



November 23, 2022

Board of County Commissioners  
 Clackamas County

**Approval of a Personal Services Contract #7185 between Water Environment Services and Carollo Engineering Inc., for design service for the Clackamas Area Interceptor project. Contract value is \$3,731,573.00. Funding is through Water Environment Services operating fund. County General Funds are not involved. - Procurement**

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| <b>Purpose/Outcome</b>                 | Approval of a Personal Services Contract #7185 between Water Environment Services and Carollo Engineering Inc., for design service for the Clackamas Area Interceptor project. Contract value is \$3,731,573.00. Funding is through Water Environment Services operating fund. County General Funds are not involved. - Procurement   |
| <b>Dollar Amount and Fiscal Impact</b> | The Contract Value is \$3,731,573.00.   |
| <b>Funding Source</b>                  | Funding is through Water Environment Services (WES) operating fund. County General Funds are not involved.  |
| <b>Duration</b>                        | The contract ends June 30, 2027.  |
| <b>Previous Board Action/Review</b>    | <ul style="list-style-type: none"> <li>• Prior discussions related to budget and Capital Improvements plan</li> <li>• Issues Discussion 10/12/2021, Approved to move forward to Business meeting 10/21/2021</li> <li>• This item was presented at Issues on November 22, 2022</li> </ul>  |
| <b>Strategic Plan Alignment</b>        | <ol style="list-style-type: none"> <li>1. This project supports the WES Strategic Plan to provide Enterprise Resiliency, infrastructure Strategy and Performance and Operational Optimization.</li> <li>2. This project supports the County’s Strategic Plan of building a strong infrastructure that delivers services to customers and honors, utilizes, promotes and invest in our natural resources.</li> </ol> |
| <b>Counsel Review</b>                  | Date of Counsel Review: November 1, 2022<br>Counsel Review: Amanda Keller   |
| <b>Procurement Review</b>              | Was this processed through Procurement: Yes   |
| <b>Contact Person</b>                  | Jessica Rinner, Civil Engineering Supervisor, 503-742-4551  |
| <b>Contract No.</b>                    | #7185   |

**BACKGROUND:**

The Collection System Master Plan (Jacobs, 2019) identified the Clackamas Area Interceptor system upstream of the Intertie 2 Pump Station, which serves Clackamas County and portions of the City of Happy Valley, as nearing its peak wet weather capacity and needing to be upsized. The Clackamas Area Interceptor Project (Project) will consist of advancing the

conceptual design developed from the Collection System Master Plan through final design and construction. Required services will include permitting, public outreach, design and engineering services during bidding and construction.

The Project includes approximately 5 miles of capacity upgrades along the Clackamas Interceptor, reconfiguring the confluence of the Clackamas, Mt. Talbert, and Lower Phillips Interceptors, and capacity upgrades in the portion of the Mt. Scott Interceptor upstream of Intertie 2 Pump Station. A description of the conceptual design for each interceptor section is provided in the following table:

| <b>Interceptor Section</b>   | <b>Conceptual Design Description</b>  |
|------------------------------|---|
| Upper Clackamas Interceptor  | <ul style="list-style-type: none"> <li>• Maintain existing 7,400 linear feet (lf) of 18 and 24-inch pipe and construct similar length parallel 30 to 42-inch pipeline.</li> <li>• 250 lf bridge crossing.</li> <li>• Two (2) diversion structures between the parallel pipelines.</li> </ul>  |
| Middle Clackamas Interceptor | <ul style="list-style-type: none"> <li>• Upsizing 10,700 lf of 24 to 27-inch pipe to 42 to 48-inch pipe.</li> <li>• Camp Withycombe pump station decommissioning.</li> <li>• CIA pump station diversion to the Clackamas Interceptor.</li> </ul>  |
| Lower Clackamas Interceptor  | <ul style="list-style-type: none"> <li>• Abandon in place existing 6,000 lf of 27-inch pipe.</li> <li>• Install 7,600 lf of 48 to 54-inch pipe in new alignment in public right of way.</li> <li>• Trenchless crossings under I-205 Bridge and Mt. Scott Creek.</li> <li>• Sliplining existing 27-inch railroad crossings to maintain service to new alignment from existing tributary sewers.</li> <li>• Intercept existing Mount Talbert Interceptor with a new diversion box and decommission the downstream portion of the Mount Talbert Interceptor.</li> <li>• Reconfigure the existing connection of the Lower Phillips Interceptor to the new alignment of the Lower Clackamas Interceptor.</li> <li>• Rehabilitate 250 lf section of the Lower Phillips Interceptor just upstream of the connection to the Lower Clackamas Interceptor.</li> </ul> |
| Mount Scott Interceptor      | <ul style="list-style-type: none"> <li>• Upsize 1,400 lf of 36-inch pipe to 54-inch pipe.</li> <li>• Trenchless 54-inch crossing of UPRR and Mt. Scott Creek.</li> </ul>  |

This contract is the first phase of the project and includes preliminary design, easement acquisition, and preliminary permitting for these improvements. At this time WES anticipates using a phased approach for construction of these improvements with construction occurring between 2025 and 2030. The total cost for the Project including construction is estimated to be approximately \$40 million.

**PROCUREMENT PROCESS:**

This project was advertised in accordance with ORS 279B and LCRB Rules on April 4, 2022. Proposals were opened on May 4, 2022. The County received two (2) proposals; Jacobs Engineering Inc. and Carollo Engineers, Inc. An evaluation committee of WES personnel scored reviewed and determined Carollo’s proposal was qualified. Upon Contract award, the final Scope of Work and project fee were negotiated and finalized.

**RECOMMENDATION:**

Staff recommends the Board of County Commissioners, acting as the governing body of Water Environment Services, approve the Contract with Carollo Engineers, Inc. for design service for the Clackamas Area Interceptor project.

Respectfully submitted,

A handwritten signature in blue ink, appearing to read "Greg Geist", with a long horizontal flourish extending to the right.

Greg Geist  
Director, Water Environment Services

Attachment: Contract #7185

**PROCUREMENT**



**WATER ENVIRONMENT SERVICES  
PERSONAL SERVICES CONTRACT  
Contract #7185**

This Personal Services Contract (this “Contract”) is entered into between Carollo Engineers, Inc. (“Contractor”), and Water Environment Services, a political subdivision of the State of Oregon (“District”).

**ARTICLE I.**

- 1. Effective Date and Duration.** This Contract shall become effective upon signature of both parties. Unless earlier terminated or extended, this Contract shall expire on **June 30, 2027**.
- 2. Scope of Work.** Contractor shall provide engineering services necessary to design the Clackamas Area Interceptor project (“Work”), further described in **Exhibit A**.
- 3. Consideration.** The District agrees to pay Contractor, from available and authorized funds, a sum not to exceed **three million seven hundred thirty-one thousand five hundred seventy-three dollars (\$3,731,573.00)** for accomplishing the Work required by this Contract. Consideration rates are on a time and materials basis in accordance with the rates and costs specified in Exhibit A. If any interim payments to Contractor are made, such payments shall be made only in accordance with the schedule and requirements in Exhibit A.
- 4. Invoices and Payments.** Unless otherwise specified, Contractor shall submit monthly invoices for Work performed. Invoices shall describe all Work performed with particularity, by whom it was performed, and shall itemize and explain all expenses for which reimbursement is claimed. The invoices shall include the total amount billed to date by Contractor prior to the current invoice. If Contractor fails to present invoices in proper form within sixty (60) calendar days after the end of the month in which the services were rendered, Contractor waives any rights to present such invoice thereafter and to receive payment therefor. Payments shall be made in accordance with ORS 293.462 to Contractor following the District’s review and approval of invoices submitted by Contractor. Contractor shall not submit invoices for, and the District will not be obligated to pay, any amount in excess of the maximum compensation amount set forth above. If this maximum compensation amount is increased by amendment of this Contract, the amendment must be fully effective before Contractor performs Work subject to the amendment.

Invoices shall reference the above Contract Number and be submitted to: [wes-payable@clackamas.us](mailto:wes-payable@clackamas.us)

- 5. Travel and Other Expense.** Authorized:  Yes    No  
If travel expense reimbursement is authorized in this Contract, such expense shall only be reimbursed at the rates in the Clackamas County Contractor Travel Reimbursement Policy, hereby incorporated by reference and found at: <https://www.clackamas.us/finance/terms.html>. Travel expense reimbursement is not in excess of the not to exceed consideration.
- 6. Contract Documents.** This Contract consists of the following documents, which are listed in descending order of precedence and are attached and incorporated by reference, this Contract, and Exhibit A.

## 7. Contractor and District Contacts.

| Contractor   | District  |
|--|---|
| Administrator: Erik Waligorski, PE<br>Phone: 206-538-5161<br>Email: <a href="mailto:ewaligorski@carollo.com">ewaligorski@carollo.com</a> | Administrator: Jessica Rinner<br>Phone: 503-742-4551<br>Email: <a href="mailto:jrinner@clackamas.us">jrinner@clackamas.us</a> |

Payment information will be reported to the Internal Revenue Service (“IRS”) under the name and taxpayer ID number submitted. (See I.R.S. 1099 for additional instructions regarding taxpayer ID numbers.) Information not matching IRS records will subject Contractor payments to backup withholding.

## ARTICLE II.

- 1. ACCESS TO RECORDS.** Contractor shall maintain books, records, documents, and other evidence, in accordance with generally accepted accounting procedures and practices, sufficient to reflect properly all costs of whatever nature claimed to have been incurred and anticipated to be incurred in the performance of this Contract. District and their duly authorized representatives shall have access to the books, documents, papers, and records of Contractor, which are directly pertinent to this Contract for the purpose of making audit, examination, excerpts, and transcripts. Contractor shall maintain such books and records for a minimum of six (6) years, or such longer period as may be required by applicable law, following final payment and termination of this Contract, or until the conclusion of any audit, controversy or litigation arising out of or related to this Contract, whichever date is later.
- 2. AVAILABILITY OF FUTURE FUNDS.** Any continuation or extension of this Contract after the end of the fiscal period in which it is written is contingent on a new appropriation for each succeeding fiscal period sufficient to continue to make payments under this Contract, as determined by the District in its sole administrative discretion.
- 3. CAPTIONS.** The captions or headings in this Contract are for convenience only and in no way define, limit, or describe the scope or intent of any provisions of this Contract.
- 4. COMPLIANCE WITH APPLICABLE LAW.** Contractor shall comply with all applicable federal, state and local laws, regulations, executive orders, and ordinances, as such may be amended from time to time.
- 5. COUNTERPARTS.** This Contract may be executed in several counterparts (electronic or otherwise), each of which shall be an original, all of which shall constitute the same instrument.
- 6. GOVERNING LAW.** This Contract, and all rights, obligations, and disputes arising out of it, shall be governed and construed in accordance with the laws of the State of Oregon and the ordinances of Clackamas County without regard to principles of conflicts of law. Any claim, action, or suit between District and Contractor that arises out of or relates to the performance of this Contract shall be brought and conducted solely and exclusively within the Circuit Court for Clackamas County, for the State of Oregon. Provided, however, that if any such claim, action, or suit may be brought in a federal forum, it shall be brought and conducted solely and exclusively within the United States District Court for the District of Oregon. In no event shall this section be construed as a waiver by the District of any form of defense or immunity, whether sovereign immunity, governmental immunity, immunity based on the Eleventh Amendment to the Constitution of the United States or otherwise, from any claim or from the jurisdiction of any court. Contractor, by execution of this Contract, hereby consents to the personal jurisdiction of the courts referenced in this section.

**7. INDEMNITY, RESPONSIBILITY FOR DAMAGES.** Contractor shall be responsible for all damage to property, injury to persons, and loss, expense, inconvenience, and delay which may be caused by, or result from, any negligent act, omission, or error of Contractor, its subcontractors, agents, or employees. The Contractor agrees to indemnify and defend the District and Clackamas County, and their officers, elected officials, agents and employees from and against all claims, actions, losses, liabilities, including reasonable attorney and accounting fees, and all expenses incidental to the investigation and defense thereof, arising out of or based upon Contractor’s negligent acts or omissions in performing under this Contract.

However, neither Contractor nor any attorney engaged by Contractor shall defend the claim in the name of District or Clackamas County (“County”), purport to act as legal representative of District or County, or settle any claim on behalf of District or County, without the approval of the Clackamas County Counsel’s Office. District or County may assume their own defense and settlement at their election and expense.

**8. INDEPENDENT CONTRACTOR STATUS.** The service(s) to be rendered under this Contract are those of an independent contractor. Although the District reserves the right to determine (and modify) the delivery schedule for the Work to be performed and to evaluate the quality of the completed performance, District cannot and will not control the means or manner of Contractor’s performance. Contractor is responsible for determining the appropriate means and manner of performing the Work. Contractor is not to be considered an agent or employee of District for any purpose, including, but not limited to: (A) The Contractor will be solely responsible for payment of any Federal or State taxes required as a result of this Contract; and (B) This Contract is not intended to entitle the Contractor to any benefits generally granted to District employees, including, but not limited to, vacation, holiday and sick leave, other leaves with pay, tenure, medical and dental coverage, life and disability insurance, overtime, Social Security, Workers' Compensation, unemployment compensation, or retirement benefits.

**9. INSURANCE.** Contractor shall secure at its own expense and keep in effect during the term of the performance under this Contract the insurance required and minimum coverage indicated below. The insurance requirements outlined below do not in any way limit the amount or scope of liability of Contractor under this Contract. Contractor shall provide proof of said insurance and name the District and Clackamas County as an additional insureds on all required liability policies. Proof of insurance and notice of any material change should be submitted to the following address: Clackamas County Procurement Division, 2051 Kaen Road, Oregon City, OR 97045 or [procurement@clackamas.us](mailto:procurement@clackamas.us).

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| Required - Workers Compensation: Contractor shall comply with the statutory workers’ compensation requirements in ORS 656.017, unless exempt under ORS 656.027 or 656.126.   |
| <input checked="" type="checkbox"/> Required – Commercial General Liability: combined single limit, or the equivalent, of not less than \$1,000,000 per claim, with an annual aggregate limit of \$2,000,000 for Bodily Injury and Property Damage.                  |
| <input checked="" type="checkbox"/> Required – Professional Liability: combined single limit, or the equivalent, of not less than \$1,000,000 per occurrence, with an annual aggregate limit of \$2,000,000 for damages caused by error, omission or negligent acts. |
| <input checked="" type="checkbox"/> Required – Automobile Liability: combined single limit, or the equivalent, of not less than \$1,000,000 per accident for Bodily Injury and Property Damage.  |

The policy(s) shall be primary insurance as respects to the District. Any insurance or self-insurance maintained by the District shall be excess and shall not contribute to it. Any obligation that District agree to a waiver of subrogation is hereby stricken.

- 10. LIMITATION OF LIABILITIES.** This Contract is expressly subject to the debt limitation of Oregon counties set forth in Article XI, Section 10, of the Oregon Constitution, and is contingent upon funds being appropriated therefore. Any provisions herein which would conflict with law are deemed inoperative to that extent. Except for liability arising under or related to Article II, Section 13 or Section 20 neither party shall be liable for (i) any indirect, incidental, consequential or special damages under this Contract or (ii) any damages of any sort arising solely from the termination of this Contract in accordance with its terms.
- 11. NOTICES.** Except as otherwise provided in this Contract, any required notices between the parties shall be given in writing by personal delivery, email, or mailing the same, to the Contract Administrators identified in Article 1, Section 6. If notice is sent to District, a copy shall also be sent to: Clackamas County Procurement, 2051 Kaen Road, Oregon City, OR 97045, or [procurement@clackamas.us](mailto:procurement@clackamas.us). Any communication or notice so addressed and mailed shall be deemed to be given five (5) days after mailing, and immediately upon personal delivery, or within 2 hours after the email is sent during District's normal business hours (Monday – Thursday, 7:00 a.m. to 6:00 p.m.) (as recorded on the device from which the sender sent the email), unless the sender receives an automated message or other indication that the email has not been delivered.
- 12. OWNERSHIP OF WORK PRODUCT.** All work product of Contractor that results from this Contract (the "Work Product") is the exclusive property of District. District and Contractor intend that such Work Product be deemed "work made for hire" of which District shall be deemed the author. If for any reason the Work Product is not deemed "work made for hire," Contractor hereby irrevocably assigns to District all of its right, title, and interest in and to any and all of the Work Product, whether arising from copyright, patent, trademark or trade secret, or any other state or federal intellectual property law or doctrine. Contractor shall execute such further documents and instruments as District may reasonably request in order to fully vest such rights in District. Contractor forever waives any and all rights relating to the Work Product, including without limitation, any and all rights arising under 17 USC § 106A or any other rights of identification of authorship or rights of approval, restriction or limitation on use or subsequent modifications. Notwithstanding the above, District shall have no rights in any pre-existing Contractor intellectual property provided to District by Contractor in the performance of this Contract except to copy, use and re-use any such Contractor intellectual property for District use only.
- 13. REPRESENTATIONS AND WARRANTIES.** Contractor represents and warrants to District that (A) Contractor has the power and authority to enter into and perform this Contract; (B) this Contract, when executed and delivered, shall be a valid and binding obligation of Contractor enforceable in accordance with its terms; (C) Contractor shall at all times during the term of this Contract, be qualified, professionally competent, and duly licensed to perform the Work; (D) Contractor is an independent contractor as defined in ORS 670.600; and (E) the Work under this Contract shall be performed in accordance with the standard of professional skill and care required for a project of similar size, location, scope, and complexity, during the time in which the Work is being performed. The warranties set forth in this section are in addition to, and not in lieu of, any other warranties provided. The Contractor shall be responsible for the technical accuracy of its services and documents resulting therefrom, and District shall not be responsible for discovering deficiencies therein. The Contractor shall correct such deficiencies without additional compensation except to the extent such action is directly attributable to deficiencies in information furnished by the District.
- 14. SURVIVAL.** All rights and obligations shall cease upon termination or expiration of this Contract, except for the rights and obligations set forth in Article II, Sections 1, 6, 7, 10, 12, 13, 14, 15, 17, 20, 21, 25, 27, and 29, and all other rights and obligations which by their context are intended to survive. However, such expiration shall not extinguish or prejudice the District's right to enforce this Contract

with respect to: (a) any breach of a Contractor warranty; or (b) any default or defect in Contractor performance that has not been cured.

- 15. SEVERABILITY.** 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.
- 16. SUBCONTRACTS AND ASSIGNMENTS.** Contractor shall not enter into any subcontracts for any of the Work required by this Contract, or assign or transfer any of its interest in this Contract by operation of law or otherwise, without obtaining prior written approval from the District, which shall be granted or denied in the District's sole discretion. In addition to any provisions the District may require, Contractor shall include in any permitted subcontract under this Contract a requirement that the subcontractor be bound by this Article II, Sections 1, 7, 8, 13, 16, and 27 as if the subcontractor were the Contractor. District's consent to any subcontract shall not relieve Contractor of any of its duties or obligations under this Contract.
- 17. 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 authorized successors and assigns.
- 18. TAX COMPLIANCE CERTIFICATION.** The Contractor shall comply with all federal, state and local laws, regulation, executive orders and ordinances applicable to this Contract. Contractor represents and warrants that it has complied, and will continue to comply throughout the duration of this Contract and any extensions, with all tax laws of this state or any political subdivision of this state, including but not limited to ORS 305.620 and ORS chapters 316, 317, and 318. Any violation of this section shall constitute a material breach of this Contract and shall entitle District to terminate this Contract, to pursue and recover any and all damages that arise from the breach and the termination of this Contract, and to pursue any or all of the remedies available under this Contract or applicable law.
- 19. TERMINATIONS.** This Contract may be terminated for the following reasons: (A) by mutual agreement of the parties or by the District (i) for convenience upon thirty (30) days written notice to Contractor, or (ii) at any time the District fails to receive funding, appropriations, or other expenditure authority as solely determined by the District; or (B) if contractor breaches any Contract provision or is declared insolvent, District may terminate after thirty (30) days written notice with an opportunity to cure.
- Upon receipt of written notice of termination from the District, Contractor shall immediately stop performance of the Work. Upon termination of this Contract, Contractor shall deliver to District all documents, Work Product, information, works-in-progress and other property that are or would be deliverables had the Contract Work been completed. Upon District's request, Contractor shall surrender to anyone District designates, all documents, research, objects or other tangible things needed to complete the Work
- 20. REMEDIES.** If terminated by the District due to a breach by the Contractor, then the District shall have any remedy available to it in law or equity. If this Contract is terminated for any other reason, Contractor's sole remedy is payment for the goods and services delivered and accepted by the District, less any setoff to which the District is entitled.
- 21. NO THIRD PARTY BENEFICIARIES.** District and Contractor are the only parties to this Contract and are the only parties entitled to enforce its terms. Nothing in this Contract gives, is intended to give, or shall be construed to give or provide any benefit or right, whether directly, indirectly or



otherwise, to third persons unless such third persons are individually identified by name herein and expressly described as intended beneficiaries of the terms of this Contract.

22. **TIME IS OF THE ESSENCE.** Contractor agrees that time is of the essence in the performance this Contract.
23. **FOREIGN CONTRACTOR.** If the Contractor is not domiciled in or registered to do business in the State of Oregon, Contractor shall promptly provide to the Oregon Department of Revenue and the Secretary of State, Corporate Division, all information required by those agencies relative to this Contract. The Contractor shall demonstrate its legal capacity to perform these services in the State of Oregon prior to entering into this Contract.
24. **FORCE MAJEURE.** Neither District nor Contractor shall be held responsible for delay or default caused by events outside the District or Contractor's reasonable control including, but not limited to, fire, terrorism, riot, acts of God, or war. However, Contractor shall make all reasonable efforts to remove or eliminate such a cause of delay or default and shall upon the cessation of the cause, diligently pursue performance of its obligations under this Contract.
25. **WAIVER.** The failure of District to enforce any provision of this Contract shall not constitute a waiver by District of that or any other provision.
26. **PUBLIC CONTRACTING REQUIREMENTS.** Pursuant to the public contracting requirements contained in Oregon Revised Statutes ("ORS") Chapter 279B.220 through 279B.235, Contractor shall:
  - a. Make payments promptly, as due, to all persons supplying to Contractor labor or materials for the prosecution of the work provided for in the Contract.
  - b. Pay all contributions or amounts due the Industrial Accident Fund from such Contractor or subcontractor incurred in the performance of the Contract.
  - c. Not permit any lien or claim to be filed or prosecuted against District on account of any labor or material furnished.
  - d. Pay the Department of Revenue all sums withheld from employees pursuant to ORS 316.167.
  - e. As applicable, the Contractor shall pay employees for work in accordance with ORS 279B.235, which is incorporated herein by this reference. The Contractor shall comply with the prohibitions set forth in ORS 652.220, compliance of which is a material element of this Contract, and failure to comply is a breach entitling District to terminate this Contract for cause.
  - f. If the Work involves lawn and landscape maintenance, Contractor shall salvage, recycle, compost, or mulch yard waste material at an approved site, if feasible and cost effective.
27. **NO ATTORNEY FEES.** In the event any arbitration, action or proceeding, including any bankruptcy proceeding, is instituted to enforce any term of this Contract, each party shall be responsible for its own attorneys' fees and expenses.
28. **KEY PERSONS.** Contractor acknowledges and agrees that a significant reason the District is entering into this Contract is because of the special qualifications of certain Key Persons set forth in the Contract. Under this Contract, the District is engaging the expertise, experience, judgment, and personal attention of such Key Persons. Neither Contractor nor any of the Key Persons shall delegate performance of the management powers and responsibilities each such Key Person is required to provide under this Contract to any other employee or agent of the Contractor unless the District provides prior written consent to such delegation. Contractor shall not reassign or transfer a Key Person to other duties or positions such that the Key Person is no longer available to provide the



**EXHIBIT A**  
**SCOPE OF WORK**

## SCOPE OF WORK

### ENGINEERING SERVICES FOR CLACKAMAS WES CLACKAMAS AREA INTERCEPTOR IMPROVEMENTS PROJECT

#### INTRODUCTION

Clackamas Water Environment Services (WES), referred to as “District” wants to complete capacity upgrades on the existing Clackamas Area Interceptors as hydraulic modeling completed as part of the Sanitary Sewer Master Plan (SSMP) work completed by Jacobs in 2019 indicated portions of the interceptor are at its peak wet weather capacity and need to be upsized. The Clackamas Area Interceptor Improvements Project (“Project”) will consist of taking an existing conceptual design through final design and construction. The Project includes approximately 5 miles of pipe and capacity upgrades which are needed at varying timeframes. The Project is expected to take 4 years to complete design, permitting, and easement acquisition activities, with construction happening in a phased approach between 2026 and 2035 depending on when the capacity in the specific section of interceptor is required.

#### BACKGROUND

WES (District), an intergovernmental partnership formed pursuant to ORS 190, produces clean water and protects human health and water quality for more than 190,000 people living and working in Clackamas County, Oregon. The District owns and operates five resource recovery facilities, 23 pumping stations and more than 350 miles of pipes. The District serves the Cities of Milwaukie, Happy Valley, Oregon City, West Linn, Gladstone, Johnson City, and unincorporated areas within Clackamas County.

The Project includes conveyance infrastructure upstream of the Intertie 2 Pump Station, which serves Clackamas County and portions of the City of Happy Valley and include the following:

- **Upper Clackamas Interceptor** – The Upper Clackamas Interceptor starts at the confluence with the Rock Creek Interceptor at the intersection of Highway (Hwy) 212 and Hwy 224 and continues west along Hwy 212 to the intersection of Hwy 212 and SE 124<sup>th</sup> Ct. The existing pipe is approximately 7,400 linear feet (lf) of 18 to 24-inch concrete sewer pipe (CSP) and polyvinyl chloride (PVC) pipe.
- **Middle Clackamas Interceptor** – The Middle Clackamas Interceptor starts at the intersection of Hwy 212 and SE 124<sup>th</sup> Ct. and travels in a northwesterly direction to the intersection of Minuteman Way and Mather Road. This section of the interceptor is approximately 10,700 lf of 24 to 27-inch pipe with a combination of ductile iron (DI), CSP, and reinforced concrete pipe (RCP).
- **Lower Clackamas Interceptor** – The Lower Clackamas Interceptor starts at the intersection of Minuteman Way and Mather Road and continues in a northwesterly direction behind properties. Near the end of the Lower Clackamas Interceptor, the Lower Phillips Interceptor and the Mount Talbert Interceptor end and discharge into the Lower Clackamas Interceptor. The Lower Clackamas Interceptor then continues a few hundred feet where it crosses the Union Pacific Railroad (UPRR) adjacent to 82<sup>nd</sup> Avenue and transitions to the Mount Scott Interceptor. In total, the Lower Clackamas Interceptor is approximately 7,600 lf of 27-inch RCP.
- **Mount Scott Interceptor** – The Mount Scott Interceptor begins at the terminus of the Clackamas Interceptor and runs along Mt. Scott Creek in a northwesterly direction to the intersection of SE Kuehn Rd. and SE Aldercrest Rd. Only the upper portion of the Mount Scott interceptor included in this project is the section between the end of the Clackamas Interceptor to the Intertie 2 Diversion box located at the end of SE Johnson Rd. This section of the Mount Scott Interceptor is approximately 1,400 lf of 36-inch RCP.

In 2019, the Sanitary Sewer System Master Plan (SSMP) was completed by the District. The SSMP identified

portions of the Clackamas and Mount Scott Interceptors as being capacity deficient under existing conditions and other portions of the system as needing capacity upgrades in the future. Portions of the Middle and Lower Clackamas Interceptor were also found to have condition issues. In September 2020, the District completed a Conceptual Design Report that summarized an evaluation of several alternatives to address capacity, condition and access issues of the Clackamas Interceptor and set forth a recommended plan to provide the required additional capacity, realigning portions of the interceptors for better access and addressing condition issues. A description of the conceptual design for each interceptor section is provided in the following table:

| Interceptor Section          | Conceptual Design Description   |
|------------------------------|---|
| Upper Clackamas Interceptor  | <ul style="list-style-type: none"> <li>• Maintain existing 7,400 lf of 18 and 24-inch pipe and construct similar length parallel 30 to 42-inch pipeline.</li> <li>• 250 lf bridge crossing.</li> <li>• Two (2) Diversion structures between the parallel pipelines.</li> </ul>  |
| Middle Clackamas Interceptor | <ul style="list-style-type: none"> <li>• Upsizing 10,700 lf of 24 to 27-inch pipe to 42 to 48-inch pipe.</li> <li>• Camp Withycombe pump station decommissioning.</li> <li>• CIA pump station diversion to the Clackamas Interceptor.</li> </ul>  |
| Lower Clackamas Interceptor  | <ul style="list-style-type: none"> <li>• Abandon in place existing 6,000 lf of 27-inch pipe.</li> <li>• Install 7,600 lf of 48 to 54-inch pipe in new alignment in public right of way.</li> <li>• Trenchless crossings under I-205 bridge and Mt. Scott Creek.</li> <li>• Sliplining existing 27-inch railroad crossings to maintain service to new alignment from existing tributary sewers.</li> <li>• Intercept existing Mount Talbert Interceptor with a new diversion box and decommission the downstream portion of the Mount Talbert Interceptor.</li> <li>• Reconfigure the existing connection of the Lower Phillips Interceptor to the new alignment of the Lower Clackamas Interceptor.</li> <li>• Rehabilitate 250 lf section of the Lower Phillips Interceptor just upstream of the connection to the Lower Clackamas Interceptor.</li> </ul> |
| Mount Scott Interceptor      | <ul style="list-style-type: none"> <li>• Upsize 1,400 lf of 36-inch pipe to 54-inch pipe.</li> <li>• Trenchless 54-inch crossing of UPRR and Mt. Scott Creek.</li> </ul>  |

Due to the need for the additional capacity in different sections being required over the course of the next 15 years, construction will be phased as the need for the additional capacity approaches. The design of the full project will be taken to a 60% level to establish alignment and elevations and determine permitting requirements and then advanced to 100% as the need for additional capacity is reached in the different sections of the interceptor system.

**PROJECT TEAM**

Carollo Engineers, Inc., (Consultant) will serve as the Prime Consultant for the Project, utilizing the following key persons:

| Key Staff         | Role                                |
|-------------------|-------------------------------------|
| Erik Waligorski   | Project Manager                     |
| Tammy Cleys       | Design Manager                      |
| Corianne Burnett  | Assistant PM/Utilities Coordination |
| Cheyenne Thompson | Project Engineer                    |
| Kathleen Mannion  | Project Engineer                    |

The following Subconsultant firms will support Consultant:

| Subconsultant                    | Key Staff        | Role   |
|----------------------------------|------------------|--|
| David Evans & Associates         | Andy Kutansky    | Road/Transportation Lead                                 |
|                                  | Ethan Rosenthal  | Environmental Lead                                       |
|                                  | Jennifer Miller  | Permitting Lead  |
|                                  | Nick Garcia      | Railroad Liaison   |
|                                  | Pat Gaylord      | Land Surveying   |
| McMillen Jacobs & Associates     | Wolfe Lang       | Geotechnical Lead  |
| Conzor (formerly Barney & Worth) | Kimi Sloop       | Public Outreach  |
|                                  | Melissa Porter   | Public Outreach  |
|                                  | Katie Wilson     | Public Outreach  |
| Common Street Consulting         | Kari Lowe        | Property Acquisition Lead                                |
|                                  | Tamisha Schrunck | Property Acquisition                                     |
| Historical Research Associates   | Cathy Bialas     | Cultural Resources                                       |
|                                  | Libby Provost    | Cultural Resources                                       |
| Harrity Tree Specialists         | Matt Sanchez     | Arborist   |
| Terraphase Engineering           | James Farrow     | Hazardous Materials and Environmental Due Diligence Lead |

**DISTRICT-PROVIDED SERVICES**

- District will furnish available studies, reports, and other data pertinent to the Project.
- District will arrange for access to, and make provisions for, the Consultant to enter upon public and private property.
- District will provide current "front-end" (Division o) documents to be used in developing the contract documents.
- District will provide current AutoCAD standards to be used in the development of the contract plans.
- District will provide one combined set of document/plan review comments for project deliverables.
- District will locate District-owned facilities along the proposed pipeline alignments prior to survey being completed by the Consultant.
- District will provide current, calibrated hydraulic model to be used in confirmation of the proposed pipe alignment and sizing.
- District will lead all right-of-entry and easement acquisition negotiations, acquire and pay for title reports, and handle closing and payment for easements.

- Clackamas County/District will lead public outreach, will maintain the community member database/mailling list and be responsible for communication/updates via the mailing list, including language translation and interpretation.
- District staff will conduct all community member interviews.
- District will lead permitting coordination.

## **GENERAL ASSUMPTIONS**

- Carollo Engineers and its subconsultants will be referred to as "Consultant" in this document.
- Clackamas Water Environment Services (WES) and its staff will be referred to as "District" in this document.
- Deliverables shall be provided in electronic PDF format, unless otherwise indicated. Final deliverables will be "wet" signed and/or digitally signed in accordance with the Oregon Administrative Rules (OAR).
- The District will furnish the Consultant available studies, reports and other data pertinent to the Consultant's services; obtain or authorize the Consultant to obtain or provide additional reports and data as required; furnish to the Consultant services of others required for the performance of the Consultant's services hereunder, and the Consultant shall be entitled to use and rely upon all such information and services provided by the District or others in performing the Consultant's services under this Agreement.
- The District will arrange for access to and make all provisions for the Consultant to enter upon public and private property as required for the Consultant to perform services hereunder.
- The project will use Consultant standard, CSI formatted specifications (6-digit, 50-division system) for technical specifications.
- Durations for meetings, workshops, and site visits in this Scope of Services are based on estimated time on-site. Allowances for travel time, as appropriate, are accounted for in the budget.
- Meetings/workshops will be conducted at District facilities, virtually, or at a District approved location.
- Current scope and fee includes consideration of standard health and safety protocol per Consultant's requirements.
- Total project duration for this phase of the work is twenty-four (24) months.

## **SCOPE OF WORK SUMMARY**

The Project will be completed in three phases:

- Phase 1 – Prepare 60% Design, Easement Acquisition Documents, and Initiate Permitting
- Phase 2 – Prepare Bid Documents, Temporary Construction Easement Acquisition, Permitting and Bid Services (future)
- Phase 3 – Engineering Services During Construction (future)

This Scope of Work provides for Phase 1 – 60% Design, Easement Acquisition Documents, and Initiate Permitting and is divided into the following tasks:

|          |                               |
|----------|-------------------------------|
| TASK 100 | PROJECT MANAGEMENT            |
| TASK 200 | PRELIMINARY DESIGN            |
| TASK 300 | 60% DESIGN                    |
| TASK 400 | OPINION OF PROBABLE COST      |
| TASK 500 | PROPERTY/EASEMENT ACQUISITION |
| TASK 600 | PUBLIC OUTREACH ASSISTANCE    |
| TASK 700 | PERMITTING ASSISTANCE         |

TASK 800 COORDINATION w/OTHER AGENCIES and UTILITIES

TASK 900 QUALITY CONTROL

Phase 2 – Prepare Bid Documents, Temporary Construction Easement Acquisition, Permitting, and Bid Services will be scoped and completed when the 60% design has been completed and the necessary capacity upgrades are required for each section of the Clackamas Interceptor.

Phase 3 – Engineering Services During Construction will be scoped and completed when the design scope of the capital improvements is better defined as a result of the design efforts completed during Phase 2.

## **SCOPE OF WORK DETAIL**

### **TASK 100 – PROJECT MANAGEMENT**

The purpose of this task is to manage and coordinate engineering and related services required for Project completion in accordance with the schedule, budget, and quality expectations that are established. Task 100 includes the following subtasks:

#### **Subtask 110 – Project Management Plan**

1. Prepare a Project Management Plan (PMP) that describes project roles and responsibilities, lists contact information for the project team, describes communication protocols, quality management, and includes the scope of work, schedule, and budget. Project schedule will be reviewed on a monthly basis throughout the project to reflect current progress.

#### **Subtask 120 – Project Monitoring and Reporting**

1. Manage the Project team to track time and budget, work elements accomplished, work items planned for the next period, level of effort, scope changes, time and budget needed to complete this Scope of Work.
2. Prepare monthly project status reports that compare work accomplished with schedule activities and compare expenditures with task budgets and submit reports to the District's Project Manager with monthly invoices. Document expenditures on a task basis and show hours by project personnel and other direct expenses related to work. Reports and invoicing will be formatted in a manner that is acceptable to the District. With each monthly progress report, provide corrective action plans to address schedule/budget deviations from baseline projections, if required.
3. Develop and maintain a Decision Log to record key decisions made by the District and others during the project to document the evolution of the design.

#### **Subtask 120 Assumptions:**

1. None.

#### **Subtask 130 – Project Management Meetings**

1. Schedule and conduct 30-minute, bi-weekly Project Management calls throughout the duration of the Project. Attendees will include Consultant PM and Assistant PM at a minimum. Additional staff will be invited as needed throughout the project to discuss project status.

#### **Subtask 130 Assumptions:**

1. Bi-weekly Project Management calls will be virtual.
2. Consultant's Project Manager will lead all meetings and calls.
3. Consultant's Project Manager and Assistant Project Manager will attend all Project Management



calls. In addition, other staff will be asked to join the calls to address the status of specific project related tasks. For the purposes of this scope of work it is assumed that three (3) Consultant's will attend the bi-weekly calls on average.

4. No agenda or meeting minutes are anticipated for the bi-weekly project management calls. Decisions made during the calls will be entered into the Decision Log.

#### Task 100 Deliverables:

1. Project Management Plan.
2. Twenty-four (24) monthly Invoices and Progress Reports.
3. Decision Log submitted at major milestones (30% and 60% Design)

### **TASK 200 – PRELIMINARY DESIGN**

The purpose of this task is to establish the final project design criteria and anticipated construction conditions. This task will develop construction bidding documents to the 30 percent completion level. Task 200 includes the following subtasks:

#### **Subtask 210 – Kickoff Meeting and Site Visit**

1. Kickoff Meeting: All key members of Consultant's team will attend this meeting. Review scope, schedule, budget, project goals, and interim milestones. Establish District preferred project communications and special invoicing requests.
2. Site Visit: Attend site visit with District staff to review/discuss the existing sewer conveyance system and associated facilities potentially impacted by this Project. Site visit will include Clackamas Area Interceptors, CIA Pump Station, and Camp Withycombe Pump Station improvement areas.

#### Subtask 210 Assumptions:

1. Kickoff Meeting will be held at District office and will be attended by a minimum of one (1) representative from each firm supporting Consultant on the project.
2. Site visit will occur immediately following the Kickoff Meeting.

#### **Subtask 220 – Data Collection and Review**

1. Data Requests: Submit data request(s) for available project documentation to support defining existing conditions. Documentation may include but is not limited to related reports and analyses, record drawings, geotechnical investigations, utility and franchise data, facility pump time/flow records and pump curves, standard operating procedures (SOPs) and other operation and maintenance records.
2. Consultant shall complete review of existing data to identify gaps in information required for the completion of Phase 1 of the Project.

#### Subtask 220 Assumptions:

1. Data review will extend to all sections of the Clackamas Area Interceptor Improvements Project, including the CIA and Camp Withycombe pump stations.
2. No field testing of the existing pump stations is included in this Scope of Work.

#### **Subtask 230 – Surveying and Utility Locating**

1. Establish a survey control network on the current realization of the Oregon Coordinate Reference System (OCRS), Portland Zone horizontal datum and NGVD29 Vertical Datum.
2. Conduct utility research for project area.

3. Conduct locates of all readily available buried utilities within project area.
4. Map trees 6" diameter and larger, map wetland flagging within the proposed corridor as identified in Task 270, and provide field survey confidence checks of FEMA Flood Plain GIS boundaries.
5. Map location of geotechnical explorations.
6. Perform public records research of assessors maps, Clackamas County Survey Records, ODOT Records, and Railroad Records for the purposes of right-of-way retracement. Information collected will be used as part of Task 500.
7. Using information obtained through public records research, recover existing survey monuments and perform right-of-way retracement and documentation of easements along pipeline corridor.
8. Complete a topographic survey in International Foot Units for the project area. As appropriate, for various portions of the project area, the survey may be conducted via a combination of aerial methods, mobile laser scanning, and ground survey and will include orthorectified photos and LIDAR data collection. Ground survey will include utility locate paint, invert elevations of storm and sanitary structures and mapping of obscured areas to locate critical features not visible in the aerial survey.
9. Produce base map with all gathered survey data in AutoCAD Civil3D V2019 with one foot contours..
10. Prepare and file a Pre-Construction Record of Survey with Clackamas County in compliance with ORS 209.150 and 209.155.
11. In support of Task 500 and any property/easement acquisition needs, prepare legal descriptions and exhibits.
12. In support of Task 500, stake the location of proposed property/easement acquisitions.

Subtask 230 Assumptions:

1. Traffic control requirements to be utilized during field investigations and data collection are included in this task including railroad flagging in and around the UPRR railroad.
2. For the purposes of this scope of work, the survey limits are assumed to be from edge of right-of-way to edge of right-of-way along existing roadways and up to 50 feet wide through existing or proposed easements.
3. Pothole of critical utilities per plan as directed through the Critical Utility Crossing and Pothole Plan Report per Subtask 290.
4. Utility locating will be completed by a private locating company, except for District facilities. This work assumes that the District will locate all District owned facilities along the proposed pipeline alignment.
5. Wetland and tree assessment flagging to be completed under Task 270 and coordinated with survey task for scheduling.
6. Title reports cost and acquisition is included in Task 500.
7. This task assumes that access along the project corridor will be covered by the right-of-entry obtained in Task 500.
8. Survey of Rock Creek Canyon is not included.

**Subtask 240 – Geotechnical Investigation and Analysis**

1. Review available geologic information for the project area including published topographic and geologic soil/bedrock maps and other available information and complete a site reconnaissance of

the proposed alignment to identify site conditions and access along the alignment.

2. Establish exploration locations along the proposed alignment and develop a geotechnical exploration plan to be used in obtaining necessary permits for the explorations.
3. Obtain the necessary permits from State Water Resources Department, Clackamas County, and ODOT. Geotechnical field work will be completed at the potential Rock Creek pipe bridge abutment locations, at each potential trenchless crossing location, and at locations where potential impacts resulting from groundwater or hazardous materials are expected. For the purposes of this Scope of Work, Consultant shall complete the following site explorations:
  - a. Rock Creek Bridge – two (2) borings to 50-feet deep each
  - b. Hwy 212 Crossing – two (2) borings with piezometer installation to 35-feet deep each
  - c. I-205 Crossing – three (3) borings to 40-feet deep each. Installing piezometers in two (2) borings.
  - d. Mt. Scott Creek Culverts at SE 84<sup>th</sup> Avenue – two (2) borings to 35-feet deep each. Installing a piezometer in one (1) boring.
  - e. Mt. Scott Creek & UPRR Tracks – two (2) borings to 35-feet deep each. Installing a piezometer in one (1) boring.
  - f. Open Cut Pipe Sections – six (6) borings to 30-feet deep each in deep excavation areas (more than 20-feet deep). Installing piezometers in each boring.
4. In field soil sampling will include field screening for potential contaminants (sheen test and photoionization detector (PID) readings).
5. Complete geotechnical laboratory testing on selected samples from the borings. Testing will include moisture content, percent fines/grain-size analysis, and Atterberg limits as appropriate for the materials encountered.
6. Provide geotechnical design recommendations for the proposed Project including evaluation of seismic hazards, evaluation of groundwater conditions and provide conclusions regarding hydrogeologic conditions and generalized dewatering considerations, recommendations for pipe bedding and trench backfill, recommendations for thrust blocks and restrained joints as appropriate, recommendations for temporary shoring.
7. Provide geotechnical recommendations for proposed trenchless crossings.
8. Provide general comments of potential construction difficulties identified during the field reconnaissance and explorations.
9. Provide a summary report presenting conclusions and recommendations with a site plan and exploration logs.

**Subtask 240 Assumptions:**

1. Consultant shall be responsible for obtaining necessary permits for the geotechnical explorations.
2. Traffic control required for explorations is included in the Scope of Work.
3. Piezometers shall include data loggers to automatically record the groundwater level for one year.
4. Drill cuttings will be drummed, stored on site until completion of all testing and then hauled and disposed of at an EPA Subtitle D Solid Waste Disposal Facility unless contaminant concentrations detected require an alternative landfill to be used. For the purposes of this scope of work, all soil is assumed to be able to be disposed of at the Subtitle D land fill. Disposal of any hazardous soil shall be addressed on a case-by-case basis through a change order.

**Subtask 250 – Hydraulic Modeling Confirmation**

The purpose of this subtask is to review the existing collection system modeling for the Clackamas Area Interceptor Improvements Project completed by the District as part of the Conceptual Design Report in

2020 and to confirm the proposed sizing and rough alignment of the proposed improvements.

1. Review existing flow and modeling data provided by the District.
2. Confirm proposed pipeline sizes and rough alignments for the improvement projects.

Subtask 250 Assumptions:

1. The District will provide the hydraulic model necessary to complete the pipe sizing and alignment confirmation.
2. No additional flow monitoring will be required to complete this subtask.
3. Recent lift station operational data, flow meter data and rainfall data (if required) are available and will be provided by the District.
4. Results of the hydraulic confirmation will be included as a chapter in the Basis of Design Report (BODR). No separate technical memorandum will be developed.

**Subtask 260 – Cultural Resources Services**

The purpose of this subtask is to identify potential cultural resources impacts that could affect the construction of the proposed improvement and develop a cultural resources monitoring plan, if needed.

Cultural Resource Risk Assessment:

1. Consultant shall conduct archival and background research to determine the presence or absence of high probability landforms, archaeological resources, and documented historic-period architectural resources within the alternatives study area and to make recommendations for further cultural resources review.
2. Consultant shall prepare a cultural resources risk assessment of the study area, which will include a description of the study, detailed historic context and ethno-historic information, methodology, recommendations for future work, detailed bibliography, and maps. At a minimum, Consultant shall examine the following databases and documents:
  - o SHPO database in Salem, Oregon for known/potential prehistoric and historic archaeological resources within a 0.5-mile radius of the alternatives.
  - o General Land Office (GLO) maps.
  - o Newspapers, tax assessors.
  - o ODOT historic right-of-way maps.
  - o Land Patents as maintained by the Bureau of Land Management (BLM)
  - o Historic topographic maps.
  - o Sanborn Fire Insurance maps.
  - o Record archives (i.e., historical societies or tribal archives)

Cultural Resources Survey:

The purpose of this effort is to establish presence or absence of historic properties in, or eligible for, the National Register of Historic Places (NRHP) that may be in the area of impact (API). The work will comply with the SHPO Guidelines for Conducting Field Archaeology in Oregon as well as the latest updated SHPO Guidelines for Reporting on Archaeological Investigations. Consultant shall complete a pedestrian survey, subsurface sampling, and an architectural inventory to identify and/or relocate archaeological resources within the API and architectural resources within or adjacent to the API for the preferred alternative.

1. Consultant shall complete a pedestrian survey, subsurface sampling, and an architectural inventory to identify and/or relocate archaeological and architectural resources within the API for the preferred alternative. Consultant shall conduct pedestrian surveys within the API that includes areas where ground will be disturbed by project construction, including temporary

access roads, staging areas, material sources, disposal sites, and detours, etc. Consultant shall determine transect spacing based on professional judgment to discover all probable site locations though transects will be no more than 30 meters apart. Consultant shall identify and record all cultural resources observable on the surface and in subsurface profiles. The pedestrian survey will enable Consultant to identify areas of high and low probability for archaeological resources and to determine the appropriate level of survey or subsurface exploratory probing.

2. Consultant shall obtain the appropriate permits for field tasks requiring a State of Oregon Archaeological Permit (issued by SHPO for all collection or excavation by an archaeologist on non-federal public lands and for collection or excavation within archaeological sites on private land). Consultant shall conduct subsurface sampling in areas where ground visibility is low and in areas of high probability for archaeological resources, unless documented proof of previous fill or other artificial surface is available (e.g. as-builts or geo-morphological work for cut or fill locations).
3. Should archeological materials be identified, a field site form will be completed that describes the setting and character of the archaeological materials. Field site forms will include a description of the artifacts as allowed by observation only. To the extent possible, they will be identified as to the type, material, function, and cultural and chronological association. All diagnostic materials will be photographed. Site boundary polygons and the locations of all features shall be recorded using GPS technology and on a site sketch map. All resources will be recorded using the state's online archaeological site form.
4. The Consultant architectural historian will identify and characterize the historic-period architectural resources in or sharing a boarder the API. They will survey each resource based on expected project impacts. Consultant shall conduct a compliance-level architectural survey (CLS) for architectural resources that will not be directly impacted by the project. Compliance surveys are intended to be a first-look at historic-period architectural resources. They record basic information to assess potential eligibility for listing in the NRHP, either individually or as a contributing resource to a historic district. Consultant's compliance surveys include limited research time into tax assessor data, SHPO data, and easily accessible online archival materials such as historic maps (GLOs/Metsker/Sanborns), newspaper archives, and other sources as appropriate. Fieldwork methods mimic SHPO Guidelines for reconnaissance-level surveys and are conducted from the public ROW.
5. Consultant shall complete an intensive-level survey (ILS) for architectural resources that will be directly impacted by the project. An ILS includes research into the history, events, and people associated with a resource, looking primarily at such facts as dates, building development, builders or architects, and biographical data of previous owners and tenants. The purpose of an ILS is to provide local governments, agencies, and the SHPO with detailed and verifiable information about specific historic resources. In addition, information collected through an ILS provides a solid basis for individual, historic district, and multiple property National Register nominations.
6. Consultant shall complete fieldwork, collecting physical and architectural information of the resources and their relative physical context within the district. Consultant shall record the original use, resource placement, general characteristics, specific features, materials, decorative elements, interior features (when possible), number, type, and location of outbuildings, features of the immediate environment, and any other relevant data. Consultant shall not provide measured drawings, but will include a site plan, floor plan, and/or original blueprints (if available and appropriate). Consultant shall also conduct background research into available SHPO records, Tax Records, Title Research, Building Permits, Historic Maps, Newspapers, and other sources.
7. Consultant shall participate in up to two (2) meetings with the tribes to convey the project limits and to identify potential cultural resources areas to be monitored during construction.

8. Consultant shall prepare a draft and final Cultural Resources Monitoring and Unanticipated Discovery Plan.

Subtask 260 Assumptions:

1. All work will be reviewed and approved by professional archeologists and architectural historians who meet the Secretary of the Interior's professional standards for Archaeology (36 Code of Federal Regulations ["CFR"] 61, Appendix A).
2. All work and reporting will meet Oregon State Historic Preservation Office (SHPO) standards.
3. Materials provided at the cultural resources meeting with the tribes will be developed in conjunction with the public outreach and design teams to maintain consistent communication of project limits and goals.
4. Fieldwork will be completed once the preferred alternatives have been determined and the design are at a minimum of 30%.
5. No more than 50 historic-period architectural resources will be inventoried at compliance-level during the cultural resources survey and no more than five (5) historic-period architectural resources will be inventoried at intensive-level. If additional resources are identified, a budget modification will be necessary.
6. Consultant shall obtain up to four (4) SHPO archaeology survey permits for sampling on publicly owned (non-federal) land. No federal archaeology permits (Archaeological Resources Protection Act) will be necessary. If additional permits are needed, a budget modification may be necessary.
7. Consultant shall survey up to 65 acres of preferred alternatives and associated staging areas for archaeological resources. They will excavate up to 100 subsurface samples (shovel probes) to test for buried archaeological resources.
8. Consultant may identify up to three (3) archaeological resources. If additional resources are identified, a budget modification will be necessary.
9. Consultant may collect up to 30 archaeological artifacts for curation per SHPO permit requirements. If additional artifacts are collected, a budget modification will be necessary.
10. If impacts to archaeological resources cannot be avoided and therefore must be evaluated for listing in the National Register of Historic Places, a separate scope and cost estimate will be developed.
11. The lead federal agency will be responsible for consulting with Tribal Governments per Section 106 requirements, if required.
12. The bulk of the work will be carried out in 2023.

**Subtask 270 – Environmental Assessments (Wetlands/Trees/Hazardous Materials)**

The purpose of this subtask is to complete any environmental assessment along the proposed project alignment which might be required to complete the permitting of the proposed improvements.

**Subtask 271 – Environmental Documentation**

1. Wetland and Waters Delineation.
  - a. Reconnaissance Natural Resources Evaluation. Consultant shall conduct a desk-top and field reconnaissance level assessment of wetlands, streams, sensitive species, and goal 5 natural resources within the project area to support the selection of preferred alignments and to refine the study area boundary.
  - b. Once the study area has been defined, Consultant shall conduct an on-site wetland delineation within the established study area. The delineation will follow the "routine" method established by the 1987 USACE Wetlands Delineation Manual and the 2010 Regional Supplement to that document. Consultant shall coordinate with the Easement Acquisition team to obtain necessary rights of entry to perform the

- necessary environmental studies.
- c. Consultant shall delineate all wetlands and waters of the state within the project limits. Consultant shall locate sample data plots according to the Manual and supplement in appropriate areas to document the presence and extent of wetlands and waters of the state. Where wetlands or waters of the state are present, the boundaries will either be collected by the field biologist using a resource grade GPS device or flagged for collection by the project surveyor. All flagged areas will be recorded on a hand-sketched map for use by land surveyors.
    - i. Consultant shall prepare a wetland delineation report and submit to the Department of State Lands (DSL) and USACE for concurrence. The report shall be prepared according to the format and requirements established by DSL and suitable for submittal to DSL and USACE.
    - ii. Consultant shall coordinate with these agencies and provide up to one (1) revision to the delineation report.
  - d. Consultant shall conduct listed plant surveys during the flowering season, typically late spring through early summer. Likely species are Nelson's checkermallow and Willamette Daisy, however, a full list will be developed based on the ORBIC and USFWS IPaC database results.
2. Stream Functional Assessment. Consultant shall conduct a stream functional assessment for streams likely to be permanently impacted by the project. The assessment will conform to the latest version of the Stream Function Assessment Method for Oregon at the time of investigation (EPA 910-D-18-001) or other suitable methods based on discussions with and consent from the USACE and DSL. This method includes review of watershed characteristics as well as an on-site survey of stream habitat values and functions. Results shall be summarized in a brief Stream Functional Assessment Report or Memorandum that will be included as an attachment to the Project's Joint Permit Application (JPA) and Compensatory Mitigation Plan (if applicable). Assessment of up to two (2) stream crossings have been included with this task.
  3. Wetland Functional Assessment. A wetland functions and values assessment is required for DSL and USACE permitting processes if permanent wetland impacts will occur. This may include permanent loss of wetland acreage as well as conversion of forested wetlands to non-forested wetland types. If permanent wetland impacts will occur, then Consultant shall conduct an assessment of those wetlands. The assessment will follow the Oregon Rapid Wetland Assessment Protocol (ORWAP) or other suitable methods based on discussions with and consent from the USACE and DSL. Results shall be summarized in a brief Wetland Functional Assessment Report or Memorandum that can be used as an attachment to the Joint Permit Application and the Compensatory Wetland Mitigation Plan (if applicable). Assessment of up to two (2) wetland crossings have been included with this task.

#### Subtask 272 – Tree Assessment

1. Conduct research, identify species, size, and health of and mark potential significant trees which could be impacted by the proposed improvements. Trees to be picked up by the topographic survey. Significant trees include a diameter of 6-inches or greater within the proposed Project alignment.
2. The project Arborist will prepare a technical memorandum summarizing the significant trees and potential impacts to the project which will be included in the BODR.

#### Subtask 273 – Hazardous Materials Assessment

1. Consultant shall complete a Linear Corridor Assessment along the proposed project alignment to identify potential hazardous materials in soil and shallow groundwater. The assessment will include a government records review and site reconnaissance at which point a

determination will be made on the need for Phase I and Phase II Environmental Site Assessments (ESA).

2. Borings and complete chemical analytical testing on a minimum of six (6) samples will be completed in areas of known hazardous material contamination. The soil samples will be submitted to a laboratory for testing to include:
  - a. RCRA 8 metals by EPA methods 6000/7000 series.
  - b. Petroleum screen by Northwest method NWTPH-HCID (hydrocarbon identification).
3. Provide a summary of soil chemical analytical testing and discussion of material handling of potentially impacted soils/groundwater, if necessary.
4. Prepare a draft and final hazardous materials handling plan to be included in the BODR.

Subtask 270 Assumptions:

1. Environmental assessments will be conducted on portions of the alignment outside of the paved right-of-way, unless specific features (street trees, hazardous materials) are impacted.
2. Two meetings with USACE/DSL to confirm delineation field and report requirements.
3. This task assumes that rights of entry will be obtained as part of Task 500 prior to accessing any private property. Consultant shall contact property owners that have provided rights of entry at least 48 hours prior conducting field work.
4. All areas of the wetland delineation study area can be safely accessed by land (e.g. special safety gear will not be needed to access Rock Creek.)
5. Functional assessments will cover up to two (2) streams and four (4) wetlands. Assessments will cover existing conditions and estimated post-project conditions.
6. Arborist will complete tree identification/tagging prior to survey/inventory period to reduce chances of mismeasurement or misidentification.
7. No regulated historic trees are encountered.
8. Consultant shall be responsible for obtaining necessary permits for the hazardous material explorations.
9. Phase I and Phase II ESA's are not included in this scope of work. If following the completion of the Linear Corridor Assessment, Phase I and Phase II ESA's are required a budget amendment for the associated work will be prepared and submitted to the District for approval.
10. Drill cuttings will be drummed, stored on site until completion of all testing and then hauled and disposed of at an EPA Subtitle D Solid Waste Disposal Facility unless contaminated concentrations detected require an alternate landfill to be used.
11. A Goal 5 Natural Resource Site Assessment Report required for Land Use permitting submittals is not included with this SOW. However, preliminary mapping of Goal 5 resources will be included with the Reconnaissance Natural Resource Assessment.

**Subtask 280 – Alternatives Analysis**

The purpose of this subtask is complete an alternative analysis on specific challenging crossings and concepts associated with the proposed improvements. Alternatives will be developed for the following:

- Staging and traffic control concept along Hwy 212.
- Trenchless crossings of Hwy 212 (if applicable), I-205, Mt. Scott Creek, and UPRR tracks.
- Installation of a new crossing of Rock Creek.
- Open cut or trenchless crossing of the Mt. Scott Creek culverts at SE 84<sup>th</sup> Avenue.
- Regulated resource crossings (e.g. wetlands, streams, Goal 5 resources)



This subtask will include the following activities:

1. Develop a list of possible alternatives to be considered, including up to two (2) crossing alternatives of Rock Creek, up to two (2) trenchless alternatives for each trenchless crossing (8 total alternatives), up to two (2) alternatives for crossing the Mt. Scott Creek culverts, and up to two (2) alternatives for the pipeline alignment along the Hwy 212 corridor.
2. Conduct a workshop with the District to present the proposed alternatives and to identify criteria and weighting factors to be used as part of the alternatives analysis and selection of a preferred alternative. District staff shall assist in development of the criteria and weighting factors before being applied to alternatives.
3. Evaluation of pipe alignment alternatives along the Hwy 212 corridor. A chapter within the BODR will summarize workshop results, describe design methodology and quantitative analysis comparing impacts to existing buried and overhead utilities, site reconstruction costs, restrictions & requirements associated with work impacting traveling public and freight, and design, review, and coordination time. Evaluation will also include impacts to travel lanes, bike lanes, curb ramps, and sidewalks, recommendations on detours TPAR, and workshop as described below.
4. Coordinate with Union Pacific Railroad to evaluate crossing alternatives and permit requirements.
5. Determine planning level costs for each alternative to be used in the selection process.
6. Complete alternatives analysis chapter within BODR and prepare a presentation of the findings for the District.
7. Conduct an alternatives selection workshop.

Subtask 280 Assumptions:

1. The pipe alignment alternatives that will be considered as part of the Hwy 212 alternatives analysis stated above are assumed to be "in-street" vs. behind the curb. The former will include impacts to utility laterals, traveling public, and freight. The latter will require extensive site restoration, above- and below-ground utility conflicts, and the potential for temporary construction easements.
2. No alternatives beyond those identified above will be considered as part of the preliminary design. This task assumes that the alignments presented in the Conceptual Design Report will not change as part of the preliminary design unless modified by or related to specific crossings that were evaluated.
3. Permitting impacts of the various alternatives will be determined under Task 700.
4. The alternatives analysis will be summarized as a chapter in in the BODR. No technical memorandum will be generated as part of this task, only presentations which will be used for District workshops. Notes and decisions shall be summarized following all presentations through formal meeting minutes.

**Subtask 290 – Basis of Design Report (30% Design)**

The purpose of this subtask is to summarize the data collected and analysis completed into a Basis of Design Report (BODR) and to prepare the 30% level plans and a specifications table of contents.

1. Summarize the preliminary analysis findings in a Draft BODR, including 30% level plans, alternatives analysis, and specifications table of contents.
2. Develop a list of critical facilities to be further researched and potholed during the Phase 2 Design of the Project.
3. Develop a proposed construction schedule for the required improvements, including permitting timelines identified in Task 700, and recommendations for construction sequencing.

4. Identify critical utility crossings and develop a potholing plan to be executed during Task 300.
5. Conduct internal QA/QC of the BODR per Task 900
6. Conduct internal QA/QC of the 30% plans per Task 900.
7. Submit the Draft BODR/30% Design to the District for review.
8. Conduct a BODR/30% Design review meeting with District staff.
9. Incorporate comments and produce a Final BODR.

Subtask 290 Assumptions:

1. The BODR will include a project schedule developed in conjunction with Task 700.
2. The 30% specifications will be limited to a table of contents of required specifications.
3. Modifications to the 30% plans and specifications table of contents will be addressed during Task 300 – 60% Design.

Task 200 Deliverables:

1. Meeting Materials, Agendas, and Minutes
2. Data Request (Subtask 220)
3. Survey Base Map (Subtask 230)
4. Property/Easement acquisition document preparation and review including development of legal descriptions and exhibits (Subtask 230)
5. Geotechnical Exploration Plan (Subtask 240)
6. Geotechnical Report (Subtask 240)
7. Hydraulic Confirmation Chapter in BODR (Subtask 250)
8. Cultural Resources Risk Assessment Report (Subtask 260)
9. Cultural Resources Technical Report (Subtask 260)
10. Cultural Resources Monitoring and Unanticipated Discovery Plan (Subtask 260)
11. Wetland Desk-Top and Field Recon Memo and associated GIS files (Subtask 271)
12. Wetland Delineation Report (Subtask 271)
13. Stream Functional Assessment Report (Subtask 271)
14. Wetland Functional Assessment Report (Subtask 271)
15. Significant Tree Study (Subtask 272)
16. Linear Corridor Assessment (Subtask 273)
17. Alternatives Criteria Presentation (Subtask 280)
18. Alternatives Selection Presentation (Subtask 280)
19. BODR (Subtask 290)
20. 30% Plans and Specification TOC (Subtask 290)
21. Critical Utility Crossings and Potholing Report (Subtask 290)

**TASK 300 – 60% DESIGN**

The purpose of this task is to develop plans and specifications of the recommended improvements to a 60% design level.

1. Prepare 60% design documents to include drawings and specifications based on comments received from the District during Task 200, Subtask 290.
2. Conduct 60% design review meeting with District staff. This meeting will be held prior to

submitting the design documents for District review and will include a review of constructability, permitting, real estate easement acquisition, and community impacts. A record of comments will be submitted with the 60% design documents per Task 900

3. Initiate pothole field work per Subtask 230 and include data into 60% Design effort.
4. Quarterly design coordination meetings with District

Task 300 Assumptions:

1. The work scoped under this task assumes that the proposed alignment from the Conceptual Design Report does not materially change.
2. Budget is based on the Preliminary Drawing List included as Attachment 1 to the Scope of Work.
3. Budget to include potential habitat mitigation costs based on a percentage of overall project costs or based on typical mitigation banking costs (i.e. not based on project-specific mitigation designs).
4. Roadway restoration (General Construction) plans
  - Road design plans format limited to:
  - Roadway, pathway and sidewalk pavement typical sections
  - Single set of plan-view identification of road construction features:
  - Paving
  - Curbs, sidewalks, and ADA curb ramps
  - Driveways
  - Roadside barriers
  - Signing
  - Pavement markings
  - Traffic signals and illumination
  - Utilities to protect or coordinate relocation
  - Stormwater pipes and structures
  - Roadway restoration plans will not include detail sheets for any of these features at the 60% design. Oregon Standard Drawings (or other agency standard drawings) will be referenced when applicable.
5. Traffic control and staging design
  - Traffic Control Plans will not be developed for Phase 1
  - Staging designs and exhibits to be developed as needed for constructability review.
  - Coordination time with stakeholders, specific to site restoration and traffic control/staging impacts, including detours and TPAR, will be included and described below
6. This task assumes up to eight (8) design coordination meetings with District staff with attendance by up to three (3) Consultant staff as required.
7. Modifications to the 60% design are not included in this Scope of Work and is assumed to occur during Phase 2 of the project. A spreadsheet containing all comments, responses and District concurrence to responses shall be submitted.
8. Pothole task will include 62 test-holes at depths no more than 10 feet. Resoration of potholes shall be limited to 5/8" minus or native backfill with EZ-street patch.

Task 300 Deliverables:

1. 60% Plans
2. Spreadsheet of District comments on all 60% Deliverables, Consultant responses, and District concurrence to responses

3. Potholing Field Data Report
4. Record of comment response per Task 900.
5. Eight (8) design coordination meeting materials, agendas, and minutes.

#### **TASK 400 – Opinion of Probable Construction Cost**

The purpose of this task is to complete an opinion of probable construction cost (OPCC) at 30% and 60% design efforts.

1. Prepare a OPCC based on 30% design documents.
2. Conduct internal QA/QC of the 30% OPCC plans per Task 900.
3. Submit the Draft 30% OPCC to the District for review in accordance with Task 200, Subtask 290.
4. Prepare a OPCC based on 60% design documents.
5. Conduct internal QA/QC of the 60% OPCC plans per Task 900.
6. Submit the Draft 60% OPCC to the District for review in accordance with Task 300.

#### Task 400 Assumptions:

1. Opinions of probable costs will be based on the level of project definition and expected accuracy range as defined by the American Association of Cost Engineers (AACE) International.
2. The OPCC generated during 30% shall be a Class 4 estimate based on AACE standards.
3. The OPCC generated during 60% shall be a Class 3 estimate based on AACE standards.
4. Modifications to the 30% OPCC shall be addressed during Task 300 – 60% Design.
5. In providing opinions of cost, financial analyses, economic feasibility projections, and schedules for potential projects, the Consultant has no control over cost or price of labor and material; unknown or latent conditions of existing equipment or structures that may affect operation and maintenance costs; competitive bidding procedures and market conditions; time or quality of performance of third parties; quality, type, management, or direction of operating personnel; and other economic and operational factors that may materially affect the ultimate project cost or schedule. Therefore, the Consultant makes no warranty that the District's actual project costs, financial aspects, economic feasibility, or schedules will not vary from the Consultant's opinions, analyses, projections, or estimates.

#### Task 400 Deliverables:

1. 30% Basis of Estimate, Summary, and Detailed Breakout OPCC
2. 60% Basis of Estimate, Summary, and Detailed Breakout OPCC

#### **TASK 500 – PROPERTY/EASEMENT ACQUISITION**

The purpose of this Task is to identify required permanent or temporary easements required for the construction of the proposed improvements, preparation of easement documents, and assist the District in tracking and obtaining the easements. Task 500 includes the following:

1. Research project alignment and identify potential permanent and temporary easements required for the construction of the proposed improvements.
2. Prepare programming estimate
3. Prepare rights-of-entry.
4. Prepare an Easement and Property Acquisition Management Plan.
5. Prepare a landowner contact matrix to monitor property acquisition activities.

6. Title research, acquisition, and review.
7. QC of appraisals in preparation for easement negotiations.
8. Interpret land use/zoning codes.
9. Prepare permanent easement offer documents and attend meetings with impacted properties.

Task 500 Assumptions:

1. Right-of-entry acquisition will be led by the District with documentation support from the Consultant.
2. Easement acquisition and negotiation will be led by the District with support from the Consultant team.
3. The District will handle the closings and paying of impacted property owners and no coordination will be required from Consultant.
4. This task assumes 50 number of right-of-entry or access agreements.
5. This task assumes identification of 29 number of temporary easements. Acquisition of temporary easements will occur in future phases of the Project when closer to construction.
6. This task assumes 21 number of permanent easements.
7. This task assumes 50 number of title research and reviews
8. Property appraisals will be completed by Clackamas County's on-call appraisal consultant.
9. The Project will not require any land use applications/actions.
10. District will pay for all title reports.
11. This task assumes up to two (2) meetings with each impacted property as part of the easement acquisition process. Up to three (3) Consultant team members will attend each property owner meeting.
12. As the lead, the District will maintain the acquisition diary/log for each acquisition.

Task 500 Deliverables:

1. Easement and Property Acquisition Management Plan.
2. Programming estimate
3. High level landowner contact matrix to monitor property acquisition activities.
4. Acquisition schedule for each acquisition assignment.
5. Subconsultant to supply District (50) Right-of-Entry or access agreement documents .
6. Subconsultant to supply District (21) offer packages
7. .

**TASK 600 – PUBLIC OUTREACH ASSISTANCE**

The purpose of the public outreach program is to inform the general public about the Clackamas Area Interceptor Improvements Project purpose, need and benefits; and provide opportunity for impacted, interested community members to provide input that informs the permitting, design, and mitigation process. It is assumed that the District/County will be the face of the project with the public and Consor will support the District/County by providing the necessary outreach materials and staff support for events as described below. Task600 includes the following:

1. Consor to attend a community relations kickoff meeting with District/Clackamas County staff to identify development of the Communications Plan.
2. Using available demographic information, Consor will perform a community/demographic data-gathering assessment of the proposed Project alignment. This effort will evaluate and research existing properties and people along the proposed alignment to identify the characteristics

(residential, commercial, recreational, etc.) and the relevant demographic information (language spoken, ethnicity, age, income level) based on census and county available data in order to identify the most appropriate public outreach methods and tools for the project.

3. As appropriate, Consor will provide recommendations of names/organizations to be added to project specific Constant Contact lists, which will be maintained by the District/County.
4. Consor will create and maintain a stakeholder database for the project. This list may include potentially impacted community members, interested organizations and advisory committees, and property owners, business owners, residents and other people along the proposed Project alignments. Names will be identified, and the stakeholder database updated, throughout the project.
5. **Develop a Project Communications Plan** Consor will work collaboratively with Clackamas County and the District to outline communications goals, key messages, and tasks to be accomplished as part of this Task. The plan will be updated twice, at 30% design and 60% design. Meetings with District/County communications staff will be held to review and update the plan.
6. **Develop an informational fact sheet and frequently asked questions (FAQ)**. Consor will create an informational fact sheet with the Project overview, project schedule, and contact information. Following meetings with key community members, develop a FAQ sheet based on the questions, comments and concerns that are raised. Both documents will be included on the District/County's Project webpage. Two updates of the fact sheet and FAQ will be provided as the design progresses. The first iteration will be at project start up, with updates at 30% and 60% design. Draft and final versions will be provided.
7. **Perform targeted community engagement**. Consor will work collaboratively with Clackamas County, ODOT Region 1, and the District to identify the most impacted and interested community members with whom to conduct interviews and assist with creation of interview questions. The purpose of the interview is to provide an opportunity for community members to ask questions and to provide input on outreach efforts, including possible future public engagement opportunities, advice on alignment and design options and permitting/mitigation efforts. Possible community members to interview include Clackamas County's Pedestrian and Bikeway Advisory Committee, impacted Community Planning Organizations, business associations/key employers in the area, environmental groups, and the historically underserved communities, including tribes. As the face of the Project, District staff will be responsible for arranging for and conducting the interviews. B&W staff will attend the interviews to take notes and provide additional support. Consor will create any meeting materials, such as a background presentation, and prepare summary notes for the interviews.
8. **Provide content for a Project webpage** to be hosted on the District/County's website. The webpage will include a project overview, timeline, frequently asked questions, contact information, and contact us form. Consor will provide the content and the District/County will be responsible for website uploading. The webpage will be updated at 30% and 60% design.
9. **Develop up to three (3) newsletter articles to be published during Phase 1 of the Project**. One at project start up, one at 30% design and one at 60% design. The articles will be based on the same information provided in the informational fact sheets and project webpage.
10. Consor will prepare for and attend up to four (4) Information Tabling/Community Events within the Project area. The purpose of attending the events will be to create awareness of the project and inform and educate the general public about the purpose, needs and benefits of the project. Materials and supplies taken to the tabling events will depend on the audience at the event. Information shared will include the project fact sheet and other project materials. Consor will assist in preparing for the events and will provide one staff person to staff two hours of each event.
11. **Prepare up to three (3) press releases** to be distributed by the District/County at key Project milestones (project start up, 30% design and 60% design). The press releases will be based on the same information provided in the informational fact sheets and project webpage.

12. Consor will prepare up to three (3) project updates to be distributed by the District/County using appropriate channels/methods at key Project milestones (project start up, 30% design and 60% design). Channels/methods may include a postcard mailing and email distribution. Possible audiences for distribution may include the constant contact list, stakeholder database, and a geographic boundary of people and properties in the project area. The project updates will be based on the same information provided in the informational fact sheets and project webpage.
13. Consor will prepare for and attend up to two (2) public open house meetings at 30% design and 60% design. The open house meetings will be a hybrid model. Preparation includes creating the powerpoint presentation, meeting materials and boards for the open house.
14. Consor will **coordinate with the Project Design** team to ensure that the public feedback is incorporated into the project design as feasible.
15. Consor will meet with the District/County communications team on a regular basis throughout the project to coordinate and complete the tasks required.

Task 600 Assumptions:

1. Public outreach will be led by Clackamas County/District and supported by Consultant.
2. The Consultant will be the lead for the content of the public outreach materials.
3. Clackamas County/District will maintain the Constant Contact lists and be responsible for communication/updates via the Constant Contact lists.
4. The Consultant team will maintain the stakeholder database.
5. This Project will use the District/County's webpage.
6. MS Teams will be used as the document management system to allow all parties to have access.
7. The public outreach team will work closely with the easement acquisition and permitting teams during Phase 1 of the Project.
8. This Project will use the County Brand/Style Guide for all documents.
9. The Communications Plan will be a living document and will be updated by Consor, in coordination with the District/County, at major Project milestones (30% and 60% Design). The document will be stored on the document management system platform.
10. District staff will conduct all impacted and interested community member interviews as part of the targeted community engagement task (#7 above).
11. Language translation of materials and interpreter at public meetings will be the responsibility of the District/County.

Task 600 Deliverables:

1. Agenda and minutes for community relations kickoff meeting.
2. Community/Demographic Data-Gathering Assessment map. Memorandum summarizing the analysis and application for public outreach.
3. Project Communications Plan. The plan will include tasks, roles, responsibilities, schedule, and a process for updating.
4. Informational fact sheet. A draft and final version of the informational sheet will be prepared. During the process, two update of the fact sheet at 30% and 60% design (with a draft and final version) are planned.
5. Frequently asked questions (FAQ) sheet. A draft and final version of the FAQ will be prepared. During the process, two update of the FAQ at 30% and 60% design (with a draft and final version) are planned.
6. List of recommendations and strategy for community member interviews as part of the targeted community engagement. task (#7 above)
7. Webpage content.

8. Three newsletter articles.
9. Attendance at and supplies/materials for four tabling events.
10. Content for three press releases.
11. Content for project updates.
12. Agenda, sign in sheet, comment forms, handouts, informational displays, presentations, and meeting summaries for two public open houses
13. Agendas and notes for weekly coordination meetings with Clackamas County/District staff. Topics may include: project deliverables, community assessment, development and updates of the communications plan, and open house and event preparation.

## **TASK 700 – PERMITTING ASSISTANCE**

The purpose of this task is to identify the permits required to complete the proposed project improvements, begin coordination with the corresponding agencies, and develop draft permit applications and documentation in preparation for submitting permits following the completion of Phase 1 of the project. Task 700 includes the following:

1. *Environmental Permitting Strategy*. Consultant shall prepare an environmental permitting strategy document to identify environmental permitting requirements for the Project. The strategy shall incorporate the natural resource information to inform the permitting process, propose a schedule for permit application submittal and approval, and identify critical path elements and risks associated with permitting the proposed Project. Consultant shall coordinate with the project design team on the proposed project improvements and develop a matrix of anticipated permits required for construction. This task will include review of anticipated means of construction, environmental impacts, and potential mitigation measures. The strategy will be based on current permitting requirements and conversations with the relevant resource agencies to confirm permit requirements and approach. The environmental permitting strategy shall include the following elements, as necessary:
  - a. List of required permits.
  - b. Permitting schedule, including critical path permit tasks.
  - c. Anticipated information needs necessary to complete the permit application process.
  - d. Coordination strategy for key stakeholders.
  - e. Key milestones and decision points throughout the permitting process.
  - f. Permitting issues and requirements associated with alternative design options.
  - g. Anticipated permitting costs and approval timelines.
  - h. General mitigation requirements and opportunities.
  - i. Proposed permitting approach for each of the required natural resource permits.
2. *Land Use Permitting Strategy*. Consultant shall prepare a land use permitting strategy document to clarify the land use permit requirements and process for the Project. The document will summarize the major land use standards, Goal 5 resources, criteria and submittal requirements for each permit and outline the land use approval process(es), including public notice and public hearing requirements, identify the decision makers, and describe the optimal timing of land use decisions based on construction schedule. In addition, the land use permitting strategy will identify and describe the potential risk and proposed approach for mitigating risks associated with land use permitting. The strategy will outline other local government permits including, as applicable, erosion control and grading, tree removal, and County roadway use. Consultant shall work closely with the design team to incorporate environmental findings into the design efforts and will update the environmental and land use strategies based on design modifications.



3. Conduct agency check-in based on environmental studies to refine permitting and mitigation strategies between 30% and 60% design. This will include environmental, land use, and railroad check-ins.
4. Initiate and attend one pre-application conference with Clackamas County planning staff and one pre-application conference with City of Happy Valley staff to confirm land use application requirements based on 60% design documents.
5. Prepare temporary wetland and stream impact restoration design for purposes of Joint Permit Application.
6. Prepare draft permit applications based on 60% design documents. Permit applications to include:
  - a. Joint Permit Application for up to two (2) streams and four (4) wetlands
  - b. Biological Assessment for up to two (2) stream crossings
  - c. Land Use Applications

Task 700 Assumptions:

1. The District will take the lead role in coordinating with permitting agencies with support from the Consultant.
2. No permit applications will be submitted as part of this Phase of the project. Applications and associated material developed during this phase will be refined and submitted during Phase 2 of the project.
3. Consultant shall evaluate natural resource-related considerations associated with different design options; however, a formal environmental/permitting alternatives analysis will not be prepared for this task.
4. An evaluation of the potential climate change impacts associated with the Project will not be conducted.
5. Wetland and/or stream mitigation design will not be developed during this phase of the project; however, potential mitigation needs will be identified and high-level cost estimates developed.

Task 700 Deliverables:

1. Preparation of Environmental and Land Use Permitting Strategy plus up to two updates at 30% and 60% design.
2. Preparation of a permitting acquisition schedule plus up to two updates.
3. Draft environmental and land use permit applications based on 60% design.

**TASK 800 – COORDINATION WITH OTHER AGENCIES AND UTILITIES**

The purpose of this task is to coordinate with other agencies and utilities directly impacted by the proposed project improvements. Task 800 includes the following:

1. Roadway/Traffic Control meetings
  - a. Four (4) design coordination meetings with Clackamas County Transportation and Development (DTD)
  - b. Six (6) design coordination meetings with ODOT
  - c. Two (2) design coordination meetings with Happy Valley
  - d. Two (2) design coordination meetings with Clackamas County DTD, Clackamas County WES, ODOT, and Happy Valley together.
2. Permitting Meetings
  - a. One (1) meeting each with City of Happy Valley and Clackamas County to discuss land use requirements.

- b. One (1) meeting each with US Army Corps of Engineers, Oregon Department of State Lands, Oregon Department of Environmental Quality, Oregon Department of Fish and Wildlife, and National Marine Fisheries Service

Task 800 Assumptions:

1. All but four meetings are assumed to be virtual.
2. Up to two (2) consulting team members will attend each meeting.

Task 800 Deliverables:

1. Meeting agenda, coordination materials, and minutes.

**TASK 900 – QUALITY MANAGEMENT**

Develop and follow a Quality Management Plan (QMP) for the project to be included in the PMP. Review technical analysis, memos, reports, etc. and address review comments addressed prior to submission in accordance with the QMP. For major work products (Basis of Design Report (30% Design) and 60% Design), develop a Record of Comment (ROC) to document District comments and Consultant responses.

Task 900 Assumptions:

1. Consultant's Quality Management team performing QA/QC checks will be comprised of senior engineers and technical writers.

Task 900 Deliverables:

1. Quality Management Plan (included as a section of the PMP).
2. Perform internal QA/QC review of 30% design.
3. Perform internal QA/QC review of 60% design.
4. Record of Comment documentation for major work products.

**Clackamas Area Interceptor Improvements Project  
Preliminary Drawing List**

| Sheet Count |            |                |
|-------------|------------|----------------|
| <b>51</b>   | <b>135</b> | <b>170</b>     |
| <b>30%</b>  | <b>60%</b> | <b>Phase 2</b> |

| Sheet No | Drawing No | Title  | 30% | 60% | Phase 2 | Owner           |
|----------|------------|--|-----|-----|---------|-----------------|
|          |            | <b>General</b>   |     |     |         |                 |
| 1        | G01        | Location Map and Title Sheet   | x   | x   | x       | Carollo         |
| 2        | G02        | Drawing List   | x   | x   | x       | Carollo         |
| 3        | G03        | Pipeline Key Plan and Survey Control Points  | x   | x   | x       | Carollo         |
| 4        | G04        | General Notes, Legends, Symbols  | x   | x   | x       | Carollo         |
| 5        | G05        | Abbreviations  | x   | x   | x       | Carollo         |
| 6        | G07        | Geotechnical Boring Locations  | x   | x   | x       | Carollo/MJA/DEA |
|          |            | <b>Typical Details</b>   |     |     |         |                 |
| 7        | T01        | Typical Details - 1  | x   | x   | x       | Carollo         |
| 8        | T02        | Typical Details - 2  | x   | x   | x       | Carollo         |
| 9        | T03        | Typical Details - 3  | x   | x   | x       | Carollo         |
| 10       | T04        | Typical Details - 4  | x   | x   | x       | Carollo         |
| 11       | T05        | Typical Details - 5  | x   | x   | x       | Carollo         |
| 12       | T06        | Typical Details - 6  | x   | x   | x       | Carollo         |
| 13       | T07        | Typical Details - 7  | x   | x   | x       | Carollo         |
| 14       | T08        | Typical Details - 8  | x   | x   | x       | Carollo         |
| 15       | T09        | Typical Details - 9  | x   | x   | x       | Carollo         |
|          |            | <b>Erosion Control</b>   |     |     |         |                 |
| 16       | EC01       | Erosion Control Plan - Cover Sheet   |     |     | x       | DEA             |
| 17       | EC02       | Erosion Control Plan Details - 1   |     |     | x       | DEA             |
| 18       | EC03       | Erosion Control Plan Details - 2   |     |     | x       | DEA             |
| 19       | EC04       | Erosion Control Plan Details - 3   |     |     | x       | DEA             |
| 20       | EC05       | Erosion Control Plan - Mt. Scott - STA 0+00 to 14+00   |     |     | x       | DEA             |
| 21       | EC06       | Erosion Control Plan - Lower - STA 0+00 to 20+00   |     |     | x       | DEA             |
| 22       | EC07       | Erosion Control Plan - Lower - STA 20+00 to 40+00  |     |     | x       | DEA             |
| 23       | EC08       | Erosion Control Plan - Lower - STA 40+00 to 60+00  |     |     | x       | DEA             |
| 24       | EC09       | Erosion Control Plan - Lower/Middle - STA 60+00 to 80+00   |     |     | x       | DEA             |
| 25       | EC10       | Erosion Control Plan - Middle - STA 80+00 to 100+00  |     |     | x       | DEA             |
| 26       | EC11       | Erosion Control Plan - Middle - STA 100+00 to 120+00   |     |     | x       | DEA             |
| 27       | EC12       | Erosion Control Plan - Middle - STA 120+00 to 140+00   |     |     | x       | DEA             |
| 28       | EC13       | Erosion Control Plan - Middle - STA 140+00 to 160+00   |     |     | x       | DEA             |
| 29       | EC14       | Erosion Control Plan - Middle - STA 160+00 to 180+00   |     |     | x       | DEA             |
| 30       | EC15       | Erosion Control Plan - Middle/Upper - STA 180+00 to 200+00   |     |     | x       | DEA             |
| 31       | EC16       | Erosion Control Plan - Upper - STA 200+00 to 220+00  |     |     | x       | DEA             |
| 32       | EC17       | Erosion Control Plan - Upper - STA 220+00 to 240+00  |     |     | x       | DEA             |
|          |            | <b>Plan and Profile</b>  |     |     |         |                 |
|          |            | <b>Mount Scott Interceptor - Install in same alignment (1,400 LF)</b>                                |     |     |         |                 |
| 33       | P01        | Plan and Profile - STA 00+00 to 10+00  | x   | x   | x       | Carollo         |
| 34       | P02        | Plan and Profile - STA 10+00 to 14+00  | x   | x   | x       | Carollo         |
| 35       | P03        | Mount Scott Interceptor - Focus Area 1 - Detail (Trenchless crossing of RR)                          |     | x   | x       | Carollo         |
| 36       | P04        | Lower Clackamas Interceptor - Focus Area 2 - Detail (Trenchless crossing of Creek)                   |     | x   | x       | Carollo         |
| 37       | P05        | Lower Clackamas Interceptor - Focus Area 3 - Detail  |     | x   | x       | Carollo         |
| 38       | P06        | Bypass plan -1   |     | x   | x       | Carollo         |
| 39       | P07        | Bypass plan -2   |     | x   | x       | Carollo         |
|          |            | <b>Lower Clackamas Interceptor - Abandon existing and install in different alignment (7,600 LLF)</b> |     |     |         |                 |
| 40       | P08        | Plan and Profile - STA 00+00 to 10+00  | x   | x   | x       | Carollo         |
| 41       | P09        | Plan and Profile - STA 10+00 to 20+00  | x   | x   | x       | Carollo         |
| 42       | P10        | Plan and Profile - STA 20+00 to 30+00  | x   | x   | x       | Carollo         |
| 43       | P11        | Plan and Profile - STA 30+00 to 40+00  | x   | x   | x       | Carollo         |
| 44       | P12        | Plan and Profile - STA 40+00 to 50+00  | x   | x   | x       | Carollo         |
| 45       | P13        | Plan and Profile - STA 50+00 to 60+00  | x   | x   | x       | Carollo         |
| 46       | P14        | Plan and Profile - STA 60+00 to 70+00  | x   | x   | x       | Carollo         |
| 47       | P15        | Plan and Profile - STA 70+00 to 76+00  | x   | x   | x       | Carollo         |
| 48       | P16        | Lower Clackamas Interceptor - Focus Area 1 - Detail (Trenchless of Mt. Scott Creek)                  |     | x   | x       | Carollo         |
| 49       | P17        | Lower Clackamas Interceptor - Focus Area 2 - Detail (Trenchless under 205 Bridge)                    |     | x   | x       | Carollo         |
| 50       | P18        | Lower Clackamas Interceptor - Focus Area 3 - Detail  |     | x   | x       | Carollo         |
| 51       | P19        | Bypass plan -1   |     | x   | x       | Carollo         |
| 52       | P20        | Bypass plan -2   |     | x   | x       | Carollo         |
| 53       | P21        | Bypass plan -3   |     | x   | x       | Carollo         |
| 54       | P22        | Sliplining Plan Location - 1   |     | x   | x       | Carollo         |
| 55       | P23        | Sliplining Plan Location - 2   |     | x   | x       | Carollo         |
| 56       | P24        | Sliplining Plan Location - 3   |     | x   | x       | Carollo         |
| 57       | P25        | Rehabilitation of Lower Phillips Interceptor Plan  |     | x   | x       | Carollo         |
| 58       | P26        | Abandonment Plan - 1   |     | x   | x       | Carollo         |
| 59       | P27        | Abandonment Plan - 2   |     | x   | x       | Carollo         |
| 60       | P28        | Abandonment Plan - 3   |     | x   | x       | Carollo         |
|          |            | <b>Middle Clackamas Interceptor - Install in same alignment (10,700 LF)</b>                          |     |     |         |                 |
| 61       | P29        | Plan and Profile - STA 76+00 to 80+00  | x   | x   | x       | Carollo         |
| 62       | P30        | Plan and Profile - STA 80+00 to 90+00  | x   | x   | x       | Carollo         |
| 63       | P31        | Plan and Profile - STA 90+00 to 100+00   | x   | x   | x       | Carollo         |
| 64       | P32        | Plan and Profile - STA 100+00 to 110+00  | x   | x   | x       | Carollo         |
| 65       | P33        | Plan and Profile - STA 110+00 to 120+00  | x   | x   | x       | Carollo         |
| 66       | P34        | Plan and Profile - STA 120+00 to 130+00  | x   | x   | x       | Carollo         |
| 67       | P35        | Plan and Profile - STA 130+00 to 140+00  | x   | x   | x       | Carollo         |
| 68       | P36        | Plan and Profile - STA 140+00 to 150+00  | x   | x   | x       | Carollo         |
| 69       | P37        | Plan and Profile - STA 150+00 to 160+00  | x   | x   | x       | Carollo         |
| 70       | P38        | Plan and Profile - STA 160+00 to 170+00  | x   | x   | x       | Carollo         |
| 71       | P39        | Plan and Profile - STA 170+00 to 180+00  | x   | x   | x       | Carollo         |
| 72       | P40        | Plan and Profile - STA 180+00 to 183+00  | x   | x   | x       | Carollo         |
| 73       | P41        | Middle Clackamas Interceptor - Focus Area 1 - Detail   |     | x   | x       | Carollo         |
| 74       | P42        | Middle Clackamas Interceptor - Focus Area 2 - Detail   |     | x   | x       | Carollo         |
| 75       | P43        | Middle Clackamas Interceptor - Focus Area 3 - Detail   |     | x   | x       | Carollo         |
| 76       | P44        | Bypass Plan - STA 76+00 to 80+00   |     | x   | x       | Carollo         |
| 77       | P45        | Bypass Plan - STA 80+00 to 90+00   |     | x   | x       | Carollo         |
| 78       | P46        | Bypass Plan - STA 90+00 to 100+00  |     | x   | x       | Carollo         |
| 79       | P47        | Bypass Plan - STA 100+00 to 110+00   |     | x   | x       | Carollo         |
| 80       | P48        | Bypass Plan - STA 110+00 to 120+00   |     | x   | x       | Carollo         |
| 81       | P49        | Bypass Plan - STA 120+00 to 130+00   |     | x   | x       | Carollo         |
| 82       | P50        | Bypass Plan - STA 130+00 to 140+00   |     | x   | x       | Carollo         |
| 83       | P51        | Bypass Plan - STA 140+00 to 150+00   |     | x   | x       | Carollo         |
| 84       | P52        | Bypass Plan - STA 150+00 to 160+00   |     | x   | x       | Carollo         |
| 85       | P53        | Bypass Plan - STA 160+00 to 170+00   |     | x   | x       | Carollo         |
| 86       | P54        | Bypass Plan - STA 170+00 to 180+00   |     | x   | x       | Carollo         |
| 87       | P55        | Bypass Plan - STA 180+00 to 183+00   |     | x   | x       | Carollo         |

| <b>Upper Clackamas Interceptor - Parellel Installation (7,400 LF)</b> |      |   |   |   |   |         |
|---|------|---|---|---|---|---------|
| 88  | P56  | Plan and Profile - STA 183+00 to 190+00                                   | x | x | x | Carollo |
| 89  | P57  | Plan and Profile - STA 190+00 to 200+00                                   | x | x | x | Carollo |
| 90  | P58  | Plan and Profile - STA 200+00 to 210+00                                   | x | x | x | Carollo |
| 91  | P59  | Plan and Profile - STA 210+00 to 220+00                                   | x | x | x | Carollo |
| 92  | P60  | Plan and Profile - STA 220+00 to 230+00                                   | x | x | x | Carollo |
| 93  | P61  | Plan and Profile - STA 230+00 to 240+00                                   | x | x | x | Carollo |
| 94  | P62  | Plan and Profile - STA 240+00 to 250+00                                   | x | x | x | Carollo |
| 95  | P63  | Plan and Profile - STA 250+00 to 260+00                                   | x | x | x | Carollo |
| 96  | P64  | Upper Clackamas Interceptor - Focus Area 1 - Detail                       |   | x | x | Carollo |
| 97  | P65  | Upper Clackamas Interceptor - Focus Area 2 - Detail                       |   | x | x | Carollo |
| 98  | P66  | Upper Clackamas Interceptor - Focus Area 3 - Detail                       |   | x | x | Carollo |
| <b>Civil - Traffic Control</b>  |      |   |   |   |   |         |
| 99  | TC01 | Traffic Control Plan - Cover Sheet  |   |   | x | DEA     |
| 100   | TC02 | Traffic Control Plan Details - 1  |   |   | x | DEA     |
| 101   | TC03 | Traffic Control Plan Details - 2  |   |   | x | DEA     |
| 102   | TC04 | Traffic Control Plan Details - 3  |   |   | x | DEA     |
| 103   | TC05 | Traffic Control Plan - Mt. Scott - STA 0+00 to 20+00                      |   |   | x | DEA     |
| 104   | TC06 | Traffic Control Plan - Mt. Scott - STA 20+00 to 40+00                     |   |   | x | DEA     |
| 105   | TC07 | Traffic Control Plan - Lower - STA 0+00 to 20+00                          |   |   | x | DEA     |
| 106   | TC08 | Traffic Control Plan - Lower - STA 20+00 to 40+00                         |   |   | x | DEA     |
| 107   | TC09 | Traffic Control Plan - Lower - STA 40+00 to 60+00                         |   |   | x | DEA     |
| 108   | TC10 | Traffic Control Plan - Lower/Middle - STA 60+00 to 80+00                  |   |   | x | DEA     |
| 109   | TC11 | Traffic Control Plan - Middle - STA 80+00 to 100+00                       |   |   | x | DEA     |
| 110   | TC12 | Traffic Control Plan - Middle - STA 100+00 to 120+00                      |   |   | x | DEA     |
| 111   | TC13 | Traffic Control Plan - Middle - STA 120+00 to 140+00                      |   |   | x | DEA     |
| 112   | TC14 | Traffic Control Plan - Middle - STA 140+00 to 160+00                      |   |   | x | DEA     |
| 113   | TC15 | Traffic Control Plan - Middle - STA 160+00 to 180+00                      |   |   | x | DEA     |
| 114   | TC16 | Traffic Control Plan - Middle/Upper - STA 180+00 to 200+00                |   |   | x | DEA     |
| 115   | TC17 | Traffic Control Plan - Upper - STA 200+00 to 220+00                       |   |   | x | DEA     |
| 116   | TC18 | Traffic Control Plan - Upper - STA 220+00 to 240+00                       |   |   | x | DEA     |
| <b>Civil - Piping</b>   |      |   |   |   |   |         |
| 117   | CP01 | Upper Clackamas Interceptor Diversion Structures - Site Piping Profile    |   | x | x | Carollo |
| 118   | CP02 | Upper Clackamas Interceptor Diversion Structures - Sections and Details   |   | x | x | Carollo |
| 119   | CP03 | CIA Pump Station Diversion - Site Piping Profile                          |   | x | x | Carollo |
| 120   | CP04 | CIA Pump Station Diversion - Sections and Details                         |   | x | x | Carollo |
| 121   | CP05 | Mount Talbert Interceptor Diversion Structure - Site Piping Profile       |   | x | x | Carollo |
| 122   | CP06 | Mount Talbert Interceptor Diversion Structure - Sections and Details      |   | x | x | Carollo |
| 123   | CP07 | Lower Clackamas Interceptor Diversion Structure - Site Piping Profile     |   | x | x | Carollo |
| 124   | CP08 | Lower Clackamas Interceptor Diversion Structure - Sections and Details    |   | x | x | Carollo |
| <b>Civil - Paving Restoration</b>                                     |      |   |   |   |   |         |
| 125   | CR01 | Paving Restoration Plan - Legend  |   | x | x | DEA     |
| 126   | CR02 | Paving Restoration Plan - Details - 1                                     |   | x | x | DEA     |
| 127   | CR03 | Paving Restoration Plan - Details - 2                                     |   | x | x | DEA     |
| 128   | CR04 | Paving Restoration Plan - Mt. Scott - STA 0+00 to 20+00                   |   | x | x | DEA     |
| 129   | CR05 | Paving Restoration Plan - Mt. Scott - STA 20+00 to 40+00                  |   | x | x | DEA     |
| 130   | CR06 | Paving Restoration Plan - Lower - STA 0+00 to 20+00                       |   | x | x | DEA     |
| 131   | CR07 | Paving Restoration Plan - Lower - STA 20+00 to 40+00                      |   | x | x | DEA     |
| 132   | CR08 | Paving Restoration Plan - Lower - STA 40+00 to 60+00                      |   | x | x | DEA     |
| 133   | CR09 | Paving Restoration Plan - Lower/Middle - STA 60+00 to 80+00               |   | x | x | DEA     |
| 134   | CR10 | Paving Restoration Plan - Middle - STA 80+00 to 100+00                    |   | x | x | DEA     |
| 135   | CR11 | Paving Restoration Plan - Middle - STA 100+00 to 120+00                   |   | x | x | DEA     |
| 136   | CR12 | Paving Restoration Plan - Middle - STA 120+00 to 140+00                   |   | x | x | DEA     |
| 137   | CR13 | Paving Restoration Plan - Middle - STA 140+00 to 160+00                   |   | x | x | DEA     |
| 138   | CR14 | Paving Restoration Plan - Middle - STA 160+00 to 180+00                   |   | x | x | DEA     |
| 139   | CR15 | Paving Restoration Plan - Middle/Upper - STA 180+00 to 200+00             |   | x | x | DEA     |
| 140   | CR16 | Paving Restoration Plan - Upper - STA 200+00 to 220+00                    |   | x | x | DEA     |
| 141   | CR17 | Paving Restoration Plan - Upper - STA 220+00 to 240+00                    |   | x | x | DEA     |
| <b>Landscape - Restoration</b>  |      |   |   |   |   |         |
| 142   | L01  | Restoration Plan - Legend and Details                                     |   | x | x | DEA     |
| 143   | L02  | Restoration Plan - Planting List  |   | x | x | DEA     |
| 144   | L03  | Restoration Plan - Mt. Scott - MS35 to MS33 - Parellel RR                 |   | x | x | DEA     |
| 145   | L04  | Restoration Plan - Mt. Scott - MS33 to MS32B - Under 82 Ave               |   | x | x | DEA     |
| 146   | L05  | Restoration Plan - Lower - MS32B to 34 - Under RR and end of Jamine Rd    |   | x | x | DEA     |
| 147   | L06  | Restoration Plan - Lower - 17 to 16 - Trenchless pits, under 205          |   | x | x | DEA     |
| 148   | L07  | Restoration Plan - Lower - 16 to 14 - ODOT bike path                      |   | x | x | DEA     |
| 149   | L08  | Restoration Plan - Lower - 14 to 9 - ODOT bike path                       |   | x | x | DEA     |
| 150   | L09  | Restoration Plan - Middle - 14 to 9 - ODOT bike path                      |   | x | x | DEA     |
| 151   | L10  | Restoration Plan - Middle - CL15A to CL15 - crossing business parking lot |   | x | x | DEA     |
| 152   | L11  | Restoration Plan - Middle - CL14 to CL13 and CL8 to CL7- landscaped field |   | x | x | DEA     |
| 153   | L12  | Restoration Plan - Middle - CL3 to CL34 - Sidewalk of HWY 212             |   | x | x | DEA     |
| 154   | L13  | Restoration Plan - Middle - CL34 to CL39 - Sidewalk of HWY 212            |   | x | x | DEA     |
| 155   | L14  | Restoration Plan - Middle - CL39 to CL43A - Sidewalk of HWY 212           |   | x | x | DEA     |
| 156   | L15  | Restoration Plan - Upper - CL34A to CL43A - Sidewalk of HWY 212           |   | x | x | DEA     |
| 157   | L16  | Restoration Plan - Upper - CL43A to CL47 - Sidewalk of HWY 212            |   | x | x | DEA     |
| 158   | L17  | Restoration Plan - Upper - RC1 to CL69 - Trechless pits for Rock Creek    |   | x | x | DEA     |
| <b>Mechanical</b>   |      |   |   |   |   |         |
| 159   | M01  | General Mechanical Notes and Schedules                                    | x | x | x | Carollo |
| 160   | M02  | Camp Withycombe Pump Station - Mechanical Decommissioning Site Plan       |   | x | x | Carollo |
| 161   | M03  | Camp Withycombe Pump Station - Mechanical Decommissioning Details         |   | x | x | Carollo |
| <b>Electrical</b>   |      |   |   |   |   |         |
| 162   | E01  | Electrical Symbols  | x | x | x | Carollo |
| 163   | E02  | Electrical Abbreviations  | x | x | x | Carollo |
| 164   | E03  | Camp Withycombe Pump Station - Electrical Decommissioning Site Plan       |   | x | x | Carollo |
| 165   | E04  | Camp Withycombe Pump Station - Electrical Decommissioning Details         |   | x | x | Carollo |
| <b>Instrumentation</b>  |      |   |   |   |   |         |
| 166   | I01  | Instrumentation Legends and Symbols                                       | x | x | x | Carollo |
| 167   | I02  | Schematic Symbols   | x | x | x | Carollo |
| 168   | I03  | Control Schematics  | x | x | x | Carollo |
| 169   | I04  | Camp Withycombe Pump Station - Instrumentation Decommissioning Site Plan  |   | x | x | Carollo |
| 170   | I05  | Camp Withycombe Pump Station - Instrumentation Decommissioning Details    |   | x | x | Carollo |

**Clackamas County Water Environment Services  
Clackamas Area Interceptor Project  
Level of Effort Estimate Summary  
October 12, 2022**

| WORK TASKS   | Carollo Hours | Subtotal Carollo Cost | Subconsultant Cost |                  |                                |                 |                  |                 |                 | Total Cost         |
|--|---------------|-----------------------|--------------------|------------------|--------------------------------|-----------------|------------------|-----------------|-----------------|--------------------|
|  |               |                       | DEA                | McMillen Jacobs  | Historical Research Associates | Common Street   | Barney & Worth   | Harrity Trees   | Terraphase      |                    |
| Direct Labor (DL) Rates  |               |                       |                    |                  |                                |                 |                  |                 |                 |                    |
| <b>TASK 100 - PROJECT MANAGEMENT</b>                             |               |                       |                    |                  |                                |                 |                  |                 |                 |                    |
| <b>Task 100 Subtotal</b>   | 574           | \$133,183             | \$0                | \$8,568          | \$9,111                        | \$0             | \$13,914         | \$0             | \$0             | \$164,776          |
| <b>TASK 200 - PRELIMINARY DESIGN</b>                             |               |                       |                    |                  |                                |                 |                  |                 |                 |                    |
| <b>Task 200 Subtotal</b>   | 2,416         | \$462,184             | \$1,267,428        | \$162,540        | \$0                            | \$0             | \$8,944          | \$14,175        | \$70,797        | \$2,175,076        |
| <b>TASK 300 - 60% Design</b>                                     |               |                       |                    |                  |                                |                 |                  |                 |                 |                    |
| <b>Task 300 Subtotal</b>   | 1,712         | \$328,288             | \$207,513          | \$84,748         | \$0                            | \$0             | \$2,585          | \$0             | \$0             | \$623,134          |
| <b>TASK 400 - OPINION OF PROBABLE CONSTRUCTION COST (OPCC)</b>   |               |                       |                    |                  |                                |                 |                  |                 |                 |                    |
| <b>Task 400 Subtotal</b>   | 168           | \$28,311              | \$0                | \$8,344          | \$0                            | \$0             | \$0              | \$0             | \$0             | \$36,655           |
| <b>TASK 500 - PROPERTY/EASEMENT ACQUISITION</b>                  |               |                       |                    |                  |                                |                 |                  |                 |                 |                    |
| <b>Task 500 Subtotal</b>   | 28            | \$5,571               | \$0                | \$0              | \$0                            | \$40,683        | \$3,221          | \$0             | \$0             | \$49,476           |
| <b>TASK 600 - PUBLIC OUTREACH ASSISTANCE</b>                     |               |                       |                    |                  |                                |                 |                  |                 |                 |                    |
| <b>Task 600 Subtotal</b>   | 199           | \$42,992              | \$0                | \$0              | \$0                            | \$0             | \$139,635        | \$0             | \$0             | \$182,626          |
| <b>TASK 700 - PERMITTING ASSISTANCE</b>                          |               |                       |                    |                  |                                |                 |                  |                 |                 |                    |
| <b>Task 700 Subtotal</b>   | 80            | \$16,539              | \$148,300          | \$0              | \$0                            | \$0             | \$0              | \$0             | \$0             | \$164,839          |
| <b>TASK 800 - COORDINATION WITH OTHER AGENCIES AND UTILITIES</b> |               |                       |                    |                  |                                |                 |                  |                 |                 |                    |
| <b>Task 800 Subtotal</b>   | 104           | \$21,904              | \$42,456           | \$0              | \$0                            | \$0             | \$0              | \$0             | \$0             | \$64,360           |
| <b>TASK 900 - QUALITY MANAGEMENT</b>                             |               |                       |                    |                  |                                |                 |                  |                 |                 |                    |
| <b>Task 900 Subtotal</b>   | 336           | \$83,499              | \$62,888           | \$0              | \$0                            | \$0             | \$0              | \$0             | \$0             | \$146,388          |
| <b>Subconsultant Markup (5%)</b>                                 |               |                       |                    |                  |                                |                 |                  |                 |                 | \$124,243          |
| <b>TOTAL CONTRACT AMOUNT</b>                                     | <b>5,617</b>  | <b>\$1,122,471</b>    | <b>\$1,728,585</b> | <b>\$264,200</b> | <b>\$9,111</b>                 | <b>\$40,683</b> | <b>\$168,299</b> | <b>\$14,175</b> | <b>\$70,797</b> | <b>\$3,731,573</b> |

COVER SHEET

- New Agreement/Contract
- Amendment/Change/Extension to \_\_\_\_\_
- Other \_\_\_\_\_

Originating County Department: \_\_\_\_\_

Other party to contract/agreement: \_\_\_\_\_

Description:

After recording please return to: \_\_\_\_\_

- County Admin
- Procurement

If applicable, complete the following: \_\_\_\_\_

Board Agenda Date/Item Number: \_\_\_\_\_