Addendum #: **Addendum #2**
Issue Date: **03/21/2024**

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

CLARIFICATIONS:

1. CORE has received a number of RFI's and is working to provide responses. Some items have been addressed in this addendum but responses will be added to the RFI log in the next addendum. See attached RFI log (rfi_list- Edgar Co - 2024-03-21)
2. All RFI's and substitution requests are due by end of day business day March 25th. Questions submitted after that time might not receive a response.
3. Section 00 24 00 BID PACKAGES is receiving numerous changes and is expected to be re-issued by March 25th.
4. See attached Addendum for Klinger and Associates

REVISIONS:

1. **REISSUE** section 00 70 00a -A201-2017 General Conditions in its entirety to include CM/Owner Agreement as requested.

CORE Construction Services of Illinois, Inc.

Printed on Thu Mar 21, 2024 at 01:39 pm 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
79	Precast Questions	Open		None	Springer, Amanda ...	03/21/2024	Levi Bauer	03/26/2024		Springer, Amanda ...				

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?

#	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
78	Precast Hauling Permit	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 01:28 pm CDT
Precast SCOPE OF WORK
Item E
We are to include all hauling permits .....
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?

#	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
77	drywall grid in lieu of stud framing for drywall ceilings.	Open		None	Springer, Amanda ...	03/21/2024	Levi Bauer	03/26/2024		Springer, Amanda ...				

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

#	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
76	Payment for stored materials	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 12:47 pm CDT
1.6 – Please confirm payment for Stored Materials.

#	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
75	Liquidated Damages	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 12:47 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.

#	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
74	Precast panel finish	Open		None	Springer, Amanda ...	03/21/2024	Levi Bauer	03/26/2024		Springer, Amanda ...				
	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.													
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?													
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?													
71	Fire alarm 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 12:36 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?													
70	Conduit/Blocking in Precast	Open		None	Springer, Amanda ... Bauer, Levi (CORE...	03/21/2024	Levi Bauer	03/26/2024		Springer, Amanda ... Bauer, Levi (CORE...				
	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.													

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	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?													
69	Form Liner Spec	Open		None	Springer, Amanda ...	03/21/2024	Levi Bauer	03/26/2024		Springer, Amanda ...				
	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.													
68	Precast finish for exterior precast panels	Open		None	Springer, Amanda ...	03/21/2024	Levi Bauer	03/26/2024		Springer, Amanda ...				
	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.													
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	Open		None	Springer, Amanda ...	03/21/2024	Levi Bauer	03/26/2024		Springer, Amanda ...				
	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.													
65	Precast Continious Insulation	Open		None	Springer, Amanda ...	03/21/2024	Levi Bauer	03/26/2024		Springer, Amanda ...				
	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?													
64	Precast Mockup/sample	Open		None	Springer, Amanda ...	03/21/2024	Levi Bauer	03/26/2024		Springer, Amanda ...				
	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?													
63	Precast embed material	Open		None	Springer, Amanda ...	03/21/2024	Levi Bauer	03/26/2024		Springer, Amanda ...				
	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?													
62	precast interior panel finish	Open		None	Springer, Amanda ...	03/21/2024	Levi Bauer	03/26/2024		Springer, Amanda ...				

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	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?													
61	Fire/Smoke Dampers	Open		None	Springer, Amanda ...	03/21/2024	Levi Bauer	03/26/2024		Springer, Amanda ...				
	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?													
60	Downspout Boot Detail	Open		None	Fries, Michael (K...	03/20/2024	Levi Bauer	03/25/2024		Fries, Michael (K...				
	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.													
59	Sallyport pedestal mounting	Open		None	Fries, Michael (K...	03/20/2024	Levi Bauer	03/25/2024		Fries, Michael (K...				
	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?													
58	Power to Access Control Pedestals	Open		None	Fries, Michael (K...	03/20/2024	Levi Bauer	03/25/2024		Fries, Michael (K...				
	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													
57	Concrete foundation for do not enter site signage	Open		None	Fries, Michael (K...	03/20/2024	Levi Bauer	03/25/2024		Fries, Michael (K...				
	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?													
56	Temporary Partitions	Open		None	Fries, Michael (K...	03/20/2024	Levi Bauer	03/25/2024		Fries, Michael (K...				
	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?													
55	Substitution Request - Elite Storage Products - Lockers	Open		None	Fries, Michael (K...	03/19/2024	Levi Bauer	03/24/2024		Fries, Michael (K...				
	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 Thu Mar 21, 2024 at 10:54 am CDT ADD: Elite Storage Products is an Architect approved manufacturer (ADDENDUM 2)													

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54	addendum 1, page 7, paragraph 2.21 Design Professional Compensation	Open		None	Bauer, Levi (CORE...	03/19/2024	Levi Bauer	03/24/2024		Bauer, Levi (CORE...				
	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 the sub-contractor or contractor ?													
53	Water/Sewer Permits	Open		None	Bauer, Levi (CORE...	03/19/2024	Levi Bauer	03/24/2024		Bauer, Levi (CORE...				
	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 ?													
52	Ground Water	Open		None	Bauer, Levi (CORE...	03/19/2024	Levi Bauer	03/24/2024		Bauer, Levi (CORE...				
	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. ?													
51	As Built Requirements	Open		None	Bauer, Levi (CORE...	03/19/2024	Levi Bauer	03/24/2024		Bauer, Levi (CORE...				
	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 ?													
50	Bid Extension	Open		None	Bauer, Levi (CORE...	03/19/2024	Levi Bauer	03/24/2024		Bauer, Levi (CORE...				
	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.													
49	Planting Soil location	Open		None	Fries, Michael (K...	03/19/2024	Levi Bauer	03/24/2024		Fries, Michael (K...				
	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: 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	Open		None	Fries, Michael (K...	03/19/2024	Levi Bauer	03/24/2024		Fries, Michael (K...				
	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: 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.	Open		None	Bauer, Levi	03/19/2024	Levi Bauer	03/24/2024		Bauer, Levi				

#	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
					(CORE...					(CORE...				

Levi Brooke Sent Tue Mar 19, 2024 at 02:09 pm CDT
On scope item 22: Coring excavation to install aggregate base at walkways.

Q: 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 ?

#	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
46	Division 28 Spec	Open		None	Fries, Michael (K...	03/19/2024	Levi Bauer	03/24/2024		Fries, Michael (K...				

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 Thu Mar 21, 2024 at 10:52 am CDT
See Addendum 2 for added sheets

#	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
45	Dewatering Treatment	Open		None	Bauer, Levi (CORE...	03/19/2024	Levi Bauer	03/24/2024		Bauer, Levi (CORE...				

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 ?

#	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
44	Protecting Graded Areas	Open		None	Bauer, Levi (CORE...	03/19/2024	Levi Bauer	03/24/2024		Bauer, Levi (CORE...				

Levi Brooke Sent Tue Mar 19, 2024 at 02:04 pm CDT
[regarding 312000 earthwork]
Q: 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 ?

#	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
43	Damaged subgrade due to weather	Open		None	Bauer, Levi (CORE...	03/19/2024	Levi Bauer	03/24/2024		Bauer, Levi (CORE...				

Levi Brooke Sent Tue Mar 19, 2024 at 02:03 pm CDT
[regarding 312000 earthwork]

Q: 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 ?

#	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
42	Subgrade protection from damage	Open		None	Fries, Michael (K... Bauer, Levi (CORE...	03/19/2024	Levi Bauer	03/24/2024		Fries, Michael (K... Bauer, Levi (CORE...				

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 Thu Mar 21, 2024 at 10:53 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
	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. (ADDENDUM 2)													
41	Dewatering	Open		None	Bauer, Levi (CORE... Bauer, Levi (CORE...	03/19/2024	Levi Bauer	03/24/2024		Bauer, Levi (CORE... Bauer, Levi (CORE...				
	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 ?													
40	Subgrade winter protection	Open		None	Fries, Michael (K...	03/19/2024	Levi Bauer	03/24/2024		Fries, Michael (K...				
	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: 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	Open		None	Fries, Michael (K...	03/19/2024	Levi Bauer	03/24/2024		Fries, Michael (K...				
	Q: Levi Brooke Sent Tue Mar 19, 2024 at 01:58 pm CDT Will the asphalt contractor need to provide the pavement markings?													
	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	Open		None	Fries, Michael (K...	03/19/2024	Levi Bauer	03/24/2024		Fries, Michael (K...				
	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.													
37	Type D Lettering on A540	Open		None	Fries, Michael (K...	03/19/2024	Levi Bauer	03/24/2024		Fries, Michael (K...				
	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.													
36	G101 Tornado Safe Room Sign	Open		None	Fries, Michael (K...	03/19/2024	Levi Bauer	03/24/2024		Fries, Michael (K...				
	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?													
35	A010 Monument Sign	Open		None	Fries, Michael (K... Bauer, Levi (CORE...	03/19/2024	Levi Bauer	03/24/2024		Fries, Michael (K... Bauer, Levi (CORE...				

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	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?													
34	Door 135B-1	Open		None	Fries, Michael (K...	03/16/2024	Levi Bauer	03/21/2024		Fries, Michael (K...				
	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 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)													
33	Door 103 and 105A	Open		None	Fries, Michael (K...	03/16/2024	Levi Bauer	03/19/2024		Fries, Michael (K...				
	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 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)													
32	Exterior Door Opening Material	Open		None	Fries, Michael (K...	03/16/2024	Levi Bauer	03/19/2024		Fries, Michael (K...				
	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: 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)													
31	recycle material	Open		None	Bauer, Levi (CORE...	03/16/2024	Levi Bauer	03/19/2024		Bauer, Levi (CORE...				
	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"													
30	topsoil depth	Open		None	Fries, Michael (K...	03/16/2024	Levi Bauer	03/19/2024		Fries, Michael (K...				
	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 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	Open		None	Bauer, Levi (CORE...	03/16/2024	Levi Bauer	03/19/2024		Bauer, Levi (CORE...				

#	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 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 ?													
28	topsoil responsibility	Open		None	Bauer, Levi (CORE...	03/16/2024	Levi Bauer	03/19/2024		Bauer, Levi (CORE...				
	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 ?													
27	Temp Seeding Responsibility	Open		None	Bauer, Levi (CORE...	03/16/2024	Levi Bauer	03/19/2024		Bauer, Levi (CORE...				
	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 ?													
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	Open		None	Bauer, Levi (CORE...	03/16/2024	Levi Bauer	03/19/2024		Bauer, Levi (CORE...				
	Q: Levi Bauer Sent Sat Mar 16, 2024 at 10:50 am CDT Please clarify who is responsible for the cost of compaction testing													
24	Halot-lit signs	Open		None	Fries, Michael (K...	03/15/2024	Levi Bauer	03/18/2024		Fries, Michael (K...				
	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													
23	etched steel for signage	Open		None	Fries, Michael (K...	03/15/2024	Levi Bauer	03/18/2024		Fries, Michael (K...				
	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.													

#	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 10:49 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	Open		None	Fries, Michael (K...	03/15/2024	Levi Bauer	03/18/2024		Fries, Michael (K...				
	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 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 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	Open		None	Fries, Michael (K...	03/15/2024	Levi Bauer	03/18/2024		Fries, Michael (K...				
	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?													
20	Monument Sign Construction	Open		None	Fries, Michael (K...	03/15/2024	Levi Bauer	03/18/2024		Fries, Michael (K...				
	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).													
19	Monument sign single/double sided?	Open		None	Fries, Michael (K...	03/15/2024	Levi Bauer	03/18/2024		Fries, Michael (K...				
	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)?													
18	Monument Sign Illumination	Open		None	Fries, Michael (K...	03/15/2024	Levi Bauer	03/18/2024		Fries, Michael (K...				
	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 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	Open		None	Fries, Michael	03/14/2024	Levi Bauer	03/17/2024		Fries, Michael				

#	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
					(K...					(K...				
	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: 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	Open		None	Fries, Michael (K...	03/14/2024	Levi Bauer	03/17/2024		Fries, Michael (K...				
	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 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	Open		None	Fries, Michael (K...	03/14/2024	Levi Bauer	03/17/2024		Fries, Michael (K...				
	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.													
11	Precast Certification Required?	Open		None	Fries, Michael (K...	03/12/2024	Levi Bauer	03/15/2024		Fries, Michael (K...				
	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													
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	Open		None	Bauer, Levi (CORE...	03/12/2024	Levi Bauer	03/15/2024		Bauer, Levi (CORE...				
	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													
8	Owner Agreement	Open		None	Bauer, Levi (CORE...	03/12/2024	Levi Bauer	03/15/2024		Bauer, Levi (CORE...				
	Q: Levi Bauer Sent Tue Mar 12, 2024 at 12:59 pm 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
	[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.													
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	Open		None	Bauer, Levi (CORE...	03/12/2024	Levi Bauer	03/15/2024		Bauer, Levi (CORE...				
	Q: Levi Bauer Sent Tue Mar 12, 2024 at 12:55 pm CDT How much does Oracle-Textura cost?													
5	Utility structure manufacture	Open		None	Fries, Michael (K...	03/12/2024	Levi Bauer	03/19/2024		Fries, Michael (K...				
	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: 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)													
4	Soil Stockpile	Open		None	Bauer, Levi (CORE...	03/12/2024	Levi Bauer	03/19/2024		Bauer, Levi (CORE...				
	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]													
3	Soil Corrections Scope	Open		None	Bauer, Levi (CORE...	03/12/2024	Levi Bauer	03/19/2024		Bauer, Levi (CORE...				
	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 ?													
2	Asphalt lift depths	Open		None	Fries, Michael (K...	03/12/2024	Levi Bauer	03/19/2024		Fries, Michael (K...				

CORE Construction Services of Illinois, Inc.

Printed on Thu Mar 21, 2024 at 01:39 pm CDT

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

#	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 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: 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	Open		None	Bauer, Levi (CORE...	03/12/2024	Levi Bauer	03/15/2024		Bauer, Levi (CORE...				
	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													

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

March 21, 2024

BIDDING ADDENDUM 2

For work titled:

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 eigthy-two (82) – 8 1/2” x 11” pages including this cover sheet and thrirty-five (35) - 30” x 42” sheets.

PROJECT MANUAL

1	Section 105113 Metal Lockers, Par 2, 2.1, A:	ADD: Elite Storage Products as an Architect approved manufacturer.
2	280500 Common Work Results	ADD Specification - See Attachement
3	280510 Cabinets and Enclosures for Electronic Security	ADD Specification - See Attachement
4	281300 Access Control System	ADD Specification - See Attachement
5	282300 IP Video Communication System	ADD Specification - See Attachement
6	282350 Electronic Security Systems Network Integration	ADD Specification - See Attachement
7	283105 Auxiliary Control System	ADD Specification - See Attachement

8	284619 Security Automation System	ADD Specification - See Attachement
9	284620 Video Graphic User Interface System	ADD Specification - See Attachement
10	285123 IP Audio Communication System	ADD Specification - See Attachement
11	312000 Earth Moving 3.1 C.	CLARIFY: For this item, subgrade preparation shall meet Section 301 of the IDOT Standard Specifications for Road & Bridge Construction.
12	312000 Earth Moving, 3.2 C.	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.
13	Section 321723 Pavement Parkings	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.
14	334100 - Storm Utility Drainage Piping	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.
15		See attached HMN Achitects Addendum No. 2 for additional Section information.
16		See attached Henderson Engineers Addendum No. 2 for additional Section information.

DRAWINGS

1	Sheet G131 / Detail A6 UL Assemblies – Joints	CHANGE: UL is removed. See revised sheet.
2	Sheet G131 / Detail F10 UL Assemblies – Joints	CHANGE: UL is removed. See revised sheet.
3	Sheet G132 / Detail A2 UL Assemblies – Joints	CHANGE: EJ information to be updated to match current project. See revised sheet.
4	Sheet G132 / Detail A4 UL Assemblies – Joints	CHANGE: EJ information to be updated to match current project. See revised sheet.
5	Sheet C111 Site Details, Standard Duty Pavement Details	CHANGE: IL9.5 & IL9.5FG are acceptable to use for lifts of surface and binder course.
6	Sheet A010 Architectural Site Plan	CLARIFY: The monument sign will be illuminated with ground mounted lights.
7	Sheet A440 Precast Wall Panel Elevations – Sallyport	CHANGE: Sheet A440 to provide steel trowl finish on interior surfaces of all panels in-lieu of sandblast finish

8	Sheet A440 / Detail D12 Precast Wall Panel Elevations – Sallyport	CHANGE: The horn/strobe location has been adjusted to avoid the doorway.
9	Sheet A440 / Detail D12 Precast Wall Panel Elevations – Sallyport	CHANGE: Switch Locations have been adjusted to avoid the doorway.
10	Sheet A441 / Detail H8 Precast Wall Panel Elevations – Sheriffs Office	CHANGE: Location of the FDC has been adjusted to correct elevation.
11	Sheet A442 / Detail H7 Precast Wall Panel Elevations - Detention Center	CHANGE: Lights previously located on or too close to panel joints have been adjusted .
12	Sheet A540 Signage Details	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.
13	Sheet A800 Opening Shedule, Door & Frame Types & Window Types	CHANGE: Exterior openings will be both stainless steel frames and doors. Opening schedule revised on sheet A800.
14	Sheet A800 Opening Shedule, Door & Frame Types & Window Types	CHANGE: Door 103 is not a FEMA rated door.
15	Sheet A800 Opening Shedule, Door & Frame Types & Window Types	CHANGE: Door 105A is a rated FEMA Door
	Sheet S102 Slab Plan	REVISE: Sheet S102 - As shown clouded on the attached sheet.
	Sheet S510 Structural Steel Details	REVISE: Sheet S510 - As shown clouded on the attached sheet.
	Sheet S511 Structural CMU Details	REVISE: Sheet S511 - As shown clouded on the attached sheet.
16	Sheet L101 Landscape Planting Plan	CLARIFY: The planting soil mix shall be in accordance with Specification section 2.10 Planting Soil Mix on plan sheet L001.

17	Sheet L501 / Details 1 & 2 Landscape Details	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."
18	Sheet E101 Lighting First Floor Plan - Overall	REPLACE Drawing, updated drawing sheet - See Attachment
19	Sheet E301 Equipment Connection First Floor Plan - Overall	REPLACE Drawing, updated drawing sheet - See Attachment
20	Sheet Fp101 Fire Protection Plan - First Floor - Overall	REPLACE Drawing, updated drawing sheet - See Attachment
21	Sheet P500 Plumbing Schedules	REPLACE Drawing, updated drawing sheet - See Attachment
22	Sheet P501 Plumbing Schedules	REPLACE Drawing, updated drawing sheet - See Attachment
23	Sheet TN101 Telecom First Floor Plan - Overall	REPLACE Drawing, updated drawing sheet - See Attachment
24	Civil Drawings	CLARIFY: Topsoil shall be installed at a minimum depth of 4”.
25		See attached HMN Achitects Addendum No. 2 for additional Drawing information.
26		See attached Henderson Engineers Addendum No. 2 for additional Drawing information.

ATTACHMENTS

HMN Achitects Addendum No. 2
Henderson Engineers Addendum No. 2
087100 - Door hardware, Sets 38.0 and 39.0
087163 - Detention Door Hardware
280500 - Common Work Results
280510 - Cabinets and Enclosures for Electronic Security
281300 - Access Control System
282300 - IP Video Communication System
282350 - Electronic Security Systems Network Integration
283105 - Auxiliary Control System
284619 - Security Automation System
284620 - Video Graphic User Interface System
285123 - IP Audio Communication System
G100 - Code Plan
G101 - Storm Shelter Code Plan
G131 - UL Assemblies - Joints
A101 - Dimension Floor Plan
A102 - Annotation Floor Plan
A130 - Enlarged Plans
A150 - Roof Plan

A430 - Wall Sections & Exterior Details
A431 - Wall Sections and Details
A531 - Detention Equipment & Interior Details
A600 - Interior Elevations
A601 - Interior Elevations
A800 - Opening Schedule, Door & Frame Types & Window Types
A801 - Detention Opening Schedule and Details
A900 - Finish Schedule & Materials Legend
A910 - Finish Plan
S102 - Slab Plan
S510 - Structural Steel Details
S511 - Structural CMU Details
E101 - Lighting First Floor Plan - Overall
E301 - Equipment Connection First Floor Plan - Overall
Fp101 - Fire Protection Plan - First Floor - Overall
P000 - Plumbing General Notes and Legend
P100 - Plumbing Foundation Plan
P101 - Plumbing Waste & Vent First Floor Plan - Overall
P103 - Plumbing Water & Gas First Floor Plan - Overall
P104 - Plumbing Water & Gas Mezzanine Plan - Jail
P105 - Plumbing Roof Plan - Overall
P201 - Plumbing Plans - Enlarged
P203 - Plumbing Plan - Enlarged - Jail South
P300 - Plumbing Riser Diagrams
P301 - Plumbing Riser Diagrams
P500 - Plumbing Schedules
P501 - Plumbing Schedules
TN101 - Telecom First Floor Plan - Overall

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

END OF ADDENDUM 2

ZE

Addendum No. 2

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:**	03-20-2024

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

Project Manual / Specifications:

1. 08 7100 Door Hardware
    a. Revised Hardware set 38.0.
    b. Revised Hardware set 39.0.
2. 08 7163 Detention Door Hardware
    a. Added hardware set DH-10.

Drawings:

1. A101 – Dimension Floor Plan
    a. Booking desk was enlarged and reconfigured to accommodate Live Scan equipment (E033).
2. A102 – Annotation Floor Plan
    a. Booking desk was enlarged and reconfigured to accommodate Live Scan equipment (E033).
    b. Added additional floor plan notes #16 at columns.
    c. Added floor plan note #18.
    d. Added floor plan note #19.
3. A130 – Enlarged Plans
    a. Plan A8/A130 – BOOKING, MEDICAL, HOLDING
        i. Booking desk was enlarged and reconfigured to accommodate Live Scan equipment piece (E033) within an alcove.
        ii. Message Monitor (E027) shifted to the west on back wall of booking desk area.
        iii. An additional recessed cuff ring was added to face of booking desk.
        iv. The floor mounted fixed stools shifted to the east to accommodate space for a wheelchair to pull up at lower ADA height countertop of booking desk.
    b. Detention Equipment Schedule
        i. Spec Section and Provided By information populated for Pistol Lockers (6).
    c. Equipment Schedule
        i. New equipment piece was added to the project: Live Scan (E033).
4. A150 – Roof Plan
    a. Added callouts for typical reglet wall section detail.
5. A430 – Wall Sections
    a. E7 – Revised notes for exterior glazing at Road Patrol.
6. A431 – Wall section and Details.
    a. Added detail E10 – Reglet Detail – typical.
    b. E8 and G8 – revised exterior glazing notes.
7. A531 – Detention Equipment & Interior Details
    a. E4 – Revised Burglar Bar detail.
8. A600 – Interior Elevations

a. Equipment Schedule
    i. New equipment piece was added to the project: Live Scan (E033).

9. A601 – Interior Elevations
    a. Elevations C5, C7, & C9
        i. Booking desk was enlarged and reconfigured to accommodate Live Scan equipment piece (E033) within an alcove.
        ii. Equipment pieces, casework, metal support brackets, countertops and walls shifted as required per new desk configuration.
    b. Elevation F6
        i. New elevation added to sheet to show more detail of new alcove for new Live Scan (E033) equipment piece.
10. A800 – Opening Schedule, Door & Frame Types& Window Types
    a. Opening Schedule:
        i. Revised Door 135B.
        ii. Added door 135B-1.
        iii. Added Notes to bottom of Opening schedule.
    b. Added new details E10 and G10 for FEMA communicating door.
11. A801 – Detention Opening Schedule and Details
    a. Added and deleted Pan shutters in Schedule comments.
    b. Frame types – Detention.
        i. Frame SS was changed to angle bottom of frame.
12. A900 – Finish Schedule & Materials Legend
    a. New Manufacturer, Model/Pattern, and Color of Decorative CMU (BBL)
13. A910 – Finish Plan
    a. Adjusted notes as well as flooring, wall base and wall paint at booking desk as required per new desk configuration.

Attachments: Drawing Sheets: A101, A102, A130, A150, A430, A431, A531, A600, A601, A800, A801, A900, and A910

ISSUED: HMN Architects, Inc.

BY:_____

Jill Ralph
Architect

ADDENDUM NO 2

March 20, 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 P000 – PLUMBING GENERAL NOTES AND LEGEND
   A. Added note 29 to sheet.
2. SHEET P100 – PLUMBING FOUNDATION PLAN
   A. Revised entire sheet which includes but not limited to pipe sleeve and plan updates.
3. SHEET P101 – PLUMBING WASTE & VENT FIRST FLOOR PLAN – OVERALL
   A. Revised entire sheet which includes but not limited to updating floor drains in room 111 and Dayrooms A & F showers.
4. SHEET P103 – PLUMBING WATER & GAS FIRST FLOOR PLAN - OVERALL
   A. Revised entire sheet.
5. SHEET P104 – PLUMBING WATER & GAS MEZZANINE PLAN - JAIL
   A. Revised entire sheet.
6. SHEET P105 – PLUMBING ROOF PLAN - OVERALL
   A. Revised entire sheet.
7. SHEET P201 – PLUMBING PLANS - ENLARGED
   A. Revised entire sheet.
8. SHEET P203 – PLUMBING PLAN – ENLARGED – JAILS SOUTH
   A. Revised entire sheet.
9. SHEET P300 – PLUMBING RISER DIAGRAMS
   A. Revised entire sheet per plan updates.
10. SHEET P301 – PLUMBING RISER DIAGRAMS

SECTION 087100
DOOR HARDWARE
REVISED ADDENDUM 2, 3/202024

Set: 38.0

Doors: 135B

Description: SINGLE INTERIOR FIRE RATED 3 POINT LOCK CLOSER MHO ***RFI

1	Continuous Hinge	HG305	630	MR	087100	
1	Multi-Point Lock classroom security	11737P FM7341 LP 188	US26D	SA	087100	
1	Small Format Inter Core	33700006N	26	MC	087100	
1	Door Closer	TB 281 O	EN	SA	087100	
1	Kick Plate	K1050 WS 10" x 2" LDW high CSK BEV	US32D	RO	087100	
1	Electromagnetic Holder	998	689	RF	087100	⚡
1	Gasketing	S773D (Head & Jambs)		PE	087100	

Notes: COMPLY WITH ALL DOOR MANFUACTURERS TESTING CRITERIA FOR ICC500 TESTED ASSEMBLY. DOOR TO BE HELD OPEN VIA FLOOR MAGNETIC HOLDER. FOR ACCESS CONTROL AT THIS LOCATION USE OUTSWING DOOR WITH CARD READER ACCESS FROM CONFERENCE ROOM TO DISPATCH COORIDOR.

Set: 39.0

Doors: 135B-1

Description: CARD READER LOCK CPS CLOSER GASKET ***RFI

2	Hinge (heavy weight)	T4A3786 4-1/2" x 4-1/2"	US26D	MK	087100	
1	Hinge, Full Mortise, Hvy Wt	T4A3786 QC12 4-1/2" x 4-1/2"	US26D	MK	087100	⚡
1	Fail Secure Lock	11737P RX 8271-24V LNP	US32D	SA	087100	⚡
1	Small Format Inter Core	33700006N	26	MC	087100	
1	Door Closer	CPS7500	689	NO	087100	
1	Kick Plate	K1050 10" x 2" LDW 4BE CSK	US32D	RO	087100	
1	Electromagnetic Holder	998 (tie into fire alarm)	689	RF	087100	⚡
1	Gasketing	S773D (Head & Jambs)		PE	087100	
1	ElectroLynx Harness	QC-C1500P/QC-C1500		MK	087100	⚡
1	ElectroLynx Harness	QC-Cxx/CxxP (size to door width/hardware)		MK	087100	⚡
1	Position Switch	DPS		SU	087100	⚡
1	iClass Reader	SE R10		HID		

1 Power Supply BPS-24-1 SU 087100

Notes: FREE ACCESS FROM DISPATCH CORRIDOR AND EGRESS FROM CONFERENCE ROOM IS BY AUTHORIZED CARD CREDENTIAL OR MANUAL KEY. ACCESS CONTROL AT THIS LOCATION USE OUTSWING DOOR WITH CARD READER ACCESS FROM CONFERENCE ROOM TO DISPATCH COORIDOR. INSTALLED AT SAME OPENING AS 135B.

END OF SECTION 087100

A. Revised entire sheet per plan updates.

11. SHEET P500 – PLUMBING SCHEDULES
    A. Revised CU fixtures.
12. SHEET P501 – PLUMBING SCHEDULES
    A. Revised Booster Pump Schedule.

Fire Protection:

1. SHEET FP101 – FIRE PROTECTION FIRST FLOOR PLAN – OVERALL
    A. Revised location of fire alarm control panels.

Electrical:

2. SHEET E101 - LIGHTING FIRST FLOOR PLAN – OVERALL
    A. Revised location of various light fixtures to coordinate with architectural ceiling grids.
    B. Revised location of various light switches to coordinate with adjusted door locations.
3. SHEET E301 – EQUIPMENT CONNECTION FIRST FLOOR PLAN – OVERALL
    A. Revised location of fire alarm control panels.

Technology:

4. SHEET TN101 - TELECOM FIRST FLOOR – OVERALL
    A. Revised layout of data in Booking #146.
    B. Added data for screening machine.

SPECIFICATIONS

Plumbing:
224600 Security Plumbing Fixtures

SECTION 087163
DETENTION DOOR HARDWARE
REVISED ADDENDUM 2, 3/202024

PART 1 GENERAL

1.1 DESCRIPTION

A. This section includes furnishing and installing detention hardware and related accessories required to complete the work as shown on the drawings, schedules and as specified herein.

B. Related Sections:

Section 11 19 00 Basic Detention Equipment Requirements
Section 11 19 10 Detention Hollow Metal
Section 11 19 30 Detention Glass and Glazing
Section 11 19 40 Detention Furnishings and Accessories
Section 11 19 45 Detention Bar Grating and Woven Mesh
Section 11 19 50 Detention Windows
Section 11 19 70 Detention Wall Systems
Section 11 19 80 Detention Cells
Section 11 19 90 Security Electronics

1.2 REFERENCES

C. ASTM F 1577-05 Test Methods for Detention Locks for Swing Doors

D. ASTM F 1643-05 Test Methods for Detention Sliding Door Locking Device Assembly

E. National Electrical Code, latest edition, for internal electrical requirements for hardware

F. UL 10B-2001

G. UL 10C-2001

1.3 SUBMITTALS

H. Make submittals in accordance with the requirements of Division 1 Section “Submittals”.

I. Submit specifications, installation instructions and general recommendations for products as required, including locks, hinges, and lock mount covers, bolt keepers, wall bumpers, weatherstripping, thresholds, escutcheons, etc.

J. Hardware and Keying Schedules:

Submit one copy of each schedule type; indicate all products by name and number for each separate opening. Include all other pertinent hardware and keying information.

1. DEC is required to coordinate a detention keying meeting with the architect and user so as not to delay the manufacturer and delivery of the required detention equipment.

2. Make promptly any corrections or changes necessary in schedules to comply with requirements; resubmit one copy of revised schedules.

K. Templates for Fabrication:

1. DEC is required to forward templates for each type of detention equipment hardware required to fabricators of work in Division 11 Section 11 19 10, “Detention Hollow Metal” following final review of hardware and keying schedules.

2. DEC is required to submit wiring diagrams for all electrical devices provided herein.

L. Locking Device Submittals:

Indicate layout plans of each opening, show anchorage and accessory items, dimensions and finishes.

M. Operating and Maintenance Manual Submittals - Furnish three copies of Operating/ Maintenance Manuals including parts lists for security locks and locking devices.

1.4 QUALITY ASSURANCE

In order to establish standards of quality and performance, the following requirements have been established for approval for each type of product listed.

1. Manufacturers Qualifications: Provide detention equipment products from manufacturers who have been actively engaged in the production of security equipment for a minimum of ten (10) years in successfully completing projects of equal scope and magnitude with products as herein specified. This evidence shall consist of a list of ten (10) projects of equal scope and magnitude that have been complete and operational for a minimum of five (5) years. The manufacturer shall now be actively engaged in the design and manufacture of security locks, locking devices, and miscellaneous detention hardware and products. All locks, locking devices and related detention hardware shall be manufactured and supplied by the same manufacturer.

2. Five (5) copies of manufacturer’s product specifications and catalog cut sheets and detail and performance data for each type of product listed in this section.

3. Provide data substantiating that products being proposed for this project comply with the requirements stated herein. Provide detailed explanation of the differences of proposed products and the specified products.

4. Manufacturer shall provide evidence of a written Quality Control System.

1.5 PRODUCT HANDLING

N. Comply with requirements of Division 11 Section 11 19 00 “Basic Detention Equipment Requirements.”

O. Package each item of hardware separately in containers, complete with necessary fasteners, installation instructions and installation templates. Mark each container with item numbers,

location of installation in accordance with corresponding information shown on final hardware schedule.

P. Store products at site to prevent damage or loss until installation is made.

Q. Deliver all keys in one shipment by secure carrier (hand carrier or registered mail) from manufacturer directly to authorized representative of the Owner, as directed by the Architect-Engineer.

1.6 WARRANTY

Comply with requirements of Division 11 Section 11 19 00 “Basic Detention Equipment Requirements.”

1.7 MAINTENANCE

R. Provide spares in the quantities listed below for each hardware type:

1. Locks: Two of each type used (one left hand, one right hand).
2. Escutcheon: Two of each type used.
3. Cylinder Shield: Two of each type used.
4. Hinges: Six of each type used.
5. Door Position Switch (DPS): Two of each type used (one of each hand, if applicable.)
6. Closer: Two of each type used (one of each hand, if applicable.)
7. Pulls:
   a. Raised Pull: Two of each type used
   b. Flush Pull: Two of each type used
8. Wall Bumper: Twelve of each type used
9. Weather Threshold: Two sets, 4’ lengths.
10. Pass-Resistant Threshold: Two sets, 4’ lengths.
11. Weatherstripping/Smoke Gasketing: Two sets
12. Jamb Switch (Keeper Switch): Two of each type used.
13. Food Pass hardware: Two food pass door sets complete with all hardware:
    a. 1 ea - Lock
    b. 2 ea - Hinges
    c. 1 ea - Pass door with integral pull
14. Kickplate:
    a. 10” x (door width less 2”) x 14 gage stainless steel, US32D finish, with security screws. Provide two.

b. 34” x (door width less 2”) x 14 gage stainless steel, US32D finish, with security screws. Provide two (per key quantities schedule only).

S. Locking Device Spare Parts:

Provide six complete sets of switches, wheels and motor assemblies.

T. Fasteners and Accessories:

Furnish five percent extra fasteners and other miscellaneous accessories required for installation.

U. Furnish, for institution use only, two complete sets of:

1. Special tools required for locking device and hardware maintenance
2. Lock repair kits for each type of lock

PART 2 PRODUCTS

2.1 MANUFACTURER

A. Manufacturer shall submit to the Architect upon request, twenty-one (21) days prior to bid date, their qualifications as required by Section 1.04.
1. Basis of Design: Southern Folger
2. Equal by: RR Brink
3. Equal by: Airteq

2.2 MECHANICAL DETENTION HARDWARE AND LOCKING DEVICES

B. Mechanical lever tumbler locks:
General: Lever tumbler locks shall operate with paracentric key. Key all lever tumbler locks into one keying system. Key locks alike in groups or key differently to approved keying schedule. Master keying is not an option for lever tumbler locks. Include lock mounting, escutcheons, strike and mounting screws for complete application. Use Torx tamper resistant screws on cylinder escutcheons, lock mounting and strike.

C. Maximum security deadlock:
1. Product/Model #:
a) Folger Adam #80 Series
b) Southern Steel 1080A
2. Material:
a) Case: Ductile iron case or formed steel case and cover
b) Cover: Cold rolled steel, 3/8 inch thick. For ductile iron case.
c) Deadbolt: Cold rolled steel, electro-galvanized, 3/4 inch thick with three 1/4 inch diameter hardened steel roller pins, 3/4 inch throw.
d) Cylinder: Investment cast, silicon brass alloy, for key one side or key both sides.
3. Performance:
a) Include anti-bind feature to prevent tumblers from binding with side pressure applied to deadbolt. Lock shall operate under 300 pound side load test.
b) Key operated deadlock. Key removable in locked and unlocked positions.
4. Accessories:

a) Lock mountings: HM for hollow metal doors, G for grill doors and P for plate doors.
b) Strike: 3/16 inch steel with dust box to protect bolt.
c) Strike: 3/16 inch steel with dust box and switch to monitor bolt position.
d) Option: Deadlock Indication – directional arrow indicates if a lockbolt is extended or retracted. Specify "SD."

D. Maximum security dead latch:
1. Product/Model#:
a) Folger Adam #70 Series
b) Southern Steel 1070A
2. Material:
a) Case: Ductile iron case or formed steel case and cover
b) Cover: Cold rolled steel, 3/8 inch thick. For ductile iron case
c) Latch bolt: Cold rolled steel, electro-galvanized, 3/4 inch thick with two 1/4 inch diameter hardened steel roller pins, 3/4 inch throw.
d) Deadlock actuator: Cold rolled steel, electro-galvanized, 1/2 inch thick, 1/2 inch travel.
e) Cylinder: Investment cast, silicon brass alloy, for key one side or key both sides.
3. Performance:
a) Lock shall comply with UL10B Fire Tests of Door Assemblies; Class A - 3 hour rating.
b) Key unlocks and retracts latch bolt. Deadlocked by actuator when closed. Key removable in latched and deadlocked position.
4. Accessories:
a) Lock mountings: G for grille doors, HM for hollow metal doors and P for plate doors.
b) Strike: 3/16 inch steel with dust box to protect bolt.
c) Strike: 3/16 inch steel with dust box and switch to monitor latch bolt position.

d) Case: Ductile iron case or formed steel case and cover
e) Cover: Cold rolled steel, 3/16 inch thick. For ductile iron case
f) Hook bolt: Cold rolled steel, hardened, electro-galvanized, 1/2 inch thick with bevel for snap locking.
g) Slide: Cold rolled steel, electro-galvanized, with fence and deadlock.
h) Deadlock pin: 1/2 inch diameter cold rolled steel, hardened, electro-galvanized.
i) Cylinder: Investment cast, silicon brass alloy, for key one side or key both sides.
5. Performance:
a) Key operated deadlatch. Key removable in locked and latched position.
6. Accessories:
a) Lock mountings: G for grille doors, HM for hollow metal doors and P for plate doors.
b) Strike: 3/16 inch steel with dust box to protect bolt.
c) Strike: 3/16 inch steel with dust box and switch to monitor latch bolt position.

E. Deadlock for access panels, key cabinets and electrical panels:
1. Product/Model#:
a) Folger Adam #10 Series
b) Southern Steel 1010A
2. Material:

a) Case: Ductile iron case or formed steel case and cover.
b) Cover: Cold rolled steel, 1/4 inch thick. For ductile iron case.
c) Deadbolt: Cold rolled steel, electro-galvanized, 3/4 inch thick, 5/8 inch throw.
d) Cylinder: Investment cast, silicon brass alloy, for key one side or key both sides.

3. Performance: Key operated deadlock. Key removable in locked and unlocked positions.
4. Accessories:
   a) Lock mountings: HM for hollow metal door, P for plate doors and G for Grating door.
   b) Strike: 3/16 inch steel with dust box to protect bolt and mounting screws.

F. Institutional mortise mechanical lock set for swinging doors:
1. Product/Model #:
   a) Folger Adam #9300 Series
   b) Southern Steel 10500 Series
2. Product includes:
   a) Lock
   b) Mogul Cylinder
   c) Strike
   d) Lever and rose set
   e) Mounting screws
3. Lock Functions:
   a) F01: Passage or Closet Latch ANSI standard
   b) F04: Entry Lock ANSI standard
   c) F05: Classroom Lock ANSI standard
   d) F07: Storeroom or Closet Lock ANSI standard
   e) F09: Apartment, Exit or Toilet Lock ANSI standard
   f) F13: Dormitory or Exit Lock ANSI standard
   g) F14: Store Door Lock ANSI standard
   h) F15: Modified Hotel Guest Lock ANSI modified
   i) F16: Deadlock ANSI standard
   j) F17: Deadlock ANSI standard
   k) F18: Deadlock ANSI standard
   l) F19: Privacy, Bedroom or Bath Lock ANSI standard
   m) F20: Apartment Corridor Door Lock ANSI standard
   n) F21: Entrance or Storeroom Door Lock ANSI standard
4. Material:
   a) Case and cover: 12 gauge steel or galvanized
   b) Faceplate: Stainless steel.
   c) Strike: 10 gauge Stainless steel.
   d) Dead latch: Stainless steel, 1-1/4 inch x 11/16 inch with 1 inch throw, field reversible.
   e) Internal parts and springs: Stainless steel or steel
   f) Lever set: Stainless steel self-centering lever. Provide safety knob and rose set where required.
   g) Mogul cylinder
5. Performance:
   a) Locks shall comply with UL10B Fire Tests of Door Assemblies; Class A 3-hour rating, except deadbolt only locks.
   b) Cylinder shall comply with UL437 Key Locks.

2.3 ELECTRO-MECHANICAL DETENTION HARDWARE AND LOCKING DEVICES

A. Jamb mounted medium to maximum security electro-mechanical lock set for swinging door shall include: Lock, plug connector, strike and mogul cylinder for mechanical release.

1. Product/Model#:
    a. Folger Adam #120 Series
    b. Southern Steel 10120AE/AM
2. Series of Operation:
    a. Remote electrical control of operation with local mechanical operation by key cylinder.
    b. Remote electrical control of operation with local mechanical operation by key cylinder one side and knob operation other side.
    c. LEK - Provide local electric key option for operational modes 1 and 2. Key shall electrically operate the lock when selected at the control console.
3. Material
    a. Case and Cover: 10 Gauge steel
    b. Bolt: Investment cast stainless steel with hardened inserts, 1 inch throw deadlatch or deadbolt.
    c. Bolt opening in case shall not allow access to internal mechanism.
    d. Deadlock Lever: Stainless steel, adjustable for variations in door gap.
    e. Roller Bolt: Investment cast stainless steel with stainless steel roller.
    f. Operating Lever: Stainless steel to operate with solenoid, motor, deadlatch or deadbolt.
    g. Strike: Investment cast stainless steel attached with screws in two directions.
    h. Solenoid: 115VAC continuous duty with stainless steel guides.
    i. Motor: 115VAC permanently lubricated fractional HP with thermal overload and positive brake. UL listed. [24VDC optional]
    j. Springs: Stainless steel.
    k. Cylinder: Mogul cylinder
    l. Finish: Galvanized case and cover
4. Performance
    a. Locks shall comply with UL 1034 Burglary Resistant Electric Locking Mechanisms.
    b. Deadlatch model -1 shall comply with UL 10B Fire Tests of Door Assemblies; Class A - 3 Hour Rating. (Some models may not qualify for fire rating due to specific functions, consult factory.)
    c. Cylinder shall comply with UL 437 Key Locks.
    d. Design lock mechanism to operate a minimum of one million cycles without failure.
    e. Certified to ASTM F1577 Impact Grade 1

B. Maximum-security remote-controlled rack and pinion keyed sliding door locking system device for individual sliding doors
1. Product/Model#:
    a. Southern Steel 3165LX.b
2. Functions
    a. Unlock, open and lock open a 3’-0” door in not more than seven (7) seconds.
    b. Unlock, close and deadlock close a 3’-0” door in not more than seven (7) seconds.
    c. Stop the movement of any door in mid-travel by applying approximately 40/45 lbs. of pressure on the door.

d. Instantly reverse the direction of the door. In the event the door is blocked, the door shall automatically continue to the open or closed position when the obstruction is removed.
e. Normal force exerted by a door in travel is 40/45 lbs.
f. The locking device shall be designed so that there will be no projecting lugs on the receiver column. Door shall automatically deadlock closed at a minimum of three points. Front locking shall not be acceptable.

3. Manual Operation:
   a. In the event of power failure, the door shall have capabilities of being unlocked with a paracentric or mogul key from either one or both sides of door.
   b. The paracentric or mogul key cylinder shall be located within a 10 gauge steel, hip high, manual release pilaster adjacent to the closing jamb of the door. Door can be moved by hand and does not automatically deadlock until pilaster handle is returned to the home position.
   c. Provide electrical paracentric key switch (PK) or mogul key switch (PKM), if required, provided at each door to permit full electrical operation to unlock open, lock open, unlock closed, lock closed, stop or reverse sliding door direction at any point of travel. Door must not go to the closed position automatically. The control console provides power to the key switch and must have the ability to override the key switch at any time. The control circuitry must be designed to prohibit the simultaneous operation from the control console and the key switch.
   d. Doors manually unlocked must be freewheeling to permit ease of movement.
4. Components:
   a. All motors shall be 1/8 horsepower, single phase, 115V, 60 Hertz, as manufactured by a nationally recognized manufacturer.
   b. Hanger carrier to be 3/16” thick steel plate, full width of door.
   c. Hanger carrier rollers to be turned from solid steel 3” OD.
   d. Rollers are to have anti-friction ball bearings with hardened members and grease shield on both sides.
5. Housing:
   a. The horizontal mechanism housing shall be constructed of 7 gauge mild steel.
   b. Housing covers shall be constructed of 10 gauge mild steel. All openings shall be baffled.
   c. The vertical lock bar housing shall be constructed of 1/8” mild steel tube to be 1” x 2” and the lock bar to be constructed of 5/8” square cold rolled bar steel, free moving within housing.
   d. Hinged Cover Panels: Cover panel is hinged to cover box assembly for maintenance access. Delete this is standard not an option.
   e. All hinged housing covers shall be locked to the track box with Torx head w/center pin security screws.
6. Finish: Paint entire assembly, except track, rollers and drive mechanism, with rust inhibitive primer.
7. Optional Features
   a. Pilaster Release – In lieu of housing cover release system – Hip-high paracentric keyed mechanical release mounted in a full-height pilaster adjacent to the receiving jamb.
   b. Electric Keyswitch: Paracentric or mogul keyed local electric control switch mounted below mechanical release mechanism in pilaster. Paracentric or mogul keyed one side or keyed two sides.

2.4 CYLINDERS, KEYS and KEYING

G. The security locks will incorporate three (3) separate keying systems: one for pin tumbler (mogul cylinder) and one for commercial cylinder locks. Each keying system's keys shall be die stamped for identification corresponding to the hardware supplier's final schematic keying chart.

H. Mogul cylinder locks shall be master keyed as directed. Provide cut change keys, and master keys as required.

I. For all individual key designations, to each required individual Key Cabinet, there shall be two (2) keys provided. For each master key designation, there shall be three (3) keys for each required individual key cabinet.

J. A complete, detailed schematic chart of the keying system will be required. The hardware supplier will also be required to enter the key symbols for all doors on additional floor plans that will be supplied by the Architect. Two (2) copies of the schematic keying chart and architectural floor plans shall be turned over to the user at the completion of the project. The cost for this service shall be included with the cost of materials at the time of bidding.

2.5 SCREWS, FASTENERS AND TOOLS

K. Furnish exposed fasteners to match item fastened. Make fastener of the same metal as item fastened, except use plated brass or stainless steel for all aluminum items. Provide twenty (20) spares of each type of fastener used for anchoring hardware.

L. Provide security-head (star design with center pin) security fasteners for exposed fasteners on all detention hardware, regardless of manufacturer. Furnish six (6) tool holders and six (6) bits for each different size screw. Holders and bits shall be left at project after installation and become property of the user.

2.6 ACCESSORIES

M. Surface hinge:
   1. Product/Model#
      a) Folger Adam 3FS
      b) Southern Steel 203FS
   2. Material/Description:
      a) Full surface, 3/8-inch thick heavy duty Cast, malleable iron leaves.
      b) Hardened hinge pin, 1/2” diameter, flush fitted with knurled end to pressed into a blind hole prevent tampering and removal.

N. Mortised institutional hinge:
   1. Product/Model#:
      a) Southern Folger 204FMSS/4-1/2FM-KS
   2. Material/Description
      a) Full mortised, 0.188 inch thick investment-cast stainless steel leaves.
      b) Two reinforced polymer bearings with lubricant designed specifically for stainless steel pin. Assembly to exhibit low coefficient of friction.
      c) Stainless steel hinge pin, non-removable and fully concealed.
      d) Provide quantities as follows:
         (1) Doors less than 5 ft high - 1 pair
         (2) Doors over 5 ft to 7 ft 6 in - 1-1/2 pair

(3) Doors over 7 ft 6 in to 10 ft - 2 pair
(4) Doors over 3 ft 8 in wide - 2 pair

O. Door position indicator switch:
   1. Product/Model#:
      a) Folger Adam 534
      b) Southern Folger 220A
   2. Material/Description:
      a) Surface mounted on frame header with actuator on door.
      b) Switch Case and Cover: 10 gauge hot roller steel.
      c) Switch Actuator: 13 gauge, galvanized cold rolled steel.
      d) Position Indication Function: Circuit shall be interrupted by the switch contained therein. Factory set when a 2'-6" door moves 3/8", activating an electric lamp indicator on the graphic control panel(s), where specified.

P. Loop door pull:
   1. Product/Model#:
      a) Southern Folger 212C
   2. Material/Description
      a) Material: Cast stainless steel.
      b) Finish: US32D.

Q. Recessed door pull:
   1. Product/Model#:
      a) Southern Folger 214S
   2. Material/Description
      a) Single direction finger grips.
      b) Optional: Bi-directional grips for sliding doors.
      c) Material: Cast stainless steel.
      d) Finish: US32D.

R. Fire/Smoke Gasketing/Threshold
   1. Seal begins compressing at 1/4". Compresses to seal up to a 1/16" gap.
   2. Seal is extruded from high-temperature silicone; effective between -58°F and 450°F.
   3. Self-extinguishing and non-toxic. Unaffected by sunlight, ozone and ultraviolet rays. Impervious to fungus and mildew; will not deteriorate under normal exposure.
   4. Meets FAR 25.853 Airworthiness Standards for Compartment Interiors. Smoke tested in accordance with UBC 7-2 and UL 1784-01; meets the requirements of NFPA 105 "Standard for the Installation of Smoke Door Assemblies and Other Opening Protectives".
   5. Air infiltration tested in accordance with ASTM E-283-04. Air infiltration is only .09 CFM / ft of crack.
   6. For use with listed steel frames and/or classified steel covered composite, hollow metal doors rated up to and including 3 hours; wood and plastic covered composite doors rated up to and including 1-1/2 hours; and wood core doors rated for 20 minutes without hose stream. When applied to the door and frame assembly in accordance with the manufacturer's installation instruction, the assembly will comply with UBC 7-2 (1997) part II.
   7. Secured with stainless steel, head-head security screws.

S. Weatherstrip
   1. Includes mounting screws and a cam.
   2. Includes end plates that provide a clean, finished look and prevent debris from entering operating mechanisms.
   3. Smoke Tested - UL1784 - tested in accordance with UL 1784-2001Air Leakage Tests of Door Assemblies, and meet the performance criteria for allowable air leakage as

specified in NFPA 105-99 Installation of Smoke Control Door Assemblies. Meets the requirements for category H - Smoke Seals.

2.7 FINISHES:

	ANSI U/S	Symbol	Description
Hinges, Exterior	US32D	630	Satin Stnls Stl
Hinges, Interior	US26D	626	Satin Chrome
Locks & Pulls	US26D	626	Satin Chrome
Closers	AL	689	Aluminum Painted
Push, Kick	US32D	630	Satin Stnls Stl
Stops	US26D	626	Satin Chrome

2.8 KEY CABINET

T. Key control shall be furnished with a capacity of 1.75 times the number of individual key designations.

U. Cabinets shall have concealed-type hinge and rounded sides.

V. Panels must have individual hook and label pockets formed as an integral part of the panel, for mogul key types, as required.

W. Keys shall not leave the manufacturer's custody without prior arrangements for delivery and authorization from the Owner.

2.9 SECURITY SPARE LOCKS AND LOCK PARTS

X. Shall be provided for the Owners' stock as follows:

Y. One complete set of security screwdrivers for all sizes of security screws used on this project.

Z. One repair parts list and assembly drawings bound in a manual for all security products supplied in this section.

PART 3 EXECUTION

3.1 GENERAL

Comply with requirements of Division 11 Section “Basic Detention Equipment Requirements.”

3.2 INSTALLATION

A. Comply with requirements of Division 11 Section “Basic Detention Equipment Requirements.”

B. All shipping of detention equipment hardware and coordination with other detention equipment shall be the responsibility of the Detention Equipment Supplier.

3.3 FIELD QUALITY CONTROL

Comply with requirements of Section “Basic Detention Equipment Requirements.”

3.4 ADJUSTMENT AND REPAIRING

Comply with requirements of Section “Basic Detention Equipment Requirements.”

3.5 PROTECTION AND CLEANING

Comply with requirements of Section, “Basic Detention Equipment Requirements.”

3.6 DETENTION DOOR HARDWARE SCHEDULE

A. General: Provide detention door hardware for each detention door to comply with requirements in this Section and with detention door hardware sets.

B. The hardware group/sets listed below indicate the items of hardware required for each opening. It is the bidder’s responsibility to accurately furnish the proper sizes, quantities, weights, gage and function as required by these specifications and as recommended by manufacturers involved.

DETENTION HARDWARE SETS

Hardware Set # DH-1

For Each Door: Sally Ports Interior Doors

Doors: 118, 121A, 122, 145A, 146, 154, 155A, 159, 162A, 162B, 166, SP1A, SP1B, SP2A, SP2B, SP3, SP4A, SP4B, SP4G

3 ea	204FMSS	4 ½ x 4 ½ Mortised Hinge
1 ea	10120AMDNL-2	120v Electro-Mechanical Dead Latch
1 ea		Cylinder extension
2 ea	212C	Loop Pull
1 ea	2215	Concealed closer
1 ea	200MRS	Magnetic DPS
1 ea	420	Detention Door Stop
3 ea	307D	Door Silencer
		Where Food Pass Noted Provide:
1 ea	1010AM-1	Mechanical Dead Bolt at Food Pass
2 ea	203FS	3 x 2 ¾ Full Surface Hinge
		Provide Pan Shutter where Noted

Hardware Set # DH-2

For Each Door: Typical Dayroom Entrance and Crossover Doors

Doors: EXC1, PODA, PODB, PODC, PODD, PODE, PODF

3 ea	204FMSS	4 ½ x 4 ½ Mortised Hinge
1 ea	10120AMDNL-2	120v Electro-Mechanical Dead Latch
1 ea		Cylinder extension
1 ea	212C	Loop Pull
1 ea		Recessed Door pull by DHM Mfg
1 ea	2215	Concealed closer
1 ea	200MRS	Magnetic DPS
1 ea	420	Detention Door Stop
3 ea	307D	Door Silencer
		Where Food Pass Noted Provide:
1 ea	1010AM-1	Mechanical Dead Bolt at Food Pass
2 ea	203FS	3 x 2 ¾ Full Surface Hinge
		Provide Pan Shutter where Noted

Hardware Set # DH-3

For Each Door: Typical Cell Door

Doors: A11, B10, B11, C10, C11, D10, D11, E10, E11, F11, HD1, HD2, HD3, MED1, PAD1, PAD2, B20, B21, B22, C20, C21, C22, D20, D21, D22, E20, E21, E22

3 ea	204FMSS	4 ½ x 4 ½ Mortised Hinge
1 ea	10120AMD-1	120v Electro-Mechanical Dead Latch
1 ea	212C	Loop Pull
1 ea		Recessed Door pull by DHM Mfg
1 ea	200MRS	Magnetic DPS
1 ea	420	Detention Door Stop
3 ea	307D	Door Silencer
		Where Food Pass Noted Provide:
1 ea	1010AM-1	Mechanical Dead Bolt at Food Pass
2 ea	203FS	3 x 2 ¾ Full Surface Hinge
		Provide Pan Shutter where Noted

PAD1 AND PAD2 REQUIRE LCN2215 CLOSER

Hardware Set # DH-4

For Each Door: Exterior Doors Typical at VSP

Doors: EXC4

3 ea	204FMSS	4 ½ x 4 ½ Mortised Hinge
1 ea	10120AE-2	120v Electro-Mechanical Dead Latch
1 ea		Cylinder extension
2 ea	212C	Loop Pull
1 ea	2215	Concealed closer
1 ea	200MRS	Magnetic DPS
1 ea	420	Detention Door Stop
1 ea	2005AT	Threshold x 3'-0"
17lf	S88	Weather seal

Hardware Set # DH-5

For Each Door: Use for mechanical locks at access panels and mop closets that are not monitored.

Doors:

3 ea	204FMSS	4 ½ x 4 ½ Mortised Hinge
1 ea	10561	Mortise Lock
1 ea	500C	Bolt Strike
1 ea	2010	Concealed closer
1 ea	220A	Surface Mounted DPS
1 ea	420	Detention Door Stop
3 ea	307D	Door Silencer

Hardware Set # DH-6

For Each Door: Corridor Sliding Devices

1 ea	3165LX.bHPKM-2	Remote Controlled Rack and Pinion Sliding Door Device
1 ea	1010AM-2	Mechanical Dead Bolt
2 ea	936	Three Position Maintained Keyswitch

Hardware Set # DH-7

For Each Door: Access Panels

2 ea	203FS	3 x 2 ¾ Full Surface Hinge
1 ea	1010AM-1	Mechanical Dead Bolt

Hardware Set # DH-8

For Each Door: Use For Doors over 3'-6"

4 ea	204FMSS	4 ½ x 4 ½ Mortised Hinge
1 ea	10120AMDNL-21	20v Electro-Mechanical Dead Latch
1 ea		Cylinder extension
2 ea	212C	Loop Pull
1 ea	2010	Concealed closer
1 ea	220A	Surface Mounted DPS
1 ea	420	Detention Door Stop
3 ea	307D	Door Silencer

Hardware Set # DH-9

For Each Door: Crossover Doors

Doors: C1, D1, EXC2, EXC3

3 ea	204FMSS	4 ½ x 4 ½ Mortised Hinge
1 ea	10120AMDNL-2	120v Electro-Mechanical Dead Latch
1 ea		Cylinder extension
1 ea	212C	Loop Pull
1 ea		Recessed Door pull by DHM Mfg
1 ea	2215	Concealed closer
1 ea	200MRS	Magnetic DPS
1 ea	420	Detention Door Stop
3 ea	307D	Door Silencer
1 ea	600s	Interlocking Threshold
1 ea	701s	Interlocking J Hook
		Where Food Pass Noted Provide:
1 ea	1010AM-1	Mechanical Dead Bolt at Food Pass
2 ea	203FS	3 x 2 ¾ Full Surface Hinge
		Provide Pan Shutter where Noted.

Hardware Set # DH-10

For Each Door: Shower Doors

2 ea	204FMSS	3 x 2 ¾ Full Surface Hinge
1 ea	1010AM-1	Mechanical Dead Bolt

END OF SECTION 087163

SECTION 224600
PLUMBING FIXTURES
REVISED ADDENDUM 2, 3/202024

PART 1-GENERAL REQUIREMENTS

1.1 SUMMARY

A. This Section includes security plumbing fixtures and trim, fittings, and accessories, appliances, appurtenances, equipment, and supports associated with plumbing fixtures. This section also includes the electronic control system for electronic controlled security fixtures.

B. Related Sections: The following Sections contain requirements that relate to this Section:

1. Division 7 Section "Joint Sealers," for materials and methods for sealing between security plumbing fixtures and interior walls.
2. Division 22 Section "General Duty Valves for Plumbing Piping" for valves used as shutoff valves and thermostatic mixing valves.

1.2 DEFINITIONS

A. Accessible: Describes a plumbing fixture, building, facility, or portion thereof that can be approached, entered, and used by physically handicapped people.

B. Accessory: Device that adds effectiveness, convenience, or improved appearance to a fixture but is not essential to its operation.

C. Appliance: Device or machine designed and intended to perform a specific function.

D. Appurtenance: Device or assembly designed to perform some useful function when attached to or used with a fixture.

E. Equipment: Device used with plumbing fixtures or plumbing systems to perform a certain function for plumbing fixtures but that is not part of the fixture.

F. Fitting: Fitting installed on or attached to a fixture to control the flow of water into or out of the fixture.

G. Fixture: Installed receptor connected to the water distribution system, that receives and makes available potable water and discharges the used liquid or liquid-borne wastes directly or indirectly into the drainage system. The term "Fixture" means the actual receptor, except when used in a general application where terms "Fixture" and "Plumbing Fixture" include associated trim, fittings, accessories, appliances, appurtenances, support, and equipment.

H. Back-Access Fixture: Security plumbing fixture designed to mount on wall sleeve built into wall or on wall, so installation and removal of fixture, piping, and other components are accessible only from service space behind wall.

I. Front-Access Fixture: Security plumbing fixture designed to mount on wall with installation and removal from fixture side of wall, and with piping and other components accessible only from access panel in fixture.

J. Roughing-In: Installation of piping and support for the fixture prior to the actual installation of the fixture.

K. Trim: Hardware and miscellaneous parts, specific to a fixture and normally supplied with it required to complete fixture assembly and installation.

L. Lead Free: Refers to the wetted surface of pipe, fittings and fixtures in potable water systems that have a weighted average lead content ≤0.25% per Safe Drinking Water Act as amended January 4th 2011 Section 1417.

1.3 SUBMITTALS

A. General: Submit the following in accordance with Conditions of Contract and Division 1 Specification Sections.

1. Product data for each type of plumbing fixture specified, including fixture and trim, fittings, accessories, appliances, appurtenances, equipment, supports, construction details, dimensions of components, and finishes.
2. Wiring diagrams for field-installed wiring of electrically operated units.
3. Maintenance data for inclusion in Operating and Maintenance Manual specified in Division 1 and Division 22 Section "General Plumbing Requirements."

B. Submit third party certification that faucets and trim for domestic water distribution for drinking or cooking comply with NSF 61 Annex G and / or NSF 372. The following faucets and trim need not comply:

1. Electronic faucets
2. Service sink faucets
3. Flush valves
4. Shower valves and heads

1.4 QUALITY ASSURANCE

A. Regulatory Requirements: Comply with requirements of ICC Standard A117.1, ""Accessible and Usable Buildings and Facilities," and "2010 ADA Standards for Accessible Design"" with respect to plumbing fixtures for individuals with disabilities.

B. Regulatory Requirements: Comply with requirements of ATBCB (Architectural and Transportation Barriers Compliance Board) "Uniform Federal Accessibility Standards (UFAS) - 1985-494-187" with respect to plumbing fixtures for the physically handicapped.

C. Listing and Labeling: Provide electrically operated fixtures specified in this Section that are listed and labeled.

1. The terms "listed" and "labeled" shall be as defined in the National Electrical Code, Article 100.

2. Listing and Labeling Agency Qualifications: A "Nationally Recognized Testing Laboratory" (NRTL) as defined in OSHA Regulation 1910.7.

D. Comply with NSF 61 Annex G and / or NSF 372 for wetted surfaces of faucets and trim containing no more than 0.25% lead by weight for domestic water distribution for drinking or cooking.

E. Design Concept: The drawings indicate types of plumbing fixtures and are based on the specific descriptions, manufacturers, models, and numbers indicated. Plumbing fixtures having equal performance characteristics by other manufacturers may be considered provided that deviations in dimensions, operation, color or finish, or other characteristics are minor and do not change the design concept or intended performance as judged by the Architect. Burden of proof for equality of plumbing fixtures is on the proposer.

1.5 SPARE PARTS

A. Deliver spare parts to Owner. Furnish spare parts described below matching products installed, packaged with protective covering for storage, and identified with labels clearly describing contents.

B. Electric Actuator Repair Kits: Furnish quantity of identical units not less than 10 percent of amount of each installed.

C. Flushometer Repair Kits: Furnish quantity of identical units not less than 10 percent of amount of each flushometer installed.

D. Provide individual metal boxes or a hinged-top wood or metal box having separate compartments for each type and size of above extra materials.

PART 2 - PRODUCTS AND MATERIALS

2.1 MANUFACTURERS

A. Manufacturers: Subject to compliance with requirements, provide products in each category, by one of the following listed for that category:

1. Security Plumbing Fixtures:

    a. Acorn Engineering Co.
    b. Bradley Corp
    c. Metcraft Industries
    d. Willoughby Industries

2. Security Plumbing Fixture Electronic Controls

    a. Acorn Engineering Co.
    b. Bradley Corp
    c. Metcraft Industries
    d. Willoughby Industries

2.2 SECURITY PLUMBING FIXTURES, GENERAL

A. Provide security plumbing fixtures and trim, fittings, other components, and supports as specified on the drawings and below:

2.3 SECURITY PLUMBING FIXTURE ELECTRONIC CONTROLS

A. Water Management System: PC-based server (operator workstation) running on Windows 10 or newer operating system. Network communications shall be CANbus based providing proactive, prioritized communications status of the controller inputs/activities to operator workstation. Polling-type networks shall not be permitted. PC shall serve as the operator interface serving single or multiple individual trunks of networked Cell Valve Controllers (CVC's). The PC operator workstation shall display all fixtures and indicate their operation and state graphically. PC shall be equipped with:

1. Touchscreen Monitor: 21 inch (534 mm) or larger with HD resolution of 1366 by 768 pixels minimum.
2. RAM: 8 GB minimum.
3. Hard Drive: 256 GB minimum.
4. USB Ports: 4 minimum.
5. CANbus interface device(s) for network communication to Cell Valve Controllers (CVC's).
6. Water Management Software: Installed on PC, configured, and tested prior to installation to provide control and monitoring of security plumbing fixtures flush valves, lavatory valves, and shower valves connected to the CANbus networked control system.

B. WMSII operator workstation shall be located where indicated on the drawings.

C. Screen Graphics: Floor Plan Screen Layout - standard. Layout information (areas and cell numbers and fixtures controlled by networked system) shall be supplied to system supplier in DWG file format. Based on information supplied:

1. Level 1 screen shall:

    a. Display top-level layout of defined sections of the facility.
    b. Provide selected areas identified by shape, color, and label to link Level 1 screen to Level 2 screens with enlarged details and fixtures of individual facility sections.

2. Level 2 screens shall:

    a. Provide magnified detail and fixture icons.
    b. Provide identification of each fixture by location on the screen layout, icon type, and labeling (e.g., cell number of its location).
    c. It shall be acceptable to use only a Level 1 screen if all fixtures can be displayed legibly and logically by functional area on one screen.
    d. Provide graphical indication of fixture status.

D. Individual microprocessor-driven Cell Valve Controllers (CVCs) shall be located in the plumbing chase(s) and shall control the operation of electronic lavatory valves, electronic shower valves, electronic drinking fountain valves, and electronic-hydraulic flush valves. An option shall also be available to control the operation of master shut-off valve(s) that provide(s) water to an area of several cells or fixtures.

1. CVC's shall require 24 volts AC for operation. System manufacturer shall supply 120/24 VAC step-down transformers for each CVC supplied. Transformers shall be UL Class 2, overload protected.
2. Each CVC shall be capable of controlling up to 2 lavatory/toilet combination units (1 hot valve, 1 cold valve, and 1 flush valve for each combination unit), 3 individual lavatories, or up to 2 toilets with overflow sensing (6 toilets without overflow sensing), or combinations thereof up to a total of 6 individual low-voltage solenoid valves. CVC's shall be modular and capable of operating in a fully networked or stand-alone configuration.

E. Valve output LEDs on the CVC shall provide the status of all valve outputs. An additional set of status LEDs shall indicate the presence and type of any inhibiting or lockout condition on valve function.

F. Diagnostic LEDs: Provided on CVC to indicate the presence of incoming AC control power, that the CVC is operational, communication status, and input status.

1. HB LED (heartbeat): Flashes to show controller is not only powered, but that the program in the controller is running. It flashes on and off.
2. COM LED: Indicating when there is network communications activity occurring.
3. ERR LED: Indicating a communication error occurred.
4. IN LED: Indicating one of the input switches is closed. (It can be used to diagnose input switch problems.)

G. Diagnostic pushbuttons on the CVC shall be provided to enable maintenance personnel to manually activate valves and overflow functions from the controller in the plumbing chase.

H. Valve activation shall come from vandal-resistant stainless steel internally sealed pushbuttons.

1. Pushbuttons shall require less than 5 lbf (22.2 N) to activate.
2. Pushbutton housings shall be electrically isolated from system voltages.

I. All solenoid valves shall be non-hold open (normally closed), but all metering times shall be independently adjustable.

1. Metering time shall be:

a. Adjustable from one (1) to sixty (60) seconds for each lavatory valve.
b. Adjustable from one (1) to ten (10) seconds for each flush valve.
c. Adjustable from one (1) second to nine (9) minutes and fifty-nine (59) seconds for each shower valve.

2. Metering cycles shall be interruptible with a second pushbutton activation.
3. All settings shall be programmable for a single fixture or a group selection of all fixtures of the same type on the operator workstation screen.

J. Each controller shall be programmed at the factory with the following settings:

1. Lavatory Valve Cycle: Fifteen (15) seconds hot water run time, fifteen (15) seconds cold water run time.
2. Flush Valve Cycle (Water Closets and Urinals): Two (2) seconds on time.
3. Shower: Upon initiation, two (2) minute run time. If the user finishes the shower before the two (2) minute period, user may press pushbutton a second time to terminate the cycle. Pressing the pushbutton during the run time shall not extend the cycle.

K. A programmable re-initiate delay feature function (toilets, urinals, lavatories, showers, and drinking fountains) shall be provided to control the amount of use to a preset threshold, after which the function will be locked out for a preset period of time of up to four hours.

L. A programmable initiate delay feature for the fixture function (toilets, urinals, lavatories, showers, and drinking fountains) shall be provided to enable a timed delay between the pushbutton switch activation and the subsequent valve activation.

M. System shall provide overuse control consisting of:

1. Individual toilet, urinal, lavatory, shower, and drinking fountain use limits.
2. Programmable response to overuse condition of notification at the operator workstation, latched lockout of fixture, or auto-limit of fixture operation to prevent its overuse. All overuse notifications shall appear on the operator workstation.
3. Configurable overuse limitation to a given number (adjustable) of valve actuations for flushing devices or a given amount of cycle-on time (adjustable) for showers, lavatories, and drinking fountains within a given time period (adjustable) of up to 24 hours.
4. Concurrent operation with other use-control features of the system.

N. The operator workstation shall be capable of networks of up to 508 CVC nodes and up to 3,048 valves.

O. Network Wiring: Twisted 3-pair cable of CAT3 or better rating shall be used for all network wiring (provided by others). Installer shall follow system manufacturer's instructions for installation and verification testing. Each network shall not exceed 3,000 feet (915 meters) in total length from operator workstation to the last CVC in the network string.

P. In the event of a loss of network communications or loss of power, system programming shall be retained in each CVC to allow fixtures to operate in the same way that they operated prior to the loss of power or the loss of network communications.

Q. Input/Output Ports Cabling:

1. Each input/output shall be clearly identified by the use of harness location, color coding of wires, gender of connectors (1/4 inch (6 mm) fully insulated male tab connections for inputs and 1/4 inch (6 mm) fully insulated female tabs for outputs), and supplied documentation.
2. All input/output cables shall be supplied with cables attached to the CVC and only outboard switch and valve connections to be plugged in by installer.
3. Supplied valve and switch cabling from the CVC control board shall each be 8 feet (2.4 m) with the option to add extensions if necessary.

R. The networked system shall be capable of:

1. Enabling or disabling an individual fixture or an entire group of fixtures from the operator workstation.
2. Controlling the maximum number of simultaneous flushes (adjustable from 1 to 999) that can occur within a given time period (adjustable from 1 to 60 seconds).
3. Automatically flushing a toilet or actuating a non-flushing fixture after an adjustable period of non-use has passed to prevent drying out or creating stagnate water.
4. Allowing for remote actuation of fixtures from the operator workstation.
5. Providing ability from the operator workstation to dynamically lock or reset (unlock) a fixture.
6. Providing up to 4 scheduled permit time periods per day and week for selected fixtures.
7. Providing indication and reset capability of overflow alarms.
8. Logging of time, date, and function of all valve activity chronologically, including:

    a. On and off times of each fixture function.
    b. Lockout times.
    c. Network status changes by node.

S. The networked system shall provide 4 levels of security accessed via user name and password depending on system settings (Each level includes the functions of the previous lower level).

1. View-only Security Level:

    a. Move between display screens.
    b. Observe fixture activity on screens.
    c. Observe any loss of communications to fixture controllers.
    d. Log into a higher-security level.

T. Operator Security Level:

1. Remote valve actuation.
2. Fixture lockout/reset.
3. Clear alarms (overflow and overuse).

U. Supervisor Security Level:

1. Set and adjust valve timing.
2. Set and adjust initiate and re-initiate delays.
3. Set and adjust permit (lockout) schedules.
4. Set and adjust overuse limits and responses.
5. Set alarm display options.
6. Enable/disable and set FlushGuard to limit simultaneous flushes.
7. Access fixture event log (if enabled by administrator).
8. Use log files to analyze water-consumption history.
9. Enable and disable sound effects.
10. Access system user activity log files (if enabled by administrator).
11. Optional selection of a 24-hour point at which all overuse counts will be reset.

V. Administrator Security Level:

1. Create system user accounts with user name, password, and security level defined.
2. Set and adjust network communications settings.
3. Enable and configure remote client connections to operator workstation.
4. Configure fixture event log files and user activity log files.
5. Set sound files to be used when sound feature is enabled.

W. Client-server Networking System shall be capable of linking client sessions on other Windows-based PCs to the main operator workstation via an Ethernet network. Control and monitor functions possible on the central operator workstation may be performed on a client PC based on user security level.

1. Operator workstation will be located where indicated on drawings.
2. Water management software shall be installed, configured, and verified by system integrator with assistance from water management software supplier.

X. Solenoids compatible with voltage, power, and mating connections of the outputs of the CVC.

PART 3 - EXECUTION

3.1 INSTALLATION, GENERAL

A. Install security plumbing fixtures, trim and supports in accordance with manufacturer’s installation instructions.

B. Install security plumbing fixture electronic controls, low voltage power wiring, cables and appurtenances in accordance with manufacturer's installation instructions.

3.2 INSTALLATION OF SECURITY PLUMBING FIXTURES

A. Install security plumbing fixtures level and plumb.

B. Install back-access, stainless steel fixtures as follows:

1. Install wall sleeve in wall if indicated.
2. Install fixture on wall sleeve or wall, as indicated, with access from accessible service space.
3. Extend supply piping from service space to fixture.
4. Install soil and waste piping from fixture and extend into service space.
5. Install fixture trap in service space instead of below fixture drain.

C. Install electronic valve actuators where indicated on the drawings as follows:

1. Install electronic actuators below microprocessor-driven Cell Valve Controllers (CVC's).
2. Provide isolation valve for hot and or cold water connection at each actuator with size as indicated on the drawings.
3. Provide polyethylene tubing, as recommended by the manufacturer, from each actuator outlet to each security fixture inlet.

D. Install microprocessor-driven Cell Valve Controllers (CVC's) where indicated on the drawings as follows:

1. Install microprocessor-driven Cell Valve Controllers (CVC's) above electronic valve actuators.
2. Install piezo electric push buttons in security plumbing fixtures.
3. Provide cables, as recommended by the manufacturer, from microprocessor-driven Cell Valve Controllers (CVC's) to push buttons and to flush valve actuators.
4. Furnish transformer to electrical for installation, refer to the electrical drawings
5. Provide low voltage power wiring from transform to microprocessor-driven Cell Valve Controllers (CVC's) as recommended by the manufacturer.
6. Coordinate installation of interconnecting cables between microprocessor-driven Cell Valve Controllers (CVC's) and the PC. Cables shall be as recommended by the manufacturer. Refer to the Electrical Drawings.

3.3 CONNECTIONS

A. Piping installation requirements are specified in other sections of Division 22. The Drawings indicate general arrangement of piping, fittings, and specialties. The following are specific connection requirements:

1. Install piping connections between security plumbing fixtures and piping systems and plumbing equipment specified in other sections of Division 22.

3.4 FIELD QUALITY CONTROL

A. Inspect each installed fixture for damage. Replace damaged fixtures and components.

B. Test fixtures to demonstrate proper operation upon completion of installation and after units are water pressurized. Replace malfunctioning fixtures and components, then retest. Repeat procedure until all units operate properly.

C. Verify security plumbing fixture push buttons actuate the correct water feature for each fixture.

3.5 ADJUSTING AND CLEANING

A. Operate and adjust faucets and controls. Replace damaged and malfunctioning fixtures, fittings, and controls.

B. Operate and adjust disposers, hot water dispensers, and controls. Replace damaged and malfunctioning units and controls.

C. Adjust water pressure at penal bubbler, showers, and flushometers, to provide proper flow and stream.

D. Clean security fixtures, fittings, and spout and drain strainers with manufacturers' recommended cleaning methods and materials.

E. Review the data in Operating and Maintenance Manuals. Refer to Division 1 Section "Project Closeout."

F. Set thermostatic mixing valve serving each shower or showers to 100F. Thermostatic mixing valves and their installation requirements are specified in Division 22 specification section “Water Distribution Piping and Specialties“. Perform work after the shower head is installed and the domestic water heater is in operation. Allow the hot water to run for 5 minutes minimum or until temperature reaches equilibrium. Allow cold to run for 5 minutes minimum or until temperature reaches equilibrium. Provide the architect a report and schedule indicating the hot, cold and mixed maximum water temperature at each shower.

G. Set thermostatic mixing valve serving each combi bubbler or bubblers to 110F. Thermostatic mixing valves and their installation requirements are specified in Division 22 specification section “Water Distribution Piping and Specialties“. Perform work after the bubbler is installed and the domestic water heater is in operation. Allow the hot water to run for 5 minutes minimum or until temperature reaches equilibrium. Allow cold to run for 5 minutes minimum or until temperature reaches equilibrium. Provide the architect a report and schedule indicating the hot, cold and mixed maximum water temperature at each bubbler.

3.6 TRAINING

A. At a time mutually agreed upon between the Owner and Contractor, provide the services of a factory trained and authorized representative to train Owner's designated personnel for a minimum of two hours on the operation and maintenance of the equipment and software provided under this section.

B. Certification: Contractor shall submit a certification letter stating that the Owner’s designated representative has been trained as specified herein. Letter shall include date, time, attendees and subject of training. The certification letter shall be signed by the Contractor and the Owner’s representative indicating agreement that the training has been provided.

END OF SECTION

SECTION 280500
COMMON WORK RESULTS FOR ELECTRONIC SAFETY AND SECURITY
REVISED ADDENDUM 2,3/202024

PART 1: GENERAL

1.1 SECTION INCLUDES

A. This section includes electronic security systems as shown on the contract documents.
B. The detention equipment contractor shall subcontract the services of a qualified Electronic Security Systems Subcontractor (ESSS).
C. All approved ESSS's bidding this project must supply with their bid to the Detention Equipment Contractor, a 100% performance and payment bond, for the full amount of their bid. This bond will be used to guarantee that the ESSS has complied with all requirements to provide "non-proprietary" security electronics hardware and software. This bond will be in place for the entire duration of the project, including through substantial completion, completion of all punch list items, including the final turnover of the system to the owner, including all the software codes. If it is determined at this time that the ESSS has not complied completely with the specified turnover of the "NON-PROPRIETARY" software codes for the Owner as well as provided all “NON-PROPRIETARY” equipment, the ESSS's bond will be called, and all costs associated with this non-performance will be borne solely by the ESSS. There will be no exception to these requirements.
D. Summary of work includes providing the following products, labor, and services for the installation of a fully functional Electronic Security System indicated and specified herein including any items necessary for a compete installation. The ESSS must provide all systems within this specification. The following individual specification section comprise the entire Electronic Security System:
    1. Section 280510 Cabinets and Enclosures for Electronic Security
    2. Section 281300 Access Control System
    3. Section 282300 IP Video Communication System
    4. Section 282350 Electronic Security Systems Network Integration
    5. Section 283105 Auxiliary Control System
    6. Section 284619 Security Automation System
    7. Section 284620 Video Graphic User Interface
    8. Section 285123 IP Audio Communication System
E. Products furnished but not installed under this section.
    1. Special back boxes which include but are not limited to speaker back boxes and camera housings.
    2. Equipment cabinets and racks.
    3. Special back boxes, racks and cabinets that must be connected to the conduit/raceway system shall be supplied by this contractor and turned over to the electrical contractor for installation.

1.2 DELINEATION OF RESPONSIBILITY

A. General Contractor/Construction Manager:
    1. Include detailed scheduling information for Security Electronics systems installation and testing in the construction schedule. This shall provide the ESSS free access and total control with no other construction traffic for a period of two weeks for proper testing/certification of the system.
    2. Provide coordination to ensure that control rooms and Security Electronics rooms are completed as early as possible to facilitate installation of control wiring. Control rooms and Security Electronics equipment rooms shall be free of airborne contaminants from cutting, grinding, painting, masonry work, etc., prior to the installation of any Security Electronics equipment. HVAC system must be started.
    3. Provide coordination with the supplier of detention hardware and frames, millwork subcontractor, electrical subcontractor and other trades that may be affected by this work.
    4. Conduct periodic coordination meetings between security, electrical, plumbing, masonry and all other contractors to make everyone aware of critical areas of construction. Distribute the meeting minutes and attendance to the Architect/Engineer and Agency within five (5) working days.
    5. Provide and install vehicle pedestal and camera pole bases.
    6. Provide and install Electronic Safety and Security head end equipment rack wire management bases/housekeeping pads.
    7. Provide coordination with the ESSS to complete the inspections, submittal and closeout documentation as described in the general provisions.

B. Electrical Contractor:
    1. Coordinate electrical requirements of all Security Electronics systems with General Contractor, DEC and ESSS.
    2. Provide termination of all 120-volt power connections required by the Security Electronics system.

Lighting and Receptacle control terminations shall be done by the electrical contractor at the terminal strip provided by the ESSS.

3. Provide to all equipment requiring 120-volt power connections, power from emergency panels, generator or UPS.
4. Furnish and install a complete conduit raceway system including back boxes, junction boxes, mortar boxes, and equipment room gutters/cable trays required by the ESSS.
5. Install all specialty back boxes including racks, cabinets, camera housings and speaker back boxes provided by the ESSS. Set all equipment racks in place and provide and install conduits from cable tray to equipment racks.
6. The raceway system provided by Division 26 shall installed to facilitate continuous cable runs, if cable runs cannot be installed without splice the electrical contractor shall modify conduit as needed.
7. Furnish and install a complete Security Electronics cable plant including power, signal and ground wiring, per NEC, as shown in the project documents and as per ESSS specific system requirements.
8. Provide labor for field device installation and terminations as well as assistance with final aiming and focusing of cameras. ESSS will provide direction from control room while EC provides field adjustment to cameras.
9. Provide all necessary ladders, lifts, standard tooling, specialized tooling, and security fasteners to accomplish all field installation.
10. Provide fiber end termination and testing if required.
11. Provide and install fiber optic patch panels If required.
12. Obtain all required permits and licenses and pay all required fees.

C. Electronic Security Systems Subcontractor (ESSS):
1. Furnish to Detention Equipment Contractor a complete fully functional Security Electronics system as defined by the Division 28, related specifications and as shown on the drawings. This shall also include all requirements for proper control of detention hardware as supplied by said contractor.
2. Provide and install individual UPS for control room computers and monitors as well as head end equipment racks, cabinets and enclosures.
3. Provide final terminations of all low voltage wiring for all Electronic Safety and Security systems, including door lock control and monitoring wire at head end equipment racks/cabinets/panels.
4. Provide coordination of the installation and electrical requirements of the Security Electronics systems with the Electrical Contractor.
5. Provide low voltage relay panels for control of lighting and power circuits in detention areas.
6. Prior to fabrication, coordinate exact location and installation of Security Electronics with other trades.
7. Provide complete system test and written operational certification to the Architect/Engineer and Agency prior to substantial completion.
8. Provide Agency training by factory-trained and authorized personnel as specified.
9. Turn over to owners all termination points and interconnection schedules, all programming source codes including Touch Screen software, PLC development software, VMS viewing software, and applicable license required for operations. This is to also include the touch screen and security management systems runtime licenses.
10. Provide authentication of Software to Architect prior to both Owner software presentation and final commissioning of system by Architect. See section 284620 Video Graphic User Interface System for Software Authentication responsibilities.

D. Detention Hardware Contractor (DEC):
1. Subcontract the services of a qualified ESSS.
2. Coordinate with the General Contractor, Electrical Contractor and ESSS.
3. Provide all hardware and frame schedules.
4. Provide wiring diagrams specific to this project.
5. Furnish and install security hardware.
6. Provide all the necessary and proper adjustments for correct hardware operation.

E. Owners/Others:
1. Provide and install inmate telephone system.
2. Provide and install video visitation system.
3. Provide and install video arraignment system.
4. Provide data connections to the Security Management System for remote diagnostics by the ESSS.

1.3 QUALITY ASSURANCE

A. The only change orders that will be considered or accepted are those initiated by the Owners.
B. All items of equipment including wire and cable requirements shall be based on an Accurate Controls design and shall function as a complete system and shall be accompanied by the ESSS's complete service notes

and drawings detailing all interconnections.

C. Supply only non-proprietary equipment. For equipment to be considered non-proprietary it shall be manufactured by a company that has produced a product line of compatible products for at least fifteen years and shall have a minimum of two Indiana distributors with annual sales over one hundred thousand dollars.
D. Provide only non-proprietary software. For software and software vendors to be considered non-proprietary it must have a minimum of five Indiana system manufacturers proficient in the programming, integration and maintenance of the manufactured software. All software logic shall be developed in the InduSoft environment and not developed in third party software or provided in a compiled DLL, EXE, NET files or other encrypted files. Any software approach that is found to be provided with this approach shall be removed. All costs to remove and rewrite the software shall be the ESSS's responsibility. Refer to 1.01 C. for specific details regarding bonding and software confirmation requirements.
E. The ESSS supplying the equipment shall show satisfactory evidence, upon request, that he maintains a fully equipped service organization capable of furnishing adequate inspection and service to the system, including replacement parts. The ESSS shall be prepared to offer a service contract for the maintenance of the system after the guarantee period. The ESSS shall produce evidence that he/she has had a fully experienced and established service organization with at least ten years and proven satisfactory installations during that time.
F. Furnish and install only new equipment and materials required (less than 1 year from manufacturer), unused without blemish or defect.
G. All equipment of the same type shall be the product of one manufacturer.
H. Submit all items necessary to obtain all required permits and licenses to the appropriate Regulatory Agencies.
I. All work shall conform to the National Electrical Code (NEC) and to applicable National Fire Protection Association (NFPA) codes.
J. All work shall conform to all federal, state and local ordinances.
K. Where applicable, all fixtures, equipment, and materials shall be as approved or listed by the following:
    1. Factory Mutual Laboratories (FM)
    2. Underwriters Laboratories (UL)
    3. National Electrical Manufacturers Association (NEMA).
    4. Include all items of labor and material required to comply with such standards and codes. Where quantity, sizes or other requirements indicated on drawings or herein specified are in excess of the standard or code requirements, the specifications or drawings respectively, shall govern.
    5. In addition, all equipment cabinets and racks capable of being labeled shall have an UL508A listing mark. This labeling must be provided by the ESSS at their assembly facility. No third-party listings shall be considered.

1.4 SUBMITTALS

A. A principal of the manufacturing firm shall sign all submittals and shop drawings indicating conformance with plans and specifications before submitting to the engineer.
B. Section 280500 shall be submitted as a complete entity. Partial submittals will not be considered.
C. All submittals shall include adequate descriptive literature, catalog cuts, shop drawings and other data necessary for the architect/engineer to ascertain that the proposed equipment and materials comply with the specification requirements. Catalog cuts shall be legible and shall clearly identify the equipment being submitted.
D. The ESSS shall submit documentation showing the type, size rating, style, catalog number, manufacturer's names, photos, and/or catalog data sheets for all items to ensure compliance with these specifications. Ten copies of this information shall be submitted to the Architect and be subject of approval.
E. Submit the layout and operational description of all the Video Graphic User Interface on CD, which shall indicate all device icons and operations. It is mandatory that the ESSS provide a minimum of three scheduled meetings with the owner’s representatives for video graphic user interface design layout so as to perform all operations and control styles these representatives require as to how they relate to the equipment specified and shown on the plans.
F. Include a software data flow diagram/chart indicating in what programs and where all control logic will reside. Provide a detailed description of software approach and provide a signed statement that all software shall be developed in the Wonderware or InduSoft environment. No software is allowed to be a compiled DLL, EXE, NET file or other encrypted software. ESSS shall provide a sample of their programming passwords and source codes to confirm their non-proprietary approach to the development of the custom software.
G. Scaled location and layout of all field equipment on floor plans.
H. Large-scale floor plans and elevation view drawing to scale of all Security Electronic rooms and control

rooms depicting all racks, consoles, cabinets, equipment, outlets, etc.

I. Block diagrams depicting system integration details specific to this project.
J. Scale elevations of all security equipment racks showing equipment-mounting locations (front and rear if any equipment is rear mounted).
K. Wire management details for the installation of cable harnesses inside racks, equipment cabinets, and consoles, control panels and other areas of exposed cable.
L. Point to point wiring diagrams for all equipment and devices specific to this project.

1.5 PREQUALIFICATION – Refer to Qualification Process Document for if prequalification is not the desired approach. If prequalification is the desired approach include the following highlighted in "red".

A. Subject to compliance with the requirements of these specifications, the following Electronic Security System Subcontractors are pre-qualified to furnish the products required by this section.
   1. Accurate Controls, Inc.; Ripon, WI.
   2. Sothern Steel, San Antonio, TX
   3. CML Security, Broomfield, CO
B. Approval as an alternate integrator is NOT to be deemed as an acceptance of any products typically used by the integrator.
C. All alternate integrators are prohibited from any substitutions or deviations from the specified intent, products, and levels of quality specified herein. Unless, as described below, the integrator has stated compliance/non-compliance on a paragraph-by-paragraph basis to all sections of Division 28 and each deviation has been approved in writing by the Architect as acceptable.
D. Non-pre-qualified ESSS's who intend to submit pricing on the work specified in this section shall provide to the Architect the following information 14 days prior to bid date and may be approved by addendum up to 10 days prior to bid date. No consideration shall be given to bids from companies who are not listed as a pre-qualified ESSS.
E. Any ESSS not pre-qualified, shall request approval and shall submit the following qualification data to the Architect in writing fourteen days prior to bid date and may be approved by Addendum prior to bid date. Verbal approval will not satisfy this requirement. Any ESSS who fails to submit all information exactly as herein requested will not be approved. Ground for disqualification shall exist if in the opinion of architect or engineer the information submitted is inaccurate or does not satisfy the qualification requirements.

1.6 QUALIFICATION PROCESS

The evaluation of the prospective ESSS qualifications will be based on the following proposal.

A. The ESSS must demonstrate that they have a minimum of ten(10) years' experience in the field of integrated security and communication systems serving the corrections industry under the same company name.
B. Provide an audited financial statement for the previous two (2) years.
C. Provide the name, address and telephone number of organization's current Bonding Company and level of bonding capacity.
D. Evidence that the principal members and key personnel (include project manager, on-site supervisor, system engineer and software engineer) to be assigned to this project have a minimum of ten (10) years' experience each in successfully completing detention projects of equal scope, listed manufacturers, quality, type and complexity to that required herein. Include resumes of all personnel. Provide organizational chart of the entire organization.
E. Provide ESSS UL 508A certification. The ESSS must be able to apply the UL 508A listing mark at their facility.
F. Provide certificate of Technology Liability Insurance to include but not limited to third party coverage for technology services and miscellaneous professional liability services, technology products, media content liability services, network security liability services and privacy liability with at least a minimum for each occurrence or claim of $5,000,000.00 with a general aggregate limit of $5,000,000.00
G. Provide evidence that the ESSS has their own custom fabrication shop in-house and shall utilize their own full-time employed engineers to manufacture all custom products.
H. The ESSS shall have a minimum of one (1) full-time employed, Microsoft certified engineer.
I. Provide evidence that the system integrator has had a full time BIM coordinator on staff for a minimum of five years. Reference a minimum of 25 projects.
J. Provide a complete list of all completed projects in the corrections or related industry. The owner reserves the right to contact any past project references of the submitting system subcontractor even if the references are not listed as part of the technical proposal. Include the following:
   a) A description of systems included, along with a description of the level of integration. References must include a minimum of 3 systems that utilized Video Graphic User Interfaces systems.

b) Date completed.

c) Contract value.

d) Owner contact and telephone number.

K. Provide a complete list of current projects. Include the following:
   a) A description of systems included, along with a description of the level of integration. References must include a minimum of 3 systems that utilized Video Graphic User Interfaces systems.

   b) Expected date of completion.

   c) Contract value.

   d) Owner contact and telephone number.

L. Provide a list of all projects where the ESSS provided a PROPRIETARY hardware and/or software approach. Design team defines proprietary software approaches as any software that included Video Graphic User Interface software with IO/DA servers other than Wonderware, InduSoft or branded as the system integrator as well as any files that include a DLL, EXE, NET or other compiled file extension. For equipment to be considered non-proprietary it shall be manufactured by a company that has produced a product line of compatible products for at least fifteen years and shall have a minimum of two distributors (located within the state of the project, but preferred to have distribution in every state in the country) with annual sales over one hundred thousand dollars. If it is found that the system integrator did not disclose projects, they will not be prequalified. Include the following information:

   a) A description of all components and software provided on the project.

   b) Date of completion.

   c) Contract value.

   d) Owner contract and telephone number.

M. List of all projects, within the last 5 years, in which the organization has been involved in litigation, been involved in a bond claim of any type or been a part of stop work order. If it is found that the system integrator did not disclose projects, they will not be prequalified.
N. Disclose any and all previous projects that the integrator did not complete the specified warranty or complete the system installation in its entirety.
O. Technical proposal shall also include and encompass the following:
   a) A technical description of the ESSS's approach to system design and implementation of each of the major systems. Identify all interfaces with other contractor work.

   b) Functional block diagram of the integrated system. For each system define all equipment interfaces.

   c) Specific systems equipment manufacturers, which the ESSS plans on utilizing.

   d) The system subcontractor shall provide a software data flow diagram/chart indicating in what programs and where all control logic will reside. Provide a detailed description of software approach and provide a signed statement that all software shall be developed in the Wonderware or InduSoft environment. Subcontractors who develop logic in compiled DLL, EXE, NET files or other encrypted as well as compiled software shall not be considered. ESSS shall provide a sample of their programming passwords and source codes to confirm their non-proprietary approach to the development of the custom software.

   e) The system manufacturer must certify that they will provide one complete software development package including license (issued to the owner). Include all other independent development licenses such as but not limited to CCTV, audio, card access system I/O servers utilized on the project. In addition, provide 40 hours of software programming instruction to the owners designated representative. Programming instruction shall include a detailed explanation of how to create I/O and memory tags, icon creation, event logging, create and edit scripts, PLC modifications, independent system programming methods (video management system, audio communication system, card access system) for all devices within the project.

   f) ESSS shall provide confirmation that their electronic security system will not include any web server, cloud based services or require any subscription for complete system operations including but not limited to the security management system, touch screen workstations, active

directory services, password assignments, audio communication system, video management system, video management storage servers, access control system or other system as specified and required.

1.7 WARRANTY AND SERVICE

A. Electronics Security System Subcontractor (ESSS) shall warrant the material and workmanship on this project for a period of one(1) year from the Date of Substantial Completion as specified in Division 1 - General Requirements. ESSS agrees to repair or replace any defective materials or work when given written notice during Warranty period. Warranty period shall begin on the Date of Substantial Completion.

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B. Preventative Maintenance: ESSS shall include in his bid, without additional cost to the owner, 4 service and inspection trips during the 12-month warranty period. Equipment shall be inspected for function. Necessary adjustments and programming shall be made as required, and a written account provided to the Owner and Architect. Schedule the first visit 2 months after operational turn- over. The remaining trips will be equally spaced three months apart.

C. ESSS shall provide emergency service during the 12-month warranty period, should a break down occur. Classifications of component failures and the required response time for each classification are as follows:

1. “Critical” - Items which compromise the security of the facility or have an adverse effect on the operations of the facility. Items in this category shall be returned to service within four (4) hours after receipt of a service call. Service shall be available seven (7) days per week and twenty-four (24) hours per day. The ESSS shall call the designated Owner’s Representative within 2 hours of receiving the service call to inform him of the estimated arrival time of the service personnel. The following items are considered “critical”:
   a. Uninterruptible Power Supply – all components.
   b. Door Control and Door Monitoring – building perimeter doors and all other monitored doors.
   c. IP Video Communication System – door control cameras, corridor cameras, all monitors and video switcher.
   d. Programmable Logic Controllers – all components or software.
   e. Control Panels and Consoles – touchscreen control systems.
   f. IP Audio Communications System – all components.
   g. Security Automation System – PLC network, LAN network, touchscreen terminals.
   h. Grounding and Surge Protection – all components.

2. “Sensitive” - Items which adversely impact the operations of the facility but are not considered "critical" as defined above. Items in this category shall be returned to service within eight (8) hours after receipt of a service call. Service shall be available seven (7) days per week and twenty-four (24) hours per day. The Security Electronics Contractor shall call the designated Owner’s Representative within 2 hours of receiving the service call to inform him of the estimated arrival time of the service personnel. The following items are considered “sensitive”:
   a. IP Video Communication System – all other cameras not listed under “critical” above and VCR or digital recorder.
   b. IP Audio Communication System – single intercom station.
   c. Security Automation System – file server and printer.

3. “Normal” - Items which require maintenance support but are not "critical" or "sensitive" as defined above. These are typically items that facility personnel identify and accept that maintenance will be performed by the SEC during the next quarterly maintenance visit. The following items are considered “normal”:
   a. Control Panels and Consoles – all other components not listed in “critical” or “sensitive” above.
   b. IP Audio Communication System – single paging station.

D. Refer to Division 01 Alternates, for security electronics equipment service agreement alternates that are

requested for Division 28 Work.

PART 2: PRODUCTS

2.1 GENERAL REQUIREMENTS

A. Reference individual specification sections included as part of the complete system for product specifications.

PART 3: EXECUTION

3.1 DELIVERY STORAGE AND HANDLING

A. Transport, handle, store, and protect materials under provisions of the General Conditions.
B. Transport materials in manufacturer's unopened original dry containers to avoid damage during shipment, with all tags and labels intact and legible, for timely installation. All enclosures, equipment racks and cabinet back planes shall be shipped to site in packaging built by the ESSS specific to the enclosure, equipment racks and cabinets supplied to avoid damage during shipment.

3.2 SERVICE GUARANTEES

A. Guarantee:
   1. All work and materials shall be guaranteed to be free of defects for a period of one year from the date of occupancy of the facility.
   2. Due to the sensitive nature of this type of facility, the contractor agrees that warranty services shall be completed promptly, and that where necessary, premium overnight freight will be used to obtain replacement parts.
   3. During the guarantee period there shall be no charges to the owner for service calls for guarantee work.

B. Service:
   1. The ESSS shall provide service to the system throughout the guarantee period in a timely manner and shall provide, upon request, a quotation for an additional year of service.
   2. Service response requirements shall include the following:
      a. Twenty-four (24) hour phone number.
      b. Ability to restore functionality within eight (8) hours after notification on a twenty-four (24) hour basis.
      c. Factory technicians trained by the manufacturers of the system components, with two years' experience servicing systems of the type included in this project.
      d. The ability to troubleshoot the system remotely from the ESSS office.

C. Software maintenance:
   1. During the initial one-year warranty/guarantee period the contractor shall provide the owner with one update/revision of schedule definitions.
      a. Revise schedule of openings assigned to groups.
      b. Review functions allowed at openings if no hardware or wiring changes is required.
      c. Camera to monitor and group and sequence assignments.

D. Demonstration:
   1. Prior to owner acceptance the ESSS shall demonstrate the functionality of the entire system to the architect, engineer, and owner's representative.
   2. Provide the architect with a detailed test report showing results of performance tests done on every device that makes up the security and function in the system.
   3. Perform such tests as the architect and engineer may require satisfying them as to the accuracy of the submitted test report. More than two discrepancies between the observed performance and the reported performance shall be grounds for rejection of the entire test report and requiring the contractor to repeat this entire final test procedure. If a second test and demonstration is required, architects and engineers' expenses shall be the responsibility of the ESSS.
   4. Conduct a complete visual inspection of all appearance items and of workmanship in the presence of the Architect, engineer and owner's representative.

E. Training:
   1. Provide complete operator training for the owner's personnel.
      a. Provide five (8) eight-hour sessions on consecutive days at times set by the owner. These should be scheduled as part of the owner's pre-occupancy transition training.
      b. Provide a complete training agenda that coincides with the owners training plan.
   2. Provide an interactive training DVD's that has been developed by the ESSS for all VGUI operations and system troubleshooting. Provide VGUI operations and system troubleshooting training on separated DVD's. Provide two copies of each.
      a. This training DVD shall also include troubleshooting and maintenance of all systems. This DVD shall be carefully organized and segmented so that training may be given on the complete system or on specific functions as may be appropriate.
      b. The DVD shall contain computer generated screen animation with narration describing icon selection, graphic animation and operation.
      c. The maintenance portion of this DVD shall contain still images with graphics and narration describing all equipment states and troubleshooting methods including LED indication and text read out.
      d. No video tape of VGUI operations which is recorded to a DVD shall be considered acceptable.

F. Test Plan and Documentation:
   1. Submit a complete testing plan for all systems for approval.
   2. Plan submitted must include testing of every field device and control function.
   3. Plan submitted must include examples of testing documentation that will be submitted when requesting final Demonstration/Inspection.

G. Shake Down Period:
   1. The ESSS shall provide 5 days of system shakedown, which shall include providing a fully trained employee of the ESSS who shall provide additional training, system repairs and alterations prior to, during and after the transfer of inmates into the facility. The system shall be fully operational and certified prior to the shakedown period beginning.
   2. This person shall be onsite during the 1st shift and be available or on-call during 2nd and 3rd shift.

H. Owner and Operator Manual:
   1. Furnish three copies of an operations and maintenance manual consisting of a three-ring binder with equipment specifications, programming instructions, maintenance instructions and full scale as built drawings.
   2. Provide names and telephone numbers of contacts by system for manufacturer's warranty and maintenance departments.
   3. Deliver to the owner with training DVD's during the training process.

END OF SECTION

SECTION 280510
CABINETS AND ENCLOSURES FOR ELECTRONIC SECURITY
REVISED ADDENDUM 2,3/202024

PART 1: GENERAL

1.1 System Description

A. Furnish and install all equipment, materials and labor necessary to complete the installation of specific systems described herein and integration of all systems as indicated, specified herein or both. The work includes the following, as well as work not listed below but described elsewhere:
B. Cabinets / Racks / Panels
C. Non-standard manufacturer furnished enclosures and back boxes.

1.2 PRODUCTS

A. General
   1. Equipment specified is intended as a reference standard for level of quality.
   2. Substitutions of equal quality will be accepted. All substitutions are to be approved prior to bid and listed by addenda. Substitutions will not be accepted after the schedule bid time. Refer to Division 00 and Division 01.
   3. Provide materials listed by UL or ETL.

B. Free Standing Electronic Equipment Racks
   1. Provide freestanding equipment cabinets to house 19” rack mountable equipment in the equipment room. Each cabinet shall have a rectangular frame with removable top panel, side panels and doors. Installed cabinets shall include thermal, power, and cable management accessories that control airflow through the cabinet and keep signal and power cables separate and organized.
   2. The cabinet frame shall be rectangular with four corner posts, manufactured from steel with welded frame construction. The sides of the frame shall be punched at the top and bottom with a hole pattern to allow attachment of equipment mounting rails and thermal, cable and power management accessories. The cabinet frame shall support 2000 lbs of equipment.
   3. The cabinet shall be a minimum of 27.6” wide by 36.3” deep by 88.8” high when doors, top panel and side panels are installed. Leveler feet will add approximately 1” to the height of the frame/cabinet.
   4. Each cabinet shall include two pairs of equipment mounting rails. Mounting rails shall bolt to the side of the cabinet frame at the top and bottom of the frame and shall be adjustable in depth to provide front and rear support for equipment. Equipment Mounting Rails shall be spaced horizontally to support 19” wide EIA-310-D compliant rack-mount equipment and shall provide up to 30.3” of rail-to-rail depth for equipment. Mounting rails shall be square-punched according to the EIA-310-D Universal hole pattern with equipment mounting holes on alternating 5/8” – 5/8” – 1/2“ vertical hole centers. Square-punched holes shall accept cage nut hardware with various threads. Rack mount spaces or units (RMU) shall be 1-3/4” high and shall be marked and numbered on the mounting rails. Numbering shall start at the bottom of the rail. Mounting rails shall provide 48 RMU for equipment.
   5. The cabinet shall include a solid top panel with one 3” x 11.5” cable access port located near the center of the frame. The cable access port shall be plastic with a brush seal to allow easy addition and removal of cables while limiting bypass airflow.
   6. The cabinet shall include two locking solid side panels with spring loaded latches for easy installation and removal. The cabinet shall be designed to allow baying with or without side panels installed.
   7. The cabinet shall include a single front door with a perforated metal panel, hidden tamper-resistant hinges with quick-release hinge pins and a swing handle. The door shall be removable and reversible to open from the right or left. The door shall open to 150° when the cabinet is bayed with other cabinets. The front door shall have a single-point slam latch with a keyed lock.
   8. The cabinet shall include a single rear door with a perforated metal panel, hidden tamper-resistant hinges with quick-release hinge pins and a swing handle. The door shall be removable and reversible to open from the right or left. The door shall open to 150° when the

cabinet is bayed with other cabinets. The front door shall have a single-point slam latch with a keyed lock.

9. The cabinet frame, top panel and side panel shall be manufactured from steel. The door frames shall be manufactured from steel and aluminum. Door panels shall be steel. The door handle, side panel latches, rear door hinges and top panel cable access ports shall be plastic. The cabinet frame and front and rear door shall be welded and bolted. Cabinet components shall assemble with hardware.
10. The mounting rails, top panel, side panels and doors shall be electrically bonded to the cabinet frame.
11. The cabinet shall be UL Listed as an Information Technology and Communications Equipment Cabinet, Enclosure and Rack System to standard UL 60950 under category NWIN. UL Listing will be stated in the manufacturer's product literature.
12. The metal components of the cabinet frame, top panel, side panels, and doors shall be painted black with epoxy-polyester hybrid powder coat paint. The mounting rails shall be zinc-plated and silver-colored. Plastic components shall be black.
13. The cabinet shall include (4) leveling feet, (4) clamps for securing the leveling feet to the floor, cage nuts of size and type required to mount all equipment and a means for bonding the cabinet to the Telecommunications Grounding Busbar.
14. Acceptable Manufacturers
    a) Lowell
    b) Chatsworth Products, Inc.
    c) Emcor

C. Miscellaneous Rack Panels and Vents
1. Blank Panels
    a) Specifications
    b) 16-gauge steel.
    c) Flanged top and bottom.
    d) Durable textured black powder coat finish.
    e) Available in 1-6 space sizes.
2. Vent Panels
    a) 1/16" diameter hole with 1/8" staggered centers. 23% open area
    b) 16 gauge perforated steel.
    c) Flanged top and bottom.
    d) Durable black powder coat finish.
    e) Available in 1-4 space sizes.

D. Free Standing Equipment Rack Cooling Fan
1. Specifications
    a) 115V 10" fan
    b) Ball bearing design
    c) Fan guard
    d) Proportional speed control
    e) Free air CFM, 500
    f) Thermostatic fan control
    g) Acceptable Manufacturer: Lowell

E. Power Distribution Unit
1. Specifications
    a) 120 VAC output nominal
    b) Max total current draw 16 Amps
    c) NEMA L5-20P single phase locking plug
    d) NEMA 5-20R receptacles (quantity of 24)
    e) One, 3-meter line cord
    f) Vertical rack design
    g) Acceptable Manufacturer: Lowell

F. NEMA Rated Wall Mounted Security Equipment Enclosures
   1. Specifications

      a) All equipment enclosures installed indoors shall be NEMA 12 enclosures.
      b) All equipment enclosures installed outside or exposed to weather shall be NEMA 4 X enclosures.
      c) Provide double door, continuous hinge enclosures.
      d) Enclosures shall be constructed of 14 gauge rolled steel, minimum.
      e) Enclosure doors shall be furnished with key lock-able doors with all Enclosures under Division 28 keyed alike.
      f) All enclosures shall be furnished with removable steel back panels for mounting equipment.
      g) 60” x 48” and larger enclosures will be equipped with floor standing “feet”
      h) Enclosures shall be grounded as specified in Section 28 05 26.
      i) All enclosures shall be furnished with black-on-white laminated plastic nameplates identifying each cabinet.
      j) Enclosures finish shall be ANSI 61 gray inside and out.
      k) Enclosures shall be sized in strict accordance with the NEC. Minimum size is as indicated on the drawings.
      l) Enclosure back panels shall be furnished with a grounding lug to be used to connect the cabinet to the signal grounding system specified in section 28 05 26.
      m) Enclosures shall be furnished with cross-ventilated, forced-air cooling to maintain the optimum temperature performance range of the equipment.
      n) Acceptable Manufacturers:
         1. Hoffman.
         2. Hammond Manufacturing
         3. Saginaw Control and Engineering

1.3 INSTALLATION

A. General
   1. Equipment specified is intended as a reference standard for level of quality.
   2. The System shall be installed by qualified personnel in strict compliance with manufacturer’s instructions.
   3. All equipment cabinets are to be assembled and tested in the Security Electronics Contractor’s facility prior to on-site installation. With the exception of field wiring, all interconnecting cables should be terminated and installed. All power distribution shall be completed.
   4. Wiring shall be color coded, uniform and in accordance with national electric codes and manufacturer's instructions.
   5. Equipment shall be firmly secured, plumb and level.
   6. Cabinets shall be installed with the minimum NEC clearance of three feet in the front and three feet in the rear of the cabinet.
   7. All cable shall be tagged and identified.
   8. Provide Panduit IN-Cabinet cable management system. segregate cabling into groups based on signal type and voltage.
   9. All power cables lengths are to be kept to a minimum and plugged into the nearest power outlet. Additional cable length shall be bundled and tied together using nylon cable ties.
   10. Maintain separation between 120VAC power cables and all signal level cables. When necessary, cross 120vac power cables perpendicular to all other cable types.
   11. Coordinate all work with General Contractor and other trades contractors.
   12. Grounding of audio cables and peripheral equipment shall be installed per manufacturer's direction to eliminate noise induction and achieve optimum system performance.
   13. All entrance and exit conduit shall utilize grounding bushings to terminate the conduit to the equipment enclosure. Route a green insulated ground conductor to the TMGB/TGB. See drawings for conductor sizing based on length.
   14. Blank panels and vent panels shall be used to fill all unused rack space.
   15. Every equipment rack shall be equipped with a ventilation fan and adequate venting. The fan shall be installed to bring air in from the bottom of the rack, drawing the cool air up and exiting out the top. Provide security covers for all rack mounted electronic components that do not require user interface.
   16. The Trade Contractor is responsible for 120VAC power distribution within the equipment racks.

17. Upon completion of the work, remove excess debris, materials, equipment, apparatus, tools etc. and leave the premises clean, neat and orderly.
18. Substitutions of equal quality will be accepted. All substitutions are to be approved prior to bid and listed by addenda. Substitutions will not be accepted after the schedule bid time. Refer to Division 00 and Division 01.
19. Provide materials listed by UL or ETL.

1.4 WARRANTY AND SERVICE

A. Electronics Security System Subcontractor (ESSS) shall warrant the material and workmanship on this project for a period of one (1) year from the Date of Substantial Completion as specified in Division 1 - General Requirements. ESSS agrees to repair or replace any defective materials or work when given written notice during Warranty period. Warranty period shall begin on the Date of Substantial Completion.

B. Preventative Maintenance: ESSS shall include in his bid, without additional cost to the owner, 4 service and inspection trips during the 12-month warranty period. Equipment shall be inspected for function. Necessary adjustments and programming shall be made as required, and a written account provided to the Owner and Architect. Schedule the first visit 2 months after operational turnover. The remaining trips will be equally spaced three months apart.

C. ESSS shall provide emergency service during the 12-month warranty period, should a break down occur. Classifications of component failures and the required response time for each classification are as follows:

1.5 DELIVERY STORAGE AND HANDLING

A. ESSS shall transport, handle, store, and protect materials under provisions of the General Conditions.
B. Transport materials in manufacturer's unopened original dry containers to avoid damage during shipment, with all tags and labels intact and legible, for timely installation. All enclosures, equipment racks and cabinet back planes shall be shipped to site in packaging built by the ESSS specific to the enclosure, equipment racks and cabinets supplied to avoid damage during shipment. Electrical Contractor shall receive on site and store equipment racks and wall cabinets prior to installation in equipment rooms and connection to conduit system.

END OF SECTION

SECTION 281300
ACCESS CONTROL SYSTEM
REVISED ADDENDUM 2,3/202024

PART 1 GENERAL:

1.1 System Description:

A. Furnish and install as shown on the Drawings and herein specified a complete and operable Access Control System. The Access Control System shall be installed in accordance with all applicable NEC, and local building codes. All equipment shall be UL labeled. All equipment shall be compatible with existing County access control equipment.
B. The system shall consist of one or more intelligent door control panels networked together for complete system operation from one location. All wiring shall be supervised.
C. The Access Control System shall be a separate system from all other systems. The Access Control System shall interface to the Security Automation System to provide for access control, door control and door monitoring by both the Access Control System and the PLC Electronic Control System/Video Graphic User Interfaces. The interfacing shall include the capability of access control door override functions.
D. The Access Control System shall interface to the Fire Alarm System as required to meet all required Fire and Life Safety Codes.
E. Device locations shall be as shown on the drawings.

PART 2 PRODUCTS:

2.1 Products:

A. Provide an Access Control System as manufactured by one of the following:
   1. Identicard
   2. Galaxy Control Systems
   3. Avigilon

B. All components used in creating the access control system shall be of the same manufacturer and/or approved by the manufacturer for system compatibility. Equipment and specified herein is for the purpose of establishing the types of equipment and the minimum quality of equipment required. It shall be the Electronic Security System Subcontractors responsibility to assure the compatibility of all access control equipment, software, programming, cable, mounting methods, etc. that are used in providing a complete system.

2.2 Material & Equipment:

A. Central Equipment: Provide a Central File Server with Card Enrollment equipment as shown on the plans. This file server shall be as specified as part of Section 28 46 20 Video Graphic User Interface System. All central equipment power shall be provided from emergency circuits. Additional UPS or Battery Backup power shall be provided for all central equipment to provide error free operation. Central equipment shall include but not be limited to the following:
B. Intelligent Controller: Supports up minimum of 8 readers. Firmware for 10,000 cardholder records and 1,000 transactions. Shall support both proximity readers and keypads simultaneously for each door. Systems shall be capable of optionally supporting LAN or WAN communications using TCP/IP.
C. Central File Server shall be part of the Security Management System.
D. Access Control Software shall operate on Windows 10. Software shall include Administration, Event Monitoring, Status Windows, and multiple application windows open simultaneously; Software shall also include the following.
E. Badge Printer: Provide a one-sided badge printer and corresponding software to allow the owner to develop custom graphics. As part of the software provide high resolution color camera and tripod. Provide a high-speed printer producing 144 cards/hour for color, one sided and 600 cards/hour for resin black. The unit shall be 16 Mbit image memory standard and operate on Windows 10 drivers. Printer shall be a Fargo DTC12050e single sided printer or approved equal.
F.P rovide Logitech HD Pro Webcam 920 with 10' USB extension cable, tripod and blue felt backdrop.
G.F ield Equipment: Provide at each controlled door a proximity reader, request to exit push button and/or motion detector as shown on the plans. Coordinate with door frame manufacturer.
H. Field Equipment at each door shall include, but not be limited to the following.

I. Wall Mounted Proximity Readers shall be a HID® Multi-class SE RP40 wall mount multi-technology prox and iClass reader. The multiCLASS S R40 shall be part of HID Global's iCLASS SE platform for adaptable, interoperable access control. Designed for multi-factor authentication door applications requiring standard wall switch mounting, multiCLASS SE RP40 supports a broad array of 13.56 MHz high frequency and 125 kHZ low frequency credential technologies and a variety of form factors, including cards, fobs and mobile devices.

J. Wall Mounted Proximity Readers with keypad shall be a HID® iCLASS SE RPK40. The multiCLASS S R40 shall be part of HID Global's iCLASS SE platform for adaptable, interoperable access control. Designed for multi-factor authentication door applications requiring standard wall switch mounting, multiCLASS SE R40 supports a broad array of 13.56 MHz high frequency and 125 kHZ low frequency credential technologies and a variety of form factors, including cards, fobs and mobile devices

K. Door hardware shall be connected to the PLC/door relay system as specified in Section 28 46 19 to provide electric operated door release, monitoring and override via the Video Graphic User Interfaces as required by Section 28 46 20. Door hardware to be supplied by the door hardware supplier and wired by the ESSS.

L. Proximity Cards shall be supplied with the access control system. Cards shall have information printed. The ESSS shall obtain from the owner the card information required. All cards shall be made available to the owner for assignment and distribution two weeks prior to substantial project completion. The following cards shall be provided:
   1. 200 – Proximity cards

M. Interface equipment and wiring shall be provided to connect the Access Control System to other systems as required.

N. Door position and lock status switches shall be provided to supply an alarm signal to the security control system. The intent is for the door position and lock status switches to provide an alarm signal to the security control system at all VGUI and SMS stations unless a valid card read or request to exit signal precedes the activation of the switch in which case the alarm point will be shunted for approximately 15 seconds. This shunt time shall be programmed via the PLC and VGUI Systems.

O. The system shall provide for the capability of intercom requested door release functions initiated by the VGUI.

P. Wire shall be provided as recommended by the manufacturer of the Access Control System.

2.3 Spare Equipment:

A. Provide the following spare equipment:
   1. (1) Spare card reader for each type used
   2. (2) Printer cartridges

END OF SECTION

SECTION 282300
IP VIDEO COMMUNICATION SYSTEM
REVISED ADDENDUM 2,3/202024

PART 1: GENERAL

1.1 SECTION INCLUDES

A. Cameras
B. Lenses
C. Monitors
D. Mounting Hardware
E. Housings
F.S witchers
G. Signal Generating
H. Processing Equipment
I. Digital Video Recorders
J. Amplifiers
K. Accessories.

1.2 RELATED SECTIONS

A. Section 28 4000 - Electronic Security Systems General Requirements.

1.3 QUALITY ASSURANCE

A. NEC Compliance. Comply with applicable requirements pertaining to TV equipment and signal distributionsystems.
B. UL Compliance. Comply with applicable requirements of UL safety standards pertaining to television equipment and accessories. Provide TV equipment and accessories, which are UL-listed and labeled.
C. EIA Compliance. Comply with applicable requirements of Electronic Industries Associations standardspertaining to television cameras and monitors.

1.4 SYSTEM DESCRIPTION

A. Visual surveillance of the facility via cameras as indicated on the camera schedule.
B. Video monitoring of all cameras on VMS workstations and displays at locations identified in RFP.
C. Review capabilities for the recorded images via the Video Management System.
D. Stored image transfer capabilities to allow archival functions and stored image transfer via removablemedia such as CD/DVD.
E. Cameras shall utilize Category 6 cable to transport video signal to the system.
F. Video surveillance system shall integrate with PLC/GUI Control system allowing for automatic camera callup upon manual input via touch screen icons, alarm, or event activation. Alarms such as panic device activation or events such as intercom call acknowledge. When an alarm is activated, the nearest camera shall be displayed on the control station VMS displays automatically.
G. All IP cameras, recording devices, viewing stations, and controllers shall reside on a private dedicated Video Surveillance Ethernet Network included by the ESSS as part of the system.
H. Provide all software and licensing as required.
I. Camera system to provide masking capability. Typical masking to include toilet/shower areas in detention areas, as well as other areas requested by Owner during final system testing.
J. This facility will have fiber connections to the existing courthouse building, new annex building that has the treasurer, and the existing jail. These connections shall facilitate video monitoring of this facility. Provide necessary equipment stations to connect the facilities. All fiber and fiber connections to be installed by others.
K. Recording parameters and storage capacity
    1. Servers and Mass storage devices are specified below. Provide a quantity of servers and

storagedevices necessary to accommodate the number of cameras indicated on the floor plans based onthe camera specifications, and the following recording parameters:

a. System shall support motion-based recording.
b. All cameras shall be constantly recorded at 7 IPS at VGA resolution.
c. Upon detecting motion, cameras shall record at 15 IPS per camera, at highest resolution.
d. System shall support adjustable pre-motion and post-motion recording from 3 seconds to 90 seconds.
e. Calculate motion based on 50% motion factor.
f. Minimum stored image retention is 180 days.

2. If the installed system fails to provide the minimum 180 days of storage image retention for each camera; the integrator shall increase the storage array capacity until the 180-day requirement is met at no additional cost to the owner.

PART 2: PRODUCTS

2.1 VIDEO MANAGEMENT SYSTEM

A. Acceptable Manufacturer

1. Acceptable Manufacturer:
   a. Hanwha Techwin WiseNet WAVE v5.1. Provide software licenses as required.
2. Video products listed in this specification section are based on Hanwha Techwin product numbers, performance, and technical characteristics. Other manufacturers listed within this specification section must have the same or better technical characteristics and performance to be accepted.
3. Bosch
4. Avigilon

B. Specifications

1. System Requirements:
   a. VMS Software is to include, at no additional cost, any API or SDKs necessary to integrate third party devices and systems.
   b. Software shall only require a one-time license fee per camera. There shall be no license or other associated software fees for Servers and Client Workstations.
   c. Software Maintenance Agreements shall not be required by the manufacturer but rather offered.
   d. Media Server Application: Responsible for discovering, connecting to, and managing system users, devices, and associated data.
   e. Desktop Application: Capable of acting as a stand-alone media player or as a client application for connecting to and managing systems.
   f. Mobile Application: For iOS and Android devices that allows users to connect to, view, search, and control IP cameras over Wifi or Data networks.
   g. There shall be no cost associated with the use of the Mobile Application.
   h. Built-In Developer and Integration Tools: Accessible from System Server's Web Admin Interface (compatible with all major browsers).
   i. Generic Events Generator: Tool which builds HTTP Generic Event calls; a method of sending events from third party systems to the VMS, which can be used to trigger system actions in the VMS.
   j. System-wide user management, alarm handling, health monitoring, and configuration.
2. Use secure technologies for inter-application communication and security.
   a. OpenSSL for Network Connections: Deprecated and insecure protocols and use only TLS v1plus.
   b. Email Server: Client (Mobile, Desktop, Web) Communications - HTTPS Email - TLS / SSL - TLS; default option.
   c. Salted/Hashed Passwords: Local credentials protected using a salted MD5 hash, cloud credentials should use a complex multi-level hash.
3. User Login Credential Management: LDAP / Active Directory / Open LDAP integration.

4. Record and Stream
    a. Video: H.264, H.265, and MJPEG.
    b. Audio: AAC, PCM (Mu-Law, A-law), g726, and MP3.
    c. Transcode Streams on Demand: For delivery to 3rd party system devices.
    d. Codecs: H.265, H.264, MJPEG or WebM.
5. Pass-through high-res or low-res HLS streams from connected devices.
6. Re-Index Archive Feature: Allow system administrators to recover archives from any storage medium.
7. Require no dedicated GPU to perform at maximum capacity.

C. VMS Desktop Application:
1. Runs on the Following Operating Systems:
    a. Windows 7 or later.
    b. Windows 10 Enterprise Solutions.
    c. Ubuntu Linux:
    d. Apple / Mac.
2. Will not require any dedicated graphics drive to work at full capacity; 64 streams on a 64-bit OS, 24 streams on a 32 bit OS, and use the CPU for all video decoding and rendering.
3. View and interact with the following types of media:
    a. Live Streams: H.265, H.264, MJPEG.
    b. Offline Media: AVI, MKV, MP4, MOV, TS, M2TS, MPEG, MPG, FLV, WMV, 3GP, JPG, PNG, GIF, BMP, and TIFF.
    c. Execute a Smart Motion Search: By selecting a subset of a live camera stream with results shown in red on the flexible timeline. Smart Motion search should be able to search a year (12 months, 365 days) of archived video in less than one second.
    d. Utilize adaptive scaling technology to automatically switch between high and low resolution streams during live and recording playback to optimize CPU and network usage.
    e. Management and configuration of all system devices, users, and resources in a single unified interface.
    f. Show or hide adaptive thumbnails in the timeline panel.
    g. Batch configuration of camera recording schedules, fps, and quality.
    h. Audit trail of operator actions and replay related video.
    i. Support single video export in .avi, .mp4, or .mkv formats and will offer the option to transcode any client-side effects (image enhancement, de-warping, time stamps) as part of the exported video.
    j. Support multi-video export in an executable format to create a fully portable version of the VMS Desktop application including all exported video files.

D. VMS Mobile Application
1. Runs on the Following Operating Systems:
    a. Google Android.
    b. Apple iOS.

2.2 VIDEO MANAGEMENT SERVER

A. Acceptable Manufactures
1. Wisenet Wave WRR-P-S202S1
2. Bosch
3. Avigilon

B. Specifications
1. Record Video and Audio: 470 Mbps
2. Support WiseStream, Wisestream II and Dynamic GOV, a smart codec used by WiseNet IP cameras.
3. Support server backup if multiple servers are in the hive for failover for redundancy.
4. RAID Support: RAID 0/1/5/6/10
5. Windows Server 2016
6. Processor: 1x Intel® Xeon® Processor

7. Memory: 16 GB, 2x 8GB DDR4
8. Video: NVIDIA Quadro P400
9. Data Drive Bays: 12x 3.5" Front Hot Swappable Bays
10. OS Drive Bays: 2x 240GB Dual RAID 1 SSD
11. Network Interface: 4x RJ45 Gigabit Ethernet
12. Dual 750W Power Supplies
13. Provide 5-Year, On-site, Next Business Day, Keep Your Hard Drive Warranty

2.3 SECURITY NETWORK SWITCH

A. Acceptable Manufacturers
1. Cisco
2. HP

B. Specifications
1. (24) Ethernet 10/100/1000 ports, (4) shared SFB/GBIC 1000ports
2. Switching fabric: 68 Gbps
3. Forwarding rate: 50 mpps
4. Memory: 64 MB DRAM & 32 MB flash
5. MAC addresses: Up to 10,000
6. IGMP groups/Multicast routes: Up to 255
7. Configurable MTU: 10000 Bytes with jumbo frames
8. 1000BaseT ports: RJ-45 connectors
9. Stacking: Minimum 16 switches
10. Stacking Backplane: 10gbps
11. Input power: 100 - 240 VAC auto-ranging
12. Indicators:
    a. Port link integrity
    b. Port disabled
    c. Port speed
    d. Port full duplex
    e. System status
    f. System RPS
    g. System link status
    h. System link duplex
    i. System link speed
13. Operating Temp: 0 to 50 degrees C
14. Operating relative humidity: 10 - 85% non-condensing
15. Power consumption: 40 Watts max (120VAC)
16. Certifications: UL listed, FCC part 15 Class A
17. POE: IEEE 802.3af on all ports simultaneously

2.4 CAMERAS

A. Manufacturers:
1. Hanwha Techwin America
2. Bosch
3. Avigilon

B. IP Fixed 1080P Video Surveillance Cameras (Type A):
1. The Vandal resistant 1080P HD camera shall have a microSD card slot that uses standard; off-the-shelf microSD (SDHC and SDXC) cards for local storage (up to 128 GB) and be enclosed in a cast-aluminum housing with an aluminum trim ring and a clear polycarbonate dome bubble (with UV blocking anti-scratch coating) and a hardened inner liner and be capable of operating in an indoor or an outdoor environment.
2. Power
    a. a. Input Voltage: 12VDC: Maximum 6.5W, typical 5.1W
    b. b. PoE: Maximum 7.7W, typical 6W
3. Video

a. Video Compression: H.265, H.264, MJPEG, Multiple streaming
b. Resolution: 1080P (1920x1080)
c. Frame Rate: H.265/H.264: Maximum 30fps
d. Dynamic Range: Wide Dynamic Range, 120dB
e. Digital Noise Reduction: SSNR

4. Minimum Illumination:
   a. 0.095Lux (F1.6, 1/30sec) Color
   b. 0Lux (IR LED on) Monochrome
5. Imager: 1/2.8" 2MP CMOS HD Day/Night
6. Optical
   a. Varifocal: Remote zoom and autofocus
   b. Iris Control: Automatic
   c. Viewing Angle (3.2-10mm):
      i H: 109.0°(Wide)~33.2°(Tele)
      ii V: 57.4°(Wide)~18.7°(Tele)
      iii D: 132.0°(Wide)~38.0°(Tele)
7. Software Control
   a. Unit Configuration: Via web browser or configuration manager
   b. Firmware: Remote update
8. Application Programming Interface: ONVIF Profile S/G/T SUNAPI (HTTP API) Wisenet open platform
9. Network
   a. Protocols: TelnetIPv4, IPv6, TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTCP, RTSP, NTP, HTTP, HTTPS, SSL/TLS, DHCP, FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, QoS, UPnP, Bonjour, LLDP
   b. Security: HTTPS (SSL) login authentication, Digest login authentication, IP address filtering, User access log, 802.1X authentication (EAP-TLS, EAP-LEAP)
   c. Ethernet: STP, 10/100 Base-T, autosensing, half/full duplex, RJ45
   d. PoE: IEEE 802.3 af compliant
10. Mechanical
    a. Dome: Polycarbonate, clear, UV-blocking anti-scratch, IK10 Impact Resistance
    b. Camera Body: Aluminum
    c. Pan / Tilt / Rotate Range: 0˚~350˚ / 0˚~67˚ / 0˚~355˚
    d. Mounting: Single Gang, Double Gang, 4” Octagon. Surface, wall, pendant, pole, corner. Provide mounting accessories as required per mounting details.
11. Acceptable Manufacturers
    a. Hanwha Techwin QNV-6082R1. Provide required mounting supports and hardware. Provide quantity shown on plans for exterior cameras. Provide software license as required.
    b. Bosch
    c. Avigilon

C. IP Fixed 5 MP Video Surveillance Cameras (Type G):
1. The Vandal resistant 5 MP HD camera shall have a microSD card slot that uses standard; off-the-shelf microSD (SDHC and SDXC) cards for local storage (up to 128 GB) and be enclosed in a cast-aluminum housing with an aluminum trim ring and a clear polycarbonate dome bubble (with UV blocking anti-scratch coating) and a hardened inner liner and be capable of operating in an indoor or an outdoor environment.
2. Power
   a. a. Input Voltage: 12VDC: Maximum 6.5W, typical 5.1W
   b. b. PoE: Maximum 7.7W, typical 6W
3. Video
   a. Video Compression: H.265, H.264, MJPEG, Multiple streaming
   b. Resolution: 1080P (1920x1080)
   c. Frame Rate: H.265/H.264: Maximum 30fps
   d. Dynamic Range: Wide Dynamic Range, 120dB

e. Digital Noise Reduction: SSNR

4. Minimum Illumination:
   a. 0.15Lux (F1.6, 1/30sec) Color
   b. 0Lux (IR LED on) Monochrome
5. Imager: 1/2.8" 5MP CMOS HD Day/Night
6. Optical
   a. Varifocal: Remote zoom and autofocus
   b. Iris Control: Automatic
   c. Viewing Angle (3.2-10mm):
      i H: 100.3°(Wide)~31.2°(Tele)
      ii V: 72.3°(Wide)~23.5°(Tele)
      iii D: 133.1°(Wide)~38.8°(Tele)
7. Software Control
   a. Unit Configuration: Via web browser or configuration manager
   b. Firmware: Remote update
8. Application Programming Interface: ONVIF Profile S/G/T SUNAPI (HTTP API) Wisenet open platform
9. Network
   a. Protocols: TelnetIPv4, IPv6, TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTCP, RTSP, NTP, HTTP, HTTPS, SSL/TLS, DHCP, FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, QoS, UPnP, Bonjour, LLDP
   b. Security: HTTPS (SSL) login authentication, Digest login authentication, IP address filtering, User access log, 802.1X authentication (EAP-TLS, EAP-LEAP)
   c. Ethernet: STP, 10/100 Base-T, autosensing, half/full duplex, RJ45
   d. PoE: IEEE 802.3 af compliant
10. Mechanical
    a. Dome: Polycarbonate, clear, UV-blocking anti-scratch, IK10 Impact Resistance
    b. Camera Body: Aluminum
    c. Pan / Tilt / Rotate Range: 0˚~350˚ / 0˚~67˚ / 0˚~355˚
    d. Mounting: Single Gang, Double Gang, 4” Octagon. Surface, wall, pendant, pole, corner. Provide mounting accessories as required per mounting details.
11. Acceptable Manufacturers
    a. Hanwha Techwin QNV-8080R. Provide required mounting supports and hardware. Provide quantity shown on plans for exterior cameras. Provide software license as required.
    b. Bosch
    c. Avigilon

D. IP 20 MP Multi-Sensor Video Surveillance Cameras (Type D):
1. The Vandal resistant 20 MP Multi-Sensor camera shall have a microSD card slot that uses standard; off-the-shelf microSD (SDHC and SDXC) cards for local storage (4 slots, maximum 256 GB per channel) and be enclosed in a cast-aluminum housing with an aluminum trim ring and a clear polycarbonate dome bubble (with UV blocking anti-scratch coating) and a hardened inner liner and be capable of operating in an indoor or an outdoor environment.
2. The camera shall provide 360-degree field of view and produce video in quad view mode. It shall also provide exchangeable lens modules along with automated video analytics to allow users to efficiently monitor large visual fields with capability to focus on certain areas when suspicious activity is observed.
   a. Lenses shall be exchangeable fixed focal length and available in the following focal lengths:
      i 5 MP 3.7 mm
      ii 5 MP 4.6 mm
      iii 5 MP 7.0 mm
3. Power:
   a. Input Voltage / Current: HPoE (IEEE802.3bt, Class 4)
   b. Power Consumption: PoE: Maximum 25.5 W

4. Video
   a. Video Compression: H.265, H.264, MJPEG, Multiple streaming
   b. Resolution: 5 MP x 4 (2560x1920) Sensors
   c. Frame Rate: H.265/H.264: Maximum 30fps at all resolutions
   d. Dynamic Range: Wide Dynamic Range, 150dB
   e. Digital Noise Reduction: SSNRV
5. Minimum Illumination:
   a. Color: Color: 0.055lux (F2.0,30 IRE)
   b. BW: BW: 0.055Lux (F2.0,30 IRE)
6. Imager: 1/1.8" 5MP CMOS x 4CH
7. Optical
   a. Viewing Angle:
      i 3.7 mm - H: 97.5°, V: 71.9°, D: 126.2°
      ii 4.6 mm - H: 77.9°, V: 57.9°, D: 98.7°
      iii 7.0 mm - H: 50.7°, V: 37.8°, D: 63.8°
8. Software Control
   a. Unit Configuration: Via web browser or configuration manager
   b. Firmware: Remote update
9. Application Programming Interface: ONVIF Profile S/G/T SUNAPI (HTTP API) Wisenet open platform
10. Network
    a. Protocols: IPv4, IPv6, TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTCP, RTSP, NTP, HTTP, HTTPS, SSL/TLS, DHCP, FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, QoS,PIM-SM, UPnP, Bonjour, LLDP
    b. Security: HTTPS(SSL) Login AuthenticationDigest Login AuthenticationIP Address FilteringUser access log802.1X Authentication (EAP-TLS, EAP-LEAP) Device Certificate (Hanwha Techwin Root CA)
    c. Ethernet: STP, 10/100 Base-T, autosensing, half/full duplex, RJ45
    d. PoE: IEEE 802.3 af compliant
11. Mechanical
    a. Dome: Polycarbonate, clear, UV-blocking anti-scratch, IK10 Impact Resistance
    b. Camera Body: Aluminum
    c. Tilt Range: 0~90
    d. Mounting: Single Gang, Double Gang, 4” Octagon, 4” Square. Surface, wall, pendant, pole, corner. Provide mounting accessories as required per mounting details.
12. Acceptable Manufacturers
    a. Hanwha Techwin PNM- C16083RVQ. Provide required mounting supports and hardware. Provide quantity shown on plans for exterior cameras. Provide software license as required.
    b. Bosch
    c. Avigilon

E. IP 20 MP Multi-Sensor Video Surveillance Cameras (Type F):

13. The Vandal resistant 20 MP Multi-Sensor camera shall have a microSD card slot that uses standard; off-the-shelf microSD (SDHC and SDXC) cards for local storage (4 slots, maximum 256 GB per channel) and be enclosed in a cast-aluminum housing with an aluminum trim ring and a clear polycarbonate dome bubble (with UV blocking anti-scratch coating) and a hardened inner liner and be capable of operating in an indoor or an outdoor environment.
14. The camera shall provide 360-degree field of view and produce video in quad view mode. It shall also provide digital PTZ along with automated video analytics to allow users to efficiently monitor large visual fields with capability to focus on certain areas when suspicious activity is observed.
    a. Lenses shall be PTRZ with remote positioning capabilities and the following focal lengths:
       i 4.13~9.4mm (2.3x) motorized varifocal.

15. Power:
    a. Input Voltage / Current: HPoE (IEEE802.3bt, type 3)
    b. Include injector with each camera.
    c. Power Consumption: PoE: Maximum 35 W
16. Video
    a. Video Compression: H.265, H.264, MJPEG, Multiple streaming
    b. Resolution: 5 MP x 4 (2560x1920) Sensors
    c. Frame Rate: H.265/H.264: Maximum 30fps at all resolutions
    d. Dynamic Range: Wide Dynamic Range, 120dB
    e. Digital Noise Reduction: SSNRV
17. Minimum Illumination:
    a. Color: Color: 0.11lux (F1.6,30 IRE)
    b. BW: BW: 0Lux (IR LED on)
18. Imager: 1/1.8" 5MP CMOS x 4CH
19. Optical
    a. Viewing Angle: H: 87.58°(Wide)~37.34°(Tele) / V: 64.58°(Wide)~28.04°(Tele) / D:112.46°(Wide)~46.85°(Tele)
20. Software Control
    a. Unit Configuration: Via web browser or configuration manager
    b. Firmware: Remote update
21. Application Programming Interface: ONVIF Profile S/G/T SUNAPI (HTTP API) Wisenet open platform
22. Network
    a. Protocols: IPv4, IPv6, TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTCP, RTSP, NTP, HTTP, HTTPS, SSL/TLS, DHCP, FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, QoS,PIM-SM, UPnP, Bonjour, LLDP
    b. Security: HTTPS(SSL) Login AuthenticationDigest Login AuthenticationIP Address FilteringUser access log802.1X Authentication (EAP-TLS, EAP-LEAP) Device Certificate (Hanwha Techwin Root CA)
    c. Ethernet: STP, 10/100 Base-T, autosensing, half/full duplex, RJ45
    d. PoE: IEEE 802.3 af compliant
23. Mechanical
    a. Dome: Polycarbonate, clear, UV-blocking anti-scratch, IK10 Impact Resistance
    b. Camera Body: Aluminum
    c. Pan / Tilt / Rotate Range: 0~360˚/ 35~80˚/ 0~90, Remote adjustment
    d. Mounting: Single Gang, Double Gang, 4” Octagon, 4” Square. Surface, wall, pendant, pole, corner. Provide mounting accessories as required per mounting details.
24. Acceptable Manufacturers
    a. Hanwha Techwin PNM-9085RQZ1. Provide required mounting supports and hardware. Provide quantity shown on plans for exterior cameras. Provide software license as required.
    b. Avigilon

F. IP Multi-Sensor/Multi-Directional Video Surveillance Cameras:
1. The Vandal resistant Multi-Sensor/Multi-Directional camera shall have a microSD card slot that uses standard; off-the-shelf microSD (SDHC and SDXC) cards for local storage (5 slots, 1 ea. per channel) and be enclosed in a cast-aluminum housing with an aluminum trim ring and a clear polycarbonate dome bubble (with UV blocking anti-scratch coating) and a hardened inner liner and be capable of operating in an indoor or an outdoor environment.
2. The camera shall provide 360-degree field of view and produce video in quad view mode and shall contain an integral 32x optical PTZ. The fixed lenses/sensors shall be selectable depending on customer’s requirement at site.
    a. Lenses/Sensors shall be available in the following resolutions and focal lengths:
        i 2 MP – 2.4mm
        ii 2 MP – 2.8mm

iii 2 MP – 3.6mm
iv 2 MP – 6.0mm
v 2 MP – 12mm
vi 5 MP – 3.7mm
vii 5 MP – 4.6mm
viii 5 MP – 7mm

3. Power:
   a. Input Voltage / Current: HPoE 802.3BT Type 4
   b. Include injector with each camera.
   c. Power Consumption: Maximum 65W
4. Video
   a. Video Compression: H.265, H.264, MJPEG, Multiple streaming
   b. Resolution: PTZ 2 MP (1920 x 1080). All other sensors are user selectable.
   c. Frame Rate: H.265/H.264: 2 MP Max. 60fps, 5 MP 30fps at all resolutions
   d. Dynamic Range: Wide Dynamic Range, 150dB-2 MP, 120dB-5 MP
   e. Digital Noise Reduction: SSNR5 (2D + 3D noise filter) (On / Off)
5. Minimum Illumination:
   a. 2 MP:
      i Color: 0.055Lux (F2.0, 1/30sec, 30IRE)
      ii B/W: 0.055Lux (F2.0, 1/30sec, 30IRE)
   b. 5 MP
      i Color: 0.16Lux (F1.6, 1/30sec, 30IRE)
      ii B/W: 0.16Lux (F1.6, 1/30sec, 30IRE)
6. Imager:
   a. 1/2.8" 2MP CMOS
   b. 1/1.8" 5MP CMOS
7. Optical
   a. Viewing Angle:
      i 2 MP – 2.4mm-H:135.4˚, V:71.2˚, D:161.6˚
      ii 2 MP – 2.8mm-H:107.4˚, V:62.2˚, D:122.0˚
      iii 2 MP – 3.6mm-H:94.8˚, V:49.3˚, D:114.3˚
      iv 2 MP – 6.0mm-H:50.4˚, V:28.8˚, D:58.1˚
      v 2 MP – 12mm-H: 26.3˚V : 14.9˚D : 30.0˚
      vi 5 MP – 3.7mm-H:97.5˚, V:71.9˚, D:126.2˚
      vii 5 MP – 4.6mm-H:77.9˚, V:57.9˚, D:98.7˚
      viii 5 MP – 7mm-H:50.7˚, V:37.8˚, D:63.8˚
8. Software Control
   a. Unit Configuration: Via web browser or configuration manager
   b. Firmware: Remote update
9. Application Programming Interface: ONVIF Profile S, SUNAPI (HTTP API)
10. Network
    a. Protocols: TCP/IP, UDP/IP, RTP (UDP), RTP (TCP), RTCP, RTSP, NTP, HTTP, HTTPS, SSL/TLS, DHCP, FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3 (MIB-2), ARP, DNS, DDNS, QoS, PIM-SM, UPnP, Bonjour
    b. Security: HTTPS(SSL) login authentication, Digest login authentication, IP address filtering,User access log, 802.1X Authentication (EAP-TLS, EAP-LEAP)
    c. Ethernet: STP, 10/100 Base-T, autosensing, half/full duplex, RJ45
    d. PoE: IEEE 802.3 af compliant
11. Mechanical
    a. Dome: Polycarbonate, clear, UV-blocking anti-scratch, IK10 Impact Resistance
    b. Camera Body: Aluminum
    c. Pan / Tilt / Rotate Range:
       i 2 MP – 2.4mm- -90˚~+90˚/ +52~+56˚/ -180˚~+180˚
       ii 2 MP – 2.8mm- -90˚~+90˚/ +26~+80˚/ -180˚~+180˚
       iii 2 MP – 3.6mm- -90˚~+90˚/ +22~+84˚/ -180˚~+180˚
       iv 2 MP – 6.0mm- -90˚~+90˚/ +10~+95˚/ -180˚~+180˚
       v 2 MP – 12mm- -90˚~+90˚/ +10~+97˚/ -180˚~+180˚

vi 5 MP – 3.7mm- -90˚~+90˚/ +36~+73˚/ -180˚~+180˚
vii 5 MP – 4.6mm- -90˚~+90˚/ +21~+85˚/ -180˚~+180˚
viii 5 MP – 7mm- -90˚~+90˚/ +12~+93˚/ -180˚~+180˚

d. Mounting: Surface, wall, pendant, pole, corner. Provide mounting accessories as required per mounting details.

12. Acceptable Manufacturers
    a. Hanwha Techwin PNM-9320VQP. Provide required mounting supports and hardware. Provide quantity shown on plans for exterior cameras. Provide software license as required.
    b. Bosch
    c. Avigilon

G. IP 2-Channel Multi-Directional Video Surveillance Cameras (Type B):
1. The Vandal Resistant Multi-Directional camera shall have a microSD card slot that uses standard; off-the-shelf microSD (SDHC and SDXC) cards for local storage (up to 512 GB) and be enclosed in a cast-aluminum housing with an aluminum trim ring and a clear polycarbonate dome bubble (with UV blocking anti-scratch coating) and a hardened inner liner and be capable of operating in an indoor or an outdoor environment.
2. The camera shall provide multi directional view and produce video in various view modes. The lenses shall be selectable depending on customer's requirement at site.
    a. Lenses shall be available in the following focal lengths:
        i 2.4mm
        ii 2.8mm
        iii 3.6mm
        iv 6.0mm
3. Video
    a. Video Compression: H.265, H.264, MJPEG, Multiple streaming
    b. Resolution: Dual 1080P (1920x1080) Sensors
    c. Frame Rate: H.265/H.264: Maximum 60fps
    d. Dynamic Range: Wide Dynamic Range, 150dB
    e. Digital Noise Reduction: SSNR
4. Minimum Illumination:
    a. 2.4mm - Color: 0.055Lux (F2.0, 1/30sec)
    b. 2.8mm - Color: 0.055Lux (F2.0, 1/30sec)
    c. 3.6mm - Color: 0.055Lux (F2.0, 1/30sec)
    d. 6.0mm - Color: 0.055Lux (F2.0, 1/30sec)
5. Imager: 1/2.8" 2MP CMOS
6. Optical
    a. Viewing Angle:
        i 2.4mm - H:135.4˚, V:71.2˚, D:161.6˚
        ii 2.8mm - H:107.4˚, V:62.2˚, D:122.0˚
        iii 3.6mm - H: 94.8˚, V: 49.3˚, D: 114.3˚
        iv 6.0mm - H: 50.4˚, V: 28.8˚, D: 58.1˚
7. Software Control
    a. Unit Configuration: Via web browser or configuration manager
    b. Firmware: Remote update
8. Application Programming Interface: ONVIF Profile S/G/T SUNAPI (HTTP API) Wisenet open platform
9. Network
    a. Protocols: IPv4, IPv6, TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTCP, RTSP, NTP, HTTP, HTTPS, SSL/TLS, DHCP,FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, QoS, PIM-SM,UPnP, Bonjour, LLDP
    b. Security: HTTPS(SSL) Login AuthenticationDigest Login AuthenticationIP Address FilteringUser access log802.1X Authentication (EAP-TLS, EAP-LEAP)
    c. Ethernet: STP, 10/100 Base-T, autosensing, half/full duplex, RJ45
    d. PoE: IEEE 802.3 af compliant
10. Mechanical

a. Dome: Polycarbonate, clear, UV-blocking anti-scratch, IK10 Impact Resistance
b. Camera Body: Aluminum
c. Pan / Tilt / Rotate Range: -176˚~+176˚/ 0˚~30˚/ -90˚~+90˚
d. Mounting: Single Gang, Double Gang, 4” Octagon, 4” Square. Surface, wall, pendant, pole, corner. Provide mounting accessories as required per mounting details.

11. Acceptable Manufacturers
    a. Hanwha Techwin PNM-7082RVD with applicable lens modules. Provide required mounting supports and hardware. Provide quantity shown on plans for exterior cameras. Provide software license as required.
    b. Avigilon

H. IP 4K Fisheye Video Surveillance Cameras (Type E):
1. The Vandal resistant 4K Fisheye camera shall have a microSD card slot that uses standard; off-the-shelf microSD (SDHC and SDXC) cards for local storage (up to 128 GB) and be enclosed in a cast-aluminum housing with an aluminum trim ring and a clear polycarbonate dome bubble (with UV blocking anti-scratch coating) and a hardened inner liner and be capable of operating in an indoor or an outdoor environment.
2. Variable View Mode (Fishyeye, Single Panorama, Double Panorama, Quad View Etc).
3. Power:
    a. Input Voltage / Current 12V DC ±10%, PoE (IEEE802.3af, Class3)
    b. Power Consumption: PoE+: Max. 13W
12V DC: Max. 11W
4. Video
    a. Video Compression: H.265, H.264, MJPEG
    b. Resolution: Double Panorama : 2560 x 1280, 1920 x 960, 1280 x 640, 704 x 352, 640 x 320Single Panorama : 2560 x 640, 1920 x 480, 1280 x 320, 704 x 176, 640 x 160 Quad View : 2944 x 2208, 2560 x 1920, 2048 x 1536, 1600 x 1200, 1280 x 960, 1024 x 768, 800 x 600, 704 x 576, 640 x 480
    c. Frame Rate: H.265 / H.264 : 20fps@4000 x 3000, 25fps@under 2992 x 2992, MJPEG : Max. 15fps
    d. Dynamic Range: Wide Dynamic Range, 120dB
    e. Digital Noise Reduction: SSNR
5. Minimum Illumination:
    a. Color mode: Color : 0.3Lux (F2.2, 30IRE)
    b. Black & white mode: 0Lux (IR LED on)
6. Imager: 1/1.7" 12.4MP CMOS
7. Optical
    a. Viewing Angle: H : 180° / V : 180° / D : 180°
8. Software Control
    a. Unit Configuration: Via web browser or configuration manager
    b. Firmware: Remote update
9. Application Programming Interface: ONVIF Profile S/G SUNAPI (HTTP API) Wisenet open platform
10. Network
    a. Protocols: TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTCP,RTSP, NTP, HTTP, HTTPS, SSL/TLS, DHCP, PPPoE, FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, QoS, PIM-SM, UPnP, Bonjour, SIP
    b. Security: HTTPS(SSL) Login Authentication, Digest Login AuthenticationIP Address Filtering, User Access log, 802.1x Authentication (EAP-TLS, EAP-LEAP)
    c. Ethernet: STP, 10/100 Base-T, autosensing, half/full duplex, RJ45
    d. PoE: IEEE 802.3 af compliant
11. Mechanical
    a. Dome: Polycarbonate, clear, UV-blocking anti-scratch, IK10 Impact Resistance
    b. Camera Body: Aluminum
    c. Mounting: Single Gang, Double Gang, 4” Octagon. Surface, wall, pendant, pole, corner. Provide mounting accessories as required per mounting details.

12. Acceptable Manufacturers
    a. Hanwha Techwin PNF-9010RV. Provide required mounting supports and hardware. Provide quantity shown on plans for exterior cameras. Provide software license as required.
    b. Bosch
    c. Avigilon

I. IP 3MP Corner Mount Camera (Type C):
1. The Vandal resistant / anti-ligature camera shall have a microSD card slot that uses standard; off-the-shelf microSD (SDHC and SDXC) cards for local storage (up to 256 GB) and be enclosed in a cast-aluminum housing.
2. Power:
    a. Input Voltage / Current 12V DC ±10%, PoE (IEEE802.3af, Class3)
    b. Power Consumption: PoE+: Max. 12W
12V DC: Max. 11W
3. Video
    a. Video Compression: H.265, H.264, MJPEG
    b. Resolution: 2048x1536. 192x1080. 1600x1200. 1280x1024. 1280x960. 1280x720. 1024x768. 800x600. 800x448. 720x576x 720x480. 640x480. 640x360. 320x240
    c. Frame Rate: H.265 / H.264 : Max 30fps at all resolutions
    d. Dynamic Range: Wide Dynamic Range, 120dB
    e. Digital Noise Reduction: SSNR
4. Minimum Illumination:
    a. Color mode: Color : 0.3Lux (F2.2, 30IRE)
    b. Black & white mode: 0Lux (IR LED on)
5. Imager: 1/2.8” CMOS
6. Optical
    a. Viewing Angle: H : 102° / V : 79° / D : 129°
7. Software Control
    a. Unit Configuration: Via web browser or configuration manager
    b. Firmware: Remote update
8. Application Programming Interface: ONVIF Profile S/G SUNAPI (HTTP API) Wisenet open platform
9. Network
    a. Protocols: TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTCP,RTSP, NTP, HTTP, HTTPS, SSL/TLS, DHCP, PPPoE, FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, QoS, PIM-SM, UPnP, Bonjour, SIP
    b. Security: HTTPS(SSL) Login Authentication, Digest Login AuthenticationIP Address Filtering, User Access log, 802.1x Authentication (EAP-TLS, EAP-LEAP)
    c. Ethernet: STP, 10/100 Base-T, autosensing, half/full duplex, RJ45
    d. PoE: IEEE 802.3 af compliant
10. Mechanical
    a. Dome: Polycarbonate, clear, UV-blocking anti-scratch, IP66, IK10+ Impact Resistance
    b. Camera Body: White Aluminum
    c. Mounting: Single Gang, Double Gang, 4” Octagon. Surface, wall, pendant, pole, corner. Provide mounting accessories as required per mounting details.
11. Acceptable Manufacturers
    a. Hanwha Wisenet T Series TNV-7011RC. Provide required mounting supports and hardware. Provide quantity shown on plans. Provide software license as required.
    b. Bosch
    c. Avigilon

2.5 SURVEILLANCE WORKSTATION COMPUTER

A. Acceptable manufacturers
1. Hanwha Techwin WWT-P-7400W

2. HP
3. Dell

B. Specifications
1. 1x Intel® Core™ i7-9700, 3.0Ghz to 4.7Ghz (8 Cores, 8 Threads, 12MB)
2. Windows 10 Professional 64 bit
3. 16GB DDR4
4. Nvidia Quadro P620 GPU 4x Mini DisplayPort
5. 1x 256GB SS
6. 1 x RJ-45, Gigabit Ethernet
7. USB Keyboard and Mouse
8. Provide 5-Year, On-site, Next Business Day, Keep Your Hard Drive Warranty

2.6 VIDEO SURVEILLANCE MONITORS

A. Acceptable Manufacturers
1. Hanwha SMT video monitor.
2. Bosch
3. Viewsonic

B. Specifications
1. LED Panel
2. Screen Size: 27” and 55”
3. Viewable Picture
Area: 22" diagonal4.
Brightness:
250cd/m2
5. Resolution: 1920x1080 pixels
6. Aspect Ratio: 16:9
7. Display Colors: 16.7 million colors
8. Response Times: 5 ms
9. Rated Life: 30,000 hours
10. Contrast: 1,000:1
11. Viewing angle: 178 deg/178 deg
12. Digital Input: BNC (2 in/ 2 out), HDMI, VGA

2.7 POWER SUPPLIES

A. A. Provide centralized power supplies with capacity adequate for the cameras, controls and all accessories of each location as scheduled. Power supplies shall be 120VAC input and 24VAC output. Each camera shall be individually protected by a circuit breaker.

B. All cameras shall have surge protection on their video terminations to guard against induced transients. Exterior PTZ cameras shall surge protection devices for both video and data. All exterior cameras shall also have surge protection devices on the 24VAC power.

2.8 SURGE PROTECTION

A. All cameras shall have surge protection on their video terminations to guard against induced transients. Exterior PTZ cameras shall surge protection devices for both video and data. All exterior cameras shall also have surge protection devices on the 24VAC power.

2.9 MICROPHONE

A. Manufacturer
1. Lourue
2. Astatic

B. The microphone shall include the following features:
1. Sensitivity: -45 dBV/Pa
2. Frequency Response: 50 Hz 15 kHz
3. Current Drain: 10 mA
4. Supply Voltage: 12VDC
5. Microphone Housing: High Impact anti-static ABS (Verifact A) Stainless Steel (Verifact D)

PART 3: EXECUTION

3.1 EXAMINATION

A. Verify that surfaces are ready to receive work.

B. Verify field measurements are as shown on Drawings.

C. Verify that required utilities are available, in proper location, and ready for use.

D. Beginning of installation means installer accepts conditions.

3.2 INSTALLATION

A. All system programming shall be done at the ESC's facility prior to installation on site.

B. Qualified personnel shall install the System in strict compliance with manufacturer's instructions.

C. Wiring shall be color coded, uniform and in accordance with national electric codes and manufacturer'sinstructions.

D. Equipment shall be firmly secured, plumb and level.

E. All cable runs to the main equipment rack shall be tagged and identified.

F. Coordinate all work with DEC and other Trades Contractors.

G. Grounding of cables and peripheral equipment shall be installed per manufacturer's direction to eliminatenoise induction and achieve optimum system performance.

H. Install and configure Security local area network as required for control and communication betweensystem devices. When required, provide necessary coordination, termination, and programming associated with integrating Security local area network with facility administrative network.

I. Equipment cabinets shall be assembled in the Security Electronics Contractor's shop prior to delivery tothe job site.

J. Cameras shall be aimed and focused in the presence and at the direction of the Owner.

3.3 SOFTWARE SUPPORT

A. Refer to Section 28 4620 for software support and programming requirements.

3.4 SYSTEM INITIALIZING AND PROGRAMMING

A. All programming shall occur in the ESSS's shop prior to installation on site.

B. The System shall be turned on and adjustment made to meet requirements of the specification and on-site conditions.

C. The System shall be programmed to function as specified.

D. Any special programming shall be documented, and a written copy given to the Owner/User.

E. Coordinate integration of other electronic systems as called for in the contract documents.

3.5 FINAL ADJUSMENTS

A. Before obtaining permission from the Owner to schedule the acceptance test, provide written certification to the Architect/Engineer that the complete system has been calibrated, tested and is ready to begin the 14-day burn-in period and acceptance testing.

B. Acceptance tests

1. Conduct final acceptance test after a period of not less than 14 consecutive normal working days oftrouble-free operation, on the complete and operational video surveillance system to demonstrate that it is functioning in accordance with all requirements of this specification. During this burn-in period, the video surveillance system shall operate continuously for 24 hours per day. Demonstratethe correct operation of all monitored and controlled points as well as the operation and capabilitiesof all sequences during the acceptance test.
2. Should retesting be deemed necessary by the Architect/Engineer due to malfunction or inappropriateconstruction methods, the ESC shall be fully responsible for additional cost incurred for retesting, including the Architect/Engineer time.
3. Final system acceptance shall be based upon the completion of the following items:
   a. Completion of the installation of all hardware items. Complete operation of the system, with nofailures during the entire acceptance test period.
   b. Satisfactory completion of the as-builts, operating, and maintenance manuals.

c. Satisfactory completion of all training programs.
d. Upon final acceptance, the warranty period shall begin.

3.6 SYSTEM TEST PROCEDURES

A. The System shall be completely tested to assure that all components are hooked up and in working order.

B. Inspect system for defects. Correct all causes of such defects. If the cause is outside of the scope of the Division 28 series scope of work, promptly notify the Architect/ Engineer in writing, indicating the cause of the defect and suggested corrective procedures.

C. The ESC is to verify the system is communicating with all controlled devices.

D. Test 120VAC power equipment and hardware internal to all equipment racks. Test all conductors for shorts, opens, and polarity.

E. Verify operation of UPS power conditioning and backup. Test by removing utility power from system.

F. Verify all field wiring is free of defects prior to termination of head end electronics.

G. After termination of head end electronics, fully test operation of system including activation of field devices, alarm initiation from field devices.

H. Provide written documentation showing all test results.

END OF SECTION

SECTION 28235
Electronic Security Systems Network Integration
REVISED ADDENDUM 2,3/202024

PART 1: GENERAL

1.1 SECTION INCLUDES

A. This section includes the layout of the IP network for the security electronics system.
B. The security electronics equipment supplied by the Electronic Security Systems Subcontractor (ESSS) shall be configured to operate on its own purpose-built network provided by the ESSS. It may or may not be necessary to create a link between this network and the existing network at the facility.

1.2 DELINEATION OF RESPONSIBILITY

A. Electronic Security Systems Subcontractor (ESSS):
    1. Configure the IP addresses of all equipment supplied by the ESSS.
    2. Ensure proper connectivity between equipment and switches supplied by the ESSS.
    3. If linking of the ESSS and owner networks is required, configure routing on the ESSS side of the link.
B. Owners:
    1. Inspect the standard network scheme and communicate an alternative to the ESSS if it overlaps any existing or planned network at the facility.
    2. If linking of the ESSS and owner networks is required, configure routing on the owner side of the link.
    3. If the security electronics equipment will use a time server on the existing network:
        i. Provide the IP address of the time server to the ESSS.
        ii. Configure any additional routing necessary to gain access to the time server.

PART 2: LAYOUT OF ESSM NETWORK

2.1 STANDARD NETWORK SCHEME

A. Unless the owners notify the ESSS of an overlap with an existing or planned network and provide an alternative scheme, a standard network scheme shall be used.
B. The standard scheme shall consist of:
    1. An overall IP space of 172.28.0.0/20.
    2. An IP space of 172.28.0.0/25 for switches and management.
    3. An IP space of 172.28.0.128/25 unassigned.
    4. An IP space of 172.28.1.0/24 unassigned.
    5. An IP space of 172.28.2.0/23 for IP audio.
    6. An IP space of 172.28.4.0/22 for programmable logic controllers (PLC) and card readers.
    7. An IP space of 172.28.8.0/21 for cameras and recording.

2.2 ALTERNATIVE NETWORK SCHEME

A. The owners shall notify the ESSS in writing at the soonest possible opportunity if the standard scheme overlaps any existing or planned network at the facility.
    1. Notification shall be given even if the owner and ESSS networks will not be linked to avoid the possibility of conflicts in the future.
B. The notification of network overlap shall include a proposal for an alternative network scheme.
    1. The alternative scheme shall use the same subnet masks as the standard scheme.
    2. The alternative scheme shall not overlap any existing or planned networks at the facility.

PART 3: LINKING OF NETWORKS

3.1: LINKING REQUIREMENTS

A. A link between the owner and ESSS networks shall be required if:

1. The owners want to view cameras from outside the control room where ESSS video equipment is installed or,
2. The owners want to view cameras from a smartphone or tablet or,
3. The owners want to have the security electronics equipment synchronized to a time server on the existing network.

3.2: STANDARD LINKING SCHEME

A. A link between the owner and ESSS networks shall be established through layer 3 routing.
B. The link shall consist of a subnet independent from either network.
   1. A layer 3 device on the ESSS network and one on the owner network shall provide routing between the linking subnet and the respective network.
   2. The device on each end shall have a static route to the one on the other end.
C. Unless the owners notify the ESSS of an overlap with any existing or planned network and provide an alternative scheme, a standard network scheme shall be used for the link.
D. The standard scheme shall have these characteristics:
   1. The IP space shall be 10.0.0.0/30.
   2. The owner side of the link shall have a static IP address of 10.0.0.2.
   3. The ESSS side of the link shall have a static IP address of 10.0.0.1.

END OF SECTION

SECTION 283105
AUXILIARY CONTROL SYSTEMS
REVISED ADDENDUM 2,3/202024

PART 1: GENERAL

1.1 RELATED SECTIONS

A. Drawings and general provisions of Contract, including General and Supplementary Conditions and Division 1 Specifications, apply to this and other sections of Division 28.
B. Refer to Division 26 control schedules and plans for the locations of devices that will be controlled and locations of Division 28 supplied relay panels.

1.2 DESCRIPTION OF WORK

A. Auxiliary control systems; included shall be located in:
   1. Remote control of cell and dayroom lighting.
   2. Remote control of power receptacles in dayrooms.
   3. Remote control of water shutoff for cells.
B. The PLC shall control via output points and interposing relays each device as scheduled.

1.3 COORDINATION

A. Coordinate work with Division 26 Contractor. Turn over to the Division 26 Contractor completely assembled and tested utility control cabinets/panels for mounting and termination of line-voltage wiring.
B. Coordinate work with Division 26 Contractor. Turn over to the Division 26 Contractor completely assembled and tested inmate telephone control cabinets. The inmate telephone control cabinet shall be mounted next to the inmate telephone system provided by the owners. Inmate telephone tip and ring terminations shall be provided by the owner's telephone system contractor. Data terminations shall be by Division 28.

PART 2: PRODUCTS

2.1 DESCRIPTION

A. This section shall be a subsystem of the PLC.

2.2 LIGHTING CONTROL

A. Each auxiliary control system shall be a subsystem within the PLC.
B. All contactors shall be by Panasonic or Douglas Lighting Systems.
C. Control relays will be enclosed single pole, double throw (SPDT) type ballast rated at 30 amps 277VAC power circuits.
D. Control relays will be mounted in cabinets.

2.3 RECEPTACLE and TELEVISION RECEPTACLE

A. Each auxiliary control system shall be a subsystem within the PLC.
B. All contactors shall be by Panasonic or Douglas Lighting Systems.
C. Control relays will be enclosed single pole, double throw (SPDT) type at 30 amps 277VAC power circuits.
D. Control relays will be mounted in cabinets.

2.4 WATER CONTROL

A. Each auxiliary control system shall be a subsystem within the PLC.
B. All contactors shall be Idec, Finder, Square D or approved equal.
C. Control relays will be enclosed double pole, double throw (DPDT) type rated at 10 amps.

2.5 INMATE PHONE CONTROL

D. Each auxiliary control system shall be a subsystem within the PLC.
E. All contactors shall be Idec, Finder, Square D or approved equal.
F.C ontrol relays will be enclosed double pole, double throw (DPDT) type rated at 10 amps.

END OF SECTION

SECTION 284619

SECURITY AUTOMATION SYSTEM
REVISED ADDENDUM 2,3/202024

PART 1: GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of contract, including general and supplementary conditions and division 1 specifications, apply to this and other sections of division 28 05 00.

1.2 DESCRIPTION OF WORK

A. The security automation system shall be comprised of one or more programmable controllers with redundant processors, communications networks and operator interfaces. This system shall provide the necessary remote I/O, power supplies, input modules, output modules and any other required equipment to provide a fully functional system. The system will receive discrete inputs and through use of an internal control logic program, control output relay operations and perform remote control functions via the video graphic user interfaces.
B. Schneider Electric Modicon TM3, or Omron CJ2 Series are the approved programmable logic controllers. No other systems are approved. All components that comprise the PLC system shall be from the same manufacturer.
C. Provide labor, equipment, materials and supervision to install, program, calibrate, adjust, document, and test the total system as required herein, as shown on the drawings and required for the complete integration of the security system.
D. Each utility control panel, PLC equipment cabinet and audio equipment rack shall be manufactured to UL 508A standards and include UL 508A Listing Mark for all utility control panels. This UL 508A Listing Mark shall be applied by only the pre-qualified electronic security system manufacturer. No outside marking facility will be accepted.

1.3 CONTROL MONITORING AND ANNUNCIATION

A. The security automation system shall control all electrically operated door hardware, monitor all doors, door position and bolt position limit switches as separate inputs (minimum 2 per door), annunciation of all door status and alarms upon violation. Lighting, receptacle, inmate phone, intercom, paging, duress, access control, and CCTV control shall be integrated into the security system. Control of a fire alarm emergency release shall be via video graphic user interfaces as well as annunciation of fire alarms by smoke zones if required. As part of video graphic user interface system provide an integral security management system that shall record to disk, paper or screen all occurrence of the system. Provide video graphic user interface terminals and security management system computers at locations as shown on the plans. The video graphic user interfaces in central control must be configured as hot-redundant backups to one another and be fully transferable.

PART 2: PRODUCTS

2.1 GENERAL REQUIREMENTS

A. Provide a complete and fully functional security automation system using materials and equipment of types, sizes and rating, as required to meet performance requirements. Use materials and equipment that comply with referenced standards and manufacturers' standard design and construction, in accordance with published product information. Coordinate the features of all materials and equipment so they form an integrated system, with components and interconnections matched for optimum performance of specified functions.

B. The programmable logic controller (hereafter referred to as the PLC) and all components in the control system shall be the product of Schneider Electric Modicon TM3 or Omron CJ2 Series. All assemblies and sub-assemblies performing similar functions in separate controllers purchased under this specification shall be interchangeable. The PLC processors shall be configured as a hot-redundant system in conjunction with the video graphic user interfaces as referenced under part 1.03 description. No other PLC manufacturers shall be considered. All components of the PLC system shall be by the same manufacturer, no mixing of multiple manufacturers shall be considered.

C. All components shall be housed in structurally sound and finished metal cabinets. All switches and other operator-controlled devices shall be of the size and durability for their intended use as is normally offered for industrial applications.

D. Modular components of the system shall be listed or recognized by a nationally recognized testing laboratory.

E. The programmable controller shall be housed in lockable enclosures hereafter referred to as security equipment cabinets or racks. The equipment cabinets or racks shall house the following items.
   1. Input and output modules related to the monitoring and control of doors, lights, intercoms, CCTV, utility control functions, watch tour stations and duress alarm annunciation.
   2. Regulated power supplies.
   3. Terminal strips and fusing. Fuse holders shall be manufactured by Phoenix Contacts, Sprecher, Schuh or Square D and shall provide indication when the fuse has blown. Fuses shall be rated for the specific load. Each door shall be equipped with a minimum of two fuses, all output voltage for door control and indication shall be fused independently.
   4. Interposing door, lighting and receptacle control relays.
   5. The programmable controller, or where applicable, transmitting and receiving modules to communicate with the PLC or remote input and output racks.
   6. The intercom amplifiers and switching relays.

F. Other necessary items as determined by the Electronic Security System Subcontract (ESSS) design.

G. All Inputs and Outputs of the integrated system shall go through the input and output cards of the PLC. Direct connection to LED's, relays or other devices will not be acceptable.

H. Door monitoring and Control: Lock bolt and door position switches, provided by others shall be monitored as separate and distinct inputs (provide a minimum of 2 inputs per door). No series connections between the lock bolt and door position switches shall be considered. Each door shall be equipped with a minimum of two fuses, all output voltage for door control and indication shall be fused independently.

I. Locks, whether solenoid, motor drive types and other required devices such as elevator interface, corridor indicator lights shall be controlled via mechanical interposing relay driven by the PLC. All interposing relays shall be included with an LED to indicate when the relay is energized. Provide all required power to control doors. If DC power supplies are required, provide only Class 2 power supplies and design the system so that the total ampacity shall be 100% greater than the worst case connected load, including inrushes. Group or emergency openings of doors shall cause doors to sequentially open with no more than 3 doors opening simultaneously. No relay boards manufactured by the electronic security system subcontractor shall be considered acceptable. Acceptable relay manufacturers are Finder, Square D, Omron or Idec.

J. Interlocks shall be via software. Any door shall have the ability to be programmed to become a member of an interlock scheme. The architect shall reserve the right to redefine interlocks during the submittal and shakedown phase without additional costs. Refer to plans for interlock groups.

K. Upon a loss of power, all doors shall de-energize. Sliding and overhead doors shall remain in their present state.

2.3 PLC EQUIPMENT AND MATERIALS

A. The programmable logic controller (PLC) shall be Schneider Electric Modicon TM3, or Omron CJ2

Series or approved equal. Input and output modules shall be bulletin 1771 and 1791 hardware.

B. Each PLC shall be password protected against unauthorized entry to software.
C. Local and remote networking shall be via dedicated interface modules providing serial communications at rates, which are selectable from 62.5K to 1M, bits per second. The interface modules shall be capable of I/O drops at distances of up to 7,500 feet and control up to 32 remotes.
D. Schneider Electric Modicon TWIDO Input/output cards shall be optically isolated and designed to accept an input signal of 24 volts AC or DC. These modules shall be rack mounted. Each input/output point shall have a corresponding red LED indicator on the upper front of the module, which illuminates when the input is read as on by the microprocessor. These modules shall be configured with 32 inputs/outputs.
E. The PLC shall have a communications card capable of communicating with an industry standard stand-alone computer.
F. Communication between the PLC and the computer(s) shall be a peer-to-peer network; no master station (central hub or server) shall be required.
G. Communication on the peer-to-peer network shall be a minimum of 50 K baud of data transmission.
H. There shall be no noticeable delay between any video graphic user interface icon or field device input and the resulting output on the video graphic user interface or in the field.
I. DipSwitch Programming is not acceptable.
J. No proprietary PLC system shall be acceptable. Each PLC shall be a standard industrial grade product designed for high reliability. The PLC shall be manufactured by a company that has produced a product line of compatible PLCs for at least fifteen years and has a minimum of two Indiana distributors with annual sales over one hundred thousand dollars. Additionally, the PLC manufacturer must have a minimum of five national integrators proficient in the programming, integration, and maintenance of the manufacturer PLC equipment.

2.4 NETWORK SWITCHES

A. Provide a network that shall include connections between the PLC system, video graphic user interfaces, IP audio system, IP camera system and other systems as required.
B. This network shall be a high speed, fault tolerant, Ethernet industrial communication network. It shall be a 100Mbps ring topology using fiber optic media as required and be in compliance with IEEE 802.3
C. See section 282350 Electronic Security Systems Network Integration.
D. Provide network switches by HP or Cisco

2.5 WALL DURESS STATION

A. This station shall mount to a standard 1-gang metal box, 3 ½ inches in depth. The faceplate shall be stainless steel and be secured to the back box with tamper proof screws.
B. The push button shall be a red mushroom head with key switch manufactured by Square D.
C. This station shall be labeled “push for help”.
D. The alarm signal provided to the PLC shall be from the closure of a normally closed dry contact.
E. Wall duress stations shall be by Telemecanique or approved equal.

2.6 DOOR RELEASE PUSH BUTTON

A. This station shall mount to a standard 1-gang metal box, 3 ½ inches in depth. The faceplate shall be stainless steel and be secured to the back box with tamper proof screws.
B. The push button shall be a blue mushroom head manufactured by Square D.
C. This station shall be labeled “door release”.
D. The input signal provided to the PLC shall be from the closure of a normally open dry contact.
E. Door release push buttons shall be by Telemecanique or approved equal.

2.7 REQUEST TO EXIT MOTION DETECTOR

A. Motion sensors shall be resistant to false alarms due to temperature changes and shall be capable of covering an area 50' x 50' with optional lens for long range coverage. This unit shall also have horizontal and vertical pattern adjustment.
B. This unit shall also have the ability to enable and disable the external LED.
C. The alarm signal provided to the PLC shall be from the closure of a normally closed dry contact.
D. Motion sensors shall be by Square D or approved equal.

2.8 UNINTERRUPTIBLE POWER SUPPLIES

A. Provide battery backup system and charger sufficient to maintain VGUI(s), SMS, PLC, all door monitoring, audio system, camera system, access control system, utility relay control and digital video recording system status for a period of 15 minutes under 50% load.
B. An un-interruptible power supply (UPS) shall be provided at each rack, cabinet and VGUI. The UPS shall also have sufficient battery capacity and charging capacity to operate all security system equipment (less door control operations). If UPS is installed in equipment racks or consoles provide rack mounted UPS Systems. When UPS is installed in cabinet provide DIN rail mountable UPS systems.
C. Provide a means for each operator station to monitor alarm/trouble signals from each UPS.
D. Provide UPS units by Powerware, Liebert, APC or approved equal.

2.9 SPARES FOR ALL ELECTRONIC SECURITY SYSTEM SECTIONS

A. Provide adequate capacity in equipment racks/cabinets, PLC, relay capacity and spare terminal to increase number of control points in the future by 10 percent above those indicated for work of this project.
B. Provide the following shelf spares:

a. PLC processor (1)
b. PLC backplane (1) of each type used
c. PLC input module (1) of each type used
d. PLC output module (1) of each type used
e. PLC system power supply (1)
f. VGUI touch screen operator station with PC loaded with software for plug and play operation (1)
g. Terminal block of each type used (20)
h. Relay of each type used (5)
i. Power supply (1) of each type used
j. Card reader for each type used (2)
k. Intercom station (2)
l. Speaker with baffle (1)
m. Camera of each type used (1)

END OF SECTION

SECTION 284620
VIDEO GRAPHIC USER INTERFACES
REVISED ADDENDUM 2,3/202024

PART 1: GENERAL

1.1 SECTION INCLUDES

A. This section contains the requirements and operational characteristics for a security automation system. The system shall feature video graphical user interfaces (VGUI) as shown on the plans allowing control for the automated security system. The Control functions to be initiated by the VGUI include, but are not limited to the following:
   1. Door control and monitoring.
   2. Interface between intercom stations and speaker output selections.
   3. Interface between video surveillance system alarm inputs and monitors.
   4. Interface between the control of power circuits for lighting, receptacles, water control, and inmate telephones.
   5. Interface, control and monitoring of card readers, push buttons, duress stations and motion detectors.
   6. Other controls as described elsewhere in these documents.

B. System shall also include a Security Management System (SMS) which shall operate as separate terminal as shown on the plans. The system shall provide administrative viewing and retrieval of database information. Data stored within the database shall be stored in Windows-compatible files for exportation and report generation. The SMS shall be capable of audio recording and playback of audio intercom files via the VGUI's audio system. Audio recording shall be provided for all intercom stations from every operator station.

1.2 OPERATIONAL DESCRIPTION

A. General Description - The VGUI display shall be divided into three main sections; the Map Display, the Site Map and the Global Function Control Bar. The VGUI graphic display will consist of no less than ten screens (screens based on actual floor plan, icon sizes and development meetings as previously addressed in other sections), one for each area and alarm display screen.

B. The Map Display is the main section of the monitor screen displaying a 2-dimensional view of a selected area in the facility. Each view is referred to as a "Map". The Maps shall have graphic icons representing all monitored and controlled devices placed on the floor plan in their approximate location. The graphics shall optimize the use of screen resolution and color to enhance and simplify the information displayed. Each operator station located in the top left-hand corner of the Map Display area shall have an "Emergency Shutdown" Icon, red in color that shall allow the operator of that station to shut down both operator stations if under duress. To re-enable each station, the operator must select the "re-start" system icon and enter a series of administrative passwords.

C. The Map Display shall make use of Multi-Touch technology. The end user may manipulate the Map Display screens with two or more fingers. Standard Multi-Touch gestures for Pinch and Stretch to resize the map and Slide to pan the map must be supported. The Map Display shall consist of an entire floor or a large area of the facility. Individual map breakouts without support for Multi-Touch gestures shall not be considered.

D. The Site Map is the section of the screen that is used to navigate between maps and view the other areas of the facility. The operator shall select an area in the Site Map by clicking on the area with the mouse/touch point. Although the Map Display can be manipulated using Multi-Touch technology, the Site Map can still be used to jump to different areas of the Map Display without the need to pan and will allow movement to different areas of the Map Display with the mouse. The area will be highlighted in white in the Site Map and be displayed in the Map Display area. The time duration to generate any screen within the GUI shall not exceed one ½ second. The Site Map area shall have an Intercom Call Pending List Display that shall display all current incoming

intercom calls. In order to perform a function, the operator must select an intercom call. Once the intercom is selected the station shall be connected to the intercom master station as well as display the area on the Map Display where the call was originated. The Site Map area shall also have an Active Call Station Display that will be activated when an operator selects an intercom call. This Display shall also have a function button. The "Disconnect" function will simply disconnect the intercom station.

E. Control between the housing control station and other jail control stations shall be fully transferable. Each operator station shall have a log on/off icon which shall end the "session" and automatically transfer control to the opposite station. To transfer control for a Central Control station to the Subcontrol stations the operator shall select the "transfer control" button on the site map and a "pop-up" window shall ask if the operator wishes to transfer control. If the operator selects yes, then control shall be transferred if the operator selects no then control shall not be transferred. If control is transferred, the operator must entire their password into the Subcontrol operator station prior to the control screens being made available.

F. This section of the monitor screen is used to control devices in the facility. Door control functions shall require a two-step operation. The two-step operation is to protect the operator from accidentally opening a door. Owners can decide between two different two-step options for controlling doors.
   1. Function Icon followed by Door Icon – Under this approach the operator will select a function Icon in the GFCB and then select a Door Icon for a normal door unlock.
   2. Door Icon followed by Function Icon – Under this approach the operator will select a Door Icon in the Display Map and then a Function Icon in the GFCB.

G. The GFCB shall have a "Utility" Icon. The Utility control is a hidden function on the VGUI screen, therefore, the operator will not see any utility Icons on the Map Display until the Utility Icon in the GFCB is selected. Once the Utility Icon is selected the utilities alone will display graphically on the Map display for three seconds. If a Utility Icon on the Map display is not selected within three seconds the command cancels. Activating a utility (i.e. lights, inmate televisions, and inmate phones) shall be done by selecting the appropriate Icon on the Display map. When a utility has been selected or turned on, the Icon symbol will change to a yellow color and will stay yellow until it is selected again or turned off.

H. Included in the operator control panel is a PLC Status Icon that will allow the operator to check the state of all the PLC modules in the facility. The PLC modules shall be grouped by PLC equipment cabinet or rack in black print and will be highlighted in red print if offline.

I. In the event a PLC or PLC module does go offline, a pop up will appear on the screen which will allow the operator to go directly to the PLC status screen.

1.3 VIDEO GRAPHIC USER INTERFACE EVENT SUMMARY

A. An event-based strategy shall be applied to the development of the VGUI screens. Color utilized in the screen development shall be neutral gray in nature. Events shall be exceptions to the screen and shall be highlighted both visually using color. The following colors shall be used for annunciation of the various device states.
   1. Red shall indicate alarm state.
   2. Yellow shall indicate interlocked sallyport and/or over sallyport.
   3. Green shall indicate an authorized operation, such as an operator unlocking a door.
   4. Amber shall indicate intercom call, paging zones, sound threshold alarms.
   5. Blue shall indicate cameras.
   6. No color shall indicate secure or non-active device.
   7. Owner shall be able to change color designations at no additional cost.

B. The system shall also incorporate the use of voice announcements and beeps and chimes so that all operator actions, system warnings and emergencies and other important information are announced to the operator. Alarm announcements shall be displayed until they are acknowledged, regardless of screen display. The operator will not have to wait for the sound to be completed before proceeding to other screen functions unless it is an emergency function.

C. The operator shall be able to choose between full voice interaction or partial voice interaction. Full voice interaction uses voice announcements for all screen operations and partial voice interaction uses beeps and chimes during normal operations and voice announcements for alarm conditions.

1.4 ALARM PRIORITIES

A. As part of the VGUI, provide priority of alarms and calls associated with different events and icons. Prioritization of alarms shall be limited to a total of seven levels. The owner shall reserve the right to provide two additional priority levels or change the priority levels listed below during the development stage of the VGUI software. Priority Levels are as follows:
   1. Level # 1: Duress Alarms
   2. Level # 2: Breech of Interlocked Sallyport
   3. Level # 3: Door Alarms
   4. Level # 4: Intercom Calls
   5. Level # 5: Inmate Intercom Calls

1.5 DEVICE ICONS

A. The VGUI shall have Device Icons located in the Map Display including, but not limited to Door Icon, Intercom Icon, Camera Icon, Page Zone Icon, Duress Icon, Card Reader Icon and Group Control Icon. The VGUI shall also have Function Icons located in the GFCB including Unlock Icon, Stop Icon, Hold Open Icon, Door Isolate Icon, Intercom Isolate Icon, Local Access Icon, Interlock Override Icon, Record Icon, Silence Icon and Reset Icon.

1.6 DOOR CONTROL

A. The steps required to open a swinging, sliding or overhead door are the same. The operator will first select the Unlock Icon in the GFCB and then within three seconds, select the Door Icon in the Map Display. Other doors may be commanded to unlock by selecting other Door Icons within the three seconds of the first. After a door has been unlocked for a specified amount of time it will then relock automatically, assuming the door hardware will allow for this operation (this is a ½ cycle door lock operations).
B. To stop motion of a sliding or overhead door the operator will select the Stop Icon in the GFCB.
C. Selecting the Hold Open Icon in the GFCB will unlock the door and keep it electrically unlocked until the operator selects the Door Icon only. The Function Icon in the GFCB shall stay illuminated during the three second selection process.
D. The Door Icons in the Map Display shall have a graphical representation of the door. If it is a swinging door it depicts the door swing and if it is a sliding or overhead door it shall depict the door as secure, in mid travel or fully open.
   1. The Door Icon is gray and the door graphic is gray and is shown closed when the door is locked and secured.
   2. The Door Icon is gray and the door graphic is green when the door is powered and opened.
   3. The Door Icon is gray and the door graphic is fast flashing red when the door is violated or manually opened.
   4. The Door Icon is gray and the door graphic is slow flashing red when the door alarm has been acknowledged by the operator.
   5. The Door Icon is gray again and the door graphic is gray again when the door has been reset by the operator.
   6. If there is a camera associated with door in alarm it shall be displayed on the call up monitor and the Camera Icon shall change to red.
E. Interlocked doors are bordered around their Icons in yellow when a door in a designated interlock group is unsecured. If two interlocked doors are attempted to be unlocked at the same time, a pop up warning shall display on the screen along with a voice announcement.

1.7 DOOR ISOLATE

A. Electrically controlled doors or doors that are controlled by card readers can be isolated so that they cannot be opened. To isolate a door the operator selects the Door Isolate Icon in the GFCB and then selects the Door Icon. Other doors can be isolated within three seconds of the first. After three seconds the Door Isolate function cancels. Repeating the process on the same Door Icon will reverse the condition. When a door is isolated the Door Icon will have a black "X" over it indicating the door cannot be opened. If an operator attempts to unlock an isolated door, a pop up warning shall display on the screen along with a voice announcement.

1.8 EMERGENCY RELEASE

A. There shall be an "Emergency Evac" button located in the GFCB. When the operator selects this button a pop up screen shall ask the operator if they would like to continue. If the operator selects the "Yes" button he/she will be able to emergency release doors by selecting the door icons on the display map. Opening the doors shall be a single step approach during an emergency release. The door icon shall flash red/green to acknowledge it has been opened. To re-close doors after and emergency release the operator shall select the "Emergency Evac" button again which shall cycle the door locks and allow them to be closed and locked again.

1.9 INTERCOM

A. Establishing audio communication at the VGUI with the remote intercom station shall be accomplished by either selecting the Intercom Icon on the Map Display or selecting the intercom call in the Pending Call List Display located below the site map.
   1. The Intercom Icon shall flash an orange color when there is incoming call.
   2. When the operator selects the Intercom call the orange color shall become solid until the call is terminated, at which time it shall change back to gray.

B. In addition to a visual color change to the Intercom Icon, a voice announcement shall alert the operator that there is an intercom call.

C. If there is a camera associated with an intercom the camera shall be displayed on the call up monitor and the Camera Icon shall change to orange when there is an intercom call on that intercom.

D. Vehicle loop detectors shall emulate an intercom call.

1.10 ISOLATE INTERCOM

A. This feature shall allow the operator to turn off an intercom station. Incoming calls will still be received and the Intercom Icon on the Display map will still flash an orange color, but no voice announcement will be given and the operator will not have to answer the call. The operator shall select the Icon Isolate Icon in the GFCB and then the Intercom Icon in the Map Display and the Intercom Icon in the Map Display will have a white "X" over it indicating it has been isolated. Repeating the process will reverse the Intercom Isolate.

1.11 PAGE

A. This function allows the operator to select one or more paging zones for a paging announcement. The operator will select the Page Icon in the Map Display. The Page Icon will change to an orange color during the paging operation and back to gray when the paging operation is completed.

1.12 ALL PAGE

A. The GFCB shall also have an All Page Icon that shall allow the operator to perform a paging operation in the entire facility. This function shall also include all intercom stations.

1.13 VIDEO

A. Establish video communications at the VGUI with a CCTV camera. Operator shall accomplish by selecting a Camera Icon in the Map Display.
   1. Upon selection of a Camera Icon the Camera Icon will turn blue and the CCTV image will be displayed on the video monitor at the operator station.
   2. Selecting the Camera Icon again shall cancel the video and return the Camera Icon to its gray color.

1.14 DURESS ALARM

A. When a duress alarm is activated the duress alarm icon on the screen shall flash red and there shall be a voice announcement alerting the operator that there is a duress alarm. If there is a camera associated with the duress alarm the camera shall be automatically displayed on the spot monitor at the operator station.

1.15 ACCESS CONTROL SYSTEM

A. The security automation system shall be capable of being expanded to incorporate and fully integrate with an access control system. This system shall consist of a data interface to an access control system, which shall be able to share card holder information.
B. The information to be shared shall be card holder name with card number, access denied with reason (such as invalid card, user does not have permission at this location).
C. This system shall be able to provide the operator with a means to display “who is in the building” through the access system.

1.16 UTILITY CONTROL

A. Utility control icons shall be placed on hidden map that shall be selected via the function keypad.
B. This function shall allow operators to select lighting, TV receptacle,and inmate phone control points for on/off control. The operator will select the particular Icon in the Map Display. Each utility control icon will change to from gray to yellow when on.
C. For each housing unit provide a group control icon to turn on all utility control functions. Note that when doing a group control sequence on/off operations so as to not overload any electrical circuits.

1.17 SECURITY MANAGEMENT SYSTEM

A. The system shall record all the previously mentioned operations activity on the hard disk to allow for computerized sorting and report generation. The recorded information for each activity shall include the time, date, point description and the activity.
B. Changes in state of all inputs and outputs including door sensors, door locks, intercom call buttons, paging zones, duress stations, card readers, lighting, receptacle, inmate phone, water solenoid, camera and visitation controls that are displayed to the operator of any VGUI.
C. Operator activity including acknowledging alarms, resetting alarms, log on functions, opening doors, turning on cameras, and responding to intercom calls.
D. The SMS at a minimum shall provide the following maintenance and diagnostic functions.
   1. Diagnostic function for troubleshooting door position switch and latch bolt position switch adjustment.
   2. Time and date resetting counter, which shall provide information as to the number of times that a door has been remotely operated and an intercom call has been placed.
E. The SMS shall also allow for audio recording and playback of audio intercom files via the VGUI’s audio system. Audio recording shall be provided for each cell intercom station from every operator station.

F. The SMS configuration software shall be a standard, off-the-shelf software package distributed nationwide with distributors located in all 50 states. This software must be 32-bit format.
G. The SMS software must operation on Windows 8.1. No other platform shall be acceptable.
H. All monitoring and login logic shall be programmed within the Indusoft program. The Security Management System software and the IO/DA (Input Output / Data Access) Servers shall be Indusoft brand; no other approach shall be considered**.** No proprietary .DLL, .EXE, .NET or other encrypted software shall be considered unless identified prior to bid and accepted by addendum. If it is found that system integrator provided any proprietary programming language or encrypted software but did not disclose this information the system shall be completely redeveloped with non-proprietary programming methods at the integrators expense.
I. The system integrator shall turn over all programming passwords, source codes and programming schedules at the end of the project. Prior to final payment all software shall be authenticated as being non-proprietary by the owners or owners designated representative.

PART 2: PRODUCTS

2.1 COMPUTERS

A. Video Graphical User Interface (VGUI) and security management system shall consist of PC-based workstations and microcomputer controllers of modular design providing the minimum distributed processing capability as per the following.
   1. The PC-based workstations shall be an industrial fanless computer with Intel Core™ i7-8650U (1.9GHz Quad Core Processor), Windows 10 Professional, 64-bit. Memory shall be a minimum of 16GB SO-DIMM DDR4 and include a hard drive with 128GB M.2 SSD.
   2. The PC-based workstation shall be an Onlogic Model ML100G-31, Teguar or approved equal.
   3. Include a wired keyboard & mouse from Logitech, HP or Dell.

2.2 MONITORS

A. Provide for each VGUI operator station a 24” TFT active LCD Flat Panel, touch screen with 1920x1080 resolution and support for Multi-Touch technology.
B. Acceptable Manufacturers:
   1. 3M
   2. NEC
   3. HP
   4. Elo
   5. or approved equal

2.3 STANDARD MONITOR FOR SECURITY MANAGEMENT SYSTEM, DVR WORKSTATION, ACCESS CONTROL COMPUTER

A. Provide 24” LCD color monitors capable of resolution of 1920x1080 pixels with refresh rates of 75Hz. It shall be capable of 32 colors in graphics mode.

B. Other Products – Point Device / heavy duty mouse, keyboard and line printer (160 characters per second).

C. Acceptable Manufacturers:
   1. 3M
   2. NEC
   3. HP
   4. Elo
   5. or approved equal

2.4 VIDEO GRAPHIC USER INTERFACE, TABLET PC WORKSTATION AND SECURITY MANAGEMENT SYSTEM SOFTWARE

A. The software shall be a commercial SCADA (Supervisory Control and Data Acquisition) system that is distributed worldwide for such automation systems. The manufacturer shall have produced a line of SCADA software for at least ten years and currently provides Internet support of its products including on-line updates and technical support.
B. All software shall be licensed (registered) to the owner.
C. The software shall operate on the Microsoft Windows 10 professional platform and exhibit strong compliance with Microsoft's Windows Open Systems Architecture (WOSA) standards. The system must support running as a service under Windows 10 PROFESSIONAL.
D. All configuration changes shall be capable of being made on-line, while the system is operating.
E. The system shall provide complete user documentation in an electronic format and on-line "help" based upon Windows standard Hypertext. Both shall provide *context-sensitive* information on the use of the package.
F. Each operator station regardless of size shall be provided with a InduSoft or Wonderware unlimited tag software package.
G. All control and monitoring as well as login logic shall be programmed within the InduSoft/Wonderware application. The Video Graphic User Interface and Security Management System software and the IO/DA (Input Output / Data Access) Servers shall be InduSoft/Wonderware; **no other approach shall be considered.** No proprietary .DLL, .EXE, .NET or other encrypted software shall be considered. If it is found that the ESSM provided any proprietary programming language or encrypted software, their P&P bond shall be pulled and the software shall be completely redeveloped with non-proprietary programming methods at the ESSS expense.
H. ESSS shall turn over with submittals a sample of their programming passwords and source codes to confirm their non-proprietary approach to the development of the custom software.
I. All PLC I/O addresses from InduSoft or Wonderware environment shall have continuous communication with the PLC. No InduSoft or Wonderware programming tag PLC addresses shall be changed during run time.
J. ESSS shall not include any web server, cloud-based services or require any subscription for any portion of the VGUI or SMC system including but not limited to the security management system, touch screen workstations, active directory services, password assignments or integration with the audio communication system, video management system, video management storage servers, access control system or other system as specified and required.
J. The system integrator shall turn over all programming passwords, source codes and programming schedules at the end of the project. Prior to final payment all software shall be authenticated as being non-proprietary by the Owners or Owners designated representative.

PART 3: EXECUTION

3.1 SOFTWARE REVIEW

A. A preliminary VGUI operations schedule shall be submitted for review during the submittal phase of this project. The owner's representative shall determine and direct the exact layout and operations of the VGUI software based upon a working demonstration of the proposed operation.
B. Provide at a minimum of two (2) meetings at the owner's representative's facility to discuss and determine final layout and operations of the VGUI and security management system software. Prior to the last scheduled meeting as determined by the owner's representative the ESSS's shall provide a 90% complete working system, with a method of controlling and manipulating ALL field devices to demonstrate all operations of the system. After this last scheduled meeting as determined by the owner's representative the ESSS's shall completely shop test and certify the software with the actual headend hardware prior to delivery of any headend equipment to the project site.
C. The complete security electronics system shall be assembled and tested at the ESSS's shop. The ESSS shall include in their bid all expenses (travel, per diem, hotel and food) for three (3) Owner's representatives and two (2) Architect representatives to attend the factory testing of the systems for a two (2) day period.

3.2 SOFTWARE AUTHENTICATION

A. ESSS shall send on USB Flash Drive the Indusoft or Wonderware software to the Architect for review. Architect shall send to Indusoft or Wonderware for Authentication.
B. ESSS shall provide on USB Flash Drive logic created Indusoft, Wonderware InTouch I/O DA Server or Aveva Edge. License numbers specific to each control station for the project shall be provided as well as specific usernames and source codes.
C. Software authentication shall be provided to Architect two (2) weeks prior to first scheduled Software review meeting with owners and two weeks prior to final on-site commissioning and punchlist by Architect.

END OF SECTION

SECTION 28 51 23
IP AUDIO COMMUNICATION SYSTEM
REVISED ADDENDUM 2,3/202024

PART 1: GENERAL

1.1 DESCRIPTION OF WORK

A. Audio communications systems included are:
   1. Intercom
   2. Zone paging
   3. Intercom with sound threshold monitoring as shown on the drawings
B. This system consists of voice communication between operator stations to intercom stations and paging zones as indicated on drawings.
C. Provide all software and hardware necessary to allow audio recording to the security management system of the video graphic user interface station communications to intercom stations, speakers, horns, paging zones and sound threshold monitoring speakers.

PART 2: PRODUCTS

2.1 DESCRIPTION OF PRODUCTS

A. The IP audio communication system and associated equipment shall be manufactured by Audiotec, Harding, Quam, Stentofon or approved equal and located in floor mounted equipment racks adjacent to the door control panels.
B. The equipment rack assemblies shall provide adequate panel mounting space to mount all equipment with a minimum 50% spare rack space. These same racks may be utilized to house network switching equipment and patch panels. Provide blank panels for unused spaces.
C. The system shall be a fully VoIP Solution with VoIP intercom stations and VoIP control room master stations.

2.2 AUDIO APPLIANCE

A. The Audiotec AIS-1001 audio appliance hardware shall incorporate the latest in technology, providing complete software, and programming source code which shall be utilized to allow users full access to configure the system as required by the contract documents. Virtualization of software on remote hardware is not acceptable.
B. The audio appliance shall have a minimum capacity to support 1,024 field devices and up to 32 control room master stations per appliance. Approved manufacturers must provide with the proposals the same minimum capacity.
C. The system shall be capable of networking 16 audio appliances and operate as one complete system.
D. The control network must be Modbus TCP/IP Ethernet.
E. The system must be non-blocking communication between any VoIP master station and VoIP field device.
F. The audio appliance shall include sound threshold monitoring with the ability to provide multiple settings for daily scheduling. Provide a minimum of 64 daily schedules.
G. The system must be capable of configuration changes while the audio appliance is both on-line and off-line. In addition, the system must utilize a YAML configuration file for editing functionality.
H. Remote system access shall be through SSH and be managed through a single port.

2.3 VOIP SWITCH BANK AMPLIFIER

A. The audio communication system shall also support 25-volt intercom stations and paging zones.
B. As required provide ASB-3210 VoIP switch bank analog intercom and paging amplifier. This unit shall utilize no more than 1U rack space and be capable of supporting no less than 32 channels with 2 independent non-blocking talk paths.

2.4 VOIP CONTROL ROOM GRAPHICAL USER INTERFACE MASTER STATIONS

A. Provide a Audiotec TMS-1002 VoIP control room graphical user interface desktop master station as shown on the contract documents which includes a compact design, rugged 16 ga. steel face plate, rubber shock isolation mounting feet, stainless steel push-to-talk button, 3” square loudspeaker with

2.35 oz ceramic magnet with moister resistant cone, replaceable 16" metal cardioid condenser gooseneck microphone, volume control push buttons, and RJ45 connection.

B. The control room graphical user interface desktop master station shall be non-proprietary, open source and open standard SIP and MQTT protocols using minimum Broadcom BCM2837 SoC with 1024 Mbytes of RAM and 8 Gbyte of eMMC flash.
C. The system shall include a high-performance audio codec with 24-bit audio and be industry standard Voice over Internet Protocol (VoIP).
D. The VoIP control room graphical user interface desktop master station must be powered by PoE (power over Ethernet), standard IEEE 802.3af class 0.
E. The control room graphical user interface desktop master station must support external privacy Bluetooth headset. Provide with each graphical user interface control station 1 – Apple Air Pod Bluetooth headset.

2.5 VOIP DESKTOP PHONE STATION

A. Provide a Audiotec DMS-1001 VoIP desktop phone station. The VoIP desktop phone station shall be non-proprietary, open source and open standard SIP.
B. The station shall be a small desktop unit with high-definition audio technology with a minimum of 7KHz audio and include a minimum of 3.5" TFT color LCD display.
C. The station shall provide audio communications between desktop phone station to any VoIP intercoms station.
D. The station shall have the ability to be configured for predefined hard keys, call transfer, mute, and one-touch redial.
E. The station shall allow for master-to-master communications.
F. The control room graphical user interface desktop master station must include automatic gain control with digital volume adjustments with up/down toggle button. Unit shall also support external Bluetooth privacy headset.

2.6 REMOTE INTERCOM STATIONS - INTERIOR

A. Provide Audiotec ATI-IC-2 series intercom station.
B. The intercom station shall mount to a 2-gang standard back box and a vandal resistant IP call-in station with integrated speaker/microphone. The intercom faceplate must be a minimum of 12-gauge stainless steel.
C. The loudspeaker must be a 2.5" square frame loudspeaker with 2.35 oz ceramic magnet and include a phenolic impregnated, moisture resistant cone. The push-to-call, program selection, lighting control or other predetermined push buttons shall be a momentary contact, stainless steel, and vandal resistant.
D. The station shall include electronics for programmable selection to include but not limited to call request, program selection, and lighting control. In addition, the station electronics shall include Class-D BTL speaker driver with an output of 2.5 watt into 4 olm or 1.6 watts into 8 olms.
E. The station electronics shall be non-proprietary, open source and open standard SIP and MQTT protocols using a minimum Broadcom BCM2837 SoC with 1024 Mbytes of RAM and 8 Gbyte of eMMC flash.
F. The station electronics shall include a high-performance audio codec with 24-bit audio and be industry standard Voice over Internet Protocol (VoIP).
G. The VoIP station electronics must be PoE (power over Ethernet) standard IEEE 802.3af class 0 and include an RJ-45 Ethernet connector.
H. Attachment screws shall be security types in compliance with Section 11196 – Detention Fasteners.
I. Assembly shall be able to withstand damage caused from physical abuse, dust, vibration, and temperature extremes from 150° F. to 10° F.
J. Unit shall have protective metal barrier designed to protect the loudspeaker from physical damage. Barrier shall be mounted to the rear of the faceplate in front of the loudspeaker.

2.7 REMOTE INTERCOM STATIONS - EXTERIOR

A. Provide Audiotec ATE-IC-2 series intercom station.
B. The intercom station shall mount to a 2-gang standard back box and a vandal resistant IP call-in station with integrated speaker/microphone. The intercom faceplate must be a minimum of 12-gauge stainless steel.
C. The loudspeaker must be a 2.5" square frame loudspeaker with 2.35 oz ceramic magnet and include a phenolic impregnated, moisture resistant cone. The push-to-call, program selection,

lighting control or other predetermined push buttons shall be a momentary contact, stainless steel, and vandal resistant.

D. The station shall include electronics for programmable selection to include but not limited to call request, program selection, and lighting control. In addition, the station electronics shall include Class-D BTL speaker driver with an output of 2.5 watt into 4 olm or 1.6 watts into 8 olms.
E. The station electronics shall be non-proprietary, open source and open standard SIP and MQTT protocols using a minimum Broadcom BCM2837 SoC, 1024 Mbytes of RAM, and 8 Gbyte of eMMC flash.
F. The station electronics shall include a high-performance audio code with 24-bit audio and be industry standard Voice over Internet Protocol (VoIP).
G. The VoIP station electronics must be PoE (power over Ethernet) standard IEEE 802.3af class 0 and include an RJ-45 Ethernet connector.
H. The VoIP station electronics must include conformal coating to provide protection in exterior applications.
I. Attachment screws shall be security types in compliance with Section 11196 – Detention Fasteners.
J. Assembly shall be able to withstand damage caused from physical abuse, moisture, corrosion, dust, vibration, and temperature extremes from 150° F. to -40° F.
K. Unit shall have protective metal barrier designed to protect the loudspeaker from physical damage. Barrier shall be mounted to the rear of the faceplate in front of the loudspeaker.

2.8 LOUDSPEAKERS

A. Loudspeakers to be nominal 8” diameter dual cone type units. Loudspeakers to incorporate 6-ounce permanent magnet and include a 5-watt multi tap transformer for use on 25 volt and 70-volt constant voltage type distribution systems.
B. Each loudspeaker to be provided with a security baffle plate and flush or surface mounted enclosure has required. Refer to finish ceiling plan for locations. Baffle and enclosure to be all metal construction and finished in polar white baked on enamel.

2.9 HORN LOUDSPEAKERS

A. Horn loudspeakers to be weatherproof compression driver units with integral screwdriver adjustable multi-tap transformer for use on both 25 volt and 70-volt constant voltage distribution systems. Integral mounting plate suitable for mounting on a standard outlet box to include swivel type alignment bracket.
B. Units to be rated to handle 15 watts input power. Nominal sensitivity 110 dB SPL at 3 feet with 1 watt input.

2.10 PEDESTAL

A. Furnish and install heavy-duty pedestals for intercom stations, cameras, and card readers at all vehicle sallyports and gates as indicated on the drawings.
B. Pedestal shall be a dual height consisting of two hoods with corresponding equipment and shall be anchored to a concrete base.
C. Pedestal shall be constructed of round pipe allowing the housing to spin without breaking if sufficient pressure is applied from the side.
D. Protective pipe bollards shall be provided by others.

2.11 CALL BUTTONS

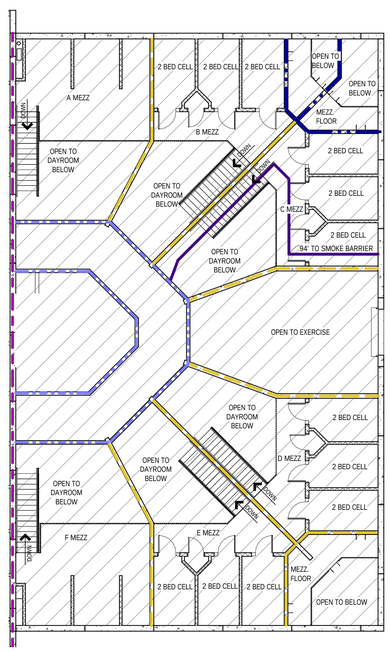
A. Provide the Quam CIB2 with a single-gang, vandal resistant call-in switch with a momentary (normally open) push-to-call button in a brushed 12-gauge stainless steel finish.

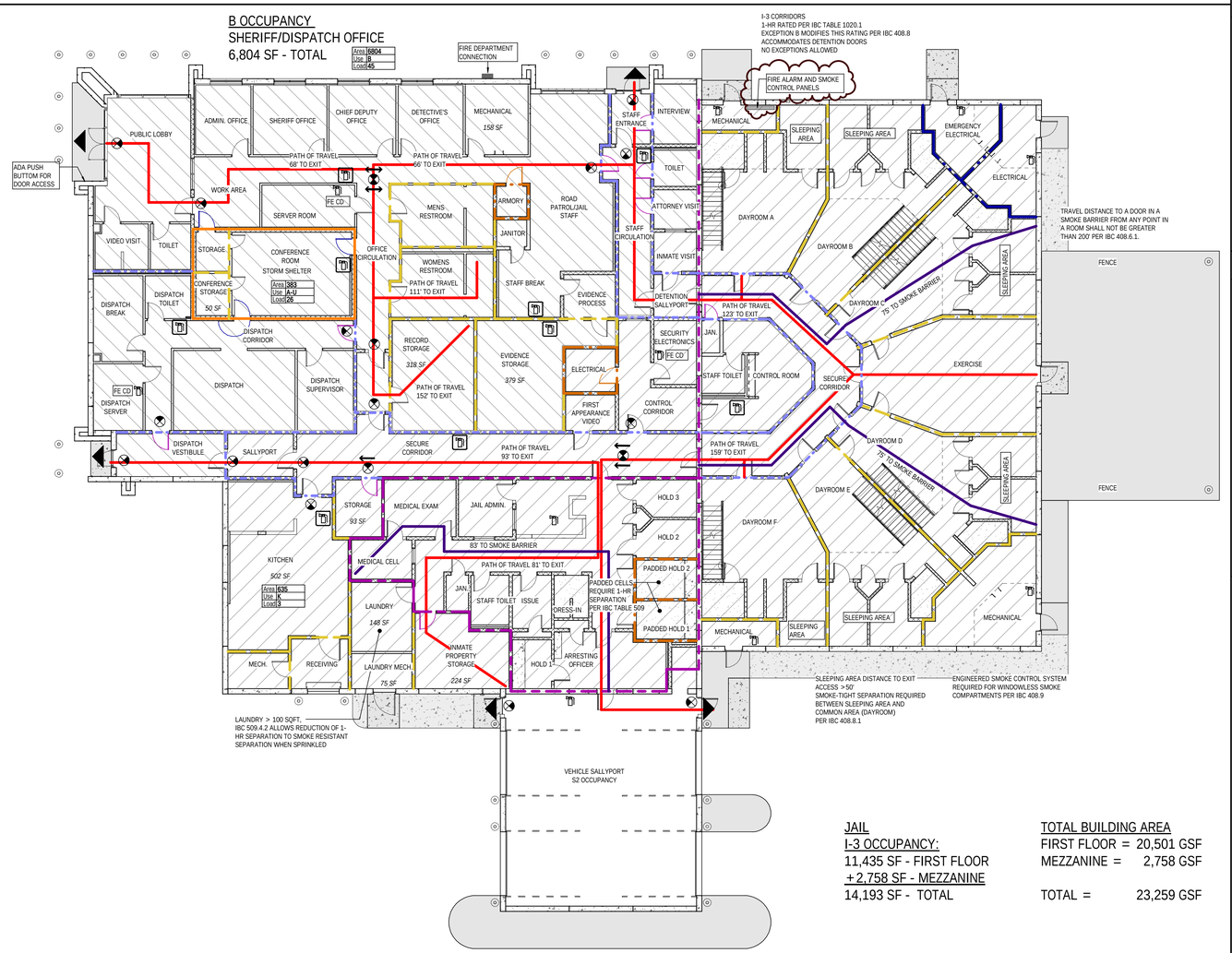
PART 3: EXECUTION

3.1 INSTALLATION

A. All intercom stations are intended to be mounted in detention security door frames or window frames.
B. Coordinate opening, back box, and conduit routing requirements with Division 11190 detention security door frames.
C. All exposed fasteners shall utilize security screws in compliance with the Detention Fasteners specification.

END OF SECTION





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
12' 6' 0' 12'

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

EO / RW / PW — OCCUPANT LOAD (#O); REQUIRED WIDTH (RW); PROVIDED WIDTH (PW)

I-3 OCCUPANCY

B OCCUPANCY

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BID & PERMIT

EDGAR COUNTY PUBLIC SAFETY CENTER
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

Drawn by: Author

CODE PLAN

G100

3/7/2024 1:22:21 PM

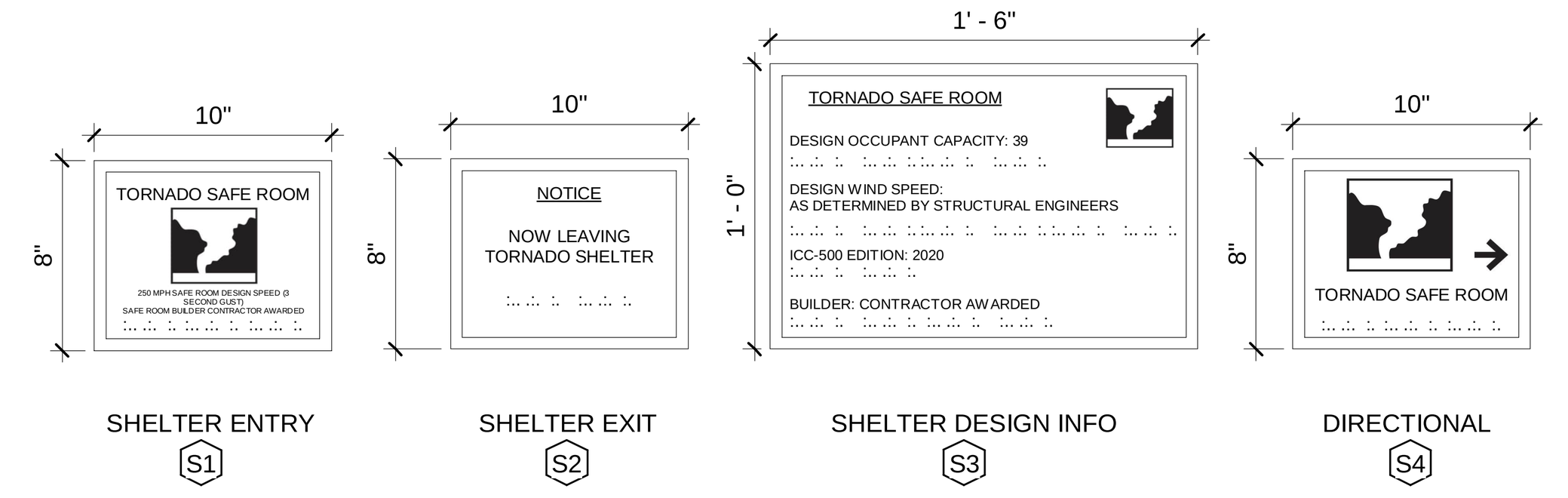
2020 - ICC 500 STORM SHELTER CODE REVIEW

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

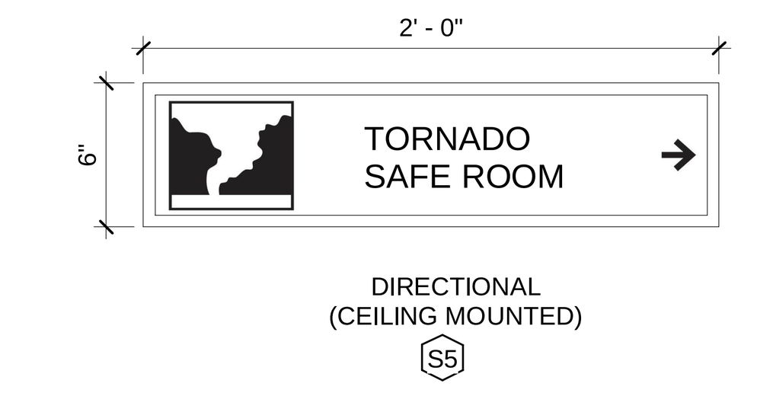
NUMBER	REQUIRED INFORMATION	INFORMATION PROVIDED
1	Type of storm shelter: residential or community and tornado, hurricane or a combination of both.	Community, tornado.
2	Use of community storm shelter: use by the general public, building occupants or a combination of both.	Community storm shelter is 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. (2)
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

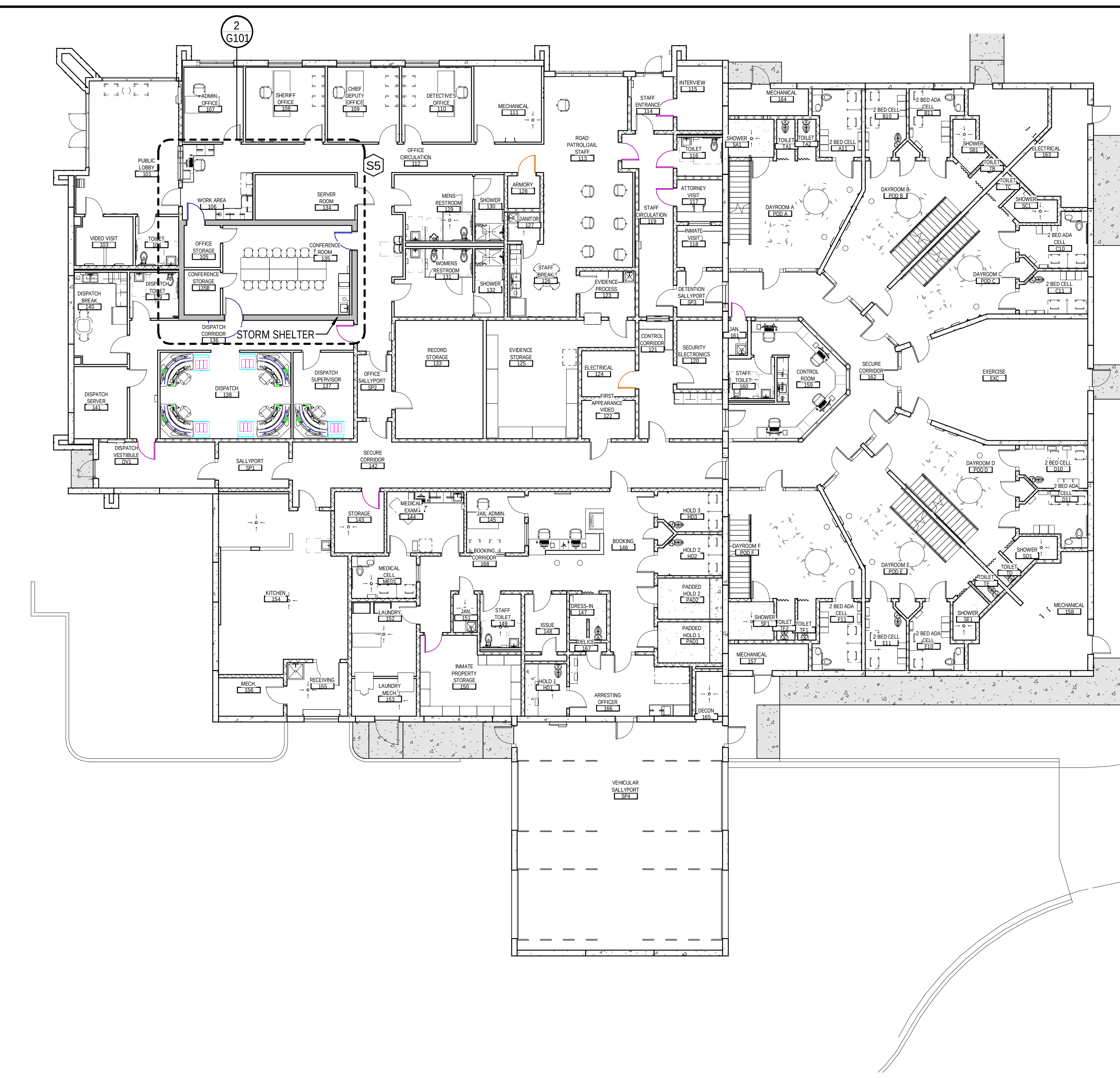
SIGN TYPES



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.

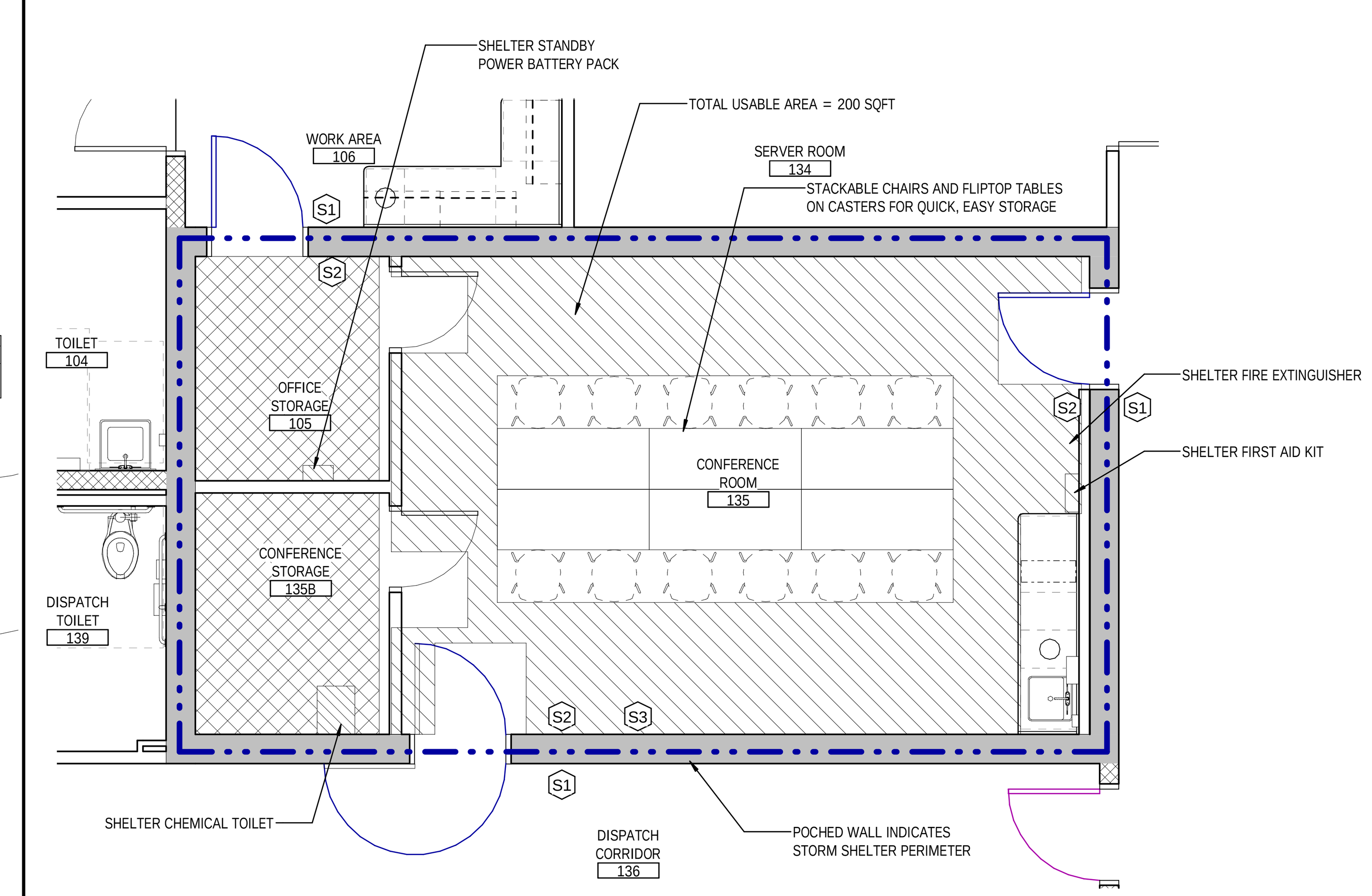




1 01 - FIRST FLOOR STORM SHELTER CODE PLAN
1/16" = 1'-0" | A2/A151
SCALE: 1/16" = 1'-0"

AREA LEGEND

ACCESSORY SHELTER AREA
USABLE SHELTER AREA



2 01 - ENLARGED STORM SHELTER CODE PLAN
1/4" = 1'-0" | 1/G101
SCALE: 1/4" = 1'-0"

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BID & PERMIT

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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

Drawn by: Author

STORM SHELTER CODE PLAN

G101

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FIRESTOP GENERAL NOTES:

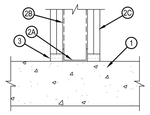
1. THE FIRESTOP SYSTEMS SHOWN ON THIS SHEET ARE IDENTIFIED BY THE ARCHITECT AS A BASIS OF DESIGN. REFER TO SPECIFICATIONS FOR MORE INFORMATION.
2. THE CONTRACTOR IS RESPONSIBLE TO COORDINATE WITH ALL TRADES TO ENSURE THE UL RATING OF THE FIRE STOP SYSTEM MEETS THE PROJECT REQUIREMENTS.

System No. BW-S-0001

BWS 9001

Classified by Underwriters Laboratories, Inc. to UL 2079 and CAN/ULC-S115

ANSI/UL2079	CAN/ULC S115
Assembly Ratings — 1 and 2 Hr (See Item 2)	F Ratings — 1 and 2 Hr (See Item 2)
Nominal Joint Width - 3/4 In.	FT Ratings — 1 and 2 Hr (See Item 2)
L Rating at Ambient — Less than 1 CFM/Lin Ft	FH Ratings — 1 and 2 Hr (See Item 2)
L Rating at 400° F — Less than 1 CFM/Lin Ft	FTH Ratings — 1 and 2 Hr (See Item 2)
	Nominal Joint Width - 3/4 In.
	L Rating at Ambient — Less than 1 CFM/Lin Ft
	L Rating at 400° F — Less than 1 CFM/Lin Ft



1. Floor Assembly — Min 4-1/2 In. (114 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m3) structural concrete. Floor may also be constructed of any 6 in. (152 mm) thick UL Classified hollow-core Precast Concrete Units". See Precast Concrete Units category in the Fire Resistance Directory for names of manufactures.
2. Wall Assembly — The 1 or 2 h fire-rated gypsum board/steel stud wall assembly shall be constructed of the materials and in the manner specified in the individual U400 or V400 Series Wall or Partition Design in the UL Fire Resistance Directory. In addition, the wall may incorporate a head-of-wall joint system constructed as specified in the HW Series Joint Systems in the UL Fire Resistance Directory. The wall shall include the following construction features:
   A. Steel Floor Runner — Floor runners of wall assembly shall consist of min No. 25 gauge galv steel channels sized to accommodate steel studs (Item 2B). Floor runners to be provided with min 1-1/4 in. (32 mm) flanges. Runners secured with steel fasteners spaced 12 in. (305 mm) OC.
   B. Studs — Steel studs to be min 2-1/2 in. (64 mm) wide. Studs cut 1/2 to 3/4 in. (13 to 19 mm) less in length than assembly height with bottom nesting in, resting on and fastened to floor runner with sheet metal screws. Stud spacing not to exceed 24 in. (610 mm) OC.
   C. Gypsum Board* — Gypsum board installed to a min total thickness of 5/8 or 1-1/4 in. (16 or 32 mm) on each side of wall for a 1 or 2 hr rated wall, respectively. Wall to be constructed as specified in the individual U400 or V400 Series Design in the UL Fire Resistance Directory, except that a max 3/4 in. (19 mm) gap shall be maintained between the bottom of gypsum board and top of concrete floor. The hourly fire rating of the joint system is equal to the hourly fire rating of the wall.
3. Fill, Void or Cavity Material* Sealant — Max separation between top of floor and bottom of gypsum board is 3/4 in. (19 mm). For 1 and 2 hr rated wall assemblies, min 5/8 in. or 1-1/4 in. (16 or 1-1/4 mm) thickness of fill material, respectively, installed on each side of the wall between the bottom of the gypsum board and the top of the concrete floor, flush with each surface of the wall.
HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CP601S Elastomeric Firestop Sealant, CP606 Flexible Firestop Sealant, CFS-S SIL GG, FS-ONE Sealant or FS-ONE MAX Intumescent Sealant

* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

Hilti Firestop Systems

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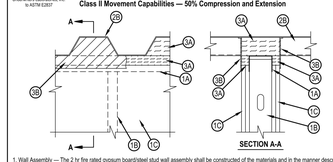
F12 UL Assembly: BW-S-0001

System No. CJ-D-0004

CJD 0004

Joint Rating — 2 Hr
Nominal Joint Width — 1-1/2 in.
Class II Movement Capabilities — 50% Compression and Extension

Classified by Underwriters Laboratories, Inc. to ASTM E2837



1. Wall Assembly — The 2 hr fire rated gypsum board/steel stud wall assembly shall be constructed of the materials and in the manner described in the individual U400, V400 or W400 Series Wall and Partition Design in the UL Fire Resistance Directory and shall include the following construction features:
   A. Steel Floor And Ceiling Runners — Floor and ceiling runners of wall assembly shall consist of galv steel channels sized to accommodate steel studs (Item 1B). Flange height of ceiling runner shall be min 1/4 in. (6 mm) greater than max extended joint width. Ceiling runner installed perpendicular to direction of fluted steel deck and secured to valleys with steel fasteners or welds spaced max 24 in. (610 mm) OC.
   A1. Light Gauge Framing* — (XHL) - Slotted Ceiling Runner — As an alternate to the ceiling runner in Item 1A, slotted ceiling runner to consist of galv steel channel with slotted flanges sized to accommodate steel studs (Item 1B). Slotted ceiling runner installed perpendicular to direction of fluted steel deck and secured to valleys with steel fasteners or welds spaced max 24 in. (610 mm) OC.
   BRADY CONSTRUCTION INNOVATIONS INC, DBA SLPTRACK SYSTEMS — SLP-TRK
   CALIFORNIA EXPANDED METAL PRODUCTS CO — CST
   CLARKDIETRICH BUILDING SYSTEMS — Type SLT, SLT-H
   CONSOLIDATED FABRICATORS CORP, BUILDING PRODUCTS DIV — SDT250, SDT300
   MARINOWARE, DIV OF WARE INDUSTRIES INC — Type SLT
   METAL-LITE INC — The System
   OLMAR SUPPLY INC — STT250, STT300
   SCAFCO STEEL STUD MANUFACTURING CO — Slotted Track
   TELLING INDUSTRIES L L C — True-Action Deflection Track
   A2. Light Gauge Framing* — (VHL) - Vertical Deflection Ceiling Runner — When the nom joint width is less than or equal to 3/4 in. (19 mm), vertical deflection ceiling runner may be used as an alternate to the ceiling runners in Items 1A and 1A1. Vertical deflection ceiling runner to consist of galv steel channel with slotted vertical deflection clips mechanically fastened within runner. Slotted clips provided with step bushings for permanent fastening of steel studs. Flanges sized to accommodate steel studs (Item 1B). Vertical deflection ceiling runner installed perpendicular to direction of fluted steel deck and secured to valleys with steel fasteners or welds spaced max 24 in. (610 mm) OC.
   THE STEEL NETWORK INC — VertiTrack VTD250, VTD362, VTD400, VTD600 and VTD800
   A3. Light Gauge Framing* — (XHL) - Notched Ceiling Runner — As an alternate to the ceiling runners in Items 1A through 1A3, notched ceiling runners to consist of C-shaped galv steel channel with notched return flanges sized to accommodate steel studs (Item 1B). Notched ceiling runner installed perpendicular to direction of fluted steel deck and secured to valleys with steel fasteners or welds spaced max 24 in. (610 mm) OC.
   OLMAR SUPPLY INC — Type SCR

Hilti Firestop Systems

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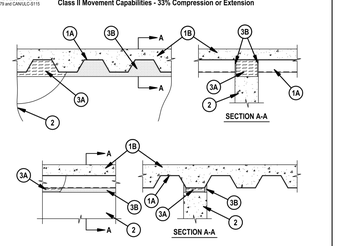
System No. HW-D-0081

HWD 0081

Assembly Rating - 2 Hr
Nominal Joint Width - 3/4 in.
Class II Movement Capabilities - 33% Compression or Extension

Classified by Underwriters Laboratories, Inc. to UL 2079 and CAN/ULC-S115



1. Floor Assembly — The fire-rated fluted steel floor unit/concrete floor assembly shall be constructed of the materials and in the manner described in the individual D700 or D900 Floor-Ceiling Design in the Fire Resistance Directory and shall include the following construction features:
   A. Steel Floor and Form Units* — Max 3 in. deep galv steel fluted floor units.
   B. Concrete — Min 2-1/2 in. thick reinforced concrete, as measured from the top plane of the floor units.
1A. Roof Assembly — (Not Shown) — As an alternate to the floor assembly, a fire rated fluted steel deck roof assembly may be used. The roof assembly shall be constructed of the materials and in the manner described in the individual P900 Series Roof-Ceiling Design in the UL Fire Resistance Directory. The hourly rating of the roof assembly shall be equal to or greater than the hourly rating of the wall assembly. The roof assembly shall include the following construction features:
   A. Steel Roof Deck — Max 3 in. deep galv steel fluted roof deck.
   B. Roof Insulation — Min 2-1/4 in. thick poured insulating concrete, as measured from the top plane of the floor units.
2. Wall Assembly — Min 5 in. thick steel reinforced lightweight or normal weight (100-150 pcf) concrete. Wall may also be constructed of an UL Classified Concrete Blocks*.
   See Concrete Block (CAZT) category in the Fire Resistance Directory for names of manufacturers.

Hilti Firestop Systems

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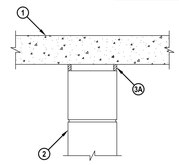
System No. HW-D-0268

HWD 0268

Classified by Underwriters Laboratories, Inc. to UL 2079 and CAN/ULC-S115

ANSI/UL2079	CAN/ULC S115
Assembly Ratings — 1, 2 and 3 Hr (See Item 3)	F Ratings — 1, 2 and 3 Hr (See Item 3)
Nominal Joint Width - 1 In.	FT Ratings — 1, 2 and 3 Hr (See Item 3)
Class II or III Movement Capabilities — 12.5% Compression or Extension	FH Ratings — 1, 2 and 3 Hr (See Item 3)
L Rating At Ambient — Less Than 1 CFM/ft	FTH Ratings — 1, 2 and 3 Hr (See Item 3)
L Rating At 400 F — Less Than 1 CFM/ft	Nominal Joint Width - 25 mm
	Class II or III Movement Capabilities — 12.5% Compression or Extension
	L Rating At Ambient — Less Than 1.5 L/s/m
	L Rating At 204 C — Less Than 1.5 L/s/m



Hilti Firestop Systems

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System No. CJ-D-0004

CJD 0004

B. Studs — Steel studs to be min 3-1/2 in. (89 mm) wide. Studs cut 3/4 in. (19 mm) less in length than assembly height with bottom nesting in and resting on floor runner and with top nesting in ceiling runner without attachment. When slotted ceiling runner (Item 1A1) is used, steel studs secured to slotted ceiling runner with No. 8 by 1/2 in. (13 mm) long wafer head steel screws at midheight of slot on each side of wall. When vertical deflection ceiling runner (Item 1A2) is used, steel studs secured to slotted vertical deflection clips, through the bushings, with steel screws at midheight of each slot. Stud spacing not to exceed 24 in. (610 mm) OC.
C. Gypsum Board* — (CKNX)- Min 5/8 in. (16 mm) thick gypsum board sheets installed on each side of wall. Wall to be constructed as specified in the individual Wall and Partition Design in the UL Fire Resistance Directory, except that a max 1-1/2 in. (38 mm) gap shall be maintained between the top of the gypsum board and the bottom of the steel deck units and the top row of screws shall be installed into the studs 3-1/2 to 4 in. (89 to 102 mm) below the lower surface of the floor or roof.
2. Nonrated Horizontal Assembly — The nonrated horizontal assembly shall be constructed of the materials as described below:
   A. Supports (Not Shown) — Structural steel or other members supporting the steel deck.
   B. Steel Deck — Max 3 in. (76 mm) deep by min 20 MSG galv steel deck, fluted max 12 in. (305 mm) on center. Welded or mechanically fastened to supports (Item 2A).
   C. Concrete (Not Shown, Optional) — Steel deck may be topped with reinforced concrete. Thickness of concrete may vary.
3. Joint System — Max separation between bottom of steel deck and top of wall assembly at time of installation of joint system is 1-1/2 in. (38 mm). Joint system is designed to accommodate a max 50 percent compression or extension from its installed width. The joint system consists of forming material and a fill material, as follows:
   A. Forming Material* — Non 4 pcf (64 kg/m3) density mineral wool batt insulation cut approx 25 percent wider than the flutes and with a length approx equal to the overall thickness of the wall. Multiple pieces stacked on top of each other, as needed, and then compressed 50 percent in thickness and inserted into the flutes of the steel deck above the top of the ceiling runner. The mineral wool batt insulation is to project beyond each side of the ceiling runner, flush with wall surfaces. Additional 1-1/4 in. (32 mm) wide strips of nom 4 pcf (64 kg/m3) mineral wool batt insulation are to be cut to fill the gap between the top of the gypsum board and bottom of the steel deck. The strips of mineral wool are compressed 50 percent and tightly packed, cut edge first, into the gap between the top of the gypsum board and bottom of the steel deck on both sides of the wall.
   ROCK WOOL MANUFACTURING CO — Delta-Board
   ROXUL INC — SAFE
   THERMAFIBER INC — Type SAF
   A1. Forming Material*—Plugs — (Optional, Not Shown) Preformed mineral wool plugs, formed to the shape of the fluted floor units, friction fit to completely fill the flutes above the ceiling channel. The plugs shall project beyond each side of the ceiling runner, flush with wall surfaces. Additional forming material, described in Item 3A2, to be used in conjunction with the plugs to fill the gap between the top of gypsum board and bottom of steel deck.
   HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CP777 Speed Plugs
   A2. Forming Material* - Strips — (Optional) - Nom 1-1/4 in. (16 or 32 mm) wide precut mineral wool strips. The strips are compressed 50 percent and firmly packed, cut edge first, into the gap between the top of the gypsum board and bottom of the steel deck on both sides of the wall.
   HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CP 767 Speed Strips
   B. Fill, Void or Cavity Material* — Min 1/16 in. (1.6 mm) dry thickness (1/8 in. or 3.2 mm wet thickness) of fill material sprayed or troweled on each side of the wall to completely cover mineral wool forming material and to overlap a min of 1/2 in. (13 mm) onto gypsum board and steel deck on both sides of wall.
   HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CFS-SP WB Firestop Joint Spray
*Bearing the UL Classification Mark

Hilti Firestop Systems

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System No. HW-D-0081

HWD 0081

Assembly Rating - 2 Hr
Nominal Joint Width - 3/4 in.
Class II Movement Capabilities - 33% Compression or Extension

Classified by Underwriters Laboratories, Inc. to UL 2079 and CAN/ULC-S115

3. Joint System — Max separation between bottom of floor or roof and top of wall is 3/4 in. The joint system is designed to accommodate a max 33 percent compression or extension from its installed width. The joint system consists of a packing material and a fill material between the top of the wall and the bottom of the floor or roof, as follows:
Configuration A
   A. Forming Material — Min 4 in. thickness of 4 pcf density mineral wool batt insulation was cut to the shape of the fluted deck, approximately 20 percent larger than the area of the flutes and compressed into the flutes of the steel deck above the wall assembly. The forming material shall be recessed 1/2 in. from each side of the wall. Additional pieces of forming material, compressed min 50 percent in thickness and installed edge first into joint opening between bottom of steel deck and top of wall, parallel with joint direction. Compressed batt sections recessed 1/2 in. from both wall surfaces. Adjoining lengths of batt to be tightly butted with butted seams spaced min 48 in. apart along the length of the joint.
   FIBREX INSULATIONS INC — FBX Salting Insulation
   A1. Forming Material*—Plugs — (Optional-Not Shown) Preformed mineral wool plugs, formed to the shape of the fluted deck, friction fit to completely fill the flutes. The plugs shall be recessed 1/2 in. from both wall surfaces. Additional forming material, described in Item 3A, to be used in conjunction with the plugs to fill the gap between the top of the wall and bottom of steel deck.
   HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CP777 Speed Plugs
   B. Fill, Void or Cavity Material* - Sealant — Min 1/2 in. thickness of fill material installed on each side of the wall in the flutes of the steel deck and between the top of the wall and the bottom of the steel deck, flush with each surface of the wall.
   HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CP606 Flexible Firestop Sealant
Configuration B
   A. Forming Material — Min 4 in. thickness of 4 pcf density mineral wool batt insulation compressed min 50 percent in thickness and installed edge first into joint opening between bottom of steel deck and top of wall, parallel with joint direction. Compressed batt sections recessed 1/2 in. from both wall surfaces. Adjoining lengths of batt to be tightly butted with butted seams spaced min 48 in. apart along the length of the joint.
   FIBREX INSULATIONS INC — FBX Salting Insulation
   B. Fill, Void or Cavity Material* - Sealant — Min 1/2 in. thickness of fill material installed on each side of the wall between the top of the wall and the bottom of the steel deck, flush with each surface of the wall.
   HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CP606 Flexible Firestop Sealant
*Bearing the UL Classification Mark

Hilti Firestop Systems

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System No. HW-D-0268

HWD 0268

1. Floor Assembly — Min 2-1/2 in. (64 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m3) structural concrete except that min thickness of floor is 4-1/2 in. (114 mm) when concrete wall (Item 2) thickness is 4-1/2 in. (114 mm). Floor may also be constructed of any min 6 in. (152 mm) thick UL Classified hollow-core Precast Concrete Units*.
   See Precast Concrete Units (CFTV) category in the Fire Resistance Directory for names of manufacturers.
2. Wall Assembly — Min 8 in. (203 mm) thick steel reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m3) structural concrete. As an option, for assembly ratings of 1 and 2 hr, the wall may be min 4-1/2 in. (114 mm) thick steel reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m3) structural concrete. Wall may also be constructed of any UL Classified Concrete Blocks*.
   See Concrete Blocks (CAZT) category in the Fire Resistance Directory for names of manufacturers.
3. Joint System — Max separation between bottom of floor assembly and top of concrete wall at time of installation is 1 in. (25 mm). The joint system is designed to accommodate a max 12.5 percent compression or extension from its installed width. The joint system shall consists of the following:
   A. Fill, Void or Cavity Material* - Sealant — A min 1/4 in. (6 mm) or min 1/2 in. (13 mm) thickness of fill material installed within the joint, flush with each surface of the wall, as specified in Table below.
   HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CP606 Flexible Firestop Sealant
   B. Forming Material — (Optional, Not Shown) - Mineral wool insulation or open or closed cell polyethylene or polyurethane foam backer rod. Forming material to be recessed from both surfaces of the wall as required to accommodate the required thickness of fill material.

Hourly Rating of Joint	Min Floor Thickness In. (mm)	Min Wall Thickness In. (mm)	Max Nom Joint Width In. (mm)	Min Sealant (Item 3A) Thickness In. (mm)	Forming Material (Item 3B)
1 and 2	4.5 (114)	4.5 (114)	1 (25)	1/4 (6)	Optional
3	2.5 (64)	8 (203)	1 (25)	1/2 (13)	Optional

* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

Hilti Firestop Systems

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Page: 2 of 2

A12 UL Assembly: CJ-D-0004

A10 UL Assembly: HW-D-0081

A8 UL Assembly: HW-D-0268

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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

Drawn by: NML

UL ASSEMBLIES - JOINTS

G131

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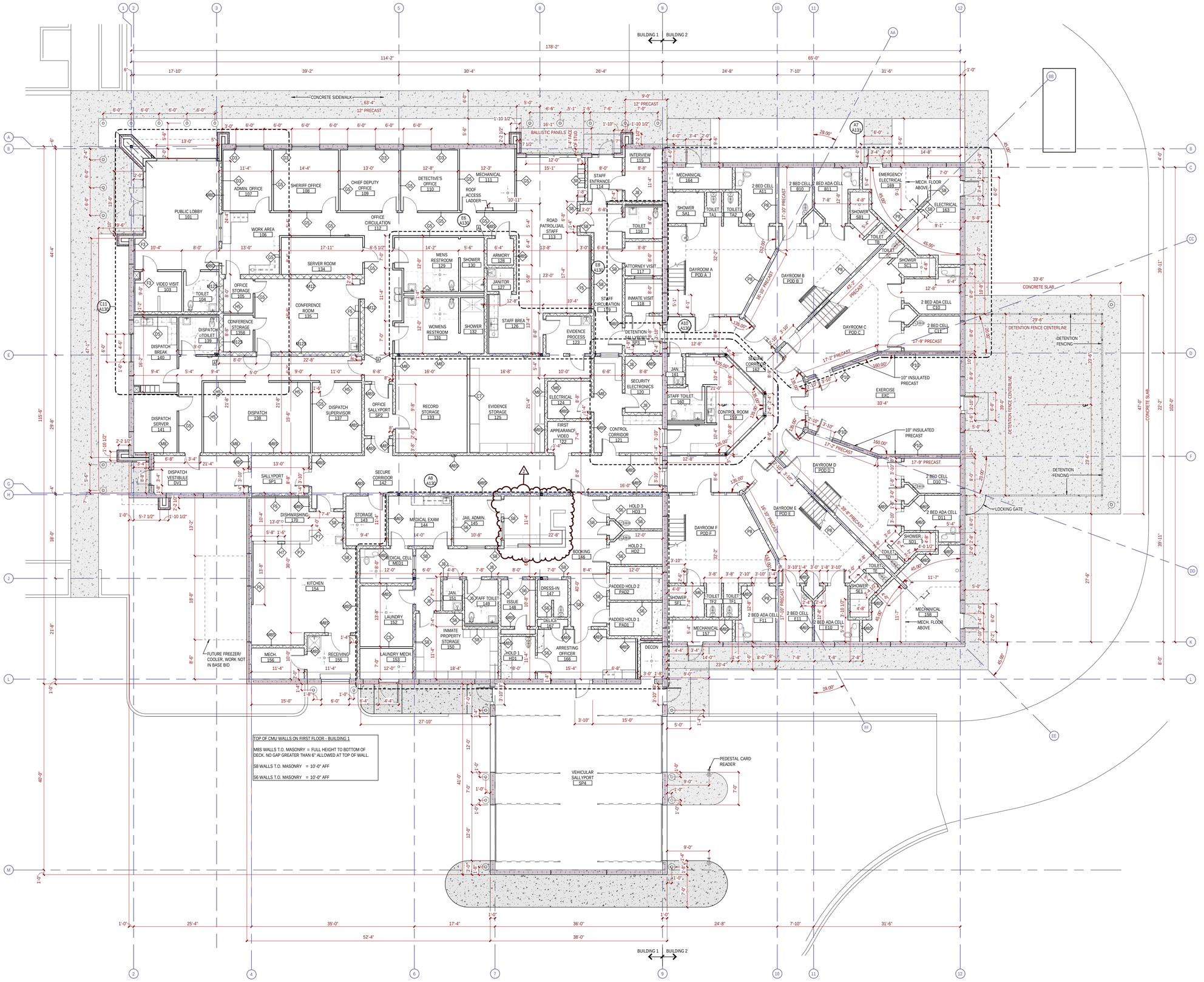

GENERAL FLOOR PLAN NOTES

1. WHERE PARTITIONS OF VARIOUS THICKNESSES MEET, MAINTAIN A FLUSH SURFACE ON THE SIDE WHERE FACES ARE STRAIGHT AND CONTINUOUS, UNLESS NOTED OTHERWISE.
2. ALL DOOR OPENINGS SHALL BE 4" FROM A PERPENDICULAR PARTITION TO THE OUTSIDE FACE OF FRAME UNLESS NOTED OTHERWISE.
3. SPRINKLER CONTRACTOR SHALL COORDINATE SPRINKLER LOCATIONS WITH WALL HUNG EQUIPMENT TO PROVIDE PROPER COVERAGE.
4. TYPICAL GYPSUM BOARD PARTITION TYPE IS TYPE G5. ALL NEW GYPSUM BOARD PARTITIONS SHALL BE TYPE G5 UNLESS NOTED OTHERWISE. PARTITIONS NOT DESIGNATED WITH A PARTITION TYPE SYMBOL SHALL BE TYPE G5.

PLAN SYMBOLS LEGEND

- NEW DOOR & FRAME
- STOREFRONT DOOR & FRAME
- NEW WALL
- EXISTING WALL
- X/A000 — INTERIOR ELEVATION TAG
- A000/X — EXTERIOR ELEVATION TAG
- X/A000 — CALLOUT TAG
- X/A000 — SECTION: BUILDING SECTION
- X/A000 — SECTION: WALL SECTION
- X/A000 — SECTION: DETAIL SECTION
- X — COLUMN GRID LINE: NEW
- X — COLUMN GRID LINE: EXISTING
- Exxx — EQUIPMENT TAG
- Fxxx — FURNITURE TAG
- XXX — DOOR & BORROWED LIGHT TAG
- XXX — DOOR & BORROWED LIGHT TAG (DETENTION)
- 00 — EXTERIOR WINDOW TAG
- X — PARTITION TYPE TAG
- 00 — CURTAIN WALL / STOREFRONT TAG
- X/XXX — ROOM NAME & NUMBER TAG
- A — ALIGN FACE OF MATERIALS SYMBOL
- CR — CARD READER
- DO — DOOR OPERATOR / TOUCHLESS ACTUATOR
- # — FLOOR PLAN / FINISH PLAN KEYNOTE
- D — DURESS BUTTON

FLOOR PLAN KEYNOTES

1	4" WIDE PAINTED LINE ON THE FLOOR
2	SEMI-RECESSED FIRE EXTINGUISHER CABINET
3	SURFACE MOUNTED FIRE EXTINGUISHER CABINET
4	ACCESS LADDER, RE: STRUCTURAL
5	OFFICE FURNITURE (OFOI).
6	PROVIDE 3/4" FIRE-TREATED PLYWOOD PANELS TO FACE OF GYP BD AS REQUIRED FOR FIRE ALARM CONTROL PANEL. DO NOT PAINT ENTIRE PLYWOOD PANEL; LEAVE AT LEAST ONE FIRE-TREATED LABEL VISIBLE ON EACH PANEL.
7	MUGSHOT PHOTO BACKDROP TO BE ALIGNED WITH MUGSHOT CAMERA AT BOOKING DESK.
8	MONITOR MOUNTED ON WALL AT 72" A.F.F. TO THE CENTERLINE.
9	4" DIA. CONCRETE BOLLARD TO CAUTION OVERHEAD CLEARANCE. RE: DETAIL A8/A531 PAINT PER FINISH PLAN
10	1" EXPANSION JOINT AT CMU PARTITION, RE: STRUCTURAL
11	EXTERIOR BOLLARDS, RE: CIVIL FOR DETAILS
12	CARD READER PEDESTAL, RE: SECURITY/ELECTRONICS
13	RECESS MOUNT KNOXBOX. MOUNTED @ 48" TO CENTER OF BOX
14	FUTURE MANUAL ROLLING STORAGE BY OTHERS. FLOOR TRACKS TO BE MOUNTED ON THE CONCRETE SLAB.
15	PIPE CHASE FOR ROOF STORM DRAINS
16	PICK-PROOF SEALANT AT EACH SIDE OF COLUMN, TYPICAL
17	FLUSHING FLOOR DRAIN VALVE COVER, RE: MEP
18	SOUTHERN STEEL 1080A-2 GATE LOCKSET. USE G-MOUNT ON GATE.
19	FIRE EXTINGUISHER

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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

Drawn by: MJR

DIMENSION FLOOR PLAN

A101

A501 - FIRST FLOOR DIMENSION PLAN
1/8" = 1'-0" | A2/A151

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

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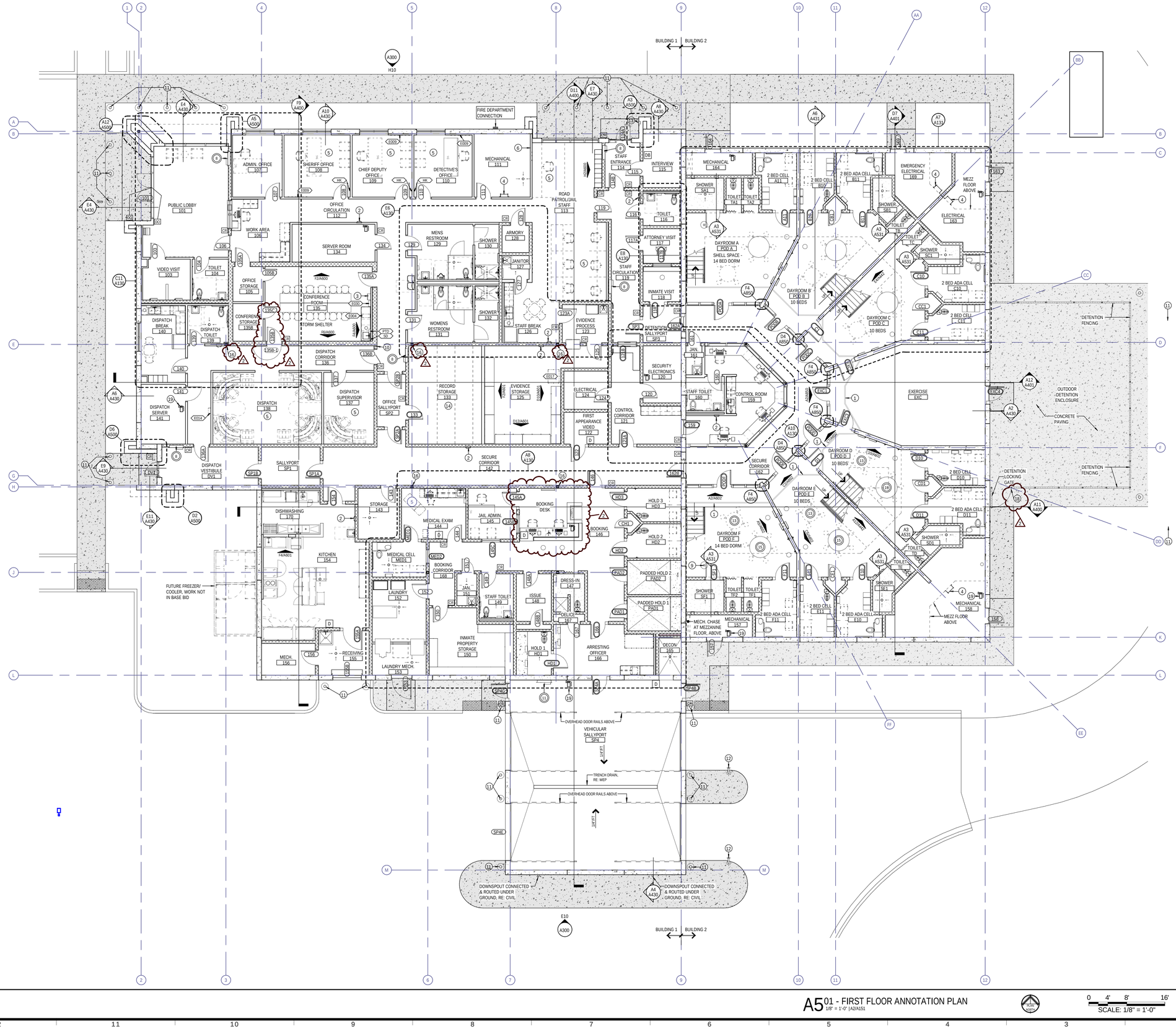

GENERAL FLOOR PLAN NOTES

1. WHERE PARTITIONS OF VARIOUS THICKNESSES MEET, MAINTAIN A FLUSH SURFACE ON THE SIDE WHERE FACES ARE STRAIGHT AND CONTINUOUS, UNLESS NOTED OTHERWISE.
2. ALL DOOR OPENINGS SHALL BE 4" FROM A PERPENDICULAR PARTITION TO THE OUTSIDE FACE OF FRAME UNLESS NOTED OTHERWISE.
3. SPRINKLER CONTRACTOR SHALL COORDINATE SPRINKLER LOCATIONS WITH WALL HUNG EQUIPMENT TO PROVIDE PROPER COVERAGE.
4. TYPICAL GYPSUM BOARD PARTITION TYPE IS TYPE G5. ALL NEW GYPSUM BOARD PARTITIONS SHALL BE TYPE G5 UNLESS NOTED OTHERWISE. PARTITIONS NOT DESIGNATED WITH A PARTITION TYPE SYMBOL SHALL BE TYPE G5.

PLAN SYMBOLS LEGEND

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- A000 X — EXTERIOR ELEVATION TAG
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- A000 — SECTION: WALL SECTION
- X A000 — SECTION: DETAIL SECTION
- X — COLUMN GRID LINE: NEW
- X — COLUMN GRID LINE: EXISTING
- Exxx — EQUIPMENT TAG
- Fxxx — FURNITURE TAG
- XXX — DOOR & BORROWED LIGHT TAG
- XXX — DOOR & BORROWED LIGHT TAG (DETENTION)
- 00 — EXTERIOR WINDOW TAG
- X — PARTITION TYPE TAG
- 00 — CURTAIN WALL / STOREFRONT TAG
- X XXX — ROOM NAME & NUMBER TAG
- A — ALIGN FACE OF MATERIALS SYMBOL
- CR — CARD READER
- DC — DOOR OPERATOR / TOUCHLESS ACTUATOR
- # — FLOOR PLAN / FINISH PLAN KEYNOTE
- D — DURESS BUTTON

FLOOR PLAN KEYNOTES

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2	SEMI-RECESSED FIRE EXTINGUISHER CABINET
3	SURFACE MOUNTED FIRE EXTINGUISHER CABINET
4	ACCESS LADDER, RE: STRUCTURAL
5	OFFICE FURNITURE (OFOI).
6	PROVIDE 3/4" FIRE-TREATED PLYWOOD PANELS TO FACE OF GYP BD AS REQUIRED FOR FIRE ALARM CONTROL PANEL. DO NOT PAINT ENTIRE PLYWOOD PANEL; LEAVE AT LEAST ONE FIRE-TREATED LABEL VISIBLE ON EACH PANEL.
7	MUGSHOT PHOTO BACKDROP TO BE ALIGNED WITH MUGSHOT CAMERA AT BOOKING DESK.
8	MONITOR MOUNTED ON WALL AT 72" A.F.F. TO THE CENTERLINE.
9	4" DIA. CONCRETE BOLLARD TO CAUTION OVERHEAD CLEARANCE. RE: DETAIL A8/AS31 PAINT PER FINISH PLAN
10	1" EXPANSION JOINT AT CMU PARTITION, RE: STRUCTURAL
11	EXTERIOR BOLLARDS, RE: CIVIL FOR DETAILS
12	CARD READER PEDESTAL, RE: SECURITY/ELECTRONICS
13	RECESS MOUNT KNOXBOX. MOUNTED @ 48" TO CENTER OF BOX
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15	PIPE CHASE FOR ROOF STORM DRAINS
16	PICK-PROOF SEALANT AT EACH SIDE OF COLUMN, TYPICAL
17	FLUSHING FLOOR DRAIN VALVE COVER, RE: MEP
18	SOUTHERN STEEL 1080A-2 GATE LOCKSET. USE G-MOUNT ON GATE.
19	FIRE EXTINGUISHER

A501 - FIRST FLOOR ANNOTATION PLAN

1/8" = 1'-0" | A2/A151

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

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KLINGNER ARCHITECT PROJECT # 22-4046

Date: 03/01/2024

	Issue	Date
2	Addendum 02	03-20-2024

Drawn by: Author

ANNOTATION FLOOR PLAN

A102

3/20/2024 1:19:30 PM

EQUIPMENT SCHEDULE

CODE	ITEM DESCRIPTION	RESPONSIBILITY OFOI	OFCI	CFCI	COMMENTS
E001	Computer Monitor (Desktop)	X			
E002	Exam Table	X			
E003	Printer/Copy/Fax (Floor)	X			
E004	Coffee Maker	X			
E005	Microwave	X			
E006	UC Refrigerator	X			
E007	PHONE (DESKTOP)	X			
E008	Breathalyzer (Countertop)	X			
E009	Tack Board		X		
E010	TRASH BIN (24 GAL)	X			
E011	Commercial Washer			X	SEE SECTION 11 1100
E012	Commercial Dryer (Gas)			X	SEE SECTION 11 1100
E013	AUTOMATED CONTROLLED SUBSTANCE DISPENSER	X			
E014	PAY STATION CLOCK	X			
E015	TV MONITOR (52")		X		CONTRACTOR TO PROVIDE BLOCKING
E016	52" ENCARTELE MESSAGE MONITOR		X		CONTRACTOR TO PROVIDE BLOCKING
E017	Refrigerator (full size w/out ice Maker)	X			
E018	Marker Board		X		
E019	Folding Table	X			
E020	Package Pass			X	SEE SECTION 10 2813.63 - 7 5/8" WALL
E021	Drop-in Deal Tray			X	
E022	COMMISSARY KIOSK	X			
E023	RED BAG TRASH (24 GAL)	X			
E024	Mugshot Camera	X			
E025	Mugshot Photo Backdrop	X			
E026	Laundry Cart	X			
E027	32" ENCARTELE MESSAGE MONITOR		X		CONTRACTOR TO PROVIDE BLOCKING
E028	BROCHURE RACK	X			
E029	Refrigerator/Freezer (full-size, w/ ice maker)		X		CONTRACTOR TO PROVIDE WATER LINE
E030	First Aid Box (wall-mounted)	X			
E031	Body Scanner	X			
E032	Wall-mounted Coat Rack (24" W)			X	
E033	Live Scan	X			

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	FLOOR 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

GENERAL FLOOR PLAN NOTES

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- NEW DOOR & FRAME
- STOREFRONT DOOR & FRAME
- NEW WALL
- EXISTING WALL
- INTERIOR ELEVATION TAG (X/A000)
- EXTERIOR ELEVATION TAG (A000/X)
- CALLOUT TAG
- SECTION: BUILDING SECTION
- SECTION: WALL SECTION
- SECTION: DETAIL SECTION
- COLUMN GRID LINE: NEW
- COLUMN GRID LINE: EXISTING
- EQUIPMENT TAG (Exxx)
- FURNITURE TAG (Fxxx)
- DOOR & BORROWED LIGHT TAG (XXX)
- DOOR & BORROWED LIGHT TAG (DETENTION) (XXX)
- EXTERIOR WINDOW TAG (00)
- PARTITION TYPE TAG (X)
- CURTAIN WALL / STOREFRONT TAG (00)
- ROOM NAME & NUMBER TAG (X / XXX)
- ALIGN FACE OF MATERIALS SYMBOL (A)
- CARD READER (CR)
- DOOR OPERATOR / TOUCHLESS ACTUATOR (DO)
- FLOOR PLAN / FINISH PLAN KEYNOTE (#)
- DURESS BUTTON (D)

FLOOR PLAN KEYNOTES

1	4" WIDE PAINTED LINE ON THE FLOOR
2	SEMI-RECESSED FIRE EXTINGUISHER CABINET
3	SURFACE MOUNTED FIRE EXTINGUISHER CABINET
4	ACCESS LADDER, RE: STRUCTURAL
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7	MUGSHOT PHOTO BACKDROP TO BE ALIGNED WITH MUGSHOT CAMERA AT BOOKING DESK.
8	MONITOR MOUNTED ON WALL AT 72" A.F.F. TO THE CENTERLINE.
9	4" DIA. CONCRETE BOLLARD TO CAUTION OVERHEAD CLEARANCE. RE: DETAIL A5/A531 PAINT PER FINISH PLAN
10	1" EXPANSION JOINT AT CMU PARTITION. RE: STRUCTURAL
11	EXTERIOR BOLLARDS, RE: CIVIL FOR DETAILS
12	CARD READER PEDESTAL, RE: SECURITY/ELECTRONICS
13	RECESS MOUNT KNOXBOX. MOUNTED @ 48" TO CENTER OF BOX
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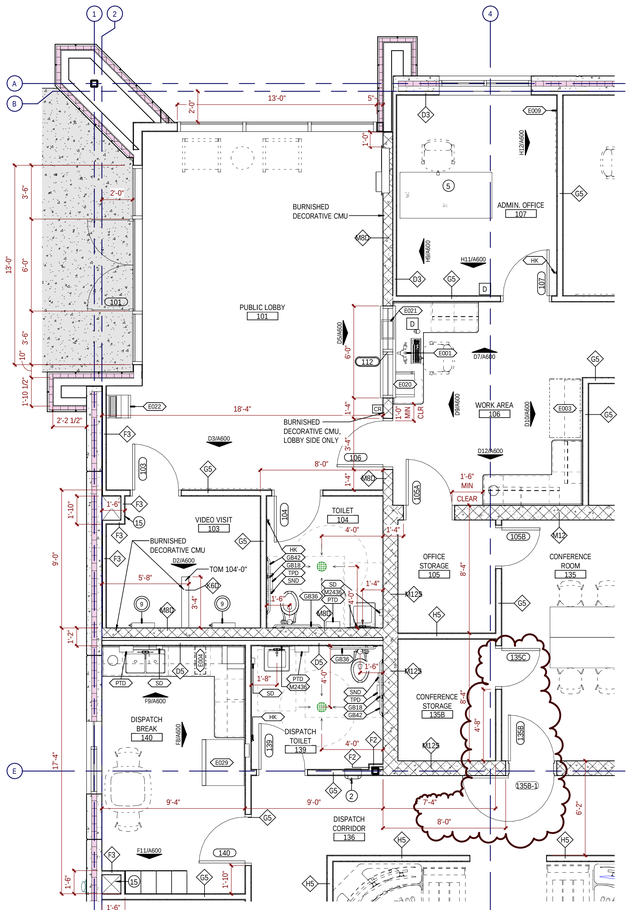
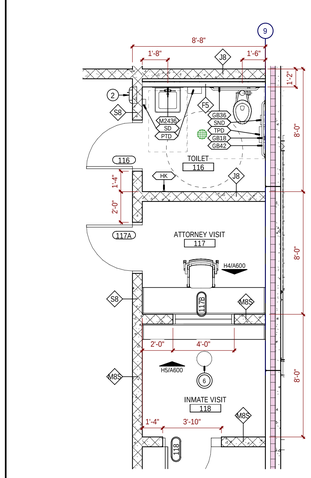
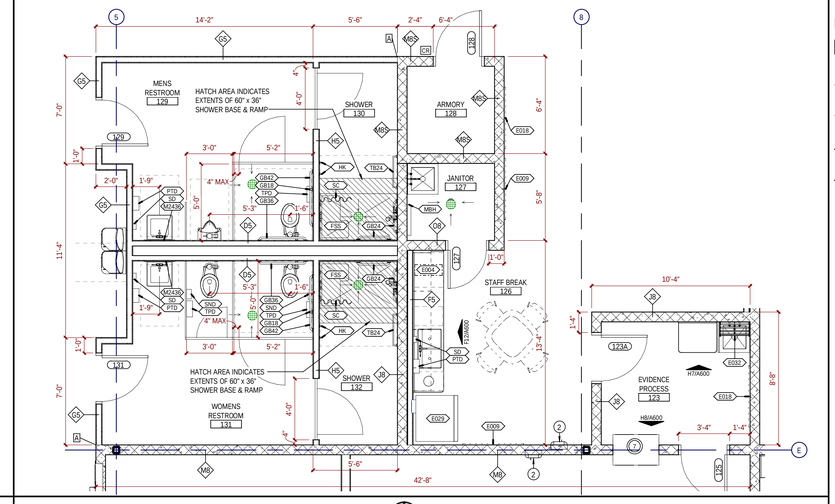
15	PIPE CHASE FOR ROOF STORM DRAINS
16	PICK-PROOF SEALANT AT EACH SIDE OF COLUMN, TYPICAL
17	FLUSHING FLOOR DRAIN VALVE COVER, RE: MEP
18	SOUTHERN STEEL 1080A-2 GATE LOCKSET. USE G-MOUNT ON GATE.
19	FIRE EXTINGUISHER



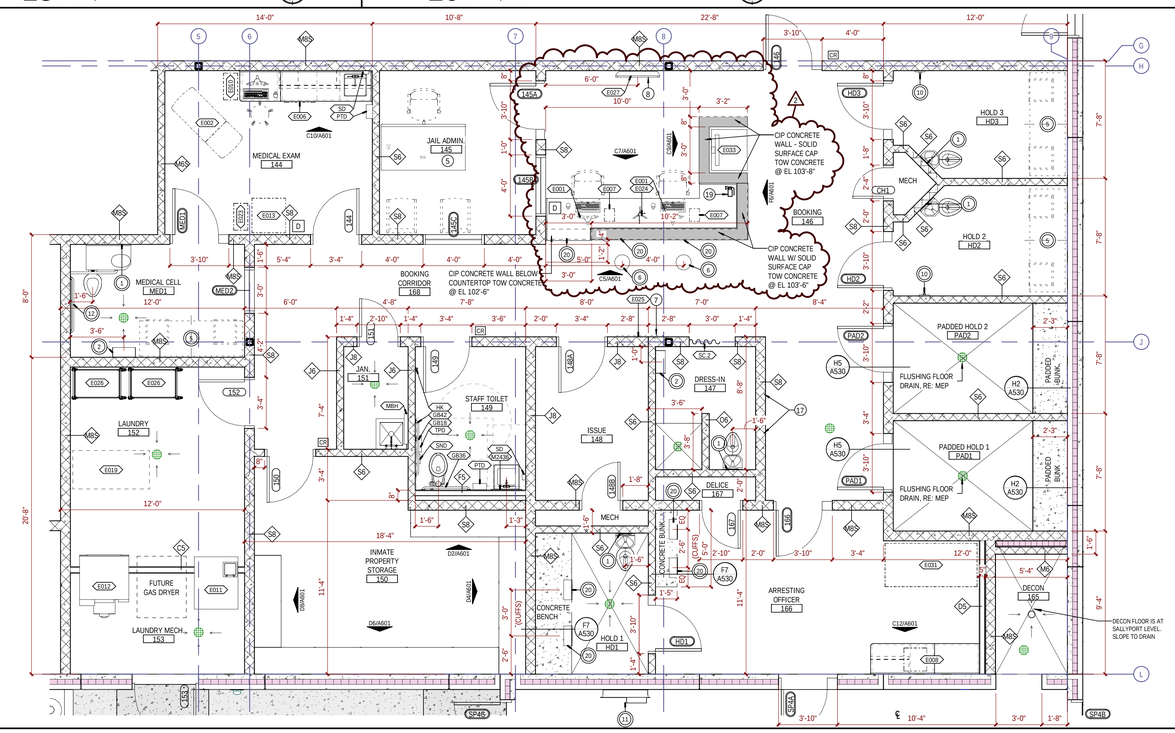
C11 01 - DISPATCH BREAK, TOILETS, VIDEO VISIT
1/4" = 1'-0" | A5/A101



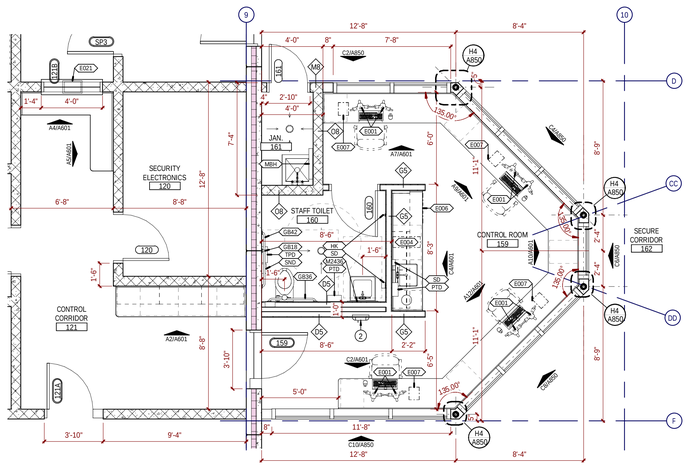
E8 01 - ATTORNEY VISIT AND TOILET
1/4" = 1'-0" | A5/A101



E6 01 - STAFF BREAK, EVIDENCE PROCESS
1/4" = 1'-0" | A5/A101



A8 01 - BOOKING, MEDICAL, HOLDING
1/4" = 1'-0" | A5/A101



A10 CONTROL ROOM
1/4" = 1'-0" | A5/A101

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KLINGNER ARCHITECT PROJECT # 22-4046
Date: 03/01/2024

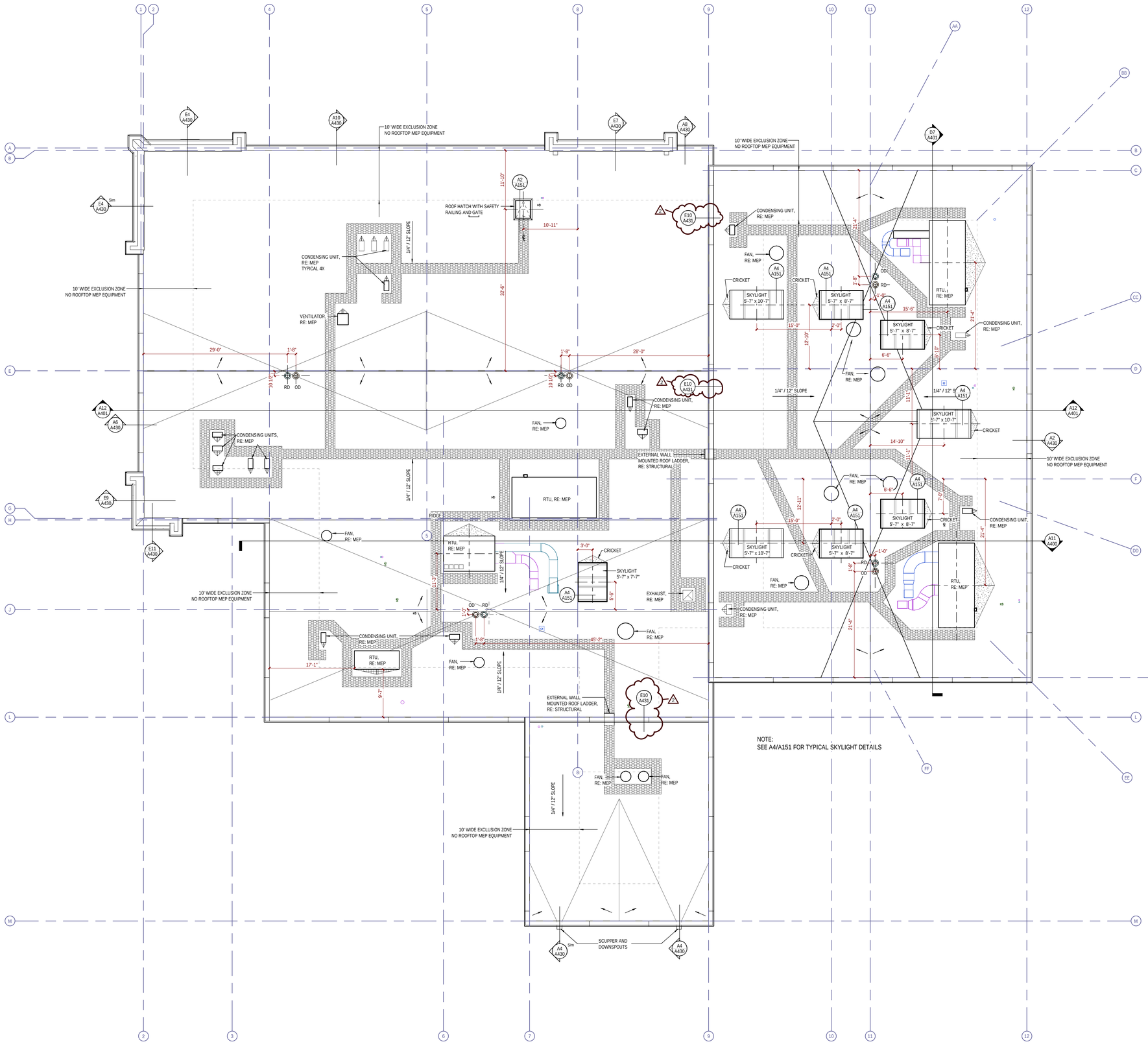
	Issue	Date
2	Addendum 02	03-20-2024

Drawn by: Author

ENLARGED PLANS

A130

3/20/2024 1:38:09 PM



GENERAL ROOF PLAN NOTES

1. PATCH AND REPAIR EXISTING ROOFING THAT IS REMOVED AND/OR DAMAGED FOR NEW WORK, INCLUDING WORK PERFORMED BY OTHER TRADES.
2. FLASH ALL CURB, PIPING AND OTHER PENETRATIONS PER ROOFING MANUFACTURER'S STANDARD DETAILS.
3. PROVIDE POSITIVE DRAINAGE AROUND AND AWAY FROM ALL ROOFTOP EQUIPMENT AND ROOF PENETRATIONS.
4. REFER TO MEP DRAWINGS FOR LOCATION OF PLUMBING VENTS.
5. MAINTAIN MINIMUM 1/4" PER FOOT SLOPE FOR POSITIVE DRAINAGE ON ALL ROOFS
6. COORDINATE FINAL ROOF DRAIN & OVERFLOW ROOF DRAIN LOCATIONS WITH STRUCTURAL BEAM AND JOIST LOCATIONS.
7. POSITION OF ROOF TOP AIR HANDLERS, AND ACCOMPANYING DUCT PENETRATIONS THROUGH ROOF DECK, ARE PRELIMINARY ONLY AND SUBJECT TO FINAL AIR HANDLER SELECTION. FINAL CONFIGURATION WILL BE ADJUSTED PER AIR HANDLER SHOP DRAWINGS AS REVIEWED AND APPROVED BY ARCHITECT, STRUCTURAL AND MECHANICAL ENGINEERS. MODIFICATIONS TO STRUCTURAL STEEL AS A RESULT OF SHOP DRAWING APPROVAL SHOULD BE ANTICIPATED. NO ADDTIONAL EXPENSES OR INCREASED IN COST OF THE WORK WILL BE ALLOWED AS A RESULT OF THIS EFFORT.

ROOF PLAN ABBREVIATIONS

DS DOWN SPOUT

PLAN SYMBOLS LEGEND

WALKWAY PROTECTION MATS

TAPERED INSULATION CRICKET: SLOPE 1/2" IN 12" AT SURFACE

DIRECTION OF ROOF SLOPE

A401 - ROOF PLAN
1/8" = 1'-0" | A2/A151

0 4' 8' 16'
SCALE: 1/8" = 1'-0"

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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

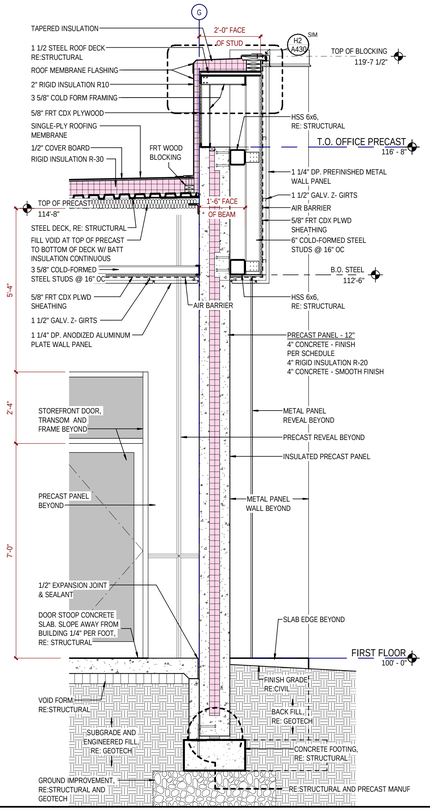
	Issue	Date
2	Addendum 02	03-20-2024

Drawn by: LES

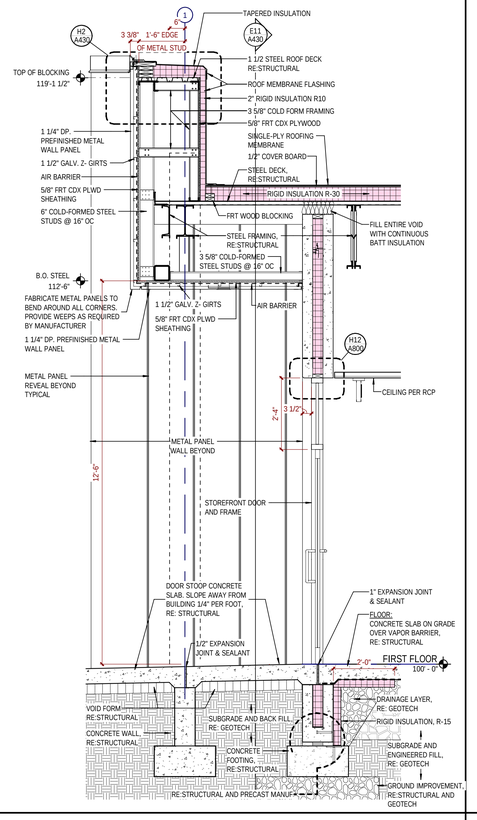
ROOF PLAN

A150

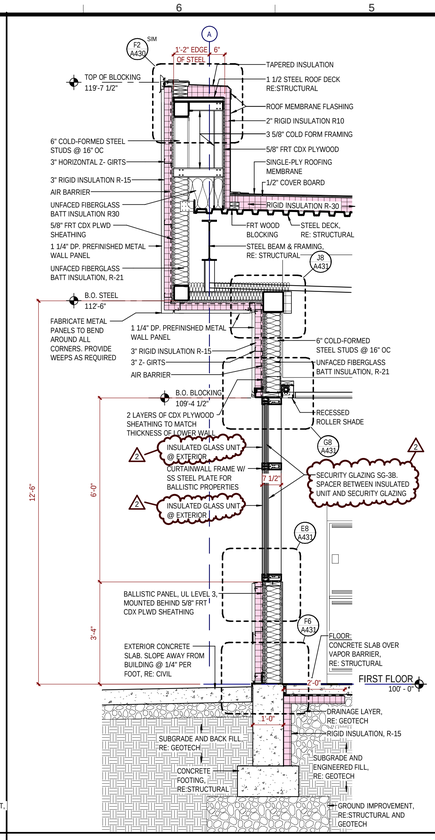
3/20/2024 1:20:09 PM



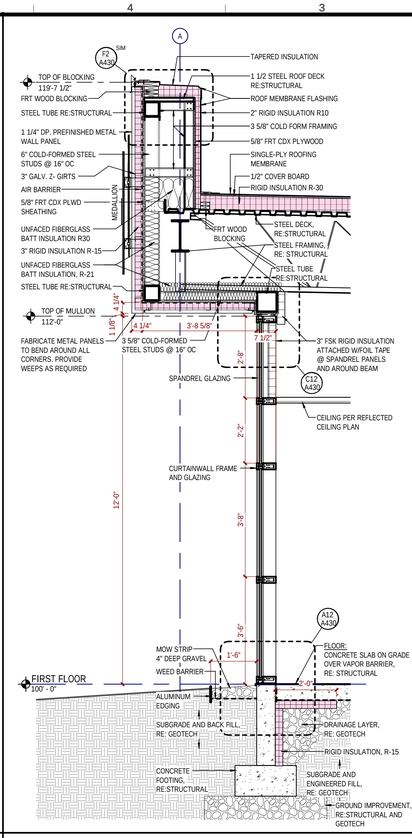
E11 WS - DISPATCH ENTRANCE - SOUTH
1/2" = 1'-0" | A5/A102



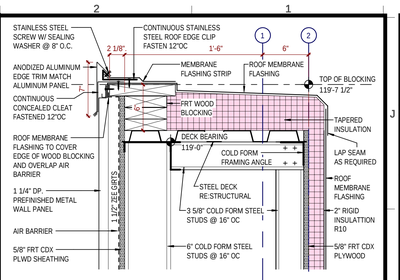
E9 WS - DISPATCH ENTRANCE - WEST
1/2" = 1'-0" | A5/A102



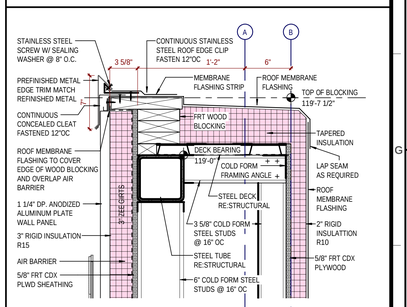
E7 WS - ROAD PATROL - NORTH
1/2" = 1'-0" | A5/A102



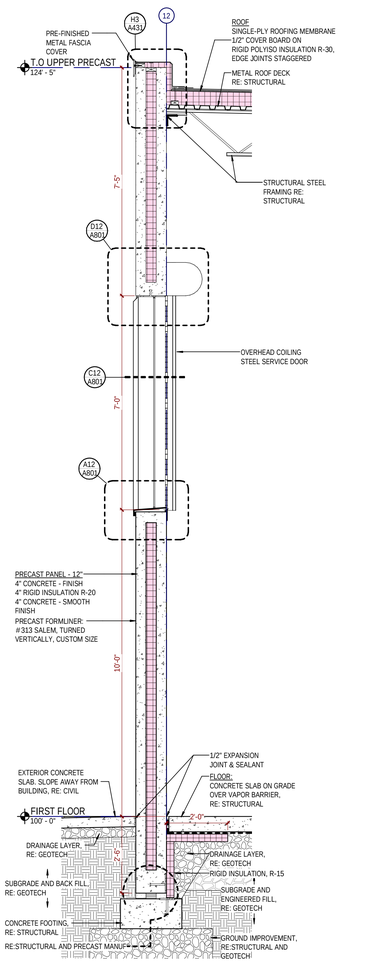
E4 WS - LOBBY - NORTH
1/2" = 1'-0" | A5/A102



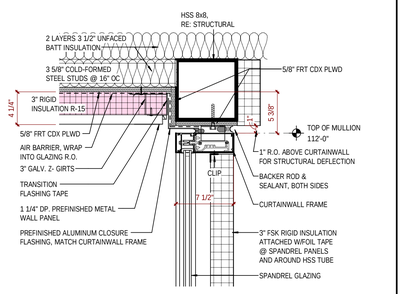
H2 METAL PANEL PARAPET - NO INSULATION
1 1/2" = 1'-0" | E9/A430



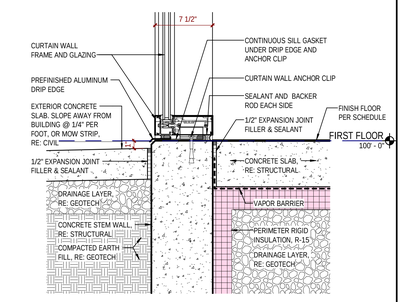
F2 METAL PANEL PARAPET WITH INSULATION
1 1/2" = 1'-0" | E4/A430



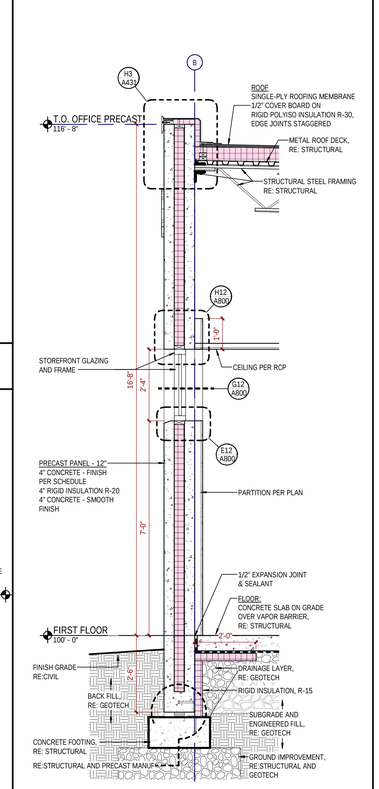
A2 WS - JAIL EXERCISE - EAST
1/2" = 1'-0" | A5/A102



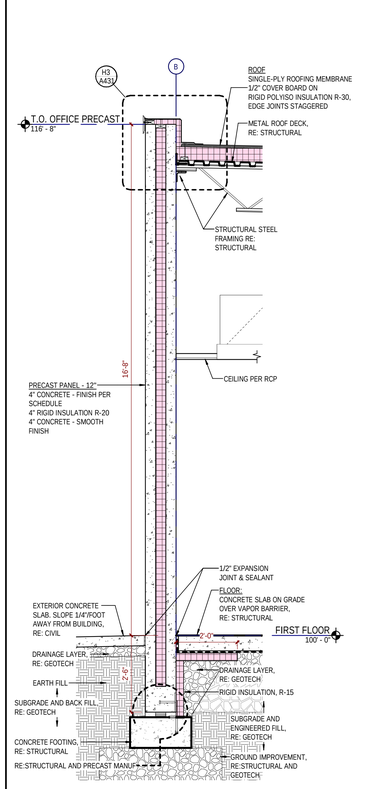
C12 CURTAINWALL HEAD @ METAL PANEL
1 1/2" = 1'-0" | E4/A430



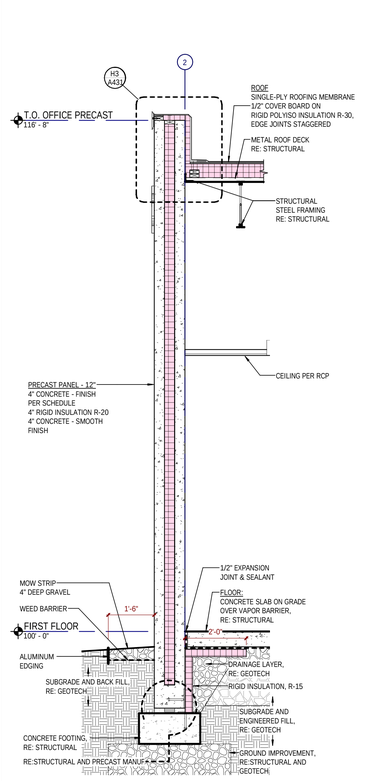
A12 FOUNDATION @ CURTAINWALL
1 1/2" = 1'-0" | E4/A430



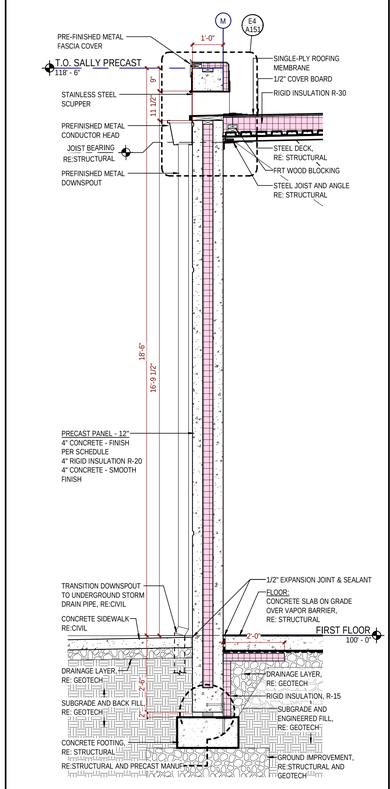
A10 WS - OFFICES - NORTH
1/2" = 1'-0" | A5/A102



A8 INTERVIEW - NORTH
1/2" = 1'-0" | A5/A102



A6 WS - DISPATCH SERVER - WEST
1/2" = 1'-0" | A5/A102



A4 WS - SALLYPORT - SOUTH
1/2" = 1'-0" | A5/A102

3/20/2024 1:20:23 PM

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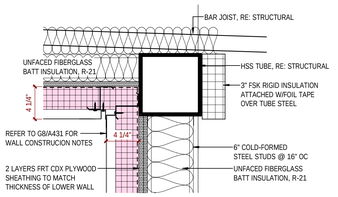
KLINGNER ARCHITECT PROJECT # 22-4046
Date: 03/01/2024

	Issue	Date
2	Addendum 02	03-20-2024

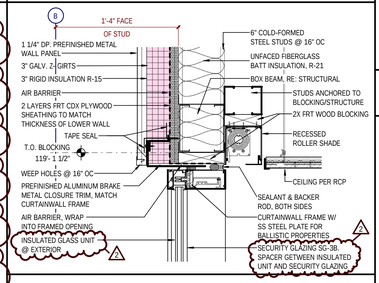
Drawn by: LES

WALL SECTIONS & EXTERIOR DETAILS

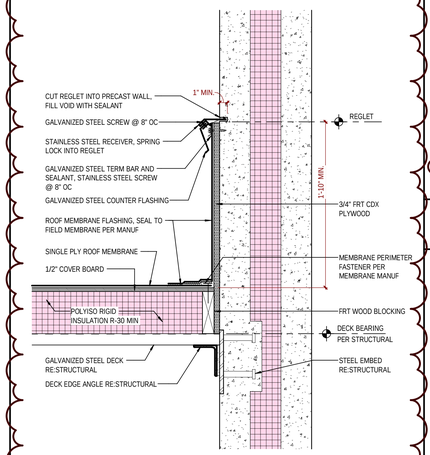
A430



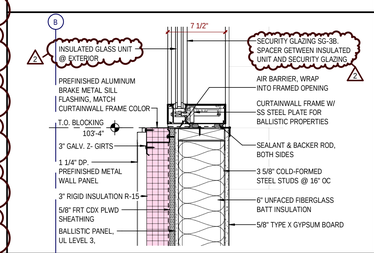
J8 METAL PANEL HEAD @ ROAD PATROL
1 1/2" = 1'-0" |E7/A430



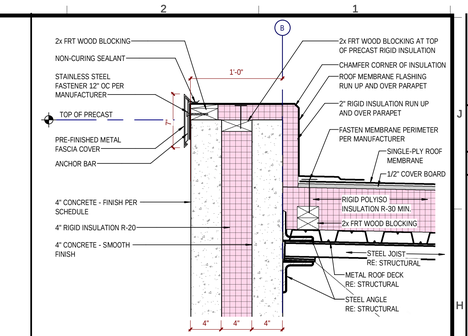
G8 CURTAINWALL HEAD @ ROAD PATROL
1 1/2" = 1'-0" |E7/A430



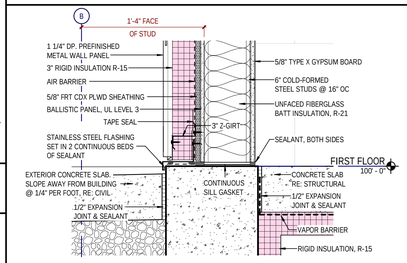
E10 REGLET DETAIL - TYPICAL
1 1/2" = 1'-0" |A4/A150



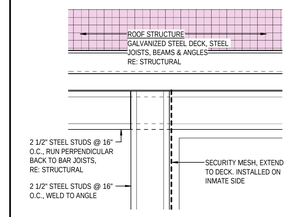
E8 CURTAINWALL SILL @ ROAD PATROL
1 1/2" = 1'-0" |E7/A430



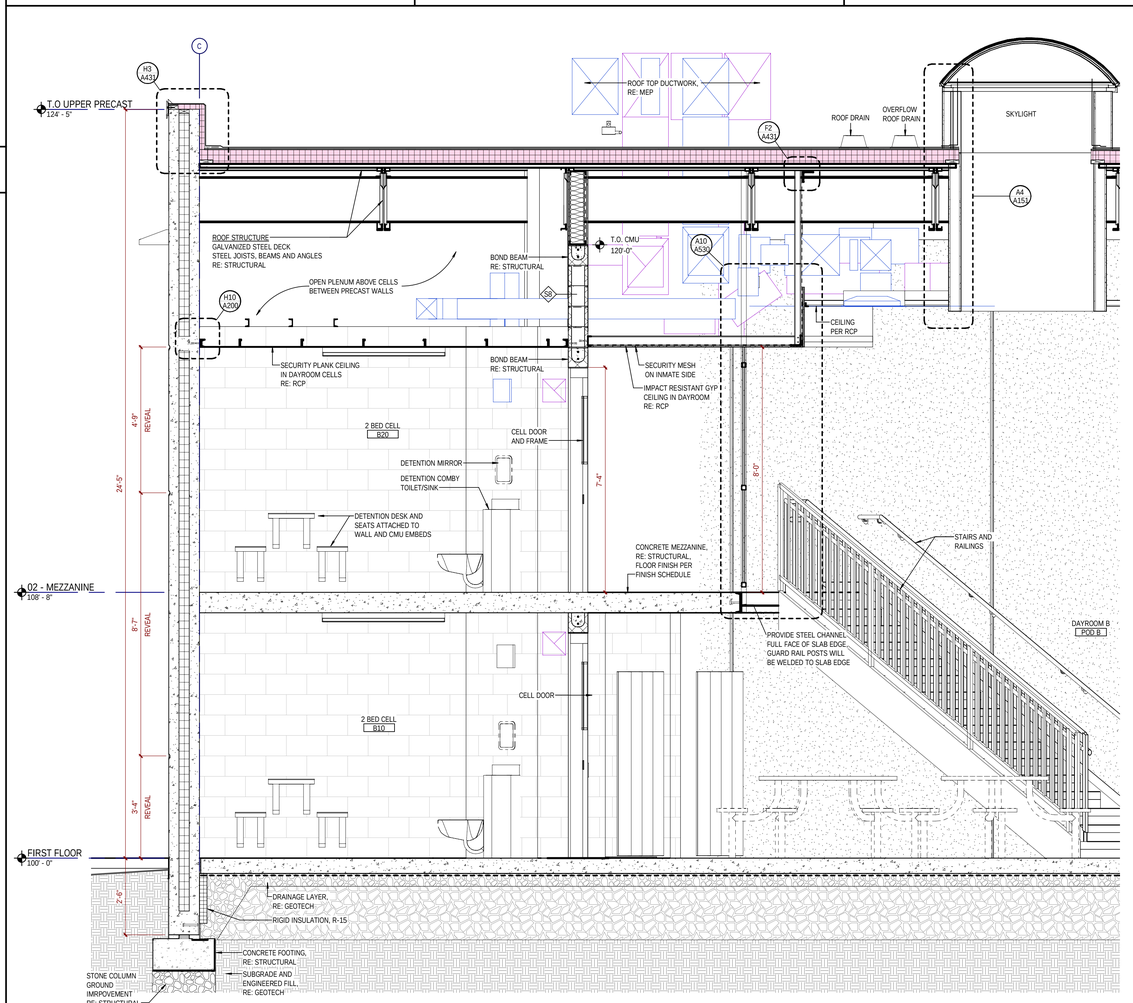
H3 TYPICAL PRECAST PARAPET
1 1/2" = 1'-0" |E4/A151



F6 FOUNDATION @ ROAD PATROL
1 1/2" = 1'-0" |E7/A430



F2 DAYROOM SOFFIT DECK CONNECTION
3" = 1'-0" |A6/A431



A6 WS - JAIL MEZZANINE, TYPICAL
1/2" = 1'-0" |A5/A102

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KLINGNER ARCHITECT PROJECT # 22-4046
Date: 03/01/2024

Issue	Date
2 Addendum 02	03-20-2024

Drawn by: JR

WALL SECTIONS AND DETAILS

A431

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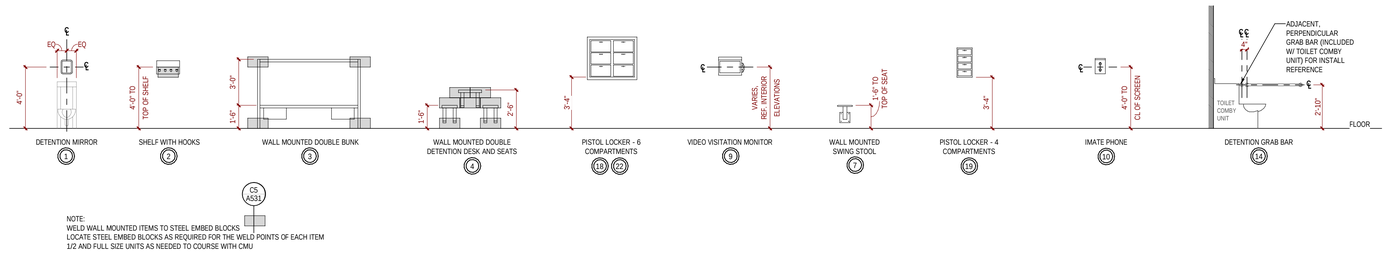
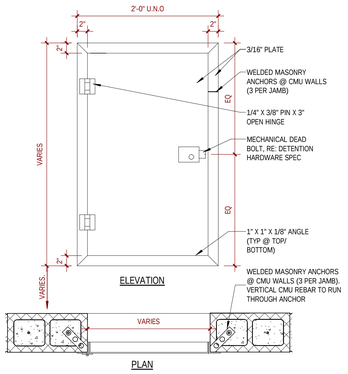
DETENTION EQUIPMENT

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	FLOOR 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



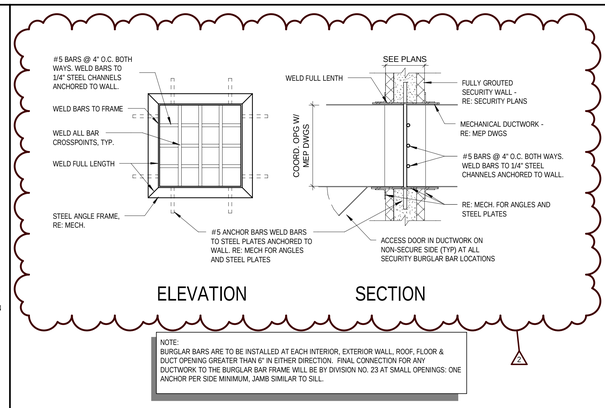
NOTE:
WELD WALL MOUNTED ITEMS TO STEEL EMBED BLOCKS
LOCATE STEEL EMBED BLOCKS AS REQUIRED FOR THE WELD POINTS OF EACH ITEM
1/2 AND FULL SIZE UNITS AS NEEDED TO COURSE WITH CMU

H8 DETENTION INSTALLATION GUIDELINES
1/4" = 1'-0" |



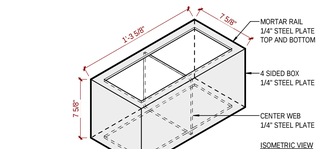
ACCESS PANEL AT MECH CORNERS TO ACCESS ABOVE THE MEZZANINE CELLS

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.

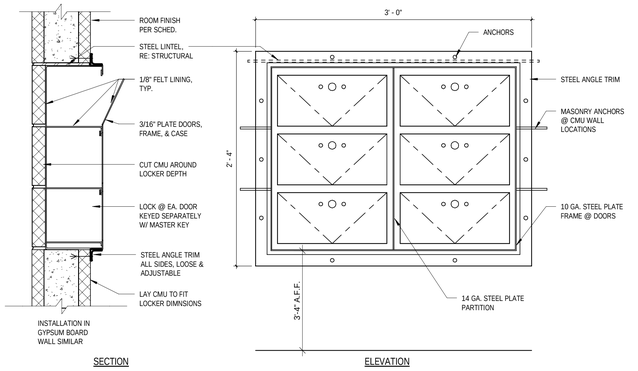
E4 BURGLAR BARS
1" = 1'-0" |



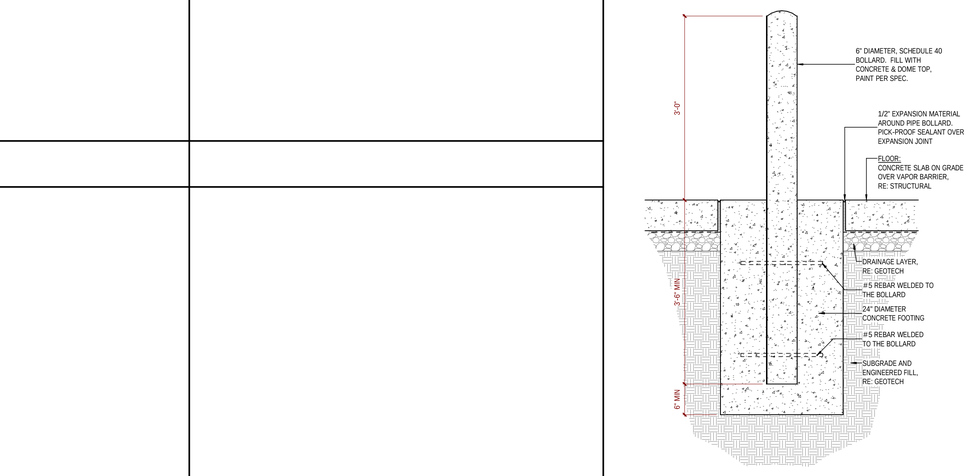
NOTE:
COAT SURFACES IN CONTACT SURFACES WITH MORTAR, INSIDE AND OUT, WITH BITUMINOUS PAINT

PRIME AND PAINT EXPOSED FACES TO MATCH SURROUNDING CMU COLOR

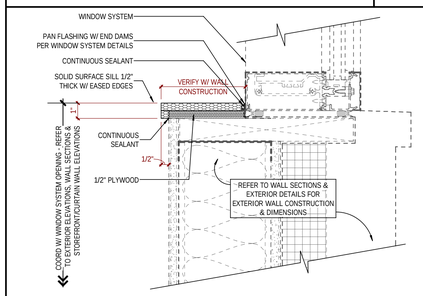
C5 STEEL EMBED BLOCK
1 1/2" = 1'-0" | H8/A531



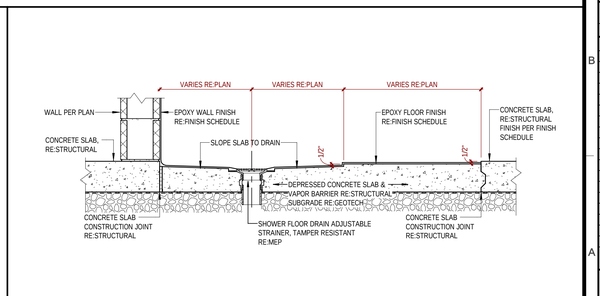
C4 GUN LOCKER DETAIL (SEMI-RECESSED)
1 1/2" = 1'-0" |



A8 INTERIOR BOLLARD RECESSED
1" = 1'-0" |



A5 WINDOW SILL - SOLID SURFACE, TYP
3" = 1'-0" |



A3 SHOWER FLOOR
1" = 1'-0" | A5/A102

COORDINATE WITH STRUCTURAL

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Drawn by: Author

DETENTION EQUIPMENT & INTERIOR DETAILS

A531

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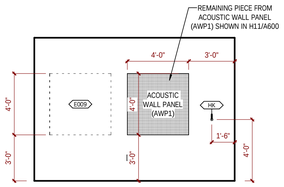
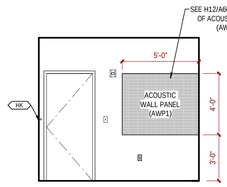
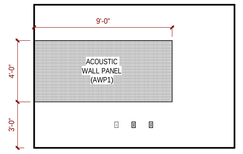
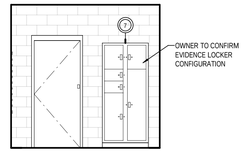
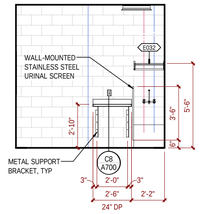
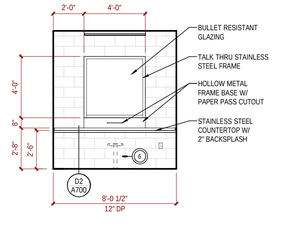


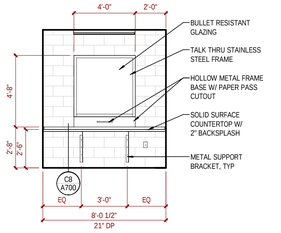


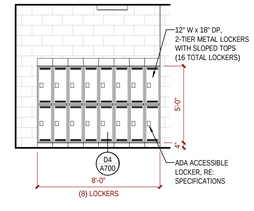












H12 ADMIN OFFICE - E
1/4" = 1'-0" | C11/A130

H11 ADMIN OFFICE - S
1/4" = 1'-0" | C11/A130

H9 ADMIN OFFICE - W
1/4" = 1'-0" | C11/A130

H8 EVIDENCE PROCESS - S
1/4" = 1'-0" | A10/A130

H7 EVIDENCE PROCESS - N
1/4" = 1'-0" | E6/A130

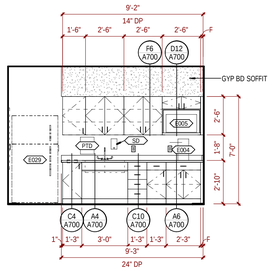
UPPER CABINETS	--
LOWER CABINETS	--
COUNTERTOPS	SS1
EDGE BANDING	--
TACKABLE FABRIC	--

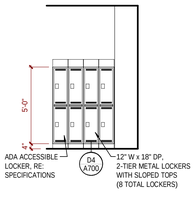
H5 INMATE VISIT
1/4" = 1'-0" | E8/A130

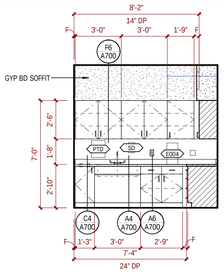
H4 ATTORNEY VISIT
1/4" = 1'-0" | E8/A130

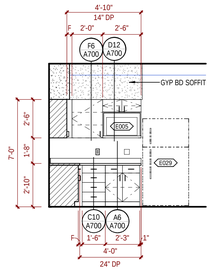
UPPER CABINETS	--
LOWER CABINETS	--
COUNTERTOPS	SS1
EDGE BANDING	--
TACKABLE FABRIC	--

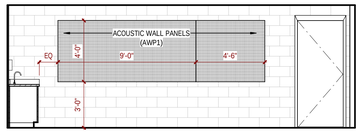
H2 ROAD PATROL
1/4" = 1'-0" | A5/A102

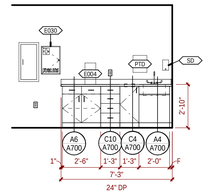


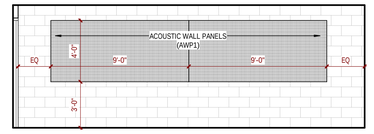












F12 STAFF BREAK W
1/4" = 1'-0" | E6/A130

UPPER CABINETS	PL1
LOWER CABINETS	PL1
COUNTERTOPS	SS1
EDGE BANDING	EB1
TACKABLE FABRIC	--

F11 DISPATCH BREAK - S
1/4" = 1'-0" | C11/A130

F9 DISPATCH BREAK - N
1/4" = 1'-0" | C11/A130

UPPER CABINETS	PL1
LOWER CABINETS	PL1
COUNTERTOPS	SS1
EDGE BANDING	EB1
TACKABLE FABRIC	--

F8 DISPATCH BREAK - E
1/4" = 1'-0" | C11/A130

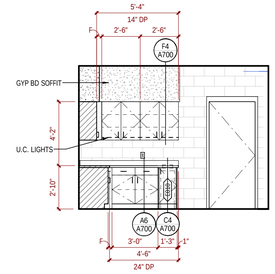
UPPER CABINETS	PL1
LOWER CABINETS	PL1
COUNTERTOPS	SS1
EDGE BANDING	EB1
TACKABLE FABRIC	--

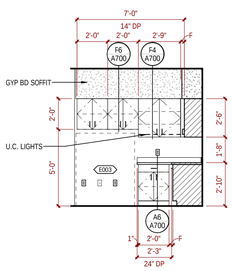
F6 CONFERENCE - S
1/4" = 1'-0" | A5/A102

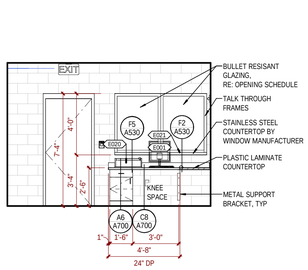
F4 CONFERENCE - E
1/4" = 1'-0" | A5/A102

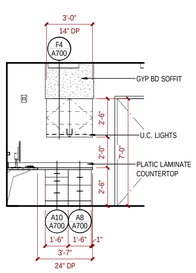
UPPER CABINETS	--
LOWER CABINETS	PL1
COUNTERTOPS	SS1
EDGE BANDING	EB1
TACKABLE FABRIC	--

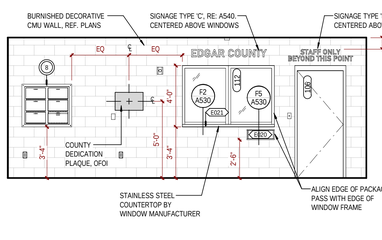
F2 CONFERENCE - N
1/4" = 1'-0" | A5/A102

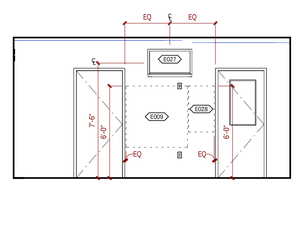


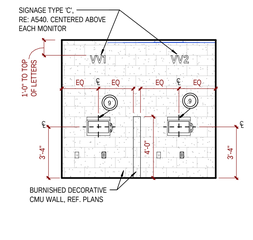












D12 WORK AREA - S
1/4" = 1'-0" | C11/A130

UPPER CABINETS	PL1
LOWER CABINETS	PL1
COUNTERTOPS	PL2
EDGE BANDING	EB1, EB2
TACKABLE FABRIC	--

D10 WORK AREA - E
1/4" = 1'-0" | C11/A130

UPPER CABINETS	PL1
LOWER CABINETS	PL1
COUNTERTOPS	PL2
EDGE BANDING	EB1, EB2
TACKABLE FABRIC	--

D9 WORK AREA - W
1/4" = 1'-0" | C11/A130

UPPER CABINETS	--
LOWER CABINETS	PL1
COUNTERTOPS	PL2
EDGE BANDING	EB1, EB2
TACKABLE FABRIC	--

D7 WORK AREA - N
1/4" = 1'-0" | C11/A130

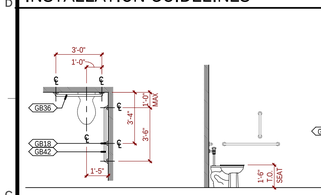
UPPER CABINETS	PL1
LOWER CABINETS	PL1
COUNTERTOPS	PL2
EDGE BANDING	EB1, EB2
TACKABLE FABRIC	--

D5 LOBBY CHECK-IN
1/4" = 1'-0" | C11/A130

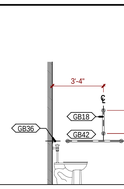
D3 LOBBY - S
1/4" = 1'-0" | C11/A130

D2 VIDEO VISIT
1/4" = 1'-0" | C11/A130

INSTALLATION GUIDELINES

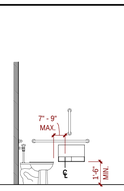


ADA TOILET COMPARTMENT GRAB BARS(PLAN)

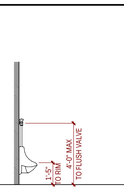


ADA TOILET (SECTION)

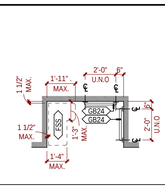
ADA TOILET COMPARTMENT GRAB BARS (ELEVATION)



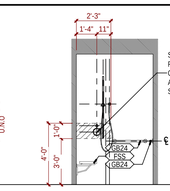
TOILET PAPER DISPENSER TPD



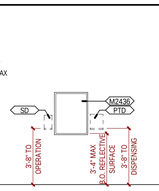
URINAL



STANDARD ROLL-IN SHOWER (PLAN)

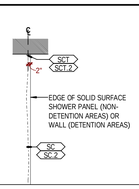


STANDARD ROLL-IN SHOWER



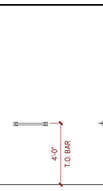
PAPER TOWEL DISPENSER, SOAP DISPENSER & MIRROR AT SINKS / MILLWORK

ALSO REFER TO ROOM ELEVATIONS AND FLOOR PLAN FOR LOCATIONS. CONFIRM W/ OWNER BEFORE INSTALLATION



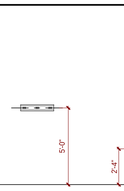
SHOWER CURTAIN & CEILING MOUNTED TRACK

FOLDING SHOWER SEAT FSS



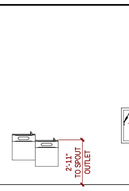
TOWEL BAR TB24

HOOK HK

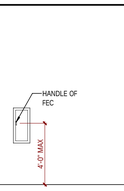


MOP AND BROOM HOLDER MBH

SANITARY NAPKIN DISPOSAL SND



ELECTRIC WATER COOLER



FIRE EXTINGUISHER CABINET

FLOOR

GENERAL INTERIOR ELEV. NOTES

1. CONTRACTOR SHALL REINFORCE WALLS AT LOCATIONS OF WALL HUNG ITEMS WITH METAL OR FIRE TREATED WOOD IN-WALL BLOCKING AS REQUIRED. COORDINATE WITH THE OWNER ON OWNER FURNISHED OWNER INSTALLED (OFOI) ITEMS.
2. DIMENSIONS FOR MEP ITEMS ARE TO THE CENTERLINE OF COVERPLATE OR CENTER OF OPERABLE MECHANISM, TYPICAL.
3. ALL ELECTRICAL, MECHANICAL, AND PLUMBING ITEMS SHOWN ARE FOR REFERENCE AND LOCATION ONLY. REFER TO MEP DRAWINGS FOR SIZES, TYPES, AND QUANTITIES. WHERE ARCHITECT PROVIDES DIMENSIONS TO MEP ITEMS, INSTALL SUCH ITEMS PER ARCHITECT INSTRUCTION. IF ARCHITECT DIMENSION CONFLICTS WITH MEP INSTRUCTION OR REQUIREMENT, SUBMIT RFI TO ARCHITECT FOR CLARIFICATION.
4. FOR COUNTERTOP SPANS EXCEEDING 3'-0", PROVIDE ADDITIONAL UNDERCOUNTER SUPPORT. REFER TO SPECIFICATIONS AND/OR INTERIOR ELEVATIONS FOR SUPPORT TYPE AND SPACING.
5. ALL FLUSH VALVES TO BE LOCATED ON THE OPEN SIDE OF THE TOILET. COORDINATE WITH GRAB BARS.
6. ALL SINKS (WALL HUNG & COUNTERTOP) SHALL BE PROVIDED WITH BLOCKING FOR OWNER PROVIDED PAPER TOWEL DISPENSER, SOAP DISPENSER AND OTHER NOTED ACCESSORIES.
7. CONTRACTOR SHALL COORDINATE WITH THE OWNER TO PROVIDE TOILET ACCESSORIES CONSISTANT WITH THE OWNER'S VENDOR SUPPLIES AND SHALL INSTALL ALL VENDOR SUPPLIED ACCESSORIES.
8. ALL COUNTERTOPS SHALL BE 24" DEEP, FRONT TO BACK EDGES, UNLESS NOTED OTHERWISE.
9. ALL UPPER CABINETS SHALL BE 14" DEEP, FROM FACE OF WALL TO FACE OF CABINET BOX, UNLESS NOTED OTHERWISE.

INTERIOR ELEVATION LEGEND

- CASEWORK SECTION CUT
- GYPSUM BOARD SOFFIT
- TACK SURFACE
- WALL PROTECTION
- WOOD
- UPPER CABINETS / LOWER CABINETS / COUNTERTOPS / EDGE BANDING / TACKABLE FABRIC — FINISH TAG
- RE: A700 SERIES FOR COUNTERTOP DETAILS
- X / A000 — SECTION: DETAIL SECTION
- CASEWORK DOOR/DRAWER LOCKED
- FINISHED END PANEL (FEP)

ELECTRICAL/MED.GAS DEVICES

C	CABLE
D	DATA
D/P	DATA/PHONE
E	EMERGENCY POWER
E4	EMERGENCY POWER, QUAD
N	NORMAL POWER
N4	NORMAL POWER, QUAD
P	PHONE
S	SWITCH

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	FLOOR 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	--	OFCI
10	INMATE PHONE	--	OFCI
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

EQUIPMENT SCHEDULE

CODE	ITEM DESCRIPTION	RESPONSIBILITY OFOI	OFCI	CFCI	COMMENTS
E001	Computer Monitor (Desktop)	X			
E002	Exam Table	X			
E003	Printer/Copy/Fax (Floor)	X			
E004	Coffee Maker	X			
E005	Microwave	X			
E006	UC Refrigerator	X			
E007	PHONE (DESKTOP)	X			
E008	Breathalyzer (Countertop)	X			
E009	Tack Board		X		
E010	TRASH BIN (24 GAL)	X			
E011	Commercial Washer			X	SEE SECTION 11 1100
E012	Commercial Dryer (Gas)			X	SEE SECTION 11 1100
E013	AUTOMATED CONTROLLED SUBSTANCE DISPENSER	X			
E014	PAY STATION CLOCK	X			
E015	TV MONITOR (52")		X		CONTRACTOR TO PROVIDE BLOCKING
E016	52" ENCARTELE MESSAGE MONITOR		X		CONTRACTOR TO PROVIDE BLOCKING
E017	Refrigerator (full size w/out Ice Maker)	X			
E018	Marker Board		X		
E019	Folding Table	X			
E020	Package Pass			X	SEE SECTION 10 2813.63 - 7 5/8" WALL
E021	Drop-In Deal Tray			X	
E022	COMMISSARY KIOSK	X			
E023	RED BAG TRASH (24 GAL)	X			
E024	Mugshot Camera	X			
E025	Mugshot Photo Backdrop	X			
E026	Laundry Cart	X			
E027	32" ENCARTELE MESSAGE MONITOR		X		CONTRACTOR TO PROVIDE BLOCKING
E028	BROCHURE RACK	X			
E029	Refrigerator/Freezer (full-size, w/ ice maker)		X		CONTRACTOR TO PROVIDE WATER LINE
E030	First Aid Box (wall-mounted)	X			
E031	Body Scanner	X			
E032	Wall-mounted Coat Rack (24" W)			X	
E033	Live Scan	X			

MATERIALS LEGEND - MILLWORK

MATERIAL	CODE	MANUFACTURER	MODEL/ PATTERN	COLOR	SIZE	NOTES
MILLWORK						
EDGE BANDING	EB1	DOELLKEN or CHARTER	--	MATCH PL1	SEE SPECS	USE W/ PL1
	EB2	DOELLKEN or CHARTER	--	MATCH PL2	SEE SPECS	USE W/ PL2
	EB3	DOELLKEN or CHARTER	--	MATCH PL3	SEE SPECS	USE W/ PL3
PLASTIC LAMINATE	PL1	WILSONART	7987-38 (FINE VELVET FINISH)	PALISADES OAK	--	VERTICAL LAMINATE (CABINETS)
	PL2	WILSONART	4882-38 (FINE VELVET FINISH)	OILED SOAPSTONE	--	HORIZONTAL LAMINATE (COUNTERTOPS)
	PL3	WILSONART	5016-38 (FINE VELVET FINISH)	FRENCH LINEN	--	(SHELVING)
SOLID SURFACE	SS1	CORIAN	--	ASH CONCRETE	--	NON-SECURE AREA (COUNTERTOPS)
	SS2	CORIAN	--	EXCAVAGE	--	SECURE AREA (COUNTERTOPS)

TOILET ACCESSORIES SCHEDULE

CODE	ITEM DESCRIPTION	OFOI	OFCI	CFCI	COMMENTS
	<varies>			<varies>	
FSS	Folding Shower Seat			X	
GB18	Vertical Grab Bar (18")			X	
GB24	Grab Bar (24")			X	
GB36	Grab Bar (36")			X	
GB42	Grab Bar (42")			X	
HK	Hook			X	
MD436	Mirror (24" x 36")			X	
MBH	Mop & Broom Holder			X	
PTD	Paper Towel Dispenser		X		
SC	Shower Curtain		X		
SC.2	Detention Shower Curtain (Tear Away)			X	
SCT	Shower Curtain Track			X	
SD	Soap Dispenser		X		
SND	Sanitary Napkin Disposal			X	
TB24	Towel Bar			X	
TPD	Toilet Paper Dispenser		X		

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BID & PERMIT

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12636 950TH ROAD
PARIS, ILLINOIS 61944

HMN 21003.003

BID & PERMIT

KLINGNER ARCHITECT PROJECT # 22-4046

Date: 03/01/2024

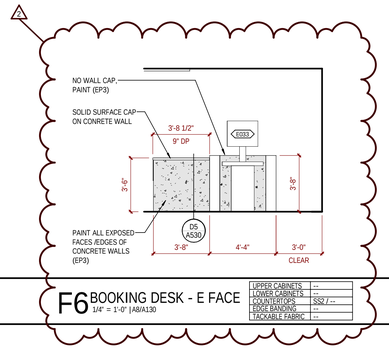
Issue	Date
2 Addendum 02	03-20-2024

Drawn by: Author

INTERIOR ELEVATIONS

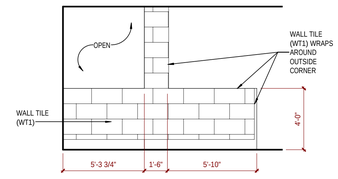
A600

3/20/2024 1:21:00 PM

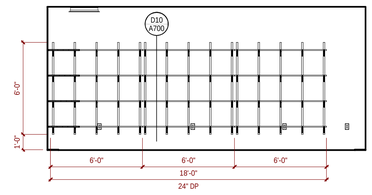


F6 BOOKING DESK - E FACE
1/4" = 1'-0" | A8/A130

UPPER CABINETS	--
LOWER CABINETS	--
COUNTERTOPS	SS2 / --
EDGE BANDING	--
TACKABLE FABRIC	--

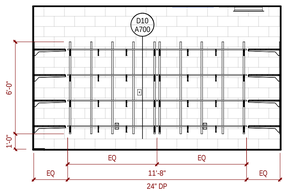


F4 DISHWASH
1/4" = 1'-0" | A5/A102



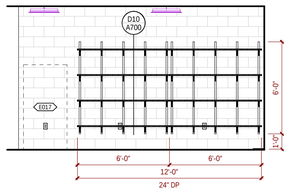
F2 EVIDENCE STORAGE - W
1/4" = 1'-0" | A5/A102

UPPER CABINETS	PL3
LOWER CABINETS	PL3
COUNTERTOPS	--
EDGE BANDING	EB3
TACKABLE FABRIC	--



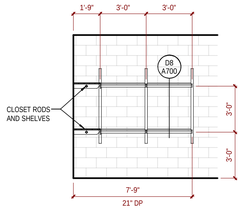
D12 EVIDENCE STORAGE - S
1/4" = 1'-0" | A5/A102

UPPER CABINETS	PL3
LOWER CABINETS	PL3
COUNTERTOPS	--
EDGE BANDING	EB3
TACKABLE FABRIC	--



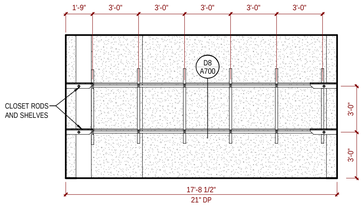
D10 EVIDENCE STORAGE - E
1/4" = 1'-0" | A5/A102

UPPER CABINETS	PL3
LOWER CABINETS	PL3
COUNTERTOPS	--
EDGE BANDING	EB3
TACKABLE FABRIC	--



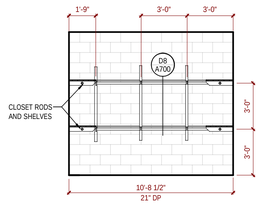
D8 INMATE PROP. STORAGE - W
1/4" = 1'-0" | A8/A130

UPPER CABINETS	PL3
LOWER CABINETS	PL3
COUNTERTOPS	--
EDGE BANDING	EB3
TACKABLE FABRIC	--



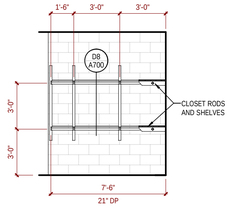
D6 INMATE PROP. STORAGE - S
1/4" = 1'-0" | A8/A130

UPPER CABINETS	PL3
LOWER CABINETS	PL3
COUNTERTOPS	--
EDGE BANDING	EB3
TACKABLE FABRIC	--



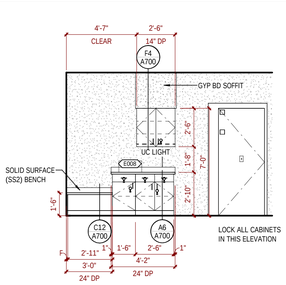
D4 INMATE PROP. STORAGE - E
1/4" = 1'-0" | A8/A130

UPPER CABINETS	PL3
LOWER CABINETS	PL3
COUNTERTOPS	--
EDGE BANDING	EB3
TACKABLE FABRIC	--



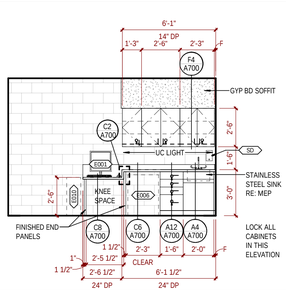
D2 INMATE PROP. STORAGE - N
1/4" = 1'-0" | A8/A130

UPPER CABINETS	PL3
LOWER CABINETS	PL3
COUNTERTOPS	--
EDGE BANDING	EB3
TACKABLE FABRIC	--



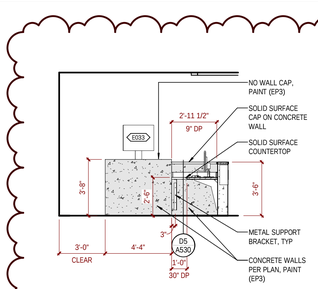
C12 ARRESTING OFFICER
1/4" = 1'-0" | A8/A130

UPPER CABINETS	PL1
LOWER CABINETS	PL1
COUNTERTOPS	SS2
EDGE BANDING	EB1
TACKABLE FABRIC	--



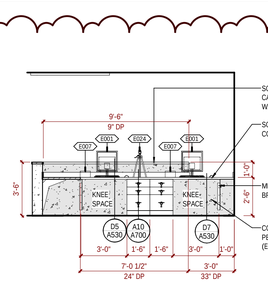
C10 MEDICAL EXAM - N
1/4" = 1'-0" | A8/A130

UPPER CABINETS	PL1
LOWER CABINETS	PL1
COUNTERTOPS	SS2
EDGE BANDING	EB1
TACKABLE FABRIC	--



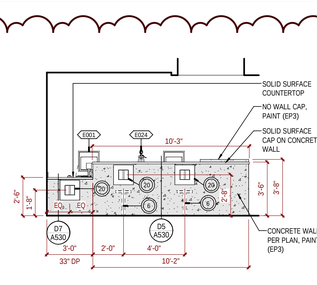
C9 BOOKING DESK - E
1/4" = 1'-0" | A8/A130

UPPER CABINETS	--
LOWER CABINETS	--
COUNTERTOPS	SS2 / --
EDGE BANDING	--
TACKABLE FABRIC	--



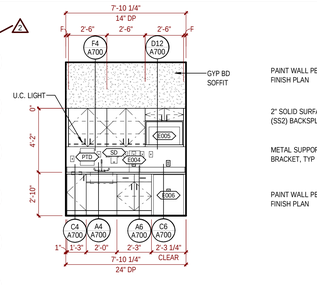
C7 BOOKING DESK - S
1/4" = 1'-0" | A8/A130

UPPER CABINETS	--
LOWER CABINETS	PL1
COUNTERTOPS	SS2
EDGE BANDING	EB1
TACKABLE FABRIC	--



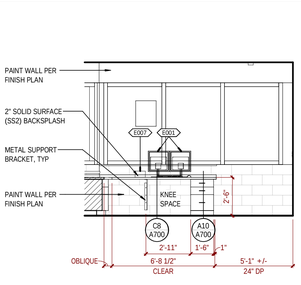
C5 BOOKING DESK - S FACE
1/4" = 1'-0" | A8/A130

UPPER CABINETS	--
LOWER CABINETS	--
COUNTERTOPS	SS2 / --
EDGE BANDING	--
TACKABLE FABRIC	--



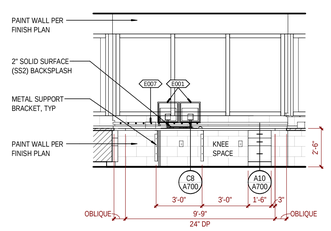
C4 CONTROL - W
1/4" = 1'-0" | A10/A130

UPPER CABINETS	PL1
LOWER CABINETS	PL1
COUNTERTOPS	SS2
EDGE BANDING	EB1
TACKABLE FABRIC	--



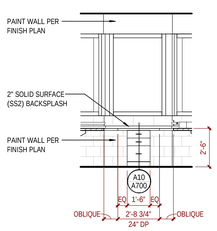
C2 CONTROL - S
1/4" = 1'-0" | A10/A130

UPPER CABINETS	--
LOWER CABINETS	PL1
COUNTERTOPS	SS2
EDGE BANDING	EB1
TACKABLE FABRIC	--



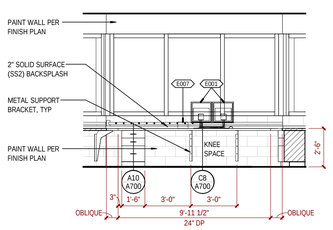
A12 CONTROL - SE
1/4" = 1'-0" | A10/A130

UPPER CABINETS	--
LOWER CABINETS	PL1
COUNTERTOPS	SS2
EDGE BANDING	EB1
TACKABLE FABRIC	--



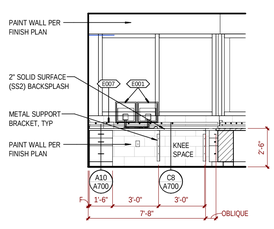
A10 CONTROL - E
1/4" = 1'-0" | A10/A130

UPPER CABINETS	--
LOWER CABINETS	PL1
COUNTERTOPS	SS2
EDGE BANDING	EB1
TACKABLE FABRIC	--



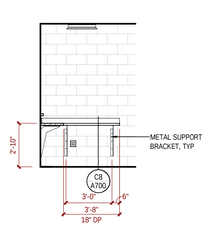
A9 CONTROL - NE
1/4" = 1'-0" | A10/A130

UPPER CABINETS	--
LOWER CABINETS	PL1
COUNTERTOPS	SS2
EDGE BANDING	EB1
TACKABLE FABRIC	--



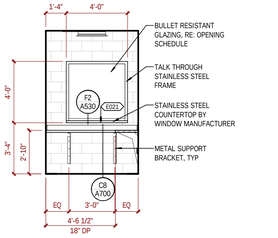
A7 CONTROL - N
1/4" = 1'-0" | A10/A130

UPPER CABINETS	--
LOWER CABINETS	PL1
COUNTERTOPS	SS2
EDGE BANDING	EB1
TACKABLE FABRIC	--



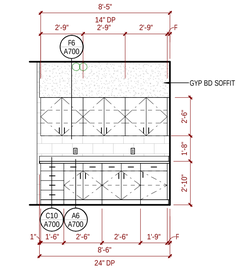
A5 CONTROL CORRIDOR - E
1/4" = 1'-0" | A10/A130

UPPER CABINETS	--
LOWER CABINETS	--
COUNTERTOPS	SS2
EDGE BANDING	--
TACKABLE FABRIC	--



A4 CONTROL CORRIDOR - N
1/4" = 1'-0" | A10/A130

UPPER CABINETS	--
LOWER CABINETS	--
COUNTERTOPS	SS2
EDGE BANDING	--
TACKABLE FABRIC	--



A2 CONTROL CORRIDOR
1/4" = 1'-0" | A10/A130

UPPER CABINETS	PL1
LOWER CABINETS	PL1
COUNTERTOPS	SS2
EDGE BANDING	EB1
TACKABLE FABRIC	--

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KLINGNER ARCHITECT PROJECT # 22-4046

Date: 03/01/2024

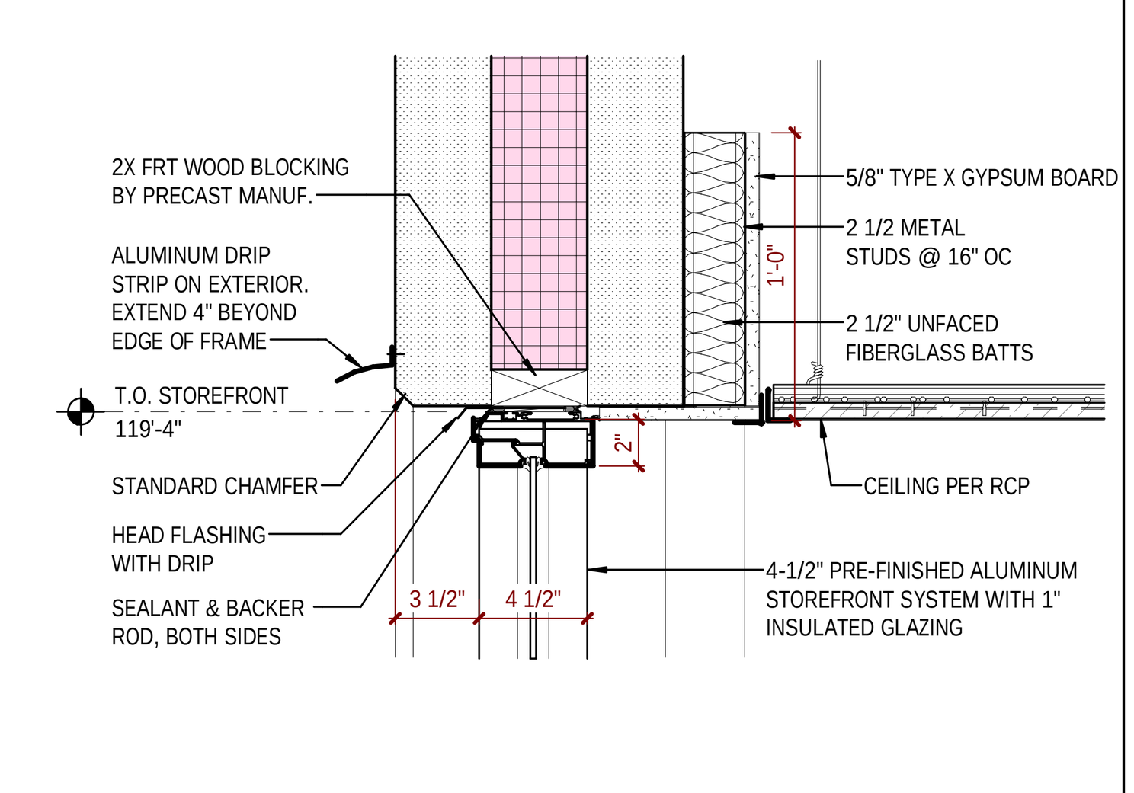
	Issue	Date
2	Addendum 02	03-20-2024

Drawn by: Author

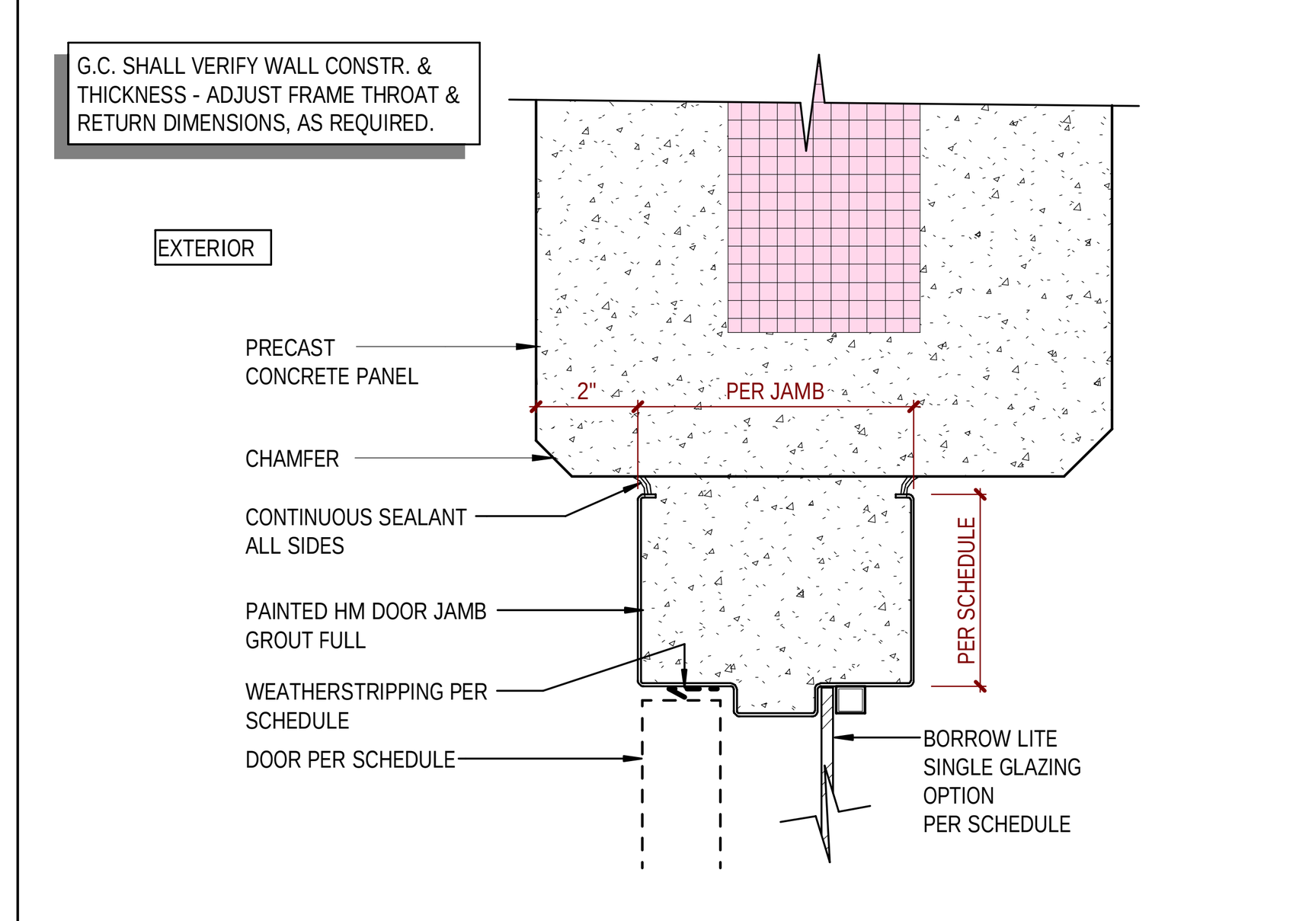
INTERIOR ELEVATIONS

A601

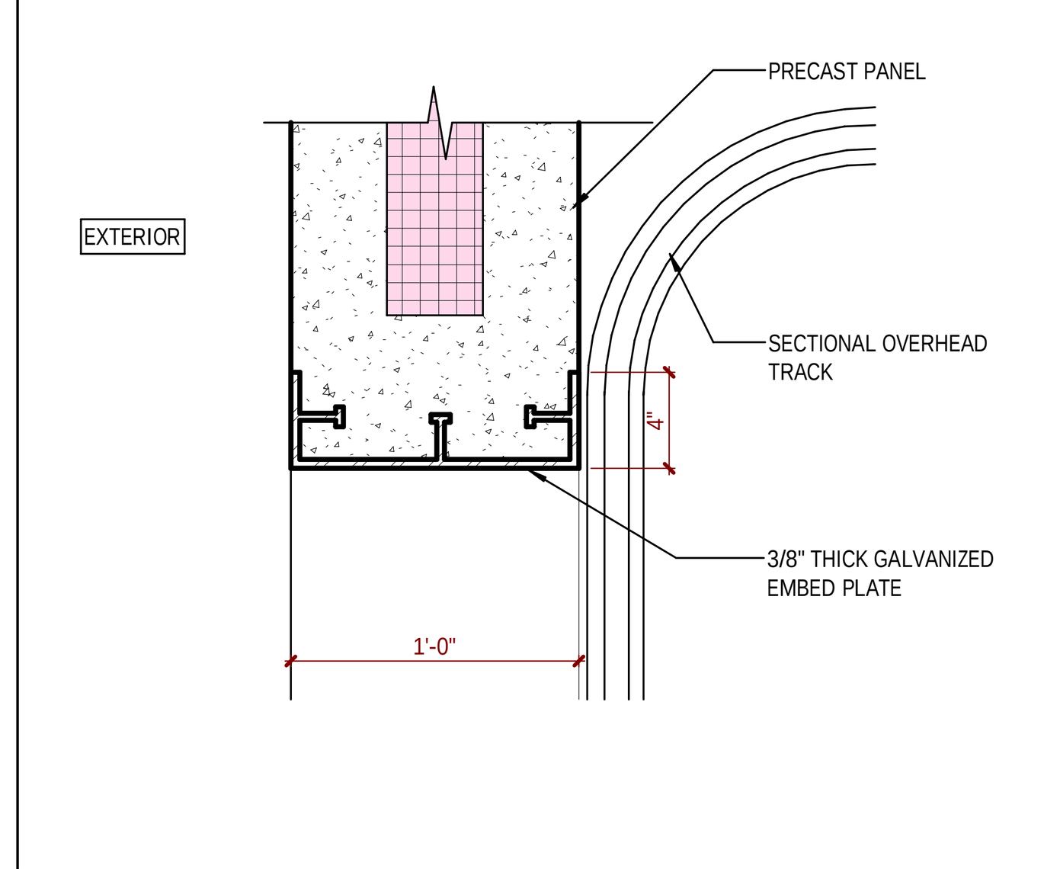
3/20/2024 1:21:16 PM



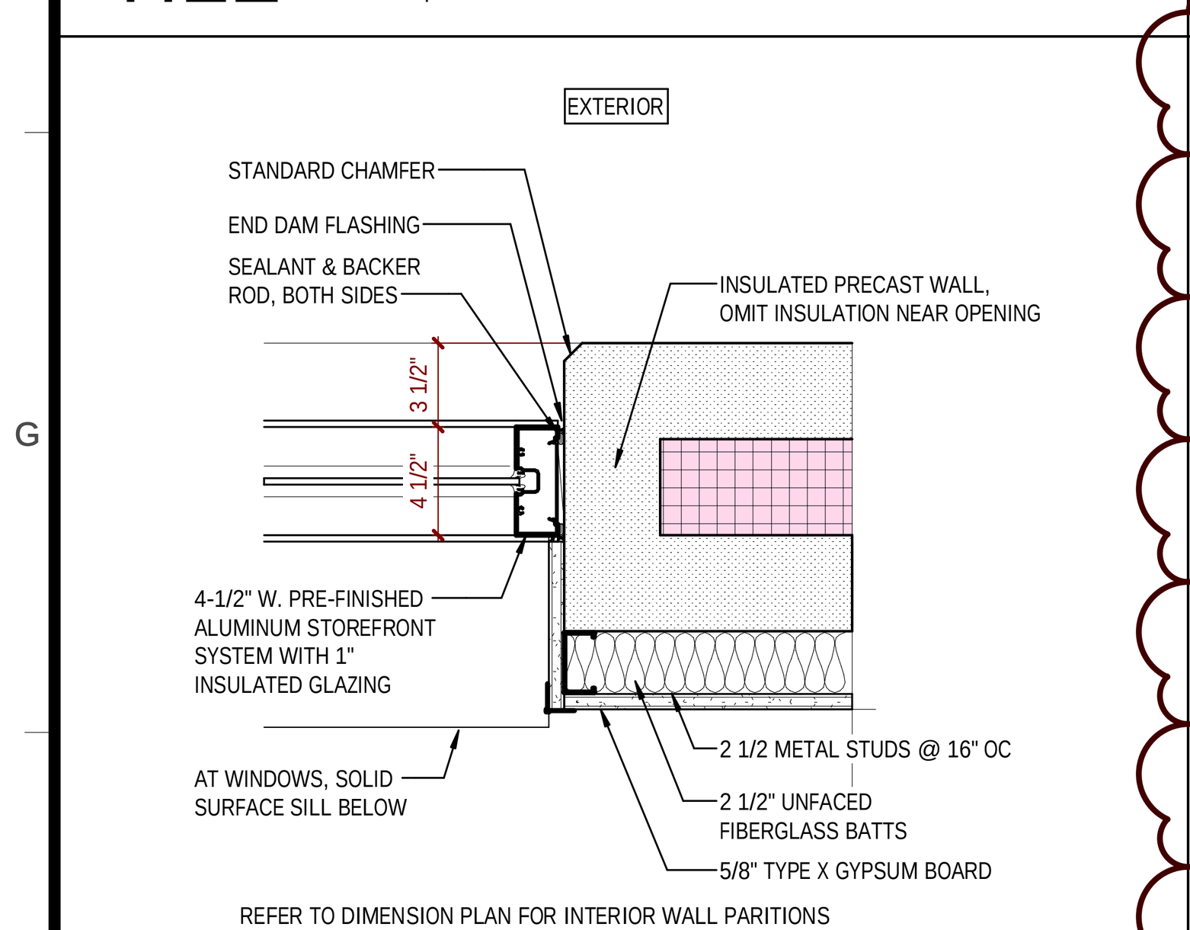
H12 STOREFRONT HEAD @ PRECAST
1 1/2" = 1'-0" | A10/A430



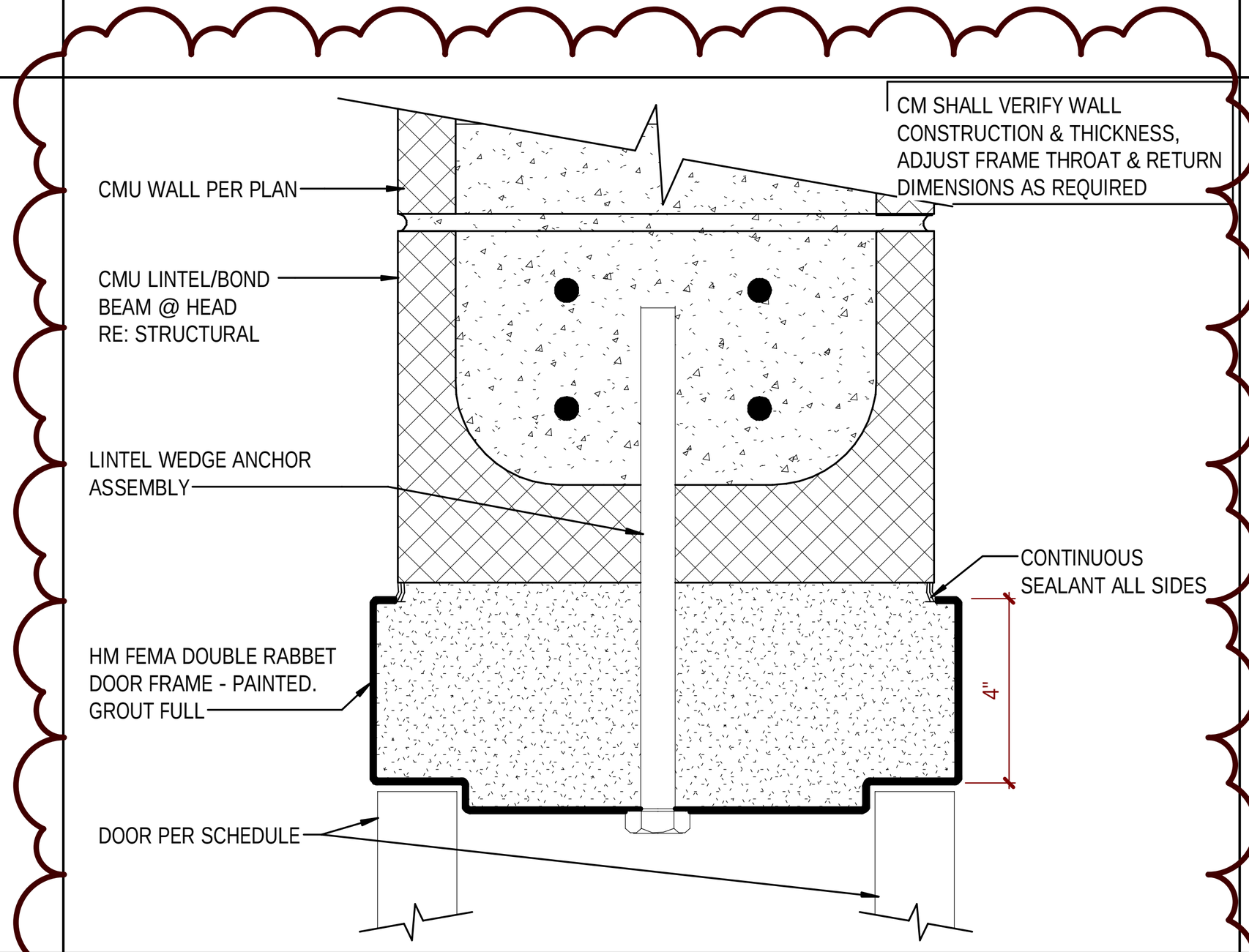
H8 HM DOOR FRAME HEAD @ PRECAST
3" = 1'-0" |



H6 SECTIONAL OVERHEAD DOOR HEAD
1 1/2" = 1'-0" |

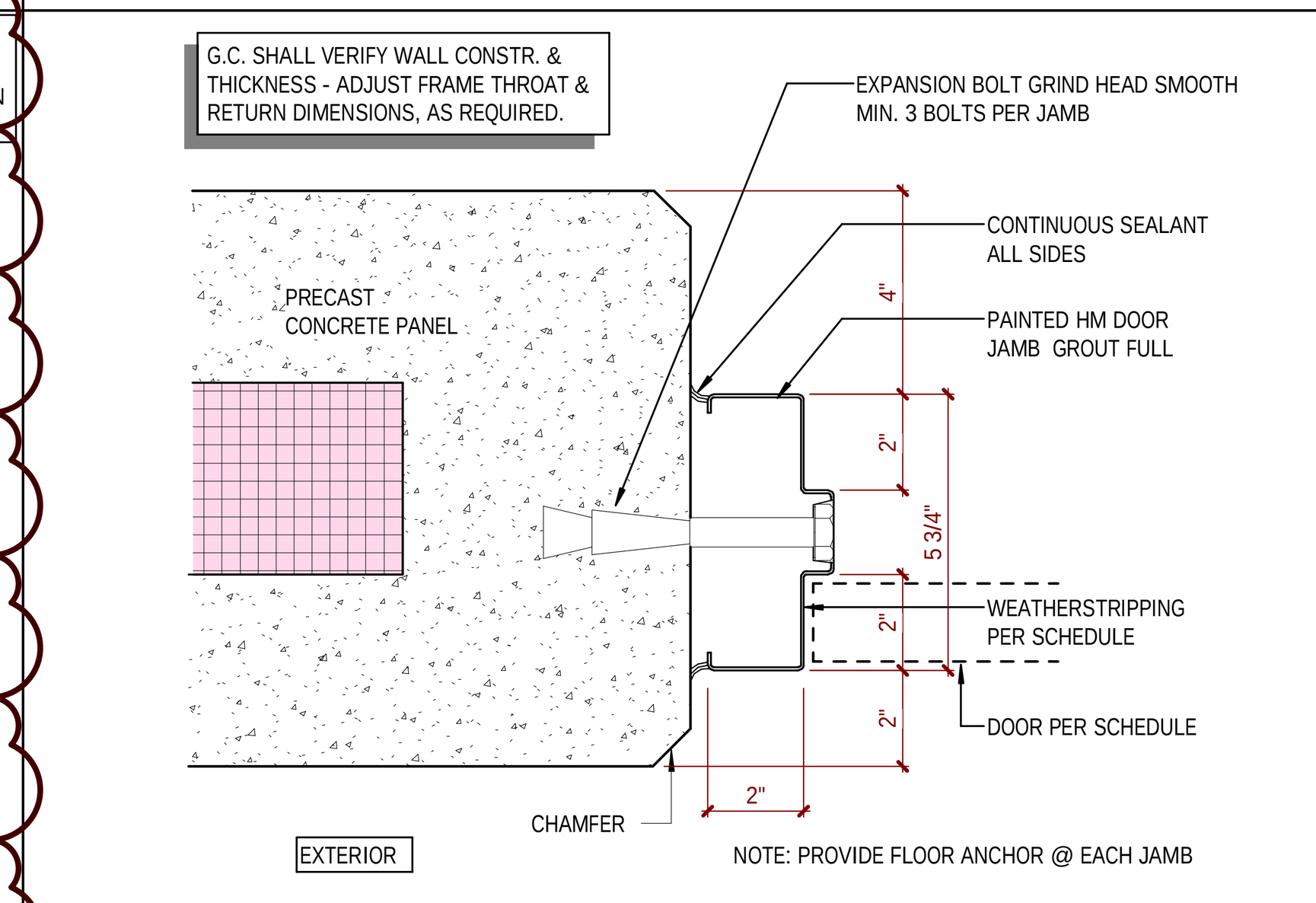


G12 STOREFRONT JAMB @ PRECAST
1 1/2" = 1'-0" | A10/A430

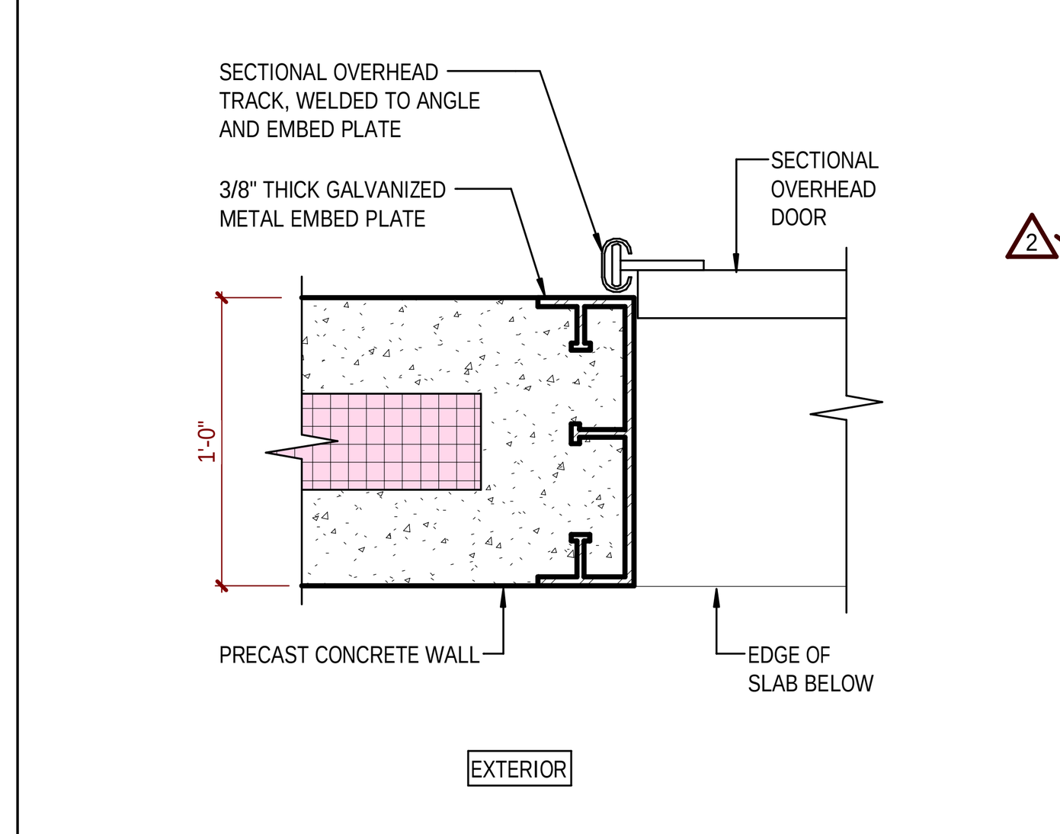


G10 HM FEMA FRAME HEAD DETAIL @ CMU
3" = 1'-0" |

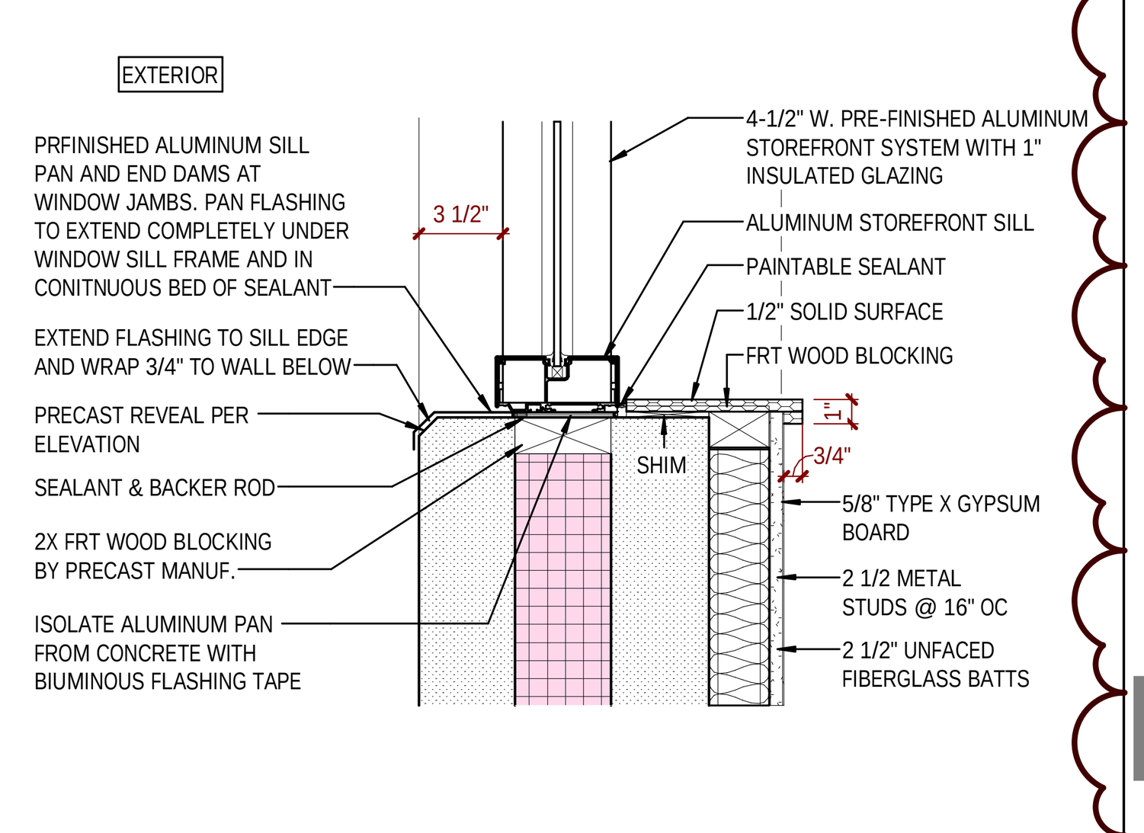
COMMUNICATING DOOR AND FRAME



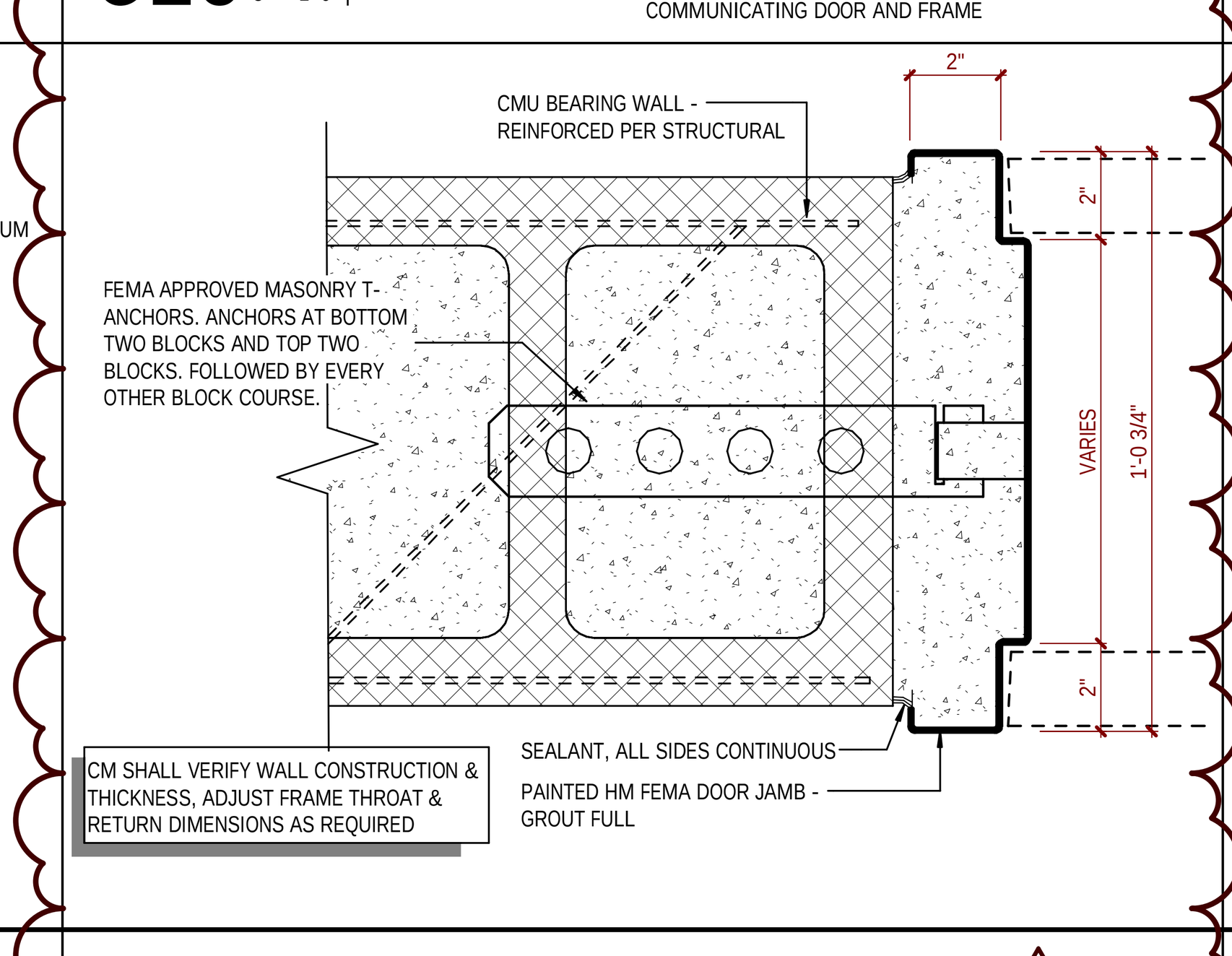
G8 HM DOOR FRAME JAMB @ PRECAST
3" = 1'-0" |



G6 SECTIONAL OVERHEAD DOOR JAMB
1 1/2" = 1'-0" |

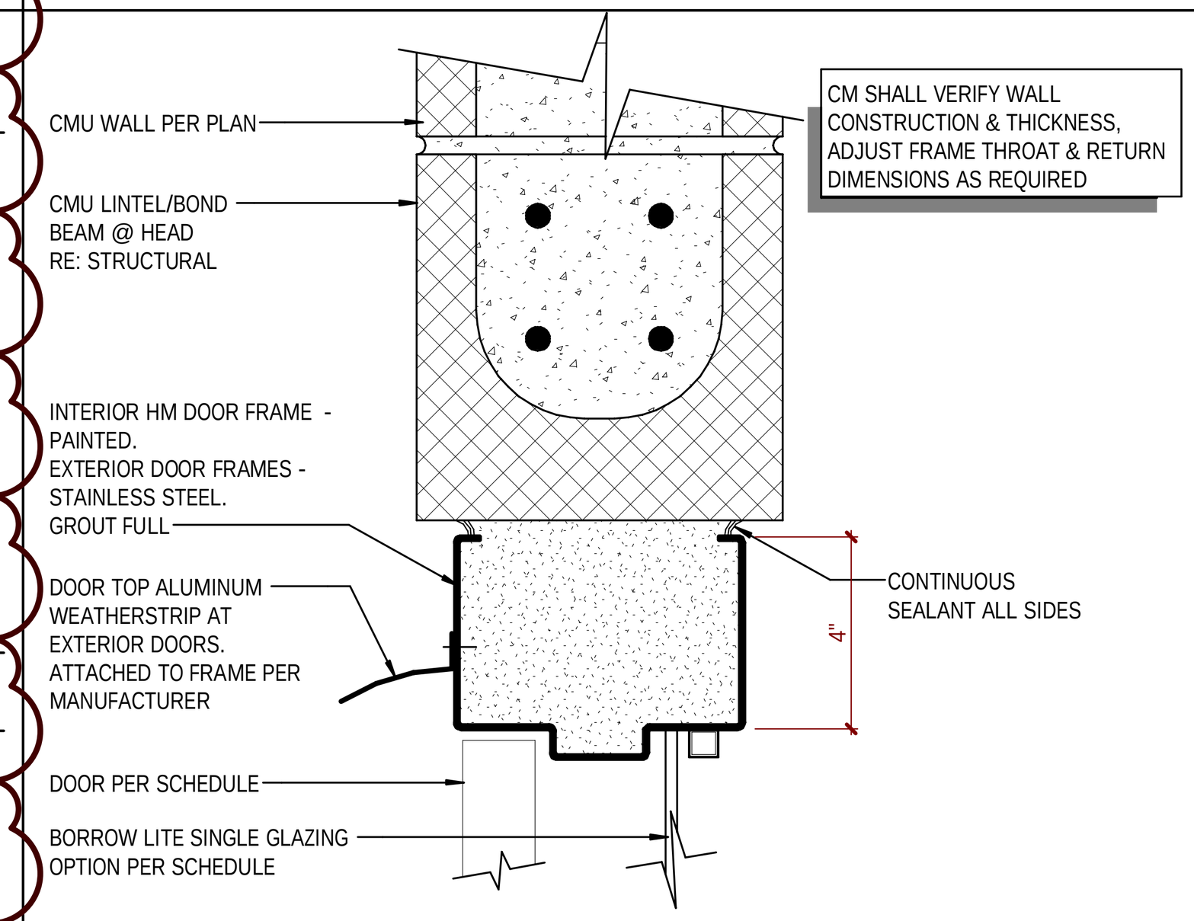


E12 STOREFRONT SILL @ PRECAST
1 1/2" = 1'-0" | A10/A430

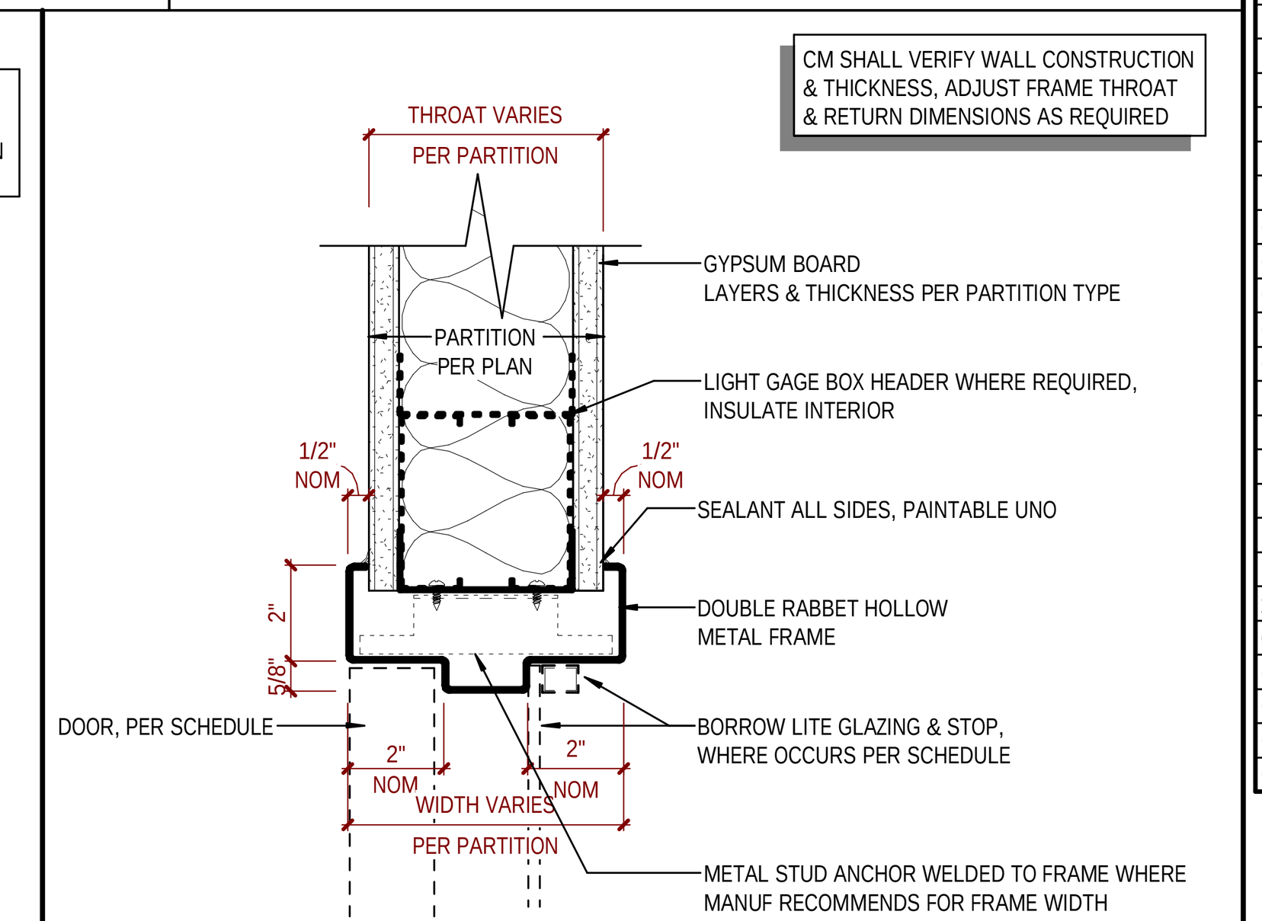


E10 HM FEMA FRAME JAMB DETAIL @ CMU
3" = 1'-0" |

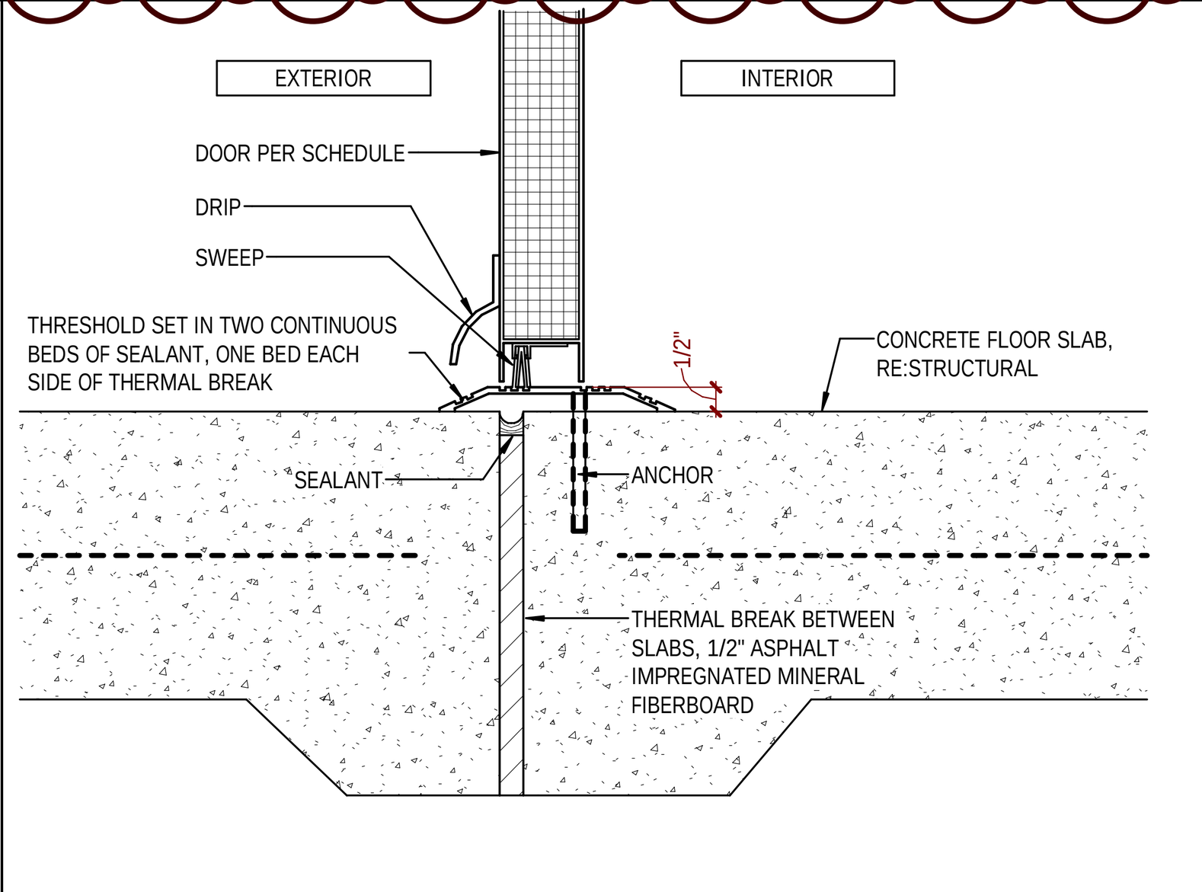
COMMUNICATING DOOR AND FRAME



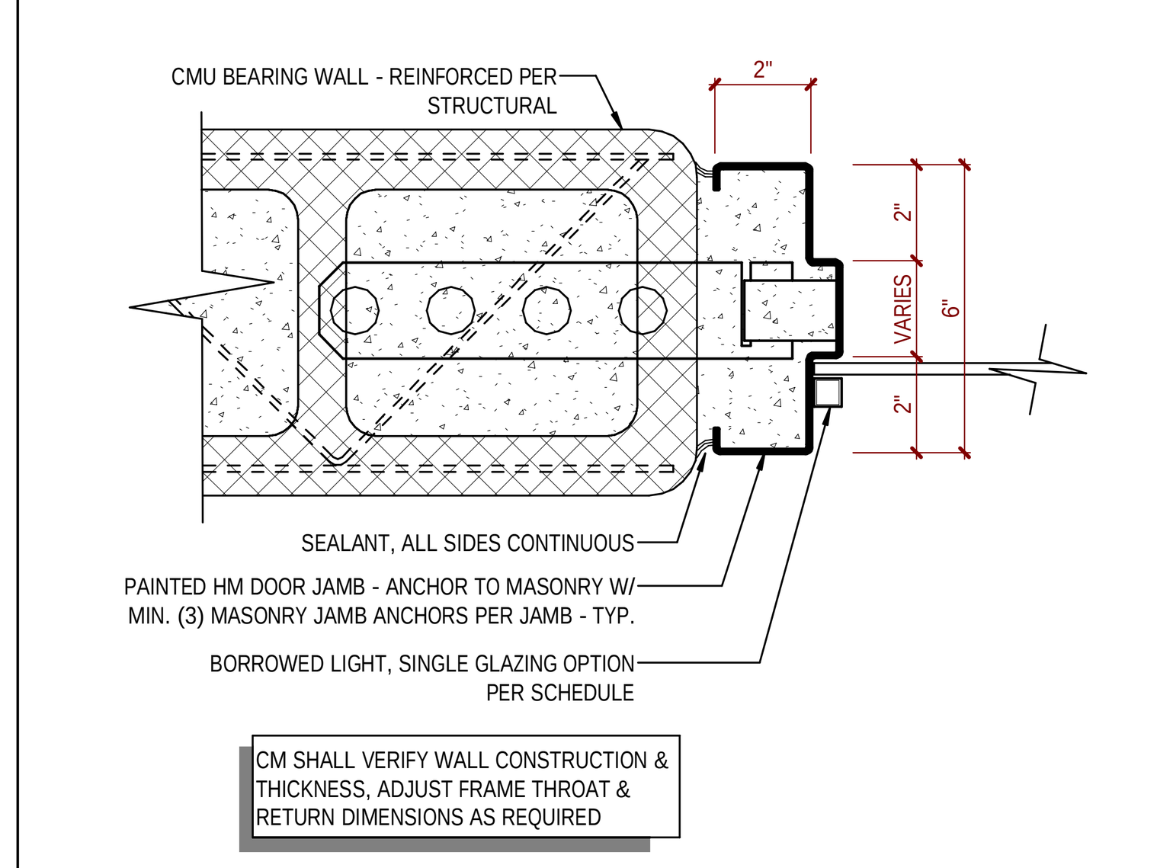
E8 HM FRAME HEAD DETAIL @ CMU
3" = 1'-0" |



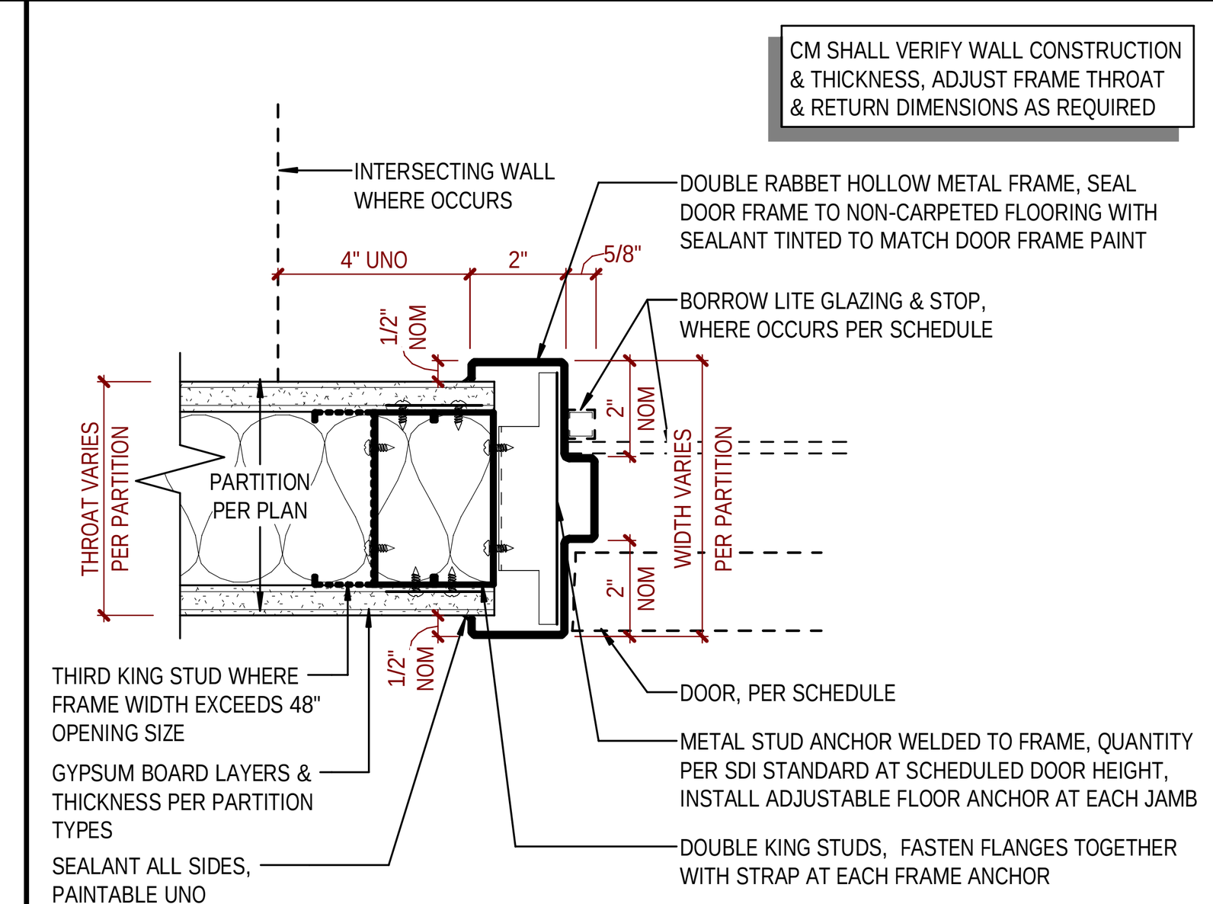
E6 HM HEAD DETAIL S/PR
3" = 1'-0" |



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" |

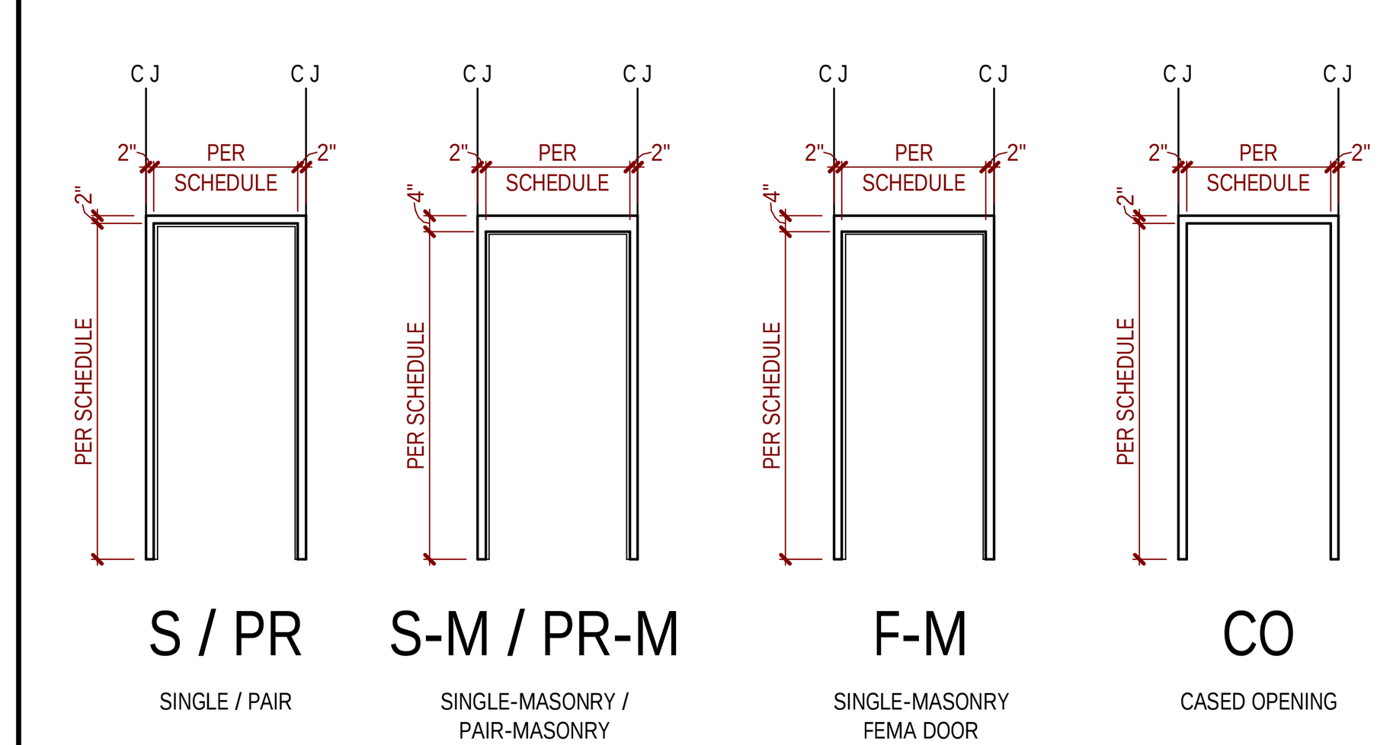
OPENING SCHEDULE (STANDARD)

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	F-M	3'-0"		7'-0"	1 3/4"	FEMA	HM		HM	G10	E10		90 min	Yes	38.0	FEMA ICC-500 Storm door, frame and hardware, Card reader to exit door 135B-1 . Additional notes below.	
135B-1	S-M	3'-0"		7'-0"			WD						n/a				
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	SS	--	SS				n/a	No	5.0	Monitored, exterior Mech., Stainless Steel door and frame	
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	SS	--	SS				n/a	No	5.0	Monitored, exterior Mech., Stainless Steel door and frame	
158	S-M	3' - 0"		7' - 0"	1 3/4"	F	SS	--	SS				n/a	No	5.0	Monitored, exterior Mech., Stainless Steel door and frame	
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	SS	--	SS				n/a	No	5.0	Monitored, exterior Mech., Stainless Steel door and frame	
164	S-M	3' - 0"		7' - 0"	1 3/4"	F	SS	--	SS				n/a	No	5.0	Monitored, exterior Mech., Stainless Steel door and frame	
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	SS	--	SS				n/a	No	5.0	Monitored, exterior Mech., Stainless Steel door and frame	
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	
x169																	
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.

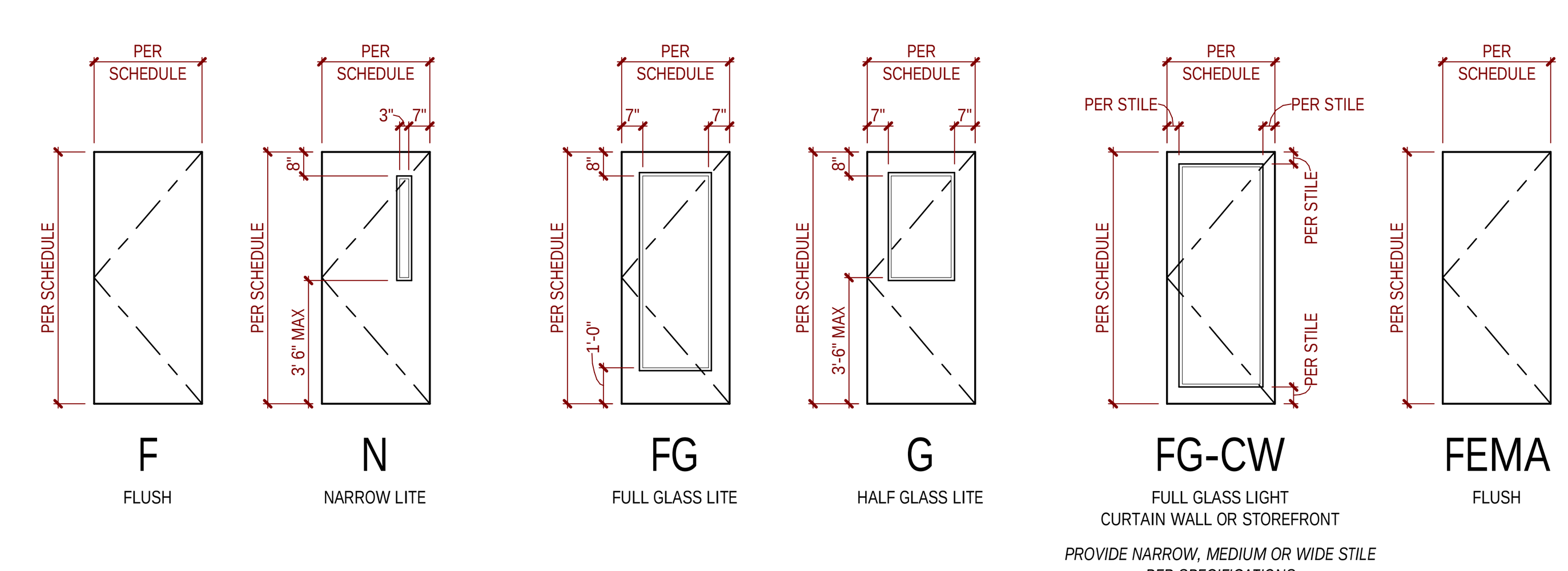
DOOR ABBREVIATIONS LEGEND

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				

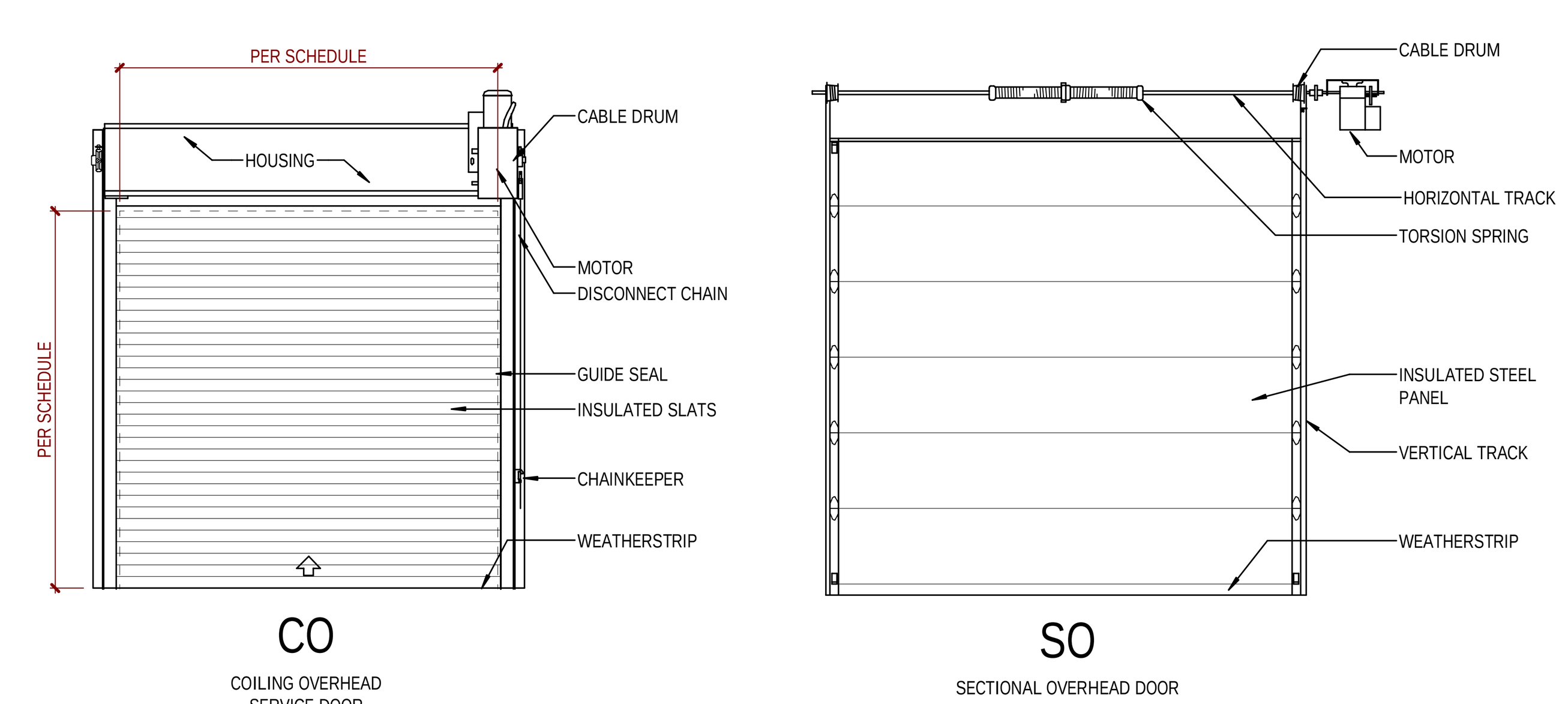


A10 FRAME TYPES - STANDARD
1/4" = 1'-0"

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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HMN 21003.003

BID & PERMIT

KLINGNER ARCHITECT PROJECT # 22-4046
Date: 03/01/2024

#	Issue	Date
2	Addendum 02	03-20-2024

Drawn by: Author

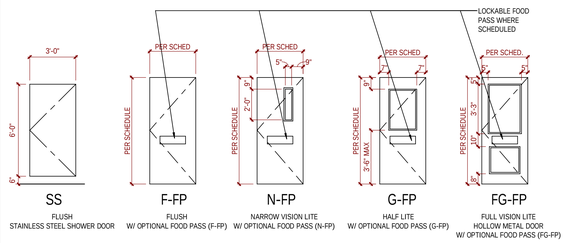
OPENING SCHEDULE, DOOR & FRAME TYPES & WINDOW TYPES

A800

3/20/2024 1:21:26 PM

OPENING SCHEDULE (DETENTION)

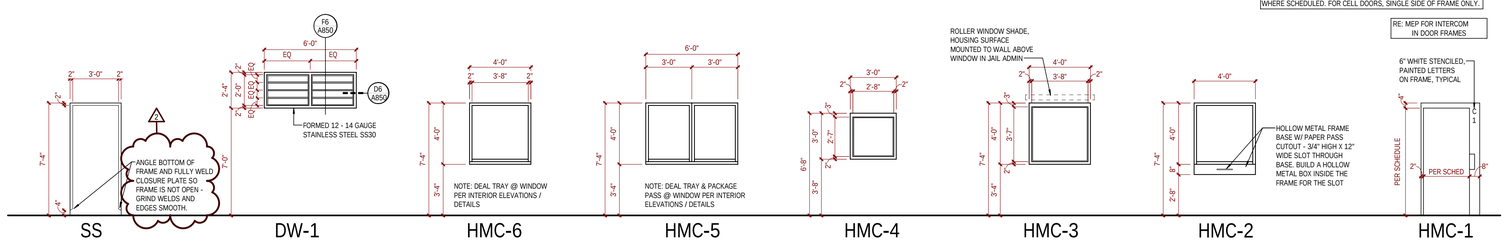
MARK	Frame Type	OPENING (REFER TO OPENING NOTES BELOW) SIZE WIDTH	HEIGHT	THICKNESS	DOOR TYPE	DOOR MATERIAL	GLAZING TYPE	FRAME MATERIAL	FRAME DETAILS (A801 UNO) HEAD	JAMB	SILL	FIRE RATING	SMOKE CONTROL	HARDWARE SET	COMMENTS	Revision #
FIRST FLOOR																
112	HMC -5	6' - 0"	4' - 0"	0"	--	--	SG2	--	D10	C10	F2/A530 & F5/A530	n/a	No		Borrowed lite w/ Talk-thru jamb - Transaction window w/ deal tray	
117B	HMC -2	4' - 0"	4' - 0"	0"	--	--	SG3	--	D10	C10	A10	n/a	No		Borrowed lite w/ Talk-thru jamb - Transaction window w/ paper pass	
118	HMC	3' - 0"	7' - 0"	2"	N	SHM	SG1	SHM	C2	A2		n/a		DH-1		
121A	HMC	3' - 0"	7' - 0"	2"	N	SHM	SG1	SHM	C2	A2		n/a		DH-1		
121B	HMC-6	4' - 0"	4' - 0"	0"	--	--	SG2	--	D10	C10	F2/A530	n/a	No		Borrowed lite w/ Talk-thru jamb - Transaction window w/ deal tray	
122	HMC	3' - 0"	7' - 0"	2"	N	SHM	SG1	SHM	C2	A2		n/a		DH-1		
145A	HMC	3' - 0"	7' - 0"	2"	F	SHM	--	SHM	C2	A2		n/a		DH-1		
145B	HMC -3	4' - 0"	4' - 0"	0"	--	--	SG3	--	D8	C8	A8	n/a	No		Fixed borrowed Lite	
145C	HMC -3	4' - 0"	4' - 0"	0"	--	--	SG3	--	D8	C8	A8	n/a	No		Fixed borrowed Lite	
146	HMC	3' - 0"	7' - 0"	2"	N	SHM	SG2	SHM	C2	A2		n/a		DH-1	Card Reader to enter	
154	HMC	3' - 0"	7' - 0"	2"	N	SHM	SG1	SHM	C2	A2		n/a		DH-1		
155A	HMC	4' - 0"	7' - 0"	2"	N	SHM	SG2M	SHM	C2	A2		n/a		DH-1	Interlocked with #155B	
159	HMC	3' - 0"	7' - 0"	2"	N	SHM	SG2M	SHM	C4	A4		n/a		DH-1	Card Reader to enter	
162A	HMC	3' - 0"	7' - 0"	2"	N	SHM	--	SHM	C4	A4	A6	n/a		DH-1	Card Reader to enter	
162B	HMC	3' - 0"	7' - 0"	2"	N	SHM	SG2M	SHM	C4	A4	A6	n/a		DH-1	Card Reader to enter	
166	HMC	3' - 0"	7' - 0"	2"	N	SHM	SG1	SHM	C2	A2		n/a		DH-1		
A11	HMC	3' - 0"	7' - 0"	2"	N-FP	SHM	SG1	SHM	C2	A2	A6	n/a		DH-3		
B10	HMC	3' - 0"	7' - 0"	2"	N-FP	SHM	SG1	SHM	C2	A2	A6	n/a		DH-3		
B11	HMC	3' - 0"	7' - 0"	2"	N-FP	SHM	SG1	SHM	C2	A2	A6	n/a		DH-3		
C1	HMC	3' - 0"	7' - 0"	2"	F	SHM	--	SHM	C4	A4	A6	--		DH-9		
C10	HMC	3' - 0"	7' - 0"	2"	N-FP	SHM	SG1	SHM	C2	A2	A6	n/a		DH-3		
C11	HMC	3' - 0"	7' - 0"	2"	N-FP	SHM	SG1	SHM	C2	A2	A6	n/a		DH-3		
D1	HMC	3' - 0"	7' - 0"	2"	F	SHM	--	SHM	C4	A4	A6	--		DH-9		
D10	HMC	3' - 0"	7' - 0"	2"	N-FP	SHM	SG1	SHM	C2	A2	A6	n/a		DH-3		
D11	HMC	3' - 0"	7' - 0"	2"	N-FP	SHM	SG1	SHM	C2	A2	A6	n/a		DH-3		
E10	HMC	3' - 0"	7' - 0"	2"	N-FP	SHM	SG1	SHM	C2	A2	A6	n/a		DH-3		
E11	HMC	3' - 0"	7' - 0"	2"	N-FP	SHM	SG1	SHM	C2	A2	A6	n/a		DH-3		
EXC1	HMC	3' - 0"	7' - 0"	2"	FG-FP	SHM	SG2M	SHM				n/a		DH-2		
EXC2	HMC	3' - 0"	7' - 0"	2"	F	SHM	--	SHM	C4	A4	A6	--		DH-9		
EXC3	HMC	3' - 0"	7' - 0"	2"	F	SHM	--	SHM	C4	A4	A6	--		DH-9		
EXC4	HMC	3' - 0"	7' - 0"	2"	N	SHM	SG2M	SHM	C4	A4	A6	n/a		DH-4		
F11	HMC	3' - 0"	7' - 0"	2"	N-FP	SHM	SG1	SHM	C2	A2	A6	n/a		DH-3		
H01	HMC	3' - 0"	7' - 0"	2"	N-FP	SHM	SG2M	SHM	C2	A2	A6	n/a		DH-3		
H02	HMC	3' - 0"	7' - 0"	2"	FG-FP	SHM	SG2M	SHM	C2	A2	A6	n/a		DH-3		
H03	HMC	3' - 0"	7' - 0"	2"	FG-FP	SHM	SG2M	SHM	C2	A2	A6	n/a		DH-3		
MED1	HMC	3' - 0"	7' - 0"	2"	N-FP	SHM	SG2M	SHM	C2	A2	A6	n/a		DH-3	Pan Shutter	2
MED2	HMC -4	3' - 0"	3' - 0"	0"	--	--	SG2	--	D8	C8	A8	n/a	No			
PAD1	HMC	3' - 0"	7' - 0"	2"	N-FP	SHM	SG2M	SHM	C2	A2	H5/A530	n/a		DH-3		
PAD2	HMC	3' - 0"	7' - 0"	2"	N-FP	SHM	SG2M	SHM	C2	A2	H5/A530	n/a		DH-3		
PODA	HMC	3' - 0"	7' - 0"	2"	FG-FP	SHM	SG2M	SHM				n/a		DH-2		
PODB	HMC	3' - 0"	7' - 0"	2"	FG-FP	SHM	SG2M	SHM				n/a		DH-2		
PODC	HMC	3' - 0"	7' - 0"	2"	FG-FP	SHM	SG2M	SHM				n/a		DH-2		
POD0	HMC	3' - 0"	7' - 0"	2"	FG-FP	SHM	SG2M	SHM				n/a		DH-2		
PODE	HMC	3' - 0"	7' - 0"	2"	FG-FP	SHM	SG2M	SHM				n/a		DH-2		
PODF	HMC	3' - 0"	7' - 0"	2"	FG-FP	SHM	SG2M	SHM				n/a		DH-2		
SA1	HMC	3' - 0"	6'-0"	2"	F	SS	--	SS				n/a		DH-10	Stainless steel door and frame	2
SF1	HMC	3' - 0"	6'-0"	2"	F	SS	--	SS				n/a		DH-10	Stainless steel door and frame	2
SP1A	HMC	3' - 0"	7' - 0"	2"	N	SHM	SG1	SHM	C2	A2		n/a		DH-1		
SP1B	HMC	3' - 0"	7' - 0"	2"	F	SHM	SG1	SHM	C2	A2		n/a		DH-1	Pan Shutter	2
SP2A	HMC	3' - 0"	7' - 0"	2"	N	SHM	SG1	SHM	C2	A2		n/a		DH-1		
SP2B	HMC	3' - 0"	7' - 0"	2"	F	SHM	SG1	SHM	C2	A2		n/a		DH-1		
SP3	HMC	3' - 0"	7' - 0"	2"	N	SHM	SG2	SHM	C2	A2		--		DH-1	Card Reader to enter, Pan shutter	2
SP4A	HMC	3' - 0"	7' - 0"	2"	F	SHM	--	SHM	C4	A4		n/a		DH-1	All 7 sallyport doors interlocked w/only one door open at a time	
SP4B	HMC	3' - 0"	7' - 0"	2"	F	SHM	--	SHM	C4	A4		n/a		DH-1	All 7 sallyport doors interlocked w/only one door open at a time	
SP4G	HMC	3' - 0"	7' - 0"	2"	F	SHM	--	SHM	C4	A4		n/a		DH-1	All 7 sallyport doors interlocked w/only one door open at a time. Card reader to enter	
02 - MEZZANINE																
B20	HMC	3' - 0"	7' - 0"	2"	N	SHM	SG1	SHM	C2	A2	A6	--		DH-3		
B21	HMC	3' - 0"	7' - 0"	2"	N	SHM	SG1	SHM	C2	A2	A6	--		DH-3		
B22	HMC	3' - 0"	7' - 0"	2"	N	SHM	SG1	SHM	C2	A2	A6	--		DH-3		
C20	HMC	3' - 0"	7' - 0"	2"	N	SHM	SG1	SHM	C2	A2	A6	--		DH-3		
C21	HMC	3' - 0"	7' - 0"	2"	N	SHM	SG1	SHM	C2	A2	A6	--		DH-3		
C22	HMC	3' - 0"	7' - 0"	2"	N	SHM	SG1	SHM	C2	A2	A6	--		DH-3		
D20	HMC	3' - 0"	7' - 0"	2"	N	SHM	SG1	SHM	C2	A2	A6	--		DH-3		
D21	HMC	3' - 0"	7' - 0"	2"	N	SHM	SG1	SHM	C2	A2	A6	--		DH-3		
D22	HMC	3' - 0"	7' - 0"	2"	N	SHM	SG1	SHM	C2	A2	A6	--		DH-3		
E20	HMC	3' - 0"	7' - 0"	2"	N	SHM	SG1	SHM	C2	A2	A6	--		DH-3		
E21	HMC	3' - 0"	7' - 0"	2"	N	SHM	SG1	SHM	C2	A2	A6	--		DH-3		
E22	HMC	3' - 0"	7' - 0"	2"	N	SHM	SG1	SHM	C2	A2	A6	--		DH-3		



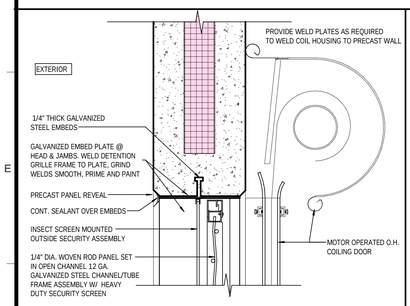
H7 DOOR TYPES - DETENTION
1/4" = 1'-0" |

NOTE: ALL DETENTION DOOR FRAMES TO HAVE A DOOR NUMBER OR IDENTIFICATION MARK STENCILED TO THE FRAME ON BOTH SIDES WHERE SCHEDULED. FOR CELL DOORS, SINGLE SIDE OF FRAME ONLY.

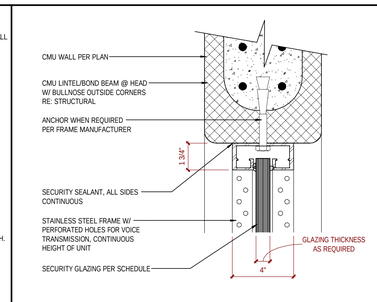
RE: MEP FOR INTERCOM IN DOOR FRAMES



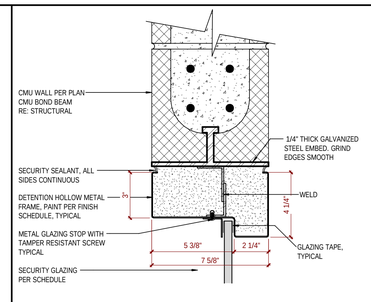
F10 FRAME TYPES - DETENTION
1/4" = 1'-0" |



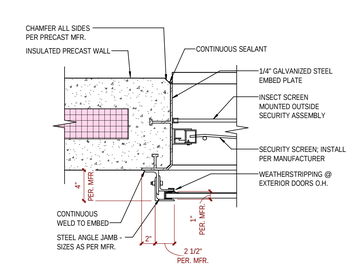
D12 HEAD DETAIL - DETENTION COILING
1 1/2" = 1'-0" |A2/A430



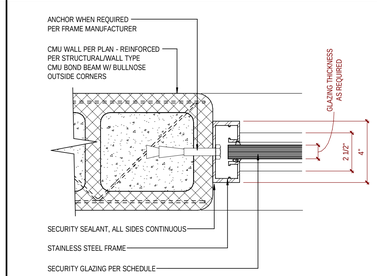
D10 HMC W/ STAINLESS STEEL FRAME HEAD @ CMU
3" = 1'-0" |



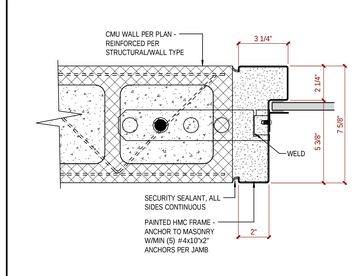
D8 HMC BORROW LITE FRAME HEAD @ CMU
3" = 1'-0" |



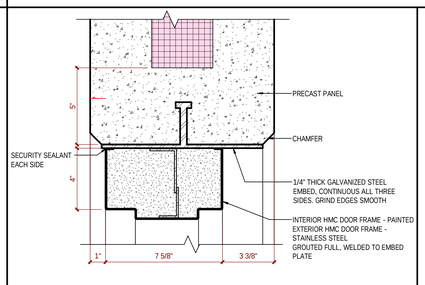
C12 JAMB DETAIL - DETENTION COILING
1 1/2" = 1'-0" |A2/A430



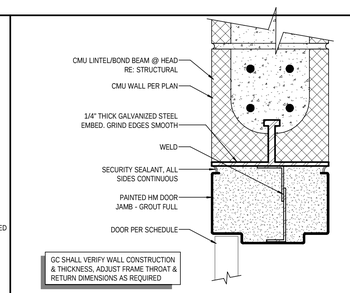
C10 HMC W/ STAINLESS STEEL FRAME JAMB @ CMU
3" = 1'-0" |



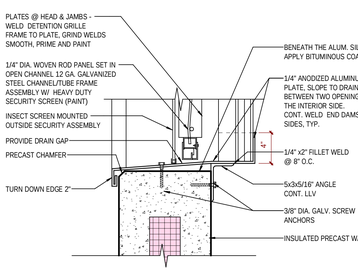
C8 HMC BORROW LITE FRAME JAMB @ CMU
3" = 1'-0" |



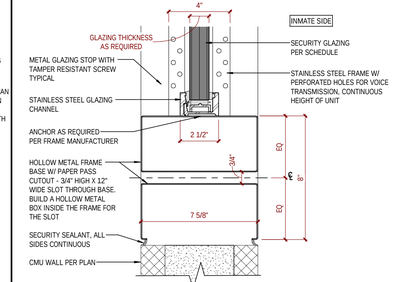
C4 HMC DOOR FRAME HEAD @ PRECAST
3" = 1'-0" |



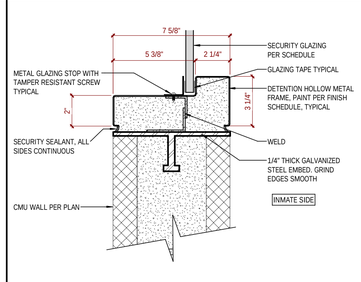
C2 HMC DOOR FRAME HEAD @ CMU
3" = 1'-0" |



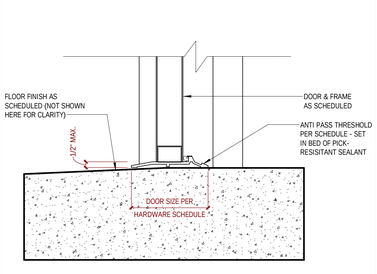
A12 SILL DETAIL - DETENTION COILING
1 1/2" = 1'-0" |A2/A430



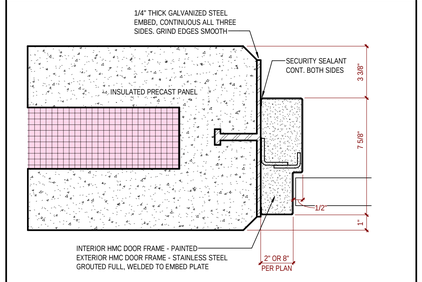
A10 HMC W/ STAINLESS STEEL FRAME SILL @ CMU
3" = 1'-0" |



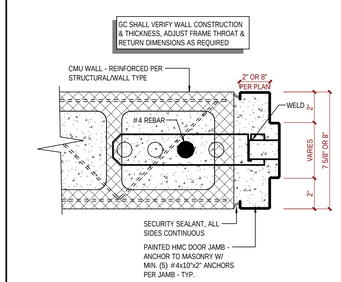
A8 HMC BORROWED LITE FRAME SILL @ CMU
3" = 1'-0" |



A6 ANTI-PASS THRESHOLD SILL
3" = 1'-0" |



A4 HMC DOOR FRAME JAMB @ PRECAST
3" = 1'-0" |



A2 HMC DOOR FRAME JAMB @ CMU
3" = 1'-0" |

3/20/2024 1:21:35 PM

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KLINGNER ARCHITECT PROJECT # 22-4046

Date: 03/01/2024

Issue	Date
2 Addendum 02	03-20-2024

Drawn by: JR

DETENTION OPENING SCHEDULE AND DETAILS

A801

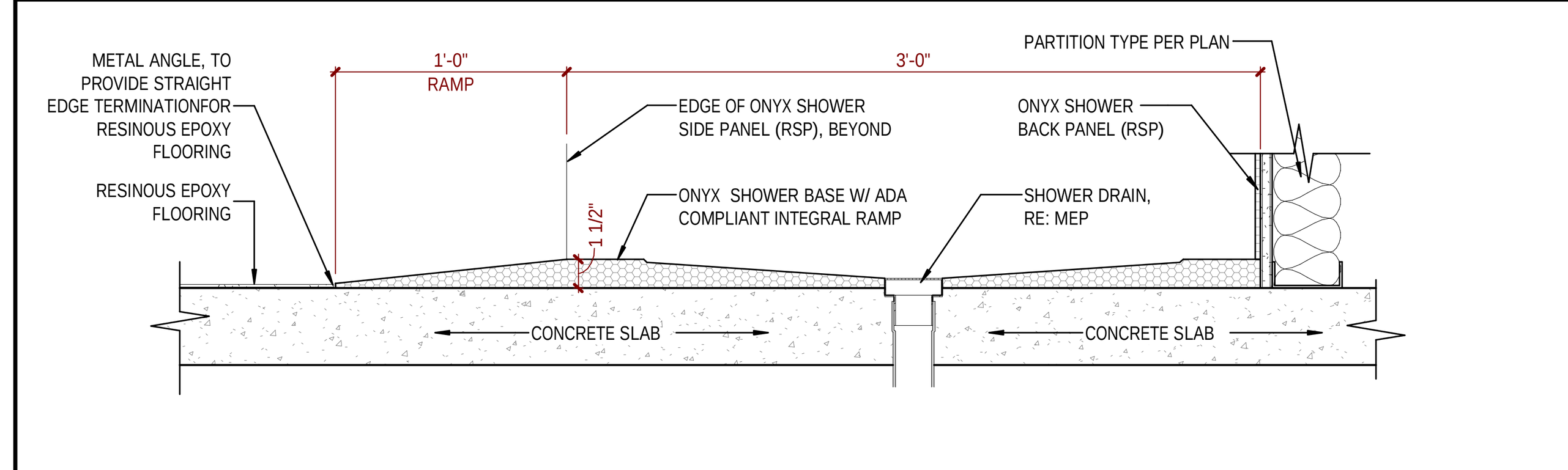
MATERIAL LEGEND

MATERIAL	CODE	MANUFACTURER	MODEL/ PATTERN	COLOR	SIZE	NOTES
FLOORING						
CARPET TILE	CPT1	PATCRAFT	COLOR FILTER I0471	AMBIENT 00290	9" x 36"	STAGGER INSTALLATION
LUXURY VINYL TILE	LVT1	TARKETT	ID LATITUDE STONE	7543 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 5T413-14557	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: D8/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 (EP# = DENOTES EPOXY PAINT VERSION OF COLORS LISTED HERE)	P1	SHERWIN WILLIAMS	--	REPOSE GRAY SW7015	--	FIELD; SECURE AREAS
	P2	SHERWIN WILLIAMS	--	ICE CUBE SW6252	--	FIELD; NON-SECURE AREAS
	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 (2)	--	--
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
DOOR FACE PAINT (INTERIOR DOORS)	DFAP1	SHERWIN WILLIAMS	--	FELTED WOOL SW9171	--	NON-SECURE AND SECURE AREAS
DOOR FACE PAINT (EXTERIOR DOORS)	DFAP2	SHERWIN WILLIAMS	--	--	--	--
WOOD DOOR STAIN	--	SEE SPECS	--	STAIN TO MATCH PL1	--	--
MISCELLANEOUS						
WINDOW SHADES	WS1	MECHOSHADE	THERMOVEIL, 1500 SERIES	BEIGE 1502	3% OPEN	LOCATION PER RCP AND FINISH PLAN KEYNOTES

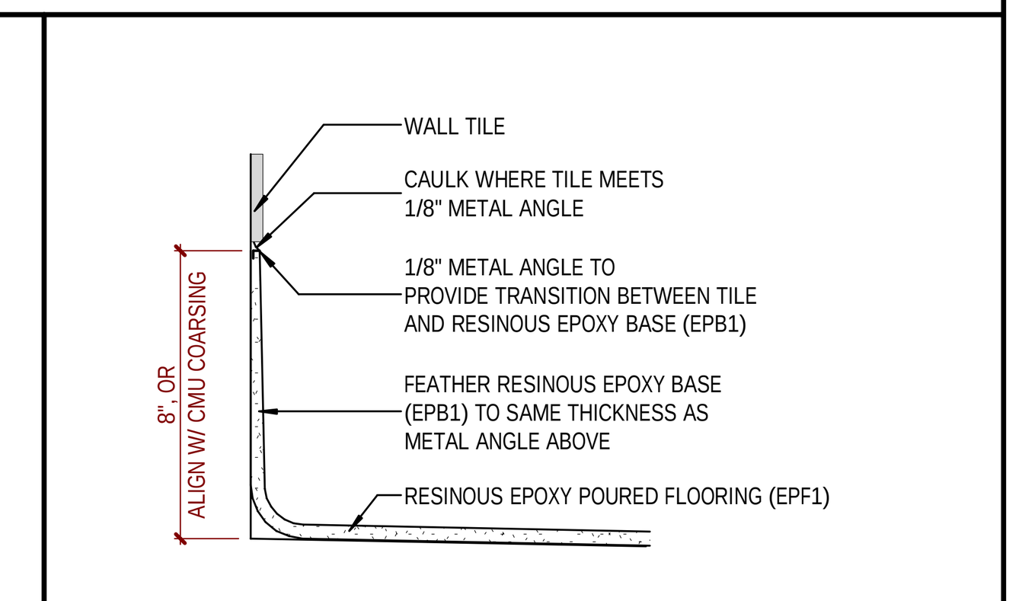
TRANSITION SCHEDULE

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 TRANSTITION 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

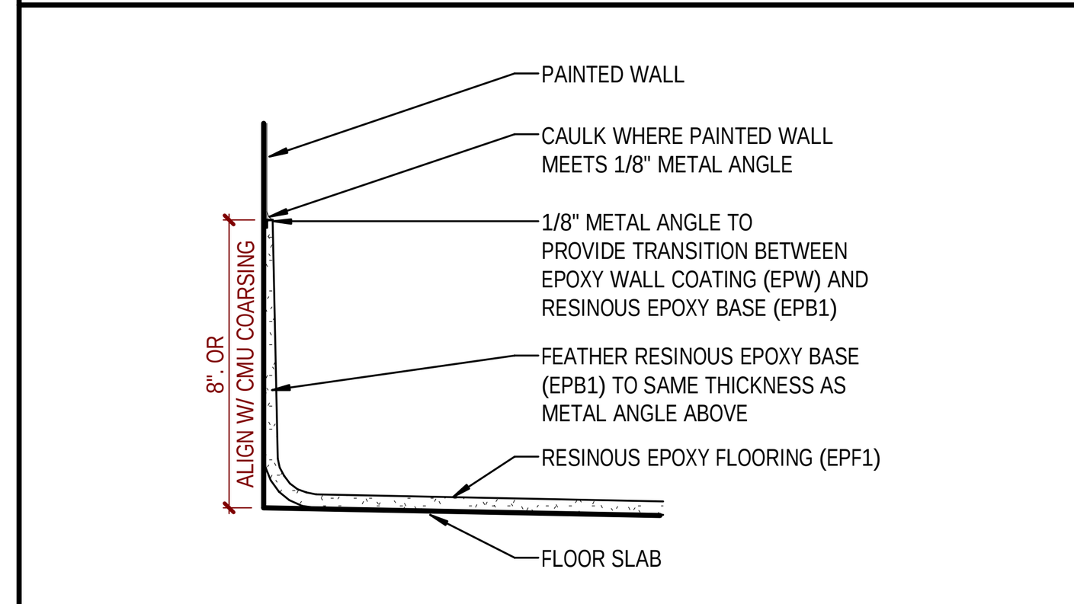
WALL MATERIAL TRANSITION	TRANSITION
OUTSIDE VERTICAL CORNERS: EPOXY WALL COATING (EPW) to EPOXY PAINT (EP#)	NO METAL TRANSITION STRIP; FEATHER EPOXY WALL COATING AS NEEDED TO CREATE SMOOTH, STRAIGHT/CLEAN EDGE TRANSITION TO EPOXY PAINT AT CORNER
OUTSIDE VERTICAL/HORIZONTAL CORNERS: WALL TILE (WT1) to WALL TILE (WT1)	SCHLUTER QUADEC - SATIN ANODIZED ALUMINUM



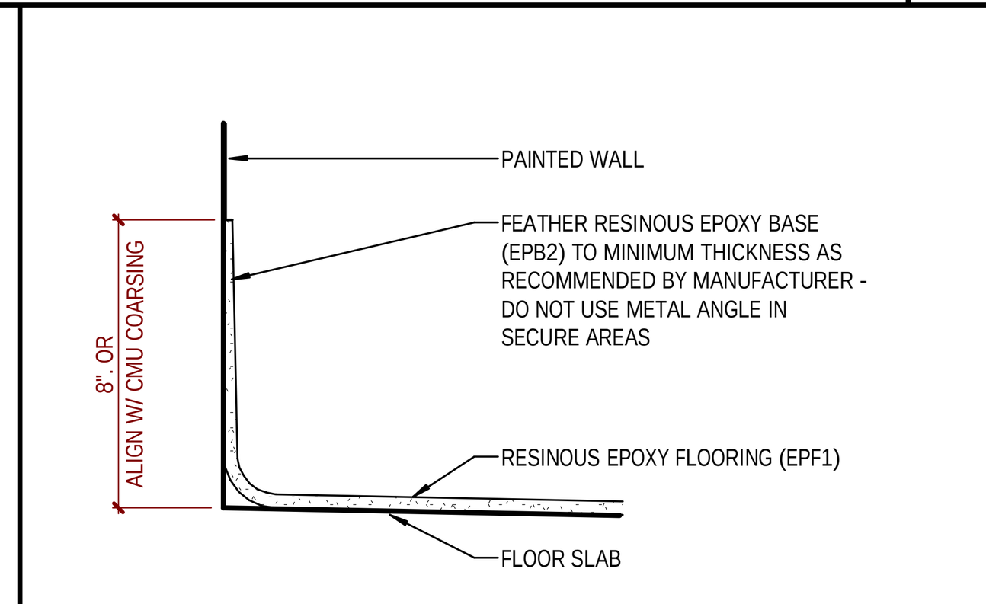
E8 SHOWER - PAN BASE w/ RAMP
1 1/2" = 1'-0"



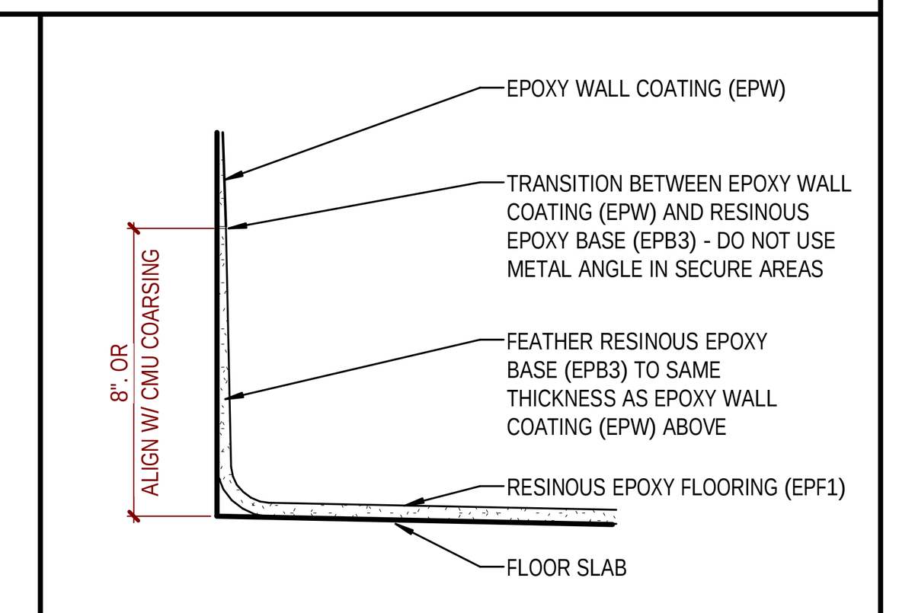
E5 RESINOUS EPOXY BASE AT WALL TILE
3" = 1'-0"



D8 EPOXY BASE @ PAINTED WALL (NON-SECURE)
3" = 1'-0"



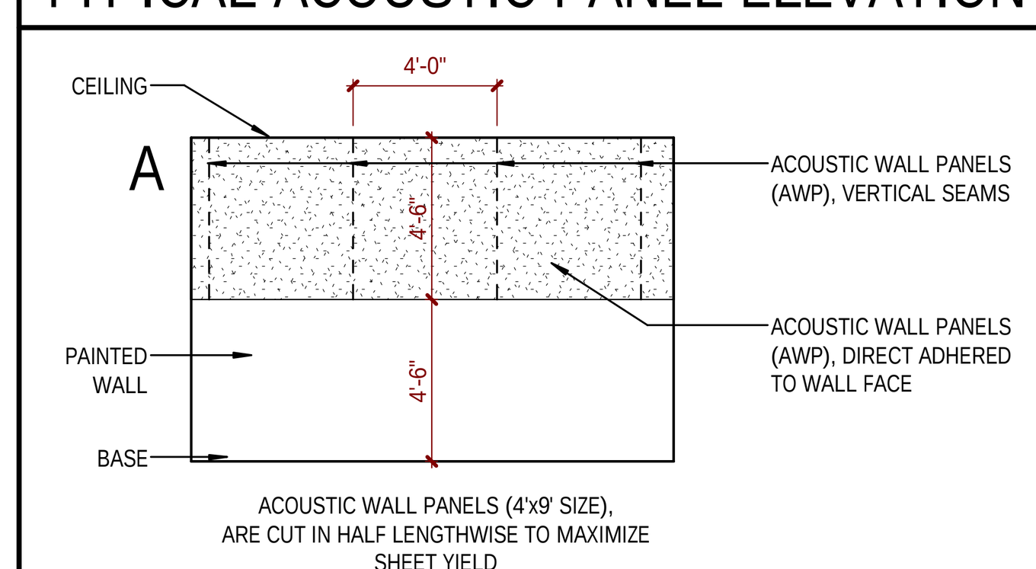
D6 EPOXY BASE @ PAINTED WALL (SECURE)
3" = 1'-0"



D5 EPOXY BASE @ EPW (SECURE)
3" = 1'-0"

TYPICAL ACOUSTIC PANEL ELEVATION

A



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

Drawn by: Author

FINISH SCHEDULE & MATERIALS LEGEND

A900

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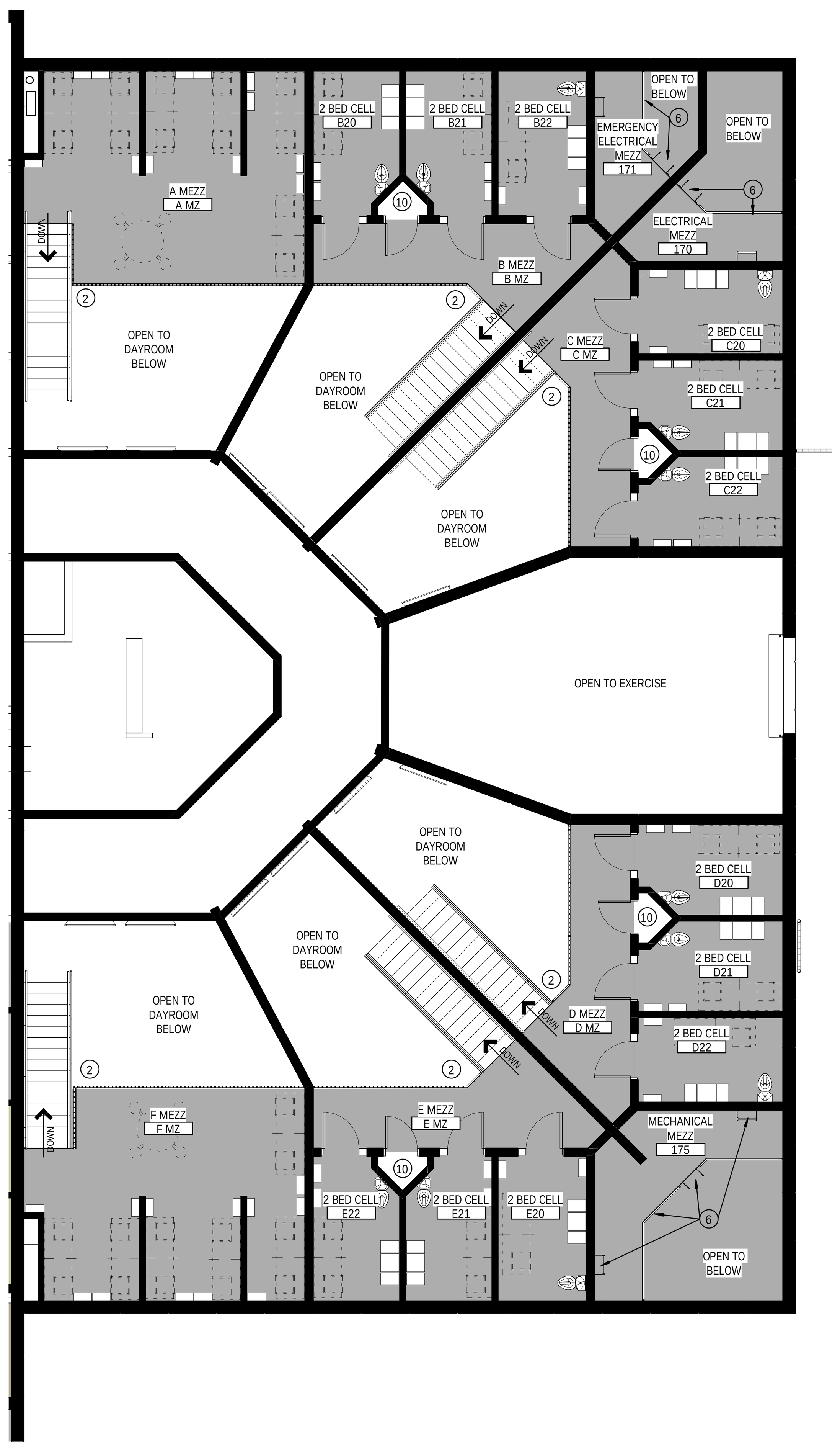
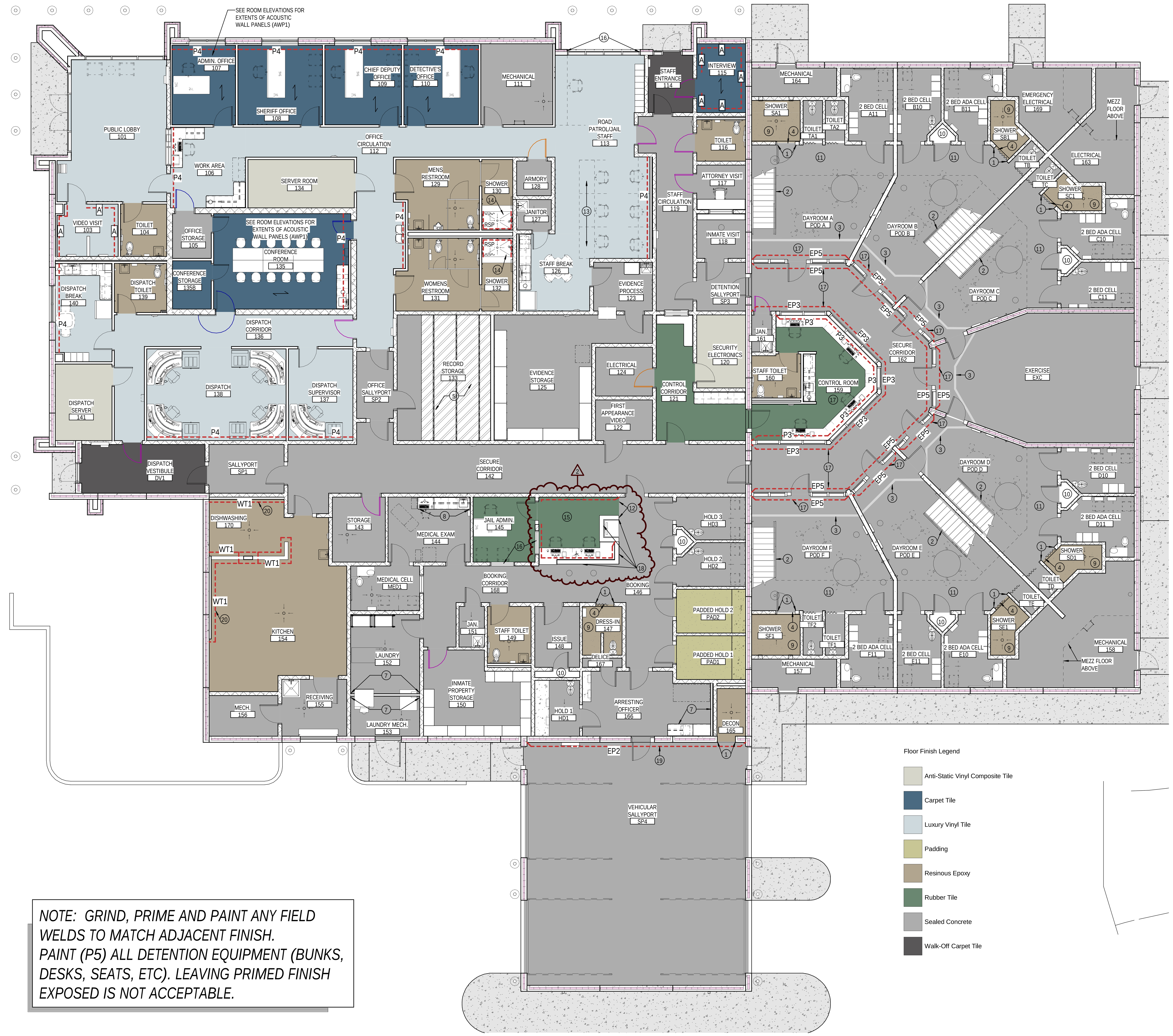
DO NOT PAINT ANY DECORATIVE CMU WALLS. PAINT ONLY STANDARD CMU, PRECAST AND GYPSUM BOARD WALLS

REFER TO DOOR FRAME ELEVATIONS FOR DETENTION DOOR FRAME NUMBERING/LABELING



A12 02 -MEZZANINE FINISH PLAN
1/8" = 1'-0" | C9/A300



NOTE: GRIND, PRIME AND PAINT ANY FIELD WELDS TO MATCH ADJACENT FINISH.
PAINT (P5) ALL DETENTION EQUIPMENT (BUNKS, DESKS, SEATS, ETC). LEAVING PRIMED FINISH EXPOSED IS NOT ACCEPTABLE.

Floor Finish Legend

- Anti-Static Vinyl Composite Tile
- Carpet Tile
- Luxury Vinyl Tile
- Padding
- Resinous Epoxy
- Rubber Tile
- Sealed Concrete
- Walk-Off Carpet Tile

A9 01 - FIRST FLOOR FINISH PLAN
1/8" = 1'-0" | A2/A151

NOTE: THIS SHEET IS ONLY VALID IF PRINTED IN COLOR

GENERAL FINISH NOTES

GENERAL FINISH PLAN NOTES

FLOORS

1. All floor transitions shall be centered under the door unless noted otherwise on the finish plan
2. Flooring/floor patterns to run continuous in knee spaces and any other open spaces below countertops.
3. Flooring patterns shown in plan are to assist in design intent. Flooring sub-contractor is to generate installation drawings/seaming diagrams for designer approval before installation of flooring. Refer to Finish Schedule for full list of flooring finishes in each room.

BASE

1. All resilient base to be rolled goods. There shall be NO pieces of wall base less than 48" long, unless the wall it is on is less than 48" long.

WALLS

1. Wall finishes are intended to be floor to ceiling, Unless noted otherwise.
2. All gypsum board soffits over casework shall be the same color/materials as they wall on which they occur, unless noted otherwise.
3. Refer to elevations for further locations/extents of wall finishes.

CEILING

1. Refer to the ceiling plan for extent of gypsum board ceiling and ceiling tile.
2. All gypsum soffits to be painted on all exposed sides. Refer to the ceiling plan for paint selection

WALL PROTECTION

1. Coordinate framing and blocking requirements with the manufacturer's recommendations.
2. Contractor to verify power and data outlets. Wall protection to be cut to allow for outlets to remain/be installed.
3. Refer to elevations for locations/extents of wall finishes.

DOORS

1. New window frames in the doors are to be painted the same as the door frames.

FINISH PLAN KEYNOTES

1	EPOXY WALL COATING (EPW) TO TERMINATE AT OUTSIDE CORNERS OF OPENING IN WALL.
2	PAINT METAL STAIR COMPONENTS AND MEZZANINE RAILING (P5); INCLUDES BUT NOT LIMITED TO HANDRAILS, STRINGERS, TREADS, RISERS, ETC.
3	4" WIDE PAINTED LINE ON FLOOR. LINE WILL BE PARALLEL TO DAYROOM ENTRY WALL. REFER TO SPEC SECTION 09 9123 FOR "CONCRETE FLOOR MARKING PAINT" INFORMATION.
4	RESINOUS EPOXY FLOORING (EPF1) TO TERMINATE AT SLAB DEPRESSION EDGE. REFER TO FLOOR PLANS AND SECTIONS FOR MORE INFORMATION.
5	CONTRACTOR TO PROVIDE EXTRA FLOOR TILES (RT1) TO OWNER FOR FUTURE USE/INSTALLATION ON ADA RAMP FOR ROLLING RECORDS STORAGE QUANTITY TO BE ENOUGH TO COVER HATCHED AREA IN ROOM PLUS ADDITIONAL 5% OVERAGE.
6	PAINT GUARDRAIL AND/OR LADDER (P5)
7	INSTALL WALL BASE (RB1) ONLY AT GYP BD WALLS AND MILLWORK TOEKICK (IF APPLICABLE); DO NOT INSTALL ON CMU OR PRECAST WALLS IN ROOM.
8	INSTALL WALL BASE (RB1) ONLY AT MILLWORK TOEKICK; DO NOT INSTALL ON CMU OR PRECAST WALLS IN ROOM.
9	REFER TO FLOOR PLAN AND SECTIONS FOR SHOWER SLAB SLOPING DETAILS.
10	NO FINISHES (WALL BASE, PAINT OR CEILING) IN MECHANICAL/CHASE AREAS.
11	SEALED CONCRETE FLOOR FINISH TO BE THROUGHOUT ENTIRE DAYROOM, INCLUDING AREA ON THIS SIDE OF DASHED LINE (I.E. UNDERNEATH MEZZANINE).
12	EDGE OF RUBBER TILE FLOORING (RT1) TO ALIGN W/ FRONT FACE OF CONCRETE WALL AT BOOKING DESK.
13	COORDINATE FLOORING INSTALL AROUND FLOOR OUTLETS.
14	ONYX SHOWER BASE & RAMP, RE: E8/A900
15	INSTALL WALL BASE (RB1) ONLY AT WALLS / LOCATIONS INDICATED BY ACCENT WALL LINETYPE WITHIN ROOM.
16	MANUAL ROLLER SHADE (WS1) AT WINDOWS INDICATED.
17	PAINT ALL PORTIONS OF EXPOSED WALL ABOVE, BELOW AND BESIDE DETENTION GLAZING SYSTEM.
18	PAINT FRONT/BACK FACES OF CONCRETE WALL OF BOOKING DESK (EP3), PER NOTES IN INTERIORS ELEVATIONS.
19	IN VEHICULAR SALLYPORT, ONLY PAINT NORTH WALL (EP2); ALL OTHER WALLS IN ROOM TO BE UNPAINTED PRECAST.
20	TILE TO BE FULL HEIGHT OF GYP WALL, TERMINATE AT CEILING

FINISH SYMBOLS LEGEND

- ROOM NAME & NUMBER TAG
- ALIGN FACE OF MATERIALS SYMBOL
- FINISH PLAN KEYNOTE
- ACCENT WALL

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BID & PERMIT

EDGAR COUNTY PUBLIC SAFETY CENTER
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

Drawn by: HAB

FINISH PLAN

A910

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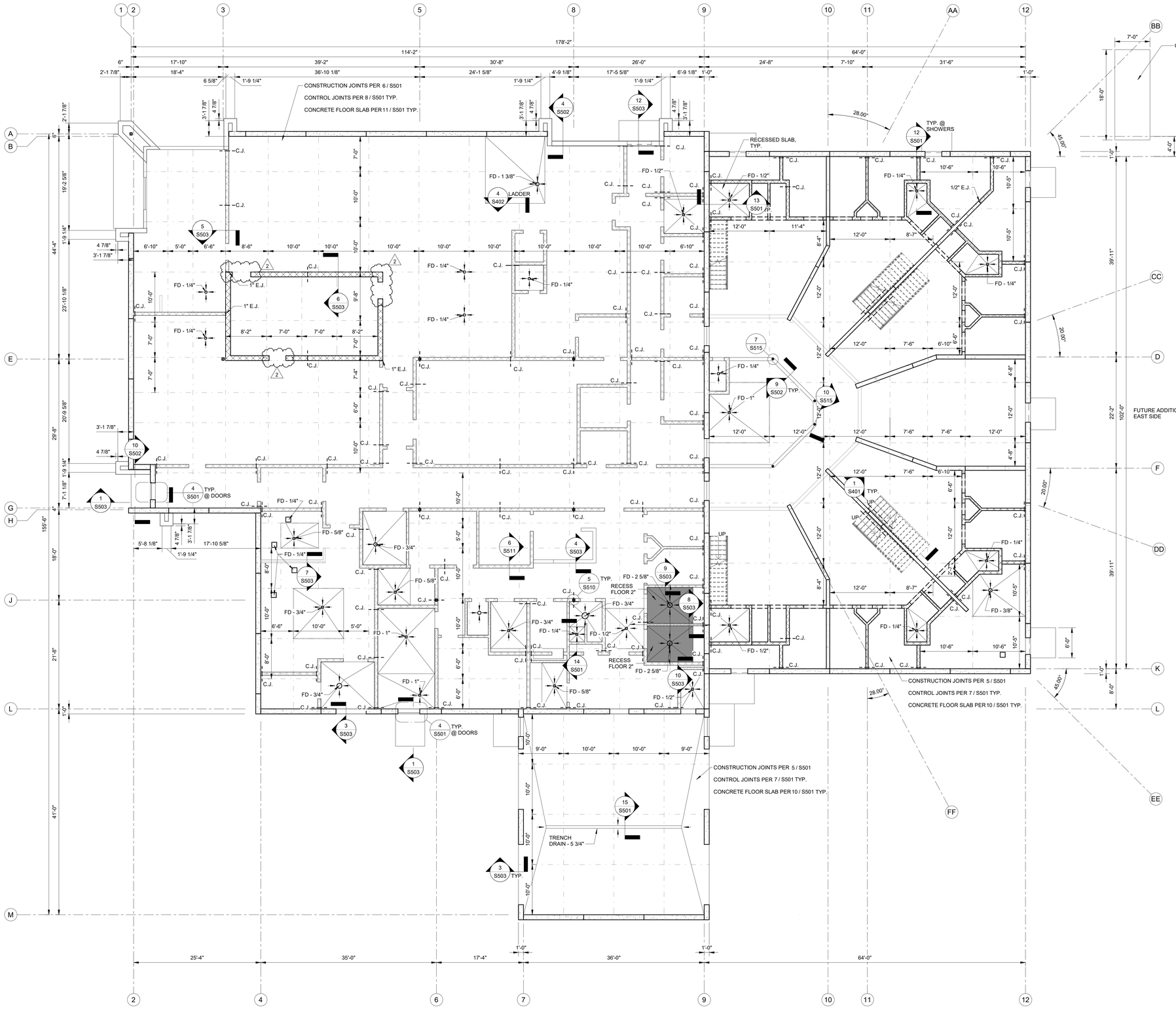

NOTES:
1. SLOPING SLAB TYPICALLY ENCLOSED BY INNER PERIMETER OF ROOM. SEE ARCHITECTURAL PLANS FOR ROOM DIMENSIONS.
2. COORDINATE ALL FLOOR SLOPES AND RECESSES WITH ARCHITECTURAL DRAWINGS AND SPECIFICATIONS.

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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REVISION HISTORY

#	DESCRIPTION	DATE	APPR
2	Addendum 02	03/20/2024	JTS

ISSUED FOR **03/01/2024**

BID & PERMIT

EDGAR COUNTY PUBLIC SAFETY CENTER

EDGAR COUNTY, ILLINOIS
12636 950TH ROAD
PARIS, ILLINOIS 61944

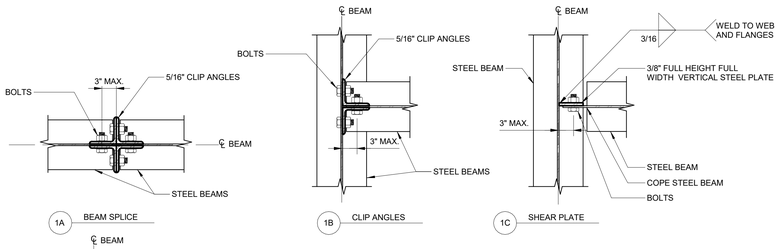
Non-Reduced Sheet Size 30" x 42"
Full sized plans have been prepared using standard scales. Reduced sized plans may not conform to standard scales.

DESIGNED	DRAWN
JTS	NML
FIELD	FIELD BOOK
CHECKED	CHECK DATE
ADL	03/01/2024

SHEET TITLE

SLAB PLAN

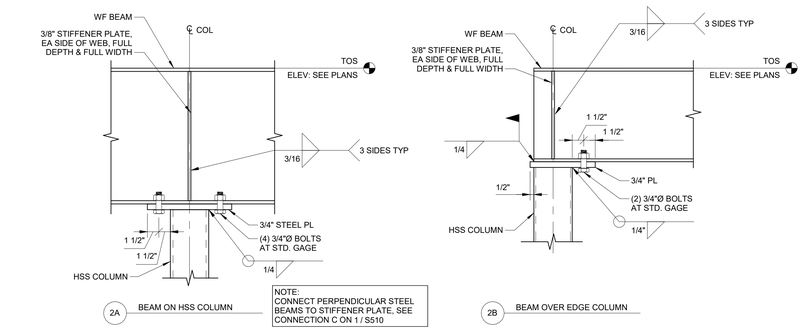
PROJECT NO.
22-4046
DRAWING ISSUED DATE:
03/01/2024
SHEET
S102



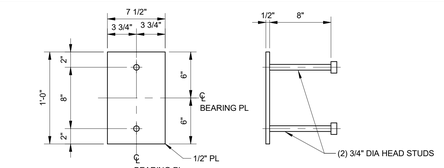
BEAM SIZE	'N' ROWS OF BOLTS	ANGLE LENGTH
W8 & W10	2 ROWS	0' 5 1/2"
W12 & W14	3 ROWS	0' 8 1/2"
W16	4 ROWS	0' 11 1/2"
W18	5 ROWS	1' 2 1/2"
W21 & W24	6 ROWS	1' 5 1/2"
W27 & W30	7 ROWS	1' 8 1/2"

NOTES:
1. ALL BOLTS ARE SNUG-TIGHT 3/4" Ø GRADE A325-N BOLTS IN 13/16" Ø HOLES. SHORT SLOTTED HOLES ARE PERMITTED IF GRADE F1852 BOLTS ARE PRETENSIONED.
2. SPACE ROWS OF BOLTS AT 3" OC
3. PROVIDE 1 1/4" MINIMUM EDGE DISTANCES
4. THE NUMBER OF ROWS ARE BASED ON THE SHALLOWER STEEL BEAM IN THE CONNECTION.
5. SUBTRACT ONE ROW OF BOLTS WHERE TOP OF STEEL DIFFERS BY 2 1/2" AND BOTTOM OF BEAM IS COPED.

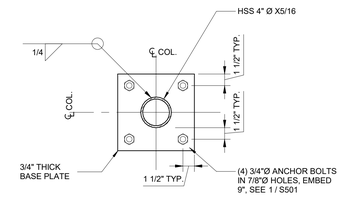
1 BEAM TO BEAM SHEAR CONNECTION DETAILS
1 1/2" = 1'-0"



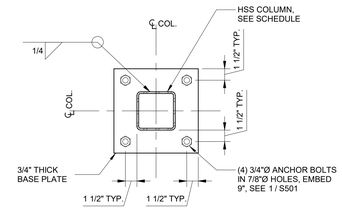
2 HSS COLUMN TO BEAM CONNECTIONS
1 1/2" = 1'-0"



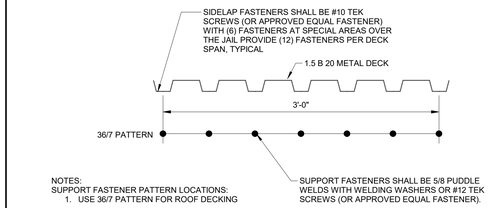
3 BEARING PLATE DETAIL
1 1/2" = 1'-0"



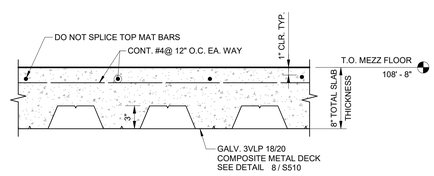
4 HSS RD. BASE PLATE
1 1/2" = 1'-0"



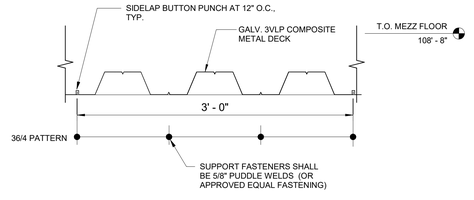
5 HSS BASE PLATE
1 1/2" = 1'-0"



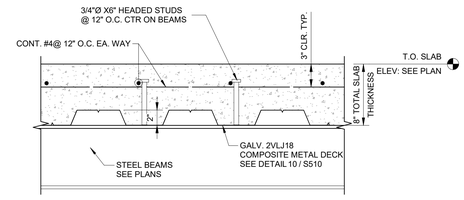
6 1.5 B 20 METAL ROOF DECK
1 1/2" = 1'-0"



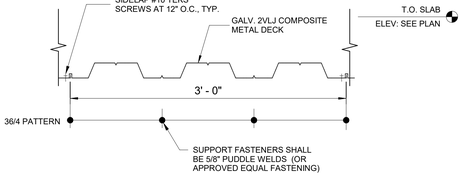
7 COMPOSITE FLOOR SLAB DETAIL
1 1/2" = 1'-0"



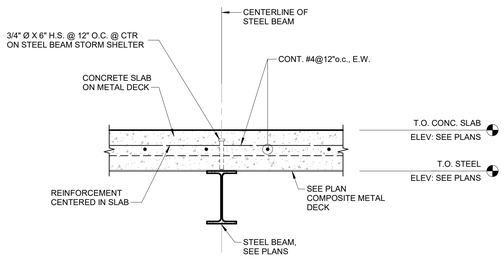
8 TYPICAL 3VLP COMPOSITE METAL DECK
1 1/2" = 1'-0"



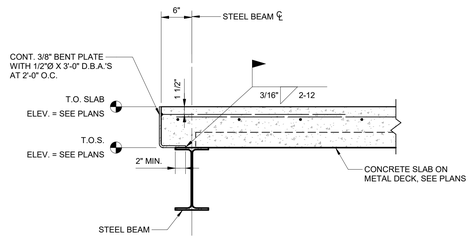
9 2" COMPOSITE FLOOR SLAB DETAIL
1 1/2" = 1'-0"



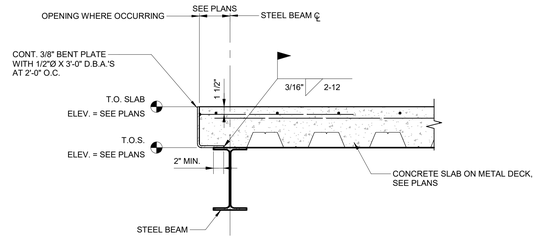
10 TYPICAL 2VLJ COMPOSITE METAL DECK
1 1/2" = 1'-0"



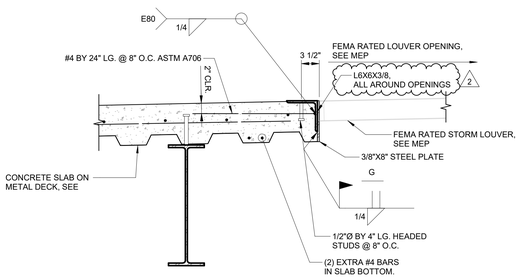
11 CONCRETE SLAB - ON - COMPOSITE METAL DECK
1" = 1'-0"



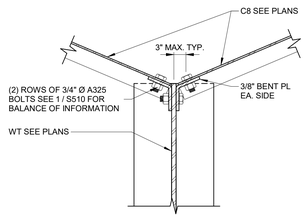
12 SLAB EDGE BRG.
1" = 1'-0"



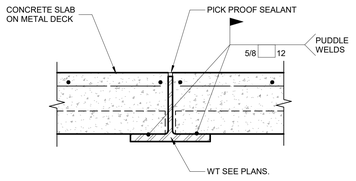
13 SLAB EDGE NON-BRG.
1" = 1'-0"



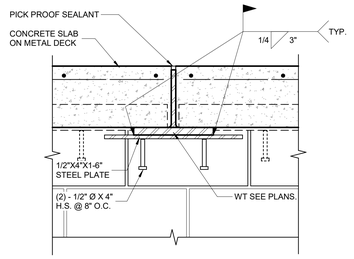
14 STORM SHELTER LOUVER DETAIL
1" = 1'-0"



15 C8 TO WT
1 1/2" = 1'-0"



16 DECK BRG. AT WT
1 1/2" = 1'-0"



17 WT BRG. ON CMU
1 1/2" = 1'-0"

0 3" 6" 1'
SCALE: 1 1/2" = 1'-0"
0 6" 1' 2'
SCALE: 1" = 1'-0"

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EDGAR COUNTY, ILLINOIS
12636 950TH ROAD
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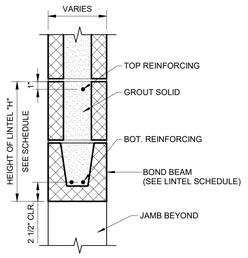
JTS	NML
FIELD	FIELD BOOK
CHECKED ADL	CHECK DATE 03/01/2024

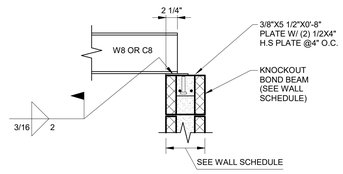
SHEET TITLE

STRUCTURAL STEEL DETAILS

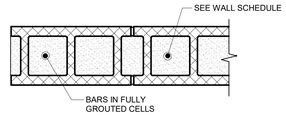
PROJECT NO. **22-4046**
DRAWING ISSUED DATE: **03/01/2024**
SHEET **S510**



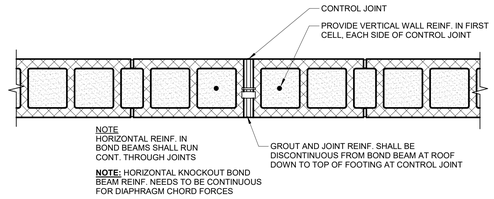
1 CMU LINTEL DETAIL
1 1/2" = 1'-0"



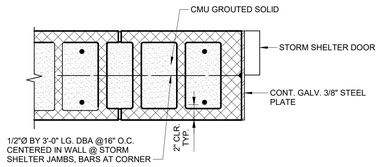
2 BEAM BEARING DETAIL
1" = 1'-0"



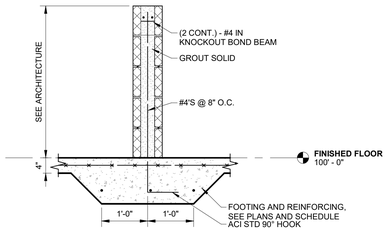
3 CMU JAMB DETAIL
1 1/2" = 1'-0"



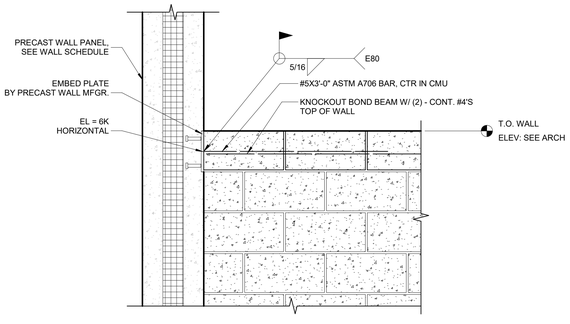
4 CONTROL JOINT DETAIL
1 1/2" = 1'-0"



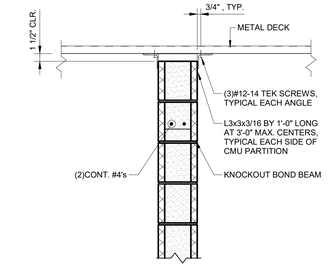
5 STORM SHELTER JAMBS
1 1/2" = 1'-0"

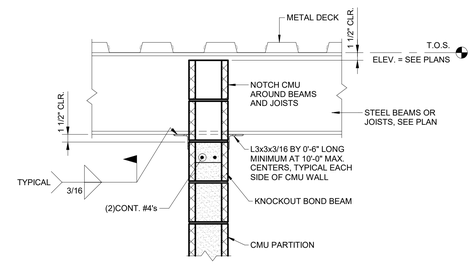


6 CMU SILL DETAIL
3/4" = 1'-0"



7 CMU PARTITION WALL CONNECTION TO PRECAST WALL
1" = 1'-0"





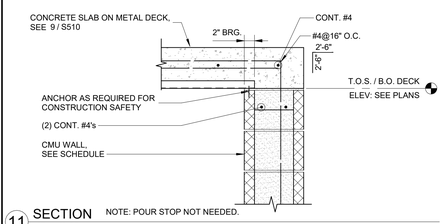
8 TYP. NON-LOAD BEARING PARTITION BRACING DETAILS
1" = 1'-0"

9 BEAM BEARING DETAIL
1" = 1'-0"

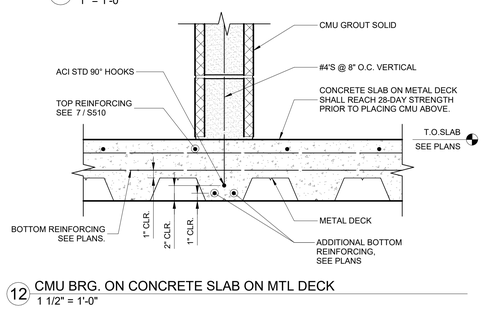
10 SECTION
NOTE: POUR STOP NOT NEEDED.
1" = 1'-0"

13 STORM SHELTER HEAD DETAIL
1" = 1'-0"

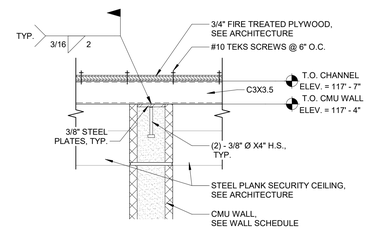
14 LINTEL CONN. TO PRECAST CONCRETE
1 1/2" = 1'-0"



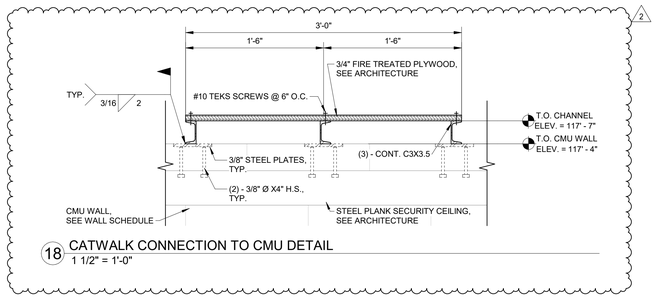
11 SECTION
NOTE: POUR STOP NOT NEEDED.
1" = 1'-0"



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"

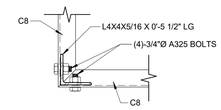


18 CATWALK CONNECTION TO CMU DETAIL
1 1/2" = 1'-0"

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"

SCALE: 1 1/2" = 1'-0"
SCALE: 3/4" = 1'-0"
SCALE: 1" = 1'-0"

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SHEET TITLE

STRUCTURAL CMU DETAILS

PROJECT NO.
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DRAWING ISSUED DATE:
03/01/2024
SHEET
S511

3/20/2024 2:47:26 PM
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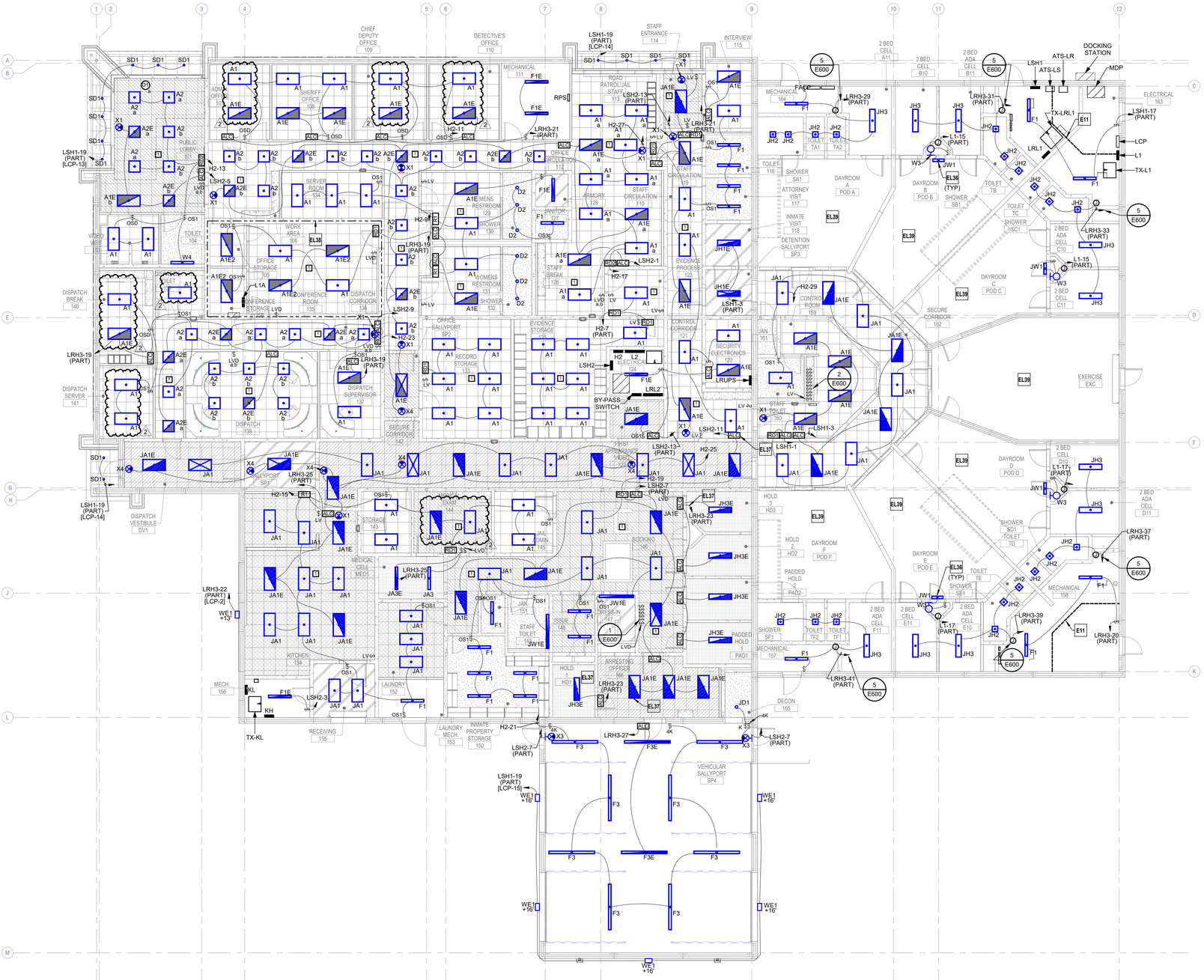
ELECTRICAL PLAN NOTES:

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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Date: 03/01/2024

	Issue	Date
2	Addendum #2	03/20/2024

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LIGHTING FIRST FLOOR PLAN - OVERALL

E101

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MICHAEL T. DERMYER

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.

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. DIVISION 26 CONTRACTOR SHALL PROVIDE HARDWIRED CONNECTION FROM EACH CVC TO CONTROLLED PLUMBING FIXTURES. 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.

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EQUIPMENT CONNECTION FIRST FLOOR PLAN - OVERALL

E301

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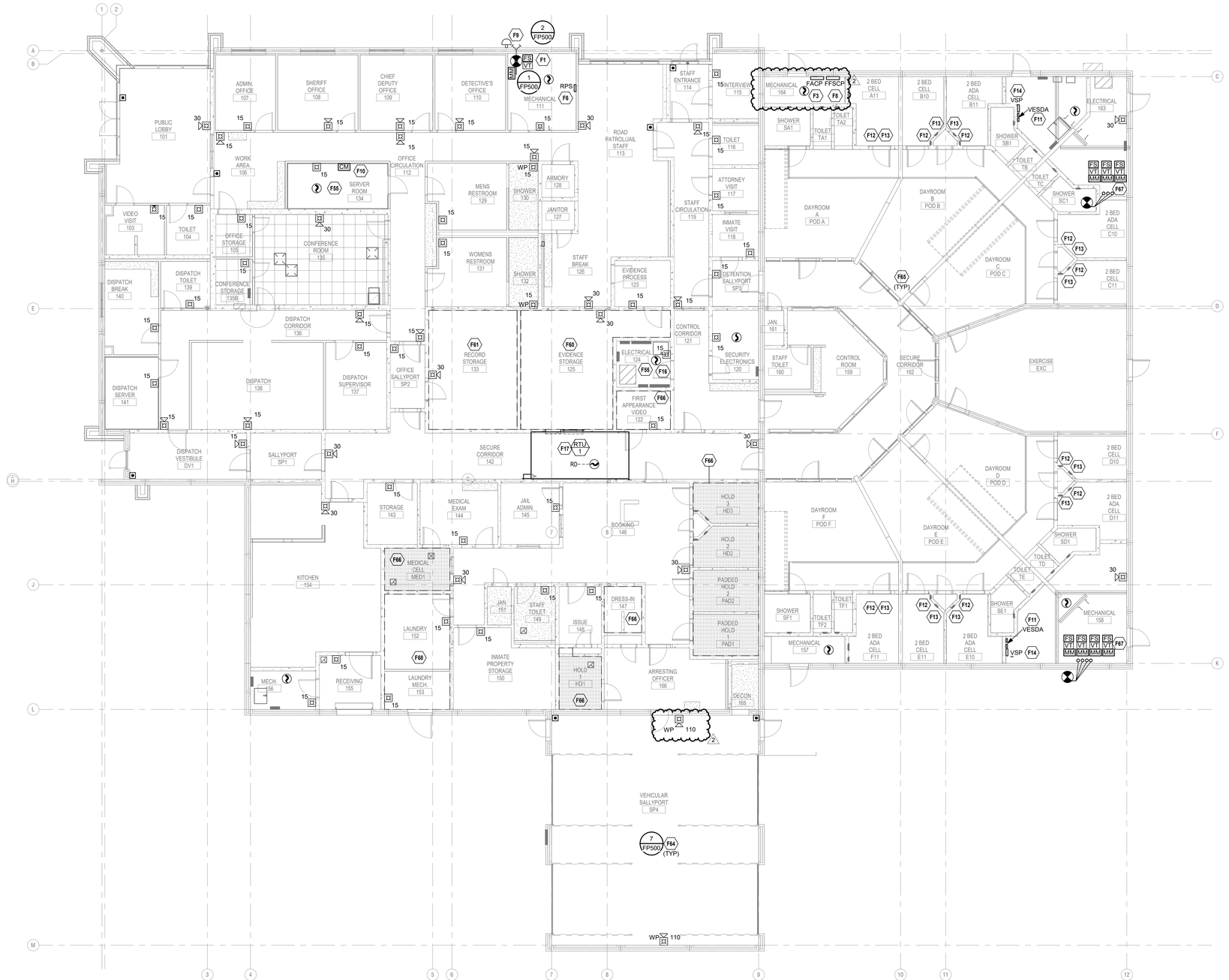

1 FIRE PROTECTION PLAN - FIRST FLOOR - OVERALL
1/8" = 1'-0"

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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03/20/2024

FIRE PROTECTION PLAN - FIRST FLOOR - OVERALL

FP101

CHRISTOPHER J. CULP

GENERAL NOTES:

1. PROVIDE A CONSTRUCTION RECORD SET OF "AS-BUILT" DOCUMENTS TO THE ARCHITECT REFLECTING ANY VARIANCES OF INSTALLED PIPING LOCATIONS OR EQUIPMENT CONTRARY TO THE CONSTRUCTION DOCUMENTS, REFER TO SPECIFICATIONS.
2. DRAWINGS ARE DIAGRAMMATIC ONLY AND REPRESENT THE GENERAL SCOPE OF THE WORK. REVIEW THE GENERAL NOTES, SPECIFICATIONS AND PLANS FOR ADDITIONAL REQUIREMENTS THAT MAY NOT BE SPECIFICALLY CALLED OUT IN THIS PORTION OF THE CONSTRUCTION DOCUMENTS. NOTIFY THE ARCHITECT OF ANY CONFLICTS OR DISCREPANCIES PRIOR TO SUBMISSION OF BID.
3. DRAWINGS ARE DIAGRAMMATIC ONLY AND REPRESENT THE GENERAL SCOPE OF THE WORK. PRIOR TO SUBMITTING BID, VISIT THE JOB SITE TO OBSERVE THE EXISTING CONDITIONS OF THE PROJECT. REVIEW THE GENERAL NOTES, SPECIFICATIONS AND PLANS FOR ADDITIONAL REQUIREMENTS THAT MAY NOT BE SPECIFICALLY CALLED OUT IN THIS PORTION OF THE CONSTRUCTION DOCUMENTS. NOTIFY ARCHITECT OF ANY CONFLICTS OR DISCREPANCIES PRIOR TO SUBMISSION OF BID.
4. PROVIDE TO THE ARCHITECT A COPY OF INSPECTION REPORTS AND APPROVAL CERTIFICATES FROM LOCAL AND STATE INSPECTIONS, REFER TO SPECIFICATIONS.
5. INSTALLATION SHALL COMPLY WITH LEGALLY CONSTITUTED CODES AND THE REQUIREMENTS OF AUTHORITIES HAVING JURISDICTION AND ALSO MEET ALL REQUIREMENTS OF THE LANDLORD. OBTAIN A COPY OF THE LANDLORD'S REQUIREMENTS AND REVIEW PRIOR TO SUBMITTING BID.
6. PLANS AND SPECIFICATIONS GOVERN WHERE THEY EXCEED CODE REQUIREMENTS.
7. VERIFY LOCATION AND DEPTH OF UTILITIES AT POINTS OF CONNECTION BEFORE START OF PIPING INSTALLATION.
8. REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATION AND MOUNTING HEIGHTS OF PLUMBING FIXTURES.
9. DO NOT SCALE FLOOR PLANS FOR EXACT HORIZONTAL LOCATION OF PIPE ROUTING.
10. INSTALL CONCEALED PIPING TIGHT TO THE STRUCTURE AND AS HIGH AS POSSIBLE.
11. VALVES SHALL BE LINE SIZE UNLESS OTHERWISE NOTED.
12. INSTALL EXPOSED PIPING, WHERE NECESSARY, IN FINISHED AREAS TIGHT TO THE STRUCTURE, WALL OR CEILING AND AS HIGH AS POSSIBLE. INSTALL PIPING PARALLEL AND / OR PERPENDICULAR TO WALLS.
13. INSTALL VALVES AND APPURTENANCES A MAXIMUM OF 24" ABOVE CEILING IN ACCESSIBLE LOCATION WITHIN 24" OF ACCESS DOORS OR ACCESSIBLE CEILING TILES. PROVIDE PIPE AND FITTINGS TO INSTALL VALVES AND APPURTENANCES AT REQUIRED HEIGHT AND WITHIN 24" OF ACCESS DOORS OR ACCESSIBLE CEILING TILES.
14. INSTALL NO PLASTIC PIPE OF ANY KIND ABOVE SLAB INSIDE OR UNDER THE BUILDING. INSTALL NO PLASTIC PIPE IN THE CEILING RETURN AIR PLENUM.
15. COORDINATE ALL WORK WITH OTHER TRADES AND CONTRACTORS.
16. COORDINATE PIPING INSTALLATION WITH STRUCTURAL GRADE BEAMS, FOOTINGS, COLUMN PIERS, ETC. SLEEVE PIPING THROUGH GRADE BEAMS, FOOTING, ETC. WHERE REQUIRED AND AS NOTED ON PLANS. COORDINATE SLEEVE INSTALLATIONS WITH THE ARCHITECT, STRUCTURAL ENGINEER, STRUCTURAL CONTRACTOR AND GENERAL CONTRACTOR BEFORE CONCRETE IS INSTALLED.
17. CLEAN FAUCET AERATORS AND PIPE STRAINERS PRIOR TO TURNING BUILDING OVER TO THE OWNER.
18. PROVIDE TRAP PRIMERS WHERE REQUIRED BY LOCAL AUTHORITIES.
19. COORDINATE PIPE ROUTING AWAY FROM ELECTRICAL PANELS. DO NOT INSTALL PIPING OVER ELECTRICAL PANELS.
20. PAINT ALL EXPOSED GAS AND WATER PIPING USING RUST INHIBITOR PAINT. PAINT AND COLOR SHALL BE COORDINATED WITH THE ARCHITECT AND / OR OWNER.
21. COORDINATE ALL ROOF PENETRATIONS WITH OTHER TRADES. MAINTAIN 10' MINIMUM CLEARANCE FROM ALL AIR INTAKES. MAINTAIN 2' CLEARANCE FROM ALL OTHER EQUIPMENT.
22. INSULATE PIPING ROUTED IN EXTERIOR BUILDING WALLS WITH MINIMUM 2" BATT INSULATION TO PREVENT FREEZING.
23. PROVIDE "HEAVY-DUTY" NO-HUB COUPLINGS ON STORM PIPING, INCLUDING CONNECTIONS TO ROOF DRAINS. SEE DIVISION 22 SPECIFICATION SECTION "STORM DRAINAGE PIPING AND SPECIALTIES" FOR MORE INFORMATION.
24. PROVIDE TRANSITION ADAPTER COUPLINGS FOR CONNECTION OF PVC DWV TO CAST IRON SANITARY, WASTE AND VENT PIPE AT SLAB ON GRADE. SEE DIVISION 22 SPECIFICATION SECTION "SANITARY DRAINAGE AND VENT PIPING AND SPECIALTIES" FOR MORE INFORMATION.
25. PROVIDE TRANSITION ADAPTER COUPLINGS FOR CONNECTION OF PVC DWV TO CAST IRON STORM PIPE AT SLAB ON GRADE. SEE DIVISION 22 SPECIFICATION SECTION "STORM DRAINAGE PIPING AND SPECIALTIES" FOR MORE INFORMATION.
26. FLOW CONTROL VALVES SHALL BE SIZE 1/2" AND SET AT 0.5 GPM UNLESS NOTED OTHERWISE.
27. WATER HAMMER ARRESTORS SHALL BE SIZE "A" UNLESS NOTED OTHERWISE.
28. PROVIDE VERTICAL LIFT SPRING LOADED CHECK VALVES IN HOT AND COLD WATER SUPPLIES FOR MOP SINK FAUCETS DOWNSTREAM OF SHUTOFF VALVES.
29. PROVIDE SIZE AND LENGHT OF HOT WATER FIXTURE SUPPLY PIPE FROM CIRCULATED HOT WATER BRANCH OR MAIN TO TERMINATION OF HOT WATER FIXTURE SUPPLY PIPE AT EACH FIXTURE PER 2018 INTERNATIONAL ENERGY CONSERVATION CODE' TABLE C404.3.1. FOR 1/2" HOT WATER FIXTURE SUPPLY PIPE SIZE TO INDIVIDUAL SINKS, PROVIDE MAXIMUM LENGTH OF 43 FEET. FOR 3/4" HOT WATER FIXTURE SUPPLY PIPE SIZE TO INDIVIDUAL SINKS, PROVIDE MAXIMUM LENGTH OF 21 FEET. (2)
30. PROVIDE WALL PIPES AT PIPING PENETRATIONS OF ELEVATED WATERPROOF FLOOR SLABS, REFER TO SPECIFICATIONS.

PLUMBING SYMBOLS

THIS IS A MASTER LEGEND AND NOT ALL SYMBOLS OR ABBREVIATIONS ARE USED. V2.02

STANDARD MOUNTING HEIGHTS

CLINIC SERVICE SINKS (RIM)	30"
HOSE BIBB (CENTERLINE)	36"
ICE MAKER OUTLET BOX (CENTER OF BOX)	24"
JANITOR'S SINK FAUCET FITTINGS (CENTERLINE)	42"
LAVATORY OR SINK	
STANDARD HEIGHT (RIM)	31"
ADA ACCESSIBLE (RIM)	34"
CHILD HEIGHT (RIM)	24"
NON FREEZE WALL HYDRANT (AFG TO CENTERLINE)	18"
SHOWER HEAD	
MEN (CENTERLINE)	78"
WOMEN (CENTERLINE)	72"
SHOWER VALVE	
STANDARD HEIGHT - MEN (CENTERLINE)	48"
STANDARD HEIGHT - WOMEN (CENTERLINE)	42"
ADA ACCESSIBLE (CENTERLINE)	38" TO 48"
SURGEON'S SCRUB-UP SINK (FRONT RIM)	35"
TUB VALVE	
STANDARD HEIGHT (CENTERLINE)	32"
ADA ACCESSIBLE	CENTER BETWEEN GRAB BAR AND TUB RIM
URINAL	
STANDARD HEIGHT (RIM)	24"
ADA ACCESSIBLE (RIM)	17"
CHILD HEIGHT (RIM)	14"
WASHING MACHINE OUTLET BOX (RIM)	42"
WATER CLOSET	
STANDARD HEIGHT (RIM)	15"
ADA ACCESSIBLE (TOP OF SEAT)	17" TO 19"
CHILD HEIGHT (RIM)	10"
WATER COOLER OR DRINKING FOUNTAIN	
STANDARD HEIGHT (SPOUT)	41"
ADA ACCESSIBLE (SPOUT)	36"
CHILD HEIGHT (SPOUT)	30"

INSTALL PLUMBING FIXTURES AT THE MOUNTING HEIGHTS SHOWN ABOVE UNO IN THE ARCHITECTURAL DRAWINGS OR ELSEWHERE IN THE CONSTRUCTION DOCUMENTS. FINAL APPROVAL OF LOCATIONS BY ARCHITECT. MOUNTING HEIGHTS LISTED ABOVE, OR ELSEWHERE IN THE CONSTRUCTION DOCUMENTS, ARE AFF, UNO. ALL DEVICES SHALL BE INSTALLED IN COMPLIANCE WITH CURRENT ADA AND LOCAL REQUIREMENTS.

ANNOTATION

- (1) PLUMBING PLAN NOTE CALLOUT
- (1) PLUMBING EQUIPMENT DESIGNATION. (CONTRACTOR FURNISHED AND INSTALLED). REFER TO PLUMBING FIXTURE OR EQUIPMENT SCHEDULES
- 1 EQUIPMENT DESIGNATION (OWNER FURNISHED, CONTRACTOR INSTALLED)
- CU 1 MECHANICAL EQUIPMENT DESIGNATION (CONTRACTOR FURNISHED AND INSTALLED UNLESS NOTED OTHERWISE)
- CONNECTION POINT OF NEW WORK TO EXISTING
- 1 / P1 DETAIL REFERENCE UPPER NUMBER INDICATES DETAIL NUMBER LOWER NUMBER INDICATES SHEET NUMBER
- 1 / P1 SECTION CUT DESIGNATION
- DEDICATED EQUIPMENT ACCESS TILE
- ACCESS PANEL

ABBREVIATIONS

ADA	AMERICANS WITH DISABILITIES ACT
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AHU	AIR HANDLING UNIT
AP	ACCESS PANEL
BAS	BUILDING AUTOMATION SYSTEM
BFF	BELOW FINISHED FLOOR
BFG	BELOW FINISHED GRADE
BOP	BOTTOM OF PIPE
BOS	BOTTOM OF STRUCTURE
BTU	BRITISH THERMAL UNIT
CP	CONDENSATE PUMP
CPVC	CHLORINATED POLYVINYL CHLORIDE
CU	COPPER
DI	DUCTILE IRON
DN	DOWN
DFU	DRAINAGE FIXTURE UNIT
DS	DOWNSPOUT
(E)	EXISTING
EMS	ENERGY MANAGEMENT SYSTEM
ETR	EXISTING TO REMAIN
EWC	ELECTRIC WATER COOLER
FD	FLOOR DRAIN
FFA	FROM FLOOR ABOVE
FFB	FROM FLOOR BELOW
FF	FINISHED FLOOR
FL	FLOW LINE
FLA	FULL LOAD AMPS
FLR	FLOOR
GPM	GALLONS PER MINUTE
HD	HEAD, HUB DRAIN
HZ	HERTZ
IE	INVERT ELEVATION
IN WC	INCHES OF WATER COLUMN
JB	JUNCTION BOX
J-BOX	JUNCTION BOX
KW	KILOWATT
MAU	MAKE-UP AIR UNIT
MAX	MAXIMUM
MBH	1000 BTU PER HOUR
MH	MANHOLE
MIN	MINIMUM
N/C	NORMALLY CLOSED
N/O	NORMALLY OPEN
NIC	NOT IN CONTRACT
ORD	OVERFLOW ROOF DRAIN
PDI	PLUMBING DRAINAGE INSTITUTE
PH/Ø	PHASE
PRV	PRESSURE REDUCING VALVE
PVC	POLYVINYL CHLORIDE
RCP	REINFORCED CONCRETE PIPE
RD	ROOF DRAIN
RPM	REVOLUTIONS PER MINUTE
RTU	ROOFTOP UNIT
SF	SQUARE FEET
SP	SUMP
SS	STAINLESS STEEL SANITARY SEWER, SOIL STACK
TDH	TOTAL DYNAMIC HEAD
TFA	TO FLOOR ABOVE
TFB	TO FLOOR BELOW
TYP	TYPICAL
UL	UNDERWRITERS LABORATORIES, INC.
UNO	UNLESS NOTED OTHERWISE
UPS	UNINTERRUPTIBLE POWER SUPPLY
VCP	VITRIFIED CLAY PIPE
VFD	VARIABLE FREQUENCY DRIVE
VS	VENT STACK
VTR	VENT THROUGH ROOF
W/	WITH
W/O	WITHOUT
WC	WATER COLUMN
WS	WASTE STACK
WSFU	WATER SUPPLY FIXTURE UNIT
WVS	WASTE VENT STACK

PIPING SYMBOLS

- OXYGEN OUTLET
- NITROUS OXIDE OUTLET
- MEDICAL AIR OUTLET
- NITROGEN OUTLET
- MEDICAL VACUUM INLET
- FLOOR SINK (FS), SIZE & TYPE
- FLOOR DRAIN (FD), SIZE & TYPE
- ROOF DRAIN (RD), SIZE & TYPE
- BALL VALVE
- CONTROL VALVE
- SHUTOFF VALVE
- CHECK VALVE
- BALANCING VALVE WITH PRESSURE PORTS
- WATER METER
- STRAINER
- STRAINER WITH BLOWOFF
- RELIEF/SAFETY VALVE
- SOLENOID VALVE
- PRESSURE REDUCING VALVE
- GAS PRESSURE REGULATOR
- THERMOSTATIC MIXING VALVE
- PA PIPE ANCHOR
- EXPANSION JOINT
- BACKFLOW PREVENTER
- PRESSURE GAUGE
- THERMOMETER
- UNION
- FLANGE CONNECTION
- HOSE BIBB (HB)
- NON-FREEZING WALL HYDRANT (NW)
- MANUAL / AUTOMATIC AIR VENT OR VACUUM RELIEF VALVE
- PRESSURE / VACUUM SWITCH
- CLEANOUT
- CAP
- WALL CLEANOUT (WCO)
- FLOOR CLEANOUT (FCO)
- EXTERIOR CLEANOUT (ECO)
- ELBOW UP
- ELBOW DOWN
- TEE UP
- TEE DOWN
- ELBOW UP WITH SHUT-OFF VALVE (SOV)
- ELBOW DOWN WITH SHUT-OFF VALVE (SOV)
- TEE UP WITH SHUT-OFF VALVE (SOV)
- TEE DOWN WITH SHUT OFF VALVE (SOV)
- "A" WATER HAMMER ARRESTER (WHA) WITH PDI SIZES, (A, B, C, D, & E)
- RECIRCULATION PUMP
- P-TRAP
- GAS COCK
- TRAP PRIMER
- TRAP PRIMER WITH DISTRIBUTION UNIT

PIPING LINETYPES

CW	DOMESTIC COLD WATER (CW)
SCW	SOFTENED COLD WATER (SCW)
HW	DOMESTIC HOT WATER (HW)
HWR	DOMESTIC HOT WATER RECIRC. (HWR)
140°	DOMESTIC HOT WATER (140°)
T	TRAP PRIMER LINE (T)
S	SOIL PIPING - ABOVE FLOOR (S)
S	SOIL PIPING - BELOW FLOOR (S)
W	WASTE PIPING - ABOVE FLOOR (W)
W	WASTE PIPING - BELOW FLOOR (W)
GW	GREASE WASTE - ABOVE FLOOR (GW)
GW	GREASE WASTE - BELOW FLOOR (GW)
CGWV	COMBINATION GREASE WASTE AND VENT (CGWV)
CWV	COMBINATION WASTE AND VENT (CWV)
ST	STORM DRAIN - ABOVE FLOOR (ST)
ST	STORM DRAIN - BELOW FLOOR (ST)
OST	OVERFLOW STORM DRAIN - ABOVE FLOOR (OST)
VBG	VENT BELOW GRADE (VBG)
VBF	VENT BELOW FLOOR (VBF)
ID	INDIRECT DRAIN (ID)
CDH	CONDENSATE DRAIN - HIGH EFFICIENCY RTU (CDH)
CD	CONDENSATE DRAIN (CD)
ACD	AUXILIARY CONDENSATE DRAIN (ACD)
SPD	SUMP OR SEWAGE PUMP DISCHARGE (SPD)
G	NATURAL GAS (G)
G	NATURAL GAS ON ROOF (G)
MPG	MEDIUM PRESSURE NATURAL GAS (MPG)
MPG	MEDIUM PRESSURE NATURAL GAS ON ROOF (MPG)
NPW	NON-POTABLE WATER (NPW)
LPG	LIQUEFIED PETROLEUM GAS (LPG)
WS	WATER SERVICE (WS)
DFP	FIRE PROTECTION SPRINKLER DRY (DFP)
FP	FIRE PROTECTION SPRINKLER WET (FP)
DSP	FIRE PROTECTION STANDPIPE DRY (DSP)
WSP	FIRE PROTECTION STANDPIPE WET (WSP)
PD	CONDENSATE PUMP DISCHARGE (PD)
V	VENT PIPING (V)
AW	ACID WASTE - ABOVE FLOOR (AW)
AW	ACID WASTE - BELOW FLOOR (AW)
AV	ACID VENT (AV)
GWS	GRAY WATER (GWS)
CA	COMPRESSED AIR (CA)
MA	MEDICAL AIR (MA)
MV	MEDICAL VACUUM (VE)
HE	HELIUM (HE)
IA	INSTRUMENT AIR (IA)
IV	INSTRUMENT VACUUM (IV)
N2	NITROGEN (N2)
N2O	NITROUS OXIDE (N20)
O2	OXYGEN (O2)
EV	EVAC/WAGD (EV)
CO2	CARBON DIOXIDE (CO2)
AI	MEDICAL AIR INTAKE (AI)
VE	MEDICAL VACUUM EXHAUST (VE)
DA	DENTAL AIR (DA)
DV	DENTAL VACUUM (DV)
FW1	FILTERED WATER (FW1)
FW2	FILTERED WATER W/ SCALE INHIBITOR (FW2)
RO	REVERSE OSMOSIS (RO)
ROR	REVERSE OSMOSIS REMINERALIZATION (ROR)

LINETYPE LEGEND

THROUGHOUT THE DRAWINGS DIFFERENT LINETYPES ARE USED IN COMBINATION WITH THE SYMBOLS TO INDICATE THE STATUS OF ITEMS AS EXISTING, TO BE DEMOLISHED, TO BE INCLUDED AS PART OF NEW WORK AND/OR ITEMS WHICH ARE ANTICIPATED TO BE PROVIDED IN THE FUTURE. THE STATUS OF ITEMS USING THESE LINETYPES ARE RELATIVE TO THE VIEW IN WHICH THEY APPEAR. PHASING SHOWN IN DRAWINGS IS NOT INTENDED TO FULLY DESCRIBE ALL NECESSARY CONSTRUCTION PHASING, WHICH IS DETERMINED BY THE CONTRACTOR AS PART OF THEIR RESPONSIBILITIES. ANY SUCH PHASES DESCRIBED IN THE CONSTRUCTION DOCUMENTS ARE GENERAL AND ONLY INTENDED TO INDICATE A BROAD ORDER FOR THE SAKE OF DESCRIBING THE PROJECT. THE FOLLOWING LINETYPES MAY BE USED ON ANY DEVICE, EQUIPMENT, NOTE, LINE, SHAPE, ETC.

EXISTING

DEMOLISH — — — — —

NEW

FUTURE - - - - - - - -

HATCHING LEGEND

ENLARGED PLAN

NOT IN SCOPE (NIS)

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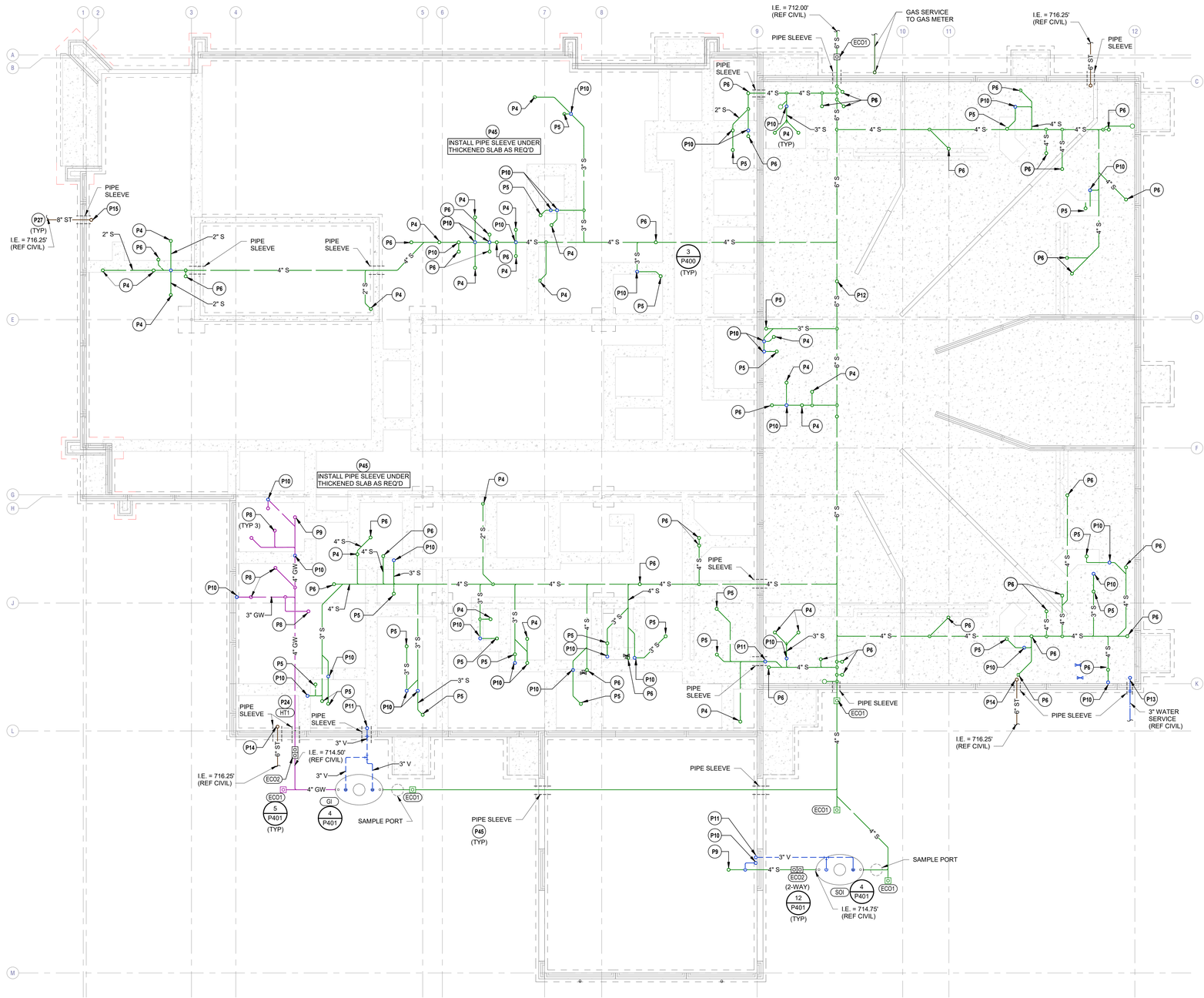
2	Addendum #2	03/20/2024

Drawn by: Author

PLUMBING GENERAL NOTES AND LEGEND

P000

SCOTT A. WALTER



PLUMBING PLAN NOTES:

- P4 2" S FFA
- P5 3" S FFA
- P6 4" S 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.

ENTIRE SHEET HAS BEEN UPDATED.

2

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PLUMBING FOUNDATION PLAN

P100

SCOTT A. WALTER

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.

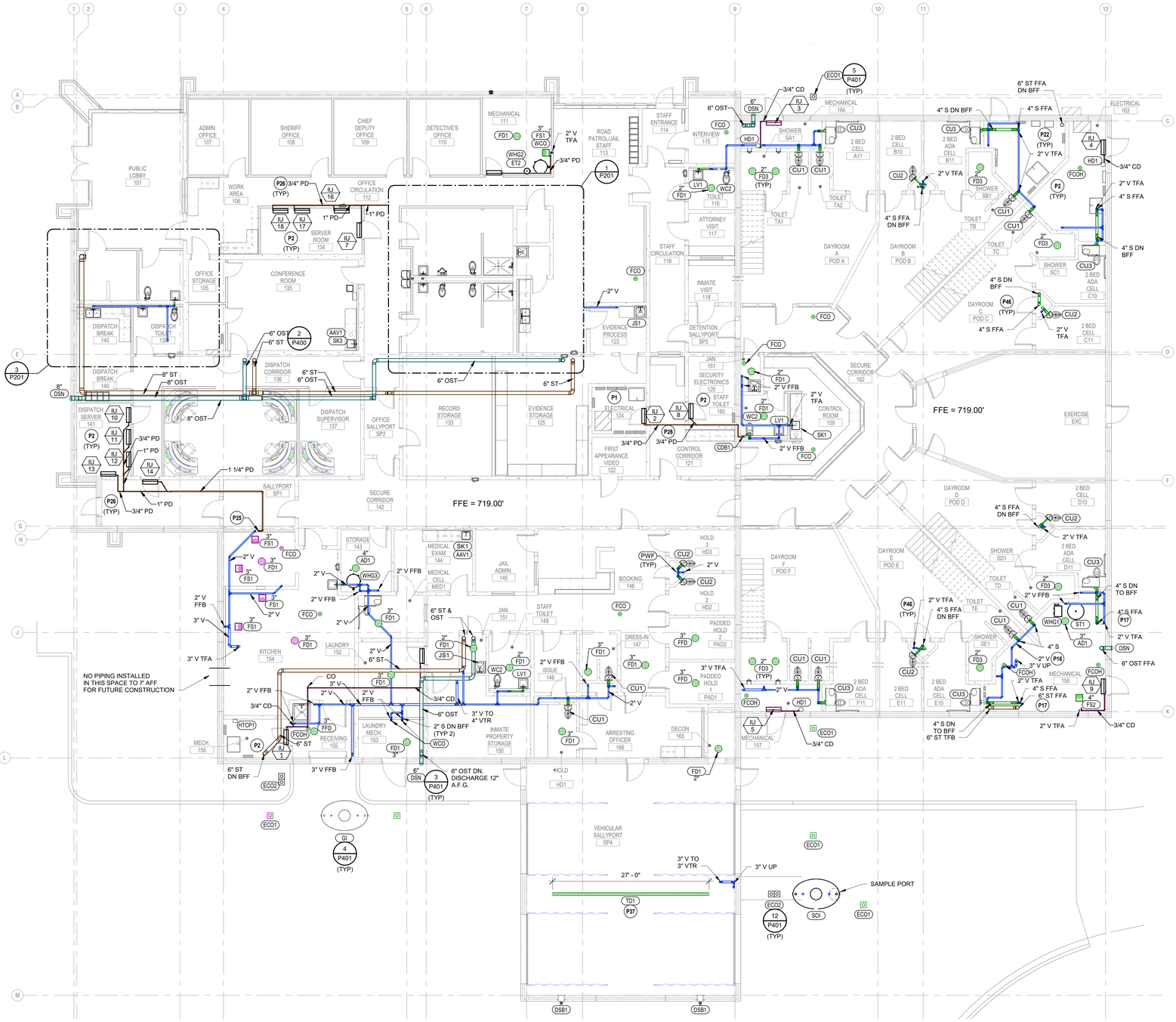
P22 INSTALL DRAIN PANS UNDER SANITARY PIPING AS NEEDED TO PROTECT ELECTRICAL EQUIPMENT MOUNTED BELOW PIPING. ADD ABOVE SLAB HUB DRAINS IN EXPOSED SANITARY PIPING IF NEEDED TO SERVE DRAIN PAN DISCHARGE.

P25 ROUTE 3/4" CD DOWN IN WALL AND DISCHARGE TO FLOOR SINK WITH AIR GAP.

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.



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

ENTIRE SHEET HAS BEEN UPDATED.

2

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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 IN DROP AND CONNECT TO ELECTRONIC VALVE ACTUATOR.

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 IN DROP AND CONNECT TO ELECTRONIC VALVE ACTUATOR.

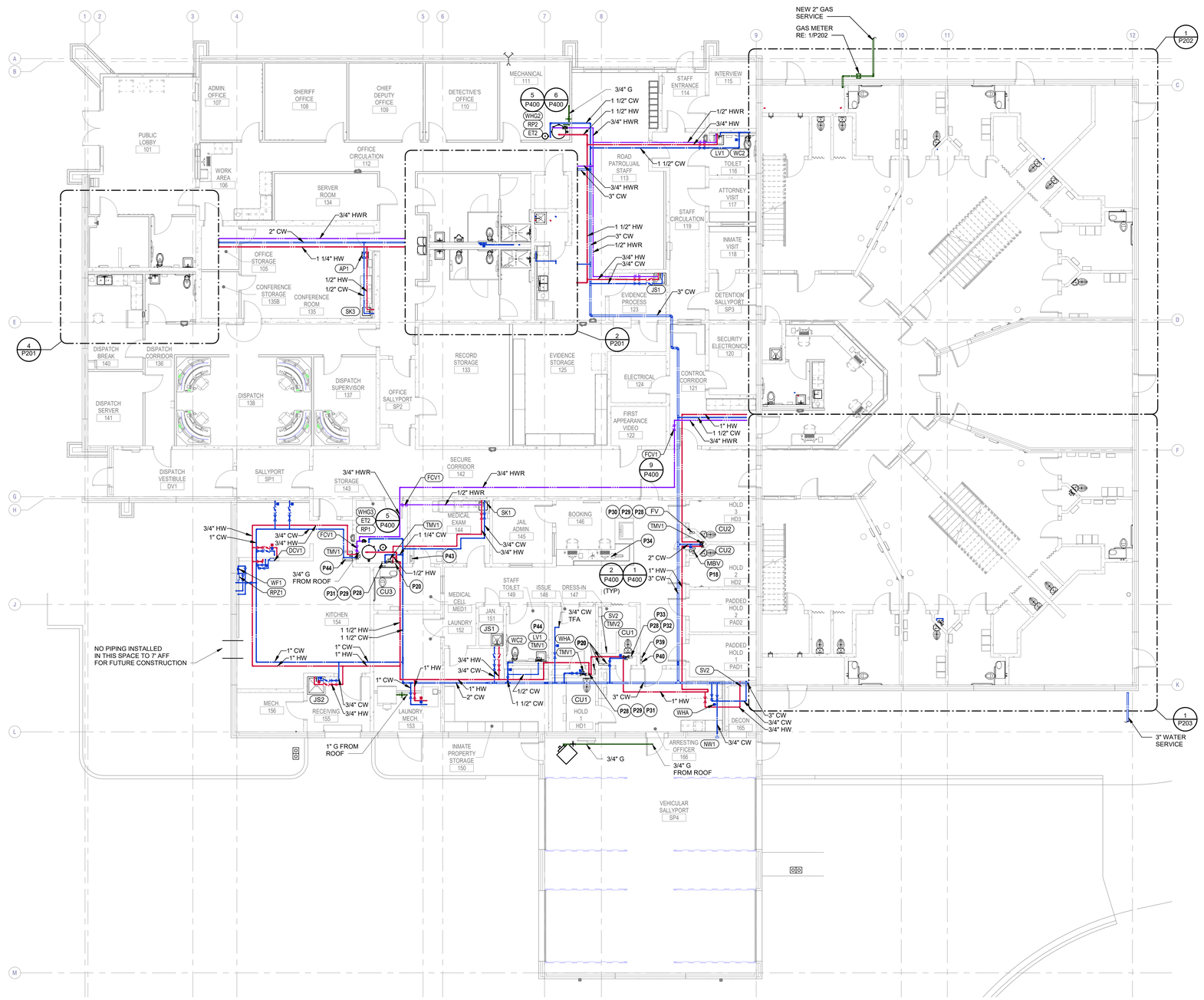
P34 PROVIDE PC FURNISHED WITH ELECTRONIC CONTROLLED FIXTURES TO ELEC FOR INSTALLATION. ELEC TO PROVIDE CABLES FROM "CVC2" ELECTRONIC CONTROLLERS TO PC

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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PLUMBING WATER & GAS FIRST FLOOR PLAN - OVERALL

P103

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.

P28 INSTALL "CVC2" ELECTRONIC CONTROLLER AND ELECTRONIC VALVE ACTUATOR ON WALL AT 4'-0"AFF. FURNISH TRANSFORMER TO ELEC FOR INSTALLATION.

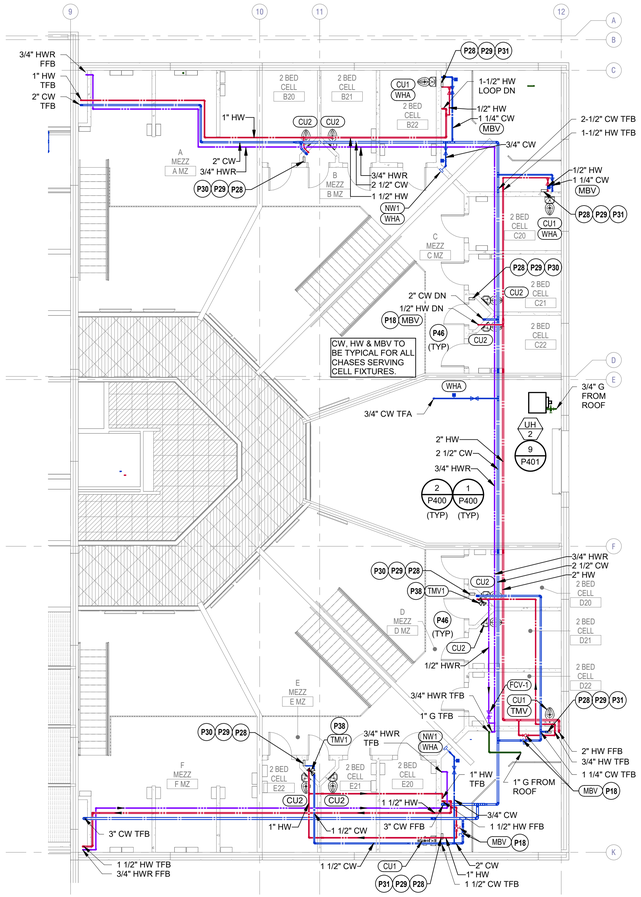
P29 PROVIDE 1/2"CW AND HW WITH SOV IN DROP AND CONNECT TO ELECTRONIC VALVE ACTUATOR.

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 COMBI UNIT A

P46 REFER TO MP101 SHEET FOR ADDITIONAL INFORMATION ON PIPE ROUTING IN CELL CHASE.



1 PLUMBING WATER & GAS MEZZANINE PLAN - JAIL
1/8" = 1'-0"

ENTIRE SHEET HAS BEEN UPDATED.
2

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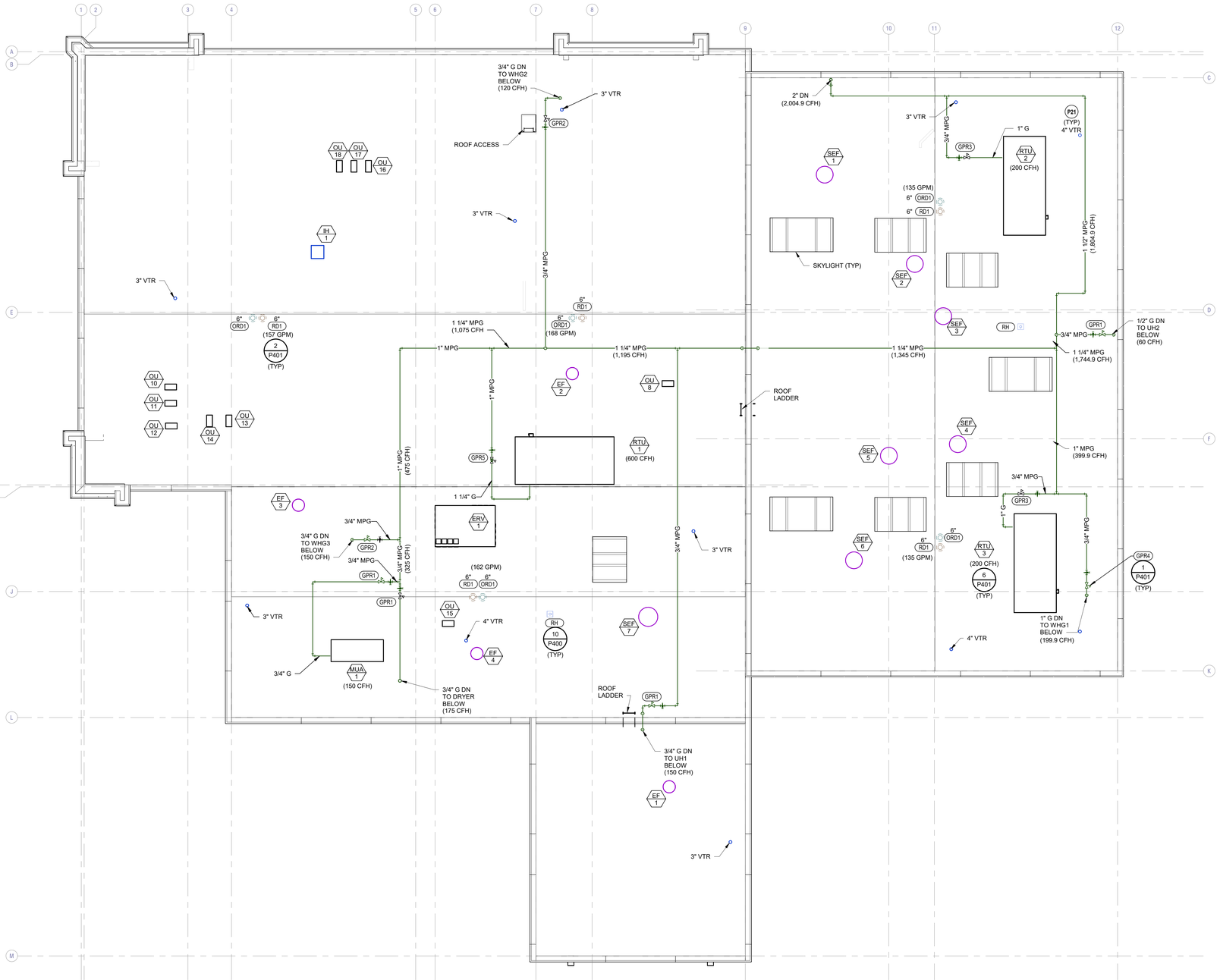
PLUMBING WATER & GAS MEZZANINE PLAN - JAIL

P104

SCOTT A. WALTER

PLUMBING PLAN NOTES:

P21 NO VENT TERMINATION SHALL BE WITHIN 10 FEET OF ANY AIR-INTAKE



1 PLUMBING ROOF PLAN - OVERALL
1/8" = 1'-0"

ENTIRE SHEET HAS BEEN UPDATED.

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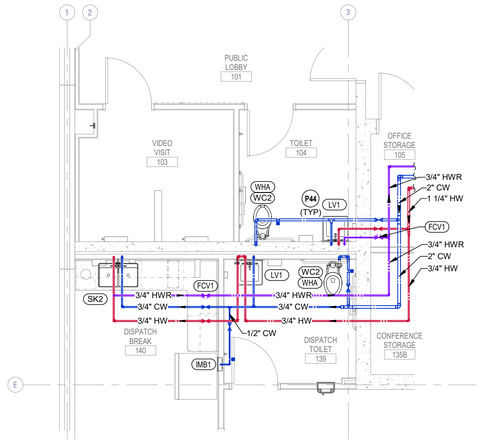
PLUMBING ROOF PLAN - OVERALL

P105

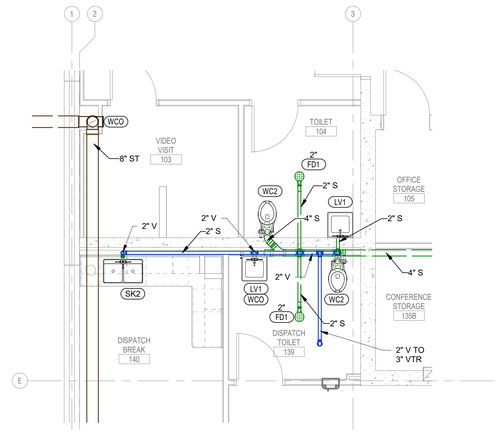
SCOTT A. WALTER

PLUMBING PLAN NOTES:

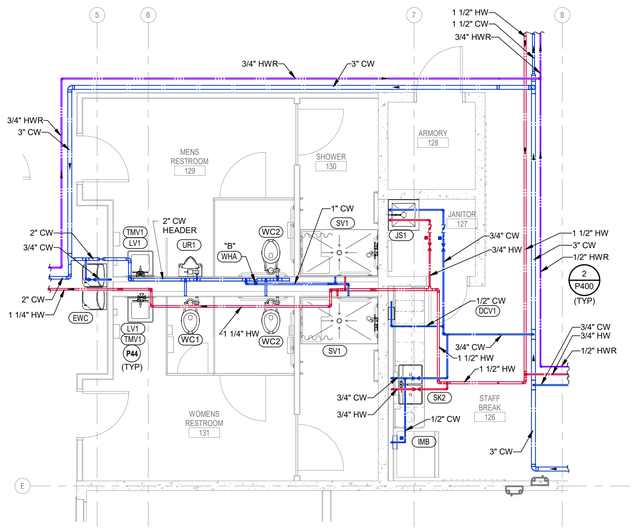
P44 ROUTE HOT AND COLD WATER PIPING DOWN IN WALL TO SERVE LAVATORY OR INDICATED FIXTURE. ROUTE HOT WATER WITHIN 6-INCHES OF PLUMBING FIXTURE STOP VALVE. LOOP HOT WATER / HOT WATER RETURN BACK UP WITHIN WALL.



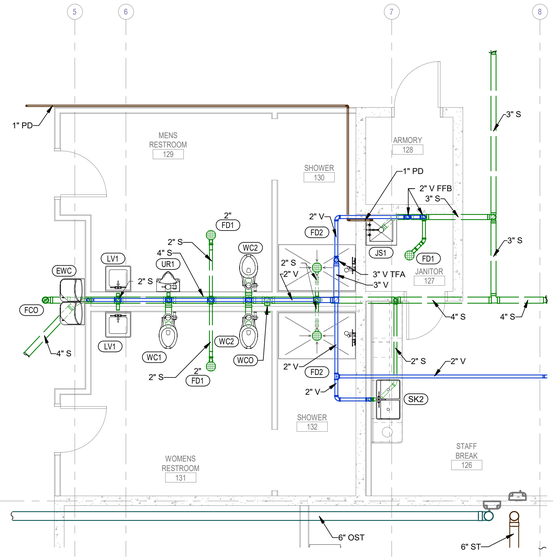
4 PLUMBING WATER & GAS ENLARGED PLAN - DISPATCH
1/4" = 1'-0"



3 PLUMBING WASTE & VENT ENLARGED PLAN - DISPATCH
1/4" = 1'-0"



2 PLUMBING WATER & GAS ENLARGED PLAN - MAIN RESTROOMS
1/4" = 1'-0"



1 PLUMBING WASTE & VENT ENLARGED PLAN - MAIN RESTROOMS
1/4" = 1'-0"

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Drawn by: Author

PLUMBING PLANS - ENLARGED

P201

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 IN DROP AND CONNECT TO ELECTRONIC VALVE ACTUATOR.

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.

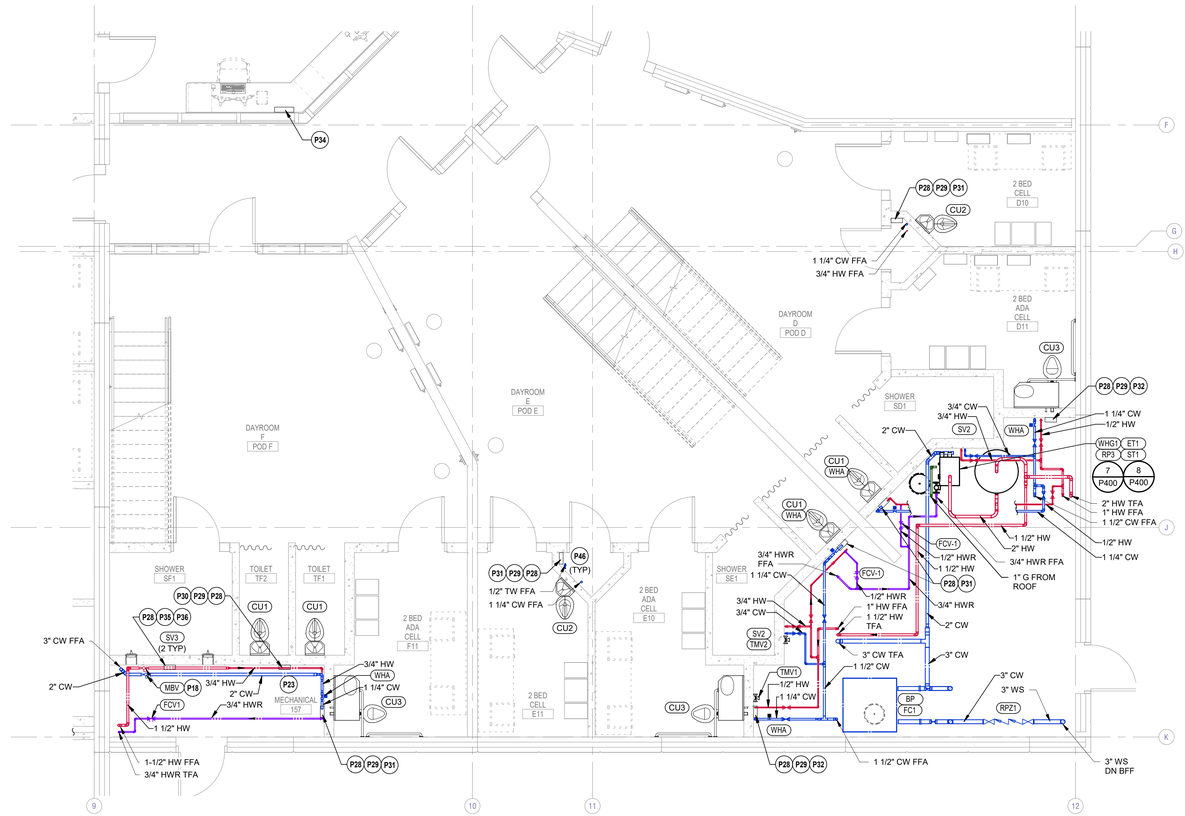
P32 FEED (1) COMBI AND (1) SHOWER WITH HOT AND COLD PE TUBING FROM ELECTRONIC VALVE ACTUATOR.

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 WITH SOV DROP AND CONNECT TO ELECTRONIC VALVE ACTUATOR.

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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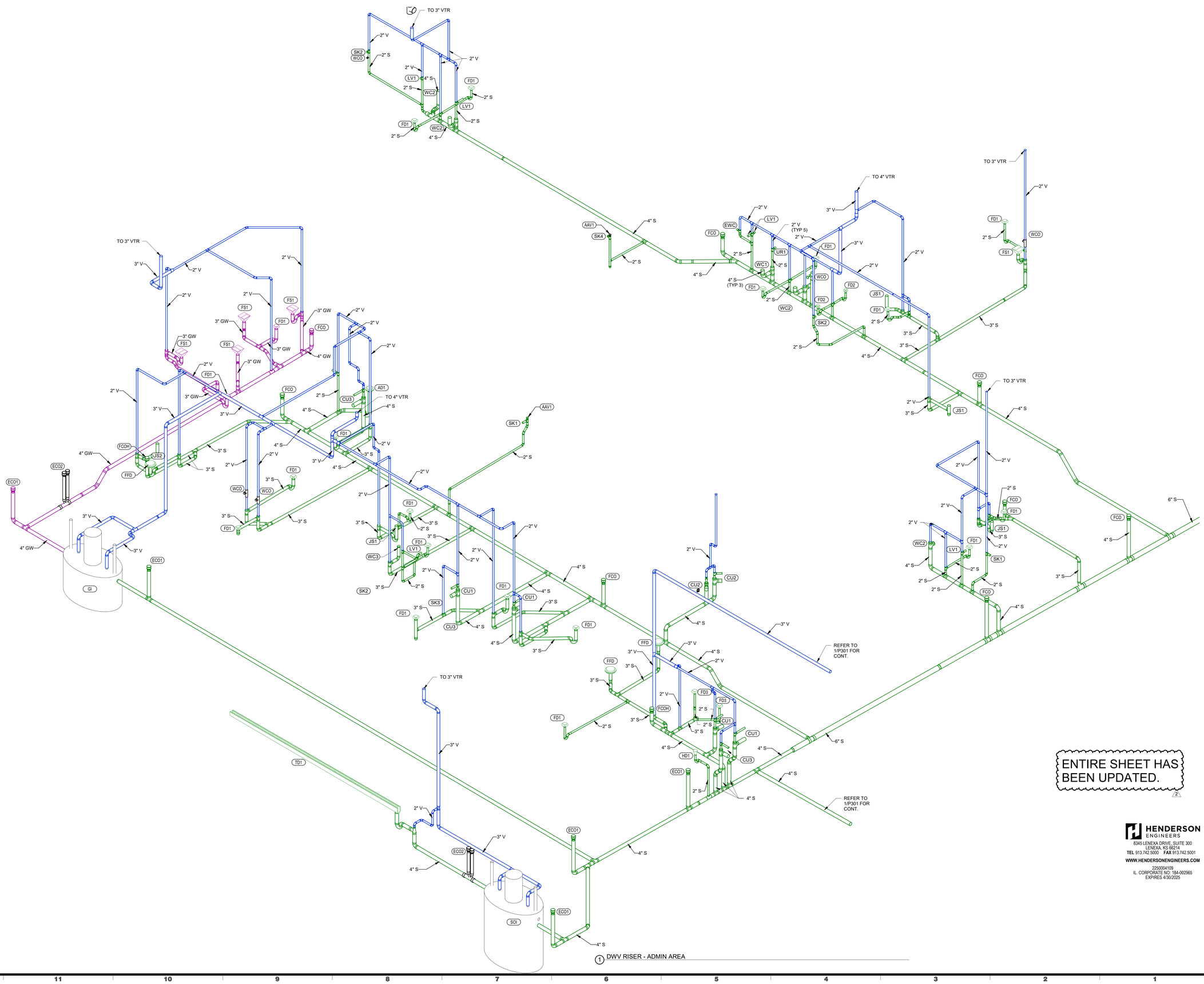
PLUMBING PLAN - ENLARGED - JAIL SOUTH

P203

SCOTT A. WALTER



1 DWV RISER - ADMIN AREA

ENTIRE SHEET HAS BEEN UPDATED.

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2	Addendum #2	03/20/2024

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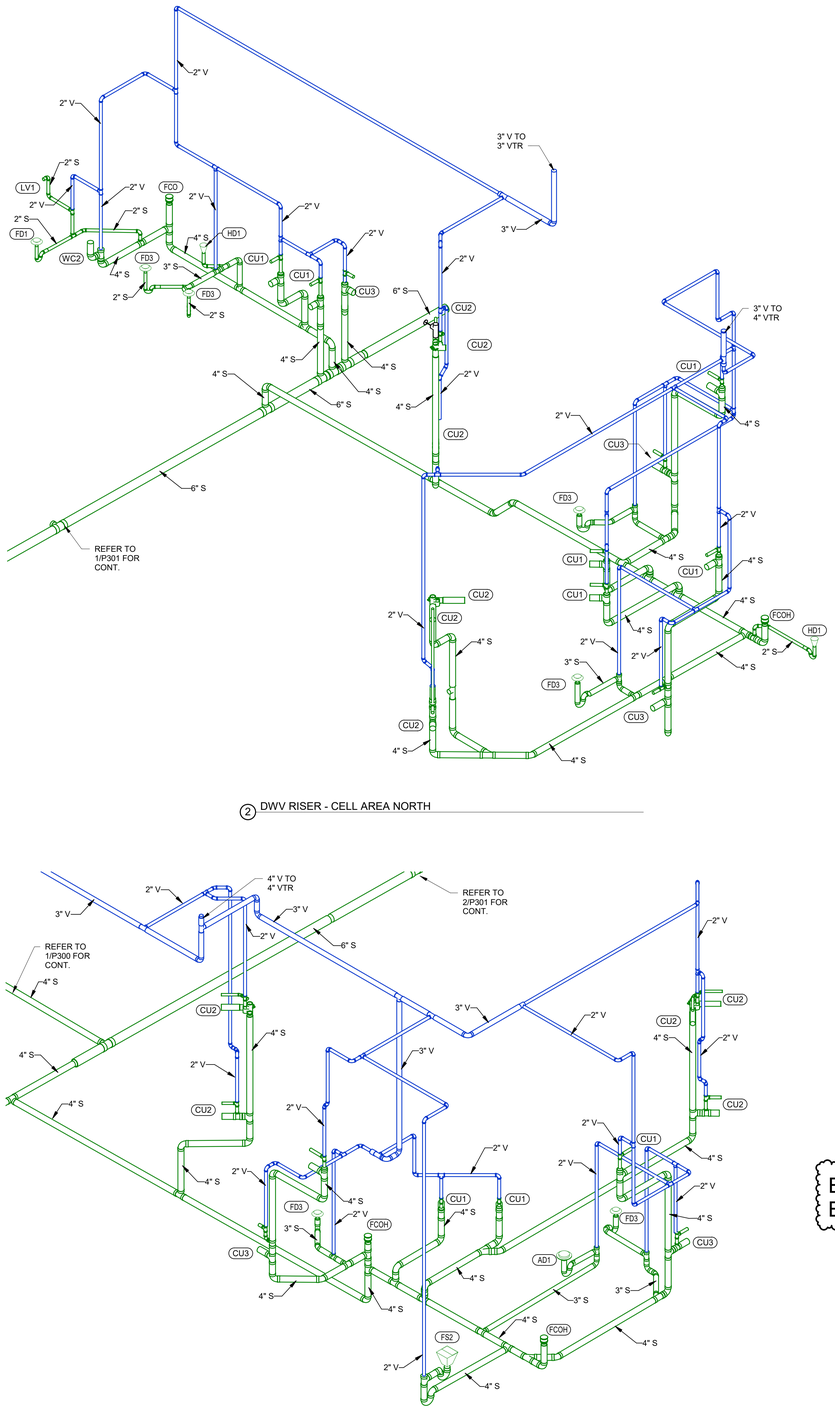
PLUMBING RISER DIAGRAMS

P300

SCOTT A. WALTER



2 DWV RISER - CELL AREA NORTH

1 DWV RISER - CELL AREA SOUTH

ENTIRE SHEET HAS BEEN UPDATED.

2

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	Issue	Date
2	Addendum #2	03/20/2024

Drawn by: Author

PLUMBING RISER DIAGRAMS

P301

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.
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.

PLUMBING FIXTURE SCHEDULE

PLUMBING PLAN MARK	DESCRIPTION
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.
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	FLSUHING FLOOR DRAIN: 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 FLSUH CNOOECTION, 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.
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 10002 "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, 2HP

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.
WF1	WATER FILTER: CUNO # CFS6112-S, 1 MICRON GRADED DENSITY CARBON FILTER, SCALE INHIBITOR, 3/8" CONNECTIONS, ONE QUICK CHANGE CARTRIDGE, AUTOMATIC SHUT-OFF VALVE, AND 1.5 GPM MAXIMUM FLOW RATE.
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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License #: XXXXX

Date: 03/01/2024

#	Issue	Date
2	Addendum #2	03/20/2024

Drawn by: Author

PLUMBING SCHEDULES

P500

SCOTT A. WALTER

DOMESTIC BOOSTER PUMP SCHEDULE

MARK	SERVICE	MANUFACTURER / MODEL #	TYPE NOTE A	DISCHARGE HEADER PRESSURE (PSI)	SUCTION HEADER PRESSURE (PSI)	NUMBER OF PUMPS	SYSTEM FLOW RATE (GPM)	INDIVIDUAL PUMP CAPACITY	SUCTION HEADER SIZE (IN.)	DISCHARGE HEADER SIZE (IN.)	ELECTRICAL DATA (NOTE B)			ACCUMULATOR TANK SIZE (GAL.)	NOTES
											VOLTS	PHASE	HP		
BP	DOMESTIC BOOSTER	GRUNDFOS CRE 10-4	T	53	14	3	146	35%	3	3	480	3	3	40	C, D, E

NOTES:

A. BOOSTER PUMP CONFIGURATION TYPES: T-VFD = TRIPLEX W/ VARIABLE FREQUENCY DRIVE FOR EACH VERTICAL MULTI-STAGE PUMP (GRUNDFOS CRE 10-4). REFER TO SPECIFICATIONS FOR MORE INFORMATION.
B. MOTOR HORSEPOWER SHOWN IS FOR ONE PUMP
C. PROVIDE WITH CONTROL PANEL. REFER TO SPECIFICATIONS FOR MORE INFORMATION
D. MINIMUM DISCHARGE HEADER PRESSURE IS 53 PSI
E. PROVIDE PUMPS WITH SCHEDULED DESIGN FLOW RATE WITH TOTAL DYNAMIC HEAD = DISCHARGE PRESSURE - SUCTION PRESSURE + 2PSI FOR SYSTEM LOSSES

TOTAL CONNECTED NATURAL GAS LOAD

MECHANICAL EQUIPMENT

EQUIPMENT DESIGNATION	DESCRIPTION	CFH (EACH)
UH1	UNIT HEATER	150
UH2	UNIT HEATER	60
RTU1	ROOF TOP UNIT	600
RTU2	ROOF TOP UNIT	200
RTU3	ROOF TOP UNIT	200
MUA1	MAKEUP AIR UNIT	150
WHG1	WATER HEATER	199.9
WHG2	WATER HEATER	120
WHG3	WATER HEATER	150
DRYER	LAUNDRY DRYER	175
	TOTAL =	2004.9
	TOTAL CONNECTED LOAD =	2004.9

NATURAL GAS SYSTEM OPERATING PRESSURE:	2 PSI
NATURAL GAS SYSTEM SIZED WITH TOTAL DEVELOPED LENGTH FROM GAS METER TO MOST REMOTE PIECE OF EQUIPMENT:	285 FEET
SYSTEM DESIGN PRESSURE DROP:	1 PSI

GAS PRESSURE REGULATOR SCHEDULE FOR 2 PSI SYSTEMS

MARK	MANUFACTURER	MODEL	VALVE TYPE	VALVE BODY SIZE (INCHES)	MAX. FLOW RATE (CFH)	INLET PRESSURE (PSI)	OUTLET PRESSURE (INCHES WATER COLUMN)	SERVICE	NOTES
GPR1	PIETRO-FIORENTINI	31052	C	3/4"	665	1	7"	UH1, UH2, MUA1, DRYER	A, B, D, E, F, G, H & I
GPR2	PIETRO-FIORENTINI	31151	C	3/4"	1,421	1	7"	WHG2, WHG3	A, B, D, E, F, G, H & I
GPR3	PIETRO-FIORENTINI	31053	C	1"	893	1	7"	RTU2, RTU3	A, B, D, E, F, G, H & I
GPR4	PIETRO-FIORENTINI	31152	C	1"	1,786	1	7"	WHG1	A, B, D, E, F, G, H & I
GPR5	PIETRO-FIORENTINI	31153	C	1-1/4"	3,735	1	7"	RTU1	A, B, D, E, F, G, H & I

NOTES:

A. C = SELF CONTAINED "DIRECT ACTING" DIAPHRAGM TYPE WITH INTERNAL VENT LIMITER
B. DROOP = 1" WATER COLUMN MAXIMUM
C. DROOP = 2" WATER COLUMN MAXIMUM
D. 65# ALUMINUM BODY, SCREWED CONNECTIONS AND OVERPRESSURE PROTECTION TO 25 PSI
E. MAXIMUM FLOW RATE SCHEDULED, MATCH BODY SIZE AND MAXIMUM FLOW RATE TO EQUIPMENT FLOW RATE. REFER TO EQUIPMENT SHOP DRAWINGS FOR EXACT LOADS.
F. LISTED TO MEET ANSI Z21.80 / CSA 6.22 WITH CSA LISTING STAMP ON REGULATOR BODY
G. GAS PRESSURE REGULATOR INLET PRESSURE = OPERATING PRESSURE - DESIGN FRICTION LOSS
H. 2 PSI MAXIMUM INLET PRESSURE AND 1 PSI MINIMUM INLET PRESSURE
I. PROVIDE EXTERNAL VENT LIMITER (WHERE APPROVED BY LOCAL AUTHORITIES) FOR INDOOR INSTALLATION AND INSTALL PER SPECIFICATIONS. INSTALL OUTDOORS PER SPECIFICATIONS.

PIPE HEAT TRACE SCHEDULE

MARK	MANUFACTURER	MODEL#	APPLICATION	TOTAL LENGTH (FT)	NUMBER OF CIRCUITS	LENGTH PER CIRCUIT (FT)	PIPE HEAT LOSS (W/FT)	TEMP. SETTING (°F)		ELECTRICAL		NOTES
								ON	OFF	VOLTS	PHASE	
HT-4	RAYCHEM	8XL2-CT	FLOW MAINTENANCE	160	1	160	7.3	110	120	277	1	B,C,D,E,G

NOTES:

A. POLYOLEFIN OUTER JACKET.
B. FLUOROPOLYMER OUTER JACKET
C. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.
D. REFER TO HEAT TRACE CONTROL PANEL SCHEDULE FOR ADDITIONAL INFORMATION.
E. COORDINATE WITH ELECTRICAL CONTRACTOR TO PROVIDE WIRING FROM CONTROL PANEL TO JUNCTION BOX ADJACENT TO THE BEGINNING OF THE HEAT TRACE SYSTEM.
F. PROVIDE 2' OF HEAT TRACE ON EACH P-TRAP. COORDINATE WITH ELECTRICAL CONTRACTOR TO PROVIDE WIRING FROM CONTROL PANEL TO A JUNCTION BOX ADJACENT TO EACH P-TRAP.
G. PRIOR TO BID COORDINATE WITH MANUFACTURER TO DETERMINE REQUIRED COMPONENTS TO COMPLETE THE SYSTEM.

HEAT TRACE CONTROL PANEL SCHEDULE

MARK	MANUFACTURER	MODEL#	DEVICE SERVED	QUANTITY	ELECTRICAL DATA			NOTES
			SERVED		WATTS	VOLTS	PHASE	
HTCP1	RAYCHEM	# C910-485	HT-1	1	2100	277	1	A-G

NOTES:

A. NEMA 4X FRP ENCLOSURE WITH GROUND FAULT CIRCUIT PROTECTION.
B. LED DISPLAY AND KEYPAD INTERFACE.
C. ALARM LIGHTS FOR HIGH AND LOW TEMPERATURE, CURRENT AND GROUND FAULT.
D. DRY ALARM CONTACTS FOR INTERLOCK WITH BUILDING MANAGEMENT SYSTEM.
E. PROVIDE WITH # RTD4AL REMOTE TEMPERATURE DEVICE AND # RTD-200 STAINLESS STEEL CABLE, LENGTH AS REQUIRED. MOUNT REMOTE TEMPERATURE SENSING DEVICE ON PIPE UNDER INSULATION. REFER TO PLANS FOR LOCATION(S) AND QUANTITY.
F. COORDINATE INSTALLATION WITH ELECTRICAL CONTRACTOR. ELECTRICAL CONTRACTOR SHALL PROVIDE WIRING FROM CONTROL PANEL TO JUNCTION BOX WHERE HEAT TAPE SYSTEM BEGINS.
G. REFER TO SPECIFICATIONS FOR MORE INFORMATION.

WATER HEATER GAS COPPER FIN TUBE SCHEDULE

MARK	MANUFACTURER/ MODEL#	AREA SERVED	INPUT MBH	ELECTRICAL REQUIREMENTS			THERMAL EFFICIENCY (%)	RECOVERY (GPH)	WEIGHT (LBS)	NOTES
				VOLTS	PHASE	FLA				
WHG1	LOCHINVAR #AWN201PM	JAIL	201	120	1	4.7	96	234	185	A, B, C, D

NOTES:

A. 100° TEMPERATURE RISE WITH 140°F OPERATING TEMPERATURE.
B. FURNISHED WITH FACTORY ALL-BRONZE CIRCULATION PUMP
C. ULTRA LOW NOx TYPE - RESIDUAL NOx IS LESS THAN 14 ng / joule. COMPLIES WITH SCAQMD RULE 1146.2
D. PROVIDE WITH CONDENSATE NEUTRALIZATION KIT TO MATCH HEATER INPUT.

GAS STORAGE WATER HEATER SCHEDULE

MARK	MANUFACTURER/ MODEL#	AREA SERVED	TANK SIZE (GALLONS)	INPUT MBH	ELECTRICAL DATA			RECOVERY (GPH)	WEIGHT (LBS)	NOTES
					VOLTS	PHASE	FLA			
WHG2	A.O. SMITH # BTH-120	OFFICER AREA	60	120	120	1	5	154	970	A, B, C
WHG3	A.O. SMITH # BTH-150	KITCH/BOOKING	100	150	120	1	5	198	1353	A, B, C

NOTES:

A. 90° TEMPERATURE RISE WITH 140°F OPERATING TEMPERATURE.
B. AUTOMATIC FLUE DAMPER INTERLOCKED WITH WATER HEATER FIRE CONTROL
C. FURNISH WITH CONDENSATE NEUTRALIZATION KIT TO MATCH HEATER INPUT, AO SMITH # CNS SERIES

EXPANSION TANK SCHEDULE

MARK	MANUFACTURER / MODEL #	TANK SIZE (GALLONS)	MIN. ACCEPTANCE VOLUME (GALLONS)	AIR PRESSURE SETTING (PSI)	SERVICE	WEIGHT (LBS)	NOTES
ET1	AMTROL ST-30V-C	14	8.96	40	WHG1	196	A
ET2	AMTROL ST-12	4.4	1.98	40	WHG2	46	A
ET3	AMTROL ST-25V	10.3	4.64	40	WHG3	110	A

NOTES:

A. CHARGE TANK WITH AIR TO IDENTICAL PRESSURE AS STATIC DOMESTIC WATER PRESSURE.

RECIRCULATION PUMP SCHEDULE

MARK	MANUFACTURER / MODEL#	LOCATION	GPM	HEAD (FT.)	CONNECTION SIZE	IMPELLER SIZE (IN.)	ELECTR...			NOTES
							VOLTS	PHASE	HP	
RP1	BELL & GOSSETT # NBF-12U	WHG2	1	7	3/4"	N/A	120	1	1/18	A, B, C, D
RP2	BELL & GOSSETT # NBF-12U	WHG3	1	11	3/4"	N/A	120	1	1/18	A, B, C, D
RP3	BELL & GOSSETT # NBF-22U	WHG1	2.5	13	3/4"	N/A	120	1	1/18	A, B, C, D

NOTES:

A. ALL LEAD FREE CAST BRONZE BOOSTER.
B. PROVIDE WITH STRAINER UPSTREAM OF PUMP
C. PROVIDE ADJUSTABLE, SURFACE MOUNTED AQUASTAT - HONEYWELL L6006C
D. SET AQUASTAT TO SHUT OFF RECIRCULATION PUMP AT WATER HEATER SET POINT AND ON AT 10F BELOW SET POINT

HOT WATER STORAGE TANK SCHEDULE

MARK	MANUFACTURER/ MODEL#	AREA SERVED	TANK SIZE (GALLONS)	WEIGHT (LBS)	NOTES
ST1	LOCHINVAR # RGA0257	JAIL	257	2960	A, B, C, D

NOTES:

A. REFER TO SPECIFICATIONS FOR MORE INFORMATION
B. 150# ASME TANK
C. VERTICAL TANK
D. WITH FACTORY PROVIDED INSULATION AND METAL JACKET

WATER PIPE SIZING CHART (IPC) BRANCHES

FIXTURE UNITS VS. PRESSURE LOSS
IN PSI / 100 FEET FOR TYPE "L" COPPER TUBE

		COLD WATER @ 4.00 PSI / 100'				HOT WATER @ 4.0 PSI / 100'		
PIPE SIZE	INTERNAL DIAMETER	FLUSH TANK SFU	FLUSH VALVE SFU	VELOCITY FEET / SEC	FLOW GPM	FLUSH TANK SFU	VELOCITY FEET / SEC	FLOW GPM
1/2"	0.545	0.7	N/A	2.9	2.1	*	*	*
3/4"	0.785	2.3	N/A	3.7	5.5	*	*	*
1"	1.025	6.4	N/A	4.4	11.1	*	*	*
1-1/4"	1.265	19.6	6.8	5.0	19.4	*	*	*
1-1/2"	1.505	55.6	14.6	5.5	30.7	45	5	27.7
2"	1.985	193.1	87.8	6.6	63.6	120.9	5	48.2
2-1/2"	2.465	439.3	323.5	7.6	112.4	246.8	5	74.3
3"	2.945	749.1	697.3	8.0	169.8	406	5	106.1
4"	3.905	1764.4	1764.4	8.0	298.6	859.4	5	186.6
6"	5.845	5269.9	5269.9	8.0	669.0	2859.7	5	418.1
8"	7.725	10143.1	10143.1	8.0	1168.6	5653.3	5	730.3
		SIZED WITH HAZEN WILLIAMS CONSTANT "C" =			135	*UTILIZE COLD WATER SIZING CHART		

PLUMBING FIXTURE CONNECTION SCHEDULE

FIXTURE	COLD WATER	HOT WATER	WASTE	VENT
WATER CLOSET (FV)	1-1/4" (NOTE 1)	--	4"	2"
URINAL	3/4" (NOTE 2)	--	2"	2"
LAVATORY/ HAND SINK	1/2"	1/2"	2"	1-1/2"
DRINKING FOUNTAIN	1/2"	--	2"	1-1/2"
JANITOR'S SINK	1/2"	1/2"	3"	2"
FLOOR DRAIN	--	--	2"	2"
TRENCH DRAIN	--	--	4"	2"
SINK	1/2"	1/2"	2"	1-1/2"

NOTES:

PIPE SIZES SHOWN ARE MINIMUM. AND ARE FOR INDIVIUAL SERVICE PIPE SIZES

(NOTE 1) PROVIDE 1-1/4" CW TO FLUSH VALVE, REDUCE TO 1" PRIOR TO CONNECTING TO FLUSH VALVE INLET AT INSIDE OF WALL
(NOTE 2) PROVIDE 1" CW TO FLUSH VALVE, REDUCE TO 3/4" PRIOR TO CONNECTING TO FLUSH VALVE INLET AT INSIDE OF WALL

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Date: 03/01/2024

	Issue	Date
2	Addendum #2	03/20/2024

Drawn by: Author

PLUMBING SCHEDULES

P501

SCOTT A. WALTER

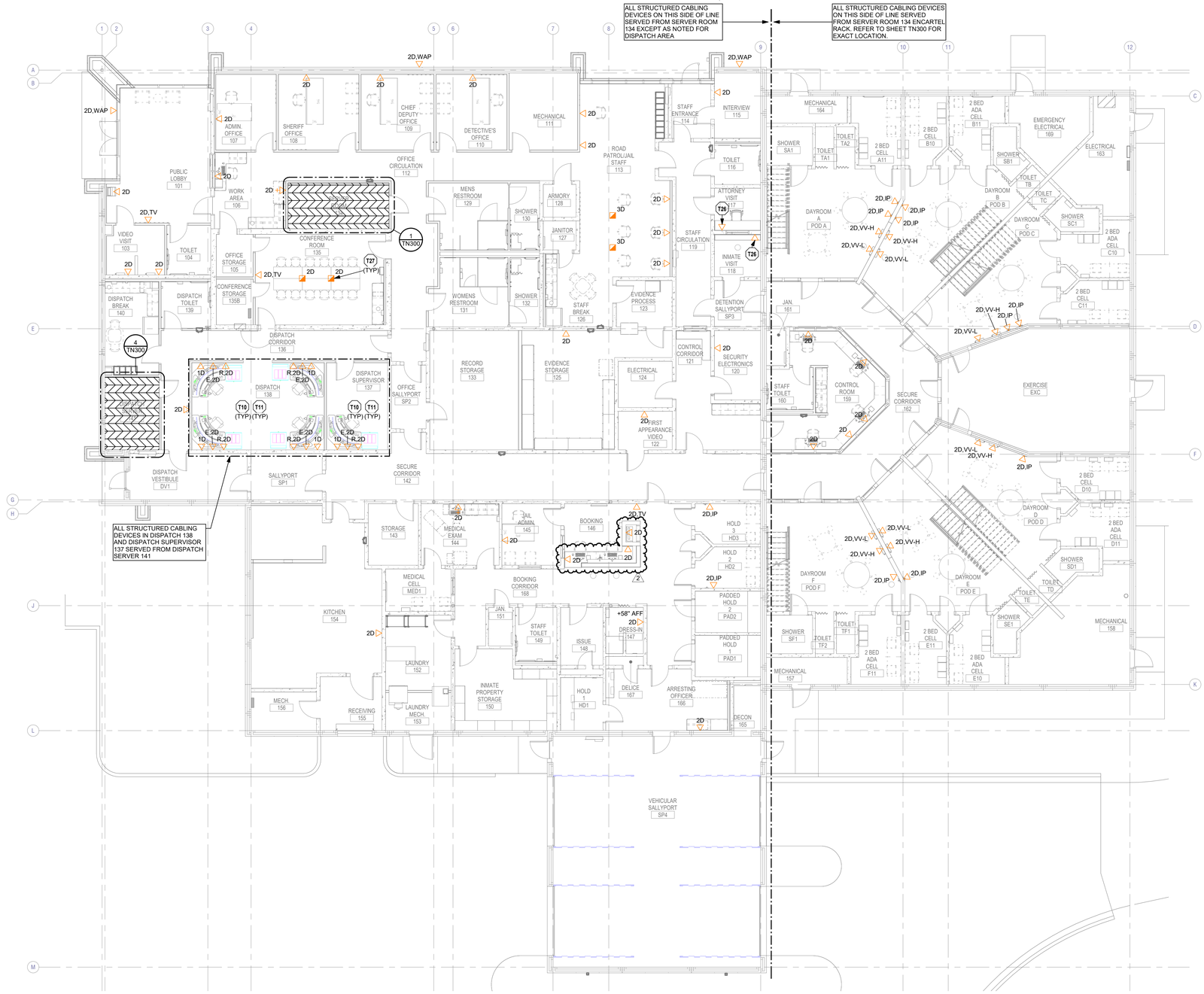
TECHNOLOGY PLAN NOTES:

T10 PROVIDE 24-PORT PATCH PANEL AT EACH DISPATCH WORKSTATION. COORDINATE WITH OWNER, ARCHITECT AND FURNITURE VENDOR ON EXACT PLACEMENT PRIOR TO INSTALLATION. PROVIDE (8) CAT6 CABLES FROM EACH WORKSTATION, ROUTED INTO DISPATCH SERVER 141. REFER TO DIVISION 27 SPECIFICATIONS FOR ADDITIONAL INFORMATION.

T11 PROVIDE SECONDARY BUS BAR (SBB) AT DISPATCH WORKSTATION. COORDINATE WITH OWNER, ARCHITECT AND FURNITURE VENDOR ON EXACT PLACEMENT PRIOR TO INSTALLATION. REFER TO DIVISION 27 SPECIFICATIONS FOR ADDITIONAL INFORMATION.

T26 PROVIDE BACKBOX AND CONDUIT INFRASTRUCTURE ONLY. CABLING PROVIDED BY SECURITY CONTRACTOR. REFER TO SE DRAWINGS FOR ADDITIONAL INFORMATION.

T27 REFER TO DIVISION 26 SPECIFICATIONS FOR FLOOR BOX AND CONDUIT REQUIREMENTS.



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EXPIRES 4/30/2025

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hmnarchitects.com

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BID & PERMIT

EDGAR COUNTY PUBLIC SAFETY CENTER

EDGAR COUNTY, ILLINOIS
12636 950TH ROAD
PARIS, ILLINOIS 61944

21003.003

BID & PERMIT

Architect's Name
License #: XXXXX

Date: 03/01/2024

#	Issue	Date
2	Addendum #2	03/20/2024

Drawn by: JC

TELECOM FIRST FLOOR PLAN - OVERALL

TN101

MICHAEL T. DERMYER

AIA® Document A133™ – 2019

Standard Form of Agreement Between Owner and Construction Manager as Constructor where the basis of payment is the Cost of the Work Plus a Fee with a Guaranteed Maximum Price

AGREEMENT made as of the 2nd day of November in the year 2022
(In words, indicate day, month, and year.)

BETWEEN the Owner:
Edgar County
115 W Court St.
Paris, IL 61944

and the Construction Manager:
CORE Construction Services of Illinois, Inc.
601 SW Water Street
Peoria, IL 61602
Ph: 309-404-4700

for the following Project:
Edgar County Jail

The Architect:

Klinger & Associates, PC
604 Liberty Street, Suite 125
Pella, IA 50219

The Owner and Construction Manager agree as follows.

ADDITIONS AND DELETIONS:
The author of this document has added information needed for its completion. The author may also have revised the text of the original AIA standard form. An *Additions and Deletions Report* that notes added information as well as revisions to the standard form text is available from the author and should be reviewed. A vertical line in the left margin of this document indicates where the author has added necessary information and where the author has added to or deleted from the original AIA text.

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

AIA Document A201™–2017, General Conditions of the Contract for Construction, is adopted in this document by reference. Do not use with other general conditions unless this document is modified.

TABLE OF ARTICLES

ARTICLE 1 INITIAL INFORMATION

§ 1.1 This Agreement is based on the Initial Information set forth in this Section 1.1.
(For each item in this section, insert the information or a statement such as "not applicable" or "unknown at time of execution.")

§ 1.1.1 The Owner's program for the Project, as described in Section 4.1.1:
(Insert the Owner's program, identify documentation that establishes the Owner's program, or state the manner in which the program will be developed.)

Construct new county jail and sheriff's office building.

§ 1.1.2 The Project's physical characteristics:
(Identify or describe pertinent information about the Project's physical characteristics, such as size; location; dimensions; geotechnical reports; site boundaries; topographic surveys; traffic and utility studies; availability of public and private utilities and services; legal description of the site, etc.)

The building will be approximately 24,000 SF and will be located off of Springfield Road.

§ 1.1.3 The Owner's budget for the Guaranteed Maximum Price, as defined in Article 6:
(Provide total and, if known, a line item breakdown.)

The final budget is to be determined but is preliminarily expected to be approximately [redacted]

§ 1.1.4 The Owner's anticipated design and construction milestone dates:

.1 Design phase milestone dates, if any:

TBD

.2 Construction commencement date:

TBD

.3 Substantial Completion date or dates:

To Be Determined and defined in the GMP Amendment.

.4 Other milestone dates:

NA

§ 1.1.5 The Owner's requirements for accelerated or fast-track scheduling, or phased construction, are set forth below:
(Identify any requirements for fast-track scheduling or phased construction.)

To Be Determined.

§ 1.1.6 The Owner's anticipated Sustainable Objective for the Project:
(Identify and describe the Owner's Sustainable Objective for the Project, if any.)

Not Applicable

§ 1.1.6.1 If the Owner identifies a Sustainable Objective, the Owner and Construction Manager shall complete and incorporate AIA Document E234™–2019, Sustainable Projects Exhibit, Construction Manager as Constructor Edition, into this Agreement to define the terms, conditions and services related to the Owner's Sustainable Objective. If E234–2019 is incorporated into this agreement, the Owner and Construction Manager shall incorporate the completed E234–2019 into the agreements with the consultants and contractors performing services or Work in any way associated with the Sustainable Objective.

§ 1.1.7 Other Project information:
(Identify special characteristics or needs of the Project not provided elsewhere.)

NA

§ 1.1.8 The Owner identifies the following representative in accordance with Section 4.2:
(List name, address, and other contact information.)

Jeff Voigt, County Board Chair
Edgar County
115 W Court St.
Paris, IL 61944

§ 1.1.9 The persons or entities, in addition to the Owner's representative, who are required to review the Construction Manager's submittals to the Owner are as follows:
(List name, address and other contact information.)

Project Architect

§ 1.1.10 The Owner shall retain the following consultants and contractors:
(List name, legal status, address, and other contact information.)

.1 Geotechnical Engineer:

NA

.2 Civil Engineer:

NA

.3 Other, if any:
(List any other consultants retained by the Owner, such as a Project or Program Manager.)

NA

§ 1.1.11 The Architect's representative:
(List name, address, and other contact information.)

Michael Fries, Project Architect
Klinger & Associates, PC
604 Liberty Street, Suite 125
Pella, IA 50219

§ 1.1.12 The Construction Manager identifies the following representative in accordance with Article 3:
(List name, address, and other contact information.)

Tim Erickson
CORE Construction Services of Illinois, Inc.
601 SW Water Street
Peoria, IL 61602
Ph: 309-404-4700
[redacted]

§ 1.1.13 The Owner's requirements for the Construction Manager's staffing plan for Preconstruction Services, as required under Section 3.1.9:

(List any Owner-specific requirements to be included in the staffing plan.)

To Be Determined

§ 1.1.14 The Owner's requirements for contractor procurement for the performance of the Work:
(List any Owner-specific requirements for contractor procurement.)

The Construction Manager will be solely responsible for determining Bid Packages and Contractor Scopes of Work. Owner is a county government in the State of Illinois required to procure the Work through public bidding and award the contract(s) for the Work to the lowest responsive and responsible bidder. All contracts for any portion of the Work shall be procured through public bidding, including, but not limited to, all trade, supplier, and material contracts. When the lowest responsive and responsible multiple prime bidders (hereinafter referred to as "Contractors") are identified and accepted by the Owner, Owner shall execute the contracts as awarded and then assign those contracts (the "Contracts") to Construction Manager. Construction Manager may reassign the Contracts to Owner if required by law or refuse assignment if a legal or contractual conflict prevents Construction Manager from accepting assignment of any Contract. In such case, the Construction Manager shall manage said Contract in the same manner as Contracts assigned to Construction Manager. Said contracts shall be included in the GMP established in this Agreement, and Construction Manager shall review any proposed changes to said Contract and advise the Owner as to the impact of any recommended changes on the GMP. Owner accepts any reassignment. The purpose of the foregoing assignment is to assist in the management and administration of the Work and completion of the Project, and Owner appoints Construction Manager as its advisor to accomplish those goals.

The Construction Manager shall cause the Contracts to incorporate substantially the following provisions:

> "This Contract has been awarded by the Owner after advertisement for bids. Upon award of the Contract by the Owner, the Owner may assign its rights in this Contract to the Construction Manager to assist in the management and administration of the Project
>
> By submitting its bid, the bidder shall be deemed to have consented to the aforesaid assignment, and to have agreed to become an assigned Contractor to the Construction Manager.
>
> Upon assignment, the Contractor shall become a Contractor of the Construction Manager pursuant to this Contract, and, except as identified within this Contract and as provided by law, shall have contractual privity only with the Construction Manager."

Construction Manager shall prepare all bid invitations, instructions to bidders, and general and supplementary conditions in accordance with applicable State of Illinois statutes. Construction Manager shall ensure that a sample contract agreement is included in the bid documents. Drawings and specifications shall be provided by the Architect. During preparation of the Construction Documents by the Architect, the Construction Manager shall review said Construction Documents to ensure consistency with the bid documents prepared by the Construction Manager.

Prior to advertisement for bids, Construction Manager shall, upon request, provide all contractor or subcontract agreements to the Owner's attorneys for review and comment.

Construction Manager shall conduct pre-bid meetings with interested bidders in accordance with publicly announced and scheduled meetings.

The Owner shall receive, open, and read aloud all bids as required by the applicable procurement laws. The Construction Manager shall record all bids, prepare bid analyses, and make recommendations to the Owner for the Owner's award of contracts and/or rejection of bids.

The contract documents prepared by Construction Manager shall require full compliance with all state and local laws and grant funding requirements.

All Work shall be performed by Contractors which have been assigned by the Owner to the Construction Manager as provided in this Agreement. If the Construction Manager has a reasonable objection to any Contractor identified as the lowest responsive bidder, it shall be the burden of the Construction Manager to present demonstrative evidence to the

Owner that the bidder is not responsible, and to present such evidence in a timely manner such that Owner suffers no detriment in procuring another Contractor if necessary.

Construction Manager shall obtain Certificates of Insurance, as well as any required Performance and Payment Bonds, for each of the Contractors immediately upon award of the Contract and verify conformance of same with the Contract Documents prior to allowing the Contractors onto the Site. Insurance of Contractors shall name Owner, Construction Manager, and Architect as "Additional Insureds". Copies of the same shall be transmitted to the Owner and Architect before Contractors may commence Work on the Project.

§ 1.1.15 Other Initial Information on which this Agreement is based:

§ 1.2 The Owner and Construction Manager may rely on the Initial Information. Both parties, however, recognize that such information may materially change and, in that event, the Owner and the Construction Manager shall appropriately adjust the Project schedule, the Construction Manager's services, and the Construction Manager's compensation. The Owner shall adjust the Owner's budget for the Guaranteed Maximum Price and the Owner's anticipated design and construction milestones, as necessary, to accommodate material changes in the Initial Information.

§ 1.3 Neither the Owner's nor the Construction Manager's representative shall be changed without ten days' prior notice to the other party.

§ 1.4 For purposes of this Agreement, the term "Contractor" refers to persons or entities who perform Work under contracts awarded by the Owner and assigned to and administered by the Construction Manager, as set forth herein.

ARTICLE 2 GENERAL PROVISIONS

§ 2.1 The Contract Documents

The Contract Documents consist of this Agreement, Conditions of the Contract (General, Supplementary and other Conditions), Drawings, Specifications, Addenda issued prior to execution of this Agreement, other documents listed in this Agreement, and Modifications issued after execution of this Agreement, all of which form the Contract and are as fully a part of the Contract as if attached to this Agreement or repeated herein. Upon the Owner's acceptance of the Construction Manager's Guaranteed Maximum Price proposal, the Contract Documents will also include the documents described in Section 3.2.3 and identified in the Guaranteed Maximum Price Amendment and revisions prepared by the Architect and furnished by the Owner as described in Section 3.2.8. The Contract represents the entire and integrated agreement between the parties hereto and supersedes prior negotiations, representations or agreements, either written or oral. If anything in the other Contract Documents, other than a Modification, is inconsistent with this Agreement, this Agreement shall govern. An enumeration of the Contract Documents, other than a Modification, appears in Article 15.

§ 2.2 Relationship of the Parties

The Construction Manager accepts the relationship of trust and confidence established by this Agreement and covenants with the Owner to cooperate with the Architect and exercise the Construction Manager's skill and judgment in furthering the interests of the Owner to furnish efficient construction administration, management services, and supervision; to furnish at all times an adequate supply of workers and materials; and to perform the Work in an expeditious and economical manner consistent with the Owner's interests. The Owner agrees to furnish or approve, in a timely manner, information required by the Construction Manager and to make payments to the Construction Manager in accordance with the requirements of the Contract Documents.

§ 2.3 General Conditions

§ 2.3.1 For the Preconstruction Phase, AIA Document A201™–2017, General Conditions of the Contract for Construction, as amended, shall apply as follows: Section 1.5, Ownership and Use of Documents; Section 1.7, Digital Data Use and Transmission; Section 1.8, Building Information Model Use and Reliance; Section 2.2.4, Confidential Information; Section 3.12.10, Professional Services; Section 10.3, Hazardous Materials; Section 13.1, Governing Law.

§ 2.3.2 For the Construction Phase, the general conditions set forth in A201–2017 as amended, shall apply to this Agreement.

§ 2.3.3 Notwithstanding anything in A201-2017, as amended, to the contrary, the Construction Manager is not a Contractor as defined in A201-2017, as amended, or Section 1.4 of this Agreement unless Construction Manager is the low bidder on a Bid Package through the public bidding process. The Construction Manager shall not perform any Work with its own forces or supply any materials unless permitted under Illinois public bidding statutes and the Owner agrees in writing to allow the Construction Manager to bid on any trade or supplier contracts, provided that the Owner has sole discretion in rejecting the Construction Manger's bid and the Construction Manager waives any bidding challenge.

ARTICLE 3 CONSTRUCTION MANAGER'S RESPONSIBILITIES

The Construction Manager's Preconstruction Phase responsibilities are set forth in Sections 3.1 and 3.2, and in the applicable provisions of A201-2017, as amended, referenced in Section 2.3.1. The Construction Manager's Construction Phase responsibilities are set forth in Section 3.3. The Owner and Construction Manager may agree, in consultation with the Architect, for the Construction Phase to commence prior to completion of the Preconstruction Phase, in which case, both phases will proceed concurrently. The Construction Manager shall identify a representative authorized to act on behalf of the Construction Manager with respect to the Project.

§ 3.1 Preconstruction Phase

§ 3.1.1 Extent of Responsibility

The Construction Manager shall exercise reasonable care in performing its Preconstruction Services. The Owner and Architect shall be entitled to rely on, and shall not be responsible for, the accuracy, completeness, and timeliness of services and information furnished by the Construction Manager. The Construction Manager, however, does not warrant or guarantee estimates and schedules except as may be included as part of the Guaranteed Maximum Price. The Construction Manager is not required to ascertain that the Drawings and Specifications are in accordance with applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of public authorities, but the Construction Manager shall promptly report to the Architect and Owner any nonconformity discovered by or made known to the Construction Manager as a request for information in such form as the Architect may require.

§ 3.1.2 The Construction Manager shall provide a preliminary evaluation of the Owner's program, schedule and construction budget requirements, each in terms of the other.

§ 3.1.3 Consultation

§ 3.1.3.1 The Construction Manager shall schedule and conduct meetings with the Architect and Owner to discuss such matters as procedures, progress, coordination, and scheduling of the Work.

§ 3.1.3.2 The Construction Manager shall advise the Owner and Architect on proposed site use and improvements, selection of materials, building systems, and equipment. The Construction Manager shall also provide recommendations to the Owner and Architect, consistent with the Project requirements, on constructability; availability of materials and labor; time requirements for procurement, installation and construction; prefabrication; and factors related to construction cost including, but not limited to, costs of alternative designs or materials, preliminary budgets, life-cycle data, and possible cost reductions. The Construction Manager shall consult with the Architect regarding professional services to be provided by the Construction Manager during the Construction Phase.

§ 3.1.3.3 The Construction Manager shall assist the Owner and Architect in establishing building information modeling and digital data protocols for the Project, using AIA Document E203™–2013, Building Information Modeling and Digital Data Exhibit, to establish the protocols for the development, use, transmission, and exchange of digital data.

§ 3.1.4 Project Schedule

When Project requirements in Section 4.1.1 have been sufficiently identified, the Construction Manager shall prepare and periodically update a Project schedule for the Architect's review and the Owner's acceptance. The Construction Manager shall obtain the Architect's approval for the portion of the Project schedule relating to the performance of the Architect's services. The Project schedule shall coordinate and integrate the Construction Manager's services, the Architect's services, other Owner consultants' services, and the Owner's responsibilities; and identify items that affect the Project's timely completion. The updated Project schedule shall include the following: submission of the Guaranteed Maximum Price proposal; components of the Work; times of commencement and completion required of each Contractor; ordering and delivery of products, including those that must be ordered in advance of construction; and the occupancy requirements of the Owner.

§ 3.1.5 Phased Construction
The Construction Manager, in consultation with the Architect, shall provide recommendations with regard to accelerated or fast-track scheduling, procurement, and sequencing for phased construction. The Construction Manager shall take into consideration cost reductions, cost information, constructability, provisions for temporary facilities, and procurement and construction scheduling issues.

§ 3.1.6 Cost Estimates
§ 3.1.6.1 Based on the preliminary design and other design criteria prepared by the Architect, the Construction Manager shall prepare, for the Architect's review and the Owner's approval, preliminary estimates of the Cost of the Work or the cost of program requirements using area, volume, or similar conceptual estimating techniques. If the Architect or Construction Manager suggests alternative materials and systems, the Construction Manager shall provide cost evaluations of those alternative materials and systems.

§ 3.1.6.2 As the Architect progresses with the preparation of the Schematic Design, Design Development and Construction Documents, the Construction Manager shall prepare and update, at appropriate intervals agreed to by the Owner, Construction Manager and Architect, an estimate of the Cost of the Work with increasing detail and refinement. The Construction Manager shall include in the estimate those costs to allow for the further development of the design, price escalation, and market conditions, until such time as the Owner and Construction Manager agree on a Guaranteed Maximum Price for the Work. The estimate shall be provided for the Architect's review and the Owner's approval. The Construction Manager shall inform the Owner and Architect in the event that the estimate of the Cost of the Work exceeds the latest approved Project budget, and make recommendations for corrective action.

§ 3.1.6.3 If the Architect is providing cost estimating services as a Supplemental Service, and a discrepancy exists between the Construction Manager's cost estimates and the Architect's cost estimates, the Construction Manager and the Architect shall work together to reconcile the cost estimates.

§ 3.1.7 As the Architect progresses with the preparation of the Schematic Design, Design Development and Construction Documents, the Construction Manager shall consult with the Owner and Architect and make recommendations regarding constructability and schedules, for the Architect's review and the Owner's approval.

§ 3.1.8 The Construction Manager shall provide recommendations and information to the Owner and Architect regarding equipment, materials, services, and temporary Project facilities.

§ 3.1.9 The Construction Manager shall provide a staffing plan for Preconstruction Phase services for the Owner's review and approval.

§ 3.1.10 If the Owner identified a Sustainable Objective in Article 1, the Construction Manager shall fulfill its Preconstruction Phase responsibilities as required in AIA Document E234™–2019, Sustainable Projects Exhibit, Construction Manager as Constructor Edition, attached to this Agreement.

§ 3.1.11 Contractors and Suppliers
§ 3.1.11.1 If the Owner has provided requirements for contractor procurement in section 1.1.14, the Construction Manager shall provide a contracting plan, addressing the Owner's requirements, for the Owner's review and approval.

§ 3.1.11.2 The Construction Manager shall develop bidders' interest in the Project and shall assist the Owner in preparing Contracts for Construction.

§ 3.1.11.3 The processes described in Article 9 shall apply if bid packages will be issued during the Preconstruction Phase.

§ 3.1.12 Procurement
The Construction Manager shall prepare, for the Architect's review and the Owner's acceptance, a procurement schedule for items that must be ordered in advance of construction. The Construction Manager shall expedite and coordinate the ordering and delivery of materials that must be ordered in advance of construction. If the Owner agrees to procure any items prior to the establishment of the Guaranteed Maximum Price, the Owner shall procure the items on terms and conditions acceptable to the Construction Manager. Upon the establishment of the Guaranteed Maximum Price, the Owner shall assign all contracts for these items to the Construction Manager and the Construction Manager shall thereafter accept responsibility for them.

§ 3.1.13 Compliance with Laws
The Construction Manager shall comply with applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities applicable to its performance under this Contract, and with equal employment opportunity programs, and other programs as may be required by governmental and quasi-governmental authorities.

§ 3.1.14 Other Preconstruction Services
Insert a description of any other Preconstruction Phase services to be provided by the Construction Manager, or reference an exhibit attached to this document
(Describe any other Preconstruction Phase services, such as providing cash flow projections, development of a project information management system, early selection or procurement of subcontractors, etc.)

§ 3.2 Guaranteed Maximum Price Proposal
§ 3.2.1 At a time to be mutually agreed upon by the Owner and the Construction Manager, after receipt of bid package bids for all components of the Work, the Construction Manager shall prepare a Guaranteed Maximum Price proposal for the Owner's and Architect's review, and the Owner's acceptance. The Guaranteed Maximum Price in the proposal shall be the sum of (i) the aggregate total cost of all multiple prime Contracts awarded as provided in Section 1.1.14, (ii) the Construction Manager's estimate of Costs as set forth in Sections 7.2, 7.6 and 7.7, provided, however, that should any such costs be subject to competitive bidding as provided by law, such items shall be included in subsection (i) of this Section 3.2.1, (iii) the Construction Manager's contingency described in Section 3.2.4, (iv) the Construction Manager's Fee described in Section 6.1.2.

§ 3.2.2 To the extent that the Contract Documents are anticipated to require further development, the Guaranteed Maximum Price includes the costs attributable to such further development consistent with the Contract Documents and reasonably inferable therefrom. Such further development does not include changes in scope, systems, kinds and quality of materials, finishes, or equipment, all of which, if required, shall be incorporated by Change Order.

§ 3.2.3 The Construction Manager shall include with the Guaranteed Maximum Price proposal a written statement of its basis, which shall include the following:

.1 A list of the Bidding Documents, Drawings and Specifications, including all Addenda thereto, and the Conditions of the Contract;
.2 A list of the clarifications and assumptions made by the Construction Manager in the preparation of the Guaranteed Maximum Price proposal, including assumptions under Section 3.2.2;
.3 A statement of the proposed Guaranteed Maximum Price, including a statement of the aggregate total cost of the Contracts awarded pursuant to Section 1.1.14 organized by trade categories or systems, including allowances; the Construction Manager's estimate of the Miscellaneous and Other Costs itemized by category as set forth in Sections 7.6 and 7.7; the Construction Manager's contingency set forth in Section 3.2.4; and the Construction Manager's Fee;
.4 The anticipated date of Substantial Completion upon which the proposed Guaranteed Maximum Price is based; and
.5 A date by which the Owner must accept the Guaranteed Maximum Price.

§ 3.2.4 In preparing the Construction Manager's Guaranteed Maximum Price proposal, the Construction Manager shall include a contingency for the Construction Manager's exclusive use to cover those costs that are included in the Guaranteed Maximum Price but not otherwise allocated to another line item or included in a Change Order.

§ 3.2.5 The Construction Manager shall meet with the Owner and Architect to review the Guaranteed Maximum Price proposal. In the event that the Owner or Architect discover any inconsistencies or inaccuracies in the information presented, they shall promptly notify the Construction Manager, who shall make appropriate adjustments to the Guaranteed Maximum Price proposal, its basis, or both.

§ 3.2.6 If the Owner notifies the Construction Manager that the Owner has accepted the Guaranteed Maximum Price proposal in writing before the date specified in the Guaranteed Maximum Price proposal, the Guaranteed Maximum Price proposal shall be deemed effective without further acceptance from the Construction Manager. Following acceptance of a Guaranteed Maximum Price, the Owner and Construction Manager shall execute the Guaranteed Maximum Price

Amendment amending this Agreement, a copy of which the Owner shall provide to the Architect. The Guaranteed Maximum Price Amendment shall set forth the agreed upon Guaranteed Maximum Price with the information and assumptions upon which it is based.

§ 3.2.7 The Construction Manager shall not incur any cost to be reimbursed as part of the Cost of the Work prior to the execution of the Guaranteed Maximum Price Amendment, unless the Owner provides prior written authorization for such costs.

§ 3.2.8 The Owner shall authorize preparation of revisions to the Contract Documents that incorporate the agreed-upon assumptions and clarifications contained in the Guaranteed Maximum Price Amendment. The Owner shall promptly furnish such revised Contract Documents to the Construction Manager. The Construction Manager shall notify the Owner and Architect of any inconsistencies between the agreed-upon assumptions and clarifications contained in the Guaranteed Maximum Price Amendment and the revised Contract Documents.

§ 3.2.9 The Construction Manager shall include in the Guaranteed Maximum Price all sales, consumer, use and similar taxes for the Work provided by the Construction Manager that are legally enacted, whether or not yet effective, at the time the Guaranteed Maximum Price Amendment is executed.

§ 3.3 Construction Phase

§ 3.3.1 General

§ 3.3.1.1 For purposes of Section 8.1.2 of A201–2017, as amended, the date of commencement of the Work shall mean the date of commencement of the Construction Phase.

§ 3.3.1.2 The Construction Phase shall commence upon the Owner's execution of the Guaranteed Maximum Price Amendment or, prior to acceptance of the Guaranteed Maximum Price proposal, by written agreement of the parties. The written agreement shall set forth a description of the Work to be performed by the Construction Manager, and any insurance and bond requirements for Work performed prior to execution of the Guaranteed Maximum Price Amendment.

§ 3.3.2 Administration

§ 3.3.2.1 The Construction Manager shall schedule and conduct meetings to discuss such matters as procedures, progress, coordination, scheduling, and status of the Work. The Construction Manager shall prepare and promptly distribute minutes of the meetings to the Owner and Architect.

§ 3.3.2.2 Upon the execution of the Guaranteed Maximum Price Amendment, the Construction Manager shall prepare and submit to the Owner and Architect a construction schedule for the Work and a submittal schedule in accordance with Section 3.10 of A201–2017, as amended.

§ 3.3.2.3 Monthly Report

The Construction Manager shall record the progress of the Project. On a monthly basis, or otherwise as agreed to by the Owner, the Construction Manager shall submit written progress reports to the Owner and Architect, showing percentages of completion and other information reasonably required by the Owner.

§ 3.3.2.4 Daily Logs

The Construction Manager shall keep, and make available to the Owner and Architect, a daily log containing a record for each day of weather, portions of the Work in progress, number of workers on site, identification of equipment on site, problems that might affect progress of the work, accidents, injuries, and other information reasonably required by the Owner.

§ 3.3.2.5 Cost Control

The Construction Manager shall develop a system of cost control for the Work, including regular monitoring of actual costs for activities in progress and estimates for uncompleted tasks and proposed changes. The Construction Manager shall identify variances between actual and estimated costs and report the variances to the Owner and Architect, and shall provide this information in its monthly reports to the Owner and Architect, in accordance with Section 3.3.2.3 above.

§ 3.3.2.6 The Construction Manager shall provide administrative, management, and related services to coordinate scheduled activities and responsibilities of the Contractors with each other and with those of the Construction Manager, the Owner, and the Architect in accordance with the latest approved Project schedule and the Contract Documents.

ARTICLE 4 OWNER'S RESPONSIBILITIES

§ 4.1 Information and Services Required of the Owner

§ 4.1.1 The Owner shall provide information with reasonable promptness, regarding requirements for and limitations on the Project, including a written program which shall set forth the Owner's objectives, constraints, and criteria, including schedule, space requirements and relationships, flexibility and expandability, special equipment, systems, sustainability and site requirements.

§ 4.1.2 Prior to the execution of the Guaranteed Maximum Price Amendment and commencement of construction, the Construction Manager may request that the Owner provide reasonable evidence that the Owner has made financial arrangements to fulfill the Owner's obligations under the Contract. Such evidence shall include the names and contact information for any and all equity investors, debt guarantors, and lenders. After execution of the Guaranteed Maximum Price Amendment, the Construction Manager may request such information as set forth in A201-2017 Section 2.2, as amended.

§ 4.1.3 The Owner shall establish and periodically update the Owner's budget for the Project, including (1) the budget for the Cost of the Work as defined in Article 7, (2) the Owner's other costs, and (3) reasonable contingencies related to all of these costs. If the Owner significantly increases or decreases the Owner's budget for the Cost of the Work, the Owner shall notify the Construction Manager and Architect. The Owner and the Architect, in consultation with the Construction Manager, shall thereafter agree to a corresponding change in the Project's scope and quality.

§ 4.1.4 Structural and Environmental Tests, Surveys and Reports. During the Preconstruction Phase, the Owner shall furnish the following information or services with reasonable promptness. The Owner shall also furnish any other information or services under the Owner's control and relevant to the Construction Manager's performance of the Work with reasonable promptness after receiving the Construction Manager's written request for such information or services. The Construction Manager shall be entitled to rely on the accuracy of information and services furnished by the Owner but shall exercise proper precautions relating to the safe performance of the Work.

§ 4.1.4.1 The Owner shall furnish tests, inspections, and reports, required by law and as otherwise agreed to in writing by the parties, such as structural, mechanical, and chemical tests, tests for air and water pollution, and tests for hazardous materials.

§ 4.1.4.2 The Owner shall furnish surveys describing physical characteristics, legal limitations and utility locations for the site of the Project, and a written legal description of the site. The surveys and legal information shall include, as applicable, grades and lines of streets, alleys, pavements and adjoining property and structures; designated wetlands; adjacent drainage; rights-of-way, restrictions, easements, encroachments, zoning, deed restrictions, boundaries and contours of the site; locations, dimensions and other necessary data with respect to existing buildings, other improvements and trees; and information concerning available utility services and lines, both public and private, above and below grade, including inverts and depths. All the information on the survey shall be referenced to a Project benchmark.

§ 4.1.4.3 The Owner, when such services are requested, shall furnish services of geotechnical engineers, which may include test borings, test pits, determinations of soil bearing values, percolation tests, evaluations of hazardous materials, seismic evaluation, ground corrosion tests and resistivity tests, including necessary operations for anticipating subsoil conditions, with written reports and appropriate recommendations.

§ 4.1.5 During the Construction Phase, the Owner shall furnish information or services required of the Owner by the Contract Documents with reasonable promptness. The Owner shall also furnish any other information or services under the Owner's control and relevant to the Construction Manager's performance of the Work with reasonable promptness after receiving the Construction Manager's written request for such information or services.

§ 4.1.6 If the Owner identified a Sustainable Objective in Article 1, the Owner shall fulfill its responsibilities as required in AIA Document E234™–2019, Sustainable Projects Exhibit, Construction Manager as Constructor Edition, attached to this Agreement.

§ 4.2 Owner's Designated Representative

The Owner shall identify a representative authorized to act on behalf of the Owner with respect to the Project. The Owner's representative shall render decisions promptly and furnish information expeditiously, so as to avoid

unreasonable delay in the services or Work of the Construction Manager. Except as otherwise provided in Section 4.2.1 of A201–2017, as amended, the Architect does not have such authority. The term "Owner" means the Owner or the Owner's authorized representative.

§ 4.2.1 Legal Requirements. The Owner shall furnish all legal, insurance and accounting services, including auditing services, that may be reasonably necessary at any time for the Project to meet the Owner's needs and interests.

§ 4.3 Architect

The Owner shall retain an Architect to provide services, duties and responsibilities as described in AIA Document B133™–2019, Standard Form of Agreement Between Owner and Architect, Construction Manager as Constructor Edition, including any additional services requested by the Construction Manager that are necessary for the Preconstruction and Construction Phase services under this Agreement. The Owner shall provide the Construction Manager with a copy of the scope of services in the executed agreement between the Owner and the Architect, and any further modifications to the Architect's scope of services in the agreement.

ARTICLE 5 COMPENSATION AND PAYMENTS FOR PRECONSTRUCTION PHASE SERVICES

§ 5.1 Compensation

§ 5.1.1 For the Construction Manager's Preconstruction Phase services described in Sections 3.1 and 3.2, the Owner shall compensate the Construction Manager as follows:

(Insert amount of, or basis for, compensation and include a list of reimbursable cost items, as applicable.)

A Lump Sum of [redacted]

§ 5.1.2 The hourly billing rates for Preconstruction Phase services of the Construction Manager and the Construction Manager's Consultants and Subcontractors, if any, are set forth below.

(If applicable, attach an exhibit of hourly billing rates or insert them below.)

Not Applicable

Individual or Position	Rate

§ 5.1.2.1 Hourly billing rates for Preconstruction Phase services include all costs to be paid or incurred by the Construction Manager, as required by law or collective bargaining agreements, for taxes, insurance, contributions, assessments and benefits and, for personnel not covered by collective bargaining agreements, customary benefits such as sick leave, medical and health benefits, holidays, vacations and pensions, and shall remain unchanged unless the parties execute a Modification.

§ 5.1.3 If the Preconstruction Phase services covered by this Agreement have not been completed within seven (7) months of the date of this Agreement, through no fault of the Construction Manager, the Construction Manager's compensation for Preconstruction Phase services shall be equitably adjusted.

§ 5.2 Payments

§ 5.2.1 Unless otherwise agreed, payments for services shall be made monthly in proportion to services performed.

§ 5.2.2 Payments are due and payable upon presentation of the Construction Manager's invoice. Amounts unpaid sixty (60) days after the invoice date shall bear interest at the rate entered below, or in the absence thereof at the legal rate prevailing from time to time at the principal place of business of the Construction Manager.

(Insert rate of monthly or annual interest agreed upon.)

1.00 % per month

ARTICLE 6 COMPENSATION FOR CONSTRUCTION PHASE SERVICES

§ 6.1 Contract Sum

§ 6.1.1 The Owner shall pay the Construction Manager the Contract Sum in current funds for the Construction Manager's performance of the Contract after execution of the Guaranteed Maximum Price Amendment. The Contract Sum is the Cost of the Work as defined in Article 7 plus the Construction Manager's Fee.

§ 6.1.2 The Construction Manager's Fee:
(State a lump sum, percentage of Cost of the Work or other provision for determining the Construction Manager's Fee.)

A lump sum equal to [redacted] of the Guaranteed Maximum Price of the Project as defined in this Agreement.

§ 6.1.3 The method of adjustment of the Construction Manager's Fee for changes in the Work:

Shall be as set forth in Section 6.1.2 for changes which increase the Guaranteed Maximum Price. This fee shall be applied to the Cost of the Work and does not include Cost of the Work expenses such as the Construction Manager's General Conditions, Bond or Insurance.

§ 6.1.4 Limitations, if any, on a Contractor's overhead and profit for increases in the cost of its portion of the Work:

Contractor's overhead and profit shall be limited to 15% for additive changes to their work per 7.2.2 of the A201-2017, as amended.

§ 6.1.5 Rental rates for Construction Manager-owned equipment shall not exceed one hundred percent (100 %) of the standard rental rate paid at the place of the Project.

§ 6.1.6 Liquidated damages, if any:
(Insert terms and conditions for liquidated damages, if any.)

Not Applicable

§ 6.1.7 Other:
(Insert provisions for bonus, cost savings or other incentives, if any, that might result in a change to the Contract Sum.)

In the event the Cost of the Work is less than the Guaranteed Maximum Price approved by the Owner and set forth in the Guaranteed Maximum Price Amendment to this Agreement, the savings shall be credited to the Owner.

§ 6.2 Guaranteed Maximum Price
The Construction Manager guarantees that the Contract Sum shall not exceed the Guaranteed Maximum Price set forth in the Guaranteed Maximum Price Amendment, subject to additions and deductions by Change Order as provided in the Contract Documents. Costs which would cause the Guaranteed Maximum Price to be exceeded shall be paid by the Construction Manager without reimbursement by the Owner.

§ 6.3 Changes in the Work
§ 6.3.1 The Owner may, without invalidating the Contract, order changes in the Work within the general scope of the Contract consisting of additions, deletions or other revisions. The Owner shall issue such changes in writing. The Construction Manager shall be entitled to an equitable adjustment in the Contract Time and the Guaranteed Maximum Price as a result of changes in the Work, as agreed to by the Owner and the Construction Manager.

§ 6.3.1.1 The Architect may order minor changes in the Work as provided in Article 7 of AIA Document A201–2017, General Conditions of the Contract for Construction, as amended.

§ 6.3.2 Adjustments to the Guaranteed Maximum Price on account of changes in the Work subsequent to the execution of the Guaranteed Maximum Price Amendment may be determined by any of the methods listed in Article 7 of AIA Document A201–2017, General Conditions of the Contract for Construction, as amended.

§ 6.3.3 Adjustments to contracts awarded on the basis of a stipulated sum shall be determined in accordance with Article 7 of A201–2017, as amended, as they refer to "cost" and "fee," and not by Articles 6 and 7 of this Agreement. Adjustments to contracts awarded with the Owner's prior written consent on the basis of cost plus a fee shall be calculated in accordance with the terms of those contracts.

§ 6.3.4 In calculating adjustments to the Guaranteed Maximum Price, the terms "cost" and "costs" as used in Article 7 of AIA Document A201–2017, as amended, shall mean the Cost of the Work as defined in Article 7 of this Agreement and the term "fee" shall mean the Construction Manager's Fee as defined in Section 6.1.2 of this Agreement.

§ 6.3.5 If no specific provision is made in Section 6.1.3 for adjustment of the Construction Manager's Fee in the case of changes in the Work, or if the extent of such changes is such, in the aggregate, that application of the adjustment provisions of Section 6.1.3 will cause substantial inequity to the Owner or Construction Manager, the Construction Manager's Fee shall be equitably adjusted on the same basis that was used to establish the Fee for the original Work, and the Guaranteed Maximum Price shall be adjusted accordingly.

ARTICLE 7 COST OF THE WORK FOR CONSTRUCTION PHASE

§ 7.1 Costs to Be Reimbursed

§ 7.1.1 The term Cost of the Work shall mean costs necessarily incurred by the Construction Manager in the proper performance of the Work. The Cost of the Work shall include only the items set forth in Sections 7.1 through 7.7.

§ 7.1.2 Where, pursuant to the Contract Documents, any cost is subject to the Owner's prior approval, the Construction Manager shall obtain such approval in writing prior to incurring the cost.

§ 7.1.3 Costs shall be at rates not higher than the standard rates paid at the place of the Project, except with prior approval of the Owner or as agreed to herein.

§ 7.2 Labor Costs

§ 7.2.1 Wages or salaries of construction workers directly employed by the Construction Manager to perform the construction of the Work at the site or, with the Owner's prior approval, at off-site workshops.**§ 7.2.2** Wages or salaries of the Construction Manager's supervisory and administrative personnel when stationed at the site and performing Work, with the Owner's prior approval.

(Paragraph deleted)

§ 7.2.2.1 Wages or salaries of the Construction Manager's supervisory and administrative personnel when performing professional services pursuant to this Agreement and stationed at a location other than the site, but only for that portion of time required for the Work. For purposes of this Section 7.2, the following labor rates shall be used and such rates shall be inclusive of personnel costs for labor, transportation, cell phone, and computer. Rates are established for May 2022 through April 2023 and are subject to escalation thereafter at a rate not to exceed 3% per year.

Director of Operations [redacted]
Project Manager
Senior Project Manager
Superintendent
Director of Field Ops
Safety Director
Project Accountant
Project Coordinator
Contract Administrator

§ 7.2.3 Wages and salaries of the Construction Manager's supervisory or administrative personnel engaged at factories, workshops or while traveling, in expediting the production or transportation of materials or equipment required for the Work, but only for that portion of their time required for the Work.

§ 7.2.4 Costs paid or incurred by the Construction Manager, as required by law or collective bargaining agreements, for taxes, insurance, contributions, assessments and benefits and, for personnel not covered by collective bargaining agreements, customary benefits such as sick leave, medical and health benefits, holidays, vacations and pensions, provided such costs are based on wages and salaries included in the Cost of the Work under Sections 7.2.1 through 7.2.3.

§ 7.2.5 If agreed rates for labor costs, in lieu of actual costs, are provided in this Agreement, the rates shall remain unchanged throughout the duration of this Agreement, unless the parties execute a Modification.

§ 7.3 Contract Costs
Aggregate total cost of all Contracts awarded by Owner and assigned to the Construction Manager pursuant to Section 1.1.14.

§ 7.4 Costs of Materials and Equipment Incorporated in the Completed Construction
§ 7.4.1 Costs, including transportation and storage at the site, of materials and equipment incorporated, or to be incorporated, in the completed construction.

§ 7.4.2 Costs of materials described in the preceding Section 7.4.1 in excess of those actually installed to allow for reasonable waste and spoilage. Unused excess materials, if any, shall become the Owner's property at the completion of the Work or, at the Owner's option, shall be sold by the Construction Manager. Any amounts realized from such sales shall be credited to the Owner as a deduction from the Cost of the Work.

§ 7.5 Costs of Other Materials and Equipment, Temporary Facilities and Related Items
§ 7.5.1 Costs of transportation, storage, installation, dismantling, maintenance, and removal of materials, supplies, temporary facilities, machinery, equipment and hand tools not customarily owned by construction workers that are provided by the Construction Manager at the site and fully consumed in the performance of the Work. Costs of materials, supplies, temporary facilities, machinery, equipment, and tools, that are not fully consumed, shall be based on the cost or value of the item at the time it is first used on the Project site less the value of the item when it is no longer used at the Project site. Costs for items not fully consumed by the Construction Manager shall mean fair market value.

§ 7.5.2 Rental charges for temporary facilities, machinery, equipment, and hand tools not customarily owned by construction workers that are provided by the Construction Manager at the site, and the costs of transportation, installation, dismantling, minor repairs, and removal of such temporary facilities, machinery, equipment, and hand tools. Rates and quantities of equipment owned by the Construction Manager, or a related party as defined in Section 7.8, shall be subject to the Owner's prior approval. The total rental cost of any such equipment may not exceed the purchase price of any comparable item.

§ 7.5.3 Costs of removal of debris from the site of the Work and its proper and legal disposal.

§ 7.5.4 Costs of the Construction Manager's site office, including general office equipment and supplies.

§ 7.5.5 Costs of materials and equipment suitably stored off the site at a mutually acceptable location, subject to the Owner's prior approval.

§ 7.6 Miscellaneous Costs
§ 7.6.1 Premiums for that portion of insurance and bonds required by the Contract Documents that can be directly attributed to this Contract. Construction Manager shall be compensated for General Liability and Excess Liability Insurance per the GMP Amendment. This insurance is not included in the Construction Manager's Fee described in Section 6.1.2.

§ 7.6.1.1 Costs for self-insurance, for either full or partial amounts of the coverages required by the Contract Documents, with the Owner's prior approval.

§ 7.6.1.2 Costs for insurance through a captive insurer owned or controlled by the Construction Manager, with the Owner's prior approval.

§ 7.6.2 Sales, use, or similar taxes, imposed by a governmental authority, that are related to the Work and for which the Construction Manager is liable.

§ 7.6.3 Fees and assessments for the building permit, and for other permits, licenses, and inspections, for which the Construction Manager is required by the Contract Documents to pay.

§ 7.6.4 Fees of laboratories for tests required by the Contract Documents; except those related to defective or nonconforming Work for which reimbursement is excluded under Article 13 of AIA Document A201–2017, as amended, or by other provisions of the Contract Documents, and which do not fall within the scope of Section 7.7.3.

§ 7.6.5 Royalties and license fees paid for the use of a particular design, process, or product, required by the Contract Documents.

§ 7.6.5.1 The cost of defending suits or claims for infringement of patent rights arising from requirements of the Contract Documents, payments made in accordance with legal judgments against the Construction Manager resulting from such suits or claims, and payments of settlements made with the Owner's consent, unless the Construction Manager had reason to believe that the required design, process, or product was an infringement of a copyright or a patent, and the Construction Manager failed to promptly furnish such information to the Architect as required by Section 3.17 of AIA Document A201–2017, as amended. The costs of legal defenses, judgments, and settlements shall not be included in the Cost of the Work used to calculate the Construction Manager's Fee or subject to the Guaranteed Maximum Price.

§ 7.6.6 Costs for communications services, electronic equipment, and software, directly related to the Work and located at the site, with the Owner's prior approval.

§ 7.6.7 Costs of document reproductions and delivery charges.

§ 7.6.8 Deposits lost for causes other than the Construction Manager's negligence or failure to fulfill a specific responsibility in the Contract Documents.

§ 7.6.9 Legal, mediation and arbitration costs, including attorneys' fees, other than those arising from disputes between the Owner and Construction Manager, reasonably incurred by the Construction Manager after the execution of this Agreement in the performance of the Work and with the Owner's prior approval, which shall not be unreasonably withheld.

§ 7.6.10 Expenses incurred in accordance with the Construction Manager's standard written personnel policy for relocation and temporary living allowances of the Construction Manager's personnel required for the Work, with the Owner's prior approval.

§ 7.6.11 That portion of the reasonable expenses of the Construction Manager's supervisory or administrative personnel incurred while traveling in discharge of duties connected with the Work.

§ 7.7 Other Costs and Emergencies

§ 7.7.1 Other costs incurred in the performance of the Work, with the Owner's prior approval.

§ 7.7.2 Costs incurred in taking action to prevent threatened damage, injury, or loss, in case of an emergency affecting the safety of persons and property, as provided in Article 10 of AIA Document A201–2017, as amended.

§ 7.7.3 Costs of repairing or correcting damaged or nonconforming Work executed by the Construction Manager, Subcontractors, or suppliers, provided that such damaged or nonconforming Work was not caused by the negligence of, or failure to fulfill a specific responsibility by, the Construction Manager, and only to the extent that the cost of repair or correction is not recovered by the Construction Manager from insurance, sureties, Subcontractors, suppliers, or others.

§ 7.7.4 The costs described in Sections 7.1 through 7.7 shall be included in the Cost of the Work, notwithstanding any provision of AIA Document A201–2017, as amended, or other Conditions of the Contract which may require the Construction Manager to pay such costs, unless such costs are excluded by the provisions of Section 7.9.

§ 7.8 Related Party Transactions

§ 7.8.1 For purposes of this Section 7.8, the term "related party" shall mean (1) a parent, subsidiary, affiliate, or other entity having common ownership of, or sharing common management with, the Construction Manager; (2) any entity in which any stockholder in, or management employee of, the Construction Manager holds an equity interest in excess of ten percent in the aggregate; (3) any entity which has the right to control the business or affairs of the Construction Manager; or (4) any person, or any member of the immediate family of any person, who has the right to control the business or affairs of the Construction Manager.

§ 7.8.2 If any of the costs to be reimbursed arise from a transaction between the Construction Manager and a related party, the Construction Manager shall notify the Owner of the specific nature of the contemplated transaction, including the identity of the related party and the anticipated cost to be incurred, before any such transaction is consummated or cost incurred. If the Owner, after such notification, authorizes the proposed transaction in writing, then the cost incurred shall

be included as a cost to be reimbursed, and the Construction Manager shall procure the Work, equipment, goods, or service, from the related party, as a Subcontractor, according to the terms of Article 9. If the Owner fails to authorize the transaction in writing, the Construction Manager shall procure the Work, equipment, goods, or service from some person or entity other than a related party according to the terms of Article 9.

§ 7.9 Costs Not To Be Reimbursed

§ 7.9.1 The Cost of the Work shall not include the items listed below:

.1 Salaries and other compensation of the Construction Manager's personnel stationed at the Construction Manager's principal office or offices other than the site office, except as specifically provided in Section 7.2, or as may be provided in Article 14;

.2 Bonuses, profit sharing, incentive compensation, and any other discretionary payments, paid to anyone hired by the Construction Manager or paid to any Subcontractor or vendor, unless the Owner has provided prior approval;

.3 Expenses of the Construction Manager's principal office and offices other than the site office;

.4 Overhead and general expenses, except as may be expressly included in Sections 7.1 to 7.7;

.5 The Construction Manager's capital expenses, including interest on the Construction Manager's capital employed for the Work;

.6 Except as provided in Section 7.7.3 of this Agreement, costs due to the negligence of, or failure to fulfill a specific responsibility of the Contract by, the Construction Manager, Subcontractors, and suppliers, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable;

.7 Any cost not specifically and expressly described in Sections 7.1 to 7.7;

.8 Costs, other than costs included in Change Orders approved by the Owner, that would cause the Guaranteed Maximum Price to be exceeded; and

.9 Costs for services incurred during the Preconstruction Phase.

ARTICLE 8 DISCOUNTS, REBATES, AND REFUNDS

§ 8.1 Cash discounts obtained on payments made by the Construction Manager shall accrue to the Owner if (1) before making the payment, the Construction Manager included the amount to be paid, less such discount, in an Application for Payment and received payment from the Owner, or (2) the Owner has deposited funds with the Construction Manager with which to make payments; otherwise, cash discounts shall accrue to the Construction Manager. Trade discounts, rebates, refunds, and amounts received from sales of surplus materials and equipment shall accrue to the Owner, and the Construction Manager shall make provisions so that they can be obtained.

§ 8.2 Amounts that accrue to the Owner in accordance with the provisions of Section 8.1 shall be credited to the Owner as a deduction from the Cost of the Work.

ARTICLE 9 SUBCONTRACTS AND OTHER AGREEMENTS

§ 9.1 Those portions of the Work that the Construction Manager does not customarily perform with the Construction Manager's own personnel, and that are not required to be publicly bid pursuant to the provisions of this Agreement, the Construction Documents, or applicable law, shall be performed under subcontracts or other appropriate agreements with the Construction Manager. The Owner may designate specific persons from whom, or entities from which, the Construction Manager shall obtain bids. The Construction Manager shall obtain bids from Subcontractors, and from suppliers of materials or equipment fabricated especially for the Work, who are qualified to perform that portion of the Work in accordance with the requirements of the Contract Documents. The Construction Manager shall deliver such bids to the Architect and Owner with an indication as to which bids the Construction Manager intends to accept. The Owner then has the right to review the Construction Manager's list of proposed subcontractors and suppliers in consultation with the Architect and, subject to Section 9.1.1, to object to any subcontractor or supplier. Any advice of the Architect, or approval or objection by the Owner, shall not relieve the Construction Manager of its responsibility to perform the Work in accordance with the Contract Documents. The Construction Manager shall not be required to contract with anyone to whom the Construction Manager has reasonable objection.

§ 9.1.1 When a specific subcontractor or supplier (1) is recommended to the Owner by the Construction Manager; (2) is qualified to perform that portion of the Work; and (3) has submitted a bid that conforms to the requirements of the Contract Documents without reservations or exceptions, but the Owner requires that another bid be accepted, then the Construction Manager may require that a Change Order be issued to adjust the Guaranteed Maximum Price by the difference between the bid of the person or entity recommended to the Owner by the Construction Manager and the amount of the subcontract or other agreement actually signed with the person or entity designated by the Owner.

§ 9.2 Subcontracts or other agreements shall conform to the applicable payment provisions of this Agreement, and shall not be awarded on the basis of cost plus a fee without the Owner's prior written approval. If a subcontract is awarded on the basis of cost plus a fee, the Construction Manager shall provide in the subcontract for the Owner to receive the same audit rights with regard to the Subcontractor as the Owner receives with regard to the Construction Manager in Article 10.

ARTICLE 10 ACCOUNTING RECORDS

The Construction Manager shall keep full and detailed records and accounts related to the Cost of the Work, and exercise such controls, as may be necessary for proper financial management under this Contract and to substantiate all costs incurred. The accounting and control systems shall be satisfactory to the Owner. The Owner and the Owner's auditors shall, during regular business hours and upon reasonable notice, be afforded access to, and shall be permitted to audit and copy, the Construction Manager's records and accounts, including complete documentation supporting accounting entries, books, job cost reports, correspondence, instructions, drawings, receipts, subcontracts, Subcontractor's proposals, Subcontractor's invoices, purchase orders, vouchers, memoranda, and other data relating to this Contract. The Construction Manager shall preserve these records for a period of three years after final payment, or for such longer period as may be required by law.

ARTICLE 11 PAYMENTS FOR CONSTRUCTION PHASE SERVICES

§ 11.1 Progress Payments

§ 11.1.1 Based upon Applications for Payment submitted to the Architect by the Construction Manager, and Certificates for Payment issued by the Architect, the Owner shall make progress payments on account of the Contract Sum, to the Construction Manager, as provided below and elsewhere in the Contract Documents.

§ 11.1.2 The period covered by each Application for Payment shall be one calendar month ending on the last day of the month.

§ 11.1.3 Provided that an Application for Payment is received by the Architect not later than the first day of a month, the Owner shall make payment of the amount certified to the Construction Manager not later than the last day of the same month. If an Application for Payment is received by the Architect after the application date fixed above, payment of the amount certified shall be made by the Owner not later than thirty (30) days after the Architect receives the Application for Payment.
(Federal, state or local laws may require payment within a certain period of time.)

§ 11.1.4 With each Application for Payment, the Construction Manager shall submit payrolls, petty cash accounts, receipted invoices or invoices with check vouchers attached, and any other evidence required by the Owner or Architect to demonstrate that payments already made by the Construction Manager on account of the Cost of the Work equal or exceed progress payments already received by the Construction Manager, plus payrolls for the period covered by the present Application for Payment, less that portion of the progress payments attributable to the Construction Manager's Fee.

§ 11.1.5 Each Application for Payment shall be based on the most recent schedule of values submitted by the Construction Manager in accordance with the Contract Documents. The schedule of values shall allocate the entire Guaranteed Maximum Price among: (1) the various portions of the Work; (2) any contingency for costs that are included in the Guaranteed Maximum Price but not otherwise allocated to another line item or included in a Change Order; and (3) the Construction Manager's Fee.

§ 11.1.5.1 The schedule of values shall be prepared in such form and supported by such data to substantiate its accuracy as the Architect may require. The schedule of values shall be used as a basis for reviewing the Construction Manager's Applications for Payment.

§ 11.1.5.2 The allocation of the Guaranteed Maximum Price under this Section 11.1.5 shall not constitute a separate guaranteed maximum price for the Cost of the Work of each individual line item in the schedule of values.

§ 11.1.5.3 When the Construction Manager allocates costs from a contingency to another line item in the schedule of values, the Construction Manager shall submit supporting documentation to the Architect.

§ 11.1.6 Applications for Payment shall show the percentage of completion of each portion of the Work as of the end of the period covered by the Application for Payment. The percentage of completion shall be the lesser of (1) the percentage of that portion of the Work which has actually been completed, or (2) the percentage obtained by dividing (a) the expense that has actually been incurred by the Construction Manager on account of that portion of the Work and for which the Construction Manager has made payment or intends to make payment prior to the next Application for Payment, by (b) the share of the Guaranteed Maximum Price allocated to that portion of the Work in the schedule of values.

§ 11.1.7 In accordance with AIA Document A201–2017, as amended, and subject to other provisions of the Contract Documents, the amount of each progress payment shall be computed as follows:

§ 11.1.7.1 The amount of each progress payment shall first include:

.1 That portion of the Guaranteed Maximum Price properly allocable to completed Work as determined by multiplying the percentage of completion of each portion of the Work by the share of the Guaranteed Maximum Price allocated to that portion of the Work in the most recent schedule of values;

.2 That portion of the Guaranteed Maximum Price properly allocable to materials and equipment delivered and suitably stored at the site for subsequent incorporation in the completed construction or, if approved in writing in advance by the Owner, suitably stored off the site at a location agreed upon in writing;

.3 That portion of Construction Change Directives that the Architect determines, in the Architect's professional judgment, to be reasonably justified; and

.4 The Construction Manager's Fee, computed upon the Cost of the Work described in the preceding Sections 11.1.7.1.1 and 11.1.7.1.2 at the rate stated in Section 6.1.2 or, if the Construction Manager's Fee is stated as a fixed sum in that Section, an amount that bears the same ratio to that fixed-sum fee as the Cost of the Work included in Sections 11.1.7.1.1 and 11.1.7.1.2 bears to a reasonable estimate of the probable Cost of the Work upon its completion.

§ 11.1.7.2 The amount of each progress payment shall then be reduced by:

.1 The aggregate of any amounts previously paid by the Owner;

.2 The amount, if any, for Work that remains uncorrected and for which the Architect has previously withheld a Certificate for Payment as provided in Article 9 of AIA Document A201–2017, as amended;

.3 Any amount for which the Construction Manager does not intend to pay a Contractor or material supplier, unless the Work has been performed by others the Construction Manager intends to pay;

.4 For Work performed or defects discovered since the last payment application, any amount for which the Architect may withhold payment, or nullify a Certificate of Payment in whole or in part, as provided in Article 9 of AIA Document A201–2017, as amended;

.5 The shortfall, if any, indicated by the Construction Manager in the documentation required by Section 11.1.4 to substantiate prior Applications for Payment, or resulting from errors subsequently discovered by the Owner's auditors in such documentation; and

.6 Retainage withheld pursuant to Section 11.1.8.

§ 11.1.8 Retainage

§ 11.1.8.1 For each progress payment made prior to Substantial Completion of the Work, the Owner may withhold the following amount, as retainage, from the payment otherwise due:
(Insert a percentage or amount to be withheld as retainage from each Application for Payment. The amount of retainage may be limited by governing law.)

Ten Percent (10%) until project is 50% complete and no more than Five Percent (5%) thereafter in accordance with Illinois (815 ILCS 603/20) Contractor Prompt Payment Act.

§ 11.1.8.1.1 The following items are not subject to retainage:
(Insert any items not subject to the withholding of retainage, such as general conditions, insurance, etc.)

The Construction Manager's Fee, General Conditions, General Requirements (where applicable), Bond, and Insurance.

§ 11.1.8.2 Reduction or limitation of retainage, if any, shall be as follows:
(If the retainage established in Section 11.1.8.1 is to be modified prior to Substantial Completion of the entire Work, insert provisions for such modification.)

With Construction Manager's approval, upon 50% completion of the overall Project, the retained percentage may be reduced for those subcontractors and suppliers whose work is complete and accepted by the Owner and the Construction Manager.

§ 11.1.8.3 Except as set forth in this Section 11.1.8.3, upon Substantial Completion of the Work, the Construction Manager may submit an Application for Payment that includes the retainage withheld from prior Applications for Payment pursuant to this Section 11.1.8. The Application for Payment submitted at Substantial Completion shall not include retainage as follows:
(Insert any other conditions for release of retainage, such as upon completion of the Owner's audit and reconciliation, upon Substantial Completion.)

Not Applicable

§ 11.1.9 If final completion of the Work is materially delayed through no fault of the Construction Manager, the Owner shall pay the Construction Manager any additional amounts in accordance with Article 9 of AIA Document A201–2017, as amended.

§ 11.1.10 Except with the Owner's prior written approval, the Construction Manager shall not make advance payments to suppliers for materials or equipment which have not been delivered and suitably stored at the site.

§ 11.1.11 The Owner and the Construction Manager shall agree upon a mutually acceptable procedure for review and approval of payments to Subcontractors, and the percentage of retainage held on Subcontracts, and the Construction Manager shall execute subcontracts in accordance with those agreements.

§ 11.1.12 In taking action on the Construction Manager's Applications for Payment the Architect shall be entitled to rely on the accuracy and completeness of the information furnished by the Construction Manager, and such action shall not be deemed to be a representation that (1) the Architect has made a detailed examination, audit, or arithmetic verification, of the documentation submitted in accordance with Section 11.1.4 or other supporting data; (2) that the Architect has made exhaustive or continuous on-site inspections; or (3) that the Architect has made examinations to ascertain how or for what purposes the Construction Manager has used amounts previously paid on account of the Contract. Such examinations, audits, and verifications, if required by the Owner, will be performed by the Owner's auditors acting in the sole interest of the Owner.

§ 11.2 Final Payment

§ 11.2.1 Final payment, constituting the entire unpaid balance of the Contract Sum, shall be made by the Owner to the Construction Manager when

.1 the Construction Manager has fully performed the Contract, except for the Construction Manager's responsibility to correct Work as provided in Article 12 of AIA Document A201–2017, as amended, and to satisfy other requirements, if any, which extend beyond final payment;

.2 the Construction Manager has submitted a final accounting for the Cost of the Work and a final Application for Payment; and

.3 a final Certificate for Payment has been issued by the Architect in accordance with Section 11.2.2.2.

§ 11.2.2 Within 30 days of the Owner's receipt of the Construction Manager's final accounting for the Cost of the Work, the Owner shall conduct an audit of the Cost of the Work or notify the Architect that it will not conduct an audit.

§ 11.2.2.1 If the Owner conducts an audit of the Cost of the Work, the Owner shall, within 10 days after completion of the audit, submit a written report based upon the auditors' findings to the Architect.

§ 11.2.2.2 Within seven days after receipt of the written report described in Section 11.2.2.1, or receipt of notice that the Owner will not conduct an audit, and provided that the other conditions of Section 11.2.1 have been met, the Architect will either issue to the Owner a final Certificate for Payment with a copy to the Construction Manager, or notify the Construction Manager and Owner in writing of the Architect's reasons for withholding a certificate as provided in Article 9 of AIA Document A201–2017, as amended. The time periods stated in this Section 11.2.2 supersede those stated in Article 9 of AIA Document A201–2017, as amended. The Architect is not responsible for verifying the accuracy of the Construction Manager's final accounting.

§ 11.2.2.3 If the Owner's auditors' report concludes that the Cost of the Work, as substantiated by the Construction Manager's final accounting, is less than claimed by the Construction Manager, the Construction Manager shall be entitled to request mediation of the disputed amount without seeking an initial decision pursuant to Article 15 of AIA Document A201–2017, as amended. A request for mediation shall be made by the Construction Manager within 30 days after the Construction Manager's receipt of a copy of the Architect's final Certificate for Payment. Failure to request mediation within this 30-day period shall result in the substantiated amount reported by the Owner's auditors becoming binding on the Construction Manager. Pending a final resolution of the disputed amount, the Owner shall pay the Construction Manager the amount certified in the Architect's final Certificate for Payment.

§ 11.2.3 The Owner's final payment to the Construction Manager shall be made no later than 30 days after the issuance of the Architect's final Certificate for Payment.

§ 11.2.4 If, subsequent to final payment, and at the Owner's request, the Construction Manager incurs costs, described in Sections 7.1 through 7.7, and not excluded by Section 7.9, to correct defective or nonconforming Work, the Owner shall reimburse the Construction Manager for such costs, and the Construction Manager's Fee applicable thereto, on the same basis as if such costs had been incurred prior to final payment, but not in excess of the Guaranteed Maximum Price. If adjustments to the Contract Sum are provided for in Section 6.1.7, the amount of those adjustments shall be recalculated, taking into account any reimbursements made pursuant to this Section 11.2.4 in determining the net amount to be paid by the Owner to the Construction Manager.

§ 11.3 Interest

Payments due and unpaid under the Contract shall bear interest from the date payment is due at the rate stated below, or in the absence thereof, at the legal rate prevailing from time to time at the place where the Project is located.
(Insert rate of interest agreed upon, if any.)

1.0 % per month

ARTICLE 12 DISPUTE RESOLUTION

§ 12.0 If the Parties cannot reach resolution on a matter relating to or arising out of the Agreement, the Parties shall endeavor to reach resolution through good faith direct discussions between the Parties' representatives who shall possess the necessary authority to resolve such matters and who shall record the date of the first discussion. If the Parties' representatives are not able to resolve such matters within five (5) business days of the date of the first discussion, the Parties' representatives shall immediately inform senior executives of the Parties in writing that resolution was not reached. Upon receipt of such notice, senior executives of the Parties shall meet within five (5) business days to endeavor to reach resolution. If the dispute remains unresolved after fifteen (15) days from the date of first discussion, the Parties may submit such matters to the dispute resolution procedures set forth herein. Such disputes or other matters shall be submitted to the Initial Decision Maker for resolution in accordance with the requirements set forth in the Contract Documents.

§ 12.1 Initial Decision Maker

§ 12.1.1 Any Claim between the Owner and Construction Manager shall be resolved in accordance with the provisions set forth in this Article 12 and Article 15 of A201–2017, as amended. However, for Claims arising from or relating to the Construction Manager's Preconstruction Phase services, no decision by the Initial Decision Maker shall be required as a condition precedent to mediation or binding dispute resolution, and Section 12.1.2 of this Agreement shall not apply.

§ 12.1.2 The Architect will serve as the Initial Decision Maker pursuant to Article 15 of AIA Document A201–2017 for Claims arising from or relating to the Construction Manager's Construction Phase services, unless the parties appoint below another individual, not a party to the Agreement, to serve as the Initial Decision Maker.
(If the parties mutually agree, insert the name, address and other contact information of the Initial Decision Maker, if other than the Architect.)

§ 12.2 Binding Dispute Resolution

For any Claim subject to, but not resolved by mediation pursuant to Article 15 of AIA Document A201–2017, as amended, the method of binding dispute resolution shall be as follows:
(Check the appropriate box.)

[X] Litigation in a court of competent jurisdiction

§ 12.2.1 Intentionally Deleted

§ 12.2.4 All claims, disputes and other matters between the Construction Manager and Owner arising out of, or relating to, agreements to which the parties are bound, or the Contract Documents or the breach thereof, shall be decided by litigation in a court of competent jurisdiction, unless the parties mutually agree otherwise.

ARTICLE 13 TERMINATION OR SUSPENSION

§ 13.1 Termination Prior to Execution of the Guaranteed Maximum Price Amendment

§ 13.1.1 If the Owner and the Construction Manager do not reach an agreement on the Guaranteed Maximum Price, the Owner may terminate this Agreement upon not less than seven days' written notice to the Construction Manager, and the Construction Manager may terminate this Agreement, upon not less than seven days' written notice to the Owner.

§ 13.1.2 In the event of termination of this Agreement pursuant to Section 13.1.1, the Construction Manager shall be compensated for Preconstruction Phase services and Work performed prior to receipt of a notice of termination, in accordance with the terms of this Agreement. In no event shall the Construction Manager's compensation under this Section exceed the compensation set forth in Section 5.1.

§ 13.1.3 Prior to the execution of the Guaranteed Maximum Price Amendment, the Owner may terminate this Agreement upon not less than seven days' written notice to the Construction Manager for the Owner's convenience and without cause, and the Construction Manager may terminate this Agreement, upon not less than seven days' written notice to the Owner, for the reasons set forth in Article 14 of A201–2017, as amended.

§ 13.1.4 In the event of termination of this Agreement pursuant to Section 13.1.3, the Construction Manager shall be equitably compensated for Preconstruction Phase services and Work performed prior to receipt of a notice of termination. In no event shall the Construction Manager's compensation under this Section exceed the compensation set forth in Section 5.1.

§ 13.1.5 If the Owner terminates the Contract pursuant to Section 13.1.3 after the commencement of the Construction Phase but prior to the execution of the Guaranteed Maximum Price Amendment, the Owner shall pay to the Construction Manager an amount calculated as follows, which amount shall be in addition to any compensation paid to the Construction Manager under Section 13.1.4:

.1 Take the Cost of the Work incurred by the Construction Manager to the date of termination;

.2 Add the Construction Manager's Fee computed upon the Cost of the Work to the date of termination at the rate stated in Section 6.1 or, if the Construction Manager's Fee is stated as a fixed sum in that Section, an amount that bears the same ratio to that fixed-sum Fee as the Cost of the Work at the time of termination bears to a reasonable estimate of the probable Cost of the Work upon its completion; and

.3 Subtract the aggregate of previous payments made by the Owner for Construction Phase services.

§ 13.1.6 The Owner shall also pay the Construction Manager fair compensation, either by purchase or rental at the election of the Owner, for any equipment owned by the Construction Manager that the Owner elects to retain and that is not otherwise included in the Cost of the Work under Section 13.1.5.1. To the extent that the Owner elects to take legal assignment of subcontracts and purchase orders (including rental agreements), the Construction Manager shall, as a condition of receiving the payments referred to in this Article 13, execute and deliver all such papers and take all such steps, including the legal assignment of such subcontracts and other contractual rights of the Construction Manager, as the Owner may require for the purpose of fully vesting in the Owner the rights and benefits of the Construction Manager under such subcontracts or purchase orders. All Subcontracts, purchase orders and rental agreements entered into by the Construction Manager will contain provisions allowing for assignment to the Owner as described above.

§ 13.1.6.1 If the Owner accepts assignment of subcontracts, purchase orders or rental agreements as described above, the Owner will reimburse or indemnify the Construction Manager for all costs arising under the subcontract, purchase order

or rental agreement, if those costs would have been reimbursable as Cost of the Work if the contract had not been terminated. If the Owner chooses not to accept assignment of any subcontract, purchase order or rental agreement that would have constituted a Cost of the Work had this agreement not been terminated, the Construction Manager will terminate the subcontract, purchase order or rental agreement and the Owner will pay the Construction Manager the costs necessarily incurred by the Construction Manager because of such termination.

§ 13.2 Termination or Suspension Following Execution of the Guaranteed Maximum Price Amendment
§ 13.2.1 Termination
The Contract may be terminated by the Owner or the Construction Manager as provided in Article 14 of AIA Document A201–2017, as amended.

§ 13.2.2 Termination by the Owner for Cause
§ 13.2.2.1 If the Owner terminates the Contract for cause as provided in Article 14 of AIA Document A201–2017, as amended, the amount, if any, to be paid to the Construction Manager under Article 14 of AIA Document A201–2017, as amended shall not cause the Guaranteed Maximum Price to be exceeded, nor shall it exceed an amount calculated as follows:

.1 Take the Cost of the Work incurred by the Construction Manager to the date of termination;
.2 Add the Construction Manager's Fee, computed upon the Cost of the Work to the date of termination at the rate stated in Section 6.1 or, if the Construction Manager' Fee is stated as a fixed sum in that Section, an amount that bears the same ratio to that fixed-sum Fee as the Cost of the Work at the time of termination bears to a reasonable estimate of the probable Cost of the Work upon its completion;
.3 Subtract the aggregate of previous payments made by the Owner; and
.4 Subtract the costs and damages incurred, or to be incurred, by the Owner under Article 14 of AIA Document A201–2017, as amended.

§ 13.2.2.2 The Owner shall also pay the Construction Manager fair compensation, either by purchase or rental at the election of the Owner, for any equipment owned by the Construction Manager that the Owner elects to retain and that is not otherwise included in the Cost of the Work under Section 13.2.2.1.1. To the extent that the Owner elects to take legal assignment of subcontracts and purchase orders (including rental agreements), the Construction Manager shall, as a condition of receiving the payments referred to in this Article 13, execute and deliver all such papers and take all such steps, including the legal assignment of such subcontracts and other contractual rights of the Construction Manager, as the Owner may require for the purpose of fully vesting in the Owner the rights and benefits of the Construction Manager under such subcontracts or purchase orders.

§ 13.2.3 Termination by the Owner for Convenience
If the Owner terminates the Contract for convenience in accordance with Article 14 of AIA Document A201–2017, then the Owner shall pay the Construction Manager a termination fee as follows:
(Insert the amount of or method for determining the fee, if any, payable to the Construction Manager following a termination for the Owner's convenience.)

Owner shall pay all costs incurred by Construction Manager prior to termination along with a termination fee equal to [redacted] of the Construction Manager's Fee not yet earned prior to the termination.

§ 13.3 Suspension
The Work may be suspended by the Owner as provided in Article 14 of AIA Document A201–2017, as amended; in such case, the Guaranteed Maximum Price and Contract Time shall be increased as provided in Article 14 of AIA Document A201–2017, as amended, except that the term "profit" shall be understood to mean the Construction Manager's Fee as described in Sections 6.1 and 6.3.5 of this Agreement.

ARTICLE 14 MISCELLANEOUS PROVISIONS

§ 14.1 Terms in this Agreement shall have the same meaning as those in A201–2017, as amended. Where reference is made in this Agreement to a provision of AIA Document A201–2017, as amended or another Contract Document, the reference refers to that provision as amended or supplemented by other provisions of the Contract Documents.

§ 14.2 Successors and Assigns
§ 14.2.1 The Owner and Construction Manager, respectively, bind themselves, their partners, successors, assigns and legal representatives to covenants, agreements, and obligations contained in the Contract Documents. Except as provided

in Section 14.2.2 of this Agreement, and in Section 13.2.2 of A201–2017, as amended, neither party to the Contract shall assign the Contract as a whole without written consent of the other. If either party attempts to make an assignment without such consent, that party shall nevertheless remain legally responsible for all obligations under the Contract.

§ 14.2.2 The Owner may, without consent of the Construction Manager, assign the Contract to a lender providing construction financing for the Project, if the lender assumes the Owner's rights and obligations under the Contract Documents. The Construction Manager shall execute all consents reasonably required to facilitate the assignment.

§ 14.3 Insurance and Bonds

§ 14.3.1 Preconstruction Phase

The Construction Manager shall maintain the following insurance for the duration of the Preconstruction Services performed under this Agreement. If any of the requirements set forth below exceed the types and limits the Construction Manager normally maintains, the Owner shall reimburse the Construction Manager for any additional cost.

§ 14.3.1.1 Commercial General Liability with policy limits of not less than One Million Dollars ($ 1,000,000) for each occurrence and Two Million Dollars ($ 2,000,000) in the aggregate for bodily injury and property damage.

§ 14.3.1.2 Automobile Liability covering vehicles owned, and non-owned vehicles used, by the Construction Manager with policy limits of not less than One Million Dollars ($ 1,000,000) combined single limit per accident for bodily injury, death of any person, and property damage arising out of the ownership, maintenance and use of those motor vehicles, along with any other statutorily required automobile coverage.

§ 14.3.1.3 The Construction Manager may achieve the required limits and coverage for Commercial General Liability and Automobile Liability through a combination of primary and excess or umbrella liability insurance, provided that such primary and excess or umbrella liability insurance policies result in the same or greater coverage as the coverages required under Sections 14.3.1.1 and 14.3.1.2, and in no event shall any excess or umbrella liability insurance provide narrower coverage than the primary policy. The excess policy shall not require the exhaustion of the underlying limits only through the actual payment by the underlying insurers.

§ 14.3.1.4 Workers' Compensation at statutory limits and Employers Liability with policy limits not less than One Million Dollars ($ 1,000,000) each accident, One Million Dollars ($ 1,000,000) each employee, and One Million Dollars ($ 1,000,000) policy limit.

§ 14.3.1.5 Professional Liability covering negligent acts, errors and omissions in the performance of professional services, with policy limits of not less than One Million Dollars ($ 1,000,000) per claim and Two Million Dollars ($ 2,000,000) in the aggregate.

§ 14.3.1.6 Other Insurance

(List below any other insurance coverage to be provided by the Construction Manager and any applicable limits.)

Coverage	Limits
Not Applicable	

§ 14.3.1.7 Additional Insured Obligations. To the fullest extent permitted by law, the Construction Manager shall cause the primary and excess or umbrella polices for Commercial General Liability and Automobile Liability to include the Owner as an additional insured for claims caused in whole or in part by the Construction Manager's negligent acts or omissions. The additional insured coverage shall be primary and non-contributory to any of the Owner's insurance policies and shall apply to both ongoing and completed operations.

§ 14.3.1.8 The Construction Manager shall provide certificates of insurance to the Owner that evidence compliance with the requirements in this Section 14.3.1.

§ 14.3.2 Construction Phase

After execution of the Guaranteed Maximum Price Amendment, the Owner and the Construction Manager shall purchase and maintain insurance as set forth in AIA Document A133™–2019, Standard Form of Agreement Between Owner and Construction Manager as Constructor where the basis of payment is the Cost of the Work Plus a Fee with a Guaranteed Maximum Price, Exhibit B, Insurance and Bonds, and elsewhere in the Contract Documents.

§ 14.3.2.1 Construction Manager and Owner shall require Payment and Performance bonds from the Multiple Prime Contractors whose contracts have been assigned to Construction Manager with Article 11 of the General Conditions. The Owner shall be named as 'Additional Insured' on the commercial general liability policy. The Construction Manager shall provide bonds as set forth in AIA Document A133™–2019 Exhibit B, and elsewhere in the Contract Documents. The surety on the bond shall be a company that is licensed by the Department of Insurance authorizing it to execute surety bonds and the company shall have a financial strength rating of at least A- as rated by A.M. Best Company, Inc., Moody's Investors Service, Standard & Poor's Corporation, or a similar rating agency.

§ 14.4 Notice in electronic format, pursuant to Article 1 of AIA Document A201–2017, as amended, may be given in accordance with AIA Document E203™–2013, Building Information Modeling and Digital Data Exhibit, if completed, or as otherwise set forth below:
(If other than in accordance with AIA Document E203–2013, insert requirements for delivering notice in electronic format such as name, title, and email address of the recipient and whether and how the system will be required to generate a read receipt for the transmission.)

§ 14.5 Other provisions:

ARTICLE 15 SCOPE OF THE AGREEMENT

§ 15.1 This Agreement represents the entire and integrated agreement between the Owner and the Construction Manager and supersedes all prior negotiations, representations or agreements, either written or oral. This Agreement may be amended only by written instrument signed by both Owner and Construction Manager.

§ 15.2 The following documents comprise the Agreement:

.1 AIA Document A133™–2019, Standard Form of Agreement Between Owner and Construction Manager as Constructor where the basis of payment is the Cost of the Work Plus a Fee with a Guaranteed Maximum Price

.2 AIA Document A133™-2019, Exhibit A, Guaranteed Maximum Price Amendment, if executed

.3 AIA Document A133™–2019, Exhibit B, Insurance and Bonds

.4 AIA Document A201™–2017, General Conditions of the Contract for Construction, as amended

.5 Intentionally Deleted

(Paragraph deleted)

.6 Other Exhibits:
(Check all boxes that apply.)

[ ]

[ ] Supplementary and other Conditions of the Contract:

Document	Title	Date	Pages

.7 Other documents, if any, listed below:
(List here any additional documents that are intended to form part of the Contract Documents. AIA Document A201–2017 provides that the advertisement or invitation to bid, Instructions to Bidders, sample forms, the Construction Manager's bid or proposal, portions of Addenda relating to bidding or proposal requirements, and other information furnished by the Owner in anticipation of receiving bids or proposals, are not part of the Contract Documents unless enumerated in this Agreement. Any such documents should be listed here only if intended to be part of the Contract Documents.)

This Agreement is entered into as of the day and year first written above.

[redacted]

OWNER *(Signature)*

Jeff Voigt, County Board Chair
(Printed name and title)

[redacted]

CONSTRUCTION MANAGER *(Signature)*

Tim Erickson, President
(Printed name and title)

AIA® Document A133™ – 2019 Exhibit B

Insurance and Bonds

This Insurance and Bonds Exhibit is part of the Agreement, between the Owner and the Construction Manager, dated the 2nd day of November in the year 2022
(In words, indicate day, month and year.)

for the following **PROJECT**:
(Name and location or address)

Edgar County Jail

THE OWNER:
(Name, legal status, and address)

Edgar County
115 W Court St.
Paris, IL 61944

THE CONSTRUCTION MANAGER:
(Name, legal status, and address)

CORE Construction Services of Illinois, Inc.
601 SW Water Street
Peoria, IL 61602
Ph: 309-404-4700

ADDITIONS AND DELETIONS:
The author of this document has added information needed for its completion. The author may also have revised the text of the original AIA standard form. An *Additions and Deletions Report* that notes added information as well as revisions to the standard form text is available from the author and should be reviewed. A vertical line in the left margin of this document indicates where the author has added necessary information and where the author has added to or deleted from the original AIA text.

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

This document is intended to be used in conjunction with AIA Document A201™–2017, General Conditions of the Contract for Construction. Article 11 of A201™–2017 contains additional insurance provisions.

TABLE OF ARTICLES

ARTICLE B.1 GENERAL

The Owner and Construction Manager shall purchase and maintain insurance, and provide bonds, as set forth in this Exhibit. As used in this Exhibit, the term General Conditions refers to AIA Document A201™–2017, General Conditions of the Contract for Construction.

ARTICLE B.2 OWNER'S INSURANCE

§ B.2.1 General

Prior to commencement of the Work, the Owner shall secure the insurance, and provide evidence of the coverage, required under this Article B.2 and, upon the Construction Manager's request, provide a copy of the property insurance policy or policies required by Section B.2.3. The copy of the policy or policies provided shall contain all applicable conditions, definitions, exclusions, and endorsements.

§ B.2.2 Liability Insurance
The Owner shall be responsible for purchasing and maintaining the Owner's usual general liability insurance.

§ B.2.3 Required Property Insurance
§ B.2.3.1 Unless this obligation is placed on the Construction Manager pursuant to Section B.3.3.2.1, the Owner shall purchase and maintain, from an insurance company or insurance companies lawfully authorized to issue insurance in the jurisdiction where the Project is located, property insurance written on a builder's risk "all-risks" completed value or equivalent policy form and sufficient to cover the total value of the entire Project on a replacement cost basis. The Owner's property insurance coverage shall be no less than the amount of the initial Contract Sum, plus the value of subsequent Modifications and labor performed and materials or equipment supplied by others. The property insurance shall be maintained until Substantial Completion and thereafter as provided in Section B.2.3.1.3, unless otherwise provided in the Contract Documents or otherwise agreed in writing by the parties to this Agreement. This insurance shall include the interests of the Owner, Construction Manager, Subcontractors, and Sub-subcontractors in the Project as insureds. This insurance shall include the interests of mortgagees as loss payees.

§ B.2.3.1.1 Causes of Loss. The insurance required by this Section B.2.3.1 shall provide coverage for direct physical loss or damage, and shall not exclude the risks of fire, explosion, theft, vandalism, malicious mischief, collapse, earthquake, flood, or windstorm. The insurance shall also provide coverage for ensuing loss or resulting damage from error, omission, or deficiency in construction methods, design, specifications, workmanship, or materials. Sub-limits, if any, are as follows:
(Indicate below the cause of loss and any applicable sub-limit.)

Cause of Loss	Sub-Limit
Not Applicable	

§ B.2.3.1.2 Specific Required Coverages. The insurance required by this Section B.2.3.1 shall provide coverage for loss or damage to falsework and other temporary structures, and to building systems from testing and startup. The insurance shall also cover debris removal, including demolition occasioned by enforcement of any applicable legal requirements, and reasonable compensation for the Architect's and Construction Manager's services and expenses required as a result of such insured loss, including claim preparation expenses. Sub-limits, if any, are as follows:
(Indicate below type of coverage and any applicable sub-limit for specific required coverages.)

Coverage	Sub-Limit
Not Applicable	

§ B.2.3.1.3 Unless the parties agree otherwise, upon Substantial Completion, the Owner shall continue the insurance required by Section B.2.3.1 or, if necessary, replace the insurance policy required under Section B.2.3.1 with property insurance written for the total value of the Project that shall remain in effect until expiration of the period for correction of the Work set forth in Section 12.2.2 of the General Conditions.

§ B.2.3.1.4 Deductibles and Self-Insured Retentions. If the insurance required by this Section B.2.3 is subject to deductibles or self-insured retentions, the Owner shall be responsible for all loss not covered because of such deductibles or retentions.

§ B.2.3.1.5 Owner and Construction Manager waive all rights against each other and against all Subcontractors, Sub-subcontractors, Material Suppliers and the Architect/Engineer, for damages caused by fire or other perils covered by Builder's Risk or any other property insurance, except such rights as they may have to the proceeds of such insurance. The Owner or Construction Manager, as appropriate, shall require of the Architect, Architect's consultants, separate contractors, if any, and the subcontractors, sub-subcontractors, agents and employees of any of them, by appropriate agreements, written where legally required for validity, similar waivers each in favor of other parties enumerated herein.

§ B.2.3.2 Occupancy or Use Prior to Substantial Completion. The Owner's occupancy or use of any completed or partially completed portion of the Work prior to Substantial Completion shall not commence until the insurance company or companies providing the insurance under Section B.2.3.1 have consented in writing to the continuance of

coverage. The Owner and the Construction Manager shall take no action with respect to partial occupancy or use that would cause cancellation, lapse, or reduction of insurance, unless they agree otherwise in writing.

§ B.2.3.3 Insurance for Existing Structures
If the Work involves remodeling an existing structure or constructing an addition to an existing structure, the Owner shall purchase and maintain, until the expiration of the period for correction of Work as set forth in Section 12.2.2 of the General Conditions, "all-risks" property insurance, on a replacement cost basis, protecting the existing structure against direct physical loss or damage from the causes of loss identified in Section B.2.3.1, notwithstanding the undertaking of the Work. The Owner shall be responsible for all co-insurance penalties.

§ B.2.4 Optional Extended Property Insurance.
The Owner shall purchase and maintain the insurance selected and described below.
(Select the types of insurance the Owner is required to purchase and maintain by placing an X in the box(es) next to the description(s) of selected insurance. For each type of insurance selected, indicate applicable limits of coverage or other conditions in the fill point below the selected item.)

[ ] **§ B.2.4.1 Loss of Use, Business Interruption, and Delay in Completion Insurance**, to reimburse the Owner for loss of use of the Owner's property, or the inability to conduct normal operations due to a covered cause of loss.

[ ] **§ B.2.4.2 Ordinance or Law Insurance**, for the reasonable and necessary costs to satisfy the minimum requirements of the enforcement of any law or ordinance regulating the demolition, construction, repair, replacement or use of the Project.

[ ] **§ B.2.4.3 Expediting Cost Insurance**, for the reasonable and necessary costs for the temporary repair of damage to insured property, and to expedite the permanent repair or replacement of the damaged property.

[ ] **§ B.2.4.4 Extra Expense Insurance**, to provide reimbursement of the reasonable and necessary excess costs incurred during the period of restoration or repair of the damaged property that are over and above the total costs that would normally have been incurred during the same period of time had no loss or damage occurred.

[ ] **§ B.2.4.5 Civil Authority Insurance**, for losses or costs arising from an order of a civil authority prohibiting access to the Project, provided such order is the direct result of physical damage covered under the required property insurance.

[ ] **§ B.2.4.6 Ingress/Egress Insurance**, for loss due to the necessary interruption of the insured's business due to physical prevention of ingress to, or egress from, the Project as a direct result of physical damage.

[ ] **§ B.2.4.7 Soft Costs Insurance**, to reimburse the Owner for costs due to the delay of completion of the Work, arising out of physical loss or damage covered by the required property insurance: including construction loan fees; leasing and marketing expenses; additional fees, including those of architects,

engineers, consultants, attorneys and accountants, needed for the completion of the construction, repairs, or reconstruction; and carrying costs such as property taxes, building permits, additional interest on loans, realty taxes, and insurance premiums over and above normal expenses.

§ B.2.5 Other Optional Insurance.
The Owner shall purchase and maintain the insurance selected below.
(Select the types of insurance the Owner is required to purchase and maintain by placing an X in the box(es) next to the description(s) of selected insurance.)

[ ] **§ B.2.5.1 Cyber Security Insurance** for loss to the Owner due to data security and privacy breach, including costs of investigating a potential or actual breach of confidential or private information.
(Indicate applicable limits of coverage or other conditions in the fill point below.)

[ ] **§ B.2.5.2 Other Insurance**
(List below any other insurance coverage to be provided by the Owner and any applicable limits.)

Coverage	Limits
Not Applicable	

ARTICLE B.3 CONSTRUCTION MANAGER'S INSURANCE AND BONDS
§ B.3.1 General
§ B.3.1.1 Certificates of Insurance. The Construction Manager shall provide certificates of insurance acceptable to the Owner evidencing compliance with the requirements in this Article B.3 at the following times: (1) prior to commencement of the Work; (2) upon renewal or replacement of each required policy of insurance; and (3) upon the Owner's written request. An additional certificate evidencing continuation of commercial liability coverage, including coverage for completed operations, shall be submitted with the final Application for Payment and thereafter upon renewal or replacement of such coverage until the expiration of the periods required by Section B.3.2.1 and Section B.3.3.1. The certificates will show the Owner as an additional insured on the Construction Manager's Commercial General Liability and excess or umbrella liability policy or policies.

§ B.3.1.2 Deductibles and Self-Insured Retentions. The Construction Manager shall disclose to the Owner any deductible or self- insured retentions applicable to any insurance required to be provided by the Construction Manager.

Insurance	Deductible or Self-Insured Retention
General Liability	$750k Deductible
Worker's Compensation	$500k Deductible
Professional / Pollution	$250k SIR

§ B.3.1.3 Additional Insured Obligations. To the fullest extent permitted by law, the Construction Manager shall cause the commercial general liability coverage to include (1) the Owner and the Architect as additional insureds for claims caused in whole or in part by the Construction Manager's negligent acts or omissions during the Construction Manager's operations; and (2) the Owner as an additional insured for claims caused in whole or in part by the Construction Manager's negligent acts or omissions for which loss occurs during completed operations. The additional insured coverage shall be primary and non-contributory to any of the Owner's general liability insurance policies and shall apply to both ongoing and completed operations. To the extent commercially available, the additional insured coverage shall be no less than that provided by Insurance Services Office, Inc. (ISO) forms CG 20 10 04 13, CG 20 37 04 13, and, with respect to the Architect, CG 20 32 04 13.

§ B.3.2 Construction Manager's Required Insurance Coverage
§ B.3.2.1 The Construction Manager shall purchase and maintain the following types and limits of insurance from an insurance company or insurance companies lawfully authorized to issue insurance in the jurisdiction where the Project

is located. The Construction Manager shall maintain the required insurance until the expiration of the period for correction of Work as set forth in Section 12.2.2 of the General Conditions, unless a different duration is stated below: *(If the Construction Manager is required to maintain insurance for a duration other than the expiration of the period for correction of Work, state the duration.)*

Not Applicable

§ B.3.2.2 Commercial General Liability

§ B.3.2.2.1 Commercial General Liability insurance for the Project written on an occurrence form with policy limits of not less than One Million Dollars ($ 1,000,000) each occurrence, Two Million Dollars ($ 2,000,000) general aggregate, and Two Million Dollars ($ 2,000,000) aggregate for products-completed operations hazard, providing coverage for claims including

.1 damages because of bodily injury, sickness or disease, including occupational sickness or disease, and death of any person;
.2 personal injury and advertising injury;
.3 damages because of physical damage to or destruction of tangible property, including the loss of use of such property;
.4 bodily injury or property damage arising out of completed operations; and
.5 the Construction Manager's indemnity obligations under Section 3.18 of the General Conditions.

§ B.3.2.2.2 The Construction Manager's Commercial General Liability policy under this Section B.3.2.2 shall not contain an exclusion or restriction of coverage for the following:

.1 Claims by one insured against another insured, if the exclusion or restriction is based solely on the fact that the claimant is an insured, and there would otherwise be coverage for the claim.
.2 Claims for property damage to the Construction Manager's Work arising out of the products-completed operations hazard where the damaged Work or the Work out of which the damage arises was performed by a Subcontractor.
.3 Claims for bodily injury other than to employees of the insured.
.4 Claims for indemnity under Section 3.18 of the General Conditions arising out of injury to employees of the insured.
.5 Claims or loss excluded under a prior work endorsement or other similar exclusionary language.
.6 Claims or loss due to physical damage under a prior injury endorsement or similar exclusionary language.
.7 Claims related to residential, multi-family, or other habitational projects, if the Work is to be performed on such a project.
.8 Claims related to roofing, if the Work involves roofing.
.9 Claims related to exterior insulation finish systems (EIFS), synthetic stucco or similar exterior coatings or surfaces, if the Work involves such coatings or surfaces.
.10 Claims related to earth subsidence or movement, where the Work involves such hazards.
.11 Claims related to explosion, collapse and underground hazards, where the Work involves such hazards.

§ B.3.2.3 Automobile Liability covering vehicles owned, and non-owned vehicles used, by the Construction Manager, with policy limits of not less than One Million Dollars ($ 1,000,000) combined single limit per accident, for bodily injury, death of any person, and property damage arising out of the ownership, maintenance and use of those motor vehicles along with any other statutorily required automobile coverage.

§ B.3.2.4 The Construction Manager may achieve the required limits and coverage for Commercial General Liability and Automobile Liability through a combination of primary and excess or umbrella liability insurance, provided such primary and excess or umbrella insurance policies result in the same or greater coverage as the coverages required under Section B.3.2.2 and B.3.2.3, and in no event shall any excess or umbrella liability insurance provide narrower coverage than the primary policy. The excess policy shall not require the exhaustion of the underlying limits only through the actual payment by the underlying insurers.

§ B.3.2.5 Workers' Compensation at statutory limits.

§ B.3.2.6 Employers' Liability with policy limits not less than One Million Dollars ($ 1,000,000) each accident, One Million Dollars ($ 1,000,000) each employee, and One Million Dollars ($ 1,000,000) policy limit.

§ B.3.2.7 Jones Act, and the Longshore & Harbor Workers' Compensation Act, as required, if the Work involves hazards arising from work on or near navigable waterways, including vessels and docks

§ B.3.2.8 If the Construction Manager is required to furnish professional services as part of the Work, the Construction Manager shall procure Professional Liability insurance covering performance of the professional services, with policy limits of not less than ($) per claim and ($) in the aggregate.

§ B.3.2.9 If the Work involves the transport, dissemination, use, or release of pollutants, the Construction Manager shall procure Pollution Liability insurance, with policy limits of not less than ($) per claim and ($) in the aggregate.

§ B.3.2.10 Coverage under Sections B.3.2.8 and B.3.2.9 may be procured through a Combined Professional Liability and Pollution Liability insurance policy, with combined policy limits of not less than One Million Dollars ($ 1,000,000) per claim and Two Million Dollars ($ 2,000,000) in the aggregate.

§ B.3.2.11 Insurance for maritime liability risks associated with the operation of a vessel, if the Work requires such activities, with policy limits of not less than ($) per claim and ($) in the aggregate.

§ B.3.2.12 Insurance for the use or operation of manned or unmanned aircraft, if the Work requires such activities, with policy limits of not less than ($) per claim and ($) in the aggregate.

§ B.3.3 Construction Manager's Other Insurance Coverage

§ B.3.3.1 Insurance selected and described in this Section B.3.3 shall be purchased from an insurance company or insurance companies lawfully authorized to issue insurance in the jurisdiction where the Project is located. The Construction Manager shall maintain the required insurance until the expiration of the period for correction of Work as set forth in Section 12.2.2 of the General Conditions, unless a different duration is stated below:
(If the Construction Manager is required to maintain any of the types of insurance selected below for a duration other than the expiration of the period for correction of Work, state the duration.)

§ B.3.3.2 The Construction Manager shall purchase and maintain the following types and limits of insurance in accordance with Section B.3.3.1.
(Select the types of insurance the Construction Manager is required to purchase and maintain by placing an X in the box(es) next to the description(s) of selected insurance. Where policy limits are provided, include the policy limit in the appropriate fill point.)

[X] **§ B.3.3.2.1** Property insurance of the same type and scope satisfying the requirements identified in Section B.2.3, which, if selected in this Section B.3.3.2.1, relieves the Owner of the responsibility to purchase and maintain such insurance except insurance required by Section B.2.3.1.3 and Section B.2.3.3. The Construction Manager shall comply with all obligations of the Owner under Section B.2.3 except to the extent provided below. The Construction Manager shall disclose to the Owner the amount of any deductible, and the Owner shall be responsible for losses within the deductible. Deductibles vary depending upon construction type. Standard deductible is $10k for AOP and $50k for Water Damage on non-combustible new construction. Upon request, the Construction Manager shall provide the Owner with a copy of the property insurance policy or policies required. The Construction Manager shall adjust and settle the loss with the insurer and be the trustee of the proceeds of the property insurance in accordance with Article 11 of the General Conditions unless otherwise set forth below:
(Where the Construction Manager's obligation to provide property insurance differs from the Owner's obligations as described under Section B.2.3, indicate such differences in the space below. Additionally, if a party other than the Owner will be responsible for adjusting and settling a loss with

the insurer and acting as the trustee of the proceeds of property insurance in accordance with Article 11 of the General Conditions, indicate the responsible party below.)

[ ] **§ B.3.3.2.2 Railroad Protective Liability Insurance**, with policy limits of not less than ($) per claim and ($) in the aggregate, for Work within fifty (50) feet of railroad property.

[ ] **§ B.3.3.2.3 Asbestos Abatement Liability Insurance**, with policy limits of not less than ($) per claim and ($) in the aggregate, for liability arising from the encapsulation, removal, handling, storage, transportation, and disposal of asbestos-containing materials.

[ ] **§ B.3.3.2.4** Insurance for physical damage to property while it is in storage and in transit to the construction site on an "all-risks" completed value form.

[ ] **§ B.3.3.2.5** Property insurance on an "all-risks" completed value form, covering property owned by the Construction Manager and used on the Project, including scaffolding and other equipment.

[ ] **§ B.3.3.2.6 Other Insurance**
(List below any other insurance coverage to be provided by the Construction Manager and any applicable limits.)

Coverage	Limits
Excess Liability	$5,000,000 per occurrence and general aggregate

§ B.3.4 Performance Bond and Payment Bond
The Construction Manager shall provide surety bonds, from a company or companies lawfully authorized to issue surety bonds in the jurisdiction where the Project is located, as follows:
(Specify type and penal sum of bonds.)

Type	Penal Sum
Payment Bond	Not Applicable. Bonds provided by each trade Contractor
Performance Bond	Not Applicable. Bonds provided by each trade Contractor

It is anticipated all surety bonds will be provided by each of the Multiple Prime Trade Contractors in conjunction with the associated Bid/Trade packages they are awarded. Such bonds from Multiple Prime Trade Contractors shall name the Owner and the Construction Manager as dual obligees.

In the event the Construction Manager is requested by the Owner to provide a surety bond for the entire GMP Amount, the Construction Manager shall provide surety bonds, from a company or companies lawfully authorized to issue surety bonds in the jurisdiction where the Project is located, in an amount as provided in §14.3.2.1 of the Agreement, as amended.

Payment and Performance Bonds shall be AIA Document A312™, Payment Bond and Performance Bond, or contain provisions identical to AIA Document A312™, current as of the date of this Agreement.

ARTICLE B.4 SPECIAL TERMS AND CONDITIONS
Special terms and conditions that modify this Insurance and Bonds Exhibit, if any, are as follows:

AIA® Document A201® – 2017

General Conditions of the Contract for Construction

for the following PROJECT:
(Name and location or address)

Edgar County Jail

THE OWNER:
(Name, legal status and address)

Edgar County
115 W Court St.
Paris, IL 61944

THE CONSTRUCTION MANAGER:
(Name, legal status and address.)

CORE Construction Services of Illinois, Inc.
601 SW Water Street
Peoria, IL 61602
Ph: 309-404-4700

THE ARCHITECT:
(Name, legal status and address)

Klinger & Associates, PC
604 Liberty Street, Suite 125
Pella, IA 50219

ADDITIONS AND DELETIONS:
The author of this document has added information needed for its completion. The author may also have revised the text of the original AIA standard form. An *Additions and Deletions Report* that notes added information as well as revisions to the standard form text is available from the author and should be reviewed. A vertical line in the left margin of this document indicates where the author has added necessary information and where the author has added to or deleted from the original AIA text.

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

For guidance in modifying this document to include supplementary conditions, see AIA Document A503™, Guide for Supplementary Conditions.

TABLE OF ARTICLES

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(Topics and numbers in bold are Section headings.)

ARTICLE 1 GENERAL PROVISIONS

§ 1.1 Basic Definitions

§ 1.1.1 The Contract Documents

The Contract Documents are enumerated in the Agreement between the Owner and Construction Manager as Constructor (hereinafter the Agreement) and consist of the Agreement, Conditions of the Contract (General, Supplementary and other Conditions), Drawings, Specifications, Project Manual, Addenda issued prior to execution of the Contract, other documents listed in the Agreement, and Modifications issued after execution of the Contract. A Modification is (1) a written amendment to the Contract signed by both parties, (2) a Change Order, (3) a Construction Change Directive, or (4) a written order for a minor change in the Work issued by the Architect. Contract Documents shall also include: Advertisements or Invitations to Bid, Instructions to Bidders, Bid Forms, the Bid or Proposal executed by the Bidder, Addenda, Certificates of Insurance, and bonds included in the Project Manual, including, but not limited to Bid Bonds, Performance Bonds, and Labor and Material Payment Bonds.

Pursuant to Subparagraph 1.1.1, enumeration of Drawings, Project Manual and Addenda is as follows:

A. ADDENDA: Contract Documents will include such Addenda as may be issued during the bidding period and acknowledged in the Proposal forms.

B. PROJECT MANUAL: Refer to "Table of Contents – Bidding Requirements and Contract Documents bound hereinbefore.

§ 1.1.2 The Contract

The Contract Documents form the Contract for Construction. The Contract represents the entire and integrated agreement between the parties hereto and supersedes prior negotiations, representations, or agreements, either written or oral. The Contract may be amended or modified only by a Modification. The Contract Documents shall not be construed to create a contractual relationship of any kind (1) between the Contractor and the Architect or the Architect's consultants, (2) between the Owner and a Subcontractor or a Sub-subcontractor, (3) between the Owner and the Architect or the Architect's consultants, or (4) between any persons or entities other than the Owner and the Contractor. The Architect shall, however, be entitled to performance and enforcement of obligations under the Contract intended to facilitate performance of the Architect's duties.

§ 1.1.3 The Work

The term "Work" means the construction and services required by the Contract Documents, whether completed or partially completed, and includes all other labor, materials, equipment, and services provided or to be provided by the Contractor to fulfill the Contractor's obligations. The Work may constitute the whole or a part of the Project.

§ 1.1.4 The Project

The Project is the total construction of which the Work performed under the Contract Documents may be the whole or a part and which may include construction by the Owner and by Separate Contractors.

§ 1.1.5 The Drawings

The Drawings are the graphic and pictorial portions of the Contract Documents showing the design, location and dimensions of the Work, generally including plans, elevations, sections, details, schedules, and diagrams.

§ 1.1.6 The Specifications

The Specifications are that portion of the Contract Documents consisting of the written requirements for materials, equipment, systems, standards and workmanship for the Work, and performance of related services.

§ 1.1.7 Instruments of Service

Instruments of Service are representations, in any medium of expression now known or later developed, of the tangible and intangible creative work performed by the Architect and the Architect's consultants under their respective professional services agreements. Instruments of Service may include, without limitation, studies, surveys, models, sketches, drawings, specifications, and other similar materials.

§ 1.1.8 Initial Decision Maker

The Initial Decision Maker is the person identified in the Agreement to render initial decisions on Claims in accordance with Section 15.2. The Initial Decision Maker shall not show partiality to the Owner or Contractor and shall not be liable for results of interpretations or decisions rendered in good faith.

§ 1.1.9 Order of Precedence

In case of any inconsistency, conflict, or ambiguity among the Contract Documents, the documents shall govern in the following order: (a) Change Orders and written amendments to this Agreement; (b) the Agreement; (c) the drawings, specifications, and addenda issued prior to the execution of this Agreement; (d) information furnished by the Owner pursuant to Article 3 of the Agreement or Article 2 of the General Conditions of the Contract; (e) other documents listed in this Agreement. Among all the Contract Documents, the term or provision that is most specific or includes the latest date shall control. If any provision of this Agreement conflicts with or is inconsistent with any other provision of other Contract Documents, the provision of this Agreement governs, unless the other provision specifically refers to the provision it supersedes and replaces in this Agreement.

§ 1.1.10 Approval

The words "approved," "approved equal," or "as directed" means approved, or as accepted by, the Architect in writing.

§ 1.1.11 Construction Manager

The Construction Manager is the individual or entity identified as such in the Agreement and shall have the duties and responsibilities set forth therein.

§ 1.2 Correlation and Intent of the Contract Documents

§ 1.2.1 The intent of the Contract Documents is to include all items necessary for the proper execution and completion of the Work by the Contractor. The Contract Documents are complementary, and what is required by one shall be as binding as if required by all; performance by the Contractor shall be required only to the extent consistent with the Contract Documents and reasonably inferable from them as being necessary to produce the indicated results.

§ 1.2.1.1 The invalidity of any provision of the Contract Documents shall not invalidate the Contract or its remaining provisions. If it is determined that any provision of the Contract Documents violates any law, or is otherwise invalid or unenforceable, then that provision shall be revised to the extent necessary to make that provision legal and enforceable. In such case the Contract Documents shall be construed, to the fullest extent permitted by law, to give effect to the parties' intentions and purposes in executing the Contract.

§ 1.2.2 Organization of the Specifications into divisions, sections and articles, and arrangement of Drawings shall not control the Contractor in dividing the Work among Subcontractors or in establishing the extent of Work to be performed by any trade.

§ 1.2.3 Unless otherwise stated in the Contract Documents, words that have well-known technical or construction industry meanings are used in the Contract Documents in accordance with such recognized meanings.

§ 1.2.4 Should discrepancies appear among the Contract Documents or between the Contract Documents and existing conditions, the Contractor shall request an interpretation from the Architect before bidding. If the Contractor fails to make such a request, it is presumed that both provisions were included in the bid and the Architect shall determine which of the conflicting requirements shall govern. The Contractor shall perform the Work at no additional cost to the Owner in accordance with the Architect's determination. Where conflicts exist within or between parts of the Contract Documents or between the Contract Documents and applicable standards, codes and ordinances, the more stringent or higher quality requirements shall apply. Large scale drawings shall take precedence over small scale drawings; figured dimensions on the drawings over scaled dimensions, and noted material over graphic representations.

§ 1.2.5 By executing the Contract, the Contractor acknowledges that it has satisfied itself as to the nature and location of the Work; the general and local conditions, including those bearing upon transportation, disposal, handling and storage of materials; availability of labor, water, electric power, roads, and uncertainties of weather; ground water table or similar physical conditions of the ground; the character, quality, and quantity of all surface and sub-surface materials to be encountered; the character of equipment and facilities needed prior to and during the execution of the Work; and all other matters that can in any way affect the Work and the cost thereof under the Contract Documents.

Any failure by the Contractor to acquaint itself with all the available information concerning these conditions will not relieve the Contractor from any obligations with respect to the Contract.

§ 1.3 Capitalization

Terms capitalized in these General Conditions include those that are (1) specifically defined, (2) the titles of numbered articles, or (3) the titles of other documents published by the American Institute of Architects.

§ 1.4 Interpretation

In the interest of brevity the Contract Documents frequently omit modifying words such as "all" and "any" and articles such as "the" and "an," but the fact that a modifier or an article is absent from one statement and appears in another is not intended to affect the interpretation of either statement.

§ 1.5 Ownership and Use of Drawings, Specifications, and Other Instruments of Service

§ 1.5.1 The Architect and the Architect's consultants shall be deemed the authors and owners of their respective Instruments of Service, including the Drawings and Specifications, and retain all common law, statutory, and other reserved rights in their Instruments of Service, including copyrights. The Contractor, Subcontractors, Sub-subcontractors, and suppliers shall not own or claim a copyright in the Instruments of Service. Submittal or distribution to meet official regulatory requirements or for other purposes in connection with the Project is not to be construed as publication in derogation of the Architect's or Architect's consultants' reserved rights.

§ 1.5.2 The Contractor, Subcontractors, Sub-subcontractors, and suppliers are authorized to use and reproduce the Instruments of Service provided to them, subject to any protocols established pursuant to Sections 1.7 and 1.8, solely and exclusively for execution of the Work. All copies made under this authorization shall bear the copyright notice, if any, shown on the Instruments of Service. The Contractor, Subcontractors, Sub-subcontractors, and suppliers may not use the Instruments of Service on other projects or for additions to the Project outside the scope of the Work without the specific written consent of the Owner, Architect, and the Architect's consultants.

§ 1.6 Notice

§ 1.6.1 Except as otherwise provided in Section 1.6.2, where the Contract Documents require one party to notify or give notice to the other party, such notice shall be provided in writing to the designated representative of the party to whom the notice is addressed and shall be deemed to have been duly served if delivered in person, by mail, by courier, or by electronic transmission if a method for electronic transmission is set forth in the Agreement.

§ 1.6.2 Notice of Claims as provided in Section 15.1.3 shall be provided in writing and shall be deemed to have been duly served only if delivered to the designated representative of the party to whom the notice is addressed by certified or registered mail, or by courier providing proof of delivery.

§ 1.7 Digital Data Use and Transmission

The parties shall agree upon protocols governing the transmission and use of Instruments of Service or any other information or documentation in digital form. The parties will use AIA Document E203™–2013, Building Information Modeling and Digital Data Exhibit, to establish the protocols for the development, use, transmission, and exchange of digital data.

§ 1.8 Building Information Models Use and Reliance

Any use of, or reliance on, all or a portion of a building information model without agreement to protocols governing the use of, and reliance on, the information contained in the model and without having those protocols set forth in AIA Document E203™–2013, Building Information Modeling and Digital Data Exhibit, and the requisite AIA Document G202™–2013, Project Building Information Modeling Protocol Form, shall be at the using or relying party's sole risk and without liability to the other party and its contractors or consultants, the authors of, or contributors to, the building information model, and each of their agents and employees.

ARTICLE 2 OWNER

§ 2.1 General

§ 2.1.1 The Owner is the person or entity identified as such in the Agreement and is referred to throughout the Contract Documents as if singular in number. The Owner shall designate in writing a representative who shall have express authority to bind the Owner with respect to all matters requiring the Owner's approval or authorization. Except as

otherwise provided in Section 4.2.1, the Architect does not have such authority. The term "Owner" means the Owner or the Owner's authorized representative.

§ 2.1.2 The Owner shall furnish to the Contractor, within fifteen days after receipt of a written request, information necessary and relevant for the Contractor to evaluate, give notice of, or enforce mechanic's lien rights. Such information shall include a correct statement of the record legal title to the property on which the Project is located, usually referred to as the site, and the Owner's interest therein.

§ 2.2 Evidence of the Owner's Financial Arrangements

§ 2.2.1 Prior to commencement of the Work and upon written request by the Contractor, the Owner shall furnish to the Contractor reasonable evidence that the Owner has made financial arrangements to fulfill the Owner's obligations under the Contract. The Contractor shall have no obligation to commence the Work until the Owner provides such evidence. If commencement of the Work is delayed under this Section 2.2.1, the Contract Time shall be extended appropriately.

§ 2.2.2 Following commencement of the Work and upon written request by the Contractor, the Owner shall furnish to the Contractor reasonable evidence that the Owner has made financial arrangements to fulfill the Owner's obligations under the Contract only if (1) the Owner fails to make payments to the Contractor as the Contract Documents require; (2) the Contractor identifies in writing a reasonable concern regarding the Owner's ability to make payment when due; or (3) a change in the Work materially changes the Contract Sum. If the Owner fails to provide such evidence, as required, within fourteen days of the Contractor's request, the Contractor may immediately stop the Work and, in that event, shall notify the Owner that the Work has stopped. However, if the request is made because a change in the Work materially changes the Contract Sum under (3) above, the Contractor may immediately stop only that portion of the Work affected by the change until reasonable evidence is provided. If the Work is stopped under this Section 2.2.2, the Contract Time shall be extended appropriately and the Contract Sum shall be increased by the amount of the Contractor's reasonable costs of shutdown, delay and start-up, plus interest as provided in the Contract Documents.

§ 2.2.3 After the Owner furnishes evidence of financial arrangements under this Section 2.2, the Owner shall not materially vary such financial arrangements without prior notice to the Contractor.

§ 2.2.4 Where the Owner has designated information furnished under this Section 2.2 as "confidential," the Contractor shall keep the information confidential and shall not disclose it to any other person. However, the Contractor may disclose "confidential" information, after seven (7) days' notice to the Owner, where disclosure is required by law, including a subpoena or other form of compulsory legal process issued by a court or governmental entity, or by court or arbitrator(s) order. The Contractor may also disclose "confidential" information to its employees, consultants, sureties, Subcontractors and their employees, Sub-subcontractors, and others who need to know the content of such information solely and exclusively for the Project and who agree to maintain the confidentiality of such information.

§ 2.3 Information and Services Required of the Owner

§ 2.3.1 Except for permits and fees that are the responsibility of the Contractor under the Contract Documents, including those required under Section 3.7.1, the Owner shall secure and pay for necessary approvals, easements, assessments and charges required for construction, use or occupancy of permanent structures or for permanent changes in existing facilities.

§ 2.3.2 The Owner shall retain an architect lawfully licensed to practice architecture, or an entity lawfully practicing architecture, in the jurisdiction where the Project is located. That person or entity is identified as the Architect in the Agreement and is referred to throughout the Contract Documents as if singular in number.

§ 2.3.3 If the employment of the Architect terminates, the Owner shall employ a successor to whom the Contractor has no reasonable objection and whose status under the Contract Documents shall be that of the Architect.

§ 2.3.4 Contractor shall confirm the location of each utility, shall excavate and dispose of each on-site utility and shall cap each off-site utility as required by the Work and as may be included in the Specifications. Owner does not assume any responsibility whatsoever with respect to the sufficiency or accuracy of borings made, or of the logs of test borings, or of other investigations, or of the interpretations made thereof, and there is no warranty or guaranty, express or implied, that the conditions indicated by such investigations, borings, logs, or information are representative of those existing throughout the Project site, or any part thereof, or that unforeseen developments may not occur. At

Owner's request, the Contractor shall make available to the Owner the results of any site investigation, test borings, analyses, studies or other tests conducted by or in possession of the Contractor or any of its agents. The Contractor represents that it is familiar with the Project site and has received all information it needs concerning the Conditions of the Project site. The Contractor represents that it has inspected the location of the Work and has satisfied itself as to the condition thereof, including, without limitation, all structural, surface, and subsurface conditions. The Contractor shall undertake such further investigations and studies as may be necessary for useful to determine surface and subsurface conditions. Based upon the foregoing inspections, understandings, agreements and acknowledgments the Contractor agrees and acknowledges (i) that the Contract Sum is just and reasonable compensation for all the Work, including all foreseen and foreseeable risks, hazards and difficulties in connection therewith, (ii) that the Contract Time is adequate for the performance of the Work, and (iii) that the Work shall not result in any lateral or vertical movement of any structure. The Contractor shall have no claims for surface or subsurface conditions encountered which are observable from an inspection of the site or are reasonably inferred from information provided in the Contract Documents. The Contractor shall exercise special care in executing subsurface work in proximity of known subsurface utilities, improvements and easements.

§ 2.3.5 The Owner shall furnish information or services required of the Owner by the Contract Documents with reasonable promptness. The Owner shall also furnish any other information or services under the Owner's control and relevant to the Contractor's performance of the Work with reasonable promptness after receiving the Contractor's written request for such information or services.

§ 2.3.6 Unless otherwise provided in the Contract Documents, the Owner shall furnish to the Contractor one copy of the Contract Documents for purposes of making reproductions pursuant to Section 1.5.2.

§ 2.4 Owner's Right to Stop the Work

If the Contractor fails to correct Work that is not in accordance with the requirements of the Contract Documents as required by Section 12.2 or repeatedly fails to carry out Work in accordance with the Contract Documents, the Owner may issue a written order to the Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, the right of the Owner to stop the Work shall not give rise to a duty on the part of the Owner to exercise this right for the benefit of the Contractor or any other person or entity, except to the extent required by Section 6.1.3. The Owner's right to stop the work shall not relieve the Contractor from its sole and exclusive responsibility for site safety. The Owner's exercise of the right to stop the work shall be solely for the Contractor's failure to complete the work in accordance with the Contract Documents and shall in no way be construed as placing the Owner in charge of the work or in any way responsible for site safety.

§ 2.5 Owner's Right to Carry Out the Work

If the Contractor defaults or neglects to carry out the Work in accordance with the Contract Documents and fails within a ten-day period after receipt of written notice from the Owner to commence and continue correction of such default or neglect with diligence and promptness, the Owner may immediately, without prejudice to other remedies the Owner may have, correct such default or neglect. In such case, an appropriate Change Order shall be issued deducting from payments then and thereafter due the Contractor the reasonable cost of correcting such deficiencies, including Owner's expenses and attorney's fees and compensation for the Architect's additional services made necessary by such default, neglect, or failure, as well as testing, engineering, accounting, and consulting services, costs, and expenses. If payments then or thereafter due the Contractor are not sufficient to cover such amounts and testing, at the Owner's option, the excess shall be deducted from any payment thereafter due or shall be paid by the Contractor immediately upon demand of the Owner. The Owner's actions pursuant to this subparagraph shall not operate as a release of any obligation of a surety upon its performance and labor and material payment bonds. Such action by the Owner and amounts charged to the Contractor are both subject to prior approval of the Architect and the Architect may, pursuant to Section 9.5.1, withhold or nullify a Certificate for Payment in whole or in part, to the extent reasonably necessary to reimburse the Owner for the reasonable cost of correcting such deficiencies, including Owner's expenses and compensation for the Architect's additional services made necessary by such default, neglect, or failure. If current and future payments are not sufficient to cover such amounts, the Contractor shall pay the difference to the Owner. If the Contractor disagrees with the actions of the Owner or the Architect, or the amounts claimed as costs to the Owner, the Contractor may file a Claim pursuant to Article 15.

ARTICLE 3 CONTRACTOR

§ 3.1 General

§ 3.1.1 All Work shall be performed by "Multiple Prime Contractors", which shall refer to persons or entities who provide construction services, materials, or equipment under contracts that are awarded by the Owner and are assigned to and administered by the Construction Manager pursuant to the Agreement. The term does not include the Owner's own forces, including persons or entities under separate contracts not administered by the Construction Manager. When the lowest, responsive and responsible Multiple Prime Contractors are identified and awarded contracts by the Owner, the award of that trade contract shall be assigned by the Owner to the Construction Manager, and each such successful bidder shall then be known as a "Contractor." The terms "Contractor," "the Contractor," or "a Contractor" may refer to all, any one, or several of the Multiple Prime Contractors. Each Contractor acknowledges: (1) that the Owner is a direct intended third party beneficiary of each contract assigned by the Owner to Construction Manager and Contractor; (2) that notwithstanding any contract provision to the contrary, Contractor shall be bound to perform the Work in accordance with these AIA A201 General Conditions, as amended, which terms the Contractor a Contractor herein; and (3) that the Contractor is not a third party beneficiary of the AIA A133 Construction Management contract between Construction Manager and Owner. Notwithstanding the assignment by the Owner to the Construction Manager of the contracts with the Contractors, all of Owner's duties and responsibilities under this Agreement shall remain in full force and effect. The Contractor shall be lawfully licensed, if required in the jurisdiction where the Project is located. The Contractor shall designate in writing a representative who shall have express authority to bind the Contractor with respect to all matters under this Contract. The term "Contractor" means the Contractor or the Contractor's authorized representative.

§ 3.1.2 The Contractor shall perform the Work in accordance with the Contract Documents.

§ 3.1.3 The Contractor shall not be relieved of its obligations to perform the Work in accordance with the Contract Documents either by activities or duties of the Architect in the Architect's administration of the Contract, or by tests, inspections or approvals required or performed by persons or entities other than the Contractor.

§ 3.1.4 The Contractor shall see to, supervise, and assure complete performance of the Work subject to the bidding requirements of the county government in accordance with the Contract Documents.

§ 3.2 Review of Contract Documents and Field Conditions by Contractor

§ 3.2.1 Execution of the Contract by the Contractor is a representation that the Contractor has visited the site, become generally familiar with local conditions under which the Work is to be performed, and correlated personal observations with requirements of the Contract Documents.

§ 3.2.2 The Contractor shall carefully study and compare the Contract Documents and shall at once report to the Architect any error, inconsistency or omission he may discover or any variance from applicable laws, statutes, ordinances, building codes, rules, regulations or any lawful orders of any governmental body, or public or quasi-public authority. The Contractor shall not be liable to the Owner or the Architect for any damage resulting from any such errors, inconsistencies, or omissions in the Contract Documents that the Contractor has reported to the Architect. If the Contractor, however, performs any Work knowing (or if the Contractor should have known) of any such errors, inconsistencies, omission or variances, and without notice to the Architect, the Contractor shall assume full responsibility therefore and shall bear all costs attributable thereto. The Contractor shall perform no portion of the Work at any time without Contract Documents or, where required, approved Shop Drawings, Product Data or Samples for such portion of the Work.

The Contractor shall take field measurements and verify field conditions and shall carefully compare such filed measurements and conditions and other information known to the Contractor with the Contract Documents before commencing activities. Errors, inconsistencies, or omissions discovered shall be reported to the Architect at once. The exactness of grades, elevations, dimensions, or locations given on any drawings issued by the Architect or the work installed by other contractors, is not guaranteed by the Architect or Owner. The Contractor shall, therefore, satisfy himself as to the accuracy of all grades, elevations, dimensions, and locations. In all cases of interconnection of its work with existing or other work, the Contractor shall verify at the site all dimensions relating to such existing or other work. Any errors due to the Contractor's failure to so verify all such grades, elevations, locations or dimensions shall be promptly rectified by him without extra cost to the Owner.

§ 3.2.3 The Contractor is not required to ascertain that the Contract Documents are in accordance with applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of public authorities, but the Contractor shall promptly report to the Architect any nonconformity discovered by or made known to the Contractor as a request for information in such form as the Architect may require.

§ 3.2.4 If the Contractor believes that additional cost or time is involved because of clarifications or instructions the Architect issues in response to the Contractor's notices or requests for information pursuant to Sections 3.2.2 or 3.2.3, the Contractor shall submit Claims as provided in Article 15. If the Contractor fails to perform the obligations of Sections 3.2.2 or 3.2.3, the Contractor shall pay such costs and damages to the Owner, subject to Section 15.1.7, as would have been avoided if the Contractor had performed such obligations. If the Contractor performs those obligations, the Contractor shall not be liable to the Owner or Architect for damages resulting from errors, inconsistencies or omissions in the Contract Documents, for differences between field measurements or conditions and the Contract Documents, or for nonconformities of the Contract Documents to applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities.

§ 3.3 Supervision and Construction Procedures

§ 3.3.1 The Contractor shall supervise and direct the Work, using the Contractor's best skill and attention. The Contractor shall be solely responsible for, and have control over, construction means, methods, techniques, sequences, and procedures, and for coordinating all portions of the Work under the Contract. If the Contract Documents give specific instructions concerning construction means, methods, techniques, sequences, or procedures, the Contractor shall evaluate the jobsite safety thereof and shall be solely responsible for the jobsite safety of such means, methods, techniques, sequences, or procedures. If the Contractor determines that such means, methods, techniques, sequences or procedures may not be safe, the Contractor shall give timely notice to the Owner and Architect, and shall propose alternative means, methods, techniques, sequences, or procedures. The Architect shall evaluate the proposed alternative solely for conformance with the design intent for the completed construction. Unless the Architect objects to the Contractor's proposed alternative, the Contractor shall perform the Work using its alternative means, methods, techniques, sequences, or procedures.

§ 3.3.2 The Contractor shall be responsible to the Owner for acts and omissions of the Contractor's employees, Subcontractors and their agents and employees, and other persons or entities performing portions of the Work for, or on behalf of, the Contractor or any of its Subcontractors.

§ 3.3.3 The Contractor shall be responsible for inspection of portions of Work already performed to determine that such portions are in proper condition to receive subsequent Work. The Contractor shall regularly inspect the site and work to familiarize itself with the progress and quality of the Work, and to determine for the Owner's benefit and protection if the Work is proceeding with the intent of the Contract Documents and the Construction Schedule. The Contractor shall use reasonable care to guard the Owner against defects and deficiencies in the Work and the Subcontractors' failure to carry out the Work in accordance with the Contract Documents and the Construction Schedule. The Construction Manager Will keep the Owner, the Architect and the Architect's Project Representative informed of the progress of the Work.

§ 3.3.4 The Contractor shall not be relieved of obligations to perform the Work in accordance with the Contract Documents either by activities or duties of the Architect in the Architect's administration of the Contract, or by tests, inspections, or approvals required or performed by persons other than the Contractor.

§ 3.3.5 If any of the Work is required to be inspected or approved by any public authority, the Contractor shall cause such inspection or approval to be performed. No inspection performed or failed to be performed by the Owner hereunder shall be a waiver of any of the Contractor's obligations hereunder or be construed as an approval or acceptance of the Work or any part therefore.

§ 3.4 Labor and Materials

§ 3.4.1 Unless otherwise provided in the Contract Documents, the Contractor shall provide and pay for labor, materials, equipment, tools, construction equipment and machinery, water, heat, utilities, transportation, and other facilities and services necessary for proper execution and completion of the Work, whether temporary or permanent and whether or not incorporated or to be incorporated in the Work.

§ 3.4.2 Except in the case of minor changes in the Work approved by the Architect in accordance with Section 3.12.8 or ordered by the Architect in accordance with Section 7.4, the Contractor may make substitutions only with the consent of the Owner, after evaluation by the Architect and in accordance with a Change Order or Construction Change Directive.

§ 3.4.3 The Contractor shall enforce strict discipline and good order among the Contractor's employees and other persons carrying out the Work. The Contractor shall not permit employment of unfit persons or persons not properly skilled in tasks assigned to them.

§ 3.5 Warranty

§ 3.5.1 The Contractor warrants to the Owner and Architect that materials and equipment furnished under the Contract will be of good quality and new unless the Contract Documents require or permit otherwise. The Contractor further warrants that the Work will conform to the requirements of the Contract Documents and will be free from defects, except for those inherent in the quality of the Work the Contract Documents require or permit. Work, materials, or equipment not conforming to these requirements may be considered defective. The Contractor's warranty excludes remedy for damage or defect caused by abuse, alterations to the Work not executed by the Contractor, improper or insufficient maintenance, improper operation, or normal wear and tear and normal usage. If required by the Architect or Owner, the Contractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment. This warranty is not limited by the provisions of Section 12.2. In addition, this warranty will not be affected by the specification of any product or procedure, unless the Contractor objects promptly to such product or procedure and advises the Architect of possible substitute products or procedures that will not affect the warranty. This warranty shall not be restricted by the limitations of any manufacturer's warranty. Liability or refusal of the Subcontractor or supplier responsible for the defective work to correct such work shall not excuse the Contractor from performing under the warranty.

§ 3.5.2 All material, equipment, or other special warranties required by the Contract Documents shall be issued in the name of the Owner, or shall be transferable to the Owner, and shall commence in accordance with Section 9.8.4.

§ 3.5.3 All Work included under this Specification unless extended elsewhere herein, shall be guaranteed against defects in material and workmanship for a period of one (1) year from the date of final acceptance of the Work as evidenced by the issuance of the Final Certificate for Payment and payment by the Owner. This guarantee and the repair and replacement obligations described in Paragraph 3.5.4 below are in addition to and not in derogation of Owner's right to bring any action for any breach of this Contract or other legal duty arising here within the full time period provided by law.

§ 3.5.4 Any defective Work or material shall be replaced or corrected to the satisfaction of the Owner immediately upon notification by the Owner at no cost to the Owner. The guarantee of repair or replacement items shall be renewed for an additional one (1) year upon the completion of the repair or replacement.

§ 3.5.5 Certain guarantees are required under various sections of the specifications. At the completion of the Work, all such guarantees covering materials, workmanship, maintenance, or other items, as specified, shall be secured from the various Subcontractors and Material Suppliers of the Contractor, and forwarded to the Architect, together with a letter addressed to the Owner summarizing the guarantees, stating the character of the Work, the Subcontractor, name of material or equipment seller, period of guarantee and conditions of guarantee.

§ 3.6 Taxes

The Contractor shall pay sales, consumer, use and similar taxes for the Work provided by the Contractor that are legally enacted when bids are received or negotiations concluded, whether or not yet effective or merely scheduled to go into effect. If sales, consumer, use and similar taxes and/or tariffs not accounted for in the Contract Sum, no matter when effective, increase the cost and/or time of the Work, the Owner hereby agrees to enter into a Change Order commensurate with said escalation to account for the full difference in the price of materials and/or time for the Work.

§ 3.7 Permits, Fees, Notices and Compliance with Laws

§ 3.7.1 Unless otherwise provided in the Contract Documents, the Contractor shall, with assistance by Owner where necessary, secure and pay for the building permit as well as for other permits, fees, licenses, and inspections by government agencies necessary for proper execution and completion of the Work that are customarily secured after execution of the Contract and legally required at the time bids are received or negotiations concluded.

§ 3.7.2 The Contractor shall comply with and give notices required by applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities applicable to performance of the Work.

§ 3.7.3 If the Contractor performs Work knowing it to be contrary to applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of public authorities, the Contractor shall assume appropriate responsibility for such Work and shall bear the costs attributable to correction.

§ 3.7.4 Concealed or Unknown Conditions

If the Contractor encounters conditions at the site that are (1) subsurface or otherwise concealed physical conditions that differ materially from those indicated in the Contract Documents or (2) unknown physical conditions of an unusual nature that differ materially from those ordinarily found to exist and generally recognized as inherent in construction activities of the character provided for in the Contract Documents, the Contractor shall promptly provide notice to the Owner, the Construction Manager, and the Architect before conditions are disturbed and in no event later than 14 days after first observance of the conditions. The Architect will promptly investigate such conditions and, if the Architect determines that they differ materially and cause an increase or decrease in the Contractor's cost of, or time required for, performance of any part of the Work, will recommend that an equitable adjustment be made in the Contract Sum or Contract Time, or both. If the Architect determines that the conditions at the site are not materially different from those indicated in the Contract Documents and that no change in the terms of the Contract is justified, the Architect shall promptly notify the Owner. The Construction Manager, and Contractor, stating the reasons. If either party disputes the Architect's determination or recommendation, that party may submit a Claim as provided in Article 15.

§ 3.7.5 If, in the course of the Work, the Contractor knowingly encounters human remains or recognizes the existence of burial markers, archaeological sites or wetlands not indicated in the Contract Documents, the Contractor shall immediately suspend any operations that would affect them and shall notify the Owner, the Construction Manager, and Architect. Upon receipt of such notice, the Owner shall promptly take any action necessary to obtain governmental authorization required to resume the operations. The Contractor shall continue to suspend such operations until otherwise instructed by the Owner but shall continue with all other operations that do not affect those remains or features. Requests for adjustments in the Contract Sum and Contract Time arising from the existence of such remains or features may be made as provided in Article 15.

§ 3.8 Allowances

§ 3.8.1 The Contractor shall include in the Contract Sum all allowances stated in the Contract Documents. Items covered by allowances shall be supplied for such amounts and by such persons or entities as the Owner may direct, but the Contractor shall not be required to employ persons or entities to whom the Contractor has reasonable objection.

§ 3.8.2 Unless otherwise provided in the Contract Documents,

.1 allowances shall cover the cost to the Contractor of materials and equipment delivered at the site and all required taxes, less applicable trade discounts;

.2 Contractor's costs for unloading and handling at the site, labor, installation costs, overhead, profit, and other expenses contemplated for stated allowance amounts shall be included in the Contract Sum but not in the allowances; and

.3 whenever costs are more than or less than allowances, the Contract Sum shall be adjusted accordingly by Change Order. The amount of the Change Order shall reflect (1) the difference between actual costs and the allowances under Section 3.8.2.1 and (2) changes in Contractor's costs under Section 3.8.2.2.

§ 3.8.3 Materials and equipment under an allowance shall be selected by the Owner with reasonable promptness.

§ 3.9 Superintendent

§ 3.9.1 The Contractor and the Construction Manager shall each employ a competent superintendent or foreman and necessary assistants who shall be in attendance at the Project site during performance of the Work. The superintendent or foreman shall represent the Contractor, and communications given to the superintendent or foreman shall be as binding as if given to the Contractor.

§ 3.9.2 The Contractor, as soon as practicable after award of the Contract, shall notify the Owner, Construction Manager, and Architect of the name and qualifications of a proposed superintendent or foreman. Within 14 days of

receipt of the information, the Architect may notify the Contractor, stating whether the Owner or the Architect (1) has reasonable objection to the proposed superintendent or foreman or (2) requires additional time for review. Failure of the Architect to provide notice within the 14-day period shall constitute notice of no reasonable objection.

The Construction Manager, as soon as practicable after execution of the Agreement, shall notify the Owner and Architect of the name and qualifications of a proposed superintendent. Within 14 days of receipt of the information, the Architect may notify the Construction Manager, stating whether the Owner or the Architect (1) has reasonable objection to the proposed superintendent or (2) requires additional time for review. Failure of the Architect to provide notice within the 14-day period shall constitute notice of no reasonable objection.

§ 3.9.3 The Contractor or the Construction Manager shall not employ a proposed superintendent to whom the Owner or Architect has made reasonable and timely objection. The Contractor or the Construction Manager shall not change the superintendent without the Owner's consent, which shall not unreasonably be withheld or delayed.

§ 3.10 Contractor's Construction and Submittal Schedules

§ 3.10.1 The Contractor, promptly after being awarded the Contract, shall submit for the Owner's, Construction Manager's, and Architect's information a Contractor's construction schedule for the Work. The schedule shall contain detail appropriate for the Project, including (1) the date of commencement of the Work, interim schedule milestone dates, and the date of Substantial Completion; (2) an apportionment of the Work by construction activity; and (3) the time required for completion of each portion of the Work. The schedule shall provide for the orderly progression of the Work to completion and shall not exceed time limits current under the Contract Documents. The schedule shall be revised at appropriate intervals as required by the conditions of the Work and Project.

§ 3.10.2 The Contractor, promptly after being awarded the Contract and thereafter as necessary to maintain a current submittal schedule, shall submit a submittal schedule for the Architect's approval. The Architect's approval shall not be unreasonably delayed or withheld. The submittal schedule shall (1) be coordinated with the Contractor's construction schedule, and (2) allow the Architect reasonable time to review submittals. If the Contractor fails to submit a submittal schedule, or fails to provide submittals in accordance with the approved submittal schedule, the Contractor shall not be entitled to any increase in Contract Sum or extension of Contract Time based on the time required for review of submittals.

§ 3.10.3 The Contractor shall perform the Work in general accordance with the most recent schedules submitted to the Owner, Construction Manager, and Architect.

§ 3.11 Documents and Samples at the Site

The Contractor shall make available, at the Project site, the Contract Documents, including Change Orders, Construction Change Directives, and other Modifications, in good order and marked currently to indicate field changes and selections made during construction, and the approved Shop Drawings, Product Data, Samples, and similar required submittals. These shall be in electronic form or paper copy, available to the Architect and Owner, and delivered to the Architect for submittal to the Owner upon completion of the Work as a record of the Work as constructed.

§ 3.12 Shop Drawings, Product Data and Samples

§ 3.12.1 Shop Drawings are drawings, diagrams, schedules, and other data specially prepared for the Work by the Contractor or a Subcontractor, Sub-subcontractor, manufacturer, supplier, or distributor to illustrate some portion of the Work.

§ 3.12.2 Product Data are illustrations, standard schedules, performance charts, instructions, brochures, diagrams, and other information furnished by the Contractor to illustrate materials or equipment for some portion of the Work.

§ 3.12.3 Samples are physical examples that illustrate materials, equipment, or workmanship, and establish standards by which the Work will be judged.

§ 3.12.4 Shop Drawings, Product Data, Samples, and similar submittals are not Contract Documents. Their purpose is to demonstrate how the Contractor proposes to conform to the information given and the design concept expressed in the Contract Documents for those portions of the Work for which the Contract Documents require submittals. Review by the Architect is subject to the limitations of Section 4.2.7. Informational submittals upon which the Architect is not

expected to take responsive action may be so identified in the Contract Documents. Submittals that are not required by the Contract Documents may be returned by the Architect without action.

§ 3.12.5 The Contractor shall review for compliance with the Contract Documents, approve, and submit to the Architect, Shop Drawings, Product Data, Samples, and similar submittals required by the Contract Documents, in accordance with the submittal schedule approved by the Architect or, in the absence of an approved submittal schedule, with reasonable promptness and in such sequence as to cause no delay in the Work or in the activities of the Owner or of Separate Contractors.

§ 3.12.6 By submitting Shop Drawings, Product Data, Samples, and similar submittals, the Contractor represents to the Owner and Architect that the Contractor has (1) reviewed and approved them, (2) determined and verified materials, field measurements and field construction criteria related thereto, or will do so, and (3) checked and coordinated the information contained within such submittals with the requirements of the Work and of the Contract Documents.

§ 3.12.7 The Contractor shall perform no portion of the Work for which the Contract Documents require submittal and review of Shop Drawings, Product Data, Samples, or similar submittals, until the respective submittal has been approved by the Architect.

§ 3.12.8 The Work shall be in accordance with approved submittals except that the Contractor shall not be relieved of responsibility for deviations from the requirements of the Contract Documents by the Architect's approval of Shop Drawings, Product Data, Samples, or similar submittals, unless the Contractor has specifically notified the Architect of such deviation at the time of submittal and (1) the Architect has given written approval to the specific deviation as a minor change in the Work, or (2) a Change Order or Construction Change Directive has been issued authorizing the deviation. The Contractor shall not be relieved of responsibility for errors or omissions in Shop Drawings, Product Data, Samples, or similar submittals, by the Architect's approval thereof.

§ 3.12.9 The Contractor shall direct specific attention, in writing or on resubmitted Shop Drawings, Product Data, Samples, or similar submittals, to revisions other than those requested by the Architect on previous submittals. In the absence of such notice, the Architect's approval of a resubmission shall not apply to such revisions.

§ 3.12.10 The Contractor shall not be required to provide professional services that constitute the practice of architecture or engineering unless such services are specifically required by the Contract Documents for a portion of the Work or unless the Contractor needs to provide such services in order to carry out the Contractor's responsibilities for construction means, methods, techniques, sequences, and procedures. The Contractor shall not be required to provide professional services in violation of applicable law.

The Construction Manager shall provide professional construction manager services, but shall not be required to provide professional services that constitute the practice of architecture or engineering unless such services are specifically required by the Agreement.

§ 3.12.10.1 If professional design services or certifications by a design professional related to systems, materials, or equipment are specifically required of the Contractor by the Contract Documents, the Owner and the Architect will specify all performance and design criteria that such services must satisfy. The Contractor shall be entitled to rely upon the adequacy and accuracy of the performance and design criteria provided in the Contract Documents. The Contractor shall cause such services or certifications to be provided by an appropriately licensed design professional, whose signature and seal shall appear on all drawings, calculations, specifications, certifications, Shop Drawings, and other submittals prepared by such professional. Shop Drawings, and other submittals related to the Work, designed or certified by such professional, if prepared by others, shall bear such professional's written approval when submitted to the Architect. The Owner and the Architect shall be entitled to rely upon the adequacy and accuracy of the services, certifications, and approvals performed or provided by such design professionals, provided the Owner and Architect have specified to the Contractor the performance and design criteria that such services must satisfy. Pursuant to this Section 3.12.10, the Architect will review and approve or take other appropriate action on submittals only for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents.

§ 3.12.10.2 If the Contract Documents require the Contractor's design professional to certify that the Work has been performed in accordance with the design criteria, the Contractor shall furnish such certifications to the Architect at the time and in the form specified by the Architect.

§ 3.13 Use of Site

The Contractor shall confine operations at the site to areas permitted by applicable laws, statutes, ordinances, codes, rules and regulations, lawful orders of public authorities, and the Contract Documents and shall not unreasonably encumber the site with materials or equipment.

§ 3.14 Cutting and Patching

§ 3.14.1 The Contractor shall be responsible for cutting, fitting, or patching required to complete the Work or to make its parts fit together properly. All areas requiring cutting, fitting, or patching shall be restored to the condition existing prior to the cutting, fitting, or patching, unless otherwise required by the Contract Documents.

§ 3.14.2 The Contractor shall not damage or endanger a portion of the Work or fully or partially completed construction of the Owner or Separate Contractors by cutting, patching, or otherwise altering such construction, or by excavation. The Contractor shall not cut or otherwise alter construction by the Owner or a Separate Contractor except with written consent of the Owner and of the Separate Contractor. Consent shall not be unreasonably withheld. The Contractor shall not unreasonably withhold, from the Owner or a Separate Contractor, its consent to cutting or otherwise altering the Work.

§ 3.15 Cleaning Up

§ 3.15.1 The Contractor shall keep the premises and surrounding area free from accumulation of waste materials and rubbish caused by operations under the Contract. At completion of the Work, the Contractor shall remove waste materials, rubbish, the Contractor's tools, construction equipment, machinery, and surplus materials from and about the Project. The Contractor shall (and shall cause its Subcontractors) to clean the Project site on a daily basis. The final clean-up to be performed by the Contractor shall include, without limitation, washing of windows, washing of plastic laminate, cleaning of floors, dusting of surfaces, washing toilet fixtures and appliances, and removing debris from the exterior grounds.

§ 3.15.2 If the Contractor fails to clean up as provided in the Contract Documents, the Owner may do so and the Owner shall be entitled to reimbursement from the Contractor.

§ 3.16 Access to Work

The Contractor shall provide the Owner and Architect with access to the Work in preparation and progress wherever located.

§ 3.17 Royalties, Patents and Copyrights

The Contractor shall pay all royalties and license fees. The Contractor shall defend suits or claims for infringement of copyrights and patent rights and shall hold the Owner and Architect harmless from loss on account thereof, but shall not be responsible for defense or loss when a particular design, process, or product of a particular manufacturer or manufacturers is required by the Contract Documents, or where the copyright violations are contained in Drawings, Specifications, or other documents prepared by the Owner or Architect. However, if an infringement of a copyright or patent is discovered by, or made known to, the Contractor, the Contractor shall be responsible for the loss unless the information is promptly furnished to the Architect.

§ 3.18 Indemnification

§ 3.18.1 To the fullest extent permitted by law, the Contractor shall indemnify and hold harmless the Owner, Construction Manager, Architect, Architect's consultants, and agents and employees of any of them from and against claims, damages, losses, and expenses, including but not limited to attorneys' fees, arising out of or resulting from performance of the Work, but only to the extent caused by the negligent acts or omissions of the Contractor, a Subcontractor, anyone directly or indirectly employed by them, or anyone for whose acts they may be liable, regardless of whether or not such claim, damage, loss, or expense is caused in part by a party indemnified hereunder. Such obligation shall not be construed to negate, abridge, or reduce other rights or obligations of indemnity that would otherwise exist as to a party or person described in this Section 3.18.

To the fullest extent permitted by law, the Construction Manager shall indemnify and hold harmless the Owner, Architect, Architect's consultants, and agents and employees of any of them from and against claims, damages, losses, and expenses, including but not limited to attorneys' fees, arising out of or resulting from performance of the Agreement, but only to the extent caused by the negligent acts or omissions of the Construction Manager, anyone directly or indirectly employed by them, or anyone for whose acts they may be liable, regardless of whether or not such claim, damage, loss, or expense is caused in part by a party indemnified hereunder. Such obligation shall not be construed to negate, abridge, or reduce other rights or obligations of indemnity that would otherwise exist as to a party or person described in this Section 3.18.

§ 3.18.2 In claims against any person or entity indemnified under this Section 3.18 by an employee of the Construction Manager, Contractor, a Subcontractor, anyone directly or indirectly employed by them, or anyone for whose acts they may be liable, the indemnification obligation under Section 3.18.1 shall not be limited by a limitation on amount or type of damages, compensation, or benefits payable by or for the Construction Manager, Contractor or a Subcontractor under workers' compensation acts, disability benefit acts, or other employee benefit acts.

ARTICLE 4 ARCHITECT

§ 4.1 General

§ 4.1.1 The Architect is the person or entity retained by the Owner pursuant to Section 2.3.2 and identified as such in the Agreement.

§ 4.1.2 Duties, responsibilities, and limitations of authority of the Architect as set forth in the Contract Documents shall not be restricted, modified, or extended without written consent of the Owner, Contractor, and Architect. Consent shall not be unreasonably withheld.

§ 4.2 Administration of the Contract

§ 4.2.1 The Architect will provide administration of the Contract as described in the Contract Documents and will be an Owner's representative during construction until the date the Architect issues the final Certificate for Payment. The Architect will have authority to act on behalf of the Owner only to the extent provided in the Contract Documents.

§ 4.2.2 The Architect will visit the site at intervals appropriate to the stage of construction, or as otherwise agreed with the Owner, to become generally familiar with the progress and quality of the portion of the Work completed, and to determine in general if the Work observed is being performed in a manner indicating that the Work, when fully completed, will be in accordance with the Contract Documents. However, the Architect will not be required to make exhaustive or continuous on-site inspections to check the quality or quantity of the Work. The Architect will not have control over, charge of, or responsibility for the construction means, methods, techniques, sequences or procedures, or for the safety precautions and programs in connection with the Work, since these are solely the Contractor's rights and responsibilities under the Contract Documents.

§ 4.2.3 On the basis of the site visits, the Architect will keep the Owner reasonably informed about the progress and quality of the portion of the Work completed, and promptly report to the Owner (1) known deviations from the Contract Documents, (2) known deviations from the most recent construction schedule submitted by the Contractor, and (3) defects and deficiencies observed in the Work. The Architect will not be responsible for the Contractor's failure to perform the Work in accordance with the requirements of the Contract Documents. The Architect will not have control over or charge of, and will not be responsible for acts or omissions of, the Contractor, Subcontractors, or their agents or employees, or any other persons or entities performing portions of the Work.

§ 4.2.4 Communications

The Owner, Construction Manager, and Contractor shall include the Architect in all communications that relate to or affect the Architect's services or professional responsibilities. The Owner shall promptly notify the Architect of the substance of any direct communications between the Owner and the Contractor or the Owner and the Construction Manager otherwise relating to the Project. Communications by and with the Architect's consultants shall be through the Architect. Communications by and with Subcontractors and suppliers shall be through the Contractor. Communications by and with Separate Contractors shall be through the Owner. The Contract Documents may specify other communication protocols.

§ 4.2.5 Based on the Architect's evaluations of the Contractor's Applications for Payment, the Architect will review and certify the amounts due the Contractor and will issue Certificates for Payment in such amounts.

§ 4.2.6 The Architect has authority to reject Work that does not conform to the Contract Documents. Whenever the Architect considers it necessary or advisable, the Architect will have authority to require inspection or testing of the Work in accordance with Sections 13.4.2 and 13.4.3, whether or not the Work is fabricated, installed or completed. However, neither this authority of the Architect nor a decision made in good faith either to exercise or not to exercise such authority shall give rise to a duty or responsibility of the Architect to the Contractor, Subcontractors, suppliers, their agents or employees, or other persons or entities performing portions of the Work.

§ 4.2.7 The Architect will review and approve, or take other appropriate action upon, the Contractor's submittals such as Shop Drawings, Product Data, and Samples, but only for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents. The Architect's action will be taken in accordance with the submittal schedule approved by the Architect or, in the absence of an approved submittal schedule, with reasonable promptness while allowing sufficient time in the Architect's professional judgment to permit adequate review. Review of such submittals is not conducted for the purpose of determining the accuracy and completeness of other details such as dimensions and quantities, or for substantiating instructions for installation or performance of equipment or systems, all of which remain the responsibility of the Contractor as required by the Contract Documents. The Architect's review of the Contractor's submittals shall not relieve the Contractor of the obligations under Sections 3.3, 3.5, and 3.12. The Architect's review shall not constitute approval of safety precautions or of any construction means, methods, techniques, sequences, or procedures. The Architect's approval of a specific item shall not indicate approval of an assembly of which the item is a component.

§ 4.2.8 The Architect may prepare Change Orders and Construction Change Directives for the Owner's signature, but the Architect cannot order changes in the Work without the Owner's written agreement with the proposed document. The Architect will investigate and make determinations and recommendations regarding concealed and unknown conditions as provided in Section 3.7.4.

§ 4.2.9 The Architect will conduct inspections to determine the date or dates of Substantial Completion and the date of final completion; issue Certificates of Substantial Completion pursuant to Section 9.8; receive and forward to the Owner, for the Owner's review and records, written warranties and related documents required by the Contract and assembled by the Contractor pursuant to Section 9.10; and issue a final Certificate for Payment pursuant to Section 9.10.

§ 4.2.10 If the Owner and Architect agree, the Architect will provide one or more Project representatives to assist in carrying out the Architect's responsibilities at the site. The Owner shall notify the Contractor of any change in the duties, responsibilities and limitations of authority of the Project representatives.

§ 4.2.11 The Architect will interpret and decide matters concerning performance under, and requirements of, the Contract Documents on written request of either the Owner or Contractor. The Architect's response to such requests will be made in writing within any time limits agreed upon or otherwise with reasonable promptness.

§ 4.2.12 Interpretations and decisions of the Architect will be consistent with the intent of, and reasonably inferable from, the Contract Documents and will be in writing or in the form of drawings. When making such interpretations and decisions, the Architect will endeavor to secure faithful performance by both Owner and Contractor, will not show partiality to either, and will not be liable for results of interpretations or decisions rendered in good faith.

§ 4.2.13 The Architect's decisions on matters relating to aesthetic effect will be final if consistent with the intent expressed in the Contract Documents.

§ 4.2.14 The Architect will review and respond to requests for information about the Contract Documents. The Architect's response to such requests will be made in writing within any time limits agreed upon or otherwise with reasonable promptness. If appropriate, the Architect will prepare and issue supplemental Drawings and Specifications in response to the requests for information.

ARTICLE 5 SUBCONTRACTORS

§ 5.1 Definitions

§ 5.1.1 A Subcontractor is a person or entity who has a direct contract with the Contractor to perform a portion of the Work at the site. The term "Subcontractor" is referred to throughout the Contract Documents as if singular in number

and means a Subcontractor or an authorized representative of the Subcontractor. The term "Subcontractor" does not include a Separate Contractor or the subcontractors of a Separate Contractor.

§ 5.1.2 A Sub-subcontractor is a person or entity who has a direct or indirect contract with a Subcontractor to perform a portion of the Work at the site. The term "Sub-subcontractor" is referred to throughout the Contract Documents as if singular in number and means a Sub-subcontractor or an authorized representative of the Sub-subcontractor.

§ 5.2 Award of Subcontracts and Other Contracts for Portions of the Work

§ 5.2.1 Unless otherwise stated in the Contract Documents, the Contractor, as soon as practicable after award of the Contract, shall notify the Owner, Construction Manager, and Architect of the persons or entities proposed for each principal portion of the Work, including those who are to furnish materials or equipment fabricated to a special design. Within 14 days of receipt of the information, the Architect may notify the Contractor whether the Owner or the Architect (1) has reasonable objection to any such proposed person or entity or (2) requires additional time for review. Failure of the Architect to provide notice within the 14-day period shall constitute notice of no reasonable objection.

§ 5.2.2 The Contractor shall not contract with a proposed person or entity to whom the Owner or Architect has made reasonable and timely objection. The Contractor shall not be required to contract with anyone to whom the Contractor has made reasonable objection.

§ 5.2.3 If the Owner, Construction Manager, or Architect has reasonable objection to a person or entity proposed by the Contractor, the Contractor shall propose another to whom the Owner or Architect has no reasonable objection. If the proposed but rejected Subcontractor was reasonably capable of performing the Work, the Contract Sum and Contract Time shall be increased or decreased by the difference, if any, occasioned by such change, and an appropriate Change Order shall be issued before commencement of the substitute Subcontractor's Work. However, no increase in the Contract Sum or Contract Time shall be allowed for such change unless the Contractor has acted promptly and responsively in submitting names as required.

§ 5.2.4 The Contractor shall not substitute a Subcontractor, person, or entity for one previously selected if the Owner or Architect makes reasonable objection to such substitution.

§ 5.3 Subcontractual Relations

By appropriate written agreement, the Contractor shall require each Subcontractor, to the extent of the Work to be performed by the Subcontractor, to be bound to the Contractor by terms of the Contract Documents, and to assume toward the Contractor all the obligations and responsibilities, including the responsibility for safety of the Subcontractor's Work that the Contractor, by these Contract Documents, assumes toward the Owner and Architect. Each subcontract agreement shall preserve and protect the rights of the Owner and Architect under the Contract Documents with respect to the Work to be performed by the Subcontractor so that subcontracting thereof will not prejudice such rights, and shall allow to the Subcontractor, unless specifically provided otherwise in the subcontract agreement, the benefit of all rights, remedies, and redress against the Contractor that the Contractor, by the Contract Documents, has against the Owner. Where appropriate, the Contractor shall require each Subcontractor to enter into similar agreements with Sub-subcontractors. The Contractor shall make available to each proposed Subcontractor, prior to the execution of the subcontract agreement, copies of the Contract Documents to which the Subcontractor will be bound, and, upon written request of the Subcontractor, identify to the Subcontractor terms and conditions of the proposed subcontract agreement that may be at variance with the Contract Documents. Subcontractors will similarly make copies of applicable portions of such documents available to their respective proposed Sub-subcontractors.

§ 5.4 Contingent Assignment of Subcontracts

§ 5.4.1 Each subcontract agreement for a portion of the Work is assigned by the Contractor to the Owner, provided that

.1 assignment is effective only after termination of the Contract by the Owner for cause pursuant to Section 14.2 and only for those subcontract agreements that the Owner accepts by notifying the Subcontractor and Contractor; and

.2 assignment is subject to the prior rights of the surety, if any, obligated under bond relating to the Contract.

When the Owner accepts the assignment of a subcontract agreement, the Owner assumes the Contractor's rights and obligations under the subcontract.

§ 5.4.2 Upon such assignment, if the Work has been suspended for more than 30 days, the Subcontractor's compensation shall be equitably adjusted for increases in cost resulting from the suspension.

§ 5.4.3 Upon assignment to the Owner under this Section 5.4, the Owner may further assign the subcontract to a successor contractor or other entity. If the Owner assigns the subcontract to a successor contractor or other entity, the Owner shall nevertheless remain legally responsible for all of the successor contractor's obligations under the subcontract.

§ 5.5 Payments to Subcontractors by the Contractor

§ 5.5.1 The Contractor shall pay each Subcontractor, upon receipt of payment from the Owner or Construction Manager, as applicable, an amount equal to the percentage of completion allowed to the Contractor on account of each Subcontractor's Work, less the percentage retained from payments to the Contractor. The Contractor shall also require each Subcontractor to make similar payments to its Sub subcontractors.

ARTICLE 6 CONSTRUCTION BY OWNER OR BY SEPARATE CONTRACTORS

§ 6.1 Owner's Right to Perform Construction and to Award Separate Contracts

§ 6.1.1 The term "Separate Contractor(s)" shall mean other contractors retained by the Owner under separate agreements. The Owner reserves the right to perform construction or operations related to the Project with the Owner's own forces, and with Separate Contractors retained under Conditions of the Contract substantially similar to those of this Contract, including those provisions of the Conditions of the Contract related to insurance and waiver of subrogation.

§ 6.1.2 When separate contracts are awarded for different portions of the Project or other construction or operations on the site, the term "Contractor" in the Contract Documents in each case shall mean the Contractor who executes each separate Owner-Contractor Agreement.

§ 6.1.3 The Owner shall provide for coordination of the activities of the Owner's own forces and of each Separate Contractor with the Work of the Contractor, who shall cooperate with them. The Contractor shall participate with any Separate Contractors and the Owner in reviewing their construction schedules. The Contractor shall make any revisions to its construction schedule deemed necessary after a joint review and mutual agreement. The construction schedules shall then constitute the schedules to be used by the Contractor, Separate Contractors, and the Owner until subsequently revised.

§ 6.1.4 Unless otherwise provided in the Contract Documents, when the Owner performs construction or operations related to the Project with the Owner's own forces or with Separate Contractors, the Owner or its Separate Contractors shall have the same obligations and rights that the Contractor has under the Conditions of the Contract, including, without excluding others, those stated in Article 3, this Article 6, and Articles 10, 11, and 12.

§ 6.1.5 The Contractor and other contractors, where Separate Contractors are employed by the Owner on the work, will not hold the Owner responsible for loss, damage and/or injury caused by any fault or negligence of such other contractors, and the respective contractors shall look to such other contractors for recovery from them for any such damage or injury. If in the performance of the work by the Contractor, or any other contractor, where Separate Contractors are employed by the Owner, and as a result of the negligence, inefficiency, delay or violation of their contract obligations with the Owner, by any Separate Contractor, if any Separate Contractor suffers any damages, that contractor may proceed directly against any Separate Contractor, and that said Separate Contractor shall pay to the contractor injured any damages as a result of the aforesaid acts together with its reasonable attorney's fees, costs and expenses in connection therewith.

§ 6.2 Mutual Responsibility

§ 6.2.1 The Contractor shall afford the Owner and Separate Contractors reasonable opportunity for introduction and storage of their materials and equipment and performance of their activities, and shall connect and coordinate the Contractor's construction and operations with theirs as required by the Contract Documents.

§ 6.2.2 If part of the Contractor's Work depends for proper execution or results upon construction or operations by the Owner or a Separate Contractor, the Contractor shall, prior to proceeding with that portion of the Work, promptly notify the Architect of apparent discrepancies or defects in the construction or operations by the Owner or Separate Contractor that would render it unsuitable for proper execution and results of the Contractor's Work. Failure of the

Contractor to notify the Architect of apparent discrepancies or defects prior to proceeding with the Work shall constitute an acknowledgment that the Owner's or Separate Contractor's completed or partially completed construction is fit and proper to receive the Contractor's Work. The Contractor shall not be responsible for discrepancies or defects in the construction or operations by the Owner or Separate Contractor that are not apparent.

§ 6.2.3 The Contractor shall reimburse the Owner for costs the Owner incurs that are payable to a Separate Contractor because of the Contractor's delays, improperly timed activities or defective construction. The Owner shall be responsible to the Contractor for costs the Contractor incurs because of a Separate Contractor's delays, improperly timed activities, damage to the Work or defective construction.

§ 6.2.4 The Contractor shall promptly remedy damage that the Contractor wrongfully causes to completed or partially completed construction or to property of the Owner or Separate Contractor as provided in Section 10.2.5.

§ 6.2.5 Each Separate Contractor shall have the same responsibilities for cutting and patching as are described for the Contractor in Section 3.14.

§ 6.3 Owner's Right to Clean Up

If a dispute arises among the Contractor, Separate Contractors, and the Owner as to the responsibility under their respective contracts for maintaining the premises and surrounding area free from waste materials and rubbish, the Owner may, after reasonable notice to Contractor, clean up and the Architect will allocate the cost among those responsible.

ARTICLE 7 CHANGES IN THE WORK

§ 7.1 General

§ 7.1.1 Changes in the Work may be accomplished after execution of the Contract, and without invalidating the Contract, by Change Order, Construction Change Directive or order for a minor change in the Work, subject to the limitations stated in this Article 7 and elsewhere in the Contract Documents.

§ 7.1.2 A Change Order shall be based upon agreement among the Owner, Contractor, and Architect. A Construction Change Directive requires agreement by the Owner and Architect and may or may not be agreed to by the Contractor. An order for a minor change in the Work may be issued by the Architect or the Owner.

§ 7.1.3 Changes in the Work shall be performed under applicable provisions of the Contract Documents. The Contractor shall proceed promptly with changes in the Work, unless otherwise provided in the Change Order, Construction Change Directive, or order for a minor change in the Work.

§ 7.2 Change Orders

§ 7.2.1 A Change Order is a written instrument prepared by the Architect and signed by the Owner, Contractor, and Architect stating their agreement upon all of the following:

.1 The change in the Work;
.2 The amount of the adjustment, if any, in the Contract Sum; and
.3 The extent of the adjustment, if any, in the Contract Time.

§ 7.2.2 If a Change Order provides for an adjustment to the Contract Sum, the amount of the adjustment shall be determined as follows:

(i) if the "actual cost" in performing the Work is increased by any such change, the Contract Sum shall be increased (without duplication) so as to reflect the "actual cost" to the Contractor (or to any tier of subcontractor) in performing the Work attributable to the change plus a percentage fee for overhead and profit. For Work which is performed by the Contractor's own forces in relation to any such change, such percentage fee shall be equal to fifteen percent (15%) of the "actual cost" incurred by the Contractor for such additional Work. For Work which is performed by subcontractors in relation to any such change, the percentage fee payable to the Contractor shall be equal to five percent (5%) of the "actual cost" incurred by the Contractor for the additional Work performed by any such subcontractors. Any fee charged by any tier of subcontractor for its overhead and profit shall likewise be limited by the preceding percentages (which percentages shall similarly be applied on the basis of whether such subcontractor performs the Work with its own forces or with the personnel of a sub-subcontractor).

(ii) If the "actual cost" in performing the Work is decreased by any such change, the Contract Sum shall be decreased (without duplication) so as to reflect the "actual cost" which would have been incurred by the Contractor (or by any tier of subcontractor) in the absence of such change, plus percentages fees calculated as described in the preceding clause (i).

(iii) For purposes of this Agreement, "actual cost" shall mean and refer to the actual cost of materials, equipment and labor, and where appropriate, payments to subcontractors or sub-subcontractors.

§ 7.3 Construction Change Directives

§ 7.3.1 A Construction Change Directive is a written order prepared by the Architect and signed by the Owner and Architect, directing a change in the Work prior to agreement on adjustment, if any, in the Contract Sum or Contract Time, or both. The Owner may by Construction Change Directive, without invalidating the Contract, order changes in the Work within the general scope of the Contract consisting of additions, deletions, or other revisions, the Contract Sum and Contract Time being adjusted accordingly.

§ 7.3.2 A Construction Change Directive shall be used in the absence of total agreement on the terms of a Change Order.

§ 7.3.3 If a Construction Change Directive provides for an adjustment to the Contract Sum,
(Paragraphs deleted)
the amount of the adjustment shall be determined as provided in Section 7.2.2.
(Paragraphs deleted)
§ 7.3.5 If the Contractor disagrees with the adjustment in the Contract Time, the Contractor may make a Claim in accordance with applicable provisions of Article 15.

§ 7.3.6 Upon receipt of a Construction Change Directive, the Contractor shall promptly proceed with the change in the Work involved and advise the Architect of the Contractor's agreement or disagreement with the method, if any, provided in the Construction Change Directive for determining the proposed adjustment in the Contract Sum or Contract Time.

§ 7.3.7 A Construction Change Directive signed by the Contractor indicates the Contractor's agreement therewith, including adjustment in Contract Sum and Contract Time or the method for determining them. Such agreement shall be effective immediately and shall be recorded as a Change Order.

§ 7.3.8 The amount of credit to be allowed by the Contractor to the Owner for a deletion or change that results in a net decrease in the Contract Sum shall be actual net cost (excluding Contractor's overhead or fee) as confirmed by the Architect. When both additions and credits covering related Work or substitutions are involved in a change, the allowance for overhead and profit shall be figured on the basis of net increase, if any, with respect to that change.

§ 7.3.9 Pending final determination of the total cost of a Construction Change Directive to the Owner, the Contractor may request payment for Work completed under the Construction Change Directive in Applications for Payment. The Architect will make an interim determination for purposes of monthly certification for payment for those costs and certify for payment the amount that the Architect determines, in the Architect's professional judgment, to be reasonably justified. The Architect's interim determination of cost shall adjust the Contract Sum on the same basis as a Change Order, subject to the right of either party to disagree and assert a Claim in accordance with Article 15.

§ 7.3.10 When the Owner and Contractor agree with a determination made by the Architect concerning the adjustments in the Contract Sum and Contract Time, or otherwise reach agreement upon the adjustments, such agreement shall be effective immediately and the Architect will prepare a Change Order. Change Orders shall be issued for all or any part of a Construction Change Directive.

§ 7.4 Minor Changes in the Work

The Architect may order minor changes in the Work that are consistent with the intent of the Contract Documents and do not involve an adjustment in the Contract Sum or an extension of the Contract Time. The Architect's order for minor changes shall be in writing. If the Contractor believes that the proposed minor change in the Work will affect the Contract Sum or Contract Time, the Contractor shall notify the Architect and shall not proceed to implement the

change in the Work. If the Contractor performs the Work set forth in the Architect's order for a minor change without prior notice to the Architect that such change will affect the Contract Sum or Contract Time, the Contractor waives any adjustment to the Contract Sum or extension of the Contract Time.

ARTICLE 8 TIME

§ 8.1 Definitions

§ 8.1.1 Unless otherwise provided, Contract Time is the period of time, including authorized adjustments, allotted in the Contract Documents for Substantial Completion of the Work.

§ 8.1.2 The date of commencement of the Work is the date established in the Agreement.

§ 8.1.3 The date of Substantial Completion is the date certified by the Architect in accordance with Section 9.8.

§ 8.1.4 The term "day" as used in the Contract Documents shall mean calendar day unless otherwise specifically defined.

§ 8.2 Progress and Completion

§ 8.2.1 Time limits stated in the Contract Documents are of the essence of the Contract. By executing the Agreement, the Contractor confirms that the Contract Time is a reasonable period for performing the Work.

§ 8.2.2 The Contractor shall not knowingly, except by agreement or instruction of the Owner in writing, commence the Work prior to the effective date of insurance required to be furnished by the Contractor and Owner.

§ 8.2.3 The Contractor shall proceed expeditiously with adequate forces and shall achieve Substantial Completion within the Contract Time.

§ 8.2.4 Contractor agrees to commence Work immediately when notified by Owner or Architect, and to conduct and perform the Work continuously and with reasonable diligence in strict accordance with Owner's time schedule and the Architect's project schedule, and in accordance with Owner's and Architect's directions as to the specific Work to be commenced and completed at any particular time. Should said time schedule be changed by order of the Owner or the Architect, Contractor agrees to proceed as directed, except in case of delays caused by acts of God, or by the Owner or Architect; and to cooperate in related Work and in no manner to interfere with the Work of other contractors or of other subcontractors; and to provide, at its expense, such additional shifts and overtime necessary to meet time schedules. Inability of Contractor to complete the Work in the time provided shall, at the option of the Owner, constitute a default on the part of Contractor hereunder.

§ 8.3 Delays and Extensions of Time

§ 8.3.1 If the Contractor is delayed at any time in the commencement or progress of the Work by (1) an act or neglect of the Owner or Architect, of an employee of either, or of a Separate Contractor; (2) by changes ordered in the Work; (3) by labor disputes, fire, unusual delay in deliveries, unavoidable casualties, adverse weather conditions documented in accordance with Section 8.3.4, or other causes beyond the Contractor's control; (4) by delay authorized by the Owner pending mediation and binding dispute resolution; or (5) by other causes that the Contractor asserts, and the Architect determines, justify delay, then the Contract Time and related overhead expenses shall be extended for such reasonable time as the Owner, Construction Manager, and Contractor mutually agree.

§ 8.3.2 Claims relating to time shall be made in accordance with applicable provisions of Article 15.

§ 8.3.3 The Contractor's sole and exclusive remedy for any such delay shall be an extension in the Contract Time.

§ 8.3.4 Adverse Weather

§ 8.3.4.1 If a Claim is made for an extension of time based upon weather delays in accordance with the Contract Documents, an extension may be granted only for the number of Adverse Weather Days in excess of the number of work days indicated in the GMP Amendment (the "Allotted Adverse Weather Days").

§ 8.3.4.2 Adverse Weather is defined as the occurrence of one or more of the following conditions within a twenty-four (24) hour day that prevents construction activity exposed to weather conditions or access to the Project Site:

(i) Precipitation (rain, snow, or ice) in excess of one-tenth inch (0.10") liquid measure.

(ii) Temperatures that are more severe than the monthly daily average for the day's construction activity, if such temperature requirement is specified or accepted as standard industry practice.
(iii) Sustained wind in excess of twenty-five (25) m.p.h.
(iv) Frost in the ground which prevents excavation or earthwork activities.
(v) other weather conditions which require cessation of work by subcontractors.

§ 8.3.4.3 Adverse Weather Days may include, if appropriate, "dry-out" or "mud" days:
(i) resulting from precipitation related days that occur beyond the Adverse Weather Days;
(ii) only if there is a hindrance to Project site access or sitework and Contractor has taken all reasonable accommodations to avoid such hindrance.

§ 8.3.4.4 Adverse Weather Days may include, if appropriate:
(i) any weather condition that requires cessation of construction activities as required by the recommendations promulgated by OSHA or by union contracts; or
(ii) an extension granted by the Owner, in the Owner's sole discretion, to avoid working in conditions which could have a negative impact on the Project quality.

§ 8.3.4.5 An Adverse Weather Day may be counted if adverse weather prevents the performance of Work for fifty percent (50%) or more of the Contractor's scheduled work day and critical path construction activities were included in the day's schedule, including a weekend day or holiday if the Contractor has scheduled construction activity that day.

§ 8.3.4.6 The number of actual Adverse Weather Days shall include days impacted by actual adverse weather and shall be calculated chronologically and shall be recorded as full days. If the number of actual Adverse Weather Days exceeds the Allotted Adverse Weather Days, such delay shall constitute a Delay in accordance with 8.3.1. In the event the actual Adverse Weather Days are less than the Allotted Adverse Weather Days, the excess time shall be considered time gained by the Contractor on the Project Schedule shall not be offset against any delays described in 8.3.1.

ARTICLE 9 PAYMENTS AND COMPLETION

§ 9.1 Contract Sum

§ 9.1.1 The Contract Sum is stated in the Agreement and, including authorized adjustments, is the total amount payable by the Owner to the Contractor for performance of the Work under the Contract Documents.

§ 9.1.2 If unit prices are stated in the Contract Documents or subsequently agreed upon, and if quantities originally contemplated are materially changed so that application of such unit prices to the actual quantities causes substantial inequity to the Owner or Contractor, the applicable unit prices shall be equitably adjusted.

§ 9.2 Schedule of Values

Where the Contract is based on a stipulated sum or Guaranteed Maximum Price, the Contractor shall submit a schedule of values to the Architect before the first Application for Payment, allocating the entire Contract Sum to the various portions of the Work. The schedule of values shall be prepared in the form, and supported by the data to substantiate its accuracy, required by the Architect. This schedule, unless objected to by the Architect, shall be used as a basis for reviewing the Contractor's Applications for Payment. Any changes to the schedule of values shall be submitted to the Architect and supported by such data to substantiate its accuracy as the Architect may require, and unless objected to by the Architect, shall be used as a basis for reviewing the Contractor's subsequent Applications for Payment.

§ 9.3 Applications for Payment

§ 9.3.1 At least ten days before the date established for each progress payment, the Contractor shall submit to the Construction Manager an itemized Application for Payment prepared in accordance with the schedule of values, if required under Section 9.2, for completed portions of the Work. The application shall be notarized, if required, and supported by all data substantiating the Contractor's right to payment that the Owner, Construction Manager, or Architect require, such as copies of requisitions, and releases and waivers of liens from Subcontractors and suppliers, and shall reflect retainage if provided for in the Contract Documents. Each Application for Payment shall include a partial unconditional lien release and waiver executed by all Subcontractors for payment for Work or materials that are the subject of the present Application for Payment.

§ 9.3.1.1 As provided in Section 7.3.9, such applications may include requests for payment on account of changes in the Work that have been properly authorized by Construction Change Directives, or by interim determinations of the Architect, but not yet included in Change Orders.

§ 9.3.1.2 Applications for Payment shall not include requests for payment for portions of the Work for which the Contractor does not intend to pay a Subcontractor or supplier, unless such Work has been performed by others whom the Contractor intends to pay.

§ 9.3.2 Unless otherwise provided in the Contract Documents, payments shall be made on account of materials and equipment delivered and suitably stored at the site for subsequent incorporation in the Work. If approved in advance by the Owner, payment may similarly be made for materials and equipment suitably stored off the site at a location agreed upon in writing. Payment for materials and equipment stored on or off the site shall be conditioned upon compliance by the Contractor with procedures satisfactory to the Owner to establish the Owner's title to such materials and equipment or otherwise protect the Owner's interest, and shall include the costs of applicable insurance, storage, and transportation to the site, for such materials and equipment stored off the site.

§ 9.3.3 The Contractor warrants that title to all Work covered by an Application for Payment will pass to the Owner no later than the time of payment. The Contractor further warrants that, by submittal of an Application for Payment, all Work for which Certificates for Payment have been previously issued and payments received from the Owner shall be free and clear of liens, claims, security interests or encumbrances in favor of the Contractor, Subcontractors, any sub-subcontractors, suppliers or any other persons or entities. The Contractor shall indemnify, defend and hold harmless the Owner from and against any liens, claims, security interests or encumbrances filed by the Contractor, any Subcontractor, any sub-subcontractor, or anyone claiming by, through or under any of them, including the reasonable attorneys' fees, court costs and expenses of litigation incurred by Owner in defending or discharging any such claims.

§ 9.3.4 Prior to the final payment, and with the final Certificate of Payment (as prepared by the Architect), the Contractor shall provide all final Waivers of Lien as follows: The Contractor's final waiver in the full amount of its contract plus any adjustments made by change orders, etc., and final Waivers of Lien from Subcontractors and Suppliers in the full amount of their subcontractors plus any Adjustments, Bonds, Guarantees, etc., as required by the Specifications.

§ 9.3.5 Upon receiving an Application for Payment complying with this Section 9.3, the Construction Manager shall promptly submit the Application to the Architect for review and certification as set forth in Section 9.4.

§ 9.4 Certificates for Payment

§ 9.4.1 The Architect will, within seven days after receipt of the Contractor's Application for Payment, either (1) issue to the Owner a Certificate for Payment in the full amount of the Application for Payment, with a copy to the Contractor; or (2) issue to the Owner a Certificate for Payment for such amount as the Architect determines is properly due, and notify the Contractor and Owner of the Architect's reasons for withholding certification in part as provided in Section 9.5.1; or (3) withhold certification of the entire Application for Payment, and notify the Contractor and Owner of the Architect's reason for withholding certification in whole as provided in Section 9.5.1.

§ 9.4.2 The issuance of a Certificate for Payment will constitute a representation by the Architect to the Owner, based on the Architect's evaluation of the Work and the data in the Application for Payment, that, to the best of the Architect's knowledge, information, and belief, the Work has progressed to the point indicated, the quality of the Work is in accordance with the Contract Documents, and that the Contractor is entitled to payment in the amount certified. The foregoing representations are subject to an evaluation of the Work for conformance with the Contract Documents upon Substantial Completion, to results of subsequent tests and inspections, to correction of minor deviations from the Contract Documents prior to completion, and to specific qualifications expressed by the Architect. However, the issuance of a Certificate for Payment will not be a representation that the Architect has (1) made exhaustive or continuous on-site inspections to check the quality or quantity of the Work; (2) reviewed construction means, methods, techniques, sequences, or procedures; (3) reviewed copies of requisitions received from Subcontractors and suppliers and other data requested by the Owner to substantiate the Contractor's right to payment; or (4) made examination to ascertain how or for what purpose the Contractor has used money previously paid on account of the Contract Sum.

§ 9.5 Decisions to Withhold Certification

§ 9.5.1 The Architect may withhold a Certificate for Payment in whole or in part, to the extent reasonably necessary to protect the Owner, if in the Architect's opinion the representations to the Owner required by Section 9.4.2 cannot be made. If the Architect is unable to certify payment in the amount of the Application, the Architect will notify the Contractor and Owner as provided in Section 9.4.1. If the Contractor and Architect cannot agree on a revised amount, the Architect will promptly issue a Certificate for Payment for the amount for which the Architect is able to make such representations to the Owner. The Architect may also withhold a Certificate for Payment or, because of subsequently discovered evidence, may nullify the whole or a part of a Certificate for Payment previously issued, to such extent as may be necessary in the Architect's opinion to protect the Owner from loss for which the Contractor is responsible, including loss resulting from acts and omissions described in Section 3.3.2, because of

.1 defective Work not remedied;

.2 third party claims filed or reasonable evidence indicating probable filing of such claims, unless security acceptable to the Owner is provided by the Contractor or covered by insurance or the basis of a Change Order;

.3 failure of the Contractor to make payments properly to Subcontractors or suppliers for labor, materials or equipment;

.4 reasonable evidence that the Work cannot be completed for the unpaid balance of the Contract Sum;

.5 damage to the Owner or a Separate Contractor not covered by insurance;

.6 reasonable evidence that the Work will not be completed within the Contract Time, and that the unpaid balance would not be adequate to cover actual or liquidated damages for the anticipated delay; or

.7 repeated failure to carry out the Work in accordance with the Contract Documents.

When the above reasons for withholding certification are removed, certification will be made for amounts previously withheld. The Owner shall not be deemed in default by reason of withholding payment while any of the above grounds remain uncured.

§ 9.5.2 When either party disputes the Architect's decision regarding a Certificate for Payment under Section 9.5.1, in whole or in part, that party may submit a Claim in accordance with Article 15. If the Contractor disputes any determination by the Architect with regard to any Certificate of Payment, the Contractor nevertheless shall expeditiously continue to execute the Work.

§ 9.5.3 When the reasons for withholding certification are removed, certification will be made for amounts previously withheld.

§ 9.5.4 If the Architect withholds certification for payment under Section 9.5.1.3, the Owner may, at its sole option, issue joint checks to the Contractor and to any Subcontractor or supplier to whom the Contractor failed to make payment for Work properly performed or material or equipment suitably delivered. If the Owner makes payments by joint check, the Owner shall notify the Architect and the Contractor shall reflect such payment on its next Application for Payment.

§ 9.6 Progress Payments

§ 9.6.1 After the Architect has issued a Certificate for Payment, the Owner shall make payment in the manner and within the time provided in the Contract Documents, and shall so notify the Architect.

§ 9.6.2 The Contractor shall pay each Subcontractor, no later than seven days after receipt of payment from the Owner or the Construction Manager, as the case may be, the amount to which the Subcontractor is entitled, reflecting percentages actually retained from payments to the Contractor on account of the Subcontractor's portion of the Work. The Contractor shall, by appropriate agreement with each Subcontractor, require each Subcontractor to make payments to Sub-subcontractors in a similar manner.

§ 9.6.3 The Architect will, on request, furnish to a Subcontractor, if practicable, information regarding percentages of completion or amounts applied for by the Contractor and action taken thereon by the Architect and Owner on account of portions of the Work done by such Subcontractor.

§ 9.6.4 The Owner or the Construction Manager, as the case may be, has the right to request written evidence from the Contractor that the Contractor has properly paid Subcontractors and suppliers amounts paid by the Owner to the Contractor for subcontracted Work. If the Contractor fails to furnish such evidence within seven days, the Owner or

the Construction Manager shall have the right to contact Subcontractors and suppliers to ascertain whether they have been properly paid. Neither the Owner, Construction Manager, nor Architect shall have an obligation to pay, or to see to the payment of money to, a Subcontractor or supplier, except as may otherwise be required by law.

§ 9.6.5 The Contractor's payments to suppliers shall be treated in a manner similar to that provided in Sections 9.6.2, 9.6.3 and 9.6.4.

§ 9.6.6 A Certificate for Payment, a progress payment, or partial or entire use or occupancy of the Project by the Owner shall not constitute acceptance of Work not in accordance with the Contract Documents.

§ 9.6.7 Unless the Contractor provides the Owner with a payment bond in the full penal sum of the Contract Sum, payments received by the Contractor for Work properly performed by Subcontractors or provided by suppliers shall be held by the Contractor for those Subcontractors or suppliers who performed Work or furnished materials, or both, under contract with the Contractor for which payment was made by the Owner. Nothing contained herein shall require money to be placed in a separate account and not commingled with money of the Contractor, create any fiduciary liability or tort liability on the part of the Contractor for breach of trust, or entitle any person or entity to an award of punitive damages against the Contractor for breach of the requirements of this provision.

§ 9.6.8 Provided the Owner has fulfilled its payment obligations under the Contract Documents, the Contractor shall defend and indemnify the Owner from all loss, liability, damage or expense, including reasonable attorney's fees and litigation expenses, arising out of any lien claim or other claim for payment by any Subcontractor or supplier of any tier. Upon receipt of notice of a lien claim or other claim for payment, the Owner shall notify the Contractor. If approved by the applicable court, when required, the Contractor may substitute a surety bond for the property against which the lien or other claim for payment has been asserted.

§ 9.7 Failure of Payment

If the Architect does not issue a Certificate for Payment, through no fault of the Contractor, within seven days after receipt of the Contractor's Application for Payment, or if the Owner or Construction Manager does not pay the Contractor within seven days after the date established in the Contract Documents, the amount certified by the Architect or awarded by binding dispute resolution, then the Contractor may, upon seven additional days' notice to the Owner and Architect, stop the Work until payment of the amount owing has been received. The Contract Time shall be extended appropriately and the Contract Sum shall be increased by the amount of the Contractor's reasonable costs of shutdown, delay and start-up, plus interest as provided for in the Contract Documents.

§ 9.8 Substantial Completion

§ 9.8.1 The Work shall be deemed substantially complete when the Contractor has completed the Work other than insubstantial details of construction and mechanical adjustment (the non-completion of which does not interfere with the Owner's occupancy and utilization of the Work for the uses and purposes intended) and a certificate of occupancy has been issued by the appropriate local authority.

§ 9.8.2 When the Construction Manager determines that the Work, or a portion thereof which the Owner agrees to accept separately, is substantially complete, the Construction Manager shall prepare and submit to the Architect a comprehensive list of items to be completed or corrected prior to final payment. Failure of the Construction Manager to include an item on such list does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract Documents. The Contractor shall reimburse Owner for all Architect's fees for Additional Services necessitated by the Architect being required to make Substantial Completion inspections beyond the initial inspection.

§ 9.8.3 Upon receipt of the Construction Manager's list, the Architect will make an inspection to determine whether the Work or designated portion thereof is substantially complete. If the Architect's inspection discloses any item, whether or not included on the Construction Manager's list, which is not sufficiently complete in accordance with the Contract Documents so that the Owner can occupy or utilize the Work or designated portion thereof for its intended use, the Contractor shall, before issuance of the Certificate of Substantial Completion, complete or correct such item upon notification by the Architect. In such case, the Contractor shall then submit a request for another inspection by the Architect to determine Substantial Completion.

§ 9.8.4 When the Work or designated portion thereof is substantially complete, the Architect will prepare a Certificate of Substantial Completion that shall establish the date of Substantial Completion; establish responsibilities of the

Owner and Contractor for security, maintenance, heat, utilities, damage to the Work and insurance; and fix the time within which the Contractor shall finish all items on the list accompanying the Certificate. Warranties required by the Contract Documents shall commence on the date of Substantial Completion of the Work or designated portion thereof unless otherwise provided in the Certificate of Substantial Completion. The Contractor is responsible for the warranty of all Work, whether performed by it or its Subcontractors at any tier.

§ 9.8.5 The Certificate of Substantial Completion shall be submitted to the Owner and Contractor for their written acceptance of responsibilities assigned to them in the Certificate. Upon such acceptance, and consent of surety if any, the Owner shall make payment of retainage applying to the Work or designated portion thereof. Such payment shall be adjusted for Work that is incomplete or not in accordance with the requirements of the Contract Documents.

§ 9.9 Partial Occupancy or Use

§ 9.9.1 The Owner may occupy or use any completed or partially completed portion of the Work at any stage when such portion is designated by separate agreement with the Construction Manager, provided such occupancy or use is consented to by the insurer and authorized by public authorities having jurisdiction over the Project. Such partial occupancy or use may commence whether or not the portion is substantially complete, provided the Owner and Construction Manager have accepted in writing the responsibilities assigned to each of them for payments, retainage, if any, security, maintenance, heat, utilities, damage to the Work and insurance, and have agreed in writing concerning the period for correction of the Work and commencement of warranties required by the Contract Documents. When the Construction Manager considers a portion substantially complete, the Construction Manager shall prepare and submit a list to the Architect as provided under Section 9.8.2. Consent of the Construction Manager to partial occupancy or use shall not be unreasonably withheld. The stage of the progress of the Work shall be determined by written agreement between the Owner and Contractor or, if no agreement is reached, by decision of the Architect.

§ 9.9.2 Immediately prior to such partial occupancy or use, the Owner, Contractor, and Architect shall jointly inspect the area to be occupied or portion of the Work to be used in order to determine and record the condition of the Work.

§ 9.9.3 Unless otherwise agreed upon, partial occupancy or use of a portion or portions of the Work shall not constitute acceptance of Work not complying with the requirements of the Contract Documents.

§ 9.10 Final Completion and Final Payment

§ 9.10.1 Upon receipt of the Construction Manager's notice that the Work is ready for final inspection and acceptance and upon receipt of a final Application for Payment, the Architect will promptly make such inspection. When the Architect finds the Work acceptable under the Contract Documents and the Contract fully performed, the Architect will promptly issue a final Certificate for Payment stating that to the best of the Architect's knowledge, information and belief, and on the basis of the Architect's on-site visits and inspections, the Work has been completed in accordance with the Contract Documents and that the entire balance found to be due the Construction Manager and noted in the final Certificate is due and payable. The Architect's final Certificate for Payment will constitute a further representation that conditions listed in Section 9.10.2 as precedent to the Construction Manager's being entitled to final payment have been fulfilled.

§ 9.10.2 Neither final payment nor any remaining retained percentage shall become due until the Construction Manager submits to the Architect (1) an affidavit that payrolls, bills for materials and equipment, and other indebtedness connected with the Work for which the Owner or the Owner's property might be responsible or encumbered (less amounts withheld by Owner) have been paid or otherwise satisfied, (2) a certificate evidencing that insurance required by the Contract Documents to remain in force after final payment is currently in effect, (3) a written statement that the Construction Manager knows of no reason that the insurance will not be renewable to cover the period required by the Contract Documents, (4) consent of surety, if any, to final payment, (5) documentation of any special warranties, such as manufacturers' warranties or specific Contractor or Subcontractor warranties, and (6) if required by the Owner, other data establishing payment or satisfaction of obligations, such as receipts and releases and waivers of liens, claims, security interests, or encumbrances arising out of the Contract, to the extent and in such form as may be designated by the Owner. If a Contractor or Subcontractor refuses to furnish a release or waiver required by the Owner, the Construction Manager may furnish a bond satisfactory to the Owner to indemnify the Owner against such lien, claim, security interest, or encumbrance. If a lien, claim, security interest, or encumbrance remains unsatisfied after payments are made, the Construction Manager shall refund to the Owner all money that the Owner may be compelled to pay in discharging the lien, claim, security interest, or encumbrance, including all costs and reasonable attorneys' fees.

§ 9.10.3 If, after Substantial Completion of the Work, final completion thereof is materially delayed through no fault of the Construction Manager or any Contractor or by issuance of Change Orders affecting final completion, and the Architect so confirms, the Owner shall, upon application by the Construction Manager and certification by the Architect, and without terminating the Contract, make payment of the balance due for that portion of the Work fully completed, corrected, and accepted. If the remaining balance for Work not fully completed or corrected is less than retainage stipulated in the Contract Documents, and if bonds have been furnished, the written consent of the surety to payment of the balance due for that portion of the Work fully completed and accepted shall be submitted by the Construction Manager to the Architect prior to certification of such payment. Such payment shall be made under terms and conditions governing final payment, except that it shall not constitute a waiver of Claims.

§ 9.10.4 The making of final payment shall constitute a waiver of Claims by the Owner except those arising from

.1 liens, Claims, security interests, or encumbrances arising out of the Contract and unsettled;
.2 failure of the Work to comply with the requirements of the Contract Documents;
.3 terms of special warranties required by the Contract Documents; or
.4 audits performed by the Owner, if permitted by the Contract Documents, after final payment.

§ 9.10.5 Acceptance of final payment by the Contractor, a Subcontractor, or a supplier, shall constitute a waiver of claims by that payee except those previously made in writing and identified by that payee as unsettled at the time of final Application for Payment.

ARTICLE 10 PROTECTION OF PERSONS AND PROPERTY

§ 10.1 Safety Precautions and Programs

The Contractor shall be responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the performance of the Contract.

§ 10.2 Safety of Persons and Property

§ 10.2.1 The Contractor shall take reasonable precautions for safety of, and shall provide reasonable protection to prevent damage, injury, or loss to

.1 employees on the Work, occupants of the building, and other persons who may be affected thereby;
.2 the Work and materials and equipment to be incorporated therein, whether in storage on or off the site, under care, custody, or control of the Contractor, a Subcontractor, or a Sub-subcontractor; and
.3 other property at the site or adjacent thereto, such as trees, shrubs, lawns, walks, pavements, roadways, structures, and utilities not designated for removal, relocation, or replacement in the course of construction.

§ 10.2.2 The Contractor shall comply with, and give notices required by applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities, bearing on safety of persons or property or their protection from damage, injury, or loss.

§ 10.2.3 The Contractor shall implement, erect, and maintain, as required by existing conditions and performance of the Contract, reasonable safeguards for safety and protection, including posting danger signs and other warnings against hazards; promulgating safety regulations; and notifying the owners and users of adjacent sites and utilities of the safeguards.

§ 10.2.4 When use or storage of explosives or other hazardous materials or equipment, or unusual methods are necessary for execution of the Work, the Contractor shall exercise utmost care and carry on such activities under supervision of properly qualified personnel.

§ 10.2.5 The Contractor shall promptly remedy damage and loss (other than damage or loss insured under property insurance required by the Contract Documents) to property referred to in Sections 10.2.1.2 and 10.2.1.3 caused in whole or in part by the Contractor, a Subcontractor, a Sub-subcontractor, or anyone directly or indirectly employed by any of them, or by anyone for whose acts they may be liable and for which the Contractor is responsible under Sections 10.2.1.2 and 10.2.1.3. The Contractor may make a Claim for the cost to remedy the damage or loss to the extent such damage or loss is attributable to acts or omissions of the Owner or Architect or anyone directly or indirectly employed by either of them, or by anyone for whose acts either of them may be liable, and not attributable to

the fault or negligence of the Contractor. The foregoing obligations of the Contractor are in addition to the Contractor's obligations under Section 3.18.

§ 10.2.6 The Contractor shall designate a responsible member of the Contractor's organization at the site whose duty shall be the prevention of accidents. This person shall be the Contractor's superintendent unless otherwise designated by the Contractor in writing to the Owner and Architect.

§ 10.2.7 The Contractor shall not permit any part of the construction or site to be loaded so as to cause damage or create an unsafe condition.

§ 10.2.8 Injury or Damage to Person or Property

If either party suffers injury or damage to person or property because of an act or omission of the other party, or of others for whose acts such party is legally responsible, notice of the injury or damage, whether or not insured, shall be given to the other party within a reasonable time not exceeding 21 days after discovery. The notice shall provide sufficient detail to enable the other party to investigate the matter.

§ 10.3 Hazardous Materials and Substances

§ 10.3.1 The Contractor is responsible for compliance with any requirements included in the Contract Documents regarding hazardous materials or substances. If the Contractor encounters a hazardous material or substance not addressed in the Contract Documents and if reasonable precautions will be inadequate to prevent foreseeable bodily injury or death to persons resulting from a material or substance, including but not limited to asbestos or polychlorinated biphenyl (PCB), encountered on the site by the Contractor, the Contractor shall, upon recognizing the condition, immediately stop Work in the affected area and notify the Owner and Architect of the condition.

§ 10.3.2 Upon receipt of the Contractor's notice, the Owner shall obtain the services of a licensed laboratory to verify the presence or absence of the material or substance reported by the Contractor and, in the event such material or substance is found to be present, to cause it to be rendered harmless. Unless otherwise required by the Contract Documents, the Owner shall furnish in writing to the Contractor and Architect the names and qualifications of persons or entities who are to perform tests verifying the presence or absence of the material or substance or who are to perform the task of removal or safe containment of the material or substance. The Contractor and the Architect will promptly reply to the Owner in writing stating whether or not either has reasonable objection to the persons or entities proposed by the Owner. If either the Contractor or Architect has an objection to a person or entity proposed by the Owner, the Owner shall propose another to whom the Contractor and the Architect have no reasonable objection. When the material or substance has been rendered harmless, Work in the affected area shall resume upon written agreement of the Owner and Contractor. By Change Order, the Contract Time shall be extended appropriately and the Contract Sum shall be increased by the amount of the Contractor's reasonable additional costs of shutdown, delay, and start-up.

§ 10.3.3 To the fullest extent permitted by law, the Owner shall indemnify and hold harmless the Contractor, Subcontractors, Architect, Architect's consultants, and agents and employees of any of them from and against claims, damages, losses, and expenses, including but not limited to attorneys' fees, arising out of or resulting from performance of the Work in the affected area if in fact the material or substance presents the risk of bodily injury or death as described in Section 10.3.1 and has not been rendered harmless, provided that such claim, damage, loss, or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself), except to the extent that such damage, loss, or expense is due to the fault or negligence of the party seeking indemnity.

§ 10.3.4 The Owner shall not be responsible under this Section 10.3 for hazardous materials or substances the Contractor brings to the site unless such materials or substances are required by the Contract Documents. The Owner shall be responsible for hazardous materials or substances required by the Contract Documents, except to the extent of the Contractor's fault or negligence in the use and handling of such materials or substances.

§ 10.3.5 The Contractor shall reimburse the Owner for the cost and expense the Owner incurs (1) for remediation of hazardous materials or substances the Contractor brings to the site and negligently handles, or (2) where the Contractor fails to perform its obligations under Section 10.3.1, except to the extent that the cost and expense are due to the Owner's fault or negligence.

§ 10.3.6 If, without negligence on the part of the Contractor, the Contractor is held liable by a government agency for the cost of remediation of a hazardous material or substance by reason of performing Work as required by the Contract Documents, the Owner shall reimburse the Contractor for all cost and expense thereby incurred.

§ 10.4 Emergencies

In an emergency affecting safety of persons or property, the Contractor shall act, at the Contractor's discretion, to prevent threatened damage, injury, or loss. Additional compensation or extension of time claimed by the Contractor on account of an emergency shall be determined as provided in Article 15 and Article 7.

ARTICLE 11 INSURANCE AND BONDS

§ 11.1 Contractor's Insurance and Bonds

§ 11.1.1 The Contractor shall purchase and maintain insurance of the types and limits of liability, containing the endorsements, and subject to the terms and conditions, as described in the Agreement or elsewhere in the Contract Documents. The Contractor shall purchase and maintain the required insurance from an insurance company or insurance companies lawfully authorized to issue insurance in the jurisdiction where the Project is located. The Owner, Architect, and Architect's consultants shall be named as additional insureds under the Contractor's commercial general liability policy or as otherwise described in the Contract Documents.

The Contractor shall purchase and maintain insurance of the types and limits of liability, containing the endorsements, and subject to the terms and conditions, as described in the Agreement or elsewhere in the Contract documents. The contractor shall purchase and maintain the required insurance from an insurance company or insurance companies lawfully authorized to do business in the State of Illinois. The Owner, Architect, and Architect's consultants shall be named as additional insureds under the Contractors insurance policies. The insurance coverage afforded under policies described herein shall be primary and non-contributing with respect to any insurance carried independently by the Owner. Any such insurance carried by the Owner shall be on an excess basis only, and the liability of Contractor's insurer shall not be reduced by any such Owner's insurance. All such insurance policies shall indicate that as respects the insureds (whether named or otherwise), cross liability and severability of interests shall exist for all coverages provided thereunder, shall be purchased and maintained from insurance companies reasonably acceptable to Owner, shall be written on an occurrence basis, and shall incorporate a provision requiring the giving of notice to Owner at least thirty (30) days prior to the cancellation, non-renewal or material alteration of such policies. Commercial General Liability, Comprehensive Automobile Liability and Worker's Compensation Insurance policies shall contain waivers of subrogation in favor of the additional insureds. Such policies shall also contain a waiver of Contractor's and Contractor's insurer's right to recover payments from Owner even if Owner is otherwise liable for an injury covered by policies. The Contractor shall promptly furnish the Owner with certificates of insurance evidencing the insurance required hereunder and shall not commence any services under this Agreement until such insurance is obtained. Except as otherwise expressly provided herein, all insurance policies required by the terms of this Paragraph 11.1 shall be kept in full force and effect until the date of final payment to Contractor for the services designated hereunder.

§ 11.1.2 Within ten (10) days of the execution of the Contract, the Contractor shall furnish a Performance Bond and a Payment Bond. The Performance bond shall be in an amount equal to One Hundred Percent (100%) of the full amount of its Contract Sum as security for the faithful performance of the Contract Documents, and the Payment Bond shall be in an amount equal to One Hundred Percent (100%) of the full amount of the Contract Sum as security for the payment of all persons performing labor and furnishing materials in connection with the Contract Documents. Such bonds shall be in a form and with a surety acceptable to the Owner and shall not include limitation period shorter than that provided by Illinois law. The bonds shall name the Owner as Primary Co-Obligee and the Construction Manager as Dual Obligee.

The Performance Bond and the Labor and Material Payment Bond shall guarantee the performance of the duties placed on the Contractor pursuant to the contract with the Owner, and shall indemnify the Owner from any liability or loss resulting to the Owner from any failure of the Contractor fully to perform each or all of said duties. The Performance Bond and the Payment Bond shall be deemed to cover all such duties.

The Performance Bond and the Payment Bond herein shall be placed with a surety company or companies having a policyholders' rating not lower than "A-" and a financial rating not lower than "XII" in Best's Insurance Guide (current edition), unless a lower rating is approved by the Owner, in writing.

All bonds shall include a specific obligation of the Surety to guarantee the faithful performance of the Contractor under the Illinois Prevailing Wage Law.

The bonds shall comply with the Public Construction Bond Act, 30 ILCS 550/1. Whenever the Contractor shall be and is declared by the Owner or Construction Manager to be in default under the Contract, the surety of the Contractor shall be responsible to make full payment to the Owner or Construction Manager for any and all extra work and accounting and other expenses incurred by the Architect and Construction Manager as a result of a Contractor's default and to pay the Owner and Construction Manager all attorney's fees in addition to paying testing, consulting, engineering, accounting and court costs incurred by Owner or Construction Manager as a result of a Contractor's default and in protecting the Owner's and Construction Manager's rights under the agreement with the Contractor to remedy the Contractor's default or honor the terms of the Performance Bond.

§ 11.1.3 Upon the request of any person or entity appearing to be a potential beneficiary of bonds covering payment of obligations arising under the Contract, the Contractor shall promptly furnish a copy of the bonds or shall authorize a copy to be furnished.

§ 11.1.4 Notice of Cancellation or Expiration of Contractor's Required Insurance. Within three (3) business days of the date the Contractor becomes aware of an impending or actual cancellation or expiration of any insurance required by the Contract Documents, the Contractor shall provide notice to the Owner and the Construction Manager of such impending or actual cancellation or expiration. Upon receipt of notice from the Contractor, the Owner shall, unless the lapse in coverage arises from an act or omission of the Owner, have the right to stop the Work until the lapse in coverage has been cured by the procurement of replacement coverage by the Contractor. The furnishing of notice by the Contractor shall not relieve the Contractor of any contractual obligation to provide any required coverage.

§ 11.2 Owner's Insurance

§ 11.2.1 The Owner shall purchase and maintain insurance of the types and limits of liability, containing the endorsements, and subject to the terms and conditions, as described in the Agreement or elsewhere in the Contract Documents. The Owner shall purchase and maintain the required insurance from an insurance company or insurance companies lawfully authorized to issue insurance in the jurisdiction where the Project is located. The Owner shall not insure nor be responsible for any loss or damage to tools, equipment or other property of any kind owned, rented or leased by the Contractor, Subcontractors, sub-subcontractors, or their respective employees or agents.

§ 11.2.2 Failure to Purchase Required Property Insurance. If the Owner fails to purchase and maintain the required property insurance, with all of the coverages and in the amounts described in the Agreement or elsewhere in the Contract Documents, the Owner shall inform the Contractor in writing prior to commencement of the Work. Upon receipt of notice from the Owner, the Contractor may delay commencement of the Work and may obtain insurance that will protect the interests of the Contractor, Subcontractors, and Sub-Subcontractors in the Work. When the failure to provide coverage has been cured or resolved, the Contract Sum and Contract Time shall be equitably adjusted. In the event the Owner fails to procure coverage, the Owner waives all rights against the Contractor, Subcontractors, and Sub-subcontractors to the extent the loss to the Owner would have been covered by the insurance to have been procured by the Owner. The cost of the insurance shall be charged to the Owner by a Change Order. If the Owner does not provide written notice, and the Contractor is damaged by the failure or neglect of the Owner to purchase or maintain the required insurance, the Owner shall reimburse the Contractor for all reasonable costs and damages attributable thereto.

§ 11.2.3 Notice of Cancellation or Expiration of Owner's Required Property Insurance. Within three (3) business days of the date the Owner becomes aware of an impending or actual cancellation or expiration of any property insurance required by the Contract Documents, the Owner shall provide notice to the Contractor of such impending or actual cancellation or expiration. Unless the lapse in coverage arises from an act or omission of the Contractor: (1) the Contractor, upon receipt of notice from the Owner, shall have the right to stop the Work until the lapse in coverage has been cured by the procurement of replacement coverage by either the Owner or the Contractor; (2) the Contract Time and Contract Sum shall be equitably adjusted; and (3) the Owner waives all rights against the Contractor, Subcontractors, and Sub-subcontractors to the extent any loss to the Owner would have been covered by the insurance had it not expired or been cancelled. If the Contractor purchases replacement coverage, the cost of the insurance shall be charged to the Owner by an appropriate Change Order. The furnishing of notice by the Owner shall not relieve the Owner of any contractual obligation to provide required insurance.

§ 11.3 Waivers of Subrogation

§ 11.3.1 The Owner and Contractor waive all rights against (1) each other and any of their subcontractors, sub-subcontractors, agents, and employees, each of the other; (2) the Architect and Architect's consultants; and (3) Separate Contractors, if any, and any of their subcontractors, sub-subcontractors, agents, and employees, for damages caused by fire, or other causes of loss, to the extent those losses are covered by property insurance required by the Agreement or other property insurance applicable to the Project, except such rights as they have to proceeds of such insurance. The Owner or Contractor, as appropriate, shall require similar written waivers in favor of the individuals and entities identified above from the Architect, Architect's consultants, Separate Contractors, subcontractors, and sub-subcontractors. The policies of insurance purchased and maintained by each person or entity agreeing to waive claims pursuant to this section 11.3.1 shall not prohibit this waiver of subrogation. This waiver of subrogation shall be effective as to a person or entity (1) even though that person or entity would otherwise have a duty of indemnification, contractual or otherwise, (2) even though that person or entity did not pay the insurance premium directly or indirectly, or (3) whether or not the person or entity had an insurable interest in the damaged property.

§ 11.3.2 If during the Project construction period the Owner insures properties, real or personal or both, at or adjacent to the site by property insurance under policies separate from those insuring the Project, or if after final payment property insurance is to be provided on the completed Project through a policy or policies other than those insuring the Project during the construction period, to the extent permissible by such policies, the Owner waives all rights in accordance with the terms of Section 11.3.1 for damages caused by fire or other causes of loss covered by this separate property insurance.

§ 11.4 Loss of Use, Business Interruption, and Delay in Completion Insurance

The Owner, at the Owner's option, may purchase and maintain insurance that will protect the Owner against loss of use of the Owner's property, or the inability to conduct normal operations, due to fire or other causes of loss. The Owner waives all rights of action against the Contractor and Architect for loss of use of the Owner's property, due to fire or other hazards however caused.

§11.5 Adjustment and Settlement of Insured Loss

§ 11.5.1 A loss insured under the property insurance required by the Agreement shall be adjusted by the Owner as fiduciary and made payable to the Owner as fiduciary for the insureds, as their interests may appear, subject to requirements of any applicable mortgagee clause and of Section 11.5.2. The Owner shall pay the Architect and Contractor their just shares of insurance proceeds received by the Owner, and by appropriate agreements the Architect and Contractor shall make payments to their consultants and Subcontractors in similar manner.

§ 11.5.2 Prior to settlement of an insured loss, the Owner shall notify the Contractor of the terms of the proposed settlement as well as the proposed allocation of the insurance proceeds. The Contractor shall have 14 days from receipt of notice to object to the proposed settlement or allocation of the proceeds. If the Contractor does not object, the Owner shall settle the loss and the Contractor shall be bound by the settlement and allocation. Upon receipt, the Owner shall deposit the insurance proceeds in a separate account and make the appropriate distributions. Thereafter, if no other agreement is made or the Owner does not terminate the Contract for convenience, the Owner and Contractor shall execute a Change Order for reconstruction of the damaged or destroyed Work in the amount allocated for that purpose. If the Contractor timely objects to either the terms of the proposed settlement or the allocation of the proceeds, the Owner may proceed to settle the insured loss, and any dispute between the Owner and Contractor arising out of the settlement or allocation of the proceeds shall be resolved pursuant to Article 15. Pending resolution of any dispute, the Owner may issue a Construction Change Directive for the reconstruction of the damaged or destroyed Work.

ARTICLE 12 UNCOVERING AND CORRECTION OF WORK

§ 12.1 Uncovering of Work

§ 12.1.1 If a portion of the Work is covered contrary to the Architect's request or to requirements specifically expressed in the Contract Documents, it must, if requested in writing by the Architect, be uncovered for the Architect's examination and be replaced at the Contractor's expense without change in the Contract Time.

§ 12.1.2 If a portion of the Work has been covered that the Architect has not specifically requested to examine prior to its being covered, the Architect may request to see such Work and it shall be uncovered by the Contractor. If such Work is in accordance with the Contract Documents, the Contractor shall be entitled to an equitable adjustment to the

Contract Sum and Contract Time as may be appropriate. If such Work is not in accordance with the Contract Documents, the costs of uncovering the Work, and the cost of correction, shall be at the Contractor's expense.

§ 12.2 Correction of Work

§ 12.2.1 Before Substantial Completion

The Contractor shall promptly correct Work rejected by the Architect or failing to conform to the requirements of the Contract Documents, discovered before Substantial Completion and whether or not fabricated, installed or completed. Costs of correcting such rejected Work, including additional testing and inspections, the cost of uncovering and replacement, and compensation for the Architect's services and expenses made necessary thereby, shall be at the Contractor's expense.

§ 12.2.2 After Substantial Completion

§ 12.2.2.1 In addition to the Contractor's obligations under Section 3.5, if, within one year after the date of Substantial Completion of the Work or designated portion thereof or after the date for commencement of warranties established under Section 9.9.1, or by terms of any applicable special warranty required by the Contract Documents, any of the Work is found to be not in accordance with the requirements of the Contract Documents, the Contractor shall correct it promptly at Contractor's expense after receipt of notice from the Owner to do so, unless the Owner has previously given the Contractor a written acceptance of such condition. The Owner shall give such notice promptly after discovery of the condition. If the Contractor fails to correct nonconforming Work within a reasonable time during that period after receipt of notice from the Owner or Architect, the Owner may correct it in accordance with Section 2.5.

§ 12.2.2.2 The one-year period for correction of Work shall be extended with respect to portions of Work first performed after Substantial Completion by the period of time between Substantial Completion and the actual completion of that portion of the Work.

§ 12.2.2.3 The one-year period for correction of Work shall not be extended by corrective Work performed by the Contractor pursuant to this Section 12.2.

§ 12.2.3 The Contractor shall remove from the site portions of the Work that are not in accordance with the requirements of the Contract Documents and are neither corrected by the Contractor nor accepted by the Owner.

§ 12.2.4 The Contractor shall bear the cost of correcting destroyed or damaged construction of the Owner or Separate Contractors, whether completed or partially completed, caused by the Contractor's correction or removal of Work that is not in accordance with the requirements of the Contract Documents.

§ 12.2.5 Nothing contained in this Section 12.2 shall be construed to establish a period of limitation with respect to other obligations the Contractor has under the Contract Documents. Establishment of the one-year period for correction of Work as described in Section 12.2.2 relates only to the specific obligation of the Contractor to correct the Work, and has no relationship to the time within which the obligation to comply with the Contract Documents may be sought to be enforced, nor to the time within which proceedings may be commenced to establish the Contractor's liability with respect to the Contractor's obligations other than specifically to correct the Work.

§ 12.3 Acceptance of Nonconforming Work

If the Owner prefers to accept Work that is not in accordance with the requirements of the Contract Documents, the Owner may do so instead of requiring its removal and correction, in which case the Contract Sum will be reduced as appropriate and equitable. Such adjustment shall be effected whether or not final payment has been made.

ARTICLE 13 MISCELLANEOUS PROVISIONS

§ 13.1 Governing Law

The Contract shall be governed by the law of the place where the Project is located, excluding that jurisdiction's choice of law rules.

§ 13.2 Successors and Assigns

§ 13.2.1 The Owner and Contractor respectively bind themselves, their partners, successors, assigns, and legal representatives to covenants, agreements, and obligations contained in the Contract Documents. Except as provided in Section 13.2.2, neither party to the Contract shall assign the Contract as a whole without written consent of the other.

If either party attempts to make an assignment without such consent, that party shall nevertheless remain legally responsible for all obligations under the Contract.

§ 13.2.2 The Owner may, without consent of the Contractor, assign the Contract to a lender providing construction financing for the Project, if the lender assumes the Owner's rights and obligations under the Contract Documents. The Contractor shall execute all consents reasonably required to facilitate the assignment.

§ 13.3 Rights and Remedies

§ 13.3.1 Duties and obligations imposed by the Contract Documents and rights and remedies available thereunder shall be in addition to and not a limitation of duties, obligations, rights, and remedies otherwise imposed or available by law.

§ 13.3.2 No action or failure to act by the Owner, Construction Manager, Architect, or Contractor shall constitute a waiver of a right or duty afforded them under the Contract, nor shall such action or failure to act constitute approval of or acquiescence in a breach thereunder, except as may be specifically agreed upon in writing.

§ 13.3.3 No provision contained in the Contract Documents shall create or give to third parties any claim or right of action against the Owner or the Construction Manager except as specifically provided herein.

§ 13.4 Tests and Inspections

§ 13.4.1 Tests, inspections, and approvals of portions of the Work shall be made as required by the Contract Documents and by applicable laws, statutes, ordinances, codes, rules, and regulations or lawful orders of public authorities. Unless otherwise provided, the Contractor shall make arrangements for such tests, inspections, and approvals with an independent testing laboratory or entity acceptable to the Owner, or with the appropriate public authority, and shall bear all related costs of tests, inspections, and approvals. The Contractor shall give the Architect timely notice of when and where tests and inspections are to be made so that the Architect may be present for such procedures. The Owner shall bear costs of tests, inspections, or approvals that do not become requirements until after bids are received or negotiations concluded. The Owner shall directly arrange and pay for tests, inspections, or approvals where building codes or applicable laws or regulations so require.

§ 13.4.2 If the Architect, Owner, or public authorities having jurisdiction determine that portions of the Work require additional testing, inspection, or approval not included under Section 13.4.1, the Architect will, upon written authorization from the Owner, instruct the Contractor to make arrangements for such additional testing, inspection, or approval, by an entity acceptable to the Owner, and the Contractor shall give timely notice to the Architect of when and where tests and inspections are to be made so that the Architect may be present for such procedures. Such costs, except as provided in Section 13.4.3, shall be at the Owner's expense.

§ 13.4.3 If procedures for testing, inspection, or approval under Sections 13.4.1 and 13.4.2 reveal failure of the portions of the Work to comply with requirements established by the Contract Documents, all costs made necessary by such failure, including those of repeated procedures and compensation for the Architect's services and expenses, shall be at the Contractor's expense.

§ 13.4.4 Required certificates of testing, inspection, or approval shall, unless otherwise required by the Contract Documents, be secured by the Contractor and promptly delivered to the Architect.

§ 13.4.5 If the Architect is to observe tests, inspections, or approvals required by the Contract Documents, the Architect will do so promptly and, where practicable, at the normal place of testing.

§ 13.4.6 Tests or inspections conducted pursuant to the Contract Documents shall be made promptly to avoid unreasonable delay in the Work.

§ 13.5 Interest

Payments due and unpaid under the Contract Documents shall be in accordance with the Illinois Local Government Prompt Payment Act, 50 ILCS 505/1 et seq. ("Act"). Provided, however, that the Owner shall not be deemed in violation of the Act for failure of the Construction Manager to timely distribute payment to the Contractor, where payments were made by the Owner to the Construction Manager in accordance with the Act and the Contract Documents.

§ 13.6 The Contractor agrees to fully comply with the requirement of the Illinois Human Rights Act, 775 ILCS 5/1-101 et seq., including, but not limited to, the provision of sexual harassment policies and procedures pursuant to Section 2-105 of the Act. The Contractor further agrees to comply with all federal Equal Employment Opportunity Laws, including, but not limited to, the Americans With Disabilities Act, 42 U.S.C. Section 12101 et seq., and rules and regulations promulgated thereunder.

As required by Illinois law, in the event of the Contractor's non-compliance with the provisions of this Equal Employment Opportunity provision, the Illinois Human Rights Act or the Rules and Regulations of the Illinois Department of Human Rights ("Department"), the Contractor may be declared ineligible for future contracts or subcontracts with the State of Illinois or any of its political subdivisions or municipal corporations, and the contract may be canceled or voided in whole or in part, and such other sanctions or penalties may be imposed or remedies invoked as provided by statute or regulation. During the performance of this contract, the Contractor agrees as follows:

(a) That it will not discriminate against any employee or applicant for employment because of race, color, religion, sex, national origin, ancestry, age, order of protection status, marital status, physical or mental disability, military status, sexual orientation, or unfavorable discharge from military service; and agrees further that it will examine all job classifications to determine if minority persons or women are underutilized and will take appropriate affirmative action to rectify any such underutilization.

(b) That, if it hires additional employees in order to perform this contract or any portion thereof, it will determine the availability (in accordance with the Department's Rules) of minorities and women in the area(s) from which it may reasonably recruit and it will hire for each job classification for which employees are hired in such a way that minorities and women are not underutilized.

(c) That, in all solicitations or advertisements for employees placed by it or on its behalf, it will state that all applicants will be afforded equal opportunity without discrimination because of race, color, religion, sex, national origin, ancestry, age, order of protection status, marital status, physical or mental disability, military status, sexual orientation, or unfavorable discharge from military service.

(d) That it will send to each labor organization or representative of workers with which it has or is bound by a collective bargaining or other agreement or understanding, a notice advising such labor organization or representative of the Contractor's obligations under the Illinois Human Rights Act and the Department's Rules. If any such labor organization or representative fails or refuses to cooperate with the Contractor in its efforts to comply with such Act and Rules, the Contractor will promptly so notify the Department and the contracting agency and will recruit employees from other sources when necessary to fulfill its obligations thereunder.

(e) That it will submit reports as required by the Department's Rules, furnish all relevant information as may from time to time be requested by the Department or the contracting agency, and in all respects comply with the Illinois Human Rights Act and the Department's Rules.

(f) That it will permit access to all relevant books, records, accounts and work sites by personnel of the contracting agency and the Department for purposes of investigation to ascertain compliance with the Illinois Human Rights Act and the Department's Rules.

(g) That it will include verbatim or by reference the provisions of this clause in every subcontract it awards under which any portion of the contract obligations are undertaken or assumed, so that such provisions will be binding upon such subcontractor. In the same manner as with other provisions of this contract, the Contractor will be liable for compliance with applicable provisions of this clause by such subcontractors; and agrees further it will promptly notify the contracting agency and the Department in the event any subcontractor fails or refuses to comply therewith. In addition, the Contractor will not utilize any subcontractor declared by the Illinois Human Rights Commission to be ineligible for contracts or subcontracts with the State of Illinois or any of its political subdivisions or municipal corporations.

The Contractor and all of its subcontractors shall pay to any laborers, workmen and mechanics, who are employed in actual construction work on the site of the construction project, not less than the prevailing rate of wages as determined by the Illinois Department of Labor.

ARTICLE 14 TERMINATION OR SUSPENSION OF THE CONTRACT

§ 14.1 Termination by the Contractor

§ 14.1.1 The Contractor may terminate the Contract if the Work is stopped for a period of 30 consecutive days through no act or fault of the Contractor, a Subcontractor, a Sub-subcontractor, their agents or employees, or any other persons or entities performing portions of the Work, for any of the following reasons:

.1 Issuance of an order of a court or other public authority having jurisdiction that requires all Work to be stopped;

.2 An act of government, such as a declaration of national emergency, that requires all Work to be stopped;

.3 Because the Architect has not issued a Certificate for Payment and has not notified the Contractor of the reason for withholding certification as provided in Section 9.4.1, or because the Owner has not made payment on a Certificate for Payment within the time stated in the Contract Documents; or

.4 The Owner has failed to furnish to the Contractor reasonable evidence as required by Section 2.2.

§ 14.1.2 The Contractor may terminate the Contract if, through no act or fault of the Contractor, a Subcontractor, a Sub-subcontractor, their agents or employees, or any other persons or entities performing portions of the Work, repeated suspensions, delays, or interruptions of the entire Work by the Owner as described in Section 14.3, constitute in the aggregate more than 100 percent of the total number of days scheduled for completion, or 120 days in any 365-day period, whichever is less.

§ 14.1.3 If one of the reasons described in Section 14.1.1 or 14.1.2 exists, the Contractor may, upon seven days' notice to the Owner and Architect, terminate the Contract and recover from the Owner payment for Work executed, as well as reasonable overhead and profit on Work not executed, and costs incurred by reason of such termination.

§ 14.1.4 If the Work is stopped for a period of 60 consecutive days through no act or fault of the Contractor, a Subcontractor, a Sub-subcontractor, or their agents or employees or any other persons or entities performing portions of the Work because the Owner has repeatedly failed to fulfill the Owner's obligations under the Contract Documents with respect to matters important to the progress of the Work, the Contractor may, upon seven additional days' notice to the Owner and the Architect, terminate the Contract and recover from the Owner as provided in Section 14.1.3.

§ 14.2 Termination by the Owner for Cause

§ 14.2.1 The Owner may terminate the Contract if the Contractor

.1 repeatedly refuses or fails to supply enough properly skilled workers or proper materials;

.2 fails to make payment to Subcontractors or suppliers in accordance with the respective agreements between the Contractor and the Subcontractors or suppliers;

.3 repeatedly disregards applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of a public authority; or

.4 otherwise is guilty of substantial breach of a provision of the Contract Documents.

§ 14.2.2 When any of the reasons described in Section 14.2.1 exist, and upon certification by the Architect that sufficient cause exists to justify such action, the Owner may, without prejudice to any other rights or remedies of the Owner and after giving the Contractor and the Contractor's surety, if any, seven days' notice, terminate employment of the Contractor and may, subject to any prior rights of the surety:

.1 Exclude the Contractor from the site and take possession of all materials, equipment, and construction equipment and machinery thereon paid for by the Owner;

.2 Accept assignment of subcontracts pursuant to Section 5.4; and

.3 Finish the Work by whatever reasonable method the Owner may deem expedient. Upon written request of the Contractor, the Owner shall furnish to the Contractor a detailed accounting of the costs incurred by the Owner in finishing the Work.

§ 14.2.3 When the Owner terminates the Contract for one of the reasons stated in Section 14.2.1, the Contractor shall not be entitled to receive further payment until the Work is finished.

§ 14.2.4 If the unpaid balance of the Contract Sum exceeds all costs to the Owner of completing the Work, then upon Final Completion of the Work the Contractor shall be paid the difference between the balance of the Contract Sum and the costs to the Owner of completing the Work, less such sums as the Owner may deduct for other damages, costs,

liens, or other matters arising under the Contract Documents. If all costs to the Owner of completing the Work exceed the unpaid balance of the Contract Sum, the Contractor shall pay the difference to the Owner immediately upon the Owner's demand. The costs to the Owner of completing the Work shall include (but not be limited to) the cost of any additional architectural, managerial, and administrative services required thereby, any costs incurred in retaining another contractor or other subcontractors, any additional interest or fees which the Owner must pay by reason of a delay in completion of the Work, attorneys' fees and expenses, and any other damages, costs, and expenses the Owner may incur by reason of completing the Work or any delay thereof. The amount, if any, to be paid to the Contractor shall be certified by the Architect, upon application, and this obligation for payment shall survive the termination of the Contract.

§ 14.3 Suspension by the Owner for Convenience

§ 14.3.1 The Owner may, without cause, order the Construction Manager in writing to suspend, delay or interrupt the Work, in whole or in part for such period of time as the Owner may determine.

§ 14.3.2 The Contract Sum and Contract Time shall be adjusted for increases in the cost and time caused by suspension, delay, or interruption under Section 14.3.1. Adjustment of the Contract Sum shall include profit. No adjustment shall be made to the extent

- .1 that performance is, was, or would have been, so suspended, delayed, or interrupted, by another cause for which the Contractor is responsible; or
- .2 that an equitable adjustment is made or denied under another provision of the Contract.

§ 14.4 Termination by the Owner for Convenience

§ 14.4.1 The Owner may, at any time, terminate the Contract for the Owner's convenience and without cause.

§ 14.4.2 Upon receipt of notice from the Owner of such termination for the Owner's convenience, the Contractor shall

- .1 cease operations as directed by the Owner in the notice;
- .2 take actions necessary, or that the Owner may direct, for the protection and preservation of the Work; and
- .3 except for Work directed to be performed prior to the effective date of termination stated in the notice, terminate all existing subcontracts and purchase orders and enter into no further subcontracts and purchase orders.

§ 14.4.3 In case of such termination for the Owner's convenience, the Owner shall pay the Contractor for Work properly executed; costs incurred by reason of the termination, including costs attributable to termination of Subcontracts; and the termination fee, if any, set forth in the Agreement.

§ 14.5 Termination by the Construction Manager

§ 14.5.1 Construction Manager shall obtain Owner's authorization before terminating any Contract pursuant to this Article 14 that has been assigned to the Construction Manager by Owner pursuant to Section 1.1.14 of the Agreement.

ARTICLE 15 CLAIMS AND DISPUTES

§ 15.1 Claims

§ 15.1.1 Definition

A Claim is a demand or assertion by one of the parties seeking, as a matter of right, payment of money, a change in the Contract Time, or other relief with respect to the terms of the Contract. The term "Claim" also includes other disputes and matters in question between the Owner and Contractor arising out of or relating to the Contract. The responsibility to substantiate Claims shall rest with the party making the Claim. This Section 15.1.1 does not require the Owner to file a Claim in order to impose liquidated damages in accordance with the Contract Documents.

§ 15.1.2 Time Limits on Claims

The Owner and Contractor shall commence all Claims and causes of action against the other and arising out of or related to the Contract, whether in contract, tort, breach of warranty or otherwise, in accordance with the requirements of the binding dispute resolution method selected in the Agreement and within the period specified by applicable law, but in any case not more than 10 years after the date of Substantial Completion of the Work. The Owner and Contractor waive all Claims and causes of action not commenced in accordance with this Section 15.1.2.

§ 15.1.3 Notice of Claims

§ 15.1.3.1 Claims by either the Owner or Contractor, where the condition giving rise to the Claim is first discovered prior to expiration of the period for correction of the Work set forth in Section 12.2.2, shall be initiated by notice to the other party and to the Initial Decision Maker with a copy sent to the Architect, if the Architect is not serving as the Initial Decision Maker. Claims by either party under this Section 15.1.3.1 shall be initiated within 21 days after occurrence of the event giving rise to such Claim or within 21 days after the claimant first recognizes the condition giving rise to the Claim, whichever is later.

§ 15.1.3.2 Claims by either the Owner or Contractor, where the condition giving rise to the Claim is first discovered after expiration of the period for correction of the Work set forth in Section 12.2.2, shall be initiated by notice to the other party. In such event, no decision by the Initial Decision Maker is required.

§ 15.1.4 Continuing Contract Performance

§ 15.1.4.1 Pending final resolution of a Claim, except as otherwise agreed in writing or as provided in Section 9.7 and Article 14, the Contractor shall proceed diligently with performance of the Contract and the Owner shall continue to make payments in accordance with the Contract Documents.

§ 15.1.4.2 The Contract Sum and Contract Time shall be adjusted in accordance with the Initial Decision Maker's decision, subject to the right of either party to proceed in accordance with this Article 15. The Architect will issue Certificates for Payment in accordance with the decision of the Initial Decision Maker.

§ 15.1.5 Claims for Additional Cost

If the Contractor wishes to make a Claim for an increase in the Contract Sum, notice as provided in Section 15.1.3 shall be given before proceeding to execute the portion of the Work that is the subject of the Claim. Prior notice is not required for Claims relating to an emergency endangering life or property arising under Section 10.4.

§ 15.1.6 Claims for Additional Time

§ 15.1.6.1 If the Contractor wishes to make a Claim for an increase in the Contract Time, notice as provided in Section 15.1.3 shall be given. The Contractor's Claim shall include an estimate of cost and of probable effect of delay on progress of the Work. In the case of a continuing delay, only one Claim is necessary.

§ 15.1.6.2 If adverse weather conditions are the basis for a Claim for additional time, such Claim shall be documented by data substantiating that weather conditions were abnormal for the period of time, could not have been reasonably anticipated, and had an adverse effect on the scheduled construction in accordance with 8.3.4.

§ 15.1.7 Waiver of Claims for Consequential Damages

The Contractor and Owner waive Claims against each other for consequential damages arising out of or relating to this Contract. This mutual waiver includes

.1 damages incurred by the Owner for rental expenses, for losses of use, income, profit, financing, business and reputation, and for loss of management or employee productivity or of the services of such persons; and

.2 damages incurred by the Contractor for principal office expenses including the compensation of personnel stationed there, for losses of financing, business and reputation, and for loss of profit, except anticipated profit arising directly from the Work.

This mutual waiver is applicable, without limitation, to all consequential damages due to either party's termination in accordance with Article 14. Nothing contained in this Section 15.1.7 shall be deemed to preclude assessment of liquidated damages, when applicable, in accordance with the requirements of the Contract Documents.

§ 15.2 Initial Decision

§ 15.2.1 Claims, excluding those where the condition giving rise to the Claim is first discovered after expiration of the period for correction of the Work set forth in Section 12.2.2 or arising under Sections 10.3, 10.4, and 11.5, shall be referred to the Initial Decision Maker for initial decision. The Architect will serve as the Initial Decision Maker, unless otherwise indicated in the Agreement. Except for those Claims excluded by this Section 15.2.1, an initial decision shall be required as a condition precedent to mediation of any Claim. If an initial decision has not been rendered within 30 days after the Claim has been referred to the Initial Decision Maker, the party asserting the Claim may demand mediation and binding dispute resolution without a decision having been rendered. Unless the Initial Decision Maker

and all affected parties agree, the Initial Decision Maker will not decide disputes between the Contractor and persons or entities other than the Owner.

§ 15.2.2 The Initial Decision Maker will review Claims and within ten days of the receipt of a Claim take one or more of the following actions: (1) request additional supporting data from the claimant or a response with supporting data from the other party, (2) reject the Claim in whole or in part, (3) approve the Claim, (4) suggest a compromise, or (5) advise the parties that the Initial Decision Maker is unable to resolve the Claim if the Initial Decision Maker lacks sufficient information to evaluate the merits of the Claim or if the Initial Decision Maker concludes that, in the Initial Decision Maker's sole discretion, it would be inappropriate for the Initial Decision Maker to resolve the Claim.

§ 15.2.3 In evaluating Claims, the Initial Decision Maker may, but shall not be obligated to, consult with or seek information from either party or from persons with special knowledge or expertise who may assist the Initial Decision Maker in rendering a decision. The Initial Decision Maker may request the Owner to authorize retention of such persons at the Owner's expense.

§ 15.2.4 If the Initial Decision Maker requests a party to provide a response to a Claim or to furnish additional supporting data, such party shall respond, within ten days after receipt of the request, and shall either (1) provide a response on the requested supporting data, (2) advise the Initial Decision Maker when the response or supporting data will be furnished, or (3) advise the Initial Decision Maker that no supporting data will be furnished. Upon receipt of the response or supporting data, if any, the Initial Decision Maker will either reject or approve the Claim in whole or in part.

§ 15.2.5 The Initial Decision Maker will render an initial decision approving or rejecting the Claim, or indicating that the Initial Decision Maker is unable to resolve the Claim. This initial decision shall (1) be in writing; (2) state the reasons therefor; and (3) notify the parties and the Architect, if the Architect is not serving as the Initial Decision Maker, of any change in the Contract Sum or Contract Time or both. The initial decision shall be final and binding on the parties but subject to mediation and, if the parties fail to resolve their dispute through mediation, to binding dispute resolution.

§ 15.2.6 Either party may file for mediation of an initial decision at any time.

§ 15.2.6.1 Intentionally Deleted

§ 15.2.7 In the event of a Claim against the Contractor, the Owner may, but is not obligated to, notify the surety, if any, of the nature and amount of the Claim. If the Claim relates to a possibility of a Contractor's default, the Owner may, but is not obligated to, notify the surety and request the surety's assistance in resolving the controversy.

§ 15.2.8 If a Claim relates to or is the subject of a mechanic's lien, the party asserting such Claim may proceed in accordance with applicable law to comply with the lien notice or filing deadlines.

§ 15.3 Mediation

§ 15.3.1 Claims, disputes, or other matters in controversy arising out of or related to the Contract, except those waived as provided for in Sections 9.10.4, 9.10.5, and 15.1.7, may, by agreement of the parties to the Claim, be submitted to mediation prior to submitting such Claim for binding dispute resolution..

§ 15.3.2 If the parties agree to submit a Claim to mediation, unless the parties mutually agree otherwise, the mediation shall be administered by the American Arbitration Association in accordance with its Construction Industry Mediation Procedures in effect on the date of the Agreement. A request for mediation shall be made in writing, delivered to the other party to the Contract, and filed with the person or entity administering the mediation. The request may be made concurrently with the filing of binding dispute resolution proceedings but, in such event, mediation shall proceed in advance of binding dispute resolution proceedings, which shall be stayed pending mediation for a period of 60 days from the date of filing, unless stayed for a longer period by agreement of the parties or court order. If an arbitration is stayed pursuant to this Section 15.3.2, the parties may nonetheless proceed to the selection of the arbitrator(s) and agree upon a schedule for later proceedings.

§ 15.3.3 Intentionally Deleted

§ 15.3.4 The parties shall share the mediator's fee and any filing fees equally. The mediation shall be held in the place where the Project is located, unless another location is mutually agreed upon. Agreements reached in mediation shall be enforceable as settlement agreements in any court having jurisdiction thereof.

§ 15.4 Arbitration – Intentionally Deleted
§ 15.4.1

(Paragraphs deleted)

ARTICLE 16 CONTRACTOR REPRESENTATIONS AND WARRANTIES

§ 16.1 Contractor hereby represents and warrants the following to Owner: (i) that the Contractor is authorized to do business in the State of Illinois and is properly licensed by all necessary governmental and quasi-governmental authorities having jurisdiction over the Contractor, the Work and/or the Project, and (ii) that the Contractor's execution and delivery of this Agreement, and/or its performance thereunder, is within its duly authorized powers.

§ 16.2 The Contractor shall be solely and fully responsible for any loss or theft, or damage to, the Work (including without limitation, any materials or equipment stored on or off the Project site or while in transit) and shall promptly repair or replace any such part or portion of the Work. In connection therewith, the Contractor is responsible for providing temporary weather enclosures when appropriate.

§ 16.3 The Contractor shall provide (i) all necessary refuse containers, (ii) porta-potties, (iii) temporary phone and portable water services, and temporary electrical circuits as provided in the electrical Specifications. The Contractor shall store all materials and equipment within the property lines of the Owner's property. The Contractor is also responsible for all barricades, lights, signs and security measures that may be necessary to discourage non-workers from entering the Project site. The Contractor shall immediately repair or replace any damage or loss to any public street or sidewalk and/or property of adjoining owners which is caused by the Contractor, a Subcontractor, a sub-subcontractor, or anyone directly or indirectly employed by any of them, or by anyone for whose acts they may be liable.

§ 16.4 The Contractor will complete the work in a manner that minimizes the impact on the Owner's operations and the Contractor will not (and will not permit any of its Subcontractors or sub-subcontractors) to interfere in any material way with the operation of the Owner's ordinary course of business.

ARTICLE 17 ATTORNEYS FEES IN EVENT OF BREACH

§ 17.1 In the event a party hereto files a suit in connection with this Contract or any provisions contained herein, then the party that prevails in such action shall be entitled to recover, in addition to all other remedies or damages, reasonable attorneys' fees and court costs incurred in such suit.