ADDENDUM #1

City of Palatka

201 North 2nd Street
Palatka, Florida 32177
Tel (386) 329-0100

St. Johns Avenue Moseley to 13th Water Main Improvements

ISSUE DATE: October 16, 2023

ENGINEER: Hanson Professional Services Inc.

SUBJECT: City of Palatka
Invitation to Bid (ITB) 2023-18
St. Johns Avenue – Moseley to 13th Water Main Improvements

INTENT: This addendum is issued prior to the date bids are due to incorporate the following clarifications, additions, omissions, deletions, or changes into the Contract Documents.

Except as hereinafter specified, the work shall be in accordance with the drawings and specifications.

Bidders are to include the work of this addendum in their proposals, and it shall become a part of the Contract Documents when construction is executed.

This addenda shall become part of the contract documents from this point forward. Bidders are reminded that this addendum must be noted on the first sheet of the "Bid Form" when they submit their bid. In an effort to ensure all bidders receive this addendum, please send a signed acknowledgment copy of this addendum with your Bid Form.

ITEM #1
Specification Section 01 78 30 As-Built Drawings has been added.

Acknowledgment

_____
Signature and Date

_____
Printed Name / Title

_____
Company Name

End of Addendum Number One

SECTION 01 78 30

AS-BUILT DRAWINGS

PART 1 - GENERAL

1.01 REQUIREMENTS

As-Builts or record drawings are required for all City of Palatka owned potable water, wastewater, chilled water and reclaimed water pipelines, pump stations, treatment plants and facilities located in either public right-of- way, in a dedicated easement or on City property and shall be prepared in conformance with this Section. The following definitions shall apply to this section:

1.02 DEFINITIONS

A. As-Built(s)

1. Applies to Work involving new construction or replacement construction and/or requires a Permit for Construction.

2. They are a revised set of drawings that represent and document the final materials and location of installed Work. They reflect all changes made by Addendum, change order, or Supplemental Work Allowance (SWA) during the construction process, and show the exact dimensions, geometry, and location of all elements of the Work completed by a Contractor under a contract.

3. They are submitted by the Contractor and certified by a Professional Land Surveyor in the employ of the Contractor or by a Professional Engineer in the employ of the Contractor upon completion of a project or of a phase of a project.

B. Florida Registered Engineer or Land Surveyor.

1. Applies to Work involving maintenance and/or minor replacement of existing infrastructure which does not require any Permit for Construction.

2. They are a revised set of drawings that represent and document the final materials and location of installed Work. They show the exact dimensions, geometry, and location of all elements of the Work.

3. These drawings do not require certification by a Professional Land Surveyor or Professional Engineer.

C. Redline Drawing(s)

1. Applies to Work that is ongoing and documents the current installation progress of planned Work or applies to field observations and/or findings that represent a deviation, discovery, or change from the expected conditions.

2. These drawings do not require the certification by a Professional Land Surveyor or Professional Engineer.

3. They represent and document the current materials and location of installed work.

1.03 SUBMITTAL TIMING

Upon completion of the Work and prior to dedication of utilities to City or final payment under the Contract, Contractor shall furnish to City electronic copies of asset data tables and as-built drawings or record drawings and certified paper copies of the as-built or record drawings which have been revised to indicate final as-built data (true to scale) and in accordance with all addenda, change orders, verbal field changes, City directives, Change Orders, and all requirements with respect to the drawings specified herein. A City representative shall verify as-built information is consistent with observable field conditions. Redrawn as-builts will be deemed unacceptable.

1.04 PROJECT WORK

A. An electronic file of the original Project drawings will be furnished to Contractor for the purpose of recording and preparing as-built or record drawings.

B. The Contractor shall provide access to buried facilities to all for accurate horizontal and vertical measurements to be acquired by the surveyor or engineer as needed. Should discrepancies exist, at the discretion of City, and at no cost to City, the contractor shall verify buried facilities.

C. All as-built information shall be recorded and kept current during the progress of the Work. Monthly, the Contractor or Developer's authorized agent shall furnish to the City Representative a copy "redline" set of drawings identifying those field changes made to the Work to date, along with a copy of the associated field notes. Revisions and recording of information on the "redline" copy set of drawings shall be done to scale, in red ink, clearly and accurately identifying those changes to the Work. The City Representative may review and comment on the drawings which shall be incorporated into the next month's as-built submittal. Failure to incorporate changes in the following month submittal may result in rejection of any invoice submittal to the City, denial of certification of completion or denial of acceptance by the City.

D. The City representative will review and comment on the proposed final as-built drawings. The subsequent submittal shall incorporate a copy set of the CADD drawing preliminary as-builts with comment by the City. The City representative shall review and comment on the copy set of CADD drawings which shall be incorporated into the final as-built submittal.

1.05 SIGNED DOCUMENTS

A. As-Built Drawings
Each page of the as-built drawings shall bear the printed name, and the signed as-built certification of the general contractor, and the signed and sealed as-built certification of the professional surveyor and mapper (PSM) or registered professional engineer (PE) who provided the horizontal and vertical dimensions and elevations on the as-built drawing. The signatures shall certify that the as-built drawings do, in fact, reflect the true as-built conditions as located under the direct supervision of the registered surveyor and/or professional engineer.

B. Redline Drawings
Each page of the reline drawings shall bear the printed name, and the signed redline certification of the project manager who provided the horizontal and vertical dimensions and elevations on the as-built drawing. The signature shall certify that the re-line drawings do, in fact, reflect the true built conditions of the infrastructure.

1.06 FINAL SUBMITTALS

Upon completion of the work, Contractor shall deliver the following completed documents:

A. As-Builts required for all projects requiring permitting:
1. As-built drawings in dwg format (Auto CAD) including all xref files.

2. As-built drawings in PDF format.

3. As-built drawings in paper format, if requested.

4. Asset data tables for each asset type in electronic format.

B. The City will review the submittal for correctness and completeness and will return either an approval stamp or list of required changes for resubmission.

PART 2 – DRAWING REQUIREMENTS

When making changes to the AutoCAD drawing for as-built purposes, originally designed utility lines that were installed differently in the field shall be deleted with the applicable notes and the correct location, notes and coordinates should be drawn in and/or added in to accurately portray the as-built conditions. Simply changing the coordinates, notes or just adding notes is not acceptable. Do not strike through notes or elevation call-outs, change them in the drawing to reflect as-built conditions. Lines, notations or required information not affected by addenda or SWAs shall not be disturbed. The legend used on the original Project drawings shall also be used to make all necessary corrections.

A. Each document shall be labeled “AS-BUILT” or “RECORD DRAWING” as applicable, in approximately 1” high printed letters and shall be submitted on 11” x 17” sheets.

B. Each document shall contain a graphic scale accurately representing the scale of the drawings.

C. Each document shall contain a north arrow.

D. As-Builts shall utilize the State Plane Coordinate System using the Florida East Zone and the North American Datum of 1983 preferred for horizontal data; North American Vertical Datum (NAVD) 1988 Datum is preferred for elevation data. Benchmarks used must be shown and verified on the drawings. If the drawings were initially created in that coordinate system.

E. Deflections that result in a change of more than two feet from the designed alignment shall be located and recorded regardless of the presence of a fitting.

F. To enable the efficient future location of the referenced facilities, the PSM or PE performing the as-built will independently verify the positional accuracy relative to the referenced horizontal and vertical datum. This will be accomplished through checks to published horizontal and vertical control points from local, state or federal agencies. These checks are to be independent of checks to local project control.

G. The positional accuracy relative to the referenced published control points used shall not exceed 0.5’ horizontally and 0.1’ vertically. Elevations relative to the site facilities must be within 0.1’ of each other.

H. As-builts shall show physical dimensioning of the separation between water mains, sewer mains, reclaimed mains and chilled water mains at crossings with all water mains, wastewater mains and facilities, reclaimed mains, chilled water mains and storms drains and facilities. This can be shown by providing elevations of each pipe or structure, or noting measurement taken at the conflict crossing between the pipes or structures on the plan view. As-builts shall also show measurement of vertical and horizontal separation in areas where water mains are parallel to wastewater mains, reclaimed mains or storm drains. The vertical and horizontal separation shall be shown for the full length of the parallel run.

I. Special detail drawings will be required where needed for clarity. Clarity is defined as pipe, fittings, valves, meter boxes, etc. clearly visible when printed to scale and when zoomed and viewed electronically.

J. Vicinity map shall be included and be similar to a Google Map or Bing Map with an arrow pointing to the location of the project. Vicinity map shall not have aerial imaging. Vicinity map shall include major street names in bold allowing the project to be located quickly. Vicinity map on the cover sheet should be approximately 6 inches by 8 inches. Outside of the map write “Project Location” and a leader line pointing to the site.

K. Master Plan phase maps required for projects that are built in phases, the phase included in the as-built shall be shown as related to previous and future phases (as applicable). Phase maps shall be shown the cover page an on each document.

L. Street names

M. Match lines referencing the appropriate drawing page sheet number.

N. Unless approved otherwise by City, the minimum scale requirements on the drawings are as follows:

- Pump Station Site: 1" = 5' (horizontal scale)
- Plan & Profile: 1" = 40' (20' preferred, horizontal scale)
  1" = 4' (2' preferred, vertical scale)
- Plan (only): 1" = 40' (20' preferred, horizontal scale)

O. Separate drawings are required for water, wastewater, reclaimed and chilled water. No drawings will be accepted which contain a combination of the above construction types, unless otherwise approved by City Project Manager. Exceptions will be allowed for simple single service, small property improvements where all utilities can be clearly depicted on one sheet.

P. All features depicted in the as-built drawings must be surveyed, City will spot check all coordinates to ensure accuracy.

Q. Cover sheet and each document sheet shall include the Project Name/Project Numbers for each commodity – Water, Wastewater, Reclaimed Water and Chilled Water. These numbers shall be approximately .3 inches tall and located under the "As-Built" notice. A City representative will provide the Project Name/Project Numbers at the preconstruction meeting and will be responsible for checking this information at the end of the project, when preliminary as-builts are submitted, to ensure that the Project Name/Project Numbers have not been modified/added throughout the project.

R. A call out shall be provided identifying the points of connection of the new project to the existing infrastructure.

PART 3 – SPECIFIC SYSTEM REQUIREMENTS

3.01 PRESSURE PIPE SYSTEMS

This section covers pressure pipes including water, wastewater, reclaimed, vacuum and chilled.

A. The location of all piping, valves, fittings, fire hydrants, meter boxes, backflow preventers, manholes, vacuum pods, casings, private pump outs, and point of connection to the existing system shall be referenced by coordinates.

B. The positional accuracy relative to the referenced published control points used shall not exceed 0.5' horizontally and 0.1' vertically. Elevations relative to the site facilities must be within 0.1' of each other.

C. Coordinates and elevations on the main and finished grade will be required at all pipe dead ends, size changes, points of connection to existing system, fittings, valves, meter boxes, at intersections/crossings of pipes, and at 100' maximum intervals from the nearest pipe or fitting elevation.

D. Asset data tables are required for all valves, hydrants, meter boxes, manholes, vaults, vacuum pods, locate wire boxes and fittings. Private pump out assembly components are required to be included in the appropriate tables, (See end of section for data table examples.)

E. Every valve, hydrant, meter box, manhole, vault, vacuum pod, locate wire box, private pump out assembly component and fitting on the as-built is to be numbered and referenced in the asset data table. Minimum font on data tables shall be 8 pts.

3.02 ASSET SPECIFIC REQUIREMENTS

A. Pipelines

1. Each pipe segment shall show a call out designating each length, size, material and pressure class of pipe installed with leader pointing to the installed pipe. Short pipe segments (less than 20 feet long) contained between fittings/valves can have the pipe length description and leader line grouped in one descriptive note with leader line pointing to the group of pipes/fittings/valves.

2. Pipe segments shall be defined as pipe lengths between valves, fittings, manholes, meter boxes, vacuum pods, pump stations, vaults, etc.

3. Lateral or service pipe segments shall be identified by a note on each page. Note shall describe the typical lateral/service size, pipe material, and pipe pressure class. Laterals/Services that deviate from the typical note shall have a pipe segment call out as described 1.

B. Fittings

1. Each fitting shall show a call out designating fitting number, fitting type (45, tee, etc.) and size with leader pointing to the installed fitting. Multiple fittings in close proximity can be grouped with one leader line. A blow-up section may be required to accurately depict all fittings in a congested area.

2. Fittings shall be designated in a fitting table, inserted in a conspicuous location within the As-Built, with the following data. Minimum font on as-built data tables shall be 8 pts. Provide a separate fitting table for water fittings, wastewater fittings, reclaimed water fittings and chilled water fittings.
    - Fitting Number
    - Subtype = Fitting Type (see data table file for subtypes)
    - Facility Owner (JEA or PRIVATE)
    - Fitting Size Primary (Inches)
    - Fitting Size Secondary (Inches)
    - Fitting Type
    - Manufacturer
    - Fitting Material (DIMJ, PVC or HDPE)
    - Lining Material
    - Fitting Top Elevation (feet)
    - Final Grade Elevation (feet)
    - Fitting Depth (feet)
    - State Plane Northing, Y Coord
    - State Plane Easting, X Coord
    - Latitude (in Decimal Degrees)
    - Longitude (in Decimal Degrees)

3. Fitting table shall also be submitted in excel format using the data table examples provided at the end of this section.

C. Valves

1. Each valve shall show a call out designating valve number, valve type, and valve size with leader pointing to the installed valve.

2. Each valve shall be designated in a valve table, inserted in a conspicuous location within the As-Built, with the following data. Minimum font on as-built data tables shall

be 8 pts. Provide a separate valve table for water valves, wastewater valves, reclaimed valves and chilled water valves.

- Valve Number (WV, WWV, RV, CV)
- Valve Subtype = Valve, ARV, Backflow, Hydrant
- (See data file for subtypes)
- Valve Type
- Facility Owner (JEA or PRIVATE)
- Valve Size
- Valve Open Direction (left/right)
- Valve number of turns required to open the valve
- Valve Depth to Operating Nut
- Final Grade Elevation (feet)
- Valve Depth to Nut (feet)
- Valve Manufacturer
- State Plane Northing, Y Coord
- State Plane Easting, X Coord
- Latitude (in Decimal Degrees)
- Longitude (in Decimal Degrees)
- RFID/Barcode Number (future)

3. Valve table shall also be submitted in excel format using the data table examples provided at the end of this section.

D. Hydrants

1. Each hydrant shall show a call out designating hydrant number with leader pointing to the installed hydrant.

2. Each hydrant shall be designated in a hydrant table, inserted in a conspicuous location within the As-Built, with the following data. Minimum font on as-built data tables shall be 8 pts. Provide a separate hydrant table for water hydrants and reclaimed hydrants.

- Hydrant Number (WH, RH)
- Hydrant Subtype = Hydrant
- Facility Owner (JEA or PRIVATE)
- Hydrant Manufacture Date (year)
- Hydrant Manufacturer
- State Plane Northing, Y Coord
- State Plane Easting, X Coord
- Latitude (in Decimal Degrees)
- Longitude (in Decimal Degrees)
- RFID/Barcode Number (future)

3. Hydrant table shall also be submitted in excel format using the data table examples provided at the end of this section.

E. Locate Wire Boxes

1. Each locate wire box shall show a call out designating locate wire box number with leader pointing to the installed box.

2. Each locate wire box shall be designated in a locate wire box table, inserted in a conspicuous location within the As-Built, with the following data. Minimum font on as-built data tables shall be 8 pts. Provide a separate locate wire box table for water, wastewater, reclaimed water and chilled water boxes.

- Locate Wire Box Number (WLW-, SLW-, RLW-, CWL-)
- Locate Box Subtype
- State Plane Northing, Y Coord
- State Plane Easting, X Coord
- Latitude (in Decimal Degrees)

- Longitude (in Decimal Degrees)

3. Locate wire box table shall also be submitted in excel format using the JEA standard excel file which can be downloaded from jea.com. See end of section for data table examples.

3.03 DATA TABLE EXAMPLES

Sample Fitting Table:

Fitting #	Subtype Fitting Type	Facility Owner	Fitting Size Primary (inch)	Fitting Size Second (Inch)	Fitting Type	Manufacturer	Fitting Material	Lining	Fitting Top Elev. (feet)	Final Grade Elev. (feet)	Bury Depth (feet)	State Plane X Coord (feet)	State Plane Y Coord (feet)	Latitude (Decimal Degrees)	Longitude (Decimal Degrees)
WF1	Elbow 90	Palatka	8		Mechanical Joint	American	DI	Epoxy	9.4	12.5	3.1	455667.55	2193930.60	30.3669169	-81.77895000
WF3	Tee	Palatka	8	4	Mechanical Joint	American	DI	Epoxy	9.4	12.5	3.1	455667.55	2193930.60	30.3669169	-81.77895000
WF4	Reducer	Private	12	6	Mechanical Joint	American	DI	Epoxy	8.4	11.5	3.1	455667.55	2193930.60	30.3669169	-81.7789500

Sample Water Valve Table:

Valve Number	Valve Subtype	Valve Type	Facility Owner	Valve Size	Valve Open Direction	Turns to Open	Op Nut Elevation (feet)	Final Grade Elevation (feet)	Valve Depth to Op Nut (feet)	Valve Manufacturer	State Plane X Coord (feet)	State Plane Y Coord (feet)	Latitude (Decimal Degrees)	Longitude (Decimal Degrees)	RFID / Barcode Number
WV1	Valve	Gate	Palatka	6	Left	18	10.1	12.6	2.5	Clow	455667.55	2193930.60	30.366916944	-81.778950000	
WV2	Valve	Plug	Palatka	6	Right	4	9.8	12.6	2.8	M&H	455667.55	2193930.60	30.366916944	-81.778950000	

Sample Hydrant Table:

Hydrant Number	Hydrant Subtype	Facility Owner	Hydrant Manufacture Date (year)	Hydrant Manufacturer	State Plane X Coord (feet)	State Plane Y Coord (feet)	Latitude (Decimal Degrees)	Longitude (Decimal Degrees)	RFID / Barcode Number
WH1	Hydrant	Palatka	2017	Mueller	455667.55	2193930.60	30.366916944	-81.778950000	
WH2	Hydrant	Palatka	2017	Mueller	455667.55	2193930.60	30.366916944	-81.778950000	
WH3	Hydrant	Palatka	2017	Mueller	455667.55	2193930.60	30.366916944	-81.778950000	

Sample Locate Wire Box Table:

Locate Box Number	Locate Box Subtype	State Plane X Coord (feet)	State Plane Y Coord (feet)	Latitude (Decimal Degrees)	Longitude (Decimal Degrees)
WH1	Locate Wire Box	455667.55	2193930.60	30.366916944	-81.778950000
WH2	Locate Wire Box	455667.55	2193930.60	30.366916944	-81.778950000
WH3	Locate Wire Box	455667.55	2193930.60	30.366916944	-81.778950000

END OF SECTION