Addendum No.: 7 **Date Of Addendum: 3/15/19**

CT DAS ● Construction Services ● Office of Legal Affairs, Policy, and Procurement

York Correctional Institution Central Plant and Piping Distribution
201 West Main Street, Niantic, CT
BI – JA – 465

Original Bid Due Date / Time:	**3/07/19**	**2:00 PM EST**

Previous Addendums: Addenda 1, 2, 3, 4, 5 & 6

TO: **Prospective Bid Proposers:**
This Addendum forms part of the "Contract Documents" and modifies or clarifies the original "Contract Documents" for this Project dated 12/21/18. Prospective Bid Proposers **shall** acknowledge receipt of the total number the Addenda issued for this Project on the space provided on Section 00 41 00 Bid Proposal Form.

Failure to acknowledge receipt of the total number the Addenda issued for this Project on the space provided on Section 00 41 00 Bid Proposal Form shall subject Bid Proposers to disqualification.

The following clarifications are applicable to drawings and specifications for the project referenced above.

Item 1:

Pre-Bid Walkthrough sign-in sheets for Bid Packages 31B, 21A/26A, 3A/4A, 5A, 9A, 1A/9B, and 9C attached.

Item 2:

See attached for responses to pre-bid questions Q266 thru Q288 with typical bar joist hanger attachment cutsheets provided for reference (A280).

End of Addendum 7

BI-JA-465 York Correctional Central Plant & Distribution System
PDS Job No. 18-030

Pre-Bid Walk Through
SIGN-IN SHEET
Bid Package 31B Sitework/Excavation (SBE)

DATE: 11 March 2019

NAME	COMPANY	OFFICE	CELL	TIME-IN	TIME-OUT	EMAIL
RANDY BECKER	PDS	860.242-8586	860-978-6316	8:35AM		randyb@pdsec.com
ROBERT NEDDEN	DOWNES		860-751-4594	8:35	10:23	
EDWARD GRANT	K+J Tree Service	203-248-8733	203-298-8074	8:35	10:19	edward@KJTreeservice.com
Rob Matejek	Midstate Site Development	860-242-1283	860-716-4735	8:35	10:19	rmatejek@msdct.com
Jim Wray	Advance Resources	860-572-9942	860-235-2846	8:35	10:19	Betty@AdvanceResourcesLLC.com
PAT DiChello	DiChello Const Co.	860-384-5182	860-384-5182	8:30		DCHLLCO@GMAIL.COM
ROBERT BURY	WSP	212-760-5610	201-230-9870	8:30	10:20	ROBERT.BURY@WSP.COM
Joe Lucia.	PDS.		860.202.8558	8:30	10:20	Joe@PDSec.com
Ed McAllister	McAlister Const.	203-858-3083	(203) 509-2555	9:46	10:20	ed@mcallisterconstruction[illegible].com
PAT Dichello	Dichello Constr	860 384 5182	860 384 5182	10:00		DCHLLCO@GMAIL.COM

BI-JA-465 York Correctional Central Plant & Distribution System
PDS Job No. 18-030

Pre-Bid Walk Through
SIGN-IN SHEET
Bid Packages 21A Fire Suppression and 26A Electrical

DATE: 11 March 2019

NAME	COMPANY	OFFICE	CELL	TIME-IN	TIME-OUT	EMAIL
Tom Manente	Dicin Electric	860-442-0826	860-463-1754	1:00	2:40	Tom@DicinElectric.com
Linda McKim	Ferguson	800-517-3221	———	1:00	2:40	lmcKim@fer-guson-ct.com
Scott Kozvch	DOWNES	860-229-3755	860-617-5109	1:00	2:42	SKozvch@downesco.com
Kurt Zwick	TUCKER	203 630-7200	2035312214	1:00	2:40	KZWICK@EMCOR.NET
Matt Hoff	Banton	203 234 2353		1	2:40	mhoff@Bantonconstruction.com
Americo Gloria	A+R ELECTRICAL INC.	203-368-3912	203 395 365	1 PM	2:40	arELECTRICAL31@aol.com
Nick Pullano	Banton	203-401-4590		1 PM	2:40	npullano@bantonconstruction.com
Chris Hewson	Dicin Electric	860-442-0826		1 PM	2:40	Chris@dicinelectric.com
Robert Bury	WSP	212-960-5610	21-230-9670	1PM	2:40	Robert.Bury@wsp.com.
Ambarish Desai	WSP	212-613-8845		1 PM	2:40	Ambarish.Desai@WSP.com
Randy Becker	PDS	860-242-8586	860-978-6316	1:00 pm	2:40	randyb@pdsec.com
Nick Dellalamera	MS Daly	203-233-3543		1:00	2:40	ndellalamera@mydaly11c.com

BI-JA-465 York Correctional Central Plant & Distribution System
PDS Job No. 18-030

Pre-Bid Walk Through
SIGN-IN SHEET
Bid Packages 3A Concrete & 4A Masonry

DATE: 12 March 2019

NAME	COMPANY	OFFICE	CELL	TIME-IN	TIME-OUT	EMAIL
RANDY BECKER	PDS	860-242-8586	860-978-6316	8:30	10:30 AM	randyb@pdsec.com
Jim Lang	Advance Resources LLC	860-572-5942	860-235-2546	8:30	9:25	Betty@AdvanceResourcesLLC.com
SCOTT KOZUCH	DOWNES	860-229-3755	860-617-5109	8:30	10:30	SKOZUCH@DOWNESCO.com
SLAWOMIR OLCHANOWSKI	CT MASONS LLC	860-621-3136	860-982-9214	8:30	9:15	CTMASONSLLC@GMAIL.com
James Filloramo	John Filloramo Const.	860-289-6433	860-965-1008	8:30	9:15	jfconstructioninc@gmail.com
PETER BOUCHIE	WSP	617-960-4240	617-777-5402	8:30	9:15	peter.BOUCHIE@WSP.COM
✡						

BI-JA-465 York Correctional Central Plant & Distribution System
PDS Job No. 18-030

Pre-Bid Walk Through
SIGN-IN SHEET
Bid Package 5A Structural Steel & Misc. Metals

DATE: 12 March 2019

NAME	COMPANY	OFFICE	CELL	TIME-IN	TIME-OUT	EMAIL
RANDY BECKER	PDS	860-242-8586	860-978-6316	1:00	2:45	randy@epdsec.com
Gil Soucier	EBP	860 243 1110	860-8183966	1:00	2:08	GSoucier@EBPFAB.com
STEPHEN PAZDAR	XTX ASSOCIATES	860-402-7711	860-402-7711	1:00	2:08	SPAZDAR@XTXASSOCIATES.COM
TIM SHEEHAN	STEELTECH	860-690-7977	860-680-7977	1:00	2:05	TSHEEHAN@STEELTECHBP.COM
Sebastian LaRosa	Steeltech	860 290 8390	860 335-2765	1:00	1:28	slarosa@steeltechbp.com
ANTHONY FRASCO	QSR STEEL	8605486248	860 748 1737	1:00	2:08	ANTHONY@QSRSTEEL.COM
PETER BOUCHIE	WSP	617-960-4910	617-777-5902	1:00	2:45	PETER.BOUCHIE@WSP.COM
SCOTT KOZUCH	DOWNES	860-229-3755	860-617-5109	1:00	2:15	SKOZUCH@DOWNESCO.COM

BI-JA-465 York Correctional Central Plant & Distribution System
PDS Job No. 18-030

Pre-Bid Walk Through
SIGN-IN SHEET
Bid Package 9A General Trades & Carpentry / Roofing & Waterproofing (M/WBE)
DATE: 13 March 2019

NAME	COMPANY	OFFICE	CELL	TIME-IN	TIME-OUT	EMAIL
Joe DeSanti	Downes		203-600 9293	8:45	9:35	JDesanti@downesco.com
RANDY BECKER	PDS	860-242-8586	860-978-6316	8:45	11:02	randyb@pdsec.com
Moe Villano	CT Carp. Corp	860-571-8812	860-416-6087	8:45	10:56	ESTIMATING@CTCARPENTRY.com
Timothy Washington	Tim's Enterprises LLC	203-772-2982	203-410 5186	8:45	10:56	tims.enterprises@yahoo.com
Andrina Valbuena	PDS Engineering & Const	860-242-8586		8:49	11:01	andrina.valbuena@pdsec.com
JOSEPH LUCAS	PDS ENGR	"	860-202-8558	8:49	11:00	JOEL@PDSEC.COM
Bill Ayles	JCJ Architecture		8032493573	8:50	11:00	WAyles@JCJ.com

BI-JA-465 York Correctional Central Plant & Distribution System
PDS Job No. 18-030

Pre-Bid Walk Through
SIGN-IN SHEET
Bid Packages 1A Moving & Cleaning (M/WBE) and 9B Painting & Caulking
DATE: 14 March 2019

NAME	COMPANY	OFFICE	CELL	TIME-IN	TIME-OUT	EMAIL
PETER KITE	ROBERGE PTG	860582-631	860 982-4498	8:30	9:55	PKITE@ROBERGEPAINTING.COM
ELI ROBERGE	"	"	860 883-2095	"	9:55	EROBERGE@ "
Bob Zacks	Schelar Painting	1877-4477246	2036274131	8:30	9:55	SchelarPainting@Gmail.com
Rich Konopka	Horizon	8602919111	8602347596	8:30	9:55	Rkonopka@HorizonSvcs.com
Tom Baerlein	Horizon Services	860798-6966	860-798-6966	830	9:55	tbaerlein@horizonsvcs.com
Tom Wilkinson	Final Klean	203-387-1725	203-996-5041	8:30	9:55	TWilkos11@Gmail.COM
Carlos Reina	Final Klean	203-387-1725	203-996-5045	8:30	9:55	reina40pal@gmail.com
James Vernale	J and J Acoustics	860-209-1025	860-209-1025	8:30	9:55	James@JandJacoustics.co
SCOTT KOZUCH	DOWNES	860-229-3755	860-617-5109	8:30	9:55	SKOZUCH@DOWNESCO.COM
Mike Nappi	M&P Painting	8602261028	8602500924	8:35	9:55	MNappi@mpPaintingLLC.com
Joseph Lucia	PDSEC			8:35	10:55	
Bill Ayles	JCJ ARCH			8:35	11:00	
DON BATCHELDER	PDS			8:35	10:45	

BI-JA-465 York Correctional Central Plant & Distribution System
PDS Job No. 18-030

Pre-Bid Walk Through
SIGN-IN SHEET
Bid Package 9C Ceilings

DATE: 14 March 2019

NAME	COMPANY	OFFICE	CELL	TIME-IN	TIME-OUT	EMAIL
Scott Kozuch	Downes	860-229-3755	860-617-5109	1:00	2:15	SKozuch@downesco.com
Matt McArdle	J. Donovan Assoc.	860-647-7990	860-234-7185	1:00	2:15	
Martin Nosal	Nosal Industries	860 669 5883	860 836 0224	1:00	2:15	MartinJR@Nosalindustries
Tyler Hetrick	Conn Acoustics Inc.	860-666-5631	860-759-0155	1:00	2:15	thetrick@connacoustics.com
Bob Macri	Macri Roofing Inc.	3032354830	2035370412	1:00	2:15	bob@macriroofing.com
Mike Skukis	Macri Roofing Inc	203 235 4830	203 537 5016	1:00	2:15	" "
Bill Ayers	JCJ			1:00	2:15	
~~Matt McArdle~~						

PDS ENGINEERING & CONSTRUCTION, INC

PRE-BID QUESTIONS AND ANSWERS (CUMULATIVE) – ADDENDUM 7

- ***Q1: (23A/26A) On Addendum #1 Drawing M518, the grade elevation where the image of a person is 38.9' and the bottom of the trench is 35.34', which would make that approximately 3'-7" deep to the bottom of pipe. The 10" pipe with insulation is about 14" diameter, that would be approximately 28" of cover, and on Addendum #1 Drawing C502 Detail #6 indicates 42" min. cover. Do we need to Heat Trace the entire runs of all the HW & CHW S&R lines or do we lower the grade at the bottom of the trench? Please advise.***

  A1: The intent is to provide heat tracing for limited lengths of underground piping where 42" cover is not available and not to provide heat tracing for entire runs of underground distribution piping. The segments of underground distribution which have less than 42" cover are generally short sections of piping which are near the new "doghouses" at the buildings and in the Building 9C loading dock area. The existing Fuel Oil piping from the Central Plant wall to the above ground Fuel Oil storage tank also gets heat traced per Drawing M209.

- ***Q2: (23A/26A) Are the Heat Trace Systems owed by Bid Package 23A or Bid Package 26A?***

  A2: Electrical Bid Package 26A shall furnish and install specified electric heating cables, accessories, warning labels, warning tape, power wiring, grounding, and control panels for the heat trace systems per Section 23 05 33, after piping has been tested and before insulation is installed, or in prefabricated heat trace tubes as indicated on Addendum #1 Drawings M518 and C502. Mechanical Bid Package 23A shall furnish and install signal and control wiring for the heat trace systems and connect the heat trace systems to the BMS. Heat trace is required for lateral HW and CHW S&R hydronic piping runs piping near and inside the new outdoor pipe enclosure "doghouses" typical as shown on Drawing C502, for the existing Fuel Oil piping to the Fuel Oil storage tank as shown on Drawings M209 and M414, and for the lateral HW and CHW S&R hydronic piping at the Building 9C loading dock area as shown on Addendum #1 Drawing M518.

- ***Q3: (23A/26A) Should the above ground bridge piping on Building 8 be prefabricated with heat trace? In a prefabricated heat trace system, the heat trace cable can be replaced without removing any insulation. This will make easier the maintenance and replacement for the heat trace cable down the road. Also, it's easier to install during construction.***

~~A3: Above ground HW S&R main loop piping will have constant flow in winter months so only the HW and CHW S&R lateral piping to the pipe enclosure "doghouses", with less than 42" of cover, are vulnerable to freezing if isolated from the main loop.~~

A3: [UPDATED RESPONSE IN ADDENDUM #3] The above-ground outdoor CHW and HW piping at Bldgs 8/9C (pipe bridge area) will be heat traced per the extents as noted on dwg M516, Issue for Bid, 12/21/18. Please note that only underground CHW and HW piping is specified as prefabricated/preinsulated type (per spec 23 21 13.13 Underground Hydronic Piping); above-ground CHW and HW piping shall comply with spec 23 21 13 Hydronic Piping.

- ***Q4: (23A/26A) Detail #3 on Drawing C501 shows a Field Insulated Elbow Kit. All other details are showing factory prefabricated fittings. Section 23 21 13.13 paragraphs 2.1 B & 2.1 G states fittings should be factory pre-fabricated/ pre-engineered and pre-insulated. Are field Insulated Fittings allowed on this project or Detail #3 should be dismissed?***

  A4: Factory pre-fabricated/pre-insulated/pre-engineered fittings are required for the underground piping installation. Please disregard Detail 3, dwg C501.

ABOVE QUESTIONS ANSWERED IN ADDENDUM #2_____

Q5: (23A) Please identify what portion of the work for chemical treatment should be carried with the Mechanical bid and which portion of the chemical treatment is direct to the owner from the existing vendor? Also, please advise who the current chemical treatment vendor is, just in case the Mechanical Contractor does own carrying any pricing from them with the Mechanical Bid?

A5: See detail D3 on drawing M907 for chemical treatment work and chemical treatment vendor contact information.

- ***Q6: (23A) Please define the demo scope for the Mechanical Contractor? Would the mechanical contractor own a cut, cap, make safe effort, while mass demolition and removal would be performed by a demolition and abatement contractor? Also, any and all asbestos removal would be by others, correct?***

  A6: Mechanical Subcontract 23A owns all Mechanical, Plumbing and Communications selective demolition required. There is no Demolition Contractor on this project. Each trade will do its own selective demolition. There is no hazardous materials abatement in the project scope.

- ***Q7: (23A, 31B) Please verify that the Site Contractor owns trenching, excavating, and backfilling for the underground mechanical piping? Additionally, please verify if they would also own assisting the mechanical contractor with unloading, distributing, placing pipe onto pipe stands for any field fab, and moving the pipe into place within the trenches (with rigging assistance by the mechanical contractor). This seems to be a more fluid method rather than having the mechanical contractor provide a separate site crew, but please verify if this is correct?***

A7: Sitework Subcontract 31B owns all excavation and backfill for the site piping. Mechanical Subcontract 23A owns its own deliveries, receiving, handling, storing, transporting, rigging, lifting, setting, and installing the underground hydronic site piping. These two Subcontractors may agree to work things out together for efficiency.

- ***Q8: (23A, 31B) Please verify that all sandbagging, thrust blocks, anchor blocks, dewatering, etc., for UG Piping trenches will be furnished and installed by the site contractor?***

  A8: Sitework Subcontract 31B will use 3/8" pea stone under pipe joints rather than sandbags, and is responsible for all dewatering. Concrete Subcontract 3A is responsible for anchor blocks.

- ***Q9: (23A, 9A) Who is responsible for patching holes in existing floors & walls (masonry & sheetrock) when demo is removed (i.e. piping, ductwork, CUHs, etc.)?***

  A9: Concrete Subcontract owns patching of concrete due to demolition. Masonry Subcontract 4A owns patching of masonry due to demolition. General Trades Subcontract 9A owns patching sheetrock (gypsum board).

- ***Q10: (23A, 4A, 5A) Who is responsible for opening & closing existing walls for any new piping, ductwork, etc.? We are assuming the masons would own masonry walls, sheetrockers would own sheetrock walls, etc., but please verify?***

  A10: Mechanical Subcontract 23A is responsible to layout and coordinate the square/rectangular wall openings and roof openings for louvers, piping, and ductwork, and round wall openings for pipe, conduit, and duct penetrations with Masonry Subcontract 4A and Structural Steel Subcontract 5A. Square or rectangular masonry openings for louvers, piping and ductwork shall be the responsibility of Subcontract 4A. Square or rectangular roof openings through steel decking will be made by Subcontract 5A. The steel pipe sleeves will be provided by Mechanical Subcontract 23A for installation in masonry walls by Subcontract 4A. Subcontract 23A is responsible to core drill their round masonry wall openings and round openings through concrete walls and floors for pipe, conduit and duct penetrations as required for the Mechanical work.

- ***Q11: (23A, 3A) Who is responsible for closing up the concrete slabs when existing piping or ductwork is removed? We are assuming the concrete contractor, but please advise?***

  A11: Concrete Subcontract 3A is responsible for concrete floor infills due to mechanical demolition.

- ***Q12: (23A, 3A) Who owns cutting up any interior slabs for mechanical piping & ductwork for existing and/or new construction (if necessary)? We are assuming the concrete contractor, but please advise?***

A12: Subcontract 3A is responsible for selective demolition and disposal of all interior concrete as needed and in accordance with Section 02 41 19 Selective Demolition and as indicated on the Drawings to facilitate the new work.

- ***Q13: (23A) Are there any associated CAD fees with signing over the release forms from the Architect to start our 3D coordination?***

  A13: Release forms shall be signed and submitted for CAD files and laser scan files at no cost to the Subcontractor.

- ***Q14: (23A, 26A) Please advise if Nelson would be an approved manufacturer for the heat trace if they can meet the spec?***

  A14: Requests for equals or substitutions may be considered only if submitted on DAS Form 7001 with backup at least two (2) weeks prior to the receipt of the Competitive Bid. Otherwise, equals or substitutions will not be considered, unless it is discovered immediately after award of Subcontract 23A in WAO #1 that the basis-of-design manufacturer and model is no longer available, and that the equivalent models by the other listed manufacturers are also no longer available. In that case, Subcontract 23A shall be responsible to submit, provide, and install a product deemed equal by the Owner and Engineer in all aspects (i.e. quality, performance, efficiency, size, capacity, type, functionality, lead time, and warranty) at no additional cost to the Owner. If the submitted and approved substitute manufacturer's equipment requires additional work, installation time, coordination, materials, space, electrical requirements, controls, lead time, expediting fees, production costs, or other constraints, as compared to the basis-of design equipment, Subcontract 23A shall be responsible to pay for all such costs.

- ***Q15: (23A) Expansion Fittings and Seismic/Vibration Isolation Specs were not provided, are they not required for this project? If they are, please provide their respective specifications as well as location requirements for expansion fittings?***

  A15: Expansion fittings and seismic/vibration isolation is not required for this project.

- ***Q16: (23A) If Vibration Isolation & Expansion is deemed a requirement, please advise if Novia Associates (rep'd by Seismic Control Products) will be acceptable for the Vib-Iso & Seismic Control Products? They have a stronger representation in the CT area than most of the other spec'd manufacturer's in the aforementioned spec sections that are usually distributed for public projects, they can meet all specs and provide a PE stamp & calculations where necessary.***

  A16: Not required.

- ***Q17: (General) Will the personnel mentioned in spec 01 35 26, paragraph 1.6 (Site Safety & Health Officer, etc.,) be provided by the CM, or does the mechanical subcontractor also need to provide an SSHO for the entirety of the project?***

  A17: The CMR provides a Safety Officer for review of Subcontractor Site Specific Safety Plans and overall monthly site safety audits. Each PDS Subcontractor shall provide their own qualified safety personnel to be responsible for employee safety, Job Hazard Analyses, daily reports, PPE, toolbox meetings, OSHA compliance, housekeeping, etc.

- ***Q18: (General) Is this project tax exempt for both labor & material?***

  A18: This project is exempt from Federal Excise Taxes as well as State of Connecticut Sales Tax to the extent allowed by law.

- ***Q19: (23A) Are the permit fees going to be waived for the mechanical contractor, or do we need to provide the city mechanical permits as well as the $0.26/thousand educational fee permit? If permits are by Mechanical Contractor, please provide the square footage of total renovation, so we may apply it to Niantic's fee schedule.***

  A19: A Municipal building permit is not required on State projects. The Code Education Fee assessed on Municipal building permits does not apply to a State project. The Building Permit will be issued by the Office of the State Building Inspector at no cost to the CMR or its Subcontractors. The State Building Code requires code inspections on State construction projects under the jurisdiction of the OSBI. Also, new boilers require registration with the State by the Installer.

- ***Q20: (General) Will free parking be provided and available to all workers on site?***

  A20: Free parking is available in a secured designated parking lot on site. Only persons with DOC clearance will be allowed to enter the premises.

- ***Q21: (23A, 9C) Selective Demolition spec states: "Remove and Reinstall: Existing ceiling and suspension grid to facilitate installation of piping system. Refer to Drawings A-100, A-101, A-102, A-103, A-104, A-105, A-105.1, A-106, A-107, A-108 and A-109. Replace damaged and unusable ceiling panels and suspension grid to match existing as required." Please confirm that this will be performed by others and is not part of the MECH Contractors scope of work?***

  A21: Ceilings Subcontract 9C is responsible to remove existing ceilings and install new ceilings as shown on the Contract Documents.

- ***Q22: (23A) Please confirm that water for flushing and testing mechanical piping will be available on site and if flushing down nearby sewer drain will be acceptable?***

A22: Mechanical Subcontract 23A shall provide its own hydrostatic pressure test water supply (tanker trucks) and disposal in an approved manner (plunge pools, frac tanks, filters, hay bales, etc.) in both hot and cold weather. No water is available on site for pipe flushing and testing.

- ***Q23: (23A) Since all underground piping is CHWS&R and HWS&R piping, please advise if B31.9 requirements could be put in place rather than B31.1? We have performed many projects under both B31.1 and B31.9, this seems to fall under B31.9 (Building Services Piping) rather than B31.1 (Power Piping), but please advise?***

  A23: Install piping per B31.1 as specified.

- ***Q24: (23A, 21A) Is all the work shown on the mechanical drawings regarding Fire Suppression systems to be included with the Mechanical Bid, or is that to be ignored and be bid on at a later date by a separate Fire Suppression company? Not a problem at all to include with our bid, just needed to verify/clarify responsibility for that work?***

  A24: Fire Suppression Subcontract 21A is responsible for modifications to the existing wet-pipe fire protection systems as needed to avoid major conflicts with the Mechanical work.

- ***Q25: (23A, 4A, 9A) Mech Scope of Work #50 states to subcontract BP #4A for installation of access doors in Masonry Walls and BP #9A for installation in Drywall? Please advise if this can be changed to have the mechanical contractor furnish the doors for BP #4A & BP #9A to install as part of their base bid package? This will keep costs down, rather than us assuming a cost for a contractor that has not yet been assigned.***

  A25: Mechanical Subcontract 23A shall furnish and locate all security access doors as required for this scope of work to Subcontract 9A for installation in drywall partitions or ceilings, and to Subcontract 4A for installation in masonry walls. Security access doors shall be furnished as specified in Section 08 31 13.53 Security Access Doors and Frames. Subcontract 23A is not responsible for installation.

- ***Q26: (23A, 9A) Please verify that barricades/fencing, temporary enclosures, & temporary shoring and supports are the responsibility of other contractors (not the Mechanical Contractor)?***

  A26: General Trades Subcontract 9A is responsible for all Temporary Construction Measures necessary to facilitate all construction activities inside the occupied buildings, including, but not limited to, furnish, install, move, and remove all staging and scaffolding, zipwalls, barricades, temporary doors and windows, temporary walls and enclosures (metal studs and fire-retardant-treated plywood and lumber), relocation of the temporary “rolling fence” (furnished by Subcontract 31A) inside Building 9, etc., and all other temporary construction measures as needed

to segregate construction workers from DOC staff and inmates, in accordance with PDS' Building Logistics Plan. Sitework Subcontract 31A is responsible for fencing. Temporary shoring and supports is the responsibility of each Subcontractor for its own work.

- ***Q27: (23A) Referring back to Pre-Bid Question and Answer #3, if the above ground portion of the main HW and CHW S&R loop shuts down in mid-winter for whatever reason, i.e. power failure, repair underground pipe leak, change a valve, etc., and it's not heat traced, won't this piping be subject to freezing?***

  A27: The above-ground outdoor CHW and HW piping at Bldgs 8/9C (pipe bridge area) will be heat traced per the extents as noted on dwg M516. Response (A3) to pre-bid question 3 has been updated.

- ***Q28: (23A) Please advise if Grooved Piping Systems (Victaulic, Anvil, etc.,) would be acceptable for all aboveground hydronic piping 2-1/2" and larger in lieu of welded systems? Additionally, please advise if ProPress Copper Systems (Viega, Nibco, etc.,) would be acceptable for aboveground hydronic piping systems for piping 2" and smaller in lieu of soldered copper systems?***

  A28: Proposed alternate piping is not acceptable. Install piping as specified.

- ***Q29: (23A) According to the HVAC General Duty Valve spec, all butterfly valves for shutoff and throttling service are to be High Performance Butterfly Valves? Can you please verify that this is the intent for this project? If not, please advise if traditional HVAC butterfly valves would be acceptable (Milwaukee, Hammond, Nibco, etc.,)?***

  A29: Install high performance butterfly valves as specified.

- ***Q30: (23A) Referring back to Question #5, please verify whether or not the current vendor for chemical treatment will be furnishing and installing any and all glycol required? If all Glycol is by the Mechanical Contractor, would it be possible to provide the additional volume of the existing to remain system, so that we can add it to the volume acquired of the new system after performing the takeoff?***

  A30: Volume of existing glycol system to remain is unknown. Coordinate with chemical treatment vendor. For contact information, see detail D3 on drawing M907.

- ***Q31: (23A, 31B) How many linear feet of trench can be left open at any given time during construction?***

  A31: Please refer to the Master Schedule and Site Logistics Plan for start and finish stationing for each underground hydronic piping sequence, which vary in length. The intent is to excavate the full length and width of the "trench" for pipe installation, then backfill over the pipe leaving the field-welded joints exposed until testing and inspection is complete. Once complete, the rest will be backfilled and the crew will move on to the next sequence.

- ***Q32: (23A, 31B) Please confirm that the site contractor will be installing trenches in a trench box-plate-trench box-plate-trench box-plate fashion, in order to allow for installation of 40' lengths of pre-manufactured pipe. Installing in the old-fashioned wood shoring fashion would significantly slow down the install time of the mechanical UG piping and will need to be considered before finalizing our estimate.***

  A32: While excavation means and methods are up to Sitework Subcontract 31B, the suggested protective system to be used is "sloping" or cutting back the trench wall at an angle inclined away from the excavation, rather than shoring or shielding. The "trench" shall be opened up wide enough to install the piping and sloped back to prevent cave-ins. Type C requires a 34 degree angle (one and a half feet back for every foot deep). If shoring or shields are used, Sitework Subcontract 31B is required to ensure that the long pre-manufactured pipe lengths can be installed.

- ***Q33: (23A) Due to the high-level quality needed to perform B31.1 welds, the extensive radiographing that will take place to make sure the welds are the highest quality of welds, and the aggressive nature of the schedule, would it be okay for the mechanical contractor to work 10 hour days and to work Saturdays (when deemed necessary) without having any added costs of paying for CM or other trades to work on site as well? After reviewing some of the areas on the logistics plans in conjunction with the schedule, it is clear that 40 hours a week, 5 days a week is not enough time.***

  A33: The DOC determines the work hours. The PDS schedule is based on an 8-hour day, with a presumed 6-hour daily productivity due to stringent security check-in and check-out procedures. In the event overtime is required, due to no fault of the CMR or its Subcontractors, as determined by the CMR and approved by the Owner, overtime will be authorized and premium time costs will be covered. However, if the Subcontractor falls behind schedule due to lack of manpower (welders and other workers), inefficiencies, poor quality control, or lack of material readiness, the CMR will request additional manpower, materials, and/or equipment to recover delays to the schedule. In such case, all costs to recover the schedule shall be borne by the Subcontractor(s) responsible for the delay.

- ***Q34: (23A, 3A, 31B) Please verify that the Site Contractor owns the Stem Risers, Isolation Valve Stations & Manholes for the UG Mechanical Piping.***

  A34: Sitework Subcontract 31B owns the precast access riser vaults and manholes and lockable covers for the isolation valves. Concrete footings and anchor blocks will be installed by Concrete Subcontract 3A. The details changed in Addendum #2. Sitework Subcontract 31B shall furnish and install the solid concrete spacer blocks on the footings before the precast risers are set. Subcontract 31B also owns furnishing and installing the drilled epoxy polypropylene coated steps in Type 2 access riser vaults.

- ***Q35: (23A) I did not see any of the Fuel Oil Supply (FOS) or Fuel Oil Return (FOR) piping on the floor plans, only the flow diagrams. Will they be added to the plans in an upcoming addendum?***

A35: There is no intention to show the FO lines on subsequent addenda. The piping is 2" and smaller and is field run pending piping coordination shop drawing approval.

- ***Q36: (23A) Drawing M209 states to insulate & Heat Trace existing to remain FOS & FOR line back to storage tank. Please advise if this is shown on the DWGs and which plan that is located on? If it is not, please add to plans so heat trace and insulation sub-contractors can bid accurately.***

  A36: Outdoor/above ground No. 2 fuel oil tank and FO piping taps are shown to scale on drawings M506 & M507. FO piping to remain exits plant in between the two existing combustion air louvers between column lines A & B.

- ***Q37: (31A) Please confirm that the Site Work Contractor would own all snow removal (trenches, laydown yards, etc.)***

  A37: Site Preparation Subcontract 31A performs snow plowing, snow shoveling, salt and sand mix, and ice removal as needed to clear the front entrance at Route 156, the front parking lot and project trailers area, the two laydown areas and the construction trailers area, and pathways in between, the fenced parking lot, pathways to portable toilets and guard shacks, temporary roads to fenced work zones and access to work along trenches, soil screening area, and haul roads to stockpiles. They are not responsible to remove snow from open trenches, from piping, from stored materials, etc. Mechanical Subcontract 23A is responsible to provide tenting and temporary heating, ventilation, power and lighting to perform welding of site pipe joints.

- ***Q38: (21A) I don't see any fire protection drawings. Please clarify if they exist or not.***

  A38: There are no fire protection drawings. The fire protection scope is limited and only consists of minor relocation of existing sprinkler heads incidental to routing of the new piping through the buildings per Spec 21 13 13, Section 1.2A. No major fire protection relocations are expected as no fire protection conflicts with the new pipe routing were identified during the field survey work during the design phase.

  ABOVE QUESTIONS ANSWERED IN ADDENDUM #3_____

- ***Q39: (23A) Who is the present Controls Contractor at York Correctional Institute and which manufacturer is being used?***

  A39: The existing control systems at York Correctional include JCI (for the majority of the systems) an older portion of the facility uses a Barber-Colman system. The Dept of Corrections typically bids out control system work to multiple contractors; there is no single or primary contractor used to service the systems.

- ***Q40: (3A) We are unable to identify where Specification Section 03 01 30 Maintenance of Cast-In-Place Concrete pertains to the project. Please advise.***

A40: Specification Section 03 01 30 Maintenance of Cast-in-place Concrete can be deleted from the scope of the project.

- ***Q41: (3A) Drawing S008 shows a typical floor slab repair detail. Please provide locations where this work is required.***

  A41: Floor slab repair detail is intended to be used to repair floor slab at locations where existing concrete housekeeping pads are removed.

- ***Q42: (3A) C502 Detail 3 "Typical Anchor Block Detail" requires no reinforcement, it that correct?***

  A42: That is correct. Anchor blocks do not require reinforcement.

- ***Q43: (5A, 9A) C510 Detail 12. Please provide a construction detail for the two 4'-0" site wall gates/doors.***

  A43: Refer to details 3, 13, 14 & 15/A-510.

- ***Q44: (5A, 9A) We are unable to locate the site wall gates/door on the schedule opening chart in Specification 08 71 63 Detention Door Hardware. Please provide.***

  A44: The site wall gates/door is opening number 115 (the last entry in the 08 06 00 Schedules for Openings).

- ***Q45: (5A, 9A) Please provide the hardware requirements for the site gates/doors.***

  A45: Refer to opening number 115 (hardware (DH-2) is identified in the opening schedule and DH-2 is specified in 08 71 63 Detention Door Hardware).

- ***Q46: (7A) We are unable to locate where Specification Section 07 13 26 Self-Adhering Sheet Waterproofing applies. Please provide locations and details.***

  A46: *Specification Section 07 13 26 Self-Adhering Sheet Waterproofing can be deleted from the scope of the project.*

- ***Q47: (7A) See Section 07 13 26, Part 1.4B.1. We are unable to locate the pedestal-supported concrete pavers. Please provide a location and detail.***

  A47: Part 1.4B.1 Pedestal-supported concrete pavers in Specification Section 07 13 26 can be deleted.

- ***Q48: (7A) Detail1/A510 calls for synthetic roofing. Please provide a specification.***

  A48: Where "synthetic roofing" is noted refer to Specification Section 07 14 16 as it should be labeled "Cold Fluid-Applied Waterproofing (Roofing)".

- ***Q49: (7A) Detail 5/A240-247 calls for liquid applied waterproofing roof. Is this specified in Section 07 14 16 Cold Fluid-Applied Waterproofing (Roofing)? If not, please provide a specification.***

  A49: Yes

- ***Q50: (7A) A510 calls for synthetic roofing on the doghouses, and A210 requires liquid applied roofing. Please clarify.***

  A50: Where "synthetic roofing" is noted refer to Specification Section 07 14 16 as it should be labeled "Cold Fluid-Applied Waterproofing (Roofing)".

  Q51: (31B) Section 02 56 01, Part 2.E describes roll-off storage containers for WSA's. Are the use of roll-offs permitted as an alternate to construction of the WSA as described in the bid documents?

  A51: Use of roll-off storage containers are part of the overall Waste Stockpile Area (WSA) operation and are not considered as an alternate to constructing the WSA.

- ***Q52: (31B) Section 02 61 04 Excavation and Handling of Controlled material, Part 1.4, A.3 requires submittals of certificates to handle hazardous waste. We are unable to locate any areas that require the handling of hazardous waste material. Please advise.***

  A52: Refer to information provided in project manual division 50 sections as referenced by spec section 00 30 00 General Statements for Available Information.

- ***Q53: (9A) Does the allowance in Bid Package 9A for temporary construction measures cover additional safety/security barriers and unforeseen DOC/OSBI/OSFM-directed changes, or just what is shown in the Building Logistics Plan?***

  A53: Subcontract 9A is responsible to include all temporary construction measures necessary to facilitate all construction activities inside the occupied buildings and for safety and security as needed to segregate construction workers from DOC staff and inmates, in accordance with PDS' Building Logistics Plan, in the Base Bid. The allowance of 200 man hours and $10,000 in materials for additional safety and security requirements is being doubled to 400 man hours and $20,000 in materials in Addendum #4. This allowance covers only changes and additions to the Building Logistics Plan, as directed by the CMR, per DOC, OSBI and/or OSFM requirements.

- ***Q54: (31A) What happens to the removed trees, bushes, branches, and stumps on the project? Can they be disposed of on site?***

  A54: During the Early Work Release, Site Preparation Subcontract 31A shall cut and remove all trees within the designated clearing areas, cut off the branches, and transport the trees off site. All tree branches, shrubs and other vegetation shall be cut up or chipped and be transported off site. The Owner does not need wood chips for use on site. The select trees marked to be removed

outside the fence may be chipped into the woods. As part of site preparation at the start of each piping sequence, the stumps and roots shall be excavated and removed completely to allow for trench excavation by Sitework Subcontract 31B. No on site disposal is allowed.

- ***Q55: (General) Does Addendum 1 need to be identified on bid proposal?***

  A55: All Addenda issued before the bid date shall be listed on the Bid Proposal Form.

- ***Q56: (23A) Are local East Lyme/Niantic building permit fees to be included in 23A Mechanical?***

  A56: No. Not required.

- ***Q57: (23A) Are CT State education fees of $0.26 per $1,000 to be included in 23A Mechanical?***

  A57: No. Not required.

- ***Q58: (23A) Can a vibration and seismic control specification be provided for Division 23 HVAC?***

  A58: See Addendum #3.

- ***Q59: (23A) There are miscellaneous plumbing relocations or modifications referenced on drawings but not really defined, is this work part of the 23A $250,000 allowance?***

  a) Is M501 note 6 to relocate exist plumbing fountain, mop sink, water heater, etc. part of the allowance?
  b) Is M511 note 7 new plumbing floor drain and piping part of allowance?
  c) Is M717 note 5 to relocate 2-1/2"city water part of allowance?
  d) Is A248.1 note to replace roof drains in disrepair part of allowance?

  A59: Any plumbing relocations or modifications referenced on Drawings and Notes shall be included in Subcontract 23A's Base Bid. In your examples cited above, only the replacement of roof drains in disrepair would potentially be part of the work against the allowance. The intent is to salvage the three (3) existing roof drains. No one knows the actual condition of these drains.

- ***Q60: (23A, 9B) 23A Scope Item 32 indicates exposed uninsulated pipes and supports to be primed and painted by 9B. 9B Scope Item 28 indicates primer is applied by 23A. Please confirm who owns priming of 23A exposed uninsulated pipes and supports.***

  A60: Painting Subcontract 9B owns primer and finish coats of all bare, exposed FP/MEP piping and supports. If, for example, Fire Suppression Subcontract 21A or Mechanical Subcontract 23A furnishes and installs primed piping or pipe supports, Painting Subcontract 9B shall prep the primed surfaces as needed to apply finish coats.

- ***Q61: (23A) Hydronic high performance butterfly valves spec 23 05 23 2.5 indicates cast steel body. The specified Jamesbury 815L valve body is not available in cast steel. Carbon steel is standard. Is a carbon steel valve body acceptable?***

A61: Carbon steel valve body for high performance butterfly valves is acceptable.

- ***Q62: (23A) Please confirm who owns coring thru Building 5 & 7 retaining wall footings referenced on S002?***

  A62: Mechanical Subcontract 23A owns all coring required for their work.

- ***Q63: (23A) Are there building expansion joint requirements for HW & CHW pipes on pipe bridge between Buildings 8 and 9C?***

  A63: Building expansion joints are not required.

- ***Q64: (23A) Was the 4" temporary repair HW pipes between Buildings 4 & 9C on M709, and to be removed under this contract, installed in an earlier contract?***

  A64: Correct. This 4" temporary repair piping was installed as part of an earlier project after a system failure.

- ***Q65: (23A) Ultrasonic flow meters are dual specified in 23 05 19 2.5 & 23 09 23 2.10.G, if there are conflicts, which spec overrides?***

  A65: Follow spec 23 09 23.

- ***Q66: (23A) Who is the existing facilities chemical water treatment vendor? Can a specification or scope of work be provided for chemical water treatment? Is chemical water treatment scope part of 23A or by Owner?***

  A66: See Pre-Bid Q&A #30 in Addendum #3 and Detail #3/M907.

- ***Q67: (23A) What is the gas pressure on house side of gas service meter that's provided by Eversource?***

  A67: The fuel gas header pressure entering the plant from the meter rig outside is 7 PSIG. Refer to contract drawing M302.

- ***Q68: (23A) What size are the (2) gas vents off each boiler routed up thru roof at approx. location indicated on A107?***

  A68: Each boiler will have one ¾" vent and one 2" vent. Refer to contract drawing M302.

- ***Q69: (23A) What size are the refrigerant safety relief pipes off chillers routed up thru roof at approx. location on A107?***

  A69: Refrigerant safety relief pipes off chiller are 3". Refer to contract drawing M511, Note 4.

- ***Q70: (23A) Can a detail or sketch be provided for the overflow & drain lines off new and relocated cooling towers?***

A70: Cooling tower overflows and drains are directed to grade near the tower. No sketch will be provided. Refer to contract drawing M907, Detail D1.

- ***Q71: (23A) Please confirm if 30% HW radiographic weld testing per 23 21 13 3.8.D is paid for by the Owner or 23A. Please confirm if 15% CHW radiographic weld testing per 23 21 13 3.8.D is paid for by the Owner or 23A. Please confirm if 30% HW & CHW radiographic weld testing per 23 21 13.13 3.5.G is paid for by Owner or 23A.***

  A71: The Owner pays for all radiographic testing and inspections of hydronic piping field welds up to the specified minimum percentages. All failed welds shall be documented, repaired, and retested until passing at Subcontract 23A's expense. If more than 10% of the tested welds fail, the Owner may require up to 100% of welds to be radiographically inspected and retested until passing at Subcontract 23A's expense.

- ***Q72: (23A) Please confirm if 23 21 13 hydronic steel pipe needs to be seamless, or is ERW pipe acceptable?***

  A72: Hydronic steel pipe shall be seamless.

- ***Q73: (23A) Please confirm if 23 21 13 hydronic fittings 2-1/2"& larger needs to be butt welded, or are grooved fittings acceptable?***

  A73: See Pre-Bid Q&A #28 in Addendum #3.

- ***Q74: (23A) Please confirm if hydronic pumps need to be purchased with VFD's per 23 21 13 2.4, or are separately purchased VFD's properly coordinated acceptable?***

  A74: Preference is for the pump vendors to provide both the pumps and the VFDs as a package to avoid coordination issues between the pump motors and VFDs.

- ***Q75: (23A) Will vertical HW & CHW pipes within doghouse enclosures require aluminum insulation jacket?***

  A75: Aluminum insulation jacketing is not required inside the doghouses.

- ***Q76: (23A) Is there an M-500 series plan view drawing laying out the fuel oil system routing? if not can one be provided?***

  A76: See Pre-Bid Q&A #35 and #36 in Addendum #3.

- ***Q77: (23A) Are there any requirements on this project for interior steel double wall containment fuel oil piping as referenced per spec 23 10 00 2.2.A?***

  A77: Double wall containment fuel oil piping is not required.

- ***Q78: (23A) Are there any requirements on this project for leak-detection and monitoring of fuel oil system per spec 23 10 00 3.8?***

A78: Fuel oil leak detection and/or monitoring is required for the FO pump set and FO filtration system pans per spec section 23 10 00, items 2.7.C.12, 2.6.E.11 and 2.6.F.5.

- ***Q79: (23A) Subcontract 23A is responsible to supply a minimum of 6 to 8 experienced certified pipe welders at all times when piping is being installed on this project, working in 4 areas (2 site areas and 2 interiors of building) simultaneously for the duration of this project until welding work is complete. We must also have extra certified welders with DOC security clearance available on short notice to cover absenteeism or when more welders are needed to meet the project's master schedule. We believe this schedule is achievable if we have a minimum of 2 certified pipe welders per site piping sequence area, and each of these welders averages (2) 10" pipe welds per day. It normally takes us 3 to 4 hours per 10" pipe weld completed to ASME B31.1 code standards. With an effective six-hour work day, this may or may not be possible. Once a weld is started, it must be finished the same day. Is overtime an option to complete welds in progress?***

  A79: The PDS Master Schedule and Site Logistics Plan requires Subcontract 23A to complete a minimum of two (2) approved B31.1 10" welds per welder per day, in other words, a minimum of four (4) approved B31.1 10" welds per day in each of the two (2) site piping sequence areas. If Subcontract 23A does not maintain this production rate, they will need to supply more certified welders to maintain the schedule. It may be necessary at times, at the discretion of the CMR, to authorize up to two (2) hours of overtime on a case-by-case basis in order to complete welds in progress on any given day. Subcontractors would be paid the premium portion of overtime worked without mark-up. Signed daily T&M tickets are required as backup. Premium for overtime will not be authorized for late start, inefficient work, failed welds, lack of manpower, materials, or equipment, etc. Overtime may or may not be possible on short notice due to DOC requirements and constraints.

- ***Q80: (23A, 26A) In Looking at Drawing C502 Detail #6, there is (1) 90 and (1) 45 elbow that need to have the heat trace tube. Will any of the risers require more fittings then shown on this detail? If so, this could cause a problem for the installation of the heat trace cable, and may require a pull port. Please clarify.***

  A80: This detail is typical of just about all the piping at the buildings. There should not be any more fittings than already shown in the detail.

- ***Q81: (23A, 26A) What size heat trace tube will be required since the heat trace cable is provided by Electrical Subcontract 26A, not the Prefabricated Pipe Manufacturer?***

  A81: Heat trace tube is provided by the underground piping manufacturer as a factory assembled piece.

- ***Q82: (23A, 26A) Looking at the run of pipe between Buildings 8 & 9, could prefabricated pipe with a factory heat trace tube be used in this area? This could save time on installation, and***

replacement of the heat trace in the future could be achieved without removal of the jacket and insulation. Please advise.

A82: Follow contract drawings. Do not use underground piping for above ground use.

- ***Q83: (23A) There is no air separator indicated on the chilled water system in the Chiller Plant, is one required?***

  A83: Not required.

- **Q84: (23A) Is doghouse piping Detail 5/M903 required on 10" HW & 10" CHW at Building 10 Warehouse on M513?**

  A84: No. For Building 10 doghouse the piping only passes through. Detail 5, Dwg M903 has been updated as part of this Addendum.

- **Q85: (23A) Is doghouse piping Detail 5/M903 required on 10" HW & 10" CHW at Building 8 on M516?**

  A85: No. For Building 8 doghouse the piping only passes through. Detail 5, Dwg M903 has been updated as part of this Addendum.

- ***Q86: (9A) In Addendum #2, the Building Logistics Plan for Building 9C states area under review. Has a plan been generated for that area yet?***

  A86: Per the attached revised Building 9C Logistics Plan, Rooms 9C-100 will have 1/8" Masonite protection installed at the storefront window wall on the interior of the room. Room 9C-110 will have the same protection installed on both sides of the storefront windows. A temporary hard wall with an access door will be constructed in Room 9C-125. (See attached Building 9C Logistics Plan in Addendum #4).

- ***Q87: (23A) Drawing ES101 states that the Communications work is to be done by the Civil Contractor, and Bid Package #23A, page 20 of 26, item #72 states that the Mechanical Contractor is responsible for the OFC. Please clarify who is responsible for pricing and installing this portion of the work.***

  A87: Per Bid Package 23A, the Mechanical Contractor owns the installation of the OFC, as noted in Items #72 and #91 of the bid package. The CMR determines the scope of work assignments in the bid packages regardless of what it says on the Drawings. The scope assignments within the ES Drawings are superseded by the bid package assignments.

- ***Q88: (1A, 23A, 26A) Ref Drawing M513***
  A. Note 1 / Who is responsible for the removal, storage and re installation of the shelving system?

B. Note 3 / Who is responsible for the removal, storage and re installation of the wire mesh partition?

C. Please confirm that electrical work (conduit relocation, lighting relocation) is not part of the HVAC package.

D. Please confirm that work associated with the Fire Alarm system (note 2) is not part of the HVAC package.

A88: A. Removal, storage and re-installation of shelving is by Subcontract 1A. B. Removal and repair of wire mesh partition around piping is by Mechanical Subcontract 23A. C. Electrical relocation is by Subcontract 26A. D. Fire Alarm System work is by Electrical Subcontract 26A.

- ***Q89: (5A, 23A) Ref Drawing M510***

  A. Demo Note 1 - Please confirm that removal of ladder and other structural steel elements in the pipe pit will be by the Structural Steel Bid Package.

  B. Demo Note 6 - Please clarify Subcontract 23A scope required - are we to remove the existing HW distribution piping within the plant and run new piping throughout the plant to feed the existing heating equipment? Or are we required to connect the new HW piping to the existing header (single connection)?

  A89: A. Steel Subcontract 5A is responsible for removal of the existing ladder and handrails from the pipe pit. However, removal of all ladders, handrails, platforms, etc. for the Cooling Towers, and re-installation of new ladders, handrails, platforms, etc. for the Cooling Towers is by Mechanical Subcontract 23A. B. The existing HW distribution piping and heating equipment within the plant is to remain. The existing plant heating piping shall have a single point of connection to the new HW headers. Refer to Contract Dwgs. M205, M206, M510 (Note 6) and M511 (Note 2).

- ***Q90: (23A, 26A) Ref Drawing M510. Various notes make reference to relocation of HVAC piping and equipment as well as electrical conduits and equipment, please confirm the following:***
  A. Any relocations of existing HVAC piping or equipment are covered in the relocation allowance that we are to include in our bid.
  B. Any relocation of electrical conduit or equipment is to be performed by the Electrical Contractor.

  A90: A. Most relocations are not covered by the Allowance. This is because all relocations of HVAC piping or equipment associated with any notes or details on Drawings that specifically call for them are included in the Base Bid. Mechanical Subcontract 23A is required to carefully work around the existing, active wet pipe Sprinkler Systems and Fire Alarm Systems in each building. Subcontract 23A is also required to install all of its new work in such a manner so as to avoid interferences with existing MEP piping, ductwork, light fixtures, controls, equipment, panels, etc. The field routing of new work around interferences is included in the Base Bid. No existing ductwork shall be removed or relocated unless specifically called for in the Drawings. The Allowance is exclusively for removal and/or relocation of major unavoidable interferences associated with Existing-To-Remain mechanical and plumbing piping, supports, controls, equipment, etc. “as needed” (and authorized in advance by the CMR) but not shown or indicated

on Drawings. B. Electrical Subcontract 26A is responsible for relocations of all light fixtures, boxes, supports, electrical conduit and wire in accordance with the bid package. This includes up to 50 light fixtures, where relocations are not indicated on the Drawings, in the Base Bid.

- ***Q91: (23A) The Scope of Work for BP 23A states that we are to utilize "Basis of Design" for the Boiler, Chiller and cooling tower. Is it your intent to "Flat Spec" the basis of design suppliers?***

  A91: No. Other listed manufacturers or pre-approved substitutions may be submitted and utilized if submittals are approved. (See Items #10 and #11 in the bid package). Subcontract 23A is responsible to first confirm to the Engineer that all basis-of-design performance criteria and efficiencies (i.e. quality, performance, efficiency, noise level, size, capacity, type, functionality, lead time, warranty, etc.) are met at no additional cost to the Owner; otherwise, that manufacturer (or model) will not be approved for use on this project. Furthermore, if the submitted listed manufacturer's equipment requires additional work, installation time, coordination, materials, space, electrical requirements, controls, lead time, expediting fees, production costs, or other constraints, as compared to the basis-of design equipment, Subcontract 23A shall be responsible to pay for all such costs.

- ***Q92: (23A) Ref BP23A / Item 38 - the Scope of Work States that "Bypass piping shall be installed in each MER to allow the systems to be drained down in each building with the distribution piping on-line and circulating." There is no indication on the P&ID that any bypass is required. Please clarify and, if this is required, please provide a sketch showing quantity, size and location of valves as well as the size of the bypass.***

  A92: Bypass piping shall be installed in building 0 doghouse only as noted in detail 5, dwg M903 which has been updated as part of this Addendum.

- ***Q93: (23A) Ref Section 00 23 00 / Pg 12 / 49.c / Spec states that "Sub shall provide any trained fire watch that may be required in the performance of their work." Are you requiring a dedicated fire watch during all hot work activities?***

  A93: The DOC shall provide fire watch duties with Correctional Officers who are assigned to that specific work area. Subcontractors performing hot work shall apply for and obtain an FM Global Hot Work Permit prior to performing hot work. Subcontractors are responsible to maintain trained personnel in the area, whatever their other duties may be, for the full duration of the fire watch.

- ***Q94: (23A) Ref BP23A / Item 69 – "The existing HW and CHW distribution piping and coils in the buildings shall be flushed, cleaned, and pressure tested by Subcontract 23A…Water in the old HW and CHW piping and coils cannot be co-mingled with water in the new HW and CHW piping and coils." This item of work is vague and unquantifiable. In order for us to properly estimate this work, can you provide a list of piping footage and listing of equipment that will have to be flushed?***

  A94: Refer to information on existing drawings (excerpted drawings from BI-JA-217C, dated 10/28/1991) provided in Section 50 80 00.6 and issued as part of this Addendum.

- ***Q95: (23A) Ref BP23A / Item 70 – "Subcontract 23A is responsible for all grooved hot water piping gasket replacement in Buildings 4 and 8." This item of work is vague and unquantifiable. In order for us to properly estimate this work, can you provide a list of sizes and quantities of joints that need to be replaced?***

  A95: Replace all gaskets for mechanical fittings and couplings with Manufacturer-recommended gaskets for all Hot Water Supply and Return piping as shown on Drawings M769 & M770. Sizes and quantities can be obtained from take-offs using these drawings. Verify piping arrangement, fittings and access in the field. Gaskets for Chilled Water piping to remain.

- ***Q96: (23A, General) Ref Section 01 45 23.13 - Testing for Indoor Air Quality, Baseline IAQ, & Materials - Please indicate how this section applies to this project.***

  A96: Since this is not a LEED project, nor a Connecticut High Performance Building project, this Specification Section has limited application. There is no building flushout requirement. However, the buildings are occupied and indoor air quality is a concern during construction activities. At a minimum, low VOC products shall be submitted and used by all Subcontracts, as applicable. Subcontract 23A shall perform the specified indoor air quality sampling and testing in each building where work is being done, in accordance with Part 3.1 of this section, while work activities are in progress. If any test fails the standards, re-testing is required, and all levels must be below the limits prior to acceptance of the building.

- ***Q97: (21A) Ref Section 21 21 13.13 Wet Pipe Sprinkler Systems / 3.4 C / Spec states that we are to circulate water for 24 hours. Is there a minimum velocity required for water circulation?***

  A97: Subcontract 21A Fire Suppression is very limited on this project. The specifications cover a standard project with a complete, new sprinkler system. The work on this project includes minor relocations of existing sprinkler piping and sprinkler heads as needed so that the new MEP work above ceilings may be done, including pipes, fittings, specialties, sprinklers, pressure gauges, delegated design, submittals, quality assurance, tests and inspections as required, etc. For individual sprinkler head relocations or additions, Subcontract 21A is responsible to comply with NFPA, State and Local Codes, FM Global, the State Fire Marshal's review and approval, and other Authority Having Jurisdiction.

- ***Q98: (General) Ref Section 01 91 00 / 3.03 G - Please clarify if mockups are required.***

  A98: All Subcontracts who are responsible to furnish and install components for the pipe chase "doghouses" shall build one complete, in-place "doghouse" mock-up at the direction of the CMR for the Architect's approval.

- ***Q99: (23A) Ref Section 23 10 00 / 2.2 A - Specs state that horizontal offsets require that the FO piping be encased in a steel sleeve. Please clarify if all of the horizontal piping in the plant needs to be double wall.***

  A99: Fuel oil piping inside the plant does not require secondary containment or double wall piping.

- ***Q100: (23A) Please provide location for water frac tanks.***

  A100: Subcontract 23A is responsible for all hydrostatic pressure test water disposal in an approved manner in both hot and cold weather, using tanker trucks, frac tanks, (insulated frac tanks in cold weather), temporary pumps and hoses/pipes as required. Driver access into the facility will require clearance. The frac tanks shall be located and moved on site as needed to store and discharge test water. Coordinate location of frac tanks with the CMR and DOC on a case-by-case basis, as there is no one correct answer to cover all conditions. We will try to locate them as close to the work as possible. Discharge of test water may be coordinated with Sitework Subcontract 31B, who will be installing erosion control measures for dewatering of excavations. If not available, or not conveniently located for controlled flow of discharge from frac tanks, Subcontract 23A shall install proper erosion control measures and repair environmental damage as needed.

- ***Q101: (23A) Please describe access for water tanker trucks.***

  A101: Subcontract 23A is responsible for all hydrostatic pressure test water supply (tanker trucks) in both hot and cold weather, and temporary pumps and hoses/pipes as required. Driver access into the facility will require clearance. Coordinate location of tanker trucks with the CMR and DOC on a case-by-case basis, as there is no one correct answer to cover all conditions. We will try to locate them as close to the work as possible.

- ***Q102: (23A) Your schedule shows we are to flush the UG piping by area and section. We will provide a hydro test per code. We planned on flushing the whole Hot Water & Chilled Water Loop and to each building entrance UG as soon as it is all completed.***

  The proposed sequence is as follows:

  1. ***Fill the system with water w/tanker trucks of water.***
  2. ***Flush complete UG piping until it is clear into frac tanks.***
  3. ***Introduce cleaning chemical.***
  4. ***Dump into frac tanks.***
  5. ***Fill the system for the buildings to be tied in later.***

  A102: The requirements are to flush and hydrotest each sequence/area/section of underground hydronic piping before it can be backfilled. The pipe joints must be exposed during the hydrotest to confirm where leaks are in the event of a failure. Each sequence shown on the Site Logistics Plan must be tested and backfilled before moving on to the next sequence. Covering the entire underground piping prior to hydrotesting is not acceptable, and is problematic for quality control.

- ***Q103: (23A) Can the drain down and pipe testing water be drained to the existing sanitary sewer?***

A103: No. The sanitary sewers are not designed for that amount of flow. See A100 above for required test water discharge procedures.

- ***Q104: (23A, 31A) Can the pre-bid attendance sheets be provided to us?***

  A104: The sign-in sheets from the Pre-Bid Conferences/Walk-throughs are attached in Addendum #4.

- ***Q105: (23A) Per the scope of work item 70, please provide the quantity of grooved piping gaskets by size that will need to be replaced. We will also need to know what piping is above the suspended and hard ceilings and what the schedule for this work would be. We have no way to determine what is needed to comply with this item without some direction. Due to the lack of information can an allowance be provided to all bidders for this work?***

  A105: (See A95). Replace all gaskets for mechanical fittings and couplings with Manufacturer-recommended gaskets for all Hot Water Supply and Return piping as shown on Drawings M769 & M770. The drawings show Acoustical Tile Ceilings in these areas, which will be removed and replaced by Subcontract 9C. See Master Schedule Activities BP-4-112 and BP-8-116 for scheduled dates. Sizes and quantities can be obtained from your take-offs using these drawings. Verify piping arrangement, fittings and access in the field. No allowances will be included for this work. No clarifications, exception, or exclusions will be accepted in bids.

- ***Q106: (23A) HVAC Piping Insulation Page 1 Paragraph 1.2 Summary – Item 5. States to insulate "Fuel Oil (FO) piping indoors and outdoors." Pages 12 and 13 - 3.11 Indoor Piping Insulation Schedule does not list a requirement to insulate indoor Fuel Oil piping. Pages 13 and 14 - 3.12 Outdoor, Above Ground Piping Insulation Schedule does list a requirement for insulating Fuel Oil piping. Please clarify this conflict. Is there a requirement to insulate the indoor Fuel Oil piping, and if so what material and thickness is required?***

  A106: Only outdoor fuel oil piping shall be insulated and heat traced. FO piping within the plant does not require pipe insulation. Refer to contract drawing M209 & M414.

- ***Q107: (23A) The specifications are silent on weather a TIG root is required. We feel that a TIG root for the Underground Piping is in the best interest to the Owner, which will reduce the amount of weld slag and weld materials getting into the heat exchangers, control valves, and the other existing equipment. Please comment.***

  A107: We have no objection to TIG root provided the welds conform to B31.1 as per contract specifications and meet all testing requirements per contract documents.

- ***Q108: (23A) Chiller Plant Optimization - From Design Narrative 8 Controls 8.1 Existing Conditions:***

"The chiller plant set points shall be controlled through an algorithm that modifies temperatures, pressures, and flows to minimize energy use. Options for these controls include Optimum Energy, Siemens Demand Flow product, and Tekworx."

- ***Are one of the above listed chiller plant energy optimization algorithms (Optimum Energy, Siemens Demand Flow product, and Tekworx) to be implemented as part of this project?***

A108: Chiller Plant Optimization is not included in this project.

- ***Q109 (23A) Existing control system conduit and wire - Is the existing control system to be demolished in it's entirety, including and not limited to the following?***
  - ***Existing controller enclosures***
  - ***Existing conduit and wire to mechanical equipment***
  - ***Existing conduit and wire between control system enclosures***

  If any of the above systems are to remain for re-use, will all conduit sizes and raceway locations be provided as part of the bid documents?

  A109: All existing Enclosures, conduit and wire are to be demolished, removed and replaced entirely.

- ***Q110: (23A) Existing mechanical equipment locations - Various pieces of mechanical equipment as detailed below are specified to be controlled by not shown on the project documents. Please provide locations of the existing systems including but not limited to:***
  - ***Toilet exhaust fans***
  - ***Mezzanine exhaust fans***
  - ***Smoke purge fans***
  - ***Smoke dampers***
  - ***Building 8 fire alarm panel interface to DDC system***
  - ***General exhaust fans***
  - ***Fan coil units***
    - ***Specified sequences for building 5,7,8 (Only shown in building 8)***
  - ***Air terminal units***
    - ***Specified sequences for buildings 4,6,8,9 (Only shown in buildings 4 & 8)***
  - ***Convectors***

  A110: Refer to information on existing drawings (excerpted drawings from BI-JA-217C, dated 10/28/1991) provided in Section 50 80 00.6 and issued as part of this Addendum. Where equipment cannot be located, allow for a maximum wire length of 150 ft. Sequences of operations will be provided in Addendum #5.

- ***Q111: (23A) The sequence of operation for many of the unit heaters within the facility states they are to be thermostatically controlled without interface to BMS. One would assume that this is how they are already being controlled. Are these unit heaters to be removed from the project scope of work? If not, please detail how they are currently being controlled so necessary changes can be determined.***

A111: Unit heaters controls will be removed from this scope of work.

- ***Q112: (23A) The convector sequence of operation calls for an electric thermostat to open the control valve on a call for heat. Are the control valves being replaced with new electric control valves? If yes, provide valve size.***

  A112: Convectors will be removed from the contract documents.

- ***Q113: (23A) Please detail how the convectors are currently being controlled so necessary changes can be determined.***

  A113: See A112.

- ***Q114: Please provide convector locations.***

  A114: See A112.

- ***Q115: Please provide for locations for all smoke dampers in Building 3 and other locations, if any.***

  A115: Refer to revised points schedule page 3 for instruction on existing Smoke Purge system. Refer to information on existing drawings (excerpted drawings from BI-JA-217C, dated 10/28/1991) provided in Section 50 80 00.6 and issued as part of this Addendum.

  FURNISH AND INSTALL NEW ELECTRONIC DAMPER ACTUATORS.
  EXTEND WIRING FROM NEW CONTROLLER TO NEW ACTUATOR AND
  COMMISSION AS SPECIFIED IN SECTIONS 230923 AND 230999.
  (TYP. SMOKE DAMPER 1 THRU 11).

  SMOKE PURGE ZONE 1 - UPPER LEVEL LOUNGE 3U-E03
  SMOKE PURGE ZONE 2 - LOWER LEVEL LOUNG 3L-E02
  SMOKE PURGE ZONE 3 - INMATE ROOMS “E”

- ***Q116: (23A) Which AHUs are part of the smoke purge system? Which dampers are assigned to which AHU? (i.e How many dampers per AHU?)***

  A116: Only AHU3-4 does smoke purge as indicated on 230999 page 8 of 31.

- ***Q117: (23A) Are these dampers electrically or pneumatically actuated? If pneumatic are they to be replaced with electric actuators? If yes, please specify actuator.***

  A117: Dampers are currently pneumatically controlled but are to be upgraded with electronic actuators.

- ***Q118: (23A) Section 23 09 23-A Page 5 Shows 11 dampers being controlled but only 8 being monitored for position. Should all 11 dampers be monitored?***

A118: Yes. See revised damper information below from the revised points schedule. Refer to existing drawings for damper location. Use a maximum distance of 150' for control wire in lieu of specific location. All equipment locations will be field verified under this section of work.

- ***Q119: (23A) Building 6 Unit Heater Sequence - Sequence appears mislabeled and/or incorrect. It is referencing shut trip breaker control. Please clarify.***

  A119: Unit heater controls will be removed from this scope of work.

- ***Q120: (23A) Air terminal units - Are these referred to TUBs on project documents?***

  A120: The project documents refer to TU for Terminal Unit. Please indicated where in the contract documents this appears.

- ***Q121: (23A) Are FCUs valves being replaced? If not, what style actuator (pneumatic, 0-10V, floating) is on the unit now?***

  A121: Yes, existing FCU valves are pneumatic and shall be replaced with electronic actuated valves under this section of work. See revised specification for valve specs and the section below from the points schedule. Valve sizing information will provided in Addendum #5.

- ***Q122: (23A) Missing sequences - Drawings contain sequences of operation for Central Plant aka Building 10. Specifications provide sequences of operation for Buildings 1 thru 9. Please provide sequence of operation for remaining buildings.***

  A122: Sequence of operations will be provided in Addendum #5.

- ***Q123: (23A) Points List 23 09 23-A page 1 of 28. EF-6 & EF-7 Quantity, Points list shows a quantity of 5 DO, 5 DI, 5 AO points per fan. The point count is either incorrect or it indicates that there are five (5) EF-6s and five (5) EF-7s. Please provide clarification for fan or point quantity.***

  A123: The Points Schedule has been updated. EF Section has been included at the end of this form for reference.

- ***Q124: (23A) Buildings 9A,B,D - Points List 23 09 23-A page 14 of 28 - Heat Trace - Points list shows heat trace, Drawings do not. Is heat trace being installed in buildings 9A, 9B, 9D?***

  A124: There is no heat tracing in Buildings 9A, 9B and 9D.

- ***Q125: (23A) Buildings 9A,B,C,D - Points List 23 09 23-A page 14 of 28. MER hot and chilled water service. Points list shows MER service meters, Drawings are unclear. Are service meters being installed in each MER for buildings 9A, 9B, 9C & 9D?***

  A125: Yes. Refer to detail D4 on contract drawing M903.

- ***Q126: (23A) Building 10A - Points List 23 09 23-A page 19 of 28. MAU-10A-1 shown on points list but not shown on Drawings. Please show location of MAU-10A-1.***

  A126: Refer to contract drawing M764, Addendum 4 for location of MAU-10A-1.

- ***Q127: (23A) Building 10A - Points List 23 09 23-A page 21 of 28. MAU-12-1 shown on points list but not shown on Drawings. Please show location of MAU-12-1.***

  A127: Refer to contract drawing M766, Addendum 4 for location of MAU-12-1. NOTE; building 7 is similar to building 12. Also, refer to contract drawing M757 for location of MAU-7-1.

- ***Q128: (23A) Buildings 22 - Points List 23 09 23-A page 24 of 28 - Heat Trace - Points list shows heat trace, Drawings do not. Is heat trace being installed in building 22?***

  A128: All piping to building 22 runs underground and does not require heat tracing.

- ***Q129: (23A) Building 23 – No mechanical drawing provided. Please provide mechanical drawing for Building 23 showing: Fiber Optic Conduit run, MER service HW & CHW service entrance and Heat Trace location.***

  A129: All piping to building 23 runs underground and does not require heat tracing. Refer to contract drawing M737 for mechanical drawing of building 23 showing fiber, HW & CHW.

- ***Q130: (23A) Control wiring of systems is not shown on project documents. Various pieces of mechanical equipment as detailed below are specified to be controlled but not shown on the project documents. Please provide locations of the existing systems including but not limited to:***
  - ***Toilet exhaust fans***
  - ***Mezzanine exhaust fans***
  - ***Smoke purge fans***
  - ***Smoke dampers***
  - ***Building 8 fire alarm panel interface to DDC system***
  - ***General exhaust fans***
  - ***Fan coil units***
  - ***Specified sequences for building 5,7,8***
  - ***Only shown in building 8***
  - ***Air terminal units***
  - ***Specified sequences for buildings 4,6,8,9***
  - ***Only shown in buildings 4 & 8***
  - ***Convectors***

- A130: Refer to information on existing drawings (excerpted drawings from BI-JA-217C, dated 10/28/1991) provided in Section 50 80 00.6 and issued as part of this Addendum for equipment locations. Where equipment cannot be located, allow for a maximum wire length of 150'. Sequences of operation will be provided in Addendum #5.

- ***Q131: (23A) Control wiring of systems is not shown on project documents. If equipment locations are not going to be provided, wiring distance(s) are currently unknown. What wire lengths between mechanical systems are to be included in the project pricing?***

  A131: Where equipment cannot be located, allow for a maximum wire length of 150'.

  Q132: (23A) Daily access to terminal equipment due to restrictions on building access and escort availability is currently undefined.

  A. How many equipment locations will be made available for modifications daily?
  B. The spaces between all mechanical systems will also need to be accessed because wiring must be installed between each system. How many pathways between mechanical systems will be made available daily for interconnecting wiring?

  A132: Access to equipment needs to be worked out in the MEP coordination process for each building. Secondly, DOC officers need to escort and observe all work crews inside the buildings. Much depends on the configuration of the building, access above ceilings and to MERs, and DOC officer availability. The schedule has limited time for each activity in each building. Working on a plan in advance is the only way to approach this.

- ***Q133: (23A) Existing pneumatic systems -***
  A. Are pneumatic systems on all specified mechanical systems to be demolished?
  B. What systems are currently using pneumatic controls?
  C. What systems are using pneumatic actuation with a DDC interface?

  A133: Refer to specification section 230923, page 2 item Q. This contractor shall provide all necessary demolition and removals required to accomplish work as described the contract documents. All pneumatic devices and tubing shall be removed and disposed of in accordance with the owner's requirements. Provide coordination with the owner on the disposition of all removed equipment and accessories. All unused lines shall be removed, cut back and sealed to the farthest extent possible. Advise the Construction manager if any pneumatic equipment is discovered or determined to be required to remain in service.

- ***Q134: (23A) The specifications include a section for the requirements on the HVAC Piping Insulation. There are no apparent requirements in that section for the insulation of any equipment. There is no HVAC Equipment Insulation Section. Please clarify any requirements.***

  A134: Provide the following:
  <u>Chilled Water and Hot Water Pump Insulated Enclosures:</u>
  1. Encase pumps in 20 gauge removable aluminum cover lined with 2-inch thick 6 lb/cu ft density rigid glass fiber insulation with a maximum thermal conductivity of 0.30 BTU/hr-sq ft-deg F at a mean temperature of 75 deg F.

2. Fabricate the enclosure with a division coinciding with the pump split case so that part of the enclosure can be removed and the pump serviced and dismantled without destroying the insulation. Provide latching mechanisms at the division to keep the enclosure closed and in place during normal equipment operation.
3. Fill voids in the interior of the insulated enclosure with scraps of fiberglass insulation.
4. Vapor seal closure joints of metal casing.
5. Insulation shall be Owens-Corning type 705, Johns Manville Type 800, or Certainteed Type iB600.

Chilled Water and Hot Water Tanks and Separators Insulation:

1. Provide 1-inch thick fiber glass insulation with factory ASJ with a maximum thermal conductivity of 0.30 BTU/hr-sq ft-deg F at a mean temperature of 75 deg F.
2. Secure insulation in place with metal straps. Use mastic at exposed edges and manufacturer approved insulation tape at joints.
3. Provide removable insulation segments at service access points and at equipment nameplates.

- ***Q135: (23A) Please provide a schedule for the phases referenced on the drawings. These do not seem to be correlated in the job schedule.***

  A135: Drawing E002 states that all phasing to follow phasing as indicated in the General Phasing Drawing G003 and the Mechanical Drawings. The "phasing" that the Engineer refers to is not exactly being followed by the CMR on this project. So, in general, you can ignore the Engineer's references to phases in the Drawings. However, PDS' Master Schedule and Site Logistics Plan are synchronized and these must be followed by all Subcontractors. The Master Schedule was used to create the Site Logistics Plan. All schedule milestones must be strictly adhered to. There should be no discrepancies between these two documents.

- ***Q136: (23A) Please reference the following sections for replacement control valve work associated with various existing equipment : Spec Section 23 09 23-A, Page 16 lines 609-613 for & Spec Section 23 09 23-A, Page 21 lines 821 & 822, we will need drawings showing locations of these units, a schedule and any associated work that may be needed.***

  A136: Locations of TU9C-1 through TU9C-5 are indicated by room number on the Points List. M761 Building 9C Equipment Layout and Controls identifies the Computer Labs. See Architectural Drawings for other room numbers if not indicated on Mechanical Drawings. Building 9C Flow Diagrams M619 and M620 show where these are located schematically. See Flow Diagrams M611 and M612 for typical HW and CHW control valves to FCUs.

- ***Q137: (23A) Civil Drawing C503 Site Details notes that T-wrenches are to be supplied to operate isolation valves from the surface. It is understood that Mechanical Subcontract 23A will furnish these T-wrenches, but no quantity is specified. How many T-wrenches shall Subcontract 23A supply to the Owner?***

  A137: Provide a minimum of three T-wrenches per TYPE of operator.

- ***Q138: (23A, 26A) Electrical Subcontract 26A is required to complete all power wiring, grounding, power circuitry, and power terminations required between a piece of mechanical equipment, controls equipment, electronic safety and security equipment, and install and connect power to VFDs. Are all electrical connections to this equipment assumed to be single-point connections?***

  A138: No. For example, Drawing E002 states that all VFDs and soft starters shall be mounted externally from the MCC as indicated in the Drawings. Refer to Drawing E203 for VFD and soft starter locations in Building 10. This applies to Cooling Tower VFDs, Chiller VFDs, pump VFDs, etc. All VFDs are to be furnished by Mechanical Subcontract 23A and installed and power connected by Electrical Subcontract 26A.

- ***Q139: (23A) Reference Section 23 09 23 page 26 & 27 paragraph 2.11. A couple of questions on the specifications for Pressure Independent Control Valves -***
  2.11 C. indicates valves smaller than 1" would be Belimo PIQCv.
  2.11 D. Indicates valves 1" thru 2" would be Belimo ePIV.
  2.11 E. Indicates 2.5" thru 6" shall be ANSI250 control valves with Coil Optimization which would be Belimo ANSI250 Energy Valve.
  2.11 G. States Valve Action indicating fail safe actuators. Ref. M805 valve schedule for AHU CV (PICCV) Schedule.

  A. PICCv's are no longer available and are replaced with the ePIV per 2.11 D. above. Shall we assume a typo? Please clarify.
  B. Is ANSI250 correct per 2.11 E. above as this would normally be the standard ANSI125 series?
  C. Basis-of-Design Manufacturer and Model for AHUs shows ANSI125 Energy Valves for all size coils with non-fail safe actuators. We believe the valve choice on the schedule for ANSI125 Energy Valves with non-fail safe actuators is appropriate and will be the most effective in reducing energy costs via reduced pumping costs and coil optimization. If Fail Safe is indeed a requirement, that is fine also. Should all AHU's per the schedule be Energy Valves with non-fail safe actuators or should this schedule conform to section 2.11C-G above?

  A139: Provide a current model, or approved equal, with fail safe feature, that complies with the project documents

- ***Q140: (23A) We could not locate sequence of operations for Building 0 points list and sequence of operations. Please provide the missing information.***

  A140: Sequence of operation will be provided in Addendum #5.

- ***Q141: (23A) Buildings 0,1,2,3,4 – We could not locate Supply fan start/stop control signal and associated VFD control signal on control points list. Please provide clarification.***

  A141: The points schedule has been revised to show start / stop for the AHUs in the referenced buildings. Units in these buildings do not have VFDs.

- ***Q142: (23A) Building CNL control Protocol for Building 2 "Main Building Chilled Water Service" (Typical for several buildings as well as hot water service). Is it BACnet or hard wired control point (AI) to a field controller?***

  A142: Provide hardwired control points as indicated on project drawing M252.

- ***Q143: (23A) Control Point list items 29, 30, 31 makes reference to EF0-6. However, (5) control points are assigned per point. Please provide clarification.***

  A143: One point of each type specified per unit. Points schedule has been corrected.

- ***Q144: (23A) AHU control valves (M805) are valves with the capacity to provide flow rate values at the head-end. Drawing M903/DTL 6 calls for Flow Meter per AHU. However, control signal for same control valves in the control points list call for an analog control signal. To read flow value, the protocol point type will need to be changed to read BACnet instead of AO. Please confirm Protocol point type on points list for AHU control valves.***

  A144: The flow meter shown in Detail 6, drawing M903 is not intended to indicate installation of a flow meter at each air handler in addition to the PICCV. The flow meter/control valve in the detail is intended to indicate the PICCV itself. AHU flow is not intended to be reported back to the head-end.

- ***Q145: (23A) Control Point list items 33, 34, 35 makes reference to EF0-7. However, (5) control points are assigned per point. Please provide clarification.***

  A145: One point of each type specified per unit. Points schedule has been corrected.

- ***Q146: (23A) Typical multizone AHU control drawings on M253 shows duct mounted discharge air temperature sensor for each zone. Could Not Locate (CNL) zone discharge air temperature sensor on control point list. For muiltizone units, are duct mounted temperature sensors required per zone?***

  A146: Yes, a duct mounted temp sensor is required for each zone.

- ***Q147: (23A) General Question: Several controls signals shown on "Control Drawings M253 and M254" are not listed in the controls point list. Is it the design intent that the control point list take precedence over the Control Drawings (M253, M254), or the other way around?***

  A147: Where control points, or an element of the BMS, appear on any contract document, they are required for the project. Refer to section 230923 page 2 of 38.

  A. When conflicts or disparities occur between any contract documents, the items of greater quantity or higher cost shall be provided.

- ***Q148: (23A) Control Drawings (M253, M254) shows freeze stats. CNL freeze stats on control point list. Is it the design intent that the control point listed takes precedence over the Control Drawings regarding freeze stats (M253, M254), or the other way around?***

  A148: See A147

- ***Q149: (23A) Control Drawings (M253, M254) shows freeze stats without DDC interface. Is the design intent to not interface freeze stat into DDC head-end?***

  A149: Refer to drawing M253, note 4, M254, notes 5 and M906, detail 3.

- ***Q150: (23A) Specification Section 23 09 23-2.10-C1 calls for RTD sensors. Would 10K-type 2 sensors be acceptable since 10K-type 2 sensors are also industry standards?***

  A150: See response to Q65.

- ***Q151: (23A) On the control point list, Building 4, AHU3-3 calls for supply air VFD control signal and no VFD control signal on exhaust/return fan VFD although VAV AHU Control Drawing on M253 shows VFD on exhaust/return fan. Shall exhaust fan be furnished with a VFD and associated control signal similar to the supply fan control signal?***

  A151: For unit UHU4-3 reference to VFD will be removed.

- ***Q152: (23A) Points list make reference to EF0-6 and EF0-7. Could Not Locate (CNL) sequence of operations for EF0-6 and EF0-7. Please provide clarification.***

  A152: Sequence of operation for this equipment will be provided with Addendum #5.

- ***Q153: (23A) Sequence of operations makes reference to EF1-6 and EF1-7. CNL control points for EF1-6 and EF1-7 on the control point list. Please provide clarification.***

  A153: The Points Schedule has been updated. EF Section has been included at the end of this for for reference.

- ***Q154: (23A) Sequence of operations makes reference to EF4-5 and EF4-6. CNL control points for EF4-5 and EF4-6 on the control point list. Please provide clarification.***

  A154: See A153.

- ***Q155: (23A) Sequence of operations makes reference to EF4-10 and EF4-11. CNL control points for EF4-10 and EF4-11 on the control point list. Please provide clarification.***

  A155: Sequences will be provided in Addendum #5.

- ***Q156: (23A) AHU: points list indicates (1) actuator for each hot and cold deck zone. M253 indicates dedicated actuator for each hot deck damper and each cold deck damper. Please provide clarification.***

  A156: Provide both as indicated on the points schedule.

- ***Q157: (23A) Control Point list line item 29 makes reference to (1) specific exhaust fan which is EF0-6. However, (5) DI point are noted. Please confirm if control point qty value is correct.***

  A157: Points schedule has been corrected to reflect one point type per unit.

- ***Q158: (23A) Building 3: Control points list makes reference to EF3-18. Could Not Locate (CNL) EF3-18 in sequence of operations. Please provide clarification.***

  A158: Sequences will be provided in Addendum #5.

- ***Q159: (23A) Building 3: Sequence of operations makes reference to EF3-5. CNL EF3-5 in control point list. Please provide clarification.***

  A159: See A153.

- ***Q160: (23A) Building 3: Sequence of operations makes reference to EF3-6 and EF3-7. CNL EF3-6 and EF3-7 in control point list. Please provide clarification.***

  A160: See A153.

- ***Q161: (23A) Building 3: Sequence of operations makes reference to EF3-10 and EF3-11. CNL EF3-10 and EF3-11 in control point list. Please provide clarification.***

  A161: See A153.

- ***Q162: (23A) Building 3: EF3-4 control signals interface with AHU3-1 per the control point list. EF3-4 control signal interfaces with AHU3-4 per the sequence of operation. Please provide clarification.***

  A162: AHU3-1 interfaces with EF3-10D. Revised points schedule section is at the end of this document for reference.

- ***Q163: (23A) Smoke purge control signal on points list is identified with corresponding room names. CNL room names on plan. Please povide smoke purge control signal locations with corresponding mechanical room locations.***

  A163: Refer to information on existing drawings (excerpted drawings from BI-JA-217C, dated 10/28/1991) provided in Section 50 80 00.6 and issued as part of this Addendum for equipment

and device locations. Use a maximum distance of 150 ft for control wire in lieu of specific location. All equipment locations will be field verified under this section of work.

- ***Q164: (23A) Control point list line item 169 through 176 indicates "DO" control signal under points and "DI" control signal under protocol. Please provide clarification.***

A164: Points schedule has been modified as follows:

SMOKE PURGE - AHU3-4 (0NLY)	SMK DAMPER 1 - SMOKE ZONE 3 - UPPER LEVEL LOUNG - 3U-E03	BLDG. 3		1			DO	FURNISH AND INSTALL NEW ELECTRONIC DAMPER ACTUATORS. EXTEND WIRING FROM NEW CONTROLLER TO NEW ACTUATOR AND COMMISSION AS SPECIFIED IN SECTIONS 230923 AND 230999. (TYP. SMOKE DAMPER 1 THRU 11). SMOKE PURGE ZONE 1 - UPPER LEVEL LOUNGE 3U-E03 SMOKE PURGE ZONE 2 - LOWER LEVEL LOUNG 3L-E02 SMOKE PURGE ZONE 3 - INMATE ROOMS E	% OPEN
SMOKE PURGE - AHU3-4 (0NLY)	SMK DAMPER 2 - SMOKE ZONE 3 - INMATE ROOMS E	BLDG. 3		1			DO		% OPEN
SMOKE PURGE - AHU3-4 (0NLY)	SMK DAMPER 3 - SMOKE ZONE 2 - LOWER LOUNGE 3L-E02	BLDG. 3		1			DO		% OPEN
SMOKE PURGE - AHU3-4 (0NLY)	SMK DAMPER 4 - SMOKE ZONE 2 - LOWER LOUNGE 3U-E02	BLDG. 3		1			DO		% OPEN
SMOKE PURGE - AHU3-4 (0NLY)	SMK DAMPER 5 - AHU3-4 - RETURN DUCT FROM INMATE RROM D AND CORRIDOR - EXHAUST DAMPER LOCATED AT AHU	BLDG. 3		1			DO		% OPEN
SMOKE PURGE - AHU3-4 (0NLY)	SMK DAMPER 6 - AHU3-4 EXHAUST DAMPER LOCATED AT AHU (EF3-10-0)	BLDG. 3		1			DO		% OPEN
SMOKE PURGE - AHU3-4 (0NLY)	SMK DAMPER 7 - SMOKE ZONE 1 - LOUNGE 3U-E02	BLDG. 3		1			DO		% OPEN
SMOKE PURGE - AHU3-4 (0NLY)	SMK DAMPER 8 - SMOKE ZONE 2 - LOWER LOUNGE 3L-E02	BLDG. 3		1			DO		% OPEN
SMOKE PURGE - AHU3-4 (0NLY)	SMK DAMPER 9 - SUPPLY DUCT TO CORRIDOR	BLDG. 3		1			DO		% OPEN
SMOKE PURGE - AHU3-4 (0NLY)	SMK DAMPER 10 - SUPPLY DUCT TO INMATE ROOM D	BLDG. 3		1			DO		% OPEN
SMOKE PURGE - AHU3-4 (0NLY)	SMK DAMPER 11 - AHU3-4 - RETURN DUCT FROM ZONES 1, 2, 3 CORRIDOR, INMATE RMS D	BLDG. 3		1			DO		% OPEN

- ***Q165: (23A) Sequence of operations makes reference to Convectors and Unit Heaters. CNL convectors and unit heaters in control point list. Please provide clarification.***

  A165: Convectors and Unit Heaters will not be included in the scope of work for this project.

- ***Q166: (23A) Please confirm if there are domestic requirements for project materials and equipment i.e. steel piping or other major items.***

  A166: While there is no specific CT DAS requirement, unless otherwise specified, it is preferred that domestic piping, materials and equipment are used on this project to the greatest extent possible.

- ***Q167: (23A) A substantial value of this project for Division 23A will be Building Management Controls and Mechanical Equipment i.e.; Direct Buried Pipe, Boilers, Chillers, Pumps, Cooling Tower, Heat Exchangers etc. These items are either sole sourced or basis of design and are not available through an SBE/MBE manufacturer or supplier. Please confirm if those values can be subtracted from the total contract value prior to meeting our CHRO goals.***

  A167: CHRO requirement cannot be waived or reduced on this project. If M/WBE suppliers are not available, there are plenty of qualified M/WBE contractors who can perform some of the work to meet the CHRO goals.

- ***Q168: (23A) Specification Section 23 21 13.13 paragraph 3.3 G, states that the manufacturer's field service instructor with at least 10 years' experience is expected to be present during critical periods as defined. This would require a factory trained field technician to be there for the complete install of all pipe, 5 days a week, 8 hours a day so as not to hold up the installing contractor. Please confirm if this is the intent or if this requirement can be relaxed.***

  A168: Manufacturer's representative shall provide contractor training and be present during first pipe section rigging and bedding, first sectionalizing valve station installation, first 10 field joints and one day every 4 weeks thereafter.

- ***Q169: (23A) Drawing G003 Phase 1 1.1 indicates that we are to install the majority of underground distribution system. Please clarify what the majority is. Does this include all branch lines to the buildings?***

  A169: Subcontract 23A is responsible to furnish and install all underground hydronic piping in this project.

- ***Q170: (23A) Specification Section 23 21 13.13 paragraph 3.4 C states that we are to circulate flushing solution for a minimum of 24 hours. Please confirm if the 24 hours is to be concurrent or three 8 hour regular daily shifts.***

A170: Concurrent.

- ***Q171: (23A) Based on the phasing schedule for underground pipe, is the intent to test and flush each section prior to moving onto the next phase or test and flush all piping once the entire loop has been installed? If we are to test and flush each section prior to moving on are we to assume we will be testing the previous section again and so on?***

  A171: You can ignore the Engineer's references to phases in General Phasing Drawing G003. Subcontract 23A will flush and test the sections of underground piping between isolations valves one sequence at a time. Then the pipe will be backfilled and you will move to the next two sections in accordance with the PDS Master Schedule and Site Phasing Plan.

- ***Q172: (23A) Specification Section 23 21 13.13 3.5 E indicates that Testing shall include; Hydrostatic pressure test and Radiographic testing of welds. 3.5 F states that Contractor may choose to backfill prior to testing of pipe and assumes all liability for re-excavating, repairing and re-testing with no additional cost to the Owner. Are we to assume that this means the piping can be backfilled only after the Owner has performed x-raying of joints?***

  A172: Subcontract 31B shall backfill each section or sequence of underground hydronic piping after it has been inspected, x-rayed, flushed, hydrotested, and approved, in accordance with the PDS Master Schedule and Site Phasing Plan.

- ***Q173: (23A) Previous RFI question Q31 (A31) states that the intent is to excavate the full length and width of the trench for pipe insulation, then backfill over the pipe leaving the field welded joints exposed until testing and inspection is complete. First it contradicts the previous question #7, Also, on past projects, with different manufacturers, we have experienced pipe failures within the pipe itself and not at the welds. Who will be responsible for re-excavating the pipe should this type of failure occur?***

  A173: Subcontract 23A shall be responsible for the cost of re-excavation and backfill due to underground pipe failures.

- ***Q174: (23A) How much underground piping can we expect to install before we have to flush and test?***

  A174: Refer to the Civil Drawings, PDS Master Schedule and Site Phasing Plan for riser vault to riser vault stationing of pipe sequences and routing of lateral piping to the doghouses.

- ***Q175: (23A) Will the site contractor be responsible for over excavating bell holes or shoring at all weld joints to insure welders are in a safe hole while welding?***

  A175: Subcontract 31B is responsible for all excavation and shoring, dewatering, and pea stone installed at pipe joints. The excavation will be made safe per OSHA requirements. The excavation

will be opened wide in most areas, with sloped embankments (Class C soil). Trench boxes or hydraulic shoring will be used on a limited basis.

- ***Q176: (23A) Will the site contractor be providing trench ladders at all weld joints?***

  A176: Each Subcontractor is responsible for their own PPE and safety equipment for its own workers.

- ***Q177: (23A) Will the mechanical contractor be fully responsible for all startup, testing and commissioning of new equipment?***

  A177: See Bid Package 23A Items #29, #33, #64, #83, #85 & #93.

- ***Q178: (23A) Will equipment used for installing piping into the trenches be allowed to stay in the fenced in secured areas at night and on weekends or will they have to come out every day?***

  A178: Unless otherwise authorized by DOC, all materials, tools and equipment inside temporary fencing on stanchions on site will need to be brought back to the locked laydown area at the end of each shift.

- ***Q179: (23A) Will service trucks be allowed within the fenced in secured areas?***

  A179: Service trucks will be allowed inside the fenced areas. Drivers must have clearance. DOC officers will need to escort them in secured areas.

- ***Q180: (23A) Will the mechanical contractor be allowed to leave a Conex Jobbox be allowed to stay within the fenced in secured areas overnight?***

  A180: Subcontractors may provide their own storage containers in the fenced laydown area. Coordinate with the PDS Superintendent.

- ***Q181: (23A) Will all tools and equipment need to be inspected and accounted for when entering and leaving the fenced in secured areas?***

  A181: Yes.

- ***Q182: (23A) Previous RFI question Q37; (31A) states that the mechanical contractor is responsible for removing snow from open trenches. If the trench has been excavated but no pipe has yet been installed is it still the mechanical contractor's responsibility?***

  A182: Yes. Site Prep Subcontract 31A is responsible for snow plowing in the laydown areas and access roads and paths only.

- ***Q183: (23A) Will independent weld inspections be performed during off hours so not to disrupt the installing contractor and if not how much time should be allotted for independent weld inspections to be performed?***

  A183: Perform weld inspections after hours to minimize disruption to construction activities.

- ***Q184: (23A) Will Tig welding be required for all root passes?***

  A184: See response to Q107.

- ***Q185: (23A) Are there specific requirements for emissions on the boilers and who is responsible for testing?***

  A185: Boiler manufacturer is responsible for boiler emissions tuning to meet the State emissions requirements. Subcontract 23A is responsible to meet all Quality Assurance requirements and must submit test data, certifications, including NFPA, ASME, AHRAE/IESNA, UL, US EPA, ABMA, ISA and other documentation to confirm that the boilers are in compliance. This shall be included in the commissioning report as well as the O&M manual. The State may also provide an independent third party for emissions testing.

- ***Q186: (23A) During the testing and commissioning of equipment who will be responsible for operating equipment, will existing plant operators be responsible for operating plant during testing and commissioning?***

  A186: Contractor is responsible for testing and commissioning of equipment prior to turn over to facility.

- ***Q187: (23A) During the startup, testing and commissioning of equipment will fuel and power be provided or will the contractor be responsible for these items?***

  A187: It's anticipated that existing utilities will be used for startup, testing and commissioning. Coordinate all startup, testing and commissioning activities with facility.

- ***Q188: (23A) Drawing G003 Phase 2 2.4 and Phase 4 4.3 indicates that we are to flush and pressure test HW and CHW piping in building mechanical rooms. Does this require us to test all existing piping or just new and if it is all existing are we required to repair any leaks, how do we quantify?***

  A188: Test all new and existing building piping. Isolate equipment during testing. Provide all temporary equipment including temporary flushing strainers. Subcontract 23A shall provide unit cost to repair leaks which may result from testing.

- ***Q189: (23A) Please advise if BAC can be an acceptable manufacturer for the cooling tower.***

A189: This question is not the specified procedure to submit a pre-bid substitution request. See Section 01 25 00.

- ***Q190: (23A) In reference to submitting the bid proposal form, one of the documents that must accompany the bid is section 00 45 17 Named Subcontractor Bidder's Qualification Statement. However the bid proposal form does not have a section to list proposed Subcontractors. Please advise if the Subcontractor Bidder's Qualification Statement form can be submitted by the apparent low bidder.***

  A190: Please attach the revised Section 00 45 17 Named Subcontractor Bidder's Qualification Statement from Addendum #4 to the bid. Use the revised Bid Proposal Form in Addendum #4 for Bid Packages 23A and 31A. There is a section for proposed M/WBE subcontractors. You may use additional sheets, if desired, for additional subcontractors.

- ***Q191: (23A) Please issue the sign-in sheet from the walk-thru on 2/19 and 2/20.***

  A191: Attached in Addendum #4.

- ***Q192: (23A) Please advise if the bid opening for 23A can be postponed an extra week.***

  A192: The Bid Date will not be postponed.

- ***Q193: (23A) HX9A Bypass Valve - Building Side. Provide control valve schedule update to include valve model number.***

  A193: Building side bypass valve is intended for pump differential pressure bypass. Select building side bypass valve based on circulating pump minimum flow.

- ***Q194: (23A) HX9A Bypass Valve - Loop Side. Provide control valve schedule update to include valve model number.***

  A194: Select loop side heat exchanger control valve based on heat exchanger design flow shown in heat exchanger schedule drawing M803.

- ***Q195: (23A) Provide TU Valve Sizes and flow rates.***

  A195: Terminal Unit valve replacement will be removed from this scope of work. Reuse of the existing terminal unit valve will be included under this section.

- ***Q196: (23A) According to the City Water Flow Diagram there are two eye washes, one to be relocated and one to remain in place and reconnect with new 1/2" piping. When reviewing the floor plans (M508 & M509), the relocated one is noted, but I couldn't find the existing to remain eye wash? Please advise on the location and the pipe route for that eye wash station?***

A196: M508; Wall mounted on column line 10 to the right of existing HW CHEMICAL TREATMENT.

- ***Q197: (23A) Please confirm that all roof penetrations for mechanical piping will be cut and patched by a roofing contractor in order to withstand any warranties associated with any roofs?***

  A197: See Bid Package 23A Items #23, #41 & #82

- ***Q198: (23A) Building 10 Plans show staged work for Phases 1, 2, 3, 4 & 5. Please advise on the durations for all 5 phases? Bid Schedule shows work going on from 2019~2021, but I couldn't locate the breakdown of the durations for phases 1-through-5. Please advise?***

  A198: Disregard Engineer's Construction Phasing Guidelines on G003. Follow PDS' Master Schedule, Site Logistics Plan, and Building Logistics Plan.

- ***Q199: (23A) Please confirm that all dropped ceilings in the rooms shown with new piping installation on drawing M516 will be taken down and reinstalled by a separate acoustical ceiling contractor, as well as all other buildings with the similar situation?***

  A199: Subcontract 9C is responsible for removing and replacing ACT ceilings where indicated on Drawings. See Bid Package 23A Item #68.

- ***Q200: (23A) Will the dumpsters for all demo'ed mechanical material be supplied by others?***

  A200: See Bid Package 23A Items #19 & #41.

- ***Q201: (23A) The updated logistics plan for UG piping from Addendum #2 (page 12 of 188 from the PDF) was updated with colored sections for piping installation. Will an updated version be provided with dates provided at the bottom of the page? Color Legend was provided at the bottom of the page, but bid schedule dates for those sections would be helpful, if possible to provide?***

  A201: See Section 00 31 13 Project Master Schedule & Site Logistics Plan

- ***Q202: (23A) Please clarify whether the site work contractor or the concrete contractor owns the 1/2" thick underground foam padding at the penetration, per note #2, and the 1" thick underground foam padding per the note where the piping increases in elevation at a 45° angle, as shown on drawing M518?***

  A202: Per Section 23 21 13.13 Underground Hydronic Piping, the Mechanical Contractor shall supply all components and accessories as required to complete installation. This includes 1/2" thick underground foam padding at penetrations and 1" thick underground foam padding shown on M518

- ***Q203: (23A) Please advise on the HWS&R & CHWS&R line sizes to AHU9C-2, AHU9C-3, & AHU9C-4. AHU9C-1 is shown on M620, however, nothing currently shown on flow diagram for the other three units?***

  A203: 2”HW and 2.5”CHW typical for three units.

- ***Q204: (23A) After attending the walkthrough, it sounded like scaffolding will be furnished, installed, and maintained by PDS, can you please confirm that this is correct?***

  A204: See Bid Package 23A Item #19.

- ***Q205: (23A) Please confirm the sizes of piping shown on M769 & M770 that would need gasket replacements? Typical installation on HVAC installation would use Grooved Piping from sizes 2-1/2" and larger, and copper piping (soldered or ProPress systems) from 2" and smaller. Please identify which sizes on the HWS&R are grooved carbon steel, and which sizes are copper (soldered or ProPress) and do not need gasket replacements?***

  A205: See Addendum #1 Drawing M769

- ***Q206: (23A) Please confirm that Demolition Note #10, #15 & #16 on drawing M510 are to be performed by the Electrical Contractor, not the mechanical contractor?***

  A206: See Bid Package 23A Items #23, #36, #39 & #41 and Section 00 23 00 Item #35.

- ***Q207: (23A) Please confirm that Note #1 on drawing M513 is to be performed by others, not the mechanical contractor?***

  A207: Subcontract 1A is responsible to remove shelving and return to original condition.

- ***Q208: (23A) Please confirm that Note #2 on drawing M513 is to be performed by the Fire Alarm Contractor, not the mechanical contractor?***

  A208: Subcontract 26A is responsible to relocate existing fire alarm strobe and return to original location. See Section 00 23 00 Item #35. Subcontract 23A is responsible to relocate existing fire extinguisher and return to original location.

- ***Q209: (23A) Please confirm that Note #5 & #9 on drawing M513 are to be performed by the Electrical Contractor, not the mechanical contractor?***

  A209: Subcontract 26A is responsible to relocate existing electrical conduits and light fixtures. See Section 00 23 00 Item #35.

- ***Q210: (23A) Please confirm that Note #6 on drawing M516 is to be performed by the Electrical Contractor, not the mechanical contractor?***

A210: Subcontract 26A is responsible to relocate existing electrical conduits for security. See Section 00 23 00 Item #35

- ***Q211: (23A) Please confirm that Note #3 on drawing M707 is to be performed by the Electrical Contractor, not the mechanical contractor?***

  A211: Subcontract 26A is responsible to relocate existing electrical conduits for security. See Section 00 23 00 Item #35

- ***Q212: (23A) Please confirm that Note #6 on drawing M710 is to be performed by the Electrical Contractor, not the mechanical contractor?***

  A212: Subcontract 26A is responsible to relocate existing electrical conduits for security. See Section 00 23 00 Item #35

- ***Q213: (23A) Please confirm that Note #6 on drawing M718 is to be performed by the Electrical Contractor, not the mechanical contractor?***

  A213: Subcontract 26A is responsible to relocate existing electrical conduits. See Section 00 23 00 Item #35

- ***Q214: (23A) Please confirm that Note #6 on drawing M722 is to be performed by the Electrical Contractor, not the mechanical contractor?***

  A214: Subcontract 26A is responsible to relocate existing light fixtures. See Section 00 23 00 Item #35.

- ***Q215: (23A) Please confirm that Note #6 on drawing M724 is to be performed by the Electrical Contractor, not the mechanical contractor?***

  A215: Subcontract 26A is responsible to relocate existing light fixtures. See Section 00 23 00 Item #35.

- ***Q216: (23A) The Chiller Refrigerant Relief Piping is spec'd (23 23 19) and detailed on M902, however, no sizes are shown and it is also not shown on the floor plans? Please provide piping routes and sizes so the piping and pipe insulation can be accounted for accurately with our estimates.***

  A216: Refer to contract drawing M511, note 4. Refrigerant relief piping does not require insulation. Relief valve on chiller is by manufacturer. Combine reliefs to common header PER chiller and route 3" to existing/new as described on M511. Do not follow location shown on A107.

- ***Q217: (23A) Detail #6 on M903 shows the control valve being demolished and replaced with PICVs. Will the remainder of the valves and appurtenances also be demolished and replaced, or***

are all other items (valving, etc.,) to remain? If other items are to replaced, can you please provide a detail showing the appurtenances expected for the replacements at the AHUs?

A217: All remaining valves and appurtenances to remain. Replacement PICV valves may have different end-to-end dimension. Furnish and install pipe nipples/unions as required.

- ***Q218: (23A) Please advise on the line sizes for PDT 1 & PDT 2 shown on drawings M202 & M206, respectively?***

  A218: 3/4”

- ***Q219: (23A) The Safety Relief Discharge Piping did not make the HVAC Insulation Spec or floor plans? Please confirm that this piping does not need to be insulated? Additionally, please confirm piping is to be 3" Carbon Steel and shoot straight up and penetrate roof, as shown on A107 (penetration locations shown, not sizes)?***

  A219: See response to Q216.

- ***Q220: (23A) Please confirm all piping shown on M412 is Existing Fuel Oil Piping, and is for reference purposes only? No new piping installation depicted on this flow diagram, correct?***

  A220: Correct. For reference only. Only B10.3 is shown to be installed on this drawing.

- ***Q221: (23A) Drawing M726 shows the HWS&R lines, CHWS&R lines and two 2" Conduits at the same exact location, continuing on M516. When you then reference M516, the HWS&R lines and two 2" conduits are starting at the same location, however the CHWS&R lines are shown much further down the building, a few rooms away? Please advise if the only CHWS&R piping not shown on M516, that would need to be accounted for from M726, is the loop tying them together and the three valves?***

  A221: M726 is correct. The CHWS&R piping terminates with the 3 valves in room 9D-132.

- ***Q222: (23A) With the underground piping being tested in sections and then covered, would it be acceptable to Air Test the piping in sections, and then perform a final hydrostatic test on the entire loop at the end? With B31.1 welding requirements and the aggressive nature of the schedule, the time consumed by water testing versus air testing is considerable. Additionally, this would eliminate the chance of standing water inside the piping for 18-22 months and possibly rust? It would take over a week to fill the system with water and setup for a test, with the loops consisting of 10" piping (just as an FYI).***

  A222: Corrosion is addressed by laying up the sections of the piping systems as part of construction phasing. See spec 23 21 13.13, Section 3.4.D and spec 23 21 13, Section 3.7.D.

- ***Q223: (23A) Please provide a rough size (LxWxH) for exhaust fan being requested to move along with its weight (or a Model number if available so we can research the particulars), so that sheet metal subcontractors have an idea of what to carry for bidding purposes?***

  A223: I assume you refer to exhaust fan in building 9C boiler room to be relocated. No particulars known for fan. M517 shows fan in relocated location (above A/C on east wall). This shows the protective cage around the fan and is to scale.

- ***Q224: (23A) M903, Detail #6 shows a symbol "FM" near the control valve? Do these signify additional Flow Meters that are required separate from the Flow Meters on the Equipment Schedule? Currently, the scheduled flow meters are shown on other flow diagrams with the symbol "FT", so I just wanted to clarify what is required for these "FM" symbols, so we can make sure the Controls Contractors are accounting for the correct items?***

  A224: These are flow meters in addition to those shown on schedule.

- ***Q225: (23A) Note #11 on M716 & Note #10 on M732 states: "RELOCATE EXISTING SENSOR MOUNTED ON EXTERIOR OF EXISTING FACADE EITHER ONTO PIPE ENCLOSURE FACADE OR ONTO EXTERIOR WALL CLEARING THE ENCLOSURE." Please verify what kind of sensor this is and whose responsibility this would be (Mechanical Controls Contractor, Fire Alarm Contractor, Electrician, etc.,)?***

  A225: Subcontract 26A is responsible to relocate these existing sensors as indicated.

- ***Q226: (23A) Please confirm that the piping to UH 7-1 is existing to remain? M715, shows piping ETR and untouched on the Mezzanine drawing, and M716 reflects the same. However, M612 (Flow Diagram) shows new piping feeding UH 7-1 and the old piping demo'ed? Please advise?***

  A226: M715 & M716 are correct.

- ***Q227: (23A) The Flow Diagram for Building 9C (M620) shows existing 4" HWS&R to remain and to be tied into by the new 4" lines. The floor plan (M724) shows 4" reducing to 3" once it enter the MER Room and connecting to existing untagged size (assuming 4"). Should the floor plan be updated to show a consistent 4" line tying into existing, as shown on the flow diagram, or is the intent correct on M724?***

  A227: Update floor plan to show consistent 4”.

- ***Q228: (23A) The Flow Diagram for Building 22 (M628) shows existing 3" HWS&R to remain and to be tied into by the new 3" lines. The floor plan (M736) shows new 3" HWR line entering the building and then increasing to 4" and connecting to existing 3" HWR lines @ the boiler? Should the floor plan be updated to show a consistent 3" line tying into existing, as shown on the flow diagram, or is the intent correct on M736?***

  A228: Update floor plan to show consistent 3”.

- ***Q229: (23A) Drawing M001, Note #3 states to: "INSULATE ALL PIPING AS SPECIFIED IN SPECIFICATION SECTION 230715 - HVAC INSULATION. REPLACE ALL PIPING INSULATION DAMAGED OR DISTURBED BY INSTALLATION OF THE WORK OF THIS CONTRACT. THE INSULATION SHALL MEET THE REQUIREMENTS OF SPECIFICATION SECTION 230715." Could an allowance be provided for this, or a spot on the unit pricing for different sizes of piping if this is needed, as this could be a small number or a huge number depending on what we find after going through all 18 buildings. No HVAC Insulation subcontractor will price this without knowing exactly what needs to be replaced, so if we can replace this requirement with an allowance or provide unit prices for different sizes on the bid form, that would be appreciated.***

  A229: There is no allowance to replace piping insulation damaged or disturbed by installation of the work of this contract. The intent is to avoid or minimize damage to existing piping insulation. The Allowance in Bid Package 23A is exclusively for removal and/or relocation of major unavoidable interferences associated with Existing-To-Remain mechanical and plumbing piping, supports, controls, equipment, etc. "as needed" (and authorized in advance by the CMR) but not shown or indicated on Drawings.

- ***Q230: (23A) Please provide the footage of piping and count & type of fittings from the Fuel Oil Tank to the building, so that the Insulation Subs can accurately account for the insulation needed for this existing to remain piping. Also, please advise on the highest point of the piping off the ground (Most likely at the penetration into Building 10), so we can account for a lift as well, if necessary?***

  A230: Piping runs the entire length outside at the same elevation as building 10 penetration. Piping runs straight out to above diesel tank, turns north and runs to above No. 2 tank, turns 90 degrees east and drops into top of tank on south end of tank. Total of 3-90 degree elbows per pipe. Refer to M507. Piping exits plant in between combustion air louvers between columns A and B. Tank nozzles shown on south end of tank.

- ***Q231: (23A) Please confirm that the only new hydronic piping work in Building 23 are the HWS&R and CHWS&R stub throughs and loops shown on M737? All non-sized piping shown in MER is existing to remain and doesn't tie in to the new piping according to the floor plan. Just wanted to verify this is correct, as there isn't a flow diagram for Building #23 to verify against?***

  A231: New HW/CHW piping and fiber optic conduits shall penetrate through the basement wall of Building 23 as shown on M737 and C310 for future addition to the new Central Plant systems

- ***Q232: (23A) Please confirm that adding (or enlarging) new housekeeping pads as well as removing any old housekeeping pads will be performed by the concrete contractor?***

  A232: See Bid Package 23A Item #76.

- ***Q233: (23A) Mechanical Scope of Work #41 states to cut, cap, drain, remove piping, ductwork and controls work in Building 4 & 9C. After reviewing the plans (M709 & M723), piping demo is shown but no extent of ductwork demo is shown? Please advise on what ductwork is being***

requested to be demo'ed (system types, sizes, locations, etc.,) so our sheet metal subs can accurately account for the demolition required?

A233: No ductwork demolition is shown on Drawings. Existing ductwork must remain in place and be worked around.

- ***Q234: (23A) Please confirm that any VFD's required for this project for mechanical equipment will be furnished by the Mechanical Contractor and installed by the electrical contractor (if not integral with the equipment)?***

  A234: All VFDs that are not integral to mechanical equipment are to be furnished by Mechanical Subcontract 23A and installed and power connected by Electrical Subcontract 26A. All VFDs that are integral to mechanical equipment are to be furnished by Mechanical Subcontract 23A and single-point power connected by Electrical Subcontract 26A.

- ***Q235: (23A) Please confirm that all electrically related demo and relocations noted on mechanical drawings will be performed by the electrical contractor (Conduits to be relocated, Disconnects shown on drawings to be removed, etc.,).***

  A235: See Section 00 23 00 Item #35 and Bid Package 26A Items #6, #16 & #17 found in Addendum #2.

- ***Q236: (23A) Please confirm that all structural steel needed to hang new mechanical piping would be furnished and installed by the structural steel contractor, and that the mechanical contractor is responsible for furnishing and installing the hangers and any supplemental steel? For example, Detail #5 on M901.1 matches the desired hanger point S-1 on Drawing M516 (where the Hot Water enters Building 8 from the doghouse). The structural beam will be by the Structural Contractor and everything above is by the mechanical contractor, correct? (Same for all other hanger support details)?***

  A236: See Bid Package 23A Items #57, #58, #59 & #77.

- ***Q237: (23A) M516, Note 8 states to: "RELOCATE EXISTING WALL MOUNTED DX UNIT AS REQUIRED TO CLEAR PIPE SUPPORT." Please advise on make & model (or tonnage) of unit to be relocated and location requested for relocation? Also, please advise on the location of the condenser so new/additional piping needed to tie into the condenser from the new location of the indoor DX unit can be accurately estimated by the mechanical contractors and insulation subcontractors?***

  A237: Relocation of wall mounted DX unit should be no more than 10 feet to the left (as you face the wall) to clear path of HW and CHW piping installation entering building from pipe bridge.

- ***Q238: (23A) We are currently assuming that the old HWS&R & CHWS&R underground piping systems are going to be abandoned in place? No mention of demo was found for the current UG Piping system, so please confirm that this assumption is correct?***

A238: Existing, old underground hydronic piping systems are to be abandoned in place once the new piping systems are placed in service.

- ***Q239: (23A) 23 09 23 Controls Spec (Point List) requests Terminal Units TU-4-1~TU-4-15 control valves to be replaced with new electronic reheat valves. Please advise if only the control valves will be replaced on these units, or if any other valves (circuit setter, isolation valves, etc.,) will also need to be replaced, as this is not shown or stated to be replaced on drawing M769? Also, could the Design GPM of the units be provided for sizing purposes?***

  A239: Terminal Unit Valve replacement will be removed from this scope of work. Reuse of existing terminal unit valves will be included in this section.

- ***Q240: (23A) 23 09 23 Controls Spec (Point List) requests Terminal Units TU-6-1~TU-6-16 control valves to be replaced with new electronic reheat valves. Please advise if only the control valves will be replaced on these units, or if any other valves (circuit setter, isolation valves, etc.,) will also need to be replaced, as this is not shown or stated to be replaced on any Building 6 drawings? Also, could the Design GPM of the units be provided for sizing purposes?***

  A240: See A239

- ***Q241: (23A) 23 09 23 Controls Spec (Point List) requests Terminal Units TU-8-1~TU-8-17 control valves to be replaced with new electronic reheat valves. Please advise if only the control valves will be replaced on these units, or if any other valves (circuit setter, isolation valves, etc.,) will also need to be replaced, as this is not shown or stated to be replaced on drawing M770? Also, could the Design GPM of the units be provided for sizing purposes?***

  A241: See A239

- ***Q242: (23A) 23 09 23 Controls Spec (Point List) requests Terminal Units TU-9B-1~TU-9B-8 control valves to be replaced with new electronic reheat valves. Please advise if only the control valves will be replaced on these units, or if any other valves (circuit setter, isolation valves, etc.,) will also need to be replaced, as this is not shown or stated to be replaced on any Building 9B drawings? Also, could the Design GPM of the units be provided for sizing purposes?***

  A242: See A239

- ***Q243: (23A) 23 09 23 Controls Spec (Point List) requests Terminal Units TU-9C-1~TU-9C-5 control valves to be replaced with new electronic reheat valves. Please advise if only the control valves will be replaced on these units, or if any other valves (circuit setter, isolation valves, etc.,) will also need to be replaced, as this is not shown or stated to be replaced on any Building 9C drawings? Also, could the Design GPM of the units be provided for sizing purposes?***

  A243: See A239

- ***Q244: (23A) 23 09 23 Controls Spec (Point List) requests Terminal Units TU-13-1~TU-13-16 control valves to be replaced with new electronic reheat valves. Please advise if only the control***

valves will be replaced on these units, or if any other valves (circuit setter, isolation valves, etc.,) will also need to be replaced, as this is not shown or stated to be replaced on any Building 13 drawings? Also, could the Design GPM of the units be provided for sizing purposes?

A244: See A239

- ***Q245: (23A) UH-1 is shown on drawing M769, but does not show up on the Controls Points list in spec 23 09 23? Is this unit not being monitored and left as is, or should this unit be added to the points list and also have its control valve changed out?***

  A245: Unit heater controls replacement will be removed from this scope of work.

- ***Q246: (23A) UH-3 is shown on drawing M770, but does not show up on the Controls Points list in spec 23 09 23? Is this unit not being monitored and left as is, or should this unit be added to the points list and also have its control valve changed out?***

  A246: Unit heater controls replacement will be removed from this scope of work.

- ***Q247: (23A) During the walkthrough, it was noted that Down-time losses will be handle by adding two hours to the work day / allowing OT to stay on track. That adds approximately 25,000 man hours to the project, in downtime, but with this lost time, we believe Saturdays would be needed to keep on track and on schedule. Will this be allowed by DOC and PDS?***

  A247: The DOC determines the work hours. The PDS schedule is based on an 8-hour day, with a presumed 6-hour daily productivity due to stringent security check-in and check-out procedures. In the event overtime is required, due to no fault of the CMR or its Subcontractors, as determined by the CMR and approved by the Owner, overtime will be authorized and premium time costs will be covered. The PDS Master Schedule and Site Logistics Plan requires Subcontract 23A to complete a minimum of two (2) approved B31.1 10" welds per welder per day, in other words, a minimum of four (4) approved B31.1 10" welds per day in each of the two (2) site piping sequence areas. If Subcontract 23A does not maintain this production rate, they will need to supply more certified welders to maintain the schedule. It may be necessary, at the discretion of the CMR, to authorize up to two (2) hours of overtime per day on a case-by-case basis in order to complete welds in progress on any given day (8-hour productivity). This generally applies to site welders and site foremen, not everyone on the job. Subcontractors would be paid the premium portion of overtime worked without mark-up. Signed daily T&M tickets are required as backup. Premium for overtime will not be authorized for late starts, inefficient work, failed welds, failed hydro testing, lack of manpower, materials, or equipment, etc. Overtime may or may not be possible on short notice due to DOC requirements and constraints.

- ***Q248: (23A) Please confirm that Surveying for the UG piping (benchmarks, elevations, pipe layout, trench layout locations, etc.,) will be by others?***

  A248: See Bid Package 23A Item #72.

- ***Q249: (23A) Does the mechanical contractor have to provide a surveyor and provide As-Builts for all installed piping, or will the site surveyor be providing that separately as part of his bid package?***

  A249: See Bid Package 23A Items #17 & #74.

- ***Q250: (23A) Invitation to Bid States that "Liquidated Damages: $6,700.00 Per Calendar Day beyond Substantial Completion. $4,400.00 Per Calendar Day beyond ninety (90) days after Substantial Completion date that the CMR fails to achieve acceptance of the work." Our bonding company wants to make sure that they understand this correctly, and that after 90 days, the LDs decrease to $4,400 per day, rather than add an additional $4,400 per day to the previous $6,700 per day, becoming $11,100 per day?***

  A250: The liquidated damages are explained in Section 00 11 16, Section 00 52 03 Article 1.1, Section 00 52 73 - 5.2, and Section 00 72 23 Article 8. Liquidated damages may be assessed at two distinct times – prior to Substantial Completion, and after Substantial Completion but prior to Acceptance of the Work. These times cannot overlap, therefore the damages are not additive.

- ***Q251: (23A) Please confirm that the electrical contractor will be providing all power needs for construction (temp power for welding machines, power chords, etc.,).***

  A251: See Bid Package 23A Item #19 and Section 00 23 00 Item #52a.

- ***Q252: (23A) Please advise on the current plan regarding bathrooms and breakrooms. Will there be break areas and bathrooms setup at the different areas around the facility, since multiple areas will be worked on simultaneously, or will there be one location for bathrooms and breakrooms? If only one area, can you please advise where, and what the security requirements would be coming in and out of work areas within the prison to the breakrooms or bathrooms?***

  A252: There will be no breakrooms, so workmen must eat in their work areas, or in the construction trailer, or in designated areas in buildings. Conditions will vary. Workmen in the site piping areas must eat outdoors in their fenced work areas. The use of bathrooms inside buildings is prohibited, unless escorted by a DOC officer. Portable toilets will be provided outside all active work areas for the workmen. See Section 00 23 00 Item #52c. See Section 00 73 63 for DOC Security Requirements.

- ***Q253: (23A) Please confirm that the structural steel currently in place is strong enough to handle the new loads that the added piping will present? In finished spaces (above dropped and finished ceilings), there will be no way of hanging off the floor, so new structural steel will need to be provided by others, if we can't hang off the existing decks. Please advise?***

  A253: Above drop ceilings, see detail “Typical Joist Hanger” on drawing S003. Provide delegated design submittals for pipe supports per spec 23 05 29.

- ***Q254: (23A) Points list has us doing work to existing units, some of which are not shown on the drawings. Please confirm that all removal and replacements of ceilings in these areas will be performed by a separate ceiling contractor?***

  A254: Subcontract 9C is responsible for removing and replacing ACT ceilings. See Bid Package 23A Item #68.

- ***Q255: (23A) For buildings with existing glycol systems, are there isolation valves available for us at points of disconnection / tie-ins, in order to keep the remainder of the building functional, rather than draining the whole building?***

  A255: Buildings 7, 12, 10A and 9D will no longer be glycol sand will need to be drained anyway. The glycol system for building 9A will remain. There are no valves in building 9A to isolate the glycol to do the work. It will have to be drained.

- ***Q256: (23A) Please advise if electrical welders will be required for indoor work, in order to keep machines within each individual building, or if diesel welders will be allowed with leads running into each individual building?***

  A256: Electrical welders will be required for indoor work. All tools, materials, and equipment must be brought to the work areas in buildings as needed and as allowed in available storage. Nothing can be left outside unattended or without DOC officer observation.

- ***Q257: (23A) Will we be able to drive a work vehicle near work areas and trenches, or are we forced to park remotely and only construction equipment will be allowed near work areas and trenches?***

  A257: Parking will be in designated parking lots only. Construction equipment and construction vehicles will be allowed in fenced site piping areas at the discretion of the DOC officer on duty.

- ***Q258: (23A) M903, Detail #4 shows total of (Qty.9) Sensors in the detail but the drawing is denoting only 5 of the 9 to be hardwired back to the BMS? Where would the other 4 sensors be tied in?***

  A258: The other 4 are local gauges and are not connected to BMS.

ABOVE QUESTIONS ANSWERED IN ADDENDUM #4_____

ADDITIONAL EXHAUST FAN INFORMATION:

EF1-6, 6A, 7, 9,10A, 10B, 10C, 10D,	EXHAUST FAN - STATUS - DIFFERENTIAL PRESSURE SWITCH (TYP. 8)	AHU1-1 ---- EF-10A (LOC.ATED COLUMN. 1-0.5) AHU1-2 ---- EF1-9 (LOCATED NEAR AHU-2)	8				DI	F/I NEW SWITCH	STATUS - ON/OFF
EF1-6, 6A, 7, 9,10A, 10B, 10C, 10D,	EXHAUST FAN - START / STOP - CT (TYP. 8)	AHU1-3 ---- EF1-10C (LOCATED AT COLUMN 9.5a AHU1-4 ---- EF1-10D (LOCATED AT COLUMN 13-0,5)		8			DO	F/I CURRENT TRANSDUCER - HAWKEYE	CONTROL
EF1-6, 6A, 7, 9,10A, 10B, 10C, 10D,	EXHAUST FAN DAMPER ACTUATOR (TYP. 8)	AHU1-5 ---- EF1-10B (LOCATED T COLUMN 4.5A EF1-6 TOILETS A&B (LOCATED MECH MEZZ - COLUMN 3.5-E - NEAR AHU1-1 EF1-6A TOILETS C&D (LOCATED MECH MEZZ - COLUMN 10.5-E - NEAR AHU1-4 EF1-7 TOILETS				8	AO	F/I NEW ELECTRONIC DAMPER ACTUATOR / EXISTING DAMPER REMAINS	% OPEN
BUILDING 2									
EF2-6, 6A, 7, 9,10A, 10B, 10C, 10D,	EXHAUST FAN - STATUS - DIFFERENTIAL PRESSURE SWITCH (TYP. 8)	AHU2-1 ---- EF2-10A (LOC.ATED COLUMN. 1-0.5) AHU2-2 ---- EF2-9 (LOCATED NEAR AHU)	8				DI	F/I NEW SWITCH	STATUS - ON/OFF
EF2-6, 6A, 7, 9,10A, 10B, 10C, 10D,	EXHAUST FAN - START / STOP - CT (TYP. 8)	AHU2-3 ---- EF2-10C (LOCATED AT COLUMN 8.5a AHU2-4 ---- EF2-10D (LOCATED AT COLUMN 13-0,5)		8			DO	F/I CURRENT TRANSDUCER - HAWKEYE	CONTROL
EF2-6, 6A, 7, 9,10A, 10B, 10C, 10D,	EXHAUST FAN DAMPER ACTUATOR (TYP. 8)	AHU2-5 ---- EF2-10B (LOCATED T COLUMN 4.5A EF2-6 TOILETS A&B (LOCATED MECH MEZZ - COLUMN 3.5-E - NEAR AHU1-1) EF2-6A TOILETS C&D (LOCATED MECH MEZZ - COLUMN 10.5-E - NEAR AHU1-4) EF2-7 TOILETS				8	AO	F/I NEW ELECTRONIC DAMPER ACTUATOR / EXISTING DAMPER REMAINS	% OPEN
BUILDING 3									
EF3-6, 6A, 7, 9,10A, 10B, 10C, 10D,	EXHAUST FAN - STATUS - DIFFERENTIAL PRESSURE SWITCH (TYP. 8)	AHU3-1 ---- EF3-10A (LOC.ATED COLUMN. 1-E5) AHU3-2 ---- EF3-10A (LOCATED COLUMN 4.5-A7)	8				DI	F/I NEW SWITCH	STATUS - ON/OFF
EF3-6, 6A, 7, 9,10A, 10B, 10C, 10D,	EXHAUST FAN - START / STOP - CT (TYP. 8)	AHU3-3 ---- EF3-10C (LOCATED COLUMN 1.3-4.7 AHU3-4 ---- EF3-10D (LOCATED AT AHU3-4		8			DO	F/I CURRENT TRANSDUCER - HAWKEYE	CONTROL
EF3-6, 6A, 7, 9,10A, 10B, 10C, 10D,	EXHAUST FAN DAMPER ACTUATOR (TYP. 8)	AHU3-5 ---- EF1-11 (LOCATED T COLUMN 8H EF3-6 TOILETS EF3-6A TOILETS EF3-7 TOILETS				8	AO	F/I NEW ELECTRONIC DAMPER ACTUATOR / EXISTING DAMPER REMAINS	% OPEN
BUILDING 4									
EF4-3, 7, 8	EXHAUST FAN - STATUS - DIFFERENTIAL PRESSURE SWITCH (TYP. 8)	AHU4-1 ----EF4-7 (LOC.ATED AT AHU)	3				DI	F/I NEW SWITCH	STATUS - ON/OFF
EF4-3, 7, 8	EXHAUST FAN - START / STOP - CT (TYP. 8)	AHU4-2 ----EF4-8 (LOCATED AT UNIT)		3			DO	F/I CURRENT TRANSDUCER - HAWKEYE	CONTROL
EF4-3, 7, 8	EXHAUST FAN DAMPER ACTUATOR (TYP. 8)	AHU4-3 ---- EF4-3 (LOCATED AT UNIT) NOTE - EF4-3 AND SF OF UNIT SERVED BY				3	AO	F/I NEW ELECTRONIC DAMPER ACTUATOR / EXISTING DAMPER REMAINS	% OPEN
	MANUAL EF FAN CONTROL PANEL LOCATED AT NURSES STATION (TYP. 6)	THIS SYSTEM WILL REMAIN IN PLACE. REPLACE PNUEMATIC OUTPUT FROM THE PANEL RELAY TO THE DAMPER ACTUATOR. REPLACE THE EXISTING PNUEMATIC ACTUATOR WITH AN ELECTRONIC ACTUATOR.							
	EF4-9 MANUAL CONTROL	ROOM 4-901	1	1		1		REPLACE THE EXISTING PNEUMATIC DAMPER ACTUATOR WITH A NEW ELECTRONIC ACTUATOR. EXTEND WIRING FROM THE EXISTING RELAY TO NEW DAMPER.	
	EF4-10 MANUAL CONTROL	ROOM 4-902	1	1		1			
	EF4-11 MANUAL CONTROL	ROOM 4-903	1	1		1			
	EF4-12 MANUAL CONTROL	ROOM 4-904	1	1		1			
	EF4-13 MANUAL CONTROL	ROOM 4-905	1	1		1			
	EF4-14 MANUAL CONTROL	ROOM 4-906	1	1		1			
BUILDING 5									
EF5-1,2,4	EXHAUST FAN - STATUS - DIFFERENTIAL PRESSURE SWITCH (TYP. 8)	AHU5-1 ----EF5-1 (LOC.ATED AT AHU)	3				DI	F/I NEW SWITCH	STATUS - ON/OFF
EF5-1,2,4	EXHAUST FAN - START / STOP - CT (TYP. 8)	EF5-2 TOILETS		3			DO	F/I CURRENT TRANSDUCER - HAWKEYE	CONTROL
EF5-1,2,4	EXHAUST FAN DAMPER ACTUATOR (TYP. 8)	EF5-4 --- MECH ROOM 5-118 NOTE: AHU5-1 SF SERVED BY EXISTING VFD				3	AO	F/I NEW ELECTRONIC DAMPER ACTUATOR / EXISTING DAMPER REMAINS	% OPEN
BUILDING 6									
EF6-4	EXHAUST FAN - STATUS - DIFFERENTIAL PRESSURE SWITCH (TYP. 8)	AHU6-1 ---- EF6-4 MECH MEZZ	3				DI	F/I NEW SWITCH	STATUS - ON/OFF
	EXHAUST FAN - START / STOP - CT (TYP. 8)	NOTE: AHU6-1 SF AND EF6-4 SERVED BY EXISTING VFD.		3			DO	F/I CURRENT TRANSDUCER - HAWKEYE	CONTROL

- ***Q259: (23A) Specification 23 05 93 Par. 3.14 States to "perform a preconstruction inspection of existing equipment that is to remain and be reused. Addendum 5 includes sequence of operations for equipment, yet the contract drawings do not provide airflow requirements for the equipment listed. To what extent is TAB pretesting of existing equipment required?***

  A259: AHU PICV replacement does not affect airside ductwork and fan operation; airside balancing not required.

- ***Q260: (23A) Specification 23 05 93 Par. 3.14, C, States "Perform testing and balancing of existing systems to the extent that existing systems are affected by the renovation work." & 4. Balance each air outlet. To what extent of the are the existing systems to be rebalanced and are all the existing outlets and registers to be rebalanced?***

  A260: AHU PICV replacement does not affect airside ductwork and fan operation; airside balancing not required.

- ***Q261: (23A) Specification 23 05 93 Par. 3.14, C, States "Perform testing and balancing of existing systems to the extent that existing systems are affected by the renovation work." & "3. If calculations increase or decrease the air flow rates and water flow rates by more than 5 percent, make equipment adjustments to achieve the calculated rates." Who is responsible if sheave changes are required to achieve the CFM flow rates required?***

  A261: AHU PICV replacement does not affect airside ductwork and fan operation; airside balancing not required.

- ***Q262: (31A) Could I please have in writing the size posts and wire gauge of the lay down area fencing?***

  A262: The laydown area fencing consists of 12-ft. high and 8-ft. high heavy-duty chain link fencing with driven in-ground posts, concrete embedded corner and gate posts, top rail, gates, corner diagonal bracing, and in-line diagonal bracing as needed. The 12-ft. fence gets 1 roll of 24/36 coiled razor wire on top. To be safe, furnish and install mesh, gates, corner posts, line posts, gate posts, and bracing per industry standards for each height. No specifications are provided other than to be "CT DOC-approved". Submittals will be required for approval.

- ***Q263: (23A) On specification 230923, page 7 of 37, it states "Provide 25% spare capacity (or a minimum of one, whichever is greater) of each type of I/O point (BI, BO, AI, AO) in each controller." This will add tremendously to the cost if confirmed because it would require the control vendors to essentially provide full redundancy of an added controller for most of the controllers throughout the facility. For example, TU, FCU & other controllers are not available with 25% spare point capacity. With a system that is modular in nature, is it necessary to provide this huge added expense regardless of its necessity?***

  A263: 10% spare capacity in hard points are required for AHU controllers as well as controllers on the Building 10 mechanical plant. No additional point capacity is required for Terminal or Fan Coil units.

- ***Q264: (23A) Please confirm that the answer to Question #72 is for above ground hydronic pipe only and that ERW may be used for the prefabricated underground hydronic piping. Section 23 21 13 Hydronic Piping is for above ground pipe only. The steel pipe spec is ASTM A53/A 53M seamless. Section 23 21 13.13 Underground Hydronic Piping. The steel pipe spec for 2 inches and larger is ASTM A53, Grade B, ERW Type E or seamless Type S.***

  A264: Correct – Response A72 applies to above-ground hydronic piping (spec 23 21 13). The prefabricated underground hydronic piping is specified to be either ERW or Seamless per spec section 23 21 13.13.

- ***Q265: (23A) The response to Question #150 does not address the question: "Specification Section 23 09 23-2.10-C1 calls for RTD sensors. Would 10K-type 2 sensors be acceptable since 10K-type 2 sensors are also industry standards?" RTD temperature sensors are proprietary and places several control manufacturers at a disadvantage, so why are 10K-type 2 sensors not acceptable?***

  A265: 10K – Type 2 sensors are acceptable

  ABOVE QUESTIONS ANSWERED IN ADDENDUM #6_____

- ***Q266: (9C) The drawings present both 2x2 tiles and 2x4 tiles. The specifications present only a 2x4 size tile with no specific type. Please provide the tile(s) that are to be used on this project.***

  A266: See specifications section 09 51 13 Acoustical Panel Ceilings, Item 2.3.H : Modular size: "24 by 24 inches (610 by 610 mm) and 24 by 48 inches (610 by 1220mm)". Tiles are to match existing.

- ***Q267: (9C) Drawing A102 shows room 4-138 (Health records) as being inside the corridor. Please provide an edge detail that shows the transition from the corridor ceiling into the health records room.***

  A267: The Health Records room is enclosed with full height walls. There is no ceiling transition from room to corridor. The ceiling grid terminates at the walls.

- ***Q268: (9C) Drawing A102 shows corridor(s) 4-159 and corridor 4-159A as two different tile sizes. Please clarify the correct tile that should be used in these corridors (2x2 or a 2x4).***

  A268: Provide 24"x24" ceiling tiles to match existing.

- ***Q269: (9C) Please confirm that the tile in the following rooms is to be 2x4 and not 2x2. 4-139, 4-140 4-141, 4-142, 4-143.***

  A269: The intent is to remove all ceiling tiles and grids. Provide new ceiling tiles and grid to match existing and be installed in same locations with lighting, mechanical diffusers, fire protection, etc. to remain. It is believed that the existing ceiling is 24"x48".

- ***Q270: (9C) Is the equipment storage room (5-119) supposed to be an acoustical tile ceiling?***

A270: The intent is to remove all ceiling tiles and grids. Provide new ceiling tiles and grid to match existing and be installed in same locations with lighting, mechanical diffusers, fire protection, etc. to remain. It is believed that the equipment storage room currently does not have a lay in ceiling.

- ***Q271: (9C) Please provide a detail showing the transition of the corridor ceiling transition found between the 8-151 corridor and the 8-152 filing vault.***

  A271: The Filing Vault room is enclosed with full height walls. There is no ceiling transition from room to corridor. The ceiling grid terminates at the walls.

- ***Q272: (9C) Both the communications equipment room (8-144) and the storage room (8-132) contain both 2x2 and 2x4 ceiling tiles. Please clarify the correct tile size/type in this area.***

  A272: The intent is to remove all ceiling tiles and grids. Provide new ceiling tiles and grid to match existing and be installed in same locations with lighting, mechanical diffusers, fire protection, etc. to remain. It is believed that the existing ceilings are is 24”x24”.

- ***Q273: (9C) Are universal hold down clips required for this project? If so please state where.***

  A273: If you are referring to the Universal hold down clips for ceiling systems, No, they are not required. Only the clips needed are at the linear ceilings outside and in buildings 8, 9A, 9B & 9C.

- ***Q274: (9C) Where are the linear metal ceilings located on this project?***

  A274: Refer to 2/A-248 called out as “existing metal ceiling system”. Also in corridor between building 9A & 9B and under the canopy at building 8/pipe bridge area.

- ***Q275: (9C) Please provide a list of all of the documents that need to be submitted (online) prior to the bid date and what can be submitted on the bid date (i.e. nondiscrimination forms).***

  A275: See list of documents to be attached to the bid in the Bid Proposal Form.

- ***Q276: (23A) RFI 144 clearly indicates that Drawings 903/Detail-6 does not required a flow meter for each air handler. RFI 224 clearly indicates that Drawings 903/Detail-6 requires a flow meter for each air handler. Is a water flow rate value required for each air handler coil?***

  A276: Flow meters are not required at each air handling unit (beyond what is included as part of the Pressure Independent Control Valves) and reporting flow values back to the BMS is not required per prior response to pre-bid question Q144.

- ***Q277: (23A) RFI 195 indicates that the existing TU valves shall remain. Listed below are follow-up questions***

    a. ***Is the existing HW valve pneumatic?***
    b. ***If the existing HW valve is pneumatic, should the PE transducer be preplaced?***

    A277: See Item 8, Addendum 6 which states to wire to existing terminal unit transducers

- ***Q278: (5A) Please clarify which structural steel items require delegated design.***

    A278: Delegated design is not required for fabricated structural steel materials shown in the Structural Drawings. Delegated design is required for engineered temporary shoring plans as needed for installation of structural steel and miscellaneous metal components.

- ***Q279: (5A) Who furnishes power for our electric welding machines?***

    A279: Subcontract 5A shall use only electric welding machines indoors. They are also responsible to furnish temporary power from their own generators outside the building. Welding leads may run inside the building on the floor in an approved manner. Welding leads must be coiled up and secured at the end of each shift.

- ***Q280: (5A) Typical Joist Hanger Detail on Drawing S003 does not clearly show what the joist hanger attachment to the top chord is. Please describe what this typical joist hanger attachment actually is.***

    A280: Provide bar joist hanger attachments similar to product cutsheets provided in this Addendum.

- ***Q281: (9A) Cold formed metal framing calls for delegated design. Where is this specifically required?***

    A281: Delegated design is not required as long as the exact size and gauge metal framing shown on the Drawings is utilized for the doghouses, and the existing size and gauge metal framing is matched for wall infills. Be sure to show this on shop drawings for approval.

- ***Q282: (31B) Are we allowed to use site trucks to haul excavated material from waterline excavation to the storage yard?***

    A282: Large site dump trucks may be used to haul materials on site (depending on the size) as long as the culverts under haul roads are protected and the haul roads and erosion control measures are maintained. Each type of dump truck used for hauling materials shall be “calibrated” for volume (CY) capacity so that accurate records can be kept.

- ***Q283: (23A) Specification Section 23 09 23 Part 2.7-I calls for Electrical power meters. Listed below are associated questions***:
  - ***A. Meter locations are not indicated on plan. Provide electrical power meter locations.***
  - ***B. Electrical power meter is not indicated on plan. Provide meter points on control point list.***
  - ***C. Could not locate electrical power meter specification. Provide specification for meter.***
  - ***D. Is electrical power meter furnished by Division 23 or Division 26.***

  A283: There are no new electrical power meters shown on the Drawings, or described in the Sequence of Operations, or any other Contract Documents, so they are not included in the scope of Work.

- ***Q284: (23A) Section 23 09 23 Part 1.3 states that the Technical Proposal is required with the bid documents. These are submittals and a proposal for a service contract to include preventative maintenance and recommended spare parts list. How are we expected to prepare a technical proposal if we are only in the bidding phase of this project? Shouldn't we wait unit we are awarded a contract for the work?***

  A284: The Technical Proposal for the Building Management System is not required to be submitted with the 23A bid. The awarded Subcontractor shall prepare and submit this proposal during the Early Work Release as part of the lump sum fee that will be included in WAO #1. The proposal for the service contract shall be submitted as a Change Order Proposal during the Early Work Release.

- ***Q285: (5A, 7A) What are the structural steel/miscellaneous metal/CFMF framing requirements for the relocation of the existing exhaust fan shown on Drawing A106?***

  A285: Subcontract 23A shall remove the exhaust fan, layout the new opening, and relocate the exhaust fan. Subcontract 26A shall remove and relocate all associated electrical conduits and wiring to the power source and remove interfering conduits. Subcontract 7A shall carefully cut and remove the existing siding panels from the new opening and relocate, install CFMF framing, and trim these pieces in the old opening (or furnish new siding to match). Subcontract 5A shall furnish and install two (2) 8" steel girts at the new opening to match existing building framing members above and below the existing fan. The existing members will remain in place.

- ***Q286: (General) If a Bidder attends one walk-through but wants to bid another Bid Package, is it mandatory that they attend each of the walk-throughs?***

  A286: No. A Bidder must attend at least one walk-through and may bid multiple Bid Packages if they are qualified to do so.

- ***Q287: (23A) Please clarify response to Q205 and/or provide additional information on sizes of victaulic type gasket replacements.***

  A287: Please see pre-bid question responses A95 and A105. Additional information is not available.

- ***Q288: (21A / 26A) Please advise what company the fire alarm is manufactured by that is currently being used at York Correctional.***

  A288: The fire alarm panel installed in building 10 shown on drawing M763 is an EST (Edwards) model # PS4B and control model # CM2N.

B3042T - Bar Joist Hanger

Size Range: 3/8"-16 and 1/2"-13 rod

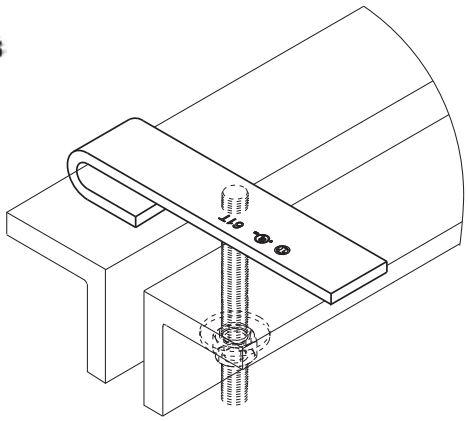
Material: Steel

Function: Designed to hook on top chord of metal bar joist. Hanger rod is threaded into product and secured with a washer and nut.

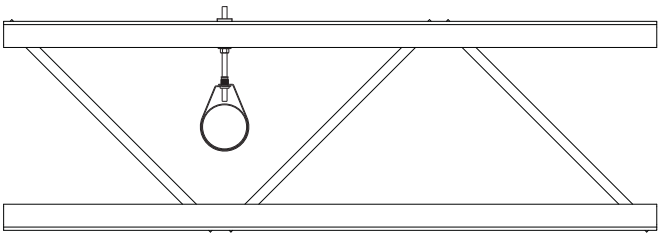
Approvals: Underwriters Laboratories Listed in the USA **(UL)** and Canada **(cUL)** for up to 4" (100mm) pipe with 3/8"-16 rod, up to 6" (150mm) pipe with 1/2"-13 rod.

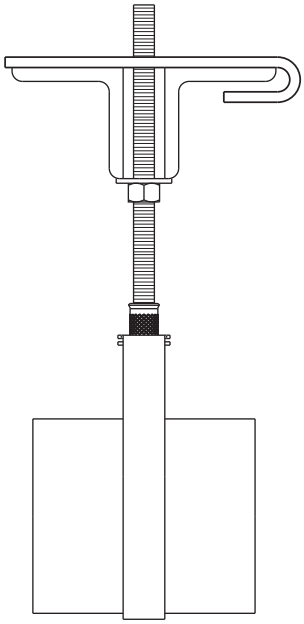
Finish: Plain. Contact customer service for alternative finishes and materials.

Order By: Part number, width and thickness of bar joist, and finish.



Part No.	Rod Size Size	For Pipe Size in.	(mm)	Design Load Lbs.	(kN)	Approx. Wt./100 Lbs.	(kg)
B3042T-3/8	3/8"-16	Up to 4"	(up to 100)	300	(1.33)	50.6	(22.9)
B3042T-1/2	1/2"-13	6"	(150)	600	(2.67)	50.0	(22.7)





All dimensions in charts and on drawings are in inches. Dimensions shown in parentheses are in millimeters unless otherwise specified.

B3031-3/8 - Light Duty Malleable C-Clamp

Material: Malleable Iron

Function: Designed for attaching a 3/8"-16 hanger rod to the top or bottom flange of a beam or bar joist when setscrew is in the down position as shown.

Approvals: Underwriters Laboratories Listed in the USA **(UL)** and Canada **(cUL)** for up to 4" pipe. Conforms to Federal Specification WW-H-171E & A-A-1192A, Type 19 and Manufacturers Standardization Society ANSI/MSS SP-69 & SP-58, Type 19.

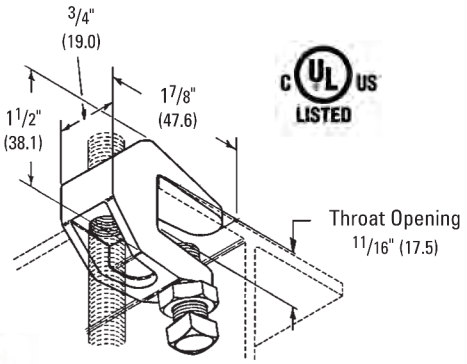
Finish: Plain or Electro-Galvanized

Order By: Part number and finish. When retaining strap is required, order Fig. 69 separately. See Page 37.

Weight: Approx. Wt./100 25 Lbs. (11.3kg)

Design Load: 350 Lbs. (1.55kN)

Note: See page 27 for recommended setscrew torque.



Hanger Rod Not Included

Set Screw and Locknut Included

B3033 - Wide Jaw Reversible C-Clamp

Size Range: 3/8"-16 thru 3/4"-10 rod
Material: Cast Malleable Steel with hardened cup point set screw and jam nut

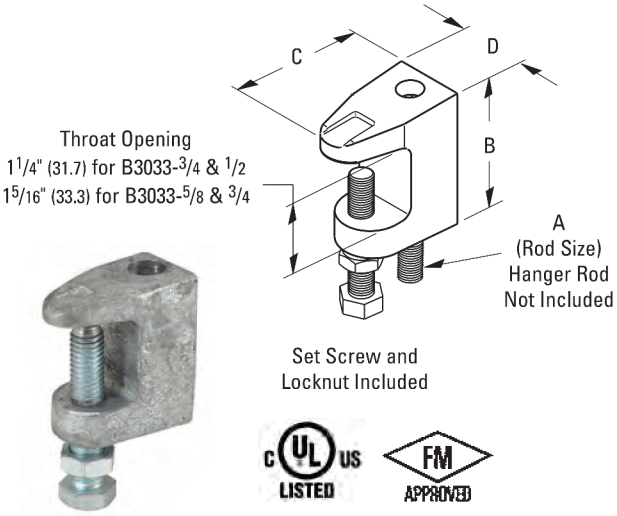
Function: For attachment to structural shapes requiring wider throat especially under roof with bar joist construction.
This clamp may be used with the set screw in the up or down position.

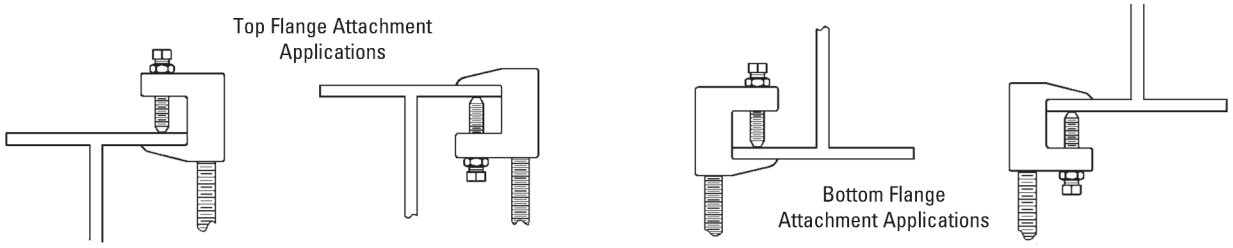
Approvals: Underwriters Laboratories Listed in the USA **(UL)** and Canada **(cUL),** and Factory Mutual Engineering Approved **(FM)**. Conforms to Federal Specification WW-H-171E Type 19 & A-A-1192A, Type 19 & 23 and Manufacturers Standardization Society ANSI/MSS SP-69 & SP-58, Type 19 & 23.

Finish: Plain. Contact customer service for alternative finishes and materials.

Order By: Part number, rod size and finish

Note: Do not over tighten set screw.





Part No.	Rod Size A	B in.	B (mm)	C in.	C (mm)	D in.	D (mm)	Design Load with Setscrew Lbs.	Design Load with Setscrew (kN)	Maximum Iron Pipe Size Per UL in.	Maximum Iron Pipe Size Per UL (mm)	Approx. Wt./100 Lbs.	Approx. Wt./100 (kg)
B3033-3/8	3/8"-16	2 1/4"	(57.1)	2"	(50.8)	1 1/8"	(28.6)	500	(2.22)	4"	(100)	54	(24.5)
B3033-1/2	1/2"-13	2 5/16"	(58.7)	2 3/16"	(55.6)	1 1/4"	(31.7)	810	(3.60)	8"	(200)	51	(23.1)
B3033-5/8	5/8"-11	2 5/8"	(66.7)	2 1/2"	(63.5)	1 3/8"	(34.9)	1000	(4.45)	8"	(200)	70	(31.7)
B3033-3/4	3/4"-10	2 11/16"	(68.3)	2 1/2"	(63.5)	1 7/16"	(36.5)	1400	(6.23)	10"	(250)	98	(44.4)

Note: See page 27 for recommended setscrew torque.

All dimensions in charts and on drawings are in inches. Dimensions shown in parentheses are in millimeters unless otherwise specified.