

**CITY OF PORTLAND  
AGREEMENT FOR PROFESSIONAL, TECHNICAL, OR EXPERT SERVICES**

CONTRACT NO. \_\_\_\_\_

**SHORT TITLE OF WORK PROJECT:  
Tryon Creek Trunk Sewer Upgrade**

This contract is between the City of Portland ("City," or "Bureau") and BergerABAM, Inc., hereafter called Contractor. The City's Project Manager for this contract is Kurt Robinson.

**Effective Date and Duration**

This contract shall become effective on October 29, 2012. This contract shall expire, unless otherwise terminated or extended, on October 29, 2014.

**Consideration**

- (a) City agrees to pay Contractor a sum not to exceed \$471,410 for accomplishment of the work.
- (b) Interim payments shall be made to Contractor according to the schedule identified in the STATEMENT OF THE WORK AND PAYMENT SCHEDULE.

**CONTRACTOR DATA AND CERTIFICATION**

Name (please print): BergerABAM, Inc.

Address: 700 Northeast Multnomah Street, Suit 900, Portland, Oregon 97232-4189

Employer Identification Number (EIN) 91-1422812

[INDEPENDENT CONTRACTORS: DO NOT PROVIDE SOCIAL SECURITY NUMBER (SSN) – LEAVE BLANK IF NO EIN]

City of Portland Business License # 193966

Citizenship: United States Nonresident alien ☐ Yes ☒ No

Business Designation (check one): ☐ Individual ☐ Sole Proprietorship ☐ Partnership ☒ Corporation  
☐ Limited Liability Co (LLC) ☐ Estate/Trust ☐ Public Service Corp. ☐ Government/Nonprofit

Payment information will be reported to the IRS under the name and taxpayer I.D. number provided above. Information must be provided prior to contract approval.

**TERMS AND CONDITIONS**

**1. Standard of Care:** Contractor shall perform all services under this contract using that care, skill and diligence that would ordinarily be used by similar professionals in this community in similar circumstances.

**2. Effect of Expiration**

Passage of the contract expiration date shall not extinguish, prejudice, or limit either party's right to enforce this Contract with respect to any default or defect in performance that has not been corrected.

**3. Order of Precedence**

This contract consists of these Terms and Conditions, the Statement of Work and Payment Schedule, and any exhibits that are attached. Any apparent or alleged conflict between these items will be resolved by using the following order of precedence: a) these Terms and Conditions; b) Statement of Work and Payment Schedule; and c) any exhibits attached to the contract.

**4. Early Termination of Contract**

(a) The City may terminate this Contract for convenience at any time for any reason deemed appropriate in its sole discretion. Termination is effective immediately upon notice of termination given by the City.

(b) Either party may terminate this Contract in the event of a material breach by the other party that is not cured. Before termination is permitted, the party seeking termination shall give the other party written notice of the breach, its intent to terminate and fifteen (15) calendar days to cure the breach. If the breach is not cured within 15 days, the party seeking termination may terminate immediately by giving written notice that the Contract is terminated.

**5. Remedies and Payment on Early Termination**

- (a) If the City terminates pursuant to 4(a) above, the City shall pay the Contractor for work performed in accordance with the Contract prior to the termination date. No other costs or loss of anticipated profits shall be paid.
- (b) If the City terminates pursuant to 4(b) above, the City is entitled all remedies available at law or equity. In addition, Contractor shall pay the City all damages, costs and sums incurred by the City as a result of the breach.
- (c) If the Contractor justifiably terminates the contract pursuant to subsection 4(b), the Contractor's only remedy is payment for work prior to the termination. No other costs or loss of anticipated profits shall be paid.
- (d) If the City's termination under Section 4(b) was wrongful, the termination shall be automatically converted to one for convenience and the Contractor shall be paid as if the Contract was terminated under Section 4(a).
- (e) In the event of early termination the Contractor's work product before the date of termination becomes property of the City.

**6. Assignment**

Contractor shall not subcontract, assign or transfer any of the work scheduled under this agreement, without the prior written consent of the City. Notwithstanding City approval of a subcontractor, the Contractor shall remain obligated for full performance hereunder, and the City shall incur no obligation other than its obligations to the Contractor hereunder. The Contractor agrees that if subcontractors are employed in the performance of this Agreement, the Contractor and its subcontractors are subject to the requirements and sanctions of ORS Chapter 656, Workers' Compensation.

**7. Compliance with Applicable Law**

Contractor shall comply with all applicable federal, state and local laws and regulations. Contractor agrees it currently is in compliance with all tax laws.

**8. Indemnification for Property Damage and Personal Injury**

Contractor shall indemnify, defend, and hold harmless the City, its officers, agents, and employees, from all claims, losses, damages, and costs (including reasonable attorney fees) for personal injury and property damage arising out of the intentional or negligent acts or omissions of the Contractor, its Subcontractors, suppliers, employees or agents in the performance of its services. Nothing in this paragraph requires the Contractor or its insurer to indemnify the City for claims of personal injury or property damage caused by the negligence of the City. This duty shall survive the expiration or termination of this contract.

**9. Insurance**

During the term of this contract, Contractor shall maintain in force at its own expense, the insurance noted below:

- (a) Workers' Compensation insurance in compliance with ORS 656.017, which requires subject employers to provide Oregon workers' compensation coverage for all their subject workers (contractors with one or more employees, unless exempt under ORS 656.027).
- (b) Commercial General Liability insurance with a combined single limit of not less than \$1,000,000 per occurrence for Bodily Injury and Property Damage. It shall include contractual liability coverage for the indemnity provided under this contract, and shall provide that City of Portland, and its agents, officers, and employees are Additional Insureds. but only with respect to the Contractor's services to be provided under this Contract:

Required by Bureau  X

Waived by Bureau

- (c) Automobile Liability insurance with a combined single limit of not less than \$1,000,000 per occurrence for Bodily Injury and Property Damage, including coverage for owned, hired, or non-owned vehicles, as applicable:

Required by Bureau  X

Waived by Bureau

- (d) Professional Liability insurance with a combined single limit of not less than \$1,000,000 per claim, incident, or occurrence. If insurance is provided on a "claims made" basis the Contractor shall acquire "tail" coverage or continue the same coverage for three years after completion of the contract, provided coverage is available and economically feasible. If not feasible, contractor shall notify City immediately.

Required by Bureau  X

Waived by Bureau

- (e) There shall be no cancellation, material change, reduction of limits, or intent not to renew any required insurance without 30 days written notice from the Contractor or its insurer(s) to the City.

- (f) Certificates of insurance. The Contractor shall furnish acceptable insurance certificates to the City showing the required insurance coverage. The certificate will specify all of the parties who are Additional Insureds. Certificates and insurers are subject to City approval. Complete policy copies shall be provided to the City upon request. The Contractor shall be financially responsible for all pertinent deductibles, self-insured retentions, and/or self-insurance.

**10. Ownership of Work Product**

All work product produced by the Contractor under this contract is the exclusive property of the City. "Work Product" includes, but is not limited to: research, reports, computer programs, manuals, drawings, recordings, photographs, artwork and any data or information in any form. The Contractor and the City intend that such Work Product shall be deemed "work made for hire" of which the City shall be deemed the author. If for any reason a Work Product is deemed not to be a "work made for hire," the

Contractor hereby irrevocably assigns and transfers to the City all right, title and interest in such work product, whether arising from copyright, patent, trademark, trade secret, or any other state or federal intellectual property law or doctrines. Contractor shall obtain such interests and execute all documents necessary to fully vest such rights in the City. Contractor waives all rights relating to work product, including any rights arising under 17 USC 106A, or any other rights of authorship, identification or approval, restriction or limitation on use or subsequent modifications. If the Contractor is an architect, the Work Product is the property of the Contractor-Architect, and by execution of this contract, the Contractor-Architect grants the City an exclusive and irrevocable license to use that Work Product.

Notwithstanding the above, all pre-existing trademarks, services marks, patents, copyrights, trade secrets and other proprietary rights of Contractor are and will remain the exclusive property of Contractor.

**11. EEO Certification:** In the event Contractor provides in excess of \$2,500.00 for services to the City in any fiscal year, Contractor shall obtain EEO certification from the City.

**12. Equal Benefits**

Contractor must comply with the City's Equal Benefits program as prescribed by Chapter 3.100 of the Code of the City of Portland. The required documentation must be filed with Procurement Services, City of Portland, prior to contract execution.

**13. Successors in Interest**

The provisions of this contract shall be binding upon and shall inure to the benefit of the parties hereto, and their respective successors and approved assigns.

**14. Severability**

The parties agree that if any term or provision of this contract is declared by a court of competent jurisdiction to be illegal or in conflict with any law, the validity of the remaining terms and provisions shall not be affected, and the rights and obligations of the parties shall be construed and enforced as if the contract did not contain the particular term or provision held to be invalid.

**15. 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.

**16. Errors**

The Contractor shall promptly perform such additional services as may be necessary to correct errors in the services required by this contract without undue delays and without additional cost.

**17. Governing Law/Venue**

The provisions of this contract shall be interpreted, construed and enforced in accordance with, and governed by, the laws of the State of Oregon without reference to its conflict of laws provisions that might otherwise require the application of the law of any other jurisdiction. Any action or suits involving any question arising under this contract must be brought in the appropriate court in Multnomah County Oregon.

**18. Amendments**

All changes to this contract, including changes to the scope of work and contract amount, must be made by written amendment and approved by the Chief Procurement Officer to be valid. Any amendment that increases the original contract amount by more than 25% must be approved by the City Council to be valid.

**19. Business License**

The Contractor shall obtain a City of Portland business license as required by PCC 7.02 prior to beginning work under this Contract.

**20. Prohibited Conduct**

The Contractor shall not hire any City employee who evaluated the proposals or authorized the award of this Contract for two years after the date the contract was authorized without the express written permission of the City and provided the hiring is permitted by state law.

**21. Payment to Vendors and Subcontractors**

The Contractor shall timely pay all subcontractors and suppliers providing services or goods for this Contract.

**22. Access to Records**

The Contractor shall maintain all records relating to this Contract for three (3) years after final payment. The City may examine, audit and copy the Contractor's books, documents, papers, and records relating to this contract at any time during this period upon reasonable notice. Copies of these records shall be made available upon request. Payment for the reasonable cost of requested copies shall be made by the City.

**23. Audits**

(a) The City may conduct financial and performance audits of the billings and services specified in this agreement at any time in the course of the agreement and during the three (3) year period established by paragraph 22. Audits will be conducted in

accordance with generally accepted auditing standards as promulgated in Government Auditing Standards by the Comptroller General of the United States Government Accountability Office.

(b) If an audit discloses that payments to the Contractor exceed the amount to which the Contractor was entitled, the Contractor shall repay the amount of the excess to the City.

#### 24. Electronic Signatures

The City and Contractor may conduct this transaction, including any contract amendments, by electronic means, including the use of electronic signatures.

#### 25. Merger Clause

This Contract encompasses the entire agreement of the parties, and supersedes all previous understandings and agreements between the parties, whether verbal or written.

#### 26. Dispute Resolution/Work regardless of disputes

The parties shall participate in mediation to resolve disputes before conducting litigation. The mediation shall occur at a reasonable time after the conclusion of the Contract with a mediator jointly selected by the parties. Notwithstanding any dispute under this Contract, the Contractor shall continue to perform its work pending resolution of a dispute, and the City shall make payments as required by the Contract for undisputed portions of the work. In the event of litigation no attorney fees are recoverable. No different dispute resolution paragraph(s) in this contract or any attachment hereto shall supersede or take precedence over this provision.

#### 27. Progress Reports: / ☒ / Applicable / ☐ / Not Applicable

If applicable, the Contractor shall provide monthly progress reports to the Project Manager as described in the Statement of the Work and Payment Schedule.

#### 28. Contractor's Personnel: / ☒ / Applicable / ☐ / Not Applicable

If applicable, the Contractor shall assign the personnel listed in the Statement of the Work and Payment Schedule for the work required by the Contract and shall not change personnel without the prior written consent of the City, which shall not be unreasonably withheld.

#### 29. Subcontractors

The Contractor shall use the subcontractors identified in its proposals. The Contractor shall not change subcontractor assignments without the prior written consent of the Chief Procurement Officer. Failure to use the identified M/W/ESB subcontractors without prior written consent is a material breach of contract.

#### 30. Third Party Beneficiaries

There are no third party beneficiaries to this contract. Enforcement of this contract is reserved to the parties.

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### STATEMENT OF THE WORK AND PAYMENT SCHEDULE

#### SCOPE OF WORK

The Scope of Work is set forth in Attachment A – Scope of Work, hereto made a part of the Contract. The Scope of Work includes, but is not limited to: monthly progress reporting; project management; public outreach; permitting; field investigation; alternatives analysis; final design; and construction services.

#### CONTRACTOR PERSONNEL

The Contractor shall assign the following key personnel to do the work in the capacities designated:

NAME	ROLE ON PROJECT
Thomas R. Wilcox	Principal/Project Executive
Howard Wells	Project Manager
Brian Maxwell	Structural Engineer
Lee Marsh	QA/QC, Structural Engineer
Bruce Henderson	Watershed/Stream Design Professional

Requests to replace key personnel must be submitted in writing, approved by the City Project Manager, and documented by written amendment to the contract.

**SUBCONTRACTORS**

The Contractor shall assign the following subcontractors to perform work in the capacities designated:

NAME	ROLE ON PROJECT
Henderson Land Services	Hydraulic Analysis, Stream Restoration/Design, Permitting
BlueDot Group	Land Survey
GRI	Geotechnical Engineering
PLI Systems	Drilling (Geotechnical Exploration)

The City will enforce all diversity in workforce and Minority, Women and Emerging Small Business (M/W/ESB) subcontracting commitments submitted by the Contractor in its Proposal. For contracts valued \$100,000 or more, the Contractor shall submit a Monthly Subconsultant Payment and Utilization Report (MUR), made part of this contract by Attachment A, reporting ALL subcontractors employed in the performance of this agreement. An electronic copy of the MUR may be obtained at: <http://www.portlandonline.com/shared/cfm/image.cfm?id=119851>.

**COMPENSATION**

The maximum that the Contractor can be paid on this contract is \$471,410 (hereafter the “not to exceed” amount.). The “not to exceed” amount includes all payments to be made pursuant to this contract, including reimbursable expenses, if any. Nothing in this contract requires the City to pay for work that does not meet the Standard of Care or other requirements of the Contract. The actual amount to be paid Contractor may be less than that amount.

The Contractor is entitled to receive progress payments for its work pursuant to the Contract as provided in more detail below. The City will pay Contractor based on these invoices for acceptable work performed and approved until the “not to exceed” amount is reached. Thereafter, Contractor must complete work based on the Contract without additional compensation unless there is a change to the scope of work.

A level of effort for each Task described in the Scope of Work is set forth in Attachment B – Fee Estimate, hereto made a part of the Contract. Increases to the level of effort and/or redistribution of allowable charges between Tasks must be approved in writing by the City prior to initiating the work to be done. Any estimate of the hours necessary to perform the work is not binding on the City. The Contractor remains responsible if the estimate proves to be incorrect. Exceeding the number of estimated hours of work does not impose any liability on the City for additional payment.

If work is completed before the “not to exceed” amount is reached, the Contractor’s compensation will be based on the Contractor’s bills previously submitted for acceptable work performed and approved.

**PAYMENT TERMS: Net 30 Days****Hourly Rates**

The hourly billing rates shall not exceed those set forth below:

Staff Designation	Maximum Hourly Billing Rate
<b>Berger ABAM</b>	
Officer	\$223
Senior Project Manager	\$179
Senior QA/QC Project Manager	\$222
Senior Civil Engineer	\$143
Senior Structural Engineer	\$157
Engineer	\$98
Lead CAD Operator	\$94
Natural Resources Team Leader	\$163
Senior Planner	\$132
Senior Public Involvement Project Manager	\$115
Associate Scientist	\$97
Associate Environmental Scientist	\$79
Scientist	\$65
Associate Planner	\$87
Strategic Communications Project Manager	\$98
Senior Technical Editor	\$101
Project Administrative Assistant	\$58

<b>Bluedot Group (Survey Subconsultant)</b>	
Professional Land Surveyor	\$111.75
Senior CAD Tech V	\$84.01
Senior CAD Tech IV	\$71.52
Survey Tech III	\$62.58
Two Man Field Crew	\$132.71
<b>GRI (Geotechnical Subconsultant)</b>	
Principal	\$185
Associate	\$170
Senior Engineer / Geologist	\$140
Project Engineer / Geologist	\$125
Staff Engineer / Scientist	\$95
Engineering Assistant	\$65
Editor	\$125
Drafter	\$85
Secretarial Services	\$55
Reproduction	\$55
<b>PLI Systems (Subsurface Exploration Subconsultant)</b>	
Two Man Hand Crew	\$125
<b>Henderson Land Services (Design Subconsultant)</b>	
Project Manager	\$145
Water Resources Engineer	\$155
Environmental Construction Lead	\$125
Construction Observer	\$95

#### Reimbursable Costs

The following costs will be reimbursed without mark-up:

- Public Meeting Materials
- Permitting Presentation Materials

#### Subconsultant Costs

Compensation for subconsultants shall be limited to the same restrictions imposed on the Consultant. The maximum markup on subconsultant services shall not exceed 5%.

#### Progress Payments

On or before the 15<sup>th</sup> of each month, the Contractor shall submit to the City's Project Manager an invoice for work performed by the Contractor during the preceding month. The invoice shall contain the City's Contract Number and set out all items for payment including, but not limited to: the name of the individual, labor category, direct labor rate, hours worked during the period, and tasks performed. The Contractor shall also attach photocopies of claimed reimbursable expenses, if applicable. The Project Coordinator shall stamp and approve all subconsultant invoices and note on the subconsultant invoice what they are approving as "billable" under the contract. The billing from the prime should clearly roll up labor and reimbursable costs for the prime and subconsultants – matching the subconsultant invoices. Prior to initial billing, the Contractor shall develop a billing format for approval by the City.

The City shall pay all amounts to which no dispute exists within 30 days of receipt of the invoice. Payment of any bill, however, does not preclude the City from later determining that an error in payment was made and from withholding the disputed sum from the next progress payment until the dispute is resolved.

The Contractor shall make full payment to its subcontractors within 10 business days following receipt of any payment made by the City to Contractor.

#### ATTACHMENTS

Attachment A: Scope of Work  
Attachment B: Fee Estimate

## INDEPENDENT CONTRACTOR CERTIFICATION STATEMENT

## SECTION A

CONTRACTOR CERTIFICATION I, undersigned, am authorized to act on behalf of entity designated below, hereby certify that entity has current Workers' Compensation Insurance.

Contractor Signature

Thomas R. N. N.

Date

9/21/12

Entity

BERGER ABAM

If entity does not have Workers' Compensation Insurance, City Project Manager and Contractor complete the remainder of this form.

## SECTION B

**ORS 670.600 Independent contractor standards.** As used in various provisions of ORS Chapters 316, 656, 657, and 701, an individual or business entity that performs labor or services for remuneration shall be considered to perform the labor or services as an "independent contractor" if the standards of this section are met. The contracted work meets the following standards:

1. The individual or business entity providing the labor or services is free from direction and control over the means and manner of providing the labor or services, subject only to the right of the person for whom the labor or services are provided to specify the desired results;
2. The individual or business entity providing labor or services is responsible for obtaining all assumed business registrations or professional occupation licenses required by state law or local government ordinances for the individual or business entity to conduct the business;
3. The individual or business entity providing labor or services furnishes the tools or equipment necessary for performance of the contracted labor or services;
4. The individual or business entity providing labor or services has the authority to hire and fire employees to perform the labor or services;
5. Payment for the labor or services is made upon completion of the performance of specific portions of the project or is made on the basis of an annual or periodic retainer.

City Project Manager Signature

Date

## SECTION C

Independent contractor certifies he/she meets the following standards:

1. The individual or business entity providing labor or services is registered under ORS Chapter 701, if the individual or business entity provides labor or services for which such registration is required;
2. Federal and state income tax returns in the name of the business or a business Schedule C or form Schedule F as part of the personal income tax return were filed for the previous year if the individual or business entity performed labor or services as an independent contractor in the previous year; and
3. The individual or business entity represents to the public that the labor or services are to be provided by an independently established business. Except when an individual or business entity files a Schedule F as part of the personal income tax returns and the individual or business entity performs farm labor or services that are reportable on Schedule C, an individual or business entity is considered to be engaged in an independently established business when four or more of the following circumstances exist. Contractor check four or more of the following:
  - \_\_\_\_\_ A. The labor or services are primarily carried out at a location that is separate from the residence of an individual who performs the labor or services, or are primarily carried out in a specific portion of the residence, which portion is set aside as the location of the business;
  - \_\_\_\_\_ B. Commercial advertising or business cards as is customary in operating similar businesses are purchased for the business, or the individual or business entity has a trade association membership;
  - \_\_\_\_\_ C. Telephone listing and service are used for the business that is separate from the personal residence listing and service used by an individual who performs the labor or services;
  - \_\_\_\_\_ D. Labor or services are performed only pursuant to written contracts;
  - \_\_\_\_\_ E. Labor or services are performed for two or more different persons within a period of one year; or
  - \_\_\_\_\_ F. The individual or business entity assumes financial responsibility for defective workmanship or for service not provided as evidenced by the ownership of performance bonds, warranties, errors and omission insurance or liability insurance relating to the labor or services to be provided.

Contractor Signature

Date

**CONTRACTOR SIGNATURE:**

This contract may be signed in two (2) or more counterparts, each of which shall be deemed an original, and which, when taken together, shall constitute one and the same Agreement.

The parties agree the City and Contractor may conduct this transaction, including any contract amendments, by electronic means, including the use of electronic signatures.

I, the undersigned, agree to perform work outlined in this contract in accordance to the STANDARD CONTRACT PROVISIONS, the terms and conditions, made part of this contract by reference, and the STATEMENT OF THE WORK made part of this contract by reference; hereby certify under penalty of perjury that I/my business am not/is not in violation of any Oregon tax laws; hereby certify that my business is certified as an Equal Employment Opportunity Affirmative Action Employer and is in compliance with the Equal Benefits Program as prescribed by Chapter 3.100 of Code of the City of Portland; and hereby certify I am an independent contractor as defined in ORS 670.600.

**BergerABAM, Inc.**

BY: Thomas R. Wilcox

Date: 9/21/12

Name: THOMAS R. WILCOX

Title: VICE PRESIDENT



Contract No. \_\_\_\_\_

Contract Title: Tryon Creek Trunk Sewer Upgrade**CITY OF PORTLAND SIGNATURES:**By: n/a Date: \_\_\_\_\_  
Bureau DirectorBy: n/a Date: \_\_\_\_\_  
Chief Procurement OfficerBy: \_\_\_\_\_ Date: \_\_\_\_\_  
Elected Official

Approved:

By: \_\_\_\_\_ Date: \_\_\_\_\_  
Office of City Auditor

Approved as to Form:

By: James H. Van Dyke Date: 10/11/12  
Office of City Attorney CITY ATTORNEY

## ATTACHMENT A — SCOPE OF WORK

### City of Portland Environmental Services Tryon Creek Trunk Sewer Upgrade

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Project Name and Location: **Tryon Creek Trunk Sewer Upgrade**

<b>BES Project Manager</b>		<b>Consultant's Project Manager</b>	
Name:	Kurt Robinson, PE Project Manager City of Portland Environmental Services	Name:	Howard Wells, PE BergerABAM
Address:	1120 SW 5 <sup>th</sup> Ave., Room 1000 Portland, OR 97204	Address:	700 NE Multnomah St., Ste. 900 Portland, OR 97232
Phone:	(503) 823-7133	Phone:	(503) 872-4114
Email:	Kurt.robinson@portlandoregon.gov	Email:	Howard.wells@abam.com

This scope of work (SOW) describes the engineering, surveying, permitting, and public involvement services to be provided by the BergerABAM team (Consultant) for the project. The services Consultant provides will include geotechnical subsurface explorations, office studies, laboratory testing, geotechnical engineering analysis, topographic surveying, structural engineering, civil engineering, permitting, and public involvement/stakeholder relations. Performance of an upgrade alternatives analysis and preparation of construction cost estimates and contract documents, including drawings and specifications, will also be included in this SOW. Permitting services will include land use and environmental permit acquisition. Public involvement will include outreach coordination, stakeholder interviews, and public meetings. Services during the bidding phase are included, but services during construction (with the exception of public involvement services during construction, which are scoped herein) are not included in this initial SOW. Construction phase engineering and permitting services will be scoped following the 60% design deliverable, and will be included in this contract via amendment.

The City of Portland Environmental Services (BES) reserves the right to amend this SOW to include other project-related services as required. The Consultant will not begin any additional work unless and until the parties enter into an effective written amendment to the SOW.

## PROJECT DESCRIPTION

This project consists of a risk assessment to be performed regarding the 2500 linear feet of 30" diameter concrete sewer pipe that extends from the headworks of the Tryon Creek Wastewater Treatment Plant in Lake Oswego, Oregon, into the Tryon Creek State Natural Area. From the headworks, the sewer conduit alignment is generally oriented in a north-northwest direction for the first 800 feet, where it then passes under State Highway 43 (North State Street) in the roadway fill. The remaining 1700 feet of the sewer included in

this project then continues in a northwest orientation into the State Natural Area, and follows the alignment of Tryon Creek.

The partially elevated sewer conduit was constructed approximately 50 years ago. BES desires to eliminate leaks and perform a voluntary upgrade to this sewer line, but first seeks to understand the risks of failure.

Following the risk assessment, the Consultant will perform an upgrade alternatives analysis, which will identify an upgrade scheme that maximizes the benefit to the system for the available project funds. Following selection of the preferred upgrade alternative, the Consultant will produce contract documents and obtain the necessary land use and environmental permits to construct the project. Public involvement services, including stakeholder relations, public meetings and newsletters, will be performed at various stages throughout the project.

## **WORK TASKS:**

Consultant is responsible for all tasks, subtasks, and deliverables identified in this SOW unless specifically stated otherwise. Consultant will provide all labor, equipment and materials to manage, coordinate, and complete the work.

Engineering completed under this SOW must be performed under the direction of the appropriate professional registered in the state of Oregon. The professional who has provided the direct supervision of the Work will stamp all reports, maps, drawings and calculations. Consultant will perform a quality control review of all deliverables using Consultant's normal internal review and sign-off process.

## **TASKS AND DELIVERABLES**

### ***TASK 1 – PROJECT MANAGEMENT***

Consultant will perform Task 1 through the delivery of 100% Plans, Specifications, and Estimate (Tasks 1 through 6). Project Management for Task 7 will occur under Task 7 – Construction Services.

#### **Task 1.1 – Project Work Plan**

Consultant will prepare a project work plan, which will contain the following documents:

- Statement of Project Vision & Goals
- List of Critical Success Factors
- Scope of Services (see below for detail)
- Design Schedule
- Permitting Schedule
- Budget

- Team Organization/Resources/Responsibilities
- QA/QC Plan
- Communication Plan
- Contingency/Risk Management Plan
- Change Management Plan
- Sample weekly team coordination meeting status report/minutes

The permitting schedule will include the approximate time to prepare, negotiate, and obtain permits for the project, including any expected in-water work windows.

**Assumptions:**

- None

**Deliverables:**

- Draft and final Project Work Plan

**Task 1.2 – Project Management and Coordination**

The Consultant will manage and oversee all engineering design, permitting, and public involvement aspects of the Project, including all invoicing, progress documentation, and tracking and overseeing the current status of the Project, any unresolved issues, and the budget. Consultant will prepare monthly progress reports in BES format.

Invoices will be prepared in conformance with the billing rates and classification approved in the Contract. Invoices for Time and Materials work will include an attached breakdown of actual hours, identifying staff and classification by task and direct non-labor costs and any other information as detailed in the Contract. The monthly billing invoices will include a copy of the Project progress/status report.

Consultant will maintain project files to include SOW, all test results, survey files, engineering computations, conditions, assumptions, working drawings, meeting minutes, correspondence, memos, transmittals, etc. Compiling the project files will be an ongoing task, commencing upon receipt of the NTP, incorporating documents as they are generated, and continuing through the end of the Contract term. Project files will be available for review by BES at Consultant's office.

**Assumptions:**

- None

**Deliverables:**

- Monthly billing invoices

**Task 1.3 – Quality Assurance / Quality Control**

The Consultant will prepare a project-specific Quality Assurance (QA) Plan and will perform Quality Control (QC) reviews of all deliverables noted in this SOW. QA and QC will be prepared and performed according to the Consultant's established QA/QC protocol.

**Assumptions:**

- Subconsultants will perform Quality Reviews of their deliverables prior to transmitting them to the Consultant.

**Deliverables:**

- None. QA/QC documentation will be maintained in the Consultant's project files and will be available for review by request.

**Task 1.4 – Project Meetings**

The design team will hold bi-weekly teleconference meetings. It is anticipated that 20 such meetings will occur over a 48 week design period. Teleconferences will be one hour in duration. BES personnel may attend these meetings. Consultant will provide a conference call telephone number for use by the team. Not all members of the design team will attend each meeting. Only Consultant's Project Manager, Project Engineer, and Project Administrative Assistant will attend all 20 meetings.

**Assumptions:**

- 48 week design phase with no more than 20 design team coordination meetings.

**Deliverables:**

- Meeting agendas and minutes.

**Task 1.5 – Work Product Review Meetings**

Key members of the design team and permitting and public involvement staff will attend up to six meetings to receive review comments for major deliverables listed within this SOW. Not all deliverables will require a work product review meeting; some work product reviews will be received via printed comments.

**Assumptions:**

- Meetings will be held to receive review comments following BES's review of the 30%, 60%, and 90% PS&E documents.
- Up to three additional meetings will be held to receive BES's review comments of other deliverables to be determined.

**Deliverables:**

- Comment resolution forms for comments received at each Work Product Review Meeting.

**TASK 2 – PUBLIC OUTREACH**

The Consultant's Public Involvement Team will provide outreach and communication support for the project during alternatives analysis, design, and construction. Consultant staff will take the lead in informing and involving stakeholders during the pre-construction phase, and coordinate with BES outreach staff throughout construction. Tasks will include conducting interviews with key stakeholders, creating a public outreach plan, writing and designing informational newsletters and helping plan and implement public meetings.

## **Task 2.1 – Stakeholder Interviews**

Identifying the issues and insights of key stakeholders at the beginning of a project helps create an effective public outreach plan and establishes a sustainable relationship with these stakeholders from project design through construction. Consultant will meet with BES staff to identify up to eight key stakeholders representing the individuals and organizations most interested in and/or affected by the project. Consultant will develop a draft list of questions for stakeholder interviews and will provide this list to BES for review and comment. After receiving comments from BES, Consultant will finalize the list of questions to ask during interviews. Each interview will last up to 45 minutes. Consultant will prepare a summary of each interview and a compiled summary of interview findings once all eight interviews are complete. Consultant will schedule each interview at the time and place most convenient for the interviewee.

### **Assumptions:**

- BES will identify and provide contact information for up to eight key stakeholders for interviews.
- BES will review one draft of the interviews summary.
- Meet with the BES team for up to two hours to identify key stakeholders, develop interview questions, and determine basic outline for the public outreach plan.

### **Deliverables:**

- Prepare draft and final list of interview questions.
- Produce a draft and final stakeholder interview summary report.

## **Task 2.2 – Public Outreach Plan**

Following the stakeholder interviews, the next step in implementing public involvement is developing an action plan that sets goals, objectives and strategies to inform and engage key stakeholders, analyze potential issues of concern, and decide on key communication messages. BergerABAM will prepare a draft and final public outreach plan after conducting stakeholder interviews and meeting with the project team to review stakeholder feedback, gather staff insights, and establish measures for success. The plan will define actions to be taken to communicate with and involve interested parties from initial investigations through alternatives analysis, final design and construction.

### **Assumptions:**

- BES will identify roles, responsibilities and coordination protocol for public outreach work performed by internal outreach staff during construction.
- One two-hour meeting with BES staff to review the stakeholder interview findings, define key issues and messages to be addressed in the public outreach plan, and set preliminary timelines and responsibilities for implementing tasks such as newsletters and public meetings, and refine measures of success.
- Client will review two drafts of the outreach plan.



**Deliverables:**

- Draft and final Public Outreach Plan

**Task 2.3 – Design Phase Newsletters**

Consultant will provide draft and final copy, and draft and final design for an initial project newsletter/flyer. The flyer will be 8.5" x 11", printed both sides, and designed to be a self-mailer. BES will handle printing and mailing. The design will follow bureau graphic standards provided by BES. This initial flyer will be established as a template for future newsletter updates and used for a mailing announcing the first public meeting and as a handout at the public meeting at 30% design. Consultant will provide draft and final copy and draft and final design for two subsequent newsletter mailer/updates at the 60% and 90% phases. These will be produced to coincide with public meetings to review the selected design alternative and to inform stakeholders about final project design and construction. Updates would include content such as updated copy to reflect the most recent project stage, and new photographs.

**Assumptions:**

- BES will provide approved project information for newsletter content development.
- BES will provide BES/City design guidelines and necessary graphics such as the City and Bureau logos.
- BES will handling printing and mailing for all newsletters.
- Consultant will produce newsletters #2 and #3 as modifications of newsletter #1.
- One round of BES review will occur with each project newsletter

**Deliverables:**

- Draft and final copy for up to three project newsletters during the 30%, 60%, and 90% design phases
- Draft and final design for up to three project newsletters during the design phase
- One, camera-ready high resolution PDF of each newsletter for printing and mailing by BES. The Newsletter will be produced prior to the issuance of the Field Investigation Plan.

**Task 2.4 – Design Phase Public Meetings**

Consultant will provide support for conducting up to three public meetings during the project design phase (30%, 60% and 90% design as noted above). This support will include providing in-meeting materials such as flip charts, exhibit board graphics (up to six boards per meeting), pens, sign-in sheets and comment forms. Consultant will also moderate staff presentations and follow-up Q&A sessions if needed. Consultant will provide a draft and final summary of each meeting within five working days following each event.

**Assumptions:**

- BES will determine date, time and location of each meeting and reserve a venue for each.

- BES will issue a public notice/news release announcing each meeting.
- BES staff project team members will attend each meeting to represent the project.
- Consultant public involvement staff will attend a one-hour meeting with BES before each public meeting to develop a meeting plan and prepare meeting agendas.
- One round of client review and edits will occur for exhibit boards and meeting summaries.

**Deliverables:**

- Draft and final meeting plans and agendas.
- Attend and facilitate up to three, 2-hour public meetings.
- Prepare support materials including sign-in sheets and draft and final comment cards.
- Draft and final versions of up to 6 original graphic boards for the first public meeting and up to two additional, original boards for each of the following two public meetings.
- Prepare draft and final meeting summaries for each of three meetings.

**Task 2.5 – Construction Phase Public Outreach/Newsletters**

Consultant will provide draft and final copy, and draft and final design for an initial newsletter/flyer to announce the start of project construction. The flyer will be 8.5" x 11", printed both sides, and designed to be a self-mailer. BES will handle printing and mailing. Design will follow bureau graphic standards provided by BES. This initial flyer will be on template created for the design-phase flyers. Consultant will produce up to two additional update flyers for mailing and handouts at public meetings at key construction milestones.

**Assumptions:**

- BES will provide approved project information for newsletter content development.
- BES will provide BES/City design guidelines and necessary graphics such as the City and Bureau logos.
- BES will handling printing and mailing for all newsletters.
- Consultant will produce newsletters #2 and #3 as modifications of newsletter #1.
- All communication and outreach conducted by Consultant will be coordinated with BES in-house outreach staff.

**Deliverables:**

- Draft and final copy for up to three project newsletters during project construction (one client review for each).
- Draft and final design for up to three project newsletters during project construction (one client review for each).
- One, camera-ready high resolution PDF of each newsletter for printing and mailing by BES.

## **Task 2.6 – Construction Phase Public Meetings**

Consultant will provide support for conducting one public meeting during project construction. This support will include providing all necessary in-meeting materials such as flip charts, exhibit board graphics (up to six boards per meeting), pens, sign-in sheets and comment forms. Consultant will also moderate staff presentations and follow-up Q&A sessions if needed. Consultant will provide a draft and final summary of the meeting within five working days following the event.

### **Assumptions:**

- Consultant public involvement staff will attend a one-hour meeting with the client before the public meeting to develop a meeting plan and prepare meeting agendas.
- BES will determine date, time and location of the meeting and reserve a venue.
- BES will issue a public notice/news release announcing the meeting.
- BES staff will attend the meeting to represent the project.
- Consultant engineering, environmental and public involvement staff will attend and facilitate one 2-hour public meeting.

### **Deliverables:**

- Prepare support materials including sign-in sheets and draft and final comment cards (one review).
- Prepare draft and final meeting summaries for the meeting (one review).
- Draft and final versions of up to 4 original graphic boards for the public meeting (one review).

## **TASK 3 – PERMITTING**

### **Task 3.1 – Create Permit Matrix and Timelines**

In the preliminary phase of the project Consultant will prepare a matrix of the local, state, and federal permits expected of the project, key development thresholds that trigger the reviews, the expected review timelines, agency contact information, and a timeline for tracking the submittal and permit review throughout the project. This matrix will serve as a tracking mechanism for the project team to review and monitor the progress of permit application development and agency reviews throughout the project.

### **Assumptions:**

- None

### **Deliverables:**

- Permit matrix with up to 10 updates throughout the project

### **Task 3.2 – Streamlining Committee First Meeting**

Because proposed project activities are expected to involve the removal, repair, and installation of facilities in and adjacent to Tryon Creek, local, state, and federal environmental reviews will be necessary. While the project will occur in Lake Oswego and

not in the City of Portland, it is expected that BES, as project proponent, will utilize its permit streamlining process to convene the affected state and federal agencies (USFWS, DEQ, Corps, NOAA Fisheries, ODFW, DEQ and DSL) for early and consistent communication throughout the project and throughout the permit review process. Although the permit streamlining committee is typically only comprised of City of Portland, state, and federal agency staff, we recommend that City of Lake Oswego review staff are invited to attend the meetings so that all local permit requirements can be adequately considered and factored into the design and permitting approach.

Consultant will work with BES staff to prepare for and attend the first meeting of the permit streamlining committee. This meeting will be an opportunity to present the scope of the project, possible design scenarios, and learn of critical environmental and permitting considerations for each affected agency. It is expected that this meeting will be held while project alternatives are under consideration and that the input received from the agencies may ultimately influence the final design alternative that is selected.

Consultant will provide materials for the meeting (e.g., reports, figures) to BES in order for BES to supply those materials to the streamlining committee one week in advance of the meeting.

**Assumptions:**

- BES staff will take the lead in contacting and coordinating with agency staff to attend the streamlining committee meeting.

**Deliverables:**

- Consultant staff preparation and attendance at Streamlining Committee Meeting #1
- Preparation and distribution of meeting minutes

**Task 3.3 – Streamlining Committee Second Meeting**

In order to avoid multiple revisions or protracted agency discussions after submittal, Consultant will review draft copies of the JPA, BA, and essential fish habitat (EFH) analysis with agency staff in a second streamlining committee meeting that will serve as a pre-application meeting with the affected agencies. This meeting will be held before any final permit applications are submitted to the agencies. Consultant will provide a draft copy of the permit applications to agency staff at least one week prior to the streamlining committee meeting to allow adequate time for agency staff to review and provide comments at the meeting. Following this meeting, Consultant will make any necessary application and document revisions and then will submit the JPA, BA, and EFH applications and associated permit documents to the DSL and the Corps for review.

Consultant will provide materials for the meeting (e.g., reports, figures) to BES in order for BES to supply those materials to the streamlining committee one week in advance of the meeting.

**Assumptions:**

- BES staff will take the lead in contacting and coordinating with agency staff to attend the streamlining committee meeting.

**Deliverables:**

- Consultant staff preparation and attendance at one 1-hour permit streamlining committee meeting
- Preparation and distribution of meeting minutes to the project team

**Task 3.4 – Streamlining Committee Final Meeting**

After the second streamlining committee meeting, Consultant will make final edits to the Joint Permit Application materials and submit to the permit application to DSL and the Corps for review and distribution to other affected agencies. Consultant has included budget for one additional streamlining committee meeting during the permit review process. This final streamlining committee meeting is intended as an opportunity for agency staff to provide any preliminary draft permit conditions to the attention of the project team and also to comment on the proposed mitigation plan. This will be an opportunity for the project team to discuss and address any potential draft permit conditions before they are finalized in the permit approvals.

Consultant will provide materials for the meeting (e.g., reports, figures) to BES in order for BES to supply those materials to the streamlining committee one week in advance of the meeting.

**Assumptions:**

- BES staff will take the lead in contacting and coordinating with agency staff to attend the streamlining committee meeting.

**Deliverables:**

- Consultant staff preparation and attendance at one 1-hour permit streamlining committee meeting
- Preparation and distribution of meeting minutes to the project team

**Task 3.5 – Joint Permit Application**

The project team will develop design graphics for all stream restoration or resource compensation/mitigation of project impacts in support of the Section 404 Joint Permit Application (JPA) preparation by others. The design team will collaborate in development of stream restoration design and construction access graphics.

After the first streamlining committee meeting with agency staff and after design development plans have been completed for the project, Consultant will prepare a Joint Permit Application (JPA) to address any anticipated wetland and stream impacts associated with the project. The JPA form will be submitted to both DSL and the Corps for application of the Section 404 Nationwide Permit, Section 401 Water Quality Certification, and DSL Removal/Fill permits.

The Corps' Section 404 Nationwide permit application will include necessary Corps' forms, background information in the form of supporting documents (delineation report, mitigation plan, biological assessment and others), and associated graphics. This task assumes that the project is eligible for a Nationwide #12 permit that addresses utility line construction and

limits permanent impacts to waters of the US (wetlands and streams) to less than ½ acre. Permanent wetland impacts include adversely affecting wetlands by filling, flooding, excavation, or drainage. Temporary wetland impacts are regulated by the Corps through its Nationwide permitting process, but are not included in the ½-acre wetland threshold. Wetlands that are temporarily filled, flooded, excavated, or drained, but restored to pre-construction contours and elevations after construction, are not included in the measurement of wetland loss. As noted elsewhere in this scope of services, Consultant will prepare for and attend a second streamlining committee meeting with agency staff in which we will discuss a draft copy of the JPA and supporting documentation with agency staff. This streamlining committee meeting will serve as the pre-application conference with regulatory agencies. After the streamlining committee meeting, Consultant will finalize the JPA and will submit the permit and documents to DSL and the Corps. Consultant will maintain consistent communication with agency staff throughout their review of the application. Prior to final permit approvals and issuance of any permit conditions, Consultant anticipates a final streamlining committee meeting in which the project team can discuss final permit conditions and the mitigation plan with staff prior to the permits becoming final. Applicants receiving a Section 404 permit from the Corps are required to obtain section 401 water quality certification from DEQ. In Oregon, DEQ has authority to review Section 401 water quality certification requests. Under this task, Consultant will coordinate with DEQ for the issuance of the permit.

The JPA packet will also be submitted to DSL for a removal/fill permit request. This removal/fill permit regulates activities that involve fill and/or removal of more than 50 cubic yards in waters of the state (wetlands and waterways) or any amount of removal/fill in a stream designated as essential salmon habitat (e.g. Tryon Creek). Under this task, Consultant will coordinate with DSL for the issuance of the permit.

Through the streamlining committee review process and through direct agency contact, Consultant will provide consistent communication with the agency staff to ensure that the project reviews are occurring in a timely manner. When requested, Consultant will promptly respond to additional information needs requested by the affected agencies.

**Assumptions:**

- Use of 30 percent design drawings is sufficient to initiate draft permit documents and determine project impacts to wetlands and other regulated waters of the US (Tryon Creek and/or tributaries).
- No design changes will be made following 30% design that would result in changes to project impacts and mitigation requirements.
- Engineers will provide information and graphics regarding the stormwater site and erosion control plans for the water quality certification.
- Consultant is not responsible for permit application fees.
- One round of client review will occur per application submittal.
- Permit modifications to address design changes directed by the client or other unforeseen circumstances are not included.

- Fee includes up to 8 hours of associate scientist coordination with agency staff (not including streamlining committee meetings) including but not limited to Corps, DSL, DEQ, and ODFW staff.
- No new archaeological or cultural resource investigations will be required for the Oregon State Historic Preservation Office (SHPO) Section 106 consultation with the Section 404 permit. If SHPO requires additional information regarding potential cultural resources within the project area, this information will come from past studies conducted by the Oregon State Parks Department, City of Portland, City of Lake Oswego or other available sources.

**Deliverables:**

- Joint Permit Application, including necessary forms, area map, and supporting information.

**Task 3.6 – Biological Assessment /Essential Fish Habitat Analysis**

At the same time that we are preparing the JPA, Consultant will prepare a biological assessment (BA) and EFH analysis for the project. These documents are required for the Corps Section 404 permit for compliance with Section 7 of the Endangered Species Act (ESA) and the Magnuson-Stevens Fisheries Conservation and Management Act (Magnuson-Stevens Act). The BA will assess project impacts to listed species and critical habitat and those proposed to be listed. The EFH analysis will assess project impacts on species with commercial and recreational importance that are federally managed under a fishery management plan. Compliance with the ESA and Magnuson-Stevens Act is triggered by the need to obtain a CWA Section 404 permit, which constitutes a federal nexus. Since a Section 404 permit is anticipated from the Corps for permanent wetland and/or stream impacts, they will be the lead agency for compliance with the ESA and Magnuson-Stevens Act and it is also expected that the Corps will lead the NEPA review of the proposed project.

Consultant staff will research available habitat studies for Tyron Creek and will work with ODFW and NOAA Fisheries staff to determine which listed and proposed fish and wildlife species are expected to occur in the action area. Consultant will conduct a field evaluation of the habitat along the corridor to identify sensitive natural resources, coordinate with local habitat biologists from ODFW to assess the presence of listed fish, and review previously prepared environmental information to determine the presence, or potential presence, of ESA-listed species and critical habitat along the corridor.

Project plans will be reviewed to determine and evaluate construction methods and project elements that may have potential effects on ESA-listed species and critical habitat. Based on the information obtained in the field and available literature, Consultant will prepare a BA for review by the Corps and consultation with the USFWS and NMFS.

**Assumptions:**

- This scope of work and fee estimate does not include implementation of formal species-specific protocol surveys to determine species presence.

**Deliverables:**

- Preparation of one draft BA and draft EFH for Client review (one hard copy and one electronic copy)
- Preparation of one final BA and final EFH based on Client comments (three hard copies and one CD)

**Task 3.7 – Lake Oswego Permitting**

The project area is within the City of Lake Oswego, which has adopted the Tryon Creek State Park as a Resource Protection (RP) district, regulated under Section 50.05.010 of the Lake Oswego Code (LOC). Routine repair and maintenance of utility projects is exempt from review under LOC Section 50.05.010. As a consequence, it is assumed that a Development Review application requesting review and approval for project elements in the Sensitive Lands Overlay District will not be required for the project. However, Lake Oswego regulates the removal or topping of any trees, and a Type 2 tree removal permit as regulated under Article 55.02 of the Lake Oswego Municipal Code will be prepared for the project.

After preliminary design plans are available for the preferred alternative, Consultant will prepare for and submit a pre-application conference request with the City of Lake Oswego to review the proposed project with City department staff. This meeting will be an opportunity to receive comprehensive input from City engineering, environmental services, and planning staff to outline the specific details that they need to see with the local permit application. Following the pre-application meeting, Consultant will receive and send formal notes from the pre-application conference to the project team staff to review. At approximately the 30% design stage and after mitigation concepts are reviewed by the permit streamlining committee in the second streamlining committee meeting, Consultant will finalize and submit the tree cutting permit and development review applications.

The Lake Oswego City Manager has the authority to require project applicants to hold a neighborhood meeting prior to submittal of a permit application. It is expected that, if a neighborhood meeting is required in this instance, that it will be combined with the first public meeting on the project, which would occur at the 30% design phase.

Consultant will compile the necessary permit documents for submittal to the City. This will include a permit application form, application narrative, field investigation report (as prepared under Task 4.8), and project plans which will include mitigation plans as submitted with the JPA (Task 3.8). Consultant will coordinate with City staff through the initial review of the application to ensure that all required materials are submitted. Upon the completion of City staff review of the application, we will request a draft copy of the staff report to distribute to the team for review and comment, if the City is amenable to the request. This will help ensure that all information in the final staff report and conditions of approval accurately reflect the project plans and intent for project implementation. Consultant will hold a meeting with the client and project team to review the draft staff report and will compile and send team edits to the City for incorporation into the final staff report. Upon receipt of the final staff report Consultant will distribute copies of the document to the project team for reference and incorporation into any final construction documents and bid specifications.



**Assumptions:**

- Permit application fees are the responsibility of BES.
- No neighborhood meetings will be conducted under this task. If a neighborhood meeting is required by the City prior to permit submittal, the public meeting held at the 30% design stage will satisfy this requirement.
- BES reviews of the permit application and project narrative will be limited to one round of review.
- Any efforts to address project appeals, if filed, will be handled under a separate scope of services.

**Deliverables:**

- Draft Tree Cutting Permit Application Form provided to BES for review
- Final Tree Cutting Permit Application Form provided to BES
- Draft Project Narrative provided to BES for review
- Final Project Narrative
- Tree Cutting Permit Plans
- Preparation and attendance of two Consultant staff at a meeting to review and comment on a draft City staff report
- Distribution of final staff report and decision to the project team

**Task 3.8 –Preliminary Wetland / Stream Mitigation Plan**

A mitigation plan will be required to accompany the application for the Corps Section 404 and DSL Fill/Removal permits. Consultant will complete engineering plans showing the amount of impact to any wetlands, its associated buffer, and other priority habitats, based on Corps and County requirements, and will calculate the quantity of mitigation that will be required.

Consultant will coordinate closely with BES and project team regarding options for performing mitigation that could include mitigating impacts within the Tryon Creek State Park or possibly at an approved wetland mitigation bank. Alternatives for project mitigation will be presented in concept at the first permit streamlining committee meeting with agency staff to obtain input regarding preferred mitigation strategies. Following this discussion and after a preferred design alternative is selected, Consultant will present a draft mitigation plan to the permit streamlining committee for review at the second permit streamlining committee meeting. Any edits or suggestions provided by the permit streamlining committee will be considered and incorporated into the final mitigation plan design that will be submitted with the JPA packet.

The mitigation plan will be based on the acreage of wetlands, stream, and/or regulated habitats to be impacted by project activities. The mitigation plan will be based on the wetland/stream impacts identified in the 30% design plans.

The conceptual mitigation plan will be prepared in accordance with Corps, DSL, and City of Lake Oswego mitigation standards. The mitigation plan will include a description of the necessity for the permitted action, an ecological assessment of the proposed mitigation area, conceptual plans for the area of mitigation, a description of performance standards, and a monitoring plan to gauge the success of the mitigation. The wetland mitigation plan will include conceptual planting plans. The preparation and submittal of the mitigation plan to the appropriate agencies also is included.

**Assumptions:**

- Permanent impacts to wetlands will be less than 0.50 acre and the project will be eligible for permitting under Nationwide Permit #12.
- Mitigation can be implemented on-site or at an approved wetland mitigation bank and additional wetland delineation and wetland concurrence for off-site locations are not required.
- No new archaeological or cultural resource investigations will be required for the Oregon State Historic Preservation Office (SHPO) Section 106 consultation with the Section 404 permit. If SHPO requires additional information regarding potential cultural resources within the project area, this information will come from past studies conducted by the Oregon State Parks Department, City of Portland, City of Lake Oswego or other available sources. Hours for meetings with agencies is reflected in Task 3.7 above. Additional agency coordination will be via e-mail and telephone.

**Deliverables:**

- Preparation of the draft mitigation plan consisting of a narrative and conceptual drawings to BES and agencies.
- Preparation of the final mitigation plan based on BES and agency personnel comments.

**Task 3.9 – Construction Easement Identification**

During the final design phase, the Consultant will identify locations that will be required by the construction contractor for access to the site. These locations will be shown on the contract documents. One likely access location has been identified at this time: the Public Storage facility on the east side of State Street, just south of the sewer alignment. This task provides for limited interaction between the Consultant team and affected property owners. The full amount of effort is unknown at this time and is therefore limited to the hours shown on the fee estimate spreadsheet. Some likely activities are listed in the assumptions below. Should the actual effort required exceed that shown on the fee estimate spreadsheet, Consultant will inform BES.

**Assumptions:**

- Consultant design team will attend one four-hour meeting with City surveyors (PBOT) on site, to walk the project area and identify potential easement limits and environmental flagging to be mapped.
- PBOT will be responsible for all survey office and field work required to define construction easements.

- BES will perform all right-of-way services, including property negotiation and acquisition.
- Consultant will provide up to 8 hours of engineering time and 8 hours of Associate Scientist time for access road and wetland identification.
- Consultant will provide up to 16 hours of Associate Scientist time to update and reissue wetland report.
- Consultant will provide up to 4 hours of time for notification of affected property owners.

**Deliverables:**

- Records of conversations with affected property owners.
- Amendment to wetland assessment report produced as part of Task 4.7.

**TASK 4 – FIELD INVESTIGATION**

The Consultant will plan for and conduct field investigations to gather data for use by the project team under this task. The goal of this task is to gather all data needed to accurately formulate and compare alternate upgrade schemes. The team will attempt to minimize disruption to the natural environment during the various field investigation activities. The Consultant will create an investigation plan for review and comment by BES and their selected reviewers. The results of the field investigations will be compiled into a single report.

**Task 4.1 – Low Impact / Investigation Charrette**

Consultant staff will conduct a project team charrette to discuss low impact field investigation techniques that will be used for site investigations. The findings from this charrette will be incorporated into a Field Investigation Plan as discussed in Task 4.2.

At this charrette, the team will also discuss general impacts related to the hazard upgrade and pipe and manhole rehabilitation techniques that could be used during the construction phase of the project. These techniques will be examined in light of the “low-impact” goals of the project

**Assumptions:**

- Minimizing impact to the natural environment is important, but there may be a price threshold at which low impact techniques become impractical.
- BES natural resource staff and BES engineering staff will participate in the low-impact charrette in order to provide guidance to the Consultant regarding the practicality of the low-impact techniques discussed.
- Charrette will be held at the Consultant’s office and will be limited to four hours in duration.

**Deliverables:**

- Meeting summary memorandum.

#### **Task 4.2 – Field Investigation Plan**

Consultant will prepare a Field Investigation Plan prior to commencing field investigations. The Field Investigation Plan will include a detailed description of work with responsible parties identified, access and egress locations, a contact list, and safety procedures. The Field Investigation Plan will identify key elevations, cross-sections, or other geomorphic locations required for survey or analysis. The final Field Investigation Plan will include a letter from BES authorizing the Consultant to perform the work.

##### **Assumptions:**

- BES will facilitate obtaining authorization to perform the field work from property owners and/or jurisdictions.
- Unless noted otherwise in this section, no permits will be required to perform the field work.

##### **Deliverables:**

- Draft and final Field Investigation Plan in Adobe pdf format.

#### **Task 4.3 – OHWM & Wetland Delineation**

In this phase, Consultant will identify and flag the ordinary high water mark of Tryon Creek and any tributaries within areas of potential construction activities, which are assumed to occur within approximately 100-foot corridor along the approximately 2,500 lineal feet of the existing pipeline. While in the field, Consultant wetland scientists will identify, flag, and assess the limits of wetlands adjacent to the pipeline. Consultant will also note any trees, plants, or habitat of significance within the project corridor. Field flagging will be marked and noted so that they can be surveyed by the survey subconsultant and incorporated into the field survey for the project. Areas where no construction activities are anticipated will be omitted. The wetland delineation will be conducted in accordance with the USACE Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region, Version 2.0 (May 2010) and with Lake Oswego standards found in LOC 50.07.004.8(d).

The first step to the delineation will be to research background information such as soil maps, topographic maps, National Wetland Inventory maps, recent and historic aerial photos, and pre-existing wetland and or stream assessments or delineations (if available). These will assist in determining the likelihood of jurisdictional wetlands occurring within the project area. During field investigations, Consultant will collect the appropriate data, determine the wetland boundaries, and flag them in the field to be surveyed and then verified by DSL and the Corps. Consultant will attend one site visit (up to 4 hours in length) with the Corps, DSL and Lake Oswego and other regulatory staff to review the wetland and stream delineated boundaries and any other sensitive features noted through our field assessment.

**Assumptions:**

- Wetland delineation and field survey will occur in areas where construction is anticipated, which will be limited to no more than a 50-foot off-set of each side of the existing pipeline.
- Construction staging will occur within the 50-foot off-set of the existing pipeline.
- The delineation fieldwork will be performed using the Corps routine wetland determination method.
- Professional land surveying for recording the wetlands and OHWM boundaries will be completed by the Consultant (Bluedot Group).

**Deliverables:**

- Flagging wetland/upland and stream boundaries in the field.
- Attendance by one Consultant staff member at one field meeting (up to 4 hours in length) with regulatory staff to review wetland and stream boundaries.

**Task 4.4 – Geotechnical Reconnaissance**

Consultant will review existing geotechnical information for the project area, available published literature, and other sources as necessary to become familiar with the geology of the project area. Much of this information is available in Consultant's files.

Consultant will complete a site visit to observe surface conditions and available access conditions. During the site visit, geologic conditions at the pipe and evidence of obvious erosional scour will be documented. Relative hardness of intact basalt rock will be estimated with a geologist hammer and other field classification methods. The shear strength of in-place fine-grained soil will be measured at various locations using a hand-held Torvane shear device. Three grain size evaluations will be completed along the project to assist with the scour evaluation. Six to eight hand-auger borings will be advanced using manually powered tools near sewer foundation locations with relatively soft, fine-grained soils to evaluate subsurface conditions. Three of the borings will be advanced between Highway 43 and the Treatment plant. Soil samples from the hand auger borings will be returned to the Consultant's laboratory for natural water content testing.

**Assumptions:**

- Soil cuttings will be replaced within the soil borings after completion.
- A permit will not be required for geotechnical work. However, Consultant will prepare a brief work plan for review by the project team, BES, and appropriate resource agencies. This work plan will be included in the Field Investigation Plan.

**Deliverables:**

- The observed conditions, geotechnical exploration boring logs, and field and laboratory test results will be documented in the draft and final geotechnical reports. See task 4.7 below.

#### **Task 4.5 – Structural Condition Assessment**

During the field investigation, Consultant will assess the general structural condition of the sewer pipeline and support structures. The condition assessment will be limited to portions of the structure that are readily accessible. No moss, lichens, ivy, soil, or other obstructions will be removed from the structural elements in order to observe the condition. Because of the elevated location of the manholes, the project team will only remove manhole lids for purposes of observing the interior in the near vicinity of the manholes when the Consultant deems it to be safe to do so.

The concrete pipe and concrete and steel structural elements will be observed. Cracking will be noted where observed when the cracks measure greater than 0.06 inch in width. Spalling, delamination, scaling, or other damage will be noted where observed. Steel members and connections to concrete will be examined for visible deformations and deficiencies. Undermining of foundations due to scour or other reasons will be noted where observed. Non-destructive testing (hammer sounding) may be used on portions of the structure that exhibit deficiencies.

The Consultant will also examine the pipe and manholes for evidence of leaks. Suspected leaks will be noted in the condition assessment. BES staff will monitor noted leaks, and this data will be provided to the Consultant when available.

#### **Assumptions:**

- A full-length interior condition inspection will not be conducted by the Consultant.
- BES to provide CCTV inspection and interior pipe condition score.
- Destructive testing or sampling will not be conducted.

#### **Deliverables:**

- Structural Condition Assessment results to be included with the Field Investigation Report as part of Task 4.8.

#### **Task 4.6 – Survey Control, Topo, Hydraulic Cross Sections, Environmental Delineation and Geotechnical Reconnaissance Mapping**

*Survey Control.* Consultant will establish a minimum of three permanent monuments being either rebar and plastic cap or brass monument epoxied into concrete. The control will be referenced vertically to the City of Portland Vertical Datum and horizontally to the Oregon State Plane Coordinate System, North American Datum 1983, North Zone and scaled to the ground using an average combined scale factor.

*Topographic Mapping.* West of Highway 43, Consultant will map the top elevated pipe, manhole structures, support columns, and ground profile of the pipe alignment at a minimum of 50-foot intervals. In addition, any points of concern identified by the Consultant team will be located. A full ground survey will be made from the manhole south of the abandoned telephone cable crossing west to the end of the encasement of the elevated sewer system and the creek to 25 feet beyond the creek banks.

East of Highway 43, Consultant will map the top of elevated pipe, manhole structures, pipe support columns, and ground profile of the pipe alignment at a minimum of 50' intervals between the highway and the treatment plant.

*Hydraulic Cross Sections.* Consultant will map the profile of the creek and cross sections at 50 foot intervals at scour areas including an additional 200 Linear Feet (LF) up and down of the scour limits (assumed 1000 LF).

*Environmental Delineation and Geotechnical Reconnaissance Mapping.* Consultant will map the delineated Ordinary High Water Mark in the scour area (assumed 2000 LF). Bluedot will map the geotechnical reconnaissance points (assumed up to 8 total).

**Assumptions:**

- Scour area is approximately 1000 LF.

**Deliverables:**

- Survey Control Report (to be included in Field Investigation Report).
- CAD Basemap in City of Portland's CAD standards (Consultant team internal deliverable only; will be transmitted to BES at completion of project).

**Task 4.7 – Geotechnical Report (Draft and Final)**

Consultant will perform geotechnical analysis for soil- and rock-related foundation mitigation design criteria. Slope stability will be evaluated for the sewer and proposed construction access roads, and construction considerations, including earthwork. Consultant will summarize and present the geotechnical design analysis and recommendations in the geotechnical report.

Consultant will prepare draft and final geotechnical reports that describe the work accomplished and present the results of the various tests and office studies. The draft and final geotechnical reports provided will include any or all of the following items as applicable to the Project:

- Site plan and vicinity map;
- Logs of borings;
- Results of field classification and laboratory tests;
- Discussion of regional and site-specific geology, including landslide hazards;
- Discussion of general site surface and subsurface conditions encountered;
- Guidelines for earthwork construction, including recommendations for site preparation, fill placement, and compaction;
- Recommended cut and fill slopes for both temporary excavations and permanent conditions;
- Mitigation of deleterious/unsuitable soil or fill conditions, if appropriate; and
- Geotechnical mitigation criteria for landslides.
- Results of grain size evaluation for scour report

**Assumptions:**

- None

**Deliverables:**

- Three copies of the draft geotechnical report for review (to be included in the Field Investigation Report in Task 4.8).

- Five copies and electronic file of the final geotechnical report.

#### **Task 4.8 – Field Investigation Report**

Consultant will prepare a technical report that summarizes the work performed and the findings of the field investigation. The Field Investigation Report will include the Survey Control Report, Wetland Delineation Report, Structural Condition Assessment including identification of suspected leaks, and draft Geotechnical Report.

Consultant will compile the data collected in the field into wetland data sheets and summarize the results in report form. Pertinent records concerning wetland alterations and site hydrology will be evaluated as required by the delineation method. Consultant will also assess the on-site wetlands using the Oregon Rapid Wetland Assessment Protocol (Adamus et. Al. 2009). Finally, the field investigation report will include all graphics required for a concurrence determination by the Corps and DSL.

#### **Assumptions:**

- None

#### **Deliverables:**

- Draft copy of field investigation report to the Client for review
- Final field investigation report based on Client comments (one hard copy for each permitting agency, and one hard copy and one electronic copy to the Client).

### **TASK 5 – ALTERNATIVES ANALYSIS**

Following the completion of Task 4 – Field Investigation, the Consultant team will conduct a risk assessment and alternatives analysis to attempt to quantify the risk of pipeline failure under seismic and landslide events and hydraulic scour, and to examine potential mitigation schemes. Consultant will also present alternative pipe and manhole rehabilitation schemes for the purpose of identifying the most appropriate method to eliminate leaks.

#### **Task 5.1 – Risk Assessment**

The American Lifelines Alliance *Wastewater System Performance Assessment Guideline*, June 2004 document will be used as the criteria to assess the performance of the pipeline under the hazards of earthquake, landslide, and hydraulic scour. Consultant will produce a technical memorandum entitled Tryon Creek Sewer Risk Assessment Report for review and comment by BES. Should failure of the pipeline due to its general structural condition be identified in the Field Investigation task, it will be discussed in the Risk Assessment task.

#### **Assumptions:**

- Only earthquake, landslide, and scour hazards will be examined.
- General condition deficiencies will not be included in risk assessment unless warranted by observed conditions.
- Hazard Assessment Method will be “Intermediate” level



**Deliverables:**

- Risk assessment draft and final technical memorandum

**Task 5.2 – Alternatives Analysis**

Based on the results of the Risk Assessment task, the Consultant team will analyze alternate design schemes intended to mitigate the risk of pipeline failure. Initially, the Consultant will consider several mitigation schemes, but will quickly narrow the field of alternatives to three plus the “do nothing” alternative. We assume that BES staff will facilitate this winnowing of the field of possibilities in the interest of using their experience to determine likely acceptable alternates.

The alternatives analysis will consider only schemes intended to mitigate the risks identified in the Risk Assessment task. Alternative designs related to the removal of the cable crossing from within Tryon Creek, or related to improving the “fish trap” situation at the encased pipeline will not be included in the Alternatives Analysis. As these are project goals outside the scope of the pipeline failure risk, these two issues will be addressed in final design. Consultant anticipates that BES will desire to use these two habitat improvements to mitigate any identified impacts due to construction of the eventual sewer upgrade.

The Alternatives Analysis will establish a comparable “cost-benefit” ratio that considers the following project features:

- Habitat Disturbance
- Visual Impacts
- Construction Flexibility (Constructability)
- Geotechnical and Structural Effectiveness
- Pipe and Manhole Rehabilitation Effectiveness
- Design Life
- Construction Duration
- Construction Cost
- Permitting Implications
- Anticipated Environmental Mitigation and Cost

For the purposes of this project, the Consultant will determine a range of the “cost of failure” of the sewer trunk. This cost of failure range will be the cost to perform emergency temporary repair followed by permanent repair to the system over a limited number of failure scenarios, e.g., from single point failure in an easily accessible area to multi-segment failure in an area that is difficult to access. The precise definition of “cost of failure” will be determined at the onset of the alternatives analysis. The Consultant anticipates that the “cost of failure” will be the denominator in the cost/benefit ratios determined during the alternatives analysis process.

Consultant anticipates that BES staff will be involved throughout the Alternatives Analysis process and will participate in up to three 3-hour meetings with members of the design team in order to build consensus regarding the alternates and the evaluation criteria.

Consultant environmental staff will prepare a technical memorandum that outlines the key permitting thresholds, important biological characteristics of the site, and possible impacts of construction. This effort will lay the groundwork for the permitting matrix that will evaluate the extent of environmental effects of the project as described under Task 5.2.

A (possibly separate) alternatives analysis will also consider alternate pipe and manhole leak rehabilitation schemes.

**Assumptions:**

- Only three alternative upgrade schemes plus the “do nothing” alternate will be subject to the cost-benefit analysis described above.
- Up to three 3-hour meetings will be held with BES staff to refine alternatives and selection criteria

**Deliverables:**

- Technical memorandum outlining key permitting thresholds and critical considerations for permitting

**Task 5.3 – Alternatives Analysis Matrix**

Consultant will complete a spreadsheet that identifies the project alternatives under consideration and will identify all decision-making criteria analyzed in the Alternatives Analysis task, including effectiveness of pipe and manhole rehabilitation for the purpose of eliminating leaks. This spreadsheet will be expanded to a meeting-scale graphic suitable for presentation or projection. This matrix will provide a basis for comparing the design alternatives and will inform the alternative selection process. It is also intended that the matrix be a clear and easy to understand communication tool for both internal and external stakeholders.

**Assumptions:**

- None

**Deliverables:**

- Hazard upgrade alternatives analysis matrix.
- Leak rehabilitation alternatives analysis matrix.

**Task 5.4 – Pre-design Report**

Consultant will prepare a Pre-design Report that summarizes the Risk Assessment and Alternatives Analysis tasks in technical memorandum format. The pre-design report will include the Alternatives Analysis Matrix. Consultant will provide draft and final copies of the report. The report will not contain a recommended alternative, but the Consultant will work with BES to facilitate a selection.

**Assumptions:**

- BES will select an alternative to advance to the Final Design phase upon receipt of the final Pre-design Report.

**Deliverables:**

- Draft and final Pre-design Report

**TASK 6 – FINAL DESIGN**

Consultant will advance the upgrade scheme selected at the conclusion of the Alternatives Analysis task to 100% construction contract documents as part of the Final Design phase. Construction contract documents will consist of plans, technical specifications, and estimate of probable construction cost (PS&E). In addition, the Consultant will produce a Final Design Report, conduct constructability reviews following the 30%, 60%, and 90% PS&E submittals, and will provide limited services during the bidding phase.

Final Design will include construction PS&E for the following project elements:

- Upgrade to sewer infrastructure to mitigate seismic, landslide, and scour risks.
- Repair of sewer pipe and supporting structures due to facility deterioration for the purposes of eliminating leaks and extending the useful life of the system if deemed appropriate by previous tasks.
- Removal of abandoned utilities that cross Tryon Creek (one location).
- Improvement of fish habitat within the area of the “fish trap” adjacent to the encased pipeline.
- Stream channel/natural resource restoration or improvement identified as mitigation for scour repair/prevention measures implemented.
- Revegetation of areas disturbed by construction access and activity.

**Task 6.1 – 30% Design (PS&E)**

The Consultant will develop preliminary construction documents to the 30% design stage. 30% documents will be submitted to BES for review and comment, and to assist in the permit process. Review documents will consist of drawings, a specification outline, and a preliminary opinion of probable construction cost.

**Assumptions:**

- Alternative selected at the conclusion of the previous task will be the only alternative advanced to the 30% stage and beyond.
- Environmental mitigation requirements addressed by Final Design will be limited to removal of the utility crossing, improvement of the aquatic habitat by removing the “fish trap,” revegetation of areas disturbed by construction access and activity, and stream and natural resource restoration associated with scour repair activities.

**Deliverables:**

- 30% design documents in Adobe pdf, MS Word, and MS Excel formats.

**Task 6.2 – 60% Design (PS&E)**

The Consultant will develop construction documents to the 60% design stage. 60% documents will consist of plans, specifications, a bid item list, and an opinion of probable construction cost.

**Assumptions:**

- Same as for Task 6.1.

**Deliverables:**

- 60% design documents in Adobe pdf, MS Word, and MS Excel formats.

**Task 6.3 – 90% Design (PS&E and Draft Final Design Report)**

The Consultant will develop construction documents to the 90% design stage. 90% documents will consist of plans, specifications, a bid item list, and an opinion of probable construction cost.

**Assumptions:**

- Same as for Task 6.1.

**Deliverables:**

- 90% design documents in Adobe pdf, MS Word, and MS Excel formats.

**Task 6.4 – 100% Design (PS&E and Final Design Report)**

The Consultant will develop construction documents to the 100% design stage. 100% documents will consist of plans, specifications, a bid item list, and an opinion of probable construction cost. 100% documents will be final documents ready for bid. No BES review will be conducted after submittal of 100% documents. 100% documents will be sealed and appropriate for jurisdictional engineering review.

**Assumptions:**

- 100% PS&E submittal is final, ready for bid documents
- There will be no revisions to the documents after submittal of 100% PS&E and prior to bidding, except to respond to City of Lake Oswego engineering plan review comments.
- Same as for Task 6.1.

**Deliverables:**

- 100% sealed design documents in Adobe pdf, MS Word, and MS Excel formats.
- 100% sealed design documents in full-size paper copies. Quantities sufficient for submittal to City of Lake Oswego.
- 100% sealed design documents following City of Lake Oswego plan check for inclusion in bidding documents.

### **Task 6.5 – Constructability Reviews at 30%, 60% & 90%**

Following delivery of each of the 30%, 60%, and 90% PS&E documents, Consultant will organize a constructability review of the project. The intent of this review will be to confirm the logistical feasibility of the design, to identify the likely methods of construction to aid in preparing project narratives for permitting purposes. Another goal of the constructability reviews will be to align the contract documents with the BES construction management team's expectations in order to produce a highly coordinated, biddable, and manageable set of contract documents.

#### **Assumptions:**

- BES staff will participate in the Constructability Reviews. BES natural resources staff will participate in at least the Constructability Review held at the 30% stage. BES construction management staff will participate in at least the Constructability Review held at the 90% stage.
- Constructability reviews will be held in meeting format.
- Up to three meetings will be held; each meeting is limited to 2 hours in duration.

#### **Deliverables:**

- Constructability Review meeting minutes.

### **Task 6.6 – Assistance During Bidding**

During the bid phase of the project, Consultant will assist BES by responding to bidder inquiries and contributing to addenda that BES may issue. Consultant assumes that Assistance During Bidding will require very little effort on the part of the Consultant and is limited to the number of hours shown on the fee estimate spreadsheet. Preparation of a conformed set of construction documents or an "issued for construction" set is not included in this scope of services.

#### **Assumptions:**

- Level of effort is limited to the hours shown on the fee estimate spreadsheet.
- Issuance of a conformed set or "issued for construction" set of documents is not included in this scope of services.

#### **Deliverables:**

- Responses to bidder inquiries and assistance with preparation of addenda as required, but limited to the number of hours shown on the fee estimate spreadsheet.

## **TASK 7 – CONSTRUCTION SERVICES**

Engineering, public involvement, and environmental services during construction will be required. Public involvement services during construction and included in this scope of services under Task 2 – Public Outreach. Engineering and environmental services are not included in this scope of services but will be included as an amendment to this contract at a later date. Following the submittal of the 60% design documents, the

Consultant will identify the scope of the construction phase services and will submit an addendum to this SOW that will become Task 7 – Construction Services.

END OF STATEMENT OF WORK

RFP No. BES128 - Tryon Creek Trunk Sewer  
Evaluation Committee Scores - June 7, 2012

<b>Firm Name</b>	<i>Description of Firm (10)</i>	<i>Experience (20)</i>	<i>Team (20)</i>	<i>Underst./Approach (35)</i>	<i>Diversity (15)</i>	<i>TOTAL</i>
Brown and Caldwell	40	79	81	138	51	389
Berger Abam	34	77	80	150	59	400
Degenkolb Engineers	34	80	82	139	44	379
Murray, Smith & Associates	40	83	56	137	58	374

BergerABAM																									
ATTACHMENT B - FEE ESTIMATE																									
Title: Tryon Creek Trunk Sewer Upgrade																									
Date: September 18, 2012																									
Hourly Rate		BergerABAM Staff Designation																							
																			Sub-consultant	Sub-consultant	Sub-consultant	Sub-consultant			
			Sr. QA/QC Project Manager	Sr. Project Manager VIII	Sr. Structural Engineer	Sr. Civil Engineer	Engineer III	Lead CAD Operator	Natural Resources Team Leader	Senior Planner	Sr. PI Project Manager	Associate Scientist	Associate Env. Scientist	Associate Planner	Scientist III	Strategic Comm. Project Manager	Senior Technical Editor	Project Admin Assistant							
		Officer																	Henderson	GRI	PLI	Bluedot	Expenses	Totals	
	\$223	\$222	\$179	\$143	\$157	\$98	\$94	\$163	\$132	\$115	\$97	\$79	\$87	\$65	\$98	\$101	\$58								
TASK	TASK DESCRIPTION																								
1	Project Management	7	24	100	42	4	4	2	16	18	6						62	\$ 9,870	\$ 3,240		\$ -	\$ 200	\$54,532.14		
1.1	Project Work Plan	1		2					8								2						\$1,748.98		
1.2	Project Management & Coordination	4		48													40						\$11,784.88		
1.3	Quality Assurance/Quality Control	2	24		6				16														\$10,308.92		
1.4	Project Meetings (48 Weeks Proj. Duration)			20	20	4	4	2		8	4						20						\$10,308.78		
1.5	Work Product Review Meetings (Assume 6)			24	16					2	2												\$7,070.58		
2	Public Outreach			33					16	168	16				144	23		\$ 1,827	\$ -		\$ -	\$ 800	\$47,938.43		
2.1	Stakeholder Interviews (8)			2						40						4							\$5,359.92		
2.2	Public Outreach Plan			1							16					2							\$2,220.12		
2.3	Design phase newsletters (3)			3							32				48	6							\$9,528.36		
2.4	Design phase public meetings (3)			18					12		36	12			40	4					\$ 400.00		\$14,423.52		
2.5	Construction Phase Newsletters (3)			3							32				48	6							\$9,528.36		
2.6	Construction Public Meeting (1)			6						4	12	4			8	1					\$ 400.00		\$4,251.15		
3	Permitting			16	12		14		12	89	4	207	72	89	48	21		\$ 17,430	\$ -		\$ -	\$ 500	\$76,680.74		
3.1	Create Permit Matrix & Timelines									8				16									\$2,437.68		
3.2	Streamlining Team First Meeting			2						11				3		1							\$2,842.44		
3.3	Streamlining Team Second Meeting			2						11				3		1							\$2,842.44		
3.4	Streamlining Team Final Meeting			2						11				3		1							\$2,842.44		
3.5	Joint Permit Application			2	4				4	12		40	32		24	4							\$11,534.16		
3.6	BA / Essential Fish Habitat Analysis			2					4	8		60	24			4							\$10,166.40		
3.7	Lake Oswego Permitting			2	4		4			24			16	64		4							\$11,693.40		
3.8	Preliminary Wetland/Stream Mitigation Plan			2					4			60			24	4							\$8,778.00		
3.9	Construction Easement Identification			2	4		10			4	4	26				2							\$5,613.78		
4	Field Investigation			13	34		52		10	6		76	48		16	8	11	\$ 10,145	\$ 14,090	\$ 2,310	\$ 17,790	\$ -	\$72,688.57		
4.1	Low Impact Investigation Charrette			4	4		4			4		4					6						\$2,939.46		
4.2	Field Investigation Plan			1	8		8					8				2	1						\$3,141.33		
4.3	OHWM & Wetland Delineation								2	2		24	24										\$4,811.28		
4.4	Geotechnical Reconnaissance																								
4.5	Structural Condition Assessment			2	16		16										2						\$4,332.78		
4.6	Survey Control. Topo, Hydraulic Cross Sections																								
4.7	Geotechnical Report (Draft & Final)			2	2																		\$643.32		
4.8	Field Investigation Report			4	4		24		8			40	24		16	6	2						\$12,485.40		
5	Alternatives Analysis			50	216	16	64	8	1	2		16			6	7	12	\$ 26,040	\$ 5,610		\$ -	\$ -	\$84,957.96		
5.1	Risk Assessment			4	24											1							\$4,243.59		
5.2	Alternatives Analysis			36	120	12	48		1	1		12					8						\$32,096.28		
5.3	Alternatives Analysis Matrix			6	32	4	12			1		4			4	2							\$8,563.35		
5.4	Pre-Design Report			4	40		4	8							2	4	4						\$8,404.74		
6	Final Design	14		41	360	26	156	188		8		8				3	32	\$ 30,450	\$ 1,000		\$ -	\$ 200	\$134,612.15		
6.1	30% Design (PS&E)	4		8	80	8	40	48									8						\$23,917.12		
6.2	60% Design (PS&E)	4		8	100	8	40	60									8						\$27,902.44		
6.3	90% Design (PS&E and Draft Final Design Report)	4		8	120	8	40	60								2	8						\$30,960.34		
6.4	100% Design (PS&E and Final Design Report)	2		8	48	2	24	20								1	4						\$13,621.07		
6.5	Constructability Reviews at 30%, 60% & 90%			8	8		8			8		8											\$5,186.64		
6.6	Assistance During Bidding			1	4		4										4						\$1,374.54		
7	Construction Services																	\$ -	\$ -		\$ -	\$ -			
7.1	Engineering						TO BE DETERMINED AT THE 60% FINAL DESIGN STAGE																		
7.2	Environmental						TO BE DETERMINED AT THE 60% FINAL DESIGN STAGE																		