



RESOLUTION
(11 - 2020)

**A RESOLUTION OF THE FAIRVIEW CITY COUNCIL AUTHORIZING
THE CITY ADMINISTRATOR TO ENTER INTO A PROFESSIONAL SERVICES
CONTRACT FOR ENGINEERING AND RELATED PROFESSIONAL SERVICES
FOR THE SOURCE FIRM CAPACITY IMPROVEMENTS (WELL NO. 10) PROJECT**

WHEREAS, in 2016 the City Council adopted the City's Water System Master Plan; and

WHEREAS, Source Firm Capacity improvements were deemed necessary to plan for future growth; and

WHEREAS, the City received proposals to perform engineering and related professional services in response to the 2019 Request for Qualifications for Engineering Services; and

WHEREAS, a Qualifications Based Selection procedure detailed in OAR 137, Division 48 was followed as specified in the City's Contracting Rules; and

WHEREAS, Murraysmith, Inc. was selected based on expertise, project understanding, responsiveness, previous work samples and other relevant factor to provide engineering services; and

WHEREAS, Murraysmith, Inc., desires to enter into a contract with the City of Fairview for professional engineering services for the Well No. 10 project

NOW, THEREFORE, BE IT RESOLVED BY THE FAIRVIEW CITY COUNCIL AS FOLLOWS:

Section 1 The Fairview City Council hereby authorizes the City Administrator to enter into a Professional Services Contract with Murraysmith, Inc. for the Well No. 10 Project for the City of Fairview for work described in the attached Exhibit "A".

Section 2 This resolution is and shall be effective from the day of its passage.

Resolution adopted by the City Council of the City of Fairview, this 18th day of March, 2020.

ATTEST

Mayor, City of Fairview
Brian Cooper

City Recorder, City of Fairview
Devree Leymaster

03-20-2020

Date

EXHIBIT A

SCOPE OF WORK NEW PRODUCTION WELL NO. 10 CITY OF FAIRVIEW

Project Understanding

The City of Fairview (City) obtains its water supply from three active production wells (Wells 5, 8, and 9) completed in the Sand and Gravel Aquifer (SGA). These active production wells supply water to the lower pressure zone Reservoirs No. 1 and 3. Liquid sodium hypochlorite is injected at each well to maintain a chlorine residual in the distribution system. In addition, water produced by Well 8 is treated to reduce iron and manganese concentrations that exceed aesthetic standards. Booster pumps transfer water from the lower pressure zone to the upper pressure zone Reservoir No. 2.

In the updated City Water System Master Plan completed by Murraysmith and GSI, one of the key recommendations was the construction of a new groundwater production source designated as Well 10 to provide firm capacity to satisfy maximum day demand conditions through build-out and provide a secondary back-up supply to the upper pressure zone. In addition, this new source will provide for the decommissioning of Wells 6 and 7 which are currently on backup status due to the presence of halogenated volatile organic contaminants in the aquifer (Well 6) and concentrations of iron and manganese which exceed secondary maximum contaminant levels (Well 7).

The GSI Well 9 siting investigation in 2007 provided the basis of siting the proposed Well 10 based on the following site selection criteria:

- Located in the upper pressure zone
- Proximity to existing water transmission mains
- City-owned property
- Adequate separation from existing operational production wells to minimize interference
- Favorable hydrogeology between known productive aquifer conditions at 223rd Avenue/Glisan Street and Well 9/5 north on 223rd Avenue

Recent coordination efforts between GSI and the City confirmed the Multnomah Detention Pond property as the preferred Well No. 10 siting alternative. There were no other viable sites identified in the upper pressure zone with a similar combination of features. The other alternative sites identified along Glisan Street do not have adequately sized transmission mains and are constrained by wetlands.

The project scope is divided into two phases. Phase 1 Preliminary Design will include elements of Tasks 1 – 6 covering property owner outreach and public involvement; environmental permitting review; land use permitting; well and site improvements preliminary design. Following the completion of Phase 1, the construction cost estimate will be updated and the final design and construction scope confirmed prior to proceeding to Phase 2 which includes well drilling and testing, final design, bidding and construction phase services. The fee estimate (Attachment A) provides a summary of Phase 1 and 2 tasks and budget subtotals.

Scope of Services

Task 1 – Project Management

Objective

Provide overall leadership and team strategic guidance aligned with City staff objectives. Coordinate, monitor, and control the project resources to meet the technical, communication, and contractual obligations required for developing and implementing the project scope.

Activities

1.1 Invoices/Status Reports

Consultant will prepare monthly invoices, including expenditures by task, hours worked by project personnel, and other direct expenses with the associated backup documentation. Monthly status reports will accompany each invoice and include comparisons of monthly expenditures and cumulative charges to budget by task.

1.2 Project Management and Coordination

Consultant will maintain communication with the City via voice and email communication. Consultant will coordinate with subconsultants on specific tasks, scope, and budget. Internal progress meetings will be conducted as appropriate.

1.3 Project Meetings

Schedule and attend project meetings at the City of Fairview at appropriate intervals based on design and permitting activities. Meetings will include, at a minimum, preliminary site plan development, land use permitting, and deliverable review meetings. Meetings associated with public involvement, land use planning, and well construction are included in individual tasks.

Deliverables

1. Monthly invoice and status reports
2. Meeting agendas and minutes for all meetings attended under this task

Assumptions

1. Consultant assumes a Notice to Proceed date by March 25, 2020.
2. Schedule and attend up to six (6) meetings with the City's Project Manager.
3. Project duration of 24 months.

Task 2 – Property Owner Outreach and Public Involvement

Objective

Assist the City with property owner outreach and public involvement efforts.

Activities

2.1 Anthem Church and Fairview Village HOA Outreach

Assist City in outreach to the owners of the Anthem Church property that abuts the north end of the Multnomah Detention Pond property. The proposed well drilling, construction, and permanent site improvements will benefit from an easement through this property as there is full northern access to the parcel and established access to NE 223rd Avenue. Attend Fairview Village HOA meeting. All-County Surveyors to prepare easement legal description.

2.2 Informational Fact Sheet

JLA and Murraysmith will prepare a one-page project informational fact sheet. The fact sheet will provide a general project overview, preliminary site layout, schedule, and project contact information. The fact sheet is intended to be shared during meetings with the community.

2.3 Open House Coordination and Attendance

Coordinate, attend, and document an open house for the community to learn more about the project. This meeting will be an informal, drop-in style open house with an opportunity for area residents to view informational displays and talk with members of the project team. Displays will include topics such as the project overview, purpose and need, timeline, construction methodology, and impacts to Multnomah Detention Pond. JLA will prepare a postcard notification.

Deliverables

1. Full color project fact sheet, two-sided on 8 1/2 x 11 paper
2. Open house notification postcard
3. One easement legal description and map

Assumptions

1. City to prepare stakeholder database including area resident contact information.

2. JLA to prepare open house postcard notification. Printing and mailing to be completed by the City. JLA will not establish a project website, City may use fact sheet content to develop web page associated with City website if desired.
3. Murraysmith representative will attend one community open house and one HOA meeting.

Task 3 – Environmental Permitting Review

Pacific Habitat Services (PHS) will conduct an assessment of existing conditions within the Multnomah Detention Pond property, which will include a wetland determination. Once the existing conditions are known, PHS will review whether federal, state or local permits are necessary to complete final design and construction based on the identified improvement alternatives in Task 5. Work will include the review of City's Chapter 19.106 Natural Resource Regulations to assess local permitting requirements.

Deliverables

1. Wetland determination documentation and identification of permitting requirements.

Assumptions

1. No impacts to Fairview Creek, wetlands or critical areas are anticipated that require permitting or mitigation.

Task 4 – Well 10 and Sentinel Well Design and Construction

Objective

GSI to provide professional services to the City for the planning, permitting, design, and construction management services for a new groundwater supply production well and construction and initial sampling of a deep sentinel well. A key element of this task is the approach to obtaining a variance from Oregon Health Authority Drinking Water Services (OHA-DWS) for sanitary setback requirements that minimizes risks to the City.

Activities

4.1 Well Design

The primary objective of this task is to complete the planning and design work necessary to select a qualified drilling contractor for completion of one production well and one sentinel well, and to obtain OHA-DWS approval for a new well source. This task will include preparing design criteria and technical specifications that are suitable for competitive public bidding and submitting the initial plan review documents for a new well source to OHA-DWS.

Work items to be conducted under this sub-task include the following.

- Plan for and attend kickoff meeting to assess project logistical issues and to help identify alternatives and requirements related to utility locates, water and drill cuttings management, erosion control, water management, site security, work hours, noise restrictions, and safety.
- Review hydrogeologic and water quality conditions in the wellfield area, update the conceptual production well design, review and confirm selection of a site for location of the sentinel well, and develop a sentinel well design to be used in the bid procurement process.
- Produce 30% pre-design specifications with well design, recommended well drilling construction and development methods, site plan, well testing plan, requirements for water management, construction work sequence, and submit for review.
- Produce 90% specifications and submit for review.
- Prepare a bid evaluation table and engineer's estimate.
- Assist the City with integration of the technical specifications into the City's bid document.
- Prepare and submit the initial OHA-DWS plan review information for site plan approval of the City's new municipal production well, including:
 - Site plan
 - Well design and technical specifications
 - Land Use Compatibility Statement signed by local planning authority
 - Water right authorization for the new well

Prior to submittal of the plan review information, GSI will work with OHA-DWS and the Oregon Water Resources Department (OWRD) well construction staff to develop a review plan to facilitate OWRD signoff on the well seal and issuance of a setback variance by OHA-DWS. Communications, task management, and administrative support.

4.2 Well Drilling Bid Services

The primary objective of this task is to support the City with selecting a qualified drilling contractor for completion of one production well and a deep (SGA) sentinel monitoring well. This task will include coordinating and leading a pre-bid meeting and site walk, addressing questions that may arise during the bidding period, preparing addenda (if required), and reviewing and summarizing the bid results.

Work items to be conducted under this sub-task include the following.

- Contact qualified drilling contractors to solicit interest in the project.

- Prepare for and attend one pre-bid meeting and site walk.
- Assist the City during the bidding phase of the project, including addressing questions and preparing bid addenda.
- Conduct technical review of bids and provide the City with a summary of this review to assist with contractor selection.
- Provide communications, task management, and administrative support.

4.3 Production Well Construction and Testing Management Services

This task includes (1) final production well design services, and (2) oversight during and documentation of production well drilling, construction, and testing.

Work items to be completed as part of this task will include the following.

- Develop a project-specific health and safety plan.
- Coordinate utility locates and oversee shallow pre-excitation (e.g., air-knife or potholing) of the target well location to clear site of potential underground utilities prior to drilling.
- Coordinate the schedule and sequencing with the selected drilling contractor.
- Prepare for and attend onsite pre-construction meeting with contractor.
- Supervise collection of representative formation samples from the production well boring and submit to soil laboratory for grain-size analyses for final production well design.
- Develop a geologic log of the production well borehole based on visual inspection of drill cuttings, drilling action, and driller observations.
- Review and analyze grain-size distributions and provide recommendations for completion of the production well, including well seal depth, production casing set depth, screen interval(s), and well screen and filter pack design.
- Provide oversight during installation of production casing and the sanitary seal to verify casing setting and seal integrity conform to the final design specifications.
- Provide regular updates on the status of drilling, geologic conditions and casing/seal installation to OWRD well construction inspection staff and OHA-DWS, and coordinate interim review of the well construction for approval of the sanitary setback variance.
- Provide oversight during well screen and filter pack installation to ensure the screen assembly and filter pack material match specifications and are placed at the designed depths.

- Provide oversight during well development activities to monitor progress and effectiveness in removing fine-grained material in and surrounding the borehole to optimize performance and produce water low in turbidity and sand content.
- Coordinate and monitor a step-rate pumping test consisting of four 60 to 90-minute pumping steps to assess well performance and develop a target pumping rate for the constant-rate test.
- Coordinate and monitor a 24-hour constant-rate pumping test to evaluate aquifer productivity, collect design criteria for the permanent pumping system, evaluate presence/absence of hydraulic boundary conditions, and evaluate well interference conditions relevant to the long-term sustainable capacity of the production well and the City's other wells.
- Periodically measure field water quality parameters with calibrated instrumentation during constant-rate pumping test.
- Schedule water quality laboratory services, arrange a sample bottle order, and collect a water quality sample near the end of the constant-rate aquifer test to be submitted to a City-approved certified laboratory to test for Safe Drinking Water Act (SDWA) regulated constituents and general geochemical parameters (e.g., common ions).
- Observe and document well completion activities (e.g., plumbness and alignment testing, well video survey, well disinfection, and wellhead completion) to verify that no defects are observed in the construction and to document that the well is completed in accordance with the technical specifications.
- Prepare an as-built construction diagram of the completed production well.
- Provide the City with regular progress updates.
- Provide communications, task management, and administrative support.

4.4 Sentinel Well Construction and Sampling Management

The primary objective of this sub-task is to support the City with providing oversight and documentation of the completion and sampling of one SGA sentinel monitoring well. This task will include coordinating and leading a pre-construction meeting and documenting the drilling, construction, and sampling of the sentinel well.

Work items to be conducted under this task include the following.

- Coordinate the schedule and sequencing with the selected drilling contractor.
- Prepare for and attend an onsite pre-construction meeting with the contractor.

- Coordinate utility locates and oversee shallow pre-excitation (e.g., air-knife or potholing) of the target well location to clear site of potential underground utilities prior to drilling.
- Supervise collection of representative formation samples from the sentinel well boring.
- Develop geologic log of the sentinel well borehole based on visual inspection of drill cuttings, drilling action, and driller observations.
- Review and analyze the stratigraphy and provide recommendations for completion of the sentinel well, including well seal depth, casing set depth, screen interval, and well completion design.
- Provide oversight during installation of the sentinel well to ensure the screen assembly, filter pack material, and well seal materials match specifications and are placed at the designed depths.
- Provide oversight during well development activities to monitor fine-grained material and clarity of water produced from the well.
- Periodically measure field water quality parameters with calibrated instrumentation during development and purging of the well.
- Complete a one-time sampling event using a rented submersible environmental sampling pump (Grundfos Redi-Flow 2 or equivalent). Schedule water quality laboratory services, arrange a sample bottle order, and collect a water quality sample to be submitted to a City-approved certified laboratory to test for volatile organic compounds and general geochemical parameters (e.g., common ions).
- Prepare an as-built construction diagram of the completed sentinel well.
- Provide communications, task management, and administrative support.

4.5 Documentation

The objectives of this task are to document well drilling, construction, and testing and to support the OHA-DWS plan review process for permitting a new municipal drinking water supply source. GSI will prepare documentation related to well drilling, construction, and testing, including a summary technical report and excerpts from the report that will be provided to the City for future compilation with wellhead design information for submittal to OHA as part of the final source plan review. The report will contain the following elements, some of which will be developed in prior tasks.

- Production well information such as geologic log and well construction diagram (from Task 4.3)
- Sentinel well geologic log and as-built construction information (from Task 4.4)

- Aquifer testing information and results, including an evaluation of the potential for pumping to impact local groundwater users and surface waters
- Recommendations for estimated long-term pumping rates and general pump design parameters, including estimated pumping levels
- Summary of the production well and sentinel well water quality test results relative to SDWA drinking water standards (tasks 4.3 and 4.4)

Deliverables

1. Prepare 30% pre-design, 90%, and final specifications and well design.
2. Prepare and submit the initial OHA-DWS plan review information for site plan approval.
3. Prepare documentation, including a preliminary geologic log and facilitate submittal of an interim driller's well report to demonstrate completion of the production casing/sanitary seal in accordance with OWRD well construction standards for interim approval of a variance for sanitary setbacks.
4. GSI will prepare a summary technical report upon completion of the production well drilling and testing program for the City and to support the OHA plan review process for permitting a new municipal drinking water supply source. The report will contain the following elements.
 - 4.1 Production well information, such as geologic log and well construction diagram
 - 4.2 Aquifer testing information and results, and recommendations for estimated long-term pumping rates and general pump specifications
 - 4.3 Summary of the water quality test results relative to SDWA drinking water standards

Assumptions

1. City will incorporate the construction specifications into their contract documents or bid-shell and will advertise the request for bids.
2. City to coordinate and complete test pit excavation at proposed well head locations.
3. City will pay the OHA-DWS plan review submittal fee of \$3,300 for a new source.
4. The estimated cost to complete Task 4.2 is based on the following assumptions.
 - 4.1 One pre-bid meeting and site walk with prospective bidders.
 - 4.2 Up to two addenda may be needed.

- 4.3 City will make the final selection of the drilling contractor and provide award notice.
5. The estimated cost to complete Task 4.4 is based on the following assumptions.
- 5.1 Drilling and utility locate contractor fees are **not included** in this cost estimate. We anticipate the City will contract with the selected contractor(s) directly and pay the associated fees separately.
- 5.2 Water quality analysis will be completed by a City contract laboratory and will be direct-billed to the City.

Task 5 – Well 10 Site Improvements Preliminary Design

Objective

Preliminary engineering and design tasks are intended to initiate and advance well siting design to determine well location and support Task 6 Land Use approvals. Subtasks are detailed as follows.

Activities

5.1 Existing Stormwater Facility Evaluation

The existing Multnomah Detention Pond associated with Fairview Village is identified in the City's Consolidated Stormwater Management Plan for enhanced water quality treatment and flow control. This task will include analysis and preliminary design to bring the system up to current stormwater management requirements. Review available design and construction information for the existing stormwater facility and confirm as-constructed conditions.

Prepare preliminary design calculations and planting plan for the stormwater facility conforming to the City's current design standards and the Fairview Creek Stormwater Master Plan Addendum 2018. Design will integrate the Master Plan's proposed solution and consider impacts of the well head and control/treatment building.

5.2 Supplemental Survey

All-County Surveyors will complete topographic and utility survey along NE 223rd Avenue for proposed well discharge connections to the existing water transmission main. Survey to tie-in any PHS identified environmental elements. Prepare an updated Existing Conditions Map showing the above items that can be used for design purposes.

5.3 Develop Preliminary Site Plan Improvement Alternatives

Under this task, develop 1-2 alternative Multnomah Detention Pond site improvement concepts incorporating the proposed well, electrical/treatment building, and park enhancement opportunities. Alternatives will consider the following elements.

- Well facility siting
- Stormwater improvements
- Park enhancement opportunities
- Landscaping improvements

5.4 Preliminary Well Facility Design

Preliminary Pump Selection – Based on estimated well production volume, system hydraulics, and well drawdown, determine pumping system head and flow conditions. From this analysis develop a preliminary system head curve and select a pump that meets the pumping conditions and the diameter that is compatible with the installed well casing.

Preliminary Well Building Design – A new well building will be designed through the 30% design level and be suitable for use with the City land use process. The following basic layout and equipment assumptions will be confirmed with City staff under this task.

- The control building will include an electrical room and chemical rooms to reflect the design layout and architecture of the existing Well 9 facility.
- Siting of the building will include provisions for construction of a future iron and manganese water treatment process building (if required).
- Control building will meet Oregon well construction standards and Oregon Specialty Building Codes.
- Well will not be operated with routine pump-to-waste. Provisions for temporary pump-to-waste piping will be provided per OAR (Oregon Administrative Rules) requirements.
- Building controls and instrumentation needs will be reviewed with the City’s system integrator and City staff.
- Electrical service requirements will be investigated with PGE.
- Standby power will be provided. A diesel standby generator is assumed.

5.5 Develop 30% Preliminary Site Plan Improvements Package

Murraysmith will develop preliminary drawings for review by the City. Preliminary drawings will include proposed well discharge connections to upper and lower pressure zones, overall well site layout, well building architectural/mechanical layout, and well building architectural elevations. Preliminary drawings will also include improvements to the Multnomah Detention Pond property aesthetics including stormwater and landscaping. Plan sheets shall be 22”x34”. Drawings will be prepared to accommodate the Conditional Use Permit requirements detailed in Task 6.1 below.

Preliminary cost estimates will be developed for proposed improvements based on established preliminary design concepts and current construction market conditions for the well site and

Multnomah Detention Pond improvements, the well drilling work, system integration work, and well discharge main construction.

Deliverables

- Preliminary Design Technical Memorandum with preliminary drawings and cost estimates.

Assumptions

- Well pump will be a submersible pump discharge head with piping configuration to accommodate at treatment building.
- Site storm drainage improvements will be identified per City Standards. No off-site storm piping will be required.
- If required, treatment process backwash water will be routed to the existing sanitary sewer.
- City to complete utility pothole investigation for water crossing of 223rd Avenue.
- Site landscaping will meet the requirements of the appropriate City Development Code.
- All well facilities will be sited on the City-owned Multnomah Detention Pond property. City will identify all possible access easements prior to the initiation of preliminary design.

Task 6 – Land Use Application and Permitting Support

Objective

Work under this task provides for the support of City Planning in obtaining required permits and approvals from the City of Fairview, OHA, and other agencies, as necessary. Construction of a new public utility building and well head on the property will be subject to a Type III Conditional Use review process. The City will lead the application process and Murraysmith will provide assistance to the City.

Activities

6.1 Type III Land Use Application Support

Assist the City in preparation of the Type III Conditional Use Permit application. Prepare required application submission requirement information outlined in Section 19.440.300 of the Fairview Municipal Code, including formatting of preliminary design sheets developed under Task 5 and additional application specific drawings including the Existing Site Conditions plan. Kittleson & Associates to complete a preliminary transportation assessment associated with conditional use. The City will address all narrative report planning and code related compliance items supplemented with the Murraysmith technical narrative.

6.2 Final Design Permitting

Murraysmith will assist the City with final design permitting. Anticipated permitting tasks include final stormwater plan, grading and ESC permit, and County utility permit.

Deliverables

1. Preliminary design drawings for Type III Conditional Use application package
2. Project narrative technical discussion
3. Assistance with final design permitting

Assumptions

1. The Type III application process is anticipated to take 120 days.
2. Attend up to one public meeting with the City and prepare supporting materials.
3. The development of any future park informational signs is not included in this effort.
4. A cultural resources investigation is not required.
5. A Traffic Impact Study will not be required.

Task 7 – Final Design

Objective

Based on the results of the well drilling, issuance of Conditional Use approval, and City input on preliminary design, Murraysmith will prepare final construction drawings, technical specifications, and contract documents for bidding and construction of the proposed well facility. Consultant will submit plans and specifications for City review at the 60%, 90%, and 100% completion levels, incorporating City review comments from each prior submittal. Construction drawings and special technical specifications will be in accordance with City standards, policies and procedures. Subtasks include the following.

Activities

7.1 60% Design Plans, Specifications and Engineer's Estimate (PS&E)

Prepare 60% plans and engineer's opinion of cost for City review including Table of Contents outline of front end documents and technical specifications. Attend design review meeting as provided under Task 1.

7.2 90% Design PS&E

Prepare 90% plans, specifications, and engineer's opinion of cost for City review. Comments from the 60% review will be incorporated into the 90% submittal. This task includes the preparation of front end contract documents using the City's most recent standard forms and technical specifications in 48-division CSI format. Attend design review meeting as provided under Task 1.

7.3 Final Contract Documents

The final 100% design submittal will be advanced from the 90% submittal, incorporating City review comments. Work under this subtask includes preparing final contract documents, technical specifications, and drawings required for bidding the project.

Deliverables

- Signed electronic scalable set of plans (11"x17" and 22"x34", PDF format)
- Signed contract documents and technical specifications (PDF format)
- Opinion of Cost (PDF format) at the 60%, 90% and final design submissions

Assumptions

- Contract documents will use the City's front-end with CSI format technical specifications.
- Design submittal for City review will be provided at the 60% and 90% completion levels.
- Geotechnical critical facility analysis not required.
- City to contract directly with Kip Edgley for I&C design coordination, PLC, and SCADA integration services.

Task 8 – Bidding Phase Services

Objective

Under this task, Murraysmith will provide assistance to the City during the public bid contractor selection process. Subtasks are as follows.

Activities

8.1 Bidding Assistance

Work under this subtask includes assisting the City with advertising the project and obtaining construction contractor proposals, coordinating with the City and preparing a pre-bid meeting, assisting the City as needed with negotiation of the final construction contract price with the selected contractor, and assisting City staff as needed with preparation and execution of the construction contract documents and receipt and review of bond and insurance documents.

8.2 Respond to Bidder Inquiries

Work under this subtask includes receiving and responding to all plan holder and bidder questions to clarify intentions and/or requirements of construction plans and/or specifications. A log of all interaction with plan holders and bidders will be maintained that includes the names of the plan holder/bidder, question(s) asked, response(s) given, and the date and time of contact.

8.3 Prepare Addenda

Work under this subtask includes preparing text of any addenda determined to be necessary to clarify the intent and/or requirements of the contract documents. All addenda shall be approved by the City project manager prior to being issued.

8.4 Pre-Bid Conference

Work under this subtask includes attending a pre-bid conference and preparing a meeting summary for City distribution to all plan holders and conference attendees.

8.5 Bid Opening & Award

Work under this subtask includes assisting City staff with the evaluation of bids and providing a written recommendation of award for the construction contract. Bid opening will be conducted at the City offices and Murraysmith will attend.

Deliverables

- Log of bidder questions and responses
- Bidding addenda as required
- Recommendation of Award letter

Assumptions

- City will lead project advertisement, distribution of bid documents, and maintaining the plan holders list.
- City will issue addenda.
- Murraysmith will attend the bid opening.

Task 9 – Construction Phase Services

Objective

The City will take the lead in construction administration and inspection. Murraysmith will provide supplemental construction phase services under this task, including the following subtasks.

Activities

9.1 Preconstruction Conference

Prepare an agenda and invitation list for a preconstruction conference and coordinate with the City regarding the conference details. Conduct the preconstruction conference, prepare a written conference summary and distribute the summary to all conference attendees.

9.2 Shop Drawings and Submittals

Receive and review shop drawings and other technical submittals such as equipment, materials of construction, performance data and certifications, laboratory test results, and technical manuals submitted by the contractor which are required by the contract documents. Provide all submittal documents and information to the City for concurrence review/approval. Maintain a submittal log and file. Submit complete submittal files to the City upon completion of the project. Consider and evaluate any alternatives or substitutions proposed by the contractor. Such reviews will be completed within 14 calendar days of receipt of submittals. Receive and review other submittals of the contractor including construction schedules, shop drawing/submittal schedules, lump sum price breakdowns, and other submittals required by the contract documents. For budgeting purposes, it is assumed that up to 35 submittals and resubmittals will be reviewed by the Consultant team.

9.3 Respond to RFIs

Provide clarification of the contract documents to the contractor based upon the contractor's written requests for information (RFI), verbal requests or as the need otherwise arises. Prepare written responses and drawings or sketches as necessary to the contractor to clarify the contract documents. Written responses to RFI will be completed within 2-3 calendar days of receipt of the contractor's RFI, but more time may be necessary depending on the complexity of the required clarification. For budgeting purposes, it is assumed that up to 8 RFIs will need to be reviewed and processed.

9.4 Construction Observation, Project Meetings and Site Visits

The City will provide day-to-day construction observation and Murraysmith will provide on-site observation for critical work or as requested by City staff. The structural engineer (PSE) will provide Building Code required observations. For budgeting purposes, it is assumed that project construction will require approximately 9 months of active construction for the overall project with approximately 12 site visits.

Periodic site visits by Consultant's project manager or project engineer will be conducted when significant construction is occurring, as important issues may need to be addressed, or as otherwise requested by the City. The purpose of these visits will be to address questions regarding the contract documents, assist with resolving project difficulties, review the progress of the work,

and review the construction work to confirm that it is proceeding in accordance with the requirements of the contract documents.

9.5 Claims and Protests

Notify the City in writing of any potential or actual claims or protests of the contractor. Coordinate with City staff and, if required, the City legal counsel regarding these matters. For budgeting purposes, it is assumed that no engineering time will be allocated for this item. Any additional engineering services associated with claims or potential claims will be outside of this work program and budget.

9.6 Testing & Start-Up / Final Inspection & Project Close-Out

Coordinate with the contractor and the City for testing and start-up of the facilities. Identify substantial completion of the project and submit a certificate of substantial completion with the City concurrence. Prepare for and conduct a final inspection of the project with representatives of the City. Prepare a “punch list” of items of work remaining to achieve final completion of the project and to prepare for the City’s acceptance of the project. Recommend final payments to the contractor as appropriate. Recommend procedures and timing of acceptance of the project. Advise the City and the contractor of the dates for any warranty periods as established in the contract documents.

9.7 Record Drawings

Prepare record drawings of the project based upon the construction records of the contractor and Consultant’s on-site representative (electronic AutoCAD and PDF format).

Deliverables

- Pre-conference meeting agenda and minutes
- Submittal reviews
- Observation reports
- Record Drawings, in electronic format (no hard copies)

Assumptions

- Construction contract claim and protests outside this scope of work
- Special inspection procurement and coordination by others
- Change orders will be reviewed and processed by City staff.
- Progress payment applications will be reviewed and processed by City staff.
- O&M manuals will be provided by the construction contractor.
- City to contract directly with Kip Edgley for PLC and SCADA integration services.

Fee Estimate

Work will be performed on a time and expense basis with a total not to exceed amount of \$439,394 (Attachment A) in accordance with the firm's current standard Schedule of Charges in effect at the time the work is performed (Attachment B).