

Agmt

**A RESOLUTION APPROVING AN AGREEMENT FOR PROFESSIONAL ENGINEERING SERVICES IN THE AMOUNT OF \$399,948 BETWEEN THE CITY OF TAMPA AND BLACK & VEATCH CORPORATION IN CONNECTION WITH CONTRACT NO. 14-D-00051; POTABLE WATER MASTER PLAN; AUTHORIZING THE MAYOR OF THE CITY OF TAMPA TO EXECUTE SAME; PROVIDING AN EFFECTIVE DATE.**

**WHEREAS**, via the competitive selection process in accordance with Florida Statutes Section 287.055, Consultants' Competitive Negotiation Act and consistent with Federal procurement policies, the City of Tampa (CITY) selected Black & Veatch Corporation as CONSULTANT to provide Professional Engineering Services in connection with Contract 14-D-00051; Potable Water Master Plan, (PROJECT) as detailed in the Agreement for Consultant Services (AGREEMENT); and

**WHEREAS**, the CITY desires to enter into an agreement with the CONSULTANT to provide certain Professional Engineering Services; and

**WHEREAS**, it is in the best interest of the City of Tampa to enter into this AGREEMENT.

**NOW, THEREFORE,**

**BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF TAMPA, FLORIDA, THAT:**

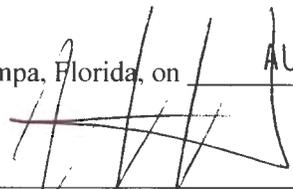
**Section 1.** The Agreement for Consultant Services between the City of Tampa and Black & Veatch Corporation in connection with Contract 14-D-00051; Potable Water Master Plan as detailed in said AGREEMENT, a copy of which is attached hereto and made part hereof, is authorized and approved in its entirety or in substantially similar form.

**Section 2.** The Mayor of the City of Tampa is authorized and empowered to execute, and the City Clerk to attest and affix the official seal of the City of Tampa to, said AGREEMENT on behalf of the City of Tampa.

**Section 3.** Funding for award of a contract for Professional Engineering Services for the Potable Water Master Plan is provided in the amount of \$399,948, subject to annual appropriation, for use by the Water Department within the Water Operations Fund.

**Section 4.** The other proper officers of the City of Tampa are authorized to do all things necessary and proper in order to carry out and make effective the provisions of this Resolution, which shall take effect immediately upon its adoption.

**PASSED AND ADOPTED** by the City Council of the City of Tampa, Florida, on AUG 27 2015



Chairman/~~Chairman Pro-Tem~~, City Council

ATTEST:

  
City Clerk/Deputy City Clerk

Approved as to Legal Sufficiency by  
Rachel S. Peterkin, Assistant City Attorney

4/2015-30

## **AGREEMENT FOR CONSULTANT SERVICES**

**THIS AGREEMENT**, made and entered into at Tampa, Florida, this \_\_\_\_ day of \_\_\_\_\_, 20\_\_, by and between the CITY OF TAMPA, a municipal corporation of the State of Florida, hereinafter referred to as "CITY", the address of which is 315 East Kennedy Boulevard, Tampa, Florida 33602, and Black & Veatch Corporation, a corporation chartered and existing under the laws of the State of Delaware, hereinafter referred to as "CONSULTANT", the address of which is 4890 West Kennedy Boulevard, Suite 950, Tampa, FL, 33609.

### **WITNESSETH:**

**WHEREAS**, the CITY desires to engage the CONSULTANT to perform certain Professional Engineering Services pertinent to such work which shall be referred to as 14-D-00051; Potable Water Master Plan "PROJECT" in accordance with this Agreement; and

**WHEREAS**, the CONSULTANT desires to provide such Professional Engineering Services in accordance with this Agreement.

**NOW, THEREFORE**, in consideration of the mutual covenants, promises, representations and considerations to be kept, performed and paid, the parties hereto agree for themselves, their successors and assigns, as follows:

### **I. GENERAL SCOPE OF THIS AGREEMENT**

A. The relationship of the CONSULTANT to the CITY will be that of an independent Professional Engineering Consultant for the PROJECT; and the CONSULTANT shall provide the professional and technical services required under this Agreement in accordance with acceptable practices and ethical standards. "CONSULTANT" is sometimes referred to as "ENGINEER" in Exhibit A. "CITY" is sometimes referred to as "CLIENT" or "client" in Exhibit A.

B. The scope of services to be provided is indicated in **Exhibit A**.

### **II. DATA AND SERVICES TO BE PROVIDED BY THE CITY**

The CITY shall provide:

A. Available plans and specifications of existing construction.

### **III. PERIOD OF SERVICE**

A. The CONSULTANT shall begin work promptly after receipt of a fully executed copy of the Agreement and a Notice to Proceed. The Agreement shall remain in force until the completion of all construction for the Project.

B. The CONSULTANT's services called for under this Agreement shall be completed provided that, if the CONSULTANT's services are delayed for reasons beyond the CONSULTANT's control, the time of performance shall be adjusted appropriately.

### **IV. GENERAL CONSIDERATIONS**

A. All original sketches, tracings, drawings, computations, details, design calculations, specifications and other documents and plans that result from the CONSULTANT's services under this Agreement shall become and remain the property of the CITY upon receipt of payment by the CONSULTANT from the CITY for services rendered in connection with the preparation of said sketches, tracings, etc. Where such documents are required to be filed with governmental agencies, the CONSULTANT will furnish copies to the CITY upon request.

B. The CITY acknowledges that the materials cited in Paragraph IV. A. above, which are provided by the CONSULTANT, are not intended for use in connection with any project or purpose other than the project and purpose for which such materials were prepared without prior written consent and adaptation by the CONSULTANT shall be at the CITY's sole risk, and the CONSULTANT shall have no responsibility or liability therefor.

C. Any use by the CITY of such materials in connection with a project or purpose other than that for which such materials are prepared without prior written consent and adaptation by the CONSULTANT shall be at the CITY's sole risk, and the CONSULTANT shall have no responsibility or liability therefor.

**V. COMPENSATION**

The CITY shall compensate the CONSULTANT for the services performed with this Agreement an upset limit of \$399,948 as indicated in **Exhibit B**.

**VI. PAYMENT**

Payments shall be made upon presentation of the CONSULTANT's approved invoice.

**VII. RECORDS**

Records for Personnel Expenses shall be kept on a generally recognized accounting basis and shall be available to the CITY or its authorized representative at mutually convenient times.

With respect to all matters covered by this Agreement, records will be made available for examination, audit, inspection, or copying purposes at any time during normal business hours at a location within Hillsborough County, Florida as often as the CITY, HUD, representatives of the Comptroller General of the United States or other federal agency may reasonably require. CONSULTANT will permit same to be examined and excerpts or transcriptions made or duplicated from such records, and audits made of all contracts, invoices, materials, records of personnel and of employment and other data relating to all matters covered by this Agreement. The CITY's right of inspection and audit shall obtain likewise with reference to any audits made by any other agency, whether local, state or federal. CONSULTANT shall retain all records and supporting documentation applicable to this Agreement for five (5) years from the date of completion. The Consultant will file or assist in filing the annual performance report to HUD, if applicable. If any litigation, claim, negotiation, audit, monitoring, inspection or other action has been started before the expiration of the required record retention period, records must be retained until completion of the action and resolution of all issues which arise from it, or the end of the required period, whichever is later.

**VIII. PERSONNEL**

The CONSULTANT represents that it has or will secure, at its own expense, all personnel required in performing the services under this Agreement. All personnel engaged in the work shall be fully qualified and shall be authorized or permitted under State and local law to perform such services. No person who is serving sentence in a penal or correctional institution shall be employed for work under this Agreement. The CONSULTANT further certifies that all of its employees assigned to serve the CITY have such knowledge and experience as required to perform the duties assigned to them. Any employee of the CONSULTANT who, in the opinion of the CITY, is

incompetent, or whose conduct becomes detrimental to the work, shall immediately be removed from association with the certain professional engineering services under this Agreement.

**IX. SUSPENSION, CANCELLATION OR ABANDONMENT**

In the event the PROJECT is suspended, cancelled or abandoned, the CONSULTANT shall be given fifteen (15) days prior written notice of such action and shall be compensated for the professional services provided and reimbursable expenses incurred up to the date of suspension, cancellation or abandonment in an amount mutually agreed to by the CITY and CONSULTANT and supported by back-up documentation.

Upon suspension, cancellation or abandonment hereof, CONSULTANT shall immediately cease work hereunder and shall be compensated for its services rendered up to the time of such cancellation or termination on a quantum meruit basis; and the CITY shall have no further financial obligation to CONSULTANT.

In the event the PROJECT is suspended, cancelled or abandoned, the CONSULTANT shall deliver all original sketches, tracings, drawings, computations, details, design calculations, specifications and other documents and plans that result from the CONSULTANT's services under this Agreement. The aforementioned original sketches, tracings, drawings, computations, details, design calculations, specifications and other documents and plans shall be without restriction on future use by the CITY.

**X. TERMINATION**

A. Termination for Cause.

In the event that the CONSULTANT shall for any reason or through any cause not have completed performance within the time fixed for performance under this Agreement; or any representation or warranty made under Article XII of this Agreement shall prove to be untrue in any material respect; or the CONSULTANT shall otherwise be in default under this Agreement; or the CONSULTANT has subcontracted, assigned, delegated, transferred its rights, obligations or interests under this Agreement without the CITY's consent or approval; or the CONSULTANT has filed bankruptcy, become insolvent or made an assignment for the benefit of creditors, or a receiver, or similar officer has been appointed to take charge of all or part of CONSULTANT assets; or the CONSULTANT disclosed CITY confidential information, procedures or activities; or the CONSULTANT fails to aggressively, adequately, timely and appropriately perform the services required by this Agreement to the satisfaction of the CITY, or other similar cause, the City may terminate this Agreement for cause.

Then the CITY may provide five (5) days written notice that the conduct of the CONSULTANT is such that the interests of the CITY are likely to be impaired or prejudiced, stating the facts upon which the opinion is based. Then the CITY may upon fifteen (15) days written notice, and at the end of the (15) days terminate this Agreement for cause (herein "Termination Date"). Upon that termination for cause, the CONSULTANT shall be entitled to compensation for services properly and satisfactorily performed through the date of such termination for cause. However, no allowance shall be included for termination expenses. In the event of such termination for cause, the CONSULTANT shall be entitled to receive just and equitable compensation for any satisfactory work performed as of the Termination Date; however, CONSULTANT shall not be compensated for any anticipatory profits that have not been earned as of the date of the Termination Date. All work accomplished by CONSULTANT prior to the Termination Date shall be documented. In the event the project is terminated for cause pursuant to this Article, the CONSULTANT shall deliver all original sketches, tracings, drawings, computations, details, design calculations, specifications and other documents and plans that result from the CONSULTANT's services under this Agreement. The aforementioned original sketches, tracings, drawings, computations, details, design calculations, specifications and other documents and plans shall be without restriction on future use by the CITY. Notwithstanding the above or any section herein to the contrary, CONSULTANT shall not be relieved of liability to the CITY for damages sustained by the CITY by virtue of any breach of the Contract by CONSULTANT.

B. Termination for Convenience.

The CITY may reduce the scope of work or terminate work under this Agreement or amendment to this Agreement without cause; in the event of such scope reduction or termination other than for cause, the CITY shall compensate the CONSULTANT for services properly performed through the date of such reduction in scope or termination, which date shall be fixed in written notice from the CITY and which date shall be not sooner than fifteen (15) days after notice. Notwithstanding such termination or reduction in scope, the CITY shall be entitled to receive from the CONSULTANT upon request any and all information related to the PROJECT and the CITY shall preserve and protect all such information and assure ready access thereto by the CONSULTANT in connection with resolution of the amount due to the Firm. The CITY, at its own discretion, shall be entitled to direct the CONSULTANT to terminate any or all the CONSULTANT's subcontracts or subconsulting agreements. In the event the project is terminated for convenience pursuant to this Article, the CONSULTANT shall deliver all original sketches, tracings, drawings, computations, details, design calculations, specifications and other documents and plans that result from the CONSULTANT's services under this Agreement. The aforementioned original sketches, tracings, drawings, computations, details, design calculations, specifications and other documents and plans shall be without restriction on future use by the CITY.

#### **XI. INSURANCE**

The CONSULTANT, at its own cost and expense, shall effect and maintain at all times during the life of this Agreement insurance, in accordance with that indicated in **Exhibit C**.

#### **XII. INTERESTS OF MEMBERS OF THE CITY**

No member of the governing body of the CITY and no other officer, employee, or agent of the CITY who exercise any functions or responsibilities in connection with the carrying out of the PROJECT to which this Agreement pertains shall have any personal interest, direct or indirect, in this Agreement.

#### **XIII. INTEREST OF THE CONSULTANT**

The CONSULTANT covenants that it presently has no interest and shall not acquire any interest, direct or indirect, in any project to which this Agreement pertains or any other interest which would conflict in any manner or degree with its performance of any contracted service hereunder. The CONSULTANT further covenants that in the performance of this Agreement no person having such interest shall be employed.

The CONSULTANT warrants that he or she has not employed or retained any company or person, other than a bona fide employee working solely for the CONSULTANT to solicit or secure this Agreement and that he or she has not paid or agreed to pay any person, company, corporation, individual, or firm, other than a bona fide employee working solely for the CONSULTANT any fee, commission, percentage, gift, or other consideration contingent upon or resulting from the award or making of this Agreement.

The CONSULTANT shall disclose any clients that may either conflict with or affect its independent judgment when performing any work for the City of Tampa covered by this Agreement. Failure of the CONSULTANT to disclose the above professional conflict of interest may result in termination of this Agreement pursuant to Article X of this Agreement and may require the return of all payments, if any, made to the CONSULTANT from the City. If, in its sole discretion the CITY of Tampa determines that a professional conflict of interest is deemed to exist, the CONSULTANT shall be disqualified from participating in the proposed Project.

#### **XIV. COMPLIANCE WITH LAWS**

A. The CONSULTANT shall comply with the applicable requirements of State laws and all Codes and Ordinances of the City of Tampa as amended from time to time.

B. If the PROJECT involves E.P.A. Grant eligible work, the CITY and the CONSULTANT agree that the provisions of 40 CFR, Part 35, Appendix C-1, shall become a part of this Agreement and that such provisions shall supersede any conflicting provisions of this Agreement for work performed under said Agreement.

C. If the PROJECT involves work under other Federal or State Grantors or Approving Agencies, the CITY and the CONSULTANT shall review and approve the applicable required provisions or any other supplemental provisions as may be included in the Agreement.

D. Truth-In-Negotiation Certification: The CONSULTANT certifies that the wage rates and other factual unit costs supporting the compensation are accurate, complete, and current at the time of the execution of the Agreement of which this Certificate is a part. The original price and any additions thereto shall be adjusted to exclude any significant sums by which the City determines the Agreement amount was increased due to inaccurate, incomplete, or non-current wage rates and other factual unit costs and that such original Agreement adjustments shall be made within one (1) year following the end of the Agreement.

## **XV. ASSIGNABILITY**

The CONSULTANT shall not assign or transfer any interest in this Agreement without consent from the CITY; provided, however, that the claim for money due or to become due the CONSULTANT from the CITY under this Agreement may be assigned to a bank or other financial institution or to a Trustee in Bankruptcy. Notice of any such assignment shall be furnished promptly to the CITY.

## **XVI. EQUAL EMPLOYMENT**

During the performance of this Agreement or any related Work Order, the CONSULTANT shall:

A. Not discriminate against any employee or applicant for employment because of race, color, religion, age, sex, handicap, or national origin. The CONSULTANT shall take affirmative action to ensure that applicants are employed and that employees are treated during employment without regard to their race, color, religion, age, sex, handicap, or national origin. Such action shall include, but not be limited to the following: Employment, upgrading, demotion, or transfer; recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The CONSULTANT shall post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.

B. In all solicitations or advertisements for employees placed by or on behalf of the CONSULTANT, it must state that all qualified applicants will receive considerations for employment without regard to race, color, religion, age, sex, handicap, or national origin.

## **XVII. EQUAL BUSINESS OPPORTUNITY PROGRAM**

A. The CONSULTANT shall demonstrate good faith effort toward the utilization of City of Certified Women/Minority Business Enterprise (W/MBE) and Small Local Business Enterprise (SLBE) subconsultants or suppliers.

B. The CITY shall make available a list of Certified W/MBEs and SLBEs.

C. The CONSULTANT shall report to the CITY its subcontractors/subconsultants/suppliers solicited or utilized (**Exhibit D**).

D. At the time of the submission of invoices, the CONSULTANT shall submit to the CITY a report (**Exhibit D**) of all subcontractors, subconsultants or suppliers utilized with their final contract amounts and any other reports or forms as may be required by the CITY.

**XVIII. CITY CODE OF ETHICS**

In connection with this Agreement, the CONSULTANT hereby covenants and agrees that it shall comply with all applicable governmental laws, statutes, rules and regulations including, without limitation, the City of Tampa's Code of Ethics. Pursuant to Section 2-522 of the City of Tampa Code, the CONSULTANT acknowledges that if it fails to comply with the City of Tampa's Code of Ethics, such a failure shall render this Agreement voidable by the CITY and subject the CONSULTANT to debarment from any future CITY contracts or agreements.

**XIX. NEGATION OF AGENT OR EMPLOYEE STATUS**

CONSULTANT shall perform this Agreement as an independent consultant and nothing contained herein shall in any way be construed to constitute CONSULTANT or the assistants of CONSULTANT to be representative, agent, subagent, or employee of CITY or any political subdivision of the State of Florida. CONSULTANT certifies CONSULTANT's understanding that CITY is not required to withhold any federal income tax, social security tax, state and local tax, to secure worker's compensation insurance or employer's liability insurance of any kind or to take any other action with respect to the insurance or taxes of CONSULTANT and assistants of CONSULTANT.

In no event and under no circumstances shall any provision of this Agreement make CITY or any political subdivision of the State of Florida liable to any person or entity that contracts with or that provides goods or services to CONSULTANT in connection with the Services the CONSULTANT has agreed to perform hereunder or otherwise, or for any debts or claims of any nature accruing to any person or entity against CONSULTANT; and there is no contractual relationship, either express or implied, between CITY or any political subdivision of the State of Florida any person or any political subdivision of the State of Florida any person or entity supplying any work, labor, services, goods or materials to CONSULTANT as a result of the provisions of the Services provided by Consultant hereunder or otherwise.

**XX. SEVERABILITY**

If any item or provision to this Agreement is held invalid or unenforceable by a court of competent jurisdiction, the remainder of the Agreement shall not be affected and every other term and provision of this Agreement shall be deemed valid and enforceable to the extent permitted by law.

**XXI. CHOICE OF LAW**

The laws of the State of Florida (without giving effect to its conflicts of law principles) govern all matters arising out of or relating to this Agreement, including, without limitation, its interpretation, construction, performance, and enforcement.

**XXII. DESIGNATION OF FORUM**

Any party bringing a legal action or proceeding against any other part arising out of or relating to this Agreement may bring the legal action or proceeding in the United States District Court for the Middle District of Florida, Tampa Division or in any court of the State of Florida sitting in Tampa.

### **XXIII. AUTHORIZATION**

Each party represents to the other that such has authority under all applicable laws to enter into an agreement containing each covenants and provisions as are contained herein, that all of the procedural requirements imposed by law upon each party for the approval and authorization of this Agreement have been properly completed, and that the persons who have executed the Agreement on behalf of each party are authorized and empowered to execute said Agreement.

### **XXIV. ENTIRE AGREEMENT**

This Agreement sets forth the entire agreement between the parties and there are no promises or understandings other than those stated herein. Exhibits to this Agreement shall be deemed to be incorporated by reference as though set forth in full herein. In the event of a conflict or inconsistency between this Agreement and the provisions in the incorporated Exhibits, and unless otherwise specified herein, then this Agreement will prevail.

### **XXV. INDEMNIFICATION**

The CONSULTANT shall indemnify and hold harmless the CITY, and its officers and employees, from liabilities, damages, losses, and costs, including, but not limited to, reasonable attorneys' fees, to the extent caused by the negligence, recklessness, or intentionally wrongful conduct of the CONSULTANT and other persons employed or utilized by the CONSULTANT in the performance of the Agreement.

### **XXVI. ESTOPPEL/WAIVER**

No waiver of any provisions of this Agreement shall be effective unless it is in writing, signed by the party against whom it is asserted and any such waiver shall only be applicable to the specific instance in which it relates and shall not be deemed to be a continuing waiver.

The failure of the CITY to enforce any term or condition of this Agreement shall not constitute a waiver or estoppel of any subsequent violation of this Agreement.

### **XXVII. AUDIT REQUIREMENTS.**

In the event, that during the period of this Agreement, CONSULTANT expends more than \$500,000.00 in federal funds in an operating year from this and other federal grants, CONSULTANT shall, at its own cost and expense, cause to be carried out an independent audit. The audit shall be completed and a copy furnished to the CITY, within the earlier of thirty (30) calendar days after receipt of the auditor's report(s) or nine (9) months after the end of the audit period, unless a longer period is agreed to in advance by the CITY. For purposes of this Agreement, an operating and/or audit year is the equivalent to the CONSULTANT's fiscal year. The determination of when Grant Funds are expended is based on when the activity related to the expenditure occurs.

The audit shall be conducted in compliance with the Office of Management and Budget Circular No. A-133, as amended and 24 CFR Parts 84 and 85, as applicable, which are made a part of this Agreement by reference thereto. In the event the audit shows that the entire funds disbursed hereunder, or any portion thereof, were not expended in accordance with the conditions of this Agreement, CONSULTANT shall be held liable for reimbursement to the City of all funds not expended in accordance with these applicable regulations and Agreement provisions within thirty (30) calendar days after the CITY has notified CONSULTANT of such non-compliance. Said reimbursement shall not preclude the CITY from taking any other action as provided herein.

If expenditure does not exceed \$500,000.00 during an operating year, CONSULTANT shall provide the CITY with its annual financial statement within ninety (90) days of the end of its operating year. Said financial statement shall be prepared by an actively licensed certified public accountant.

**XXVIII. DEFAULT**

In accordance with 24 CFR 85.43, a default shall consist of any use of Grant Funds for a purpose other than as authorized by this Agreement, noncompliance with any provision in all Articles herein, any material breach of the Agreement, failure to comply with the audit requirements as provided herein, or failure to expend Grant Funds in a timely or proper manner.

**XXIX. BUDGET APPROPRIATIONS**

The CITY is subject to Section 166.241, Florida Statutes, and is not authorized to contract for expenditures in any fiscal year except in pursuance of budgeted appropriations. With respect to this Agreement, the CITY has budgeted and appropriated sufficient monies to fund the CITY’s obligations under this Agreement; however, all funding under this Agreement for subsequent years is subject to the availability of funds. The obligations of the CITY hereunder shall not constitute a general indebtedness of the CITY within the meaning of the Florida Constitution.

IN WITNESS WHEREOF, the CITY has caused these presents to be executed in its name by its Mayor, and attested and its official Seal to be hereunto affixed by its City Clerk, and the CONSULTANT has hereunto set its hand and Seal in TRIPLICATE, the day and year first written above.

ATTEST:

BLACK & VEATCH CORPORATION

By: \_\_\_\_\_  
Timothy W. Triplett, Corporate Secretary  
(SEAL)

By: \_\_\_\_\_  
Ervin Myers, Associate Vice President

ATTEST:

CITY OF TAMPA

\_\_\_\_\_  
City Clerk/Deputy City Clerk (SEAL)

By: \_\_\_\_\_  
Bob Buckhorn, Mayor

APPROVED AS TO LEGAL SUFFICIENCY

\_\_\_\_\_  
Rachel S. Peterkin, Assistant City Attorney

The execution of this document was authorized by  
Resolution No. 2015-\_\_\_\_

## **Exhibit A – Scope of Services**

### **PROFESSIONAL ENGINEERING SERVICES FOR THE CITY OF TAMPA POTABLE WATER SYSTEM MASTER PLAN CONTRACT 14-D-00051 (Date: 07-29-15)**

#### **I. PROJECT DESCRIPTION**

The City of Tampa’s Water Department treats surface water from the Hillsborough River Reservoir to service a population of approximately 590,000 people in the City of Tampa/Hillsborough County area. The Master Plan developed in 2009 needs to be updated for staff to plan infrastructure improvements and effectively manage the treatment and distribution systems. The goal and objective of the Potable Water Master Plan (Project) is to assist staff in providing a reliable and redundant potable water system with adequate capacity and accommodate future growth within the City.

The City of Tampa (CITY) has selected Black & Veatch Corporation (CONSULTANT) to provide professional services to support the development of an updated CITY Potable Water Master Plan. The CONSULTANT services provided will generally consist of the following:

- Updating and calibrating the existing hydraulic model
- Distribution system analysis for the existing system (2015) and planning years 2020, 2025 and 2035; considering hydraulic capacity and water quality.
- Pumping and storage facility assessments regarding capacity
- Resiliency and reliability assessments of the water system
- Asset management program development
- Enhancing the risk based pipeline prioritization framework for recommending pipeline replacement projects
- Capital Improvement Program planning support
- Documenting the Master Plan
- Training CITY Staff on the continued use and updating of the planning tools

The specific services to be performed by CONSULTANT are described in the remainder of this Scope of Services document.

## II. SCOPE OF SERVICES

The services to be provided by CONSULTANT are organized into the following phases:

- Phase 100: Project Management, Administration and QA/QC
- Phase 150: Initiate Project
- Phase 200: Update and Calibrate Hydraulic Model
- Phase 300: Distribution System Analysis
- Phase 400: Resiliency and Reliability Assessment
- Phase 500: Evaluation of Distribution System Improvement Options
- Phase 600: Asset Management Program Development
- Phase 700: Risk Based Pipeline Prioritization
- Phase 800: Capital Improvement Planning
- Phase 900: Document Master Plan
- Phase 950: Training

### Phase 100: Project Management and Administration

#### **Deliverables:**

- Monthly status reports with invoices
- Project Schedule updates

#### **Task 101 – Project Management and Administration**

CONSULTANT will perform general administrative duties associated with the Project, including project set-up, resource and sub-consultant management, progress monitoring, scheduling, QA/QC plan development and updating, general correspondence, office administration, and invoicing.

CONSULTANT will maintain an accurate project documentation and project cost accounting system throughout the project to include the following:

- Maintain a project filing system throughout life of Project to use for storage and retrieval of Project documents.
- Prepare monthly status reports and invoices for engineering services in format acceptable to CITY. Status reports will include a summary of work completed during the previous month.

CONSULTANT will update the project execution schedule based upon the CITY NTP date and distribute the updated schedule at the project initiation meeting. The project schedule will identify the following information:

- Key project tasks and deliverables.
- Critical dates for data submission and decisions by the CITY.
- Meetings and workshops.

CONSULTANT will review, update and submit to City updated Project schedules upon completion of each Project Phase. Each updated schedule will track original target completion dates.

### **Task 102 – Quality Assurance/Quality Control (QA/QC)**

CONSULTANT will maintain continuous control over the quality of all its work efforts. This will include oversight and review by the lead technical engineer(s), project manager, senior technical staff and managerial staff.

## **Phase 150: Initiate Project**

The initiation phase of the project will consist of CONSULTANT a) Communicating project scope to relevant CITY staff and b) Requesting and receiving data from the CITY.

### **Deliverables:**

- Data Request
- Project Initiation Meeting Agenda and Minutes

### **Task 151 – Project Initiation Meeting**

CONSULTANT will schedule and facilitate a Project Initiation Meeting. The meeting will be held at CITY's offices. The objectives of the meeting include:

- Identify and meet key team members from the CITY and CONSULTANT.
- Establish the project roles and communication channels.
- Identify and discuss the project objectives and scope.
- Review planned activities.
- Review data provided by the CITY to date and identify additional requirements.
- Distribute an updated Project schedule.
- Conduct technical discussions to facilitate key project tasks.

CONSULTANT will a) Prepare the Project Initiation Meeting agenda a minimum of 2 weeks in advance and b) Prepare meeting minutes and distribute to meeting attendees within 3 days of the meeting. CONSULTANT will also follow up on action points from the meeting.

### **Task 152 – Data Request & Collection**

A copy of the preliminary Data Request will be submitted prior to the Project Initiation Meeting. This request will be refined and resubmitted based on Project Initiation Meeting discussion. The status of data transmittals will be tracked by CONSULTANT until all available items are received.

## **Phase 200: Update and Calibrate Hydraulic Model**

### **Deliverables:**

- Population/Demand Growth Projection Figures including ESRI shape files reflecting relative distribution of demand increase projections (2020, 2025 and 2035)
- Nonrevenue Water Allocation Figures
- Model Calibration Plan
- Model Calibration Technical Memorandum – Draft and Final
- Calibrated Hydraulic Model

### **Task 201 – Population/Demand Projections**

The CONSULTANT will review and summarize the population and demand data provided by the CITY and other appropriate sources. This is anticipated to include CITY SCADA data, CITY production division monthly operating reports, CITY potable & reclaimed meter consumption data including interconnects, CITY water audit documentation, CITY monthly non-revenue water reports, CITY Exhibit K documents, CITY 2009 Potable Water Master Plan, CITY annual WUP reports, CITY water service commitment letters, SWFWMD RWSPs, TBW Demand Forecasts, TBW 2035 System Analysis Update, Reiss Engineering New Tampa Pressure Improvements Preliminary Engineering Report, CITY GIS databases for service & main break locations, CITY traffic analysis zone data, SWFWMD data and population projects and Planning Commission population data & projections). The summary will culminate with the creation of demand projection figures/maps illustrating the location of the projected demands.

**Population Projections.** CONSULTANT will review data from available documents. Planning level populations for the planning years will be reviewed for the base year and selected planning years (2020, 2025 and 2035). It is anticipated that the CITY will provide to the CONSULTANT the Planning Commission population data in spreadsheet form and including totals for each year. The spatial distribution of population projections will consider Planning Commission and SWFWMD data. The CONSULTANT will prepare a single spatial distribution of population projections utilizing professional judgment.

**Non-Revenue Water Demands.** The CONSULTANT will utilize CITY non-revenue water (NRW) reports for the previous 5-yr period to determine if a correlation exists between the NRW percentage and months of the year. The CONSULTANT will meet with the CITY to propose the use of a long term average NRW percentage or an individual NRW percentage (perhaps a 5-yr average) for each month.

**Establish Existing and Future Water Demands.** Water demands for the base year will be established with monthly metered consumption data for the year 2014, provided by the CITY, from the billing system and making use of the CITY shapefile containing address-matched account X-Y locations. Shapefile points are not connected to pipes, but will be used to assign accounts to appropriate model nodes.

The CONSULTANT will analyze CITY provided SCADA data for the past five years to determine ratios for each year within the previous 5-yr period. CONSULTANT will calculate statistics for each ratio such as minimum, maximum, 5-yr average, standard deviation, etc. and meet with the CITY to propose peaking factors to be utilized for model calibration. The ratios will include:

- average day demand (ADD) to maximum day demand (MDD)
- ADD to peak hour demand (PHD)
- ADD to average month demand (AMD)
- ADD to maximum month demand (MMD)
- MDD to MMD
- PHF to MMD

The agreed upon peaking ratios and NRW percentages will be used to convert available monthly meter data into the 2014 maximum day demand and 2014 peak hour demand. Additionally, the location of future population projections obtained from the Planning Commission will be used in conjunction with other sources identified in Task 201 to project the spatial distribution of future demands. It is anticipated that future demands will increase from either system expansion due to new development, from increased population density due to redevelopment, or an increase in industrial/commercial developments/demands. The projected demands for the industrial/commercial customers will be determined based on information provided by the CITY, SWFWMD and Planning Commission (anticipated information sources are listed in Task 201) and may be specific to the type of industrial/commercial use.

***Population/Demand Projection Figures.*** CONSULTANT will prepare and submit to the CITY a system map for the base year and each planning year (2020, 2025 and 2035) summarizing the spatial distribution of projected potable water demand. These figures, once approved by the CITY, will be the basis for the distribution capacity analysis and will show the location of each new projected development and new large scale industrial user based on input from the CITY, and available information sources (Task 201).

***Spatial Distribution of Distribution System NRW Demands.***CONSULTANT will prepare and submit to the CITY a system map summarizing the probable spatial distribution of NRW system demands. The CITY's service and main breaks GIS databases will be reviewed in conjunction with the CITY's water audit results to prepare this system map. It is anticipated the distribution of a) NRW demands due to apparent losses and b) Authorized unbilled unmetered consumption will be evenly distributed throughout the distribution system, however, real losses will be estimated throughout the service area based on the spatial distribution of the CITYs historic main/service break locations.

## **Task 202 – Update and Calibrate Hydraulic Model**

The existing water distribution system model has been updated by the CITY’s staff and is an all-pipes model. It is assumed that the model does not need to be updated with regards to new pipe installation nor facilities (pumps, storage, etc.). However, new demand allocations and recalibration by CONSULTANT will be necessary. The following tasks will be completed by CONSULTANT as part of this effort:

### ***Hydraulic Model Updates:***

Demand Allocations: Update the existing system demands based on 2014 meter data, spatial distribution of NRW percentages, and the peaking factors determined as part of Task 201. It is anticipated approximately 100% of the accounts have x-y locations.

### ***Hydraulic Model Calibration:***

Model Calibration Plan: CONSULTANT will develop a model calibration plan including identification of needed system operations data (i.e., SCADA and remote pressure monitoring locations) and duration of data collection. The model calibration plan will include identification of strategic pressure monitoring locations based on a) The previous pressure monitoring locations used for the 2009 master plan project and b) Input from CITY staff. It is assumed that the CITY will provide all required system monitoring equipment and be responsible for collecting the required system data. Field data collection, performed by the CITY, will be limited to data from CITY owned pressure loggers. The remaining field data shall be limited to the data available from SCADA. CONSULTANT will compile the data and use the data for model calibration. The calibration plan will be applicable to hydraulic calibration. Calibration of water quality (chlorine residual) modeling is not included in this scope of work.

Diurnal Demand Patterns: CONSULTANT will use 15-minute flow and tank level data from SCADA and/or other system operational records collected by the CITY during the calibration data collection to determine the calibration diurnal demand patterns for the system. It is assumed that calibration data collection shall occur during a high demand month. Archived SCADA data will also be analyzed to calculate the system analysis diurnal patterns for use during the MDD and water quality/age simulations. Diurnal demand patterns for both watering and non-watering day demands will be developed.

Model Hydraulic Calibration: The hydraulic model will be calibrated using a 24-hour extended period simulation (EPS) with 15-min increments. The model results will be compared to the field data and appropriate adjustments to model input parameters will be made to ensure the model simulates actual system conditions within reasonable accuracy tolerances for system planning purposes. The calibration period will be limited to the availability and time of the field data collection.

Model Calibration Technical Memorandum: Prepare a draft technical memorandum to document the calibration process, field data to initial model output data comparisons, changes made to better correlate the model results with the field data and field data to final model output data comparisons for review and comment by CITY’s staff. CONSULTANT will finalize the draft technical memorandum addressing questions and incorporating the resolution of CITY comments.

### **Phase 300: Distribution System Analysis**

CONSULTANT will conduct assessments of the existing distribution system for the purposes of identifying capacity needs and operational improvements. The following table summarizes the 12 scenarios that will be modeled under this Phase.

Scenario #	Scenario Name	Demand Conditions	EPS Duration
1	Base MDD Analysis	2014 MDD	24 hrs
2	2020 MDD Analysis	2020 MDD	24 hrs
3	2025 MDD Analysis	2025 MDD	24 hrs
4	2035 MDD Analysis	2035 MDD	24 hrs
5	Base MDD+FF Analysis	2014 MDD	24 hrs
6	2020 MDD+FF Analysis	2020 MDD	24 hrs
7	2025 MDD+FF Analysis	2025 MDD	24 hrs
8	2035 MDD+FF Analysis	2035 MDD	24 hrs
9	Base Water Quality Analysis	2014 ADD	Min 72 hrs
11	Base PHD Analysis	2014 PHF	NA (Steady State)
12	Base ADD Analysis	2014 ADF	NA (Steady State)

#### **Deliverables:**

- Level of Service/Performance Criteria Rankings and Summary
- Criteria Development Workshop - Agenda & Meeting Minutes
- Distribution System Assessment Workshop - Agenda & Meeting Minutes
- Draft Distribution System Assessment Technical Memorandum
- Final Distribution System Assessment Technical Memorandum

The following tasks will be completed as part of the distribution system analysis.

#### **Task 301 – Criteria Development Workshop**

CONSULTANT and the CITY will meet to develop the project assessment and performance criteria as well as the desired level of service (LOS) to be provided by the system, which will set the path forward for the distribution system evaluation and

improvement alternatives identification. Collectively, the group will establish the basic assumptions and performance criteria that will be used to evaluate the system and develop system improvements. Priorities and constraints (such as financial expenditure) will also be discussed. Criteria will take items such as existing and proposed regulations into consideration. The outcome of the meeting will be the development of evaluation criteria and ranking of importance of these criteria.

### **Task 302 – Capacity Assessment of Potable Water Supply, Storage and Pumping Facilities**

CONSULTANT will conduct a spreadsheet capacity assessment of the potable water supply, storage, and pumping capacities for the base year and each planning year (2020, 2025 and 2035) to evaluate the adequacy of existing facilities and to identify any deficiencies in capacity based on the performance criteria. Additional assessments will be completed under Task 303 to identify any sub-regions of the system that may not have sufficient supply, storage or pumping capacity available due to hydraulic limitations in the distribution system.

### **Task 303 – Distribution System Capacity Assessments**

Using the calibrated hydraulic model, CONSULTANT will perform a hydraulic system analyses to evaluate the distribution system performance under MDD conditions using 24-hour EPS for the base year and each planning year (2020, 2025 and 2035) as well as a peak hour demand (PHD) and average day demand (ADD) using steady state conditions for the base year. Demand allocation for future planning horizons (2020, 2025, and 2035) will be based on the spatial distribution determined in Task 201. For the purposes of the system analysis, MDD and PHD scenarios will include the ASR demands. The EPS analyses will encompass the maximum hour and storage replenishment conditions within the MDD scenario. The system analyses will evaluate the effectiveness and adequacy of the distribution system to meet the level of service criteria established in conjunction with the CITY. It is assumed that the water supply from the Tippin WTP will be the first water resource used and will be supplemented by the Morris Bridge WTP connection once the Tippin WTP source has reached maximum capacity.

### **Task 304 – Distribution System Fire Flow Capacity Assessments**

Using the calibrated hydraulic model, CONSULTANT will perform a hydraulic system analyses to evaluate the distribution system performance under MDD plus fire flow (FF) conditions using 24-hour EPS for the base year, 2020, 2025 and the 2035 planning years. The system analyses will evaluate the effectiveness and adequacy of the distribution system to meet the level of service criteria established in conjunction with the CITY. Task 305 – Base Year Water Quality Analysis

CONSULTANT will add appropriate pump/valve controls and storage tank mixing parameters to the hydraulic model. Water age simulations will be performed for average day system conditions for the base year using an EPS of no less than 72 hours.

The simulations will be used to identify likely problem areas in the distribution system noted by the CITY and the DBP sampling locations. The water age analysis will include the base year without any improvements. Additional water quality analysis may be performed under Phase 500 of this scope of work.

### **Task 306 – Distribution System Assessment and Project Needs Workshop**

A workshop will be conducted by CONSULTANT with the CITY to review the draft results of the Tasks 303, 304 and 305 and Phase 400 system assessments and discuss potential system improvement alternatives to be evaluated as part of Phase 500 of this scope of work (Evaluation of Distribution System Improvement Options).

### **Task 307 – Distribution System Assessment – Draft Technical Memorandum**

CONSULTANT will prepare and submit to CITY a Draft Water Distribution System Assessment Technical Memorandum incorporating the results of Task Nos. 301-306 for CITY review and comment.

### **Task 308 – Finalize Distribution System Assessment**

CONSULTANT will complete updated modeling and analyses to address CITY questions and comments regarding the initial results and recommendations from the Phase 300 system assessments. CONSULTANT will prepare and submit to CITY a Final Water Distribution System Assessment Technical Memorandum that presents the results of Task Nos. 301-306 and identifies areas of the distribution system that require improvement (and why).

## **Phase 400: Resiliency and Reliability Evaluations**

CONSULTANT will conduct assessments of the existing potable water supply sources, pumping facilities, storage facilities and distribution systems for the purposes of identifying improvements to enhance resiliency and reliability of the overall water system.

### **Deliverables:**

- Draft and Final Tech Memo Summarizing Results of Water System Resiliency and Reliability Assessment
- Draft and Final Tech Memo for TIA & TPA Meter and Piping Evaluation and Improvements Summary
- Draft and Final Tech Memo for City Identified Problem Areas 1, 2 & 3 Evaluations and Improvements Summary

- Workshop to Review Draft Results from Phase 400 tasks - Agenda & Meeting Minutes

**Task 401 – Water System Resiliency and Reliability Assessment**

CONSULTANT will analyze the system to assess the current system’s resiliency and reliability under the potential emergency scenarios listed below.

**Identification of Critical Pipes and Valves.**CONSULTANT will use the InfoWater Extension, Valve Criticality, to determine which pipes are critical based on criteria required by the model and agreed to with the CITY. Criteria could include information such as number of isolated customers, type of customer affected, etc. The CONSULTANT will provide to CITY recommended criteria for review and final determination prior to completing the identification of pipes and valves.

**Asset Failure Analyses.** CONSULTANT will perform a hydraulic system analyses to evaluate the distribution system performance under MDD conditions using 24-hour EPS for the base year and the 2035 planning year for the following failure conditions. The following table summarizes the scenarios modeled under this Task.

Scenario #	Scenario Name	Demand Conditions	EPS Duration
1	DLT WTP Failure	2014 MDD	24 hrs
2	DLT WTP Failure	2035 MDD	24 hrs
3	Morris Bridge WTP Failure	2014 MDD	24 hrs
4	Morris Bridge WTP Failure	2035 MDD	24 hrs
5	Interbay Repump Station Failure	2014 MDD	24 hrs
6	Interbay Repump Station Failure	2035 MDD	24 hrs
7	Northwest Repump Station Failure	2014 MDD	24 hrs
8	Northwest Repump Station Failure	2035 MDD	24 hrs
9	Palma Ceia Elevated Tank Failure	2014 MDD	24 hrs
10	Palma Ceia Elevated Tank Failure	2035 MDD	24 hrs
11	West Elevated Tank Failure	2014 MDD	24 hrs
12	West Elevated Tank Failure	2035 MDD	24 hrs
13	Failure of top 10 most critical pipe/valve	2014 MDD	24 hrs
14	Failure of top 10 most critical pipe/valve	2035 MDD	24 hrs

**Overall System Reliability Analyses.** CONSULTANT will analyze the distribution system to assess the existing system’s resiliency and reliability specific to looping and critical customer protection.

- Looping – Determine critical pipes that may be candidates for “looping” in order to increase reliability to a specific region or part of the system.
- Critical Customer Protection – Determine critical customers that should have more than one connection to protect against service disruptions due to main breaks.

## **Task 402 – TIA and TPA Master Meter and Distribution System Evaluation**

CONSULTANT shall perform the conceptual analysis to transition from the existing multiple water supply meters at the Tampa International Airport (TIA) and the Tampa Port Authority (TPA) areas into single (or a reduced number of) master meters, and eliminating or reducing CITY owned distribution piping infrastructure within the TIA and TPA properties. CONSULTANT will identify improvements required to maintain the desired level of service throughout the planning horizon based on system changes associated with the concepts for master meters and elimination of City owned and maintained distribution piping within TIA and TPA properties. The conceptual analysis shall include the development of figures showing existing and proposed distribution system connectivity and existing and proposed meter locations. The CONSULTANT will also prepare conceptual level opinions of probable project costs to implement the proposed changes. The CONSULTANT will provide a cost:benefit summary of the improvement concepts that are developed for both customer properties (TIA and TPA) to support the CITY's decision on pursuing improvements at either location.

CONSULTANT shall prepare and submit a Draft Technical Memorandum regarding the TIA and TPA master meter and distribution system evaluations to the CITY for review and comment. CONSULTANT will address CITY's comments and submit a Final Technical Memorandum. The Technical Memorandum will include a discussion on potential system reliability improvement alternatives that can be evaluated as part of Phase 500 of this scope of work (Evaluation of Distribution System Improvement Options).

## **Task 403 – CITY Identified Problem Areas 1, 2 and 3**

The CITY has identified three specific areas of concern based on increased frequency of main breaks. These general areas include:

1. Himes Ave. from W Gandy Blvd to Columbus Dr.
2. Causeway Boulevard from 3700 block to the 5000 block.
3. 22<sup>nd</sup> Street from MLK Blvd to Sligh Ave.

CONSULTANT shall complete evaluations focused on these three specific areas to further assess the problems, and develop and evaluate improvement options to resolve the problems.

CONSULTANT shall develop conceptual planning figures to illustrate the existing and proposed distribution system connectivity, pipe sizing and meter locations. The CONSULTANT will prepare a conceptual level cost opinions to implement the proposed changes. The CONSULTANT will develop a cost:benefit summary associated with the conceptual plan for improvements for the three areas to support the CITY's decisions for moving forward with improvements in each area.

CONSULTANT shall prepare and submit a Draft Technical Memorandum regarding the three identified problem areas to the CITY for review and comment. CONSULTANT will address CITY’s comments and submit a Final Technical Memorandum.

**Phase 500: Evaluation of Distribution System Improvement Options**

CONSULTANT will develop, investigate and recommend improvement options for the purposes of remedying current or anticipated future capacity, water quality and reliability issues identified as part of the Phase 300 and 400 tasks of this scope of services. For the purpose of this scope of services, a budget of \$40,025 is reserved for the evaluation of distribution system improvement options (phase 500 tasks).

CONSULTANT will provide the CITY Project Manager with scope and budget information for the evaluations proposed under Phase 500, and obtain authorization from the CITY Project Manager in writing (via e-mail or letter) before proceeding with any efforts under Phase 500 of this scope of services.

The Phase 500 task descriptions below provide an example of the type of services that are anticipated under Phase 500.

**Anticipated Deliverables:**

- Scope and budget for proposed evaluations to define recommended improvements
- Distribution System Improvement Workshop - Agenda & Meeting Minutes
- Draft and Final Tech Memos for Distribution System Improvements

The following table provides a list of scenarios that may be modeled as part of Tasks 501 - 504.

Scenario #	Scenario Name	Demand Conditions	EPS Duration
1	Base MDD Improvements	2014 MDD	24 hrs
2	2020 MDD Improvements	2020 MDD	24 hrs
3	2025 MDD Improvements	2025 MDD	24 hrs
4	2035 MDD Improvements	2035 MDD	24 hrs
5	Base MDD+FF Improvements	2014 MDD	24 hrs
6	2035 MDD+FF Improvements	2035 MDD	24 hrs
7	Base Water Quality Improvements	2014 ADD	Min 72 hrs
8	2020 Water Quality Improvements	2020 ADD	Min 72 hrs
9	2025 Water Quality Improvements	2025 ADD	Min 72 hrs
10	2035 Water Quality Improvements	2035 ADD	Min 72 hrs

### **Task 501 – Distribution System Capacity Improvements**

If authorized by the CITY, CONSULTANT will identify up to four distribution system improvements to address capacity concerns identified in Task 303 under the MDD conditions using 24-hour EPS for the base year and each planning year (2020, 2025 and 2035). The extent of the improvements will be sufficient to meet the level of service criteria established in conjunction with the CITY. It is assumed that the water supply from the Tippin WTP will be the first water resource used and will be supplemented by the Morris Bridge WTP connection once the Tippin WTP source has reached maximum capacity.

### **Task 502 – Distribution System Fire Flow Capacity Improvements**

If authorized by the CITY, CONSULTANT will identify up to two distribution system improvements to address capacity concerns identified in Task 304 under MDD+FF conditions using 24-hour EPS for the base year and the 2035 planning year. The extent of the improvements will be sufficient to meet the level of service criteria established in conjunction with the CITY.

### **Task 503 – Base Year Water Quality Improvements**

If authorized by the CITY, CONSULTANT will identify up to one distribution system improvements to address water quality concerns identified in Task 305 under ADD conditions using a minimum of 72-hour EPS. The extent of the improvements will be based on meeting the level of service criteria established in conjunction with the CITY.

### **Task 504 – Planning Years Water Quality Analyses**

If authorized by the CITY, CONSULTANT will perform up to three water age simulations for average day system conditions for each planning year (2020, 2025 and 2035) using an EPS of no less than 72 hours. The simulations will be used to refine the capacity improvements identified in Tasks 501 and 502 as necessary, and to identify improvements or modifications to remedy high water age areas in the distribution system as identified in Task 305. The water age analysis will include the capacity improvements identified for each planning year (2020, 2025 and 2035).

### **Task 505 – Water System Resiliency and Reliability Improvements**

If authorized by the CITY, CONSULTANT will identify and recommend improvements to enhance the current system's resiliency and reliability under the potential emergency scenarios listed below.

***Asset Failure Improvements.*** CONSULTANT will identify up to ten recommended improvements the distribution system to improve the performance under MDD conditions using 24-hour EPS for the base year and the 2035 planning year for the

following failure conditions. The following table summarizes the scenarios modeled under this Task.

Scenario #	Scenario Name	Demand Conditions	EPS Duration
1	DLT WTP Failure Improvements	2014 MDD	24 hrs
2	DLT WTP Failure Improvements	2035 MDD	24 hrs
3	Morris Bridge WTP Failure Improvements	2014 MDD	24 hrs
4	Morris Bridge WTP Failure Improvements	2035 MDD	24 hrs
5	Interbay Repump Station Failure Improvements	2014 MDD	24 hrs
6	Northwest Repump Station Failure Improvements	2014 MDD	24 hrs
7	Palma Ceia Elevated Tank Failure Improvements	2014 MDD	24 hrs
8	West Elevated Tank Failure Improvements	2014 MDD	24 hrs
9	Failure of most critical pipe/valve Improvements	2014 MDD	24 hrs
10	Failure of second most critical pipe/valve Improvements	2014 MDD	24 hrs

**Overall System Reliability Improvements.** CONSULTANT will identify and recommend Up to two distribution system improvements to enhance the existing system’s resiliency and reliability specific to looping and critical customer protection.

- Looping – Determine connections to critical pipes that should be looped to increase reliability to a specific region or part of the system.
- Critical Customer Protection – Determine improvements to the infrastructure around critical customers to protect against service disruptions due to main breaks.

The reliability and resiliency improvement analyses will also identify optimal locations and delivery requirements for potential future wholesale water supply interconnects and emergency interconnects with other utilities.

**Task 506 – Distribution System Recommended Improvements Workshop**

If authorized by the CITY, CONSULTANT will conduct a workshop with the CITY to review the draft recommended distribution system improvements in preparation for the draft Distribution System Assessment and Improvements Technical Memorandum.

**Task 507 – Distribution System Assessment and Improvements Technical Memorandum**

If authorized by the CITY, CONSULTANT will prepare and submit to CITY a Draft Distribution System Assessment and Improvements Technical Memorandum for review and comment. CONSULTANT will address CITY comments and submit a Final Distribution System Improvements Technical Memorandum.

## **Phase 600: Asset Management Program Development**

CONSULTANT will support the CITY in developing an implementation plan for an Asset Management Program that is consistent with industry best practices. CONSULTANT will complete the following tasks to support the CITY’s Asset Management Program Development related to the distribution system and connection of the distribution system to other areas of the water system such as the treatment facilities.

### **Deliverables:**

- Gap Assessment Meetings: Agenda & Meeting Minutes for each meeting
- Draft and Final Gap Assessment Technical Memorandum
- Asset Management Roadmap Workshop Agenda and Meeting Minutes
- Draft and Final Implementation Plan Technical Memorandum

### **Task 601 – Asset Management Gap Assessments**

#### ***Gap Assessment Data Collection (for Asset Management Program Development):***

The CONSULTANT will facilitate a meeting to commence the task, plan interviews and workshops, and collect information and documentation for the document review. Prior to the meeting CONSULTANT will provide CITY with a document request. The CONSULTANT will review and assess the documents provided by the CITY against the ISO 55001 requirements prior to the assessment interviews and workshops.

***Gap Assessment:*** The CONSULTANT shall perform an asset management maturity assessment of the CITY’s water operations using the international standard ISO 55001:2014 *Asset Management – Management System Requirements* (ISO 55001). The assessment will review all 27 sections of ISO 55001, as listed in the table below. The level of effort and detail for the assessment is designed to provide the CITY with an action plan for asset management improvements, rather than compliance with ISO 55001. (If compliance with ISO 55001 is desired by the CITY, a more detailed and in-depth assessment could be provided as a supplemental service).

<b>Section Title</b>	<b>Section</b>
4 Context of the Organization	4.1 Understanding the organization and its context 4.2 Understanding the needs and expectations of stakeholders 4.3 Determining the scope of the asset management system 4.4 Asset management system
5 Leadership	5.1 Leadership and commitment 5.2 Policy 5.3 Organizational roles, responsibilities and authorities
6 Planning	6.1 Actions to address risks and opportunities

	6.2.1 Asset management objectives 6.2.2 Planning to achieve asset management objectives
7 Support	7.1 Resources 7.2 Competence 7.3 Awareness 7.4 Communication 7.5 Information requirements 7.6.1 Documented information general 7.6.2 Creation and updating documented information 7.6.3 Control of documented information
8 Operation	8.1 Operational planning and control 8.2 Management of change 8.3 Outsourcing
9 Performance Evaluation	9.1 Monitoring, measurement, analysis and evaluation 9.2 Internal audit 9.3 Management review
10 Improvement	10.1 Nonconformity and corrective action 10.2 Preventative action 10.3 Continual improvement

Gap Assessment Meetings: The CONSULTANT’s assessment team will spend 4 consecutive days on-site at CITY’s offices and will meet with a cross-section of CITY staff, including senior management, operations (production division), maintenance (production division), distribution division, and engineering (design and planning) staff. CONSULTANT will facilitate small group sessions lasting between 90 minutes and 3 hours, with no more than 5 staff members in each session. CONSULTANT has assumed 6 group sessions would be facilitated and the assessment would include a visit to the David L Tippin Water Treatment Facility and Rome Yard. CONSULTANT will use the Institute of Asset Management’s SAM assessment tool with its standard set of questions during the assessment sessions. In addition to the group sessions the CONSULTANT will facilitate a 2-hour familiarization session for CITYS staff on the ISO 55001 asset management system and good practice asset management approaches. Each group session and familiarization session will be documented with a meeting agenda and meeting minutes.

Gap Assessment and Technical Memorandum: Using the results of the document review, the interviews and the outputs from the workshops, the CONSULTANT will undertake a gap analysis against the 27 elements of ISO 55001:2014 Asset Management, Management Systems. The CONSULTANT will produce a summary Gap Assessment Technical Memorandum that will document the current asset management practices, summarize the results of the ISO 55001 assessment and provide detail on the gaps identified against each of the 27 elements and good industry practice. A draft technical memorandum shall be submitted to CITY for review and comment.

CONSULTANT will submit a final technical memorandum that addresses the questions and comments provided by the CITY.

### **Task 602 – Asset Management Implementation Plan**

Asset Management Roadmap Workshop: CONSULTANT will present the results of the gap assessment at a Roadmapping Workshop attended by relevant CITY’s staff. This workshop will be a full day workshop and CONSULTANT will facilitate development of an Improvement Plan (Roadmap) with input from CITY to confirm specific improvement activities, timescales, resources and task owners. Improvement activities will be prioritized in the workshop. The CONSULTANT’s approach and budget estimate assumes a high level of CITY’s staff input into developing the Improvement Plan as this will ultimately be owned and implemented by the CITY.

Implementation Plan Technical Memorandum: CONSULTANT will prepare a draft improvement plan following the workshop consisting of high level action plan and schedule. The technical memorandum shall be submitted to CITY for review and comment. CONSULTANT will submit a final technical memorandum addressing questions and comments from the CITY.

### **Phase 700: Risk Based Pipeline Prioritization**

CONSULTANT will complete a risk based prioritization for pipeline improvements. The following tasks will be completed as part of the Risk Based Pipeline Prioritization.

#### **Deliverables:**

- Risk Based Prioritization Workshop - Agenda and Meeting Minutes
- Risk Based Prioritization Model (InfoMaster)
- Linear Asset R&R Rate Gap Analysis Figures
- Draft Memo - Risk Based Prioritization Analysis Technical Memorandum
- Final Memo - Risk Based Prioritization Analysis Technical Memorandum
- Pipeline Assessment and Project Needs Workshop Agenda and Meeting Minutes

### **Task 701 – Risk Based Prioritization Frame Work**

Risk Based Pipeline Prioritization Data Collection: CONSULTANT will use available data from CITY, including the technical memorandum prepared by Cristian Rubiano, to evaluate the data available for use in the updated pipeline prioritization. The relevant data provided by the CITY will include: previous prioritization spreadsheets, GIS, main break data, and a technical memorandum regarding attribute data associated with the ESRI atlas layer and the model layer.

Risk Based Prioritization Workshop: CONSULTANT will conduct a workshop with CITY to discuss Likelihood and Consequence of Failure factors to be used in the updated

prioritization (e.g. size, criticality, age, proximity to critical customer, max/min operating pressures).

### **Task 702 – Risk Based Prioritization Model Development and Execution**

Risk Based Prioritization Model: Based on the results of the workshop, CONSULTANT will build a dynamic and interactive risk-based prioritization model in Innovyze InfoMaster (built on top of ArcGIS Desktop). GIS tools (including network traces) will be combined with the customizable query features of InfoMaster to implement the Likelihood and Consequence factors. Deterioration curves (e.g. Weibull, Herz and Cox) will be used to enhance the prediction of remaining useful life.

The InfoMaster pipeline prioritization will provide matrix-based prioritization results which will enable assignment of pipelines to management groups for assessment prioritization and inclusion in the CIP for rehabilitation and replacement projects. These management groups will quantify risk to optimize life-cycle cost and drive the condition assessment, rehabilitation and replacement projects for the CITY'S aging pipelines.

### **Task 703 – Linear Asset R&R Rate Gap Analysis**

Previous CITY master planning efforts (2009 and prior) recommended populating attribute data fields for distribution pipe installation and / or as-built dates for each linear asset. The City has since populated attribute data tables for approximately 86% of its linear assets. The City has pipe material attribute data populated for >99% of its linear assets. It is assumed that the CITY will provide the data required to complete this task in electronic tabular format (i.e shapefiles or spreadsheets).

The CONSULTANT will:

- 1) Identify projected planning level life spans of different pipe types installed in the CITY's distribution system. This research will include planning level minimum, maximum and average life spans for each pipe type.
- 2) Prepare statistics for the CITY's past 5 years worth of distribution system R&R CIPs. These statistics will include length of pipe replaced, type of pipe replaced, size of pipe replaced, size of installed pipe and the monetary value of this replacement (% corresponding \$/ft replacement value for different sizes of replacement pipe—to verify \$/ft estimates historically utilized for City planning purposes).
- 3) Prepare statistics for the CITY's past 5 years worth of developer installed water main improvements. These statistics will include length of pipe replaced, age of pipe replaced, type of pipe replaced, remaining projected lifespan of pipe replaced, size of pipe replaced, size of installed pipe and the monetary value of this replacement using \$/ft replacement value estimates for different sizes of replacement pipe).
- 4) Estimate a replacement cost of each installed linear asset using planning level \$/ft estimates.

- 5) Utilize the CITY's existing databases (pipe type, pipe age), expected min/avg/max pipe lifespan estimates and an agreed upon \$/ft replacement value for each size of pipe to estimate the value of expected pipe replacement needs for each year over the next 50 year period. Discussions will be conducted with CITY staff to identify how the ~14% of linear assets with unknown installation dates will be handled. It is expected the solution will evenly distribute assets among the range of years associated with that type of pipe material. It is also expected that anticipated projected replacement investment rates will utilize the 6" \$/ft unit cost for some agreed upon percentage of replacing 2" water mains.
- 6) Generate a figure elucidating the a) Projected pipe replacement needs for each year over the next 50 years and b) The pipe R&R rate for the past five year period. The goal of this figure will be to identify if the current R&R rate is excessive, reasonably optimal or deficient.
- 7) Generate figures elucidating the economics of developer driven distribution system replacement vs. regularly scheduled distribution system R&R CIPs. The goal of these figures will be to help guide future decisions (based on expected cash flows / NPV / lifecycle cost analyses) on whether to collect connection fees from developers or require developers to replace water main infrastructure adjacent to their project.
- 8) Development of decision support metrics that can be used to determine the economics of valve replacement only vs. valve+line replacement to support the CITY in standardized decision making process for valve replacement only vs. valve+line replacement.

#### **Task 704 – Pipeline Assessment and Project Needs Workshop**

A workshop will be conducted with the CITY to review the results of the Phase 700 Risk Based Pipeline Prioritization to confirm risk based pipeline improvement projects that should be included in the Master Plan CIP.

#### **Task 705 – Risk Based Pipeline Prioritization Technical Memorandum**

Prepare and submit to CITY a draft Risk Based Pipeline Prioritization Technical Memorandum for review and comment. A list of recommended pipe segments for replacement, including along street, from street, too street, length, proposed size and cost estimate will be included as part of Task 802. CONSULTANT will finalize the draft technical memorandum addressing questions and incorporating the resolution of CITY comments.

### **Phase 800: Capital Improvement Planning**

During this phase, the water system improvement needs identified during Phases 400, 500 and 700 will be presented in a capital projects list. Planning-level estimates of probable project cost will be prepared for each project (capital costs and annual O&M cost impacts). Projects will be prioritized by planning year (2020, 2025 or 2035).

## **Deliverables:**

- Opinions of Probable Cost tables for improvement projects.
- Prioritized InfoMaster GIS database populated with CIP projects
- Project Validation and Prioritization Workshop Agenda/Meeting Minutes

### **Task 801 – Opinions of Probable Project Costs**

CONSULTANT will prepare unit cost information and assumptions for the variety of types of improvements that will be identified as part of the potable water system master planning efforts. This unit cost information will be used to develop planning-level opinions of probable project costs. The unit cost information will be added to the InfoMaster software program to support the calculation and organization of CIP project costs. Tables will be prepared to summarize cost information for the proposed improvement projects. Estimated annual O&M cost impacts associated with the projects will also be provided, where applicable.

### **Task 802 – CIP Project Prioritization and Scheduling**

CONSULTANT will define an initial prioritization and implementation schedule for the recommended capital improvement projects. CONSULTANT will develop a draft 5 year implementation schedule for improvements that are recommended between 2016 and 2020. The implementation schedule will consider financial constraints and other prioritization criteria and goals defined with the CITY throughout the Master Planning efforts. Project costs will be applied at the appropriate time in the implementation schedule, and total annual capital costs will be determined for each year between 2016 to 2020. CONSULTANT will also identify CIP projects that are recommended for implementation between 2021 and 2025; and between 2026 and 2035.

CONSULTANT will use InfoMaster software to support the organization, prioritization and scheduling of the CIP projects. As noted in Task 801, InfoMaster will also be used by the CONSULTANT to support the calculation and organization of CIP project costs. InfoMaster will maintain a record of the project ID, size, location, description and other project information including projects costs and schedules, all within one centralized GIS database.

The InfoMaster tool will be used during the Project Validation and Prioritization Workshop to support refinements to the scheduling of projects for each planning year (2020, 2025 or 2035).

The InfoMaster database with the final CIP projects in GIS database format will be delivered to the CITY at the end of the project for its use in updating and maintaining the CIP into the future.

### **Task 803 – Project Validation and Prioritization Workshop**

A workshop will be conducted with the CITY’s staff to review the projects list. The justification for each project will be reviewed and discussed, as well as the priority ranking for each project as compared to previously identified evaluation criteria. Opinions of probable project cost and the proposed implementation schedule will also be reviewed.

## **Phase 900: Document Master Plan**

### **Deliverables:**

- Draft and Final Water Master Plan Report
- Draft Report Workshop – Agenda and Meeting Minutes
- Hydraulic Model Training presentation slides and tutorials.
- Updated Hydraulic Model

### **Task 901 – Draft Report**

CONSULTANT will document the Water Master Plan project in a draft report. The report will incorporate the final versions of the various technical memoranda prepared and outcomes of the various workshops during previous phases of work. The report will describe the evaluations performed and the resulting recommendations. The report will provide year by year recommendations for system and facility improvements between 2016 and 2020; and also define longer term improvements recommended through 2035. System maps and figures to support the recommendations and summarize the proposed improvements will be provided. Seven (7) hard copies and one electronic copy of the draft Water Master Plan Report will be provided. The updated hydraulic model and CIP planning tools will also be provided with the draft report.

### **Task 902 – Draft Report Workshop**

CONSULTANT will facilitate a workshop with the CITY’s staff to present the draft report and receive comments.

### **Task 903 – Final Report**

CONSULTANT will incorporate comments from the review workshop and update the Water Master Plan Report to address these comments. Seven (7) hard copies and one electronic copy of the final report will be provided.

## **Phase 950: Training**

### **Deliverables:**

- Hydraulic Model Training presentation slides and tutorials.
- InfoMaster Training presentation slides and tutorials.

Training sessions will be held at the Black & Veatch Tampa office (4890 W Kennedy Blvd, Suite 950, Tampa, FL 33609). As part of training, CONSULTANT shall prepare and provide PowerPoint presentations and tutorial guide training materials to CITY Staff for each planning tool.

### **Task 951 – Training Sessions for CITY Staff on Updated Hydraulic Model**

CONSULTANT will provide up to two full days of informal training sessions for CITY Staff on the use of the tools and hydraulic software that have been developed or updated as part of the Potable Water Master Plan project for three staff members. This includes the following:

- Innovyze InfoWater Model Basics – training class on the basics of the hydraulic modeling package and specific setup/configuration of the CITY specific model.
- Innovyze InfoWater Hydraulic Model Upgrades – water age; source trace, and valve criticality – See Phase 300, 400 and 500 tasks.

### **Task 952 – InfoMaster Training**

The CONSULTANT will provide a two day training on the construction and use of the CITY specific InfoMaster Model. A few hours of the first day of training will be set aside for an overview of InfoMaster intended for non-users to better understand the tool. The remaining time will be focused on custom tutorials created by the CONSULTANT to training users from the CITY on how the InfoMaster model was created, how to use the software, and how to maintain/update the model.

### **III. OBLIGATIONS OF THE CITY**

It is understood that the CITY will:

- Provide the CONSULTANT with access to the previous work completed for the population projections for analysis and facilitate obtaining copies of the spatial allocation of demands from the Planning Commission (in TAZ shapefiles) and SWFWMD (in parcel shapefiles).
- Provide all required system monitoring equipment and be responsible for collecting the required system calibration data.
- Provide CONSULTANT with access to facilities for the on-site observations and data collection identified in the Scope of Services.
- Provide the data required to complete Task 703 in electronic tabular format (i.e shapefiles or spreadsheets).
- Review and provide comments on CONSULTANT's deliverables within 4 weeks of receiving them.
- Participate in review meetings and workshops as indicated in the Scope of Services.

### **IV. SCHEDULE**

The delivery schedule for this Scope of Services is 17 months. Details regarding the project schedule are provided in Figure 1 – Project Schedule.

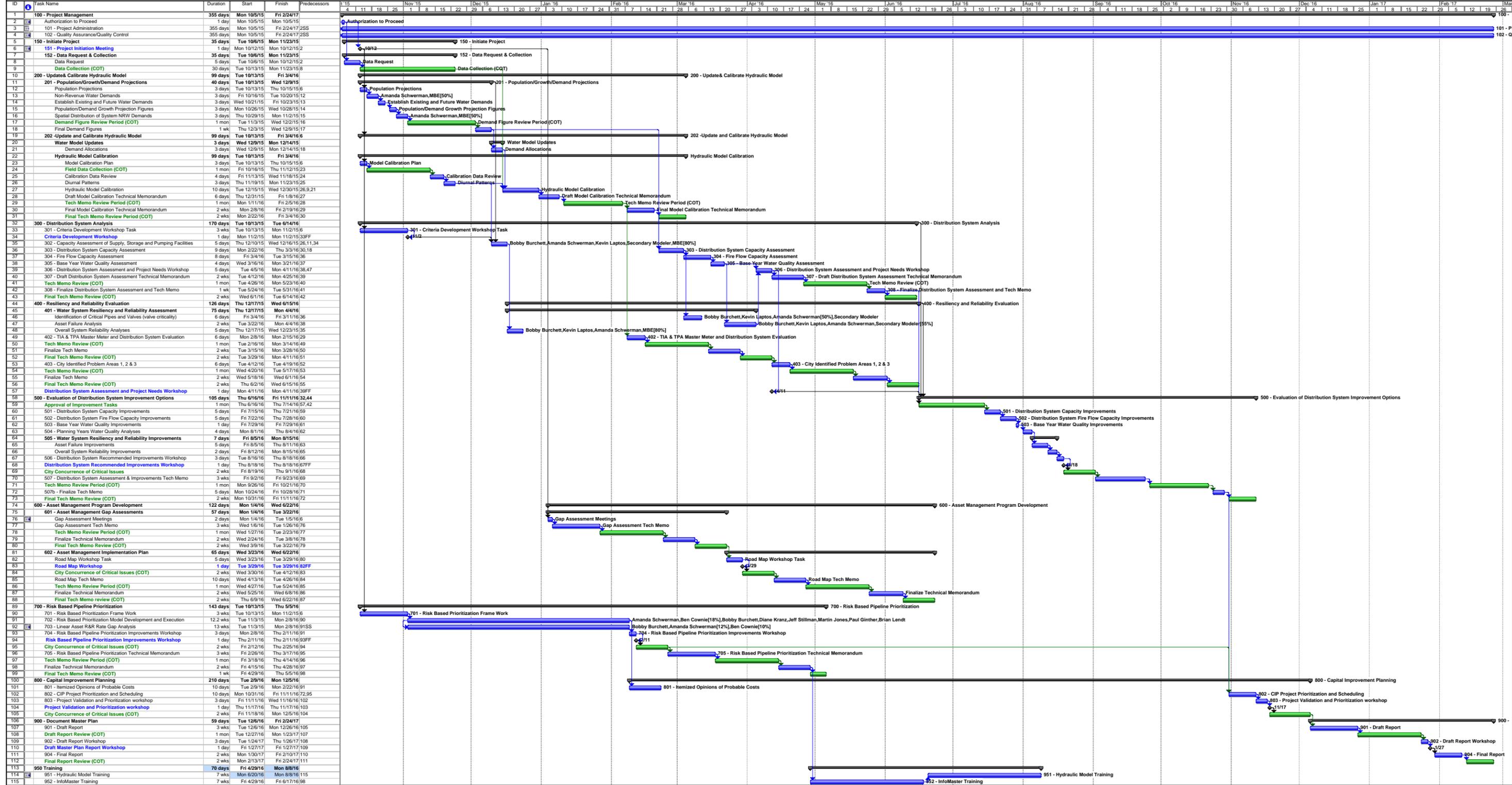
### **V. SUPPLEMENTAL SERVICES**

Work requested by the CITY that is not included in the Scope of Services will be classified as Supplemental Services. CONSULTANT can provide Supplemental Services under an amendment to this Scope of Services approved by the City Commission. Supplemental Services may include, but are not limited to:

1. Additional meetings with local, state, or federal agencies and/or wholesale customers to discuss the project beyond quantity indicated in Part 2.0.
2. Presentations to the City Commissioners.
3. Field surveying services.
4. Geo-coding of customer billing meters or customer consumption data.
5. Population growth projections and calculations.
6. Updates to the associated water demands after acceptance in Phase 200.
7. Revisions to the Level of Service/Performance Criteria after acceptance in Phase 150.
8. Data collection beyond what is available in electronic tabular format to support the analysis is Task 703.

9. Field testing of water system (fire flow, C-factor, etc.).
10. Raw water quality monitoring, sampling, and analysis.
11. Permitting and regulatory approval assistance with water supply.
12. Permitting and regulatory approval assistance with Environmental Impact Statements (EIS) or with Environmental Assessment (EA).
13. Regulatory review for the distribution system and treatment plant.
14. Public relations assistance.
15. Pipeline field/inspection condition assessments.
16. Condition assessments for D.L Tippin WTP and other City of Tampa storage and pumping facilities.
17. WTP hydraulic profile development and assessments.
18. Chlorine residual and DBP modeling assessments.
19. Calibration for water quality modeling analyses.
20. Source water trace simulations with model.
21. Energy efficiency modeling or analysis.
22. Development of an ISO 55001 compliant Asset Management System.
23. Water resource / water supply planning.
24. Hydrant spacing analysis.
25. Reclaimed water planning
26. Comprehensive field testing and assessment of high services pumps to compare actual performance versus original performance data.
27. Development of Standard Operating Procedure (SOP) documents for the City's Pump Stations.
28. Energy efficiency analysis of pumping facilities and energy efficiency modeling of the distribution system.
29. Electric utility rate analysis vs facility energy use requirements (4 facilities)
30. Surge modeling analyses.
31. Collection and analysis of surge pressure data from high speed pressure data loggers.
32. Providing an updated 10-Year Facilities Work Plan.

Figure 1 - Project Schedule



**Exhibit B- FEE SUMMARY**

POTABLE WATER SYSTEM MASTER PLAN  
CONTRACT 14-D-00051

For performing the services identified within Exhibit A, an upset limit amount of \$399,948 has been established as the fee for the work described. Invoices will be submitted monthly.

• Task 100: Project Management & Administration	\$16,547
• Task 150: Initiate Project	\$7,825
• Task 200: Update and Calibrate Hydraulic Model	\$46,842
• Task 300: Distribution System Analysis	\$42,803
• Task 400: Resiliency and Reliability Evaluation	\$33,371
• Task 500: Evaluation of Distribution System Improvements	\$40,025
• Task 600: Asset Management Program Development	\$48,951
• Task 700: Risk Based Pipeline Prioritization	\$73,853
• Task 800: Capital Improvement Planning	\$42,435
• Task 900: Document Master Plan	\$31,742
• Task 900: Training	<u>\$15,554</u>
<b>TOTAL:</b>	<b>\$399,948</b>

## CITY OF TAMPA INSURANCE REQUIREMENTS

During the life of the award/contract the Awardee/Contractor shall provide, pay for, and maintain insurance with companies authorized to do business in Florida, with an A.M. Best rating of B+ (or better) Class VII (or higher), or otherwise be acceptable to the City if not rated by A.M. Best. All insurance shall be from responsible companies duly authorized to do business in the State of Florida.

All commercial general liability insurance policies (and Excess or Umbrella Liability Insurance policies, if applicable) shall provide that the City is an additional insured as to the operations of the Awardee/Contractor under the award/contract including the additional insured endorsement, the subrogation waiver endorsement, and the Severability of Interest Provision. In lieu of the additional named insured requirement, if the Awardee/Contractor's company has a declared existing policy which precludes it from including additional insureds, the City may permit the Contractor to purchase an Owners and Contractors Protective Liability policy. Such policy shall be written in the name of the City at the same limit as is required for General Liability coverage. The policy shall be evidenced on an insurance binder which must be effective from the date of issue until such time as a policy is in existence and shall be submitted to the City in the manner described below as applicable to certificates of insurance.

The insurance coverages and limits required must be evidenced by a properly executed Acord 25 Certificate of Insurance on form or its equivalent. Each Certificate must be personally manually signed by the Authorized Representative of the insurance company shown in the Certificate with proof that he/she is an authorized representative thereof. Thirty days' written notice must be given to the City of any cancellation, intent not to renew, or reduction in the policy coverages, except in the application of the aggregate liability limits provisions. Should any aggregate limit of liability coverage be reduced, it shall be immediately increased back to the limit required by the contract. The insurance coverages required herein are to be primary to any insurance carried by the City or any self-insurance program thereof.

The following coverages are required:

A. Commercial General Liability Insurance shall be provided on the most current Insurance Services Office (ISO) form or its equivalent. This coverage must be provided to cover liability arising from premises and operations, independent contractors, products and completed operations, personal and advertising injury, contractual liability, and XCU exposures (if applicable). Completed operations liability coverage shall be maintained for a minimum of one-year following completion of work. The amount of Commercial General Liability insurance shall not be less than the amount specified.

(a) \$1,000,000 per occurrence and a \$2,000,000 general aggregate for projects valued at \$2,000,000 or less. General aggregate limit for projects over that price shall equal or exceed the price of the project. An Excess or Umbrella Liability insurance policy can be provided to meet the required limit. Risk Management may be contacted for additional information regarding projects of this nature.

B. Automobile Liability Insurance shall be maintained in accordance with the laws of the State of Florida, as to the ownership, maintenance, and use of all owned, non-owned, leased, or hired vehicles. The amount of Automobile Liability Insurance shall not be less than the amount specified.

(a) \$500,000 combined single limit each occurrence bodily injury & property damage- for projects valued at \$100,000 and under

(b) \$1,000,000 combined single limit each occurrence bodily injury & property damage – for projects valued over \$100,000

C. Worker's Compensation and Employer's Liability Insurance shall be provided for all employees engaged in the work under the contract, in accordance with the Florida Statutory Requirements. The amount of the Employer's Liability Insurance shall not be less than:

(a) \$500,000 bodily injury by accident and each accident, bodily injury by disease policy limit, and bodily injury by disease each employee – for projects valued at \$100,00 and under

(b) \$1,000,000 bodily injury by accident and each accident, bodily injury by disease policy limit, and bodily injury by disease each –for projects valued over \$100,000

D. Excess Liability Insurance or Umbrella Liability Insurance may compensate for a deficiency in general liability, automobile, or worker's compensation insurance coverage limits. If the Excess or Umbrella policy is being provided as proof of coverage, it must name the City of Tampa as an additional insured (**IF APPLICABLE**).

E. Builder's Risk Insurance, specialized policy designed to cover the property loss exposures that are associated with construction projects. The amount of coverage should not be less than the amount of the project. **(IF APPLICABLE)**.

F. Installation Floater- a builder's risk type policy that covers specific type of property during its installation, is coverage required for highly valued equipment or materials such as compressors, generators, or other machinery that are not covered by the builder's risk policy **(IF APPLICABLE)**.

G. Longshoreman's & Harbor Worker's Compensation Act/Jones Act coverage shall be maintained for work being conducted upon navigable water of the United States. The limit required shall be the same limit as the worker's compensation/employer's liability insurance limit **(IF APPLICABLE)**.

H. Professional Liability shall be maintained against claims of negligence, errors, mistakes, or omissions in the performance of the services to be performed and furnished by the Awaradee/Contractor or any of its subcontractors when it acts as a DESIGN PROFESSIONAL. The amount of coverage shall be no less than amount specified **(IF APPLICABLE)**.

(a) \$1,000,000 per incident and general aggregate. Note all claims made policies must provide the date of retroactive coverage.

The City may waive any or all of the above referenced insurance requirements based on the specific nature of goods or services to be provided under the award/contract.

ADDITIONAL INSURED - The City must be included as an additional insured by on the general and (Excess or Umbrella liability policies) if applicable. Alternatively, the Contractor may purchase a separate owners protective liability policy in the name of the City in the specified amount as indicated in the insurance requirements.

CLAIMS MADE POLICIES - If any liability insurance is issued on a claims made form, Contractor agrees to maintain uninterrupted coverage for a minimum of one year following completion and acceptance of the work either through purchase of an extended reporting provision, or through purchase of successive renewals with a retroactive

date not later than the beginning of performance of work for the City. The retroactive date must be provided for all claims made policies.

CANCELLATION/NON-RENEWAL - Thirty (30) days written notice must be given to the City of any cancellation, intent to non-renew or material reduction in coverages (except aggregate liability limits). However, ten (10) days notice may be given for non-payment of premium. Notice shall be sent to the City of Tampa Department of Public Works, 306 E. Jackson Street, Tampa, FL 33602.

NUMBER OF POLICES - General and other liability insurance may be arranged under single policies for the full amounts required or by a combination of underlying policies with the balance provided by an excess or umbrella liability insurance policy.

WAIVER OF SUBROGATION - Contractor waives all rights against City, its agents, officers, directors and employees for recovery of damages to the extent such damage is covered under the automobile or excess liability policies.

SUBCONTRACTORS - It is the Contractor's responsibility to require all subcontractors to maintain adequate insurance coverage.

PRIMARY POLICIES - The Contractor's insurance is primary to the City's insurance or any self insurance program thereof.

RATING - All insurers shall be authorized to do business in Florida, and shall have an A.M. Best rating of B+ (or better), Class VII (or higher), or otherwise be acceptable to the City if not rated by A.M. Best.

DEDUCTIBLES - The Contractor is responsible for all deductibles. In the event of loss which would have been covered but for the presence of a deductible, the City may withhold from payment to Contractor an amount equal to the deductible to cover such loss should full recovery not be obtained under the insurance policy.

INSURANCE ADJUSTMENTS - These insurance requirements may be increased, reduced, or waived at the City's sole option with an appropriate adjustment to the Contract price.

Document updated on 12/22/2009 by RLD (Risk Management)





**Page 1 of 2 –DMI Payment**  
**City of Tampa – DMI Sub-(Contractors/Consultants/Suppliers) Payments**  
**(FORM MBD-30)**

Partial  Final

Contract No.: \_\_\_\_\_ WO#,(if any): \_\_\_\_\_ Contract Name: \_\_\_\_\_

Contractor Name: \_\_\_\_\_ Address: \_\_\_\_\_

Federal ID: \_\_\_\_\_ Phone: \_\_\_\_\_ Fax: \_\_\_\_\_ Email: \_\_\_\_\_

GC Pay Period: \_\_\_\_\_ Payment Request/Invoice Number: \_\_\_\_\_ City Department: \_\_\_\_\_

Total Amount Requested for pay period: \$ \_\_\_\_\_ Total Contract Amount(including change orders):\$ \_\_\_\_\_

Type of Ownership - (F=Female M=Male), BF BM = African Am., HF HM = Hispanic Am., AF AM = Asian Am., NF NM = Native Am., CF CM = Caucasian S = SLBE

Type	Company Name Address Phone & Fax	Total Sub Contract Or PO Amount	Amount Paid To Date	Amount To Be Paid For This Period
Trade/Work Activity			Amount Pending Previously Reported	Sub Pay Period Ending Date
<input type="checkbox"/> Sub <input type="checkbox"/> Supplier				
Federal ID				
			\$	\$
			\$	\$
			\$	\$
			\$	\$
			\$	\$

**(Modifying This Form or Failure to Complete and Sign May Result in Non-Compliance)**

Certification: I hereby certify that the above information is a true and accurate account of payments to sub – contractors/consultants on this contract.

Signed: \_\_\_\_\_ Name/Title: \_\_\_\_\_ Date: \_\_\_\_\_



**Page 2 of 2 – DMI Payment**  
**Instructions for completing The DMI Sub-(Contractors/Consultants/ Suppliers) Payment Form**  
**(Form MBD-30)**

This form must be submitted with all invoicing or payment requests where there has been subcontracting rendered for the pay period. If applicable, after payment has been made to the subcontractor, “Waiver and Release of Lien upon Progress Payment”, “Affidavit of Contractor in Connection with Final Payment”, or an affidavit of payment must be submitted with the amount paid for the pay period. The following will detail what data is required for this form. The instructions that follow correspond to the headings on the form required to be completed. **(Modifying or omitted information from this form my result in non-compliance).**

- **Contract No.** This is the number assigned by the City of Tampa for the bid or proposal.
- **W.O.#** If the report covers a work order number (W.O.#) for the contract, please indicate it in that space.
- **Contract Name.** This is the name of the contract assigned by the City of Tampa for the bid or proposal.
- **Contractor Name.** The name of your business.
- **Address.** The physical address of your business.
- **Federal ID.** A number assigned to a business for tax reporting purposes.
- **Phone.** Telephone number to contact business.
- **Fax.** Fax number for business.
- **Email.** Provide email address for electronic correspondence.
- **Pay Period.** Provide start and finish dates for pay period. (e.g. 05/01/13 – 05/31/13)
- **Payment Request/Invoice Number.** Provide sequence number for payment requests. (ex. Payment one, write 1 in space, payment three, write 3 in space provided.)
- **City Department.** The City of Tampa department to which the contract pertains.
- **Total Amount Requested for pay period.** Provide all dollars you are expecting to receive for the pay period.
- **Total Contract Amount (including change orders).** Provide expected total contract amount. This includes any change orders that may increase or decrease the original contract amount.
- **Signed/Name/Title/Date.** This is your certification that the information provided on the form is accurate.
- **See attached documents.** Check if you have provided any additional documentation relating to the payment data. Located at the bottom middle of the form.
- **Partial Payment.** Check if the payment period is a partial payment, not a final payment. Located at the top right of the form.
- **Final Payment.** Check if this period is the final payment period. Located at the top right of the form.

The following instructions are for information of any and all subcontractors used for the pay period.

- **(Type) of Ownership.** Indicate the Ethnicity and Gender of the owner of the subcontracting business or SLBE.
- **Trade/Work Activity.** Indicate the trade, service, or material provided by the subcontractor.
- **SubContractor/SubConsultant/Supplier.** Please indicate status of firm on this contract.
- **Federal ID.** A number assigned to a business for tax reporting purposes. This information is critical in proper identification of the subcontractor.
- **Company Name, Address, Phone & Fax.** Provide company information for verification of payments.
- **Total Subcontract Amount.** Provide total amount of subcontract for subcontractor including change orders.
- **Amount Paid To Date.** Indicate all dollars paid to date for the subcontractor.
- **Amount Pending, Previously Reported.** Indicate any amount previously reported that payments are pending.
- **Amount To Be Paid for this Period.** Provide dollar amount of dollars requested for the pay period.
- **Sub Pay Period Ending Date.** Provide date for which subcontractor invoiced performed work.

*Forms must be signed and dated or will be considered incomplete. The company authorized representative must sign and certify the information is true and accurate. Failure to sign this document or return the document unsigned can be cause for determining a company is in non-compliance of Ordinance 2008-89.*

If any additional information is required or you have any questions, you may call the Minority Business Development Office at (813) 274-5522.