

Addendum No. 2

**CITY OF ABERDEEN
ABERDEEN, MARYLAND
DEPARTMENT OF PUBLIC WORKS
ABERDEEN ADVANCED WWTP HEAT
EXCHANGER REPLACEMENT**



Engineering Project No. 11205021

Receipt of this Addendum shall be automatically recorded by the City of Aberdeen once each Bidder downloads the Addendum No. 2 file from the City of Aberdeen website. No further action on the part of a Bidder is required to acknowledge receipt.

BIDS DUE EXTENSION

Bid date is extended to **2:00 PM prevailing time, on September 17, 2020.**

Questions concerning the information provided in the bidding documents will be accepted until **4:00 PM prevailing time, on September 11, 2020.**

General Clarifications and Reminders

1. Bidders shall use the equipment price listed in Section 11395 for the heat exchangers.
2. Supplemental information provided by Walker during preselection bid evaluation included improvements to the timelines for submittals and production of the new HHX units as follows:
 - Submittals: 4-6 weeks after receipt of Purchase Order.
 - Shipment: 18-20 weeks after approval.

Walker's timeline for submittals and production has been used to develop the contract time of 300 calendar days from notice to proceed to substantial completion for the Project. An example timeline for the Project follows:

	Schedule Milestone	Accumulated Time (days)	Notes
1	NTP	0	
2	HHX Shop Drawing Approval – 8 weeks from NTP	56	4-6 wks per Walker
3	HHX Fabrication and Delivery – 20 weeks	196	18-20 wks per Walker
4	HHX #1 Installation – 6 weeks	238	Includes demo of existing units
5	HHX #1 Operation Demonstration – 1 week	245	
6	HHX #2 Installation – 6 weeks	287	Includes demo of existing units
7	HHX #2 Operational Demonstration – 1 week	294	Round up to 300 days

3. A discussion with Walker involving the limited clearances available for installation of the new units has indicated the standard equipment dimensions shown on the equipment cut sheets can be modified to reduce the overall shipped height of the units. The required dimensions of the HHX units in will be

verified during the shop drawing submittal phase to satisfy the measured clearance limitations within the basement area of the Digester Control Building.

4. The existing Heater Room door is to be replaced with a new double door (see attached specification and drawing).
5. A codes review of the Heater Room has identified the designation as "Unclassified". Based on this codes review, explosion proof fixtures are not required.
6. The hot water system must be maintained in operation at all times.
7. The concrete pad for future HHX Unit No. 3 is not installed in this project.
8. The existing digester gas piping drop legs will be reconnected to the new HHX Units No. 1 and 2. The digester gas drop leg for future HHX Unit No. 3 will be capped. The existing digester gas trains mounted to the existing HHX Units No. 1, 2, and 3 will be demolished by Contractor.
9. The 120 VAC control voltage wiring from CLS-1, CLS-2 and CLS-3 to HE-1 and HE-2 is shown on diagrams on Drawings E-601 (Hydronic Pump Elementary Diagram) and E-602 (Heat Exchanger HE-1 Wiring Diagram). The Contractor may run these control circuits in one conduit per CLS (three conduits) as indicated on Drawing E-101, or one conduit per HE (two conduits). Running all the control wiring in a single conduit will not be permitted as it would introduce a single point of failure for the hydronic heating system.

Modifications to the Project Manual

1. Owner will test for asbestos on equipment and materials to be demolished. If asbestos is found on the existing equipment, Contractors will use the allowance shown in Specification Section 00410 – Bid Form - for time and material charges to remove the asbestos.

REPLACE Specification Section 00410 – Bid Form in its entirety (attached).

2. **ADD** Specification Section 08110 Steel Doors and Frames (attached).
3. SPECIFICATION 13100 – Piping, Valve and Specials
REPLACE Article 2.02, Paragraph A in its entirety with the following:

A. Plug Valves

1. General

- a. Plug valves shall be non-lubricated, eccentric type, full port and shall close drop-tight at a rated working pressure of 150 psig.
- b. Port areas shall be at least 100 percent of the full pipe area to provide clog-free operation, unless otherwise indicated in the Contract Documents.
- c. Valves shall be furnished with end connections shown on the Drawings.
 - 1) Flange drilling shall conform to ASME B16.1, Class 125 or ASME B16.5, Class 150 to match adjoining flanges.
 - 2) Mechanical joint ends shall be in accordance with the ANSI/AWWA C111/A21.11

- d. Internal components shall be chemically resistant to the conveyed liquid.
 - e. Submerged valves shall be capable of withstanding external water pressure 50% greater than the pressure to which it is exposed.
2. Construction:
- a. Body: Cast iron in accordance with ANSI/AWWA C517.
 - b. Hardware: Exposed nuts, bolts, springs, and washers shall be stainless steel.
 - c. Capable of providing drop-tight shut-off to the full rating with pressure on either side of the plug.
 - d. Upon request of the Engineer, the manufacturers shall submit proof of design data as well as calculations showing rear sizing compared to break away torque under full pressure in both directions.
 - e. Welded-in-place nickel seats, except where rubber lining is required.
 - f. Seats shall be raised 1/4-inch to prevent the plug from being in contact with the valve body when the plug is closed.
 - g. Plug
 - 1) Monolithic cast iron with synthetic EPDM rubber facing, suitable for frequent open-close operation and flow throttling.
 - 2) Capable of withstanding the full pressure rating of the valve in either direction without the use of structural ribs that extend beyond the profile of the plug.
 - 3) Bolt on sections to the plug are not allowed.
 - h. Bearings
 - 1) Replaceable, sleeve-type journal bearings shall be provided at each end of the plug and shall be of the wetted type to prevent binding.
 - 2) Bearings shall be designed not to exceed a stress 1/5 of the compressive strength of the material used, and the stress shall not exceed 2,000 psig.
 - 3) Manufacturers shall provide copies of strength and stress calculations upon Engineer's request.
 - 4) Fabricated from sintered oil impregnated 316 stainless steel to allow the plug to operate freely after long periods of inactivity.
 - i. Shaft Seals
 - 1) Utilize a stuffing box and chevron packing ring.
 - 2) Seal shall be adjustable or completely replaceable without removing the operator, bonnet, or plug from the valve.

- 3) Capable of being allowed to drain away from the valve without any liquid entering the operator.
3. Milliken full port plug valve, Model 600N1, or equal.

Modifications to the Project Drawings

1. **REPLACE** Drawing D-101 with the attached sheet.

END OF ADDENDUM NO. 2

SECTION 00410

BID FORM

Aberdeen Advanced Wastewater Treatment Plant

Heat Exchangers Replacement

Bid Number 20-12

ARTICLE 1 – BID RECIPIENT

1.01 This Bid is submitted to:

Mr. Parley Hess
Assistant City Engineer
60 North Parke Street
Aberdeen, MD 21001
Phone Number: 410-272-1600 ext. 233
Cell Phone Number: 443-617-0038
Email: phess@aberdeenmd.gov

1.02 The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an Agreement with Owner in the form included in the Bidding Documents to perform all Work as specified or indicated in the Bidding Documents for the prices and within the times indicated in this Bid and in accordance with the other terms and conditions of the Bidding Documents.

ARTICLE 2 – BIDDER’S ACKNOWLEDGEMENTS

2.01 Bidder accepts all of the terms and conditions of the Instructions to Bidders, including without limitation those dealing with the disposition of Bid security. This Bid will remain subject to acceptance for 60 days after the Bid opening, or for such longer period of time that Bidder may agree to in writing upon request of Owner.

ARTICLE 3 – BIDDER’S REPRESENTATIONS

3.01 In submitting this Bid, Bidder represents that:

A. Bidder has examined and carefully studied the Bidding Documents, and any data and reference items identified in the Bidding Documents, and hereby acknowledges receipt of the following Addenda:

<u>Addendum No.</u>	<u>Addendum, Date</u>
_____	_____
_____	_____
_____	_____

B. Bidder has visited the Site, conducted a thorough, alert visual examination of the Site and adjacent areas, and become familiar with and satisfied itself as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work.

C. Bidder is familiar with and has satisfied itself as to all Laws and Regulations that may affect cost, progress, and performance of the Work.

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- D. Bidder has carefully studied all: (1) reports of explorations and tests of subsurface conditions at or adjacent to the Site and all drawings of physical conditions relating to existing surface or subsurface structures at the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings, and (2) reports and drawings relating to Hazardous Environmental Conditions, if any, at or adjacent to the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings.
- E. Bidder has considered the information known to Bidder itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Bidding Documents; and any Site-related reports and drawings identified in the Bidding Documents, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder; and (3) Bidder's safety precautions and programs.
- F. Bidder agrees, based on the information and observations referred to in the preceding paragraph, that no further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of this Bid for performance of the Work at the price bid and within the times required, and in accordance with the other terms and conditions of the Bidding Documents.
- G. Bidder is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents.
- H. Bidder has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Bidding Documents, and confirms that the written resolution thereof by Engineer is acceptable to Bidder.
- I. The Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance and furnishing of the Work.
- J. The submission of this Bid constitutes an incontrovertible representation by Bidder that Bidder has complied with every requirement of this Article, and that without exception the Bid and all prices in the Bid are premised upon performing and furnishing the Work required by the Bidding Documents.

ARTICLE 4 – BIDDER'S CERTIFICATION

4.01 Bidder certifies that:

- A. This Bid is genuine and not made in the interest of or on behalf of any undisclosed individual or entity and is not submitted in conformity with any collusive agreement or rules of any group, association, organization, or corporation;
- B. Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid;
- C. Bidder has not solicited or induced any individual or entity to refrain from bidding; and
- D. Bidder has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for the Contract. For the purposes of this Paragraph 4.01.D:
 - 1. "corrupt practice" means the offering, giving, receiving, or soliciting of any thing of value likely to influence the action of a public official in the bidding process;
 - 2. "fraudulent practice" means an intentional misrepresentation of facts made (a) to influence the bidding process to the detriment of Owner, (b) to establish bid prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition;

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3. "collusive practice" means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish bid prices at artificial, non-competitive levels; and
4. "coercive practice" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.

ARTICLE 5 – BASIS OF BID

5.01 Schedule A - Lump Sum Bid Items:

- A. Bidder will complete the Work in accordance with the Contract Documents for the prices provided in [HTTPS://Aberdeenmd.gov/bids](https://Aberdeenmd.gov/bids) and inserted in the blank spaces below. To the extent that there is any inconsistency between the two, the prices provided in [HTTPS://Aberdeenmd.gov/bids](https://Aberdeenmd.gov/bids) shall control.
- B. Bidder agrees to provide all Work specified in the Contract Documents. Lump sum work price shall include the cost for providing equipment and materials for the project, complete in place.
- C. For Specification Section 11395, the Digester Heating Equipment has been pre-selected by the City of Aberdeen and is to be purchased and installed by Contractor. Bidders shall include the equipment price of \$252,000 as part of the lump sum Bid Item 1 for the purchase of the digester heating equipment identified within Walker Process Equipment Proposal No. 19-0107S attached to Section 11395.
- D. Lump sum items include all Work in the Contract Documents except Allowances.

5.02 Schedule B - Allowance:

- A. Bidder agrees to provide an allowance of \$5,000.00. Allowance includes cost of product and applicable taxes to Contractor or Subcontractor, less applicable trade discounts. Allowance includes costs associated with labor, equipment, and material costs to remove asbestos, not identified in the Contract Documents, that are identified by the Owner during the Construction Period at the Site.

5.03 Schedule C - Total Bid Price:

- A. Determination of the apparent low Bidder shall be based on the Total Bid Price determined as follows.
- B. All mathematical errors will be corrected. In case of discrepancy between the correct sum of individual bid items and the (incorrectly) calculated sum, the correct sum of individual bid items will govern.

ITEM NO.	TOTAL PRICE
Schedule A Total (Lump Sum Bid Items)	\$
Schedule B Total (Allowance)	\$ 5,000.00
Total Bid Price	\$

TOTAL BID PRICE (in words)

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ARTICLE 6 – TIME OF COMPLETION

- 6.01 Bidder agrees that the Work will be substantially complete and will be completed and ready for final payment in accordance with Paragraph 15.06 of the General Conditions on or before the dates or within the number of calendar days indicated in the Agreement.
- 6.02 Bidder accepts the provisions of the Agreement as to liquidated damages.

ARTICLE 7 – ATTACHMENTS TO THIS BID

- 7.01 The following documents are submitted with and made a condition of this Bid:
 - A. Required Bid Bond;
 - B. Statement of Bidder’s Qualifications;
 - C. Non-Collusive Affidavit;
 - D. List of Proposed Subcontractors;
 - E. Evidence of authority to do business in the state of the Project; or a written covenant to obtain such license within the time for acceptance of Bids.

ARTICLE 8 – DEFINED TERMS

- 8.01 The terms used in this Bid with initial capital letters have the meanings stated in the Instructions to Bidders, the General Conditions, and the Supplementary Conditions.

ARTICLE 9 – BID SUBMITTAL

BIDDER: *[Indicate correct name of bidding entity]*

By: _____
[Signature]

_____ *[Printed name]*
(If Bidder is a corporation, a limited liability company, a partnership, or a joint venture, attach evidence of authority to sign.)

Attest: _____
[Signature]

_____ *[Printed name]*

Title: _____

Submittal Date: _____

Address for giving notices:

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Telephone Number: _____

Fax Number: _____

Contact Name and e-mail address: _____

Bidder's License No.: _____
(where applicable)

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SECTION 08110

STEEL DOORS AND FRAMES

PART 1 GENERAL

1.01. RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.02. SUMMARY

- A. This Section includes the following:
 - 1. Steel doors.
 - 2. Steel door frames.
 - 3. Finish Hardware.
- B. Related Sections include the following:
 - 1. Division 9 Section "Painting" for field painting factory-primed doors and frames.

1.03. DEFINITIONS

- A. Steel Sheet Thicknesses: Thickness dimensions, including those referenced in ANSI A250.8, are minimums as defined in referenced ASTM standards for both uncoated steel sheet and the uncoated base metal of metallic-coated steel sheets.

1.04. SUBMITTALS

- A. Product Data: For each type of door and frame indicated, include door designation, type, level and model, material description, core description, construction details, label compliance, sound and fire-resistance ratings, and finishes.
- B. Shop Drawings: Show the following:
 - 1. Elevations of each door design.
 - 2. Details of doors including vertical and horizontal edge details.
 - 3. Frame details for each frame type including dimensioned profiles.
 - 4. Details and locations of reinforcement and preparations for hardware.
 - 5. Details of each different wall opening condition.
 - 6. Details of anchorages, accessories, joints, and connections.
 - 7. Coordination of glazing frames and stops with glass and glazing requirements.

- C. Door Schedule: Use same reference designations indicated on Drawings in preparing schedule for doors and frames.

1.05. QUALITY ASSURANCE

- A. Steel Door and Frame Standard: Comply with ANSI A 250.8, unless more stringent requirements are indicated.

1.06. DELIVERY, STORAGE, AND HANDLING

- A. Deliver doors and frames cardboard-wrapped or crated to provide protection during transit and job storage. Provide additional protection to prevent damage to finish of factory-finished doors and frames.
- B. Inspect doors and frames on delivery for damage, and notify shipper and supplier if damage is found. Minor damages may be repaired provided refinished items match new work and are acceptable to Architect. Remove and replace damaged items that cannot be repaired as directed.
- C. Store doors and frames at building site under cover. Place units on minimum 4-inch- high wood blocking. Avoid using non-vented plastic or canvas shelters that could create a humidity chamber. If door packaging becomes wet, remove cartons immediately. Provide minimum 1/4-inch spaces between stacked doors to permit air circulation.

PART 2 PRODUCTS

2.01. MANUFACTURERS

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - 1. Steel Doors and Frames:
 - a. Ceco Door Products; a United Dominion Company.
 - b. Curries Company.
 - c. Steelcraft
 - d. Or equal.
 - 2. Finish Hardware:
 - a. Butts and Hinges:
 - 1) Hager Hinge Co.
 - 2) McKinney Products Co.
 - 3) Stanley Hardware, Div. Stanley Works.*
 - 4) Or equal.
 - b. Cylinders and Locks:

- 1) Corbin & Russwin Architectural Hardware, Div. Black & Decker Corp.
 - 2) Sargent Manufacturing Company.*
 - 3) Or equal.
- c. Exit/ Panic Devices:
- 1) Corbin & Russwin Architectural Hardware, Div. Black & Decker Corp.
 - 2) Precision Hardware, Inc.
 - 3) Sargent Manufacturing Company.*
 - 4) Yale Security Inc.
- d. Push/Pull Units:
- 1) Corbin & Russwin Architectural Hardware, Div. Black & Decker Corp.
 - 2) Hager Hinge Co.
 - 3) H.B. Ives, A Harrow Company.
 - 4) Rockwood Architectural Hardware*
- e. Overhead Closers:
- 1) Corbin & Russwin Architectural Hardware, Div. Black & Decker Corp.
 - 2) Sargent Manufacturing Company.*
 - 3) Yale Security Inc.
 - 4) Or equal.
- f. Door Trim Units:
- 1) Hager Hinge Co.
 - 2) H.B. Ives, A Harrow Company
 - 3) Rockwood Architectural Hardware.*
- g. Bolts:
- 1) Hager Hinge Co.
 - 2) H.B. Ives, A Harrow Company
 - 3) Rockwood Architectural Hardware.*
- h. Door Contacts:
- 1) Sentrol*

- 2) Or Equal.
- i. Door Stripping and Seals:
 - 1) National Guard Products, Inc.
 - 2) Pemko Manufacturing Co., Inc.*
 - 3) Or equal.
- j. Thresholds:
 - 1) National Guard Products, Inc.
 - 2) Pemko Manufacturing Co., Inc.*
 - 3) Or equal.

2.02. MATERIALS

- A. Hot-Rolled Steel Sheets: ASTM A 569/A 569M, Commercial Steel (CS), Type B; free of scale, pitting, or surface defects; pickled and oiled.
- B. Cold-Rolled Steel Sheets: ASTM A 366/A 366M, Commercial Steel (CS), or ASTM A 620/A 620M, Drawing Steel (DS), Type B; stretcher-leveled standard of flatness.
- C. Metallic-Coated Steel Sheets: ASTM A 653/A 653M, Commercial Steel (CS), Type B, with an A40 zinc-iron-alloy (galvannealed) coating; stretcher-leveled standard of flatness.
- D. Electrolytic Zinc-Coated Steel Sheet: ASTM A 591/A 591M, Commercial Steel (CS), Class B coating; mill phosphatized; suitable for unexposed applications; stretcher-leveled standard of flatness where used for face sheets.

2.03. DOORS

- A. General: Provide doors of sizes, thicknesses, and designs indicated.
- B. Interior Doors: Provide doors complying with requirements indicated below by referencing ANSI A250.8 for level and model and ANSI A250.4 for physical-endurance level.
 - 1. Level 3 and Physical Performance Level A (Extra Heavy Duty), Model 1 Full Flush.

2.04. FRAMES

- A. General: Provide steel frames for doors that comply with ANSI A250.8 and with details indicated for type and profile. Conceal fastenings, unless otherwise indicated.
- B. Frames of 0.067-inch- thick steel sheet for:
 - 1. Level 3 steel doors.
- C. Door Silencers: Except on weather-stripped frames, fabricate stops to receive three silencers on strike jambs of single-door frames and two silencers on heads of double-door frames.

- D. Plaster Guards: Provide 0.016-inch- thick, steel sheet plaster guards or mortar boxes to close off interior of openings; place at back of hardware cutouts where mortar or other materials might obstruct hardware operation.
- E. Supports and Anchors: Fabricated from not less than 0.042-inch- thick, electrolytic zinc-coated or metallic-coated steel sheet.
 - 1. Wall Anchors in Masonry Construction: 0.177-inch- diameter, steel wire complying with ASTM A510 may be used in place of steel sheet.
- F. Inserts, Bolts, and Fasteners: Manufacturer's standard units. Where zinc-coated items are to be built into exterior walls, comply with ASTM A 153/A 153M, Class C or D as applicable.

2.05. FABRICATION

- A. General: Fabricate steel door and frame units to comply with ANSI A250.8 and to be rigid, neat in appearance, and free from defects including warp and buckle. Where practical, fit and assemble units in manufacturer's plant. Clearly identify work that cannot be permanently factory assembled before shipment, to assure proper assembly at Project site.
- B. Exterior Door Construction: For exterior locations and elsewhere as indicated, fabricate doors, panels, and frames from metallic-coated steel sheet. Close top and bottom edges of doors flush as an integral part of door construction or by addition of 0.053-inch- thick, metallic-coated steel channels with channel webs placed even with top and bottom edges.
- C. Interior Door and Panel Faces: Fabricate exposed faces of doors and panels from the following material:
 - 1. Cold-rolled steel sheet.
- D. Core Construction: One of the following manufacturer's standard core materials that produce a door complying with SDI standards:
 - 1. Resin-impregnated kraft/paper honeycomb (Interior doors only).
 - 2. Polyurethane.
- E. Clearances for Non-Fire-Rated Doors: Not more than 1/8 inch at jambs and heads, except not more than 1/4 inch between pairs of doors. Not more than 3/4 inch at bottom.
- F. Clearances for Fire-Rated Doors: As required by NFPA 80.
- G. Single-Acting, Door-Edge Profile: Square edge.
- H. Tolerances: Comply with SDI 117, "Manufacturing Tolerances for Standard Steel Doors and Frames."
- I. Fabricate concealed stiffeners, reinforcement, edge channels, louvers, and moldings from either cold- or hot-rolled steel sheet.
- J. Exposed Fasteners: Unless otherwise indicated, provide countersunk flat or oval heads for exposed screws and bolts.

- K. Thermal-Rated (Insulating) Assemblies: At exterior locations and elsewhere as shown or scheduled, provide doors fabricated as thermal-insulating door and frame assemblies and tested according to ASTM C 236 or ASTM C 976 on fully operable door assemblies.
1. Unless otherwise indicated, provide thermal-rated assemblies with U-value of >0.10 Btu/sq. ft. x h x deg F or better.
- L. Hardware Preparation: Prepare doors and frames to receive mortised and concealed hardware according to final door hardware schedule and templates provided by hardware supplier. Comply with applicable requirements in ANSI A250.6 and ANSI A115 Series specifications for door and frame preparation for hardware.
- M. Frame Construction: Fabricate frames to shape shown.
1. Fabricate frames with mitered or coped and continuously welded corners and seamless face joints.
 2. Provide welded frames with temporary spreader bars.
- N. Reinforce doors and frames to receive surface-applied hardware. Drilling and tapping for surface-applied hardware may be done at Project site.
- O. Locate hardware as indicated on Shop Drawings or, if not indicated, according to ANSI A250.8.
- P. Glazing Stops: Manufacturer's standard, formed from 0.032-inch- thick steel sheet.
1. Provide nonremovable stops on outside of exterior doors and on secure side of interior doors for glass, louvers, and other panels in doors.
 2. Provide screw-applied, removable, glazing stops on inside of glass, louvers, and other panels in doors.

2.06. FINISHES

- A. Prime Finish: Manufacturer's standard, factory-applied coat of rust-inhibiting primer complying with ANSI A250.10 for acceptance criteria.

2.07. FINISH HARDWARE

- A. Keying: Key locks into Owners master key or grand master key system.
- B. Manufacturers: Equal products of other hardware manufacturers not listed below are acceptable.
- C. Hardware Sets:
1. Set No. 1
 - a. 3 Pr. Butts – Stanley FBB 191 x 4 ½ x 4 ½ x NRP x US32D
 - b. 1 Exit Device – Sargent 8713 x ETL x US32D
 - c. 1 Exit Device – Sargent 8710 x ETL x US32D

- d. 2 Closers – Sargent x EN1431 - PH9 x SRI.

PART 3 EXECUTION

3.01. DOOR INSTALLATION

- A. General: Install steel doors, frames, and accessories according to Shop Drawings, manufacturer's data, and as specified.
- B. Placing Frames: Comply with provisions in SDI 105, unless otherwise indicated. Set frames accurately in position, plumbed, aligned, and braced securely until permanent anchors are set. After wall construction is completed, remove temporary braces and spreaders, leaving surfaces smooth and undamaged.
 - 1. Provide at least three completed opening anchors per jamb; install adjacent to hinge location on hinge jamb and at corresponding heights on strike jamb. Set frames and secure to adjacent construction with wood frame anchorage devices.
- C. Door Installation: Comply with ANSI A250.8. Fit hollow-metal doors accurately in frames, within clearances specified in ANSI A250.8. Shim as necessary to comply with SDI 122 and ANSI/DHI A115.1G.

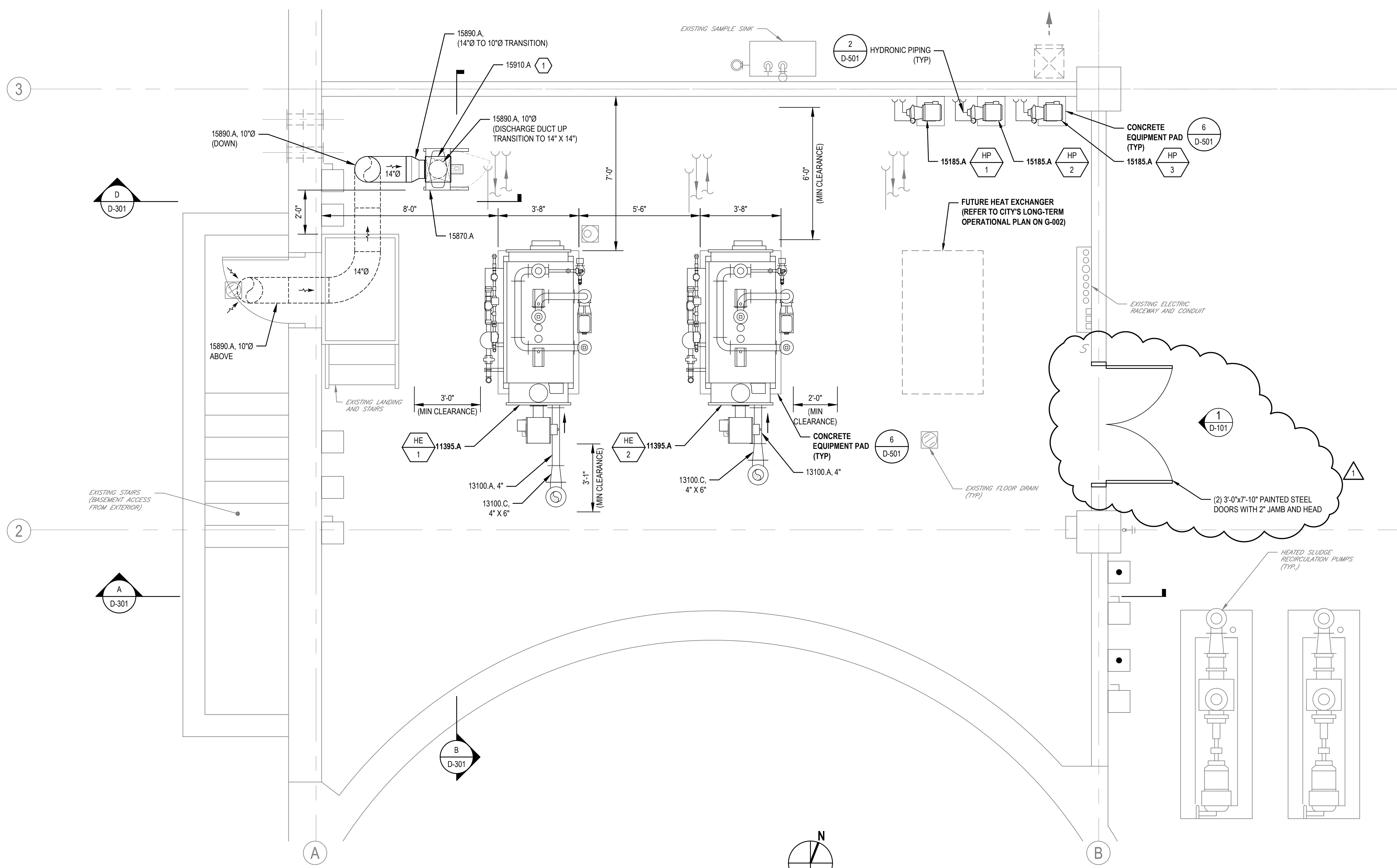
3.02. HARDWARE INSTALLATION

- A. Mount Hardware units at heights indicated in "Recommended Locations for Builders Hardware Institute, except as specifically indicated or required to comply with governing regulations, and except as may be otherwise directed by Engineer.
- B. Install each hardware item in compliance with the manufacturer's instructions and recommendations. Wherever cutting and fitting is required to install hardware onto or into surfaces, which are later to be painted or finished in another way, coordinate removal, storage and re-installation or application of surface protections with finishing work specified in the Division-9 sections. Do not install surface-mounted items until finishes have been completed on the substrate.
- C. Set units level, plumb and true to line and location. Adjust and reinforce the attachment substrate as necessary for proper installation and operation.
- D. Drill and countersink units, which are not factory-prepared for anchorage fasteners. Space fasteners and anchors in accordance with industry standards.
- E. Set thresholds for exterior doors in full bed of butyl-rubber or polyisobutylene mastic sealant.

3.03. ADJUSTING AND CLEANING

- A. Prime-Coat Touchup: Immediately after door and frame installation, sand smooth any rusted or damaged areas of prime coat and apply touch up of compatible air-drying primer.
- B. Protection Removal: Immediately before final inspection, remove protective wrappings from doors and frames.

END OF SECTION



PLAN
SCALE: 3/8" = 1'-0"

MATERIALS KEYING LEGEND

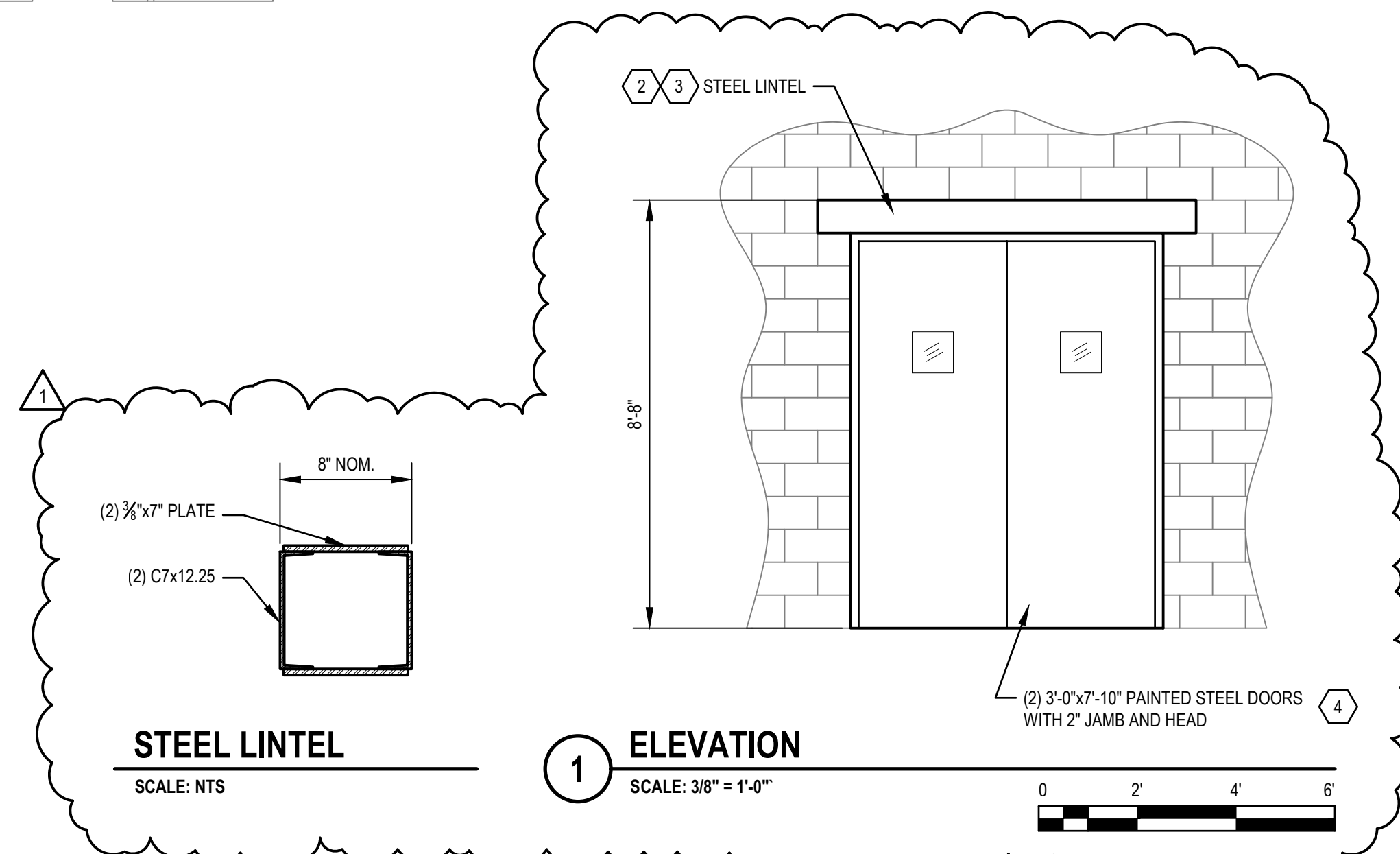
11395: DIGESTER HEATING EQUIPMENT	A	HEAT EXCHANGER
13100: PIPING, VALVES AND SPECIALS	A	DUCTILE IRON PIPE (FLANGED)
	C	REDUCER
15185: HYDRONIC PUMPS	A	HYDRONIC PUMP
15870: POWER VENTILATORS	A	COMBUSTION AIR FAN
15890: DUCTWORK	A	GALVANIZED STEEL DUCT
15910: DUCTWORK ACCESS	A	14" X 14" BACKDRAFT DAMPER

SHEET GENERAL NOTES

- CONTRACTOR TO VERIFY HEAT EXCHANGER LOCATIONS TO PROVIDE MINIMUM REQUIRED CLEARANCE FOR EQUIPMENT MAINTENANCE AS PER MANUFACTURER'S RECOMMENDATIONS.

SHEET KEYNOTES

- CONTRACTOR TO PROVIDE WIRE MESH SCREEN AT COMBUSTION AIR OUTLET.
- SAW CUT MASONRY. TOOTH VERTICAL EDGE AT NEW LINTEL LOCATION.
- PROVIDE LINTEL FOR NEW DOOR OPENING. LINTEL TO BEAR 8" MINIMUM ON EACH SIDE OF OPENING. REPAIR AFFECTED MASONRY. REPAIR AND PAINT BOTH SIDES OF WALL.
- COORDINATE OPENING REQUIREMENTS FOR DOORS WITH APPROVED MANUFACTURER'S SHOP DRAWINGS.



STEEL LINTEL
SCALE: NTS

1 ELEVATION
SCALE: 3/8" = 1'-0"

No.	Issue	Drawn	Approved	Date
1	ADDENDUM No 2	KH	PC	AUG-31-2020
0	BID DOCUMENTS	EC	PC	JUL-24-2020

Bar is one inch on original size sheet	0 2 4 6
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Project Manager	P. CHEN	Date	JULY 24, 2020
This document shall not be used for construction unless signed and sealed for construction.		Scale	AS SHOWN

Client	CITY OF ABERDEEN		
Project	ABERDEEN AWWTP HEAT EXCHANGER REPLACEMENT		
Title	EXISTING ADMINISTRATION & SOLIDS BUILDING HEATER ROOM PLAN		
Project No.	11205021		
Original Size	Arch D	Sheet No.	D-101
		Sheet	8 of 16