

WORK ORDER CONTRACT
Land Use/Transportation Planning

Work Order Contract # 2

Agreement to Agree # 23482

Project Name and Location: **I-5 Columbia River Crossing Partnership; Conceptual Engineering and Environmental Analysis**

This Work Order Contract ("WOC") hereby incorporates by this reference all of the terms and conditions contained in the Agreement to Agree between the Oregon Department of Transportation ("Agency") and Kittelson & Associates, Inc., ("Contractor"), effective date September 29, 2003, and all references to "Agreement to Agree" therein are deemed to be references to "Work Order Contract" for purposes of this WOC except for references to "Agreement to Agree" in the second sentence of Section 1, Effective Date and Duration, in Section 3(a), Compensation, and in Exhibit A, Section H, Travel.

No Services shall occur until this Work Order Contract is signed by all parties and all necessary State of Oregon governmental approvals are obtained, and the Notice-to-Proceed is issued by the Agency.

WOC Expiration Date: December 31, 2005

DBE Goal (Does this WOC include federal funds? Y <input checked="" type="checkbox"/> N <input type="checkbox"/>)	%
ODOT Key # (or N/A)	# N/A
The authorized Not-to-Exceed compensation for this WOC (This amount includes \$ _____ for Contingency Tasks that must receive separate NTP)	\$

STATEMENT OF WORK and SUMMARY OF ESTIMATE FOR SERVICES are attached and incorporated by this reference.

Certification: The individual signing on behalf of Contractor hereby certifies and swears under penalty of perjury: (a) the number shown on the above-referenced Agreement to Agree is Contractor's correct taxpayer identification; (b) Contractor is not subject to backup withholding because (i) Contractor is exempt from backup withholding, (ii) Contractor has not been notified by the IRS that Contractor is subject to backup withholding as a result of a failure to report all interest or dividends, or (iii) the IRS has notified Contractor that Contractor is no longer subject to backup withholding; (c) s/he is authorized to act on behalf of Contractor, s/he has authority and knowledge regarding Contractor's payment of taxes, and to the best of her/his knowledge, Contractor is not in violation of any Oregon tax laws (including, without limitation, the state inheritance tax, gift tax, personal income tax, withholding tax, corporation income and excise taxes, amusement device tax, timber taxes, cigarette tax, other tobacco tax, 9-1-1 emergency communications tax, the homeowners and renters property tax relief program and local taxes administered by the Department of Revenue (Multnomah County Business Income Tax, Lane Transit District Tax, Tri-Metropolitan Transit District Employer Payroll Tax, and Tri-Metropolitan Transit District Self-Employment Tax).; and (d) Contractor is an independent contractor as defined in ORS 670.600.

CONTRACTOR

Name/Title

Date

LEGAL Refer to Class Exemption from the Department of Justice dated June 24, 2003.

AGENCY

Rob Rickard, Manager, Purchasing & Contract Management

Date

Michael Wolfe, Manager of Statewide Delivery Project

Date

DAS Refer to Delegation 008-99b from DAS dated June 28, 2002.

23482, WOC 2, I-5 Columbia River Crossing Partnership: Conceptual Engineering and Environmental Analysis

8-3-04

EXHIBIT A
STATEMENT OF WORK, BUDGET, AND DELIVERY SCHEDULE

WOC No. 2
ATA No. 23482

**Project Name: I-5 Columbia River Crossing Partnership:
 Conceptual Engineering and Environmental Analysis**

This is a Land Use Planning Assignment

	Agency's Work Order Project Manager (WPM)		Contractor's Project Manager (PM)
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A. BACKGROUND/OVERVIEW

The Strategic Plan approved at the end of the previous phase of the I-5 Transportation and Trade Partnership found that (i) the two-lane sections of I-5 between I-205 and Fremont Bridge should be upgraded to three lanes, (ii) the I-5 Columbia River crossing should provide five traffic lanes in each direction, and (iii) one or more of these lanes should be reserved for HOV or reversible lanes. The Strategic Plan and related documents specified several "Bridge Influence Area" design options (the "BIA Options") for accomplishing these objectives. These include, but are not limited to:

- 5-lane supplemental lift-span bridge (west of existing bridge) serving southbound traffic and five lanes of northbound traffic provided on existing bridge.
- 10-lane replacement fixed-span bridge.
- 4-lane supplemental lift-span bridge serving collector-distributor function with existing bridge providing six lanes of through freeway traffic.

These bridge/freeway options are considered with and without light rail transit (LRT) and some include HOV lanes. Concept drawings exist for many of these concepts. Further, the previous studies examined No Build and Baseline concepts that were used to assess the traffic, travel time, and economic benefits/impacts of the highway/bridge improvements; including such measures as representative travel times, hours of delay, etc.

The purpose of this Statement of Work (SOW) is to assist Agency and Agency's overall project contractor in scoping and analyzing highway/bridge improvement concepts for the I-5 Columbia River Crossing

Project. The study area for this project is limited to the Bridge Influence Area (SR 500 to Columbia Boulevard) including the I-205 bridge area. This SOW is intended to accomplish the following:

- Assist the Agency in identifying and resolving the status of freeway improvement concepts and ramp configuration options examined in the Strategic Planning phase of study and identifying such concepts and options that have not yet been studied but merit study;
- Document conceptual ramp, interchange and design-related reasons for recommending continued study or screening-out bridge and freeway improvement concepts.
- Document environmental issues with the range of concepts currently under study to be used to select the concepts that will be proposed during "Scoping" to advance into the DEIS.
- Document key environmental issues that will require special attention in the DEIS.

B. PHASES AND TASKS

This section describes, on a phase and task-by-task basis, the specific activities, products, and schedule for the Contractor and Agency. Due to the nature of this project, the SOW has been divided into two phases (Phase I and Phase II) to meet the identified timelines and allow the flexibility necessary to properly address the potential gaps in available information and analysis necessary to bring all the identified concepts (existing and new) to a consistent level from an engineering, environmental, and cost perspective. The task descriptions and deliverables employ the following conventions and principles:

- Three types of deliverable products are specified in this SOW:
 - **Technical Memoranda (TM)** that provide a comprehensive analysis of an issue specified in this SOW.
 - **Working Papers (WP)** that document interim findings or methodological conclusions, or are ad hoc or informal memoranda prepared in response to questions or meetings.
 - **Meeting Reports (MR)** that are written summaries of issues, management decisions, etc., identified or resolved at the formal meetings. For meetings requiring preparation of an MR, unless stated otherwise in this SOW, Contractor shall also prepare and distribute a meeting agenda. Meeting agendas must be distributed to the Work Order Project Manager (WPM) at least two days prior to meetings unless a different timeframe is agreed to by Agency's WPM.
- Unless requested otherwise, Contractor shall provide one copy of all Technical Memoranda (TM), Working Papers (WP) and Meeting Reports (MR) to the WPM or his/her designee (a) electronically in Microsoft Word format for the Microsoft Windows NT or XP operating system and (b) in hard copy.
- Wherever a TM or WP is shown as a deliverable, only the final product is shown as the deliverable. In all such cases, Contractor shall provide a draft of the TM or WP to the WPM for a five-business day review and comment period by Agency (unless additional time is agreed to between the WPM and Contractor), and Contractor shall revise the draft TM or WP based on such comments, as appropriate, and provide the final TM or WP to the WPM.
- Depending on the needs of the study process and meeting schedules, the WPM may request Contractor to prepare a TM or WP in two or more stages. Unless otherwise approved by the WPM, Contractor shall complete the final TM or WP in the series by the due date; ensuring that Agency receives the full product in accordance with the schedule.

- MRs and agendas will only be written for formal meetings. Informal or ad hoc meetings, emails, and phone calls, unless otherwise requested by Agency or where important project/program related decisions are made or action items are assigned, unless otherwise requested by Agency or deemed important by Contractor. Contractor is not required to write detailed meeting reports for informal or on-going coordination and oversight meetings with sub-contractors where no project/program decisions are made or action items are assigned.
- Contractor shall provide regular monthly program status reports (including invoices).
- The budget shown for each task is the best estimate. However, the study process may dictate that more funding be applied to some tasks and less to others. Contractor shall monitor such needs on an on-going basis and, when needed, propose budget refinements (within the limits of the not-to-exceed amount established for this WOC) to the WPM for his/her approval on a monthly basis as part of the invoicing and status report.
- The term “days” as used in this SOW refers to business days.

PHASE 1

The purpose of Phase I is to compile and perform a strategic review of prior engineering, environmental, and stakeholder/public outreach related data, analyses, and formal and informal work products or deliverables. This information will be supplemented with new information from current, parallel activities (toll feasibility investigations and communications team) to create a comprehensive resource pool from which to assess future project needs. Understanding the content of prior and current work efforts, the Contractor will assess the quality, consistency, and interrelationship of the information to identify potential gaps, risks to the I-5 Columbia River Crossing project, and develop a strategy and work approach to complete needed engineering, environmental, and stakeholder/public efforts leading to the environmental scoping. At the end of Phase 1, the agency partners will be able to answer the following questions:

Engineering

- What is the full range of potential transportation concepts under consideration?
- What is the integrity of prior work and have the concepts been developed to a consistent and adequate level of detail?
- What gaps exist in prior work and what revisions might be required to address possible tolling options or resolve possible operational questions?
- What are the engineering needs necessary to effectively and efficiently conduct future NEPA scoping activities?

Environmental

- What is the extent and adequacy of prior environmental analyses?
- What critical gaps, inconsistencies, or subjects must be addressed to initiate NEPA scoping?
- What are possible context sensitive topics, issues, or concerns that might become part of the project's Purpose and Need?
- What additional environmental planning, analyses, or screening is required to complete future NEPA scoping?

Community/Stakeholder/Outreach

- What is the extent of prior outreach and what are key findings and observations?
- What additional efforts might be required to adequately assess necessary components of the project's Purpose and Need?
- What are the potential processes for successful outreach and what efforts are needed to support the current pre-scoping activities?
- What type of activities might be needed to seamlessly transition to future environmental scoping and NEPA analysis activities?

TASK A – PROJECT MANAGEMENT

Purpose:

This task includes day-to-day management of the project, including scheduling, monitoring, and controlling the work. In addition, all of the Phase 1 project related meetings will be administered through this task. This task includes the oversight of schedules and budgets, review of work products, and the establishment of lines of communication between the WPM, interested agencies, and the Contractor. The WPM shall oversee the work of the Contractor, and coordinate the work of Agency and other interested agencies. The Contractor Project Manager shall manage the work of the consultant team and work closely with the WPM to coordinate related tasks by others.

The Contractor shall:

Task A1: Project Management

A.1.1 Direct and supervise consultant team.

A.1.2 Coordinate with WPM, Agency, and other interested agencies.

A.1.3 Prepare and update project schedule.

A.1.4 Develop and maintain a project filing system.

Task A2: Meetings (Phase 1 only)

The Contractor will conduct the following meetings during Phase 1 of this project.

A.2.1 Prepare meeting agendas and MR as necessary.

A.2.2 Prepare for and attend bi-monthly meetings with the overall consultant team project manager, WPM, Agency, and WSDOT staff. These meetings will primarily focus on presenting materials developed through each task and for general project coordination [4 meetings for Kittelson & Associates, Inc. (KAI) staff, 2 meetings for CH2M Hill (CH), Howell Consulting (HC), and J.D. White Company (JDW), and one meeting for Parsons Brinckerhoff (PB) and Right of Way Associates (RWA)]

A.2.3 Prepare for and attend monthly internal consultant team meetings [2 meetings for KAI, CH, HC, and JDW, and one meeting for PB and RWA]. These meetings will be used for general coordination and information gathering and sharing throughout the project as well as coordination with the other consultant teams (Traffic and Communication).

Task A3: Monthly Progress Reports

A.3.1 Prepare monthly invoices and supporting data

A.3.2 Contractor shall prepare monthly progress reports that track project scope, schedule and budget, and:

- Include description of the previous month's project activities, meetings facilitated/attended, and the planned activities for the next month.
- Record of important project/program related decisions made and action items assigned during ad hoc meetings and communications (report must include dates and participants).
- Identify issues and/or concerns that affect the project SOW, schedule, and/or budget.
- Indicate the percentage of each task completed, and reconcile the percentage of the total work completed versus the percentage of the not-to-exceed amount billed to date.

Products and Schedule for Task A

Task No. A	Product	Due Date NLT 12 Months from NTP
A.1.3	Update project schedule	2 weeks
A.2.2	4 Consultant Team Project Manager Meetings	Bi-Monthly
A.2.3	2 Internal Consultant Team Meetings	Monthly
A.3.1	Invoices	Monthly
A.3.2	Progress reports	Monthly

TASK B - DATA COLLECTION AND REVIEW OF EXISTING INFORMATION

Purpose:

The purpose of this task is compile and document in a technical memorandum all of the applicable engineering, environmental, and other related work products produced over the past five years that document existing conditions and potential concepts within the study area (Interstate-5 from SR-500 to Columbia Boulevard, and I-205 bridge area). In addition, this task will include compiling and documenting all Agency and WSDOT engineering-related guidelines and standards for bridges and approaches (including engineering, design and level-of-service) and propose an approach for reconciling differences between Agency and WSDOT guidelines and standards.

Finally, the Contractor will determine what additional information and analysis is necessary from an engineering, environmental, and context sensitive solution perspective to generate a complete and consistent I-5 River Crossing Concepts Document as identified in Phase II, Task C.

The Contractor shall:

Task B0: Integrate Context Sensitive Solutions and Design Into Project

The purpose of this activity is to assist Agency and WSDOT in the implementation of the context sensitive design process throughout this project. FHWA defines the primary principles of context sensitive design as:

- The project satisfies the purpose and needs as agreed to by a full range of stakeholders. This agreement is forged in the earliest phase of the project and amended as warranted as the project develops.
- The project is a safe facility for both the user and the community.
- The project is in harmony with the community, and it preserves environmental, scenic, aesthetic, historic and natural resource values of the area (i.e., exhibits context sensitive design).
- The project exceeds the expectations of both designers and stakeholders and achieves a level of excellence.
- The project involves efficient and effective use of the resources (time, budget, community) of all involved parties.
- The project is designed and built with minimal disruption to the community.
- The project is seen as having added lasting value to the community.

The design and engineering refinement effort for the I-5 project must meet these objectives and it must address FHWA's and WSDOT's guidance on context sensitive design (*Flexibility in Highway Design* (FHWA-PD-97-062); and *Building Projects that Build Better Communities – Recommended Best Practices* (WSDOT 2003)).

To do so, throughout the project, the Contractor shall include:

- CSD as an integral element of the overall concept refinement, DEIS, and public involvement process, rather than being implemented through a one-time workshop similar to the traditional value engineering process.
- CSD as a crucial component included as part of all the existing three consultant team's statements of work and overall efforts over the next 9 months.
- CSD in the engineering and environmental process similarly to the concepts and methodologies used by engineers and planners to ensure adequate mobility and the protection of endangered species, respectively.

Specifically, the Contractor shall:

- B.0.1 Collect and review summaries and reports of prior Public Outreach and communications from past phases of the project. Information should depict the types and extent of public outreach and community involvement, possible issues and community and stakeholder values leading to current solutions, and generally portray the extent of outreach and public communications over the life of the project.
- B.0.2 Evaluate the information obtained in Activity B.0.1 and assess the extent in which this information potentially addresses the basic outline of community impact assessments (FHWA-PD-96-036). Identify possible strategies and future work efforts for the team to integrate into subsequent work activities. The Contractor's goal is to understand the existing project context, potential community impacts, stakeholder values and visions, and possible subjects that might be considered a part of the project's purpose and need statement.

Task B1: Compile and Document all Existing Bridge Crossing Documentation and Bridge and Approach Design Guidelines, Standards and Permitting Requirements

- B.1.1 Submit TM #B.1.1 to Agency and WSDOT requesting the source documents needed to complete this task, including, but not limited to: Design files (AutoCAD and Microstation); digital aerial photos with appropriate geo-referencing and tiling information; forecast traffic and transportation planning analysis summaries; traffic engineering analyses including intersection, ramp terminal, weaving, and segment capacity analyses; safety analyses; toll facility concept design concepts and criteria; environmental-related data bases, documents, maps, figures, etc. and reports, summaries, and documents related to the environmental considerations (natural and built environment including socio-economics, community profiles, special populations, and historical and cultural data) of the concepts from the project's inception; applicable bridge and approach design manuals, guidance and criteria; seismic design manuals, guidance and criteria; and interchange spacing and design standards. The request must specify the purpose of the request, the primary Contractor contact and the submittal deadline. Contractor shall compile submitted manuals, guidance and criteria.
- B.1.2 Compile other source documents from other agencies/jurisdictions needed to complete this task, including, but not limited to, manuals, guidance and criteria that could affect bridge and approach design from: FHWA; AASHTO; City of Vancouver; City of Portland, Clark County; Multnomah County, BNSF, USCG and others.
- B.1.3 For forthcoming environmental analysis scoping, catalogue and document all contacts (e.g., mail, significant e-mail, meetings, conference calls and significant two-person phone calls) between Agency, WSDOT and any environmental resource or oversight agency. Contractor shall compile the contact information in a database and shall update it monthly.
- B.1.4 Contractor shall develop a comprehensive and accessible web-integrated database to house all the information obtained in Tasks B.1.1 through B.1.3.
- B.1.5 Evaluate the acquired applicable bridge and approach design manuals, guidance and criteria and document findings in a technical memorandum (TM #B.1.5). The memorandum must, at a minimum provide: an annotated bibliography of the acquired documents (e.g., source, date, summary of contents, critical elements); a brief topical assessment of the primary design requirements that will be placed on the I-5 Columbia river crossing bridge design; identification of any conflicting or potentially-conflicting design requirements; and proposed approach for reconciling any conflicting or potentially-conflicting design requirements.
- B.1.6 Prepare a PowerPoint Presentation #B.1.6 and Technical Memorandum TM #B.1.6 (an executive summary of TM #B.1.5) that summarizes the policy-level and significant design impacts related to the design manuals, guidance and criteria for bridges and approaches, and be delivered at up to two presentations.
- B.1.7 Prepare a PowerPoint Presentation #B.1.7 and Technical Memorandum TM #B.1.7 describing the contents of the web-integrated database developed in Task B.1.4. This presentation and technical memorandum will provide directions on how to access and utilize the database and be delivered at up to two presentations.

Task B2: Determine Extent of Conceptual Engineering Required to Identify and Screen Highway/Bridge Improvement Concepts

B.2.1 Contractor shall conduct a detailed review of the material compiled in Tasks B.1.1 and B.1.2 (i.e. the conceptual engineering drawings and technical memoranda prepared for the previous phase of the I-5 Trade Corridor Partnership) to assess if the material is sufficiently reliable and detailed, or if more detailed concept drawings must be prepared to identify, evaluate, and screen road/bridge improvement concepts in this current phase of study.

B.2.2 Contractor shall assemble existing information and analysis from Agency, WSDOT, Metro and Regional Transportation Commission (RTC) regarding operational and physical issues affecting the utility and performance of the I-205 Bridge and approaches, both current and projected.

B.2.3 Contractor shall prepare WP #B.2.3 documenting the findings from Tasks B.1.1, B.1.2, B.2.1 and B.2.2. The WP must describe each bridge/highway concept examined during the Strategic Plan phase of study, the level of detail it was defined and evaluated, and the current status of the alternative.

The WP must also describe:

- (a) The extent to which the previous information and design concepts can be relied upon for complete evaluation in the environmental process.
- (b) Critical freeway and interchange improvements with each of the bridge concepts that needs potential further refinement.
- (c) Concepts that were discussed in the Strategic Plan phase that required study, or more study, but whose study was deferred to the next phase.
- (d) Other concepts that should be addressed in the Phase 2 portion of this study based on meetings with Agency, WSDOT, and other affected agency staff.

B.2.4 Contractor shall determine where more detailed work must be completed in order to provide a consistent base level screening of the existing and new freeway/bridge concepts in Phase 2 of this study. This information will be provided in a WP #B.2.4 that describes at a minimum, the following key elements:

- (a) Identify how existing concept drawings and cost estimates must be refined based on (i) interchange issues raised but not addressed in the previous study phase, (ii) incorporating toll collection footprint concepts and other results from the traffic analysis work currently being undertaken, and (iii) vertical clearance and channel issues associated with the marine and air constraints.
- (b) Document key environmental issues and assess their adequacy and consistency to complete future NEPA scoping activities. Identify key topics that should be considered.
- (c) Identify critical engineering considerations with regard to the design concepts such as the ability to maintain existing traffic flow or need to construct temporary bridge, relative limitations or time impacts of in-water construction, limitations or affects on type of bridge design options, and others.

As an outcome of Tasks B.2.1 through B.2.3, the Contractor will:

- Confirm that the three categories of concepts encompass all reasonable combinations of freeway and arterial crossings;
- Confirm whether or not dropping the collector-distributor options from further evaluation is justified (and that sufficient justification has been developed to support that conclusion);

- Identify key distinctions between options (i.e. cost, function, impacts, ability to integrate tolling, etc.) to develop screening criteria; and
- Review Strategic Plan findings and determine what additional analyses are needed to resolve outstanding issues.

This information will also be included in WP B.2.4.

B.2.5. Contractor shall develop an initial refined Phase II scope of work and budget addressing the outcomes from Tasks B.2.3 and B.2.4. The refined scope of work will be presented in WP #B.2.5 and PowerPoint Presentation #B.2.5 to the WPM, Agency, and WSDOT staff at a presentation. Based on comments received from the WPM, Agency, and WSDOT staff, the Contractor will finalized the Phase II scope of work and budget. [Task B.2.5. is a non-budget related task]

Task B3: Boat Survey

The objective of the boat survey is to document the existing vessel traffic patterns between Columbia River miles 105.5-113.5 to establish maximum vertical & horizontal clearance requirements and frequency of use. ‘Updates’ refer to adding data since the 1999 OBA Navigation Report.

- B.3.1 Describe existing commercial and recreational vessel traffic between Columbia River miles 105.5 and 113.5 [this reach spans the existing BN railroad and I-205 bridges]. Summarize predominant vessel trip patterns, sizes and vertical & horizontal clearance requirements for commercial and recreational traffic.
- B.3.2 Identify and interview businesses with commercial and recreational water-dependent markets that currently use the river stretch. These are expected to include but not be limited to Schnitzer, Christensen Yacht, Tidewater, Columbia River Towboat Association, American West Cruise, public and private marinas, and vessel repair facilities. Document historic maximum air [height] clearance requirements and frequency.
- B.3.3 Update bridge closure data for BNRR and I-5 Bridges [from 1999 Navigation Report Table 3.2] as available from BNRR, ODOT and/or WASHDOT. Document any changes to bridges that have affected clearance in the past five years. Update water year data from USGS gage data. Document existing I-5 bridge closure restrictions.
- B.3.4 Summarize findings of Tasks B.3.1 through B.3.3 in Technical Memorandum #B.3.4. This memorandum will document the number of users needing height clearance greater than I-205 vertical. Respond to comments and questions; finalize report.

Products and Schedule for Task B

Task No. B	Product	Due Date NLT _____ from NTP
B.0	Context Sensitive Solutions and Design	On-going through out project
B.1.1	TM #B.1.1: Source Document Request	1 week from the NTP
B.1.4	Web Integrated Database	6 weeks from the receipt of files
B.1.5	TM #B.1.5: Evaluation of Design Guidelines &	4 weeks from receipt of

	Criteria	files
B.1.6	Powerpoint Presentation B.1.6: Design Criteria Issues impacts	5 weeks from receipt of files
B.1.6	TM #B.1.6: Design Criteria Issues	5 weeks from receipt of files
B.1.7	PowerPoint Presentation B.1.7: Web-Integrated Data Base	7 weeks from the receipt of files
B.1.7	TM #B.1.7: Web-Integrated Data Base	7 weeks from the receipt of files
B.2.3	WP #B.2.3: Assessment of Alternative Information and Analysis	8 weeks from the receipt of files
B.2.4	WP #B.2.4: Identification of Additional Analysis Work	10 weeks from the receipt of files
B.2.5	Initial Refined Phase 2 Scope of Work	11 weeks from the receipt of files
B.2.5	PowerPoint Presentation B.2.5: Initial Refined Phase 2 Scope of Work	12 weeks from the receipt of files
B.2.5	Final Refined Phase 2 Scope of Work	13 weeks from the receipt of files
B.3.4	TM #B.3.4: Boat Survey	10 weeks from the NTP

PHASE 2 (Information Only)

The purpose of Phase 2 is to perform engineering and environmental analyses required to provide a uniform and consistent level of baseline information. The outcome of this work will be documented in an Concepts Report that will provide the factual information necessary for the Agency and WSDOT, along with other affected agencies to make decisions regarding which concepts should go forward in the NEPA process. This information will be used in conjunction with possible community/stakeholder outreach strategies to identify possible elements of the project's Purpose and Need. All of this information will be used to establish a NEPA scoping plan and environmental documentation strategy. Finally, this information will be used to identify an appropriate strategy and framework for meaningful and continuous community/stakeholder outreach, sensitive to the diverse variety of contexts in and around the project area.

Since the nature and scope of the Phase 2 work is dependent on the outcomes of Phase 1 (e.g., the number of concepts, the amount of effort necessary to bring all the concepts to desired uniform and consistent level of baseline information, etc.), Tasks C and D have been developed on a preliminary level to illustrate the likely engineering and environmental work that will be accomplished during this phase. A specific scope of work for these Tasks will be developed at the end of Phase 1.

TASK IIA – PHASE 2 MEETINGS

If Agency authorizes Phase II of this project, Contractor will conduct the following meetings:

- Prepare meeting agendas and MR as necessary.
- Prepare for and attend bi-monthly meetings with the overall consultant team project manager, WPM, Agency, and WSDOT staff. These meetings will primarily focus on presenting materials

developed through each task and for general project coordination [20 meetings for Kittelson & Associates, Inc. (KAI) staff, 10 meetings for CH2M Hill (CH) and Howell Consulting (HC), two meetings for J.D. White Company (JDW), and one meeting for Parsons Brinckerhoff (PB) and Right of Way Associates (RWA))]

- Prepare for and attend monthly internal consultant team meetings [10 meetings for KAI staff, four meetings for CH and HC, two meetings for JDW, and one meeting for PB and RWA]. These meetings will be used for general coordination and information gathering and sharing throughout the project as well as coordination with the other consultant teams (Traffic and Communication).

TASK C – GAP CLOSURE ANALYSIS

The purpose of this task is to bring all the identified concepts as well as any additional concepts defined in Task B to the desired uniform and consistent level of the Agency and WSDOT. The gap closure analysis will entail the necessary engineering, environmental, and costing analysis to provide the factual information on each concept within the project study area (SR 500 to Columbia Boulevard) in a consistent and comparable format. Contractor has, in the preceding task, identified specific additional work that must be completed and shall not unnecessarily replicate work done in the previous phase of the project.

As a result of Task C, a Concepts Report will be published that provides consistent and uniform engineering, environmental, and cost information for each of the defined concepts

The Contractor shall:

Task C1: Additional Engineering and Environmental Analysis

- C.1.1 Contractor shall prepare TM#C.1.1 describing refinements in existing conceptual design necessary to address interchange issues, toll plaza footprints concepts, critical environmental issues and other results of traffic analysis.
- C.1.2 Contractor shall prepare TM#C.1.2 describing critical engineering considerations of each design concept. Contractor will consider the potential features and themes and opportunities and constraints that might be a byproduct of understanding community impacts and context sensitive solutions work efforts.
- C.1.3 Contractor shall conduct the analysis necessary to assess the critical environmental issues for each alternative under consideration and prepare an environmental considerations technical memorandum that summarizes the results of the analysis (TM#C.1.3).

Task C2 - Engineering Design and Refinement

In this task, the Contractor will prepare updated and new (for any newly defined concepts) concept drawings based on the concepts defined in Task B and the information identified in Tasks C1. These concept design drawings will build upon and modify prior design files (including centerline stationing, horizontal alignments, ramp configurations, lane numbers and arrangements, cross section details, and assumptions for vertical alignments) generated by ODOT and WSDOT staff and/or contractors. Contractor concept development and refinement shall include the following:

- C.2.1 WP #C.2.1 will provide a summary of all the design assumptions and costing documents prepared for this task (categorized by alternative under consideration), including an assessment of all significant constructability issues identified, general design constraints, any fatal flaws, and a description of how the context sensitive design process is incorporated into the current design;
- C.2.2 A revised set of concept drawings for each alternative, including;
- 1"=200' working drawings
 - English units
 - Centerline geometry (stationed): Contractor shall develop horizontal alignment at a concept level only where needed to test feasibility and or impacts of an improvement concept
 - Typical sections
 - Bridges: Conceptual Design (rough layout) identify type
 - Tunnels: Conceptual Design (rough layout indicating depth and daylight points)
 - Plan location of retaining structures and approximate heights
 - Drafting Standards as defined by Agency and WSDOT
 - Aerial photo base mapping
 - Conceptual Design showing footprints of proposed concepts, existing right of way, proposed right of way, general structure locations, and conceptual lane striping.
 - 11"x17" or other schematic drawing scales or formats that will be suitable for public displays and reports
- C.2.3 Prepare WP #C.2.3 that summarizes the associated costs of each alternative, including: a summary of the costing methodology (using unit cost data from prior work as applicable); a summary of conceptual capital costs (engineering, construction, and right-of-way) for each alternative; a summary of life cycle costs for each alternative; and an assessment of the potential sensitivity of costs to currently unknown variables (e.g., construction unknowns, mitigation).
- C.2.4 Contractor shall prepare TM#C.2.4 that describes ways in which the design or other characteristic of each alternative selected to advance into the DEIS could be modified to avoid, minimize or mitigate the potential or anticipated impact(s) of that alternative.
- C.2.5 Prepare a PowerPoint Presentation #C.2.5 and presentation graphics that summarize the primary engineering, design, environmental and costing characteristics of the concepts under consideration, based on the other products prepared within this task and WOC. Include a summary of the opportunities and constraints of possible features and themes that result from CSS efforts. The presentation graphics must include, but are not limited to: a street base map plan; simplified project-level alignments, interchange improvements, ramp configurations, bridges and structures; concept-level profiles of all bridge concepts; schematics of major engineering concepts (e.g., lane configurations, etc.).
- C.2.6 Prepare and deliver up to a total of six presentations on primary engineering, design and costing issues.

C.2.7 Respond to questions and requests for data related to design, engineering and costing from other contractors, agencies and jurisdictions. It is anticipated that these requests will be for work already completed, no new work will be conducted as part of this task.

Task C3: Concepts Report

C.3.1 Prepare a comprehensive Concepts Report that provides consistent and uniform engineering, environmental, and cost information for each of the defined concepts. This report will include an executive summary summarizes the baseline conditions of all the concepts as well as the remaining engineering and analysis work that still remains to refine the concepts to an acceptable EIS level. In addition, a Technical Appendix will be provided that documents and references all the engineering, environmental, costing assumptions for each alternative. The report will also identify various constructability issues, environmental issues, and cost estimates that may be used in future screening activities. However, the report will not provide any findings or remarks that directly compare, rank, or in any other manner suggest a preferred or set of preferred concepts.

C.3.2 Prepare and deliver up to a total of three presentations on the contents and information presented in the Concepts Report.

TASK D - PRELIMINARY SCOPING

Within the project study area, (SR 500 to Columbia Boulevard), this task includes:

- The identification of resource and environmental oversight agencies to be involved in the Project's early coordination and Federal Scoping process;
- The identification and documentation of environmental issues with the range of concepts currently under study to the extent and in a manner required for "Scoping" these concepts for the DEIS;
- An analysis of the critical environmental issues, and the special environmental considerations associated with each that require further study for concepts currently under study or developed during the current phase of study. The purpose of the analysis is to support the identification of concepts that will be recommended to advance into the DEIS phase;
- Assistance to Agency and WSDOT during the Federal Scoping process, including preparation for the Scoping meetings; addressing and documenting environmental-related questions and comments received during the Scoping process and documenting the comments and responses.
- Define and engage scoping group partners. Use the process broadly to incorporate state, local, and other jurisdictions beyond the required federal jurisdictions.
- Establish roles of partners, including lead and cooperating agency requirements, establish an agreement.
- Identify issues and boundaries of the project study area.
- Agreement on NEPA documentation requirements to satisfy all future needs of agencies that will adopt the NEPA document and issue permits or approvals.
- Develop process and schedules that satisfy interdependent agency needs.

Task D.1: Establish Scoping Group

Contractor will assist ODOT's CETAS group and WSDOT's SAC group in identifying representatives to the Scoping Group. Federal agencies will likely select only one representative to represent both states. As needed Contractor will assist with the process of confirming the suggested representative has authority

to make sustainable decisions for the agency. In addition to the current members of CETAS and SAC, the following agencies or authorities should be considered:

- US Coast Guard
- Port authorities below the first dam.
- Federal and State Economic Development agencies
- FTA
- TriMet
- Ctran
- Park authorities for Fort Vancouver

D.2: Establish Potential Environmental Criteria and Measures

Prepare a technical memorandum that identifies the array of environmental criteria and measures that could be considered in the public process and ultimately for screening concepts in the DEIS. These could include:

- fish habitat associated with bridge construction: the scale of impact, the type and scale of mitigation concepts, and likelihood of environmental sign-off on fish habitat associated with bridge construction (potential short and long-term impacts);
- potential impacts to 6 (f) and 4(f) resources: the scale of impact, the type and scale of mitigation concepts, and likelihood of environmental sign-off;
- potential displacement of wetlands: the scale of impact, the type and scale of mitigation concepts, and likelihood of environmental sign-off;
- potential displacements: the scale of impact, the type and scale of mitigation concepts, and likelihood of environmental sign-off;
- potential impacts to special populations, users, cultures, or other community impacts

The evaluation must allow for the differentiation between the concepts and must be measurable given the level of detail of design and traffic analysis

D.3: Scoping Assistance

D.3.1 Prepare for and assist Agency and WSDOT with a public scoping meeting.

D.3.2 Provide engineering and environmental analysis support during Scoping and prepare a summary technical memorandum that provides written responses to all design and cost-related comments/questions received during the Project Scoping period, citing the comment made, the source and date made and the Project response (similar comments may be grouped together with a single response).

D.3.3 Contractor shall prepare for and participate in meetings with technical staffs from participating governments, policy-makers, and public involvement.

D.3.4 Contractor shall assist WPM in addressing questions arising during this phase of study from technical staffs of participating governments, policy-makers, and public involvement. Contractor shall also prepare written responses to questions as requested by WPM.

D.4 Establish Roles and Responsibilities for Scoping Group members

D.4.1 Contractor will assist ODOT and WSDOT in determining the following roles of Scoping Group members:

- Lead or co-lead agency status for federal agencies for NEPA processes
- Cooperating agency status of remaining federal agencies particularly the US Coast Guard, and the Army Corps of Engineers.
- Determine if any agencies other than the lead agencies will be contributing to the project through study, evaluation, mitigation development, or joint funding of mitigation proposals.

D.5 Establish process for Scoping Group

Both Washington State and Oregon have written NEPA process agreements with a subset of the Scoping Group partners. Contractor will assist ODOT and WSDOT with developing a process that incorporates the two processes. This single process will be negotiated so that all members may act in good faith with standing agreements.

D.6 Technical Assistance to Scoping Group

Provide technical assistance to the Scoping Group to establish the following:

- Agreement on the NEPA classification (assumed to be Class 1)
- Determination of important and minor issues from the agency perspective
- Input to project goals and objectives
- Determine other actions or projects by member agencies that interact with the schedule, purpose, or location of the proposed project, and determine process and schedules that allow mutual accomplishment of actions.
- Establish the study area boundaries relevant to each agency's mission.
- Determine opportunities for collaborative goal attainment
- Determine opportunities for collaborative mitigation
- Determine opportunities for joint funding of project or mitigation
- Document all scoping agreements to carry forward into the NEPA process.

D.7 Final Report on Results of Evaluation

Contractor shall prepare a Final Report documenting the results and recommendations from Task D. The FR shall also include an executive summary with appropriate color graphics.

C. DELIVERABLES AND SCHEDULE

PHASE 1

Products and Schedule for Task IA

Task No. A	Product	Due Date NLT 12 Months from NTP
A.1.3	Update project schedule	2 weeks
A.2.2	4 Consultant Team Project Manager Meetings	Bi-Monthly
A.2.3	2 Internal Consultant Team Meetings	Monthly
A.3.1	Invoices	Monthly
A.3.2	Progress reports	Monthly

Products and Schedule for Task B

Task No. B	Product	Due Date NLT _____ from NTP
B.0	Context Sensitive Solutions and Design	On-going through out project
B.1.1	TM #B.1.1: Source Document Request	1 week from the NTP
B.1.4	Web Integrated Database	6 weeks from the receipt of files
B.1.5	TM #B.1.5: Evaluation of Design Guidelines & Criteria	4 weeks from receipt of files
B.1.6	Powerpoint Presentation B.1.6: Design Criteria Issues impacts	5 weeks from receipt of files
B.1.6	TM #B.1.6: Design Criteria Issues	5 weeks from receipt of files
B.1.7	PowerPoint Presentation B.1.7: Web-Integrated Data Base	7 weeks from the receipt of files
B.1.7	TM #B.1.7: Web-Integrated Data Base	7 weeks from the receipt of files
B.2.3	WP #B.2.3: Assessment of Alternative Information and Analysis	8 weeks from the receipt of files
B.2.4	WP #B.2.4: Identification of Additional Analysis Work	10 weeks from the receipt of files
B.2.5	Initial Refined Phase 2 Scope of Work	11 weeks from the receipt of files
B.2.5	PowerPoint Presentation B.2.5: Initial Refined Phase 2 Scope of Work	12 weeks from the receipt of files
B.2.5	Final Refined Phase 2 Scope of Work	13 weeks from the receipt of files
B.3.4	TM #B.3.4: Boat Survey	10 weeks from the NTP

PHASE 2

The Deliverables and Schedule for Phase 2 will be defined as part of Task B.2.5

D. ACRONYMS

Agency/ODOT	Oregon Department of Transportation
ATA	Agreement to Agree
CA	Concepts Analysis
C-TRAN	Clark County Transit District
DEIS	Draft Environmental Impact Statement
EIS	Environmental Impact Study
FEIS	Final Environmental Impact Statement
FHWA	Federal Highway Administration
FR	Final Report
FTA	Federal Transit Administration
GMA	Growth Management Act
HOV	High Occupancy Vehicle
ICCP	Intergovernmental Coordination and Communications Plan
LRT	Light Rail Transit
IPP	Agency's Innovative Partnerships Program
MPO	Metropolitan Planning Organization
MOS-1	Minimum Operable Segment No. 1
MR	Meeting Reports
NEPA	National Environmental Policy Act
NTE	Not to Exceed
NTP	Notice to Proceed
PE	Preliminary Engineering
PPP	Public-Private Partnership
PPT	Power Point Presentation
RFP	Request For Proposals
RTC	Regional Transportation Commission
SEPA	State Environmental Policy Act
SOW	Statement of Work
TDM	Transportation Demand Management
T&M	Time and Materials
TM	Technical Memoranda
TriMet	Tri-County Metropolitan Transportation District of Oregon
TSM	Transportation System Management
TSUB	Transportation System User Benefits
WOC	Work Order Contract
WP	Working Paper
WPM	Agency's Work Order Project Manager
WSDOT	Washington Department of Transportation

E. SUMMARY OF ESTIMATE FOR SERVICES

See attached Fee Estimate.

F. COST AND METHOD OF COMPENSATION

Total Not To Exceed (NTE) payable to Contractor is:

All Compensation under this WOC is on a Time and Materials (T&M) basis and is only for the tasks identified for this Phase 1 work up to the NTE amount stated in the Compensation section on page 1. **No compensation is provided to Contractor for negotiations, preparing or revising cost estimate for services, or negotiating contracts with subcontractors.** Invoices for T&M work must include an attached breakdown of actual hours (as detailed in the ATA), identifying staff, and classification by task and allowable direct non-labor costs.