

**RESOLUTION NO. 3524**

**A RESOLUTION** of the Port Commission of the Port of Seattle authorizing the Chief Executive Officer to enter into an agreement with the Washington State Department of Transportation to conduct an environmental assessment for the SR 518 Improvements between Seattle Tacoma International Airport and the I-5/I-405 Interchange.

**WHEREAS**, the Port and the Washington State Department of Transportation ("WSDOT") prepared a Scope of Work in 2000 to begin an Environmental Assessment ("EA") on SR 518 between 24th Avenue South and SR-99, but let that agreement lapse in 2002 due to Northend Development Program planning changes at Seattle Tacoma International Airport ("Airport"); and,

**WHEREAS**, the Port and WSDOT completed the SR-518 Route Development Plan in 2002; and,

**WHEREAS**, the Port is now pursuing as its highest priority on SR-518 the addition of a third eastbound lane on SR-518 between the Airport and I-5/I-405, which was included as a recommendation in the SR-518 Route Development Plan, and,

**WHEREAS**, the Port has requested that WSDOT initiate an Environmental Assessment (EA) for an additional eastbound lane on SR-518 from the Airport to I-5/I-405, and the Port has agreed to fund the EA up to \$1,000,000.

**NOW, THEREFORE, BE IT RESOLVED** by the Port Commission of the Port of Seattle that:

**Section 1** The Chief Executive Officer is hereby authorized to execute an agreement with WSDOT in substantially the form attached hereto as Exhibit A and incorporated herein by this reference.

Section 2 Port staff is authorized to take all necessary actions to fulfill the terms of the agreement, including a payment to WSDOT not to exceed \$1,000,000.

Section 3 A copy of the final executed agreement shall be attached to this Resolution as Exhibit B and incorporated herein by this reference.

**ADOPTED** by the Port Commission of the Port of Seattle at a regular meeting thereof, held this 13th day of April, 2004, and duly authenticated in open session by the signatures of the Commissioners voting in favor thereof and the seal of the Commission.

Paige R. Miller PAIGE MILLER

Bob Edwards BOB EDWARDS

Alec Fiskén ALEC FISKEN

Patricia Davis PATRICIA DAVIS

Port Commission

**EXHIBIT A TO RESOLUTION NO. 3524**

**AGREEMENT GCA 4012  
SR-518 Environmental Assessment (EA)  
Improvements between Seattle Tacoma International Airport  
and I-5/ I-405 Interchange**

THIS AGREEMENT, made and entered into this \_\_\_\_ day of \_\_\_\_\_, 2004, between the STATE OF WASHINGTON, Department of Transportation, acting by and through the Secretary of Transportation, hereinafter called the "STATE" and the PORT of Seattle, acting by and through the PORT of Seattle Commission, 2711 Alaskan Way, Seattle, Washington, 98121, hereinafter called the "PORT", and collectively referred to as the "PARTIES;"

WHEREAS, the WSDOT and the PORT have jointly been studying the needs for corridor improvements on SR-518, and

WHEREAS, the WSDOT and the PORT in 2000 agreed by Resolution 3441 to contribute to the SR-518 Route Development Plan and to prepare an Environmental Assessment (EA) for improvements required on SR-518 due to the proposed Airport North Terminal Expansion, and,

WHEREAS, the WSDOT completed the SR-518 Route Development Plan in 2002, and,

WHEREAS, the PORT revised its planning for the North End Terminal Expansion, therefore not initiating the EA for improvements on SR-518, allowing that agreement to lapse, and,

WHEREAS, The PORT is now pursuing as its highest priority on SR-518 the addition of a third- eastbound lane on SR-518 between the Airport and I-5/I-405, which was included as a recommendation in the SR-518 Route Development Plan, and,

WHEREAS, the PORT is now requesting that the STATE initiate an Environmental Assessment (EA) for an additional eastbound lane on SR-518 from the airport to I-5/I-405, and

WHEREAS, The PORT has agreed to fund the EA up to \$1,000,000,

NOW, THEREFORE, by virtue of RCW 47.28.140 and in consideration of the terms, conditions and covenants contained herein, or attached and incorporated and made a part hereof,

IT IS MUTUALLY AGREED AS FOLLOWS:

## I GENERAL

The STATE, through its Consultant, hereinafter called the "CONSULTANT", agrees to conduct the alternative analysis and environmental documentation, as noted in Exhibit "A", Scope of Work, attached hereto and by this reference made a part of this AGREEMENT.

The STATE, upon completion of the work, shall transfer ownership of the Environmental Analysis, as described in the Scope of Work, to the PORT.

## II PAYMENT

The PORT, in consideration of the faithful performance of the work to be done by the STATE, agrees to reimburse the STATE for the actual direct and related indirect cost of the work, not to exceed a maximum amount of \$1,000,000.00.

An itemized estimate of the cost for work to be performed by the STATE at the PORT's expense is marked Exhibit "B" and is attached hereto and by this reference made a part of this AGREEMENT.

Partial payments shall be made by the PORT, upon request from the STATE, to cover costs incurred. These payments are not to be more frequent than one (1) per month. It is agreed that any such partial payment will not constitute agreement as to the appropriateness of any item and that, at the time of final audit, all required adjustments will be made and reflected in the final payment.

The STATE agrees to submit a final bill to the PORT within forty-five (45) days after the state has completed the work.

## III EXTRA WORK

In the event it is determined that any change from the scope of work contained in this AGREEMENT is required, written approval must be secured from the PORT prior to the beginning of such work. Changes to the scope of work shall require a written change approval by the PORT to this AGREEMENT. Reimbursement for increased costs resulting from a change in the scope of work will be modified by a written SUPPLEMENTAL AGREEMENT covering said increase.

IV  
PERIOD OF PERFORMANCE

This AGREEMENT shall commence on the date first written above and shall terminate on June 1, 2006. This AGREEMENT may be extended for a period of time to be agreed upon in a written supplement to this AGREEMENT.

VI  
NOTIFICATION

Any notice required or permitted to be given pursuant to the AGREEMENT shall be in writing, shall be sent postage prepaid by U.S. mail, return receipt requested to the following addresses unless otherwise indicated by the parties to the AGREEMENT:

To the STATE:                   Mehrdad Moini, P.E.  
Project Manager  
Washington State Department of Transportation  
6431 Corson Avenue South, MS-61  
Seattle, WA 98108-3445

To the PORT:                    Dan Burke  
Project Manager  
Pier 69 PO Box 1209  
Seattle WA 98111

VII  
RIGHT OF ENTRY

The PORT hereby grants and conveys to the STATE the right of entry upon all land which the PORT has interest, within or adjacent to the right-of-way of State Route 518 that is within the project area as defined in Exhibit "C", for the purpose of performing the work described herein.

VIII  
DISPUTES

The designated representatives shall use their best efforts to resolve disputes between parties. If these individuals are unable to resolve a dispute, the responsible department directors shall review the matter and attempt to resolve it. If they are unable to resolve the dispute, the matter shall be reviewed by the chief officer of each party or his or her designee. The parties agree to exhaust each of these procedural steps before seeking to resolve disputes in a court of law or any other forum.

IX  
INDEMINIFCATION  
AND HOLD HARMLESS

The PARTIES agree to the following:

Each of the PARTIES, shall protect, defend, indemnify, and save harmless the other PARTY, its officers, officials, employees, and agents, while acting within the scope of their employment as such, from any and all costs, claims, judgment, and/or awards of damages, arising out of, or in any way resulting from, each of the PARTY's own negligent acts or omissions. No PARTY will be required to indemnify, defend, or save harmless the other PARTY if the claim, suit, or action for injuries, death, or damages is caused by the sole negligence of the other PARTY. Where such claims, suits, or actions result from the concurrent negligence of the PARTIES, the indemnity provisions provided herein shall be valid and enforceable only to the extent of a PARTY's own negligence. Each of the PARTIES agrees that is obligations under this subparagraph extended to any claim, demand and/or cause of action brought by, or on behalf of, any of its employees or agents. For this purpose, each of the PARTIES, by mutual negotiation, hereby waives, with respect to each of the other PARTY only, any immunity that would otherwise be available against such claims under the Industrial Insurance provision of Title 51 RCW. In the event that any of the PARTIES or combination of PARTIES incurs any judgment, award, and/or cost arising therefrom, including attorneys' fees, to enforce the provisions of the Section, all such fees, expenses, and costs shall be recoverable from the responsible PARTY or combination of PARTIES to the extent of that PARTY's / those PARTIES' culpability.

X  
VENUE

This AGREEMENT shall be deemed to be made in the County of Thurston, State of Washington, and the legal rights and obligations of the STATE and PORT shall be determined in accordance with the laws of the State of Washington. All legal actions in connection with this AGREEMENT shall be brought in the County of Thurston, State of Washington.

IN WITNESS WHEREOF, the PARTIES hereto have executed this AGREEMENT as of the day and year first above written.

PORT OF SEATTLE

WASHINGTON STATE DEPARTMENT  
OF TRANSPORTATION

\_\_\_\_\_

By

\_\_\_\_\_

By

\_\_\_\_\_

Title

\_\_\_\_\_

Title

\_\_\_\_\_

Date

\_\_\_\_\_

Date

APPROVED AS TO  
FORM:

APPROVED AS TO  
FORM:

\_\_\_\_\_

Senior Port Counsel

\_\_\_\_\_

Assistant Attorney General

\_\_\_\_\_

Date

\_\_\_\_\_

Date

**AGREEMENT GCA 4012**  
**SR-518 Environmental Assessment (EA)**  
**Improvements between Seattle Tacoma International Airport**  
**and I-5/ I-405 Interchange**

THIS AGREEMENT, made and entered into this 20<sup>th</sup> day of July, 2004, between the STATE OF WASHINGTON, Department of Transportation, acting by and through the Secretary of Transportation, hereinafter called the "WSDOT" and the PORT of Seattle, acting by and through the PORT of Seattle Commission, 2711 Alaskan Way, Seattle, Washington, 98121, hereinafter called the "PORT", and collectively referred to as the "PARTIES;"

WHEREAS, the WSDOT and the PORT have jointly been studying the needs for corridor improvements on SR-518, and

WHEREAS, in 2000, the PORT adopted Resolution 3441, which allowed for the PORT's contribution toward the development and preparation of the SR-518 Route Development Plan and the Environmental Assessment (EA) for improvements required on SR-518 due to the proposed Airport North Terminal Expansion, and

WHEREAS, in March of 2001, the WSDOT and the PORT entered into an Agreement, known as GCA 2412, for the development and preparation of the SR-518 Route Development Plan and the EA for improvements required on SR-518 due to the proposed Airport North Terminal Expansion, and

WHEREAS, the WSDOT completed the SR-518 Route Development Plan in June, 2002, and,

WHEREAS, the PORT revised its planning for the North End Terminal Expansion, therefore not initiating the EA for improvements on SR-518, and,

WHEREAS, the PORT is now pursuing, as its highest priority on SR-518, the addition of a third eastbound lane on SR-518 between the Airport and I-5/I-405, which was included as a recommendation in the SR-518 Route Development Plan, and,

WHEREAS, the PORT is now requesting that the WSDOT initiate National Environmental Protection Act (NEPA) Environmental Assessment (EA) for an additional eastbound lane on SR-518 from the airport to I-5/I-405, hereinafter the "PROJECT", and

WHEREAS, the PORT, by adoption of Resolution No. 3524 has agreed to fund the EA up to \$1,000,000.00.

NOW, THEREFORE, by virtue of RCW 47.28.140 and in consideration of the terms, conditions and covenants contained herein, or attached and incorporated and made a part hereof,



IT IS MUTUALLY AGREED AS FOLLOWS:

I  
GENERAL

The WSDOT, through its Consultant, hereinafter called the "CONSULTANT", agrees to conduct the alternative analysis and environmental documentation, as noted in Exhibit "A", Scope of Work, attached hereto and by this reference made a part of this AGREEMENT.

The WSDOT, upon completion of the work, shall transfer ownership of that portion of the Environmental Analysis that has been completed within the financial limitations of the Agreement, as described in the Scope of Work, to the PORT.

II  
PAYMENT

The PORT, in consideration of the faithful performance of the work to be done by the WSDOT, agrees to reimburse the WSDOT for the actual direct and related indirect cost of the work, not to exceed a maximum amount of \$1,000,000.00. An itemized estimate of the cost for work to be performed by the WSDOT at the PORT's expense is marked Exhibit "B" and is attached hereto and by this reference made a part of this AGREEMENT.

Partial payments shall be made by the PORT, upon request from the WSDOT, to cover costs incurred. These payments are not to be more frequent than one (1) per month. It is agreed that any such partial payment will not constitute agreement as to the appropriateness of any item and that, at the time of final audit, all required adjustments will be made and reflected in the final payment.

The WSDOT agrees to submit a final bill to the PORT within forty-five (45) days after the WSDOT has completed the work.

III  
EXTRA WORK

In the event it is determined that any change from the scope of work contained in this AGREEMENT is required, written approval must be secured from the PORT prior to the beginning of such work. Changes to the scope of work shall require a written change approval by the PORT to this AGREEMENT. Reimbursement for increased costs resulting from a change in the scope of work will be modified by a written SUPPLEMENTAL AGREEMENT covering said increase.

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This AGREEMENT shall commence on the date this AGREEMENT is entered into as written above and shall terminate on June 1, 2006. This AGREEMENT may be extended for a period of time to be agreed upon in a written supplement to this AGREEMENT.

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To the WSDOT:                   Mehrdad Moini, P.E.  
Project Manager  
Washington State Department of Transportation  
6431 Corson Avenue South, MS-61  
Seattle, WA 98108-3445

To the PORT:                    Dan Burke  
Project Manager  
Pier 69 PO Box 1209  
Seattle WA 98111

VI  
RIGHT OF ENTRY

The PORT hereby grants and conveys to the WSDOT the right of entry upon all land which the PORT has interest, within or adjacent to the right-of-way of State Route 518 that is within the PROJECT area as defined in Exhibit "C", for the purpose of performing the work described herein.

VII  
DISPUTES

The above designated representatives shall use their best efforts to resolve disputes between the PARTIES. If these representatives are unable to resolve a dispute, the responsible department directors shall review the matter and attempt to resolve it. If they are unable to resolve the dispute, the matter shall be reviewed by the chief officer of each PARTY or his or her designee. The PARTIES agree to exhaust each of these procedural steps before seeking to resolve disputes in a court of law or any other forum.

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INDEMINIFCATION  
AND HOLD HARMLESS

The PARTIES agree to the following:

Each of the PARTIES, shall protect, defend, indemnify, and save harmless the other PARTY, its officers, officials, employees, and agents, while acting within the scope of their employment as such, from any and all costs, claims, judgment, and/or awards of damages, arising out of, or in any way resulting from, each of the PARTY's own negligent acts or omissions. No PARTY will be required to indemnify, defend, or save harmless the other PARTY if the claim, suit, or action for injuries, death, or damages is caused by the sole negligence of the other PARTY. Where such claims, suits, or actions result from the concurrent negligence of the PARTIES, the indemnity provisions provided herein shall be valid and enforceable only to the extent of a PARTY's own negligence. Each of the PARTIES agrees that its obligations under this subparagraph extended to any claim, demand and/or cause of action brought by, or on behalf of, any of its employees or agents. For this purpose, each of the PARTIES, by mutual negotiation, hereby waives, with respect to each of the other PARTY only, any immunity that would otherwise be available against such claims under the Industrial Insurance provision of Title 51 RCW. In the event that any of the PARTIES or combination of PARTIES incurs any judgment, award, and/or cost arising therefrom, including attorneys' fees, to enforce the provisions of the Section, all such fees, expenses, and costs shall be recoverable from the responsible PARTY or combination of PARTIES to the extent of that PARTY's / those PARTIES' culpability. This indemnification shall survive the termination of this AGREEMENT.

IX  
VENUE

This AGREEMENT shall be deemed to be made in the County of Thurston, State of Washington, and the legal rights and obligations of the WSDOT and PORT shall be determined in accordance with the laws of the State of Washington. All legal actions in connection with this AGREEMENT shall be brought in the County of Thurston, State of Washington.

IN WITNESS WHEREOF, the PARTIES hereto have executed this AGREEMENT as of the day and year first above written.

PORT OF SEATTLE

WASHINGTON STATE DEPARTMENT  
OF TRANSPORTATION

20 M.R. Dinsmore Greg J. Sten  
By By

M. R. Dinsmore  
Title  
**M. R. Dinsmore**  
**Chief Executive Officer**  
Date 7/20/04

Urban Conrad Director  
Title  
7-8-04  
Date

APPROVED AS TO  
FORM:  
Debbie D. Johnson  
Senior Port Counsel  
7/13/04  
Date

APPROVED AS TO  
FORM:  
Russell Brown  
Assistant Attorney General  
7-8-04  
Date

## EXHIBIT "A" TO AGREEMENT NO. GCA-4012

### Washington State Department of Transportation Scope of Work SR 518 Improvements between SeaTac Airport and the I-5/I-405 Interchange

#### 1.0 PROJECT Description

The purpose of this scope of work is to prepare a National Environmental Policy Act (NEPA) Environmental Assessment (EA) for the *SR 518 Improvements between SeaTac Airport and the I-5/I-405 Interchange project* (the PROJECT) consistent with WSDOT, Federal Highway Administration (FHWA), and NEPA guidelines. Contingent upon PROJECT reviews and public/agency comments, it is anticipated that the PROJECT will take approximately eighteen months.

The PROJECT is located along SR 518 and the SR 99 Interchange and South 154<sup>th</sup> Street. It is just east of SeaTac Airport. The PROJECT consists of the following:

- add a third eastbound lane between SeaTac Airport and the I-5/I405 interchange;
- revisions to the South 154<sup>th</sup> and 24<sup>th</sup> Avenue South interchange;
- revisions to the SR 518 and SR 99 interchange; and
- addition of a westbound frontage road between 24<sup>th</sup> Avenue South and SR 99.

The PROJECT is being designed to correct the existing operating inefficiencies and to accommodate projected growth in the surrounding community over the next twenty years. **Following completion of this EA, the PROJECT will be phased. Design and construction of the 3<sup>rd</sup> Eastbound lane will proceed immediately. The remaining portions of the PROJECT will be designed and completed as funding becomes available.**

A NEPA Environmental Assessment will be prepared which will include these components. Pursuant to the recommendation in the *SR 518 Route Development Plan* (RDP) (WSDOT, June 2002), two alternatives will be analyzed in the EA. Although environmental assessments typically look at one preferred alternative, this document will include the two recommended alternatives. Based upon the findings in the EA, a preferred alternative will then be recommended.

#### 2.0 General Assumptions

A number of assumptions have been made in relation to this scope of work and its deliverables. These assumptions are:

- WSDOT staff will coordinate with the FHWA lead agency and cooperating agencies (Port of Seattle and the City of Burien).

- WSDOT staff will prepare and process necessary Federal Register notices and other appropriate notices required for release of the NEPA document.
- WSDOT staff will prepare and process necessary and appropriate documentation to adopt this NEPA EA under State Environmental Policy Act (SEPA).
- A public hearing, although not required under NEPA for an EA, will be held in the general PROJECT vicinity.
- For any field investigations, acquiring the permission of private landowners whose property would be visited will be the responsibility of WSDOT staff. Permission must be obtained prior to any field work on privately owned land. Right of entry permits may take up to sixty days to acquire.
- WSDOT staff will assist with answering public comments.
- WSDOT staff will be responsible for reproduction and distribution of the environmental documents.
- Although not typical, this EA will analyze two alternatives. A preferred alternative will be recommended following public comments and publication of the Final EA.

### **3.0 PROJECT Alternatives**

As identified in the *SR 518 RDP*, two alternatives will be analyzed in the NEPA environmental assessment:

- Concept Two: Phase Two Combined Diamond/Single-Point Urban Interchange (SPUI); and
- Concept Three: Modified Split Diamond/Loop.

Addition of a third eastbound lane between SeaTac Airport and the I-5/I-405 Interchange will also be incorporated into each of these alternatives.

If additional alternatives are developed as a result of public scoping or technical analysis, a scope amendment and revised budget will be developed.

### **4.0 Work Elements**

The following presents specific work elements for this PROJECT:

#### **Work Element 1. PROJECT Management**

The CONSULTANT will be responsible for overall contract management and monthly invoicing. The CONSULTANT will make certain the resources necessary to complete the PROJECT are available. The CONSULTANT will also provide overall quality review and assurance, including a Quality Assurance (QA)/Quality Control (QC) memorandum at three key milestones: Draft Purpose and Need; Discipline Reports; and preliminary draft EA. This review will take place prior to WSDOT's review. The CONSULTANT will produce a Project

Management Plan that will provide team contacts, goals of the PROJECT, deliverables and schedules.

On-going and extensive telephone/in-person coordination is anticipated. Technical team meetings will be held as needed. It is anticipated that these technical team meetings will be held monthly while discipline reports are being prepared.

Monthly invoices and progress reports will be prepared by each firm and submitted to the CONSULTANT by the 30<sup>th</sup> of each month. The CONSULTANT will review these documents and incorporate them into a monthly task invoice/progress report. The task invoice/progress report will be submitted to WSDOT by the 15<sup>th</sup> of each month.

**Deliverables:**

- PROJECT Schedule
- Mgmt Team meeting minutes
- Tech Team meeting minutes
- Management Plan
- QA/QC Memorandum
- Invoice/Progress Reports

**Work Element 2. Agency/Public Involvement**

The CONSULTANT will work with WSDOT staff to develop, prepare, and present information to local agencies and elected officials. Initial contact with these agencies will include a letter of introduction, telephone contact, and in-person meetings. This coordination will take place during PROJECT scoping. The CONSULTANT will assist with letter development and will attend up to five meetings with WSDOT staff. Materials prepared for the resource agencies will also be used for these meetings.

**2.1 Meeting Logistics and Preparation**

The CONSULTANT will be responsible for identifying public scoping and hearing meeting locations. The CONSULTANT will make necessary arrangements for these locations. Presentation materials for public open houses and other outreach meetings will be prepared by the CONSULTANT. The CONSULTANT will assist in collection of technical information (to present to the public), as needed. The CONSULTANT will be responsible for maintaining a PROJECT mailing list.

At least two technical staff members, in addition to two public involvement specialists, will attend one scoping meeting and one public hearing. The CONSULTANT will be responsible for taking meeting notes at these two meetings and disseminating these notes to WSDOT staff and meeting participants, as appropriate.

## **2.2 Public Involvement Plan**

A formal public involvement plan is not required for an environmental assessment. However, the State of Washington and WSDOT are committed to proactively involve the public and community stakeholders in this PROJECT. The CONSULTANT will update the Public Involvement Plan (PIP) from the previous work completed within this corridor by WSDOT. The CONSULTANT will modify this Public Involvement Plan (PIP) as appropriate for the specific customers identified for these PROJECT improvements, and will use this PIP as Appendix A of the Project Management Plan. The PIP will be in accordance with Section 210 of the WSDOT's Design Manual. The CONSULTANT will submit the PIP outline to WSDOT for approval. Following WSDOT comments, the CONSULTANT will prepare a draft PIP. The draft PIP will be revised based on WSDOT comments.

### **Deliverables:**

- Presentation materials, including discipline report summaries
- Resource agency meetings
- Local agency and elected official meetings
- Presentation materials and logistics
- Public Hearing (1)
- Public Open House (Scoping) (1)
- PIP Outline
- Draft PIP
- Final PIP

### **Work Element 3. Preliminary Engineering**

This group of work elements will be performed concurrently with the EA preparation. The CONSULTANT will perform Preliminary Engineering to a level sufficient to support the NEPA EA. The Preliminary Engineering work will involve preparing layouts of the road improvement concepts under consideration. These conceptual layouts will be evaluated in plan and in profile to determine their feasibility with respect to meeting engineering, environmental, and economic constraints.

The following work elements will be performed by the CONSULTANT:

#### **3.1 Data Collection**

Collect, review and catalog any further PROJECT information not already obtained from WSDOT files upon confirmation by WSDOT of the need for the information. The data to be collected includes available existing plans, studies, and surveys. See Section 4.9, Transportation, for additional Data Collection.

A summary of relevant geometric design criteria, as is necessary to complete the EA, will be prepared by the CONSULTANT, based on applicable Design Standards in accordance with Section 440 of WSDOT's Design Manual. All elements will be reviewed by WSDOT prior to the start of detailed horizontal and



vertical alignment studies.

### **3.2 Survey, Base and Aerial Mapping**

WSDOT completed an aerial survey (English units) in the summer of 2000, and has converted the information into Microstation Computer Aided Drafting and Design (CADD) format. WSDOT will provide the CONSULTANT with PROJECT vertical and horizontal control in English units and conforming to North American Datum (NAD) 83/91 format. The CONSULTANT will supplement the mapping with additional field survey work only to the extent necessary to capture survey data considered essential to the completion of the NEPA EA. This could include, but is not limited to, wetland delineation, drainage details, and underground utility information. The level of survey accuracy for the approximate locations of underground utilities will be based on the Utility As-Built information and supported by the "Utility One-Call" locates. The CONSULTANT will supply WSDOT with a hard copy of the survey field notes and information, to the level of accuracy per current WSDOT standards, where required. **Surveying required beyond this assumed amount and approved by WSDOT will be considered extra work.**

The CONSULTANT will complete necessary base mapping at a 1-inch = 100-foot scale suitable for preparing the alternative conceptual layouts along the SR 518 corridor. This will include preparing a digital terrain model and develop contoured base maps using CaiCE from the XYZ coordinates provided by WSDOT.

### **3.3 Typical Sections**

Typical sections will be developed to an appropriate scale, to show the lane configuration, median and shoulder widths, pavement details, cross slopes, bike lane and/or sidewalk widths (where appropriate), side-slope details, retaining walls (if provided), and proposed right-of-way widths.

### **3.4 Roadway Plans and Profiles**

The CONSULTANT will prepare preliminary plans and profiles for each of the alternatives under consideration at a 1-inch = 100-foot horizontal scale and a 1-inch = 20-foot vertical scale. The Preliminary Engineering files for these alternatives will be developed using CAiCE roadway design software, in accordance with WSDOT standards. The plans will show half-tone imaging of the base mapping details, and full-tone imaging of the alternative being considered. Details to be shown include, but are not limited to, the proposed profile grade line with stationing; right-of-way limits; cut and fill side slope limits; lanes, median and shoulders; interchange and intersection layouts; drainage details; potential retaining wall locations; and bridge structures.

Where appropriate, minor construction alignment deviations will be evaluated by the CONSULTANT to reduce impacts on flood plains, wetlands, unstable soils, 4(f) and Section 106 facilities, hazardous waste, threatened and endangered

species habitats, and cost to construction.

### **3.5 Utility Layout Plans**

Public and private utilities known or thought to have facilities within the PROJECT right-of-way will be identified, as well as noting whether the presence is by easement, permit, franchise or other. Answer: unknown at this time. WSDOT will be responsible for requesting as-built information.

The CONSULTANT will prepare a set of Utility Layout Plans at a 1-inch = 100-foot scale, based on the as-built, aerial and utility survey information gathered. The plans will follow WSDOT Plans Preparation Manual guidelines.

After information has been obtained, and plotted, and potential impacts to utilities have been identified, a meeting, or meetings, will be held with the CONSULTANT, WSDOT, and the affected utility companies, to discuss utility relocation or modification costs. The CONSULTANT will be responsible to record the meeting notes and to provide copies to WSDOT.

It is expected that engineering services required for the relocation of existing utilities will be done by others.

### **3.6 Hydraulics and Geotechnical**

A Hydraulics Technical Memorandum will be completed by the CONSULTANT and will follow the WSDOT Hydraulics Manual and Highway Runoff Manual procedures. Main areas of work include:

- Preliminary Hydraulic Analysis for retention, detention, and water quality,
- Identify Existing Conveyance System (ditches, culverts, pipes) Plans and Profiles,
- Major Drainage Basins,
- Approximate locations of Detention Facilities, and
- Proposed Conveyance Profiles (and do the profiles affect adjacent parcels.)

It is assumed that there are no existing hydraulic analyses of the existing bridges available from WSDOT.

For budgeting purposes, it is assumed that no gutter, sag, or pipe calculations or design will be done for this stage of the PROJECT. Hydraulic analyses for culverts and bridges on creeks will be based on existing available flow data, and will be minimal, done at selected locations. No new studies will be performed as a part of this PROJECT.

A Preliminary Geotechnical Report will be completed while developing Preliminary Engineering work related to the EA. Main areas of work that will be completed by the CONSULTANT include:

- Review of available geotechnical-study reports for the PROJECT area

- Geological reconnaissance
- Engineering design recommendations relating to structures, pavement design, side-slope stability, and drainage facilities
- Construction considerations
- A proposed subsurface investigation plan (is not envisioned as part of this EA/RDP Scope of Work. Subsurface investigation will be done by others.)

### **3.7 Structures**

The CONSULTANT will conduct a basic alternative analysis for new or impacted existing bridge crossings on the PROJECT considering cost and construction feasibility. The analyses will be of a conceptual nature only, using basic geotechnical engineering parameters, and developed to a sufficient level to support the EA and enable preliminary costs. WSDOT will provide as-built plans, and repair, maintenance, and accident records for existing bridges. **If Special Structural Studies or Bridge Site Data are required, they will be considered extra work.** A Structural Appendix will not be prepared for the EA. A meeting with WSDOT's Bridge and Structures office in Olympia and the CONSULTANT and Project Office to discuss the structural aspects of the PROJECT and to agree on the assumed structure types will be held. The CONSULTANT will take meeting notes. The CONSULTANT will submit deviation requests, if applicable, if the use of existing structures is recommended in the EA alternative.

Specific structure types, span lengths, and pier locations will not be mentioned in the text or shown in drawings. The CONSULTANT will assume a structure type only for purposes of construction cost estimating. The overall structure length will be mentioned, but only as an approximate length. The description of proposed bridges will include the overall width, lane, shoulder, and sidewalk widths, bridge barrier and rail requirements, the vertical profile and the horizontal alignment.

For widened bridges, the CONSULTANT will assume a structure type similar to the existing. Consideration of impacts to existing bridges will include widening to carry additional lanes of traffic, rail replacement, or demolition of the existing structure.

### **3.8 Quantities and Cost Estimates**

Once the typical sections and the roadway plan and profile sheets have been completed, cross sections along SR 518 will be cut at 50-foot intervals, and preliminary earthwork quantities will be calculated (using CAiCE) for the mainline and interchanges along the corridor.

Preliminary quantities for all major elements of the PROJECT will be determined and an opinion of cost will be developed, based on the Standard Item Table, Bid Tabulations, and WSDOT bridge square-foot costs. For budgeting purposes, the

level of effort will be commensurate with that required to support the “build” alternatives proposed in the EA.

| <b>Deliverables:</b>  |
|---|
| <ul style="list-style-type: none"><li>• Base Maps for the SR 518 corridor (1 electronic copy)</li><li>• Survey Field Notes</li><li>• Typical Sections (hard copy)</li><li>• Roadway Plan and Profile Sheets (hard copy and electronic copy)</li><li>• Meeting Notes</li><li>• Utility Plan Sheets (hard copy and electronic copy)</li><li>• Drainage Basin Map (hard copy)</li><li>• Preliminary Drainage Area Plans (electronic and hard copy)</li><li>• Hydraulic Technical Memorandum (electronic and hard copy)</li><li>• Preliminary Geotechnical Report (hard copy and electronic)</li><li>• Bridge Data input to Design File</li></ul> |

#### **Work Element 4. Discipline Reports**

The discipline reports will follow the content and outlines in the WSDOT Environmental Procedures Manual (M 31.11), Volume 2, except as modified or expanded by this scope of work. Each discipline report will contain:

- Studies and coordination
- Affected environment
- Permits
- Long term impacts and mitigation
- Construction impacts and mitigation
- Secondary and cumulative impacts

Discipline reports will be used as the basis for the analysis in the environmental assessment.

#### **4.1 Wetlands**

The wetlands discipline report will describe identified wetlands in terms of location, size, function, and relative importance. Following this initial review, only those wetlands which will be impacted by the proposed alternatives will be delineated. Approximate impacts due to construction and operation of the PROJECT will be evaluated. Mitigation measures to reduce adverse impacts on these wetlands will be proposed and discussed.

A graphic will be prepared and included in this discussion to demonstrate the relationship of the wetlands impacted by the proposed action to the regional wetlands from the U.S. Department of Interior, Fish and Wildlife Service’s National Wetland Inventory maps () or other available existing information.

#### **4.2 Wildlife, Fish and Vegetation**

This report will include discussion of Threatened and Endangered Species and a summary of the Biological Assessment (BA).

Coordination with appropriate Federal and State agencies and Treaty Tribes regarding work in and adjacent to streams will be conducted as early in the process as practicable to assist in the evaluation of alternatives, and identify agency and tribal management plans and concerns. The level of stream analysis necessary for the proposed PROJECT will be based on consultation with Federal, State, and Local Agencies. For this scope of work, it is assumed that no stream surveys or stream special studies will be required.

Upland vegetation communities and habitat types in the PROJECT area will be assessed during a two-day reconnaissance of the PROJECT area by two CONSULTANT team biologist(s). The presence of critical habitats or any rare, threatened, or endangered species will be identified. Boundaries of the PROJECT area and roadway corridors will be identified by the CONSULTANT prior to the initiation of field work. Wetland data will be collected during the wetland study. A habitat map of the PROJECT area will be prepared that depicts the major vegetation communities in the PROJECT area. The habitat map will be based on the field reconnaissance and interpretation of the aerial photographs. Field reconnaissance for the BA is not included as part of this task.

Surface water bodies in the PROJECT area will be described from existing resources and from the field reconnaissance. Aquatic resources that inhabit these streams, and ponds will be described. Those streams that support anadromous fish runs as well as resident Endangered Species Act (ESA)-protected species will be described based on data from WDFW.

The impacts to upland vegetation, fish, and wildlife will be evaluated and documented. The primary impacts from the PROJECT will occur during the construction phase. Loss of habitat will be described and aerial effects will be estimated. The effects to wildlife associated with the affected habitat communities will be described. Any impacts to crossing of creeks and drainage ways will be determined. Impacts on migratory waterfowl or other bird species that may use the site will be evaluated. Indirect effects from construction of the PROJECT including effects to aquatic resources, temporary effects from noise and disturbance as well as cumulative effects will be evaluated. Adverse effects to upland vegetation, fish, and wildlife from operation of the PROJECT will be described and, where possible, expressed numerically, based on published studies. Those adverse effects that are unavoidable will be summarized.

Fish and Wildlife studies conducted under this scope will be qualitative in nature. This means that observations of parameters surveyed will be characterized descriptively rather than being presented as estimates expressed with statistical confidence intervals.

Appropriate mitigation measures and construction Best Management Practices (BMP's) to reduce the effects of the PROJECT on upland vegetation, fish, and wildlife will be recommended. Construction windows to avoid adverse effects on salmonid migration and other species will be identified. Commitments and monitoring procedures will be identified.

#### **4.3 Cultural Resources**

The CONSULTANT will consult with King County, the Washington State Office of Archaeology and Historic Preservation (OAHP), and local historical societies and jurisdictions to determine the location of any known archaeological, cultural, or historic sites in the PROJECT area. FHWA, WSDOT and the CONSULTANT, will coordinate with Native Americans regarding usual and accustomed areas.

A field survey will be performed. The presence of known cultural, historic, and archaeological resources will be determined. These sites will be described by site type, location, and historical significance under the Criteria of the National Register of Historic Places and the importance to the local area.

The CONSULTANT will identify archaeological and historic resources in the corridor to facilitate the preliminary screening conducted as part of the RDP.

The impact discussion will include property acquisition by WSDOT, structural demolition, or changes to the surrounding environment.

Mitigation measures will include OAHP notification, recordation, avoidance, protection, or other appropriate techniques.

**Should subsurface testing be necessary due to the discovery of an archaeological site during the consultation, historic research, or archaeological survey associated with this PROJECT, it will occur as an addendum to this contract or as a separate work order.** If any historical resources are found within the impacted area, a separate Section 4(f) and/or Section 106 and/or 6(f) analysis may be required. A recommendation will be made by the CONSULTANT and a determination will be made by WSDOT on the applicability of other required analysis during the preparation of the discipline report. **Any additional analysis would be considered extra work.**

#### **4.4 Air Quality**

The air quality impact analysis will follow the WSDOT Environmental Procedures Manual (EPM) guidelines, Volume 3, Chapter 5, Section 5-1, except when directed otherwise by this contract.

Air quality impacts will be assessed, quantified, and described for:

1. The Existing Year (2003)
2. The Year of Opening - No Build (2010)
3. The Year of Opening - Build (2010)

4. The Design Year - No Build (2030)
5. The Design Year – Build (2030)

The existing air quality and pollution sources will be described.

Air quality impacts from construction activities and vehicles operating on the roadway will be evaluated qualitatively. Temporary air quality impacts during construction will be examined, and mitigation measures to control fugitive dust will be discussed referencing the Memorandum of Agreement with the Puget Sound Clean Air Agency regarding fugitive dust in Short Term Mitigation measures. This agreement requires evaluation and implementation of best management practices.

The long-term impacts from changes in vehicular traffic operating on the roadway will be discussed. Monitoring and modeling of air pollutants other than carbon monoxide (CO) is not proposed.

**Studies and Coordination:** The air quality analysis will meet the requirements of WAC 173-420 and follow EPA guidelines. The microscale analysis will be performed to determine carbon monoxide (CO) concentrations using the USEPA CAL3QHC Version 2 or other EPA approved computer models (the mesoscale analysis is done on transportation projects by the Puget Sound Regional Council as part of the Transportation Improvement Program (TIP) analysis). Vehicular emissions will be computed by using the EPA's latest emission factor algorithm - MOBILE5.0A or later version as required by the EPA. The intersections selected for modeling and the corresponding receptor siting will be based on traffic volume, and level of service (LOS) in accordance with the Puget Sound Regional Council, *Guidebook for Conformity*. Maximum one-hour and eight-hour CO concentrations will be estimated at receptor sites for each alternative (including the no-build), for peak traffic periods, for existing, year of opening, and the Design year. The results will be compared to the State and National Ambient Air Quality Standards (NAAQS).

The CONSULTANT will include the following traffic (as collected by WSDOT) and modeling information for all study years, as defined above, for the Air Quality Discipline Report:

- AM and PM peak hour traffic volumes and LOS for all new, modified, and impacted intersections for all alternatives at intersections with signals,
- Description of intersections selected
- Description or figure showing receptor locations
- Identification of models used,
- 1-hour and 8-hour maximum pollutant concentrations at each intersection for each modeling scenario.

The analysis will conclude with the PROJECT conformity statement. Include the

PROJECT's inclusion in pertinent conforming transportation plan and conforming transportation improvements program, and relation to transportation control measures. Note the emissions relationship between build and no-build alternatives. Indicate whether the PROJECT contributes to the reduction of frequency and severity of violations of NAAQS (if any).

#### **4.5 Noise**

The CONSULTANT will prepare a technical report documenting the procedures and results of the noise analysis.

The CONSULTANT will conduct a reconnaissance of the PROJECT area to determine land uses to locate sensitive receptors and determine their distances from the proposed roadway alignment. All of the following land uses will be identified for noise sensitivity:

- Lands upon which serenity and quiet are of extraordinary significance and serve as an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose,
- Picnic areas, recreation areas, playgrounds, active sports areas, parks, residences, motels, hotels, schools, churches libraries and hospitals,
- Developed lands not included above, and
- Undeveloped lands.

Up to five sensitive receptors will be selected for the study based upon their sensitivity to noise and their distance from the PROJECT. The CONSULTANT will note physical and terrain features that may be altered during construction and affect noise levels.

The guidelines presented in the current Federal Aid Policy Guide, Sub-Chapter H, Part 772 and the WSDOT State Highway Policy Procedures will be used. Sampling noise measurements will be conducted at up to five sites as needed to ensure complete description of existing noise levels and calibrate the traffic noise model that are representative of the land uses along the proposed alignments.

American National Standards Institute (ANSI) approved Type 1 or Type 2 noise meters with current certification will be used for field measurements.

All measurements will be conducted for 15 minute sampling periods during daytime off-peak hours (10 a.m. to 4 p.m.) when traffic is moving freely. At each measurement site, traffic counts as described in the Traffic Study will be conducted concurrently with the noise measurements. Non-highway noise sources will be noted and measured. The monitored noise levels will be adjusted to represent traffic noise levels during peak hour traffic movements. Measurements used for modeling purposes will include only traffic noise and the sources will be documented in the study. Traffic volumes that were counted during the noise measurement survey will be compared with the existing peak hour traffic volumes and an adjustment will be made to the measured noise levels using the FHWA STAMINA 2.0/Optima noise prediction or other FHWA or



WSDOT approved computer model. Traffic counted during the noise measurement will be used to calibrate the model. Existing peak hour traffic will be used with speed limit speeds to calculate existing peak noise levels. In locations where there are no existing roadways and no traffic to model, the measurements will represent the existing noise level.

The CONSULTANT will compile and include the following information (from TRAFFIC STUDY): traffic and plan data for all study years: Existing (Year 2003), Design year No Build (2030), Design Year Build (2030):

- Existing peak hour volumes, speeds and classification counts.
- Future peak hour volumes, speeds, and classification counts.

The CONSULTANT will model the future year traffic noise level with and without the proposed PROJECT using the FHWA STAMINA 2.0, or most current version, Highway Noise Prediction Model. Noise predictions will be modeled at the measured noise sensitive receptors and other noise sensitive land uses along the corridor. Modeled receptors will be adequate to assess all traffic noise impacts, the noise levels at each of the impacted receptors, the increase in traffic noise and amount of reduction to each outdoor area as a result of mitigation or the lack of mitigation. Outdoor areas that would have a substantial increase in predicted noise levels over existing noise levels will be identified by the CONSULTANT for all land uses and impacts quantified.

The report will discuss mitigation techniques found in 28CFR772.13 and provide specific information on the mitigation measures. For example:

- Which ones are reasonable and feasible, which are likely to be implemented, and what are the associated costs for expected noise level reductions?
- Which impacted activities have no prudent solutions?

In accordance with FHWA, WSDOT, County and City requirements at locations along the alignments where traffic noise impacts are predicted, noise abatement measures will be considered and could include noise barriers, as well as other FHWA required techniques and those specifically mentioned in 23CFR772. The CONSULTANT will provide height, length, cost and benefits per impacted user for each proposed barrier. It will contain a complete discussion of impacted areas that do not meet the state criteria and specifically note reasons for not including mitigation.

#### **4.6 Relocation**

This report will comply with the Uniform Relocation Act, and contain a discussion on "Availability of Suitable Replacement Housing and Business Space." The acquisition of property, including land, structures, and landscaping, will be identified based upon Right-of-Way plans and title reports. Any necessary displacement of residences and businesses, loss of parking, or change in access will be identified and evaluated. Mitigation measures specific to properties will

be analyzed, including the provision of relocation assistance.

#### **4.7 Hazardous Materials**

The CONSULTANT will provide an estimate of the contamination likely to be present on properties within existing and proposed WSDOT Right-Of-Way, and likely clean-up costs required to remedy the problem prior to construction. These estimates will be based on sufficient investigation and research of each potentially contaminated parcel, and an analysis consistent with Code of Federal Regulations, CFR 1502.22 (Incomplete or Unavailable Information) will be made and included in the report.

Hazardous waste evaluations will be made in consultation with the United States Environmental Protection Agency (USEPA) and the Washington State Department of Ecology (WSDOE). If these agencies have any plans for cleanup of the site(s), this will be mentioned.

Where contaminated sites are not being avoided, there will be text to indicate the justification.

The Hazardous Waste Report will contain an initial site assessment for any sites identified as possibly contaminated. Where there are known or potential hazardous waste sites affected by an alternative, the report will include the potential impacts and public health concerns and the proposed mitigation measures to eliminate or mitigate such impacts or concerns.

#### **4.8 Visual Quality**

The following three criteria will be analyzed to determine visual quality impacts:

- *Vividness* (measures the memorability, intensity, diversity, and observer position.)
- *Intactness* (measures the prominence of man-caused features.)
- *Unity* (measures the degree of harmony and continuity between the man-made and natural landscape.)

The PROJECT improvements will conform to the Roadside Classification Manual or the visual quality will note the areas of non-conformance.

A site reconnaissance will be conducted to define the visual environment within the PROJECT area. Identify the most sensitive viewer groups based on their location, number, and duration of their view. Review WSDOT and local jurisdiction policy documents pertaining to visual quality in the PROJECT area. Identify and photograph key views from the surrounding area toward the PROJECT alignment as well as views from the PROJECT alignment toward the surrounding area.

Assess the visual impacts of the PROJECT during construction and operation. The discussion of impacts will relate to impacts at the various key views and to specific viewer groups.

Describe how headlight glare, highway lighting, or other area lighting could interact or interface with existing lighting features.

Identify measures to mitigate the impacts, including screening and temporary storage of construction equipment. Describe any proposed landscaping treatment that will be part of the PROJECT.

#### **4.9 Transportation**

The Consultant will develop a summary of the RDP, incorporating additional detail as necessary, to provide input into the EA.

For the identified Preferred Alternative, the CONSULTANT will perform analyses using the Highway Capacity Manual method (current version) for all mainline sections and un-signalized intersections, and TRANSYT 7-F (Release 7.2 or later) for all existing and proposed signalized intersections. The study will include the following traffic information to support the preferred alternative advanced in the EA:

- Determine Peak Periods (AM and PM), **including Airport AM and PM peak hours (which is currently 11 am to 1 pm),**
- Develop LOS for all intersections and highway sections for all alternatives and study years,
- Estimate the future traffic volumes for all alternatives and study years for daily and peak hour volumes using growth factors,
- Evaluate future signal operations (at existing and proposed signal locations): cycle lengths, red times / splits,
- Evaluate the need for coordination and interconnect of traffic signals,
- Prepare recommendations for mitigating major accident problem locations, and
- Traffic Signal Warrant Analyses for intersections for the preferred alternative.
- The extract of the final discipline study on the transportation study will become part of the EA to illustrate transportation related data not already displayed elsewhere in the EA and will contain a summary of forecasted traffic volumes, Level of Service (LOS), queue analysis, signal warrants, and future signal operations for each build alternative considered in the EA.

The Consultant will develop a phasing plan based on the outcome of the EA. The Phasing Plan will identify which improvements, if any, need to be included in the six year capital program. As part of this effort it is assumed that year 2010 PM peak hour volumes for up to eight intersections will need to be developed and intersection capacity analysis performed. **The Consultant will work with the**

**Port of Seattle to obtain traffic data for both the AM and PM Airport peak hours.**

#### **4.10 Energy**

Estimate the quantity of energy required during construction, using available information on construction equipment requirements.

Discuss the potential impacts on local fuel availability and energy production facilities during construction. Analyze the effects of changes in traffic flow after construction on vehicle fuel consumption.

Identify measures to mitigate the impacts, including increased transit use, ridesharing and other transportation system management techniques.

#### **4.11 Soils and Geology**

The CONSULTANT will collect and review existing information on geology, soils, topography, erosion, and other unique physical features or hazards within the PROJECT area. The existing information to be reviewed will include USGS and NRCS geology and soil maps, any applicable county/city sensitive area maps and other relevant information that may be available.

The CONSULTANT will describe existing conditions including the general topographic setting, the presence of unique physical features, geology of the PROJECT area, the types of soil, steep and unstable slopes, areas of erosion and landslide potential, previous mining activities, and hazards that might result from seismic activity.

The CONSULTANT will discuss the effects of PROJECT construction, based on review of the preliminary alignment of the roadway. The review will consider the existing conditions including the impacts of embankment construction, effects of soil excavation and stockpiling, requirements for a sources of borrow materials for embankment construction, plans for handling excess materials from excavations, changes in soil stability, ground settlement from embankment loading, the potential for soil erosion, and the effects of pile driving and constructing retaining walls.

The CONSULTANT will identify measures to mitigate the impacts, including procedures for dealing with soft soil and the handling of erosion during construction.

#### **4.12 Waterways and Hydrological Systems**

The CONSULTANT will identify all water bodies potentially affected by the proposed PROJECT, including known aquifers, wetlands, lakes, rivers, creeks, and public water supplies.

Any impacts to water quantity, flow rates, groundwater movement, and stream

and surface drainage will be analyzed using existing data. Any impacts that could occur to existing constructed drainage features, such as culverts and storm drain systems will be identified. The locations of water wells in the PROJECT area will be identified based on available records from the Washington Department of Ecology.

The analysis of potential impacts on receiving waters will generally be qualitative. If design plans are sufficient to determine areas of new impervious surfaces, locations and types of runoff control features, and flow discharge points, then the analysis will quantify impacts to the extent possible. Additional flow measurements will not be collected under this task.

#### **4.13 Water Quality and Floodplains**

The discipline report will contain details on the water quality impacts and associated mitigation commitments (water quantity and quality) for each alternative.

Existing water quality will be described for water resources in the PROJECT area including wetlands and sole source aquifers. The discussion of construction impacts will focus on erosion and the effects of excavation and fill activities in the proposed Right-of-Way. Impacts of handling, use and disposal of toxic materials, waste and cement leachate in relation to existing water resources also will be described. Impacts of operation will focus on the effects of storm water runoff on surface and ground water as a result of fuel and lubricant contaminants washing from increased impervious surfaces.

The CONSULTANT will coordinate with the Washington State Department of Ecology to determine the location of any water wells adjacent to the highway corridor. The CONSULTANT will recommend to WSDOT which water supply wells may be impacted by the proposed construction activities. These potentially impacted wells will be inventoried under the "before" and "after" condition related to water quality (state and any applicable local standards) and water quantity (flow rate). **Because the number of possible wells is unknown as this Scope of work begins, the CONSULTANT will be compensated for this work element under Extra Work, by supplemental agreement.**

FEMA maps will be reviewed for potential floodplain encroachment. The consultant will review existing information floodplains in the PROJECT vicinity including floodplain, floodway, and peak flood flow information obtained from NFIP flood studies, Flood Insurance Rate Maps (FIRM) and/or floodway maps, topographic maps, aerial photos, GIS data, published literature and other readily available literature. The consultant will also contact regional hydrologists and/or flood control districts where appropriate. Information collected will include: locations of 100-year floodplains, locations of flood control structures, and history of flooding in the PROJECT area.

NFIP flood studies for the affected jurisdictions will be used as base information for PROJECT areas within floodplains. FIRM panels and floodway maps will be

used for existing flood elevation information. For locations where no floodplain data are available, existing flood elevations will be estimated from the best available hydraulic data, usually kept by the jurisdiction having regulatory authority.

After consolidating existing information, the CONSULTANT will field verify existing floodplain conditions potentially affected by the PROJECT. This will include descriptions of land cover, gradient, hydraulic continuity, existing structures, hydraulic improvements (levees, culverts and other flood control structures) and area of the floodplain within the PROJECT footprint.

The CONSULTANT will evaluate potential impacts of the proposed PROJECT on: flood elevations downstream of the PROJECT site, potential effects to flood control structures, and potential effects to natural and beneficial floodplain values. No calculations will be made for hydrologic modeling, pollutant loading estimates, flood elevation estimates, ditch or culvert sizing, or other runoff estimates. In locations where data are lacking, qualitative judgments will be made to allow for alternative comparisons. The consultant will identify for WSDOT, any modeling which may be required (i.e. based on field surveys and analysis, areas requiring further analysis due to site conditions and potential effects).

The CONSULTANT will describe impacts in general terms regarding the nature and the magnitude of potential impacts to floodplains that could be expected. Special concerns will be identified where circumstances indicate that potential problems exist (e.g. where work will occur within or immediately adjacent to floodplains, or where avoidance, or minimization of impacts will be required). Where impacts are identified, the consultant will identify conceptual mitigation measures.

#### **4.14 Land Use (including Farmlands)**

The land use analysis will evaluate existing land use along the SR 518 PROJECT corridor. Direct and indirect impacts to land use resulting from the PROJECT will be identified. Coordination with King County, the City of SeaTac, the City of Tukwila, and possibly the City of Burien will be required to determine consistency and/or actual or potential inconsistencies with local comprehensive plans, zoning ordinances, sensitive areas ordinances, and other relevant plans and policies. The Land Use section will include a "Relationship to Plans and Policies" analysis. This discussion will contain a "Relationship to Plans and Policies" section. It will include a discussion of consistency with or the actual or potential inconsistencies with the comprehensive/zoning/master plans will be addressed and documented. Documentation should include review and reference to the EIS's completed to support the comprehensive plans. Documentation of coordination with local planning will indicate that the preferred alternative is compatible with (or will be made compatible with) all of the local plans. If any inconsistencies remain, the report will suggest actions, which could be taken for resolution.

In the event that the planned improvements result in surplus WSDOT property, the CONSULTANT will include a discussion for possible uses of the land, particularly to mitigate impacts.

The CONSULTANT will conduct a site reconnaissance to verify existing land use information. Local jurisdictional staffs will be contacted to identify any recently proposed projects in the area. Maps of existing land uses and zoning will be prepared

#### **4.15 Social and Economic Elements**

The CONSULTANT will describe the existing social environment of the PROJECT area and the surrounding community, including neighborhood structure, recreational facilities, public services, and growth and development potential. Information on recreational facilities and public services will be procured from appropriate local jurisdictions and other service providers.

The CONSULTANT will use the most recent U.S. Census data, or later population estimates produced by local jurisdictions, if available, and as approved by WSDOT. When using such data, a graphic showing the referenced census tracts will be provided.

**Community Cohesion:** The CONSULTANT will discuss potential changes in neighborhood cohesion and community character as a result of possible splitting of neighborhoods, isolating a portion of a neighborhood, and the appearance of incompatible development with the neighborhood. Mitigation measures to minimize both the short-term and long-term effects of the proposal on existing and proposed uses on adjacent properties will be evaluated.

**Environmental Justice:** The CONSULTANT will inventory the population impacted by the proposed PROJECT to determine the extent of populations that conform to U.S. DOT definitions for "minority" and "low-income". Methods to be considered will include examining census block information, visual surveys of the affected area, and conducting interviews with church leaders, providers of social services, ethnic clubs and organizations and local agencies (planners, Office of Equal Opportunities [OEO] representatives, elected officials, school attendance records, etc.) in the study area.

If minority or low-income populations are present, the CONSULTANT will develop methods for identifying adverse impacts, mitigation and enhancement measures, and disproportionately high and adverse effects on minority or low-income populations. The report will contain a description of any measures that may be taken to address the disproportionately high and adverse effects on minority or low-income populations. Included will be statistics and characteristics of the population including the portion of the population with income under the poverty level. Low income will be defined by the U.S. Department of Health and Human Services. (HHS). An annual update of HHS poverty guidelines is typically published in the Federal Register each February.

**Title VI:** Title VI of the Civil Rights Act of 1964:

***WSDOT assures full compliance with Title VI of the Civil Rights Act of 1964 by prohibiting discrimination based on race, color, national origin and sex in the provision of benefits and services.***

This Act ensures that the potential for discrimination is identified and corrected and that the identification, evaluation, and mitigation of the following adverse effects are addressed:

- Destruction or disruption of community cohesion,
- Destruction or disruptions of or access to available public and private facilities and services,
- Displacement of people,
- Adverse employment effects,
- Displacement of businesses, farms, housing, and people,
- Tax and property value losses,
- Actions injurious to the public's health (e.g. air, noise, and water pollution,) and
- Actions deleterious to the public's well being (e.g. aesthetic impacts and loss of recreational property.)

The CONSULTANT will provide enough information to determine if the proposed action of this PROJECT would create undue hardship to the populations defined above.

The CONSULTANT will compare demographic information of the people within the study area to the larger County base and determine if any Title VI populations reside within the PROJECT limits that exceed the characteristics of the County as a whole.

If yes, discuss the four primary factors that address the needs of this population: transportation, housing, community, and health and social services.

Any proposed mitigation measures for Title VI impacts will refer the reader to proposed mitigation measures in other appropriate discipline studies (i.e. air quality, noise, social, etc.).

**Recreation:** The CONSULTANT will list recreational facilities within the PROJECT study area. Potential impacts to recreational facilities during and after construction, including access to, the usability of, and the integrity of existing and proposed facilities will be discussed. Resources that qualify as a 4(f) facility will be identified. Discuss if there are feasible and prudent alternatives to the impacts of the alternative. Coordination with the local jurisdictions will be documented.

**Regional and Community Growth:** Regional population and growth patterns will be described. Population changes anticipated or accommodated as a result of the proposed transportation PROJECT will be analyzed qualitatively.



**Services and Utilities:** The CONSULTANT will describe how each public service (schools, police and fire protection, ambulance) will be affected by the construction and operation of the PROJECT improvements, including service disruptions, circuitry of access, and changes in service travel times during construction. Discuss changes in service areas, service travel times, and new or additional services that may be needed as a result of any secondary or cumulative growth after PROJECT construction. Include any services provided to the public that may be impacted (such as police and fire protection, ambulance companies, public or private bus service, cemeteries, government offices, doctor and veterinarian offices, schools, religious institutions, community organizations).

The discussion of impacts to existing and proposed utilities will include major distribution and transmission facilities for natural gas, electrical power, telephone, cable television, water supplies, sanitary sewer, storm sewer, solid waste routes, petroleum transmission facilities, public diking districts, and others that may be identified during this PROJECT. Contacts and resulting coordination with each utility will be documented.

**Pedestrian and Bicyclist Facilities:** The relative amount of use of the existing facility by pedestrians and bicyclists will be generally described (no pedestrian or bike counts will be made.) The CONSULTANT will indicate if SR 518 is part of a designated or planned bicycle route or trail or if any designated or planned bicycle route or trail crosses SR 518.

Measures to mitigate the impacts, including identification of possible replacement land for acquired property, landscaping, aesthetic treatments and other techniques will be discussed.

**Economic Components:** The CONSULTANT will use current applicable information and data to describe the existing economic conditions in the PROJECT area (number and type of business, employment, property values, and tax base).

Describe the impacts of the PROJECT, including construction-period economic impacts, temporary and long-term changes in traffic and associated shopping patterns, loss of businesses and jobs as a result of Right-of-Way acquisition, construction and long-term employment, and business growth.

Identify measures to mitigate economic activity or employment impacts (mitigation measures are not typically identified for property value or tax revenue impacts.)

- Employment.
- Tax Revenues.
- Property Values.

**Deliverables:**

- Wetlands Draft and Final Discipline Report
- Wildlife, Fish and Vegetation Draft and Final Discipline Report
- Cultural Resources Draft and Final Discipline Report
- Air Quality Draft and Final Discipline Report
- Noise Draft and Final Discipline Report
- Relocation Draft and Final Discipline Report
- Hazardous Materials Draft and Final Discipline Report
- Visual Quality Draft and Final Discipline Report
- Transportation Draft and Final Discipline Report
- Energy Draft and Final Discipline Report
- Soils and Geology Draft and Final Discipline Report
- Waterways and Hydrological Systems Draft and Final Discipline Report
- Water Quality and Floodplains Draft and Final Discipline Report
- Land Use and Farmlands Draft and Final Discipline Report
- Social and Economic Elements Draft and Final Discipline Report

**Work Element 5. Biological Assessment**

To fulfill its requirements mandated by Section 7 of the federal Endangered Species Act (ESA) of 1973, Section 7(c) as amended, for all construction projects with a federal nexus, the Federal Highway Administration (FHWA) must conduct a Biological Assessment (BA) to determine the potential effects of the PROJECT on federally listed, threatened and endangered species, that are likely to occur in the PROJECT area. The conclusions of the BA will be used to determine if Formal Consultation with USFWS or National Marine Fisheries Service (NMFS) is required, at which point conservation recommendations can be developed for the affected species.

If, based upon contacts with State and Federal agencies (including USFWS and NMFS) it is determined that a Section 7 consultation will be required as a result of potentially adverse impacts on threatened and endangered species in the PROJECT area, the BA will be a separate document and will not be appended to the Draft EA. The results of the BA will be briefly summarized in the Wildlife, Fish, and Vegetation discipline report prepared for the Draft EA. **If an update or addendum to the BA is required for the Discipline Reports based upon new information from agencies or other sources, this work will be scoped later under a separate work plan and budget when the level of effort can be determined.** Reports will be based on existing data, general field reconnaissance, and habitat mapping from aerial photographs.

In addition to proposed and listed threatened and endangered species, USFWS and NMFS will identify candidate species that may occur within the PROJECT area. Although FHWA is not required by the ESA to consider the effects of the PROJECT on candidate species, it is advisable to do so to avoid complications if

any of these species are listed in the near future. If a project has begun construction and a candidate species in the area is then listed, construction could be stopped while the U.S. Fish and Wildlife Service (USFWS) or NMFS requires the proponent to update the PROJECT BA.

Aerial photographs, agency reports, previous technical studies, and natural resource inventories will be reviewed to assess potential habitat for threatened, endangered, and candidate species listed or proposed, by USFWS and NMFS as potentially occurring in the PROJECT area. In addition, agency personnel will be contacted for information on the level and type of use of the PROJECT area by these species. Reconnaissance-level surveys for species that may be affected by the proposed PROJECT will be conducted in areas of potential habitat for one build alternative with up to four design variations. **Comprehensive, quantitative field surveys will not be conducted under this Scope of Work.**

Fisheries and wildlife studies conducted under this scope will be qualitative in nature. This means that observations of parameters surveyed will be characterized descriptively rather than being presented as estimates expressed with statistical confidence intervals.

Sensitive species habitat conditions will be assessed during a one-day reconnaissance of the PROJECT area by two PROJECT team biologists. Boundaries of the PROJECT area and roadway corridors will be identified by the CONSULTANT prior to the initiation of field work.

Surface water bodies in the PROJECT area will be described from existing resources and from the field reconnaissance. Aquatic resources that inhabit these rivers, streams, and ponds will be described. Those rivers and streams that support anadromous fish runs will be described based on data from WDFW and other available resources.

The amount of in-stream habitat that may be lost due to implementation of the PROJECT will be estimated and mapped (in relation to the PROJECT site) by habitat type.

A draft report will be prepared that meets USFWS and NMFS guidelines for a BA under the ESA. This report will provide a summary of the literature survey, determination of effect of the proposed PROJECT on federally listed and candidate species, and recommendations for mitigation. Secondary and cumulative effects of the proposed PROJECT will also be described.

The Preliminary Draft Biological Assessment (PDBA) will be presented to WSDOT staff for submittal to FHWA. The CONSULTANT will review the comments on the BA and will discuss the procedures for facilitation of the Section 7 Consultation process. Comments will be addressed and the report will be revised accordingly. The revised BA will be bound and prepared for distribution to the USFWS and NMFS.

FHWA will send the BA to USFWS and NMFS with a cover letter requesting concurrence on the conclusions of the BA. The CONSULTANT will prepare a Draft of this cover letter and submit to WSDOT for forwarding to FHWA. FHWA will revise the letter for FHWA letterhead, and submit to USFWS and NMFS.

The Consultation may result in the development of conservation measures to protect the affected species. The CONSULTANT will provide technical assistance to FHWA and WSDOT during the Formal Consultation process. The CONSULTANT staff will attend consultation meetings with FHWA and WSDOT to provide technical information on the BA up to the amount budgeted.

Comments on the report and mitigation recommendations from USFWS and NMFS will be addressed and incorporated into the final BA.

|                      |
|----------------------|
| <b>Deliverables:</b> |
|----------------------|

- |   |
|---|
| <ul style="list-style-type: none"><li>• Draft Biological Assessment</li><li>• Revised Draft Biological Assessment</li><li>• Final Biological Assessment</li></ul> |
|---|

#### **Work Element 6. Environmental Assessment**

The EA will be written and prepared pursuant to FHWA Technical Advisory T 6640.8A and 23 CFR 771, and the WSDOT Environmental Procedures Manual. The design of the document will be based upon WSDOT's newest Style Guidelines recently prepared by the Environmental Services Office (ESO).

##### **6.1 Purpose and Need**

Based upon information gleaned from the RDP and other background information supplied by WSDOT, a Purpose and Need Statement will be developed. This statement will be prepared for review by WSDOT. In conjunction with the Purpose and Need, evaluation criteria will also be developed. Both documents will incorporate public and agency input from the public scoping phase of this PROJECT. It is anticipated that additional sources will be used to supplement this chapter.

##### **6.2 Development of Alternatives**

Based upon information developed for public outreach, a discussion of alternatives will be expanded for Chapter 2 of the EA. Alternatives considered but rejected, as well as related actions by others will also be discussed in this chapter. While some of this work has been completed, it is anticipated that additional research and development will be necessary for alternatives development.

##### **6.3 Impacts and Mitigation**

The majority of the information contained in this chapter will be extracted from the discipline reports. It is not anticipated that any additional research or analysis will be needed.

This chapter will begin with a generalized overview of the environmental conditions within the PROJECT area. The conditions will be discussed by technical element.

#### **6.4 Miscellaneous Document Requirements**

Other necessary elements for a clear and concise EA will be developed. This information includes: NEPA cover sheet; Table of Contents; Glossary; List of Acronyms; Public and Agency Coordination; List of Preparers; List of EA Recipients; and Appendices. Information will be collected by the CONSULTANT with assistance from WSDOT. Historic files and documents will be needed to complete this task.

#### **6.5 Document Preparation: PDEA, DEA, and EA**

A draft PDEA will be provided to WSDOT for internal review. Following incorporation of their comments, the PDEA will be disseminated to the FHWA and the cooperating agencies. Agency comments will be reviewed by the consultant and WSDOT staff. Comments and revisions will be incorporated into the document as necessary. It may be necessary for technical discipline report staff to provide revised technical information in response to agency comments. The document will be revised and a Draft EA will be released for public comment.

At the close of the public comment period, the CONSULTANT and WSDOT staff will review written and oral public comments. Comments will be sorted by technical discipline. The CONSULTANT and WSDOT staff will respond to comments. It is assumed that no more than 50 comments will be received. **If additional comments are received, a revised scope and budget will be necessary.** Following response to comments, a preliminary Final EA will be distributed to WSDOT and FHWA. Following their approval, a Final EA will be released for FHWA signature.

#### **6.6 Finding of No Significant Impacts (FONSI)**

FHWA will determine whether a FONSI will be issued or an EIS is required. If a FONSI is granted, a FONSI will be prepared by the WSDOT. Notices and the FONSI will be prepared and distributed to all relevant agencies by WSDOT. Notices of FONSI availability will be prepared by WSDOT and distributed, by the CONSULTANT, to the PROJECT mailing list. WSDOT will advertise in newspapers.

#### **6.7 EA Adoption under SEPA**

Upon acceptance of the EA and FONSI under NEPA, WSDOT may adopt the findings under SEPA. WSDOT will document the EA and FONSI and support

SEPA adoption.

**Deliverables:**

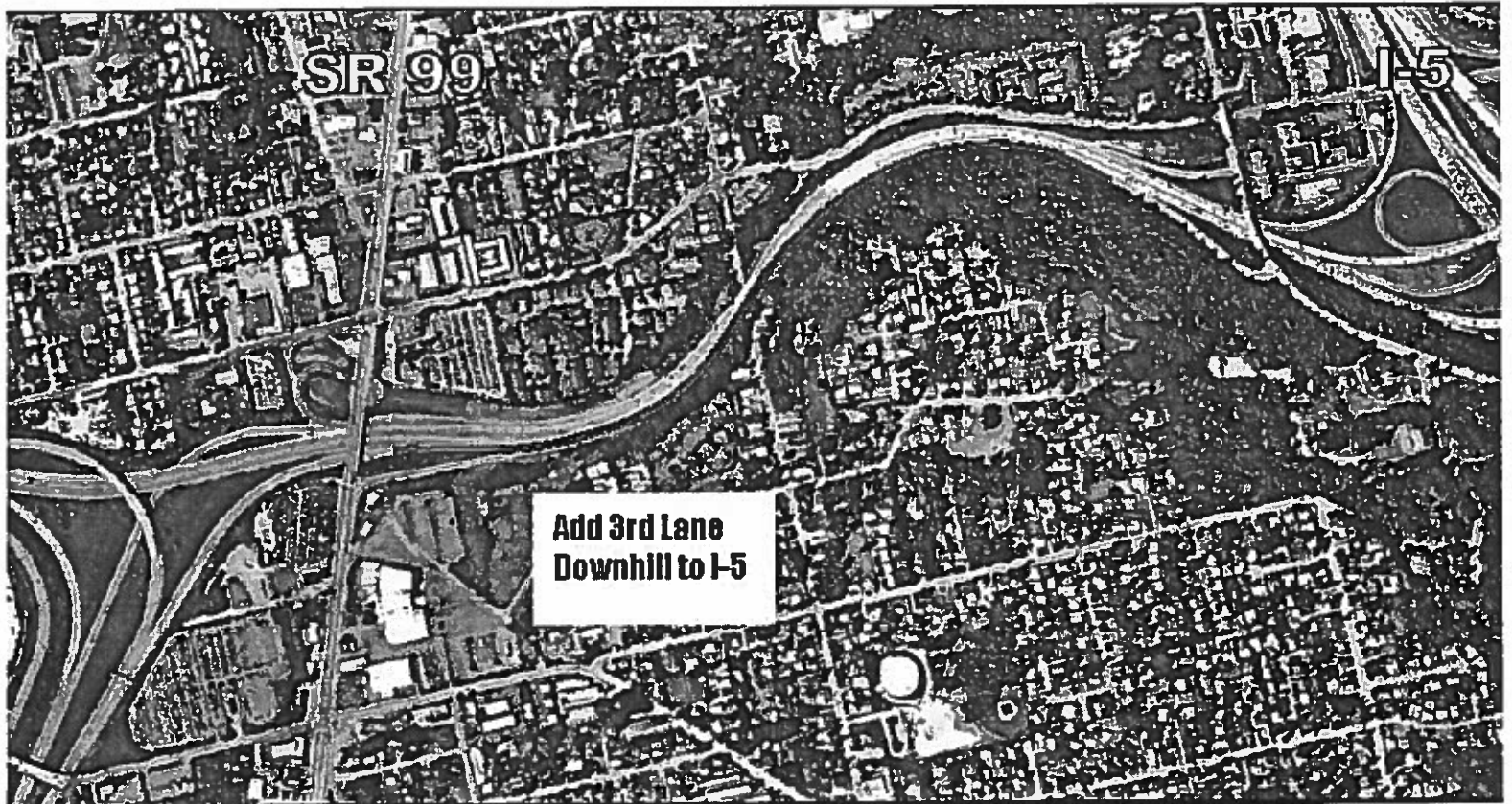
- Evaluation Criteria
- Draft Purpose and Need
- Final Purpose and Need
- Draft Alternatives Chapter
- Final Alternatives Chapter
- Glossary
- Index
- Cover/Fact Sheets
- Table of Contents
- List of Acronyms
- Public/Agency Coordination Chapter
- List of Preparers
- List of EA Recipients
- Appendices
- Preliminary Draft Environmental Assessment (PDEA)
- Draft Environmental Assessment (DEA)
- Preliminary Final Environmental Assessment (PFEA)
- Final Environmental Assessment (FEA)
- Mailing of FONSI to PROJECT mailing list

**End of Scope**

**GCA 4012  
Exhibit B  
SR-518 EA - WSDOT Services  
Estimate of Cost**

| <b>Task</b>                                 | <b>EA<br/>WSDOT</b> | <b>EA<br/>Consultants</b> | <b>EA Total</b>   |
|---|---------------------|---------------------------|-------------------|
| Project Administration/ Management          | \$ 75,000           | \$130,000                 | \$ 205,000        |
| Agency/ Public Involvement                  | \$ 19,500           | \$ 62,000                 | \$ 81,500         |
| Preliminary Engineering                     | \$ 65,000           | \$ 210,000                | \$ 275,000        |
| EA Scoping                                  | \$ -                | \$ 5,000                  | \$ 5,000          |
| Technical/ Disciplinary Reports             | \$ 32,000           | \$ 165,000                | \$ 197,000        |
| Biological Assessment                       | \$ 4,200            | \$ 14,000                 | \$ 18,200         |
| NEPA/ SEPA Documentation                    | \$ 20,000           | \$ 70,000                 | \$ 90,000         |
| <b>Sub-Total</b>                            | <b>\$ 215,700</b>   | <b>\$656,000</b>          | <b>\$ 871,700</b> |
| Direct Expense                              | \$ -                | \$ 7,150                  | \$ 7,150          |
| 14% Related Direct non-labor for WSDOT work | \$ 30,198           | \$ -                      | \$ 30,198         |
| <b>Sub-Total</b>                            | <b>\$ 245,898</b>   | <b>\$ 663,149</b>         | <b>\$ 909,047</b> |
| 10% Contingency                             | \$ 24,590           | \$ 66,315                 | \$ 90,905         |
| <b>Total</b>                                | <b>\$ 270,488</b>   | <b>\$ 729,464</b>         | <b>\$ 999,952</b> |

# SR 518 Corridor



**GCA-4012**

**Exhibit C**