

**WORK ASSIGNMENT NO. 2016-1 PURSUANT TO
THE JUNE 28, 2016 AGREEMENT BETWEEN THE
CITY OF VENICE, FLORIDA AND
KING ENGINEERING ASSOCIATES, INC.**

WHEREAS, on June 28, 2016, the City of Venice, Florida ("OWNER") and King Engineering Associates, Inc. ("CONSULTANT"), entered into an Agreement whereby the CONSULTANT would perform professional services for the OWNER pursuant to an executed Work Assignment; and

WHEREAS, the OWNER wishes to authorize the CONSULTANT to perform professional services concerning the "Water Main Replacement Program – Phase 6" as more particularly described in the Scope of Services herein; and

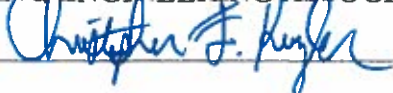
WHEREAS, the CONSULTANT wishes to perform such professional services,

NOW THEREFORE, in consideration of the premises and mutual covenants contained in the June 28, 2016 Agreement and this Work Assignment, the parties agree as follows:

1. General description of the project: CONSULTANT will provide design, permitting and construction services for water main construction.
2. Scope of services to be performed. CONSULTANT shall perform the services described in the Scope of Services attached hereto as Attachment "A".
3. Compensation to be paid. OWNER shall pay the CONSULTANT the sum of three hundred fifty three thousand, two hundred ninety dollars and zero cents (\$353,290.00) for performance of the professional services specified in this work assignment.
4. Time for completion. CONSULTANT shall complete the professional design services specified in this work assignment within 270 days from the date of this work assignment, and will provide the bidding and construction phase services in accordance with the construction schedule to be determined by OWNER.
5. The terms and conditions of the June 28, 2016, Agreement shall remain in full force and effect until the completion of this Work Assignment.

IN WITNESS WHEREOF, the parties have executed this work assignment on the ____ day of ____, 2017.

KING ENGINEERING ASSOCIATES, INC.



CITY OF VENICE, FLORIDA

By: _____

John Holic, Mayor

ATTEST:

City Clerk

Attachment A
SCOPE OF SERVICES

King Engineering Associates, Inc.
Work Assignment No. 2016-1

Water Main Replacement Program - Phase 6

Background

Many of the residential lots in older areas of the City of Venice are provided water service from small diameter water mains in rear lot easements. Many of these water mains are unlined cast iron and over the years have deteriorated, resulting in decreased service pressure to customers. In addition, maintaining the mains, and their associated meters, requires City staff to enter and potentially disturb residents' backyards. In order to improve customer water service and eliminate issues associated with maintaining the mains, the City has implemented a Program to connect homeowners' meters to existing mains in the City-owned street rights-of-way, construct new mains along the streets where necessary and abandon the mains in the rear easements.

Most of the rear easement mains are on the island, in the older part of the City, and the City intends on implementing the Program in Phases in order to distribute the costs and construction activity over time. This Work Assignment authorizes King Engineering Associates, Inc. (CONSULTANT) to provide design, permitting, bidding and construction management services for Phase 6 of the Program, which constitutes the area shown on the map at the end of this Work Assignment. Specifically, the work elements to be included in Phase 6 are:

1. New service connections from the existing mains on Park Boulevard North and South;
2. New service connections from the existing mains on Menendez Street;
3. New service connections from the existing mains on Barcelona Avenue;
4. New service connections from the existing mains on Harbor Drive North and South;
5. New service connections from the existing mains on Granada Avenue;
6. New service connections from the existing main on Pedro Street;
7. New service connections from the existing mains on Airport and Base Avenues;
8. Approximately 1,275 LF of new water main on Manatee Court with service connections to the lots on the south side of the street between Narvaezi Street and Harbor Drive North;
9. Approximately 470 LF of new water main on Barcelona Avenue with service connections to the lots on the north side of the street between Ave Des Parques and Harbor Drive North;

-
10. Approximately 300 LF of new water main on Sarasota Street west of Nassau Street North;
 11. Approximately 1,115 LF of new water main on Palmetto Court with service connections to the lots on the north, west, and east sides of the street north of Menendez Street;
 12. Approximately 740 LF of new water main on Pensacola Road with service connections to the lots on the north side of the street between Valencia Road and Nassau Street;
 13. Approximately 600 LF of new water main in the alley between Miami Avenue West and Ponce DeLeon Drive, east of Nassau Street South;
 14. Approximately 1,100 LF of new water main on Airport Avenue, between Shore Road and The Rialto;
 15. Approximately 130 LF of new water main on Nokomis Avenue, between Airport Avenue and the existing water main south of Base Avenue;
 16. Approximately 1,050 LF of new water main on Base Avenue, between Davis Street and Ringling Drive;
 17. Approximately 300 LF of new water main on Avenida Del Circo between Airport Avenue and Base Avenue;
 18. Abandonment of rear lot water mains within the project area.

The work described above is shown in attached Figure G from the City of Venice Rear Lot Water Main Replacement Report and totals approximately 7,475 LF of new water main and 115 service relocations on private lots.

Scope of Services:

Task 1 – Design Project Management

CONSULTANT will provide the following services, extending throughout the duration of the project:

- Coordinate the activities and communications of the CONSULTANT's staff and subconsultants with those of the OWNER.
- Develop and maintain the project design schedule.
- Develop monthly invoices.
- Review and internally log and file project correspondence.
- Meet with the OWNER at a kickoff meeting and up to two (2) additional times at the 50% and 100% design completion levels.
- Initiate and execute the Quality Control process.

Task 2- Field Investigations

Task 2.1 – Door Hanger

Prior to beginning the field efforts, CONSULTANT will revise the door hanger used for previous program phases to notify the residents of the impending work. The door hanger will be submitted to the OWNER for review and approval prior to its use. The door hanger will be placed on residents' door at the start of surveying.

Task 2.2 - Survey

CONSULTANT will perform topographic survey services extending from right-of-way line to right-of-way line on the streets with proposed new water mains

The survey along streets will record the following above ground features:

- Edge of pavement;
- Curbs, driveways and sidewalks;
- Power poles;
- Above ground utilities;
- Manhole rims, inverts and pipe sizes;
- Trees and their approximate driplines.

The survey will be based on tied to State Plane Coordinates and an arbitrary vertical datum. The survey effort does not include right-of-way surveys, however, readily available property corners along the fronts of the properties will be located for reference.

Task 2.3 - Field Visits

CONSULTANT will visit the site to evaluate potential new water main alignments prior to the survey effort. A second field visit will be made to supplement the information collected by survey.

Task 2.4 – Private Property Service Routes

CONSULTANT will visit each of the 100 properties where water service relocation will take place to verify the existing meter and water service connection locations, select a location for the new meter, and select a route for the new water service. Existing meter, proposed meter, water service connection locations and restoration items will be recorded with hand drawn sketches. Lots with irrigation services will be identified using OWNER provided billing data. Proposed new meter locations and water service routes will be coordinated with information provided with Property Owner Agreements obtained as part of Task 3. The OWNER's applicable meter grid spreadsheet will be updated and included in the Contract Documents so that, in combination with the Overall Service Relocation Plan, the affected lots and required services can be tracked.

Task 2.5 - Geotechnical Investigation

Through the use of a subconsultant, CONSULTANT will obtain a total of twenty six (26) hand auger borings to a depth of 10 feet along the proposed water main routes. Results of the geotechnical testing will be summarized in a signed and sealed geotechnical report outlining:

- Boring location plan;
- Borings logs with soil stratification based on visual soil classification;
- Encountered soil and bedrock conditions;
- Summarized laboratory data;
- Groundwater levels observed during drilling;
- Geotechnical recommendations.

Task 2.6 – Subsurface Utility Engineering (SUE)

Through the use of a subconsultant, provide Level A SUE at 15 locations to confirm potential utility conflicts. Electromagnetic induction, ground penetrating radar and vacuum excavation will be used to help identify/expose utilities. Once the utility has been identified/exposed, the depth, diameter and material type will be obtained.

Task 3- Property Owner Agreements

CONSULTANT will hire a specialist to work with and obtain signed agreements up to 115 private property owners whose water services will be relocated. The specific tasks to be performed are:

- 3.1 Review individual properties with aerials or plans that show existing water shut off valves/service connections (WSC).
- 3.2 Confirm location of WSC and/or advise of correct location on properties where owners request on-site review.
- 3.3 Confirm location of private property water line with property owner and advise of specific owner requests or concerns related to the location or construction of water line on private property.
- 3.4 Confirm use of existing water service meter relocation agreement and letter with OWNER Staff. Finalize Agreement and letter with revisions, if applicable.
- 3.5 Prepare database of owners, based on aerials or plans using Property Appraiser (PA) data; print PA info sheet for owner file.
- 3.6 Verify ownership on Clerk of Court website – print deed or ownership conveyance document for property.
- 3.7 Review OWNER Meter Location list for each property. Note existing water meter location, irrigation and reclaim meter and back flow preventer information as applicable.
- 3.8 Prepare files for property owner information as applicable to project.
- 3.9 Prepare letter and Agreement for each owner.
- 3.10 Research phone number for each property owner, call owner, advise of project and offer method to receive Letter, Agreement and aerial or plan sheet copy: on site meeting, meeting at City Hall, e-mail or US Mail.
- 3.11 Verify owner preference for contact for project: telephone numbers and e-mail addresses if owner responds verbally or by e-mail to attempts for discussion.
- 3.12 Attempt minimum of one in person visit to home to hand deliver project information for owners with no available phone number. If unable to contact

-
- owner by site visit or phone, project information will be sent by US Mail. Letters sent by US Mail will include return envelope addressed to Right of Way Specialist.
- 3.13 Respond to property owner calls and e-mails; site review property at owner's requests, coordinate on site meetings.
 - 3.14 Prepare e-mail, mark-up of aerial or plan sheet to document on-site meeting with property owner if applicable to design details and/or construction activity.
 - 3.15 Convey owner requests, comments and/or concerns.
 - 3.16 Follow-up as required with owner by phone, e-mail or site visit.
 - 3.17 Coordinate witnessing of Agreements with owner by referring to City Clerk's office staff or Warfield Avenue staff. Witness Agreements only when asked by property owner if no other witness available.
 - 3.18 Review existing Thank You letter from previous projects with OWNER Staff and finalize.
 - 3.19 Prepare thank you letters for executed Agreements approximately every 30 days. Coordinate delivery of letters and agreements to City Manager and City clerk for execution. US Mail or e-mail owner thank you letter with copy of Agreement.
 - 3.20 Prepare list of fully executed original Agreements and deliver to City Clerk's office with original executed Agreements approximately every 30 days.
 - 3.21 On-going update of Spreadsheet in numerous formats. Provide PDF of spreadsheet throughout project. If requested, spreadsheet will be provided in excel at end of project.
 - 3.22 Review plan sets and update and/or revise spreadsheet(s), verify all owners with relocated meter have been contacted; advise as necessary based on review.
 - 3.23 Follow-up with non-responsive owners, send "second request" letter from City to Owners who are non-responsive. Coordinate timing of letter and finalization of letter.
 - 3.24 Identify owners, if any, and discuss recommendation for "third request" letter, sent certified mail, advising of owner responsibility to pay to connect to services if Agreement not received.
 - 3.25 Prepare binders of owner information - with individual spreadsheets with owner information and copy of owner executed agreement copy, owner contact info, correspondence and property information.
 - 3.26 Respond to OWNER Staff, property owner, Plumber, Contractor questions after acquisition of Agreement phase is complete, prior, during and after construction based on funds remaining in budget.

Task 4 – Design

Task 4.1 – Engineering Evaluations

CONSULTANT will perform the following evaluations as part of the design of the project:

- 4.1.1 –HDD calculations to determine the feasibility of HDD and/or the required drill depths or special requirements.

4.1.2 –Determination of existing utilities along the proposed new water main alignments. CONSULTANT will call in a Florida One Call Design Ticket and send draft plans to the affected utilities to obtain the location of their existing facilities. This information will be combined with the visual observation of markings placed by utilities prior to the geotechnical field effort. Utilities will not be located in areas where it is proposed to only install new services from existing water mains. These utilities will be located by the contractor as described below.

4.1.3 –CONSULTANT will coordinate data collected in the field with the OWNER's private property service spreadsheet and information provided by the Property Owner Agreement subconsultant to confirm the route for the service line on private property, the location of the required connection to the lot building/service and other special requests from the individual property owners.

Task 4.2 - Drawings

CONSULTANT will develop design drawings for use in obtaining bids, permitting and constructing the project. Drawings sheets are anticipated to include:

- Cover
- Notes, Legend and Abbreviations
- Stormwater Pollution Prevention Plan
- Overall Project Site Plan and Key Map
- Overall Existing Water Main Abandonment and Tie-In Shutdown Plan
- Overall Service Relocation Plan
- Proposed New Water Main Plan – Manatee Court (3 panels)
- Proposed New Water Main Plan – Barcelona Avenue (1 panel)
- Proposed New Water Main Plan – Sarasota Street (1 panel)
- Proposed New Water Main Plan – Palmetto Court (3 panels)
- Proposed New Water Main Plan – Pensacola Road (2 panels)
- Proposed New Water Main Plan – Airport Avenue (3 panels)
- Proposed New Water Main Plan – Nokomis Avenue S. (1 panel)
- Proposed New Water Main Plan – Base Avenue E. (3 panels)
- Proposed New Water Main Plan – Avenida del Circo (1 panel)
- Proposed New Services to Existing Water Main – Park Boulevard North (1 Panel)
- Proposed New Services to Existing Water Main – Park Boulevard South (1 Panel)
- Proposed New Services to Existing Water Main – Menendez Street (2 Panels)
- Proposed New Services to Existing Water Main – Barcelona Avenue (1 Panels)
- Proposed New Services to Existing Water Main – Harbor Drive North (1 Panel)
- Proposed New Services to Existing Water Main – Harbor Drive South (1 Panel)
- Proposed New Services to Existing Water Main – Granada Avenue (2 Panels)
- Proposed New Services to Existing Water Main – Pedro Street (1 Panel)
- Proposed New Services to Existing Water Main – Milan Avenue West (1 Panel)
- Proposed New Services to Existing Water Main – Venice Avenue West (1 Panel)
- Proposed New Services to Existing Water Main – Nassau Street North (1 Panel)
- Proposed New Services to Existing Water Main – Base Avenue East (4 Panels)
- Proposed New Services to Existing Water Main – Airport Avenue East (5 Panels)
- Special Crossings and Details, including applicable OWNER standard utility details (3 sheets)

-
- Maintenance of Traffic (7 sheets)

Drawings will be developed in AutoCAD and will be similar in detail and approach and those developed for the Phase 5 project. Drawings will be half-size (11" x 17" sheets). Drawings for new water mains will be at 1"=30' scale, plan view only and will include abandonment of the existing mains. Property lines will be shown based on the Sarasota County Property Appraiser's maps and, as such, will be approximate. Aerials will be Google aerials.

Areas requiring only new services from existing water mains will be shown on aerial plan views at 1"=50' showing property lines, the proposed services and water mains to be taken out of service. Sheets will include the following information on private lots: existing meter(s) location, WSC location(s), new tap and meter location in the ROW and the route and tie-in location for new water service(s).

Task 4.3 Specifications

CONSULTANT will develop technical specifications (Divisions 1 and higher) for the project including a Bid Form including line items and quantities for Water Service Pipe (LF Unit Price based on designed route for installation and material), Private Property Restoration - Sod (LF Unit Price based on designed route and 18" trench width, will be identified in specs); Private Property Restoration - Others (Unit Price according to material - brick pavers, concrete, unavoidable obstacles based on designed route); Contractor/Property Owner Coordination - Based on 30 minutes per homeowner (methodology to be defined in specs).

It is assumed that the Technical Specifications will be those developed for Phase 5 of the Program with minor modifications. The OWNER will provide its standard Division 0 front end documents.

Task 4.4 Review Submittals

Drawings and specifications will be submitted for the OWNER's review at the 50% and 100% completions levels. The main purpose of the 50% submittal will be to agree on the water main alignments. A meeting with the OWNER will be held after each submittal to review the OWNER's comments.

Task 4.5 Opinions of Probable Construction Cost

CONSULTANT will develop an opinion of probable construction cost for the project at the 50%, and 100% completion levels. The 50% opinion will be a Class 2 cost estimate and the 100% opinion will be a Class 1 cost estimate as defined by American Association of Cost Engineer's (AACE). The 100% opinion will be summarized in the same format as the Bid Form.

Task 5 – Permitting

Task 5.1 FDEP (Health Department) Permit

CONSULTANT will prepare an FDEP Notice of Intent to Use the General Permit for Construction of Water Main Extensions for PWSs for submittal to the Sarasota County Department of Health and will respond to questions necessary to obtain approval for the permit. Fees include the \$900 Permit processing fee.

Task 5.2 Sarasota County Right-of-Way Permit

CONSULTANT will prepare a Sarasota County Right-of-Way Permit application for the new services to be installed on Harbor Drive South and will respond to questions necessary to obtain approval for the permit. There is no application fee associated with this permit.

Task 6 – Bid Services

CONSULTANT will provide the following services during advertisement and bidding of the project by the OWNER:

- Prepare for, attend and conduct a Pre-Bid Conference to meet with prospective bidders and discuss the project.
- Provide written clarifications and prepare Addenda responding to questions raised at the prebid meeting and sent in by bidders.
- Review the bids, develop a Bid Tabulation spreadsheet, call the low bidder's references and submit a recommendation of award.

Task 7 – Services During Construction

CONSULTANT will provide construction management and engineering services over an anticipated fifteen month (65 week) construction contract. Specific services will include:

- Prepare for, attend and moderate a preconstruction meeting with the contractor, OWNER and affected utility representatives. CONSULTANT will prepare meeting minutes.
- Logging and reviewing the contractor's submittals. Fees assume a maximum total of twenty five (25) shop drawings. Of the twenty five, 12 will be resubmitted for a second review. The specifications will require that the Contractor pay for three or more reviews. It is assumed that the Contractor will submit his Shop Drawings electronically. A preliminary list of anticipated submittals is provided in Table 1.
- Reviewing the Contractor's initial schedule and monthly schedule updates.
- Attendance at and moderation of up to twelve (12) construction progress meetings/site visits by CONSULTANT's Project Manager and/or Project Engineer. CONSULTANT will prepare and distribute an agenda and minutes.
- Providing site visits by CONSULTANT's Project Engineer to observe the progress of the work, address questions raised during construction and observe pressure testing. A total of 20 hours is budgeted for this effort.
- Responding to the Contractor's Requests for Information (RFIs). For the purposes of this Work Order, a total of 10 RFIs is assumed.
- Assisting the OWNER with preparing and issuing up to five (5) Interim Field Change Agreements (IFCAs) and with reviewing the resulting proposals and negotiating and preparing one (1) Change Order.

-
- Reviewing and approving the Contractor's Pay Applications.
 - Reviewing and logging compaction and materials test reports.
 - Preparing AutoCAD Record Drawings based on red-lined As-Built drawing markups and survey files provided by the Contractor.
 - Developing ESRI GIS data files for the constructed project in accordance with Section 7 of the City of Venice Standard Details, General Notes and Testing Requirements Updated January 2017 and based on data provided by the Contractor.
 - Reviewing of up to ten (10) sets of pressure test and disinfection test results and preparing and submitting ten (10) certification packages to the Department of Health;
 - Providing assistance with final closeout consisting of:
 - Performing a Substantial Completion walkthrough and developing a punchlist;
 - Providing the OWNER with signed and sealed Record Drawings;
 - Providing the OWNER with Record Drawings in PDF and AutoCAD formats;
 - Providing general Program Management during construction including:
 - Maintaining routine contact and discussing construction progress and project developments with the OWNER's inspector;
 - Reviewing the OWNER Inspector's Daily Reports;
 - Miscellaneous phone calls and emails and coordination with the OWNER's Project Manager and other OWNER staff, including assisting the OWNER's Project Manager with miscellaneous minor project related questions and general consultation with respect to the Contractor's contractual obligations;
 - Miscellaneous phone calls and emails with the Contractor's staff required to respond to minor questions not requiring formal RFIs;
 - Document control including maintaining files of correspondence, meeting minutes, Contract Documents, Change Orders, Field Orders, RFIs, Work Change Directives, Addenda, additional Drawings issued subsequent to the execution of the Contract, progress reports, Shop Drawing and Sample submittals, regulatory correspondence and other Project-related documents.

Deliverables

- Three (3) signed and sealed copies of the final Geotechnical Report.
- Four (4) half-size color drawing sets, technical specifications and an Opinion of Probable Construction cost at the 50% completion level. The submittal will also be provided in PDF format by email or FTP site.
- Four (4) half-size color drawing sets, technical specifications and an Opinion of Probable Construction cost at the 100% completion level. The submittal will also be provided in PDF format by email or FTP site.
- Four (4) half-size signed and sealed color copies of the Bid Document drawings along with a CD containing the drawings in PDF and AutoCAD format, the technical specifications

in PDF format, the final Engineer's Opinion of Probable Construction Cost in PDF format and the Bid Form in Word format.

- One hardcopy of all permit application packages and RAI submittals.

Compensation

The proposal fee for the above scope of work will be charged as a Lump Sum and will be invoiced monthly based on percentage completion of each task. The following table shows the fee by task.

This Work Assignment includes an Owner's Allowance of \$15,000 for unforeseen tasks required to complete the project, which will be used only with the written approval of the OWNER. A scope description and fee breakdown will be provided to the OWNER for any proposed use of the Owner's Allowance.

Fee Proposal			
Task	Description	Basis	Fee
1	Project Management	LS	\$10,308
2	Field Investigations	LS	\$69,164
3	Property Owner Agreements	TM	\$56,350
4	Design	LS	\$85,410
5	Permitting	LS	\$4,512
6	Bid Services	LS	\$5,566
7	Services During Construction	LS	\$106,980
	Owner's Allowance		\$15,000
	Total		\$353,290

Time of Completion

The project schedule is outlined below. The schedule provides time from start to completion of each task in calendar days from notice to proceed. The notice to proceed will be effective the date this Work Assignment is approved by the OWNER.

Project Schedule (Calendar Days from Date of Work Assignment)			
Task	Description	Start	Complete
1	Project Management	0	270
2	Field Investigations	0	60
3	Property Owner Agreements	75	270
4	Design	0	270
5	Permitting	150	270
6	Bidding Services	Per OWNER Schedule	
7	Construction Phase Services	455 days from NTP	

Assumptions

- Documents will be developed based on the Contractor hiring a licensed plumber for the water service work on private property.
- The OWNER will distribute the Bid Documents and Addenda and will prepare and execute final Agreements, Contract Documents and insurance/bonding documentation with the selected low bidder.
- The Contractor will be responsible for obtaining all Building Department permits and inspections.
- The OWNER will provide an inspector on the project who will provide the CONSULTANT with a copy of his daily reports weekly. The Inspector and the OWNER's Project Manager will be responsible for reviewing and approving the quantities in Pay Applications; witnessing pressure and disinfection tests and providing test reports and confirming that items listed on the Substantial Completion punchlist are completed.
- Prior to submitting certifications to the Health Department, the OWNER's inspection firm will provide a letter, signed and sealed by a Florida Professional Engineer, stating "This letter is to certify that a person acting under my responsible charge observed construction of the substantially complete portion of this project, and based upon said observation, the substantially complete portion of this project has been completed in general accordance with the approved drawings and specifications and that any deviations were approved by the Engineer-of-Record."
- The project will be funded through a State Revolving Fund (SRF) loan. Administrative services associated with tracking or reporting required for the SRF loan will be provided by others.

Table 1

Preliminary List of Contractor's Submittals

1	Emergency Contacts and Misc.
2	Hurricane Preparedness Plan
3	Construction Phasing Plan
4	Schedule of Values
5	Pre-Construction Video
6	Maintenance of Traffic
7	Project Signs
8	Horizontal Direction Drilling Plan
9	Dewatering Plan
10	Erosion Control
11	Flowable Fill
12	Asphalt Restoration Materials
13	Concrete
14	PVC Pipe and Fittings
15	HDPE Pipe
16	Water Services
17	Valves and Appurtenances
18	Tapping Sleeves
19	Hydrants
20	Meter Assemblies
21	Sod

