

DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

DEVELOPMENT SERVICES BUILDING

150 BEAVERCREEK ROAD OREGON CITY, OR 97045

October 31, 2024	BCC Agenda Date/Item:
, -	9

Board of County Commissioners Clackamas County

Approval of a Contract with PBS Engineering and Environmental LLC for the Oatfield Rd Jennings Ave signal project. Total Contract Value is \$472,969 for 2 years. Funding is through the Community Road Fund. No County General Funds are involved.

Previous Board	10/29/24: Request for Cor	nsent													
Action/Review															
Performance	The project will build a strong infrastructure.														
Clackamas															
Counsel Review	10/14/2024, AN	Procurement Review	Yes												
Contact Person	Bob Knorr	Contact Phone	503-742-4680												

EXECUTIVE SUMMARY: The existing signal system at the intersection of Oatfield Road and Jennings Avenue is about 30 years old and nearing the end of its life span. Also, the existing pedestrian facilities do not meet current ADA standards and must be upgraded, including sidewalks, ADA curb ramps and pushbuttons. Additionally, the improvements include modifying both the existing retaining walls on the northeast and southeast corners of the intersection.

The project is funded through Community Road Fund- Safety Projects. Oatfield Road and Jennings Avenue are both minor arterial roadways with significant volumes of vehicle traffic. The design of the project is estimated to be completed by the spring of 2026 with construction starting in the summer of 2026.

The personal services contract will provide project management; environmental and stormwater management services; utility coordination; traffic engineering; public outreach; development of plans, specifications and estimates; right-of-way services; and bid assistance through bid award for the Oatfield Rd Jennings Ave Signal Rebuild Safety Work Project.

For Filing Use Only

PROCUREMENT PROCESS:

Clackamas County solicited services for design, project management, survey, geotechnical services, traffic engineering and limited right-of-way services by advertising a Request for Proposals. Three consultant proposals were submitted by PBS Engineering and Environmental LLC., Harper Houf Peterson Righellis Inc., and Consor North America, Inc. by the request for proposal deadline. A selection committee of three DTD personnel scored PBS Engineering and Environmental LLC.'s proposal the highest. After Notice of Intent to Award was issued, the statement of work and project fees were negotiated and finalized.

RECOMMENDATION:

Staff respectfully recommends that the Board approve and execute this Personal Services Contract with PBS Engineering and Environmental LLC, for the Oatfield Rd Jennings Ave Signal Rebuild Safety Work Project.

Respectfully submitted,

Dan Johnson

Dan Johnson
Director Transportation & Development



CLACKAMAS COUNTY PERSONAL SERVICES CONTRACT Contract #1019

This Personal Services Contract (this "Contract") is entered into between **PBS Engineering and Environmental LLC**, ("Contractor"), and Clackamas County, a political subdivision of the State of Oregon ("County"), on behalf of its Department of Transportation and Development.

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, 2026.
- 2. Scope of Work. Contractor shall provide the following personal services for the Oatfield Rd Jennings Ave Signal Rebuild Safety Work Project ("Work"), further described in Exhibit A.
- 3. Consideration. The County agrees to pay Contractor, from available and authorized funds, a sum not to exceed Four Hundred Seventy-Two Thousand Nine Hundred Sixty-Nine dollars (\$472,969.00), for accomplishing the Work required by this Contract. Consideration rates are on a fixed fee basis in accordance with the rates and costs specified in Exhibit B. If any interim payments to Contractor are made, such payments shall be made only in accordance with the schedule and requirements in Exhibit B.
- 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 County's review and approval of invoices submitted by Contractor. Contractor shall not submit invoices for, and the County 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: RKnorr@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 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, Exhibit A, and Exhibit B.

7. Contractor and County Contacts.

Contractor Administrator: Ken Rehms P.E.	County Administrator: Robert Knorr
Phone: 503-248-1939	Phone: 503-750-4680
Email: ken.rehms@pbsusa.com	Email: <u>RKnorr@clackamas.us</u>

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. County 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 County 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 County 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 County 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 act, omission, or neglect of Contractor, its subcontractors, agents, or employees. The Contractor agrees to indemnify and defend the County, and its 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 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 County, purport to act as legal representative of County, or settle any claim on behalf of County, without the approval of the Clackamas County Counsel's Office. County may assume its own defense and settlement at its election and expense.

- 8. INDEPENDENT CONTRACTOR STATUS. The service(s) to be rendered under this Contract are those of an independent contractor. Although the County 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, County 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 County 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 County 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 requirement outlined below do not in any way limit the amount of scope of liability of Contractor under this Contract. Contractor shall provide proof of said insurance and name the County as an additional insured 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 emailed to the County Contract Analyst.

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.

Required - Commercial General 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 Bodily Injury and Property Damage.

Required - Professional 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 damages caused by error, omission or negligent acts.

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 County. Any insurance or self-insurance maintained by the County shall be excess and shall not contribute to it. Any obligation that County 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 Contact 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 County, a copy shall also be sent to: Clackamas County Procurement, 2051 Kaen Road, Oregon City, OR 97045. 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 County'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 County. County and Contractor intend that such Work Product be deemed "work made for hire" of which County shall be deemed the author. If for any reason the Work Product is not deemed "work made for hire," Contractor hereby irrevocably assigns to County 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 County may reasonably request in order to fully vest such rights in County. 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, County shall have no rights in any pre-existing Contractor intellectual property provided to County by Contractor in the performance of this Contract except to copy, use and re-use any such Contractor intellectual property for County use only.
- 13. REPRESENTATIONS AND WARRANTIES. Contractor represents and warrants to County 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 County 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 County.
- **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 34, and all other rights and obligations which by their context are intended to survive. However, such expiration shall not extinguish or prejudice the County'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 County, which shall be granted or denied in the County's sole discretion. In addition to any provisions the County 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. County'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 County 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 County (i) for convenience upon thirty (30) days written notice to Contractor, or (ii) at any time the County fails to receive funding, appropriations, or other expenditure authority as solely determined by the County; or (B) if contractor breaches any Contract provision or is declared insolvent, County may terminate after thirty (30) days written notice with an opportunity to cure.
 - Upon receipt of written notice of termination from the County, Contractor shall immediately stop performance of the Work. Upon termination of this Contract, Contractor shall deliver to County all documents, Work Product, information, works-in-progress and other property that are or would be deliverables had the Contract Work been completed. Upon County's request, Contractor shall surrender to anyone County designates, all documents, research, objects or other tangible things needed to complete the Work.
- **20. REMEDIES.** If terminated by the County due to a breach by the Contractor, then the County 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 County, less any setoff to which the County is entitled.
- 21. NO THIRD PARTY BENEFICIARIES. County 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 of 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 County nor Contractor shall be held responsible for delay or default caused by events outside the County 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 County to enforce any provision of this Contract shall not constitute a waiver by County 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 County 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 County 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. Reserved
- 29. Reserved
- **30. KEY PERSONS.** Contractor acknowledges and agrees that a significant reason the County is entering into this Contract is because of the special qualifications of certain Key Persons set forth in the contract. Under this Contract, the County 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 County 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 County with such Key Person's services unless the County provides prior written consent to such reassignment or transfer.
- 31. Reserved
- 32. Reserved

33. Reserved.

34. MERGER. THIS CONTRACT CONSTITUTES THE ENTIRE AGREEMENT BETWEEN THE PARTIES WITH RESPECT TO THE SUBJECT MATTER REFERENCED THEREIN. THERE ARE NO UNDERSTANDINGS, AGREEMENTS, OR REPRESENTATIONS, ORAL OR WRITTEN, NOT SPECIFIED HEREIN REGARDING THIS CONTRACT. NO AMENDMENT, CONSENT, OR WAIVER OF TERMS OF THIS CONTRACT SHALL BIND EITHER PARTY UNLESS IN WRITING AND SIGNED BY ALL PARTIES. ANY SUCH AMENDMENT, CONSENT, OR WAIVER SHALL BE EFFECTIVE ONLY IN THE SPECIFIC INSTANCE AND FOR THE SPECIFIC PURPOSE GIVEN. CONTRACTOR, BY THE SIGNATURE HERETO OF ITS AUTHORIZED REPRESENTATIVE, IS AN INDEPENDENT CONTRACTOR, ACKNOWLEDGES HAVING READ AND UNDERSTOOD THIS CONTRACT, AND CONTRACTOR AGREES TO BE BOUND BY ITS TERMS AND CONDITIONS.

By their signatures below, the parties to this Contract agree to the terms, conditions, and content expressed herein.

PBS Engineering and Environmental LLC	Clackamas County	
Dustin E Cooley 2024.10.01 17:08:18-07'00'		
Authorized Signature Date	Chair	Date
Dustin Cooley, PE Transportation Mgr		
Name / Title (Printed)	Recording Secretary	
<u>2241754-97</u>		
Oregon Business Registry #	APPROVED AS TO FORM	
FLLC/Delaware	Ly/	10/14/2024
Entity Type / State of Formation	County Counsel	Date

EXHIBIT A PERSONAL SERVICES CONTRACT SCOPE OF WORK

SCOPE OF WORK

INTRODUCTION

Clackamas County Department of Transportation and Development ("DTD"), hereafter referenced as "County", is seeking the services of a qualified consultant to provide project management, survey, geotechnical services, traffic engineering, public outreach, and the development of both preliminary design and final PS&E (Plans, Specifications and Estimates) design for asphalt pavement, traffic signals, striping, ADA facilities and potentially stormwater facilities, as well as utility coordination, limited right-of-way services, and bid assistance for the "Oatfield Rd Jennings Ave Signal Rebuild Safety Work Project".

BACKGROUND

Oatfield Road and Jennings Avenue are both minor arterial roadways with significant volumes of vehicle traffic. Work includes rebuilding the intersection's traffic signal, adding illumination, upgrading ADA curb ramps and making other safety enhancements to address overrepresented crashes including broadside, nighttime and injury crashes. The existing signal system at this intersection is about 30 years old and nearing the end of its life span. Also, the existing pedestrian facilities do not meet current ADA standards and must be upgraded, including sidewalks, ramps and pushbuttons. Stormwater upgrades may also be required.

PROJECT UNDERSTANDING

This project will survey the area and identify public right-of-way through and around the intersection. It is the intent of the County to utilize existing right of way for this project.

This project will design for and replace existing signals, pedestrian pushbuttons, curb and sidewalks, ADA curb ramps, gabion retaining walls, install ITS fiber conduit, streetlights and storm facilities, and asphalt and striping as necessary to accomplish the project goals. The overhead span wire will be replaced with conduit and mast arms.

Lane Configuration and Geometry:

The Oatfield Road and Jennings Avenue intersection lane configurations should remain unchanged with only minor adjustments due to potential right of way limitations.

Stormwater Management:

Best Management Practices (BMP's) utilized per Oak Lodge Water Services District (OLWSD) Standards. This project is within the Oak Lodge Water Services District.

Lighting:

Replace existing street lighting.

Franchise Utilities:

Relocate franchise utilities.

Natural Resources:

No anticipated impacts.

Landscaping:

Grass seed shall be shown to match existing landscaping beyond improvements

Public Involvement and Outreach:

Public involvement will consist of providing information for County's website, in-person meetings with adjacent property owners, and facilitating a virtual open house.

Right-of-Way (ROW):

It is assumed that a minimal amount of additional right of way will be required to accommodate ADA curb ramp upgrades and modifying placement of signal poles and traffic cabinets of which will require replacement of the retaining wall structures behind the existing curb ramps. Consultant will confirm with survey and preliminary design and County will perform appraisal, negotiation, and acquisition work

SPECIFIC SCOPE OF SERVICES

SUMMARY OF WORK

Project management, survey, traffic engineering, utility coordination, geotechnical, stormwater services, public outreach, the development of both preliminary design and final PS&E (Plans, Specifications and Estimates) design, limited right-of-way services, and bid assistance up through bid award for this project based on the scope of services described herein.

Task 1.0	Project Management and Project Coordination
Task 2.0	Survey, Field Investigations and Mapping
Task 3.0	Environmental Reconnaissance and Permitting
Task 4.0	Stormwater / Hydraulics Related Services
Task 5.0	Utility Coordination
Task 6.0	Geotechnical and Geologic Services
Task 7.0	DAP and Preliminary Design (30%)
Task 8.0	Public Involvement/Outreach
Task 9.0	Final Design (60%, 90%, and 100% Bid Ready)
Task 10.0	Right-of-Way
Task 11.0	Bid and Award Assistance

The duration of the design of this project is assumed to be from October 2024 through December 2025 for the completion of design. Bidding will occur in January - February 2026. This scope of services does not include construction engineering or construction support but may be added at the discretion of the County towards the end of the design phase through a contract amendment.

Task 1.0 Project Management and Project Coordination

1.1 Project Management

Consultant shall:

- Document action items from meetings, comments, and responses in a master comment/response log.
- Document risks, opportunities, and task decisions in individual deliverables such as meeting minutes and memoranda included within each task.
- Prepare monthly invoices and progress reports. Assume a 18-month timeframe for the project to be designed and bid for construction.

1.2 Project Coordination

The proposed approach to project coordination during design is to hold project meetings with key project team members and representatives from the County. The Consultant Project Manager shall direct all meetings and provide direction to the rest of the team as the project progresses. These

meetings shall have a specific agenda with a predefined objective and outcome to address and resolve project issues as they are encountered. Agendas shall be distributed a minimum of 3 days in advance of the meeting.

- It is assumed in-person or virtual coordination meetings (1.5 hours each) shall be held during the design phase of the project (15-month time frame for a total of 15 meetings). Meetings to be held at County office or virtually. Up to 3 consultant personnel are expected to attend each meeting. Consultant shall prepare agenda in advance of deliverable review and other meetings as needed and provide minutes after each meeting including action items.
- Team (1 hour each). Up to 3 consultant personnel are expected to attend each meeting.
- Assist County PM and ROW staff in meeting with property owners to answer questions related to temporary/permanent property impacts. Attend up to 4 property owner meetings on site.
- A total of up to 20 bi-weekly telephone check-in meetings with the Consultant PM (1) hour each).
- Consultant shall prepare a project schedule at the on-set of design. Consultant shall provide an updated project schedule, as needed, with all major deliverables (30%, 60%, 90%, and 100%).

Task 1.0 Deliverables:

- Monthly Invoices and Progress Reports
- Project Schedule with Periodic Updates
- Meeting Agendas and Minutes for In-Person Coordination Meetings

Task 2.0 Survey, Field Investigations and Mapping

Consultant shall survey this Project for the areas as described in Project understanding section of this SOW unless otherwise noted in specific tasks.

Specific to agency standards, Survey will follow Ground Confidence Point Analysis and Report standards as defined in the 2015 ODOT Survey Policy and Procedure Manual to ensure DTM accuracy along the entire project corridor.

All other project survey methods will adhere to Clackamas County Survey Standards and Procedures.

2.1 Research

Consultant shall:

 Obtain the research data for the area as described in Project Understanding section of this SOW. Consultant shall perform data research as necessary to prepare for and support Project activities, and to produce Project maps and reports as called for in subsequent tasks. The typical records required for research are, but not limited to; vesting deeds, land sales contracts, County assessor plats and road records, subdivision plats, General Land Office plats, ODOT ROW drawings, railroad maps, County surveys, road dedications and vacations.

2.1.1 Existing Vesting Deeds and Property Ownerships

• The County shall obtain all necessary "Trio listing kits" (typically provided by a Title Company). Consultant shall identify property ownership within and adjacent to the Project site by investigating property deeds and County tax records. Consultant shall itemize and report property ownership and owner contact information to CPM. Consultant shall submit each deed in its own electronic file. Consultant shall include all vesting deeds referenced in the Property Vesting Deeds if needed to resolve the property boundary.

2.1.2 Existing Right of Way Records

Consultant shall:

- Research and obtain copies of surveys, subdivision plats, and land partition plats filed
 in the County surveyor's office related to the properties potentially impacted by the
 Project. This information is used to find monuments that might be impacted from the
 Project and establish property lines for area calculations when new ROW is acquired.
- Consultant shall research and obtain copies of County assessor maps, General Land Office plats, and County Road records related to the properties potentially impacted by the Project.
- Consultant shall research and obtain available data about Government Public Lands Survey Corners and their references in the Project area as defined in the SOW.

2.1.3 Existing Horizontal/Vertical Control Stations

Consultant shall

• Research and obtain data about horizontal and vertical control points as required for the Project area including GPS stations, benchmarks, and prior Project control surveys from county, city, and other governmental agencies.

2.1.4 Existing Utility Records

Consultant shall

 Research and obtain available facility maps and as-built construction plan data pertaining to utilities in or near the Project area from the County, One-Call Service, County, city, or other governmental agencies and utility companies.

Task 2.1 - Deliverables and Schedule

Consultant shall provide:

• Incorporate information from this task into the deliverables listed in Tasks 2.4, 2.5 and 10.1 as required for delivery of documents in subsequent tasks.

2.2 Horizontal And Vertical Control Network

The purpose of this task is to provide the means by which the Project can be located relative to horizontal and vertical datum, map projection, and coordinate systems. Consultant shall establish a horizontal and vertical control network using the datum associated with the Project area or as approved by the County. Reference the network and all mapping to the County approved vertical datum. The Horizontal Datum to be NAD 83(2011) epoch 2010.00 utilizing the Oregon Real Time Network (ORGN PDX Zone). The Horizontal Network shall be resolved using differential Real Time Kinematic (RTK) GPS observations along with Terrestrial ground measurements. The Vertical Datum shall be NAVD 88. A GPS derived elevation shall be utilized using the Oregon Real Time Network. Closed loop differential level measurements shall run through all of the on-site Control.

Consultant shall establish horizontal control according to County standards using Terrestrial (Theodolite and EDM), GPS (Static or Rapid Static) or a combination of both. Consultant shall set and adjust control points in conformance with County guidelines.

Consultant shall use 5/8" Rebar with plastic or brass caps, or other County approved control point, for the GPS and network points. Consultant shall establish a minimum of 3 GPS control points through the length of the survey.

Consultant shall establish vertical control using differential leveling. Consultant shall get County approval before using other methods such as trigonometric leveling and elevations derived from GPS.

Task 2.2 - Deliverables and Schedule

Consultant shall provide:

- Place control points in the ground at the Project location.
- Consultant shall incorporate the information listed below into the deliverables listed in Tasks 2.4 and 2.5 as required for delivery of documents in subsequent tasks.
 - An adjustment report for one or more of the following, Least Squares adjustment for networks, an approved traverse adjustment method for traverses and/or a GPS adjustment report when using GPS.
 - o An ASCII file containing the coordinates for every network point set and found.
 - o If the levels were electronically processed then one copy each of the following: original raw level file as collected in the field, ASCII file showing level closure data, ASCII file with elevations on all network points and/or an ASCII file showing the level rod readings.
 - Original field notes for the control network and one scanned copy of the original field notes in ".pdf" format.
 - An Autodesk Civil3D file containing all the set and tied control points to show elevations.
 - An Autodesk Civil3D containing all vertical and horizontal control points stored as COGO points to show elevations.

2.3 Monument Recovery

The purpose of this task is to address the requirements of ORS 209.150 and 209.155, and other survey related statutes for construction Projects.

Consultant shall survey for but not limited to: government corners, geodetic control stations, bench marks, ROW monuments, property boundary markers, and roadway alignment markers.

Identify, Search and Recover Monuments

Consultant shall recover existing monuments to preserve the locations of any monuments of record that may be endangered by any activity related to the Project and to resolve roadways and property lines. Consultant shall provide a record (field notes) of monuments searched for, the date of the search and the results of the search.

Field Survey of Recovered Monuments

Consultant shall locate, measure and document the location of survey markers and monuments of record for property boundaries and/or ROW needed within the areas.

Task 2.3 - Deliverables and Schedule

Consultant shall provide:

• Incorporate the information gathered in this task including field notes into the deliverables listed in Tasks 2.4 and 2.5 as required for delivery of documents in subsequent tasks.

2.4 Topographic Data, Detailed Base Map And Digital Terrain Model (DTM)

The purpose of this task is to collect the existing topographic features and create a detailed basemap and DTM for the Project.

2.4.1 Topographic Data Collection

Consultant shall:

- Collect topographic data between the boundaries described in the Project Understanding section of this SOW. Consultant shall collect and tie topographic data of man-made and/or natural features using a variety of County approved methods. These methods include but are not limited to: collecting the data using terrestrial (Theodolite and EDM), GPS (RTK), 3D Laser Scanning, or station and offset.
- Consultant shall contact Oregon Utility Notification Center to request a pre-survey utility locates. Consultant shall keep the locate request number and ticket information within the Project file.
- Consultant shall record in the field notes the utility ownership when describing the line data points. Consultant shall record all visible utility identifications in the field notes, such as numbers shown on power and/or telephone poles, vault tags, telephone pedestals (aka risers), cabinets, meters, fences or screened enclosures for gas regulators, and sanitary sewer pump stations. This data is needed for the County or Consultant to communicate where the facility may be in conflict with the Project.
- Consultant shall measure and record all utility facility structures (e.g. concrete pads, top slab of vaults, pump station housing, barrier screens or fenced enclosures).
 Consultant shall make a request to the utility owner to pull the cover whenever a manhole is found locked or bolted.
- Consultant shall tie improvements or vegetation within proposed easement boundaries or within close proximity of proposed easement boundaries when the proximity to the improvement has the potential to cause the improvement to suffer damage.

The project limits shall include:

- From the Oatfield Road Jennings Avenue Street intersection, 500 feet north and south along Oatfield Road, 500 feet east and west along Jennings Avenue.
- All features within 10 feet of existing right-of-way should be considered within
 project limits, except for the two SE and NE properties respectively. These two
 corner properties will require additional area as determined by the Consultant and
 County to accommodate retaining wall construction impacts. All other properties
 along the 500 foot frontages and approximately 100 feet past the intersection may not
 require topo beyond the right of way. This will be determined by the Consultant and
 County.
- Additional topographic survey will be completed on the west side of the intersection
 in order to pick up as-built conditions due to placement of curb returns and pavement
 surfaces with completion of the Jennings Ave construction project. This information
 will be utilized in design of the intersection improvements.

2.4.2 Detailed Basemap

Consultant shall:

• Take applicable topographic data collected in this subtask and create a detailed basemap file. A detailed basemap has all features drafted to County provided criteria.

2.4.3 Digital Terrain Model (DTM)

Consultant shall:

• Create a 3-dimensional digital terrain surface using all relevant topographical data collected in this subtask.

Collect the topographical data to create points and break lines in adequate quantity
and in proper placement, to accurately represent the surface of the ground.
Consultant shall collect confidence points in the field and generate a confidence point
report that conforms with the 2015 ODOT Survey Policy and Procedure Manual. The
topographical data and confidence points must meet Agency Criteria. Consultant
shall generate 1-foot minor contours and 5-foot major contours throughout the DTM
for a QC analysis of the surface.

Task 2.4 - Deliverables and Schedule

Consultant shall provide the following deliverables and submit them electronically (.PDF) to CPM within 30 days of NTP 1 copy of field notes:

- Copy of the Autodesk Civil3D CADD Files Detailed Base Map with Civil3D DTM
- Updated base map drawings following the Jennings Ave: OR99E to Oatfield Rd Project construction
- All files for the network control points in (ASCII) format
- Files of listing kits
- Files of survey research
- Files of tax maps
- Control Point Worksheet with datum used and descriptions of control points found and set

2.5 Existing Row & Boundary Resolution

The purpose of this task is to identify the location of the existing Centerline(s), ROW lines and property line(s) as necessary, to perpetuate the location of the monuments found, to document the control used for this Project area, and establish property lines for area calculations when new ROW is acquired. This task addresses the requirements of ORS 209.150 and 209.155 and other survey related statutes.

2.5.1 Resolve ROW and Property Boundaries

Consultant shall:

- Obtain 4 title reports
- Resolve the location of the ROW within the present limits as described in this SOW.
- Resolve identified ROW centerlines alignments, ROW lines and property boundaries abutting the roadway and along the proposed route of construction, using accepted concepts and rationale methods of survey professional judgment. Consultant shall evaluate the available evidence for relevance, adequacy, and reliability; use professional judgment in determining the type and quantity of evidence available, and the influence given each factor; and determine a best fit with the evidence and probable location of ROW alignments and property boundaries for the area as described. Consultant shall provide a detailed narrative of available evidence, desirable evidence not available, rationale for decisions made, and a summary of the conclusions in the establishment of the ROW centerline, ROW lines (including all jogs) and property boundary lines.

2.5.2 Control, Recovery, Retracement Record of Survey

If the Project will impact property or existing survey monuments, Consultant shall create a Record of Survey (ROS) which meets County and ORS requirements. Scale for the survey map shall be 1"=40", or as approved. The "Control" survey must consist of Geodetic and Terrestrial points set for the Project. The "Recovery" is the documentation of the monuments recovered for the Project. The "Retracement" is a record of resolved ROW centerlines, ROW

lines and/or property boundaries. These surveys may be combined, or separate surveys as directed by CPM.

Consultant shall:

• Submit a draft ROS to CPM for review. Consultant shall address comments received from the CPM and submit the final ROS for filing to the appropriate County in the format required.

Task 2.5 - Deliverables and Schedule

Consultant shall provide:

- 4 title reports
- Draft ROS to CPM within 60 days of NTP.
- Final ROS to the County Surveyor's Office for filing within 2 weeks of receipt of comments from County.
- Copy of Final ROS to CPM upon submittal to County for filing.

2.6 Right of Way Engineering, Maps & Descriptions

The purpose of this subtask is to prepare right of way engineering products used in the acquisition of property. For estimating purposes the estimated number of right of way files is two (2). These products are:

- Right of Way acquisition map
- AutoCAD CAD file used to prepare the acquisition map
- Right of Way legal descriptions and exhibits

The right of way acquisition map exhibits and legal descriptions shall be prepared in accordance with Agency standards.

Consultant shall perform ROW data research as necessary to prepare for and support all Project activities. With information provided by the County, the Consultant will produce Project maps and reports as called for in subsequent tasks. Consultant shall review general Project background documentation, recorded surveys and conveyance documents provided by the Consultant.

Consultant shall develop and provide a centerline description from one end of the project limits to the other to be used by the County with their Resolution of Necessity for the project. County will review and provide feedback to Consultant if needed. Consultant will make any necessary changes and resubmit information to County.

For each file, Consultant shall prepare a ROW Impact Map, developed to County standards. ROW Impact Maps show property, right of way, and proposed easement lines and all improvements, fencing, landscaping, curbs, sidewalks, utilities, etc. located in those areas and within 20 feet of the dwelling. County will provide an example if needed. County will review and provide feedback to Consultant if needed. Consultant will make any necessary changes requested by County.

For each file, Consultant shall prepare ROW Engineering Maps and Descriptions based upon centerline stationing and in accordance with the current County standards. Consultant shall submit to County for review and make any necessary changes requested by County.

Task 2.6 - Deliverables and Schedule

Consultant shall provide:

• Project Schedule developed in accordance with Task 1:

- Final Right of Way acquisition map in electronic (.PDF and CADD) format to the CPM.
- ROW Legal descriptions and exhibits, one set for each acquisition property in electronic (.PDF) format to the CPM.
- ROW Impact Map(s), one for each acquisition property in electronic (.PDF) format to CPM per the schedule developed in Task 1 Project Management.

2.7 Staking

Consultant shall place stakes during Project development to demarcate existing ROW, proposed ROW, and proposed easements to support Task 10 activities. A Notice to Proceed is required from the Agency to perform this task.

Task 2.7 - Deliverables and Schedule

Consultant shall provide:

- *Physically place stakes and/or paint marks, supported by:*
- Original data collector printout field notes in .pdf format per the schedule developed in Task 1 Project Management.
- Text file of 'as-staked' points with associated exhibit map in .pdf format per the schedule developed in Task 1 Project Management.
- Provide staking services for up to 4 parcels.

Task 3.0 Environmental Reconnaissance and Permitting

Consultant will obtain Rights of Entry (ROE) for field reconnaissance work. Consultant shall provide County with an exhibit map for each property showing the approximate location of any invasive test sites on the property, e.g. anything more than minor shovel sampling, test pits, etc. prior to initiating ROEs.

The following tasks will be completed by the Consultant to identify issues and ensure compliance with the regulating agencies:

- Perform a natural resources reconnaissance for biological and wetland resources and write a memo documenting existing conditions. For scoping, it is assumed that no wetland impacts are associated with the project.
- Perform a Level One Hazardous Materials Corridor Assessment and provide draft and final memorandums.
- Depending on the findings of the Level One Assessment, a Level Two Assessment may be required. This activity may be added by amendment at a later date.

3.1 Wetland and Waters Delineation

Consultant shall conduct a site visit of the project's Area of Potential Impact (API). It is anticipated that reconnaissance will determine no wetlands exist within the project area. Consultant will provide a memo indicating final result of reconnaissance.

Assumptions

- Perform a reconnaissance for wetlands and write a memo documenting existing conditions. For scoping, it is assumed that no wetland impacts are associated with the project.
- The County and Consultant will provide Consultant biologist with the final project API prior to completion of the reconnaissance work.

• The Consultant will coordinate property access and entry approval for completion of the reconnaissance.

3.2 Hazardous Materials Corridor Study

Consultant shall conduct a Hazardous Materials Corridor Study (Level 1) to identify potential hazardous material in the project area.

Assumptions

• If required right of entry (ROE) access and entry approval will be obtained by the County.

Task 3.0 Deliverables:

• Meeting summaries; draft and final Wetland Reconnaissance memo, draft and final Hazardous Materials Corridor Study Report.

Task 4.0 Stormwater / Hydraulics Related Services

It is anticipated that existing storm drainage will be adequate with minor adjustments to existing catch basins and manholes. These minor adjustments must be included in the project design.

Note: the latest OLWSD guidelines state that stormwater quantity and quality upgrades are required for improvements or changes that exceed 2,500 square feet but planning to adopt WES standards where 5,000 square feet is the threshold. It is unclear at this time whether or not the project will meet that threshold. Therefore, the stormwater design requirements outlined below should be considered a contingency task to be used only if needed.

The purpose of this subtask is to design stormwater systems for the management of drainage in the Project.

4.1 Stormwater Conveyance

Provide design of stormwater conveyance facilities that collect and carry roadway runoff in conformance with Oak Lodge Water Services District (OLWSD) requirements.

Consultant shall:

- Determine the locations of flow entering and leaving the Project right-of-way (R/W).
- Review existing conditions downstream of locations where flow is leaving the Project R/W for deficiencies and document observations.
- Review existing stormwater conveyance, detention and water quality facility designs and reports.
- Delineate on-site drainage basins, calculate peak flow rates for design, model the proposed pipe network, and calculate hydraulic grade line to check that proper freeboard design requirements are being met.
- Check inlet capacity and inlet spacing, calculate gutter flow to check spread, and provide design recommendations for inlet locations.
- Provide design recommendations for pipe network, associated pipe sizes, pipe material recommendations, and manhole access design recommendations (i.e. -spacing, location within a travel lane, etc.).
- Provide manhole diameter design recommendations based upon analysis of pipe connections at each manhole.
- Compare pipe network against known utilities in the Project area and provide design recommendations to minimize utility conflicts or to adjust existing utilities.
- Provide Stormwater Outfall design and energy dissipater design recommendations if needed and environmental permits are required.

4.2 Roadside Channel Conveyance

Not applicable.

4.3 Stormwater Quality Design

Provide design of stormwater management facilities that provide water quality treatment of roadway runoff per OLWSD standards.

Consultant shall:

- Define Contributing Impervious area.
- Identify treatment Best Management Practice ("BMP") types applicable for the site.
- Identify potential locations to site facilities within and outside the existing R/W.
- Estimate facility size, type and space needs at each of the potential locations.
- Evaluate constraints to siting a stormwater facility (i.e.-drainage area, adjacent grades, roadway safety, presence of existing utilities, protected resource areas, etc.).
- Maximize existing stormwater quality facilities located within the project area.
- Prepare up to 3 stormwater management strategies that combine potential stormwater facilities into a comprehensive solution for meeting the needs of the Project.
- Compare alternative stormwater management strategies and recommend a preferred strategy.

Task 4.3 Deliverables:

• Information from this task shall be incorporated into deliverables for Task 4.6.

4.4 Stormwater Quantity Design

Provide design of stormwater management facilities that control quantity and flow rate of roadway runoff per County standards.

Consultant shall:

- Identify potential locations to site facilities within and outside the existing R/W.
- Estimate facility size, type and space needs at each of the potential locations.
- Evaluate constraints to siting a stormwater facility (i.e. drainage area, adjacent grades, roadway safety, presence of existing utilities, protected resource areas, etc.).
- Maximize existing stormwater detention facilities located within the project area.
- Prepare up to 3 stormwater management strategies that combine potential stormwater facilities into a comprehensive solution for meeting the needs of the Project.
- Compare alternative stormwater management strategies and recommend a preferred strategy.
- Provide written design recommendations in the Stormwater Design report (Task 4.6) as applicable for:
 - Pipe network and associated pipe sizes
 - Manhole diameters
 - Pipe material recommendations
 - Channel Lining
 - Stormwater outfalls
 - Energy dissipaters
- Provide documentation in the Stormwater Design report (Task 4.5) for up to 3 stormwater management strategies and include a recommended preferred strategy.

Task 4.4 Deliverables:

• Information from this task shall be incorporated into deliverables for Task 4.5.

4.5 Stormwater Design Report

Provide preliminary stormwater design recommendations and document the final stormwater facility design recommendations.

Consultant shall:

- Prepare a preliminary version of the Project Stormwater Design Report per OLWSD guidelines containing preliminary stormwater facility design recommendations.
- Prepare a final Stormwater Design Report to reflect 30% and 60% County DTD and OLWSD review comments on stormwater facility design recommendations, changes to stormwater facility design due to advancement of the overall Project design and supporting documentation of the final stormwater facility design.
- Revise final Stormwater Design Report if there are DTD and/or OLWSD comments from the 90% review submittal.

Task 4.5 Deliverables:

- Draft Stormwater Design Report in MS Word and Adobe "pdf" format containing the report narrative, due with the Preliminary Plans.
- Advanced Stormwater Design Report, PDF file of complete report due with 90% Advanced Plans.
- Revised final Stormwater Design Report (PDF) at 100% Final Plans.

4.6 Stormwater Operation and Maintenance (O&M) Manual

Provide Operations and Maintenance Manual documentation of all proposed stormwater management facilities so the County has a record of the stormwater facilities that need to be operated and how to maintain them after the Project is constructed.

Consultant shall:

- Prepare up to two (2) Draft Operation and Maintenance ("O&M") Manuals, one for each stormwater facility anticipated for the Project, per Chapter 4, Section 4.6.6 of the Oregon Department of Transportation (ODOT) Hydraulics Manual (latest edition).
- Prepare operational plans as outlined in ODOT Technical Bulletin GE 16-01 (B) titled "Stormwater Control Facility Operation and Maintenance Plan Development Drafting Guidance".
- Finalize O&M manuals

Task 4.6 Deliverables:

- One copy of each Draft O&M manual in MS Word and Adobe "pdf" format to the County Project Manager (CPM) with 90% Advanced Plans.
- One copy of each final operational plan in MS Word and Adobe "pdf" format to the CPM with 100% Final Plans.

Task 5.0 Utility Coordination

5.1 Utility Coordination

Consultant shall initiate coordination with utilities and incorporate utility provided relocation plans into the design documents. The locations and elevations of existing utilities and options for resolving conflicts shall be investigated. This work shall include working with the County and utility companies to "pothole" crossings and other areas to identify and eliminate conflicts where possible. It is expected that potholing shall be provided by the utility companies. Once "potholing" data is obtained and mapped, the Consultant shall incorporate the data into the plans.

It is assumed up to ten (10) utilities will require coordination.

Consultant shall:

- Develop a utility contact information list and email project information letters (in email format) to utility companies involved to explain the nature of the work and to have utilities verify their facilities from our survey base map with located utilities.
- Prepare a Utility Conflict Spreadsheet and send utility conflict letters with 30% plans to the affected utility companies describing the conflicts that exist, and the required adjustment to eliminate the conflict. A spreadsheet of centerline reference points and elevations shall be provided to utility companies for use in excavating existing utilities (potholing) at points of potential conflicts. Consultant shall also provide the conflict list to an independent potholing service who shall provide quotes to the utilities and coordinate with the Project team to aid in gathering pothole data. The schedule for making the necessary adjustment or relocation ahead of the beginning of road construction shall be identified.
- Provide survey staking of the utility conflict locations to aid utilities in potholing their facilities if required or requested. One field crew day for staking potential conflicts.
- Review pothole data provided by the utilities and make recommendations to the project design to minimize utility relocation.
- Prepare and send a Utility Relocation Letter of conflict with 90% plans for each utility, notifying them of unavoidable conflicts with a mandatory relocation date.
- Organize and lead a group utility coordination meeting at the 90% design milestones.
- Conduct up to six coordination meetings with individual utilities.
- Perform ongoing coordination with utilities to resolve utility conflicts and finalize utility relocation requirements as appropriate.
- Provide 90% plans to each utility, perform ongoing coordination with utilities to resolve utility conflicts and finalize utility relocation requirements as appropriate.
- In conjunction with the Consultant's work, the County to provide standard 60-day and 30-day utility notice letters during design.

Task 5.0 Deliverables:

- Utility contact list
- Utility Conflict Spreadsheet(s) and Letter(s)
- The final utility relocation plan(s) submitted to the County Project Manager (CPM) within 10 days after acceptance.
- Final Notice Letter(s) submitted to each utility and CPM 15 business days after submittal of 90% Plans to County.

Task 6.0 Geotechnical and Geologic Services

The County will obtain Rights of Entry (ROE) for field reconnaissance work, if needed. If needed, the Consultant will provide a list of properties requiring ROEs for research disciplines no less than six (6) weeks before such ROE's are required to perform work on private parcels. Consultant shall provide County with an exhibit map for each property showing the approximate location of any invasive test sites on the property, e.g. anything more than minor shovel sampling, test pits, etc. prior to County initiating ROEs.

Consultant shall conduct geotechnical field investigations to explore the subsurface conditions for signal pole drilled shafts, pavement inlay/overlay options at the intersection, and potential new pavement for widening areas. Consultant shall provide a Geotechnical Report summarizing and presenting the results of the investigation, analyses, and recommendations. Assessment of Material Sources and Disposal Sites is not included in these Services.

Consultant shall complete the geotechnical and geological services in accordance with County design standards, AASHTO, and FHWA. Consultant shall summarize the findings in a Geotechnical Report. Consultant shall perform the following subtasks for the foundation investigation.

6.1 Site Reconnaissance, Exploration and Testing Work Plan

Consultant shall perform site reconnaissance. The site reconnaissance must include the following. Consultant shall:

- Observe surface conditions indicative of subsurface conditions.
- Identify site constraints and staging concerns (for exploration and construction).
- Identify potential exploration locations.
- Attend meetings with County or other parties to discuss, review, and ascertain site conditions relevant to the geotechnical project work.

The site reconnaissance will facilitate understanding of the site constraints for field explorations, construction, and traffic staging. Proposed boring locations will be staked or painted on the ground.

Consultant shall perform visual pavement assessment in accordance with ODOT's Good-Fair-Poor (GFP) Pavement Condition Rating Manual and Distress Survey Manual. The primary goal shall be to identify and map areas of severely distressed existing pavement to determine the cause of the distresses and to determine potential mitigation strategies. Mapping will identify surface manifestation of weak, poor, or failing subgrade, and locations of pavement failure such as longitudinal cracking or raveling; in addition, subsurface drainage conditions shall be assessed based on surface evidence. The mapped locations shall be identified using a measuring wheel.

Consultant shall prepare an Exploration and Site Plan figure to show the proposed exploration locations and Traffic Control Plans (TCPs). The traffic control plan must be prepared by a flagging company licensed to work in the State of Oregon. The TCP must address a minor road encroachment as well as a single lane closure for activities associated with drilling exploratory borings from the roadway. Consultant shall submit the figure and TCPs to the County for approval. Consultant shall obtain ROW permit from the County.

6.2 Field Exploration and Laboratory Testing

Consultant shall perform the geotechnical explorations and reconnaissance to evaluate subsurface conditions and develop geotechnical recommendations for design of pavements, retaining walls, and signal pole shaft foundations as shown in the following table.

STRUCTURE	EST # OF BORINGS	ESTIMATED BORING DEPTH
Signal Poles (Drilled Shafts	2	30 feet below ground
Existing Pavement	2	5 feet below ground
Retaining Walls	2	30 feet below ground

Consultant shall perform geotechnical field explorations to determine the subsurface conditions for the express purpose of characterizing subsurface conditions within the project limits and determining the new traffic signal drilled shaft, retaining wall, and pavement design recommendations.

Consultant shall perform exploration work in accordance with Federal, State, and Local regulations. Consultant shall perform the subsurface exploration work in conformance with the ETWP as described in Task 6.1.

Exploration tasks include the following:

- Obtain a drilling permit from Clackamas County.
- The permit fee will be waived.
- Locate utilities in the vicinity of the proposed borings by and through the One-Call system prior to the fieldwork.
- Drill all borings with a truck-mounted drill rig using mud-rotary drilling techniques.
- If rock is encountered above the target depth, switch to HQ-size core drilling.

- Notify the County immediately and place drill cuttings/fluids in separate drums, labeled with the boring #, depth, and date and transport drums to a location designated by the County, if contaminated soil/groundwater is encountered. The geotechnical investigation does not include any services related to environmental or hazardous materials.
- By and through the drilling subcontractor, drum and dispose of all cuttings offsite.
- The field explorations will be performed during weekdays between 9 am and 6 pm.
- Provide temporary traffic control for shoulder and single lane closures.

Consultant shall provide an engineer or geologist to supervise the field operations and log the borings. Subsurface explorations must be conducted in general accordance with American Association of State Highway Transportation Officials (AASHTO). Soil samples must be obtained at 2.5-foot to 5-foot intervals using either a standard penetration sampler or a Shelby tube sampler.

Laboratory Testing: Consultant shall conduct water contents, sieve analyses, and Atterberg limits tests on soil samples obtained from the borings to classify the soils and estimate their engineering properties. If soft soils are encountered, a consolidation and direct shear test may be performed by Consultant to assist with the engineering studies.

6.3 Geotechnical Analysis

Consultant shall perform analyses of the field and laboratory test data to develop geotechnical recommendations for drilled shafts, embankment, pavement design and construction. The Consultant shall provide the analysis and design for the foundation in accordance with County's design standard, FHWA, AASHTO, design guidelines.

6.4 Geotechnical Report

Consultant shall prepare a Geotechnical Report summarizing the subsurface conditions, design, and construction recommendations. The Geotechnical Report must summarize the field observations, subsurface conditions, laboratory test data, analysis results, construction issues and geotechnical recommendations for the project. Consultant shall prepare the Geotechnical Report in accordance with the Geotechnical Report and Documentation requirements contained in the most current version of the ODOT Geotechnical Design Manual.

Consultant shall provide special provisions relating to embankment and construction. Special Provisions shall be per ODOT Standard Specifications format.

Task 6.0 Deliverables:

- Exploration and Site Plan
- Draft and Final Geotechnical Report

Task 7.0 Design Acceptance Package ("DAP") and Preliminary Design (30%)

The objective of the DAP is to identify the size of the Project footprint, required design exceptions, right of way ("R/W") impacts, and any required environmental permits prior to preparing the Preliminary, Advance and Final Plans.

Consultant shall prepare a DAP that includes preliminary design plans a construction cost estimate and a design narrative that addresses the following:

- Description of the purpose, need, and design solution for the Project.
- Summary of existing conditions, (i.e., Project location, roadway classification, lanes, average daily traffic ("ADT"), posted speed, and other design standards pertinent to the Project).
- Summary of design exceptions that will be necessary.
- Summary of roadway alignment and typical section alternatives considered, including recommendations.

- Summary of structure type, size and location ("TS&L") alternatives considered, including recommendations.
- Outline of Project constraints such as topography, environmental, permits, R/W, utilities and cost (NOTE: these may be executive summaries prepared by Consultant for other deliverables associated with this Project).
- Summary of the Traffic Analysis.
- Environmental impacts and mitigation measures.
- Environmental permitting requirements.
- Utility conflicts.
- Description of geotechnical subsurface conditions.
- Draft Geotechnical Report.
- Draft Stormwater Design Report.
- Description of drainage features.
- R/W Acquisition and easement needs.
- Local permit needs.
- Construction staging, temporary detours, and temporary protection and direction of traffic during construction.
- Description of impact to freight mobility.
- Design acceptance checklist.
- Traffic Control Management including Temporary Pedestrian Access Route (TPAR).

Consultant shall develop preliminary design and plans generally described as follows:

7.1 Traffic Analysis

Consultant shall prepare a traffic analysis to determine design elements within Project limits including the following:

- Signalization needs (signal warrant and capacity analysis)
- Lane configurations
- Turn lane lengths
- Traffic signal phasing

Consultant shall collect the following traffic data:

- Three 24-hour vehicle counts (including vehicle classifications and speed), one in advance of each leg of the intersection of Oatfield Road & Jennings Avenue
- AM and PM turn movement counts at the intersection of Oatfield Road & Jennings Avenue

Consultant shall conduct AM and PM peak traffic analysis for both existing conditions and future conditions approximately 20 years in the future at the intersection of Oatfield Road & Jennings Avenue. Future traffic volumes must be based on a current Transportation System Plan ("TSP") for Agency or a regional travel demand model when either of those exist. Consultant shall determine future volume estimates as follows: Capacity analysis must be based on current Highway Capacity Manual ("HCM") methodology. Left turn signal phasing must be determined based on ODOT Signal Policy and Guidelines.

7.2 Traffic Signal Design

Consultant shall prepare plans and cost estimate for the construction of a new traffic signal at Oatfield Road & Jennings Avenue. All traffic signal plans and specifications must conform to Manual on Uniform Traffic Control Devices (MUTCD), ODOT, Clackamas County, and National Electric Code ("NEC") standards as applicable. Consultant shall coordinate with the utility for service connections. Consultant shall develop cabinet plans according to County and ODOT

standards in AutoCAD format. Consultant shall develop temporary detection plans for the existing traffic signal to be using during the construction of the new traffic signal.

Plans and specifications shall include locating pedestrian push buttons to meet current MUTCD and ADA standards, in accordance with the ODOT Signal Design Manual, Agency ADA standards, the ODOT Signal Policy and Guidelines, and applicable ODOT standard drawings. This task shall develop alternatives to be evaluated based on the design criteria to meet the overall project needs, as well as to reach agreement on the preferred alternative.

7.3 Traffic Signal Interconnect and Pan-Tilt-Zoom Camera

Consultant shall prepare for the replacement of fiber optic traffic signal interconnect and Pan-Tilt-Zoom (PTZ) camera at the intersection of Oatfield Road & Jennings Avenue.

The traffic signal interconnect plans and specifications shall conform to MUTCD, ODOT, Agency and NEC standards as applicable.

7.4 Curb Ramp and Push Button Analysis

Consultant shall review and recommend curb ramp types and push-button locations based on the design criteria to meet the overall project needs, and to reach agreement with the County on the preferred alternative.

Consultant shall:

- Provide ADA complaint push-button design for all corners.
- Provide ADA complaint curb ramp design for the east side corners.
- Confirm with the County that the west side ramps were constructed as part of the Jennings Ave construction project and met ADA compliance as part of their inspection and acceptance.

7.5 Permanent Signing

Consultant shall prepare plans and construction cost estimates for the permanent signing associated with the proposed improvements. The design must be completed in accordance with applicable MUTCD, ODOT, and Agency standards.

7.6 Permanent Pavement Markings

Consultant shall prepare plans and construction cost estimates for the permanent pavement markings associated with the proposed improvements. The design must be completed in accordance with applicable MUTCD, ODOT, and Agency standards.

7.7 Illumination Analysis

Consultant shall prepare a lighting analysis for the construction of an illumination system at the intersection of Oatfield Road & Jennings Avenue. Consultant shall conduct lighting analysis to determine appropriate lighting design (signal pole layout, mounting heights, and wattages) to meet current Illumination Engineering Society ("IES") or Agency standards for light levels. Roadway lighting and specifications shall conform to the NEC, ODOT, and Agency standards as applicable.

7.8 Traffic Control Plans ("TCPs")

Consultant shall prepare and submit temporary traffic control to accommodate the public during construction. Consultant shall develop plans and specifications to accommodate vehicle, bicycle and pedestrian traffic during construction. ODOT or Agency standard plans must be referenced where possible.

Consultant's TCPs must indicate such elements as traffic control sequencing, work zone limits, transitions, traffic control devices, signage, detours and staging cross sections (where applicable), and work zone details for vehicles, bicycles and pedestrians.

Consultant shall prepare a Temporary Pedestrian Accessible Route Plan ("TPARP") as part of the TCPs. The TPARP must include a pedestrian route through or around each work area that is equal to or better than the route that was there before construction.

TCPs must meet MUTCD, ODOT, and Agency requirements.

7.9 Retaining Wall Type, Size, and Location Alternatives Evaluation

This task shall develop up to three alternatives at the northeast and southeast corners of the intersection to be evaluated based on the design criteria to meet the overall project needs, as well as to reach agreement on the preferred alternative.

Consultant shall:

Perform a proposed retaining wall analysis for an abbreviated type, size, and location study that will consider temporary and permanent property and utility impacts, constructability, costs, aesthetics, and maintenance. Produce a brief memorandum summarizing the evaluation and providing recommended wall types and alignments. The preferred and recommended walls will be in the DAP plans.

7.10 Civil, Roadway, and Asphalt Pavement Resurfacing Concept

This task shall develop alternatives to be evaluated based on the design criteria and geotechnical testing data and recommendations to meet the overall project needs, as well as to reach agreement on the preferred alternative. Develop all roadway alignments, curbs, returns, and transitions. Determine and prepare design exceptions (assumed up to 2).

Consultant shall:

- Develop proposed asphalt pavement resurfacing approach within the project area. Determine and specify which asphalt rehabilitation treatment is appropriate (rebuild section, grind and inlay, etc.). Prepare concept plan sheet.
- Design roadway alignment and profiles, curbs and transitions. Prepare civil/roadway plans, details, and other miscellaneous sheets not included in other DAP subtasks.
- Prepare up to 2 Design Exceptions for approval.

7.11 Stormwater Conveyance Concept Alignment and Grade

The Consultant shall design conceptual stormwater layout and profiles for the preferred alternative. This shall validate the stormwater discharge locations and depth of the storm system. This shall also provide locations of potential utility conflicts and potholing needs covered under the Utility Coordination task.

Consultant shall:

- Determine the locations of stormwater flow entering and leaving the Project right-of-way.
- Review existing conditions downstream of locations where flow is leaving the Project rightof-way for deficiencies and document observations. Obtain maintenance records from DTD and/or OLWSD.
- Delineate on-site drainage basins, calculate peak flow rates for design, model the proposed pipe network, and calculate hydraulic grade line to check that proper freeboard design requirements are being met.
- Check inlet capacity and inlet spacing, calculate gutter flow to check spread, and provide design recommendations for inlet locations.
- Provide design recommendations for pipe network, associated pipe sizes, pipe material recommendations, and manhole access design recommendations (i.e.-spacing, location within a travel lane, etc.).
- Provide manhole diameter design recommendations based upon analysis of pipe connections at each manhole.

- Compare pipe network against known utilities in the Project area and provide design recommendations to minimize utility conflicts or to adjust existing utilities.
- Provide Stormwater Outfall design and energy dissipater design recommendations in compliance with applicable Project permits.
- Identify treatment Best Management Practice ("BMP") types applicable for the site.
- Identify potential locations to site facilities within and outside the existing right-of-way.
- Estimate facility size, type and space needs at each of the potential locations.
- Evaluate constraints to siting a stormwater facility (i.e.-drainage area, adjacent grades, roadway safety, presence of existing utilities, protected resource areas, etc.)

7.12 Construction Estimate

Consultant shall develop estimated costs early in the 30% design process for use in decision making. Consultant shall provide quantities and construction cost estimates for design alternatives considered and the preferred alternative.

7.13 Design Memorandum

Consultant shall provide a design memorandum summarizing the preferred alternative. The memorandum will reference the other applicable reports, memorandums, and documents supporting the preliminary design.

Task 7.0 Deliverables:

- Draft Acceptance Package
- Draft Traffic Analysis Technical Memorandum
- Final Traffic Analysis Technical Memorandum
- 30% Traffic Signal plans
- 30% Traffic Signal Interconnect and PTZ Camera plans
- 30% Permanent Signing plans
- 30% Permanent Pavement Markings plans
- 30% Traffic Control Plans
- 30% Retaining Wall Memorandum
- 30% Asphalt Pavement Resurfacing
- 30% Stormwater Conveyance Concept
- Lighting analysis Technical Memorandum
- Cost Estimate (one electronic copy in PDF form and one copy in Excel form)
- Design Memorandum (one electronic copy in PDF form)
- Draft (at 30%) and Final (at 60%) Design Exceptions

Task 8.0 Public Involvement/Outreach

The Consultant shall assist the County's community relations specialists with preparation of documents to be distributed or made available to the general public. Consultant to provide Project information and address specific questions and concerns related to the Project.

Tasks related to public involvement include:

- Coordinating with the County's community relations specialists, County PM and other relevant staff.
- Consultant shall prepare fact sheets and exhibits for the County's website. Consultant shall prepare:
 - o Project fact sheets,
 - Photos
 - o Roll maps with and without aerial background.

- Consultant shall provide project graphics and information for inclusion on the County's website
- The Agency will advertise the project on Agency website and through Agency social media.
- Consultant shall develop, print and mail a project mailer/flyer.
- The Agency will provide a template and list of addresses for use of developing and mailing the project mailer/flyer.

Task 8.0 Deliverables:

- Up to 2 two-page fact sheets, up to 12 project photos, and 1 roll map of the proposed project. The files will be provided in draft and final forms in both PDF and their original native file formats. The PDFs will be placed on the County's website.
- Project mailer/flyer for printing and mailing. The mailer/flyer will be provided in draft form for County review and approval prior to finalizing and mailing.

8.1 Public Involvement Project Website [RESERVED]

Task 9.0 Final Design (60%, 90% and 100% Bid Ready) - Plans, Specifications, and Estimate (PS&E)

The Consultant shall advance the recommended alternative from the Preliminary Design (30% design) stage to the 100% complete stage.

Consultant shall:

- Conduct work sessions (per Task 1) with County staff.
- Complete engineering drawings for submittal to the County at 60%, 90%, and Final milestones and perform quality assurance and in-house independent design checks and plan review of all drawings and related quantities including constructability reviews. Plans will be drafted with the latest version of AutoCAD software and the final CAD drawings provided through an FTP site or secure link.
- Provide relevant plan drawings per the anticipated sheet list below for submittal to County for review. Drawings shall include sufficient information for review and bidding including ROW lines, alignments, elevations, etc. with the assumption that more detailed staking and layout information necessary for construction will be provided electronically to the Contractor after notice of intent to award. Standard details and drawings will be attached at the end of the plan set without the need for a title block. Additional specific plan sheet requirements include:
 - o Index of Drawings: Provide a list of the standard details and drawings utilized with a link to the location where they can be found.
 - Roadway Plan and Profile: Consultant shall prepare roadway construction plans in accordance with County design standards, AASHTO, and Oregon Standard Specifications for Construction with ROW information shown as applicable.
 - Driveway Connection Details
 - O ADA Curb Ramp Details: Assumes 2 ADA curb ramps per sheet.
 - Drainage, Utilities & Grading Plans: Consultant shall prepare grading and drainage plans in accordance with County design standards. Drainage profiles will accompany the same sheet as the juxtaposed plan. Water, sewer and gas utility relocation designs are excluded from the utility plans.
 - o Retaining wall plan, profile, Sections, and details at the NE and SE corners of the intersection.
 - Erosion Control: Consultant shall prepare erosion control plans in accordance with the 1200-CA permit.
 - Traffic Signal: Consultant shall prepare traffic signal plans (removal, new, and temporary detection on existing signal) and specifications in accordance with the

- Manual on Uniform Traffic Control Devices (MUTCD), ODOT, Clackamas County, and National Electric Code ("NEC") standards as applicable.
- Cabinet Prints: Consultant shall develop cabinet plans according to County and ODOT standards in AutoCAD format.
- Traffic Signal Interconnect: Consultant shall prepare traffic signal interconnect plans and specifications that conform to MUTCD, ODOT, Agency and NEC standards as applicable.
- Traffic Control: Consultant shall prepare temporary traffic control plans in accordance with County design standards, the MUTCD, and Oregon Standard Specifications for Construction. Plans are anticipated to include staging plans, lane shifts, lane and shoulder widths, temporary barriers, delineation, signing, and Temporary Pedestrian Accessible Routes (TPAR).
- O Push Buttons: Consultant shall prepare push button modification plans for all signalized intersections within the project area. Plans are anticipated to include details for installing pedestrian push button reach, height and level landing and meet current MUTCD and ADA standards, in accordance with the ODOT Signal Design Manual, Agency ADA standards, the ODOT Signal Policy and Guidelines, and applicable ODOT standard drawings.
- O Signing/Striping: Consultant shall prepare signing and striping plans per County and MUTCD standards. A sign inventory will be completed to evaluate existing sign conditions and verify compliance with current MUTCD standards.
- Consultant shall complete a photometric analysis and verify that replacement of existing lighting will meet current applicable standards.
- Calculate quantities and develop an engineer's construction cost estimate for submittal at each plan development milestone (60%, 90%, Final).
- Develop an anticipated construction schedule (90%, Final)
- Prepare relevant sections of specifications based on the current Oregon Standard Specifications for Construction. Produce special provisions for the project using standard ODOT boilerplate special provisions and County boilerplate special provisions to the specifications in Part 00100 General Requirements and Part 00900 Permanent Traffic Control and Illumination Systems.
- Revise and submit final Special Provisions based on comments received during County reviews.
- Make corrections as required by County and submit final plans to County (both documents and electronic copies).

Consultant shall provide services for each deliverable per the following subtasks:

9.1 60% Preliminary Design

Provide 60% complete design, plans, and estimate as described above.

9.2 90% Advanced Design

Provide 90% complete design, plans, specifications, estimate, and construction schedule as described above.

9.3 100% Final Design

Provide Final design, plans, specifications, estimate, and construction schedule as described above.

The Consultant shall prepare plan sheets according to the following table:

Name of Sheet	Scale	Estimated # of Sheets	60% PS&E Submittal	90% PS&E Submittal	Final Submittal
Title Sheet, Sheet Index & Standard Drawings (County / ODOT)	NTS	1	Х	X	х
Legend & Abbreviations / General Notes	NTS	1	X	X	X
Typical Sections	NTS	1	X	X	X
Construction Details (Intersection Grading, Ramps & Misc.)	NTS	4	X	X	X
Erosion Control Plans & Details & General Notes	1"-50'	4	X	X	X
Roadway Plan & Profiles	1"-30'	4	X	X	X
Stormwater Plan & Details (including WQ Facility)	1"-20'	3	X	X	X
Temporary Traffic Control Plan	1"-30'	5	X	X	X
Traffic Signal & Lighting Plans	1"-30"	8	X	X	X
Sign & Striping Plans & Details	1"-30"	4	X	X	X
Retaining Wall Plan, Elevation, & Details	1"=20'	4	X	X	X

Task 9.0 Deliverables (all electronic):

- 60%, 90%, and Final Engineering Plans (Full Size 11"X17")
- 90% and Final Construction Schedule
- 90% and Final Specifications and Bid Schedule
- Documentation of 60% and 90% review comments
- 60%, 90%, and Final Engineer's Estimate
- Updated Comment/Response Log at each milestone

Task 10.0 Right-of-Way Research and ROW Activities

Consultant shall complete ROW research as needed to locate and identify existing right of way lines, easement lines and property ownership as required in Task 2.0 Survey. Right of way lines, easement lines and property ownership must be shown on the plans.

Consultant shall conduct the ROW activities for all properties in accordance with the most current version of the following:

- Right of Way Services Agreement specific to the Project
- ORS 35, with reference to the "Uniform Standards of Professional Appraisal Practice" (USPAP)
- County ROW acquisition policies and procedures (which are guided by the ODOT ROW Manual)
- "ODOT Right of Way Manual"

10.1 Title Reports and Document Requests

Consultant shall obtain and assemble all title documents, including vesting deeds, necessary to accomplish acquisition of ROW to Agency standards for each impacted property.

Task 10.1 Deliverables

• Digital copies of Preliminary Title Reports and Title Documents per the schedule developed in Task 1 Project Management.

10.2 Preliminary Activities [RESERVED]

Note: Work under this task to be provided by the County.

PLEASE NOTE: Consultant shall not perform any Services described in Acquisition Services below until Agency issues NTP for the ROW phase of the Project.

10.3 Acquisition Services [RESERVED]

Note: Work under this task to be provided by the County.

Task 11.0 Bid and Award Assistance

This task includes the preparation of up to two addenda, as needed, and responding to questions during the bidding phase. Consultant shall respond to questions from County and Construction Contractors about the plans and specifications during the bidding process.

Consultant's Project Manager, or Consultant's designee(s) approved by County, shall assist County with questions regarding the bid documents and bid process. Consultant shall respond to all questions in writing within 3 days to the CPM.

During the bidding process, Consultant shall not separately communicate with Construction Contractors or suppliers during bidding. Any communication will go through County Procurement passed on to the CPM in a manner that assures that no Construction Contractor or supplier is provided with information not in the bidding documents and that could provide a bidding advantage or disadvantage. Consultant shall prepare a written log to document responses to CPM response requests as a result of construction contractors or suppliers' questions to Procurement. Consultant shall maintain a written log and provide upon request of the CPM.

Task 11.0 Deliverables:

- Written log of conversations, questions and answers, provided to the CPM upon request.
- Up to two addenda

REIMBURSABLE EXPENSES

The reimbursable budget estimate is based on our experience with this project type and the governing agencies. It is an estimate only. Additional budget may be necessary to complete the project.

Customary reimbursable expenses mean the actual expense incurred in direct connection with the project. Vehicle mileage is reimbursed at the current Internal Revenue Service (IRS) rate for project related travel.

The following project related expenses are reimbursed at cost:

- External Reproduction Services
- Travel Expenses, other than private vehicle mileage
- Express Postage
- Other Direct Expenses (survey filing fees; project specific supplies, etc.)

ASSUMPTIONS

All permits and application fees shall be paid by Clackamas County, or as a reimbursable expense at cost.

COUNTY'S RESPONSIBILITIES

The County will:

- 1. Provide a project manager who is responsible for overall project development and management and for coordination between the Consultant and the County including coordination of review and comment by County staff on design deliverables.
- 2. Maintain records and process Consultant invoices.
- 3. Coordinate the relationship with adjacent property owners and with the general public.
- 4. Maintain and manage the public involvement mailing list and project press releases.
- 5. Provide County standard drawings and details when possible.
- 6. Provide as-built CAD files of recent construction projects.
- 7. Provide standard pavement sections for use in pavement design.
- 8. Assist in utilities coordination through attendance at coordination meetings and providing County templates for 60- and 30-day final notices.
- 9. Provide Consultant with digital copies of the County 00100 Special Provisions. County to prepare the front-end contract forms, prepare the bid-booklet, and provide legal review of the contracts and bid forms.

Data

10. Advertise and manage the bidding process for construction.

Work Schedule:

T40ma

The County has prepared the following anticipated schedule for this project:

<u>rtem</u>	Date
Notice to Proceed for Consultant (Estimated)	October 2024
Submit DAP (30%)	January 2025
Submit 60% Plans and Estimate	April 2025
Submit Advance (90%) PS&E (RW Acquisition Starts March)	July 2025
Submit Final PS&E	December 2025
Solicit Construction Bids	January 2026
Begin Construction	April 2026

EXHIBIT B FEE SCHEDULE

a Strondon (Jakoba) (20 statem) Transcard (Society Strondon (Society Strondon (Society Strondon (Society Strondon (Society Society Society	A Speciation and Estimate (PAE)	a Attenution (calaution (20% Liberita)) Institute (Conge) (Conge	A Benediction (Address (DN statemer)) and district Constat process and Grade Oct. Oct.	or (200 Librolia)	(n) (29% schools) (or (200 Libration)	on (20% salembra) A Sectification, and Estimate (PSAS)	or (DN standar)	os (20% salembra)	on (2006 submitted)	or (20% s.do-mity)	on [20% submitted]	or (30% submitted)	One of the state o	A Aduden (20% sdamita))	alustion (30% (ubmitts))	aluation (aluation i	2. Cusp haing all Pub British Analysis 2.5 Personant Spring 2.6 Personant Spring 2.6 Personant Personal Multility 2.7 Extraction Analysis 3.7 Extracti	7.2 Curb Burrip and Pauli Button Arabylis 7.2 Fernament Signing 1.5 Fernament Pownment Mandings 7.1 Burnination Analysis 7.1 Burnination Analysis	25 Acuth Barga and Subs Batton Analysis. 75 Permanent Signing. 76 Permanent Spring. 76 Permanent Springer State St	7.4 Curb Bamp and Push Button Analysis 7.5 Permanent Signing	7.4 Curb Ramp and Push Button Analysis 7.5 Decreases Service	7.4 Curb Ramp and Push Button Analysis		7.3 Traffic Signal Interconnect and Pan-Tilt-Zoom Camera	7.2 Traffic Signal Design	7.1 Traffic Analysis	TASK 7: DESIGN ACCEPTANCE PACKAGE ("DAP") AND PREUMINARY DESIGN (30%)	b.4 Geotechnical Report 2	b.3 Geotechnical Analysis	b.2 held Exporation and Exporatory Texting	C.1 Site hecomiscource, exploration and resulting work main	THE STATE OF THE S	OCICAL SERVICES	5.1 Utility Coordination 43	TASK STITILITY COORDINATION	4.5 Stormwater Desgii Report	A S Germunder Charles Benort	4.4 Stormwater Quantity Design	A 3 Streamwater Chieffer Design	4.7 Braddide Channel Corveyance (not applicable)	4.1 Stormwater Conveyance	TASK 4: STORMWATER/HYDRAULICS RELATED SERVICES	3.2 Hazardous Materials Corridor Study	3.1 Wetland and Waters Delineation	TASK 3: ENVIRONMENTAL RECONNAISSANCE AND PERMITTING	2.7 Staking 1	2.6 Right Of Way Engineering (Mapping & Descriptions)	2.5 Existing ROW & Boundary Resolution	2.4 Topographic Data, Detailed Base Map and Digital Terrain Model (DTM)	2.3 Monument Recovery	2.2 Horizontal and Vertical Control Network	2.1 Research	TASK 2: SURVEY, FIELD INVESTIGATIONS AND MAPPING		1.1 Project Management 48	TASK 1: PROJECT MANAGEMENT AND COORDINATION	Task and Description ENG-VII PM	August 29, 2024 Ken	Phase I (Preliminary Engineering & Bidding) - Fee Estimate
225.00	Ī	9100		l		ľ		ł	30	+	+		4		1 2	6	Ĺ	2		5	A		1		2	4	12	25		Ĺ	1	1	1		ľ	2	ĺ	1	1	1													L			0 77	H		TI PM ENG-VIII APM	NR Jeff	
ĺ		261.00	1		1	l		ł	31 44	+	+					12	_			12	10	3		4	00	L	25	L		L	1	l	1			1		1	1				1			1							_			Ĺ			JI'SE ENG-III	W Bhauve.	
		236.00			l			ł	3 8	+	+		12			80	16	24		2		l	1							1	1					110		, ,			4		16					1	12							8			II ENG STAFF II	sh J Phillip	
0 40 4		354	,		l		l		4 6		85					12				25	15	0		8	00	00	40	80			l		l	l				l																					F II ENG STAFF!	Karina M	
6 27		364.00			l										2	2	16			l		l	1								l		l				46	5 12	24	8 6	16		72																FI ENG STAFFIII	ID Riley O	
5 5	00 178.0	DO 32.0	1		İ			٠	n o	,	à									l		İ	1								İ		l					, ,		2	ė.		2																III ENG IV	QC	
5 3.5	270.00	30			İ				Ì											ĺ		İ	Ì							4	. 4							Ì	Ì																	l			Princ. Geotech	Ryan W.	
\$ 4,0	1	0 24.00			İ		Ī			Ì										Ī		İ	1							10	10		, ,					1																		ĺ			Eng-III	Brian A.	
\$ 3.9	140.00	28.00					Ī			Ì												Ì	Ì							40		Δ	3	Ī																									Proj. Geol. II	Jack P.	
960.00	120.00	800																												4		4																											Eng. Tech II	Rabin G	
\$ 17,808.00	168.00	10600	,					40	16	2.0	74				8				32																																								ENG-III Structural		
\$ 8,100.00	270.00	30.00						,	, ,		h				2				+																																					14			Prin. Eng. Structural	Hod	PBS
\$ 9,728.00	152.00	64.00						,			24								24																																								DES-IV Structural		PBS Engineering an
\$ 1,600.00	200.00	×××																																														1	4	1	1			1					Survey -VII	Regan S	and Environment
\$ 15,050,00	175.00	86.00																																														2	20	40	80	10	2	۵					Survey-VI	Terry G	al
\$ 20.448.00	142.00	144.00			ļ	L														l		l									ļ		1					1										6	24	32	S	16	6	10		L			Survey-IV	Matt L	
\$ 22,440.00 \$	220.00	102.00			ļ	L																									ļ		1					1										10			50	28	14			L			Survey 2 Person Crew	Crew	
s	175.00	34.00			ļ								32							L		ļ									ļ		1					1																		L	2		Public Irre. PM		
	120.00	an on			ļ	L			1				40							L											ļ		1					1	1																	L			Public Inv. II		
920.00	230.00	400			ļ	L			1											L											ļ		1					1	1						4											L			Sr. PM VI GeoEnv	-	
5,460.00 S	130.00	42.00	_		ļ				1											L											ļ		1					1	1						42											L			Project Geologist I		
690.00	115.00	500	_		ļ				1				2							L											ļ		1					4	,						2											L			Editor		
390.00 \$	130.00	300	_		ļ				1											L											ļ		1					1	1						23											L			GIS Analyst II		
2 240 00 5	130.00	18.00			ļ				1											L		ļ									ļ		1					1	1							180										L			Wetland Scientist	┿	
760.00 \$	190.00	4.00																																												ås.										L			Senior Scientist	╀	
2.750.00 \$	110.00	25.00	1		ļ	ļ	1			, ,	n		25		2			S	S	L			ļ	2				s			ļ		1					1	1				s		1 5	5		s		\$	5	S				S	22		Project Admin. II		
00,000,10,0		000000	۰						60.00		60 80		100.00 \$			10		30.00	30.00 \$			L	00,00	30.00				4,000.00 \$				14,500.00 \$				٥							30.00		450.00	200.00		30.00		2,000.00 \$	180.00	30.00				200.00			Expense		
\$ 475,487,00			7119.00	ľ		900.00		20,020,000	20,773.00		47 200 00		9.714.00		5,620.00	7,552.00	6,020.00	6,378.00	12,250.00	7,395.00	4,695.00	1,805.00	. 000.00	2.518.00	2,920.00	3,054.00	12,785.00	29,360.00		4,402.00	2,985.00		10 200 00			27.835.00	4,904.00	200100	602200	5,224.00	4978.00	`	15.814.00		8,010.00	3.575.00		4,009.00	10.882.00		19,880.00	10,212.00	4,282.00	2,320.00		43,926.00	18,260.00		TOTAL	PBS	
S . S.			1	1	+	+			 	1							L						1			L	L	L		L	+	l	1			1	1	1	 	1			$\frac{1}{1}$		$\frac{1}{1}$	$\frac{1}{1}$		$\frac{1}{1}$					L			L					99
5-			1	t	†	+			1	1		ļ	1				L			ŀ	ļ	†	†			Ĺ	L	F		F	t	1	†		f	1	ĺ	†	1	1			1		1	1		1	1				L			ļ	L		Su	ĺ	SLAVATINSWOOD
. 8			000	0.00		0.00 \$		9	000	0.00	200 5	0	0.00 \$		0.00 \$	0.00 \$	0.00 \$		0.00 \$			0.00	1		0.00 \$		0.00 \$	0.00 \$	S	0.00 5	0.00 5	, ,			,	000 5	0.00	0.00		0.00 5	2 00.0		0.00 \$		0.00 \$	0.00 \$	S	0.00 \$	0.00 S	5	s	S	s	S	s	0.00 \$	0.00 \$	S	SUBTOTAL A		
472,969.00			7118.00			900.00	300.00	00.000	6 39 079 00	TO 270 00	\$ 47,700,00	126 502 00	\$ 9.714.00	9,714,00	5,620.00	7,552.00	6,020.00	6,378.00	12,250.00	\$ 7,395.00	4,695.00	1,806,00			\$ 2,920.00	3,064.00	12,785.00	29,360.00	\$ 99,845.00	4,402.00	2,985.00		3 2,335.00		20 225 00	\$ 77,835,00	77 925 00	2001.00	5,629,00	\$ 5,224,00	4 908 00		\$ 15.814.00	\$ 34.879.00	8.010.00	3.525.00		4,009.00	10.882.00	5 13,744.00	19,880.00	10,212.00	\$ 4,282.00	\$ 2,320.00	65,329.00	\$ 43,926.00	\$ 18,260.00	62,186.00	AMOUNT	BUDGET	TOTAL