, 2024 at 03:10 pm CDT follow up question, Since the non-tornado signage needs painted braille, does this mean these signs are photopolymer?													
	A: Amanda Springer (Klingner & Associates, P.C) Responded Fri Mar 29, 2024 at 10:46 am CDT The Tornado Safe Room Signage shall be 1/4" acrylic panels and match the style and color of other interior signs shown on A540. The Tornado Safe Room Signage shall be mounted with foam vinyl tape. (ADD 3)													
35	A010 Monument Sign	Closed		None	Springer, Amanda ... Bauer, Levi (CORE...	03/19/2024	Levi Bauer	03/24/2024	04/04/24					
	Q: Levi Brooke Sent Tue Mar 19, 2024 at 01:45 pm CDT A010 Monument Sign, detail G4 has NO callouts – do you require the medallion or letters as part of the 101400? Or is this outside our scope?													
	A: Levi Bauer (CORE Construction - Peoria) Responded Thu Apr 4, 2024 at 02:07 pm CDT Signage as described below shall be provided by general trades													
	A: Amanda Springer (Klingner & Associates, P.C) Responded Fri Mar 29, 2024 at 10:45 am CDT ADD: All letters on the monument sign will be 1/2" thick aluminum cut letters with painted black (gloss finish) mounted on concealed pins. The top row of letters on the monument sign will be 6 inch high aluminum, similiar to Sign Type 'C' on sheet A540. The second row of letters will be 4 inch high aluminum, similar to Sign Type 'B' on sheet A540. The seal shall be 1'-8" diameter, 3/8" aluminum with etched (or painted) Seal of Edgar County in black and grayscale toness, similiar to D5/A540. The medallion face stall be satin finsh and the edges matte finish. The medallin shall be mounted on concealed standoffs. An updated G4/A010 drawing will be provided in the next addendum. (ADD 3)													
34	Door 135B-1	Closed		None	Springer, Amanda ...	03/16/2024	Levi Bauer	03/21/2024	04/04/24					
	Q: Levi Bauer Sent Sat Mar 16, 2024 at 11:13 am CDT in the hardware spec there is a set 40 that reads it's for door 135B-1 There is not a 135B-1 on the door schedule please confirm no opening 135B-1													
	A: Amanda Springer (Klingner & Associates, P.C) Responded Fri Mar 29, 2024 at 10:55 am CDT ADD 2													
	A: Amanda Springer (Klingner & Associates, P.C) Responded Thu Mar 21, 2024 at 10:51 am CDT Reivsed: hardware spec section 08 7100 and sheet A800 Opening Schedule included in Addendum 02. (ADDENDUM 2)													

#	Subject	Status	Responsible Contractor	Received From	Assignee	Date Initiated	RFI Manager	Due Date	Closed Date	Ball In Court	Location	Schedule Impact	Cost Code	Cost Impact
33	Door 103 and 105A	Closed		None	Springer, Amanda ...	03/16/2024	Levi Bauer	03/19/2024	04/04/24					

Q: Levi Bauer Sent Sat Mar 16, 2024 at 11:11 am CDT
Door schedule opening 103 reads FEMA but it's not part of the storm shelter and opening 105A is not noted as FEMA but it is part of the storm shelter

please confirm105A is FEMA and 103 is not

A: Amanda Springer (Klingner & Associates, P.C) Responded Fri Mar 29, 2024 at 10:55 am CDT
ADD 2

A: Amanda Springer (Klingner & Associates, P.C) Responded Thu Mar 21, 2024 at 10:50 am CDT
REVISE: Door 103 is not a FEMA rated door. REVISE: Door 105A is a rated FEMA Door (ADDENDUM 2)

#	Subject	Status	Responsible Contractor	Received From	Assignee	Date Initiated	RFI Manager	Due Date	Closed Date	Ball In Court	Location	Schedule Impact	Cost Code	Cost Impact
32	Exterior Door Opening Material	Closed		None	Springer, Amanda ...	03/16/2024	Levi Bauer	03/19/2024	04/04/24					

Q: Levi Bauer Sent Sat Mar 16, 2024 at 11:10 am CDT
Exterior openings with comment SS frame, should those
have a SS door as well or just the frame?

A: Levi Bauer (CORE Construction - Peoria) Responded Thu Apr 4, 2024 at 02:05 pm CDT
Stainless steel doors and frames to be provided by general trades

A: Amanda Springer (Klingner & Associates, P.C) Responded Fri Mar 29, 2024 at 10:54 am CDT
ADD 2

A: Amanda Springer (Klingner & Associates, P.C) Responded Thu Mar 21, 2024 at 10:50 am CDT
REVISE: Exterior openings will be both stainless steel frames and doors. Opening schedule revised on sheet A800.(ADDENDUM 2)

#	Subject	Status	Responsible Contractor	Received From	Assignee	Date Initiated	RFI Manager	Due Date	Closed Date	Ball In Court	Location	Schedule Impact	Cost Code	Cost Impact
31	recycle material / Temp roads	Closed		None	Bauer, Levi (CORE...	03/16/2024	Levi Bauer	03/19/2024	04/04/24					

Q: Levi Bauer Sent Sat Mar 16, 2024 at 11:01 am CDT
With regards to bid package 4 (civil), Note 8

I'm not sure what the material referred to as "recycle"

Levi Bauer (CORE Construction - Peoria) Responded Thu Apr 4, 2024 at 01:59 pm CDT
This is recycled concrete.

A: The scope of the temporary roads is going to be revised. The intent is at least 10" of aggregate (either recycled or CA-6) and a fabric separator will be provided at noted areas for temporary roads, staging, and parking.

Refer to revised bid packages and revised alternate specification.

#	Subject	Status	Responsible Contractor	Received From	Assignee	Date Initiated	RFI Manager	Due Date	Closed Date	Ball In Court	Location	Schedule Impact	Cost Code	Cost Impact
30	topsoil depth	Closed		None	Springer, Amanda ...	03/16/2024	Levi Bauer	03/19/2024	04/04/24					

Q: Levi Bauer Sent Sat Mar 16, 2024 at 10:57 am CDT
I cannot see what depth you want the site topsoil installed ?

A: Amanda Springer (Klingner & Associates, P.C) Responded Fri Mar 29, 2024 at 10:54 am CDT
ADD 2

#	Subject	Status	Responsible Contractor	Received From	Assignee	Date Initiated	RFI Manager	Due Date	Closed Date	Ball In Court	Location	Schedule Impact	Cost Code	Cost Impact
	A: Amanda Springer (Klingner & Associates, P.C) Responded Thu Mar 21, 2024 at 10:50 am CDT CLARIFY: Topsoil shall be installed at a minimum depth of 4”. (ADDENDUM 2)													
29	Planter Topsoil	Closed		None	Bauer, Levi (CORE...	03/16/2024	Levi Bauer	03/19/2024	04/04/24					
	Q: Levi Bauer Sent Sat Mar 16, 2024 at 10:56 am CDT The civil package includes supplying the planter topsoil. But I do not see who install the planter topsoil Can you clarify ?													
	A: Levi Bauer (CORE Construction - Peoria) Responded Thu Apr 4, 2024 at 01:39 pm CDT Refer to RFI 28 response													
28	topsoil responsibility	Closed		None	Bauer, Levi (CORE...	03/16/2024	Levi Bauer	03/19/2024	04/04/24					
	Q: Levi Bauer Sent Sat Mar 16, 2024 at 10:56 am CDT Regarding topsoil: It looks like the civil package will place and grade topsoil but the general trades package has landscaping including any soil amendments required. Is this correct ?													
	A: Levi Bauer (CORE Construction - Peoria) Responded Thu Apr 4, 2024 at 01:41 pm CDT Topsoil depth to be 4" per RFI response 30 from Klinger													
	A: Levi Bauer (CORE Construction - Peoria) Responded Thu Apr 4, 2024 at 01:38 pm CDT Civil bid package shall respread/place new clean topsoil a minimum of 6” to within +/- 0.1’ of subgrade at all lawn areas, landscape beds, and islands. General trades shall provide all soil preparation including amending soil, providing positive drainage, as well as removal and disposal of all weeds, vegetation and rocks as required. Bid packages will be updated to this effect.													
27	Temp Seeding Responsibility	Closed		None	Bauer, Levi (CORE...	03/16/2024	Levi Bauer	03/19/2024	04/04/24					
	Q: Levi Bauer Sent Sat Mar 16, 2024 at 10:54 am CDT I see temporary seeding is listed in general trades package and also in the civil package. Which package will be responsible for temp. seeding ?													
	A: Levi Bauer (CORE Construction - Peoria) Responded Thu Apr 4, 2024 at 01:31 pm CDT The civil bid package will be responsible for temp seeding. Bid packages will be updated													
26	clouded area on civil plans	Closed		None	Bauer, Levi (CORE...	03/16/2024	Levi Bauer	03/19/2024	03/16/24					
	Q: Levi Bauer Sent Sat Mar 16, 2024 at 10:53 am CDT On the east side of the site, I see a clouded area that may be trees. I'm thinking these trees will not be removed and that area will not be graded.													
	A: Levi Bauer (CORE Construction - Peoria) Responded Sat Mar 16, 2024 at 10:53 am CDT Confirmed													
25	Compaction Testing	Closed		None	Bauer, Levi (CORE...	03/16/2024	Levi Bauer	03/19/2024	04/04/24					
	Q: Levi Bauer Sent Sat Mar 16, 2024 at 10:50 am CDT													

#	Subject	Status	Responsible Contractor	Received From	Assignee	Date Initiated	RFI Manager	Due Date	Closed Date	Ball In Court	Location	Schedule Impact	Cost Code	Cost Impact
	Please clarify who is responsible for the cost of compaction testing													
	A: Levi Bauer (CORE Construction - Peoria) Responded Thu Apr 4, 2024 at 01:30 pm CDT Per section 31 2100 part 3.17 compaction testing will be provided by the Owner.													
24	Halot-lit signs	Closed		None	Springer, Amanda ...	03/15/2024	Levi Bauer	03/18/2024	04/04/24					
	Q: Levi Bauer Sent Fri Mar 15, 2024 at 09:25 am CDT have attached a few images of layered, halo-lit signs we have done for some school applications. We propose to use a similar technique for this sign, putting the halo element between the star and the back plate "ring". We propose to make the center badge as a circular fabricated cabinet with a polycarbonate face decorated with a translucent vinyl overlay rending the State of Illinois logo in color (similar to the bullet element in the Williamsville HS sign). I suspect that this alternate fabrication method, if done in aluminum, will be less costly than the steel version specified and shown in the architects' drawing. I have included the proofs for the two example signs so that the architect can get an idea of how we did them. 103447.1.Proof.pdf Williamsville HS.PNG Monticello HS.PNG 103694 - LargeLogo - Proof.pdf													
	A: Amanda Springer (Klingner & Associates, P.C) Responded Fri Mar 29, 2024 at 10:46 am CDT CLARIFY: There are no exterior signs made of steel. All exterior signs are made of aluminum. See Sheet A540 for exterior sign information.													
23	etched steel for signage	Closed		None	Springer, Amanda ...	03/15/2024	Levi Bauer	03/18/2024	04/04/24					
	Q: Levi Bauer Sent Fri Mar 15, 2024 at 08:53 am CDT Is there a reason they have specified etched steel? We typically fabricate this sort of signage in aluminum. Would aluminum be acceptable? The foundry we use for etched plaques has size restrictions; pieces must be no larger than 24"-dia.													
	A: Amanda Springer (Klingner & Associates, P.C) Responded Fri Mar 29, 2024 at 10:54 am CDT ADD 2													
	A: Amanda Springer (Klingner & Associates, P.C) Responded Thu Mar 21, 2024 at 10:49 am CDT CLARIFY: Aluminum is an acceptable alternate to steel. Detail F5/A540 calls for aluminum. The size of the medallion sign is 4' diameter. Aluminum shall be electrically isolated from other metals to prevent galvanic corrosion. (ADDENDUM 2)													
22	metal panel finish	Closed		None	Springer, Amanda ...	03/15/2024	Levi Bauer	03/18/2024	04/04/24					
	Q: Levi Bauer Sent Fri Mar 15, 2024 at 08:45 am CDT What is the finish of the pre-finished metal paneling upon which the seal is to be mounted? Halo-lighting is most effective on light-colored, textured backgrounds. Smooth or shiny metal backgrounds will result in "hot spots" at the the perimeter of the sign.													
	A: Levi Bauer (CORE Construction - Peoria) Responded Thu Apr 4, 2024 at 01:18 pm CDT General trades to bid as shown.													
	A: Amanda Springer (Klingner & Associates, P.C) Responded Fri Mar 29, 2024 at 10:49 am CDT CLARIFY: The basis of design for the prefinished metal panels is the Petersen Aluminum Corporation Modular AL Metal Wall Panel System. The Pacific Blue Color has a reflectivity of 0.28. Further concerns about "hot spots" caused by lighting should be shared with the Architect for review. (ADD 3)													
	A: Levi Bauer (CORE Construction - Peoria) Responded Fri Mar 15, 2024 at 08:49 am CDT Per section 07 42 13 part 2.4 A the metal panel system finish is noted below. Fluoropolymer Coil Coating System: Polyvinylidene fluoride (PVDF) multi-coat superior													

#	Subject	Status	Responsible Contractor	Received From	Assignee	Date Initiated	RFI Manager	Due Date	Closed Date	Ball In Court	Location	Schedule Impact	Cost Code	Cost Impact
	performing organic coatings system complying with AAMA 2605, including at least 70 percent PVDF resin, and at least 80 percent of coil coated metal surfaces having minimum total dry film thickness (DFT) of 0.9 mil, 0.0009 inch; color and gloss as selected by Architect from manufacturer's standard line. Klinger to clarify concerns about hot spots													
21	medallion illumination	Closed		None	Springer, Amanda ...	03/15/2024	Levi Bauer	03/18/2024	04/04/24					
	Q: Levi Bauer Sent Fri Mar 15, 2024 at 08:44 am CDT The medallion on the outside of the building (see at H10/A300 with details at F5/A540) is specified as etched steel with back-lighting. Please have the architect clarify that they are seeking a halo-lit structure (diagram at F5/A540 does not show location of LED units). Do they understand that the face of the medallion will look black/dark at night since the halo-lighting will overpower any ambient light on the face?													
	A: Levi Bauer (CORE Construction - Peoria) Responded Thu Apr 4, 2024 at 01:18 pm CDT General trades bid package to provide all integral and taped lighting for signage. Electrical bid package to provide all rough-in, power and final connections. Electrical bid package to provide all unattached lighting for signage such as the ground mounted signage for the monument sign complete.													
	A: Amanda Springer (Klingner & Associates, P.C) Responded Fri Mar 29, 2024 at 10:48 am CDT CLARIFY: As described in Detail F5/A540, the sign is aluminum. Provide LED tape light, tied to photo sensor, around the perimeter of the back plate ring. (ADD 3)													
20	Monument Sign Construction	Closed		None	Springer, Amanda ...	03/15/2024	Levi Bauer	03/18/2024	04/04/24					
	Q: Levi Bauer Sent Fri Mar 15, 2024 at 08:44 am CDT The signage specifications do not address how the monument is to be constructed. Please have the architect specify (monument cabinet with a vinyl-applied polycarbonate face or a solid aluminum face routed with push-thru or subsurface acrylic/polycarbonate for lettering & medallions, etc).													
	A: Levi Bauer (CORE Construction - Peoria) Responded Thu Apr 4, 2024 at 01:14 pm CDT 1. Precast bid package shall provide the precast monument sign. Install embeds supplied by general trades. Include separate mobilization. 2. General trades shall provide alum letters and seal mounted on concealed standoffs as described in RFI 3 3. General trades shall supply and deliver embeds to concrete and precast bid packages for them to install/cast-in 4. Building Concrete shall provide monument base/curbs/plinths including excavation, backfill, forming, chamfers, joint sealant and install embeds provided by general trades. include additional mobilization to pour curbs/ plinths after sign installation													
	A: Amanda Springer (Klingner & Associates, P.C) Responded Fri Mar 29, 2024 at 10:48 am CDT ADD: The monument sign shall be precast concrete with chamfered corners on both sides. The front face of the monument will have the signage (medallion and letters) facing the public road and be illuminated from ground mounted lights. The front face and sides of the precast panel will be steel form bed finish with a light sandblasting as described on Precast Finish Legend/A440. The back of the precast panel will have a smoth steel trowel finish as described on A440. See structural drawing S002 for detail on foundation and mounting. (ADD 3)													
19	Monument sign single/double sided?	Closed		None	Springer, Amanda ...	03/15/2024	Levi Bauer	03/18/2024	04/04/24					
	Q: Levi Bauer Sent Fri Mar 15, 2024 at 08:43 am CDT If the monument is illuminated, is it to be single or double-sided (graphics on both sides)?													
	A: Amanda Springer (Klingner & Associates, P.C) Responded Fri Mar 29, 2024 at 10:47 am CDT CLARIFY: The monument sign will have signage on only one side (the road side) and be illuminated with ground mounted lights on the road side of the sign. (ADD 3)													
18	Monument Sign Illumination	Closed		None	Springer, Amanda ...	03/15/2024	Levi Bauer	03/18/2024	04/04/24					

#	Subject	Status	Responsible Contractor	Received From	Assignee	Date Initiated	RFI Manager	Due Date	Closed Date	Ball In Court	Location	Schedule Impact	Cost Code	Cost Impact
	Q: Levi Bauer Sent Fri Mar 15, 2024 at 08:42 am CDT I see a monument sign at A010. I suspect it is an illuminated piece based on the architectural site plan (appears to show power feed to the unit). Please confirm if this is an illuminated piece													
	A: Amanda Springer (Klingner & Associates, P.C) Responded Fri Mar 29, 2024 at 10:54 am CDT ADD 2													
	A: Amanda Springer (Klingner & Associates, P.C) Responded Thu Mar 21, 2024 at 10:49 am CDT CLARIFY: The monument sign will be illuminated with ground mounted lights. (addendum 2)													
14	Precast Panel Form Liners	Closed		None	Springer, Amanda ...	03/14/2024	Levi Bauer	03/17/2024	04/04/24					
	Q: Levi Bauer Sent Thu Mar 14, 2024 at 08:43 am CDT Has there been any decision on the type of form liner that is needed for the exterior finish of some of the precast panels? See F-4 on the precast finish legend													
	A: Amanda Springer (Klingner & Associates, P.C) Responded Fri Mar 29, 2024 at 10:48 am CDT REVISE: Precast Finish Legend F3 Form Liner Finish, REVISE note: "See note 4." in lieu of note 5. REVISE: Precast Finish Legend F4 Form Linter Finish, ADD note: "See Sheet A444 Precast Concrete Panel Patterns for more information." ADD: Sheet A444 Precast Concrete Panel Patterns which shows the information on the F4 form liner finish. (ADD 3)													
	A: Levi Bauer (CORE Construction - Peoria) Responded Thu Mar 14, 2024 at 08:51 am CDT Form liners where intended to be an alternate but there doesn't appear to be anything noted on drawings currently in this regard. Klinger to clarify													
13	Sandblast finish on precast panels	Closed		None	Springer, Amanda ...	03/14/2024	Levi Bauer	03/17/2024	04/04/24					
	Q: Levi Bauer Sent Thu Mar 14, 2024 at 08:38 am CDT Some of the precast panel types on sheet A440 state that the interior face of the panels has a lite sandblast finish labeled F1. See image below. We would not recommend a sandblast finish due to bursting of the cement paste. We would recommend a steel trowel finish on all interior surfaces. Is this acceptable? The precast spec section 2.2 G and H state steel trowel on back surfaces of the panels to have steel trowel precast sandblast panels.png													
	A: Amanda Springer (Klingner & Associates, P.C) Responded Fri Mar 29, 2024 at 10:53 am CDT ADD 2													
	A: Amanda Springer (Klingner & Associates, P.C) Responded Thu Mar 21, 2024 at 10:49 am CDT REVISE: Sheet A440 to provide steel trowl finish on interior surfaces of all panels in-lieu of sandblast finish (ADDENDUM 2)													
12	Precast Mix Design	Closed		None	Springer, Amanda ...	03/14/2024	Levi Bauer	03/17/2024	04/04/24					
	Q: Levi Bauer Sent Thu Mar 14, 2024 at 08:33 am CDT Section 03 4500 part 2.8 indicates "Cement: ASTM C150/C150M, Type II - Moderate Portland type" Can this be changed to type III cement? Type III cement provide better stripping strengths for the wall panels. [we] do not recommend type II cement.													
	A: Amanda Springer (Klingner & Associates, P.C) Responded Fri Mar 29, 2024 at 10:50 am CDT Revise: Specification section 034500 paragraph 2.8.A "Cement ASTM C150/C150M, Type I/II or ASTM C595 Type IL." (ADD 3)													
11	Precast Certification Required?	Closed		None	Springer, Amanda ...	03/12/2024	Levi Bauer	03/15/2024	04/04/24					
	Q: Levi Bauer Sent Tue Mar 12, 2024 at 01:05 pm CDT BP #8 Scope of Work - Precast - Item 5rr. refers to the PCI supplier holding PCI certification levels as indicated in the 34500 Specification; however, the 34500 Spec 1.7 B5 uses a no longer specified A1 category for certification. The categories were changed in October 2021 to a range of AA through AE. Please see attached document and please specify which will be required for this project. PCI-Certification-Statement-for-Industry.pdf													

#	Subject	Status	Responsible Contractor	Received From	Assignee	Date Initiated	RFI Manager	Due Date	Closed Date	Ball In Court	Location	Schedule Impact	Cost Code	Cost Impact
	A: Amanda Springer (Klingner & Associates, P.C) Responded Fri Mar 29, 2024 at 10:49 am CDT Revise: Regarding the Precast/Prestressed Concrete Institute (PCI) Plant Certification, note the following. Specification section 034500 paragraph 1.7.B.5 from "catagory A1 - Architectural Precast Concrete" to "category AD Architectural Precast Concrete Products" (ADD 3)													
10	Schedule	Closed		None	Bauer, Levi (CORE...	03/12/2024	Levi Bauer	03/15/2024	03/14/24					
	Q: Levi Bauer Sent Tue Mar 12, 2024 at 01:04 pm CDT Schedule - no schedule was included within the Bid Documents, so we assume this will be forthcoming in Addendum?													
	A: Levi Bauer (CORE Construction - Peoria) Responded Thu Mar 14, 2024 at 08:45 am CDT Schedule has been issued with addendum 1													
9	Precast Leave out Panels	Closed		None	Bauer, Levi (CORE...	03/12/2024	Levi Bauer	03/15/2024	04/04/24					
	Q: Levi Bauer Sent Tue Mar 12, 2024 at 01:03 pm CDT BP #8 Scope of Work - Precast - Item 5jj. refers to a Site Logistics Plan that shows leave-out panels and potentially crane roadways, but nothing seems to be included within the Bid Documents													
	A: Levi Bauer (CORE Construction - Peoria) Responded Thu Apr 4, 2024 at 12:52 pm CDT Refer to site logistics plan issued with addendum 1 for where precast panels should be left out. Precast bid package is required to include additional mobilizations for each leave out panel.													
8	Owner Agreement	Closed		None	Bauer, Levi (CORE...	03/12/2024	Levi Bauer	03/15/2024	04/04/24					
	Q: Levi Bauer Sent Tue Mar 12, 2024 at 12:59 pm CDT [assuming] the CM's Subcontract Agreement will reference the CM's Agreement with the Owner, so we would need a redacted copy of that as well to review.													
	A: Levi Bauer (CORE Construction - Peoria) Responded Thu Apr 4, 2024 at 12:51 pm CDT Refer to addendum 2													
7	Sample Subcontract Agreement	Closed		None	Bauer, Levi (CORE...	03/12/2024	Levi Bauer	03/15/2024	03/14/24					
	Q: Levi Bauer Sent Tue Mar 12, 2024 at 12:57 pm CDT Section 00 21 13 - 1.17A states that a copy of the CM's Subcontract Agreement would be available for viewing within the Bid Documents, but there is nothing included. Please include for review													
	A: Levi Bauer (CORE Construction - Peoria) Responded Thu Mar 14, 2024 at 10:15 am CDT Sample subcontract agreement has been provided with addendum 1													
6	Textura Cost	Closed		None	Bauer, Levi (CORE...	03/12/2024	Levi Bauer	03/15/2024	04/04/24					
	Q: Levi Bauer Sent Tue Mar 12, 2024 at 12:55 pm CDT How much does Oracle-Textura cost?													
	A: Levi Bauer (CORE Construction - Peoria) Responded Thu Apr 4, 2024 at 12:50 pm CDT Refer to sample subcontract issued with addendum 1 (page 46 of addendum) Textura cost are 0.22% of the contract value with a maximum of $5,000 and a $100 per Subtier subcontractor. All bid package prime bidders and vendors working directly for CORE shall include Textura in their base bid price and modify it as necessary for any alternates.													
5	Utility structure manufacture	Closed		None	Springer,	03/12/2024	Levi Bauer	03/19/2024	04/04/24					

#	Subject	Status	Responsible Contractor	Received From	Assignee	Date Initiated	RFI Manager	Due Date	Closed Date	Ball In Court	Location	Schedule Impact	Cost Code	Cost Impact
					Amanda ...									

Q: Levi Bauer Sent Tue Mar 12, 2024 at 09:44 am CDT
Regarding the storm and sanitary manholes and pre-cast concrete:

Can we use a manufacturer who is INDOT approved and has their
NPCA certificate ? (National Precast Concrete Association)

A: Levi Bauer (CORE Construction - Peoria) Responded Thu Apr 4, 2024 at 12:46 pm CDT
Refer to addendum 2

A: Amanda Springer (Klingner & Associates, P.C) Responded Fri Mar 29, 2024 at 10:51 am CDT
CLARIFY: For storm and sanitary manholes (pre-cast concrete), manufacturers who are INDOT approved and have their NPCA certificate are acceptable. Manhole structures shall meet the size and materials specified in the plans and specifications.

A: Amanda Springer (Klingner & Associates, P.C) Responded Thu Mar 21, 2024 at 10:48 am CDT
CLARIFY: For storm and sanitary manholes (pre-cast concrete), manufacturers who are INDOT approved and have their NPCA certificate are acceptable. Manhole structures shall meet the size and materials specified in the plans and specifications. (ADDENDUM 2)

#	Subject	Status	Responsible Contractor	Received From	Assignee	Date Initiated	RFI Manager	Due Date	Closed Date	Ball In Court	Location	Schedule Impact	Cost Code	Cost Impact
4	Soil Stockpile	Closed		None	Bauer, Levi (CORE...	03/12/2024	Levi Bauer	03/19/2024	04/04/24					

Q: Levi Bauer Sent Tue Mar 12, 2024 at 09:27 am CDT
The erosion control plans do not show where we can stockpile topsoil.
[Please indicate a location]

A: Levi Bauer (CORE Construction - Peoria) Responded Thu Apr 4, 2024 at 12:45 pm CDT
location will be established during the kickoff meeting. Civil bid package can assume it'll be onsite.

#	Subject	Status	Responsible Contractor	Received From	Assignee	Date Initiated	RFI Manager	Due Date	Closed Date	Ball In Court	Location	Schedule Impact	Cost Code	Cost Impact
3	Soil Corrections Scope	Closed		None	Bauer, Levi (CORE...	03/12/2024	Levi Bauer	03/19/2024	04/04/24					

Q: Levi Bauer Sent Tue Mar 12, 2024 at 09:25 am CDT
I understand the Geotech reports and recommendations are to be included in our pricing for earthwork.

After reading the report, I understand the bldg concrete slab, must have a 24" undercut to remove unsuitable soils. In addition, we backfill with either on site lean clay or imported granular. How do we know if on site clay is suitable for this purpose ? I see the liquid limit for most on site soils is above the maximum recommended use of 45% LL. Its tough to price what might or might not work.

With regards to the site paving, roads and parking areas, there is a "fat clay" present in the upper portions of this site. We are directed to either rework and rework this material until is passes tests, or use a geogrid support, or use a lime/cement stabilization. The pricing on each of these methods is different and the quantity needed is really a guess at this point.
How do we price this ? Could there be a unit price established for this work ?

A: Levi Bauer (CORE Construction - Peoria) Responded Thu Apr 4, 2024 at 12:44 pm CDT
The civil bid package shall undercut 24" of unsuitable soils to 5' outside the building pad and backfill it with imported granular material to the subgrade elevation. This will be a backfill depth will be 18" deep at the 6" slab, 20" deep at 4" slabs, etc as required to achieve the subgrade elevation.

The granular material is needed to act as a work pad that the aggregate piers can be installed on.

The building concrete bid package will provide the permeant aggregate base over the backfilled aggregate that is installed by the civil contractor prior to slab installation. Regrading and repair of the slab will be addressed via the temporary road maintenance allowance in the civil package.

Corrections to unsuitable soils in the site paving areas will be addressed via the lime stabilization allowance in the general trades package.

#	Subject	Status	Responsible Contractor	Received From	Assignee	Date Initiated	RFI Manager	Due Date	Closed Date	Ball In Court	Location	Schedule Impact	Cost Code	Cost Impact
	The bid packages will be updated to this effect.													
2	Asphalt lift depths	Closed		None	Springer, Amanda ...	03/12/2024	Levi Bauer	03/19/2024	04/04/24					
	Q: Levi Bauer Sent Tue Mar 12, 2024 at 09:17 am CDT The plans call for the IL-19.0 , N50 (BINDER) to placed in 1 1/2" lifts. The minimum lift thickness for an IL-19.0 mix is 2 1/4". Should we plan on using an IL-9.5 FG level binder instead and placing the binder in two lifts? Or should we figure on using the IL-19.0 mix and placing the binder in a single 3 1/2" lift													
	A: Levi Bauer (CORE Construction - Peoria) Responded Thu Apr 4, 2024 at 12:21 pm CDT Refer to addendum 2													
	A: Amanda Springer (Klingner & Associates, P.C) Responded Fri Mar 29, 2024 at 10:51 am CDT REVISE: IL9.5 & IL9.5FG are acceptable to use for lifts of surface and binder course.													
	A: Amanda Springer (Klingner & Associates, P.C) Responded Thu Mar 21, 2024 at 10:48 am CDT REVISE: IL9.5 & IL9.5FG are acceptable to use for lifts of surface and binder course.													
1	Site Logistics Plan	Closed		None	Bauer, Levi (CORE...	03/12/2024	Levi Bauer	03/15/2024	04/04/24					
	Q: Levi Bauer Sent Tue Mar 12, 2024 at 09:09 am CDT Provide temp. aggregate roads/laydown/parking areas as noted on site logistics plan. Can you tell me where to find the site logistic plan													
	A: Levi Bauer (CORE Construction - Peoria) Responded Thu Apr 4, 2024 at 12:19 pm CDT Refer to addendum 1													

KLINGNER & ASSOCIATES, P. C.
Engineers • Architects • Surveyors

April 5, 2024

BIDDING ADDENDUM 4

For work titled:
Edgar County Jail

TO ALL BIDDERS

GENERAL NOTES

This addendum is issued for the purpose of clarifying the intent of the contract documents or for making necessary corrections, deletions, and/or additions to the documents on all items of discrepancy raised up to the time of the issuance of this addendum.

Each bidder is hereby instructed and authorized to incorporate into his proposal the instructions contained in this addendum. This addendum forms a part of the bidding and contract documents and modifies the original bidding documents, dated March 1, 2024. Acknowledge receipt of this addendum in space provided on Bid Form. FAILURE TO DO SO MAY SUBJECT BIDDER TO DISQUALIFICATION.

This addendum consists of one hundred twenty-eight (128) pages including this cover sheet.

PROJECT MANUAL

1	034500 Precast Architectural Concrete, 2.8 C	**REVISE:** Architect will work with Precast contractor during shop drawings to select the PCI mix sample.
2	034500 Precast Architectural Concrete, 2.2 B	**REVISE:** Architect will work with Precast contractor during shop drawings to select the PCI Color and Texture.
3	034500 Precast Architectural Concrete, 1.7, G and 1.8	**CLARIFY:** As specified, (2) 4’-0” x 4’-0” samples and (2) 6’-0” x 5’-0” mock-ups, and disposal of all four when the job is complete.
4	'083613 Sectional Doors 2, 2.2 A. 1, C	**CLARIFY:** The exterior steel of the door assembly shall be hot dipped galvanized with a Two-coat baked-on polyester as specified in Part 2, 2.2, A, 2.
5	083323 Overhead Coiling DOors 3, 2.2F and G / A801 - C12 / A801 - A12	**CLARIFY:** Security screen to be provided by Detention Equipment contractor. Construction Manager to coordinate bid scopes to determine who provides bug screen and sill plate as detailed.
6	083323 Overhead Coiling Doors, 2.1 A	**REVISE:** Replace "18 guage aluminum" with "18 gauge galvanized steel." Finish shall be PowderGuard Max: Applied to curtain, guides, bottom bar, headplates: Manufacturer’s limited Max Finish warranty for 5 years. Architect to select color from standard color chart.

7	'083323Overhead Coiling Doors, 2.2, A, 1	**REVISE:** Front Slats shall be 18 gauge galvanized steel.galvanized steel, back slats shall be 22 gauge galvanized steel. Finish shall be PowderGuard Max: Applied to curtain, guides, bottom bar, headplates: Manufacturer's limited Max Finish warranty for 5 years. Architect to select color from standard color chart.
8	083323 Overhead Coiling Doors,-2, 2.7	**REVISE:** The Architect's Basis of Design "625 Stormtite Insulated Survice Door" by Overhead Door Co remains unchanged. Replace "Aluminum finishes" with "Galvanized Steel Finishes". slats and hood galvanized in accordance with ASTM A 653 and receive rust-inhibitive, roll coating process, including 0.2 mils thick baked-on prime paint, and PowderGuard Max powder coat (By Overhead Door Co), color as selected by Architect. Powder coat applied to: curtain, bottom bar, headplates. Non-galvanized exposed ferrous surfaces shall receive one coat of rust-inhibitive primer.
9	083100 Access Doors and Panels	**REVISE:** Replace Section 083100 Access Doors and Panels entirely with Section 08 3113.53 - Security Access Doors and Frames.
10	081113 Hollow Metal Doors and Frames, 2.7.A	**REVISE:** For all exterior hollow metal doors and frames, stainless steel doors and frames have been replaced with hot dipped galvanized.
11	084413 Aluminum Glazed Curtain Wall Systems, 2.2	**REVISE**: The Curtain Wall Basis of Design shall be EFCO 5500X to accomodate an 1-7/8" security g
12	088000 Glazing, 2.	**REVISE:** Replace the orignal specified glass for Vision Panel V1 with the following: Basis of Design: Guardian Glass SunGuard SNR 43 Crystal Gray.
13	088000 Glazing, 2.	**REVISE**: Replace the orignal specified Spandrel Panel S1 with a Spandrel glass to replicate Vision Panel V1 Basis of Design: Guardian Glass SunGuard SNR 43 Crystal Gray.
14	088853 Security Glass, 2.1,A	**ADD**: Line Item #3. Basis of Design: UL 752 Bullet Resistant Glazing by Isoclima Specialty Glass (1-866-412-6977). Substitutions must provide a certificate by Underwriters Laboratories indicating compliance with this testing criteria.
15	088853 Security Glass, 2.2,F	**REVISE**: Glazing Type SG-3B has been revised. See attached addendum.
16	099123 Painting	**ADD:** Paragraph 3.6 Exterior Paint Schedule (see attached specification). This system is intended to be used for Exterior Ferrous Metal.
17	099123 Painting, 1.2, A	**ADD:** In addition to exposed interior items, add "Exposed Exterior Items"
18	224600 Security Plumbing Fixtures	**REVISE:** Regarding the Water Management System, plumbing drawings have been updated with fixtures and piping. Additional information is being released with Addendum #4.
19	271300 Communications Backbone Cabeling	**CLARIFY**: Refer to Specification Section 271300 for list of approved list of manufacturers.
20	316613 Stone Column Ground Improvement	**REMOVE:** Specification 316613 paragraph 1.1.B.2 and 1.1.B.4. The spread footing test per ASTM 1194 is not required. The uplift load test ASTM D3689 is not required. Remove: reference to an uplift test in paragraph 1.7. **CLARIFY:** Both methods are included in the specification section 316613 paragraph 3.3 and 3.4. The ground improvement designer and installer must meet the design criteria in paragraph 1.5. and on sheet S001. The submittals shall include items described in paragraph 1.7 and include the method of stone column ground improvement installation being implemented. **ADD:** Add the following to specification section 316613 paragraph G.2.b. "In place of the minimum stone column area coverage the ground shall be improved to provide uniform soil stiffness and soil bearing pressure at the footing bearing surface."

DRAWINGS

1	G100 Code Plan, A9 First Floor Code Plan	**ADD:** The Conference Room/ Storm Shelter #135 has 2-hour fire rated walls and structural lid.
2	G110 Storm Shelter Code Plan, Sign Types	**REVISE:** Added information on sign materials. Panel signage can be either arcylic or photopolymer; they are both acceptable substrate materials
3	A300 Exterior Elevations, Glazing Legend	**CLARIFY:** Glazing Type SG-3B explains the UL balistic rating for the exterior Security Glazing. Section 088853 Security Glass was included in the bid documents and contains the information on the security and ballistic rated glass. REVISE: Glazing Type SG-3B thickness shall be 1-7/8" thick.
4	A300 Exterior Elevations: North, South, East, and West Elevations	**REVISE:** The labels for wall mounted lights and security cameras have been updated.
5	A400 BUilding Sections, F9 Offices Building Section N-S	**ADD:** The Conference Room/ Storm Shelter #135 has 2-hour fire rated walls and structural lid.
6	A400 Building Sections	**CLARIFY:** The lowest point of the roof truss in the one story space is 12' - 0' AFF.
7	D4/A440 Precast Wall Panels-Sallyport	**REVISE**: Security cameras originally shown on precast panel joints have been relocated away from the panel joint.
8	D10/A440 Precast Wall Panels-Sallyport	**REVISE:** The exterior louver has been relocated.
9	A10/A441 Precast Wall Panels-Sheriffs Office	**REVISE**: Mechanical openings originally shown on precast panel joints have been relocated.
10	H8/A441 Precast Wall Panels-Sheriffs Office	**REVISE:** The FDC will be installed at an elevation of 3'-0" above grade.
11	E12/A442 Precast Wall Panels-Detention Center	**REVISE:** Security cameras originally shown on precast panel joints have been relocated away from the panel joint.
12	E12/A442 Precast Wall Panels-Detention Center	**REVISE** Detail E12 - Additional light added & light locations adjusted
13	A531 Detention Equipment & Interior Details, Detention Equipment Schedule	**REVISE:** H8/A531 - Renumbered Detention Installation Guidelines to coordinate with Detention Equipment Code numbers. Eliminated the elevations of the wall mounted swing stool and pistol locker - 4 compartments, which are not in this project. All inmate accessible areas shall receive pick-proof sealant. Refer to A100, Security plans. Detention hollow metal frames shall be installed by detention contractor. CMU steel embed can be supplied by Detention equipment contractor or supplier. **CLARIFY:** For wall mounted detention equipment on precast concrete walls: the detention contractor shall provide the embeds needed for the detention furniture. The exposed face of embed plate shall be set flush with the surface of the precast. The plate will be reprimed and painted. **CLARIFY:** For wall mounted detention equipment on concrete block walls: Provided the steel embed block as shown on detail C5/A531.

14	A531 Detention Equipment & Interior Details	**ADD:** Detail D8 to show expansion joint cover at the storm shelter wall.
15	F5/A540 Signage Details	**REVISE:** Medallion lights will be controlled by light control panel and it can be programmed with photocell. We will add LED tape to Sheet E400 Light Fixture Schedule.
16	A540 Signage Details	**REVISE:** the quantity listed is for # of characters (i.e. a total count of individual letters) - Sign Type C = 6" tall letters; interior & exterior use = (28) letters/characters total = new info per Addendum 4 to include both interior and exterior signage - Sign Type D = 18" tall letters; exterior use only = (58) letters/characters total
17	A800 Opening Schedule, Door & Frame Types & Window Types	**REVISE:** On the Opening Schedule (Standard), all exterior hollow metal doors and frames shall be revised from Stainless Steel to hot dipped galvanized. Door #s 153, 157, 158, 163, 164, 169 have been updated in the Opening Schedule (Standard).
18	A900 Finish Schedule & Materials Legend	**CLARIFY:** The solid surface information is found in the bid drawings within in the Millwork Legend on Sheet A600 Interior Elevations. The specifications can be found in Section 123661 Simulated Stone Countertops included with the Bid Documents.
19	K100 Food Service Equipment Plan & Schedule- Phase 1	**CLARIFY:** Only the Phase 1 kitchen equipment is to be included in the base bid. The phase 2 equipment was shown for reference.
20	S101 Foundation Plan	**CLARIFY:** The actual total loads are listed in the footings schedule comments S101 unless the full 4000 psf bearing pressure is required. This has been condensed down from numerous combinations of dead loads, live loads, wind loads, snow loads, rain loads, and seismic loads. The loading cases required by the building code are more complex than simply dead load and live load.
21	S101	**REVISED** as clouded on sheet S101
22	S102	**REVISED** as clouded on Sheet S102
23	S201	**REVISE**D as clouded on Sheet S201
24	S511	**REVISED** as clouded on Sheet S511
25	S502/S503	**CLARIFY:** Titles have been revised as shown clouded on the drawing attached to clarify where the details are to be used. The thickened slab footings with top of footings at elevation 100'-0" are intended to be placed with the floor slab, but means and methods of construction will be determined by the Contractor if additional construction joints are nessecary. The floor slopes, recessed floors, and drains need to be accomodiated as shown on the Architectural, Structural, and/or Plumbing drawings.
26	FP 101 Fire Protection First Floor	**CLARIFY:** Scope TBD by CM but VESDA system, Detectors, and wiring are all required for proper operation.
27	M101.B HVAC Firest FLoor Plan-Area B	**CLARIFY:** It is acceptable to install the temperature and humidity sensors in the return duct. The setpoints shall be adjustable through the graphics.
28	P101	**CLARIFY**: Refer to sheet P101 for split system condensate drain sizes and locations.
29	P500	**CLARIFY:** Panels indicated are fusible type for selective coordination on the emergency electrical system. Updated Panelboard schedules included in Addendum #4.
30	M101.B HVAC Firest FLoor Plan-Area B	**REVISE:** Locations and quantity of CO and NO2 sensors have been shown on sheet M101.B. Mount sensors 12" below roof structure.
31	TN000 Telecom General Notes and Legend	**CLARIFY:** Terminate only one cable for inmate wall phone. Second cable is for future use.

32	TN101 Telecom First Floor Plan-Overall, Technology Plan Note T10	**CLARIFY:** Drops shown on plans are for radio and 911. Additional drops are for other equipment such as Motorola and other 3rd party equipment.
33	TN300 Telecom-Enlarged Plans, Technology Plan Note T16	**CLARIFY:** Refer to Specification Section 271300 Communications Backbone Cabling where single mode fiber is required.
34	F500 Plumbing Schedules	**CLARIFY:** Sewer Grinder is in-line type. Drawing/spec information has been updated.

ATTACHMENTS
Section 034500 Precast Architectural Concrete (28 pgs)
Section 083113.53 Security Access Doors and Frames (3 pgs)
Section 088000 Glazing (8 pgs)
Section 088853 Security Glazing (6 pgs)
Section 099123 Painting (15 pgs)
Henderson - Edgar County Addendum 4 with attachments (43 pgs)
HMN Addendum 4 (13 pgs)
Klingner Addendum 4 Sheets (5 pgs)

All other terms and conditions of the Project Manual and Drawings shall remain unchanged.

END OF ADDENDUM 4

SECTION 03 4500
PRECAST ARCHITECTURAL CONCRETE

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Architectural precast concrete wall panels with integral insulation.

B. Architectural precast concrete accessories.

C. Supports, anchors, and attachments.

D. Grouting under panels.

1.2 RELATED REQUIREMENTS

A. Section 03 2000 - Concrete Reinforcing.

B. Section 03 3000 - Cast-in-Place Concrete: for installing connection anchors in concrete and Admixtures.

C. Section 05 1200 - Structural Steel: for furnishing and installing connections attached to structural-steel framing.

D. Section 05 5000 - Metal Fabrications: for furnishing and installing loose hardware items, kickers, and other miscellaneous steel shapes.

E. Section 07 2100 - Thermal Insulation: Integral insulation.

F. Section 07 6200 - Sheet Metal Flashing and Trim: Reglets recessed in units.

G. Section 07 9200 - Joint Sealants: Sealing perimeter and intermediate joints.

H. Section 084313 Aluminum-Framed Storefronts - Aluminum Windows: for windows set into architectural precast concrete panels

1.3 REFERENCE STANDARDS

A. AASHTO LRFD - Bridge Design Specifications; 2020, with Errata (2021).

B. AASHTO M251M/M251 - Standard Specification for Plain and Laminated Elastomeric Bridge Bearings; 2022.

C. ACI CODE-318 - Building Code Requirements for Structural Concrete and Commentary; 2019 (Reapproved 2022).

D. ACI SPEC-301 - Specifications for Concrete Construction; 2020.

E. ASHRAE (FUND) - ASHRAE Handbook - Fundamentals; Most Recent Edition Cited by Referring Code or Reference Standard.

F. ASHRAE Std 90.1 I-P - Energy Standard for Buildings Except Low-Rise Residential Buildings; Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.

G. ASTM A276/A276M - Standard Specification for Stainless Steel Bars and Shapes; 2024.

H. ASTM A283/A283M - Standard Specification for Low and Intermediate Tensile Strength Carbon Steel Plates; 2018.

I. ASTM A36/A36M - Standard Specification for Carbon Structural Steel; 2019.

J. ASTM A47/A47M - Standard Specification for Ferritic Malleable Iron Castings; 1999, with Editorial Revision (2022).

K. ASTM A108 - Standard Specification for Steel Bar, Carbon and Alloy, Cold-Finished; 2018.

L. ASTM A123/A123M - Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products; 2017.

M. ASTM A153/A153M - Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware; 2023.

N. ASTM A193/A193M - Standard Specification for Alloy-Steel and Stainless Steel Bolting for High Temperature or High Pressure Service and Other Special Purpose Applications; 2023.

O. ASTM A307 - Standard Specification for Carbon Steel Bolts, Studs, and Threaded Rod 60 000 PSI Tensile Strength; 2021.

P. ASTM A500/A500M - Standard Specification for Cold-Formed Welded and Seamless Carbon Steel Structural Tubing in Rounds and Shapes; 2023.

Q. ASTM A563/A563M - Standard Specification for Carbon and Alloy Steel Nuts (Inch and Metric); 2021a.

R. ASTM A572/A572M - Standard Specification for High-Strength Low-Alloy Columbium-Vanadium Structural Steel; 2021, with Editorial Revision.

S. ASTM A666 - Standard Specification for Annealed or Cold-Worked Austenitic Stainless Steel Sheet, Strip, Plate, and Flat Bar; 2023.

T. ASTM A675/A675M - Standard Specification for Steel Bars, Carbon, Hot-Wrought, Special Quality, Mechanical Properties; 2014 (Reapproved 2019).

U. ASTM A706/A706M - Standard Specification for Deformed and Plain Low-Alloy Steel Bars for Concrete Reinforcement; 2022a.

V. ASTM A775/A775M - Standard Specification for Epoxy-Coated Steel Reinforcing Bars; 2022.

W. ASTM A780/A780M - Standard Practice for Repair of Damaged and Uncoated Areas of Hot-Dip Galvanized Coatings; 2020.

X. ASTM A1064/A1064M - Standard Specification for Carbon-Steel Wire and Welded Wire Reinforcement, Plain and Deformed, for Concrete; 2022.

Y. ASTM C1602/C1602M - Standard Specification for Mixing Water Used in the Production of Hydraulic Cement Concrete; 2022.

Z. ASTM C1610/C1610M - Standard Test Method for Static Segregation of Self-Consolidating Concrete Using Column Technique; 2021.

AA. ASTM C1611/C1611M - Standard Test Method for Slump Flow of Self-Consolidating Concrete; 2021.

BB. ASTM C1621/C1621M - Standard Test Method for Passing Ability of Self-Consolidating Concrete by J-Ring; 2017.

CC. ASTM C1712 - Standard Test Method for Rapid Assessment of Static Segregation Resistance of Self-Consolidating Concrete Using Penetration Test; 2020.

DD. ASTM D412 - Standard Test Methods for Vulcanized Rubber and Thermoplastic Elastomers--Tension; 2016 (Reapproved 2021).

EE. ASTM C31/C31M - Standard Practice for Making and Curing Concrete Test Specimens in the Field; 2024.

FF. ASTM C33/C33M - Standard Specification for Concrete Aggregates; 2023.

GG. ASTM C42/42M - Standard Test Method for Obtaining and Testing Drilled Cores and Sawed Beams of Concrete; 2020.

HH. ASTM C143/C143M - Standard Test Method for Slump of Hydraulic-Cement Concrete; 2020.

II. ASTM C144 - Standard Specification for Aggregate for Masonry Mortar; 2018.

JJ. ASTM C150/C150M - Standard Specification for Portland Cement; 2022.

KK. ASTM C260/C260M - Standard Specification for Air-Entraining Admixtures for Concrete; 2010a (Reapproved 2016).

LL. ASTM C404 - Standard Specification for Aggregates for Masonry Grout; 2024.

MM. ASTM C494/C494M - Standard Specification for Chemical Admixtures for Concrete; 2019, with Editorial Revision (2022).

NN. ASTM C578 - Standard Specification for Rigid, Cellular Polystyrene Thermal Insulation; 2023.

OO. ASTM C881/C881M - Standard Specification for Epoxy-Resin-Base Bonding Systems for Concrete; 2020a.

PP. ASTM C1107/C1107M - Standard Specification for Packaged Dry, Hydraulic-Cement Grout (Nonshrink); 2020.

QQ. ASTM C1218/C1218M - Standard Test Method for Water-Soluble Chloride in Mortar and Concrete; 2020.

RR. ASTM C1582/C1582M - Standard Specification for Admixtures to Inhibit Chloride-Induced Corrosion of Reinforcing Steel in Concrete; 2011, with Editorial Revision (2017).

SS. ASTM D2240 - Standard Test Method for Rubber Property--Durometer Hardness; 2015 (Reapproved 2021).

TT. ASTM E165/E165M - Standard Practice for Liquid Penetrant Testing for General Industry; 2023.

UU. ASTM E543 - Standard Specification for Agencies Performing Nondestructive Testing; 2021.

VV. ASTM E709 - Standard Guide for Magnetic Particle Testing; 2021.

WW. ASTM E1444/E1444M - Standard Practice for Magnetic Particle Testing for Aerospace; 2022.

XX. ASTM F436/F436M - Standard Specification for Hardened Steel Washers Inch and Metric Dimensions; 2019.

YY. ASTM F593 - Standard Specification for Stainless Steel Bolts, Hex Cap Screws, and Studs; 2022.

ZZ. ASTM F844 - Standard Specification for Washers, Steel, Plain (Flat), Unhardened for General Use; 2019.

AAA. ASTM F959/F959M - Standard Specification for Compressible-Washer-Type Direct Tension Indicators for Use with Structural Fasteners, Inch and Metric Series; 2017a.

BBB. ASTM F2329/F2329M - Standard Specification for Zinc Coating, Hot-Dip, Requirements for Application to Carbon and Alloy Steel Bolts, Screws, Washers, Nuts, and Special Threaded Fasteners; 2015.

CCC. ASTM F3125/F3125M - Standard Specification for High Strength Structural Bolts and Assemblies, Steel and Alloy Steel, Heat Treated, Inch Dimensions 120 ksi and 150 ksi Minimum Tensile Strength, and Metric Dimensions 830 MPa and 1040 MPa Minimum Tensile Strength; 2023.

DDD. AWS B2.1/B2.1M - Specification for Welding Procedure and Performance Qualification; 2021.

EEE. AWS C5.4 - RECOMMENDED PRACTICES FOR STUD WELDING; 1993.

FFF. AWS D1.1/D1.1M - Structural Welding Code - Steel; 2020, with Errata (2023).

GGG. AWS D1.4/D1.4M - Structural Welding Code - Steel Reinforcing Bars; 2018, with Amendment (2020).

HHH. AWS D1.6/D1.6M - Structural Welding Code - Stainless Steel; 2017, with Amendment (2021).

III. IAS AC157 - Accreditation Criteria for Fabricator Inspection Programs for Reinforced and Precast/Prestressed Concrete; 2017, with Editorial Revision (2019).

JJJ. MIL-DTL-882 - CLOTH, DUCK, COTTON OR COTTON- POLYESTER BLEND, SYNTHETIC RUBBER, IMPREGNATED, AND LAMINATED, OIL RESISTANT; 2022.

KKK. MIL-P-21035 - PAINT HIGH ZINC DUST CONTENT, GALVANIZING REPAIR (METRIC); Revision B.

LLL. MPI (APL) - Master Painters Institute Approved Products List; Master Painters and Decorators Association; Current Edition.

MMM. PCI MNL-116 - Manual for Quality Control for Plants and Production of Structural Precast Concrete Products; 2021.

NNN. PCI MNL-117 - Manual for Quality Control for Plants and Production of Architectural Precast Concrete Products; 2013.

OOO. PCI MNL-120 - PCI Design Handbook; 2017, with Errata (2021).

PPP. PCI MNL-122 - Architectural Precast Concrete: Fully Revised Manual Including New Sections, Extensive Updates, and Detailed Specifications to Meet Today's Construction Needs.; 2007.

QQQ. PCI MNL-123 - Connections Manual: Design and Typical Details of Connections for Precast and Prestressed Concrete; 1988.

RRR. PCI MNL-135 - Tolerance Manual for Precast and Prestressed Concrete Construction; 2000.

SSS. PCI TR-6 - Guidelines For The Use Of Self-Consolidating Concrete In Precast/Prestressed Concrete; 2015.

TTT. SSPC-PA 1 - Shop, Field, and Maintenance Coating of Metals; 2016.

UUU. SSPC-Paint 20 - Zinc-Rich Coating (Type I - Inorganic, and Type II - Organic); 2019.

VVV. SSPC-SP 3 - Power Tool Cleaning; 2018.

1.4 ADMINISTRATIVE REQUIREMENTS

A. Preinstallation Meeting: Convene one week prior to commencing work of this section.

1.5 COORDINATION

A. The General Contractor or Construction Manager will be responsible for coordinating all trades to ensure all openings and penetrations within the precast walls are accounted for and properly sized before submitting shop drawings to the architect and engineer for review.

B. Fabricator shall coordinate with electrical contractor to ensure all recessed boxes and conduit are installed at the correct location and elevation.

1.6 SUBMITTALS

A. See Section 01 3000 - Administrative Requirements, for submittal procedures.

B. Product Data: Manufacturer's information on accessory products, including each type of product indicated, including: pigments, admixtures, inserts, plates, etc.

C. Design Mixtures: For each precast concrete mixture. Include results of compressive strength and water-absorption tests.

D. Shop Drawings: Indicate layout, unit locations, configuration, unit identification marks, reinforcement, integral insulation, insulated panel system connectors, connection details, support items, location of lifting devices, dimensions, openings, and relationship to adjacent materials. Provide erection drawings.

1. Include details of mix designs.

2. Include structural design calculations.

3. Detail fabrication and installation of architectural precast concrete units.

4. Indicate locations, plan views, elevations, dimensions, shapes, and cross-sections of each unit.

5. Indicate aesthetic intent including joints, drips, chamfers, rustications or reveals, and extent and location of each surface finish.

6. Indicate details at building corners.

7. Indicate separate face and backup mixture locations and thicknesses.

8. Indicate welded connections by AWS standard symbols and show size, length, and type of each weld.

9. Indicate locations, tolerances, and details of anchorage devices to be embedded in or attached to structure or other construction.

10. Indicate locations, extent, and treatment of dry joints if two-stage casting is proposed.

11. Indicate plan views and elevations showing unit location and dimensions, erection sequences, and bracing plan for special conditions.

12. Indicate location of each architectural precast concrete unit by same identification mark placed on unit.

13. Indicate relationship of architectural precast concrete units to adjacent materials.

14. Indicate multiple wythe connection details.

15. Indicate shim sizes and grouting sequence.

16. Coordinate and indicate openings and inserts required by other trades.

17. Clearly indicate loads which are transferred to portions of the structure designed by the Engineer of Record.

18. Design Modifications: If design modifications are proposed to meet performance requirements and field conditions, notify the Architect and submit design calculations and Shop Drawings. Do not adversely affect the appearance, durability, or strength of units when modifying details or materials and maintain the general design concept.

19. Comprehensive engineering design signed and sealed by qualified structural engineer responsible for its preparation licensed in the jurisdiction in which the project is located. Show governing panel types, connections, concrete cover and reinforcement types, including special reinforcement such as epoxy coated carbon fiber grid. Indicate location, type, magnitude, and direction of loads imposed on the building structural frame by the architectural precast concrete.

E. Samples: Submit design reference samples for each type of finish for initial verification of design intent 2 inch, 12 by 12 inch in size, illustrating surface finish, color and texture. Include one for each color and texture. **Architect to work with Precast Contractor during shop drawings to select reference samples.**

1. When back face of precast concrete unit is to be exposed, include Samples illustrating surface finish and texture.

F. Designer's Qualification Statement.

G. Integrally Insulated Panel System Manufacturer's Installation Instructions: Submit manufacturer's current installation instructions for system specified. Certify that copies are available at fabrication site prior to start of precast fabrication

H. Fabricator's Qualification Statement: Provide documentation showing precast concrete fabricator is accredited under IAS AC157.

I. Welders' Qualification Statement: Welders' certificates in accordance with AWS B2.1/B2.1M and dated no more than 12 months before start of scheduled welding work.

J. Integrally Insulated Panel System Design Data:

1. Thermal Resistance: Submit calculations complying with ASHRAE Std 90.1 I-P, isothermal planes method, and demonstrating thermal resistance of integrally insulated panel system.

2. Dew Point: Submit calculations complying with ASHRAE (FUND). Demonstrate condensation prevention, prevention of frost or ice formation on panels surfaces, and inner wall condensation potential of _____ ounce per day per square foot or less.

3. Thermal Bowing and Crack Mitigation: Submit drawing details and written procedures for mitigation and repair of bowing and cracking in insulated concrete panels without full-thickness concrete sections or metallic connectors between wythes.

K. Maintenance Data: Indicate surface cleaning instructions.

1.7 QUALITY ASSURANCE

A. Design Engineer Qualifications: Design precast concrete units under direct supervision of a Professional Structural Engineer experienced in design of precast concrete and licensed in the State in which the Project is located.

B. Fabricator Qualifications:

1. A firm that complies with the following requirements and is experienced in producing architectural precast concrete units similar to those indicated for this Project and with a record of successful in-service performance.

2. Firm having at least 2 years of documented experience in production of precast concrete of the type required.

3. Assumes responsibility for engineering architectural precast concrete units to comply with performance requirements. This responsibility includes preparation of Shop Drawings and comprehensive engineering analysis by a qualified structural engineer.

4. Structural Engineer Qualifications: A structural engineer who is licensed in the jurisdiction where Project is located and who is experienced in providing engineering services of the kind indicated. Engineering services are defined as those performed for installations of architectural precast concrete that are similar to those indicated for this Project in material, design, and extent

5. Plant certified under Precast/Prestressed Concrete Institute Plant Certification Program; product group and category A1 - Architectural Precast Concrete.

6. Has sufficient production capacity to produce required units without delaying the Work.

7. Plant certified under Architectural Precast Association Plant Certification Program for production of architectural precast concrete.

8. Fabricator Qualifications: Precast concrete fabricator accredited by IAS according to IAS AC157.

C. Fire Resistance: Where indicated, provide architectural precast concrete units whose fire resistance satisfy the fire resistance ratings of the Contract Documents and meets the prescriptive requirements of the governing code or has been calculated according to [PCI MNL 124, Design for Fire Resistance of Precast Prestressed Concrete) (ACI 216.1/TMS 0216.1,

Standard Method for Determining Fire Resistance of Concrete and Masonry Construction Assemblies] and is acceptable to authorities having jurisdiction.

D. Welder Qualifications: Welding processes and welding operators qualified in accordance with AWS D1.1/D1.1M and no more than 12 months before start of scheduled welding work.

E. Design Standards: Comply with ACI CODE-318 and design recommendations of PCI MNL-120, "PCI Design Handbook-Precast and Prestressed Concrete," applicable to types of architectural precast concrete units indicated.

F. Quality-Control Standard: For manufacturing procedures and testing requirements, quality-control recommendations, and dimensional tolerances for types of units required, comply with PCI MNL-116,"Manual for Quality Control for Plants and Production of Architectural Precast Concrete Products."

G. Sample Panels: After sample approval and before fabricating architectural precast concrete units, produce a minimum of 2 sample panels approximately16 sq. ft.in area for review by Architect. Incorporate full-scale details of architectural features, reveals, finishes, textures, and transitions in sample panels.

1. Locate panels where indicated or, if not indicated, as directed by Architect.

2. Damage part of an exposed-face surface for each finish, color, and texture, and demonstrate adequacy of repair techniques proposed for repair of surface blemishes.

3. After acceptance of repair technique, maintain one sample panel at manufacturer's plant and one at Project site in an undisturbed condition as a standard for judging the completed Work.

4. Demolish and remove sample panels when directed.

1.8 MOCK-UPS

A. Provide two mock-up, six feet long by five feet wide, with lifting device, and attachment points, and finish in accordance with approved sample.

B. See Section 01 4000 - Quality Requirements for additional requirements.

C. Include mock-up panel with recessed concrete pattern and window opening.

D. Locate where directed.

E. Mock-up panels will not need foundations, but panels will be set on aggregate base and will be braced by deadmen. Panes will be located on site.

1.9 DELIVERY, STORAGE, AND HANDLING

A. Handling: Lift and support precast units only from support points.

B. Deliver architectural precast concrete units in such quantities and at such times to ensure compliance with the agreed upon project schedule and setting sequence and also to limit unloading units temporarily on the ground or other rehandling.

C. Blocking and Lateral Support During Transport and Storage: Use materials that are clean, non-staining, and non-harmful to exposed surfaces. Provide temporary lateral support to prevent bowing and warping.

D. Protect units to prevent staining, chipping, or spalling of concrete.

E. Mark units with date of production in location that will be concealed after installation.

F. Handle and transport units in a position consistent with their shape and design in order to avoid excessive stresses which would cause cracking or damage.

G. Lift and support units only at designated points shown on Shop Drawings.

PART 2 PRODUCTS

2.1 MANUFACTURERS

A. Architectural Precast Concrete:

1. Any manufacturer holding a PCI Group A Plant Certification for the types of products specified; see www.pci.org/#sle.

2.2 PRECAST UNITS, GENERAL

A. Precast Architectural Concrete Units: Comply with PCI MNL-120, PCI MNL-122, PCI MNL-123, PCI MNL-135, and ACI CODE-318.

1. Concrete Face Mix: Minimum 5000 psi, 28 day strength, air entrained to 6 to 8 percent; comply with ACI SPEC-301.

a. Backup Mix: Same aggregate-cement ratio as face mix; achieve 28 day compressive strength of 5000 psi. Normal weight concrete.

2. Design Loads: Static loads, anticipated dynamic loading, including positive and negative wind loads, thermal movement loads, and erection forces as defined by applicable code.

3. Calculate structural properties of units in accordance with ACI CODE-318.

4. Accommodate construction tolerances, deflection of building structural members, and clearances of intended openings.

5. Provide connections that accommodate building movement and thermal movement and adjust to misalignment of structure without unit distortion or damage.

6. Design framing system and connections to maintain clearances at openings, to allow for fabrication and construction tolerances, to accommodate live-load deflection, shrinkage and creepof primary building structure, and other building movements.

B. Exposed panel faces shall be free of joint marks, grain, and other obvious defects. Corners, including false joints shall be uniform and straight. Finish exposed-face surfaces of architectural precast concrete units to match approved design reference sample, sample panels, mockups, and as follows:

1. PCI's Architectural Precast Concrete - Color and Texture Selection Guide, ~~to match sample indicated~~. **Architect will work with Precast contractor during shop drawings to select the PCI Color and Texture.**

a. Abrasive Sandblast Finish: Use abrasive grit, equipment, application techniques, and cleaning procedures to expose aggregate and surrounding matrix surfaces.

b. As-Cast Surface Finish: Provide surfaces to match accepted sample or mockup units for acceptable surface air voids, sand streaks, and honeycombs.

C. Finish Type A: Ensure exposed-to-view finish surfaces of precast units are uniform in color and appearance.

D. Finish Type C: Sand blast exposed-to-view precast unit surfaces to light exposure. Protect adjacent surfaces.

E. Finish Type E: Textured finish. Remove excess concrete from joints and faces of units cast with form liner or other texture. Protect adjacent surfaces.

F. Finish all mechanical spacesunexposed surfaces of architectural precast concrete units with as-cast finish.

G. In the detention areas and any spaces with jail inmates, finish back surfaces of architectural precast concrete units by steel-trowel finish. There shall be no holes or pockets larger than 1/8"

H. Finish back surfaces of architectural precast concrete units by steel-trowel finish.

2.3 MOLD MATERIALS

A. Molds: Rigid, dimensionally stable, non-absorptive material, warp and buckle free, that will provide continuous and true precast concrete surfaces within fabrication tolerances indicated; nonreactive with concrete and suitable for producing required finishes.

1. Mold-ReleaseAgent: Commercially produced liquid-release agent that will not bond with, stain or adversely affect precast concrete surfaces and will not impair subsequent surface or joint treatments of precast concrete.

B. Form Liners: Units of face design, texture, arrangement, and configuration to match those used for precast concrete design reference sample. Furnish with manufacturer's recommended liquid-release agent that will not bond with, stain, or adversely affect precast concrete surfaces and will not impair subsequent surface or joint treatments of precast concrete.

2.4 REINFORCEMENT

A. Comply with requirements of Section 03 2000.

2.5 PRESTRESSING TENDONS

A. Prestressing Strand: ASTM A 416/A 416M, Grade 270 (Grade 1860), uncoated, 7-wire, low-relaxation strand.

B. Unbonded Post-Tensioning Strand: ASTM A 416/A 416M, Grade 270 (Grade 1860), 7-wire, low-relaxation

C. Post-Tensioning Bars: ASTM A 722/A 722 M, uncoated high strength steel bar.

2.6 STAINLESS-STEEL CONNECTION MATERIALS

A. Stainless-Steel Plate: ASTM A666, Type304, of grade suitable for application.

B. Stainless-Steel Bolts and Studs: ASTM F593, Alloy 304 or 316, hex-head bolts and studs; stainless-steel nuts; and flat, stainless-steel washers.

1. Lubricate threaded parts of stainless-steel bolts with an antiseize thread lubricant during assembly.

C. Stainless-Steel-Headed Studs: ASTM A276/A276M, with minimum mechanical properties of PCI MNL-116, Table3.2.3.

2.7 STEEL CONNECTION MATERIALS

A. Carbon-Steel Shapes and Plates: ASTM A572/A572M Grade 50.

B. Carbon-Steel Headed Studs: ASTM A108, Grades 1010 through 1020, cold finished, AWS D1.1/D1.1M, Type A or B, with arc shields and with minimum mechanical properties of PCI MNL-116, Table 3.2.3.

C. Carbon-Steel Plate: ASTM A283/A283M, Grade C.

D. Malleable Iron Castings: ASTM A47/A47M, Grade 32510 or 35028.

E. Carbon-Steel Castings: ASTM A27/A27M, Grade 60-30 (Grade 415-205).

F. High-Strength, Low-Alloy Structural Steel: ASTM A572/A572M.

G. Carbon-Steel Structural Tubing: ASTM A500/A500M, Grade C.

H. Wrought Carbon-Steel Bars: ASTM A675/A675M, Grade 65 (Grade 450).

I. Deformed-Steel Wire or Bar Anchors: ASTM A1064/A1064M or ASTM A706/A706M.

J. Carbon-Steel Bolts and Studs: ASTM A307, Grade A or C carbon-steel, hex-head bolts and studs; carbon-steel nuts (ASTM A563/A563M, Grade A); and flat, unhardened steel washers, ASTM F844.

K. High-Strength Bolts and Nuts: ASTM A193/A193M, Grade B5 or B7, ASTM F3125/F3125M, Grade A325, Type 1, heavy hex steel structural bolts, heavy hex carbon-steel nuts, (ASTM A563/A563M) and hardened carbon-steel washers (ASTM F436/F436M).

L. Shop-Primed Finish: Prepare surfaces of nongalvanized steel items, except those surfaces to be embedded in concrete, according to requirements in SSPC-SP 3 and shop-apply lead- and chromate-free, rust-inhibitive primer, complying with performance requirements in MPI (APL) according to SSPC-PA 1 .

M. Zinc-Coated Finish: For steel items in exterior walls and items indicated for galvanizing, apply zinc coating by hot-dip process according to ASTM A123/A123M, after fabrication, ASTM A153/A153M, or ASTM F2329/F2329M as applicable.

1. For steel shapes, plates, and tubing to be galvanized, limit silicon content of steel to less than 0.03 percent or to between 0.15 and 0.25 percent or limit sum of silicon content and 2.5 times phosphorous content to 0.09 percent.

2. Galvanizing Repair Paint: Zinc paint with dry film containing not less than 94 percent zinc dust by weight, and complying with MIL-P-21035 or SSPC-Paint 20. Comply with manufacturer’s requirements for surface preparation.

N. Welding Electrodes: Comply with AWS standards.

2.8 CONCRETE MATERIALS

A. Cement: ASTM C150/C150M, Type II - Moderate Portland type.

1. For surfaces exposed to view in finished structure, use standard gray portland cement, of same type, brand, and mill source throughout the precast concrete production.

2. Standard gray Portland cement may be used for non-exposed backup concrete.

B. Fine and Coarse Structural Aggregates: ASTM C33/C33M.

1. Aggregates complying with Class 5S.

2. Stockpile fine and coarse aggregates for each type of exposed finish from a single source (pit or quarry) for Project. The aggregate may be sourced locally.

3. Face-Mixture Coarse Aggregates: Selected, hard, and durable; free of material that reacts with cement or causes staining; to match selected finish sample.

4. Gradation: To match design reference sample.

5. Face-Mixture Fine Aggregates: Selected, natural, or manufactured sand of a material compatible with coarse aggregate to match selected Sample finish.

6. Aggregates shall be non-reactive when used in concrete with regard to alkali-silica reaction.

C. Surface Finish Aggregate: ~~Complying with sample in office of Architect.~~ **Architect will work with Precast contractor during shop drawings to select the PCI mix sample.**

D. There shall be no coloring admixtures or additives in the concrete material mix. For surface color, the design intent is to rely on a consistent gray color produced by the gray Portland cement and aggregates for each finish specified.

E. Water: ASTM C1602/C1602M; clean, potable, and not detrimental to concrete.

F. Air Entrainment Admixture: ASTM C260/C260M.

G. Chemical Admixtures: Certified by manufacturer to be compatible with other admixtures and to not contain calcium chloride, or more than 0.06 percent chloride ions or other salts by weight of admixture.

1. Water-Reducing Admixture: ASTM C494/C494M, Type A.

2. Water-Reducing Admixture: ASTM C494/C494M, Type C.

3. Water-Reducing and Retarding Admixture:ASTM C494/C494M, Type D.

4. Water-Reducing and Accelerating Admixture: ASTM C494/C494M, Type E.

5. High-Range, Water-Reducing Admixture: ASTM C494/C494M , Type F.

6. High-Range, Water-Reducing and Retarding Admixture: ASTM C494/C494M, Type G.

7. Corrosion Inhibiting Admixture: ASTM C494/C494M Type S and ASTM C1582/C1582M.

H. Sand-Cement Grout: Portland cement, ASTM C150/C150M, Type I, and clean, natural sand, ASTM C144 or ASTM C404. Mix at ratio of 1 part cement to 2 1/2 to 3 parts sand, by volume, with minimum water required for placement and hydration. Water-soluble chloride ion content of grout with less than 0.06 percent chloride ion by weight of cement when tested in accordance with ASTM C1218/C1218M.

I. Nonmetallic, Nonshrink Grout: Premixed, prepackaged non-ferrous aggregate, noncorrosive, nonstaining grout containing selected silica sands, portland cement, shrinkage-compensating agents, plasticizing and water-reducing admixtures, complying with ASTM C1107/C1107M, Grade A for drypack and Grades B and C for flowable grout and of consistency suitable for application within a 30-minute working time. Water-soluble chloride ion content of grout with less than 0.06 percent chloride ion by weight of cement when tested in accordance with ASTM C1218/C1218M.

J. Epoxy-Resin Grout: Two-component, mineral-filled epoxy-resin: ASTM C881/C881M of type, grade, and class to suit requirements.

K. Limit water-soluble chloride ions to maximumpercentage by weight of cementpermitted by ACI CODE-318 or PCI MNL-116 when tested according to ASTM C1218/C1218M.

L. Water Absorption: 6 percent by weight or 14 percent by volume, tested according to PCI MNL-116.

M. Add air-entraining admixture at manufacturer's prescribed rate to result in concrete at point of placement having an air content complying with PCI MNL-116.

2.9 FORM LINERS

A. Manufacturers:

B. Material: Glass fiber reinforced polyester, Acrylonitrile butadiene styrene, Polyvinyl chloride, Polystyrene, or Polyurethane.

2.10 REVEAL AND ACCENT STRIPS

A. Material: Non-staining, non-reactive, high-density polyethylene.

B. Material: Wood, non-reactive, wood.

C. Profile(s): As indicated on drawings.

2.11 SUPPORT DEVICES

A. Connecting and Support Devices; Anchors and Inserts: ASTM A36/A36M steel; hot-dip galvanized in accordance with ASTM A153/A153M.

1. Clean surfaces of rust, scale, grease, and foreign matter.

2. Galvanize after fabrication in accordance with requirements of ASTM A123/A123M.

B. Bolts, Nuts, and Washers: ASTM F3125/F3125M heavy hex structural bolts, Type 1, plain, with matching ASTM A563/A563M nuts, and washers as follows:

1. Standard Washers: ASTM F436/F436M washers, in finish matching bolts.

C. Primer: Zinc rich type.

2.12 MOLD FABRICATION

A. Molds: Accurately construct molds, mortar tight, of sufficient strength to withstand pressures due to concrete placement and vibration operations and temperature changes, and for prestressing and detensioning operations. Coat contact surfaces of molds with release agent before reinforcement is placed. Avoid contamination of reinforcement and prestressing tendons by release agent.

1. Place form liners accurately to provide finished surface texture indicated. Provide solid backing and supports tomaintain stability of liners during concrete placement. Coat form liner with form-release agent.

B. Maintain molds to provide completed architectural precast concrete units of shapes, lines, and dimensions indicated in Contract Documents, within fabrication tolerances specified.

1. Form joints are not permitted on faces exposed to view in the finished work.

2. Edge and Corner Treatment: Uniformly chamfered.

2.13 INTEGRALLY INSULATED PANEL SYSTEM (TRUSS CONNECTORS)

A. Integrally Insulated Panel System: Precast concrete panel formed from two layers of concrete with rigid insulation and non-conducting truss connectors between layers.

1. Panel Type: Structurally composite.

2. Connectors: System manufacturer's standard; epoxy coated, interlaid carbon fiber mesh.

3. Continuous Insulation: Rigid expanded polystyrene (EPS) board insulation; ASTM C578, Type I.

4. Extruded-Polystyrene Board Insulation: ASTM C578, R-value – 20. Foam-Control Maxx 150 Min. R-Value 15 is an acceptable substitute.

5. Wythe Connectors: Non-conductive – no thermal bridging allowed.

a. Provide holes in insulation for connector placement at least 4 in. (100 mm) and no more than 12 in. (0.30 m) from edges of panel or openings.

6. Design and construct panels to maintain overall R-value of _____, with less than one percent change due to penetrations and connections, when calculated in accordance with ASHRAE Std 90.1 I-P, isothermal planes method.

2.14 FABRICATION

A. Fabricate in compliance with PCI MNL-117 and PCI MNL-135.

B. Maintain plant records and quality control program during production of precast units. Make records available upon request.

C. Use rigid molds, constructed to maintain precast unit uniform in shape, size, and finish.

D. Use form liners in accordance with manufacturer's instructions.

E. Maintain consistent quality during manufacture.

F. Fabricate connecting devices, plates, angles, inserts, bolts, and accessories. Fabricate to permit initial placement and final attachment.

G. Embed reinforcing steel, anchors, inserts plates, angles, and other cast-in items.

H. Integrally Insulated Panel System: Comply with manufacturer's written installation instructions.

I. Place recessed flashing reglets continuous and straight.

J. Cure units to develop concrete quality, and to minimize appearance blemishes such as non-uniformity, staining, or surface cracking.

K. Cast-in Anchors, Inserts, Plates, Angles, and Other Anchorage Hardware: Fabricate anchorage hardware with sufficient anchorage and embedment to comply with design requirements. Accurately position for attachment of loose hardware and secure in place during precasting operations. Locate anchorage hardware where it does not affect position of main reinforcement or concrete placement.

1. Weld headed studs and deformed bar anchors used for anchorage according to AWS D1.1/D1.1M and AWS C5.4, "Recommended Practices for Stud Welding."

L. Furnish loose hardware items including steel plates, clip angles, seat angles, anchors, dowels, cramps, hangers, and other hardware shapes for securing architectural precast concrete units to supporting and adjacent construction.

M. Cast in reglets, slots, holes, and other accessories in architectural precast concrete units as indicated on Contract Drawings.

N. Cast in openings larger than 10 in. in any dimension. Do not drill or cut openings or prestressing strand without Architect's approval.

O. Reinforcement: Comply with recommendations in PCI MNL-116 for fabrication, placing, and supporting reinforcement.

1. Clean reinforcement of loose rust and mill scale, earth, and other materials that reduce or destroy the bond with concrete. When damage to epoxy-coated reinforcing exceeds limits specified in ASTM A775/A775M, repair with patching material compatible with coating material and epoxy coat bar ends after cutting.

2. Accurately position, support, and secure reinforcement against displacement during concrete- placement and consolidation operations. Completely conceal plastic tipped or corrosion resistant metal or plastic chair support devices to prevent exposure on finished surfaces.

3. Place reinforcing steel and prestressing tendon to maintain at least 3/4 in. (19 mm) minimum concrete cover. Increase cover requirements for reinforcing steel to 1 1/2 in. (38 mm) when units are exposed to corrosive environment or severe exposure conditions. Arrange, space, and securely tie bars and bar supports to hold reinforcement in position while placing concrete. Direct wire tie ends away from finished, exposed concrete surfaces.

4. Install welded wire reinforcement in lengths as long as practicable. Lap adjoining pieces at least one full mesh spacing and wire tie laps, where required by design. Offset laps of adjoining widths to prevent continuous laps in either direction.

P. Reinforce architectural precast concrete units to resist handling, transportation and erection stresses, and specified in-place loads, whichever governs.

Q. Prestress tendons for architectural precast concrete units by pretensioning or post-tensioning methods. Comply with PCI MNL-116.

1. Delay detensioning or post-tensioning of precast, prestressed architectural precast concrete units until concrete has reached its indicated minimum design release compressive strength as established by test cylinders cured under the same conditions as concrete unit.

2. Detension pretensioned tendons either by gradually releasing tensioning jacks or by heat-cutting tendons, using a sequence and pattern to prevent shock or unbalanced loading.

3. If concrete has been heat cured, detension while concrete is still warm and moist to avoid dimensional changes that may cause cracking or undesirable stresses.

4. Protect strand ends and anchorages with bituminous, zinc-rich, or epoxy paint to avoid corrosion and possible rust spots.

R. Comply with requirements in PCI MNL-116 and requirements in this Section for measuring, mixing, transporting, and placing concrete. After concrete batching, no additional water may be added.

S. Place face mixture to a minimum thickness after consolidation of the greater of 1 in. (25 mm) or 1.5 times the nominal maximum aggregate size, but not less than the minimum reinforcing cover as indicated on Contract Drawings.

1. Use a single design mixture for those units in which more than one major face (edge) is exposed.

2. Where only one face of unit is exposed, at the fabricator’s option, either of the following mixture design/casting techniques may be used:

a. A single design mixture throughout the entire thickness of panel.

b. Separate mixtures for face and backup concrete; using cement and aggregates for each type as appropriate, for consecutive placement in the mold. Use cement and aggregate specified for face mixture. Use cement and aggregate for backup mixture complying with specified criteria or as selected by the fabricator.

T. Place concrete in a continuous operation to prevent cold joints or planes of weakness from forming in precast concrete units.

1. Place backup concrete to ensure bond with face-mixture concrete.

U. Thoroughly consolidate placed concrete by internal and/or external vibration without dislocating or damaging reinforcement and built-in items, and minimize pour lines, honeycombing, or entrapped air voids on surfaces. Use equipment and procedures complying with PCI MNL-116.

1. Place self-consolidating concrete without vibration in accordance with PCI TR-6 "Interim Guidelines for the Use of Self-Consolidating Concrete." If face and backup concrete is used, ensure adequate bond between concrete mixtures.

V. Comply with PCI MNL-116 procedures for hot- and cold-weather concrete placement.

W. Identify pickup points of architectural precast concrete units and orientation in structure with permanent markings, complying with markings indicated on Shop Drawings. Imprint or permanently mark casting date on each architectural precast concrete unit on a surface that will not show in finished structure.

X. Cure concrete, according to requirements in PCI MNL-116, by moisture retention without heat or by accelerated heat curing using low-pressure live steam or radiant heat and moisture. Cure units until the compressive strength is high enough to ensure that stripping does not have an effect on the performance or appearance of final product.

Y. Repair damaged architectural precast concrete units to meet acceptability requirements in PCI MNL-117 and Architect's approval.

2.15 INSULATED PANEL CASTING

A. Cast, screed and consolidate bottom concrete wythe supported by mold.

B. Place insulation boards, abutting edges and ends of adjacent boards. Insert wythe connectors through insulation holes, and consolidate concrete around connectors according to connector manufacturer’s written instructions.

C. Ensure bottom wythe or insulation layer are not disturbed after bottom wythe reaches initial set.

D. Cast and screed top wythe to meet required finish.

E. Maintain temperature below 150 deg. F in bottom concrete wythe.

2.16 FABRICATION TOLERANCES

A. Comply with PCI MNL-117 and PCI MNL-135, except as specifically amended below.

1. Maximum Variation From Nominal Face Dimensions: Plus or minus 3/32 in.

2. Maximum Variation From Square or Designated Skew: Plus or minus 1/8 inch in 10 feet.

3. Maximum Variation from Thickness: Plus or minus 1/8 in.

4. Maximum Misalignment of Anchors, Inserts, Openings: Plus or minus 1/8 inch.

5. Maximum Bowing of Members: Plus or minus length/360.

6. Length and Width of Blockouts and Openings within One Unit: Plus or Minus 1/4 in.

7. Location and Dimensions of Blockouts Hidden from View and Used for HVAC and Utility Penetrations: Plus or Minus 3/4 in.

8. Dimensions of Haunches: Plus or Minus 1/4 in.

9. Haunch Bearing Surface Deviation from Specified Plane: Plus or Minus 1/8 in.

10. Difference in Relative Position of Adjacent Haunch Bearing Surfaces from Specified Relative Position: Plus or Minus 1/4 in.

11. Bowing: Plus or Minus L/360, maximum 1 in.

12. Local Smoothness: 1/4 in. per 10 ft.

13. Warping: 1/16 in. per 12 in. of distance from the nearest adjacent corner.

14. Tipping and Flushness of Plates: Plus or Minus 1/4 in.

15. Dimensions of Architectural Features and Rustications: Plus or Minus 1/8 in.

B. Position Tolerances: For cast-in items measured from datum line location, as indicated on Shop Drawings.

1. Weld Plates: Plus or Minus 1 in. Do not place embedded plates where continuous steel members are shown as field welded below the surface of the concrete. Allow for tolerances specified in AWS D1.1. for welding.

2. Inserts: Plus or Minus 1/2 in.

3. Handling Devices: Plus or Minus 3 in.

4. Reinforcing Steel and Welded Wire Reinforcement: Plus or Minus 1/4 in. where position has structural implications or affects concrete cover; otherwise, Plus or Minus 1/2 in.

5. Reinforcing Steel Extending out of Member: Plus or Minus 1/2 in. of plan dimensions.

6. Tendons: Plus or Minus 1/4 in., perpendicular to panel; Plus or Minus 1 in., parallel to panel.

7. Location of Rustication Joints: Plus or Minus 1/8 in.

8. Location of Opening within Panel: Plus or Minus 1/4 in.

9. Location of Flashing Reglets: Plus or Minus 1/4 in.

10. Location of Flashing Reglets at Edge of Panel: Plus or Minus 1/8 in.

11. Reglets for Glazing Gaskets: Plus or Minus 1/8 in.

12. Electrical Outlets, Hose Bibs: Plus or Minus 1/2 in.

13. Location of Bearing Surface from End of Member: Plus or Minus 1/4 in.

14. Allowable Rotation of Plate, Channel Inserts, Electrical Boxes: 2-degree rotation or 1/4 in. maximum measured at perimeter of insert.

15. Position of Sleeve: Plus or Minus 1/2 in.

16. Location of Window Washer Track or Buttons: Plus or Minus 1/8 in.

17. See the drawings for additional restrictions regarding tolerances.

2.17 ACCESSORIES

A. Bearing Pads: High density plastic; Shore A Durometer ____; 1/8 inch thick, smooth both sides.

B. Reglets: Specified in Section 07 6200 - Sheet Metal Flashing And Trim.

C. Reglets: Stainless steel, Type 304, felt or fiber filled, or with face opening of slots covered.

D. Precast Accessories: Provide clips, hangers, plastic or steel shims, and other accessories required to install architectural precast concrete units.

E. Provide one of the following bearing pads for architectural precast concrete units as recommended by precast concrete fabricator for application:

1. Elastomeric Pads: AASHTO M251M/M251 , plain, vulcanized, 100 percent polychloroprene (neoprene) elastomer, molded to size or cut from a molded sheet, 50 to 70 Shore A durometer according to ASTM D2240, minimum tensile strength 2250 psi (15.5 MPa) per ASTM D412.

2. Random-Oriented, Fiber-Reinforced Elastomeric Pads: Preformed, randomly oriented synthetic fibers set in elastomer. Surface hardness of 70 to 90 Shore A durometer according to ASTM D2240. Capable of supporting a compressive stress of 3000 psi (20.7 MPa) with no cracking, splitting, or delaminating in the internal portions of the pad. Test one specimen for each 200 pads used in Project.

3. Cotton-Duck-Fabric-Reinforced Elastomeric Pads: Preformed, horizontally layered cotton-duck fabric bonded to an elastomer. Surface hardness of 80 to 100 Shore A durometer according to ASTM D2240. Conforming to Division II, Section 18.10.2 of AASHTO LRFD Bridge Design Specifications, or Military Specification, MIL-DTL-882.

4. Frictionless Pads: Tetrafluoroethylene (Teflon), glass-fiber reinforced, bonded to stainless or mild-steel plates, or random-oriented, fiber-reinforced elastomeric pads, of type required for in-service stress.

5. High-Density Plastic: Multimonomer, nonleaching, plastic strip capable of supporting loads with no visible overall expansion.

F. Reglets: Specified in Section 07 6200.

2.18 SOURCE QUALITY CONTROL

A. Provide testing and analysis of concrete mix.

B. Take 5 concrete test cylinders for every 25 cu yd of concrete placed; make and cure in accordance with ASTM C31/C31M.

C. Take 1 slump tests for every 5 test cylinders in accordance with ASTM C143/C143M.

D. Take one air entrainment test cylinders for each set of exterior concrete test cylinders taken.

E. Take water absorption test in accordance with PCI MNL-117.

F. Quality-Control Testing: Test and inspect precast concrete according to PCI MNL-117 requirements. If using self-consolidating concrete also test and inspect according to PCI TR-6 "Interim Guidelines for the Use of Self-Consolidating Concrete" and ASTM C1611/C1611M, ASTM C1712, ASTM C1610/C1610M, and ASTM C1621/C1621M.

G. In addition to PCI Certification, Owner will employ an accredited independent testing agency to evaluate architectural precast concrete fabricator's quality-control and testing methods.

1. Allow Owner’s testing agency access to material storage areas, concrete production equipment, and concrete placement and curing facilities. Cooperate with Owner’s testing agency and provide samples of materials and concrete mixtures as may be requested for additional testing and evaluation.

H. Strength of precast concrete units will be considered deficient if units fail to comply with ACI CODE-318 concrete strength requirements.

I. Testing: If there is evidence that strength of precast concrete units may be deficient or may not comply with ACI CODE-318 requirements, fabricator will employ an independent testing agency to obtain, prepare, and test cores drilled from hardened concrete to determine compressive strength according to ASTM C42/42M and ACI CODE-318.

1. A minimum of three representative cores will be taken from units of suspect strength, from locations directed by Architect.

2. Cores will be tested in an air-dry condition.

3. Strength of concrete for each series of three cores will be considered satisfactory if the average compressive strength is equal to at least 85 percent of the 28-day design compressive strength and no single core is less than 75 percent of the 28-day design compressive strength.

4. Test results will be reported in writing on the same day that tests are performed, with copies to Architect, Contractor, and precast concrete fabricator. Test reports will include the following:

    a. Project identification name and number.

    b. Date when tests were performed.

    c. Name of precast concrete fabricator.

    d. Name of concrete testing agency.

    e. Identification letter, name, and type of precast concrete unit(s) represented by core tests; design compressive strength; type of break; compressive strength at breaks, corrected for length-diameter ratio; and direction of applied load to core in relation to horizontal plane of concrete as placed.

J. Patching: If core test results are satisfactory and precast concrete units comply with requirements, clean and dampen core holes and solidly fill with precast concrete mixture that has no coarse aggregate, and finish to match adjacent precast concrete surfaces.

K. Acceptability: Architectural precast concrete units that do not comply with acceptability requirements in PCI MNL-117, including concrete strength, manufacturing tolerances, and color and texture range are unacceptable. Chipped, spalled, or cracked units may be repaired, if repaired units match the visual mock-up. The Architect reserves the right to reject any unit if it does not match the accepted sample panel or visual mock-up. Replace unacceptable units with precast concrete units that comply with requirements.

PART 3 EXECUTION

3.1 EXAMINATION

A. Verify that building structure, anchors, devices, and openings are ready to receive work of this section.

B. Proceed with precast concrete installation only after unsatisfactory conditions have been corrected.

C. Examine supporting structural frame or foundation and conditions for compliance with requirements for installation tolerances, true and level bearing surfaces, and other conditions affecting performance.

D. Contractor shall notify precast concrete erector that supporting cast-in-place concrete foundation and building structural framing has attained minimum allowable design compressive strength or supporting steel or other structure is structurally ready to receive loads from precast concrete units prior to proceeding with installation.

3.2 PREPARATION

A. Provide for erection procedures and induced loads during erection. Maintain temporary bracing in place until final support is provided.

B. Furnish anchorage devices for precast concrete units to be embedded in or attached to the building structural frame or foundation before start of such Work. Provide locations, setting diagrams, templates and instructions for the proper installation of each anchorage device.

3.3 ERECTION

A. Install loose clips, hangers, bearing pads, and other accessories required for connecting architectural precast concrete units to supporting members and backup materials.

B. Structural steel fabricator to supply and install miscellaneous steel preweld connection hardware in the shop.

C. Erect architectural precast concrete level, plumb, and square within the specified allowable erection tolerances. Provide temporary supports and bracing as required to maintain position, stability, and alignment of units until permanent connections are completed.

1. Install temporary steel or plastic spacing shims as precast concrete units are being erected. Surface weld steel shims to each other to prevent shims from separating.

2. Maintain horizontal and vertical joint alignment and uniform joint width as erection progresses.

3. Remove projecting lifting devices and use sand-cement grout to fill voids within recessed

4. lifting devices flush with surface of adjacent precast concrete surfaces when recess is exposed.

5. Unless otherwise indicated, provide for uniform joint widths of 3/4 in.

D. Connect architectural precast concrete units in position by bolting, welding, grouting, or as otherwise indicated on Shop (Erection) Drawings. Remove temporary shims, wedges, and spacers as soon as practical after connecting and/or grouting are completed.

1. Disruption of roof flashing continuity by connections is not permitted; concealment within roof insulation is acceptable.

E. Welding: Comply with applicable AWS D1.1/D1.1M, AWS D1.4/D1.4M and AWS D1.6/D1.6M requirements for welding, welding electrodes, appearance of welds, quality of welds, and methods used in correcting welding work.

1. Protect architectural precast concrete units and bearing pads from damage during field welding or cutting operations and provide noncombustible shields as required.

2. Welds not specified shall be continuous fillet welds, using not less than the minimum fillet as specified by AWS D1.1/D1.1M, AWS D1.4/D1.4M or AWS D1.6/D1.6M.

3. Clean weld- affected metal surfaces with chipping hammer followed by brushing or power tool cleaning and then reprime damaged painted surfaces in accordance with paint manufacturer's recommendations.

4. For galvanized metal, clean weld-affected metal surfaces with chipping hammer followed by brushing or power tooling cleaning and then apply a minimum 0.004-in.-thick (4 mil) coat of galvanized repair paint to galvanized surfaces in conformance with ASTM A780/A780M.

5. Visually inspect all welds critical to precast concrete connections. Visually check all welds for completion and remove, reweld or repair all defective welds.

F. At bolted connections, use upset threads, thread locking compound or other approved means to prevent loosening of nuts after final adjustment.

1. Where slotted connections are used, verify bolt position and tightness at installation. For sliding connections, properly secure bolt but allow bolt to move within connection slot.

2. For slip critical connections, one of the following methods shall be used to assure proper bolt pretension:

a. Compressible Washer Direct Tension Indicators – meeting ASTM F959/F959M

b. Twist-off Tension Control Bolt – meeting ASTM F3125/F3125M Grade F1852.

3. For slip critical connections, the method to be used and the inspection procedure to be used shall be approved by the Architect and coordinated with the inspection agency.

G. Erect units without damage to shape or finish. Replace or repair damaged panels.

H. Erect units level and plumb within allowable tolerances.

I. Align and maintain uniform horizontal and vertical joints as erection progresses.

J. Weld units in place. Perform welding in accordance with AWS D1.1/D1.1M.

K. Provide non-combustible shields during welding operations.

L. Touch-up field welds and scratched or damaged galvanized surfaces.

M. Set vertical units dry, without grout, attaining joint dimension with plastic spacers. Pack grout to base of unit.

N. Exposed Joint Dimension: 1/4 inch. Adjust units so that joint dimensions are within tolerances.

O. Install thin prestressed panels according to manufacturer's written instructions.

1. Field Modifications: Refer to manufacturer's instructions for drilling, cutting, and edging.

2. Brackets and Embeds: Obtain manufacturer's written approval of any field modification of supporting devices or embedded anchors. Coat field-modified supports and anchors with galvanizing repair paint complying with ASTM A780/A780M.

P. Grouting or Dry-Packing Connections and Joints: Indicate joints to be grouted and any critical grouting sequences on Shop (Erection) Drawings. Grout connections where required or indicated on Shop (Erection) Drawings. Retain flowable grout in place until it gains sufficient strength to support itself. Alternatively pack spaces with stiff dry pack grout material, tamping until voids are completely filled. Place grout and finish smooth, level, and plumb with adjacent concrete surfaces. Promptly remove grout material from exposed surfaces before it affects finishes or hardens. Keep grouted joints damp for at least 24 hours after initial set.

3.4 TOLERANCES

A. Erect members level and plumb within allowable tolerances. Comply with PCI MNL-135, except as specifically amended below.

1. Plan Location from Building Grid Datum: Plus or minus ____ in.

2. Top Elevation from Nominal Top Elevation: Plus or minus ____ inch.

3. Maximum Plumb Variation Over Height of Structure or 100 ft (whichever is less): Plus or minus 1/2 inch.

4. Exposed Joint Dimension: Plus or minus 1/4 inch.

5. Maximum Jog in Alignment of Matching Faces or Edges: Plus or minus 1/4 inch.

6. Differential Bowing or Camber as Erected Between Similar Adjacent Members: Plus or minus 1/4 inch.

7. Joint Width (Governs over Joint Taper): Plus or Minus 1/4 in.

8. Maximum Joint Taper: 3/8 in.

9. Joint Taper over 10 ft: 1/4 in.

10. Opening Height between Spandrels: Plus or Minus 1/4 in.

3.5 FIELD QUALITY CONTROL

A. Special Inspections: Owner will engage a qualified special inspector to perform the following special inspections and prepare reports:

1. Erection of loadbearing precast concrete members.

B. Testing: Owner will engage accredited independent testing and inspecting agency to perform field tests and inspections and prepare reports.

1. Field welds will be subject to visual inspections and may be subject to dye penetrant or magnetic particle testing in accordance with ASTM E165/E165M or ASTM E1444/E1444M and ASTM E709. Testing agency shall be qualified in accordance with ASTM E543.

2. Testing agency will report test results promptly and in writing to Contractor and Architect.

C. Repair or remove and replace work where tests and inspections indicate that it does not comply with specified requirements.

D. Additional testing and inspecting, at Contractor's expense, will be performed to determine compliance of corrected work with specified requirements.

3.6 REPAIRS

A. Repairs will be permitted provided structural adequacy of units, durability, and appearance are not impaired.

B. Repair damaged units to meet acceptability requirements of PCI MNL-117.

C. Repairs visible at 20 ft or greater viewing distance: A certain amount of product repairs is to be expected as a routine procedure. Repair methods should ensure that the repaired area will conform to the balance of the work with respect to applicable requirements for appearance, structural adequacy, serviceability, and durability. Slight color variations may occur between the repair area and the original surface due to the different age and curing conditions of the repair. The repair will generally become less noticeable over time (at least a month) with exposure to the environment and should blend into adjacent surfaces so it becomes less noticeable. Excessive variation in color and texture of repairs from adjacent surfaces may be cause for rejection until the variation is minimized.

D. Prepare and repair damaged galvanized coatings with galvanizing repair paint according to ASTM A780/A780M.

E. Wire brush, clean, and paint damaged prime-painted components with same type of shop primer.

F. Remove and replace damaged architectural precast concrete units when repairs do not comply with specified requirements.

3.7 CLEANING

A. Clean all surfaces of precast concreete to be exposed to view, as necessary, prior to shipping.

B. Clean mortar, plaster, fireproofing, weld slag, and any other deleterious material from concrete surfaces and adjacent materials immediately.

C. Clean exposed surfaces of precast concrete units after erection and completion of joint treatment to remove weld marks, dirt, stains and other markings.

1. Perform cleaning procedures, if necessary, according to precast concrete fabricator's recommendations. Protect adjacent work from staining or damage due to cleaning operations.

2. Do not use cleaning materials or processes that could change the appearance of exposed concrete finishes or damage adjacent materials.

D. See Section 01 7419 - Construction Waste Management and Disposal, for additional requirements.

3.8 PROTECTION

A. Clean all surfaces of precast concrete to be exposed to view, as necessary, prior to shipping.

B. Protect installed precast panels from damage that could occur from subsequent construction operations.

END OF SECTION

SECTION 083113.53
SECURITY ACCESS DOORS AND FRAMES

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. Section includes security access doors and frames for walls and ceilings.

1.3 ACTION SUBMITTALS

A. Product Data: For each type of product.

1. Include construction details, fire ratings, materials, individual components and profiles, and finishes.

B. Shop Drawings:

1. Include plans, elevations, sections, details, and attachments to other work.
2. Detail fabrication and installation of access doors and frames for each type of substrate.

C. Samples: For each door face material, at least 3 by 5 inches in size, in specified finish.

D. Product Schedule: Provide complete access door and frame schedule, including types, locations, sizes, latching or locking provisions, and other data pertinent to installation.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

A. Fire-Rated Access Doors and Frames: Units complying with NFPA 80 that are identical to access door and frame assemblies tested for fire-test-response characteristics according to the following test method and that are listed and labeled by UL or another testing and inspecting agency acceptable to authorities having jurisdiction:

1. NFPA 252 or UL 10B for fire-rated access door assemblies installed vertically.

2. Locations of fire rated security access doors are shown on plan.

2.2 SECURITY ACCESS DOORS AND FRAMES

A. High-Security Flush Access Doors:

1. Assembly Description: Fabricate door to fit flush to frame. Provide manufacturer's standard-width exposed flange, proportional to door size.
2. Locations: Wall, where required to maintenance equipment.
3. Door Size: As Required. See Drawings.
4. Uncoated Steel Sheet for Door: Nominal 0.134 inch, 10 gage.

    a. Finish: Factory prime.

5. Frame Material: Same material, thickness, and finish as door.
6. Hinges: Manufacturer's standard security hinge.
    a. Hinge Preparation: Prepare door panel to accept hinge specified in Section 08 7163 "Detention Door Hardware."

7. Hardware: Tamper-resistant lock.
    a. Lock Preparation: Prepare door panel to accept cylinder specified in Section 08 7163 "Detention Door Hardware."

2.3 MATERIALS

A. Steel Plates, Shapes, and Bars: ASTM A 36/A 36M.

B. Steel Sheet: Uncoated or electrolytic zinc coated, ASTM A 879/A 879M, with cold-rolled steel sheet substrate complying with ASTM A 1008/A 1008M, Commercial Steel (CS), exposed.

C. Metallic-Coated Steel Sheet: ASTM A 653/A 653M, Commercial Steel (CS), Type B; with minimum G60 or A60 metallic coating.

D. Stainless-Steel Sheet, Strip, Plate, and Flat Bars: ASTM A 666, Type 304. Remove tool and die marks and stretch lines or blend into finish.

E. Frame Anchors: Same type as door face.

F. Inserts, Bolts, and Anchor Fasteners: Hot-dip galvanized steel according to ASTM A 153/A 153M or ASTM F 2329.

2.4 FABRICATION

A. General: Provide access door and frame assemblies manufactured as integral units ready for installation.

B. Metal Surfaces: For metal surfaces exposed to view in the completed Work, provide materials with smooth, flat surfaces without blemishes. Do not use materials with exposed pitting, seam marks, roller marks, rolled trade names, or roughness.

C. Doors and Frames: Grind exposed welds smooth and flush with adjacent surfaces. Furnish attachment devices and fasteners of type required to secure access doors to types of supports indicated.
    1. Provide mounting holes in frame for attachment of masonry anchors.

D. Latching Mechanisms: Furnish number required to hold doors in flush, smooth plane when closed.

    1. For cylinder lock, furnish two keys per lock and key all locks alike.

2.5 FINISHES

A. Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes.

B. Protect mechanical finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.

C. Appearance of Finished Work: Noticeable variations in same piece are not acceptable. Variations in appearance of adjoining components are acceptable if they are within the range of approved Samples and are assembled or installed to minimize contrast.

D. Steel and Metallic-Coated-Steel Finishes:

1. Factory Prime: Apply manufacturer's standard, fast-curing, lead- and chromate-free, universal primer immediately after surface preparation and pretreatment.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine substrates for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.

B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

A. Comply with manufacturer's written instructions for installing access doors and frames.

B. Install doors flush with adjacent finish surfaces or recessed to receive finish material.

3.3 ADJUSTING

A. Adjust doors and hardware, after installation, for proper operation.

B. Remove and replace doors and frames that are warped, bowed, or otherwise damaged.

END OF SECTION 08 3113.53

SECTION 088000
GLAZING

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes glazing for the following products and applications, including those specified in other Sections where glazing requirements are specified by reference to this Section:

1. Doors.
2. Storefront framing.
3. Curtain wall framing.

1.2 SUBMITTALS

A. Product Data: For each glass product and glazing material indicated.

B. Samples: 12-inch- square, for opaque glass.

C. Preconstruction Adhesion and Compatibility Test Report: From glazing sealant manufacturer.

1.3 DEFINITIONS

A. Interspace: Space between lites of an insulating-glass unit that contains dehydrated air or a specified gas.

B. Deterioration of Coated Glass: Defects developed from normal use that are attributed to the manufacturing process and not to causes other than glass breakage and practices for maintaining and cleaning coated glass contrary to manufacturer's written instructions. Defects include peeling, cracking, and other indications of deterioration in metallic coating.

C. Deterioration of Insulating Glass: Failure of hermetic seal under normal use that is attributed to the manufacturing process and not to causes other than glass breakage and practices for maintaining and cleaning insulating glass contrary to manufacturer's written instructions. Evidence of failure is the obstruction of vision by dust, moisture, or film on interior surfaces of glass.

1.4 PERFORMANCE REQUIREMENTS

A. General: Provide glazing systems capable of withstanding normal thermal movement and wind and impact loads (where applicable) without failure, including loss or glass breakage attributable to the following: defective manufacture, fabrication, and installation; failure of sealants or gaskets to remain watertight and airtight; deterioration of glazing materials; or other defects in construction.

B. Glass Design: Glass thickness designations indicated are minimums and are for detailing only. Confirm glass thicknesses by analyzing Project loads and in-service conditions. Provide glass lites in the thickness designations indicated for various size openings, but not less than

thicknesses and in strengths (annealed or heat treated) required to meet or exceed the following criteria:

1. Glass Thicknesses: Select minimum glass thicknesses to comply with ASTM E 1300, according to the following requirements:

    a. Specified Design Wind Loads: As indicated.

        1) Basic Wind Speed: 120mph
        2) Importance Factor: Risk Category IV.
        3) Exposure Category: C.

    b. Specified Design Snow Loads: As indicated, but not less than snow loads applicable to Project as required by ASCE 7, "Minimum Design Loads for Buildings and Other Structures": Section 7.0, "Snow Loads."
    c. Probability of Breakage for Vertical Glazing: 8 lites per 1000 for lites set vertically or not more than 15 degrees off vertical and under wind action.

        1) Load Duration: 3 seconds.

    d. Minimum Glass Thickness for Exterior Lites: Not less than 6.0 mm.
    e. Thickness of Tinted and Heat-Absorbing Glass: Provide the same thickness for each tint color indicated throughout Project.

C. Thermal Movements: Provide glazing that allows for thermal movements resulting from the following maximum change (range) in ambient and surface temperatures acting on glass framing members and glazing components. Base engineering calculation on surface temperatures of materials due to both solar heat gain and nighttime-sky heat loss.

1. Temperature Change (Range): 120°F, ambient; 180°F, material surfaces.

D. Thermal and Optical Performance Properties: Provide glass with performance properties specified based on manufacturer's published test data, as determined according to procedures indicated below:

1. For monolithic-glass lites, properties are based on units with lites 6.0 mm thick.
2. For insulating-glass units, properties are based on units of thickness indicated for overall unit and for each lite 6.0 mm thick and a nominal 1/2-inch- wide interspace.
3. Center-of-Glass Values: Based on using LBL-44789 WINDOW 5.0 computer program for the following methodologies:

    a. U-Factors: NFRC 100 expressed as Btu/ sq. ft. x h x deg F.
    b. Solar Heat Gain Coefficient: NFRC 200.
    c. Solar Optical Properties: NFRC 300.

1.5 QUALITY ASSURANCE

A. Glazing for Fire-Rated Door Assemblies: Glazing for assemblies that comply with NFPA 80 and that are listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction, for fire ratings indicated, based on testing according to NFPA 257.

B. Glazing Publications: Comply with published recommendations of glass product manufacturers and organizations below, unless more stringent requirements are indicated. Refer to these publications for glazing terms not otherwise defined in this Section or in referenced standards.

1. GANA Publications: GANA Laminated Division's "Laminated Glass Design Guide" and GANA's "Glazing Manual."
2. AAMA Publications: AAMA GDSG-1, "Glass Design for Sloped Glazing," and AAMA TIR-A7, "Sloped Glazing Guidelines."
3. IGMA Publication for Sloped Glazing: IGMA TB-3001, "Sloped Glazing Guidelines."
4. IGMA Publication for Insulating Glass: SIGMA TM-3000, "Glazing Guidelines for Sealed Insulating Glass Units."

C. Insulating-Glass Certification Program: Permanently marked either on spacers or on at least one component lite of units with appropriate certification label of the **Insulating Glass Certification Council**.

1.6 WARRANTY

A. Manufacturer's Special Warranty for Coated-Glass Products: Manufacturer's standard form, made out to Owner and signed by coated-glass manufacturer agreeing to replace coated-glass units that deteriorate as defined in "Definitions" Article, f.o.b. the nearest shipping point to Project site, within specified warranty period indicated below.

1. Warranty Period: **10** years from date of Substantial Completion.

B. Manufacturer's Special Warranty on Insulating Glass: Manufacturer's standard form, made out to Owner and signed by insulating-glass manufacturer agreeing to replace insulating-glass units that deteriorate as defined in "Definitions" Article, f.o.b. the nearest shipping point to Project site, within specified warranty period indicated below.

1. Warranty Period: **10** years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 GLASS PRODUCTS

A. Annealed Float Glass: ASTM C 1036, Type I (transparent flat glass), Quality-Q3; of class indicated.

1. Ultra-Clear (Low-Iron) Float Glass: Class I (clear); with a minimum 91 percent visible light transmission and a minimum solar heat gain coefficient of 0.87.

B. Insulating-Glass Units, General: Factory-assembled units consisting of sealed lites of glass separated by a dehydrated interspace, and complying with ASTM E 774 for Class CBA units and with requirements specified in this Article and in Part 2 "Insulating-Glass Units" Article.

1. Provide Kind FT (fully tempered) glass in place of annealed glass where needed to resist thermal stresses induced by differential shading of individual glass lites and to comply with glass design requirements specified in Part 1 "Performance Requirements".
2. Overall Unit Thickness and Thickness of Each Lite: Dimensions indicated for insulating-glass units are nominal and the overall thicknesses of units are measured perpendicularly from outer surfaces of glass lites at unit's edge.
3. Sealing System: Dual seal.
4. Spacer Specifications: Manufacturer's standard spacer material and construction.

5. Spacer Specifications: Manufacturer's standard spacer material and construction complying with the following requirements:

   a. Spacer Material: ~~Aluminum with mill~~ **1/2" Black SS** ~~or clear anodic finish~~.
   b. Corner Construction: Manufacturer's standard corner construction.

2.2 GLAZING GASKETS

A. Dense Compression Gaskets: Molded or extruded gaskets of material indicated below, complying with standards referenced with name of elastomer indicated below, and of profile and hardness required to maintain watertight seal:

   1. Neoprene, ASTM C 864.
   2. EPDM, ASTM C 864.
   3. Silicone, ASTM C 1115.
   4. Thermoplastic polyolefin rubber, ASTM C 1115.
   5. Any material indicated above.

B. Soft Compression Gaskets: Extruded or molded, closed-cell, integral-skinned gaskets of material indicated below; complying with ASTM C 509, Type II, black; and of profile and hardness required to maintain watertight seal:

   1. Neoprene.
   2. EPDM.
   3. Silicone.
   4. Thermoplastic polyolefin rubber.
   5. Any material indicated above.

2.3 GLAZING SEALANTS

A. General: Provide products of type indicated, complying with the following requirements:

   1. Compatibility: Select glazing sealants that are compatible with one another and with other materials they will contact, including glass products, seals of insulating-glass units, and glazing channel substrates, under conditions of service and application, as demonstrated by sealant manufacturer based on testing and field experience.
   2. Suitability: Comply with sealant and glass manufacturers' written instructions for selecting glazing sealants suitable for applications indicated and for conditions existing at time of installation.

B. Glazing Sealants for Fire-Resistive Glazing Products: Identical to products used in test assemblies to obtain fire-protection rating.

2.4 GLAZING TAPES

A. Back-Bedding Mastic Glazing Tapes: Preformed, butyl-based elastomeric tape with a solids content of 100 percent; nonstaining and nonmigrating in contact with nonporous surfaces; with or without spacer rod as recommended in writing by tape and glass manufacturers for application indicated; packaged on rolls with a release paper backing; and complying with ASTM C 1281 and AAMA 800 for products indicated below:

   1. AAMA 804.3 tape, where indicated.

2. AAMA 806.3 tape, for glazing applications in which tape is subject to continuous pressure.
3. AAMA 807.3 tape, for glazing applications in which tape is not subject to continuous pressure.

B. Expanded Cellular Glazing Tapes: Closed-cell, PVC foam tapes; factory coated with adhesive on both surfaces; packaged on rolls with release liner protecting adhesive; and complying with AAMA 800 for the following types:

1. Type 1, for glazing applications in which tape acts as the primary sealant.
2. Type 2, for glazing applications in which tape is used in combination with a full bead of liquid sealant.

2.5 MISCELLANEOUS GLAZING MATERIALS

A. General: Provide products of material, size, and shape complying with referenced glazing standard, requirements of manufacturers of glass and other glazing materials for application indicated, and with a proven record of compatibility with surfaces contacted in installation.

B. Cleaners, Primers, and Sealers: Types recommended by sealant or gasket manufacturer.

C. Setting Blocks: Elastomeric material with a Shore, Type A durometer hardness of 85, plus or minus 5.

D. Spacers: Elastomeric blocks or continuous extrusions with a Shore, Type A durometer hardness required by glass manufacturer to maintain glass lites in place for installation indicated.

E. Edge Blocks: Elastomeric material of hardness needed to limit glass lateral movement (side walking).

F. Cylindrical Glazing Sealant Backing: ASTM C 1330, Type O (open-cell material), of size and density to control glazing sealant depth and otherwise produce optimum glazing sealant performance.

G. Perimeter Insulation for Fire-Resistive Glazing: Identical to product used in test assembly to obtain fire-resistance rating.

2.6 FABRICATION OF GLAZING UNITS

A. Fabricate glazing units in sizes required to glaze openings indicated for Project, with edge and face clearances, edge and surface conditions, and bite complying with written instructions of product manufacturer and referenced glazing publications, to comply with system performance requirements.

B. Allow for thermal movements from ambient and surface temperature changes acting on glass framing members and glazing components.

1. Temperature Change: 120 deg F, ambient; 180 deg F, material surfaces.

C. Clean-cut or flat-grind vertical edges of butt-glazed monolithic lites to produce square edges with slight chamfers at junctions of edges and faces.

D. Grind smooth and polish exposed glass edges and corners.

2.7 INSULATING-GLASS UNITS: Vision Panel V1 (See Glazing Legend on Sheet A300). Basis of Design: Guardian Glass SunGuard SNR 43 Crystal Gray.

A. Passive Solar Low-E Insulating-Glass Units:

1. Overall Unit Thickness and Thickness of Each Lite: 25 and 6.0 mm.
2. Interspace Content: 12.7mm wide, hermetically sealed, dehydrated 90% Argon space. 1/2" Black SS.
3. Outdoor Lite: Sputter-coated CrystalGray® glass.

a. CrystalGray® Glass: ASTM C 1036, Type 1, Class 2, Quality q3.
b. Vacuum Deposition Sputtered Coating: ASTM C 1376.
c. Low-E Coating: Coating on Surface No. 2: Guardian SunGuard SNR 43.
4. Additional information:

a. Annealed above 7'-0"
b. Kind FT (fully tempered) below 7'-0".

5. Indoor Lite: Clear Float Glass: ASTM C 1036, Type 1, Class 1, Quality q3.

a. Annealed above 7'-0"
b. Kind FT (fully tempered) below 7'-0".
6. Winter Nighttime U-Factor: 0.24 maximum.
7. Summer Daytime U-Factor: 0.212 maximum.
8. Solar Heat Gain Coefficient: 0.18 maximum.
9. Visible Light Transmittance: 31 %
10. Visible Light Reflectance Outdoors: 16 %

2.8 INSULATING-GLASS UNITS: Spandrel Panel S1 (See Glazing Legend on Sheet A300). **Basis of Design: Spandrel Glass to replicate Vision Panel V1.**

A. Passive Solar Low-E Insulating-Glass Units:

1. Overall Unit Thickness and Thickness of Each Lite: 25 and 6.0 mm.
2. Interspace Content: **12.7mm wide, hermetically sealed, dehydrated 90% Argon space. 1/2" Black SS.**
1. Outdoor Lite: Sputter-coated CrystalGray® glass with Spandrel Coating.

a. CrystalGray® Glass: ASTM C 1036, Type 1, Class 2, Quality q3.
b. Vacuum Deposition Sputtered Coating: ASTM C 1376.
c. Low-E Coating: Coating on Surface No. 2: Guardian SunGuard SNR 43.

d. Annealed above 7'-0"
e. Kind FT (fully tempered) below 7'-0".

2. Indoor Lite: Class 1 (clear) float glass.

a. Annealed above 7'-0"
b. Kind FT (fully tempered) below 7'-0".
1. Winter Nighttime U-Factor: 0.24 maximum.
2. Summer Daytime U-Factor: 0.212 maximum.
3. Solar Heat Gain Coefficient: 0.18 maximum.

4. Visible Light Transmittance: 31 %
5. Visible Light Reflectance Outdoors: 16%

PART 3 - EXECUTION

3.1 GLAZING

A. General: Comply with combined written instructions of manufacturers of glass, sealants, gaskets, and other glazing materials, unless more stringent requirements are indicated, including those in referenced glazing publications.

1. Glazing channel dimensions, as indicated on Drawings, provide necessary bite on glass, minimum edge and face clearances, and adequate sealant thicknesses, with reasonable tolerances. Adjust as required by Project conditions during installation.
2. Protect glass edges from damage during handling and installation. Remove damaged glass from Project site and legally dispose of off Project site. Damaged glass is glass with edge damage or other imperfections that, when installed, could weaken glass and impair performance and appearance.
3. Apply primers to joint surfaces where required for adhesion of sealants, as determined by preconstruction sealant-substrate testing.
4. Install setting blocks in sill rabbets, sized and located to comply with referenced glazing publications, unless otherwise required by glass manufacturer. Set blocks in thin course of compatible sealant suitable for heel bead.
5. Do not exceed edge pressures stipulated by glass manufacturers for installing glass lites.
6. Provide spacers for glass lites where length plus width is larger than 50 inches.
7. Provide edge blocking where indicated or needed to prevent glass lites from moving sideways in glazing channel, as recommended in writing by glass manufacturer and according to requirements in referenced glazing publications.

B. Tape Glazing: Position tapes on fixed stops so that, when compressed by glass, their exposed edges are flush with or protrude slightly above sightline of stops. Install tapes continuously, but not necessarily in one continuous length. Do not stretch tapes to make them fit opening.

1. Cover vertical framing joints by applying tapes to heads and sills first and then to jambs. Cover horizontal framing joints by applying tapes to jambs and then to heads and sills.
2. Place joints in tapes at corners of opening with adjoining lengths butted together, not lapped. Seal joints in tapes with compatible sealant approved by tape manufacturer.
3. Apply heel bead of elastomeric sealant.
4. Center glass lites in openings on setting blocks and press firmly against tape by inserting dense compression gaskets formed and installed to lock in place against faces of removable stops. Start gasket applications at corners and work toward centers of openings.
5. Apply cap bead of elastomeric sealant over exposed edge of tape.

C. Gasket Glazing (Dry): Fabricate compression gaskets in lengths recommended by gasket manufacturer to fit openings exactly, with allowance for stretch during installation.

1. Insert soft compression gasket between glass and frame or fixed stop so it is securely in place with joints miter cut and bonded together at corners.
2. Center glass lites in openings on setting blocks and press firmly against soft compression gasket by inserting dense compression gaskets formed and installed to lock in place against faces of removable stops. Start gasket applications at corners and work toward

centers of openings. Compress gaskets to produce a weathertight seal without developing bending stresses in glass. Seal gasket joints with sealant recommended by gasket manufacturer.

3. Install gaskets so they protrude past face of glazing stops.

D. Sealant Glazing (Wet): Install continuous spacers, or spacers combined with cylindrical sealant backing, between glass lites and glazing stops to maintain glass face clearances and to prevent sealant from extruding into glass channel and blocking weep systems until sealants cure. Secure spacers or spacers and backings in place and in position to control depth of installed sealant relative to edge clearance for optimum sealant performance.

1. Force sealants into glazing channels to eliminate voids and to ensure complete wetting or bond of sealant to glass and channel surfaces.
2. Tool exposed surfaces of sealants to provide a substantial wash away from glass.

3.2 CLEANING AND PROTECTION

A. Protect exterior glass from damage immediately after installation by attaching crossed streamers to framing held away from glass. Do not apply markers to glass surface. Remove nonpermanent labels, and clean surfaces. Protect glass from contact with contaminating substances resulting from construction operations, including weld splatter. If, despite such protection, contaminating substances do come into contact with glass, remove substances immediately as recommended by glass manufacturer.

B. Remove and replace glass that is broken, chipped, cracked, or abraded or that is damaged from natural causes, accidents, and vandalism, during construction period.

END OF SECTION 088000

SECTION 088853
SECURITY GLAZING
ADDENDUM 4

PART 1 - GENERAL

1.1 SUMMARY

A. The required security glass and glazing work includes: exterior glazing, interior glazing, doors, side lites and other various interior partitions as required.

B. Detention Contractor to furnish all labor, materials, tools, equipment required to satisfactorily and in compliance with all contract documents, complete the project.

1.2 RELATED DOCUMENTS

A. Refer to related sections including, but not limited to:

1. Section 11 1900 Basic Detention Material/ Equipment Requirements
2. Section 11 1910 Security Hollow Metal Doors and Frames
3. Section 11 1930 Security Hardware

1.3 REFERENCES

A. Glass Association of North America (GANA) Glazing Manual, latest edition.

B. ASTM F-1915- Test Standard for Detention Glazing.

C. ASTM D-1044-94 Test Method for Resistance of Transparent Plastics to surface abrasion.

D. CPSC 16 CFR Part 1201 Safety Standard for Architectural Glazing materials.

E. ASTM C-1036 Specification for Flat Glass.

F. ASTM C-1349-96 Standard Specification for Architectural Flat Glass clad polycarbonate.

G. ASTM F-1592-01 Standard Test Method for Detention Hollow Metal Vision Systems.

H. ASTM C-1172 Standard Specification for Laminated Architectural Flat Glass.

1.4 SUBMITTALS

A. Provide 2 each 12" x 12" square samples of each type of security glazing product to be used on the project.

B. Provide 2 each of the most recent product data for each security glazing product, including thickness, test performance, (reports may be requested), method of test and cleaning instructions. Manufacturer's suggested installation recommendations shall also be provided.

C. Provide a detail showing all caulks, setting blocks, tapes and letters of compatibility for each with the specified glazing material, to the architect for approval prior to commencement of installation.

D. Warranty: Provide a signed copy of the manufacturer's warranty for the specified security glazing product.

E. Any other documentation the manufacturer deems necessary to assure compliance to the specification.

1.5 QUALITY ASSURANCE

A. Comply with ASTM F-1915 containment test for forced entry performance. Round robin testing is not acceptable.

B. Comply with Underwriters Lab Test UL-752 for ballistic requirements and supply only "listed" UL products.

C. Experience Criteria: Manufacturers not prior approved, shall provide evidence of five years experience in manufacturing specified item.

D. Testing: All specified products shall be tested by a laboratory conforming to ASTM E-699.

E. Security glazing substitutions: All requests (and submittals) for "approval" as a security glazing material must be made to the architect 30 days prior to bid.

F. Warranty:

1. Glass clad polycarbonate: shall be a written warranty from the manufacturer agreeing to provide replacement material, FOB point of manufacture, freight prepaid and allowed, in the event of product failure or defect for a period of 5 years from date of substantial completion. Defect shall be defined as delamination, yellowing or hazing.

2. Laminated Polycarbonate: shall be a written warranty from the manufacturer agreeing to provide replacement material, FOB point of manufacture, freight prepaid and allowed, in the event of product failure or defect for a period of 5 years from date of substantial completion. Defect shall be defined as delamination, yellowing or hazing.

3. Air - Gap Units: shall be a written warranty from the manufacturer agreeing to provide replacement material, FOB point of manufacture, freight prepaid and allowed, in the event of product failure or defect for a period of one year from date of substantial completion. Defect shall be defined as edge seal failure, hazing or fogging.

G. Comply with glazing recommendations as stated in the "GANA" Glazing Association of North America's glazing manual, latest edition.

H. Coordination meeting shall be held at the job site with the architect, Security glazing manufacturer, installer and other relevant trades as deemed necessary by the architect. Purpose of said meeting is to coordinate, review and address security glazing installation products installation method and compatibility.

I. Glazing Detail: the successful glazing installer shall provide as part of the submittal package, a detail drawing of the proposed installation method, included shall be data sheets of all products, glass, caulk, setting blocks, tapes etc. and letters of compatibility with each.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Security Glazing Categories:

1. Polycarbonate: Laminated or monolithic polycarbonate shall be extruded, UV stabilized, but when laminated uses various layers of urethane resins. Polycarbonate laminates shall have a flexural strength not less than 13,500 psi: (ASTM D-790,) 180*F continuous service temperature. Products must conform to all applicable IBC building Codes with a CC-1 flammability performance rating.
2. Glass Clad polycarbonate: Shall be laminated glass – polycarbonate construction using urethane interlayers. Product supplied must be manufactured to ASTM C-1349. All bullet resistant glass clad polycarbonate is to be "no spall" as defined by UL-752 test procedure.
3. **Basis of Design: UL 752 Bullet Resistant Glazing by Isoclima Specialty Glass (1-866-412-6977). Substitutions must provide a certificate by Underwriters Laboratories indicating compliance with this testing criteria.**

2.2 SECURITY GLAZING TYPES (Glass Clad Polycarbonate) Basis of Design is listed, equal by Dlubak and or LTI is acceptable.

A. SG-1 - Security Glass Type (10 Minute Forced Entry)

1. 9/16" nominal, glass clad polycarbonate, clear, ASTM F-1915 Grade 4, 10-minute forced entry rated, Global Security Glazing Secur-Tem+Poly 2117 (basis of design) or equal. Product shall consist of a combination of heat or chemically strengthened glass outboard lites laminated to a polycarbonate core sufficient to meet test requirements.

B. SG-1M - Security Glass Type (10 Minute Forced Entry/Mirrored)

1. 9/16" nominal, glass clad polycarbonate, one-way mirror, ASTM F-1915 Grade 4, 10-minute forced entry rated, Global Security Glazing Secur-Tem+Poly 2117M (basis of design) or equal. Product shall consist of a combination of heat or chemically strengthened glass outboard lites laminated to a polycarbonate core sufficient to meet test requirements. Mirrored glass shall be installed on Interview side.

C. SG-2 - Security Glass Type (40-minute Forced Entry)

1. 3/4" nominal, glass clad polycarbonate, clear, ASTM F-1915 Grade 2, 40-minute forced entry rated, Global Security Glazing Secur-Tem+Poly SP019 (basis of design) or equal. Product shall consist of a combination of heat or chemically strengthened glass outboard lites laminated to a polycarbonate core sufficient to meet test requirements.

D. SG-2M - Security Glass Type (40-minute Forced Entry/Mirrored)

1. 3/4" nominal, glass clad polycarbonate, one way mirrored, ASTM F-1915-98 Grade 2, 40-minute forced entry rated, Global Security Glazing Secur-Tem+Poly SP019M (basis of design) or equal. Product shall consist of a combination of heat or chemically strengthen Glass outboard lites laminated to a polycarbonate core sufficient to meet test requirements. Mirrored glass shall be installed on Dayroom side.

E. SG-3 - Security Glass Type (60-minute Forced Entry)

1. 1" nominal, glass clad polycarbonate, clear, ASTM F-1915 Grade 1, 60-minute forced entry rated, Global Security Glazing Secur-Tem +Poly SP028 (basis of design) or equal. Product shall consist of a combination of heat or chemically strengthened glass outboard lites laminated to a polycarbonate core sufficient to meet test requirements.

F. SG-3B - Security Glass (UL 752 Level III / 60-minute Forced Entry)
   1. **Overall Insulated Glass Unit Thickness: 1 7/8”**
   2. **1 7/8" (1/4” Guardian SNR 43 Tempered, (1/2" Black SS Argon), Secur-Tem + Poly SP311**
   2. **Product: Secur-Tem + Poly SP311 by Global Security Glazing**
      a. **Ballistics Resistance: Level 3 per UL 752, No Spall – UL Listed**
      b. **Construction: Glass-clad polycarbonate with abrasion resistant coating on the witness (safe) side.**
      c. **Glass Color: Clear**
   3. **U-Factor: 0.23**
   4. **Solar Heat Gain Coefficient: 0.16**
   5. **Overall Visible Light Transmittance: 0.28**
   6. **SC: 0.18**
   7. **Provide UL Glazing Label on Glass Units**

G. SG-3M – Security Glass Type (UL 752 Level III / 60-minute Forced Entry/Mirrored)

1. 1-3/8" nominal, air gap unit, clear, UL 752 Level III .44 mag listed, Global Security Glazing SP035A-1M (basis of design) or equal. Product shall consist of a combination of heat or chemically strengthened glass, air gap, one-way mirrored glass and laminated mar resistant polycarbonate sufficient to meet test requirements. Mirrored glass shall be installed on the public side.

H. SG-3F – Fire Rated (20-minute Forced Entry)

1. Global Security Glazing, FRP-4520 or equal 45-minute fire rated.

2.3 SECURITY GLAZING SEALANTS-MATERIALS

A. General: Provide product and materials of the type indicated and approved for use with the specified security glazing products. Topping shall be a pick proof caulking, Pecora Dynaflex or equal.

B. Comply with recommendations of the security glazing manufacturer for each type of security glazing material regarding, installation, storage, shelf-life, tooling, and finish. Coordinate all materials and pick proof caulk with glazing manufacturer.

C. Compatibility: Use only those products previously tested and approved for use with the specified security glazing materials. It shall be the responsibility of the glazing installer to coordinate such approval to the architect through submittals for silicones, setting blocks, glazing tape, and edge blocks.

D. Setting blocks and tape are used to hold the glass in place.

E. Install pick proof caulk as a topping.

F. Provide sealants of a color as indicated by the architect.

G. Materials:
1.
2. Silicone sealants shall NOT be used.
3. Pick proof caulk topping shall be Pecora Dynaflex or equal.
4. Glazing tapes shall be 1/8" x 1/2" preformed butyl tape, 100% solids, Tremco 440 or approved equal. Shimmed or unshimmed as needed.
5. Blocking shall be EPDM, Neoprene, silicone or thermoset rubber as tested to be compatible with the specified security glazing product.
6. Setting blocks are to be 80-90 shore A durometer, 1/4" thick.
7. Edge blocks are to be 70-80 shore A durometer, 1/8" thick.
8. Primers, cleaners, sealers shall be supplied per the manufacturers recommendations for compatibility as required.

H. Fire rated glazing materials shall be installed using sealants as indicated in manufacturer's recommendations.

2.4 BULLET RESISTING TRANSACTION WINDOW

A. Factory-Assembled Transaction Windows: In the Public Lobby and other locations indicated on plans, provide the following transaction windows:

1. Basis of Design: AVT Bullet Resisting Transaction Windows as manufactured by GE Polymershapes Insulgard. Windows shall be of the following description:

a. Extruded aluminum transaction window.
b. Natural voice transmission rail
c. Ballistic rated glazing materials, Level 3 ballistic option
d. Stainless steel deal trays
e. Stainless steel counter
f. Custom size as indicated on the drawings
g. Voice rail clear anodized1-1/4" Lexgard® SP1250, unless noted otherwise.

2. STW – S – Chicago Bullet Proof

PART 3 - EXECUTION

3.1 PRE-INSTALLATION

A. Inspection: Prior to installation, the glazier shall inspect all hollow metal frames for compliance to specifications, including size, squareness, edge clearance, weep holes, weld splatter and any other conditions detrimental to the installer's successful completion of the install. Any such conditions shall be brought to the attention of the architect and general contractor with all such conditions corrected prior to commencement of installation.

B. Clean all glazing channels immediately prior to installation.

C. Confirm sizes of all glass; the use of field measurements for ordering glass shall be at the discretion of the installer.

3.2 INSTALLATION

A. Security glazing installation and fabrication shall comply with the written recommendations of the manufacturer.

B. In stall security glazing as late as possible in the construction of the facility. All polycarbonate glazing shall have its masking removed only for approximately 1-2" from the edge so as to allow installation.

C. All polycarbonate glazing exposed to direct sunlight shall have its masking entirely removed, recovered with plastic poly/duct tape to the frames. Failure to remove polycarbonate masking when in direct sunlight may cause staining or "shadows" later.

D. Pickproof cap beads shall be required on all glazing tape and all lites (either interior or exterior) in direct contact with inmates.

E. Proper coordination of cleaning the security glazing shall be the sole responsibility of the General Contractor. It is highly recommended that a meeting of related trades; installer, glazing manufacturer, painter, general contractor be conducted to assure glazing is not damaged by subsequent trades.

END OF SECTION 088853

SECTION 09 9123

PAINTING

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 surface preparation and field painting of exposed exterior and interior items and surfaces.

1. Work of this Section includes surface preparation, priming, and finish coats specified in this Section. Surfaces which have shop priming and surface treatment specified in other Sections that is in satisfactory condition, need only the required surface preparation (cleaning) and two finish coats, unless specifically noted otherwise.

B. Paint exposed surfaces, except where these Specifications indicate that the surface or material is not to be painted or is to remain natural. If an item or a surface is not specifically mentioned, paint the item or surface the same as similar adjacent materials or surfaces. If a color of finish is not indicated, Architect will select from standard colors and finishes available.
1. Painting includes field painting of exposed bare and covered pipes and ducts (including color coding), hangers, exposed steel and iron supports, and surfaces of mechanical and electrical equipment which have been factory primed but do not have a factory-applied final finish.

C. Do not paint prefinished items, concealed surfaces, finished metal surfaces, operating parts, and labels.
1. Prefinished items include the following factory-finished components:
    a. Architectural woodwork and casework.
    b. Metal lockers.
    c. Finished mechanical and electrical equipment.
    d. Light fixtures.
    e. Distribution cabinets.
2. Concealed surfaces include walls or ceilings in the following generally inaccessible spaces:
    a. Furred areas.
    b. Ceiling plenums.
    c. Pipe spaces.
    d. Duct shafts.
3. Finished metal surfaces include the following:
    a. Anodized aluminum.

b. Stainless steel.
c. Chromium plate.
d. Copper and copper alloys.
e. Bronze and brass.

4. Operating parts include moving parts of operating equipment and the following:
   a. Valve and damper operators.
   b. Linkages.
   c. Sensing devices.
   d. Motor and fan shafts.
5. Labels: Do not paint over UL, FMG, or other code-required labels or equipment name, identification, performance rating, or nomenclature plates.

D. Related Sections include the following:
1. Division 32 Section "Asphalt Paving" for traffic-marking paint.
2. Division 05 Section "Structural Steel Framing" for shop priming structural steel.
3. Division 05 Section "Metal Fabrications" for shop priming ferrous metal.
4. Division 08 Section "Hollow Metal Doors and Frames" for factory priming steel doors and frames.
5. Division 8 Section "Steel Detention Doors and Frames" for factory priming steel detention doors and frames.
6. Division 9 Section "Gypsum Board Assemblies" for surface preparation of gypsum board.
7. Division 9 Section "Epoxy Coatings" for special coatings.
8. Division 23: Painting of mechanical work is specified in Division 23.

1.3 SUBMITTALS

A. Product Data: For each paint system indicated. Include block fillers and primers.
1. Material List: An inclusive list of required coating materials. Indicate each material and cross-reference specific coating, finish system, and application. Identify each material by manufacturer's catalog number and general classification.
2. Manufacturer's Information: Manufacturer's technical information, including label analysis and instructions for handling, storing, and applying each coating material.

B. Samples for Verification: For each color and material to be applied, with texture to simulate actual conditions, on representative Samples of the actual substrate.

1. Provide a list of materials and applications for each coat of each Sample. Label each Sample for location and application.

1.4 QUALITY ASSURANCE

A. Applicator Qualifications: A firm or individual experienced in applying paints and coatings similar in material, design, and extent to those indicated for this Project, whose work has resulted in applications with a record of successful in-service performance.

B. Source Limitations: Obtain block fillers and primers for each coating system from the same manufacturer as the finish coats.

C. Benchmark Samples (Mockups): Provide a full-coat benchmark finish sample for each type of coating and substrate required. Comply with procedures specified in PDCA P5. Duplicate finish of approved sample Submittals.
   1. Architect will select one room or surface to represent surfaces and conditions for application of each type of coating and substrate.
      a. Wall Surfaces: Provide samples on at least 100 sq. ft. (9 sq. m).
   2. Apply benchmark samples, according to requirements for the completed Work. Provide required sheen, color, and texture on each surface.
      a. After finishes are accepted, Architect will use the room or surface to evaluate coating systems of a similar nature.
   3. Final approval of colors will be from benchmark samples.

1.5 DELIVERY, STORAGE, AND HANDLING

A. Deliver materials to Project site in manufacturer's original, unopened packages and containers bearing manufacturer's name and label and the following information:
   1. Product name or title of material.
   2. Product description (generic classification or binder type).
   3. Manufacturer's stock number and date of manufacture.
   4. Contents by volume, for pigment and vehicle constituents.
   5. Thinning instructions.
   6. Application instructions.
   7. Color name and number.
   8. VOC content.

B. Store materials not in use in tightly covered containers in a well-ventilated area at a minimum ambient temperature of 45 deg F (7 deg C). Maintain storage containers in a clean condition, free of foreign materials and residue.
   1. Protect from freezing. Keep storage area neat and orderly. Remove oily rags and waste daily. Take necessary measures to ensure that workers and work areas are protected from fire and health hazards resulting form handling, mixing, and application.

1.6 PROJECT CONDITIONS

A. Apply waterborne paints only when temperatures of surfaces to be painted and surrounding air are between 50 and 90 deg F (10 and 32 deg C).

B. Apply solvent-thinned paints only when temperatures of surfaces to be painted and surrounding air are between 45 and 95 deg F (7 and 35 deg C).

C. Do not apply paint in snow, rain, fog, or mist; or when relative humidity exceeds 85 percent; or at temperatures less than 5 deg F (3 deg C) above the dew point; or to damp or wet surfaces.

1. Painting may continue during inclement weather if surfaces and areas to be painted are enclosed and heated within temperature limits specified by manufacturer during application and drying periods.

1.7 EXTRA MATERIALS

A. Furnish extra paint materials from the same production run as the materials applied and in the quantities described below. Package with protective covering for storage and identify with labels describing contents. Deliver extra materials to Owner.
   1. Quantity: Furnish Owner with an additional 5 percent, but not less than 1 gal. (3.8 L) or 1 case, as appropriate, of each material and color applied.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Products: Subject to compliance with requirements, provide one of the products listed in the Finish Schedule on the Drawings.

B. Manufacturers' Names: Shortened versions (shown in parentheses) of the following manufacturers' names are used in other Part 2 articles:

   1. Iowa Paint Manufacturing Co. Inc. (IPM)
   2. Benjamin Moore & Co. (Moore).
   3. ICI Dulux/ Devoe Coatings (ICI).
   4. PPG Industries, Inc. (Pittsburgh).
   5. Pratt & Lambert, Inc. (P & L)
   6. Sherwin-Williams Co. (S-W).
   7. Kwal Paint (Kwal)

2.2 PAINT MATERIALS, GENERAL

A. Material Compatibility: Provide block fillers, primers, and finish-coat materials that are compatible with one another and with the substrates indicated under conditions of service and application, as demonstrated by manufacturer based on testing and field experience.

B. Material Quality: Provide manufacturer's best-quality paint material of the various coating types specified that are factory formulated and recommended by manufacturer for application indicated. Paint-material containers not displaying the manufacturer’s product identification will not be acceptable.

C. Colors: Match colors selected by the Architect and indicated by reference to manufacturer's color designations. If required, provide custom colors to match Architect's samples.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine substrates, areas, and conditions, with Applicator present, for compliance with requirements for paint application. Comply with procedures specified in PDCA P4.
   1. Proceed with paint application only after unsatisfactory conditions have been corrected and surfaces receiving paint are thoroughly dry.
   2. Start of painting will be construed as Applicator's acceptance of surfaces and conditions within a particular area.

B. Coordination of Work: Review other Sections in which primers are provided to ensure compatibility of the total system for various substrates. On request, furnish information on characteristics of finish materials to ensure use of compatible primers.
   1. Notify Architect about anticipated problems when using the materials specified over substrates primed by others.

3.2 PREPARATION

A. Remove hardware and hardware accessories, plates, machined surfaces, lighting fixtures, and similar items already installed that are not to be painted. If removal is impractical or impossible because of size or weight of the item, provide surface-applied protection before surface preparation and painting.
   1. After completing painting operations in each space or area, reinstall items removed using workers skilled in the trades involved.

B. Cleaning: Before applying paint or other surface treatments, clean substrates of substances that could impair bond of the various coatings. Remove oil and grease before cleaning.
   1. Schedule cleaning and painting so dust and other contaminants from the cleaning process will not fall on wet, newly painted surfaces.

C. Surface Preparation: Clean and prepare surfaces to be painted according to manufacturer's written instructions for each particular substrate condition and as specified.
   1. Provide barrier coats over incompatible primers or remove and reprime.
   2. Cementitious Materials: Prepare concrete, concrete unit masonry, cement plaster, and mineral-fiber-reinforced cement panel surfaces to be painted. Remove efflorescence, chalk, dust, dirt, grease, oils, and release agents. Roughen as required to remove glaze. If hardeners or sealers have been used to improve curing, use mechanical methods of surface preparation.
      a. Use abrasive blast-cleaning methods if recommended by paint manufacturer.
      b. Determine alkalinity and moisture content of surfaces by performing appropriate tests. If surfaces are sufficiently alkaline to cause the finish paint to blister and burn, correct this condition before application. Do not paint surfaces if moisture content exceeds that permitted in manufacturer's written instructions.
      c. Clean concrete floors to be painted with a 5 percent solution of muriatic acid or other etching cleaner. Flush the floor with clean water to remove acid, neutralize with ammonia, rinse, allow to dry, and vacuum before painting.

3. Wood: Clean surfaces of dirt, oil, and other foreign substances with scrapers, mineral spirits, and sandpaper, as required. Sand surfaces exposed to view smooth and dust off.
    a. Scrape and clean small, dry, seasoned knots, and apply a thin coat of white shellac or other recommended knot sealer before applying primer. After priming, fill holes and imperfections in finish surfaces with putty or plastic wood filler. Sand smooth when dried.
    b. Prime, stain, or seal wood to be painted immediately on delivery. Prime edges, ends, faces, undersides, and back sides of wood, including cabinets, counters, cases, and paneling.
    c. If transparent finish is required, backprime with spar varnish.
    d. Backprime paneling on interior partitions where masonry, plaster, or other wet wall construction occurs on back side.
    e. Seal tops, bottoms, and cutouts of unprimed wood doors with a heavy coat of varnish or sealer immediately on delivery.
4. Ferrous Metals: Clean un-galvanized ferrous-metal surfaces that have not been shop coated; remove oil, grease, dirt, loose mill scale, and other foreign substances. Use solvent or mechanical cleaning methods that comply with SSPC's recommendations.
    a. Blast steel surfaces clean as recommended by paint system manufacturer and according to SSPC-SP 10/NACE No. 2.
    b. Treat bare and sandblasted or pickled clean metal with a metal treatment wash coat before priming.
    c. Touch up bare areas and shop-applied prime coats that have been damaged. Wire-brush, clean with solvents recommended by paint manufacturer, and touch up with same primer as the shop coat.
5. Galvanized Surfaces: Clean galvanized surfaces with nonpetroleum-based solvents so surface is free of oil and surface contaminants. Remove pretreatment from galvanized sheet metal fabricated from coil stock by mechanical methods.

D. Material Preparation: Mix and prepare paint materials according to manufacturer's written instructions.
1. Maintain containers used in mixing and applying paint in a clean condition, free of foreign materials and residue.
2. Stir material before application to produce a mixture of uniform density. Stir as required during application. Do not stir surface film into material. If necessary, remove surface film and strain material before using.
3. Use only thinners approved by paint manufacturer and only within recommended limits.

3.3 APPLICATION

A. Apply paint according to manufacturer's written instructions. Use applicators and techniques best suited for substrate and type of material being applied.
1. Paint colors, surface treatments, and finishes are indicated in the paint schedules.
2. Do not paint over dirt, rust, scale, grease, moisture, scuffed surfaces, or conditions detrimental to formation of a durable paint film.
3. Provide finish coats that are compatible with primers used.
4. The term "exposed surfaces" includes areas visible when permanent or built-in fixtures, grilles, convector covers, covers for finned-tube radiation, and similar components are in place.

Extend coatings in these areas, as required, to maintain system integrity and provide desired protection.

5. Paint surfaces behind movable equipment and furniture the same as similar exposed surfaces. Before final installation of equipment, paint surfaces behind permanently fixed equipment or furniture with prime coat only.
6. Paint interior surfaces of ducts with a flat, non-specular black paint where visible through registers or grilles.
7. Paint back sides of access panels and removable or hinged covers to match exposed surfaces.
8. Finish exterior doors on tops, bottoms, and side edges the same as exterior faces.
9. Sand lightly between each succeeding enamel or varnish coat.

B. Scheduling Painting: Apply first coat to surfaces that have been cleaned, pretreated, or otherwise prepared for painting as soon as practicable after preparation and before subsequent surface deterioration.

1. The number of coats and film thickness required are the same regardless of application method. Do not apply succeeding coats until previous coat has cured as recommended by manufacturer. If sanding is required to produce a smooth, even surface according to manufacturer's written instructions, sand between applications.
2. Omit primer over metal surfaces that have been shop primed and touchup painted.
3. If undercoats, stains, or other conditions show through final coat of paint, apply additional coats until paint film is of uniform finish, color, and appearance. Give special attention to ensure that edges, corners, crevices, welds, and exposed fasteners receive a dry film thickness equivalent to that of flat surfaces.
4. Allow sufficient time between successive coats to permit proper drying. Do not recoat surfaces until paint has dried to where it feels firm, and does not deform or feel sticky under moderate thumb pressure, and until application of another coat of paint does not cause undercoat to lift or lose adhesion.

C. Application Procedures: Apply paints and coatings by brush, roller, spray, or other applicators according to manufacturer's written instructions.

1. Brushes: Use brushes best suited for type of material applied. Use brush of appropriate size for surface or item being painted.
2. Rollers: Use rollers of carpet, velvet-back, or high-pile sheep's wool as recommended by manufacturer for material and texture required.
3. Spray Equipment: Use airless spray equipment with orifice size as recommended by manufacturer for material and texture required.

D. Minimum Coating Thickness: Apply paint materials no thinner than manufacturer's recommended spreading rate to achieve dry film thickness indicated. Provide total dry film thickness of the entire system as recommended by manufacturer.

E. Mechanical and Electrical Work: Painting of mechanical and electrical work is limited to items exposed in equipment rooms and occupied spaces.

F. Mechanical items to be painted include, but are not limited to, the following:

1. Uninsulated metal piping.
2. Uninsulated plastic piping.

3. Pipe hangers and supports.
4. Tanks that do not have factory-applied final finishes.
5. Visible portions of internal surfaces of metal ducts, without liner, behind air inlets and outlets.
6. Duct, equipment, and pipe insulation having "all-service jacket" or other paintable jacket material.
7. Mechanical equipment that is indicated to have a factory-primed finish for field painting.

G. Electrical items to be painted include, but are not limited to, the following:
1. Electrical equipment that is indicated to have a factory-primed finish for field painting.

H. Block Fillers: Apply block fillers to concrete masonry block at a rate to ensure complete coverage with pores filled.

I. Prime Coats: Before applying finish coats, apply a prime coat, as recommended by manufacturer, to material that is required to be painted or finished and that has not been prime coated by others. Recoat primed and sealed surfaces where evidence of suction spots or unsealed areas in first coat appears, to ensure a finish coat with no burn-through or other defects due to insufficient sealing.

J. Pigmented (Opaque) Finishes: Completely cover surfaces as necessary to provide a smooth, opaque surface of uniform finish, color, appearance, and coverage. Cloudiness, spotting, holidays, laps, brush marks, runs, sags, ropiness, or other surface imperfections will not be acceptable.

K. Transparent (Clear) Finishes: Use multiple coats to produce a glass-smooth surface film of even luster. Provide a finish free of laps, runs, cloudiness, color irregularity, brush marks, orange peel, nail holes, or other surface imperfections.
1. Provide satin finish for final coats.

L. Stipple Enamel Finish: Roll and redistribute paint to an even and fine texture. Leave no evidence of rolling, such as laps, irregularity in texture, skid marks, or other surface imperfections.

M. Completed Work: Match approved samples for color, texture, and coverage. Remove, refinish, or repaint work not complying with requirements.

3.4 CLEANING

A. Cleanup: At the end of each workday, remove empty cans, rags, rubbish, and other discarded paint materials from Project site.
1. After completing painting, clean glass and paint-spattered surfaces. Remove spattered paint by washing and scraping without scratching or damaging adjacent finished surfaces.

3.5 PROTECTION

A. Protect work of other trades, whether being painted or not, against damage from painting. Correct damage by cleaning, repairing or replacing, and repainting, as approved by Architect.

B. Provide "Wet Paint" signs to protect newly painted finishes. After completing painting operations, remove temporary protective wrappings provided by others to protect their work.

1. After work of other trades is complete, touch up and restore damaged or defaced painted surfaces. Comply with procedures specified in PDCA P1.

3.6 EXTERIOR PAINT SCHEDULE

A. FM - Exterior Ferrous Metal
   1. ZM - SGAC - Exterior Semigloss Acrylic Enamel: Provide 2 finish coats of semigloss waterborne acrylic-latex enamel over a primer.
      a. PZM - Exterior Galvanized Metal Primer: Factory-formulated galvanized metal primer for exterior application.
         1) ICI; 4020-XXXX Devflex DTM Flat Interior/Exterior Waterborne Primer & Finish: Applied at a dry film thickness of not less than 2.2 mils (0.056 mm).
         2) IPM;Meta-Cryl Pure Acrylic Galvanized Primer #1069: Applied at a dry film thickness of not less than .5 mils and not more than 1. mil.
         3) Kwal:5810 Ambassador G-Prime Acrylic Metal Primer.
         4) Moore; Moore's IMC Acrylic Metal Primer No. M04: Applied at a dry film thickness of not less than 2.0 mils (0.051 mm).
         5) Pittsburgh; 90-709 Pitt-Tech One Pack Interior/Exterior Primer/Finish DTM Industrial Enamel: Applied at a dry film thickness of not less than 3.0 mils (0.076 mm).
         6) P & L; Primer not required on new galvanized metal. Apply 2 finish coats.
         7) S-W; primer not required over this substrate.

      b. First and Second Coats:
         1) ICI; 2406-XXXX Dulux Professional Exterior 100 Percent Acrylic Semi-Gloss Finish applied at a dry film thickness of not less than 1.3 mils (0.033 mm).
         2) IPM; Sterling Acrylic Gloss House Paint #3800: Applied at a dry film thickness of not less than 1.4 mils.
         3) Kwal: 3200 Ambassador 100% Acrylic S/G Block Resistant Enamel: Applied at a dry film thickness of not less than 1.6 mils.
         4) Moore; Moorcraft Super Spec Latex House & Trim Paint No. 170: Applied at a dry film thickness of not less than 1.1 mils (0.028 mm).
         5) Pittsburgh; 6-900 Series SpeedHide Exterior House & Trim Semi-Gloss Acrylic Latex Paint: Applied at a dry film thickness of not less than 1.5 mils (0.038 mm).
         6) P & L; Z-3100 Aqua Royal Latex House & Trim: Applied at a dry film thickness of not less than 1.3 mils
         7) S-W; A-100 Latex Gloss A8 Series: Applied at a dry film thickness of not less than 1.3 mils (0.033 mm).

3.7 INTERIOR PAINT SCHEDULE

A. CSM - Interior Concrete and Concrete Masonry Units (CMU)
   1. CSM - LLAC - Interior Low-Luster Acrylic Paint System: Provide 2 finish coats of eggshell acrylic-latex paint over a primer (a block filler at CMU).

a. PCSMAC - Interior Concrete and Masonry Primer: Factory-formulated alkali-resistant acrylic-latex interior primer for interior application.
   1) ICI; 1030-1200 Ultra-Hide PVA Interior Primer-Sealer General Purpose Wall Primer: Applied at a dry film thickness of not less than 1.9 mils (0.048 mm).
   2) IPM;All Purpose Acrylic Undercoat #3301: Applied at a dry film thickness of not less than 2 mils.
   3) Kwal:0800 Accu-Tone Hi-Hide PDQ Sealer: Applied at a dry film thickness of not less than 1.4 mils.
   4) Moore; Moorcraft Super Spec Latex Enamel Undercoater & Primer Sealer No. 253: Applied at a dry film thickness of not less than 1.2 mils (0.030 mm).
   5) Pittsburgh; 6-2 SpeedHide Interior Quick-Drying Latex Sealer: Applied at a dry film thickness of not less than 1.0 mil (0.025 mm).
   6) P & L;Z-1001 Suprime "1" 100% Acrylic Multi-Purpose Primer; Applied at a dry film thickness of not less than 1.5 mils.
   7) S-W; PrepRite Masonry Primer B28W300: Applied at a dry film thickness of not less than 3.0 mils (0.076 mm).

b. CSM - LLAC Interior Low-Luster Acrylic Enamel: Factory-formulated eggshell acrylic-latex interior enamel.
   1) ICI; 1402-XXXX Dulux Professional Acrylic Eggshell Interior Wall & Trim Enamel: Applied at a dry film thickness of not less than 1.4 mils (0.036 mm).
   2) IPMMaster Series Eggshell Enamel #2300: Applied at a dry film thickness of not less than 1.5 mils.
   3) Kwal:2100 Accu-Pro PC Latex Eggshell: Applied at a dry film thickness of not less than 1.5 mils.
   4) Moore; Moorcraft Super Spec Latex Eggshell Enamel No. 274: Applied at a dry film thickness of not less than 1.3 mils (0.033 mm).
   5) Pittsburgh; 6-400 Series SpeedHide Eggshell Acrylic Latex Enamel: Applied at a dry film thickness of not less than 1.25 mils (0.032 mm).
   6) P & L;Z-8200 Pro-Hide Gold Interior Latex Eggshell: Applied at a dry film thickness of not less than 1.5 - 2.5 mils.
   7) S-W; ProMar 200 Interior Latex Egg-Shell Enamel B20W200 Series: Applied at a dry film thickness of not less than 1.6 mils (0.041 mm).

2. CSM - SGAC - Interior Semigloss Acrylic Paint System: Provide 2 finish coats of Semigloss acrylic-latex enamel over a primer.
   a. PCSMAC - Interior Concrete and Masonry Primer: Factory-formulated alkali-resistant acrylic-latex interior primer for interior application.
      1) ICI; 1030-1200 Ultra-Hide PVA Interior Primer-Sealer General Purpose Wall Primer: Applied at a dry film thickness of not less than 1.9 mils (0.048 mm).
      2) IPM;All Purpose Acrylic Enamel Undercoat #3301: Applied at a dry film thickness of not less than 2 mils.
      3) Kwal:0800 Accu-Tone Hi-Hide PDQ Sealer: Applied at a dry film thickness of not less than 1.4 mils.
      4) Moore; Moorcraft Super Spec Latex Enamel Undercoater & Primer Sealer No. 253: Applied at a dry film thickness of not less than 1.2 mils (0.030 mm).
      5) Pittsburgh; 6-2 SpeedHide Interior Quick-Drying Latex Sealer: Applied at a dry film thickness of not less than 1.0 mil (0.025 mm).

6) P & L;Z-1001 Suprime "1" 100% Acrylic Multi-Purpose Primer; Applied at a dry film thickness of not less than 1.5 mils.
7) S-W; PrepRite Masonry Primer B28W300: Applied at a dry film thickness of not less than 3.0 mils (0.076 mm).

b. CSM - SGAC Interior Semigloss Acrylic Enamel: Factory-formulated semigloss acrylic-latex enamel for interior application.
1) ICI; 1406-XXXX Dulux Professional Acrylic Semi-Gloss Interior Wall & Trim Enamel: Applied at a dry film thickness of not less than 1.5 mils (0.038 mm).
2) IPM;Master Series Semi Gloss Enamel #3200: Applied at a dry film thickness of not less than 1.5 mils.
3) Kwal:3000 Accu-Pro Latex Semi Gloss: Applied at a dry film thickness of not less than 1.5 mils.
4) Moore; Moorcraft Super Spec Latex Semi-Gloss Enamel No. 276: Applied at a dry film thickness of not less than 1.2 mils (0.031 mm).
5) Pittsburgh; 6-500 Series SpeedHide Interior Semi-Gloss Latex: Applied at a dry film thickness of not less than 1.0 mil (0.025 mm).
6) P & L;Z-8300 Pro-Hide Gold Interior Latex Semi-Gloss: Applied at a dry film thickness of not less than 2 mils.
7) S-W; ProMar 200 Interior Latex Semi-Gloss Enamel B31W200 Series: Applied at a dry film thickness of not less than 1.3 mils (0.033 mm).

B. GB - Interior Gypsum Board
1. GB - LLAC - Interior Low-Luster Acrylic Paint System: Provide 2 finish coats of eggshell acrylic-latex enamel over a primer.
a. PGB - Interior Gypsum Board Primer: Factory-formulated latex-based primer for interior application.
1) ICI; 1000-1200 Dulux Ultra Basecoat Interior Latex Wall Primer: Applied at a dry film thickness of not less than 1.2 mils (0.031 mm).
2) IPM;Prime Line Hi Hiding PVA Primer #514: Applied at a dry film thickness of not less than 1.5 mils.
3) Kwal:0890 Accu-Pro Sandable Primer: Applied at a dry film thickness of not less than 1.5 mils.
4) Moore; Moorcraft Super Spec Latex Enamel Undercoater & Primer Sealer No. 253: Applied at a dry film thickness of not less than 1.2 mils (0.030 mm).
5) Pittsburgh; 6-2 SpeedHide Interior Quick-Drying Latex Sealer: Applied at a dry film thickness of not less than 1.0 mil (0.025 mm).
6) P & L.Z-1004 Suprime "4" Interior Latex Wallprimer: Applied at a dry film thickness of not less than 1.2 mils.
7) S-W; PrepRite 200 Latex Wall Primer B28W200 Series: Applied at a dry film thickness of not less than 1.6 mils (0.041 mm).

b. GB - LLAC Interior Low-Luster Acrylic Enamel: Factory-formulated eggshell acrylic-latex interior enamel.
1) ICI; 1402-XXXX Dulux Professional Acrylic Eggshell Interior Wall & Trim Enamel: Applied at a dry film thickness of not less than 1.4 mils (0.036 mm).
2) IPM;Master Series Eggshell Enamel #2300: Applied at a dry film thickness of not less than 1.5 mils.

3) Kwal:2100 Accu-Pro PC Latex Eggshell: Applied at a dry film thickness of not less than 1.5 mils.
4) Moore; Moorcraft Super Spec Latex Eggshell Enamel No. 274: Applied at a dry film thickness of not less than 1.3 mils (0.033 mm).
5) Pittsburgh; 6-400 Series SpeedHide Eggshell Acrylic Latex Enamel: Applied at a dry film thickness of not less than 1.25 mils (0.032 mm).
6) P & L;Z-8200 Pro-Hide Gold Interior Latex Eggshell: Applied at a dry film thickness of not less than 1.5 - 2.5 mils.
7) S-W; ProMar 200 Interior Latex Egg-Shell Enamel B20W200 Series: Applied at a dry film thickness of not less than 1.6 mils (0.041 mm).

C. WH - Interior Wood and Hardboard
1. WH - LLAC - Interior Low-Luster Acrylic Paint System: Provide 2 finish coats of eggshell acrylic-latex enamel over a primer.
a. PWAC - Interior Wood Primer for Acrylic-Enamel and Semigloss Alkyd-Enamel Finishes: Factory-formulated alkyd- or acrylic-latex-based interior wood primer.
1) ICI; 3210-1200 Ultra-Hide Aquacrylic GRIPPER Stain Killer Primer Sealer: Applied at a dry film thickness of not less than 1.8 mils (0.046 mm).
2) IPM;Prime Line Latex Fast Dry Wood Undercoat #517: Applied at a dry film thickness of not less than 1.5 mils.
3) Kwal:0890 Accu-Pro Sandable Primer: Applied at a dry film thickness of not less than 1.5 mils.
4) Moore; Moorcraft Super Spec Alkyd Enamel Underbody and Primer Sealer No. 245: Applied at a dry film thickness of not less than 1.5 mils (0.038 mm).
5) Pittsburgh6-855 SpeedHide Latex Enamel Undercoater: Applied at a dry film thickness of not less than 1.0 mil (0.025 mm).
6) P & L;S-1011 Suprime "11" Interior Alkyd Wood Primer: Applied at a dry film thickness of not less than 1.4 mils.
7) S-W; PrepRite Wall and Wood Primer B49W200 Series: Applied at a dry film thickness of not less than 1.6 mils (0.041 mm).
b. WH - LLAC Interior Low-Luster Acrylic Enamel: Factory-formulated eggshell acrylic-latex interior enamel.
1) ICI; 1402-XXXX Dulux Professional Acrylic Eggshell Interior Wall & Trim Enamel: Applied at a dry film thickness of not less than 1.4 mils (0.036 mm).
2) IPM;Master Series Eggshell Enamel #2300: Applied at a dry film thickness of not less than 1.5 mils.
3) Kwal:2100 Accu-Pro PC Latex Eggshell: Applied at a dry film thickness of not less than 1.5 mils.
4) Moore; Moorcraft Super Spec Latex Eggshell Enamel No. 274: Applied at a dry film thickness of not less than 1.3 mils (0.033 mm).
5) Pittsburgh; 6-400 Series SpeedHide Eggshell Acrylic Latex Enamel: Applied at a dry film thickness of not less than 1.25 mils (0.032 mm).
6) P & L;Z-8200 Pro-Hide Gold Interior Latex Eggshell: Applied at a dry film thickness of not less than 1.5 - 2.5 mils.
7) S-W; ProMar 200 Interior Latex Egg-Shell Enamel B20W200 Series: Applied at a dry film thickness of not less than 1.6 mils (0.041 mm).

D. FM - Interior Ferrous Metal

1. FM - SGALK - Interior Semigloss Alkyd Paint System: Provide 2 finish coats of Semigloss alkyd enamel over a primer.
    a. PFM - Interior Ferrous-Metal Primer: Factory-formulated quick-drying rust-inhibitive alkyd-based metal primer.
        1) ICI; 4160-6130 Devguard Multi-Purpose Tank & Structural Primer: Applied at a dry film thickness of not less than 2.0 mils (0.051 mm).
        2) IPM;Meta-Kote Rust Inhibitive Metal Primer #1064: Applied at a dry film thickness of not less than 2 mils.
        3) Kwal:9210 Accu-Pro Rust Inhibitive Primer: Applied at a dry film thickness of not less than 2.0 mils.
        4) Moore; Moore's IMC Alkyd Metal Primer No. M06: Applied at a dry film thickness of not less than 2.0 mils (0.051 mm).
        5) Pittsburgh; 90-709 Pitt-Tech One Pack Interior/Exterior Primer/ Finish DTM Industrial Enamel: Applied at a dry film thickness of not less than 1.5 mils (0.038 mm).
        6) P & L:S3206/S3207 SteelTech Universal Primer: Applied at a dry film thickness of not less than 2 - 2.5 mils.
        7) S-W; Kem Kromik Universal Metal Primer B50NZ6/B50WZ1: Applied at a dry film thickness of not less than 3.0 mils (0.076 mm).
    b. FM - SGALK Interior Semigloss Alkyd Enamel: Factory-formulated semigloss alkyd enamel for interior application.
        1) ICI; 1516-XXXX Ultra-Hide Alkyd Semi-Gloss Interior Wall & Trim Enamel: Applied at a dry film thickness of not less than 1.7 mils (0.043 mm).
        2) IPM;Synex Semi Gloss Alkyd Enamel #302: Applied at a dry film thickness of not less than 2 mils.
        3) Kwal:4600 Accu-Pro Alkyd Semi Gloss: Applied at a dry film thickness of not less than 1.7 mils.
        4) Moore; Moorcraft Super Spec Alkyd Semi-Gloss Enamel No. 271: Applied at a dry film thickness of not less than 1.4 mils (0.036 mm).
        5) Pittsburgh; 6-1110 Series SpeedHide Interior Enamel Wall & Trim Semi-Gloss Oil: Applied at a dry film thickness of not less than 1.4 mils (0.036 mm).
        6) P & L;S-8800 Pro-Hide Gold Alkyd Semi-Gloss: Applied at a dry film thickness of not less than 1.5 mils.
        7) S-W; ProMar 200 Interior Alkyd Semi-Gloss Enamel B34W200 Series: Applied at a dry film thickness of not less than 1.7 mils (0.043 mm).

E. ZM - Interior Zinc-Coated Metal
1. ZM - SGALK - Interior Semigloss Alkyd Paint System: Provide 2 finish coats of Semigloss alkyd enamel over a primer.
    a. PZM - Interior Zinc-Coated Metal Primer: Factory-formulated galvanized metal primer.
        1)
        2) ICI; 4160-6130 Devguard Multi-Purpose Tank & Structural Primer: Applied at a dry film thickness of not less than 2.0 mils (0.051 mm).
        3) IPM;Meta-Cryl Pure Acrylic Galvanized Primer #1069: Applied at a dry film thickness of not less than .5 mils and not more than 1 mil.
        4) Kwal:5810 Ambassador G-Prime Acrylic Metal Primer: Applied at a dry film thickness of not less than 1.6 mils.

5) Moore; Moore's IMC Acrylic Metal Primer No. M04: Applied at a dry film thickness of not less than 2.0 mils (0.051 mm).
6) Pittsburgh; 90-709 Pitt-Tech One Pack Interior/Exterior Primer/Finish DTM Industrial Enamel: Applied at a dry film thickness of not less than 3.0 mils (0.076 mm).
7) P & L;Z-190 Enducryl DTM Primer Finish: Applied at a dry film thickness of not less than 2 - 3 mils
8) S-W; Galvite HS B50WZ30: Applied at a dry film thickness of not less than 3.0 mils (0.076 mm).

b. ZM - SGALK Interior Semigloss Alkyd Enamel: Factory-formulated semigloss alkyd enamel for interior application.
1)
2) ICI; 1516-XXXX Ultra-Hide Alkyd Semi-Gloss Interior Wall & Trim Enamel: Applied at a dry film thickness of not less than 1.7 mils (0.043 mm).
3) IPMSynex Semi Gloss Alkyd Enamel #302: Applied at a dry film thickness of not less than 2 mils.
4) Kwal:4600 Accu-Pro Alkyd Semi Gloss: Applied at a dry film thickness of not less than 1.7 mils.
5) Moore; Moorcraft Super Spec Alkyd Semi-Gloss Enamel No. 271: Applied at a dry film thickness of not less than 1.4 mils (0.036 mm).
6) Pittsburgh; 6-1110 Series SpeedHide Interior Enamel Wall & Trim Semi-Gloss Oil: Applied at a dry film thickness of not less than 1.4 mils (0.036 mm).
7) P & L;S-8800 Pro-Hide Gold Alkyd Semi-Gloss Enamel: Applied at a dry film thickness of not less than 1.5 mils
8) S-W; ProMar 200 Interior Alkyd Semi-Gloss Enamel B34W200 Series: Applied at a dry film thickness of not less than 1.7 mils (0.043 mm).

F. SIZE - Interior Insulation Covering
1. SIZE - FAC - Interior Flat Latex-based Paint System: Provide 2 finish coats of flat latex -based paint over an all-service jacket insulation covering. If plastic jackets are used as covering over insulation, consult manufacturers to determine that product listed is suitable.
a. SIZE - Interior Flat Latex-Emulsion Size: Factory-formulated flat latex-based interior paint.
1)
2) ICI; 1200-XXXX Dulux Professional Velvet Matte Interior Flat Latex Wall & Trim Finish: Applied at a dry film thickness of not less than 1.4 mils (0.036 mm).
3) IPM;Master Series Latex Flat Enamel #1900: Applied at a dry film thickness of not less than 1.4 mils.
4) Kwal:0910 Accu-Pro Velva Sheen Interior Flat: Applied at a dry film thickness of not less than 1.6 mils.
5) Moore; Moorecraft Super Spec Latex Flat No. 275: Applied at a dry film thickness of not less than 1.2 mils (0.031 mm).
6) Pittsburgh; 6-70 Line SpeedHide Interior Wall Flat-Latex Paint: Applied at a dry film thickness of not less than 1.0 mil (0.025 mm).
7) P & L;Z-8100 Pro-Hide Gold Interior Latex Flat: Applied at a dry film thickness of not less than 2 mils

8) S-W; ProMar 200 Interior Latex Flat Wall Paint B30W200 Series: Applied at a dry film thickness of not less than 1.4 mils (0.036 mm).

G. Concrete Floors:

1. Sealed Concrete Light Duty – Pedestrian Traffic: All exposed concrete floors scheduled to be "sealed concrete" shall receive a maintenance sealer, Hillyard's Cover 1™. Depending on the condition of concrete surface, prepare and apply Cover 1™ in the number of coats as recommended by the manufacturer.

H. Striping Paint for Interior Concrete Floors

1. Concrete Floor Marking Paint: Alkyd-resin type; ready mixed; complying with FS TT-P-115, Type I, or AASHTO M 248, Type N. Color as selected by Architect from manufacturer's standard colors.

END OF SECTION 09 9123

ADDENDUM NO 4

April 3, 2024

ISSUED BY
Henderson Engineers, Inc.
8345 Lenexa Dr
Lenexa, KS 66214

ISSUED FOR
Edgar County Public Safety Center
12636 950th Road
Paris, IL 61944

NOTICE TO ALL BIDDERS FOR THE
Edgar County Public Safety Center
Paris, IL

You are instructed to read and to note the following described changes, corrections, clarifications, omissions, deletions, additions, approvals, and statements pertinent to the Contract Bid and Construction Documents.

This addendum is part of the Contract Bid and Construction Documents and shall govern in the performance of the Work.

DRAWINGS

Plumbing:

1. SHEET P100 – PLUMBING FOUNDATION PLAN
   A. Revised kitchen piping.
   B. Revised sanitary pipe serving Holding cells 2 & 3.
   C. Added vent piping to restrooms.
   D. Revised shower drain and vent pipes serving Pod A & F showers.
   E. Relocated floor drain pipe serving Decon 165.
2. SHEET P101 – PLUMBING WASTE & VENT FIRST FLOOR PLAN - OVERALL
   A. Revised kitchen piping.
   B. Revised notes for condensate drain discharge.
   C. Relocated floor drain serving Decon 165
3. SHEET P103 – PLUMBING WATER & GAS FIRST FLOOR PLAN - OVERALL
   A. Revised kitchen equipment connections.
   B. Revised pipe and notes to FFD flush valve location.
4. SHEET P104 – PLUMBING WATER & GAS MEZZANINE PLAN - JAIL
   A. Added hose bibbs to chases and remove recessed hose bibbs.
   B. Revised pipes serving Pods A, B & C.
5. SHEET P202 – PLUMBING PLAN – ENLARGED – JAILS NORTH
   A. Revised entire sheet.
6. SHEET P203 – PLUMBING PLAN – ENLARGED – JAILS SOUTH
   A. Revised shower piping.

   B. Added TMV callouts.
7. SHEET P300 – PLUMBING RISER DIAGRAM
   A. Revised riser per plan updates.
8. SHEET P301 – PLUMBING RISER DIAGRAM
   A. Revised riser per plan updates.
9. SHEET P401 – PLUMBING DETAILS
   A. Added Detail #13.
10. SHEET P500 – PLUMBING SCHEDULES
   A. Revised SG.
   B. Added HB1.

Electrical:

1. SHEET E100 – ELECTRICAL SITE PLAN
   A. ADD type U2 for sign back light.
2. SHEET E102 - LIGHTING MEZZANINE PLAN – JAIL
   B. Relocated and added exterior lights.
   C. ADD type U2 Undercabinet lights in select locations.
3. SHEET E201 – POWER FIRST FLOOR PLAN - OVERALL
   A. REVISE Various receptacle locations.
4. SHEET E301 – EQUIPMENT CONNECTION FIRST FLOOR PLAN - OVERALL
   A. Updated plumbing valve power locations.
5. SHEET E400 – LIGHT FIXTURE SCHEDULE
   A. ADD Type U2 light fixture.

Fire Protection:

1. SHEET FP101 – FIRE PROTECTION PLAN – FIRST FLOOR.
   A. ADD VESDA System notes to booking area cells.
   B. RELOCATE VESDA panels in Mechanical 158.

Mechanical:

1. SHEET M101.A – HVAC FIRST FLOOR PLAN – AREA A
   A. Revised duct routing in Conference Room 135.
   B. Added section views 2 and 3 to sheet M101.A.

2. SHEET M101.B – HVAC FIRST FLOOR PLAN – AREA B
   A. Revised VAV 1-19 and VAV 1-21 duct routing to avoid precast panel joint clearances.
   B. Revised location of 30” x 16” transfer boot to avoid precast panel joint clearances.
   C. Added keynote M44 to drawings.
   D. Revised location of L 1 to be centered on precast panel.

3. SHEET M101.C – HVAC FIRST FLOOR PLAN – AREA C
   A. Revised VAV 1-19 and VAV 1-21 duct routing to avoid precast panel joint clearances.
   B. Revised location of 30” x 16” transfer boot to avoid precast panel joint clearances.

C. Added keynote M44 to drawings.

Technology:

1. SHEET TN102 – TELECOM MEZZANINE FLOOR PLAN
   A. Revised area of service notes on plan that all cables shown are to be terminated into Encartel rack in Server Room #134.
2. SHEET TN300 – TELECOM ENLARGED PLANS
   A. Revised keynotes #13 and #17 to state that all network switches and UPS' are to be installed by owner.
3. SHEET TN500 – RISER DIAGRAMS
   A. Update riser diagram to indicate fiber infrastructure requirement between Server Room #134 and Dispatch Server #141.

SPECIFICATIONS

1. Section 220700 Plumbing Insulation
   A. Revised to add Direct Bury Insulation.

SECTION 220700

PLUMBING INSULATION

PART 1 - GENERAL REQUIREMENTS

1.1 SECTION INCLUDES

A. Piping Insulation.

B. Equipment Insulation.

1.2 RELATED REQUIREMENTS

A. Division 22 Section "Hangers and Supports for Plumbing Piping," for insulation shields and high-density insulation inserts.

1.3 DEFINITIONS

A. Cold Pipe: Piping that carries fluid with a minimum operating temperature less than 60 degrees F.

B. Hot Pipe: Piping that carries fluid with a minimum operating temperature greater than 105 degrees F.

C. Cold Equipment: Equipment that carries fluids with a minimum operating temperature less than 60 degrees F.

D. Hot Equipment: Equipment that carries fluids with a minimum operating temperature greater than 105 degrees F.

E. Exposed: Insulation that is visible from the occupied space.

F. Exposed to Weather: Insulation that is exposed to potential damage caused by weather, including sunlight, moisture, wind, and solar radiation.

G. Exterior: Locations outside of or within the building envelope (walls, roof, floors, etc) as defined by the architectural drawings and specifications.

H. NAIMA: North American Insulation Manufacturers Association

I. Direct Bury Pipe: Piping that contains grease waste with a minimum operating temperature of 100 and maximum operating temperature of 110F

1.4 SUBMITTALS

A. Product Data: Submit manufacturer's technical product data and installation instructions for each type of Plumbing insulation.

B. Insulation Schedule: Include product name, conductivity k-value, thickness, and furnished accessories for each service.

C. Maintenance Data: Submit maintenance data and replacement material lists for each type of Plumbing insulation. Include this data and product data in maintenance manual.

D. Manufacturer's Instructions: Include installation instructions for storage, handling, protection, examination, preparation, and installation of the product.

1.5 QUALITY ASSURANCE

A. Manufacturer Qualification: Company specializing in manufacturing the products specified in this section with not less than three years of documented experience.

B. Installer Qualifications: Skilled mechanics who have successfully completed an apprenticeship program or another craft training program certified by the Department of Labor, Bureau of Apprenticeship and Training.

C. Flame/Smoke Ratings: Provide composite plumbing insulation (insulation, jackets, coverings, sealers, mastics and adhesives) with flame-spread index of 25 or less and smoke-developed index of 50 or less, as tested by UL 723 or ASTM E84 (NFPA 255) method.

1. Exception: Exterior plumbing insulation may have flame spread index of 75 and smoke developed index of 150.

1.6 DELIVERY, STORAGE, AND HANDLING

A. Accept materials on site, labeled with manufacturer's identification, product density, and thickness.

B. Protect insulation from weather and construction traffic, dirt, water, chemical, and mechanical damage; store in original wrapping.

1.7 FIELD CONDITIONS

A. Maintain ambient conditions required by manufacturers of each product.

B. Maintain temperature before, during, and after installation for minimum of 24 hours.

PART 2 - PRODUCTS

2.1 PIPING INSULATION MATERIALS

A. Mineral Fiber (rock, slag, or glass):

1. Manufacturers:
   a. Knauf Insulation
   b. Johns Manville
   c. Owens Corning

2. Insulation: ASTM C547, Type I or II, rigid mineral fiber, pre-formed for the application.

    a. K-value: ASTM C518 or C177, maximum 0.24 at 75 degrees F.
    b. Minimum Service Temperature: 0 degrees F
    c. Maximum Service Temperature: 850 degrees F for Type I, 1200 degrees F for Type II.
    d. Density: Between 3 to 6 pounds per cubic foot for Type I, between 6 to 8 pounds per cubic foot for Type II.

3. Factory Applied Jacket: ASTM C1136, Type I.

    a. All-Service Jacket (ASJ): Paper/Foil/Scrim, water vapor permeance of 0.02 perms and self-sealing lap.
    b. Poly ASJ: Paper/Foil/Scrim with polymer coating, water vapor permeance of 0.01 perms and self-sealing lap.
    c. Color: White.

B. Flexible Elastomeric:

1. Manufacturers:

    a. Aeroflex USA, Inc.
    b. Armacell LLC.
    c. K-Flex USA.

2. Insulation: ASTM C534, Grade I, flexible elastomeric cellular rubber insulation, pre-formed for the application.

    a. K-value: ASTM C518 or C177, maximum 0.28 at 75 degrees F.
    b. Minimum Service Temperature: Minus 297 degrees F
    c. Maximum Service Temperature: 220 degrees F for Grade I, 300 degrees F for Grade II.

3. Factory Applied Jacket:

    a. Polymeric Coating: Multi-ply, polymeric blend coating, 16 mils thick, designed to prevent damage to underlying insulation from sunlight, installation, and physical abuse, with water vapor permeance of 0.03 perms. Reference Jacket requirements in Part 3 of this specification for application of this jacket.

C. Field-Applied Jacket:

1. Semi-rigid PVC: One-piece, pre-molded PVC cover conforming to ASTM D1784, including factory-furnished, pre-cut insulation blanket inserts for fittings.

    a. Outdoor Applications: Provide minimum 30 mils thickness and UV protection.
    b. Manufacturers:

        1) Johns Manville Zeston PVC Jacketing and 2000 Series Fitting Covers
        2) Proto Corp LoSmoke PVC Jacketing and Pro Fitting Covers.
        3) Or approved equal.

2. Rigid Aluminum Shell: One-piece, pre-formed cover conforming to ASTM C1729 with weather-proof construction. Shell shall have the following minimum thickness based on the outer insulation diameter:

Outer Insulation Diameter (in)	Minimum Aluminum Jacket Thickness, (in) Non-Rigid Insulation	Rigid Insulation	Finish
≤ 8	0.016	0.016	Stucco
< 12	0.020	0.016	Stucco
≤ 24	0.024	0.016	Stucco

a. Banding:

1) For piping less than or equal to 8 inches, provide 0.020 inch thick, 3/4 inch wide aluminum bands.
2) For piping larger than 8 inches, provide 0.020 inch thick, 3/4 inch wide stainless steel bands.

3. Multilayer Laminate Vapor Barrier Cladding: UV-resistant multi-ply outer layer and cold weather acrylic adhesive. Provide VentureClad Plus 1579 CW, or approved equal.

a. Water Vapor Transmission: 0.0 perms per ASTM E96.
b. Puncture Resistance: Minimum 65 pounds per ASTM D1000.

4. Multilayer Laminate Vapor Barrier Cladding for Direct Bury: UV-resistant elastomeric foam based on synthetic rubber with polymeric coating and cold weather acrylic adhesive. Rated for direct bury. Provide Armaflex “Tuffcoat”

a. Water Vapor Transmission: 0.0 perms per ASTM E96.
b. Puncture Resistance: Minimum 65 pounds per ASTM D1000.

D. Pipe Insulation Accessories: Provide staples, bands, wires, cement, and other appurtenances as recommended by insulation manufacturer for applications indicated.

E. Adhesives, Sealers, Mastics, and Protective Finishes: As recommended by insulation manufacturer for applications indicated.

1. Lagging Adhesive: Comply with MIL-A-3316C, Class 1, Grade A. Provide Foster 30-36, Childers CP-50AHV2, or equal.
2. Weather Barrier Breather Mastic: Permeance shall be 1.0 perms or less at 62 mils dry per ASTM E96, Procedure B. Provide Foster 46-50, Childers CP-10/11 or equal.
3. Solvent-Based Vapor Barrier Mastic: Comply with MIL-PRF-19565C, Type II, with water vapor permeance 0.05 perms or less at 35 mils dry per ASTM F 1249.
4. Water-Based Vapor Barrier Mastic: Comply with MIL-PRF-19565C, Type II, with water vapor permeance in accordance with ASTM C755 for insulation application. Provide Foster 30-80, Childers CP-38, or equal.

Table: Recommended Maximum Permeance of Water Vapor Retarders (Note 1)

Insulation Application	Insulation Permeability, Less than 4.0 perm-in. (Note 2)	Insulation Permeability, 4.0 or greater perm-in. (Note 2)
	Vapor Retarder perms	Vapor Retarder perms
Pipe and vessels (33 F to ambient)	0.05	0.05

Pipe and vessels (-40 F to 32 F)	0.02	0.02

Notes:

1. Water vapor permeance of the vapor retarder in perms when tested in accordance with Test Methods E96.
5. Water vapor permeability of the insulation material when tested in accordance with Test Methods E96.

F. Insulation Diameters: Comply with ASTM C585 for inner and outer diameters of rigid thermal insulation.

G. Pipe, Valve and Fitting Covers: Comply with ASTM C450 for fabrication of fitting covers for pipe, valves and fittings.

H. High Density Insulation Billets:

1. Calcium Silicate: ASTM C533 and C795.

I. Multilayer Laminate Vapor Barrier Cladding: UV-resistant multi-ply outer layer and cold weather acrylic adhesive. Provide VentureClad Plus 1579 CW.

a. Water Vapor Transmission: 0.0 perms per ASTM E96.
b. Puncture Resistance: Minimum 65 pounds per ASTM D1000.

J. Pipe Insulation Accessories: Provide staples, Bands, Wires, and Cement and other appurtenances as recommended by insulation manufacturer for applications indicated.

K. Insulation Diameters: Comply with ASTM C585 for inner and outer diameters of rigid thermal insulation.

L. Pipe, Valve and Fitting Covers: Comply with ASTM C450 for fabrication of fitting covers for pipe, valves and fittings.

M. High Density Insulation Billets:

1. Cellular Glass: ASTM C552.

2.2 EQUIPMENT INSULATION MATERIALS

A. Flexible Mineral Fiber (rock, slag, or glass):

1. Manufacturers:

a. CertainTeed Corp.
b. Johns Manville.
c. Knauf Insulation.
d. Owens Corning.

2. Insulation: ASTM C553, Type I and II or ASTM C547 Type II, flexible mineral fiber blanket.

a. K-value: ASTM C518 or C177, maximum 0.31 at 75 degrees F.
b. Minimum Service Temperature: Minus 20 degrees F

c. Maximum Service Temperature: 450 degrees F for ASTM C553 Types I and II, 1200 degrees F for ASTM C547 Type II.
d. Density: Minimum 1.5 pounds per cubic foot.

3. Factory Applied Vapor Barrier Jacket: ASTM C1136, Type II.

a. All-Service Jacket (ASJ): Paper/Foil/Scrim, water vapor permeance of 0.02 perms.
b. Color: White.

B. Flexible Removeable and Reusable Blanket Insulation:

1. Manufacturers:

a. Auburn Manufacturing.
b. Approved equal.

2. Insulation: ASTM C553, Type V, flexible, noncombustible.

a. Comply with ASTM C1695.
b. K-value: ASTM C518 or C177, maximum 0.37 at 100 degrees F.
c. Minimum Service Temperature: 32 degrees F
d. Maximum Service Temperature: 500 degrees.

C. Rigid Mineral Fiber (rock, slag, or glass):

1. Manufacturers:

a. Johns Manville.
b. Knauf Insulation.
c. Owens Corning.

2. Insulation: ASTM C612, Type IA or IB, rigid mineral fiber board.

a. K-value: ASTM C518 or C177, maximum 0.25 at 75 degrees F.
b. Minimum Service Temperature: 0 degrees F
c. Maximum Service Temperature: 450 degrees.
d. Density: Minimum 3.0 pounds per cubic foot.

3. Factory Applied Vapor Barrier Jacket: ASTM C1136, Type II.

a. All-Service Jacket (ASJ): Paper/Foil/Scrim, water vapor permeance of 0.02 perms.
b. Color: White.

D. Flexible Elastomeric:

1. Manufacturers:

a. Aeroflex USA, Inc.
b. Armacell LLC.
c. K-Flex USA.

2. Insulation: ASTM C534, Grade I or II, flexible elastomeric cellular rubber insulation, sheet form.

a. K-value: ASTM C518 or C177, maximum 0.28 at 75 degrees F.
b. Minimum Service Temperature: Minus 40 degrees F
c. Maximum Service Temperature: 220 degrees F for Grade I, 300 degrees F for Grade II.

E. Field-Applied Jacket:

1. Aluminum: ASTM B209, 3003 alloy, H-14 temper, with 3-mil thick polyfilm moisture barrier to interior surface.

a. Thickness: 0.032 inch sheet.
b. Finish: Smooth.
c. Joining: Longitudinal slip joints and 2 inch laps.
d. Metal Jacket Bands: 3/8 inch wide; 0.015 inch thick aluminum or 0.010 inch thick stainless steel.

2. Multilayer Laminate Vapor Barrier Cladding: UV-resistant multi-ply outer layer and cold weather acrylic adhesive. Provide VentureClad Plus 1579 CW, or approved equal.

a. Water Vapor Transmission: 0.0 perms per ASTM E96.
b. Puncture Resistance: Minimum 65 pounds per ASTM D1000.

F. Equipment Insulation Accessories: Provide staples, bands, wire, wire netting, tape, corner angles, anchors, stud pins, and other appurtenances as recommended by insulation manufacturer for applications indicated.

G. Adhesives, Sealers, Mastics, and Protective Finishes: Provide cements, adhesives, coating, sealers, mastics, and protective finishes as recommended by insulation manufacturer for applications indicated.

1. Mineral Fiber Lagging Adhesive: Comply with ASTM C916, Type 2 or MIL-A-3316C, Class 2, Grade A. Provide Foster 85-60, Childers CP-127, or equal water-based adhesive.
2. Water-Based Vapor Barrier Mastic: Comply with MIL-PRF-19565C, Type II, with water vapor permeance 0.05 perms or less at 47 mils dry per ASTM E96. Provide Foster 30-80, Childers CP-38, Design Polymerics 3040, or equal.
3. Lagging Adhesive: Comply with MIL-A-3316C, Class 1, Grade A. Provide Foster 30-36. Childers CP-50AHV2 or equal.
4. Tie Wire: Annealed steel, 16 gauge, 0.0508 inch diameter.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Test piping and ductwork for design pressure, liquid tightness, and continuity prior to applying insulation materials.

B. Verify that surfaces are clean and dry, with foreign material removed.

3.2 PROTECTION AND REPLACEMENT

A. Provide all required protection for insulation (installed and uninstalled) throughout the duration of construction to avoid exposure to plaster, dust, dirt, paint, moisture, deterioration, and physical damage.

B. Repair existing plumbing insulation that is damaged during this construction period. Use insulation of same type and thickness as existing insulation. Install new jacket lapping and sealed over existing.

C. Replace damaged insulation which cannot be repaired satisfactorily at no additional expense to the Owner, including insulation with vapor barrier damage and insulation that has been exposed to moisture during shipping, storage, or installation. Drying the insulation is not acceptable. Dry surfaces prior to installation of new insulation that replaces the damaged or wet insulation.

3.3 INSTALLATION, GENERAL

A. Install in accordance with manufacturer's installation instructions.

B. Install in accordance with NAIMA National Insulation Standards.

3.4 PLUMBING PIPING SYSTEM INSULATION

A. Maintain continuous thermal and vapor-retarder integrity throughout entire installation and protect it from puncture and other damage.

B. Install insulation on pipe systems subsequent to installation of heat tracing, painting, testing, and acceptance of tests.

C. Install insulation materials with smooth and even surfaces. Insulate each continuous run of piping with full-length units of insulation, with a single cut piece to complete run. Do not use cut pieces or scraps abutting each other.

D. Exposed Piping: Locate insulation and cover seams in least visible locations.

E. Cold Piping Insulation:

1. Insulate entire system, including fittings, valves, unions, flanges, strainers, flexible connections, pump bodies, and expansion joints.
2. Provide with factory applied vapor barrier jacket.
3. Provide high density insulation material under supports or pre-insulated supports. Protect insulation with shields to prevent puncture or other damage. Refer to Section "Hangers and Supports for Plumbing Piping" for pre-insulated supports and insulation shields. and for exception where high density insulation inserts are not required.
4. High density insulation material shall extend a minimum 2 inches past the pipe shield on each side.
5. Secure all-service jacket with self-sealing longitudinal laps.

F. Butt pipe insulation tightly at insulation joints. Apply wet coat of vapor barrier lap cement on joint and seal with 3 inch wide vapor barrier tape or band and coat all taped seams and staple penetrations with vapor barrier coating to prevent moisture infiltration.

G. Hot Piping Insulation:

1. Insulate entire system, including fittings, valves, unions flanges, strainers, flexible connections, pump bodies, and expansion joints.
2. Provide jackets without vapor barrier. Jackets with factory applied vapor barrier are allowed.
3. Provide high density insulation material or pre-insulated supports where supports are installed outside of the insulation. Protect insulation with shields to prevent puncture or other damage. Refer to Section “Hangers and Supports for Plumbing Piping” for pre-insulated supports and insulation shields and for exception where high density insulation inserts are not required.
4. High density insulation material shall extend a minimum 2 inches past the pipe shield on each side.
5. Secure all-service jacket with self-sealing longitudinal laps.
6. Butt pipe insulation tightly at insulation joints and wrap insulation around supports. Apply 3 inch wide vapor barrier tape or band over joint.

H. Exterior piping:

1. Encase exterior piping insulation with aluminum weather-proof jackets.
2. Insulate exterior cold water, hot water, hot water recirculation and non-potable water piping as previously described.
3. Insulate and heat trace exterior [sanitary p-traps,] [sanitary,] [grease waste,] [storm,] and [overflow storm] piping as described below. Refer to Division 22 Section “Heat Tracing for Plumbing Piping” for heat trace system material and installation requirements.

    a. Fiberglass: 2" thickness.
    b. Flexible Elastomeric: 1” thickness.

I. Interior piping with heat trace:

1. Insulate and heat trace grease waste piping and grease waste P-traps as described below. Refer to Division 22 Section “Heat Tracing for Plumbing Piping” for heat trace system material and installation requirements.

    a. Fiberglass: 2" thickness.
    b. Flexible Elastomeric: 1” thickness.

3.5 EQUIPMENT INSULATION

A. Cold Equipment (Below Ambient Temperature):

1. Application Requirements: Insulate the following cold equipment:

    a. Drip pans under chilled equipment.
    b. Water softeners.
    c. Pneumatic water tanks.
    d. Roof drain bodies.

2. Insulate each item of equipment specified above with one of the following types and thicknesses of insulation:

a. Fiberglass: 2" thick for cold surfaces above 35 degrees F (2 degrees C) and 3" thick for surfaces 35 degrees F (2 degrees C) and lower.
b. Flexible Elastomeric: 1" thick.

B. Hot Equipment (Above Ambient Temperature):

1. Application Requirements: Insulate the following hot equipment:

a. Hot water storage tanks.
b. Heat exchangers.
c. Hot water pumps.
d. Condensate pumps.

2. Insulate each item of equipment specified above with one of the following types and thicknesses of insulation:

a. Fiberglass: 2" thick, except 3" thick for steam-jacketed heat exchangers.

3.6 INSTALLATION OF PIPING INSULATION

A. General: Install insulation products in accordance with manufacturer's written instructions, and in accordance with recognized industry practices to ensure that insulation serves its intended purpose.

B. Maintain continuous thermal and vapor-retarder integrity throughout entire installation unless otherwise indicated.

C. Install insulation on pipe systems subsequent to installation of heat tracing, painting, testing, and acceptance of tests.

D. Install insulation materials with smooth and even surfaces. Insulate each continuous run of piping with full-length units of insulation, with a single cut piece to complete run. Do not use cut pieces or scraps abutting each other.

E. Clean and dry pipe surfaces prior to insulating.

F. Cold Pipe Insulation:

1. Insulate all cold piping to prevent moisture condensation on exterior surfaces.
2. Provide high density insulation material under supports or pre-insulated supports. Refer to Division 22 Section “Hangers and Supports for Plumbing Piping” for pre-insulated supports.
3. Protect insulation with shields to prevent puncture or other damage. Refer to division 22 Section “Hangers and Supports for Plumbing Piping” for insulation shields.
4. High density insulation material shall extend a minimum 2 inches past the pipe shield on each side.
5. Butt pipe insulation tightly at insulation joints. Apply wet coat of vapor barrier lap cement on joint and seal with 3 inch wide vapor barrier tape or band and coat all taped seams and staple penetrations with vapor barrier coating to prevent moisture ingress.

G. Hot Pipe Insulation:

1. Provide pipe hangers for hot piping sized for the outside diameter of piping.

2. Butt insulation to hanger or riser clamp for vertical pipe. Butt pipe insulation tightly at insulation joints. Seal exposed insulation at hanger with joint sealant.

H. Pipe insulation:

1. Insulate all cold piping to prevent moisture condensation on exterior surfaces.
2. Provide high density insulation material under supports or pre-insulated supports. Refer to Division 22 Section “Hangers and Supports for Plumbing Piping” for pre-insulated supports.
3. Protect insulation with shields to prevent puncture or other damage. Refer to division 22 Section “Hangers and Supports for Plumbing Piping” for insulation shields.
4. High density insulation material shall extend a minimum 2 inches past the pipe shield on each side.
5. Butt insulation to hanger or riser clamp for vertical pipe. Butt pipe insulation tightly at insulation joints.
6. For hot pipes, apply 3" wide vapor barrier tape or band over the butt joints.
7. For cold pipes, apply wet coat of vapor barrier lap cement on joint and seal with 3 inch wide vapor barrier tape or band and coat all taped seams and staple penetrations with vapor barrier coating to prevent moisture ingress.

I. Insulation Installation on Fittings, Valves, Strainers, Flanges, and Unions:

1. Install insulation over fittings, valves (except balancing and flow control valves), strainers, flanges, unions, and other specialties with continuous thermal and vapor-retarder integrity unless otherwise indicated.
2. Insulate pipe elbows using preformed fitting insulation or mitered fittings made from same material and density as adjacent pipe insulation. Butt tightly against adjoining pieces and bond with adhesive. Fill joints, seams, voids, and irregular surfaces with insulating cement finished to a smooth, hard, and uniform contour that is uniform with adjoining pipe insulation.
3. Insulate tee fittings with preformed fitting insulation or sectional pipe insulation of same material and thickness as used for adjacent pipe. Cut sectional pipe insulation to fit. Butt each section closely to the next and hold in place with tie wire. Bond pieces with adhesive.
4. Insulate valves using preformed fitting insulation or sectional pipe insulation of same material, density, and thickness as used for adjacent pipe. Overlap adjoining pipe insulation by not less than two times the thickness of pipe insulation, or one pipe diameter, whichever is thicker. For valves, insulate up to and including the bonnets, valve stuffing-box studs, bolts, and nuts. Fill joints, seams, and irregular surfaces with insulating cement.
5. Insulate strainers using preformed fitting insulation or sectional pipe insulation of same material, density, and thickness as used for adjacent pipe. Overlap adjoining pipe insulation by not less than two times the thickness of pipe insulation, or one pipe diameter, whichever is thicker. Fill joints, seams, and irregular surfaces with insulating cement. Insulate strainers so strainer basket flange or plug can be easily removed and replaced without damaging the insulation and jacket. Provide a removable reusable insulation cover. For below-ambient services, provide a design that maintains vapor barrier.
6. Insulate flanges and unions using a section of oversized preformed pipe insulation. Overlap adjoining pipe insulation by not less than two times the thickness of pipe insulation, or one pipe diameter, whichever is thicker.
7. Cover segmented insulated surfaces with a layer of finishing cement and coat with a mastic. Install vapor-barrier mastic for below-ambient services and a breather mastic for above-ambient services. Reinforce the mastic with fabric-reinforcing mesh. Trowel the mastic to a smooth and well-shaped contour.
8. For services not specified to receive a field-applied jacket except for flexible elastomeric, install fitted PVC cover over elbows, tees, strainers, valves (except balancing and flow

control valves), flanges, and unions. Terminate ends with PVC end caps. Tape PVC covers to adjoining insulation facing using PVC tape.

9. Stencil or label the outside insulation jacket of each union with the word "union." Match size and color of pipe labels.

J. Insulate instrument connections for thermometers, pressure gages, pressure temperature taps, test connections, flow meters, sensors, switches, and transmitters on insulated pipes. Shape insulation at these connections by tapering it to and around the connection with insulating cement and finish with finishing cement, mastic, and flashing sealant.

K. Install removable insulation covers at locations indicated. Installation shall conform to the following:

1. Make removable flange and union insulation from sectional pipe insulation of same thickness as that on adjoining pipe. Install same insulation jacket as adjoining pipe insulation.
2. When flange and union covers are made from sectional pipe insulation, extend insulation from flanges or union at least two times the insulation thickness over adjacent pipe insulation on each side of flange or union. Secure flange cover in place with stainless-steel or aluminum bands. Select band material compatible with insulation and jacket.
3. Construct removable valve insulation covers in same manner as for flanges, except divide the two-part section on the vertical center line of valve body.
4. When covers are made from block insulation, make two halves, each consisting of mitered blocks wired to stainless-steel fabric. Secure this wire frame, with its attached insulation, to flanges with tie wire. Extend insulation at least 2 inches over adjacent pipe insulation on each side of valve. Fill space between flange or union cover and pipe insulation with insulating cement. Finish cover assembly with insulating cement applied in two coats. After first coat is dry, apply and trowel second coat to a smooth finish.

L. Extend piping insulation without interruption through walls, floors, and similar piping penetrations, except where otherwise indicated.

M. Heat Traced Piping

1. Heat Traced Piping: Insulate fittings, joints, and valves with insulation of like material, thickness, and finish as adjoining pipe. Size large enough to enclose pipe and heat tracer. Cover with aluminum jacket with seams located on bottom side of horizontal piping. Provide insulation shields so that the piping supports cannot puncture, cut or break the jacket.

3.7 INSTALLATION OF EQUIPMENT INSULATION

A. General: Install equipment thermal insulation products in accordance with manufacturer's written instructions, and in compliance with recognized industry practices to ensure that insulation serves intended purpose.

B. Install insulation materials with smooth and even surfaces and on clean and dry surfaces. Redo poorly fitted joints. Do not use mastic or joint sealer as filler for gapping joints and excessive voids resulting from poor workmanship.

C. Maintain integrity of vapor-barrier on equipment insulation and protect it to prevent puncture and other damage.

D. Do not apply insulation to equipment, breechings, or stacks while hot.

E. Apply insulation using the staggered joint method for both single and double layer construction, where feasible. Apply each layer of insulation separately.

F. Coat insulated surfaces with layer of insulating cement, troweled in workmanlike manner, leaving a smooth continuous surface. Fill in scored block, seams, chipped edges and depressions, and cover over wire netting and joints with cement of sufficient thickness to remove surface irregularities.

G. Cover insulated surfaces with all-service jacketing neatly fitted and firmly secured. Lap seams at least 2". Apply over vapor barrier where applicable.

H. Do not insulate boiler manholes, handholes, cleanouts, ASME stamp, and manufacturer's nameplate. Provide neatly beveled edge at interruptions of insulation.

I. Provide removable insulation sections to cover parts of equipment which must be opened periodically for maintenance; include metal vessel covers, fasteners, flanges, frames, and accessories.

3.8 PROTECTION AND REPLACEMENT

A. Replace damaged insulation which cannot be repaired satisfactorily, including units with vapor barrier damage and moisture saturated units.

B. Protection: Insulation Installer shall advise Contractor of required protection for insulation work during remainder of construction period, to avoid damage and deterioration.

3.9 PIPING SYSTEM INSULATION SCHEDULE

A. Reference Pipe Insulation Thickness Schedule at the end of this specification for thickness requirements based on insulation conductivity.

B. Do not apply insulation to piping that operates outside of the minimum and maximum service temperature range.

C. Omit insulation on the following:

1. Flexible connections and expansion joints in pipes with fluids above ambient temperatures.
2. Chrome-plated exposed piping
3. Water Hammer Arrestors
4. Balancing and flow valves
5. Drain lines from water coolers
6. Drainage piping located in crawl spaces or tunnels
7. Exterior condensate drain piping
8. Buried piping
9. Pre-insulated equipment.

D. Cold Piping (minimum operating temperature less than 60 degrees F.)

1. Service

a. Potable cold water piping.
b. Non-potable cold water piping
c. Potable chilled water piping.
d. Plumbing vents within 6 lineal feet of roof outlet.
e. Horizontal interior above-ground storm drainage piping and vertical run from roof drain to horizontal run.
f. Horizontal and vertical interior above-ground storm drainage piping and vertical run from roof drain to horizontal run.
g. Horizontal and vertical interior above-ground overflow storm drainage piping and vertical run from roof drain to horizontal run. Where vertical overflow storm drainage piping from the outlet exceeds 15 feet, only insulate within 15 feet of the outlet.
h. Lawn irrigation piping.
i. Condensate piping inside the building.

2. Insulate each piping system specified above with one of the following types of insulation.

a. Mineral fiber.
b. [Flexible elastomeric.]

E. Hot Temperature Piping (105 degrees to 180 degrees F (40 to 82 degrees C)):

1. Service:

a. Hot water supply and return piping.

2. Insulate each piping system specified above with one of the following types of insulation.

a. Mineral fiber.
b. [Flexible elastomeric.]

3.10 PIPE INSULATION THICKNESS SCHEDULE

A. P-traps:

1. Insulate P-traps receiving chilled water waste and P-traps of water coolers as described below:

a. Flexible Elastomeric: 1" thick for pipe sizes up to and including 2", 1-1/2” thick for pipe sizes 2” to 6” (largest size permitted).

2. Insulate P-traps receiving hot water waste above 140F as described below:

a. Fiberglass: 1" thickness.
b. [Calcium Silicate: 1-1/2" thickness.]
c. Flexible Elastomeric (high temp formula up to 300F): 1” thickness.

B. Piping Inside Masonry Wall Units:

1. Insulate cold, hot, and hot water recirculation piping installed inside of masonry walls where the piping needs to be insulated as the wall is constructed as described below:

a. Flexible Elastomeric: 1/2" thick for pipe sizes up to and including 2", 1” thick for pipe sizes 2-1/2” to 6” (largest size permitted).

C. Exterior Heat Traced Piping Systems

1. Refer to Division 22 Section “Heat Tracing for Plumbing Piping” for heat trace system material and installation requirements.
2. Freeze Protection: Insulate P-traps in waste systems with mineral fiber insulation 2” thick insulation where indicated on the drawings. [Insulate waste piping systems with mineral fiber insulation 2” thick insulation where indicated on the drawings.]
3. Grease Waste Flow Maintenance: Insulate grease waste P-traps and piping with mineral fiber insulation 2” thick insulation where indicated on the drawings.

D. IECC – 2018 Requirements, Pipe Insulation

Minimum Pipe Insulation Thickness

	Insulation Conductivity		Nominal Pipe or Tube Size (in.)				
Fluid Operating Temp. Range (°F) And Usage	Conductivity, Btu·in./(hr·ft²·°F)	Mean Rating Temp., °F.	<1	1 to <1-1/2	1-1/2 to <4	4 to <8	≥8
			Insulation Thickness, in.				
141°F–200°F	0.25–0.29	125	1.5	1.5	2.0	2.0	2.0
105°F–140°F	0.21–0.28	100	1.0	1.0	1.5	1.5	1.5
40°F–60°F	0.21–0.27	75	0.5	0.5	1.0	1.0	1.0

Notes:

a. For piping smaller than 1-1/2 inch and located in partitions within conditioned spaces, reduction of these thicknesses by 1 inch shall be permitted (before thickness adjustment required in footnote b) but not to a thickness less than 1 inch.
b. For insulation outside the stated conductivity range, the minimum thickness (T) shall be determined as follows: T = r[(1 + t/r)^(K/k) – 1] where

1) T = minimum insulation thickness (in.),
2) r = actual outside radius of pipe (in.),
3) t = insulation thickness listed in the table for applicable fluid temperature and pipe size,
4) K = conductivity of alternate material at mean rating temperature indicated for the applicable fluid temperature (Btu·in/hr·ft²·°F); and
5) k = the upper value of the conductivity range listed in this table for the applicable fluid temperature.

c. Insulation thicknesses are based on energy efficiency considerations only. Add insulation where noted on the drawings.
d. The table is based on steel pipe. Non-metallic pipes schedule 80 thickness or less shall use the table values. For other non-metallic pipes having thermal resistance greater than that of steel pipe, reduced thicknesses are permitted if documentation is provided showing that the pipe with the proposed insulation has no more heat transfer per foot than a steel pipe of the same size with the insulation thickness shown on the table.

E. ASHRAE 90.1 – 2016 Requirements, Pipe Insulation

Minimum Pipe Insulation Thickness

	Insulation Conductivity	Nominal Pipe or Tube Size (in.)

Fluid Operating Temp. Range (°F) And Usage	Conductivity, Btu·in./(hr·ft²·°F)	Mean Rating Temp., °F.	<1	1 to <1-1/2	1-1/2 to <4	4 to <8	≥8
			Insulation Thickness, in.				
141°F–200°F	0.25–0.29	125	1.5	1.5	2.0	2.0	2.0
105°F–140°F	0.22–0.28	100	1.0	1.0	1.5	1.5	1.5
40°F–60°F	0.21–0.27	75	0.5	0.5	1.0	1.0	1.0

Notes:

a. For insulation outside the stated conductivity range, the minimum thickness (T) shall be determined as follows: T = r{(1 + t/r)^(K/k) – 1} where

1) T = minimum insulation thickness (in.),
2) r = actual outside radius of pipe (in.),
3) t = insulation thickness listed in this table for applicable fluid temperature and pipe size,
4) K = conductivity of alternate material at mean rating temperature indicated for the applicable fluid temperature (Btu·in./hr·ft²·°F); and
5) k = the upper value of the conductivity range listed in this table for the applicable fluid temperature.

b. Insulation thicknesses are based on energy efficiency considerations only. Add insulation where noted on the drawings.

c. For piping smaller than 1-1/2 inch and located in partitions within conditioned spaces, reduction of these thicknesses by 1 inch shall be permitted (before thickness adjustment required in footnote a) but not to a thickness less than 1 inch.

d. The table is based on steel pipe. Non-metallic pipes schedule 80 thickness or less shall use the table values. For other non-metallic pipes having thermal resistance greater than that of steel pipe, reduced thicknesses are permitted if documentation is provided showing that the pipe with the proposed insulation has no more heat transfer per foot than a steel pipe of the same size with the insulation thickness shown on the table.

3.11 PIPING JACKET SCHEDULE

A. Exposed piping within mechanical rooms (below 10 feet):

1. Semi-rigid PVC.
2. Rigid aluminum shell.

B. Exposed piping within mechanical rooms (above 10 feet):

1. Semi-rigid PVC.
2. Rigid aluminum shell.

C. Exposed piping:

1. All-service jacket.
2. Semi-rigid PVC.

D. Piping within return air plenums:

1. All-service jacket.

E. Direct Bury Heat Traced Piping Systems

1. Refer to Division 22 Section “Heat Tracing for Plumbing Piping” for heat trace system material and installation requirements.
2. Grease Waste Flow Maintenance: Insulate grease waste P-traps and piping with flexible elastomeric 1” thick insulation where indicated on the drawings.

3.12 PIPING JACKET SCHEDULE

A. Exposed piping within mechanical rooms (below 10 feet):

1. Semi-rigid PVC.
2. Rigid aluminum shell.

B. Exposed piping within mechanical rooms (above 10 feet):

1. Semi-rigid PVC.
2. Rigid aluminum shell.

C. Exposed piping:

1. All-service jacket.
2. Poly ASJ jacket, painted with color per architect and paint per division 7.
3. Semi-rigid PVC.

D. Piping within return air plenums:

1. All-service jacket.

E. Exterior Piping Exposed to Weather

1. Aluminum with stucco finish.
2. Multilayer Laminate Vapor Barrier Cladding (flexible elastomeric only).

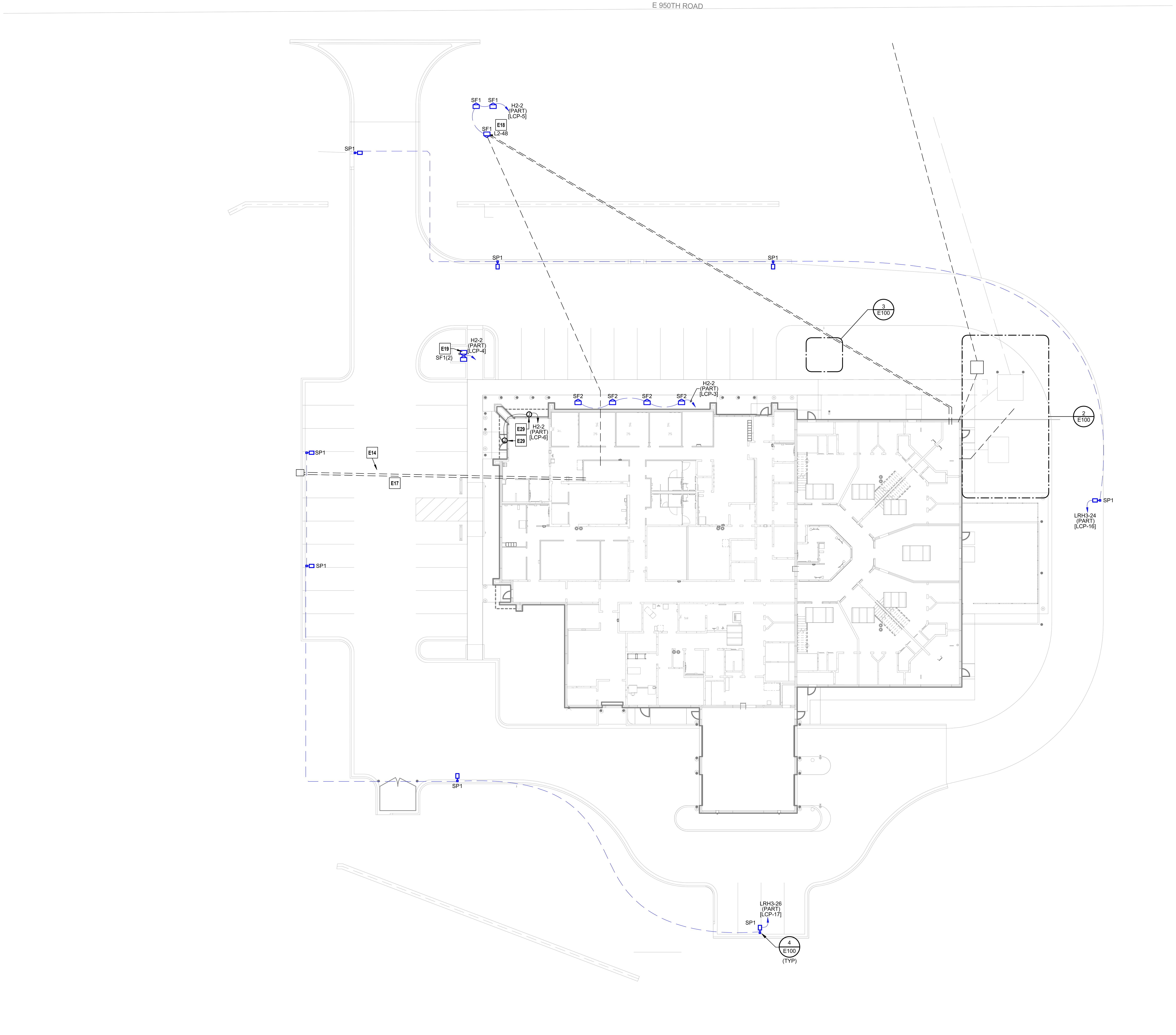
F. Direct Bury Grease Waste Piping:

1. Multilayer Laminate Vapor Barrier Cladding for Direct Bury (flexible elastomeric only).

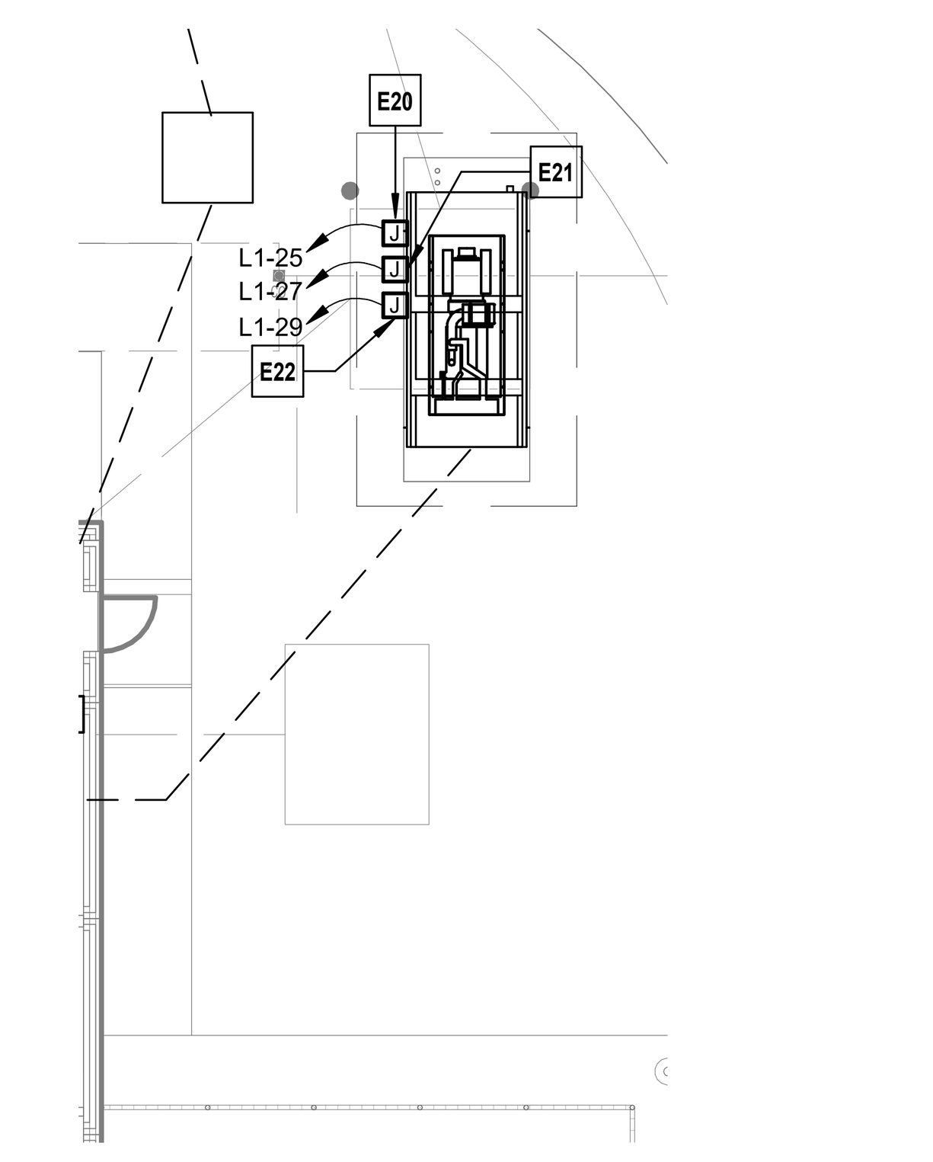
END OF SECTION

ELECTRICAL PLAN NOTES:

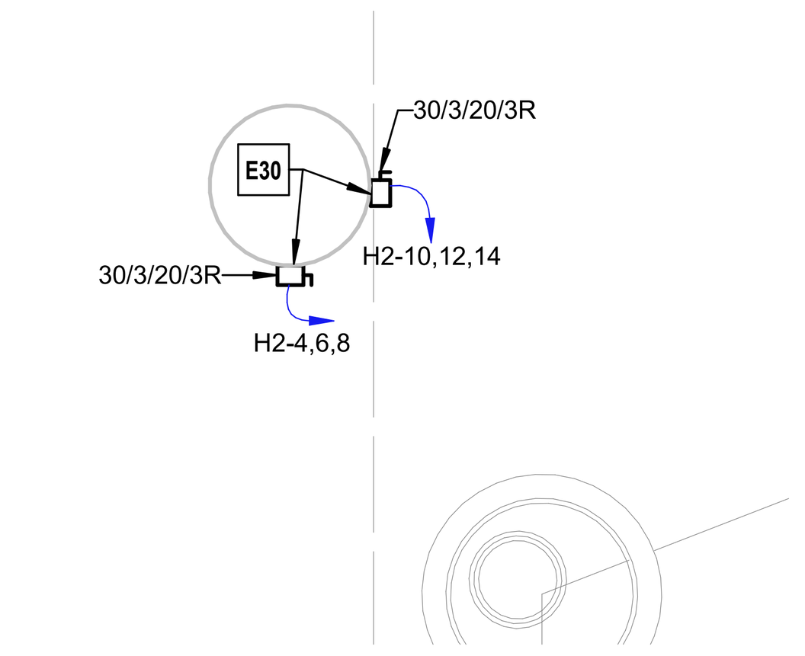
- E12 PROVIDE (3) 1" CONDUITS TO MONUMENT FOR POWER, LIGHTING AND DATA. COORDINATE LOCATION WITH ARCHITECT AND OWNER PRIOR TO ROUGH-IN.
- E14 HANDHOLE PROVIDED BY OTHERS. SHOWN FOR REFERENCE ONLY.
- E17 PROVIDE 2-4" CONDUITS FROM TELECOM HANDHOLE TO IT SERVER ROOM. COORDINATE FINAL LOCATION WITH DATA PRIOR TO ROUGH-IN.
- E18 FLOODLIGHT FOR MONUMENT SIGN.
- E19 PROVIDE [665-9312 SP2-2/M8 PIPE CLAMP, DOUBLE] FOR FLAG POLE LIGHT(S).
- E20 POWER FOR JACKET HEATER IN THE GENERATOR.
- E21 POWER FOR LUBE OIL HEATER AND CONTROL ANTI-CONDENSATION HEATER IN THE GENERATOR.
- E22 POWER FOR BATTERY CHARGER IN THE GENERATOR.
- E29 PROVIDE HARD WIRED CONNECTION TO BACKLIT MEDALLION SIGN. PROVIDE LOCAL NEMA 3R DISCONNECTING MEANS FOR SIGNAGE. CONFIRM CONNECTION TYPE WITH APPROVED SHOP DRAWINGS ~~PRIOR TO ROUGH-IN. CIRCUIT AND PROVIDE RELAY AS~~ SHOWN. PROVIDE U2 LIGHT FIXTURE FOR BACK LIGHT WITHIN MEDALLION SIGN. (4)
- E30 LOCAL DISCONNECTING MEANS FOR LIFT STATION. LIFT STATION PROVIDED WITH (2) PUMPS BY OTHERS. CONFIRM CONNECTION TYPE WITH APPROVED EQUIPMENT PRIOR TO ROUGH-IN.



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



2 ENLARGED UTILITY TRANSFORMER AND GENERATOR
3/32" = 1'-0"

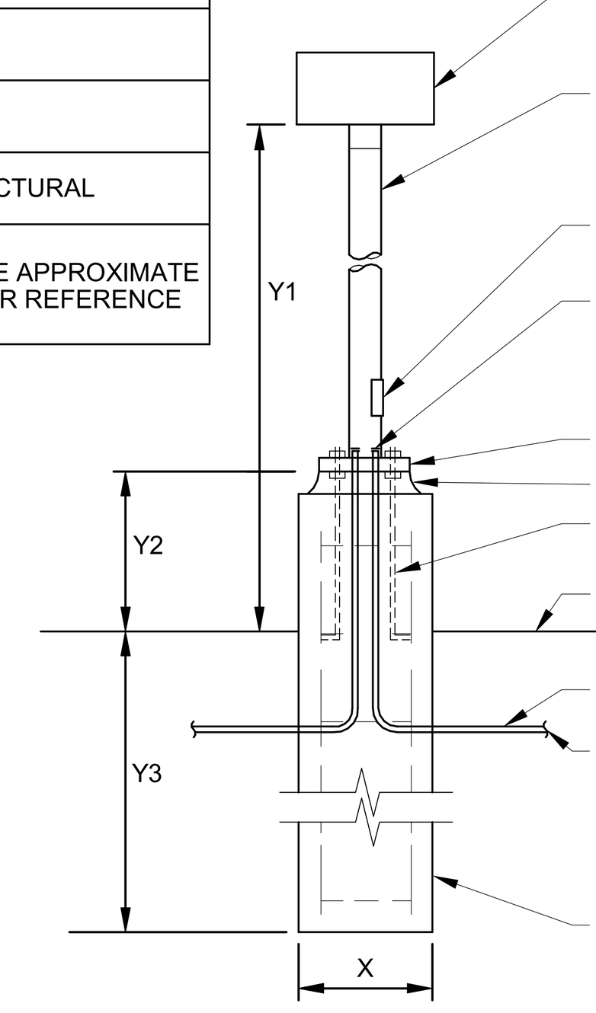


3 ELECTRICAL SITE PLAN - SEWAGE GRINDER
1/4" = 1'-0"

TABLE OF DIMENSIONS*	
X	REFER TO STRUCTURAL
Y1	REFER TO PLAN
Y2	2'-6"
Y3	REFER TO STRUCTURAL

* NOTE: ALL DIMENSIONS ARE APPROXIMATE AND ARE SHOWN FOR REFERENCE ONLY.

REFERENCE CIVIL OR STRUCTURAL DRAWINGS FOR FOUNDATION DETAILS.



4 POLE BASE DETAIL
NTS

HENDERSON ENGINEERS
8345 LENEXA DRIVE, SUITE 300
LENEXA, KS 66214
TEL 913.742.5000 FAX 913.742.5001
WWW.HENDERSONENGINEERS.COM
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EXPIRES 4/30/2025

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BID & PERMIT

EDGAR COUNTY PUBLIC SAFETY CENTER
EDGAR COUNTY, ILLINOIS
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PARIS, ILLINOIS 61944

21003.003

BID & PERMIT

Architect's Name
License #: XXXXX
Date: 03/01/2024

#	Issue	Date
4	Addendum #4	04/03/2024

Drawn by: Author

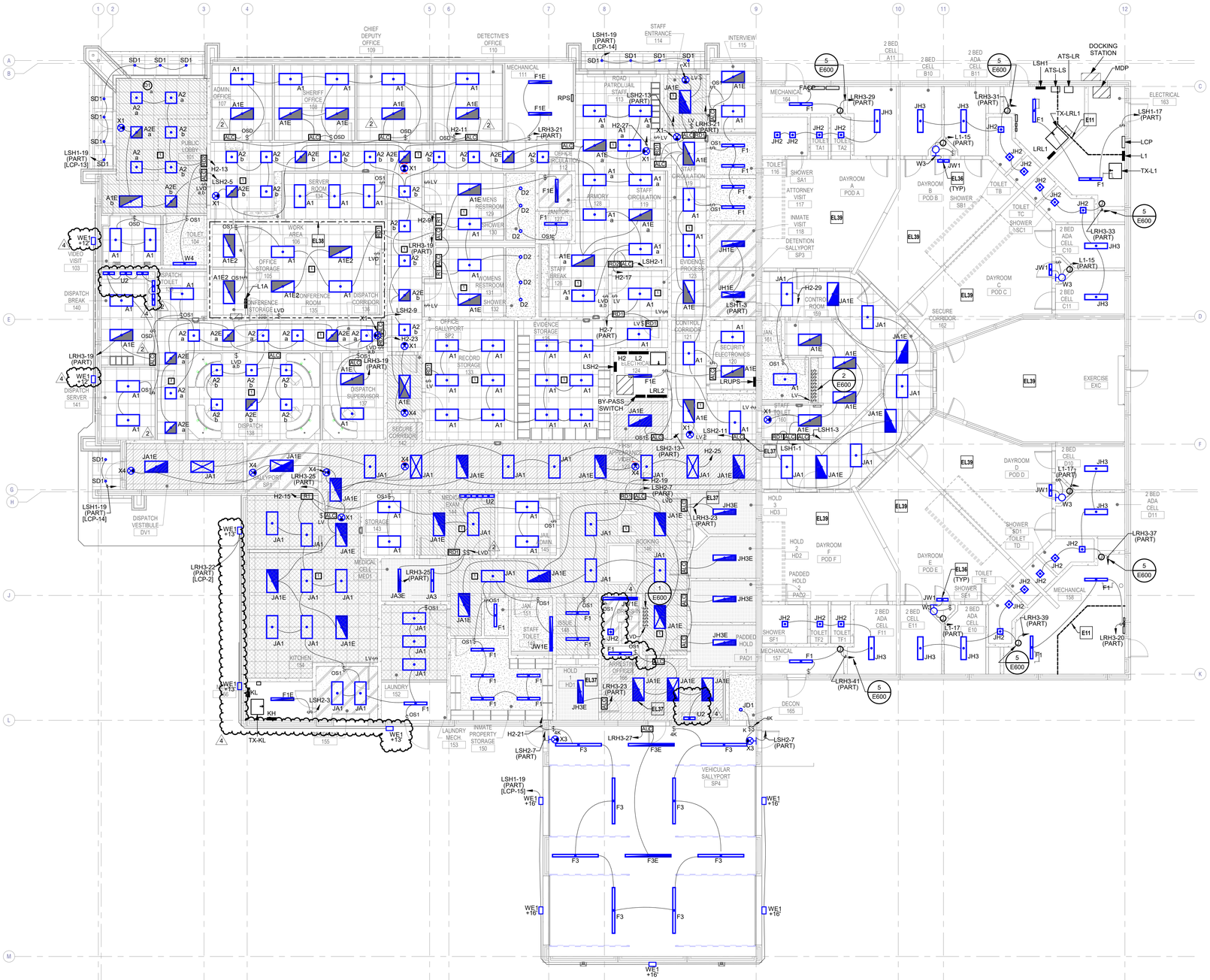
ELECTRICAL SITE PLAN

E100

MICHAEL T. DERMYER

ELECTRICAL PLAN NOTES:

E11 MEZZANINE FLOOR OUTLINE, APPROXIMATE.
EL36 JW1 FIXTURES ON THIS CIRCUIT SHALL BE WIRED AS UNSWITCHED NIGHT LIGHTS.
EL37 REFER TO BOOKING LIGHTING CONTROL DETAIL FOR SPACE.
EL38 ICC 500 SHELTER AREA.
EL39 REFER TO SHEET E102 FOR LIGHTING OVER THIS AREA.



1 LIGHTING FIRST FLOOR PLAN - OVERALL
1/8" = 1'-0"

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	Issue	Date
2	Addendum #2	03/20/2024
4	Addendum #4	04/03/2024

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LIGHTING FIRST FLOOR PLAN - OVERALL

E101

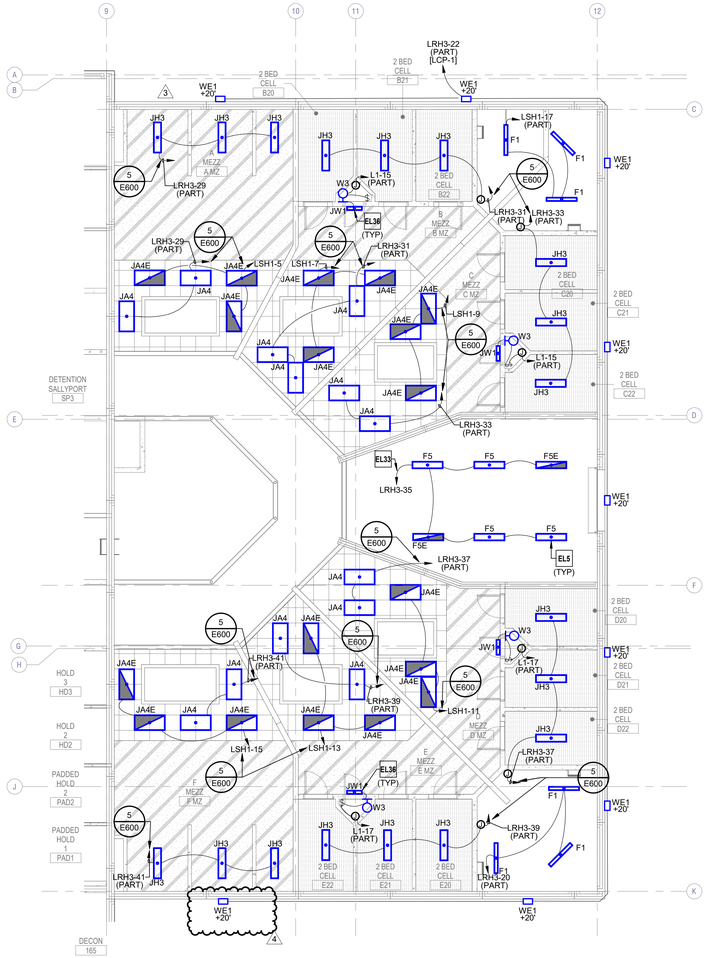
MICHAEL T. DERMYER

ELECTRICAL PLAN NOTES:

EL5 FIXTURE SHALL BE RIGIDLY ATTACHED TO STRUT FRAMING BETWEEN BOTTOM CHORDS OF JOISTS. REFER TO LIGHTING FIXTURE SCHEDULE FOR ADDITIONAL INFORMATION.

EL3 3 REC YARD LIGHTING SHALL BE CONTROLLED VIA SECURITY SYSTEM. ROUTE CIRCUIT THROUGH RELAY. PROVIDE CONSTANT HOT TO "E" TYPE FIXTURES.

EL3 6 JW1 FIXTURES ON THIS CIRCUIT SHALL BE WIRED AS UNSWITCHED NIGHT LIGHTS.



1 LIGHTING MEZZANINE PLAN - JAIL
1/8" = 1'-0"

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LIGHTING MEZZANINE PLAN - JAIL

E102

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ELECTRICAL PLAN NOTES:

- E8 PROVIDE POWER FOR AUTOMATIC CONTROLLED SUBSTANCE DISPENSER. COORDINATE EXACT POWER REQUIREMENTS WITH OWNER PROVIDED EQUIPMENT PRIOR TO ROUGH-IN.
- E9 PROVIDE POWER FOR COFFEE MAKER. COORDINATE EXACT POWER REQUIREMENTS WITH OWNER PROVIDED EQUIPMENT PRIOR TO ROUGH-IN.
- EP1 ROOM/AREA SHALL BE CONSIDERED A SECURE AREA AND SHALL MEET ALL ELECTRICAL REQUIREMENTS OF A SECURE AREA INCLUDING BUT NOT LIMITED TO: SECURITY COVERPLATES WITH TAMPERPROOF TORX SCREWS, SAFETY-TYPE, TAMPER RESISTANT RECEPTACLES AND SECURITY TYPE KEYED SWITCHES.
- EP2 PROVIDE CHASE RECEPTACLE GANGED IN SAME BOX AS LIGHT SWITCH FOR CHASE LIGHTING. PROVIDE VOLTAGE BARRIER AS REQUIRED.
- EP3 DISPLAY HEIGHTS SHALL BE COORDINATED WITH ARCHITECT AND OWNER PRIOR TO ROUGH-IN.
- EP11 PROVIDE WIREMOLD SERIES 4000 DUAL CHANNEL RACEWAY, OR APPROVED EQUAL, WITH DUPLEX OUTLETS AT 12" O.C. ALTERNATE OUTLETS BETWEEN NORMAL CIRCUIT AND STAND-BY CIRCUIT. LOCATE WIREMOLD JUST BELOW COUNTERTOP. COORDINATE DATA OUTLET LOCATIONS WITH TECHNOLOGY DRAWINGS.
- EP14 PROVIDE RECEPTACLES CENTERED BETWEEN TOP OF WINDOW AND CEILING FOR SECURITY MONITORS. COORDINATE EXACT LOCATION OF RECEPTACLES WITH SECURITY CONTRACTOR PRIOR TO ROUGH-IN.
- EP47 PROVIDE POWER CONNECTION TO DOOR OPERATOR ON INDICATED CIRCUIT PER MANUFACTURER'S INSTALLATION INSTRUCTIONS. ALL CONTROL WIRING, DEVICES, AND CONTROLS CONDUIT ASSOCIATED WITH DOOR SHALL BE PROVIDED BY DIVISION 28.
- EP48 GENERATOR REMOTE ANNUNCIATOR CONTROL PANEL LOCATION. COORDINATE FINAL LOCATION WITH CLIENT PRIOR TO ROUGH-IN.
- EP49 GENERATOR EMERGENCY STOP BUTTON LOCATION. COORDINATE FINAL LOCATION WITH OWNER PRIOR TO ROUGH-IN.
- EP70 ICC 500 SHELTER AREA.

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4	Addendum #4	04/03/2024

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POWER FIRST FLOOR PLAN - OVERALL

E201

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ELECTRICAL PLAN NOTES:

E5 POWER THROUGH ASSOCIATED CONDENSING UNIT LOCATED ON ROOF. ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL ALL INTERCONNECTING POWER AND SIGNAL WIRING PER MANUFACTURER 'S REQUIREMENT.

E32 LAND POWER AT THRUDOOR DISCONNECT PROVIDED INSIDE CONTROL PANEL.

EP5 PROVIDE HARDWIRED CONNECTION TO PLUMBING VALVE CONTROL TRANSFORMER. DIVISION 26 CONTRACTOR SHALL ROUTE CONTROL FROM EACH CVC,(CELL VALVE CONTROLLERS) BACK TO THE CENTRAL WMS SERVER (WASTER WATER MANAGEMENT) LOCATED IN CONTROL ROOM 159. REFER TO PLUMBING PLANS FOR CONTROLLED FIXTURES. COORDINATE ALL REQUIREMENTS WITH APPROVED SHOP DRAWINGS PRIOR TO ROUGH-IN. COORDINATE WITH ENGINEER ANY DISCREPANCIES.

EP9 HEAT TRACE SYSTEM SHALL BE ROUTED AND CONTROLLED VIA HEAT TRACE CONTROL PANEL. CONFIRM CONTROL WITH MANUFACTURER AND APPROVED SHOP DRAWINGS PRIOR TO ROUGH-IN.

EQ1 EQUIPMENT DISCONNECT FURNISHED INTEGRAL FROM MANUFACTURER.

1 EQUIPMENT CONNECTION FIRST FLOOR PLAN - OVERALL
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EQUIPMENT CONNECTION FIRST FLOOR PLAN - OVERALL

E301

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LIGHT FIXTURE SCHEDULE - INTERIOR

TYPE	MANUFACTURER	SERIES / MODEL	APPROVED ALTERNATES	SOURCE TYPE	SOURCE CRI	SOURCE CCT	SOURCE LUMENS	DIMMING TYPE	VOLTAGE	INPUT WATTS	INPUT VA	DESCRIPTION	NOTES
A1	COOPER LIGHTING	D3X-WD-50L835-LD5-UNV-24-T1-STD	COLUMBIA, SIGNIFY, HE WILLIAMS, LITHONIA	LED	80	3500	5000	0-10V	277	38	42	CORELITE CLASS D3X 2'X4' LED FIXTURE. ROUND PERF SHIELDING WITH STANDARD DRIVER.	
A1E	COOPER LIGHTING	D3X-WD-50L835-LD5-UNV-24-T1-STD-EL7W	COLUMBIA, SIGNIFY, HE WILLIAMS, LITHONIA	LED	80	3500	5000	0-10V	277	38	42	SAME AS A1. EXCEPT WITH EM BATTERY.	
A1E2	COOPER LIGHTING	D3X-WD-50L835-LD5-UNV-24-T1-STD-EL14W	COLUMBIA, SIGNIFY, HE WILLIAMS, LITHONIA	LED	80	3500	5000	0-10V	277	38	42	SAME AS A1. EXCEPT WITH 14W EM BATTERY BACKUP REDUCED TO 70% LUMEN OUTPUT TO PROVIDE 120 MIN. RUN TIME.	
A2	COOPER LIGHTING	D3X-WD-31L835-LD5-UNV-22-T1-STD	COLUMBIA, SIGNIFY, HE WILLIAMS, LITHONIA	LED	80	3500	3100	0-10V	277	27	30	CORELITE CLASS D3X 2'X2' LED FIXTURE. ROUND PERF SHIELDING WITH STANDARD DRIVER.	
A2E	COOPER LIGHTING	D3X-WD-31L835-LD5-UNV-22-T1-STD-EL7W	COLUMBIA, SIGNIFY, HE WILLIAMS, LITHONIA	LED	80	3500	3100	0-10V	277	27	30	SAME AS A2 EXCEPT WITH EM BATTERY BACKUP.	
D2	H.E. WILLIAM	6DR-TL-L15/835-DIM1-UNV-L-W-SF-WH-IP-N-F1	SIGNIFY, GOTHAM, PRESCOLITE	LED	80	3500	1500	0-10V	277	13	14	6" LED DOWNLIGHT WITH A FLUSH LENS AND 55 DEGREE DISTRIBUTION.	
F1	COOPER LIGHTING	4SNLED-LD5-48SL-UNV-L835-CD1-U	COLUMBIA, SIGNIFY, LITHONIA	LED	80	3500	4827	0-10V	277	35	39	METALUX SNLED BASE 4' LED STRIPLIGHT.	
F3	COOPER LIGHTING	8LBLED-LD4-10-SYMF-UNV-L835-CD1-C3	COLUMBIA, SIGNIFY, LITHONIA	LED	80	3500	10000	0-10V	277	76	84	METALUX LBLED 8' LOW BAY LINEAR. SYMMETRIC FROST OPTIC.	
F5	KENALL	MLHA12-48-FA-34I/82C-37K8-DV-PM	COLUMBIA, SIGNIFY, LITHONIA	LED	80	3700	8757	0-10V	277	82	82	4' INDUSTRIAL LED WITH FROSTED ACRYLIC LENS AND FRAME. PENDENT MOUNTED. ORDER ALL NECESSARY MOUNTING HARDWARE.	
F5E	KENALL	MLHA12-48-FA-34I/82C-37K8-DV-LEL-PM	COLUMBIA, SIGNIFY, LITHONIA	LED	80	3700	8757	0-10V	277	82	82	4' INDUSTRIAL LED WITH FROSTED ACRYLIC LENS AND FRAME. PENDENT MOUNTED. ORDER ALL NECESSARY MOUNTING HARDWARE. WITH 10W EMERGENCY BATTERY BACKUP.	
JA1	KENALL	RMCD-4-##-0-45L35K-DCC-DV-4/G-1	KURTZON, NEW STAR, LC DOANE	LED	80	3500	3949	-	277	50	56	2X4' RECESSED CEILING MOUNT LED FIXTURE WITH CLEAR AND PRISMATIC POLYCARBONATED LENS.	
JA1E	KENALL	RMCD-4-##-0-45L35K-DCC-DV-4/G-1-LEL	KURTZON, NEW STAR, LC DOANE	LED	80	3500	3949	-	277	50	56	SAME AS JA1 BUT WITH AN EMERGENCY BATTERY BACKUP.	
JA3	KENALL	RMCA-4-##-0-45L35K-DCC-DV-4/G-1	KURTZON, NEW STAR, LC DOANE	LED	80	3500	2747	-	277	50	56	1'X2' RECESSED CEILING MOUNT LINEAR LED WITH TORX HEAD W/CENTER PIN FASTENER.	
JA3E	KENALL	RMCA-4-##-0-45L35K-DCC-DV-4/G-1-LEL	KURTZON, NEW STAR, LC DOANE	LED	80	3500	2747	-	277	50	56	SAME AS JA3 BUT WITH AN EMERGENCY BATTER BACKUP.	
JA4	KENALL	RCM-4-##-0-67L35K-DCC-DV-4/G-1	KURTZON, NEW STAR, LC DOANE	LED	80	3500	5660	-	277	74	82	SAME AS JA1 BUT WITH AN INCREASED LUMEN OUTPUT.	
JD1	KENALL	HADL6-FF-2FW-12L-35K8-M-CS-G-RIG6-DV-DIM1	KURTZON	LED	80	3500	1048	-	277	15	17	6" SEALED, RECESSED DOWNLIGHT WITH FLUSH LENS TRIM LUMINAIRE FOR HIGH ABUSE APPLICATIONS.	
JH1E	KENALL	SSA-4-0/0-45L35K-DCC-DV-4/G-1-EL	KURTZON, NEW STAR, LC DOANE	LED	80	3500	3863	-	277	50	56	1'X2' SURFACE CEILING MOUNT LINEAR LED WITH TORX HEAD W/CENTER PIN FASTENER.	
JH2	KENALL	SQCA-0/0-23L35K-DCC-DV-4/G-1-WL	KURTZON, NEW STAR, LC DOANE	LED	82	3500	1711	-	277	35	39	13"X13" SURFACE CEILING MOUNT LED FIXTURE TORX HEAD W/CENTER PIN FASTENER.	
JH3	KENALL	SSA-4-0/0-67L35K-DCC-DV-4/G-1	KURTZON, NEW STAR, LC DOANE	LED	82	3500	5537	-	277	74	82	SAME AS JH1E BUT WITH AN INCREASED LUMEN OUTPUT AND NO BATTERY BACKUP.	
JH3E	KENALL	SSA-4-0/0-67L35K-DCC-DV-4/G-1-EL	KURTZON, NEW STAR, LC DOANE	LED	82	3500	5537	-	277	74	82	SAME AS JH3 BUT WITH AN EMERGENCY BATTERY BACKUP.	
JW1	KENALL	CC-2-0/0-25L35K-DCC-DV-4/G-1	KURTZON, NEW STAR, LC DOANE	LED	82	3500	2557	-	120	28	31	CORNER MOUNT, HINGED CLAMSHELL LED FIXTURE WITH TORX HEAD W/CENTER PIN FASTENER.	
JW1E	KENALL	CC-2-0/0-25L35K-DCC-DV-4/G-1-EL	KURTZON, NEW STAR, LC DOANE	LED	82	3500	2557	-	277	28	31	SAME AS JW1 BUT WITH AN EMERGENCY BATTERY BACKUP.	
U2	Q-TRAN	WALA-SW-PPS-2-IP67-35-4.0-ENC-TL		LED	98	3500	263		277	8	9	FLEXIBLE ENCAPSULATED FIXTURE.	
W3	HUBBELL	VW-151-150/A-21-VFB-15-VW-1-VG-15	LITHONIA, LEVITON, EATON	LED	80	3500	NA	NONE	120	150	167	WALL ARM MOUNTED ENCLOSED/GASKETED EXTERIOR LED FIXTURE.	
W4	H.E. WILLIAM	WMA-#-#-8-35-#	NEW STAR, LITHONIA	LED	80	3500	6092	NONE	277	46	51	3' LED ARCHITECTURAL WALL MOUNT FIXTURE.	
X1	COOPER LIGHTING	APX6-XX-R-WHITE	LITHONIA, NEW STAR	LED	NA	NA	NA	NA	277	5	5	UNIVERSAL MOUNT EXIT SIGN. RED LETTERING. AC OPTION ONLY. WHITE FINISH. THERMOPLASTIC HOUSING. MVOLT.	COORDINATE ARROWS WITH PLANS.
X3	KENALL	MMEX-1-0-R-DT	LITHONIA, NEW STAR	LED	NA	NA	NA	NA	277	5	5	VANDAL RESISTANT, SURFACE MOUNTED (CEILING OR WALL), EXIT SIGN. RED LETTERING. COORDIANTE FACE COUNT WITH PLANS.	COORDINATE ARROWS WITH PLANS.
X4	KENALL	MMEX-1-0-R-DT	ITHONIA, NEW STAR	LED	NA	NA	NA	NA	277	5	5	SIMILAR TO TYPE X3 BUT CEILING MOUNTED.	COORDINATE ARROWS WITH PLANS.

4

LIGHT FIXTURE SCHEDULE GENERAL NOTES:

1. ALL LIGHT FIXTURES AND RELATED COMPONENTS SHALL BE PROVIDED BY THE CONTRACTOR, UNLESS NOTED OTHERWISE.
2. THE PARTY SUPPLYING THE LIGHT FIXTURES IS RESPONSIBLE FOR SUPPLYING THE PROPER QUANTITY OF LIGHT FIXTURES.

LIGHT FIXTURE SCHEDULE SUPPLEMENTAL SPECIFICATIONS:

1. ANY PROPRIETARY, SOLE-SOURCED LIGHT FIXTURE LISTED IN THE LIGHT FIXTURE SCHEDULE SHALL BE UNIT PRICED ONLY. NO PACKAGING OR LOT PRICING OF THESE LIGHT FIXTURES SHALL BE ALLOWED. UNIT PRICES SHALL BE CLEARLY IDENTIFIED ON THE BID FORM.
2. PACKAGING OF LIGHT FIXTURES WILL NOT BE CONSIDERED OR APPROVED. REPRESENTATIVE AGENTS SHALL BE ALLOWED TO OFFER MINI-LOT PRICING (MLP) FOR LIGHT FIXTURES AS ALLOWED IN ELECTRICAL SPECIFICATIONS.
3. LIGHTING CONTROLS PRICING, INCLUDING BUT NOT LIMITED TO THOSE REFERENCED IN ELECTRICAL SPECIFICATIONS, SHALL BE COMPLETELY SEPARATE OF ANY LIGHT FIXTURE PRICING. ANY LIGHTING CONTROLS PRICING THAT IS SUBMITTED WITH LIGHT FIXTURE PRICING (UNIT OR MINI-LOT) WILL BE IMMEDIATELY REJECTED IN ITS ENTIRETY.
4. CATALOG NUMBERS SHALL NOT BE CONSIDERED COMPLETE AND MATERIAL SHALL NOT BE ORDERED BY MANUFACTURER AND CATALOG NUMBERS ONLY. FIRST READ THE COMPLETE DESCRIPTION, NOTES AND SPECIFICATIONS IN CONJUNCTION WITH THE CATALOG NUMBER TO DETERMINE THE MATERIAL AND ACCESSORIES TO BE ORDERED. THE MANUFACTURERS LISTED ARE THE BASIS FOR THE DESIGN.
5. FOR SUBSTITUTIONS: PROVIDE PHOTOMETRIC CALCULATIONS AND OTHER NECESSARY INFORMATION FOR ENGINEER REVIEW. REFER TO SPECIFICATIONS FOR MORE INFORMATION.
6. COORDINATE LIGHT FIXTURE MOUNTING HARDWARE AND TRIMS NEEDED TO SUIT CEILING CONDITIONS. LIGHT FIXTURES NEAR OR IN CONTACT WITH INSULATION SHALL COMPLY WITH CODE. MAINTAIN 3" MINIMUM WORKING CLEARANCE BETWEEN NON-IC RATED LIGHT FIXTURE HOUSINGS AND INSULATION ON ALL ADJACENT DUCTWORK, PIPING, WALLS, AND CEILINGS.

LIGHTING CONTROL DEVICE SCHEDULE

LINE-VOLTAGE WALL SWITCH OCCUPANCY SENSORS

SYMBOL TAG	MANUFACTURER MODEL/SERIES	ALTERNATE MANUFACTURER	DEVICE DESCRIPTION	COVERAGE (W X D)	VOLTAGE	NOTES
$ OS1	WATTSTOPPER DW-100	COOPER HUBBELL LEVITON SENSORSWITCH	WALL MOUNT DUAL TECHNOLOGY OCCUPANCY SENSOR. SINGLE RELAY. INTEGRAL MANUAL OVERRIDE SWITCH. LINE VOLTAGE.	PIR MAJOR 30' x 35' PIR MINOR 15' x 20' ULT MAJOR 20' x 20' ULT MINOR 15' x 15'	120/ 277	

LINE-VOLTAGE DIMMING WALL SWITCH OCCUPANCY SENSORS

SYMBOL TAG	MANUFACTURER MODEL/SERIES	ALTERNATE MANUFACTURER	DEVICE DESCRIPTION	COVERAGE (W X D)	VOLTAGE	NOTES
$ OSD	WATTSTOPPER DW-311	LUTRON LEVITON	WALL MOUNT DUAL TECH VACANCY SENSOR. MULTI-WAY, INTEGRAL MANUAL OVERRIDE SWITCH SINGLE RELAY. LINE VOLTAGE 0-10V DIMMING.	MAJOR 24' x 25'	120/ 277	

CEILING MOUNT OCCUPANCY SENSORS

SYMBOL TAG	MANUFACTURER MODEL/SERIES	ALTERNATE MANUFACTURER	DEVICE DESCRIPTION	COVERAGE (W X D)	VOLTAGE	NOTES
1	WATTSTOPPER DT-300	COPPER HUBBELL LEVITON SENSORSWITCH	CEILING MOUNT DUAL TECHNOLOGY OCCUPANCY SENSOR. 360 DEGREE COVERAGE. LOW VOLTAGE.	PIR MAJOR 44' Ø PIR MINOR 25' Ø ULT MAJOR 40' x 40' ULT MAJOR 30' x 30'	24V	

NETWORK LIGHTING CONTROL SYSTEMS

NETWORK DAYLIGHT SENSORS

SYMBOL TAG	MANUFACTURER MODEL/SERIES	ALTERNATE MANUFACTURER	DEVICE DESCRIPTION	VOLTAGE	NOTES
D1	WATTSTOPPER LMRC-21# LMRL-100	COOPER HUBBELL LEVITON ACUITY	DIGITAL ON/OFF/0-10V DIMMING ROOM CONTROLLER. # WITHIN SYMBOL SHALL INDICATE NUMBER OF RELAYS IN CONTROLLER.	120	

NETWORK ROOM CONTROLLERS (POWER PACK)

SYMBOL TAG	MANUFACTURER MODEL/SERIES	ALTERNATE MANUFACTURER	DEVICE DESCRIPTION	VOLTAGE	NOTES
R1	LEGRAND LMRC-101 (NON-DIM)	ACUITY, CRESTRON ETC, HUBBELL	DIGITAL ROOM CONTROLLER FOR ON/OFF CONTROL OF LIGHTING LOADS. (1) 20A LOAD INPUT, (1) RELAY OUTPUT. MANUAL- AND AUTO-ON MODES.	120/ 277	
RD1	LEGRAND LMRC-211 (0-10V)	ACUITY, CRESTRON ETC, HUBBELL	DIGITAL ROOM CONTROLLER FOR ON/OFF/0-10V DIMMING CONTROL OF LIGHTING LOADS. (1) 20A LOAD INPUT, (1) RELAY OUTPUT. 100mA SINK PER RELAY. MANUAL-, PARTIAL-, AND AUTO-ON MODES.	120/ 277	1
RD2	LEGRAND LMRC-212 (0-10V)	ACUITY, CRESTRON ETC, HUBBELL	DIGITAL ROOM CONTROLLER FOR ON/OFF/0-10V DIMMING CONTROL OF LIGHTING LOADS. (1) 20A LOAD INPUT, (2) RELAY OUTPUTS. 100mA SINK PER RELAY. MANUAL-, PARTIAL-, AND AUTO-ON MODES.	120/ 277	1

NETWORK LIGHTING SWITCHES

SYMBOL TAG	MANUFACTURER MODEL/SERIES	ALTERNATE MANUFACTURER	DEVICE DESCRIPTION	VOLTAGE	NOTES
$ LV	WATTSTOPPER RH4FBL3PW	LEVITON HUBBELL COOPER	0-10 V LINE VOLTAGE ROCKET-TYPE DIMMER SWITCH WITH SLIDE CONTROLLER.	120/ 277	
$ LVD	WATTSTOPPER LMDM-101	LEVITON HUBBELL COOPER	0-10 V LOW VOLTAGE ROCKET-TYPE DIMMER SWITCH FOR CONTROL OF DIMMING ZONES. DIGITAL LIGHTING SYSTEM COMPONENT.	24	
$ 4K	LEGRAND PS20AC4-K		4-WAY TOGGLE SWITCH FOR MANUAL ON/OFF CONTROL. KEYED.	120/ 277	

AUXILIARY EQUIPMENT

SYMBOL TAG	MANUFACTURER MODEL/SERIES	ALTERNATE MANUFACTURER	DEVICE DESCRIPTION	VOLTAGE	NOTES
ALC	LEGRAND ELCU-200	SEE DESCRIPTION	AUTOMATIC LOAD CONTROL RELAY. UL924 LISTED. OPERATES AS CONTROL DEVICE OR BYPASS PER SEQUENCE OF OPERATIONS. INTEGRAL TEST BUTTON. ALTERNATE MANUFACTURERS: ACUITY/IOTA/LC&D, EATON/COOPER, ETC, HUBBELL, LUTRON, LVS CONTROLS, SIGNIFY/BODINE.	120/ 277	1
LCP	LEGRAND LMCP24-10V	ACUITY	24 RELAY PANELBOARD, WITH EMERGENCY UL 924 LISTED RELAYS. 0-10V DIMMING PROVIDED. 24" WIDE BY 32" TALL.	120/ 277	

GENERAL NOTES:

A. OCCUPANCY SENSOR LAYOUT DESIGNED FROM BASIS-OF-DESIGN COVERAGE PATTERNS. IF SUBMITTING ALTERNATE PER 'EQUIVALENT MANUFACTURER' COLUMN, ADJUST SENSOR QUANTITIES AND LOCATIONS PER MANUFACTURER-SPECIFIC SPACING CRITERIA.
B. PROVIDE SHOP DRAWINGS FOR ENGINEER AND ARCHITECT REVIEW THAT INCLUDE PRODUCT CUTSHEETS AND PROJECT-SPECIFIC LAYOUTS. LAYOUTS MUST INCLUDE SENSOR LOCATIONS, HEIGHTS, ORIENTATION, AND COVERAGE AREAS. SHOW COORDINATION WITH ALL OTHER CEILING DEVICES INCLUDING BUT NOT LIMITED TO HVAC SUPPLY AND RETURN GRILLES, SPRINKLERS, LIGHT FIXTURES, AND OTHER OWNER-PROVIDED CEILING MOUNTED DEVICES SUCH AS SPEAKERS, SECURITY CAMERAS, PROJECTORS, ETC. (SENSORS MAY BE ADVERSELY AFFECTED IF LOCATED TOO CLOSE TO OTHER CEILING MOUNTED DEVICES). ALSO PROVIDE SCHEMATICS AND SCHEDULES WHEN APPLICABLE.
C. LIGHTING CONTROLS PRICING SHALL BE COMPLETELY SEPARATE OF ANY LIGHT FIXTURE PRICING.
D. VERIFY COLOR(S) FOR ALL WALL AND CEILING MOUNTED DEVICES WITH THE ARCHITECT.
E. ALL WALL SWITCH AND CEILING SENSORS SHALL HAVE AN ADJUSTABLE TIME DELAY RANGE OF 0-30 MIN, UNO. CONFIRM SENSOR SETTINGS WITH SEQUENCE OF OPERATIONS AND OWNER PRIOR TO SYSTEM COMMISSIONING.
F. PROVIDE COPIES OF OPERATION AND MAINTENANCE INSTRUCTIONS FOR ALL DEVICES TO OWNER.
G. PROVIDE A NEUTRAL CONDUCTOR TO ALL WALL SWITCH LOCATIONS PER NEC REQUIREMENTS.
H. DO NOT SHARE NEUTRAL CONDUCTOR ON LOAD SIDE OF DIMMERS.

NOTES:

1. RECORD FINAL LOCATION OF DEVICE FOR AS-BUILT DRAWINGS AND MAINTENANCE PURPOSES.

VERSION: 4.06

LIGHTING CONTROL SEQUENCE OF OPERATIONS

ROOM TYPE	SYSTEM: CENTRALIZED NETWORKED	SYSTEM: STAND-ALONE	TIMECLOCK / CENTRALIZED MESH SYS.: TIME ON	TIME OFF	PHOTOCELL ON / OFF	SETBACK REDUCTION	AUTO OFF (AFTER HOURS)	RECEPTACLE CONTROL	OCCUPANCY SENSOR: AUTO ON	AUTO OFF	SETBACK REDUCTION	RECEPTACLE CONTROL	MANUAL CONTROL: MANUAL OVERRIDE ON	MANUAL OVERRIDE OFF	LOCAL MANUAL SWITCH (ON / OFF / DIM)	DISPLAY, ACCENT, TASK CONTROL	DAYLIGHT CNTRL: AUTO CONTINUOUS DIMMING	SEQUENCE OF OPERATION
PUBLIC LOBBY (101)	X		5:00 AM	6:00 PM					100%	20 MIN					X		X	AUTO-ON VIA NETWORK. LOCAL DIMMING CONTROLS. AUTO ON VIA OCCUPANCY SENSOR AFTER HOURS.AUTO OFF VIA OCCUPANCY SENSOR AFTER HOURS.
PRIVATE OFFICES & INTERVIEWS (107, 108, 109, 110, 103, 115, 117, 135, 137, 122, 148, 145)		X								20 MIN					X			MANUAL ON. AUTO OFF VIA OCCUPANCY SENSOR. LOCAL CONTROLS WITHIN SPACE.
BREAKROOMS - ENCLOSED (140)		X								20 MIN					X			MANUAL ON. AUTO OFF VIA OCCUPANCY SENSOR. LOCAL CONTROLS WITHIN SPACE.
BACK OF HOUSE SPACES (134, 141, 105, 135B, 127, 152, 153, 155, 151)		X								20 MIN			X					MANUAL ON. AUTO OFF VIA OCCUPANCY SENSOR. LOCAL CONTROLS WITHIN SPACE.
LARGE STORAGE ROOMS (133, 125, 150)		X								20 MIN			X					MANUAL ON. AUTO OFF VIA OCCUPANCY SENSOR. LOCAL CONTROLS WITHIN SPACE.
DISPATCH AREA (136, 138)	X								100%	20 MIN					X			AUTO ON VIA NETWORK. LOCAL DIMMING CONTROLS. AUTO OFF VIA OCCUPANCY SENSOR AFTER HOURS.
STAFF CIRCULATION & JAIL STAFF AREA (112, 113, 123)	X		5:00 AM	6:00 PM					100%	20 MIN					X			AUTO ON VIA NETWORK. LOCAL DIMMING CONTROLS. AUTO OFF VIA OCCUPANCY SENSOR AFTER HOURS. AUTO ON VIA OCCUPANCY SENSOR AFTER HOURS.
RESTROOMS PUBLIC (129, 131)	X		5:00 AM	6:00 PM					100%	20 MIN				X				AUTO ON VIA NETWORK. LOCAL CONTROLS. AUTO OFF VIA OCCUPANCY SENSOR AFTER HOURS. AUTO ON VIA OCCUPANCY SENSOR AFTER HOURS.
RESTROOMS PRIVATE (139, 104, 116, 160, 147, 149)										20 MIN				X				MANUAL ON. AUTO OFF VIA OCCUPANCY SENSOR. LOCAL CONTROL.
STAFF CIRCULATION, OFFICE SALLYPORT (119, 114)	X		5:00 AM	6:00 PM					100%	20 MIN					X			AUTO ON VIA NETWORK. LOCAL CONTROLS. AUTO OFF VIA OCCUPANCY SENSOR AFTER HOURS. AUTO ON VIA OCCUPANCY SENSOR AFTER HOURS.
CONTROL CORRIDR (121)		X							100%	20 MIN				X				AUTO ON & AUTO OFF VIA OCCUPANCY SENSOR. LOCAL MANUAL CONTROL.
CONTROL ROOM (159)		X												X				MANUAL ON. NO AUTO-OFF FOR SECURITY CONCERN. LOCAL CONTROL.
SECURE CORRIDOR (162)		X													X			MANUAL ON VIA REMOTE SWITCH IN CONTROL ROOM 159. NO AUTO-OFF.
SECURE CORRIDOR, SALLYPORT, DISPATCH (142, DV1)		X													X			MANUAL ON VIA REMOTE SWITCH IN CONTROL ROOM 159. NO AUTO-OFF.
SALLYPORTS (SP1, SP2, SP3)		X																CONTINOUSLY LIT. NO MANUAL CONTROL.
BOOKING (146)	X		5:00 AM	6:00 PM					100%	20 MIN					X			AUTO ON VIA NETWORK. LOCAL CONTROLS. AUTO OFF VIA OCCUPANCY SENSOR AFTER HOURS. AUTO ON VIA OCCUPANCY SENSOR AFTER HOURS.
ARRESTING OFFICER (166)		X													X			MANUAL ON. NO AUTO-OFF. REMOTE CONTROL IN BOOKING 146.
HOLDING CELLS (PAD1, PAD2, HD1, HD2, HD3)		X													X			MANUAL ON. NO AUTO-OFF. REMOTE CONTROL IN BOOKING 146.
MEDICAL EXAM (144)		X								20 MIN					X			MANUAL ON. AUTO OFF VIA OCCUPANCY SENSOR. LOCAL CONTROLS WITHIN SPACE.
MEDICAL CELL (MED1)		X													X			MANUAL ON. NO AUTO-OFF. REMOTE CONTROL IN MED EXAM 144.
KITCHEN (154)		X								20 MIN			X					MANUAL ON. AUTO OFF VIA OCCUPANCY SENSOR. LOCAL CONTROLS WITHIN SPACE.
MECH & ELEC ROOMS (157, 158, 163, 164, 111, 124, 120)		X													X			MANUAL ON. NO AUTO-OFF.
SALLYPORT (SP4)		X													X			MANUAL ON. NO AUTO-OFF.
EXERCISE (EXC)		X													X			MANUAL ON/OFF VIA REMOTE SWITCH IN CONTROL ROOM 159.
DAY ROOMS (A, B, C, D, E, F)	X														X			CONNECTED TO SECURITY PANEL IN CONTROL ROOM 159. MANUAL CONTROL VIA REMOTE SWITCH IN CONTROL ROOM 159.

LIGHTING CONTROL PANEL SCHEDULE

PANEL NAME: LCP — MOUNTING: SURFACE
LOCATION: ELEC ROOM 163 — VOLTAGE: 120/277V

RELAY	CIRCUIT	LOAD CONTROLLED	MODULE TYPE	ZONE	SEQ.
1	LRH3-22	EXTERIOR WALL SCONCES - EASTERN AREA	0-10V	E4	B
2	LRH3-22	EXTERIOR WALL SCONCES - WESTERN AREA	0-10V	E2	B
3	H-2	WALL WASH FLOODS	0-10V	E6	B
4	H-2	FLAG POLE	0-10V	E7	B
5	H-2	MONUMENT SIGN	0-10V	E8	B
6	H-2	MEDALLION SIGNAGE	0-10V	E9	B
7		SPACE			
8		SPACE			
9		SPACE			
10		SPACE			
11		SPACE			
12		SPACE			
		VOLTAGE BARRIER			
13	LSH1-19	DOWNLIGHTS - EM EGRESS - PUBLIC LOBBY	0-10V	E1	B
14	LSH1-19	DOWNLIGHTS - EM EGRESS - DV1 EXIT & STAFF ENTRANCE	0-10V	E2	B
15	LSH1-19	SALLY PORT EM LTG	0-10V	E3	C
16	LRH3-24	PARKING LOT POLES - NORTH & EAST	0-10V	E5	A
17	LRH3-26	PARKING LOT POLES - SOUTH & WEST	0-10V	E5	A
18		SPARE			
19		SPARE			
20		SPARE			
21		SPACE			
22		SPACE			
23		SPACE			
24		SPACE			

MODULE TYPE LEGEND:

- ELV = ELECTRONIC LOW VOLTAGE DIMMING
- MLV = MAGNETIC LOW VOLTAGE DIMMING
- NON-DIM = SWITCHING ONLY LOAD (NO DIMMING)
- MOTOR = MOTOR CONTROL
- 0-10V = 0-10V DIMMING
- 2-WIRE = 2-WIRE DIMMING
- 3-WIRE = 3-WIRE DIMMING
- DMX = COLOR CHANGING DIMMING

NOTES:

1 ALL RELAYS SHALL BE LABELED INSIDE THE FRONT COVER INDICATING THE LOADS THAT ARE CONTROLLED AS WELL AS CONTROL CIRCUITS AS STATED ABOVE.
2 INSTALL LOW-VOLTAGE CONTROL WIRING PER MANUFACTURER SHOP DRAWING DETAILS.

SCHEDULE: CONFIRM FINAL TIME SCHEDULE FROM OWNER PRIOR TO SYSTEM PROGRAMMING.

SEQUENCE:

A EXTERIOR POLES: SHALL OPERATE FROM 8PM TO 6AM.
B EXTERIOR FAÇADE: SHALL OPERATE FROM 8PM TO 6AM.
C SALLY PORT LIGHTING: SHALL OPERATE FROM 8PM TO 6AM.

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4	Addendum #4	04/03/2024

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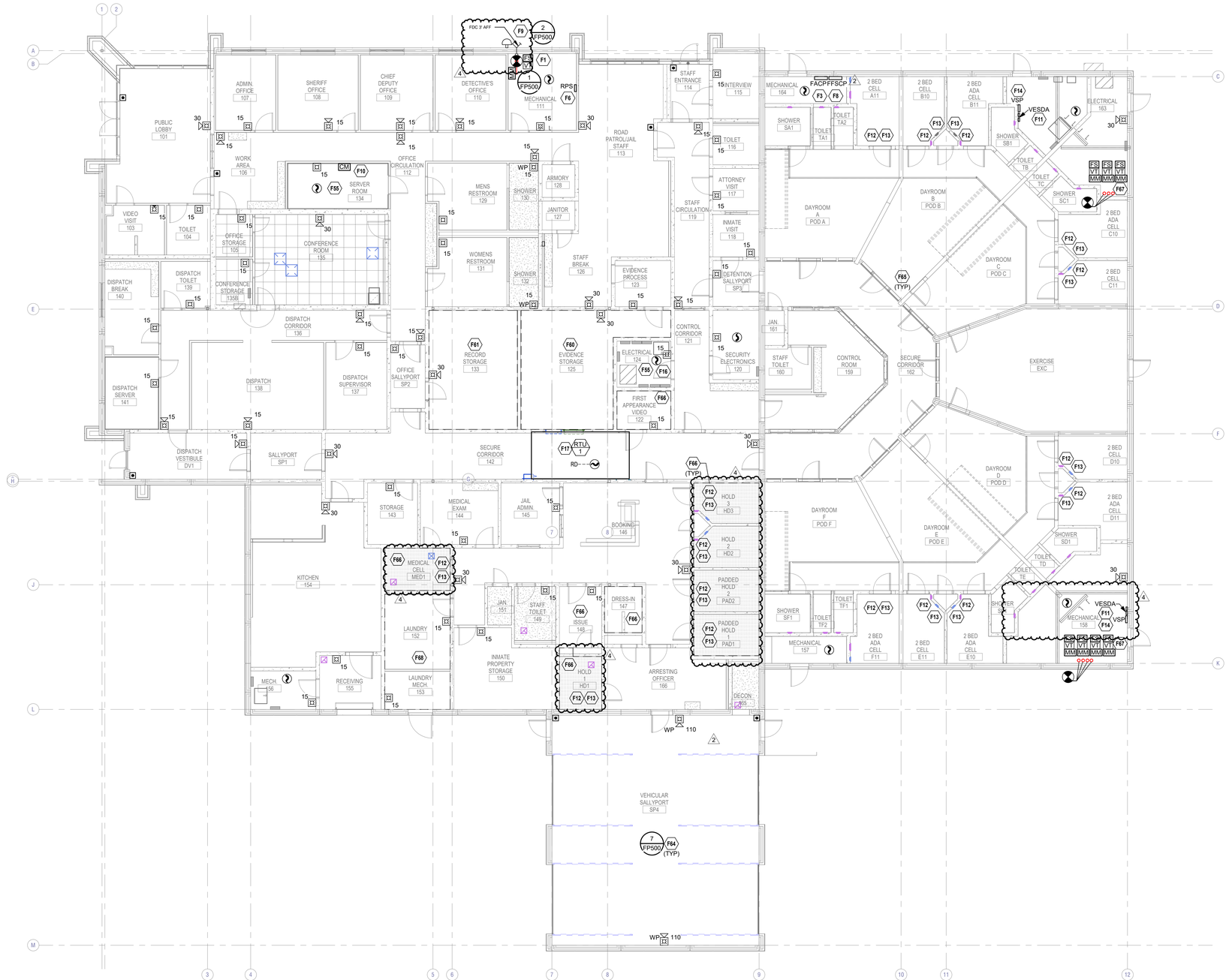
LIGHT FIXTURE SCHEDULE

E400

MICHAEL T. DERMYER



1 FIRE PROTECTION PLAN - FIRST FLOOR - OVERALL
1/8" = 1'-0"

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

FIRE PROTECTION PLAN NOTES:

F1 CONNECT FIRE SPRINKLER MONITORING DEVICES TO FIRE ALARM SYSTEM. COORDINATE QUANTITY AND LOCATION OF DEVICES WITH FIRE PROTECTION SYSTEMS.
F3 PROVIDE NEW FIRE ALARM CONTROL PANEL.
F6 PROVIDE NEW FIRE ALARM REMOTE POWER SUPPLY
F8 FIREFIGHTER'S SMOKE CONTROL PANEL LOCATION SHOWN FOR REFERENCE. REFER TO MECHANICAL SHEETS FOR MORE INFORMATION.
F9 CONNECT EXTERIOR WATERFLOW ALARM TO FIRE ALARM SYSTEM. EXTERIOR WATERFLOW ALARM AND FIRE DEPARTMENT CONNECTION SHOWN OFFSET FOR CLARITY. CENTER WATERFLOW ALARM ABOVE FIRE DEPARTMENT CONNECTION.
F10 PROVIDE CONNECTIONS TO AUTOMATICALLY ACTIVATE SMOKE CONTROL SYSTEM UPON SIGNAL FROM FIRE ALARM CONTROL PANEL.
F11 PROVIDE (2) VESDA-E VEP SMOKE DETECTORS AT THIS LOCATION. PANELS TO BE PROVIDED TO MONITOR SMOKE. COORDINATE VESDA SMOKE DETECTION ZONES WITH MECHANICAL SMOKE CONTROL ZONES. AT A MINIMUM PROVID A ONE SMOKE DETECTION ZONE PER POD. REFER TO MECHANICAL SHEETS FOR ADDITIONAL INFORMATION.
F12 PROVIDE VESDA-E VEP AIR SAMPLING POINT IN EXHAUST DUCT TO EACH INDIVIDUAL CELL TO DETECT SMOKE.
F13 EACH CELL SHALL BE PROVIDED WITH A 2" DIAMETER HOLE FROM THE CHASE TO THE CELL ABOVE THE SINK AND A 2" DIAMETER HOLE FROM THE CHASE TO THE DAYROOM ABOVE THE CHASE ACCESS DOOR FOR INSTITUTIONAL SIDEWALL SPRINKLERS.
F14 PROVIDE VESDA VSP POWER SUPPLY TO POWER VESDA E VEP SMOKE DETECTORS.
F16 PROVIDE LOW VOLTAGE WIRING FROM DUCT DETECTOR TO REMOTE TEST STATION. MOUNT REMOTE TEST STATION ON WALL AT 48" AFF. LABEL FOR EQUIPMENT SERVED.
F17 PROVIDE EQUIPMENT AND CONNECTIONS NECESSARY TO SHUTDOWN FAN POWERED MECHANICAL AIR HANDLING EQUIPMENT WITH A DESIGN CAPACITY LESS THAN 2000 CFM. REFER TO SEQUENCE OF OPERATION FOR ADDITIONAL INFORMATION.
F55 DO NOT ROUTE SPRINKLER PIPING ABOVE ELECTRICAL PANELS.
F60 PROVIDE SPRINKLER PROTECTION IN ACCORDANCE WITH NFPA 13 FOR EXTRA HAZARD GROUP I. UTILIZE THE ROOM DESIGN METHOD AS OUTLINED IN CHAPTER 11 IN CONJUNCTION WITH INCREASED PASSIVE FIRE PROTECTION. REFER TO ARCHITECT CODE SHEET FOR ADDITIONAL INFORMATION.
F61 PROVIDE SPRINKLER COVERAGE FOR ORDINARY HAZARD II IN ACCORDANCE WITH NFPA 13.
F64 INSTALL SPRINKLER PROTECTION BELOW GARAGE ROLLUP DOORS.
F65 INSTITUTIONAL TYPE SIDEWALL SPRINKLERS SHALL BE PROVIDED TO PROTECT THE INMATE CELLS AND BELOW THE SECOND LEVEL WALKWAY ON THE EXTERIOR OF THE CELLS. ALL SPRINKLERS SHALL BE INSTALLED IN MANUFACTURER PROVIDED SPRINKLER PENETRATION FROM THE CELL CHASE. ALL SPRINKLER PIPING SHALL BE ROUTED THOUGH CELL CHASE TO SUPPLY SPRINKLERS
F66 PROVIDE INSTITUTIONAL TYPE (TAMPER RESISTANT) SPRINKLERS IN ALL AREAS ACCESSIBLE TO INMATES.
F67 PROVIDE FIRE SPRINKLER MANIFOLD WITH DEDICATED RISERS, CONTROL VALVES AND FLOW SWITCHES FOR EACH SMOKE CONTROL ZONE. FLOW SWITCH SHALL ACTIVATE SMOKE EVACUATION FOR THAT ZONE. REFER TO MECHANICAL SHEETS FOR SMOKE CONTROL ZONES.
F68 PROTECT AREA INDICATED AS ORDINARY HAZARD 2 IN ACCORDANCE WITH NFPA 13.

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	Issue	Date
2	Addendum #2	03/20/2024
4	Addendum #4	04/03/2024

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FIRE PROTECTION PLAN - FIRST FLOOR - OVERALL

FP101

CHRISTOPHER J. CULP

MECHANICAL PLAN NOTES:

M17 INSTALL 3" IPEX UL 1738 PVC PIPING FOR WATER HEATER FLUE AND INTAKE. CONNECT TO WATER HEATER PER MANUFACTURERS RECOMMENDATIONS. ROUTE PIPING THROUGH ROOF.

M24 MOUNT BAS CONTROL PANEL TO WALL IN THE LOCATION SHOWN.

M30 INSTALL INDOOR PRESSURE PORT FLUSH WITH CEILING.

M33 ROUTE DUCT THROUGH THE ROOF TO EXHAUST FAN. INSTALL TRANSITION TO FULL-SIZE FAN CONNECTION IF REQUIRED.

M42 INSTALL LOUVER IN PENETRATION OF CONCRETE SLAB ABOVE CEILING AND CONNECT 36" X 12" RETURN DUCT.

M43 INSTALL LOUVER IN PENETRATION OF CONCRETE SLAB ABOVE CEILING. TAP 5" DIAMETER ROUND DUCT INTO SIDE OF 24" X 12" TO SERVE VAV BOX.

1 HVAC FIRST FLOOR PLAN - AREA A
1/4" = 1'-0"

4 STORM SHELTER SUPPLY DUCT
1/8" = 1'-0"

3 STORM SHELTER TRANSFER DUCT
1/8" = 1'-0"

2 STORM SHELTER VENTILATION
1/8" = 1'-0"

KEYPLAN

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HVAC FIRST FLOOR PLAN - AREA A

M101.A

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04/03/2024

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MECHANICAL PLAN NOTES:

M13 INSTALL VEHICLE EMISSIONS CONTROL PANEL AS SHOWN. MOUNT AT 48" AFF. VERIFY FINAL MOUNTING LOCATION WITH MANUFACTURER'S RECOMMENDATIONS. MOUNT ALARMS AT 12" BELOW ROOF STRUCTURE.

M15 ROUTE 16" X 16" EXHAUST DUCT THROUGH THE ROOF TO EF-1. INSTALL TRANSITION TO FULL-SIZE FAN CONNECTION IF REQUIRED.

M16 INSTALL 1/4" WIRE MESH OVER INTAKE DUCT DOWNSTREAM OF MOTORIZED DAMPER.

M17 INSTALL 9" IPEX UL 1738 PVC PIPING FOR WATER HEATER FLUE AND INTAKE. CONNECT TO WATER HEATER PER MANUFACTURERS RECOMMENDATIONS. ROUTE PIPING THROUGH ROOF.

M22 ROUTE VENT PIPING FROM UNIT HEATER UP THROUGH ROOF.

M23 SLOPE EXHAUST DUCT 1/4" PER FOOT TOWARDS DISHWASHER.

M25 PROVIDE THERMOSTAT WITH VANDAL PROOF COVER PER SPECIFICATIONS.

M32 LAUNDRY MAKE-UP AIR UNIT (MUA 1) IS SCHEDULED AT 2000 CFM TO ACCOMMODATE FUTURE SECOND DRYER. GRILLES SHALL BE BALANCED AT 500 CFM EACH AS SHOWN ON THE DRAWINGS TO ACCOMMODATE SINGLE DRYER.

M33 ROUTE DUCT THROUGH THE ROOF TO EXHAUST FAN. INSTALL TRANSITION TO FULL-SIZE FAN CONNECTION IF REQUIRED.

M35 EXTEND EXHAUST AIR DUCT DOWN TO 12" A.F.F. INSTALL 1/4" WIRE MESH SCREEN AT EXHAUST AIR OPENING. CONSTRUCT DUCT RISER WITH 18 GA. SHEET METAL.

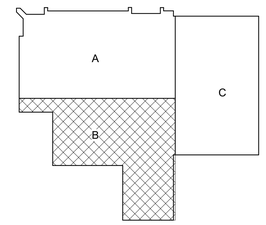
M40 MOUNT BOTTOM OF SPD AT 10' 4" AFF.

M41 MOUNT BOTTOM OF LOUVER 12'-2" AFF.

M44 ROUTE VAV 1-21 SUPPLY DUCTWORK ABOVE VAV 1-19 SUPPLY DUCTWORK.

1 HVAC FIRST FLOOR PLAN - AREA B
1/4" = 1'-0"

KEYPLAN



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HVAC FIRST FLOOR PLAN - AREA B

M101.B

SCOTT A. WALTER

MECHANICAL PLAN NOTES:

M19 INSTALL 3" IPEX UL 1738 PVC PIPING FOR WATER HEATER FLUE AND INTAKE. CONNECT TO WATER HEATER PER MANUFACTURERS RECOMMENDATIONS AND ROUTE AS SHOWN.

M20 ROUTE 3" IPEX UL 1738 PVC PIPING TIGHT TO STRUCTURE IN MECHANICAL ROOM AND UP TO FLOOR ABOVE.

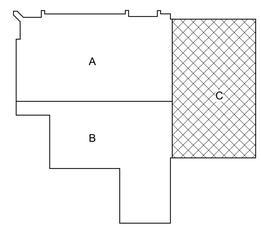
M25 PROVIDE THERMOSTAT WITH VANDAL PROOF COVER PER SPECIFICATIONS.

M33 ROUTE DUCT THROUGH THE ROOF TO EXHAUST FAN. INSTALL TRANSITION TO FULL-SIZE FAN CONNECTION IF REQUIRED.

M44 ROUTE VAV 1-21 SUPPLY DUCTWORK ABOVE VAV 1-19 SUPPLY DUCTWORK.

1 HVAC FIRST FLOOR PLAN - AREA C
1/4" = 1'-0"

KEYPLAN



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HVAC FIRST FLOOR PLAN - AREA C

04/03/2024

M101.C

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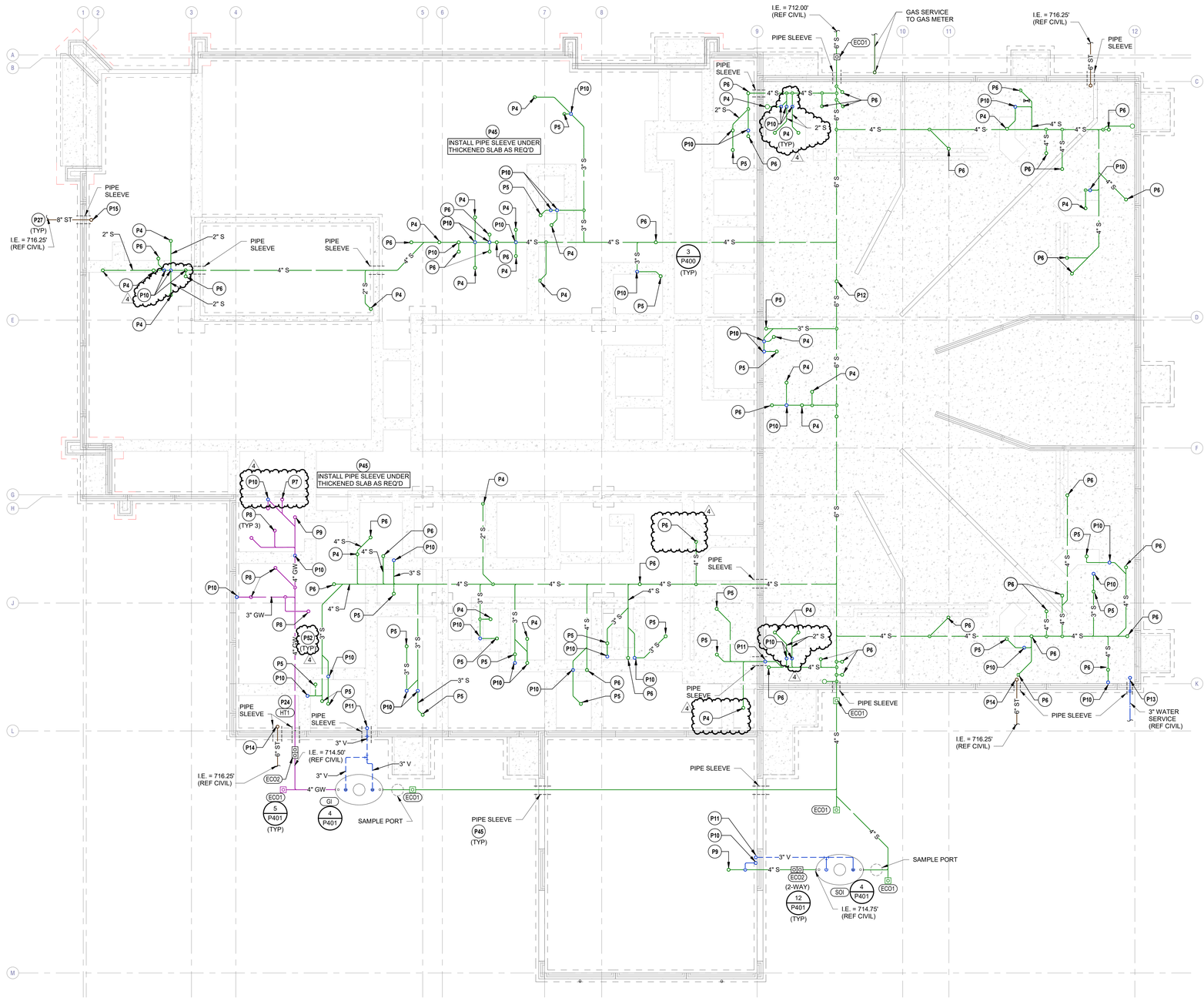

2 PLUMBING GRINDER PUMP PLAN
1/8" = 1'-0"

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

PLUMBING PLAN NOTES:

- P4 2" S FFA
- P5 3" S FFA
- P6 4" S FFA
- P7 2" GW FFA
- P8 3" GW FFA
- P9 4" GW FFA
- P10 2" V TFA
- P11 3" V TFA
- P12 6" S FFA
- P13 3" WATER SERVICE TFA
- P14 6" ST FFA
- P15 8" ST FFA
- P24 INSTALL HEAT TRACE TO ENTIRE GREASE WASTE SYSTEM. ALL GREASE WASTE PIPING SHALL BE CAST IRON WRAPPED WITH 2" INSULATION. REFERENCE SPECIFICATIONS FOR ADDITIONAL INFORMATION.
- P27 INSTALL BELOW GRADE INSULATION ON STORM DRAIN PIPING A MINIMUM OF 20' BEYOND EXTERIOR WALL OF BUILDING.
- P45 PIPE SLEEVE MUST BE INSTALLED WHEN PIPING PENETRATED FOUNDATION WALL. WHEN TOP OF PIPE IS WITHIN 24" FROM BOTTOM OF FOOTING OR GRADE BEAM, OR TOP OF PIPE IS WITHIN 12" FROM BOTTOM OF THICKENED SLAB.
- P52 GREASE WASTE PIPING BELOW GRADE SHALL BE HEAT TRACED AND HAVE BELOW GRADE DIRECT BURY INSULATION INSTALLED AS REQUIRED.

ENTIRE SHEET HAS BEEN UPDATED.

2

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2	Addendum #2	03/20/2024
4	Addendum #4	04/03/2024

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PLUMBING FOUNDATION PLAN

P100

SCOTT A. WALTER

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

PLUMBING PLAN NOTES:

- P1 DO NOT INSTALL PLUMBING PIPING OVER ELECTRICAL PANELS OR EQUIPMENT.
- P2 COORDINATE WATER PIPE ROUTING AWAY FROM ELECTRIC PANELS. MAINTAIN CLEARANCES PER NEC.
- P16 ROUTE VENT PIPING BELOW MEZZANINE SLAB AND DOWN TO VENT STACK BELOW. COORDINATE PIPE ROUTING WITH ALL OTHER DISCIPLINES.
- P17 INDICATED PIPE RISERS TO BE ROUTED UP AT EDGE OF MEZZANINE SLAB OVERHEAD.
- P22 INSTALL DRAIN PANS UNDER SANITARY PIPING AS NEEDED TO PROTECT ELECTRICAL EQUIPMENT MOUNTED BELOW PIPING. ADD ABOVE SLAB HUB DRAINS IN EXPOSED SANITARY PIPING IF NEEDED TO SERVE DRAIN PAN DISCHARGE.
- P26 INSTALL CHECK VALVE IN EACH UNITS PUMPED CONDENSATE BRANCH DISCHARGE PIPING TO PROTECT AGAINST BACKFLOW TO OTHER UNITS.
- P37 INDICATED LENGTH OF TRENCH DRAIN IS NOMINAL. ACTUAL DIMENSION SHOULD BE SIMILAR BUT BASED ON MANUFACTURE AND INSTALLATION REQUIREMENTS.
- P46 REFER TO MP101 SHEET FOR ADDITIONAL INFORMATION ON PIPE ROUTING IN CELL CHASE.
- P47 INSTALL CONDENSATE DRAIN BOX WITHIN WALL IN AN ACCESSIBLE LOCATION. ROUTE 2" DRAIN AND 2" VENT PIPING THRU CHASE TO SANITARY AND VENT PIPING.
- P48 ROUTE CONDENSATE DRAIN PIPING DOWN TO FLOOR SINK. DISCHARGE INTO FLOOR SINK WITH AIR GAP.
- P50 PROVIDE SOLID AIR TIGHT COVER FOR ALL FLOOR SINKS AND DRAINS INSTALLED TO SERVE FUTURE EQUIPMENT.
- P51 CAP WALL STUB OUT FOR FUTURE DISPOSAL WITH AIR TIGHT CAP. LEAVE STUB OUT EXPOSED FOR FUTURE CONNECTION.

ENTIRE SHEET HAS BEEN UPDATED.

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4	Addendum #4	04/03/2024

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PLUMBING WASTE & VENT FIRST FLOOR PLAN - OVERALL

P101

SCOTT A. WALTER

PLUMBING PLAN NOTES:

P18 PROVIDE MOTORIZED BALL VALVES INSTALLED ON BOTH HOT AND COLD-WATER PIPING TO SERVE CELL AREA PLUMBING FIXTURES. EACH AREA (PODS A-F) SHALL HAVE ISOLATED MASTER MOTORIZED BALL VALVES CAPABLE OF SHUTTING DOWN ALL WATER TO THAT POD. INSTALL CONTROLLER PER MANUFACTURE'S RECOMMENDATIONS. HOT WATER LOOP SHALL BE ROUTED WITHIN 24" OF FIXTURE CONNECTIONS. MOTORIZED BALL VALVES SHALL BE CONNECTED TO SECURITY SYSTEM AS REQUIRED. REFER TO SECURITY AND ELECTRICAL DRAWINGS FOR MORE INFORMATION.

P20 INSTALL FLUSH VALVE FURNISHED WITH "FFD" IN CHASE AT SAME ELEVATION OF COMBI FLUSH VALVE AND ATTACH TO WALL.

P28 INSTALL "CVC2" ELECTRONIC CONTROLLER AND ELECTRONIC VALVE ACTUATOR ON WALL AT 4'-0"AFF. FURNISH TRANSFORMER TO ELEC FOR INSTALLATION.

P29 PROVIDE 1/2"CW AND HW WITH SOV AND TMV1 IN DROP AND CONNECT 1/2" TEMPERED HW TO ELECTRONIC VALVE ACTUATOR. SECURE TMV2 TO WALL.

P30 FEED (2) COMBI'S WITH HOT AND COLD PE TUBING FROM ELECTRONIC VALVE ACTUATOR ASSEMBLY.

P31 FEED (1) COMBI'S WITH HOT AND COLD PE TUBING FROM ELECTRONIC VALVE ACTUATOR ASSEMBLY.

P32 FEED (1) COMBI AND (1) SHOWER WITH HOT AND COLD PE TUBING FROM ELECTRONIC VALVE ACTUATOR.

P33 PROVIDE 1/2"CW AND 3/4"HW WITH SOV AND TMV2 IN DROP AND CONNECT 3/4" TEMPERED HW TO ELECTRONIC VALVE ACTUATOR. SECURE TMV2 TO WALL.

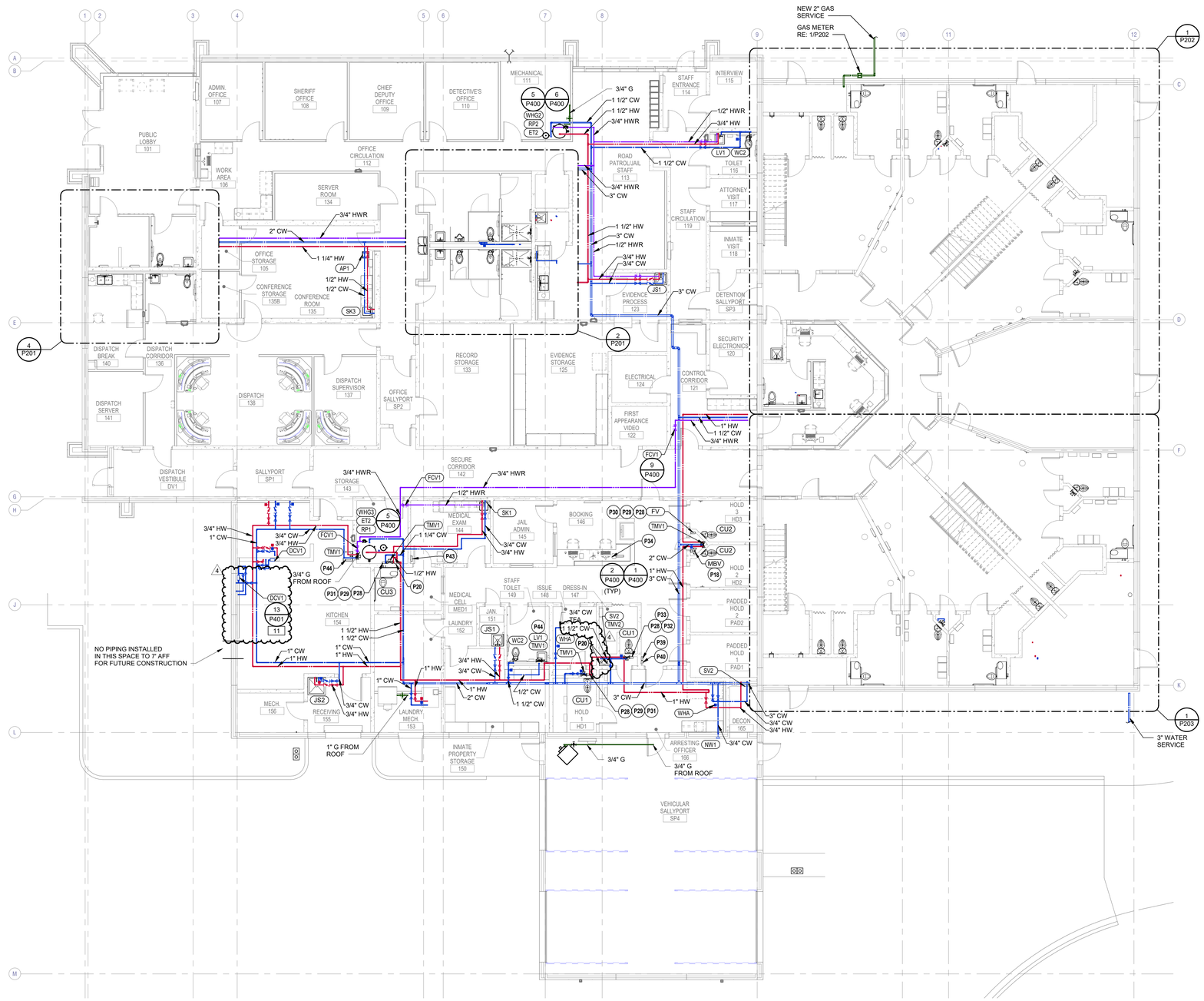
P34 PROVIDE PC FURNISHED WITH ELECTRONIC CONTROLLED FIXTURES TO ELEC FOR INSTALLATION. ELEC TO PROVIDE CABLES FROM "CVC2" ELECTRONIC CONTROLLERS TO PC

P39 INSTALL PIEZO ELECTRIC PUSH BUTTON INSIDE WALL, SERVING "FFD" IN PADDING HOLDING PD2.

P40 INSTALL PIEZO ELECTRIC PUSH BUTTON INSIDE WALL, SERVING "FFD" IN PADDING HOLDING PD1.

P43 INSTALL PIEZO ELECTRIC PUSH BUTTON INSIDE WALL, SERVING "FFD" MEDICAL HOLDING MED1.

P44 ROUTE HOT AND COLD WATER PIPING DOWN IN WALL TO SERVE LAVATORY OR INDICATED FIXTURE. ROUTE HOT WATER WITHIN 6-INCHES OF PLUMBING FIXTURE STOP VALVE. LOOP HOT WATER / HOT WATER RETURN BACK UP WITHIN WALL.



1 PLUMBING WATER & GAS FIRST FLOOR PLAN - OVERALL
1/8" = 1'-0"

ENTIRE SHEET HAS BEEN UPDATED.

2

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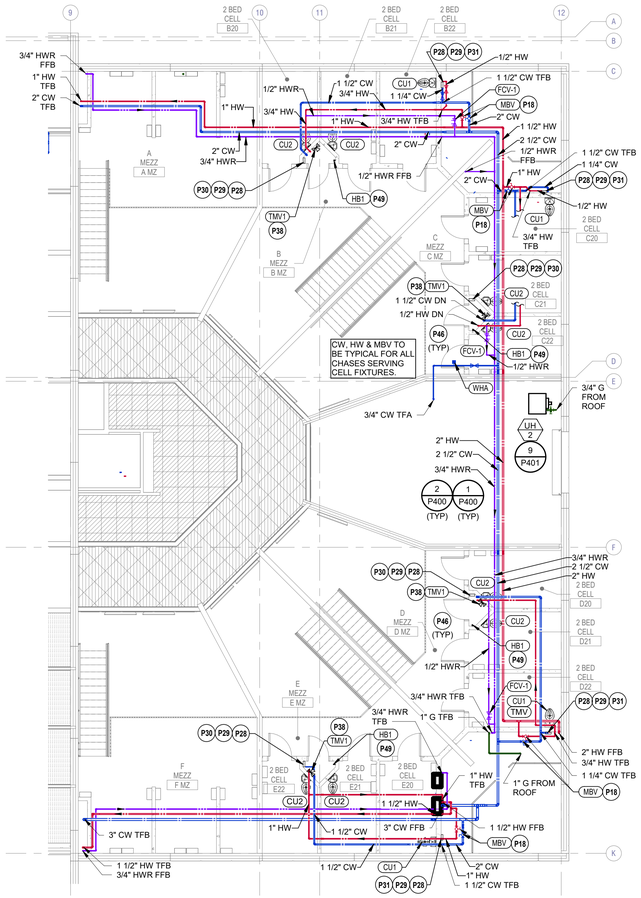
4	Addendum #4	04/03/2024

Drawn by: Author

PLUMBING WATER & GAS FIRST FLOOR PLAN - OVERALL

P103

SCOTT A. WALTER



1 PLUMBING WATER & GAS MEZZANINE PLAN - JAIL
1/8" = 1'-0"

PLUMBING PLAN NOTES:

P18 PROVIDE MOTORIZED BALL VALVES INSTALLED ON BOTH HOT AND COLD-WATER PIPING TO SERVE CELL AREA PLUMBING FIXTURES. EACH AREA (PODS A-F) SHALL HAVE ISOLATED MASTER MOTORIZED BALL VALVES CAPABLE OF SHUTTING DOWN ALL WATER TO THAT POD. INSTALL CONTROLLER PER MANUFACTURE'S RECOMMENDATIONS. HOT WATER LOOP SHALL BE ROUTED WITHIN 24" OF FIXTURE CONNECTIONS. MOTORIZED BALL VALVES SHALL BE CONNECTED TO SECURITY SYSTEM AS REQUIRED. REFER TO SECURITY AND ELECTRICAL DRAWINGS FOR MORE INFORMATION.

P28 INSTALL "CVC2" ELECTRONIC CONTROLLER AND ELECTRONIC VALVE ACTUATOR ON WALL AT 4'-0"AFF. FURNISH TRANSFORMER TO ELEC FOR INSTALLATION.

P29 PROVIDE 1/2"CW AND HW WITH SOV AND TMV1 IN DROP AND CONNECT 1/2" TEMPERED HW TO ELECTRONIC VALVE ACTUATOR. SECURE TMV2 TO WALL.

P30 FEED (2) COMBI'S WITH HOT AND COLD PE TUBING FROM ELECTRONIC VALVE ACTUATOR ASSEMBLY.

P31 FEED (1) COMBI'S WITH HOT AND COLD PE TUBING FROM ELECTRONIC VALVE ACTUATOR ASSEMBLY.

P38 CONNECT HOT AND COLD WATER TO MIXING VALVE AS REQUIRED. ROUTE 1/2" TEMPERED WATER FROM MIXING VALVE TO ELECTRONIC VALVE ACTUATOR AND TFB. SECURE "TMV1" TO WALL.

P46 REFER TO MP101 SHEET FOR ADDITIONAL INFORMATION ON PIPE ROUTING IN CELL CHASE.

P49 INSTALL WASH-DOWN HOSE BIBB IN CHASE. ROUTE 3/4" COLD WATER FROM WATER SUPPLY AS REQUIRED. COORDINATE FINAL LOCATION WITH ALL OTHER DISCIPLINES.

PIPING FOR PODS A, B & C HAS BEEN UPDATED.

ENTIRE SHEET HAS BEEN UPDATED.

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4	Addendum #4	04/03/2024

Drawn by: Author

PLUMBING WATER & GAS MEZZANINE PLAN - JAIL

P104

SCOTT A. WALTER

PLUMBING PLAN NOTES:

P2 COORDINATE WATER PIPE ROUTING AWAY FROM ELECTRIC PANELS. MAINTAIN CLEARANCES PER NEC.

P18 PROVIDE MOTORIZED BALL VALVES INSTALLED ON BOTH HOT AND COLD-WATER PIPING TO SERVE CELL AREA PLUMBING FIXTURES. EACH AREA (PODS A-F) SHALL HAVE ISOLATED MASTER MOTORIZED BALL VALVES CAPABLE OF SHUTTING DOWN ALL WATER TO THAT POD. INSTALL CONTROLLER PER MANUFACTURE'S RECOMMENDATIONS. HOT WATER LOOP SHALL BE ROUTED WITHIN 24" OF FIXTURE CONNECTIONS. MOTORIZED BALL VALVES SHALL BE CONNECTED TO SECURITY SYSTEM AS REQUIRED. REFER TO SECURITY AND ELECTRICAL DRAWINGS FOR MORE INFORMATION.

P28 INSTALL "CVC2" ELECTRONIC CONTROLLER AND ELECTRONIC VALVE ACTUATOR ON WALL AT 4'-0"AFF. FURNISH TRANSFORMER TO ELEC FOR INSTALLATION.

P29 PROVIDE 1/2"CW AND HW WITH SOV AND TMV1 IN DROP AND CONNECT 1/2" TEMPERED HW TO ELECTRONIC VALVE ACTUATOR. SECURE TMV2 TO WALL.

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P31 FEED (1) COMBI'S WITH HOT AND COLD PE TUBING FROM ELECTRONIC VALVE ACTUATOR ASSEMBLY.

P32 FEED (1) COMBI AND (1) SHOWER WITH HOT AND COLD PE TUBING FROM ELECTRONIC VALVE ACTUATOR.

P33 PROVIDE 1/2"CW AND 3/4"HW WITH SOV AND TMV2 IN DROP AND CONNECT 3/4" TEMPERED HW TO ELECTRONIC VALVE ACTUATOR. SECURE TMV2 TO WALL.

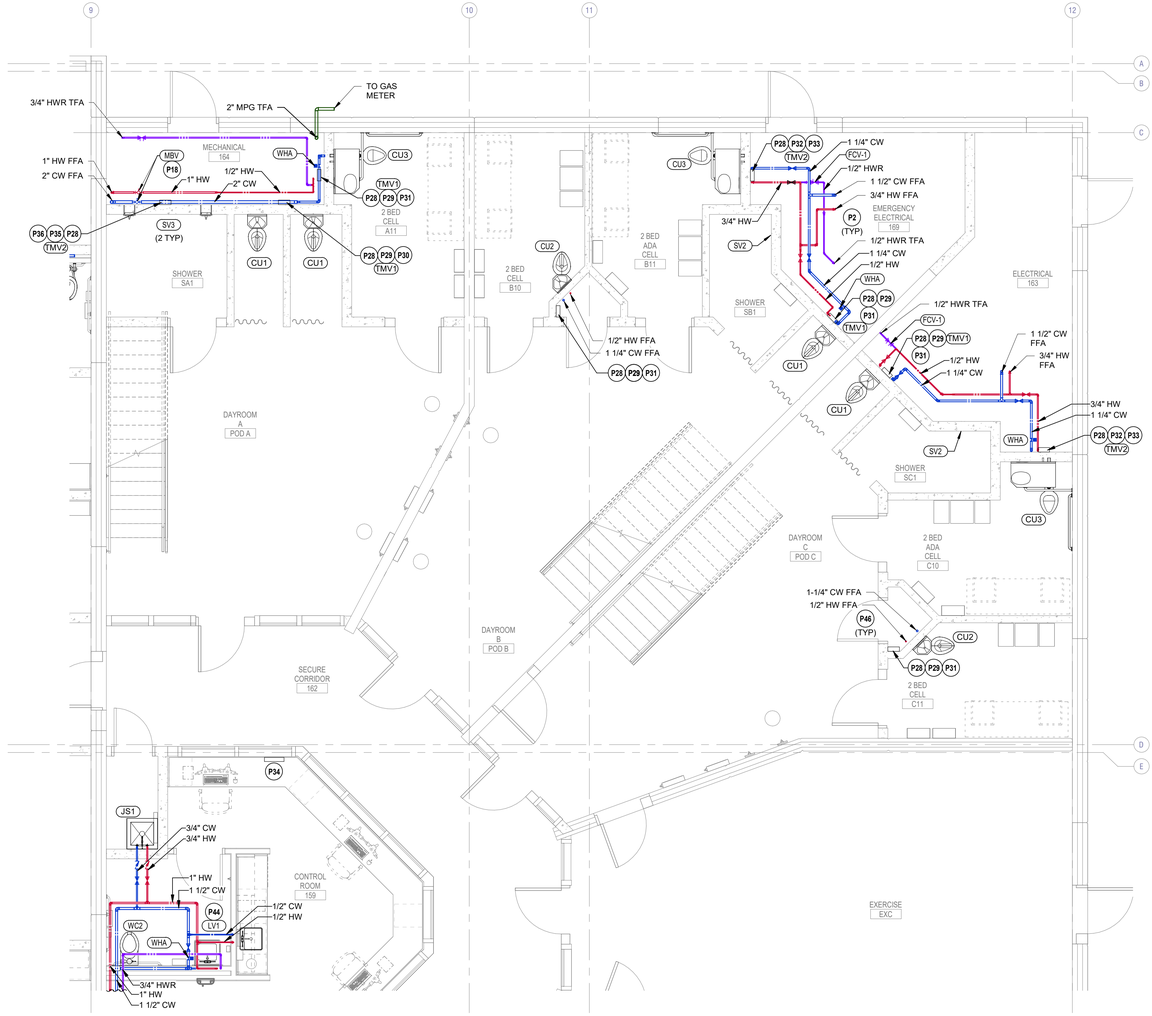
P34 PROVIDE PC FURNISHED WITH ELECTRONIC CONTROLLED FIXTURES TO ELEC FOR INSTALLATION. ELEC TO PROVIDE CABLES FROM "CVC2" ELECTRONIC CONTROLLERS TO PC

P35 FEED (2) SHOWERS WITH HOT PE TUBING FROM HOT WATER TEMPERATURE ACTUATOR.

P36 PROVIDE 3/4"HW AND CW WITH SOV AND TMV2 IN DROP AND CONNECT 3/4" TEMPERED HW TO ELECTRONIC VALVE ACTUATOR. SECURE TMV2 TO WALL.

P44 ROUTE HOT AND COLD WATER PIPING DOWN IN WALL TO SERVE LAVATORY OR INDICATED FIXTURE. ROUTE HOT WATER WITHIN 6-INCHES OF PLUMBING FIXTURE STOP VALVE. LOOP HOT WATER / HOT WATER RETURN BACK UP WITHIN WALL.

P46 REFER TO MP101 SHEET FOR ADDITIONAL INFORMATION ON PIPE ROUTING IN CELL CHASE.



1 PLUMBING WATER & GAS - JAIL - NORTH
1/4" = 1'-0"

ENTIRE SHEET HAS BEEN UPDATED.

4

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4	Addendum #4	04/03/2024

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PLUMBING PLAN - ENLARGED - JAIL NORTH

P202

SCOTT A. WALTER

PLUMBING PLAN NOTES:

P18 PROVIDE MOTORIZED BALL VALVES INSTALLED ON BOTH HOT AND COLD-WATER PIPING TO SERVE CELL AREA PLUMBING FIXTURES. EACH AREA (PODS A-F) SHALL HAVE ISOLATED MASTER MOTORIZED BALL VALVES CAPABLE OF SHUTTING DOWN ALL WATER TO THAT POD. INSTALL CONTROLLER PER MANUFACTURE'S RECOMMENDATIONS. HOT WATER LOOP SHALL BE ROUTED WITHIN 24" OF FIXTURE CONNECTIONS. MOTORIZED BALL VALVES SHALL BE CONNECTED TO SECURITY SYSTEM AS REQUIRED. REFER TO SECURITY AND ELECTRICAL DRAWINGS FOR MORE INFORMATION.

P19 INSTALL MOTORIZED BALL VALVE ON WATER PIPE SERVING CELL FIXTURES PER OWNER REQUIREMENTS. REFER TO SECURITY AND ELECTRICAL DRAWINGS FOR MORE INFORMATION.

P23 STACK PIPING MOUNTED ALONG WALL. SECURE TO WALL AS REQUIRE PER SPECIFICATIONS.

P28 INSTALL "CVC2" ELECTRONIC CONTROLLER AND ELECTRONIC VALVE ACTUATOR ON WALL AT 4'-0"AFF. FURNISH TRANSFORMER TO ELEC FOR INSTALLATION.

P29 PROVIDE 1/2"CW AND HW WITH SOV AND TMV1 IN DROP AND CONNECT 1/2" TEMPERED HW TO ELECTRONIC VALVE ACTUATOR. SECURE TMV2 TO WALL.

P30 FEED (2) COMBI'S WITH HOT AND COLD PE TUBING FROM ELECTRONIC VALVE ACTUATOR ASSEMBLY.

P31 FEED (1) COMBI'S WITH HOT AND COLD PE TUBING FROM ELECTRONIC VALVE ACTUATOR ASSEMBLY.

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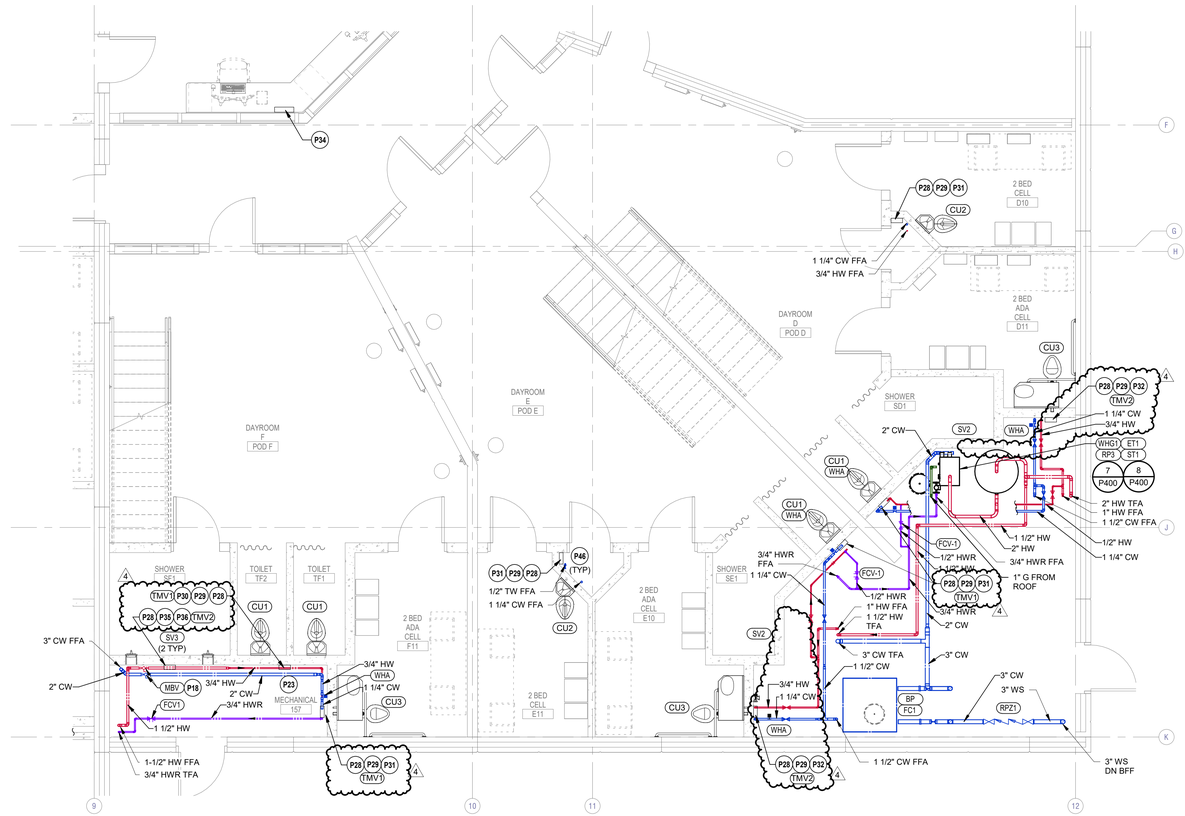
P34 PROVIDE PC FURNISHED WITH ELECTRONIC CONTROLLED FIXTURES TO ELEC FOR INSTALLATION. ELEC TO PROVIDE CABLES FROM "CVC2" ELECTRONIC CONTROLLERS TO PC.

P35 FEED (2) SHOWERS WITH HOT PE TUBING FROM HOT WATER TEMPERATURE ACTUATOR.

P36 PROVIDE 3/4"HW AND CW WITH SOV AND TMV2 IN DROP AND CONNECT 3/4" TEMPERED HW TO ELECTRONIC VALVE ACTUATOR. SECURE TMV2 TO WALL.

P46 REFER TO MP101 SHEET FOR ADDITIONAL INFORMATION ON PIPE ROUTING IN CELL CHASE.



1 PLUMBING WATER & GAS - JAIL - SOUTH
1/4" = 1'-0"

ENTIRE SHEET HAS BEEN UPDATED.

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4	Addendum #4	04/03/2024

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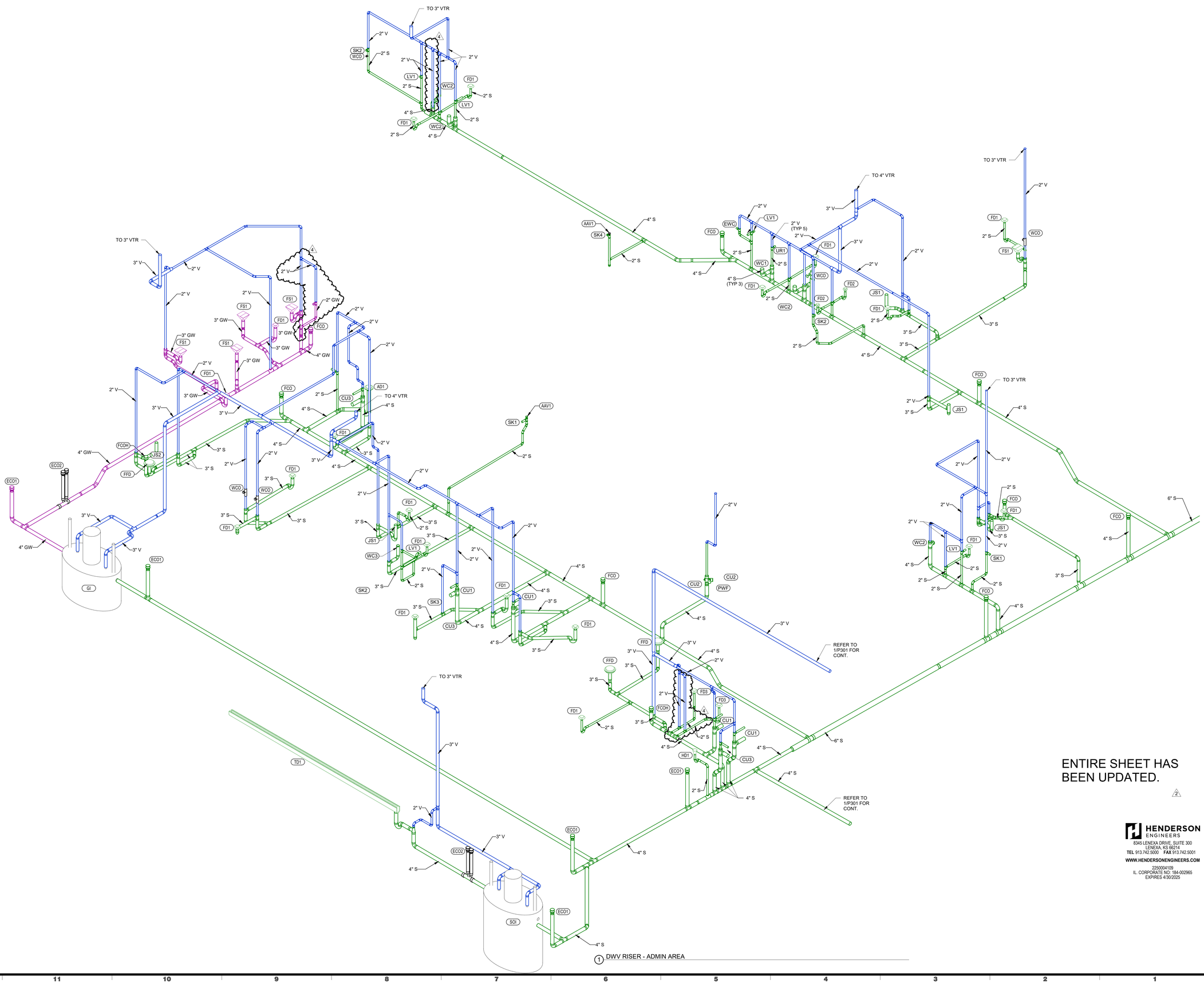
PLUMBING PLAN - ENLARGED - JAIL SOUTH

P203

SCOTT A. WALTER



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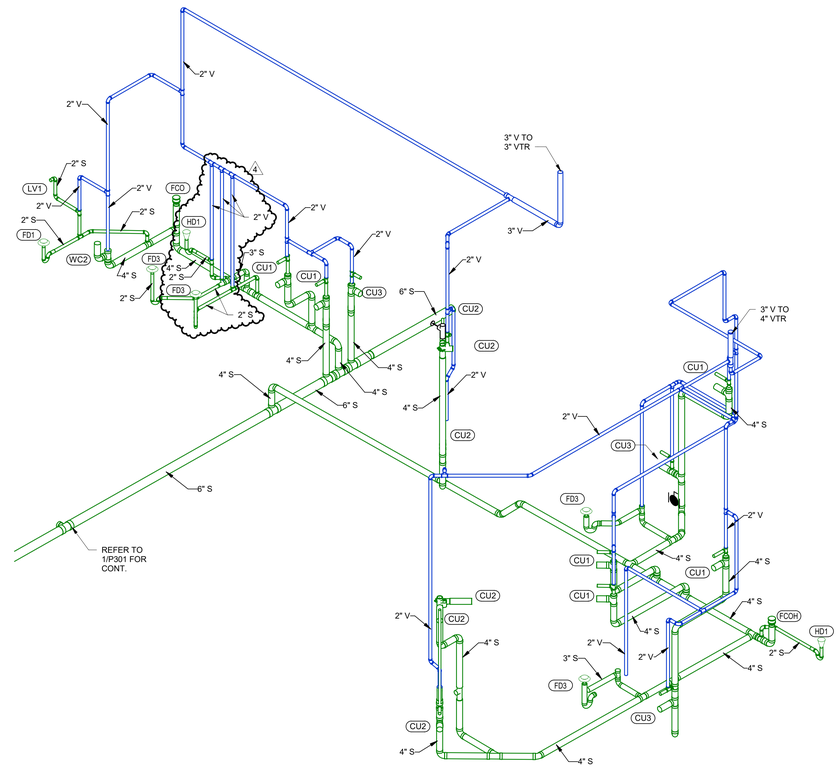
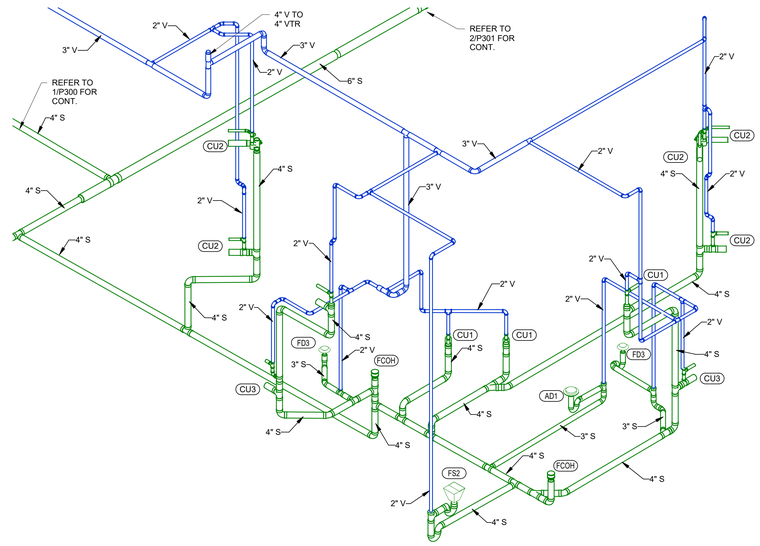
PLUMBING RISER DIAGRAMS

P300

SCOTT A. WALTER



2 DWV RISER - CELL AREA NORTH



1 DWV RISER - CELL AREA SOUTH

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EDGAR COUNTY PUBLIC SAFETY CENTER

EDGAR COUNTY, ILLINOIS
12636 950TH ROAD
PARIS, ILLINOIS 61944

21003.003

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Architect's Name
License #: XXXX
Date: 03/01/2024

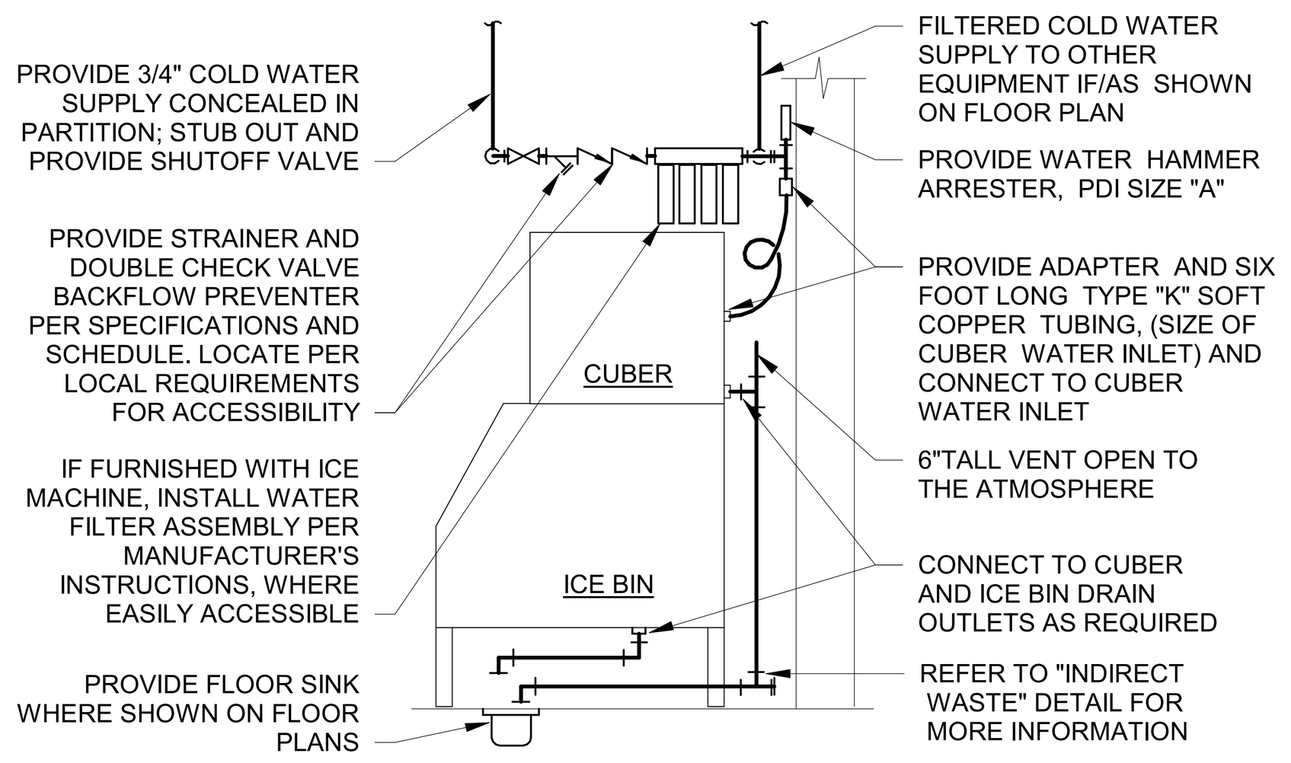
#	Issue	Date
2	Addendum #2	03/20/2024
4	Addendum #4	04/03/2024

Drawn by: Author

PLUMBING RISER DIAGRAMS

P301

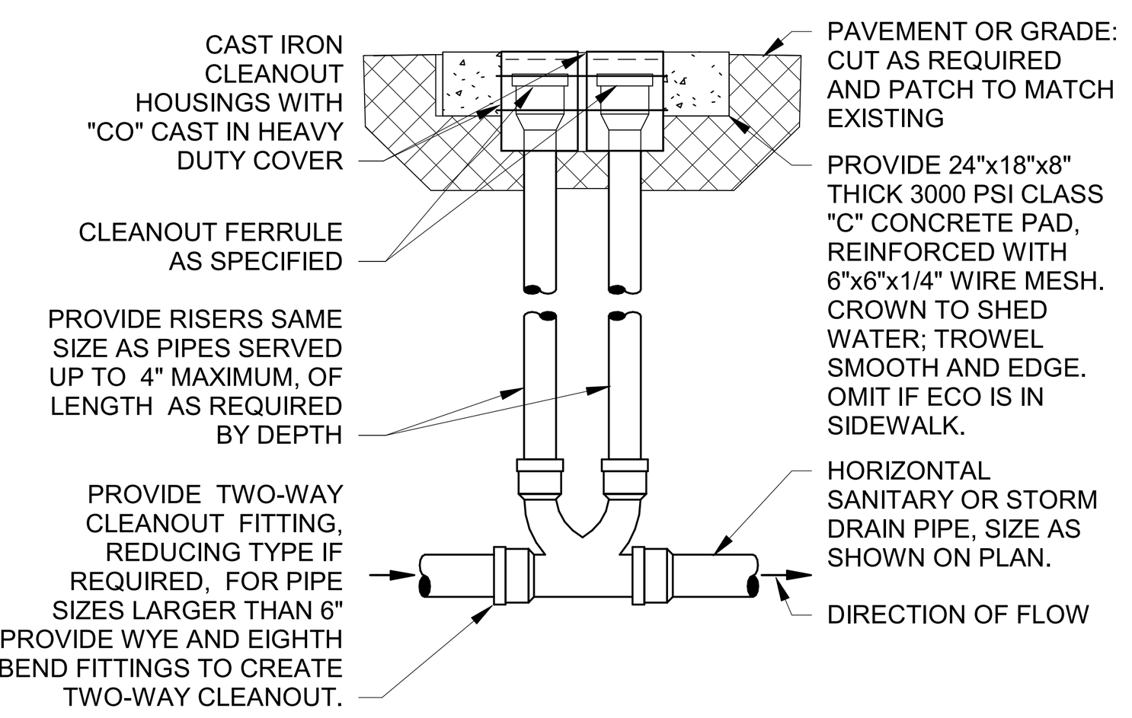
SCOTT A. WALTER



PIPING ARRANGEMENT SHOWN IS SCHEMATIC. ADJUST AS REQUIRED TO SUIT ACTUAL INSTALLATION CONDITIONS AND MEET RECOMMENDATIONS OF EQUIPMENT MANUFACTURERS.

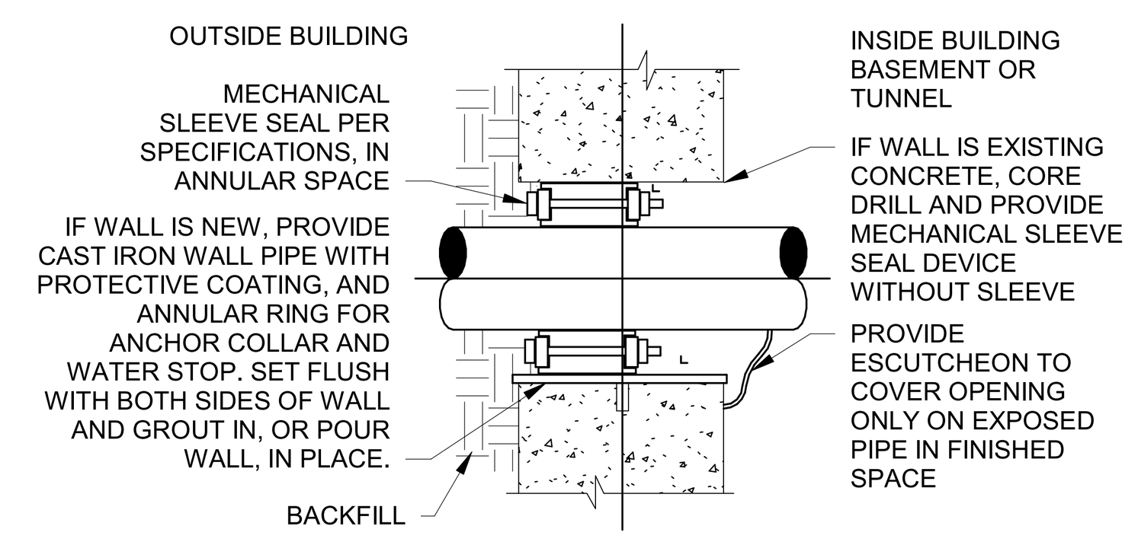
v1.00

13 ICE MACHINE CONNECTIONS
NTS



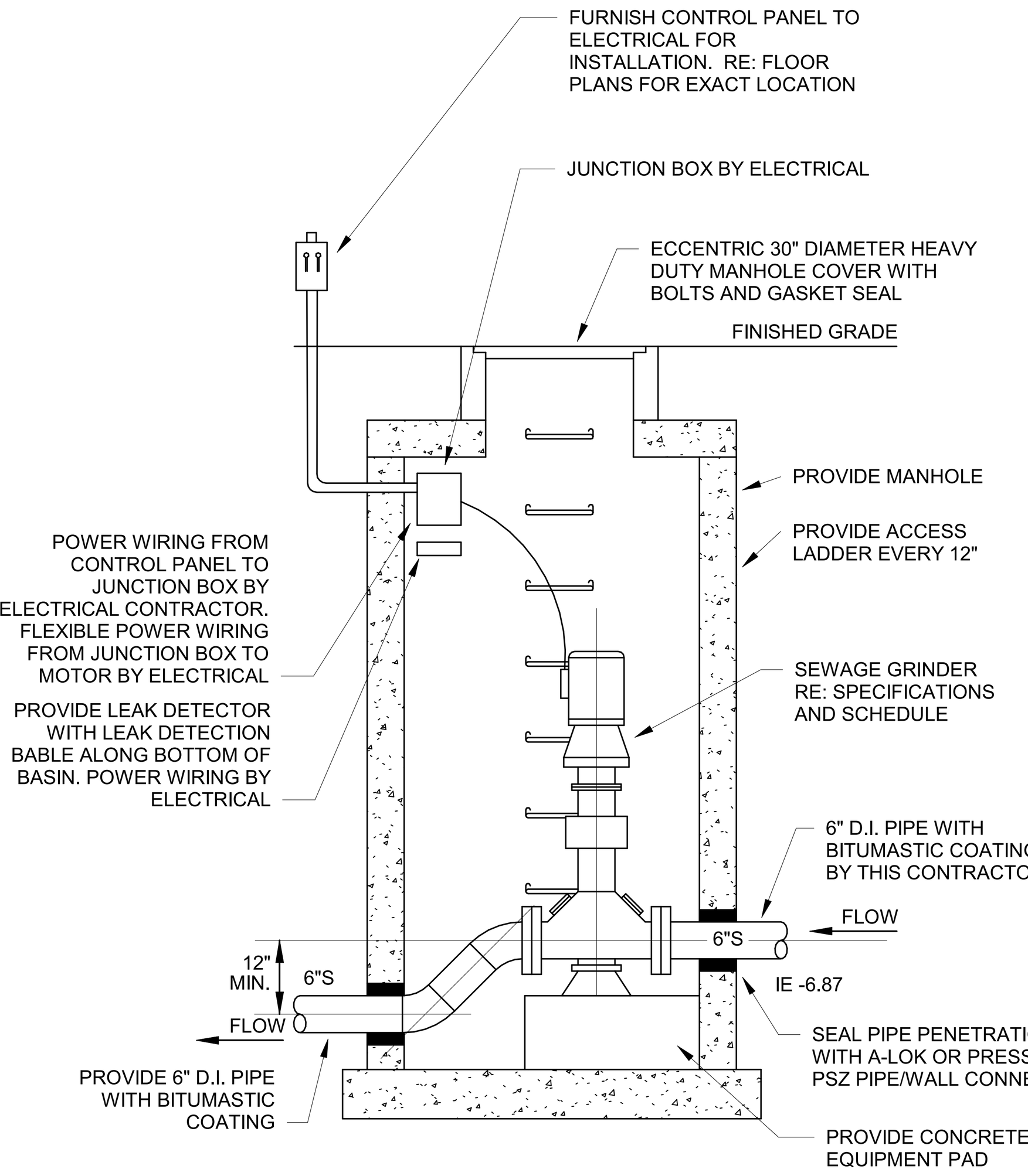
LOCATE EXTERIOR TWO-WAY CLEANOUT AT EXIT OF BUILDING DRAINS AND WHERE SHOWN ON PLAN. REFER TO SPECIFICATIONS AND SCHEDULES FOR MORE INFORMATION.

12 EXTERIOR TWO-WAY CLEANOUT
NTS



REFER TO SPECIFICATIONS FOR FURTHER INFORMATION. COORDINATE INSTALLATION WITH GENERAL CONTRACTOR.

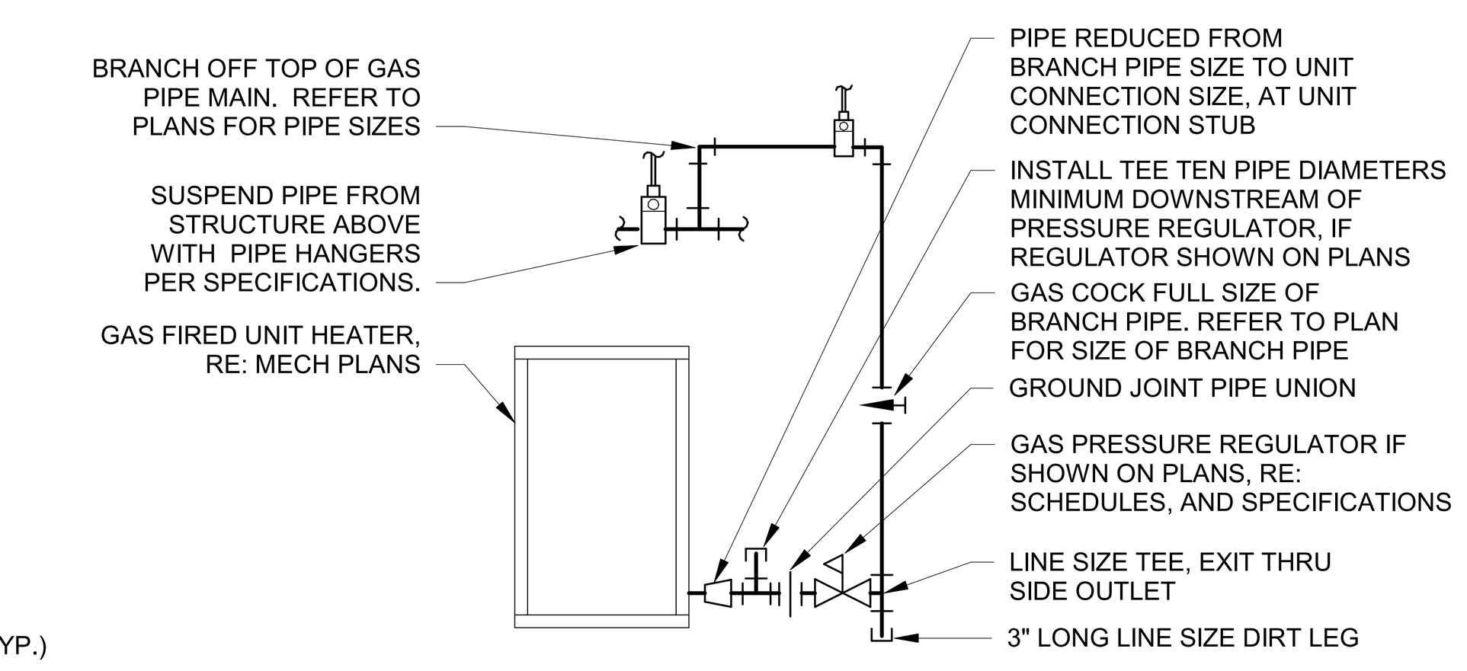
11 BELOW GRADE PENETRATION OF EXTERIOR WALL
NTS



PIPING ARRANGMENT SHOW IS SCHEMATIC, ADJUST TO SUIT FILED CONDITIONS. REFER TO SPECIFICATIONS FOR MORE INFORMATION.

v1.02

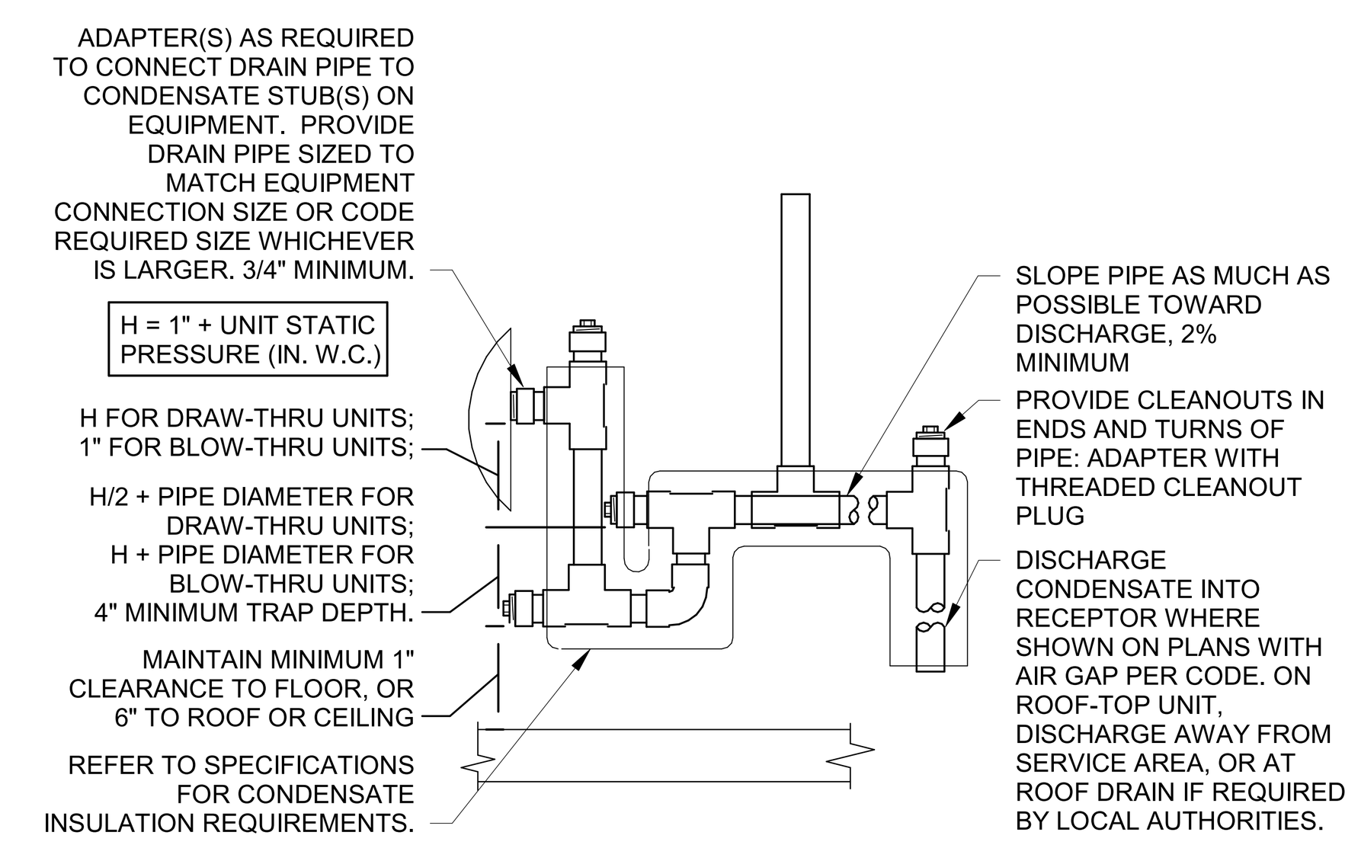
10 OUTDOOR SEWAGE GRINDER
NTS



ARRANGEMENT SHOWN IS SCHEMATIC. ADJUST TO SUIT FIELD CONDITIONS. PROVIDE CONNECTIONS SHOWN IN EQUIPMENT MANUFACTURER'S INSTALLATION INSTRUCTIONS. VERIFY CONNECTION LOCATIONS BEFORE INSTALLING PIPE RUNS. REFER TO SPECIFICATIONS FOR PIPE AND FITTING MATERIALS AND INSTALLATION. FOR PIPE SIZE(S) REFER TO FLOOR PLANS, PROVIDE GAS COCK, UNION, AND DIRT LEG SAME SIZE AS BRANCH.

v1.00

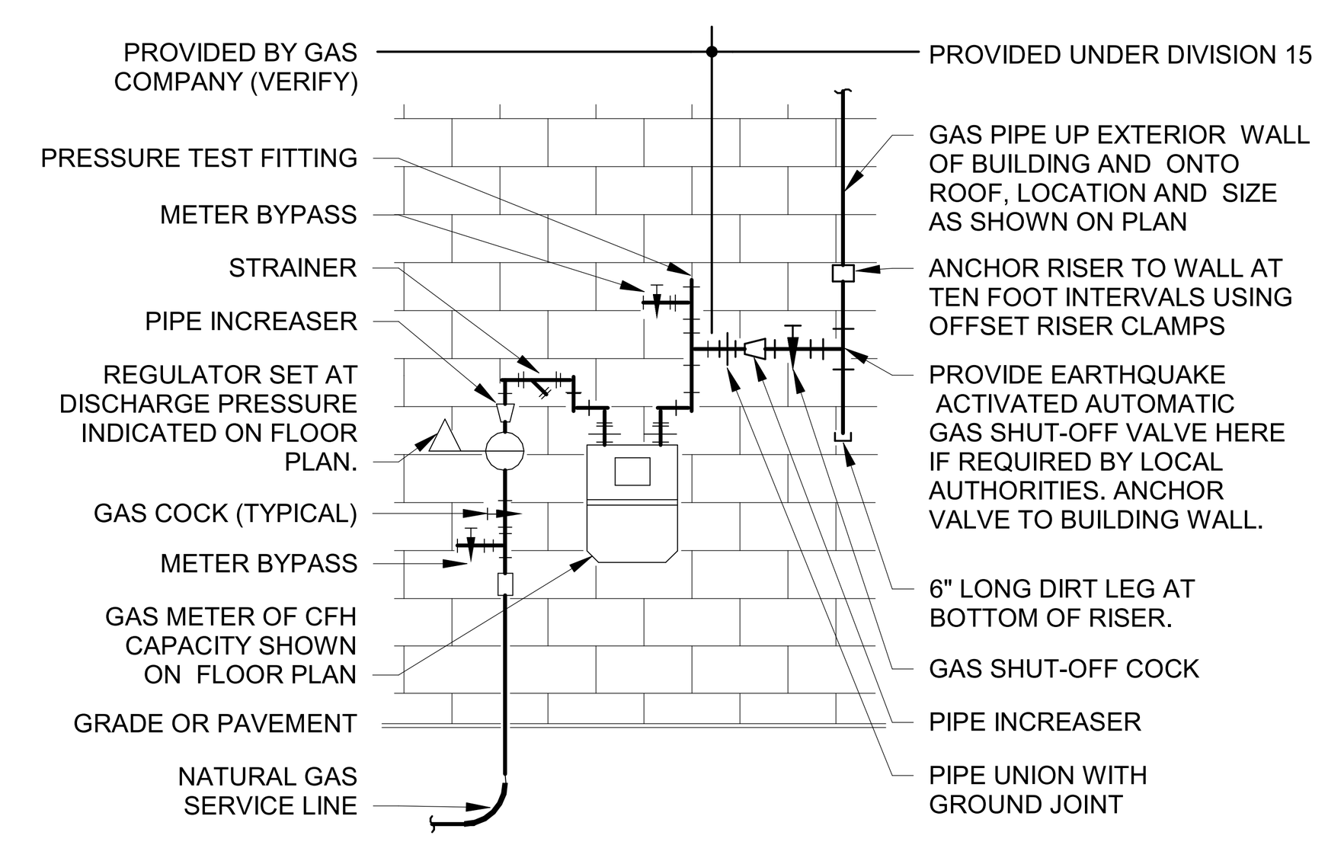
9 GAS HEATER CONNECTION
NTS



ARRANGEMENT SHOWN IS SCHEMATIC. ADJUST TO SUIT FIELD CONDITIONS. PROVIDE CONNECTIONS SHOWN IN EQUIPMENT MANUFACTURER'S INSTALLATION INSTRUCTIONS. REFER TO SPECIFICATIONS FOR PIPE AND FITTING MATERIALS AND INSTALLATION. PROVIDE DIELECTRIC UNION IF CONNECTING DISSIMILAR METALS. AT MOTORIZED EQUIPMENT ABOVE CEILING, PROVIDE NEOPRENE TUBE AND STAINLESS STEEL SCREW CLAMPS FOR FLEXIBLE CONNECTION. FOR PIPE SIZE(S) REFER TO FLOOR PLANS, OR CODE REQUIREMENTS FOR HVAC UNIT TONNAGE. PROVIDE HANGERS OR SUPPORTS PER SPECIFICATIONS. DO NOT COMBINE CONDENSATE DRAIN PIPES WITH NON-CONDENSATE INDIRECT DRAINS.

v1.00

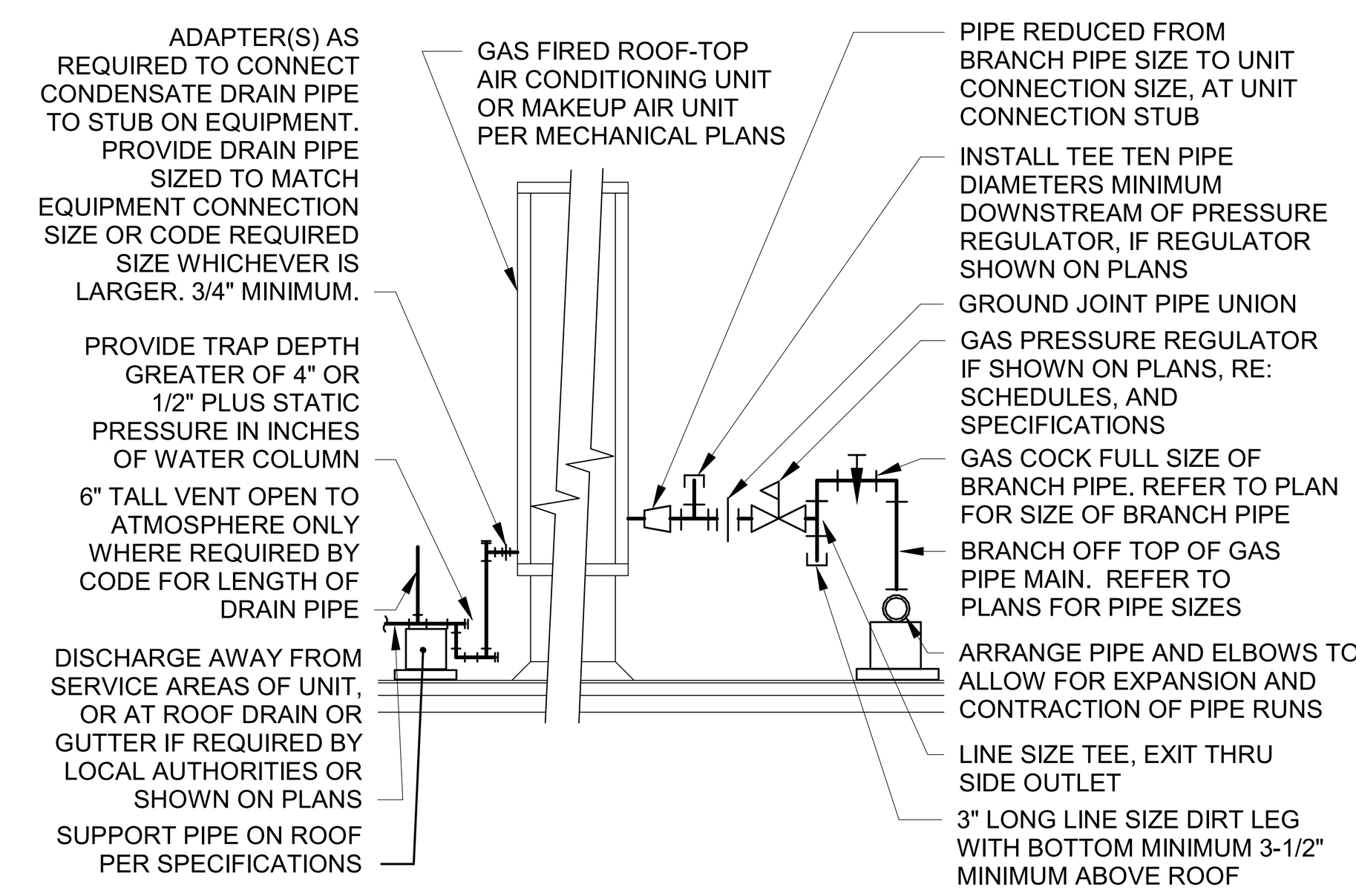
8 CONDENSATE DRAIN INSTALLATION
NTS



VERIFY REQUIREMENTS FOR METERING AND PIPING WITH GAS COMPANY. COORDINATE WITH GAS COMPANY WITH REGARD TO INSTALLATION OF OTHER PLUMBING UTILITIES IN VICINITY, IF ANY. APPLY FOR AND PAY GAS COMPANY FEES FOR INSTALLATION. USE WELDED OR SCREWED PIPE AND FITTINGS PER PLUMBING SPECIFICATIONS.

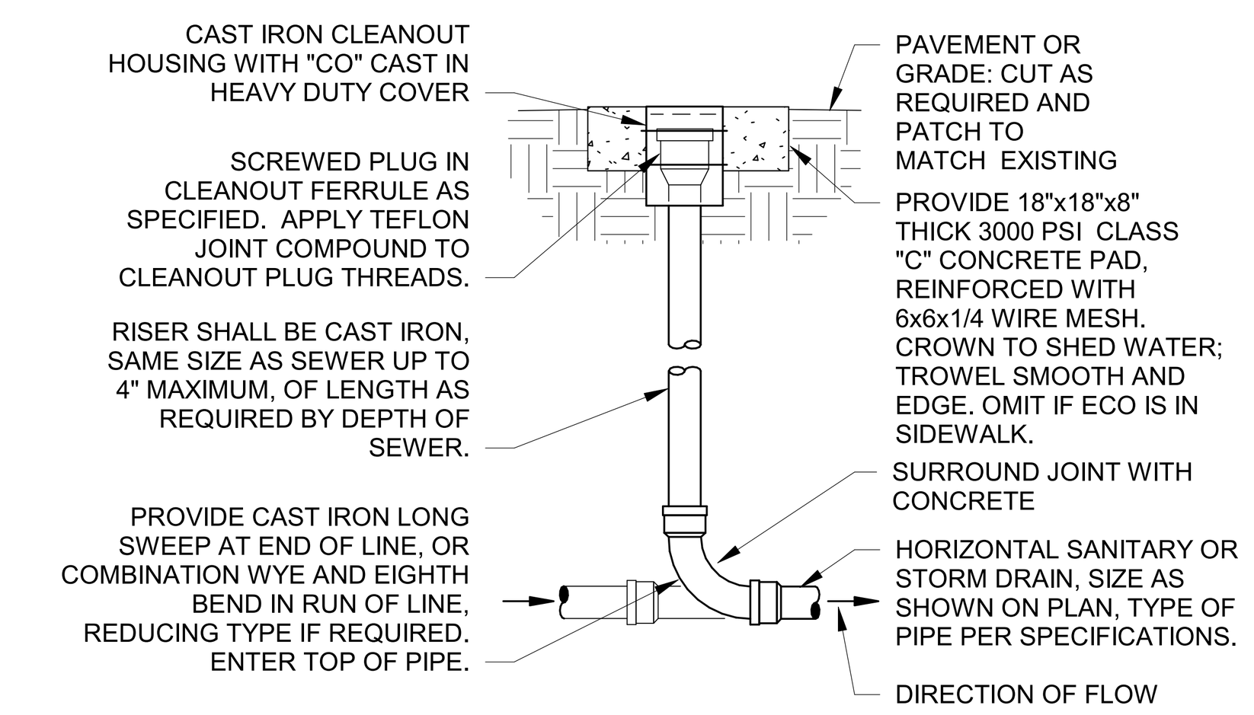
v1.00

7 GAS METER SETTING
NTS



ARRANGEMENT SHOWN IS SCHEMATIC. ADJUST TO SUIT FIELD CONDITIONS. PROVIDE CONNECTIONS SHOWN IN EQUIPMENT MANUFACTURER'S INSTALLATION INSTRUCTIONS. VERIFY CONNECTION LOCATIONS BEFORE INSTALLING PIPE RUNS. REFER TO SPECIFICATIONS FOR PIPE AND FITTING MATERIALS AND INSTALLATION. PROVIDE DIELECTRIC UNION IF CONNECTING DISSIMILAR METALS. FOR PIPE SIZE(S) REFER TO FLOOR PLANS, OR CODE REQUIREMENTS FOR HVAC UNIT TONNAGE. PROVIDE GAS COCK, UNION AND DIRT LEG SAME SIZE AS BRANCH PIPE. SLOPE CONDENSATE PIPE AS MUCH AS POSSIBLE TOWARD DISCHARGE, 2% MINIMUM. PROVIDE CLEANOUTS IN ENDS AND TURNS OF PIPE PER LOCAL CODE REQUIREMENTS: ADAPTER WITH THREADED CLEANOUT PLUG. PROVIDE MINIMUM 6" CLEARANCE TO ROOF UNDER PIPES.

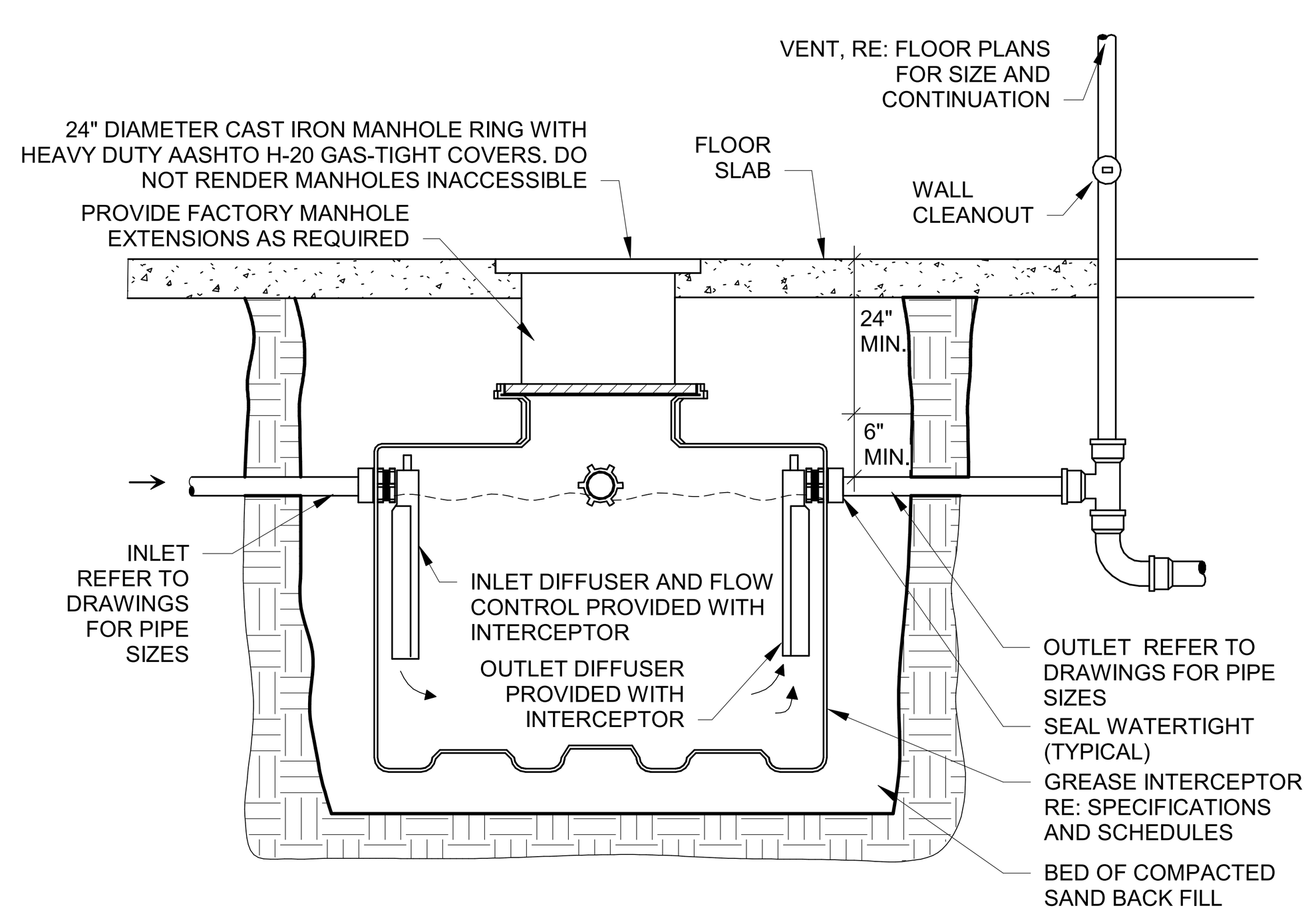
6 CONNECTIONS TO ROOF-TOP UNIT
NTS



LOCATE EXTERIOR CLEANOUTS AT ENDS OF RUNS, AT TURNS OF PIPE GREATER THAN 45 DEGREES, AT MINIMUM 75 FOOT INTERVALS ON STRAIGHT RUNS, AND WHERE SHOWN ON PLANS. PROVIDE EARTH BACKFILL AND COMPACTION PER ARCHITECTURAL SPECIFICATIONS. REFER TO SPECIFICATIONS AND SCHEDULES FOR MORE INFORMATION.

v1.00

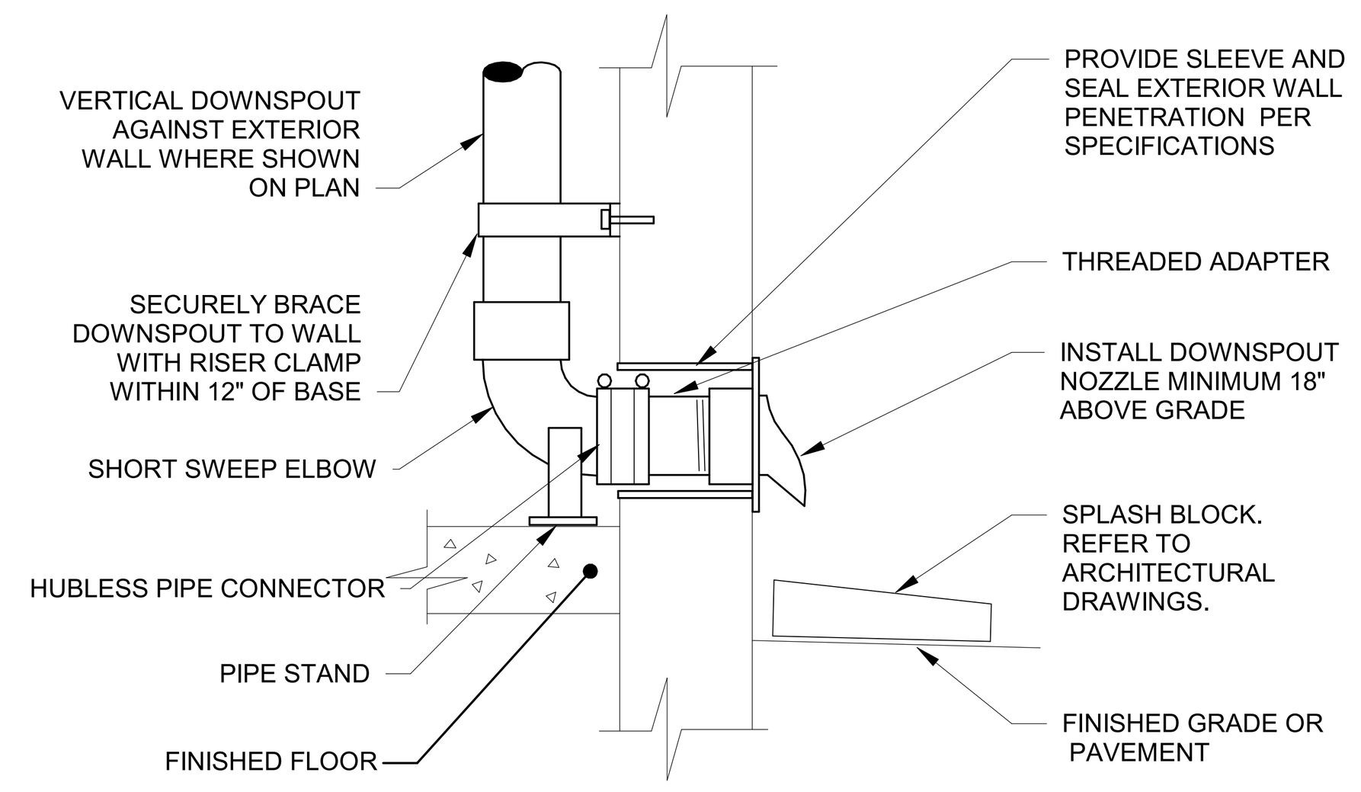
5 EXTERIOR CLEANOUT
NTS



PIPING ARRANGEMENT SHOWN IN SCHEMATIC. ADJUST TO SUIT FIELD CONDITIONS. SUBMIT PROPOSED GREASE INTERCEPTOR INSTALLATION PLANS AND SPECIFICATIONS TO LOCAL AUTHORITIES FOR THEIR APPROVAL BEFORE ACQUISITION OF INTERCEPTOR. PROVIDE CAPACITY AS REQUIRED BY LOCAL AUTHORITIES.

v1.00

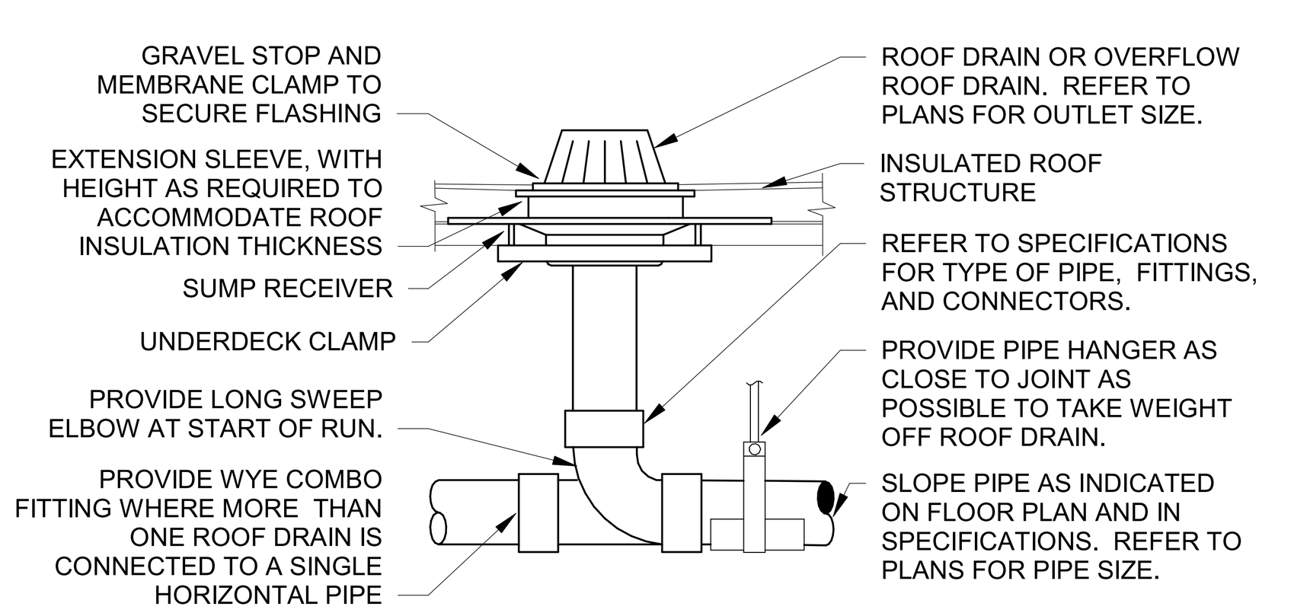
4 GREASE INTERCEPTOR
NTS



ARRANGEMENT SHOWN IS SCHEMATIC. ADJUST TO SUIT FIELD CONDITIONS. REFER TO SPECIFICATIONS FOR DOWNSPOUT NOZZLE, AND TYPE OF PIPE, FITTINGS, AND CONNECTORS.

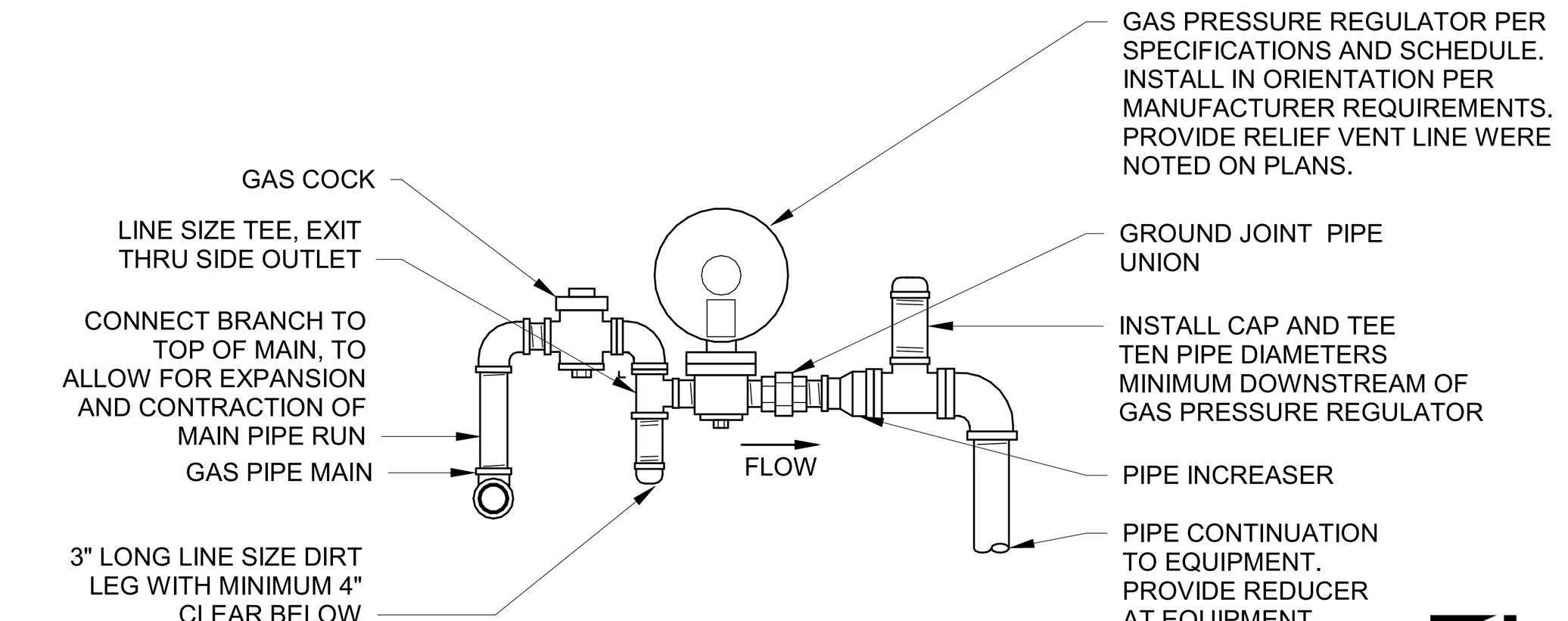
v1.00

3 DOWNSPOUT NOZZLE
NTS



UNDERDECK CLAMP AND SUMP RECEIVER ARE NOT REQUIRED WHEN ROOF DRAIN BODY IS CAST INTO CONCRETE ROOF. INSTALL PER MANUFACTURER'S RECOMMENDATIONS. INSULATE ROOF DRAIN SUMP AND PIPE PER SPECIFICATIONS. LOCATE DRAINS WHERE SHOWN ON ARCHITECTURAL PLANS. VERIFY WITH STRUCTURAL PLANS FOR ROOF LOW POINTS. COORDINATE WITH STRUCTURAL DRAWINGS REGARDING PROVISION FOR SUPPLEMENTARY STEEL FRAMING AROUND ROOF OPENING. COORDINATE ROOF DRAIN INSTALLATION WITH ARCHITECTURAL DETAILS AND ROOFING INSTALLATION. SET OVERFLOW DRAIN WEIR ELEVATION 2" ABOVE PRIMARY ROOF DRAIN WEIR ELEVATION.

2 ROOF DRAIN INSTALLATION
NTS



REFER TO PLANS FOR PIPE SIZE(S). ARRANGEMENT SHOWN IS SCHEMATIC. ADJUST TO SUIT FIELD CONDITIONS. PROVIDE CONNECTIONS SHOWN IN EQUIPMENT MANUFACTURER'S INSTALLATION INSTRUCTIONS. VERIFY CONNECTION LOCATIONS BEFORE INSTALLING PIPE RUNS. REFER TO SPECIFICATIONS FOR PIPE AND FITTING MATERIALS AND INSTALLATION. PROVIDE GAS COCK, UNION AND DIRT LEG SAME SIZE AS BRANCH PIPE.

1 GAS PRESSURE REGULATOR
NTS

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LENEXA, KS 66214
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Architect's Name
License #: XXXXX
Date: 03/01/2024

#	Issue	Date
4	Addendum #4	04/03/2024

Drawn by: Author

PLUMBING DETAILS

P401

SCOTT A. WALTER

PLUMBING FIXTURE SCHEDULE

PLUMBING PLAN MARK	DESCRIPTION
AAV1	AIR ADMITTANCE VALVE; STUDOR "MINI-VENT" # 20301, MEETING ASSE 1051 TYPE "A", POLYSTYRENE PROTECTIVE COVER, ABS VALVE WITH ELASTROMERIC MEMBRANE AND PVC CONNECTOR, 2" INLET, AND ATMOSPHERIC PORT.
AD1	AREA DRAIN: JAY R. SMITH # 2120L (-M), CAST IRON BODY, HEAVY-DUTY, 8" DIAMETER, DUCTILE IRON GRATE, SEEPAGE PAN, AND MEMBRANE FLASHING CLAMP. USE PUSH-ON JOINT OR CAULK OUTLET OF SIZE AS SHOWN ON PLANS.
AP1	ACCESS PANEL: JAY R. SMITH # 4762 - 12" x 12" - CL, TYPE 304 STAINLESS STEEL PANEL AND FRAME WITH CONCEALED HINGE, KEY OPERATED CYLINDER LOCK. PROVIDE WITH NAILER SLOTS FOR INSTALLATION IN STUD WALLS AND ANCHOR STRAPS FOR INSTALLATION IN MASONRY CONSTRUCTION.
CDB1	CONDENSATE DRAIN BOX: SIOUX CHIEF "OXBOX" MODEL # 696-3 OUTLET BOX, MODEL #696-CF SECONDARY DRAINAGE FUNNEL AND #696-SC SOLID COVER PLATE.
CU1	SECURITY STRAIGHT WATER CLOSET / LAVATORY COMBINATION: WILLOUGHBY #1846-EWC-C-BC-E1L2-MA4-PZPB-WMSII-EB-LW1-TWE-PC4-TWC4C-EFVP-ET4-TFE-FVT-RTH-TF24H-WS 18" WIDE X 12" DEEP LAVATORY BOWL WITH STRAIGHT 1.28 GALLON PER FLUSH WATER CLOSET BOWL, FLOOR MOUNTED, BACK OUTLET TYPE OF 14 GAUGE 304 STAINLESS STEEL WELDED CONSTRUCTION, # 4 FINISH, WITH PENAL BUBBLER WITH 0.5 GPM FLOW CONTROL, HOT AND COLD ELECTRONIC ACTIVATED CONTROL VALVES WITH PIEZO ELECTRIC PUSH BUTTONS CONFIGURED TO FEED TWO LAVATORIES FED WITH FDA POLYETHYLENE TUBING AS INDICATED ON THE DRAWINGS, TOILET PAPER HOLDER, 1-1/2" REMOVABLE P-TRAP WITH THROUGH WALL EXTENSION, CLEANOUT TEE WITH 3" PLAIN WASTE INLET, 4" NO-HUB OUTLET WITH CLEANOUT PIN (EXTEND PIN TO 2" ABOVE FLOW LINE), AND ELECTRONIC ANTI FLOOD CONTROL DEVICE. INSTALL WITH WALL SLEEVE, FLUSH VALVE THROUGH WALL EXTENSION LENGTH AS REQUIRED AND FLUSH VALVE CONNECTION KIT. TRIM: ELECTONICALLY ACTUATED FLUSH VALVE WITH SWEAT ADAPTER KIT, WHEEL HANDLE STOP VALVE, SOLENOID VALVE ACTUATOR AND PIEZO ELECTRIC PUSH BUTTON. 120VAC / 24VAC HARD WIRED TRANSFORMER AND ELECTRONIC CONTROLLER THAT CAN SUPPORT UP TO (2) COMBI'S "CVC2" ELECTRONIC CONTROLLERS AND ELECTRONIC VALVE ACTUATOR ASSEMBLY.
CU2	SECURITY ANGLED WATER CLOSET / LAVATORY COMBINATION: WILLOUGHBY #1846-EWC-L OR R--BC-E1L2-MA4-PZPB-WMSII-EB-LW1-TWE-PC4-TWC4C-EFVP-ET4-TFE-FVT-RTH-TF24H-WS 18" WIDE X 12" DEEP LAVATORY BOWL WITH LEFT OR RIGHT HAND ANGLED 1.28 GALLON PER FLUSH WATER CLOSET BOWL, AS SHWON ON THE DRAWINGS, FLOOR MOUNTED, BACK OUTLET TYPE OF 14 GAUGE 304 STAINLESS STEEL WELDED CONSTRUCTION, # 4 FINISH, WITH PENAL BUBBLER WITH 0.5 GPM FLOW CONTROL, HOT AND COLD ELECTRONIC ACTIVATED CONTROL VALVES WITH PIEZO ELECTRIC PUSH BUTTONS CONFIGURED TO FEED TWO LAVATORIES FED WITH FDA POLYETHYLENE TUBING AS INDICATED ON THE DRAWINGS, TOILET PAPER HOLDER, 1-1/2" REMOVABLE P-TRAP WITH THROUGH WALL EXTENSION, CLEANOUT TEE WITH 3" PLAIN WASTE INLET, 4" NO-HUB OUTLET WITH CLEANOUT PIN (EXTEND PIN TO 2" ABOVE FLOW LINE), AND ELECTRONIC ANTI FLOOD CONTROL DEVICE. INSTALL WITH WALL SLEEVE, FLUSH VALVE THROUGH WALL EXTENSION LENGTH AS REQUIRED AND FLUSH VALVE CONNECTION KIT. TRIM: ELECTONICALLY ACTUATED FLUSH VALVE WITH SWEAT ADAPTER KIT, WHEEL HANDLE STOP VALVE, SOLENOID VALVE ACTUATOR AND PIEZO ELECTRIC PUSH BUTTON. INSTALL, WHERE INDICATED ON THE DRAWINGS SUPPORTING TWO FIXTURES, WITH A JOSAM # 15984 NO-HUB VERTICAL 90 DEGREE PRISON FITTING WITH 2" THREADED AUXILIARY INLET, 2" COMMON NO-HUB VENT AND ANCHOR FEET SECURELY BOLTED TO THE FLOOR. 120VAC / 24VAC HARD WIRED TRANSFORMER AND ELECTRONIC CONTROLLER THAT CAN SUPPORT (2) COMBI'S "CVC2" ELECTRONIC CONTROLLERS AND ELECTRONIC VALVE ACTUATOR ASSEMBLY.
CU3	ADA COMPLIANT SECURITY WATER CLOSET / LAVATORY COMBINATION: WILLOUGHBY #4896-L OR R-ON-DMBH-E1L2-MA2-PZPB-WMSII-EB-LW1-PC4-TWC4C-EFVP-ET4-TFE-FVT-RTH-TF24H-MT 49-1/2" WIDE X 21" DEEP LAVATORY BOWL WITH LEFT OR RIGHT HAND 1.28 GALLON PER FLUSH WATER CLOSET BOWL, FLOOR MOUNTED, BACK OUTLET TYPE OF 14 GAUGE 304 STAINLESS STEEL WELDED CONSTRUCTION WITH INTEGRAL GRAB BAR, # 4 FINISH, WITH PENAL BUBBLER WITH 0.5 GPM FLOW CONTROL, HOT AND COLD ELECTRONIC ACTIVATED CONTROL VALVES WITH PIEZO ELECTRIC PUSH BUTTONS CONFIGURED TO FEED ONE LAVATORIES WITH FDA POLYETHYLENE TUBING AS INDICATED ON THE DRAWINGS, TOILET PAPER HOLDER, 1-1/2" REMOVABLE P-TRAP WITH THROUGH WALL EXTENSION, CLEANOUT TEE WITH 3" PLAIN WASTE INLET, 4" NO-HUB OUTLET WITH CLEANOUT PIN (EXTEND PIN TO 2" ABOVE FLOW LINE) AND ANTI FLOOD CONTROL DEVICE WITH MANUAL RESET. INSTALL WITH WALL TEMPLATE, FLUSH VALVE THROUGH WALL EXTENSION LENGTH AS REQUIRED AND FLUSH VALVE CONNECTION KIT. TRIM: ELECTONICALLY ACTUATED FLUSH VALVE WITH SWEAT ADAPTER KIT, WHEEL HANDLE STOP VALVE, SOLENOID VALVE ACTUATOR AND PIEZO ELECTRIC PUSH BUTTON. INSTALL WITH SINGLE VENTED CLOSET TEE FITTING WHERE INDICATED ON THE DRAWINGS. 120VAC / 24VAC HARD WIRED TRANSFORMER AND ELECTRONIC CONTROLLER THAT CAN SUPPORT (2) COMBI'S "CVC2" ELECTRONIC CONTROLLERS AND ELECTRONIC VALVE ACTUATOR ASSEMBLY.
DCV1	DOUBLE CHECK VALVE BACKFLOW PREVENTER: WATTS # LF007QT-S, MEETING ASSE 1015, LEAD FREE CAST BRONZE BODY, SCREW DRIVER SLOTTED TEST COCKS, QUARTER TURN BALL VALVES, AND STRAINER.
DSB1	DOWNSPOUT BOOT: JAY R. SMITH # 1787-24, 24" LONG CAST IRON BODY WITH CAST IRON SECURING STRAPS, 4" ROUND INLET, 2" CLEANOUT PLUG, AND 4" DIAMETER OUTLET.
DSN	DOWNSPOUT NOZZLE: JAY R. SMITH # 1770T, CAST BRONZE BODY AND FLANGE. PROVIDE OUTLET SIZE AS SHOWN ON PLANS.
ECO1	EXTERIOR CLEANOUT: JAY R. SMITH # 4261L SERIES DUCO CAST IRON DOUBLE FLANGED HOUSING WITH HEAVY DUTY SECURED SCORIATED CAST IRON COVER WITH LIFTING DEVICE AND CLEANOUT BODY WITH ABS PLASTIC PLUG WITH GASKET SEAL AND PUSH-ON JOINT. REFER TO SPECIFICATIONS FOR INSTALLATION.
ECO2	EXTERIOR CLEANOUT (2-WAY): JAY R. SMITH # 4261L SERIES DUCO CAST IRON DOUBLE FLANGED HOUSING WITH HEAVY DUTY SECURED SCORIATED CAST IRON COVER WITH LIFTING DEVICE AND CLEANOUT BODY WITH ABS PLASTIC PLUG WITH GASKET SEAL AND PUSH-ON JOINT. REFER TO SPECIFICATIONS FOR INSTALLATION.
EWC	ELECTRIC WATER COOLER (ADA ACCESSIBLE): ELKAY # EZSTL8C WALL-MOUNTED, LEAD FREE, BARRIER FREE, DUAL-LEVEL, FRONT AND SIDE PUSH ACTUATOR BARS, STAINLESS STEEL BOWL, FLEXIBLE POLYESTER ELASTOMER SAFETY BUBBLER AND GALVANIZED STEEL FRONT AND SIDES, CHILLER WITH 8.0 GALLONS PER HOUR CAPACITY, 50° F DRINKING WATER AT 80° F INLET TEMPERATURES 90° F ROOM TEMPERATURE. TRIM: McGUIRE # LF2165CC LEAD FREE BRASS COMPRESSION ANGLE STOP VALVE WITH RISER AND ESCUTCHEON, McGUIRE # B8912CF 1-1/2" 17 GAUGE CAST CHROME PLATED BRASS ADJUSTABLE P-TRAP AND WASTE ARM WITH CLEANOUT PLUG AND ESCUTCHEON, AND SUITABLE CARRIER WITH STANCHIONS TO FLOOR. ELECTRICAL REQUIREMENTS: 120-VOLT, 4 FULL LOAD AMPS.
FC1	FLEXIBLE CONNECTOR: UNITED FLEXIBLE #AFBX1, 3" X 12" LONG CORRUGATED 316L STAINLESS STEEL BELLOWS AND 304 STAINLESS STEEL SINGLE BRAID WITH CLASS 150 STAINLESS STEEL WELDED PLATE FLANGE ON EACH PIPE WITH A MAXIMUM OPERATING PRESSURE OF 290 PSI.
FCO	FLOOR CLEANOUT: JAY R. SMITH, CAST IRON BODY, FLASHING FLANGE WITH CLAMPING COLLAR, ABS PLUG, AND ADJUSTABLE, ROUND, SECURED, NICKEL BRONZE, TOP. # 4031L (-F-C), SCORIATED TOP FOR EXPOSED, FLUSH WITH FINISHED FLOOR, APPLICATION(S), # 4031L (-F-C-Y), STAINLESS STEEL MARKER FOR INSTALLATION IN CARPETED FLOOR AREA(S), # 4151 (-F-C), 1/8" RECESS FOR INSTALLATION IN TILED FLOOR AREA(S), # 4191 (-F-C), 1/2" RECESS FOR INSTALLATION IN TERRAZZO AND SIMILAR POURED FLOOR AREA(S). REFER TO SPECIFICATIONS FOR INSTALLATION.
FCOH	FLOOR CLEANOUT: HEAVY DUTY: JAY R. SMITH #4111L CAST IRON BODY, FLASHING FLANGE WITH CLAMPING COLLAR, ABS PLUG, AND ADJUSTABLE, ROUND, SECURED, HEAVY DUTY SCORIATED NICKEL BRONZE TOP. REFER TO SPECIFICATIONS FOR INSTALLATION.
FCV1	FLOW CONTROL VALVE: FLOWDESIGN # ICSS "AUTOFLOW", SERIES 300 STAINLESS UNION BODY WITH NICKEL PLATED UNION NUT, STAINLESS STEEL PRESSURE COMPENSATING CARTRIDGE, MEETING NSF 61 ANNEX G, NAMEPLATE AND 1/2" VALVE BODY SIZE UNLESS SHOWN OTHERWISE ON PLANS. PROVIDE 0.5 GPM FLOW RATE CARTRIDGE UNLESS SHOWN OTHERWISE ON PLANS.
FCV2	FLOW CONTROL VALVE: FLOWDESIGN # ICSS "AUTOFLOW", SERIES 300 STAINLESS UNION BODY WITH NICKEL PLATED UNION NUT, STAINLESS STEEL PRESSURE COMPENSATING CARTRIDGE, MEETING NSF 61 ANNEX G, NAMEPLATE AND 1/2" VALVE BODY SIZE UNLESS SHOWN OTHERWISE ON PLANS. PROVIDE 0.5 GPM FLOW RATE CARTRIDGE UNLESS SHOWN OTHERWISE ON PLANS.
FCV-1	FLOW CONTROL VALVE: BELL & GOSSETT # LF-CB "CIRCUIT SETTER PLUS", LEAD FREE CAST BRONZE BODY, BRASS BALL, CALIBRATED BALANCE VALVE, DIFFERENTIAL PRESSURE READOUT PORTS, DRAIN PORT, MEMORY STOP, NAMEPLATE AND 1/2" VALVE BODY SIZE UNLESS SHOWN OTHERWISE ON PLANS. SET AND BALANCE TO 0.5 GPM FLOW RATE UNLESS SHOWN OTHERWISE ON PLANS AND PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.
FD1	FLOOR DRAIN: JAY R .SMITH # 2005L(A)-U-NB, CAST IRON BODY AND CLAMPING COLLAR, ADJUSTABLE 6" ROUND NICKEL BRONZE STRAINER AND VANDAL PROOF SCREWS. USE PUSH-ON JOINT OF OUTLET SIZE AS SHOWN ON PLANS. TRAP SEAL: PROVIDE TRAP SEAL PER SPECIFICATIONS FOR ACTUAL FLOOR DRAIN MODEL AND SIZE.
FD2	FLOOR DRAIN: ZURN FD2250 SHOWER DRAIN, PVC BODY, CLAMP COLLAR WITH ADJUSTABLE PVC HEAD AND STAINLESS STEEL STRAINER USE PUSH-ON JOINT OF OUTLET SIZE AS SHOWN ON PLANS.

PLUMBING FIXTURE SCHEDULE

PLUMBING PLAN MARK	DESCRIPTION
FD3	FLOOR DRAIN: WILLOUGHBY # LRFD SERIES, CAST IRON BODY AND CLAMPING COLLAR, NIKALOY ADJUSTABLE HOUSING, 6" ROUND STAINLAEE STEEL LIGATURE-RESISTANT STRAINER AND VANDAL PROOF PIN TORX SCREWS. USE PUSH-ON JOINT OF OUTLET SIZE AS SHOWN ON PLANS WITH DEEP SEAL TRAP.
FFD	FLUSHING FLOOR WILLOUGHBY #FD-1400-WF-EFVP-WMSII 14" DIAMTER, 14 GAUGE, 304 STAINLESS STEEL FLOOR DRAIN WITH INTEGRAL P-TRAP WITH 3" NO-HUB CONNECTION, 1-1/2"COLD WATER FLUSH CONNECTION, 7 GAUGE STAINLESS STEEL FLUSH GRATE WITH 1/2" WIDE ELONGATED HOLES. TRIM: ELECTONICALLY ACTUATED FLUSH VALVE WITH SWEAT ADAPTER KIT, WHEEL HANDLE STOP VALVE, SOLENOID VALVE ACTUATOR AND PIEZO ELECTRIC PUSHBUTTON ASSEMBLY WITH REMOTE FRONT ACCES JUNTION BOX. INSTALL WHERE INDICATED ON THE DRAWINGS. PROVIDE 1-1/2' TYPE "K" FLUSH TUBE FROM FLUSH VAVLE OUTLET TO DRAIN FLUSH CONNECTION.. PROVIDE TYPE "K" COPPER TUBING FROM FLUSH VALVE TO FLOOR DRAIN AS INDICATED ON DETAIL. PROVIDE 1/2" CONDIUT PER ELECTRICAL SPECIFICATIONS FROM JUNCTION BOX TO ABOVE CEILING AND INTO TOILET CHASE AND LAND CABLE AT "CVC2" ELECTRONIC CONTROLLER.
FS1	FLOOR SINK: JAY R. SMITH # 3111L (-12), 6" DEEP CAST IRON BODY WITH ACID RESISTING ENAMELED INTERIOR, ANCHOR FLANGE WITH SEEPAGE HOLES, CLAMP COLLAR, ALUMINUM SEDIMENT BUCKET, AND 12" SQUARE NICKEL BRONZE RIM AND HALF GRATE. USE PUSH-ON JOINT OF OUTLET SIZE AS SHOWN ON PLANS.
FS2	FLOOR SINK: JAY R. SMITH # 3131L (-12), 10" DEEP CAST IRON BODY WITH ACID RESISTING ENAMELED INTERIOR, ANCHOR FLANGE WITH SEEPAGE HOLES, CLAMP COLLAR, WHITE ABS SEDIMENT BUCKET, AND 12" SQUARE NICKEL BRONZE RIM AND HALF GRATE. USE PUSH-ON JOINT OF OUTLET SIZE AS SHOWN ON PLANS.
GI	GREASE INTERCEPTOR: GREENTURTLE PROCEPTOR GMC 1000, FIBERGLASS REINFORCED PLASTICS BODY, SINGLE BAFFLE DESIGN, 1000 GALLON CAPACITY AND RATED FOR 577 GALLONS OF GREASE STORED, WITH (1) 24" GASKETED, AASHTO H-20 LOAD RATED COVER WITH EXTENSIONS. TRAPPED INLET AND OUTLET AND (2) 3" VENT CONNECTIONS. EXTEND CLEANOUTS TO GRADE. UNIT SHALL INCLUDE 30 YEAR WARRANTY AGAINST LEAKS AND STRUCTURAL FAILURE.
HB1	HOSE BIBB: PRIER PRODUCTS # C-255CP.75, POLISHED CHROME PLATED BRASS 3/4" FEMALE INLET, 3/4" THREADED HOSE CONNECTION, LOOSE KEY HANDLE, AND ASSE 1011 INTEGRAL VACUUM BREAKER.
HD1	HUB DRAIN FLOOR SINK: JAY R. SMITH # 3811T (-DBS), 7" DEEP x 6" DIAMETER CAST IRON BODY WITH ACID RESISTING ENAMELED INTERIOR AND EXTERIOR FUNNEL WITH 2" CAST IRON SCREWED OUTLET, SCREWED x HUBLESS ADAPTER, HUBLESS CAST IRON P-TRAP AND ALUMINUM DOME BOTTOM STRAINER.
IMB	FIRE RATED ICE MAKER BOX: GUY GRAY MODEL # FRMIB12ABDS, ASTM E814 LISTED, WHITE POWDER COAT ON COLD ROLLED STEEL BOX WITH TWO INTUMESCENT PADS ATTACHED, BOTTOM INLET WATER SUPPLY WITH 1/2" x 1/4" LEAD FREE COMPRESSION ANGLE STOP VALVE. TRIM: LOOP 4 FEET OF 1/4" TYPE "K" SOFT COPPER TUBING.
IMB1	ICE MAKER BOX: GUY GRAY MODEL # BIM875, 20 GAUGE GALVANIZED STEEL BOX, 18 GAUGE STEEL FACEPLATE, BOTTOM INLET WATER SUPPLY WITH 1/2" x 1/4" COMPRESSION ANGLE STOP VALVE. TRIM: LOOP 4 FEET OF 1/4" TYPE "K" SOFT COPPER TUBING.
JS1	JANITOR'S SINK: STERN-WILLIAMS # MTB-2424, 24" x 24" x 10" HIGH TERRAZZO BASIN WITH INTEGRAL STAINLESS STEEL DRAIN BODY. FAUCET: CHICAGO FAUCET # 897-CP FAUCET WITH WALL BRACE, INTEGRAL VACUUM BREAKER, PAIL HOOK, AND 3/4" MALE HOSE THREADED OUTLET. SECURE FAUCET IN WALL WITH BACKBOARD. TRIM: # BP TYPE 304, 20 GAUGE, STAINLESS STEEL WALL SURROUNDS, # T-35 THREE FOOT LONG REINFORCED HOSE WITH 3/4" CHROME COUPLING AND WALL HOOK, # V-70 EXTRUDED VINYL BUMPER GUARD, AND # T-40 24" STAINLESS STEEL MOP HANGER.
JS2	JANITOR'S SINK: STERN-WILLIAMS # SB-500, 36" x 36" x 12" HIGH TERRAZZO BASIN WIT ONE PIECE STAINLESS STEEL CAP AND INTEGRAL STAINLESS STEEL DRAIN BODY. FAUCET: CHICAGO FAUCET # 897-CP FAUCET WITH WALL BRACE, INTEGRAL VACUUM BREAKER, PAIL HOOK, AND 3/4" MALE HOSE THREADED OUTLET. SECURE FAUCET IN WALL WITH BACKBOARD. TRIM: # BP TYPE 304, 20 GAUGE, STAINLESS STEEL WALL SURROUNDS, # T-35 THREE FOOT LONG REINFORCED HOSE WITH 3/4" CHROME COUPLING AND WALL HOOK, AND # T-40 24" STAINLESS STEEL MOP HANGER.
LV1	WALL-MOUNTED LAVATORY (ADA ACCESSIBLE): AMERICAN STANDARD # 0355.012 "LUCERNE" 20-1/2" X 18-1/4" RECTANGULAR WALL MOUNTED WHITE VITREOUS CHINA FIXTURE WITH FAUCET LEDGE AND FRONT OVERFLOW. FAUCET: CHICAGO FAUCET # 802-VE2805ABXKCP 4" CENTERSET, VANDAL RESISTANT, LEAD FREE FAUCET WITH # 390 LEVER HANDLES, CERAMIC QUARTER TURN CARTRIDGES AND # E2805 0.5 GPM AERATOR. TRIM: McGUIRE # 155A GRID DRAIN WITH TAILPIECE, McGUIRE # LF2165CCLK LEAD FREE BRASS LOOSE KEY COMPRESSION ANGLE STOP VALVES WITH RISERS AND ESCUTCHEONS, McGUIRE # B8872CF 1-1/4" 17 GAUGE CAST CHROME PLATED BRASS ADJUSTABLE P-TRAP AND WASTE ARM WITH CLEANOUT PLUG AND ESCUTCHEON, CONCEALED ARM CARRIER WITH STANCHIONS TO FLOOR, AND PLUMBEREX "PRO-EXTREME" # X-4333 INSULATION KIT FOR WATER AND WASTE PIPES. THERMOSTATIC MIXING VALVE: POWERS # LFe480, SOLID LEAD FREE BRASS BODY, THERMOSTATIC WAX ELEMENT, CORROSION RESISTANT INTERNAL PARTS, AND INTEGRAL CHECKS, ASSE 1070 COMPLIANT, CAPABLE OF 2.2 GPM WITH A 20 PSI DIFFERENTIAL AND A MINIMUM FLOW RATE OF 0.5 GPM. SET TEMPERATURE TO 110F FOR DUEL TEMPERATURE LAVATORIES AND HAND SINKS. MOUNT BELOW THE PLUMBING FIXTURE WHERE INDICATED ON PLAN(S).
MBV	MOTORIZED BALL VALVE: LINE SIZED APOLLO # 82LF-200, THREE PIECE LEAD-FREE BODY, SWEAR ENDS, FULL PORT BRASS BALL WITH APPOLLO MOTORIZED ACTUATOR # AE20010-7, PERMANENTLY LUBRICATED GEAR TRAIN AND BEARINGS, 2 SPDT SWITCHES, NEMA 4 ENCLOSURE, POSITION TRANSMITTER AND # 78153201 STAINLESS STELL MOUNTING KIT. ELECTRICAL REQUIREMENTS: 120 VOLT SINGLE PHASE POWER SUPPLY, 1 FLA.
NW1	NON-FREEZE WALL HYDRANT: PRIER PRODUCTS # C-634NBX1, SATIN NICKEL PLATED BRASS 1" MALE INLET BY 3/4" FEMALE INLET, 3/4" THREADED HOSE CONNECTION, LOOSE KEY HANDLE, HYDRANT LENGTH AS REQUIRED FOR INSTALLED WALL THICKNESS, ADJUSTABLE WALL CLAMP, BRASS BOX WITH SATIN NICKEL PLATED FINISH AND INTEGRAL ASSE 1052 DOUBLE CHECK VACUUM BREAKER.
ORD1	OVERFLOW ROOF DRAIN: JAY R. SMITH # 1330Y (-C-R-CID-WD-02), 8-1/2" DIAMETER CAST IRON BODY, FLASHING CLAMP, GRAVEL STOP, UNDERDECK CLAMP, SUMP RECEIVER, HUBLESS OUTLET, AND CAST IRON DOME BOLTED OR LOCKED DOWN AND 2" HIGH WATER DAM. PROVIDE OUTLET SIZE AS SHOWN ON PLANS.
PWF	PRISON WASTE FITTING: CHARLOTTE PIPE AND FOUNDRY, # NH 502, 4 WITH TAP, CAST IRON MEETING STANDARDS CISPI 301, ASTM A888 AND BEARING CISPI AND ASTM TRADEMARKS, 4" NO-HUB PRISON FITTING WITH 2" TOP VENT, INTERIOR BAFFLE TO PREVENT PASSAGE OF CONTRABAND BETWEEN CELLS AND TAPPING BOSS FOR CLEANOUT ACCESS.
RD1	ROOF DRAIN: JAY R. SMITH # 1330Y (-C-R-CID), 8-1/2" DIAMETER CAST IRON BODY, FLASHING CLAMP, GRAVEL STOP, UNDERDECK CLAMP, SUMP RECEIVER, HUBLESS OUTLET, AND CAST IRON DOME BOLTED OR LOCKED DOWN. PROVIDE OUTLET SIZE AS SHOWN ON PLANS.
RH	ROOF NON-FREEZE POST HYDRANT: MAPA PRODUCTS # MPH-24FP FREEZE PROOF POST HYDRANT MEETING ASSE #1057 WITH BLACK POWDER COATED CAST ALUMINUM WEATHER-GUARD DOME HANDLE, STAINLESS STEEL SHROUD WITH WELDED STAINLESS STEEL FLANGE, UNDER DECK CLAMP, BRONZE GLOBE ANGLE VALVE, 3/4" HOSE CONNECTION, QUICK DISCONNECT WITH BUILT-IN VACUUM BREAKER, STAINLESS STEEL RESERVOIR.
RPZ1	REDUCED PRESSURE ZONE BACKFLOW PREVENTER: WATTS # LF009QT-S, MEETING ASSE 1013, LEAD FREE CAST BRONZE BODY, QUARTER TURN TEST COCKS, QUARTER TURN BALL VALVES, BRONZE STRAINER, AND # 909AG AIR GAP FITTING.
SG	SEWAGE GRINDER: JWC ENVIRONMENTAL MODEL 10000-0806 "MUFFIN MONSTER", GRINDER SUITABLE FOR 80 GPM, GRINDERSTACK WITH ALLOY STEEL CUTTERS, GREEN EPOXY COATED DUCTILE IRON END HOUSING AND HIGH FLOW SIDE RAILS, 304 STAINLESS STEEL GUIDE RAILS AND LIFT BAIL. CONTROLLER: JWC ENVIRONMENTAL #PC2200 STANDARD MOTOR CONTROLLER IN NEMA 4X IN FIBERGLASS ENCLOSURE ACCEPTING 480V-3-60 INPUT POWER, INCLUDE IEC STARTER WITH OVER CURRENT PROTECTION, JAM SENSING CURRENT TRANSFORMER AND MICRO PLC. ELECTRICAL REQUIREMENTS: 480V-3-60, 3HP

PLUMBING FIXTURE SCHEDULE

PLUMBING PLAN MARK	DESCRIPTION
SK1	SINK: ELKAY # LR-1517-2, 15" x 17-1/2" x 7-1/2" DEEP, SINGLE COMPARTMENT, SELF-RIMMING, 18 GAUGE TYPE 302 STAINLESS STEEL, FIXTURE WITH FAUCET LEDGE. SET IN BED OF PUTTY. FAUCET: CHICAGO FAUCET # 895-207589AB 4" CENTERSET LEAD FREE FAUCET WITH VANDAL RESISTANT # 369 LEVER HANDLES, GN1A GOOSENECK SPOUT, # E36VP 1.5 GPM VANDAL RESISTANT, LAMINAR FLOW AERATOR, QUARTER TURN CERAMIC CARTRIDGES TRIM: McGUIRE # LF2165CC LEAD FREE BRASS WHEEL HANDLE ANGLE STOP VALVES WITH RISERS AND ESCUTCHEONS, McGUIRE # 151M CUP STRAINER WITH 1-1/2" 17 GAUGE TAILPIECE, McGUIRE # B8912CF 1-1/2" 17 GAUGE CAST CHROME PLATED BRASS ADJUSTABLE P-TRAP WITH BRASS CLEANOUT AND ESCUTCHEON.
SK2	SINK (ADA ACCESSIBLE): ELKAY # LRAD-3319-55-3, 33" x 19-1/2" x 5-1/2" DEEP, DOUBLE COMPARTMENT, SELF-RIMMING, 18 GAUGE TYPE 302 STAINLESS STEEL, FIXTURE WITH FAUCET LEDGE. SET IN BED OF PUTTY. FAUCET: CHICAGO FAUCET # 201-214914AB 8" SPREAD LEAD FREE FAUCET WITH VANDAL RESISTANT # 317 WRISTBLADE HANDLES, L9 SWING SPOUT, # E36VP 1.5 GPM VANDAL RESISTANT, LAMINAR FLOW AERATOR, QUARTER TURN CERAMIC CARTRIDGES. TRIM: McGUIRE # LF2165CC LEAD FREE BRASS WHEEL HANDLE ANGLE STOP VALVES WITH RISERS AND ESCUTCHEONS, (2) McGUIRE # 151M CUP STRAINERS WITH 1-1/2" 17 GAUGE TAILPIECE, McGUIRE # 111C16G17 1-1/2" 17 GAUGE CONTINUOUS WASTE, McGUIRE # B8912CF 1-1/2" 17 GAUGE CAST CHROME PLATED BRASS ADJUSTABLE P-TRAP WITH BRASS CLEANOUT AND ESCUTCHEON, AND PLUMBEREX # EO3061 KITCHEN END OUTLET AND P-TRAP INSULATION KIT AND # X-4112 VALVE AND SUPPLY COVERS.
SK3	SINK (ADA ACCESSIBLE): ELKAY # LRAD-1517-2, 15" x 17-1/2" x 5-1/2" DEEP, SINGLE COMPARTMENT, SELF-RIMMING, 18 GAUGE TYPE 302 STAINLESS STEEL, FIXTURE WITH FAUCET LEDGE. SET IN BED OF PUTTY. FAUCET: CHICAGO FAUCET # 895-201199AB 4" CENTERSET LEAD FREE FAUCET WITH VANDAL RESISTANT # 317 WRISTBLADE HANDLES, GN1A GOOSENECK SPOUT, # E36VP 1.5 GPM VANDAL RESISTANT, LAMINAR FLOW AERATOR, QUARTER TURN CERAMIC CARTRIDGES TRIM: McGUIRE # LF2165CC LEAD FREE BRASS WHEEL HANDLE ANGLE STOP VALVES WITH RISERS AND ESCUTCHEONS, McGUIRE # 151M CUP STRAINER WITH 1-1/2" 17 GAUGE TAILPIECE, McGUIRE # B8912CF 1-1/2" 17 GAUGE CAST CHROME PLATED BRASS ADJUSTABLE P-TRAP WITH BRASS CLEANOUT AND ESCUTCHEON, PLUMBEREX "PRO-EXTREME" # X-4222 INSULATION KIT FOR WATER AND WASTE PIPES.
SOI	OIL INTERCEPTOR: GREENTURTLE PROCEPTOR OMC 1500, FIBERGLASS REINFORCED PLASTICS BODY, SINGLE BAFFLE DESIGN, 1500 GALLON CAPACITY AND RATED FOR 819 GALLONS OF GREASE STORED, WITH (1) 24" GASKETED, AASHTO H-20 LOAD RATED COVER WITH EXTENSIONS. TRAPPED INLET AND OUTLET AND (2) 3" VENT CONNECTIONS. EXTEND CLEANOUTS TO GRADE. UNIT SHALL INCLUDE 30 YEAR WARRANTY AGAINST LEAKS AND STRUCTURAL FAILURE.
SV1	SHOWER VALVE (ADA ACCESSIBLE): SYMMONS # 9605-X-PLR, PISTON TYPE PRESSURE BALANCING MIXING VALVE WITH BRASS STEM, MEETING ASSE 1016P, SINGLE BLADE LEVER HANDLE, SET ADJUSTABLE LIMIT STOP SCREW TO 110F, INTEGRAL SERVICE STOPS, DIVERTER VALVE, [1.5 GPM][2.0 GPM] "CLEAR-FLO" SHOWER HEAD WITH ARM AND FLANGE, [1.5 GPM][2.0 GPM] WALL / HAND SHOWER WITH FLEXIBLE METAL HOSE, IN-LINE VACUUM BREAKER, WALL CONNECTION AND FLANGE, AND 30" SLIDE BAR.
SV2	SECURITY SHOWER VALVE: ACORN # 1741-03-M-PYY-RD, "PENAL-PAK", 14 GAUGE, TYPE 304 STAINLESS STEEL WALL SHOWER AND PANEL, STAINLESS STEEL OR CHROME-PLATED TRIM, PNUEMATICALLY AIR-CONTROLLED METERING VALVE CONFORMING TO NSF61, NON-HOLD OPEN TYPE PUSHBUTTON, 2.5 GPM VANDAL RESISTANT PENAL SHOWERHEAD WITH LOCKABLE UNIVERSAL BALL JOINT AND RECESSED SOAP DISH.
SV3	SECURITY SHOWER VALVE (ADA ACCESSIBLE): ACORN # 1741-04-PYY-PSO-RD, "PENAL-PAK", 14 GAUGE, TYPE 304 STAINLESS STEEL WALL SHOWER AND PANEL, FRONT ACCESS, STAINLESS STEEL OR CHROME-PLATED TRIM, PNUEMATICALLY AIR-CONTROLLED METERING VALVE CONFORMING TO NSF61, NON-HOLD OPEN TYPE PUSHBUTTON, 2.5 GPM VANDAL RESISTANT PENAL SHOWERHEAD WITH LOCKABLE UNIVERSAL BALL JOINT HANDHELD SHOWER WITH VACUUM BREAKER, QUICK DISCONNECT WITH POSITIVE SHUTOFF AND MOUNTING BRAKET AND RECESSED SOAP DISH.
TD1	TRENCH DRAIN: ZURN # Z-886-HD-E1-U4-GDE-USA, 6-3/4" WIDE HIGH DENSITY POLYETHYLENE STRUCTURAL COMPOSITE TRENCH DRAIN WITH GALVANIZED DUCTILE SLOTTED CLASS E GRATE, CUT IN 20" SECTIONS FOR REQUIRED LENGTH AS SHOWN ON FLOOR PLAN. PROVIDE WITH END CAPS AND 4" BOTTOM OUTLET. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.
TMV1	THERMOSTATIC MIXING VALVE: POWERS # LFe480, SOLID LEAD FREE BRASS BODY, THERMOSTATIC WAX ELEMENT, CORROSION RESISTANT INTERNAL PARTS, AND INTEGRAL CHECKS, ASSE 1070 COMPLIANT, CAPABLE OF 2.2 GPM WITH A 20 PSI DIFFERENTIAL AND A MINIMUM FLOW RATE OF 0.5 GPM. SET TEMPERATURE TO 110F FOR DUEL TEMPERATURE LAVATORIES AND HAND SINKS, 100F FOR SINGLE TEMPERATURE LAVATORIES AND HAND SINKS AND 120F FOR SINKS. MOUNT BELOW THE PLUMBING FIXTURE WHERE INDICATED ON PLAN(S).
TMV2	THERMOSTATIC MIXING VALVE: POWERS # LFLM491-2, SOLID LEAD FREE BRASS BODY WITH 3/4" SWEAT CONNECTIONS, CORROSION RESISTANT INTERNAL PARTS, AND CHECK VALVES, ASSE 1017 COMPLIANT, CAPABLE OF 7.6 GPM WITH A 5 PSI DIFFERENTIAL AND A MINIMUM FLOW RATE OF 0.5 GPM. SET MAXIMUM TEMPERATURE TO 110F.
UR1	URINAL (ADA ACCESSIBLE): AMERICAN STANDARD # 6561.017 "TRIMBROOK" WHITE VITREOUS CHINA FIXTURE WITH FLUSHING RIM, 3/4" TOP SPUD, AND SIPHON FLUSH ACTION. VALVE: SLOAN "OPTIMA – SLOAN MODEL" # 186 ES-S TMO 1.0 GALLON PER FLUSH, EXPOSED, CHROME-PLATED, HARD WIRED, WALL MOUNTED SENSOR OPERATED, DIAPHRAGM TYPE, FLUSH VALVE LESS TRANSFORMER WITH CHLORAMINE RESISTANT DIAPHRAGM AND PROTECTED ORIFICE, MECHANICAL OVERRIDE BUTTON, ESCUTCHEON, INTEGRAL SCREWDRIVER STOP, VACUUM BREAKER, 3/4" FLUSH TUBE, AND SWEAT ADAPTER KIT. TRIM: SUITABLE CARRIER WITH STANCHIONS TO FLOOR.
WC1	FLOOR-MOUNTED WATER CLOSET: AMERICAN STANDARD # 2234.001 "MADERA" WHITE VITREOUS CHINA FIXTURE WITH ELONGATED UNIVERSAL BOWLAND DIRECT-FED SIPHON JET ACTION. VALVE- SLOAN "SLOAN" # 111-1.6 GALLON PER FLUSH EXPOSED CHROME-PLATED DIAPHRAGM TYPE FLUSH VALVE WITH CHLORAMINE RESISTANT DIAPHRAGM AND PROTECTED ORIFICE, OSCILLATING ADA COMPLIANT HANDLE, ESCUTCHEON, INTEGRAL SCREWDRIVER STOP WITH VANDAL RESISTANT CAP, VACUUM BREAKER, AND SWEAT ADAPTER KIT. TRIM- CHURCH # 9500SSCT WHITE OPEN-FRONT CONTOURED, SOLID PLASTIC, HEAVY DUTY, SEAT LESS COVER WITH SELF-SUSTAINING CHECK HINGES AND STAINLESS STEEL BOLTS.
WC2	FLOOR-MOUNTED WATER CLOSET (ADA ACCESSIBLE): AMERICAN STANDARD # 3043.001 "MADERA" WHITE VITREOUS CHINA FIXTURE WITH ELONGATED UNIVERSAL BOWL AND DIRECT-FED SIPHON JET ACTION. VALVE- SLOAN "SLOAN" # 111-1.6 GALLON PER FLUSH EXPOSED CHROME-PLATED DIAPHRAGM TYPE FLUSH VALVE WITH CHLORAMINE RESISTANT DIAPHRAGM AND PROTECTED ORIFICE, OSCILLATING ADA COMPLIANT HANDLE, ESCUTCHEON, INTEGRAL SCREWDRIVER STOP WITH VANDAL RESISTANT CAP, VACUUM BREAKER, AND SWEAT ADAPTER KIT. INSTALL FLUSH VALVE HANDLE ON THE WIDE SIDE OF THE STALL. TRIM- CHURCH # 9500SSCT WHITE OPEN-FRONT CONTOURED, SOLID PLASTIC, HEAVY DUTY, SEAT LESS COVER WITH SELF-SUSTAINING CHECK HINGES AND STAINLESS STEEL BOLTS.
WCO	WALL CLEANOUT: JAY R. SMITH # 4530S, CAST IRON CLEANOUT TEE, COUNTER SUNK PLUG, STAINLESS STEEL ROUND COVER AND SCREW, AND IRON PLUG WITH GASKET SEAL. REFER TO SPECIFICATIONS FOR INSTALLATION.
WHA	WATER HAMMER ARRESTER: PRECISION PLUMBING PRODUCTS, HARD DRAWN COPPER BODY WITH WROUGHT COPPER FITTINGS, PISTON TYPE WITH LUBRICATED EPDM "O" RING SEALS, MEETING ASSE 1010 OR PDI WH-201. PROVIDE PDI SIZES "A" THROUGH "F" AS SHOWN ON PLANS. PROVIDE SIZE "A" UNLESS SHOWN OTHERWISE ON THE PLANS.

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Architect's Name
License #: XXXXX

Date: 03/01/2024

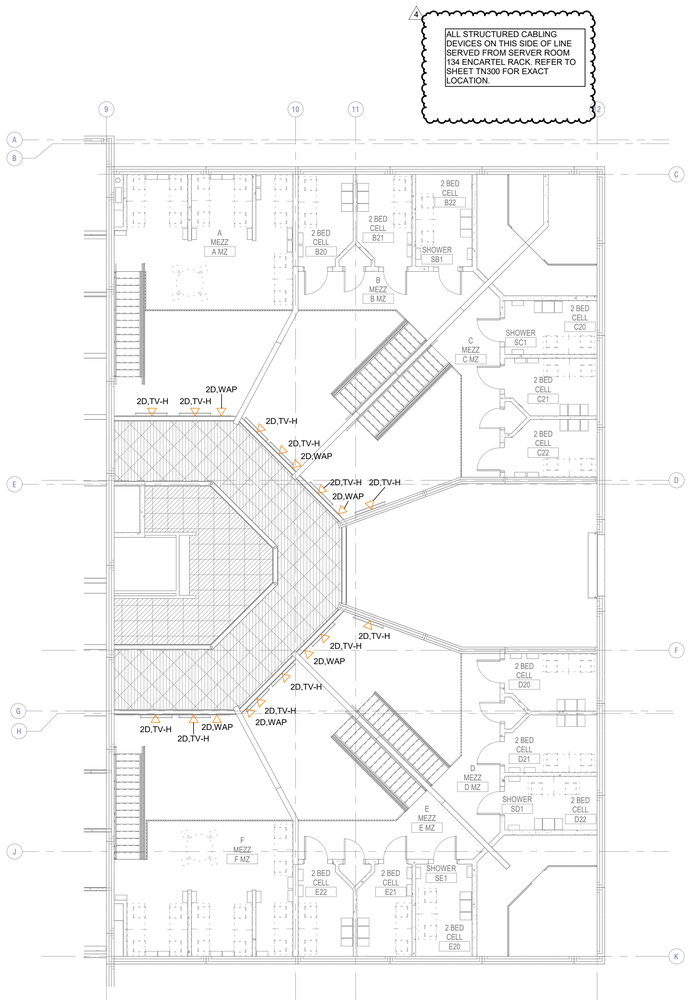
#	Issue	Date
2	Addendum #2	03/20/2024
4	Addendum #4	04/03/2024

Drawn by: Author

PLUMBING SCHEDULES

P500

SCOTT A. WALTER



1 TELECOM MEZZANINE PLAN - JAIL
1/8" = 1'-0"

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Date: 03/01/2024

	Issue	Date
4	Addendum #4	04/03/2024

Drawn by: JC

TELECOM MEZZANINE FLOOR PLAN - JAIL

TN102

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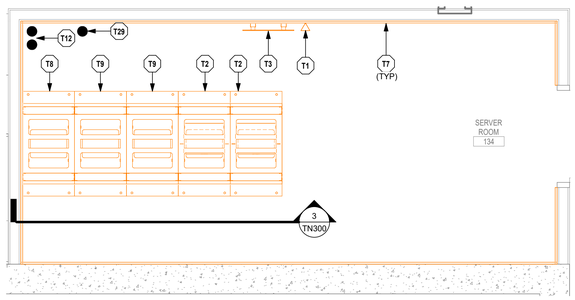
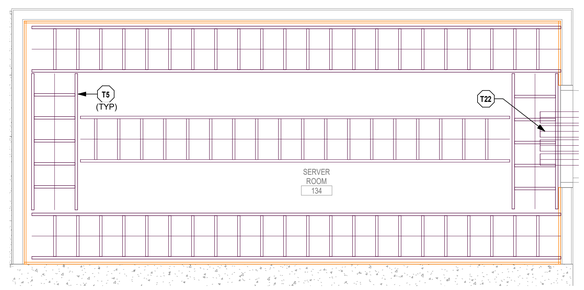
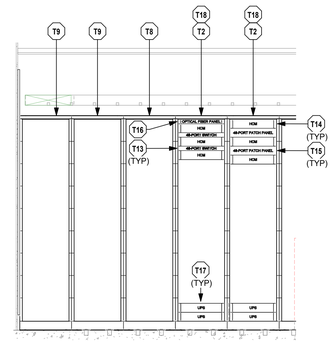
MICHAEL T. DERMYER



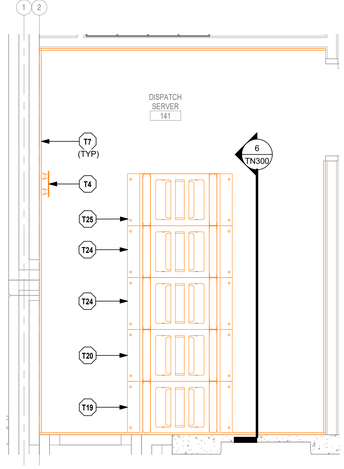
1 SERVER ROOM 134 - ENLARGED FLOOR PLAN
1/2" = 1'-0"



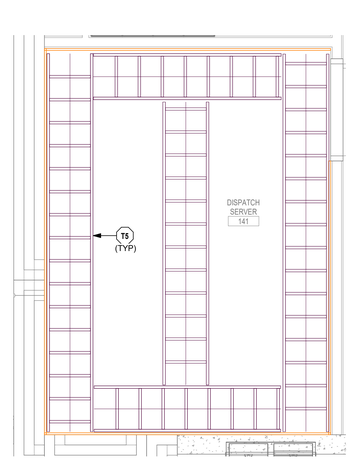
2 SERVER ROOM 134 - ENLARGED RCP
1/2" = 1'-0"



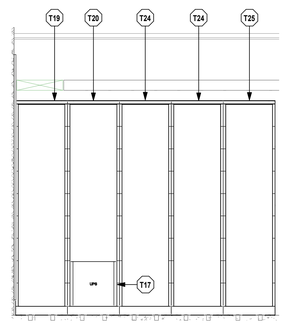
3 SERVER ROOM 134 - RACK ELEVATION
1/2" = 1'-0"



4 DISPATCH SERVER 141 - ENLARGED FLOOR PLAN
1/2" = 1'-0"



5 DISPATCH SERVER 141 - ENLARGED RCP
1/2" = 1'-0"



6 DISPATCH SERVER 141 - RACK ELEVATION
1/2" = 1'-0"

TECHNOLOGY PLAN NOTES:

T1 PROVIDE DATA OUTLET FOR BUILDING AUTOMATION CONTROL SYSTEM (BACS). FIELD VERIFY EXACT LOCATION WITH CONTROLS CONTRACTOR.

T2 PROVIDE 4-POST RACK. REFER TO DIVISION 27 SPECIFICATIONS FOR ADDITIONAL INFORMATION.

T3 PROVIDE TELECOMMUNICATIONS PRIMARY BUS BAR (PBB). REFER TO DIVISION 27 SPECIFICATIONS AND 9/TN400 FOR ADDITIONAL INFORMATION.

T4 PROVIDE TELECOMMUNICATIONS SECONDARY BUS BAR (SBB). REFER TO DIVISION 27 SPECIFICATIONS AND 10/TN400 FOR ADDITIONAL INFORMATION.

T5 PROVIDE 18" WIDE LADDER RACK WITH 9" RUNG SPACING. REFER TO DIVISION 27 SPECIFICATIONS FOR ADDITIONAL INFORMATION.

T7 PROVIDE TELECOMMUNICATIONS BACKBOARD. GRADE A/C 3/4" THICK FIRE RATED PLYWOOD BACKBOARDS DOUBLE COATED IN UL 723 CLASSIFIED FIRE RETARDANT LOW GLOSS WHITE PAINT. THE "A" SIDE SHALL BE EXPOSED TO THE INTERIOR OF THE ROOM AND THE "C" SIDE PLACED AGAINST THE BUILDING STRUCTURE. PLYWOOD SHALL BE PAINTED PRIOR TO INSTALLATION OF EQUIPMENT. REFER TO DIVISION 27 SPECIFICATIONS FOR ADDITIONAL INFORMATION.

T8 PROVIDE 4-POST RACK FOR OWNER PROVIDED ENCARTEL EQUIPMENT.

T9 PROVIDE 4-POST RACK FOR OWNER PROVIDED ICN EQUIPMENT.

T12 PROVIDE (2) 4" SERVICE ENTRANCE CONDUITS FROM HANDHOLE IDENTIFIED BY KEY NOTE 14 ON ELECTRICAL SHEET E100. PROVIDE PULL STRING. REFER TO CIVIL SITE PLANS AND DIVISION 27 SPECIFICATIONS FOR ADDITIONAL INFORMATION.

T13 INSTALL OWNER FURNISHED NETWORK SWITCH.

T14 PROVIDE HORIZONTAL CABLE MANAGER. SEE DIVISION 27 SPECIFICATIONS FOR ADDITIONAL INFORMATION.

T15 PROVIDE 48-PORT CATEGORY 6 PATCH PANEL. PROVIDE QUANTITY AS REQUIRED TO SUPPORT ALL CATEGORY 6 DATA OUTLETS SERVED BY TELECOM ROOM PLUS SPARES AS NOTED IN DIVISION 27 SPECIFICATIONS.

T16 PROVIDE OPTICAL FIBER PANEL. SEE DIVISION 27 SPECIFICATIONS FOR ADDITIONAL INFORMATION.

T17 INSTALL OWNER FURNISHED UNINTERRUPTIBLE POWER SUPPLY.

T18 PROVIDE VERTICAL POWER DISTRIBUTION UNIT. REFER TO DIVISION 27 SPECIFICATIONS FOR ADDITIONAL INFORMATION.

T19 PROVIDE 4-POST RACK FOR RELOCATED 911 EQUIPMENT.

T20 PROVIDE 4-POST RACK FOR OWNER PROVIDED UPS.

T22 PROVIDE (4) 4" FIRESTOP ASSEMBLIES FOR HORIZONTAL. REFER TO DIVISION 27 SPECIFICATIONS AND 1/TN401 FOR ADDITIONAL INFORMATION.

T24 PROVIDE 4-POST RACK FOR RELOCATED RADIO EQUIPMENT.

T25 PROVIDE 4-POST RACK FOR FUTURE EQUIPMENT.

T29 PROVIDE (1) 4" CONDUIT FOR SITE SIGN. REFER TO CIVIL DRAWINGS FOR ADDITIONAL INFORMATION.

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EDGAR COUNTY PUBLIC SAFETY CENTER

EDGAR COUNTY, ILLINOIS
12636 950TH ROAD
PARIS, ILLINOIS 61944

21003.003

BID & PERMIT

Architects Name
License #: XXXXX

Date: 03/01/2024

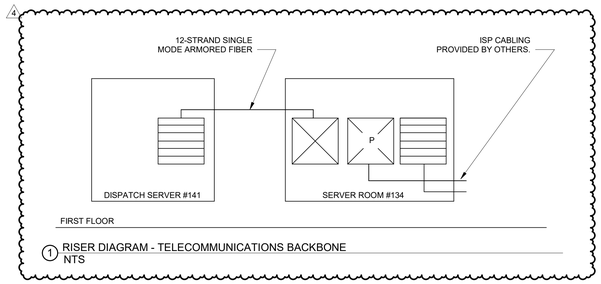
	Issue	Date

Drawn by: JC

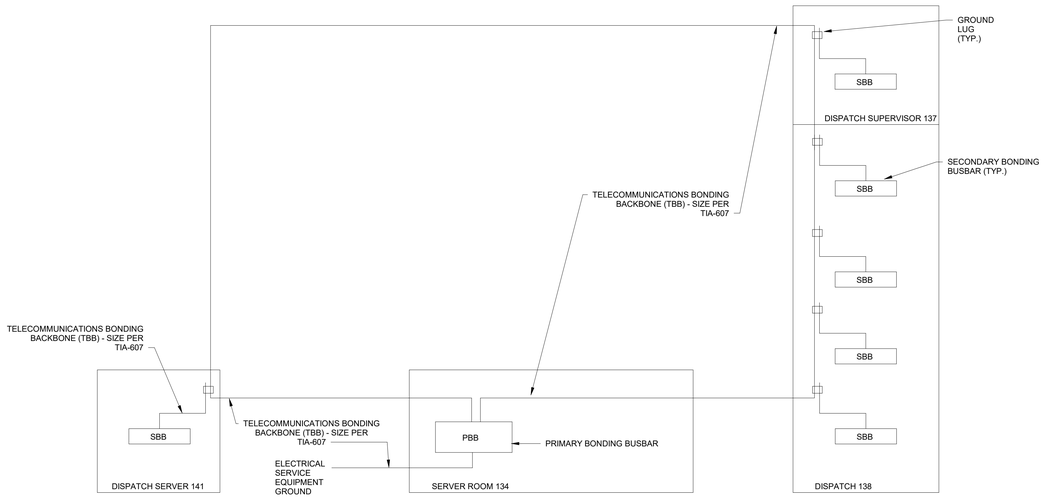
TELECOM - ENLARGED PLANS

TN300

MICHAEL T. DERMYER



1 RISER DIAGRAM - TELECOMMUNICATIONS BACKBONE
NTS



2 RISER DIAGRAM - GROUNDING AND BONDING
NTS

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Architect's Name
License #: XXXXX
Date: 03/01/2024

⚠	Issue	Date
4	Addendum #4	04/03/2024

Drawn by: JC

RISER DIAGRAMS

TN500

MICHAEL T. DERMYER

Addendum No. 4

Project:	**Edgar County Public Safety Center** 12636 950th Road Paris, IL 61944	**Issued to:**	CORE Construction
Owner:	Edgar County Illinois 115 W. court Street Paris, IL 61944	**Attention:**	Bidders
Project No.:	21003.003	**Date of Issue:**	04-04-2024

This Addendum supersedes and supplements all portions of the bidding documents with which it conflicts. Written addenda, including drawings or other graphic documents issued before execution of the contract modifies or interprets the bidding documents.

Architectural

Drawings:

1. G100 – Code Plan
    a. Adde 2-hour fire barrier around storm shelter.
2. G101 – Storm Shelter Code Plan
    a. Revised Storm Shelter Sign Types info to add notes for sign material, text/symbols, braille and attachments.
3. A010 – Architectural Site Plan
    a. G4 – added information for signage components on monument sign.
4. A200 – Reflected Ceiling Plan
    a. A9 – added information for ceiling mounted sign at intersection north/south and east/west portions of Office Circulation 112 corridor.
    b. Added Ceiling Plan Keynote #13.
5. A300 – Building Elevations
    a. Corrected/added notes pointing to exterior lights and exterior mounted cameras.
    b. Added dimensions for placement of building lights.
6. A400 – Building Sections
    a. Added 2-hour fire barrier line type around the storm shelter, including the structural lid which is the continuation of the fire barrier.
7. A531 – Detention Equipment
    a. E4 and E5 - Revised/added notes.
    b. Added detail D8 for Interior expansion joint at storm shelter.
    c. H8 - Detention Installation Guidelines.
        i. Renumbered elevations to coordinate with Detention Equipment Code numbers.
        ii. Eliminated the elevations of the Wall mounted swing stool and Pistol Locker – 4 compartments. These items are not in the project.
8. A540 – Signage Details
    a. Revised Type E, Medallion sign, to add note for lighting.
    b. Revised Types B and C, Dimensional Characters
        i. edited note about referring to Interior Elevations on A600 for locations/mounting.
        ii. Revised location text to say both Interior and Exterior
        iii. Revised quantity of characters
    c. Revised Types D, Dimensional Characters
        i. Revised quantity of characters
    d. D5 – clarification info added to Edgar County seal for the monument sign at the drive entrance.
9. A800 – Opening Schedule

a. Exterior doors and frames changed from stainless steel to hollow metal galvanized.

10. A850 – Security Glazing Elevations & Details
    a. A2, A4 and A7 – eliminated one horizontal row of hollow metal frame in the security glazing dayroom fronts.
    b. Section A12 – added horizontal hollow metal frame to match elevations.
11. A900 – Finish Schedule & Materials Legend
    a. Materials Legend – added information for exterior door frame paint (DFP3) and exterior door face paint (DFAP2).

Attachments: Drawing Sheets: G100, G101, A010, A200, A300, A400, A440, A441, A442, A531, A540, A800, A850 and A900.

ISSUED: HMN Architects, Inc.

BY:_____

Jill Ralph
Architect

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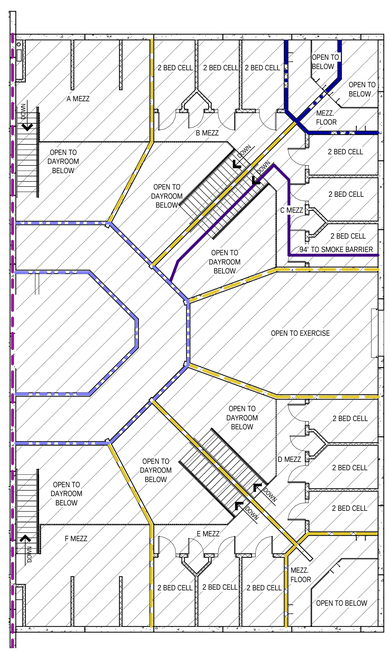

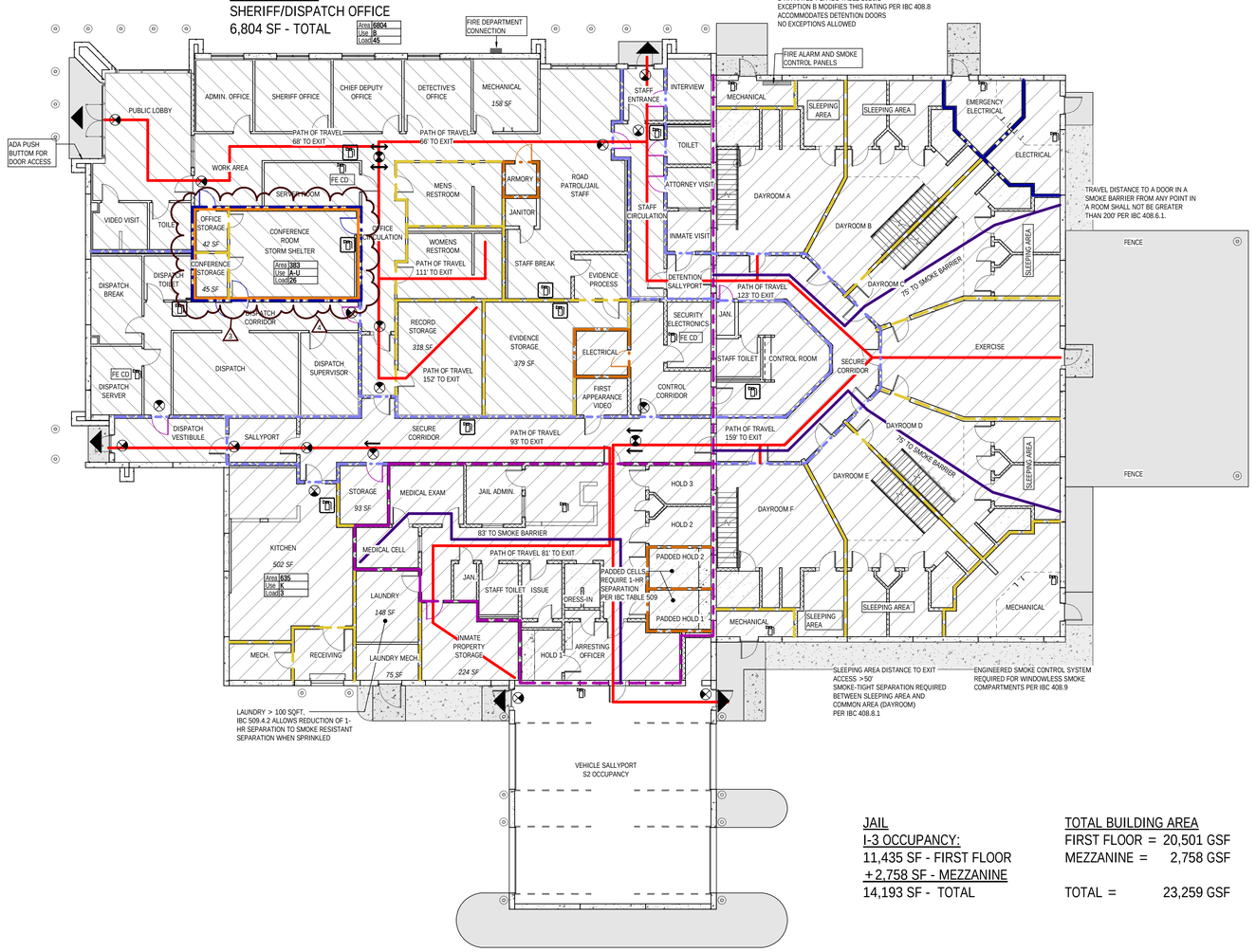

JAIL
I-3 OCCUPANCY:
11,435 SF - FIRST FLOOR
+2,758 SF - MEZZANINE
14,193 SF - TOTAL

TOTAL BUILDING AREA
FIRST FLOOR = 20,501 GSF
MEZZANINE = 2,758 GSF
TOTAL = 23,259 GSF

NOTE: THIS SHEET IS ONLY VALID IF PRINTED IN COLOR

A12 02 - MEZZANINE CODE PLAN
3/32" = 1'-0" | C9/A300

A9 01 - FIRST FLOOR CODE PLAN
3/32" = 1'-0" | A2/A151

12' 6' 0' 12'

CODE SUMMARY

General:

Construction Purpose:	New Building Construction
Project Address:	12636 E. 950th Road Paris, IL 61944
Owner's Address:	Edgar County 115 W. Court St. Paris, IL 61944
County:	Edgar
Local Fire Department:	Paris Fire Department
Local Water Department:	Paris City Water Department
Local Building Inspection Dept:	Paris Code Enforcement Office

Codes / Regulations Utilized to Design this Project:

2021	International Building Code
2021	National Electric Code
2021	International Mechanical Code
2021	International Plumbing Code
2018	Illinois Plumbing Code
2021	International Fire Code
2018	International Energy Conservation Code Illinois Energy Conservation Code
2021	International Energy Conservation Code
2015	NFPA 101, Life Safety Code
2010	ADA Standards for Accessible Design
2018	Illinois Accessibility Code
2014	Illinois County Jail Standards by the Illinois Department of Corrections

JAIL DAYROOMS = 68 BEDS
BOOKING = 8 BEDS
TOTAL = 76 BEDS

Code Analysis:

Occupancy Classification:	I-3 CONDITION 4
Accessory Occupancy Classification:	B
Type of Construction:	II-B
Allowable Building Stories:	2 Stories
Actual Building Stories:	1 Stories
Allowable Building Height:	75 Feet
Actual Building Height:	25 Feet
Allowable Building Area:	40,000 GSF
Actual Building Area:	23,259 GSF

Fire-Resistive Requirements:

Structural Frame:	0-Hour
Bearing Walls:	
Exterior:	0-Hour
Interior:	0-Hour
Non-Bearing Walls & Partitions:	
Exterior:	0-Hour
Interior:	0-Hour
Floor Construction:	0-Hour
Roof Construction:	0-Hour
Shaft Enclosures:	1-Hour
Vertical Exit Enclosures:	1-Hour

Fire Safety Features:

Active
Fully Sprinkled
Fire Alarm
Smoke Detection
Smoke Evacuation System
Illuminated Exit Signage
Emergency Egress Lighting
Emergency Power Backup Generator

Passive
Smoke Compartments
Fire Extinguishers

Means of Egress:

Exit Access Travel Distance	200 Feet
Common Path of Egress Travel Distance	100 Feet
Travel Distance to a Smoke Barrier	200 Feet
Maximum Dead End Corridor Lengths	50 Feet

Required Stairway Width:
3" per occupant
36" minimum width if floor occupancy is <50
44" minimum width if floor occupancy is ≥50

Other Egress Width:
2" per occupant
36" minimum width if floor occupancy is <50
44" minimum width if floor occupancy is ≥50

CODE PLAN LEGEND

- SMOKE PARTITION: NON-RATED GYP. BD: UL #U465, UL #HW D-0060 CMU: UL #U906
- FIRE PARTITION: 1-HOUR FIRE RATED GYP. BD: UL #U465, UL #HW D-0060 CMU: UL #U906
- FIRE BARRIER: 1-HOUR FIRE RATED GYP. BD: UL #U465, UL #HW D-0060 CMU: UL #U906
- SMOKE BARRIER: 1-HOUR FIRE RATED UL#U465
- FIRE BARRIER: 2-HOUR FIRE RATED GB:UL#U411 SHAFT: UL #U428 CONC: IBC 2021 TABLE 721.1(2)4-1.1
- SMOKE BARRIER: 2-HOUR FIRE RATED GB:UL#U411 SHAFT: UL #U428 CONC: IBC 2021 TABLE 721.1(2)4-1.1
- PATH OF TRAVEL TO SMOKE BARRIER
- PATH OF TRAVEL TO EXIT
- STORM SHELTER

Area / Use / Load — OCCUPANT LOAD TAG

Occupant Load Tag Use Abbreviations *(Based on IBC 2021 - Table 1004.5)*		Sq. Ft. per Occupant	
A-C	Assembly - Concentrated - chairs only	7 SF	Net
A-S	Assembly - Standing Space	5 SF	Net
A-U	Assembly - Unconcentrated - tables & chairs	15 SF	Net
B	Business Area	150 SF	Gross
C	Courtrooms - other than fixed seating areas	40 SF	Net
D	Dormitories	50 SF	Gross
E	Exercise Rooms	50 SF	Gross
E-C	Educational - Classroom	20 SF	Net
I-ITA	Institutional - Inpatient Treatment Area	240 SF	Gross
I-OA	Institutional - Outpatient Area	100 SF	Gross
I-SA	Institutional - Sleeping Area	120 SF	Gross
K	Kitchen, Commercial	200 SF	Gross
PG	Parking Garages	200 SF	Gross
S	Storage Area / Mechanical Equipment Room	300 SF	Gross

- DIRECTIONAL EXIT SIGN
- FIRE EXTINGUISHER CABINET
- FIRE EXTINGUISHER
- FE CD CARBON DIOXIDE FIRE EXTINGUISHER
- FIRE HOSE CABINET
- FIRE PULL STATION
- FIRE STAIR
- STANDPIPE
- STROBE
- HANDICAP SYMBOL
- EXIT, EXTERIOR
- EXIT, INTERIOR
- FIRE DEPARTMENT CONNECTION
- FO / RW / PW — OCCUPANT LOAD (#O); REQUIRED WIDTH (RW); PROVIDED WIDTH (PW)

I-3 OCCUPANCY

B OCCUPANCY

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EDGAR COUNTY, ILLINOIS
12636 950TH ROAD
PARIS, ILLINOIS 61944

HMN 21003.003

BID & PERMIT

KLINGNER ARCHITECT PROJECT # 22-4046

Date: 03/01/2024

△	Issue	Date
2	Addendum 02	03-20-2024
3	Addendum 03	03-27-2024
4	Addendum 04	04-04-2024

Drawn by: Author

CODE PLAN

G100

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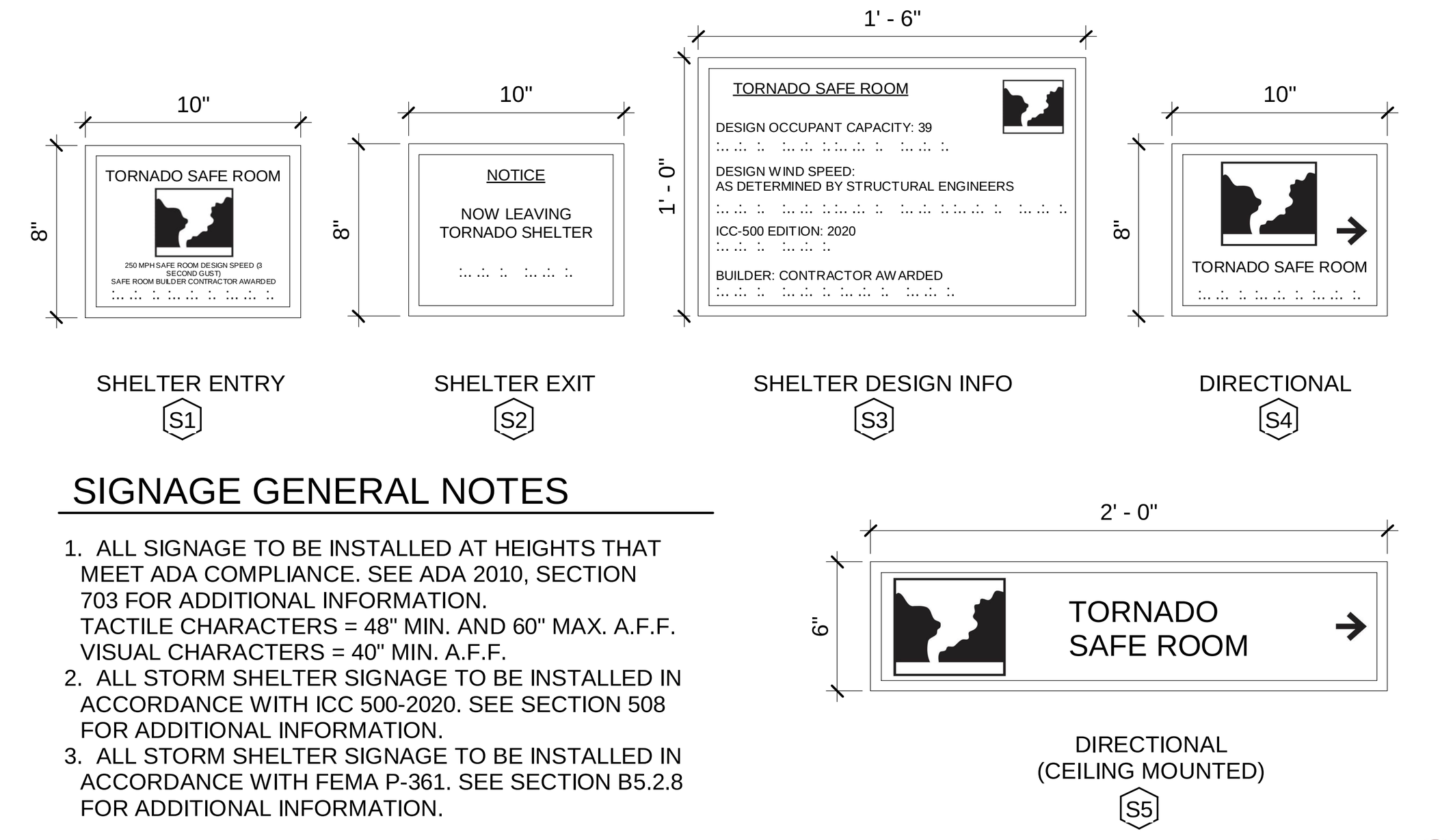
2020 - ICC 500 STORM SHELTER CODE REVIEW

ICC 500 - SECTION	ICC 500 - REQUIREMENT	ICC 500 - APPLICATION	ICC 500 - COMMENT #
Chapter 1: Application and Administration			
104.1 Storm shelters within host buildings	Where a designated storm shelter is constructed as a room or space within a host building that will normally be occupied for other purposes, the requirements of the applicable code for the occupancy of the building, or the individual rooms or spaces thereof, shall apply unless otherwise required by ICC 500.	See Sheet G100 for IBC 2021 code provisions.	
106.2.1 Design information	For the areas of a building designed for occupancy as a storm shelter, the following information shall be provided within the construction documents: see separate schedule for list of information.	See separate table this sheet for required information.	
106.2.4 Signage	The type and location of signs required by this standard shall be indicated on the floor plans.	See storm shelter code plan this sheet.	
106.2.5 Storm shelter details	The construction documents shall provide or include any manufacturer's details or installation instructions for systems or equipment designed for the protection and operation of the storm shelter.	Manufacturer's details and installation instructions shall be provided by the Contractor in the form of submittals and provided to the Owner as part of an Operations and Maintenance manual for the project.	
106.2.6 Storm shelter instructions	The construction documents shall provide or include any details or instructions required for the functional operation of the storm shelter, such as: 1. Type and location of equipment and amenities required within the storm shelter, including water supply, sanitary facilities, fire extinguishers, batteries, flashlights, special emergency lighting equipment or any other equipment required to be installed in the storm shelter. 2. Specifications for any alarm system to be installed. 3. Instructions for the installation or deployment of any impact-protective systems such as shutters, screens, doors or windows. 4. Instructions for the installation, activation or deployment of any mechanical, electrical and plumbing equipment.	See code plan this sheet for components listed in item #1. See specification section 283100 for item #2. Information for items #3 and #4 shall be provided by the Contractor in the form of submittals and provided to the Owner as part of an Operations and Maintenance manual for the project.	
107.2 Detailed requirements	A quality assurance plan shall be provided for the following: 1. Roof cladding, soffits and roof framing connections. 2. Wall connections to roof and floor diaphragms and framing. 3. Roof and floor diaphragm systems, including connectors, drag struts and boundary elements. 4. Main windforce-resisting systems, including braced frames, moment frames and shear walls. 5. Main windforce-resisting system connections to the foundation. 6. Fabrication and installation of components and assemblies that are part of wall assemblies, roof assemblies, or impact-protective systems of the storm shelter envelope required to meet impact or static or cyclic pressure test requirements of Chapter 3, such as, window assembly, door assembly, shutter assembly or louver. 7. Wall cladding and wall cladding connections. 8. Corrosion resistance or protection of exposed metal connectors providing load path continuity. 9. Storm shelter critical support systems and connections and impact protection of the components and connections. 10. Foundation design. 11. Prefabricated storm shelter installation requirements, including anchor location and minimum required capacity for each type of anchor. 12. Prefabricated storm shelter minimum foundation capacity requirements.	See structural sheets, structural specifications, and Section 014500 Quality Control.	
107.3 Quality assurance plan preparation	A quality assurance plan prepared by a registered design professional shall be provided for each main windforce-resisting system and wind-resisting components and cladding. The quality assurance plan shall identify the following: 1. The main windforce-resisting systems and wind-resisting components and cladding. 2. The special inspections and testing to be required in accordance with Section 110.1. 3. The type and frequency of testing required. 4. The type and frequency of special inspections required. 5. The structural observations to be performed in accordance with Section 111.1. 6. The required distribution, type and frequency of reports of test, inspections and structural observations.	See structural sheets, structural specifications, and Section 014500 Quality Control.	
109.1 Storm shelters requiring peer review	A peer review shall be conducted for the following storm shelter types: 1. Community storm shelters with a design occupant capacity of 50 or greater. 2. Storm shelters in elementary schools, secondary schools and day care facilities with a design occupant capacity greater than 16. 3. Storm shelters for buildings and structures assigned to Risk Category IV (essential facilities) as defined in Table 1604.5 in the International Building Code.	The community storm shelter for a sheriff department and 911 dispatch Risk Category IV essential facility, therefore a peer review shall be performed.	
109.2 Peer review	The owner or the owner's authorized agent, other than the registered design professionals for the project, shall employ independent registered design professionals to conduct a peer review for compliance with the requirements of Sections 106, 107, 110 and 111 and Chapters 3, 4, 5, 6 and 7.	A peer review by an independent design professional shall be performed per these requirements.	
111.1 Structural observations	During construction of community storm shelters, the building owner shall employ a registered design professional to conduct visual observations of the construction of the structural system for general conformance to the approved construction documents at significant construction stages and at completion of the construction of the structural system. Structural observation shall not obviate the need for other inspections or testing required by this standard or the applicable code. Deficiencies shall be reported in writing to the authority having jurisdiction and owner or the owner's authorized agent. At the conclusion of the work, the registered design professional who made the structural observations shall submit to the authority having jurisdiction a written statement that the site visits have been made and shall identify any reported deficiencies that, to the best of the structural observer's knowledge, have not been resolved.	Special inspections shall be provided per these requirements.	
112.1 Listing and labeling	Impact-protective systems shall be listed and labeled denoting compliance with this standard.	Impact-protective systems shall be listed and labeled denoting compliance with ICC 500.	
Chapter 3: Structural Design and Testing Criteria			
302.1 General	The storm shelter shall be designed to resist the load combinations specified in Section 302.2 or 302.3. Storm shelters that are designed as combination tornado and hurricane shelters shall comply with requirements for both sets of load combinations using either Section 302.2 or 302.3.	See structural drawings for information regarding load resistance.	
304.1 General	Wind loads from hurricanes, WH, and tornadoes, WT, shall be determined in accordance with ASCE 7, Chapters 26 through 31, except as modified by this section.	See structural drawings for information regarding load resistance.	
304.2 Design wind speed	For tornado shelters, the design wind speed VT, shall be in accordance with Figure 304.2(1). For hurricane shelters, the design wind speed, VH, shall be in accordance with Figure 304.2(2). For storm shelters in Alaska, the design wind speed, VH, shall be in accordance with Figure 304.2(3).	See structural drawings for information regarding load resistance.	
305.1 Wind-borne debris	All storm shelters shall be designed for the impact loads of wind-borne debris in accordance with Section 305.1.1 through 305.2.2.	See structural drawings for information regarding load resistance.	
306.4.1 Impact-protective systems	Impact-protective systems for use in the storm shelter envelope shall be tested for impact in accordance with Section 803 and static and cyclic pressure in accordance with Sections 804 and 805. Any changes to listed impact-protective systems, such as a change of glazing, shall require evaluation by the listing agency or retesting of the entire assembly. Exception 1: Window assemblies and other glazed openings where the opening is protected on the exterior side by an impact-protective system are not required to be tested for impact. Exception 2: Window assemblies and other glazed openings where the opening is protected on the interior side by an impact-protective system are not required to be tested for impact and static and cyclic pressure. Exception 3: Nonoperable, permanently affixed shields or cowlings designed to resist the design wind pressures are not required to be tested for static and cyclic pressure in accordance with Sections 804 and 805.	See structural drawings for information regarding load resistance.	
Chapter 4: Siting			
402.5 Storm shelter siting	Storm shelters shall be located outside of the following high-risk areas: 1. Coastal high-hazard areas and coastal A zones 2. Floodways	The storm shelter shall not be located in a high-risk area.	
402.6.1 Minimum floor elevation of community tornado shelters	The lowest floor used for the occupied storm shelter areas and occupant support areas of a community tornado shelter shall be elevated to or above the highest of the elevations determined by all of the following: 1. The minimum elevation of the lowest floor required by the authority having jurisdiction. 2. One foot above the base flood elevation. 3. For storm shelters that are Risk Category IV facilities or serving Risk Category IV facilities: 3.1 The 500-year flood elevation. 3.2 Two feet above the base flood elevation.	The finish floor is located above the flood elevation. See civil sheets for finished floor elevation.	
Chapter 5: Occupant Density, Access, Accessibility, Egress and Signage			
502.2.1 Assigned	The assigned design occupant capacity shall be based on the design occupant capacity of the storm shelter, as determined by the designer and the owner or the owner's authorized agent, and approved by the authority having jurisdiction.	See code plan this sheet for design occupant capacity and 106.2.1 Design Information Table.	
502.3 Required usable floor area	For community storm shelters, the minimum required usable floor area shall be computed at the rate of one occupant per unit of area prescribed in Table 502.3. Each storm shelter shall be sized to accommodate a minimum of one wheelchair space for every 200 storm shelter occupants or portion thereof.	See 502.4.2	
502.3 Table, Occupant density - community storm shelters	Occupant who are standing or seated = 5 usable sf per occupant Occupants using a wheelchair = 10 usable sf per occupant	200 usable square feet 10 sf for one (1) wheelchair spaces = 1 occupants 180/5 sf per person = 38 occupants Total 39 occupants	
502.4.2 Alternative calculation of usable floor area	The usable floor area shall be determined by subtracting from the gross floor area, the floor area of partitions and walls, columns, fixed or movable objects, furniture, equipment or other features that under probable conditions cannot be removed.	See code plan for usable area hatch.	
504.2 Wall and roof openings	All access openings, means of egress doors, emergency escape openings and overhead hatches in the storm shelter envelope shall be considered openings and shall be protected in accordance with Section 306.4.	All openings shall be protected per requirements.	
504.3 Accessibility	Buildings and space used as community storm shelters shall be accessible in accordance with the applicable code.	See Chapter 11 section on G100.	
504.4 Egress doors	The means of egress doors in the storm shelter envelope shall be determined based upon the occupant load for the normal occupancy of the space in accordance with the applicable code. The number of doors shall also comply with Section 603. Where the applicable code requires only one means of egress door from the storm shelter, the storm shelter shall also provide an emergency escape opening in accordance with Section 504.5 or an overhead hatch accessed by an emergency stair, ladder or alternating tread device in accordance with Section 506.	The normal occupancy of the space requires multiple egress doors. An emergency escape opening shall not be required.	
508.2 Design information signage	All storm shelters shall have a sign on or within the storm shelter with all of the following: 1. The design occupant capacity. 2. The storm type. 3. The design wind speed. 4. The edition of the ICC 500 used for the design. 5. The name of the manufacturer or builder of the storm shelter.	See code plan for location of required signage. Signage shall include the information listed.	
508.3 Exterior directional signage	Where the storm shelter serves the general public, exterior directional signage is required to direct intended occupants to the storm shelter.	See code plan for location of required signage. Signage shall include the information listed.	
508.6 Entry signage	Signage indicating "Tornado Shelter," or "Hurricane Shelter," and appropriate symbols as applicable, shall be installed on the outside of the storm shelter, adjacent to every access opening intended to provide entry for occupants into the storm shelter.	See code plan for location of required signage. Signage shall include the information listed.	
508.7 Perimeter signage	Signs shall be installed inside of the storm shelter adjacent to every access or egress opening, which access nonprotected areas located outside of the storm shelter. For example, signage indicating "Notice: Now leaving the Tornado Shelter," or "Notice: Now leaving the Hurricane Shelter."	See code plan for location of required signage. Signage shall include the information listed.	
Chapter 6: Fire Safety			
602.1 Fire protection system	Fire protection systems shall be provided within the storm shelter where required by the applicable code for the normal use of the space. These systems are not required to remain functional for the design storm event and minimum period of shelter occupancy (24 hours for hurricane shelters, 2 hours for tornado shelters) or to be protected from the wind load and impact requirements of Chapter 3 or the flood-resistance requirements of Chapter 4.	Fire protection systems shall be required and shall be provided. See fire protection sheets for additional information.	
603.1 Fire separation	Walls or horizontal assemblies between community storm shelters and other host building areas shall be fire barriers or horizontal assemblies with a minimum fire-resistance rating of 2 hours constructed in accordance with the applicable code. Exception 4: The means of egress is designed in accordance with the applicable code for the design occupant capacity, the storm shelter has at least two egress doors and at least 50 percent of the total required capacity for the means of egress from the storm shelter is directly to the exterior of the building.	See code plan for location of required fire-resistance rated construction.	
604.1 General	A fire extinguisher shall be required within each story of all community storm shelters.	See code plan for location of fire extinguishers.	
Chapter 7: Storm Shelter Essential Features and Accessories			
702.3 Table, Required water closet and lavatories for tornado shelters	Community, design occupant capacity < 50 Water closets = 1 Lavatories = 0	See 702.3.1 on this sheet for more information. Provide chemical toilet.	
702.3.1 Water closets and lavatories	Water closets and lavatories shall be either permanent plumbing fixtures installed within the tornado shelter, or temporary water closets or lavatories, such as chemical toilets or other means approved by the authority having jurisdiction.	One (1) chemical toilet shall be provided.	
702.4.1 Table, Venting area required for tornado shelters	Community, design occupant capacity ≥ 50 = 6 inches per occupant	See mechanical sheets for ventilation information.	
702.4.2 Mechanical ventilation	Tornado shelters that rely on mechanical ventilation shall be provided with the minimum mechanical ventilation rate of required outdoor air at a minimum rate of 5 cubic feet per minute per occupant for the design occupant capacity. The mechanical ventilation system shall be connected to a standby power system.	See mechanical sheets for ventilation information.	
702.5 Standby power	Where required by Section 702.4 or 702.8, community tornado shelters shall be provided with a standby power system. The standby power system shall support occupied storm shelter areas and occupant support areas.	See mechanical and electrical sheets for standby power system information.	
702.5.2 Duration	The standby power system shall be designed to provide continuously the required output capacity for a minimum of 2 hours.	See mechanical and electrical sheets for standby power system information.	
702.8 Standby lighting	Community tornado shelters shall be provided with a standby lighting system. The standby lighting system shall provide illumination levels of not less than 1 foot-candle at the walking surface in occupied storm shelter areas and occupant support areas. The standby lighting system shall be connected to a standby power system.	See electrical sheets for standby power system information.	
702.9 First aid kit	A Class A first aid kit complying with ANSI/ISEAI Z308.1 shall be supplied in all community tornado shelters.	See storm shelter code plan on sheet G101 for location of first aid kit.	

106.2.1 DESIGN INFORMATION

NUMBER	REQUIRED INFORMATION	INFORMATION PROVIDED
1	Type of storm shelter: residential or community and tornado, hurricane or a combination of both.	Community, tornado.
2	Use of community storm shelter: use by the general public, building occupants or a combination of both.	Community storm shelter is to be used by building staff: sheriff department and 911 dispatch.
3	A statement that the design conforms to the provisions of the ICC 500 Standard for the Design and Construction of Storm Shelters, with the edition year specified and to the FEMA Funding Critera of FEMA P-361, with the edition year specified.	This design shall conform to ICC 500 (2020).
4	The storm shelter design wind speed, VT, VH, or both mph (m/s).	Vult = 250 mph
5	The wind exposure category (indicate all where more than one is used).	Exposure category C
6	The internal pressure coefficient Gcpi.	± 0.55
7	The topographic factor, Kzt.	1.0
8	The directionality factor, Kd.	1.0
9	Design wind pressures and their applicable zones with dimensions needed for the specification of the components and cladding of the storm shelter envelope, psf (kN/m2).	See S001 for additional information. a= 3.0' Walls (200 SF)= 200 PSF Doors (20 SF)= 240 PSF Roof uplifts: Beams= (100)= 320 PSF Roof Connections (10 SF)= 390 PSF
10	Where the storm shelter is subject to the requirements of Section 402.1, a statement that the storm shelter has or has not been constructed in accordance with Chapter 4.	The project site is not located in a special flood hazard zone. See Civil
11	Where the storm shelter is subject to the requirements of Section 402.1, the minimum elevation of the lowest floor required by the authority having jurisdiction for the location where the storm shelter is installed; the base flood elevation, 500-year flood elevation and storm surge flood elevation where applicable; and the storm shelter floor elevation. Where the National Hurricane Center's Sea, Lake and Overland Surgers from Hurricanes (SLOSH) or other approved source is utilized for data, the construction documents shall indicate the version, date and the source of the maps.	Lowest storm shelter floor elevation - ELEV 719.0,
12	Documentation showing that components of the storm shelter envelope will meet the static and cyclic pressure and impact test requirements identified in Chapters 3 and 8.	Compliance shall be demonstrated via submittals related to the different components of the storm shelter envelope. See individual specification sections for requirements related to specific components.
13	A floor plan drawing or image indicating location of the storm shelter on a site or within a building or facility; including a drawing or image indicating the entire facility.	See code plan sheets and cover sheet.
14	A storm shelter section or elevation indicating the height of the storm shelter relative to the finished grade, finished floor and the host building, where applicable.	See A400 and S201.
15	The lowest storm shelter floor elevation and corresponding datum, except for residential tornado shelters outside of special flood hazard areas.	Lowest storm shelter floor elevation - ELEV 719.0
16	The design occupant capacity.	39 occupants (including 1 wheelchair)
17	Calculations for the assigned usable floor area, in square feet.	200 square feet
18	Calculations for the venting area providing and the locations in the storm shelter.	39 occupants * 5 CFM/occupant = 195 CFM
19	Calculations for the number of sanitation facilities for community storm shelter.	1 water closet required for less than 50 occupants; chemical toilet provided. no lavatory required;
20	Minimum foundation capacity requirements including foundation thickness, steel reinforcement and concrete cover.	Concrete grade beams on geopiers per structural sheets.
21	Storm shelter installation requirements, including anchor location, minimum edge and end distance and minimum required capacity for all post-installed anchors.	N/A
22	For hurricane shelters, the rainfall rate of the roof primary drainage system.	N/A
23	For hurricane shelters, the rainfall rate of the roof secondary (overflow) drainage system where required.	N/A
24	For hurricane shelters, the rainwater drainage design rainfall rate for facilities subject to rainwater impoundment.	N/A

SIGN TYPES

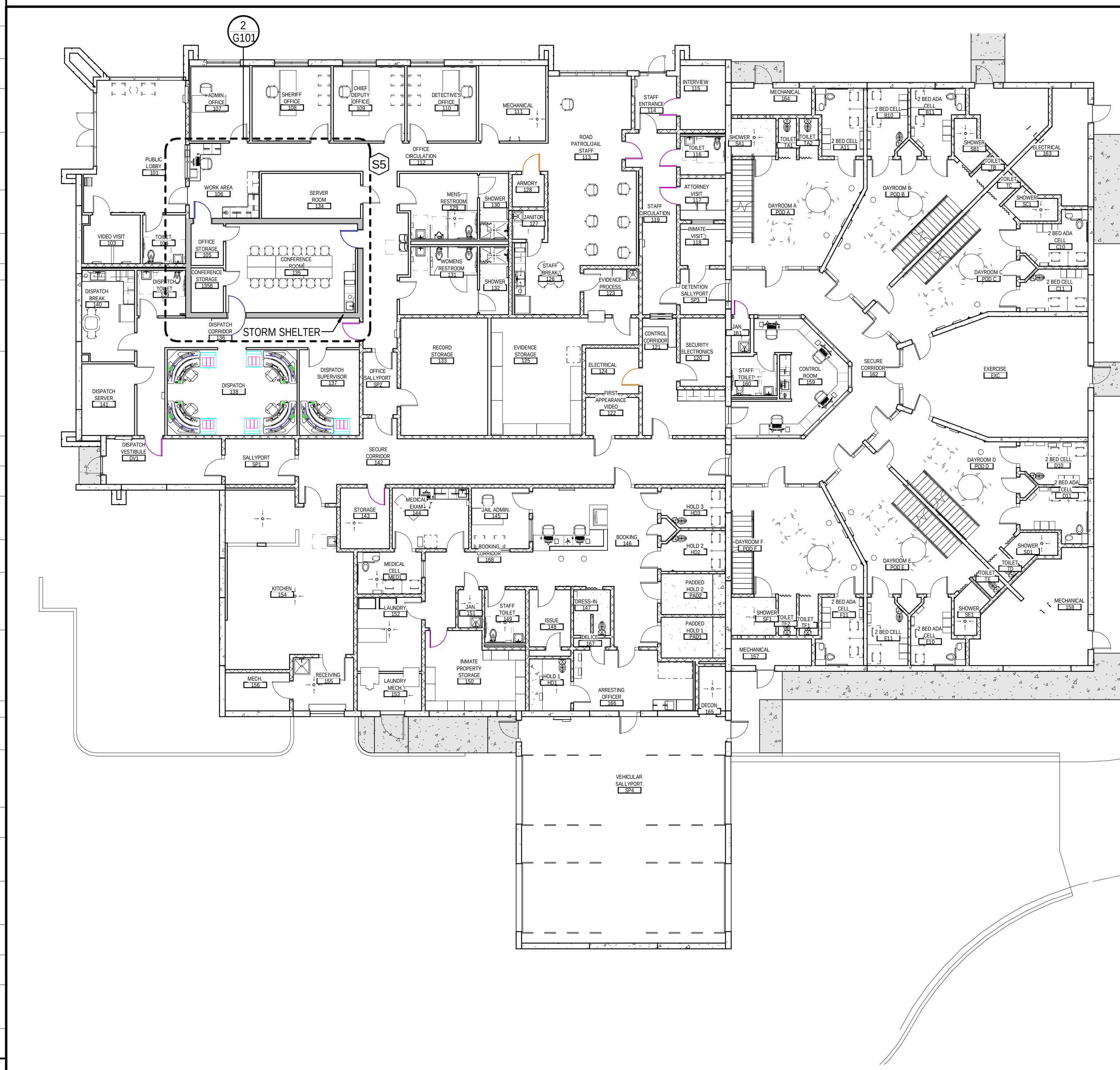


SIGNAGE GENERAL NOTES

1. ALL SIGNAGE TO BE INSTALLED AT HEIGHTS THAT MEET ADA COMPLIANCE. SEE ADA 2010, SECTION 703 FOR ADDITIONAL INFORMATION.
   TACTILE CHARACTERS = 48" MIN. AND 60" MAX. A.F.F.
   VISUAL CHARACTERS = 40" MIN. A.F.F.
2. ALL STORM SHELTER SIGNAGE TO BE INSTALLED IN ACCORDANCE WITH ICC 500-2020. SEE SECTION 508 FOR ADDITIONAL INFORMATION.
3. ALL STORM SHELTER SIGNAGE TO BE INSTALLED IN ACCORDANCE WITH FEMA P-361. SEE SECTION B5.2.8 FOR ADDITIONAL INFORMATION.

SIGN MATERIAL	TEXT / SYMBOL	BRAILLE	ATTACHMENT
.25" Acrylic (Square edge) Pantone Match to Sherwin Williams Foggy Day SW6235	Applied Raised Profile (Tactile) SansSerif Black (Matte)	1/32" Raised Braille Pantone Match to Sherwin Williams Gossamer Veil SW9165	Walls - Vinyl Foam Tape Ceiling - Hang from (2) hooks, one at each end of sign

4

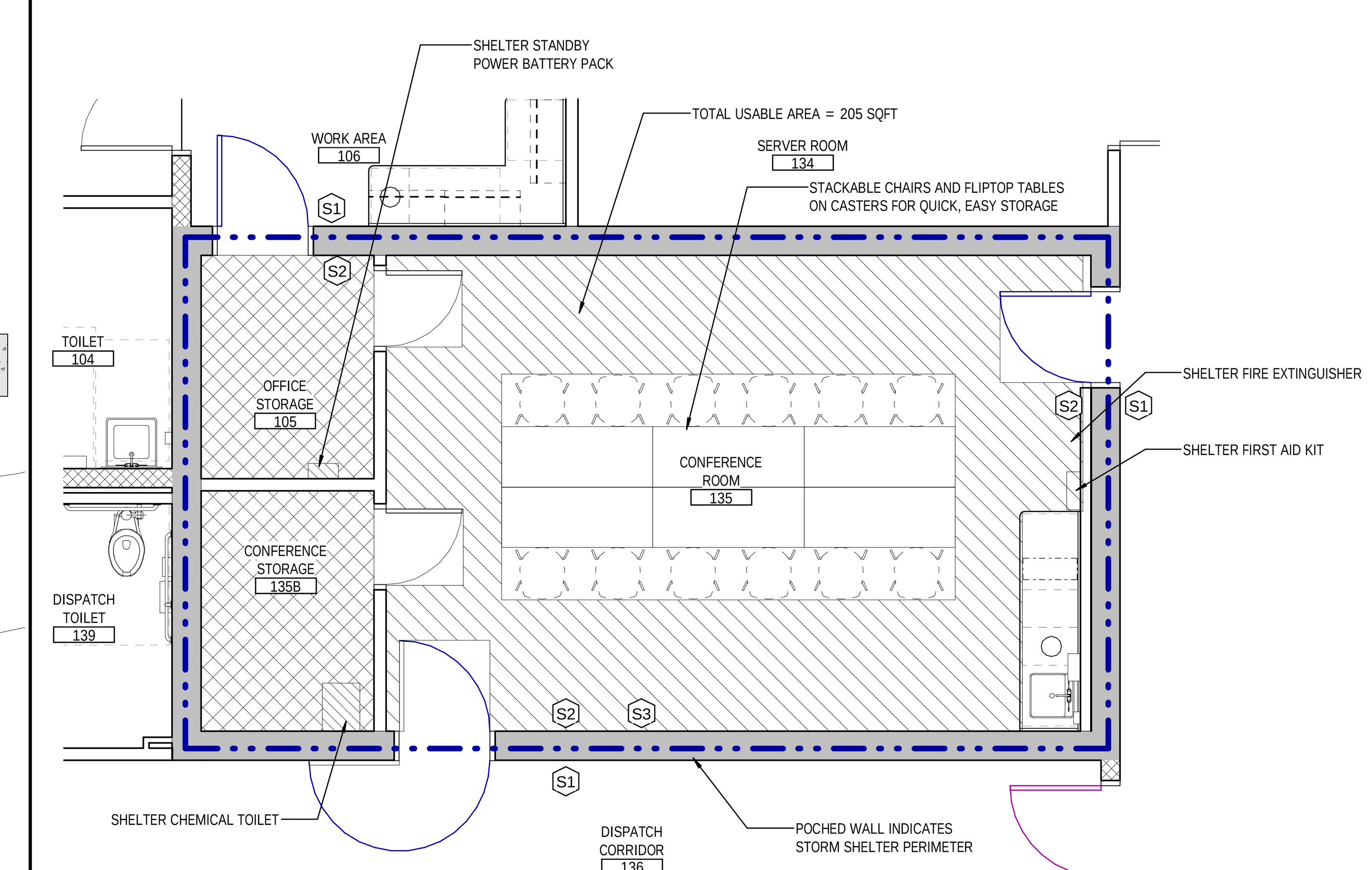


1 01 - FIRST FLOOR STORM SHELTER CODE PLAN
1/16" = 1'-0" | A2/A151
SCALE: 1/16" = 1'-0"

AREA LEGEND

ACCESSORY SHELTER AREA

USABLE SHELTER AREA



Refer to sheet G100 for Code Plan Legend and linetypes

2 01 - ENLARGED STORM SHELTER CODE PLAN
1/4" = 1'-0" | 1/G101
SCALE: 1/4" = 1'-0"

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KLINGNER ARCHITECT PROJECT #
22-4046
Date: 03/01/2024

	Issue	Date
2	Addendum 02	03-20-2024
4	Addendum 04	04-04-2024

Drawn by: Author

STORM SHELTER CODE PLAN

G101

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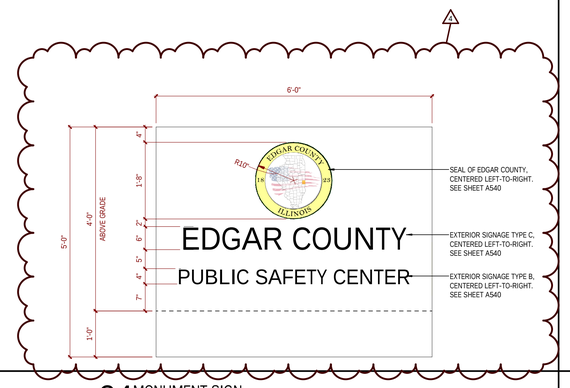
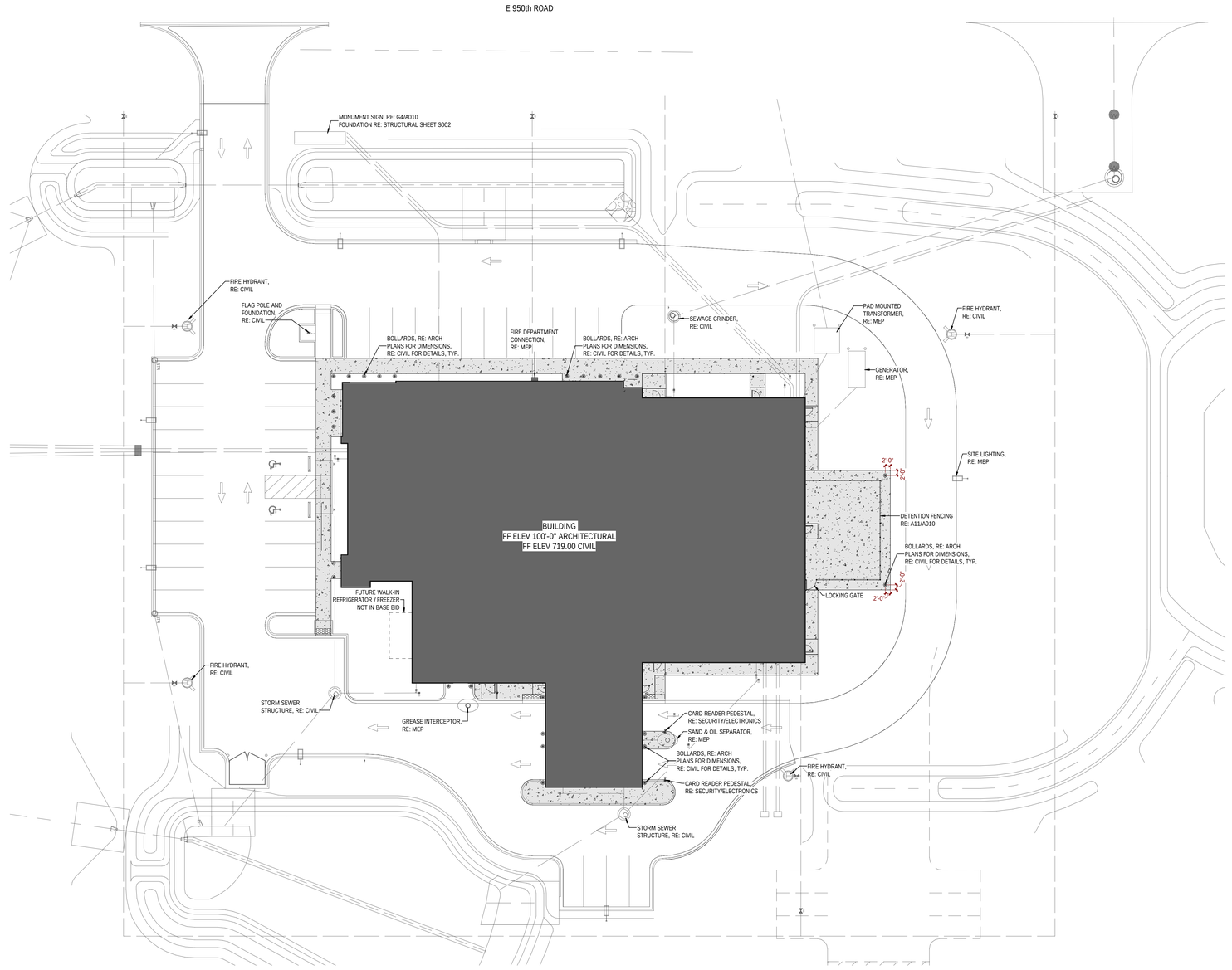
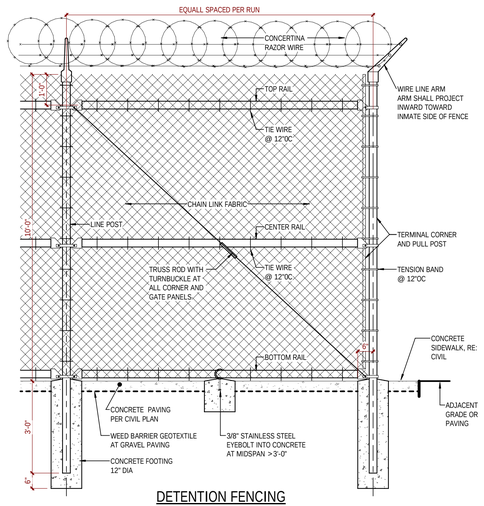


G4 MONUMENT SIGN
3/4" = 1'-0" |





DETENTION FENCING

A11 DETENTION FENCING
1/2" = 1'-0" |

0 20' 40'
SCALE: 1" = 20'

A3 ARCHITECTURAL SITE PLAN
1" = 20'-0" | A2/A151

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KLINGNER ARCHITECT PROJECT # 22-4046
Date: 03/01/2024

	Issue	Date
4	Addendum 04	04-04-2024

Drawn by: Author

ARCHITECTURAL SITE PLAN

A010

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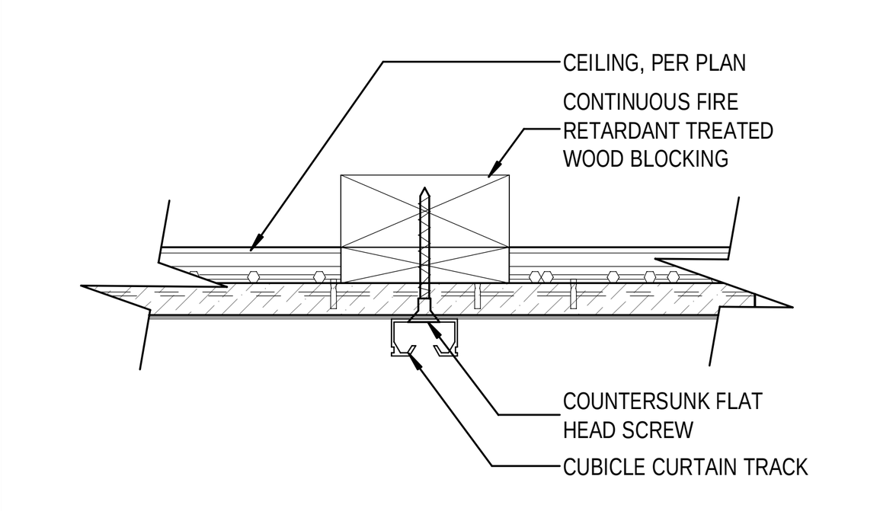
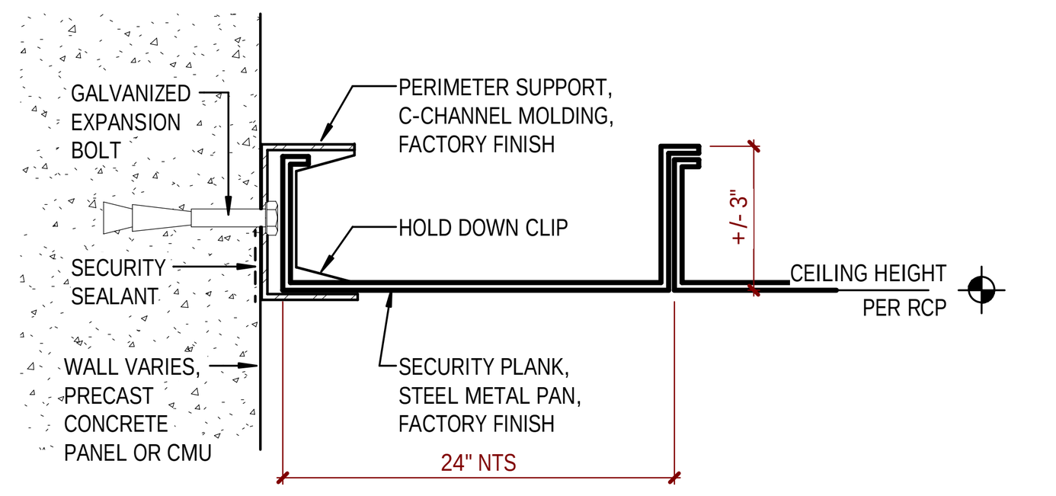
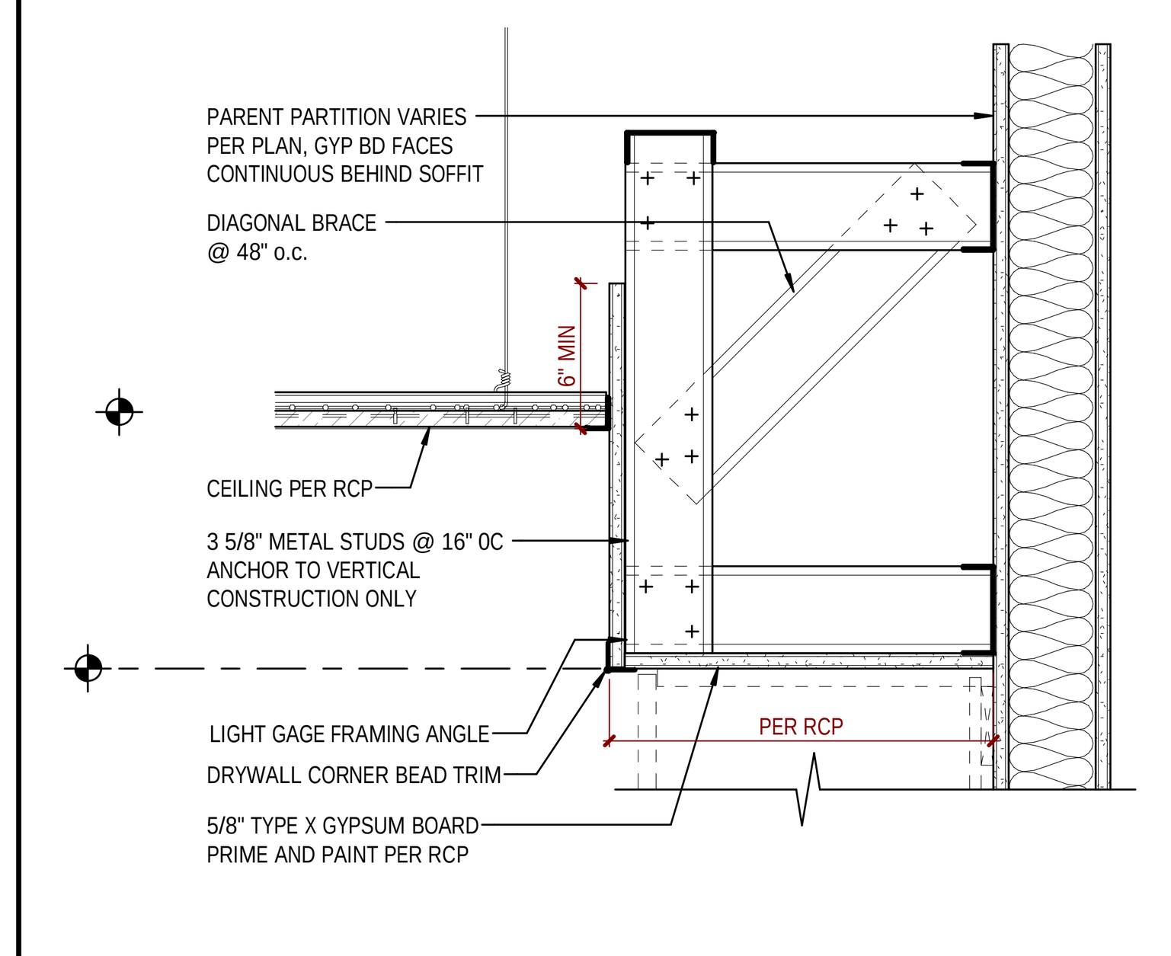


H11 CUBICLE CURTAIN TRACK
3" = 1'-0" |



H10 SECURITY PLANK CEILNG AT WALL
3" = 1'-0" | A6/A431



H8 GYP BD SOFFIT @ WALL
1 1/2" = 1'-0" | A9/A200

MATERIALS LEGEND - CEILING

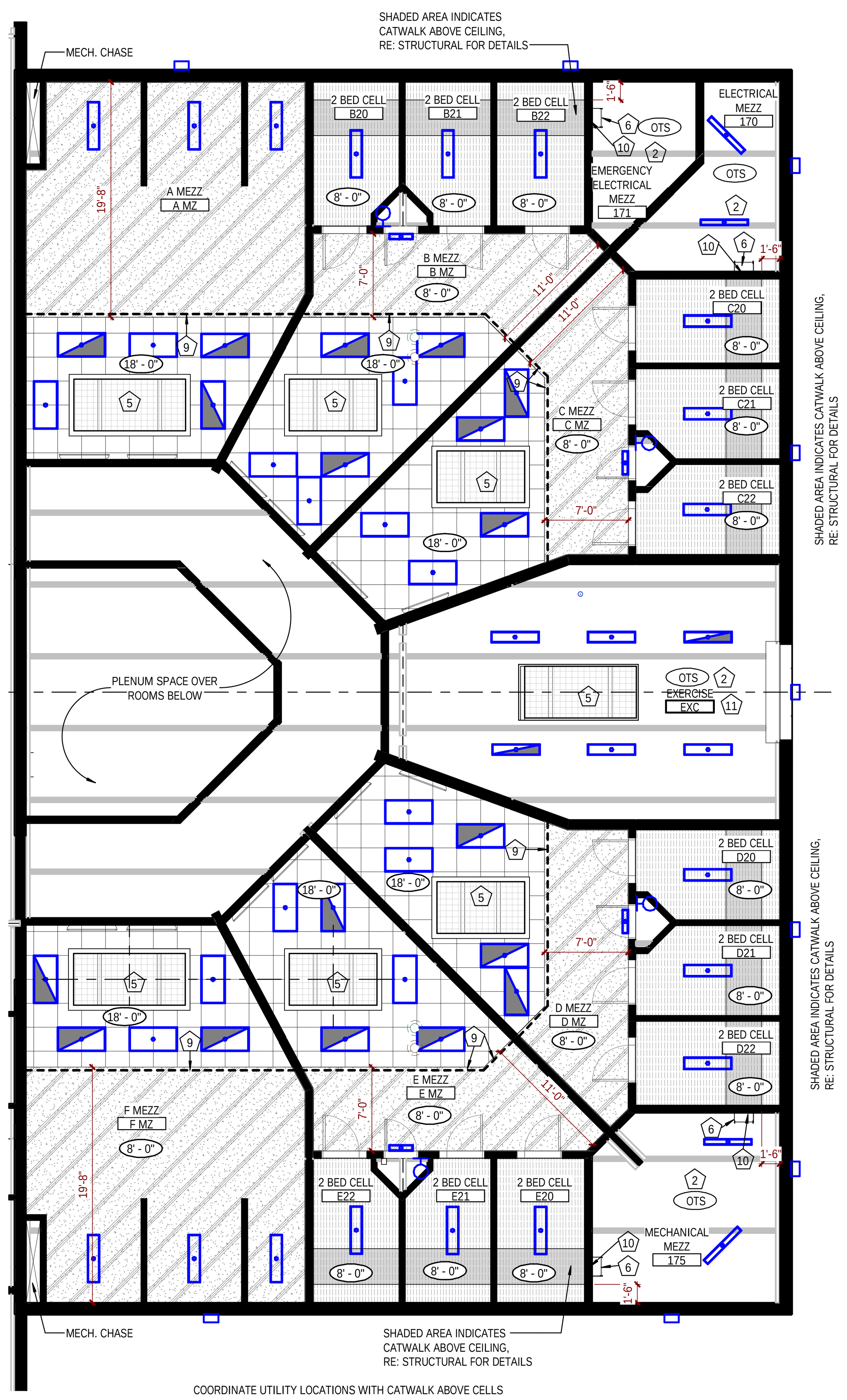
MATERIAL	CODE	MANUFACTURER	MODEL/ PATTERN	COLOR	SIZE	NOTES
CEILING						
ACOUSTICAL CEILING TILE	ACT1	ARMSTRONG	FINE FISSURED HIGH NRC 1756	WHITE	2'-0" x 2'-0"	15/16" WHITE GRID; HOLD DOWN CLIPS W/IN SECURE PERIMETER
	ACT2	ARMSTRONG	RANDOM FISSURED 2908	WHITE	2'-0" x 2'-0"	15/16" WHITE GRID; HOLD DOWN CLIPS W/IN SECURE PERIMETER
	ACT3	ARMSTRONG	CORTEGA SQUARE LAY-IN 769	TECH BLACK (BL)	2'-0" x 4'-0"	15/16" TECH BLACK GRID; HOLD DOWN CLIPS W/IN SECURE PERIMETER
GYPSUM BOARD	GB	--	--	--	--	--
PAINT						
PAINT (EP# = DENOTES EPOXY PAINT VERSION OF COLORS LISTED HERE)	P1	SHERWIN WILLIAMS	--	REPOSE GRAY SW7015	--	--
	P2	SHERWIN WILLIAMS	--	ICE CUBE SW6252	--	--
	P3	SHERWIN WILLIAMS	--	FELTED WOOL SW9171	--	--
	P4	SHERWIN WILLIAMS	--	FOGGY DAY SW6235	--	--
	P5	SHERWIN WILLIAMS	--	URBANE BRONZE SW7048	--	--
	P6	SHERWIN WILLIAMS	--	CEILING WHITE	--	GYP BD CEILINGS
OTHER ABBREVIATIONS						
NO FINISH	NF					
PATCH TO MATCH	PTM					
OPEN TO STRUCTURE	OTS					

GENERAL RCP NOTES

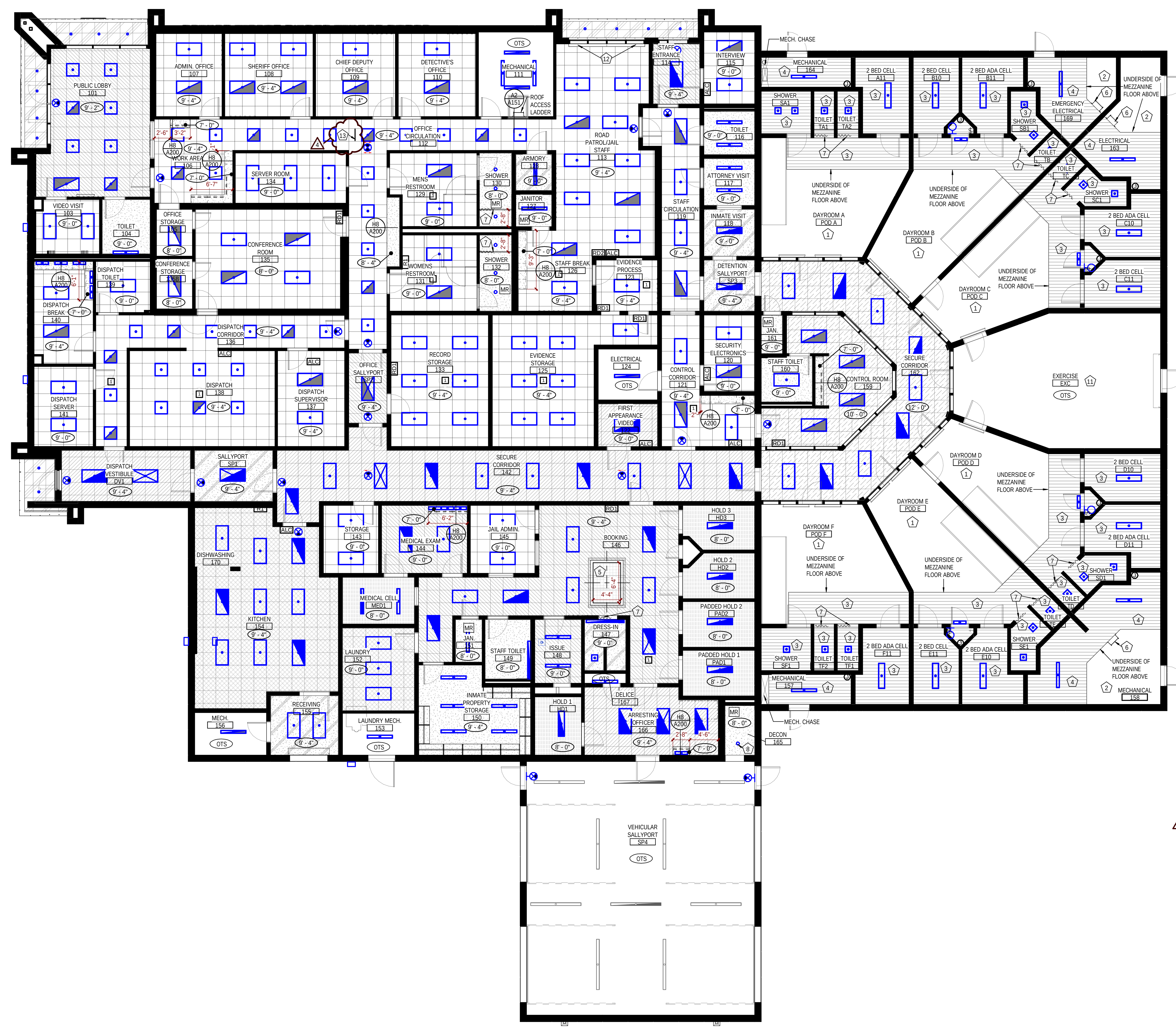
1. PATCH EXISTING CEILINGS SHOWN TO REMAIN, THAT ARE DAMAGED BY WORK PERFORMED ABOVE CEILING, INCLUDING WORK PERFORMED BY OTHER TRADES SUCH AS, BUT NOT LIMITED TO, INSTALLATION AND DEMOLITION OF UTILITIES. RETURN CEILING SURFACE TO ITS ORIGINAL CONDITION. FINISH TO MATCH ORIGINAL AND/OR PROVIDE NEW FINISH WHERE SCHEDULED.
2. REFER TO REFLECTED CEILNG PLAN FOR REQUIRED CEILING HEIGHTS. WHERE CEILING HEIGHTS ARE NOT OTHERWISE IDENTIFIED OR REQUIRED, FINISH CEILING HEIGHT SHALL BE 9'-0" AFF.
3. CENTER ALL SPRINKLER HEADS, DEVICES, LIGHTING, CLOCKS, EXIT SIGNS, ETC... WITHIN CEILING PANELS, UNLESS NOTED OTHERWISE.
4. CENTER ALL SUSPENDED ACT CEILING GRIDS WITH-IN THE ROOM UNLESS NOTED OTHERWISE.
5. ALL SOFFITS ABOVE CASEWORK SHALL BE 1'-4" DEEP, UNLESS NOTED OTHERWISE, OR AS REQUIRED TO ACCOMODATE DEEPER CASEWORK.
6. ALL GYPSUM BOARD SOFFITS TO BE PAINTED TO MATCH WALL ON WHICH THEY OCCUR, UNLESS NOTED OTHERWISE. SEE RCP AND FINISHES SHEETS FOR P# FOR ACCENT PAINT LOCATIONS.
7. PENETRATIONS THROUGH ACT CEILING PANELS AT EXPOSED HANGERS, PIPES, WIRING OR OWNER EQUIPMENT MASTS SHALL BE FINISHED WITH METAL OR PLASTIC ESCUTCHEONS TO MATCH COLOR OF CEILING.
8. SPRINKLER CONTRACTOR SHALL COORDINATE SPRINKLER LOCATIONS WITH WALL HUNG AND CEILING HUNG EQUIPMENT TO PROVIDE PROPER COVERAGE.

RCP SYMBOLS LEGEND

- GB: GYP BD CEILING / SOFFIT
- PRE-FINISHED STEEL PLANK SECURITY CEILING
- UNDERSIDE OF MEZZANINE FLOOR ABOVE, PAINTED (EP6) UNLESS NOTED OTHERWISE
- ACT1: 2' x 2' ACOUSTICAL CEILING TILE & GRID (NO HOLD DOWN CLIPS)
- ACT1: 2' x 2' ACOUSTICAL CEILING TILE & GRID (WITH HOLD DOWN CLIPS)
- ACT2: 2' x 2' VINYL FACED ACOUSTICAL CEILING TILE & GRID USE HOLD DOWN CLIPS WITHIN SECURE PERIMETER (W/ HIGH HUMIDITY GRID)
- ACT3: 2' x 2' BLACK ACOUSTICAL CEILING TILES & GRID (WITH HOLD DOWN CLIPS WITHIN SECURE PERIMETER)
- BENT STEEL PLATE SECURITY SOFFIT PAINTED TO MATCH CEILING IN ROOM (P6)
- GB: SECURITY CEILING - METAL STUDS, SECURITY MESH, AND 5/8" IMPACT RESISTANT GYP. BD. WITH EPOXY PAINT (EP6)
- GB: SECURITY CEILING - METAL STUDS AND 5/8" IMPACT RESISTANT GYP. BD. WITH EPOXY PAINT (EP6)
- MR — GB: MOISTURE RESISTANT GYP BD CEILING / SOFFIT WITH EPOXY PAINT (EP5)
- AD — CEILING ACCESS DOOR
- OR — DIFFUSER - RETURN, RE: MECHANICAL
- OR — DIFFUSER - SUPPLY, RE: MECHANICAL
- LINEAR DIFFUSER - SUPPLY, RE: MECHANICAL
- ROUND DIFFUSER - SUPPLY, RE: MECHANICAL
- 2' x 2' LIGHT FIXTURE, RE: ELECTRICAL
- 2' x 4' LIGHT FIXTURE, RE: ELECTRICAL
- CORNER MTD. SECURITY LED, RE: ELECTRICAL
- CAN LIGHT, RE: ELECTRICAL
- LINEAR LIGHT, RE: ELECTRICAL
- J — CEILING MOUNTED JUNCTION BOX
- MOISTURE RESISTANT SECURITY LED
- EXIT SIGN



B12 02 -MEZZANINE FLOOR - RCP
1/8" = 1'-0" | C9/A300



A9 01 - FIRST FLOOR - RCP
1/8" = 1'-0" | A2/A151

CEILING PLAN KEYNOTES

1	REFER TO MEZZANINE CEILING FOR THIS ROOM
2	NO CEILING; OPEN TO STRUCTURE ABOVE
3	PAINT UNDERSIDE OF MEZZANINE FLOOR (EP5)
4	DO NOT PAINT UNDERSIDE OF MEZZANINE FLOOR IN THIS ROOM
5	SKYLIGHT; PAINT ALL GYPSUM BOARD & EXPOSED FACES OF STEEL ANGLES AND BARS (EP6)
6	ACCESS LADDER, RE: STRUCTURAL
7	CEILING MOUNTED CURTAIN TRACK, RE:A230 FOR DETAIL.
8	CENTER LIGHT FIXTURE IN GYP BD CEILING/SOFFIT.
9	DASHED LINE INDICATES LOCATION OF SECURITY MESH, RE: WALL SECTIONS
10	DETENTION ACCESS PANEL, RE: E5/A531
11	PAINT OPEN TO STRUCTURE CEILING IN EXERCISE (EP1)
12	MANUAL ROLLER SHADE POCKET AT LOCATION(S) INDICATED. SEE WALL SECTION DETAIL FOR MORE INFORMATION.
13	REFER TO SIGNAGE INFORMATION ON G101 FOR CEILING MOUNTED STORM SHELTER SIGN TYPE 'S5'.

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KLINGNER ARCHITECT PROJECT #
22-4046

Date: 03/01/2024

#	Issue	Date
4	Addendum 04	04-04-2024

Drawn by: HAB

REFLECTED CEILING PLANS

A200

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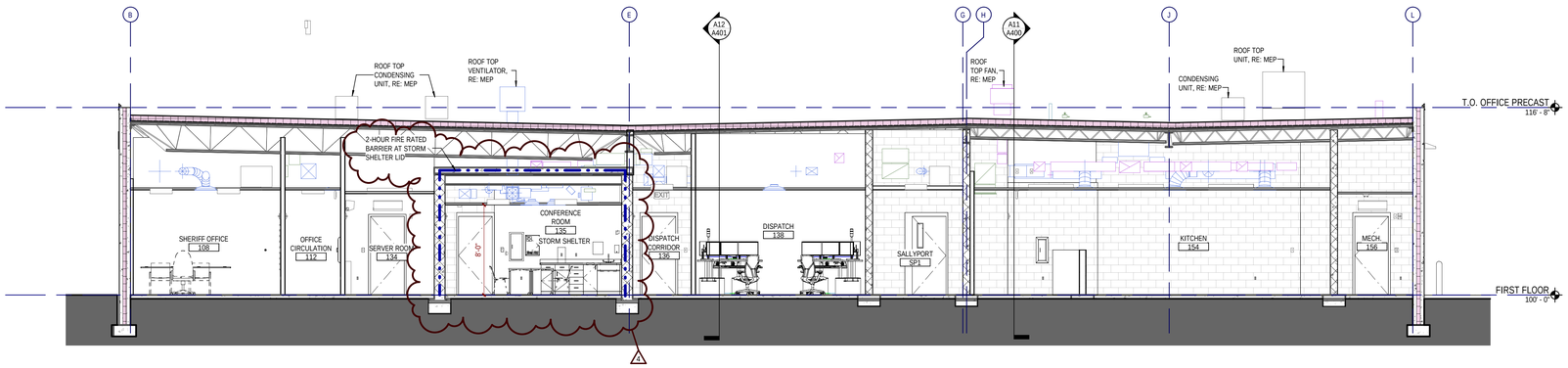
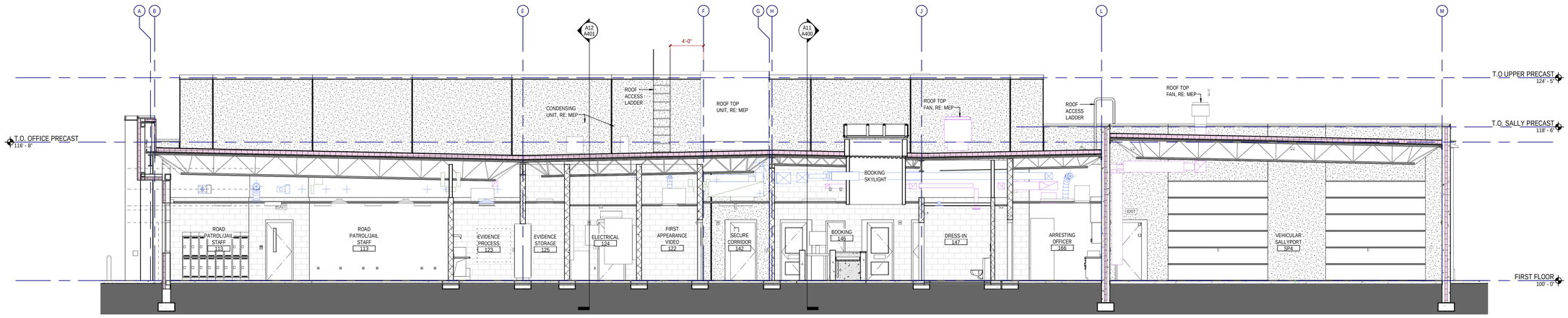
GENERAL NOTES

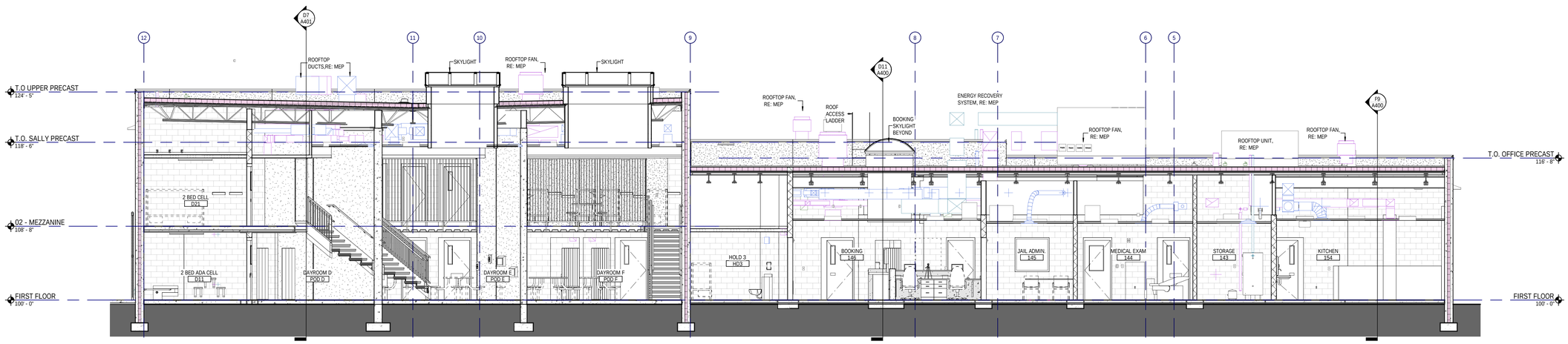
1. REFER TO G130 FOR PARTITION TYPES AND PARTITION HEIGHTS



F9 OFFICES BUILDING SECTION N-S
3/16" = 1'-0" | A5/A102



D11 JAIL AND OFFICES BUILDING SECTION N-S
3/16" = 1'-0" | A5/A102



A11 JAIL BUILDING SECTION E-W
3/16" = 1'-0" | A5/A102

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KLINGNER ARCHITECT PROJECT #
22-4046
Date: 03/01/2024

⚠	Issue	Date
4	Addendum 04	04-04-2024

Drawn by: LES

BUILDING SECTIONS

A400

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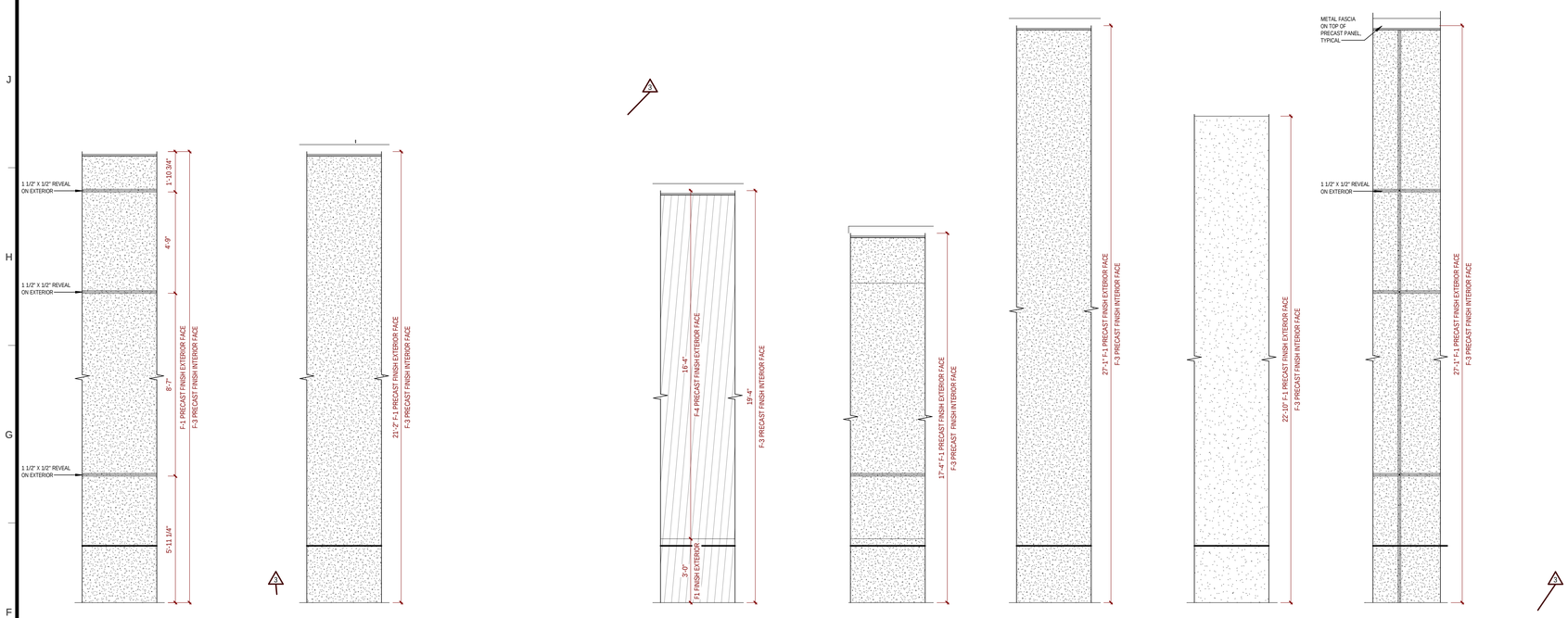


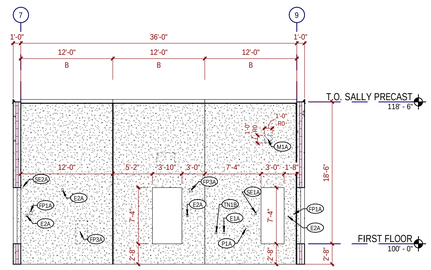
F12 PANEL TYPE A 3/8" = 1'-0" | F11 PANEL TYPE B 3/8" = 1'-0" | F9 PANEL TYPE D 3/8" = 1'-0" | F8 PANEL TYPE E 3/8" = 1'-0" | F7 PANEL TYPE F 3/8" = 1'-0" | F6 PANEL TYPE G 3/8" = 1'-0" | F4 PANEL TYPE H 3/8" = 1'-0"

PRECAST PANEL KEYNOTES

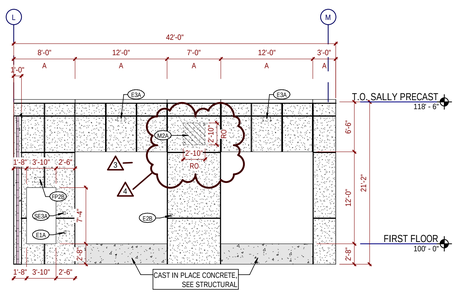
#	DESRIPTION
E1A	RECESSED BOX & CONDUIT FOR RECEPTICAL
E1B	RECESSED BOX & CONDUIT FOR RECEPTICAL (OTHER SIDE)
E2A	RECESSED BOX & CONDUIT FOR SWITCH
E2B	RECESSED BOX & CONDUIT FOR SWITCH (OTHERSIDE)
E3A	RECESSED BOX & CONDUIT FOR LIGHT FIXTURE
E4A	RECESSED BOX & CONDUIT FOR THERMOSTAT
E4B	RECESSED BOX & CONDUIT FOR THERMOSTAT
E5A	TECH CONDUITS
E6B	RECESSED BOX & CONDUIT FOR DISCONNECT SWITCH
FP1A	RECESSED BOX & CONDUIT FOR PULL STATION
FP1B	RECESSED BOX & CONDUIT FOR PULL STATION (OTHER SIDE)
FP2B	RECESSED BOX & CONDUIT FOR EXIT SIGN (OTHER SIDE)
FP3A	RECESSED BOX & CONDUIT FOR HORN/STROBE
FP3B	RECESSED BOX & CONDUIT FOR HORN/STROBE (OTHER SIDE)
FP4A	3" OPENING FOR SIAMESE FDC
FP5A	RECESSED BOX & CONDUIT FOR ELECTRIC BELL
M1A	OPENING FOR DUCT
M2A	LOUVER OPENING
M3A	OPENING FOR NATURAL GAS LINE
M4A	OPENING FOR SMOKE DAMPER
P1A	RECESSED BOX FOR HYDRANT
P2A	3" OPENING FOR PLUMBING
P3A	6" OPENING FOR PLUMBING
P4A	6" OPENING FOR DOWNSPOUT
P5A	2" OPENING FOR PLUMBING
P6A	xx" OPENING FOR STORM WATER
SE1A	RECESSED BOX & CONDUIT FOR SWITCH
SE2A	RECESSED BOX & CONDUIT FOR CAMERA
SE2B	RECESSED BOX & CONDUIT FOR CAMERA (OTHER SIDE)
SE3A	RECESSED BOX & CONDUIT FOR CARD READER
SE4A	RECESSED BOX & CONDUIT FOR INTERCOM
SE5A	RECESSED BOX FOR PAGING SPEAKER
TN1A	RECESSED BOX & CONDUIT FOR DATA RECEPTICAL
TN1B	RECESSED BOX & CONDUIT FOR DATA RECEPTICAL (OTHER SIDE)

PRECAST KEYNOTE LEGEND

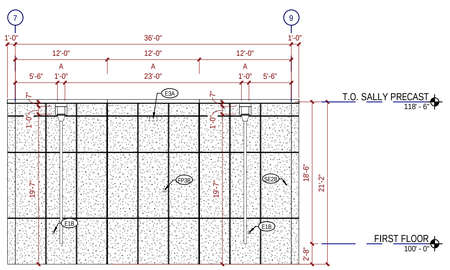
X # Y X = DISCIPLINE
# = ITEM
Y = FACE OF PRECAST



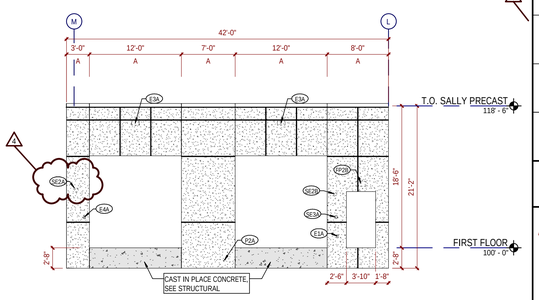
D12 PRECAST ELEVATION - SHERIFF OFFICE 1/8" = 1'-0" | F5/A440



D10 PRECAST ELEVATION - SALLYPORT 1/8" = 1'-0" | A8/A130



D7 PRECAST ELEVATION - SALLYPORT 1/8" = 1'-0" | F5/A440



D4 PRECAST ELEVATION - SALLYPORT 1/8" = 1'-0" | F5/A440

PRECAST FINISH LEGEND:

SEE SPEC 03 45 00 FOR MORE INFORMATION

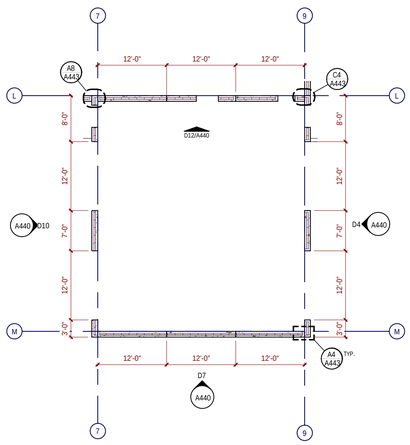
	F-1	LITE SANDBLAST FINISH
	F-2	OMITTED
	F-3	STEEL TROWEL FINISH, SEE NOTE 4.
	F-4	FORMLINER FINISH SEE SHEET A444

PRECAST ELEVATION LEGEND:

PANEL WIDTH
X = PANEL TYPE

PRECAST GENERAL NOTES:

1. BOTTOM OF PRECAST WALL PANELS TO BE MAXIMUM 1-1/2" ABOVE TOP OF FOOTING FOR SHIM SPACE. SEE STRUCTURAL SHEETS.
2. SEE PRECAST DETAILS ON SHEET A443 FOR PANEL JOINT PROFILE, INSULATION, AND FIRE STOP INFORMATION.
3. PRECAST SILLS AT ALL WINDOW AND LOUVER OPENINGS TO SLOPE: SEE WINDOW SHEETS A800-A801.
4. PRECAST WALL PANEL TO BE PAINTED AS NOTED IN FINISH SCHEDULE ON SHEET A900.
5. COORDINATE ALL MEPFT OPENINGS WITH MEPFT SHEETS.
6. THE INFORMATION SHOWN ON THE PRECAST ELEVATIONS REPRESENTS THE INTENT OF THE ARCHITECT AND ENGINEER TO DOCUMENT PENETRATIONS, OPENINGS, JOINTS, AND RECESSED DEVICES WITHIN THE PRECAST CONCRETE PANELS AMONGST ALL OF THE TRADES. THE INFORMATION SHOWN SHALL NOT BE CONSIDERED FINAL OR ALL INCLUSIVE. THE INFORMATION SHOWN DOES NOT RELIEVE THE CONTRACTOR OF THEIR RESPONSIBILITY TO THOROUGHLY CHECK AND CROSS COORDINATE ALL WORK DURING SHOP DRAWINGS- INCLUDING ANYTHING NOT SHOWN ON THESE PRECAST DRAWINGS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO MAKE SURE ANY TRADE ADJUSTMENTS MADE DURING SHOP DRAWING REVIEW ARE ALSO COORDINATED WITH THE PRECAST CONCRETE PANELS.
7. ALL PRECAST WALLS THAT RECEIVE A RUBBER WALL BASE SHALL HAVE ADDITIONAL SEALANT APPLIED WITHIN THE INTERIOR CHAMFER JOINT TO BE FLUSH WITH FACE OF WALL TO THE RUBBER BASE HAS A CONTINUOUS WALL SURFACE FOR ATTACHMENT.
8. ALL INTERIOR PRECAST SURFACES WITHIN THE DETENTION CENTER SHALL HAVE ALL VOIDS AND HOLES LARGER THAN 1/8" FILLED SOLID TO PREVENT INMATES FROM PICKING THE WALL SURFACE.
9. ALL INMATE ACCESSIBLE AREAS SHALL HAVE PICK-PROOF SEALANT. REFER TO SHEET A100, SECURITY PLANS.



F5 PRECAST PANEL KEYPLAN - SALLYPORT 3/32" = 1'-0" | A2/A151

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

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12638 950TH ROAD
PARIS, ILLINOIS 61944

HMN 21003.003

BID & PERMIT

KLINGNER ARCHITECT PROJECT # 22-4046
Date: 03/01/2024

Issue		Date
3	Addendum 03	03-27-2024
4	Addendum 04	04-04-2024

Drawn by: NML

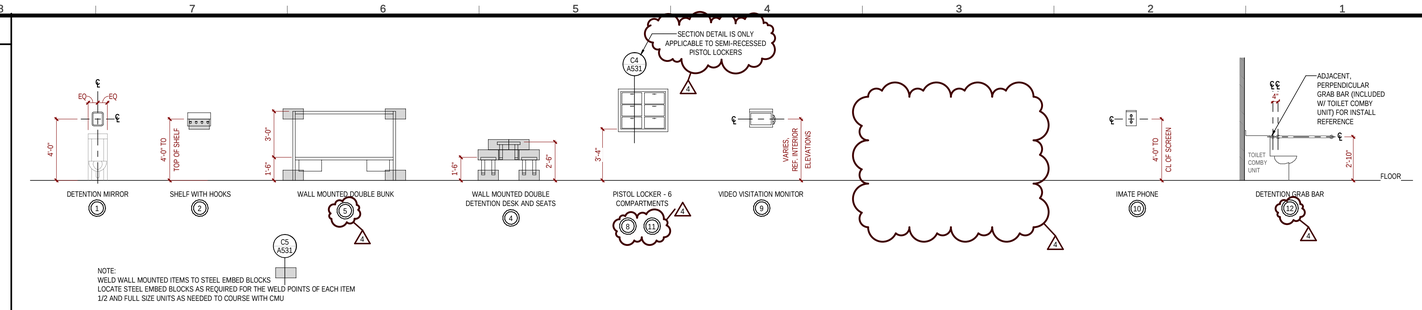
PRECAST WALL PANEL ELEVATIONS - SALLYPORT

A440

4/4/2024 5:15:06 PM

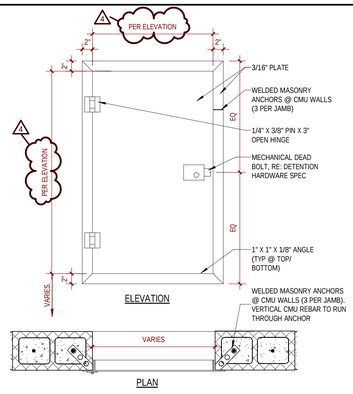
DETENTION EQUIPMENT

CODE	ITEM DESCRIPTION	SPEC SECTION	PROVIDED BY
	<varies>		
1	DETENTION MIRROR	10 2813.63	CFCI
2	SHELF WITH HOOK	10 2813.63	CFCI
4	WALL MOUNTED DOUBLE DETENTION DESK AND SEATS	12 5500	CFCI
5	WALL MOUNTED DOUBLE BUNK	12 5500	CFCI
6	FLOOR MOUNTED FIXED STOOL	12 5500	CFCI
7	EVIDENCE LOCKER (PASS-THRU) - 6 COMPARTMENTS	11 1916	CFCI
8	PISTOL LOCKER (RECESSED) - 6 COMPARTMENTS	11 1916	CFCI
9	VIDEO VISITATION MONITOR	--	CFCI
10	INMATE PHONE	--	OFOI
11	PISTOL LOCKER (SURFACE MOUNTED) - 6 COMPARTMENTS	11 1916	CFCI
12	DETENTION GRAB BAR (42")	10 2813.63	CFCI
13	4-MAN TABLE	12 5500	CFCI
15	6-MAN TABLE	12 5500	CFCI
20	RECESSED CUFF RING	10 2813.63	CFCI
21	SECURITY INTERCOM	RE: MEP	CFCI



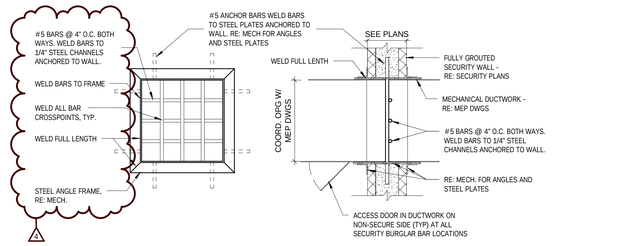
NOTE:
WELD WALL MOUNTED ITEMS TO STEEL EMBED BLOCKS
LOCATE STEEL EMBED BLOCKS AS REQUIRED FOR THE WELD POINTS OF EACH ITEM
1/2 AND FULL SIZE UNITS AS NEEDED TO COURSE WITH CMU

H8 DETENTION INSTALLATION GUIDELINES
1/4" = 1'-0" |



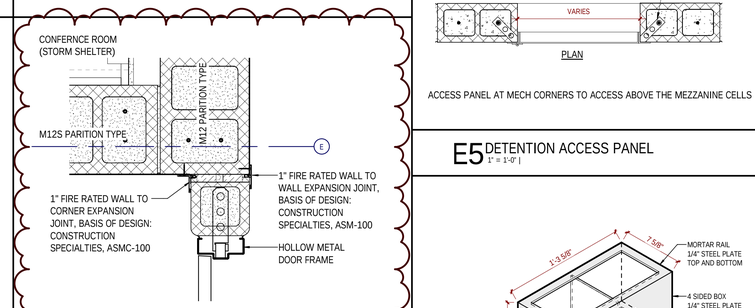
ACCESS PANEL AT MECH CORNERS TO ACCESS ABOVE THE MEZZANINE CELLS

E5 DETENTION ACCESS PANEL
1" = 1'-0" |

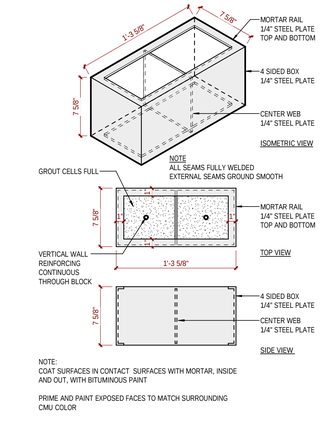


NOTE:
BURGLAR BARS ARE TO BE INSTALLED AT EACH INTERIOR, EXTERIOR WALL, ROOF, FLOOR & DUCT OPENING GREATER THAN 6" IN EITHER DIRECTION. FINAL CONNECTION FOR ANY DUCTWORK TO THE BURGLAR BAR FRAME WILL BE BY DIVISION NO. 23 AT SMALL OPENINGS: ONE ANCHOR PER SIDE MINIMUM, JAMB SIMILAR TO SILL.

E4 BURGLAR BARS
1" = 1'-0" |



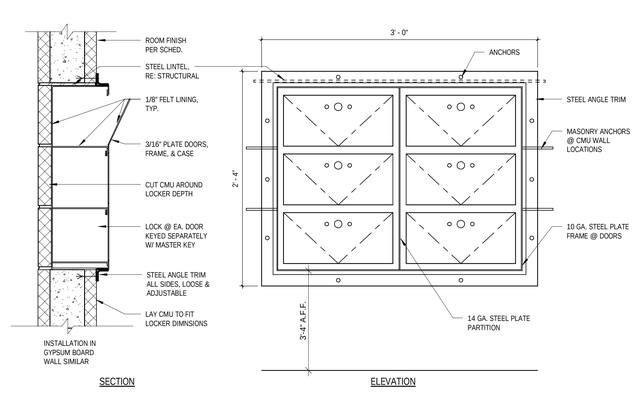
D8 INTERIOR EXPANSION JOINT
1 1/2" = 1'-0" |A5/A102



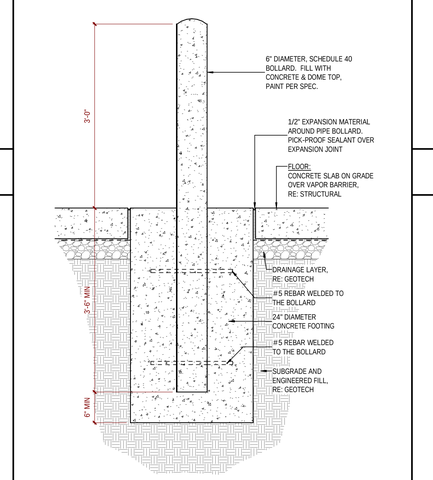
NOTE:
COAT SURFACES IN CONTACT SURFACES WITH MORTAR, INSIDE AND OUT, WITH BITUMINOUS PAINT

PRIME AND PAINT EXPOSED FACES TO MATCH SURROUNDING CMU COLOR

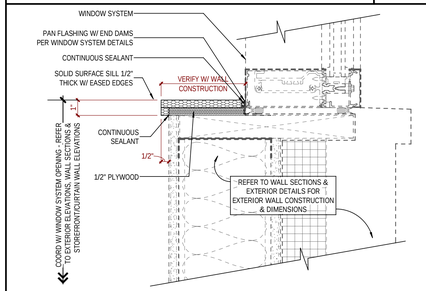
C5 STEEL EMBED BLOCK
1 1/2" = 1'-0" |H8/A531



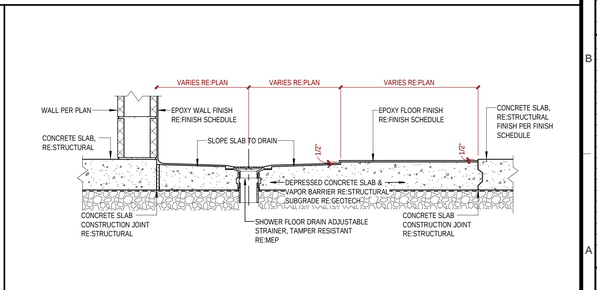
C4 GUN LOCKER DETAIL (SEMI-RECESSED)
1 1/2" = 1'-0" |H8/A531



A8 INTERIOR BOLLARD RECESSED
1" = 1'-0" |



A5 WINDOW SILL - SOLID SURFACE, TYP
3" = 1'-0" |



A3 SHOWER FLOOR
1" = 1'-0" |A5/A102

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7400 W. 110th Street, Suite 200
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KLINGNER ARCHITECT PROJECT # 22-4046

Date: 03/01/2024

Issue	Date
2 Addendum 02	03-20-2024
4 Addendum 04	04-04-2024

Drawn by: Author

DETENTION EQUIPMENT & INTERIOR DETAILS

A531

4/4/2024 5:15:17 PM

INTERIOR SIGNAGE SCHEDULE

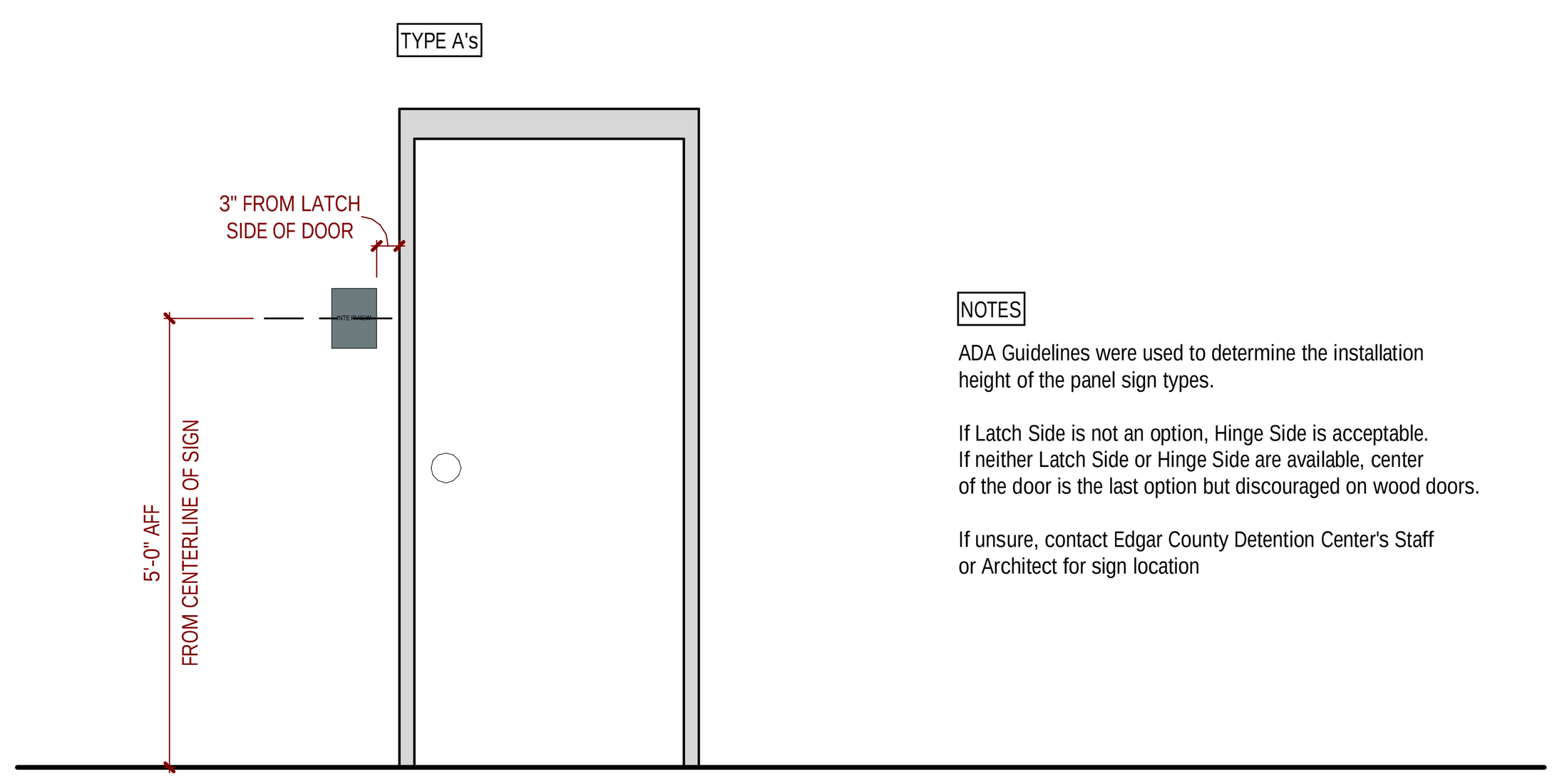
CONFIRM SIGNAGE QUANTITIES WITH EDGAR COUNTY STAFF

Number	Room Name (Per Plan)	Sign Text	Type	Notes
101	PUBLIC LOBBY	B = 'STAFF ONLY BEYOND THIS POINT" C = "EDGAR COUNTY"	B / C	B = ABOVE DOOR FROM LOBBY TO WORK AREA 106; C = CENTERED ON WALL ABOVE WINDOW TO WORK AREA 106 (RE: ELEVATION ON A600)
103	VIDEO VISIT	C = "VV1", "VV2"	A1 / C	A1 = ON WALL NEXT TO DOOR FROM LOBBY; C = CENTERED ON WALL ABOVE VIDEO VISIT MONITORS (RE: ELEVATION ON A600)
104	TOILET		A3	
105	OFFICE STORAGE		F	
107	ADMIN. OFFICE		A1	
108	SHERIFF OFFICE		A1	
109	CHIEF DEPUTY OFFICE		A1	
110	DETECTIVE'S OFFICE		A1	
111	MECHANICAL		F	
113	ROAD PATROL/JAIL STAFF		A1	
115	INTERVIEW		A1	
116	TOILET		A3	
117	ATTORNEY VISIT		A1	
123	EVIDENCE PROCESS		A1	
127	JANITOR		F	
128	ARMORY		A1	
129	MENS RESTROOM		A2	
131	WOMENS RESTROOM		A2	
134	SERVER ROOM		F	
135	CONFERENCE ROOM		A1	
135B	CONFERENCE STORAGE		F	
137	DISPATCH SUPERVISOR		A1	
138	DISPATCH		A1	
139	DISPATCH TOILET		A3	
140	DISPATCH BREAK		A1	
141	DISPATCH SERVER		F	

INFORMATION IN THIS COLUMN TO BE CONFIRMED WITH CLIENT DURING SUBMITTAL REVIEW

TYPICAL PANEL SIGN INSTALLATION HEIGHTS

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

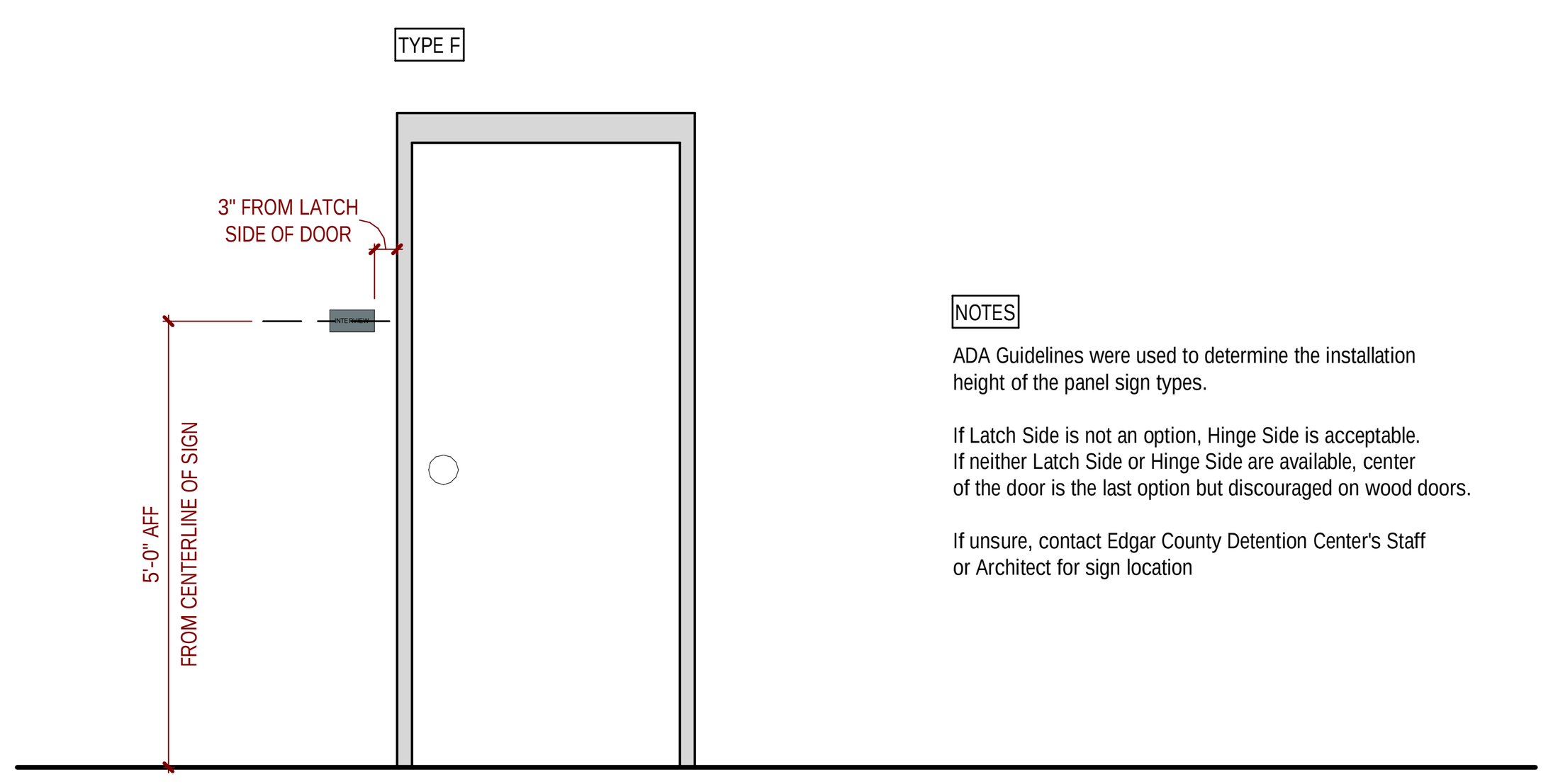


NOTES

ADA Guidelines were used to determine the installation height of the panel sign types.

If Latch Side is not an option, Hinge Side is acceptable.
If neither Latch Side or Hinge Side are available, center of the door is the last option but discouraged on wood doors.

If unsure, contact Edgar County Detention Center's Staff or Architect for sign location



NOTES

ADA Guidelines were used to determine the installation height of the panel sign types.

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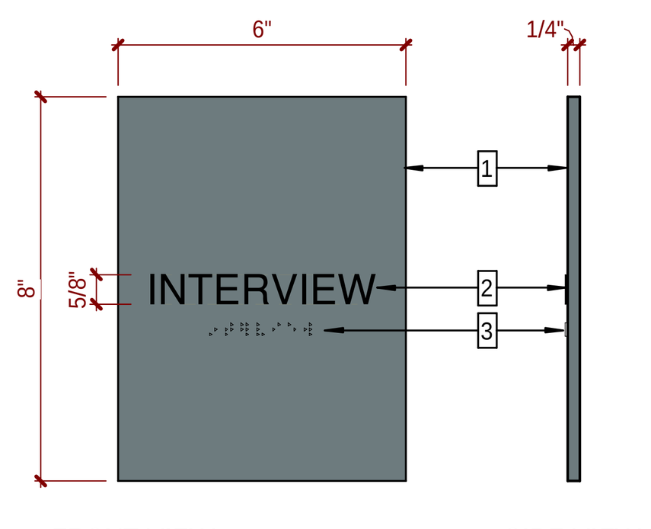
If neither Latch Side or Hinge Side are available, center of the door is the last option but discouraged on wood doors.

If unsure, contact Edgar County Detention Center's Staff or Architect for sign location

PANEL SIGNS - INTERIOR ONLY

SCALE: 3" = 1'-0"

SIGN TYPE A1



QUANTITY / LOCATION
13 - SEE SIGNAGE SCHEDULE

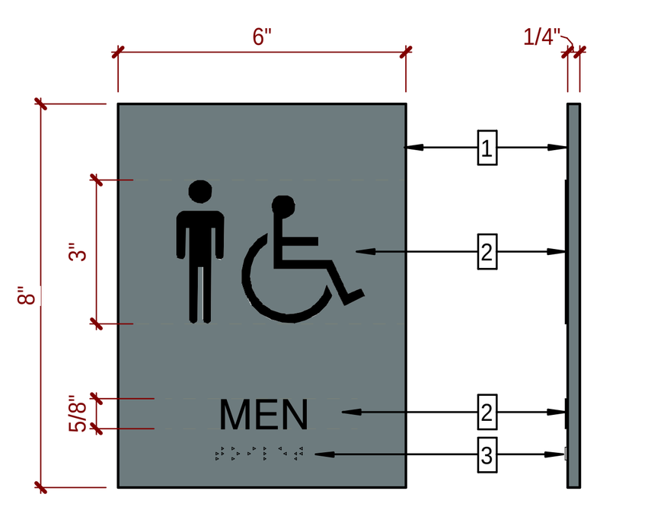
1 MATERIAL
.25" Acrylic (Square edge)
Pantone Match to Sherwin Williams Foggy Day SW6235

2 TEXT / SYMBOL
Applied Raised Profile (Tactile)
SansSerif
Black (Matte)

3 BRAILLE
1/32" Raised Braille
Pantone Match to Sherwin Williams
Gossamer Veil SW9165

ATTACHMENT
Vinyl Foam Tape

SIGN TYPE A2 (MULTIUSER - MEN)



QUANTITY / LOCATION
1 - SEE SIGNAGE SCHEDULE

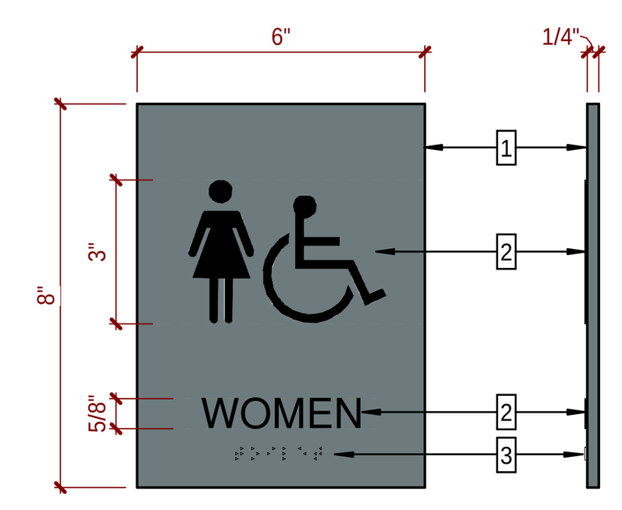
1 MATERIAL
.25" Acrylic (Square edge)
Pantone Match to Sherwin Williams Foggy Day SW6235

2 TEXT / SYMBOL
Applied Raised Profile (Tactile)
SansSerif
Black (Matte)

3 BRAILLE
1/32" Raised Braille
Pantone Match to Sherwin Williams
Gossamer Veil SW9165

ATTACHMENT
Vinyl Foam Tape

SIGN TYPE A2 (MULTIUSER - WOMEN)



QUANTITY / LOCATION
1 - SEE SIGNAGE SCHEDULE

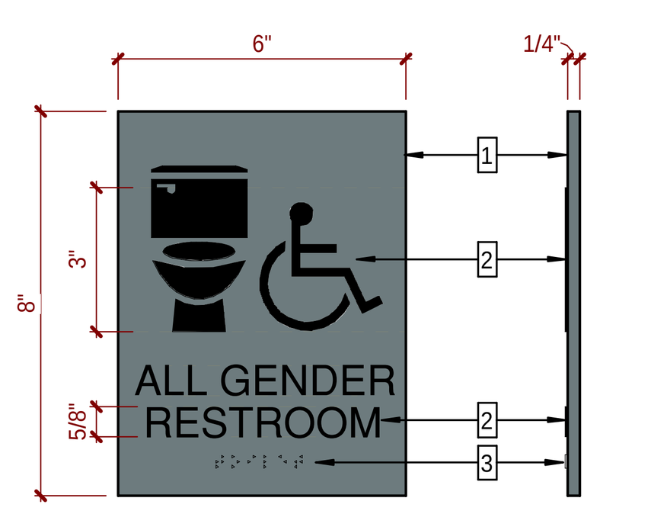
1 MATERIAL
.25" Acrylic (Square edge)
Pantone Match to Sherwin Williams Foggy Day SW6235

2 TEXT / SYMBOL
Applied Raised Profile (Tactile)
SansSerif
Black (Matte)

3 BRAILLE
1/32" Raised Braille
Pantone Match to Sherwin Williams
Gossamer Veil SW9165

ATTACHMENT
Vinyl Foam Tape

SIGN TYPE A3 (SINGLE USER - ALL GENDER)



QUANTITY / LOCATION
3 - SEE SIGNAGE SCHEDULE

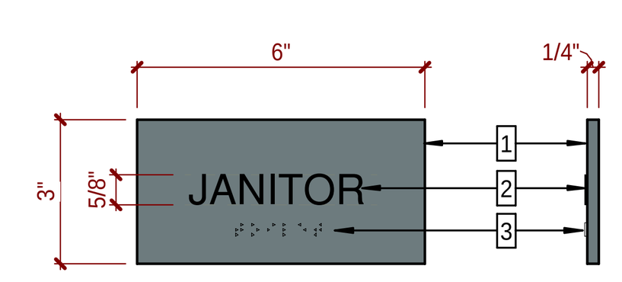
1 MATERIAL
.25" Acrylic (Square edge)
Pantone Match to Sherwin Williams Foggy Day SW6235

2 TEXT / SYMBOL
Applied Raised Profile (Tactile)
SansSerif
Black (Matte)

3 BRAILLE
1/32" Raised Braille
Pantone Match to Sherwin Williams
Gossamer Veil SW9165

ATTACHMENT
Vinyl Foam Tape

SIGN TYPE F



QUANTITY / LOCATION
6 - SEE SIGNAGE SCHEDULE

1 MATERIAL
.25" Acrylic (Square edge)
Pantone Match to Sherwin Williams Foggy Day SW6235

2 TEXT / SYMBOL
Applied Raised Profile (Tactile)
SansSerif
Black (Matte)

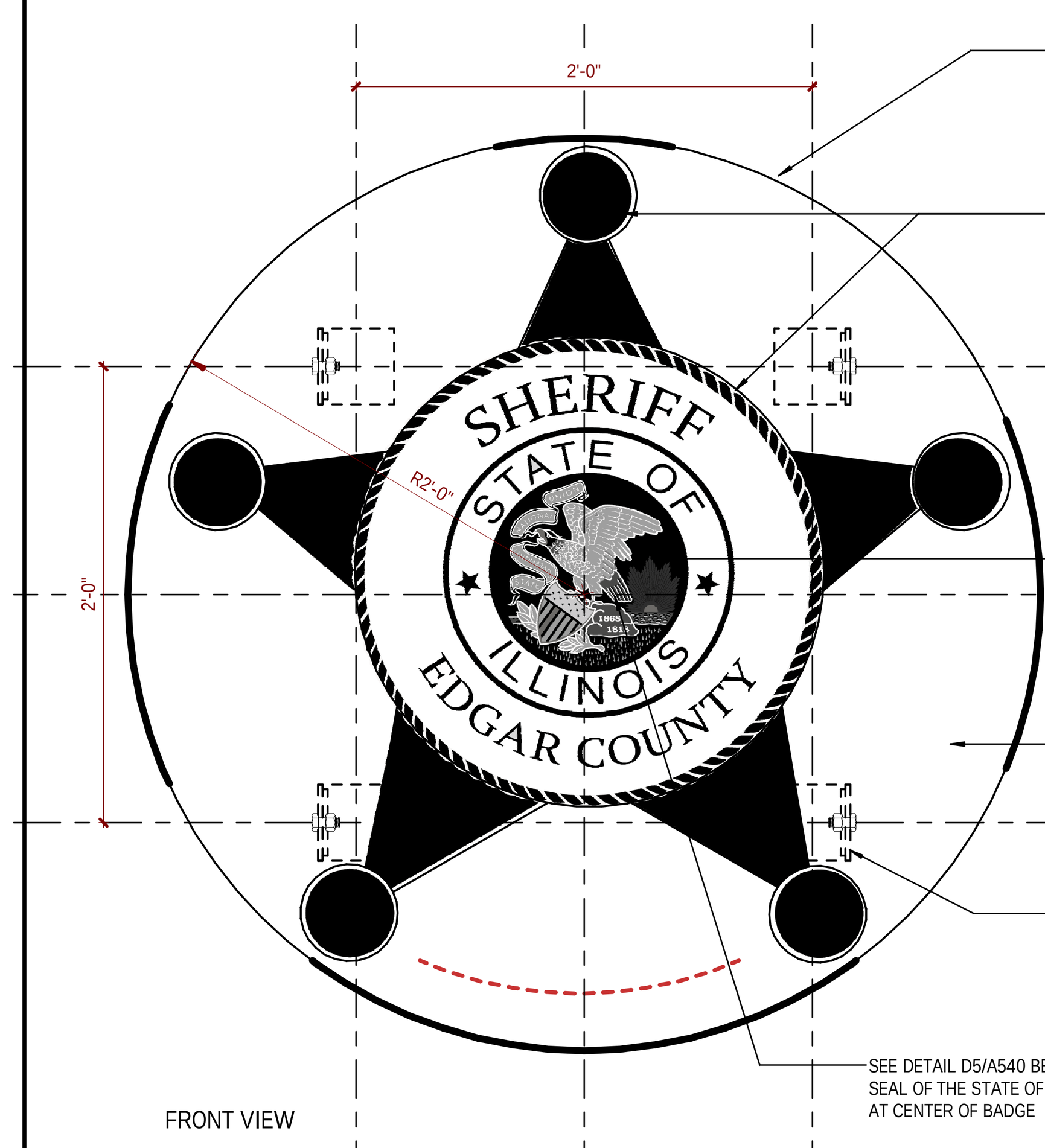
3 BRAILLE
1/32" Raised Braille
Pantone Match to Sherwin Williams
Gossamer Veil SW9165

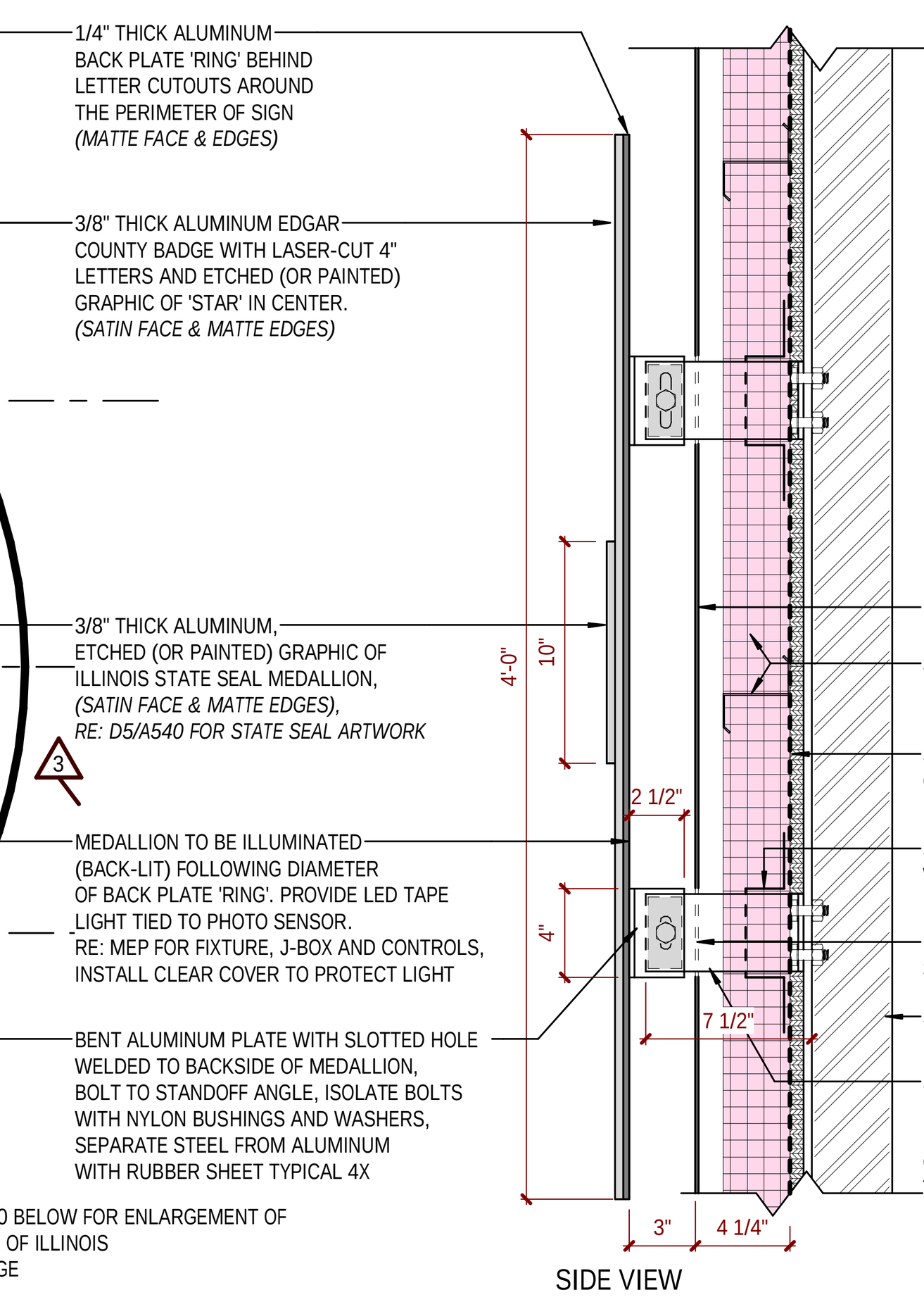
ATTACHMENT
Vinyl Foam Tape

FOR STORM SHELTER SIGNS, SEE SHEET G101

MEDALLION SIGN - EXTERIOR ONLY

SIGN TYPE E





QUANTITY
2

MATERIAL
3/8" ETCHED ALUMINUM ILLINOIS STATE SEAL MEDALLION WELDED TO 3/8" ETCHED (OR PAINTED) AND CUT ALUMINUM EDGAR COUNTY BADGE WELDED TO 1/4" SOLID STAINLESS STEEL BACK PLATE 'RING'

GRAPHICS
SEAL OF THE STATE OF ILLINOIS AS SHOWN IN DRAWING BLACK & WHITE VERSION

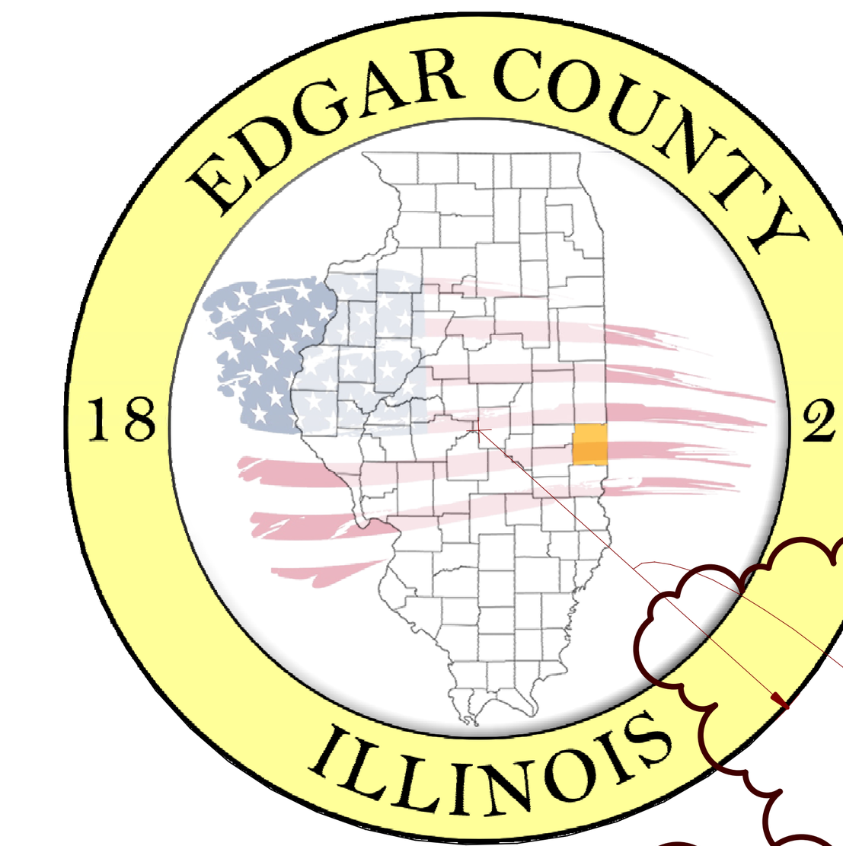
ATTACHMENT
BOLT TO BUILDING MOUNTED STANDOFF PLATES

NOTES
RE: SHEET A300 FOR MOUNTING HEIGHTS & LOCATION AT BUILDING ENTRIES

F5 EXTERIOR MEDALLION SIGN

1 1/2" = 1'-0" | A9/A300

SEAL OF THE STATE OF ILLINOIS



QUANTITY
1

MATERIAL
3/8" ETCHED ALUMINUM SEAL OF EDGAR COUNTY

GRAPHICS
FLAG OVERLAID ON STATE OF ILLINOIS AS SHOWN IN DRAWING AT LEFT

ATTACHMENT
CONCEALED STAND-OFFS, SIMILAR TO MEDALLION SIGN SHOWN IN F5/A540

SEAL OF EDGAR COUNTY - FOR MONUMENT SIGN AT ENTRANCE DRIVE (RE: A010)

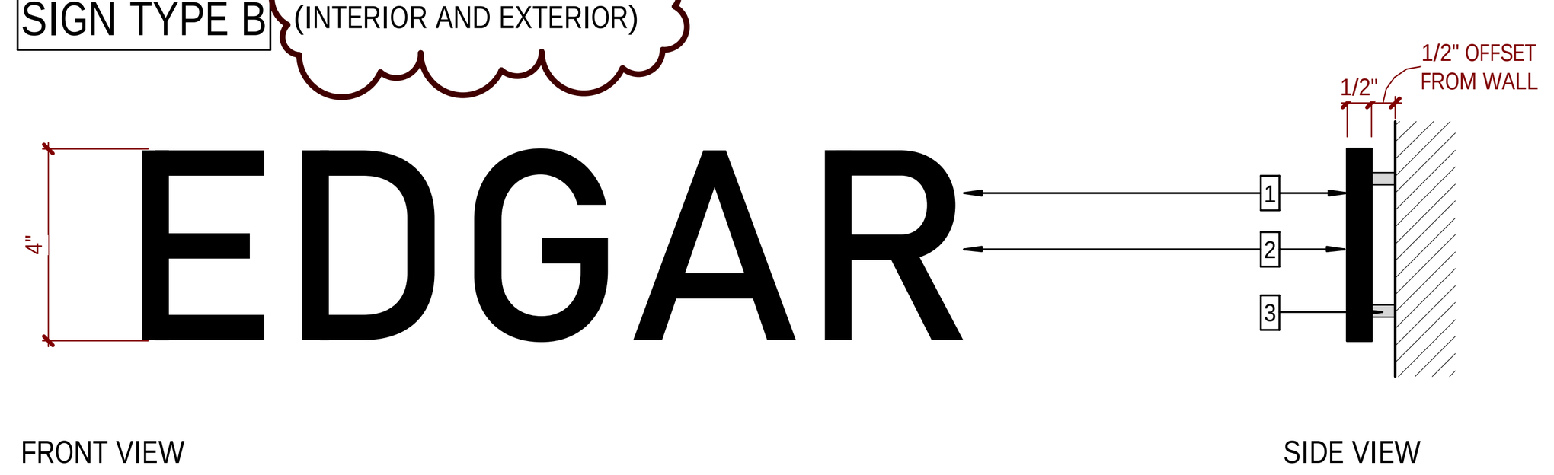
D5 STATE AND COUNTY SEALS

N.T.S.

DIMENSIONAL CHARACTERS

SCALE: 3" = 1'-0"

SIGN TYPE B (INTERIOR AND EXTERIOR)



QUANTITY
Interior = 24 Characters - See Signage Schedule and A600
Exterior = 18 Characters - See Monument Sign A010

1 MATERIAL
1/2" Cut Aluminum
Painted Black (Gloss)

2 TEXT
Bahnschrift SemiBold

3 ATTACHMENT
Concealed Pin Mount

NOTES
For Locations & Mounting Heights, Ref. Interior Elevations on A600 and Monument Signage on A010

SIGN TYPE C (INTERIOR AND EXTERIOR)

QUANTITY
Interior = 17 Characters - See Signage Schedule and A600
Exterior = 11 Characters - See Monument Sign A010

1 MATERIAL
1/2" Cut Aluminum
Painted Black (Gloss)

2 TEXT
Bahnschrift SemiBold

3 ATTACHMENT
Concealed Pin Mount

NOTES
For Locations & Mounting Heights, Ref. Interior Elevations on A600 and Monument Signage on A010

SIGN TYPE D EXTERIOR SIGN ON NORTH AND WEST FACADES

QUANTITY
58 Characters

1 MATERIAL
1" Cut Aluminum
Brushed Aluminum Finish

2 TEXT
Bahnschrift SemiBold

3 ATTACHMENT
Concealed Pin Mount

NOTES
Exterior
For Locations & Mounting Heights, Ref. Exterior Elevations on sheet A300.

NOTE: THIS SHEET IS ONLY VALID IF PRINTED IN COLOR

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hmnarchitects.com

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PARIS, ILLINOIS 61944

HMN 21003.003

BID & PERMIT

KLINGNER ARCHITECT PROJECT #
22-4046

Date: 03/01/2024

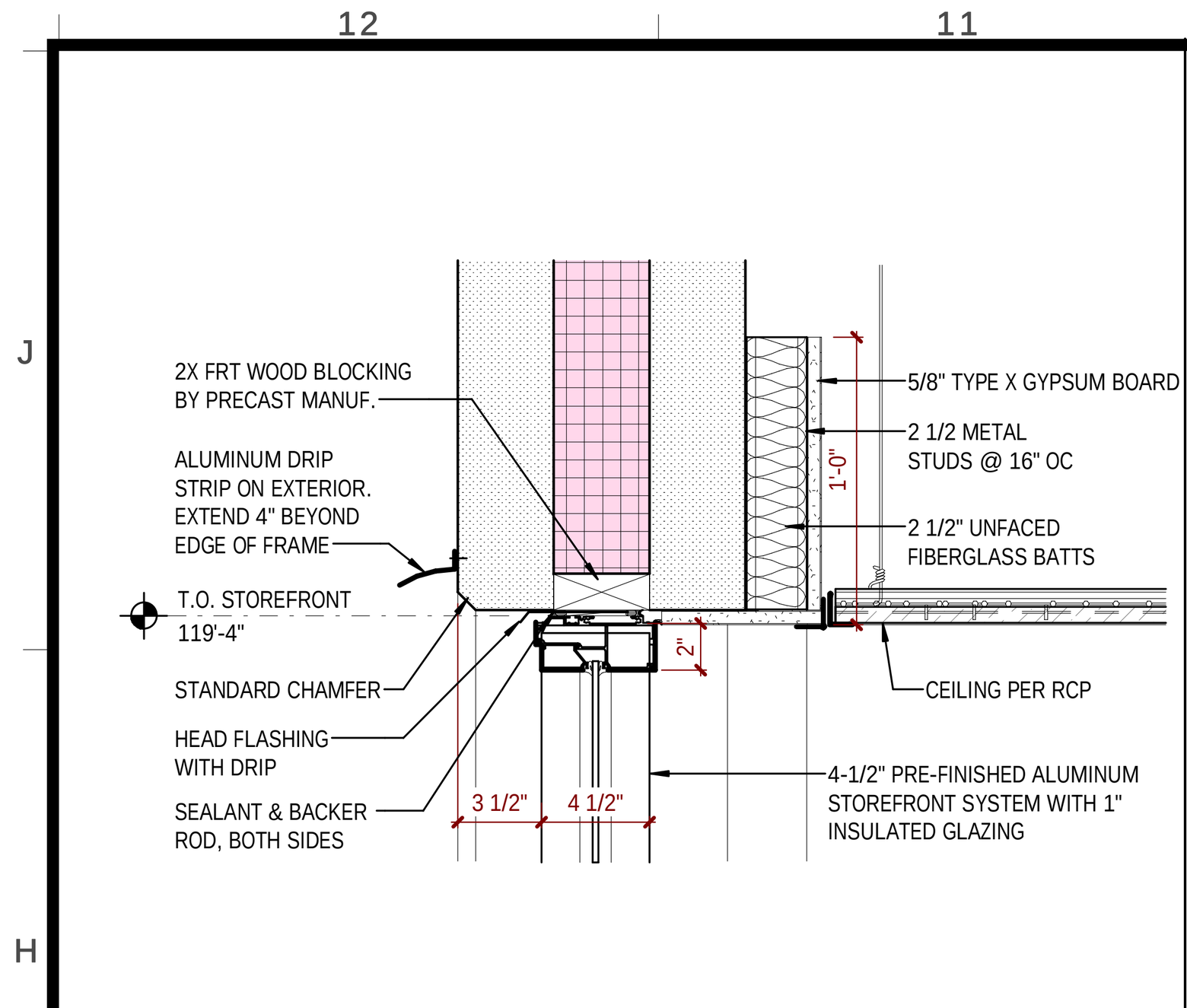
Δ	Issue	Date
3	Addendum 03	03-27-2024
4	Addendum 04	04-04-2024

Drawn by: Author

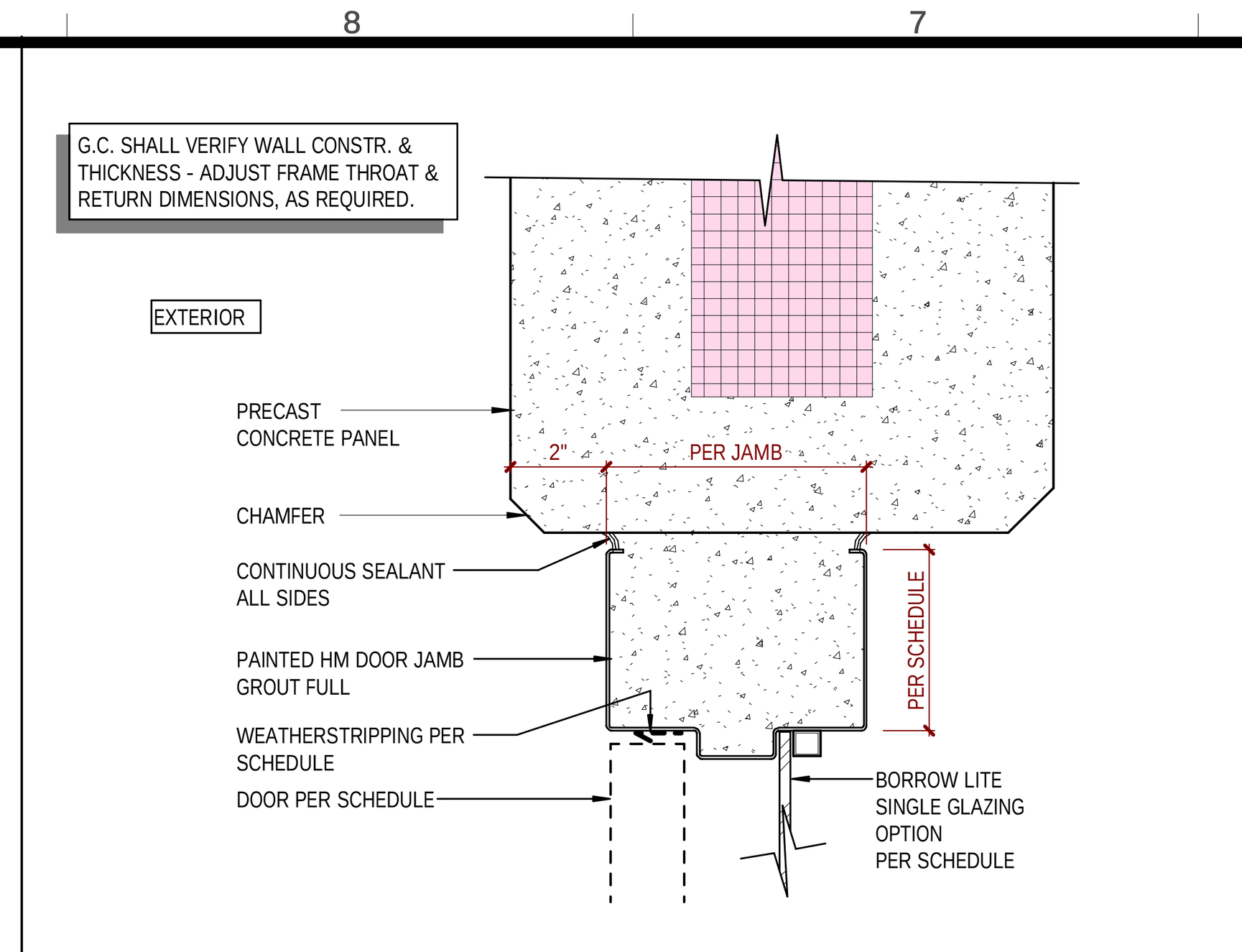
SIGNAGE DETAILS

A540

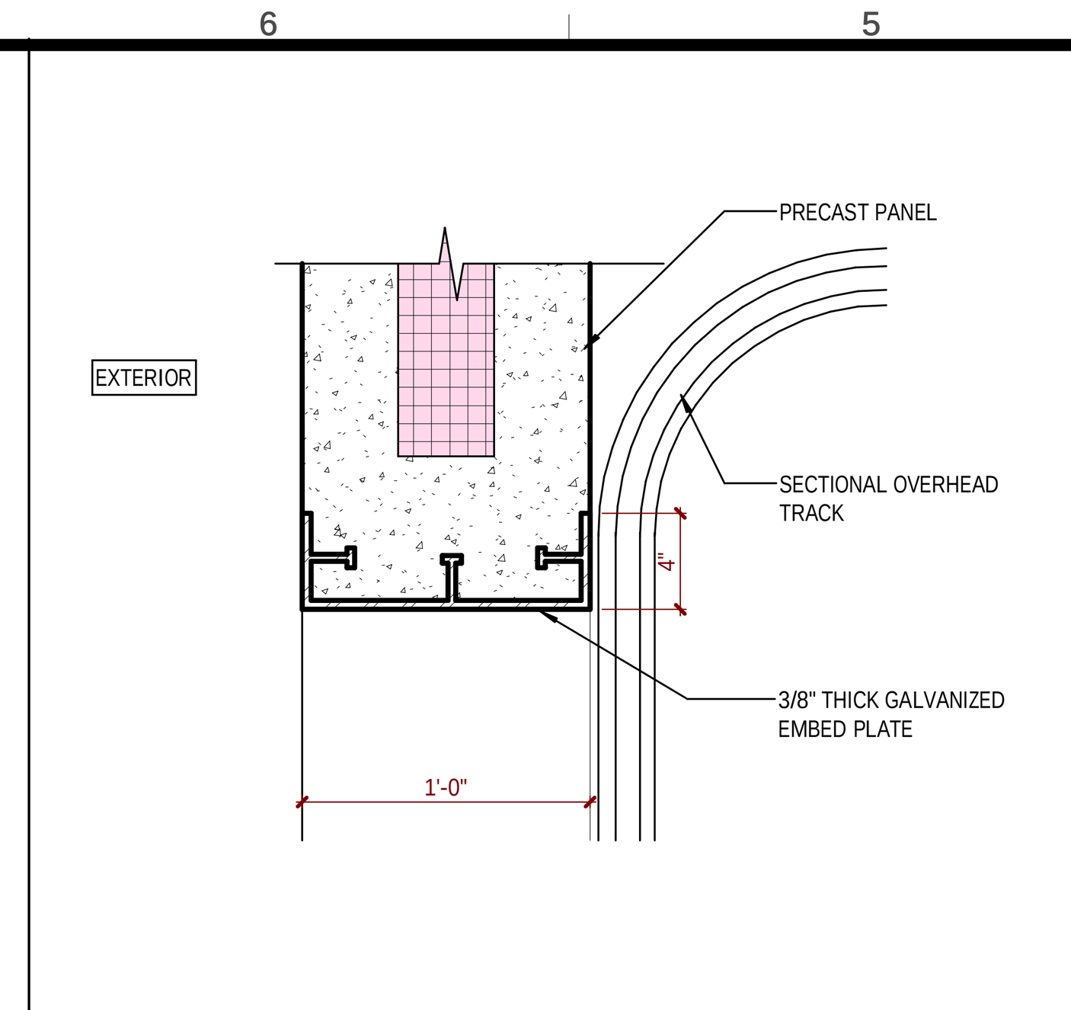
4/4/2024 5:15:23 PM



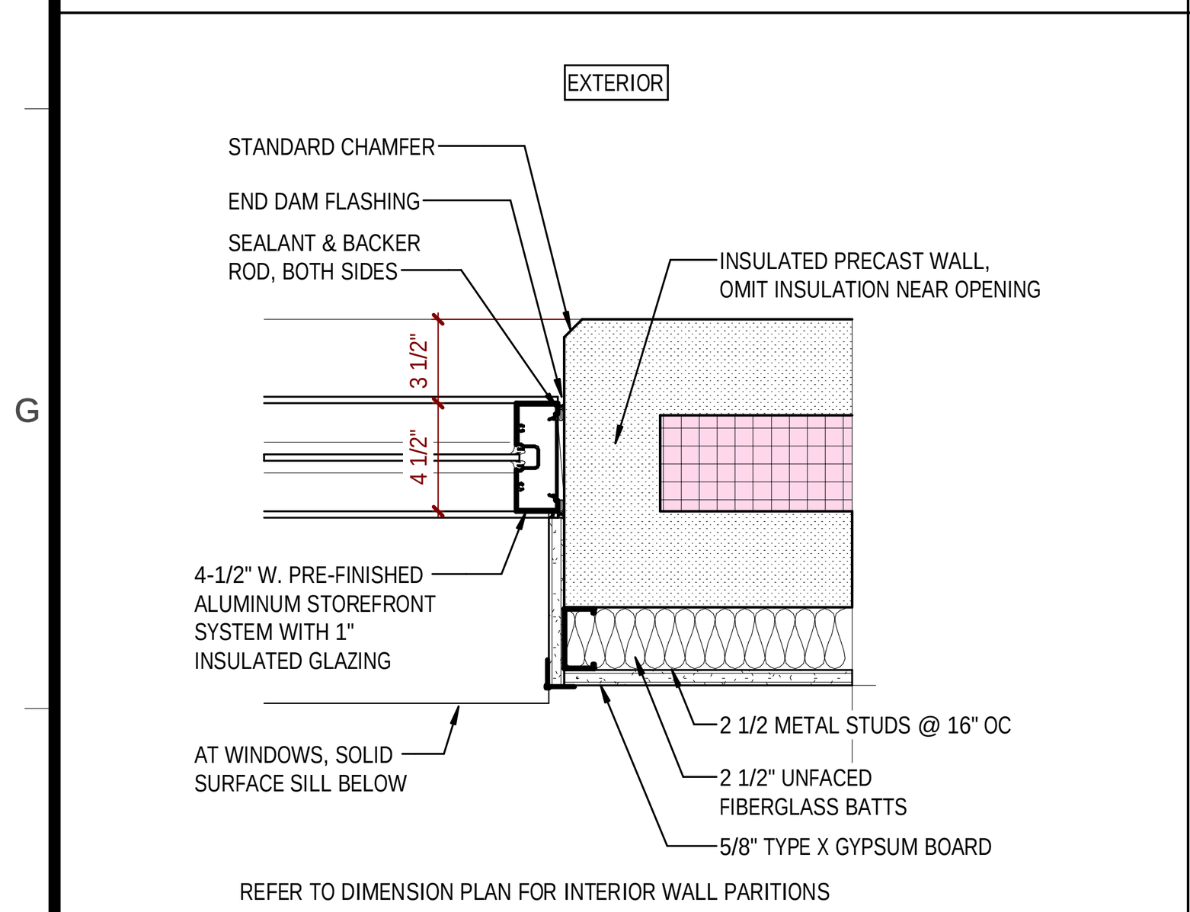
H12 STOREFRONT HEAD @ PRECAST
1 1/2" = 1'-0" | A10/A430



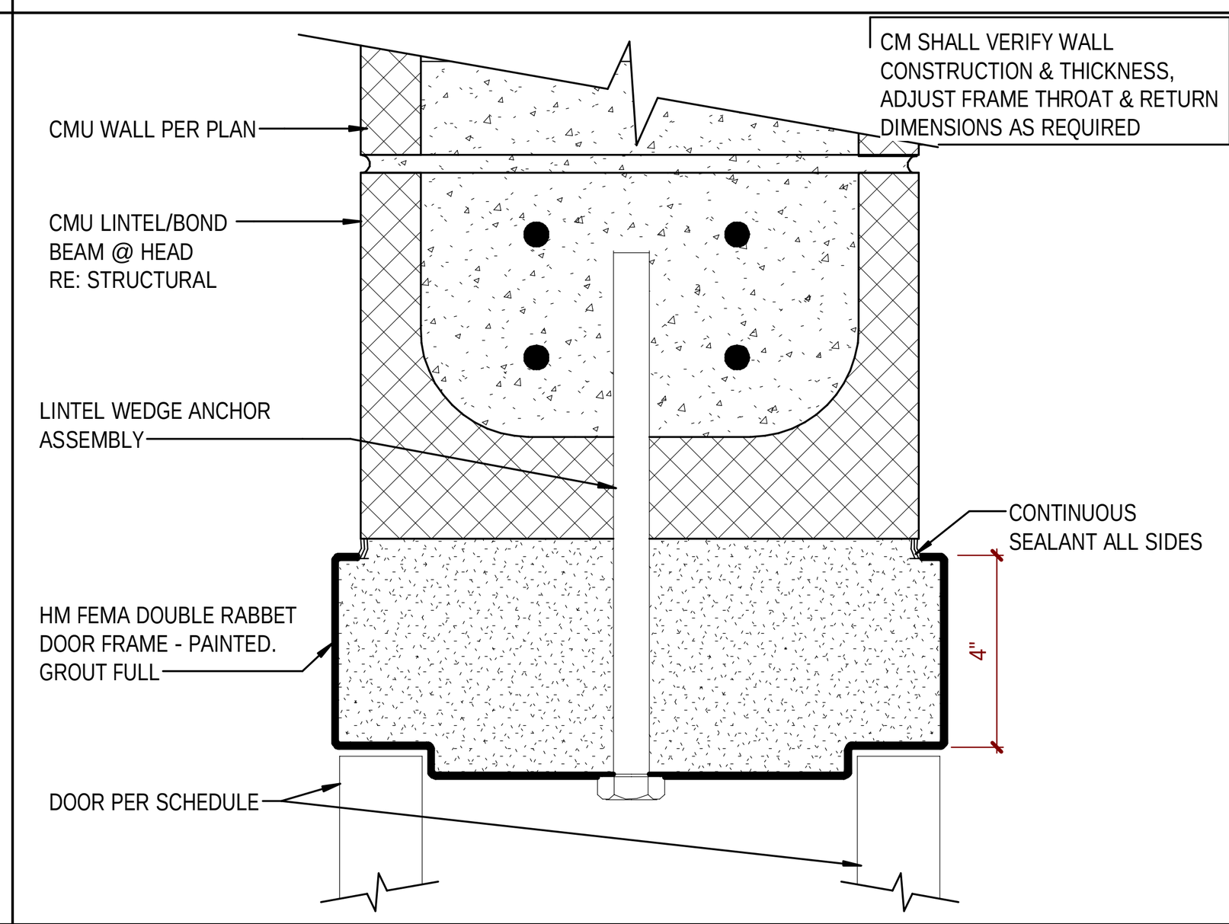
H8 HM DOOR FRAME HEAD @ PRECAST
3" = 1'-0" |



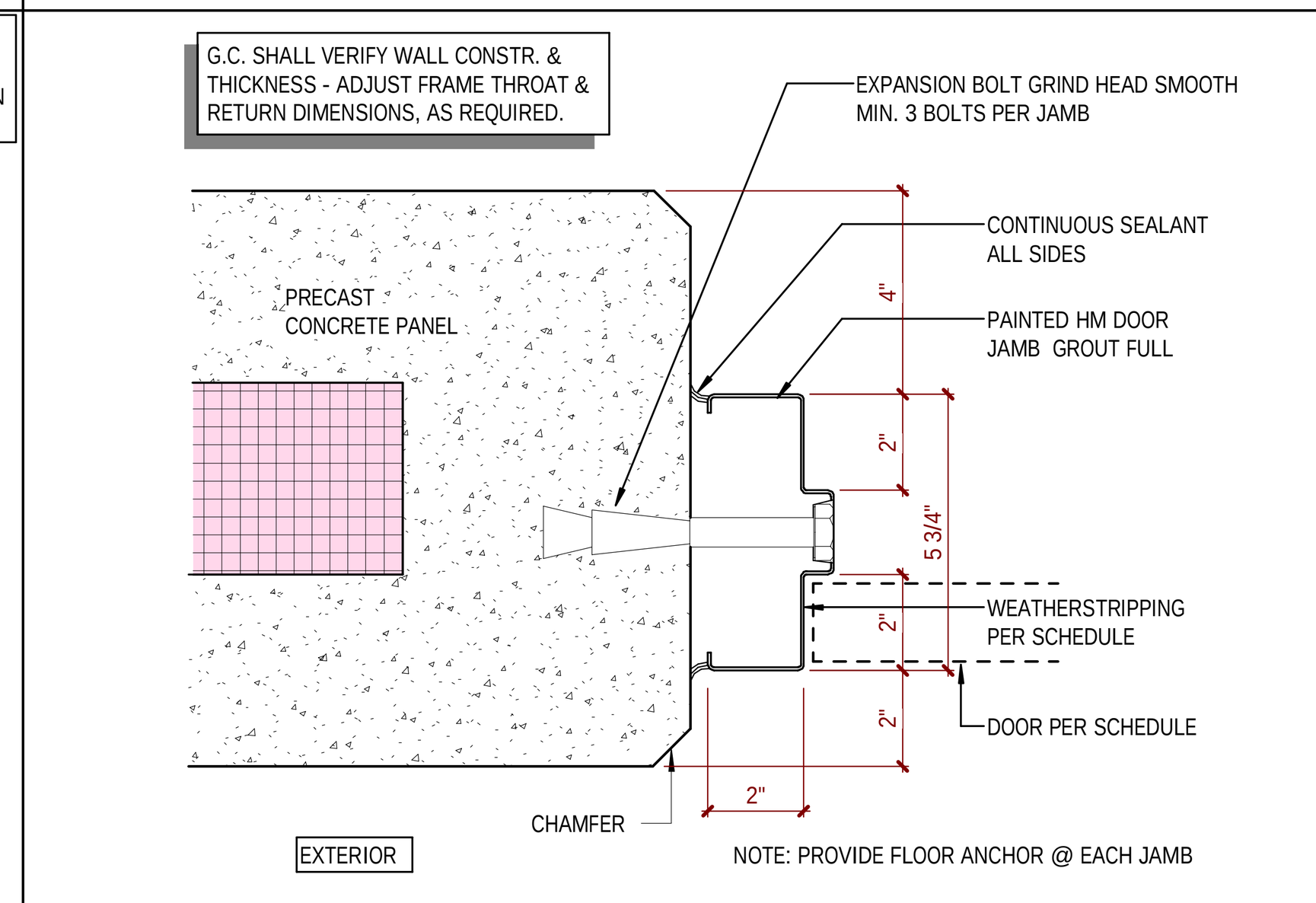
H6 SECTIONAL OVERHEAD DOOR HEAD
1 1/2" = 1'-0" |



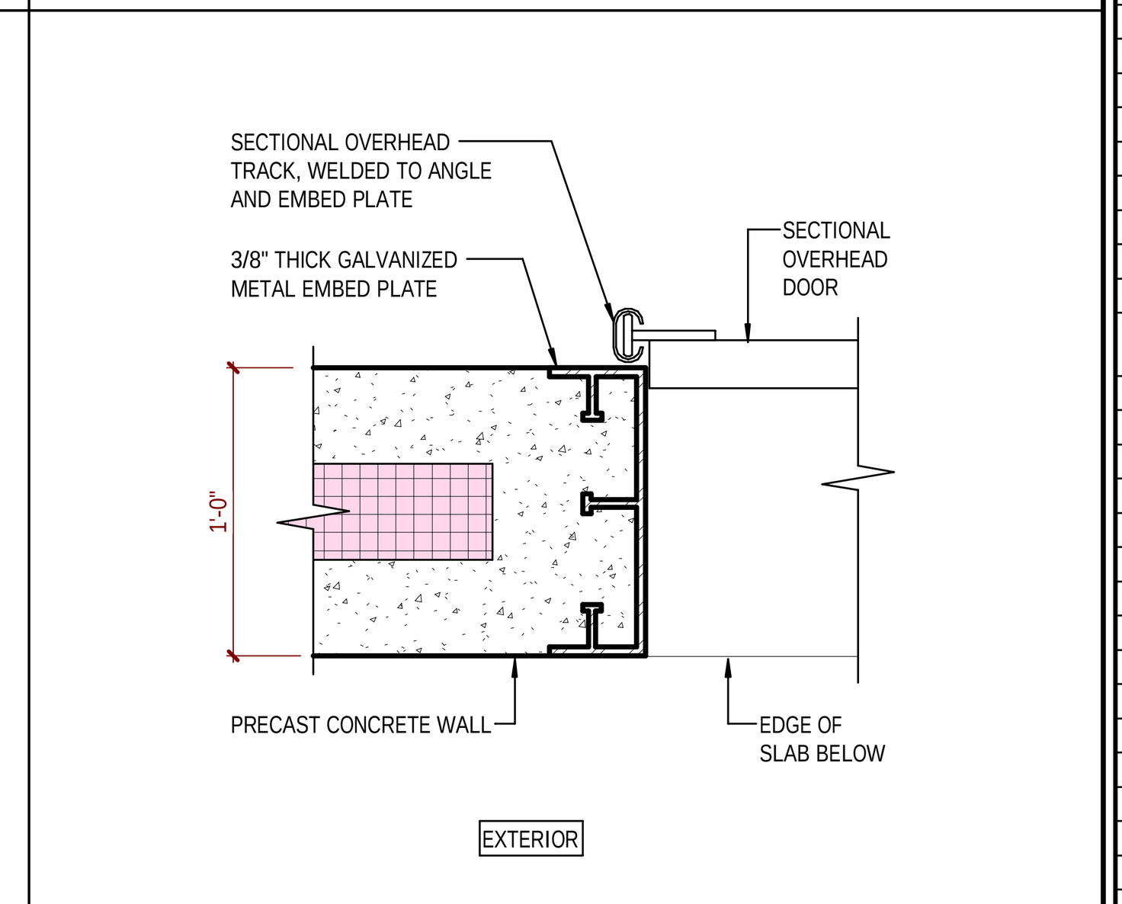
G12 STOREFRONT JAMB @ PRECAST
1 1/2" = 1'-0" | A10/A430



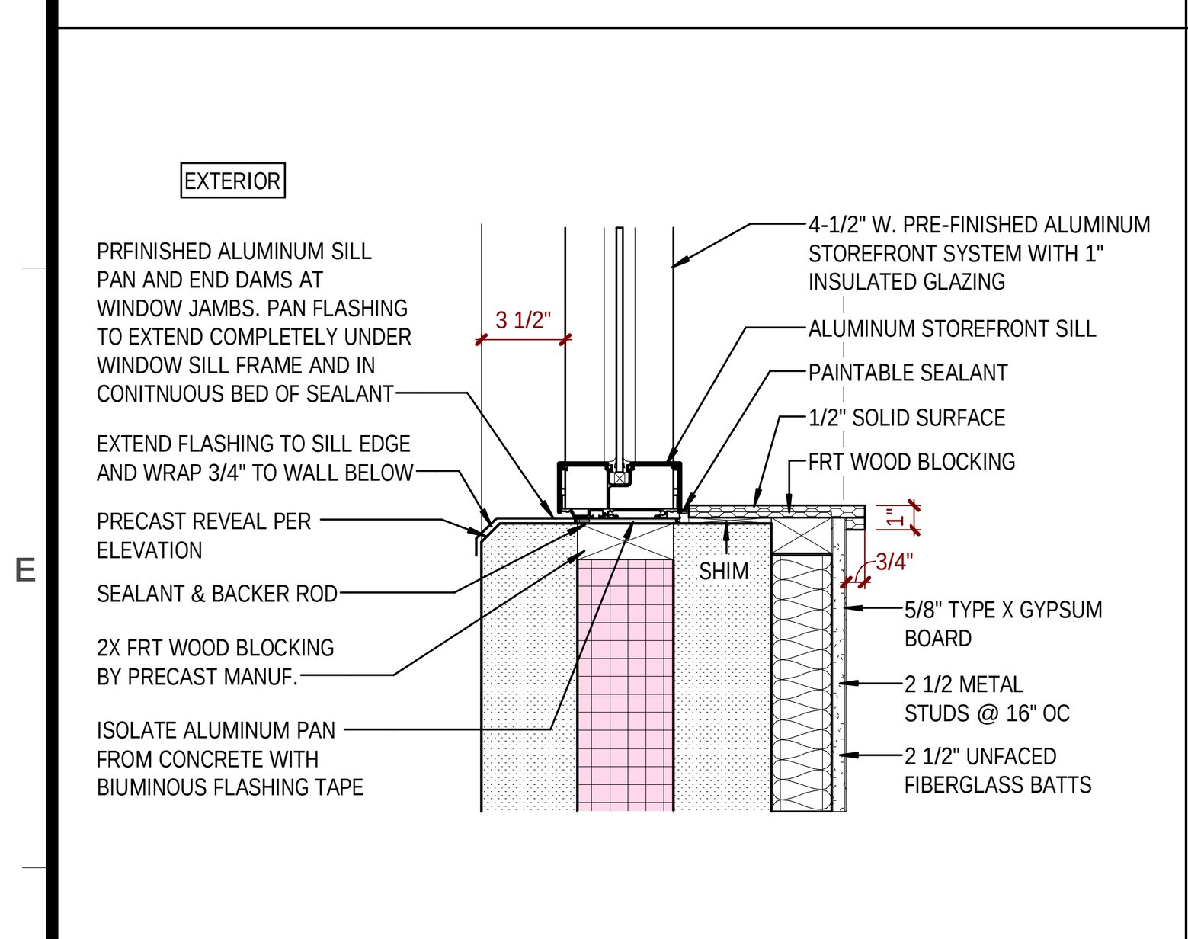
G10 HM FEMA FRAME HEAD DETAIL @ CMU
3" = 1'-0" |
COMMUNICATING DOOR AND FRAME



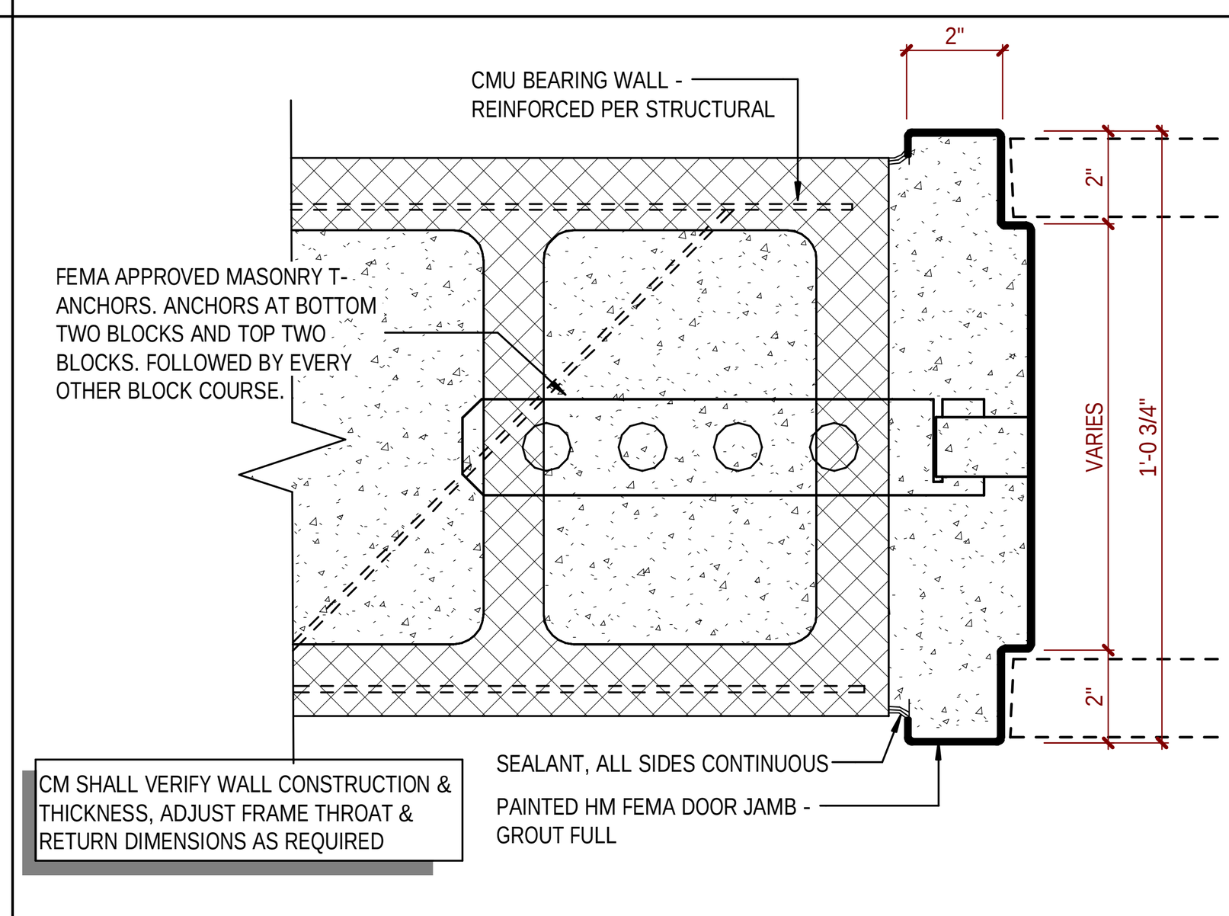
G8 HM DOOR FRAME JAMB @ PRECAST
3" = 1'-0" |



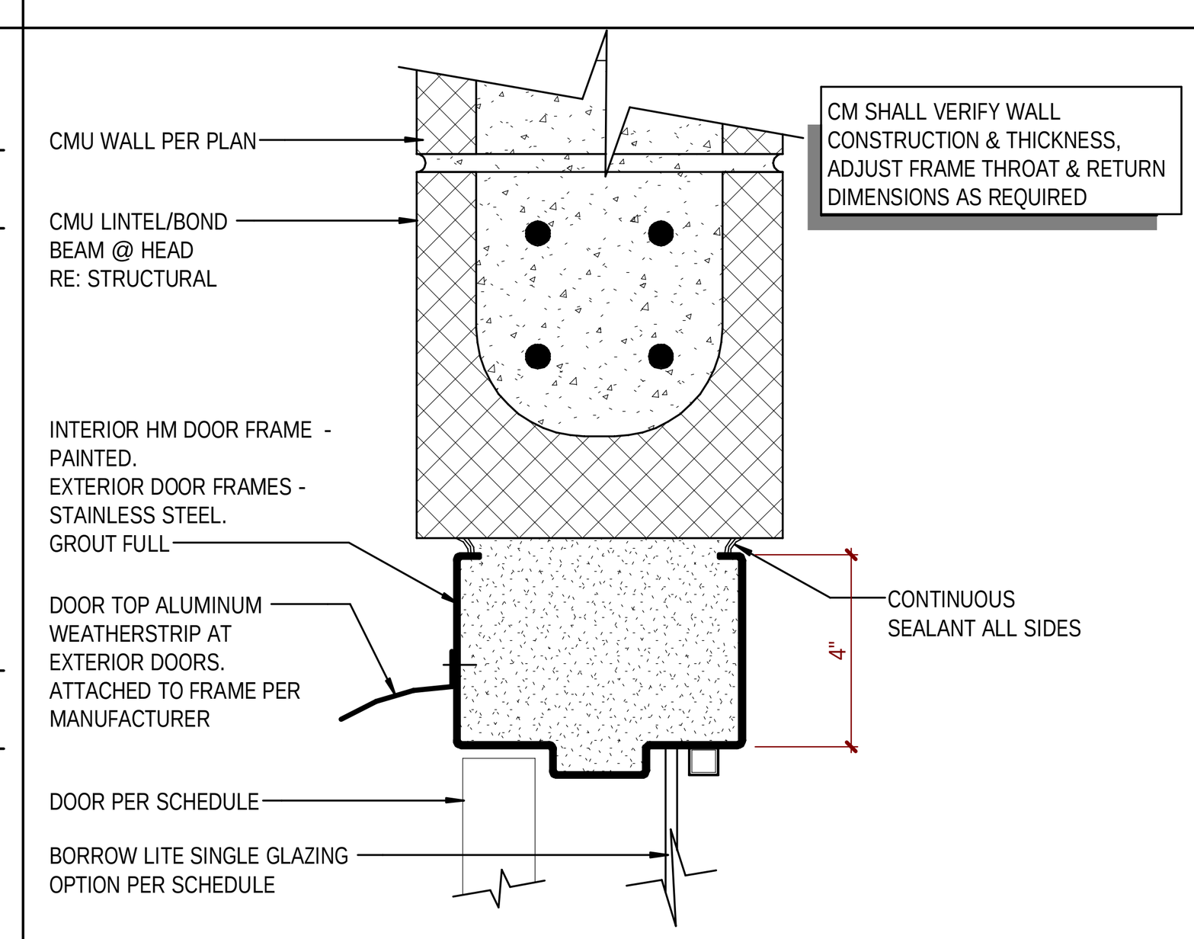
G6 SECTIONAL OVERHEAD DOOR JAMB
1 1/2" = 1'-0" |



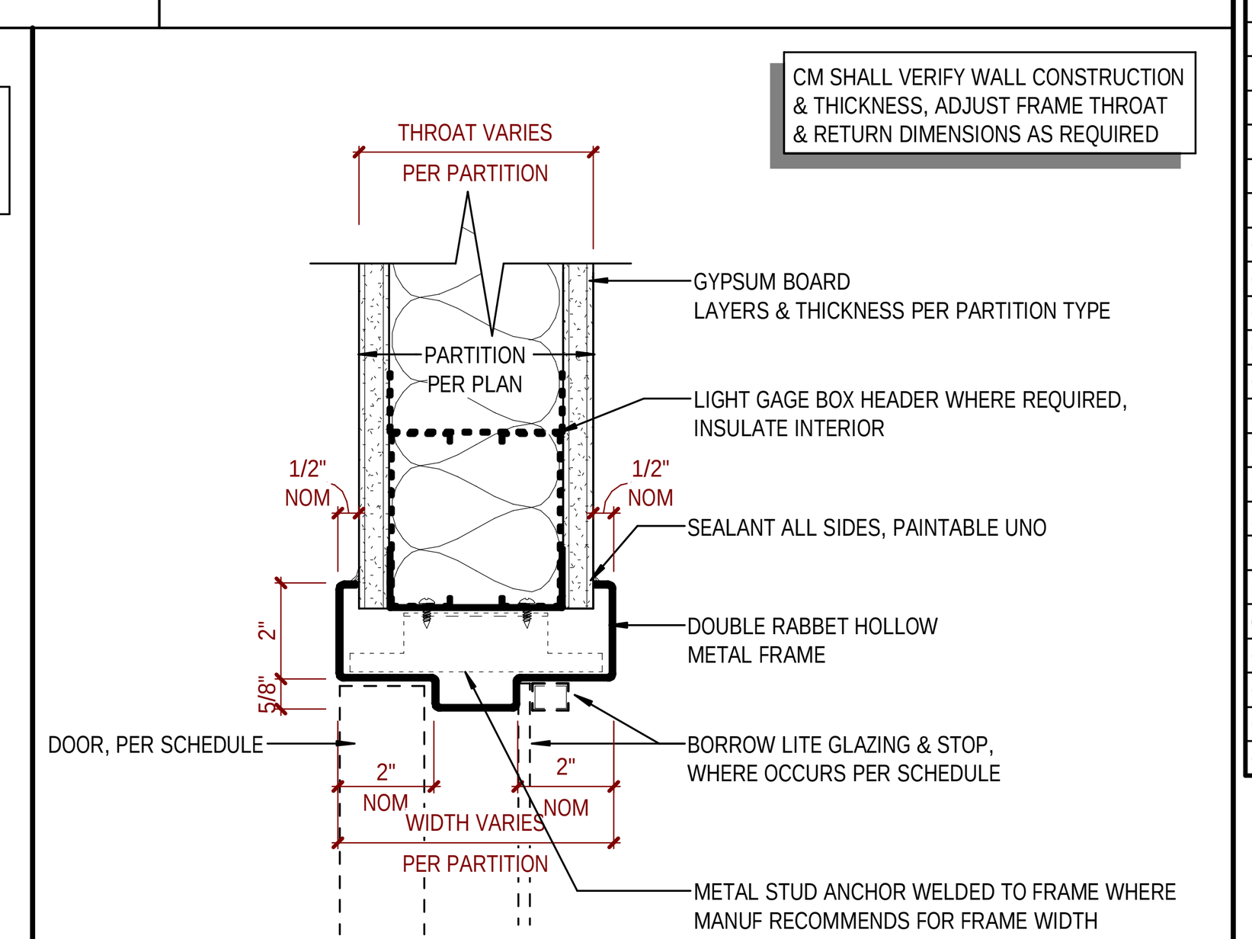
E12 STOREFRONT SILL @ PRECAST
1 1/2" = 1'-0" | A10/A430



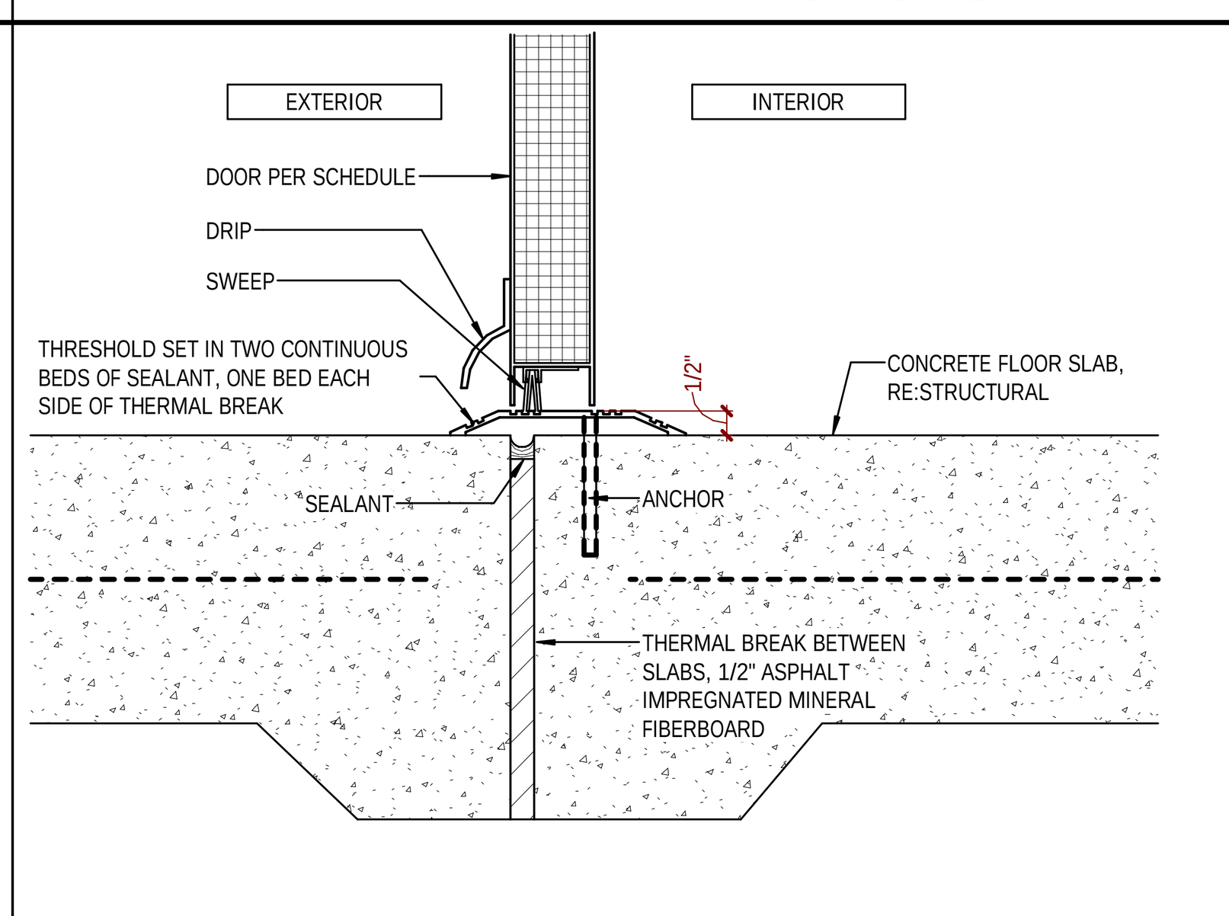
E10 HM FEMA FRAME JAMB DETAIL @ CMU
3" = 1'-0" |
COMMUNICATING DOOR AND FRAME



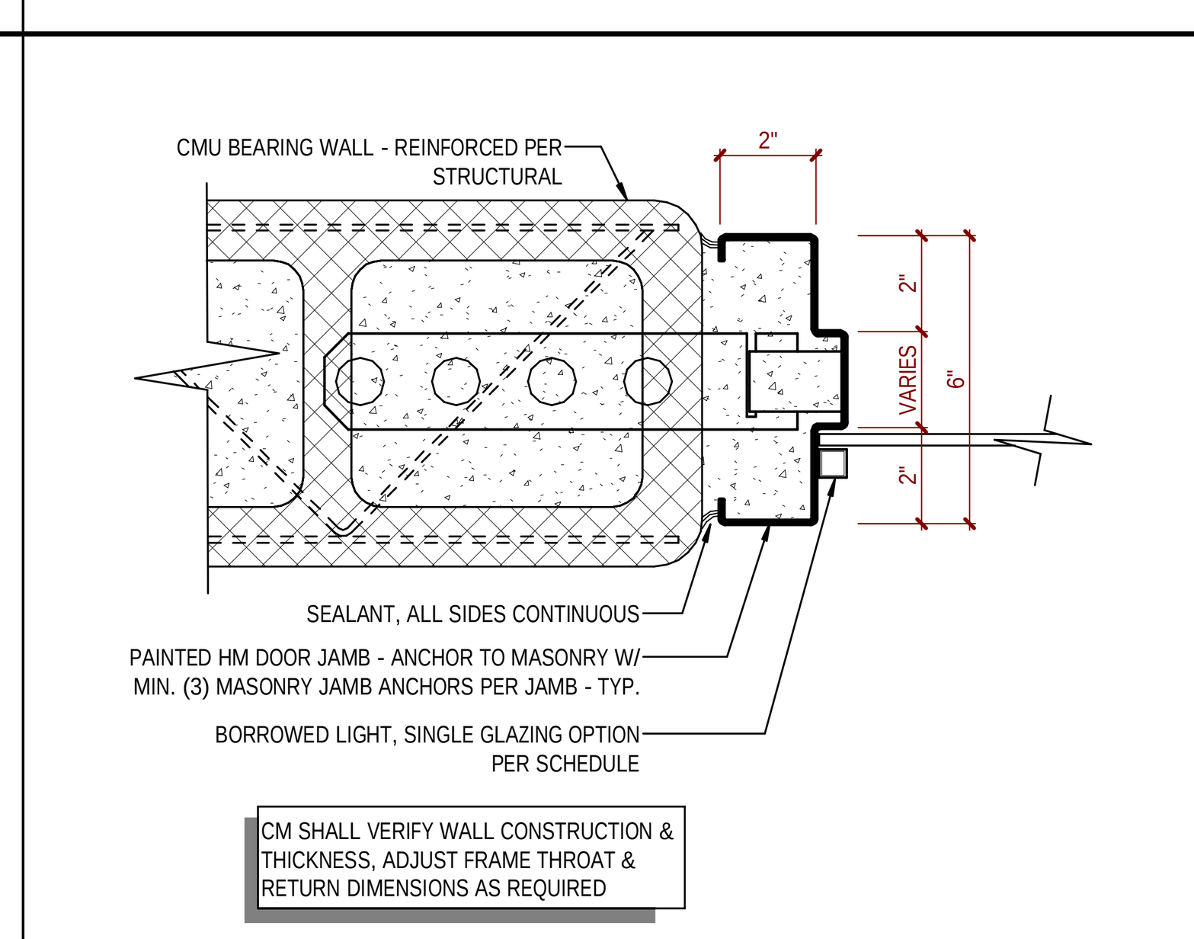
E8 HM FRAME HEAD DETAIL @ CMU
3" = 1'-0" |



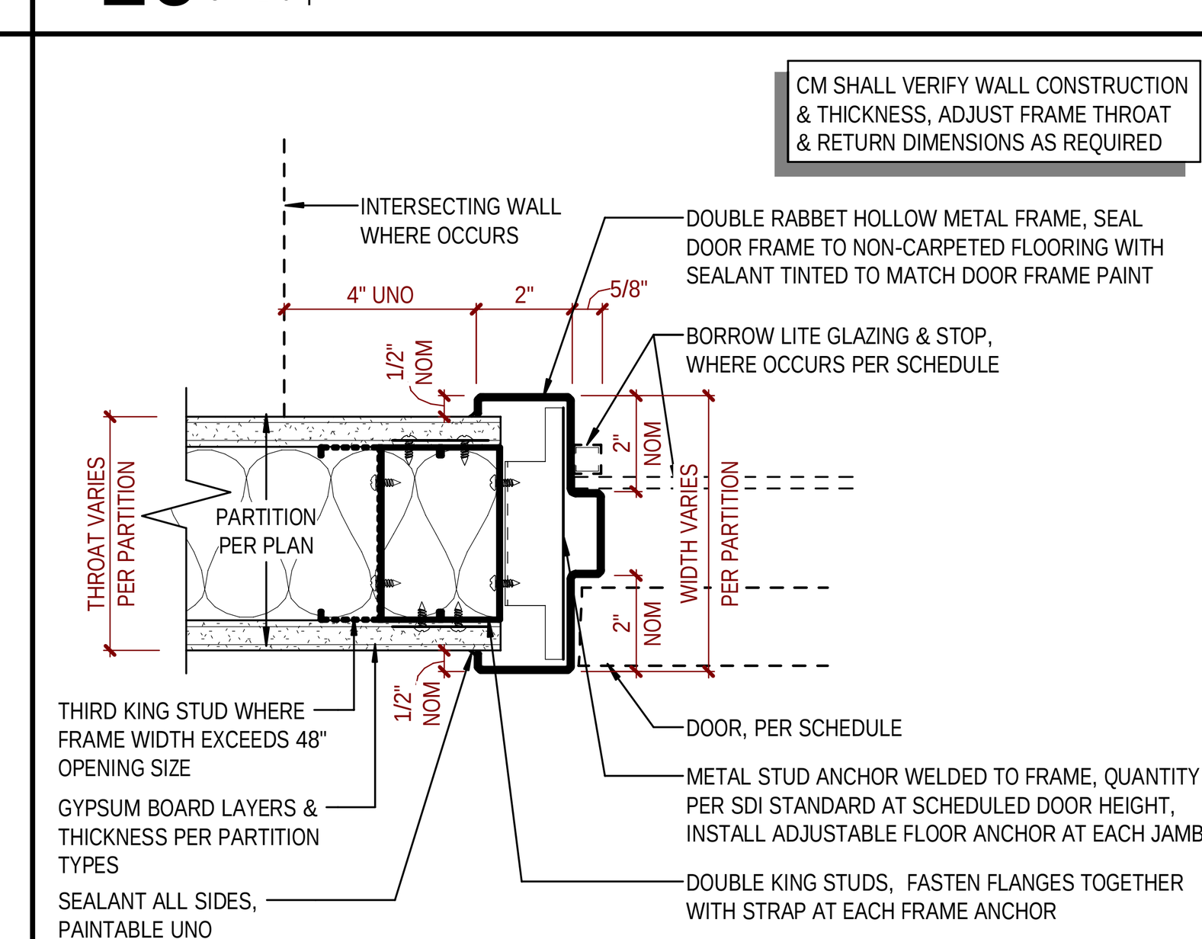
E6 HM HEAD DETAIL S/PR
3" = 1'-0" |



C10 SILL DETAIL EXTERIOR SWING
3" = 1'-0" |



C8 HM FRAME JAMB DETAIL @ CMU
3" = 1'-0" |



C6 HM JAMB DETAIL S/PR
3" = 1'-0" |

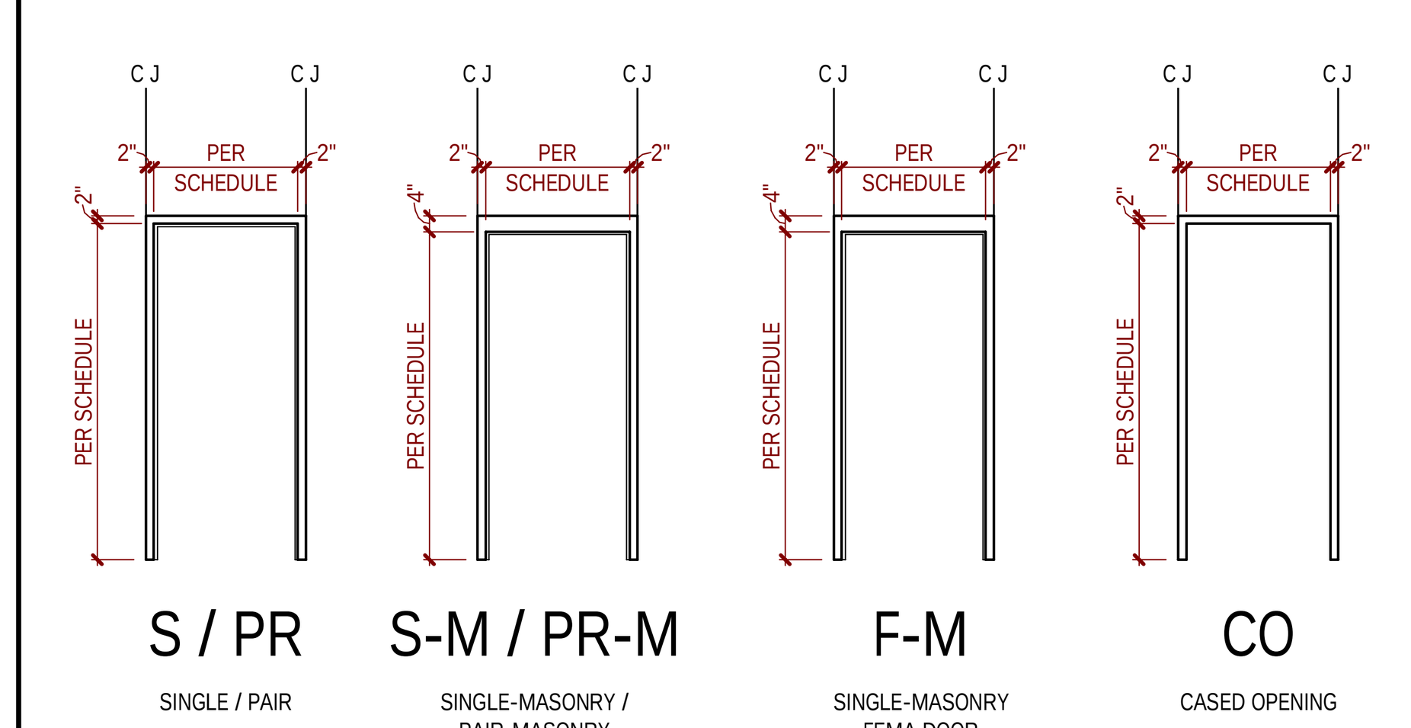
OPENING SCHEDULE (STANDARD)

MARK	TYPE	OPENING (REFER TO OPENING NOTES BELOW) — SIZE: WIDTH	UNEQUAL LEAF WIDTH	HEIGHT	THICKNESS	DOOR TYPE	DOOR MATERIAL	GLAZING TYPE	FRAME: FRAME MATERIAL	DETAILS (A/800 UNO): HEAD	JAMB	SILL	FIRE RATING	SMOKE CONTROL	HARDWARE SET	COMMENTS	Revision #
R101															4.0	ROOF HATCH	
FIRST FLOOR																	
101	PR	3' - 0"		7' - 0"	1 3/4"	FG-CW	ALUM	1T	ALUM			C10	--		1.0	Intercom at exterior (S/E)	
103	S	3' - 0"		7' - 0"	1 3/4"	G	WD	1T	HM	E6	C6		n/a	No	24.0	Monitored	
104	S	3' - 0"		7' - 0"	1 3/4"	F	WD	--	HM	E6	C6		n/a	No	20.0		
105A	F-M	3' - 0"		7' - 0"	1 3/4"	FEMA	HM	--	HM	E8	C8		90 min	No	36.0	FEMA ICC-500 Storm door, frame and hardware, Storage lockset	
105B	S	2' - 6"		7' - 0"	1 3/4"	F	WD	--	HM	E6	C6		n/a	No	7.0		
106	S-M	3' - 0"		7' - 0"	1 3/4"	F	WD	--	HM	E8	C8		n/a	No	32.0	Card Reader and Intercom to enter (S/E)	
107	S	3' - 0"		7' - 0"	1 3/4"	F	WD	--	HM	E6	C6		n/a	No	6.0		
108	S	3' - 0"		7' - 0"	1 3/4"	F	WD	--	HM	E6	C6		n/a	No	6.0		
109	S	3' - 0"		7' - 0"	1 3/4"	F	WD	--	HM	E6	C6		n/a	No	6.0		
110	S	3' - 0"		7' - 0"	1 3/4"	F	WD	--	HM	E6	C6		n/a	No	6.0		
111	S	3' - 0"		7' - 0"	1 3/4"	F	WD	--	HM	E6	C6		n/a	No	13.0	Mech room, storage lockset	
114A	S	3' - 0"		7' - 0"	1 3/4"	FG-CW	ALUM	2T	ALUM				n/a	No	2.0	Card Reader to enter, Intercom on both sides (S/E)	
114B	S-M	3' - 0"		7' - 0"	1 3/4"	F	WD	--	HM	E8	C8		n/a	No	35.0	Card reader and Intercom both sides (S/E)	
115	S-M	3' - 0"		7' - 0"	1 3/4"	F	WD	--	HM	E8	C8		20 min	No	22.0	Request to exit	
116	S-M	3' - 0"		7' - 0"	1 3/4"	F	WD	--	HM	E8	C8		20 min	No	19.0		
117A	S-M	3' - 0"		7' - 0"	1 3/4"	N	WD	--	HM	E8	C8		20 min	No	19.0		
119	S-M	3' - 0"		7' - 0"	1 3/4"	N	WD	--	HM	E8	C8		20 min	No	33.0	Card Reader and Intercom to enter, Request to exit (S/E)	
120	S-M	3' - 0"		7' - 0"	1 3/4"	F	WD	--	HM	E8	C8		n/a	No	8.0	Monitored	
123A	S-M	3' - 0"		7' - 0"	1 3/4"	N	WD	--	HM	E8	C8		n/a	No	26.0	Card Reader to enter (S/E)	
124	S-M	3' - 0"		7' - 0"	1 3/4"	F	WD	--	HM	E8	C8		45 min	Yes	8.0	DPS	
125	S-M	3' - 0"		7' - 0"	1 3/4"	F	WD	--	HM	E8	C8		--	Yes	30.0	Card Reader to exit (S/E)	
127	S-M	2' - 6"		7' - 0"	1 3/4"	F	WD	--	HM	E8	C8		n/a	No	10.0	Janitor's closet	
128	S-M	3' - 0"		7' - 0"	1 3/4"	F	HM	--	HM	E8	C8		45 min	No	31.0	Card Reader, Amory with 14 ga. door and frame	
129	S	3' - 0"		7' - 0"	1 3/4"	F	WD	--	HM	E6	C6		--	Yes	18.0		
131	S	3' - 0"		7' - 0"	1 3/4"	F	WD	--	HM	E6	C6		--	Yes	18.0		
133	S-M	3' - 0"		7' - 0"	1 3/4"	F	WD	--	HM	E8	C8		n/a	No	34.0	Storage lockset for Record Storage	
134	S	3' - 0"		7' - 0"	1 3/4"	F	WD	--	HM	E6	C6		n/a	No	31.0	Card Reader to enter (S/E)	
135A	F-M	3' - 0"		7' - 0"	1 3/4"	FEMA	HM	--	HM	E8	C8		90 min	No	37.0	FEMA ICC-500 Storm door, frame and hardware	
135B 135B-1	F-M S-M	3'-0" 3'-0"		7'-0" 7'-0"	1 3/4"	FEMA	HM WD		HM	G10	E10		90 min n/a	Yes	38.0	FEMA ICC-500 Storm door, frame and hardware, Card reader to exit door 135B-1 . Additional notes below.	
135C	S	2' - 6"		7' - 0"	1 3/4"	F	WD	--	HM	E6	C6		n/a	No	9.0	Storage lockset	
136A	S-M	3' - 0"		7' - 0"	1 3/4"	F	WD	--	HM	E8	C8		20 min	No	31.0	Card Reader to enter, Request to exit (S/E)	
136B	S-M	3' - 0"		7' - 0"	1 3/4"	F	WD	--	HM	E8	C8		20 min	No	27.0	Card Reader to enter, Request to exit (S/E)	
137	S	3' - 0"		7' - 0"	1 3/4"	F	WD	--	HM	E6	C6		n/a	No	6.0		
139	S	3' - 0"		7' - 0"	1 3/4"	F	WD	--	HM	E6	C6		n/a	No	20.0		
140	S	3' - 0"		7' - 0"	1 3/4"	N	WD	--	HM	E6	C6		n/a	No	23.0		
141	S	3' - 0"		7' - 0"	1 3/4"	F	WD	--	HM	E6	C6		n/a	No	13.0	Storage lockset	
143	S-M	3' - 0"		7' - 0"	1 3/4"	F	WD	--	HM	E8	C8		20 min	No	13.0	Storage lockset	
144	S-M	3' - 0"		7' - 0"	1 3/4"	G	WD	1T	HM	E8	C8		--	Yes	28.0	Integral blinds, Request to exit, Card reader to enter (S/E)	
148A	S-M	3' - 0"		7' - 0"	1 3/4"	F	WD	--	HM	E8	C8		n/a	No	16.0	Storage lockset	
148B	S-M	2' - 6"		7' - 0"	1 3/4"	F	WD	--	HM	E8	C8		n/a	No	17.0	Storage lockset	
149	S-M	3' - 0"		7' - 0"	1 3/4"	F	WD	--	HM	E8	C8		n/a	No	25.0	Card Reader to enter (S/E)	
150	S-M	3' - 0"		7' - 0"	1 3/4"	F	WD	--	HM	E8	C8		20 min	Yes	29.0	Card Reader to enter (S/E)	
151	S-M	2' - 6"		7' - 0"	1 3/4"	F	WD	--	HM	E8	C8		n/a	No	11.0	Janitor's closet	
152	S-M	3' - 0"		7' - 0"	1 3/4"	N	WD	1T	HM	E8	C8		n/a	Yes	15.0	Storage room lockset, Hold-open	
153	S	4' - 0"		7' - 0"	1 3/4"	F	HM	--	HM				n/a	No	5.0	Monitored, exterior Mechanical	
155B	n/a	6' - 0"		7' - 4"	0"	CO	STL		STL	D12/A801	C12/A801		--		3.0	Interlocked with #155A, Intercom on exterior (S/E)	
156	S-M	3' - 0"		7' - 0"	1 3/4"	F	HM	--	HM	E8	C8		--	Yes	14.0	Mech room, storage lockset	
157	S-M	3' - 0"		7' - 0"	1 3/4"	F	HM	--	HM				n/a	No	5.0	Monitored, exterior Mechanical	
158	S-M	3' - 0"		7' - 0"	1 3/4"	F	HM	--	HM				n/a	No	5.0	Monitored, exterior Mechanical	
160	S	3' - 0"		7' - 0"	1 3/4"	F	WD	--	HM	E6	C6		n/a	No	21.0	Privacy lockset for toilet	
161	S-M	2' - 6"		7' - 0"	1 3/4"	F	WD	--	HM	E8	C8		20 min	No	11.0	Janitor's closet	
163	S-M	3' - 0"		7' - 0"	1 3/4"	F	HM	--	HM				n/a	No	5.0	Monitored, exterior Mechanical	
164	S-M	3' - 0"		7' - 0"	1 3/4"	F	HM	--	HM				n/a	No	5.0	Monitored, exterior Mechanical	
167	S-M	2' - 6"		7' - 0"	1 3/4"	F	WD	--	HM	E8	C8		n/a	No	12.0		
169	S-M	3' - 0"		7' - 0"	1 3/4"	F	HM	--	HM				n/a	No	5.0	Monitored, exterior Mechanical	
CB1	S-M	2' - 8"		7' - 0"	1 3/4"	F	HM		HM	E8	C8		n/a	No	11.0	14 Ga. HM Frame	
CC1	S-M	2' - 8"		7' - 0"	1 3/4"	F	HM		HM	E8	C8		n/a	No	11.0	14 Ga. HM Frame	
CD1	S-M	2' - 8"		7' - 0"	1 3/4"	F	HM		HM	E8	C8		n/a	No	11.0	14 Ga. HM Frame	
CE1	S-M	2' - 8"		7' - 0"	1 3/4"	F	HM		HM	E8	C8		n/a	No	11.0	14 Ga. HM Frame	
CH1	S	2' - 0"		7' - 0"	1 3/4"	F	HM		HM	E8	C8		n/a	No	11.0	14 Ga. HM Frame	
DV1	S	3' - 0"		7' - 0"	1 3/4"	FG-CW	ALUM	1T	ALUM	H12	G12	C10	n/a	No	2.0	Card Reader and Intercom to enter (S/E)	
EXC5	n/a	8' - 0"		7' - 0"	0"	CO	STL		STL	D12/A801	C12/A801	A12/A801	--		4.0	Overhead door at Mezz. level	
SP4C	n/a	12' - 0"		12' - 0"	2"	SO	STL	--	STL	F10	E10	C10	n/a		3.0	All 7 sallyport doors interlocked w/only one door open at a time	
SP4D	n/a	12' - 0"		12' - 0"	2"	SO	STL	--	STL	F10	E10	C10	n/a		3.0	All 7 sallyport doors interlocked w/only one door open at a time	
SP4E	n/a	12' - 0"		12' - 0"	2"	SO	STL	--	STL	F10	E10	C10	n/a		3.0	All 7 sallyport doors interlocked w/only one door open at a time	
SP4F	n/a	12' - 0"		12' - 0"	2"	SO	STL	--	STL	F10	E10	C10	n/a		3.0	All 7 sallyport doors interlocked w/only one door open at a time	
02 - MEZZANINE																	
CB2	S-M	2' - 8"		7' - 0"	1 3/4"	F	HM		HM	E8	C8		n/a	No	11.0	14 Ga. HM Frame	
CC2	S-M	2' - 8"		7' - 0"	1 3/4"	F	HM		HM	E8	C8		n/a	No	11.0	14 Ga. HM Frame	
CD2	S-M	2' - 8"		7' - 0"	1 3/4"	F	HM		HM	E8	C8		n/a	No	11.0	14 Ga. HM Frame	
CE2	S-M	2' - 8"		7' - 0"	1 3/4"	F	HM		HM	E8	C8		n/a	No	11.0	14 Ga. HM Frame	

Notes:
Door 135B is a 90 minute FEMA storm shelter door with magnetic hold open. Hollow metal door and frame.
Door 135B-1 is the active door with card reader inside of the conference room to unlock the door for security to enter into Dispatch. The door material is wood.
These two doors are in the same communicating, hollow metal, FEMA rated, door frame.

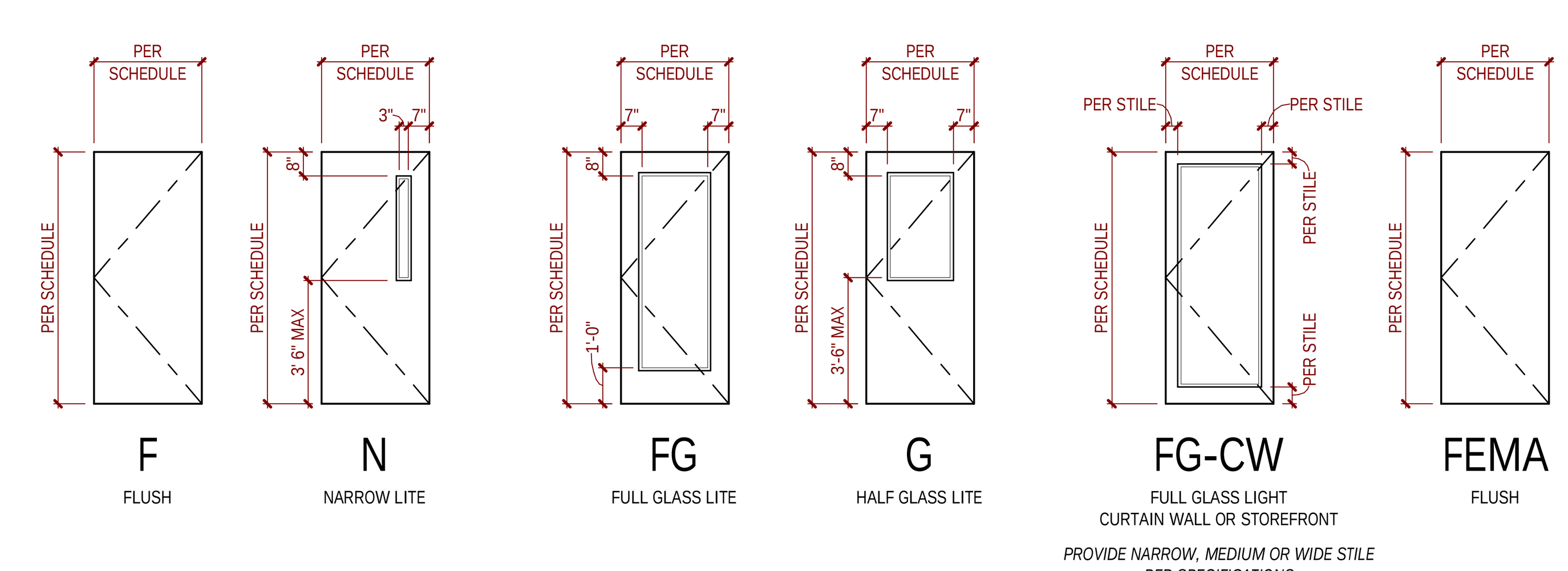
DOOR ABBREVIATIONS LEGEND

ALUM	ALUMINUM	F	FLUSH	N	NARROW LITE	RVS	RIGID VINYL SHEET
ACVN	ACROVYN	FG	FULL GLASS	P	POCKET	SDK	SMOKE & DRAFT KIT
BL-#	BORROWED LITE	FRP	FIBERGLASS REINFORCED PANELS	PL	POSITIVE LATCHING	SL-#	SIDE LITE
CG	COILING GRILL OVERHEAD DOOR	G	HALF GLASS	PLK	PAINT LITE KIT	SO	SECTIONAL OVERHEAD DOOR
CL	COILING OVERHEAD DOOR	HM	HOLLOW METAL	PP	POSITIVE PRESSURE	T	TEMPERED
CO	CASED OPENING	IB	INTEGRAL BLINDS	PR	PAIR	V	VISION GLASS
D	DUTCH DOOR	LLDF	LEAD-LINED DOOR & FRAME	S	SINGLE	WD	WOOD
DE	DOUBLE EGRESS	M	MIRRORED				

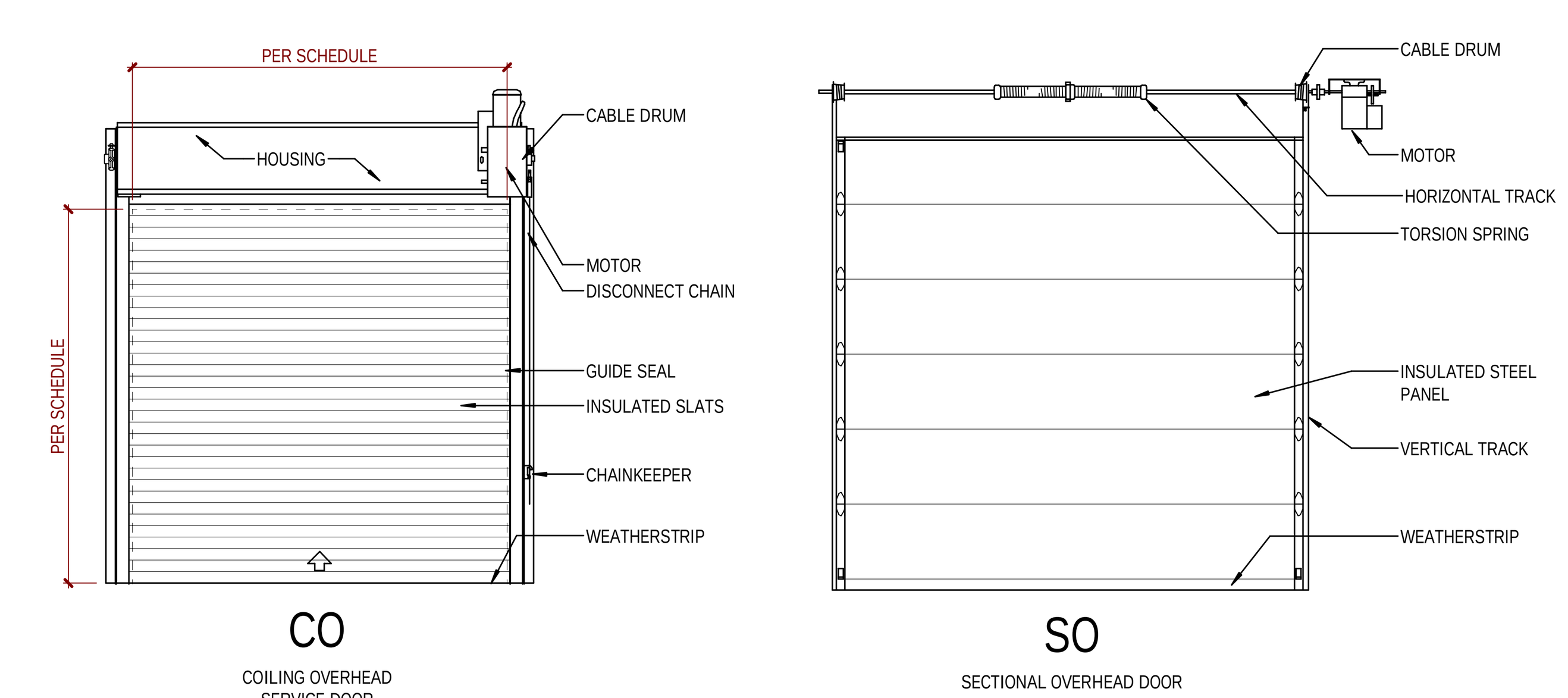


A10 FRAME TYPES - STANDARD
1/4" = 1'-0"

NOTE: CONTROL JOINT (CJ), TO EXTEND HEIGHT OF GYPSUM BOARD, EACH SIDE OF WALL (TYPICAL)



A8 DOOR TYPES - SWING DOORS
1/4" = 1'-0"



A4 DOOR TYPES - SERVICE DOORS
1/4" = 1'-0"

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BID & PERMIT

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EDGAR COUNTY, ILLINOIS
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HMN 21003.003

BID & PERMIT

KLINGNER ARCHITECT PROJECT # 22-4046
Date: 03/01/2024

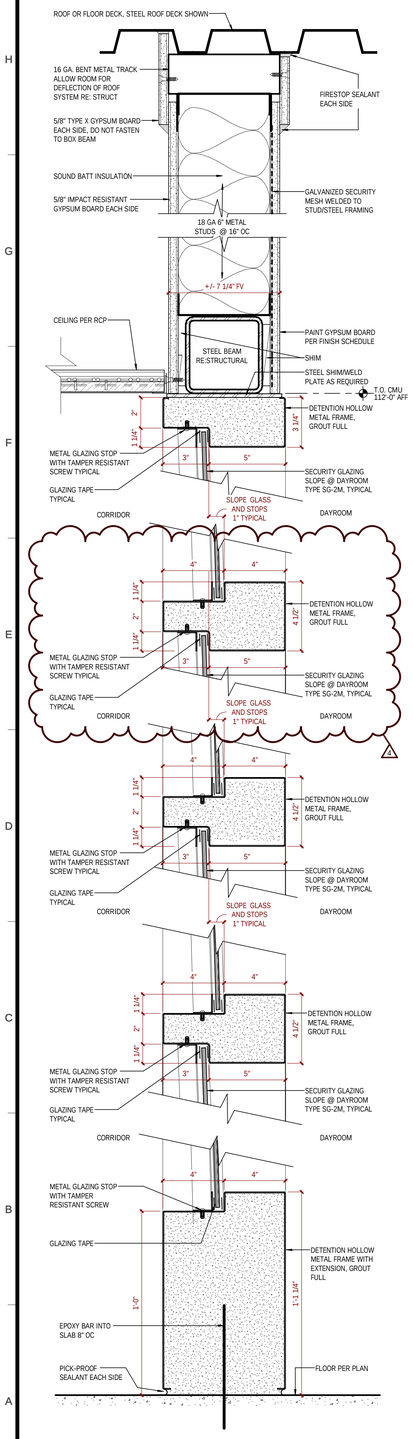
#	Issue	Date
2	Addendum 02	03-20-2024
4	Addendum 04	04-04-2024

Drawn by: Author

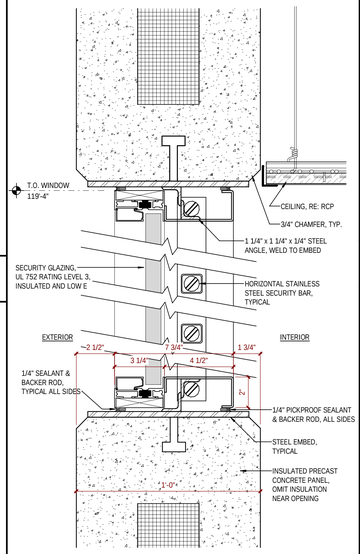
OPENING SCHEDULE, DOOR & FRAME TYPES & WINDOW TYPES

A800

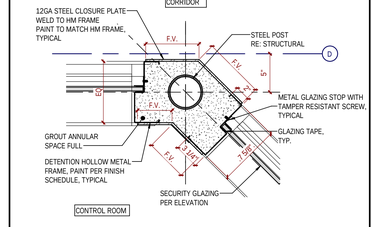
4/4/2024 5:15:32 PM



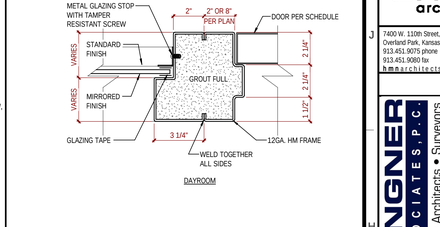
A12 DAYROOM SECURITY GLAZING
3" = 1'-0" | A2/A850



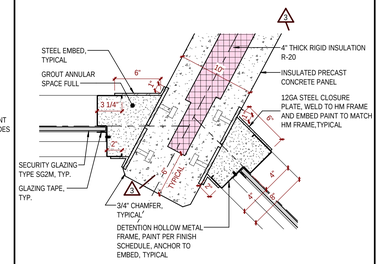
F6 DETENTION WINDOW - HEAD & SILL
3" = 1'-0" | F10/A801



H4 CORNER MULLION - CONTROL ROOM
1 1/2" = 1'-0" | A10/A130

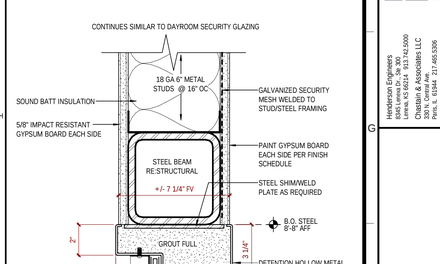


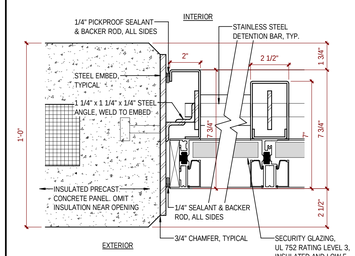
H2 DAYROOM DOOR FRAME
3" = 1'-0" | A2/A850



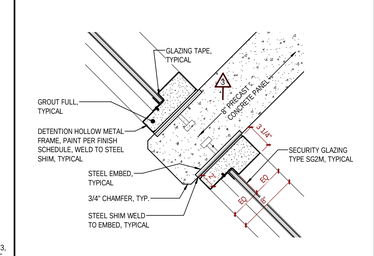
F4 JAMB MULLION - ANGLED @ PRECAST
1 1/2" = 1'-0" | A5/A102

DETAIL SIMILAR AT 8" THICK, NON-INSULATED, PRECAST WALL

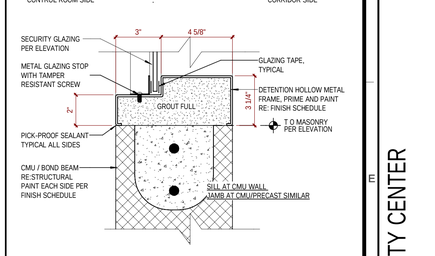




D6 DETENTION WINDOW - JAMB & MULLION
3" = 1'-0" | F10/A801

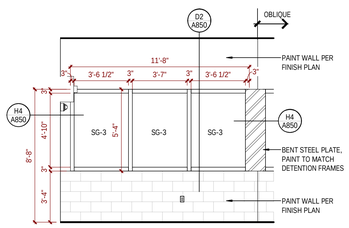


D4 JAMB MULLION @ PRECAST
1 1/2" = 1'-0" | A5/A102

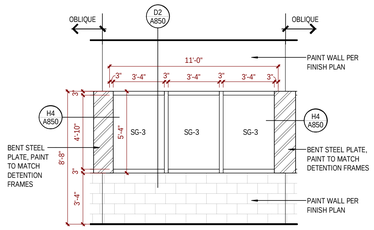


D2 CONTROL ROOM SECURITY GLAZING
3" = 1'-0" | C2/A850

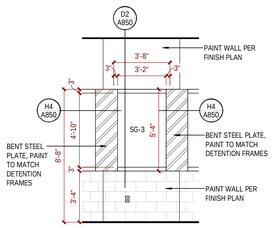
REFER TO SHEET A100 FOR SECURITY CONSTRUCTION NOTES



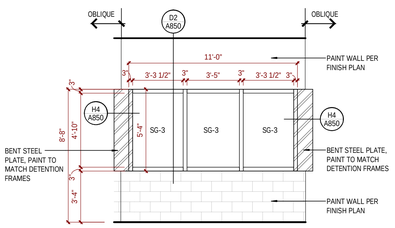
C10 SECURITY GLAZING - CONTROL - SW
1/4" = 1'-0" | A10/A130



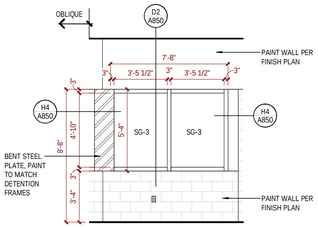
C8 SECURITY GLAZING - CONTROL - SE
1/4" = 1'-0" | A10/A130



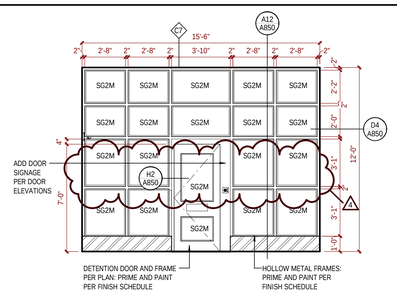
C6 SECURITY GLAZING - CONTROL - E
1/4" = 1'-0" | A10/A130



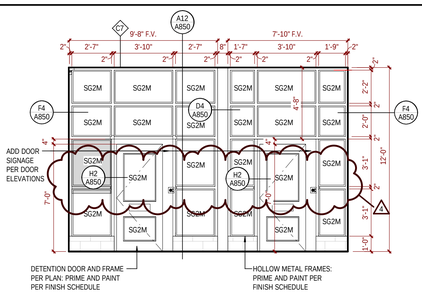
C4 SECURITY GLAZING - CONTROL -NE
1/4" = 1'-0" | A10/A130



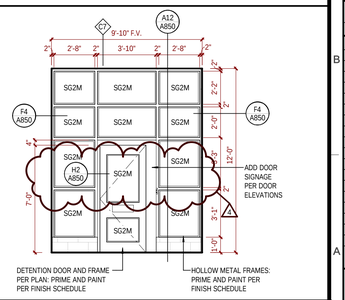
C2 SECURITY GLAZING - CONTROL - N
1/4" = 1'-0" | A10/A130



A7 SECURTIY GLAZING - DAYROOM A & F
1/4" = 1'-0" | A7/A131



A4 SECURITY GLAZING - DAYROOM B, C, D & E
1/4" = 1'-0" | A7/A131



A2 SECURITY GLAZING - EXERCISE
1/4" = 1'-0" | A5/A102

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HMN 21003.003

BID & PERMIT

KLINGNER ARCHITECT PROJECT # 22-4046

Date: 03/01/2024

	Issue	Date
3	Addendum 03	03-27-2024
4	Addendum 04	04-04-2024

Drawn by: JR

SECURITY GLAZING ELEVATIONS & DETAILS

A850

4/4/2024 5:15:43 PM

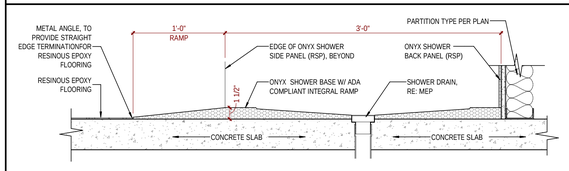
MATERIAL LEGEND

MATERIAL	CODE	MANUFACTURER	MODEL/ PATTERN	COLOR	SIZE	NOTES
FLOORING						
CARPET TILE	CPT1	PATCRAFT	COLOR FILTER I04471	AMBIENT 00290	9" x 36"	STAGGER INSTALLATION
LUXURY VINYL TILE	LVT1	TARKETT	ID LATITUDE STONE	75431 LAVA STONE	18" x 18" (.118" THICKNESS)	QUARTER-TURN INSTALLATION
RUBBER TILE	RT1	JOHNSONITE/TARKETT	COLOR SPLASH SPECKLED	HRTSP VF6 SANDHILL CRANE	24" x 24" (.078" THICKNESS)	HAMMERED SURFACE TEXTURE; MONOLITHIC INSTALLATION
DETENTION CELL PADDING	PADDING	SEE SPECS	--	--	--	--
SEALED CONCRETE	SC	SEE SPECS	--	--	--	--
RESINOUS EPOXY POURED FLOOR	EPF1	DESCO	QUARTZ CREMONA DB	CUSTOM BLEND S#0416-268DB	--	--
VINYL COMPOSITION TILE (STATIC-DISSIPATIVE)	VCT1	ARMSTRONG	EXCELON SDT	RIDGE 51957	12" x 12" (1/8" THICKNESS)	QUARTER-TURN INSTALLATION
WALK OFF CARPET TILE	WOM	SHAW	ALL ACCESS - PACE	TRAVERSE ST413-14557	24" x 24"	ASHLAR INSTALLATION
BASE						
RESILIENT COVE BASE	RB1	JOHNSONITE/TARKETT	STANDARD COVE/TOE	CHARCOAL 20	4"	--
RESINOUS EPOXY BASE (INTEGRAL)	EPB1	DESCO	QUARTZ CREMONA DB	CUSTOM BLEND S#0416-268DB	8"	RE: DB/A900 OR E5/A900 DEPENDING ON WALL FINISH
	EPB2	DESCO	QUARTZ CREMONA DB	CUSTOM BLEND S#0416-268DB	8"	RE: D6/A900
	EPB3	DESCO	QUARTZ CREMONA DB	CUSTOM BLEND S#0416-268DB	8"	RE: D5/A900
WALLS						
PAINT	P1	SHERWIN WILLIAMS	--	REPOSE GRAY SW7015	--	FIELD; SECURE AREAS
(EP# = DENOTES EPOXY PAINT	P2	SHERWIN WILLIAMS	--	ICE CUBE SW6252	--	FIELD; NON-SECURE AREAS
VERSION OF COLORS LISTED HERE)	P3	SHERWIN WILLIAMS	--	FELTED WOOL SW9171	--	ACCENT; SECURE AREAS
	P4	SHERWIN WILLIAMS	--	FOGGY DAY SW6235	--	ACCENT; NON-SECURE AREAS
	P5	SHERWIN WILLIAMS	--	URBANE BRONZE SW7048	--	ACCENT; SECURE AREAS
EPOXY WALL COATING	EPW	SEE SPECS	FIBERGLASS MAT REINFORCED EPOXY	MATCH PAINT P1', REPOSE GRAY SW7015	--	--
ACOUSTIC WALL PANELS	AWP1	MDC	ZINTRA - ETCH "VJ BOARD WIDE"	CADET	4' x 9' SHEETS; 1/2" THICKNESS	REFER TO ELEVATIONS FOR LOCATIONS/INSTALLATION DIRECTION
DECORATIVE CMU (BURNISHED BLOCK)	BBL	NORTHFIELD	TRENDSTONE PLUS	ASH CHARCOAL	--	--
WALL TILE	WT1	DALTILE	ASTRONOMY	NEBULA - MATTE	12" x 24" (5/16" THICKNESS)	--
RESIN SHOWER PANELS	RSP	ONYX COLLECTION	SHOWER WALL PANELS AND SHOWER BASE W/ ADA INTEGRAL RAMP	CONCRETE - GLOSS SMOOTH FINISH	3/8" THICK PANELS, REFER TO PLANS/ELEVS FOR SIZES NEEDED	USE MANUFACTURER'S COORDINATION TRIM AND INSIDE CORNER PIECES. RE: E8/A900 FOR COORDINATING LOW PROFILE SHOWER BASE W/ RAMP
DOORS						
DOOR FRAME PAINT	DFP1	SHERWIN WILLIAMS	--	URBANE BRONZE SW7048	--	SECURE AREAS
	DFP2	SHERWIN WILLIAMS	--	FELTED WOOL SW9171	--	NON-SECURE AREAS
⚠1 DOOR FRAME PAINT (EXTERIOR DOORS)	DFP3	SHERWIN WILLIAMS	--	TBD TO COORDINATE W/ PRECAST COLOR	--	EXTERIOR HOLLOW METAL FRAMES WILL BE SAME COLOR AS DFP3
DOOR FACE PAINT (INTERIOR DOORS)	DFAP1	SHERWIN WILLIAMS	--	FELTED WOOL SW9171	--	SECURE AREAS
DOOR FACE PAINT (EXTERIOR DOORS)	DFAP2	SHERWIN WILLIAMS	--	TBD TO COORDINATE W/ PRECAST COLOR	--	NON-SECURE AREAS
⚠1 WOOD DOOR STAIN	--	SEE SPECS	--	STAIN TO MATCH FE1	--	EXTERIOR HOLLOW METAL DOORS WILL BE SAME COLOR AS DFP3
MISCELLANEOUS						
WINDOW SHADES	WS1	MECHOSHADE	THERMOVEIL, 1500 SERIES	BEIGE 1502	3% OPEN	LOCATION PER RCP AND FINISH PLAN KEYNOTES

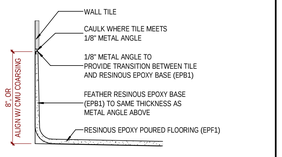
TRANSITION SCHEDULE

FLOORING MATERIAL TRANSITION	TRANSITION
LVT to CARPET TILE	JOHNSONITE SLIM LINE TRANSITION SLT-XX-A
LVT to SEALED CONCRETE	JOHNSONITE REDUCER SSR-XX-B
LVT to RESINOUS EPOXY FLOORING	EPOXY INSTALLER TO PROVIDE METAL STRIP FOR TRANSTITION TO RUBBER TILE. FEATHER SUBFLOOR BENEATH LUXURY VINYL TILE AS NEEDED TO CREATE FLUSH/LEVEL TRANSITION TO TOP OF EPOXY. SLOPE NO STEEPER THAN 1:12 TO MEET ADA REQUIREMENTS.
LVT to VCT	BUTT TILE W/ SILICONE. (USE SUBFLOOR LEVLER UNDER LVT FOR FLUSH TRANSITION) SLOPE TO NOT BE STEEPER THAN 1:12 TO MEET ADA REQUIREMENTS.
VCT to RUBBER TILE	BUTT TILE W/ SILICONE. (USE SUBFLOOR LEVLER UNDER RUBBER TILE FOR FLUSH TRANSITION) SLOPE TO NOT BE STEEPER THAN 1:12 TO MEET ADA REQUIREMENTS.
RESINOUS EPOXY FLOORING to SEALED CONCRETE	WITHIN SECURE PERIMETER; NO METAL STRIP, SEE FINISH PLAN KEYNOTES OUTSIDE SECURE PERIMETER; EPOXY INSTALLER TO PROVIDE TAPERED METAL STRIP FOR TRANSITTION TO 0"
RESINOUS EPOXY FLOORING to RUBBER TILE	USE ALUMINUM TRANSITION STRIP FROM EPOXY INSTALLER. USE SUBFLOOR LEVELER UNDER RUBBER TO MEET EPOXY FLOOR, FOR FLUSH TRANSITION. FEATHER SLOPE MINIMUM 12" FROM TRANSITION.
RESINOUS EPOXY FLOORING to RESIN SHOWER PAN	USE ALUMINUM TRANSITION STRIP FROM EPOXY INSTALLER TO CREATE STRAIGHT EDGE/TERMINATION TO ABUTT TO SHOWER RAMP
SEALED CONCRETE to RUBBER TILE	JOHNSONITE REDUCER SSR-XX-B
SEALED CONCRETE to PADDING	USE REDUCER STRIP FROM PADDING MANUFACTURER

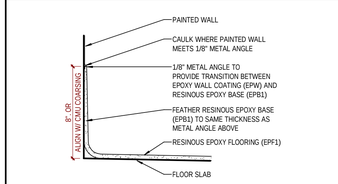
WALL MATERIAL TRANSITION	TRANSITION
OUTSIDE VERTICAL CORNERS: EPOXY WALL COATING (EPW) to EPOXY PAINT (EP#')	NO METAL TRANSITION STRIP; FEATHER EPOXY WALL COATING AS NEEDED TO CREATE SMOOTH, STRAIGHT/CLEAN EDGE TRANSITION TO EPOXY PAINT AT CORNER
OUTSIDE VERTICAL/HORIZONTAL CORNERS: WALL TILE (WT1) to WALL TILE (WT1)	SCHLUTER QUADEC - SATIN ANODIZED ALUMINUM



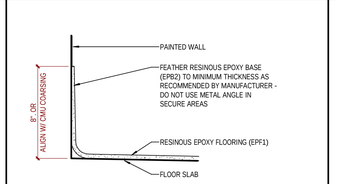
E8 SHOWER - PAN BASE w/ RAMP
1 1/2" = 1'-0" |



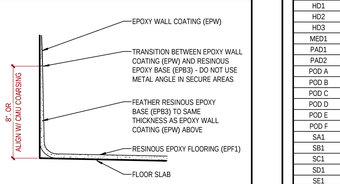
E5 RESINOUS EPOXY BASE AT WALL TILE
3" = 1'-0" |



D8 EPOXY BASE @ PAINTED WALL (NON-SECURE)
3" = 1'-0" |

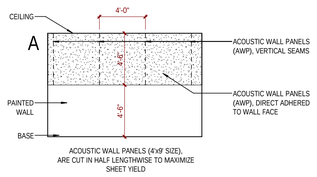


D6 EPOXY BASE @ PAINTED WALL (SECURE)
3" = 1'-0" |



D5 EPOXY BASE @ EPW (SECURE)
3" = 1'-0" |

TYPICAL ACOUSTIC PANEL ELEVATION



ACOUSTIC WALL PANELS (4'x9' SIZE), ARE CUT IN HALF LENGTHWISE TO MAXIMIZE SHEET YIELD

FINISH SCHEDULE

NO	NAME	FLOOR	BASE	WALLS	COMMENTS	Revision #
FIRST FLOOR						
101	PUBLIC LOBBY	LVT1	RB1 / --	P2 / BBL		
103	VIDEO VISIT	LVT1	RB1	P2 / BBL / AWP1		
104	TOILET	EPF1	EPB1	EP2 / BBL		
105	OFFICE STORAGE	SC	RB1	P2		
106	WORK AREA	LVT1	RB1	P2, P4		
107	ADMIN. OFFICE	CPT1	RB1	P2, P4 / AWP1		
108	SHERIFF OFFICE	CPT1	RB1	P2, P4		
109	CHIEF DEPUTY OFFICE	CPT1	RB1	P2, P4		
110	DETECTIVE'S OFFICE	CPT1	RB1	P2, P4		
111	MECHANICAL	SC	P2	RB1		
112	OFFICE CIRCULATION	LVT1	RB1	P2, P4		
113	ROAD PATROL/JAIL STAFF	LVT1	RB1	P2, P4		
114	STAFF ENTRANCE	WOM	--	P2		
115	INTERVIEW	CPT1	--	P2 / AWP1		
116	TOILET	EPF1	EPB1	EP2		
117	ATTORNEY VISIT	SC	--	P2		
118	INMATE VISIT	SC	--	EP1		
119	STAFF CIRCULATION	SC	--	P2		
120	SECURITY ELECTRONICS	VCT1	RB1	P2		
121	CONTROL CORRIDOR	RT1	RB1	P2		
122	FIRST APPEARANCE VIDEO	SC	--	EP1		
123	EVIDENCE PROCESS	SC	--	EP1		
124	ELECTRICAL	SC	--	P1		
125	EVIDENCE STORAGE	SC	--	EP1		
126	STAFF BREAK	LVT1	--	P2		
127	JANITOR	SC	--	EP2		
128	ARMORY	SC	--	P2		
129	MENS RESTROOM	EPF1	EPB1	EP2		
130	SHOWER	EPF1	EPB1	EP2 / RSP		
131	WOMENS RESTROOM	EPF1	EPB1	EP2		
132	SHOWER	EPF1	EPB1	EP2 / RSP		
133	RECORD STORAGE	SC	--	EP2		
134	SERVER ROOM	VCT1	RB1	P2		
135	CONFERENCE ROOM	CPT1	RB1	P2, P4 / AWP1		
135B	CONFERENCE STORAGE	CPT1	RB1	P2		
136	DISPATCH CORRIDOR	LVT1	RB1	P2		
137	DISPATCH SUPERVISOR	LVT1	RB1	P2, P4		
138	DISPATCH	LVT1	RB1	P2, P4		
139	DISPATCH TOILET	EPF1	EPB1	EP2		
140	DISPATCH BREAK	LVT1	RB1	P2, P4		
141	DISPATCH SERVER	VCT1	RB1	P2		
142	SECURE CORRIDOR	SC	--	EP1		
143	STORAGE	SC	--	EP1		
144	MEDICAL EXAM	SC	RB1 / --	EP1	R2	
145	JAIL ADMIN.	RT1	RB1	P2		
146	BOOKING	RTI / SC	RB1 / --	EP1, EP3	R3	
147	DRESS-IN	EPF1	EPB3	EPW		
148	ISSUE	SC	--	EP1		
149	STAFF TOILET	EPF1	EPB1	EP2		
150	INMATE PROPERTY STORAGE	SC	--	EP1		
151	JAN.	SC	--	EP1		
152	LAUNDRY	SC	RB1 / --	EP1	R1	
153	LAUNDRY MECH.	SC	RB1 / --	EP1	R1	
154	KITCHEN	EPF1	EPB1	EP1 / WT1		
155	RECEIVING	SC	--	EP1		
156	MECH.	SC	--	--		
157	MECHANICAL	SC	--	--		
158	MECHANICAL	SC	--	--		
159	CONTROL ROOM	RT1	RB1	P2 ,P3	R5	
160	STAFF TOILET	EPF1	EPB1	EP2		
161	JAN.	SC	--	EP1		
162	SECURE CORRIDOR	SC	--	EP1, EP3, EP5	R4	
163	ELECTRICAL	SC	--	--		
164	MECHANICAL	SC	--	--		
165	DECON	EPF1	EPB3	EPW		
166	ARRESTING OFFICER	SC	--	EP1	R2	
167	DELICE	SC	--	EP1		
168	BOOKING CORRIDOR	SC	--	EP1		
169	EMERGENCY ELECTRICAL	SC	--	--		
170	DISHWASHING	EPF1	EPB1	EP1 / WT1		
A11	2 BED CELL	SC	--	EP1		
B10	2 BED CELL	SC	--	EP1		
B11	2 BED ADA CELL	SC	--	EP1		
C10	2 BED ADA CELL	SC	--	EP1		
C11	2 BED CELL	SC	--	EP1		
D10	2 BED CELL	SC	--	EP1		
D11	2 BED ADA CELL	SC	--	EP1		
DV1	DISPATCH VESTIBULE	WOM				
E10	2 BED ADA CELL	SC	--	EP1		
E11	2 BED CELL	SC	--	EP1		
EXC	EXERCISE	SC	--	EP1, EP5		
F11	2 BED ADA CELL	SC	--	EP1		
HD1	HOLD 1	SC	--	EP1		
HD2	HOLD 2	SC	--	EP1		
HD3	HOLD 3	SC	--	EP1		
MED1	MEDICAL CELL	SC	RB1 / --	EP1	R1	
PAD1	PADDED HOLD 1	PADDING	PADDING	PADDING		
PAD2	PADDED HOLD 2	PADDING	PADDING	PADDING		
POD A	DAYROOM A	SC	--	EP1, EP5	R4	
POD B	DAYROOM B	SC	--	EP1, EP5	R4	
POD C	DAYROOM C	SC	--	EP1, EP5	R4	
POD D	DAYROOM D	SC	--	EP1, EP5	R4	
POD E	DAYROOM E	SC	--	EP1, EP5	R4	
POD F	DAYROOM F	SC	--	EP1, EP5	R4	
SA1	SHOWER	EPF1	EPB3	EPW		
SB1	SHOWER	EPF1	EPB3	EPW		
SC1	SHOWER	EPF1	EPB3	EPW		
SD1	SHOWER	EPF1	EPB3	EPW		
SE1	SHOWER	EPF1	EPB3	EPW		
SF1	SHOWER	EPF1	EPB3	EPW		
SP1	SALLYPORT	SC	--	EP1		
SP2	OFFICE SALLYPORT	SC	--	EP1		
SP3	DETENTION SALLYPORT	SC	--	EP1		
SP4	VEHICULAR SALLYPORT	SC	--	-- / EP2		
TA1	TOILET	SC	--	EP1		
TA2	TOILET	SC	--	EP1		
TB	TOILET	SC	--	EP1		
TC	TOILET	SC	--	EP1		
TD	TOILET	SC	--	EP1		
TE	TOILET	SC	--	EP1		
TF1	TOILET	SC	--	EP1		
TF2	TOILET	SC	--	EP1		
02 - MEZZANINE						
170	ELECTRICAL MEZZ	SC	--	--		
171	EMERGENCY ELECTRICAL MEZZ	SC	--	--		
175	MECHANICAL MEZZ	SC	--	--		
A MZ	A MEZZ	SC	--	EP1		
B20	2 BED CELL	SC	--	EP1		
B21	2 BED CELL	SC	--	EP1		
B22	2 BED CELL	SC	--	EP1		
B MZ	B MEZZ	SC	--	EP1		
C20	2 BED CELL	SC	--	EP1		
C21	2 BED CELL	SC	--	EP1		
C22	2 BED CELL	SC	--	EP1		
C MZ	C MEZZ	SC	--	EP1		
D20	2 BED CELL	SC	--	EP1		
D21	2 BED CELL	SC	--	EP1		
D22	2 BED CELL	SC	--	EP1		
D MZ	D MEZZ	SC	--	EP1		
E20	2 BED CELL	SC	--	EP1		
E21	2 BED CELL	SC	--	EP1		
E22	2 BED CELL	SC	--	EP1		
E MZ	E MEZZ	SC	--	EP1		
F MZ	F MEZZ	SC	--	EP1		

FINISH COMMENTS

R1. INSTALL WALL BASE (RB1) ONLY AT GYP BD WALLS; DO NOT INSTALL WALL BASE ON CMU OR PRECAST WALLS IN ROOM (DESIGNATED AS '--' IN "BASE" CATEGORY OF SCHEDULE), AND PER FINISH PLAN KEYNOTE #7.
R2. INSTALL WALL BASE (RB1) ONLY AT MILLWORK (EXPOSED SIDED AND/OR TOEKICK); DO NOT INSTALL WALL BASE ON WALLS IN ROOM (DESIGNATED AS '--' IN "BASE" CATEGORY OF SCHEDULE), AND PER FINISH PLAN KEYNOTE #8.
R3. INSTALL WALL BASE (RB1) ONLY AT WALLS / LOCATIONS INDICATED BY ACCENT WALL LINE TYPE WITHIN ROOM PER FINISH PLAN KEYNOTE #15. DO NOT INSTALL WALL BASE ON WALLS NOT INDICATED WITH ACCENT WALL LINE TYPE WITHIN ROOM (DESIGNATED AS '--' IN "BASE" CATEGORY OF SCHEDULE).
R4. REFER TO FINISH PLAN KEYNOTE #17 FOR PAINT (EP3) ON CMU WALLS AROUND DETENTION GLAZING, WHERE INDICATED BY ACCENT WALL LINE TYPE IN FINISH PLAN.
R5. REFER TO FINISH PLAN KEYNOTE #18 FOR PAINT (P3) ON WALLS ABOVE, BELOW AND BESIDE DETENTION GLAZING WHERE INDICATED BY ACCENT WALL LINE TYPE IN ROOM ON FINISH PLAN.

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HMN 21003.003

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KLINGNER ARCHITECT PROJECT # 22-4046

Date: 03/01/2024

⚠	Issue	Date
2	Addendum 02	03-20-2024
4	Addendum 04	04-04-2024

Drawn by: Author

FINISH SCHEDULE & MATERIALS LEGEND

A900

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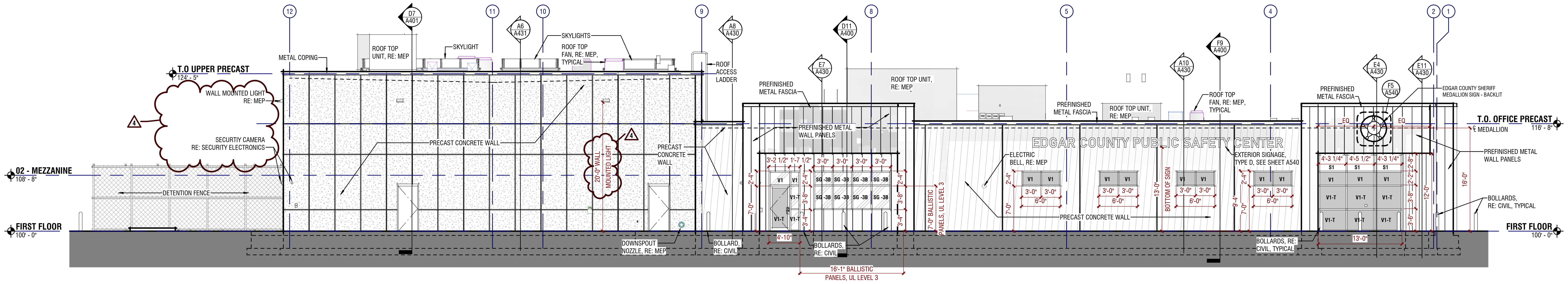
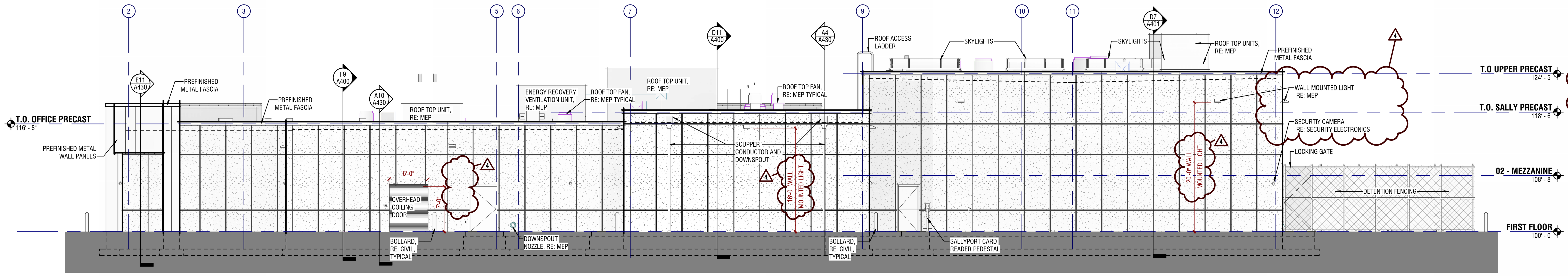


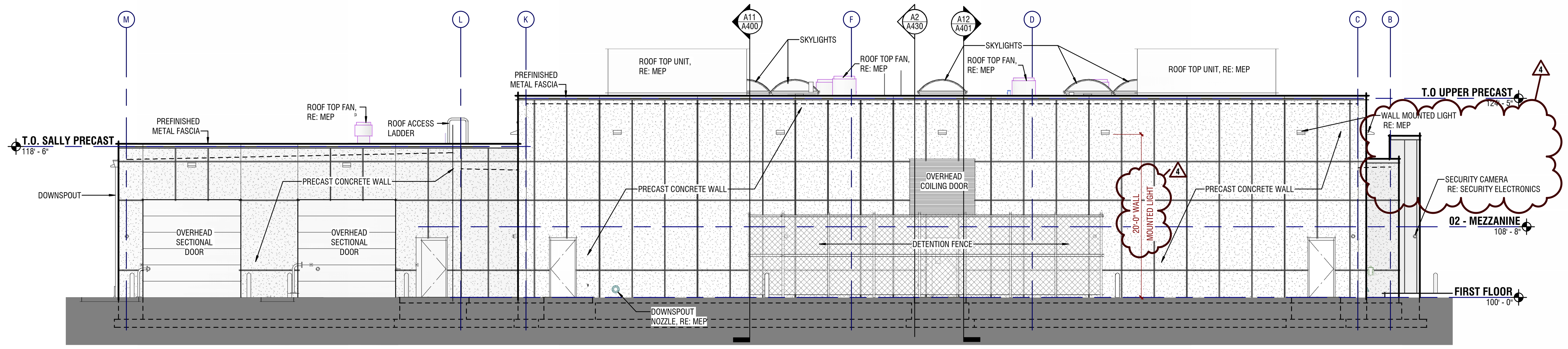
H10 NORTH ELEVATION

1/8" = 1'-0" | A5/A102



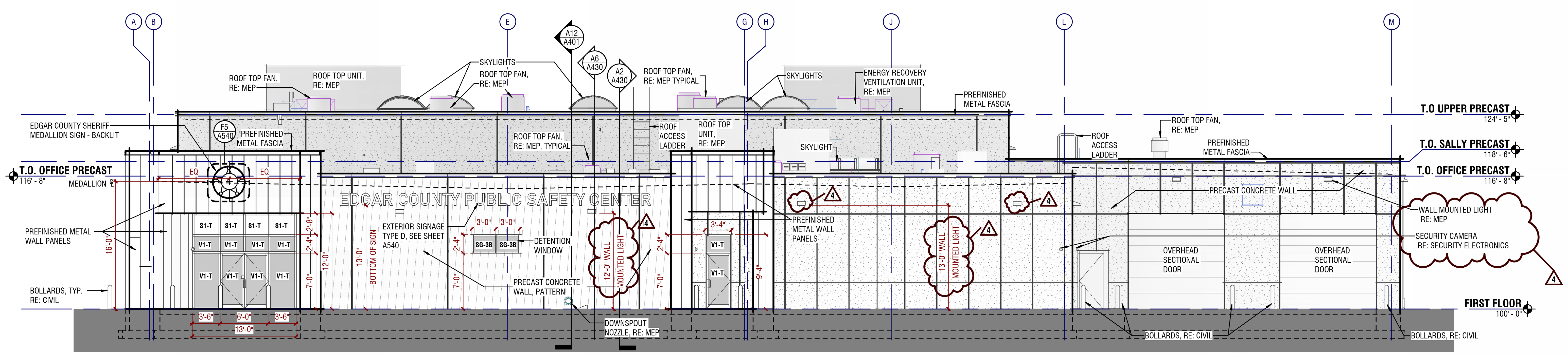
E10 SOUTH ELEVATION

1/8" = 1'-0" | A5/A102



C9 EAST ELEVATION

1/8" = 1'-0" | A5/A102



A9 WEST ELEVATION

1/8" = 1'-0" | A5/A102

0 4' 8' 16'

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

EXTERIOR ELEV KEYNOTES

#	NOTE

GLAZING LEGEND

V1 VISION PANEL
- 1" INSULATING GLASS
- TINTED / LOW E
- -T = TEMPERED SAFETY GLASS

S1 SPANDREL PANEL
- 1" INSULATING GLASS
- -T = TEMPERED SAFETY GLASS

SG-3B SECURITY GLAZING
- LEVEL 3 - (UL) 752 RATING
- 1-7/8" INSULATING GLASS
- LOW E
- See Section 088853 SECURITY GLASS

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KLINGNER ARCHITECT PROJECT # 22-4046

Date: 03/01/2024

#	Issue	Date
4	Addendum 04	04-04-2024

Drawn by: LES

EXTERIOR ELEVATIONS

A300

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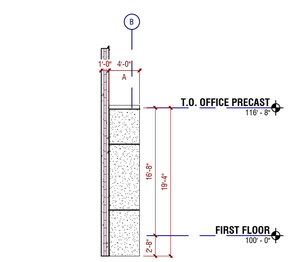
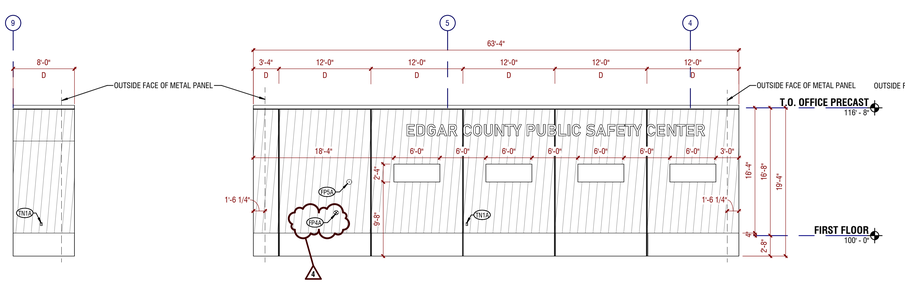
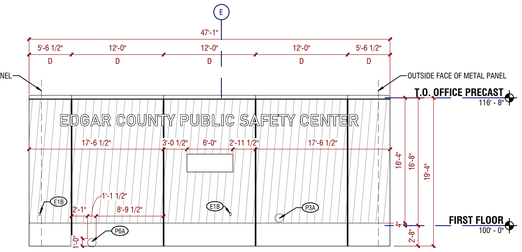




SEE SHEET A444 PRECAST CONCRETE PANEL PATTERNS FOR INFORMATION ON F-4 FORM LINER FINISH



SEE SHEET A444 PRECAST CONCRETE PANEL PATTERNS FOR INFORMATION ON F-4 FORM LINER FINISH

H12 PRECAST ELEVATION - SHERIFF OFFICE
1/8" = 1'-0" | A6/A441

H8 PRECAST ELEVATION - SHERIFF OFFICE
1/8" = 1'-0" | A10/A120

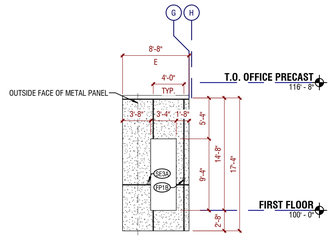
H4 PRECAST ELEVATION - SHERIFF OFFICE
1/8" = 1'-0" | C11/A130

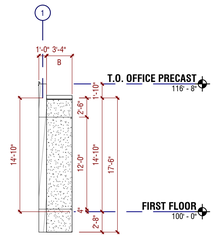
PRECAST PANEL KEYNOTES

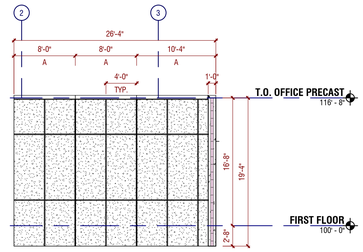
#	DESRIPTION
E1A	RECESSED BOX & CONDUIT FOR RECEPTICAL
E1B	RECESSED BOX & CONDUIT FOR RECEPTICAL (OTHER SIDE)
E2A	RECESSED BOX & CONDUIT FOR SWITCH
E2B	RECESSED BOX & CONDUIT FOR SWITCH (OTHERSIDE)
E3A	RECESSED BOX & CONDUIT FOR LIGHT FIXTURE
E4A	RECESSED BOX & CONDUIT FOR THERMOSTAT
E4B	RECESSED BOX & CONDUIT FOR THERMOSTAT
E5A	TECH CONDUITS
E6B	RECESSED BOX & CONDUIT FOR DISCONNECT SWITCH
FP1A	RECESSED BOX & CONDUIT FOR PULL STATION
FP1B	RECESSED BOX & CONDUIT FOR PULL STATION (OTHER SIDE)
FP2B	RECESSED BOX & CONDUIT FOR EXIT SIGN (OTHER SIDE)
FP3A	RECESSED BOX & CONDUIT FOR HORN/STROBE
FP3B	RECESSED BOX & CONDUIT FOR HORN/STROBE (OTHER SIDE)
FP4A	3" OPENING FOR SIAMESE FDC
FP5A	RECESSED BOX & CONDUIT FOR ELECTRIC BELL
M1A	OPENING FOR DUCT
M2A	LOUVER OPENING
M3A	OPENING FOR NATURAL GAS LINE
M4A	OPENING FOR SMOKE DAMPER
P1A	RECESSED BOX FOR HYDRANT
P2A	3" OPENING FOR PLUMBING
P3A	6" OPENING FOR PLUMBING
P4A	6" OPENING FOR DOWNSPOUT
P5A	2" OPENING FOR PLUMBING
P6A	xx" OPENING FOR STORM WATER
SE1A	RECESSED BOX & CONDUIT FOR SWITCH
SE2A	RECESSED BOX & CONDUIT FOR CAMERA
SE2B	RECESSED BOX & CONDUIT FOR CAMERA (OTHER SIDE)
SE3A	RECESSED BOX & CONDUIT FOR CARD READER
SE4A	RECESSED BOX & CONDUIT FOR INTERCOM
SE5A	RECESSED BOX FOR PAGING SPEAKER
TN1A	RECESSED BOX & CONDUIT FOR DATA RECEPTICAL
TN1B	RECESSED BOX & CONDUIT FOR DATA RECEPTICAL (OTHER SIDE)

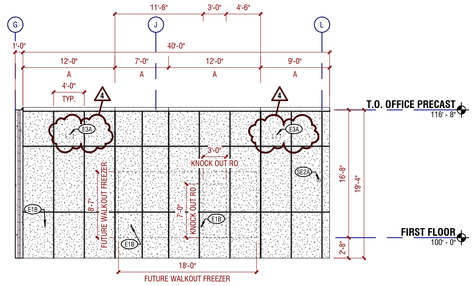
PRECAST KEYNOTE LEGEND

X # Y X = DISCIPLINE
# = ITEM
Y = FACE OF PRECAST









F11 PRECAST ELEVATION - SHERIFF OFFICE
1/8" = 1'-0" | A6/A441

F9 PRECAST ELEVATION - SHERIFF OFFICE
1/8" = 1'-0" | A6/A441

F7 PRECAST ELEVATION - SHERIFF OFFICE
1/8" = 1'-0" | A6/A441

F4 PRECAST ELEVATION - SHERIFF OFFICE
1/8" = 1'-0" | A6/A441

PRECAST FINISH LEGEND:

SEE SPEC 03 45 00 FOR MORE INFORMATION

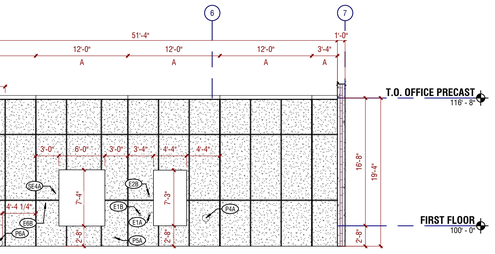
	F-1	LITE SANDBLAST FINISH
	F-2	OMITTED
	F-3	STEEL TROWEL FINISH, SEE NOTE 4. ⚠4
	F-4	FORMLINER FINISH SEE SHEET A444

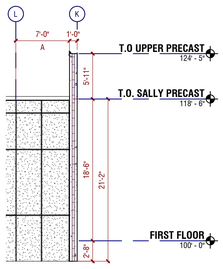
PRECAST ELEVATION LEGEND:

PANEL WIDTH
X = PANEL TYPE

PRECAST GENERAL NOTES:

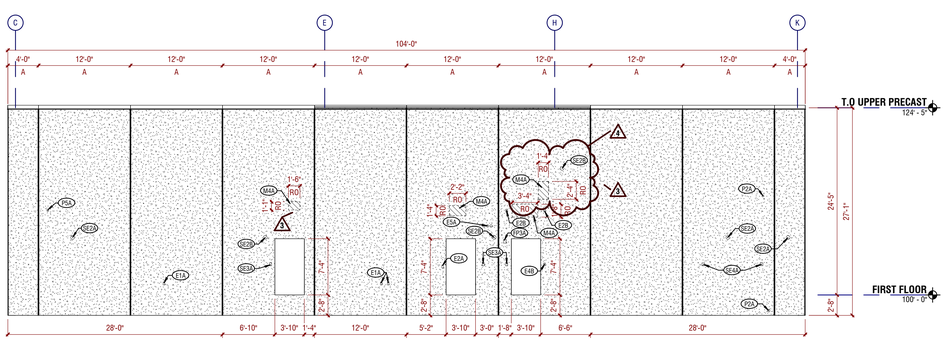
1. BOTTOM OF PRECAST WALL PANELS TO BE MAXIMUM 1-1/2" ABOVE TOP OF FOOTING FOR SHIM SPACE. SEE STRUCTURAL SHEETS.
2. SEE PRECAST DETAILS ON SHEET A443 FOR PANEL JOINT PROFILE, INSULATION, AND FIRE STOP INFORMATION.
3. PRECAST SILLS AT ALL WINDOW AND LOUVER OPENINGS TO SLOPE: SEE WINDOW SHEETS A800-A801.
4. PRECAST WALL PANEL TO BE PAINTED AS NOTED IN FINISH SCHEDULE ON SHEET A900.
5. COORDINATE ALL MEPFT OPENINGS WITH MEPFT SHEETS.
6. THE INFORMATION SHOWN ON THE PRECAST ELEVATIONS REPRESENTS THE INTENT OF THE ARCHITECT AND ENGINEER TO DOCUMENT PENETRATIONS, OPENINGS, JOINTS, AND RECESSED DEVICES WITHIN THE PRECAST CONCRETE PANELS AMONGST ALL OF THE TRADES. THE INFORMATION SHOWN SHALL NOT BE CONSIDERED FINAL OR ALL INCLUSIVE. THE INFORMATION SHOWN DOES NOT RELIEVE THE CONTRACTOR OF THEIR RESPONSIBILITY TO THOROUGHLY CHECK AND CROSS COORDINATE ALL WORK DURING SHOP DRAWINGS- INCLUDING ANYTHING NOT SHOWN ON THESE PRECAST DRAWINGS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO MAKE SURE ANY TRADE ADJUSTMENTS MADE DURING SHOP DRAWING REVIEW ARE ALSO COORDINATED WITH THE PRECAST CONCRETE PANELS.
7. ALL PRECAST WALLS THAT RECEIVE A RUBBER WALL BASE SHALL HAVE ADDITIONAL SEALANT APPLIED WITHIN THE INTERIOR CHAMFER JOINT TO BE FLUSH WITH FACE OF WALL TO THE RUBBER BASE HAS A CONTINUOUS WALL SURFACE FOR ATTACHMENT.
8. ⚠3 ALL INTERIOR PRECAST SURFACES WITHIN THE DETENTION CENTER SHALL HAVE ALL VOIDS AND HOLES LARGER THAN 1/8" FILLED SOLID TO PREVENT INMATES FROM PICKING THE WALL SURFACE.
9. ⚠4 ALL INMATE ACCESSIBLE AREAS SHALL HAVE PICK-PROOF SEALANT. REFER TO SHEET A100, SECURITY PLANS.





D11 PRECAST ELEVATION - SHERIFF OFFICE
1/8" = 1'-0" | A8/A130

D8 PRECAST ELEVATION - SHERIFF OFFICE
1/8" = 1'-0" | A6/A441



A10 PRECAST ELEVATION - SHERIFF OFFICE
1/8" = 1'-0" | A8/A130

A6 PRECAST PANEL KEYPLAN - SHERIFF OFFICE
3/32" = 1'-0" | A2/A151

PLAN NORTH

0 4' 8' 16'
SCALE: 1/8" = 1'-0"

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KLINGNER ARCHITECT PROJECT # 22-4046

Date: 03/01/2024

⚠	Issue	Date
3	Addendum 03	03-27-2024
4	Addendum 04	04-04-2024

Drawn by: NML

PRECAST WALL PANEL ELEVATIONS - SHERIFFS OFFICE

A441

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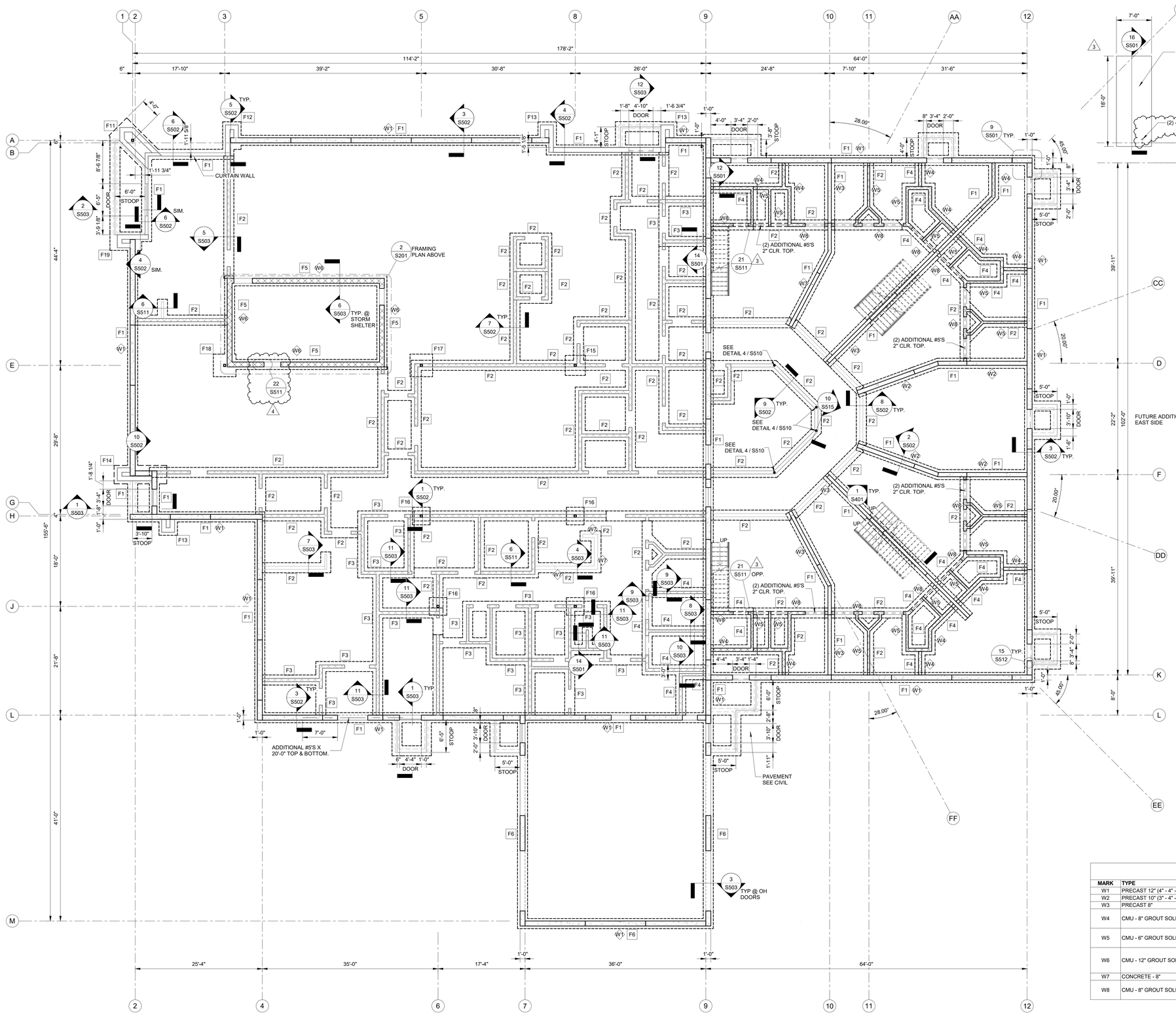

COLUMN SCHEDULE

COLUMN LOCATION MARK	TYPE	BASE LEVEL	TOP LEVEL	BASE PLATE	CAP PLATE	COMMENTS
A-1	HSS5X5X1/4	T.O.FTG	LOW ROOF	5 / S510	SEE PLAN	
E-3	HSS5X5X3/8	T.O.FTG	LOW ROOF	5 / S510	2A / S510	
E-5	HSS5X5X3/8	T.O.FTG	LOW ROOF	5 / S510	2A / S510	
E-8	HSS5X5X5/16	T.O.FTG	LOW ROOF	5 / S510	2A / S510	
H-5	HSS5X5X1/4	T.O.FTG	LOW ROOF	5 / S510	2A / S510	
H-8	HSS5X5X1/4	T.O.FTG	LOW ROOF	5 / S510	2A / S510	
J-6	HSS5X5X1/4	T.O.FTG	LOW ROOF	5 / S510	2A / S510	
J-8	HSS5X5X1/4	T.O.FTG	LOW ROOF	5 / S510	2A / S510	

WALL FOOTING SCHEDULE

MARK	WIDTH	THICKNESS	EL AT TOP	REINFORCEMENT	COMMENTS
F1	2' - 0"	1' - 0"	97' - 4"	(2) - CONT. #5'S LONGITUDINAL TOP & BOTTOM. #4 CLOSED STIRRUPS AT 4'-0" O.C.	SEE PLAN FOR ADDITIONAL REINFORCING
F2	2' - 0"	1' - 0"	100' - 0"	(3) - CONT. #5'S LONGITUDINAL BOTTOM.	1.5 klf THICKENED SLAB SEE 7 / S502
F3	2' - 0"	1' - 4"	100' - 0"	(3) - CONT. #5'S LONGITUDINAL BOTTOM.	1.5 klf THICKENED SLAB SEE 7 / S502 , SEE 14 / S501
F4	2' - 0"	1' - 6"	100' - 0"	(3) - CONT. #5'S LONGITUDINAL BOTTOM.	1.5 klf THICKENED SLAB SEE 7 / S502 , SEE 12 / S501
F5	2' - 0"	1' - 0"	99' - 4"	(3) - CONT. #5'S LONGITUDINAL TOP & BOTTOM. #4 CLOSED STIRRUPS @ 4'-0" O.C.	STORM SHELTER
F6	2' - 0"	1' - 0"	97' - 4"	(4) - CONT. #5'S LONGITUDINAL TOP & BOTTOM. #4 CLOSED STIRRUPS @ 4'-0" O.C.	

NOTES:
1. SEE WALL FOOTING DETAILS: 2 / S502 ,4 / S502 , AND 3 / S502.
2. SEE PLANS FOR ADDITIONAL REINFORCING.
3. MAXIMUM NET FOOTING LOAD GRAVITY LOADS = 8 KLF

COLUMN FOOTING SCHEDULE

MARK	LENGTH	WIDTH	THICKNESS	EL AT TOP	REINFORCEMENT	COMMENTS
F11	9' - 6"	5' - 0"	1' - 0"	97' - 4"	(5) - #4'S LONGITUDINAL BOTTOM. (9) - #4'S TRANSVERSE BOTT.	40 kips
F12	5' - 6"	3' - 8"	1' - 0"	97' - 4"	(4) - #4'S LONGITUDINAL BOTTOM. (6) - #4'S TRANSVERSE BOTT.	20 kips
F13	4' - 8"	3' - 8"	1' - 0"	97' - 4"	(4) - #4'S LONGITUDINAL BOTTOM. (6) - #4'S TRANSVERSE BOTT.	20kips
F14	10' - 6"	3' - 8"	1' - 0"	97' - 4"	(4) - #4'S LONGITUDINAL BOTTOM. (11) - #4'S TRANSVERSE BOTT.	30kips
F15	4' - 0"	4' - 0"	1' - 0"	97' - 4"	(4) - #4'S E.W. BOTTOM.	
F16	3' - 6"	3' - 6"	1' - 0"	98' - 0"	(4) - #4'S E.W. BOTTOM.	
F17	4' - 6"	4' - 6"	1' - 4"	98' - 0"	(5) - #4'S E.W. BOTTOM.	
F18	4' - 6"	4' - 6"	1' - 4"	99' - 4"	(5) - #4'S E.W. BOTTOM.	
F19	6' - 4"	3' - 8"	1' - 0"	97' - 4"	(4) - #4'S LONGITUDINAL BOTTOM. (6) - #4'S TRANSVERSE BOTT.	20 kips

NOTES:
1. SEE COLUMN FOOTING DETAILS: 1 / S502.

WALL SCHEDULE

MARK	TYPE	THICKNESS	REINFORCEMENT	COMMENT
W1	PRECAST 12" (4" - 4" - 4")	1' - 0"	BY PRECASTER	
W2	PRECAST 10" (3" - 4" - 3")	0' - 10"	BY PRECASTER	
W3	PRECAST 8"	0' - 8"	BY PRECASTER	
W4	CMU - 8" GROUT SOLID	0' - 7 5/8"	#4'S @ 8" O.C. VERTICAL CENTERED, 9 GA. LADDER TYPE HORIZONTAL JOINT REINFORCING @ 16" O.C., (2) - CONT. #4'S HORIZONTAL IN KNOCKOUT BOND BEAM @ TOP OF WALL.	
W5	CMU - 6" GROUT SOLID	0' - 5 5/8"	#4'S @ 8" O.C. VERTICAL CENTERED, 9 GA. LADDER TYPE HORIZONTAL JOINT REINFORCING @ 16" O.C., (2) - CONT. #4'S HORIZONTAL IN KNOCKOUT BOND BEAM @ TOP OF WALL.	
W6	CMU - 12" GROUT SOLID	0' - 11 5/8"	#4'S @ 8" O.C. VERTICAL CENTERED, #5'S EA. FACE VERTICAL @ EA. JAMB OF DOOR, 9 GA. LADDER TYPE HORIZONTAL JOINT REINFORCING @ 16" O.C., (2) CONT. #4'S HORIZONTAL IN KNOCKOUT BOND BEAM @ TOP OF WALL	
W7	CONCRETE - 8"	0' - 8"	4 / S503	
W8	CMU - 8" GROUT SOLID.	0' - 7 5/8"	#4'S @ 8" O.C. VERTICAL CENTERED, 9 GA. LADDER TYPE HORIZONTAL JOINT REINFORCING @ 16" O.C., (1) - CONT. #5 HORIZONTAL IN KNOCKOUT BOND BEAM @ TOP OF WALL.	

NOTES:
1. OPENING FOR DOORS ARE SHOWN AS NOMINAL DIMENSIONS. THE OPENINGS NEED TO BE INCREASED FOR ROUGH OPENINGS.

1 FOUNDATION PLAN
1/8" = 1'-0"

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

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REVISION HISTORY

Δ	DESCRIPTION	DATE	APPR
3	Addendum 03	03/27/2024	JTS
4	Addendum 04	04/04/2024	JTS

ISSUED FOR **03/01/2024**

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EDGAR COUNTY PUBLIC SAFETY CENTER

EDGAR COUNTY, ILLINOIS
12636 950TH ROAD
PARIS, ILLINOIS 61944

Non-Reduced Sheet Size 30" x 42"
Full sized plans have been prepared using standard scales. Reduced sized plans may not conform to standard scales.

DESIGNED	DRAWN
JTS	NML
FIELD	FIELD BOOK
CHECKED ADL	CHECK DATE 03/01/2024

SHEET TITLE

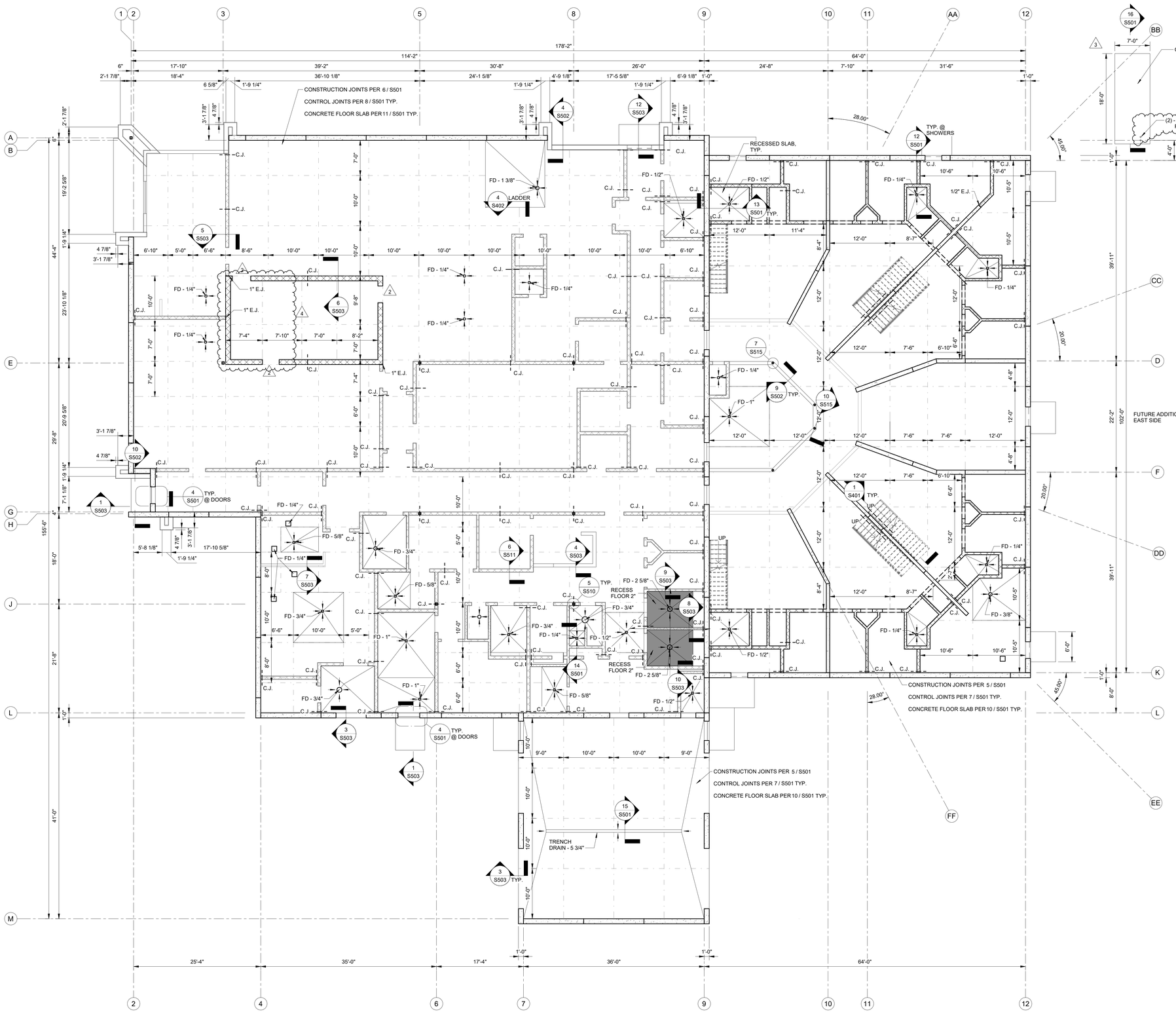
FOUNDATION PLAN

PROJECT NO. **22-4046**

DRAWING ISSUED DATE: **03/01/2024**

SHEET

S101



NOTES:
1. SLOPING SLAB TYPICALLY ENCLOSED BY INNER PERIMETER OF ROOM. SEE ARCHITECTURAL PLANS FOR ROOM DIMENSIONS.
2. COORDINATE ALL FLOOR SLOPES AND RECESSES WITH ARCHITECTURAL DRAWINGS AND SPECIFICATIONS.

1 FOUNDATION PLAN
1/8" = 1'-0"

LEGEND

FD - 3/4" - DENOTES FLOOR DRAIN AND TOP OF DRAIN DISTANCE FROM FINISHED FLOOR (- MEANS TOP DRAIN IS BELOW F.F.)

C.J. - CONTROL JOINT IN CMU WALL, SEE 4 / S511

0 4' 8' 16'
SCALE: 1/8" = 1'-0"

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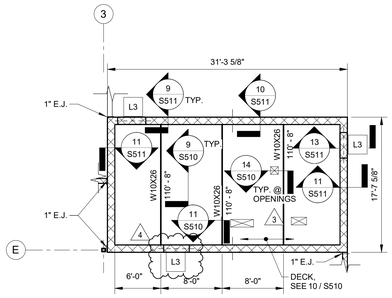
DESIGNED	DRAWN
JTS	NML
FIELD	FIELD BOOK
CHECKED	CHECK DATE
ADL	03/01/2024

SHEET TITLE

SLAB PLAN

PROJECT NO.
22-4046
DRAWING ISSUED DATE:
03/01/2024
SHEET
S102

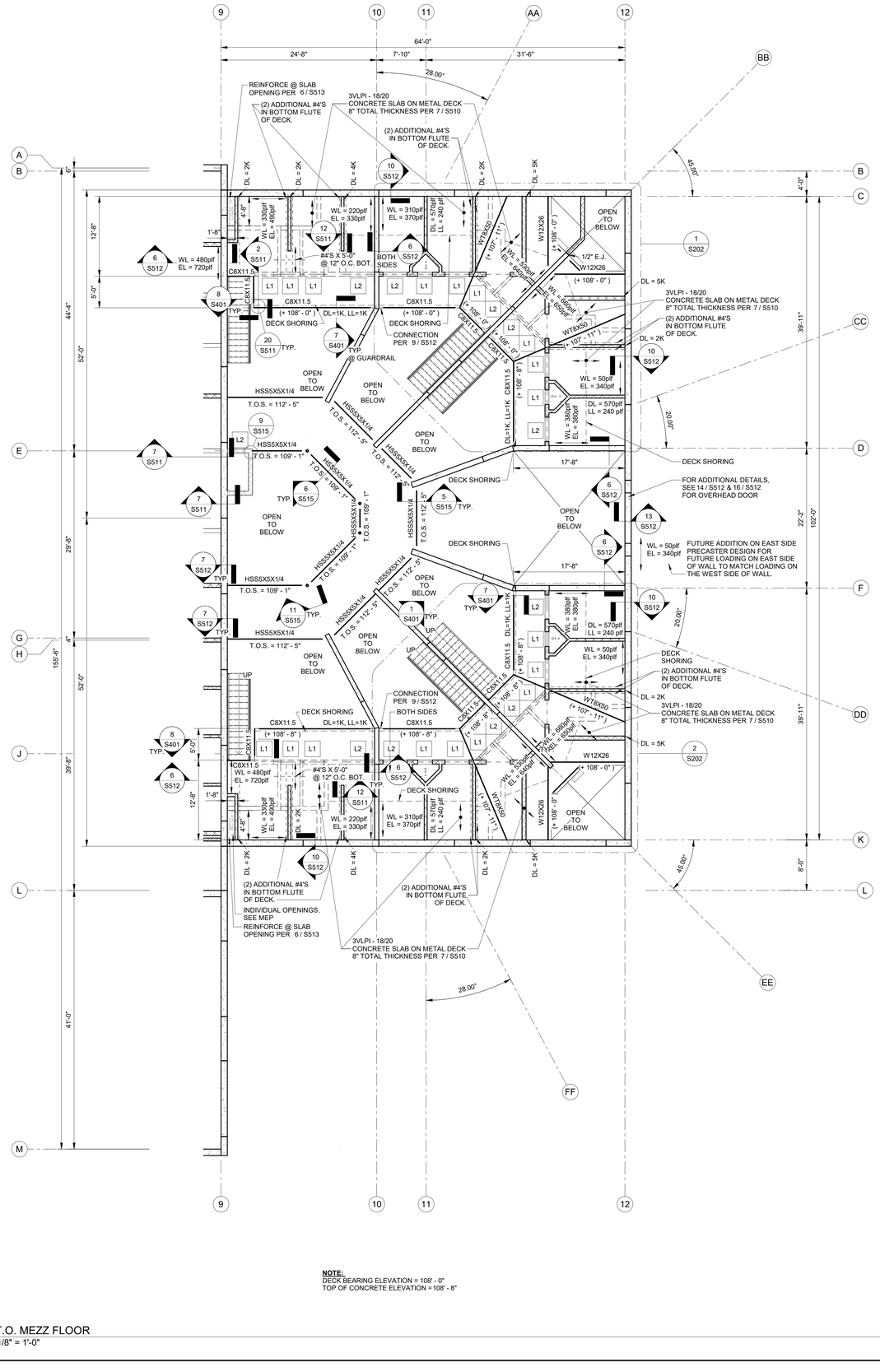


NOTE: TOP OF CONCRETE = 111' - 4"

2 STORM SHELTER FRAMING
1/8" = 1'-0"

LINTEL SCHEDULE

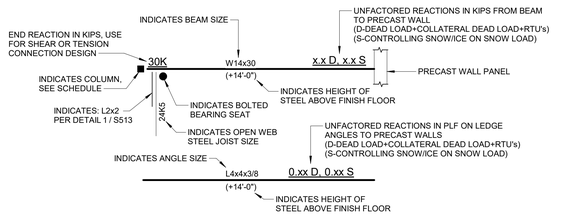
MARK	SIZE	DETAIL	REINFORCING
L1	1' - 0"	1 / S511 & 3 / S511	CONT. # 5'S TOP & BOTTOM.
L2	1' - 0"	1 / S511 , 3 / S511 & 14 / S511	CONT. # 5'S TOP & BOTTOM.
L3	4' - 0"	13 / S511 & 5 / S511 (JAMBS)	(2) CONT. #5'S BOTTOM.
L4	1' - 4"	1 / S511 , 3 / S511 & 14 / S511 SIM. W/O CONCRETE DECK	CONT. # 5'S TOP & BOTTOM.
L5	0' - 8"	1 / S511 & 3 / S511	(2) - #4'S BOTTOM



NOTE:
DECK BEARING ELEVATION = 108' - 0"
TOP OF CONCRETE ELEVATION = 108' - 8"

1 T.O. MEZZ FLOOR
1/8" = 1'-0"

FRAMING LEGEND



0 2' 4' 8'
SCALE: 1/4" = 1'-0"
0 4' 8' 16'
SCALE: 1/8" = 1'-0"

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REVISION HISTORY

#	DESCRIPTION	DATE	APPR
3	Addendum 03	03/27/2024	JTS
4	Addendum 04	04/04/2024	JTS

ISSUED FOR **03/01/2024**

BID & PERMIT

EDGAR COUNTY PUBLIC SAFETY CENTER

EDGAR COUNTY, ILLINOIS
12636 950TH ROAD
PARIS, ILLINOIS 61944

Non-Reduced Sheet Size 30" x 42"
Full sized plans have been prepared using standard scales. Reduced sized plans may not conform to standard scales.

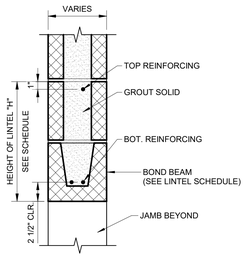
DESIGNED	DRAWN
JTS	NML
FIELD	FIELD BOOK
CHECKED	CHECK DATE
ADL	03/01/2024

SHEET TITLE

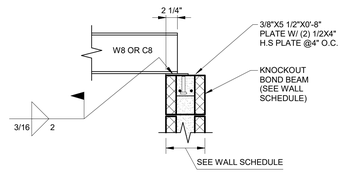
MEZZANINE FRAMING PLAN

PROJECT NO.
22-4046
DRAWING ISSUED DATE:
03/01/2024
SHEET
S201

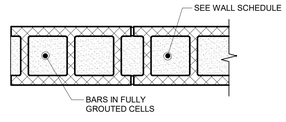
4/4/2024 12:19:52 PM
Autodesk Docs://Edgar County Illinois 2022/S22_EDGAR COUNTY JAIL_22-4046.rvt



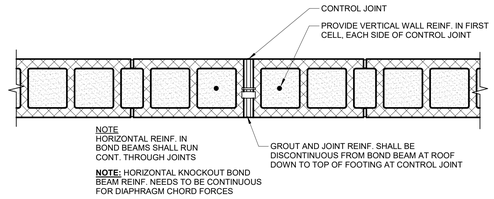
1 CMU LINTEL DETAIL
1 1/2" = 1'-0"



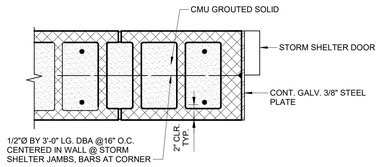
2 BEAM BEARING DETAIL
1" = 1'-0"



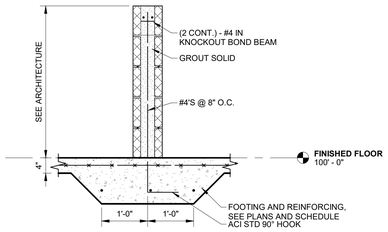
3 CMU JAMB DETAIL
1 1/2" = 1'-0"



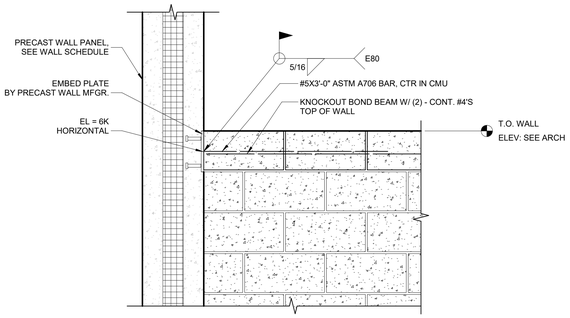
4 CONTROL JOINT DETAIL
1 1/2" = 1'-0"



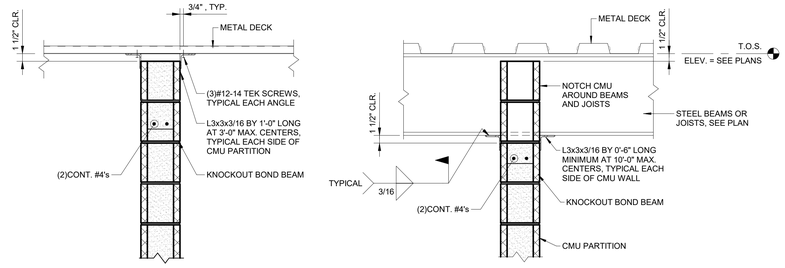
5 STORM SHELTER JAMBS
1 1/2" = 1'-0"



6 CMU SILL DETAIL
3/4" = 1'-0"



7 CMU PARTITION WALL CONNECTION TO PRECAST WALL
1" = 1'-0"



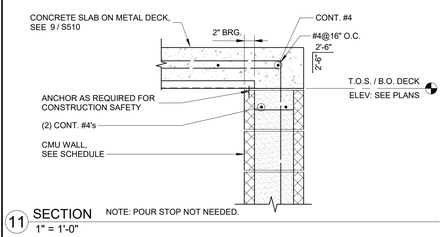
8 TYP. NON-LOAD BEARING PARTITION BRACING DETAILS
1" = 1'-0"

9 BEAM BEARING DETAIL
1" = 1'-0"

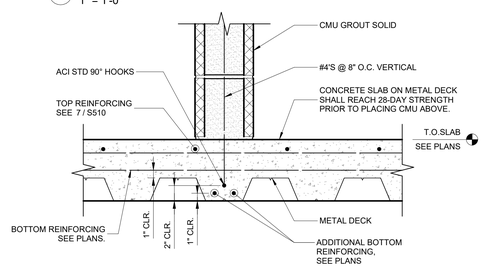
10 SECTION
NOTE: POUR STOP NOT NEEDED.
1" = 1'-0"

13 STORM SHELTER HEAD DETAIL
1" = 1'-0"

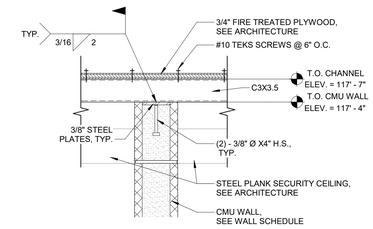
14 LINTEL CONN. TO PRECAST CONCRETE
1 1/2" = 1'-0"



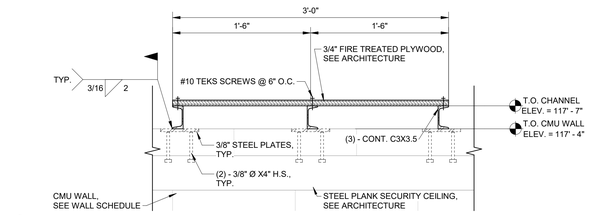
11 SECTION
NOTE: POUR STOP NOT NEEDED.
1" = 1'-0"



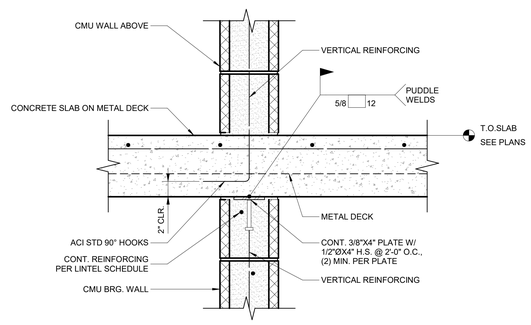
12 CMU BRG. ON CONCRETE SLAB ON MTL DECK
1 1/2" = 1'-0"



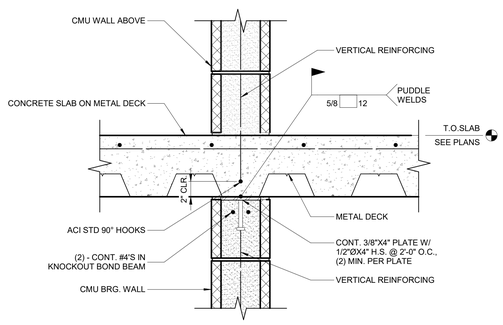
17 CATWALK CONNECTION TO CMU SECTION
1 1/2" = 1'-0"



2 ## 18 CATWALK CONNECTION TO CMU DETAIL
1 1/2" = 1'-0"



15 DECK BRG. ON WALL
1 1/2" = 1'-0"



16 DECK CONNECTION TO WALL
1 1/2" = 1'-0"

19 CATWALK CONNECTION TO PRECAST WALL
1 1/2" = 1'-0"

20 C8 CORNER CONNECTION DETAIL
1 1/2" = 1'-0"

22 STORM SHELTER ADD'L REINFORCING
3/4" = 1'-0"

3 ## 21 CMU PIER REINFORCING
3/4" = 1'-0"

0 3" 6" 1'
SCALE: 1 1/2" = 1'-0"
0 1' 2'
SCALE: 3/4" = 1'-0"
0 6" 1' 2'
SCALE: 1" = 1'-0"

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REVISION HISTORY

#	DESCRIPTION	DATE	APPR.
2	Addendum 02	03/20/2024	JTS
3	Addendum 03	03/27/2024	JTS
4	Addendum 04	04/04/2024	JTS

ISSUED FOR **03/01/2024**

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JTS	NML
FIELD	FIELD BOOK
CHECKED	CHECK DATE
ADL	03/01/2024

SHEET TITLE

STRUCTURAL CMU DETAILS

PROJECT NO. **22-4046**

DRAWING ISSUED DATE: **03/01/2024**

SHEET **S511**

4/4/2024 1:20:10 PM
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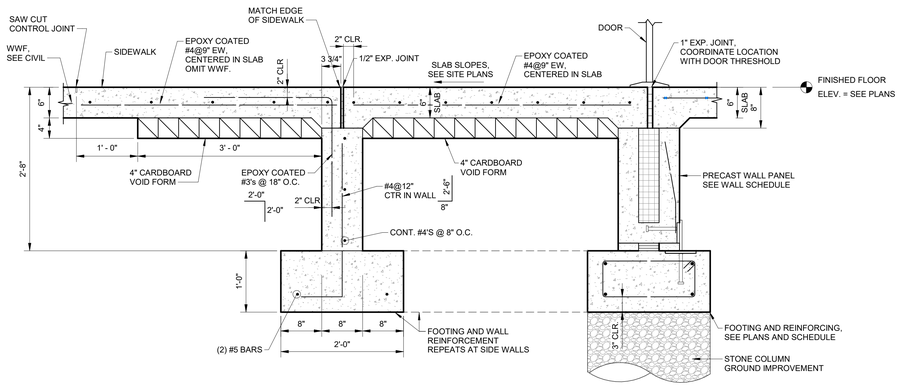
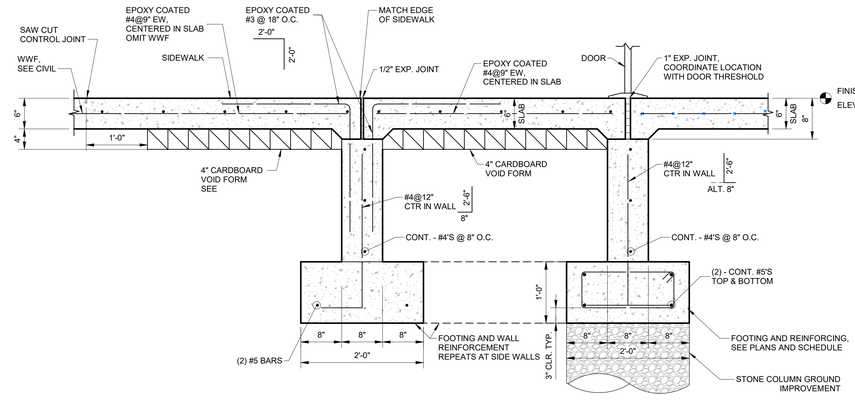
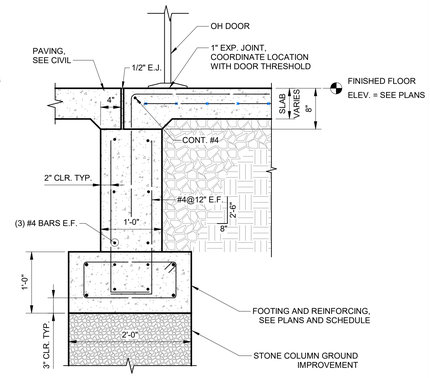


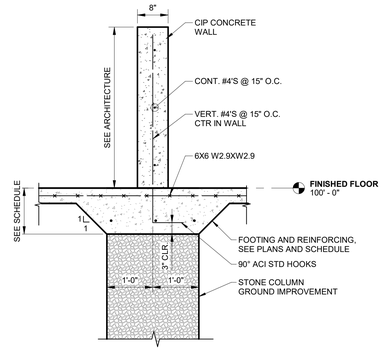
1 TYP. STOOP SECTION
1" = 1'-0"



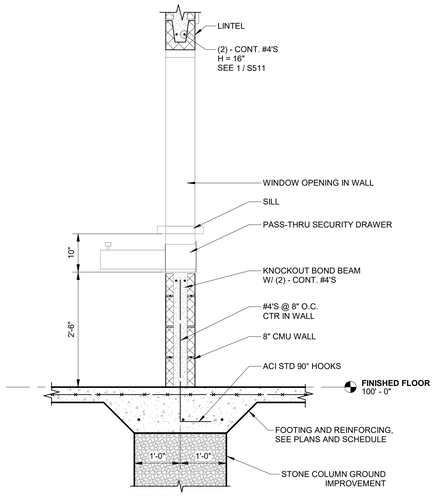
2 STOOP SECTION
1" = 1'-0"



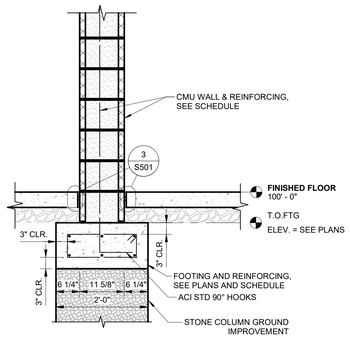
3 OVERHEAD DOOR FOUNDATION WALL
1" = 1'-0"



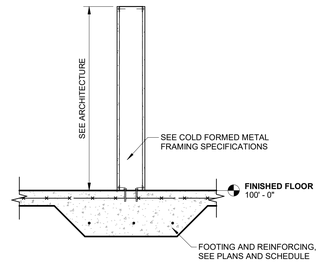
4 BOOKING DESK SECTION
3/4" = 1'-0"



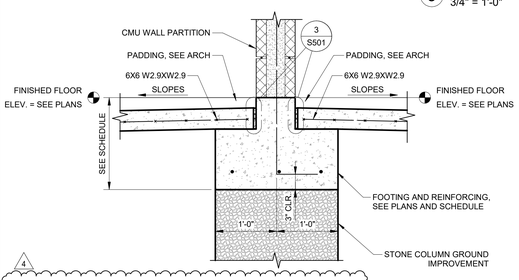
5 SECURITY DRAWER SECTION
3/4" = 1'-0"



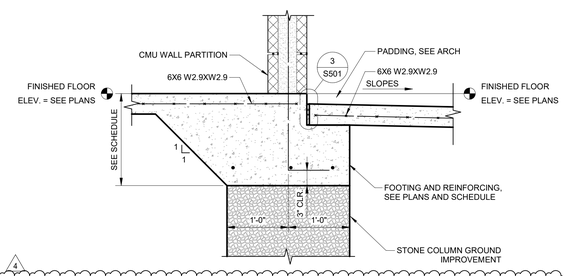
6 STORM SHELTER FOOTING
3/4" = 1'-0"



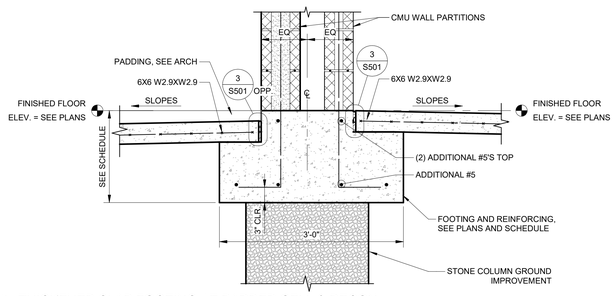
7 HALF WALL IN KITCHEN
3/4" = 1'-0"



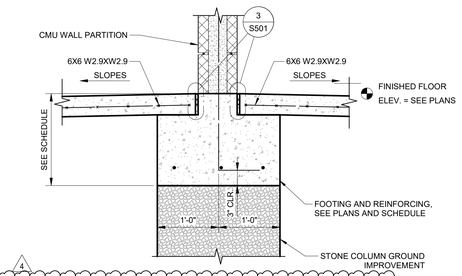
8 FOOTING SECTION BETWEEN PADDED CELLS
1" = 1'-0"



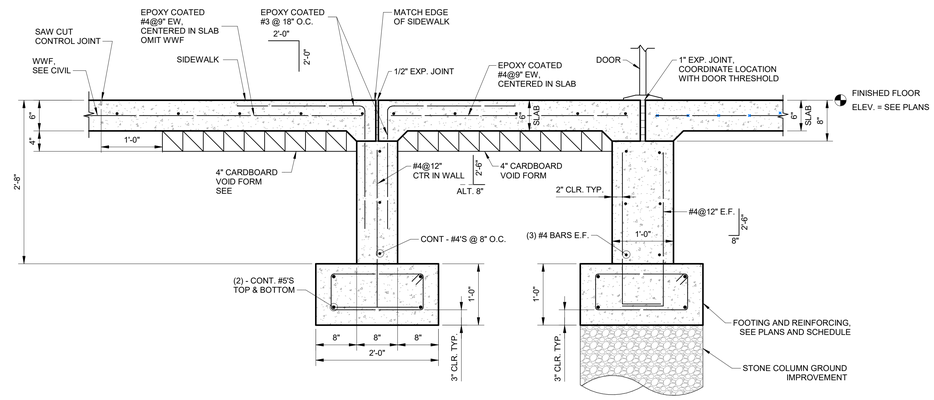
9 FOOTING SECTION AT PADDED CELLS
1" = 1'-0"



10 THICKENED SLAB FOOTING AT PADDED CELL & DECON
1" = 1'-0"



11 FOOTING SECTION BETWEEN TWO SLOPE FLOORS
1" = 1'-0"



12 STOOP SECTION
1" = 1'-0"

0 6" 1' 2'
SCALE: 1" = 1'-0"

4/4/2024 1:27:25 PM
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SHEET TITLE

FOUNDATION DETAILS

PROJECT NO.
22-4046
DRAWING ISSUED DATE:
03/01/2024
SHEET
S503