



# City of Tukwila Transportation and Infrastructure Services Committee

- ❖ Kate Kruller, Chair
- ❖ Mohamed Abdi
- ❖ Tosh Sharp

<b>Distribution:</b> K. Kruller M. Abdi C. Hougardy T. Sharp H. Ponnekanti S. Kim (email) G. Lerner (email)	City Attorney (email) Clerk File Copy  Place pkt pdf on SharePoint Z Trans & Infra Agendas  email cover to: F. Ayala, A. Le, C. O'Flaherty, A. Youn, B. Saxton, S. Norris, L. Humphrey
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## AGENDA

**MONDAY, MARCH 21, 2022 – 5:30 PM**  
**HYBRID MEETING – ONSITE AND VIRTUAL**

**DUWAMISH CONFERENCE ROOM, 6300 BUILDING, 2<sup>ND</sup> FLR**  
**MS Teams: [Click here to join the meeting](#)**

**Virtual Meeting - Members of the public may listen by dialing 1-253-292-9750 and entering conference ID 96968911#**  
**6300 BUILDING, SUITE 100)**

Item	Recommended Action	Page
<b>1. PRESENTATIONS</b>		
<b>2. BUSINESS AGENDA</b>		
a) S 152nd Street Safe Routes to School Project Consultant Selection and Agreement (C. Knighton)	a) Forward to 04/04/2022 Regular Consent Agenda	Pg. 1
b) Fleet & Facilities Public Works Shop - Equipment (C. Lee Gray)	b) Forward to 03/21/2022 Regular New Business	Pg. 27
c) Neighborhood Traffic Calming Program - Allentown Neighborhood Transportation Study (C. Knighton)	c) Forward to 03/28/2022 Committee of the Whole	Pg. 31
d) 42nd Ave S Bridge Replacement Project Type, Size, and Location Report (A. Cox)	d) Forward to 03/28/2022 Committee of the Whole	Pg. 47
<b>3. MISCELLANEOUS</b>	<b>Future Agenda:</b>	

**Next Scheduled Meeting: April 4, 2022**





# INFORMATIONAL MEMORANDUM

TO: **Transportation and Infrastructure Services Committee**  
 FROM: **Hari Ponnekanti, Public Works Director/City Engineer**  
 BY: **Cyndy Knighton, Senior Program Manager**  
 CC: **Mayor Ekberg**  
 DATE: **March 18, 2022**  
 SUBJECT: **S 152<sup>nd</sup> Street Safe Routes to School Project**  
**Project Nos. 91710303 and 90341206**  
**Consultant Selection and Agreement**

## **ISSUE**

Authorize the Mayor to execute a consultant agreement with KPG-Psomas to provide preliminary engineering design services for the S 152<sup>nd</sup> Street Safe Routes to School (SRTS) Project.

## **BACKGROUND**

The S 152<sup>nd</sup> Street SRTS project will design new curb, gutter, and sidewalks along the stretch of road between Tukwila International Boulevard and 42<sup>nd</sup> Avenue S. Additionally, improvements to the existing storm drainage system will be included to improve operation and water quality in the Gilliam Creek basin. On-street parking, landscaping, amenities, and wayfinding may also be included after reaching out to the neighborhood to solicit preferences.

## **ANALYSIS**

The City issued a Request for Proposals for this project on October 5, 2021. Three proposals were submitted by the deadline of October 26, 2021: KPG, OTAK, and Transpo Group. All three firms were deemed highly qualified, and all were invited to interview.

After scoring the proposals and conducting interviews, staff selected KPG as the most qualified firm. After negotiations, the attached Consultant Agreement was developed.

## **FINANCIAL IMPACT**

The cost estimate provided by KPG for design is for \$453,254.00. The contract will be funded in part by a Sound Transit System Access Fund Grant, awarded to the City for design in 2020. Remaining costs are related to drainage system improvements and will be covered by the NW Gilliam Basin Storm Drainage System CIP budget.

	<b><u>Cost Estimate</u></b>	<b><u>Budget</u></b>
Consultant Agreement	\$453,254	
System Access Fund Grant		\$369,000
NW Gilliam Basin Storm Drainage System		\$100,000
<b>Total</b>	<b>\$453,254</b>	<b>\$469,000</b>

## **RECOMMENDATION**

The Council is being asked to approve the consultant agreement with KPG-Psoma in the amount of \$448,994.00 and consider this item on the Consent Agenda at the April 4, 2022 Regular Meeting.

**ATTACHMENTS:** Page 3, 2021 CIP  
Page 93, 2021 CIP  
Consultant Agreement

## CITY OF TUKWILA CAPITAL PROJECT SUMMARY

2021 to 2026

**PROJECT:** S 152nd St Safe Routes to School

Project No. 91710303

**DESCRIPTION:** Install curb, gutter, and sidewalks on both sides of S 152nd St, including widening pavement width by three feet to construct an on-street parking lane as a buffer between the roadway and sidewalk on the north side.

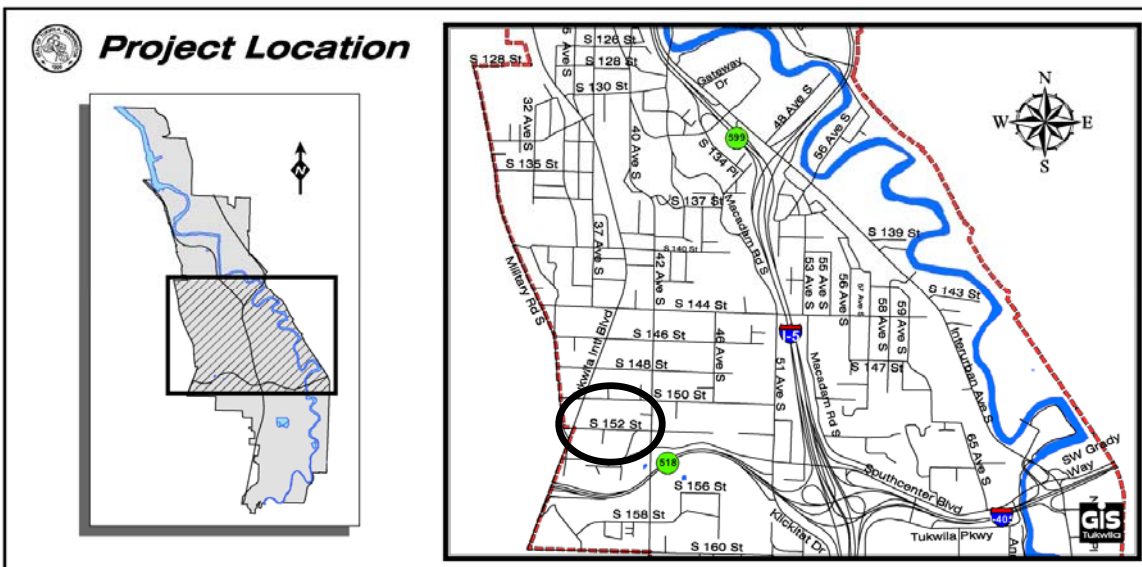
**JUSTIFICATION:** Enhance safety for students walking to Foster High School, Showalter Middle School, and Thorndyke Elementary School and encourage transportation choices for the neighborhood.

**STATUS:** Design funded, construction pending SRTS grant funding.

**MAINT. IMPACT:** New sidewalk and pavement will need to be maintained.

**COMMENT:** Sound Transit System Access Fund Grant of \$369k for design. Apply for SRTS grant in 2021 for construction.

FINANCIAL (in \$000's)	Through		Estimated								
	2019	2020	2021	2022	2023	2024	2025	2026	BEYOND	TOTAL	
<b>EXPENSES</b>											
Design			369							369	
Land (R/W)										0	
Const. Mgmt.				400						400	
Construction				2,200						2,200	
<b>TOTAL EXPENSES</b>	<b>0</b>	<b>0</b>	<b>369</b>	<b>2,600</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,969</b>	
<b>FUND SOURCES</b>											
Awarded Grant			369							369	
Proposed Grant				2,340						2,340	
Solid Waste Utility Tax										0	
Mitigation Expected										0	
City Oper. Revenue	0	0	0	260	0	0	0	0	0	260	
<b>TOTAL SOURCES</b>	<b>0</b>	<b>0</b>	<b>369</b>	<b>2,600</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,969</b>	



# CITY OF TUKWILA CAPITAL PROJECT SUMMARY

2021 to 2026

**PROJECT:** Northwest Gilliam Basin Storm Drainage System Project No. 90341206

**DESCRIPTION:** Upgrade existing storm drainage system. Provide water quality treatment manholes at the downstream end of the retrofitted drainage systems. Provide asphalt overlay and extruded asphalt curb for all streets.

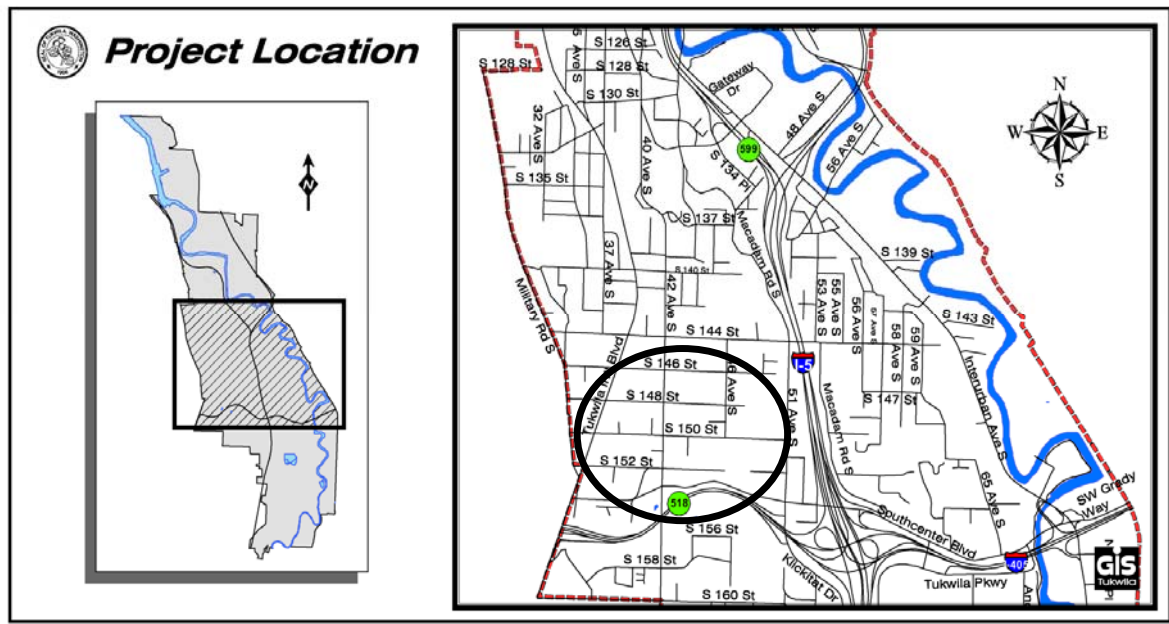
**JUSTIFICATION:** Reduces right-of-way and private property flooding by increasing the hydraulic capacity of the existing storm drainage system. Water quality manholes remove sediment and oil from street runoff.

**STATUS:** S 146th St was completed in 2009 and S 150th in 2015 with Thorndyke Safe Routes to School. Remaining streets include S 148th St and S 152nd St.

**MAINT. IMPACT:** Expected to decrease maintenance.

**COMMENT:** Where feasible, combine with future water quality and overlay projects to reduce costs and construction impact.

FINANCIAL (in \$000's)	Through		Estimated							TOTAL
	2019	2020	2021	2022	2023	2024	2025	2026	BEYOND	
<b>EXPENSES</b>										
Design				100						100
Land (R/W)										0
Const. Mgmt.					40					40
Construction					800					800
<b>TOTAL EXPENSES</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>100</b>	<b>840</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>940</b>
<b>FUND SOURCES</b>										
Awarded Grant										0
Proposed Grant										0
Mitigation Actual										0
Mitigation Expected										0
Utility Revenue	0	0	0	100	840	0	0	0	0	940
<b>TOTAL SOURCES</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>100</b>	<b>840</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>940</b>





**PROFESSIONAL SERVICES AGREEMENT**

*(Includes consultants, architects, engineers, accountants, and other professional services)*

**THIS AGREEMENT** is entered into between the City of Tukwila, Washington, hereinafter referred to as “the City”, and KPG-Psomas, hereinafter referred to as “the Consultant”, in consideration of the mutual benefits, terms, and conditions hereinafter specified.

1. **Project Designation.** The Consultant is retained by the City to perform engineering design services in connection with the project titled S 152<sup>nd</sup> Street Safe Routes to School.
2. **Scope of Services.** The Consultant agrees to perform the services, identified on Exhibit “A” attached hereto, including the provision of all labor, materials, equipment and supplies.
3. **Duration of Agreement; Time for Performance.** This Agreement shall be in full force and effect for a period commencing upon execution and ending December 31, 2023, unless sooner terminated under the provisions hereinafter specified. Work under this Agreement shall commence upon written notice by the City to the Consultant to proceed. The Consultant shall perform all services and provide all work product required pursuant to this Agreement no later than December 31, 2023 unless an extension of such time is granted in writing by the City.
4. **Payment.** The Consultant shall be paid by the City for completed work and for services rendered under this Agreement as follows:
  - A. Payment for the work provided by the Consultant shall be made as provided on Exhibit “B” attached hereto, provided that the total amount of payment to the Consultant shall not exceed \$453,254.00 without express written modification of the Agreement signed by the City.
  - B. The Consultant may submit vouchers to the City once per month during the progress of the work for partial payment for that portion of the project completed to date. Such vouchers will be checked by the City and, upon approval thereof, payment shall be made to the Consultant in the amount approved.
  - C. Final payment of any balance due the Consultant of the total contract price earned will be made promptly upon its ascertainment and verification by the City after the completion of the work under this Agreement and its acceptance by the City.
  - D. Payment as provided in this section shall be full compensation for work performed, services rendered, and for all materials, supplies, equipment and incidentals necessary to complete the work.
  - E. The Consultant’s records and accounts pertaining to this Agreement are to be kept available for inspection by representatives of the City and the state of Washington for a period of three (3) years after final payments. Copies shall be made available upon request.

5. **Ownership and Use of Documents.** All documents, drawings, specifications and other materials produced by the Consultant in connection with the services rendered under this Agreement shall be the property of the City whether the project for which they are made is executed or not. The Consultant shall be permitted to retain copies, including reproducible copies, of drawings and specifications for information, reference and use in connection with the Consultant's endeavors. The Consultant shall not be responsible for any use of the said documents, drawings, specifications or other materials by the City on any project other than the project specified in this Agreement.
6. **Compliance with Laws.** The Consultant shall, in performing the services contemplated by this Agreement, faithfully observe and comply with all federal, state, and local laws, ordinances and regulations, applicable to the services rendered under this Agreement.
7. **Indemnification.** The Consultant shall defend, indemnify and hold the City, its officers, officials, employees and volunteers harmless from any and all claims, injuries, damages, losses or suits including attorney fees, arising out of or resulting from the acts, errors or omissions of the Consultant in performance of this Agreement, except for injuries and damages caused by the sole negligence of the City.

Should a court of competent jurisdiction determine that this Agreement is subject to RCW 4.24.115, then, in the event of liability for damages arising out of bodily injury to persons or damages to property caused by or resulting from the concurrent negligence of the Consultant and the City, its officers, officials, employees, and volunteers, the Consultant's liability hereunder shall be only to the extent of the Consultant's negligence. It is further specifically and expressly understood that the indemnification provided herein constitutes the Consultant's waiver of immunity under Industrial Insurance, Title 51 RCW, solely for the purposes of this indemnification. This waiver has been mutually negotiated by the parties. The provisions of this section shall survive the expiration or termination of this Agreement.

8. **Insurance.** The Consultant shall procure and maintain for the duration of the Agreement, insurance against claims for injuries to persons or damage to property which may arise from or in connection with the performance of the work hereunder by the Consultant, its agents, representatives, or employees. Consultant's maintenance of insurance as required by the agreement shall not be construed to limit the liability of the Consultant to the coverage provided by such insurance, or otherwise limit the City's recourse to any remedy available at law or in equity.

A. **Minimum Amounts and Scope of Insurance.** Consultant shall obtain insurance of the types and with the limits described below:

1. **Automobile Liability** insurance with a minimum combined single limit for bodily injury and property damage of \$1,000,000 per accident. Automobile Liability insurance shall cover all owned, non-owned, hired and leased vehicles. Coverage shall be written on Insurance Services Office (ISO) form CA 00 01 or a substitute form providing equivalent liability coverage. If necessary, the policy shall be endorsed to provide contractual liability coverage.
2. **Commercial General Liability** insurance with limits no less than \$2,000,000 each occurrence, \$2,000,000 general aggregate. Commercial General Liability insurance shall be at least as broad as ISO occurrence form CG 00 01 and shall cover liability arising from premises, operations, stop-gap independent contractors and personal injury and advertising injury. The City shall be named as an additional insured under the Consultant's Commercial General Liability insurance policy with respect to the work performed for the City using an additional insured endorsement at least as broad as ISO endorsement form CG 20 26.
3. **Workers' Compensation** coverage as required by the Industrial Insurance laws of the State of Washington.

4. Professional Liability with limits no less than \$2,000,000 per claim and \$2,000,000 policy aggregate limit. Professional Liability insurance shall be appropriate to the Consultant's profession.
- B. **Public Entity Full Availability of Contractor Limits.** If the Contractor maintains higher insurance limits than the minimums shown above, the Public Entity shall be insured for the full available limits of Commercial General and Excess or Umbrella liability maintained by the Contractor, irrespective of whether such limits maintained by the Contractor are greater than those required by this Contract or whether any certificate of insurance furnished to the Public Entity evidences limits of liability lower than those maintained by the Contractor.
- C. **Other Insurance Provision.** The Consultant's Automobile Liability and Commercial General Liability insurance policies are to contain, or be endorsed to contain that they shall be primary insurance with respect to the City. Any Insurance, self-insurance, or insurance pool coverage maintained by the City shall be excess of the Consultant's insurance and shall not be contributed or combined with it.
- D. **Acceptability of Insurers.** Insurance is to be placed with insurers with a current A.M. Best rating of not less than A:VII.
- E. **Verification of Coverage.** Consultant shall furnish the City with original certificates and a copy of the amendatory endorsements, including but not necessarily limited to the additional insured endorsement, evidencing the insurance requirements of the Contractor before commencement of the work. Upon request by the City, the Consultant shall furnish certified copies of all required insurance policies, including endorsements, required in this Agreement and evidence of all subcontractors' coverage.
- F. **Notice of Cancellation.** The Consultant shall provide the City with written notice of any policy cancellation, within two business days of their receipt of such notice.
- G. **Failure to Maintain Insurance.** Failure on the part of the Consultant to maintain the insurance as required shall constitute a material breach of contract, upon which the City may, after giving five business days notice to the Consultant to correct the breach, immediately terminate the contract or, at its discretion, procure or renew such insurance and pay any and all premiums in connection therewith, with any sums so expended to be repaid to the City on demand, or at the sole discretion of the City, offset against funds due the Consultant from the City.
9. **Independent Contractor.** The Consultant and the City agree that the Consultant is an independent contractor with respect to the services provided pursuant to this Agreement. Nothing in this Agreement shall be considered to create the relationship of employer and employee between the parties hereto. Neither the Consultant nor any employee of the Consultant shall be entitled to any benefits accorded City employees by virtue of the services provided under this Agreement. The City shall not be responsible for withholding or otherwise deducting federal income tax or social security or for contributing to the state industrial insurance program, otherwise assuming the duties of an employer with respect to the Consultant, or any employee of the Consultant.
10. **Covenant Against Contingent Fees.** The Consultant warrants that he has not employed or retained any company or person, other than a bonafide employee working solely for the Consultant, to solicit or secure this contract, and that he has not paid or agreed to pay any company or person, other than a bonafide employee working solely for the Consultant, any fee, commission, percentage, brokerage fee, gifts, or any other consideration contingent upon or resulting from the award or making of this contract. For breach or violation of this warrant, the City shall have the right to annul this contract without liability, or in its discretion to deduct from the contract price or consideration, or otherwise recover, the full amount of such fee, commission, percentage, brokerage fee, gift, or contingent fee.



11. **Discrimination Prohibited.** Contractor, with regard to the work performed by it under this Agreement, will not discriminate on the grounds of race, religion, creed, color, national origin, age, veteran status, sex, sexual orientation, gender identity, marital status, political affiliation, the presence of any disability, or any other protected class status under state or federal law, in the selection and retention of employees or procurement of materials or supplies.
12. **Assignment.** The Consultant shall not sublet or assign any of the services covered by this Agreement without the express written consent of the City.
13. **Non-Waiver.** Waiver by the City of any provision of this Agreement or any time limitation provided for in this Agreement shall not constitute a waiver of any other provision.
14. **Termination.**
  - A. The City reserves the right to terminate this Agreement at any time by giving ten (10) days written notice to the Consultant.
  - B. In the event of the death of a member, partner or officer of the Consultant, or any of its supervisory personnel assigned to the project, the surviving members of the Consultant hereby agree to complete the work under the terms of this Agreement, if requested to do so by the City. This section shall not be a bar to renegotiations of this Agreement between surviving members of the Consultant and the City, if the City so chooses.
15. **Applicable Law; Venue; Attorney's Fees.** This Agreement shall be subject to, and the Consultant shall at all times comply with, all applicable federal, state and local laws, regulations, and rules, including the provisions of the City of Tukwila Municipal Code and ordinances of the City of Tukwila. In the event any suit, arbitration, or other proceeding is instituted to enforce any term of this Agreement, the parties specifically understand and agree that venue shall be properly laid in King County, Washington. The prevailing party in any such action shall be entitled to its attorney's fees and costs of suit. Venue for any action arising from or related to this Agreement shall be exclusively in King County Superior Court.
16. **Severability and Survival.** If any term, condition or provision of this Agreement is declared void or unenforceable or limited in its application or effect, such event shall not affect any other provisions hereof and all other provisions shall remain fully enforceable. The provisions of this Agreement, which by their sense and context are reasonably intended to survive the completion, expiration or cancellation of this Agreement, shall survive termination of this Agreement.
17. **Notices.** Notices to the City of Tukwila shall be sent to the following address:
 

City Clerk  
City of Tukwila  
6200 Southcenter Boulevard  
Tukwila, WA 98188

Notices to Consultant shall be sent to the following address:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_
18. **Entire Agreement; Modification.** This Agreement, together with attachments or addenda, represents the entire and integrated Agreement between the City and the Consultant and supersedes all prior negotiations, representations, or agreements written or oral. No amendment or modification of this Agreement shall be of any force or effect unless it is in writing and signed by the parties.

DATED this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

CITY OF TUKWILA

CONSULTANT

\_\_\_\_\_  
Allan Ekberg, Mayor

By: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Title: \_\_\_\_\_

Attest/Authenticated:

Approved as to Form:

\_\_\_\_\_  
City Clerk, Christy O'Flaherty

\_\_\_\_\_  
Office of the City Attorney

# **SCOPE OF SERVICES**

## **Exhibit A**

### **City of Tukwila S 152<sup>nd</sup> St Non Motorized Connections Project City Project No. 91710303 KPG Project No 21120**

KPG Psomas Inc  
February 2022

#### **Project Description and Goals**

This project will design and construct sidewalks on S 152nd Street as well as wayfinding at nine critical locations to assist pedestrians and cyclists on decision making for routing and safe walking. The new sidewalks will eliminate a gap in the pedestrian network that services both the Tukwila International Boulevard Link Station (TIBS) and the local K-12 schools in the Tukwila School District. The TIBS station is within 1/3 mile of the project and has a high rate of local pedestrians accessing the high-capacity transit site. Improving the walkability of surrounding streets is expected to increase pedestrian access to the TIBS site and reduce the reliance on local vehicular access into the surrounding parking lot and overflow parking areas.

The City of Tukwila is in the process of creating zoning changes for the surrounding Tukwila International Boulevard (TIB) neighborhood, supporting the creation of a transit oriented development (TOD) neighborhood. Residential densities are expected to increase substantially over the current level, parking standards would be reduced to encourage and support transit mobility, and pedestrian passages along with improved sidewalks on existing streets would create greater walkability. A new high-density housing (Bellwether) site on S 152nd Street is providing a north/south pedestrian connection from the public street to the TIBS overflow parking lot, north of the TIBS site. Wayfinding along this street and at key locations in the immediate vicinity will be included.

This project is envisioned to change the current condition of two 10' wide lanes and 5' paved shoulder on the north side of the street, to maximize the use of the existing 50' right-of-way to include on-street parking, street trees, and separated sidewalks. Additionally, the storm drainage system will be upgraded to close intermittent open ditches, replace existing conveyance pipes where necessary, and install water quality improvements. Undergrounding of the overhead aerial utilities is not expected.

#### *Key Elements:*

- ◆ Final design and PS&E for all work on S 152nd Street
- ◆ SEPA checklist
- ◆ Coordination with Bellwether site development for connections to the north/south pedestrian corridor.
- ◆ Piping intermittent open ditch drainage
- ◆ Utility coordination

The work included in this agreement includes all necessary survey, permitting, and design to complete the project as described in the scope of work. No underground utility construction is anticipated or included in the scope of work. A new conveyance system is expected to be designed and constructed with these improvements. Water quality and detention facilities are expected to be incorporated into the proposed drainage system.

*Potential Supplemental Work:*

- ◆ Environmental studies
- ◆ Construction support

*Assumptions for the S 152<sup>nd</sup> St Non Motorized Connections*

- ◆ Federal Funding will not be procured for the construction phase of the improvements.
- ◆ ROW acquisition will not be required for this project. Permanent and Temporary Easements may be required and KPG will utilize subconsultant for documentation.
- ◆ SEPA will be required.
- ◆ DAHP EZ 1 Form per EO 21-02 will be required.
- ◆ Drainage & Water Quality Reports will be required.
- ◆ Environmental Documentation beyond SEPA and DAHP EZ form will not be required.
- ◆ Undergrounding of the aerial utilities is not included in this scope of work.
- ◆ SCL will install required project illumination. KPG will document and identify where supplemental illumination is required. Specific illumination plan and specification preparation within the construction documents will not be required.
- ◆ City will provide As-Built Plans for existing development and 42<sup>nd</sup> Ave S Stormwater Facility.

*Deliverables*

- ◆ Scroll Plots and meeting notes during the alternative selection process
- ◆ 30% review submittal with Plans and Estimate
- ◆ 60% review submittal with Plans, Specifications, and Estimate
- ◆ 90% review submittal with Plans, Specifications, and Estimate
- ◆ 100% review submittal with Plans, Specifications, and Estimate
- ◆ Routing of 30%, 60%, and 90% Plans to utilities for review and comment.
- ◆ Bid Documents and Engineer's Estimate.
- ◆ Coordinate upload of Plans and Specifications to Builders Exchange.
- ◆ Bid Analysis and recommendation for award.
- ◆ Preconstruction Meeting Attendance.
- ◆ Grant writing applications
- ◆ Illumination Memo
- ◆ Draft and Final Drainage Report
- ◆ Geotechnical Report
- ◆ Utility and Property Owner Coordination Logs
- ◆ SEPA Checklist
- ◆ EZ 1 Form for EO 21-02

## Scope of Work:

### Task 1 Project Management/Coordination/Administration.

- 1.1 The Consultant will provide continuous project management for the project duration through the bid opening and award in April 2023 (16 Months).
- 1.2 The Consultant shall prepare monthly progress reports identifying work in progress, upcoming work elements, and reporting of any delays, problems, or additional information needs. Any elements that may impact project completion time and cost shall be highlighted. Monthly invoices for work completed to date shall be submitted to the City.
- 1.3 The Consultant shall prepare for and attend up to two coordination meetings per month (estimate 26 meetings) with the City during the project to discuss design issues and track progress. The Consultant shall prepare a summary of design issues and discussion items for all meetings.

#### Deliverables

- ◆ Project Schedule and necessary updates
- ◆ Monthly progress reports and invoicing
- ◆ Meeting agendas and minutes including a summary of decisions made / needed resulting from design coordination meetings

### Task 2 Survey and Base Mapping.

#### Limits of survey:

- S 152<sup>nd</sup> St (from right of way to right of way plus additional 10' and an additional 15' at driveways and 50' at side streets) from 5' west of curb radii at Tukwila International Boulevard to the east ROW line along 42<sup>nd</sup> Ave S.
  - Existing 42<sup>nd</sup> Ave S Stormwater Detention facility including 20' beyond the fence line to east, north and south.
  - 42<sup>nd</sup> Ave S (from right of way to right of way) 150' north and south of the S 152<sup>nd</sup> St Intersection.
- 2.1 Establish horizontal and vertical control points along the corridor for field topographic survey. Basis of control will be NAD83(2011) and NAVD88. The CONSULTANT will locate, field survey, and calculate positions for all 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. Monuments or corners to be located and field surveyed include the following:
    - Section Corners
    - Side street monuments
    - Property Corners
  - 2.2 Field Survey and Note Reduction. Perform note reduction of the field survey data.
  - 2.3 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 as well as incorporating existing mapping data provided by the City.

- 2.4 The Consultant will retain the services of a firm to field locate and paint all utility locations within the project corridor so that they can be surveyed and incorporated into the base maps. Service line locations and gravity storm and sewer will not be field located. Perform field survey to locate paint marks including surface features (valves, manholes, catch basins, junction boxes, vaults, etc). Irrigation systems will not be included.
- 2.5 Perform observation and measure-downs of existing storm drain catch basins and 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 storm drainage pipes will be documented. These observations will be made from the surface.
- 2.6 The Consultant shall survey the utility potholes performed by franchise utilities.
- 2.7 QA/QC review base map for completeness and accuracy and incorporate findings.

#### Deliverables

- ◆ Electronic copies of the completed field topographic base map in PDF and AutoCAD.

### **Task 3 Right of Way Calculations**

Perform the following work items necessary to establish the existing right-of-way (ROW) along the corridor based on publicly available information. Title research or property rights acquisition is not anticipated or included in the project budget. Research Records. Determine which existing corners and monuments should be field located and surveyed.

- 3.1 Determine and order title reports for up to five (5) parcels requiring easement acquisition from a title company acceptable to the City.
- 3.2 Calculations for ROW centerline alignment and ROW lines. Using the research information and the survey mapping work described above, calculate location and surveyed corners, roadway features and monuments. The Consultant will determine the centerline alignment for S 152<sup>nd</sup> St within the project limits as defined in this scope. The ROW centerline will be defined geometrically using Washington state plane coordinates and stationing will be assigned to the alignment.
- 3.3 Mark easement areas. Easement areas will be marked in white paint or survey hubs for viewing by the land owners and ROW Consultant.

#### Deliverables:

- ◆ Right of way information will be incorporated into the project base maps.
- ◆ Title reports for affected properties.

- ◆ Easement lines will be incorporated into the construction plan set.

#### **Task 4 Preliminary Design**

The Consultant shall prepare preliminary engineering of the S 152<sup>nd</sup> Non Motorized Improvements. Preliminary engineering will include the following sub-tasks:

- 4.1 The Consultant shall evaluate up to five cross sections to determine the best fit cross section for the corridor. Cross sections and their pros and cons will be presented to City for evaluation. The Consultant shall make a recommendation on which cross sections are most appropriate for the corridor.
- 4.2 The Consultant shall evaluate the feasibility of up to two new crossings of S 152<sup>nd</sup> St. One mid block crossing connection to the Bellwether shared use path and another potential crossing at 40<sup>th</sup> Ave S. Enhanced crossing treatments will be evaluated for both crossings, including RRFB analysis.
- 4.3 The Consultant shall provide assistance to the City on identifying opportunities for the integration of the directional wayfinding signs, to guide users to the major points of interest. The Consultant shall coordinate with City to create design parameters for the graphic content/aesthetic, theme/character development and alternatives for thematic elements of the wayfinding. The Consultant shall attend up to (2) meetings for design, review and approval wayfinding design. The Consultant shall integrate the wayfinding design into Urban Design Toolkit deliverable.
- 4.4 The Consultant shall evaluate existing illumination system along the project limits. Work shall include, but not limited to, identifying poorly illuminated areas, taking inventory of existing fixtures, and model performance of the existing system. Illumination improvements will likely include installation of new luminaires on existing poles and/or adding utility poles and luminaires. KPG will provide the illumination report and proposed pole locations to SCL for installation of the improvements.
- 4.5 The consultant shall prepare a draft design memo is based on the WSDOT Design Manual (M 22-01), the American Association of State Highway Transportation Officials (AASHTO) publication A Policy of Geometric Design of Highways and Streets and the City of Tukwila Public Works Development Standards.
- 4.6 The Consultant shall prepare 30% Design Plans. Attend a meeting with City staff to go through proposed improvements and discuss costs, and/or utilities to coordinate relocations or design modifications.

It is anticipated that 30% plans will include the following sheets. Sheets may be combined or separated for clarity:

Cover sheet	(1 sheet)
Sheet Index, Survey Control & Alignment Data	(1 sheet)
Legend and Abbreviations	(1 sheet)
Roadway Typical Sections	(1 sheets)

Site Preparation Plans	(2 sheets)
Roadway & Drainage Plan	(4 sheets)
Details	(2 sheets)
Curb Ramp & Crossing Plan	(4 sheets)
Landscape Plans	(2 sheets)
Irrigation Plans	(2 sheets)
Urban Design Plans	(2 sheets)
Wayfinding Plan	(2 sheets)

TOTAL = 26 sheets

- 4.7 The Consultant shall prepare a 30% Cost Estimate.
- 4.8 The Consultant shall provide support of the City during coordination with Sound Transit for connection to the parking station south of the project location.
- 4.9 Provide senior QA/QC review of preliminary deliverables.

#### Deliverables

- ◆ 5 Alternative Sections presented in scroll plot PDF format.
- ◆ 30% Plan Set 1 electronic copy in PDF format.
- ◆ Illumination Technical Memo, 1 bound copy and 1 electronic file in PDF format.
- ◆ 30% Cost Estimate, 1 electronic file in PDF format.
- ◆ Urban Design Toolkit including alternatives for wayfinding signage.
- ◆ Design Memorandum.

#### Assumptions

- ◆ Illumination improvements will include installation of new luminaires on existing poles and/or adding utility poles and luminaires. It is anticipated that KPG will provide proposed pole locations and that design and installation work will be performed by SCL.

### **Task 5 Stormwater Management**

The Consultant shall prepare preliminary engineering of stormwater management and conveyance facilities required for the project. In addition, the consultant shall assess the existing 42<sup>nd</sup> Ave S Stormwater Pond for incorporation into the stormwater management requirements of the corridor improvements. Preliminary engineering will include the following sub-tasks:

- 5.1 Compile and review existing stormwater data, including GIS data, record drawings, and previous storm drainage reports for projects in the vicinity of the proposed roadway improvements, including the 42<sup>nd</sup> Ave S Stormwater Facility.
- 5.2 Perform an offsite analysis in accordance with of the 2021 King County Surface Water Design Manual (KCSWDM). The analysis will extend downstream from the approximately 1/4 mile to the 42<sup>nd</sup> Ave S Stormwater Facility and the Gilliam Creek



outfall.

- 5.3 Analyze all applicable Core and Special Requirements of the KCSWDM to determine stormwater management requirements that will apply to the S 152<sup>nd</sup> St project.
- 5.4 Identify potential alternatives for meeting stormwater management requirements of the KCSWDM, including utilization of the existing 42<sup>nd</sup> Ave S Stormwater Facility and a full retrofit of the roadway for water quality treatment. Perform preliminary calculations for sizing alternatives facilities and prepare conceptual drawings to illustrate each alternative.
- 5.5 Perform alternatives evaluation, consisting of planning-level cost estimates and evaluation of advantages and disadvantages for each alternative identified in Task 5.4 for use in alternative selection by the City.
- 5.6 Prepare and submit a Draft Stormwater Design Report to document the preliminary stormwater design activities performed in the above subtasks. The report will identify a recommended alternative for the stormwater management design.
- 5.7 Prepare a Final Stormwater Design Report.

#### Deliverables

- ◆ Conceptual Drawings to illustrate each stormwater alternative., 1 electronic file in PDF format
- ◆ Draft Stormwater Design Report, 2 bound copies of report and 1 electronic file in PDF format
- ◆ Final Stormwater Design Report, 2 bound copies of report and 1 electronic copy in PDF format
- ◆ Cost Estimate for the each stormwater alternative, 1 electronic file in PDF format

#### **Task 6 Geotechnical Services**

The Consultant shall coordinate with a qualified geotechnical firm to complete field investigations to support the project as follows:

The Consultant shall support and coordinate with the Sub-Consultant, Nv5, to complete the following geotechnical work:

##### 6.1 Geotechnical Exploration

The purpose of our services will be to provide geotechnical recommendations for support design of the new and replaced HMA section for the proposed roadway, retaining walls, luminary foundations, and utility installation. Our proposed scope of services is summarized as follows:

- Review information. We will review available existing preliminary plans and

geotechnical, geological, and environmental reports for the immediate area to help evaluate stormwater infiltration potential.

- Plan, coordinate, and manage the field investigation, which will include 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 get the utility locates completed, and a second trip will be necessary to observe locates and verify conflicts do not exist or to select an alternate exploration location.
  - Obtain a ROW permit and prepare an associated traffic control plan to support the field activities and subcontract traffic control.
  - Complete up to seven shallow borings to depths of up to 15 feet BGS to explore the existing pavement section and the subsurface conditions, and complete two boring up to 30 feet BGS within or adjacent to the existing 42nd Avenue South detention pond. The borings will be completed using hollow-stem auger drilling equipment. Our representative will collect soil samples via the Standard Penetration Test at approximately 2.5-foot intervals to a depth of 12 feet BGS and then at 5-foot intervals thereafter and maintain a log of the subsurface conditions encountered.
- Complete geotechnical laboratory analyses on disturbed soil samples collected from the explorations, including the following:
  - Moisture content determinations
  - Grain-size determinations
  - Cation exchange capacity (CEC) tests
  - Organic matter content determinations
- Prepare a draft (electronic PDF copy) and final report summarizing our findings, conclusions, and recommendations related to the following:
  - Subsurface soil and groundwater conditions and results the of laboratory testing.
  - Estimated preliminary soil infiltration rates based on the results of in-situ testing and experience in the area
  - Foundation recommendations for luminaries based on Washington State Department of Transportation Chapter 17.

- Pavement section recommendations for new pavement based on traffic count and classification information provided by KPG. Pavement sections will be provided for dense HMA.

## 6.2 Infiltration Study

The infiltration study will support design of the stormwater infiltration systems. The study is not included in Task 1, as locations of infiltration elements are generally not available until the civil engineering design progresses to approximately 30 percent. The study will include explorations to evaluate the subsurface conditions at the proposed locations of stormwater infiltration systems. Included under this task is an evaluation of the existing 42nd Avenue South detention pond and associated critical areas as described above.

Our proposed scope of services to support design of shallow infiltration systems is summarized as follows:

- Explore subsurface conditions by excavating up to two shallow test pits within the proposed infiltration areas and collect samples in general accordance with City code requirements.
  - Perform small-scale pilot infiltration tests (PITs) in the test pits to estimate long-term infiltration rates.
  - Obtain a ROW permit and prepare an associated traffic control plan to support the field activities and subcontract traffic control.
  - Perform analytical laboratory testing (CEC tests and organic content determinations) on samples near the base of the proposed infiltration facilities to evaluate water quality treatment potential.
  - Perform a geologic reconnaissance below the 42nd Avenue South detention pond to identify geologic critical areas, observe existing conditions, and identify potential project impacts and mitigation measures in accordance with City Municipal Code subsection 18.45.120.
  - Prepare a report summarizing our findings, conclusions, and recommendations, including the following:
    - Subsurface soil and groundwater conditions
    - Recommended long-term soil infiltration rates for shallow infiltration systems based on the results of the small-scale PITs
    - Summary of measured infiltration rates for the 42nd Avenue South detention pond
    - Project impacts and potential mitigation measures for geologic

critical areas adjacent to the 42nd Avenue South detention pond

### Deliverables

- ◆ Draft and Final Geotechnical letter report

## **Task 7 Environmental Services**

- 7.1 SEPA Checklist: The Consultant will prepare a SEPA checklist for the project improvements based on the reviewed 30% Plans. Submittal and processing will be by the City.
- 7.2 The Consultant will prepare and submit the EZ form in compliance with Washington State EO 21-02. It is assumed that a formal cultural resources assessment will not be required due to the developed nature of the site. An inadvertent discovery plan will be prepared and included in the project specifications if required.
- 7.3 The Consultant will prepare a Notice of Intent letter for submittal to the Washington Department of Ecology for a National Pollutant Discharge Elimination System (NPDES) Construction Stormwater General Permit. The Stormwater Pollution Prevention Plan (SWPPP) to support the NPDES permit will be prepared under Task 7. The application will include certification that public notice and SEPA requirements have been met.

### Assumptions:

- ◆ The City will submit all permit application materials to the resource agencies and will pay all permit fees.
- ◆ The City will prepare and publish all required public notices for the permits.
- ◆ No other environmental permits besides NPDES will be required for this project.
- ◆ Preparation of a Stormwater Pollution Prevention Plan (SWPPP) will be by the construction contractor and is not included in this scope of work.

### Deliverables:

- ◆ SEPA submittal copies as required.
- ◆ EO 21-02 EZ form
- ◆ Inadvertent discovery plan, if required
- ◆ Notice of Intent

## **Task 8 Community Outreach**

- 8.1 Meet with City to develop a community outreach coordination plan. It is assumed this meeting will establish public outreach meeting needs and schedule (1 meeting).
- 8.2 Prepare and mail initial contact flyers with graphic and text (1-page, double sided) to the designated community members outlining the City's project goals, anticipated schedule and invitation to the Open House Community Meeting. The Consultant shall prepare and send flyer, City to provide a mailing list.
- 8.3 Prepare for and attend one Open House Meeting with the community to discuss the preliminary and final design processes. The Consultant shall provide scroll plots,

sample traffic calming device boards or graphics and up to 2 perspective drawings.

- 8.4 Prepare and mail two sets of follow up flyers with graphics and text (2-page, double sided) for community members as a follow up to the community meeting. Content to be established by the City after the community meeting. Reduce information from board and plots created for the community meeting in a format to be posted on the City website.
- 8.5 Meet with property owners in the field to discuss layout placement and impacts. Prepare additional graphics for property owner meetings, if necessary.

Deliverables:

- ◆ Design exhibits as required for described meetings and open house
- ◆ Meeting Minutes
- ◆ Graphics for property owner discussions
- ◆ Coordination Logs between project engineer and property owners

**Task 9 Utility Coordination**

- 9.1 Initial utility coordination letters will be sent to the Water District 125, PSE, Valley View Sewer District, Seattle City Light, Comcast and other franchise utility providers in the area at the beginning of the project. These letters will serve to notify the utilities about the upcoming project and request information on any planned projects along the corridor within the next 2 years. Follow up letters will be sent to the utilities after each submittal along with a set of plans with the individual utility's facilities highlighted. Potential conflicts will be identified, and potholing will be requested, if necessary.
- 9.2 The Consultant will prepare presentation materials and attend up to four (4) coordination meetings with franchise utility owners to review project elements, potential conflicts, and schedule of construction.
- 9.3 Coordinate with the utility companies and identify locations for potholing based on the preferred design alternative as determined after 30% review by the City.

Consultant will prepare a potholing plan for review and approval by the City. **The Consultant shall conduct all potholing of utilities utilizing a third party vector service or City provided vector team.** Pothole locations will be marked with pins to identify depth from existing grade to top of their facilities. The pothole information will be tabulated and shown on the plans for drainage profiles. Depths of utility lines located by potholing will be identified by a symbol in the construction documents and provided to the construction contractor.

- 9.4 Coordinate designs with the franchise utilities during the final design process through email and phone conversations for coordination of adjustments, relocations, and any planned upgrades by the utility owner.

Deliverables:

- ◆ Pothole plans and field notes
- ◆ Design exhibits as required for described meetings
- ◆ Meeting Minutes
- ◆ Coordination Logs with utility owners for email and phone correspondence
- ◆ Any utility pole relocation or luminaire needs will be coordinated by the Consultant but directed to SCL by the City.

**Task 10 Grant Assistance**

The following grant applications are anticipated to be submitted for during the design of the project:

- ◆ DOE Water Quality Grant
- ◆ King County Flood Control Grant
- ◆ TIB Urban Arterial Program
- ◆ TIB Sidewalk Program
- ◆ WSDOT Safe Routes to School Programs

The Consultant shall provide assistance for preparation of up to five grant applications as follows:

- 10.1 Review project and highlight elements that meet current grant funding criteria and work collaboratively with the City to determine which elements of the project can be included in the application.
- 10.2 Prepare supporting graphics for the project areas included in the application.

Deliverables:

- ◆ Grant Application materials, including but not limited to, graphics, cost estimates, and plan sheets.

**Task 11 Final Plans, Specifications and Estimates**

The Consultant shall prepare Final Plans, Specifications and Estimates for advertisement and award 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. Final bid documents will be signed by a licensed professional engineer in the State of Washington.

- 11.1 The consultant shall prepare 60% Plans, Specifications, and Estimates incorporating comments from the 30% design meeting and utility/stakeholder coordination.
- 11.2 The Consultant shall prepare 90% Plans, Specifications, and Estimates, incorporating City comments from the 60% and design review and utility/stakeholder coordination.

- 11.3 The Consultant shall prepare 100% Plans, Specifications, and Estimates, incorporating City comments from the 90% and design review and utility/stakeholder coordination.
- 11.4 The consultant shall prepare a final design memo is based on the WSDOT Design Manual (M 22-01), the American Association of State Highway Transportation Officials (AASHTO) publication A Policy of Geometric Design of Highways and Streets and the City of Tukwila Public Works Development Standards. This memo will include, a summary of the utility and stakeholder coordination work and a summary of the public outreach process and feedback. Background documentation for an environmental review shall be provided.
- 11.5 The Consultant shall prepare Bid Documents, Specifications, and Estimates, incorporating City comments from the 100% and design review.

Bid documents will be uploaded to bxwa.com for advertisement by the City. It is anticipated that final plans will include the following sheets. Sheets may be combined or separated for clarity:

Cover sheet	(1 sheet)
Sheet Index, Survey Control & Alignment Data	(1 sheet)
Legend and Abbreviations	(1 sheet)
Roadway Typical Sections	(1 sheets)
Site Preparation Plans	(2 sheets)
Site Preparation Details	(1 sheet)
Roadway & Drainage Plan and Profile	(4 sheets)
Roadway & Drainage Details	(6 sheets)
Curb Ramp & Crossing Details	(6 sheets)
Wall Plan and Profile	(2 sheets)
Wall Details	(1 sheet)
Driveway Plan and Profile	(4 sheets)
Driveway Schedule and Details	(1 sheet)
Landscape Plans	(2 sheets)
Landscape Details	(1 sheet)
Irrigation Plans	(2 sheets)
Irrigation Details	(1 sheet)
Urban Design Plans	(2 sheets)
Urban Design Details	(2 sheets)
Wayfinding Plan & Details	(3 sheets)

TOTAL = 46 sheets

- 11.6 The Consultant shall provide internal QA/QC reviews of the following major work elements prior to submittal to the City.
  - o Provide senior engineer review of 60% plans, specifications and estimates.
  - o Provide senior engineer and construction management review of 90% plans, specifications and estimates.

- 11.7 The Consultant shall provide bid phase services to include responses to bidder inquiries, preparation of addenda, attendance at bid opening, preparation of bid tabulation, and recommendation to award or reject the apparent low bidder. The budget assumes a straight forward review process, including but not limited to, reference checks, licensing checks, L&I checks, and bidder checklist confirmation, with the low bidder receiving the contract award.

#### Deliverables

- ◆ 60% Plans (½ size), specifications & estimate, electronic files in PDF format
- ◆ 90% Plans (½ size), specifications & estimate, electronic files in PDF format
- ◆ 100% Plans (½ size), specifications & estimate, electronic files in PDF format
- ◆ Final Bid Documents, Plans provided in ½ size and full size, electronic files in PDF format
- ◆ Final Design Memorandum
- ◆ Addenda Preparation, Bid tabulation and analysis, and a recommendation to award letter.

#### **Task 12 Right Of Way**

- 12.1 KPG will prepare legal descriptions and exhibit maps for up to five (5) parcels requiring temporary construction easements. Conduct up to five (5) one-on-one meetings with adjacent residents to describe the project and obtain right of entry signatures.
- 12.2 Prepare right of entry and license to construct forms and exhibits for each property along the corridor, up to five (5).
- 12.3 KPG will prepare draft and final Right-of-way plans showing all required permanent and temporary construction easements.

#### KPG Deliverables:

- ◆ Legal descriptions and exhibits for up to 5 parcels requiring fee take and/or temporary construction easements.
  - ◆ Right of entry forms and exhibits (5 parcels)
- 12.4 RES Group Northwest will perform services under subcontract with the Consultant. Services will include the following:
- A. Project funding estimate (PFE) and Administrative offer summary (AOS)  
Based on the approved right of way plan, the Consultant will prepare and PFE and AOS for up to two (2) impacted parcels. The PFE report will utilize consistent comparable sales and valuation techniques. AOS will be written for acquisitions under \$25,000 in the PFE. It is assumed that no formal appraisals will be required.
  - B. Title review, Clearing, and Closing  
The Consultant will review title reports for acquisition parcels and provide Title



Review Memo identifying all potential encumbrances to project team members. The Consultant will assist in clearing the necessary encumbrances prior to closing if feasible.

C. Right of Way Documentation, Negotiations, and Closing

The Consultant will assist the City in developing all right of way documents / offer letters in accordance with the City's right of way procedures manual for acquisition of impacted properties using City approved forms. The Consultant will act in good faith at all times and never coerce owners in an attempt to settle the parcels. All negotiations will start with an in person 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 diaries. The Consultant will work with City staff throughout the negotiation process with the property owners.

Assumptions:

- ◆ KPG will order and review title reports.

RES Deliverables:

- ◆ Project Funding Estimate (hard copy and electronic PDF)
- ◆ Communication Log / Right of Way Tracking Spreadsheet describing all communication with property owners.

**Additional Services**

The City may require additional services of the Consultant in order to advance all or portions of the project corridor through final design and construction. This work may include items identified in the current task authorizations as well other items, which may include, but are not necessarily limited to the following:

- ◆ Providing additional permitting or environmental studies
- ◆ Providing additional design services
- ◆ Providing additional right of way services
- ◆ Providing construction management services

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.

**EXHIBIT B**

**PRIME CONSULTANT COST COMPUTATIONS**

Client: City of Tukwila

Project: S 152nd St Non Motorized Connections

City Project Number: 91710303

DATE: 03/14/2022

Task No.	Task Description	Labor Hour Estimate																				Total Hours and Labor Fee Estimate by Task		
		Principal	Engineering Manager	Senior Engineer	Senior Project Engineer	Project Engineer II	Design Engineer	Technician	Engineering Assistant	Survey Manager	Survey Crew II (W/Equip)	Project Surveyor	Survey Technician	Urban Design Manager	Project Landscape Architect	Landscape Technician	Senior Transportation Planner	Construction Manager	CAD Manager	CAD Technician	Business Manager	Hours	Fee	
		274	246	203	179	153	126	100	90	246	238	155	105	195	141	100	167	188	177	112	174			
<b>Task 1 Project Management/Coordination/Administration (16 Months)</b>																								
1.1	Project Management Administrative Services					32															20	68	\$	12,312.00
1.2	Internal Project Management and Coordination (2 per month)	4	16			40							4	8								72	\$	13,060.00
1.3	Project Coordination Meetings with City (2 per month)		16			40							4	4		4						68	\$	12,068.00
	<b>Task Total</b>	<b>4</b>	<b>48</b>	<b>0</b>	<b>0</b>	<b>112</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>8</b>	<b>12</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>20</b>	<b>208</b>	<b>\$</b>	<b>37,440.00</b>
<b>Task 2 Survey and Basemapping</b>																								
2.1	Horizontal and Vertical Control									2	16											18	\$	4,300.00
2.2	Field Survey and Note Reduction									2		16										18	\$	2,172.00
2.3	Basemapping									2	68	60										130	\$	22,976.00
2.4	Survey Utility Locates										8	2										10	\$	2,114.00
2.5	Measure Downs										8	2										10	\$	2,114.00
2.6	Pothole Survey										4	2										6	\$	1,162.00
2.7	QAQC									4												4	\$	984.00
	<b>Task Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>10</b>	<b>104</b>	<b>0</b>	<b>82</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>196</b>	<b>\$</b>	<b>35,822.00</b>
<b>Task 3 Right of Way Calculations</b>																								
3.1	Title Report Review									4		4										8	\$	1,604.00
3.2	Centerline and ROW Calculations									8		20										28	\$	5,068.00
3.3	Easement Field Markings										8	12										20	\$	3,764.00
	<b>Task Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>12</b>	<b>8</b>	<b>36</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>56</b>	<b>\$</b>	<b>10,436.00</b>
<b>Task 4 Preliminary Design</b>																								
4.1	Cross Section Evaluation	2	4			12	16															34	\$	5,384.00
4.2	New Crossing Evaluation			20		4	8	20									16					68	\$	10,352.00
4.3	Wayfinding Integration					2							8	16								26	\$	4,122.00
4.4	Illumination Evaluation & Memorandum			32				40														72	\$	10,496.00
4.5	Draft Design Memoandum		4	4		12															20	\$	3,632.00	
4.6	30% Design Plans	2		16	4	8	32	20					2	12	8			8	24		136	\$	18,754.00	
4.7	30% Cost Estimate			8		8	16	4					2	2							40	\$	5,936.00	
4.8	Sound Transit Coordination	2				20															22	\$	3,608.00	
4.9	QAQC		4	4	4	8															20	\$	3,736.00	
	<b>Task Total</b>	<b>6</b>	<b>12</b>	<b>84</b>	<b>8</b>	<b>74</b>	<b>72</b>	<b>84</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>12</b>	<b>30</b>	<b>8</b>	<b>16</b>	<b>0</b>	<b>8</b>	<b>24</b>	<b>0</b>	<b>438</b>	<b>\$</b>	<b>66,020.00</b>
<b>Task 5 Stormwater Management</b>																								
5.1	Compile and Review Existing Stormwater Data				8		16															24	\$	3,448.00
5.2	Offsite Analysis				8		24															32	\$	4,456.00
5.3	Core and Special Requirements Analysis				8		20															28	\$	3,952.00
5.4	Alternative Identification				16	4	32															52	\$	7,508.00
5.5	Alternative Evaluation				24	4	40															68	\$	9,948.00
5.6	Draft Stormwater Design Report				16		40															56	\$	7,904.00
5.7	Final Stormwater Design Report				24		20															44	\$	6,816.00
5.8	Conveyance System Design				24	4	100															128	\$	17,508.00
	<b>Task Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>128</b>	<b>12</b>	<b>292</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>432</b>	<b>\$</b>	<b>61,540.00</b>
<b>Task 6 Geotechnical Services</b>																								
6.1	Consultant Support of Geotechnical Subconsultant				4	16	8															28	\$	4,172.00
	<b>Task Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>16</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>28</b>	<b>\$</b>	<b>4,172.00</b>
<b>Task 7 Environmental Services</b>																								
7.1	SEPA Checklist		2			16	4															22	\$	3,444.00
7.2	DAHP EZ Form					4																4	\$	612.00
7.3	NPDES & SWPPP Preparation				4	8	4															16	\$	2,444.00
	<b>Task Total</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>4</b>	<b>28</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>42</b>	<b>\$</b>	<b>6,500.00</b>

<b>Task 8 Community Outreach</b>																								
8.1	City Outreach Plan Meeting (One Meeting)					2								4	2						8	\$	1,368.00	
8.2	Initial Mailers to community members (One Mailer)					2									8	8				20	38	\$	5,714.00	
8.3	Open House Meetings (One Meeting)		4			4	4							4	12	12					40	\$	5,772.00	
8.4	Follow-up Mailers (Two mailers)					2									4	4				20	30	\$	4,750.00	
8.5	On Site meetings (Up to four)					4															4	\$	612.00	
<b>Task Total</b>		<b>0</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>14</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>8</b>	<b>26</b>	<b>24</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>40</b>	<b>120</b>	<b>\$</b>	<b>18,216.00</b>
<b>Task 9 Utility Coordination</b>																								
9.1	Utility Coordination Letters					4	8														12	\$	1,620.00	
9.2	Utility Coordination Meetings (up to 4)			4		8	8														20	\$	3,044.00	
9.3	Pothole Plans					2	8														10	\$	1,314.00	
9.4	Final Coordination for Adjustments and Relocations		2	2		12	8														24	\$	3,742.00	
<b>Task Total</b>		<b>0</b>	<b>2</b>	<b>6</b>	<b>0</b>	<b>26</b>	<b>32</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>66</b>	<b>\$</b>	<b>9,720.00</b>
<b>Task 10 Grant Assistance</b>																								
10.1	Review Project Elements for Funding Criteria		2		2	2															10	\$	1,824.00	
10.2	Prepare Supporting Graphics					2									16						18	\$	2,562.00	
<b>Task Total</b>		<b>0</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>16</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>28</b>	<b>\$</b>	<b>4,386.00</b>
<b>Task 11 Final Plans, Specifications, and Estimates</b>																								
11.1	60% Plans, Specifications, & Estimate		2	8		24	40	8	40					8	16	16					162	\$	20,644.00	
11.2	90% Plans, Specifications, & Estimate		4	40		40	60	60	40					16	16	40					316	\$	41,760.00	
11.3	100% Plans, Specifications, & Estimate		4	8		24	20	8	8					2	16	12					102	\$	14,166.00	
11.4	Final Design Memorandum		2			16	16														34	\$	4,956.00	
11.5	Bid Documents		2	8		24	16							2	2						54	\$	8,476.00	
11.6	QAQC	4	12	16	8	8													32		80	\$	15,968.00	
11.7	Bid Period Services		2			12	4														18	\$	2,832.00	
<b>Task Total</b>		<b>4</b>	<b>28</b>	<b>80</b>	<b>8</b>	<b>148</b>	<b>156</b>	<b>76</b>	<b>88</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>28</b>	<b>50</b>	<b>68</b>	<b>0</b>	<b>32</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>766</b>	<b>\$</b>	<b>108,802.00</b>
<b>Task 12 Right of Way Services</b>																								
12.1	Prepare Legal Descriptions and Exhibit Maps					4	8						8								20	\$	2,860.00	
12.2	Right of Entry and License to Construct					8	16						8								32	\$	4,480.00	
12.3	Prepare Draft and Final Right of Way Plans					4	8						8								20	\$	2,860.00	
<b>Task Total</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>16</b>	<b>32</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>24</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>72</b>	<b>\$</b>	<b>10,200.00</b>
<b>Total Labor Hours and Budget</b>		<b>14</b>	<b>98</b>	<b>170</b>	<b>154</b>	<b>450</b>	<b>604</b>	<b>160</b>	<b>88</b>	<b>22</b>	<b>112</b>	<b>60</b>	<b>82</b>	<b>56</b>	<b>134</b>	<b>100</b>	<b>24</b>	<b>32</b>	<b>8</b>	<b>24</b>	<b>60</b>	<b>2,452</b>	<b>\$</b>	<b>373,254.00</b>
<b>Subconsultants</b>																								
																					Task 6.2 Geotechnical Services (Nv5)	\$	54,000.00	
																					Task 12.3 Right of Way Services (RES Group Northwest)	\$	10,000.00	
																					<b>Total Subconsultant Expense</b>	<b>\$</b>	<b>64,000.00</b>	
<b>Reimbursable Direct Non-Salary Costs</b>																								
																					Mileage at current IRS rate	\$	500.00	
																					Reproduction Allowance	\$	500.00	
																					Title Reports	\$	5,000.00	
																					Utility Locates	\$	5,000.00	
																					Potholing	\$	5,000.00	
																					<b>Total Reimbursable Expense</b>	<b>\$</b>	<b>16,000.00</b>	
																					<b>Total Estimated Budget</b>	<b>\$</b>	<b>453,254.00</b>	





## INFORMATIONAL MEMORANDUM

**TO:** Transportation & Infrastructure Services Committee  
**FROM:** Hari Ponnekanti, Public Works Director/ City Engineer  
**By:** Cody Gray, Operations Manager – Fleet, Facilities & Street Maintenance  
 Garron Herdt, Fleet Superintendent  
**DATE:** March 18, 2022  
**SUBJECT:** Fleet & Facilities Public Works Shop - Equipment

**Issue**

Approve the purchase of two lifts for the new Fleet & Facilities Shop and the cost of moving one existing lift and one crane from the George Long Shop to the new facility.

**Background**

The new Fleet & Facilities Heiser building has three lift bays for repair of fleet vehicles. The original plan accounted for the purchase of one lift and the relocation of two lifts from the George Long building. However, one of the existing lifts is obsolete and has subsequently suffered mechanical issues rendering it unusable. As a result, the City will need to purchase a second new lift to meet capacity needs of the Heiser building. The existing rotary 2-post hoist lift and a heavy-duty crane will move to the new shop as well.

**Discussion**

Fleet Services reached out to four potential vendors to relocate the existing lift and purchase two lifts - one 20,000 lb. capacity 2-post lift and one 16,000 lb. 2-post lift with 3-stage front and rear arms. The attached quote from Shop Equipment Co., Inc. was the lowest responsive bid.

**Financial Impact**

Costs for purchasing and moving the vehicle lifts will be 100% funded from the Fleet Replacement budget in the 501 Fund. The Fleet Replacement budget is more than sufficient to cover these costs.

	<u>Cost Estimate</u>	<u>Fleet Replacement Budget</u>
Two new lifts	\$58,291.05	\$572,000
Transfer existing lift & crane	<u>6,407.82</u>	
<b>Total</b>	<b>\$64,698.87</b>	

**Recommendation**

Council is being asked to approve the purchase of two (2) lifts, including shipping and installation, from Shop Equipment Co., Inc. and the transfer of existing shop equipment in the amount of \$64,698.87 and consider this item same day at the March 21, 2022 Regular New Business Meeting.

**Attachment:** 2021 CIP, page 56  
 Shop Equipment Co., Inc. Purchase Estimate  
 Shop Equipment Co., Inc. Transfer Estimate

# CITY OF TUKWILA CAPITAL PROJECT SUMMARY

2021 to 2026

**PROJECT:** Public Works Shops

Project No. 91630601

**DESCRIPTION:**

Construct a new City Public Works maintenance and operations center, combining all operational functions at one location. Facility may also include a City Clerk & Police Records Center and Police evidence storage.

**JUSTIFICATION:**

Existing Public Works operations and maintenance areas are inadequate structurally and seismically. Current land for staging dirt and vector materials is only temporary. Project includes selling dirt/vector land, Minkler Shops,

**STATUS:**

and George Long Shops to acquire the real estate to build an equipment operations center that meets current Separate from the Public Safety Plan. Was formerly known as City Maintenance Facility.

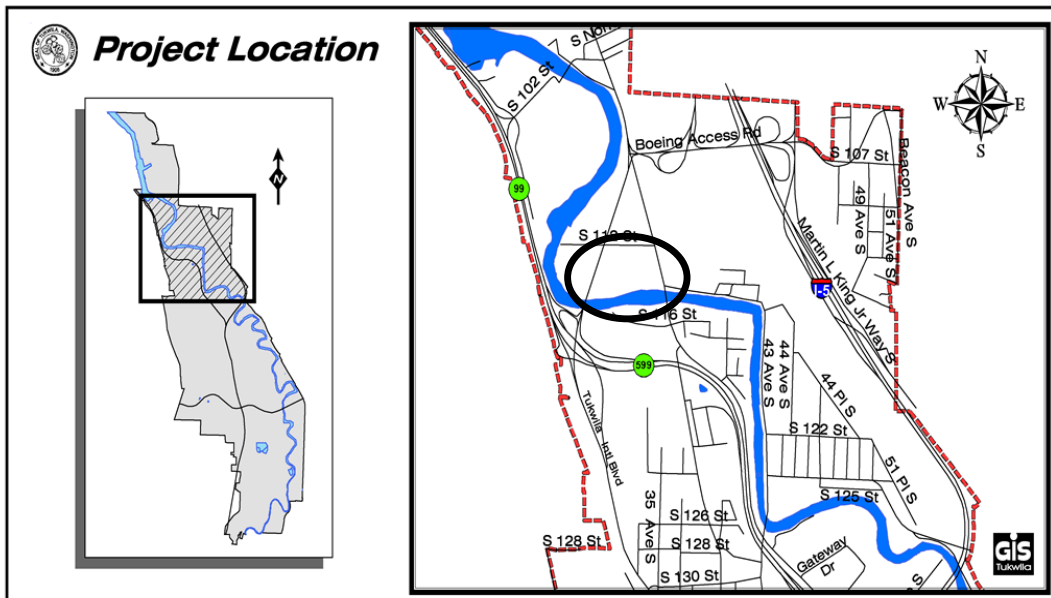
**MAINT. IMPACT:**

Improves safety and efficiency for First Responders and maintenance operations.

**COMMENT:**

Based on usage and benefits, it is estimated that the Water, Sewer, and Surface water enterprise funds will fund 50% of the Public Works Shops with the other 50% funded by Streets, Facilities, & Equipment Rental.

FINANCIAL (in \$000's)	Through		Estimated							BEYOND	TOTAL
	2019	2020	2021	2022	2023	2024	2025	2026			
<b>EXPENSES</b>											
Design/PM	722	300			500					1,522	
Land (R/W)	25,462									25,462	
Const. Mgmt.	11		1,050							1,061	
Construction	14	624	7,517			20,000	20,000			48,155	
<b>TOTAL EXPENSES</b>	<b>26,209</b>	<b>924</b>	<b>8,567</b>	<b>0</b>	<b>500</b>	<b>20,000</b>	<b>20,000</b>	<b>0</b>	<b>0</b>	<b>76,200</b>	
<b>FUND SOURCES</b>											
Enterprise Funds	8,572	462	4,284		250	20,000				33,568	
Councilmatic Bond	5,572					20,000				25,572	
REET/ Funds	3,000		3,000							6,000	
General Fund		462	1,283		250					1,995	
306 Fund Balance	9,065	0	0	0	0	(20,000)	20,000	0	0	9,065	
<b>TOTAL SOURCES</b>	<b>26,209</b>	<b>924</b>	<b>8,567</b>	<b>0</b>	<b>500</b>	<b>20,000</b>	<b>20,000</b>	<b>0</b>	<b>0</b>	<b>76,200</b>	





# SHOP EQUIPMENT CO., INC.

*Automotive Service Equipment*

Shop Equipment Co., Inc.

21504 Bents CT. NE

Aurora, OR 97002

Phone # 503.620.2794 Fax # 503.620.1763

## QUOTE

Estimate #
18858

Ship To
City of Tukwila 14000 Inner Urban Ave S Tukwila, WA 98068

Date	Terms	Rep
2/1/2022	Net 10 days	PJ

Qty	Item	Description	Cost	Total
		16,000 LB CAPACITY 2 POST <span style="border: 1px solid red; padding: 2px;">UNIT 9616</span>		
1	CH-CL16-3S	Symmetric cargo vehicle 2-post lift, 3-stage front and 3-stage rear arms (174 in. height) - Designed specifically for cargo van style carrying vehicles.	21,598.58	21,598.58T
1	S&H	Shipping & Handling	1,195.00	1,195.00T
1	S&H	Freight Surcharge	1,263.00	1,263.00T
1	Install 2p	Install 2 post, less electrical (208/230 VAC, single phase on a 30 amp service).	1,500.00	1,500.00T
1	Hyd. oil	Hydraulic oil for lift power unit	35.00	35.00T
		20,000 LB CAPACITY 2 POST <span style="border: 1px solid red; padding: 2px;">UNIT 9617</span>		
1	CH-CL20	Challenger 20,000 lb capacity Symmetric 2-post lift, 2-stage front and 2-stage rear arms, single point air actuated lock release (174 in. height)	22,849.15	22,849.15T
1	S&H	Shipping & Handling	1,263.00	1,263.00T
1	S&H	Freight Surcharge	1,335.00	1,335.00T
1	Install 2p	Install 2 post, less electrical (208/230 VAC, single phase on a 30 amp service).	1,500.00	1,500.00T
1	Hyd. oil	Hydraulic oil for lift power unit	35.00	35.00T
2	Material - Install	Hilti Anchor Package	185.00	370.00T

	<b>Sales Tax (10.1%)</b>	\$5,347.32
	<b>Total</b>	\$58,291.05

Signature \_\_\_\_\_





## **INFORMATIONAL MEMORANDUM**

**TO: Transportation and Infrastructure Services Committee**  
**FROM: Hari Ponnekanti, Public Works Director**  
**BY: Cyndy Knighton, Senior Program Manager**  
**Deontae Elder, Transportation Project Manager**  
**CC: Mayor Ekberg**  
**DATE: March 18, 2022**  
**SUBJECT: Neighborhood Traffic Calming Program**  
**Project No. 80010301**  
**Allentown Neighborhood Transportation Study**

### **ISSUE**

Provide status update for the Neighborhood Traffic Calming Program (NTCP) and an update on the traffic calming study conducted by KPG Psomas (KPG) for the Allentown neighborhood.

### **BACKGROUND**

Late in 2021, the Council provided \$100,000 to the 2021 NTCP budget and reinstated the full \$400,000 to the 2022 budget by using ARPA funding made available to the City from the Federal government. At the same time, staff presented the Top-10 Recommended NTCP Projects list. Nearly all of the 2021 budget (\$98,863.39) was expended by replenishing normal stock items used in traffic calming, such as street signs and speed feedback signs. Staff also purchased Rectangular Rapid Flashing Beacon units and additional rubber speed cushions for future installation. Staff directed KPG to conduct a traffic calming study in Allentown (Project A on the Top-10 List) as part of their on-call contract for traffic calming support. The S 144<sup>th</sup> Street/46<sup>th</sup> Avenue S ADA Ramps project is being designed and will be constructed as part of the 2022 Annual Overlay Program.

For the Allentown neighborhood study, KPG was directed to prepare a Transportation Study to evaluate existing conditions, vehicle volumes and speeds, signage, and five years of historical crash data. The draft report (attached) discusses their finding to potentially improve safety, calm traffic, and enhance pedestrian mobility. Preliminary cost estimates on the recommended improvements are also included in the report.

### **DISCUSSION**

Overall, staff has made progress on several of the Top 10 list for 2022. The Allentown Neighborhood Speed and Safety Study findings are discussed below. The Tukwila Community Center (TCC) Pedestrian Crossing Safety Improvements will install two Rectangular Rapid Flashing Beacons (RRFBs) adjacent to the TCC this summer. The design is currently at the 50% level and will be completed in the second quarter.

The City will also be receiving a new Complete Streets grant from the Transportation Improvement Board in the second quarter of 2022, with a minimum award of \$300,000 that is eligible to expend on ADA and Pedestrian Safety Improvements. Staff will be recommending that once the grant amount

has been determined and awarded, the grant could be used to fund part or all of the Tukwila Elementary Schools Safety Improvements, Impact Charter School Safety Improvements, Cascade View Elementary School Safety Improvements, and Ryan Way Pedestrian Safety Improvements. Beginning design and improving signage for these projects can begin in the second or third quarter of this year, depending on staffing availability.

**Allentown Neighborhood Speed and Safety Study**

KPG staff will be attending the March 28, 2022 Committee of the Whole meeting to present findings and recommendations of the attached Allentown Neighborhood Transportation Study. The report studies existing conditions on several of the key streets in the neighborhood and makes some recommendations for improvements that could be made to improve quality of life for residents, reduce speeds and improve safety for all users. The primary focus of this study is on S 124<sup>th</sup> Street, 42<sup>nd</sup> Avenue S, S 115<sup>th</sup> Street, and 50<sup>th</sup> Place S. This study is in addition to the other studies currently underway in the area: the 42<sup>nd</sup> Avenue S Bridge Replacement, the Alternative Truck Access EIS, and the reopening of the 42<sup>nd</sup> Avenue S Bridge.

The attached study recommends a variety of improvements on some of Allentown’s key streets including S 124<sup>th</sup> Street, 50<sup>th</sup> Place S and 42<sup>nd</sup> Avenue S. Speed cushions are not recommended for use on the collector arterial streets (S 115<sup>th</sup> Street, 42<sup>nd</sup> Avenue S, S 124<sup>th</sup> Street, and 50<sup>th</sup> Place S), but could be used in the future on the local streets.

**FINANCIAL IMPACT**

Projects on the Staff Top-10 list, including all of the recommendations made in the attached study for Allentown neighborhood traffic calming, are now anticipated to cost over \$1.2 million. Some of these costs can be borne by the existing \$400k budget and the future Complete Streets grant award of \$300-500k (restricted to ADA and pedestrian safety improvements).

Planning level cost estimates for construction of the recommended Allentown improvements are provided in the Allentown Neighborhood Transportation Study: Appendix B, but do not include costs for engineering, permitting, or construction management. If all of the above work is desired to be done in one calendar year, the department will require more staffing resources to execute the projects.

**RECOMMENDATION**

The Council is being asked to consider the Allentown Neighborhood Traffic Calming Study and consider this item at the March 28, 2022 Committee of the Whole meeting. The council is also being asked to direct the priority of top 10 list and the priority of Allentown traffic calming projects.

- ATTACHMENTS:** CIP Page 2 Traffic Calming/Residential Safety Improvements  
Allentown Neighborhood Transportation Study  
Staff Top-10 Recommended NTCP Projects List Updated 3-14-22  
Staff Top 10 Recommended NTCP Projects Map

## CITY OF TUKWILA CAPITAL PROJECT SUMMARY

2021 to 2026

**PROJECT:** Traffic Calming/Residential Safety Improvements Project No. 80010301

**DESCRIPTION:** Programmatic approach to addressing neighborhood traffic concerns through a variety of methods. Residential street improvements with sidewalks, safety improvements, and bike facilities.

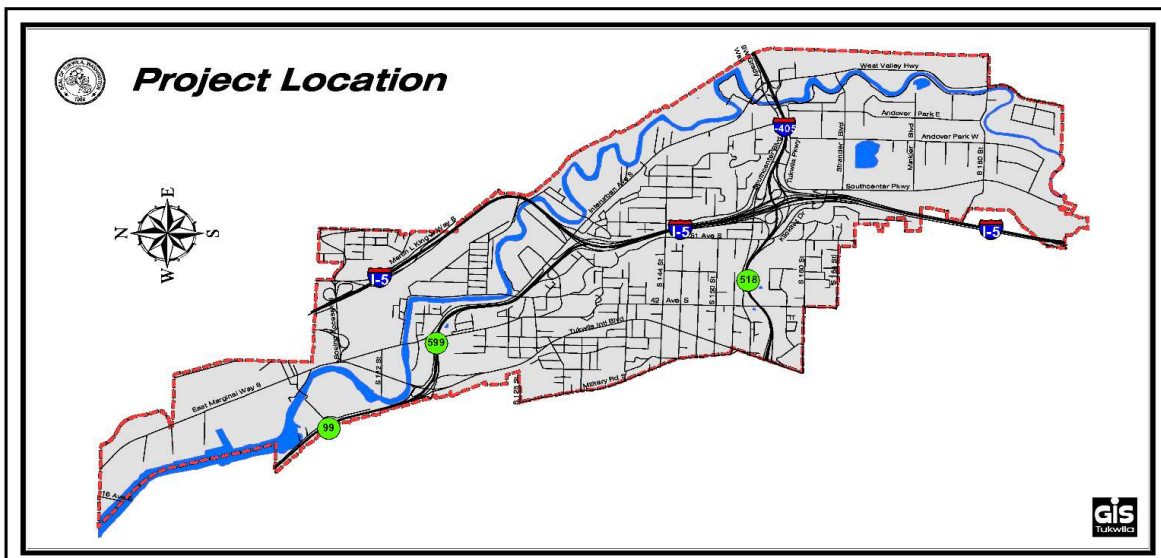
**JUSTIFICATION:** Neighborhood revitalization by improving residential streets.

**STATUS:** Future candidates are listed in the citywide comprehensive update and safety-based prioritization of residential street improvements, sidewalks, and bike lanes.

**MAINT. IMPACT:** Varies, depends on treatment(s) used.

**COMMENT:** Residential improvements and traffic calming features to reduce speeds and improve pedestrian and bicycl such as the speed cushions, RRFB crossings, LED enhanced signs, Radar driver feedback signs, etc.

FINANCIAL (in \$000's)	Through 2019	Estimated 2020	2021	2022	2023	2024	2025	2026	BEYOND
<b>EXPENSES</b>									
Design	63	50	100	100					
Land (R/W)									
Const. Mgmt.	37								
Construction	148	0		300					
<b>TOTAL EXPENSES</b>	<b>248</b>	<b>50</b>	<b>100</b>	<b>400</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>FUND SOURCES</b>									
ARPA Funding			100	400					
Awarded Grant									
Proposed Grant									
Mitigation Actual									
Mitigation Expected									
City Oper. Revenue	248	50	0	0	0	0	0	0	0
<b>TOTAL SOURCES</b>	<b>248</b>	<b>50</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>



# CITY OF TUKWILA CAPITAL PROJECT SUMMARY

e safety

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<b>TOTAL</b>
313
0
37
448
<b>798</b>
500
0
0
0
0
298
<b>798</b>

## Memorandum

**To:** Public Works Department, City of Tukwila  
**From:** KPG  
**Date:** 3/14/2022  
**Re:** Allentown Neighborhood Transportation Study

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The City has received several requests for traffic calming from citizens in the Allentown Neighborhood. As part of the Neighborhood Traffic Calming Program, the City hired KPG to evaluate existing roadway and non-motorized facilities, adjacent land uses, vehicle speeds, vehicle volumes, signage, and five years of historical crash data. Based on this analysis, KPG developed a set of potential improvements to calm traffic, improve safety, and enhance pedestrian mobility.

The approximate boundaries of the Allentown Neighborhood are the Duwamish River to the south and west, S 115th Street to the north, and I-5 to the east. The primary land uses in the Neighborhood are residential, Tukwila Community Center, BNSF Railway Intermodal facility. **Figure 1** shows a map of the Allentown Neighborhood study area.

### Street Network

Due to Duwamish River, BNSF Railroad tracks, and I-5 being located around the perimeter of the Allentown Neighborhood, there are only three access points to the Neighborhood at S 115th Street, 42nd Avenue S bridge over the Duwamish River, and 50th Place S that connects to S 129th Street. S 129th Street provides one of the few crossings of the BNSF Railroad tracks and I-5 in the area.

There are two street classification types in the Allentown Neighborhood: Collector Arterials and Local Streets. The Collector Arterials are S 115th Street, 42nd Avenue S, S 124th Street, 50th Place S, and S 129th Street. The Collector Arterials are intended to carry the majority of the traffic through the Neighborhood. Local Streets are intended to provide circulation and access to adjacent properties. Except for local access, trucks are restricted on S 115th Street and the segment of 42nd Avenue S, north of S 124th Street.

### Truck Traffic

The BNSF Railway Intermodal facility is located along the eastern boundary of the neighborhood with its primary access on S 124th Street at 51st Place S. This facility generates a high volume of truck traffic as containers are transferred between trains and trucks. There are other businesses in the Neighborhood along 44th Place S and 51st Place S that generate truck traffic and trucks must use Local Streets to access these businesses.

Figure 1. Allentown Neighborhood Study Area



## Related Projects in Allentown

### Allentown Truck Reroute Project

This project is evaluating potential alternative routes to access the BNSF Railway Intermodal facility. Alternatives include maintaining the existing access or relocating the facility access to the north or south. An Environmental Impact Statement is currently being prepared to assess the impacts of each alternative.

### Replacement of 42nd Avenue S bridge over Duwamish River

The 42nd Avenue S bridge over the Duwamish River connects the Allentown Neighborhood with Interurban Avenue S. The bridge is considered structurally deficient and the City will replace the bridge either at its current location or relocate it to cross the Duwamish River at S 124th Street. In December 2021, the bridge was damaged by an over-height truck load and was closed to all modes of travel pending repairs.

## Traffic Calming

Traffic calming uses physical improvements and other strategies to slow vehicle speeds and improve safety through neighborhood areas. Traffic calming treatments include signs, pavement markings, chicanes, roundabouts, center medians, speed humps or cushions, raised crosswalks, on-street parking, and narrowing the roadway with striping, raised curb or curb bulbs. The decision on whether to install traffic calming should consider the potential for diverting traffic to parallel routes, emergency vehicle response times, type of vehicles using the roadway, travel delay and neighborhood support.

For collector arterial streets such as S 115th Street, 42nd Avenue S, S 124th Street, and 50th Place S, KPG does not recommend the installation of speed humps or cushions for the following reasons:

- Inappropriate for collector arterials which are intended to carry the majority of traffic in the Neighborhood.
- Potential for vehicles to shift from arterials to parallel local streets.
- Negative impacts to emergency vehicle response times (including Tukwila Fire Station 53).
- Noise impacts to homes due to vehicles crossing cushions, braking and accelerating.
- Not compatible with truck operations that access existing businesses in the Neighborhood.

## Analysis Findings and Potential Improvements

The transportation volume and speed data were collected in 2020 and 2021 during the COVID-19 pandemic when traffic volumes were potentially lower due to more people working from home and fewer people traveling for social and recreational activities. The 42nd Avenue S bridge over the Duwamish River was closed for repairs when part of the 2020 traffic data was collected on 42nd Avenue S, north of S 124th Street. KPG evaluated the most recent five years of historical crash data (9/10/2016 - 9/9/2021). A summary of the crash data is provided in **Appendix A**.

The following sections describe the characteristics of individual streets in the Neighborhood and potential improvements to calm traffic, improve safety, and enhance pedestrian mobility. The potential implementation of these improvements will require additional input from the public and stakeholders and will depend on available funding for design and construction. Cost estimates and additional description of the potential improvements is included in **Appendix B**.

### S 124th Street

Street Classification	Collector Arterial
Speed Limit	25 mph
Eastbound Average Vehicle Speed	27 mph
Eastbound 85th Percentile Vehicle Speed	33 mph
Westbound Average Vehicle Speed	27 mph
Westbound 85th Percentile Vehicle Speed	33 mph
Average Weekday Traffic Volume	8,100

Note: Data collected July and August 2021.

S 124th Street provides access to single family homes, Tukwila Community Center, and BNSF’s Intermodal facility at the east end of the street. There is curb and sidewalk along the frontage of the Community Center and the north side of the street has a pedestrian walkway with segments of extruded curb that provide a buffer from the roadway between 42nd Avenue S and 49th Avenue S. An eastbound vehicle speed radar feedback sign is located at 45th Avenue S. S 124th Street experienced 8 crashes during the five-year study period. In 2019, there was a fatal vehicle-pedestrian crash at the S 124th Street/46th Avenue S intersection.



S 124th Street at 46th Avenue S (looking west)

#### Potential Improvements:

- Rectangular Rapid Flashing Beacon (RRFB) system at 44th Avenue S (Community Center driveway) – construct raised curb and sidewalk at the northeast corner of the 44th Avenue S intersection to separate pedestrians and vehicles, narrow the pedestrian crossing distance, and provide traffic calming.
- RRFB system at 46th Avenue S – construct raised curb and sidewalk at the northwest corner of the 46th Avenue S intersection to separate pedestrians and vehicles, narrow the pedestrian crossing distance, and provide traffic calming.
- North side pedestrian walkway between 49th Avenue S and 51st Place S – improve this segment to provide a continuous pedestrian walkway along north side of S 124th Street.
- Remove eastbound right turn slip lane at the 50th Place S intersection – currently, eastbound right turning vehicles are not required to stop at the intersection. Reconfigure the intersection with a single-lane eastbound approach and maintain all-way stop control. Evaluate truck turning movements and pedestrian facilities. Requiring eastbound right turn vehicles to stop will calm traffic and improve safety.



S 124th Street/50th Place S intersection



### S 115th Street

Street Classification	Collector Arterial
Speed Limit	30 mph

S 115th Street runs east-west between East Marginal Way S and 42nd Avenue S. The street provides access to the Duwamish Hill Preserve and the Allentown Neighborhood. There is a sidewalk on the north side of the street.

#### Potential Improvement

- Speed limit reduction – lower the speed limit from 30 mph to 25 mph to lower speed entering the Allentown Neighborhood and to be consistent with the speed limit on 42nd Avenue S.

### 42nd Avenue S

	Segment north of S 124th Street <sup>1</sup>	Segment south of S 124th Street <sup>2</sup>
Street Classification	Collector Arterial	Collector Arterial
Speed Limit	25 mph	25 mph
Northbound Average Vehicle Speed	31 mph	25 mph
Northbound 85th Percentile Vehicle Speed	36 mph	30 mph
Southbound Average Vehicle Speed	31 mph	23 mph
Southbound 85th Percentile Vehicle Speed	36 mph	29 mph
Average Weekday Traffic Volume	3,900	9,300

Notes: <sup>1</sup>Data collected 1/13/2022-1/22/2022 when 42nd Avenue S bridge over Duwamish River was closed.

<sup>2</sup> Data collected August 2021.

42nd Avenue S runs along the east bank of the Duwamish River with residential homes along the east side of the street. There is a pedestrian bridge crossing of the river at S 119th Street and the Duwamish Park is located at approximately S 117th Street. A continuous sidewalk runs along the east side of the street between S 115th Street and Interurban Avenue S, except for a missing segment at the southeast corner of the S 124th Street/42nd Avenue S intersection. The 42nd Avenue S corridor experienced 10 crashes during the five-year study period; of these crashes, 4 crashes occurred at the S 124th Street/42nd Avenue S intersection.



42nd Avenue S at S 119th Street (looking north)

#### Potential Improvements

- 25 mph pavement markings – paint 25 mph pavement markings on southbound 42nd Avenue S, south of S 115th Street and on northbound 42nd Avenue S, north of S 124th Street.

- Curb bulb at S 119th Street pedestrian bridge crosswalk – construct a curb bulb and ADA sidewalk improvements to shorten the pedestrian crossing distance and calm traffic.
- Sidewalk at southeast corner of S 124th Street/42nd Avenue S intersection – add sidewalk to complete missing segment in front of store and create a continuous sidewalk on the east side of the street between S 115th Street and Interurban Avenue S. This would impact the store’s parking lot.

**50th Place S**

Street Classification	Collector Arterial
Speed Limit	25 mph
Northbound Average Vehicle Speed	32 mph
Northbound 85th Percentile Vehicle Speed	36 mph
Southbound Average Vehicle Speed	33 mph
Southbound 85th Percentile Vehicle Speed	39 mph
Average Weekday Traffic Volume	7,300

Note: Data collected July and August 2021.

50th Place S connects between S 124th Street and S 129th Street. S 129th Street crosses the BNSF tracks and I-5, and is the southeast entrance to the Allentown Neighborhood. 50th Place S serves residential properties and Codiga Park along the Duwamish River. There is a segment of sidewalk on the west side of the street along the Park’s frontage. The eastside of the street has a striped paved shoulder that has a few segments of extruded curb that provide separation from vehicles.



50th Place S, looking south

Potential Improvements

- Northbound vehicle radar feedback sign – add a feedback sign at Railroad Avenue, where 50th Place S enters the Allentown Neighborhood.
- Pedestrian walkway – construct continuous pedestrian facility on either the west or east side of the street.

**Local Streets**

Within the Allentown Neighborhood, the local streets are low-volume streets that provide access to homes and businesses. These local streets typically do not include formal pedestrian facilities and on-street parking is typically allowed.

Potential Improvements

- Additional speed limit signs at select locations.
- Reduce default speed limit from 25 mph to 20 mph for local streets – this could be part of a proposed Citywide speed limit reduction effort.

### 51st Place S

Street Classification	Local Street
Speed Limit	25 mph
Northbound Average Vehicle Speed	17 mph
Northbound 85th Percentile Vehicle Speed	28 mph
Southbound Average Vehicle Speed	22 mph
Southbound 85th Percentile Vehicle Speed	31 mph
Average Weekday Traffic Volume	200

Note: Data collected July and August 2021.

51st Place S is a low-volume street that runs northwest and southeast between S 122nd Street and dead ends just north of S 129th Street. This street provides access to homes and businesses.

#### Potential Improvements

- Speed limit reduction – reduce speed limits to 20 mph on local streets.

### S 125th Street

S 125th Street is a local street along Duwamish River that connects between 46th Avenue S and 50th Place S. Residents along the street have expressed concerns regarding speeding and cut-through traffic. There have been 3 crashes at the S 125th Street/50th Place S intersection over the last 5 years. This intersection is just south of the S 124th Street/50th Place S intersection, which has an eastbound right turn slip lane that does not require vehicles to stop.

#### Potential Improvements

- The removal of the eastbound right turn slip lane at the S 124th Street/50th Place S intersection – this project (described above as a potential improvement for S 124th Street) would benefit the S 125th Street/50th Place S intersection by requiring eastbound right turning vehicles to stop at the S 124th Street/50th Place S intersection. This would slow southbound traffic and potentially create additional gaps in traffic approaching the S 125th Street/50th Place S intersection, improving traffic operations and safety.
- Either partially or fully close S 125th Street at 50th Place S – work with the residents along S 125th Street to get their input on either a full closure or a restriction of left turns with c-curbing. The potential improvement at the S 124th Street/50th Place S intersection that will remove the eastbound right turn slip lane may lessen the need for a partial or full closure of S 125th Street.
- Speed cushions – work with residents to get their input on the addition of speed cushions to reduce speeds. Speed cushions could be an appropriate treatment along this street because there is not a parallel local street that could be impacted by diverting traffic.

## Appendix A.

### Allentown Neighborhood Crash Data by Corridor – 5 Year Period

Corridors	Rear end	Sideswipe	Head On	Left Turn	Angle	Fixed Object	Exits Roadway	Pedestrian	Pedal-cyclist	Other	Total
42nd Ave S				3	1	4 (1)	1 (1)			1	10 (2)
S 124th St <sup>1</sup>	1		1	2	2			1 (1)		1	8 (1)
50th Pl S <sup>2</sup>	1				1	2					4
46th Ave S		1				2					3
S 122nd St				1	1						2
S 125th St						1				1	2
S 115th St						1					1
S 116th St										1	1
45th Ave S						1					1
<b>Total</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>6</b>	<b>5</b>	<b>11 (1)</b>	<b>1 (1)</b>	<b>1 (1)</b>	<b>0</b>	<b>4</b>	<b>32 (3)</b>

Source: WSDOT crash data from (9/10/2016 - 9/9/2021).

Notes: (#) indicates severe (fatality or serious injury) crashes.

<sup>1</sup> Crashes at the 42nd Avenue S/S 124th Street intersection are included with the 42nd Avenue S corridor.

<sup>2</sup> Crashes at the S 124th Street/50th Place S intersection are included with S 124th Street corridor.



Appendix B. Allentown Neighborhood Potential Improvements and Cost Estimates



3/14/2022

\*\*All costs are 2022 dollars

INITIAL IMPROVEMENTS	DESCRIPTION	COST
<b>S 124th St</b>		
RRFB System at 44th Ave S / Community Center Driveway	Construct curb, gutter, and sidewalk at the northeast corner of the 44th Avenue S intersection to separate pedestrians and vehicles, narrow the pedestrian crossing distance, and provide traffic calming.	\$ 35,000
RRFB System at 46th Ave S	Construct curb, gutter, and sidewalk at the northwest corner of the 46th Avenue S intersection to separate pedestrians and vehicles, narrow the pedestrian crossing distance, and provide traffic calming.	\$ 35,000
POTENTIAL IMPROVEMENTS	DESCRIPTION	COST
<b>S 124th St</b>		
Remove eastbound right turn slip lane at the 50th Place S Intersection	Reconfigure the intersection with a single-lane eastbound approach and all-way stop control. Evaluate truck turning movements and pedestrian facilities. Requiring eastbound right turn vehicles to stop will slow traffic and improve safety.	\$ 75,000
124th North Side Pedestrian Walkway	Add/rehabilitate north side walkway from 49th Avenue S to 51st Place S in conjunction with the slip lane removal.	\$ 150,000
<b>S 115th St</b>		
Speed Limit Reduction	Replace the existing 30 mph speed limit signs with 25 mph speed limit signs to lower speed entering the Allentown Neighborhood and to be consistent with the speed limit on 42nd Avenue S.	\$ 2,000
<b>42nd Ave S</b>		
25 MPH Pavement Markings	Install thermoplastic "25 MPH" pavement markings on southbound 42nd Avenue S, south of S 115th Street and on northbound 42nd Avenue S, north of S 124th Street.	\$ 2,500
Curb Bulb at S 119th St Pedestrian Bridge Crosswalk	Construct a curb bulb and ADA sidewalk improvements to shorten the pedestrian crossing distance and calm traffic.	\$ 30,000
Sidewalk at Southwest Corner of S 124th St/ 42nd Ave S Intersection	Add sidewalk to complete missing segment in front of store and create a continuous sidewalk on the east side of the street between S 115th Street and Interurban Avenue S. This would impact the store's parking lot.	\$ 75,000
<b>50th Place S</b>		
Northbound vehicle radar feedback sign	Install a radar feedback sign at Railroad Avenue, where 50th Place S enters the Allentown Neighborhood.	\$ 10,000
Pedestrian Walkway	Construct continuous pedestrian facility on either the west or east side of the street.	\$ 110,000
<b>51st Place S</b>		
Speed Limit Reduction	Replace the existing 25 mph speed limit signs with 20 mph speed limit signs to lower speed on local streets.	\$ 2,000
<b>S 125th St</b>		
Closure of S 125th St at 50th Pl S	Either a full closure or a restriction of left turns with c-curbings. The potential improvement at the S 124th Street/50th Place S intersection that will remove the eastbound right turn slip lane may lessen the need for a partial or full closure of S 125th Street.	\$ 10,000
Speed Cushions	Install speed cushions to calm traffic on this local street. Speed cushions could be an appropriate treatment along this street because there is not a parallel local street that could be impacted by diverting traffic.	\$ 5,000
<b>Total Cost</b>		<b>\$ 541,500.00</b>

**Staff Top-10 Recommended NTCP Projects**

*Modified 3/14/2022*

Project	Details	Potential Treatment Options	Estimated Cost Range	Status	Budget/ Expended	Updated Cost Estimate
A Allentown Neighborhood Speed and Safety Study	<i>Since 2018, five individual requests for traffic calming have been recorded in the NTCP list of requests; however, traffic complaints have been made to the City over prior years. Addressing traffic safety concerns in Allentown is a top priority for the City.</i>			Draft Study complete. Present to TISC on 3/21/22	\$35,000b for A and E	\$640k for full recommendation \$610k for new construction only
	Study neighborhood-wide volume, speed, classification and safety issues. Design plan for Level 1 and Level 2 treatments throughout Allentown.	Level 1: Improved signage; radar feedback signs; pavement marking modifications Level 2: Curb extensions	\$50,000-80,000			
B Tukwila Elementary School Safety Improvements	<i>Since 2018, 12 traffic calming requests have been made in the Cascade View neighborhood, with a significant number of them near Tukwila Elementary School. Common complaints have been over speeding and crosswalk or pedestrian safety. Additionally, the Council has asked for proactively addressing or anticipating concerns, specifically around school zones. Some improvements have been made around Tukwila Elementary School already but more improvements are needed.</i>			Have reached out to Tukwila School District/Tukwila Elementary School staff. Will begin study later in 2022 with any improvements installed likely in 2023.		
	Address speeding and crosswalk safety concerns.	Level 1: Improved signage; radar feedback signs; pavement marking modifications Level 2: Curb extensions; RRFB installation; ADA ramp upgrades; improved illumination	\$30,000-80,000			
C Impact Charter School Safety Improvements	<i>A request specific to the newly opened Impact Charter School was received in 2019. The request was to provide a signed school zone, which Tukwila has provided along with signs marking school crossings on S 148th Street. ADA-compliant ramps have not been installed at the marked school crossings. The charter school has expanded their site to the north with a need for consideration of a school zone on S 146th Street and other potential improvements for children's safety. Additionally, the Council has asked for proactively addressing or anticipating concerns, specifically around school zones.</i>			Awaiting a proposed private development for possible ADA ramp improvement. Signage improvements will be studied in 2/3Q		
	Provide school crossing improvements, establish school zone on S 146th Street, if needed. Provide school crossing improvements, observe operating speeds, if necessary establish speed zone.	Level 1: Improved signage for school zones on S 148th Street and S 146th Street; crosswalk installation Level 2: ADA ramp improvements; curb extensions	\$8,000-15,000			
D Cascade View Elementary School Safety Improvements	<i>Since 2018, the Tukwila Hill neighborhood has seen 9 requests for traffic calming. Four of the locations are around the speeding, school crossing and pedestrian safety around the Cascade View Elementary School. 85th Percentile speeds of ~30MPH in the 25MPH zones have been recorded, but analysis to separate whether the speeding is even more than the posted school zone has not been done. Additionally, the Council has asked for proactively addressing or anticipating concerns, specifically around school zones.</i>			Study for improved signage and crosswalk to begin in 2/3Q. Design for ADA improvements later in year with construction likely in 2023		
	Upgrade School Zone signing, design and install pedestrian crossing improvements.	Level 1: Improved signage for school zones on S 148th Street and S 146th Street; crosswalk installation Level 2: ADA ramp improvements; curb extensions	\$8,000-15,000			
E Tukwila Community Center Pedestrian Crossing Safety Improvements	<i>The City Council has expressed desire for the NTCP to have a proactive element in addressing traffic calming and safety needs throughout the City. The TCC is a well-utilized facility by the Allentown neighborhood as well as the entire City and surrounding area. Concerns over the pedestrian crossings on S 124th Street have been raised by staff and residents in the past, along with the larger complaints of speeding in Allentown. Increasing pedestrian visibility to improve safety in this high-use area is a recommended top priority for the NTCP.</i>			Design at 50% and RRFB units purchased in 2021. Installation scheduled for summer 2022.	\$35,000b for A and E	\$78k RRFB Installation
	Design and install mid-block pedestrian safety improvements on S 124th Street.	Level 1: Improve pedestrian crossing signage Level 2: RRFB installations; upgrade ADA ramps; curb extensions; improved illumination	\$80,000-100,000			
F Macadam Road Speed and Safety Improvements	<i>At least five requests for traffic calming, specific to speeding (and some secondary reasons) have been made since 2018. A radar feedback sign was placed near the 13700 block in 2019 but requests have continued to be made. Additional analysis is warranted to determine what other improvements could be used to address the speeding, especially where Macadam has extremely limited sight distance due to the curvy nature of the roadway.</i>			Design to begin in 2/3Q.		
	Design and install treatments addressing speeding and curve safety north of S 144th Street.	Level 1: Improved signage; LED chevron signs; channelization modifications Level 2:	\$10,000 - 30,000			

**Staff Top-10 Recommended NTCP Projects**

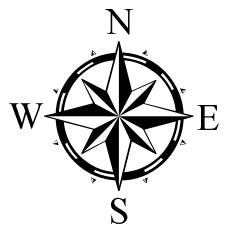
Modified 3/14/2022

Project	Details	Potential Treatment Options	Estimated Cost Range	Status	Budget/ Expended	Updated Cost Estimate		
G Southcenter Boulevard/65th Avenue S Pedestrian Safety Improvements	<i>Staff identified the need for improvement pedestrian safety at this location several years ago. Southcenter Boulevard is a 5-lane roadway with known speeding issues along with curves that restrict sight distance. A high pedestrian usage at this intersection accessing the King County Metro bus stop that services both the Rapid Ride F-Line and Route 150, both workhorses of the south County transit network, justifies improving pedestrian crossing safety. This intersection is slated for full signalization in the future, but interim pedestrian safety improvements should be considered sooner.</i>	Design and install pedestrian safety improvements	Level 1: Improved signage for pedestrian crossing Level 2: RRFB installation; ADA ramp upgrades; improved illumination \$50,000-\$90,000	Funding available for design of full signal in 2022 CIP. Design to begin in 2022. Will consider signage improvements for interim in 2/3Q.				
H City-wide Residential Speed Limit Review	<i>As part of the City Council's expressed desire to proactively look at traffic calming needs, a full review of the residential street posted speed limits is recommended by staff. State law establishes city speed limits at 25MPH unless an engineering study is completed to justify higher speed limits. Most residential streets are posted at 25MPH today, but there are many that are posted at 30MPH or 35MPH. Likely, those speed limits are legacies of past annexation areas, where a speed study was completed by King County. The general impression Staff has is that most residents and elected officials would be happier with lower speed limits. City of Seattle has also recently lowered all speed limits nearly city-wide to be 25MPH</i>	Identify residential streets with speed limits currently above 25MPH. Conduct volume, speed and safety review. Recommend changes to speed limits, as necessary.	Level 1: Modify speed limit ordinance; as needed; install new signs; as needed. Level 2: \$5,000-8,000	Not started yet.				
I S Ryan Way Pedestrian Safety Improvements	<i>Two requests for traffic calming to address speeding and pedestrian crossing safety in the Ryan Hill area have been made in 2021. New developments are coming forward that will increase the residential population of this part of the City with multi-family developments. The speed concerns, especially along S Ryan Way, coupled with the new housing developments increasing the likelihood of increased pedestrian activity, warrants this analysis be recommended as a top priority.</i>	Safety study on S Ryan Way from MLK Jr. Way to east city limits, focusing on speeding and pedestrian safety. Recommend Level 1 and Level 2 improvements. Design and construct improvements.	Level 1: Improved signage Level 2: Curb extension, improved illumination \$10,000-100,000	Study for improved signage and safety improvements may begin in 2/3Q. Construction of improvements possible in 2023.				
J S 144th Street/46th Avenue S ADA Ramps	<i>The Tukwila School District requested school crossing safety improvements at this intersection in 2017. A new Rectangular Rapid Flashing Beacon was installed in early 2019. At the time the RRFB was installed, the City was also submitting a grant application for the 46th Avenue S Safe Routes to School project, which would improve pedestrian safety between this intersection south to S 150th Street, and would include either a raised pedestrian crosswalk at the RRFB or install ADA-compliant curb ramps. The grant was not awarded. State law requires ADA ramps be brought up to current standards anytime a new signal, including the RRFB, is installed. Since grant monies for the larger improvement are not expected in the short term, staff recommends this as a priority to comply with all state and federal laws regarding Americans with Disabilities Act requirements</i>	Design and install ADA-compliant ramps at the intersection.	Level 1: Level 2: ADA upgrades to ramps at RRFB (not done at time of RRFB installation due to budget constraints) \$15,000-20,000	Design at 50% with construction to be done with the 2022 Annual Overlay Project	\$35,000 Overlay Budget	\$90,000		
<b>Total Cost Range</b>				<b>\$266,000 - 538,000</b>	<b>Total</b>		<b>\$70,000 PE \$47,000 Equip.</b>	<b>\$808,000</b>



# City of Tukwila

## Top 10 Staff Recommended NTCP Projects

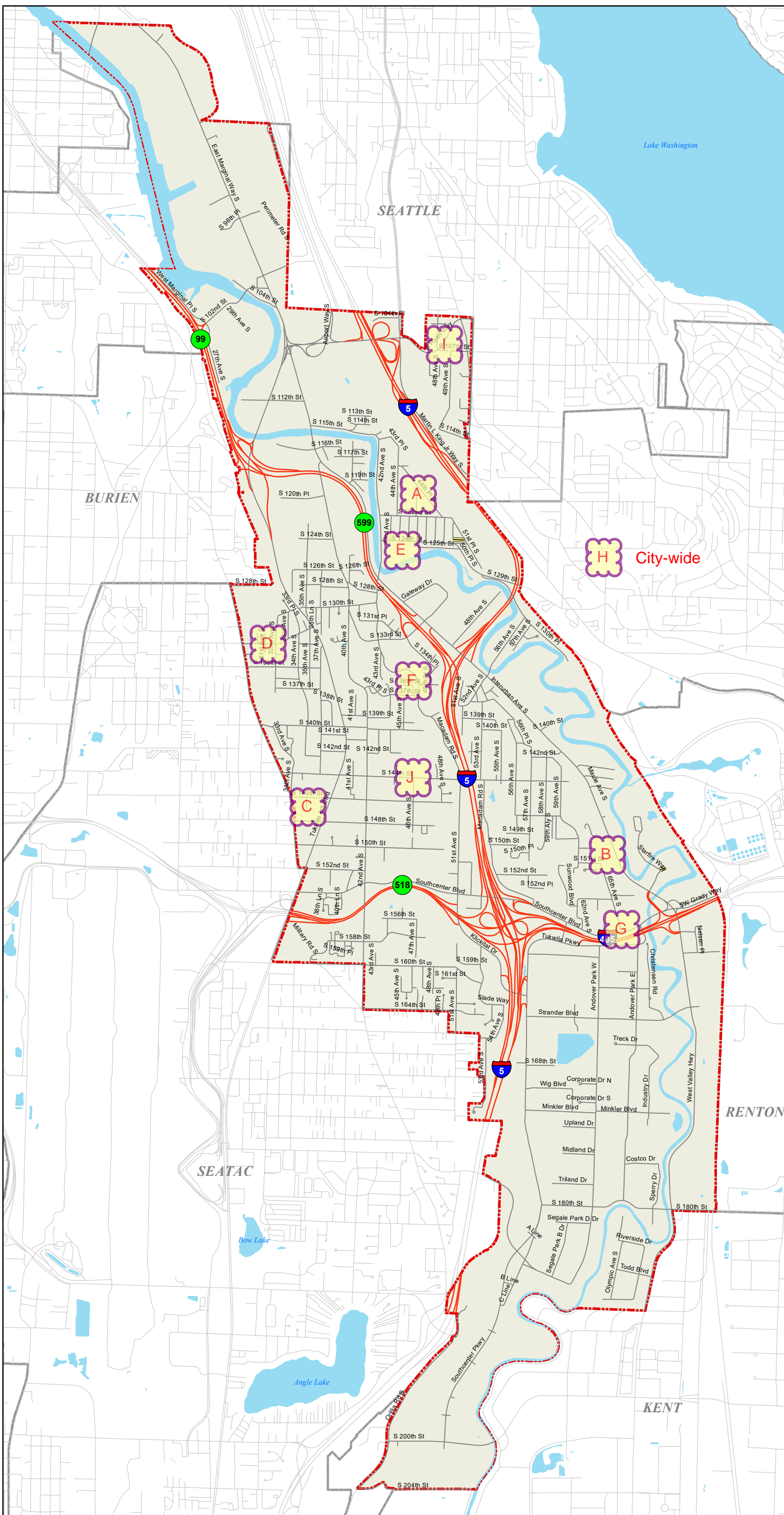


Not to Scale

### Vicinity Map



Disclaimer: The location of features and boundaries are approximate and are intended for reference only. Data is based on best information available.







## INFORMATIONAL MEMORANDUM

TO: **Transportation & Infrastructure Services Committee**  
 FROM: **Hari Ponnekanti, P.E., Public Works Director/ City Engineer**  
 BY: **Adam Cox, P.E., Transportation Project Manager**  
 DATE: **March 18, 2022**  
 SUBJECT: **42<sup>nd</sup> Ave S Bridge Replacement Project -Type, Size, and Location Report**

### ISSUE

Update the Council and answer questions asked at the February 14, 2022 Committee of the Whole meeting regarding the Type, Size, and Location (TS&L) report for the 42<sup>nd</sup> Ave S Bridge Replacement project and seek Council direction. Staff recommends the 42<sup>nd</sup> Ave S steel girder alternative due to community feedback.

### BACKGROUND

At the October 26, 2020 Committee of the Whole meeting, Council members were presented with the option to move the 42<sup>nd</sup> Ave S Bridge Replacement project forward with the selection of 30% Plans and Estimate (P&E) or the 100% ad-ready Plans, Specifications, and Estimate (PS&E). Included in the 30% P&E was a description of the TS&L report and the two conceptual alternatives for the replacement of the 42<sup>nd</sup> Ave S Bridge:

1. Replace the bridge in its current location; or
2. Replace the structure at S 124<sup>th</sup> St.

Both alternatives are eligible for funding as the new structure will remain in the same corridor. On November 02, 2020, Council directed staff to move forward with the 30% P&E as part of TranTech’s original contract and re-examine alternatives for 100% PS&E once additional funding was secured.

The intent of starting the 30% P&E was to make the replacement project more competitive for the federally funded Local Bridge Program’s (formerly known as BRAC) call for projects that was announced in late 2020, with the due date for the application in February 2021. The City Council adopted funding for the 42<sup>nd</sup> Ave S Bridge as its top state and federal legislative priority. In June 2021, the City was awarded \$1.5M in federal contingency funding from the Puget Sound Regional Council (PSRC) to be applied toward the design phase, and in July 2021, the Local Bridge Program awarded \$12M for the design and construction phases of the 42<sup>nd</sup> Ave S Bridge Replacement Project. These funds will cover all design expenses and move the project well into construction.

Staff conducted the initial consultant selection process for the project in accordance with the Washington State Department of Transportation (WSDOT) Local Agency Guideline (LAG) manual to ensure the selected consultant would be approved by WSDOT and expenses would be eligible for federal grant reimbursement throughout the project. Given that federal protocol was adhered to during the selection process, WSDOT Local Programs Department determined that TranTech is an approved consultant to perform the design work without the need to readvertise or reinterview design consultants, a process that would take a minimum of three months. The ability to move forward with 100% design through the existing contract with TranTech provided the City with costs savings and prevented project delays. The supplemental agreement was issued to TranTech in October 2021 to reach 100% ad ready PS&E enabling future construction bidding. The bid ready PS&E is still on schedule to be completed by the third quarter of 2023.

### HISTORICAL TIMELINE

2017	City applied for and did not receive state funding for local bridge replacement
2019	City applied for and did not receive state funding for local bridge replacement
2020	City adopts 42 <sup>nd</sup> St. Bridge Replacement as top state and federal legislative priority
February 2020	Council approves \$1M for 30% design
May 2020	Advertisement for design is published

August 2020	TranTech Engineering, LLC selected
November 2020	Council Awarded 30% Design (Type, Size, Location) to TranTech
June 2021	PSRC Funds Awarded
June 2021	Local Bridge Program Funds Awarded
October 2021	Council Awarded 100% Design to TranTech
December 2021	Draft TS&L submitted for Public Works Engineers for Review
December 15, 2021	Bridge Strike
February 2022	Project included in the State Transportation Package for \$17M in funding and is currently being considered by the legislature
February 14, 2022	Committee of the Whole Discussion on TS&L report
March 21, 2022	TISC Discussion on TS&L report

As part of the 30% P&E, TranTech was tasked with creating a TS&L report to give the City alternatives for replacement of the 42<sup>nd</sup> Ave S Bridge. The TS&L report is an industry design standard that allows the agency to receive multiple alternatives and weighs all outcomes when selecting a structure for replacement. During the TS&L process, TranTech and its subcontractors have used their best engineering judgement to create an accurate report that lines up with the City's best interests when replacing the structure. All four alternatives presented are using the same cross section configuration with 12 ft wide travel lanes, a concrete pedestrian barrier, and a 10 ft wide ADA-approved pedestrian walkway. The differences between the structures are: 1) the structure location; and 2) material used for girders. All four alternatives are eligible for federal funding and grants as they are in the same corridor as the current structure. All alternatives provided below have inherent pros and cons and the comparison matrix found in the draft TS&L report illustrates all the weighted variables and provides a professional rating of each element.

Due to the complexity of each replacement option and the limited scope of work in preparation of the TS&L, each option has had a constructability review at a cursory level. This allows the design team to explore multiple avenues without wasting time focusing on one option that would not be the preferred structure for this project. There are still multiple unknowns that will be investigated during the design process. Once a replacement is selected, TranTech can then focus their efforts to creating a safe, dependable structure that has a design life of 100+ years.

The following alternatives to be considered for the 42<sup>nd</sup> Ave S Bridge replacement are:

- **Alternative 1: New 42<sup>nd</sup> Ave S Bridge with Steel Girders**  
Replace the structure in its current location with the main span consisting of steel girders.
- **Alternative 2: New 42<sup>nd</sup> Ave S Bridge with Concrete Girders**  
Replace the structure in its current location with the main span consisting of concrete girders.
- **Alternative 3: New S 124<sup>th</sup> Street Bridge with Steel Girders**  
New structure at S 124<sup>th</sup> St with the main span consisting of steel girders.
- **Alternative 4: New S 124<sup>th</sup> Street Bridge with Concrete Girders**  
New structure at S 124<sup>th</sup> St with the main span consisting of concrete girders.

### ANALYSIS

Council was presented the four alternatives for the 42<sup>nd</sup> Ave S Bridge replacement at the February 14, 2022 Committee of the Whole meeting. At that meeting, Council had the opportunity to ask City staff and TranTech Engineering staff technical questions about the proposed locations of the 42<sup>nd</sup> Ave S and S 124<sup>th</sup> St replacement locations.

City staff also presented the same presentation at the February 22, 2022 Allentown meeting and gave the opportunity to have community members ask questions regarding the bridge locations. Also at the Allentown meeting, a 3D model was present to allow attendees to observe the 42<sup>nd</sup> Ave S and S 124<sup>th</sup> St alignments from multiple firsthand angles. Many comments and questions were

expressed during the Allentown meeting. The attached table has multiple questions asked by council and community. Please see photographs with the questions/comments written down and posted onto the available boards at the community meeting.

### **PROPOSED NEXT STEPS**

Public Works staff will continue to share and answer comments/questions regarding the 42<sup>nd</sup> Ave S Replacement and gather additional feedback at the monthly Allentown Community Meeting on March 22, 2022 and other community outreach meetings. City staff currently has a video and survey available on the City's website for Tukwila residents, businesses, and daily users to give their feedback on the bridge location selection. City staff will return to Council at the March 28, 2022 Committee of the Whole with the results of the City wide survey and comments from the Allentown meeting to seek Council's direction regarding the selection of the replacement option.

Ad ready 100% plans, specifications, and estimate (PS&E) is still on schedule to be completed in the 3<sup>rd</sup> quarter of 2023 with obligation of construction funds in 2024. City staff will update to the Council after the construction bid results are obtained. Project completion is still estimated in late 2025.

### **FINANCIAL IMPACT**

Based on location preference, the final construction costs will vary. The difference between the 42<sup>nd</sup> Ave S steel girder alternative and the 124<sup>th</sup> S St steel girder alternative is approximately \$2,868,537 (approximately 12%). The Washington State Legislature passed the \$17 billion Move Ahead WA transportation package, which included \$17 million for the replacement of the 42nd Avenue Bridge. The City of Tukwila has also received funding from PSRC and the State Local Bridge program, totaling an additional \$13.5million. According to current engineering estimates, the City now has enough funds to complete the 42nd Avenue Bridge replacement.

### **RECOMMENDATION**

The attached TS&L triple bottom line matrix recommends the steel girder S 124th St as the preferred option. However, staff recommends 42nd Ave S steel girder alternative due to community feedback. Staff seeks Council direction on the preferred location of the 42<sup>nd</sup> Ave S/ 124<sup>th</sup> Street bridge replacement at the March 28, 2022 Committee of the Whole meeting.

**ATTACHMENTS:** 2021 CIP, Pg 9 Revised  
Council Questions and Answer Presentation  
[Draft Type, Size, and Location Report](#)  
42<sup>nd</sup> Ave S and S 124<sup>th</sup> St Bridge Renderings

# CITY OF TUKWILA CAPITAL PROJECT SUMMARY

2021 to 2026

**PROJECT:** 42nd Ave S Bridge Replacement

Project No. 91810404

**DESCRIPTION:** Design and construct a replacement structure for the existing 42nd Ave S Bridge near the Tukwila Community Center. Council approved 30% design with City funding of \$1M in 2020, remaining scheduled in 2022.

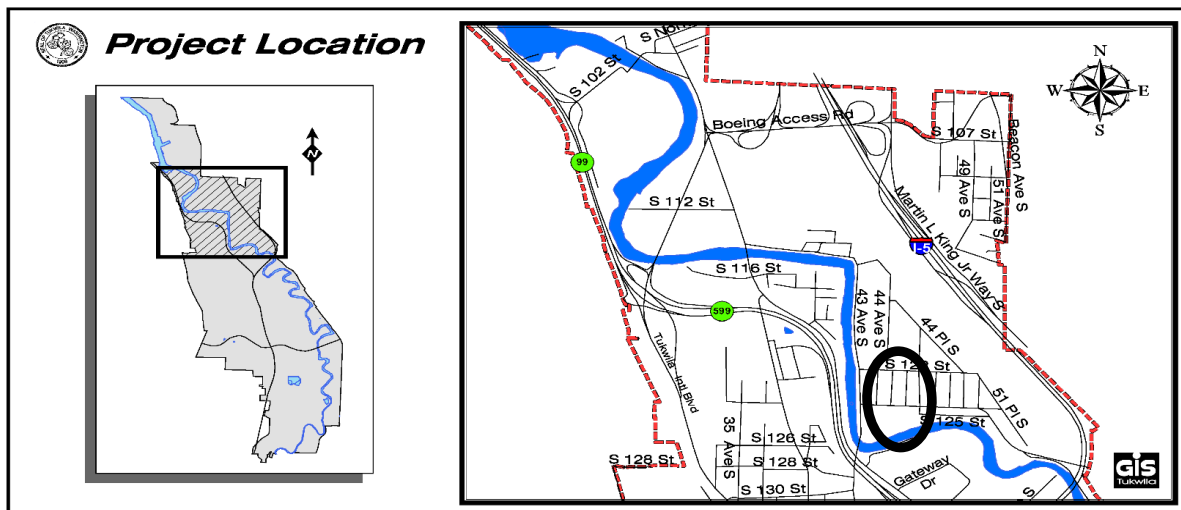
**JUSTIFICATION:** The current bridge has a sufficiency rating of 7.6 (out of 100), is load restricted for AASHTO Type 3 trucks and is structurally deficient. Truck speed was reduced to 15 mph in 2018.

**STATUS:** In 2017 and 2019, Bridge Replacement Advisory Committee (BRAC) funding was submitted, but not awarded. Staff will apply for future BRAC funding during the next call. Applying for STP funding in 2020 for \$1.5m for design.

**MAINT. IMPACT:** New bridge.

**COMMENT:** STP funding has 13.5% match requirement. BRAC funding would be at 80% match for up to \$12 million. Project partners may include FMSIB & BNSF Railroad as they have over 1,800 trips a day on the 42nd Ave S Bridge and it is the only ingress/egress available for their intermodal yard. Also State TIB for \$3M.

FINANCIAL (in \$000's)	Through		Estimated							TOTAL
	2019	2020	2021	2022	2023	2024	2025	2026	BEYOND	
<b>EXPENSES</b>										
Design	19	200	878	248	2,355					3,700
Land (R/W)					200					200
Const. Mgmt.					288	1,380	1,390			3,058
Construction						9,500	9,500			19,000
<b>TOTAL EXPENSES</b>	<b>19</b>	<b>200</b>	<b>878</b>	<b>248</b>	<b>2,843</b>	<b>10,880</b>	<b>10,890</b>	<b>0</b>	<b>0</b>	<b>25,958</b>
<b>FUND SOURCES</b>										
Awarded PSRC Grant				248	1,252					1,500
Awarded WSDOT Grant					302	5,698	6,000			12,000
Proposed Grants						5,000	3,429			8,429
Solid Waste Utility Tax			650	700	700	710	720	549		4,029
City Oper. Revenue	19	200	228	(700)	589	(528)	741	(549)	0	0
<b>TOTAL SOURCES</b>	<b>19</b>	<b>200</b>	<b>878</b>	<b>0</b>	<b>1,289</b>	<b>10,880</b>	<b>10,890</b>	<b>0</b>	<b>0</b>	<b>25,958</b>



City of Tukwila



# 42<sup>nd</sup> Ave S Bridge Replacement Update

March 2022



# Questions and Answers from the 2/14 COW (1 of 6)

- Who makes the ultimate decision for bridge type and location?
  - Council makes the decision for the replacement location
- Is an EIS study required for the 42<sup>nd</sup> Ave S Replacement?
  - An EIS is not required for the bridge replacement. However environmental permits will be filed for the replacement.
- Would a traffic signal be placed at S 124<sup>th</sup> and 42<sup>nd</sup> Ave S intersection?
  - A Traffic signal is not warranted at the S 124<sup>th</sup> St and 42<sup>nd</sup> Ave S intersection.
- Allentown Community has concerns about truck speed on S 124<sup>th</sup>.
  - City staff will evaluate the traffic conditions and implement traffic calming in the Allentown Neighborhood.
- Bridge alternatives are not decided at the 2/14 COW?
  - Correct, Council will only discuss bridge alternatives.
- Will the same information be shared at the next upcoming Allentown meeting?
  - Yes, same information will be presented at the Allentown meeting.

# Questions and Answers from the 2/14 COW (2 of 6)

- What do the scores on the matrix fully represent.
  - City staff receive definitions from TranTech regarding the category and weighted numbers
- Will the Allentown meeting be advertised as 42nd Ave and S 124th?
  - Yes, the project has been labeled 42nd Ave S and S 124th St replacement
- What is the cost difference between the most expensive and least expensive option?
  - The difference is \$4,453,879 or approximately 20% of the total amount.
- What material lasts longer, steel or concrete?
  - Both steel and concrete have a 75+ year design lifespan.
- Why is Council being presented the different materials if both have the same life span?
  - City staff wanted to present Council all the alternatives for the bridge replacement.
- Is the 500-year flood verses the 100-year flood all elevation based?
  - Yes, the S 124 St bridge elevation is higher than the 42nd Ave S location.

# Questions and Answers from the 2/14 COW (3 of 6)

- Why was the 42nd Ave S Bridge constructed in the current location and not at S 124th St.
  - The 42nd Ave S Bridge was constructed in 1949, with no evidence on why that location was selected
- What is the traffic flow at 42nd Ave S and Interurban Ave and S 124th St and Interurban Ave?
  - According to the traffic flow analysis, the current level of service (LOS), taken prior to the strike, at the intersection of 42nd Ave S and S 124th St is a “B” and the LOS at 42nd Ave S and Interurban Ave S is a “C”. If the bridge is replaced at 42nd Ave S (its existing location), the 2040 traffic calculations state that the LOS at 42nd Ave S and 124th Ave S would remain a “B” and the 42nd Ave S and Interurban Ave S would increase to a “D”. If the bridge is replaced at 124th Ave S, the projected LOS at S 124th and Interurban Ave is a “B” with a signalized intersection, and LOS at 42nd Ave S and 124th Ave S would remain a “B”. In this calculation, “A” is a better LOS and “D” is a worse LOS.
- What is community’s the feedback?
  - The Allentown community has indicated they prefer the 42nd Ave S alternative. City wide survey is available for residence and users of the bridge to leave their feedback.
- Do not lose sight that the bridge replacement does not stop the truck reroute study.
  - Correct, this is the 42nd Ave S Bridge replacement project that runs parallel with the Allentown Truck Reroute project.



# Questions and Answers from the 2/14 COW (4 of 6)

- What time was the 2/22/2022 Allentown meeting at?
  - The Allentown meeting was conducted at 5:30 pm on 2/22/22 at the Tukwila Community Center.
- Can truck traffic be limited once new bridge is constructed?
  - The new structure will be constructed to the WSDOT Bridge Design Manual LRFD standards and without an engineering study to illustrate the impacts to the infrastructure from trucks, restrictions cannot be enforced.
- Can the City of Tukwila be involved with the selection process?
  - Yes, residents can answer the survey posted on the City's website to provide feedback
- How far does the 42nd Ave S corridor extend?
  - The 42nd Ave S corridor extends the length of 42nd Ave S and the new structure is required to connect Interurban Ave to 42nd Ave S.
- Is 48th Ave outside of the current corridor?
  - 48th Ave is not in the 42nd Ave S corridor.
- What is the length of the current structure and length of the future structure?
  - The current 42nd Ave S Bridge has 220 ft main span. The proposed 42nd Ave S Bridge has a main span of 250 and the S 124th St has a main span of 220 ft.

# Questions and Answers from the 2/14 COW (5 of 6)

- Will the old structure be used for the temporary bridge during construction of the new 42nd Ave Bridge?
  - The old superstructure could be used as the temporary structure during construction.
- How much additional space is needed to construct the S124th St bridge and which properties would be affected?
  - TranTech is providing cross sectional of the S 124th St and 42nd Ave S intersection.
- Will the property's at 42nd Ave S and S 124th St be impacted?
  - There will be impact to property's during construction.
- Have the homeowners been contacted about the intersection?
  - Properties owners have been contacted during the Allentown meeting.
- Will the Allentown meeting be virtual or in-person
  - The Allentown meeting was in-person at the TCC on 2/22/22.

# Questions and Answers from the 2/14 COW (6 of 6)

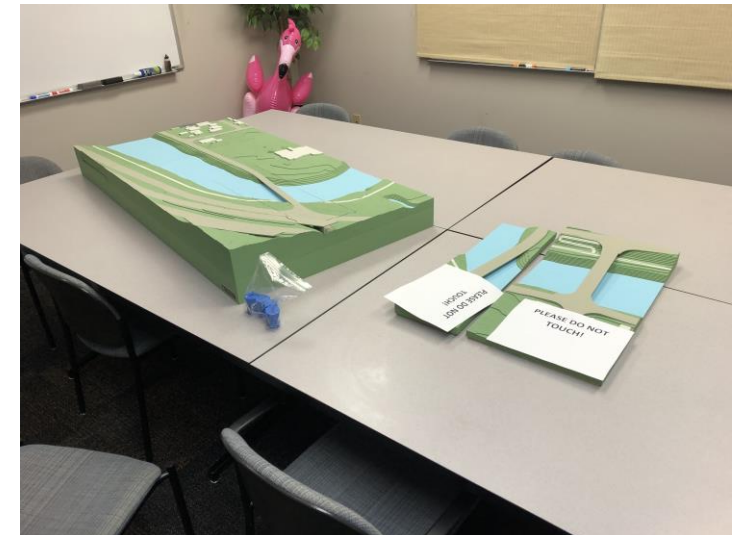
Item	42nd Ave S Steel	42nd Ave S Concrete	S 124th Ave Steel	S 124th Ave Concrete
<b>Cost</b>	\$24,372,157	\$25,957,499	\$21,503,620	\$22,962,950
<b>Design life</b>	75+ years	75+ years	75+ years	75+ years
<b>Design Timeline</b>	Complete 3rd Quarter 2023	Complete 3rd Quarter 2023	Complete 3rd Quarter 2023	Complete 3rd Quarter 2023
<b>Construction Timeline</b>	approx. 275 working days	approx. 275 working days	approx. 253 working days	approx. 253 working days
<b>Seismic Design</b>	Rated for a 1,000 year return event earthquake	Rated for a 1,000 year return event earthquake	Rated for a 1,000 year return event earthquake	Rated for a 1,000 year return event earthquake
<b>Traffic Flow</b>	Same traffic configuration	Same traffic configuration	New added signal at S 124th and Interurban Ave	New added signal at S 124th and Interurban Ave
<b>Annual Maintenance Costs</b>	\$2,000/year	\$1,000/year	\$2,000/year	\$1,000/year
<b>Right-of-way</b>	City owned ROW	City owned ROW	City owned ROW and small improvements to Northeast and Southeast corners at S 124th and 42nd Ave S Intersection	City owned ROW and small improvements to Northeast and Southeast corners at S 124th and 42nd Ave S Intersection

# Is a Transportation Impact Analysis (TIA) required?

- A TIA is not required for this project as the new bridge structure does not generate new or additional traffic. TIA's are required for new developments (I.E. shopping centers, housing developments...) as traffic patterns will change. The proposed replacement of the 42<sup>nd</sup> Ave S Bridge will see the same traffic.
- A traffic analysis was performed as part of the TS&L and studied the level of service (LOS) at the affected intersections with today's traffic volume and traffic volumes in 2040.
- Please refer to page 129 of the TS&L for the traffic analysis.

# 2/22/2022 Allentown meeting

- Staff conducted an Allentown meeting on Tuesday, February 22<sup>nd</sup> at the Tukwila Community Center.
- A 3D model was present for attendees to visualize both alignments. Please see the photograph below of the 3D model
- There were approximately 45 individuals that attended the Allentown meeting. The City received 27 votes for the preferred location. Please see the next slides with total votes and comments left by attendees.
- Please see the next slides of input given at the Allentown meeting



# Input from the 2/22/2022 Allentown meeting

Post-it SUPERSTICKY EASYPAD TABLEAU À FEUILLES MONTÉES SUPERCOLLANTES SUPERFESTIVAS BLOQUE DE HOJAS REPOSICIONABLES

30 25 IN/PO x 30 IN/PO 63.5 cm x 76.2 cm 6.2-5.0 FT/PO (0.49 m) 3M

Which one - 42<sup>nd</sup> or 124<sup>th</sup> - is your preferred option?

50<sup>th</sup> PLACE SOUTH CROSSING TO 48<sup>AV.</sup> IN INDUSTRIAL PARK ACROSS RIVER

42<sup>nd</sup> - But keep Semis out of my hood.  
||||| ||||| ||||| ||||| ||||| |||||

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124<sup>TH</sup>

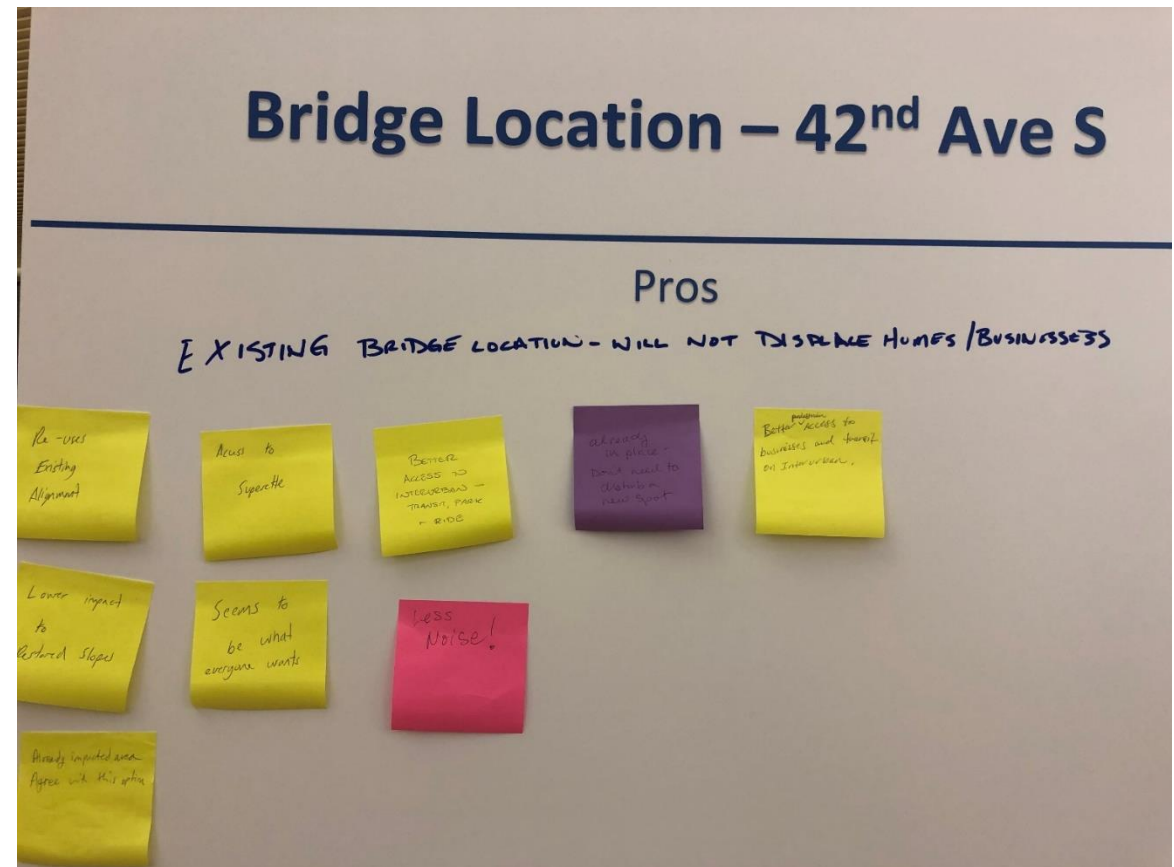
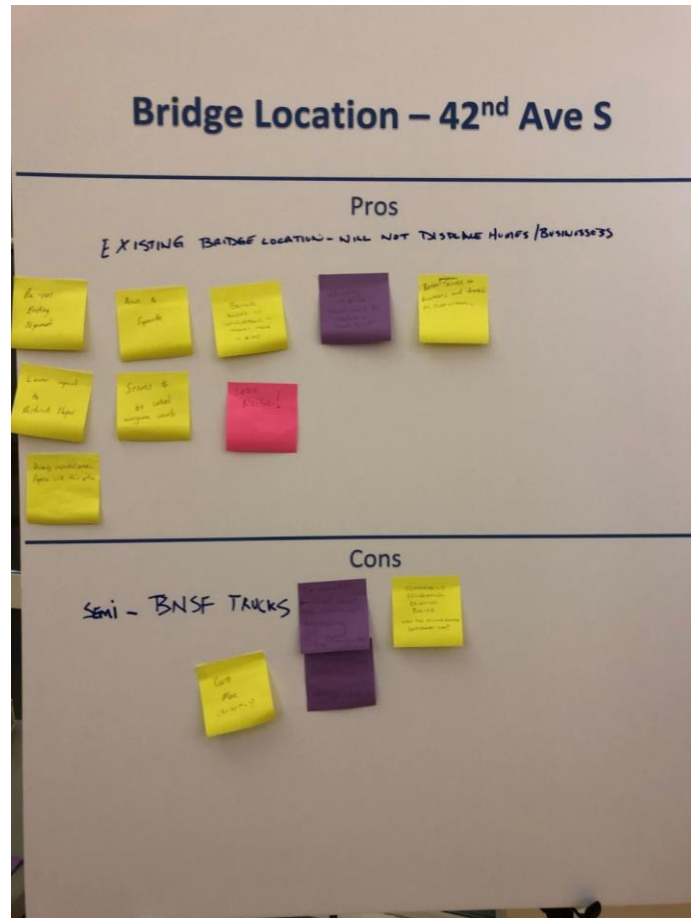
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Neither - 48<sup>th</sup> Ave S - this has been the preferred route in all the prior studies

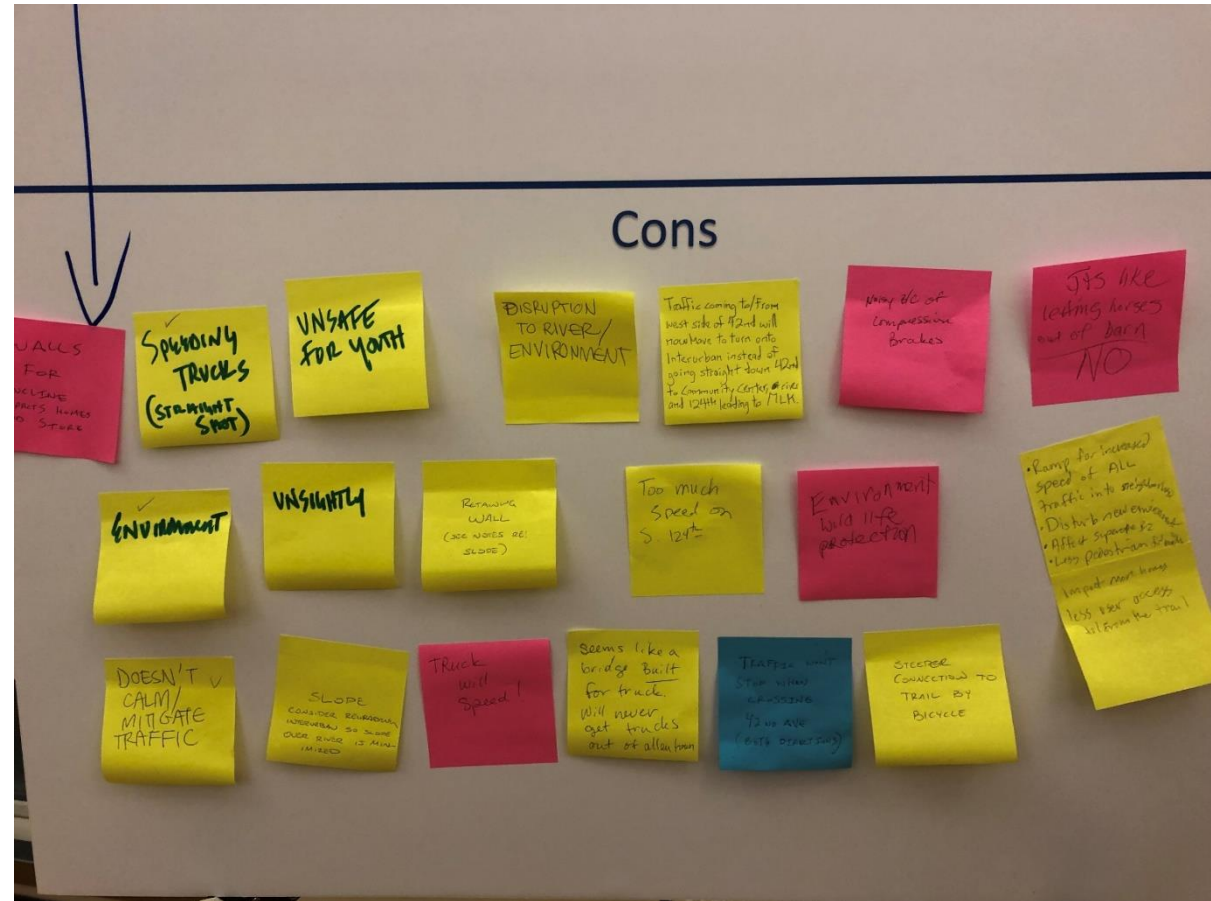
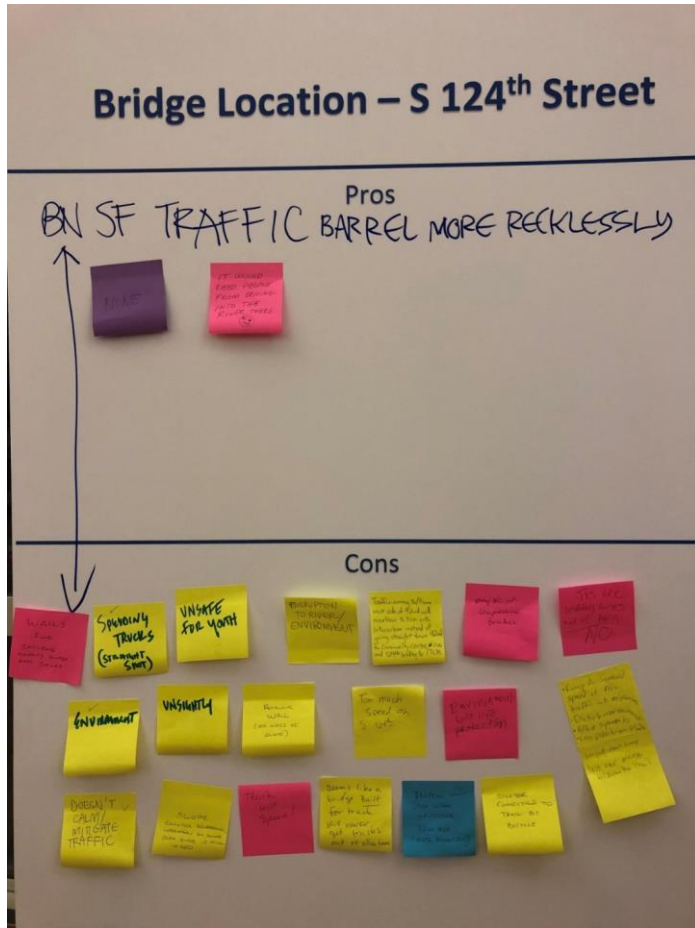
**What else should we know?**

[A collection of approximately 15 colorful sticky notes with handwritten notes in various colors (yellow, pink, purple, blue) are pinned to a whiteboard under the heading 'What else should we know?'. The notes contain various comments and questions related to the project, such as 'This is a highland with real estate', 'BNSF is 1/200' Altian Company', and 'The area along the river...']

# Input from the 2/22/2022 Allentown meeting



# Input from the 2/22/2022 Allentown meeting





# Pros & Cons

## 42<sup>nd</sup> Ave S Alignment

- Pros
  - Familiar traffic pattern
  - No impacts to private property
  - Allentown residents preferred option
- Cons
  - Possible hydrological/scour issues
  - Temporary structure during construction required and impact to the splash park
  - Most expensive option

## S 124<sup>th</sup> Street Alignment

- Pros
  - Best hydrological placement and flood rating
  - Traffic control during construction
  - Least expensive option
- Cons
  - Unfamiliar traffic pattern
  - Potential impacts to private property
  - Allentown residents do not prefer this option
  - Residents feedback that the trucks will barrel through 124<sup>th</sup>
  - Residents feedback that possible environmental and wildlife disturbance
  - Adverse affects on the superette store

# Recommendation

**Staff recommends 42nd Ave S steel girder alternative due to community feedback.**

**42<sup>nd</sup> Ave S Bridge Renderings**



42nd Ave S Bridge Elevation Looking North Rendering



42nd Ave S Bridge Elevation Looking North Rendering

**S 124<sup>th</sup> Street Bridge Renderings**



S 124th St Bridge Looking East Rendering



S 124th St Bridge Elevation Looking North Rendering