


CITY OF MARYSVILLE AGENDA BILL

EXECUTIVE SUMMARY FOR ACTION

CITY COUNCIL MEETING DATE: November 9, 2015

AGENDA ITEM: Wastewater Treatment Plant Headworks Retrofit Project — Professional Services Agreement with BHC Consultants, LLC for professional design services to upgrade the Plant's Headworks	
PREPARED BY: Patrick Gruenhagen, Project Manager DEPARTMENT: Engineering	DIRECTOR APPROVAL: 
ATTACHMENTS: <ul style="list-style-type: none">Professional Services Agreement	
BUDGET CODE: 40220594.563000 S1503	AMOUNT: \$529,941.00

SUMMARY:

The City's Wastewater Treatment Plant Headworks Retrofit project proposes to move forward with design and eventual construction of necessary improvements to the headworks which will result in more efficient Plant operation, improved odor control, and reduced need for day-to-day maintenance.

The City recently issued a Request for Proposals and subsequently interviewed four (4) professional design consultants in anticipation of beginning work on the project. Those firms under consideration included Gray & Osborne, Tetra Tech, Wilson Surveying & Engineering, and BHC Consultants. While all firms' presentations were well thought out and persuasive, the City's selection committee ultimately concluded that BHC was uniquely-qualified and able to perform the work at hand.

The attached Professional Services Agreement outlines the scope of services to be provided by BHC, as well as the underlying improvements that the City intends to advance over the course of the project. Staff believes that the negotiated fee of \$529,941.00 is fair and reasonable, and that Marysville will be well-served by contracting with BHC for this particular project.

RECOMMENDED ACTION: Staff recommends that Council Authorize the Mayor to sign and execute the attached Professional Services Agreement in the amount of \$529,941.00 with BHC Consultants, LLC.
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**PROFESSIONAL SERVICES AGREEMENT BETWEEN
CITY OF MARYSVILLE
AND BHC CONSULTANTS
FOR CONSULTANT SERVICES**

THIS AGREEMENT (“Agreement”) is made and entered into by and between the City of Marysville, a Washington State municipal corporation (“City”), and **BHC Consultants**, a Washington LLC (“Consultant”).

NOW, THEREFORE, in consideration of the terms, conditions, covenants and performances contained herein, the parties hereto agree as follows:

ARTICLE I. PURPOSE

The purpose of this Agreement is to provide the City with consultant services consisting of **preliminary and final design, permitting assistance, and preparation of contract bid documents for planned improvements to the City’s Wastewater Treatment Plant (WWTP) Headworks**, as described in Article II. The general terms and conditions of the relationship between the City and the Consultant are specified in this Agreement.

ARTICLE II. SCOPE OF SERVICES

The Scope of Services is attached hereto as **Exhibit “A”** and incorporated herein by this reference (“Scope of Services”). All services and materials necessary to accomplish the tasks outlined in the Scope of Services shall be provided by the Consultant unless noted otherwise in the Scope of Services or this Agreement. All such services shall be provided in accordance with the standards of the Consultant’s profession.

ARTICLE III. OBLIGATIONS OF THE CONSULTANT

III.1 MINOR CHANGES IN SCOPE. The Consultant shall accept minor changes, amendments, or revision in the detail of the Scope of Services as may be required by the City when such changes will not have any impact on the service costs or proposed delivery schedule. Extra work, if any, involving substantial changes and/or changes in cost or schedules will be addressed as follows:

Extra Work. The City may desire to have the Consultant perform work or render services in connection with each project in addition to or other than work provided for by the expressed intent of the Scope of Services in the scope of services. Such work will be considered as extra work and will be specified in a written supplement to the scope of services, to be signed by both parties, which will set forth the nature and the scope thereof. All proposals for extra work or services shall be prepared by the Consultant at no

cost to the City. Work under a supplemental agreement shall not proceed until executed in writing by the parties.

III.2 WORK PRODUCT AND DOCUMENTS. The work product and all documents produced under this Agreement shall be furnished by the Consultant to the City, and upon completion of the work shall become the property of the City, except that the Consultant may retain one copy of the work product and documents for its records. The Consultant will be responsible for the accuracy of the work, even though the work has been accepted by the City.

In the event that the Consultant shall default on this Agreement or in the event that this Agreement shall be terminated prior to its completion as herein provided, all work product of the Consultant, along with a summary of work as of the date of default or termination, shall become the property of the City. Upon request, the Consultant shall tender the work product and summary to the City. Tender of said work product shall be a prerequisite to final payment under this Agreement. The summary of work done shall be prepared at no additional cost to the City.

Consultant will not be held liable for reuse of documents produced under this Agreement or modifications thereof for any purpose other than those authorized under this Agreement without the written authorization of Consultant.

III.3 TERM. The term of this Agreement shall commence at such time that the City issues Notice to Proceed to the Consultant and shall terminate at midnight, **June 1, 2017**. The parties may extend the term of this Agreement by written mutual agreement.

III.4 NONASSIGNABLE. The services to be provided by the Consultant shall not be assigned or subcontracted without the express written consent of the City.

III.5 EMPLOYMENT.

a. The term “employee” or “employees” as used herein shall mean any officers, agents, or employee of the of the Consultant.

b. Any and all employees of the Consultant, while engaged in the performance of any work or services required by the Consultant under this Agreement, shall be considered employees of the Consultant only and not of the City, and any and all claims that may or might arise under the Workman's Compensation Act on behalf of any said employees while so engaged, and any and all claims made by any third party as a consequence of any negligent act or omission on the part of the Consultant or its employees while so engaged in any of the work or services provided herein shall be the sole obligation of the Consultant.

c. Consultant represents, unless otherwise indicated below, that all employees of Consultant that will provide any of the work under this Agreement have not ever been retired from a Washington State retirement system, including but not limited to Teacher (TRS), School District (SERS), Public Employee (PERS), Public Safety

(PSERS), law enforcement and fire fighters (LEOFF), Washington State Patrol (WSPRS), Judicial Retirement System (JRS), or otherwise. *(Please indicate No or Yes below)*

_____ No employees supplying work have ever been retired from a Washington state retirement system.

_____ Yes employees supplying work have been retired from a Washington state retirement system.

In the event the Consultant indicates “no”, but an employee in fact was a retiree of a Washington State retirement system, and because of the misrepresentation the City is required to defend a claim by the Washington State retirement system, or to make contributions for or on account of the employee, or reimbursement to the Washington State retirement system for benefits paid, Consultant hereby agrees to save, indemnify, defend and hold City harmless from and against all expenses and costs, including reasonable attorney’s fees incurred in defending the claim of the Washington State retirement system and from all contributions paid or required to be paid, and for all reimbursement required to the Washington State retirement system. In the event Consultant affirms that an employee providing work has ever retired from a Washington State retirement system, said employee shall be identified by Consultant, and such retirees shall provide City with all information required by City to report the employment with Consultant to the Department of Retirement Services of the State of Washington.

III.6 INDEMNITY.

a. **Indemnification / Hold Harmless.** Consultant shall defend, indemnify and hold the City, its officers, officials, employees and volunteers harmless from any and all claims, injuries, damages, losses or suits including attorney fees, arising out of or resulting from the acts, errors or omissions of the Consultant in performance of this Agreement, except for injuries and damages caused by the sole negligence of the City.

b. The Agreement is subject to RCW 4.24.115 and, in the event that a court of competent jurisdiction determines that liability for damages arising out of bodily injury to persons or damages to property was caused by or resulted from the concurrent negligence of the Consultant and the City, its officers, officials, employees, and volunteers, the Consultant's liability, including the duty and cost to defend, hereunder shall be only to the extent of the Consultant's negligence.

c. The provisions of this section shall survive the expiration or termination of this agreement.

d. For the purposes of the indemnity contained in subpart “A” of this paragraph 3.6, Consultant hereby knowing, intentionally, and voluntarily waives the immunity of the Industrial Insurance Act, Title 51 RCW, solely for the purposes of this

indemnification. This waiver has been mutually negotiated by the parties.

_____ (initials) _____ (initials)

III.7 INSURANCE.

a. **Minimum Limits of Insurance.** The Consultant shall procure, and maintain for the duration of the Agreement, insurance against claims for injuries to persons or damage to property which may arise from or in connection with the performance of the work and services hereunder by the Consultant, its agents, representatives, employees or subcontractors. The Consultant shall, before commencing work under this agreement, file with the City certificates of insurance coverage and the policy endorsement to be kept in force continuously during this Agreement, in a form acceptable to the City. Said certificates and policy endorsement shall name the City, its officers, elected officials, agents and/or employees as an additional named insured with respect to all coverages except professional liability insurance and workers' compensation.

b. **Minimum Scope of Insurance - Consultant shall obtain insurance of the types described below:**

- (1). Automobile Liability insurance covering all owned, non-owned, hired and leased vehicles. Coverage shall be written on Insurance Services Office (ISO) form CA 00 01 or a substitute form providing equivalent liability coverage. If necessary, the policy shall be endorsed to provide contractual liability coverage.
- (2). Commercial General Liability insurance shall be written on ISO occurrence form CG 00 01 and shall cover liability arising from premises, operations, independent contractors and personal injury and advertising injury. The City shall be named as an insured under the Consultant's Commercial General Liability insurance policy with respect to the work performed for the City.
- (3). Workers' Compensation coverage as required by the Industrial Insurance laws of the State of Washington.
- (4). Professional Liability insurance appropriate to the Consultant's profession.

c. **The minimum insurance limits shall be as follows:**

- (1) Comprehensive General Liability. \$1,000,000 combined single limit per occurrence for bodily injury personal injury and property damage; \$2,000,000 general aggregate.

(2) Automobile Liability. \$1,000,000 combined single limit per accident for bodily injury and property damage.

(3) Workers' Compensation. Workers' compensation limits as required by the Workers' Compensation Act of Washington.

(4) Professional Liability/Consultant's Errors and Omissions Liability. \$1,000,000 per claim and \$1,000,000 as an annual aggregate.

d. **Notice of Cancellation.** In the event that the Consultant receives notice (written, electronic or otherwise) that any of the above required insurance coverage is being cancelled and/or terminated, the Consultant shall immediately (within forty-eight (48) hours) provide written notification of such cancellation/termination to the City.

e. **Acceptability of Insurers.** Insurance to be provided by Consultant shall be with a current A.M. Best's rating of no less than A:VII, or if not rated by Bests, with minimum surpluses the equivalent of Bests' VII rating.

f. **Verification of Coverage.** In signing this agreement, the Consultant is acknowledging and representing that required insurance is active and current. Consultant shall furnish the City with original certificates and a copy of the amendatory endorsements, including but not necessarily limited to the additional insured endorsement, evidencing the insurance requirements of the Consultant before commencement of the work. Further, throughout the term of this Agreement, the Consultant shall provide the City with proof of insurance upon request by the City.

g. **Insurance shall be Primary.** The Consultant's insurance coverage shall be primary insurance as respect the City. Any insurance, self-insurance, or insurance pool coverage maintained by the City shall be excess of the Consultant's insurance and shall not contribute with it.

h. **No Limitation.** Consultant's maintenance of insurance as required by this Agreement shall not be construed to limit the liability of the Consultant to the coverage provided by such insurance or otherwise limit the recourse to any remedy available at law or in equity.

i. **Claims-made Basis.** Unless approved by the City all insurance policies shall be written on an "Occurrence" policy as opposed to a "Claims-made" policy. The City may require an extended reporting endorsement on any approved "Claims-made" policy.

j. **Failure to Maintain Insurance** Failure on the part of the Consultant to maintain the insurance as required shall constitute a material breach of contract, upon which the City may, after giving five business days' notice to the Consultant to correct

the breach, immediately terminate the contract or, at its discretion, procure or renew such insurance and pay any and all premiums in connection therewith, with any sums so expended to be repaid to the City on demand, or at the sole discretion of the City, offset against funds due the Consultant from the City.

III.8 DISCRIMINATION PROHIBITED AND COMPLIANCE WITH EQUAL OPPORTUNITY LEGISLATION. The Consultant agrees to comply with equal opportunity employment and not to discriminate against client, employee, or applicant for employment or for services because of race, creed, color, religion, national origin, marital status, sex, sexual orientation, age or handicap except for a bona fide occupational qualification with regard, but not limited to, the following: employment upgrading; demotion or transfer; recruitment or any recruitment advertising; layoff or terminations; rates of pay or other forms of compensation; selection for training, rendition of services. The Consultant further agrees to maintain (as appropriate) notices, posted in conspicuous places, setting forth the provisions of this nondiscrimination clause. The Consultant understands and agrees that if it violates this nondiscrimination provision, this Agreement may be terminated by the City, and further that the Consultant will be barred from performing any services for the City now or in the future, unless a showing is made satisfactory to the City that discriminatory practices have been terminated and that recurrence of such action is unlikely.

III.9 UNFAIR EMPLOYMENT PRACTICES. During the performance of this Agreement, the Consultant agrees to comply with RCW 49.60.180, prohibiting unfair employment practices.

III.10 LEGAL RELATIONS. The Consultant shall comply with all federal, state and local laws and ordinances applicable to work to be done under this Agreement. The Consultant represents that the firm and all employees assigned to work on any City project are in full compliance with the statutes of the State of Washington governing activities to be performed and that all personnel to be assigned to the work required under this Agreement are fully qualified and properly licensed to perform the work to which they will be assigned. This Agreement shall be interpreted and construed in accordance with the laws of Washington. Venue for any litigation commenced relating to this Agreement shall be in Snohomish County Superior Court.

III.11 INDEPENDENT CONTRACTOR.

a. The Consultant and the City understand and expressly agree that the Consultant is an independent contractor in the performance of each and every part of this Agreement. The Consultant expressly represents, warrants and agrees that his status as an independent contractor in the performance of the work and services required under this Agreement is consistent with and meets the six-part independent contractor test set forth in RCW 51.08.195 or as hereafter amended. The Consultant, as an independent contractor, assumes the entire responsibility for carrying out and accomplishing the services required under this Agreement. The Consultant shall make no claim of City

employment nor shall claim any related employment benefits, social security, and/or retirement benefits.

b. The Consultant shall be solely responsible for paying all taxes, deductions, and assessments, including but not limited to federal income tax, FICA, social security tax, assessments for unemployment and industrial injury, and other deductions from income which may be required by law or assessed against either party as a result of this Agreement. In the event the City is assessed a tax or assessment as a result of this Agreement, the Consultant shall pay the same before it becomes due.

c. The City may, during the term of this Agreement, engage other independent contractors to perform the same or similar work that the Consultant performs hereunder.

d. Prior to commencement of work, the Consultant shall obtain a business license from the City.

III.12 CONFLICTS OF INTEREST. The Consultant agrees to and shall notify the City of any potential conflicts of interest in Consultant's client base and shall obtain written permission from the City prior to providing services to third parties where a conflict or potential conflict of interest is apparent. If the City determines in its sole discretion that a conflict is irreconcilable, the City reserves the right to terminate this Agreement.

III.13 CITY CONFIDENCES. The Consultant agrees to and will keep in strict confidence, and will not disclose, communicate or advertise to third parties without specific prior written consent from the City in each instance, the confidences of the City or any information regarding the City or services provided to the City.

III.14 SUBCONTRACTORS/SUBCONSULTANTS.

a. The Consultant is responsible for all work performed by subcontractors/subconsultants pursuant to the terms of this Agreement.

b. The Consultant must verify that any subcontractors/subconsultants they directly hire meet the responsibility criteria for the project. Verification that a subcontractor/subconsultant has proper license and bonding, if required by statute, must be included in the verification process. The Consultant will use the following Subcontractors/Subconsultants:

Rolluda Architects

Perteet

c. The Consultant may not substitute or add subcontractors/subconsultants without the written approval of the City.

d. All Subcontractors/Subconsultants shall have the same insurance coverages and limits as set forth in this Agreement and the Consultant shall provide verification of said insurance coverage.

ARTICLE IV. OBLIGATIONS OF THE CITY

IV.1 PAYMENTS.

a. The Consultant shall be paid by the City for services rendered under this Agreement as described in the Scope of Services and as provided in this section. In no event shall the compensation paid to Consultant under this Agreement exceed **\$529,941.00** without the written agreement of the Consultant and the City. Such payment shall be full compensation for work performed and services rendered and for all labor, materials, supplies, equipment and incidentals necessary to complete the work. In the event the City elects to expand the scope of services from that set forth in Exhibit A, the City shall pay Consultant a mutually agreed amount.

b. The Consultant shall submit a monthly invoice to the City for services performed in the previous calendar month in a format acceptable to the Cities. The Consultant shall maintain time and expense records and provide them to the Cities upon request.

c. The City will pay timely submitted and approved invoices received before the 20th of each month within thirty (30) days of receipt.

IV.2 CITY APPROVAL. Notwithstanding the Consultant's status as an independent contractor, results of the work performed pursuant to this Agreement must meet the approval of the City, which shall not be unreasonably withheld if work has been completed in compliance with the Scope of Services and City requirements.

IV.3 MAINTENANCE/INSPECTION OF RECORDS. The Consultant shall maintain all books, records, documents and other evidence pertaining to the costs and expenses allowable under this Agreement in accordance with generally accepted accounting practices. All such books and records required to be maintained by this Agreement shall be subject to inspection and audit by representatives of the City and/or the Washington State Auditor at all reasonable times, and the Consultant shall afford the proper facilities for such inspection and audit. Representatives of the City and/or the Washington State Auditor may copy such books, accounts and records where necessary to conduct or document an audit. The Consultant shall preserve and make available all such books of account and records for a period of three (3) years after final payment under this Agreement. In the event that any audit or inspection identifies any discrepancy in such financial records, the Consultant shall provide the City with appropriate clarification and/or financial adjustments within thirty (30) calendar days of notification of the discrepancy.

ARTICLE V. GENERAL

V.1 **NOTICES.** Notices to the City shall be sent to the following address:

**Patrick Gruenhagen, Project Manager
City of Marysville Public Works
80 Columbia Avenue
Marysville, WA 98270**

Notices to the Consultant shall be sent to the following address:

**Tom Giese, Jr., Project Engineer
BHC Consultants
950 Pacific Avenue, Suite 710
Tacoma, WA 98402**

Receipt of any notice shall be deemed effective three (3) days after deposit of written notice in the U.S. mail with proper postage and address.

V.2 **TERMINATION.** The right is reserved by the City to terminate this Agreement in whole or in part at any time upon ten (10) calendar days' written notice to the Consultant.

If this Agreement is terminated in its entirety by the City for its convenience, the City shall pay the Consultant for satisfactory services performed through the date of termination in accordance with payment provisions of Section VI.1.

V.3 **DISPUTES.** The parties agree that, following reasonable attempts at negotiation and compromise, any unresolved dispute arising under this Agreement may be resolved by a mutually agreed-upon alternative dispute resolution of arbitration or mediation.

V.4 **EXTENT OF AGREEMENT/MODIFICATION.** This Agreement, together with attachments or addenda, represents the entire and integrated Agreement between the parties and supersedes all prior negotiations, representations, or agreements, either written or oral. This Agreement may be amended, modified or added to only by written instrument properly signed by both parties.

V.5 **SEVERABILITY**

a. If a court of competent jurisdiction holds any part, term or provision of this Agreement to be illegal or invalid, in whole or in part, the validity of the remaining provisions shall not be affected, and the parties' rights and obligations shall be construed and enforced as if the Agreement did not contain the particular provision held to be invalid.

b. If any provision of this Agreement is in direct conflict with any statutory provision of the State of Washington, that provision which may conflict shall be deemed inoperative and null and void insofar as it may conflict, and shall be deemed modified to

conform to such statutory provision.

V.6 NONWAIVER. A waiver by either party hereto of a breach by the other party hereto of any covenant or condition of this Agreement shall not impair the right of the party not in default to avail itself of any subsequent breach thereof. Leniency, delay or failure of either party to insist upon strict performance of any agreement, covenant or condition of this Agreement, or to exercise any right herein given in any one or more instances, shall not be construed as a waiver or relinquishment of any such agreement, covenant, condition or right.

V.7 FAIR MEANING. The terms of this Agreement shall be given their fair meaning and shall not be construed in favor of or against either party hereto because of authorship. This Agreement shall be deemed to have been drafted by both of the parties.

V.8 GOVERNING LAW. This Agreement shall be governed by and construed in accordance with the laws of the State of Washington.

V.9 VENUE. The venue for any action to enforce or interpret this Agreement shall lie in the Superior Court of Washington for Snohomish County, Washington.

V.10 COUNTERPARTS. This Agreement may be executed in one or more counterparts, each of which shall be deemed an original, but all of which shall constitute one and the same Agreement.

V.11 AUTHORITY TO BIND PARTIES AND ENTER INTO AGREEMENT. The undersigned represent that they have full authority to enter into this Agreement and to bind the parties for and on behalf of the legal entities set forth below.

DATED this _____ day of November, 2015.

CITY OF MARYSVILLE

BHC CONSULTANTS, LLC

By _____
Jon Nehring, Mayor

By _____
Name, Title:

Approved as to form:

Jon Walker, City Attorney

Exhibit A Scope of Work

City of Marysville WWTP Headworks Retrofit Project

Statement of Understanding

The City of Marysville (City) has selected BHC Consultants, LLC (BHC) to prepare bid documents for the Wastewater Treatment Plant (WWTP) Headworks Retrofit Project. The primary purposes for this project were identified in the 2011 Sewer Comprehensive Plan, as follows:

- Correct deficiencies with the Parshall flume influent flow measurement
- Replace the existing headworks mechanical bar screens, including the associated corroded electrical/control conduit and equipment, with new screens having a smaller opening size for improved capture of material and debris.

The City has identified the following additional improvements for consideration as part of this project to improve operations and performance:

- Replace the existing screenings washer/compactor, which is old and prone to freezing during cold weather, with a new unit that includes protection from freezing.
- Replace the Trunk A Palmer-Bowlus flume.
- Repair the Trunk A overflow pipeline.
- Provide a permanent hoisting method for removal of the influent screw pump motors and gearboxes.
- Cover the open channels and headworks equipment to contain odors and provide ducting and equipment to collect and treat foul air pulled from within the covered areas of the headworks.
- Rehabilitate the screw pumps.
- Retrofit actuators on the slide gates used to isolate the screen channels.
- Add drains to the screen channels.
- Construct a larger and enclosed area for a higher capacity screenings dumpster.
- Improve grit holding capacity in the screw pump sumps and/or provide grit pockets in the screening channels.
- Improve access for collection of influent grab samples.
- Install VFDs for the influent screw pumps and program automated control of these pumps based on level.

This Scope of Work for engineering services includes preliminary design, final design and bidding services for the WWTP Headworks Retrofit Project. Because the scope of design will not be fully defined until completion of the preliminary design, this Scope of Work includes a number of optional tasks that have a reasonable probability of being required, depending on the scope of improvements being considered. Any construction support services related to this project would be provided through an amendment to the original agreement.

Schedule

BHC will undertake to complete the Scope of Work based on the milestones listed below, assuming notice-to-proceed is provided by early November 2015.

- Completion of the Draft Preliminary Design Technical Memorandum by the end of March 2016.

- Completion of the final bid documents by the end of December 2016.
- Project bidding and award in first quarter of 2017.

Budget

The budget for this Scope of Work includes \$390,995 for the base Scope of Work and an additional \$138,946 in contingency for optional tasks identified herein for a total budget of \$529,941. BHC will be compensated on a time and materials basis per the attached budget estimate. Compensation shall not exceed the budgeted amount without prior authorization from the City. Contingency allocated for the optional tasks shall not be utilized unless approved by the City. Each optional task shall be limited to the scope identified herein and allocated budget, unless otherwise authorized by the City.

Scope of Services

Tasks for the Scope of Work include the following:

Task 1 – Project Management and Quality Control

- 1.1 Project setup and invoicing, communications with the City, and overall project planning and coordination.
- 1.2 Internal quality control reviews of each submittal and deliverable to the City.
- 1.3 Conduct a constructability review of the 50% submittal.

Receivables:

- Invoicing requirements, as applicable, from the City.

Deliverables:

- Invoices.

Task 2 – Preliminary Design

- 2.1 Alternatives for consideration during preliminary design will be as follows:
 - a) Identify up to three viable alternatives for replacement of the existing screens. Alternatives for consideration will be selected based on suitability for this application and availability of desired features and/or function based on feedback from the City during the predesign kickoff workshop.
 - b) Identify up to three viable alternatives for treatment of odors. Alternatives for consideration will be selected based on suitability for this application and availability of desired features and/or function based on feedback from the City during the predesign kickoff workshop.
 - c) For the Parshall flume, consider replacement or nesting a smaller flume.
 - d) For hoisting, consider a monorail or large davit crane.
 - e) For grit holding capacity, consider enlarging holding in the screw pump sumps and/or adding grit pockets in the screening channels.
 - f) For covering the screw pump channels, consider a building enclosure versus channel covers.
- 2.2 Develop improvement concepts for the other improvements, which will not involve multiple alternatives. Confirm these concepts with the City in the predesign kickoff workshop. After the improvement concepts are confirmed, develop costs associated with each.
- 2.3 Identify the closest comparable installations for each mechanical screen type selected for evaluation. Provide contact information to the City, so that the City may arrange and conduct site visits.
- 2.4 Evaluate and compare the alternatives identified above. The comparison will be based on cost (capital and O&M) and appropriate non-cost factors. Provide initial recommendations of improvement alternatives based on results of the comparisons and verify with the City during the alternatives evaluation workshop.

- 2.5 Develop an initial prioritized and itemized list of improvements and associated costs for the headworks retrofit project. Discuss and confirm the prioritization of improvements with the City and select those improvements that will be proposed for design during the alternatives evaluation workshop.
- 2.6 Evaluate the hydraulics associated with the proposed improvements to confirm additional modifications are not required to convey peak flows through the headworks with the proposed improvements in place. This evaluation will also consider the impact of rerouting the filter backwash discharge from the West Trunk Pump Station to the complete-mixed cells of the lagoons. Prepare hydraulic profile drawing.
- 2.7 Develop a process schematic drawing for the proposed improvements and prepare a preliminary site layout drawing.
- 2.8 Determine the scope of electrical and controls work associated with the proposed improvements.
- 2.9 Develop process and instrumentation diagrams (P&IDs) and preliminary control narratives for the proposed improvements.
- 2.10 Develop a preliminary opinion of probable construction cost, which will reflect a Class 4 estimate (applicable for 1% to 15% design) as defined by the American Association of Cost Engineers (AACE) with an expected accuracy range of -20% to +30%.
- 2.11 Develop a preliminary list of equipment, type and preferred manufacturers and a preliminary construction phasing approach.
- 2.12 Identify permits that will likely be required for the project. BHC will prepare a project specific SEPA checklist for the City and the City will be responsible for conducting the SEPA review process. BHC will assist the City with responding to technical related comments received during the review period.
- 2.13 Prepare a preliminary design technical memorandum summarizing the recommendations associated with this task and critical design parameters and considerations. A draft of the technical memorandum will be submitted to the City for review. Comments from the City collected during the preliminary design review workshop will be incorporated into a final version of the technical memorandum.

Receivables:

- Information as requested on existing equipment, structures, electrical and control requirements and existing control system.
- Consolidated comments on the draft preliminary design technical memorandum.

Deliverables:

- List and contact information for local installations.
- Summary of information from local installation site visits.
- Draft and final preliminary design technical memorandum including hydraulic profile, process schematic, preliminary site layout, P&IDs, control narratives, opinion of probable construction cost, and preliminary equipment list.
- SEPA checklist.

Task 3 – Site Investigations

- 3.1 BHC will conduct site visits to take field measurements, photographs, gather information from City staff, and verify existing conditions and equipment compared to record drawings. Two site visits (2 hours each) with three representatives from BHC for each are assumed.
- 3.2 BHC's structural engineer will review the geotechnical report that was prepared for the nearby decant facility to use as a guideline for work associated with creating a larger and enclosed screenings dumpster holding area and other incidental structural improvements.
- 3.3 BHC will subcontract with a surveyor to perform a topographic site survey of the project area. The scope of services for the topographic site survey will include the following:
 - a) The site survey work will cover an area of approximately 50,000 square feet around the existing headworks structure located at the northeast corner of the WWTP.

- b) Prior to performing survey work, the surveyor will designate and mark known conductible buried utilities using standard APWA colors and perform a sweep of the survey area in an attempt to identify unknown utilities.
 - c) The surveyor will establish horizontal (NAD83[2011] Washington North Zone State Plane coordinate system) and vertical control (NAVD 88) necessary for the topographic survey.
 - d) The site survey will locate all above ground features such as trees, fences, visible and identified buried utilities including inverts (where possible) as well as other significant natural and man-made details necessary to develop a 1' contour model of the site.
 - e) The site survey will include spot elevations at critical locations identified by BHC.
 - f) The surveyor will prepare a scale drawing in AutoCAD format using standard APWA symbols and point listing in a text file. Following review by BHC Consultants, LLC (BHC), the surveyor will make revisions as necessary to the drawing.
- 3.4 **OPTIONAL** – If the proposed improvements require more substantial structural work, a geotechnical investigation will need to be conducted to determine appropriate structural design parameters. Additionally, if the proposed structural or civil work requires significant excavation and earthwork, a cultural resources survey will need to be conducted. It is expected that excavation and earthwork will likely be constrained to areas of fill. Therefore, it is assumed that no historical properties will be impacted and not archaeological sites encountered. As a result, it is assumed that the cultural resources investigation should not have to go beyond preparation of an EZ-1 form and the associated approval process. It is also assumed that federal funds will not be utilized for this project, such that Section 106 will not supersede Governor's Executive Order 05-05. Should both or either of the geotechnical or cultural resources investigations be deemed necessary, the City will contract separately with a geotechnical engineer and/or archeologist to perform those services. However, BHC's effort to help coordinate these site investigations is included as an optional work item.

Receivables:

- Existing available site survey, geotechnical and cultural resources information for areas within or immediately surrounding the WWTP site.

Deliverables:

- Topographic survey of the area surrounding the WWTP headworks in AutoCAD.

Task 4 – Permitting

- 4.1 BHC will provide technical input to assist the City with preparing a Stormwater Pollution Prevention Plan, which is limited to the hours budgeted for this particular task work item. Preparation and submittal of an application for coverage under the Construction Stormwater General Permit will be deferred to construction.
- 4.2 BHC will provide technical input to the City to support preparation of applications for and responding to inquiries from other permitting agencies. BHC's permitting support is limited to the hours budgeted for this particular task work item. The City will prepare all permit applications (aside from the Construction Stormwater General Permit), function as the point of contact, and be responsible for securing those permits.
- 4.3 BHC will submit 90% design documents to the Washington State Department of Ecology (Ecology) and to the appropriate City departments for review and approval. Comments received from Ecology will be discussed during the Ecology review meeting, addressed in the final bid documents, and a list of responses to Ecology and City department comments prepared and submitted to Ecology and the City departments for verification that the manner in which the comments were addressed are acceptable.

Receivables:

- City building department, fire department and electrical review comments.

Deliverables:

- Ecology and City design review package, including structural calculations if necessary.
- Responses to Ecology and City department review comments.

Task 5 – Project Workshops and Meetings

- 5.1 Preliminary design kickoff workshop – Up to four representatives from BHC will attend the kickoff workshop. The purpose of this workshop will be to discuss scope and schedule, review the identified viable alternatives, discuss and confirm screening of alternatives, discuss and confirm criteria for evaluation of alternatives and discuss and confirm concepts for other improvements.
- 5.2 Alternatives evaluation workshop – Up to three representatives from BHC will attend the alternatives evaluation workshop. The purpose of this workshop will be to review results of the alternative evaluations, select alternatives for implementation and develop an initial prioritized and itemized list of selected improvements.
- 5.3 Preliminary design review workshop – Up to two representatives from BHC will attend this workshop. The purpose of this workshop is to collect and discuss comments from the City on the draft preliminary design technical memorandum.
- 5.4 Design kickoff workshop – Up to four representatives from BHC will attend this workshop. The purpose of this workshop will be to discuss any modifications to scope and schedule, review the basis of design, discuss scheduling and coordination of site investigation activities, review preliminary equipment list and manufacturers used as basis of design and review additional information needs.
- 5.5 50% design review workshop – Up to three representatives from BHC will attend this workshop. The purpose of this workshop will be to collect and discuss comments from the City on the 50% design submittal, review the opinion of probable construction cost, and determine if any adjustments need to be made to the scope of design.
- 5.6 90% design review workshop – Up to three representatives from BHC will attend this workshop. The purpose of this workshop will be to collect and discuss comments from the City on the 90% design submittal, review the opinion of probable construction cost, and determine if any adjustments need to be made to the scope of design.
- 5.7 Ecology review meeting – Up to two representatives from BHC will attend this meeting. The purpose of this meeting will be to review and discuss comments from the Ecology on the 90% design submittal.
- 5.8 Public Works Committee Meeting – BHC will assist the City with preparation of materials for presentation of the project at a Public Works Committee meeting. The effort is limited to the budget allocated for this item and does not include time for attendance at the meeting.
- 5.9 Pre-Bid meeting – Up to two representatives from BHC will attend this meeting. BHC will conduct an initial overview of the project and field questions from bidders. BHC will also help lead a tour of the headworks facility following the meeting.

Receivables:

- None.

Deliverables:

- Meeting/workshop agendas.
- Meeting/workshop minutes.
- Public Works Committee Meeting presentation materials

Task 6 – Preparation of Bid Documents

- 6.1 BHC will conduct internal project team coordination meetings every other week to coordinate design tasks, communicate progress and identify information needs. The project manager will also coordinate efforts between disciplines and facilitate exchange of information.
- 6.2 The 50% design drawings will consist of:
 - a) Title sheet, drawing index, abbreviations, symbols and notes, process schematic, design criteria and hydraulic profile.
 - b) Existing site plan, new site plan and yard piping plan.
 - c) Structural notes and plans.
 - d) Architectural plan, if necessary.
 - e) Mechanical plans and major sections.
 - f) Electrical site plan and one-line diagram.
 - g) Process and instrumentation diagrams.
- 6.3 The 50% specifications will consist of a table of contents and drafts of major equipment specifications and the control narratives in CSI format. These CSI formatted specifications (Divisions 1 – 17) will be referenced and included as Special Provisions to the Standard Specifications by WSDOT that the City uses in the final bid documents.
- 6.4 The 50% opinion of probable construction cost will reflect a Class 2 estimate (applicable for 30% to 75% design) as defined by the AACE with an expected accuracy range of -10% to +15%.
- 6.5 The 90% design drawings will incorporate comments on the 50% drawings and consist of the following additional drawings:
 - a) Erosion control plan and details.
 - b) Civil details.
 - c) Structural sections and details.
 - d) Architectural sections, details and schedules, if necessary.
 - e) Mechanical details and remaining sections.
 - f) Electrical schematic diagrams, MCC elevation, conduit and wire schedules, panel schedules, power and signal plan, lighting plan and details.
 - g) Instrumentation details and network diagram.
- 6.6 The 90% specifications will incorporate comments on the 50% specifications and include applicable technical specifications (CSI format utilizing Divisions 1 – 17) and front end documents based on the City's standard, which references the WSDOT Standard Specifications. BHC will revise the City's standard Special Provisions to modify the WSDOT Standard Specifications for this project. Specifications not covered by the WSDOT Standard Specifications will be prepared in CSI format and referenced in the Special Provisions.
- 6.7 The 90% opinion of probable construction cost will reflect a Class 1 estimate (applicable for 65% to 100% design) as defined by the AACE with an expected accuracy range of -5% to +10%.
- 6.8 BHC will prepare a preliminary construction schedule for the 50% design submittal and update the schedule for the 90% design submittal. This schedule will aid in setting the contract duration and developing project phasing.
- 6.9 Comments from the City, Ecology and permitting agencies on the 90% submittal will be incorporated into the design documents. A 100% submittal will be prepared and submitted to the City for final review. The 100% submittal may consist of a few new items in response to comments, but will largely be a revision and update of the 90% submittal based on comments received.
- 6.10 BHC will incorporate any comments from the City on the 100% submittal into the design documents and produce final documents for bidding.
- 6.11 **OPTIONAL** – Design effort associated with the following improvements will be individually broken out as optional items, in case the City decides to exclude any or all of these from the design effort following completion of preliminary design:
 - a) Constructing a building type enclosure over the screw pumps to allow access by staff for routine cleaning and inspection of the pumps, if it is determined that there are no covers for the screw pump

channels that are suitable to facilitate routine access. The extra structural, architectural, mechanical, and electrical design effort associated with addition of this building/enclosure is based on the assumptions that it would enclose the screw pump sump and channel areas at the north end of the headworks structure (approximate 40 feet long by 24 feet wide) and consist of a concrete foundation, CMU walls and metal roof with windows/skylights for natural lighting and stair access to doorways. Interior surfaces would be designed to resist corrosion and facilitate washdown. The building would be tall enough to facilitate hoisting of the screw pump motors and gearboxes with a permanent hoisting mechanism (e.g., monorail) and the entire enclosed space would be ventilated for odor control. BHC would subcontract the architectural design to an architectural firm.

- b) Significant structural modifications necessary to support a wider headworks screen.
- c) Rehabilitation of the screw pumps.
- d) Retrofitting actuators on the slide gates used to isolate the screen channels.
- e) Adding drains to the screen channels.
- f) Improve grit holding capacity in the screw pump sumps and/or provide grit pockets in the screening channels.
- g) Installing VFDs for the influent screw pumps and programming automated control of these pumps based on level.

Receivables:

- Consolidated comments on the 50%, 90% and 100% design submittals.
- City standard front-end documents.
- Legal review comments to revised front-end documents.

Deliverables:

- 50%, 90% and 100% design submittals each consisting of drawings, specifications and opinion of probable construction cost.
- Revised front end documents for legal review.

Task 7 – Bidding Support Services

- 7.1 BHC will assist the City with responding to questions from bidders as requested by the City. Time for this work item is limited to the budget allocated.
- 7.2 BHC will prepare addenda and clarifications. Up to three addenda/clarification documents are assumed.

Receivables:

- Bidder questions.

Deliverables:

- Responses to bidder questions, as requested by the City.
- Addenda/clarifications.

City Responsibilities

The following items are specific responsibilities of the City in support of this Scope of Work.

- Participate in project meetings and workshops and arrange the meeting location.
- Arrange and conduct site visits to review installations of different screening alternatives.
- Select alternatives and improvements for implementation.
- Provide consolidated review comments on submittals.
- Provide requested information to BHC, as available, and provide access to staff.

- Contract directly with a geotechnical engineer to perform a geotechnical investigation and/or an archeologist to perform a cultural resources survey as necessary to support design and permitting of the proposed improvements.
- Prepare a Stormwater Pollution Prevention Plan for the project.
- Provide specification and drawing standards.
- Provide the City's standard front-end documents, which shall include bid proposal documents and Special Provisions, and provide legal review of revisions made by BHC.
- Prepare all permit applications (aside from the Construction Stormwater General Permit), function as the point of contact, and be responsible for securing the permits.
- Pay all permitting fees.
- City will prepare the bid advertisement, advertise project, provide bid documents to bidders and maintain plan holder list.
- City will respond to bidder questions and distribute addenda/clarification documents.
- City will prepare bid tabulation.
- City will evaluate bid proposals and make a recommendation for project award.

Exclusions

The following items are excluded from this Scope of Work, but can be added via amendment to the original agreement or included in a future Scope of Work if the City so desires:

- Preparation of a separate Engineering Report for submittal to and review by Ecology.
- Updates to the current sewer comprehensive plan or WWTP facility plan. As discussed above, the current sewer comprehensive plan already identifies key improvements to the headworks to address the most critical deficiencies.
- Conducting the SEPA review process, aside from preparation of a SEPA checklist and assisting the City with responses to technical related comments from agency review and the public comment period.
- State Environmental Review Process (SERP), cultural resources survey (except optionally preparation and approval of an EZ-1 form), biological assessment and environmental permitting beyond the SEPA checklist support and preparation of the application for coverage under the Construction Stormwater General Permit.
- Geotechnical investigation, except optionally effort to coordinate with a geotechnical engineer hired by the City to support design of the proposed improvements as necessary.
- Cultural resources survey, except optionally effort to coordinate with an archeologist hired by the City to support permitting the proposed improvements as necessary.
- Preparation of a cultural resources unanticipated discovery plan.
- Preparation of a Stormwater Pollution Prevention Plan or application for coverage under the Construction Stormwater General Permit.
- Evaluation of alternatives for preliminary design beyond the number and type identified in this Scope of Work.
- Arranging, conducting or participating in site visits to review installations of different screening alternatives.
- Handling/disposal of hazardous material.
- New electrical utility service.
- Stormwater or drainage improvements.
- Shoring or dewatering design
- Wetlands mitigation support.
- Easement or right-of-way support.

- Utility pot-holing.
- Permit support for a shoreline permit, hydraulic project approval (HPA), Puget Sound Clean Air Agency and Federal Emergency Management Agency (FEMA). None of these are expected to be required.
- Modifications to or applications for a new NPDES permit or Biosolids General Permit, as neither of these are expected to be impacted by this project.
- Council briefings.
- Preparation of a construction quality assurance plan (CQAP). This would be prepared as part of construction support services.
- Preparation of conformed documents. These would be prepared as part of construction support services if desired.
- Preparation of bid advertisement, advertisement of project, providing bid documents to bidders, maintaining plan holder list, distributing clarifications and addenda, evaluating bid proposals, making a recommendation for project award.
- Bid support services if the project is re-bid.
- Construction support services.
- Programming services for programmable logic controllers or any other electrical devices.
- Startup services.
- Record drawings.