

**WORK ASSIGNMENT NO. 5 PURSUANT TO
THE JULY 13, 2010 AGREEMENT BETWEEN THE
CITY OF VENICE, FLORIDA AND
KING ENGINEERING ASSOCIATES, INC.**

WHEREAS, on July 13, 2010 the parties 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 3** as more particularly described in the Scope of Services contained herein; and

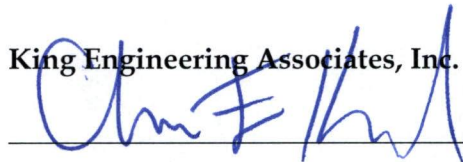
WHEREAS, the **CONSULTANT** wishes to perform such professional services.

NOW THEREFORE, in consideration of the premises and mutual covenants contained in the July 13, 2010 Agreement and in this Work Assignment, the parties agree as follows:

1. General description of the project: Design permitting and construction services for water main replacements.
2. Scope of services to be performed. **CONSULTANT** shall perform the services described in the scope of services attached as Attachment "A".
3. Compensation to be paid. City shall pay the **CONSULTANT** the sum of \$187,060 for performance of the professional services specified in this work assignment.
4. Time for completion. **ENGINEER** shall complete the professional design services specified in this work assignment within 150 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.

IN WITNESS WHEREOF, the parties have executed this work assignment on the ____ day of ____, 2013.

King Engineering Associates, Inc.



CITY OF VENICE, FLORIDA

By: _____

Mayor

ATTEST:

City Clerk

Attachment A
SCOPE OF SERVICES

King Engineering Associates, Inc.
Work Assignment No. 5

Water Main Replacement Program - Phase 3

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 3 of the Program, which constitutes the area roughly bound by Nokomis Avenue to the west, Firenza Avenue to the north, Base Avenue to the south and Davis Street to the east. Specifically, the work elements to be included in Phase 3 are:

1. New service connections from the existing main on Nokomis Avenue to the lots on the east side of the street between The Corso and Firenza Avenue;
2. New service connections from the existing main on The Rialto to the lots on the west side of the street between The Corso and Firenza Avenue;
3. New service connections from the existing main on Gulf Drive/Field Avenue to the lots on the north side of the street between Nokomis Avenue and The Rialto, including one lot north of Gulf Drive/Field Avenue on The Rialto;
4. New service connections from the existing main on Gulf Drive/Field Avenue to the lots on the south side of the street between Nokomis Avenue and Cockrill Street and between Cooper Street and Davis Street;
5. Approximately 1,020 LF of new water main on Aurora Street with service connections to the lots on the north and south side of the street between Nokomis Avenue and Cockrill Street;
6. Approximately 675 LF of new water main on Aurora Street with service connections to the lots on the north and south side of the street between Cooper Street and Davis Street;

7. Approximately 1,020 LF of new water main on Alba Street with service connections to the lots on the north and south side of the street between Nokomis Avenue and Cockrill Street;
8. Approximately 675 LF of new water main on Alba Street with service connections to the lots on the north and south side of the street between Cooper Street and Davis Street;
9. Approximately 1,020 LF of new water main on Base Avenue with service connections to the lots on the north side of the street between Nokomis Avenue and Cockrill Street;
10. Approximately 675 LF of new water main on Base Street with service connections to the lots on the north side of the street between Cooper Street and Davis Street, and;
11. Abandonment of all rear lot water mains within the project area.

The work described above is shown in attached Figures 1 and 2.

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 City.
- Develop and maintain the project design schedule.
- Develop monthly invoices.
- Review and internally log and file project correspondence.
- Meet with the City up to two (2) times to review the project progress.
- Initiate and execute the Quality Control process.

Task 2- Field Investigations

Task 2.1 – Door Hanger

Prior to beginning the field efforts, Consultant will develop a door hanger to notify the residents of the impending work. The door hanger will be submitted to the City for review and approval prior to its use. The door hanger will be placed on residents' door no later than 48 hours before the start of either the survey or geotechnical testing effort, whichever is first.

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;
- All 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. Existing meters and building service connections will be located as part of this effort.

Task 2.5- Geotechnical Investigation

Through the use of a subconsultant, Consultant will obtain a total of fifteen (15) standard penetration test (SPT) 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 3- Property Owner Agreements

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

- 3.1 Perform a review of individual properties with the 60% plans and advise the City of concerns/questions related to site review.
- 3.2 Review City Meter Location list.
- 3.3 Review existing water service meter relocation agreement and letter with City Staff. Coordinate finalization of Agreement and letter which could include e-mails and/or meeting with City Staff / City Attorney.
- 3.4 Prepare spreadsheet of owners based on plans and Property Appraiser (PA) data; print PA info sheet for owner file or utilize Engineer spreadsheet and property owner data.
- 3.5 Verify ownership on Clerk of Court website – print deed or ownership conveyance document for property. Update property appraiser data based on sale of property or death of owner(s).

- 3.6 Prepare owner spreadsheet for mail merge and use throughout project.
- 3.7 Prepare file folder for each plan sheet with individual owner information.
- 3.8 Prepare letters and Agreement for each owner.
- 3.9 Research phone number for owner, call owner, advise of project and offer method to receive Letter, Agreement and plan sheet copy of their property: on site meeting, meeting at City Hall, e-mail or US Mail.
- 3.10 Respond to owner; if by US Mail, include return envelope addressed to City Utilities, Warfield Ave address.
- 3.11 Attempt hand delivery of letters one time - to owners who do not have published phone number or correct phone number on record with City and if not at home, US Mail info with return envelope to City Utility office on Warfield Ave.
- 3.12 Respond to owner calls / e-mails; review properties at owner's requests, coordinate on site meetings as necessary.
- 3.13 Prepare e-mails to document on-site meetings with owners and results of same.
- 3.14 Follow-up if necessary - with owners by phone, e-mail or site visit
- 3.15 Coordinate witnessing of Agreements with owners by referring to City Clerk's office staff. Witness Agreements only when specifically asked.
- 3.16 Review existing Thank You letter with City Staff and finalize for use on Phase 3.
- 3.17 Prepare thank you letters for executed Agreements - approximately every 30 days - and coordinate delivery of letters and agreements to City Manager and City clerk for execution. Either mail or e-mail owner thank you letter with copy of Agreement.
- 3.18 Prepare list of fully executed original Agreements and deliver to City approximately every 30 days.
- 3.19 On-going update of Spreadsheet in numerous formats.
- 3.20 Follow-up with non-responsive owners, recommend delivery of certified "second" letter from City to Owners who are non-responsive - coordinate and finalize same.
- 3.21 Prepare binders of owner information - by plan sheet with spreadsheet for each plan sheet with owner information and copy of owner executed agreement copy, owner contact info, correspondence and property information.
- 3.22 Respond to questions after acquisition of Agreement phase is complete.

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 to existing water meters. These utilities will be located by the contractor as described below.

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 Watermain Abandonment Site Plan
- Proposed New Water Main Plan – Aurora Street (3 panels)
- Proposed New Water Main Plan – Alba Street (3 panels)
- Proposed New Water Main Plan – Base Avenue (3 panels)
- Proposed New Services to Existing Water Main – Nokomis Avenue and The Rialto (1 Panel)
- Proposed New Services to Existing Water Main – Field Avenue (3 Panels)
- Special Crossings and Details (3 sheets)
- Maintenance of Traffic (5 sheets)

Drawings will be developed in AutoCAD and will be similar in detail and approach and those developed for the Phase 1 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.

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 contain notes requiring the contractor to locate all existing utilities and confirming the new water meter location and route for the new water services on private property prior to installing the new services in the street.

Aerials will be Google aerials.

Task 4.3 Specifications

Consultant will develop technical specifications (Divisions 1 and higher) for the project including a Bid Tabulation. It is assumed that the Technical Specifications will be those developed for Phase 1 of the Program and will require little modification. The City will provide its standard Division 0 front end documents.

Task 4.4 Review Submittals

Drawings and specifications will be submitted for the City'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.

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 – FDEP Water 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 6 – Bid Services

Consultant will provide the following services during advertisement and bidding of the project by the City:

- 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 twenty six week (26) week construction contract. Specific services will include:

- Prepare for, attend and moderate a preconstruction meeting with the contractor, City and affected utility representatives. King 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 up to four (4) construction progress meetings/site visits by King's Project Engineer. It is assumed that preparation and distribution of an agenda and minutes will be provided by the City's inspector.
- Providing site visits by King's Project Engineer to address questions raised during construction. A total of 30 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 City with preparing and issuing up to five (5) Work Change Directives and with reviewing the resulting proposals and negotiating and preparing the required Change Orders.
- Reviewing and approving the Contractor's Pay Applications.
- Reviewing and logging compaction and materials test reports.
- Preparing Record Drawings based on red-lined As-Built drawing markups provided by the Contractor;
- Reviewing of up to six sets of pressure test and disinfection test results and preparing and submitting six (6) (one for each new water main) 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 City with signed and sealed Record Drawings;
 - Providing the City 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 City's inspector;
 - Reviewing the City Inspector's Daily Reports;
 - Miscellaneous phone calls and emails and coordination with the City's Project Manager and other City staff, including assisting the City'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.
- Five (5) half-size 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.
- Five (5) half-size 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.
- Five (5) half-size signed and sealed copies of the Bid Document drawings along with a CD containing the drawings in PDF and AutoCAD format, the technical specifications in PDF and Word format and the final Engineer's Opinion of Probable Construction Cost in PDF 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 City. A scope description and fee breakdown will be provided to the City for any proposed use of the Owner's Allowance.

Fee Proposal			
Task	Description	Basis	Fee
1	Project Management	LS	\$6,780
2	Field Investigations	LS	\$36,060
3	Property Owner Agreements	TM	\$40,000
4	Design	LS	\$36,740
5	Permitting	LS	\$2,320
6	Bid Services	LS	\$4,075
7	Services During Construction	LS	\$46,085
	Owner's Allowance		\$15,000
	Total		\$187,060

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 City.

Project Schedule (Calendar Days from Date of Work Assignment)			
Task	Description	Start	Complete
1	Project Management	0	180
2	Field Investigations	0	60
3	Property Owner Agreements	75	180
4	Design	0	150
5	Permitting	90	150
6	Bidding Services	Per City Schedule	
7	Construction Phase Services	Per City Schedule	

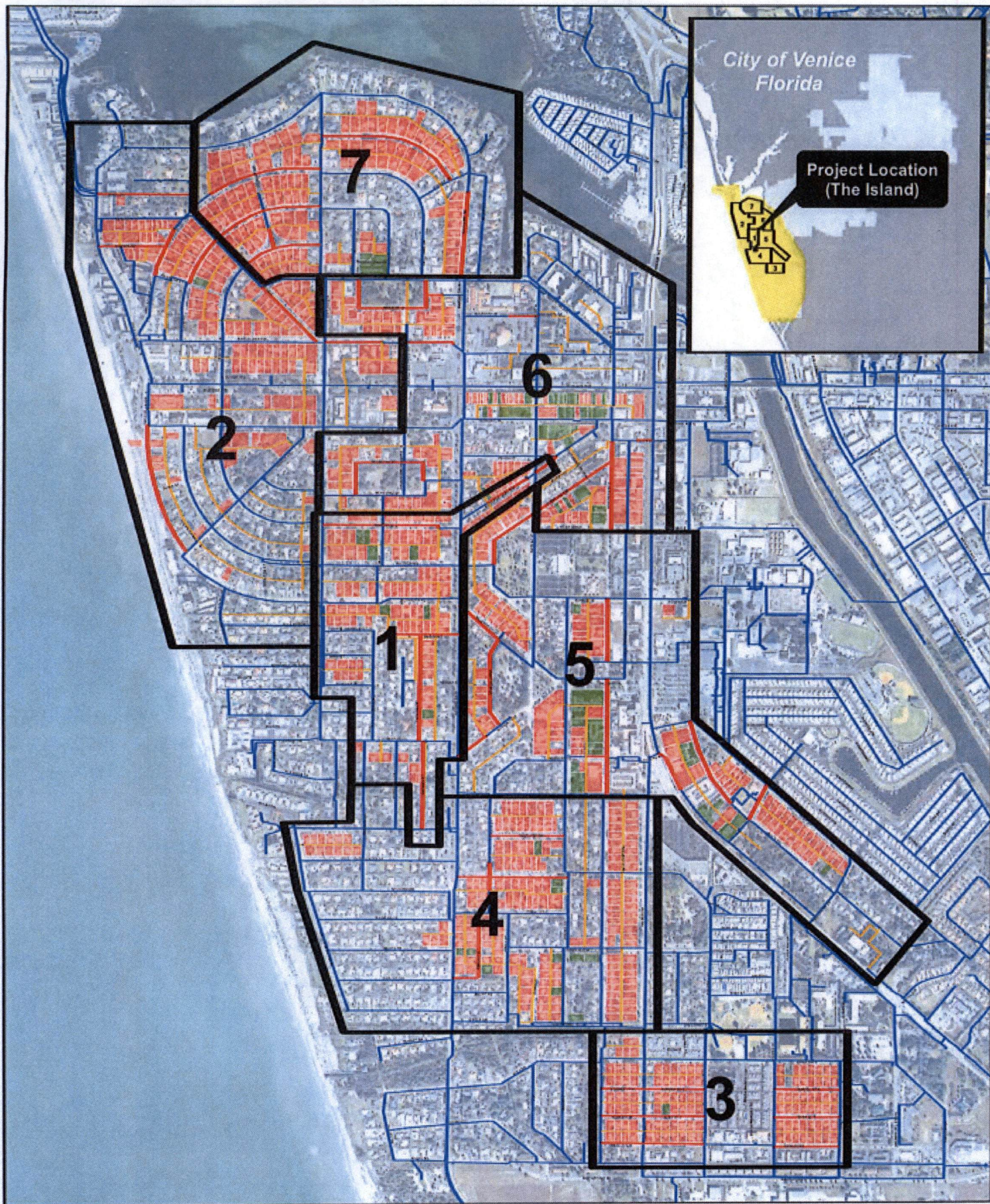
Assumptions

- Documents will be developed based on the Contractor hiring a licensed plumber for the water service work on private property.
- The City 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 City Building Department permits and inspections.
- The City will provide a full-time inspector on the project who will provide the Consultant with a copy of his daily reports weekly. The Inspector and the City'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.

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



1 inch = 1,200 feet

Legend

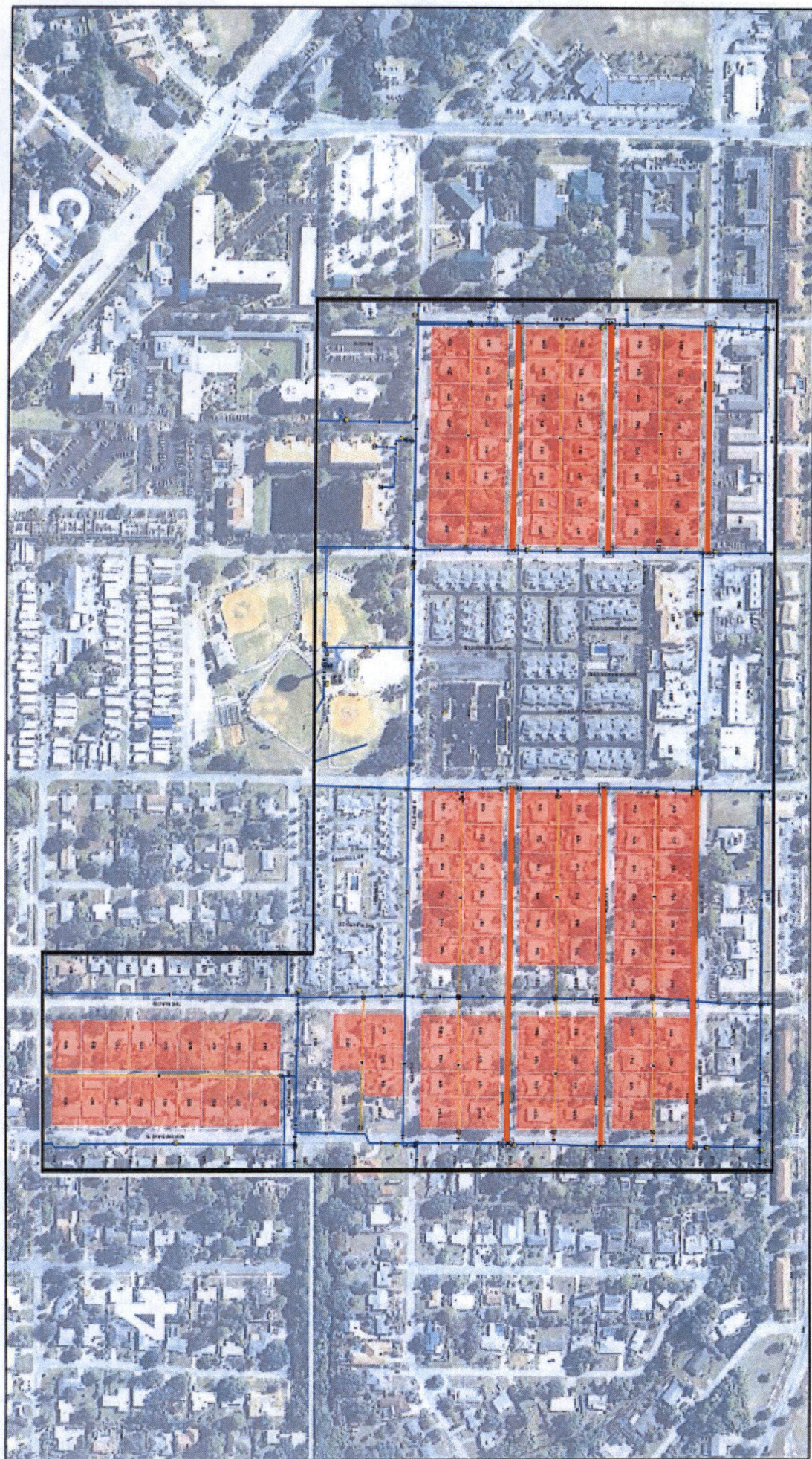
Zone Boundary

Watermain
 Existing Main
 Relocation
 Proposed

Water Service Relocation Status
 Proposed Relocation
 State Unknown
 To Change
 Insert



City of Venice Rear Lot Watermain Relocation
FIGURE 1: Phasing Map



Wade Trim

Legend

- Peace Boundary
- 400m
- Existing House
- Potential Urban
- Existing Inpatient
- Potential Inpatient

Water Status

- Existing Water
- Abandon
- Required

Water Service Replacement

- Existing
- Proposed Replacement
- Existing Landmark
- No Change

1 inch = 250 feet

City of Venice Rear Lot Water Main Replacement

PHASE 3

FIGURE 2