

Transportation & Public Works Meeting Agenda

July 16, 2020; 4:30 – 6:00 PM "Virtual Meeting"

Due to the current COVID-19 public health emergency, and social distancing protocols, pursuant to the Governor's and public health officials' orders, this meeting will be conducted virtually. The meeting will be live streamed on SeaTV and the City's website. The public may also call in to the conference line to listen to the meeting. The number is 206-973-4555. While you will be able to hear the meeting, you will not be able to participate in the meeting. Please note that if you are unable to mute your phone, everyone else on the call-in line will be able to hear you, so please refrain from speaking. City Hall is closed so no one will be able to physically attend this meeting.

Councilmembers:

Peter Kwon, Chair Pam Fernald Takele Gobena

Note: A quorum of the Council may be present

Staff Coordinators: Will Appleton, Public Works Director; Florendo Cabudol, City Engineer;

Other Staff participating:

TIME	TOPIC	PROCESS	WHO	TIME
1	Call to order		Chair	
2	Public Comment Process: In an effort to adhere to the social distancing protocols, pursuant to the Governor's and public health officials' orders, and in order to keep our residents, Council and staff healthy, the Committee will not hear any in-person public comments during this COVID-19 public health emergency. If you wish to submit a public comment, please email any comments by 2:30 PM the day of the meeting to tpwpubliccomment@seatacwa.gov . The public comment will be mentioned by name and subject, and then placed in the T&PW handout packet posted to the website.		Chair	5

3	Prior Minutes Approval	July 2 minutes to approve	Chair	5
4	Professional Services Contract for design of the Airport Station Pedestrian Improvements Project	Discussion/Recomm endation	Trevor Ralph/Flo rendo Cabudol	15
5	Professional Services Contract for design of the 2021 Overlays Project	Discussion/Recomm endation	Brenton Cook/Flor endo Cabudol	15
6	Deferrals of Improvements Covenants	Discussion/Recomm endation	Will Appleton	20
7	Future Meeting Topics: Sound Transit Parking Tax; Tukwila International Blvd. Reconfiguration; 1% for the Arts on PW Projects;			5
7	Adjourn	Adjourn Meeting	Chair	



Transportation & Public Works Committee Meeting

Minutes

Approve Prior Meeting Minutes

Thursday, July 2, 2020 5:30 PM – 6:30 PM ** Virtual Meeting **

Members: Present: Absent: Commence: 5:30 PM
Adjourn: 6:30 PM
Peter Kwon, Chair X
Pam Fernald X
Takele Gobena X

Other Councilmembers participating: Erin Sitterley, Mayor; Clyde Hill, Councilmember;

Staff Coordinators: Will Appleton, Public Works Director; Florendo Cabudol, City

Engineer

Other Staff Participating: Mason Giem, PW Programs Coordinator; Gwen Voelpel, Deputy City Manager; Mary Mirante Bartolo, City Attorney;

Public Comment.	None
T ubito dominent.	None
Approve Prior Meetings' Minutes	June 18 Minutes – Approved by Committee
KC Proposed Solid Waste Rate Increases	 Staff presented information on King County Solid Waste proposal for a rate increase A reduction in landfill tipping fees is leading to a financial hardship Solid Waste Advisory Council was approach with this rate increase proposal. King County is proposing a 6% increase (\$0.37/mo) in January, 2021 and an 8% increase (\$0.92/mo) in January, 2022 compared to current rates King County is in the process of reducing discretionary spending and looking at staff reductions Still \$26M short If the shortfall is not filled, further reduction in staffs; limited to 4-day access at transfer station; no grants for community recycling events; reduction in recycling With limited access transfer station hours, it would severely impact businesses within SeaTac that rely on that access. This rate increase is not up for public approval and subject to King County Council approval

	Questions raised by Committee
	o What are some causes for reduction in landfill usage?
	 Staff responded that reduction primarily from limited
	commercial business due to COVID pandemic
	 King County has a lot of operational costs that need to be
1	addressed regardless of the reduction in waste
	o If this rate increase is approved, can it be removed at a
	later date?
	Staff responded that this would be at discretion of KC
	Council;
	Verifying the financial impact to resident household with
1	increase.
1	Why is rate increases needed if service levels are
	reduced?
	Staff responded that there are inherent costs associated
	with operating these services that are not scalable to
	service levels.
	 Are other options being evaluated? It may not make
	sense to the public with the understanding that service
	level reductions should lead to savings.
	 Staff responded that although service levels are reduced,
	there are still fixed costs (bonds/debt to build capital
	assets) to pay off that were built into the service fees.
	 Request for clearer information justifying the need for the
	rate increase from KC.
	 Staff committed to reach out to KC to get more info.
	 Confirming that the rate increase is a pass through cost
	countywide so it is shared equally amongst ratepayers.
	Staff confirmed that all users, with the exception of Seattle
	(which has a separate contract not through KC), will be
	assessed the same rate increase.
	assessed the same rate melease.
PW Project Update	Update
1 VV 1 Toject Opdate	Committee asked about sidewalk improvements for 42nd Ave S between
	S 160th and Military Rd South, and commented on safety related
	concerns associated with the 5-legged intersection at Military Rd South
	and S 164th St.
	Committee asked about the S 152nd Street & Military Rd South project
	and modification of the access to IB.
	Committee reinforced their satisfaction with the planned pedestrian
	improvements.
3. Adjourn	Adjourn Meeting
. / . /	/ wjourn mooning

Approve Prior Meeting Minutes



MEMORANDUM

To: Transportation and Public Works Committee From: William Appleton, Public Works Director

Date: 7/13/2020

Subject: Restrictive Covenants Deferring Construction Improvements

Purpose:

To provide an overview of restrictive covenants, how they are used to defer construction improvements and discuss the best approach to administering these deed restrictions when they are identified.

Background:

In the past, the City allowed for required improvements associated with development to be deferred through the use of restrictive covenants. As a result, a developer was able to subdivide a property into multiple lots, defer the required improvements associated with the subdivision, sell the lots, and obligate each of the owners of the individual lots to build the improvements in the future (typically at the time a home was built). Ideally, the owners of the lots were aware of the restrictive covenant at the time of purchase and the City, as part of the permit process, made sure that the improvements were constructed at the time the property was developed. However, in some cases, this is not what happened.

The Public Works Engineering Division is uncovering properties within the City that have been developed (a single family home has been constructed) and have restrictive covenants deferring construction improvements that have not been fulfilled. These discoveries are made during the real estate review and acquisition phase of capital project design. Consequently, home owners, who may or may not be aware of the covenant, end up with a very significant financial obligation that is revealed at the time a Public Works capital project comes through their neighborhood. The cases that have been found to date are from the early 90's and are included as attachments to this memo.

Staff is requesting approval from Council to allow the City Manager or his designee to develop an administrative approach to resolve the matter of restrictive covenants deferring construction improvements that have not been properly implemented.

Options/Recommendation:

Authorize staff to address/resolve all restrictive covenants deferring construction improvements through an appropriate administrative policy (recommended).

Require that Council continue to address restrictive covenants deferring construction improvements on a case by case basis.



AFTER RECORDING RETURN TO: City of SeaTac Legal Department 4800 South 188th Street SeaTac, WA 98188

DECLARATION OF RESTRICTIVE COVENANTS TO PERMIT DEFERRED CONSTRUCTION OF IMPROVEMENTS

Grantor(s): Joan J. Johnson and Linda K. Criswell

Co-Executors of the Estate of Charles Cavey Jr.

Grantee: City of SeaTac

Abbreviated Legal Description: Lots 7 and 8, Block 9, McMicken Heights,

Division No. 2, according to the unrecorded

Plat thereof.

Assessor's Property Tax Parcel Account Number(s): 537980-1430

Reference Numbers of Documents Assigned or Released, if Applicable: N/A

THIS DECLARATION OF RESTRICTIVE COVENANTS is made and entered into effective upon the date of final approval of the Short Plat identified hereinbelow, by and between Joan J Johnson and Linda K. Criswell, co-executors of the Estate of Charles Cavey Jr, hereinafter called the "Grantor", and the City of SeaTac, a municipal corporation of the State of Washington, hereinafter called the "Grantee", on the following terms and conditions

WITNESSETH:

WHEREAS, the Grantor is the owner of real property in the City of SeaTac, County of King, State of Washington, located at the address of 16103 34th Avenue South, SeaTac, WA 98188 and more particularly described as:

Lots 7 and 8, Block 9, McMicken Heights, Division No 2, according to the unrecorded Plat thereof.; and

WHEREAS, the Grantor has made application to Grantee for a short plat of the aforesaid real property which is City of SeaTac Short Plat No. SUB02-00009, and

WHEREAS, the Grantor desires to defer construction of those required improvements and Grantee is willing to permit deferral subject to this Declaration of Restrictive Covenants and the agreements contained herein;

NOW, THEREFORE, based upon good and valuable consideration, the sufficiency of which is hereby acknowledged, the mutual promises contained herein, and approval and recording of the aforesaid short plat, Grantor covenants and the parties agree as follows

1. PROPERTY AFFECTED

The property affected by this Declaration, as set forth below, is more particularly described as:

Lots 1, 3, and 4 of City of SeaTac Short Plat No. SUB02-00009, as recorded in records of King County, Washington under Recorder's No 20030324900001

2. DESCRIPTION OF IMPROVEMENTS

- (a) The following improvements, the construction of which is deferred by terms of this Declaration are set forth with specificity by the plans, specifications, drawings, and/or approvals maintained by, and available for review at, Grantee's Department of Public Works, Engineering Division, identified as File No. SP-143, and/or Department of Planning & Community Development, identified as File No. SUB02-00009, which are summarized as follows:
 - (i) Paved Pedestrian pathway (minimum of 8 feet wide) along the property frontage of Lots 1, 3, and 4 of said City of SeaTac Short Plat.

3. PERFORMANCE BONDS REQUIRED

Cash or a performance bond equal to one hundred fifty percent (150%) of the estimated cost of construction of the improvements described in Paragraph 2, above, shall be posted with the Grantee prior to the issuance of right-of-way use permits to construct the improvements

4. CONSTRUCTION OF IMPROVEMENTS

The Grantor hereby agrees and covenants to construct or cause to be constructed, by Washington State licensed contractors who then hold a current City of SeaTac business license, the improvements identified and set forth in Paragraph 2(a) of this Declaration, at Grantor's expense, upon application and prior to issuance of any building permit pertaining to Lots 1, 3, and 4

5. RELEASE OF RESTRICTIVE COVENANTS

Upon construction of all improvements described in Paragraph 2 of this Declaration, and upon request of Grantor, the Grantee shall file with the King County Recorder a release of the covenants of Paragraph 4, above

6. COVENANT APPURTENANT AND BINDING ON SUCCESSORS

This Declaration and the covenants, conditions, and terms hereof shall be appurtenant to, and shall run with, the real property described in Paragraph 1 of this Declaration, shall be binding on the personal representatives, heirs, assigns, and successors in interest of the Grantor, and shall additionally be fully enforceable by Grantee Grantor shall include, as a condition of sale, the covenants and obligations contained herein.

7. CHOICE OF LAW

This Declaration shall be construed in accordance with the laws of the State of Washington In the event of any litigation regarding construction or effect of this Declaration, or the rights of the parties to this Declaration, it is agreed that venue shall be King County, Washington.

8. COSTS TO PREVAILING PARTY

In the event that either party initiates any action to enforce the terms and conditions of this Declaration, the prevailing party shall be entitled to reasonable costs and attorneys fees

9. ENTIRE AGREEMENT

This Declaration contains the entire understanding of the parties with respect to the matters set forth herein, and any prior or contemporaneous understandings are merged herein. This Declaration shall not be modified except by written Agreement executed by the parties hereto.

3

IN WITNESS WHEREOF, the parties hereto have executed this Declaration effective on the date and year first above set forth

GRANTOR:

Joan J Johnson
Co-Executor

2 - LACCATOI

Linda K Criswell

Co-Executor

GRANTEE:

CITY OF SEATAC

Bruce A. Rayburn / City Manager

Approved as to Form

Robert L. McAdams

City Attorney

STATE OF WASHINGTON)	
)	SS
COUNTY OF KING)	

On this day, personally appeared before me Joan J. Johnson and Linda K. Criswell, Co-executors of the Estate of Charles Cavey Jr., to me known to be the individuals described in and who executed the within and foregoing instrument as Grantor and acknowledged that they signed the same as their free and voluntary act and deed, for the uses and purposes therein mentioned.

GIVEN under my hand and official seal or stamp this 21st day of February 2003.



Print Name <u>January</u>
NOTARY PUBLIC in and for the State of Washington, residing at <u>Auburn</u>
My commission expires: <u>3-5-03</u>

STATE OF WASHINGTON) ss COUNTY OF KING)

On this day, personally appeared before me Bruce A. Rayburn, to me known to be the City Manager of the City of SeaTac, Grantee herein, who executed the within and foregoing instrument, and acknowledged that the said instrument was signed as his free and voluntary act and deed for and on behalf of the City, for the uses and purposes therein mentioned, and stated that he was authorized to execute the said instrument for and on behalf of the City

GIVEN under my hand and official seal or stamp this 18th day of March 2002



Print Name: Jank - 5 No. 6. No. 150r

NOTARY PUBLIC in and for the State of Washington, residing at Auburn

My commission expires: 3-5-07

3108071048

可能在自然的主要的主

PRECEIVED THIS BAY

Uddin/Nasma & Gill 16403-11495

FILED FOR RECORD AT THE REQUEST OF:

CITY OF SEATAC

19215 - 28th Avenue South THE DIVISION OF SeaTac, Washington 9818 CORDS & FILE CHUNS KING COUNTY

91/08/07 RECFEE #1048 B

*CFEE 2.00

RECD F 7.00

******9.00

DECLARATION OF RESTRICTIVE COVENANTS

are the owners of real property in the City of SeaTac, County of King, State of Washington, described as shown on Exhibit A, attached hereto; and

WHEREAS, the aforesaid owner or owners of the said property desire to impose the following restrictive covenants in order to secure approval by the City of SeaTac for deferral of construction of certain required improvements;

NOW, THEREFORE, the aforesaid owner or owners hereby establish and declare the following restrictions and covenants running with the land hereinabove described, as follows:

LOCAL IMPROVEMENT DISTRICT

The owner or owners of the above described property, their successors, heirs and assigns, hereby agree and covenant to participate in, sign a petition in support of, and accept any future Local Improvement District (LID) of the City of SeaTac, relating to the improvements described below, and to pay their pro-rata fair share thereof, except that the said owners reserve the right to object to individual assessment pursuant to state law, for the purposes of providing required on-site and off-site improvements pursuant to City Ordinances. The aforesaid pro-rata fair share of each short platted lot shall be computed by determining the assessment applicable to the original parcel as if it had not been short platted and then dividing that sum by the total number of short platted lots.

STATE OF WASHINGTON

COUNTY OF KING

) 252.

On this day personally appeared before me, F.L. HORST

to me known to be the individual or individuals described in and who executed the within and foregoing instrument, and acknowledged that he signed the same as his free and voluntary act and deed, for the uses and purposes therein mentioned.

May nder my hand and official seal this 8th day of

NOTARY PUBLIC in and for the State of Washington, residing at WOODLING (Commission expires: 7-12-75)



CONSTRUCTIVE OF IMPROVEMENTS

The owner or owners of the above-described property, their successors, heirs and assigns, shall immediately construct the deferred improvements at his or her expense upon determination by the Director of the Department of Public Works that the improvements have become necessary, or in event the City determines to construct the improvements as part of a public works project, then the property owner, or owners, shall make payment to the City of their prorata share of the cost of the project. The aforesaid pro-rata fair share of each short platted lot shall be computed by determining the charge applicable to the original parcel as if it had not been short platted and then dividing that sum by the total number of short platted lots.

DESCRIPTION OF IMPROVEMENTS

The said improvements include the following:
"Full half-street improvements including, but not
limited to; curb, gutter, sidewalk, possible minimum
five (5') foot planter strip with street trees, street
lighting, paying and storm drainage."

DURATION

These restrictive covenants shall run with the land and shall not expire until construction of the required improvements waiver by the City thereof, and filing of a WAST Release of Restrictive Covenants.

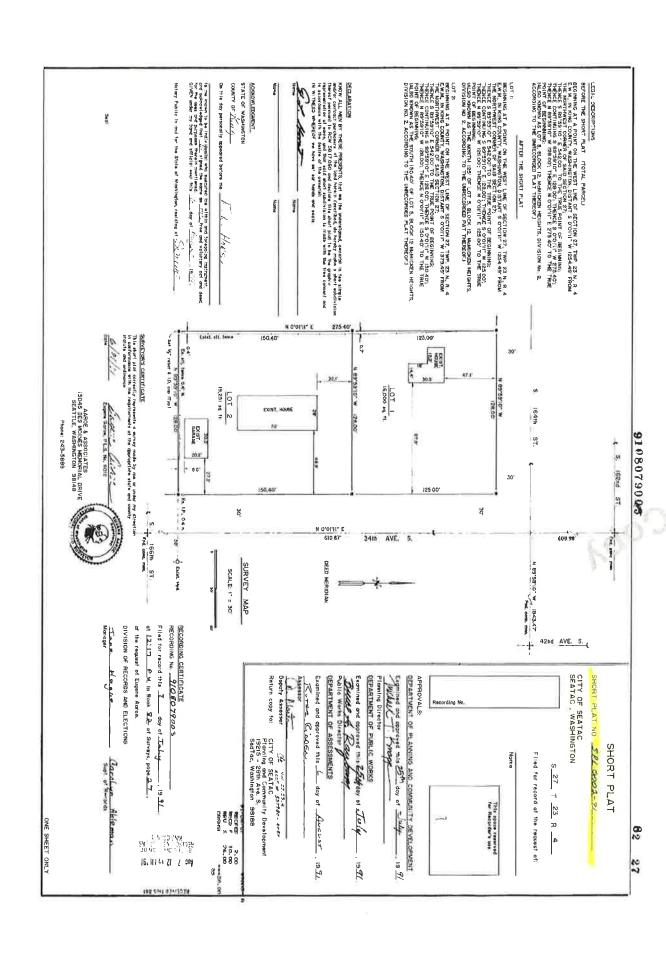
VIOLATIONS

Any violation or breach of these restrictive covenants may be enforced by appropriate legal procedures in the Superior Court of King County by either the City of SeaTac or any property owners adjoining the subject property who are adversely affected by said breach.

OWNERS

De Mant

ANGER 1864 / PROPERTY BEFORE THE STORY



https://recordsearch.kingcounty.gov/LandmarkWeb/search/index?theme=.blue§ion=searchCriteriaInstrumentNumber&quickSearchSelection=#



To: Transportation and Public Works Committee Through: William Appleton, Public Works Director

From: Florendo Cabudol/Trevor Ralph

Date: 7/16/20

Subject: ST-141 Airport Station Improvement Project

Purpose:

Public Works is seeking Committee recommendation for Council authorization to execute a professional services design contract for the design of the Airport Station Pedestrian Improvement Project - South 180th Street, 32nd Ave South, 76th Ave South.

Background:

The selection of this project through the Sidewalk Program and recent availability of Sound Transit funding has allowed Public Works to move forward with street and pedestrian improvements along several streets within the Airport Light Rail Station Area. This presents a unique opportunity to begin improvements outlined in the Transportation Master Plan earlier than originally anticipated. In addition, the project addresses a need for safer and more reliable active transportation (walking and biking) facilities that had been clearly communicated by the community at various recent public outreaches. The project also jump starts many of the proposed goals outlined in the SeaTac City Center Phase 1 Vision report, prepared by the Community and Economic Development Department. The short timeline required to use the Sound Transit funding, coupled with the limited capacity of City staff, necessitates that design work be contracted out for completion.

The project scope adds new sidewalks and bike facilities on 32nd Ave South from South 170th Street to South 180th Street, and on South 180th Street to its terminus at the Hunt's Club Apartments. This portion of the project is approximately 4,908-feet in length, and will include ADA curb ramps, landscaping, decorative lighting, undergrounding of utilities, improved stormwater infrastructure, and an overall aesthetic that will complement the future vision of the area as SeaTac's City Center.

In addition, frontage improvements on the north side of South 176th street, from International Boulevard to 32nd Ave South, are also included within the scope of work. The goal for this corridor is to improve existing pedestrian facilities, add landscaping and bike lanes, and create a

corridor that is more in line with City of SeaTac's vision for a 'main street.' A redesign of the intersection at South 176th and 32nd Avenue South is within the scope of the project.

Design of the project is currently in the preliminary stages. The chosen consultant, KPG, is working with Public Works staff to present a 10% concept design and is assisting staff on applications for available grant funding from the state. The design contract will enable the consultant to establish 100% Final Construction drawings, assist in the purchase and negotiation of Right of Way, assist in community/public outreach, and design an urban plan that will set the tone for the future of the City of SeaTac City Center.

The final amount of the design contract is currently estimated at a Not To Exceed amount of \$1,787,242. The scope and fee presented today is a first draft, and contract discussions are still ongoing. A final contract amount will be available at the time this is presented to full council on August 11. The total budget for this project is \$9,350,000. This includes design and construction costs. Based on preliminary estimates for construction costs provided by KPG, this value may need to be adjusted. KPG has conservatively estimated a total project cost of \$13,952,937, which includes design costs. Any future need to increase project budget will be decided when a more detailed project estimate is available and the final scope of the project is determined.

Options/Recommendation:

Staff recommends moving this item forward for Council review and action at the August 11th Regular Council Meeting.

EXHIBIT A

CITY OF SEATAC

AIRPORT STATION PEDESTRIAN IMPROVEMENT PROJECT

SCOPE OF WORK

JULY 10, 2020

A. PROJECT BACKGROUND / DESCRIPTION

The City of SeaTac ("City") was recently successful in obtaining a Sound Transit System Access Grant for the design and construction of the Airport Station Pedestrian Improvement Project ("Project") that will provide roadway, intersection, and non-motorized improvements to enhance safety/mobility of pedestrians and improve access to the Airport Link Light Rail Station. Primary components of this project will improve mobility and safety for all modes of travel and create an inviting urban design/streetscape environment that will encourage new economic development opportunities and transform the Airport station Area into a destination. The Project will design and construct the following improvements:

- S 176th Street from International Boulevard to 32nd Avenue S
 - New 8' wide sidewalk with 4' wide planter on the north side of S 176th
 Street
 - New decorative LED pedestrian and roadway illumination
 - New channelization to accommodate bicycle facilities
- 32nd Avenue from S 176th Street to S 170th Street
 - New 8' wide combined sidewalk and amenity zones on both sides of the street
 - New decorative LED pedestrian and roadway illumination
 - New channelization to accommodate bicycle facilities
 - Utility undergrounding
- 32nd Avenue from S 180th Street to S 176th Street
 - New 8' wide combined sidewalk and amenity zone on the east side of the street
 - New decorative LED pedestrian and roadway illumination
 - New channelization to accommodate bicycle facilities
 - Utility undergrounding
- S 180th Street from 32nd Avenue S to S 176th Street
 - New 8' wide combined sidewalk and amenity zone on the north side of the street
 - New decorative LED pedestrian and roadway illumination

1

- o New channelization to accommodate bicycle facilities
- Utility undergrounding
- New landscaping, streetscape, and urban design improvements throughout the Station Area
- New traffic signal system at the S 176th Street/32nd Avenue S Intersection
- Traffic signal modifications at the S 176th Street/International Boulevard (SR 99)
 Intersection
- New wayfinding and signage
- Upgraded ADA facilities throughout the Station Area

The Airport Station Pedestrian Improvement Project is considered Phase 1 of the multiphased improvement plan for the Station Area. Future project phases will advance preliminary designs and construct full width roadway improvements on S 176th Street and S 180th Street. Additionally, the City is looking to develop conceptual plans for the paved 0.75-acre Park and Ride facility located at the NE corner of S 176th Street/International Boulevard (SR 99).

This scope outlines the design efforts, supplemental services, and coordination required to achieve the City's Project goals. KPG ("Consultant") will provide the following services:

- Topographic Survey and Basemapping
- Stormwater Documentation and Reporting
- Transportation Analysis and Reporting
- Geotechnical/Infiltration Investigation and Reporting
- Environmental Permitting Support
- Right of Way Determination
- ROW Acquisition and Relocation
- Public Involvement
- Coordination with Utilities and Stakeholders
- Conceptual designs and cost estimates for S 176th Street and S 180th Street full buildouts
- WSDOT Coordination, Channelization Plans, Summary of Design, Intersection Control Evaluation
- Station Area Urban Design Report
- Preparing Plans, Specifications, and Estimates

B. GENERAL PROJECT ASSUMPTIONS

The following assumptions were identified to provide direction with design:

The project is funded through a Sound Transit System Access Grant and other City funding sources. ☐ There is no design DBE Goal established for this project. The Project may require NEPA Documentation (assuming that future Federal funding will be acquired). □ The Project will require ROW Acquisition Services and all ROW Services rendered will assume federal funding, guidelines, and requirements. □ WSDOT Channelization Plan Approval will be required. Structural engineering is not included in this scope of work and will be supplemented as required. □ Water and Sanitary Sewer system designs, upgrades, and existing condition analysis are not included in this scope of work. ☐ The Project will be advertised and bid as one project. The Consultant shall prepare all drawings using AutoCAD or Civil 3D 2017 and KPG **Drafting Standards.** C. **CONSULTANT DELIVERABLES** Deliverables prepared by the Consultant are identified at the end of each Work Element (WE). D. **CITY OF PROVIDED ITEMS:** Submittal reviews, comments, and approvals Public notices, property owner mailings, postage Host and update project website Meeting room or virtual meeting arrangements and arrange for public open houses and community meetings Right-of-entries for surveying, geotechnical review, and/or construction, if required Available traffic data and vehicle classification Provide Consultant with existing record drawings (as-built plans) of street and public utilities (water, sanitary sewer, storm), right-of-way (ROW) plans, horizontal and vertical monument information, GIS maps and other applicable information, as may be available. □ Provide Consultant with a list of WSDOT approved Public Interest Findings (PIF) materials to be incorporated into the project. Provide Consultant with City Standard details to be incorporated into the project. Provide Consultant with all City standard contract documents, GSP's, and City bid forms in Microsoft Word, Microsoft Excel and Adobe pdf formats, as applicable.

Provide Consultant ROW documents templates.

3

Signal timing plans at intersections.

E. SCOPE OF WORK

WORK ELEMENT 1 - MANAGEMENT / COORDINATION / ADMINISTRATION

The Estimated project duration is 18 months.

- 1.1 The Consultant will provide continuous project management for the duration of the project through Final Design and ROW Acquisition (estimate 18 months). The Consultant will prepare monthly progress reports identifying work completed in the previous month, work in progress, upcoming work elements, and reporting of any delays, problems, or additional information needs. These reports will be submitted with the Consultant invoices.
- 1.2 Prepare for and attend monthly design coordination meetings with City Staff and other project stakeholders. These meetings will be held over virtual meeting venues (estimate 20 meetings total).
- 1.3 The Consultant will prepare and update a project schedule.
- 1.4 The Consultant will conduct regular project team meetings (estimate 20 meetings total) with internal staff and subconsultants.
- 1.5 The Consultant will provide internal quality assurance/quality control (QA/QC) reviews of all major deliverables prior to submittal to the City.

Work Element 1 Deliverables:

- Monthly progress reports (18 months)
- Project Schedule and Updates
- QA/QC Checklist (Signed and Initialed)

WORK ELEMENT 2 - SURVEY AND BASE MAPPING

- 2.1 Establish horizontal and vertical control points along the corridor for field topographic survey. Basis of control will be NAD 83/2011 for horizontal, and NAVD 88 for vertical. Control points will be established and will be made available for use during design/construction. The consultant will locate, field survey, and calculate positions for monuments and control points throughout the project limits, using the Washington State plane coordinate system. Conventional or GPS surveying methods will be used on this project.
- 2.2 Field survey within the project limits:
 - Field survey of planimetric features and utilities. Topographic mapping of the existing ground will be taken at approximately at 25-ft intervals (to 2-ft. contour

4

City of SeaTac Airport Station Improvements Final Design Project Number: 20066 intervals). The following streets will have complete survey out to approximately five (5) feet behind the back of walk:

- o 32nd Ave S from S 170th St to S 180th St, approximately 3,400 lineal feet.
- S 176th St from International Blvd to 300 feet east of 32nd St, approximately 1,500 lineal feet.
- S 180th St from 32nd Ave S, east for approximately 1,700 lineal feet to the dead end.
- 0.75 acre paved park and ride on S 176th St near intersection of International Blvd., approximately 400 lineal feet.
- o Totaling approximately 7,000 lineal feet
- Included in this WE are locate overhead lines, walls, signal loops, locate paint marks in WE 2.3 at 50-ft intervals, locate surface features (valves, manholes, catch basins, junction boxes, vaults, etc.). Irrigation systems will not be included. Perform observation and measure-downs of existing storm drain catch basins and manholes and sewer manholes. The approximate size, type (brick, concrete), and general condition of the structures to confirm suitability for continued use, and approximate size and location of pipes will be documented. These observations will be made from the surface.
- 2.3 The Consultant shall coordinate utility locates. Consultant shall subcontract with a utility locating company to paint all utility locations within the complete survey sections so that they can be surveyed in WE 2.2. While every reasonable effort will be made by KPG to depict the location of underground utilities based on utility locates, KPG is not liable for errors or omissions by utility locators or erroneous or insufficient information shown on utility record drawings.
- 2.4 CADD mapping work to prepare 1"=20' topographic base map and digital terrain model (DTM) in AutoCAD format of the project within the limits described above. KPG mapping standards and Civil3D version 2017 will be utilized in base map preparation.
- 2.5 Research Records. Determine which existing corners and monuments should be field located and surveyed.
- 2.6 Calculations for ROW centerline alignment and ROW lines. Using the research information and the survey work described above, calculate location and surveyed corners, roadway features and monuments. The ROW centerline and margins will be defined geometrically using Washington state plane coordinates and stationing will be assigned to the alignment.

2.7 Potholing to identify potential utility conflicts will be completed as necessary for design (75 estimated). The locations of the potholes will be surveyed and added to the basemap.

Work Element 2 Deliverables:

Electronic copies of the completed basemap will be delivered to the City.

Work Element 2 Assumptions:

 All parcel lines and existing ROW outside of the area where the acquisition services are required will be defined using King County GIS

WORK ELEMENT 3 – STORMWATER ANALYSIS

This task includes the effort required to perform preliminary analysis, design and documentation of the project's stormwater management requirements in accordance with the 2016 King County Surface Water Design Manual (KCSWDM) and 2017 City of SeaTac Addendum to the KCSWDM.

- 3.1 Consultant will review the existing storm water conveyance facilities within the project limits and identify all downstream conveyance systems; attend one (1) meeting with CITY utilities staff; document applicable regulations, standards, hydrology and hydraulic design criteria; delineate threshold discharge areas (TDAs); coordinate with current and identify any SWM projects proposed in the next ten years based on review of the City Comprehensive Plan and/or discussions with City staff; identify downstream conveyance systems, pipe condition, pipe capacity and existing drainage easements on private parcels with CITY staff; determine the applicability of Core Requirements #3 (Flow Control), #8 (Water Quality), and #9 (On-Site BMPs).
- 3.2 Identify feasible alternative approaches for fulfilling required stormwater management requirements for proposed project and potential future right-of-way redevelopment. The on-site BMP analysis will include coordination with geotechnical subconsultant and roadway design as applicable. alternatives/concepts list to City for approval prior to conceptual design/layout work and prepare conceptual design and layout for each alternative. Evaluate identified alternatives based on construction cost, right-of-way acquisition cost, maintenance cost, and other relevant criteria as identified through discussions with CITY staff. Document alternatives analysis and recommended stormwater management approach in a technical memorandum for CITY review and approval.
- 3.3 Identify potential to provide water quality treatment as a retrofit for the TDAs.

- 3.4 Perform design calculations and sizing of stormwater facilities for selected alternative for inclusion in the draft and final Technical Information Report (TIR) submittal.
- 3.5 Prepare a draft and final TIR to document the applicable Core Requirements with technical information and analysis of the stormwater facilities, a Level 1 Downstream Analysis, hydrologic calculations for detention, water quality, and on-site BMP facility design; hydraulic modeling for pipe sizing and conveyance analysis of new systems, and associated figures. The TIR will be finalized concurrent with the 100% design submittal.

Work Element 3 Deliverables:

- PDF of Technical Memorandum of alternative analysis for stormwater management facilities
- PDF of the Draft Technical Information Report
- PDF Final Technical Information Report

Work Element 3 Assumptions:

- Up to two (2) stormwater management alternatives will be evaluated for each threshold discharge areas (TDAs) if needed
- Information on infiltration feasibility and design will be obtained from geotechnical engineer for evaluation of On-Site BMPs.
- The downstream analysis provided in the Draft TIR will be a Level 1 qualitative analysis. A numerical analysis to evaluate the direct discharge exemption from flow control is not included in this scope of work.

WORK ELEMENT 4 – TRANSPORTATION ANALYSIS REPORT

- 4.1 The Consultant shall develop an existing conditions traffic operations model (Synchro 10) for the AM peak hour and PM peak hour. The analysis will use a combination of new counts and available historical traffic counts to develop traffic volumes that reflect typical conditions. The analysis includes the collection of two-hour AM and PM vehicle turning movement counts at up to five (5) intersections. These intersection counts will include the number of pedestrian and bicycle crossings. The analysis will include the collection of up to four (4) 3-day, 24-hour tube counts to allow for the evaluation of heavy vehicles, speed data and traffic control devices. The following five intersections will be included in the analysis:
 - S 170th Street / International Boulevard (SR 99)
 - S 170th Street / 32nd Avenue S
 - S 176th Street / International Boulevard (SR 99)

7

S 176th Street / 32nd Avenue S

- S 180th Street / 32nd Avenue S
- 4.2 The Consultant shall evaluate existing transportation conditions for vehicles, transit, pedestrians and bicycles. The Consultant will analyze existing AM and PM peak hour operations at each study intersection using the developed Synchro models. The Consultant will evaluate existing pedestrian and bicycle activity at within the study area and document existing and planned transit operations and facilities.
- 4.3 The Consultant will obtain five (5) years of historical collision data from WSDOT to evaluate collision types and frequencies on streets and at intersection within the study area. The data will be used to identify collision and crash types and to recommend changes to study streets and intersections to reduce the frequency and severity of collisions.
- 4.4 The Consultant will develop traffic operations models for the 2040 AM and PM peak hours. The 2040 PM volumes will be extrapolated the 2035 traffic forecasts from the City's 2015 Transportation Master Plan. For the 2040 AM peak hour, the traffic forecasts will be developed based on the growth rates identified for the 2040 PM peak hour. The 2040 AM and PM peak hour traffic operations models will be developed using the 2040 traffic forecasts and expected intersection and street improvements in the study area.
- 4.5 The Consultant shall identify and evaluate appropriate non-motorized crossing locations and treatments, changes to intersection channelization and storage lengths, and modifications to signal timing and phasing. The Consultant will use the 2040 AM and PM peak hour traffic operations models to evaluate intersection traffic operations without and with the proposed improvements and will assess future transportation conditions for transit, pedestrians, and bicycles.
- 4.6 The Consultant shall prepare a technical memorandum documenting the transportation analysis and findings for the preliminary design. The report will include the information and results from Tasks 4.1 to 4.5. The Consultant shall provide a draft technical memorandum for review by the City. Once comments are received from the City, the Consultant shall update the document and submit a final technical memorandum to the City.
- 4.7 The Consultant shall provide additional operational analysis and input to support the design process. This includes responding to design issues as they relate to traffic operations and to evaluate the impacts of proposed design solutions. This task also includes support for environmental documentation of the project.

4.8 The Consultant will evaluate traffic operation during construction and recommend potential detour routing in support of the project's Traffic Control Plans. This may include evaluation of full or partial closures to streets, driveways, sidewalks and bicycle facilities, and changes to transit routing.

Work Element 4 Deliverables:

- Electronic pdf copies of the draft Preliminary Transportation Analysis for City review and comment.
- Electronic copies of Existing and 2040 AM and PM Peak Hour Synchro models.
- Electronic pdf copies of the final Preliminary Transportation Analysis, including any responses to City review comments.

Work Element 4 Assumptions:

- City will provide signal timing and phasing plans for signalized study intersections.
- For the existing conditions analysis, historic traffic count data will be used to supplement collected counts to determine typical traffic condition in the study area.
- 2040 traffic forecasts will be based on the growth from the 2035 traffic forecasts from the 2015 Transportation Master Plan. Travel demand forecasting or other modeling are not included.
- Operation analysis will be based on the one-hour AM and one-hour PM peak hours for existing and 2040 future conditions.

WORK ELEMENT 5 – GEOTECHNICAL INVESTIGATION

5.1 Field Investigation

- Conduct a walk-through to observe pavement condition. Provide information regarding pavement distress that may require repair or reconstruction before global rehabilitation.
- Coordinate and manage the field exploration, including utility locates, access preparation, and scheduling contractors and GeoDesign staff.
- Prepare traffic control plans and obtain ROW permits from the City.
- Drill up to 19 pavement borings to depths of up to 8 feet below ground surface (BGS) using solid-stem auger methods. The total number of pavement borings will depend on the ROW permit, the total amount of time available on the road, and potential utility conflicts. We estimate the following pavement borings will be drilled:
 - Segment 1: South 176th Street from International Boulevard to 32nd Avenue South
 - (1,000 feet), four pavement borings.
 - Segment 2: 32nd Avenue South from South 170th Street to South 176th Street (2,000 feet), six pavement borings.
 - Segment 3: 32nd Avenue South from South 176th Street to South 180th Street (1,300 feet), four pavement borings.

- Segment 4: South 180th Street from 32nd Avenue South to east end of the street (1,000 feet), five pavement borings.
- Drill two borings at or near the proposed location of signal poles at the intersection of South 176th Street and 32nd Avenue South to depths of up to 25 feet BGS.
 - The borings will be drilled using hollow-stem auger drilling techniques and samples will be collected at 2.5-foot intervals to a depth of 15 feet BGS and then at 5-foot intervals to a depth of 25 feet BGS.
- Our representative will collect samples from the borings and log the subsurface conditions encountered.
- All core holes will be patched with EZ Street-brand polymer-modified patch compound.
- Conduct laboratory testing on select samples. We estimate the following laboratory tests will be performed:
 - Up to 19 moisture-content determinations
 - Up to six fines content tests (particles by dry weight passing the U.S. Standard No. 200 sieve)
 - Up to three grain-size analyses
- Conduct falling weight deflectometer (FWD) in situ testing to support pavement design. The FWD testing will be performed at an approximately 100-foot spacing in outside travel lanes for approximately 150 tests. The testing will provide a large number of in situ measurements on which to base the rehabilitation design. At each FWD test location, we will estimate the effective pavement modulus and effective structural number based on the results of the testing. Pavement FWD testing is nondestructive, provides accurate in situ information regarding the structural capacity of the existing pavement, and identifies underlying issues that can cause surface distress. Using FWD linked with global positioning system coordinates provides locationspecific results and rehabilitation of the pavement based on variable conditions. The in situ FWD measurements will significantly improve our confidence in the parameters used to develop rehabilitation options and support a design based on actual measured parameters rather than assumed or empirically estimated values. In addition, FWDbased rehabilitation designs are tailored to fit urban geometric constraints using grind, inlay, and overlay construction methods. This will improve the efficiency of the design and help minimize the risk of early pavement failures.

5.2 Engineering and Report

- Review available schematic or preliminary plans for the project.
- Review as-builts for past road construction and pavement maintenance.
- Review geotechnical information available online at www.geologyportal.dnr.was.gov and in GeoDesign database for the project area or site adjacent to the project area.
- Evaluate laboratory data and use FWD test data to estimate resilient modulus and effective pavement capacity values at each test location.

- Analyze traffic classification count data for each street segment provided by the design team and determine design pavement equivalent single-axle load for each street segment.
- Perform engineering analysis to evaluate geologic hazards and measures to mitigate impacts; identify feasible retaining wall types; and provide retaining wall design parameters, utility trench and temporary shoring soil parameters, dewatering considerations, and foundation recommendations for luminaries and signal poles.
- Prepare a draft report (electronic PDF copy) summarizing our findings, conclusions, and recommendations related to the following:
 - Summary of subsurface conditions, lab testing, and FWD testing
 - A table of resilient modulus values back-calculated from the FWD data for use by the City in designing an appropriate pavement section
 - Subgrade preparation for asphalt concrete or portland cement concrete roadway and beneath hardscape pavement
 - Pavement rehabilitation and widening recommendations
 - Light and luminary foundation support
 - Applicable retaining wall types to support the slope cuts or replace existing rockeries along the project alignment
 - Retaining wall design parameters
 - Utility trench construction
 - Material specifications recommendations
 - Temporary excavations and dewatering
- Finalize report after incorporating review comments from KPG, P.S. and the City.
- 5.3 Post Geotechnical Report Consultation Service We will provide post-report consultation services. An allowance of approximately \$3,000 is included in our estimated fees.
- 5.4 Infiltration Study As part of our geotechnical services we will perform an infiltration study to support design of stormwater management low-impact development (LID) facilities. This study will consist of the following:
 - Explore subsurface conditions at up to eight locations of proposed stormwater system components within the project alignment, including the following:
 - Mark exploration locations and request public utility locates. A separate trip to the site will be necessary to mark the exploration locations in order to conduct utility locates, and a second trip will be necessary to observe locates and verify that no conflicts exist or to select an alternate exploration location.
 - Coordinate and manage the field explorations, which will include excavation of up to eight test pits. Test pits will be excavated at locations within existing landscape or lawn areas within the ROW. Small-scale pilot infiltration testing will be performed in each test pit to evaluate infiltration potential. Testing will be performed at a depth that is near the planned base of the stormwater facility, which we anticipate will vary from approximately 18 inches to 6 feet

BGS. After the infiltration testing is performed, test pits will be extended using a 12-inch-diameter auger to a depth of approximately 12 feet BGS. Our representative will collect soil samples manually from the backhoe bucket or auger and maintain a log of the subsurface conditions encountered. We should be able to perform testing in two days.

- Perform geotechnical laboratory analyses on disturbed soil samples collected from the explorations, including the following:
 - Up to eight cation exchange capacity tests
 - Up to eight organic matter content determinations
- Prepare a draft (electronic PDF copy) and final report summarizing our findings, conclusions, and recommendations relating to the following:
 - Subsurface soil and groundwater conditions and results of laboratory testing
 - Estimated long-term soil infiltration rates based the results of the in situ testing and our experience in the area
 - The potential of existing soil to provide water quality treatment

Work Element 5 Deliverables:

- Plan showing proposed exploration locations to confirm that they are within the City ROW to be signed off by KPG, P.S. and a City representative.
- Draft and final electronic pdf files of our Geotechnical Investigation and Pavement Engineering Report, stamped and signed by a professional engineer licensed in the state of Washington.
- Draft and final electronic pdf files of our Infiltration Study Report to be stamped and signed by a professional engineer licensed in the State of Washington.

Work Element 5 Assumptions:

- Design plans showing project ROW extent, location and extent of proposed improvements will be provided to GeoDesign prior to the planning of field work.
- KPG survey to confirm planned exploration locations are within ROW at proposed borings for signal pole foundations.
- Soil parameters for pole foundations will be based on the Washington State Department of Transportation's Geotechnical Design Manual. If very soft soils are encountered with SPT blow counts less than 2, L-pile parameters will be provided to support pole foundation design.
- The project duration will be three months from notice to proceed.
- Post report consultation will not exceed \$3,000.
- We assume proposed LID infiltration facilities will infiltrate at depths of up to 6 feet BGS.
- We assume the test pit locations for infiltration testing will be in unpaved areas where ground disturbance is acceptable; surface restoration may result in exposed soil and shallow rutting.

WORK ELEMENT 6 - ENVIRONMENTAL PERMITTING AND SUPPORT SERVICES

Environmental Science Associates (ESA) shall provide environmental permit support for the proposed project, which currently has access to local funding, but will pursue state and federal grants. This WE will account for each potential funding scenario.

- 6.1 This WE includes time for regular communication with the KPG project manager, project engineers, and technical staff; agency coordination; work authorization set-up and monitoring; preparing progress reports and invoices; managing budget and schedule; and quality control and assurance. We have assumed that one (1) project kick-off meeting will occur. Environmental permitting support is expected to last 9 months.
- 6.2 Prepare a Draft and Final SEPA Checklist to address the City of SeaTac Airport Station Area Pedestrian Improvements Project. We will use existing information to complete the Checklist. At this time, it is reasonable to assume that no additional studies would be necessary to complete the Checklist.
- 6.3 Cultural resources have been in identified in the project vicinity in the past indicating there is potential for the discovery of additional resources. ESA will coordinate with the geotech subcontractor prior to their field investigation to discuss an informal inadvertent discovery plan (IDP) should materials of interest be unearthed during their work. ESA will review boring logs and include relevant information as part of SEPA Checklist Question 13 discussed under WE 6.2. ESA will also develop a formal IDP to support project construction after design has been progressed past 75% design.
- 6.4 (State Funding) Project will be subject to Executive Order 05-05 (EO 05-05) if grant funds are used from the Washington State Transportation Improvement Board (TIB). ESA will conduct requisite background archival research, as practical, at DAHP, the University of Washington, King County Assessor Records, King County Archives, within its own archives, and online to identify recorded and potential archaeological and historic resources in and around the project area. ESA will also review available environmental and geological background information. ESA will summarize the findings of our work in a Technical Report.
- 6.5 (Federal Funding) This project will be subject to National Environmental Policy Act (NEPA) if federal grant funds are used. ESA will prepare documentation to satisfy NEPA requirements as described in the following three subtasks. For the purposes of this scope and budget, it is assumed the appropriate level of documentation will be a Documented Categorical Exclusion (DCE). This includes the completion of the WSDOT Categorical Exclusion (CE) Form and supporting documentation regarding environmental justice and cultural resources per the WSDOT

Environmental Manual (June 2020) and the Local Programs CE Guidebook (October 2019).

- 6.6 (Federal Funding) ESA will prepare a Draft WSDOT CE Form for the project to document compliance with NEPA. The CE Form will be completed per the guidance and requirements in the WSDOT Environmental Manual and the Local Programs CE Guidebook at the time a notice to proceed is received by ESA. ESA will complete the Draft CE Form using existing information from the technical reports completed for the project, the project design plans, and other available information.
- 6.7 (Federal Funding) ESA will prepare an Environmental Justice (EJ) Technical Memorandum consistent with Chapter 458 of WSDOT's Environmental Manual/Section 4.13 of the CE Guidebook. ESA will collect demographic and community data as needed to characterize any EJ populations in the project vicinity. The EJ Technical Memorandum shall also summarize the communication plan and the completed and planned outreach efforts, as well as the right-of-way acquisition process.
- 6.8 (Federal Funding) ESA will prepare a Cultural Resources Discipline Report consistent with Chapter 456 of the WSDOT's Environmental Manual/Section 4.3 of the CE Guidebook. ESA will coordinate with the City to define the project area of potential effect (APE) in order to initiate the Section 106 review with WSDOT. ESA will develop a draft APE letter for submittal by WSDOT to the Department of Archaeology and Historic Preservation (DAHP) and the tribes to initiate Section 106. ESA will perform a background review of existing information on known cultural resources and geological conditions. The literature search will be used to draft a cultural resource report to be submitted to the City, and eventually WSDOT, for review.

Work Element 6 Deliverables (WE 6.1, 6.2, 6.3)

- Monthly progress report (submitted with monthly invoice).
- Draft SEPA Checklist (provided electronically in MSWord format).
- Final SEPA Checklist (provided electronically in Adobe PDF format) includes edits based on one round of review comments by KPG and one round of review comments by the City. All comment/edits made to the Word document will be provided in track changes mode.
- Draft and Final Inadvertent Discovery Plan (IDP) provided in MSWord and Adobe PDF format, respectively.

Work Element 6 Deliverables (WE 6.4)

- Draft Cultural Resources Technical Report (provided electronically in MSWord format).
- Final Cultural Resources Technical Report (provided electronically in Adobe PDF format) revised per one round of review and comment by KPG and the City.

Work Element 6 Deliverables (WE 6.5, 6.6, 6.7, 6.8)

- Electronic copy of the Draft CE form for comments by the City; the City will finalize and submit the CE form to WSDOT.
- Draft Environmental Justice Technical Memorandum provided to KPG and the City for one round of review and comment (electronic submittal). ESA will incorporate edits and submit final versions of the documentation to the City; the City will finalize and submit the Technical Memorandum to WSDOT.
- Draft Cultural Resources Discipline Report (provided electronically in MSWord format).
- Final Cultural Resources Discipline Report (provided electronically in Adobe PDF format) revised per one round of review and comment by KPG and the City.

Work Element 6 Assumptions:

- For purposes of this scope of services, ESA has assumed that the City will be the SEPA lead agency and that they will issue a SEPA determination consistent with their SEPA rules. The City will be responsible for finalizing the checklist and responding to public and agency comments.
- ESA assumes that any technical document necessary for SEPA review outside the scope of this proposal will be provided by others.
- The SEPA Checklist will be based on about 30 percent design level project plans.
- The City will be responsible for any publication fees.
- In consultation with City and WSDOT staff, technical memoranda will be "right-sized" to address the potential impacts of this project. We assume that a CE is the appropriate environmental classification for this project. This scope of work will need to be amended if WSDOT and FHWA determine that additional technical reports will be required, or that the project requires an environmental assessment or Environmental Impact Statement to complete NEPA documentation.
- This SOW assumes that no fieldwork and surveys will be required, rather a desktop exercise will provide sufficient documentation.
- The City will be responsible for submitting the EZ-01 form to begin DAHP consultation.
- KPG will provide ESA with geotechnical information of the project area.
- The SOW assumes that WSDOT will concur that no historic property inventory will be required. The project alignment is bordered by commercial and residential buildings that are set-back from the right-of-way. Based on the proposed project elements, it is assumed that there will be no physical impacts to these buildings, and project elements will be similar to existing conditions. Therefore, no historic properties will be inventoried as part of this SOW.
- The SOW does not include revisions to the cultural resources report based on review by Section 106 consulting parties; this work would require an amendment to the SOW.
- Scope assumes an archaeological survey will not be required; if a survey is required, a separate scope of work will be prepared.

- The Project will not increase traffic capacity and therefore is not subject to air quality conformity analysis requirements, nor will a noise assessment be required under NEPA.
- No wetlands or streams are located within the project area; therefore, a wetland discipline report and fish, wildlife, and vegetation technical memorandum are not required under NEPA.
- No Section 4(f) properties are located within the project area.
- No hazardous materials are located within the project area.

WORK ELEMENT 7 - RIGHT OF WAY INVESTIGATION AND SUPPORT SERVICES

This WE covers the effort required to support the right of way acquisition / appraisal processes.

- 7.1 The Consultant will prepare up to 34 property owner exhibits to be utilized during appraisal/City meetings and negotiations with the property owners. The purpose of these exhibits is to give each property owner a clear understanding of ROW and parking impacts along their frontage. The exhibits will contain the following information:
 - Scale, north arrow, and legend (in color)
 - Parcel name and number
 - Existing parcel features, ROW lines, and Parcel Lines
 - Proposed Frontage Improvements and dimensions where necessary
 - Proposed Parking Revisions
 - Proposed ROW lines
 - Proposed permanent easement lines
 - Proposed temporary easement lines
- 7.2 The Consultant will prepare up to 42 legal descriptions (24 fee, 17 permanent easements) and 70 exhibits (24 fee, 17 permanent easements, 29 temporary easements) to be utilized in the acquisition process. Legal descriptions will be stamped and signed by a licensed surveyor.

Work Element 7 Deliverables:

- Property Owner Exhibits
- Stamped Legal Descriptions and Exhibits (Fee and Permanent Easements)
- Exhibits for Temporary Construction Easements

Work Element 7 Deliverables:

ROW Plans will be prepared in WE 13.

WORK ELEMENT 8 - RIGHT OF WAY ACQUISITION

Epic Land Solutions will acquire the required fee acquisitions, permanent easements, temporary construction easements associated with the Project.

- 8.1 Epic will provide general ongoing coordination, administration direction, and guidance for the Epic staff working on this project. Epic will provide weekly project updates on progress of work. Epic will perform project management and administration for the following real estate services tasks as follows:
 - Ongoing management and administration of the acquisition process.
 - Epic and KPG/City agree to maintain clear lines of communication, determine, and document the appropriate decision-making process to achieve project goals and to provide open access to available data that is pertinent to the project.
 - Attend project meetings, as necessary.
 - Track and update acquisition easement schedule milestones.
 - Prepare and email weekly status report for all acquisition activities.
 - Epic will prepare and submit invoices, including tabulation of hours expended for each item.
 - Epic shall order and provide title reports/updates, as necessary for all acquisitions.
 - Epic shall confer with KPG/City on proposed settlements over the approved offer amount set by the City.
 - All deliverables will be produced in accordance with the approved quality control/quality assurance process established by KPG and the Consultant team.
 - Assumes acquisition of right of way will be done by December of 2021.
- 8.2 Epic will prepare a Right of Way Funding Estimate for the acquisition of lands, property rights and temporary construction easements necessary for the City to perform this project in accordance with the guidelines detailed in the WSDOT Right of Way Manual in order to keep the project eligible for federal funding. The funding estimate will include costs for appraisals, right of way acquisition (land and improvements), severance damages, escrow, demolition and clearance, legal costs, and other support costs for this project's impacted parcels. Data will be provided justifying estimate costs using assessed value information obtained from the County's website as well as using a confidence factor to determine estimated ROW costs. We will deliver to City for approval. If federal funds are obtained, the City will forward to Local Agency Coordinator for comment and WSDOT approval. Epic will provide updates to the ROW Funding Estimate based on City and WSDOT review and commentary.

- 8.3 Epic will prepare an Administrative Offer Summary (AOS) for each parcel where it is anticipated that acquisition costs are estimated at less than \$25,000 in lieu of an appraisal and appraisal review. This includes performing market research to determine comparable sales to be used to establish the valuation for the acquisition area or property right to be acquired.
- 8.4 Epic will interface with the City and its partners to manage the scope of the appraisal/valuation services necessary for this flood control project. We will assure the appraisals will comply with USPAP, The Appraisal Institute's Code of Ethics, and federal policies and regulations. Per the Uniform Act, every Appraisal Report produced for this project will require an Appraisal Review performed by an independent party. One appraisal and appraisal review will be prepared for each property if determined that an AOS will not work. Review of appraisals will be prepared by Epic in-house appraisal group on WSDOT's Approved Appraiser List and presented to the City for the Determination of Just Compensation and to set Initial Offer amount.

Based on the preliminary plans provided, Epic's appraisal staff will provide the following appraisal efforts:

- Prepare and maintain project appraisal schedule.
- Provide periodic progress reports to KPG/City.
- Complete one (1) appraisal report for each property owner as determined necessary.
- Appraiser shall coordinate with property owners to offer the opportunity for the joint site inspections.
- Appraisal shall coordinate with acquisition staff to be at property inspection.
- Complete one (1) appraisal review for each appraisal.
- 8.5 Epic will provide real estate acquisition and negotiation services for the parcels impacted by this project. Epic will assist KPG/City in developing all right-of-way documents and offer letters in accordance with the City's right-of-way procedures manual for acquisition of impacted properties. Epic will draft the acquisition documents using City-approved forms or quality control of any forms that are created directly by City staff for pre-acquisition review before any offers are made to property owners. Epic agents will act in good faith always and will never coerce owners in an attempt to settle the parcel. All negotiations will start with an inperson presentation of all offers when feasible. We will identify property owner issues, concerns, and differences early on and document that information in the individual parcel negotiation diary. Epic will work with City staff throughout the negotiation process with the property owner until settlement is reached. Epic will perform the following work for acquisition services:
 - Complete negotiations for up to 34 property owners.

18

- Epic shall coordinate with the KPG/City, as necessary, and in accordance with local laws and regulations, City's administrative rules, to facilitate the acquisition of identified properties.
- Maintain and complete electronic and hard copy parcel files.
- Review title reports and updates to prepare encumbrance reports.
- Review plans/exhibits/legal descriptions for consistency.
- Prepare and deliver offer packages to property owners:
 - o Act as the agent of the Client in negotiations.
 - o Finalize acquisitions and obtain signatures on documents.
 - Maintain current negotiators diaries.
 - Process all property owner payments through the Client for closings,
 i.e. clear encumbrances and provide all signed documents to the
 Client for recording and payment processing.
- Transmit completed hard copy parcel files to the Client for retention by the City.
- 8.6 Epic agents shall develop a relocation plan, prepare and present all relocation notices and benefit letters, provide relocation services, prepare relocation documents, and compile executed documents and final relocation files for submittal to the City project manager. Epic will provide relocation services up to 3 residential displacements and up to 3 Personal Property Only (PPO) displacements. The agents shall:
 - Prepare and maintain electronic and hard copy relocation files.
 - Track and update relocation right of way schedule milestones.
 - Interview displaced occupants and estimate relocation costs.
 - Prepare a relocation plan and related relocation documents.
 - Act as agents of the City in providing relocation advisory services which include:
 - Preparation and delivery of General Notice of Relocation Rights, 90
 Day Notice, and Notice of Eligibility notices.
 - o Preparation of move schedule or bids solicitation.
 - Obtaining and analyzing move estimates as needed.
 - o Computing relocation entitlements and obtaining the City approvals.
 - Monitor actual relocation of displacee from displacement site.
 - Process relocation payments through the City.
 - Transmit completed relocation files to the City.

 Coordinate with City's Property Management Team on lease preparation, vacate inspection, photographs of premises and document condition of property.

Work Element 8 Deliverables:

- Weekly status report of acquisition and relocation activities Excel.
- Title reports and necessary updates.
- Transmit ROW Funding Estimate Package Excel.
- Transmit Administrative Offer Summary (AOS) worksheets for each parcel, if applicable
- Transmit Comparable Sales Package for each AOS worksheet.
- Transmit up to 18 appraisal reports.
- Transmit up to 18 appraisal reviews.
- Offer packages.
- Negotiation services for property owners.
- Executed acquisition documents for fee, temporary construction easements, and permanent easements.
- Completed hard copy acquisition files.
- Relocation plan, schedule and related documents.
- Relocation parcel files, general and eligibility notices, diaries, moving cost estimates, relocation computations, claim forms.
- Relocation documents and executed relocation forms.

Work Element 8 Assumptions:

- Assumes no more than twelve (12) monthly meetings with client.
- Assumes one (1) title report for each impacted property and only one (1) update up to 25 reports.
- Assumes up to 24 fee acquisitions, up to 17 permanent utility easements, and up to 29 temporary construction easements on up to 34 parcels are impacted by this project.
- Assumes no plan revisions once NTP is issued.
- Assumes up to two (2) updates/revisions to the ROW Funding Estimate.
- Assumes City will want to forgo appraisals and appraisal reviews on any estimated acquisition values of \$25,000 or less.
- Assumes no plan revisions once NTP is issued.
- The fee does not include the cost of any other professional reports which may be needed including a landscape specialist, arborist, general contractor, etc. The fee is for the appraisal analysis only and Marshall Valuation Service will be used as the basis for any cost-to-cure analysis for all site improvements, landscaping estimates, irrigation, etc.. Any additional professional analysis or reports will only be used with prior written consent by the client.
- There will be only one review of the appraisal report performed by an independent, review appraiser. Requests from the client, project manager, or others to make

changes to a report will be considered additional work and will be charged at appropriate hourly rates.

- Assumes the appraisal review will be a desk review.
- There are 18 properties which need appraisals.
- The Plans that are at least 30% completed will be provided. If the plans change, we reserve the right to review the new plans to determine if any changes are necessary to the appraisal analysis, and the fee will be increased accordingly.
- The fee quoted assumes that appraisal right-of-way maps, legals & plats, grant deed document language, TCE time periods and dates, title report and underlying documents, survey of the property, previous appraisals, engineering studies, environmental assessments, all information regarding the operation of the property in the possession of the agency, all correspondence with the property owner, contact information for the Project Engineer, etc. will be provided at the time the appraisal work is to commence. Any delay in the delivery of these items could cause a delay in the delivery schedule.
- There will be only three meetings with the client or agency during the term of this assignment. An initial scoping session with all Project participants, and two more during the course of the Project. Additional meetings will be billed for mileage and time expended.
- The fee assumes there will be an electronic copy of a draft appraisal report submitted for review and, upon final acceptance, an electronic copy of each appraisal report delivered. If the client needs paper copies of the appraisal report, they can be provided at a cost of \$50 each.
- This fee represents the cost of the basic Appraisal service. Any additional work requested such as additional analysis, meetings, presentations, testimony at deposition or trial, and preparation for testimony, will be paid based on time expended. Hourly Rates are as follows: \$75 for administrative support, \$250 per hour for associate time, and \$450 per hour for principal appraiser.
- The appraisals will comply with USPAP, The Appraisal Institute's Code of Ethics and the current Washington State Department of Transportation Right-of-Way manual, M26-01.17, Chapter 4. The Uniform Appraisal Standards for Federal Land Acquisitions (Yellowbook) is not a required standard for these appraisals.
- Assumes one (1) revision for each report
- Assumes no plan revisions once NTP is issued.
- Acquisition/negotiations up to 34 property owners.
- Assumes up to 24 fee acquisitions, up to 17 permanent utility easements, and up to 29 temporary construction easements on up to 34 parcels are impacted by this project.
- Only one (1) revision to the right of way plans.
- No Condemnation actions.
- Project has no delays and can be completed by December of 2021.
- Assumes up to 3 residential relocations
- Assumes up to 3 Personal Property Only (PPO) relocations.
- Assumes only one (1) revision to the right of way plans.

- Assumes use of WSDOT Local Agency Relocation Forms.
- Relocation appeal support not included.
- Project has no delays and can be completed by December of 2021.

WORK ELEMENT 9 – PUBLIC INVOLVEMENT

Stepherson & Associates Communications (S&A) shall develop a public outreach plan and provide public outreach services for the duration of the project.

- 9.1 Project Management and Administration
- Project Scope & Schedules S&A will provide input to public involvement schedule portion of overall schedule and provide monthly public involvement plan workplan updates
- Monthly Progress Reports & Invoices
 - □ Monthly progress reports and invoices (up to 10)
- Project Kickoff Meeting
 - □ Assumes one (1) S&A staff will attend meeting
- Design Coordination Meetings (KPG and City of SeaTac meetings)
 - □ Internal (consultant) design team planning meetings (1 staff up to 10 meetings)
 - Design team meetings with the City of SeaTac (1 staff up to 6 meetings)
- 9.2 Public Outreach and Stakeholder Engagement Services
- Public Outreach Communication Coordination Meetings S&A will plan, facilitate, and report on Public Outreach communication coordination meetings with City. The purpose of these meetings will be to plan and coordinate Public Outreach efforts with City staff.
- Assumptions:
 - Assumes up to ten (10) meetings.
 - These meetings will occur online or at City offices.
 - Meetings will last approximately one (1) hour.
 - KPG Project Manager and the Public Outreach Lead will participate in these meetings.
- Deliverables:
 - Agenda and pre-meeting materials
 - Meeting minutes and action items
- 9.3 Consultant Communication Team Meetings and Coordination S&A will plan and implement internal communication coordination meetings with S&A team. The purpose of these meetings will be to plan and coordinate outreach efforts.

Assumptions:

- Assumes up to twenty (20) meetings.
- Meetings will last approximately 30 minutes.
- Two to three (2-3) S&A staff will participate.
- 9.4 Public Involvement Plan S&A will develop a public involvement plan (PIP) that identifies approaches for effectively informing and involving all audiences and is equitable in its distribution of outreach resources to various communities. It will include key messaging, a stakeholder list, and outreach tools/methods and associated timeline. Plan will include targeted outreach to disadvantaged/Title VI populations. S&A will schedule, plan, and attend a kickoff meeting with City staff prior to PIP development. The PIP will be developed in coordination with the City and early stakeholder interviews and a community demographic analysis will inform the plan.

Assumptions:

- Assumes one (1) PIP kick-off meeting that will last approximately ninety
 (90) minutes and occur online. Up to two (2) Stepherson staff will attend.
- Includes up to three (3) stakeholder interviews that will occur on the phone or online.
- City will provide to Stepherson any existing stakeholders lists, summary of community commitments and other pertinent outreach document upon Notice to Proceed.

Deliverables:

- PIP kick-off meeting agenda, pre-meeting materials, meeting minutes and action items
- One (1) Draft PIP (electronic copy)
- One (1) Final PIP (electronic copy)
- Key messages One (1) original and one (1) update
- 9.5 Communication Materials Development S&A will coordinate with the City and the design team to facilitate preparation, production, and distribution of all public-facing communication materials, including project fact sheet, frequently asked questions (FAQ), webpage content and email update content. Fact sheet and FAQ will be translated in up to three (3) languages.

Assumptions:

S&A will provide content updates, photos, and graphics to City for City-hosted project website. Webpage updates will be submitted to City for review, approval and posting.

- KPG will provide graphics and renderings for use in communication materials.
- S&A will coordinate mailing services and translation of materials.
- The City will be directly invoiced for printing and mailing, and translation services.

Deliverables:

- Project fact sheet: one (1) draft and one (1) final at early preliminary design (10%) as well as one (1) draft and (1) final at 75% design (electronic copy)
- Project FAQ: (1) draft and one (1) final for early preliminary design (10%) as well as one (1) draft and (1) final at 75% design (electronic copy)
- Website update content (up to 4)
- Email update content (up to 5)
- 9.6 Project Open House S&A will plan, coordinate, promote and attend one (1) inperson open house. The open house will provide information and gather input on 75% design. S&A will prepare a detailed event plan for the open house that identifies goals, team member roles, all supplies and materials and a work back schedule for meeting preparation. S&A will develop display boards and all supporting open house materials.

Assumptions:

- The City will host open house by coordinating meeting space.
- S&A will coordinate interpretation services and mailing services related to promoting open house.
- The City will be directly invoiced for mailing and interpretation services related to the open house.
- The City will use their communication channels to actively promote the open house.
- Assumes a 3-hour event, plus 2 hours set up and clean up time.
- Up to three (3) S&A staff will attend open house.
- KPG will provide graphics and support content development for open house materials.

Deliverables:

- Detailed event plan for one (1) open house event
- Meeting materials (sign-in sheet, comment form, directional signage) for one (1) open house event
- Mailer/postcard for one (1) open house event
- Up to ten (10) 24"x36" presentation quality display boards for the open house event

9.7 Online Open House and Survey - S&A will plan, set up, draft content, promote and report on one (1) online open house and survey to provide information and gather input on 10% design. It will contain project and City branding elements and include a survey.

Assumptions:

- Online open house site will be live for up to three weeks.
- Will utilize S&A's online open house platform infocommunity.org.
- The online open house will meet City branding standards and guidelines.
- KPG will provide graphics and support content development for online open house.
- S&A will coordinate translation services.
- The City will be directly invoiced for translation services.

Deliverables:

- Up to two (2) drafts and one (1) final, in Word format, of online open house and survey content
- Up to one (1) draft and (1) final of built online open house and survey
- Review of up to 500 survey responses
- Three (3) weekly online open house activity and survey reports
- One (1) draft and one (1) final online open house and survey
- 9.8 Briefings and Community Presentations S&A will schedule, prepare for, staff and report on one-on-one meetings, stakeholder briefings and community presentations.

Assumptions:

- Assumes up to eight (8) briefings/meetings.
- Up to two (2) online presentations.
- City will provide existing property owner contact information.
- City will participate in briefings.
- One (1) S&A staff and KPG Project Manager will attend these briefings and meetings.
- S&A will coordinate interpretation services, if required.
- City will be directly invoiced for interpretation services, if required.

Deliverables:

- One (1) draft and one (1) final individual stakeholder briefing/meeting notes per event (up to 10) (electronic copy)
- 9.9 Correspondence S&A will support City in the development of responses to public communications.

Assumptions:

 S&A will draft responses. The City will review, finalize, and distribute responses.

Deliverables

Up to twenty-five (25) draft communication responses (electronic copy)

WORK ELEMENT 10 – UTILITY COORDINATION

The Consultant will coordinate with private/franchise utilities affected by the proposed improvements. Efforts included under this WE are as follows:

- 10.1 The Consultant will coordinate with each of the utilities through emails and phone calls. Updated plans will be sent to each utility at the 10%, 75%, and 100% design and Bid Document submittal phases. A Utility Contact Matrix will be updated throughout the duration of the project.
- 10.2 Prepare and update Pothole and Utility Conflict Plan: This plan will be submitted to all purveyors with utilities in the project limits to assess whether said utilities may conflict with the proposed improvements.
- 10.3 The Consultant shall prepare for and attend meetings (15 assumed) with public and franchise utilities to discuss utility conflicts, relocations, system limitations, system termini, and requirements.
- 10.4 Utility locating service will provide potholing services to identify potential utility conflicts (75 estimated). The locations of the potholes will be surveyed and added to the basemap (WE 2). The Consultant will collect and analyze the pothole data necessary to develop the Pothole and Utility Conflict Plan (WE10.2).
- 10.5 The Consultant will request and review existing record documents, and utility design standards from the local water and sewer districts. The Consultant will coordinate with the utility districts to identify any known plans of future improvements to be completed by that utility that may affect the proposed roadway project. The Consultant will coordinate with the utility districts to identify potential conflicts as described above. The Consultant will coordinate with the utility districts for relocations of existing services based on proposed roadway design.

Work Element 10 Deliverables:

- Prepare and Update Pothole and Utility Conflict Plan (11x17)
- Pothole Data Sheets

- Updated basemap showing utility potholes and actual utility locations
- Request and review record drawings and utility design standards

Work Element 10 Assumptions:

 Any private/franchise utility expansion which is required to be incorporated into the project is not included.

WORK ELEMENT 11 - WSDOT CHANNELIZATION, SOD, ICE

This WE includes the effort required to attend introductory project review meetings with WSDOT staff to provide project updates on the preferred roadway alternative and share the necessary design files/reports to obtain feedback on the preliminary channelization at International Boulevard (SR 99) and S 176thStreet. Additionally, the Consultant will prepare a Summary of Design (SOD), Channelization Plans, and Intersection Control Evaluation (ICE) for review and approval.

- 11.1 The CONSULTANT shall prepare for and attend two (2) meetings with WSDOT. Design roll plots and reports pertinent to the meeting will be provided. It is anticipated that the first meeting with WSDOT staff will introduce the 10% channelization design to identify issues of significance early on. The second meeting will be held after the 75% design is underway and once items identified in the first meeting have been incorporated into the most up to date channelization plan. The Consultant will continue coordination efforts with WSDOT video conference and email correspondence.
- 11.2 Consultant shall prepare WSDOT channelization plans that will meet current WSDOT channelization plan requirements. This effort will begin once the selects a preferred alignment alternative and after the City reviews the Channelization Plans.
- 11.3 The Consultant shall prepare and submit WSDOT SOD in accordance with current WSDOT requirements including required supporting documentation, deviation requests, Basis of Design matrix, and design vehicle turning movement analysis. It is anticipated that an approval will require four (4) submittals of the analysis.
- 11.4 WSDOT Design Manual Chapter 1300.05 now requires an Intersection Control Evaluation (ICE) for all signal projects. The Consultant will prepare an ICE to document the background and project needs, evaluate alternatives, and select a recommended alternative. The analysis will compare the proposed signal alternative with a roundabout, as required by WSDOT. The ICE will review traffic operations, safety, transit needs, right of way requirements, and cost, using a

qualitative analysis of impacts. Synchro and Sidra analysis will be performed to provide an assessment of intersection operations. A draft report will be submitted for review to the City and WSDOT for comments, followed by the issuance of a final report.

Work Element 11 Deliverables:

- Electronic PDF copy of the Draft Chan Plan, SOD, and ICE delivered to the City and WSDOT
- Electronic PDF copy of the Final Chan Plan, SOD, and ICE delivered to the City and WSDOT

Work Element 11 Assumptions:

 Only the intersection of International Boulevard (SR 99) and S 176th Street will require WSDOT SOD, Channelization Plans, and ICE approvals.

WORK ELEMENT 12 - PRELIMINARY DESIGN (10%), URBAN DESIGN REPORT, S 176TH AND S 180TH

The Consultant shall prepare an Urban Design Report and Preliminary Design roll plot. The purpose of the Preliminary Design (10%) Phase is to define project scope, limits, and phasing. Additionally, this WE covers the effort to develop project design features and obtain input from project stakeholders before the development of the 75% Design Plans.

- 12.1 The Consultant shall develop an Urban Design Report which will include the following illustrations:
 - □ Illustrative Roadway Section
 - Roadway Photo Simulations
 - Decorative illumination and Bases
 - Urban Design Palette Benches, Bollards, Trash Receptacles, Bike Racks
 - □ Intersection Diagram with Decorative Surface Features
 - □ Plant and Tree Palette
 - Planter Fencing and Tree Grates
 - Wayfinding/Kiosk Locations
- 12.2 The Consultant shall prepare a Preliminary Design (10%) roll plot layout in AutoCAD format drafted with an aerial backdrop. The layout will show (plan view) decorative surface features, sidewalk and scoring patterns, planter and tree locations, curb ramps, crosswalks, parking stalls, signals poles/mast arms, lighting, kiosk locations (if available from the City), roadway channelization, and bicycle markings. It is estimated that the Preliminary Design will be reviewed by the City before the plan is unveiled to the Public.

28

- 12.3 The Consultant shall prepare a Preliminary Design (10%) Opinion of Cost showing proposed pay items and method of measurement.
- 12.4 The Consultant shall advance full buildout roadway layouts for S 176th Street and S 180th Street (One each) in roll plot layouts in AutoCAD format drafted with an aerial backdrop. The layout will show (plan view) roadway features, sidewalk, planters, crosswalks, parking stalls, roadway channelization, and bicycle markings. An Opinion of Cost for each layout will be prepared showing proposed pay items and method of measurement.

Work Element 12 Deliverables:

- PDF copy of the Urban Design Package
- Half size and full size roll plots of the Illustrative Preliminary Design (10%) Layout and PDF
- Two (2) electronic versions (PDF and Excel) of the Preliminary Design (10%) Opinion of Cost
- Half size and full size roll plots of the S 176th and S 180th Layouts and PDF
- Two (2) electronic versions (PDF and Excel) of the S 176th and S 180th Layouts and PDF Opinion of Costs

Work Element 12 Assumptions:

- The Consultant shall assist in identifying the locations of the of the City's Kiosk, Wayfinding Signs, and Parklet's. Designs of these features are not included in this scope. Their locations will be shown in the Preliminary Design Submittal
- The Preliminary Design (10%) Opinion of Cost will capture only those roadway improvements approved by the City at the time the cost estimate is prepared.
- Sound Transit Parcel will be surveyed in WE 2. Design options for this parcel are not included in this scope of work.

WORK ELEMENT 13 - FINAL DESIGN (75%, 100%)

The Consultant shall prepare 75% and 100% Plans, Specifications and Estimates for review and approval by the City. Plans shall be formatted to provide sufficient detail for convenient field layout of all proposed facilities. City Standard Details and WSDOT standard plans will be supplemented with project specific details as required. All design plans and documents will be signed by a licensed professional engineer in the State of Washington.

The consultant shall prepare 75% plans for review and approval by the City. The 75% submittal will include comments received from the Preliminary Design (10%) and Stakeholder Input.

- 13.2 The consultant shall prepare 100% plans for review and approval by the City. The 100% submittal will include all comments received from the 75% review.
- 13.3 Consultant will calculate quantities and prepare construction cost estimates in support of the 75% and 100% submittals.
- 13.4 Consultant will prepare specifications based on 2020 WSDOT Standard Specifications, using contract boilerplate, federal funding requirements (if needed), and general special provisions provided by the City for the 75% and 100% submittals.
- 13.5 Consultant will prepare preliminary construction phasing plans.
- 13.6 The Consultant shall evaluate lighting performance using the AGI32 illumination model that shows lighting levels and uniformity. Lighting report will be prepared for the 75% and 100% design submittals.

Work Element 13 Deliverables:

- Five (5) ½-size bound copies of the 75% Design Plans and PDF copy
- Five (5) ½-size bound copies of the 100% Design Plans and PDF copy
- PDF and Excel versions of the 75% and 100% Engineer's Estimate
- Five (5) hard copies and PDF copy of the 75% and 100% Specifications
- AGI32 Illumination Report

Work Element 13 Assumptions:

 Construction Phasing Plans shall be incorporated into the design plan set with the assumption that the contractor will adopt the sequencing plan and develop traffic control plans.

WORK ELEMENT 14 - WSDOT REVIEW (ASSUMES FEDERAL FUNDING) AND BID DOCUMENTS

The Consultant shall provide WSDOT Review Plans, Specifications and Estimates for review and approval by WSDOT. Bid Document Plans, Specifications and Estimates will be developed after addressing WSDOT review comments. WSDOT Review documents and Bid Documents will be stamped, signed and dated by a licensed professional engineer in the State of Washington.

14.1 The Consultant shall prepare a set of WSDOT concurrence submittal documents (Plans, Specifications and Cost Estimate) for WSDOT Northwest Region for review. The WSDOT review submittal will include all comments received from the City's 100% Design review and include the WSDOT Checklist.

- 14.2 Provide Quantity and Estimate support in the development of City prepared Public Interest Findings (PIF) for all City sole sourced materials and prepare Maximum Extent Feasible (MEF) documentation in accordance with WSDOT requirements.
- 14.3 The Consultant shall prepare Bid Documents (Plans, Specifications and Cost Estimate) for advertisement by the City. The Bid Documents will include all comments received from the WSDOT review submittal.
- 14.4 Consultant will assist the City during the bidding process in answering questions by the Contractors, or in providing information for an addendum, as requested by the City.

The estimated sheet count is the following:

- □ 1 Cover Sheet
- □ 2 Sheet Index, Alignment Plan, and Survey Control
- ☐ 1 Legend and Abbreviations
- □ 3 Typical Roadway Sections
- □ 3 Roadway Details
- ☐ 6 Driveway Profiles
- □ 1 Driveway Details
- 5 7 Site Preparation Plans and TESC Plans
- ☐ 14 Roadway and Drainage Plans/Profiles
- 2 Stormwater Details
- □ 14 JUT Plans/Sections
- 1 JUT Details
- □ 6 Wall Plan and Elevation
- □ 1 Wall Details
- 8 Curb Ramp Details
- ☐ 2 Signalization Plans
- 2 Signal Pole Details
- 2 Wiring Diagram
- □ 14 Illumination Plans
- 2 Illumination Details
- 7 Urban Design Plans
- □ 3 Urban Design Details
- □ 7 Landscape Plans
- □ 1 Landscape Details
- □ 7 Irrigation Plans
- □ 1 Irrigation Details
- 7 Channelization and Signing Plans
- □ 10 Construction Phasing Plans/Details
- 3 Right of Way Plans

Total: 138 Sheets

Work Element 14 Deliverables:

- PDF copy of the Plans, Specifications, & Estimate, delivered to WSDOT
- PIF for sole source materials to be submitted to WSDOT
- MEF Documentation
- Five (5) 1/2-size bound copies of the Bid Design Plans and PDF copy
- PDF and Excel versions of the Bid Engineer's Estimate
- Five (5) hard copies and PDF copy of the Bid Specifications
- Addenda and Answers to Questions During Bidding

Work Element 14 Assumptions:

- The City will provide the Consultant with copies of PIF documents to be submitted to WSDOT. Consultant will assist with quantities and estimates.
- Only one (1) Bid review by WSDOT will be required.

ADDITIONAL SERVICES

The City may require additional services of the Consultant. The scope of these services will be determined based on the unanticipated project needs or other considerations at the sole discretion of the City. This work may include items identified in the current WE authorizations as well other items, which may include, but are not necessarily limited to the following:

- City/Utility District Design Services
- Providing Construction Engineering Support Services
- Providing Construction Administration Services
- Hazardous Material Reporting and Support
- Structural Engineering Services
- Sound Transit Parcel Conceptual Design Services
- Grant Funding Assistance

These services will be authorized under a future contract supplement if necessary. At the time these services are required, the Consultant shall provide a detailed scope of work and an estimate of costs. The Consultant shall not proceed with the work until the City has authorized the work and issued a notice to proceed.



To: Transportation and Public Works Committee Through: William Appleton, Public Works Director

From: Brenton Cook

Date: 7/13/20

Subject: 2021 Overlays Project – Professional Services Contract

Purpose:

Public Works is seeking Committee recommendation for Council authorization to execute a professional services contract for the design of the 2021 Overlays Project.

Background:

This project consists of two project sites separated by approximately two miles. Descriptions of each project site are as follows:

- South 188th Street: This project site is located adjacent to the southwest end of SeaTac International Airport. This project proposes resurfacing approximately 5,200 lineal feet of pavement along South 188th Street corridor between International Boulevard and the intersection at Des Moines Memorial Drive South. Because work will occur within the 188th Street tunnel that runs beneath the south end of the SeaTac Airport runways, coordination with the Port of Seattle will be necessary.
- Military Road South Intersection: This project site is a five-way intersection for Military Road South, 42nd Avenue South, and South 164th Street. The east leg of the intersection, South 164th Street, is located within Tukwila limits. Coordination with the City of Tukwila will be necessary. The extent to which overlays will occur along each leg of the intersection will be defined at a later date.

The pavement work will generally consist of two to four-inch grind and overlays proposed for each site. In some areas of each project site, existing pavement conditions may warrant full depth removal and replacement. For both sites, existing pedestrian facilities will be updated to meet requirements and address deficiencies as identified in the ADA Transition Plan. Tentatively, no improvements to existing storm facilities are planned at either project site. However, water quality treatment for the roadway surfaces will be incorporated into the design. Traffic signal improvements will be assessed at the Military Road South intersection.

The scope of the professional services contract includes developing a construction contract bid set, including plans, specifications, and a construction estimate. The Blueline Group has been

selected for completing this work. The Blueline Group is currently working on the design of the City's Spot Drainage Project.

The amount of the contract is currently being negotiated and will be known prior to bringing this item before Council. The latest draft provided by The Blueline Group has a design service contract totaling a Not to Exceed amount of \$382,100. The overall budget for this project including design and construction is \$1.84 Million.

Options/Recommendation:

Staff recommends moving this item forward for Council review and action at the July 28 Regular Council Meeting.

PROJECT DESCRIPTION

The Blueline Group, LLC ("Blueline") will provide engineering services for the City of SeaTac 2021 Overlays Project ("Project") generally consisting of the design of pavement resurfacing and repair and updated pedestrian facilities to meet ADA requirements in 2 locations designated by the City. As outlined herein, Blueline will provide design Plans, Specifications, and an Engineer's Estimate.

Project areas are as follows:

- South 188th Street between International Boulevard and the intersection at Des Moines Memorial Drive South.
 - Specifically, the project will start at the end of the western radius on International Boulevard and go through the intersection of Des Moines Memorial Drive South.
 - At Des Moines, ADA retrofits are assumed to be necessary at two of the four corners (south side), including the pedestrian island. Permanent video detection will be installed.
 - o At 28th Ave S, ADA Retrofits are not anticipated as they appear to be recently upgraded. Existing traffic loops will be restored.
 - At International Boulevard, overlay will terminate at the curb return radius point, therefor no ADA retrofit is anticipated to be required. Existing traffic loops will be restored.
 - Remainder of the corridor will be either grind and overlay (2" or 4") or other pavement reconstruction as coordinated with the City and geotechnical investigations.
- Military Road South Intersection. 5-way intersection at South 164th Street extending 100 feet in each direction except for the east side of South 164th Street, which is in the City of Tukwila ROW.
 - Permanent video detection will be installed.
 - Travel lane geometry will remain the same.
 - ADA retrofit will be completed within existing island footprints so that the lane geometry will not be impacted.
 - Signal operation improvements will be evaluated including traffic count collection, upgrading existing signage, and protected left turn operations for northbound traffic on Military Road.
 - This project is intended to occur after Highline Water District completes a water main upgrade within the intersection.

PROJECT SCHEDULE

Blueline shall begin work immediately upon receipt of Notice to Proceed from the City and proceed according to the Project Schedule below. This schedule reflects the City's desire to bid the project in early January 2021. Key dates are as follows:

Blueline Notice to Proceed	July 17, 2020
Survey/Geotechnical Investigations Complete	Mid August, 2020
Preliminary Traffic Engineering Submittal	September 4, 2020
60% Design Submittal	September 18, 2020
Project Walkthrough	September 30, 2020

90% Design Submittal	November 6, 2020
Project Walkthrough	
Final Design Submittal	December 18, 2020

TASK SUMMARY

Task 001	PROJECT MANAGEMENT
Task 002	SURVEY & BASE MAPPING
Task 003	GEOTECHNICAL INVESTIGATIONS
Task 004	TRAFFIC ENGINEERING
Task 005	WATER QUALITY RETROFIT
Task 006	60% DESIGN
Task 007	90% DESIGN
Task 008	FINAL DESIGN
Task 009	COORDINATION AND PERMITTING
Task 010	EASEMENT GENERATION (AXIS)
Task 011	EASEMENT COORDINATION
Task 012	MANAGEMENT RESERVE
Task 999	EXPENSES

SCOPE OF WORK

Blueline's scope of work for the Project is described as follows:

Task 001 - PROJECT MANAGEMENT...... T&E/NTE: \$19,600

This task is for general coordination and meetings on the project, including:

- Up to 3 project meetings with City staff throughout the project.
- Preparation of monthly invoices for work performed during the previous month, including any pertinent backup materials.
- QA/QC review of deliverables throughout the project to ensure City standards and expectations are being met.
- Management of all tasks and staff for design support services.
- Communication with the City regarding the design process, issues, costs, and schedule.

Task 002- SURVEY & BASE MAPPING T&E/NTE: \$49.500

The Project area mapping is generally for Street Surface Overlays and ADA Improvements at the following sites (Sites more precisely shown in Exhibit C):

- Mapping of approximately 5,200 lineal feet of S 188th Street from International Blvd, west through the intersection with Des Moines Memorial Drive.
- Mapping of the 5 way intersection for Military Road South, 42nd Ave S, and S 164th Street.

Axis Survey and Mapping will prepare base mapping for the overlay areas specified in the Project Description above. AutoCAD drawings will be prepared at a scale of 1"=20'. Services will include the following:

 Control survey in NAD 83/91 Horizontal Datum, with all elevations derived from and checked to NAVD 88 Vertical Datum.

- Delineate parcel lines within above-described area as available from recorded plats and public records further compared to King County Parcel GIS lines.
- Ground elevations within mapping limits on an approximate 50' grid plus elevations along obvious topographic breaks.
- Show and dimension located topographic features and contours at 2' intervals.
- Location, elevation and road clearance of SeaTac International Airport runway overpass located on S 188th Street.
- Location and elevation of the following infrastructure improvements:
 - Asphalt, curbing, sidewalks and other surface improvements
 - Catch basins, culverts, sewer manholes, fire hydrants and other utilities which are observable from surface exploration
- Set additional elevation benchmarks at each end of project area and every 500-700' along the route.
- Depict hard and soft surfaces on individual layers per accepted APWA standards.
- Show known utilities as provided by City of SeaTac and GIS, research of available utility asbuilt records and as located by utility locators. Cost for private utility locators (\$10,500) included herein. Entire project area will be located due to unknown water quality facility location.

Assumptions: The City will provide all necessary right of entry into private property and

notice to landowners along the route of mapping activity. The City will provide a copy of the notice to be presented to landowners by Axis Survey

Crews.

Deliverables: AutoCad 2016 drawing file with point database and dtm files.

Task 003 – GEOTECHNICAL INVESTIGATIONS......Fixed Fee: \$51,300 HWA Geosciences will provide Geotechnical engineering services including pavement explorations and design recommendations for the areas specified in the Project Description on page 1. See

attached Exhibit D for a full description of services.

Deliverables: Geotechnical Investigation Report with pavement design

recommendations.

Task 004 - TRAFFIC ENGINEERING T&E/NTE: \$68,100

PH Consulting will provide transportation engineering services to prepare contract drawings for the areas specified in the Project Description on page 1. See attached Exhibit E for a full description of services. As the traffic signal improvement will require substantial coordination, an additional preliminary submittal has been included to ensure all parties are in agreement on the initial design prior to incorporating in the full PS&E.

Deliverables: Channelization & Signing Plans.

Traffic Signal Improvement Plans and Traffic Signal Details & Wiring

Diagrams.

Temporary Traffic Control Plans.

Task 005 - WATER QUALITY RETROFIT......T&E/NTE: \$14,500

Blueline will provide engineering services to design and locate a stormwater treatment facility for a single targeted drainage basin as directed by the City. These services will include:

- Basin analysis to determine tributary area and existing land cover within the targeted drainage basin. For areas outside the initial scope of the survey, this will be completed with GIS and/or aerials.
- Flow calculations
- Identification of receiving water body impairments
- Incorporation of water quality facility into the existing PS&E set. It is assumed the City will determine the location of the target drainage basin prior to 90% submittal to ensure time for the City to review and comment.

Assumptions:

Traffic data to identify high-use sites is not included under this task and will be provided by the City or through an additional task.

This task is intended for the design and integration of a single water quality unit within the project limits. Addition water quality efforts or areas outside of the proposed scope will require additional tasks.

Flow control design and facilities will not be required.

Water Quality Retrofit will not trigger environmental permitting, including SEPA.

Deliverables:

Water Quality Memorandum documenting the water quality requirements per the 2016 King County Surface Water Design Manual.

Water quality facility incorporated into prepared plan sheets.

Task 006 - 60% DESIGN...... T&E/NTE: \$42,300

Based on the base maps provided by Axis Survey and Mapping and initial comments on the preliminary traffic design, Blueline will provide the design Plans, Specifications, and Engineer's Estimate for the proposed project including:

- Plan sheets for the proposed improvements, including:
 - Sheets at 22"x34" with roughly an 18"x28" drawing area.
 - o Drawing scale at 1"=20' horizontal and 1"=5' vertical.
 - o 60% Design Cover Sheet, General Notes, and Sheet Index.
 - Proposed improvements shown in plan view only (no grading with this submittal) per City standards.
 - o 60% Traffic Control Plans
 - Placeholder sheets for water quality design, profiles, grading details, etc.
- Design memo discussing design assumptions, questions, and recommendations.
- Engineer's Estimate including quantities and a large contingency at this stage.
- Preliminary determination of temporary and permanent easement requirements.
- Outline Specifications including the City's front end Contract Provisions, the City's boilerplate typical Special provisions, and a Bid Schedule. This includes draft custom special provisions addressing project specific construction activities and materials.
- Site Walkthrough with City following 60% Design to confirm proposed project elements.

Deliverables: 60% PDFs of Plans, Specifications, Engineer's Estimate and Design Memo.

Updated Design Schedule (if necessary)

Task 007 - 90% DESIGN...... T&E/NTE: \$50,700

Based on the City's 60% design comments and information obtained at the 60% Walkthrough, Blueline will provide the design Plans, Specifications, and Engineer's Estimate for the proposed project including:

- Plan sheets for the proposed improvements, including:
 - o Sheets at 22"x34" with roughly an 18"x28" drawing area.
 - o Drawing scale at 1"=20' horizontal and 1"=5' vertical.
 - o 90% Design Cover Sheet, General Notes, and Sheet Index.
 - 90% Design TESC notes and details.
 - o Proposed improvements shown in plan with grading per City standards.
 - o Water quality design in plan and profile (as needed).
 - o 90% Traffic Control Plans
 - o ADA-compliant ramp details
 - 90% Design details shown, referencing the City's standard details and developing specialized details as necessary.
- 90% Engineer's Estimate.
- 90% Project Specifications.
- Submittal to Port of Seattle, Tukwila as necessary for their review.
- Design memo discussing design assumptions, questions, and recommendations.
- MEF documentation where applicable.
- Site Walkthrough with City following 90% Design.

Deliverables: 90% PDFs of Plans, Specifications, Engineer's Estimate and Design Memo.

Ramp MEF Documentation

Updated Design Schedule (if necessary)

Walkthrough, Blueline will complete production of the Final Design (Bid Documents), including:

- Incorporating City's 90% comments into the contract documents.
- Final Plans, Specifications, and Engineer's Estimate, including Traffic Control.
- Internal QA/QC.
- Final Ramp MEF documentation where applicable.

Assumptions: No further review comments will need to be addressed after final design

submittal.

Deliverables: PDF of Plans, Specifications, and Engineer's Estimates, plus all documents in

digital format (and ACAD files) uploaded to ftp site.

Task 009 - COORDINATION AND PERMITTING.......T&E/NTE: \$10,900

This task will include preparation and submittal of applications for known necessary permits and approvals pertaining to this project. We will also provide the appropriate coordination during these processes until the approvals are obtained. It is assumed for budget purposes that the following permits/approvals will be needed for the project:

- City of Tukwila ROW permit.
- Port of Seattle coordination and approval of work adjacent to airport.
 - o Assumes that the City has a maintenance agreement with the Port and is not required to complete the Port's permitting process

Assumptions:

Any fees associated with permitting are not included and are to be paid by the City.

An ASA can be provided for any additional permits determined necessary during design.

- Order plat certificates and research additional parcels legal description for easement efficacy.
- Consult with design Engineer and City for permanent and temporary construction easements determination and need.
- Generate up to 10 legal descriptions and exhibits for inclusion in new easements.
- Review and respond to edits from design Engineer and City.

Task 011 - EASEMENT COORDINATIONT&E/NTE: \$4,900

This task will include assisting the City with easement determination, coordination, and acquisition for the following:

- Working with Axis and the City to determine necessary easement locations for up to 10 easements.
- Contacting property owners and assisting the City with easement negotiations.
- On-going follow-up, support, and assistance until necessary easements are in place.
- Review and respond to edits from City Attorney to Easement Documents.

Any fees associated with the easements are not included and are to be paid by the City.

Task 012 - MANAGEMENT RESERVE #R-NTE (Allowance): \$34,600

This task provides for unanticipated services deemed to be necessary during the course of the Project that are not specifically identified in the scope of work tasks defined above. Any funds under this item are not to be used unless explicitly authorized by the City. Fee estimate is based on $\pm 10\%$ of Tasks 001 – 011.

Deliverables:

None yet identified.

Task 999 - EXPENSES......(Allowance): \$1,500

This task provides for mileage reimbursement associated with meetings and site visits throughout the course of the project.

GENERAL ASSUMPTIONS & NOTES

- Scope and fees outlined above are based on the following information (any changes to these items may result in changes to the fees):
 - Correspondence between the City of SeaTac and The Blueline Group June-July 2020.
- We do not anticipate that additional Structural, Electrical or Environmental services will be necessary for this project, and they are not included in this proposal.
- The City will coordinate with franchise utility companies for any required utility or pole relocations.
- The following items are not anticipated necessary and are not included in this proposal.
 - Sanitary sewer main replacement/improvements.
 - Storm system replacement/improvements except for a single water quality treatment facility retrofit.
 - Water main replacement/improvements.
 - Gas main relocation coordination.
 - Power relocation coordination.
 - Other dry utility relocation coordination.
 - Street lighting.
 - Wall or rockery design.
 - Flow control design.
 - Capacity analysis of existing stormwater conveyance system.
 - Environmental documentation/permits.
 - Cultural Resource Assessment.
- Project stops/starts and significant changes to the Project Schedule may result in changes to the fees provided above and a separate fee proposal will be provided.
- Agency fees (if any) are not included as part of the fees outlined above.
- Bidding, Award, Construction Staking, and Construction services are not included in this proposal. It is assumed that Construction Staking will be the responsibility of the Contractor. A separate fee proposal can be provided upon request.
- The fees stated above do not include reimbursable expenses such as large format copies (larger than letter/legal size), mileage, and plots. These items will be billed under a separate task called Expenses. Estimate: \$1,500.
- These fees stated above are valid if accepted within 30 days of the date of the proposal.
- If the Client requests Blueline's assistance in complying with any public records request, including without limitation providing copies of documents and communications, Client will pay Blueline's hourly fees and costs incurred in providing such assistance at then-current rates. Such fees and costs will be billed as a separate task and will be in addition to the maximum or total fees and costs stated in the agreement to which this scope of work as attached.
- Blueline reserves the right to move funds between approved Tasks 001 011 as necessary based on approved scope of work provided the overall budget of Tasks 001 – 011 is not exceeded. City Project Manager will be notified if funds are shifted.
- Client revisions requested after the work is completed will be billed as Time and Expense
 under a new task called <u>Client Requested Revisions</u>. A fee estimate can be provided to the
 Client prior to proceeding with the revisions.

City of SeaTac 2021 Overlays Project

Job Number: 20-193

Date: June 23, 2020

Prepared By: Checked By: Brett Justinen Robert Dahn, PE

		Pr	incipa	al	Projec	t Ma	anager		rojec igine		Ei	ngine	er	_	inee esigr	ring ner					
Task#	Task Description	\$2	205/h	ır	\$	188,	/hr	\$:	178/	hr	\$	158/	'hr	\$	146/	/hr	Total	Γ	Total	To	otal Cost
1035 #	Task Description	Hours		\$	Hours	L	\$	Hours		\$	Hours		\$	Hours		\$	Hours	L	Cost	(R	lounded)
001	Project Management	20	\$	4,100	54	\$	10,152	30	\$	5,340	0	\$		0	\$		104	\$	19,592	\$	19,600
002	Survey & Base Mapping						ORT LA			S. IFA			470.00					\$	49,450	\$	49,500
003	Geotechnical Investigations			1853 11						24/17/17		190		P. C.				\$	51,300	\$	51,300
004	Traffic Engineering		120				130									1000		\$	68,100	\$	68,100
005	Water Quality Retrofit	0	\$		6	\$	1,128	20	\$	3,560	40	\$	6,320	24	\$	3,504	90	\$	14,512	\$	14,500
006	60% Design	6	\$	1,230	20	\$	3,760	46	\$	8,188	70	\$	11,060	124	\$	18,104	266	\$	42,342	\$	42,300
007	90% Design	6	\$	1,230	18	\$	3,384	70	\$	12,460	76	\$	12,008	148	\$	21,608	318	\$	50,690	\$	50,700
800	Final Design	6	\$	1,230	20	\$	3,760	43	\$	7,654	61	\$	9,638	42	\$	6,132	172	\$	28,414	\$	28,400
009	Coordination and Permitting	0	\$	TORKE I	20	\$	3,760	40	\$	7,120	0	\$		0	\$	in the party	60	\$	10,900	\$	10,900
010	Easement Generation (Axis)	AV 145		STATE OF	2,800.00			-0-1	1000		10015		001324			0		\$	5,800	\$	5,800
011	Easement Coordination	Ō	\$	7	8	\$	1,504	16	\$	2,848	0	\$		4	\$	584	28	\$	4,900	\$	4,900
012	Management Reserve	KII R													200	(A 1)=(A)		\$	34,600	\$	34,600
999	Expenses				377					100			0.75	1000			RJ II			\$	1,500
	TOTAL	38	ŝ	7.790	146	5	27,448	265		47,170	247	5	39.026	342	\$	49,932	1038	\$	380.600	\$	382.100

The Blueline Group

City of SeaTac 2021 Overlays Project

001	Project Management	Pri	ncipal	Projec	t Manager		roject gineer	En	gineer	_	neering algner		
item #	Description	\$2	05/hr	\$1	.88/hr	\$1	L78/hr	\$1	.58/hr	\$1	46/hr	TOTAL	TOTAL
Itom w	Descripción	HRS	FEE	HRS	FEE	HRS	FEE	HRS	FEE	HRS	FEE	HRS	FEE
1	Project Meetings (up to 3)	4.0	\$ 820	12,0	\$ 2,256	18.0	\$ 3,204	0.0	\$ -	0.0	\$.	34,0	\$ 6,280
2	Monthly Invoices/Progress Reports/Schedule Updates	0.0	\$ **	14.0	\$ 2,632	0.0	\$ #	0,0	5	0,0	\$.	14.0	\$ 2,632
3	QA /QC Program	12.0	\$ 2,460	6.0	\$ 1,128	0.0	\$	0,0	\$ -	0.0	\$.	18,0	\$ 3,588
4	Schedule & Team Management	4,0	\$ 820	22.0	\$ 4,136	12.0	\$ 2,136	0,0	\$ -	0.0	\$ -	38,0	\$ 7,092
	Total	20.0	\$ 4,100	54.0	\$ 10,152	30.0	\$ 5,340	0.0	\$ -	0.0	\$	104.0	\$ 19,592
										001	HR-NTE		\$ 19,600

002	Survey & Base Mapping		Total Cost (Per Axis)		Blueline Markup		
Item #	Description				15%		TOTAL FEE
		,	Fixed Fee		Lump Sum		FEE
1	Survey & Base Mapping		\$ 43,000	\$	6,450	\$	49,450
	Total		\$ 43,000	4	6,450	\$	49,450
		**			002 Fixed Fee	s	49.500

003	Geotechnical Investigations		Total Cost (Per HWA)	Blueline Markup		
Item #	Description		Fixed Fee	15% Lump Sum		TOTAL FEE
1	Geotechnical Investigations		\$ 44,596	\$ 6,689	\$	51,285
	Total		\$ 44,596	\$ 6,689	\$	51,285
-		······································		003 Fixed Fee	\$	51,300

004	Traffic Engineering	.	Total Cost Per PH Consulting)	Blueline Markup		
Item #	Description	L"	er Fit Collegiung)	15%		TOTAL
item #	Description		Fixed Fee	Lump Sum		FEE
1	Traffic Engineering	\$	59,219	\$ 8,883	\$	68,102
	Total	\$	59,219	\$ 8,883	\$	68,102
				004 Fixed Fee	\$	68,100

The Blueline Group

City of SeaTac 2021 Overlays Project

005	Water Quality Retrofit	Prir	ncipal	Project	: Manager		oject gineer	En	gineer		neering signer		
Item #	Description	\$2	05/hr	\$1	88/hr	\$1	78/hr	\$1	.5 8/ hr	\$1/	46/hr	TOTAL	TOTAL
ILCIN W	Description	HRS	FEE	HRS	FEE	HRS	FEE	HRS	FEE	HRS	FEE	HRS	FEE
1	Basin Analysis	0,0	\$ -	0,0	\$ -	4.0	\$ 712	8,0	\$ 1,264	24.0	\$ 3,504	36.0	\$ 5,480
2	Flow Calculations	0,0	\$ -	0,0	\$ -	4.0	\$ 712	8.0	\$ 1,264	0.0	\$ +	12,0	\$ 1,976
3	Water Quality Facility Sizing and Selection	0.0	\$ -	4,0	\$ 752	8.0	\$ 1,424	16,0	\$ 2,528	0,0	\$	28,0	\$ 4,704
4	Revisions Per City Review Comments	0,0	\$ -	2.0	\$ 376	4.0	\$ 712	8,0	\$ 1,264	0,0	\$	14.0	\$ 2,352
	Total	0.0	\$ ×	6.0	\$ 1,128	20.0	\$ 3,560	40.0	\$ 6,320	24.0	\$ 3,504	90.0	\$ 14,512
										005	HR-NTE		\$ 14,500

006	60% Design	Prin	ncipal	Projec	t Manager		roject gineer	En	gineer	-	neering signer		
Item #	Description	\$205/hr \$188/hr \$178/hr \$158/					.58/hr	\$1	46/hr	TOTAL	TOTAL		
ICOM III	Description	HRS	FEE	HRS	FEE	HRS	FEE	FEE HRS		HRS	FEE	HRS	FEE
1	Survey Incorporation/Sheet Setup	0.0	\$ -	0.0	\$ -	6.0	\$ 1,068	0,0	\$ -	60.0	\$ 8,760	66.0	\$ 9,828
2	Horizontal Layout	0.0	\$.	4,0	\$ 752	8.0	\$ 1,424	16.0	\$ 2,528	40,0	\$ 5,840	68.0	\$ 10,544
3	60% Design Plans	2.0	\$ 410	2,0	\$ 376	4.0	\$ 712	10.0	\$ 1,580	20.0	\$ 2,920	38.0	\$ 5,998
4	60% Specifications	2,0	\$ 410	2,0	\$ 376	8.0	\$ 1,424	20.0	\$ 3,160	0.0	\$ -	32,0	\$ 5,370
5	60% Engineer's Estimate	2.0	\$ 410	2,0	\$ 376	8.0	\$ 1,424	20.0	\$ 3,160	4.0	\$ 584	36.0	\$ 5,954
6	Design Memo	0.0	\$ -	2,0	\$ 376	4:0	\$ 712	4.0	\$ 632	0.0	\$.	10.0	\$ 1,720
. 7	Site Walkthrough	0.0	\$.	8.0	\$ 1,504	8.0	\$ 1,424	0.0	\$ -	0,0	\$	16.0	\$ 2,928
	Total	6.0	\$ 1,230	20.0	\$ 3,760	46.0	\$ 8,188	70.0	\$ 11,060	124.0	\$ 18,104	266.0	\$ 42,342
										006	HR-NTE		\$ 42,300

The Blueline Group

City of SeaTac 2021 Overlays Project

007	90% Design	Prin	icipal	Project	t Manager		roject gineer	En	gineer	_	eering gner		
No. or Al	Description	\$205/hr \$188/hr \$178/hr					\$1	58/hr	\$14	6/hr	TOTAL	TOTAL	
Item #	Description	HRS	FEE	HRS	FEE	HRS	FEE	HRS	FEE	HRS	FEE	HRS	FEE
1	City Comment Review Meeting on 60% Design	0.0	\$ -	4.0	\$ 752	4.0	\$ 712	0.0	\$ -	0,0	\$ -	8.0	\$ 1,464
2	ADA Ramp Grading	0,0	\$ -	0,0	\$ -	20,0	\$ 3,560	0,0	\$ -	100.0	\$ 14,600	120.0	\$ 18,160
3	90% Design Plans	2.0	\$ 410	2.0	\$ 376	10.0	\$ 1,780	20.0	\$ 3,160	40,0	\$ 5,840	74.0	\$ 11,566
4	90% Specifications	2,0	\$ 410	2,0	\$ 376	10,0	\$ 1,780	20,0	\$ 3,160	0,0	\$ -	34.0	\$ 5,726
5	90% Engineer's Estimate	2.0	\$ 410	2.0	\$ 376	8,0	\$ 1,424	16.0	\$ 2,528	4,0	\$ 584	32.0	\$ 5,322
6	Design Memo	0.0	\$ -	2.0	\$ 376	4.0	\$ 712	4:0	\$ 632	0.0	\$ -	10.0	\$ 1,720
7	MEF Documentation for up to 4 Ramps	0.0	\$ -	0.0	\$	8.0	\$ 1,424	16.0	\$ 2,528	4.0	\$ 584	28.0	\$ 4,536
8	Site Walkthrough	0.0	s -	6,0	\$ 1,128	6,0	\$ 1,068	0.0	\$.	0.0	\$ -	12.0	\$ 2,196
	Total	6.0	\$ 1,230	18.0	\$ 3,384	70.0	\$ 12,460	76.0	\$ 12,008	148.0	\$ 21,608	318.0	\$ 50,690
										007	HR-NTE		\$ 50,700

008	Final Design	Prir	ncipal	Project	t Manager			oject gneer	E	ngine	er	_	neering nigner			
Mar. #	Description	\$20	05/hr	\$1	.88/hr		\$1	78/hr	\$:	158/	hr	\$14	46/hr	TOTAL		TOTAL
Item #	Description	HRS	FEE	HRS	FEE		HRS	FEE	HRS		FEE	HRS	FEE	HRS		FEE
1	City Comment Review Meeting on 90% Design	0.0	\$ -	4.0	\$	752	4.0	\$ 712	0.0	\$	- 1	0.0	\$ =	8.0	\$	1,464
2	Final Design Plans	2,0	\$ 410	2,0	\$	376	10.0	\$ 1,780	20,0	\$	3,160	40.0	\$ 5,840	74,0	\$	11,566
3	Final Specifications	2.0	\$ 410	2.0	\$	376	10.0	\$ 1,780	16.0	\$	2,528	0.0	\$::	30.0	\$	5,094
4	Final Engineer's Estimate	2.0	\$ 410	2.0	\$	376	10.0	\$ 1,780	16.0	\$	2,528	2,0	\$ 292	32.0	\$	5,386
5	Final QA/QC - Written Responses to 90% Review Comments	0.0	\$ -	10.0	\$ 1,	380	4.0	\$ 712	0,0	\$	150	0.0	\$	14.0	\$	2,592
6	Final MEF Documentation	0.0	\$ -	0.0	\$	ec.	4,0	\$ 712	8.0	\$	1,264	0,0	\$	12.0	\$	1,976
7	Upload Plans and Contract Specifications to FTP	0.0	\$ -	0.0	\$	ē.	1,0	\$ 178	1.0	\$	158	0,0	\$ -	2,0	\$	336
	Total	6.0	\$ 1,230	20.0	\$ 3,	60	43.0	\$ 7,654	61.0	\$	9,638	42.0	\$ 6,132	172.0	\$	28,414
						· ·			*-			008	HR-NTE	7	•	28.400

009	Coordination and Permitting	Pri	rincipal Project Manager			oject gineer	En	gineer	Engir Des					
Item #	Description	\$205/hr		\$188/hr		\$178/hr		\$158/hr		\$146/hr		TOTAL	TC	OTAL
nem #		HRS	FEE	HRS	FEE	HRS	FEE	HRS	FEE	HRS	FEE	HRS	F	FEE
1	City of Tukwila	0.0	\$	10.0	\$ 1,880	20,0	\$ 3,560	0.0	\$	0,0	\$ +	30.0	\$	5,440
2	Port of Seattle	0.0	\$ -	10.0	\$ 1,880	20,0	\$ 3,560	0.0	\$	0.0	\$ -	30.0	\$	5,440
	Total	0.0	\$ =	20.0	\$ 3,760	40.0	\$ 7,120	0.0	\$	0.0	\$ -	60.0	\$:	10,880
The Blueline Group													\$:	10,900

City of SeaTac 2021 Overlays Project

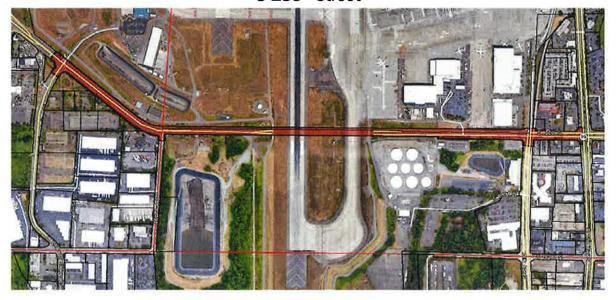
010	Essement Generation (Axis)		Total Cost (Per Axis)	Blueline Markup		
item #	Description	i	 Fixed Fee	15%		TOTAL FEE
			FIXED FEE	Lump Sum		LCC
1	Easement Generation		\$ 5,000	\$ 750	\$	5,750
	Total		\$ 5,000	\$ 750	\$	5,750
		-		010 Fixed Fee	\$	5,800

011	Easement Coordination	Pri	Principal		Project Manager Project Engineer			En	gineer		neering signer		
Item #	Description	\$2	05/hr	\$188/hr		\$178/hr		\$158/hr		\$146/hr		TOTAL	TOTAL
Item #		HRS	FEE	HRS	FEE	HRS	FEE	HRS	FEE	HRS	FEE	HRS	FEE
1.	Survey Coordination	0.0	\$ =	4.0	\$ 752	8.0	\$ 1,424	0.0	\$ -	4.0	\$ 584	16.0	\$ 2,760
2	Easement acquisition support	0.0	\$	4.0	\$ 752	B.0	\$ 1,424	0,0	\$:*:	0,0	\$:**	12.0	\$ 2,176
	Total	0.0	\$:=:	8.0	\$ 1,504	16.0	\$ 2,848	0.0	\$ =	4.0	\$ 584	28.0	\$ 4,936
										011	HR-NTE		\$ 4,900

012	Management Reserve	Total Cost (±10% of 001-011)		
Item #	Description	10%	Γ	TOTAL
Kein w	Description	As Needed		FEE
1	Unassigned Services Reserve	\$ 34,600	\$	34,600
	Total	\$ 34,600	\$	34,600
		012 Not to Exceed	\$	34,600

EXHIBIT C Project Overview

S 188th Street



Military Road and 42nd Ave S

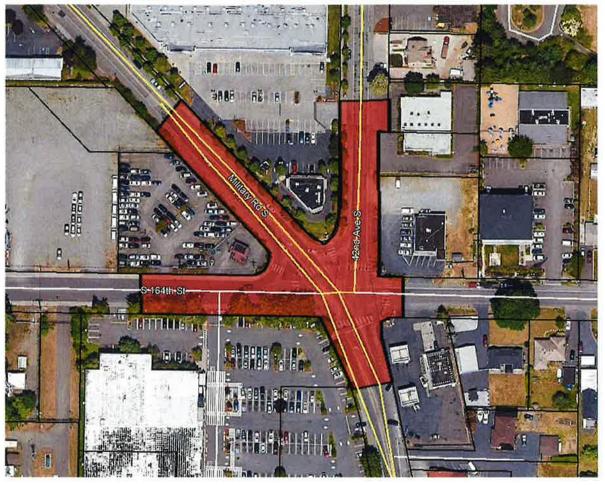


Exhibit D - Pavement Explorations and Design (HWA)

4.2 Project Setup

• **Project Setup/Coordination:** HWA will set up the project in our accounting software and coordinate with the team to set project schedules and goals.

4.2 Pavement Explorations

- Develop Traffic Control Plans for FWD and Pavement Coring: HWA will coordinate
 with the City and design team and develop traffic control plans for FWD testing and
 pavement coring.
- Conduct FWD Testing: HWA will perform FWD testing along the travel lanes, in each direction, of 188th Street. No FWD testing will be conducted at the Military Road intersection due to small project area. Testing will be performed at intervals of approximately 100 feet. FWD testing sequence to consist of three (3) drops at each test location (6k, 9k and 12k). Traffic control will consist of single lane closures on a multi lane roadway and will not require flaggers.
- Pavement Reconnaissance and Utility Locates: HWA will conduct a pavement reconnaissance of both project locations. This reconnaissance will be used to evaluate existing pavement conditions and mark pavement core locations in the field. HWA will arrange utility locates.
- Conduct Pavement Coring: HWA will core the pavement at twenty (20) locations along the two project alignments. Twelve (12) cores will be conducted within the travel lanes of 188th Street and eight (8) cores will be conducted within the travel lanes of various legs of the Military Road intersection. Cores will be performed in distressed areas to assess the depths of cracking as well as in non-distressed areas. Coring will be performed using a 6-inch-diameter, diamond-tipped core barrel. At each core location hand borings will be excavated through the core holes to depths of about two (2) to three (3) feet, in order to evaluate pavement layer thicknesses and subgrade soil conditions. Core holes will be patched with Aquaphalt cold-patch. Traffic control is expected to consist of single lane closures of a multi lane roadway, without flaggers, for 188th Street. Traffic control for the Military Road cores is expected to consist of flaggers with a uniformed police officer.
- **Prepare Core logs**: HWA will prepare summary pavement core logs for each pavement core location.

4.5 Pavement Design Services

- Evaluate FWD Data and Complete Pavement Design: HWA will evaluate the FWD and pavement core data and develop subgrade resilient modulus values for pavement design. HWA will use this information to develop pavement design recommendations for the corridors.
- Prepare Letter Report: HWA will prepare a letter report for the project. This report will contain the results of the explorations and analyses, a site plan showing exploration locations and other pertinent features, summary coring logs, and laboratory test results. The report will provide pavement design recommendations for both project locations.
- Task Management: HWA will provide task management to all pavement design and exploration related aspects of the project. HWA will correspond with the City and the design team in the form of emails, fax, and telephone calls, as necessary.

Assumptions:

- All pavement cores conducted through the roadway will be patched with Aquaphalt coldpatch. No saw cuts and hot mix asphalt patches will be required.
- No FWD testing will be conducted at the Military Road intersection location.
- Pavement cores will be limited to 20 cores.
- Traffic control along 188th Street will consist of single lane closures within a multi lane roadway and will not require flaggers.
- All pavement coring and FWD testing will be conducted during the daytime hours.
- Field exploration will be conducted between the hours of 7AM and 5PM

Project Cost Estimate Seatac Pavement Overlays SeaTac, Washington

HWA GEOSCIENCES INC.

HWA Ref: 2020-P074-21 Date: 19-Jun-20 Prepared by: DJH

Scope of Work See attached scope of work

WORK TASK	Principal	Engr. VII	Engr. II	Gool, III	Gool, II	CAD	Clerical	TOTAL	TOTAL
DESCRIPTION	\$230.00	\$225.00	\$120.00	\$110.00	\$95.00	\$92.00	\$80.00	HOURS	AMOUNT
Project Satup/Coordination		2						2	\$450
Propare TCP and Submit to City				4				4	\$440
Perform FWD Testing				12	12			24	\$2,460
Site Reconnaissance / Mark Pavement Cores and Call Locates		8		8				16	\$2,680
Conduct Pavemetri cores (asume 20 cores)				40	40			80	\$8,200
Prepare Photographic Playement Core Logs		4	-	16				20	\$2,660
FWD Data Analyses & Engineering		24						24	\$5,400
Prepare Letter Report	4	16		4		8	2	34	\$5,856
Consultation / Project Management		8						8	\$1,800
TOTAL LABOR CHARGES:	4	62	0	84	S2	8	2	212	\$29,946

LABORATORY TEST SUMMARY:

	Est. No.	Unit	Total
Test	Tests	Cost	Cost
Grain Size Distribution	0	\$115	50
Atterberg Limits (plasticity index)	0	\$175	\$0
CBR/Proctor	0	\$500	\$0
ARCDATORY TOTAL			70

ESTIMATED DIRECT EXPENSES:	
Mileege @ IRS rate	\$450
FWD Rate (@ \$250/hr)	\$2,000
Pavement Coring (@ \$60/core)	\$1,200
Traffic Control (Flaggers/Arrowboard/Signs)	\$10,000
Uniformed Police officer (assume 2 days)	\$1,000

Laboratory Testing
TOTAL DIRECT EXPENSES: \$14,650

PROJECT TOTALS AND SUMMARY:	
Total Labor Charges	\$29,946
Direct Expenses	\$14,650
GRAND TOTAL:	\$44,596

Assumed Conditions:

1. All coals are estimated, and may be increased or decreased within the limits of the total budget at the discretion of HWA's project manager.

2. No Street Use Permits/ROW Use fees will be required.



Exhibit E - Scope of Services

Introduction

During the term of this AGREEMENT, PH Consulting LLC (PHC) shall perform professional services for The Blueline Group (BG) in support of the following City of SeaTac (CITY) project:

City of SeaTac 2021 Overlays

This Scope of Work is for the 2021 Overlays (Project). This scope includes project coordination, data collection, site reconnaissance, preliminary engineering, final design (including plans, specifications, and estimates), and traffic signal timing/coordination development and implementation support.

Project Description

The 2021 Overlays Project consists of two project sites within City limits separated by approximately two miles. Descriptions of each project site are as follows:

South 188th Street: This project site is located adjacent to the southwest end of SeaTac International Airport. Propose resurfacing approximately 5,200 lineal feet of pavement along South 188th Street corridor between the curb returns of the east approach to International Boulevard and through the intersection at Des Moines Memorial Drive South.

Military Road South Intersection: This project site is a five-way intersection for Military Road South, 42nd Avenue South, and South 164th Street. The east leg of the intersection, South 164th Street, is located within City of Tukwila limits and will not be included in this overlay project. Extents to which overlays will occur along each leg of the intersection has yet to be fully defined.

Assumptions

The following general assumptions have been made in developing the Scope of Work and Budget for the Project. Additional detail has been included in the task descriptions contained in the remainder of the Scope of Work.

General Assumptions

- The AGREEMENT has an anticipated start date of July 28, 2020 and is expected to be ready to advertise for
 construction by January 2021. PHC's ability to meet the completion date is contingent upon timely receipt of
 information from the BG, CITY, and others and provided the scope proceeds as outlined and within the
 timeframe above.
- 2. Drawings will be produced using AutoCAD format. PHC shall be responsible for resolving any conversion issues and ensuring that submitted electronic files adhere to CITY standards.
- 3. Unless otherwise noted, all project deliverables are items that are to be submitted by PHC to the BG. Unless otherwise directed by the BG, PHC will first prepare a draft version of the deliverable and submit it for review and comment. PHC shall address any comments, make revisions, and re-submit the final version, except for plan submittals for which PHC will submit revisions with the next planned submittal. The CITY will provide one consolidated set of CITY review comments to PHC.



- 4. While at the project site, PHC is not responsible for the health and safety of others, other than PHC'S own personnel and is not responsible for those duties that belong to the CITY and/or other entities, and do not relieve the CITY and / or other entity of their obligations, duties, and responsibilities.
- 5. The CITY will provide to PHC all data in the CITY's possession relating to PHC's services on the Project. PHC will reasonably rely upon the accuracy, timeliness, and completeness of the information provided by the CITY only to the extent directed by the CITY.
- 6. The standard of care applicable to PHC's Services will be the degree of skill and diligence normally employed by professional engineers or PHCs performing the same or similar Services at the time said services are performed. PHC will re-perform any services not meeting this standard without additional compensation.

TASK 1

1. Project Coordination, Reporting, and Invoicing

This task will be continuous throughout the Project duration. It will include the work necessary to set up and plan the Project and establish project-specific procedures, including communication, internal quality control (QC), overall Project coordination with BG and Project team, and Project closeout. Components of this work include planning the Project, executing the Project, managing change, and closing the Project.

Assumptions:

Project duration is assumed to be 7 months.

Deliverable(s):

1.1. Project Monitoring, Progress Reporting, and Invoicing

Project monitoring shall include the coordination of design team members, project scheduling, and preparation of a monthly progress report and a monthly billing statement. The monthly progress report shall summarize work completed during the reporting period; issues addressed, and anticipated issues during the next reporting period. Regular e-mail correspondence is anticipated between the project team members to ensure timely response to issues and maintenance of the overall schedule.

Deliverable(s):

- Monthly Progress Reports
- Monthly Billing Statements

1.2. Project Coordination & Team Meetings

PHC will coordinate with BG on a regular basis to keep BG's project manager informed about project issues and schedule. PH will assist in scheduling project related meetings, review, and other coordination activities needed to keep the project moving forward. Communication shall occur a frequency consistent with the overall progress of the project. In addition to required coordination with BG, the sub-consultant shall also provide necessary support of City coordination with KC Signals, Metro Transit, Port of Seattle, and WSDOT. PHC will have internal project coordination meetings throughout the duration of the Project. Team meetings are estimated to be needed on a biweekly basis with BG throughout the duration of the Project; unless the Project is in a CITY review phase and team meetings are not warranted.

Deliverable(s):

- Correspondence Diary
- Meeting Notes



TASK 2

2. Preliminary Design

The preliminary design task includes reviewing BG provided base map, reviewing existing as-built data, and conducting field reconnaissance to verify accuracy of existing facilities and conduit conditions. The preliminary design task will progress the design to 30% contract drawings for review. See Attachment 1 for sheet list. In addition to preparing the contract drawings, PHC will maintain design documentation including design calculations; as well as draft technical memorandums as described herein. Quantity take-offs will be performed under this task and for the final submittal, quantity take-offs will align with the final bid items, to be compiled in Task 6 Cost Estimating.

Assumptions:

- BG will provide electronic Base mapping and CITY will provide existing as-builts along the corridor and at intersections.
- The level of effort and fee estimate for this task is based on the number of sheets as shown in the sheet list
 provided in Attachment 1. The sheet list was prepared based on PHC's current knowledge of the project
 scope and anticipated work elements.
- Utility and Right of Way coordination will be provided by BG.
- Applicable CITY and/or WSDOT Standard Plans will be included in the Contract Provisions.

2.1. Data Collection and Review

BG and the CITY will provide PHC with all reference material pertaining to this project. PHC will review the asbuilts, CAD files, GIS Data, and incorporate relevant information.

2.2. Site Reconnaissance

PHC will visit the project sites and familiarize themselves with the site conditions and data collected for the project. PHC will obtain photographs for design reference. The preliminary base maps will be field checked by PHC and CITY to confirm complete and accurate representation of existing conditions. PHC will also field check the design to assure the design fits the conditions in the field.

After review of the above data, PHC will notify BG of any additional information or clarification required.

2.3. Preliminary Design

PHC will prepare preliminary channelization, signing, traffic signal modifications, and temporary traffic control plans with construction notes and standard details. No wiring diagrams or custom details will be included in the 30% design package. Temporary Traffic Control / Detour Plans will be high level conceptual exhibits for coordination with stakeholders and approval of concept by the City.

Deliverable(s):

- Preliminary Channelization & Signing Sheets (PDF)
- Preliminary Traffic Signal & Street Lighting Improvement Sheets (PDF)
- Conceptual Temporary Traffic Control Exhibits (PDF)
- Preliminary Technical Design Memorandum



2.4. 30% Design Package

PHC will prepare the 30% Design Package submittal which will include the following deliverables in a single comprehensive plan set.

Deliverable(s):

- 30% Plans (PDF) (as described in Subtasks 2.3)
- 30% Opinion of Cost (as described in Task 5)
- Preliminary Technical Design Memorandum (PDF)

TASK 3

3. Contract Drawings

This final design task progresses the design from 30% level to preparing the 60% drawings, 90% contract drawings for review, the contract 100% check-set drawings for review, and the 100% (bid ready) contract drawings. See Attachment 1 for sheet list. In addition to preparing the contract drawings, PHC will maintain design documentation including design calculations. Quantity take-offs will be performed for the final submittal, quantity take-offs will align with the final bid items, to be compiled in Task 5, Cost Estimating.

Assumptions:

The level of effort and fee estimate for this task is based on the number of sheets for each discipline as shown
in the sheet list provided in Attachment 1. The sheet list was prepared based on PHC'S current knowledge of
the project scope and anticipated work elements.

3.1. Channelization & Signing

PHC will prepare channelization improvement plans and details in accordance with CITY standards, CITY guidelines, and MUTCD. PHC will submit to the CITY a set of plans showing proposed locations for channelization, pavement marking, and signage. Channelization is anticipated to be replaced mostly as currently designed with modifications to pavement legends, crosswalks markings, and other site-specific revisions as identified during preliminary design process. Singing improvements will be evaluated during preliminary design and mat include pedestrian warning signage as appropriate per MUTCD requirements. PHC will prepare quantity takeoffs, tabulations, and backup calculations for this work based on CITY standards. PHC will coordinate with CITY staff to receive comments on each plan submittal and respond to each set of comments.

Deliverable(s):

• 60%, 90%, 100% Channelization & Signing Improvement Plans.

3.2. Traffic Signal Modifications

PHC will prepare traffic signal modification plans and details in accordance with CITY standards, CITY guidelines, and MUTCD. PHC will submit to the CITY a set of plans showing proposed locations for new vehicle detection loops, video detection systems, pedestrian signal poles, traffic signal heads, pedestrian push buttons, wiring diagrams, electrical hardware, conduit, and pedestrian poles, as necessary. Pedestrian Signal upgrades to meet ADA requirements are anticipated at the Military Road and Des Moines Dr intersections. Temporary video detection and loop restoration is assumed to be required at the intersections of \$ 188th St with 28th Ave \$ and International Blvd. New permanent video detection is assumed at the Military Road \$ and Des Moines SCOPE OF WORK

PAGE 4 OF 8



intersections. PHC will prepare quantity takeoffs, tabulations, and backup calculations for this work based on CITY standards. PHC will coordinate with CITY staff to receive comments on each plan submittal and respond to each set of comments.

Deliverable(s):

- 60%, 90%, 100% Traffic Signal Improvement Plans
- 60%, 90%, 100% Traffic Signal Details & Wiring Diagrams

3.3. Temporary Traffic Control / Detour Plans

PHC will prepare site specific temporary traffic control plans and details in accordance with WSDOT standard plans, CITY standards, CITY guidelines, and MUTCD. PHC will submit to the CITY a set of plans showing proposed traffic control devices, construction phasing plan, and pedestrian detours. PHC will prepare quantity takeoffs, tabulations, and backup calculations for this work based on CITY standards. PHC will coordinate with CITY staff to receive comments on each plan submittal and respond to each set of comments.

Deliverable(s):

• 60%, 90%, 100% Temporary Traffic Control / Detour Plans

3.4. Submittals (60%, 90%, 100% Bid-Ready)

For each submittal (60%, 90%, 100%) PHC will assemble the plans into a single comprehensive plan set.

3.4.1.60% Review

At the 60% review, 30% comments will be resolved and addressed.

Deliverable(s):

- 60% Progress Plans & Details (1 pdf copy)
- 60% Draft special provisions and contract specifications (as described in Task 4)
- 60% Opinion of Cost (as described in Task 5)

3.4.2.90% Submittal

At the 90% review, 60% comments will be resolved and addressed.

Deliverable(s):

- 90% Plans (1 pdf copy)
- 90% Draft special provisions and contract specifications (as described in Task 4)
- 90% Opinion of Cost (as described in Task 5)

3.4.3. 100% Check/Bid-Ready Submittal

At the 100% review, 90% comments will be resolved and addressed. The purpose of this submittal is for the CITY to check that all comments have been addressed prior to final printing of the bid-ready documents. The 100% check-set submittal will be provided to the CITY in electronic version only. Any 100% Check-Set comments will be resolved and addressed. Plans, Special Provision and Contract Specifications, and Engineer's Estimate will all be stamped and signed by Washington State Professional Engineer.

Deliverable(s):

- 100% Plans (1 electronic pdf copy)
- 100% Special Provisions and contract specifications (as described in Task 4)



100% Opinion of Cost (as described in Task 5)

TASK 4

4. Specifications

PHC will use the Section 1-10, 8-20, 8-21, and 8-22 of WSDOT/APWA 2020 Standard Specifications in preparing the contract documents and the CITY's standard special provisions as applicable to the project design. PHC will provide the contract provisions, special provisions, and appendices for the project to BG for incorporation into the project package. Contract specifications will be prepared beginning with the 60% design submittal. A sample boilerplate provisions will be provided by the CITY.

Deliverable(s):

Project specifications with 60%, 90% (Word, PDF), and 100% bid-ready submittals (as described in Task 3.4)

TASK 5

5. Cost Estimating

Assumptions:

- Cost Opinions at the 30%, 60%, 90%, and 100% submittals shall include specification references. The 30% estimate with specification section references will serve as the specification outline.
- 60%, 90%, and 100% Cost Opinions will list all project bid items.
- All bid item backup information will be included in the 90% and 100% Cost Opinions.
- 90% and 100% Cost Opinions will be submitted in the Bid Proposal Form format.

5.1. Quantities

PHC will compile quantities for the project into a single summary of quantities sheet. PHC will provide BG with calculation and measurement notes for estimated quantities at each design level.

5.2. Opinion of Cost

PHC will prepare an engineer's opinion of cost for the project at the 30%, 60%, 90%, 100% levels of completion. The opinions of cost will be prepared using bid items with documented unit costs, lump-sum prices, and back up. The opinions of cost will be submitted in hard copy and PDF Format and the final opinion of cost will also be submitted in Excel format meeting the CITY's standard format.

Deliverable(s):

- One 30% preliminary level estimate in electronic PDF format.
- One 60% design level estimate in electronic PDF format.
- One 90% design level estimate in electronic PDF format.
- One final 100% bid-ready design level estimate in electronic PDF and one hard copy format.



TASK 6

6. Traffic Analysis / Timing / Coordination Plans

Assumptions:

- CITY will provide available historical traffic collision data and traffic count data information for all applicable intersections.
- CITY will provide existing traffic signal timing sheets and electronic controller database/configuration files for the intersection being analyzed.

6.1. Military Road Intersection Signal Timing Plan Development

PHC will prepare recommended basic signal timing parameters and up to two new time of day coordination plans for the Military Road Intersection. Intersection is anticipated to operate in free mode during off peak periods. Proposed new basic timing parameters will include calculated pedestrian clearance phase timings per MUTCD. PHC will coordinate with King County traffic operations staff to document required timing parameters and understand needs as they relate to signal timing. PH will collect current traffic count data from third party vendor.

Deliverable(s):

- Weekday AM, and PM Synchro models with proposed signal timing plans. (Synchro)
- Traffic Analysis Memorandum documenting approach, proposed timings, coordination periods and Existing and Proposed LOS Results.

TASK 7

Services During Bidding

PHC will provide services during the bid period. Services include preparation of addenda and supporting plan, specification, quantity changes, and preparation of responses to bidder questions.



Sheet List

Sheet List	30% Design	60%, 90% & 100% Design	
Drawing Title	No. of Sheets	No. of Sheets	Com m ents
S 188th St Channelization & Signing	4	4	
Military Road Int. Channelization & Signing	1	1	
Des Moines Drive Signal Improvements	1	1	
Military Road Signal Improvements	1	1	
Traffic Signal Modification Details		1	
28th Ave S & IB/SR-99 Temp Video	1	1	
S 188th St Traffic Control / Detour	1	4	
Military Road Int. Traffic Control	1	2	
TOTAL	10	15	

Consultant Fee Determination - Fee Summary City of SeaTac 2021 Overlays

PH Consulting Staff Category			Hours	Rate	Cost
Principal			0	\$ 168.00	\$ 195
Senior Project Manager			6	\$ 168.00	\$ 1,008.00
Project Manager			144	\$ 144.00	\$ 20,736.00
Senior Traffic Engineer			136	\$ 132.00	\$ 17,952.00
CAD Designer			196	\$ 90.00	\$ 17,640.00
Office Administrator			2	\$ 84.00	\$ 168.00
Office Assistant			12	\$ 48.00	\$ 576.00
	Total Hours		496		\$ 58,080.00
Direct Expenses		Unit	Cost	Total	
Traffic Counts		1	800	\$ 800.00	
Reproduction Costs					
Full Sized Copies (Bond)		1	100	\$ 100.00	
Full Sized (PVC)				\$ (¥)	
Reprographics		1	100	\$ 100.00	
Parking/Tolls				\$ =	
2020 Mileage Rates		240	\$0,575/Mi	\$ 139.20	
			0		
			0		
Sub-Total Direct Expenses					\$ 1,139.20
Sub-Total Direct Labor					\$ 58,080.00
Total Fee					\$ 59,219.20



Consultant Fee Determination - Task Budget Detail City of SeaTac 2021 Overlays

				T 5e	aTac 2021	_		_		_		_		_	
Task No.	Task Description		or Project anager		Project Manager		nior Traffic Engineer	CAI	D Designer	Adı	Office ninistrator		Office	- 1	PH Total
	Hourly Rate	\$	168.00	\$	144.00	\$	132,00	\$	90.00	\$	84.00		48.00		
1.0	PROJECT MONITORING AND COORDINA	ATION		Т											
1,1	Project Monitoring, Progress Reporting, &	Г		-							2		4	_	В
1,2	Invoicing Project Coordination & Team Meetings				12	-	16		16						44
	Task 1.0 Total Hours		0		12		16		16		2		4		50
	Subtotal Task 1.0	\$:5	\$	1,728.00	\$	2,112.00	\$	1,440.00	\$	168.00	\$	192.00	\$	5,640.00
2.0	PRELIMINARY DESIGN (30%)			T				-							
2,1	Data Collection & Review				4		4		В						16
2,2	Site Reconnaissance						8		8						16
2,3	Preliminary Design		2		16		16		32			_			66
2,4	30% Design Package				2	-	2		4		_		2	_	10
	Task 2,0 Total Hours		2		22	Г	30		52		0		2		108
	Subtotal Task 2,0	\$	336.00	\$	3,168.00	\$	3,960.00	\$	4,680.00	\$		\$	96.00	\$	12,240.00
3.0	Contract Drawings (60%/90%/100%)														
3,1	Channelization & Signing Plans				16		8		32						56
32	Traffic Signal Modifications	_		-	4	\vdash	24		32	_				_	
3,3			_	-		H	8	-		-		_		_	
- 2	Temporary Traffic Control Plans	_		_	24	L	_	_	32	_		_		_	
3.4	Submittals			_	8		8		8			_	2		
	Took 2.0 Total Naves	_	0	-	52	H	48	-	104	-	0		2	_	0
	Task 3.0 Total Hours	_	U	_		L		_		_	U	_	_		56
	Subtotal Task 3.0	\$	- 3	\$	7,488.00	\$	6,336.00	\$	9,360.00	\$		\$	96.00	\$	23,280.00
4.0	Specifications (60%/90%/100%)							1							
4,1	Specifications				40		8		4				4		56
-	Tack 4.0 Tatal Ulavia	_	0	-	40	\vdash	8	\vdash	4	_	D	_	4	_	0
	Task 4,0 Total Hours			-	40	_		-			U	_			56
	Subtotal Task 4.0	\$	- 2	\$	5,760.00	\$	1,056.00	\$	360,00	\$		\$	192.00	\$	7,368.00
5.0	Cost Estimating (30%/60%/90%/100%)														
5.1 5.2	Quantities		2		8		8		B 8			_			26
3.2	Opinion of Cost				•		-								26 0
	Task 5.0 Total Hours		4		16	Г	16		16		0		0		52
	Subtotal Task 5.0	\$	672.00	\$	2,304.00	\$	2,112.00	\$	1,440.00	\$		\$		\$	6,528.00
6.0	Traffic Analysis / Timing / Coordination P	lane		Ė		Ė				Ė	7-		_	Ė	
6,1	Military Road Signal Timing	Idiria		_		H	16			-				_	16
	, too by the same														0
	Task 6.0 Total Hours		0		0		16		0		0		0		16
	Subtotal Task 6.0	\$:	\$	9	\$	2,112.00	\$	5.	\$	3	\$		\$	2,112.00
7.0	Services During Bidding	9.0				no.							1113		
7.1	Services During Bidding				2		2		4						В
	Task 7,0 Total Hours		0		2		2	_	4		0	-	0		8
	Subtotal Task 7.0	\$	U -	\$	288,00	\$	264.00	\$	360,00	\$	<u></u>	\$	- U	\$	912.00
	Oublote Teah 7.0	_		-	230,00	٣	237,00	-	550,00			Ψ	0	.	312.00
				-		-				_					
	PH TOTAL HOURS		6		144		136	n.c-	196		2		12		346
	TOTAL ALL TASKS	\$	1,008.00	\$	20,736.00	\$	17,952.00	\$	17,640.00	\$	168.00	5	576.00	5	58,080.00

