PROGRESSIVE DESIGN-BUILD CONTRACT DOCUMENTS

for the Design and Construction of

Replacement of 2.0 MG Reservoir Project

Contract No. W-481

Project No. W-481

PROGRESSIVE DESIGN-BUILD AGREEMENT
REPLACEMENT OF 2.0 MG RESERVOIR PROJECT

Contract No. W-481

Project No. W-481

PARTIES:

City of St. Helens, Oregon ("City")
265 Strand Street
St. Helens, Oregon 97051
(503) 397-6272

Emery & Sons Construction Group, LLC ("Design-Builder")
3841 Fairview Industrial Dr, SE. Ste 150
Salem, OR 97302
(503) 588-7576

RECITALS:

A. City selected Design-Builder to perform work for the City by a competitive proposal process. Design-Builder's Proposal earned the highest total score from all proposals received.

B. The applicable requirements of RFP No. W-481 is hereby included in this Agreement by reference.

C. This Agreement contemplates Pre-Construction Design, including Preliminary Engineering and Construction Document Development for the Project. The Parties intend for the Design-Builder to later submit a proposal for the completion of design and construction, based on the Construction Documents. If the parties reach an agreement as to the terms of the Design-Builder's Construction Proposal, the parties will enter into a Guaranteed Maximum Price Amendment ("GMP Amendment") for the construction of the Project, based on the terms of this Agreement.

AGREEMENT:

1. DEFINED TERMS

Unless defined in this Agreement, capitalized terms have the meanings assigned to them in the General Conditions.

2. TERM; SCOPE OF WORK; INCORPORATION OF DOCUMENTS

A. Term. This contract shall be effective when signed by both parties. It shall remain in effect until the work on the project has been completed, the improvement accepted by the City, and the warranty period has expired. The expiration of the term does not affect any right that arose prior to expiration, and terms that by their nature survive expiration shall remain in effect after expiration.
Work shall commence as stated in the notice to proceed from City to Contractor.

B. The Work includes the design and construction of the Project and any portion thereof required to complete the Project in its entirety. Work, prepared by Design-Builder and accepted by the City in writing, shall proceed at the direction and sole discretion of the City and all provisions of this Contract apply to the Project, or portion thereof, as it proceeds at the sole direction of the City.

C. Collaboration. The Parties intend through this Agreement to establish a collaborative environment where all parties have the opportunity to contribute their best efforts for the benefit of the Project as a whole rather than the benefit of individual parties. The Parties agree to work together to create a culture of open and honest communication. The Parties agree to resolve disputes at the lowest level possible, including following the dispute resolution provisions in this Agreement. The Parties agree to integrate the design and construction teams as early as possible.

D. The Design-Builder must provide all things necessary for the complete performance of the Work, which includes, but is not limited to, Preliminary Engineering, Construction Document development, and, at the direction of the City, Design Development and / or preparation of the Construction Proposal.

E. Upon execution of the GMP Amendment, if any, the Work may include, but not be limited to, Design Development, Construction Document development, and performance of construction Work for the Project.

F. The Work must be performed in accordance with the terms of the Contract.

G. This Contract consists of the main text of this Progressive Design-Build Agreement and the following exhibits:

1. Exhibit 1, Design-Build General Conditions

2. Exhibit 2, Guaranteed Maximum Price Amendment

3. Exhibit 3, Scope of Work

4. Exhibit 4, Design-Builder’s Proposal

H. In addition, the following documents are part of the Design-Build Documents and are binding on the parties:

1. Addenda to Contract Documents

2. Contract change orders

3. Project Special Provisions and Technical Specifications

4. Design-Builder's Proposal

5. Plan Drawings and Construction Documents, as they are developed by Design-Builder and approved by the City

6. General and Supplementary Conditions of the Contract

7. Outside agencies permits/requirements as may be required by law or loan agreements

8. City of St. Helens Municipal Code, Engineering Manual

9. City Engineering Standard Technical Specifications

10. 2021 Oregon Standard Specifications for Construction

11. 2021 Oregon Standard Drawings and Details

12. Reference Specifications.

I. The City's Engineering Division Manager, or designee, will resolve any discrepancies between these documents. The following order of precedence (highest to lowest) shall apply to any review by the Engineering Division Manager or reviewing court. The terms of this Contract and all exhibits, as set forth in Section 2.E., control over any inconsistent provision of any document other than a Change Order because this Contract was prepared by the City Attorney's office and other contract documents may be prepared by consultants or other third parties who are not aware of the City's contract policies.

1. Authorized Amendments, Change Orders and Change Directives (in that order)

2. This Contract, including exhibits

3. Permits applicable to the Project and restrictions imposed by funding sources (in that order)

4. Supplemental Conditions

5. Project Special Provisions and Technical Specifications

6. City of St. Helens Engineering Manual

7. City Engineering Standard Technical Specifications

8. Special Provisions to the 2021 Oregon Standard Specifications for Construction

9. 2021 Oregon Standard Specifications for Construction

10. Construction Documents, as they are developed by Design-Builder and approved by the City

11. City of St. Helens Standard Drawings

12. 2021 Oregon Standard Drawings and Details

13. Figure dimensions, and dimensions that can be computed, on plans shall take precedence over scale dimensions.

14. Design-Builder's Proposal

J. Nothing in this Agreement shall be considered as an acceptance of the terms of the Proposal if the terms of the Proposal conflict or are otherwise incompatible with the express terms contained in this Agreement and Attachments or in the City's request for proposals.

K. Design-Builder acknowledges that it has or has access to all the contract documents referred to in this Section and agrees to comply with all the contract documents.

3. EXAMINATION OF THE SCOPE OF WORK AND THE SITE

By executing this Agreement, the Design-Builder represents that its representatives have reviewed the City's Scope of Work and visited the Project site, become familiar with the local conditions under which the Work is to be completed, correlated their personal observations with the requirements of the Contract, and confirmed that the information contained in the City's Scope of Work complies with applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of public authorities.

4. DESIGN-BUILDER'S DUTIES AND STATUS

A. General Duties

1. The Design-Builder recognizes the relationship of mutual trust and confidence established between the Design-Builder and the City by the Agreement. With respect to all construction activities, the Design-Builder shall furnish its skill, expertise, judgment, and cooperation in furthering the interests of the City. With respect to all design and professional service activities, the Design-Builder shall apply the technical knowledge and skill applied by similar designers and professionals in good standing where the Project is located.

2. The Design-Builder must comply with any applicable licensing requirements in the jurisdiction where the Project is located, including but not limited to ORS 701.026(1).

3. The Design-Builder shall perform the Work in accordance with the Design-Build Documents. The Design-Builder shall not be relieved of the obligation to perform the Work in accordance with the Design-Build Documents by the activities, tests, inspections or approvals of the City.

4. The Design-Builder agrees to furnish efficient business administration and superintendence, to use every effort to keep an adequate supply of design professionals, workers and materials on hand at all times, and to perform construction activities for the Work in the best and most sound way and in the most expeditious and economical manner consistent with the interests of the City.

5. The Design-Builder's Designer shall perform its services as expeditiously as is consistent with such professional skill and care and the orderly progress of the Project. The Design-Builder will cooperate with the Engineering Division Manager or designee and Owner's Representative and utilize the Design-Builder's professional skill, efforts and judgement in furthering the interests of the City; and to perform the Work in conformance with the terms and conditions of the Design-Build Documents in an expeditious and economical manner consistent with the interests of City.

6. When the Design-Build Documents require that a Subcontractor provide design professional services or certifications related to materials or equipment, or when the Design-Builder in its discretion provides such design services or certifications through a Subcontractor, the Design-Builder shall cause such design professional services or certifications to be provided by a properly licensed design professional, whose stamp and signature shall appear on all drawings, calculations, specifications, and certifications.

B. Project Staffing

1. The following persons will serve in the following roles for the Design-Builder:

   a. Project Principal: Arin Atiyeh, Emery & Sons Construction Group

   b. Preconstruction Lead: Brian Vinson, PE, Emery & Sons Construction Group

   c. Construction Lead: Jenny Shipman, Emery & Sons Construction Group

   d. Construction Superintendent: Matt Atiyeh, Emery & Sons Construction Group

   e. Scheduler: Arin Atiyeh, Emery & Sons Construction Group

   f. Safety Director: Jeremy Lawson, Emery & Sons Construction Group

   Unless they leave the employ of the Design-Builder, the above-named persons must serve in these positions throughout the duration of the Design-Builder's performance of the Contract except as approved otherwise in writing in advance by the City. Persons named to replace those set out above must be approved in writing in advance by the City, and shall shadow the person they are replacing at no cost to the City for at least two-weeks prior to stepping into the role. The City's approvals as required by this subsection will not be unreasonably withheld.

   The following person or entity will serve as the Designer for the Design-Builder:

   a. Design Project Manager: Peter Olsen, PE, Keller Associates

   b. Civil Design Lead: Shannon Williams, PE, Keller Associates

   c. Structural Design Lead: Brandon Keller, PE, SE, Keller Associates

   d. Geotechnical/Foundation Engineering: Elliot Mecham, PE, Shannon Wilson

   e. Mechanical Lead: Jason King, PE Keller Associates

2. The Design-Builder may not employ personnel, or contract with Designers, Subcontractors or suppliers, to whom the City has made reasonable and timely objection. The Design-Builder will not be required to contract with anyone to whom the Design-Builder has made reasonable and timely objection.

3. If the City has reasonable objection to a person or entity proposed by the Design-Builder, the Design-Builder must propose another to whom the City has no reasonable objection. If the rejected person or entity was reasonably capable of performing the Work, the Guaranteed Maximum Price and Contract Time will be increased or decreased by the difference, if any, occasioned by such change, and an appropriate Change Order shall be issued before commencement of the substitute person or entity's Work. However, no increase in the Guaranteed Maximum Price or Contract Time will be allowed for such change unless the Design-Builder has acted promptly and responsively in submitting names as required.

4. If the Design-Builder changes any of the Designer(s) identified above or Subcontractors identified in the GMP Amendment, the Design-Builder must notify the City and provide the name and qualifications of the new Designer(s) or Subcontractors. The City may reply within 14 days to the Design-Builder in writing, stating (1) whether the City has reasonable objection to the proposed Designer or Subcontractors or (2) that the City requires additional time to review. Failure of the City to reply within the 14-day period constitutes notice of no reasonable objection.

5. Except for those persons or entities already identified or required in the GMP Amendment, the Design-Builder, as soon as practicable after execution of the GMP Amendment, must furnish in writing to the City the names of persons or entities (including those who are to furnish materials or equipment fabricated to a special design) proposed for each principal portion of the Work. The City may reply within 14 days to the Design-Builder in writing stating (1) whether the City has reasonable objection to any such proposed person or entity or (2) that the City requires additional time for review. Failure of the City to reply within the 14-day period constitutes notice of no reasonable objection.

C. Submittals

1. Construction Documents, Shop Drawings and other submittals must be prepared by a licensed professional. Construction Documents, Shop Drawings and other submittals related to the Work designed or certified by such professionals must bear such design professional's stamp and signature. The City is entitled to rely upon the adequacy, accuracy and

completeness of the services, certifications or approvals performed by such design professionals.

2. The Design-Builder must direct specific attention, in writing or on resubmitted design and Construction Documents or other submittals such as Shop Drawings, Product Data, Samples or similar submittals, to revisions other than those requested by the City on previous submittals. In the absence of such written notice, the City's approval of a resubmission will not apply to such revisions.

5. PRE-CONSTRUCTION DESIGN PHASE

A. Any information submitted by the Design-Builder, and any interim decisions made by the City, will be for the purpose of facilitating the design process and will not modify the Scope of Work or Design-Builder's proposal unless the City and Design-Builder execute a Change Order or the City issues a Change Directive specifically identifying the change to the City's Scope of Work.

B. The Pre-Construction Design, Phase 1, consists of the following subphases, as directed by the City in writing, for the Project ("Pre-Construction Design Phase"):

1. Preliminary Engineering

2. Construction Document Development

3. Construction Proposal.

Each of these subphases, found in RFP Tasks 1 through 3, is further defined below.

Throughout this Pre-Construction Design Phase, the Design-Builder will advise the City on proposed site use and improvements, designs, and selection of materials. The Design-Builder must also provide the City with recommendations, consistent with the City's Scope of Work, on constructability; availability of materials and labor; time requirements for procurement, design options, installation and construction; and factors related to construction cost including, but not limited to, costs of alternative designs or materials, preliminary budgets, life-cycle data, and possible cost reductions.

C. Preliminary Engineering

1. The Preliminary Engineering phase may include review and validation of previous engineering, documents, concept development, alternatives analysis, and site reconnaissance to support preliminary engineering efforts, as further specified in the Scope of Work. Preliminary Engineering may also include initiation of research, studies, and alternatives analysis

deemed necessary to support concept design as detailed in the Scope of Work prepared by the City in consultation with the Design-Builder, as well as preparation of a proposed price and schedule, and shall be consistent with the Design-Builder's Proposal except as specifically modified by the Scope of Work.

2. The Design-Builder shall schedule and conduct meetings with the City and any other necessary individuals or entities to discuss and review the Scope of Work to establish Design-Builder's preliminary evaluation of the Project or Subproject(s) and to provide any and all preliminary engineering required to design the Project, as detailed in the Scope of Work or determined by the Design-Builder, in consultation with the City, to be necessary to complete preliminary engineering for the Project. The Design-Builder shall not complete any technical analysis or evaluation without written approval from the City unless such analysis or evaluation is specifically authorized in the Scope of Work.

3. Preliminary Engineering shall result in a written report from the Design-Builder to the City for review.

4. The City will review the Design-Builder's written report and, if acceptable, provide the Design-Builder with written consent to proceed for the Project. If the City does not provide written consent to proceed, Design-Builder shall continue Preliminary Engineering unless otherwise directed by the City. The consent to proceed may include the City's direction on what documents the Design-Builder will prepare in the Construction Document Development subphase. The consent to proceed will not be understood to modify the Scope of Work unless the City and Design-Builder execute a Change Order or the City issues a Change Directive specifically identifying the change to the Scope of Work.

D. Construction Document Development

1. Upon the City's issuance of a written consent to proceed, the Design-Builder shall prepare and submit to the City for the City's written approval Construction Documents as specified in the written consent to proceed, sufficient to construct the Project, including but not limited to Drawings and Specifications. Deviations, if any, from the Preliminary Engineering or any other materials previously provided must be disclosed in writing and are subject to the approval of City.

2. Development and review of the Construction Documents including drawings, specifications and any required supplementals may include, pursuant to the written direction of the City:

a. Site plans, studies, plan alignments and profiles, utility plans, gradings plans, demolition plans and details as requested;

b. 30%, 60%, 90%, and/or 100% design; An updated schedule, including proposed design milestones; dates for receiving additional information from, or for work to be completed by, the City; anticipated date for the Design-Builder's Construction Proposal; and dates of periodic design review sessions with the City;

c. Outline specifications or sufficient drawing notes describing construction materials; and

d. Comprehensive written estimate of the cost to design and construct the Project based upon the current Design Development documents. Such written estimates must be submitted with the respective Design Development documents.

3. The Construction Documents must establish the quality levels of materials required. The Construction Documents must be consistent with the Design-Build Documents, including but not limited to the Scope of Work, and Preliminary Engineering, unless otherwise disclosed in writing, and must include all items necessary for the proper execution and completion of the Work and reasonably inferable from the Design-Build Documents, including but not limited to the Scope of Work, as being necessary to produce the indicated results.

4. The Design-Builder shall submit completed Construction Documents to the City for the City's approval. If the City discovers any deviations between the Construction Documents and the Design-Build Documents not previously disclosed by Design-Builder, the City will promptly notify the Design-Builder of such deviations in writing. Unless the City and Design-Builder execute a Change Order or the City issues a Change Directive specifically identifying the particular deviation and City's agreement with such deviation, the Design-Builder must correct the deviation and resubmit the Construction Documents. The Construction Documents shall not modify the Design-Build Documents, including but not limited to the Scope of Work, or Preliminary Engineering. Acceptance of the Design Documents will not constitute the City's acceptance of a deviation unless the deviation is specifically identified by the Design-Builder or included in a Change Order or Change Directive.

5. The City, Design-Builder, and its Designer will meet a minimum of twice a month until the completion of the milestone construction document submittal, as described in the City's written consent to proceed, for the Work to review scope, quality, budget and other issues.

6. Before completion of the Construction Documents for the Work, the City, Design-Builder, and its Designer will perform an internal review of the Construction Documents, the Design-Builder's schedule and any critical issues relating to scope, quality or budget. In addition to delivering to City three hard copies, including full-sized plan drawings, and one electronic PDF copy, of the Construction Documents for the Work, including but not limited to Drawings and Specifications, Design-Builder and Designer will make reasonable efforts to demonstrate to the City the scope and quality aspects of the design.

7. At the completion of the City's, Design-Builder's, and its Designer's Construction Documents review, the City will provide its written approval of the Construction Documents, including any revisions thereto made during the internal review. However, review or approval by City or its agents of design and Construction Documents shall not relieve Design-Builder to the extent of its liability for any damages resulting from or arising out of professional errors or omissions in the design and Construction Documents, except where City expressly directs such defective or deficient design and Design-Builder delivers to City its written objection thereto. Upon the City's written approval of Construction Documents, the Design-Builder, with the assistance of the City, shall prepare and file documents required to obtain necessary approvals of governmental authorities having jurisdiction over the Project.

8. If required by City, the Design-Builder shall obtain from each of the Design-Builder's professionals and furnish to the City certifications with respect to the documents and services provided by such professionals (a) that, to the best of their knowledge, information and belief, the documents or services to which such certifications relate (i) are consistent with the Scope of Work set forth in the Design-Build Documents, except to the extent specifically identified in such certificate, (ii) comply with applicable professional practice standards, and (iii) comply with applicable laws, ordinances, codes, rules and regulations governing the design of the Project in effect at the time of the applicable permit; and (b) that the City and its consultants are entitled to rely upon the accuracy of the representations and statements contained in such certifications.

9. In the sole discretion of the City, the City may elect to accept the Construction Documents as the Design-Builder's final submittal or to continue with Construction Document Development.

E. Design-Builder's Construction Proposal

1. Upon the City's issuance of a written consent directing the Design-Builder to proceed to this subphase, the Design-Builder must prepare and submit

to the City a proposal for completion of design and construction of the Project to the extent the City has given consent to proceed and requested a Construction Proposal. The Design-Builder's Construction Proposal must include the following as set forth in the written consent to proceed or otherwise determined in writing by the City:

a. Either:

i. A list of preliminary Construction Documents and other information, including the Design-Builder's clarifications, assumptions and deviations from the Scope of Work, upon which the Design-Builder's Construction Proposal is based; or

ii. A list of Construction Documents prepared by the Design-Builder under the Construction Document Design subphase the Design-Builder will use for construction of the Project.

b. The proposed Guaranteed Maximum Price for construction of the Project, including a written statement of the estimated Cost of the Work organized by trade categories, allowances, contingency, Design-Builder's Percentage Fee as proposed in Design-Builder's Proposal, and other items that comprise the Guaranteed Maximum Price in such detail and with such substantiation as City may reasonably require;

c. An enumeration of any assumptions and exclusions, if applicable;

d. A list of Design-Builder's key personnel, Subcontractors and suppliers;

e. The date on which the Design-Builder's Construction Proposal expires, which date must be at least 90 days after submission of the Design-Builder's Construction Proposal to the City; and

f. The Design-Builder's proposal, if any, for self-performed work and work to be performed by subcontractors without a competitive process, pursuant to Section 6.13 of the General Conditions ("Procurement Plan").

2. Upon the City's receipt of Design-Builder's Construction Proposal, the City and the Design-Builder agree to negotiate in good faith regarding the terms and conditions of the GMP Amendment, including but not limited to the amount of the adjustment to the Guaranteed Maximum Price. Without limiting the City's right to terminate this Contract, if the City and the Design-Builder are unable to agree on the terms and

conditions of the GMP Amendment, the City will have the right to one or more of the following actions:

a. Terminate this Contract pursuant to the General Conditions;

b. Terminate negotiations for the GMP Amendment;

c. Terminate Design-Builder's work for the Project;

d. Direct Design-Builder to prepare Construction Documents for 100% design under section 5.D. for the Project; and/or

e. Continue this Contract for the remaining Design Work, or other continuation of the Work under this Contract, in the City's sole discretion.

3. If the City terminates the Contract or any portion thereof, then (1) the City will continue to have the rights and obligations set forth in subsection 10.B regarding the ownership and use of the Work Product and (2) the City may obtain an assignment of some or all of the subcontracts and purchase orders (including but not limited to agreements with Designers). The amount of time allotted for negotiations and the timing of any termination will be determined in the City's sole discretion.

4. If the City and the Design-Builder agree on the terms and conditions of the GMP Amendment, the City and Design-Builder shall execute the GMP Amendment in the form set forth in Exhibit 2 with the blanks and other information completed in the normal course.

6. CONSTRUCTION PHASE

A. Phase 2 - Construction.

1. Design-Builder shall prepare and submit to the City for the City's written approval Construction Documents sufficient to construct the Project, or portions thereof, as directed by the City, including but not limited to Drawings and Specifications. Deviations, if any, from the Preliminary Engineering, previously prepared Construction Documents, and/or Scope of Work must be disclosed in writing and are subject to the approval of City.

2. The Construction Documents must establish the quality levels of materials required. The Construction Documents must be consistent with the Design-Build Documents, including but not limited to the Scope of Work, previously prepared Construction Documents, and Preliminary Engineering, unless otherwise disclosed in writing, and must include all

items necessary for the proper execution and completion of the Work and reasonably inferable from the Design-Build Documents, including but not limited to the Scope of Work, as being necessary to produce the indicated results.

3. The Design-Builder shall submit completed Construction Documents to the City for the City's approval. If the City discovers any deviations between the Construction Documents and the Design-Build Documents not previously disclosed by Design-Builder, the City will promptly notify the Design-Builder of such deviations in writing. Unless the City and Design-Builder execute a Change Order or the City issues a Change Directive specifically identifying the particular deviation and City's agreement with such deviation, the Design-Builder must correct the deviation and resubmit the Construction Documents. The Construction Documents shall not modify the Design-Build Documents, including but not limited to the Scope of Work, previously prepared Construction Documents, or Preliminary Engineering. Execution of the GMP Amendment will not constitute the City's acceptance of a deviation unless the deviation is specifically identified and described as such in the GMP Amendment. The failure of the City to discover any such deviations will not relieve the Design-Builder of the obligation to perform the Work in accordance with the Design-Build Documents.

4. The City, Design-Builder, and its Designer will meet a minimum of twice a month until the completion of the Construction Documents for the Work to review scope, quality, budget and other issues.

5. Before completion of the Construction Documents for the Work, the City, Design-Builder, and its Designer will perform an internal review of the Construction Documents, the Design-Builder's schedule and any critical issues relating to scope, quality or budget. In addition to delivering to City copies of the Construction Documents for the Work, including but not limited to Drawings and Specifications, Design-Builder and Designer will make reasonable efforts to demonstrate to the City the scope and quality aspects of the design.

6. At the completion of the City's, Design-Builder's, and its Designer's Construction Documents review, the City will provide its written approval of the Construction Documents, including any revisions thereto made during the internal review. However, review or approval by City or its agents of design and Construction Documents shall not relieve Design-Builder to the extent of its liability for any damages resulting from or arising out of professional errors or omissions in the design and Construction Documents, except where City expressly directs such defective or deficient design and Design-Builder delivers to City its written objection thereto. Upon the City's written approval of

Construction Documents, the Design-Builder, with the assistance of the City, shall prepare and file documents required to obtain necessary approvals of governmental authorities having jurisdiction over the Project.

7. If required by City, the Design-Builder shall obtain from each of the Design-Builder's professionals and furnish to the City certifications with respect to the documents and services provided by such professionals (a) that, to the best of their knowledge, information and belief, the documents or services to which such certifications relate (i) are consistent with the Scope of Work set forth in the Design-Build Documents, except to the extent specifically identified in such certificate, (ii) comply with applicable professional practice standards, and (iii) comply with applicable laws, ordinances, codes, rules and regulations governing the design of the Project in effect at the time of the applicable permit; and (b) that the City and its consultants are entitled to rely upon the accuracy of the representations and statements contained in such certifications.

B. Construction

1. Except as permitted in subsection 6.B.2, construction shall not commence prior to (1) execution of the GMP Amendment and (2) City's approval of the Construction Documents required for the Work Package. The Design-Builder shall perform no construction Work prior to the City's review and approval of the Construction Documents required for the Work Package. In addition, the Design-Builder shall perform no portion of the Work for which the Design-Build Documents require the City's review of submittals, such as Shop Drawings, Product Data and Samples, until the City has approved each submittal.

2. If the City and Design-Builder agree in a Change Order or the City issues a Change Directive, construction may proceed prior to the execution of the GMP Amendment. However, such Change Order or Change Directive shall not waive the City's right to reject the Design-Builder's Construction Proposal or otherwise limit City's rights and remedies under this Contract.

3. The construction Work must be in accordance with approved submittals, including but not limited to the Construction Documents, except that the Design-Builder will not be relieved of responsibility for deviations from requirements of the Design-Build Documents by the City's review and approval of design and Construction Documents or other submittals such as Shop Drawings, Product Data, Samples or other submittals, unless the Design-Builder has specifically informed the City in writing of such deviation at the time of submittal and (1) the City has given written approval to the specific deviation as a minor change in the Work, or (2) a Change Order or Change Directive has been issued authorizing the deviation. The City's review and approval of design and Construction

Documents or other submittals such as Shop Drawings, Product Data, Samples or other submittals does not relieve the Design-Builder of responsibility for errors or omissions in those approved documents and submittals.

4. The Design-Builder shall keep the City informed of the progress and quality of the Work.

5. The Design-Builder is responsible for the design, supervision and direction of the Work, using the Design-Builder's best skill and attention. If the Design-Build Documents give specific instructions concerning construction means, methods, techniques, sequences or procedures, the Design-Builder must evaluate the jobsite safety of such means, methods, techniques, sequences or procedures and, except as stated below, will be fully and solely responsible for the jobsite safety of such means, methods, techniques, sequences or procedures. If the Design-Builder determines that such means, methods, techniques, sequences or procedures may not be safe, the Design-Builder must give timely written notice to the City and may not proceed with that portion of the Work without further written instructions from the City.

6. The Design-Builder is responsible for inspection of any portions of Work already performed to determine that such portions are in proper condition to receive subsequent work.

C. Unless otherwise provided in the Design-Build Documents, the Design-Builder must provide and pay for supervision, labor, materials, equipment, tools, construction equipment and machinery, water, heat, utilities, transportation, and other facilities and services, necessary for proper execution and completion of the Work, whether temporary or permanent, and whether or not incorporated or to be incorporated in the Work.

D. The Design-Builder shall include in the Guaranteed Maximum Price, as set forth in the GMP Amendment, all allowances, if any, stated in the Design-Build Documents. Items covered by allowances must be supplied for amounts and by persons or entities as the City may direct, but the Design-Builder will not be required to employ persons or entities to whom the Design-Builder has reasonable objection.

E. The City reserves the right to perform construction or operations or services related to the Project, and to furnish materials and equipment for the Project, with the City's own forces; and to award separate contracts in connection with other portions of the Project, or other construction or operations on the site. If the Design-Builder claims that delay or additional cost is involved because of such action by the City, the Design-Builder must make a claim as provided in the General Conditions.

7. COMPENSATION

A. Design Services Compensation. City shall pay Design-Builder for Pre-Construction Design Phase 1 Work, described above in Article 5, as set out in Exhibit 4, based on time and materials as set forth in the attached Exhibits, but the total payment under this Agreement, which includes allowable expenses or reimbursement as per the attached exhibits, shall not exceed Three Hundred Seventy-Eight Thousand Four Hundred Fifty-Eight dollars and Zero cents ($378,458.00). This Not to Exceed amount may be exceeded only upon prior written increase in the Scope of Work, accompanied by written authorization for an increase in fee from the City. If there is no change in Scope of Work, the Design-Builder shall complete all identified Work within the Not to Exceed amount as indicated above. Any known additional or optional tasks are listed in Exhibit 4.

1. Design-Builder shall send City an invoice each month setting forth the fee due for that month and include a detailed summary of the work performed during the pay period. City shall review all submitted invoices promptly and shall pay all undisputed amounts within 30 days of City's receipt of the invoice.

2. Invoices will be directed to the Sharon Darroux, Engineering Division Manager. Invoices may be emailed to sdarroux@sthelensoregon.gov. If an invoice is delivered on a nonbusiness day, the invoice shall be considered received on the next day the City is open for business.

3. Design-Builder shall reference the Contract Number on all invoices.

B. Guaranteed Maximum Price. If the parties execute a GMP Amendment, the City shall pay Design-Builder the as set forth in this Article and the GMP Amendment. The Guaranteed Maximum Price shall include (1) the Cost of the Work as defined in Article 9 and (2) the Design-Builder's Percentage Fee. Design-Builder must pay costs that would cause the Guaranteed Maximum Price, as it may be adjusted pursuant to the GMP Amendment, to be exceeded, without reimbursement by the City.

C. Design-Builder's Percentage Fee

1. The Design-Builder's Percentage Fee must be set forth in the GMP Amendment and shall not exceed a fixed amount equal to the percentage as set forth in Exhibit 4. The Design-Builder may invoice the City for payments toward the Design-Builder's Percentage Fee in accordance with subsection 7.C.3. of this Agreement. The Design-Builder's Percentage Fee

is conclusively presumed to include all costs not reimbursable under this Contract, including, without limitation, overhead and profit.

2. If the Guaranteed Maximum Price is adjusted after execution of the GMP Amendment, if any, an adjustment to the Design-Builder's Percentage Fee will be determined by fixing an amount equal to 12 percent of the estimated Cost of the Work related to the change that is the basis for the adjustment to the Guaranteed Maximum Price. The City will not pay for any costs that exceed the Guaranteed Maximum Price, including any additional fee based on such costs, and the Design-Builder's Percentage Fee is subject to no other adjustments.

3. Each of the Design-Builder's requests for progress payment may include a request for payment of Design-Builder's Percentage Fee equal to the percentage as set forth in Exhibit 4 of the reimbursable costs for that period.

D. The City does not anticipate early construction work occurring during the Pre-Construction Design phase of this Contract. However, in the event that early construction work is determined to be necessary, consistent with subsection 6.B.2, the City will issue a Change Order or Change Directive amending this Contract to incorporate the early work and adjusting Design Services Compensation accordingly. The parties acknowledge that early work in excess of $50,000 may require Prevailing Wage.

E. As used in this Contract, the phrase "performance of the Work" includes Design Services, any Work that is authorized under a Change Order or Change Directive issued before the execution of the GMP Amendment, Work authorized under the GMP Amendment and Article 6, if any, and all of the Design-Builder's other obligations under this Contract.

8. COST OF THE WORK

A. The term "Cost of the Work" means costs necessarily incurred by the Design-Builder in the proper performance of the Work. Such costs must be at rates not higher than the standard paid at the place of the Project except with the prior written consent of the City. The Cost of the Work shall only include the items set forth in this Article 8. Where any cost is subject to the City's prior written approval, the Design-Builder must obtain this written approval prior to incurring the cost, which prior written approval is a condition precedent of Design-Builder's right to payment for such cost. Following are costs included in the Cost of the Work.

1. Reasonable payments to Subcontractors (including but not limited to Designers), provided that: (1) the City receives the benefit of trade and quantity discounts; (2) the Design-Builder may retain the benefits of

discounts for early payment; (3) each subcontract, including those for supplies for which the Design-Builder seeks reimbursement, has been awarded in accordance with the terms of the Contract; (4) reimbursement will be reduced to the extent the cost for which reimbursement is sought fails to satisfy the requirements set forth in Article 10 of the General Conditions; and (5) reimbursement will be further reduced to the extent the cumulative total of all markups on a cost by Subcontractors at all tiers exceeds the percentage specified in Article 10 of the General Conditions.

2. Salaries or wages, plus fringe benefits routinely provided by the Design-Builder (including, as applicable, retirement, life insurance, medical insurance, sick leave, holiday pay, vacation, workers' compensation premiums, and other benefits required by law or by a current labor agreement), for all of the following Design-Builder employees for the time they are engaged in the Work:

    a. Field labor, including field superintendents;

    b. Employees directly involved in performing the Work stationed at the Design-Builder's field office and scheduling personnel and others stationed at the Design-Builder's corporate office or any other location who are pre-approved by the City; and

    c. Employees engaged at the shops or on the road in expediting the production or transportation of materials or equipment required under the Contract.

    d. "Casual overtime" costs (overtime that is sustained for 7 consecutive days or less) may be incurred at the Design-Builder's sole discretion. The Design-Builder must obtain City approval prior to incurring all other overtime costs, including those incurred while performing additional work directed by the City or as incurred by the Design-Builder working crews on an "extended overtime" schedule (overtime that is sustained for more than seven consecutive days).

        Notwithstanding the foregoing, delay by the Design-Builder will not be excused merely because the City declines to approve reimbursement of overtime costs.

3. Costs pertaining to Design-Builder-furnished insurance (excluding subcontractor default insurance) or self-insurance and bonds, including premiums and the cost of any deductibles, self-insured retentions, loss above coverage limits, co-pay percentages, claim handling, administration, enrollment, or management costs or expenses, and broker fees under the Design-Builder's insurance program. Costs of Subcontractor bonds;

provided that the furnishing of such bonds is subject to the prior written approval of the City. Costs of subcontractor default insurance (e.g., Subguard) are subject to the prior written approval of the City.

4. Subsistence and travel for the Design-Builder's salaried employees normally stationed in the field office when those employees are required to travel and remain out of the St. Helens metropolitan area overnight in direct performance of the Work under the Contract, but only with the City's prior written approval and subject to any limitations or restrictions the City may impose in giving its approval.

5. Field office supplies and services, including office supplies, telephone, postage, reproduction, photographs, and field office data processing equipment.

6. Equipment, materials, supplies, consumables and services procured, purchased and utilized in the performance of the Work as required to protect the safety and health of all persons who may be exposed to the hazards of construction. This includes the cost of first aid supplies, temporary fire protection and the cost of administering the Design-Builder's safety program, including safety lunches and safety incentive payment programs, but excludes the cost of material rewards such as shirts, jackets, hats, etc.

7. Temporary facilities and services at the Work site, including the job shack and other structures, sanitation, debris removal, roads, heat, light, water, air, and weather protection.

8. For that portion of the Work described as Craft Services, the Design-Builder may use Design-Builder-furnished craft labor approved by the City and brought on early in the Project. The City will reimburse the Design-Builder for this labor for the direct cost of wages, payroll taxes, and fringe benefits.

9. Materials, expendable supplies, consumables, and hand tools necessary to complete self-performed Work which Design-Builder did not otherwise own, and their transportation to the Work site.

10. Costs of removal and proper disposal of debris from the Work site.

11. Fees for laboratories for testing required by the Design-Build Documents, except those related to Defective Work.

12. Licenses, royalties, bond premiums, and sales or similar taxes that the Design-Builder is required by law to pay and are in effect as of the effective date of the Contract, other than personal property taxes on the

Design-Builder's construction equipment and the Design-Builder's income taxes. If the entire amount is allocable to the Work, then the Design-Builder shall be entitled to reimbursement of the entire amount. If only part of the amount is allocable to the Work, then the Design-Builder shall be entitled to a prorated reimbursement based on the proportion of the amount allocable to the Work.

13. Reimbursement for use of Design-Builder-owned equipment and rental of equipment owned by third party equipment vendors while the equipment is engaged in the Work, plus fuel and routine maintenance costs. Equipment rental rates will be the lowest of: The Design-Builder's established company rates, actual rental rates, or the rates in effect in each section of the Rental Rate Blue Book on the Work Start Date. Rental rates shall be calculated hourly, daily, weekly, or monthly, as appropriate based on the duration of the use of the equipment. The rate which results in the lowest charge for equipment use will be applied. Rates will be adjusted annually after the anniversary date of the Work Start Date to reflect published revisions of the Rental Rate Blue Book.

    a. The Rental Rate Blue Book denotes discontinued models by showing a star next to the model number. Many manufacturers continue the same model number through successive years. In the event the City and the Design-Builder are unable to distinguish discontinued models from current models having different rates in the Rental Rate Blue Book, the lower rate shall apply. In the event a rate is not given for either a new model or an older model, a rate for the most similar model in the Rental Rate Blue Book will be used. Such characteristics as manufacturer, capacity, horsepower, and fuel will be used as the basis for selecting a similar model.

    b. In the event a rate has not been established for a particular equipment category in the Rental Rate Blue Book, the Design-Builder shall call the Equipment Watch company for written documentation of a rental rate on the equipment and present it to the City for approval before use of the equipment.

14. The City generally does not make progress payments for materials stored offsite or pay financing costs pending their reimbursement, but may make exceptions in some circumstances. Subject to the City's approval in advance and in writing of the circumstances and conditions, such as location, insurance, clear title, and risk of loss, progress payments may be made for materials stored offsite in a secure location .

15. All permits for the Work normally obtained by and paid for by the Design-Builder, including those required for bidder-designed work, excluding building permits.

16. Preparing and obtaining reports, schedules, manuals, Drawings, Specifications, related data processing services, and other documents that are not furnished by the City but are necessary for the performance of the Work as specified in the Contract Documents.

17. The cost of repairing damaged Work or damage to City property as requested by the City, except:

    a. To the extent the cost of repair is covered by insurance;

    b. To the extent covered by warranty obligations of the Design-Builder or those for whom Design-Builder is responsible;

    c. To the extent caused by faulty, deficient, or defective workmanship of Design-Builder or those for whom Design-Builder is responsible;

    d. To the extent the cost of repair is covered by warranty provisions to include rework and faulty workmanship;

    e. To the extent the Design-Builder recovers the cost of repairs from Subcontractors; or

    f. To the extent the damage is the result of one or more breaches of the Contract.

18. Costs of Design-Builder's field office computer services (hardware and software) and other outside computer processing services expended in direct performance of the Work, but only to the extent such costs are approved in writing in advance by the City.

19. Other costs incurred in the performance of the Work if, and to the extent, approved in writing in advance by the City.

9. COSTS NOT REIMBURSABLE

A. The following is a non-exclusive list of categories of costs for which the Design-Builder is not entitled to reimbursement as the Cost of the Work, and which are deemed to be accounted for in the Design-Builder's Percentage Fee:

1. The salary of individuals who are officers of the Design-Builder, or of individuals employed in the Design-Builder's office(s) other than the field office, except as provided in subsection 8.A.2.

2. Corporate overhead and general and administrative costs.

3. Interest on capital.

4. Profit.

5. Preparation of the Design-Builder's response to the City's request for proposals for the Project.

6. Legal costs.

7. Prorated cost of the public works bond that design-builders generally must file with the Construction Contractors Board (CCB), as provided in ORS 279C.836.

8. Subcontractor costs arising out of or related to Defective Work.

9. Costs related to corrective Work and warranty Work. The Design-Builder shall diligently pursue and, whenever possible, enforce the performance of corrective Work obligations and warranty repairs under the terms of its subcontracts and purchase agreements. If the Design-Builder is unable to enforce the terms of a corrective obligation or warranty directly with a Subcontractor or vendor or with its bonding company, costs related to corrective Work or warranty Work will not be reimbursed by the City.

10. Any cost due to the negligence or failure of the Design-Builder and Subcontractors (including but not limited to Designer), or anyone directly or indirectly employed by any of them or for whose acts or omissions any of them may be liable, to fulfill a specific responsibility of the Contract.

11. Costs incurred prior to the City's approval of Design-Build Documents, when the Design-Build Documents require such approval.

12. Costs incurred in excess of the City's limitations or contrary to the City's limitations or instructions, when such instructions or limitations are imposed pursuant to the Design-Build Documents.

13. Costs of subcontractor default insurance (e.g., Subguard) and Subcontractor bonds, except when such costs are approved in advance by the City.

14. Costs related to home computers, software subscriptions or renewals, and other outside computer processing services not physically located at the Project site office.

15. Costs expressly excluded from the Cost of the Work by the Design-Build Documents.

16. Otherwise reimbursable costs in excess of the Guaranteed Maximum Price.

B. Any conflict between Article 8 ("Cost of the Work") and this Article 9 ("Costs Not Reimbursable") shall be resolved in favor of Article 9.

10. ACCESS TO RECORDS – FILES; CONFIDENTIAL INFORMATION.

A. Design-Builder shall maintain all books, documents, papers and records relating to the Agreement, including job cost estimates, job cost detail reports, and job cost summary reports, for at least ten years following Substantial Completion of the Project. Design-Builder shall maintain any other records pertinent to this Agreement in such a manner as to clearly document Design-Builder's performance. City, state and federal government, and their duly authorized representatives shall have access to the books, documents, papers and records of the Design-Builder which are directly pertinent to the specific Agreement for the purpose of making audit, examination, excerpts and transcript. Design-Builder agrees that all files or other documents generated or in the possession of Design-Builder related to Design-Builder's delivery of service are the property of the City and shall be available to the City upon request. Design-Builder may be privy to information that is confidential, proprietary or sensitive in nature, which information shall not be disclosed to any third person or entity without the consent of the City or at the City's direction, either during the term of this Agreement or after its termination. Likewise, any analysis or commentary provided by Design-Builder of a confidential or sensitive nature shall not be released or disclosed to any person without the consent or direction of the City.

B. The Design-Builder shall require all insurers, material suppliers, and Subcontractors (including but not limited to Designers) at any tier to comply with these requirements.

C. The Design-Builder shall be entitled to no extra compensation for complying with these requirements.

11. INTELLECTUAL PROPERTY RIGHTS.

A. Royalties, Patents and Copyrights

1. The Design-Builder shall pay all royalties and license fees.

2. The Design-Builder shall defend suits or claims for infringement of copyrights and patent rights and shall hold the City and its separate subcontractors and consultants harmless from loss on account thereof. If the Design-Builder has reason to believe that the design, process or

product required in the Scope of Work is an infringement of copyright or patent, the Design-Builder shall promptly notify the City.

B. Ownership of Work Product

1. All Design-Build Documents created by Design-Builder pursuant to this Agreement, including derivative works and compilations, and whether or not such work product is considered a "work made for hire" or an employment to invent ("Work Product"), shall be the exclusive property of City. City and Design-Builder agree that such original works of authorship are "works made for hire" of which City is the author within the meaning of the United States Copyright Act. To the extent City is not the owner of the intellectual property rights in Design-Builder's Work Product, Design-Builder irrevocably assigns to City any and all of its rights, title, and interest in all original Work Product created pursuant to this Agreement, whether arising from copyright, patent, trademark, trade secret, or any other state or federal intellectual property law or doctrine. Upon City's request, Design-Builder shall execute such further documents and instruments necessary to fully vest such rights in City. Design-Builder forever waives any and all rights relating to original work product created pursuant to this Agreement, including, without limitation, any and all rights under 17 USC § 106A or any other rights of identification of authorship or rights of approval, restriction or limitation on use or subsequent modifications.

2. Design-Builder grants to City, for purposes of accomplishing the Project, an irrevocable, nonexclusive, nontransferable, perpetual, royalty-free license to use any intellectual property owned by Design-Builder developed independently from this Agreement and applicable to services provided by Design-Builder or included in the work product. This grant includes the right of City to authorize contractors, consultants and others to use such intellectual property for any purpose related to the Project.

3. Design-Builder may refer to the Work Product in its brochures or other literature that Design-Builder utilizes for advertising, or other promotional purposes, including proposals for future, unrelated work, and, unless otherwise specified, Design-Builder may use standard line drawings, specifications and calculations on other, unrelated projects.

12. SUBROGATION

Design-Builder grants Waiver of Subrogation to the City, its officers, agents, employees and volunteers for any claims arising out of Design-Builder's work or service. Further, Design-Builder agrees that in the event of loss due to any of the risks for which it has agreed to provide insurance, recovery by the Design-Builder shall be solely with their insurance carrier. Design-Builder also grants to City on behalf of any insurer providing coverage to either Design-Builder

or City with respect to the work or services of Design-Builder a waiver of any right to subrogation which any insurer or Design-Builder may acquire against City by virtue of the payment of any loss under such insurance coverage.

13. SUBCONTRACTING

It is the intent of the Parties that Work authorized under the Contract will be competitively bid and executed under subcontracts, except that the Design-Builder may self-perform or exempt portions of the Work from competitive bidding requirements as allowed in the General Conditions. The Design-Builder will provide the City with the opportunity to attend all introductory meetings and post-bid evaluation meetings with such prospective Subcontractors. See the General Conditions for additional subcontracting requirements.

14. PREVAILING WAGE RATES

The Design-Builder agrees to comply with the requirements of ORS 279C.800 to 279C.870 governing the prevailing wage rates. Current wage rates and amendments determined by the Oregon Bureau of Labor and Industries (BOLI) may be obtained at www.boli.state.or.us. However, the rates in effect at the time this Contract first constitutes a binding and enforceable obligation on the part of the Design-Builder to perform or arrange for the performance of construction, reconstruction, major renovation, or painting, or when the GMP Amendment is executed, whichever occurs first, are the rates that shall apply for the duration of the Work.

15. NONDISCRIMINATION

The Design-Builder agrees to comply with all federal and state laws and regulations regarding nondiscrimination in employment, employee benefits and facilities.

16. COMPLIANCE WITH LAW

A. Design-Builder shall comply with all applicable federal, state and local laws, ordinances, and regulations. When multiple standards apply, Design-Builder shall comply with the more stringent standard. Design-Builder shall comply with Title VI of the Civil Rights Act of 1964, with Section V of the Rehabilitation Act of 1973, and with all applicable requirements of federal, state and City civil rights and rehabilitation statues, ordinances, rules and regulations. Design-Builder also shall comply with the Americans with Disabilities Act of 1990 (Pub L No. 101-336), ORS 659.425, and all regulations and administrative rules established pursuant to those laws. Design-Builder agrees to comply with ADA in its employment practices, and that it shall perform its contractual obligations consistently with ADA requirements and regulations, state law, and applicable regulations.

B. The Design-Builder shall comply with applicable federal, state and local laws and regulations, including those adopted by the Oregon Department of Environmental Quality, Division of State Lands, Environmental Protection Agency, and/or the

US Army Corps of Engineers, relating to the prevention of environmental pollution and preservation of natural resources.

17. PROVISIONS REQUIRED BY STATE LAW

A. Design-Builder shall:

1. Make payment promptly, as due, to all persons supplying to the Design-Builder labor or material for the performance of the work provided for in the contract.

2. Pay all contributions or amounts due the Industrial Accident Fund from the Design-Builder or subcontractor incurred in the performance of the Contract.

3. Not permit any lien or claim to be filed or prosecuted against City.

4. Pay to the Department of Revenue all sums withheld from employees under ORS 316.167.

5. Demonstrate that an employee drug testing program is in place. City has the right to audit and/or monitor the program. On request by the City, Design-Builder shall furnish a copy of the employee drug-testing program.

6. Salvage or recycle construction and demolition debris, if feasible and cost-effective.

B. If Design-Builder fails, neglects or refuses to make prompt payment of any claim for labor or services furnished to the Design-Builder or a subcontractor by any person in connection with the public improvement contract as the claim becomes due, the City may pay the claim to the person furnishing the labor or services and charge the amount of the payment against funds due or to become due the Design-Builder by reason of the contract.

C. If Design-Builder or a First-Tier Subcontractor fails, neglects or refuses to make payment to a person furnishing labor or materials in connection with this contract within 30 days after receipt of payment from the City (or in the case of a subcontractor, from Design-Builder), Design-Builder or first-tier subcontractor shall owe the person the amount due plus interest charges commencing at the end of the 10-day period that payment is due under ORS 279C.580 (4) and ending upon final payment, unless payment is subject to a good faith dispute as defined in ORS 279C.580. The rate of interest charged to Design-Builder or first-tier subcontractor on the amount due shall equal three times the discount rate on 90-day commercial paper in effect at the Federal Reserve Bank in the Federal Reserve district that includes Oregon on the date that is 30 days after the date when payment was received from the contracting agency or from the Design-

Builder, but the rate of interest may not exceed 30 percent. The amount of interest may not be waived.

D. If Design-Builder or a Subcontractor fails, neglects or refuses to make payment to a person furnishing labor or materials in connection with this, the person may file a complaint with the Construction Contractors Board, unless payment is subject to a good faith dispute as defined in ORS 279C.580.

E. The payment of a claim in the manner authorized in this section does not relieve the Design-Builder or the Design-Builder's surety from obligation with respect to any unpaid claims.

F. For work under this Contract, a person may not be employed for more than 10 hours in any one day, or 40 hours in any one week, except in cases of necessity, emergency or when the public policy absolutely requires it, and in those cases, the employee shall be paid at least time and a half pay:

1. For all overtime in excess of 8 hours in any one day or 40 hours in any one week when the work week is five consecutive days, Monday through Friday; or

2. For all overtime in excess of 10 hours in any one day or 40 hours in any one week when the work week is four consecutive days, Monday through Friday; and

3. For all work performed on Saturday and on any legal holiday specified in ORS 279C.540.

4. Design-Builder is not required to pay overtime if the request for overtime pay is not filed within 90 days of completion of the Contract if Design-Builder has posted and maintained in place a circular with the information contained in ORS 279C.545 as required by ORS 279C.545(1).

G. Design-Builders and Subcontractors must give notice in writing to employees who perform work under this contract, either at the time of hire or before commencement of work on the contract, or by posting a notice in a location frequented by employees, of the number of hours per day and days per week that the employees may be required to work.

H. Design-Builder shall promptly, as due, make payment to any person, copartnership, association or corporation furnishing medical, surgical and hospital care services or other needed care and attention, incident to sickness or injury, to the employees of Design-Builder, of all sums that Design-Builder agrees to pay for the services and all moneys and sums that the Design-Builder collected or deducted from the wages of employees under any law, Contract or Agreement for the purpose of providing or paying for the services.

I. All employers, including Design-Builder, that employ subject workers who work under this Contract in the State of Oregon shall comply with ORS 656.017 and provide the required Workers' Compensation coverage, unless exempt under ORS 656.126. Design-Builder shall ensure that each of its subcontractors comply with these requirements.

J. Design-Builder shall utilize where applicable, recycled materials if (a) The recycled product is available; (b) The recycled product meets applicable standards; (c) The recycled product can be substituted for a comparable non-recycled product; and (d) The recycled product's costs do not exceed the costs of non-recycled products by more than 5 percent.

K. Design-Builder shall include in each first-tier subcontract, including contracts with material suppliers, a clause that obligates Design-Builder to pay the first-tier subcontractor for satisfactory performance under its subcontract within 10 days out of the amounts paid to Design-Builder by City under this contract, and if payment is not made within 30 days after receipt of payment from City, to pay an interest penalty as specified in ORS 279C.515(2) to the first-tier Subcontractor. The interest penalty does not apply if the only reason the delay in payment is due to a delay in payment by City to Design-Builder. Design-Builder shall include in each of Design-Builder's subcontracts, a provision requiring the first-tier subcontractor to include a similar payment and interest penalty clause and shall require subcontractors to include similar clauses with each lower-tier subcontractor or supplier. Design-Builder shall also include in each first-tier subcontract a clause that requires Design-Builder to provide a standard form that the first-tier subcontractor may use as an application for payment and that requires Design-Builder to use the same form throughout the period of the contract, unless the Design-Builder provides written notice of a change in the form, including a copy of the new form, at least 45 days before change.

L. By signing this Contract, Design-Builder certifies that all Subcontractors performing construction work shall be registered by the Construction Contractors Board or licensed by the State Landscape Contractors Board before the subcontractor starts work on the Project.

M. By signing this Contract, Design-Builder certifies that it shall comply with Oregon tax laws.

18. NON-PARTNERSHIP

Neither the City nor Design-Builder is a partner or joint venture with the other party in connection in connection with the activities carried out under this contract. Design-Builder is engaged as an Independent Contractor.

A. Design-Builder shall be solely responsible for payment of any Federal or State taxes required as a result of this Contract.

B. Design-Builder is not a City employee and is not entitled to any benefits granted to City employees.

19. WAIVER

The failure of the City to enforce any provision of this contract shall not constitute a waiver by the City of that or any other provision.

20. LIMITATION ON AUTHORITY

City retains its authority to execute all applications, contracts and other documents relating to the Work. Design-Builder has no right or authority, express or implied, to commit or otherwise obligate City or any of its partners, except as permitted by the express terms of this Contract, or as authorized in writing.

21. ATTORNEY FEES AND GOVERNING LAW

In the event an action, suit of proceeding, including appeal, is brought for failure to observe any of the terms of this Contract, each party shall be responsible for that party's own attorney fees, expenses, costs and disbursements for the action, suit, proceeding or appeal. The provisions of this contract shall be construed in accordance with the provisions of the laws of the State of Oregon. Alternative dispute resolution shall be used prior to filing suit, in accordance with the provision of the General Conditions.

22. SUCCESSORS AND ASSIGNS

This Agreement shall inure to the benefit of and be binding upon the City and the Design-Builder, respectively, and their respective partners, successors, assigns, and legal representatives. Neither the City nor the Design-Builder shall assign, transfer, or sublet any interests or obligations hereunder without the prior written consent of the other party.

23. MERGER

No waiver, consent, modification or change of terms of this Contract shall bind either party unless in writing and signed by both parties. A waiver, consent, modification or change, if made shall be effective only in the specific instance and for the specific purpose given. There are no understandings, agreements, or representations, oral or written, not specified herein regarding this Contract. Design-Builder by signature of its authorized representative hereby acknowledges that Design-Builder understands the Contract and agrees to be bound by its terms and conditions.

24. NOTICES

All notices shall be in writing and shall be served upon the other party by personal service, facsimile transmission, or e-mail followed by mail delivery of the original Notice, by overnight courier with proof of receipt, or by certified mail, return receipt requested, postage prepaid, addressed as follows:

If to City:
Sharon Darroux
Engineering Division Manager
City of St. Helens, Oregon
265 Strand Street
St. Helens, Oregon 97051
Fax: (503) 397-4016
Email: sdarroux@sthelensoregon.gov

If to Design-Builder:
Arin Atiyeh
Senior Project Manager
Emery & Sons Construction Group
PO Box 13069
Salem, OR 97309
Fax: (503) 371-6637
Email: Arin.Atiyeh@emeryandsons.com

Service by mail shall be deemed complete on the date of actual delivery or three (3) business days after being sent via certified mail. Service by facsimile transmission or email shall be deemed served on receipt of the facsimile or email, followed by mail delivery.

25. EFFECTIVE DATE

This Contract shall become effective as of the date of the latest signature below.

IN WITNESS WHEREOF, the parties hereto have caused these presents to be duly executed:

CONTRACTOR DATA, CERTIFICATION, AND SIGNATURE

Business Name (Please Print): EMERY & SONS CONSTRUCTION GROUP, LLC

Contact Name: Arin Atiyeh Phone: (503) 949-9734 Fax: (503)371-6637

Address: P.O. BOX 13069, SALEM, OR 97309

Social Security #: N/A St. Helens Business License #: 00346

Federal Tax ID#: 83-0966301 State Tax ID #: 01742978-4

Construction Contractors Board #: 221536

Citizenship: Nonresident Alien ❑ Yes ❑ No

Business Designation (check one): ❑ Individual ❑ Sole Proprietorship ❑ Partnership
☒ Corporation (LLC) ❑ Government/Nonprofit

The above information must be provided prior to contract approval. Payment information will be reported to the Internal Revenue Service (IRS) under the name and taxpayer I.D. number provided above. (See IRS 1099 for additional instructions regarding taxpayer ID numbers.) Information not matching IRS records could subject you to withholding.

I, the undersigned, understand that the documents incorporated into this Contract in Article 2 above are an integral part of this Contract and agree to perform the Work described in the Contract Documents in accordance with the terms and conditions of this Contract. I further understand the City is prohibited from entering into a contract when the contractor has neglected or refused to file any return, pay any tax, or properly contest a tax, pursuant to ORS305.385; I hereby certify, under penalty of perjury and false swearing, that I/my business am/is not in violation of any Oregon Tax Laws; I further certify that I am an independent contractor as defined in ORS 670.600.

Signed by Contractor:

_____

Signature/Title Date

NOTICE TO CONTRACTOR: This Contract does not bind the City of St. Helens unless and until it has been executed by the Mayor after authorization by the City Council at a public meeting.

CITY OF ST. HELENS SIGNATURE

Approved: _____

Mayor Rick Scholl Date

Authorized by the full Council on _____

Attest: _____

City Recorder Date

Reviewed: _____

City Attorney Date

CONTRACT EXHIBIT 1

DESIGN-BUILD GENERAL CONDITIONS

DEFINITIONS

For the purposes of this Contract, terms are defined in the Agreement and in this section, and may be defined in the Specifications or Drawings. Terms used in a defined sense normally are capitalized; terms used in a general or undefined sense normally are not capitalized. Unless the context clearly requires otherwise, or the term is expressly defined otherwise for a particular purpose, the following definitions apply throughout this Contract.

Acceptance - When the Project is complete in all respects in accordance with the Plans and Specifications, and the Contract has been otherwise fully performed by the Design-Builder, to the full satisfaction of the City, the City will accept the Project as complete.

Act of God - A natural phenomenon of such catastrophic proportions or intensity as would reasonably prevent performance, and which could not have been prevented or escaped by any amount of foresight, reasonable degree of care, or by the aid of any equipment reasonably required under the circumstances.

Addendum - A document issued by the City during the proposal or bidding period that may modify or supersede portions of the Contract documents

Agreement - The Progressive Design-Build Agreement for the Project signed by the parties and incorporating other documents.

Ambiguities - Conflicts, errors, discrepancies, or inconsistencies.

Business Day – Every official work day of the week that the City is open for business. These are the days between and including Monday through Friday, and does not include public holidays and weekends.

Change Directive - A written order prepared and signed by the City, directing a change before agreement on adjustment, if any, in the Guaranteed Maximum Price or Contract Time, or both. A Change Directive may state a proposed basis for adjustment, if any, in the Guaranteed Maximum Price or Contract Time, or both.

City – City of St. Helens, Oregon

Change Order - A written amendment to this Contract which authorizes an addition, deletion, or revision to the Work described in this Contract, and which may authorize an adjustment in the Guaranteed Maximum Price, the Contract Time, or both.

Construction Documents – Documents necessary to complete construction, including but not limited to, the Contract General Conditions, Plans, Specifications, and Addenda related to the bidding and construction of the Project, and the Drawings and Specifications prepared by the Design-Builder.

Construction Proposal – Proposal prepared by Design-Builder for completion of design and construction of the Project following the Pre-Construction Design Phase of the Work.

Contract - The entire written agreement between the City and the Design-Builder establishing their respective rights and obligations concerning the Work and which supersede any prior negotiations, representations, or agreements, either written or oral.

Contract Amount - The amount of compensation stated in the Agreement for the performance of the Work, as adjusted by Change Order.

Contract Time - The number of days between the Work Start Date established by the Notice to Proceed and the date by which Substantial Completion of all Work must be achieved under this Contract.

Cost of the Work - Costs necessarily incurred by the Design-Builder in the performance of the Work in accordance with Article 8 of the Agreement.

Craft Services – Work performed to further the physical construction of the Project that requires specialized training, for which the parties elect not to enter into an early work agreement under Section 6.B.2 of the Agreement. These services may include site preparation and cleanup, setting up and moving access equipment, working on concrete and masonry, steel, wood, and pre-cast erecting projects, handling materials and equipment, or performing limited demolition, excavation or compaction activities.

Day or Calendar Day - Any 24-hour period beginning at midnight.

Defective - (1) Unsatisfactory, faulty, or deficient, (2) not conforming to this Contract, or (3) not meeting the requirements of any inspection, test, or approval required by this Contract or federal, state, or local Law.

Design Development - The design phase described in the Agreement.

Design Services – The services provided by the Design-Builder or Lead Designer in the Pre-Construction Design Phase of the Project, described in Article 5 of the Agreement.

Design-Build Documents – All documents, including exhibits and attachments, that make up this Contract, and required submittals from the Design-Builder, including but not limited to the Agreement; the Scope of Work; Preliminary Engineering; Construction Documents; bonds; these General Conditions; wage rates; written consents to proceed to a subsequent phase, and the Notice to Proceed.

Design-Builder or Contractor - The person or entity identified as such in the Agreement.

Design-Builder's Percentage Fee – A fixed fee described in the Agreement which is adjustable only under very limited circumstances.

Design-Builder's Construction Proposal - The Design-Builder's proposal for completion of design and performance of construction work on the Project following Preliminary Engineering to be completed under a GMP Amendment. Unless specifically incorporated into the GMP Amendment (and then only to the extent such proposal relates to the scope of the Work), the Design-Builder's Construction Proposal is not part of the Design-Build Documents.

Design-Builder's Proposal - The proposal Design-Builder submitted in response to the City's Request for Proposals for this Project

Design-Builder's Representative - An individual authorized in writing by the Design-Builder to represent the Design-Builder with respect to this Contract.

Designer - A person or entity providing design services for the Design-Builder for all or a portion of the Work that is licensed to practice architecture or engineering in the State of Oregon. The Designer is referred to throughout the Contract Documents as if singular in number, although there may be more than one Designer providing design services for the Design-Builder.

Drawings - The graphic representations which show the character and scope of the Work to be performed, which have been prepared by Design-Builder and approved by the City in accordance with the Agreement.

Early Work - Work, including preparatory activities and long lead time materials, which the Design-Builder shall perform under an Early Work Amendment prior to a Pricing Amendment that includes such Work.

Early Work Amendment - The City's written order describing and authorizing Design- Builder to proceed with certain Early Work.

Engineer - The Oregon-licensed engineer employed by Design-Builder, who is responsible for engineering services. There may be more than one engineer, depending on the Work required, (i.e., civil, structural, electrical, geotechnical, mechanical).

Final Acceptance - The City's written acknowledgment that the Work has been fully completed and all Contract-required documentation has been received and accepted.

Guaranteed Maximum Price - The limit established in the Agreement on the City's obligation to pay the Design-Builder for (1) the Cost of the Work plus (2) the Design-Builder's Percentage Fee.

Guaranteed Maximum Price Amendment - An amendment to the Agreement setting forth the City's and Design-Builder's agreement, if any, to the terms and conditions applicable to the Work following completion of the Preliminary Engineering, including but not limited to the adjustment to the Guaranteed Maximum Price.

He, Him, His - Used solely for legibility and ease of writing and applies equally to both genders.

Law - Any statute, rule, regulation, ordinance, or order of any federal, state, or local government including, but not limited to, ordinances and resolutions adopted by the City Council of the City of St Helens, and rules and regulations adopted in accordance with those ordinances and resolutions.

Maintenance Data - Manufacturer's catalog information, shop drawings, installation, operation, and maintenance manuals, and other information needed for operating, troubleshooting, preventive maintenance, repair, restoration, or overhaul of materials, products, systems, and equipment furnished or provided by the Design-Builder.

Notice to Proceed - A written notice given by the City to the Design-Builder fixing the Contract Time and designating a date on which the Design-Builder is authorized to begin the Work under the Guaranteed Maximum Price Amendment.

Plans - The drawings prepared by Design-Builder and approved by the City, which include elevations, sections, details, material and equipment schedules, diagrams, information, notes, or reproductions of any of these, and which show the location, character, dimension, or details of the Work.

Preliminary Engineering - The documents created in the first phase of Design Services and prior to preparation of the Design-Builder's Construction Proposal as described in the Agreement.

Product Data - Pictures, standard schedules, performance charts, instructions, brochures, diagrams and other information furnished by the Design-Builder to illustrate a material, product, or system for some portion of the Work. Product Data are not Design-Build Documents.

Progress Schedule - The periodically updated Construction Schedule that reflects the actual progress of the Work and impacts on the Work thereby maintaining a current projected date of completion. Impacts on the Work include, but are not limited to, anticipated delays, re-sequencing of tasks, and Change Orders.

Project – The preconstruction work authorized in writing by the City, and any construction work authorized in writing by the City pursuant to a GMP Amendment or an early work agreement, to complete design and construction work of the contracted for improvement.

Project Manager - An individual authorized in writing by the City to represent the City with respect to this Contract within the scope of the authority conferred by the written authorization.

Rental Rate Blue Book - The book by that name published by Equipment Watch, Primedia Corp., 1735 Technology Drive, Suite 410, San Jose, California, 95110.

Request for Proposals – The information published by the City, soliciting proposals from third parties for completion of the Project.

Samples - Physical examples of material, equipment, or workmanship which demonstrate and establish standards by which the Work will be judged. Samples are not Design-Build Documents.

Scope of Work - The program for the Project set forth in Exhibit 3, which includes initial information about the Project. These documents shall be evaluated and refined by the Design-Builder to develop the Preliminary Engineering.

Shop Drawings - Diagrams, drawings, illustrations, instructions, and other data submitted by the Design-Builder to illustrate some portion of the Work. Shop Drawings are not Design-Build Documents.

Site - The area specified in the Contract Documents for the Project and the area made available for Design-Builder's operation.

Specifications - Those written technical descriptions of materials, equipment, systems, standards, and workmanship prepared by the Design-Builder and approved by the City in accordance with the Agreement.

Subcontractor - An individual or firm having a direct or indirect contract with the Design-Builder or with any other Subcontractor at any tier for the performance of a part of the Work, including but not limited to the Designer.

Substantial Completion - Completion of the Work, or a part of the Work designated by the City in writing, in accordance with this Contract, to the point where it may be utilized and occupied for the purpose for which it was intended.

Supplier or Vendor - Any individual or business entity that contracts with the Design-Builder to provide materials or equipment.

Work - That which is to be constructed or done under the Contract, including the furnishing of all design, labor, materials, and equipment. required by this Contract.

Work Start Date - The day stated in the Notice to Proceed when the Contract Time will begin to run in accordance with this Contract.

ARTICLE 1 – TERMINOLOGY

1.1 Unless stated otherwise in this Contract, words or phrases which have a well-known technical, construction industry, or trade meaning are used in accordance with such recognized meaning.

1.2 Unless stated otherwise in this Contract, all requirements are directed to the Design-Builder. This includes statements which have no grammatical subject, as in "Install equipment plumb and level."

1.3 In the interest of brevity, this Contract frequently omits modifying words such as "all" and "any" and articles such as "the" and "an," but the fact that a modifier or an article is absent from one statement and appears in another is not intended to affect the interpretation of either statement.

1.4 The following terms are used in this Contract: as allowed, as directed, as ordered, as required, acceptable, proper, reasonable, satisfactory, suitable. These items and any others of like effect or import describe direction, judgment, requirement, or review of the City. Such use is solely to evaluate the Work for compliance with this Contract unless there is a specific statement otherwise. The use of such terms never indicates the City has authority to supervise or direct performance of the Work.

1.5 The words, “design,” “furnish,” “install,” “perform,” and “provide” have the following meanings for the purposes of this Contract. When such verbs are not used in connection with services, materials, or equipment in a context clearly requiring an obligation on the part of the Design-Builder, “provide” is implied.

A. Design means to perform architectural or engineering, or both, design professional services, including but not limited to planning, designing, observing, consulting, evaluating and other related services, for the construction of the Work.

B. Furnish means to supply and deliver services, materials, or equipment to the Work site (or other specified location) ready for use or installation and in usable or operable condition.

C. Install means to put into use or place in final position services, materials, or equipment complete and ready for intended use.

D. Perform or provide means to perform design services and furnish and install services, materials, or equipment complete and ready for intended use.

ARTICLE 2 – PRELIMINARY MATTERS

City Representative

2.1 The City’s Engineering Division Manager is authorized to represent the City with respect to this Contract, provided that his authority to amend this Contract is limited to the amount set by City policy. The Engineering Division Manager will appoint a Project Manager in writing to exercise all or part of his authority. Although a person may have the title Engineering Division Manager, such person shall have no responsibility for any engineering or architectural, or both, design aspects of the Work.

Design-Builder’s Representative

2.2 The Design-Builder shall authorize the Design-Builder’s Representative to receive communications from the City and to sign the Design-Builder’s communications to the City. The Design-Builder’s Representative must be approved in writing in advance by the City. The City’s approvals as required by this subsection will not be unreasonably withheld.

Communications

2.3 In addition to the communication between the City’s representative and the Design-Builder’s Representative noted above, frequent informal communication will take place between City and Design-Builder employees to facilitate the Work. These communications may include Contract enforcement and interpretation. If the Design-Builder concludes that any communication from the City appears that it will result in a change in Contract Time or the Design-Builder’s cost to complete the Work, the Design-Builder shall request that the issue be presented in writing.

Copies of Project Manual and Drawings

2.4 The City will provide the Design-Builder with digital copies of any documents referenced in Exhibit 3.

Time is of the Essence /Commencement of Contract Time/Substantial Completion and Final Completion

2.5.1 City and Design-Builder mutually agree that time is of the essence with respect to the dates and times set forth in the Contract Documents. City agrees to provide all site access, materials, information, data, and approvals required under the Contract Documents in a timely manner, in accordance with a mutually acceptable schedule as reasonably required for Design-Builder to achieve the interim milestones of the Schedule and the Scheduled Substantial Completion Date.

2.5.2 The Contract Time will commence to run on the Work Start Date stated in the Notice to Proceed. Design-Builder's Phase 1 Services shall commence within five (5) days of Design-Builder's receipt of the City's Phase 1 Notice to Proceed unless the parties mutually agree otherwise in writing. The parties shall use their best efforts to complete the Phase 1 Services within two hundred (200) calendar days following City's Phase 1 Notice to Proceed.

2.5.3 Substantial Completion of the entire Work shall be achieved no later than April 4, 2025 ___("Scheduled Substantial Completion Date"). Interim milestones and/or Substantial Completion of identified portions of the Work shall be achieved in accordance with Exhibit 4, Schedule.

2.5.4 Final Completion of the Work or identified portions of the Work shall be achieved within thirty (30) calendar days after Substantial Completion.

2.5.5 All of the dates set forth in this Section 2.5 shall be subject to adjustment in accordance with the General Conditions.

Starting the Work

2.6 The Design-Builder may start to perform the Work on the Work Start Date stated in the Notice to Proceed.

Before Starting Work

2.7 Before the Design-Builder begins performance of the Work, one or more meetings as requested by the City will be held to establish a working understanding among the parties. Procedures will be established for operations coordination and administrative communication for

matters such as design reviews, submittals, clarifications and interpretations, and Change Orders; and for processing applications for payment. At the first meeting, the Design-Builder must submit to the City for review a Design Services progress schedule. After execution of the GMP Amendment, if any, Design-Builder must submit an updated design schedule and preliminary construction schedule, submittal schedule, a preliminary cash flow schedule, and a written site-specific safety and health plan.

A. The Design Services progress schedule must be finalized and submitted to the City one week after the first meeting. The revised design schedule and preliminary construction schedule must be submitted to the City one week after the first meeting following execution of the GMP Amendment, if any. Unless specified otherwise, the progress schedules must indicate the Design-Builder's planned progress in increments of not more than seven-day periods. The schedule will not exceed the time limits current under the Design-Build Documents and will be subject to review and comment by the City. The Design-Builder must prepare and submit revisions to match actual and projected progress as requested by the City, before and during the course of design and construction, at no added cost to the City. The Design-Builder must adhere to the most recent version of the schedule.

B. The preliminary submittal schedule must be finalized and submitted to the City one week after the first meeting following execution of the GMP Amendment, if any. The submittal schedule must demonstrate that submittals will be submitted in time to allow the City's review and comment and the Design-Builder's submission of revised submittals before the Work covered by the submittals is scheduled to start under the work progress schedule. The City's review of a submittal, shop drawings, product data, or samples is not conducted to determine the accuracy of details such as dimensions or quantities, or for substantiating instructions for installation or performance of equipment or systems. The submitting party remains responsible for accurate content in submitted documents, coordination with other trades, and confirming and correlating dimensions. Review is not approval of safety precautions, construction means, methods, techniques, sequences, or procedures.

C. Prior to commencement of any physical construction Work, the Design-Builder must submit the contractor safety information form for safety planning purposes. The Design-Builder must also include applicable company policies, procedures, or plans. The City expects that the Design-Builder will abide by all Oregon OSHA requirements and the Design-Build Documents to provide for the safety of the Design-Builder's employees, City employees, tenants, and the general public. Work performed by Subcontractors must be on the form. Safety data sheets (SDS) for chemical products introduced to City premises will be submitted with this information, and shall also be maintained by the Design-Builder on site and made available to the City upon request.

2.8 Before undertaking each part of the Work, the Design-Builder must carefully study and compare this Contract and check and verify pertinent figures shown therein and all applicable field measurements. The Design-Builder must promptly report in writing to the City any Ambiguities that the Design-Builder may discover.

ARTICLE 3 – DESIGN-BUILD DOCUMENTS

Intent

3.1 This Contract is complementary; what is called for by one element is as binding as if called for by all.

3.2 It is the intent of this Contract to describe the Work. Any design services, supervision, labor, material, equipment, or service that may be reasonably inferred from this Contract as being required to produce the intended result shall be supplied whether or not it is expressly specified.

3.3 The Design-Builder is expected to read the entirety of the Design-Build Documents and to seek clarification from the City of any Ambiguities found between, among or within the Design-Build Documents. Absent written clarification from the City to the contrary, the Design-Builder shall, in resolving Ambiguities discovered either before or after original procurement and/or installation, provide the better quality of, and the greater quantity of, the Work. The Design-Builder shall specifically notify all Subcontractors and suppliers of this requirement.

3.4 Clarifications and interpretations of this Contract will be issued by the City. They will be consistent with or reasonably inferable from the overall scope of this Contract.

3.5 This Contract is unique. Design services, labor, material, equipment, or services approved for other City work may not necessarily be approved for this Contract.

3.6 Pursuant to ORS 15.320, Oregon law applies to this Contract. In the event ORS 15.320 is deemed invalid or inapplicable, the parties agree that Oregon law applies to this Contract.

3.7 If the Design-Builder's Construction Proposal is incorporated into this Contract, any Ambiguities between the proposal and this Contract will be resolved in favor of this Contract. Any limitations of liability, waivers of damages, or disclaimers of warranty as to construction work or materials supplied or otherwise or liability contained in the Design-Builder's Construction Proposal will not apply to the Work or this Contract.

3.8 If any provision of this Contract is held to be illegal, invalid, or unenforceable under present or future Laws effective during the terms of this Contract or in subsequent dispute resolution proceedings, the legality, validity, and enforceability of the remaining provisions of this Contract will not be affected thereby. As to the illegal, invalid or unenforceable clauses, they shall be rendered void only to the extent of such illegal, invalid and unenforceable portions, with the remainder of such clauses given full force and effect.

Reference Standards

3.9 Unless expressly provided otherwise, references to standard specifications, manuals, or codes of any technical society, organization, or association, or to the codes of any governmental authorities, shall mean the latest version or edition in effect on the effective date of this Contract,

except that all references to the Oregon Standard Specifications for Construction shall mean the 2021 edition. Such reference may be specific or implied. No provision of any referenced standard specification, manual, or code shall change the duties and responsibilities of the City, the Design-Builder, or any of their employees, contractors, subcontractors, or agents from those set forth in this Contract.

Reporting Ambiguities

3.10 If, during the performance of the Work, the Design-Builder discovers any Ambiguities within this Contract, the Design-Builder must report it to the City, in writing, at once. The Design-Builder will proceed with the affected Work after receiving clarification or interpretation from the City. The Design-Builder will be liable to the City for failure to report any Ambiguities in this Contract if the Design-Builder factually knew or reasonably should have known of the Ambiguities.

Reuse

3.11 Neither the Design-Builder nor any Designer, Subcontractor, manufacturer, fabricator, supplier, or distributor will have or acquire any title to or ownership rights in any of the Drawings, Specifications or other documents, or copies thereof, prepared by Design-Builder. They may not reuse any of them for any purpose unrelated to this Contract without the prior written consent of the City, except as provided for under Article 11.3.B.3 of the Design-Build Agreement.

Electronic Documents

3.12 Those using electronic documents provided by the City do so at their own risk. Electronic documents are subject to data erosion, erasure, and alteration. Because computer software may become obsolete with time, the City makes no warranties or representations regarding the ability to permanently access electronic documents it provides. The City makes no warranties or representations regarding the presence or absence of computer viruses in electronic documents it provides; any person using an electronic document provided by the City should check the document for computer viruses before using it in a manner that might allow the spread of a computer virus. All or parts of electronic documents provided by the City may be copyrighted, and those using them are responsible for determining the existence of copyrights and for obtaining permission to copy copyrighted material.

ARTICLE 4 – AVAILABILITY OF LANDS; PHYSICAL CONDITIONS; SURVEY CONTROL

Availability of Lands

4.1 The City will provide access to: (1) lands upon which the Work shall be performed, (2) rights-of way for access to those lands, and (3) such other lands designated in this Contract for the use of the Design-Builder. Where necessary and as described in the Scope of Work, the Design-Builder will be responsible for identifying and leading the acquisition process for any

additional easements or right of way for the Project. Any easements for permanent structures or permanent changes in existing facilities will be obtained and paid for by the City, unless otherwise provided in this Contract. The Design-Builder will provide, at no additional cost to the City, additional lands, easements, and access that the Design-Builder may require for temporary construction facilities or storage or use of material and equipment, including but not limited to swing-way easements for cranes and other equipment.

Physical Conditions – Investigations, Reports, and Tests

4.2 Investigations, reports, or tests which the City may make available to the Design-Builder are the City's known information at the time of execution of the Agreement. However, the City makes no warranty or representation regarding accuracy or completeness unless the investigations, reports, or tests have been made a part of this Contract.

Differing Site Conditions

4.3 The Design-Builder must promptly notify the City in writing of: (1) subsurface or latent physical conditions at the site differing materially from those shown in this Contract or (2) unknown conditions of an unusual nature, differing materially from conditions ordinarily encountered in the region and generally recognized as inherent in the Work. The Design-Builder must, to the extent reasonably possible, provide prompt written notice of such conditions before they are substantially disturbed or altered. The City will promptly review those conditions and advise the Design-Builder in writing if further investigation or tests are necessary. The Design-Builder may not continue Work in the affected area until the City has inspected such condition to determine whether an adjustment to the Contract is required. The City will obtain any necessary additional investigations and tests. If the conditions differ materially from those shown in this Contract or from what reasonably could have been anticipated by the Design-Builder, this Contract may be amended to allow additional compensation or time, or both, as reasonably necessary to accommodate the differing conditions.

Survey Control

4.4 Unless otherwise provided in the Contract, the Design-Builder will provide engineering surveys and establish those survey control points necessary to lay out the Work. The Design-Builder must: (1) lay out the Work, unless otherwise specified in this Contract, (2) protect and preserve the established survey control points, and (3) make no change or relocation of the survey control points without the prior written approval of the City. The Design-Builder must report to the City whenever any survey control point is lost, destroyed, or requires relocation. At no additional cost to the City, the Design-Builder shall be responsible for the accurate replacement or relocation of survey control points lost or destroyed without City approval. Such replacement must be by a professional land surveyor licensed by the State of Oregon.

ARTICLE 5 – BONDS AND INSURANCE

Bonds

5.1 Upon execution of the Agreement, the Design-Builder shall furnish bonds in accordance with the Agreement and this Article, as security for the faithful performance of, and payment of, all the Design-Builder's obligations, including without limitation preparation and completion of design and related personal services and self-performed work, under this Contract. The performance bond, and labor and material payment bond shall be on the forms prescribed by the bidding and contract requirements and executed by sureties: (1) licensed to conduct business in the State of Oregon, and (2) named in the current list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Circular 570 (amended) by the Audit Staff Bureau of Accounts, U.S. Treasury Department. All bonds signed by an agent shall be accompanied by a power of attorney or other evidence of the agent's authority to act on behalf of the surety.

a. Design-Builder shall provide a separate Performance Bond and a separate Payment Bond in a form acceptable to the City Attorney. Each bond shall be equal to 100 percent of the contract amount for the Project. The Performance Bond and the Payment Bond must be signed by the Surety's Attorney-in-Fact, and the Surety's seal must be affixed to each bond. Bonds shall not be canceled without the City's consent, nor shall the City release them prior to Contract completion, including completion of all enduring obligations and liabilities under the Contract. Bonds must be originals. Faxed or photocopied Bond Forms shall not be accepted.

b. Design-Builder shall file with the Construction Contractor's Board and provide City with a copy of a Public Works Bond with a corporate surety authorized to do business in the State of Oregon in the amount of $30,000 prior to starting construction work under this contract unless otherwise exempt. Design-Builder is aware of the provisions of ORS 279C.600 and 279C.605 relating to notices of claim and payment of claims on Public Works Bonds.

c. Design-Builder shall include in every Subcontract a provision requiring the Subcontractor to have a public works bond filed with the Construction Contractor's Board before starting construction work on the project, unless otherwise exempt.

d. Refer to GMP Amendment for Warranty Bond requirements.

5.2 The Design-Builder shall substitute another bond and surety meeting the requirements of Item 5.1 within five days after the surety on any bond furnished by the Design-Builder: (1) is declared bankrupt, (2) becomes insolvent, (3) has its right to do business terminated in any state where any part of the Work is located, or (4) ceases to meet the requirements of Item 5.1.

5.3 In lieu of requiring Subcontractors to provide performance and payment bonds for their respective Work, the Design-Builder may utilize a Subcontractor default program to address defaults by Subcontractors on their contractual responsibilities.

5.4 This section intentionally left blank.

Workers' Compensation

5.5 The Design-Builder shall maintain workers' compensation and employer's liability insurance as required by ORS Chapter 656 and meeting the minimum requirements therein, for all employees subject to the workers' compensation Laws of the State of Oregon, unless exempt, and any other appropriate jurisdiction. In lieu of such insurance, the Design-Builder may maintain a self-insurance program approved by the State of Oregon and a policy of excess workers' compensation insurance in the amount required by the State, which policy includes coverage for employer's liability. The Design-Builder shall provide evidence of such insurance and self-insurance to the City before commencing Work and throughout the term of this Contract.

Commercial General Liability Insurance

5.6 The Design-Builder shall maintain Commercial General Liability Insurance in an amount not less than $2,000,000 per incident, claim or occurrence and $5,000,000 in aggregate throughout the duration of the Contract, subject to any increases in limits that may be required in subsequent GMP Amendments or other amendments to this Contract. Such insurance shall include coverage for personal injury, bodily injury, advertising injury, property damage, premises, operations, products completed operations, employer's practices liability and contractual damages. Contractor shall remain fully responsible and liable for any claims resulting from the negligence or intentional misconduct or contractor, its subcontractors, and their officials, agents and employees in performance of this contract, even if not covered by, or in excess of insurance limits.

Automobile Liability Insurance

5.7 The Design-Builder shall maintain business automobile liability insurance in an amount not less than $2,000,000 per occurrence to protect against liability arising from the use, loading, and unloading of all of the Design-Builder's owned, hired, and non-owned automobiles in connection with this Contract. Such insurance shall cover the City as an additional insured, provided that the Design-Builder's insurer shall not be required to indemnify the City for damages arising out of the death or bodily injury to persons or damage to property to the extent caused by the negligence of the City. The limits set forth herein may be met through the stacking of primary and excess policies.

Professional Liability Insurance

5.8 The Design-Builder shall maintain professional liability insurance or "errors and omissions" coverage in amounts not less than $5,000,000 per claim and $10,000,000 aggregate. The Design-Builder shall cause its lead designer to maintain professional liability insurance in amounts not less than $2,000,000 per claim and $5,000,000 aggregate. Such insurance shall be written to cover all costs of correcting defects and deficiencies arising from error, omission, or

negligent acts of the Design-Builder and lead designer and any other Subcontractor providing design, engineering, or other professional services. The policy shall not contain any provision or exclusion (including any so-called "insured versus insured" exclusions or "cross-liability" exclusion) the effect of which would be to prevent, bar, or otherwise preclude the City or the Design-Builder from making a claim which would otherwise be covered by such policy on the grounds that the claim is brought by an insured or additional insured against an insured or additional insured under the policy. Insurance shall be maintained through completion of construction and for at least 5 years past project completion. The retroactive date for coverage will be no later than the commencement date of design. If coverage is canceled and not replaced with similar coverage with a consistent retroactive date, the Design-Builder or lead designer shall purchase an extended reporting period of at least 5 years or otherwise as by agreement with the City.

Subcontractor Insurance

5.9 All Subcontractors (including designers) shall maintain the same insurance as required of Design-Builder as set forth herein, including but not limited to the types of insurance, extent and durations of coverages, and notice requirements, except that the limits of insurance for Subcontractors shall be no less than the following:

a. Workers' Compensation: same as Design-Builder above.

b. Commercial General Liability: $2,000,000 per occurrence/$2,000,000 aggregate.

c. Professional Liability: The Design-Builder shall require Subcontractors who perform design work to provide coverage at limits determined by the Design-Builder not to exceed $2,000,000 per claim/$2,000,000 aggregate.

d. Automobile Liability: $2,000,000 per occurrence.

General Insurance Requirements

5.10 The limits set forth herein may be met through the stacking of primary and excess policies.

5.11 The limits set forth herein may be increased or modified in subsequent GMP Amendments.

5.12 Design-Builder and lead designer shall provide proof of coverage required by acceptable Certificate of Insurance and signed Endorsement from the carrier(s). The Certificate and Endorsement shall provide that there will be no cancellation, termination, material change or reduction in limits of the insurance coverage without a minimum 30-day written notice to the City. The Certificate and Endorsement shall also state the deductible or self-insured retention level.

5.13 Commercial General Liability coverage shall name, by certificate and endorsement the City, its officers, agents, employees and volunteers as additional insureds with respect to Contractor's work or services provided under this contract.

ARTICLE 6 – DESIGN-BUILDER'S RESPONSIBILITIES

Administration and Supervision

6.1 The Design-Builder must supervise and direct the Work competently and efficiently, applying the skills and expertise as may be necessary to perform the Work in accordance with this Contract. The Design-Builder is solely responsible for the means, methods, techniques, sequences, and procedures of construction. The Design-Builder is responsible for seeing that the finished Work complies accurately with this Contract.

6.2 The Design-Builder must provide a competent project superintendent at the site at all times during work progress. The superintendent is responsible for oversight of the work being performed by the Design-Builder and his Subcontractors. The project superintendent may only be replaced as provided in the Agreement.

6.3 If the Design-Builder's Representative is not available for project administration, the superintendent will have the authority to receive direction from the City on behalf of the Design-Builder. All communications given to the superintendent will be as binding as if given to the Design-Builder. This authority includes, but is not limited to, receipt of City-issued documentation, taking action on City direction not involving changes to this Contract, taking direct action in emergency situations, and implementing stop work orders issued by the City.

Labor and Material

6.4 The Design-Builder must provide competent, suitably qualified personnel to survey and lay out the Work, and to perform construction as required by this Contract. The Design-Builder must at all times maintain good discipline and order at the site.

6.5 The Design-Builder must give not less than 24 hours' notice to the City if work is to be performed outside normal day-shift hours or on Saturday, Sunday or any legal holiday. Emergency conditions relating to safety or protection of persons or property are valid exceptions to such notice.

6.6 Unless otherwise specified, the Design-Builder must furnish for the execution, required testing, initial operation, and completion of the Work all necessary material, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, and all other facilities and incidentals.

6.7 All material incorporated into the Work must be new, except as otherwise provided in this Contract. Products containing asbestos or other hazardous material, as defined by ORS 466.605, may be used only with the City's prior written approval. If required by the City, the

Design-Builder will furnish satisfactory evidence that the kind and quality of material and equipment provided meet Contract requirements. Satisfactory evidence may include test reports.

6.8 The Design-Builder must obtain documentation from distributors, fabricators, manufacturers, and suppliers that provide instructions for the application, cleaning, connection, erection, installation, and use of their products. The Design-Builder must follow these instructions unless more stringent requirements are provided in this Contract.

6.9 All material provided and normally tested and labeled by an approved testing laboratory, such as Underwriters Laboratories (UL), Canadian Standards Association (CSA), or by a similarly recognized third-party approval authority, must be so labeled.

"Pre-Bid Approved Equals," "Equals," and Substitutes

6.10 Whenever an item of material or equipment is specified or described in the Construction Documents by using the name of a proprietary item or the name of a particular supplier, the specification or description is intended to establish the type, function, appearance, and quality required. Unless the specification or description indicates that no substitution is permitted, other items of material or equipment, or material or equipment of other suppliers, may be submitted to the City for evaluation under the circumstances described below:

A. "Pre-Bid Approved Equal" Items: The Design-Builder shall submit requests to the City for "pre-bid approved equal" material, products, or services on behalf of Subcontractors prior to submittal of bids. The Design-Builder must submit such requests no less than five Business Days prior to the bid opening. The Design-Builder must then forward approval of materials, products, or services the City deems equivalent by addendum to the Subcontractors at least 72 hours prior to the bid opening date and time.

B. "Equal" Items: If in the City's sole discretion an item of material or equipment proposed by the Design-Builder is functionally equal to that named and sufficiently similar so that no change in related Work will be required, it may be considered by the City as an "equal" item, in which case evaluation and approval of the proposed item may, in the City's sole discretion, be accomplished without compliance with some or all of the requirements for approval of proposed substitute items. Proprietary materials, products, or services that are specified but not followed by the words "or pre-bid approved equal," "or equal," or "no substitution" will be evaluated as if they were followed by the words "or equal." For the purposes of this paragraph, a proposed item of material or equipment will be considered functionally equal to an item so named if:

1. It is at least equal in quality, durability, maintainability, appearance, strength, and design characteristics;

2. It will reliably perform at least equally well the function imposed by the design concept of the completed Work as a functioning whole; and

3. The Design-Builder certifies that there is no increase in cost to the City; and that it will conform substantially, even with deviations, to the detailed requirements of the item named in this Contract.

C. Substitute Items:

4. The Design-Builder may treat Subcontractor substitution requests in accordance with this section, but must obtain the City's approval of the substitution before allowing the Subcontractors to bid based upon the substitution.

5. If an item of material or equipment proposed by the Design-Builder does not qualify as an "equal" item as defined above, it will be considered a proposed substitute item. This determination will be at the City's sole discretion.

6. The Design-Builder must submit sufficient information, as provided below, to allow the City to determine that the item of material or equipment proposed is essentially equivalent to that named and an acceptable substitute therefor. The City will not accept requests for evaluation of proposed substitute items of material or equipment from anyone other than the Design-Builder. The Design-Builder must make the request as a submittal.

7. The application must certify that the proposed substitute item will adequately perform the functions and achieve the results called for by the general design, be similar in substance to that specified, and be suited to the same use as that specified.

8. The application must state the extent, if any, to which the use of the proposed substitute item will prejudice the Design-Builder's achievement of Substantial Completion on time, whether or not use of the proposed substitute item in the Work will require a change in this Contract (or in the provisions of any other affected contract with the City for work) to adapt the design to the proposed substitute item, and whether or not incorporation or use of the proposed substitute item in connection with the Work is subject to payment of any license fee or royalty.

9. The application must identify any variations of the proposed substitute item from that specified, and shall identify available engineering, sales, maintenance, repair, and replacement services.

10. The application must contain an itemized estimate of all costs or credits that will result directly or indirectly from use of such substitute item, including costs of redesign and claims of other contractors affected by any resulting change, all of which will be considered by the City in evaluating the proposed substitute item.

11. The City may require the Design-Builder to furnish additional data beyond that listed above about the proposed substitute item.

12. The City may require the Design-Builder to furnish, at the Design-Builder's expense, a special performance guarantee or other surety with respect to any substitute.

13. No increase in the Guaranteed Maximum Price or extension of the Contract Time will be considered when a substitution is not accepted.

D. No Substitution:

14. Materials, products, or services marked "no substitution" have been determined to be 1) manufactured from a single source only or 2) required for the efficient utilization of existing equipment or systems. Requests for substitution will not be considered for these items.

6.11 Design-Builder Application for Evaluation: The application for evaluation of "equal" or substitute items must be made using the forms provided by the City at the City's option. These forms may be copied.

6.12 City's Evaluation: Within 10 days, the City will evaluate each application for "equal" and substitute items. The City will be the sole judge of acceptability. No "equal" or substitute item shall be ordered, installed, or utilized until the City's evaluation is complete, which will be evidenced by either a Change Order for a substitute or an approved submittal for an "equal." The City will advise the Design-Builder in writing of any negative determination.

Concerning Subcontracting and Self-Performance

6.13 Selection of sources of design services, labor, material, equipment, and services necessary to accomplish the Work is governed by this section. For the purposes of this section, "Subcontractor" also includes suppliers.

A. The Design-Builder shall seek to develop Subcontractor interest in the Work and shall furnish to the City a list of potential qualified Subcontractors from whom bids may be requested. The City may identify additional potential qualified Subcontractors from whom the Design-Builder shall request bids. Unless exempted and approved by the City under subsection C or D below, the Design-Builder will perform each element of the Work through a subcontract awarded in accordance with the competitive selection process described in subsection F below. In bundling elements of the Work for subcontracting or self-performance purposes, the Design-Builder is not constrained by the grouping or association of elements of the Work in the Specifications and Drawings.

B. Unless already exempted by subsection D, the Design-Builder must submit for City approval each element of the Work the Design-Builder proposes to self-perform, and each element of the Work the Design-Builder proposes to subcontract without the competitive selection process. The proposal must include an explanation as to why self-performance or exemption from the competitive selection process is in the City's best interest. The proposal must also describe the process the Design-Builder will use to qualify and select prospective

Subcontractors for the portions of the Work that are not subject to the qualification and selection process.

1. The Design-Builder must provide an independent cost estimate for the Work element that will be subject to the non-competitive process, if required by the City.

2. The Design-Builder must fully respond to any questions or comments submitted to the Design-Builder by the City in regard to the non-competitive process.

3. The Design-Builder must demonstrate and give assurances that the self-performed work is insured to the extent it causes property damage.

C. To determine whether self-performance or exemption from the competitive selection process is in the City's best interest, the City will consider some or all of the following factors including, but not limited to: emergency circumstances, the Design-Builder's need to utilize a key Subcontractor member of the Design-Builder's project team consistent with the Design-Builder's project proposal, the need to meet other specified Contract requirements, the continuation or expansion of an existing Subcontractor agreement that was awarded through a "competitive process" along with facts supporting the continuation or expansion of the Subcontractor agreement, special requirements for the Work, special advantages or capabilities of the Design-Builder or Subcontractor to perform the Work, the significance of the Work as a critical path item, market availability of the requested services or products, and demonstration that the price is reasonable and fair.

D. The following are exempt from the competitive selection process:

1. Management services self-performed by the Design-Builder.

2. Subcontracted or self-performed Work valued at $10,000 or less.

3. Subcontracted Work valued at less than $100,000 but more than $10,000 provided the Design-Builder receives a minimum of three written quotations and awards the subcontract to a qualified Subcontractor at a fair and reasonable price. However, the City may waive the three-quotation minimum requirement after reviewing the Design-Builder's good faith efforts to obtain them.

4. Design professional services self-performed by Design-Builder.

5. Design professional services performed by one or more Designers identified in the Agreement.

E. The competitive selection process includes all of the elements described below:

1. The Design-Builder must develop the criteria (qualifications and price) that will be used to analyze bids for each element of the Work, in accordance with the following:

a. Unless identified in 6.13.E.b. below or exempted from the competitive process as described in 6.13.D above, subcontracted work shall be awarded to the firms that meet minimum qualifications and offer the lowest price following a competitive selection process as outlined in this section.

b. Unless allowed without a competitive process as described in 6.13.C, above, subcontracts in the trades or design disciplines listed below will be awarded to the firms that offer the best combination of qualifications and price:

1) Concrete Work

2) Structural elements (e.g., bridge foundation and structure, retaining walls)

3) Water distribution system

4) Excavation and earthwork

5) Architectural elements

6) Other trades or design disciplines proposed by Design-Builder in its Procurement Plan and accepted by the City in the GMP Amendment.

c. Design-Builder shall consult with the City regarding subcontracts for an element of the Work not listed above, and will use the competitive procedure detailed in 1.a. or 1.b., as directed by the City for that subcontract.

d. Subcontract pricing may be lump sum or cost plus a fixed fee. The criteria must be presented to the City for review, and are subject to approval. The City may also add criteria for evaluation upon reasonable justification.

e. If the Design-Builder or an affiliate or subsidiary of the Design-Builder will be included in the Subcontractor selection process to perform particular design services or construction Work on the project, the Design-Builder must disclose that fact in the selection process documents and announcements. The Design-Builder must utilize the conditions, processes, and procedures identified in subsection 6 below.

2. Advertisements of each solicitation for bids must be published in the Portland Daily Journal of Commerce, and other trade journals if appropriate, in a manner reasonably calculated to give timely notice of the solicitation to all qualified prospective bidders likely to submit bids.

3. Design-Builder must obtain a minimum of three Subcontractor bids for each element of the Work, unless the City waives the three-bid minimum requirement after reviewing the Design-Builder's good faith efforts to obtain bids.

4. If requested by the City, bid solicitation documents must be provided to the City for review not less than five Business Days prior to issuance of bid solicitation, unless a different schedule is agreed to by the Design-Builder and the City. Each solicitation must state the time and place bids will be opened.

5. All bids must be in writing, sealed, and submitted to a specific location by a specific time. If Subcontractors are required by Law to have State of Oregon Construction Contractors Board license and Workers' Compensation Insurance, the bids must include the Subcontractor's Contractors Board license number and insurance identification number. If Subcontractors are required by Law to have State of Oregon architect, landscape architect or engineering registration, the bids must include the Subcontractor's registration number.

6. Bids must be opened in public with the City's Project Manager or his designee present at the time and place stated in the solicitation. The Design-Builder must evaluate the Subcontractors according to the criteria approved in subsection F.1 above. After evaluation, the Design-Builder shall share the results of the evaluation with the City. Upon completion of the City's review and subject to the City's disapproval, the Design-Builder shall then award the contract to the selected bidder and announce the results to all Subcontractors who submitted bids for that element of the Work. The announcement of award shall:

a. Be communicated to Subcontractors via email.

b. Specify that Subcontractors who were not selected for an element of the Work may, within 60 days from the Design-Builder's notice of award of a subcontract for that Work, submit a written request to the Design-Builder for a post-selection meeting with the Design-Builder to discuss the Subcontractor qualification and selection process. Indicate that a meeting with the Subcontractor will be set within 45 days of the Subcontractor's written request.

7. The City will not resolve or be involved in the resolution of protests of the Design Builder's selection of Subcontractors and suppliers. The procedures and reporting mechanisms related to the resolution of Subcontractor and supplier protests shall be as follows:

a. The Design-Builder's Managing Principal will review any protest. Upon completion of the review the Design-Builder will determine the path of resolution with three possible outcomes: (1) confirmation of the original findings; (2) re-solicitation of bid package; or (3) revised award.

8. The City retains the right to monitor the subcontracting process in order to protect the City's interests and to confirm the Design-Builder's compliance with the Contract and with applicable statutes, administrative rules, and other legal requirements.

9. The Design-Builder's subcontracting records are not considered to be public records except to the extent that they are prepared, owned, used, or retained by the City in the conduct of the City's business.

F. The Design-Builder shall submit monthly usage reports on Work contracted with disadvantaged, minority, women, and emerging small business.

G. All subcontracts, including but not limited to subcontracts with Designers, shall include a clause stating that the City is a third-party beneficiary of the subcontract and the subcontract is assignable to the City upon the City's written request in the event the City takes over the Work.

H. Upon execution of any subcontract, the Design-Builder shall provide the City with a bid tabulation for the portion of the Work covered by the subcontract.

6.14 The Design-Builder shall include a provision in all subcontracts that all Subcontractors (including but not limited to Designers) agree to be bound to the Design-Builder by terms of the Design-Build Documents, and to assume toward the Design-Builder all the obligations and responsibilities, including but not limited to the responsibility for safety of the Subcontractor's Work, which the Design-Builder, by this Contract, assumes toward the City.

6.15 Subcontractors shall be subject to disapproval of the City. If the City disapproves a Subcontractor, the Design-Builder shall submit an acceptable substitute.

6.16 The Design-Builder is responsible for: (1) all acts and omissions of his Subcontractors (including but not limited to Designers), (2) persons and organizations directly or indirectly employed by his Subcontractors, (3) persons and organizations for whose acts any of his Subcontractors may be liable, and (4) scheduling and coordinating the work of Subcontractors, suppliers, and other individuals or entities designing, performing or furnishing any of the Work under a direct or indirect contract with the Design-Builder. Nothing in this Contract shall create any contractual relationship between the City and any Subcontractor or other person or organization having a direct contract with the Design-Builder. Nothing in this Contract shall create any obligation on the part of the City to pay or to see to the payment of any moneys due any Subcontractor or other person or organization, except as may otherwise be required by Law. The City may furnish to any Subcontractor or other person or organization, to the extent practicable, evidence of amounts paid to the Design-Builder on account of specific Work completed.

Patent Fees and Royalties

6.17 If any design, device, material, or process covered by letters patent or copyright is used by the Design-Builder or is provided for the City's use, the Design-Builder shall: (1) provide for

such use by agreement with the owner of the patent or copyright or a duly authorized licensee of such owner, and (2) defend, indemnify, reimburse and hold the City harmless from all damages, losses and expenses, including, without limitation, attorneys' and expert witness' fees arising from the use of the patented or copyrighted design, device, material, or process.

Computer Software and Code Use Rights

6.18 If the Design-Build Documents require the Design-Builder to provide the City with computer software programs or code as part of the Work, the Design-Builder shall provide the City with all documentation and instruments necessary to evidence the City's right to use such software or code, including but not limited to ownership transfer documentation, software license agreements generally in accordance with the forms of agreements included in the Design-Build Documents as exhibits, subscription agreements, or assignments of intellectual property interests, as applicable.

Permits

6.19 Unless otherwise provided in the Design-Build Documents, the Design-Builder shall secure and pay for any and all permits, fees, licenses, inspections, and agreements by governmental agencies or other entities, necessary for proper execution of the Work and Substantial Completion of the Project, including but not limited to mechanical, plumbing, electrical and similar special permits, plan check fees, system development charges, road approach and right-of-way permits, including permits and all other agreements, qualifications, and insurance necessary for work over the railroad right of way, air discharge permits and all other necessary permits, approvals, assessments and charges required for construction, use or occupancy of permanent structures or for permanent changes in existing facilities.

A. The Design-Builder shall submit to the City, for review, all calculations and other documentation required for purposes of obtaining permits.

B. After City review, the Design-Builder shall submit to federal, state, and local units of government all calculations and other documentation required for obtaining permits. During review by units of government or other entities, the Design-Builder shall notify the City of proposed deviations from the original permit documentation.

C. The Design-Builder shall submit to the City all calculations and other documentation approved by units of government.

D. The Design-Builder shall pay costs and charges imposed by local units of government or other entities for permits issued to the Design-Builder.

E. The Design-Builder shall give all notices necessary for permit-related inspections by third parties.

F. The Design-Builder shall submit to the City a legible copy of agreements, permits, certificates of approval, and certificates of occupancy issued by the responsible unit of government.

6.19.1 Design-Builder shall acquire a City Business Licenses and ensure that all Subcontractors acquire a City Business License prior to performing any work on the Project.

Laws and Regulations

6.20 The Design-Builder shall comply, and shall ensure that his employees and those of his Subcontractors and suppliers at every tier comply, with the most current versions of applicable Laws, rules, regulations, and practices.

6.21 If the Design-Builder performs any Work knowing or having reason to know that it is contrary to any Law, the Design-Builder shall be responsible for all claims, costs, losses, and damages arising out of or relating to the Design-Builder's performance or the resulting Work. The Design-Builder shall immediately report to the City if performance under this Contract would violate any Law in any respect.

A. The Contract hereby incorporates all contract provisions that are required to be incorporated into contracts with public entities pursuant to (a) the Public Contracting Code (ORS Chapters 279A, 279B and 279C), (b) the City's Contracting Rules and (c) other applicable Law. The provisions incorporated into the Contract under the preceding sentence include, without limitation, any provisions or amendments to provisions that become required after the Contract is executed. The provisions listed in this section are not necessarily an exhaustive list of provisions that are required under the Public Contracting Code, the City's Contracting Rules or other applicable Law, and the fact that this section does not list a provision that is required by the Public Contracting Code, the City's Contracting Rules or other applicable Law will not (i) prevent or otherwise diminish the incorporation of that unlisted provision into the Contract or (ii) negate or otherwise diminish Design-Builder's obligation to comply with applicable Laws.

Environmental Responsibilities

6.22 The following federal, state, and local agencies have enacted ordinances or regulations dealing with the prevention of environmental pollution and the preservation of natural resources that may affect the performance of this Contract:

A. City and County where the Work is to be performed

B. Oregon Environmental Quality Commission

C. U.S. Environmental Protection Agency

6.23 Known conditions at the construction site may require the Design-Builder to comply with statutes or with ordinances or regulations enacted by the agencies listed above.

6.24 The Design-Builder is solely responsible for (1) considering applicable statutes and the ordinances and regulations enacted by the agencies listed above, (2) considering the known conditions specifically referred to in this Contract, and (3) ensuring that the activities of the Design-Builder and the Design-Builder's employees, Subcontractors (including suppliers), agents, and invitees with respect to those conditions do not violate any of those statutes, ordinances, or regulations. Without limiting the foregoing, the Design-Builder is solely responsible for the following environmental and natural resource risks associated with the performance of this Contract:

A. Air pollution;

B. Water pollution;

C. Contamination of soil, groundwater, or sediment;

D. Filling or destruction of wetlands;

E. Taking of a federally listed threatened or endangered species through habitat destruction, habitat degradation, or otherwise; and

F. Introduction of an invasive species.

6.25 In addition to the foregoing requirements, the Design-Builder shall manage and conduct all activities related to the performance of this Contract in accordance with all environmental Laws and regulations, and with the requirements of all permits issued under those Laws and regulations of which the Design-Builder has been given notice or has actual knowledge. "Environmental Laws and regulations" means all federal and state statutes, all local ordinances, and all regulations adopted pursuant to those statutes and ordinances, as any of them may be amended from time to time, dealing with the prevention of environmental pollution or the preservation of natural resources, including but not limited to: the Resource Conservation and Recovery Act, the Comprehensive Environmental Response, Compensation and Liability Act, the Toxic Substances Control Act, the Clean Air Act, the Clean Water Act, and Oregon Revised Statutes Chapters 465, 466, 467, 468, 468A, 468B, and 496. If the Design-Builder believes compliance with a requirement under this Contract or a direction given by the City will result in violation of any environmental Laws or regulations, the Design-Builder shall so notify the City in writing immediately and shall not proceed pursuant to that requirement or direction until the City directs the Design-Builder to proceed.

6.26 In the event of a sudden spill or discharge of hazardous material as a result of the negligence or other fault of the Design-Builder, its Subcontractor(s), agents, employees or anyone else for whom Design-Builder is responsible, the City may take action, including contracting for control or cleanup of the spill or discharge, unless the Design-Builder takes immediate appropriate action. If the City takes action pursuant to this paragraph, the City may recover from the Design-Builder all reasonable cost necessarily incurred in effecting the control

and cleanup of the spill or discharge. Regardless of who undertakes the cleanup or control of the spill or discharge, the methods used shall be subject to the approval of the City.

A. Unless disposition of environmental pollution is specifically a part of this Contract, or was caused by Design-Builder (reference 6.26), Design-Builder shall immediately notify City of any hazardous substance(s) which Design-Builder discovers or encounters during performance of the Work required by this Contract. "Hazardous substance(s)" means any hazardous, toxic and radioactive materials and those substances defined as “hazardous substances,” “hazardous materials,” “hazardous wastes,” “toxic substances,” or other similar designations in any federal, state, or local law, regulation, or ordinance, including without limitation asbestos, polychlorinated biphenyl (PCB), or petroleum, and any substances, materials or wastes regulated in 40 CFR, Part 261 and defined as hazardous in 40 CFR S 261.3. In addition to notifying City of any hazardous substance(s) discovered or encountered, Design-Builder shall immediately cease working in any particular area of the project where a hazardous substance(s) has been discovered or encountered if continued work in such area would present a risk or danger to the health or well-being of Design-Builder’s or any Subcontractor's work force.

B. Upon notification from Design-Builder of the presence of hazardous substance(s) on the project site, City shall arrange for the proper disposition of such hazardous substance(s). City may agree to a Change Order or Change Directive to extend the Contract Time, depending on the nature and extent of necessary disposition or remediation for hazardous substances under this section.

Taxes

6.27 The Design-Builder shall pay or ensure payment of sales, consumer, use, and other similar taxes required of the Design-Builder or any Subcontractor under any Law with respect to performance under this Contract. Design-Builder shall comply with all Oregon tax Laws and shall submit a certification of such compliance in accordance with ORS 305.385(6).

Use of Premises

6.28 The Design-Builder shall confine equipment, the storage of material, and the operations of workers to areas permitted by this Contract. The Design-Builder shall not unreasonably encumber the premises with equipment or material.

6.29 During the progress of the Work, the Design-Builder shall keep the premises free from accumulations of waste material, rubbish and other debris resulting from the Work. At the completion of the Work, the Design-Builder shall leave the site clean and ready for occupancy. The Design-Builder shall restore to their original condition those portions of the site not designated for alteration by this Contract.

6.30 The Design-Builder shall not permit any part of any structure to be subjected to loads that may endanger its structural stability. The Design-Builder shall not subject any part of the Work or adjacent property to stresses or pressures that will endanger it.

Safety and Protection

6.31 The Design-Builder shall comply with all Laws applicable to the safety of persons or property. Damage, injury, or loss to property caused by the Design-Builder, Subcontractor, or anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable shall be remedied by the Design-Builder.

6.32 The Design-Builder shall be solely responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the Work.

6.33 Prevention through Design: In order to minimize or eliminate risk and hazards, during the design phase, the Design-Builder shall assign a design safety coordinator to anticipate hazards during the construction phase(s) and during occupancy.

A. The design safety coordinator shall develop a safety and health plan anticipating hazards applicable to the construction site, taking into account the construction activities that will take place on the site. The plan shall be provided to the construction team safety representative(s) for inclusion into their site-specific safety plan. This plan shall also include specific measures addressing hazards which may fall within one or more of these categories:

1. Work involving engulfment hazards.

2. Work involving falls from height hazards.

3. Work which puts workers at risk from chemical or biological substances.

4. Work with ionizing radiation.

5. Work near high voltage lines.

6. Work involving Hazardous Energy Control Procedures.

7. Work exposing workers to the risk of drowning (work over water).

8. Work carried out by divers.

9. Work involving the use of explosives.

10. Work involving the assembly or dismantling of heavy prefabricated components.

11. Work involving an OSHA or other regulatory requirement for worker health exposure monitoring.

12. Work taking place on, near, or over railroad right of way.

13. Work that impacts the use of the right of way by the travelling public.

14. Work near high-pressure gas lines or other potentially life-threatening utilities as identified by the City in writing.

B. The design safety coordinator shall also develop a safety and health plan anticipating hazards applicable to the use and maintenance of the permanent facility, ensuring the protection of employees and the public. This plan shall be submitted to the City prior to beneficial occupancy.

6.34 The Design-Builder shall designate a qualified and experienced safety representative whose duties and responsibilities shall be the prevention of accidents and the maintenance and supervision of safety precautions and programs. This person shall be the Design-Builder's project superintendent unless otherwise designated in writing by the Design-Builder to the City.

6.35 The Design-Builder shall report promptly in writing to the City all recordable accidents and injuries occurring at the site. When the Design-Builder is required to file an accident report with a public authority, the Design-Builder shall submit a copy of the report to the City.

6.36 The Design-Builder shall inform the City of the specific requirements of the Design-Builder's safety program with which the City's employees and representatives must comply while at the site.

6.37 If the City deems any part of the Work unsafe, the City, without assuming responsibility for the Design-Builder's safety program, may require the Design-Builder to stop performance of the Work or take corrective measures satisfactory to the City, or both. If the Design-Builder does not adopt corrective measures, the City may perform them and deduct their cost from the Contract Sum. The Design-Builder agrees to make no claim for damages, for an increase in the Contract Sum, or for a change in the Contract Time based on the Design-Builder's compliance with the City's reasonable request.

6.38 The Design-Builder shall erect and maintain necessary safeguards for the safety and protection of:

A. Employees on the Work and other persons whose safety may be adversely affected by performance of the Work.

B. The Work and material to be incorporated into the Work, whether in storage on or off the site. If the Design-Builder fails to protect the Work, the City may, after giving notice to the Design-Builder, protect the Work and deduct the resulting cost from payment due the Design-Builder. The City's determination of when and to what degree such protection is necessary shall be final.

C. Other property at the site including trees, shrubs, lawn, walks, pavements, roadways, structures, and utilities not designated for removal, relocation, or replacement.

D. Adjacent property and utilities when prosecution of the Work may affect them.

6.39 The Design-Builder's duties and responsibilities for the safety and protection of the Work shall continue until the Design-Builder has completed all obligations under this Contract.

Emergencies

6.40 In the event of an emergency affecting the safety or protection of persons or the Work or property at, adjacent to, or near the site, the Design-Builder shall act to prevent threatened damage, injury, or loss. The Design-Builder may act without special instruction or authorization from the City. The Design-Builder shall give the City written notice within 24 hours of any significant change in the Work or deviation from this Contract caused by the Design-Builder's acts or omissions.

Submittals (Construction Documents, Shop Drawings, Product Data, Maintenance Data, Other Information, and Samples)

6.41 The Design-Builder shall check and verify all field measurements associated with the fit and function of supplied equipment, products, and material. He shall then submit Construction Documents, Shop Drawings, Product Data, Maintenance Data, other information, and Samples to the City in accordance with the accepted submittal schedule, with such promptness as to cause no delay in the Work. All submittals shall be identified as the City requires, and shall be accompanied by the City's standard submittal form. Submittals shall be reviewed and stamped with the approval of the Design-Builder prior to submittal to the City.

6.42 Construction Documents, Shop Drawings, Maintenance Data, Product Data, and other information including, but not limited to, substitution requests, certificates, reports, test data, mix designs, and warranties shall be submitted electronically unless otherwise specified. Data shown in submittal information shall be complete with respect to quantities, dimensions, material, and specified performance and design criteria, to allow the City to verify conformance with this Contract.

6.43 The Design-Builder shall submit to the City the specified number of Samples required by this Contract. Samples shall be identified clearly as to material, manufacturer, pertinent catalog numbers, and intended use.

6.44 The Design-Builder shall call the City's attention to any deviations from the requirements of the Construction Documents that the Shop Drawings, Product Data, Maintenance Data, other information, or Samples may have. This shall be in a written format approved by the City and shall be submitted electronically to the City's Project Manager.

6.45 Within 7 Business Days of actual receipt, the City will stamp, date, and return proposed deviations to the Design-Builder indicating the action to be taken, or notify the Design-Builder of the reason for delay in return. The City's review will be only for conformance with the design concept of the Work and for general compliance with this Contract. It will not extend to means,

methods, sequences, techniques, or procedures of construction; nor will it extend to safety precautions or programs related thereto, or to the assembly in which an item functions.

6.46 The Design-Builder shall make any corrections required by the City and proceed according to the City's directions. The Design-Builder shall return the required number of corrected copies of submittal information and resubmit new Samples for review. The Design-Builder shall direct specific attention in writing to revisions other than the corrections called for by the City on previous submittals.

6.47 The Design-Builder's stamp of approval on any submittal shall constitute a representation to the City that the Design-Builder has: (1) determined and verified all quantities, dimensions, field construction criteria, material, catalog numbers, and similar data or assumes full responsibility for doing so, and (2) has reviewed and coordinated each submittal with the requirements of this Contract.

6.48 When a submittal is required by this Contract, no related Work shall be commenced until the submittal has successfully completed the Design-Builder's review process and any deviations have been submitted to and reviewed by the City, unless permission to commence has been granted in writing by the City. The Work shall be in accordance with approved submittals (including but not limited to the Construction Documents), except that Design-Builder shall not be relieved of its responsibility to perform Work in accordance with the requirements of the Design-Build Documents.

6.49 The City's review of a submittal (including but not limited to the Construction Documents) shall not relieve the Design-Builder from responsibility for any deviations from this Contract except those called to the City's attention at the time of submission and specifically accepted in writing by the City. Changes in the Work shall follow procedures outlined for a Change Order. Review by the City shall not relieve the Design-Builder from responsibility for errors or omissions in the submittal, including but not limited to errors or omissions in the Construction Documents.

6.50 Submittals that have successfully completed the review process shall become binding upon the Design-Builder, and Design-Builder shall be obligated to perform in accordance with the reviewed submittal.

Schedule of Values

6.51 The Design-Builder shall submit a schedule of values prepared by distributing the Guaranteed Maximum Price to line items in a format approved by the City. The distribution of the Guaranteed Maximum Price shall accurately reflect the estimated cost of the individual line items.

6.52 The Design-Builder shall submit the initial schedule of values for review and approval at the first meeting between the City and Design-Builder. Once approved, the schedule of values shall be updated monthly.

Work Progress Schedule

6.53 The Design-Builder shall submit a critical path method work progress schedule with activities coded to facilitate organizing the schedule.

6.54 The Design-Builder shall submit the initial work progress schedule for review at the first meeting between the City and Design-Builder. The work progress schedule shall be updated monthly.

Access to the Work

6.55 The Design-Builder shall provide reasonable and safe access to the City and inspection authorities for observation, testing, and inspection of the Work including, but not limited to, ladders, lifts, equipment, and tie-off apparatus.

Prosecution of the Work

6.56 The Design-Builder shall continue performance of the Work in accordance with the work progress schedule during all claims or disputes with the City. No Work shall be delayed or postponed pending resolution of any disputes or disagreements, except as the Design-Builder and the City may otherwise agree in writing.

City's Right to Do the Work

6.57 If the Design-Builder fails to prosecute the Work properly or fails to perform any provision of this Contract, the City, after a three-day written notice to the Design-Builder, may, without prejudice to any other remedy it may have, make good such failures. The City may deduct the cost thereof from any payment due the Design-Builder. In cases of emergency, the City may prosecute such Work without notice or delay and may deduct the cost thereof from any payment due the Design-Builder.

Indemnification

6.58 Design-Builder shall defend, indemnify, reimburse, and hold the City, its officers, agents, employees and volunteers harmless against all liability, claims, losses, damages, demands, suits, fees and judgments (collectively known as 'claims') to the extent that claims may be based on, or arise out of damage (including economic or noneconomic damages) or injury (including death) to persons or property caused by or resulting from any breach, negligence, act, omission, or other fault of Design-Builder or its agents, representatives, or subcontractors sustained in connection with Design-Builder's, its agents', representatives', or subcontractors' performance of this contract or by conditions created thereby or based upon violation of any statute, ordinance or regulation, including professional errors and omissions, design warranties, construction operations, and faulty Work claims. This required indemnification shall not apply to claims to the extent caused by the negligence or willful misconduct of the City, its officers, agents, employees, and volunteers. The Contractor agrees that it is not an agent of the City and is not

entitled to indemnification and defense under ORS 30.285 and ORS 30.287. Nothing in the foregoing shall be deemed to require any indemnity made void by ORS 30.140.

Prevailing Wage Rates

6.59 The Design-Builder shall comply with the prevailing wage rate requirements of ORS 279C.800 to 279C.870 at the time this Contract first constitutes a binding and enforceable obligation on the part of the Design-Builder to perform or arrange for the performance of construction, reconstruction, major renovation, or painting, or when the GMP Amendment is executed, whichever occurs first.

A. The existing prevailing rates of wage which may be paid to workers in each trade or occupation required for this Work and employed in the performance of this Work by the Design-Builder or a Subcontractor, or any other person doing or contracting to do all or any part of the Work, may be obtained from the Bureau of Labor and Industries' web site at www.boli.state.or.us.

B. Workers in each trade or occupation required for this Work and employed in the performance of this Work by the Design-Builder, a Subcontractor, or any other person doing or contracting to do all or any part of the Work, shall be paid not less than the minimum hourly rate of wage specified in the foregoing paragraph. The Design-Builder shall ensure that each subcontract includes a provision that workers shall be paid not less than the minimum hourly rate of wage specified in the foregoing paragraph.

C. The Design-Builder shall have a public works bond filed with the Construction Contractors Board as provided by ORS 279C.836. In every subcontract, the Design-Builder shall include a provision requiring the Subcontractor to have a public works bond filed with the Construction Contractors Board, unless exempt, as provided by ORS 279C.836.

D. The fee that is required to be paid to the commissioner of the Bureau of Labor and Industries under ORS 279C.825(1) shall be paid under the administrative rule of the commissioner.

Labor Relations

6.60 The Design-Builder shall be responsible for labor relations and shall seek to resolve disputes between himself and his employees. Any labor dispute arising from this Contract that causes a disruption of the City's operations shall be to the account of and the responsibility of the Design-Builder.

ARTICLE 7 – WORK BY OTHERS

7.1 The Design-Builder shall afford utility service companies, other contractors and City employees reasonable access to the Work. He shall allow storage of material and execution of work by others. He shall properly connect and coordinate his Work with work by others.

7.2 Notice will be given to the Design-Builder prior to the start of any additional work by others not noted in this Contract. If the Design-Builder believes that the performance of such additional work by the City or others involves additional expense to the Design-Builder or requires an extension of the Contract Time, the Design-Builder shall promptly notify the City in writing.

7.3 If any part of the Design-Builder's Work depends upon the work of any other contractor, utility service company, or the City, the Design-Builder shall inspect and promptly report to the City in writing any reasons that render work by others unsuitable. The Design-Builder's failure to report unsuitability of work by others shall constitute the Design-Builder's acceptance of the work by others as fit and proper for integration with the Design-Builder's Work. Latent or non-apparent defects and deficiencies in the work by others shall be reported to the City in writing promptly upon discovery.

7.4 The Design-Builder shall do all cutting, fitting, and patching of the Work that may be required to make its parts come together properly and integrate with such other work. The Design-Builder shall not endanger any work by others. The Design-Builder shall cut or alter work by others only with the written consent of the City and those whose work will be affected.

7.5 Unless otherwise specified, the City shall be the final authority regarding coordination issues between the Design-Builder and work by others.

ARTICLE 8 – CITY'S STATUS

Project Manager

8.1 The City's Engineering Division Manager will be the City's representative during the design and
construction phases of the Work.

8.2 The Project Manager will resolve any and all questions which may arise as to Contract compliance. The Design-Builder shall at all times carry out and fulfill the City's instructions and directions insofar as they concern the Work to be performed under this Contract.

A. The Project Manager's authority includes, but is not limited to:

1. Determining the quantity, quality, and acceptability of material furnished and Work performed.

2. Reviewing and approving/disapproving the manner of performance and rate of progress of the Work.

3. Stopping the Work whenever such stoppage is deemed necessary.

4. Administering this Contract.

5. Determining acceptable fulfillment of this Contract by the Design-Builder.

B. Written approval by the Project Manager signifies favorable opinion and qualified consent. It does not carry with it: (1) certification, (2) assurance of completeness, (3) assurance of quality, or (4) assurance of accuracy concerning details, dimensions, and quantities.

C. Written approval by the Project Manager will not relieve the Design-Builder from responsibility for: (1) errors, (2) improper fabrication, (3) nonconformance with requirements, or (4) deficiencies within the Design-Builder's control.

Clarifications and Interpretations

8.3 The Project Manager will issue with reasonable promptness such written clarifications or interpretations of this Contract as may be necessary. If the Design-Builder believes that a written clarification or interpretation justifies an increase in the Guaranteed Maximum Price or the Contract Time, the Design-Builder may notify the City as provided in Article 9.

Rejection of Defective Work

8.4 The Project Manager is authorized to disapprove or reject Work which is Defective and to require additional inspection or testing of the Work whether or not the Work is fabricated, installed, or completed.

City Inspectors

8.5 The City may assign City inspectors who are authorized to:

A. Inspect the Work as it is performed and all material being furnished. Such inspections may extend to all or any part of the Work and to the preparation, fabrication, or manufacture of the material to be used.

B. Call the attention of the Design-Builder to any failure of the Work to meet this Contract.

C. Reject material not meeting the requirements of this Contract.

D. Suspend that part of the Work affected by Contract nonconformance until the issue can be referred to and a decision issued by the Project Manager.

8.6 City inspectors are not authorized to:

A. Supervise or perform any other duties for the Design-Builder, or interfere with the Design-Builder's management of the Work.

B. Give final approval or acceptance of any portion of the Work.

C. Issue instructions or directions contrary to this Contract.

8.7 No act or failure to act on the part of a City inspector will render the City liable in any way, nor shall it relieve the Design-Builder from fulfilling all of the terms and conditions of this Contract.

Limitations on the City's Responsibilities

8.8 The City is not responsible for the acts or omissions of the Design-Builder or the Design-Builder's employees, Subcontractors, manufacturers, fabricators, suppliers, distributors, or any other persons at the site or otherwise performing any of the Work, or their agents or employees.

8.9 The City is not responsible for the Design-Builder's means, methods, procedures, sequences, or techniques of construction, or related safety precautions and programs, except as specified in the Design-Build Documents.

8.10 The City is not responsible for the Design-Builder's failure to perform the Work in accordance with this Contract.

ARTICLE 9 – CHANGES

Changes in the Work

9.1 Without invalidating this Contract, the City may, at any time, order additions, deletions, or revisions to the Work by written Change Order or Change Directive. All such additions to or revisions of the Work shall be performed in accordance with the applicable provisions of this Contract. The Design-Builder will not receive compensation for changes absent prior written approval from the City.

9.2 If the City and Design-Builder agree on the terms and conditions related to a change in the Work, a Change Order will be executed to adjust the Guaranteed Maximum Price, schedule, or both.

9.3 If the City and Design-Builder cannot agree on the adjustment to the Guaranteed Maximum Price, schedule, or both, the City may issue a Change Directive. Design-Builder shall immediately proceed with the changes to the Work involved upon receipt of a Change Directive.

9.4 If the Design-Builder disagrees with any City-issued Change Directive, the Design-Builder may assert a claim in accordance with Article 14. Design-Builder shall continue with the Work so long as City continues to pay undisputed amounts.

9.5 The Design-Builder shall continue performance of the Work, including the change, during the negotiation of the Change Order, even if a dispute arises which delays or prevents agreement on the terms and conditions of the Change Order.

9.6 Any Change Order shall constitute an accord and satisfaction with respect to issues related to changes in the Guaranteed Maximum Price and the Contract Time. The Change Order shall be deemed to contain all the costs and credits relating to changes.

9.7 To assist in the preparation of a Change Order, the Design-Builder shall give the City a detailed cost estimate and a proposed schedule adjustment if a change in Contract Time is necessary. The cost estimate shall include a line item for each category of cost reimbursable under the Contract (see the Agreement), shall be submitted in writing to the City within 10 days after the City orders the additional work, and shall demonstrate satisfaction of the requirements set forth in Article 10. If a Change Order includes multiple, unrelated changes, the cost estimate and proposed schedule adjustment shall treat those changes independently.

9.8 The parties shall negotiate to resolve any disagreements over the cost estimate or proposed schedule adjustment. The negotiated cost estimate shall be the basis for increasing or decreasing the Guaranteed Maximum Price. Based upon the negotiated cost estimate and schedule adjustment, the City will prepare and the parties shall sign a Change Order.

Change of Contract Time

9.9 All time limits stated in this Contract are of the essence. Contract Time will be changed only by a Change Order. Any extension in Contract Time will be based on written notice delivered to the City within 15 days of the occurrence of the event precipitating the request. The Design-Builder shall deliver a work progress schedule analysis or summary justifying the time extension within 30 days of such occurrence. Failure to deliver any documentation to the City within the time limits specified above will completely foreclose consideration of an extension of Contract Time and all rights and remedies arising therefrom.

9.10 Time extensions will be granted only when conditions described in Item 9.11 exist and when the City agrees that the work progress schedule substantiates the need.

A. An adjustment of Contract Time will be the Design-Builder's sole remedy for any delay in performing the Contract, including without limitation any delay in achieving contractually required Substantial Completion, Final Acceptance, or milestone dates. To the extent the delay is unreasonable and is caused by the acts or omissions of the City or persons acting for the City, the Design-Builder is not precluded from the recovery of damages or from an equitable adjustment.

9.11 Extension of Contract Time will be determined by the City and will be an equitable adjustment if all or a part of the Work is hindered, delayed, or suspended by an Act of God, act of war, act of terrorism, or the acts or omissions of the City or the City's commissioners, employees, contractors, or agents.

9.12 Requests for extension of Contract Time will not be considered for: (1) contention that insufficient time was specified in this Contract; (2) delays which affect the Design-Builder's planned early completion but not the specified Contract Time; (3) suspensions made at the

request of the Design-Builder; (4) delays caused by labor disputes involving the Design-Builder or his Subcontractors; or (5) delays caused by issues known and addressed in this Contract.

ARTICLE 10 – SUBCONTRACTS

10.1 For the purposes of this article, "subcontract" includes without limitation subcontracts at any tier for construction services or supplies.

10.2 An adjustment for the changes in the Work will be made in accordance with one or a combination of the following methods as the Design-Builder may elect:

A. Fixed price Change Orders as supported by the breakdown of estimated costs.

B. Force account Change Orders in accordance with the 2021 Oregon Standard Specifications for Construction, with the City's prior written authorization.

Fixed Price Subcontractor Change Orders

10.3 Except as otherwise provided by this article or agreed to in writing by the City, subcontract change orders shall meet the following requirements.

A. Direct Costs

1. Material (itemize)

a. The cost to the Subcontractor for the material directly required for the performance of the changed Work. Such cost of material may include the cost of transportation. No delivery charges will be allowed unless the delivery is specifically for the changed Work.

b. Trade discounts offered by the supplier to the Subcontractor shall be credited to the City. If the material is obtained from a source owned wholly or in part by the Subcontractor, payment thereof will not exceed the current wholesale price for the material. The term "trade discount" includes the concept of cash discounting.

c. If, in the opinion of the City, the cost of the material is excessive or if the Subcontractor fails to furnish satisfactory evidence of a cost to him from the supplier then, in either case, the cost of the material shall be deemed to be the lowest current wholesale price at which similar material is available in the quantities required.

d. The City reserves the right to furnish such material as it deems advisable and the Subcontractor shall have no claims for cost or profit on material furnished by the City.

2. Labor (man-hours, rates by crafts)

a. Payroll costs shall include, but not be limited to, salaries and wages, and fringe benefits including social security contributions, unemployment, excise and payroll taxes, workers' compensation, health and retirement benefits, sick leave, vacation and holiday pay applicable thereto. The costs for all supervision, including general superintendents and foremen, shall be included in the markups established by this Contract. The only exception to this shall be working foremen who perform manual labor. No labor charges will be accepted for engineering or proposal preparation. These costs shall be included in the markups established by this Contract.

b. Overtime and premium time pricing will be allowed only for labor which is authorized by the City to be performed after normal working hours, or on Saturday, Sunday, or legal holidays.

3. Equipment (type, size, attachments, hours, rate)

a. The cost to the Subcontractor for the use of equipment directly required in the performance of the changed Work. No mobilization or demobilization cost will be allowed for equipment already on site.

b. For equipment owned, furnished, or rented by the Subcontractor, costs allowed shall be the actual usage costs incurred as supported by the Subcontractor's published standard equipment rates or rental invoices. Rates charged shall not exceed the rates established by the Rental Rate Blue Book.

c. The amount to be paid to the Subcontractor for the use of equipment as set forth above will constitute full compensation for the cost of fuel, power, oil, lubricants, supplies, small tools, small equipment, necessary attachments, repairs and maintenance of any kind, depreciation, storage, insurance, labor (except for equipment operators) and any and all costs incidental to the use of the equipment.

4. Direct costs shall not include:

a. Payroll costs and other compensation of the Subcontractor's officers, executives, principals of partnerships and sole proprietorships, general managers, engineers, architects, estimators, lawyers, auditors, accountants, purchasing and contracting agents, expeditors, timekeepers, clerks, superintendents and foremen, and similar administrative personnel. These costs shall be considered administrative costs covered by the Subcontractor's fee.

b. Expense of the Subcontractor's principal and branch offices other than the Subcontractor's office at the site.

c. Any part of the Subcontractor's capital expenses. Interest on the Subcontractor's capital employed for the Work. Charges against the Subcontractor for delinquent payments.

d. Costs due to the negligence of the Subcontractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable. Negligence costs include correction of Defective Work, disposal of material wrongly supplied, and making good any damage to property.

e. Other overhead or general expense costs of any kind.

f. Cost of small tools and supplies.

g. Cost of safety programs.

h. Costs of insurance.

i. Cost of warranty work.

B. Subcontract Costs

1. Direct costs shall be as outlined in Item 10.3, A.

2. Subcontractors' (at any tier) markups for overhead and profit shall not exceed 15 percent of the direct costs.

C. Subcontractor's Markup

1. The Subcontractor's markup for overhead and profit shall not exceed the following:

a. No more than 15 percent of material, labor and equipment costs incurred; and

b. No more than 8 percent on payments to Subcontractors at all tiers.

2. The amount of credit to the City for a change which results in a net decrease in cost shall be the amount of the actual net decrease plus a deduction in the Subcontractor's overhead and profit markup by an amount equal to that allowed above.

3. When both additions and credits are involved in any one change, the adjustment in the Subcontractor's overhead and profit markup shall be computed on the basis of the net change in cost.

4. Notwithstanding the foregoing, the cumulative total of all markups

on a cost by Subcontractors at all tiers may not exceed 30 percent.

ARTICLE 11 – WARRANTY; TESTS AND INSPECTIONS; CORRECTION, REMOVAL, OR ACCEPTANCE OF DEFECTIVE WORK

Tests and Inspections

11.1 Testing shall be by the 2021 Oregon Standard Specifications for Construction and, as necessary, as described in the GMP Amendment.

11.2 This section intentionally left blank.

11.3 This section intentionally left blank.

Uncovering Work

11.4 The Design-Builder, at the City's request, shall uncover, expose, and reconstruct, or otherwise make available for observation, inspection, testing, or approval, any portion of the Work. The Design-Builder shall furnish all necessary labor, material, and equipment. The cost shall be allocated as follows:

A. The Design-Builder shall bear the cost if the Work was covered contrary to the direction or without approval of the City.

B. The Design-Builder shall bear the cost if the Work was covered without concurrence of the City unless the Design-Builder had given the City timely notice of intent to cover such Work, and the City did not act with reasonable promptness in response to such notice.

C. The Design-Builder shall bear the cost if the previously installed Work is found to be Defective.

D. For situations not covered above, the Design-Builder may be allowed an increase in the Guaranteed Maximum Price or an extension of the Contract Time, or both, directly attributable to such uncovering, exposure, observation, inspection, testing, and reconstruction if he makes a request therefor as provided in Articles 9 and 10.

Warranty

11.5 Contractor unconditionally warrants all the construction activities constituting the Work and materials under this contract, including additional work authorized under change orders, against any defects whatsoever, for two years from the date of acceptance by the City, except that manufacturers' warranties and extended manufacturer warranties as specified in the contract documents or otherwise is a standard manufacturer product warranty shall not be abridged. In addition to its right to proceed on the warranty, the City may recover for breach of contract, negligence, or any other theory other than the express warranty even if defects do not become evident during the warranty period.

A. Contractor shall perform all Work in accordance with all specifications, correcting any Work not in compliance with specifications, and for all repairs of damage to other improvements, natural and artificial structures, systems, equipment, and vegetation caused by, or resulting in whole or in part from occurrences beginning during the warranty period and are the result of defects in construction or materials installed under this contract. Contractor shall be responsible for all costs associated with site cleanup and remediation caused by, or resulting in whole or in part from, defects in its work or materials.

B. Within 10 calendar days of the City's written notice of defects, Contractor or Contractor's Surety shall start repair of the defects and all related damage. If Contractor or Contractor's Surety fails to correct and repair the defects in a timely manner, the City may have the correction and repair done by others. Contractor or Contractor's Surety shall promptly reimburse the City for all expenses incurred to correct and repair the defects.

C. In case of an emergency where delay could result in serious loss or damage, the City may make emergency corrections and repairs, without written notice.
Contractor or Contractor's Surety shall promptly reimburse the City for all expenses incurred to correct and repair the defects.

D. All Work done to comply with the warranty shall itself be warranted for one year beginning on the date of the City's acceptance of the corrections, repairs, replacements or changes.

11.6 The Design-Builder further warrants that the construction work will conform to the requirements of the Contract Documents and will not be Defective for any reason, and that all materials and equipment selected by the Design-Builder or Subcontractor will be suitable for the purposes indicated in the Design-Build Documents. Work, materials, or equipment not conforming to these requirements may be considered Defective. The Design-Builder’s warranty excludes remedy for damage or defect caused by abuse, alterations to the Work not executed by the Design-Builder, improper or insufficient maintenance, improper operation, or normal wear and tear and normal usage. If required by the City, the Design-Builder shall furnish satisfactory evidence as to the kind and quality of materials and equipment.

11.7 Without limitation of any remedy of the City, upon Substantial Completion or termination of the Contract, the City shall be entitled to enforce at its option any and all Subcontractor warranties relating to Work performed and materials and equipment furnished by such Subcontractors. The Design-Builder agrees to perform the Work in such manner so as to preserve any and all such Subcontractor warranties. The Design-Builder also shall collect, assemble in a binder, and submit to the City written Subcontractor warranties and related documents, including without limitation from Subcontractors at all tiers performing Work and furnishing materials, equipment, appliances and other components of the Project.

11.8 Effective upon final payment, the written demand of the City, or upon the insolvency, bankruptcy, dissolution or other incapacity of the Design-Builder, the Design-Builder assigns to

the City all Subcontractors' warranties in materials and equipment and other portions or components of the Work.

11.9 The Design-Builder shall collect, assemble in a binder and submit to the City written warranties and related documents provided by Subcontractors, including but not limited to suppliers of equipment, operations and maintenance guides, appliances and other components of the Project, at all tiers. All such written warranties shall extend to the City. The Design-Builder hereby assigns to the City any warranty or maintenance obligation provided by a Subcontractor or supplier in excess of that required by this Contract.

Correction or Removal of Defective Work

11.10 In addition to the Design-Builder's warranty obligations and all other remedies of the City, if at any time during the period ending two years after Substantial Completion the Work is found to be Defective, the Design-Builder shall promptly correct all Defective Work without added cost to the City, whether or not fabricated, installed, or completed or, at the City's option, remove it from the site and replace it with Work that meets the Contract requirements. If the Design-Builder does not promptly comply with the terms of such instructions, or in an emergency where delay would cause risk of loss or damage, the City may have the Defective Work corrected or removed and replaced, and all direct and indirect costs of such correction or removal and replacement, including compensation for additional professional services, shall be paid by the Design-Builder or the Design-Builder's surety.

11.11 Nothing contained in Item 11.10 shall be construed to establish a period of limitation with respect to other obligations the Design-Builder has under the Design-Build Documents or applicable Law. Establishment of the period for correction of Work as described in Item 11.10 relates only to the specific obligation of the Design-Builder to correct the Work, and has no relationship to the time nor shall otherwise be deemed to limit the time within which the obligation to comply with the Design-Build Documents or applicable Law may be sought to be enforced, nor to the time within which proceedings may be commenced to establish the Design-Builder's liability with respect to the Design-Builder's obligations other than specifically to correct the Work.

City May Correct Defective Work

11.12 If the Design-Builder fails, within three days after written notice from the City, to proceed to correct, or to remove and replace Defective Work as required by the City, or if the Design-Builder fails to perform the Work in accordance with this Contract (including any requirements of the work progress schedule), the City may correct and remedy any such deficiency. To the extent necessary to complete corrective and remedial action, the City may: (1) exclude the Design-Builder from all or part of the site; (2) take possession of all or part of the site; (3) suspend the Design-Builder's services related thereto; (4) take possession of the Design-Builder's tools, appliances, construction equipment and machinery at the site; and (5) incorporate in the Work material stored at the site or for which the City has paid the Design-Builder but which has been stored elsewhere. The Design-Builder shall allow the City's representatives, contractors, agents, and employees such access to the site as may be necessary to exercise the

rights under this paragraph. All direct and indirect costs in exercising such rights will be charged against the Design-Builder. A Change Order will be executed incorporating the necessary revisions to this Contract and a reduction in the Guaranteed Maximum Price. Such direct and indirect costs will include, in particular but without limitation: (1) additional professional services required; and (2) repair and replacement of the Work of others destroyed or damaged by correction, removal, or replacement of the Design-Builder's Defective Work. The Design-Builder will not be allowed an extension of the Contract Time because of any delay in performance of the Work attributable to the exercise of the City's rights under this section.

ARTICLE 12 – PAYMENTS TO THE CONTRACTOR AND COMPLETION

Before Request for Progress Payment

12.1 Prior to submitting the first request for progress payment, the Design-Builder shall submit the following to the City:

A. Work progress schedule.

B. Schedule of values.

C. Cash flow schedule.

D. Final submittal schedule.

E. Wage certification.

1. If the Design-Builder is required to file a certified statement under ORS 279C.845, and the certified statement has not been filed as required, the City will retain 25 percent of any amount earned under this Contract until the certified statement has been filed. The City will pay the Design-Builder the amount retained within 14 days after the missing certified statement has been filed. Failure of a Subcontractor to file a certified statement required under ORS 279C.845 will not trigger retainage under this paragraph.

12.2 After the City's receipt and acceptance of the items listed under Item 12.1 above, the Design-Builder shall attend a pre-progress payment meeting, if requested by the City, to discuss payment requests, procedures, and requirements.

Request for Progress Payment

12.3 Thirty days or more following the Work Start Date, the Design-Builder may request the first monthly progress payment on Work completed by the date of the request. The request shall be made in a format that is acceptable to the City and shall be accompanied by supporting documentation required by this Contract. Requests shall be signed by the Design-Builder and submitted to the City for review.

12.4 This section intentionally left blank.

12.5 Material delivered and stored on site but not yet incorporated in the Work may be included in the request for progress payment subject to approval by the City and the following:

A. No payment will be made for material costing less than $50,000 total.

B. The City's title to and interest in the material must be clearly established and free of all liens or other encumbrances.

C. Value shall be established by invoice, freight bill, or other document.

D. Payment for stored material will be limited to 90 percent of the net cost invoiced to the Design-Builder.

E. When there is a bid price on material in place, the City will estimate the cost of placing. The progress payment will be limited to 90 percent of the bid price less the estimated cost of placing.

F. Risk of loss remains with the Design-Builder.

G. Materials must be stored in a location that is acceptable to the City where the City has access to said materials. Additionally, the materials must be stored in a fashion that does not compromise the materials in any way.

12.6 Progress payments shall not be construed as acceptance or approval of the Work or waiver of any defects in the Work.

Retainage

12.7 This section intentionally left blank. Refer to GMP Amendment.

Review of Request for Progress Payment

12.8 Within 15 days, the City will review each request for progress payment and recommend payment or respond in writing to the Design-Builder with the reasons the City is requiring resubmittal of the pay request before it can be approved.

12.9 The City may refuse to make payment and withhold payment, in whole or any part, to the extent:

A. The Work is Defective, or completed Work has been damaged requiring correction or replacement;

B. Written claims have been made against the City or liens have been filed in connection with the Work;

C. The City has been required to correct Defective Work or to complete the Work;

D. [Intentionally left blank]

F. The Design-Builder's prosecution of the Work in accordance with this Contract is unsatisfactory;

G. The Design-Builder has failed to make payments covered by past progress payments to Subcontractors, or for labor or material; or

H. The Design-Builder is in breach of this Contract.

I. Testing of work element failed or was not performed.

J. Specified warranties for work products are not provided to the City.

Substantial Completion

12.10 When the Design-Builder considers the entire Work ready for its intended use, he shall certify in writing that the entire Work is Substantially Complete and request a letter confirming Substantial Completion. Within 15 days thereafter, the Design-Builder and the City shall make an inspection of the Work to determine the status of completion, to include representatives of the lead designer. If, upon written recommendation by the lead designer, the City considers the Work Substantially Complete, the City will, within 15 days of date of inspection, execute and deliver to the Design-Builder a letter confirming Substantial Completion with a list of items begun by the lead designer and revised and issued by the City to be completed or corrected. The letter will state the date of Substantial Completion. If the City does not consider the Work Substantially Complete, the City will notify the Design-Builder in writing giving reasons therefor.

A. Warranties and operation and maintenance manuals shall be submitted and approved by the City and training shall be completed for the Work to be considered Substantially Complete.

12.11 The City may exclude the Design-Builder from that part of the Work after the date of Substantial Completion. The City will allow the Design-Builder reasonable access to complete or correct items on the list.

12.12 The Design-Builder may request, in writing, that the City confirm Substantial Completion for a part of the Work using the inspection and correction procedure described above. The City will only consider confirming Substantial Completion for a part of the Work if the City desires that part to become operational.

12.13 The City may allow the Design-Builder use of equipment installed as part of the Work prior to Substantial Completion, subject to the Design-Builder:

A. Obtaining the City's written approval.

B. Maintaining the equipment, and preparing and maintaining a log recording all maintenance activities.

C. Returning equipment to "as-new" condition upon Substantial Completion.

Partial Utilization

12.14 The City may request, in writing, the use of any part of the Work which may be used without significant interference with construction of other parts of the Work. If the City requests use of any part of the Work prior to Substantial Completion of all the Work, the City will issue to the Design-Builder a letter granting Substantial Completion for that portion of the Work with a list of items to be completed or corrected. The City will assume responsibility for security, safety, operation, maintenance, and utilities for that part of the Work while it is being used by or under the control of the City.

Final Inspection and Final Acceptance

12.15 When the Design-Builder considers the entire Work, or an agreed-upon portion thereof, to be complete, he shall certify, in writing, that the Work is complete and request a letter granting Final Acceptance. Within 30 days after receipt of the Design-Builder's certification, the City will inspect the Work, and the lead designer shall certify that it has reviewed the Work, and, upon recommendation by the lead designer, the City will notify the Design-Builder, in writing, of Final Acceptance or of all particulars in which this inspection reveals that the Work is incomplete or Defective. The Design-Builder shall immediately take such measures as are necessary to remedy such deficiencies and allow an additional 30 days for the City to complete another inspection of the Work. Issuance of Final Acceptance by the City shall not constitute (1) a waiver of any right or remedy of the City under the Contract or Law or (2) approval of or acquiescence to any breach of this Contract. The Design-Builder's certification shall be preceded or accompanied by all documentation called for in this Contract, including but not limited to:

A. Redline Drawings for creating record drawings.

B. Bonds, if any.

C. Software or code use rights documentation.

D. Certificates of inspection from jurisdictional authorities.

E. Releases, waivers, or exoneration of all liens arising out of or filed in connection with the Work.

F. The Design-Builder's Waiver of Claims to Date form certifying that all payrolls and material bills and other indebtedness connected with the Work for which the City might in any way be responsible have been paid or otherwise satisfied.

G. Consent of surety, if any, to final payment.

Final Payment

12.16 This section intentionally left blank. Refer to GMP Amendment.

12.17 This section intentionally left blank.

Design-Builder's Continuing Obligation

12.18 The Design-Builder's obligation to perform and complete the Work in accordance with this Contract shall be absolute and cannot be waived in whole or in part by the City except by express written instrument signed by an authorized City representative. Any such waiver will specifically identify the Work that the City is willing to accept and the manner in which that Work fails to meet the original requirements of the Contract. Accordingly, and by way of example only, none of the following will constitute acceptance of Work not in accordance with this Contract or release the Design-Builder from obligation to perform the Work in accordance with this Contract, regardless of whether any defect, deficiency, or damage is patent or latent:

A. Any act of acceptance by the City, except in an express written instrument as described above.

B. Any correction by the City of Defective Work.

C. Use, operation, or occupancy of the Work or any part of the Work by the City.

D. Recommendation by City staff for any progress or final payment.

E. Payment by the City to the Design-Builder.

F. Issuance of a letter of Substantial Completion.

G. Issuance of a letter of Final Acceptance.

Design-Builder's Warranty of Title

12.19 The Design-Builder warrants that title to all Work and material covered by any request for payment, whether incorporated in the Work or not, will pass to the City at the time of payment. Title shall be free and clear of all liens, claims, security interests, and encumbrances.

Waiver of Claims

12.20 The acceptance of final payment will constitute a waiver of all claims by the Design-Builder against the City other than those previously made in writing and still unsettled.

Other Damages

12.21 The City will have the right to recover from the Design-Builder and, to the extent permitted by Law, to deduct from any payment due the Design-Builder, the amount of any loss suffered by the City on account of the failure of the Design-Builder, Subcontractor, anyone directly or indirectly employed by any of them, and anyone for whose acts any of them may be liable to comply with the rules and regulations referenced or contained in this Contract.

ARTICLE 13 – SUSPENSION OR TERMINATION OF THE WORK

City May Suspend the Work

13.1 The City may, at any time and without cause, suspend the Work or any portion thereof for a period of not more than 90 consecutive days by notice, in writing, to the Design-Builder. This notice will fix the date on which Work shall stop and the date on which it shall resume. The Design-Builder shall resume the Work on the date so fixed. The Design-Builder will be allowed an increase in the Guaranteed Maximum Price or an extension of the Contract Time, or both, directly attributable to the suspension.

13.2 If the Work is Defective, or if the Design-Builder fails to supply sufficient skilled workers or suitable material or equipment, or if the Design-Builder fails to perform the Work in such a manner that the completed Work conforms to this Contract, the City may order the Design-Builder to suspend the Work, or any portion thereof, until the cause for such order has been eliminated. However, this right of the City to suspend the Work shall not give rise to any duty on the part of the City to exercise this right for the benefit of the Design-Builder or any other party.

13.3 In the event the Design-Builder, Subcontractor, or anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable fails to comply with the rules and regulations referenced in this Contract, the City may suspend the Work or any portion thereof. The suspension shall continue until completion of any investigation or evaluation by the City and full compliance with any corrective measures which the City may reasonably require. The City will not be liable to the Design-Builder for any delay caused by such suspension, nor will there be any adjustment in the Guaranteed Maximum Price or Contract Time.

City May Terminate the Work

13.4 The occurrence of any one or more of the following events will justify termination for cause:

A. The Design-Builder is adjudged bankrupt or insolvent.

B. The Design-Builder makes a general assignment for the benefit of creditors.

C. A trustee or receiver is appointed for the Design-Builder or for any of the Design-Builder’s property.

D. The Design-Builder files a petition to take advantage of any debtor's act, or to reorganize under bankruptcy or similar Laws.

E. The Design-Builder fails to supply sufficient skilled workers or suitable material or equipment.

F. The Design-Builder fails to make prompt payments to Subcontractors or for labor and material.

G. The Design-Builder disregards Laws, ordinances, rules, regulations, or orders of any public body having jurisdiction including, without limitation, ordinances adopted by the City and referenced in this Contract, and the rules and regulations adopted by the City's City Manager or designee.

H. The Design-Builder disregards the authority of the City.

I. The Design-Builder otherwise violates in any substantial way any provision of this Contract.

13.5 The City may, after giving the Design-Builder a seven-day written notice (1) terminate this Contract for default; (2) exclude the Design-Builder from the site; (3) take possession of the site and the Design-Builder's tools, appliances, construction equipment and machinery at the site, or take possession of tools, appliances, construction equipment and machinery not at the site that is to be incorporated into the Work and for which Design-Builder received payment, and use the same to the full extent they could be used by the Design-Builder without liability to the Design-Builder for trespass or conversion; (4) take possession of and incorporate in the Work material stored at the site or for which the City has paid the Design-Builder but which is stored elsewhere; (5) finish the Work as the City may deem expedient, and (6) obtain an assignment of some or all of the subcontracts and purchase orders (including but not limited to agreements with Designers) relating to the uncompleted Work. By executing this Contract, the Design-Builder agrees to execute documents necessary to effect the assignment of those subcontracts and purchase orders if requested by the City in the event of termination of this Contract pursuant to this article.

13.6 Where the Design-Builder's services have been so terminated by the City, the termination will not affect any rights of the City against the Design-Builder then existing or which may thereafter accrue. Any retention or payment of moneys due the Design-Builder by the City will not release the Design-Builder from liability.

City May Terminate the Work for Convenience

13.7 Upon giving the Design-Builder a seven-day written notice, the City may, without cause and without prejudice to any other right or remedy, elect to terminate this Contract in whole or in part for the convenience of the City. In such case, the Design-Builder will be paid for the costs of all Work acceptably performed and installed, together with reasonable profit and overhead on

those costs, and any justifiable costs actually sustained in the process of termination, including without limitation the cost of demobilization and termination of subcontracts, purchase agreements, and purchase orders. If this Contract is terminated for default and it is subsequently determined through mediation, arbitration, or litigation that the termination was improper, this Contract shall be treated as if it had been terminated for the convenience of the City, and the Design-Builder shall be entitled to payment under the provisions of this paragraph.

13.8 In the event of a termination for convenience, the Design-Builder remains liable for all elements of the Work actually performed by the Design-Builder or Subcontractors, or those for whom any of them are responsible, regardless of whether: (a) such performance occurred before or after the effective date of termination; or (b) the City provided an opportunity to cure. The Design-Builder's liability includes, but is not limited to, liability for having performed all Work according to the Design-Build Documents, industry standards, the Contract Time and schedule, and the other standards incorporated in this Contract. The Design-Builder also remains liable for all representations, warranties, and guarantees to the extent applicable to the Work performed. City shall be solely responsible for the use of modified and/or partially completed design documents to the extent modified or completed.

ARTICLE 14 – DISPUTE RESOLUTION

14.1 If the Design-Builder wishes to assert a claim, it shall submit to the City a written statement of the claim within 30 Calendar Days after the Design-Builder first has knowledge of or reason to know of the facts upon which the claim is based. The statement of claim shall recite the facts upon which the claim is based and shall include copies of all documentary evidence in support of the claim. Within 15 Calendar Days after receiving a claim, the City will respond in writing stating whether the claim is allowed, partially allowed, or denied. If the Design-Builder disputes the action taken by the City, the Design-Builder shall deliver a written notice of dispute to the City within 15 Calendar Days after the Design-Builder receives the City's written response to the claim. The written notice of dispute shall be entitled "Notice of Dispute." A claim shall be barred if the Design-Builder fails to comply with the foregoing notice of dispute requirement or fails to timely deliver the notice of dispute to the City.

A. The City's Contract is with the Design-Builder. It is the Design-Builder's responsibility to fully evaluate any claim before presenting it to the City. In addition, when a claim includes Work done or costs incurred by any Subcontractors or any person or entity other than the Design-Builder, the Design-Builder remains solely responsible for presenting the claim to the City. Claims that include Work done or costs incurred by any Subcontractors or any entity other than the Design-Builder will not be considered by the City unless the Design-Builder has (1) completed and provided to the City its own written evaluation of the claim, (2) verified by its own independent review and evaluation of the amount of compensation sought, and (3) certified in writing the claim as follows:

> "Under penalty of law for perjury or falsification, the undersigned, (Name) (Title), (Company) certifies that this claim originating from the Subcontractor (Company) for additional compensation (1) is being asserted by the Design-Builder in good faith, (2) is an accurate and reasonable

statement, independently verified by Design-Builder, of the costs incurred in the amount of $, exclusive of interest; (3) was timely and properly submitted; and (4) is fully justified, documented and supported under the Contract between the parties and the amount requested accurately reflects the amount for which the Design-Builder believes the City is liable.

Signature:

Date: _____, 20___

Subscribed and sworn before me this ____ day of , 20__

_____ Notary Public

My commission expires _____ _____."

14.2 The parties shall attempt to resolve all disputes by negotiation. Negotiation shall be initiated at the earliest opportunity. Each party shall freely share unprivileged information requested by the other and shall make a good faith effort to ensure that all relevant issues are fully developed and fairly presented to the other side.

14.3 If a dispute is not resolved through negotiation between the Design-Builder and the City, the parties shall submit the dispute to mediation. Either party may request mediation. The requesting party shall suggest an independent mediator with the request for mediation. If the parties cannot agree upon a mediator, either party may apply to the Presiding Judge, Columbia County Circuit Court, for appointment of a mediator. The parties shall share equally in the fees and costs of the mediator. Mediation shall be at St. Helens, Oregon, unless the parties agree otherwise.

14.4 If a dispute is not resolved by mediation, the parties may, but are not required to, agree to submit the dispute to binding arbitration. The parties shall agree upon a single arbitrator, the applicable rules for arbitration, and the time and place of arbitration.

14.5 If a dispute cannot be resolved by mediation, and the parties do not agree to submit the dispute to arbitration, either party may file a lawsuit to resolve the dispute in a court with proper jurisdiction located in Columbia County, Oregon.

14.6 Should any lawsuit, arbitration, or other action be commenced in connection with any dispute arising out of this Contract, each party shall bear all its costs and expenses.

14.7 Except to the extent performance may be legally excused under the particular circumstances, each party shall continue to perform its duties under this Contract while the resolution of a dispute is pending. Failure to comply with this requirement shall be a material breach of this Contract.

ARTICLE 15 – MISCELLANEOUS

Computation of Time

15.1 Any period of time referred to in this Contract by days shall be computed to exclude the first and include the last day of such period. If the last day of any time period falls on a Saturday or Sunday or on a day made a legal holiday by the Law of the applicable jurisdiction, such day shall not be included in determining the time period.

Liability Claims

15.2 Should the City or the Design-Builder suffer injury or damage to person or property because of any error, omission, or act of the other party or of any of the other party's employees, contractors, or agents or others for whose acts the other party is legally liable, claim shall be made: (1) in writing, and (2) to the other party within a reasonable time of the first observance of such injury or damage.

Rights and Remedies

15.3 These General Conditions impose duties and obligations on the Contract parties and provide for rights and remedies. The rights and remedies available to each party are in addition to, and shall not limit, actions allowed by Law or other parts of this Contract. All representations, warranties, and guaranties made in this Contract shall survive final payment and/or termination (whether for cause or convenience) and/or completion of this Contract. The content of this paragraph shall apply as if repeated specifically in this Contract in connection with each duty, obligation, right, and remedy.

Commencement of Limitations Period

15.4 As to acts, omissions, breaches of contract or warranty, negligence, misrepresentation, strict liability, fraud, or any other improper conduct of the Design-Builder or those persons or entities for whom the Design-Builder is responsible, whether occurring prior to or after completion of the Work, all applicable limitations periods shall not commence to run and any alleged cause of action shall not be deemed to have accrued unless and until the City has actual knowledge of all three of the following: (1) the identity of all party(ies) responsible; (2) the actual magnitude of the damage or injury; and (3) the cause(s) of the damage or injury. The discovery rule provided herein applies in lieu of any otherwise applicable statute or case authority.

CONTRACT EXHIBIT 2

GUARANTEED MAXIMUM PRICE AMENDMENT TO THE PROGRESSIVE DESIGN-BUILD CONTRACT FOR THE REPLACEMENT OF 2.0 MG RESERVOIR PROJECT

Contract No. W-481
Project No. W-481

This Amendment to the Progressive Design-Build Contract ("Amendment") is entered into effective between the City of St. Helens, Oregon ("City") and Emery & Sons Construction Group, LLC ("Design-Builder") and amends the Progressive Design-Build Contract between City and Design-Builder dated _____.

The Agreement is revised as follows:

1. Project Scope. Design-Builder shall construct ___ ("GMP Work"). The GMP Work is described in more detail in the attached Exhibit A – Scope of Work. Design-Builder is required to furnish all materials, labor, water, tools, power, equipment, transportation and other work needed to construct the GMP Work.

2. Contract Documents. This Amendment consists of the main text of this Amendment and the following exhibits:

a. Exhibit A – Scope of Work

b. Exhibit B – GMP Supporting Documents

3. GMP. The parties agree that the Guaranteed Maximum Price ("GMP") for the Project is $_____, consisting of the Estimated Cost of the Work and Contingencies, summarized as follows:

Preconstruction Fee $0.00

Construction Documents $0.00

Estimated Cost of Work $0.00

Contractor Fee (Design-Builder's Percentage Fee) $0.00

GMP Total (Total of Above) $0.00

4. Basis of GMP. The GMP is based on the GMP Supporting Documents included as Exhibit B, including the allowances, assumptions, exclusions, unit prices, and schedule designated in those documents. The GMP Supporting Documents are based on the Preliminary Engineering and any Construction Documents approved by the City. The Design-Build

Documents remain in full force and effect; this Basis of GMP supplements design document requirements but does not replace them.

a. GMP Encompasses Further Design Development. Design-Builder represents that the Drawings and Specifications upon which the Guaranteed Maximum Price is based are approximately ___% complete and that the Drawings and Specifications will require further development from Design-Builder's design team. In deriving the Guaranteed Maximum Price stated herein, Design-Builder has already anticipated and provided for this further design development and has included in the Guaranteed Maximum Price all costs expected or which reasonably could be expected for further design development, engineering and consultant services and reports, the creation and finalization of construction documents and issued-for-construction drawings, all design-team contract administration services and site visits, and all construction labor, materials, equipment, general conditions, fee and all other costs necessary, incidental or inferable from the documents, physical access to the site, and information available to date in order to design and build the Project consistent with the Owner's Project Criteria, the scope description, the Drawings and Specifications, and all other design and Owner-supplied information to date. The Guaranteed Maximum Price does not include significant changes in Project scope, systems, kinds and quality of materials, finishes or equipment after the date hereof, all of which, if required, shall be incorporated by Change Order or Construction Change Directive. By executing the Contract and upon execution of each Amendment to the Contract, the Design-Builder is deemed to have included in the Guaranteed Maximum Price sufficient amounts to cover all of its obligations under or arising from the Contract, at law, and otherwise, and to have allowed the necessary resources to enable Design-Builder to achieve Substantial Completion by the Scheduled Substantial Completion Date.

5. Substantial Completion Date. Notwithstanding any provision in the GMP Supporting Documents to the contrary, the required date for Substantial Completion of the GMP Work is __.

6. Compensation. Article 7, Compensation, is amended by adding the following:

a. City shall pay Design-Builder for GMP Work according to the schedules and unit prices stated in Exhibit B, plus the Design-Builder's Percentage Fee as set forth in this Amendment and Article 7 of the Agreement.

b. Design-Builder shall invoice the City monthly for work performed, based on an estimate of the amount of work completed and the value of the completed Work. Invoices shall be directed to the City of St. Helens, Attn: Sharon Darroux, Engineering Manager, 265 Strand Street, St. Helens, OR 97051. Invoices may be emailed to: sdarroux@sthelensoregon.gov. If an invoice is delivered on a non-business day, the invoice shall be considered received on the next day the City is open for business. City shall make a progress payment equal to the value of the completed Work, less amounts previously paid, less retainage of 5 percent within 30 days of receipt of the invoice.

c. City shall inspect the Project within 15 days of receipt of written notice from Design-Builder that the Work is ready for final inspection and acceptance. The City shall either accept or reject the work in writing. A rejection must state the reasons for the rejection and list

the Work that must be done before the Project can be accepted. If a rejection is issued, Design-Builder shall complete all Work needed to be done and request another inspection. The process shall be continued until the City determines that the Project is complete and accepted. Within 30 days after written acceptance by the City and receipt of the Warranty Bond required by Section 8.c of this GMP Amendment and Section 5.1.b of the General Conditions, all remaining amounts, including the retainage, shall be paid to Contractor, provided that Design-Builder shall submit evidence satisfactory to the City that all payrolls, material bills, and other indebtedness connected with the Work have been paid; except that in case of disputed indebtedness or liens, the Contractor may submit in lieu of evidence of payment, a Surety Bond satisfactory to City guaranteeing payment of all such disputed amounts when adjudicated in cases where such payment has not already been guaranteed by Surety Bond. If City fails to pay within 30 days of acceptance and receipt of the Bond, City shall pay interest at the rate as specified in ORS 279C.515 on any unpaid amounts.

7. Prevailing Wage

a. Design-Builder shall comply with all provisions required by ORS 279C.800 through ORS 279C.870 relating to the payment of prevailing wage rates for work performed.

b. Design-Builder shall pay to workers in each trade or occupation the current, applicable State prevailing rate of wage as established by the Oregon State Bureau of Labor and Industries ("BOLI") http://www.boli.state.or.us/BOLI. Design-Builder and any Subcontractors shall post the prevailing wage rates and fringe benefits as required by ORS 279C.840.

c. Design-Builder shall prepare weekly certified payroll reports and statements and submit them to the City by the fifth business day of each month (ORS 279C.845). Reports shall be submitted to the City of St. Helens, Attention: Sharon Darroux, Engineering Manager, on a form prescribed by the Commissioner of the Bureau of Labor, certifying: (a) the hourly rate of wage paid each worker whom the contractor or the Subcontractor has employed upon the public works; and (b) that no worker employed upon the public works has been paid less than the prevailing rate of wage or less than the minimum hourly rate of wage specified in the contract. If the Design-Builder has not filed the certified statements as required under this contract, the City shall retain 25 percent of any amount earned by the Design-Builder until the Design-Builder has complied. The City shall pay the Design-Builder the amount retained under this subsection within 14 days after the Design-Builder has filed the certified statements with the City.

d. Contractor shall allow BOLI to enter the office or business establishment of Contractor at any reasonable time to determine whether the prevailing rate of wage is actually being paid and shall make payment records available to BOLI on request. Contractor shall require subcontractors to provide the same right of entry and inspection.

e. City shall not make final payment unless the prevailing wage rate certifications are received.

f. Design-Builder must comply with all laws and regulations relating to prevailing wages, whether or not set out in this contract. Further information regarding prevailing wages is

available by contacting BOLI at (971) 6730839 or on-line at the BOLI web site: http://www.boli.state.or.us/BOLI/WHD/PWR/index.shtml.

g. Prevailing Wage publications applicable to this contract are the Prevailing Wage Rates for Public Works Contracts in Oregon effective July 1, 2023, including all Prevailing Wage Rate Amendments and PWR Apprenticeship Rates.

8. Insurance and Bonds.

a. Design-Builder shall provide a separate Performance Bond and a separate Payment Bond in the form provided by the City. Each bond shall be equal to 100 percent of the GMP, or if either bond is issued to replace the bond previously issued under the Contract, equal to the total amount of the Progressive Design-Build Contract including the GMP Amendment. The Performance Bond and the Payment Bond must be signed by the Surety's Attorney-in-Fact, and the Surety's seal must be affixed to each bond. Bonds shall not be canceled without the City's consent, nor shall the City release them prior to Contract completion. Bonds must be originals. Faxed or photocopied Bond Forms shall not be accepted.

b. Builder's Risk or Installation Floater. The Design-Builder shall obtain and maintain for the benefit of the parties an all risk builder's risk or installation floater policy insuring 100 percent of the Cost of the Work. Such insurance shall include testing, and shall allow utilization of part of the equipment prior to Substantial Completion of all the GMP Work. Coverage shall continue until Substantial Completion of the GMP Work. The City and all Subcontractors shall be additional named insureds, as their interests may appear. The City shall be given not less than 30 days' written notice prior to cancellation, nonrenewal, or material change in the policy. One copy of the policy and a certificate of insurance shall be delivered to the City before commencing GMP Work and shall be subject to approval by the City. The City may defer delivery of the copy of the policy, but such deferral shall not be a waiver of the City's right to a copy of the policy. In the event the Design-Builder fails to maintain insurance required under this subsection 5.14, the City, at its sole option, may arrange for such coverage, and any administrative costs and premium incurred shall be reimbursed by the Design-Builder.

c. Design-Builder shall provide a Warranty Bond. The Warranty Bond shall be ten percent of the GMP and shall remain in effect and continue after completion and acceptance of the Work for a period of two years from the date of acceptance to guaranty against any defective work or labor done, or defective materials furnished, in the performance of the improvements. A separate warranty bond may be required for any repairs done pursuant to the warranty obligation. Such warranty bond shall be for a period of two years from the date of completion of such repairs.

d. Intentionally left blank.

9. Liquidated Damages. Design-Builder understands that if Substantial Completion is not achieved by the Scheduled Substantial Completion Date (as it may be extended hereunder), the City will suffer damages which are difficult to determine and accurately specify. Design-Builder agrees that if Substantial Completion is not achieved by the Scheduled Substantial Completion

Date, Design-Builder shall pay Owner $2,000 as liquidated damages for each day that Substantial Completion extends beyond the Substantial Completion Date.

Unless otherwise recoverable under this Contract, the liquidated damages provided herein shall be in lieu of all liability for any and all extra costs, losses, expenses, claims, penalties and any other damages, whether special or consequential, and of whatsoever nature incurred by Owner which are occasioned by any delay in achieving Substantial Completion. They are not compensation for other harm the City may sustain form the Design-Builder's other breaches of this Contract. Nothing in this Contract shall be interpreted to prevent the City from seeking other damages or recovery in addition to the liquidated damages specified in this section.

The City is authorized to deduct the amount of the liquidated damages from any amounts due and the Contractor and its Surety shall be liable for any excess.

If the Contract is terminated according to the General Conditions and if the Work has not been completed by other means on or before the expiration of Contract Time or adjusted Contract Time, liquidated damages shall be assessed against the Contractor for the duration of time reasonably required to complete the work.

10. Other Damages. The City may recover from the Design-Builder, withhold from payments under this Contract, or both, actual costs incurred by the City due to the extra effort necessitated because the Work is extended over a longer period of time, such as the actual costs of additional engineering and inspections by the City or extended third party services. This right to actual damages shall apply to both late Substantial Completion and late Final Acceptance.

11. Termination for Convenience. In the event of a termination of this GMP Amendment for convenience, the Design-Builder will not be entitled to overhead or profit on the unperformed Work, and will not be entitled to payments in excess of (1) the Cost of the Work incurred by the Design-Builder to the date of termination, (2) the prorated portion of the Design-Builder's Percentage Fee based on the ratio of (a) the Cost of the Work incurred by the Design-Builder to the date of termination divided by (b) the Guaranteed Maximum Price less the Design-Builder's Percentage Fee, (3) fair compensation, either by purchase or rental at the election of the City, for any equipment owned by the Design-Builder which the City elects to retain and which is not otherwise included in the Cost of the Work under sub-item (1), and (4) fair compensation for the Design-Builder's demobilization costs and other costs directly incurred relating to the termination which are not otherwise included in the Cost of the Work under sub-item (1); provided, however, that the total amount of such payment shall be subject to the Guaranteed Maximum Price.

In all other respects the Contract shall remain in full force and effect.

This Amendment may be executed in two originals, with one original to be delivered to each party.

THE PARTIES SIGNING BELOW WARRANT, REPRESENT AND AGREE THAT THEY HAVE THE AUTHORITY TO SIGN THIS AGREEMENT AND AGREE TO ALL TERMS:

CONTRACTOR SIGNATURE

Signed by Contractor:

_____

Signature/Title Date

NOTICE TO CONTRACTOR: This Contract does not bind the City of St. Helens unless and until it has been executed by the Mayor after authorization by the City Council at a public meeting.

CITY OF ST. HELENS SIGNATURE

Approved: _____

Mayor Rick Scholl Date

Authorized by the full Council on _____

Attest: _____

City Recorder Date

Reviewed: _____

City Attorney Date

CONTRACT EXHIBIT 3

SCOPE OF WORK
(Refer to RFP Section 2.3)

SECTION 2 – PROJECT DELIVERY & SCOPE OF WORK

2.1 Progressive Design-Build Delivery Method

The City intends to implement the project through a progressive design-build approach. The scope of work for the project will be divided into two phases:

- Phase 1 – Design and Preconstruction Phase
- Phase 2 – Construction Phase

During the Phase 1, the Design-Builder will be required to perform preliminary engineering; develop and advance the design in accordance with City requirements; progress the permit drawings/specifications for the project to construction documents; participate in on-going community engagement process, as necessary; and develop a GMP (Guaranteed Maximum Price) for the project, including obtaining quotes from trade subcontractors based on the approved design documents. Construction and construction administration services for early authorized work (e.g., abatement, demolition, and grading) may also occur during this phase.

Phase 2 will advance the project to construction and the Design-Builder will be required to provide construction and construction administration services to demolish or partially demolish the existing reservoir, construct a new water storage reservoir at the site, and perform all work necessary to successfully execute the Work, including grading, the disassembly and disposal of all or portions of the existing reservoir, protection of existing systems and the of the adjacent reservoir; the installation of level sensors, piping, fittings, and other appurtenances to connect the new reservoir to the water system.

Required permitting activities may occur in each phase as necessary to advance the Work. Please see **Section 2.3 | Scope of Work** for a more detailed outline of the work.

2.2 Project Delivery Schedule

The City anticipates the project to be completed and available to be put in service no later than October 2024.

2.3 Scope of Work

This Scope of Work (SOW) is intended to be a general outline of the work and not an all-inclusive description of the professional and construction services that may be required to undertake and complete the Project. The Propose is expected to expand upon these tasks and include additional tasks, as needed, to prepare a complete proposal based on their experience.

2.3.1 Phase 1 – Design and Preconstruction

Phase 1 services shall address all items necessary for design and permitting of the new facility, including, but not limited to,

TASK 1 – PROJECT MANAGEMENT

1.1 Project Administration

(a) Provide overall project management for the project including, but not limited to, DB team staffing, budget, schedule, scope, and coordination with the City.

(b) Designate a Project Manager as the Single Point of Contact to organize, direct, coordinate, monitor and manage the activities of the project with respect to budget, schedule, and contractual obligations. The Project Manager is expected to remain consistent throughout the life of the project.

(c) Coordinate the Work with the City's Project Manager and work closely with City staff, and other agencies and stakeholders, as appropriate.

1.2 Kick Off Meeting

(a) Initiate the project kickoff meeting and prepare an agenda for the meeting and invite the necessary attendees. Kickoff meeting shall be an in-person meeting.

(b) Kickoff meeting is intended to develop project goals, vision, objectives, and criteria. The meeting will outline project management approach, identify roles and responsibilities, and confirm project scope and schedule. Prepare and distribute meeting minutes following kickoff.

(c) Develop a Preliminary Design and Project execution plan to be approved by the City.

1.3 Design Review Workshops

(a) Lead design review workshops with the City after preliminary, intermediate, and final design submittals. Design workshops will be scheduled following review comments submitted by the City.

(b) The purpose of the workshops will be to review major comments, discuss important design considerations, review the schedule, discuss permitting status, and set action items. In general, design review workshops are expected to take place virtually.

1.4 Targeted Value Design (TVD) Workshop

(a) Conduct a TVD Study for the project and present alternatives and findings to City at a TVD workshop with recommendations. The TVD workshop is expected to take place in person.

1.5 Progress Review Meetings

(a) Lead regular progress review meetings. Progress review meetings are expected to occur twice monthly, except when kickoff, design review, and TVD workshops are scheduled. Progress review meetings are expected to take place virtually.

1.6 Public Meetings

(a) Participate in up to four public meetings.

1.7 Quality Assurance & Quality Control Review

(a) Conduct internal Quality Assurance and Quality Control and follow-up with technical experts, as necessary, during the course of the project to maintain a high level of service.

1.8 Deliverables:

(a) *Draft meeting agendas (provide at least 24 hours prior to meeting), presentation and review materials, project schedule updates, meeting minutes (provide at least 48 hours following meeting). Monthly Progress Reports with status report of work completed by sub-tasks for the invoice period with each invoice. Indicate each DB team member's time spent on each sub-task for the invoice period*.

TASK 2 – PRELIMINARY ENGINEERING

2.1 Data Collection and Review

(a) Complete a tour of the existing reservoir (interior and exterior), site and facilities with City personnel. The purpose of the facility tour is for gathering information and performing a visual observation of the facilities.

(b) Submit a Request for Information (RFI) for data that will assist in the work. This will include, but not be limited to,

- Water master plan
- Reservoir data
- Water system maps, record drawings, and construction drawings
- SCADA data
- Valves, pumps, and piping system data

- O&M records for leaks, repairs, and replacement
- Current operational and maintenance procedures
- Topography maps

2.2 Existing Site System Analysis

(a) Conduct a study of the existing 2.0 MG and 2.5 MG reservoirs onsite to identify and determine the overall operation efficiency of the facilities and how it will affect design and future operations.

(b) Develop a plan to maintain and increase the efficiency of the hydraulic connection between the proposed reservoir and the existing 2.5 MG reservoir. Analysis should include all circumstances that could impact final design of the project.

2.3 Geotechnical Engineering Report

(a) Conduct and prepare a complete geotechnical report necessary to complete the objectives of the Project, including but not limited to, locating and performing testing borings and preparing boring logs at the site for the proposed reservoir.

(b) Make recommendations regarding site and subgrade preparation, backfilling, and grading.

(c) Discuss foundation conditions at the proposed reservoir location and new structural evaluation, determine depth of groundwater, and discuss proposed dewatering methods.

2.4 Preliminary Design (30% Concept Design)

(a) Perform preliminary engineering to support design and cost estimating.

(b) Develop preliminary design, including basis of design for project components, the technical approach and design parameters, design assumptions, applicable codes, guidelines, regulations, early cost estimate, and other references such as regulatory compliance and permitting and final design recommendations.

(c) Identify project permitting requirements.

2.5 *Deliverables*

(a) Request for Information, Existing site system analysis findings, Geotechnical Report, Preliminary 30% concept design documents

TASK 3 – DETAILED DESIGN

Submit design plans and specifications for the project, as follows,

3.1 Intermediate Design (60% Design Documents)

(a) Produce 60% complete construction drawings

(b) Produce redlined marked up specifications

(c) Prepare detailed cost estimate developed to approximately 60% completion

(d) Initiate permitting activities. Submit and prepare documents and applications for all necessary and applicable permits

3.2 Design Builder's Construction Proposal

(a) Prepare and submit to the City a proposal for completion of design and construction of the Project

(b) Develop the Guaranteed Maximum Price (GMP) for construction of the project

3.3 Deliverables

(a) Intermediate 60% design documents; Construction Proposal; GMP

2.3.2 Phase 2 – Construction

Phase 2 services shall complete the design development and shall address all items and work necessary for construction and operation of the completed facility, including completion of all construction documents, and the procurement of all permits, equipment, and subcontractors, to construction the new facility.

The DB Team shall provide all construction services from mobilization through project completion, including but not limited to, construction services, construction management, contract administration, cost control, subcontractor procurement, scheduling, coordination, shop drawing processing/review, distribution of product warranties/related documentation, training, commissioning and startup, acceptance testing and final completion.

Tasks shall include, but not be limited to,

- Providing overall project & construction management
- Participate in project meetings, including construction kickoff, bi-weekly construction progress meetings

- Produce 100% complete construction drawings and specifications which shall include all backup material previously submitted and revised, as necessary, all design calculations, and all explanatory material giving the design rationale for any design decisions
- Secure all necessary permits
- Procure equipment and subcontractors to construct per approved plans
- Construct the Project
- Conduct startup, staff training, commissioning, and performance testing
- Provide warranty coverage
- Prepare As-Builts
- Prepare O&M Manuals

2.4 Roles and Responsibilities

2.4.1 City Roles and Responsibilities

The City of St. Helens will cooperate with the Design-Builder and will fulfill its responsibilities in a timely manner to facilitate the Design-Builder's timely and efficient performance of services. The City responsibilities include:

- Review submissions and provide timely comments to Design-Builder
- Provide data and information regarding project elements including record drawings, reports and studies.
- Provide funding consistent with approved Guaranteed Maximum Price.
- Lead coordination with public outreach.
- Provide access to the City owned property.
- Have staff available for scheduled meetings to provide operations and engineering input.

2.4.2 Design-Build Team Roles and Responsibilities

The Design-Builder will cooperate with the City and will provide in a timely manner the Phase 1 and Phase 2 services necessary to complete the Project scope specified in this RFP, including:

- Perform all field investigation services.
- Prepare design and construction documents.
- Regularly communicate with City and Stakeholders

- Obtain all required permits required for project.
- Procure project subcontractors and vendors.
- Supervise subcontractors and Design-Builder personnel.
- Implement quality-management procedures
- Implement project health and safety practices
- Maintain site security.
- Conduct performance testing.
- Lead project meetings and prepare agenda and meeting minutes.
- Plan, design, and construct a complete, fully operational new reservoir.

2.5 Project Funding

The estimated project budget is $2.5 million dollars.

CONTRACT EXHIBIT 4

DESING-BUILDER’S PROPOSAL

CITY OF ST. HELENS

RFP | PROGRESSIVE-DESIGN-BUILD SERVICES FOR

REPLACEMENT OF 2.0 MG RESERVOIR

RFP NO. W-481

07/11/2023 - 3PM

City of St. Helens
FOUNDED 1850
Oregon

EMERY&SONS
CONSTRUCTION GROUP, LLC

KELLER
ASSOCIATES

TABLE OF CONTENTS

APPENDIX

5.3

TRANSMITTAL LETTER & EXECUTIVE SUMMARY

City of St. Helens
265 Strand Street
St. Helens, OR 97051
ATTN: Mouhamad Zaher, Public Works Director

EMERY&SONS CONSTRUCTION GROUP, LLC

07/11/2023

RE: PROGRESSIVE DESIGN BUILD SERVICES FOR REPLACEMENT OF 2MG RESERVOIR RFP – NO. W-481

Dear Mr. Zaher,

Built in 1929, the 2 MG Pittsburgh Road Reservoir is failing. Despite multiple attempts to resolve structural issues to extend the life of the reservoir, water continues to leak from the structure. Therefore, the City of St. Helens has requested the services of a design-build team to demolish and replace the partially-buried reservoir. In addition to the new reservoir, the project will require a new tank mixing system, installation of piping connecting the new reservoir to an adjacent 2.5 MG reservoir, and the replacement of primary piping, fittings, and level sensors to bring the new reservoir online.

Alternative Delivery Experience: The City has selected the Progressive Design Build (PDB) delivery process, as it facilitates collaboration among your staff, the designer, and the contractor, creating efficiencies that expedite schedule and make the most of your investment. As this is the City's first PDB project, you need a Design-Build (DB) team that is easy to work with and brings a cooperative approach to the assignment.

We offer the City a time-tested DB team with a successful working relationship that will work seamlessly with you to develop solutions that meet your immediate storage needs and long-term water system infrastructure goals. With unparalleled reservoir design and construction experience and a strong alternative delivery background, we are the ideal team to successfully deliver this large, complex project for you.

Efficient Project Delivery: We are suggesting that this project will likely not be delivered by October 2024 date as desired. In order to complete the project as early as possible however, all phases of this project must go smoothly. Our PDB team offers great efficiencies stemming from our decades working together on reservoir projects, our alternative delivery experience, and our collaborative approach.

Team of Experts: The City is looking to hold an Alternative Analysis Workshop early in the pre-construction design phase. As such, you need a team ready to quickly assist with pre-construction design services, including the selection of the tank site through this workshop. ***For over 20 years, Emery & Sons and Keller have been working together on projects that incorporate all the same features as this project.*** Our team consists of all local firms that share a common goal of delivering quality projects through responsive service. With the broadest reservoir design and construction experience in the region, we're well equipped to jump into this work without needing time to get up to speed. We are a partner ideally suited to expedite the schedule by swiftly navigating the land use process, minimizing impacts to neighbors, and delivering quality facilities that meet the City's immediate needs and long-term water system operational requirements.

Emery & Sons, if selected for this project, will provide all services contained in the RFP. We also accept all terms and conditions contained within the RFP and Design-Build Agreement. Due to our extensive experience and relationship-driven mindset, we feel that our team is best suited to delivery your very first PDB project. Therefore, we look forward to partnering with you to successfully deliver this important project and appreciate your consideration. If you have any questions, please contact Dan Vannoy.

Acknowledgment of Addenda: Emery & Sons acknowledges receipt of (2) Addendum's for this RFP solicitation.

Insurance/Bonding Capacity: Emery & Sons is able to comply with all insurance requirements contained within the RFP. Additionally, we are Bonded for **$150M Aggregate** and **$65M single project.**

Sincerely,

Dan Vannoy
Member/Manager
Emery & Sons Construction Group, LLC
OR CCB#221536

PROPOSER'S LEAD CONTACT & SIGNER FOR CONTRACTS

Dan Vannoy
Emery & Sons Construction Group, LLC
Dan.Vannoy@EmeryandSons.com

5.4

PROPOSAL SIGNATURE PAGE

SECTION 8 – PROPOSAL SIGNATURE PAGE

The undersigned hereby submits this proposal to furnish all work, services systems, materials, and labor as indicated herein and agrees to be bound by the following documents: Request for Proposal, Design-Build Services Contract, and associated inclusions and references, specifications, Proposal Form, Design-Builder response, mutually agreed clarifications, exceptions which are acceptable to the City, and all other Design-Builder submittals.

The undersigned hereby certifies and represents that the Design-Builder: has examined and is thoroughly familiar with the Request for Proposal; has examined and is thoroughly familiar with the Design-Build Services Contract, and agrees to accept the contract terms, and execute such contract upon award; understands that the City reserves the right to accept a proposal or reject all proposals if deemed in the best interest of the City; and understands that all information included in, attached to, or required by this RFP shall be public record subject to disclosure within the context of the federal Freedom of Information Act and Oregon Revised Statutes (ORS) 192.501 and ORS 192.502.

Receipt of Addenda

Design-Builder acknowledges that ADDENDA NUMBERED One THROUGH Two have been reviewed as part of the Request for Proposal.

Signature

The Design-Builder hereby certifies that the information contained in these certifications and representations is accurate, complete, and current. We therefore offer and make this proposal to furnish services herein in fulfillment of the attached requirements and specifications of the City.

Emery & Sons Construction Group, LLC
FIRM NAME

Arin Atiyeh, Senior Project Manager
CONTACT PERSON NAME/ TITLE

PO Box 13069, Salem, OR 97309
MAILING ADDRESS, CITY, STATE, AND ZIP CODE

(503) 588-7576
FIRM TELEPHONE NUMBER

(503) 949-9734
CONTACT PERSON TELEPHONE

Arin.Atiyeh@emeryandsons.com
CONTACT PERSON EMAIL ADDRESS

IF CORPORATION, ATTEST:
(CORPORATE OFFICER)

☐ CORPORATION ☐ PARTNERSHIP ☐ INDIVIDUAL ☒ OTHER, Limited Liability Company

FEDERAL TAX IDENTIFICATION NUMBER (TIN): 83-0966301

STATE OF OREGON CONSTRUCTION CONTRACTORS BOARD LICENSE NO: 221536

Dan Vannoy, Member/Manager
PRINT NAME AND TITLE OF FIRM'S AUTHORIZED REPRESENTATIVE

Dan Vannoy
SIGNATURE OF FIRM'S AUTHORIZED REPRESENTATIVE

July 11, 2023
DATE

5.5

DESIGN-BUILDER PROFILE & PROJECT TEAM

Emery & Sons Construction Group, LLC (Emery & Sons) and Keller Associates (Keller) have been working as an integrated team for 20 years. Our time-tested approach to working together will provide the City of St. Helens a united, efficient design-build team to deliver this critical project.

1) PROPOSED TEAM

Emery has been serving the Pacific Northwest since 1967 and is considered one of best heavy civil contractors in the region. We have an extensive resume which includes work on water reservoirs, water and sewer pump stations, treatment plants, residential and commercial subdivisions, small and large diameter gravity and pressure piping systems, roadways, projects involving in-water work, and other major infrastructure projects.

Keller started 30 years ago in water and wastewater systems planning and design. Since then, they have provided high-quality municipal engineering services to public agencies. Keller has led the design of 24 concrete tanks in the region in the last 15 years, 200 booster pump stations, and over 300 miles of pressure and gravity pipelines across the Pacific Northwest. Collectively, Keller's team has over 100 years of experience in water system design – many of which have received awards for excellence. We continue to improve on our tank design through lessons learned, coordination with general contractors, and our relationships with prestressing contractors.

2) TEAM OVERVIEW

EMERY & SONS CONSTRUCTION GROUP, LLC
Role: General Contractor
Structure: Limited Liability Company

EMERY AREAS OF EXPERTISE:
- *RESERVOIRS*
- *PUMP STATIONS*
- *WATER TRANSMISSION MAINS*
- *ROADWAY DEMOLITION & CONSTRUCTION*
- *ALTERNATIVE DELIVERY METHODS*

56 Years in Business **205** Employees

5.5.1 MAIN PROJECT OFFICE LOCATION | *Salem, OR*

KELLER ASSOCIATES, INC.
Role: Designer
Structure: S Corporation

KELLER AREAS OF EXPERTISE:
- *CIVIL ENGINEERING*
- *PERMITTING*
- *PUMP STATIONS*
- *TRANSMISSION & DISTRIBUTION PIPELINES*
- *HYDRAULIC MODELING & ANALYSES*

30 Years in Business **171** Employees

5.5.1 MAIN PROJECT OFFICE LOCATION | *Salem, OR*

3) DISCLOSURE

There are **NO** factors or events that have the potential to adversely impact the Design-Builder's ability to perform our contractual commitments.

- **NO** *material historical, existing, or anticipated changes in financial position.*
- **NO** *pending or past legal proceedings and judgments, or any contingent liability that could adversely affect the financial position of Design-Builder or affect Design- Builder's ability to perform contractual commitments to the City.*
- **NO** *failure to complete any contract, nor has any contract been terminated due to alleged poor performance or default within the past 10 years.*
- **NO** *debarments with respect to public contracts in any state or federal jurisdiction.*
- **NO** *bankruptcy action filed for reorganization.*
- **NO** *liens or surety claims against Design-Builder on any contracts that have been performed or are in the course of being performed.*
- **NO** *termination of surety and/or insurance coverage due to excessive claims history and/or nonpayment of premiums.*

5.5.2 ORGANIZATIONAL STRUCTURE

Emery & Sons and Keller is committing a team of highly experienced staff for the City's project. Our core team of engineers, construction contractors, and specialized subconsultants have been working together for over two decades, bringing our local communities safe and affordable water conveyance and storage solutions.

In addition to technical expertise, our team has experience coordinating with public and regulatory agencies for water storage tank and water transmission main projects and satisfying project funding requirements during design and construction project phases. This team, along with its expert subconsultants will utilize its previous reservoir experience, to guide this project to a successful completion within both schedule and budget.

KELLER ASSOCIATES

City of St. Helens FOUNDED 1850 Oregon

EMERY&SONS CONSTRUCTION GROUP, LLC

PDB PROJECT MANAGER
Arin Atiyeh

PDB PRE-CONSTRUCTION MGR
Brian Vinson, PE

PDB PRINCIPAL-IN-CHARGE & QA/QC
James Bledsoe, PE

PDB DESIGN MANAGER
Peter Olsen, PE

PDB SAFETY MANAGER
Jeremy Lawson

PDB STRUCTURAL ENGINEER
Brandon Keller, PE, SE

PDB SUPERINTENDENT
Matt Atiyeh

PDB PROJECT ENGINEER/MECHANICAL LEAD
Jason King, PE

PDB CONSTRUCTION MGR - STEEL TANK
Casey Dark

PDB SITE DESIGN
Shannon Williams, PE

PDB CONSTRUCTION MGR - CONCRETE TANK
Jenny Shipman

PDB MODELING & HYDRAULICS
Trenton Buster, EI

ADDITIONAL SUBCONSULTANTS

PDB GEOTECHNICAL ENGINEER	PDB SURVEY	PDB I&C
Shannon and Wilson	FFN Surveying	Portland Engineering, Inc.

KEY STAFF

The following represents our core team members and the experience that prepares them to successfully complete this important progressive design build project. Extended resumes for the key team members, as identified in the organizational chart, are included in (Section 5.9 - Appendix A)

% AVAILABILITY FOR THE PROJECT
PHS 1 - 75%
PHS 2 - 25%

PDB PROJECT MANAGER - Arin Atiyeh

EMERY & SONS CONSTRUCTION GROUP, LLC

ROLES & RESPONSIBILITIES	CURRENT ASSIGNMENTS	RELEVANT EXPERIENCE
Overall Project Manager during all phases of the project. Responsible for organizing the DB team & verifying close collaboration with the City and all other project stakeholders.	• Farmington Flouridation & Flow Control Facility, Beaverton, OR • Cooper Mtn. Res., Beaverton, OR	• Grabhorn Reservoir (TVWD), OR • Cooper Mtn. Res. No. 2, City of Beaverton, OR • WWSP Intertie Pipeline, City of Beaverton, OR •Thompson PS Transmission Line (TVWD), OR • Priest Rapids Reservoir, Grant County PUD • 4.0 MG Sunset Reservoir No. 2, Sherwood OR

UNIQUE QUALIFICATIONS *Arin brings 29 years of experience in heavy civil construction of concrete reservoirs, pump stations, pipelines,earthwork, demolition, and shoring. Arin is our subject matter expert in designing and constructing water reservoirs and water pump stations. Working in the field and owning his own construction company, Arin brings a comprehensive perspective to managing projects, and has true understanding and respect for safety.*

% AVAILABILITY FOR THE PROJECT
PHS 1 - 25%
PHS 2 - 10%

PDB PRE-CONSTRUCTION MANAGER - Brian Vinson

EMERY & SONS CONSTRUCTION GROUP, LLC

ROLES & RESPONSIBILITIES	CURRENT ASSIGNMENTS	RELEVANT EXPERIENCE
Brian will be providing assistance with developing the subcontracting plan and soliciting of bid packages.	• ASR #5 & Sorrento Pump Station, Beaverton OR • Sexton Mountain Pump Station, Beaverton OR • ASR#3 Pump Station, Beaverton OR	• ASR #5 & Sorrento PS, Beaverton OR • Sexton Mountain PS, Beaverton OR • Redmond Res 7 & Well 8, Redmond OR • Reservoir 18, Tigard OR

UNIQUE QUALIFICATIONS *Brian's experience in water reservoirs, wastewater treatment plants, water and sewer pump stations, water and sewer pipeline projects, large transportation projects, and commercial building construction, will contribute to a valuable design and construction experience.*

% AVAILABILITY FOR THE PROJECT
PHS 1 - 20%
PHS 2 - 100%

PDB SUPERINTENDENT - Matt Atiyeh

EMERY & SONS CONSTRUCTION GROUP, LLC

ROLES & RESPONSIBILITIES	CURRENT ASSIGNMENTS	RELEVANT EXPERIENCE
Matt will act as the primary point of contact and day-to-day field supervisor for the project.	• Farmington Flouridation & Flow Control Facility, Beaverton, OR • Cooper Mtn. Res. Beaverton, OR	• Grabhorn Reservoir (TVWD), OR • Cooper Mtn. Res. No. 2, City of Beaverton, OR • WWSP Intertie Pipeline, City of Beaverton, OR • 3.0 MG 550 Zone Reservoir, Tigard OR • 4.0 MG Sunset Reservoir No. 2, Sherwood OR

UNIQUE QUALIFICATIONS *Matt brings 30 years of experience managing construction sites in the Pacific Northwest including heavy civil, earthwork, shoring systems, reservoirs, pump stations, and waterline projects. Matt is our subject matter expert, as it relates to the construction of D-110 Type 1 reservoirs. He is an effective communicator and is exceptional at coordinating multiple work activities between several crews.*

KEY STAFF - Continued

PDB CONSTRUCTION MANAGER (STEEL TANK) – Casey Dark

EMERY & SONS CONSTRUCTION GROUP, LLC

% AVAILABILITY FOR THE PROJECT
PHS 1 - 20%
PHS 2 - 100%

ROLES & RESPONSIBILITIES	CURRENT ASSIGNMENTS	RELEVANT EXPERIENCE
During Phase 1 Casey will assist with implementing project controls. During Phase 2 he will manage our construction team for the steel tank option and be responsible for schedule and budget tracking.	• Cox Creek Phase 2 Sewer Collection, Albany OR • EWEB Shasta 947 Reservoir, Eugene OR • Western Oregon University Steam Line, Monmouth OR	• Reservoir 7 & Well 8, Redmond OR • Merganser Steel Reservoir No.1, Bend OR • Piggyback Reservoir, Lane County OR

UNIQUE QUALIFICATIONS *Casey brings 18 years of experience in heavy civil construction, earthwork, demolition, shoring, pump stations, and pipeline projects. Casey is also our subject matter expert when it comes to the design and construction of welded and bolted steel reservoirs.*

PDB CONSTRUCTION MANAGER (CONCRETE TANK) – Jenny Shipman

EMERY & SONS CONSTRUCTION GROUP, LLC

% AVAILABILITY FOR THE PROJECT
PHS 1 - 20%
PHS 2 - 100%

ROLES & RESPONSIBILITIES	CURRENT ASSIGNMENTS	RELEVANT EXPERIENCE
During Phase 1 Jennifer will assist with implementing project controls. During Phase 2 Jennifer will manage our construction team for the concrete tank option and be responsible for schedule and budget tracking.	• ASR#2/#3, Tigard OR • Farmington Fluoridation & Flow Control Facility, Beaverton OR	• ASR#2/#3, Tigard OR • Cooper Mountain Res, Beaverton OR • Reservoir 6 & Well 7, Redmond OR • Rivergrove Reservoir No. 3, Lake Oswego OR

UNIQUE QUALIFICATIONS *Jennifer brings 15 years of experience in a wide range of projects, including reservoirs and pump stations. Jennifer is also our subject matter expert when it comes to the design and construction of concrete reservoirs.*

PDB SAFETY DIRECTOR – Jeremy Lawson

EMERY & SONS CONSTRUCTION GROUP, LLC

% AVAILABILITY FOR THE PROJECT
PHS 1 - 10%
PHS 2 - 10%

ROLES & RESPONSIBILITIES	CURRENT ASSIGNMENTS	RELEVANT EXPERIENCE
Jeremy will collaborate with our design and construction team to ensure appropriate safety measures are being implemented. Jeremy will also prepare the site-specific safety plan for construction.	• Jeremy Supports ALL Emery & Sons projects.	• Jeremy has 30 years of experience in the heavy civil construction industry, ranging from small commercial projects to water reservoirs and large water and wastewater treatment plants.

UNIQUE QUALIFICATIONS *Jeremy has 30 years of experience in the construction industry, ranging from small commercial projects, to water reservoirs, to large wastewater treatment plants. Jeremy is involved with each and every Emery & Sons project from the start, and is responsible for organizing and coordinating the safety operations and procedures for over 180 field staff.*

KEY STAFF - Continued

% AVAILABILITY FOR THE PROJECT
PHS 1 - 20%
PHS 2 - 20%

PDB DESIGN PRINCIPAL-IN-CHARGE & QA/QC – James Bledsoe, PE

ROLES & RESPONSIBILITIES	CURRENT ASSIGNMENTS	RELEVANT EXPERIENCE
James will ensure this project has the resources it needs for successful completion. He will also oversee quality control reviews to ensure this project meets Keller's high standards of excellence.	• Veolia (Boise) 6.8 M Concrete tank. • Mountain Home Well & Pipeline project. • Nampa Well, Booster, & Tank project. • Various water resource planning studies throughout the NW	• TVWD Grabhorn Reservoir (Beaverton, OR) • 2 MG Prestressed Concrete Tank & 0.6 MG Steel Tank Rehab Mountain Home, ID • 3 MG & 1.5 MG Concrete Tanks Nampa, ID • 2 MG Bolted Steel Tank Burley, ID • Two 1 MG Steel Tanks; CMS Services, Amador, CA

UNIQUE QUALIFICATIONS *With over 20 years of experience, James excels at providing innovative solutions for complex water projects. As Principal-in-Charge, James will ensure the allocation of resources and the quality of deliverables. He will also play an active role in the concept design phase of the project. James oversaw the design of a 5.0 MG tank for TVWD, 0.5 MG concrete tank expansion project in Wood Village, and tanks for Nampa (1.5 MG and 3.0 MG), Mountain Home (2.0 MG), and Burley. His experience also includes progressive design build and design-build delivery projects, including for multiple tank projects.*

% AVAILABILITY FOR THE PROJECT
PHS 1 - 30%
PHS 2 - 20%

PDB DESIGN MANAGER – Peter Olsen, PE

ROLES & RESPONSIBILITIES	CURRENT ASSIGNMENTS	RELEVANT EXPERIENCE
Peter will coordinate permitting, design, and construction staff early in the project to ensure it runs smoothly from the start. He will communicate with the City and representatives to keep them informed of progress and key decisions that need to be made.	• North Santiam Canyon Sewer Project, (Marion County) • Amity Water System Improvements, Amity, OR • Aurora, Amity, & Willamina City Engineering, Aurora, Amity, & Willamina, OR	• Water System Improvements Gates, OR • Grabhorn Reservoir Replacement, Beaverton, OR • Water System Improvements Amity, OR • Charbonneau Tank Seismic Evaluation, Willsonville, OR

UNIQUE QUALIFICATIONS *Peter manages our Salem, OR office and will serve as the Design Manager for this project. He brings over 18 years of experience which allows him to provide clients with high quality products on time and within budget. Peter's design experience is complemented by his planning and construction management experience, including construction engineering and inspection for all the capital projects he has been involved in and water master planning and modeling for communities throughout the Willamette Valley.*

Peter is familiar with the area, having been the Project Manager for the water, stormwater, and wastewater master plans for the City of St. Helens. Peter previously served as the Project Engineer for the 5.0 MG Grabhorn Reservoir project for TVWD. At Wilsonville he helped manage the model/plan updates and storage tank seismic rehabilitation evaluation for the Charboneau Tank

KEY STAFF - Continued

PDB STRUCTURAL ENGINEER – Brandon Keller, PE, SE

KELLER ASSOCIATES

% AVAILABILITY FOR THE PROJECT
PHS 1 - 40%
PHS 2 - 30%

ROLES & RESPONSIBILITIES	CURRENT ASSIGNMENTS	RELEVANT EXPERIENCE
Brandon will be responsible for the tank design.	• Veolia 6.8 MG Presstressed Concrete Tank Boise, ID • Wastewater Membrane Facility, Boise, ID • LILB Bridge Replacement, Idaho	• TVWD Grabhorn Reservoir Beaverton, OR • Four water storage tanks for Veolia ranging from .3 MG to 6 MG Boise, ID • Four water storage tanks ranging from .5 MG to 1 MG, Pocatello, ID

UNIQUE QUALIFICATIONS *Brandon is a licensed structural engineer and will lead structural tasks for this project. He brings over 23 years of experience which includes the design of over 50 water storage reservoirs or water retaining structures throughout the Northwest in the past 10 years.*

PDB PROJECT ENGINEER / MECHANICAL LEAD – Jason King, PE

KELLER ASSOCIATES

% AVAILABILITY FOR THE PROJECT
PHS 1 - 40%
PHS 2 - 30%

ROLES & RESPONSIBILITIES	CURRENT ASSIGNMENTS	RELEVANT EXPERIENCE
Jason will lead any mechanical tasks and provide support where needed.	• 7th Street Booster Station Reno, NV • Sandercock Reservoir Repairs, Sandy, OR • Nampa Tank, Well, & Booster Upgrades Nampa, ID	• Whistle Pig Reservoir Boise, ID • TVWD Grabhorn Reservoir Replacement Beaverton, OR

UNIQUE QUALIFICATIONS *Jason has extensive experience with water systems, such as storage tanks, water transmission lines, pump stations, and treatment facilities. In the past 13 years, he has led the preliminary evaluation, design, and construction of several water storage and distribution facilities, which encompass a wide range of sizes, configurations, flow, and pressure conditions. His recent experience includes two potable water storage tanks for Veolia in Boise, ID, the 5 MG Grabhorn water storage reservoir for Tualatin Valley Water District, and a Nampa, ID water tank/well/booster project.*

PDB SITE DESIGN – Shannon Williams, PE

KELLER ASSOCIATES

% AVAILABILITY FOR THE PROJECT
PHS 1 - 25%
PHS 2 - 20%

ROLES & RESPONSIBILITIES	CURRENT ASSIGNMENTS	RELEVANT EXPERIENCE
Shannon will oversee analysis of the existing site and design of needed site improvements, including stormwater management.	• Willamina Water System Improvement Project, Willamina, OR • City Engineering, Indepedence, OR • Falls Park Phase II, Mill City, OR • Neotsu Pedestrian Bridge PDB Lincoln City, OR • Salem Streetscapes, Salem, OR	• Silver Creek Water Intake & Pipeline, Silverton, OR • Willamina Water System Improvement Project Willamina, OR • Falls Park Phase I and II Mill City, OR

UNIQUE QUALIFICATIONS *Shannon has 24 years of experience in the civil and environmental engineering field, spanning a variety of technical disciplines, including utility planning, design, construction management, and environmental permitting. Shannon is well known for her collaborative communication style, effectively communicating with regulators, owners, designers, and construction contractors to meet client expectations. Her strong relationships with agency partners allow Shannon to guide clients through the design and permitting process. Shannon has provided design, permitting, and construction management services for a variety of site civil, pressure and gravity pipeline projects over her career.*

KEY STAFF - Continued

% AVAILABILITY FOR THE PROJECT
PHS 1 - 20%
PHS 2 - 20%

PDB MODELING & HYDRAULICS – Trenton Buster, EI

KELLER ASSOCIATES

ROLES & RESPONSIBILITIES	CURRENT ASSIGNMENTS	RELEVANT EXPERIENCE
Trenton will be in charge of updating and exercising hydraulic models.	• Weiser Water Reservoir 1 Corrosion Mitigation Weiser, ID • Meridian Water Master Plan, Meridian, ID • Eagle Sewer District Collection System Master Plan, Meridian, ID	• Water Master Plan, St.Helens, OR • Stormwater Master Plan St. Helens, OR • Cascade Valley Reservoir Siting & Sizing Study, Moses Lake, WA • Water Master Plan, Weiser, ID • Hydraulic Model Development Moses Lake, WA

UNIQUE QUALIFICATIONS *Trenton brings 4 years of experience, and was the lead modeler and project engineer for St Helen's recent water master plan and therefore is already familiar with the system operation and model scenarios. He is aware of the City's need for additional water storage and will work with the City staff to assess the hydraulic impacts of the new reservoir and recommend operational setpoints to meet the required storage components. Trenton has provided modeling support for several potable water systems across the northwest including Meridian, Weiser, and Nampa, ID; Washington State University; and Moses Lake, WA.*

% AVAILABILITY FOR THE PROJECT
PHS 1 - 20%
PHS 2 - 20%

PDB GEOTECHNICAL ENGINEER – Elliot Mecham, PE

SHANNON &WILSON

ROLES & RESPONSIBILITIES	CURRENT ASSIGNMENTS	RELEVANT EXPERIENCE
Elliot will be responsible for characterizing the existing geological conditions & making recommendations for structural design parameters.	• Scappoose Reservoir Scapoose, OR • Winston-Dillard Reservoir Winston, OR • Awbrey Butte Transmission, Bend, OR	• Grabhorn Reservoir, Beaverton, OR • Timber Reservoir, Timber, OR • Redland Reservoir Clackamas County, OR • Beacon Hill Elevated Reservoir Longview, WA

UNIQUE QUALIFICATIONS *Elliott has been the project manager for over 25 reservoir projects. He specializes in working on sites with complex geotechnical conditions, and has worked collaboratively with contractors and civil engineers on numerous alternative delivery projects to develop unique solutions that benefit the owner.*

% AVAILABILITY FOR THE PROJECT
PHS 1 - 40%
PHS 2 - 40%

PDB SURVEYOR – Steven Howell, PLS

ROLES & RESPONSIBILITIES	CURRENT ASSIGNMENTS	RELEVANT EXPERIENCE
Steven will be responsible for establishing the survey control points, topographic mapping, and boundary resolution.	• Willamette Education District Sidewalk Survey McMinnville, OR • Silver Falls School District Boundary Survey Silverton, OR	• Crestview Waterline Survey Salem, OR • Wastewater Facilities Master Plan (Multiple Cities) • Sidewalk Improvements (Marion County, OR)

UNIQUE QUALIFICATIONS *Steven Howell is the owner of FFN Surveying and has over 18 years of land surveying experience. He has worked for both large and small firms throughout his surveying career, completing projects from complicated boundary and topographic surveys to simple lot surveys. He is directly involved with all project aspects to ensure a high level of quality control and consistent final product.*

5.5.4 SUBCONSULTANTS & SUBCONTRACTORS

Keller will provide all services in-house except for geotechnical, surveying, and some limited instrumentation and controls, thus limiting the need to manage subconsultants. We have worked with Shannon & Wilson on multiple tank projects, including the recently completed Grabhorn Reservoir for TVWD, and have a great working relationship with them. This teaming approach has allowed us to meet aggressive deadlines with quality designs. We will look to continue, and manage this relationship as with previous projects, with a clearly defined scope of work and reasonable deadlines.

PDB GEOTECHNICAL – SHANNON & WILSON, INC.

 # PROJECTS PERFORMED WITH:

PRIME DESIGN-BUILDER
8

LEAD DESIGN FIRM
10
(Within the Past 5 Years)

Shannon & Wilson, Inc., is an employee-owned geotechnical, environmental, and pavement consulting firm founded in Washington in 1954. Their local Portland-area branch was founded in 1961 and has completed more than 4,200 projects in Oregon and SW Washington, providing us with extensive knowledge of the region's geologic and geotechnical conditions. Their Lake Oswego staff of 38 includes geotechnical engineers, engineering geologists, environmental engineers, pavement engineers, and administrative staff. They can also draw on the resources of more than 330 employees nationwide.

Shannon & Wilson's primary services include geotechnical engineering and instrumentation; environmental science/engineering; geology and geophysics; dewatering; stormwater infiltration testing, modeling and design; slope stability evaluation and mitigation; underground engineering; earthquake engineering; pavement engineering and design, and environmental science/engineering. They also provide a professionally staffed soil and rock testing laboratory and CAD and GIS services.

PDB SURVEY – FORTY FIVE NORTH SURVEYING

 # PROJECTS PERFORMED WITH:

LEAD DESIGN FIRM
14
(Within the Past 5 Years)

FFN Surveying is a land surveying company based in Salem, Oregon. They are in the heart of the Willamette Valley on the 45th Parallel (halfway between the equator and North Pole). They service land surveying needs in both Oregon and Washington in an efficient and timely manner. With over 18 years of land surveying experience, you can be assured you are receiving the best possible care when it comes to your project needs. From start to finish, they keep the project goal in mind to provide clients with the best possible product to help eliminate costly mistakes and unforeseen problems.

PDB INSTRUMENTATION & CONTROL – PORTLAND ENGINEERING, INC.

 # PROJECTS PERFORMED WITH:

PRIME DESIGN-BUILDER
4

LEAD DESIGN FIRM
14
(Within the Past 5 Years)

Portland Engineering, Inc. was founded in 1992 and specializes in bringing all types of subsystems together. They specialize in water, wastewater, manufacturing, packaging, food and beverage, power, and utilities throughout the Pacific Northwest on all major brands of automation hardware and software. They will bring comprehensive instrumentation and control as well as systems integration services to this Project.

5.5.5 EXPERIENCE

SIMILAR PROJECT EXPERIENCE

Currently our team is in the process of delivering 10 significant/complex water projects which include the same type of work required of the St. Helens Reservoir project.

The project clients include:

City of Beaverton | City of Tigard | Tualatin Valley Water District (TVWD)
Willamette Water Supply Program (WWSP) | Eugene Water and Electric Board (EWEB)

Regarding our 5 similar projects within the past 5 years that demonstrate our broad experience with reservoir projects, we offer the following:

1

Tualatin Valley Water District (TVWD)
Grabhorn Reservoir Project
- *Concrete*
- *Progressive-Design-Build*

2

City of Beaverton
Cooper Mountain Reservoir No 2
- *Concrete*
- *Design-Bid-Build*

3

City of Redmond
South Redmond Water Facilities Project
- *Concrete*
- *CM/GC*

4

Water Wonderland Irrigation District
Merganser Reservoir No. 1
- *Steel*
- *Design-Bid-Build*

5

Veolia Water Idaho
Whistle Pig Tank
- *Concrete*
- *Design-Bid-Build*

SIMILAR PROJECTS

TEAM MEMBERS

PROJECT MANAGER - Arin Atiyeh
CONSTRUCTION MANAGER - Jennifer Shipman
SUPERINTENDENT - Matt Atiyeh

OWNER CONTACT

TVWD
Nicholas Augustus, PE
1850 SW 170th Ave.
Beaverton, OR, 97003
(971) 327-6292
Nick.augustus@tvwd.org

ENGINEER CONTACT

KELLER ASSOCIATES
James Bledsoe, PE
131 SW 5th Ave. Ste A
Meridian, ID 83642
(208) 813-7555
Jbledsoe@kellerassociates.com

RESERVOIR PROJECT
TVWD – Grabhorn Reservoir – PDB

Emery & Sons was selected by the Tualatin Valley Water District (TVWD) for the design and construction of the new 5 MG Grabhorn Reservoir. The scope of Emery's work included preliminary site investigation, geotechnical exploration, project design, permitting, demolition/hazardous material abatement of the failing existing 5 MG reservoir, construction, testing and commissioning of a new 5 MG AWWA D110 reservoir, valve house, site piping, off-site transmission piping, storm drain systems, excavation (27,000 CY), grading, road construction and complete project restoration. The site's location presented unique challenges for both design and construction—it was located on a steep wooded parcel surrounded by established neighborhoods with a sensitive stream/and vegetative corridor.

PROCUREMENT METHOD	YEAR STARTED	YEAR COMPLETED	CONTRACT VALUE
Progressive Design Build	2017	2019	$ 12,035,387.00

KEY SIMILAR PROJECT ELEMENTS

- Fast-track project
- Integration w/existing system
- Large diameter piping
- Extremely confined site
- Residential neighborhood

INNOVATIVE CONCEPTS

Used PDB method to complete project in a shorter time frame (reduced schedule by 6mos.) Saving TVWD $1.4 million.

TEAM MEMBERS

PROJECT MANAGER - Arin Atiyeh
SUPERINTENDENT - Matt Atiyeh

OWNER CONTACT

City of Beaverton
Priya Dhanapal,PM
12725 SW Millikan Way
Beaverton, OR 97005
(971) 291-2852
pdhanapal@beavertonoregon.gov

ENGINEER CONTACT

MURRAYSMITH
Michael McKillip, PE
888 SW 5th Ave, Ste. 1170
Portland OR 97204
(503) 225-9010
Michael.McKillip@murraysmith.us

RESERVOIR PROJECT
City of Beaverton – Cooper Mountain Reservior No. 2

This project consisted of the construction of a new 5.5 MG D-110 Type 1 Reservoir, pump station, aquifer storage and recovery well facilities, 1,300 LF of off-site 24" dia. water main and associated site piping and site improvements. It serves to add additional water storage, and needed water pressure for future development at higher elevations. Notable features to this project include a 30' deep 1,050 SF reinforced concrete mechanical vault including a 350+ SF CMU control building on top at the ground level, a 1,450 SF CMU booster pump station building and a 3,750+ SF CMU ASR building with its own on-site sewer septic system. The project included mass grading, rock excavation, 30'+ deep piping, storm drain improvements, chemical injections and sampling systems, retaining walls, detention ponds, permanent fencing, and landscaping. Every aspect of the project is designed to be seismically resilient.

PROCUREMENT METHOD	YEAR STARTED	YEAR COMPLETED	CONTRACT VALUE
Design-Bid-Build	2020	2023	$ 19,716,135.00

KEY SIMILAR PROJECT ELEMENTS

- Fast-Tracked Schedule
- Budget Limitations

INNOVATIVE CONCEPTS

To minimize delays, our team worked to prioritize the order of permit reviews to allow critical path work to proceed, and expedited information requests and revisions requested by the plan reviewers.

SIMILAR PROJECTS

TEAM MEMBERS

SR PROJECT MANAGER - Brian Vinson
CONSTRUCTION MANAGER - Casey Dark
SUPERINTENDENT - Neil Miotke

OWNER CONTACT

City of Redmond
Mike Caccavano, City Engineer
(541) 504-2011
411 SW 9th Street
Redmond, OR 97756
Mike.Caccavano@redmondoregon.com

ENGINEER CONTACT

MURRAYSMITH
Dennis Galanato, PE
(503) 225-9010
888 SW 5th Ave, Ste. 1170
Portland OR 97204
Dennis.Galinato@murraysmith.us

EMERY&SONS CONSTRUCTION GROUP, LLC

RESERVOIR PROJECT
City of Redmond – S Redmond Water Facilities
Reservoir 7 & Well 8 – CM/GC

This facility includes a new groundwater well, a 4 MG pre-stressed concrete storage reservoir, ASR well, and booster pump station. The City chose CM/GC contracting because of schedule requirements and potential constructability issues. Murraysmith assisted the City in the CM/GC process and contractor selection which resulted in selecting Emery & Sons. Early construction packages include well drilling, earthwork, and procurement of long lead time items.

PROCUREMENT METHOD	YEAR STARTED	YEAR COMPLETED	CONTRACT VALUE
CM/GC	2020	2022	$16,254,235.00

KEY SIMILAR PROJECT ELEMENTS

- Alternative delivery
- Aesthetic design key for public buy-in.
- Urgent need for additional system capacity.

INNOVATIVE CONCEPTS

- Designed a custom single shank ripper attachment for excavator to remove the material, saving tens of thousands of dollars.

TEAM MEMBERS

PROJECT MANAGER - Casey Dark
SUPERINTENDENT - Mark Pride

OWNER CONTACT

Water Wonderland Irrigation Dist.
Leslie Graff
(541) 593-2902
17153 Crane Drive
Bend, OR 97707
wwid@qwestoffice.net

ENGINEER CONTACT

Clearwater Engineering Group, Inc.
David Prull
(541) 366-8243
320 SW Upper Terrace Drive
Suite 102, Bend, OR 97702
dcprull@gmail.com

EMERY&SONS CONSTRUCTION GROUP, LLC

RESERVOIR PROJECT
WWID – Bend, OR – Merganser Reservoir No. 1

The Water Wonderland Irrigation District – Merganser Reservoir No. 1 project included clearing and earthwork of approximately ¼ acre, yard piping and interconnection of the existing system, construction of a bolted steel reservoir, ancillary site improvements and construction, testing, and coordination of inspections as required for erection and connection of the nominal 180,000-gallon bolted steel tank to the potable water system. Also included was the Controls and programing for the SCADA system as well as the reorientation of the existing wellhead.

PROCUREMENT METHOD	YEAR STARTED	YEAR COMPLETED	CONTRACT VALUE
Bid / Build	05/2019	01/2020	$ 437,995.00

KEY SIMILAR PROJECT ELEMENTS

- Project required an innovative foundation design due to the low soil density.
- System Integration
- Limited access to site
- Proximity to existing infrastructures.
- Project located within residential neighborhood.

INNOVATIVE CONCEPTS

- Replaced existing foundation soils with lightweight fill durable enough to support the structure in times of high soil saturation creating a reservoir that floats on its foundation.
- Designed a custom, cost-saving single shank ripper attachment for excavator to remove the material .

SIMILAR PROJECTS

TEAM MEMBERS

- PRINCIPAL-IN-CHARGE - James Bledsoe
- PROJECT MANAGER - Branden Keller
- HYDRAULICS/PIPELINE - Jason King
- MODELLING - Trenton Buster

OWNER CONTACT

Veolia Water Idaho
Roger Greaves, Dir. of Engineering
(208) 362-7330
8248 West Victory Road
Boise ID 83709
Roger.greaves@veolia.com

LEAD CONTRACTOR CONTACT

JC Constructors, Inc
Sabino Papasodaro, PM
(208) 447-0738
1305 E Columbia Rd
Meridian, ID 83642
sabino@jccboise.com

RESERVOIR PROJECT
Veolia Water Idaho – Whistle Pig Tank

Keller recently designed the prestressed concrete 2.65 MG Whistle Pig Reservoir for Veolia in Boise, ID. This project included a preliminary engineering report, permitting (hillside application permit and a conditional use permit), design for current and future needs, pressure reducing valves, high- and low-pressure ranges and connectivity to existing transmission line, pumpless mechanical mixing, a valve vault, a control structure built on top of the fully buried tank within a steep hillside, a new access road, and site improvements. The tank is fully buried with several feet of soil above the tank. Provisions for future rechlorination facilities were also incorporated. Since completing the tank, Keller was selected to design Veolia's new 6 MG above ground reservoir. Our same tank team has helped with the tank sizing, material selection, and concept design. The project is on schedule to be fully designed and permitted within eight months of the notice to proceed.

PROCUREMENT METHOD	YEAR STARTED	YEAR COMPLETED	CONTRACT VALUE
Design-Bid-Build	2019	2023	$ 4,800,000.00

KEY SIMILAR PROJECT ELEMENTS

- Similar tank size, connectivity to existing lines, tank replacing existing on-site storage.

INNOVATIVE CONCEPTS

- Fully buried tank to minimize visibility on existing Birds of Prey reserve site.
- Use of high-pressure fill line to drive mechanical mixing without the need for pumping & associated electrical equipment.
- Two-stage pressure reducing to mitigate risks of valve failure & prolong PRV life.
- Site optimization & use of reinforced soil to reduce excavation & backfill costs.

D-110 CONCRETE & STEEL RESERVOIR EXPERIENCE

Emery & Sons has extensive experience constructing AWWA D-110 Type 1 prestressed cast-in-place concrete reservoirs, including horizontal wall pre-stressing and vertical wall post-tensioning. Together, our team has designed and constructed 32 D-110 water reservoirs in the past 15 years. These projects have been constructed across the Pacific Northwest, and our team has been put to the test installing these structures in the most extreme environmental (weather) conditions and in varied geologic conditions. Therefore experience matters when constructing these complex structures, and it cannot be overstated that our team has significantly more experience than any other team out there. Our team is comprised of staff that have worked together for many years and has recently completed the first PDB reservoir project in Oregon. With the same team, our collective experience, expertise, and teamwork will translate into a highly successful project once again.

Emery & Sons also has extensive experience installing steel (bolted and welded) tanks. In addition, we are an official distributor and certified installer of bolted steel tanks for United Industries Group (UIG), one of the leading manufacturer's of bolted steel tanks. In the last 5 years we have installed 16 steel tanks, and we are currently contracted for (2) ½-million gallon steel tanks for the Eugene Water and Electric Board (EWEB).

Please see (Appendix B) for a letter of reference regarding our certification and expertise.

EXPERIENCE WORKING TOGETHER

EMERY&SONS CONSTRUCTION GROUP, LLC | KELLER ASSOCIATES

Emery and Keller have a rich history working together on projects, including water reservoirs and pump stations. In just the last 5 years, we have either completed or are currently working on the following projects together:

TVWD – Grabhorn Reservoir: This PDB project included the demolition of an existing concrete reservoir and the construction of a new concrete reservoir. The most significant aspect of this project was the phasing of construction activities on such a small project site. This was the first PDB reservoir project completed in Oregon, and has served as the road map for delivering heavy civil projects.

TVWD – Farmington Booster Pump Station: Using a CM/GC delivery method, Emery and Keller collaborated on this project to design and construct a booster pump station and fluoridation facility that incorporated seasonal operating scenarios. Through collaboration with the Owner, the team realized that a full booster pump station was not needed. Therefore the project was re-designed to include a pressure-reducing valve (PRV) within a fluoridation facility.

City of Silverton – Silver Creek Raw Water Line: This was a design-bid-build project that included a water intake facility, including site piping, pumps, mechanical piping, electrical and controls, and site improvements. Emery and Keller worked hard to deliver this complex project on time and within budget.

ALTERNATIVE DELIVERY EXPERIENCE

Emery has a long history of establishing and maintaining strong working relationships with Owners/clients, engineers, and communities regardless of the project delivery method. We are not confrontational and do not file claims. We accomplish this by being active team members, working continually to achieve collaboration and trust.

As our public agency clients transition more of their projects towards alternative forms of project delivery, we have strategically positioned ourselves to answer their call. Over the past several years, Emery has actively sought out and been selected for many alternative delivery projects (CM/GC and Design-Build). We have completed 10 significant design-build and 5 CM/GC projects, and are currently under contract for 8 additional alternative delivery projects. We understand the PDB delivery method and process for providing a smooth and stress-free Owner experience. We believe the essence of alternative delivery is teamwork, which is what Emery is known for.

Our team's list of current Alternative Delivery projects include the following:

CURRENT ALTERNATIVE DELIVERY PROJECTS	
1	**City of Bend Parks and Recreation – Drake Park and Path Improvements** *(CM/GC)*
2	**Oregon State University – Community Hall Slope Project** *(CM/GC)*
3	**TVWD – Farmington Road Facilities** *(CM/GC)*
4	**City of Lebanon – Westside Sewer Interceptor** *(CM/GC)*
5	**City of Beaverton – ASR#5 & Sorrento Pump Station** *(CM/GC)* Includes an epoxy-coated Bolted Steel Reservoir
6	**City of Beaverton – Sexton Mountain Pump Station** *(CM/GC)*
7	**City of Tigard – Reservoir 18 and Pump Station** *(PDB)* AWWA D110 Concrete Reservoir
8	**Chehalem Parks and Recreation – Pedestrian Bridge Project** *(CM/GC)*

EXPERIENCE - TEAM'S SIMILAR ADDITIONAL PROJECTS

PROJECT NAME	SCOPE OF WORK	PROJECT VALUE	OWNER
ASR#5 & Sorrento Pump Station, Beaverton, OR	*125,000 gallon ASR epoxy coated bolted steel surge tank, pump station, ASR well, and associated distribution main piping.*	$16,452,295	City of Beaverton, OR
Resrvoir 6 & Well 7 Redmond, OR	*3.5 MG concrete reservoir, pump station upgardes, and associated distribution main piping*	$1,600,896	City of Redmond, OR
Piggyback Leachate Improvements, Eugene, OR	*1.3 MG bolted steel tank and associated distribution main piping*	$822,435	Lane County, OR
Mill Creek Reservoir Mill City, OR	*2.3 MG concrete reservoir, pump station, and 960 LF of 18" distribution main piping*	$4,692,200	City of Salem, OR
Forest Park Low Tank Portland, OR	*1.3 MG concrete reservoir and associated distribution main piping*	$6,106,618	City of Portland, OR
Priest Rapids Water System Improv. Beverly, WA	*170-Foot tall 250,000 gallon elevated water reservoir, well building, and 22,000 LF of 16" welded HDPE piping*	$3,830,300	Grant County PUD
Sunset Reservoir Sherwood, OR	*4.0 MG concrete reservoir, 30,000 CY of excavation, and 2,100 LF of 24" to 48" steel distribution main piping*	$8,058,000	City of Sherwood, OR
Clearwell No. 3 Oregon City, OR	*2.0 MG concrete reservoir and distribution main piping*	$3,546,502	South Fork Water Board
550 Zone Resrevoir Tigard, OR	*3.0 MG concrete reservoir, 24,000 CY of excavation, and 2,700 LF of 18" to 24" distribution main piping*	$5,786,583	City of Tigard, OR
Water Improvements Mill City, OR	*1.0 MG bolted steel tank and associated distribution main piping*	$2,281,000	City of Mill City, OR
Florence Lane Reservoir Seismic Upgrades Beaverton, OR	*Seismic upgrades of (2) steel tanks, foundations, and piping*	$479,673	Tualatin Valley Water District
Mountain Home Reservoir, Mountain Home, ID	*Keller completed the planning and design for a new 2.0 MG water storage tank.*	$3,500,000	City of Mountain Home, ID
Rexburg Water Tank Rexburg, ID	*Keller provided design, bid, construction administration, & resident project representative services for a 2.5 MG prestressed concrete tank.*	$3,100,000	City of Rexburg, ID
Simplot Fire Suppression Tanks Pocatello, ID	*Keller provided design & construction phase services for two new 1.25 MG fire suppression storage tanks (2.5MG total) at the Simplot Don Plant*	$2,500,000	Simplot John Osborn, OperationsSupervisor
Water Strorage Tanks Emmett, ID	*Keller completed final design services on water system improvements that included a 1.15 MG steel storage tank.*	$3,060,000	City of Emmett, ID
Star Sewer & Water District Water Improvements, Star, ID	*Keller helped SSWD expand its water system to include a new municipal well, a 750,000-gallon partially buried water tank.*	$5,500,000	Star Sewer & Water District, ID
Ammon Tanks & Booster Stations Ammon, ID	*Keller designed a recently completed 1 MG conventional reinforced concrete water storage tank for the City of Ammon.*	$5,300,000	City of Ammon, ID
Water Improvements Chubbuck, ID	*The improvements included a buried 1.5 MG cast-in-place concrete storage tank.*	$3,400,000	City of Chubbuck, ID
Tank 1 Rehab & Expansion Wood Village, OR	*Keller modified an existing reservoir & increased the storage capacity by over 200,000 gallons to a total capacity of over 500,000 gallons, while maintaining the footprint of the existing tank.*	$400,000	City of Wood Village, OR

5.6

COST MANAGEMENT APPROACH

PRE-CONSTRUCTION COST CONTROL

As you will see later in our proposal, we are anticipating that the stated budget of $2.5-million will likely not be adequate to cover the design and construction costs for the project. Based on our understanding of the project scope, we believe a budget of 4.0-million to 4.3-million is more realistic *(see our Conceptual Design-Build Budget below (Figure 5.6 A)*. Therefore, our project management staff will work with the City to evaluate design alternatives that will minimize the ultimate project budget without sacrificing functionality and quality.

Two alternatives to be considered are: 1) Bolted Steel Tank | 2) AWWA D110 Concrete Tank

Further on in our proposal we provide a relative cost comparison of these two options, along with pros and cons for each. Regarding progress milestones and final design decisions, we have found this to be a project-specific discussion. Therefore, a Project Management Plan will be created to capture the critical project delivery criteria. This will begin after the initial kickoff meeting.

With all this in mind, our cost control management strategy for this project will be as follows:

Emery & Sons believes the successful management of costs are primarily achieved during the pre-construction planning of a project. Based on our overall knowledge of the project, and the project challenges discussed herein, we propose that a focused Scoping/Planning Session (Target Value Design Workshop) be scheduled as soon as possible after contract award. The purpose of this meeting will be to discuss the critical project scope, schedule, budget, potential permitting constraints, and safety elements for the project.

During pre-construction, the Emery/ Keller team will provide constructability reviews and identify well defined scopes for each work activity to be performed. Doing this will determine critical areas of work, the scope involved, potential conflicts, and help mitigate the potential for cost overruns.

These same procedures will take place regularly through the life of the project, allowing the overall performance to be evaluated and assessed to ensure the project progresses as expected.

HeavyBid

Emery & Sons uses the HCSS estimating software, HeavyBid, during the pre-construction phase of our alternative delivery projects. This software is specifically tailored to civil infrastructure projects such as this one. It allows for an estimate to be accurately built and maintained, and provides, real time job cost and production analysis.

Our estimating team utilizes detailed cost history information to evaluate/estimate various costs for materials, subcontractors, installation productions, crew sizes, equipment resources, transportation, bonding/insurance, specialty contractors, labor rates, and tax rates.

VIEWPOINT

We also provide further detailed cost analysis by importing our estimating file into Viewpoint, a secondary project management and accounting program.

Using these two programs simultaneously throughout the life of the project, allows us to meticulously monitor costs and scheduling while providing the most accurate project forecasting.

Our estimating software allows design alternatives and changes/revisions to be evaluated and analyzed quickly and efficiently.

CONSTRUCTION COST CONTROL

Our Superintendents use HCSS HeavyJob, a project management software, to record:

- *Daily Crew Time*
- *Equipment Usage*
- *Material Deliveries*
- *Trucking*
- *Daily Productions*
- *Subcontractor Work*

This real time tracking of construction activity allows our team to make adjustments to correct any cost inefficiencies being experienced at the time. The reports generated by our system are easy to understand and interpret, but we will provide the Owner and Engineer training on how to track and manage our cost accounting deliverables.

In addition to our HeavyJob software, our Project Superintendent and Project Manager will ensure cost control by managing the Project Execution & Control Strategy; making sure our labor, equipment, and subcontractor resources are configured and scheduled appropriately for the prosecution and progress of the work. For this to happen, we'll focus diligently on planning the work well in advance, to gain ample time to resolve unforeseen issues.

Regarding our Control Strategy, we concentrate on three primary components:

1. *Performance*
2. *Issue/Risk Avoidance*
3. *Quality Control*

For this project, it will be imperative to resource and schedule the work in a manner that allows for high performance while maintaining a high level of quality control. As this can be challenging on projects with multiple crews working, we will accomplish this by providing the appropriate level of field and administrative supervision.

TARGET VALUE ESTIMATING

EVALUATE DESIGN ALTERNATIVES

One of the reasons that Emery & Sons likes alternative delivery projects is due to our ability to influence project cost, schedule, and quality by having input during the design process.

During the pre-construction phase of a project, we feel it is our responsibility to supplement the technical/engineering aspects of a project with experienced-based solutions that are cost effective without sacrificing overall quality or functionality

We understand that the team cannot operate in a continuous mode of value engineering, therefore cost decisions must be made in a quick and efficient manner. In order for this process to work however, there must be full buy-in from the entire team.

We will do our part by drawing on our experience with similar projects to quickly and efficiently help the team evaluate design alternatives as the project moves forward.

KEEP ON BUDGET

In order for Emery & Sons to keep this project on budget throughout the design phase, with minimal redesign, our team will work diligently with:

- ✓ *The Owner*
- ✓ *Design Engineer*
- ✓ *Consultants*
- ✓ *Subcontractors*
- ✓ *Suppliers*

to provide detailed real time estimates in order to vet:

- ✓ *Design Ideas*
- ✓ *Material Selection*
- ✓ *Project Scopes vs. Cost*

to ensure value goals are met.

We find that face to face group meetings result in clear concise communication and give all of the stake holders a chance to be heard.

KNOW RANGE OF COSTS

The key to target value estimating is to know what the range of costs are for each component of the work. This is where our HeavyBid software comes into play. Knowing what the different alternatives are for materials and/or construction methods, we can accurately compare alternatives and provide the Owner with sound recommendations. We are able to use our historical/actual HeavyJob costs for similar work completed.

Combining these two cost control mechanisms, we can provide an initial/baseline estimate on day one using the most current design information. During the kick-off meeting, we anticipate talking in detail about project scope, project goals, and project objectives.

Armed with this information, we will update the estimate at each phase of design, including an appropriate amount of contingency based on the unknowns at that time. The more we can nail down scope that poses the most cost risk to the project, the more accurate our estimates will be.

ALTERNATIVES ANALYSIS

In order to evaluate the best solution for the project, our team has identified several criteria for comparing design alternatives. These criteria include materials of construction, site logistics, operation and maintenance, capital cost, and life cycle cost. Through the process of comparing the different alternatives, it will be up to the project team to assign relative values to each criteria for the purpose of scoring each alternative. Therefore, during the early stages of preconstruction, our approach will be to collaborate with the City to define and evaluate these and other possible criteria. The importance of this effort will be to ensure the City understands the ramifications of selecting a particular alternative after considering all of the pros and cons of each decision criteria.

Based on our experience with other similar projects, we have already started to understand many of the technical challenges associated with the steel versus concrete reservoir options. These challenges include geotechnical considerations, earthwork and grading requirements, shoring, and existing utilities. These items are discussed in further detail in Section 5.7.

CONSTRUCTABILITY & VALUE-ENGINEERING

With our teams' experience with water reservoirs, constructability will be about designing and constructing the right solution for the existing site conditions. Similarly, Value-Engineering will be about how to implement the selected design in the most cost-effective manner. Based on the existing property boundaries, the geographic characteristics of the site (slope), and existing utilities, constructability will serve to be valuable inputs into the value engineering discussion.

Based on the design criteria and constructability discussion above, we have identified the following Value-Engineering items:

1 EARTHWORK

We recommend finding a site nearby to stage/store native excavated materials rather than hauling in imported fill. This could save the project upwards of approximately

$200,000.00

This assumes construction of the concrete reservoir option. Steel tank would require the material to be disposed of off-site.

2 INLET MIXING SYSTEM

Due to the expected turnover time in the new reservoir, we recommend implementing a simple inlet mixing system. This could save the project upwards of approximately

$75,000.00

This is compared to the standard TideFlex mixing system.

3 RESERVOIR LOCATION

By adjusting the reservoir slightly downhill to the "south", we believe the project could experience a savings of approximately

$200,000.00

The value engineering items above are based on construction of the concrete reservoir option, as these cost reductions would not be viable with the steel tank option.Please see additional information regarding project costs in (Section 5.7)

PRE-QUALIFICATION OF SUBCONTRACTORS

In some cases Emery & Sons has recommended that the reservoir subcontractor be retained during the pre-construction phase to help with constructability and value engineering. For this project we do not see a need to do that, as your project is fairly straightforward regarding the tank design options. Therefore, we will pre-qualify subcontractors for the construction of the concrete reservoir option. ***We have extensive experience soliciting a pre-qualification process and subsequent bidding process.***

In the event a steel reservoir is selected after the alternatives analysis effort, Emery & Sons will request self-performing the reservoir installation. Being a certified installer, the City will be assured of a quality installation. ***Having Emery & Sons self-perform the tank installation will also provide the City the best overall value, as we would not have to mark-up a subcontractors bid. We will however propose soliciting for bids for the steel tank materials. This will ensure that the City experiences the very best pricing for materials.***

RISK ASSESSMENT & MITIGATION

Rather than each party making assumptions as to what risks will be transferred to whom, the PDB delivery method allows the team to appropriately share the risks.

> ***Assignment of risk is usually based on who has the better ability/influence to manage the risk.***

During the pre-construction phase of the project, as requested in the RFP, the Emery/Keller team will further develop the preliminary risk register, included at the end of Section 5.7 (see Figure 5.7A) The purpose of this risk register is to identify potential issues that could have a significant cost and/or schedule impact on the project. While the risk register can typically grow in the number of items, the list tends to become less burdensome as mitigation measures are identified and implemented prior to construction.

At this time our proposed preliminary risk register does not have a scoring section, however risks are typically given a score related to its probability of occurrence and the extent to which the risk can be mitigated. The remaining risks are then assigned a cost to mitigate. Risk costs assigned to the Owner are typically covered by an Owner-controlled contingency budget, while the risks assigned to the contractor are covered by the project contingency (within the GMP).

> ***When implemented correctly, project risks are managed to reduce or eliminate unanticipated cost and/or schedule impacts to the project.***

CONCEPT DESIGN-BUILD BUDGET

(Figure 5.6 A)

Depending on the type of tank selected for the project (Steel or Concrete), the Design Services as well as Construction Costs will be significantly different, as we further explain later in our proposal. Therefore, our conceptual budget indicated below includes both options.

Phase 1 & 2 (Steel Tank)

Soft Costs • Includes costs for Phase 1 only *(See Fee & Rate Proposal Form)*	$357,158.00
Hard Costs (Construction) Construction Cost *(Cost of the Work)* • Includes general conditions & Design-Builder Fee % • Estimated life cycle costs (bolted tank at 30 yrs.)	$3,800,000.00 $250,000.00
Design & Construction Contingency	$250,000.00
Total	**$4,657,158.00**

Phase 1 & 2 (Concrete Tank)

Soft Costs • Includes costs for Phase 1 only *(See Fee & Rate Proposal Form)*	$377,158.00
Hard Costs (Construction) Construction Cost *(Cost of the Work)* • Includes general conditions & Design-Builder Fee % • Estimated life cycle costs (at 30 yrs.)	$3,600,000.00 $20,000.00
Design & Construction Contingency	$250,000.00
Total	**$4,247,158.00**

5.7

PROJECT UNDERSTANDING & APPROACH

5.7 PROGRESSIVE DESIGN-BUILD UNDERSTANDING

The team we've assembled for this project includes our subject matter experts, with many years of proven alternative delivery experience. The benefit of the design-build method is that the Owner, Design-Builder, and Designer each have a seat at the table and are engaged and motivated to take advantage of collaborative decision-making and risk management. The design-build delivery method also provides for ongoing scheduling and estimating, allowing for real time adjustments of project goals and objectives if/when budget issues arise. This same iterative design approach also allows for constructability reviews and value engineering changes without sacrificing project functionality and quality.

> ***More importantly, the PDB delivery method allows for a stress-free project experience by allowing each team member the opportunity to break down pre-conceived barriers typical of the design-bid-build method.***

PROJECT UNDERSTANDING

Based on the 2022 Water Master Plan, the City has experienced a steady increase in population over the past few decades. While the rate of population increase has slowed in recent years, population projections will require water system infrastructure upgrades. While the water system storage capacity indicates a surplus of 1 MG with the 2.0 MG reservoir online, future growth will create the need for additional capacity.

With the 2.0 MG reservoir being offline at this time due to significant deficiencies, the City has decided to replace the reservoir rather than further repairing the 100 year old structure.

> *As stated in the RFP, the new reservoir shall consist of 2.0 million gallons located within the same footprint as the existing reservoir.*

We also understand that the City is interested in cost effective replacement options, which include both steel (welded or bolted) and reinforced concrete (AWWA D110 Style). While we understand the City's desire to consider both of these options, our team intends on showing that the AWWA D110 concrete tank is the best solution based on the existing site constraints and overall lifecycle cost.

Due to the urgency of getting the 2.0 MG storage capacity back on line as soon as possible, the City has decided to use the Progressive Design-Build (PDB) delivery method in order to optimize the completion schedule. The City also has a desire to deliver the project in an efficient manner by working directly with a Design-Build team to realize cost effectiveness through implementing a streamlined design process that includes constructability reviews, value engineering, and innovation.

Since this will be the first Progressive Design-Build project for the City, our team will guide you through the process with a smooth and stress-free experience.

> *The Emery/Keller team recently completed the Grabhorn Reservoir project for the Tualatin Valley Water District – the first PDB reservoir project delivered in Oregon. Your project will include many of the same project elements as the Grabhorm Reservoir, and we will use our extensive reservoir experience to design, permit, budget, and construct the project in an effective and efficient manner.*

PROJECT UNDERSTANDING - *Continued*

Outlined below are the City Goals/Objectives and Key Issues as we understand them. Our approach to addressing these items is outlined in the following pages.

CITY'S GOALS / OBJECTIVES

1. Replace Existing Reservoir
2. Efficient Hydraulic Connection
3. Optimize Project Schedule
4. Cost Effective Solution
5. Smooth Project Delivery Process

KEY ISSUES

- Project Budget
- Alternatives Analysis
- Geotechnical Considerations
- Earthwork & Grading
- Public Outreach
- Permitting Considerations
- Project Schedule

APPROACH TO MEETING CITY GOALS

1 **REPLACE EXISTING RESERVOIR –** The City wishes to replace the existing 2.0 MG reservoir with a new reservoir that will meet the current storage deficit. While the current storage deficit is less than 2.0 MG, the City would like the new reservoir to retain the 2.0 MG capacity.

Our team will perform an alternatives analysis that seeks to replace the existing reservoir with a resilient structure without sacrificing the desired storage volume. This will be accomplished by collaborating with the City during pre-construction to evaluate and solve design and construction constraints.

We believe this evaluation can be completed quick and efficient by holding a focused alternatives analysis meeting shortly after the project kick-off meeting.

2 **EFFICIENT HYDRAULIC CONNECTION –** The City has expressed a desire to evaluate the hydraulic connection between the 2.5 MG and 2.0 MG reservoirs. This will require some thoughtful analysis about the best way to operate and control flow with the two-tank system.

This will be accomplished by understanding how the City currently operates the system, and how future plans may affect the design. Once our team understands these critical parameters, design development will begin.

3 **OPTIMIZE PROJECT SCHEDULE –** With the system currently operating at capacity, the City would like the reservoir replaced by October 30, 2024. While the PDB delivery process will certainly reduce the design and construction timeline for the project, our team is concerned about this aggressive timeline.

We will work with the Owner to evaluate alternatives, prepare a final design, and complete construction as soon as possible, however our current schedule shows substantial completion of the project on or about April, 2025.

4 **COST EFFECTIVE SOLUTION –** While we have already pointed out the budget deficit, our team will be committed to evaluating and implementing the most cost-effective solution.

Our team will complete a detailed alternatives analysis that takes into account not only capitol costs but long term life-cycle costs as well.

5 **SMOOTH PROJECT DELIVERY PROCESS –** While the PDB delivery model is the best way to streamline project execution, a good project team is essential to success. Not only has our team been involved in PDB projects in the past, the Emery/Keller team delivered the very first PDB reservoir project in Oregon.

We will use our past successes to deliver a stress-free experience to the City. From start to finish, acting as an integrated partner, we will keep you involved and informed.

This will be accomplished by implementing project controls that ensure accountability of all team members.

APPROACH TO ADDRESSING KEY CHALLENGES

CHALLENGE PROJECT BUDGET

The number one challenge for the project will be to evaluate design alternatives to minimize the overall cost of the project without sacrificing functionality or quality.

SOLUTIONS

Based on our teams' past reservoir experience, our analysis will be focused on evaluating a steel reservoir and a concrete reservoir. Regardless of which design alternative is chosen, the project budget will have to be increase from the current $2.5-million.

During preconstruction, our team will collaborate with the City to refine the scope and budget in order to minimize project costs. This will be accomplished through a value engineering workshop, the project team will identify and fully vet any and all cost savings ideas. This, combined with our cost estimating software and library of reservoir cost history, will result in the most cost-effective design.

> *On the Grabhorn Reservoir project we worked to develop and implement over $1.5-million worth of value engineering during the design phase, with another $600,000.00 of savings during construction. While the scope and complexity of your project is fairly straightforward, we are confident in our ability to identify creative/innovative design and construction value added savings ideas.*

CHALLENGE ALTERNATIVES ANALYSIS

In order to maintain a streamlined project delivery, it will be imperative to identify and agree on the most appropriate design alternative during Phase 1.

SOLUTIONS

A key element of the project will include evaluating design alternatives for a reservoir constructed of steel or concrete. Alternatives analysis that we have performed in the past have indicated that concrete reservoirs are more cost-effective for a reservoir capacity larger than 1.5 MG. While steel might be a competitive solution for a reservoir of this size (2.0 MG), existing site constraints will have a significant impact on project costs.

Therefore, during the preconstruction phase of the project, our team will perform a detailed comparison that outlines not only up-front capital cost but also long-term life cycle costs. In (Section 5.6 – Cost Management Approach,) we provided a conceptual budget based on recent experience with steel and concrete reservoirs. Our conceptual budget indicates that a steel reservoir would be about the same initial capital cost as a concrete reservoir. After considering other factors such as life-cycle costs and site constraints, we believe a concrete reservoir will be the best overall value. The site constraints associated with the steel tank option are discussed further below. (Refer to life-cycle cost analysis included in the appendix.)

CHALLENGE GEOTECHNICAL CONSIDERATIONS

Due to the existing site conditions, the proximity of the reservoirs to each other, the proximity of the reservoir to the property line, and existing utilities, there are geotechnical design and construction considerations to consider regardless of the tank design (steel or concrete).

SOLUTIONS

Due to the proximity of the 2.0 MG reservoir to the 2.5 MG reservoir, sloping the excavation for the new tank will relieve lateral pressures currently supporting the 2.5 MG reservoir. This could likely result in lateral failure of the 2.5 MG reservoir.

We will either install vertical shoring or dig a trench around the perimeter (uphill side) of the 2.5 MG tank, reducing lateral earth pressures. At this time our recommendation would be to dig the trench, as installing vertical shoring would likely be cost prohibitive.

A similar situation exists at the east and west side of the existing 2.0 MG reservoir. With the existing property line to the east only 30 feet away, sloping of the excavation would likely result in an encroachment of private property.

APPROACH TO ADDRESSING KEY CHALLENGES - Continued

SOLUTIONS GEOTECHNICAL CONSIDERATIONS - Continued

Therefore, our team will configure a way to construct a slope or shoring that would prevent such encroachment. Similarly on the west side of the 2.0 MG tank, the access road and existing waterline are less than 30 feet away. For this situation, we would suggest temporarily relocating the waterline in order to not damage the pipe and to ensure operation of the 2.5 MG reservoir.

CHALLENGE EARTHWORK & GRADING

Due to the existing site topography and the proximity of the tanks to each other and the property line, the two design alternatives will be significantly different.

SOLUTIONS

- Because a steel tank cannot be buried, the excess excavated material must be disposed of off-site (approx. $200,000.00). This will create a significant cost to the project due to trucking costs and disposal fees.
- Additionally, in order to prevent grading issues from affecting the existing reservoir and adjacent private property, retaining walls will have to be installed. This will result in significant costs to the project (approx. $250,000.00).
- Lastly, due to anticipated groundwater concerns, the steel tank option would require a more extensive drainage system be installed around the perimeter of the tank. This would be required due to the steel tank being in a “hole”. This would result in an additional cost to the project of approximately $75,000.00.

Through our alternatives analysis effort during preconstruction, we will refine our evaluation of the steel tank option and show that a concrete tank is the more cost-effective solution.

CHALLENGE PUBLIC OUTREACH

We understand there are adjacent neighbors that may not be totally on board with the project.

SOLUTIONS

Our experience indicates that involving the local/adjacent property occupants early in the process can be key to building good relationships. In addition, we have extensive experience working near existing neighborhoods. Nearly all of our projects include public outreach efforts.

Therefore we will approach this project the same way we do with all of our projects, with a commitment to being a good neighbor. We understand the concerns the public have with heavy equipment and large trucks operating in close proximity. Ultimately people just want someone to listen to their concerns and address them appropriately.

> *We look forward to participating in public outreach meetings, as they are can be very productive venues to communicate critical project information and to address community concerns face to face.*

CHALLENGE PERMITTING

While significant permitting efforts are not expected, and public notice will likely not be required, project execution can be significantly affected by delayed permit reviews/approvals.

SOLUTIONS

As we understand it, replacement of the existing reservoir will be considered a non-conforming use. As the existing reservoir was allowed by previous zoning regulations, the project will likely not have to go through an extensive land use process or public notice and comment period.

By meeting early with all permit agencies however, regulatory and technical issues are addressed, applications can be submitted earlier, completeness reviews are faster, permit review requires fewer clarifications, and the risk of appeal is reduced.

APPROACH TO ADDRESSING KEY CHALLENGES - Continued

CHALLENGE PROJECT SCHEDULE

The Owner would like to complete the design and construction by October 30, 2024.

SOLUTION

As mentioned previously, our team does not believe completion by October 2024 is achievable, however we will work diligently with the Owner to complete the project as soon as possible.

Our team has prepared a schedule indicating the critical project milestones and major work activities (See the Schedule on the last page of this Section) This schedule draws upon our vast experience constructing reservoirs and piping systems. As our schedule does not include time for any unforeseen circumstances or contingencies, it represents what we feel to be a best case scenario. In order to meet the completion timeline indicated, you will see that we are suggesting some early work activities.

Early work activities will allow final design and construction activities to happen concurrently, thus reducing the overall project timeline. Given this realization, we will work with the City to figure out a work sequencing and phasing to accomplish the project in the least time possible.

APPROACH TO SUBCONTRACTED & SELF-PERFORMED WORK

To the maximum extent practicable, and as approved by the City, Emery & Sons would like to self-perform much of the earthwork and pipeline work for the project. Combining our expertise as a self-performing CM/GC contractor for reservoir and pipeline projects, Emery & Sons will be the best fit for this project and for self-performing the following work:

- *RESERVOIR TANK FOUNDATION PREPARATION*
- *ROADWAY RECONSTRUCTION*
- *EROSION CONTROL*
- *EARTHWORK & GRADING*
- *ROCK EXCAVATION*
- *DEMOLITION*
- *DEWATERING*
- *UTILITY PIPING*
- *MECHANICAL PIPING*
- *STEEL TANK CONSTRUCTION*

Primary reasons that justify self-performing the work:

PROJECT UNDERSTANDING The self-performing general contractor is uniquely positioned to effectively and efficiently transition into the construction phase and build the work without a complete set of construction documents.

PROJECT SCHEDULE In order to meet time sensitive completion dates and project phasing, there is often not enough time to create and solicit bid packages for critical scopes of work.

COST CERTAINTY We can not only provide cost certainty without having to bid out critical work activities, but also cost control by performing “open book” method of cost tracking and accounting.

RISK REDUCTION Subcontracting high risk work will result in higher costs due to subcontractors accounting for them in their bids. By self-performing these, we can significantly control schedule and cost risks, accomplished due to our familiarity with the design and City.

Emery & Sons has extensive experience soliciting competitive bids from subcontractors and suppliers. Our experience includes bid solicitation for hard bid projects and alternative delivery projects.

We understand the process, complexity, risk, and extra work associated with preparing bid packages and procuring subcontractor bids.We understand preparation of bid packages not only requires a detailed knowledge of the project, but a detailed knowledge of how the contract documents and supplemental information are put together. Therefore, we will undertake the research and legwork from the start to coordinate with the Owner and Engineer to determine the exact need and rationale for each specific work package, verifying there are no scope gaps or overlaps.

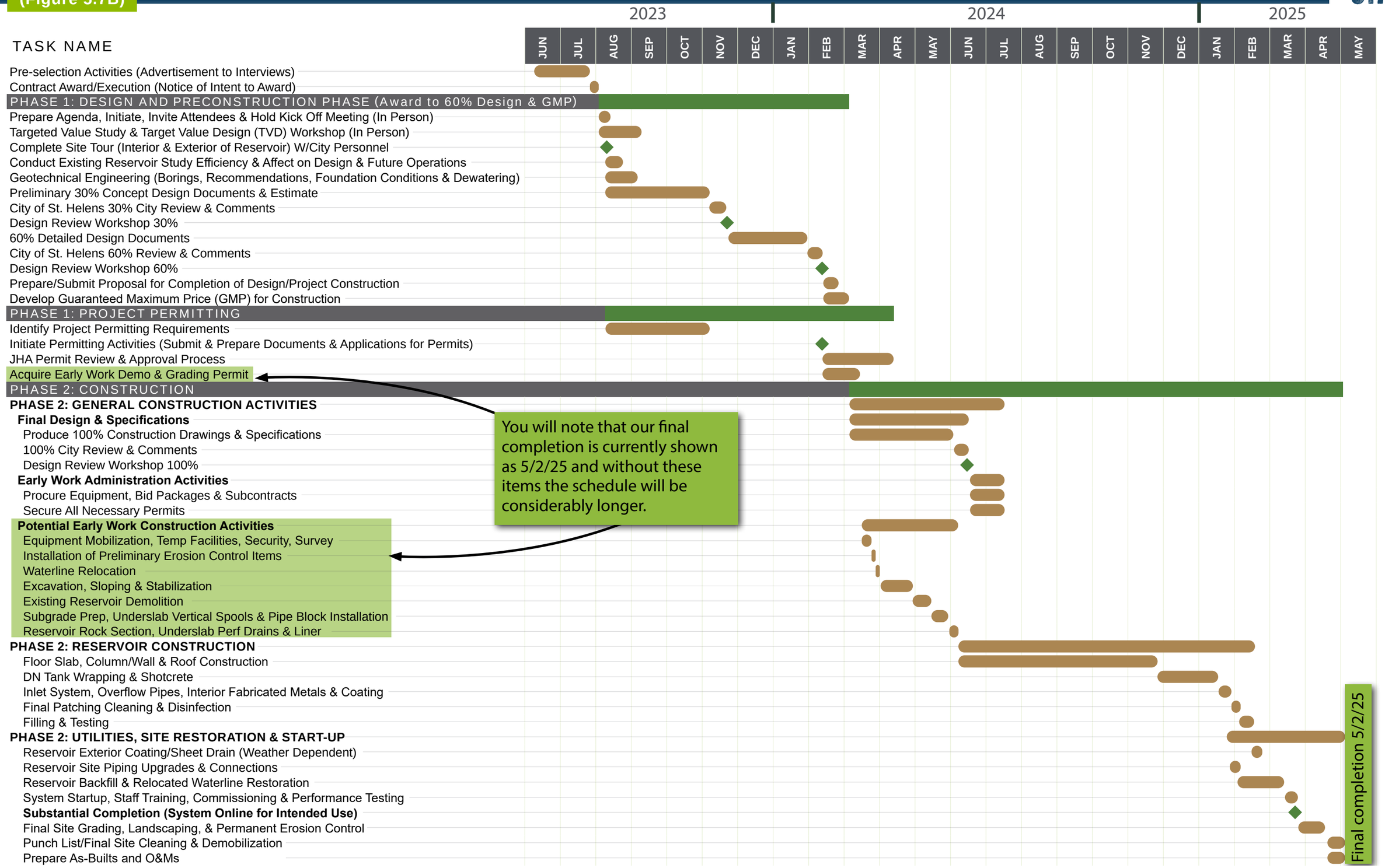
> *This is accomplished by creating clear expectations with subcontractors regarding trade scope, project scheduling requirements/constraints, qualification requirements, and coordination requirements between trades.*

PRELIMINARY RISK REGISTER

PHASE I & II PROJECT RISKS (Design, Permitting & Construction)

	RISKS	ALLOCATION OF RISK	POTENTIAL IMPACT	MITIGATION OPPS.
1	**Scope of Work Expands During Phase I Effort**	Increased Phase I Costs, Potential Schedule Impacts	*Clearly Define Scope of Work up Front. Early Identification of Potential out of Scope Work & Timely Resolution.*	**Owner**
2	**Long Lead-time Material Procurement**	Schedule Impacts	*Identify & Procure Long Lead-time Materials Early*	**Owner/PDB**
3	**Unknown Existing Infra-structure, or Deteriorated Utilities Slated to Remain; Particularly Underground**	Some Increased Construction Costs & Potential for Schedule Impacts	*Potholing of On-site Utilities. Include Contingency in Project Budget for Unanticipated Items, or Utilities that Need to be Replaced.*	**Owner**
4	**Permitting Delays**	Schedule Impact	*Develop Permitting Plan.* • *Regular Communication w/ Permitting Entities.* • *Submit Land Use Application Early to Allow Time for Protest/Appeals.* • *Submit Plans to OHA after 60% Design.*	**Owner/PDB**
5	**Late Spring and/or early Fall Wet Weather**	Shortened Dry Weather Earthwork Period	*Begin Critical Dry Weather Work as Soon in Season as Feasible.*	**Owner/PDB**
6	**Hazardous Materials Found**	Schedule Disruption Pending Resolution	*Testing for Asbestos, Lead, & PCBs.*	**Owner**
7	**Excavation Slope Stability Impacts Existing Reservoir or Neighboring Properties**	Cost & Schedule Impacts	*Identify Design Alternatives Based on the Geotechnical Report & Communi-cation with the Owner.*	**PDB**
8	**Unsuitable Foundation Conditions**	Increased Foundation Construction Cost	*Conduct Thorough Geotechnical Borings to Characterize Foundation Conditions. Include Contingency in the Event Conditions are not Consistent with Geotech Report.*	**PDB**
9	**Targeted Substantial & Final ProjectCompletion**	Schedule Impact	*Evaluate Early Work Activities to Include Erosion Control, Excavation/ Sloping Existing Reservoir Demolition, Reservoir Under-slab Pipe & Founda-tion Preparation.*	**PDB**
10	**Substantial Gvroundwater**	Some Increased Construction Costs & Potential for Schedule Impacts	*Identify Ground Water in Borings, Design/Plan for Temporary Dewatering During Construction. Include Contin-gency in the Event Conditions are not Consistent with Geotech Report.*	**PDB**

(Figure 5.7B)


2023
2024
2025
JUN
JUL
AUG
SEP
OCT
NOV
DEC
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
OCT
NOV
DEC
JAN
FEB
MAR
APR
MAY
TASK NAME
Pre-selection Activities (Advertisement to Interviews)
Contract Award/Execution (Notice of Intent to Award)
PHASE 1: DESIGN AND PRECONSTRUCTION PHASE (Award to 60% Design & GMP)
Prepare Agenda, Initiate, Invite Attendees & Hold Kick Off Meeting (In Person)
Targeted Value Study & Target Value Design (TVD) Workshop (In Person)
Complete Site Tour (Interior & Exterior of Reservoir) W/City Personnel
Conduct Existing Reservoir Study Efficiency & Affect on Design & Future Operations
Geotechnical Engineering (Borings, Recommendations, Foundation Conditions & Dewatering)
Preliminary 30% Concept Design Documents & Estimate
City of St. Helens 30% City Review & Comments
Design Review Workshop 30%
60% Detailed Design Documents
City of St. Helens 60% Review & Comments
Design Review Workshop 60%
Prepare/Submit Proposal for Completion of Design/Project Construction
Develop Guaranteed Maximum Price (GMP) for Construction
PHASE 1: PROJECT PERMITTING
Identify Project Permitting Requirements
Initiate Permitting Activities (Submit & Prepare Documents & Applications for Permits)
JHA Permit Review & Approval Process
Acquire Early Work Demo & Grading Permit
PHASE 2: CONSTRUCTION
PHASE 2: GENERAL CONSTRUCTION ACTIVITIES
Final Design & Specifications
Produce 100% Construction Drawings & Specifications
100% City Review & Comments
Design Review Workshop 100%
Early Work Administration Activities
Procure Equipment, Bid Packages & Subcontracts
Secure All Necessary Permits
Potential Early Work Construction Activities
Equipment Mobilization, Temp Facilities, Security, Survey
Installation of Preliminary Erosion Control Items
Waterline Relocation
Excavation, Sloping & Stabilization
Existing Reservoir Demolition
Subgrade Prep, Underslab Vertical Spools & Pipe Block Installation
Reservoir Rock Section, Underslab Perf Drains & Liner
PHASE 2: RESERVOIR CONSTRUCTION
Floor Slab, Column/Wall & Roof Construction
DN Tank Wrapping & Shotcrete
Inlet System, Overflow Pipes, Interior Fabricated Metals & Coating
Final Patching Cleaning & Disinfection
Filling & Testing
PHASE 2: UTILITIES, SITE RESTORATION & START-UP
Reservoir Exterior Coating/Sheet Drain (Weather Dependent)
Reservoir Site Piping Upgrades & Connections
Reservoir Backfill & Relocated Waterline Restoration
System Startup, Staff Training, Commissioning & Performance Testing
Substantial Completion (System Online for Intended Use)
Final Site Grading, Landscaping, & Permanent Erosion Control
Punch List/Final Site Cleaning & Demobilization
Prepare As-Builts and O&Ms
You will note that our final completion is currently shown as 5/2/25 and without these items the schedule will be considerably longer.
Final completion 5/2/25

5.8

PROJECT MANAGEMENT APPROACH

5.8 PROJECT MANAGEMENT

PROJECT MANAGER'S EXPERIENCE ON PAST PROJECTS

PDB PROJECT MANAGER - Arin Atiyeh

EMERY&SONS CONSTRUCTION GROUP, LLC

Arin Atiyeh has been in the civil construction industry for over 29 years, with 21 years of his career spent at Emery & Sons. Arin is our water reservoir design and construction subject matter expert. Arin recently led and successfully completed the TVWD Grabhorn Reservoir project, which was the first PDB reservoir project ever completed in Oregon.

The Grabhorn project has similarities to the St Helen's 2.0 MG Reservoir Project—it included a 5 MG D110 concrete reservoir, site piping, off-site piping, mechanical piping, building construction, earthwork, paving, concrete hardscapes, landscaping, site security, and even ASR system improvements. Arin has also managed many other reservoir, pipeline, mechanical, and earthwork projects, which have included design bid build, best value, CM/GC, and progressive design build delivery methods.

SCHEDULE MANAGEMENT

Our team takes pride in outperforming the schedule without compromising quality. Arin believes developing a detailed schedule is a team effort, so he will solicit input from the entire team to verify all critical tasks are included and properly sequenced. At major project deliverables, he reviews project progress in detail and discusses any existing or future concerns/issues the team may have.

If the project schedule does get behind, he is experienced in finding creative ways of re-sequencing work or accelerating the schedule in order to maintain progress and productivity.

PROJECT SCOPE

Success starts with confirming all parties are on the same page. Arin believes identifying a concise project scope will lead to the fewest changes, which relies on understanding the City's goals and expectations from the PDB team from design through construction. To achieve scope certainty, Arin will hold focused scoping/planning meetings quickly after notice to proceed. The purpose of these meetings will be to discuss the critical project, scope, schedule, budget, permitting, and communication protocol. The outcome will include identifying the major objectives that will inform the final scope and define the framework for project success.

Our team will then work with the City to tailor a structured management approach for the project.

PROJECT BUDGET

Arin will gather input from the City, design team, subcontractors, and suppliers throughout the process. Arin thinks outside of the box and understands that some of the most valuable ideas are developed as a design progresses.

He is a firm believer in the open book process because a successful PDB project is built around trust and transparency.

Understanding that Phase I will culminate in providing the City with a 60% GMP, Arin will begin preparing the skeleton estimate from day one. Arin will work with all parties during pre-construction to refine the estimate as the project progresses from schematic design, 30% design, and then 60% design.

The entire time we will be gathering information from our subcontractor and supplier resources to keep a pulse on material lead times and pricing.

In order to maximize the project scope and control costs during the design process, Arin will use our HCSS software, HeavyBid. Our budget software enables an estimate to be accurately built and maintained, allowing for design alternatives and changes to be analyzed quickly and efficiently.

During construction, Arin and our field staff will be using HeavyJob. This software allows for project accounting by tracking daily crew time, equipment usage, material usage, trucking, daily productions, and subcontractor work.

PROJECT MANAGEMENT - Continued

CHANGE MANAGEMENT

Changes will inevitably occur with every project, but the key is to proactively communicate with the City and PDB team to develop solutions and keep the schedule on track. We will discuss variations from the agreed-to scope and decisions during our regularly scheduled progress meetings, which will be captured with a design contingency log. This method allows for open discussion, facilitating assessment of each item as a collaborative and coming to a resolution as a team.

Arin recommends that our budget includes a very small design contingency to account for changes in design scope. Any funds remaining at the conclusion of design would be transferred to the construction budget.

Changes on alternative delivery projects during construction typically arise from true changes in scope from what was identified in the GMP or scope gaps between trades. To account for these changes, Arin recommends that our team create a contractor contingency budget and an owner contingency budget. Contractor contingency is typically used for unknown changes, while owner contingency is associated with known issues/risks. Managing changes in this fashion allows the City to experience savings when contingency is not used. To date, our team has maintained a track record of using less than 3% construction contingency on our alternative delivery projects.

EXPECTATIONS OF THE OWNER

Aside from the Owner roles and responsibilities outlined in the RFP, including providing timely comments on the design deliverables, our team expects that the City will be also be involved in the permitting process and construction observation.

In addition, the Owner will have to hold the contract with the third party testing and inspection firm for the items of work requiring special inspections.

Emery & Sons firmly believes that the success of this project will be the direct result of all team members and stakeholders coming together as an integrated team, therefore we also expect that the City will be an active and outspoken member of the team, with full buy-in of the PDB process. Further, we expect the City to clearly convey their needs and expectations so our team can provide exactly what you are looking for.

COMMUNICATIONS & INFORMATION SYSTEMS

COMMUNICATION PHILOSOPHY

The foundation of successful project management is facilitating frequent, clear, and open communication. This starts with our team listening to you and determining your vision for the project. To establish clear lines of communication, the Project Management Plan (PMP) will include communication protocol for the consultant team, as well as with the City's team and internal and external stakeholders.

We will work as an extension of your staff, seeking input and direction, and listening to your concerns and needs.

COMMUNICATIONS & INFORMATION SYSTEMS – Continued

COMMUNICATION PROTOCOL

We communicate early—as soon as we know something, you will too, especially if it impacts schedule or budget. We will update you regularly regarding project status and respond in a timely manner to your questions and concerns. Written communications will be clear, concise, and easy to understand. We will also regularly discuss with the consultant team to see that all disciplines are coordinated and on track. As you will come to realize, we quickly respond to all phone calls, emails, hard correspondence, and requests for meetings (in the office or in the field) – previously scheduled or impromptu, if needed.

As project manager, Arin will be your primary point of contact, fostering a collaborative approach across our team, which will result in efficient decision making, continuous alignment of scope roles, and work products.

MEETINGS & WORKSHOPS

Our team will work diligently to minimize the time required for City staff. We will seek staff input and conduct field activities in well-organized meetings and workshops. We will foster City involvement to see that the project continually meets your expectations. This will be accomplished by weekly scheduled team meetings via video conference, phone, or in-person meetings as needed, and by email. With each deliverable, we will offer a review workshop to discuss comments and specific design elements.

All comments will be recorded in a comment-response log that will be shared with the City to communicate how comments were addressed.

INFORMATION SYSTEMS

Our team is equally adept at managing project information and data sharing using online web-based information sharing platforms to provide a secure place to store, organize, share, and access information remotely, including SharePoint, ProjectWise, Virtual Project Manager (VPM), and e-Builder.

Our team has used all of the above on recent projects and can easily accommodate the City's preferred system, or recommend one to fit your needs.

FACILITATING STAKEHOLDER INPUT

Since the project site has adjacent neighbors, construction activities will have an impact on the residents. The neighborhood may have concerns related to temporary construction noise, vibration, dust, and traffic, as well as permanent visual impacts and aesthetics.

Public outreach and incorporation of public comments will be critical to gain support and keep the neighbors aware of timing and impacts. Our team will provide all technical information, including schedule and type of impacts required to inform residents, and will assist the City with any public meetings and public information materials needed. We have extensive prior experience assisting our clients with public outreach with great success. We provide clear imagery for public information and present project details in concise, easy-to- understand language that answers residents' questions and addresses their concerns. Input from the public and internal stakeholders will be documented as key issues in the project action log to keep critical items on the project team's radar for resolution.

FACILITATING STAKEHOLDER INPUT – Continued

We anticipate providing the following assistance to the City, as needed.

DURING DESIGN & PERMITTING PROCESS

- Facilitating or assisting with open house/ neighborhood meetings.
- Creating high-quality, easy-to-understand renderings, mapping, & exhibits.
- Conducting effective presentations at public meetings & managing concerns of neighborhood residents.

DURING CONSTRUCTION

- Minimizing duration of impacts – Get In, Get Done, & Get Out.
- Informing people when things will happen and sticking to the plan.
- Communicating a well-conceived sequence of construction to help set expectations and establish a positive rapport.

PROCESS FOR DOCUMENTING DECISIONS

Our Proven Project Management Tools

RISK REGISTER

We use a risk register to identify, track, and mitigate risks throughout the life of the project to help identify areas where key decisions will be critical.

PROJECT ACTION LOG

The project action log tool compiles and tracks key issues, action items, the decision log, and the change log so that both the City and Design-Build team have a record of critical items.

Our team will prioritize communication with the City, especially relating to budget, schedule, and decisions. Risks will be quantified and weighted using our tried-and-true risk register, so you can make informed decisions.

- ☑ Key issues requiring decisions will be highlighted in weekly status meetings and design review meetings, followed by documentation in the project action log.
- ☑ Periodic review of unresolved items helps keep critical items on the project team's radar. At key milestones, such as design reviews, all issues and resolved decisions are reviewed to verify prior assumptions are still appropriate and key assumptions are applied moving forward.
- ☑ Our team will assign action items and key issues to individuals, creating clear responsibilities. This is essential for projects where meeting schedule is critical, such as the City's reservoir project.
- ☑ The project action log also provides a running, searchable list of decisions and scope changes made during the life of the project, complete with who was the final say, and why the decision was made.

Our Design Manager, Peter Olsen, will visit this log as a standing item in check-in meetings to confirm decisions, so nothing is misunderstood or lost in translation.

WORK QUALITY & COST CONTROL

WORK QUALITY

Our team is committed to Quality Control and Quality Assurance, and achieves both through detailed preparation, experienced scheduling, and resource management. Quality control, whether during pre-construction or construction, begins with structured supervision.

Our Project Manager Arin Atiyeh will manage all aspects of the project workflow in a clear and consistent manner. Quality control during the design process will be achieved by conducting regularly scheduled design meetings, and documenting all decisions made by the project team. Engineering/design document deliverables will be thoroughly reviewed for completeness and accuracy, with revisions/comments being incorporated prior to advancing the design.

- We will keep a Record of Comment (ROC) log that will capture all team comments. This will ensure that the design does not move forward without approval from all team members.
- Our plan will include setting up the plans and specifications in such a way that includes only the requirements absolutely necessary for quality installation. This will help avoid muddying the water with requirements that do not support effective and efficient construction of the work.
- We will also put together testing and inspection checklists to ensure compliance with the project requirements.
- Regarding field quality control, our plan will be administered by providing clear project-specific requirements for each component of the work as described above.
- Along with the testing and inspection checklists, we will create a submittal checklist only for the most critical components of the project. And of course any deviations from the project specifications will be submitted for review and approval.

In general, our structured quality control plan follows the process outlined below:

PRE-CONSTRUCTION PHASE QC PLAN

Based on the final project specifications, Emery & Sons will work with our Design group during pre-construction to develop a Project Specific Quality Control Plan and material testing schedule for all components of the project. The Quality Control Plan will outline the standards, expectations, and testing requirements. Developing this plan during pre-construction will aid in identifying and mitigating any potential issues that may arise, and will help provide the most accurate construction schedule and project budget.

CONSTRUCTION PHASE TESTING & INSPECTIONS

During the construction phase, performance standards will be monitored and maintained by our supervision staff and through random inspections by the Owner and the Design-Builder team. Emery & Sons will coordinate with the Owner's independent third party testing firm to perform all required tests and inspections. Through the "testing distribution list," the Owner and Design-Builder will simultaneously receive current inspection reports throughout the project. Any non-conforming work will be fixed and re-tested until project standards are met.

THE PUNCHLIST

We also suggest establishing a running "punchlist" approach to controlling project quality. This quality control punchlist would be managed by the project manager, superintendent, the Owner's inspector, as well as the Design-Builder. This list would be shared at each progress meeting where we will discuss and resolve items as they come up. We have found that implementing this approach goes a long way to help with the overall cohesion and collaboration between team members.

WORK QUALITY- Continued

SELECT THE PROJECT QA/QC TEAM

Selecting the right team members for reviews provides the experience needed to complete a thorough, detailed review, providing you with quality deliverables.

CONDUCT AN INTERNAL KICK-OFF MEETING & DOCUMENT REVIEWS

Conduct the meeting with the design and QC team and develop the project management plan (PMP) in which the QA/QC plan is included and QC forms are saved in the project folder. This meeting gets the team started off on the right foot and makes everyone aware of the expectations regarding quality and schedule.

CHECK-IN REGULARLY WITH THE PROJECT TEAM

The plan includes regular check-ins with QC reviewers and technical advisors during the design process to receive input at the appropriate times. This makes the design process more efficient, as it allows the team to foresee issues and address them sooner to reduce rework and recognize opportunities and leverage these in the early design phases.

CONDUCT THE QC REVIEWS AND COMPLETE REVISIONS

Our team schedules the appropriate amount of time for reviews and time to complete revisions prior to submitting to the client. The project manager checks to make sure the client's comments are addressed from the previous submittal prior to finalizing the subsequent design submittal.

CLOSE-OUT PROJECT

Project close-out involves documenting lessons learned and providing this information to our technical services team to be leveraged on future similar projects.

COST CONTROL

Over both Emery & Sons' and Keller's long histories, our teams have developed strong reputations for delivering high-quality designs and projects on time and within budget.

Cost control is a central element of our delivery approach, where tracking costs and earned value is a critical element of project success. We do what it takes to get the job done, and strictly honor commitments on cost.

Our team has a fully-automated project accounting system that reports budget status of all projects weekly. This information allows project managers to confirm work progress relative to budgets, and to make any adjustments in work programming that may be required to keep project work on track. The project is monitored weekly, and invoices are prepared monthly. Actual expenses are compared to the budget, and actual progress is compared to the schedule. We submit a status report on these comparisons to the client as part of the monthly invoice.

These comparisons indicate if the team needs to adjust its work to perform on time and within budget. Any budget or schedule adjustments required by changes in scope are discussed and authorized by the client prior to proceeding with the work.

South Redmond Water Facilities Project (CM/GC)

Emery & Sons was selected as the CM/GC lead and has expertly guided Redmond through their alternative delivery project, working at all phases to understand the methods available, including efficient early work packages, open-book pricing for self-performed work, and when to solicit bids for subcontractor work.

Our team provided valuable insight into cost-saving measures, including innovative piping solutions, avoiding tens of thousands of dollars of rock excavation and disposal, and processing of excavated material on-site for reuse.

ADEQUATE & APPROPRIATE STAFFING

As a matter of practice, we employ the following resources and techniques to manage overall staffing needs to make sure our project schedule commitments are fulfilled.

CAPACITY

We have proposed a local core project team with sufficient capacity and responsiveness to address City needs.

Based out of Salem, Emery & Sons has:

205 Employees
(including a deep bench of technical staff.
10 Construction Managers
15+ superintendents.

Keller Currently Employs:

171 Personnel

Keller has many engineering technical and administrative support staff and additional capacity through firmwide resources in our other regional offices, providing essential bandwidth during high volume work periods. Our team also includes highly experienced technical specialists and subconsultants based in the area. The City can have confidence that our qualified, local team and extended pool of resources will meet key project deadlines. Key staff available to work on your project are highlighted in Section 3, Design-Builder & Project Team Qualifications.

Our team's historical and recent successful performance is evidence of our ability and commitment to meeting schedules. We encourage you to contact our references who can verify our team's ability to meet schedule and budget.

ASSESSMENT OF WORKLOAD

To balance and manage workload and staff resources, we track, monitor, and manage firm resources through our resource firm resources through resource plans for each project contained in our centralized database.

We plan our staffing resources well in advance utilizing our Resource Planning software to reserve and dedicate our key staff to specific projects.

Our project management team meets monthly to review resource allocation and is authorized to make necessary adjustments to meet the City's specific project needs.

ABILITY TO MEET SCHEDULES

Our team maintains schedule flexibility by having enough qualified staff available to respond to project needs.

We will provide dedicated local management, design, and construction staff, as well as additional qualified engineers and designers, to meet delivery schedules.

The up-to-date resource management systems and techniques described above allow us to fully commit to meeting tight project schedules with confidence.

5.9

RESUMES

SEE APPENDIX A

5.10

PROJECT SCHEDULE

PROJECT SCHEDULE

The critical factor in delivering this project on schedule will be to evaluate and choose a reservoir design in a timely manner.

Please reference our project schedule (Figure 5.7B). This schedule represents our understanding of the scope, timing, and phasing of the project. Emery believes in structured scheduling and takes pride in outperforming the schedule without compromising quality. To accomplish this, our company management staff meets weekly to discuss all projects and addresses specific individual project needs, ensuring that the project managers have what they need to be successful. By adhering to our scheduling practices, along with project review meetings, the proper work activities can be accurately planned for and scheduled well in advance. This allows us to bring the vision of constructability, identify value engineering opportunities, and solutions to conflicts that may cause undue disruption to the flow and timing of the project.

Specific to each project, Emery & Sons prepares/maintains monthly project schedules that include:

- ***All Major Activities Milestones***
- ***Permitting***
- ***Long Lead-Time Material Procurements***
- ***Supporting Activities***

- Our master schedule will break down major activities into smaller, more manageable work items.
- We will review the project schedule with the Owner and Engineer at our weekly meetings, discussing concerns regarding any existing or future issues.
- Our project managers are skilled in anticipating upcoming work and potential obstacles. Being proactive in this manner helps our team stay focused, efficient and able to resolve problems as they come up.
- We will provide 3-week look-ahead schedules which track the work more precisely to help avoid schedule slips.
- Should our schedule experience a slip, further delays will be mitigated by a recovery plan that will outline all activities and resources needed to get the project back on track.

On our recently completed WWSP PLM_5.2 Project, we proved our commitment to schedule recovery by allocating additional equipment and personnel resources once it was determined that the project schedule may be in jeopardy. As a result, this project was finished ahead of schedule.

WWSP PLM_5.2 Project – *Beaverton, OR*

5.11

FEE & RATE PROPOSAL

PROGRESSIVE DESIGN-BUILD SERVICES FOR REPLACEMENT OF 2.0 MG RESERVOIR
FEE AND RATE PROPOSAL SUMMARY FORM

PHASE 1 SERVICES FEE SUMMARY			
Phase 1 Services	Total Hours (including subconsultants)	Direct Expenses	Total Costs
Project Initiation	39	$100.00	$7,040.00
Project Management and Administration	293	$800.00	$50,790.00
Basis of Design Technical Memorandum	153	$100.00	$24,020.00
Geotechnical Investigations, Data, and Report	275	$0.00	$82,908.00
Engineering Design Development	1111	$0.00	$175,230.00
Permitting	113	$3,800.00	$21,470.00
Cost Estimate Submittal and GMP Proposal	16	$200.00	$17,000.00
Total Phase 1 Services	2000	$5,000.00	$378,458.00
PHASE 1 OPTIONS TASKS			
OPT1			
OPT2			
OPT3			
(Please use additional sheet if needed)			
Total Phase 2 Options Tasks			

GENERAL CONDITIONS PERCENTAGE SUMMARY	
	Estimated Percentage of Direct Costs
Design-Builder General Conditions Percentage	GC's = 8.0%; Plus Insurance = 1.85%; Bonds = 1.0%

DESIGN-BUILDER'S FEE PERCENTAGE SUMMARY	
	Estimated Percentage
Design-Builder Fee Percentage	5.25%

(1) Proposer shall provide supporting rationale for its proposed project coordination and management cost proposal, including a staffing matrix, anticipated hours per project role, and reimbursable costs.
(2) Proposer shall provide supporting information in the approach to clarify the type of permits that would be applied for and obtained for the Project.
(3) Estimated General Conditions shall be based on the Phase 2 Services duration as provided in the RFP. Proposer shall provide supporting rationale for its proposed construction staff percentage information, which includes an organizational chart of its Construction staff and a person-hour estimate of Key personnel who provides services in Phase 2.
(4) Design-Builder Fee percentage should be inclusive of Design-Builder's risk, corporate overhead (i.e., costs not included within Direct Costs, Design- Builder Project Contingency, and Indirect Costs) and profit.
(5) Direct expenses for Phase 1 Services shall be those expenses to the project that do not include labor.
(6) Total cost of each item shall be the sum of labor costs and direct expenses for that item.

By signature hereon, the Proposer's authorized agent ("Agent") certifies that all necessary corporate acts have been taken to authorize the Agent to sign this document and that all information provided in Fee and Rate Proposal Summary Form are an accurate representation of the information the Proposer's is providing.

Design-Builder's Name	Emery & Sons Construction Group, LLC
Signed by (Authorized Representative)	Dan Vannoy
Printed Name	Dan Vannoy
Title	Member/Manager
Date	July 11, 2023

END OF FORM

APPENDIX

APPENDIX A - Resumes

APPENDIX B - UIG Letter of Reference

APPENDIX C - Steel vs Concrete
(Life Cycle Analysis)

APPENDIX D - Expanded Schedule

ARIN ATIYEH PDB Project Manager

29 Years Experience

A.A.S., Transfer Degree
Chemeketa Community College
Salem,OR

(503) 588-7576 | Arin.Atiyeh@emeryandsons.com

PROJECT EXPERIENCE

City of Beaverton – Cooper Mountain Reservoir No. 2 – *Project Manager* for constructing a new 5.5 MG prestressed concrete reservoir, pump station, aquifer storage and recovery well facility, 1,300 LF of off-site 24" dia. water main, associated site piping, and site improvements. Work includes the construction of a 4,800 SF steel storage building, a 30' deep 1,050 SF reinforced concrete mechanical vault, a 350+ SF CMU control building on top at the ground level, a 1,450 SF CMU booster pump station building and a 3,750+ SF CMU ASR building with its own on-site sewer septic system. The project also includes mass grading, rock excavation, 30'+ deep piping, storm drain improvements, chemical injections and sampling systems, retaining walls, detention ponds, permanent fencing, and landscaping. Every aspect of the project is designed to be seismically resilient.

City of Beaverton – WWSP – Intertie Pipeline – *Project Manager* for the construction of a new waterline of approximately 2,800 LF of 24" ductile iron water transmission pipeline (100 LF trenchless within a 42"dia. casing), 32 LF of 24" steel water transmission pipeline, (3) flow control valve vaults and (2) flow meter vaults and appurtenances. The pipe will be wrapped with V-Bio poly wrap and include a full cathodic protection system. Installation of this water system requires the completion of the 24" ductile iron line, re-routing the existing 36" through the 24" then cutting into 36" line.

City of Beaverton – TVWD – Grabhorn 5.0 MG Reservoir Replacement – *Project Manager* for the design and construction of TVWD's new 5.0 MG Grabhorn Reservoir located in Beaverton, Or. The scope of Emery's work included preliminary site investigation, geotechnical exploration, project design, permitting, demolition/hazardous material abatement of the failing existing 5.0 MG reservoir, construction, testing and commissioning of a new 5.0 MG AWWA D-110 reservoir, valve house, site piping, off-site transmission piping, storm drain systems, grading, road construction and complete project restoration. The control building for the ASR system was 30 feet away and sits over 50' higher in elevation than the designed reservoir excavation.

City of Beaverton – TVWD – Thompson Pump Station 24-Inch Transmission Suction Line – *Project Manager* for the installation of approximately 5,605 LF of 24" dia. cement mortar lined, and polyurethane coated welded steel pipe. As part of the project there will be a jack and bore of a 36" steel casing approximately 160 LF. Work also includes the installation of isolation valves, combined air release/vacuum relief valves; blow off valves, testing, disinfection, corrosion protection, traffic control, erosion control, restoration work and installation of appurtenances as required.

City of Salem – Mill Creek Reservoir – *Project Manager.* Construction of a 140' dia. 2.3 million gallon partially buried prestressed concrete reservoir and an associated 1,900 SF control building, complete with SCADA system for radio telemetry. The control building housed valves, and flow meters required for the operation of the reservoir as well as a 1,200 gpm duplex booster pump station, miscellaneous instruments, a tablet chlorinator and a recirculation pump for monitoring and boosting chlorine residuals. A seismically activated valve isolation system was also required. General site improvements included the installation of 960' of 18" ductile iron pipe, the paving of 1,500 LF of an existing gravel access roadway, and the installation of 2,700 LF of chain link fence as well as earthwork to prepare the site for a second future reservoir of the same size. Medical waste and large boulders were encountered during the excavation.

P.U.D. No. 2 of Grant County – Priest Rapids Water System Improvements – *Project Manager.* The new systems construction includes a 170'+ tall, 250,000 gallon elevated water reservoir, well building, pumps, 22,000+ LF of 2" to 16" welded HDPE supply lines and valves, internal powerhouse piping, ARV's, fire hydrants, services and pressure reducing stations. Other components of the system include electrical, control equipment, current system modifications, multiple trenchless crossings, concrete coring of the existing powerhouse, chemical injection equipment, paving, seeding, dewatering, well modifications, coatings and erosion control.

MATT ATIYEH PDB Superintendent

30 Years Experience

Competent Person Training
Crane/Rigging Training & Trainer
First Aid/CPR
Confined Space
Cathotic Welding
CESCL Certification

(503) 588-7576 | Matt.Atiyeh@emeryandsons.com

PROJECT EXPERIENCE

City of Beaverton – Cooper Mountain Reservoir No. 2 – *Project Manager* for constructing a new 5.5 MG prestressed concrete reservoir, pump station, aquifer storage and recovery well facility, 1,300 LF of off-site 24" dia. water main, associated site piping, and site improvements. Work includes the construction of a 4,800 SF steel storage building, a 30' deep 1,050 SF reinforced concrete mechanical vault, a 350+ SF CMU control building on top at the ground level, a 1,450 SF CMU booster pump station building and a 3,750+ SF CMU ASR building with its own on-site sewer septic system. The project also includes mass grading, rock excavation, 30'+ deep piping, storm drain improvements, chemical injections and sampling systems, retaining walls, detention ponds, permanent fencing, and landscaping. Every aspect of the project is designed to be seismically resilient.

Tualatin Valley Water District - Grabhorn Reservoir Replacement – *Project Manager.* In May of 2017 Emery & Sons Construction Group (Emery) was selected by the Tualatin Valley Water District (TVWD) for the design and construction of the new 5 MG Grabhorn Reservoir located in Beaverton, Oregon. The scope of Emery's work includes preliminary site investigation, geotechnical exploration, project design, permitting, demolition/hazardous material abatement of the failing existing 5 MG reservoir, construction, testing and commissioning of a new 5 MG AWWA D-110 reservoir, valve house, site piping, off-site transmission piping, storm drain systems, grading, road construction and complete project restoration. The control building for the ASR system is not only 30 feet away, it sits over 50 feet higher in elevation than the designed reservoir excavation.

City of Bend – Surface Water Project - Bid Packages 101 & 102 – *Superintendent.* Bid Package 101 included the construction of approximately 13,200 lf of 36" HDPE pipe of various DR, 1700 lf of 30" restrained joint Ductile Iron Pipe, an aerial stream crossing, including epoxy coated and heat traced welded steel pipe and an open-cut stream crossing of Tumalo Creek, stream diversion, miscellaneous select demolition, installation of pipeline appurtenances, hydrostatic testing and flushing. Bid Package 202 included the construction of approximately 37,000 LF of 30-inch welded steel cement mortar lined and coated pipeline, ARV vaults, and hydrants.

Water Supply Improvement Project Transmission Pipeline, City of Sherwood, Oregon – *Superintendent* of the construction of a finished water transmission main and related work that consisted of 18,000 LF of 48" diameter welded steel water transmission piping; 625 linear feet of 8" waterline and 554 linear feet of storm drain piping, combination air/vacuum valve assemblies; blow off assemblies; isolation valves; crossing of a seasonal creek through a wetland; two jack and bore crossings of Rock Creek; connection to existing finished water pipelines; installation of a control valve in an existing valve vault including electrical, instrumentation and control systems; approximately 12,000 linear feet of roadway resurfacing.

4.0 MG Sunset Reservoir No. 2, City of Sherwood, Oregon – *Superintendent* on the construction of a one below grade new 4 MG DYK Wrapped Reservoir, 30,000 CY of excavation, 22,000 CY of embankment, 1100 sf of block wall, 24" & 18" site piping, construction of detention basin, street lights, 1400 lf of 48" steel pipe (offsite), 700 lf of 36´DI or Steel pipe (onsite), panel vault, fencing, electrical, new 1400 sf pump station, with 5 new pumps & Associated Piping. AC drive way, AC foot path, construction of new tennis courts.

3.0 MG 550-Foot Service Zone Reservoir #2, City of Tigard, Oregon – *Superintendent* for the construction of a 3 MG Reservoir, 24,000 CY of site excavation, completely backfill reservoir after completion, build park on buried reservoir, yard piping, 2000 LF of 24" DI water main, 700 LF of 18" DI water main, 1/2 street improvements on Bull Mountain Rd, traffic control, new sidewalks, curb & gutter, grind & inlay, valve vault, site Sanitary & Storm.

BRIAN VINSON, PE PDB Pre-construction Manager

27 Years Experience	B.S. Civil Engineering Oregon State University	Registered Professional Engineer, Lic # 54741

(503) 588-7576 | Brian.Vinson@emeryandsons.com

PROJECT EXPERIENCE

City of Lebanon – CM/GC Westside Sewer Interceptor Phase V Project – *Preconstruction Manager.* Work included Preconstruction Services – Emery & Sons and its Team members worked collaboratively and proactively with the Owner and Owner's Engineer to identify and develop changes required to deliver the WSI project within the Owner's budget goal, prepared documents required for the GMP, and prepared documents required for Construction Phase Services. Construction Services –This Project had several elements, the primary focus being completion of the WSI system which provided relief to an at capacity sanitary system, and provided infrastructure for continued growth. Work included 19,200 LF of 12"–36" sewer main, 1,800 LF of 15"–24" storm pipe, and 2,400 LF of 12" water main.

City of Newport – NW 48th St & Schooner Pump Station – *Project Manager.* Construction of two Sanitary Sewer pump stations. The 48th St. Pump Station included the installation of a 120" dia. 30' deep wet well, (4) 48" sewer MH's to a depth of 22', (1) 60" sanitary MH to 22' deep, 533 LF of 8" gravity sanitary sewer in Highway 101, 2,109 CY of excavation, 1,894 CY of sand backfill, 45 LF of gravity retaining wall to heights of 17'. The new pump station building consisted of a 34' x 24' CMU control building which housed a 45 Kw generator, electrical / I&C room and a surge tank system.

City of Beaverton – Sexton Mountain Pump Station Upgrades – *Project Manager* for work which was split into two phases of construction and included modifications to an existing booster pump station (Phase I) and the construction of a new booster pump station (Phase II). Phase I included 1) Construction of a new power service and switchgear to serve the pump station upgrades. 2) Replacement of two of the four existing vertical turbine 250 HP pumps and discharge piping. 3) Replacement of soft starters with VFD's for the pumps. 4) Construction of a formliner concrete retaining wall. 5) Installation of a new 600 KW standby generator. Phase II included 1) Construction of a new booster pump station. 2) Installation of an in pipe hydroturbine unit to utilize the system energy lost through an existing pressure relief valve.

City of Redmond – Redmond Water Facility Project – Reservoir 7 and Well 8 (CM/GC) – *Project Manager* for the construction of a 4-million gallon D-110 concrete water reservoir, 3,500 SF booster pump station, 1,000' domestic water well, site piping, and off-site improvements.

City of Beaverton – TVWD – Farmington Rd Booster Pump Station & Discharge Main (CM/GC) – *Preconstruction Manager* for the construction phase services for the Farmington Road Booster Pump Station and Discharge Main Water ("Project"), which is a new Booster Pump Station with a pumping capacity of up to 7 million gallons per day (MGD). Included approximately 10,500 LF of 18" dia. DI discharge main, and 1,000 LF 24" DI pipeline. A new 10,500 LF 18" dia. ductile iron pipeline was installed to connect the pump station to the Cooper Mountain Reservoir. In addition, a new 1,000 LF 24" DI pipeline was installed from the SW Farmington Road and SW 209th Avenue intersection to Leland Drive connecting to the Grabhorn Reservoir line. This 24" pipeline replaced the existing 12" along this same alignment.

City of Salem – Cordon Road Pump Station – *Project Manager* for the design and construction of a $6-million sanitary sewer pump station replacement. This project include upgrading the existing station with a completely new station, capable of delivery higher flows through the distribution system. The project included a new wet well, valve vaults, controls building, and associated site improvements. The project had to be constructed while keeping the existing pump station in operation.

JENNY SHIPMAN PDB Construction Manager - *Concrete Tank*

15 Years Experience

B.S. Interior Design
Oregon State University

(503) 588-7576 | Jennifer.Shipman@emeryandsons.com

PROJECT EXPERIENCE

City of Tigard – ASR 3 & 2 Wellhouse Improvements – *Project Manager*. Construction of the ASR 3 well house including installation of a new seismic valve vault and site grading, stormwater, and piping improvements. Improvements to Reservoir 4 included installation of a new reservoir vent, sealing existing reservoir vents, installation of a new PRV valve vault, and site piping improvements. Improvements to ASR 2 included the replacement of the VFD, the existing electrical and telemetry systems, and replacement of water quality instrumentation.

City of Beaverton – Cooper Mountain Reservoir No. 2 – *Assistant Project Manager.* Construction of a new 5.5 MG Prestressed Concrete Reservoir, Pump Station, Aquifer Storage and Recovery Well Facilities, 1,300 LF of off-site 24" dia. water main and associated site piping and site improvements. This project serves to add additional water storage, and needed water pressure for future development at higher elevations. Features include a 4,800 SF steel storage building, a 30' deep 1,050 SF reinforced concrete mechanical vault including a 350+ SF CMU control building on top at the ground level, a 1,450 SF CMU booster pump station building and a 3,750+ SF CMU ASR building with its own on-site sewer septic system. The project included mass grading, rock excavation, 30'+ deep piping, storm drain improvements, chemical injections and sampling systems, retaining walls, detention ponds, permanent fencing, and landscaping. Every aspect of the project is designed to be seismically resilient.

City of Lake Oswego – Rivergrove Water District – Reservoir No. 3 Landslide Remediation and Seismic Upgrades – *Project Manager.* Construction of a foundation expansion, including anchor bolts and chairs, and reservoir improvements to Reservoir No. 3, as well as a water distribution system and reservoir site improvements necessary to prepare the system to allow Reservoir No. 3 to be taken offline for seismic and reservoir upgrades.

City of Beaverton – TVWD Grabhorn 5.0 MG Reservoir Replacement – *Assistant Project Manager.* The scope of Emery's work included preliminary site investigation, geotechnical exploration, project design, permitting, demolition and hazardous material abatement of the failing existing 5.0 MG reservoir. Construction included, testing and commissioning of the new 5.0 MG AWWA D-110 reservoir, valve house, site piping, off-site transmission piping, storm drain systems, grading, road construction and complete project restoration. The site's location offered unique challenges for both design and construction as it was located on a steep wooded parcel surrounded by established neighborhoods, and a sensitive stream / and vegetative corridor. The location of the existing reservoir and the new reservoir were within 30' of an active aquifer storage and recovery system (ASR) which stores and supplies an excess of 300 MG for the TVWD. The control building for the ASR system was not only 30' away, it sat over 50' higher in elevation than the designed reservoir excavation. Emery's careful planning, successfully avoided accidental interruption of ASR.

City of Redmond – Redmond Reservoir 6 & Well 7 Improvements – *Project Manager.* The Work included a new 3.5 million gallon (MG) circular prestressed concrete reservoir and associated appurtenances. As well as earthwork and site grading, water system and storm water piping, and associated electrical, instrumentation, controls and telemetry systems integration work. The Work also included improvements to the existing Well 7 Pump Station, consisting of four new 50 HP vertical turbine pumps into existing vacant pump barrels, new pump control and check valves, a new pressure relief valve, new VFD, new motor soft starts, piping, new water-cooled air conditioners, new positive pressure fans, and associated mechanical and associated electrical, instrumentation, controls and telemetry systems integration work.

CASEY DARK PDB Construction Manager - *Steel Tank*

19 Years Experience | B.S. Western Oregon University

(503) 588-7576 | Casey.Dark@emeryandsons.com

PROJECT EXPERIENCE

South Redmond Water Facilities Project – *Construction Manager.* The South Redmond Water Facilities Project is a CM/GC contract for the City of Redmond. The scope of on-site work on this project includes the construction of a new groundwater well, 4 MG D110 pre-stressed concrete storage reservoir, well booster pump station with back-up power generation and enclosure, site work including grading, drainage, paving, yard piping and landscaping, transmission and distribution piping, and site frontage improvements.

City of Newport – NW 48th and Schooner Creek Pump station Projects – *Project Manager.* Construction of two new pump stations including below grade wet well structures to 32 feet deep, Associated Valve Vaults, Force Main vaults, CMU Electrical and control buildings, Inlet sewer installation, 300 LF of Jack and Bore installed Gravity sewer, 5,500 LF of HDPE Sanitary Sewer Forcemain along Highway 101, bio swale construction, site grading and Surfacing. This project posed many challenges among which was the discovery of a design oversite that caused the original design to require the Gravity sewer system to be installed over 20 feet deep in the middle of Highway 101. Emery & Sons was able to identify this early in construction and provide assistance in re-designing the sewer. Through this partnership Emery & Sons was able to value engineer many aspects of the project and provide nearly $350,000.00 in savings to the owner.

Merganser Reservoir No. 1 - The Water Wonderland Irrigation District – Merganser Reservoir No. 1 – *Project Manager* project included clearing and earthwork of approximately ¼ acre, yard piping and interconnection of the existing system, Epoxy bolted reservoir tank construction, ancillary site improvements and construction, testing, and coordination of inspections as required for erection and connection of the nominal 180,000 gallon bolted steel tank to the potable water system. Also included is the Controls and programing for the SCADA system as well as the reorientation of the existing well head.

City of Grants Pass – Webster Lift Station – *Project Manager.* Construction of the Webster Lift Station No. 1, including below-grade wet well and valve vault, inlet gravity sanitary sewer pipeline, and above-grade control panel, backflow preventer, and associated site work. The Work also consisted of decommission and partial demolition of the existing Webster Lift Station No. 1, pavement rehabilitation, parking lot restriping, and electrical conduit extension and service modifications. During installation of the 12” influent sanitary sewer, extensive ground water was encountered. Emery crews implemented a dewatering system to move approximately 1000 GPM within a highly utilized public park. Emery & Sons has received nothing but high regards for their interaction with the public and the care taken to keep the park as usable as possible. Restoration for this project will include 100 LF of mountable curb and 200 LF of sidewalk along with a drivable grass surface stabilized with Grass Pave II.

City of Albany – Collection System Access Improvements – *Project Manager.* Construction of a vault access on an existing manhole located in Bowman Park of Albany, OR. This work included excavation, formwork, rebar installation and placement of concrete. A new hatch was installed on the access vault.

Lane County - Phase V-B Piggyback Liner and Leachate Management Improvements – Short Mountain Landfill – *Project Manager.* Construction of a 1.3-mg bolted steel leachate storage tank with secondary containment.

JAMES BLEDSOE, PE

PDB Principal-in-Charge &
Quality Assurance/Quality Control

25 Years Experience

M.S., Civil Engineering, Brigham Young University

Registered Professional Engineer
OR 73454PE | ID 10803 | CA 85071 | NV 025635 | WA 43984

(503) 364-2002 jbledsoe@kellerassociates.com

PROJECT EXPERIENCE

Tualatin Valley Water District Grabhorn Reservoir / Beaverton, OR – *Hydraulics / Design Project Manager.* 5.0 MG prestressed concrete tank with mixing system. Project included co-ordination with operations and progressive-design-build team; project elements included pump / valve control coordination, reservoir mixing system (including CDF model results), and water quality monitoring at variable tank heights.

Concrete Tank and Tank Rehab Projects / Mountain Home, ID – *Senior Engineer.* This 2 MG prestressed concrete tank located adjacent to Interstate 84 included tank mixing provisions. Also, managed the replacement of a concrete roof for a second 2 MG tank, using an aluminum dome cover. Lastly, managed welded steel tank upgrades, including recoating of interior of tank.

Veolia Water Tanks Whistle Pig Reservoir / Boise, ID – *Principal-in-Charge and led QA/QC* for the Whistle Pig 2.65 MG prestressed concrete reservoir that was fully buried. Currently serving as principal for the Columbia 6.8 MG concrete water tank under design. Also provided concept design support for two other tanks, including one tank that was completed using design-build delivery.

Multiple tank projects / Nampa, ID – *Project Manager* for two prestressed concrete tanks in Nampa; tank mixing provisions provided with each tank. Tanks included a 3 MG, 48-foot-tall concrete tank and a 1.5 MG, 40-foot-tall concrete tank.

Clearwell Baffle Improvements / Stayton, OR – *Project Manager.* Project included interior piping modifications and installation of curtains to improve tank mixing. Tracer studies were used to check project outcomes.

0.5 MG Concrete Tan Expansion / Wood Village, OR – *Project Manager.* Managed expansion of an existing 300,000 gallon 100-year old tank to be a 500,000 gallon tank. Design included innovative walls, roof, and liner.

Two 1.0 MG Welded Steel Reservoirs / Amador Water Agency, OR – *Project Manager* for the construction phase services for two 1 MG welded steel reservoirs.

Tank Seismic Rehabilitation / Wilsonville and Ashland, OR – *Project Manager.* Managed tank seismic rehabilitation evaluation for Wilsonville, OR buried concrete tank; managed tank siting evaluation for new water treatment plant and tank project in Ashland, OR; all sites included steep terrain, challenging geotechnical, and site development constraints.

Langley Gulch Water Supply / Idaho Power Company – *Senior Engineer.* Project included shallow well field, 350 psi pump station, and nine miles of transmission pipeline; received 1st Place ACEC Award for 2013.

PETER OLSEN, PE PDB Design Manager

18 Years Experience	M.S., Civil Engineering Brigham Young University	Registered Professional Engineer OR 83510PE | ID 13824 | WA 46680

(503) 364-2002 polsen@kellerassociates.com

PROJECT EXPERIENCE

Tualatin Valley Water District Grabhorn Reservoir / Beaverton, OR – *Construction Phase Manager* for stormwater design, permitting and coordination, and review of site civil for this 5MG concrete reservoir project. Tracked project schedule, budget, and progress; coordinated design and permitting to ensure smooth project delivery. This project followed a progressive design/build delivery method.

TVWD Farmington Booster Pump Station / Beaverton, OR – *Project Manager.* Completed site and stormwater facilities design for this combined 17-million-gallon-per-day (MGD) fluoridation facility and 7 MGD pump station. This project followed a construction manager/general contractor delivery method.

Water System Improvements / Gates, OR – *Project Manager.* Managed design and construction phase services for water system improvements which included storage tank improvements, waterlines, intake wetwell modifications, and water treatment plant upgrades.

Water System Improvements / Amity, OR – *Project Manager* for this water improvement project which includes a new intake, reservoir improvements, and a new pretreatment facility. Daily inspection and reporting were completed by Keller for the reservoir.

Water System Improvements / Willsonville, OR – *Project Engineer.* Assisted with water master plan and water management and conservation plans, Gesellschaft Well support upgrades, and Elligsen Well discharge evaluation; managed water system improvement modeling and planning support along with pumping facility, control valve, and associated pipeline evaluations, design, and construction phase services; and Charbonneau Tank seismic evaluation.

Water System Improvements / Willamina, OR – *Project Manager* for the water master plan, concept design and support, City Engineer plan reviews, supporting Project Engineer for the new water intake water system improvements project, raw water pipeline, booster pump station and distribution pipeline.

Water System Master Planning and ASR Feasibility Study / Stayton, OR – *Project Manager* for water master planning, water quality sampling and testing plan, water management and conservation plan, and ASR feasibility study and concept evaluation.

Crestview Waterline / Salem, OR – *Project Manager* for the Crestview Waterline project (ongoing), 2,000 feet of 18-inch ductile water line and 500 feet of 8-inch ductile water line.

JASON KING, PE PDB Project Engineer / Mechanical Lead

13 Years Experience	B.S., Civil Engineering University of Idaho	Registered Professional Engineer OR 92481PE | ID 16695 | NV 026871 | WA 57287

(503) 364-2002 jking@kellerassociates.com

PROJECT EXPERIENCE

Tualatin Valley Water District Grabhorn Reservoir / Beaverton, OR – *Project Engineer.* Provided mechanical support for this 5 MG reservoir, valve house, and pipelines project.

Farmington Booster Pump Station / Beaverton, OR – *Mechanical QA/QC.* Provided pump selection support and evaluation for the 7.5 MGD booster pump station. Developed graphs to optimize pump performance and system efficiency.

Whistle Pig Reservoir / Boise, ID – *Design Lead.* Led hydraulics and pipelines for this 2.65 MG prestressed concrete reservoir.

Bel Mar Booster Station / Boise, ID – *Project Engineer* in charge of pump evaluation and sizing, pipeline hydraulics, and pressure-reducing valve sizing and design.

Park Estates Booster Station / Ashland, OR – *Design Manager* for replacing an existing buried potable water pump station with a new five-pump system capable of delivering fire flows to structures bordering the City's forested boundary. Performed an in-depth pump selection to optimize the system that saw demands from 5 to 2,000 gpm. Included standby power, VFD controls, CMU structure, and electrical/control improvements. The design was completed in eight months to allow construction to occur during times of low demand.

Terrace Street Booster Station / Ashland, OR – *Project Manager.* Coordinated design and construction phase service activities for a major pumping facility and associated pipelines.

Badger Mountain Booster Pump Station / Richland, WA – *Design Lead.* Led technical design to upgrade additional pumping capacity, increasing total pumping capacity to 12,200 gpm. This project included evaluating several pump types and configurations due to net positive suction head available concerns. Ultimately a new booster pump station was designed to accommodate total capacity, and the existing booster pump station was converted into onsite sodium hypochlorite generation storage and delivery.

Cabinet Mountains Water District System Improvements / Bonners Ferry, ID – *Technical Design Lead and QA/QC* for three new booster stations with varying demands (100 to over 2,000 gpm). Included three water storage facilities varying from buried and above grade to elevated, ranging from 200,000 to 300,000 gallons of storage.

SHANNON WILLIAMS, PE PDB Site Design

24 Years Experience	B.E., Environmental Engineering Stevens Institute of Technology	Registered Professional Engineer OR 81007PE | ID 20421 | WA WA52194

(503) 364-2002 swilliams@kellerassociates.com

PROJECT EXPERIENCE

Water System, Reservoir, and Filter Improvements / Amity, OR – *Project Engineer.* Water system improvements QA/QC reviews, environmental permitting, and stormwater management design for this raw water intake, treatment plant upgrade, and pipeline replacement project.

Tualatin Valley Water District Farmington Booster Pump Station / Beaverton, OR – *Senior Engineering Support* for a two-mile pipeline; assisted the owner with navigating construction manager/general contractor alternative delivery approach; assisted with hazardous material reviews.

Silver Creek Water Intake / Silverton, OR – *Project Manager.* Design and delivery of a new intake structure and nearly 1,500 feet of large diameter, high-pressure transmission pipeline; led the environmental process, which involved extensive permitting efforts for in-water work.

Raw Water Intake Relocation and Pipelines / Willamina, OR – *Design & Permitting Lead* for this critical infrastructure project that replaces the City's failing raw water intake, nearly two miles of pipeline, adds variable frequency drives to the existing pump station and booster station, and replaces the existing SCADA with a federally compliant system, and improves stormwater systems including an upgraded outfall on the S. Yamhill River; supported the City through grant and loan applications totaling nearly $12M for construction water improvement project.

24-inch Gravity Main / Sheridan, OR – *Project Manager* for 24-inch gravity sewer main and complete streets project in 30% design; helping the City navigate the complexities of environmental permitting for a new sewer line crossing of the South Yamhill River; led the conceptual design, cost estimating, and preliminary permitting strategy for nearly one mile of pipeline. Assisted the City in obtaining nearly $1.7M in grant funds for final design. Project also includes regional stormwater and replacement waterlines.

Falls Park Phase I and II / Mill City, OR – *Project Manager and Site Civil Design Lead* for the design and construction of Mill City Falls Park and pathway improvements, including an 11-foot-tall retaining wall, electrical, and landscaping design. Phase II will add an overlook on the N. Santiam River.

Master Plans / St. Helens, OR – *Senior Engineering Reviewer* of proposed projects and cost estimating support for the stormwater, water, and sanitary sewer master plans.

McClaine Street Improvements / Silverton, OR – *Design Lead* for green stormwater infrastructure and sanitary sewer replacement (approximately two miles of pipeline) for this roadway widening project.

Shaff Road Roundabout / Stayton, OR – *Lead Water Resource Engineer* for the first roundabout in Stayton. Site is very flat with high groundwater and wetlands. Design must comply with US Army Corps of Engineers permitting requirements.

BRANDON KELLER, PE PDB Structural Lead

23 Years Experience	M.S., Civil Engineering, Brigham Young University	Registered Professional Engineer OR 79041 | PE/SE | AZ 48268 | CA 85070, PE | CA 6952, SE HI 16139, PE/SE | ID 12447, PE/SE | MT 18397 | NV 019216,PE/SE UT 4775841, PE/SE | WA 44436, PE/SE | WY 12214

(503) 364-2002 bkeller@kellerassociates.com

PROJECT EXPERIENCE

Tualatin Valley Water District Grabhorn Reservoir / Beaverton, OR – *Structural Lead* for this 5 MG reservoir, valve house, and pipelines project.

Veolia Water Storage Improvements / Boise, ID – *Project Manager* for a 6.8 MG sister water storage reservoir on Columbia Ridge. This project includes site improvements, pressure zone / control modifications, and connectivity to Veolia's existing transmission line. Additional water storage tanks Brandon has led or designed for Veolia include the .6 MG Boulder Reservoir, .3 MG Bogus Basin Reservoir predesign, and the 2.65 MG prestressed concrete Whistle Pig Reservoir highlighted in this proposal.

Water Storage Improvements / Pocatello, ID – *Structural Lead.* Brandon led the design of two 1 MG welded steel fire suppression tanks at the Simplot Don Plant near Pocatello, ID. In addition, he led the design of the 1 MG prestressed concrete South Valley Tank and the .5 MG concrete conventional cast-in-place tank with a booster building on top for the City of Pocatello.

Water Storage Improvements / Ammon, ID – *Structural Lead.* Water storage improvements for Ammon included 1.5 MG and 2 MG prestressed concrete reservoirs and the Well 13 booster station, which included a 1 MG conventional cast-in-place concrete tank with booster building on top of tank.

Water Storage Improvements / Rexburg, ID – *Structural Lead.* Rexburg water storage improvements included a 2.5 MG prestressed concrete reservoir and a .3 MG concrete storage reservoir for Brigham Young University.

Well 6 Tank and Booster Station / Chubbuck, ID – *Structural Engineeer.* This project included a buried 1.5 MG conventional cast-in-place concrete tank, a 4,200-gpm booster station with an attached pavilion located on top of the tank, and a well house to enclose the new 2,200-gpm Well #6. The project also installed site piping, electrical, controls, chlorination, HVAC, and all other appurtenances to the facility.

2 MG Concrete Tank / Mountain Home, ID – *Structural Lead.* Brandon led the structural tasks for this 2 MG sister tank. The new prestressed concrete tank has an aluminum dome roof, separate inlet / outlet piping for improved mixing, and an emergency overflow storage pond.

Water Storage Improvements / Nampa, ID – *Structural Lead* for the recently completed design of a 1.5 MG water tank, booster station and well facility. Previous projects for this growing community include a 3 MG tank and booster station.

Multiple Water Tank Projects / Burley, Dubois, and Emmett, ID – *Structural Lead.* Brandon completed bolted steel tanks for the communities of Burley, Dubois, and Emmett, ID

TRENTON BUSTER, EI PDB Modeling & Hydraulics

4 Years Experience	B.S., Civil Engineering Boise State University	Engineer-in-Training Certificate

(503) 364-2002 tbuster@kellerassociates.com

PROJECT EXPERIENCE

Water Master Plan / St. Helens, OR – *Modeling / Techincal Lead.* Updated the existing hydraulic model to include newly allocated water demands, additional pipelines, a pressure reducing valve, and a new booster station. Completed a seismic resilience assessment identifying critical infrastructure needed to continue supplying potable water to users in a large seismic event. Provided recommendations for additional system storage and included a high-level evaluation of future reservoir locations. Updated St. Helens' water management and conservation plan, which consisted of establishing benchmarks for conservation efforts such as leak detection and unaccounted for water audits, as well as an updated water curtailment plan in the event of a water supply shortage.

Cascade Valley Reservoir Siting and Sizing Study / Moses Lake, WA – *Modeling.* Utilized the existing water model to assess the location and size of a new storage reservoir to serve an additional 1,200 acres outside of the City's current service area. Considered various reservoir types (elevated, standpipe, ground-level) and materials (bolted steel, welded steel, concrete) and recommended reservoir dimensions based on regulatory requirements for operational, equalization, fire suppression, and standby storage. Several reservoir locations were evaluated to meet desired water system pressures and system available fire flow.

Water Master Plan, Weiser, ID – *Modeling.* Modeled the City's distribution system, which consisted of three storage reservoirs, two pump stations, a water treatment plant, and miles of distribution piping; improvements recommended included upsizing piping to meet fire flow goals and modification of pressure zones. Included an evaluation of the build-out conditions which consisted of additional system storage and a new pressure zone.

Hydraulic Model Development, Moses Lake, WA – *Project Manager.* Created a new water system model using the City's GIS, record drawings, and historical records. Calibrated the water model using hydrant testing, pump testing, and SCADA outputs and exercised the model to evaluate peak hour pressures and available fire flow throughout the system.

Stormwater Master Plan, St. Helens, OR – *Modeling / Techincal Lead.* Developed hydraulic and hydrologic stormwater model using available GIS and survey data, record drawings, LiDAR elevations, relevant outfall flood-plain influences, and flow monitoring data. Assigned basin characteristics using near-infrared imagery to calculate pervious versus impervious surfaces within over 150 sub-basins. Calibrated the model to flow monitoring data and adjusted basin characteristics to match observed peak flows. Evaluated the existing and future stormwater system against multiple design storm events, including the 2-, 10-, 25-, and 100-year storm events. Evaluated improvements and recommended capital improvement projects to alleviate modeled flooding within the conveyance system; recommended improvements included developing natural detention basins, re-routing flows, and upsizing undersized pipelines/open channels.

ELLIOT MECHAM, PE PDB Geotechnical Engineer

21 Years Experience	MS, Civil Engineering University of Texas – 2001 BS, Civil Engineering Utah State University – 1999	Registered Professional Engineer Lic#77330 Past President ASCE Oregon Geotechnical Group Member AWWA

(503)-403-8939 Elliott.Mecham@Shanwil.com

PROJECT EXPERIENCE

Tualatin Valley Water District Grabhorn Reservoir / Beaverton, OR – *Lead Geotech Engineer & Project Manager* that developed expedited reports and recommendations for this time-sensitive design-build project to meet the project schedule. TVWD replaced an existing structurally deficient concrete reservoir with a new 5 MG reservoir on a sloped property with space limitations. Since the construction of the original reservoir, new housing developments have been constructed on the adjacent properties, and a new Aquifer Storage and Recovery building has been constructed on-site. Significant grading was required to bury the new reservoir at the elevation of the existing reservoir and maintain the required pressure zones. Elliott was responsible for providing geotechnical recommendations for a tie-back shoring wall with an upper and lower level, slope stability during site grading for a new access road, and foundation recommendations for a seismically resilient reservoir structure. The team developed a unique solution that used the old reservoir wall as a temporary retaining wall during the construction of the new reservoir resulting in an estimated project savings of more than half a million dollars. During construction Shannon & Wilson observed site grading, evaluated the reservoir foundation subgrade, and observed retaining wall construction.

Tualatin Valley Water District Ridgewood View Park Reservoir / Portland, OR – *Project Engineer* for the evaluation of the new 8 MG, cast-in-place concrete reservoir to replace two aging reservoirs for the Tualatin Valley Water District. Geotechnical work consisted of soil/rock borings and geophysics testing; final reservoir siting; engineering evaluations including site-specific seismic hazards and mitigation evaluation, rock foundation preparation, and seismic lateral earth pressures; and providing support to plans and multiple specifications, including excavation blasting. The design included 400 linear feet of soil nail wall up to 30 feet high along four sides of the five-sided reservoir, and micro-piles under a portion of the deep pump station not founded on rock. The geological challenges included seismic slope instability, large-diameter volcanic rubble/boulder deposits, and localized deep and discontinuous bedrock deposits.

Clackamas River Water Redland Reservoir Design & Retrofit / Oregon City, OR – *Project Manager.* Shannon & Wilson performed the retrofit of an existing 0.75 MG steel reservoir and provided recommendations for construction of a new 1.3 MG hilltop steel reservoir. We observed Clackamas River Water dig test pits near the existing reservoir and completed four geotechnical borings. We found that site conditions across the site varied significantly, with conditions ranging from dense native gravels, undocumented fills, and soft clays. We evaluated subsurface conditions (including slope stability and site-specific seismic hazards), and developed recommendations for reservoir design and construction, earthwork, and foundation alternatives to mitigate the presence of undocumented fill on site in the area of the new foundation. We also provided geotechnical retrofit recommendations for the reservoir. During construction we observed submittals, RFI's, and performed construction observations of the subgrade to confirm all of the undocumented fill was removed and replaced with firm, unyielding structural fill.

Sunrise Water Authority Sunrise Reservoir No. 11 / Happy Valley, OR – *Project Engineer* for the siting, predesign, and final design for a 5 MG, 170-foot-diameter, partially buried concrete reservoir in Clackamas County. The project consisted of 60-foot-deep cuts with foundation and wall drainage systems. Our other services consisted of a site-specific seismic analysis, evaluation of liquefaction and seismic potential, foundation design (including bearing pressure, settlement, static and seismic lateral earth pressures), and pipeline recommendations. We also provided recommendations for retaining walls and cut slopes. During construction, we observed site grading, subgrade, and reviewed submittals.

UNITED INDUSTRIES GROUP, INC.

Date: 7-05-23

To: Sharon Darroux, PMP, Engineering Manager

Re: City of St Helens
Emery & Sons' Glass-Fused-to-Steel tank construction projects experience.

Dear Sharon,

We are, United Industries Group, Inc., as OEM of glass fused to steel tanks, and AWWA D103std. design sub-committee members.

United Industries Group, Inc. and Emery and Sons have been working together since 2015. Emery and Sons is UIG's authorized and factory trained erection company in Oregon. They own a set of jacking equipment provided by UIG, Inc. Our first project together was for Lane County Department of Public Works that we completed back in 2016. It comprised of two 1.3M USG/each Glass-Fused-to-Steel bolted tanks with Aluminum geodesic Domes.

Since then, we have been utilizing two of Emery and Sons' supervisors (Mark Pride and Brett Dunmire), and their jacks for our nationwide tank erection projects as follows:

- Two (2) 1,320,000USG/ea AWWA D103-09std Glass Fused to-steel Make-up Water Tanks with AWWA D108-10std Self-Supporting Geodesic Aluminum Dome roofs.
  Project Completed in 2018/2019
  Project Name: MNK7A;

- Two (2) 1,000,000USG/ea AWWA D103-09std Glass Fused to-steel Make-up Water Tanks with AWWA D108-10std Self-Supporting Geodesic Aluminum Dome roofs.
  Project Name: MNK7A;
  Project Completed in 2019/2020

- One (1) 600,000USG AWWA D103-09std Glass Fused to-steel Make-up Water Tanks with AWWA D108-10std Self-Supporting Geodesic Aluminum Dome roofs.
  Project Completed in 2021
  Project Name: MNK8A;

- Six (6) 540,000USG/each Everstore® AWWA D103-09std Make-up Water Tanks with AWWA D108-10std Self-Supporting Geodesic Aluminum Dome roofs.
  Project Name: SPC 1A, SPC2A, SPC3A, SPC4A.
  Project Location: Clarksville, TN
  Year Completed: 2018-2019.

- One (1) 450,000USG NSF61 Everstore® AWWA D103-09std/NFPA22 Potable/Fire Water Tank
  Project Name: Barona Casino Contract C2016-159
  Location: Lakeside, CA.
  Owner: Barona Band of Mission Indians
  Projects Completed: 2018

Address |11 RANCHO CIRCLE | LAKE FOREST | CALIFORNIA | 92630 | USA
Phone | 949.759.3200 | Fax | 949.759.3425 | www.Unitedind.com

- Two (2) 650,000USG NSF61 Everstore® AWWA D103-09std/NFPA22/NSF61 Potable/Fire Water Tanks with AWWA D108-10std Self-Supporting Geodesic Aluminum Dome roofs.
  Projects also included design of tank foundations.
  Tank installation by UIG crews.
  Project Name: Peco Foods, Inc. Water Treatment Plant.
  Owner: Peco Foods, Inc.
  Project Location: Pocahontas, AR.
  Projects Completed: 2020

Additionally, if required, United Industries Group, Inc. is ready and willing to support Emery and Sons with our own manpower resources such as UIG on-site representative as necessary to complete tank erection. However, we are confident in Emery and Sons' ability and expertise to complete this tank erection without any issues on their own.

Please feel free to contact us with any questions you may have.

Best regards.

Art Yanovskiy
V.P. of Project Management
UNITED INDUSTRIES GROUP, INC
Email: ay@unitedind.com
Tel.: 949-759-3200
Cell: 949-550-9535

LIFE CYCLE ANALYSIS

While this life cycle analysis is for welded steel, bolted steel tank life cycle costs are similar.

WELDED STEEL TANK MAINTENANCE COSTS

Return Period	Maintenance Scheduled	Sq Ft	Unit Price	Total Price
15	Blast exterior and re-application of coating	15,574	$12.00	$186,888.00
15	Blast interior and re-application of coating	20,535	$12.00	$246,420.00
15	Engineering Design Cost (Estimate 10%)			$43,330.80
15	Construction Management / Inspection Cost (Estimate 10%)			$43,330.80
TOTAL MAINTENANCE COST PER 15 YEAR RETURN PERIOD				**$519,969.60**

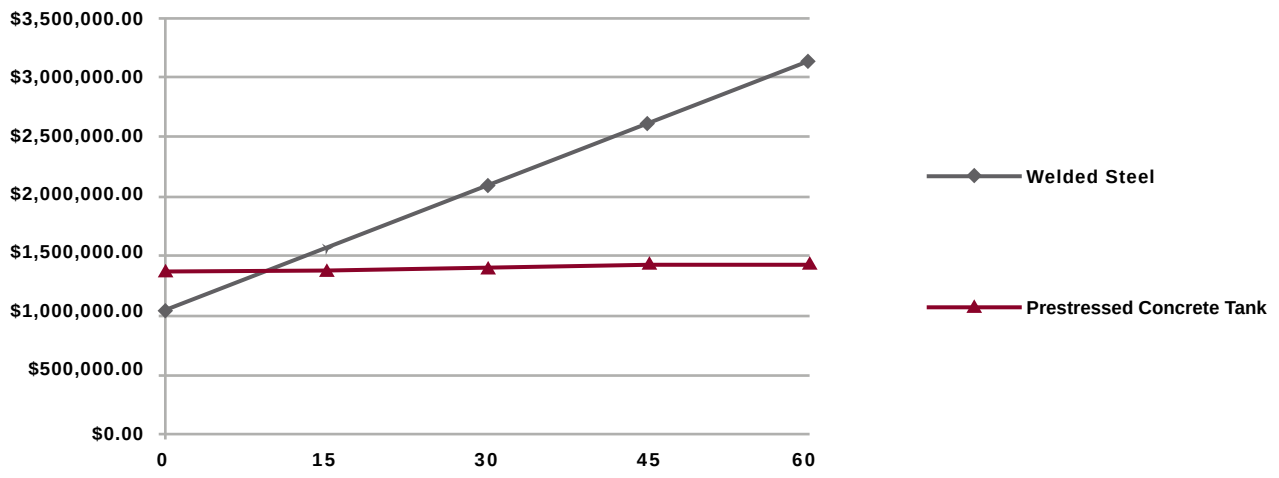
PRESTRESSED CONCRETE TANK MAINTENANCE COSTS

Return Period	Maintenance Scheduled	Sq Ft	Unit Price	Total Price
15	Powerwashing, Routine Maintenance, and Inspection	LS	$15,000.00	$15,000.00
TOTAL MAINTENANCE COST PER 15 YEAR RETURN PERIOD				**$15,000.00**

60 YEAR COST OF OWNERSHIP COMPARISON

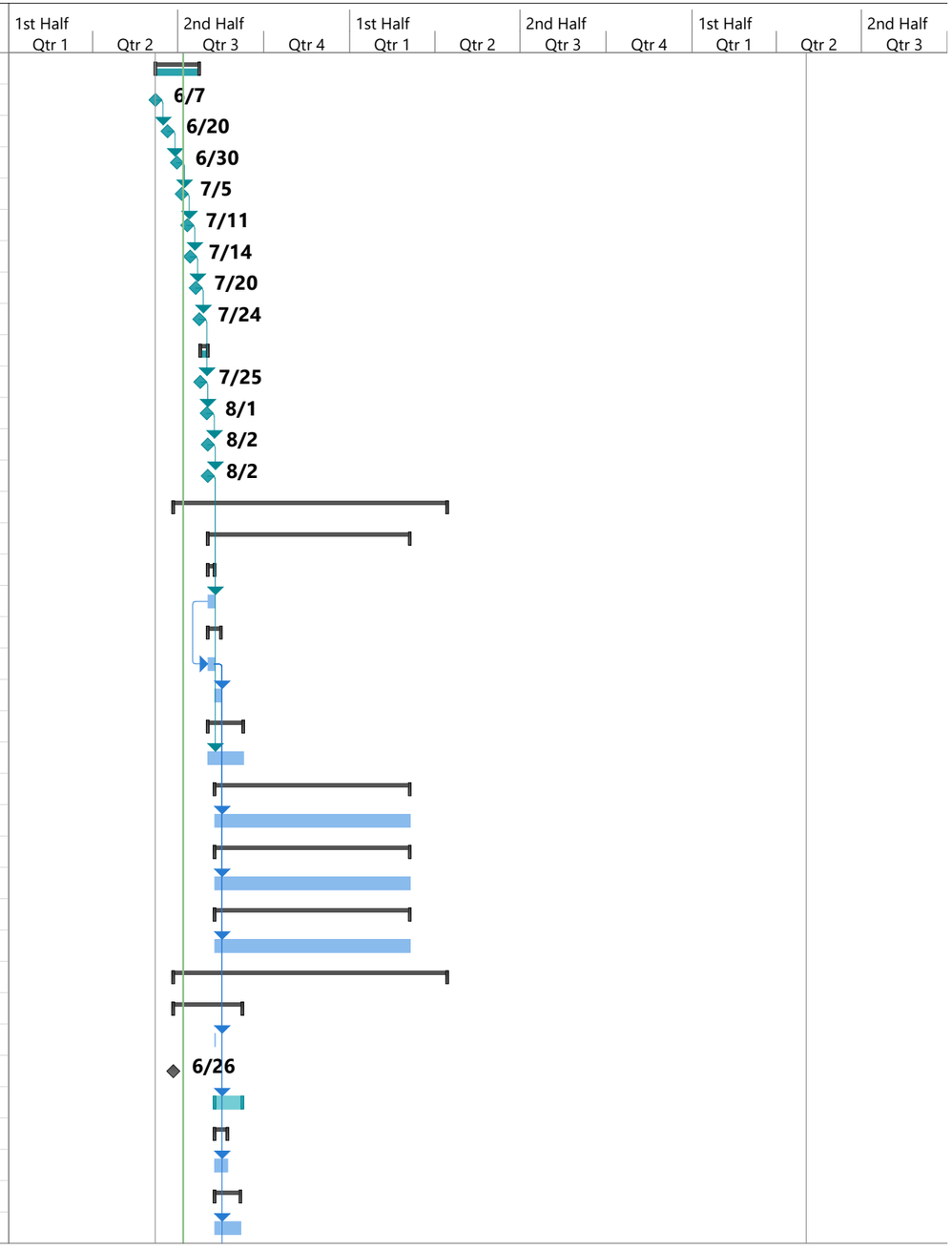
	Total Maintenance Cost Schedule		Cumulative Total Cost of Ownership	
YEAR	Prestressed Concrete	Welded Steel	Prestressed Concrete	Welded Steel
0	$0.00	$0.00	$1,375,000.00	$1,038,937.50
15	$15,000.00	$519,969.60	$1,390,000.00	$1,558,907.10
30	$30,000.00	$1,0339,939.20	$1,405,000.00	$2,078,876.70
45	$45,000.00	$1,559,908.80	$1,420,000.00	$2,598,846.30
60	$60,000.00	$2,079,878.40	$1,435,000.00	$3,118,815.90

60 YEAR COST OF OWNERSHIP COMPARISON BY TANK TYPE



CITY OF ST HELEN'S – RFP PDB SERVICES FOR REPLACEMENT OF 2.0 MG RESERVOIR

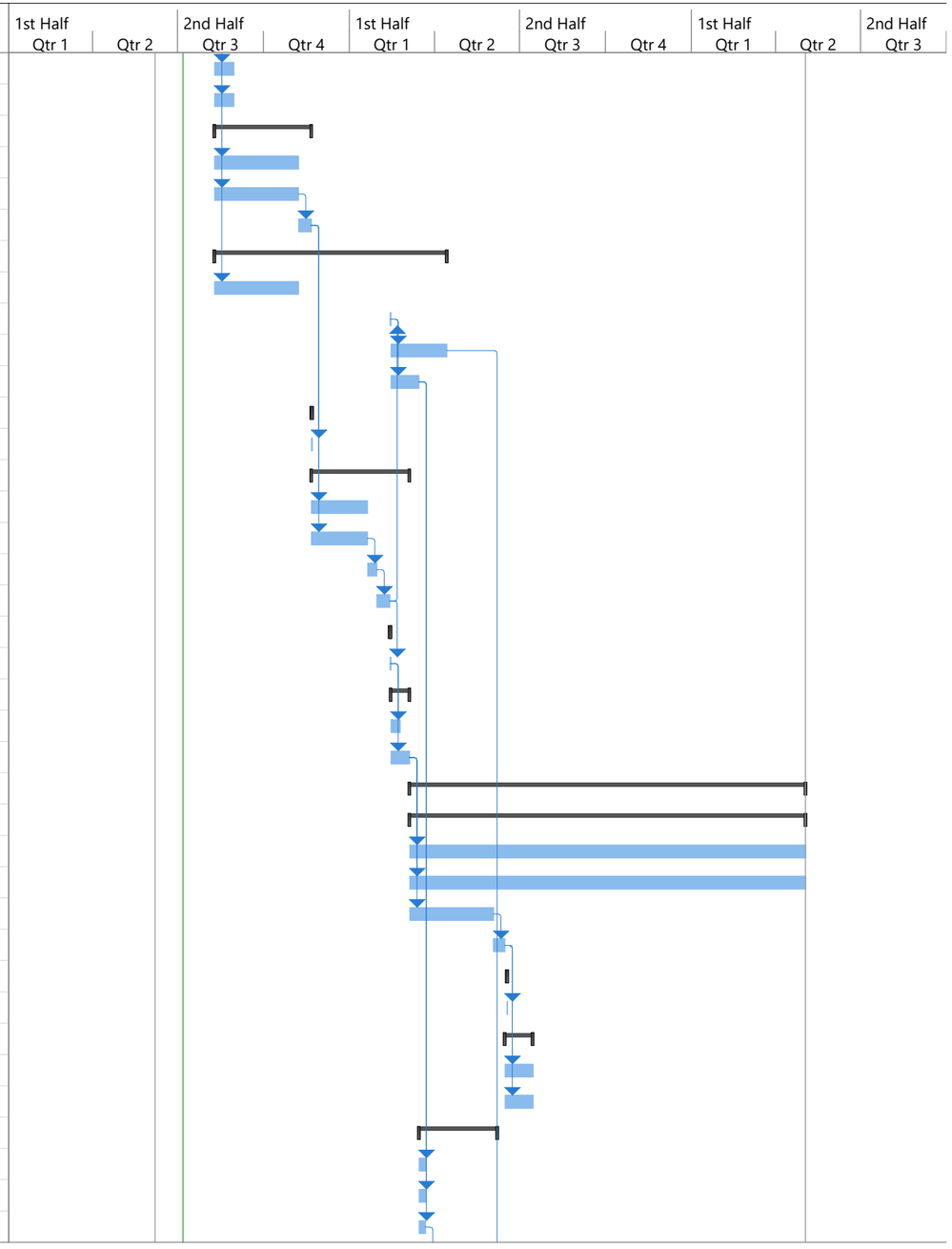
ID	Task Name	Duration	Start	Finish
1	**Pre-Selection Activities**	**47 days**	**Wed 6/7/23**	**Mon 7/24/23**
2	RFP Issued	0 days	Wed 6/7/23	Wed 6/7/23
3	Mandatory Pre-Proposal Conference/Site Tour (9:00 AM)	0 days	Tue 6/20/23	Tue 6/20/23
4	Deadline for Questions	0 days	Fri 6/30/23	Fri 6/30/23
5	Last Addendum to be Issued	0 days	Wed 7/5/23	Wed 7/5/23
6	Proposals Due (3:00 PM)	0 days	Tue 7/11/23	Tue 7/11/23
7	Shortlist Notification	0 days	Fri 7/14/23	Fri 7/14/23
8	Deadline for Protest of Shortlist Notification	0 days	Thu 7/20/23	Thu 7/20/23
9	Shortlist Interviews	0 days	Mon 7/24/23	Mon 7/24/23
10	**Contract Award/Execution**	**8 days**	**Tue 7/25/23**	**Wed 8/2/23**
11	Notice of Intent to Award	0 days	Tue 7/25/23	Tue 7/25/23
12	Deadline to Protest Award	0 days	Tue 8/1/23	Tue 8/1/23
13	Award of Contract	0 days	Wed 8/2/23	Wed 8/2/23
14	Contract Execution	0 days	Wed 8/2/23	Wed 8/2/23
15	**Phase I Design and Preconstruction Phase**	**293 days**	**Mon 6/26/23**	**Sat 4/13/24**
16	**Task 1 Project Management**	**216 days**	**Wed 8/2/23**	**Mon 3/4/24**
17	**Task 1.1 Project Administration**	**7 days**	**Wed 8/2/23**	**Tue 8/8/23**
18	Initial Coordination With City PM, Staff, Agencies & Stakeholders	5 days	Wed 8/2/23	Tue 8/8/23
19	**Task 1.2 Kick Off Meeting**	**10 days**	**Wed 8/2/23**	**Tue 8/15/23**
20	Prepare Agenda, Initiate, Invite Attendees & Hold Kick Off Meeting (In Person)	5 days	Wed 8/2/23	Tue 8/8/23
21	Develop a Preliminary Design & Project Execution Plan	5 days	Wed 8/9/23	Tue 8/15/23
22	**Task 1.4 Targeted Value Design (TVD) Workshop**	**28 days**	**Wed 8/2/23**	**Fri 9/8/23**
23	Targeted Value Study & Target Value Design (TVD) Workshop (In Person)	28 days	Wed 8/2/23	Fri 9/8/23
24	**Task 1.5 Review Meetings**	**148 days**	**Wed 8/9/23**	**Mon 3/4/24**
25	*Progress Review Meetings (Twice Monthly)*	148 days	Wed 8/9/23	Mon 3/4/24
26	**Task 1.6 Public Meetings**	**148 days**	**Wed 8/9/23**	**Mon 3/4/24**
27	*Public Meetings (Up to Four Each)*	148 days	Wed 8/9/23	Mon 3/4/24
28	**Task 1.7 Quality Assurance & Quality Control Review**	**148 days**	**Wed 8/9/23**	**Mon 3/4/24**
29	*Quality Assurance & Quality Control (As Necessary)*	148 days	Wed 8/9/23	Mon 3/4/24
30	**Task 2 - Preliminary Engineering (30 % Concept)**	**209 days**	**Mon 6/26/23**	**Sat 4/13/24**
31	**Task 2.1 Data Collection & Review**	**74 days**	**Mon 6/26/23**	**Thu 9/7/23**
32	Task 2.1a Complete Site Tour (Interior & Exterior of Reservoir) W/City Personnel	1 day	Wed 8/9/23	Wed 8/9/23
33	*Task 2.1b Submit RFI for Data WMP, Reservoir Data, Etc. (Keller Already Has From WMP)*	0 days	Mon 6/26/23	Mon 6/26/23
34	Task 2.1c (Added) Site Survey (Needed to Complete Task 2.2)	30 days	Wed 8/9/23	Thu 9/7/23
35	**Task 2.2 Existing Site System Analysis**	**14 days**	**Wed 8/9/23**	**Tue 8/22/23**
36	Task 2.2a Conduct Existing Reservoir Study Efficiency & Affect on Design & Future Operatior	14 days	Wed 8/9/23	Tue 8/22/23
37	**Task 2.3 Geotechnical Engineering Report**	**28 days**	**Wed 8/9/23**	**Tue 9/5/23**
38	Task 2.3a Locate, Perform Borings, Prepare Boring Logs at Proposed Reservoir Site	28 days	Wed 8/9/23	Tue 9/5/23



Project: Proposal Schedule
Date:Tues 7/11/23

Task	Project Summary	Manual Task	Start-only	Deadline
Split	Inactive Task	Duration-only	Finish-only	Progress
Milestone	Inactive Milestone	Manual Summary Rollup	External Tasks	Manual Progress
Summary	Inactive Summary	Manual Summary	External Milestone

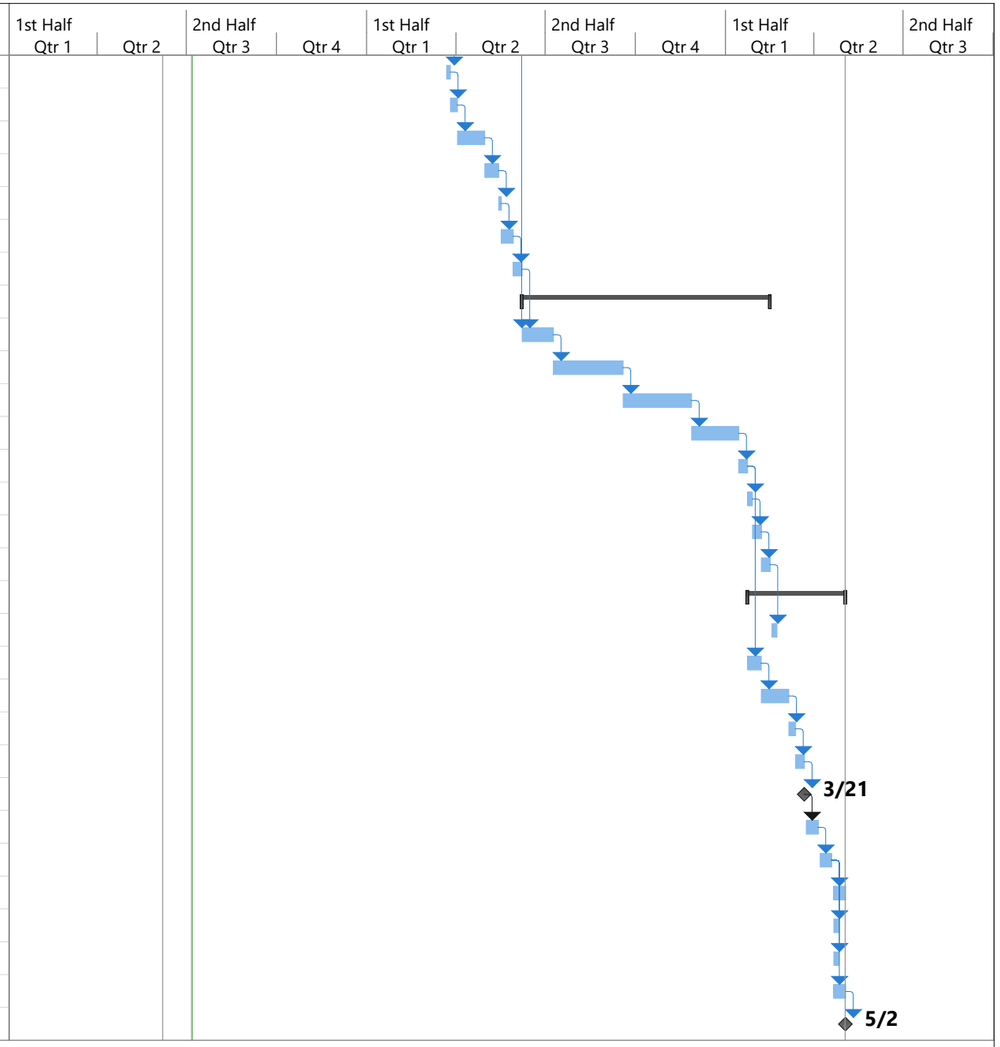
ID	Task Name	Duration	Start	Finish
39	Task 2.3b Make Recommendation Regarding Site & Subgrade Prep, Backfill & Grading	21 days	Wed 8/9/23	Tue 8/29/23
40	Task 2.3c Discuss Foundation Conditions, Groundwater & Dewatering	21 days	Wed 8/9/23	Tue 8/29/23
41	**Task 2.4 Preliminary 30% Concept Design Documents & Estimate**	**104 days**	**Wed 8/9/23**	**Mon 11/20/23**
42	Task 2.4a Perform Preliminary Engineering to Support Design & Cost Estimating	90 days	Wed 8/9/23	Mon 11/6/23
43	Task 2.4b Preliminary Design, Approach, Parameters, Assumptions, Codes & Early Cost Estin	90 days	Wed 8/9/23	Mon 11/6/23
44	City of St. Helens 30% City Review & Comments	10 days	Tue 11/7/23	Mon 11/20/23
45	**Project Permitting Process**	**249 days**	**Wed 8/9/23**	**Sat 4/13/24**
46	Task 2.4c Identify Project Permitting Requirements	90 days	Wed 8/9/23	Mon 11/6/23
47	Task 3.1d Initiate Permitting Activities (Submit & Prepare Documents & Applications for Per	1 day	Tue 2/13/24	Tue 2/13/24
48	Task 3.1e (Added) JHA Permit Review & Approval Process	60 days	Wed 2/14/24	Sat 4/13/24
49	Task 3.1f (Added) Aquire Early Work Demo & Grading Permit	30 days	Wed 2/14/24	Thu 3/14/24
50	**Task 1.3 Design Review Workshop 30%**	**1 day**	**Tue 11/21/23**	**Tue 11/21/23**
51	Task 1.3 a&b Lead Design Review Workshop (Design, Schedule, Permitting & Action Items)	1 day	Tue 11/21/23	Tue 11/21/23
52	**Task 3 - Detailed Design (60% Drawings)**	**105 days**	**Tue 11/21/23**	**Mon 3/4/24**
53	Task 3.1a Produce 60% Construction Drawings	60 days	Tue 11/21/23	Fri 1/19/24
54	Task 3.1b Produce Redlined Marked Up Specifications	60 days	Tue 11/21/23	Fri 1/19/24
55	Task 3.1c Prepare Detailed Cost Estimate Developed to Approximately 60% Completion	10 days	Sat 1/20/24	Mon 1/29/24
56	City of St. Helens 60% City Review & Comments	10 days	Tue 1/30/24	Mon 2/12/24
57	**Task 1.3 Design Review Workshop 60%**	**1 day**	**Tue 2/13/24**	**Tue 2/13/24**
58	Task 1.3 a&b Lead Design Review Workshop (Design, Schedule, Permitting & Action Items)	1 day	Tue 2/13/24	Tue 2/13/24
59	**Task 3.2 Design Builder's Construction Proposal**	**20 days**	**Wed 2/14/24**	**Mon 3/4/24**
60	Task 3.2a Prepare/Submit Proposal for Completion of Design/Project Construction	10 days	Wed 2/14/24	Fri 2/23/24
61	Task 3.2b Develop Guaranteed Maximum Price (GMP) For Construction	20 days	Wed 2/14/24	Mon 3/4/24
62	**Phase II Construction**	**424 days**	**Tue 3/5/24**	**Fri 5/2/25**
63	**Phase II General Construction Activities**	**424 days**	**Tue 3/5/24**	**Fri 5/2/25**
64	*Provide Overall Project & Construction Management*	424 days	Tue 3/5/24	Fri 5/2/25
65	*Project Meetings (Kickoff, & Bi-Weekly Construction Meetings)*	424 days	Tue 3/5/24	Fri 5/2/25
66	Produce 100% Construction Drawings & Specifications	90 days	Tue 3/5/24	Sun 6/2/24
67	100% City Review & Comments	10 days	Mon 6/3/24	Fri 6/14/24
68	**Task 1.3 Design Review Workshop**	**1 day**	**Mon 6/17/24**	**Mon 6/17/24**
69	Task 1.3 a&b Lead Design Review Workshop (Design, Schedule, Permitting & Action Items)	1 day	Mon 6/17/24	Mon 6/17/24
70	**Early Work Administration Activities**	**30 days**	**Sat 6/15/24**	**Sun 7/14/24**
71	Procure Equipment, Bid Packages & Subcontracts	30 days	Sat 6/15/24	Sun 7/14/24
72	Secure All Necessary Permits	30 days	Sat 6/15/24	Sun 7/14/24
73	**Potential Early Work Construction Activities**	**59 days**	**Fri 3/15/24**	**Thu 6/6/24**
74	Equipment Mobilization	5 days	Fri 3/15/24	Thu 3/21/24
75	Setup of Temporary Facilities & Security	5 days	Fri 3/15/24	Thu 3/21/24
76	Preliminary Project Survey	5 days	Fri 3/15/24	Thu 3/21/24



Project: Proposal Schedule
Date:Tues 7/11/23

Task
Split
Milestone
Summary
Project Summary
Inactive Task
Inactive Milestone
Inactive Summary
Manual Task
Duration-only
Manual Summary Rollup
Manual Summary
Start-only
Finish-only
External Tasks
External Milestone
Deadline
Progress
Manual Progress

ID	Task Name	Duration	Start	Finish
77	Installation of Preliminary Erosion Control Items	2 days	Fri 3/22/24	Mon 3/25/24
78	Waterline Relocation	5 days	Tue 3/26/24	Mon 4/1/24
79	Excavation, Sloping & Stabilization	20 days	Tue 4/2/24	Mon 4/29/24
80	Existing Reservoir Demolition	10 days	Tue 4/30/24	Mon 5/13/24
81	Subgrade Prep	3 days	Tue 5/14/24	Thu 5/16/24
82	Underslab Vertical Spools & Pipe Block Installation	7 days	Fri 5/17/24	Tue 5/28/24
83	Reservoir Rock Section, Underslab Perf Drains & Liner	7 days	Wed 5/29/24	Thu 6/6/24
84	**Phase II Reservoir Construction**	**174 days**	**Fri 6/7/24**	**Fri 2/14/25**
85	Floor Slab Construction	20 days	Fri 6/7/24	Mon 7/8/24
86	Column & Wall Construction	50 days	Tue 7/9/24	Tue 9/17/24
87	Roof Construction	50 days	Wed 9/18/24	Tue 11/26/24
88	DN Tank Wrapping & Shotcrete	30 days	Wed 11/27/24	Mon 1/13/25
89	Inlet System, Overflow Pipes & Interior Fabricated Metals	7 days	Tue 1/14/25	Wed 1/22/25
90	Interior pipe Coatings	3 days	Thu 1/23/25	Mon 1/27/25
91	Final Patching Cleaning & Disinfection	7 days	Tue 1/28/25	Wed 2/5/25
92	Filling & Testing	7 days	Thu 2/6/25	Fri 2/14/25
93	**Phase II Utilities, Site Restoration & Start-Up**	**72 days**	**Thu 1/23/25**	**Fri 5/2/25**
94	Reservoir Exterior Coating/Sheet Drain (Weather Dependent)	5 days	Mon 2/17/25	Fri 2/21/25
95	Reservoir Site Piping Upgrades & Connections	10 days	Thu 1/23/25	Wed 2/5/25
96	Reservoir Backfill (Weather Dependent)	20 days	Thu 2/6/25	Wed 3/5/25
97	Relocated Waterline Restoration	5 days	Thu 3/6/25	Wed 3/12/25
98	System Startup, Staff Training, Commissioning & Performance Testing	7 days	Thu 3/13/25	Fri 3/21/25
99	***Substantial Completion (System On-Line for Intended Use)***	0 days	Fri 3/21/25	Fri 3/21/25
100	Final Site Grading	10 days	Mon 3/24/25	Fri 4/4/25
101	Landscaping & Permanent Erosion Control	10 days	Mon 4/7/25	Fri 4/18/25
102	Punch List/Final Site Cleaning & Demobilization	10 days	Mon 4/21/25	Fri 5/2/25
103	Provide Warranty Coverage	5 days	Mon 4/21/25	Fri 4/25/25
104	Prepare As-Builts	5 days	Mon 4/21/25	Fri 4/25/25
105	Prepare O&M's	10 days	Mon 4/21/25	Fri 5/2/25
106	***Final Completion***	0 days	Fri 5/2/25	Fri 5/2/25



Project: Proposal Schedule
Date:Tues 7/11/23

Task	Project Summary	Manual Task	Start-only	Deadline
Split	Inactive Task	Duration-only	Finish-only	Progress
Milestone	Inactive Milestone	Manual Summary Rollup	External Tasks	Manual Progress
Summary	Inactive Summary	Manual Summary	External Milestone

EMERY&SONS
CONSTRUCTION GROUP, LLC

MAIN OFFICE (503) 588.7576
PO BOX 13069 · Salem, OR 97309
OR CCB# 221536

emeryandsons.com