

ADDENDUM NO. FIVE

JOB NAME: KNOX COUNTY JAIL DESIGN

PROJECT NUMBER: 20-700-151-2

DATE OF ADDENDUM: 03/09/2022



A handwritten signature in cursive script that reads "Eric Weflen".

**Eric S. Weflen, AIA, NCARB
Indiana Registration No. AR11500136**

THIS ADDENDUM FORMS A PART OF THE CONTRACT DOCUMENTS AND IS ISSUED IN ACCORDANCE WITH THE INSTRUCTIONS TO BIDDERS. ACKNOWLEDGE RECEIPT OF THIS ADDENDUM BY SIGNING THE ADDENDUM ACKNOWLEDGEMENT SECTION OF YOUR PROPOSAL.

Specifications:


1. Specification No.: 01 12 00
Specification Title: Multiple Contract Summary
Description: Bid Package No. 6 Metal Studs, Drywall, Paint & Acoustic Ceilings
 - a) ADD: Specification Section 03 35 43 "Polished Concrete Finishing" to Bid Package
Scope of Work – material to be used for "SC-1" finished floor
2. Specification No.: 00 00 00
Specification Title: Specification Volume II Index
Description: Remove and replace with attached
3. Specification No.: 00 00 00
Specification Title: Specification Volume III Index
Description: Remove and replace with attached
4. Specification No.: 03 35 43
Specification Title: Polished Concrete Finishing
Description: Add attached specification.

5. Specification No.: 09 97 26
Specification Title: Cementitious Coating
Description: Remove specification.

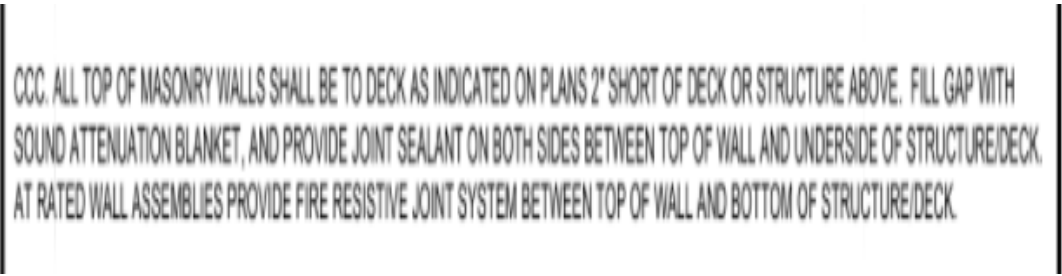
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Item No.	Item Description	Received From	Date Received	Date To RQAW	Response Date	Response
01	Area "C" – existing ceiling is not labeled for demolition (is this exposed as existing, Installation of new MEP will require access ?)	Garmong		2/2/2022		Added to set pre-addendum #1
02	Wall partition M10-D used on Area "D" – do not see that wall type on A002	Garmong		2/2/2022		Added to set pre-addendum #1
03	Finish Plan IN 101 1B1 – indicates new floor finishes in all rooms, excluding Kitchen (Kitchen is indicated as "existing" – are we providing new floor finish as indicated ? (New floor finishes in rooms not being remodeled will require contents removal / replacement – kitchen support areas / freezer will require shutdown)	Garmong		2/2/2022	2/16/2022	ADDN 02- Sheet IN101 1B Floor tags updated; Cart Storage 1316 flooring to match existing Kitchen 1309 flooring (Owner has attic storage product); Chemical Storage 1318 flooring to remain existing VCT (additional VCT may be required)
04	General Note Drawing IN 001 Existing areas "B" wall paint, at all rooms ?	Garmong		2/2/2022	2/16/2022	ADDN 02 - clarified in Interiors General Notes on Sheet IN001
05	Drawing partition type details to not reflect this construction 	Garmong		2/2/2022		See sheet A 335 Addendum #2
06	A reflected ceiling plan has not been provided for Area "C" (AC 1B1 for Area B extends into Area C, but indicates the existing ceiling is to remain. (Electrical is shown from feeding 1245 - 1247 area)	Garmong		2/2/2022		Added to set pre-addendum #1 (Garmong comment: please confirm for electrical feeds)
07	Civil Drawing C-300 does not indicate domestic water route into the building. Several utility pipe sizes are indicated as "X"	Garmong		2/2/2022		These will be addressed in Addendum #2
08	Drawn A210 REF Section 3A / A321 - drawing section doesn't appear to be the correct location at the exterior wall	Garmong		2/2/2022		Added to set pre-addendum #1
09	Site Electrical E010 does not indicate primary / secondary power feed to Unit "F", or emergency generator	Garmong		2/2/2022		Added to Addendum #2
10	Site Electrical E010 does not indicate revisions to accommodate Unit "D" alternates (relocation of generator, transformer etc.)	Garmong		2/2/2022		Added to Addendum #2

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11	Geotechnical Report - please provide document	Garmong		2/3/2022		Document provided
12	Volume II Index includes 05 40 00 Cold Formed Metal Framing - no specification has been included in the documents	Garmong		2/3/2022		ADDN 01 added specification
13	Specifications include Seismic Hanger sections for HVAC and Plumbing - No Seismic Hanger specification is included for Electrical	Garmong		2/3/2022		Addendum 03
14	A1-D5 (not in drawing index)	Garmong		2/7/2022		ADDN 01
15	AC-ALT-D1-D5 (not in drawing index)	Garmong		2/7/2022		ADDN 01
16	A400 (not in drawing index)	Garmong		2/7/2022		ADDN 01
17	S-012 (not in drawing index) S-301 (on drawing index, no physical drawings)S-302; S-303; SF-ALTD1-1; SR2D2; SR2F1 (not in drawing index)	Garmong		2/7/2022		ADDN 01 UPDATED DRAWING COVER SHEET , Addendum #2 added S-301
18	C000 & C602 (not in drawing index)	Garmong		2/7/2022		ADDN 01
19	FS100; FS300; FS400; FS500 (not in drawing index)	Garmong		2/7/2022		ADDN 01 UPDATED DRAWING COVER SHEET
20	P700; P701; P703 (not in drawing index)	Garmong		2/7/2022		ADDN 01 UPDATED DRAWING COVER SHEET
21	E001; E010, E392D (not in drawing index)	Garmong		2/7/2022		ADDN 01
22	E011; E012; E013; E110; E391D (on drawing index, no physical drawings)	Garmong		2/7/2022		E010, E011 Included in Addendum #2. E013 and E391D will be omitted.
23	E500; E292D ; ES104D; ES204D; ES204D4 (on drawing index, no physical drawings)	Garmong		2/7/2022		ES104D and ES204D were included issued with original set.
24	ES101A; ES301; ES302; ES303; ES401; ES402 (not in drawing index)	Garmong		2/7/2022		ADDN 01 UPDATED DRAWING COVER SHEET
25	Would it be possible to get the CAD drawings for the Knox County Justice Campus project in order to establish cut & fill?	Wabash Utilities	2/8/2022	2/9/2022		This can be released to contractor once bids are awarded.
26	RQAW Specification 11 19 00 Detention Contractors - indicates to submit a bid to the General Trades Contractor - BP #07 is a stand alone package for the Detention Equipment scope of work.	Garmong		2/9/2022		ADDN 02

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27	Section 033000 Cast in Place-Concrete Rev_1 shows precast items and structures. Nothing on Concrete Mix designs usually show aggregate requirements, Minimum cement, admixtures, Water Cement ratios, Slump requirements. (specifications provided are section 33 05 13 "Manholes & Structures)	Jones & Son	2/9/2022	2/9/2022		See 03-30-00 page 4 for aggregate requirements. See section 2.2 page 8 of -3-30-00 for mix design information
28	Storm drainage for Unit "F" (building roof drains) does not appear to be indicated, on either C300 or C400	Garmong	2/9/2022	2/9/2022		updated in Addendum #2
29	Civil Drawings for Unit D Alternates - have not been provided (erosion control, sanitary, storm, grading etc)	Garmong	2/9/2022	2/9/2022		This will be added in Addendum #2
30	ES302 indicates Room 1515 as IT Room - floor plans indicate 1515 as a Restroom (IT appears to be Room 1514)	Garmong	2/9/2022	2/9/2022		Addendum #2; Room should be labeled as 1514 on drawing ES302.
31	Security systems for Unit A land at SQE #06 in the existing IT Room, and then to SQE #01 in Room 2603 (new IT Room at Unit D - Level II) - will Unit "A" Security and other area systems remain operable - without SQE #01 complete and operable ?	Garmong	2/9/2022	2/9/2022		Addendum #2; New field devices for Unit "A" to terminate to SQE#3 and SQE#4. Functionality of systems in Unit "A" shall not be dependent on SQE#1 being complete and operable. Controls head-end at SQE#6 shall be updated to integrate with new controls at SQE#3 and SQE#4.
32	Sanitary site piping: please confirm depth of existing manhole, which new Unit D / F pipe runs are indicated to tie into - has sufficient depth for pipe runs (Previous project installing site contractor has indicated the existing manhole is shallow (less than 36")) New sanitary piping will cross multiple existing utilities	Wabash Utilities	2/10/2022	2/10/2022		Conflicts were resolved in addendum #3
33	Drawing AF 1A1 Note 11 references Drawing A401 for Book In Counter details (Drawing A401 is stair details)	Garmong	2/10/2022	2/11/2022		Note #11 should refer to A 404
34	Unit "A" foundations vs. interior / exterior slabs are indicated in different locations , at the overhead door locations. Structural drawings indicate the exterior slab pours over the foundation entirely vs Architectural indicates the interior slab pouring completely over the foundation	Garmong	2/11/2022	2/11/2022		Provide slab on grade as per the structural drawings.
35	Drawing SF 1A1 contains the foundation schedules - there is no indication for 8W1, 8W2 etc., which are continuous foundations at the interior / exterior areas on several units.	Garmong	2/11/2022	2/11/2022		See 06/S-012 for CMU Wall Reinforcement Schedule
36	Drawing SR1A1 contains many section cuts referenced to Drawing S301 (no S301 drawing has been issued)	Garmong	2/11/2022	2/11/2022		S-301 was part of the bid pack. If it is missing in the prints, it will be provided as part of addendum #2
37	"Shackle Rings" are indicated at concrete benches - please provide specifications	Garmong	2/11/2022	2/11/2022		See 2B/A-405 for detail, no specification needed
38	RE: Insulation indicated on detail pages shows 4" R-13 in the roof and walls but the spec pages have R-30 simple saver roof and 6" walls. Which one is correct?	Service Partners	2/15/2022	2/15/2022		All PEMB walls are min R-13 and roofs are R-19 (no simple saver system)

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39	Site Layout drawing indicates 6" curb on the west side of the drive (north side of Salleyport). Grades appear to indicate a low point, with water run off towards the west - an opening in the curbing would be needed for water passage	Garmong	2/16/2022	2/16/2022		Addressed in addendum #2
40	No site curbing is indicated at the asphalt paving edge / landscape area immediately east of the Salleyport. Given traffic flow radius, should curbing be placed to prevent driving into the landscape area ?	Garmong	2/16/2022	2/16/2022		Addressed in addendum #2
45	Civil Drawings are not included for Alternate "A" (Day Room 1533 & Cell Area)	Garmong	2/16/2022	2/16/2022		This will be addressed in Addendum #2
46	RULE 5 / CSGP - has RQAW Team applied and paid fee for Erosion Control / NOI ?	Prebid BP Contractor	2/17/2022	2/17/2022		In coordination
47	Drawing C001 "Erosion Control" Note #12 - this note conflicts with requirements indicated on Drawing C400 / Note "G"	Garmong	2/17/2022	2/17/2022		The note will be update in addendum #2 to reflect that no cut will be removed from the site
	Raw Water, Unit A - Main piping incomplete lines. Where does it come from?	HG Heinz	2/17/2022	2/17/2022		Corrected in Addendum #3.
48	Hot water piping to TMV and isolation pods in unit A. Line sizes don't make sense.	HG Heinz	2/17/2022	2/17/2022		Corrected Addendum #2.
49	Shower valve adjacent to room 1510. No fixture specified.	HG Heinz	2/17/2022	2/17/2022		Added to plumbing fixture schedule. Corrected in Addendum #3.
50	Detail 8 on P802 - does this apply to both mechanical rooms in units A & D?	HG Heinz	2/17/2022	2/17/2022		Corrected in Addendum #3.
51	Is there a water softener in unit A or D mechanical room? Not shown on enlarged mech room drawings. Where is RM # D109?	HG Heinz	2/17/2022	2/17/2022		Water Softener for Unit F. Corrected in Addendume #3.
52	Is there a booster pump in Unit A or D mechanical room? Not shown on enlarged mech room drawings.	HG Heinz	2/17/2022	2/17/2022		Booster pump is an alternate bid . Corrected in Addendum #3.
53	No booster pump on plumbing schedule	HG Heinz	2/17/2022	2/17/2022		Booster pump is an alternate bid. Corrected in Addendum #3.
54	3" gas in mechanical room unit A? Where does this come from?	HG Heinz	2/17/2022	2/17/2022		Gas goes up to roof. Corrected in Addendum #3.
55	4" gas line in unit D? Where is this going?	HG Heinz	2/17/2022	2/17/2022		4" gas line comes from the existing gas main in Unit C corridor. Corrected in Addendum #3.
56	Gas isometric and plumbing drawings don't match. Where is tie-in to existing gas located at?	HG Heinz	2/17/2022	2/17/2022		4" gas line comes from the existing gas main in Unit C corridor. Corrected in Addendum #3.
57	CFSH-5 on drawings not shown in fixture spec	HG Heinz	2/17/2022	2/17/2022		Corrected in Addendum #3.
58	P100- The grease interceptor outside is hashed out as if it were being demoed. Is this correct? If so, is it being replaced?	Altstadt / Hoffman	2/17/2022	2/17/2022		Grease trap is existing to remain. Corrected Addendum #2.
59	P110- Note 5 says sinks and piping to remain, but they are not on P210B	Altstadt / Hoffman	2/17/2022	2/17/2022		Corrected Addendum #2.
60	P210A- There are TMV's with 1/2" pipe coming off of them and are running to several fixtures that are 3/4" drops. Is this size correct?	Altstadt / Hoffman	2/17/2022	2/17/2022		Corrected Addendum #2.

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61	P210D- Where does the water for Building D originate from?	Altstadt / Hoffman	2/17/2022	2/17/2022		An existing capped 4" domestic water main was provided near Secure Corridor 1300 for future connections in the existing design. Corrected in Addendum #4.
62	P210F- Rm 178, is the one toilet with the larger stall supposed to be handicapped?	Altstadt / Hoffman	2/17/2022	2/17/2022		Yes
63	P210F- There is a prep sink in rm 144, who's responsible for that?	Altstadt / Hoffman	2/17/2022	2/17/2022		Yes, the plumbing contractor. Corrected in Addendum #4.
64	P220D- Where does the 4" gas main terminate in Restroom 2606A	Altstadt / Hoffman	2/17/2022	2/17/2022		Corrected in Addendum #3.
65	(Question #9) P220F- What size are the risers for domestic water to the 2nd floor? Note 7 says 1" for hot and cold, but this is feeding 3" and 2" mains on the 2nd floor.	Altstadt / Hoffman	2/17/2022	2/17/2022		Corrected in Addendum #3.
66	P500- Drawing 1, Where do the water pipes go outside of the doors? Are they underground?	Altstadt / Hoffman	2/17/2022	2/17/2022		Corrected in Addendum #3.
67	P500- Drawing 1, Where does the 3" gas come from?	Altstadt / Hoffman	2/17/2022	2/17/2022		Gas piping goes to the roof. Corrected in Addendum #3.
68	P500- Drawing 3, Pipe sizes in this room, are they correct? Refer to my number 9 question	Altstadt / Hoffman	2/17/2022	2/17/2022		Corrected in Addendum #3.
69	P600- I do not find anything for roof drains, and there are several fixture abbreviations throughout the job with the number being X. None of these are in the schedule (TMV and ST are a couple).	Altstadt / Hoffman	2/17/2022	2/17/2022		Refet to specification section 22 14 00 for roof drain specs. ST (storage tanks) are listed on the HW Storage Tank Schedule.
70	Will there be Civil drawings showing the Hydronic piping to building F?	Altstadt / Hoffman	2/17/2022	2/17/2022		hydronic piping called out in addendum #3 - refer to mechanical drawings for additional detail
71	Alternates for D1-3: Can you color code a drawing for separating the piping between each one?	Altstadt / Hoffman	2/17/2022	2/17/2022		Can not be provided at the time.
72	Is there a special type of caulking for the correctional fixtures?	Altstadt / Hoffman	2/17/2022	2/17/2022		See spec 07 92 00. Anywhere inmates will have access to, Dynapoxy "pick-proof" security sealant is required. If movement is expected, Dynaflex is required.
73						
74	RQAW Specification Index : 036020 Non-shrink grout (specification issued 036200)	Garmong	2/17/2022	2/17/2022		Both 03 60 20 and 03 62 00 are included in set. Error in index only for 03 62 00
75	RQAW Specification Index: 090100 Maintenance of Finishes (specification issued 090111)	Garmong	2/17/2022	2/17/2022		Corrected Addendum #2
76	RQAW Specification Index: 087110 Door Hardware Schedule (section not included in specifications)	Garmong	2/17/2022	2/17/2022		Corrected Addendum #2
77	RQAW Specification Index: 101423 Room Identification Signage (specification issued 10.14.23.13)	Garmong	2/17/2022	2/17/2022		Corrected Addendum #2
78	RQAW Specification Index: 105113 Metal Wardrobe Lockers (duplicate spec section with Metal Lockers)	Garmong	2/17/2022	2/17/2022		Corrected Addendum #2
79	RQAW Specification Index: 096723 Resinous Flooring (not in specification book)	Garmong	2/17/2022	2/17/2022		Removed from Spec Index, Addendum #2
80	RQAW Specification Index: 220502 Selective Demolition (not in specification book)	Garmong	2/17/2022	2/17/2022		Added in Addendum #3
81	RQAW Specification section 282300 ("End Of Section" indicates 282320)	Garmong	2/17/2022	2/17/2022		Corrected in Addendum #3
82	RQAW Specification Section 270526 - appears to be missing part of the specification	Garmong	2/17/2022	2/17/2022		Formatting issue. Corrected in Addendum #3
83	HRC chiller module included in bid? Shown on chiller schedule but M500 shows it is for future. If it is not to be included in bid are recirc pumps and lines needed?	HG Heinz	2/18/2022	2/18/2022	2/21/22	HRC-1 module is included in the bid. The note on M500 indicates allocating space for (2) future HRCs if the owner needs additional capacity when the existing HVAC system is placed on the new hot water and chilled water plant.
84	Where is DOAS-D2. Only one DOAS is shown in D on first floor.	HG Heinz	2/18/2022	2/18/2022	2/21/22	DOAS-D2 is located in the alternate buildout of the Pod in unit D. Refer to drawings M290D, M291D, M390D, and M391D.
85	North roof drain piping in Unit F not shown	HG Heinz	2/18/2022	2/18/2022		Drains tie together & routes down in chase at RR123 below f.f. Corrected on Addendum #4.
86	Duplex booster pump in Unit F mechanical room?	HG Heinz	2/18/2022	2/18/2022		Booster pump is an alternate bid. Corrected in Addendum #3.
87	Pipe sizes in Unit F mech room detail are smaller than lines throughout the building. Review pipe sizes.	HG Heinz	2/18/2022	2/18/2022		Corrected in Addendum #3.
88	SK-X in Unit F not shown on fixture schedule	HG Heinz	2/18/2022	2/18/2022		Fixture is SK-5. Corrected in Addendum #3.

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89	Door 1505 is shown as 36" - is this sufficient for passage from the Salleyport into Booking (handcuffed person + law enforcement)	Garmong	2/18/2022	2/18/2022		The following doors are to be changed from 36" to 42" in addendum #4: 1114, 1115.1, 1505, 1511.1, 1511.2, 1511.5
90	Looks like footers on P200F with pipes going through or under them. There will be a minimum of a 2' drop from the farthest point south to the exit of the building with these drains. How thick are the footers?	Altstadt / Hoffman	02/21/2022	02/21/2022		Corrected in Addendum #3.
91	There are several fixtures not in schedule- WC-3, LV-2 FV-1, TMV-x, YCO, SK-X, RD-1 & 2, F-WF-2, F-HWRP-2	Altstadt / Hoffman	02/21/2022	02/21/2022		Corrected in Addendum #3.
92	Are the washer/dryer units by owner? Also not on schedule	Altstadt / Hoffman	02/21/2022	02/21/2022		Yes, By owner
93	P210F has CFC-7 in observation 141, P500 calls it to be CFC-2	Altstadt / Hoffman	02/21/2022	02/21/2022		Corrected in Addendum #3.
94	P500, mixing valve not labeled	Altstadt / Hoffman	02/21/2022	02/21/2022		Corrected in Addendum #3.
95	P500 #2 Unit C water heater equipment, none of this is on schedule	Altstadt / Hoffman	02/21/2022	02/21/2022		Corrected on Addendum #3.
96	P802 #4: where is this system? And is there a booster pump?	Altstadt / Hoffman	02/21/2022	02/21/2022		Booster pump is an alternate bid. Corrected in Addendum #3.
97	P805 has fittings darkened, nothing in the plumbing system is pre-fabbed is it?	Altstadt / Hoffman	02/21/2022	02/21/2022		Only fixtures/equipment is pre-fabricated by the cell manufacturer. All piping is detailed on site.
98	Who provides mechanical equipment foundations / pads ?	HG Heinz	02/21/2022			General Trades contractor will provide all interior / exterior pads & foundations - for all MEP equipment
99	We are looking at bidding some section on this project. One of them being the casework / millwork. The spec would indicate that the casework would be commercial grade div 12 casework but the finish plans make reference to aristocrat cabinetry. The elevations would also indicate that the cabinet would have face frames and framed doors. Can you clarify what is to be provided?	Lee Company	02/21/2022	02/21/2022		Submit Alternatives to Architect with color samples that match Aristokraft Finishes, Face Frames, and Door Styles as called out on Finish Schedule.
100	Note 36 calls for existing 24x24x72 lockers. where are these coming from? The demo plans do not show any lockers coming out of the existing building. What package is responsible for relocation / reinstallation of these lockers?	Lee Company	02/21/2022	02/21/2022		Owner is responsible for relocating and installing existing lockers. New lockers installed by contractor.
101	Should note 35 read 12x12x72 3 tier locker? The elevations clearly show these as 12x12x72 triple tier lockers.	Lee Company	02/21/2022	02/21/2022		Yes, these lockers are (3) three tier lockers.
102	How many tiers are the note 34 lockers? The note just says 15x18x72 Locker. Is this the type A locker shown on Sheet A500?	Lee Company	02/21/2022	02/21/2022		This is a single tier locker. The detail 1A/A-500 is incorrect.
103	The spec section 105113 does not match what the architect has detailed on the drawings. The specs would indicate all of the lockers are a first responder type locker but none of these are shown or detailed on the documents.	Lee Company	02/21/2022	02/21/2022		Lockers are not first responder type.
104	On the one-line(s), sheet E700 and E701, there are a handful of panels shown mounted on a pad. The panel schedules for these show that the amperages of these panels range between 400A-800A, with smaller amperage feeder breakers also, therefore we could quote these are a power panel or even our standard lighting panel product. The concern I have is that our power panel product does not offer feet to be able to free-stand on a pad, the enclosures would need to be bolted to the wall for support. Would this be acceptable or are you looking for more of a switchboard type?	AJ Baker	02/21/2022	02/21/2022	2/28/2022	Pad or Surface mounted are both acceptable. Addressed via Addendum #3.

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105	A few of the panel schedules (1HEM1, 1HEM3, 1HEMDP1, 1HLRDP1, 1HNDP1, 1HOPDP1, 1LEMDP1) call for the main breaker to be 100% rated and be individually mounted. We can do this for the necessary power panels by making our main breaker vertically mounted, so I do not see an issue here. But if we quoted panels 1HEM1 and 1HEM3 as a power panel, I feel it would be overkill on size and cost due to these panels being rated 100A with 20A/1P feeder. Can you advise if this is a typo or do they need to have 100% rated mains and have the mains individually mounted?	AJ Baker	02/21/2022	02/21/2022		Addressed via Addendum #3
106	Switchboard 1HSNB1 – on the one-line this switchboard shows as 3 sections, in which 1 of the sections feeds (4) ATS and each of these ATS are 1600A. On this switchboard schedule there is no feeder breakers listed to feed these. Can you advise if a revision needs to be made and what amperage of feeders are necessary ?	AJ Baker	02/21/2022	02/21/2022		Addressed via Addendum #3
107	Switchboard 1HEMSB1 – running into the same concerns as 1HSNB1	AJ Baker	02/21/2022	02/21/2022		Addressed via Addendum #3
108	Unit F One-Line, Sheet E701 : Missing amperages on panel schedules for CDHEM1 and CDHOP1, Panel schedule is empty with no feeder breakers for C1LEM1	AJ Baker	02/21/2022	02/21/2022	2/28/22	Addressed via Addendum #2 & #3
109	Under BP 2 Scope of work it states that temporary roads and snow removal is to be included but under 015000 Temporary Facilities and Controls B. 1. it states that snow removal and temp access shall be included as part of BP 1. Could you please clarify?	Kerns	02/21/2022		2/21/2022	Follow BP #2 narrative, a clarification as part of Addn #03 for 015000 will be issued
110	Does the paving near the Sallyport have to be done in phases or will it be available all at the same time?	E&B Paving	2/21/2022		2/21/2022	Include (2) Mobilizations - (1) for placing base / binder & (1) for mill (if required) / top of new and existing
111	Where does vent pipe for unit D alternates terminate? No vent main shown on mezzanine or isometric.	HG Heinz	2/23/2022	2/23/2022		One 4" vent main shall terminate to the roof at each Alternate if accepted.
112	Mechanical piping mains in alternates D2 and D3 will be required to finish classrooms 1641 & 1649.	HG Heinz	2/23/2022	2/23/2022	2/28/22	Piping to VAV-D1-10 to serve classroom 1641 is in the base bid. The piping mains shown in Alternate D2 and D3 will have to be routed if Alternate D1 is accepted. This also applies to the ductwork mains. The ductwork mains shown in Alternate D2 and D3 will have to be routed if Alternate D1 is accepted.
113	Should all mechanical piping and equipment in alternate D be in the base bid to maintain space temperature if alternates D1-D3 are not taken?	HG Heinz	2/23/2022	2/23/2022	2/28/22	FCU-D4 and FCU-D5 are provided in Alternate D to temper the buildout area.
114	Are there MEP plans for alternates A & C, building out day rooms? Will there be MEP work if alternates are taken?	HG Heinz	2/23/2022	2/23/2022	2/28/22	The MEP build out for Alternate A are shown on the callouts on the Unit A plans for each discipline. The MEP build out for Alternates D-D4 are shown on the alternate sheet series 290s, 390s, and 490s.
115	Domestic water drops in unit F on the 2nd floor are smaller than pipe sizes shown on enlarged drawing P501. Verify drop sizes.	HG Heinz	2/23/2022	2/23/2022		Corrected In Addendum #3 & #4.
116	Fixtures not labeled detail #7 plan P500	HG Heinz	2/23/2022	2/23/2022		All fixtures tagged. Corrected in Addendum #3.
117	What is the sink in meal prep 144?	HG Heinz	2/23/2022	2/23/2022		2-Compartment sink (CS-1) by plumbing contractor. Corrected in Addendum #4.
118	Gas line size in unit F mechanical room is different on isometric and detail drawing.	HG Heinz	2/23/2022	2/23/2022		Correct sizing on isometric. Corrected in Addendum #4.
119	Duke Power Transformer Requirement- must be within 10' of access road (for transformer replacement). Please include this notation on the site electrical drawing.	Garmong	2/23/2022	2/23/2022	2/28/2022	Electrical Site Plan includes notes to coordinate exact location with Utility.
120	Are supports need for toilet partitions or are they floor mounted? If ceiling mounted are they in our scope?	Waukegen Steel	2/23/2022	2/23/2022		Please confirm - floor mounted toilet partitions / over head braced (no structural steel support is required overhead)
121	RE: the fire alarm system at the Knox County Justice Campus. In the spec is says this is a new system, but on the plans its says fire alarm system is existing and will be extend into the additions. Can you tell me which one is true? And what the existing system is?	Midwest Security Solutions	2/24/2022	2/24/2022		(Existing F/A Drawings were included in Addn #03 "For Reference Only")
122	Where is the connection point, to tie onto the existing Fire Sprinkler systems for the new additions?	Southwestern Sprinkler Services	2/24/2022	2/24/2022		Unit B sprinkler main shall be extended to new Unit A. Unit D requires a new sprinkler riser off the existing sprinkler main.
123	Per SF1D1 at the following column lines(P.9/11.4, P.9/16, P.9/19.7) the column in question is not sized. Is it possible these are to be furnished by the pre-engineered building provider?	Geiger & Peters	2/24/2022	2/24/2022		These columns are in the scope of PEMB Vendor

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124	As a follow-up on SF1D1...would the following column locations also be provided by others? Ref: R14, R19, S19.	Geiger & Peters	2/24/2022	2/24/2022		These columns are in the scope of PEMB Vendor
125	Drawing F-800, the jail zone risers detail for unit -F? I don't see any cell areas on my F drawings?	Southwestern Sprinkler Services	2/24/2022	2/24/2022		Unit F does not have cells. Unit D has cells.
126	Looking through addendum #2 civil plans and there is a note on C300 for a sanitary lift station. Can more detail be provided on this	Koberstein Contracting	2/25/2022	2/25/2022		Detail for lift pump/station product info was added in addendum #3 sheet C603. Refer to electrical drawings for additional information
127	4/S-301 shows kickers and new deck where Units A and B meet, HSS kicker is welded to every joist but there is no joist spacing indicated. Is there structural drawings for the existing building?	Waukegen Steel	2/25/2022	2/25/2022		See existing jail as-builts attached with Addendum #3 for Reference Only.
128	Area D has two columns that are not called out, I'm guessing they're HSS5 x 5 x 5/16? See SF1D1, SR1D1, and SF Alt D1-1, 10.1 Line at U.2 & V.7.	Waukegen Steel	2/25/2022	2/25/2022		YES - HSS 5x5x5/16 is correct
129	Structural Detail 8/S3.00 shows a ¼" x 6" x 6" plate with girt, does this belong to BP #1?	Waukegen Steel	2/25/2022	2/25/2022		YES - BP #01 should include the 6"x6" plate, which is indicated along with the girt in the detail
130	Zinkan Enterprises/Chem Ready (a water treatment company) reviewing the Knox County Justice project. The Plans mention a 4,200 gallon heating system and 4,500 gallon glycol chill loop. There isn't anything in the specs for water treatment. Usually Section 232513 HVAC Water Treatment. It will list chemical pot feeder to add corrosion inhibitor to the closed loop systems. It might mention an automatic glycol feed system for the glycol loop to maintain system pressure. Usually a 1-year chemical treatment and service contract. I have attached some data sheets for items that are usually common for these projects.	Zinkan Enterprises	2/28/2022	2/28/2022		23 25 13 Water Treatment For Closed-Loop Systems specification added in Addendum 4.
131	Is Note 3 on SR 1F1 included in steel shown on this drawing or is this for additional steel not shown? If not what is beam size and what walls and can a detail be provided?	Waukegen Steel	2/28/2022	2/28/2022		Note 3 on SR1F1 refers only to the steel beams shown on the drawing.
132	4/S303 detail shows continuous angle at Kane Screen - where is this located ? (Specification 11 19 10 indicates Detention Contractor provides angles at masonry and concrete - shouldn't this contractor also provide these attachment angles at the stud framing, for their screen installation ?)	Waukegen Steel	2/28/2022	2/28/2022		Coordinate Kane Screen location with Architectural.
133	Please provide the structural roof framing for the Unit A alternate.	Geiger & Peters	2/28/2022	2/28/2022		See sheet SR ALT A1
134	On A315 & A319 Section 1A there is steel framing called out above the security mesh. The notes refer to S-series drawings but there is no detail of this referenced material on structural drawings. Can a detail be provided to clarify?	Geiger & Peters	2/28/2022	2/28/2022		See Detail 4/S303, Security Screen is called Kane Screen on Structural drawings.
135	On A331 Section 1C: bent plate frame and razor ribbon - where in the document are these materials specified ? Are these to be provided by the Detention BP ?	Geiger & Peters	2/28/2022	2/28/2022		Basis of Design Atkore Razor Ribbon, Maximum Security Application, NSN 5660-01-495-9534, 30in Stainless Steel
136	Div 7 lists intumescent coatings as part of the project; however, I have not located which structural members are to be coated. Please clarify the need for intumescent. Also, is there a place that notes which hour rating that you are looking for?	Sherwin Williams	03/01/2022	03/01/2022		Intumescent coating is expected in areas where steel structure is in fire rated walls such as columns in stair ST01.
137	Item #2-Cooler/Freezer- On FS100-the schedule confirms to "Replace Door Panels & Light Fixtures", One FS101-There isn't a note detailed on the schedule. There is also no information listed on the spec to confirm where modification work needs to be completed-Please advise.	Stafford Smith	3/1/2022	3/1/2022		Item # 2 Cooler/Freezer has been corrected by the jail maintenance and this is not included in this project any longer.
138	Item #4-Dry Storage Shelving Unit-On the drawing schedule on both FS100 and FS101 this item is showing as "Existing/Remain" but in the FS Spec it doesn't confirm this to be an "Existing/Remain" item. Please advised if this is to be a new or existing/remain item.	Stafford Smith	3/1/2022	3/1/2022		New Item as specified in written specifications.
139	Item #21-Toaster-Please advise if this is to be a "Spare"	Stafford Smith	3/1/2022	3/1/2022		Any changes to the Item # 21 Toaster is not included in this project
140	Item #31.1-Chemical Storage Shelving Unit- On the drawing schedule on both FS100 and FS101 this item is showing as "Existing/Remain" but in the FS Spec it doesn't confirm this to be an "Existing/Remain" item. Please advised if this is to be a new or existing/remain item.	Stafford Smith	3/1/2022	3/1/2022		New item as specified in written specifications.
141	In reviewing the specifications, we are not finding any insurance limits that are required. Section 006216 references a schedule of coverages, but we do not see where any where provided. 007300 Supplementary Conditions Article 11 references coverages, but no limits.	Hannig Construction	3/1/2022	3/1/2022		Specification 006213 will be reissued with Addendum #04, indicating insurance limits

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142	Need clarification on Thermal Insulation as it is specified in Bid Package #1 and Bid Package #6. Need to know which bid package it is to be included in and if it is both need clarification of what each bid package need to include	Wolfe Construction	3/1/2022	3/1/2022		BP #01 -All Exterior Envelope Insulation, including foundations - except where indicated in BP 03, or BP 05 required for composite roof system. BP 06 All interior insulation - excluding insulation indicated to be provided by BP03
143	SC-01 Sealed Concrete Floor : what is specification for this finish, and which bid package should it be included in ?	Wolfe Construction	3/1/2022	3/1/2022		Will be addressed via Addendum #4.
144	E310B shows the following panels and transformer as existing H1B, T:2, L1B. However panels and transformers T1LEM3, LEM3, T1LOP3, LOP3, T1LN3 are shown in the storage room but not shown at all on the 1 line diagram. Also panel 1LN3 is shown in storage room but is shown as being fed from Panel 1LNDP1 on the one line diagram. There is some panels and transformers that have designations close on the one line diagram to all of these but need clarification on what panels and transformers are to go in this location compared to the one line diagram. Thanks	Central State Construction	3/1/2022	3/1/2022		Will be addressed via Addendum #4.
145	Transformer labeled T-1LOPDP1, I believe this should be T-1LOP3 and the panel it's feeding is 1LOP3. Do you agree?	Lytle/ Skill Electric	3/2/2022	3/2/2022		Will be addressed via Addendum #4.
146	How do you want to handle the AIC ratings?	Lytle/ Skill Electric	3/2/2022	3/2/2022		Addressed via Addendum #3
146a	480/277V Switchboards – 65KAIC?	Lytle/ Skill Electric	3/2/2022	3/2/2022		Addressed via Addendum #3
146b	480/277V Distribution Panels – 65KAIC?	Lytle/ Skill Electric	3/2/2022	3/2/2022		Addressed via Addendum #3
146c	480/277V Branch Panels – 35KAIC?	Lytle/ Skill Electric	3/2/2022	3/2/2022		Addressed via Addendum #3
146d	208/120V Distribution Panels – 42KAIC?	Lytle/ Skill Electric	3/2/2022	3/2/2022		Addressed via Addendum #3
146e	208/120V Branch Panels – 22KAIC?	Lytle/ Skill Electric	3/2/2022	3/2/2022		Addressed via Addendum #3
147	Civil Plans do not indicate riprap or any other erosion control construction, for the storm piping from Unit F, into the drainage pond. What is required ?	Garmong	3/2/2022	3/2/2022		Addendum #4
148	Does the owner expect placement, grading and compaction of excess cut from site(build a new berm)? Or will we only be stockpiling excess cut from site near the gun range berms?	S&G	3/2/2022	3/2/2022		Assume that the owner would want the dirt to be placed, graded, compacted and seeded to expand the berms that already exist on the site.
149	Can you provide detail on lift station hatch?	S&G	3/2/2022	3/2/2022		The lift station detail was provided in addendum 3
150	What, if any, materials cannot be placed on gun range berms? Can concrete, asphalt, waste stone from old laydown areas.. etc., be placed in the berm?)	S&G	3/2/2022	3/2/2022		The material placed on the berm should be limited to soil only. construction debris (asphalt, concrete, waste stone, etc.) should not be placed on the berm.
151	Can you provide specifications or drawings on the radio tower to be removed?	S&G	3/2/2022	3/2/2022		Tower will be removed by owner. Contractor to remove pad. Concrete pad is 5'x4' -5'-0" Deep reinforced with 3 antana stubs.
152	Can you add the sanitary structures to the structure table? I can gather most info needed but there are no rim elevations that i can see on any sanitary structures.	S&G	3/2/2022	3/2/2022		A structure schedule for the sanitary manholes that includes top of casting information included in addendum 4.
153	Does the generator or transformer need to salvaged for the owner?	S&G	3/2/2022	3/2/2022		Refer to electrical drawings
154	Plans say "excess cut from site" to be placed on gun range berms. What is the definition of "excess cut from site"?	S&G	3/2/2022	3/2/2022		Excess cut refers to the excess dirt that might remain after all proposed grading is completed.
155	Will Knox County require road bonds? We must drive a few miles down county roads to get to our dump site.	S&G	3/2/2022	3/2/2022		The county will wave road bonds for this project.
156	Will Garmong handle processing of procotors for aggregate?	S&G	3/2/2022	3/2/2022		See ADDENDUM #02
157	Mechanical Room Unit A : . TMV-1 size per spec is 2" inlet and outlet. / Drawing on P500 shows 2" CW inlet 2-1/2" HW inlet and 3" HW outlet	HG Heinz	3/2/2022	3/2/2022		2" H&CW inlet and 3" outlet is correct.
158	P802 has a detail for Unit F Water piping system F. Is there a detail for Unit A mechanical room? What about a detail for Unit C mechanical room?	HG Heinz	3/2/2022	3/2/2022		Detail added. Corrected on Addendum #4.
159	C-TMV-1 shown on P-500 with 3" HW outlet. No TMV's this size or this spec on plumbing schedule	HG Heinz	3/2/2022	3/2/2022		Lawler Model 805
160	Notes 2 & 3 on P220F show 1" CW drops. P501 shows 2" CW.	HG Heinz	3/2/2022	3/2/2022		Note 3 revised to show 2" cw & 1-1/4" hw drop. Correction on Addendum #4.

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161	Will bid package 2 be responsible for any damage to existing asphalt.? RE: concerns about damage to existing asphalt where it is being used as a construction entrance	S&G	3/2/2022	3/2/2022		BP #11 Contractor is responsible for any repair, which is required to the existing pavement, due to project construction (Addendum #02 clarification)
162	Drawing C100 indicates removal of the existing Radio Tower is part of the construction project. Knox County Sheriff has indicated this is not included in the construction scope, and will be done via a separate contractor, hired by Knox County - please correct the notation on the project drawings	Garmong	3/2/2022	3/2/2022		Tower will be removed by owner. Contractor to remove pad. Concrete pad is 5'x4' -5'-0" Deep reinforced with 3 antana stubs. The existing air conditioner unit next to tower will also be removed by owner. Contractor to remove 4" concrete pad.
163	P500 Mech Room C : Only 2 boilers shown on P500, 3 listed on the schedule and shown on M500	HG Heinz	3/2/2022	3/2/2022		Three boilers noted as on mechanical plan. Corrected on Addendum #4.
164	P500 Mech Room C: Gas header for boilers shown as 4" on P500, gas isometric shows 2-1/2" @ 2.0 psi. Which is right?	HG Heinz	3/2/2022	3/2/2022		Gas piping corrected to indicate 3" gas header @ 5.0 psi. Corrected on Addendum #4.
165	P500 Mech Room C : Gas line to water heaters shown as 3" on P500. Isometric shown 2-1/2" @ 2.0 psi	HG Heinz	3/2/2022	3/2/2022		Gas piping corrected to water heaters to indicate 1" gas @ 5.0 psi. Corrected on Addendum #4.
166	P210D / P220D / P500: Where does 4" CW originate from? Note 25 in addendum 3 says up from roof.	HG Heinz	3/2/2022	3/2/2022		4" cw originates from an existing 4" capped connection from existing design in Corridor 1300
167a	Correction Fixtures Spec 22 46 00 - Unit D Alternate Housing Pod:Addendum 3 spec calls for base bid of unit D to be masonry construction with fixtures by plumbing contractor. Latest drawings P210D/P220D & P291D/P292D show fixtures that are called out to be by cell manufacturer. What fixtures are to be in base bid of unit D and what fixtures are to be in alternate for unit D?	HG Heinz	3/3/2022	3/3/2022		All fixtures are tagged accordingly. Masonry construction is the basis of design and if selected then all fixtures, devices, valves, controls, sleeves, etc., shall be provided by the plumbing contractor. This applies to alternated layouts D1-D3. If steel construction is accepted then all plumbing fixtures in cells shall be by the cell manufacturer. All other plumbing fixtures (not in cells) and all associated controls, devices, valves, sleeves etc. shall be by the plumbing contractor.
167b	Does any this apply to alternates D - D3?	HG Heinz	3/3/2022	3/3/2022		This applies to alternated layouts D1-D3.
167c	Will there be base bids and alternate bids under each alternate D1, D2 and D3?	HG Heinz	3/3/2022	3/3/2022		Provide pricing for base bid and alternates as described in documents
167d	Is there an updated list of alternates?	HG Heinz	3/3/2022	3/3/2022		Alternates will be updated to include Booster Pump
168	Should lockers in rooms 166 and 163 have addendum note 36 for existing owner provided lockers?	Lee Company	03/03/2022	03/03/2022		Yes. Owner Provided Lockers
169	Should lockers on west wall of 207 2nd floor unit F have note 34?	Lee Company	03/03/2022	03/03/2022		Yes. Note 34
170	Should lockers on the south wall of 174 1st floor unit F have note 34?	Lee Company	03/03/2022	03/03/2022		Yes. Note 34
171	Drawing E410B shows no fire alarm equipment in the kitchen area. Is there a drawing showing this equipment?	Weyer Electric	3/3/2022	3/3/2022		No fire alarm work in this area.
172	Drawing E410C shows no fire alarm equipment. Is there a drawing showing this equipment?	Weyer Electric	3/3/2022	3/3/2022		No fire alarm work in this area.
172	Specifications call for voice system but drawing symbols are for horn strobe devices. Which is correct?	Weyer Electric	3/3/2022	3/3/2022	3/7/2022	Fire Alarm System shall be a horn type system. Will be addressed via Addendum #04.
174	Specifications discuss aspirating smoke detection system. Is there any of these systems?	Weyer Electric	3/3/2022	3/3/2022	3/7/2022	No, will be removed from spec. via Addendum #04.
175	Drawing E491D shows no fire alarm equipment. Is there a drawing showing this equipment?	Weyer Electric	3/3/2022	3/3/2022		E491D does have work in this area. Refer to original bid documents.
176	Specifications ask for 520hz sounders in sleeping areas. Day rooms have and standard horn only devices. Are these to be 520hz Horns?	Weyer Electric	3/3/2022	3/3/2022	3/7/2022	Dayrooms are not considered sleeping areas.
177	Specifications ask for 520hz sounders in sleeping areas. Day rooms have and standard Smoke detectors. Do these need to be 520hz sounder bases?	Weyer Electric	3/3/2022	3/3/2022	3/7/2022	Dayrooms are not considered sleeping areas.
178	The plan indicates an existing system but does not identify what it is. Are they looking to replace the whole system or expand / reuse existing equipment and do you know what is there currently?	Weyer Electric	3/3/2022	3/3/2022		Refer to Addendum #04.
179	On the drawings there are area's with no indication of existing fire alarm devices or new devices. Unit C for example. What is the plan for those areas?	Weyer Electric	3/3/2022	3/3/2022		Existing to remain unless indicated otherwise. Refer to Addendum #04.
180	Is floor slab in new Electric Rooms on Sheet E310D being removed to allow for new secondary feeder conduits/conductors from utility transformers & generators? If so, who is responsible for removal and replacement?	Weyer Electric	3/3/2022	3/3/2022		Yes, saw cut floor as required for conduit/conductors. Replace where needed. (Floor x-ray, removal, replace is the responsibility of BP #10
181	On Addendum #3 there was to be a revised Sheet E700 per the written narrative, however upon opening the Sheet E700 on the plan site, it opened to Page E603. Is there a revised E700?	Weyer Electric	3/3/2022	3/3/2022		Refer to Addendum #04.
182	Specs make mention of a BIM modeling component for this project. Will BIM for all trades be required?	Weyer Electric	3/3/2022	3/3/2022		BIM removed from project scope by Addn #04
183	On Sheet E210F, there are several rooms (Programming 117 and 125, Women's Locker 128, Men's Locker 131, Waiting 121 & 129, Drug Test RR 122 & 130, Body Scan 120 , Meal Prep 144) that call out to connect light fixtures to lighting control devices shown. No lighting control devices are shown in these areas. Please provide clarifications as to how these lights are to be controlled.	Weyer Electric	3/3/2022	3/3/2022	3/6/2022	Waiting 129, Drug Test 122 & 130, and Body Scan 120 all had controls shown on the original bid docs set. The other spaces will be addressed via Addendum #4.
184	Is there any work in the kitchen area for the mechanical/plumbing contractor?	HFI Mechanical	3/3/2022	3/3/2022		Yes, plumbing fixtures and all associated piping to be disconnected and capped in Staff RR 1317.

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185	General note 10 on P100 states that "IT MAY BE NECESSARY FOR THE CONTRACTOR TO X-RAY CONCRETE FLOORS TO DETERMINE EXACT LOCATIONS OF HIDDEN PIPING OR STRUCTURAL OBJECTS." Should the plumbing contractor include this cost in their proposal?	HFI Mechanical	3/3/2022	3/3/2022		YES
186	On M001, HVAC Demolition General Note C states "THE MECHANICAL CONTRACTOR SHALL PERFORM SERVICE AND REPAIR ON THE EXISTING EQUIPMENT AND ITS ACCESSORIES AS FOLLOWS: CLEAN ALL COILS, REPLACE THE FILTERS AND BELTS, INSPECT, REPAIR, OR REPLACE THE ECONOMIZERS, DRIVES AND FAN BEARINGS, MOTORS, CONTROL COMPONENTS, VALVES AND ANY OTHER ITEM NECESSARY FOR A COMPLETE AND PROPER OPERATING SYSTEM. THIS CONTRACTOR SHALL ALSO VISIT THE SITE, PRIOR TO FINAL BIDDING, AND VERIFY ALL EXISTING SITE CONDITIONS. PROVIDE ALL MATERIAL AND COMPONENTS AS NEEDED TO BRING THE UNITS TO FULL COMPLIANCE OF THE LANDLORD'S CRITERIA AND LOCAL AUTHORITY HAVING JURISDICTION." Can you provide a complete list of equipment with manufacturer and model # for each?	HFI Mechanical	3/3/2022	3/3/2022		Disregard General Note C on M001. This note will be deleted in the Construction Set. (DO NOT INCLUDE ANY COSTS OR ALLOWANCES FOR SERVICE OR REPAIR OF EXISTING EQUIPMENT - SPECIFIC TO NOTE M001)
187	What bid package is responsible for the buried HHW/CHW piping running between buildings D and F shown on both mechanical and site drawings?	HFI Mechanical	3/3/2022	3/3/2022		BP #09 should include this site piping - as a complete system, Unit F to Unit D to equipment hookup
188	After reviewing the documents, we believe that the best option for BIM coordination is to fully coordinate the new areas A, D, and F, including the mechanical room in area C, but field coordinate the existing areas B and C. Please advise if this is acceptable.	HFI Mechanical	3/3/2022	3/3/2022		BIM removed from project scope by Addn #04
189	No fire alarm drawings for area E. Is there drawings for this area?	Weyer Electric	3/3/2022	3/3/2022		Existing Building As Build Drawings were included with Addn #03 - which do include the F/A drawings (Drawings indicated as "For Reference Only")
190	Will primary conduits be required to new utility transformer for Community Corrections? None shown on electrical site plan or Civil Drawings.	Weyer Electric	3/3/2022	3/3/2022		Primary conduits by Duke energy.
191	Note 9 on Sheet E010, calls for (2) – 4" Conduits to extend to property line, but sheet shows them stopping just outside the building. Can you provide clarification as to where these terminate? If to a property line, which line and where at on the line as it will affect our conduit footage?	Weyer Electric	3/3/2022	3/3/2022	3/7/2022	Please coordinate with owner's telecom vendor and provide as required, as per plan note.
192a	Spec Section 00 54 36 - Building Information Modeling: Is this spec section being used? If yes, see below	HG Heinz	3/3/2022	3/3/2022		BIM removed from project scope by Addn #04
192b	To what extent is the design team's construction model complete?	HG Heinz	3/3/2022	3/3/2022		BIM removed from project scope by Addn #04
192c	What LOD is the design teams model?	HG Heinz	3/3/2022	3/3/2022		BIM removed from project scope by Addn #04
192d	Will you give your model to the contractors to make adjustments?	HG Heinz	3/3/2022	3/3/2022		BIM removed from project scope by Addn #04
192e	How much of the model is incomplete for the MEP contractor to finish -ie. To what extent are the items listed under section 3.4 of the spec complete by the design design team prior to construction? What items and in what quantity will remaining items of section 3.4 need to be completed?	HG Heinz	3/3/2022	3/3/2022		BIM removed from project scope by Addn #04
193	Pre-Engineered Building - is erection part of BP # 4 ?	Hannig Construction	3/7/2022	3/7/2022		PEMB complete (material / erect) is entirely included in BP #01
194	Questions regarding Unit D building: More specifically the area on the high side looks to extend beyond the main frame and then there is some masonry wall as well as some columns that may be part of PEMB but may not be PEMB. A201 detail 1A is building section / Blow up is 3A and A313 - Looks like main single slope frame goes to Column Line 10, then large masonry wall is at Column Line 9, then lower roof framing at Column Line 8.5 (The section appears to extend PEMB Roof/siding to beyond (and bear) on the masonry wall.) Did RQAW worked with any specific Metal Building Company in the design of this?	Hannig Construction	3/7/2022	3/7/2022		No specific metal building company was used. Provide delegated design by PEMB, for areas indicated or similar in design
195	Spec Section 21 13 13 :2.7 Nitrogen Generating System - Will two nitrogen systems be required, one for each building?	Tri-State Fire Protection	3/8/2022	3/8/2022		Yes, one in Unit D and one in Unit F.
196a	Drawings indicate the minimum web thickness for the PEMB frames is 3/8". This will drive the PEMB costs through the roof and has been addressed with RQAW on past project and the acquiesce. The PEMB design the structure to meet the design criteria as is typical. Ref: Note 6 on (PEMB) drawing S-002	Hannig Construction	3/9/2022	3/9/2022		

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196b	Looking over the collateral loading on Knox Co Jail see drawing S-001 : There are some crazy collateral loading shown. CECO Supplied Vermillion Co Jail (Rochelle's project) and it had 10# psf collateral load. These loads on S-001 are the same as outlined on Vermillion plans. Same architect RQAW. 15psf for roofing material, MEP 15 psf, Ceiling and Flooring 5 psf. It makes sense to include 10psf like Vermillion has and that is even more than typical PEMB (normally 5psf or less). Is the same 10 psf adequate for Knox?	Hannig Construction	3/9/2022	3/9/22022		Lara : Please send the below response. The 55 psf load does not apply to PEMB. See note 4 under PEMB on S002.Gravity Loads: In general,10 psf collateral should cover the suspended MEP & ceilings for all of PEMB. You need to account for the self-weight of roof framing members, metal deck and roof insulation. Snow loads are as per S001. You also need to account for lateral loads on the PEMB frames due to out of plane seismic loads from CMU walls.
197	Panel 1LN2 is shown in the base bid portion of section D in Mech hallway 1662. However no circuits in this area feed from this panel. This panel is also shown in Alternate D3 as part o that gear package. The only circuits feeding from it however are in Alternate D1. Please clarify the location and where in the bid package this panel should be in. I assumed all panels shown in ALT D3 would be included as part of that ALT package. Please confirm if this is correct.	Central State Construction	3/9/2022	3/9/2022		
198	Also no lighting circuits are indicated on the Alternate plans for any D sections. Please advise.	Central State Construction	3/9/2022	3/9/2022		
199	Detail 3A/A315 shows a drywall ceiling in rooms 150 and 151. (assuming 149 would be the same) But on the ceiling plan, sheet AC2F1 it shows APC-1.	Robinson Painting	3/9/2022	3/9/2022		

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SECTION 03 35 43

POLISHED CONCRETE FINISHING

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes polished concrete system.

1.2 REFERENCES

A. ANSI B101.3– Dynamic Coefficient of Friction (DCOF) Standard.

B. ASTM C 805 – Standard Test Method for Rebound Number of Hardened Concrete.

C. ASTM E 1155 – Standard Test Method for Determining FF Floor Flatness and FL Floor Levelness Numbers.

D. ASTM E96 – Standard Test Methods for Water Vapor Transmission of Materials.

E. ASTM C309 – Standard Specification for Liquid Membrane-Forming Compounds for Curing Concrete

F. Certification of Installers:

1. Consult RCS (reactive co-polymerizing solids) material supplier for available trained installers. Untrained installers must become trained prior to performing the work. 1-888-881-1726

1.3 DEFINITIONS

A. Cementitious Materials: Portland cement alone or in combination with one or more of the following: blended hydraulic cement, fly ash, slag cement, other pozzolans, and silica fume; materials subject to compliance with requirements.

B. Ra: Roughness average

C. W/C Ratio: The ratio by weight of water to cementitious materials.

1.4 ACTION SUBMITTALS

A. Product Data: For each type of product.

B. Samples for Initial Selection: Design reference samples for initial verification of design intent, for each type of finish indicated, on exposed surfaces of architectural precast concrete units, representative of finish, color, and texture variations expected.

C. Samples for Verification: Samples prepared by installer, demonstrating selected color, finish, and texture, representative of finish, color, and texture variations.

1.5 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For Installer.
- B. Installer's Project References: Submit installer's list of successfully completed polished concrete floor system projects, including project name and location, name of architect, and type and quantity of polished concrete floor system installed.

1.6 CLOSEOUT SUBMITTALS

- A. Maintenance Manual: Submit installer's maintenance manual, including maintenance and cleaning instructions for polished concrete floor system with specified Ra baseline.

1.7 QUALITY ASSURANCE

- A. Pre-installation Conference: Conduct conference at Project site.
 - 1. Before submitting design mixtures, review concrete design mixture and examine procedures for ensuring quality of concrete materials. Require representatives of each entity directly concerned with cast-in-place concrete to attend, including the following:
 - a. Contractor's superintendent.
 - b. Independent testing agency responsible for concrete testing.
 - c. Architect.
 - d. Construction Manager
 - g. Concrete subcontractor
 - h. Polishing Subcontractor.
 - 2. Review the following:
 - a. Special inspection and testing and inspecting agency procedures for field quality control.
 - b. Concrete finishes and finishing.
 - c. Concrete topping solution selection.
 - d. Methods for achieving specified floor and slab flatness and levelness. e. Floor and slab flatness and levelness measurement.
 - f. Floor finishing, and concrete protection.

- B. Installer's Qualifications: A qualified installer who is trained by RCS manufacturer/supplier.

- 1. Use an experienced and trained RCS polishing contractor and adequate number of skilled workpeople who are trained and experienced in the work involving RCS applied products and Ra readings. (www.specificationproducts.com) 1-888-881-1726

- C. Mockups: After sample panel and range sample approval, but before production of polished concrete flooring, construct mockups to verify selections made under Sample submittals and to demonstrate aesthetic effects and to set quality standards for materials and execution.

- 1. In a portion of the concrete floor selected by Architect, prepare an area 10- by 10-foot

- for review and approval. The mock up shall be installed following the removal of any existing flooring. The mockup location shall be selected by Owner or its agents.
2. Approval of mockups does not constitute approval of deviations from the Contract Documents contained in mockups unless Architect specifically approves such deviations in writing.
 3. Construct the mockup using processes and techniques intended for use on permanent work, including curing procedures.
 4. The mockup shall be polished and densified by the individual workers who will actually be performing the work for the Project.
 5. Obtain written approval of the mockup from owner before the start of work.
 6. Retain approved mockup through completion of the Work for use as a quality standard for finished work.
 7. Approved mockup may become part of the completed Work if undisturbed at time of Substantial Completion.
 8. The following information will be determined via the mock up process:
 - a. What width crack will require repair.
 - b. What size spalling will require repair.
 - c. Final Ra value.

1.8 DELIVERY, STORAGE, AND HANDLING

- A. Delivery: Deliver materials to site in manufacturer's original, unopened containers and packaging, with labels clearly identifying product name and manufacturer.
- B. Storage:
 1. Store materials in clean, dry area indoors in accordance with manufacturer's instructions.
 2. Keep materials from freezing.
- C. Handling: Protect materials during handling and application to prevent contamination or damage.

PART 2 - PRODUCTS

2.1 SYSTEM DESCRIPTION

- A. Installation of reactive co-polymerizing solids (RCS) polished concrete floor system for interior concrete floors by wet grinding and polishing with abrasive grain tooling, application of densifier and reflective finish.
- B. Performance Requirements: Improve performance of floor by installation of polished concrete floor system as measured by the following criteria.
 1. Dynamic Coefficient of Friction: Per ANSI B101.3.
 - a. Level Surfaces: Greater than 0.42.
 2. Aggregate Exposure:
 - a. Light Aggregate Exposure: Up to 1/16 inch.
 3. Gloss Levels: Ra minimum (microinch/micrometer)
 - a. 30 μ in/.76 μ m, matte finish.
 - b. 16 μ in/.41 μ m, semi-gloss finish. Typical of all interior flatwork.

2.2 CONCRETE MATERIALS

A. See Section 03 30 10 "Cast-In-Place Concrete Slabs" for requirements for new concrete.

2.3 ACCESSORY MATERIALS

A. Expansion and Isolation-Joint-Filler: ASTM D4819 Type II 1/2-inch thick closed cell non cross- linked polyethylene foam.

B. Do not use liquid curing materials that leave a bond barrier to densifier penetration, especially dissipative cures.

C. Penetrating Liquid Floor Treatment:

1. Chemically reactive, neutral pH, waterborne solution of inorganic materials and proprietary components that are odorless, colorless that penetrates, hardens, and densifies concrete surfaces when applied at time of placement and finishing process.

- a. Permanent densifying, sealing and hardening compound for concrete.
- b. Odorless.
- c. VOC: 0.

2. Available Products for cutting compounds, densifier and reflective finish:

- a. ElementFive (E5)

E. Protective Composite Panel System for exposed concrete finishes:

1. Protective panel appropriate for moisture levels and curing of RCS systems.

2.4 FABRICATING REINFORCEMENT

A. Fabricate steel reinforcement according to CRSI's "Manual of Standard Practice."

2.5 EQUIPMENT TO BE USED FOR INSTALLATION

A. Vacuum System: System specifically designed for surface preparation and concrete refinement as determined by installer to perform required dust extraction during grinding and polishing of approved flooring system.

B. Grinding Apparatus: System specifically designed for surface preparation and concrete refinement as determined by installer to perform required material removal and surface polishing/refinement of approved flooring system.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine floor to receive polished concrete floor system.

B. Notify Architect of conditions that would adversely affect installation or subsequent use.

C. verify the Following for New Concrete Floors:

1. Floor Finish:

- a. Slabs and flatwork shall be placed and finished monolithically
- b. Strike off and laser screed slabs to true, plane surfaces at required elevations.
- c. Thoroughly compact concrete with vibrators, floats, and tampers to force coarse aggregate below the surface.
- d. Power trowel with no hand finishing.
- e. Pan float.
- f. Steel finish.
- g. Surface should not be burned due to excessive troweling.
- h. Imprints are not acceptable (i.e. boots, foreign objects dropped into concrete).
- i. Do not use liquid curing materials that leave a bond barrier to densifier penetration, especially dissipative cures.

2. Floor and Joints:

- a. Free of debris and excessive dirt, dust, clay, and mud. b. Dry.

3. Use the straightedge method test, ACI 117 to verify that there is no more than ¼ inch (6 mm) deviation in flatness in a 10 foot span.

4. Concrete Compressive Strength: 3,500 psi to 5,000 psi.
5. Lightweight Concrete: Not allowed if aggregate exposure is required.
6. Concrete Curing: Minimum 8 days water cured or dissipating curing compound applied.
7. Concrete Adjacent to Floor Penetrations: Troweled flat and level with surrounding concrete.
8. Concrete Adjacent to Drains, Clean-outs, and Other Floor-Level Penetrating Structures: Finish level to the top of the structure.
9. Newly placed concrete shall be sufficiently cured for a recommended 28 days prior to the application of the densifier.

- D. Do not begin surface preparation or topping slab installation until unacceptable conditions are corrected.

3.2 VAPOR TESTING CONCRETE FLOORS

A. Alkalinity:

1. Test Method: Measure PH according to method indicated in ASTM F 710.
2. Comply with manufacturer's acceptable application limits.

B. Moisture Vapor Transmission Rate:

1. Test Method: Perform anhydrous calcium chloride test according to ASTM F 1869
2. Comply with manufacturer's acceptable application limits.

3.3 SURFACE PREPARATION

A. Protection: Protect surrounding areas and adjacent surfaces from the following:

1. Minimal accumulation of dust from grinding and polishing.
2. Contact with overspray of concrete densifier.
3. Contact with overspray of concrete reflective finish products.

- B. Surface Preparation: Prepare surfaces in accordance with installer's instructions.
- C. Clean Surfaces: Remove dirt, dust, debris, oil, grease, curing agents, bond breakers, paint, coatings, and other surface contaminants, which could adversely affect installation of polished concrete floor system.

3.4 GENERAL CLEANING AND POLISHING REQUIREMENTS

- A. Polished Concrete Floor System: Reactive Co-polymerizing solids (RCS)
- B. Use non-oil based sweeping compound to control airborne dust.
- C. Treat oil spots with oil remediation system
- D. Scrub floor with scrubber machine and appropriate brushes or pads and pH compatible detergent.
- E. Do not use stain or scuff removing agents on finished floor surface.
- F. Clean floors as specified hereinafter prior to polishing application.
- G. Polish floors as specified hereinafter prior to application of reflective finish.
- H. Final finish Ra shall be equivalent accepted on the Mock-up and as specified herein.

3.5 DENSIFIER APPLICATION

- A. Area to be Treated: Apply densifier to all interior concrete floors except floors with color textured concrete finishes, floors to receive resilient flooring, and concrete floors with soft surfaces.
- B. Examination and Preparation:
 - 1. Examine surfaces receiving densifier. Verify that surfaces conform to product manufacturer's requirements for substrate conditions.
 - 2. Vacuum and clean saw cut joints and surrounding area so that no dust remains to react with concrete finish material.
 - 3. Remove remnant of any temporary film forming curing compound prior to application of densifier. Remove compound by cleaning and scrubbing in accordance with manufacturer's instructions.
 - 4. Prior to application, scrub floor to remove latent salts. Do not proceed until unsatisfactory conditions have been corrected.
 - 5. Beginning of application indicates acceptance of existing conditions.
- C. Application:
 - 1. Application shall be performed by trained applicator in accordance with manufacturers published instructions.
 - 2. Schedule to begin not before 28 days after floor slab placement.
 - 3. Employ methods to ensure concrete surface is not damaged during application, including discoloration.
 - 4. Apply densifier finish at the rate recommended by manufacturer.
 - 5. Apply with low pressure sprayer with conical tip with enough coverage to keep concrete surface wet for the manufacturers recommended dwell times to ensure the slab has been densified to its maximum potential and to the point of rejection.

3.6 POLISHING APPLICATION

- A. The following grinding steps shall be included both in the common floor areas as

well as all edges.

1. Sequencing steps that were approved during the mock up is the approved process for the main project.
 2. Alternate methods/sequencing steps or equipment substitutions are not permitted.
 3. Measure floor Ra and select tool from equipment manufacturer that most closely matches the texture on the concrete surface without exceeding the maximum refinement number of the selected tool.
 4. Fill control and isolation joints before initial grinding steps begin. Joint filler must also be same as approved in the mock up area. No substitutions or alternates are accepted after the mock up approval process.
 5. Measure substrate to get Ra average select qualifying abrasive tool and operate the tool until maximum refinement is achieved on the surface by the certified Ra Profilometer. It is a requirement that the first tool must be ran in a north/south AND east/west direction to avoid corn rowing the concrete surface.
 6. After the proper Ra number is achieved, change to the next tool that will properly remove the prior Ra produced and operate this tool until its maximum Ra refinement number is achieved.
 7. After proper densification and stain protection steps, continue execution of floor refinement until final surface texture grade is achieved.
 8. Follow guidelines for sampling areas and take the necessary amount of Ra readings and record these readings on the floor plan drawings.
 9. Once the specified Ra is achieved, thoroughly clean floor with auto scrubber and apply protective finish.
 10. Burnish the floor with the manufacturer's recommended burnishing-pad in accordance with manufacturer instructions.
- B. Finished Level of Refinement and Clarity: Refine floor to specified Ra.

3.7 FIELD QUALITY CONTROL

- A. Inspect completed polished concrete floor system with Owner, Contractor, Architect, and Installer prior to protection covering.
- B. Review procedures with Architect to correct unacceptable areas of completed polished concrete floor system.
- C. Testing: Test completed polished concrete floor system for compliance with specified values.
 1. Dynamic Coefficient of Friction per ANSI B101.3.
 2. Ra refinement determined by Owner
 3. Floor Surface Profiles, ASTM E 1155.
- D. Test Results:
 1. Report test results in writing to Owner, Contractor, and Architect within 24 hours after tests.
 2. Report final Ra measurements to SCS and owner representative for certification and future maintenance baseline.

3.8 PROTECTION

- A. Protect completed polished concrete floor system from damage until Substantial Completion.
 1. Do not allow vehicle and pedestrian traffic on unprotected floor.

2. Do not allow construction materials, equipment, and tools on unprotected floor.

B. Immediately remove mortar splatter, spilled liquids, oil, grease, paint, coatings, and other surface contaminants which could adversely affect completed polished concrete floor system.

C. Repair damaged areas of completed polished concrete floor system to satisfaction of Architect.

3.9 PRODUCT DISPOSAL

A. Upon completion of densifier and reflective finish application, dispose of excess material as required by local agency having jurisdiction.

B. Certified applicator shall remove densifier and reflective finish product containers from job site immediately upon completion of treatment.

3.10 CLEANING, DEMONSTRATION AND TRAINING

A. Perform final cleaning according to liquid treatment system manufacturer's instructions. Record cleaning and Ra measurement in maintenance log.

B. Train Owner's maintenance personnel on baseline Ra and on cleaning and maintaining RCS polished concrete floors.

C. Prepare and deliver maintenance log to Owner.

3.11 MAINTENANCE

A. Full warranty will be applied when the RCS maintenance system is applied regularly. Consult RCS manufacturer's recommendations.

END OF SECTION