SECTION 01340

SUBMITTALS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes:
 - 1. Mechanics and administration of the submittal process for:
 - a. Shop Drawings.
 - b. Copies of Contractor acquired work permits (locality, State, Federal)
 - c. Miscellaneous submittals.
 - 2. General content requirements for Shop Drawings.

1.2 DEFINITIONS

- A. Shop Drawings:
 - 1. See General Conditions.
 - 2. Product data are Shop Drawing information.
- B. Copies of Contractor acquired work permits
 - Provide a copy to HRSD for all permits obtained granting permission by the locality, State, and/or Federal to perform the work identified in the Bid Documents.
- C. Miscellaneous Submittals:
 - 1. Submittals other than Shop Drawings.
 - 2. Representative types of miscellaneous submittal items include but are not limited to:
 - a. Utility test hole reports.
 - b. Construction schedule.
 - c. Soil compaction and pressure test reports.
 - d. Manufacturer's installation certification letters.
 - e. Warranties.
 - f. Construction photographs {and video if applicable}.
 - g. Survey data.
 - h. Schedule of values.
 - i. Subcontractor's qualifications.
 - j. Sketches and drawings of equipment.
 - k. Interim and Final Valve Guides (refer to Section 01323)
 - 1. Interim and Final Record Drawings (refer to Section 01323)
 - m. Written procedures for implementing portions of the work.
 - x, y, Z Table for buried pipe installation (submitted monthly with Contractor's payment request).
 - o. Virginia Clean Water Revolving Loan Fund (VCWRLF) American Iron & Steel (AIS) certification [if applicable]
- D. Unifier Enterprise Project Management System
 - 1. See Unifier Management System User Manual
 - {Engineer to specify and provide details on any collaboration and document management system other than Oracle Unifier (Unifier) Enterprise Project Management System to be used. These alternative systems must be pre-approved by HRSD's Project Manager before developing the Bid Document}

1.3 SUBMITTAL SCHEDULE

- A. Schedule of Shop Drawings:
 - 1. Submitted within {insert number of days} days of receipt of Notice to Proceed.

- Account for multiple transmittals under any specification section where partial submittals will be transmitted.
- B. Shop Drawings: Submit well in advance of the need for the material or equipment for construction and with ample allowance for the time required to make delivery of material or equipment after data covering such is approved. [Engineer to specify time durations needed for each type of approval so no confusion on what is meant by "well in advance" and "ample allowance"]. Contactor shall assume the risk for all materials or equipment which is fabricated or delivered prior to the approval of Shop Drawings. Materials or equipment will not be included in periodic progress payments until approval thereof has been obtained in the specified manner.
- C. Copies of Contractor acquired permits: Copies of all construction related permits to be furnished to HRSD within 14 calendar days of obtaining a permit.

1.4 PREPARATION OF SUBMITTALS

- A. General:
 - 1. All submittals shall be either created in Portable Document Format (PDF) or scanned from paper copies into PDF files.
 - 2. All submittals and all pages of all copies of a submittal shall be completely legible.
 - Submittals which, in the Engineer's sole opinion, are illegible will be returned without review.
- B. Shop Drawings:
 - 1. Limit scope of any submittal and letter of transmittal to one specification section.
 - 2. Numbering letter of transmittal:
 - a. Include as prefix the specification section number followed by a series number, "-xx", beginning with "01" and increasing sequentially with each additional transmittal.
 - If more than one submittal under any specification section, assign consecutive series numbers to subsequent transmittal letters.
 - 3. Describing transmittal contents:
 - a. Provide listing of each component or item in submittal capable of receiving an independent review action.
 - b. Identify for each item:
 - 1) Manufacturer and Manufacturer's drawing or data number.
 - 2) Unique page numbers for each page of each separate item.
 - c. When submitting "or-equal" items that are not the products of named manufacturers, include the words "or-equal" in the item description.
 - 4. Contractor stamping:
 - a. General:
 - Contractor's review and approval stamp shall be applied either to the letter of transmittal or a separate sheet preceding each independent item in the submittal.
 - Contractor's signature and date shall be required. {Engineer to coordinate with HRSD's Contract Specialist regarding requirements for hand signatures verses digital signatures}.
 - b) Shop Drawing submittal stamp shall read "(Contractor's Name) has satisfied Contractor's obligations under the Contract Documents with respect to Contractor's review and approval as stipulated under General Conditions."
 - Letters of transmittal may be stamped only when the scope of the submittal is
 one item.
 - 2) Submittals containing multiple independent items shall be prepared with an index sheet for each item listing the discrete page numbers for each page of that item, which shall be stamped with the Contractor's review and approval stamp.
 - a) Individual pages or sheets of independent items shall be numbered in a manner that permits Contractor's review and approval stamp to be associated with the entire contents of a particular item.

- b. Electronic stamps:
 - Contractor may electronically embed Contractor's review and approval stamp to either the letter of transmittal or a separate index sheet preceding each independent item in the submittal.
 - 2) Contractor's signature and date on electronically applied stamps shall be original ink signature. {Engineer to coordinate with HRSD's Contract Specialist regarding requirements for hand signatures verses digital signatures}
- 5. Resubmittals:
 - Number with original root number and a suffix letter starting with "A" on a (new) transmittal form.
 - o. Do not increase the scope of any prior transmittal.
 - c. Account for all components of prior transmittal.
 - If items in prior transmittal received "A" or "B" Action code, list them and indicate "A" or "B" as appropriate.
 - a) Do not include submittal information for items listed with prior "A" or "B" Action in resubmittal.
 - Indicate "Outstanding-To Be Resubmitted at a Later Date" for any prior "C" or "D" Action item not included in resubmittal.
 - a) Obtain Engineer's approval to exclude items.
- 6. All submittals shall be submitted through the Unifier System. Please refer to the Unifier User Guide to see the Business Process from start to finish. **[Engineer to specify if an alternate collaboration and document management system is requested to be used. **Advanced approval to use a system other than or in addition to Unifier shall be preapproved by HRSD's Project Manager before development of Bid Document!
- 7. Provide clear space (3 IN SQ) for Engineer stamping of each component defined in PREPARATION OF SUBMITTALS Contractor Stamping.
- 8. Contractor shall not use red color for marks on transmittals.
- 9. Transmittal contents:
 - a. Coordinate and identify Shop Drawing contents so that all items can be easily verified by the Engineer.
 - b. Identify equipment or material use, tag number, drawing detail reference, weight, and other project specific information.
 - c. Provide sufficient information together with technical cuts and technical data to allow an evaluation to be made to determine that the item submitted is in compliance with the Contract Documents
 - Submit items such as equipment brochures, cuts of fixtures, product data sheets or catalog sheets.
 - 1) Indicate exact item or model and all options proposed.
 - e. When a Shop Drawing submittal is called for in any specification section, include as appropriate, scaled details, sizes, dimensions, performance characteristics, test data, installation instructions, storage and handling instructions, controls, weights and other pertinent data in addition to information specifically stipulated in the specification section.
 - Arrange data and performance information in format similar to that provided in Contract Documents.
 - 2) Provide, at minimum, the detail specified in the Contract Documents.
 - f. If proposed equipment or materials deviate from the Contract Drawings or Specifications in any way, clearly note the deviation and justify the said deviation in detail in a separate letter immediately following transmittal sheet.
- C. Operation and Maintenance Manuals: {delete this part if it does not apply}
 - 1. Owner's use of manufacturer's Operation and Maintenance materials:
 - Materials are provided for Owner's use, reproduction and distribution as training and reference materials within Owner's organization.

- 1) Applicable to hard copy {Engineer to coordinate with HRSD Project Manager if paper copies are needed} or electronic media.
- Applicable to materials containing copyright notice as well as those with no copyright notice.
- b. Notify manufacturer of this intended use of materials provided under the Contract.
- 2. Number each Operation and Maintenance Manual transmittal with the original number of the associated Shop Drawing.
 - a. Identify resubmittals with the original number plus a suffix letter starting with "A."
- 3. Submittal format:
 - a. Interim submittals: Submit PDF format through the Unifier Enterprise Project
 Management system until manual is approved. **(Engineer to specify if an alternate collaboration and document management system is requested to be used. Advanced approval to use a system other than or in addition to Unifier shall be pre-approved by HRSD's Project Manager before development of Bid Document}
 - b. Final submittals:
 - 1) Within 30 days of receipt of approval, submit two (2) electronic copies on Compact Disc (CD-ROM) in Portable Document Format (PDF). *verify with HRSD if submittals are to be submitted electronically via Unifier or other preapproved collaboration and document management system in addition to transmitted CDs*
 - a) Compact discs to be secured in jewel cases.
 - Electronic copies will be reviewed for conformance with the approved electronic copy (PDF) requirements of this Specification.
 - 3) Non-conforming CDs will be returned with comments.
 - a) Provide final CDs within 30 days of receipt of comments.
- 4. Electronic copy submittals:
 - Electronic copies of the approved paper copy Operation and Maintenance Manuals are
 to be produced in Adobe Acrobat's Portable Document Format (PDF) Version {5.0} or
 higher.
 - b. Do not password protect and/or lock the PDF document.
 - c. Create one (1) PDF document (PDF file) for each equipment O&M Manual.
 - d. Drawings or other graphics must be converted to PDF format and made part of the one (1) PDF document.
 - 1) Scanning to be used only where actual file conversion is not possible.
 - Rotate pages that must be viewed in landscape to the appropriate position for easy reading.
 - f. Images only shall be scanned at a resolution of 300 dpi or greater.
 - 1) Perform Optical Character Recognition (OCR) capture on all images.
 - 2) Achieve OCR with the "original image with hidden text" option.
 - Word searches of the PDF document must operate successfully to demonstrate OCR compliance.
 - g. Create bookmarks in the navigation frame, for each entry in the Table of Contents/Index.
 - 1) Normally three (3) levels deep (i.e., "Chapter," "Section," "Sub-section").
 - h. Thumbnails must be generated for each PDF file.
 - i. Set the opening view for PDF files as follows:
 - 1) Initial view: Bookmarks and Page.
 - 2) Magnification: Fit in Window.
 - 3) Page layout: Single page.
 - 4) Set the file to open to the cover page of the manual with bookmarks to the left, and the first bookmark linked to the cover page.
 - j. All PDF documents shall be set with the option "Fast Web View" to open the first pages of the document for the viewer while the rest of the document continues to load.
 - k. File naming conventions:

Commented [HG1]: Is this still the preferred format?

{Project Name} Submittals {Month, Year}

- File names shall use a "ten dot three" convention (XXXXX-YY-Z.PDF) where XXXXX is the Specification Section number, YY is the Shop Drawing Root number and Z is an ID number used to designate the associated volume.
 - a) Example 1:
 - (1) Two (2) pumps submitted as separate Shop Drawings under the same Specification Section:
 - (a) Pump 1 = 11061-01-1.pdf.
 - (b) Pump 2 = 11061-02-1.pdf.
 - b) Example 2:
 - (1) Control system submitted as one (1) Shop Drawing but separated into two
 - (2) O&M volumes:
 - (a) Volume 1 = 13440-01-1.pdf.
 - (b) Volume 2 = 13440-01-2.pdf.
- l. Labeling:
 - As a minimum, include the following labeling on all CD-ROM discs and jewel cases:
 - a) Project Name.
 - b) Equipment Name and Project Tag Number.
 - c) Project Specification Section.
 - d) Manufacturer Name.
 - e) Vendor Name.
- m. Binding:
 - 1) Include labeled CD(s) in labeled jewel case(s).
 - a) Bind jewel cases in standard three-ring binder Jewel Case Page(s), inserted at the front of the Final paper copy submittal.
 - b) Jewel Case Page(s) to have means for securing Jewel Case(s) to prevent loss (e.g., flap and strap).
- 5. Operation and Maintenance Manuals for Materials and Finishes:
 - a. Building Products, Applied Materials and Finishes:
 - Include product data, with catalog number, size, composition and color and texture designations.
 - 2) Provide information for re-ordering custom manufactured products.
 - b. Instructions for Care and Maintenance:
 - Include manufacturer's recommendations for cleaning agents and methods, precautions against detrimental agents and methods and recommended schedule for cleaning and maintenance.
 - c. Moisture Protection and Weather Exposed Products:
 - Include product data listing, applicable reference standards, chemical composition, and details of installation.
 - 2) Provide recommendations for inspections, maintenance and repair.
 - d. Additional requirements as specified in individual product specifications.
- 6. Operation and Maintenance Manuals for Equipment and Systems:
 - Submission of Operation and Maintenance Manuals for equipment and systems is applicable but not necessarily limited to:
 - 1) Major equipment.
 - 2) Equipment powered by electrical, pneumatic or hydraulic systems.
 - Specialized equipment and systems including instrumentation and control systems and system components for HVAC process system control.
 - 4) Valves and water control gates.
 - b. Equipment and Systems Operation and Maintenance Manuals shall include, but not necessarily be limited to, the following completed forms and detailed information, as applicable:
 - 1) Fully completed copies (in Excel format) of the associated Equipment Record(s), Exhibits C1, C2 and C3. Equipment Record(s) shall be included under the first tab following the Table of Contents of each Operation and Maintenance Manual.

- a) Each section of the Equipment Record must be completed in detail.
 - Simply referencing the related manual for nameplate, maintenance, spare parts or lubricant information is not acceptable.
- For equipment items involving components or subunits, a fully completed Equipment Record Form is required for each operating component or subunit.
- Submittals that do not include the associated Equipment Record(s) will be rejected without further content review.
- d) Utilize digital copies (in Excel format) of Exhibits C1, C2, and C3 to transmit the Equipment Record(s). {Engineer to verify these referenced exhibits are included and appended to this section}.
- 2) Equipment function, normal operating characteristics, limiting operations.
- Assembly, disassembly, installation, alignment, adjustment, and checking instructions.
- Operating instructions for start-up, normal operation, control, shutdown, and emergency conditions.
- 5) Lubrication and maintenance instructions.
- 6) Troubleshooting guide.
- 7) Parts lists:
 - a) Comprehensive parts and parts price lists.
 - b) A list of recommended spare parts.
 - List of spare parts provided as specified in the associated Specification Section.
- 8) Outline, cross-section, and assembly Drawings; engineering data; and electrical diagrams, including elementary diagrams, wiring diagrams, connection diagrams, word description of wiring diagrams and interconnection diagrams.
- 9) Test data and performance curves.
- 10) As-constructed fabrication or layout Drawings and wiring diagrams.
- 11) Instrumentation or tag numbers assigned to the equipment by the Contract Documents are to be used to identify equipment and system components.
- Additional information as specified in the associated equipment or system Specification Section.
- D. Copies of Contractor acquired permits:
 - Provide a single PDF version of each permit acquired granting construction rights. Each
 permit to be transmitted to the Engineer for uploading into the HRSD's Unifier system.
- E. Virginia Clean Water Revolving Loan Fund (VCWRLF) and WIFIA Submittals:
 - 1. List of American Iron and Steel (AIS) required products. Submittal shall include:
 - a. Product description.
 - b. Material quantity and value.
 - 2. American Iron and Steel (AIS) certificates with the following requirements:
 - a. Project name
 - b. Product name
 - c. Fabrication City/State
 - d. Required Signature
 - e. References relevant AIS Requirement
 - Davis Bacon Certified Payroll shall be submitted monthly for both Prime and Subcontractor employees.

F.

- G. Miscellaneous Submittals:
 - Prepare in the format and detail specified in specification requiring the miscellaneous submittal

1.5 TRANSMITTAL OF SUBMITTALS

A. Shop Drawings:

- 1. Transmit all submittals through HRSD's Unifier System
- 2. Utilize digital copies of attached Exhibit "A" to transmit all Shop Drawings to {insert Engineer's name} {Engineer to verify referenced Exhibit A is included and appended to this section}.
- 3. All submittals must be from Contractor.
 - a. Submittals will not be received from or returned to subcontractors.
- Provide submittal information defining specific equipment or materials utilized on the project.
 - Generalized product information, not clearly defining specific equipment or materials to be provided, will be rejected.
- B. Calculations required in the individual specifications are required for For-Information Only.
- C. Miscellaneous Submittals:
 - 1. Transmit under Contractor's standard letter of transmittal or letterhead.
 - 2. Submit as specified in individual specification section.
- D. Expedited Return Delivery: {delete this paragraph or revise as necessary if exclusively electronic submittals}
 - Include prepaid express envelope or air bill in submittal transmittal package for any submittals Contractor expects or requires express return mail.
 - 2. Inclusion of prepaid express envelope or air bill does not obligate Engineer to conduct expedited review of submittal.
- E. Fax transmittals are not acceptable.

1.6 ENGINEER'S REVIEW ACTION

- A. Shop Drawings:
 - Items within transmittals will be reviewed for overall design intent and will receive one of the following actions:
 - a. A FURNISH AS SUBMITTED.
 - b. B FURNISH AS NOTED {By Engineer}.
 - c. C REVISE AND RESUBMIT.
 - d. D REJECTED.
 - e. E ENGINEER'S REVIEW NOT REQUIRED.
 - Submittals received will be initially reviewed to ascertain inclusion of Contractor's approval stamp.
 - a. Submittals not stamped by the Contractor or stamped with a stamp containing language other than that specified herein will not be reviewed for technical content and will be returned without any action.
 - In relying on the representation on the Contractor's review and approval stamp, Owner and Engineer reserve the right to review and process poorly organized and poorly described submittals as follows:
 - a. Submittals transmitted with a description identifying a single item and found to contain multiple independent items:
 - Review and approval will be limited to the single item described on the transmittal letter.
 - 2) Other items identified in the submittal will:
 - a) Not be logged as received by the Engineer.
 - Be removed from the submittal package and returned without review and comment to the Contractor for coordination, description and stamping.
 - c) Be submitted by the Contractor as a new series number, not as a re-submittal number.
 - Engineer, at Engineer's discretion, may revise the transmittal letter item list and descriptions, and conduct review.

- Unless Contractor notifies Engineer in writing that the Engineer's revision of the transmittal letter item list and descriptions was in error, Contractor's review and approval stamp will be deemed to have applied to the entire contents of the submittal package.
- 4. Submittals returned with Action "A" or "B" are considered ready for fabrication and installation
 - a. If for any reason a submittal that has an "A" or "B" Action is resubmitted, it must be accompanied by a letter defining the changes that have been made and the reason for the resubmittal.
 - b. Destroy or conspicuously mark "SUPERSEDED" all documents having previously received "A" or "B" Action that are superseded by a resubmittal.
- Submittals with Action "A" or "B" combined with Action "C" (Revise and Resubmit) or "D" (Rejected) will be individually analyzed giving consideration as follows:
 - a. The portion of the submittal given "C" or "D" will not be distributed (unless previously agreed to otherwise at the Preconstruction Conference).
 - 1) One copy or the one transparency of the "C" or "D" drawings will be marked up and returned to the Contractor. {Engineer to verify with Contractor the desire for paper verses digital media}
 - a) Correct and resubmit items so marked.
 - b. Items marked "A" or "B" will be fully distributed.
 - c. If a portion of the items or system proposed is acceptable, however, the major part of the individual drawings or documents are incomplete or require revision, the entire submittal may be given "C" or "D" Action.
 - 1) This is at the sole discretion of the Engineer.
 - 2) In this case, some drawings may contain relatively few or no comments or the statement, "Resubmit to maintain a complete package."
 - Distribution to the Owner and field will not be made (unless previously agreed to otherwise).
- Failure to include any specific information specified under the submittal paragraphs of the Specifications will result in the submittal being returned to the Contractor with "C" or "D" Action.
- 7. Calculations required in individual specification sections will be received for information purposes only, as evidence calculations have been performed by individuals meeting specified qualifications and will be returned stamped "E. Engineer's Review Not Required" to acknowledge receipt.
- 8. Transmittals of submittals which the Engineer considers as "Not Required" submittal information, which is supplemental to but not essential to prior submitted information, or items of information in a transmittal which have been reviewed and received "A" or "B" Action in a prior submittal, will be returned with Action "E. Engineer's Review Not Required."

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION