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PROFESSIONAL SERVICES AGREEMENT
WATER SERVICES DEPARTMENT ASSET MANAGEMENT SYSTEM
ASSESSMENT SERVICES - PHASE I

City Project No. 161702

This Professional Services Agreement ("Agreement") is entered into and effective between CITY OF GLENDALE, an Arizona municipal corporation ("City") and Black & Veatch Corporation, a Delaware corporation authorized to do business in Arizona, ("Consultant") as of the _____ day of _____, 2017 ("Effective Date").

RECITALS

- A. City intends to undertake a project for the benefit of the public and with public funds that is more fully set forth in **Exhibit A**, Project (the "Project");
- B. City desires to retain the professional services of Consultant to perform certain specific duties and produce the specific work as set forth in the attached **Exhibit B**, Project Scope of Work ("Scope");
- C. Consultant desires to provide City with professional services ("Services") consistent with best consulting or architectural practices and the standards set forth in this Agreement, in order to complete the Project; and
- D. City and Consultant desire to memorialize their agreement with this document.

AGREEMENT

The parties hereby agree as follows:

1. Key Personnel; Other Consultants and Subcontractors.

1.1 Professional Services. Consultant will provide all Services necessary to assure the Project is completed timely and efficiently consistent within Project requirements, including, but not limited to, working in close interaction and interfacing with City and its designated employees, and working closely with others, including other consultants or contractors, retained by City.

1.2 Project Team.

a. Project Manager.

- (1) Consultant will designate an employee as Project Manager with sufficient training, knowledge, and experience to, in the City's opinion, complete the project and handle all aspects of the Project such that the work produced by Consultant is consistent with applicable standards as detailed in this Agreement; and
- (2) The City must approve the designated Project Manager.

b. Project Team.

- (1) The Project Manager and all other employees assigned to the Project by Consultant will comprise the "Project Team."
- (2) Project Manager will have responsibility for and will supervise all other employees assigned to the Project by Consultant.

c. Discharge, Reassign, Replacement.

- (1) Consultant acknowledges the Project Team is comprised of the same persons and roles for each as may have been identified in **Exhibit A**.
- (2) Consultant will not discharge, reassign, replace or diminish the responsibilities of any of the employees assigned to the Project who have been approved by City

without City's prior written consent unless that person leaves the employment of Consultant, in which event the substitute must first be approved in writing by City.

- (3) Consultant will change any of the members of the Project Team at the City's request if an employee's performance does not equal or exceed the level of competence that the City may reasonably expect of a person performing those duties, or if the acts or omissions of that person are detrimental to the development of the Project.

d. Subcontractors.

- (1) Consultant may engage specific technical contractors (each a "Subcontractor") to furnish certain service functions.
- (2) Consultant will remain fully responsible for Subcontractor's services.
- (3) Subcontractors must be approved by the City.
- (4) Consultant will certify by letter that all contracts with Subcontractors have been executed incorporating requirements and standards as set forth in this Agreement.

2. **Schedule.** The Services will be undertaken in a manner that ensures the Project is completed timely and efficiently in accordance with the Project.

3. **Consultant's Work.**

3.1 **Standard.** Consultant must perform Services in accordance with the standards of due diligence, care, and quality prevailing among consultants having substantial experience with the successful furnishing of Services for projects that are equivalent in size, scope, quality, and other criteria under the Project and identified in this Agreement.

3.2 **Licensing.** Consultant warrants that:

- a. Consultant and its Subconsultants or Subcontractors will hold all appropriate and required licenses, registrations and other approvals necessary for the lawful furnishing of Services ("Approvals"); and
- b. Neither Consultant nor any Subconsultant or Subcontractor has been debarred or otherwise legally excluded from contracting with any federal, state, or local governmental entity ("Debarment").
 - (1) City is under no obligation to ascertain or confirm the existence or issuance of any Approvals or Debarments, or to examine Consultant's contracting ability.
 - (2) Consultant must notify City immediately if any Approvals or Debarment changes during the Agreement's duration. The failure of the Consultant to notify City as required will constitute a material default under the Agreement.

3.3 **Compliance.**

- a. Services will be furnished in compliance with applicable federal, state, county and local statutes, rules, regulations, ordinances, building codes, life safety codes, and other standards and criteria designated by City.
- b. Consultant must not discriminate against any employee or applicant for employment on the basis of race, color, religion, sex, national origin, age, marital status, sexual orientation, gender identity or expression, genetic characteristics, familial status, U.S. military veteran status or any disability. Consultant will require any Sub-contractor to be bound to the same requirements as stated within this section. Consultant, and on behalf of any subcontractors, warrants compliance with this section.

3.4 **Coordination; Interaction.**

- a. For projects that the City believes requires the coordination of various professional services, Consultant will work in close consultation with City to proactively interact with any other professionals retained by City on the Project ("Coordinating Project Professionals").
- b. Consultant will meet to review the Project, Schedule and in-progress work with Coordinating Project Professionals and City as often and for durations as City reasonably considers necessary in order to ensure the timely work delivery and Project completion.
- c. For projects not involving Coordinating Project Professionals, Consultant will proactively interact with any other contractors when directed by City to obtain or disseminate timely information for the proper execution of the Project.

3.5 Work Product.

- a. **Ownership.** Upon receipt of payment for Services furnished, Consultant grants to City, and will cause its Subconsultants or Subcontractors to grant to the City, the exclusive ownership of and all copyrights, if any, to evaluations, reports, drawings, specifications, project manuals, surveys, estimates, reviews, minutes, all "architectural work" as defined in the United States Copyright Act, 17 U.S.C § 101, *et seq.*, and other intellectual work product as may be applicable ("Work Product").
 - (1) This grant is effective whether the Work Product is on paper (e.g., a "hard copy"), in electronic format, or in some other form.
 - (2) Consultant warrants, and agrees to indemnify, hold harmless and defend City for, from and against any claim that any Work Product infringes on third-party proprietary interests.
- b. **Delivery.** Consultant will deliver to City copies of the preliminary and completed Work Product promptly as they are prepared.
- c. **City Use.**
 - (1) City may reuse the Work Product at its sole discretion.
 - (2) In the event the Work Product is used for another project without further consultations with Consultant, the City agrees to indemnify and hold Consultant harmless from any claim arising out of the Work Product.
 - (3) In such case, City will also remove any seal and title block from the Work Product.

4. **Compensation for the Project.**

- 4.1 **Compensation.** Consultant's compensation for the Project, including those furnished by its Subconsultants or Subcontractors will not exceed \$485,090 as specifically detailed in **Exhibit D** ("Compensation").
- 4.2 **Change in Scope of Project.** The Compensation may be equitably adjusted if the originally contemplated Scope as outlined in the Project is significantly modified.
 - a. Adjustments to Compensation require a written amendment to this Agreement and may require City Council approval.
 - b. Additional services which are outside the Scope of the Project contained in this Agreement may not be performed by the Consultant without prior written authorization from the City.
 - c. Notwithstanding the incorporation of the Exhibits to this Agreement by reference, should any conflict arise between the provisions of this Agreement and the provisions found in the Exhibits and accompanying attachments, the provisions of this Agreement shall take priority and govern the conduct of the parties.

- 4.3 **Allowances.** An "Allowance" may be identified in **Exhibit D** only for work that is required by the Scope and the value of which cannot reasonably be quantified at the time of this Agreement.
- a. As stated in Sec. 4.1 above, the Compensation must incorporate all Allowance amounts identified in **Exhibit D** and any unused allowance at the completion of the Project will remain with City.
 - b. Consultant may not add any mark-up for work identified as an Allowance and which is to be performed by a Subconsultant.
 - c. Consultant will not use any portion of an Allowance without prior written authorization from the City.
 - d. Examples of Allowance items include, but are not limited to, subsurface pothole investigations, survey, geotechnical investigations, public participation, radio path studies and material testing.

- 4.4 **Expenses.** City will reimburse Consultant for certain out-of-pocket expenses necessarily incurred by Consultant in connection with this Agreement, without mark-up (the "Reimbursable Expenses"), including, but not limited to, document reproduction, materials for book preparation, postage, courier and overnight delivery costs incurred with Federal Express or similar carriers, travel and car mileage, subject to the following:
- a. Mileage, airfare, lodging and other travel expenses will be reimbursable only to the extent these would, if incurred, be reimbursed to City of Glendale personnel under its policies and procedures for business travel expense reimbursement made available to Consultant for review prior to the Agreement's execution, and which policies and procedures will be furnished to Consultant;
 - b. The Reimbursable Expenses in this section are approved in advance by City in writing; and
 - c. The total of all Reimbursable Expenses paid to Consultant in connection with this Agreement will not exceed the "not to exceed" amount identified for Reimbursable Services in the Compensation.

5. Billings and Payment.

5.1 Applications.

- a. Consultant will submit monthly invoices (each, a "Payment Application") to City's Project Manager and City will remit payments based upon the Payment Application as stated below.
- b. The period covered by each Payment Application will be one calendar month ending on the last day of the month.

5.2 Payment.

- a. After a full and complete Payment Application is received, City will process and remit payment within 30 days.
- b. Payment may be subject to or conditioned upon City's receipt of:
 - (1) Completed work generated by Consultant and its Subconsultants and Subcontractors; and
 - (2) Unconditional waivers and releases on final payment from all Subconsultants and Subcontractors as City may reasonably request to assure the Project will be free of claims arising from required performances under this Agreement.

- 5.3 **Review and Withholding.** City's Project Manager will timely review and certify Payment Applications.

- a. If the Payment Application is rejected, the Project Manager will issue a written listing of the items not approved for payment.
- b. City may withhold an amount sufficient to pay expenses that City reasonably expects to incur in correcting the deficiency or deficiencies rejected for payment.

6. Termination.

6.1 For Convenience. City may terminate this Agreement for convenience, without cause, by delivering a written termination notice stating the effective termination date, which may not be less than 15 days following the date of delivery.

- a. Consultant will be equitably compensated for Services furnished prior to receipt of the termination notice and for reasonable costs incurred.
- b. Consultant will also be similarly compensated for any approved effort expended, and approved costs incurred, that are directly associated with Project closeout and delivery of the required items to the City.

6.2 For Cause. City may terminate this Agreement for cause if Consultant fails to cure any breach of this Agreement within seven days after receipt of written notice specifying the breach.

- a. Consultant will not be entitled to further payment until after City has determined its damages. If City's damages resulting from the breach, as determined by City, are less than the equitable amount due but not paid Consultant for Services furnished, City will pay the amount due to Consultant, less City's damages, in accordance with the provision of Sec. 5.
- b. If City's direct damages exceed amounts otherwise due to Consultant, Consultant must pay the difference to City immediately upon demand; however, Consultant will not be subject to consequential damages more than \$1,000,000 or the amount of this Agreement, whichever is greater.

7. **Conflict.** Consultant acknowledges this Agreement is subject to A.R.S. § 38-511, which allows for cancellation of this Agreement in the event any person who is significantly involved in initiating, negotiating, securing, drafting, or creating the Agreement on City's behalf is also an employee, agent, or consultant of any other party to this Agreement.

8. **Insurance.** For the duration of the term of this Agreement, Consultant shall procure and maintain insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of all tasks or work necessary to complete the Project as herein defined. Such insurance shall cover Consultant, its agent(s), representative(s), employee(s) and any subcontractors.

8.1 **Minimum Scope and Limit of Insurance.** Coverage must be at least as broad as:

- a. **Commercial General Liability (CGL):** Insurance Services Office Form CG 00 01, including products and completed operations, with limits of no less than \$1,000,000 per occurrence for bodily injury, personal injury, and property damage. If a general aggregate limit applies, either the general aggregate limit shall apply separately to this project/location or the general aggregate limit shall be twice the required occurrence limit.
- b. **Automobile Liability:** Insurance Services Office Form Number CA 0001 covering Code 1 (any auto), with limits no less than \$1,000,000 per accident for bodily injury and property damage.
- c. **Professional Liability.** Consultant must maintain a Professional Liability insurance covering errors and omissions arising out of the work or services performed by Consultant, or anyone employed by Consultant, or anyone for whose acts, mistakes, errors and omissions Consultant is legally liability, with a liability insurance limit of \$1,000,000 for each claim and a \$2,000,000 annual aggregate limit.

- d. **Worker's Compensation:** Insurance as required by the State of Arizona, with Statutory Limits, and Employers' Liability insurance with a limit of no less than **\$1,000,000** per accident for bodily injury or disease.

8.2 **Indemnification.**

- a. To the fullest extent permitted by law, Consultant must defend, indemnify, and hold harmless City and its elected officials, officers, employees and agents (each, an "Indemnified Party," collectively, the "Indemnified Parties") for, from, and against any and all claims, demands, actions, damages, judgments, settlements, personal injury (including sickness, disease, death, and bodily harm), property damage (including loss of use), infringement, governmental action and all other losses and expenses, including attorneys' fees and litigation expenses (each, a "Demand or Expense" collectively "Demands or Expenses") asserted by a third-party (i.e. a person or entity other than City or Consultant) and that arises out of or results from the breach of this Agreement by the Consultant or the Consultant's negligent actions, errors or omissions (including any Subconsultant or Subcontractor or other person or firm employed by Consultant), whether sustained before or after completion of the Project.
- b. This indemnity and hold harmless provision applies even if a Demand or Expense is in part due to the Indemnified Party's negligence or breach of a responsibility under this Agreement, but in that event, Consultant will be liable only to the extent the Demand or Expense results from the negligence or breach of a responsibility of Consultant or of any person or entity for whom Consultant is responsible.
- c. Consultant is not required to indemnify any Indemnified Parties for, from, or against any Demand or Expense resulting from the Indemnified Party's sole negligence or other fault solely attributable to the Indemnified Party.

8.3 **Other Insurance Provisions.** The insurance policies required by the Section above must contain, or be endorsed to contain the following insurance provisions:

- a. **The City, its officers, officials, employees and volunteers are to be covered as additional insureds** of the CGL and automobile policies for any liability arising from or in connection with the performance of all tasks or work necessary to complete the Project as herein defined. Such liability may arise, but is not limited to, liability for materials, parts or equipment furnished in connection with any tasks, or work performed by Consultant or on its behalf and for liability arising from automobiles owned, leased, hired or borrowed on behalf of the Consultant. General liability coverage can be provided in the form of an endorsement to the Consultant's existing insurance policies, provided such endorsement is at least as broad as ISO Form CG 20 10, 11 85 or both CG 20 10 and CG 23 37, if later revisions are used.
- b. For any claims related to this Project, the **Consultant's insurance coverage shall be primary insurance** with respect to the City, its officers, officials, employees, and volunteers. Any insurance or self-insurance maintained by the City, its officers, officials, employees or volunteers shall be in excess of the Consultant's insurance and shall not contribute with it.
- c. Each insurance policy required by this Section shall provide that coverage shall not be canceled, except after providing notice to the City.

8.4 **Acceptability of Insurers.** Insurance is to be placed with insurers with a current A.M. Best rating of no less than A: VII, unless the Consultant has obtained prior approval from the City stating that a non-conforming insurer is acceptable to the City.

8.5 **Waiver of Subrogation.** Consultant hereby agrees to waive its rights of subrogation which any insurer may acquire from Consultant by virtue of the payment of any loss. Consultant agrees to obtain any endorsement that may be necessary to effect this waiver of subrogation. The

Workers' Compensation Policy shall be endorsed with a waiver of subrogation in favor of the City for all work performed by the Consultant, its employees, agent(s) and subcontractor(s).

- 8.6 **Verification of Coverage.** Within 15 days of the Effective Date of this Agreement, Consultant shall furnish the City with original certificates and amendatory endorsements, or copies of any applicable insurance language making the coverage required by this Agreement effective. All certificates and endorsements must be received and approved by the City before work commences. Failure to obtain, submit or secure the City's approval of the required insurance policies, certificates or endorsements prior to the City's agreement that work may commence shall not waive the Consultant's obligations to obtain and verify insurance coverage as otherwise provided in this Section. The City reserves the right to require complete, certified copies of all required insurance policies, including any endorsements or amendments, required by this Agreement at any time during the Term stated herein.

Consultant's failure to obtain, submit or secure the City's approval of the required insurance policies, certificates or endorsements shall not be considered a Force Majeure or defense for any failure by the Consultant to comply with the terms and conditions of the Agreement, including any schedule for performance or completion of the Project.

- 8.7 **Subcontractors.** Consultant shall require and shall verify that all subcontractors maintain insurance meeting all requirements of this Agreement.
- 8.8 **Special Risk or Circumstances.** The City reserves the right to modify these insurance requirements, including any limits of coverage, based on the nature of the risk, prior experience, insurer, coverage or other circumstances unique to the Consultant, the Project or the insurer.

9. **E-verify, Records and Audits.** To the extent applicable under A.R.S. § 41-4401, the Consultant warrant their compliance and that of its subconsultants with all federal immigration laws and regulations that relate to their employees and compliance with the E-verify requirements under A.R.S. § 23-214(A). The Consultant or subconsultant's breach of this warranty shall be deemed a material breach of the Agreement and may result in the termination of the Agreement by the City under the terms of this Agreement. The City retains the legal right to randomly inspect the papers and records of the other party to ensure that the other party is complying with the above-mentioned warranty. The Consultant and subconsultant warrant to keep their respective papers and records open for random inspection during normal business hours by the other party. The parties shall cooperate with the City's random inspections, including granting the inspecting party entry rights onto their respective properties to perform the random inspections and waiving their respective rights to keep such papers and records confidential.

10. **No Boycott of Israel.** The Parties agree that they are not currently engaged in, and agree that for the duration of the Agreement they will not engage in, a boycott of Israel, as that term is defined in A.R.S. §35-393.

11. **Attestation of PCI Compliance.** When applicable, the Contractor will provide the City annually with a Payment Card Industry Data Security Standard (PCI DSS) attestation of compliance certificate signed by an officer of Contractor with oversight responsibility.

12. **Notices.**

- 12.1 A notice, request or other communication that is required or permitted under this Agreement (each a "Notice") will be effective only if:
- a. The Notice is in writing; and
 - b. Delivered in person or by overnight courier service (delivery charges prepaid), certified or registered mail (return receipt requested).
 - c. Notice will be deemed to have been delivered to the person to whom it is addressed as of the date of receipt, if:

- (1) Received on a business day before 5:00 p.m. at the address for Notices identified for the Party in this Agreement by U.S. Mail, hand delivery, or overnight courier service; or
- (2) As of the next business day after receipt, if received after 5:00 p.m.
- d. The burden of proof of the place and time of delivery is upon the Party giving the Notice.
- e. Digitalized signatures and copies of signatures will have the same effect as original signatures.

12.2 Representatives.

- a. Consultant. Consultant's representative (the "Consultant's Representative") authorized to act on Consultant's behalf with respect to the Project, and his or her address for Notice delivery is:

Dan Meyer, P.E.
Black & Veatch Corporation
2231 E Camelback Road, Suite 250
Phoenix, AZ 85016

- b. City. City's representative ("City's Representative") authorized to act on City's behalf, and his or her address for Notice delivery is:

City of Glendale
c/o City Engineer
Engineering Department
5850 West Glendale Avenue
Glendale, Arizona 85301

With required copy to:

City Manager
City of Glendale
5850 West Glendale Avenue
Glendale, Arizona 85301

City Attorney
City of Glendale
5850 West Glendale Avenue
Glendale, Arizona 85301

- c. Concurrent Notices.

- (1) All notices to City's representative must be given concurrently to City Manager and City Attorney.
- (2) A notice will not be deemed to have been received by City's representative until the time that it has also been received by the City Manager and the City Attorney.
- (3) City may appoint one or more designees for the purpose of receiving notice by delivery of a written notice to Consultant identifying the designee(s) and their respective addresses for notices.

- d. Changes. Consultant or City may change its representative or information on Notice, by giving Notice of the change in accordance with this section at least ten days prior to the change.

13. Financing Assignment. City may assign this Agreement to any City-affiliated entity, including a non-profit corporation or other entity whose primary purpose is to own or manage the Project.

14. Entire Agreement; Survival; Counterparts; Signatures.

- 14.1 Integration. This Agreement contains, except as stated below, the entire agreement between City and Consultant and supersedes all prior conversations and negotiations between the parties regarding the Project or this Agreement.

- a. Neither Party has made any representations, warranties or agreements as to any matters concerning the Agreement's subject matter.
- b. Representations, statements, conditions, or warranties not contained in this Agreement will not be binding on the parties.
- c. Inconsistencies between the solicitation, any addenda attached to the solicitation, the response or any excerpts attached as **Exhibit A**, and this Agreement, will be resolved by the terms and conditions stated in this Agreement.

14.2 Interpretation.

- a. The parties fairly negotiated the Agreement's provisions to the extent they believed necessary and with the legal representation they deemed appropriate.
- b. The parties are of equal bargaining position and this Agreement must be construed equally between the parties without consideration of which of the parties may have drafted this Agreement.
- c. The Agreement will be interpreted in accordance with the laws of the State of Arizona.

14.3 Survival. Except as specifically provided otherwise in this Agreement, each warranty, representation, indemnification and hold harmless provision, insurance requirement, and every other right, remedy and responsibility of a Party, will survive completion of the Project, or the earlier termination of this Agreement.

14.4 Amendment. No amendment to this Agreement will be binding unless in writing and executed by the parties. Electronic signature blocks do not constitute execution for purposes of this Agreement. Any amendment may be subject to City Council approval.

14.5 Remedies. All rights and remedies provided in this Agreement are cumulative and the exercise of any one or more right or remedy will not affect any other rights or remedies under this Agreement or applicable law.

14.6 Severability. If any provision of this Agreement is voided or found unenforceable, that determination will not affect the validity of the other provisions, and the voided or unenforceable provision will be reformed to conform with applicable law.

14.7 Counterparts. This Agreement may be executed in counterparts, and all counterparts will together comprise one instrument.

15. Term. The term of this Agreement commences upon the Effective Date and continues for a five (5)-year period. There are no automatic renewals of this Agreement.

16. Dispute Resolution. Any controversy or claim arising out of or relating to this contract, or the breach thereof, shall be settled by arbitration administered according to the American Arbitration Association's Commercial Arbitration Rules, and judgment on the award rendered by the arbitrator may be entered in any court having jurisdiction thereof.

17. Exhibits. The following exhibits, with reference to the term in which they are first referenced, are incorporated by this reference.

Exhibit A	Project
Exhibit B	Scope of Work
Exhibit C	Schedule
Exhibit D	Compensation

(Signatures appear on the following page.)

(Signatures appear on the following page.)

The parties enter into this Agreement effective as of the date shown above.

City of Glendale,
an Arizona municipal corporation

By: Kevin R. Phelps
Its: City Manager

ATTEST:

Julie K. Bower (SEAL)
City Clerk

APPROVED AS TO FORM:

Michael D. Bailey
City Attorney

Black & Veatch Corporation,
a Delaware corporation



By: Dan W. Meyer
Its: Vice President

EXHIBIT A
Professional Services Agreement

PROJECT

See attached

EXHIBIT A
SCOPE OF SERVICES FOR CITY OF GLENDALE
WATER SERVICES DEPARTMENT ASSET MANAGEMENT SYSTEM
ASSESSMENT SERVICES – PHASE I
CITY PROJECT NO. 161702

DESCRIPTION OF PROJECT

The City of Glendale (COG) Water Services Department (WSD) lacks an integrated Asset Management System that defines the roles, responsibilities, policies and systems necessary to ensure continuous asset reliability and economical water/wastewater systems operations and maintenance.

COG is seeking assistance with developing and implementing an International Organization for Standardization (ISO) Asset Management System (ISO standards 55000, 55001 and 55002) to improve financial performance and reliability, reduce risk, and enhance sustainability. WSD is also seeking to replace its Computerized Maintenance Management System (CMMS) and determine if integration with a number of other software systems in use by COG is required.

Under the first phase of this project, the engineering firm (Consultant) will performed an assessment to identify WSD gaps between City practices and industry best asset management practices per the ISO 55000 series standard. The Consultant will create a roadmap to close the gaps and achieve the desired level of ISO compliance. Consultant will also assess and recommend an Enterprise Asset Management (EAMS) software system to meet WSD needs.

Subsequent phases include software purchase and implementation, facilitation and development of key performance indicators (KPIs), asset management plans and condition assessment, and business case development / capital improvement planning. The Scope of Services and compensation for subsequent phases will be performed under an amendment to this contract at a later date.

EXHIBIT B
Professional Services Agreement

SCOPE OF WORK

See attached

EXHIBIT B

SCOPE OF SERVICES FOR CITY OF GLENDALE

WATER SERVICES DEPARTMENT ASSET MANAGEMENT SYSTEM

ASSESSMENT SERVICES – PHASE I

CITY PROJECT NO. 161702

BACKGROUND

The City of Glendale (COG) Water Services Department (WSD) is seeking assistance with developing and implementing an International Organization for Standardization (ISO) Asset Management System (ISO standards 55000, 55001 and 55002) to improve financial performance and reliability, reduce risk, and enhance sustainability.

The COG WSD has been using the Hansen Computerized Maintenance Management System (HCMMS) since the mid 1990's and the current version (7.7 release 810) is no longer being supported. The HCMMS is not integrated with a number of other software systems in use by COG (including financial, human resources and fleet management systems). The COG WSD lacks an integrated Asset Management System that defines the roles, responsibilities, policies and systems necessary to ensure continuous asset reliability and economical water/wastewater systems operations and maintenance.

PURPOSE

The work will be performed in several phases by Black & Veatch, (Consultant). Under Phase I of this project, Black & Veatch (Consultant) will perform an assessment to identify gaps between WSD practices and industry best asset management practices per the ISO 55000 series standard. The Consultant will create a roadmap to close the gaps and achieve the desired level of ISO compliance. Consultant will also assess and recommend an Enterprise Asset Management System (EAMS) software to meet WSD needs.

Subsequent phases include software purchase and implementation, facilitation and development of key performance indicators (KPIs), asset management plans and condition assessment, and business case development / capital improvement planning. The Scope of Services and compensation for subsequent phases will be performed under an amendment to this contract at a later date.

SCOPE – PHASE I

The Asset Management System project Phase I scope of services is comprised of the following tasks.

Task Group 100: Project Management

Task 110: General Management & Administration

The Consultant will provide general coordination of the project with the City staff including Engineering, Water Services, and other departments as necessary to facilitate the project.

Consultant will develop and submit the initial data/document information request and project schedule as well as perform other administrative functions including, maintaining project data files, tracking project progress and invoicing throughout the project.

Project management documentation consists of monthly progress reports and schedule updates. The monthly project reports will summarize the work progress, project issues, and project schedule status. Consultant will also submit quarterly cash flow schedule and quarterly updates regarding future funds needed to complete the project.

Task 120: Project Kick-off & Team Building

At the project kickoff meeting, Consultant will present the scope of the initial ISO assessment planning, planned interviews and workshops, the preliminary schedule, and any additional requested data not previously received.

On the same week as the kick-off meeting, Consultant will facilitate up to four (4) two-hour team building familiarization sessions for the City's staff on the ISO 55001 asset management system and good practice asset management approach. At the conclusion of the familiarization sessions, Consultant will meet with WSD senior management to identify three core groups associated with the project:

- Champions (WSD Project Sponsor, Project/Program Manager, Lead Representatives, Sector Champions for Water, Wastewater, Distribution, Collections, and EAMS)
- Steering Committee (WSD Executive Leadership)
- Internal Advocates (Water, Wastewater, Distribution, Collections individuals)

Consultant will prepare meeting documentation (agenda and minutes) to document and summarize key discussions, comments, decisions, and any action items required.

Prior to the project kick-off, Consultant will create a brief on-line survey to be disseminated by the City PM to obtain a baseline for professionals' perception of WSD's current asset management practices as well as suggestions for improvement. The data will be collected, analyzed, and incorporated into the kick-off and team building meetings. Raw survey data will be provided to the City.

Group 100 Deliverables:

- Project Schedule
- On-line survey, raw survey data
- Workshop Agenda and Minutes, with Action Items & Decision Log
- Monthly Progress Reports and Schedule Updates
- Document and Data Request Log
- Quarterly cash flow projections

Task Group 200: ISO Asset Management System Assessment

The following tasks are associated with the ISO Asset Management System assessment, analysis and roadmap.

Task 201 – Data Collection and Review:

The following documentation and data in its current form will be obtained:

- Strategic Plan & Objectives
- Asset Management Strategy & Plan (current form)
- Key Performance Indicators
- Organizational Charts
- Roles & Responsibilities and Job Descriptions
- Resource & Training Plans
- Risk Management Process

- Risk Assessments (results)
- Emergency Management Plans
- Mapped Business Processes & Procedures
- Communications Plan & Protocols
- Change Management Process

Available documentation will be reviewed in preparation for subsequent tasks.

Task 202 – WSD ISO Interviews

The ISO interviews provide a forum for WSD staff to share details about their day-to-day activities and discuss their views and engagement in regards to asset management. Specific questions will be asked during the interviews to support the asset management maturity assessment described in Task 203. Consultant will coordinate and spend up to five (5) consecutive days on-site at the City's Water Services Department offices to conduct a series of structured interviews with a cross-section of staff, including Management, Operations, Maintenance and other important groups. Consultant will work with the City's Project Manager prior to the identified interview period to identify additional appropriate individuals and groups for the interviews outside of those identified in Task 120 as Champions, Steering Committee members, and Internal Advocates.

Consultant will facilitate small group sessions and individual interviews with managers and division heads lasting between 60 and 90 minutes, with no more than 5 staff members in each group session. Up to 10 group sessions and up to 6 individual interviews will be conducted during the identified on-site period. Group sessions and interviews will be adjusted in coordination with City's staff availability.

Consultant will use Consultant's Asset Management Insight System (AMIS) tool during the assessment sessions. Each interview and group session will be provided a list of questions prior to each meeting.

Task 203 – Asset Management Maturity Assessment

Based on the results of Tasks 201 and 202, Consultant will perform an asset management maturity assessment of the City's operations using the ISO 55001:2014 Asset Management – Management System Requirements (ISO 55001). The assessment, also known as a gap analysis, will review all 27 sections of ISO 55001 as listed in the following table. The level of effort and assessment detail will provide the City with an action plan for asset management improvements compliant with ISO 55001.

Section Title	Section Title
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 for the asset management system 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

Task 204 – Gap Assessment Workshop

Consultant will present the results of the gap assessment as described in Task 203 at a workshop attended by relevant City staff. This full-day workshop will facilitate discussions on improvement initiatives to support development of an Improvement Plan (Roadmap). Consultant will solicit input from City to confirm specific improvement activities, timescales, resources and task owners. With City's input, Consultant will prioritize improvement activities during the workshop. This approach assumes an active level of input from City's staff to develop the Improvement Plan that will ultimately be implemented by the City.

Task 205 – Gap Assessment Technical Memorandum

Using the results of Tasks 201 through 204, 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. Submit draft memorandum to the City for review and incorporate comments as mutually agreed to with the City.

Task 206 – Asset Management Roadmap Workshop

Using the results of Tasks 204 and 205, Consultant will present the preliminary findings at up to one (1) monthly meeting and draft Asset Management Roadmap at a workshop to review the roadmap components and initiatives to confirm results and facilitate consensus.

Task 207 – Asset Management Roadmap Technical Memorandum

Using the results of Tasks 201 through 206, Consultant will prepare a draft AM roadmap consisting of a high level action plan and schedule intended to close asset management gaps. Where possible, the roadmap will identify peer utilities that have implemented solutions potentially beneficial to the City for follow-up by City with its industry peers. Submit the draft AM Roadmap to City for review.

The final Gap Assessment and AM Roadmap memoranda will be combined and submitted to the City.

Task 208 – Asset Management Policy and Strategic Asset Management Plan Development

The gap assessment and AM roadmap developed in Task 207 will provide the foundation for development of an asset management policy and a strategic asset management plan (SAMP). The SAMP will define implementation initiatives necessary to implement the policy. The SAMP development will involve identifying asset management improvement initiatives to be undertaken to address gaps identified during the gap assessment and identification of resources, responsibilities, and timelines for implementing the initiatives. The SAMP consists of the following key components:

- Commitments and Obligations
- Stakeholder Requirements
- Approach to Managing Assets
- Asset Management Objectives
- Program Implementation Initiatives (based on roadmap developed in Task 207)

Consultant will provide the City with a SAMP template document and incorporate the components developed as described in this task. The following subtasks will be performed to support development of the AM policy and SAMP components.

- A. Consultant will develop an Asset Management Policy for the WSD using an ISO 55001-compliant template. The asset management policy is a short statement that sets out the principles for applying asset management. The policy will be a single page document and will include:
- a. WSD's mission and obligations
 - b. The principles to be applied to asset management
 - c. A commitment to comply with regulatory requirements
 - d. A commitment to continual improvement

Consultant will facilitate up to two (2) half-day workshops (one (1) on-site, one (1) via conference call) with the Project Champions and Steering Committee to review and further develop the policy. The resulting policy will be delivered to the City for final review and approval.

- B. Consultant will work with the City to develop the Commitments and Obligations as well as the Stakeholders Requirements sections of the SAMP. The Commitments and Obligations will be related to the internal City and regulatory requirements. Stakeholder Requirements will consider both external and internal stakeholders.

Consultant will facilitate up to three (3) half-day workshops (two (2) on-site, one (1) via conference call) to review the SAMP sections including Commitments and Obligations, Stakeholder Requirements, Approach to managing assets, and Asset Management Objectives described in Subtasks C and D below. Consultant will update the sections based on comments received and incorporate the final sections into the SAMP document.

- C. Consultant will develop an approach to managing assets. The approach comprises guidelines to support decision on how to manage assets. This section of the SAMP will include key elements related to service levels, risk management, capital planning, information management, and staffing resource management.

Consultant will facilitate workshops coordinated with Subtask B. Consultant will update the approach to managing assets section based on comments received and incorporate the final approach into the SAMP document.

- D. Consultant will develop Asset Management Objectives defining initial level of service goals and key performance indicators and monitoring and reporting expectations. The development of the objectives will also consider how the ISO 55001 asset management maturity should improve over time and identify the specific maturity level targets.

Consultant will facilitate workshops with Subtask B. Consultant will update the asset management objectives based on comments received and incorporate the final objectives into the SAMP document.

- E. Consultant will assist the City in developing a “to-be” Asset Management Framework structure (outline) based on the results of the gap assessment developed in Task 207 and the SAMP. The framework document will outline the structure for developing a full asset management framework by the City. The framework structure will include the following components:

- Asset management objectives including levels of service and key performance indicators
- Defining organizational roles, responsibilities, and authorities
- Management plans that incorporate future demands and the impacts on assets, that are risk-based and cover the full asset lifecycle
- Criteria for decision making (including capital prioritization) and risk management methodology and processes (including utilizing condition and criticality of assets)
- Business processes covering the asset lifecycle: planning, asset creation, operation, maintenance, and asset disposal
- Enablers and controls, such as resource management, training, communication, and document management
- Information management
- Performance management, including evaluation and reporting
- Audit and management review
- Planning level costs ranges (high, medium, low) for implementation
- Processes for corrective and preventative actions

Consultant will facilitate up to three (3) half-day workshops (two (2) on-site, one (1) via conference call) with the City to review the framework structure. Development of the actual framework and asset management plans will be completed in a subsequent phase.

- F. Consultant will work with the City to develop specific improvement initiatives and implementation activities, including an action plan and schedule. These initiatives will be based on the gaps identified in the ISO 55001 assessment (Task 207), the Asset Management Objectives (Subtask D), and the requirements from the Asset Management Framework (Subtask E). Development and update of improvement initiatives will be coordinated during Subtasks A-E.

Task 209 – Strategic Asset Management Plan Workshop

Using the results of Task 208, Consultant will present the draft SAMP and asset management framework structure to the City at a workshop to facilitate consensus.

Task 210 – Strategic Asset Management Plan Technical Memorandum

Using the results of Tasks 208 and 209, Consultant will prepare a draft policy, SAMP template document, and asset management framework structure and submit to City for review.

The final SAMP will include the Gap Assessment and AM Roadmap memoranda will be combined and submitted to the City in a format such that it will allow for continued development.

Group 200 Deliverables

- Interview Agendas / Minutes
- Draft Gap Assessment TM (electronic only)
- Draft Asset Management Plan / Roadmap TM (electronic only)
- Final Gap Assessment / AM Roadmap (one (1) electronic and six (6) hard copies)
- Draft Asset Management Policy (electronic only)
- Draft Strategic Asset Management Plan (electronic only)

- Draft Asset Management Framework Structure (electronic only)
- Final Asset Management Policy, SAMP, and Asset Management Framework Structure (one (1) electronic and six (6) hard copies (Final only))

Task Group 300: Enterprise Asset Management System

The following tasks are associated with the Enterprise Asset Management System (EAMS) software assessment, analysis, and creation of a short list of software system recommendations to meet WSD's needs.

Task 301 – Data Collection and Review

The following documentation and data in its current form will be obtained:

- Data Needs, Processes & Procedures
- GIS & Hansen Database (current state)
- Asset Registers (current state)
- Quarter Section Maps
- IT Strategy
- Work Requests, Work Orders, & Inspections Reports (examples of each)
- Software Licensing

Available documentation will be reviewed in preparation for subsequent tasks.

Task 302: WSD EAMS Interviews

Consultant will coordinate and spend up to three (3) consecutive days onsite at the City's Water Services Department offices to conduct a series of structured interviews with a cross-section of staff, including Management, Operations, Maintenance, Billing, IT, and other important groups. Consultant will develop and submit a questionnaire to the City's Project Manager that will focus on high level work flow processes to gain input from identified appropriate individuals and groups regarding their needs and expectations of the asset management software in preparation for the subsequent interviews. Interviews will also include discussion of intra- and interdepartmental relationships for communications, data sharing, data ownership (party responsible for specific information maintenance), data maintenance, and updates.

During the days onsite, Consultant will facilitate interviews with WSD managers and division heads, Billing, GIS, IT, etc. with up to four (4) small group sessions lasting between 2-3 hours, with no more than 5 staff members in each group session and up to eight (8) one-on-one interviews with other individuals, Group sessions, and individual interviews will be adjusted in coordination with City's staff availability.

Task 303 – High-Level Software Needs Specifications

Based on the results of Tasks 301 and 302, Consultant will perform a high-level software needs assessment of the City's overall EAMS needs and general workflows to clarify the scope / breadth of software requirements versus those covered by other systems. Prioritization of each requirement will be established for implementation, including potential multi-level analytics solution that incorporates different data sources.

Task 304 – EAMS Assessment Workshop

Consultant will present the results of the EAMS assessment as described in Task 303 at a workshop attended by relevant City staff. This half-day workshop will summarize results of the interviews, questionnaire responses, and specific group and overall goals to facilitate discussions for and prioritize EAMS system requirements.

Task 305 – EAMS Software Packages Evaluation & Workshop

Using the results of Task 304, Consultant will review available EAMS software packages based on the specification developed, software capabilities, compatibility with existing software, multi-level analytics solution capabilities, hardware requirements, implementation requirements, software cost, minimization of custom programming, references from other installations, and approximate annual maintenance costs.

Consultant will develop list of up to four (4) software vendors / systems for detailed evaluation using the developed specifications to meet WSD needs and requirements.

Consultant will present the results of the potential EAMS software systems at a workshop attended by relevant City staff. The half-day workshop will review available software systems and solicit City input to reduce the identified potential EAMS software systems to up to three (3) vendors / systems.

Task 306 – EAMS Software Pre-RFP Vendor Meetings

Consultant will facilitate meetings with up to three (3) software vendors within a two day period prior to issuance of the RFP. Consultant will assist with the discussions, questions, and explanation of each vendor's software system with the City.

Task 307 – EAMS Assessment / Software Package Technical Memorandum

Based on the results of Tasks 301 through 306, Consultant will produce an EAMS Assessment / Software Package Technical Memorandum that will document the consolidated Questionnaire / Interview feedback, high-level software needs assessment, initial and shortlisted software package evaluations, and pre-RFP vendor meetings. Consultant will submit the draft memorandum to City to the City for review and incorporate comments as mutually agree to with the City.

Task 308 – EAMS Procurement Documents & Software Selection Assistance

Consultant will create the final EAMS software system specifications to be included in the procurement documents with input from the City based on initial software system presentations. Using the results of Task 305, Consultant will create initial use case demonstration scripts using specific City-related data and processes to be utilized during software vendor demonstrations. Consultant will assist the City in development of evaluation criteria and weighting methodology. City will prepare all necessary front-end documents as well as issuance and management of the RFQ and procurement documents.

Consultant will assist the City for EAMS software system selection to assist in identification of qualified vendors, and facilitation and support of vendor demonstrations. City will schedule with staff and provide facilities for vendor-lead demonstrations over a one to two consecutive day period as well as provide scoring for proposals and demonstrations. Consultant will attend vendor demonstrations.

Group 300 Deliverables

- EAMS system questionnaire
- Interview Agendas / Minutes
- Draft / Final EAMS software system specifications
- Initial / Final Use Case Demonstration Scripts for potential software vendors' presentations
- Draft EAMS Assessment / Software Package TM (electronic only)
- Final EAMS Assessment / Software Package TM (one (1) electronic and six (6) hard copies)

SUPPLEMENTAL SERVICES ALLOWANCE

Allowance A: Owner's Allowance

An allowance is provided for miscellaneous tasks at the City's discretion. The allowance described below cannot be performed until authorized by the City. Such tasks could include, but are not limited to:

- To facilitate possible expansion of EAMS to other departments outside of WSD, Consultant will evaluate the ease / ability to add possible future enhancements. This effort would provide Consultant the opportunity to work with WSD to coordinate with other City Departments to determine the feasibility and/or need to expand the EAMS to incorporate users and assets from those other City Departments. One series of workshops over a two day period would allow Consultant to meeting with key stakeholders from other departments to assess current asset maintenance practices, high level asset data availability, key risks and benefits associated with using the EAMS, and a high level outline of efforts needed for a Department to expand EAMS for usage.
- Additional assessment for ISO 55001 compliance or certification
- Defining integration requirements and mapping with specific third party applications such as GIS, SCADA, Financial systems, etc.
- Developing potential EAM organizational management structure to include governance committee, system administration, and technical steering committee.
- Other miscellaneous tasks associated with the project as requested by the City.

SCHEDULE

See attached Schedule Exhibit C.

BUDGET

See attached Level of Effort Exhibit D.

EXHIBIT C
Professional Services Agreement

SCHEDULE

See attached

EXHIBIT C
WATER SERVICES DEPARTMENT ASSET MANAGEMENT SYSTEM ASSESSMENT SERVICES - PHASE I
CITY PROJECT NO. 161702

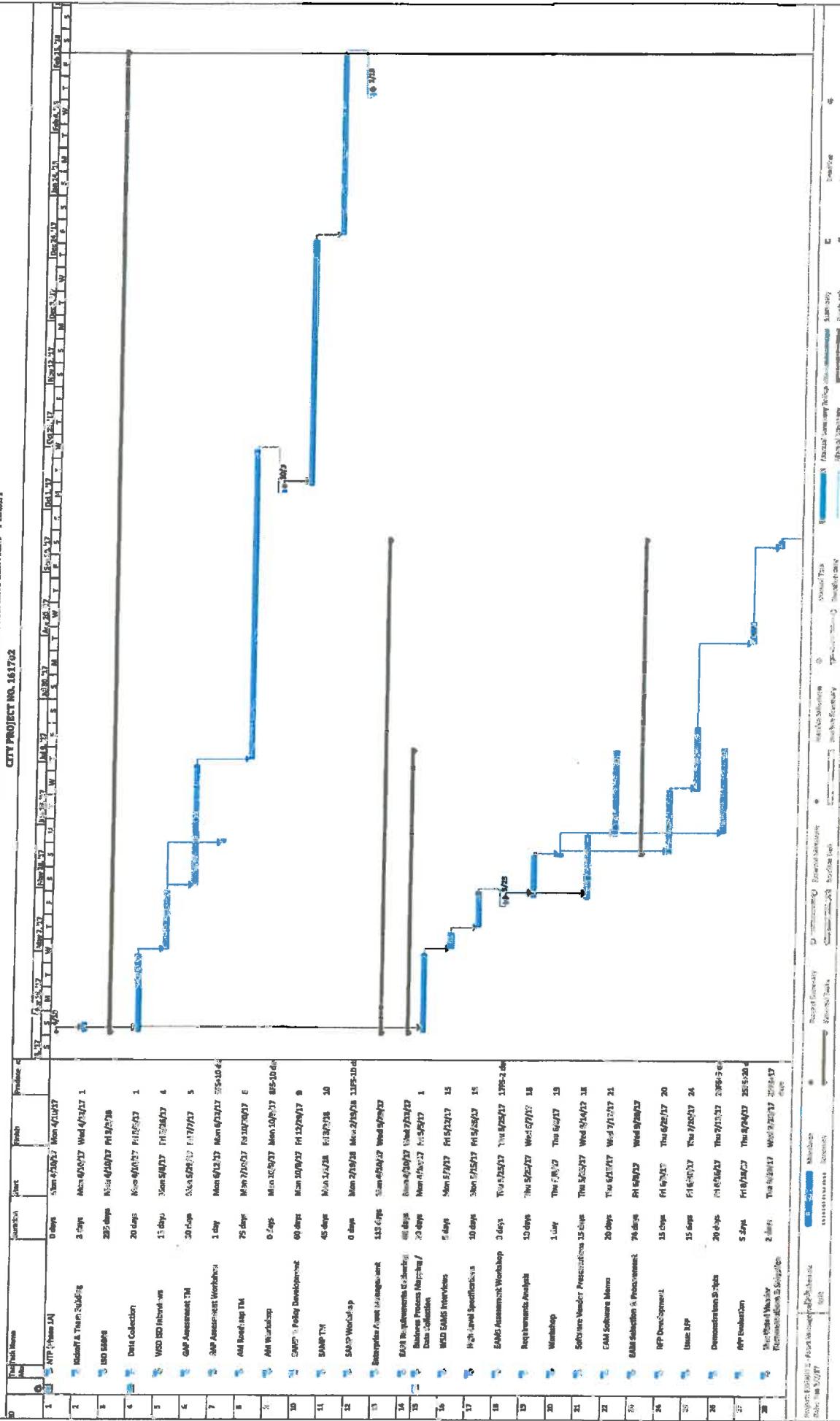


EXHIBIT D
Compensation
Scope of Services for City of Glendale
WATER SERVICES DEPARTMENT ASSET MANAGEMENT SYSTEM
ASSESSMENT SERVICES – PHASE I
CITY PROJECT NO. 161702

METHOD AND AMOUNT OF COMPENSATION

Method of payment is hourly, based on hourly rates and reimbursement for expenses.

NOT-TO-EXCEED AMOUNT

The total amount of compensation paid to Consultant for full completion of all work required by the Project during the entire term of the Project must not exceed \$485,090 for professional services.

DETAILED PROJECT COMPENSATION

Detailed project compensation by Task is included in the following exhibit.

Exhibit D Compensation Asset Management System City of Glendale		
Task	Description	Fee
100	PROJECT MANAGEMENT	
	General Management & Administration	\$13,880
	Kick-off & Team Building	\$21,940
	Subtotal	\$35,820
200	ISO ASSET MANAGEMENT SYSTEM	
	Data Collection & Review	\$16,900
	WSD ISO Interviews	\$26,580
	Asset Management Maturity Assessment	\$17,920
	Gap Assessment Workshop	\$13,780
	Gap Assessment TM	\$17,280
	AM Roadmap Workshop	\$16,630
	Roadmap TM	\$27,420
	SAMP and Policy Development	\$71,740
	SAMP TM	\$6,180
	Subtotal	\$224,850
300	ENTERPRISE ASSET MANAGEMENT SYSTEM	
-	Data Collection & Review	\$12,980
-	WSD EAMS Interviews	\$17,700

Task	Description	Fee
-	High-Level Software Needs Specifications	\$14,380
-	EAMS Assessment Workshop	\$12,970
-	EAMS Software Packages Evaluation & Workshop	\$18,080
-	EAMS Software Pre-RFP Vendor Meetings	\$13,250
-	EAMS Assessment / Software Package TM	\$18,040
-	EAMS Procurement Docs & Software Selection Assistance	\$21,160
Subtotal		\$128,560
	REIMBURSIBLE EXPENSES	\$45,860
	BLACK & VEATCH PHASE I SUBTOTAL w/o ALLOWANCE	\$435,090
	ALLOWANCE	
A	Owner's Allowance	\$50,000
Subtotal		\$50,000
	BLACK & VEATCH PHASE I TOTAL w/ ALLOWANCE	\$485,090
	The level of effort for future phases will be estimated at a later date.	

Notes:

1. Expenses include delivery such as Courier, Fed Exp and UPS, travel costs, including meals, lodging, and travel mileage at IRS approved rates, reproduction (printing, reproduction of deliverable).
2. The level of effort estimate is based on data currently provided by the City. Unforeseen conditions which require additional Engineer / subconsultant services will be considered as supplemental services that will be performed following scopes of services and level of effort negotiations as required and approval by the City.