

CITY COUNCIL AGENDA ITEM
CITY OF SHORELINE, WASHINGTON

AGENDA TITLE:	Authorizing the City Manager to Execute Supplement No. 2 to Contract 8463 with H.W. Lochner in the Amount of \$2,471,183 for Design and Environmental Services for the SR-523 & Interstate-5 Interchange Project
DEPARTMENT:	Public Works
PRESENTED BY:	Tricia Juhnke, City Engineer
ACTION:	<input type="checkbox"/> Ordinance <input type="checkbox"/> Resolution <input checked="" type="checkbox"/> Motion <input type="checkbox"/> Discussion <input type="checkbox"/> Public Hearing

PROBLEM/ISSUE STATEMENT:

Staff is requesting that the City Council authorize the City Manager to execute Supplement No. 2 to Contract 8463 with H.W. Lochner (Lochner), for design, environmental and right of way services related to the SR-523 (N/NE 145th Street) & Interstate-5 (I-5) Interchange Project. The proposed scope of work for this Supplement is attached to this staff report as Attachment A.

In February 2021, Lochner delivered the 30 percent design plans and other deliverables to City staff for review. At that time, staff also distributed the 30 percent plans to other project stakeholders for review and comment, including the Washington State Department of Transportation (WSDOT), the Seattle Department of Transportation (SDOT), Sound Transit, Seattle Public Utilities, and Seattle City Light. The City's and stakeholder's reviews were completed in May 2021, and Lochner has incorporated the comments into the design plans.

This Supplement is required for Lochner to advance the design plans from 30 percent to 100 percent design completion, complete technical specifications, final construction estimate, incorporate comments from the final City, WSDOT and stakeholder reviews and provide technical assistance during bidding.

RESOURCE/FINANCIAL IMPACT:

This project is included in the adopted 2021-2026 Capital Improvement Plan. The project budget summary is as follows:

EXPENDITURES

City Staff	\$ 200,000
City Direct Expenses	\$ 50,000
<i>Consultant Contracts</i>	
HW Lochner Contract, Including Supplement 1	\$ 2,124,935
<i>HW Lochner Supplement 2, Including Management Reserve</i>	\$ 2,471,183
WSDOT Review	\$ 125,000
WSDOT Project Administration	180,000
Right of Way Acquisition	\$ 4,932,000
Construction Administration & Engineering	\$ 2,490,000
Construction	\$ 16,562,520
Construction Contingency	\$ 1,656,252
Total Expenditures	\$ 30,591,890

REVENUE

Secured	
Roads Capital Fund	\$ 860,000
Federal STP Grant – Design 2018	\$ 3,982,500
Federal STP Grant – Construction 2020	\$ 4,920,000
WSDOT Regional Mobility Grant – Construction 2021	\$ 5,000,000
Total Secured Revenue	\$ 14,672,500
Pending	
Sound Transit Agreement	\$ 10,000,000
Transportation Improvement Board (TIB) - Construction	\$ 5,000,000
Unfunded	
Funding Source TBD	\$ 1,327,500
Total Pending/Unfunded Revenue	\$ 16,327,500
Total Revenue (Secured + Pending + Unfunded)	\$ 31,000,000

Supplement 2 would increase Lochner's contract amount by \$2,471,183, from \$2,124,935 to \$4,596,118.

RECOMMENDATION

Staff recommends that Council authorize the City Manager to execute Supplement No. 2 to HW Lochner's professional services contract in the amount of \$2,471,183, for a total contract amount of \$4,596,118 for engineering design, right of way and environmental permitting services for the SR 523/N 145th Street – Interstate 5 Interchange Project.

Approved By: City Manager **DT** City Attorney **MK**

BACKGROUND

In 2016, the City began implementing improvements identified in the [145th Street Multimodal Corridor Study](#) to improve access and safety for all travel modes, and to improve access to Sound Transit's (ST) 145th Street Light Rail Station. Proposed improvements for the SR 523/145th Street – Interstate 5 interchange included traffic signal optimization, a new non-motorized bridge, and a new northbound I-5 on-ramp. In May 2017, the City Council [authorized execution of contract 8463](#) with H. W. Lochner for providing engineering, right of way acquisition and environmental review up to 30 percent design completion.

During Lochner's initial design work in 2018, the Washington State Department of Transportation (WSDOT) requested a design evaluation of the intersections at the east and west ends of the existing overpass. As a result of the design evaluation, called an Intersection Control Evaluation (ICE), the City found that incorporating roundabouts into the design at these two locations will provide significantly greater multi-modal access and mobility than the signal-controlled intersections that were proposed in the City's 2016 corridor study, and at approximately the same total cost.

In January 2020, the City Council discussed the 145th Street/I-5 Interchange project delivery strategy [at the January 27, 2020 Council Meeting](#). The Council concurred with staff's recommendation to continue with completion of 30 percent design, environmental review and right of way acquisition, and to then turn the project over to WSDOT for completion of final design, permitting and construction. WSDOT subsequently provided a letter to the City and the US Department of Transportation of WSDOT's intent to accept transfer of the project but stipulating that the project must be fully funded at transfer.

In June 2020, the [City Council Authorized Supplement 1 to Lochner's contract](#), providing for completion of 30 percent design, design documentation, environmental review and preliminary right of way acquisition work. In February 2021, Lochner delivered the 30 percent design plans and other deliverables to City staff for review. At that time, staff also distributed the 30 percent plans to other project stakeholders for review and comment; this included WSDOT, SDOT, Sound Transit, Seattle Public Utilities, and Seattle City Light. The City's and stakeholder's reviews were completed in May 2021, and Lochner has incorporated the comments into the design plans.

DISCUSSION

Tonight, staff is requesting that the City Council authorize the City Manager to execute Supplement No. 2 to Contract 8463 with H.W. Lochner (Lochner), for design, environmental and right of way services related to the SR-523 (N/NE 145th Street) & Interstate-5 (I-5) Interchange Project. The proposed scope of work for this Supplement is attached to this staff report as Attachment A.

This Supplement is required for Lochner to advance the design plans from 30 percent to 100 percent design completion, complete technical specifications, final construction estimate, incorporate comments from the final City, WSDOT and stakeholder reviews and provide technical assistance during bidding.

The SR-523 (N/NE 145th Street) & I-5 Interchange Project is not fully funded based on the estimates developed with the 30% design. Staff is negotiating with Sound Transit for their \$10 million contribution, and an agreement regarding this contribution is anticipated to be ready for Council consideration in the next couple of months. Staff is also preparing to submit for a Transportation Improvement Board (TIB) grant of \$5 million. The result of this grant application will be known at the end of November. As staff continues to seek grant funding for this project, they are also looking for opportunities to reduce costs and expenditures. The cost estimate will be updated again at 60% design which is anticipated in December 2021.

ALTERNATIVE ANALYSIS

The recommended alternative is to authorize the City Manager to execute Supplement No. 2 to this contract to continue to progress design, environmental documentation and right of way work to 100 percent completion as planned, engage a WSDOT project manager, and to engage a consulting firm to provide Construction Administration and Engineering. The second alternative is not to authorize the City Manager to execute Supplement No. 2, which would halt the project. This would result in loss of the Federal STP grant and the requirement to return the approximately \$1.7M of grant funds that has already been paid to the City during design development and 30 percent completion. This second alternative is not recommended by staff.

COUNCIL GOAL(S) ADDRESSED

This project addresses Goal 2: Continue to deliver highly valued public services through management of the City’s infrastructure and stewardship of the natural environment; and Goal 3: Continue preparation for regional mass transit in Shoreline.

RESOURCE/FINANCIAL IMPACT

This project is included in the adopted 2021-2026 Capital Improvement Plan. The project budget summary is as follows:

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RECOMMENDATION

Staff recommends that Council authorize the City Manager to execute Supplement No. 2 to HW Lochner’s professional services contract in the amount of \$2,471,183, for a total contract amount of \$4,596,118 for engineering design, right of way and environmental permitting services for the SR 523/N 145th Street – Interstate 5 Interchange Project.

ATTACHMENTS

Attachment A – Scope of Work – HW Lochner Supplement No. 2 Contract

Scope of Services – Supplement 2

Project No. STPUL-0523(011), LA 9075

PS&E and Ad Ready Plan Development of NE 145th Street (SR 523) and I-5 Interchange Improvements

City of Shoreline NE 145th Street (SR 523) & I-5 Interchange Improvements

Prepared for:

City of Shoreline, Washington



April 2021

Prepared by:

LOCHNER

915 118th Avenue SE, Suite 130
Bellevue, WA 98005

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PROJECT DESCRIPTION

The City of Shoreline completed the NE 145th Street Multimodal Corridor Study (November 2016) which outlined improvements along the entire length of NE 145th Street (SR523) as well as off-corridor improvements for bikes. The NE 145th Street and I-5 Interchange Improvement project is one of several projects identified in the City of Shoreline's Transportation Improvement Plan. This project makes improvements for vehicles, bikes, and pedestrians at the I-5 interchange along NE 145th Street and connects the NE 145th Corridor Improvements to Sound Transit's South Shoreline Transit Center. The project initially proposed improvements that included the addition of a non-motorized bridge spanning I-5, immediately to the north of the existing vehicular bridge, providing an additional lane of traffic on the existing bridge, adding a new northbound on-ramp to I-5, improvements to adjacent intersections at 4th Avenue NE and 5th Avenue NE, and making non-motorized connections between the interchange area and Sound Transit's proposed light rail station north of NE 145th Street. However, the project has evolved during the design phase.

The Project's current scope includes two roundabout at the intersection of NE 145th Street and 5th Avenue NE and at NE 145th Street and I-5 Southbound Ramps. The non-motorized bridge has been determined to be unnecessary and as a result has been eliminated from the project scope. The current lane configuration on the existing NE 145th Street Overpass Bridge will be reconfigured to remove the opposing left-turn lanes and add a two-way bike lane on the north side of the Overpass Bridge that connects to bike lanes on 5th Avenue NE and the proposed shared use path on the north side of NE145th Street west of I-5.

GENERAL ASSUMPTIONS

H.W. Lochner, Inc. (CONSULTANT) will provide professional services to the City of Shoreline (CITY) as outlined in the task descriptions below. The following general provisions and assumptions have been added and/or revised to the original scope of services:

- a. Original permits, approvals, agreements or other obligations will be forwarded to the CITY in hardcopy and electronic form, in formats designated by the CITY.
- b. The project will not be permitted through the City of Seattle.

DESIGN STANDARDS

Plans, specifications, and contract documents, to the extent feasible, will be developed in accordance with the following, as applicable:

- a. Washington State Department of Transportation, "Standard Specifications for Road, Bridge, and Municipal Construction", M41-10, 2020;
- b. Washington State Department of Transportation, "Design Manual", M22-01 version at time of Design Approval;
- c. Public Right of Way Accessibility Guidelines (PROWAG), current edition.
- d. Washington State Department of Transportation, "Standard Plans for Road and Bridge Construction", M21-01 latest version ;;FHWA and Washington State Department of Transportation, "Manual on Uniform Traffic Control Devices for Streets and Highways" 2009;

- e. A Policy on Geometric Design of Highways and Streets (AASHTO green book), 7th Edition, 2018;
- f. Department of Ecology (Ecology) 2012 “Stormwater Management Manual for Western Washington” (SWMMWW);
- g. 2019 WSDOT Hydraulics Manual.
- h. City of Shoreline Engineering Development Standards, 2012 or current version.
- i. City of Seattle Standards Plans and Specs.
- j. Applicable provisions of the Americans with Disabilities Act, as amended.
- k. WSDOT Bridge Design Manual (LRFD) 2019.
- l. AASHTO LRFD Bridge Specifications, 8th Edition.
- m. AASHTO Standard Specifications for Highway Bridges, 17th Edition 2002.
- n. The design elements in Tasks 4 and 5 will be developed using MicroStation and InRoads software in conjunction with WSDOT CAD standards as prescribed in the WSDOT Plans Preparation Manual M22-31.07.

TASK 1: PROJECT MANAGEMENT

1.1 CONTRACT MANAGEMENT

The CONSULTANT will provide a status/progress report with invoices every four (4) weeks, to the CITY that will describe services provided by the CONSULTANT and its team members during the current reporting period. The progress reports will be prepared in a format provided and approved by the CITY's Project Manager.

Assumptions:

- a. Covers time period from March 1, 2021 to June 30, 2022 at which time the PS&E Phase and CONSULTANT's scope of work will be completed.
- b. Bid Support is not included in this Scope of Services per CITY's instructions.

Deliverables:

- a. Every four weeks status/progress reports, and invoice.

1.2 SUBCONSULTANT MANAGEMENT

The CONSULTANT will be responsible for on-going management of the consultant team in accordance with the provisions of this Agreement.

Assumptions:

- a. None.

Deliverables:

- a. None.

1.3 COORDINATION WITH THE CITY AND WSDOT

The CONSULTANT will maintain regular contact and coordination with the CITY's Project Manager and WSDOT's Project Manager in accordance with the provisions of the Agreement. The CONSULTANT's Project Manager will be responsible for:

- a. Maintaining regular contact with the CITY and WSDOT and designated project management team staff through informal office visits, telephone conversations, e-mails, and correspondence.
- b. Maintaining open access to project information by the CITY.
- c. The CITY's and WSDOT's Project Manager may contact team members as needed during each phase of the project with a summary of discussions sent to the CONSULTANT's Project Manager.
- d. The CONSULTANT will facilitate periodic meetings with the CITY's and WSDOT Project Leadership staff. It is expected that meetings of the "Project Leadership Team" (PLT) will occur on a regular basis and with a frequency that supports effective management of key transformational issues that may alter or otherwise affect the course of the project. Initially, given the projects accelerated schedule, it is expected that the PLT will meet every two weeks. The PLT will include key decision makers of the CITY and WSDOT and the CONSULTANT that control or manage the project and its resources for delivery. Among other things, key items to be managed by the PLT include changes or modifications to the Scope of Work, Key Deliverables as defined in the Scope of Work, the Schedule that is set for the project, and established Project Budgets. Progress

towards completion of the design effort will be reported to the PLT on the basis of Earned Value. Strategies for management of risk affecting the project itself and/or CONSULTANT's ability to deliver the project will be set and reviewed at the PLT meetings on an on-going basis. Emerging change will be identified to the PLT and where possible the CONSULTANT shall employ strategies that will avoid or mitigate change to the greatest extent possible. Where change cannot be avoided, recommendations for change will be provided to the PLT for approval or redirection. Where project change is directed by the PLT, the CONSULTANT will process changes to the work plan, Scope of Work, Schedule, and/or Budget as appropriate resetting the project's base line so that continuing performance towards completion of the project can be effectively monitored.

Assumptions:

- a. Project meetings with the WSDOT Project manager and the CITY are anticipated to occur weekly for Fifty-two (52) weeks.
- b. Project Leadership Team meetings every Two weeks or as otherwise directed by the PLT for a total of twenty-four (24) meetings.
- c. City on occasion will call additional meetings to address specific project subjects, up to twelve (12) meetings are anticipated during the PS&E development phase.
- d. Project and PLT Meetings will be attended by CONSULTANT staff as needed. Other CONSULTANT staff will attend when necessary to provide technical expertise. Other CONSULTANT staff may also attend via conference call (MS TEAMS) if appropriate.
- e. CITY staff will provide timely and coordinated review of draft strategies and materials to streamline production and team efficiency.

Deliverables:

- a. Meeting agendas, and meeting summaries (one (1) electronic copy for twelve (12) months for PTL meetings totaling twenty four (24) meeting agendas and summaries ,
- b. Facilitated Project Meetings with the CITY's and WSDOT's Project Manager for up to Fifty-two (52) meetings and up to Twenty-four (24) PLT meetings. Deliverables will include meeting agendas and one (1) electronic copy of meeting summaries.
- c. Other meeting materials will include work products that convey the current level of progress as necessary.

1.4 INTERAGENCY COORDINATION

The SR 523 and I-5 Interchange project involves coordination with multiple departments of several agencies, including, City of Shoreline, City of Seattle, King County, Washington State Department of Transportation (WSDOT), Sound Transit (ST), Community Transit, and affected Northwest Indian Tribes. In addition, The CONSULTANT anticipates attending coordination meetings with other consultant teams concurrently developing design and construction documents for adjacent projects. The CONSULTANT will work with the CITY and WSDOT to facilitate stakeholder meetings to keep parties informed about project progress, resolve project issues and obtain approvals.

Assumptions:

- a. For budgeting purposes, the following Interagency Coordination Meetings are anticipated;
- b. WSDOT Meetings – Sixteen (16) will be part of the bi-weekly project coordination meeting in sub-task 1c.

- i. Bridge office (Structural Walls)
 - ii. Design office / Public Transportation
 - iii. Northwest Region Traffic Office
 - iv. Other (Enviro, R/W, Permitting)
- c. Adjacent projects Consultant Coordination Meetings – ten (10) meetings
 - d. Up to Sixteen (16) additional one-on-one meetings with WSDOT designers for continuity of Project design;
 - e. Up to 26 bi-weekly coordination meeting with the City of Seattle;
 - f. Up to twenty (26) bi-weekly coordination meetings with Sound Transit;
 - g. Interagency coordination meetings will be held at the CITY or WSDOT NW Region office or using MS TEAMS and facilitated by WSDOT or CITY staff. The CONSULTANT will organize and schedule meetings and provide meeting notes;
 - h. At the request of the CITY and WSDOT, the CONSULTANT will provide materials to support each meeting; and
 - i. One (1) telephone conference call per week, up to fifty-two (52) conference calls, to support meeting preparation with other stakeholder agencies.

Deliverables:

- a. Meeting materials will include products that convey the current level of progress.

1.5 PROJECT MANAGEMENT PLAN

The CONSULTANT will update the Project Management Plan that was prepared for the project dated June 5, 2020

Assumptions:

- a. None.

Deliverables:

- a. Updated Project Management Plan

1.5.1 Risk Management Plan

The Risk Management Plan (RMP) previously established for the project will be updated to identify risk to the Project itself as well as the CONSULTANT's ability to deliver the work as defined in the project's Scope of Work, Schedule, and Budget. The RMP will include a summary of organizations, people, or issues that may affect the project, as well as any known risks to the project that have been identified. The Risk Management plan will assess, analyze, and develop strategy to respond to major risks affecting the project. Risk response strategies addressing selected major risks affecting the project will be presented to the PLT for approval and then implemented over the course of the project. Additional risk management efforts will be conducted as project risks evolve, or as directed by the Project Leadership Team.

Assumptions:

- a. None.

Deliverables:

- a. Updated RMP to include a facilitated review of project risks, qualitative and quantitative assessment of risks, and initial strategies for selected key risks developed.

1.5.2 Cost Risk Analysis

The project prospectus identifies the possible cost of the project to be between \$10 million and \$25 million, requiring a Cost Risk Analysis (CRA) be performed. The CRA will include a one-day workshop using a self-modeling spreadsheet template as developed by WSDOT. The CRA Workshop will be attended by subject matter cost-risk experts and the project team. The CRA Workshop will define, review, and validate cost and schedule-based estimates, document assumptions and constraints and replace the typical traditional project “contingency” with key identifiable risks. The CRA will assess risks with respect to the engineer’s opinion of probable cost and project schedule.

Assumptions:

- a. None.

Deliverables:

- a. Updated Cost Risk Analysis Report

1.5.3 Change Management Plan

A Change Management Plan (CMP) will be developed to address changes to the scope of the planned improvements that evolve during the design phase. These changes can affect the overall scope and intent of the project. The change management plan will identify elements that monitor for emerging change. Once an emerging change is identified, the CONSULTANT will identify means that will avoid the change or the impacts of change altogether. Where change can’t be avoided, the CONSULTANT will identify efforts that will mitigate the impacts of change. Where change can’t be avoided or mitigated, the CONSULTANT will identify how change can be best accepted into the project in a manner that best supports the project while also addressing the underlying needs for the change itself. These actions, managing change to the project itself, can also affect the boundary conditions and assumptions for the project as well as the Consultant’s scope of work, schedule, and/or deliverables for the project’s design effort. These impacts will be summarized and presented to the PLT along with recommendations for further action.

The CMP identifies the means to recognize emerging change to the project impacting scope, schedule and budget. The CMP will provide a project specific process to monitor and analyze change, including risk driven change. The CMP will track change to the project using a change management log that includes response and recovery strategies.

Assumptions:

- a. None.

Deliverables:

- a. Updated Change Management Plan
- b. Updated Summaries of changes, strategies, and recommendations provided to the PLT for direction.

1.6 PROJECT CLOSEOUT

The CONSULTANT will gather project files from the CONSULTANT team, organize them, and combine them into one file. CAD files will be in the final files will be delivered to the CITY (and WSDOT at the direction of the CITY). MicroStation files will be converted to AutoCAD format for CITY archives.

Assumptions:

- a. None.

Deliverables:

- a. Project deliverable files in an electronic format or formats acceptable to the CITY.
- b. Design files will be in MicroStation format and AutoCAD format for the CITY archives.

TASK 2: COMMUNITY ENGAGEMENT AND AGENCY OUTREACH

2.1 PUBLIC INVOLVEMENT PLAN UPDATE

The CONSULTANT will update and manage the implementation of the Public Involvement Plan (PIP) in accordance with City of Shoreline's public communications requirements. Once the PIP is approved, a work plan will be developed and actively managed.

Assumptions

- a. CONSULTANT developed a PIP for outreach activities during 30% design. CONSULTANT will update this version of the PIP for final design.
- b. CONSULTANT will draft a Key Messages appendix as part of the PIP.
- c. CONSULTANT will have up to 2 planning meetings with City of Shoreline to review the plan and discuss implementation.
- d. CONSULTANT will develop and manage a project work plan that provides a schedule and outline for implementation of the PIP.

Deliverables

- a. One (1) update to the Public Involvement Plan
- b. Eleven (11) updates to community outreach work plan.
- c. Key messages document (up to two (2) updates)

2.2 PROJECT MEETINGS AND TEAM COORDINATION

The CONSULTANT will plan, facilitate, and report on communication coordination meetings with the CITY and the CONSULTANT. The purpose of these meetings will be to plan and coordinate outreach and communication efforts with CITY staff. CONSULTANT staff will plan and meet regularly as a team to coordinate work.

City of Shoreline Communications Team Meetings

The CONSULTANT will plan, facilitate and report on up to eleven (11) City of Shoreline team meetings. These meetings will occur online. A public outreach coordinator will participate in up to five (5) meetings. CONSULTANT will prepare meeting agendas, summaries and action items.

Consultant Team Meetings

The CONSULTANT will plan and facilitate up to eleven (11) internal consultant team meetings to coordinate work. These meetings will be 30 minutes and will occur online or at CONSULTANT offices with up to 3 consultant staff at each meeting.

Design Team Meetings and Integration

The CONSULTANT will integrate and attend all necessary internal technical team meetings including *Regular Planning and Design Team meetings*: Participate in team meetings (online) to stay informed of planning progress and milestones, and report back on community input.

Assumptions

- a. Eleven (11) months of Communications meetings, CONSULTANT team meetings, and Design Team meetings
- b. These meetings will occur online

Deliverables:

- a. City of Shoreline Team Meeting agendas and meeting summaries (up to (11) eleven)
- b. Attendance at up to five (5) Design Team meetings

2.3 BRIEFINGS AND COMMUNITY PRESENTATIONS

CONSULTANT, in coordination with City of Shoreline, schedule, prepare for, staff and report on one-on-one meetings, stakeholder briefings and community presentations. This includes briefing support with neighborhood associations and adjacent property owners.

Assumptions:

- a. Assumes up to ten (10) briefings
- b. City of Shoreline will provide existing property owner contact information
- c. City of Shoreline will participate in briefings
- d. One (1) CONSULTANT staff and Lochner Project Manager will attend these briefings and presentations.
- e. CONSULTANT will coordinate interpretation services, if required. City of Shoreline will pay for interpretation services, if required

Deliverables:

- a. Draft and Final briefing reports (up to 10) (electronic copy)

2.4 ONLINE PRESENTATION

CONSULTANT will plan, coordinate, promote and attend two (2) online presentations. The first online presentation will provide information and gather input on 60% design. The second online presentation will provide information and gather input on 90% design and set the stage for construction. CONSULTANT will prepare a detailed event plan for each online presentation that identifies goals, team member roles, promotions, and a work back schedule for meeting preparation. Two (2) practice sessions for each online presentation will be facilitated by CONSULTANT.

Assumptions

- a. CONSULTANT will coordinate printing and mailing, and translation services.
- b. The City of Shoreline will be invoiced directly for printing and mailing, and translation services.
- c. The City of Shoreline will use their communication channels to actively promote the online presentation and online open house.
- d. Assumes two (2), 1-hour events with closed captioning. Interpretation services will be provided upon request and coordinated by CONSULTANT
- e. Assumes up to two (2), 2-hour practice sessions per online presentation.
- f. Two (2) Lochner team members and three (3) CONSULTANT staff will attend each online presentation.

- g. Lochner will take the lead in developing Power Point presentations.
- h. Lochner will provide graphics and content for the online presentations.

Deliverables:

- a. Detailed event plan for two (2) online presentation
- b. Mailer/postcard for two (2) online presentations (jointly promoting online open house)
- c. Two (2) drafts and two (2) final online presentation activity reports and summaries.

2.5 ONLINE, SOCIAL AND MEDIA ENGAGEMENT

To increase project reach and accessibility of project information, and to provide additional avenues for the public to engage with the project, CONSULTANT will, in close coordination with City of Shoreline, employ online tools and tactics.

Elements include:

- a. *City of Shoreline project webpage development and updates:* CONSULTANT will provide updates to City of Shoreline for City-hosted page. Webpage updates will be submitted to City of Shoreline for review, approval, and posting.
- b. *Online open house:* CONSULTANT will plan, develop content, set up, test, promote, and report on 1 project online open house as a companion to the online presentation. The online open house will have up to eight (8) pages, contact project and City of Shoreline branding elements, and include a survey.

Assumptions:

- a. CONSULTANT will provide content updates, photos, and graphics to City of Shoreline for review, approval and posting.
- b. Up to two (2) drafts, one final and maintenance of online open house site for up to three weeks.
- c. Will utilize CONSULTANT's online open house platform infocommunity.org.
- d. The online open house will meet City branding standards and guidelines.
- e. Google translate will be utilized for translations.
- f. Graphics will be provided by the other design team members

Deliverables:

- a. Website update content (up to 4)
- b. Online open house survey questions
- c. Online open house and survey, two (2) drafts and one (1) final
- d. Review of up to 500 survey responses
- e. Online open house activity reports (3)
- f. Online open house activity and survey report (1 draft, 1 final)

2.6 COMMUNICATIONS MATERIALS DEVELOPMENT

CONSULTANT will coordinate with City of Shoreline and the project team to facilitate preparation, production and distribution of communications materials, including project fact sheet, email updates, frequently asked questions (FAQ) and topic sheets (topic-specific sheets might describe elements of roundabouts).

Assumptions:

- a. CONSULTANT will draft email update content.
- b. City of Shoreline will review, approve, and send final email update.
- c. CONSULTANT will coordinate translation services.
- d. City of Shoreline will be invoiced directly translation services.

Deliverables:

- a. Project fact sheet: one (1) draft and one (1) final at 60% design as well as one (1) draft and one (1) final at 90% design (electronic copy) one (1) draft and one (1) final at final design (electronic copy)
- b. Project email updates: one (1) draft and one (1) final at 60% design as well as one (1) draft and (1) final at 90% design (electronic copy)
- c. Project FAQ: one (1) draft and one (1) final at 60% design as well as one (1) draft and (1) final at 90% design (electronic copy)
- d. Project topic sheets: one (1) draft and one (1) final, for up to 2 topic sheets (electronic copy)

2.7 CORRESPONDENCE & REPORTING

CONSULTANT will support City in the development of responses to public communications and reporting of project related community outreach during design.

Assumptions:

- a. CONSULTANT will draft responses. The City will review, finalize, and distribute responses.
- b. CONSULTANT will draft a summary of community outreach activities that details how community was informed and involved in the project. This report will be drafted in a manner to be used with internal and external audiences.

Deliverables:

- a. Up to twenty-five (25) draft communication responses (electronic copy)
- b. One (1) draft and one (1) final community outreach report

2.8 PROJECT STAGING AND CONSTRUCTION DETOUR VIDEO (OPTIONAL SERVICES)

1. CONSULTANT will prepare Project Staging Construction Phasing and Video (2-3 minutes). The video will include the following elements:
 - a. Renderings from a 3D model of each desired phase of construction (up to 10 phases);
 - b. Graphics and animations communicating the desired message (up to 40 graphic elements)
 - c. Maps depicting detour routes;
 - d. Sound effects;
 - e. Music;
 - f. Voice-over.

2. Renderings of each construction phase (up to 10) including graphics effectively conveying the phasing.
3. Production Pipeline
 - a. Pre-production
 - Project analysis
 - Outlines
 - Script development
 - Story boards
 - b. Production
 - 3D Models (existing conditions, construction phases, cars)
 - Graphics Development
 - Voice-over recording
 - c. Post-production
 - Editing
 - Sound design implementation (music, effects, voice-over)
 - Motion graphics

Deliverables:

- a. Draft Video of Construction Staging and Detour Route 2 to 3 minutes in length
- b. Final Video of Construction Staging and Detour Route 2 to 3 minutes in length

TASK 3: PROJECT PROFILE (PROJECT SUMMARY)

3.1 BASIS OF DESIGN, DESIGN PARAMETER SHEETS, ALTERNATIVE COMPARISON TABLE (DESIGN DECISIONS SUMMARY, UPDATE AS NECESSARY)

Sections 1, 2, 3, 4, and 5 of WSDOT's BOD form have been filled out as part of the Intersection Control Evaluation report for NE 145th Street (SR 523) and I-5 Southbound On/Off ramps and NE 145th Street (SR 523) and NE 5th Avenue and was updated during the Scoping and Geometric Design Phases. As the Final PS&E Design progress the BOD will be reviewed by the CONSULTANT and WSDOT Design Team and revised as necessary. The BOD will be prepared and submitted to WSDOT for approval.

Assumptions:

- a. None.

Deliverables:

- a. Basis of Design form with updated project data

3.2 PROJECT DEFINITION

The CONSULTANT will prepare the document that states the purpose and need for the project and the solution of the deficiency. The Project Definition will be submitted to WSDOT PEO for approval prior to submittal of 60% Design.

Assumptions:

- a. None.

Deliverables:

- a. Draft Project Definition (one review by WSDOT PEO) in PDF format.
- b. Final Project Definition in PDF format

TASK 4: ACCESS CONTROL

4.1 MANAGED ACCESS PERMIT

A Managed Access Permit issued by WSDOT will be required for Project construction related activities.

Assumptions:

- a. WSDOT will issue a Managed Access Permit to the CITY for Project related construction activities.

Deliverables:

- a. None.

4.2 HEARINGS

The Project may require a Limited Access Hearing. The CONSULTANT will prepare the Limited Access plan to be used as an exhibit for this hearing.

Assumptions:

- a. WSDOT will be the lead agency through the limited access hearing.
- b. WSDOT will prepare the documents required for the information packet for the hearing and mail to abutters.
- c. WSDOT will conduct the Limited Access Hearing.

Deliverables:

- a. Limited Access Plan

4.3 LIMITED ACCESS REPORT & PLANS

The CONSULTANT will assist WSDOT in preparation of the Limited Access Report that will be sent to the CITY and City of Seattle. This report will be used to inform the CITY and City of Seattle of the impacts of the modification of limited access to their local street network.

Assumptions:

- a. WSDOT will issue the limited access report to the CITY and to the City of Seattle.

Deliverables:

- a. Draft limited access report.

4.4 LIMITED ACCESS HEARING PACKET

A Limited Access Hearing Packet will be required if a Limited Access Hearing is convened. WSDOT will prepare this information packet in accordance with Section 210.09(4) of the WSDOT DM.

Assumptions:

- a. WSDOT will prepare the documents required for the information packet for the hearing and mail to abutters.

Deliverables:

- a. None.

4.5 FORMAL ACCESS HEARING

If required WSDOT will convene a formal Access Hearing for the change in Limited Access proposed by the project.

Assumptions:

- a. WSDOT will manage and perform all aspects of the Limited Access Hearing process.

Deliverables:

- a. None.

4.6 LIMITED ACCESS FINDINGS & ORDER

After the Limited Access Hearing WSDOT will prepare a findings and order document that contains the findings and conclusions of the limited access hearing.

The findings and order package contains:

- a. The draft findings and order.
- b. Draft responses to comments (reserved exhibits).
- c. A draft findings and order Plan as modified from the hearing plan. • All limited access hearing exhibits: originals and three copies.
- d. The limited access hearing transcript: original and three copies.
- e. The notice of appearance forms.
- f. Estimate of the number of copies of the final findings and order plan and text the region will need for the mailing.

Assumptions:

- a. WSDOT will prepare the limited access finding and order document.

Deliverables:

- a. None.

4.7 ADOPTION OF LIMITED ACCESS FINDINGS & ORDER

Following adoption of the findings and order, the HQ Plans Section makes the necessary revisions to the limited access hearing plan, which then becomes the findings and order plan. If necessary, the CONSULTANT will revise the Limited Access plan base on the adoption of the Findings Order by WSDOT.

Assumptions:

- a. None.

Deliverables:

- a. Revised Limited Access Plan

TASK 5: MATERIAL AND GEOTECHNICAL

5.1 EXPLORATION PLAN MEMORANDUM

The consultant will prepare a technical memorandum summarizing available existing subsurface information from explorations in the project area and proposing an exploration plan to support the geotechnical investigation and pavement design services. The memorandum will include the following:

1. Compile and review readily available geologic and geotechnical information and other geotechnically relevant data for the project area. Possible data sources include information in consultant and agency files, published geologic and topographic maps, City of Seattle permit records, and the Washington Geologic Information Portal, including the following:
 - a. WSDOT historic borings for the NE 145th Street overpass;
 - b. Sound Transit Lynnwood Link project;
 - c. Regional geologic maps;
 - d. WSDOT NE 145th Street overpass plans
2. Perform a site reconnaissance to select boring locations, evaluate access requirements, and identify locations where ROW permits will be required by the permitting agency.
3. Meet with the design team to discuss boring locations and confirm agency(s) responsible for granting the ROW permit.
4. Prepare a geotechnical exploration plan for review and approval by the City of Shoreline and WSDOT, including the following:
 - a. Site plan of the area, approximate locations of known existing geotechnical explorations relevant to the project area, and proposed explorations, depths, and instrumentation;
 - b. Summary logs of existing explorations as available;
 - c. Summary of proposed methods to access exploration locations and restoration details;
 - d. Identify borings where right-of-entry (ROE) or ROW permits will be required to conduct the exploration.

Assumptions:

- a. The geotechnical explorations proposed herein will not be used to assess site environmental conditions. However, visual or olfactory observations regarding potential contamination will be noted. Analysis, testing, storage, and handling of potentially contaminated soil and groundwater (either sampled or spoils from drilling) are beyond this scope of services. If contaminated soils and/or groundwater are encountered, the material will be properly contained on-site for disposal as mutually agreed upon without additional cost to the CONSULTANT.
- b. Relatively disturbed subsurface soil samples will be collected from the borings using the Standard Penetration Test (SPT) at intervals of 2.5 feet in the upper 20 feet and at intervals of 5 feet below 20 feet (if applicable).
- c. The VVPs installed as part of this exploration program will be maintained throughout design and abandoned by the contractor during construction.

- d. The subsurface exploration spoils will be non-hazardous. Non-contaminated drilling spoils and related debris will be drummed on site and transported off site for disposal by the drilling subcontractor.
- e. Field explorations will be conducted between the hours of 8AM to 5PM, Monday through Friday.
- f. Required rights of entry will be provided by the CITY. CITY will provide access and rights of entry for the exploration locations at least 2 weeks prior to beginning field work.
- g. Traffic control during drilling is included in the scope of services.
- h. Ramps, roads, vegetation clearing, or other access requirements are not needed to complete the exploration activities.
- i. CONSULTANT will be responsible for post drilling clean up. Exploration locations will be restored to the extent practical but will not be restored to pre-exploration conditions.
- j. Required street use permits will be prepared and provided by the CITY at no cost to CONSULTANT. Traffic control plans for permitting will be provided to the CITY by the CONSULTANT.
- k. Geotechnical borings conducted through the pavement will be patched with quick drying cement or cold patch asphalt. Saw cutting of the pavement or hot mix asphalt patches will not be required.
- l. Exploration-related equipment can remain on the CITY right-of-way at the PROJECT site, or at a CITY approved property near the PROJECT site, at no cost for the duration of exploration activities.
- m. The borehole locations will be surveyed as part of the surveying included in this Contract.
- n. Geotechnical strength and consolidation testing will not be performed. Environmental laboratory testing will not be performed.
- o. Explorations for stormwater facilities will not be performed.
- p. Exploration and laboratory test data for Sound Transit Lynnwood Link final design will be made available.

Deliverables:

- a. Draft geotechnical exploration plan memorandum
- b. Final geotechnical exploration plan memorandum

5.2 GEOTECHNICAL INVESTIGATION AND REPORT

The consultant will prepare a Geotechnical Investigation Report that contains geotechnical engineering recommendations in general accordance with information requirements identified in the WSDOT Geotechnical Design Manual. The investigation will include the following:

1. Plan the explorations and coordinate and support Lochner in obtaining ROE and/or ROW permits to conduct the explorations. We anticipate the following ROE or ROW will be required:
 - a. City of Seattle for explorations along the southern side of NE 145th Street for Wall #1;
 - b. GeoDesign can prepare the permit application for Lochner's submission to the City of Seattle;
 - c. ROE for Lakeside School's caretaker residence. Lochner to acquire ROE from Lakeside;

- d. WSDOT for explorations to support Wall #2 alignment along the southbound I-5 onramp, Wall #3 at northeastern corner of southbound off ramp and NE 145th Street;
 - e. Sound Transit permission for Wall #4, as anticipated boring locations are within the Sound Transit construction area;
 - f. City of Shoreline and City of Seattle for pavement cores along NE 145th Street. GeoDesign will prepare the permit application for Lochner's submission to the City of Shoreline;
 - g. We assume permits will be acquired at least two weeks before the scheduled exploration activities;
 - h. Required street use permits will be provided by the agency at no cost to the consultant;
2. Prepare traffic control plans to support ROW permit acquisition for the proposed explorations along NE 145th Street and the I-5 southbound off ramp. Plans will be prepared to support the geotechnical explorations and pavement services pavement cores.
 3. Conduct a geotechnical field exploration including the following:
 - a. Mark and call-in public utility locates for the proposed exploration locations;
 - b. Contract with a private utility locate service to survey proposed explorations for underground utility obstructions;
 - c. Wall #1: Drill up to five borings as follows:
 - i. Two borings to depths of up to 8 feet below ground surface (BGS) along the NE 145th Street ROW at the back of the sidewalk. Traffic control and ROW permit with limited daylight work hours are anticipated;
 - ii. Two borings to depths of up to 40 feet BGS on the Lakeside School's caretaker residence property (limited work hours from 8 a.m. to 5 p.m. are anticipated);
 - iii. One boring east of 4th Avenue NE to a depth of 15 feet BGS (City of Seattle ROW or WSDOT ROW permit);
 - iv. Install a vibrating wire piezometer (VWP) with a data logger in one of the deeper Wall #1 explorations and collect regular automated measurement for up to three months;
 - v. The VWP will remain available for contractor use. The consultant will return to the site two times to download and process the groundwater data.
 - d. Wall #2: Excavate up to three test pits as follows:
 - i. Three test pits will be excavated in the greenbelt area (work hours from 8 a.m. to 5 p.m. are anticipated) to depths of up to 10 feet BGS and backfilled with excavation spoils. A WSDOT ROW permit will likely be required;
 - ii. Test pits will be excavated with a tracked excavator and surface disturbance will occur that consists of tracking, rutting, and a small amount of vegetation clearing for off-site removal or disposal. Temporary erosion and sedimentation control measures and site restoration are not included, nor are they anticipated to be required;
 - iii. Test pits will not be left open overnight.
 - e. Wall #3: Drill up to two borings to depths of up to 20 feet BGS at the northeastern corner of the intersection of the I-5 southbound off ramp along the proposed wall alignment. One boring will be behind the sidewalk and the other will be on the shoulder of the I-5 off ramp.

Traffic control and WSDOT/City of Shoreline ROW permit and limited daylight work hours are anticipated.

- f. Wall #4 – Drill up to three borings as follows:
 - i. Three borings to depths of up to 20 feet BGS west of the sidewalk along 5th Avenue NE within the area currently being used for Sound Transit Station construction. This area has been regraded and filled during the Sound Transit work. Sound Transit coordination is anticipated;
 - ii. Relatively disturbed subsurface soil samples will be collected from the borings via SPT at intervals of 2.5 feet in the upper 20 feet and at intervals of 5 feet below 20 feet BGS (if applicable);
 - iii. Disturbed grab samples will be collected from the test pits at significant changes in stratigraphy;
 - iv. Measurements, pacing, and/or a handheld recreational global positioning system will be used to estimate the boring locations for the purposes of showing the approximate location on a map;
 - v. Exploration locations will be restored to the extent practical but will not be restored to pre-exploration conditions;
 - vi. Geotechnical borings conducted through the pavement will be patched with quick drying cement or cold patch asphalt. Saw cutting of the pavement or hot mix asphalt (HMA) patches will not be required;
 - vii. The VWP installed as part of this exploration program will be maintained throughout design and abandoned by the contractor during construction;
 - viii. The subsurface boring spoils are expected to be non-hazardous. Uncontaminated drilling spoils and related debris will be drummed on site and transported off site for disposal by the drilling subcontractor;
 - ix. The subsurface test pit excavation spoils will be used to backfill the test pits and will be placed in lifts and compacted with the excavator bucket;
 - x. Prepare summary logs of the explorations;
- g. Review soil samples in the laboratory and select samples for laboratory testing. Tests are anticipated to include the following:
 - i. Visual-manual classification;
 - ii. Moisture content determinations;
 - iii. Particle-size analyses;
 - iv. Ph and resistivity – corrosivity suite (for cathodic protection of 24-inch water transmission main).
- h. Perform engineering analyses and prepare a draft Geotechnical Investigation Report that provides recommendations and/or addresses the following:
 - i. City of Seattle Environmentally Critical Area code regarding Geologic Hazard Areas;
 - ii. Field and laboratory data for select soil strength and other parameters;
 - iii. AASHTO/WSDOT seismic design parameters. The consultant will determine the site class and develop the design spectral acceleration parameters with the

- AASHTO Specifications for Road and Bridge and the WSDOT Geotechnical Design Manual;
- iv. Seismic hazards including liquefaction potential at the site;
 - v. Existing slope stability along Wall #1 and Wall #3 proposed alignments for stability model calibration and to support stability analyses of proposed walls or reinforced soil slopes;
 - vi. Global slope stability analyses of Wall #1 and Wall #3 using limit equilibrium methods consistent with the WSDOT Geotechnical Design Manual;
 - vii. Retaining wall design recommendations for walls that may consist of structural earth walls, gravity CMU block, cast-in-place concrete cantilever walls, and soil nail walls;
 - viii. Soil parameters for reinforced soil slopes, structural earth walls, or mechanically stabilized earth wall design;
 - ix. Lateral earth pressures for shoring and retaining walls;
 - x. Soil nail wall soil parameters;
 - xi. Signal pole and luminary pole recommendations based on Chapter 17 of the WSDOT Geotechnical Design Manual;
 - xii. Cut and fill slopes for temporary and permanent inclinations;
 - xiii. Groundwater management and drainage considerations;
 - xiv. Earthwork, including temporary and permanent slope configurations;
 - xv. Materials for fill criteria, fill placement criteria, and subgrade preparation;
 - xvi. Suitability of excavated soil for use as structural fill;
 - xvii. Geotechnical observation during construction;
 - xviii. Where design assumptions and parameters can be affected by the construction means and methods;

Assumptions:

- a. The geotechnical explorations proposed herein will not be used to assess site environmental conditions. However, visual or olfactory observations regarding potential contamination will be noted. Analysis, testing, storage, and handling of potentially contaminated soil and groundwater (either sampled or spoils from drilling) are beyond this scope of services. If contaminated soil and/or groundwater are encountered, the material will be properly contained on site for disposal as mutually agreed upon without additional cost to the consultant;
- b. The subsurface exploration spoils will be non-hazardous. Non-contaminated drilling spoils and related debris will be drummed on site and transported off site for disposal by the drilling subcontractor;
- c. The consultant will be responsible for post drilling clean up. Exploration locations will be restored to the extent practical but will not be restored to pre-exploration conditions;
- d. Lochner or the City of Shoreline will obtain ROE from Lakeside School for borings at the caretaker residence;
- e. Required street use permits for the City of Shoreline will be provided by the City of Shoreline at no cost to the consultant;
- f. Lochner will obtain the ROW permit from WSDOT for explorations where required (anticipated at Wall #2 and Wall #3 locations);

- g. Saw cutting of the pavement or HMA patches at exploration locations will not be required;
- h. Bore explorations through hardscape or pavement will be patched with a PCC plug or cold mix asphalt;
- i. Environmental laboratory testing will not be performed;
- j. Explorations for stormwater facilities and in situ infiltration testing will not be performed;
- k. Geotechnical strength and consolidation laboratory testing will not be performed;
- l. The consultant will not provide dewatering design;
- m. The consultant will not provide recommendations for the detention vault west of I-5;
- n. Preliminary recommendations for retaining walls can be provided via email after the field exploration is completed;

Deliverables:

- a. Draft Geotechnical Investigation Report (Word and/or PDF format)
- b. Final Geotechnical Engineering Recommendations Report (Word and/or PDF format)
- c. Summary of Geotechnical Condition

5.3 PAVEMENT DESIGN SERVICES

The consultant will provide recommendations for pavement design as guided by Chapter 620 of WSDOT's Design Manual and the WSDOT Pavement Policy. The scope of our pavement design services will include the following:

1. Identify proposed exploration locations and prepare a site plan to the project team for review.
2. Drill six pavement borings to depths of up to 10 feet BGS using a diamond core bit followed with a solid-stem auger. The depth of exploration will depend on the total cut.
3. Perform dynamic cone penetrometer (DCP) testing in borings close to the proposed roundabout.
4. Maintain a detailed log of each boring, visually classify the soil encountered, collect soil samples as appropriate for the soil conditions encountered, and observe groundwater conditions in the borings.
5. Perform laboratory testing for moisture content and material passing the U.S. Standard No. 200 sieve.
6. Review traffic count information provided by the project team and calculate pavement design equivalent single-axle loads (ESALs).
7. Calculate required pavement capacity based on traffic information, subsurface explorations, and DCP testing results.
8. Prepare a draft pavement design report that includes recommendations addressing the following:
 - a. New flexible and rigid pavement;
 - b. Materials and construction;
 - c. Prepare a final pavement design report.

Assumptions:

- a. Traffic data counts and classifications for NE 145th Street from current and future annual average daily traffic will be provided by others to compute ESALs for pavement design.

Deliverables:

- a. Draft Pavement Design Report provided as an electronic document in Microsoft Word and PDF formats. Reviewers will include the design team, the City of Shoreline, and WSDOT.

- b. A Final Pavement Design Report addressing review comments to be provided in PDF format.

5.4 GEOTECHNICAL AND PAVEMENT DESIGN POST REPORT SERVICES

The consultant will provide geotechnical consultation services during the design phase. These services will include the following:

1. Provide consultation on geotechnical or pavement matters as requested on an on-call basis.
2. Review roundabout PCC pavement jointing once completed by the design team.
3. Conduct a geotechnical review of the 90% Project Plans and Special Provisions for conformance with the geotechnical engineering recommendations, construction considerations, and pavement design recommendations.

Assumptions:

- a. a. Consultant review will be limited to geotechnical aspects and planned pavement sections of the project for conformance with our recommendations.

Deliverables:

- a. Geotechnical Letter summarizing our plan review in PDF format.

TASK 6: STRUCTURES

The CONSULTANT will develop the design level plans as a continuation of the preliminary plans with the incorporation of the comments from the Preliminary Design reviews for each of the selected alternatives.

6.1 RETAINING WALL DESIGN

The CONSULTANT will prepare Constructability Review (60%), and Pre-contract PS&E (90%) retaining wall plans to support roadway embankment and cut walls at the roundabout intersections and NE 145th Street Between I-5 SB Ramps and 1st Avenue NE. Retaining walls necessary to support 4th Avenue NE and 3rd Avenue NE (a private drive) will also be designed.

Retaining wall #4 will be advanced to issue for construction (IFC) for Sound Transit to construct prior to the 145th Street and I-5 Interchange Improvement project going to Ad Ready.

Assumptions:

- a. None.

Deliverables:

- a. IFC plans for Retaining Wall #4 for Sound Transit one (1) hard copy and one (1) electronic copy, CAD drawings in Auto CAD format.
- b. Constructability (60%) Roadway plans in 11"x17" format – one (1) hard copy and one (1) electronic copy.
- c. Pre-contract (90%) Roadway plans in 11"x17" format – one (1) hard copy and one (1) electronic copy.
- d. CAD drawings of intermediate design phase elements in MicroStation format.

6.2 APPROACH SLABS

The CONSULTANT will prepare draft and final Constructability Review (60%), and Pre-contract PS&E (90%) for the bridge approach slabs on the east and west sides of the SR 523 and I-5 overcrossing bridge.

Assumptions:

- a. None.

Deliverables:

- a. Draft and Final Constructability (60%) Roadway plans in 11"x17" format – one (1) hard copy and one (1) electronic copy.
- b. Draft and Final Pre-contract (90%) Roadway plans in 11"x17" format – one (1) hard copy and one (1) electronic copy.
- c. CAD drawings of intermediate design phase elements in MicroStation format.
- a. .

6.3 ILLUMINATION BASES

The CONSULTANT will prepare draft and final Constructability Review (60%), and Pre-contract PS&E (90%) and Final PS&E (100% and Ad Ready) for the Illumination Bases that may be standalone or integrated into the retaining wall system.

The CONSULTANT will prepare the plans stated above as contract plans in accordance the guidelines in the WSDOT Plans Preparation Manual. Intermediate design plans for each developed structure will be provided in electronic PDF format and are expected to include the following sheets, as indicated in the WSDOT BDM Structural Submittal Expectations Matrix:

- a. Wall Plan and Elevation
- b. General Notes
- c. Construction Sequence
- d. Foundation Layout, including foundation locations and preliminary sizes
- e. Bridge Approach Slabs with updated geometry
- f. Illumination bases and supports

Assumptions:

- a. On-going coordination with roadway designer, landscape designer, and geotechnical engineer, and environmental permitting staff.
- b. Wall size and locations will be determined by roadway geometry, right-of-way, and gateway elements.
- c. Electronic copies will be in PDF format.
- d. Plans will be developed using MicroStation and WSDOT BMD format
- e. Geotechnical Recommendations will be available ahead of this submittal.

Deliverables:

- a. At draft and final Constructability Review (60%), and Pre-contract PS&E (90%) Illumination Base plans – one (1) hard copies and one (1) electronic copy.
- b. CAD drawings of Constructability Review (60%), PS&E (90%) and Final PS&E (100% and Ad Ready) design elements in MicroStation format.
- c. Construction Quantities and Cost Estimate for Retaining Walls, Bridge Approach Slabs, and Illumination Bases and Supports in electronic PDF format.
- d. General Special Provisions and identify anticipated special provisions at Constructability Review (60%) phase.
- e. Comment responses from previous submittal.

TASK 7 ROADWAY GEOMETRICS AND PLANS

7.1 ROADWAY DESIGN

The CONSULTANT will advance the Geometric Design developed in Task 4 Preliminary Design from Contract Agreement LAA 9075, Supplement 1. Advancement of the Preliminary Design will include further development of the geometric design, earthwork quantities, channelization design, and safety improvements for the project. It will include development and refinement of the roadway plans. Roadway plans are anticipated to include roadway alignment plan and profile, roundabout geometrics and grading, roadway sections, paving plans, and signing and pavement marking plans.

Plans for the sidewalk and curb and gutter on the west side of 5th Avenue north of 145th Street will be advanced to issue for construction (IFC) and delivered to Sound Transit LLE L200 project team for early works construction by Sound Transit.

Assumptions:

- a. Roadway design will be in accordance with the WSDOT Design Manual, the WSDOT Standard Plans, and City of Shoreline Engineering Standards.
- b. Roadway design elements approved by WSDOT in the design approval process will be advanced to the final design stages and made part of the Ad Ready plans.
- c. All electronic copies will be in PDF format and MicroStation.

Deliverables:

- a. IFC plans for sidewalk and curb issued to Sound Transit, Plans in 11" x 17" format - one (1) hard copy and one (1) electronic copy in PDF format, CAD drawings in Auto CAD format.
- b. Draft and final Constructability (60%) Roadway plans in 11"x17" format – one (1) hard copy and one (1) electronic copy.
- c. Draft and final Pre-contract (90%) Roadway plans in 11"x17" format – one (1) hard copy and one (1) electronic copy.
- d. CAD drawings of intermediate design phase elements in MicroStation format..

7.2 ALIGNMENT PLAN

Horizontal and vertical alignment plans for 145th Street between 1st Avenue and 6th Avenue, 5th Avenue between I-5 NB and SB ramps, I-5 SB On and Off ramps at NE 145th Street, 4th Avenue, And 3rd Avenue. Alignments will be final in 60% submittal.

Assumptions:

- a. None.

Deliverables:

- a. Roadway horizontal and vertical alignments will be integrated into the Constructability (60%) Roadway plans.

7.3 SPECIFICATIONS

The CONSULTANT will develop Contract Provision, Amendments, General Special Provisions and appendices in accordance with WSDOT Plans Preparation Manual.

1. General Contract Provisions will consist of the following:
 - a. Notice to Planholders Project Engineer's name, address, phone number, and email address.
 - b. Table of Contents 3.
 - c. Amendment As of September 1, 2019, there are no Amendments to the Standard Specifications for Road, Bridge, and Municipal Construction (Standard Specifications). All changes to the Standard Specifications will be accomplished through General Special Provisions (GSPs).
 - d. Special Provisions. A combination of the General Special Provisions (GSPs), Region Special Provisions (RSPs) and project-specific provisions
 - e. Boring Logs, final boring logs provided by the WSDOT Geotechnical Division, Region Materials Engineers, and/or consultants
 - f. Federal-Aid Provisions
 - g. Prevailing Minimum Hourly Wage Rate, State, federal, or both, depending on project funding
 - h. Proposal (informational copy), Proposal Bond, Declaration of Non-Collusion (Federal Aid Contracts), Certification for Federal-Aid Contractors (Federal Aid Contracts over \$100,000), DBE/UBE Utilization Certification and Written Confirmation(Federal Aid projects with a Condition of Award (COA) DBE/UDBE goal. Subcontractor List (Contracts Estimated over \$1,000,000), Wage Law Compliance Certification, Signature Page
 - i. Appendices to the Special Provisions
2. Project Specific Provisions: The project-specific provisions will be prepared by the CONSULTANT to supplement or revise information in the WSDOT Standard Specifications to make them fit the project being developed. Project-specific provisions are not to duplicate information contained in the Standard Specifications, GSPs, or plans. Approval of project-specific specifications that alter the Standard Specifications (WSDOT Spec. book) is required prior to inclusion in the contract documents. Project-specific specifications will be sent, with justification, to the WSDOT Project Engineer Office, or delegated authority for concurrence and approval.
3. Pay Groups and Pay Items for Special Provision Items: Special Provision items to be bid as part of the project will be identified and describe and quantified. The bid item in the payment statement will be written in quotes and followed by the unit of measure. The bid item will have the exact same name found in the Summary of Quantities.

Assumptions:

- a. WSDOT Standard Specifications will be used as the Project's primary technical specifications;
- b. Standard Bid Item Table will be used as standard nomenclature for bid items.

Deliverables:

- a. Preliminary GSP and Special Provisions
- b. Run list
- c. Bid Schedule

7.4 CHANNELIZATION PLAN

Channelization plan developed under the Geometric Design phase (30%) will be completed by adding approved Right-of-Way plan elements. The Channelization Plan addresses the channelization design

considerations in accordance with Design Manual Chapter 1310 will be submitted for to WSDOT for approval at the Constructability Review submittal phase (60%).

Assumptions:

- c. Roadway design will be in accordance with the WSDOT Design Manual, the WSDOT Standard Plans, and City of Shoreline Engineering Development Standards.
- d. Plans preparation will be in accordance with WSDOT Plans Preparation Manual.
- e. No Design Approvals are necessary.
- f. The Channelization plans will follow the WSDOT NW Region Channelization Plan Checklist.
- g. No more than two (2) rounds of WSDOT review are anticipated.
- h. Electronic copies will be in PDF format.

Deliverables:

- a. First Draft Channelization Plan submittal – five (5) hard copies and one (1) electronic copy.
- b. Response to first draft comments – one (1) hard copy and one (1) electronic copy).
- c. Second Draft Channelization Plan submittal – five (5) hard copies and one (1) electronic copy.
- d. Response to second draft comments – one (1) hard copy and one (1) electronic copy.
- e. Final Channelization Plan submittal – one (1) hard copy on Mylar and one (1) electronic copy.
- f. CAD drawings of concept level design elements in MicroStation format (to be included in the deliverable for Task 4i Preliminary Plans)

7.4 PROJECT FOOTPRINT AND EARTHWORK QUANTITIES

The Project Footprint & Earthwork Quantities are calculations that determine the cut/fill lines and project footprint, and the earthwork cut/fill quantities that specialty groups such as Environmental and Real Estate need to start their processes. These lines and quantities help identify if the project extends beyond WSDOT R/W, which determine the need for Right of Way acquisition. Theoretical quantities will be developed using Bentley InRoads.

Assumptions:

- a. None.

Deliverables:

- a. Project earthwork limits (cut/fill) lines plans in 11"x17" format – one (1) hard copy and one (1) electronic copy.
- b. Earth work quantities tabulation report from InRoads.

7.5 ROADWAY SECTIONS

Geometric roadway cross section developed in the Geometric Review phase (30%) will be finalized at the Constructability Review phase (60%) from the subgrade to finish grade. Roadway cross sections will be integrated in to the project progress submittals as Roadway Section RS sheet series. Roadway sections will be developed for:

- a. NE 145th Street West of I-5 (between 1st Avenue and I-5 South Bound Ramps);
- b. 3rd Avenue (Private Drive off of 147th Street);
- c. 4th Avenue (EMS Access on Lakeside School);

- d. I-5 South Bound on and Off Ramps at NE 145 Street;
- e. 5th Avenue (between I-5 North Bound On Ramp and NE 145th Street);
- f. 5th Avenue (between I-5 North Bound Off Ramp and NE 145th Street);
- g. NE 145th Street (between 5th Avenue and 6th Avenue;
- h. NE 145th Street (I-5 Overpass Structure);
- i. Roundabout Intersections at NE 145th Street and 5th Avenue and NE 145th Street and I-5 South Bound Ramps.

Deliverables:

- a. Roadway Sections plans in 11"x17" format – one (1) hard copy and one (1) electronic copy.

7.6 ROADSIDE SAFETY ANALYSIS

A project related Safety Analysis Report (SAR) will be prepared using the safety data prepared for the ICE Report and BOD. The SAR will be standalone report. This report was submitted to the CITY as part of the Geometric Design (30%). This report will be updated and finalized as part of the Constructability Review Submittal (60%) to reflect any changes that may have occurred during design evolution between the Geometric Design (30%) and Constructability Review Submittal (60%).

Deliverables:

- a. Updated Safety Analysis Report – one (1) hard copy and one (1) electronic copy

7.7 ENGINEER'S OPINION OF PROBABLE COST

The CONSULTANT will calculate quantities and prepare a summary of quantities and estimate of probable construction costs using historical costs from WSDOT unit bid analysis.

Assumptions:

- a. The Preliminary Cost estimate will utilize the WSDOT Standard Item table.
- b. Unit Prices for standard items will be determined using WSDOT Unit Bid Analysis.
- c. All electronic copies will be in PDF format.

Deliverables:

- a. Draft and final Cost Estimate at the Constructability (60%) Roadway plans in 11"x17" format – one (1) hard copy and one (1) electronic copy.
- b. Draft and final Cost Estimate at the Pre-contract (90%) Roadway plans in 11"x17" format – one (1) hard copy and one (1) electronic copy.
- c. Preliminary Cost Estimate – five (5) hard copies and one (1) electronic copy.

TASK 8: HYDRAULICS/DRAINAGE

8.1 TYPE A HYDRAULIC REPORT

Type A Hydraulic Reports contain documentation of design for major hydraulic work. See the Hydraulics Manual.

Assumptions:

- a. The west side of the interchange will have shares detention facility with the 145th Street Corridor Project.
- b. The Project will have independent water quality treatment system.

Deliverables:

- a. Draft and final Type A Hydraulic Report at the 60% design phase.

8.2 STORMWATER BMP MAINTENANCE PLAN

The CONSULTANT will prepare Stormwater Best Management Practice Maintenance Plans for hand off to WSDOT Construction Office for construction of the BMP and field survey verification testing of the constructed facility. WSDOT Construction Office will provide as-built feedback to the WSDOT NWR PEO of the BMP plan, which will be finalized into the a WSDOT Owner's Manual for the Stormwater facility. Governed by the National Pollution Discharge Elimination System (NPDES) stormwater permit and the Clean Water Act, WSDOT constructs facilities to control and remove pollutants from stormwater discharged to surface waters. The NPDES permit requires that these best management practice (BMP) facilities be maintained for long-term performance. Stormwater BMPs are the physical, structural, and managerial practices that, when used singly or in combination, prevent or reduce the detrimental impacts of stormwater, such as the pollution of water, degradation of channels, damage to structures, and flooding.

Assumptions:

- a. This is a CITY project so it is exempt from WSDOT's Puget Sound retrofit project requirements
- b. The stormwater BMPs on the west side of I-5 will be limited to one proprietary treatment vault.
- c. The stormwater BMPs on the east side of I-5 will be limited to one proprietary treatment vault and one detention vault.
- d. The maintenance plan for the detention vault on the west side of I-5 will be provided by the corridor project. The maintenance plan for the proprietary treatment vault on the west side of I-5 will be provided by Lochner.

Deliverables:

- a. Draft and final Pre-contract (90%) Draft Stormwater BMP Maintenance Plan – one (1) hard copy and one (1) electronic copy.

8.3 CONVEYANCE SYSTEMS PLANS AND DETAILS

The CONSULTANT will prepare stormwater drainage plans for the Constructability Review (60%), and Pre-contract PS&E (90%) plans submittals for stormwater conveyance system for NE 145th Street between 1st Avenue and 6th Avenue, 5th Avenue between I-5 NB Off Ramp and I-NB On Ramp, and Roundabouts

located at the intersection of 145th Street and I-5 SB Ramps and 145th Street and 5th Avenue, Private Drive (3rd Avenue NE) off of NE 147th Street and 4th Avenue modifications. Stormwater conveyance system outside WSDOT limited access control for I-5 will be design in accordance with City of Shoreline's Stormwater Design Manual, stormwater conveyance system inside WSDOT's limited access will be design in accordance with WSDOT Highway Runoff Manual and WSDOT Hydraulics Manual.

Assumptions:

- a. Conveyance system design will be in accordance with the WSDOT Highway Runoff Manual and WSDOT Hydraulics Manual within WSDOT Limit Access, outside WSDOT Limit Access Conveyance system design will be in accordance with City of Shoreline Engineering Standards.
- b. Stormwater conveyance design elements approved by WSDOT in the design approval process will be advanced to the final design stages and made part of the Ad Ready plans.
- c. All electronic copies will be in PDF format and MicroStation.
- d. I-5 SB Ramps drainage system is adequate and need no modification
- e. The overpass bridge drainage system will not be modified as part of this project and is excluded from the Scope of Services.
- f. The existing conveyance systems in 145th Street and 5th Street are as shown in documents provided by the City of Shoreline.
- g. The existing conveyance systems within the WSDOT Limited Access are as shown on the as-built and design drawings provided.

Deliverables:

- a. Constructability (60%) Conveyance system plans in 11"x17" format – one (1) hard copy and one (1) electronic copy.
- b. Pre-contract (90%) Conveyance System plans in 11"x17" format – one (1) hard copy and one (1) electronic copy.
- c. Contract Ready (final review) Conveyance System plans in 11"x17" format – one (1) hard copy and one (1) electronic copy.
- d. CAD drawings of intermediate design phase elements in MicroStation format.

8.4 DETENTION SYSTEMS PLANS AND DETAILS

For the west side of the Interchange CONSULTANT will prepare stormwater calculations of the quantity of volume of stormwater to be detained in the stormwater vault designed by Others. The CONSULTANT will prepare TDA maps to define the stormwater basin for sizing the detention vault.

For the east side of the Interchange the CONSULTANT will size and design a detention facility for stormwater runoff from the project area within the project limits on the east side of the Interchange.

Assumptions:

- a. Stormwater in the west side of I-5 will be over detained in a vault designed and contracted by the 145th Street Corridor project. Stormwater runoff from the Roundabout at 145th Street and I-5 SB Ramps will not be detained and by pass the detention vault.
- b. The WSDOT Puget Sound Retrofit requirements do not apply to this project.
- c. Oil control is not required for this project.

Deliverables:

- a. Constructability (60%) Detention system elements to be integrated into the Stormwater System plans for east side of Interchange in 11"x17" format – one (1) hard copy and one (1) electronic copy.
- b. Pre-contract (90%) Detention system elements to be integrated into the Stormwater System plans in 11"x17" format – one (1) hard copy and one (1) electronic copy.
- c. Contract Ready (final review) Detention system elements to be integrated into the Stormwater System plans in 11"x17" format – one (1) hard copy and one (1) electronic copy.
- d. CAD drawings of intermediate design phase elements in MicroStation format.

8.5 WATER QUALITY PLANS AND DETAILS

For the west side of the Interchange CONSULTANT will prepare stormwater calculations of the quantity of volume of stormwater to be detained in the stormwater vault designed by Others. The CONSULTANT will prepare TDA maps to define the stormwater basin for sizing the detention vault. CONSULTANT will design one proprietary storm water treatment vault to provide water quality treatment between 1st Street and I-5.

For the east and west side of the Interchange the CONSULTANT will size and design a proprietary treatment vault for bio-filtration swales lined with composed amended soils or stormwater runoff from the project area within the project limits on the east side of the Interchange.

Assumptions:

- a. Stormwater quality system design will be in accordance with the WSDOT Highway Runoff Manual within WSDOT Limit Access, outside WSDOT Limit Access the stormwater quality system design will be in accordance with City of Shoreline Engineering Standards.

Deliverables:

- a. Constructability (60%) Water Quality system elements to be integrated into the Stormwater System plans for east side of Interchange in 11"x17" format – one (1) hard copy and one (1) electronic copy.
- b. Pre-contract (90%) Water Quality system elements to be integrated into the Stormwater System plans in 11"x17" format – one (1) hard copy and one (1) electronic copy.
- c. Contract Ready (final review) Water Quality system elements to be integrated into the Stormwater System plans in 11"x17" format – one (1) hard copy and one (1) electronic copy.
- d. CAD drawings of intermediate design phase elements in MicroStation format.

TASK 9: ROADSIDE RESTORATION

9.1. CONCEPT DESIGN – ALTERNATIVES – RETAINING WALL AND STAMPED CONCRETE

Develop up to two (2) alternatives for review by the CITY and the public. It is assumed the conceptual roundabout design work completed in the previous contract will be used for the concept design level review of the project. The alternatives concepts will explore spatial and aesthetic studies related to the retaining walls and streetscape elements. Drawings and graphics will be as identified in Exhibit A – Fee Schedule. A brief written description will accompany each alternative.

The Draft Preferred Wall & Landscape Concept Plans will be based on City and community feedback of the alternatives, the project goals, assumptions, and expectations as determined through discussion with the client. 1 elevation will be developed to accompany each of the draft preferred concept plans. A preliminary square-footage level cost estimate will be provided for the Draft preferred concept plan.

The Final Wall Aesthetic Design & Landscape Concept Plans will be a refinement of the Draft Preferred Concept Plans. The Final Wall Aesthetic Design & Landscape Concept Plans will be presented to the client for approval and adoption. Furthermore, a tech memo will be developed outlining the preferred aesthetic concepts and products. A preliminary square-footage level cost estimate will be provided for the Final Wall Aesthetic Design & Landscape Concept Plans. In addition, up to 2 PowerPoint presentations will be developed for use in web meetings with the client and the public.

Deliverables:

- a. See Exhibit A – Fee Schedule

9.2. PRELIMINARY DESIGN (30%)

This task includes advancing the streetscape and gateway pedestrian landscape areas of the preferred landscape design from the Conceptual Design prepared in the previous tasks.

It is anticipated that the concept design of the roundabouts will be used as a starting point for that portion of the project.

The design will be refined, including identification of products and materials, decorative paving, landscape area conceptual landforms, landscape planting character and identification of irrigation points of connection and coverage areas. The design concepts will be detailed adequately to allow for coordination with the City and design team and to incorporate aesthetic design details of the roundabout landscaping into the project engineering design. The Consultant will prepare preliminary aesthetic and landscape architectural design plans (approximately 30 percent complete) for the roundabouts, splitter islands areas and streetscapes. The preliminary level cost estimate will be based on square foot unit costs only.

Deliverables:

- a. See Exhibit A – Fee Schedule

9.3. 60%, 90% AND AD READY PLANS, COST ESTIMATE AND SPECIFICATIONS

This task includes the 60%, 90% and Ad Ready plans, cost estimate, and specifications of the streetscape and gateway pedestrian landscape areas as developed in the 30% design.

The Consultant shall prepare planting and restoration plans, (at 1" = 20') for the SR523 & I-5 Interchange area gateway/intersections including street trees and accent plantings. The planting plan will show where trees, shrubs and groundcovers are located and will be accompanied by a plant list identifying plants selected for the project. Irrigation design will be provided for plantings, as guided by the preliminary design. Wall, planting, and irrigation details will also be developed and further refined from the previous 30% preliminary design phase. JA Brennan will provide input for wall finishes only. Wall design by others.

The Consultant will develop the necessary special provisions text for the proposed elements not covered by the WSDOT Standard Specifications. Consultant will provide cost and quantities for the cost estimate.

Deliverables:

- a. See Exhibit A – Fee Schedule

OPTIONAL SERVICES – GATEWAY DESIGN

9.4 CONCEPT DESIGN – ALTERNATIVES – GATEWAY SIGNS

This task includes the conceptual design for gateway signage at the SR 532 & I-5 Interchange. The process will first develop a series of 4 alternative elevation sketches, then narrowing it down to 2 draft preferred elevation sketches. Development of 2 final gateway sign elevation sketches will be the last step in this task in preparation for preliminary design (30%).

Deliverables:

- a. See Exhibit A – Fee Schedule

9.5 PRELIMINARY DESIGN ELEVATIONS (30%)

This task includes the preliminary design for gateway signage at the SR 532 & I-5 Interchange to advance the design of the preferred gateway signage prepared in the previous contract phase. Draft and final elevations will be developed for locations at the 5th Ave. gateway & West Roundabout. The design concepts will be detailed adequately to allow for coordination with the CITY and design team.

Deliverables:

- a. See Exhibit A – Fee Schedule

9.6 GATEWAY SIGNAGE CONSTRUCTION DOCUMENTS 60%, 90%, AND AD READY

This task includes the 60%, 90% and Ad Ready details, cost estimate, and specifications of the gateway signs as developed in the preliminary design (task 1f). The details will show appropriate construction and layout of the gateway signs.

Assumptions:

1. Specifications will not be provided at preliminary design (30%).
2. Subsequent to the 30% submittal, landscape and irrigation cost estimates will be calculated as bid item quantity costs. It is assumed that irrigation costs will be a lump sum bid item for the completed irrigation system.
3. No federal funding is anticipated for this project. If federal funding occurs, additional tasks may need to be added to the scope of work and schedule under a supplemental contract.
4. Special provisions to the WSDOT APWA 2020 standard specifications are anticipated. the CONSULTANT will provide up to date PNW landscape special provisions and limited custom special provision sections that relate to landscape, paving, and irrigation design elements.
5. Additional signage, gateway elements and lighting special provisions by others. It is assumed that proprietary items may be specified. Signage design work, if included in the CONSULTANT contract, will be coordinated with Lochner and the Client within the meetings for the rest of the project.
6. Signage design work, if included in the CONSULTANT contract, will be coordinated with Lochner and the Client within the meetings for the rest of the project.
7. The CONSULTANT recommends that the City contracts with a signage and branding specialist for completion of the gateway signs for the project. As identified in Task E and G above.
8. The client will provide a current topographic and boundary survey that includes utilities, trees, vegetation edge, and built elements. The client is responsible for meeting surveying criteria as defined by local jurisdiction. The CONSULTANT is not responsible for discrepancies between survey and actual conditions.
9. Grading and planting design for natural drainage stormwater features is not anticipated.
10. Graphics may be hand drawn during the preliminary design (30%) phase.
11. The client will review cost estimate assumptions prior to cost estimating.
12. The client will provide coordinated review of each submittal. Additional fee will be required for additional review steps.
13. The CONSULTANT will not be responsible for working with adjacent landowners or developers, except at public meetings, if applicable.
14. The client will be responsible for the reproduction and distribution of documents.
15. The CONSULTANT will consolidate, edit, and print up to 3 copies of contract documents at review stages, and 2 copies of the final plans and specifications.
16. Construction support can be provided under a supplemental contract.
17. The project will be bid in 1 package. More than one bid package can be provided for additional fee.
18. No permit support from The CONSULTANT is anticipated.
19. The CONSULTANT will provide construction drawings in AutoCAD format.

Deliverables:

- a. See Exhibit A – Fee Schedule

TASK 10: TRAFFIC DESIGN & PLANS

10.1 ILLUMINATION DESIGN & PLANS

The CONSULTANT will prepare design level plans for illumination systems showing location, size and details. The CONSULTANT will calculate illumination fixture spacing requirements and confirm illumination fixture models to be used. The CONSULTANT will determine the location of new signal poles and will coordinate the design with the CITY.

The CONSULTANT will develop Illumination plans and details based on the calculations. The CONSULTANT will prepare quantity takeoffs, tabulations, and backup calculations.

The CONSULTANT will include Illumination information on the Q-tabs and develop Illumination details. Plans for Illumination will be developed in accordance with WSDOT Preparation Manual (PPM) 400.06 and WSDOT Design Manual Chapter 1040.

Assumptions:

- a. The CONSULTANT will use the CITY's specified light pole and luminaire as the preferred standard.

Deliverables:

- a. Draft and final Constructability Review (60%), PS&E (90%) and Final PS&E (100% and Ad Ready) Illumination plans – one (1) hard copies and one (1) electronic copy.
- b. CAD drawings of Constructability Review (60%), PS&E (90%) and Final PS&E (100% and Ad Ready) design elements in MicroStation format.
- c. Construction Quantities and Cost Estimate for Illumination System in electronic PDF format.

TASK 11: UTILITIES

The Consultant shall review Utility information provided by the City as Reference Documents to verify known Utilities within the site of work. The Consultant shall call for locates of existing Utilities, and for circumstances where existing information is either conflicting or not available, the Consultant shall coordinate and engage the services of a Utility location service for identifying, designating, locating, and mapping existing and abandoned Utilities where necessary.

Assumptions:

- a. The number of potentially affected Utilities is assumed to be ten (10) utilities.
- b. The number of Utility franchise agreements and as-builts to be reviewed is assumed to be ten (10) sets of agreements and as-builts.
- c. The number of plan sheets required to be developed for each existing Utility conflict plan is assumed to be four (4) sheets each.
- d. The number of potholes required to verify existing Utilities within the project area that have the potential to create direct or indirect conflicts with the Project is assumed to be thirty (30) potholes.
- e. The number of Relocation Agreements (temporary and permanent) that will be required to be developed for the project is assumed to be ten (10) agreements

Deliverables:

- a. None.

11.1 DRAFT AND FINAL POTHOLING PLAN

The Consultant shall identify Utilities requiring additional pothole information and shall prepare a potholing plan for the City's Review and Comment. Following receipt of the City's comments, the Consultant shall revise and submit a final potholing plan. The CITY shall conduct potholing in accordance with the potholing plan and incorporate the additional and-or updated Utility information into the survey base map, existing Utility plans, and the Utility Conflict Resolution Plan (see Utility Investigations and Conflict Resolution for plan references). The Consultant shall also update the Existing Utility Listing included in the Reference Documents.

Assumptions:

- a. Survey will be provided by the CITY.
- b. Potholing utilities will be provided by the CITY and are not included in the scope of services of this Supplement.

Deliverables:

- a. Draft and final Potholing Plan at the Constructability Review (60%)
- b. Updated conflict plan and Existing Utility Plans as necessary

11.2 UTILITY COORDINATION MEETINGS

The CONSULTANT shall conduct meetings with the CITY and SCL and SPU and private Utilities as needed to clarify information or inconsistencies within the Utility Agreements and plans. The Consultant shall notify the City of Utility coordination meetings so that the City's designee can participate as appropriate. The Consultant shall prepare draft and final minutes summarizing the results of each meeting.

Assumptions:

- a. Meeting will be held via MS TEAMS and convened on a bi-weekly basis.
- b. The CITY will coordinate with the Evergreen and Shay Developers for utility services.

Deliverables:

- a. Draft and final minutes from Utility Coordination meetings

11.3 DRAFT AND FINAL UTILITY CONFLICT RESOLUTION PLAN

The Consultant shall identify Utility easements within the project limits and review the title reports for private Utility encumbrances on properties being considered for acquisition or property rights outside of City and State rights of way for potential conflicts.

Upon completion of Utility investigations, the Consultant shall develop and provide for the City's review and comment Existing Utilities Plans for the project site of work including Utilities identified to be within the limits of anticipated temporary and permanent property rights to be acquired for the project. Following receipt of the City's comments, the Consultant shall prepare a final Existing Utilities Plan for the project site of work.

Assumptions:

- a. Utilities have been located and mapped by Others for the Geometric Design phase.

Deliverables:

- a. Updated Existing Utility Listing document (including private Utility encumbrances)
- b. Draft and final Constructability Review (60%), and Pre-contract PS&E (90%) Existing Utility plans.

11.4 UTILITY INVESTIGATIONS AND CONFLICT RESOLUTION

The Consultant shall perform Utility conflict investigations for the footprint of the preferred alternative for the project, develop resolution strategies, and lead the Utility Relocation effort for the project. The Consultant shall develop a plan that first Avoids the Utility, to Protect in Place the identified Utility (either permanently or temporarily), or to Relocate identified conflicting Utilities prior to the Advertisement Date established for the project. Where necessary and where the conflicting utility cannot be relocated prior to project's Advertisement Date, the Consultant shall include develop contract provisions, design work, and Draft agreements that provide for the Utilities relocation work to be completed during the City's Construction Contract Work of the project or to be performed by the City's Construction Contractor. The Consultant shall develop and submit draft Utility Conflict Resolution Plans at the 30 Percent or Geometric Design milestone as well as final Utility Conflict Resolution Plans at the 60 Percent or Design milestone. The "**Utility Conflict Resolution Plan**" shall at a minimum:

- a. Identify City of Shoreline, City of Seattle, Sound Transit, WSDOT and private Utilities that will be impacted by the project and recommendations for strategies to Avoid, Protect in Place, or Relocate each of the identified conflicting Utilities.
- b. Identify City of Shoreline, City of Seattle, Sound Transit, WSDOT and Private Utilities that require relocation prior to the proposed Advertisement Date for the City's Construction Contract for the project.
- c. Identify the approach for Relocation of each conflicting Utility that cannot be relocated prior to the proposed Advertisement Date for the City's Construction Contract. To identify provisions,

conditions, and to make recommendations for the relocation work to be conducted by the affected Utility during the City's Construction Contract or to be performed by the City's Construction Contractor.

- d. Identify coordination efforts (previous and planned) with each affected Utilities at each milestone.
- e. Identify the cost responsibility for each Utility Relocation in accordance with current Utility franchise agreements or other agreements affecting the Utilities presence within the project's corridor of improvements. The Consultant shall provide a recommendation for who might be responsible for each Utility Relocation based on the conceptual solution, type of Utility conflict, utility locations within the existing Right of Way, and any governing agreements that may have been identified.
- f. Identify preliminary costs for Utility Relocations that are identified to be the City's responsibility.
- g. Include a detailed schedule for planning and implementation of each Utility Relocation, including each Relocation Agreement. Following the City's Review and Comment on the draft Utility Conflict Resolution Plan, the Consultant shall revise the draft Utility Conflict Resolution Plan and initiate contact with Utility Owner to begin work developing a draft Relocation Agreement in accordance with WSDOT Utilities Manual that meets the project's design schedule.

The Consultant shall update the draft Utility Conflict Resolution plan and draft Relocation Agreement for each impacted Utility based on discussions with the Utility Owners and the City and shall submit the final documents with the 60 percent Design Package.

Assumptions:

- a. The CITY will provide additional survey to located utilities if needed.

Deliverables:

- a. Draft and Final Utility Conflict Resolution Plan for the Constructability Review (60%) milestone.
- b. Draft and Final Relocation Agreements for each conflicting Utility
- c. Draft and Final Utility Conflict Resolution Plan for the 60 Percent or Design milestone.

11.5 DESIGN RELOCATION OF SPU WATER TRANSMISSION MAIN

NE 145th Street will be regrade and from the intersection of 1-5 SB Ramps to approximately 150 east of 1st Avenue NE. The regrade of NE 145th Street will make it necessary to relocate approximately 650 lineal feet (lf) of 24-inch water transmission line owned and operated by Seattle Public Utilities (SPU). The CONSULTANT shall prepare intermediate and final design specifications and plans for the realignment of the 24-inch water transmission main. The CONSULTANT shall incorporate review comments from SPU suitable and prepare documents for public bidding.

Assumptions:

- a. The design will meet SPU's Design Standards and Guidelines published November 2020.
- b. SPU will permit the 24-inch water transmission main relocation
- c. The new transmission water main (WTM) will be relocated in same horizontal alignment as the existing water main;
- d. Materials for the new water transmission water main will be either be welded steel or earthquake resistant ductile iron pipe;
- e. The transmission water main will be designed to meet SPU Design Standard Guidelines for seismic performance requirements;

- f. Corrosion potential of soils will be assessed by SPU, corrosion control measures for the WTM (if required) will be specified by SPU;
- g. In accordance with City of Seattle Standard Plans of Municipal Construction (2020) Standard Plan No. 030 the WTM burial depth results in less than 3'0" of cover from top of pipe to finished elevation of the roadway pavement;
- h. The length of WTM to be replaced is dictated by SPU minimum cover requirement in accordance with City of Seattle Standard Plans of Municipal Construction (2020) Standard Plan No. 030;
- i. Permits and or reviews from Washington State Department of Health is excluded;
- j. This scope of work omits distribution water main or service lines;
- k. The City of Seattle will provide as-built documents and maintenance records of the 24-inch transmission line.

Deliverables:

- a. Constructability Review (60%), and Pre-contract PS&E (90%) Plans and Specifications for relocation of the 24-inch water main for SPU review.
- b. Final Plans and Specifications for relocation of the 24-inch water main for SPU review.

TASK 12: WORK ZONE TRAFFIC CONTROL

12.1 WORK ZONE TRAFFIC CONTROL MEETING

A meeting with the Work Zone Traffic Control (WZTC) design team, construction office, and other stakeholders to discuss various traffic control strategies for the project will be convened. A working group with WSDOT, City of Shoreline, SDOT, Sound Transit, King County Metro and Community Transit will be established to develop the detour plans for street closures and work zone traffic control strategies. These meetings will be convened bi-weekly. The CONSULTANT will prepare meeting agendas, action item tracker and meeting notes. The goal of this WZTC Working Group will be to aid the development of Work Zone Traffic Control Strategies and traffic detour plans that will be approved by City of Shoreline, WSDOT NWR Traffic and SDOT Traffic.

Assumptions:

- a. Work Zone Traffic Control working group will meet for 8 times.
- b. City of Shoreline, WSDOT and SDOT are the approval authority for the Work Zone Traffic Control strategy and detour routes.
- c. Plans preparation will be in accordance with WSDOT Plans Preparation Manual.

Deliverables:

- a. Meeting Agendas for bi-weekly meetings
- b. Meeting Notes for bi-weekly meetings
- c. Action Item tracker

12.2 TRANSPORTATION MANAGEMENT PLAN (TMP)

The CONSULTANT will prepare a Traffic Management Plan (TMP) document that summarizes strategies for managing work zone impacts in accordance with WSDOT requirements. The plan will address temporary traffic control, traffic operations, and public outreach strategies.

Assumptions:

- a. One (1) revision is assumed, incorporating WSDOT and CITY comments.
- b. WSDOT will have final approval of the Traffic Management Plan.

Deliverables:

- a. Draft TMP to WSDOT and the CITY at the 60% Design level.
- b. Final TMP to WSDOT and the CITY at the 90% Design level

12.3 WORK ZONE CAPACITY ANALYSIS

Work zone congestion and delay will be a significant issue for this Project. Work zone traffic restrictions will be analyzed by the CONSULTANT to determine the level of impacts.

The WZC Analysis will identify strategies to maintain traffic mobility through and around the Project's work zones. The goal for the Work Zone Capacity Analysis is to keep a project's work zone traffic capacity compatible with existing traffic demands.

Strategies will include phasing roadway closures of NE 145th Street between 1st Avenue NE and I-5 SB Ramps, Intersection of I-5 SB Ramps and NE 145th Street, and the intersection of 5th Avenue NE and NE 145th Street. A Demand Management plan will be developed for the traffic control strategies and phasing.

Assumptions:

- a. Current traffic volume will be provided by WSDOT.
- b. WSDOT will coordinate with local agencies to obtain need traffic volumes.
- c. WSDOT will have final approval of the Traffic Management Plan.

Deliverables:

- a. Traffic Work Zone capacity analysis memo at the Constructability Review (60%) Design level.

12.4 STAGING DESIGN

The CONSULTANT will develop a construction sequence/staging strategy Construction Staging plans intended to show the proposed construction stages (NE 145th Street between 1st Avenue NE and I-5 SB Ramps, Intersection of I-5 SB Ramps and NE 145th Street, Intersection of 5th Avenue NE and NE 145th Street, and the Bridge Deck) and the work required for each stage. The Staging plans will refer to the corresponding TCPs for the traffic control details of each stage of the Project during construction.

Assumptions:

- a. The Project will have four Construction Staging Phases (1. NE 145th Street between 1st Avenue NE and I-5 SB Ramps; 2. Intersection of I-5 SB Ramps and NE 145th Street; 3. Intersection of 5th Avenue NE and NE 145th Street; 4.the Bridge Deck).

Deliverables:

- a. Construction Staging plans for each of the four project Phases.

12.5 TRAFFIC CONTROL PLANS

The Project will include plans and payment items for controlling traffic based on a strategy that is consistent with the project construction elements. A constructible and biddable method of temporary traffic control is the goal.

Site-specific traffic control plans will be developed for the Project's work zones located at NE 145th Street between 1st Avenue NE and I-5 SB Ramps, Intersection of I-5 SB Ramps and NE 145th Street, and the intersection of 5th Avenue NE and NE 145th Street.

The CONSULTANT will provide a Class A sign and specifications sheet to include location, post information, and notes for Standard Plans or other specific sign information and sign details.

The CONSULTANT will prepare Quantity Tabulation sheets for barrier and attenuator items and temporary pavement markings for temporary traffic control items used for NE 145th Street between 1st Avenue NE and I-5 SB Ramps; Intersection of I-5 SB Ramps and NE 145th Street; and the intersection of 5th Avenue NE and NE 145th Street staged construction areas.

Assumptions:

- a. Current traffic volume will be provided by WSDOT.
- b. WDOT will coordinate with local agencies to obtain need traffic volumes.

- c. WSDOT will have final approval of the Traffic Management Plan.
- d. The Interchange will have phased road closures during construction.

Deliverables:

- a. Constructability Review (60%), and Pre-contract PS&E (90%) Class A sign plan and specification sheet.
- b. Constructability Review (60%), and Pre-contract PS&E (90%) Quantity tabulation sheets
- c. Constructability Review (60%), and Pre-contract PS&E (90%) WZTC plans for each Phase of the project.

12.6 DETOUR PLAN

The CONSULTANT will develop traffic detour plans for each Construction Phase of the Project.

Assumptions:

- a. Detour Plans will be approved by the City of Shoreline, WSDOT NWR Traffic, and SDOT.

Deliverables:

- a. Constructability Review (60%), and Pre-contract PS&E (90%) Detour plans for each of the four project Phases.

TASK 13: DESIGN DOCUMENTATION

Design documentation is prepared to record the evaluations by the various disciplines that result in design recommendations.

13.1 DESIGN APPROVAL

Design approval includes: a memo that describes the project, Project Summary Documents, Design Criteria, Design Variances, known deviations, applicable Channelization plans, Intersection plans, Interchange plans, or Alignment plans and a current cost estimate. This document will be prepared by the CONSULTANT for WSDOT POE approval.

Assumptions:

- a. None.

Deliverables:

- a. Draft Design Approval memo (for one WSDOT review).
- b. Final Design Approval memo

13.2 DESIGN DOCUMENTATION PACKAGE (DDP)

The Design Documentation Package (DDP) is a compilation of assumptions, decisions, justifications, and approvals that support the ultimate design of the project, to include review of the package. The DDP will include the following documents: Scope Validation, Deliverables for the Project, Schedule, Cost Estimate, Risk Management Plan, Change Management Plan, Approved MEFs, Quality Management Plan, Project Profile - comprised of Project Definition, Environmental Review Summary, and Basis of Design for the Project.

Assumptions:

- a. None.

Deliverables:

- a. Draft Design Documentation Package (DDP) for one WSDOT review.
- b. Final Design Documentation Package (DDP).

13.3 ADA ACCESSIBILITY DESIGN AND DOCUMENTATION OF MEF (MAXIMUM EXTENT FEASIBLE)

ADA Accessibility of existing Pedestrian Facilities to the Maximum Extend Feasible Documentation

The CONSULTANT will document the maximum extent feasible for situations where curb ramps, drive way cuts and pedestrian route as a result of physical constraints will have deficient elements of the ADA requirements. The MEF document will be submitted to the WSDOT PEO for approval by the Assistant State Design Engineer. The approved MEF will be include in the DDP.

Assumptions:

- a. Up to ten (10) MEF may be prepared
- b. WSDOT will approve MEFs within the Limited Access for I-5
- c. The City of Shoreline will approve MEFs within the City of Shoreline R/W

- d. The City of Seattle will approve MEFs within the City of Seattle R/W

Deliverables:

- a. Draft MEF for WSDOT PEOO, and or SDOT and or City of Shoreline to review.
- b. Final MEF for WSDOT Assistant State Design Engineer, and or SDOT and or City of Shoreline approval.

13.4 DESIGN ANALYSIS

A documented decision granting approval at project specific locations to differ from the design level specified in the Design Manual.

One Design Approval for the project has been identified thus far through the Geometric Design phase. The sight distance for the right turning movement for west bound 145th Street on to 5th Avenue NE is substandard due to the SPU FOY Pump Station.

Assumptions:

- a. Up to two (2) Design Approval may be required

Deliverables:

- a. Draft Design Approval Package for WSDOT NWR approval with two reviews (electronic file in PDF format)
- b. Final Design Approval Package for WSDOT signature (5 hard copies for signature, and electronic file in PDF format of signed DAs)

TASK 14: R/W PLANS

14.1 R/W AND LIMITED ACCESS PLANS

The CONSULTANT will prepare limited access plans base on the design of roundabout intersections that modify the current limited access from modified to full limited access. Limed Access plan will be developed in accordance with WSDOT DM Chapter 530 Limited Access Control Section 530.03(3) Crossroads at Interchange Ramp.

Assumptions:

- a. WSDOT has developed an Access Report to inform the CITY and City of Seattle the proposed limited access for I-5.

Deliverables:

- a. Draft and final plan at Constructability Review (60%).

14.2 MONUMENTATION MAP TYPE - 1

WSDOT will prepare a Monumentation Map as part of the Record of Survey for the east side of the Interchange. Existing monument will be used to tie the R/W centerline to the Monumentation Map. The Monumentation Map will include a full and complete analysis of the R/W alignment control baseline. The Monumentation Map will document the alignment control baseline relationship to the pertinent deeds and cadastral ties to the Public Land Survey System.

Assumptions:

- a. WSDOT will prepare the Documentation Map west of I-5 for full Limited Access for the Interchange.

Deliverables:

- a. Record of Survey stamped by a PLS or PE and recorded at King County.

14.3 OWNERSHIP INTERESTS AND ENCUMBRANCES (TITLE REPORTS)

The CONSULTANT will provide current title reports for 13 parcels that may be partial or full property acquisitions.

Assumptions:

- a. Thirteen (13) parcels will be partially of fully acquired

Deliverables:

- a. Up to Thirteen (13) Title reports; one hard copy, and one electronic file in PDF format

14.4 RIGHT-OF-WAY PROJECT FUNDING ESTIMATE (PFE)

The CONSULTANT will prepare a Right-of-Way Project Funding Estimate (PFE) in accordance with Section 4-2 of the WSDOT Right of Way Manual M 26-01.25. The PFE will be a parcel-by-parcel of the total expected R/W acquisition costs.

As a minimum, the PFE contains the following information:

1. A parcel-by-parcel list of right of way costs.

2. A notation on every parcel with a listing on the Washington State Department of Ecology's Facility Site HazMat Database (www.ecy.wa.gov/fs). This information is to be included in the appraisal and the Determination of Value.
3. A total project right of way cost summary.
4. A project data package including sales, sales map, neighborhood and project description, scope of sales search and, if applicable, damage studies, cost-to-cure documentation, Assumptions and Limiting Conditions, and Acquisition Appraisal Salient Information. The PFE Parcel Work Sheet is included in the data package.

Assumptions:

- a. WSDOT will enter the in information in to the Integrated Real Estate Information System (IRIS)

Deliverables:

- a. Provide completed PFE to the City for WSDOT LAC review
- b. Update as necessary to increase/decrease parcel list of all impacted parcels and displaces.

TASK 15: ENVIROMENTAL PERMITTING

15.1 ENVIROMENTAL PERMITTING

Scope of services for Contract Supplement 1

Assumptions:

- a. None.

Deliverables:

- a. Narrative appraisals and/or AOS to set Just Compensation
- b. Appraiser on the WSDOT roster
- c. Follow approved City RW procedures

15.2 ADDITIOANL CULTUAL RESOUCES EFFORT

1. Update Area of Potential Effect amendment and GIS services.
2. Additional pedestrian survey.
3. Additional HPI preparation and survey.
4. Additional reporting update resulting from prior scope changes to the original APE

15.3 NOISE STUDY

The noise analysis will be completed as detailed in the Washington State Department of Transportation *2011 Traffic Noise Policy and Procedures, October 2012*. One build alternative will be studied. The analysis will include the following items:

15.3.1 Compilation of Data

Assimilate mapping, traffic data and land use information for the existing, no-build and one proposed build alternative.

15.3.2 Selection of Analysis Sites

Identify noise sensitive areas and select receptor sites.

15.3.3 Preparation of Base Maps

Prepare base map for use in noise analysis.

15.3.4 Noise Analysis

Background noise levels will be determined using a sound level meter.

The FHWA Traffic Noise Model 2.5 will be used to determine the “worst case” roadway noise levels at the selected noise receptors. Analysis will be performed for both existing traffic and the design year traffic for build and no build scenarios.

15.3.5 Determination of Impacts

Impacts for the build alternative will be determined based on comparison between the existing and design year Leq levels and between the design year build and the Noise Abatement Criteria (NAC).

15.3.6 Noise Abatement Considerations

Noise abatement will be investigated if design year Leq levels exceed existing Leq levels substantially and/or design year Leq levels approach, equal or exceed FHWA NAC. Applicable noise abatement measures will be tested for cost effectiveness. If barriers are the recommended noise abatement measure, approximate length, height, attenuation and cost effectiveness will be furnish for each barrier.

Assumptions:

- a. Traffic data will be provided and will include the peak volume, directional split, the percentage of medium and heavy trucks and the average speeds. The traffic data will include the proposed roadway and I-5 as well as all cross-streets within the project limits.
- b. Topographic data will be provided which will include contour data to a distance of 500' from the proposed roadway edge line.
- c. Locations and descriptions of all proposed traffic control devices will be provided. The data will include estimated timing for existing and proposed traffic signals.
- d. Noise monitoring will be performed at a maximum of 4 locations.
- e. There will be no public involvement. Polling for any mitigation found to be feasible and reasonable will occur early in the design phase of the project.

Deliverables:

- a. Prepare a Draft Noise Study Technical Report, documenting the methods, assumptions, input data, results and recommendations of the noise analysis.
- b. Address comments received from the WSDOT following their review of the Draft Technical Report
- c. Prepare a Final Noise Study Technical Report.

TASK 16: REAL ESTATE SERVICES

16.1 APPRAISAL/ADMINISTRATIVE OFFER SUMMARY

The CONSULTANT will prepare an Administrative Offer Summary form approved by WSDOT for a basis of offer for low valued (not greater than \$25,000) parcels.

Assumptions:

- a. Provide appraisals and/or AOS for low valued impacted parcels

Deliverables:

- a. Narrative appraisals and/or AOS to set Just Compensation
- b. Appraiser on the WSDOT roster
- c. Follow approved City RW procedures

16.2 REVIEW & DETERMINATION OF VALUE (DV)

The CONSULTANT will prepare a Determination of Value (DV) for up to thirteen (13) parcels. The DV will be used to establish the just compensation to be paid by the CITY for the needed property and property rights.

Assumptions:

- a. Review Appraisals

Deliverables:

- a. Review Appraisals for accuracy for DV
- b. Provide final DV to City for setting JC
- c. Follow current approved RW procedures
- d. Reviewer on the WSDOT Roster

16.3 ACQUISITION

The CONSULTANT shall act as the CITY's Agent to acquire up to thirteen (13) parcels needed for the Project. Property acquisition will be performed in accordance with WSDOT Right of Way Manual Chapter 6 Acquisition and the CITY's approved ROW procedures. Property acquisitions will follow the standard process.

Assumptions:

- a. Acquire all rights needed for the project in fee and/or easement

Deliverables:

- a. Acquire property rights from all impacted properties
- b. Clear encumbrances
- c. Legal description accuracy
- d. Title research
- e. Coordinate Escrow and recordings
- f. Coordination with WSDOT LAC

16.4 RELOCATION/RELOCATION REVIEW BOARD AND/OR ADJUDICATIVE HEARINGS

The CONSULTANT will assist the CITY with preparation of documents needed for relocation assistance of eligible parties and Adjudicative Hearing and/or Relocation Review Board.

Assumptions:

- a. Relocation of all impacted displacees

Deliverables:

- a. Relocation Plan to identify all impacted businesses and displacees
- b. Provide moving estimates, replacement housing payments, business relocation estimates
- c. Advisory Services
- d. Housing payment estimates
- e. Coordination with acquisition activities

16.5 CONDEMNATION/POSSESSION & USE

The CONSULTANT will assist the CITY in the preparation of documents needed for the judicial process to acquire property where the CITY has been unable to reach a settlement through negotiation.

Assumptions:

- a. Condemnation in the event the agency is unable to acquire property rights

Deliverables:

- a. Provide last notices to property owner
- b. Voluntary Possession and Use documents
- c. City attorney coordination

16.6 CERTIFICATION

The CONSULTANT will assist the CITY in the preparation of documents needed to achieve WSDOT Local Programs Project Certify.

Assumptions:

- a. WSDOT Certification

Deliverables:

- a. Provide all files for WSDOT RW Review
- b. PS&E to match RW maps
- c. Proof of payments and recorded deeds
- d. Title Policies to reflect City ownership
- e. LAC coordination

TASK 17: PS&E AND AD READY

17.1 CONTRACT PLAN SHEET PRAPARATION

The CONSULTANT will prepare Contract plans in accordance with WSDOT's Plan Preparation Manual. Design review comments will be resolved and address. Coordination as required between design disciplines will be completed on roadway geometrics and structural walls, traffic control, drainage, barrier and guardrail, illumination, and landscaping.

Assumptions:

- a. WSDOT Plans Preparation Manual will be used as the CAD standard for the plans.
- b. Required revision received by email or online meeting from the CITY and WSDOT prior to the PS&E submittal will be incorporated in the Ad Ready Plans.
- c. Ad Ready PS&E Plans will be reviewed by the CITY and WSODT concurrently.
- d. Ad Ready PS&E Plans will be reviewed and approved by the CITY and WSDOT before issued to advertisement.

Deliverables:

- a. Ad Ready (signed and sealed) Plans for construction, five (5) paper hard copies of plans 11"x17" size, and electronic file (camera ready) in PDF file format.

17.2 CONTRACT SPECIFICATIONS

Referring to the latest WSDOT Standard Specifications and supplemental specifications the CONSUTLANT will make revisions to the Special Provisions and other elements the Project's proposal ad contract documents. Final revisions will be made to the Project's bid schedule to reflect changes from the 100% Submittal Phase. The ONSULTANT will assemble the plans into an Ad Ready package.

Assumptions:

- a. Required revision received by email or online meeting from the CITY and WSDOT prior to the PS&E submittal will be incorporated in the Ad Ready Contract Specifications.
- b. Ad Ready PS&E Contract Specifications will be reviewed by the CITY and WSODT concurrently.
- c. Ad Ready PS&E Contract Specifications will be reviewed and approved by the CITY and WSDOT before issued to advertisement.

Deliverables:

- a. Ad Ready (signed and sealed) Contract Specifications for construction, five (5) bound paper hard on bond paper, and electronic file (camera ready) in PDF file format.

17.3 BASIS OF ESTIMATE

The CONSULTANT will update the Basis of Estimate to reflect changes that may have occurred as a result of the 100% PS&E review

Assumptions:

- a. The final Basis of Estimate will be reviewed by the CITY and WSODT concurrently.

- b. The final Basis of Estimate will be reviewed and approved by the CITY and WSDOT before issued to advertisement.

Deliverables:

- a. Final Basis of Estimate, five (5) bound paper hard copies on bond paper, and electronic file (camera ready) in PDF file format.

17.4 ENGINEER'S OPINION OF PROBABLE COST

The CONSULTANT will update the Engineering's opinion of probable cost to reflect changes that may have occurred as a result of the 100% PS&E review.

Assumptions:

- a. The final Engineering's opinion of probable cost will be reviewed by the CITY and WSODT concurrently.
- b. The final Engineering's opinion of probable cost will be reviewed and approved by the CITY and WSDOT before issued to advertisement.

Deliverables:

- a. Final Engineer's Opinion of Probable Cost (signed and stamped), five (5) bound paper hard copies on bond paper, and electronic file (camera ready) in PDF file format.

17.5 WORKING DAY ESTIMATE

Final revision will be made to the working day estimate to reflect comments or changes obstinate during the 100% PE&S phase review.

Assumptions:

- a. None.

Deliverables:

- a. Final working day estimate.