ENGINEERING AND RELATED SERVICES CONTRACT

Contract Number: TBD

Project Title: 82 nd Avenue Civic Corridor Transportation Investment Program	Agency Project Number: T01183 and T01218
Project Location: Portland, OR	Associated RFP Number: 00001757
Federal Aid Number: N/A	DBE Goal: 8.5% (see Exhibit E)
Total Not-to-Exceed ("NTE") amount for this Contract. This to	otal includes: a) all allowable
costs and expenses, profit, and fixed-fee amount, if any; and b) \$921,145.03 for	
contingency tasks, each of which must be separately authorized by Agency.	

This Contract is between City of Portland, hereafter called "Agency" and KPFF, Inc., a Washington corporation, hereafter called "Consultant." Agency and Consultant together are also referred to as "Parties" and individually referred to as "Party." The primary contacts for this Contract are identified in Exhibit J, Contact Information and Key Persons.

For purposes of this Contract:

- a) "business days" means calendar days, excluding Saturdays, Sundays and all State of Oregon recognized holidays;
- b) "calendar days" means any day appearing on the calendar, whether a weekday, weekend day, national holiday, State of Oregon holiday or other day;
- c) "Engineering" Services means architectural, engineering, photogrammetric mapping, transportation planning or land surveying services that must be procured using qualifications based selection procedures [see ORS 279C.100 and ORS 279C.110]; and
- d) "Related Services" has the meaning provided in ORS 279C.100.

TERMS AND CONDITIONS

- 1. Contract Effective Date and Term. This Contract is effective on the date it has been signed by the parties and all required approvals have been obtained. No work or compensation under the Contract is authorized until notice to proceed has been issued in writing (email acceptable) by the Agency. Unless otherwise amended or terminated, this Contract shall expire TBD.
- 2. Statement of Work. Consultant shall perform all Services and deliver all deliverables as described in Exhibit A, Statement of Work (the "Services"). The required schedule for performance under the Contract is specified in the Statement of Work.
- 3. Compensation. The maximum NTE amount, which includes the total of all allowable and reimbursable costs and expenses (and contingency tasks, if any) payable to Consultant under this Contract, is set forth in the table above and detailed further in Exhibit B, Compensation. Agency reserves the right, in its sole discretion, to amend this Contract to increase this amount for additional Services within the scope of the procurement. If this Contract was awarded as a Direct Appointment/Small Purchase, amendments to increase the maximum amount payable are subject to limitations and additional requirements as set forth in applicable Federal, State and local laws. The payment methodology and basis for payment to Consultant is described in Exhibit B, Compensation. Consultant and any subconsultants are subject to the requirements and limitations of 48 CFR Part 31 Contract Cost Principles and Procedures.
- **4. Contract Exhibits.** This Contract includes the following exhibits, each of which is incorporated into this Contract as though fully set forth herein:
 - Exhibit A Statement of Work
 - Exhibit B Compensation
 - Exhibit C Insurance

Exhibit A

- Exhibit D Title VI Non-Discrimination Provisions
- Exhibit E Disadvantaged Business Enterprise ("DBE") Provisions
- Exhibit F -Special Terms & Conditions
- Exhibit G RESERVED
- Exhibit H RESERVED
- Exhibit I Errors & Omissions ("E&O") Claims Process
- Exhibit J Contact Information and Key Persons
- 5. Order of Precedence. Unless a different order is required by law, this Contract shall be interpreted in the following order of precedence: this Contract (including all amendments, if any) less all Exhibits, attachments and other documents/information incorporated into this Contract, then the Statement of Work and Payment Schedule, then all other Exhibits, then any other attachments or documents/information incorporated into this Contract by reference.

6. Independent Contractor; Conflict of Interest; Responsibility for Taxes and Withholding; Consultant Oversight.

- a. Consultant, by its signature on the Contract, certifies that it is an independent contractor as defined in ORS 670.600 and as described in IRS Publication 1779, which is available at the following link: https://www.irs.gov/pub/irs-pdf/p1779.pdf. Consultant shall perform all required Services as an independent contractor. Although Agency reserves the right (i) to determine the delivery schedule (as mutually acceptable to Agency and Consultant) for the Services to be performed and (ii) to evaluate the quality of the completed performance, Agency cannot and will not control the means or manner of Consultant's performance. Consultant is responsible for determining the appropriate means and manner of performing the Services. Consultant is not an "officer", "employee", or "agent" of Agency, as those terms are used in ORS 30.265.
- b. Consultant, by its signature on the Contract, certifies that: (i) Consultant and, to the best of its information, knowledge and belief, its Associates have made any disclosures required under the COI Disclosure Form (available at: https://www.oregon.gov/ODOT/Business/Procurement/Pages/LPA.aspx) or any applicable law; and (ii) if a conflict of interest is discovered during the term of the Contract, Consultant shall timely submit a COI Disclosure Form to Agency disclosing the conflict(s).
- c. Consultant shall be responsible for all Federal or State of Oregon ("State") taxes applicable to compensation or payments paid to Consultant under the Contract and, unless Consultant is subject to backup withholding, Agency will not withhold from such compensation or payments any amount(s) to cover Consultant's Federal or State tax obligations. Throughout the duration of the Contract, Consultant shall submit an updated W-9 form (https://www.irs.gov/pub/irs-pdf/fw9.pdf) to Agency whenever Consultant's backup withholding status or any other information changes. Consultant is not eligible for any social security, unemployment insurance or workers' compensation benefits from compensation or payments paid to Consultant under the Contract, except as a self-employed individual.
- d. Consultant shall not be responsible for or have control over the means, manner, methods or techniques required of or used by other consultants or contractors under contract with Agency, unless otherwise expressly agreed to in writing by the Parties. The Parties agree, however, that these Section 6.d. provisions do not in any way revise or adjust Consultant's professional responsibility to report to Agency any information that comes to Consultant's attention (during performance of this Contract) pertaining to a project, or to performance by other consultants or contractors on a project, that would adversely affect Agency or a particular project.

7. Subcontracts and Assignment; Successors and Assigns

a. Consultant shall obtain Agency's written consent prior to entering into any subcontracts for any of the Services required by the Contract, or in any manner assigning, selling or transferring any of its rights or interest under the Contract or delegate any of its duties or performance under the Contract. In addition to any other provisions Agency may require, Consultant shall include, in any permitted subcontract under the Contract, contractual provisions that shall require any subcontractor (which may also be referred to as "subconsultant") to comply with Sections 9, 10, 11, 12, 13, 16, 17,18,19, 23, 27 and 29 of these Contract provisions, the limitations of **Exhibit B** - Compensation, Exhibit D - Title VI Nondiscrimination Provisions, and the requirements and sanctions of ORS Chapter 656, Workers' Compensation, in the performance of the subcontractor's Services on the project that is the subject of the Contract, as if the subcontractor were the Consultant. Agency's consent to any subcontract shall not relieve Consultant of any of its duties or obligations under the Contract, including with respect to any Services, whether performed or to be performed by Consultant or a subcontractor.

- **b.** The provisions of the Contract shall be binding upon and shall inure to the benefit of the Parties hereto, and their respective successors and permitted assigns, if any.
- **c.** Any purported assignment, delegation or disposition in violation of subsection "a." above is void.
- **8.** Third Party Beneficiaries. The State of Oregon, the Oregon Transportation Commission (OTC) and ODOT, are intended third-party beneficiaries of the Contract with express independent authority to enforce the terms and conditions of the Contract. Otherwise, there are no third-party beneficiaries of the Contract.
- 9. Representations and Warranties. Consultant represents and warrants to Agency that (i) Consultant has the power and authority to enter into and perform the Contract, (ii) the Contract, when executed and delivered is a valid and binding obligation of Consultant, enforceable in accordance with its terms, (iii) the Services under the Contract will be performed in accordance with the professional standard of care set forth in Section 10 below; (iv) Consultant is duly licensed to perform the Services, and if there is no licensing requirement for the profession or Services, is duly qualified and professionally competent to perform the Services; and (v) Consultant is an experienced firm having the skill, legal capacity, professional ability and resources necessary to perform all the Services required under the Contract. The warranties set forth in this Section are in addition to, and not in lieu of, any other warranties provided.
- 10. Professional Standard of Care; Responsibility of Consultant; Design Within Funding Limit
 - a. Professional Standard of Care.

Consultant shall perform all Services under the Contract in accordance with the degree of skill and care ordinarily used by competent practitioners of the same professional discipline when performing similar services under similar circumstances, taking into consideration the contemporary state of the practice and the project conditions.

- b. Responsibility of Consultant.
 - (i) Consultant shall be responsible for the professional quality, technical accuracy, and coordination of all designs, drawings, specifications, and other Services furnished by Consultant under the Contract. Consultant shall, without additional compensation, correct or revise any errors or deficiencies in its designs, drawings, specifications and other Services.
 - (ii) Agency's review, approval or acceptance of, or payment for, the Services required under the Contract shall not be construed to operate as a waiver of any rights under the Contract or of any cause of action arising out of the performance of the Contract, and Consultant shall be and remain liable to Agency in accordance with applicable law for all damages to Agency caused by Consultant's negligent performance of any of the Services furnished under the Contract or negligent failure to perform any of the Services under the Contract.
 - (iii) The rights and remedies of Agency provided for under the Contract are in addition to any other rights and remedies provided by law.
 - (iv) If Consultant is comprised of more than one legal entity (for example, a joint-venture or partnership), each such entity shall be jointly and severally liable under the Contract.
- c. Design Within Funding Limit.
 - When the Services under the Contract include preparation of design plans for the project:
 - (i) Consultant shall accomplish the design Services required under the Contract so as to permit construction of the project within Agency's budget for construction. Agency's budget for construction of the project is \$27,000,000. Consultant shall promptly advise Agency's Contract Administrator if it finds that the project being designed will exceed or is likely to exceed the funding limitations and it is

- unable to design a usable project within these limitations. Upon receipt of such information, the Contract Administrator will review Consultant's revised estimate of construction cost. Agency may, if it determines that the estimated construction contract price set forth in this Section is so low that award of a construction contract not in excess of such estimate is improbable, authorize a change in scope or materials as required to reduce the estimated construction cost to an amount within the estimated construction contract price set forth in this Section, or Agency may adjust such estimated construction contract price.
- (ii) Prior to releasing the bid for the construction contract, Agency will prepare an estimate of constructing the design submitted. If Agency's estimator(s) determines Consultant's design exceeds Agency's budget for the construction contract as set forth in Section (i) above {and as may be revised per Section (i) above}, then Consultant shall perform such redesign and other Services as are necessary to permit contract award within the funding limitation. These additional Services shall be performed at no increase in the price of the Contract. However, Consultant shall not be required to perform such additional Services at no cost to Agency if Consultant's design exceeds Agency's budget {as set forth in Section (i) above} as a result of conditions beyond Consultant's reasonable control.

11. Ownership of Work Product

- a. **Definitions.** The following terms have the meanings set forth below:
 - (i) "Consultant Intellectual Property" means any intellectual property owned by Consultant and developed independently from the Contract.
 - (ii) "Third Party Intellectual Property" means any intellectual property owned by parties other than Agency or Consultant.
 - (iii) "Work Product" means every invention, discovery, work of authorship, trade secret or other tangible or intangible item, and all intellectual property rights therein, that Consultant is required to deliver to Agency pursuant to the Contract.
- b. Work Product. All Work Product created by Consultant pursuant to the Contract, including derivative works and compilations, and whether or not such Work Product is considered a "work made for hire," shall be the exclusive property of Agency. Agency and Consultant agree that Work Product that constitutes original works of authorship (the "Original Work Product") is "work made for hire" of which Agency is the author within the meaning of the United States Copyright Act. If for any reason Original Work Product created pursuant to the Contract is not "work made for hire," Consultant hereby irrevocably assigns to Agency any and all of its rights, title, and interest in all Original Work Product created pursuant to the Contract, whether arising from copyright, patent. trademark, trade secret, or any other State or Federal intellectual property law or doctrine. Upon Agency's reasonable request, Consultant shall execute such further documents and instruments necessary to fully vest such rights in Original Work Product in Agency. Consultant forever waives any and all rights relating to Original Work Product created pursuant to the Contract, 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. However, see Sections 11.c and 11.d immediately below, for provisions applicable to Consultant Intellectual Property, Third Party Intellectual Property, Consultant Intellectual Property derivative works and Third Party Intellectual Property derivative works.
- c. Consultant and Third Party Intellectual Property. In the event that any Work Product is Consultant Intellectual Property or Third Party Intellectual Property (Consultant Intellectual Property or Third Party Intellectual Property that is applicable to the Services being performed by Consultant under the Contract or included in Work Product deliverable to Agency under the Contract), or in the event any Consultant Intellectual Property or Third Party Intellectual Property is needed by Agency to reasonably enjoy and use any Work Product, Consultant hereby agrees that it will grant to, or obtain for, the Agency an irrevocable, non-exclusive, non-transferable, perpetual, royalty-free license to use, reproduce, prepare derivative works based upon, distribute copies of, perform and display Consultant Intellectual Property and or Third Party Intellectual Property, including the right of Agency to authorize contractors, consultants and others to do the same on Agency's behalf. This obligation of the Consultant does not apply to a situation involving a third party who enters a license agreement directly with the Agency. At the request of Consultant, Agency shall take reasonable steps to protect the confidentiality and proprietary interests of Consultant in any Consultant Intellectual Property licensed under this Section, within the limits of the Oregon Public

- Records Law (ORS 192.410 through 192.505) and the Oregon Uniform Trade Secrets Act (ORS 646.461 to 646.475).
- d. Consultant and Third Party Intellectual Property-Derivative Work. In the event that Work Product created by Consultant under the Contract is a derivative work based on Consultant Intellectual Property or Third Party Intellectual Property, or is a compilation that includes Consultant Intellectual Property or Third Party Intellectual Property, Consultant hereby agrees to grant to, or obtain for, Agency an irrevocable, non-exclusive, non-transferable, perpetual, royalty-free license to use, reproduce, prepare derivative works based upon, distribute copies of, perform and display the pre-existing elements of Consultant Intellectual Property or Third Party Intellectual Property employed in the Work Product, including the right of Agency to authorize others to do the same on Agency's behalf.
- e. Consultant Use of Work Product. Notwithstanding anything to the contrary in this Section 11, Consultant may refer to the Work Product in its brochures or other literature that Consultant utilizes for advertising purposes and, unless specified otherwise in Exhibit A Statement of Work, Agency hereby grants to Consultant a non-exclusive, non-transferable, royalty-free license to use, reproduce, prepare derivative works based upon, distribute copies of, perform and display Agency-owned Work Product on other unrelated projects, except for any "Confidential Information" protected from disclosure under the provisions of Section 12 below, pertaining to Confidentiality and Non-Disclosure.
- 12. Confidentiality and Non-Disclosure. Consultant and its subcontractors, and their respective employees and agents, shall keep confidential all information, in whatever form, produced, prepared, observed or received to the extent that such information is designated as confidential by the Agency, by law, or by this Contract. In the event Consultant is required to disclose Confidential Information pursuant to a subpoena or other legal process, Consultant shall immediately notify Agency of such subpoena or other legal process, provide Agency with copies of any subpoena, other legal process and any other written materials supporting the subpoena or other legal process, and otherwise cooperate with Agency in the event Agency decides to oppose the disclosure of the Confidential Information. In the event Agency decides not to oppose such subpoena or other legal process or Agency's decision to oppose the subpoena or legal process has not been successful, Consultant shall be excused from the confidentiality provisions of this Section, to the extent necessary to meet the requirements of the subpoena or other legal process controlling the required disclosure.

13. *Indemnity*

- a. Claims for Other Than Professional Liability. Consultant shall indemnify, defend, save, and hold harmless the Agency, State of Oregon, the OTC and ODOT, and their respective officers, members, agents and employees from any and all claims, suits, actions, losses, liabilities, damages, costs and expenses, including attorney fees, of whatsoever nature, resulting from or arising out of the acts or omissions of Consultant or its subcontractors, or their respective agents or employees, under the Contract.
- b. Claims for Professional Liability. Consultant shall indemnify, defend, save, and hold harmless the Agency, State of Oregon, the OTC and ODOT, and their respective officers, members, agents and employees from any and all claims, suits, actions, losses, liabilities, damages, costs and expenses, including attorney fees, of whatsoever nature, resulting from or arising out of the professionally negligent acts, errors or omissions of Consultant or its subcontractors, or their respective agents or employees, in the performance of Consultant's professional services under the Contract.
- c. Indemnity for Infringement Claims. Without limiting the generality of section 13(a) or 13(b), Consultant expressly agrees to indemnify, defend, save and hold harmless the Agency, State of Oregon, the OTC and ODOT, and their respective officers, members and their agencies, subdivisions, officers, directors, agents, and employees from any and all claims, suits, actions, losses, liabilities, damages, costs and expenses, including attorney fees, arising out of or relating to any claims that Consultant's services, the

Work Product or any other tangible or intangible items delivered to the Agency by Consultant that may be the subject of protection under any state or federal intellectual property law or doctrine, or the Agency's use thereof, infringes any patent, copyright, trade secret, trademark, trade dress, mask work, utility design, or other proprietary right of any third party; provided, Agency shall provide Consultant with prompt written notice of any infringement claim. Provided, however, Consultant shall not be obligated to indemnify, defend, save and hold harmless the Agency (or other entities identified above) under this section 13(c), based solely on the following: Consultant's compliance with Agency specifications or requirements, including, but not limited to the required use of tangible or intangible items provided by Agency.

- d. Defense Qualification. Neither Consultant nor any attorney engaged by Consultant shall defend or purport to defend a claim in the name of the Agency, the State of Oregon, the OTC or ODOT without first receiving from the applicable entity, authority to act as legal counsel, nor shall Consultant settle any claim on behalf of the foregoing entities without the approval of these entities. The Agency, the State of Oregon, the OTC or ODOT may, at their election and expense, assume their own defense and settlement.
- e. Agency's Acts or Omissions. This section 13 does not include indemnification by Consultant of the Agency, the State of Oregon, the OTC and ODOT, and their respective officers, members, agents and employees, for the acts or omissions of these entities and their respective officers, members, agents and employees, whether within the scope of the Contract or otherwise.
- **14. Insurance**. Consultant shall carry insurance as required on **Exhibit C**.

15. Termination

- **a. Termination by Mutual Consent**. The Contract may be terminated at any time, in whole or in part, by mutual written consent of the Parties.
- **b.** Agency's Right to Terminate for Convenience. Agency may, at its sole discretion, terminate the Contract, in whole or in part, upon 30 calendar days prior written notice to Consultant.
- c. Agency's Right to Terminate for Cause. Agency may terminate the Contract, in whole or in part, immediately upon written notice to Consultant or at such later date as Agency may establish in such notice, upon the occurrence of any of the following events:
 - (i) Agency fails to receive appropriations, limitations or other expenditure authority sufficient to allow Agency, in the exercise of its reasonable administrative discretion, to continue to make payments for Consultant's Services. Payments under this Contract and continuation of this Contract beyond the current biennium are subject to and contingent upon sufficient funds being appropriated, budgeted, and otherwise made available from current funding sources. The Agency may terminate this Contract, and Consultant waives any and all claims for damages, effective immediately upon receipt of written notice, or any date specified therein, if for any reason the Agency's funding from local, state and/or federal sources is not appropriated or is withdrawn, limited or impaired;
 - (ii) Federal, State or local laws, regulations or guidelines are modified or interpreted in such a way that either the Services under the Contract are prohibited or Agency is prohibited from paying for such Services from the planned funding source;
 - (iii) Consultant no longer holds any license or certificate that is required to perform the Services; or
 - (iv) Consultant commits any material breach or default of any covenant, warranty, obligation or agreement under the Contract, fails to perform the Services under the Contract within the time specified or any extension thereof, or so fails to perform the Services as to endanger Consultant's performance under the Contract in accordance with its terms, and such breach, default or failure is not cured within 14 calendar days after Agency's notice to Consultant, or such longer period as Agency may specify in such notice.
- d. Consultant's Right to Terminate for Cause.

- (i) Consultant may terminate the Contract by giving written notice to Agency if Agency fails to pay Consultant pursuant to the terms of the Contract and if Agency fails to cure within 14 calendar days after receipt of Consultant's written notice, or such longer period of cure as Consultant may specify in such notice.
- (ii) Consultant may terminate the Contract, for reasons other than nonpayment, if Agency commits any material breach or default of any covenant, warranty, obligation or agreement under the Contract, fails to perform under the Contract within the times specified, or so fails to perform as to endanger Consultant's performance under the Contract, and such breach, default or failure is not cured within 14 calendar days after Consultant's notice to Agency, or such longer period as Consultant may specify in such notice.

e. Remedies.

- (i) In the event of termination pursuant to Sections 15(a), 15(b), 15(c)(i), 15(c)(ii) or 15(d), Consultant's sole remedy (except as otherwise required by applicable State or Federal law) shall be a claim for payment of the satisfactory Services actually rendered up to the time of termination, less previous amounts paid and any claim(s) which State has against Consultant, except in the event of a termination under Section 15(c)(i) where no payment will be due and payable for Services performed or costs incurred after the last day of the current biennium. If previous amounts paid to Consultant exceed the amount due to Consultant under this subsection, Consultant shall pay all excess to Agency upon demand.
- (ii) In the event of termination pursuant to Section 15(c)(iii) or 15(c)(iv), Agency shall have any remedy available to it in law or equity. If it is determined for any reason that Consultant was not in default under Section 15(c)(iii) or 15(c)(iv), the rights and obligations of the Parties shall be the same as if the Contract was terminated pursuant to Section 15(b).
- f. Consultant's Tender Upon Termination/Retained Remedies of Agency. Upon receiving a notice of termination of the Contract, Consultant shall immediately cease all activities under the Contract, unless Agency expressly directs otherwise in such notice of termination. Upon termination of the Contract, Consultant shall deliver to Agency all documents, information, works-in-progress and other property that are or would be deliverables had the Contract been completed. Upon Agency's request, Consultant shall surrender to anyone Agency designates, all documents, information, research, works-in-progress, Work Product and other property, that are deliverables or would be deliverables had the Contract been completed, that are in Consultant's possession or control and may be needed by Agency to complete the Services.
- 16. Records Maintenance; Access. Consultant, and its subconsultants, shall maintain all fiscal records relating to the Contract in accordance with generally accepted accounting principles. In addition. Consultant shall maintain all other records pertinent to the Contract and the project and shall do so in such a manner as to clearly document Consultant's performance. The Agency, ODOT, the Oregon Secretary of State's Office (OSS), FHWA and the Comptroller General of the United States (CGUS) and their respective, duly authorized representatives shall have access, and Consultant shall permit the aforementioned entities and individuals access, to such fiscal records and other books, documents, papers, plans and writings of Consultant that are pertinent to the Contract to perform examinations and audits and make excerpts and transcripts. Consultant shall retain and keep accessible all such fiscal records, books, documents, papers, plans, and writings for a minimum of 6 years, or such longer period as may be required by applicable law, following final payment and expiration or termination of the Contract, or until the conclusion of any audit, controversy or litigation arising out of or related to the Contract, whichever date is later. Any cost data submitted by Consultant pursuant to this Contract may be shared with ODOT, FHWA, OSS and CGUS, as necessary, for audit purposes. Agency, ODOT and FHWA shall have the right to review or examine the work in progress for any Services performed under the Contract.
- 17. Performance Evaluations. Agency will conduct performance evaluation(s) on the Consultant and its subconsultants during the term of the Contract, which will be compiled and maintained by Agency, and become a written record of Consultant's performance. Generally, the performance evaluations will include criteria related to, but not limited to, quality and technical performance, adherence to contract scope and budget, schedule performance, and business relations (including

communications and negotiations performance). Agency will provide a copy of the performance evaluation results to Consultant within 14 calendar days following completion. Consultant may respond, in writing, or may request a meeting to address any or all findings contained in the completed performance evaluation within 30 calendar days following receipt. Agency may adjust evaluation score(s) upon Agency's finding of good cause. Agency may provide copies of any performance evaluation documentation to ODOT, FHWA, and other parties unless lawfully exempt from disclosure. Agency may use performance evaluation findings and conclusions in any way deemed necessary, including, but not limited to, corrective action, requiring submittal of performance improvement plan by Consultant and withholding of retainage. Agency and ODOT may use Consultant performance under previous contracts as a selection criterion for future contracts.

18. Compliance with Applicable Law. Consultant shall comply with all Federal, State and local statutes, regulations, administrative rules, executive orders, ordinances and other laws applicable to the Services under the Contract, in effect at the time the Contract is executed and as may be amended, revised, enacted or adopted thereafter. Changes in these legal requirements after the execution of the Contract may or may not be the basis for modifications to Consultant's schedule, scope and fee, depending on a reasonable assessment of the nature of the change, the extent to which the change was anticipated by Consultant or the Parties, and other circumstances then existing. Without limiting the generality of the foregoing, Consultant expressly agrees to comply with: (i) Title VI of the Civil Rights Act of 1964; (ii) Section V of the Rehabilitation Act of 1973; (iii) the Americans with Disabilities Act of 1990 and ORS 659a.142; (iv) the Clean Air Act (42 U.S.C. 7401-7671g); (v) the Federal Water Pollution Control Act as amended (33 U.S.C. 1251-1387); (vi) Executive Order 11738; (vii) Environmental Protection Agency regulations (40 CFR part 15); (viii) and all applicable standards, orders, regulations and administrative rules established pursuant to the foregoing laws. Agency's performance under the Contract is conditioned upon Consultant's compliance with, and Consultant shall comply with, the obligations applicable to public contracts and intended for contractors under ORS 279C.520 and 279C.530, which are incorporated by reference herein. All rights and remedies available to Agency under applicable federal, state and local laws are also incorporated by reference herein and are cumulative with all rights and remedies under the Contract. If Consultant discovers a conflict among Federal, State and local statutes, regulations, administrative rules, executive orders, ordinances and other laws applicable to the Services under the Contract, Consultant shall in writing request Agency to resolve the conflict (in collaboration with ODOT and FHWA as applicable). Consultant shall specify if the conflict(s) create a problem for the design or other Services required under the Contract. If Agency concludes there is a conflict among the applicable laws, Federal laws shall govern among the others; State laws shall govern over the others except Federal. The resolution of the conflict of the applicable laws by Agency shall be final and not subject to further review or challenge.

19. Permits and Licenses

- a. Permits and licenses to conduct business. Unless otherwise specified in Exhibit A, Statement of Work, Consultant shall obtain, hold, maintain and fully pay for during the term of the Contract all permits and licenses required by law for Consultant to conduct its business and perform the Services under the Contract.
- b. Permits and licenses required for the project. Unless otherwise specified in Exhibit A, Statement of Work, Consultant shall obtain, hold and maintain during the term of the Contract all permits and licenses required for the project (for example, permits from regulatory authorities and use permits or licenses from owners of real and personal property), but Agency shall pay for such permits and licenses. Consultant shall review the project site, if applicable, and the nature of the Services that Consultant shall perform under the Contract. Consultant shall advise Agency throughout the course of the project as to the necessity of obtaining all project permits and licenses, the status of the issuance of any such permits and licenses, and any issues or impediments related to the issuance or continuation of any such permits and licenses.
- **20.** Foreign Contractor. If Consultant is not domiciled in or registered to do business in the State of Oregon, Consultant shall promptly provide to the Oregon Department of Revenue and the Secretary of State Corporation Division all information required by those agencies relative to the Contract.

- **21.** Force Majeure. Neither Agency nor Consultant shall be held responsible for delay or default in the performance of its obligations due to a cause beyond its reasonable control, including, but not limited to, fire, riot, acts of God, terrorist acts or other acts of political sabotage, or war where such cause was beyond the reasonable control of Agency or Consultant, respectively. Consultant shall, however, 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 the Contract.
- **22. Survival**. All rights and obligations shall cease upon termination or expiration of the Contract, except for the rights and obligations set forth in Sections 5, 9, 10, 11, 12, 13, 15(e), 15(f), 16, 22, 23, 26, 27 and 29 and all other rights and obligations which by their context are intended to survive.
- **23. Time is of the Essence**. Consultant agrees that time is of the essence in Consultant's performance of its obligations under the Contract.
- **24. Notice**. Except as otherwise expressly provided in the Contract, any communications between the Parties hereto or notices to be given hereunder shall be given in writing by e-mail, by personal delivery, facsimile, or mailing the same, postage prepaid, to Consultant or Agency at the e-mail address, the delivery address or facsimile number set forth in the Contract, or to such other addresses or numbers as either Party may hereafter indicate in writing to the other. Any notice or day-to-day communication sent by e-mail shall be deemed received when it is sent. **The recipient of any notice sent by e-mail shall reply by e-mail to confirm receipt of such notice.** Any communication or notice made by personal delivery shall be deemed to be received when actually delivered. Any communication or notice properly addressed and mailed shall be deemed received 5 calendar days after the date of mailing. Any communication or notice delivered by facsimile shall be deemed received on the date of the notice of successful transmission generated by the transmitting machine. To be effective, such facsimile transmission must be confirmed by telephone notice to Agency's Contract Administrator or Consultant's representative, as applicable.
- **25.** Severability. The Parties agree that if any term or provision of the 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.
- **26. Dispute Resolution and Errors & Omissions Claims Process.** In the event of a dispute between the Parties regarding any aspect of the Contract or performance under the Contract, the Parties agree to attempt in good faith to investigate and resolve any such dispute through direct communications and negotiations.
 - a. Errors & Omissions Related. In the event those good faith efforts do not resolve disputes related to potential Errors and Omissions, the Parties agree to make good faith efforts to resolve the matter pursuant to Exhibit I, Errors & Omissions Claims Process.
 - b. Other Disputes. In the event good faith efforts do not resolve disputes unrelated to Errors & Omissions, the Parties agree to make a good faith effort to resolve any such dispute through fact finding and non-binding mediation prior to resorting to litigation. The mediator shall be selected by mutual agreement of the Parties. If the Parties fail to agree on a mediator, each Party shall select a mediator and those two persons shall agree on a third-party, who will be the sole mediator. The cost of the mediator shall be split equally between the Parties.
 - c. Notification to ODOT. Agency shall immediately notify ODOT of any disputes that seek resolution with the Errors & Omissions Claims Process or mediation.
- 27. Governing Law; Venue; Consent to Jurisdiction. The Contract shall be governed by, and construed and enforced in accordance with, the laws of the State of Oregon, without regard to principles of conflicts of law. Any claim, action, suit or proceeding (collectively, "Claim") between Agency (or any agency or department of the State of Oregon) and Consultant that arises from or relates to the Contract shall be brought and conducted solely and exclusively within the Circuit Court located in the County in which the

Project is located; provided, however, if a Claim must be brought in a Federal forum, then 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 Agency or State of Oregon of any form or defense or immunity, whether based on sovereign immunity, governmental immunity, immunity based on the Eleventh Amendment to the United States Constitution, or otherwise. CONSULTANT, BY EXECUTION OF THE CONTRACT, HEREBY CONSENTS TO THE IN PERSONAM JURISDICTION OF SAID COURTS.

28. Amendments. Agency may amend the Contract to the extent permitted by applicable statutes, administrative rules and ordinances and as mutually agreed upon by Agency and Consultant. Agency may agree to appropriate increases in the maximum compensation payable under the Contract, should any Agency-approved increase occur in the scope, character, schedule or complexity of Services as outlined in the Statement of Work. Consultant shall not commence any Services authorized under an amendment, and the amendment is not effective, unless it is in writing, signed by the Parties and all approvals required by applicable law have been obtained.

29. False Claims

- a. Consultant understands and acknowledges it is subject to the Oregon False Claims Act (ORS 180.750 to 180.785) and to any liabilities or penalties associated with the making of a false claim under that Act. By its execution of the Contract, Consultant certifies the truthfulness, completeness, and accuracy of any statement or claim it has made, it makes, it may make, or cause to be made that pertains to the Contract or the Project for which the Services are being performed, including but not limited to Consultant's statement of proposal and any invoices, reports, or other deliverables.
- b. Consultant shall immediately disclose (in writing) to Agency whenever, in connection with the award, performance or closeout of the Contract, or any subcontract thereunder, Consultant has credible evidence that a principal, employee, agent, or subcontractor of Consultant has committed—
 - (i) A violation of the Oregon False Claims Act; or
 - (ii) A violation of State or Federal criminal or civil law involving fraud, conflict of interest, bribery, gratuity or similar misconduct.
- c. Consultant must include subsections (a) and (b) of this section in each subcontract Consultant may award in connection with the performance of the Contract. In doing so, Consultant may not modify the terms of those subsections, except to identify the subcontractors or sub grantee that will be subject to those provisions.
- **30. Certified Small Businesses.** Respecting certification as a disadvantaged business enterprise, minority-owned business, woman-owned business, business that a service-disabled veteran owns or an emerging small business under ORS 200.055, as and when applicable, the Consultant shall maintain the certifications, and require in its subcontracts that subcontractors maintain the certifications required by Section 2, Chapter 325, Oregon Laws 2015, as amended by Section 26, Chapter 565, Oregon Laws 2015 as a material condition of the Contract. If the Consultant or subcontractor was awarded the Contract or subcontract, as applicable, in the course of Agency carrying out an affirmative action goal, policy or program under ORS 279A.100, and fails to maintain the required certification, Agency may terminate the Contract, require the Consultant to terminate the subcontractor, or exercise any of remedies reserved for breach of the Contract.
- **31. Merger Clause; Waiver; Interpretation**. The Contract, including everything incorporated by reference, constitutes the entire agreement between the Parties on the subject matter hereof. There are no understandings, agreements, or representations, oral or written, not specified herein regarding the Contract. No waiver, consent, modification or change of terms of the Contract shall bind either Party, unless such waiver, consent, modification or change of terms is in writing and signed by the Parties, and all necessary State of Oregon governmental approvals have been obtained. Such a waiver, consent, modification or change, if made, shall be effective only in the specific instance and for the specific purpose given. Either Party's failure to enforce any provision of the Contract shall not constitute a waiver by that

Exhibit A

Party of that or any other provision. The characterization of provisions of the Contract as material provisions or the failure to comply with certain provisions as a material breach of the Contract shall in no way be construed to mean that any other provisions of the Contract are not material or that failure to comply with any other provisions is not a material breach of the Contract.

CONSULTANT CERTIFICATIONS

- A. Any individual (the undersigned) signing on behalf of Consultant hereby certifies under penalty of perjury:
- (1) Consultant has provided its correct TIN to Agency;
- (2) Consultant is not subject to backup withholding because (a) Consultant is exempt from backup withholding, (b) Consultant has not been notified by the IRS that Consultant is subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified Consultant that Consultant is no longer subject to backup withholding; and
- (3) The undersigned is authorized to act on behalf of Consultant, s/he has authority and knowledge regarding Consultant's payment of taxes, and to the best of the undersigned's knowledge, Consultant is not in violation of any Oregon Tax Laws. For purposes of this certification, "Oregon Tax Laws" means a State tax imposed by ORS 320.005 to 320.150 and 403.200 to 403.250, ORS Chapters 118, 314, 316, 317, 318, 321, and 323; and local taxes administered by the Department of Revenue under ORS 305.620.
- B. Any individual (the undersigned) signing on behalf of Consultant hereby certifies the undersigned is authorized to sign this Contract and that:
- (1) Consultant has read this Contract, understands it, and agrees to be bound by its terms and conditions.
- (2) Consultant understands and agrees that various documents are not physically attached, but are incorporated by reference and have the same force and effect as if fully set forth herein.
- (3) Consultant understands and has provided to all Associates the COI Disclosure Form available at: https://www.oregon.gov/ODOT/Business/Procurement/Pages/LPA.aspx. Consultant and (to the best of the undersigned's information, knowledge and belief) Consultant's Associates are in compliance with the disclosure requirements of the COI Disclosure Form and have no conflicts of interest to disclose. If disclosures regarding this Contract or the related Project are required per the COI Disclosure Form, Consultant has made such disclosures to Agency on a properly prepared and submitted form and, if determined necessary by Agency or ODOT, a mitigation plan has been approved by Agency and ODOT.
- (4) (a) No Federal appropriated funds have been paid or will be paid, by or on behalf of Consultant, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
 - (b) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
 - (c) This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.
 - (d) Consultant shall require that the language of this certification be included in all subcontracts in excess of \$100,000 at all tiers and that all such subcontractors shall certify and disclose accordingly.
- (5) Consultant is an independent contractor as defined in ORS 670.600 and as described in IRS Publication 1779.
- (6) In the event that Consultant is a general partnership or joint venture, Consultant signature(s) on this Contract constitutes certifications to the above statements pertaining to the partnership or joint venture, as well as certifications of the above statements as to any general partner or joint venturer signing this Contract.

No Payment shall be made for Services that are performed before all necessary governmental approvals have been obtained, the Contract is fully executed, and Notice-To-Proceed has been issued by Agency.

Counterparts: The Contract may be executed in several counterparts, all of which when taken together shall constitute one agreement binding on all Parties, notwithstanding that all Parties are not signatories to the same counterpart. Each copy of the Contract so executed shall constitute an original.

Exhibit A

CONSULTANT SIGNATURE(s)

Signature:		Date:
Name:	Title:	
Signature:		
Name:		
AGENCY SIGNATURES		
Signature:		Date:
Name:	Title:	

AGENCY LEGAL REVIEW:

Signature Stamped Approval:

CONSULTANT DRAFT 5/25/22

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A. PROJECT DESCRIPTION and OVERVIEW OF SERVICES

Consultant shall provide the following in conformance with the tasks, standards and other applicable requirements set forth or incorporated in this contract: planning; engineering services required to prepare the final plans, specifications and estimate ("PS&E") documents; right-of-way (R/W) services; and assistance during bidding (the "Services"). The required services are for the 82nd Avenue Transportation Investment Program Project described below (the "Project").

Project Description

The City of Portland Bureau of Transportation (Agency or PBOT) is contracting consultant services in connection with project management, design, and planning services for the 82nd Avenue Transportation Investment Program. The Project is a partnership among PBOT, Metro, and TriMet. A Steering Committee will be the decision-making body for the Transit Alternatives Analysis and will include Metro, TriMet, PBOT, Clackamas County, Oregon Department of Transportation (ODOT), the Port of Portland and up to five Community-Based Organizations (CBOs).

The Project includes two phases:

- Phase 1 (Safety Project Design)
- Phase 2 (Transit Project Alternatives Analysis and Portland Civic Corridor Planning)

Phase 2 (Planning) includes two components:

- 1. A Regional Transit Alternatives Analysis (including both City of Portland and Clackamas County, referenced as **Full Geography**) and
- 2. A City Civic Corridor Planning Process (City of Portland from NE Lombard St to SE Clatsop St, referenced as such)

Phase 2 of the Project includes some tasks to be completed by PBOT, Metro, or TriMet. Other partner agencies (such as ODOT, Clackamas County, or the Port of Portland) will also participate in Phase 2 planning work. This contract is between KPFF and PBOT. This Statement of Work (SOW) refers to specific partner agencies by name (Agency or PBOT, Metro, and TriMet) and collectively as Agencies or the Planning PMT to document intended roles and responsibilities. For the purposes of this contract, Agency shall hold responsibility for coordinating all work by partner agencies and ensuring Consultant has clear direction at all times.

The Project site is described as follows:

- Phase 1 (Design), located within the City of Portland:
 - o 82nd Ave from SE Foster Rd to the northern end of the property at 2330 SE 82nd Ave, including side streets within 150-feet of the right-of-way along 82nd Ave
 - 82nd Ave from NE Schuyler St to Siskiyou St, including side streets within 150-feet of the right-ofway along 82nd Ave
 - o ITS and Signal Improvements on 82nd Ave from Springwater to NE Lombard St
 - Intersection spot improvements at NE Fremont St., including access management along 82nd near Fremont
- Phase 2 (Planning), located within the City of Portland and Clackamas County:
 - o Full Geography Transit Alternatives Analysis: 82nd Ave from the Portland International Airport or Parkrose, northern terminus TBD to Clackamas Town Center

o Portland Geography Civic Corridor: 82nd Ave from NE Lombard St to SE Clatsop St

Phase 1 will improve the existing right-of-way as follows:

From SE Foster Rd to approximately 400-feet north of SE Division St:

- Pavement rehabilitation (full depth reconstruction of outer lanes; 3-inch grind/inlay of inner lanes; portions of side streets as needed)
- ADA ramp reconstruction (approximately 146 ramps)
- Lighting evaluations and design at locations with new and modified signalized intersections and beacons
- Signing and striping
- Drainage and sewer system improvements
- Strategic sidewalk widening (to be determined)
 - O Widening would mostly occur along specific frontages where sufficient right-of-way already exists for full sidewalk, but sidewalk is currently curb tight. Strategic sidewalk repair (to be determined)
 - Opportunity to widen sidewalk on west side from Raymond Ct to just north of Foster Rd by moving curb out by roughly 7-feet to achieve a 15-foot sidewalk corridor (would still need to develop right turn pocket approaching slip lane)
- Strategic sidewalk repair (to be determined)
 - o In some areas, curb is crumbling away, sidewalk is in very poor condition, driveways have too much cross-slope, or driveways have been abandoned
 - o Address any curb with low reveal (<4")
- New curb and sidewalk infill just north of Division St in front of several frontages that currently have no curb and have an asphalt area rather than a standard curb and concrete sidewalk
 - o 2366 SE 82nd Ave, 2360 SE 82nd Ave, and 2330 SE 82nd Ave
 - Property lines extend out to roughly 2-feet from roadway, so ROW acquisition will be required for this sidewalk infill
 - One building is too close to roadway to allow for more than a curb-tight sidewalk
- Other safety enhancements (to be determined in Task 20.2)
- Access management (to be determined, including medians (with trees and/or landscaping where
 possible) and traffic separators to address locations with a documented risk of angle or turning crashes
 and for community enhancement or placemaking)
- Rectangular Rapid Flashing Beacon (RRFB) rebuilds at SE Francis/Center St and approximately 400feet north of Division St
 - O Put RRFBs on mast-arms and have them powered rather than solar
 - Reconstruct substandard refuge islands
- Modify RRFB at SE Mitchell (adding mast arm)
 - o This is a funded ODOT project, not yet constructed
- New signalized pedestrian crossing at Rhone St to fill last remaining crossing gap in this segment of 82nd Ave
 - o Anticipate half-signal with median, similar to many other new crossings
- Signal rebuilds at Raymond St, Holgate Blvd, Boise St, and Woodward St
 - o Consider removing bus pull-outs and fixing inconsistent curb lines at Holgate

- o Southbound bus pull-out may remain but become a right turn except bus lane with leading bus and right turn interval in signal phasing
- Fiber optic interconnect
 - o At new and rebuilt signals, add CCTV traffic monitoring cameras
- R/W acquisition
 - Likely only needed for ADA ramps and for sidewalk infill north of Division St; potentially needed for sidewalk widening

From NE Schuyler St to Siskiyou St and at NE Fremont St:

- Pavement rehabilitation (full depth reconstruction of outer lanes; 3-inch grind/inlay of inner lanes; portions of side streets as needed) only from Schuyler to Siskiyou
 - o ODOT repayed Siskiyou to Fremont in 2019
- ADA ramp reconstruction (approximately 60 ramps)
- Signing and striping
- Drainage and sewer system improvements
- Strategic sidewalk widening (to be determined)
 - Widening would mostly occur along specific frontages where sufficient right-of-way already exists for full sidewalk, but sidewalk is currently curb tight. Strategic sidewalk repair (to be determined)
 - o In some areas, curb is crumbling away, sidewalk is in very poor condition, driveways have too much cross-slope, or driveways have been abandoned
 - o Address any curb with low reveal (<4")
- Other safety enhancements (to be determined)
- Lighting evaluations and design at locations with new and modified signalized intersections and beacons
- Access management (to be determined, including medians (with trees and/or landscaping where possible) and traffic separators to address locations with a documented risk of angle or turning crashes and for community enhancement or placemaking)
- Signal rebuilds at NE Fremont St, Siskiyou St, and Tillamook St
 - Previous scoping effort at Fremont St identified need for a small segment of new curb and sidewalk on north side of Fremont St just east of 82nd Ave to accommodate future bike lanes and for access management within one block of Fremont
- Fiber optic interconnect
 - o At signalized intersections, add CCTV traffic monitoring cameras
- R/W acquisition
 - Likely only needed for ADA ramps or sidewalk widening

ITS and Signal Improvements from Springwater to NE Lombard St:

- Fiber Optic Cable Installation
 - Between Lombard St and Webster St VMS
 - Webster St Signal
 - Prescott St Signal
 - McDaniel High School Signal
 - o Between Glisan St and Oregon St VMS
 - Tibbets St (SB) VMS

- o Bush St (NB) VMS
- Woodstock St Signal
- CCTV Camera Installation
 - Between Lombard St and Webster St VMS
 - Webster St Signal
 - o Prescott St Signal
 - o McDaniel High School Signal
 - Jonesmore St Signal
 - Multnomah St Signal
 - Oregon St VMS
 - o Burnside St Signal
 - o Yamhill St Signal
 - Mill St Signal
 - o Tibbets St (SB) VMS
 - o Bush St (NB) VMS
 - Woodstock Blvd Signal
 - o Flavel St Signal
- Radar Detection Installation
 - Webster St VMS Side fire radar
 - o Prescott St Signal Four stop bar and two advance radar systems
 - O Wasco St Signal Four stop bar and two advance radar systems
 - o Multnomah St Signal Three stop bar and two advance radar systems
 - o Oregon St VMS Side fire radar
 - o Tibbets St (SB) VMS Side fire radar
 - o Bush St (NB) VMS Side fire radar
- Controller Cabinet Replacement
 - o Prescott St Signal
 - Sandy Blvd Signal
 - Wasco St Signal
 - o Multnomah St Signal
 - Springwater Signal
- Bicycle & Pedestrian Detection Installation
 - Lombard St
 - o Burnside St
 - Yamhill St
 - Mill St
 - o RRFB north of Division St
 - Division St
 - o RRFB between Center St & Francis St
 - Foster Rd

- o Raymond St
- o Duke St
- o Springwater
- Bicycle Signal Installation
 - Springwater
- Speed Feedback Warning Sign Upgrades
 - o SB @ Webster St
 - o NB @ Sandy Blvd
 - o SB @ Hancock St
 - o NB @ Broadway
 - o SB @ Clay St
 - o NB @ Market St
 - o NB @ Holgate Blvd
 - o SB @ Ramona St
 - o SB @ Ogden St
 - o SB @ Crystal Springs Blvd

Consultant shall prepare plans, specifications, and estimates (PS&E) for the Project that meet the requirements of the 2020 City of Portland Standard Construction Specifications.

Phase 1 survey limits extend 150-feet in each direction from the curb line associated with each intersection corner.

Phase 1 improvements will be completed as follows:

- The Phase 1 design will advance to the 60% level of completion as 1 documentation package.
- After 60%, the project will be divided geographically into up to 3 documentation packages.
- The Agency may elect to let the project as an alternative delivery contract (e.g., Construction Manager/General Contractor (CMGC)) following the 30% submittal.

The Consultant will assist the Agency through construction document preparation, with possible assistance during the bid phase and construction phase as part of a future contract amendment.

Phase 2 Transportation Investment Program work will develop a vision and preferred alternative for 82nd Ave that addresses community determined priorities including transit and multimodal improvements, safety and maintenance projects, and equitable development needs. Phase 2 will include the following process milestones:

- Confirm context and issues; confirm community values.
- Confirm evaluation criteria and evaluation framework.
- Develop range of alternatives.
- Evaluate range of alternatives and confirm with the public.
- Refine alternatives based on feedback.
- Evaluate and confirm refined alternative(s) with the public.
- Develop preferred alternative.
- Develop programming plan. (Civic Corridor geography)

The Agency reserves the right to amend this SOW to include tasks and deliverables required to complete the Project. The Consultant shall not provide any additional services unless and until an amendment to this SOW have been executed and a written notice to proceed (NTP) for the additional work has been issued by the Agency.

General Expectations

Consultant commits to oversee and direct the design of the Project to obtain the greatest long-term value for the Agency, and which reflects the prudent expenditure of public funds within the constraints of the Project, program, context and budget. In pursuing this goal, Consultant commits to:

- Develop a design that is appropriate for the context of the Project and the nature of its function, both present and future.
- Avoid expenditures for aesthetic effect which are disproportionate to the Project.
- Manage and facilitate all facets of the project that are reasonably within Consultant's control to ensure the Project is completed on or ahead of time and within budget.
- Strive to reduce the construction cost of the Project while keeping life-cycle costs low.
- Use recycled/recyclable products to the maximum extent economically feasible in the performance of the contract work set forth in this document.

Construction Budget

The estimated construction contract price for Phase 1 of the Project described in this SOW is \$27M.

Partner Agency Responsibilities

This project will have a "**Design PMT**" for Phase 1 work and a "**Planning PMT**" for Phase 2 work. The Design PMT consists of representatives from PBOT, led by one PBOT project manager. The Planning PMT consists of one project manager from each of the following: PBOT, Metro, and TriMet. The term "**Project PMT**" is used to describe responsibilities that apply to both the Design PMT and the Planning PMT. The "Agency" is the City of Portland Bureau of Transportation (PBOT). The "Agencies" are Metro/TriMet/PBOT.

PBOT, Metro and TriMet will develop a Memorandum of Understanding (MOU) clearly delineating roles and who is leading each task for the Transit Alternatives Analysis and the Civic Corridor planning, which will overlap. This MOU will clarify who the Consultant should report to by task and how the agencies will collaborate. Phase 1 will be led by PBOT. In general, Phase 2 Civic Corridor planning will be led by PBOT, and Transit Alternatives Analysis will be led by Metro with some tasks led by TriMet.

Partner agency responsibilities include the following:

- Attendance at appropriate meetings and work sessions. (Project PMT)
- Coordination and communication of internal agency staff. (Project PMT)
- Coordination and communication with ODOT and other stakeholders. (Metro/TriMet/PBOT)
- Provide access to available Project information (including corridor atlas and safety analysis GIS and CAD files), recommendations and goals. (Project PMT)
- Provide Consultant with transit origins and destinations including HOP Fastpass analysis as applicable. (Project PMT)
- Provide Consultant with INRIX waypoint data including data by mode as applicable (walking, bicycling, driving). (PBOT)
- Review of Project progress to verify adherence to this Contract and delivery schedule. (Project PMT)

- Notify Consultant of any known delays above and beyond the control of Consultant. (Project PMT)
- Provide appropriate and timely review of Project deliverables supplied by Consultant to verify they are
 consistent with Project objectives and the requirements of the Contract. Comments must be consolidated
 and reconciled within each agency and among agencies before being provided to Consultant. (Project
 PMT)
- Define stakeholder roles/authority. (Project PMT)
- Define which agency (Portland, Metro, or TriMet) is the lead for tasks that consultant is tasked with. (Project PMT)
- Review and approve Project goals and design criteria. (Project PMT and Transit Project Steering Committee for the transit project)
- All lighting improvements for Phase 1 other than lighting associated with traffic signals designed within Consultant's scope. (PBOT)
- Coordinate media contact. (Project PMT)
- Establish the Project Management Team. (Project PMT)
- Lead Agency and City Bureau coordination for equitable development. (Metro and PBOT)
- Lead internal Agency coordination and lead the Technical Advisory Committee. (Project PMT)
- Initial development of the draft community engagement strategy. (Metro and PBOT)
- Establish, recruit, and facilitate the Community Advisory Committee. (PBOT)
- Provide advice on event space for the Community Advisory Committee. (PBOT)
- Lead website design and maintenance. (Project PMT)
- Lead work with City Council, Metro Council, and Government Relations. (Metro and PBOT)
- Assess, identify, and review community and business stabilization needs. (Metro and PBOT)
- Lead coordination and contracting with Community-Based Organizations (CBOs). (Project PMT)
- Lead briefings with community groups, including schools; expect to have around 20 groups that are regularly updated. (Metro and PBOT)
- Inform Blueprint for Change Report identifying responsibilities for each Bureau. (PBOT)
- Traffic modeling and analysis (PBOT and Metro) including:
 - o Updated traffic counts and/or volumes (2022)
 - Before-after traffic impacts of major projects (as available), such as Division Transit (traffic volumes, U-turn volumes, median performance)
 - O Synchro baseline model of 82nd Ave from Lombard to Clatsop
 - o Travel demand model outputs as needed
- Pay any printing or mailing fees. (PBOT)
- Provide B-roll for video production. (Project PMT)
- Develop and provide a Corridor Atlas and Safety Analysis (CASA). This will include crash analysis of crashes within the past 5 years including contributing factors, severity, and other relevant data points. This will also include an inventory of existing conditions including available infrastructure data: sidewalk widths, sidewalk condition, location of utilities, crosswalks, signals and type, crash locations and crash records for the past 5 years, etc. (PBOT)
- Provide 5 years of the most recent crash data highlighting collisions for all modes, including time of day, crash type, crash severity, crash cause/factors, collision type and reported location for Civic Corridor geography. (PBOT)

- Provide all data files (GIS and CAD) associated with CASA. (PBOT)
- Provide all available GIS files associated with existing conditions. (Metro)
- Project PMT will answer Requests for Information within five business days. (Project PMT)
- Provide 3 weeks lead time to Consultant prior to activating any Contingency tasks to allow Consultant time to work plan. (Project PMT)

Schedule

- Notice to Proceed is anticipated June 23, 2022.
- Phase 1 Final PS&E Delivery to Agency is anticipated December 31, 2024.
- Phase 1 Bid-let target date is by December 2024.
- Phase 2 planning work completion is anticipated December 31, 2023.

B. STANDARDS and GENERAL REQUIREMENTS

1. Standards

The standards, manuals, directives and other guidance applicable to Professional Services and Related Services provided under the Contract are referenced below or available on Agency's webpages linked below and are incorporated by this reference with the same force and effect as though fully set forth herein. Additional standards, guidance, and general requirements applicable to the Project may be specified in individual tasks or elsewhere in the Contract.

The standards, manuals, directives and other guidance listed below or available on Agency's webpages are not exhaustive and may not include all applicable standards for a given Project. Consultant shall be responsible for determining all applicable practices and standards to be used in performing Professional Services and Related Services. Consultant shall inform and demonstrate to Agency if standards, directives, or practices required by Agency in performance of the work are insufficient, in conflict with applicable standards, or otherwise create a problem for the design. Should the requirements of any reference, standard, manual or policy referenced in the Contract conflict with another, Consultant shall request Agency in writing to resolve the conflict.

Unless otherwise specified in a given task, the most current version of applicable standards, manuals, directives and other procedural guidance shall apply. Unless otherwise specified, the system of measurement and language used in all deliverables will be English.

Planning, Survey, Professional Engineering and Design Manuals, Standards and Guidance:

Primary Resources (PBOT)

- **Design Guidance** (https://www.portland.gov/transportation/engineering/design)
- Signals and Street Lighting Guidance (https://www.portland.gov/transportation/engineering/signals-and-street-lighting)
- ADA Guidance (https://www.portland.gov/transportation/engineering/ada-page)
- 2020 City of Portland Standard Construction Specifications (https://www.portland.gov/transportation/engineering/construction-specifications)
- Standard Drawings (https://www.portland.gov/transportation/engineering/standard-drawings)
- 2020 Stormwater Management Manual (https://www.portland.gov/bes/stormwater/swmm)
- Traffic Design Manual (Traffic Design Manual (portlandoregon.gov))

Supporting Resources (ODOT)

- Technical Manuals alphabetical list (https://www.oregon.gov/ODOT/Engineering/Pages/Manuals.aspx)
- Planning Guidance and Resources (https://www.oregon.gov/ODOT/Planning/Pages/Guidance.aspx)
- Planning Analysis (https://www.oregon.gov/ODOT/Planning/Pages/Technical-Tools.aspx)
- **Geo-Environmental Guidance** (https://www.oregon.gov/ODOT/GeoEnvironmental/Pages/Guidance.aspx)
- Geometronics Resources & Guidance (https://www.oregon.gov/ODOT/ETA/Pages/OCRS.aspx)
- Surveying Manuals & Resources (https://www.oregon.gov/ODOT/ETA/Pages/Surveying.aspx)
- Bridge Standards & Manuals (https://www.oregon.gov/odot/bridge/pages/index.aspx)
- Engineering Guidance (https://www.oregon.gov/ODOT/Engineering/Pages/Eng-Guidance.aspx)
- Technical Guidance (https://www.oregon.gov/ODOT/Engineering/Pages/Technical-Guidance.aspx)
- **Project Delivery Guide & Forms** (https://www.oregon.gov/ODOT/ProjectDel/Pages/Project-Delivery-Guide.aspx)
- Oregon Standard Specifications for Construction (https://www.oregon.gov/ODOT/Business/Pages/Standard_Specifications.aspx)
- ODOT Forms Library (https://www.oregon.gov/ODOT/Forms/Pages/default.aspx)
- ADA Compliance Assessment, Design, Inspection. When the Services under this Contract include assessment or design (or both) for curb ramps, sidewalks, or pedestrian-activated signals (new, modifications or upgrades), Consultant shall:
 - Use both PBOT and ODOT standards to assess and ensure Project compliance with the Americans with Disabilities Act of 1990 ("ADA"), including ensuring that all sidewalks, curb ramps, and pedestrian-activated signals meet current PBOT design guidance and ODOT Highway Design Manual standards; and
 - Follow both PBOT's and ODOT's processes for design, modification, upgrade, or construction of sidewalks, curb ramps, and pedestrian-activated signals, including using the PBOT design guidance, PBOT ramp reports, ODOT Highway Design Manual, ODOT Design Exception process, ODOT Standard Drawings, ODOT Construction Specifications, providing a temporary pedestrian accessible route plan and current ODOT Curb Ramp Inspection form.

When the Services under this Contract include inspection of curb ramps, sidewalks, or pedestrian-activated signals (new, modifications or upgrades), all such inspections shall include inspection for compliance with the appropriate standards and requirements. Inspections must be performed by ODOT certified inspectors (which must include certified environmental inspectors when appropriate). In addition, at Project completion, Consultant shall complete the applicable ramp-specific ODOT Curb Ramp Inspection Form734-5020(A-G) for each curb ramp constructed, modified, upgraded, or improved as part of the Project. Each completed form must be submitted electronically by clicking the "Submit by E-mail" button on the form (and cc: Agency). The forms are documentation required to show that each curb ramp meets ODOT standards and is ADA compliant. ODOT's fillable Curb Ramp Inspection Form and instructions are available at the following address: https://www.oregon.gov/ODOT/Engineering/Pages/Accessibility.aspx

Above references to curb ramps, sidewalks or pedestrian-activated signals also include, when applicable, shared use paths, transit stops, park-and-rides and on-street parking.

2. Design Criteria and Project Assumptions/Conditions.

Project design criteria shall conform to the following:

- o AASHTO A Policy on Geometric Design of Highways and Streets
- AASHTO Roadside Design Guide

- ODOT Highway Design Manual
- o PBOT Civil Design Guide
- o PBOT Traffic Design Manual
- o PBOT Pedestrian Design Guide
- PBOT Signal Design Guide
- o TriMet Design Criteria Manual

3. Software Requirements

Consultant's software must produce deliverables that are fully compatible, readable, and useable by Agency software, requiring no modification or translation of Consultant's deliverables. No loss of data integrity or accuracy may result from any transfer of data. Compressed data must be in a "self-expanding executable" format. To ensure and verify this level of compatibility, Agency may provide sample or required format(s) to Consultant, and Consultant and Agency may conduct tests of sample deliverables from Consultant, and Agency may provide sample or required format(s) to Consultant. Agency reserves the right to reject deliverables that do not meet these requirements. If a deliverable is rejected, Consultant shall resubmit deliverables to Agency that meet these requirements and shall not bill Agency for the rejected deliverables or for time associated with correcting the rejected deliverables.

Consultant shall deliver all Work Products in the format(s) required by Agency. Consultant may propose alternative software for consideration by Agency. If Agency determines that the alternative software meets the compatibility requirements of this section, Agency may choose to accept the use of the alternative software. Agency will document this approval in writing.

Software standards currently used by Agency are specified below. Agency anticipates that it will update its software periodically and at such time, new software may be required by notice provided to Consultant 30 days in advance. Software standards include but are not limited to the following:

- Bentley MicroStation and InRoads (Phase 1)
- Autodesk AutoCAD and Civil3D (Phase 2)
- Microsoft Word, Project, and Excel
- Adobe Acrobat (.PDF)

4. Professional Licenses, Registrations and Qualifications

- Consultant and its subconsultants must be duly licensed to perform the Services, as required by the applicable Oregon Revised Statutes and Oregon Administrative Rules, and other applicable laws. Consultant's personnel and subconsultant personnel must be duly licensed to perform all Services which they will be performing under the Contract and must perform such Services under the "responsible charge" of a person so licensed (as that term is defined under ORS Chapter 672) or must be otherwise exempt from any licensing requirements applicable to the Services being performed.
- Agency may require Consultant's Personnel to demonstrate a competency in the particular area/discipline to which they are assigned. This may include, but is not limited to, submittal of license number, resume, and work samples from previously completed services or projects.

5. General Requirements

- Quality Plan (QP) for Professional Services and Related Services. Consultant shall ensure quality assurance and quality control is performed in conformance with an approved QP, to be developed, submitted, and approved through the Contract.
- Endorsement of Data. Consultant shall place their official Oregon Registered Engineer seal and signature on all engineering design drawings and specifications furnished to Agency as well as any

- other materials specified in ORS 671.025, 671.379, 672.020(2), 672.025(2), 672.028(2) and 672.605, as applicable, that require such seal and signature.
- Electronic Documents, Digital Seal and Signature. If required under the Contract, Consultant shall use PBOT's RoadRunner platform for electronic submittal and receipt of files as necessary for the Project. All final documents identified in ORS 671.025, 671.379, 672.020(2), 672.025(2), 672.028(2) and 672.605, as applicable, must bear the digital seal and signature of the Oregon registered professional under whose supervision and control they were prepared. Documents must be submitted in the format specified in the Contract for each deliverable and must comply with OAR 804-030, OAR 806-010, OAR 809-050 and OAR 820-025 requirements, as applicable, for digital seal and signature capable of independent verification, final and draft documents, modifications to designs, and dual stamping of documents.
- Safety Equipment. Consultant shall provide and use all safety equipment including (but not limited to) hard hats, safety vests and clothing if required by City, State and Federal regulations and policies and procedures for the Services under the Contract.
- **Personnel, Materials, and Equipment.** Consultant shall provide competent personnel and shall furnish all supplies, equipment, tools, and incidentals required to accomplish the work. All equipment and tools must be in good operating condition and shall be kept in proper adjustment throughout the duration of the Contract. All materials and supplies must be of good quality and suitable for the assigned work.
- Access to ODOT Right-Of-Way. Consultant shall notify and coordinate with the Agency Project Manager at least 48 hours in advance of needing to be on-site. Agency Project Manager shall coordinate with the ODOT District Manager, or Assistant District Manager, having jurisdiction over the Project area, as applicable. Consultant shall not begin on-site work until approval is received from the district. Consultant shall reschedule the on-site work if requested by the district.
- Temporary Protection and Direction of Traffic. When a field crew is working within the public right-of-way, Consultant shall protect the crew and warn approaching traffic by providing safety equipment and temporary traffic controls conforming to a stamped and approved traffic control plan or PBOT's 2019 Traffic Design Manual Volume 2: Temporary Traffic Control(temp-traffic-control-2018-12-19 final.pdf (portland.gov)).
- Subsurface Exploration Work. Prior to conducting subsurface exploration work, Consultant shall obtain archeologic clearances from Agency for specific exploration plans and noise permits from state or local jurisdictions if applicable.

6. [RESERVED]

C. REVIEW, COMMENT and SCHEDULE OVERVIEW

- Consultant shall coordinate with Project PMT as necessary and shall revise draft deliverables to incorporate Project PMT draft review comments. Project PMT and Agency will consolidate and resolve conflicting comments before providing them to Consultant.
- Consultant shall return the revised deliverables to Project PMT, with Project PMT comments
 incorporated, within 10 business days of Consultant's receipt of Project PMT's comments, unless a
 different timeframe is specified for specific tasks or otherwise agreed to in writing by Project PMT.

D. FORMAT REQUIREMENTS

- Consultant shall use RoadRunner for electronic submittal and receipt of files as necessary for the Project (see PA Exhibit L [OR] WOC Attachment D).
- Consultant shall submit draft deliverables in electronic format via email (and hard copy if requested).
- Consultant shall also submit all graphic files accompanying reports separately in .jpg or .tif formats unless specified differently by Agency.

- Each draft and final text-based or spreadsheet-based deliverable shall be provided in MS Office file formats (i.e., MS Word, Excel, etc.) and must be fully compatible with version used by Agency.
- Additional format requirements may be listed with specific tasks/deliverables in the SOW.

E. TASKS, DELIVERABLES and SCHEDULE

Consultant shall complete all tasks and provide all deliverables (collectively, the "Services") included in this SOW and in accordance with the performance and delivery schedules listed below.

TASK 1 PROJECT MANAGEMENT

Consultant shall manage and coordinate the tasks included in this SOW. Consultant shall also coordinate with the Project PMT on work tasks performed by others. Consultant shall provide Quality Control ("QC") such that deliverables submitted to Project PMT have been peer-reviewed prior to submittal.

Task 1.1 Project Management and Coordination

Consultant shall schedule and coordinate Work Tasks within this SOW and shall maintain liaison and coordination with Project PMT. Consultant's Project Manager (PM) shall be Consultant's primary point of contact and shall communicate with Project PMT regarding the status of work being performed and to discuss issues or concerns that may impact the Project. This includes email and weekly check-in phone calls between the PM and Project PMT.

Consultant shall monitor the Project budget and expenditures to meet Project requirements and objectives.

Consultant shall maintain Project files including but not limited to engineering computations, assumptions, meeting agendas and minutes, business drawings, progress reports, correspondence and memoranda. Compiling the Project files must be an ongoing task, commencing upon receipt of the notice to proceed ("NTP"), and incorporating documents as they are generated throughout the Services for this Project.

Deliverables/Schedule: Consultant shall provide:

- Project files must be delivered within 4 weeks of request by Agency.
- Scheduled weekly check-in phone call calendar event (reoccurring event) within 2 weeks after NTP.

Task 1.2 Monthly Invoices and Progress Reports

Consultant shall submit monthly invoices and progress reports throughout the duration of the Services for this Project (until 12/31/2024). Consultant shall prepare monthly invoices in a format approved by the Agency Contract Administrator.

Consultant shall prepare monthly progress reports in a format acceptable to Agency and must:

- Summarize the previous month's Consultant activities, the deliverables submitted, and identify who the deliverables were provided to.
- Show percent complete of each of the tasks/deliverables in progress, and the percent of overall Services complete to date.
- If R/W Services are included in the SOW, include status of R/W activities for each parcel impacted by the Project.
- For fixed-price method of compensation, identify staffing used for that reporting period. For other compensation methods, the staffing used must be identified in the invoice backup documentation.
- Describe the planned activities for the next month.

• Identify any schedule or budget issues, other pending issues that need resolution, team personnel changes, unanticipated problems, any issues that may delay the delivery schedule, and other relevant events or information, as applicable.

Deliverables/Schedule: Consultant shall provide:

• Monthly invoice and progress reports submitted via email to APM due no later than the 15th 20th calendar day of the month following the reporting month.

Task 1.3 Project Schedule, Schedule Updates, and Work Plan

Consultant shall prepare a Project Work Plan (PWP) and submit a detailed work element schedule to Agency using MS Project for Consultant's tasks. Consultant's work element schedule must have, as a minimum, the following milestones with associated submittal dates:

- NTP
- Meetings
- Site Visits
- Phase 1 milestone completion dates (30% design, 60% design, 95% design, 100% design)
- Agency review periods
- R/W Phase
- PS&E delivery date
- Advertisement Date
- Bid Opening Date
- Phase 2 planning process milestones

Deliverables/Schedule: Consultant shall provide:

- Baseline Microsoft Project Schedule submitted within two weeks after the written NTP (one electronic copy).
- Monthly Project Schedule updates as needed.
- A Project Work Plan which includes a detailed Project description, objective and vision, lists team roles
 and responsibilities, discusses quality and performance management, and describes communication
 processes, change management, success factors, and Project close-out procedures within 2 weeks from
 NTP.

Task 1.4 Meetings

Consultant shall prepare for, lead and facilitate meetings as identified below. Meeting dates and locations will be collaboratively scheduled between Consultant and Project PMT. Consultant shall host meetings with screen and voice sharing software capable of running concurrently for use by Project PMT, Consultant staff, and sub-Consultant staff, at the discretion of the Project PMT.

For each meeting, Consultant shall prepare a meeting agenda and provide draft meeting notes, which must include draft action items and record of any decisions from the meetings. Agendas must be submitted to the Project PMT 3 business days prior to each meeting. Consultant shall prepare and maintain a Project action item/decision log to track action items and decisions discussed at Project meetings (as determined by Project PMT).

The action item/decision log must include a description of the item or decision and who is assigned the action. Consultant shall provide the draft summary notes to Project PMT for review and distribution.

Task 1.4.1 Kick-Off Meeting

Consultant shall facilitate 1 Project kick-off meeting within 20 business days of NTP. The Project kick-off meeting will be held on-line or at Agency's office. Up to 8 Consultant staff (PM, Design Manager, Planning Lead, Transportation/Traffic Lead, Public Engagement Manager, Traffic Design Engineer, Principal in Charge, note taker) shall attend the meeting, which is estimated to be 2 hours in length excluding travel time.

Deliverables/Schedule; Consultant shall:

- Provide meeting agenda 5 business days prior to the meeting (one electronic copy).
- Provide draft summary notes (including action item/decision log) within 5 business days of meeting (one electronic copy).
- Provide final summary meeting notes within 5 business days of receipt of all Agency comments (one electronic copy).

Task 1.4.2 Project Management Team Meetings ("PMT")

Consultant shall facilitate up to 30 monthly PMT meetings to be held virtually or at Agency's office during performance of the work. PMT meetings will be scheduled on a regular schedule at the Project PMT discretion. Up to 6 Consultant staff (PM, Design Manager, Planning Lead, Alternatives Analysis Lead, note taker, one at PM discretion depending on agenda) will attend the PMT meetings assumed to be 1.5 hours in length excluding travel time and will focus on key decision points associated with the scope of the Project.

Deliverables/Schedule: Consultant shall:

- Provide Roll Map including key Project elements 30 business days after NTP.
- Provide meeting agenda to Project PMT 5 business days prior to date of the meeting.
- Provide draft summary notes (including action item/decision log) within 5 business days of meeting (one electronic copy).
- Provide final summary meeting notes within 5 business days of receipt of all Agency comments (one electronic copy).

Task 1.4.3 Project Design Sub-Team Meetings

Consultant shall conduct up to 30 monthly meetings virtually to coordinate design efforts by a particular technical discipline. Up to 10 Consultant staff shall attend each sub-team meeting. Sub-team meetings will be held virtually and are anticipated to be no more than 2 hours in length.

Deliverables/Schedule: Consultant shall:

- Provide meeting agenda to Project PMT 5 business days prior to date of the meeting.
- Provide draft summary notes (including action item/decision log) within 5 business days of meeting (one electronic copy).
- Provide final summary meeting notes within 5 business days of receipt of all Project PMT comments (one electronic copy).

Task 1.4.4 Phase 1 Project Site Meetings

Consultant shall schedule and conduct up to 2 general site visit meetings with Agency staff to identify existing conditions, strategies, and solutions. Up to 10 Consultant staff (PM, Design Manager, Planning Lead, Equity Director, Roadway Design Lead, Traffic Design Lead, Stormwater Lead, Utility Lead, Pavement Design Lead, Landscape Architecture Lead) will attend the 4-hour general site visit meetings, which excludes travel time.

Consultant shall also schedule and conduct up to 36 2-hour discipline-specific site visit meetings with Agency staff to identify existing conditions, strategies, and solutions. Up to 6 Consultant staff will attend the 2-hour discipline-specific site visit meetings, which excludes travel time.

Deliverables/Schedule: Consultant shall:

- Provide general site visit meeting agenda to Design PMT 5 business days prior to date of meeting.
- Attend and conduct the general site visit meeting as requested by Design PMT.
- Draft summary notes (including action item/decision log) within 5 business days of general site visit meeting (one electronic copy).
- Provide discipline-specific site visit meeting agenda to Design PMT 5 business days prior to date of meeting.
- Attend and conduct the discipline-specific site visit meeting as requested by Design PMT.
- Draft summary notes (including action item/decision log) within 5 business days of discipline-specific site visit meeting (one electronic copy).

Task 1.4.5 Design Verification Workshop ("DVW") (RESERVED)

Task 1.4.6 Design Acceptance Workshop ("DAW") (RESERVED)

Task 1.4.7 Design Review Meetings

Consultant shall prepare for and attend up to 4 Design Review Meetings (2 hours each) for PMT, Agency managers, and Agency staff at 30%, 60%, 95%, and 100% PS&E. The meeting purpose is to apprise managers of the current status of Project, obtain management concurrence on major Project issue resolution, engage in problem-solving for unresolved issues, and identify areas where management support is needed. Meetings will be scheduled as staff availability dictates. Up to 10 Consultant staff (PM, Design Manager, Planning Lead, Equity Director, Roadway Design Lead, Traffic Design Lead, Stormwater Lead, Utility Lead, Pavement Design Lead, Landscape Architecture Lead) will attend each review meeting.

Agenda should address Project status (scope, schedule and budget), Project communications with stakeholders, and Project accomplishments and issues. Project description should identify Project goals, proposed improvements, schedule and budget, and note significant changes in scope, schedule or budget since the start of design, as well as any known hot-button issues.

Deliverables/Schedule: Consultant shall:

- Provide draft agenda and draft one-page project description prepared with Design PMT at least 5 business days prior to each meeting. Design PMT will distribute final agenda and project description 3 business days prior to meeting.
- Provide up to 4 exhibits for each meeting, including a 1-page Microsoft Project schedule comparing actual versus planned timelines, review comments from previous design submittal, and an updated budget summary comparing actual versus planned expenditures.

Task 1.4.8 Region Management Review Meetings (RESERVED)

Task 1.4.9 Construction Hand-off Meeting (RESERVED)

Task 1.4.10 Phase 2 Planning Sub-Team Meetings

Consultant shall conduct up to 30 bi-monthly meetings to coordinate planning efforts. Up to 6 Consultant staff (Planning Lead, Transit Alternative Analysis Lead, Traffic Lead, and two discretionary) shall attend each sub-

team meeting. Sub-team meetings will be held on-line or in-person and are anticipated to be no more than 2 hours in length excluding travel time.

Deliverables/Schedule: Consultant shall:

- Provide meeting agenda to Planning PMT 5 business days prior to date of the meeting.
- Provide draft summary notes (including action item/decision log) within 5 business days of meeting (one electronic copy)
- Provide final summary meeting notes within 5 business days of receipt of all Planning PMT comments (one electronic copy).

Task 1.4.11 Utility Coordination Meetings

Consultant shall conduct up to 6 Utility Coordination Meetings (1 hour each) with Agency, public utilities and private utilities to identify utility conflicts and relocation needs. Assumes up to 3 consulting staff at each meeting.

Deliverables/Schedule: Consultant shall:

- Provide meeting agenda to Design PMT 5 business days prior to date of the meeting.
- Provide draft summary notes (including action item/decision log) within 5 business days of meeting (one electronic copy).
- Provide final summary meeting notes within 5 business days of receipt of all Agency comments (one electronic copy).

Task 1.4.12 Drafting Coordination Meetings

Consultant shall conduct up to 2 Drafting Coordination Meetings (1 hour each), the first one at the beginning of 30% Design, with Agency staff to identify drafting needs. The agenda will include any drafting issues and seek feedback for decision-making resolution. Agency will provide the applicable GIS and aerial base files. Assumes up to 9 consulting staff at each meeting.

Deliverables/Schedule: Consultant shall:

- Provide meeting agenda to Design PMT 5 business days prior to date of the meeting.
- Provide draft summary notes (including action item/decision log) within 5 business days of meeting (one electronic copy).
- Provide final summary meeting notes within 5 business days of receipt of all Agency comments (one electronic copy).

Task 1.4.13 Implementation Coordination Meetings

Consultant shall conduct up to 5 Implementation Coordination Meetings (up to 2 hours each) with staff at Design PMT request to discuss topics such as construction phasing and packaging, MWESB strategy during construction, or construction delivery methods. Assumes up to 6 consulting staff per meeting.

Deliverables/Schedule: Consultant shall:

- Provide meeting agenda to Design PMT 5 business days prior to date of the meeting.
- Provide draft summary notes (including action item/decision log) within 5 business days of meeting (one electronic copy).
- Provide final summary meeting notes within 5 business days of receipt of all Agency comments (one electronic copy).

Task 1.4.14 Technical Advisory Committee (TAC) Support

Consultant shall attend up to 12 TAC Meetings (up to 2 hours each) with Project PMT request to provide presentations and technical support.

Deliverables/Schedule: Consultant shall:

• Attend up to 12 meetings (up to 3 staff per meeting), due at request of Project PMT.

Task C1.4.15 Additional Meetings (CONTINGENCY TASK)

Consultant shall coordinate with the Portland Water Bureau and Environmental Services if they develop plans and specifications for any water line replacement work or sewer replacement work that will be incorporated into the construction documents for this project by Agency, or just for informational purposes only during construction. This contingency task identifies up to 3 additional meetings (up to 2 hours each) which the Agency at their discretion may elect to authorize the Consultant to produce either for coordination with the Portland Water Bureau or other meetings. Consultant shall complete this task and the identified deliverables only upon written authorization from APM. Assumes up to 4 consulting staff per meeting.

Deliverables/Schedule: Consultant shall provide:

• Up to 3 additional meetings (up to 2 hours each) during Project design phases to review work and to address and resolve Project issues as they are encountered. Consultant shall schedule, attend and document each meeting including preparation and distribution of agendas (at least 5 business days prior to each meeting) and meeting notes within 2 business days following each meeting.

Task 1.5 Quality Assurance/Quality Control

Consultant shall develop and obtain Agency approval of a Quality Plan. Consultant shall perform QC reviews prior to submittal of plans, design revisions and computations, estimates, and other deliverables in conformance with the approved Quality Plan. Consultant shall coordinate between design disciplines so that the design is in conformance with applicable Agency design standards (in place at time of Project), and that prior review comments have been incorporated into the design. Consultant shall maintain a comment log noting review comments received from Agency, Consultant's response to each of the comments, as well as the final resolution of the issue. Consultant shall include documentation of completed QC reviews in the QA/QC section of the Project files.

Deliverables/Schedule: Consultant shall provide completed comment log (electronic copy), QC checklists and QC certification/sign-off page with the following milestones:

- Quality Plan documenting QA/QC program that includes scheduled formal reviews with documentation procedures within 3 weeks of NTP.
- Documentation of reviews with submittal documents upon request from Agency.

Task 1.6 Project Risk Management (RESERVED)

Task C1.7 Equitable Development Strategy (CONTINGENCY TASK)

Consultant shall support Agency and community partners in developing an equitable development strategy for the Project. Consultant shall attend up to 18, 2-hour meetings with Agency and Community-Based Organizations to support development of the equitable development strategy and shall provide review for the strategy document. Consultant shall coordinate with Community-Based Organizations to develop an up to 4-hour equity training for the Project team, which will be delivered up to once a year throughout the duration of the Project. Equity training preparation will include an agenda, presentation, organization of speakers, meeting logistics and scheduling, meeting summary, and recommendations for next steps. Up to 30 Consultant team members will attend each training.

Deliverables/Schedule: Consultant shall provide:

- Support of equitable development strategy upon Agency request.
- Review and comments on draft equitable development strategy due within 10 business days of receipt of draft strategy.
- Review and comments on final equitable development strategy due within 10 business days of receipt of final strategy.
- Attendance for up to two Consultant staff at up to 18, up to 2-hour meetings, due at time of meeting.
- Develop, organize, and deliver up to 3 4-hour equity trainings for the Project team, due within 2 months of NTP or after request of APM.
- Attendance of up to 30 Consultant staff at 3 up to 4-hour equity trainings.

Task 1.8 Contract Management and Project Change Requests

Consultant shall establish and maintain agreements with subconsultants.

Consultant shall develop up to 2 contract modifications that include scope and budget items to be amended or added for prime Consultant and up to 17 subconsultants during the Project at Project PMT request.

Deliverables/Schedule: Consultant shall provide:

- Preparation and execution of up to 17 subconsultant agreements within 15 business days after NTP.
- Develop up to two contract modifications, due within 20 business days of Project PMT request.

TASK 2 SURVEY

Consultant shall survey the Project for the areas as described in Section A of this SOW unless otherwise noted in specific tasks. Consultant shall adhere to the standards stipulated by Oregon Revised Statute ("ORS") 672.047, subsections (1) through (7). Consultant's Professional Land Surveyor, registered in the State of Oregon, shall review and stamp as "Approved" all survey related deliverables and shall perform all land surveying Services under this SOW in conformance with all state statutes pertaining to survey and land boundary laws. These include but are not limited to the following state statutes: ORS Chapters 92, 93, 209 and 672.

The Services provided under this task must be accomplished according to the following manuals and standards:

• PBOT Surveying Standards

Consultant shall conform to applicable requirements in Agency manuals and standards for all authorized contingency tasks/deliverables.

Prior to Commencing Survey

Consultant shall schedule meeting with PBOT to review SOW and discuss any specific questions.

Limits of Consultant Survey

Consultant shall provide surveying Services for the area shown in the attached limits map.

Task 2.1 Survey Control

Consultant shall recover, verify, and supplement PBOT provided published control. (NOTE: Consultant supplemental points are to be referenced to PBOT provided published control only, not to any non-project published control or City Benchmarks.)

Deliverables/Schedule:

- ASCII file containing the following information in this order: Point number, Northing, Easting, Elevation & Description for all supplemental Survey Control Points set.
- Tie Sketches for each supplemental Survey Control Point set. Tie Sketches to show swing tie distances from supplemental Survey Control Points set to nearby physical features

Task C2.1.1 Additional Control for Changes to Project Limits (RESERVED)

Task 2.2 Recovery and Retracement

Consultant shall identify the location of the existing R/W lines, Property line(s) (Resolve), to perpetuate the location of the monuments found and document the control used for this Project area. Consultant shall produce Survey Filing Maps ("SFM") as deliverables. Consultant's Survey is to reference the Control, Centerline Retracement and Monument Recovery Survey to be filed by PBOT Survey.

These tasks must address the requirements of ORS 209.150 and 209.155 and other survey related statutes.

Research

Consultant shall perform data research as necessary to prepare for and support all Project activities, and to produce Project maps and reports as called for in subsequent tasks.

Monument Recovery

Consultant shall survey all features necessary to complete Monument Recovery for this Project.

Consultant shall notify County Surveyor of any public land survey corner or accessories in danger of being destroyed due to the impending Project, pursuant to ORS 209.140.

Existing R/W & Boundary Resolution

Consultant shall resolve the R/W centerlines alignments for streets crossing 82nd Ave, R/W lines and schematic property sideline boundaries based on GIS and record information abutting the highway along the proposed route of construction at the location shown on the attached limits map.

Consultant shall submit the retracement and narrative to PBOT Surveyor for review prior to drafting the SFM.

Control, Recovery, Retracement Survey Filing Map ("SFM")

Consultant shall create an SFM in accordance with Agency "Survey Filing Map Standards", County and ORS requirements.

Consultant shall submit a 99% deliverable to PBOT, and a copy of the Control, Recovery or Retracement survey(s) will be sent to the County for review.

Consultant shall submit the following with the Draft SFM package:

• ASCII file containing the following information in this order: Point number, Northing, Easting, Elevation, Description for all recovered record monuments.

Deliverables/Schedule: Consultant shall provide Draft and Final SFM packages (per the due dates included in the project milestone file) within 12 weeks of NTP:

- A .pdf copy of the DRAFT survey to be submitted to county surveyor.
- A .pdf copy of the recorded survey as approved by the County.

Task 2.3 Topographic Data and Base map

Consultant shall collect the existing topographic features and create a base map used to design this Project. Consultant shall collect topographical data to accurately represent the surface of the ground to be included in the Digital Terrain Model.

Consultant shall collect topographic data of constructed and natural features within the Project limits using Agency approved methods and standards, including all file naming and coding formats.

Two-dimensional features, if needed, must be mapped according to Agency standards.

Consultant shall make field ties of all utility features including but not limited to underground and overhead utility.

Deliverables/Schedule: Consultant shall submit the following items (per the due date included in the project milestone file) within 24 weeks of NTP:

- ASCII/Text file containing the following information in this order:
 - o Point Number, Northing, Easting, Elevation, Desc. (PNEZD) for all points surveyed.
- Base Map in MicroStation/InRoads containing all the tied topographic features conforming to Agency file naming conventions.

Task 2.4 Digital Terrain Model ("DTM")

Consultant shall create a three-dimensional digital terrain surface using topographical data collected within the areas described in this SOW.

Consultant shall create the DTM that meets Agency's criteria for surface triangulation. Consultant shall collect confidence points in the field and generate a confidence point report. The topographical data and confidence points must be gathered by techniques consistent with the construction of a DTM as defined by Agency standards.

Deliverables/Schedule: Consultant shall submit the following items (per the due date included in the project milestone file) within 24 weeks of NTP:

• MicroStation/InRoads file displaying triangles and contours.

Task C2.4.1 Base Map/DTM Revisions (RESERVED)

Task 2.5 Right-of-Way ("R/W") Engineering (Mapping and Descriptions)

Consultant shall perform the following Services under this Task:

- Determine the necessary R/W to accommodate the Project construction.
- Develop a R/W base map.
- Develop the R/W acquisition maps.
- Prepare written property description and addendums in a Metes and Bounds format.
- Prepare sketch map to accompany legal descriptions.
- Support the Project R/W acquisition, including on site staking of proposed easements and acquisitions.
- Stake Takes and TCEs for field inspections (assumes 52 properties).

Task 2.5.1 R/W Base Map and New R/W Design/Layout for Project

Consultant shall prepare the R/W base map and new R/W Design/Layout according to Agency standards.

Deliverables/Schedule: Consultant shall submit the following items (per the due date included in the project milestone file) with 60% Design:

• PDF file.

Task 2.5.2 Active R/W Acquisition Map

Consultant shall prepare the R/W Acquisition Map according to Agency standards.

Deliverables/Schedule: Consultant shall submit the following items (per the due date included in the project milestone file) with 60% Design:

• A .pdf and MicroStation/InRoads file.

Task 2.5.3 R/W Descriptions and Exhibit Maps

Consultant shall use the Active R/W Acquisition Map to develop the descriptions and exhibit maps for 52 parcel(s), according to Agency standards.

Prior to preparing any Descriptions (Exhibit A) and/or accompanying Exhibit Maps Exhibit B for any properties, Consultant must meet with PBOT R/W to review format, file numbers, etc.

Deliverables/Schedule: Consultant shall submit the following items (per the due date included in the project milestone file) within 8 weeks of receiving Agency's 60% Design comments:

- The electronic vesting documents for each property owner(s) submitted in single, independent electronic files for each individual property description to the Region Survey Unit with notification to the APM.
- The R/W Sketch Map in electronic format (.pdf). The R/W Sketch map must have the topographic model referenced into it.

Task C2.5.4 Right of Way Descriptions Revisions due to Project Scope Changes (RESERVED)

Task C2.5.5 Railroad Exhibit Maps (RESERVED)

Task C2.5.6 Forest Service Plat Maps (RESERVED)

Task C2.5.7 Bureau of Land Management ("BLM") Plat Maps (RESERVED)

Task C2.6 Staking (RESERVED)

Task C2.7 Monumentation Surveys (CONTINGENCY TASK)

Consultant shall prepare the post construction monumentation survey according to Agency standards.

The purpose of the monumentation task is to document the location of the R/W Centerlines and R/W lines, at the end of construction. These tasks are to address the requirements of ORS 209.155.

Consultant shall replace destroyed monuments that are not within areas of new R/W purchased and to monument the location of new R/W, according to ORS 209.150 and 209.155. Consultant shall place ODOT-provided caps or Company specific caps per ORS on all monuments replaced or referenced.

Consultant shall create SFMs in accordance with Agency "Survey Filing Map Standards", County and ORS requirements.

Deliverables/Schedule

Consultant shall submit the following items (per the due date included in the project milestone file) on a schedule to be mutually agreed upon by Agency and Consultant upon authorization:

- A .pdf copy of the DRAFT survey to be submitted to County Surveyor.
- A .pdf copy of the recorded survey as approved by the county.

TASK 3 ENVIRONMENTAL SERVICES

Tasks 3.1-3.22 (RESERVED)

Task 3.23 Hazardous Materials Study and Services

The purpose of this task is to facilitate Agency compliance with environmental regulations pertaining to site cleanup and waste management. The Services to be provided shall include:

- Conduct a Hazardous Materials Corridor Study to identify potential sources of contamination that could impact property acquisition or construction.
- Conduct geophysical surveys to identify potential underground storage tanks or buried debris.
- Screen and collect soil and water samples from geotechnical borings which may be drilled in areas with known or suspected subsurface contamination.
- Collect surface soil samples from road shoulders to determine if the soil meets Oregon Department of Environmental Quality ("DEQ") standards for clean fill.
- Conduct site-specific subsurface investigations to determine if soil or groundwater are contaminated within the project corridor.
- Prepare contract bid documents for handling and disposal of contaminated materials.

Consultant shall conduct all tasks in accordance with ODOT's HazMat Program Manual (July 2020) and applicable industry standards. Consultant shall submit deliverables in an electronic format (native file and .pdf) version using Microsoft® Word.

Task 3.23.1 Hazardous Materials Corridor Study

Consultant shall conduct a Hazardous Materials Corridor Study ("HMCS") of the Project Corridor (82nd Ave from NE Airport Way to the intersection with SE Sunnyside Rd and SE Harmony Rd) according to the following standards and guides:

- "Hazardous Waste Guide for Project Development" (1990), by the American Association of State Highway and Transportation Officials ("AASHTO") Special Committee on Environment, Archaeology and Historic Preservation.
- "ODOT Hazmat Program Manual," July 2020, Oregon Department of Transportation.
- "Level 1 Corridor Study" report template, Oregon Department of Transportation; and
- The requirements listed below.

Consultant shall conduct a site reconnaissance to identify potential sources of contamination that could impact construction or result in Agency acquiring contaminated property.

Consultant shall review available federal and State environmental databases to identify sites that could potentially impact the Project, using the minimum search radii listed below.

Environmental Database	Search Radius
State-Equivalent NPL List (ECSIS)	0.5 mile

Oregon Permitted Landfills List	0.25 mile
State Leaking Underground Storage Tank (LUST) List	0.25 mile
Federal RCRA Generators List	Site and Adjoining
State Fire Marshal's Spill Response List	Site and Adjoining
State Registered Underground Storage Tank (UST) List	Site and Adjoining

Consultant shall review DEQ files, available using DEQ's Facility Profiler web site at http://deq12.deq.state.or.us/fp20/, to determine whether contamination from adjacent facilities is likely to impact Project construction, and the Oregon State Fire Marshal's spills database. Alternatively, this review may be conducted using commercially available database reports such as provided by EDR.

Consultant shall review the Oregon Water Resources Department on-line database at http://apps.wrd.state.or.us/apps/gw/well_log/Default.aspx to determine if water wells or monitoring wells are located on or adjacent to the project corridor.

Consultant shall review project files at the DEQ Northwest Region office in Portland, OR and/or on-line for all facilities considered to be high risk for impacting Project construction. Consultant shall use DEQ file information to delineate contaminated areas within the project corridor and identify if that information is sufficient to develop construction plans and specifications without additional sampling.

Consultant shall conduct historical research to identify past uses of the project corridor and adjacent properties, using at least one of the following resources:

- Sanborn Fire Insurance Maps
- Aerial Photographs
- Reverse City Directories
- Historic property ownership/occupancy records or building permits

The resource(s) selected must, if possible, provide historic information regarding land use back to 1935 at 10-year intervals, or Consultant must demonstrate that such information is not readily available.

Consultant shall review pertinent records that may be made available by Agency as they relate to the environmental condition of the project corridor.

Consultant shall assess if soil sampling is necessary to determine if soil excavated from the project corridor shall meet DEQ clean fill screening levels for contaminants-of-concern including pesticides, herbicides, metals, polynuclear aromatic hydrocarbons, petroleum hydrocarbons, and solid waste.

Consultant shall prepare a HMCS report summarizing the information obtained through the activities listed above, using ODOT's Corridor Report Template available at https://www.oregon.gov/ODOT/HWY/GEOENVIRONMENTAL/Pages/guidance resources.aspx.

The report must include photographs documenting project corridor observations. The report must include conclusions that identify specific sources of contamination that could impact Project construction and recommendations for further investigation, if needed.

Deliverables/Schedule: Consultant shall provide:

• Draft HMCS report to Agency within 16 weeks following Notice to Proceed (NTP).

• Final HMCS report within 1 week following receipt of Agency comments.

TASK 4 PUBLIC INVOLVEMENT – PUBLIC INFORMATION

Consultant shall assist Project PMT with public involvement throughout the Project. Project PMT will have overall responsibility for the Project public involvement and outreach program.

Task 4.1 Public Involvement/Communications Plan for Full Geography and for City of Portland

Task 4.1.1 Public Involvement Kick-off/strategy meeting

Consultant shall prepare for and attend 1 kick off/strategy meeting with Project PMT. Meeting dates, times and locations will be collaboratively scheduled between Consultant, Project PMT, and Communications staff from Metro/TriMet/PBOT. Consultant shall have capability to host meetings with screen and voice sharing software capable of running concurrently for use by Agency and Consultant at the discretion of the Project PMT. Up to 6 Consultant staff shall attend the meeting, estimated to be 2 hours in duration, to be held on-line. The purpose of the meeting will be to discuss the Project goals and desired communication objectives and outcomes. The benefits and schedule for the Project will also be reviewed.

Deliverables/Schedule: Consultant shall provide:

- Meeting Agenda due 5 business days prior to start of meeting.
- Attendance and participation at the meeting within 25 business days of the kickoff meeting.
- Draft summary notes (including action item / decision log) within five business days of meeting- (one electronic copy).
- Submit final summary notes to be delivered to APM within 5 business days of receipt of APM comments on draft summary notes (one electronic copy).

<u>Task 4.1.2 Equity-Focused Public Involvement/Communications Plan with Recommendations For Both The</u> Full Geography And For City Of Portland

Consultant shall review Agency's draft communications plan for the Project, collect additional feedback from the Planning PMT, refine engagement and communications goals, and finalize the plan. The plan will include target audiences, key messages, communication and outreach tools, and a public engagement schedule with key engagement milestones. The plan will further detail Metro/TriMet/PBOT, Community-Based Organization and Consultant roles and responsibilities. The plan will include separate sections and work plans for Phase 1 (Design) and Phase 2 (Planning) work. This will include recommendations for communicating the Phase 2 planning work.

Scoping the engagement and communications tasks for the Transit Alternatives Analysis will need to be developed with Metro communications and will include more detail in the future. Metro's Transit Alternatives Analysis will have its own website, transit-specific fact sheets, and informational newsletters. However, the public engagement and outreach will need to be highly coordinated with the Civic Corridor project, including through engagement tasks, while simultaneously addressing the needs of the different geographic audiences for the Regional Transit Alternatives Analysis (City of Portland and Clackamas County) and the City Civic Corridor Planning Process (City of Portland only). Consultant will ensure Transit Alternatives Analysis questions are included as part of Civic Corridor activities; consultant is also expected to recommend and implement focused engagement in the Alternatives Analysis project areas not included in the Civic Corridor geography. Note the Transit Alternatives Analysis project area is expected to be, roughly, an additional 2 miles on either end of the Civic Corridor geography.

Consultant shall evaluate previous outreach efforts and update the Public Involvement/Communication Plan. Consultant shall summarize previous community input to inform the Civic Corridor and Transit Alternatives

Analysis projects, reflect to the community what has been shared during prior efforts, and determine gaps in geography or communities where more focused engagement should be prioritized. *Note: Community feedback has expressed frustration with governments "asking the same questions over and over"; it is important to validate prior involvement and information provided as part of starting or furthering conversation about community needs and aspirations.*

The Public Involvement/Communication Plan must identify tasks related to access management and identify property owners that will be affected by access modification.

As part of implementation of Public Involvement/Communication Plan, Consultant shall coordinate (up to 20 hours) with Project PMT staff related to the stakeholder database and comment log.

The Public Involvement/Communication Plan for the planning work may include the following milestones:

- Engagement around community priorities Fall 2022
- Engagement around the first round of alternatives Winter 2023
- Engagement around the second round of alternatives Spring 2023
- Engagement around the preferred alternative Fall 2023

Deliverables/Schedule: Consultant shall provide:

- Comments on Draft Public Involvement/Communication Plan due 30 business days after receipt of plan from Project PMT.
- Final Public Involvement/Communication Plan (.pdf) within 50 business days after kick-off; final no later than 10 business days from receipt of Project PMT comments.
- Comment log coordination support (up to 20 hours) due 2 business days after Agency request
- Draft summary of community input from prior efforts throughout the corridor due 30 business days after receipt of plan from Project PMT; final summary due within 20 business days after receipt of Project PMT comments.

Task C4.1.3 Stakeholder Database and Comment Log (CONTINGENCY TASK)

Consultant shall develop and maintain a stakeholder database that will be used to inform and update impacted businesses, residents, neighborhoods, organizations/jurisdictions in the Project area. The stakeholder list must be separated by location of the proposed work, identify the type of impact (noise, R/W, access management, etc.), including contacts and addresses for property owners adjacent to the Project area. Consultant shall update the Stakeholder Database as needed, as well as coordinate with PBOT and other Agencies to utilize their existing GovDelivery accounts to send emails.

Consultant shall create and maintain a communications log to track communications with the public. The communications log will be accessible to the entire team including Oregon Walks and CBOs working in coordination with the Project. This will allow the entire outreach team to have a clear understanding of individual and community comments that are collected. Consultant shall respond to correspondence in the form of letters, emails and phone calls on behalf of Agency as follows: emails within in 5 business days, letters within 10 business days and phone calls within 5 business days. Consultant shall provide letters and emails to Agency for review before distribution.

Deliverables/Schedule: Consultant shall provide:

• An electronic copy of the draft stakeholder database to Agency within 20 business days of Project kick-off meeting.

- An electronic copy of the final stakeholder database within 5 business days after receiving Agency comments.
- A copy of each written response to APM and Agency engagement lead.
- A record of all correspondence in the Project comment log, updates provided to Agency at Agency's request.

Task 4.2 Communications Materials for Full Geography and For City Of Portland

Consultant shall prepare text and graphic layout of informational materials and presentations to be used during outreach events and available on-line. Standard text about the availability of translated materials and ADA accommodations shall be included in all printed materials and the website.

Task C4.2.1 Graphics (CONTINGENCY TASK)

Consultant shall prepare up to 80 equity appropriate graphics to be used on the Project. Graphics may include the following:

- Header (Name of the Project)
- Logo
- Web button
- User-Friendly Map identifying Project limits and proposed work for each location of work
- Detour Maps

The graphics must be compatible for print and web formats.

Deliverables/Schedule: Consultant shall submit:

- Electronic copy of the draft graphics to the Project PMT engagement lead on due date as determined by Project PMT.
- Electronic copy of the final graphics to the Project PMT within 5 business days after receiving Project PMT comments.

Task C4.2.2 Newsletters and Project Fact Sheets (CONTINGENCY TASK)

Consultant shall prepare text and provide the graphic layout for up to 4 single-sided 8.5"x11" Project fact sheets to use at public events, Project area canvassing, and to post on-line. 2 fact sheets will be updated throughout the Project to reflect current information and schedule.

Consultant shall create up to 6 Project newsletters (2 for Phase 1, 4 for Phase 2), each assumed to be double-sided 11"x17". The newsletters must provide a Project overview, map of Project limits, schedule, contact information and will invite people to participate in the in-person and on-line open house events (if relevant). Consultant shall draft, design and distribute the final newsletters to hit mailboxes 2 weeks prior to open houses (if scheduled). Up to 10,000 people will receive the mailers and Project PMT shall pay printing and mailing fees directly. Project PMT shall send electronic notifications out to the Project email list via the GovDelivery system.

- Up to 4 draft and final Fact Sheets (electronic) with draft due date as determined by Project PMT; final no later than 2 business days from receipt of Project PMT comments.
- Up to 2 update(s) to the Project Fact Sheets with draft and final updated Fact Sheet (electronic) on due dates as determined by Project PMT; final no later than 2 business days from receipt of Project PMT comments.

• Up to 6 draft and final newsletters with draft due date as determined by Project PMT; final no later than 2 business days from receipt of Project PMT comments. Drafts in electronic format; print quantity to be determined by Agency.

Task 4.2.3 Translation of Newsletters and Project Fact Sheets

Consultant shall make arrangements with a translation provider to translate up to 4 fact sheets produced in Task 4.2.2 plus up to 2 updates to each fact sheet into 4 languages chosen by Project PMT.

Consultant shall make arrangements with a translation provider to translate up to 6 newsletters produced in Task 4.2.2 into 4 languages chosen by Project PMT.

Deliverables/Schedule: Consultant shall provide:

- Up to 4 draft and final translated Fact Sheets, as well as 2 updates (electronic) with draft due date as determined by Project PMT; final no later than 2 business days from receipt of Project PMT comments.
- Up to 6 draft and final translated newsletters with draft due date as determined by Project PMT; final no later than 2 business days from receipt of Project PMT comments.

Task 4.2.4 Interpretive Services

Consultant shall provide interpretation services at up to 12 public event(s) or one-on-one stakeholder meetings in up to 4 languages chosen by the Project PMT informed by the Limited English Proficiency strategy included in the Public Involvement/Communication Plan. Consultant shall hold up to 4, 1-hour meetings to ensure communications materials (Task 4.2.3) are culturally specific and resonate with communities along the 82nd Ave corridor. These meetings will also provide an opportunity for interpreters to understand the Project, ask the technical team questions, and gain any other clarification needed before the events.

Deliverables/Schedule: Consultant shall provide:

- Interpretation services in up to 4 languages approved by the Project PMT informed by the Public Involvement/Communication Plan at up to 12 public events or one-on-one stakeholder meetings.
- Attendance at up to 4 1-hour meetings with interpreters and Project PMT to advise on Project messaging.

Task 4.2.5 Display Boards

Consultant shall draft, design and print display boards to show the Project purpose and need, location, and design to be used at the open house or public events. Consultant expects to create 10 display boards per open house/public event, with a total of 40 unique boards created throughout the Project. Boards will be reused whenever possible.

Deliverables/Schedule: Consultant shall provide:

• Up to 40 total draft and final display boards for use at 4 open houses/public events with draft due date as determined by Project PMT; final no later than 2 business days from receipt of Project PMT comments on the draft display boards. Drafts provided in electronic format, print copies per number of display boards.

Task 4.2.6 Website (RESERVED)

Task 4.2.7 Social Media Content (RESERVED)

Task 4.2.8 Media Releases (RESERVED)

Task 4.2.9 Videos

Consultant shall develop up to 2 videos for Agency use. Video production includes development of a script and editing and recording of videos. Videos are assumed to be no longer than two minutes each. The videos will be translated in up to 4 languages and English, with the exact languages/subtitles determined for each video. Project PMT will provide B-roll as applicable.

Deliverables/Schedule: Consultant shall provide:

- Up to 2 draft and final video scripts with due date as determined by APM, final no later than 5 business days from receipt of Agency comments.
- Up to 2 draft and final videos with due date as determined by Agency; final no later than 10 business days from receipt of Agency comments.

Task 4.3 In-person/On-line Community Engagement Events and Meetings

In coordination with Community-Based Organization partners and culturally specific organizations, Consultant shall plan and implement outreach events to collaborate, provide information and answer questions, and gain feedback on Phase 2 efforts from community members and stakeholders.

Task 4.3.1 Open Houses/Public Events

Up to 3 rounds of open houses/public events will be held, with the format being determined in coordination with Agency and based on coordination with Community-Based Organization partners and culturally-specific organizations and contact with stakeholders. Each round will include 3 meetings at different locations throughout the corridor. Each event shall include information both for the full geography and for the City of Portland. Consultant shall lead preparation for events. This includes the development of a meeting plan that includes information about outreach goals, logistics, notification tools, messaging, displays, staffing, staffing safety, and the public comment process that will be implemented jointly with Agency. For estimating purposes, up to 3 Consultant staff will be present for preparation and to answer questions (Public Involvement Lead, Translator, one at Agency discretion). Communications and notification materials developed in Task 4.2 shall be used at the event. Agency will distribute invitation mailings and newspaper advertising, with a focus on multilingual publications. Following the event, Consultant shall prepare a meeting summary to document attendees and comments received.

- Draft and final Meeting Plan. Draft due no later than 4 weeks before the event.
- Rental fees and refreshment costs will be covered by Consultant.
- Additional compensation, prizes, or stipends for allowance will be covered by Project PMT.
- Coordination of room/space rental for events.
- Attendance, participation at event(s).
- Materials and supplies needed for event(s), in addition to Task 4.2, including a printed version of the online survey to collect comments from attendees (Task 4.3.3).
- Draft and final Event Summary of up to 10 pages and appendices of raw comments; draft due no later than 20 business days following the event; final no later than 5 business days from receipt of Agency comments.

Task C4.3.2 Additional Open House/Public Event (CONTINGENCY TASK) (RESERVED)

Task 4.3.3 On-line Open Houses and Surveys

Consultant shall produce up to 3 on-line asynchronous open houses for the Project using Agency's platform, coordinated with the open houses/public events in Task 4.3.1. The On-line Open Houses shall include information both for the full geography and for the City of Portland and must include the following components and will be available for the community to participate for at least 3 weeks:

- Welcome page/site index
- Interactive display boards
- Comment and contact form
- Map of corridor
- On-line survey

Deliverables/Schedule: Consultant shall provide:

• Up to 3 draft on-line open house content/pages and graphics for Planning PMT review, with draft due date as determined by Agency; final no later than 5 business days from receipt of Agency comments. Up to 3 draft and final online survey questions (up to 15 questions, including optional demographic information, for each survey) with due date as determined by Agency.

Task 4.3.4 Project Area Canvassing

Consultant shall conduct door-to-door outreach to up to 80 stakeholders that may potentially be impacted by Project construction of Phase 1 design. The purpose of this outreach will be to introduce the Project, identify the appropriate point of contact for future meetings, and assess whether interpretation services may be needed.

Consultant shall identify the canvassing area, to be approved by Agency via email prior to canvassing.

Communications and notification materials developed in Task 4.2 will be used for canvassing.

Deliverables/Schedule: Consultant shall provide:

- Conduct door-to-door outreach to up to 80 properties potentially impacted by Project on date agreed to by Agency.
- Draft and final summary notes (each about 1 page in length); draft due no later than 5 business days following canvassing; final no later than 2 business days from receipt of Agency comments.
- Summary of outreach inserted in the Project communications log.

<u>Task 4.3.5 Small Group Briefings; One-on-One Briefings; Discussion Groups, Focus Groups, and Stakeholder Interviews</u>

Consultant shall identify community groups, special interest groups, neighborhood associations or selected stakeholders that require a briefing of the Project, or discussion about the Project based on the stakeholders identified in the Public Involvement/Communications Plan, to be approved by Project PMT. Consultant shall conduct up to 10 total briefings or discussions.

Consultant shall schedule and prepare for briefings or discussions to provide Project updates and obtain input.

Consultant shall coordinate with Project PMT on staff schedules for attending briefings or discussions.

Consultant shall communicate with the group, secure meeting or spot for Agency staff on the agenda and prepare for a meeting or presentation of Project at the meetings. Consultant shall utilize informational materials

developed under Task 4.2 for meetings and events. For estimating purposes, it is assumed that up to 3 Consultant staff will attend each briefing or discussion, with each estimated to be up to 2 hours in duration including travel time.

Consultant shall conduct up to 100 one-on-one meetings with small business owners in the 82nd Ave corridor area for technical assistance, including advising small business owners in some of the following areas: digital media, e-commerce; marketing campaigns; relocation advising; loan readiness/access to capital; and lease review/negotiations. Project PMT will also be connecting with existing community groups, neighborhood association, and schools. Efforts will be made to ensure regular check-ins with these groups by the Project PMT.

Deliverables/Schedule: Consultant shall provide:

- Scheduling, attendance, and participation at up to 10 briefings or discussions.
- Meeting or presentations materials (as needed from Task 4.2).
- Draft summary notes (each about one page in length) of meeting (including action item / decision log) to be delivered to Agency within 5 business days following the meeting (one electronic copy).
- Final summary notes to be delivered to Agency within 5 business days of receipt Agency comments of draft summary notes (one electronic copy).
- Summary of each meeting inserted in the Project communications log.
- Scheduling, attendance, and participation at up to 100 one-on-one meetings with small businesses.
- Summary notes of small business meetings (up to 1 page, bullet format) to be delivered to Agency within 5 business days following the meeting (one electronic copy).

Task 4.4 Phase 1 Access Management Outreach for City of Portland

Consultant shall schedule, identify locations for, and coordinate Project team involvement in up to 80 1-hour access management meetings with affected property owners and tenants. Consultant shall attend and take meeting notes at access management meetings (each about 1-2 pages in length noting decisions made and follow up actions required). Agency will lead these meetings. Consultant shall coordinate with Agency on staff schedules for attending access management meetings.

Consultant shall provide relevant property owner information and 1 exhibit with design information (truck turning movements, driveway width, etc.) for up to 40 affected properties. Consultant shall coordinate with Agency to develop property owner notification letters for up to 40 affected properties for this Project and to incorporate any property owner input regarding access needs into Task 10.1.7.

Deliverables/Schedule: Consultant shall provide:

- Schedule and attend up to 80 access management meetings with affected property owners and tenants.
- 1 11x17 .pdf exhibit for up to 40 affected properties.
- Meeting notes for up to 80 access management meetings within 5 business days of meetings.
- Meeting notes (up to 1 page in length) of each meeting inserted in the Project communications log.
- A draft and final property owner notification letter to be submitted as part of Task 14 deliverables.

Task 4.5 Planning Public Involvement Summary Report

Consultant shall draft and revise a final report to summarize the public outreach activities and the key stakeholder issues identified during the planning Project. The final report must document any commitments made by the Project team related to future design and decision-making.

- Draft Project Public Involvement Summary Report 40 business days after completion of the 4th round of public engagement.
- Final Project Involvement Summary Report within 20 business days of Project PMT comment.

Task 4.6 Community Advisory Committee (CAC) meetings

Consultant shall prepare for, support and facilitate up to 8, 2-hour CAC meetings, with the format being determined in coordination with PBOT. Consultant shall develop, in coordination with PBOT, a draft and final CAC charter. In coordination with Agency, Consultant shall develop a meeting plan, agenda, PowerPoint presentation, and meeting packet for each meeting. Consultant shall conduct a 1-hour dry run for each CAC meeting with Consultant and Agency PBOT staff. Up to 5 Consultant staff shall attend each meeting. Following the meeting, Consultant shall prepare a meeting summary to document key decisions and action items.

Deliverables/Schedule: Consultant shall provide:

- Draft and final Meeting Plan for up to 8 meetings. Draft due no later than 4 weeks before the meeting.
- Facilitation at up to 8 CAC meetings.
- Up to 8 CAC dry run meetings, due no later than 5 business days before the meeting.
- Draft and final CAC charter, draft due no later than 5 business days before the first CAC meeting; final due no later than 5 days before the second CAC meeting.
- Attendance at meeting(s) for up to 5 Consultant staff.
- Materials and supplies needed for meeting(s), including agenda, PowerPoint presentation, meeting packet, due no later than 5 business days before the meeting.
- Rental fees and refreshment costs will be covered by Consultant.
- Additional compensation, prizes, or stipends for allowance will be covered by Project PMT.
- Draft and final meeting summary; draft due no later than 5 business days following the meeting; final no later than 2 business days from receipt of PBOT comments.
- Summary of each meeting inserted in the Project communications log.

Task C4.7 Community-Based Organization partner coordination (CONTINGENCY TASK)

Consultant shall support Agency coordination with Community-Based Organization partners, including but not limited to APANO, Oregon Walks, Unite Oregon, Verde, Green Lents, IRCO, OPAL, and Disabilities Rights Oregon. Consultant shall attend up to 20, 2-hour coordination meetings at request of APM. For estimating purposes, up to 2 Consultant staff shall attend each meeting.

Deliverables/Schedule: Consultant shall provide:

- Attendance and supportive coordination at up to 20 meeting(s) due at request of APM.
- Review of the CBO summary or other documentation for inclusion into the project team documents and Task 4.5 summary.

Task C4.8 Tabling at community events (CONTINGENCY TASK)

Consultant shall staff information tables at up to 20 community events to share information about the Project. Examples of events include the Jade Night Market, street fairs, or other community activities. Consultant shall provide coordination with event staff, set-up and take-down, and staffing of the information table (assumed to be 3 Consultant staff per event). Events are assumed to be 3 hours, not including set-up and take-down.

- Preparation for and attendance at up to 20 meeting(s), due at request of APM.
- Draft and final event summary (each up to 2 pages in length); draft due no later than 5 business days following the event; final no later than 2 business days from receipt of Agency comments.
- Summary of each event inserted in the Project communications log.

Task C4.9 Special events (CONTINGENCY TASK)

Consultant shall develop and conduct up to 8 special events along the corridor to have in-depth workshops related to specific topics. Examples of special events include a workshop for relatives or friends of people who have lost their lives along the 82nd Ave corridor, to determine ways in which a future Project can honor their loved ones; or a workshop on how future plans and design can ameliorate climate concerns or address equitable design from the community perspective. Events are assumed to be four hours, not including set-up and takedown.

Deliverables/Schedule: Consultant shall provide:

- Preparation for and attendance at up to 8 events, due at request of APM.
- Summary of each event inserted in the Project communications log.

TASK 5 UTILITY COORDINATION

Consultant shall provide utility coordination support for the Project for up to 13 utilities for 1 bid set package at 30% and 60%, and up to 3 geographic bid set packages post 60%. Consultant shall identify potential overhead and underground utility conflicts related to the proposed improvements and coordinate through the Agency with the affected utilities during the design phase of the project.

If any utility is nonresponsive or uncooperative, Consultant shall notify Agency, and Agency will communicate with the utility to affect a solution.

Task 5.1 Utility Conflict Identification

Consultant shall identify existing condition and utility conflict/modification for review with the Preliminary Design (30%) plan review submittal.

Deliverables/Schedule: Consultant shall provide:

• Identifying existing condition and utility conflict/modification on plans with 30% PS&E submittal at the 30% PS&E submittal date.

Task 5.2 Utility Coordination

The Agency will notify all public and private utilities through written notification by following the agencies standard utility notification process of City of Portland Administrative Rule in Policy number TRN-10.45 - Relocation Process for Public Utilities. Agency will furnish an estimated construction start date and may include additional dates for consultant design coordination meetings. Consultant shall finalize utility conflict relocations, identify them on the Plans, and prepare Special Provisions. Special provisions shall identify any special conditions in which a utility must work and also specify available work windows. Consultant will incorporate permitted utility relocations into the 100% plans.

Consultant shall provide potholing services for up to 200 potholes within the Phase 1 Project area, including associated traffic control, planning, oversight, and reporting. It is estimated that all potholing work will occur within a continuous 3-week period following the 60% submittal. Agency shall pay all applicable permit fees.

Pothole data will be collected via field measurements. Utility locations will be measured in the field. 95% pipe profiles will be revised to include utility elevation information. Agency acknowledges that anticipated expenses associated with potholing are an estimation based on quotes received during project scoping. Consultant shall collect revised quotes for potholing work following the 60% submittal and Agency shall process an amendment for associated price changes.

Deliverables/Schedule: Consultant shall provide:

- Preliminary Utility Conflict and Coordination notes and Conflict Log, Plans, and Special Provisions with 60% PS&E Deliverable at the 60% PS&E submittal date.
- Updated Utility Conflict and Coordination notes and Conflict Log, Plans, and Special Provisions with 95% PS&E Deliverable at the 95% PS&E submittal date.
- Final Utility Conflict and Coordination notes and Conflict Log, Plans, and Special Provisions with 100% PS&E Deliverable at the 100% PS&E submittal date.
- Pothole reports at the 95% PS&E submittal date.

Task C5.2.1 Utility Coordination (CONTINGENCY TASK)

- The agency will receive written comments from affected utilities and will forward all notifications to the consultant for coordination.
- Consultant shall work in coordination with utilities and Agency to determine best solution for utility conflicts, the best relocation schedule and any coordination requirements with the construction project.

Task 5.3 Utility Coordination Meetings (RESERVED)

Task C5.4 Review Utility Relocation Plans (CONTINGENCY TASK)

If requested by Agency, Consultant shall examine Agency-furnished utility relocation plans for completeness and accuracy. If relocation plans do not resolve utility conflict, Consultant shall provide comments to Agency for Utility's correction and re-submittal. Task includes reviewing up to 6 relocation plans.

Deliverables/Schedule: Consultant shall provide:

• The review of utility relocation plan(s) submitted to the APM within 2 weeks after Agency's request.

Task 5.5 Utility Reimbursement (RESERVED)

Task 5.6 Utility Certification (RESERVED)

TASK 6 GEOTECHNICAL, GEOLOGIC and PAVEMENT DESIGN SERVICES

The purpose of this task is to develop pavement design criteria, pavement design parameters, and recommendations for pavement preservation, pavement rehabilitation, and new pavement sections, as appropriate, for an acceptable pavement design that meets the intent of the scope identified by the Agency, for the following areas. Additionally, Consultant shall provide rehabilitation design recommendations based on a future construction identified by the Agency in order for the Consultant to take into account continued deterioration caused by on-going traffic loading.

• 82nd Ave (OR213 [Hwy 068]): NE Lombard St to SE Clatsop St (MP 0.25 to MP 7.23), 4 lanes plus a center turn lane, will be rehabilitated or reconstructed as necessary to meet a 15- or 30- year design period, respectively for asphalt concrete surfaced streets. Agency will provide Portland cement concrete bus pad designs.

- Arterial and collector side streets along the 82nd Ave corridor will be rehabilitated or reconstructed as necessary to meet a 15- or 30-year design period, respectively, and match grades between 82nd Ave and the side street.
- Local side streets will be rehabilitated or reconstructed based on the recommendations provided by Consultant. Reconstruction recommendations will be based on the Agency's minimum design standards.

Work related to completing pavement design must be in accordance with the latest edition of the ODOT Pavement Design Guide ("PDG") and the PBOT Civil Design Guide for Public Street Improvement; the guidance in the PBOT Civil Design Guide for Public Street Improvement supersedes the PDG.

References herein to specific PDG chapters are for informational purposes only, and inclusion of these references does not relieve Consultant of responsibility for meeting all relevant requirements contained in the PDG.

Task 6.1 Pavement Design

Task 6.1.1 Pavement Field Exploration and Testing

Consultant shall conduct field investigation work to obtain information essential for pavement design.

Consultant shall conduct a field reconnaissance visit for planning the necessary field investigation work and to assess the temporary traffic control needs for the field investigation.

Consultant shall prepare a Subsurface Exploration Plan (SEP) before beginning the work. The SEP must provide a site plan showing the proposed exploration locations and details regarding the drilling, sampling, and bore hole restoration procedures, as well as details regarding other testing as identified in Chapters 4 and 12 of the PDG. The SEP must also include a Traffic Control Plan (TCP). Consultant shall not perform fieldwork, other than initial site reconnaissance, before designated Agency Representative has reviewed and approved the SEP. The TCP must be prepared by a flagging company licensed to work in the State of Oregon, and it must address a minor road encroachment as well as a single lane closure for activities associated with drilling exploratory borings from the roadway surface. Consultant shall not perform fieldwork, other than initial site reconnaissance, before Agency Traffic Control Engineers have reviewed and approved the TCP.

Consultant shall identify and approximately locate underground and overhead utilities in the Project area. Consultant shall contact the Oregon Utility Notification Center ("One-Call" System) to locate utilities before conducting any subsurface exploration or testing operations.

82nd Ave from NE Lombard St to SE Clatsop St is a north-south principal arterial just west of Interstate 205. There are two lanes in each direction with a center turn lane. Along the project alignment, the roadway is bordered by curb and gutter, and it is surfaced with asphalt concrete. Based on previous work performed by ODOT, Consultant understands that portions of the roadway are underlain by Portland cement concrete. The project will include rehabilitating and/or reconstructing 82nd Ave and the adjoining arterial or collector cross streets as necessary to meet a 15-year design period. Consultant's proposed field investigation assumes that Consultant will utilize some prior field data that was collected by ODOT. Agency is responsible for obtaining all necessary permits, including paying applicable permit fees.

Consultant's field investigation is comprised of falling weight deflectometer (FWD) testing, core/boring explorations, ground penetrating radar (GPR) testing, and soil sampling.

The following tables provide a summary of the pavement field exploration and testing program.

Stree	Street Segment (Seg) Limits							
Seg No.	Segmen	nt Description	n / Work Scope		ODOT Hwy No.	ВМР	ЕМР	Total No. Lanes
1			rd St to SE Clats	op St	068	0.25	7.23	5
Segm	ent Pave	ment Field I	Exploration and	Testing l	Program			
Dir	Lane	Wheel Track	FWD Deflections	Full- Depth Cores	Rut Depths & Curb Reveal	Photos	GPR	Soil Samples
NB	A	IWT	Every 200 feet. About 150 tests	15	Rut depth only at all core locations	At all core locations	Longitudinal: Entire length Transverse: 3 per block	At all core locations
NB	В	OWT	Every 200 feet. About 150 tests	16	At all core locations	At all core locations	Longitudinal: Entire length Transverse: 3 per block	At all core locations
SB	A	IWT	Every 200 feet. About 150 tests	15	Rut depth only at all core locations	At all core locations	Longitudinal: Entire length Transverse: 3 per block	At all core locations
SB	В	OWT	Every 200 feet. About 150 tests	21	At all core locations	At all core locations	Longitudinal: Entire length Transverse: 3 per block	At all core locations
NB/ SB	Center	BWT	None	11	Rut depth only at all core locations	At all core locations	Longitudinal: Entire length Transverse: 3 per block	At all core locations

*Notes: Consultant will use FWD testing data conducted by ODOT on NE 82nd Ave from NE Couch St to SE Division St. Consultant will use 134 core explorations that were conducted by ODOT on NE 82nd Ave from NE Lombard St to SE Clatsop St.

Street Segment (Seg) Limits								
Seg No.	Segmer	ıt Descripti	on / Work Sco	ope	ODOT Hwy No.	ВМР	ЕМР	Total No. Lanes
2	82 nd Ave: NE Lombard St to NE Webster St					0.25	0.44	3-4
Segm	ent Pave	ment Field	Exploration a	and Testing	Program			
Dir	Lane	Wheel Track	FWD Deflections	Full Depth Cores	Rut Depths & Curb Reveal	Photos	GPR	Soil Samples
NB	A	OWT	Every 100 feet. About 9 tests	1	Rut depth only at all core locations	At all core locations	Longitudinal: Entire length Transverse: 3 per block	At all core locations

Street Segment (Seg) Limits								
Seg No.	Segmen	ıt Descripti	on / Work Sco	ope	ODOT Hwy No.	ВМР	ЕМР	Total No. Lanes
2	82 nd Ave: NE Lombard St to NE Webster St				068	0.25	0.44	3-4
Segm	ent Pave	ment Field	Exploration a	and Testing	Program			
Dir	Lane	Wheel Track	FWD Deflections	Full Depth Cores	Rut Depths & Curb Reveal	Photos	GPR	Soil Samples
NB	В	OWT	Every 100 feet. About 9 tests	1	Rut depth only at all core locations	At all core locations	Longitudinal: Entire length Transverse: 3 per block	At all core locations
SB	A	IWT	Every 100 feet. About 9 tests	1	At all core locations	At all core locations	Longitudinal: Entire length Transverse: 3 per block	At all core locations
SB	В	OWT	Every 100 feet. About 9 tests	2	At all core locations	At all core locations	Longitudinal: Entire length Transverse: 3 per block	At all core locations

^{*}Notes: Consultant will use the one core exploration conducted by ODOT on the NE 82nd Ave on/off ramp to NE Lombard St.

Street Segment (Seg) Limits								
Seg No.			tion / Work Sc	ope	ODOT Hwy No.	ВМР	ЕМР	Total No. Lanes
			ctor Side Street					
3			Lombard St to	SE	N/A	N/A	N/A	2-4
	Clatsop		J. E14:	1 T4°		N/A	IN/A	∠ -4
Segm	ent Pave	ment Fiei	d Exploration :	and Testing	Rut		T	
Dir	Lane	Wheel Track	FWD Deflections	Full Depth Cores	Depths & Curb Reveal	Photos	GPR	Soil Samples
EB	В	OWT	Every 50 feet. Or at least 5 tests per segment. About 98 tests	26	At all core locations	At all core locations	Longitudinal: Entire length	At all core locations
WB	В	OWT	Every 50 feet. Or at least 5 tests per segment. About 98 tests	26	At all core locations	At all core locations	Longitudinal: Entire length	At all core locations

*Notes: arterial and collector side streets include 11 segments that are located on either the east or west side of NE 82nd Ave.

In preparing and conducting the pavement field exploration and testing program, Consultant shall:

- Provide an experienced staff member to supervise the field operations.
- Conduct field investigation services during Monday through Friday between the hours of 9 a.m. and 4 p.m.
- Provide traffic control for lane closures in accordance with the approved TCP.
- Complete pavement surface cores through the bound pavement layer (or layers) by using a diamond-tipped core barrel only.
- Complete shallow borings (exploration holes) to collect soil samples at core explorations within pavement areas to depth of 2 feet below the top of the existing subgrade or to a maximum depth of 5 feet below the pavement surface using a hollow-stem or solid-stem auger.
- Retain core samples or boring materials from all pavement exploration locations and samples of materials encountered at shallow boring locations.
- Restore core and shallow boring explorations in paved areas as identified in a SEP.

Consultant shall provide the results of the pavement field explorations and testing.

Deliverables/Schedule:

• Electronic copy of the SEP and TCP, due 1 month after NTP.

Task 6.1.2 – Laboratory Testing

Consultant shall conduct all necessary laboratory testing as needed to comply with the requirements of the PDG and to provide the basis for the necessary inputs required for the pavement design analysis. Consultant shall conduct laboratory tests on samples of the materials encountered during pavement field explorations. Consultant shall complete the following tests on select samples obtained from the core/shallow borings:

- Atterberg limits
- Grain size analysis percent passing number 200 sieve
- Moisture contents

Consultant shall perform all materials testing in accordance with standard American Association of State Highway and Transportation Officials ("AASHTO"), American Society for Testing and Materials ("ASTM"), and Agency methods and practices.

Deliverables/Schedule:

• Results of the laboratory testing program provided in Task 6.1.3 – Pavement design analysis and package, due 1 month prior to 30% design submittal.

Task 6.1.3 – Pavement Design Analysis and Package

Consultant shall complete a pavement design analysis for the Project following procedures outlined in the latest edition of the PDG. Consultant shall meet with the Agency to confirm the design parameters and methods prior to completing the pavement design analysis.

Consultant shall gather the appropriate traffic information for the purposes of computing the 18-kip equivalent single axle loads ("ESALs") within the Project limits as required by the PDG. Consultant shall acquire the traffic data for computing ESALs from Agency's on-line traffic count data or from ODOT's Traffic Volume and Vehicle Classification web site, or from both. Consultant shall estimate the traffic growth rate for roadways on

the Oregon State Highway System based on current and future annual average daily traffic volumes available from the Agency or from ODOT's Traffic Volume and Vehicle Classification web site. For roadways not on the Oregon State Highway System, Consultant shall request the traffic growth rate from the Agency's traffic engineer. Appendix I of the PDG provides an example for calculating ESALs.

Consultant recommendations for material properties must follow guidance presented in the PDG and, in particular, Chapter 10, Chapter 11, and Appendix J.

Pavement design for the areas identified above in Task 6 – Pavement Design Services must include the following:

- Pavement design parameters derived from the pavement field exploration and testing program identified above in Task 6.1.1 Pavement field exploration and testing.
- Pavement design for an Asphalt Concrete Pavement ("ACP") system.
- Pavement design recommendation limits and treatment(s) based upon all data collected and analysis provided.
- Material specification recommendations for all pavement system materials required to construct the recommended pavement section (or sections) within the Project boundaries.
- Subgrade stabilization recommendations for all new pavement construction areas where stabilization is required.

For the entire project corridor, the Consultant shall prepare a Draft and Final PDP in accordance with the requirements presented in Chapter 12 of the PDG. The PDP must include:

- Pavement Design Memo (PDM) See PDG Chapter 12, Section 12.3.1 and Appendix K.
- Pavement Design Summary (PDS) See PDG Chapter 12, Section 12.3.2.
- Pavement Design File Attachments Documentation of data and analyses used in support of the recommendations in the Pavement Design Memo. These must be organized, labeled, and divided by function or type. See PDG Chapter 12, Section 12.3.3.

The project has been broken into multiple phases. For Phase I, which generally encompasses NE 82nd Ave at NE Fremont St; NE 82nd Ave from NE Siskiyou St to NE Broadway; and SE 82nd Ave from SE Division St to SE Foster Rd, the Consultant shall prepare a Draft and Final Pavement Design Memo (PDM) prior to the 30% design milestone for Phase 1.

Consultant shall submit the initial Pavement Design Package (PDP) for Agency review and comment. Agency will consolidate all comments and submit to Consultant. Consultant shall respond to Agency review comments on the initial PDP and incorporate responses into the Draft Final PDP.

Consultant shall modify the Draft Final PDP only if directed by Agency to accommodate previously unidentified needs or Agency-directed changes in scope.

Consultant shall submit a Final PDP following development of at least one set of plans (60% design) and before development of the final design.

Deliverables/Schedule:

- Phase I Draft PDM, due 10 business days prior to 30% design submittal.
- Phase I Final PDM, due 10 business days prior to 60% design submittal.
- Initial PDP, due 10 business days prior to 95% design submittal.
- Final PDP signed, due 10 business days prior to final design submittal.

TASK 7 HYDRAULICS & STORMWATER

Consultant shall develop hydraulics studies to facilitate the stormwater design. Consultant shall perform work under this task in accordance with the guidelines and requirements of the City's Sewer and Drainage Facilities Design Manual (2020), the Stormwater Management Manual (2020), and the following table.

Road Cl	Design Storm	
	On grade	10-year
Local Streets	Local sag point	25-year
	Major/Main line sag point	50-year
	On grade	10-year
Arterials and Collectors	Local sag point	25-year
	Major/Main line sag point	50-year

- Task 7.1 Site Investigation and Data Collection/Analysis (RESERVED)
- Task 7.2 Hydrologic Analysis (RESERVED)
- Task 7.3 Hydraulic Analysis (RESERVED)
- Task 7.4 Hydraulic Report (RESERVED)
- **Task 7.5 Stormwater Design Documentation**
- Task 7.5.1 Water Resources Impact Assessment (RESERVED)
- Task 7.5.2 Preliminary Stormwater Recommendations (RESERVED)
- <u>Task 7.5.3 Standard Stormwater Design Documentation (RESERVED)</u>

Task 7.5.4 Stormwater Design Report

Consultant shall prepare a Stormwater Design Report that summarizes the stormwater design criteria, existing conditions, proposed improvements, design calculations, and stormwater management plan. The facility design(s) incorporated in the Final Plans must comply with the information in the Stormwater Design Report unless approval for any change has been obtained from the Engineer of Record for the Stormwater Design Report.

Deliverables/Schedule: Consultant shall provide:

- Draft Stormwater Design Report delivered with the 30%, 60%, and 95% Submittals (Task 11.5, 14.1, and 14.2).
- Final Stormwater Design Report delivered with the 100% Submittal (Task 14.3).

Task 7.5.5 Stormwater Design Supporting Data

Consultant shall assemble Stormwater Design Supporting Data package which must include but is not limited to:

- Basin maps.
- Hydrologic and hydraulic calculations.
- Existing conditions analysis.
- Maintenance considerations.

• Stormwater Management design and analysis, as needed.

Deliverables/Schedule: Consultant shall provide:

• Stormwater Design Supporting Data (submit with Stormwater Design Report).

Task 7.5.6 Stormwater Operation & Maintenance Manual (RESERVED)

Task 7.6 Stormwater Conveyance and Treatment Plans

Consultant shall prepare Stormwater Conveyance and Treatment Plans for 30%, 60%, 95% and 100% deliverables as covered by Task 11.5 and Tasks 14.1, 14.2, and 14.3. These plans must be developed in accordance with City standards and include Drainage Plan and Profile sheets, Drainage Detail Sheets and Pipe Data Sheets (if needed).

Deliverables/Schedule: Consultant shall provide:

- 30% Stormwater Conveyance and Treatment Plan Sheets delivered with Task 11.5
- 60% Stormwater Conveyance and Treatment Plan Sheets delivered with Task 14.1
- 95% Stormwater Conveyance and Treatment Plan Sheets delivered with Task 14.2
- 100% Stormwater Conveyance and Treatment Plan Sheets delivered with Task 14.3

TASK 8 HIGHWAY DESIGN

Task 8.1 Roadside Inventory

Consultant shall complete a roadside inventory in a format acceptable to the Agency. This data will typically be two-dimensional and require a digital picture. Consultant shall relate the digital picture to the feature in the roadside inventory spreadsheet. The roadside inventory must conform to Agency standards.

Deliverables/Schedule: Consultant shall provide as required by Agency or within 8 weeks from NTP:

- One electronic copy of the Roadside Inventory recorded in Agency approved Roadside Inventory spreadsheet.
- An electronic copy of all digital pictures taken of features.

Task 8.2 ADA Curb Ramp PS&E

Consultant shall provide a design that brings existing curb ramps up to current ADA standards as implemented by Agency. Design and documentation must comply with both PBOT and ODOT requirements. Guidance is provided at:

https://www.portlandoregon.gov/transportation/article/727351

http://www.oregon.gov/ODOT/Engineering/Pages/Accessibility.aspx

Consultant shall prepare plan sheets showing curb ramp details for curb ramps at all locations within the project area, as stated in the Project Description.

The detailed plan sheets must comply with the relevant requirements of the RD 900 series of the Oregon Standard Drawings, DET1720, DET1721 and applicable Agency ADA Inspection Forms 734-5020(A-G). The plans must show design finished grade elevations and slopes at concrete joints and along the concrete curb and gutter and shall show saw-cut locations where the new ADA Curb Ramp joins existing sidewalk.

ADA Ramps 30% Design Submittal

Consultant shall prepare 30% ADA design to identify R/W needs, utility conflicts, cost and other feasibility issues related to updating ADA curb ramps to current standards. Consultant shall develop concept-level design

for each ADA curb ramp location affected by the Project so that R/W acquisition is minimized or avoided, and the identification of utility, drainage conflicts, and cost can be identified early in the Project. Consultant shall prepare an ADA Curb Ramp Design Checklist and Ramp Cost Estimate which must be submitted with the 30% design. Refer to ODOT Right of Way Technical Bulletin RW15-02(B).

Consultant shall submit ADA Ramp Reports in Agency's preferred format with 60%, 90%, and 100% submittals.

60%, 95%, and 100% Plans

Consultant shall refine plan sheets for the subsequent plan review sets.

Deliverables/Schedule: Consultant shall provide:

- ADA curb ramps design identifying R/W constraints and conflicts with utilities or other feature; ADA
 Curb Ramp Design Checklist and Ramp Cost Estimate to be submitted with 30% Design submittal
 (Task 11.5 submittal).
- 60% ADA ramp plans and ramp reports (PBOT and ODOT) delivered with Task 14.1 submittal.
- 95% ADA ramp plans and ramp reports (PBOT and ODOT) delivered with Task 14.2 submittal.
- 100% ADA ramp plans and ramp reports (PBOT and ODOT) delivered with Task 14.3 submittal.

Task 8.3 Roadway Design

Consultant shall describe the design criteria and identify all design exceptions for the Project. Consultant shall present the draft design criteria in a table or matrix format listing all conditions, assumptions, and minimum standards for all design elements of the Project.

Consultant shall prepare the roadway design and plan sheets to support the 30% Design, which establishes the geometric boundaries of the Project footprint, and allows for concurrent R/W, environmental permitting, and the development of construction contract documents to occur. The expected sheets included with the 30% Design submittal include but are not limited to the following:

- Title Sheet
- Index
- Sheet Layout Plan
- Typical Sections
- Alignment and RW Sheets
- Street Plans and Profiles

Consultant shall prepare 60% Plans, 95% Plans, and 100% Plans submittals. These deliverables must include all the plan sheets required in the Final PS&E submittal (see Task 14).

- Design Criteria Sheet.
- Roadway 30% Plans (to be provided as part of Task 11.5).
- 60% Roadway Plan (to be provided as part of Task 14.1).
- 95% Roadway Plans (to be provided as part of Task 14.2).
- 100% Roadway Design elements shall be included in the 100% Plans, Specifications and Estimate submitted in Task 14.3.

TASK 9 BRIDGE AND STRUCTURES DESIGN

Task 9.1 Bridge Design (RESERVED)

Task 9.2 Retaining Wall / Sound Wall Design

Consultant shall complete retaining wall design work for the Project which must be submitted as part of the 30%, 60%, 95%, and 100% Plans. Design procedures must follow ODOT's latest edition of the Geotechnical Design Manual. All retaining walls shall be designed in accordance with PBOT's Retaining Wall Guidance on Design, Materials, Detailing and Review Requirements (https://www.portland.gov/sites/default/files/2021/pbot-retaining-walls-design-guidance-7-1-21.pdf).

Retaining wall types shall be reinforced concrete, unless approved otherwise by City Engineer or Designee.

Consultant will design up to 5 retaining walls, of up to 100-feet in length and up to 4-feet in height. Retaining wall locations will be determined through the course of design.

Task 9.2.1 Retaining Wall Alternatives Analysis (RESERVED)

Task 9.2.2 Sound Wall Evaluation (RESERVED)

Task 9.2.3 Retaining Wall PS&E

Consultant shall develop wall plans and details and shall include all sheets anticipated in the 60% Plans. Consultant shall further refine the 60% Plans as needed to prepare 95% Plans and 100% Plans for the Retaining/Sound Wall.

Consultant shall prepare special provisions and cost estimate for retaining walls.

- 60% retaining wall plans, special provisions and cost estimate submitted with the 60% plans submittal (Task 14.1).
- 95% retaining wall plans, cost estimate, special provisions and construction schedule submitted with the 95% Plan submittal (Task 14.2).
- 100% retaining wall plans, cost estimate, final special provisions submitted with the 100% Plans submittal (Task 14.3).

Task 9.3 Traffic Structures Design (RESERVED)

TASK 10 TRAFFIC ENGINEERING & MANAGEMENT

Task 10.1 Transportation Technical Analysis (Planning and NEPA)

Task 10.1.1 Transportation Safety Evaluation (RESERVED)

Task 10.1.2 Future Demand Forecasting (RESERVED)

Task 10.1.3 Intersection Analysis (RESERVED)

Task 10.1.4 Freeway Operations Performance Analysis (RESERVED)

Task 10.1.5 Active Transportation (RESERVED)

Task 10.1.6 Transit Assessment (RESERVED)

Task 10.1.7 Access Management

Consultant shall clearly identify locations of private approaches (driveways) and potential alternate routes to access properties on the corridor and identify potential access-related impacts to properties in the study area. Agency will supply Consultant with Access Control Research and a list of permitted approaches in the project limits including within interchange areas (where available). Consultant shall review, research and create a map of existing approaches, permitting status and existing width, and identify modification, relocation or removal of approaches, and approaches that will be considered for turning movements restrictions. If applicable, Consultant shall identify alternate access concept for impacted properties to Agency and provide exhibits with design information (turning templates, existing and proposed driveway location, etc.).

Consultant shall develop an Access Management Strategy by developing a matrix of potential access improvement opportunities that should include properties with multiple accesses, open frontages, access rights and access easements and access locations with identified safety challenges where modifications could benefit Phase 1 of the 82nd Ave improvements. Approaches will be classified into 3 categories: approaches unlikely to be modified; approaches with potential minor modifications; and approaches with modifications that could need additional R/W or design considerations. Consultant shall document the Access Management Strategy and property owner input gathered in Task 4.4 in a memorandum.

Consultant shall conduct 2 sub-team meetings with two Consultant staff at Agency for up to 2 hours each.

Deliverables/Schedule: Consultant shall provide:

- Map of existing private approaches impacted by the project
- Matrix summarizing potential access improvements
- Draft Access Management Memorandum. Final Access Management Memorandum, 2 weeks following Agency comments.

Task 10.2 Traffic Safety Memorandum

Consultant shall prepare a traffic safety memorandum that summarizes available crash data at the following intersections:

- SE 82nd Ave/SE Raymond St
- SE 82nd Ave/SE Holgate Blvd

- SE 82nd Ave/SE Boise St
- SE 82nd Ave/SE Rhone St
- SE 82nd Ave/SE Francis St/SE Center St (segment)
- SE 82nd Ave/SE Woodward St
- SE 82nd Ave/RRFB near PCC
- NE 82nd Ave/NE Tillamook St
- NE 82nd Ave/NE Siskiyou St
- NE 82nd Ave/NE Fremont

Consultant shall prepare a draft and final memorandum summarizing the findings of Agency crash data, including crash severity, crash type, crash modes, crash locations and crash frequency and include recommendations for design modifications to address specific crash patterns if needed.

Deliverables/Schedule: Consultant shall provide:

- Draft Safety Memorandum, to be included with the 30% Design Package (Task 11).
- Final Safety Memorandum 2 weeks following Agency comments.

Task 10.3 Transportation Management Plan (TMP) (RESERVED)

Task 10.4 Access Management Notifications to Property Owners (RESERVED)

Task 10.5 Crosswalk Closure Requests

It is Agency's policy to provide accessible crosswalks unless the crosswalk is officially closed to all pedestrians. Agency will allow crosswalks to be closed if the crossing or the roadway constitutes a safety issue for the pedestrian. Crosswalk closure requires an engineering study and approval by the City Traffic Engineer.

Consultant shall develop the engineering study information and the crosswalk closure request at up to 15 locations.

Consultant shall provide engineering analysis of pedestrian routes and shall prepare up to 15 crosswalk closure requests. Closure locations will be determined through design.

Consultant shall prepare an engineering study that includes:

- A narrative substantiating a geometric design or operational concern that adversely impacts pedestrian safety.
- Discussion of reasonable alternate ADA accessible routes between the two points of the crossing that are being closed.
- A description of proposed closure treatments.

- Draft Engineering Study and Crosswalk Closure Requests with the 30% submittal (Task 11.5).
- Final Engineering Study and Crosswalk Closure Requests 2 weeks following Agency comments.

Task 10.6 Traffic Control Plans (TCPs)

Consultant shall provide for TCPs, project specific typical traffic control details, special provisions, and cost estimates needed for the Project.

TCPs will be provided for the SE Powell Blvd/SE 82nd Ave intersection and SE Powell Blvd construction work. Consultant shall prepare the Temporary Pedestrian Accessible Route Plans (TPARPs) for the SE Powell Blvd/SE 82nd Ave intersection as part of the TCPs.

The TCPs are used to describe how the existing roadway area is divided up between live traffic and the construction site. Plan sheets also identify the type, quantity and location for temporary traffic control devices. TCPs must include but are not limited to the following information: staging plan, lane shifts, lane and shoulder widths, lane closures, road closures, temporary detour, temporary diversion, temporary striping, temporary signing, cutting sections at critical areas with dimensions and other relevant information.

Consultant shall identify each stage of the Project and how traffic will be shifted within the Project limits for that stage. Considerations will include multimodal traffic, property access, desired pavement seam locations, signal staging, and constructability. Consultant shall develop TCPs in accordance with the City of Portland, ODOT, and the MUTCD design standards, as applicable.

Project specific typical traffic control details will be provided for the intersections and roadways under the City of Portland jurisdiction. Standard drawings will be used to the extent possible. Contractor shall develop up to 12 typical traffic control details. Consultant shall prepare the typical traffic control details in accordance with PBOT's latest Temporary Traffic Control Manual and the MUTCD.

Deliverables/Schedule: Consultant shall provide:

- Identification of construction stages and how traffic will be managed at each stage. Concept TCPs and typical traffic control details to be submitted as part of the 30% Design Package (Task 11).
- 60% TCPs, typical traffic control details, special provisions and cost estimate submitted as part of Task 14.1.
- 95% TCPs, typical traffic control details, special provisions and cost estimate submitted as part of Task 14.2.
- 100% TCPs, typical traffic control details, special provisions and cost estimate submitted as part of Task 14.3.

Task 10.7 Traffic Signal Design

Consultant shall develop the design for traffic signals, including new or replacement traffic signals, flashing beacons, signal interconnect systems, emergency vehicle preemption systems, and other signal-related features in conformance with PBOT's Traffic Signal Design Guide. All traffic control devices installed in the State of Oregon are required to conform to the MUTCD and the Oregon Supplements as to the MUTCD as established by ORS 810.200 and OAR 734-020-0005. Agency to provide signal type for each intersection through the PBOT signal approval process.

Consultant shall perform the required services at the following locations:

- SE 82nd Ave/SE Mitchell St (RRFB modification)
- SE 82nd Ave/SE Raymond St
- SE 82nd Ave/SE Holgate Blvd
- SE 82nd Ave/SE Boise St
- SE 82nd Ave/SE Rhone St

- SE 82nd Ave/SE Francis St/SE Center St (pedestrian signal)
- SE 82nd Ave/SE Woodward St
- SE 82nd Ave/PCC ped crossing (pedestrian signal)
- NE 82nd Ave/NE Tillamook St
- NE 82nd Ave/NE Siskiyou St
- NE 82nd Ave/NE Fremont

Signal cabinet prints will be prepared for each location listed above.

Signal Interconnect

Consultant shall conduct field evaluation of the corridor to determine the best solutions for traffic signal interconnect. Interconnect design will include fiber optic interconnect to reconnect each signalized location into the existing signal interconnect system along 82nd Ave per PBOT standards. Consultant shall evaluate each site in the field and meet with PBOT as needed to discuss proposed solutions.

Consultant shall design interconnect attachments to utility poles and prepare/submit permit applications for pole attachments. No wireless path analysis will be conducted. No interconnect plans (aside from the concept plans) will be prepared for the 30% Design Package.

Illumination on Signal Poles

Consultant shall conduct lighting analysis at each intersection identified above to determine luminaire locations, wattages and orientation and develop the subsequent designs based on standard Agency signal poles and foundations. Luminaires at signalized intersections will be included on the signal mast arm poles or adjacent utility poles.

Temporary Signal Plans

Consultant shall prepare temporary signal designs to show temporary traffic signal elements needed during intersection and new signal construction. Elements of the temporary signal design may include installation of temporary poles (for vehicle signals, pedestrian signals, or pushbuttons), temporary vehicle/pedestrian detection, and/or temporary relocation of signal equipment.

30% Design Plans

Key outcomes of the 30% Design deliverable include confirming that additional R/W or easements will not be necessary to install traffic signals and obtaining necessary signal-related approvals.

The 30% Plans must include Signal and ITS Concept Plans with the following level of details:

- Signal appurtenances symbolically shown; do not detail with bubble notes at this stage.
- Signal plan sheet:
 - o Number of lanes and lane use.
 - Crosswalk closures.
 - o ADA ramps to be used to identify the amount of R/W needed to accommodate proper placement.
 - o Normal Signal Phasing diagram.
 - o Location of mast arm poles, strain poles, pedestals, controller cabinet, and service cabinet (used to identify the amount of R/W needed to accommodate proper placement).
 - o Location of potential commercial power source.
 - o Existing and proposed R/W lines shown.

No temporary signal plans will be prepared for the 30% Design submittal. For the 30%, 60% and 100% Designs, Consultant shall prepare Signal and ITS Plans and shall develop an estimate of cost and special provisions as required.

Deliverables/Schedule: Consultant shall provide:

- Concept Signal and ITS Plans and Cost Estimate submitted with 30% Design deliverable (Task 11).
- 60% Design signal, detection, and ITS plans, special provisions and cost estimate to be included as part of Task 14.1 deliverables.
- 95% Design signal,, detection, and ITS plans, special provisions and cost estimate to be included as part of Task 14.2 deliverables.
- 100% Design signal, detection, and ITS plans, special provisions and cost estimate to be included as part of Task 14.3 deliverables.

Task 10.8 Additional ITS and Signal Design

Consultant shall develop the design for improvements including installing Advanced Transportation Controller (ATCs) at signalized intersections, radar detection, CCTV cameras, and high-speed fiber optic communications interconnect.

Task 10.8.1 Fiber Optic Communication Design

Consultant shall develop construction plans, specifications, and cost estimate for Fiber Optic installation.

- Between Lombard St and Webster St VMS
- Webster St Signal
- Prescott St Signal
- McDaniel High School Signal
- Between Glisan St and Oregon St VMS
- Tibbets St (SB) VMS
- Bush St (NB) VMS
- Woodstock St Signal

Task 10.8.2 CCTV Design

Consultant shall develop construction plans, specifications, and cost estimate for CCTV camera installation.

- Webster St VMS
- Webster St Signal
- Prescott St Signal
- McDaniel High School Signal
- Jonesmore St Signal
- Multnomah St Signal
- Oregon St VMS
- Burnside St Signal
- Yamhill St Signal
- Mill St Signal
- Tibbets St (SB) VMS

- Bush St (NB) VMS
- Woodstock Blvd Signal
- Flavel St Signal

Task 10.8.3 Radar Detection Installation

Consultant shall develop construction plans, specifications, and cost estimate for radar detection installation.

- Webster St VMS Side fire radar
- Prescott St Signal Four stop bar and two advance radar systems
- Wasco St Signal Four stop bar and two advance radar systems
- Multnomah St Signal Three stop bar and two advance radar systems
- Oregon St VMS Side fire radar
- Tibbets St (SB) VMS Side fire radar
- Bush St (NB) VMS Side fire radar

Task 10.8.4 Controller Cabinet Replacement

Consultant shall develop construction plans, specifications, and cost estimate for Controller Cabinet Replacement, including signal controller cabinet prints.

- Prescott St Signal
- Sandy Blvd Signal
- Wasco St Signal
- Multnomah St Signal
- Springwater Signal

Task 10.8.5 Bicycle & Pedestrian Detection Installation

Consultant shall develop construction plans, specifications, and cost estimate for Bicycle & Pedestrian Detection installation.

- Lombard St
- Burnside St
- Yamhill St
- Mill St
- RRFB north of Division St.
- Division St
- RRFB between Center St & Francis St
- Foster Rd
- Raymond St
- Duke St
- Springwater

Task 10.8.6 Bicycle Signal Installation

Consultant shall develop construction plans, specifications, and cost estimate for Bicycle Signal installation.

• Springwater

Task 10.8.7 Speed Feedback Warning Sign Upgrades

Consultant shall develop construction plans, specifications, and cost estimate for Speed Feedback Warning Sign Upgrades.

- SB @ Webster St
- NB @ Sandy Blvd
- SB @ Hancock St
- NB @ Broadway
- SB @ Clay St
- NB @ Market St
- NB @ Holgate Blvd
- SB @ Ramona St
- SB @ Ogden St
- SB @ Crystal Springs Blvd

Deliverables/Schedule: Consultant shall provide:

- 30% ITS Plans and Cost Estimate submitted with 30% Design deliverable (Task 11)
- 60% ITS plans, special provisions and cost estimate to be included as part of Task 14.1 deliverables.
- Advance ITS plans, special provisions and cost estimate to be included as part of Task 14.2 deliverables.
- Final ITS plans, special provisions and cost estimate to be included as part of Task 14.3 deliverables.

Task 10.9 Sign Design

Consultant shall perform the design work for this task in conformance with PBOT's latest Traffic Design Manual, the MUTCD, and Oregon Supplements to the MUTCD (OAR 734-020-005).

Signing Plans must include but are not limited to the following: permanent signing plan, signing details, and signpost and data table. Signing plans will be limited to design modifications associated with new or modified traffic signal and flasher designs, median signing, and other added safety improvements.

Agency intends to construct a signing and striping project in advance of Phase 1. Consultant shall review relevant plans from that project for the same. No detailed review of existing signs and supports for compliance with the MUTCD shall be conducted for the City's signing and striping design.

For the 60% Plans, 95% Plans and 100% Plans, Consultant shall provide signing plan and sign details sheets. Signpost data table sheets will be included for the 95% and 100% plan submittals. Consultant shall develop an estimate of permanent signing costs and shall develop special provisions as required.

- 30% sign costs to be included as part of the 30% Plans Package (Task 11).
- 60% sign plans, special provisions and cost estimate to be included as part of Task 14.1 deliverables.
- 95% sign plans, special provisions and cost estimate to be included as part of Task 14.2 deliverables.
- 100% sign plans, special provisions and cost estimate to be included as part of Task 14.3 deliverables.

Task 10.10 Striping Design

Consultant shall prepare striping plans in accordance with guidance in PBOT's latest Traffic Design Manual, MUTCD, the Oregon Supplement to the MUTCD, and PBOT Standard Drawings. Permanent Striping plans must include but are not limited to roadway alignment, stationing, channelization information, tapers, centerlines, lane lines, shoulder width information, and dimensions. Striping design is expected to include: replacement of lines with repave, signal/beacon rebuilds and installations, and other safety fixes.

Consultant shall develop striping plans, special provisions and cost estimate.

Deliverables/Schedule: Consultant shall provide:

- Concept striping plans and cost estimate to be included as part of the 30% Plans Package (Task 11).
- 60% striping plans, special provisions and cost estimate to be included as part of Task 14.1 deliverables.
- 95% striping plans, special provisions and cost estimate to be included as part of Task 14.2 deliverables.
- 100% striping plans, special provisions and cost estimate to be included as part of Task 14.3 deliverables.

Task 10.11 Illumination Design (RESERVED)

TASK 11 30% DESIGN PACKAGE

This task only applies to Phase 1 improvements.

The purpose of the 30% Design is to confirm the Project footprint, the required design exceptions and any required environmental permits prior to preparing the 60%, 95%, and 100% Plans. The 30% Design will define the horizontal alignment, proposed centerline and gutter profiles, typical sections, utility notes, and anticipated design exceptions.

This task includes compiling the 30% Plans prepared under other tasks, preparation of the 30% Design Narrative (including a summary of pavement rehabilitation recommendations), 30% Estimate and construction schedule, as well as responding and finalizing work products in response to Agency review comments.

Task 11.1 Compile Design Verification Package ("DVP") (RESERVED)

Task 11.2 Prepare Draft Narrative

Consultant shall prepare a Draft Narrative for the project. The narrative must reference and address all reports, technical memoranda, and plans/drawings as specified below. Plans and drawings must be attached as appendices to the Draft Narrative in the 30% submittal package. The Draft Narrative will only address project requirements include in this Scope of Work.

- Description of the purpose, need, and design solution for the Project.
- Summary of existing conditions, (i.e., Project location, highway classification, lanes, ADT, posted speed, roadside inventory, and other design standards pertinent to the Project).
- Schedule to PS&E and construction bid letting.
- Outline of Project constraints such as topography, geology, hydrology, environmental, permits, R/W, utilities and cost (NOTE: these may be executive summaries prepared by Consultant for other deliverables associated with this Project).
- Traffic Engineering Narrative:
 - o Traffic signal requirements.
 - o Traffic signal interconnect and CCTV camera needs.

- o Signage and striping requirements.
- o Temporary traffic control requirements.
- Lighting evaluation.
- o IDVAR intersection reports.
- Access Management narrative:
 - o Identify driveways impacted by design improvements or traffic separators.
 - Describe mitigation measures.
- Survey Control Data.
- List of utility conflicts and utility contact information.
- R/W Narrative:
 - o R/W needs, including a file list and preliminary RW estimate.
 - o Jurisdiction/ownership of proposed acquisitions.
 - o Mention of any post-project relinquishments.
 - o Identification of existing encroachments and plan for resolution.
- Stormwater management needs.
- Constructability recommendations.
- Local permit needs.
- Construction cost estimate.

Deliverables/Schedule: Consultant shall provide:

• Draft Narrative submitted with Task 11.5 submittal.

Task 11.3 Prepare Design Exception Requests

Consultant shall prepare up to 2 draft ODOT Design Exception Requests for ADA curb ramps. The Design Exception Requests shall be prepared using the Agency's preferred process and format. No additional Design Exception Requests are anticipated.

PBOT design exceptions involving ADA curb ramps shall be documented using the Agency's ADA Ramp Report and will not require additional design exception requests or documentation.

Agency will provide comments on the draft Design Exception Requests within 2 weeks of the submittal to Agency. The final Design Exception Requests for the Project shall be submitted no later than 2 weeks after receipt of comments. Agency will coordinate approval of the Design Exception Requests.

Deliverables/Schedule: Consultant shall provide:

- 1 electronic copy (.pdf format) of draft Design Exception Request with 60% submittal.
- 1 electronic copy (.pdf format) of final Design Exception Request no later than 2 weeks after receipt of comments.

Task 11.4 Prepare Construction Estimate

Consultant shall prepare 30% cost estimates for the remaining elements of the Project and develop a comprehensive 30% Project Cost Estimate. The estimate must be based on standard Agency bid items and current average unit cost data from Agency Bid Catalogs. The estimate must include appropriate percentages for CA/CEI and contingencies at the 30% development stage.

Deliverables/Schedule: Consultant shall provide:

• 1 electronic copy (MS Excel® and .pdf) of 30% Cost Estimate submitted as part of the 30% submittal (tasks 11.5).

Task 11.5 Compile 30% Submittal Package

Consultant shall compile the 30% plans from all disciplines and prepare the 30% package for submittal to Agency.

Drawings submitted must be marked as "30% Plans for Review." Consultant shall prepare the Plan Title sheet in accordance with Agency standards and provide an index to the drawing set.

Deliverable/Schedule: Consultant shall provide:

- 30% submittal package within 8 months of NTP which includes 1 electronic copy of the plans, narratives, and reports for the package.
- 1 electronic copy in MicroStation and InRoads CADD files of the 30% plans.
- 1 KMZ file of proposed improvements

TASK 12 LANDSCAPE ARCHITECTURE

Task 12.1 Erosion Control Design (RESERVED)

Task 12.2 Wetland Mitigation Plans (RESERVED)

Task 12.3 Planting Plans

Consultant shall prepare 30%, 60%, 95%, 100% Bid Ready and 100% Final plans. Deliverables after the 30% submittal must have all the plan sheets that are expected to be included in the final PS&E submittal. Plan formatting should follow Agency standards and formatting.

Consultant shall coordinate with appropriate Agencies in developing planting and tree plans to fit project requirements.

Consultant shall prepare base sheets making sure that critical existing topography, proposed grades, existing and proposed utilities, existing and proposed stormwater, and existing vegetation is shown.

Consultant shall coordinate with Agency on landscaping issues. Consultant shall develop the following Roadside Development plans:

- Planting Plans to include planting details and schedules.
- All required plantings as listed in 12.4

- 30% Plans to be provided as part of Task 11.5.
- 60% Plans to be provided as part of Task 14.1.
- 95% Plans to be provided as part of Task 14.2.
- 100% Design elements shall be included in the 100% Plans, Specifications and Estimate submitted in Task 14.3.

Task 12.4 Tree Plans

Consultant shall provide necessary tree inventory and assessment required to produce plans to satisfy City of Portland Title 11 requirements for Phase 1 development. This assumes all portions of the Phase 1 project will be considered within City of Portland jurisdiction for tree impacts and permitting requirements. Consultant will coordinate with design team members as well as City of Portland representatives (Urban Forestry) to develop a permittable approach.

Deliverables/Schedule:

Consultant shall provide the following for all areas within Phase 1 limits to include:

- Tree inventory, assessment, and 60% plan as Required by City of Portland Title 11, to be provided concurrent with 60% Plans (Task 14.1).
- Onsite meeting with Urban Forestry to review and adjust for final tree plans.
- Tree Removal, Protection and Mitigation plans and report as required under City of Portland Title 11 for all areas of Phase 1 to potentially be impacted by construction plus 25-feet beyond, to be provided with 95% (Task 14.2) and 100% (Task 14.3) Plans.

TASK 13 RIGHT OF WAY ("R/W")

Consultant shall provide all labor, equipment and materials to provide R/W services on behalf of Agency as further described and outlined in this task and sub-tasks or as necessary to support Project delivery.

All R/W Services provided by Consultant shall be in conformance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, and all amendments thereto ("Uniform Act"), ODOT Right-of-Way Manual, ODOT Guide to Appraising Real Property, and City requirements.

A separate written authorization and notice to proceed is required from Agency R/W Project Manager or their designee for all R/W budget tasks/sub-tasks.

Assumptions:

• For estimating purposes, the Project will impact 85 parcels; 33 ADA TCEs only and 52 standard acquisitions.

Task 13.1 R/W Services Administration

Consultant shall coordinate work under this task with Agency R/W Project Manager or designee:

Marty Maloney, Right of Way Project Manager 1120 SW 5th Avenue, Suite 1331 Phone: (503) 865-6342

Agency will provide Consultant information regarding previous contacts with landowners that may be affected by the proposed Project. Agency will provide any previously procured title reports, relocation interviews, and notes from discussions with PBOT engineers regarding potential R/W impacts. This information will be provided for planning purposes only.

Consultant shall perform a QC review of all General Information Notices, Appraisals, Offer-Benefit Packages, Relocation Benefit Claims, and Final Reports. Consultant shall track the progress of each right of way file and provide monthly status updates to the Agency. Consultant shall organize and attend up to 10 1-hour virtual ROW status meetings with Agency.

Deliverables/Schedule: Consultant shall provide:

• Consultant will provide Agency with up to 24 monthly ROW status reports

Task C13.2 Rights of Entry (CONTINGENCY TASK)

Consultant shall contact property owners to obtain up to 20 rights of entry for permitting engineering and environmental investigations. Each owner will be given a copy of the right of entry and description or exhibit of the area needed for access. Consultant shall coordinate with Agency if condemnation for entry is necessary.

Deliverables/Schedule: Consultant shall provide:

• Deliver signed Right of Entry for each property owner affected to Agency at Agency request.

Task 13.3 Title Review

Consultant shall review the title reports to assess future complications with acquiring marketable title to the property and potential conflicts with utility encumbrances that could potentially delay the acquisition closing process. Consultant shall provide the Agency with a summary of encumbrances per parcel along with recommendations on resolving any complications or conflicts with property title and draft a Title Review Memo for the Agency's review and approval.

Deliverables/Schedule: Consultant shall provide:

Submit for Agency approval, Title Review Memos for up to 30 parcels at Agency request.

Task 13.4 Real Estate Appraisals and Appraisal Review (RESERVED)

Task 13.5 Negotiation and Offer

All R/W shall be acquired in the name of Agency. Consultant shall conduct negotiations, on behalf of Agency, in good faith and in compliance with all Federal and State laws and regulations. Consultant shall conduct negotiations for acquisition of real property based on Appraisal Review and in accordance with the Right-of-Way Manual and applicable State and Federal laws.

Consultants shall prepare and present to Agency the draft offer benefit packages for approval. All offers will be made on Agency letterhead, will include Agency and consultant contact information, and will be signed by Agency R/W Project Manager. These packages shall include but are not limited to acquisition and relocation brochures, offer-benefit letter, acquisition and relocation summary statements, copy of appraisal, map of acquisition, applicable plan sheets, instruments of conveyance and W-9 form.

Consultant shall make all offers in person or by certified mail. Proof of delivery shall be documented in the Report of Personal Interview and file. Property owners considering a donation must be informed in writing of their right to just compensation; such property owners may elect to donate by signing a donation document.

Consultant shall make no less than three attempts to acquire the R/W expeditiously by negotiation. Consultant shall provide property owners with reasonable opportunity to consider the offer (statutorily 40 calendar days) and to present information the owner believes is relevant to determining the value of the property.

- IF the offer is ACCEPTED, Consultant shall present a Final Report Packet covering the acquisition of R/W to Agency for final approval, payment, conveyance of title and recording. (See Task 13.11 Closings).
- IF a counteroffer is received, Consultant shall submit the proposed COUNTEROFFER (exceeding the estimate of Just Compensation) with justification and owner supplied supporting documentation to Agency for approval. If accepted see above.
- IF an acceptable agreement is not reached, then Consultant shall prepare and submit to Agency a Recommendation for Condemnation Packet 19 weeks prior to PS&E. (See Task 13.10 R/W Condemnation).

Consultant shall maintain written diaries of contact with property owners and tenants to record events such as – delivery of required notices, efforts to achieve amicable settlements, owner's suggestions for changes in plans, and responses to owner's counterproposals. Consultant shall clear any encumbrances indicated on the Title Review Memo approved by Agency.

Assumptions:

- Consultant will negotiate up to 85 files; 33 ADA TCEs only and 52 standard acquisitions.
- Agency may elect to complete some or all negotiations in-house.
- Copies of all file documents will be retained by Consultant for 7 years or for such period as may be necessary to resolve any pending matters.

Deliverables/Schedule: Consultant shall provide:

- Draft Offer Packet for review for each file within 2 weeks of receipt of Agency's determination of Just Compensation.
- Final draft Offer Packet for review and signature within 1 week of receipt of Agency comments.
- Documentation of Offer Packet sent certified mail and regular mail or hand delivered for each file within 7 calendar days of appraisal recommendation for offer.
- Counteroffers with justification letter for review/approval by Agency.
- Final Report or R/C packet See Tasks 10.10 & 10.11, as applicable.

Task 13.6 Relocation (RESERVED)

Task C13.7 R/W Condemnation Support (CONTINGENCY TASK)

Consultant shall, after a good faith effort has been made to acquire R/W at Agency's determination of Just Compensation, attempt to negotiate an approved administrative settlement. Consultant shall not advance the time of condemnation, or defer negotiations, condemnation, or the deposit of funds with the court, or take other coercive action in order to induce an agreement on the price to be paid for the property (49 CFR 24.102(h)).

Agency may initiate Condemnation proceedings and perform closings as appropriate. Consultant shall provide needed Condemnation support to Agency until all files are settled or resolved through trial proceedings.

If settlement with the property owner is NOT reached, Consultant shall accomplish the following tasks:

- Prepare and submit Recommendation for Condemnation for up to 10 files in accordance with the ODOT Right-of-Way Manual 19 weeks prior to Project PS&E.
- With Agency authorization, send Final Offer Letter to the property owner for up to 10 files in accordance with the ODOT Right-of-Way Manual.
- Support and assist Agency (limited to the hours estimated) with mediation and condemnation proceedings for up to 5 files and assist property owner with necessary relocation according to the ODOT Right-of-Way Manual as required by Agency.

Deliverable/Schedule: Consultant shall provide:

- Recommendation for Condemnation 19 weeks prior to PS&E submittal.
- Final Offer Letter to the property owner.

Task 13.8 Closings

Closings and related Services include but are not limited to satisfaction of liens, calculation of final settlement figures and preparation of closing documents, except that no deed, conveyance document or agreement obtained

by Consultant will be binding UNTIL IT HAS BEEN APPROVED IN WRITING BY Agency. It is assumed that title clearing efforts will be needed on up to 30 files.

Consultant shall submit closing packets to Agency for payment. All documents with original signatures or private identifying information shall be physically delivered to Agency upon generating Final Report.

Agency prefers property owner payment by ACH. Consultant will need to provide most recent ACH form and W9 as part of the offer packet. If denied by property owner, a physical check can be completed.

Agency will review the packet, request corrections or amendments, or close the transaction and make final payment.

Deliverable/Schedule: Consultant shall provide:

• A Final Report Packet for each parcel file after signed property conveyance documents/agreements are obtained no later than 4weeks prior to Project PS&E date. If requested following Agency review, provide corrections and amendments promptly.

Task 13.9 R/W Coordination during Construction (RESERVED)

Task C13.10 Additional R/W Files (CONTINGENCY TASK)

Consultant shall provide complete R/W Services for 10 additional R/W files as identified during the 30% Phase of the Project. For each authorized additional file, Consultant shall provide deliverables as per the requirements of the following tasks: 2.6, 13.3, 13.5, 13.6, 13.7, 13.8, 13.10, 13.11 and 13.12.

Deliverables/Schedule: Consultant shall provide:

• All deliverables to be submitted on the same schedule as identified for tasks 2.6, 13.3, 13.4, 13.5, 13.6, 13.7, 13.8, 13.10, 13.11 and 13.12.

TASK 14 PLANS, SPECIFICATIONS & ESTIMATE (PS&E)

The purpose of this task is to compile plan development at 60%, 95%, and 100% milestone deliverables to provide Agency an opportunity to review comment and provide direction on work.

Consultant shall compile the milestone deliverables performed under other tasks. Below are the standards that will be followed as part of the design of this project:

- Agency agrees and will verify that the installation of traffic control devices shall meet the warrants prescribed in the "Manual on Uniform Traffic Control Devices and Oregon Supplements".
- All plans and specifications shall be developed in general conformance with the current Agency standard plans and details and the current 2020 City of Portland Standard Construction Specifications" and/or guidelines provided.
- 30-60-95-100 Design Review Checklist.
- The Drafting Checklist <u>Documents | Engineering Services | Portland.gov.</u>

Upon completion of the 30% design and receipt of the comments from City, Consultant shall complete the final design that shall include 60%, 95%, and 100% Plans, Specifications, and Estimate (PS&E) submittals.

Consultant shall coordinate all submittals with Agency and provide the necessary copies and transmittals for Agency review. Consultant shall respond to and update the plans as a result of review comments at each design review stage. The Schedule will include a 4-week 60% review, a 4-week 95% review, and a 2-week 100% review by Agency.

Quality Control Checks

Consultant shall provide a QC Verification Letter to PBOT accompanying the Consultant deliverables, on Consultant letterhead, with project specific statements attested by the Principal of Consultant's firm and by the Consultant's Oregon licensed professional engineer(s) who performed the Quality Control reviews describing that Consultant performed a Quality Control check on the deliverables, including the following:

- Review for conformance with project design criteria, legibility, completeness and compliance with regulatory and code requirements.
- Calculations checked for accuracy, precision and methodology.
- Drawings checked for accuracy, completeness, and legibility and in PBOT approved format(s).
- Specifications, quantities and estimates checked for accuracy and with supporting backup.
- Earthwork quantities checked using digital terrain modelling, average end area method or methods of equivalent accuracy.
- Consultant's Quality Control review shall verify compliance with the following requirements:
 - o AASHTO, MUTCD and other applicable standards
 - o PBOT Design Items <u>30-60-95-100 Design Review Checklist</u>.
 - o PBOT SSL Checklist
 - PBOT Standard Drawings and Standard Specifications https://www.portlandoregon.gov/transportation/article/668196
 - o https://www.portlandoregon.gov/transportation/53295
 - o PBOT ADA Design and Construction Standards ADA Page | Portland.gov
 - o ODOT Curb Ramp Design Checklist
 - o https://www.oregon.gov/odot/Forms/2ODOT/7345184.pdf

Consultant's QC submittal shall include a consolidation of prior review comments along with a comment log tracking responses and resolutions. Consultant shall prepare and present 95% plans to Project Team. The purpose of the meeting is to identify any design and utility conflicts and show that Consultant has applied reasonable effort to resolve all issues identified during the 60% review.

Task 14.1 60% Design

Task 14.1.1 Compile 60% Design Package

Consultant shall compile the 60% Plans performed under other tasks.

Number of sheets shown in parenthesis (Scale based on 22"x34" sheet size):

- 60% Roadway Plans; Specs and Estimate
 - o Title Sheet (1) Not to Scale (NTS)
 - o Index and List of Std Drawings (1) NTS
 - Sheet Layout Key (1)
 - o Typical Sections (10)
 - o Details (10)
 - o Curb Ramp Grading Details (180)
 - o Alignment and RW Sheets (70) (1"=20")
 - o General Construction Plan Sheets (70) (1"=20")

- o Profile Sheets (70) (1"=20")
- o Paving Plans (70) (1"=20')
- 60% Traffic Structures Plans; Specs and Estimate
- 60% Retaining Wall Plans; Specs and Estimate
- Wall Location Sheet
- 60% Roadside Development Plans; Specs and Estimate
- 60% Erosion Control Plans; Specs and Estimate
 - o Erosion Control Plans (70) (1"=20")
 - o Erosion Control Detail Sheets (3) NTS
- 60% Hydraulics/Utilities Plans; Specs and Estimate
 - o Drainage Plans (70) (1"=20')
 - o Drainage Profiles (60)
 - o Drainage Details (4)
- 60% Traffic Control Plans and typical traffic control details (up to 12); Specs and Estimate
- 60% Sign Plans (32); Specs and Estimate
- 60% Striping Plans (34); Specs and Estimate
- 60% Signal Plans; Specs and Estimate
- 60% ITS Plans; Specs and Estimate

The estimated total number of plan sheets for this Project is 1,000.

Engineer's Estimate

Consultant shall prepare the Engineer's Estimate in Excel format using Agency's Project bid items historical bid prices. Consultant shall keep the Estimate confidential and distribute it only as directed by Agency.

Deliverables/Schedule: Consultant shall provide 60% PS&E plans to the Agency for review and comment within 12 weeks of reconciliation of Agency comments on the 30% submittal:

60% PS&E: Vertical Alignment established

- Electronic upload of submittal and comment responses in RoadRunner.
- 1 11x17 set of 60% Design plans in Adobe Acrobat (.pdf) format.
- The 60% tab of the 30-60-95-100 Design Review Checklist.
- The Drafting Checklist <u>Documents | Engineering Services | Portland.gov.</u>
- 60% construction cost estimate in Adobe Acrobat (.pdf) format.
- 1 construction schedule (1 electronic copy).
- 1electronic set of special provisions in Microsoft Word format.
- Quality Control Verification Letter signed by Engineer of Record.
- Summary of Design Exception Status.
- ADA Ramp Reports.

Task 14.1.2 Respond to 60% Design Review Comments

Agency will provide comments on the 60% Plans. Consultant shall resolve issues and provide a written response to the review comments.

Deliverables/Schedule: Consultant shall submit:

• 60% PS&E Comments Log showing comments and resolutions through 95% PS&E with the 95% PS&E submittal.

Task 14.2 95% Plans

Task 14.2.1 Compile 95% Plans Package

Consultant shall compile the 95% Plans performed under other tasks.

Consultant's 95% Plans must include all of the plan sheets that are intended to be in the construction bid package. The 95% Plans must be of sufficient detail to enable an independent quantity check if desired.

The number of sheets anticipated is the same as the 60% Plan list from Task 14.1.

The estimated total number of plan sheets for this submittal is 1,000.

Deliverables/Schedule: Consultant shall provide 95% PS&E plans to the Agency for review and comment within 12 weeks from reconciliation of 95% Agency review comments.

95% Constructability Review Plans: Plans Complete, biddable, and buildable.

- Electronic upload of submittal and comment responses in RoadRunner.
- 1 full-size set of 95% Design plans in Adobe Acrobat (.PDF) format.
- The 95% tab of the <u>30-60-95-100 Design Review Checklist</u>.
- The Drafting Checklist Documents | Engineering Services | Portland.gov.
- Earthwork quantities checked using digital terrain modelling (DTM), average end area method or methods of equivalent accuracy. If using DTM provide files in all files in MicroStation/InRoads format, file .dgn, .alg, .dtm and all CED cogo points.
- All finish grade and subgrade dtm's.
- 95% construction cost estimate.
- 1 Construction Schedule (one electronic copy).
- 1 electronic set of special provisions in Microsoft Word format.
- Provide files in all files in MicroStation/InRoads format, file .dgn, .alg, .dtm and all CED cogo points necessary to perform the peer review.
- 95% plans Quality Control Check presentation to the Project Team with design complete, all major issues resolved. The QC check meeting will be scheduled to coincide with the 95% submittal date.
- Quality Control Verification Letter signed by Engineer of Record.
- Design Exception Approvals.

Task 14.2.2 Respond to 95% Design Review Comments

Agency will provide comments on the 95% Plans. Consultant shall resolve issues and provide a written response to the review comments.

Deliverables/Schedule: Consultant shall submit:

• 95% PS&E Final Comments Log showing comments and resolutions through 100% PS&E within 3 days of the due date for 100% PS&E review comments.

Task 14.3 100% Design

Task 14.3.1 Compile 100% Bid Ready Design Package

Consultant shall update the design elements to reflect review comments and changes from the 95% Plan review, bring the design level to 100% Plans suitable for advertisement and bidding, and submit to the Agency for formal review. Consultant shall:

- Update Plans and add detail to address comments on the 95% Plans.
- Update Construction Schedule.
- Update cost estimate to address comments on the 95% Plans.
- Update specifications to address comments on the 95% Plans.
- Review utility impacts, and property impacts for conformance with R/W negotiations (if needed).

Deliverables/Schedule: Consultant shall incorporate review comments from 95% PS&E plan and re-submit 100% PS&E plans to the Agency for review within 12 weeks of reconciliation of 95% Agency review comments. The Agency will review and return plans following the formal review.

100% Bid-Ready Plans: Constructability comments incorporated for final review

- Electronic submittal and comment responses in RoadRunner.
- 1 full-size set of 100% Design plans in Adobe Acrobat (.pdf) format.
- The 100% tab of the 30-60-95-100 Design Review Checklist.
- 1 electronic set of the special provisions in Microsoft Word format.
- 100% construction cost estimate.
- 1 Construction Schedule.
- Quality Control Verification Letter signed by Engineer of Record.

Task 14.3.2 Respond to 100% Design Review Comments

Agency will provide comments on the 100% Plans. Consultant shall resolve issues and provide a written response to the review comments.

Deliverables/Schedule: Consultant shall submit:

• 100% PS&E Final Comments Log showing comments and resolutions through Final PS&E within 3 days of the due date for Final PS&E review comments.

Task 14.4 100% Final Submittal Package (Stamped and Signed)

Task 14.4.1 Compile PS&E Submittal Package

Consultant shall incorporate 100% review comments and submit final stamped and signed plans to Agency for construction contract advertisement.

Deliverables/Schedule: Consultant shall incorporate review comments from 100% Bid Ready plan review and submit final (100%) stamped and signed PS&E plans to the Agency for construction contract advertisement within 12 weeks of reconciliation of 100% Agency review comments.

100% Final Plans: Stamped plans

• Electronic submittal and comment responses in RoadRunner.

- 1 full-size set of final design plans in Adobe Acrobat (.pdf) format.
- Electronic files in MicroStation (.dgn) Design File format. The MicroStation design files shall be kept on their original coordinate base. Level names that currently exist shall remain. New logical level names may be added as needed. All necessary MicroStation resource files (font libraries, line styles, etc.) shall be included with the returned set. File structure is to be organized so that the CADD operator can open the disk, go to a specific plan sheet and print the plan sheet in the final condition without having to reattach or move reference files. All files in MicroStation/InRoads format, file .dgn, .alg, .dtm and all CED cogo points.
- Final construction cost estimate.
- 1 electronic set of the special provisions in Microsoft Word format.
- 1 Construction Schedule.
- Quality Control Verification Letter signed by Engineer of Record.

Task 14.4.2 Preparation of eBIDS Handoff Package (RESERVED)

Task 14.5 Construction Survey Handoff

- Consultant shall meet with a representative of PBOT's Survey Section prior to commencing final design to discuss electronic data files that will be needed for construction staking.
- Prepare electronic data files for construction staking with final PS&E. Design files to be provided will include design DTM, InRoads geometry, design file used to create DTM file, and others as specified in Task 4.1.4.
- Prior to full file transfer, Consultant shall provide staking data for one intersection so Survey Section can confirm that the appropriate information is included.

Deliverables/Schedule: Consultant shall provide:

- Separate survey stationing and file for each curb alignment and tied to centerline stationing.
- Crown lines, gutter lines, top of curb lines, backs of sidewalk and berm lines.
- Valley gutters and surface elevation of catch basins.
- Driveways and wheelchair ramps.
- Property lines, easements, work limits.
- Utility features including water lines, sewer lines, underground power and phone lines, and sawcut lines.
- Structures such as retaining walls, bridges, buildings and build doorways etc.
- Any additional features (concrete pads, tree wells, light pole bases, and traffic signals) that need to be staked.
- Horizontal curves within alignments need to be tangent curves, where incoming and outgoing tangents are perpendicular to the curves radius.
- A .dgn file representing the above features separated on discrete levels is required.
- A comma delineated ASCII file or "points list", of the features in the .dgn file is required in Point Number, Northing, Easting, Elevation, Description, (P,N,E,Z,D) format.
- A text file of profile information for crown lines, gutter lines, backs of sidewalk, and berm lines.
- Field Notes or Sketches showing location of each Survey Control Point.

• Surveying/Mapping work performed for the City of Portland must be referenced to the horizontal and vertical coordinate systems identified in Task 2.

TASK 15 BID AND AWARD ASSISTANCE

Task 15.1 Pre-bid Meeting (RESERVED)

Task C15.2 Questions during Bidding (CONTINGENCY TASK)

Consultant's Project Manager, or Consultant's designee(s) approved by Agency, shall answer questions regarding the bid documents and bid process from Agency. Consultant shall perform these Services in accordance with Agency procurement policies and procedures, administrative rules and statutes. Consultant shall, during the bidding process, manage the communications with Agency's construction office.

Deliverables/Schedule: Consultant shall provide:

• Written log of questions and responses received from Agency Construction office 5 business days after bid opening.

Task C15.3 Addenda to the Bid Documents (CONTINGENCY TASK)

If authorized via NTP from APM, Consultant shall prepare up to 2 bid addenda to provide interpretation of construction documents. Consultant shall prepare addenda within Agency procurement policies and procedures, administrative rules and statutes.

Consultant shall prepare and deliver the addenda text in a Microsoft Word file. Consultant shall prepare and deliver drawings in electronic format. Consultant shall coordinate reviews of addenda by APM prior to submittal. Consultant shall not be responsible for distributing addenda to bidders. Agency will issue and distribute all addenda.

Deliverables/Schedule: Consultant shall provide:

• Bid document addenda; electronic drawings; or special provision revisions. Due within 5 calendar days from NTP unless a different timeframe is agreed to and stated in the NTP.

TASK 16 VALUE ENGINEERING STUDY (RESERVED)

TASK 17 COST RISK ASSESSMENT (CRA) (RESERVED)

TASK 18 CORRIDOR GOALS AND INVENTORY

Consultant shall build upon previous work and collate existing data developed by the Agencies.

Task 18.1 Goals, Objectives, and Priorities

Task 18.1.1 Distill Previous Work

This task will distill previous technical analysis and engagement activities. Consultant shall identify prior decision points for the technical team and emerging community goals and priorities for use in 18.1.2. Consultant shall summarize prior community engagement work and outcomes. Plans for review include:

- Corridor plans
 - o ODOT Avenue of Roses Plan
 - o PBOT 82nd Avenue Plan
 - o BPS 82nd Avenue Redevelopment Analysis

- Jade District Vision
- Transit Analysis
 - o Get Moving 2020
 - TriMet delay dashboard (Nelson\Nygaard and TriMet versions)
 - o PBOT Rose Lanes Plan
 - PBOT Rose Lanes Implementation (design and operations tradeoffs of different transit configurations)
 - o Powell/Division
 - Enhanced Transit Corridors
- Traffic
 - Summary of prior traffic findings
- Safety
 - PBOT Corridor Atlas and Safety Analysis: Agency to provide crash data for the most recent 5-year period. It is assumed the data will be in format suitable for use in Excel, and Agency will provide data definitions.
 - Agency will summarize crash data for the most recent 5-year period (complete calendar year) including crash frequency, crash severity, crash type, crashes involving vulnerable roadway users, crashes involving driveways, major contributing factors (e.g., time of the day, lighting condition, weather, impairment). Crash data will be summarized by segment (including driveway crashes) and at signalized intersections within the civic corridor only. Driveway crashes will be identified based solely on crash report data.
 - Consultant shall identify Safety Priority Index System sites based on most recent ODOT data.
 - Consultant shall summarize driveway density by segment compared to Agency standards. It is assumed Agency will provide driveway location data in a shapefile.
- Policy Framework
 - Jurisdictional Transfer documents
- Community Engagement
 - o Summarize themes heard across previous plans
- Parallel Efforts
 - o APANO Jade District
 - o R82 with Oregon Walks
 - o Metro Equitable Development

Deliverables/Schedule: Consultant shall provide within 3 weeks of NTP:

• Draft and final summary presentation of previous technical and community engagement efforts in PowerPoint format. Planning PMT will gather up to 2 rounds of comments from Agencies and appropriate committees. Planning PMT will resolve conflicting comments and provide a final set of comments to Consultant.

Task 18.1.2 Goals, Objectives and Priorities

Building on prior planning efforts summarized in 18.1.1 and regional policy objectives, Metro will lead development of shared goals for the full geography and Agency will develop goals for the Civic Corridor. Agencies will compare and combine into a set of overarching goals encompassing both the Civic Corridor and full geography.

Consultant will review goals and objectives.

Deliverables/Schedule: Consultant shall provide within 5 weeks of NTP:

• Comments on Agencies' goals and objectives documentation.

Task 18.2 Corridor Inventory

Task 18.2.1 Build Online Base Map

Agencies shall provide existing aerial and GIS data layers for the full geography. Consultant shall collate existing information into an online base map to be used as a team resource.

TriMet will collect 2022 ridership and compare to 2019 ridership; TriMet will provide a final set of ridership data to use after reconciling 2019 and 2022 data. TriMet will provide origin-destination information from HOP analysis. Metro will provide regional GIS layers. Metro will produce static maps as needed. Agency will provide safety-specific GIS layers.

No new data will be collected by the Consultant.

Base layers will be categorized by topic for ease of navigation and may include:

- Street Network (signal locations, functional classification, ADT, ROW, utility locations)
- Transit (bus and MAX stops, ridership by stop, travel times, delay, average speed, on-time performance, origins and destinations from HOP data)
- Community Demographics (equity populations, projected growth)
- Travel Patterns (origins and destinations for all users from Metro travel demand model)
- Safety (crash locations)
- Walking (sidewalks, marked crossings, pedestrian signals, flashing beacons, paths)
- Bicycling (bicycle lanes, planned bicycle lanes, paths)
- Land Use and Destinations (zoning, community destinations, approved developments)

Deliverables/Schedule: Consultant shall provide within 8 weeks of NTP:

• Online base map using ArcGIS online. Planning PMT will gather up to 2 rounds of comments from Agencies and appropriate committees. Planning PMT will resolve conflicting comments and provide a final set of comments to Consultant.

Task C18.2.2 Define Corridor Segments (CONTINGENCY TASK)

For analysis, design, and community engagement purposes, consultant shall divide the corridor into up to 5 segments based on land use, context patterns, street operations, and previous plans. Segments will be verified with Agencies and could include: Airport to NE Lombard St, 3 sections within the Civic Corridor, and SE Clatsop St to Clackamas Town Center.

Consultant shall build a CAD base of the corridor using readily available GIS or CAD data.

Deliverables/Schedule: Consultant shall provide at a time determined by Planning PMT:

• Draft and final corridor segments map and CAD base for full geography. Planning PMT will gather up to 1 round of comments from Agencies and appropriate committees. Planning PMT will resolve conflicting comments and provide a final set of comments to Consultant.

Task C18.2.3 Field Visits / Base Map Confirmation (CONTINGENCY TASK)

Consultant shall conduct spot checks of curb-to-curb widths using a measuring wheel in the field. Up to 10 field checks will be conducted based on locations where existing curb line data is questionable and where determining street widths are critical to designing an alternative.

Deliverables/Schedule: Consultant shall provide at time determined by Project PMT:

• Updated base maps reflecting field checks

Task 18.2.4 Establish Basis of Design

Consultant shall work with ODOT, TriMet, PBOT, Metro and other stakeholders to develop a basis of design document confirming the design and operations standards the Consultant shall follow as a starting point. These standards will include topics such as:

- Street design (minimum and preferred widths for lanes and sidewalks, design vehicle, U-turns, etc.)
- Street operations (design speed, target speed, design vehicle, queue lengths, etc.)
- Land use considerations (contextual overlays that allow for variations in standards)

TriMet will provide the TV Highway basis of design deliverable as a start point for TriMet and ODOT facilities. Consultant shall integrate Agency and Clackamas County standards. Consultant shall summarize standards by jurisdiction and land use context into a spreadsheet for team reference.

Deliverables/Schedule: Consultant shall provide within 10 weeks of NTP:

• Draft and final basis of design memo in Word format, including a summary of standards in a table. Planning PMT will gather up to 2 rounds of comments from Agencies and appropriate committees. Planning PMT will resolve conflicting comments and provide a final set of comments to Consultant.

Task 18.2.5 Travel Forecasting

Consultant shall develop a Methods and Assumptions memo that identifies the following elements:

- Study intersection and model extents
- Traffic analysis methodology
- Volume development assumptions
- Key model input assumptions
- SimTraffic calibration criteria
- Performance measures

Metro will complete all travel demand model runs for the existing and future no build conditions. Metro will integrate volumes from I-205 tolling outcome. Agency will provide Metro with additional network connectivity assumptions for the Civic Corridor. Consultant shall review and confirm model assumptions.

Agency will collect all traffic counts for the Civic Corridor section. Agency to provide initial balanced and factored count data for review by Consultant. Consultant shall approve count data prior to use with existing traffic analysis.

Consultant shall collect AM and PM traffic counts for up to 20 intersections and/or driveways for the sections south of SE Clatsop St or north of NE Lombard St. Consultant shall balance and factor count data to develop AM and PM existing conditions volumes.

Metro will complete diversion analysis for up to 3 lane reduction scenarios using future demand. Consultant and Agency will advise Metro on model inputs, including but not limited to link capacity and speed, and reduction

extent. Metro will provide volume difference, select link, and link volume-to-capacity ratio plots of analysis results. Consultant to evaluate accuracy of diversion model results. Consultant shall perform preliminary intersection capacity analysis using Synchro for up to 10 intersections for lane reduction evaluation.

Consultant shall develop AM and PM future no-build traffic analysis volumes for the full geography using the methodology in NCHRP 765: Analytical Travel Forecasting Approaches for Project-Level Planning and Design. Agency will review volumes prior to future no build traffic analysis. Consultant to develop future volumes for up to 1 lane reduction scenario.

Deliverables/Schedule: Consultant shall provide within 10 weeks of NTP:

- Draft and final Methods and Assumptions memo in Word format. Planning PMT will gather up to 2 rounds of comments from Agencies and appropriate committees. Planning PMT will resolve conflicting comments and provide a final set of comments to Consultant.
- Traffic counts for up to 20 intersections from SE Clatsop St to Clackamas Town Center and NE Lombard St to northern terminus

<u>Task 18.2.6 Existing and Baseline Traffic Analysis - Civic Corridor</u>

Civic Corridor:

Agency will develop AM and PM existing Synchro Model from NE Lombard St to SE Clatsop St. Consultant shall review model inputs. Consultant shall follow ODOT Analysis Procedures Manual (APM) protocols.

Consultant shall develop an AM and PM existing SimTraffic model for the Civic Corridor based on Agency's Synchro model. The model will be developed per ODOT APM and calibrated based on travel time data from RITIS.

Consultant shall perform existing conditions traffic analysis using Synchro to report intersection volume to capacity ratios (v/c) for up to 27 intersections. SimTraffic travel time (corridor and segment), queue, and delay results will be reported for up to 16 intersections. SimTraffic results will be used to inform the travel time performance evaluation under Task 18.2.9.

Consultant shall develop AM and PM future no-build Synchro and SimTraffic models for the Civic Corridor.

Consultant shall perform future no build conditions traffic analysis using Synchro to report intersection v/c for up to 30 intersections. SimTraffic travel time, queue, and delay results will be reported for up to 18 intersections. Consultant to coordinate with Agency staff on incorporating future funded projects along the corridor, which will include approximately 12 new signal/RRFB crossings.

Task 18.2.7 Existing and Baseline Traffic Analysis – Full Geography

Consultant shall develop AM and PM existing Synchro Model. The model will be developed per ODOT APM.

Consultant shall perform existing conditions traffic analysis using Synchro to report intersection v/c and queueing for transit approaches for up to 10 intersections.

Consultant shall develop AM and PM future no build Synchro models.

Consultant shall perform future no build conditions traffic analysis using Synchro to report intersection v/c and queueing for transit approaches for up to 10 intersections. Consultant to coordinate with Agency staff on incorporating future funded projects along the corridor.

Task C18.2.8 SimTraffic for Full Geography (CONTINGENCY TASK)

Consultant to develop AM and PM SimTraffic models from SE Clatsop St to Clackamas Town Center for existing conditions and future no-build. Up to 4 additional AM and PM traffic counts will be collected. Results will be reported with a revised traffic analysis results memorandum with reporting consistent with the Civic Corridor analysis.

Consultant shall develop AM and PM SimTraffic models for the northern terminus for up to 5 intersections for the existing conditions and future no-build. Results will be reported with a revised traffic analysis results memorandum with reporting consistent with the Civic Corridor analysis.

Task 18.2.9 Transit Travel Time Performance (Existing and Future no build)

Consultant shall develop a transit and auto travel time performance spreadsheet based on the spreadsheet developed for the TriMet Division Transit Project and Enhanced Transit Corridors Project. Consultant shall calibrate the spreadsheet based on existing TriMet data. TriMet will provide Line 72 run time and dwell data. Future no build transit travel times will be based on adjustments from the SimTraffic and/or Synchro models.

Consultant shall perform Vissim simulations to evaluate technology-based solutions, such as transit signal priority, dynamic phase changes and multimodal signal timing strategies. This analysis will utilize the future nobuild Vissim model developed for the Powell-Division Transit Project, covering 82nd Ave from south of Powell to north of Division. This model will be used unchanged aside from the proposed 82nd Ave alternative treatments. This analysis will serve as a bench test for potential treatments at both major and minor street intersections.

Consultant shall document all AM/PM auto and transit performance results for the Civic Corridor, northern terminus and the portion of the full geography from SE Clatsop St to Clackamas Town Center in the Draft Existing and Future No Build Conditions Traffic Analysis Results Memorandum. This memo will document the model development process, calibration results and analysis results.

Deliverables/Schedule: Prior to public outreach planned for Fall 2022, Consultant shall provide:

• Draft and Final Existing and Future No Build Conditions Traffic Analysis Results Memorandum. Planning PMT will gather up to 2 rounds of comments from Agencies and appropriate committees. Planning PMT will resolve conflicting comments and provide a final set of comments to Consultant.

Task 18.3 Needs Assessment and Opportunities

Based upon community input, Consultant will take a deeper dive into available data to support and confirm community ideas. This task will set the stage for development of alternatives that respond to community input. This task will include two steps: (1) summarizing corridor needs and (2) identifying corridor opportunities.

Corridor needs analysis will depend on public input, but may include analysis into topics such as:

- Street Network
 - Street connectivity/intersection density
 - o Driveway spacing compared to standards
 - o Traffic patterns
- Bicycling (parallel routes and access to 82nd Ave destinations)
 - o Bicycle Level of Traffic Stress
 - Bicycling demand compared to facilities
- Safety
 - Crash data (cross-tabbed based on community input)

Consultant shall conduct an evaluation of the fatalities and injuries (KABC) within the Civic Corridor to identify crash trends such as common roadway characteristics or common contributing factors. Consultant shall identify potential countermeasures to address the fatal and injury crashes and countermeasures (up to 10) that could potentially be utilized elsewhere on the corridor.

Transit

- o Bus stop conditions
- Transfers
- Walking
 - Walk isochrones around key destinations
 - o Crossing spacing integrating planned crossing improvements in Phase 1
- Greenery
 - o Trees per capita
 - o Green space (parks and recreation facilities) per capita

Consultant shall develop a toolkit of corridor opportunities by topic area that respond to identified needs. Topics might include solutions related to access management, safety, transit performance, transit comfort, walkability, bicycling, or programming.

Consultant shall identify and map environmental constraints that could affect selection of an alternative. This includes:

- 4(f) and 6(f) sites and structures that would be more than 50 years old in 2027 using DEQ Facility Profiler review
- Utility conflicts
- Hazardous materials site locations (this will be completed as part of Phase 1, task 3)

Deliverables/Schedule: Consultant shall provide within 6 weeks after Fall 2022 public engagement:

- Draft and final needs and constraints documentation, consisting of a brief, graphic summary for the corridor overall and for each of the 5 segments. Draft and final opportunities toolkit. Planning PMT will gather up to 2 rounds of comments from Agencies and appropriate committees. Planning PMT will resolve conflicting comments and provide a final set of comments to Consultant.
- Draft and final environmental constraints map.

Task 18.4 Evaluation Framework

Consultant shall confirm Purpose & Need statement and develop an evaluation framework and performance measures based upon the goals and objectives (18.1) and will include topics such as safety, economy/business support, transit performance, environmental benefit, equity advancement, cost, etc.

The framework will provide the outputs needed to weigh different transportation alternatives and include criteria needed for the Transit Alternatives Analysis. Given the length of the corridor and jurisdictions served, the framework will include a set of overall, core criteria for the full geography as well as subsets of criteria specific to the Civic Corridor.

Key elements of an effective framework include:

- Goals and objectives (defined in Task 18.1).
- Evaluation criteria, or what can be measured.

• Performance metrics, which are the results of the measurement.

The evaluation criteria and metrics will include data points that can be easily collected from the alternatives, readily available data sources, or traffic analysis performed as part of this project.

Applying the framework will include two tiers applied at different stages in the project:

- Screening/Tier 1: High-level evaluation using core criteria applied to first draft of alternatives. Tier 1 screening criteria are typically framed as "yes/no" questions where an alternative needs to meet certain conditions to advance.
- Evaluation/Tier 2: Detailed evaluation using core and secondary criteria applied to refined alternatives. Tier 2 evaluation criteria typically involve more detailed technical data analysis to help illustrate tradeoffs for alternatives.

To test the criteria and outcomes, Consultant shall develop cross-section ideas for each segment and apply the tier 1 criteria. Based on how the draft framework performs, Consultant shall revise into a final framework.

As part of this framework testing process, Consultant shall confirm the modes of transit under consideration for the Transit Alternatives Analysis.

Deliverables/Schedule: Consultant shall provide within 10 weeks after Fall 2022 public engagement:

- Draft and final evaluation framework in Excel plus documentation memo. Planning PMT will gather up to 2 rounds of comments from Agencies and appropriate committees. Planning PMT will resolve conflicting comments and provide a final set of comments to Consultant.
- Draft and final mode confirmation memo. Planning PMT will gather up to 1 round of comments from Agencies and appropriate committees. Planning PMT will resolve conflicting comments and provide a final set of comments to Consultant.

TASK 19 DEVELOP CORRIDOR ALTERNATIVES (ROUND 1)

Consultant shall develop transit concepts for the full geography and transportation alternatives for the Civic Corridor.

Task 19.1 Transit Corridor Concepts

Task 19.1.1 Alignment and Termini

Consultant shall conduct a high-level terminus feasibility assessment for the northern terminus of the Transit Alternatives Analysis project. The analysis will assess the market for transit using demographic, land use, and origin-destination data provided by TriMet and the Metro regional travel demand model. Potential north termini could include Cully Triangle, Parkrose MAX, Cascades Station MAX, or the airport.

The southern terminus of the transit project is expected to be Clackamas Town Center. Consultant shall evaluate routing options through Clackamas Town Center during non-holiday season and the terminus at Fuller Rd Park and Ride during holidays.

Deliverables/Schedule: Consultant shall provide in advance of Transit Solutions Workshop (Task 19.1.4):

• Draft and final map of potential alignments and termini locations. Planning PMT will gather up to 1 round of comments from Agencies and appropriate committees. Planning PMT will resolve conflicting comments and provide a final set of comments to Consultant.

Task 19.1.2 Station Locations

Consultant shall review a preliminary list of station locations provided by Planning PMT. Consultant will provide comments based on information collected in task 18.2 including existing stop-level boardings, surrounding land use, ROW availability, walk/bike access, alignment with other planning efforts, and optimal station spacing.

Station locations shall include a profile of transit center locations (Clackamas Town Center, Parkrose Transit Center, 82nd Ave MAX) including capacity, usage, and physical conditions developed by Planning PMT.

Deliverables/Schedule: Consultant shall provide in advance of Transit Solutions Workshop (Task 19.1.4):

• Comments on draft and final station locations map and list, including transit center profiles.

Task 19.1.3 Operating & Capital Assumptions

Consultant shall identify high-delay locations for transit priority treatments; this initial list will be refined in Task 19.1.4. TriMet shall provide the Consultant with unit cost estimates for transit priority treatments based on local agency experience, and Consultant shall review and update based on national experience with similar treatments.

TriMet shall provide the Consultant with operating assumptions for bus service, including bus operating costs, frequency, span of service, vehicle type, and other considerations such as power source. Consultant shall review assumptions and estimate overall operating and maintenance unit costs for bus service using these inputs. Consultant shall calculate necessary bus fleet size and average/backup percentage needed to meet operating assumptions.

Deliverables/Schedule: Consultant shall provide in advance of Transit Solutions Workshop (Task 19.1.4):

• Draft and final table of capital and operating unit cost assumptions. Planning PMT will gather up to 1 round of comments from Agencies and appropriate committees. Planning PMT will resolve conflicting comments and provide a final set of comments to Consultant.

Task 19.1.4 Transit Solutions Workshops

Consultant shall convene and lead up to 5 interagency, interdisciplinary workshops to collaboratively define a set of feasible transit alternatives for the full geography that can be integrated into the Civic Corridor alternatives.

Workshops will be 2 hours in length and will cover different geographies:

- Clackamas Town Center terminus performance, transfers, and considerations
- SE Clatsop St to Clackamas Town Center, covering ODOT jurisdiction and southern terminus routing
- Civic Corridor (NE Lombard St to SE Clatsop St) this section may be split into two workshops
- Airport to NE Lombard St, to consider northern termini locations and alignments.

The workshops will use data gathering and traffic analysis from Task 18 plus initial community engagement results to help define where transit priority treatments are reasonable and feasible for inclusion in the conceptual alternatives. Concepts should include a range of transit priority improvements including but not limited to: exclusive center running transit lanes, single-lane swap transit lanes, Business Access Transit Lanes (BAT lanes), queue jumps, signal priority treatments, bus stop relocations and/or consolidation.

Consultant shall prepare base maps and other supporting graphics to facilitate the workshop discussions. Consultant shall provide previous traffic analysis including transit travel time savings. Participation in each workshop will vary depending on jurisdiction and discipline needs. Representation from planning, civil engineering, and traffic engineering/signal design will be needed from Consultant. Agencies will handle meeting

logistics including invitations and securing the location. Workshops are tentatively planned to be in-person with virtual participation options (i.e., "hybrid"), but this is subject to change depending on local health authority guidance related to COVID-19. Consultant shall compile notes in a summary memorandum to distribute to the Project PMT.

Deliverables/Schedule: Consultant shall provide in advance of Task 19.2 (anticipated to be no later than December 2022):

- Draft and final workshop materials.
- Draft and final workshop summary memo. Planning PMT will gather up to 1 round of comments from Agencies and appropriate committees. Planning PMT will resolve conflicting comments and provide a final set of comments to Consultant.

Task 19.1.5 Conceptual Definition of Alternatives Memo

Consultant shall summarize the outcomes of Tasks 19.1.1 through 19.1.4 and will include a description of each conceptual transit alternative, maps of the alignment, termini, and station locations, and definition of the limits of each type of transit priority treatment considered.

Deliverables/Schedule: Consultant shall provide within 3 weeks after Task 19.1.4:

• Draft and Final Conceptual Definition of Alternatives Memorandum. Planning PMT will gather up to 2 rounds of comments from Agencies and appropriate committees. Planning PMT will resolve conflicting comments and provide a final set of comments to Consultant.

Task 19.2 Corridor Alternatives (Round 1)

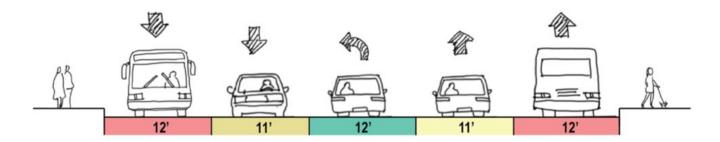
Consultant shall develop transportation alternatives that feature a significant investment in transit for the full geography and a significant investment in all modes of transportation for the Civic Corridor. Alternatives shall be based on community input, project goals, and an assessment of available data.

Task 19.2.1 Definition of Integrated Alternatives (Round 1)

Consultant shall develop three overarching transportation themes for the corridor that emphasize different goals in the evaluation framework. These themes are a first step in developing the transportation vision that will be refined throughout the project, and could include ideas such as people movement, neighborhood access, slow streets, thriving business districts, etc. Ultimately the vision will support multiple goals, but at this early stage providing themes with clear distinctions will help the community and stakeholders see how differently the street could look and operate.

The range of transit options developed in 19.1.4 and 19.1.5 will be integrated into these alternatives at a high level. For example, if side-running BRT is a concept the Planning PMT and public want to explore it would be part of one of the themes at a cross-section level of detail.

Consultant shall create up to 15 2-D cross-sections (of which 9 will be in the Civic Corridor) and up to 3 renderings at key locations in the Civic Corridor.



Consultant shall create a graphic two-pager summarizing each alternative, including potential impacts and benefits at a high level.

Up to 2 workshops will be held with a diverse group of stakeholders to discuss these alternatives at a time deemed appropriate.

Deliverables/Schedule: Prior to public outreach planned for Winter 2023, Consultant shall provide:

- Draft and final
 - o Alternative two-pager (one per alternative).
 - Up to 15 cross-sections (9 must be within Civic Corridor), including plan "bands" below each section to show diagrammatic roadway and sidewalk uses.
 - o Up to 3 renderings (within Civic Corridor).
- Up to 2 workshops.
- Planning PMT will gather up to 1 round of comments from Agencies and appropriate committees.
- Planning PMT will resolve conflicting comments and provide a final set of comments to Consultant.

Task 19.2.2 Tier 1 Evaluation

Consultant shall calculate tier 1 metrics for each alternative using the cross-sections and readily available data. Preliminary traffic analysis may be completed for up to 6 intersections, for up to 3 build alternatives for a single peak period to an initial assessment of alternatives at key intersection types. Consultant shall evaluate transit-specific metrics for the full geography and all metrics for the Civic Corridor. The evaluation will be high-level (e.g., using plus/minus signs or yes/no rating to indicate how well the alternative meets the goals) and integrated into the corridor two-pagers (19.2.1) in a graphic manner.

Deliverables/Schedule: Prior to public outreach planned for Winter 2023, Consultant shall provide:

• Draft and final evaluation table for tier 1. Planning PMT will gather up to 1 round of comments from Agencies and appropriate committees. Planning PMT will resolve conflicting comments and provide a final set of comments to Consultant.

Task 19.2.3 Traffic Analysis of Round 1 Alternatives

Civic Corridor Segment – NE Lombard St to SE Clatsop St:

Consultant shall develop and analyze AM and PM Synchro and SimTraffic models for up to three (3) alternatives. Synchro will be used to report intersection v/c for up to 30 intersections and SimTraffic to report travel time, queue, and delay results for up to 18 intersections.

South Terminus Analysis

Consultant shall develop and analyze AM and PM Synchro models for up to three (3) alternatives. Synchro will be used to report intersection v/c and HCM queueing for up to 10 intersections..

The SE Clatsop St to Clackamas Town Center Synchro models cover 3 build alternatives, each of which may include a unique Clackamas Town Center south terminus circulation option. This analysis will cover 1 additional circulation alternative as a 4th option. Circulation options are not assumed to extend beyond one signal on 82nd Ave south of Monterey Ave, east of the east CTC Monterey Ave driveway, or otherwise outside the CTC property. Up to 2 terminus concepts will be evaluated under holiday conditions where TriMet current restricts service during this period. The holiday analysis will include Synchro analysis for up to 6 intersections along with a qualitative assessment of CTC operations. Holiday volumes will be estimated for PM peak holiday conditions using data collected in 2016 for the Clackamas County Clackamas Regional Center Study.

North Terminus Analysis:

Consultant shall provide AM/PM Synchro analysis at up to 5 intersections. Agency will provide assumptions for future improvements, such as at the intersection of 82nd Way and Airport Way. Consultant shall develop Synchro models for existing conditions, future no-build and up to 2 build alternatives. Consultant shall develop future year projected AM/PM volumes for up to 5 study intersections. Transit travel time estimates will be based on a combination of RITIS, Google, TriMet and Synchro results data. Consultant will coordinate with the Port of Portland on potential operations near the terminal if necessary.

Transit Travel Time Performance (Build Alternatives):

Consultant shall use the transit travel time performance spreadsheet developed under Task 18.2.6 and the results of the Round 1 alternatives traffic analysis to estimate vehicle and transit travel time performance. Transit efficiencies from dynamic treatments, such as transit signal priority and advanced dynamic signal timing strategies, will be estimated based on analysis from the Division Transit Project and/or based on observations from treatments used with other similar BRT systems.

Consultant shall document all AM/PM traffic and transit performance results for the Civic Corridor and Clackamas County segments in a Draft Round 1 Alternatives Traffic Analysis Results Memorandum. This memo will document the key model assumptions and results.

Deliverables/Schedule: Prior to public outreach planned for Winter 2023, Consultant shall provide:

• Draft and Final Round 1 Alternatives Traffic Analysis Results Memorandum. Planning PMT will gather up to 2 rounds of comments from Agencies and appropriate committees. Planning PMT will resolve conflicting comments and provide a final set of comments to Consultant.

<u>Task C19.2.4 Traffic Analysis of Round 1 Alternatives - SimTraffic Full Geography (CONTINGENCY TASK)</u>
Consultant to develop AM and PM SimTraffic models from SE Clatsop St to Clackamas Town Center and NE Lombard St to northern terminus for up to 3 alternatives. Results will be reported with a revised traffic analysis

results memorandum with reporting consistent with the Civic Corridor analysis.

Consultant shall develop AM and PM SimTraffic models for the northern terminus for up to 5 intersections for up to 3 alternatives. Results will be reported with a revised traffic analysis results memorandum with reporting consistent with the Civic Corridor analysis.

Task 20 REFINE CORRIDOR ALTERNATIVES (ROUND 2)

Consultant shall refine and add detail to Round 1 alternatives based on Winter 2023 public engagement and input from project committees.

Task 20.1 Transit Corridor Definition

Task 20.1.1 Stations, Alignment, Termini

Consultant shall refine the alternatives (up to 3) that advance from the Round 1 screening to provide a greater level of specificity and design necessary to determine Tier 2 evaluation metrics.

For stations, consultant shall modify locations based on community and committee input. Consultant shall conduct a high-level spatial fit analysis for representative transit stations that, depending on the alternatives that advance, use the Division Transit Project station footprint as a baseline. Consultant shall recommend modifications to draft station locations identified in Round 1 depending on the fit analysis, other streetscape elements (particularly in the City of Portland Civic Corridor segment(s)), and community feedback during the Round 1 screening meetings.

For alignment and termini, Consultant shall conduct a more detailed feasibility analysis of the costs and benefits of each option using the order of magnitude costs referenced above. This will provide inputs into the Tier 2 screening (20.2.4).

Deliverables/Schedule: Prior to public outreach planned for Spring 2023, Consultant shall provide:

• Draft and final GIS layer and maps of alignment and station alternatives. Planning PMT will gather up to 1 round of comments from Agencies and appropriate committees. Planning PMT will resolve conflicting comments and provide a final set of comments to Consultant.

Task 20.1.2 Transit Corridor Operations

Consultant shall take Metro-generated outputs such as travel time and ridership from the regional travel model in Task 20.1.3 to determine refined operating cost estimates.

Consultant shall further refine and map locations for transit priority capital investments after public input.

Consultant shall develop rough order of magnitude costs for the transit alternatives based on general quantities for transit elements such as stations, signals, bus lanes, queue jumps, etc. Consultant shall apply unit costs as determined in Task 19.1.3 to generate overall cost estimates, as well as peer research from projects with similar types and amounts of transit capital investment. Consultant shall provide capital cost information in a format that aligns with the SCC Workbook categories to facilitate capital costing during the LPA phase of the Alternatives Analysis.

Deliverables/Schedule: Prior to public outreach planned for Spring 2023, Consultant shall provide:

• Draft and final GIS layer and maps of transit priority locations and table of capital and operating costs. Planning PMT will gather up to 1 round of comments from Agencies and appropriate committees. Planning PMT will resolve conflicting comments and provide a final set of comments to Consultant.

Task 20.1.3 Ridership Analysis

Metro shall use the GIS layers produced by Consultants in tasks 20.1.1 and 20.1.2 and code the detailed alternatives into the regional travel demand model. Metro will run them through the model to generate travel time estimates (which will inform Task 20.1.2) and ridership for each transit alternative. Metro will provide the Consultant with the model outputs in both spatial and spreadsheet form. Consultant shall review analysis.

Deliverables/Schedule: Prior to public outreach planned for Spring 2023, Consultant shall provide:

• Definition of each alternative in map form with locations of transit priority treatments, alignment, and station locations for Metro model runs.

Task 20.1.4 Federal Strategy

TriMet will begin coordination with FTA Region 10, confirm the likely Capital Investment Grant (CIG) track for each alternative, and the likely NEPA track for each alternative (i.e., DCE or EA). Based on initial costs and environmental constraints identified in 18.3 (4(f) and 6(f) sites, structures over 50 years old, hazardous materials sites), TriMet shall develop up to two schedules with key milestones for how the future LPA might progress through the federal process.

Consultant shall review the timelines and assumptions and provide up to 1 round of comments for TriMet to incorporate into a final funding strategy memo for the detailed alternatives.

Deliverables/Schedule: Prior to public outreach planned for Spring 2023, Consultant shall provide:

- Comments on TriMet's federal strategy memo.
- Up to three virtual meetings of no more than 1 hour to discuss federal strategy.

Task 20.2 Corridor Alternatives (Round 2)

Task 20.2.1 Corridor Alternatives (Round 2)

Consultant shall refine the first set of alternatives based on committee and public input. The Round 2 alternatives will include a greater level of specificity and design. Consultant may identify a set of baseline improvements that are common across all segments in an alternative or potentially across alternatives (e.g., pedestrian-scale lighting, ADA upgrades). Each alternative will integrate the refined full geography transit options (20.1).

Consultant shall create updated cross-sections for each alternative and segment. Consultant shall update initial 3 renderings and create up to 3 more for the Civic Corridor. Consultant shall create up to 4 corridor-level diagrams illustrating how transportation opportunities might play out for each alternative (e.g., a diagram of street circulation, a diagram of pedestrian crossings, etc.).

Inherent in street design are decisions about tradeoffs and how to use limited space. Consultant shall develop up to 6 infographics illustrating key tradeoffs. Consultant shall integrate the efforts of parallel projects (Metro's Equitable Development project, R82 streetscape and art project), if available, to present a unified set of community alternatives in updated alternative two-pagers.

Up to 2 workshops will be held with a diverse group of stakeholders to discuss these alternatives at a time deemed appropriate by the Planning PMT.

Deliverables/Schedule: Prior to public outreach planned for Spring 2023, Consultant shall provide:

- Updated alternative 2-pager (one per alternative).
- Updated 15 cross-sections (9 must be within Civic Corridor), including plan "bands" below each section to show diagrammatic roadway and sidewalk uses.
- Updated 3 renderings (within Civic Corridor).
- Up to 3 new renderings (within Civic Corridor).
- Up to 3 plan views at 10%. Each plan view at an identified critical location.
- Up to 4 diagrams.
- Up to 6 infographics illustrating street design tradeoffs.
- Up to 2 workshops.

Planning PMT will gather up to 1 round of comments on all graphics from Agencies and appropriate committees. Planning PMT will resolve conflicting comments and provide a final set of comments to Consultant.

Task 20.2.2 Corridor Safety Opportunities

Consultant shall develop an initial list of multimodal safety opportunities within the civic corridor, recommending potential countermeasures that could be implemented at specific locations and corridor-wide or systemic countermeasures based on the Round 2 alternatives and set of baseline improvements identified in 20.2.1. This list shall include proven countermeasures based on the types of crashes happening on 82nd Ave today and may identify whether those are short, medium or long term improvements. Consultant will refine the list with input from Agency into specific capital projects list. Consultant will identify Crash Modification Factors if available for proven countermeasures or provide a qualitative assessment of anticipated benefits.

Deliverables/Schedule: Prior to public outreach planned for Spring 2023, Consultant shall provide:

• Draft and final list of safety opportunities both hot spot and systemic, including applicable location(s) and documentation of basis for recommendation (crash pattern or other basis), planning-level cost (\$-\$\$\$), and potential implementation timeline (short/medium/long). Planning PMT will gather up to 1 round of comments from Agencies and appropriate committees. Planning PMT will resolve conflicting comments and provide a final set of comments to Consultant.

Task 20.2.3 Traffic Analysis of Round 2 Alternatives

Civic Corridor

Consultant shall develop and analyze AM and PM Synchro and SimTraffic models for up to 3 alternatives. Synchro will be used to report intersection v/c for up to 35 intersections and SimTraffic to report travel time, transit travel time, queue and delay results will be reported for up to 18 intersections. Analysis includes 5 intersections for the northern terminus analysis as determined from Task 19.2.3

Full Geography

Consultant shall develop and analyze AM and PM Synchro models for up to 3 alternatives. Synchro will be used to report intersection v/c and HCM queuing for up to 10 intersections.

Transit Travel Time Performance (Build Alternatives):

Consultant shall use the transit travel time performance spreadsheet from Round 1 and the results of the Round 2 alternatives traffic analysis to estimate vehicle and transit travel time performance. Transit efficiencies from dynamic treatments, such as transit signal priority and advanced dynamic signal timing strategies will be estimated based on analysis from the Division Transit Project and/or based on observations from treatments used with other similar BRT systems.

Consultant shall document all AM/PM traffic and transit performance results for the Civic Corridor and full geography in a Draft Round 2 Alternatives Traffic Analysis Results Memorandum. This memo will document the key model assumptions and results.

Deliverables/Schedule: Prior to public outreach planned for Spring 2023, Consultant shall provide:

• Draft and Final Round 2 Alternatives Traffic Analysis Results Memorandum. Planning PMT will gather up to 2 rounds of comments from Agencies and appropriate committees. Planning PMT will resolve conflicting comments and provide a final set of comments to Consultant.

Task C20.2.4 Traffic Analysis of Round 2 Alternatives - SimTraffic Full Geography (CONTINGENCY TASK)

Consultant to develop AM and PM SimTraffic models from Clatsop to Clackamas Town Center for up to 3 alternatives. Results will be reported with a revised traffic analysis results memorandum with reporting consistent with the Civic Corridor analysis.

Consultant shall develop AM and PM SimTraffic models for the northern terminus for up to 5 intersections for up to 3 alternatives. Results will be reported with a revised traffic analysis results memorandum with reporting consistent with the Civic Corridor analysis.

Task 20.2.5 Tier 2 Evaluation

Consultant shall apply Evaluation Criteria/Tier 2 to up to 3 Civic Corridor alternatives that integrate transit alternatives from Task 20.1. Consultant shall evaluate transit-specific metrics for the full geography and all metrics for the Civic Corridor. Consultant shall summarize how the evaluation results have changed between Draft Alternatives – Round 1 and Draft Alternatives – Round 2 to provide transparency to the community.

Consultant shall apply weighting to the criteria based on community priorities in each segment to create a weighted score for each alternative and help with the final decision-making step leading to a preferred alternative.

Consultant shall develop rough order of magnitude costs for the Civic Corridor alternatives based on general quantities for roadway elements such as sidewalks, signals, etc. Consultant shall apply unit costs based on local project experience, as well as peer research from projects with similar types and amounts of streetscape investment. Consultant shall present capital costs for the Tier 2 evaluation as separate amounts for elements specific to the Transit Alternatives Analysis (calculated in Task 20.1.1) and the Civic Corridor project.

Deliverables/Schedule: Consultant shall provide before Spring 2023 public outreach:

- Draft and final Evaluation Matrix for all alternatives, presented in a concise memo in Word format and a Power Point presentation. Planning PMT will gather up to 2 rounds of comments from Agencies and appropriate committees. Planning PMT will resolve conflicting comments and provide a final set of comments to Consultant.
- Draft and final order of magnitude cost estimates for each alternative in Excel format.

Task 21 PREFERRED ALTERNATIVE

Consultant shall define one preferred alternative based on Spring 2023 public engagement and input from project committees.

Task 21.1 Preferred Transit Corridor (LPA)

Task 21.1.1 Mode, Stations, Alignment, Terminus

Consultant shall conduct one final revision of station locations based on community feedback. Consultant shall make refinements to the station "kit of parts" using the Division Transit Project as a baseline. This analysis will be used to develop a typology of stations (small/medium/large, for example) that can be applied based on ridership, space available, etc. Consultant will develop visualizations for each type of station.

Consultant shall finalize the preferred alignment including one terminus each at the north and south limits of the full geography, including recommended routing through Clackamas Town Center during holiday and non-holiday seasons.

Deliverables/Schedule: Consultant shall provide prior to July 2023:

- Draft and final GIS layer and static map showing preferred alternative alignment and stations. Planning
 PMT will gather up to 1 round of comments from Agencies and appropriate committees. Planning PMT
 will resolve conflicting comments and provide a final set of comments to Consultant.
- Draft and final visualizations (up to 3) of typical project stations by type. Planning PMT will gather up to 1 round of comments from Agencies and appropriate committees. Planning PMT will resolve conflicting comments and provide a final set of comments to Consultant.

Task 21.1.2 Operations and Maintenance (RESERVED)

Task 21.1.3 Capital Costs

TriMet shall provide unit costs for fleet assumptions based on outcome of separate electric vehicle study. Consultant shall use unit costs to estimate capital costs for fleet needed to meet the operating plan of the LPA defined in Task 21.1.2.

Consultant shall develop construction cost estimates for the LPA using customary unit pricing from Agency, TriMet, ODOT, and recent similar projects. Estimates will include anticipated costs for construction, right of way acquisition, and professional services. Anticipated TriMet overhead and management costs will be estimated and provided by TriMet or excluded from the estimates. Construction costs will account for the final number of stations, station placement, and transit priority treatments. TriMet will use this information to complete the SCC workbook for the preferred alternative.

Deliverables/Schedule: Consultant shall provide prior to July 2023:

• Draft and final capital and construction cost estimate spreadsheet. Planning PMT will gather up to 1 round of comments from Agencies and appropriate committees. Planning PMT will resolve conflicting comments and provide a final set of comments to Consultant.

Task 21.1.4 Basis of Estimate and Basis of Design

Consultant shall work with ODOT, TriMet, PBOT, Metro and other stakeholders as appropriate to update the basis of design established in Task 18.2.4. This task will document key design decisions made, design exceptions needed, and cost assumptions.

Deliverables/Schedule: Consultant shall provide:

• Draft and final updated Basis of Estimate and Basis of Design report memo in Word format. Planning PMT will gather up to 1 rounds of comments from Agencies and appropriate committees. Planning PMT will resolve conflicting comments and provide a final set of comments to Consultant.

Task 21.1.5 Capital Investment Grant Justification Criteria

Consultant shall produce high-level corridor rating estimates for Capital Investment Grant (CIG) scoring categories including cost-effectiveness, economic development, land use, mobility, environmental benefits, and congestion relief using Consultant's CIG-AR spreadsheet tool. The tool uses outputs from ridership modeling (Task 21.1.2) as well as information gathered during the Corridor Inventory (Task 18.2). Consultant shall provide a brief summary memo describing the tool methodology and preliminary estimates to accompany the spreadsheet deliverable.

TriMet and Metro will coordinate with FTA Region 10 to document the LPA selection and plan for future CIG application and environmental process next steps. TriMet will develop a funding strategy for the local match.

Deliverables/Schedule: Consultant shall provide prior to July 2023:

• Draft and final CIG-AR Technical Memorandum describing the CIG-AR methodology and preliminary estimates for the LPA. Planning PMT will gather up to 1 round of comments from Agencies and

appropriate committees. Planning PMT will resolve conflicting comments and provide a final set of comments to Consultant.

• CIG-AR spreadsheet tool outputs in Excel format.

Task C21.1.6 Locally Preferred Alternative Selection Memo (CONTINGENCY TASK)

Consultant shall document the definition and justification for selecting the Locally Preferred Alternative (LPA) in a technical memorandum to the Project PMT. This memo will include the outcomes of Tasks 21.1.1 through 21.1.5 and will include a description of the preferred alternative, maps of the alignment, termini, and station locations, summary of the results of the evaluation process, and capital and operating costs for the LPA.

Deliverables/Schedule: Consultant shall provide prior to July 2023:

• Draft and Final Locally Preferred Alternative Selection Memorandum. Planning PMT will gather up to 2 rounds of comments from Agencies and appropriate committees. Planning PMT will resolve conflicting comments and provide a final set of comments to Consultant.

Task 21.2 Preferred Corridor Alternative

Task 21.2.1 Preferred Alternative – Civic Corridor

Consultant shall integrate public and committee input, as well as the Tier 2 Evaluation findings, into a preferred alternative transportation vision for the Civic Corridor. Consultant shall create updated cross-sections, renderings and diagrams for the preferred alternative.

Consultant shall refine the AM/PM Synchro and SimTraffic modeling to generate a single model as needed to reflect any changes made to the preferred alternative based on public input (e.g., the public prefers one option but with elements included from another option). Traffic analysis results for the preferred alternative will be submitted in a Draft and Final Preferred Alternative Traffic Analysis Results Memo.

Consultant shall run the preferred alternative through the evaluation framework to calculate a final scoring output.

Up to 1 workshop will be held with a diverse group of stakeholders to discuss the preferred alternative.

Deliverables/Schedule: Consultant shall provide before Fall 2023 public outreach:

- Draft and final preferred alternative cross-sections (up to 5), renderings (up to 3), diagrams (up to 4).
- Draft and final preferred alternative evaluation results, presented in a Power Point presentation.
- Draft and final Preferred Alternative Traffic Analysis Results Memo.
- 1 workshop.
- Planning PMT will gather up to 2 rounds of comments from Agencies and appropriate committees on these deliverables. Planning PMT will resolve conflicting comments and provide a final set of comments to Consultant.

Task 21.2.2 Safety-Focused Projects

Based on the preferred alternative and conceptual design (21.2.3), Consultant shall develop a list of safety project elements at specific locations in the Civic Corridor that Agency can begin designing in the immediate term. Consultant shall not provide costing of each project but shall provide a generalized cost range (\$-\$\$\$). Consultant shall include a summary of how each project will meet specific safety issues and/or crash patterns identified to be used in project justification or grant applications.

Deliverables/Schedule: Consultant shall provide before Fall 2023 public outreach:

• Draft and final spreadsheet of capital project locations and project types. Planning PMT will gather up to 1 round of comments from Agencies and appropriate committees. Planning PMT will resolve conflicting comments and provide a final set of comments to Consultant.

Task 21.2.3 Conceptual Design for Civic Corridor

Consultant shall develop the Civic Corridor preferred alternative integrating the transit LPA and identified safety elements (21.2.2) to a conceptual design level (approximately 5%). The conceptual design will include sufficient detail to define:

- Construction limits and area of potential effect
- Right of way acquisition
- Back of sidewalk
- Safety countermeasures (e.g., lighting, access management, crossings)
- Proposed cross section(s)
- Curb line, travel lane, and sidewalk configuration
- Intersection treatments
- Traffic signal improvements and transit priority treatments
- Potential planting locations or community features

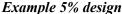
The Conceptual Design Plans will include the following sheets:

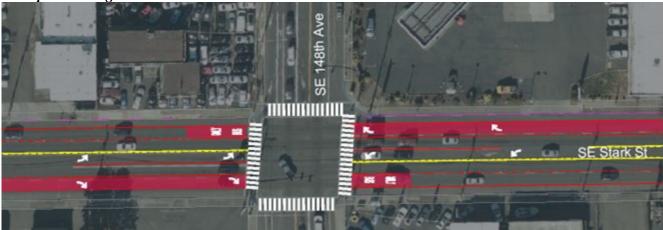
- Title sheet
- Notes, legends, and abbreviations
- Plan views with typical sections

Based on the preferred alternative, stormwater management considerations will be documented in an accompanying memo.

Consultant shall create one plan sheet for initial review by Project and Planning PMT.

At up to 10 locations (200' on either side of an intersection) determined by Project PMT, Consultant shall design to a 15% level.





Deliverables/Schedule: Consultant shall provide in advance of Fall 2023 outreach:

- Draft and final Civic Corridor 5% design example sheet. Planning PMT will gather up to 2 rounds of comments from Agencies and appropriate committees. Planning PMT will resolve conflicting comments and provide a final set of comments to Consultant.
- Draft and final Civic Corridor 5% design plan set, 1" = 60', 11 x 17 page size, and roll plot. Planning PMT will gather up to 1 round of comments from Agencies and appropriate committees. Planning PMT will resolve conflicting comments and provide a final set of comments to Consultant.
- Draft and final summary maps at the corridor level highlighting design elements. Planning PMT will gather up to 1 round of comments from Agencies and appropriate committees. Planning PMT will resolve conflicting comments and provide a final set of comments to Consultant.
- Design files in Microstation and CAD
- Draft and final stormwater strategy memo. Planning PMT will gather up to 1 round of comments from Agencies and appropriate committees. Planning PMT will resolve conflicting comments and provide a final set of comments to Consultant.

Task C21.2.4 Conceptual Design for Full Geography (CONTINGENCY TASK)

Consultant shall develop plan views for the transit LPA in Clackamas County and North Terminus as determined by Planning PMT, in the same manner as described in 21.2.3.

Deliverables/Schedule: Consultant shall provide in a time determined by the Planning PMT:

- Draft and final SE Clatsop St to Clackamas Town Center 5% design plan set, 1" = 60', 11 x 17 page size. Planning PMT will gather up to 1 round of comments from Agencies and appropriate committees. Planning PMT will resolve conflicting comments and provide a final set of comments to Consultant.
- Draft and final SE Clatsop St to Clackamas Town Center Roll plot. Planning PMT will gather up to 1 round of comments from Agencies and appropriate committees. Planning PMT will resolve conflicting comments and provide a final set of comments to Consultant.
- Draft and final Full Geography 5% design plan set, 1" = 60', 11 x 17 page size, and roll plot. Planning PMT will gather up to 1 round of comments from Agencies and appropriate committees. Planning PMT will resolve conflicting comments and provide a final set of comments to Consultant.
- Design files in Microstation and CAD

Task 21.2.5 Cost and Funding

Consultant shall develop construction cost estimates for the Civic Corridor preferred alternative using customary unit pricing from Agency, TriMet, ODOT, and recent similar projects. Estimates will include anticipated costs for construction, right of way acquisition, and professional services. Anticipated Agency overhead and management costs will be estimated and provided by the Agency or excluded from the estimates. Consultant shall estimate right of way costs based on information available from Agency staff and Consultant's Phase 1 right of way work.

Deliverables/Schedule: Consultant shall provide upon request by the Project PMT:

• Draft and final construction cost tables. Planning PMT will gather up to 2 rounds of comments from Agencies and appropriate committees. Planning PMT will resolve conflicting comments and provide a final set of comments to Consultant.

Task 21.2.6 Implementation Strategies for Civic Corridor

The preferred alternative goes beyond what can be portrayed in a plan view and includes systems-level, network, and policy changes that can bring the community vision to life. Consultant shall create implementable strategy and policy recommendations for the Civic Corridor that are vetted with the TAC and public.

Topics might include but not be limited to:

- Speed management
- Safe systems (including safety elements addressed in 21.2.2)
- Transportation demand management
- Transit priority
- Noise
- Crossing spacing
- Bicycling network
- Bicycle parking
- Micromobility
- Access management
- Pedestrian-scale lighting
- Street circulation
- Parking management

Consultant shall develop a list of strategies and develop implementation steps for up to 12 strategies.

Agencies will develop content for parallel projects to be packaged with Civic Corridor Blueprint for Change, as needed.

Deliverables/Schedule: Consultant shall provide before Fall 2023 engagement:

• Up to 12 corridor strategies 1-pagers and 1 corridor strategies memo. Planning PMT will gather up to 2 rounds of comments from Agencies and appropriate committees. Planning PMT will resolve conflicting comments and provide a final set of comments to Consultant.

Task C21.2.7 Implementation Strategies for Full Geography (CONTINGENCY TASK)

Implementation strategies for the full geography will be undertaken at a time determined by the Planning PMT as described in Task 21.2.6.

Deliverables/Schedule: Consultant shall provide at a time determined by Planning PMT:

• Up to 4 corridor strategies one-pagers and one corridor strategies memo. Planning PMT will gather up to 2 rounds of comments from Agencies and appropriate committees. Planning PMT will resolve conflicting comments and provide a final set of comments to Consultant.

Task C21.2.8 Streetscape (CONTINGENCY TASK)

Consultant shall support implementation of the R82 project community streetscape and art vision for the civic corridor. Consultant shall provide guidance on technical implementation (materials, products) and graphic examples.

Consultant shall align the R82 vision with the preferred alternative and identify specific locations where community ideas can be implemented. Streetscape implementations might include wayfinding, decorative sidewalks or crosswalks, seating, art, street trees, and/or landscaping.

Agency may further define use of contingency funds based upon the findings from R82.

Deliverables/Schedule: Consultant shall provide at a time determined by Planning PMT:

- Up to 8 plan views/illustrative examples at key locations showing paving, planting, street lighting, furnishings, including 1 round of edits.
- Up to 8 section views/illustrative examples at key locations at concept level for public consumption
- Up to 6 precedent images on materiality focused on options for paving, furnishings, lighting, tree plantings, stormwater, shrub/ground cover, including 1 round of edits.
- Up to 4 meetings with the R82 team.

Task C21.2.9 Land use, Housing, Business Support (CONTINGENCY TASK)

Consultant shall provide support implementation of Metro's Equitable Development strategy at a time agreed upon by the Planning PMT. Topics addressed will include affordable housing, business retention and support, and land use. Tasks might include:

- Review planned changes to housing along the corridor, how housing costs have changed during the past several years and evaluate housing cost burdens to the community.
- Provide up to 4 case studies of housing types and mixed-use developments along similar transit corridors.
- Provide input on appropriate density and housing typologies for specific sites based upon the preferred alternative.
- Conceptual schedule for housing / mixed-used design implementation (pre-design, design, permit and construction phases).
- Site Capacity Studies (architectural / master planning conceptual drawings of select site(s).
- Conduct site-specific development feasibility analysis to evaluate current or proposed land use
 designations to understand the relationship between desired development outcomes, market support, and
 market timing.
- Provide a list of strategies that can be paired with the preferred alternative. Strategies might include affordable housing incentives, anti-displacement policies, homeowner support, city land banking, BIPOC business support programs, etc.

Deliverables/Schedule: Consultant shall provide at a time determined by Planning PMT:

- Analysis or advisement as determined by Planning PMT.
- Up to 4 meetings with the Equitable Development team.

Task 21.2.10 Phasing and Project Development

Consultant shall categorize Civic Corridor vision elements into short, medium, and long-term. Consultant shall use Tier 2 screening to identify a set of immediate-term projects that could be further designed and implemented.

Deliverables/Schedule: Consultant shall provide before initiating Task 21.3:

Prioritized list of projects for development in short- and medium-term in Excel format. Planning PMT will gather up to 1 round of comments from Agencies and appropriate committees. Planning PMT will resolve conflicting comments and provide a final set of comments to Consultant.

Task 21.3 Blueprint for Change

Task 21.3.1 Draft Report

Consultant shall develop an up to 6-page executive summary and up to 40-page draft report in In Design that relies upon graphics, maps, and diagrams to tell the story of the preferred alternative and how it meets community needs.

Report shall primarily rely on already produced graphics (infographics, plans, sections, renderings, tables).

Consultant shall produce a draft outline, draft layout page, content review draft, 1 full draft, and 1 final draft.

Deliverables/Schedule: Consultant shall provide:

- Draft and final outline of executive summary and report in Word format. Planning PMT will gather up to 1 round of comments from Agencies and appropriate committees. Planning PMT will resolve conflicting comments and provide a final set of comments to Consultant.
- Draft and final sample page layout in InDesign. Planning PMT will gather up to 1 round of comments from Agencies and appropriate committees. Planning PMT will resolve conflicting comments and provide a final set of comments to Consultant.
- Draft and final content in Word format. Planning PMT will gather up to 1 round of comments from Agencies and appropriate committees. Planning PMT will resolve conflicting comments and provide a final set of comments to Consultant.
- Draft Blueprint for Change. Planning PMT will gather up to 2 rounds of comments from Agencies and appropriate committees. Planning PMT will resolve conflicting comments and provide a final set of comments to Consultant.

Task 21.3.2 Final Report

Consultant shall revise the draft report based on feedback from the Project PMT, Planning PMT, and project committees.

Consultant shall deliver technical work as appendices in their original format (PDF of PowerPoint presentation or memo), including:

- Corridor Inventory
- Engagement summary
- Evaluation
- Implementation

Deliverables/Schedule: Consultant shall provide:

• Final Blueprint for Change and appendices in PDF format and in a packaged InDesign folder, including links and fonts within 6 weeks of delivery of consolidated comments.

TASK 22 PHASE 1 CONSTRUCTION PROCUREMENT SUPPORT

Consultant shall assist the Agency in developing and implementing a contract delivery plan for Phase 1. Consultant shall consider innovations and best practices to prioritize:

- Meeting federal funding related schedule requirements
- Minority-owned business participation in construction contracts
- Community engagement

• Project Labor Agreements and Community Benefit Agreements

The Consultant shall develop analysis and documentation supporting a recommended contract delivery mechanism.

Task 22.1 Alternative Contracting Analysis and Findings

Consultant shall prepare for and conduct a half-day workshop with Agency staff and any invited partners (i.e., community, workforce agencies, other public agencies) to assess viability of contract delivery mechanisms relative to their ability to meet Agency priorities. Consultant shall engage these entities regarding expected outcomes, requirements, processes, and timelines.

Consultant shall develop a contract findings document summarizing alternatives, compare delivery mechanisms against Agency priorities, and provide a recommended alternative.

Deliverables/Schedule: Consultant shall provide by end of Fall 2022:

- Alternative Contracting white paper detailing viable procurement options.
- Up to 3 meetings to discuss options and review white paper.

Task 22.2 Phase 1 Construction Procurement

Consultant shall assist in review of draft solicitation documents at Agency request to support scheduled Phase 1 construction contract procurement:

Consultant shall draft scope and selection criteria based on recommendations developed in Task 22.1.

Deliverables/Schedule: Consultant shall provide by Spring 2023:

Documented review comments on RFP sections.

EXHIBIT B - COMPENSATION

Definitions:

CPFF - Cost Plus Fixed Fee

FCCM - Facilities Capital Cost of Money

NBR - Negotiated Billing Rates. NBRs are fully loaded billing rates inclusive of direct salary, indirect expenses and profit.

NTE - Not to Exceed Amount

T&M - Time and Materials

A. METHOD of COMPENSATION for NON-CONTINGENCY TASKS

Payment will be made for completion of, or acceptable monthly progress on, tasks and deliverables in conformance with Contract requirements and all applicable standards. Consultant shall complete all Services and provide all deliverables as defined in the Contract. If the applicable compensation is exhausted, but Services and deliverables are not complete, Consultant shall complete the Services and provide the deliverables to Agency's satisfaction without additional compensation.

The amount payable under the Contract may be adjusted by Agency or renegotiated to:

- Reduce the NTE, Fixed-Price or Fixed-Fee amount associated with Tasks/Deliverables that were not authorized by Agency or not performed by Consultant;
- Reduce the NTE, Fixed-Price or Fixed-Fee amount commensurate with deductive amendments to reduce the risk associated with the Project or to reduce the scope of work required under the Contract;
- Increase the NTE, Fixed-Price or Fixed-Fee amount for additional Tasks/Deliverables added to the scope of work via amendment to the Contract.

{The method(s) of compensation for contingency tasks, if any, is specified in Exhibit A, Contingency Task Summary Table.}

1. Time and Materials with Not-To-Exceed (T&M)

Agency will pay Consultant for completion of Services required under the Contract on the basis of T&M, up to the NTE amount established in the Contract. Billable items include:

- Loaded Costs- the NBR (which is inclusive of profit and overhead costs); or the actual direct salary rate paid to the specific employee(s) (up to the maximum rate approved in the Contract for the employee's classification) productively engaged in work to complete the Services required under the Contract, plus profit and the approved overhead.
- **ODCs** (without mark-up) Approved travel costs (up to the rates allowed in Section B of this Exhibit) and other approved direct-non labor expenses that are not included in overhead.
- Subcontractor Costs (without mark-up, unless Agency notifies Consultant otherwise in writing) the hourly labor rates and ODCs (as described above) that have been billed to Consultant and recognized by Consultant as valid, undisputed and payable.

The dollar amount for T&M non-contingency Services is: \$11,721,167.72

B. PAYMENT OPTIONS

Payments will occur only after Agency has determined that Consultant has completed, and Agency has accepted, the required Services (including defined deliverables) for which payment is sought via a properly submitted and correct invoice.

Progress Payments for Acceptable Progress. Agency will pay Consultant monthly progress payments for actual costs, up to the Contract NTE amount, for Consultant's acceptable (and verifiable) progress on tasks and deliverables included in the invoice.

C. TRAVEL

Travel costs are allowable only if they are authorized under the Contract and if the travel is essential to the normal discharge of Agency's responsibilities and is related to official Agency business. All travel shall be conducted in the most efficient and cost-effective manner that results in the best value for the State. Personal expenses shall not be authorized at any time. The following guidelines shall apply to the Contract:

- The travel, lodging, and per diem rates referenced in this Section C are the maximums that Consultant's estimate (or reimbursement, if applicable) may be based on. Travel rates other than those referenced in this Section C may be negotiated in the Contract, however, under no circumstance shall travel, lodging and per diem rates exceed the maximums set forth by the State Controller at https://www.oregon.gov/das/Financial/Acctng/Documents/40.10.00.pdf.
- Mileage For compensation based on Cost-Plus-Fixed-Fee or Time and Materials (or Fixed Price or Price Per Unit when travel reimbursement is approved and mileage is compensated separately), all mileage approved by Agency will be reimbursed according to the rates set forth by the State Controller at https://www.oregon.gov/das/Financial/Acctng/Documents/40.10.00.pdf
 that are in effect on the date when the travel occurs.
- For compensation based on Cost-Plus-Fixed-Fee or Time and Materials, Consultant shall submit receipts for travel-related expenses billed to Agency, such as but not limited to, lodging, rental vehicles, and air fare. If lodging is shared by two or more travelers, the lodging receipt must indicate the names of any travelers on official State business who shared the room.

D. INVOICES

Consultant shall submit invoices in the format required by Agency (and with supporting documentation to substantiate charges on the invoice, including a detailed line-item breakdown of labor and ODCs by task/subtask) no more frequently than once per month. The address for invoice submittal is set forth in Exhibit J. In addition to all other applicable invoice requirements in this section D, each invoice must include the following information:

- The Agency's Contract number
- The Agency's Project number

Progress Reports: Each monthly invoice must include a progress report. The monthly progress report must cover the period invoiced and, at minimum, must:

- Describe the previous month's Project activities and the planned activities for the next month;
- For each task/deliverable identify the percentage completed during the month and the cumulative percentage completed;
- Reconcile progress of each task/deliverable with the schedule identified for each.
- Identify issues/concerns that may affect the Project Statement of Work, schedule or budget.

"Paid Summary Report"

Consultant shall complete and submit to APM <u>Paid Summary Report(s)</u> [form 734-2882] per the instructions on the form. Consultant must report payment information for all subcontractors and suppliers used under the Contract throughout the period of performance. This reporting is required for all Contracts that include subs, regardless of funding or whether or not a DBE goal or Certified Small Business Aspirational Target is assigned.

CPFF and T&M Compensation:

- Consultant shall prepare invoices based on the actual hourly rates, up to the maximums for each respective classification approved in the Contract, of the employees (or subconsultants) that performed the Services.
- Consultant shall provide documentation in each invoice to itemize all reimbursable actual labor
 costs and ODCs for which Consultant seeks reimbursement, including a breakdown by task of
 the number of labor hours for each employee, employee names and classifications. Include
 receipts for any items purchased or equipment rentals for the Project that exceed \$100. Include
 copies of all invoices, similarly detailed, from authorized subconsultants.
- Agency will reimburse Consultant for approved travel expenses incurred in accordance with Exhibit B, Section C of the Contract, if Agency has agreed to reimburse Consultant for travel expenses. For travel expense claims include receipts for lodging; rental cars, airfare.

Fixed-Price Compensation. Consultant shall prepare invoice(s) based on the payment option identified in Section B of this Exhibit:

- For Contracts using "Payment upon Full Completion" payment option, Consultant shall submit a single invoice requesting payment for the full Fixed-Price amount after all Services have been completed and all Deliverables have been accepted by Agency.
- For Contracts using "Progress Payments for Percentage of Services Completed" payment option, Consultant invoices shall be limited to an amount commensurate with the percentage of the total Services (including Deliverables) that were completed in the month invoiced.

Agency may request a full written itemization of and receipts for, but not limited to, any or all labor and direct costs billed by Consultant. Consultant shall provide written itemization and receipts to Agency within 5 business days of Agency's request. Agency will not make payment to Consultant under the applicable invoice until Agency has received all requested supporting documentation from Consultant and Agency has approved the invoiced amounts. Any overdue payments to Consultant by Agency for an approved invoice are subject to ORS 293.462.

E. PAYMENT TERMS

Payment will be made to Consultant no later than 45 calendar days from receipt of invoice completed in conformance with all contractual requirements. Agency will endeavor to notify Consultant within 10 business days of receipt of invoice regarding any necessary revisions or corrections to the invoice. If revisions are necessary, payment will be made no later than 45 calendar days from receipt of the revised invoice. Any interest for overdue payment will be in conformance with Oregon law.

F. CORRECTIVE WORK

Consultant shall complete all Services, including Deliverables, as required in the Contract to Agency's satisfaction. If Agency, using reasonable discretion, determines that the Services or associated deliverables, or both, are unacceptable, Agency shall notify Consultant in writing of the deficiency. Within 7 calendar days (unless a different timeframe is agreed to by the Parties) of receipt of the deficiency notification Consultant shall respond to Agency outlining how the deficiency shall be corrected. Consultant shall correct any deficiencies in the Services and Deliverables to Agency's satisfaction without further compensation. Agency will not unreasonably withhold payment.

G. WITHHOLDING/RETAINAGE

Agency reserves the right to initiate, at any time during the Contract, withholding of payment equal to 5% of the amount of each invoice submitted to Agency under the Contract. Agency will make final payment of any balance due to Consultant promptly upon verification of completion and acceptance of all Services by Agency and will pay interest as required on retainage.

H. PAYMENT REDUCTION

Agency, or its duly authorized agents, may audit Consultant's fiscal records, including certified payroll and overhead records at any time. If Agency finds previously undisclosed inaccurate or improper costs have been invoiced and paid, Agency will notify Consultant and seek clarification. Agency, in its sole discretion, may reduce the payment for Services by withholding the inaccurate or improper amounts from any future payment to Consultant, withhold the inaccurate or improper amounts from final payment to Consultant, or may use any other means to seek recovery of already paid but improperly calculated amounts.

I. SPECIFIC LIMITATIONS and UNALLOWABLE CHARGES

Specific Limitations

For cost reimbursement compensation such as CPFF or T&M, Consultant shall invoice Agency only for actual productive time Consultant personnel spend on Services by any level of Consultant's staff (up to the established not-to-exceed amount). Consultant's general supervisors or personnel who are responsible for more than one Agency project shall charge only for actual productive time spent directly on the Project identified in the Contract.

Agency will pay Consultant only up to the hourly rates set forth in the Contract that are commensurate with the type of Services performed regardless of the classification, title, or level of experience of the individual performing those Services. However, under no circumstances shall Consultant invoice Agency based on higher direct salary rates than the actual amount paid to its employees.

Discriminatory Pricing. Direct and indirect costs as applied to work performed under Agency contracts and subcontracts may not be discriminatory against the Agency. It is discriminatory against the Agency if employee (or owner/sole proprietor) compensation (in whatever form or name) is in excess of that being paid for similar non-Agency work under comparable circumstances.

Discriminatory Wage Rates. Pursuant to ORS 279C.520, Consultant shall comply with the prohibitions set forth in ORS 652.220. Failure to comply is a breach that entitles the Agency to terminate the Contract for cause.

Employee Discussions Regarding Compensation. Consultant shall not prohibit any of its employees from discussing the employee's rate of wage, salary, benefits or other compensation with another employee or another person and may not retaliate against an employee who discusses the employee's rate of wage, salary, benefits or other compensation with another employee or another person {see ORS 279C.520(1)}.

Unallowable Charges

Agency will not pay for direct or indirect costs that are unallowable under the provisions of <u>48 CFR Part</u> 31.

Costs or direct charges for, but not limited to, the following are not reimbursable:

- Costs for negotiation of the Contract or Contract amendments, including but not limited to proposal preparation, BOC preparation, preparation for negotiations, and negotiation of level of effort/budget.
- Costs related to disputes or E&O Claims, including but not limited to discussions, meetings and preparation of any dispute or claim related documentation.
- Mark-up on subcontractors or ODCs.
- Transfer of knowledge and information related to Key Person replacements.
- Correcting or making adjustments to incorrect or improper invoices.
- Direct compensation for items included in firm's indirect costs (unless properly credited back to indirect cost).
- Premium costs incurred as a result of working overtime or holidays. (Premium time should normally be charged to overhead. In accordance with ORS 279C.520, employees shall be paid at not less than time and one-half for all overtime worked and for work on legal holidays, except for individuals who are

excluded from receiving overtime under personal services contracts pursuant to ORS 653.010 to 653.261 or under 29 U.S.C. 201 to 209.)

J. INDIRECT COSTS; SALARY and BILLING RATE SCHEDULES

- **1. Approved cost data on file with ODOT -** If Consultant or its subconsultants have current, approved overhead, salary, or NBR rate schedules on file at ODOT, Consultant and its subconsultants will submit those approved rate schedules and any required certifications (or Agency may obtain rate schedules from ODOT) as required in subsections 2 and 3 below for use under the Contract.
- 2. Overhead Schedule If Consultant or subconsultants calculate overhead as part of their normal business practice, the overhead schedules shall be prepared and submitted in accordance with ODOT's Billing Rate Policy (as may be revised from time to time by ODOT) available at: https://www.oregon.gov/ODOT/Business/Procurement/DocsPSK/brPolicy.pdf. Consultant Certification of compliance with Federal Cost Principles is required per FHWA directive 4470.1a: https://www.fhwa.dot.gov/legsregs/directives/orders/44701a.htm. A signed https://www.fhwa.dot.gov/legsregs/directives/orders/44701a.htm.

In order to assess the adequacy of an audited overhead rate for use in fair and reasonable price negotiation, Agency and/or ODOT may evaluate a firm's financial capability, internal control structure, and overhead schedule. This includes a determination as to the applicability of historical overhead rates to the anticipated future contract period, performing financial ratio analysis, evaluating overhead account trends and utilization rates for reasonableness.

3. Salary and Billing Rate Schedules

Consultant shall, and shall cause all of its subconsultants to submit electronically to Agency the applicable rate schedules described below.

Direct Salary Rate Schedule - includes the name, classification and actual direct salary rate as approved for each employee that may be used under the Contract. This schedule is required for firms that calculate an overhead rate. This schedule will not be included in the Contract but will be retained by Agency.

Negotiated Billing Rate Schedule - may be required for Consultants or subconsultants that do not have a cognizant or acceptable independent audit for overhead rates (or do not calculate overhead as part of their normal accounting practice) and Agency determines it is in the public's best interest to negotiate specific billing rates. Instead of calculating a billing rate using a formula that applies overhead, profit, and FCCM to the direct salary rate, this schedule lists negotiated rates that are fully inclusive of profit, overhead and any cost of living or merit raises. The billing rates invoiced under the Contract must not exceed the rates per classifications listed in the schedule and may be no greater than the lowest rates charged to other public or private clients.

ODC Schedule - is an optional schedule used to list actual costs of reimbursable items that are not included in the firm's overhead rate (or that are properly applied as a credit in overhead calculation).

Approved rate schedules for Consultant and its approved subconsultants/subcontractors are not physically attached but are on file electronically with Agency. The approved rate schedules are incorporated herein by reference and shall apply for cost estimating and invoicing purposes with the same force and effect as though fully set forth herein. Consultant may obtain copies of currently approved rate schedules on file with Agency by emailing a request to Agency's Contract Administrator for this Contract.

K. RATE REVISIONS

The hourly rates (including escalations, if any) approved for use under this Contract shall remain in effect throughout the duration of the Contract unless revisions are approved by Agency. Requests for rate revisions will not be considered prior to 12 months after Contract execution. Any approved revisions to the hourly rates allowable under the Contract shall not cause an increase in the Contract NTE amount (exceptions may be approved by Agency on a case by case basis).

L. BREAKDOWN OF COSTS (BOC)

Prior to execution of the Contract or any amendments that add Services, Consultant shall prepare and submit a BOC based on the approved overhead and actual direct salary rates (and approved NBRs as applicable) for each classification to be used under the Contract. Consultant shall include names of proposed staffing in the BOC.

The BOC must include a detailed breakdown of the costs for each element of the work regardless of compensation method. The BOC must identify:

- a) the proposed staff assignments (classifications and names) and hours per task and sub-task;
- b) an itemization with documentation (estimates from vendors shall be provided upon request) to support rental equipment, flaggers, travel and other ODCs; and
- c) the estimate for Services as provided by each subconsultant that shows the assigned staff and hours per task and sub-task and itemized ODCs. Agency may ask for qualifications of any staff assigned to work on a project if they were not included in Statement of Proposal originally submitted for solicitation.
- d) the certification status of any disadvantaged business enterprise, minority-owned business, woman-owned business, service-disabled veteran-owned business or emerging small business subcontractors included in the BOC.
- e) Contingency Tasks. Amounts for any contingency tasks must be shown as a separate line-item for each task. The amount for a contingency task must include all labor, overhead, profit, and expenses for the task. Expenses for contingency tasks must not be included in an overall amount for ODCs applied to the budget for the non-contingency tasks. Enter the agreed to unit and extended amounts for contingency tasks in the Contingency Task Summary table.

Notes:

- Vendors for flagging services, testing services or other items that are not personal services
 are treated as ODCs. The breakdown of costs for ODCs is entered on Expense sheets for
 prime and subs, with the total expense for each subtask entered on BOC sheet.
- No mark-up is permitted on subconsultants or ODCs.

The final BOC agreed to by the Parties is incorporated by this reference.

EXHIBIT C - INSURANCE

All insurance required by this Contract shall be maintained with insurers with an A.M. Best Financial Strength Rating of no less than A-. Insurers must be legally authorized to transact the business of insurance and issue coverage in the State of Oregon. Consultant shall be financially responsible for all pertinent deductibles, self-insured retentions and self-insurance. Prior to beginning work and during the term of this Contract, including any extensions or warranty period, Consultant shall maintain in force at its own expense each insurance set forth below:

1.	workers' Compensation insurance in compliance with ORS 656.017, which requires subject employers to provide Oregon workers' compensation coverage for all their subject workers (Consultants with one or more employees, unless exempt under ORS 656.027).
2.	 Required by Agency □ Not required by Agency. Professional Liability insurance with a per claim limit of not less than □ \$1,000,000, or □ \$2,000,000. Any annual aggregate limits must not be less than □ \$1,000,000 □ \$2,000,000 □ \$4,000,000 □
	\$10,000,000. This insurance must cover damages to the extent caused by negligent acts, errors or omissions of Consultant and Consultant's subcontractors, agents, officers or employees related to the professional Services to be provided under the Contract. If this insurance is provided on a "claims made" basis, Consultant shall continue the same coverage for 2 years, 3 years, or 6 years after completion of the Services or for the foregoing extended period beyond Contract expiration or termination.
3.	Required by Agency Not required by Agency. Commercial General Liability insurance must be issued on an occurrence basis with per occurrence limit, or the equivalent, of not less than \$1,000,000 covering "bodily injury" and "property damage." Any general aggregate limits shall not be less than \$2,000,000 and products/completed operations aggregate of \$2,000,000.
4.	Required by Agency Not required by Agency. Automobile Liability insurance covering Consultant's business-related automobile use, with a combined single limit, or the equivalent, of not less than \$1,000,000 each accident for "bodily injury" and "property damage," including coverage for all owned, non-owned, rented or hired vehicles.
5.	Notice of change or cancellation. There shall be no cancellation or nonrenewal of the insurance coverage(s) without 30 calendar days prior written notice from Consultant or its insurer(s) to Agency, except 10 days notice for non-payment of premium. All policies and certificates of insurance, including Workers' Compensation, must include a notice of cancellation or nonrenewal clause as required under ORS 742.700 to 742.710.
6.	Certificates of Insurance. As evidence of the insurance coverages required by this Contract, Consultant shall furnish reasonably acceptable insurance certificates to Agency prior to Contract execution. Throughout the life of this Contract, Consultant shall submit updated certificates of insurance after the policy expiration date(s) indicated for the required coverages. If requested by Agency, Consultant shall provide additional insured waiver or subrogation and notice of cancellation endorsements, included with the certificate of insurance.
7.	Additional Insureds. Insurance certificates for Automobile and Commercial General Liability must include an endorsement physically attached to the certificate specifying the Agency, the State of Oregon, the OTC, the Oregon Department of Transportation, and their respective officers, members, agents and employees as Additional Insureds.

8. Subcontractors. Consultant shall: (i) obtain proof of the above insurance coverages, as applicable,

Consultant's coverage for the duration of the subcontractor's Services related to this Contract.

from any subcontractor providing Services related to this Contract, or (ii) include subcontractors within

EXHIBIT D - TITLE VI NON-DISCRIMINATION PROVISIONS

During the performance of this Contract, Consultant, for itself, its assignees and successors in interest (hereinafter referred to as the "Consultant") agrees as follows:

- a. Compliance with Regulations: Consultant shall comply with the Regulations relative to nondiscrimination in Federally-assisted programs of the Department of Transportation Title 49, Code of Federal Regulations, Part 21, as they may be amended from time to time, (hereinafter referred to as the Regulations), which are herein incorporated by reference and made a part of this Contract.
- b. Nondiscrimination: Consultant, with regard to the work performed by it during the Contract, shall not discriminate on the grounds or race, color, sex, or national origin in the selection and retention of subconsultants, including procurements of materials and leases of equipment. Consultant shall not participate either directly or indirectly in the discrimination prohibited by section 21.5 of the Regulations, including employment practices when the Contract covers a program set forth in Appendix B of the Regulations.
- c. Solicitations for Subcontracts, Including Procurements of Materials and Equipment: In all solicitations either by competitive bidding or negotiation made by Consultant for work to be performed under a subcontract, including procurements of materials or leases of equipment, each potential subconsultant or supplier shall be notified by Consultant of Consultant's obligations under this Contract and the Regulations relative to nondiscrimination on the grounds of race, color, sex, or national origin.
- d. Information and Reports: Consultant shall provide all information and reports required by the Regulations, or directives issued pursuant thereto, and shall permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Agency, ODOT, FHWA or the Federal Transit Administration (FTA) as appropriate, to be pertinent to ascertain compliance with such Regulations, orders and instructions. Where any information required of Consultant is in the exclusive possession of another who fails or refuses to furnish this information, Consultant shall so certify to Agency, ODOT, FHWA or FTA as appropriate, and shall set forth what efforts it has made to obtain the information.
- e. Sanctions for Noncompliance: In the event of Consultant's noncompliance with the nondiscrimination provisions of this Contract, Agency shall impose such Contract sanctions as it, ODOT, FHWA or FTA may determine to be appropriate, including, but not limited to:
 - (i) Withholding of payments to Consultant under the Contract until Consultant complies, and/or
 - (ii) Cancellation, termination or suspension of the Contract, in whole or in part.
- f. Incorporation of Provisions: Consultant shall include the provisions of paragraphs (a) through (e) in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Regulations, or directives issued pursuant thereto. Consultant shall take such action with respect to any subcontract or procurement as Agency, ODOT, FHWA or FTA may direct as a means of enforcing such provisions including sanctions for non-compliance: Provided, however, that, in the event Consultant becomes involved in, or is threatened with, litigation with a subconsultant or supplier as a result of such direction, Consultant may request Agency, ODOT, and, in addition, Consultant may request the United States to enter into such litigation to protect the interests of the United States.

EXHIBIT E - DISADVANTAGED BUSINESS ENTERPRISE ("DBE") PROVISIONS (Goal)

The DBE program is administered by the ODOT Office of Civil Rights ("OCR"). As the Agency is entering into this Contract under authority granted by ODOT, the DBE Provisions apply the same as if ODOT were the contracting agency.

"Consultant" and "Contractor" are hereinafter referred to as "Contractor". See sections d and i for specific documentation and reporting requirements of Contractor.

- **a. Policy and Program Authorities:** ODOT and Contractor agree to abide by and take all necessary and reasonable steps to comply with these DBE Provisions and the following, which are incorporated in this Contract with the same force and effect as though fully set forth in this Contract:
 - ODOT DBE Policy Statement
 - o ODOT DBE Program Plan, and
 - Requirements of <u>Title 49</u>, <u>Code of Federal Regulations</u>, <u>Part 26</u> Participation by Disadvantaged Business Enterprises in Department of Transportation Financial Assistance Programs.

ODOT's DBE Program authorities are set forth in the ODOT DBE Program Plan.

- b. DBE Goals: ODOT's overall goal for DBE participation is 11.6% for FHWA funded contracting and 6% (proposed) for FTA funded contracting. For FHWA funded contracting, ODOT may assign DBE Contract goals to increase participation by DBEs. For any Contract with an assigned DBE goal, Contractor shall select a portion of work available under the Contract for DBE participation. Contractor may use DBE subcontractors, suppliers, manufacturers, or Professional Services and Related Services providers to fulfill the assigned DBE Contract goal as long as the DBE is certified in the types of work selected. The assigned DBE Contract goal remains in effect throughout the life of the Contract. Dollar values of participation shall be credited toward meeting the assigned DBE Contract goal based on DBE gross earnings.
 - A separate DBE Contract goal, as set forth on page 1 of the Contract, has been assigned for this procurement.
- c. Nondiscrimination Requirement: Contractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this Contract. Contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of this DOT-assisted Contract. Failure by Contractor to carry out these requirements is a material breach of this Contract, which may result in the termination of this Contract or such other remedy as ODOT deems appropriate. Each subcontract the Contractor signs with a subcontractor must include the assurance in this paragraph (see 49 CFR § 26.13(b)).
- d. Documentation of Proposed Participation: Contractor shall document sufficient DBE participation to meet an assigned Contract goal or, alternatively, document adequate good faith efforts to do so (see 49 CFR § 26.53). All work committed to a DBE firm toward meeting the assigned participation goal must be performed under a written subcontract. The subcontract must fully describe any work committed to be performed by the DBE and shall include all required flow-down provisions of the primary Contract. Contractor must complete and submit the following documentation, as applicable:
 - 1. Subcontractor Solicitation and Utilization Report (SSUR) submitted with proposal in response to formal and informal Requests for Proposals (RFPs).
 - 2. Breakdown of Costs ("BOC") or ("BOC-NBR"), as applicable submitted prior to negotiation and execution of the Contract and each amendment that changes the scope of work and costs under the Contract. The BOC forms and BOC Requirements are available from the Internet at: https://www.oregon.gov/ODOT/Business/Procurement/Pages/PSK.aspx. The BOC or BOC-NBR must clearly list any tasks or subtasks to be performed by subcontractors (DBEs and non-DBEs), each subcontractor's Federal Tax ID and identification of any required personnel. Include in the Expense Detail tab any required equipment and supplies furnished by the DBE, any of the prime contractor's resources that will be provided for the DBE's use, and identification of any second or lower tier subcontractors with the dollar amounts for each.
 - 3. **Committed DBE Breakdown and Certification Form(s)-AE.** Required for all Contracts with assigned goals and completed prior to Contract execution and any proposed substitution. See submittal instructions on the Instructions tab of the form.

- 4. **Subcontractor Reporting:** Complete and submit an initial **Paid Summary Report** [form 734-2882] per the instructions on the form.
- e. Good Faith Efforts: Contractor shall make good faith efforts, as set forth in 49 CFR § 26.53, Appendix A to Part 26, and ODOT DBE Program Plan, to obtain and support DBE participation that could reasonably be expected to produce and maintain a level of DBE participation sufficient to meet the Contract goal. Good faith efforts are required during solicitation, upon Contract award, and continue throughout the performance of the Contract to maximize DBE participation. The Agency (or local agency when applicable) Project Manager ("APM") may request Contractor to submit evidence of good faith efforts prior to Contract execution or at any time during the course of the Contract and Contractor shall promptly submit such evidence. Contractor shall use the specific DBEs listed in the Committed DBE Breakdown and Certification form(s) to perform the work and supply the materials for which each is listed unless the contractor obtains ODOT's prior written consent to terminate and replace a DBE as provided in section j. below. Contractor shall not be entitled to any payment for work or material unless it is performed or supplied by the listed DBEs as required by this provision.
- f. Commercially Useful Function ("CUF"): Contractor is responsible to ensure the DBE performs a commercially useful function on the Contract. A DBE performs a CUF when it is responsible for execution of the work of the Contract/subcontract and is carrying out its responsibilities by actually performing, managing, and supervising the work involved. Additional detail regarding CUF requirements and other conditions for counting participation by DBE contractors is set forth in 49CFR § 26.55. The APM will review the proposed DBE participation and may provide written comments as to whether the activities and type of work identified for DBEs complies with program regulations. In those instances where proposed activity and type of work violates applicable regulations, written comments will be offered as to corrective action required in order to comply with the regulations. ODOT may perform a CUF review at any time during the performance of the Contract.
- g. Changes in Work Committed to DBE: ODOT will consider the impact on DBE participation in instances where the prime Contract is amended to reduce, or delete work committed to the DBE. In such instances, Contractor shall not be required to replace the work but is encouraged to do so to the maximum extent practicable.
- h. Prompt Payment and Retainage: Contractor shall pay each subcontractor for satisfactory performance under its contract no later than 10 calendar days from receipt of each payment Contractor receives from ODOT (or local agency when applicable) for the subcontracted work. In addition, within 10 calendar days of receipt of retainage from ODOT (or local agency when applicable), Contractor shall pay to each subcontractor the retainage that pertains to the work of that subcontractor.
- i. Reporting Requirements: Contractor must report payment information for <u>all</u> subcontractors and suppliers used under the Contract throughout the period of performance. Contractor shall complete and submit initial, interim and final Paid Summary Report(s) [form 734-2882] per the instructions included on the form.
- j. Termination of DBE Notification Requirement: Contractor shall comply with all requirements set forth in 49 CFR § 26.53 regarding termination of DBEs including, without limitation, documentation of good cause, 5-day notice to the DBE subcontractor and ODOT, DBE responses, ODOT's prior written consent of DBE termination, and replacement of DBEs. ODOT will provide such written consent only if it agrees the prime contractor has good cause to terminate the DBE in accordance with 49 CFR 26.53(f)(3).
 - **k. Remedies:** Contractor's failure to comply with these DBE Provisions and the requirements of 49 CFR Part 26 may result in one or more of the following administrative actions as deemed appropriate by ODOT: non-compliance documented in ODOT evaluation of Contractor performance, a corrective action plan prepared by Contractor, ODOT (or local agency when applicable) withholding of retainage, suspension of work, reporting of non-compliance to the federal System for Award Management ("SAM") available at https://sam.gov/SAM/, any other remedies provided under the Contract.
- I. Information/Questions: The DBE program is administered by the ODOT Office of Civil Rights ("OCR"). Questions related to the DBE Program may be sent via email to <u>ocrinforequest@odot.state.or.us</u> or otherwise directed to: Oregon Department of Transportation Office of Civil Rights ODOT Materials Laboratory Building, 800 Airport Road SE, Rm 61, Salem, OR 97301; Phone: 503-986-4350.
- m. Directory of Certified Firms: A searchable database for active certified firms (by NAICS code, NIGP code, ODOT code, certification type, location or project ethnicity goals) is available on line at: https://oregon4biz.diversitysoftware.com/FrontEnd/VendorSearchPublic.asp.

All forms, documents and CFR citations referenced or linked in these DBE Provisions are available on line at:

- Forms: https://www.oregon.gov/ODOT/Business/OCR/Pages/Forms.aspx
- Documents: https://www.oregon.gov/ODOT/Business/OCR/Pages/Disadvantaged-Business-Enterprise.aspx
- 49 CFR Part 26: https://www.ecfr.gov/cgi-bin/text-idx?c=ecfr&SID=34ea04c7ed3d45b0e41f82a5646f1c15&rgn=div5&view=text&node=49:1.0.1.1.20&idno=49

Acronyms & Definitions Applicable to Exhibit E

APM ODOT's or local agency's Project Manager

BOC Breakdown of Costs

BOC-NBR Breakdown of Costs for Negotiated Billing Rates

CFR Code of Federal Regulations
CUF Commercially useful function
DBE Disadvantaged Business Enterprise

OCR ODOT Office of Civil Rights
ODOT Oregon Dept. of Transportation

RFP Request for Proposals

SSUR Subcontractor Solicitation and Utilization Report USDOT United States Department of Transportation

COMMITTED DBE BREAKDOWN and CERTIFICATION FORM(s)

- Include the above heading,
- Consultant completes a <u>Committed DBE Breakdown and Certification Form-AE #734-5235</u> for each DBE subcontractor;
- Consultant signs and obtains DBE signature (a separate form is required for each DBE sub) and emails PDF of signed form(s) to Purchasing & Contract Specialist (PCS);
- PCS places form(s) in OCR folder, sends notice to OCR, and Includes the language below to incorporate the signed forms.

The signed Committed DBE Breakdown and Certification Form(s) is not physically attached but incorporated into this Contract by this reference with the same force and effect as though fully set forth herein. A copy of the signed Committed DBE Breakdown and Certification Form(s) has been provided to the ODOT Office of Civil Rights (for tracking purposes) prior to Contract execution.

EXHIBIT F - RESERVED

EXHIBIT G - RESERVED

EXHIBIT H - RESERVED

EXHIBIT I - ERRORS & OMISSIONS ("E&O") CLAIMS PROCESS

Exhibit I is not physically attached but is incorporated into this Contract with the same force and effect as though fully set forth herein. For purposes of this Contract, the term "Agency", as used in the E&O Claims Process, means "local public agency". The E&O Claims Process (as may be revised from time to time by ODOT) is available at the following Web address as Exhibit I:

http://www.oregon.gov/ODOT/Business/Procurement/DocsPSK/xbti.pdf

EXHIBIT J - CONTACT INFORMATION and KEY PERSONS

1. Party Contact Information.

a.1 * Agency's Project Manager (APM) Name:	Nicole Peirce
Ph:	503-823-6186
E-mail:	Nicole.Peirce@portlandoregon.gov

a.2 *: Agency Contract Administrator for contractual matters:

<u> </u>	Contract / tarrillilicitator for contractical matters.
Name:	Manh Saechao
Ph:	503-823-5055
E-mail:	Manh.T.Saechao@portlandoregon.gov

a.3 Agency's address for invoicing:

Mailing	E-Builder
Address:	
E-mail:	PBOT.E-Builder@portlandoregon.gov

b. **Consultant's Project Manager (PM) for this Contract is:

	Constitution in a journal and got (in in) for the Constitution		
Name:	TBD		
Ph:	TBD		
E-mail:	TBD		

c. Consultant's remit address for payments and contact for billings:

- COLIGUIA	Constitution of the address for paymonts and contact for binings:	
Name:	TBD	
Address:	TBD	
Ph:	TBD	
E-mail:	TBD	

^{*} Agency may change the Contract Administrator or Project Manager designation by promptly sending written notice (e-mail acceptable) to Consultant.

^{**}Any changes to Consultant's Project Manager must be approved in writing (e-mail acceptable) by Agency.