



INFORMATIONAL MEMORANDUM

TO: **Transportation and Infrastructure Committee**
FROM: **Henry Hash, Public Works Director** *H.H.*
BY: **Hari Ponnekanti, Deputy Director/City Engineer**
CC: **Mayor Ekberg**
DATE: **May 31, 2019**
SUBJECT: **Strander Boulevard Extension Phase 3**
Project No. 98610403
Discussion on Value Engineering Results

ISSUE

Presentation and discussion on the Strander Blvd Extension Project Phase 3 Project.

BACKGROUND

The City of Renton completed Phase 1 of the Strander Boulevard/SW 27th Street (Oakesdale Avenue to Naches Avenue) in 2008 and Phase 2 (Naches Avenue to the new Tukwila Station/Sounder Commuter Rail Station parking lot, between BNSF and UPRR) in 2014. Phase 3 is being led by the City of Tukwila.

In 2016, Tukwila received Federal grant funding for the preliminary engineering and right-of-way phases and is proceeding with the design process as part of the preliminary engineering phase (the project design started last year and is currently at 30%),

Due to the increased complexity of the project and projected increased costs from original estimates, WSDOT and TIB recommended that a Value Engineering Study (VE) be performed for the Strander Blvd Phase 3 Project, to either find cost savings which could be incorporated into the design or validate the current design as the most cost-efficient option.

City administration and City staff have met with various legislators and funding agencies listed below:

- Vice Chair of the House Transportation Committee - Representative Jake Fey
- Member of Senate Transportation Committee - Senator Curtis King
- Washington State Department of Transportation (WSDOT) Secretary - Roger Millar
- WSDOT Northwest Region Local Programs Engineer - Mehrdad Moini
- WSDOT Local Programs Director - Kathleen Davis
- Washington State Freight Mobility Strategic Investment Board (FMSIB) Director - Brian Ziegler
- Washington State Transportation Improvement Board (TIB) Director – Ashley Probart

Staff has also had conversations with our state and federal lobbyists regarding the best strategy for the state and federal funding awards.

DISCUSSION

Earlier this year, the City conducted a VE study after awarding a contract to MENG Analysis to perform the work. Three options were ultimately identified for the City to consider which are detailed in the attached presentation.

Option No. 1: Continue with current design of 4 lane road (\$5 - \$10M potential cost savings from VE study)

Option No. 2: Incorporate full VE proposals of 2 lane road, no seal, if possible, and continue design (\$10 - \$25M potential cost savings). This option is recommended by the Administration since it will meet the original scope of the project which was a new regional east-west arterial in this area.

Option No. 3: Stop Work. Return grant funding, reimburse approximately \$2 million of federal funds spent to date.

Project and Funding Timeline

Dates	City Council Actions/Updates	Funding/Grants	Project Milestones
2012	City Adopts Financial Planning Model and Capital Improvement Program (CIP) lists Strander Blvd/SW 27 th St Extension with costs in Beyond years	No specific funding identified	
2013	CIP adopted without major changes from 2012	No specific funding identified	
2014	Adopted CIP includes \$20,000 for professional services to apply for Federal TIGER grant and FMSIB	<ul style="list-style-type: none"> TIGER grant not awarded 	Phase 2 – SW 27 th St. Extension completed by Renton
2015	Adopted CIP included proposed grants from TIGER, FMSIB, and STP	<ul style="list-style-type: none"> TIGER grant not awarded 	
2016	Council adopts state and federal legislative priorities with a focus on securing funds for Stander Blvd	<ul style="list-style-type: none"> TIGER grant not awarded STP (PSRC) grant \$5.1M for design Federal FASTLANE grant awarded \$5 million 	
2017	Adopted CIP estimates costs of \$39 million and identifies several sources of funding: <ul style="list-style-type: none"> City operating funds: \$2 million Awarded STP grant: \$5.1 M 	<ul style="list-style-type: none"> State FMSIB Reconfirmed & Awarded \$5M State Discretionary grant awarded \$500,000 BUILD grant (formerly TIGER) not awarded 	City award design contract to Berger/ABAM
2018	Council adopts state and federal legislative priorities with a continued focus on Strander and renewed focus on securing Statewide funding as part of a possible Transportation package. Council adopts contract for Value Engineering study to be completed in 1 st Quarter 2019	<ul style="list-style-type: none"> BUILD grant not awarded 	<p>City Council briefed on increased estimated project costs due to complexity</p> <p>City contracts for utility coordination</p> <p>City staff begin meeting with state elected and department representatives.</p> <p>Revised & significantly higher cost estimate from 30% design resulted in requiring a Value Engineering (VE) study to be completed by funding partners</p>
2019	Adopted CIP lists estimated project costs of \$83.78 million		<p>Perform Value Engineering (VE) study and prepare reports</p> <p>City Council briefed on VE results</p>

Current Funding and Grant obligations

Grant	Awarded	Amount	Restrictions
STP (PSRC)	2016	\$5.1 million	<ul style="list-style-type: none"> \$3.9 million for construction. Must be used by 2030 or repay funds \$1.2 million for ROW, must be obligated by 12/31/2019
Federal FASTLANE	2016	\$5 million	Must be obligated for Construction by September 2019
FMSIB	2017 (reconfirmed)	\$5 million	Must be obligated for Construction by January 2020
WA State Discretionary Funds	2017	\$500,000	

If funds are not obligated by the dates mentioned above, they will need to be returned to the funding agency and then can be reapplied for in the future. Based upon our conversations internally, in discussions with our funding partners and with our state and federal lobbyists, City Administration and Staff are suggesting that we notify the appropriate agency and relinquish the funding awards for FASTLANE, STP ROW, and FMSIB. This will help with building support when the City eventually applies for future funds.

Possible next steps

- June 2019 – Council Briefed on Value Engineering results and provide direction on preferred design alternative
- 2019-2020 – Design alternative is completed
- 2019-2022 – Secure significant statewide funding for new design
- 2020-2023 – Reapply for federal and State grants and secure other regional partner funding

FINANCIAL IMPACT

The financial impact varies depending on the direction taken on the project. Option 2 (2 lane road) with \$10 - \$25M potential costs savings is recommended by the administration.

The potential funding path forward for Option 2:

Phase 3 Funding	PE	ROW	Construction	Total	Notes
SECURED					
City of Tukwila	\$607,500	\$195,750	\$1,196,750	\$2,000,000	Secured
State Funding		\$276,166	\$223,834	\$500,000	Secured
STP (PSRC)	\$3,892,500			\$3,892,500	Secured
RETURNED & REAPPLY					
FASTLANE			\$5,000,000	\$5,000,000	Return and reapply
FMSIB			\$5,000,000	\$5,000,000	Return and reapply
STP (PSRC)		\$1,254,250	\$0	\$1,254,250	Return and reapply
POTENTIAL FUNDING SOURCES					
State Legislative Funding			\$20,000,000	\$20,000,000	Potential
TIB			\$7,000,000	\$7,000,000	Potential
Additional PSRC (STP)			\$5,000,000	\$5,000,000	Potential
Sound Transit			\$5,000,000	\$5,000,000	Potential
OTHER FUNDING SOURCES					
City of Renton			\$4,000,000	\$4,000,000	Possible
Additional City of Tukwila			\$4,000,000	\$4,000,000	Possible
UPRR			\$0	\$0	
BNSF			\$0	\$0	
BUILD Grant			\$0	\$0	
Potential Grant Funding	\$4,500,000	\$1,726,166	\$56,420,584	\$62,646,750	
Phase 3 Costs	\$4,500,000	\$1,720,166	\$55,000,000	\$61,220,166	2-Lane concept Cost

RECOMMENDATION

The City Administration is seeking Council consensus for a path to move forward with Option 2 (two lane road).

Based upon discussions with funding partners and with state and federal lobbyists, City Administration and Staff recommend that the City notify the appropriate agency and relinquish the funding awards for FASTLANE, STP ROW, and FMSIB.

ATTACHMENTS

Design Consultant's VE options power point presentation



Strander Boulevard Extension

Project Update/Value Engineering Results

June 2019



Agenda



- Purpose of Meeting
- Project Purpose & Need
- Project Background
- Current Project Funding Status
- Recommendations
- Options
- Questions?



Strander Boulevard Extension

Purpose of Meeting



- Update on Project Status and Value Engineering (VE) Study
- Seek Council Consensus for Recommended Path Forward



Strander Boulevard Extension

Project Purpose & Need – Quality of Life



Completes the last 1,500 feet of an east-west connection in the Green River Valley that currently does not exist today by constructing a safe crossing of a key regional railroad line.

- Improves Freight Mobility in the Green River Valley
- Reduces Traffic Congestion for Commuters
- Improves Connectivity to large employment centers
- Improves Access to a Regional Urban Center
- Reduces Air and Noise Pollution



Strander Boulevard Extension

Project Purpose & Need – Accommodates Growth

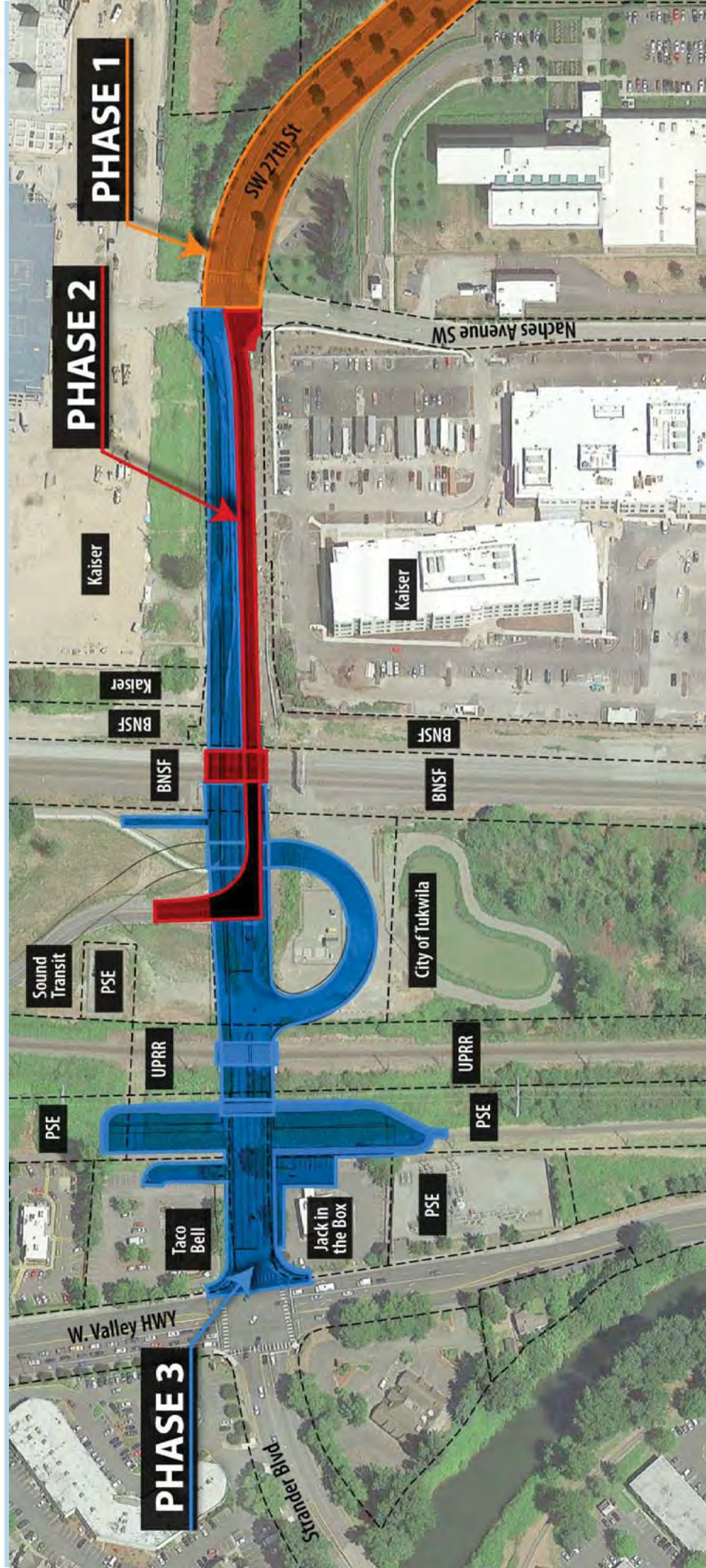


- Facilitates the Cities Ability to Meet Growth Management Concurrency Standards.
- Moves 22,500 vehicles per day, including 1,800 trucks, off of existing South 180th, Grady Way and I-405.
- Provides Level of Service (LOS) “E” on South 180th and Grady Way
- Provides \$65M in Travel Time Economic Benefits (2022 to 2052)



Strander Boulevard Extension

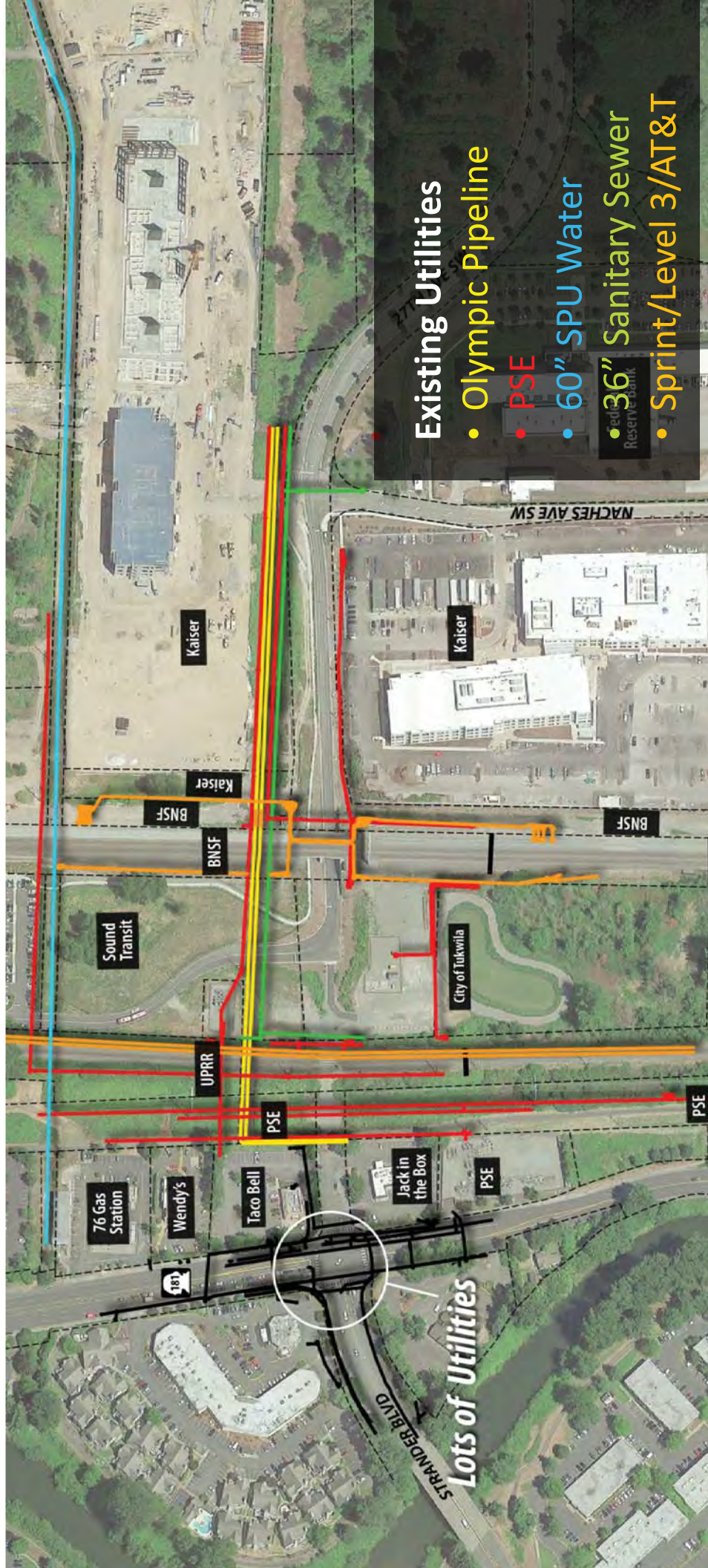
Project Background (Current 4-Lane Layout)



Strander Boulevard Extension



Major Utility Conflicts



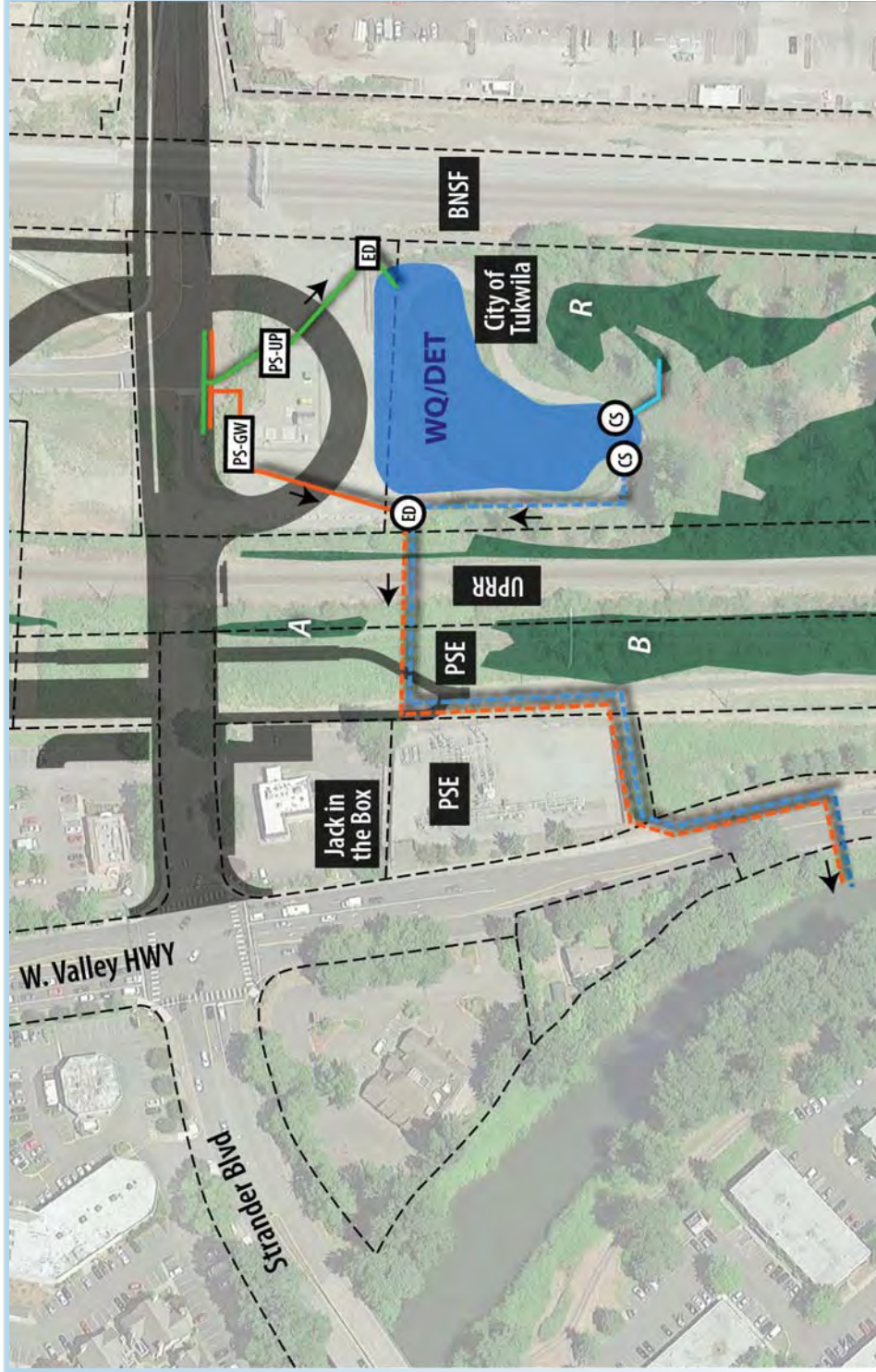
Existing Utilities

- Olympic Pipeline
- PSE
- 60" SPU Water
- 36" Sanitary Sewer
- Sprint/Level 3/AT&T

Strander Boulevard Extension



Groundwater Management Issues



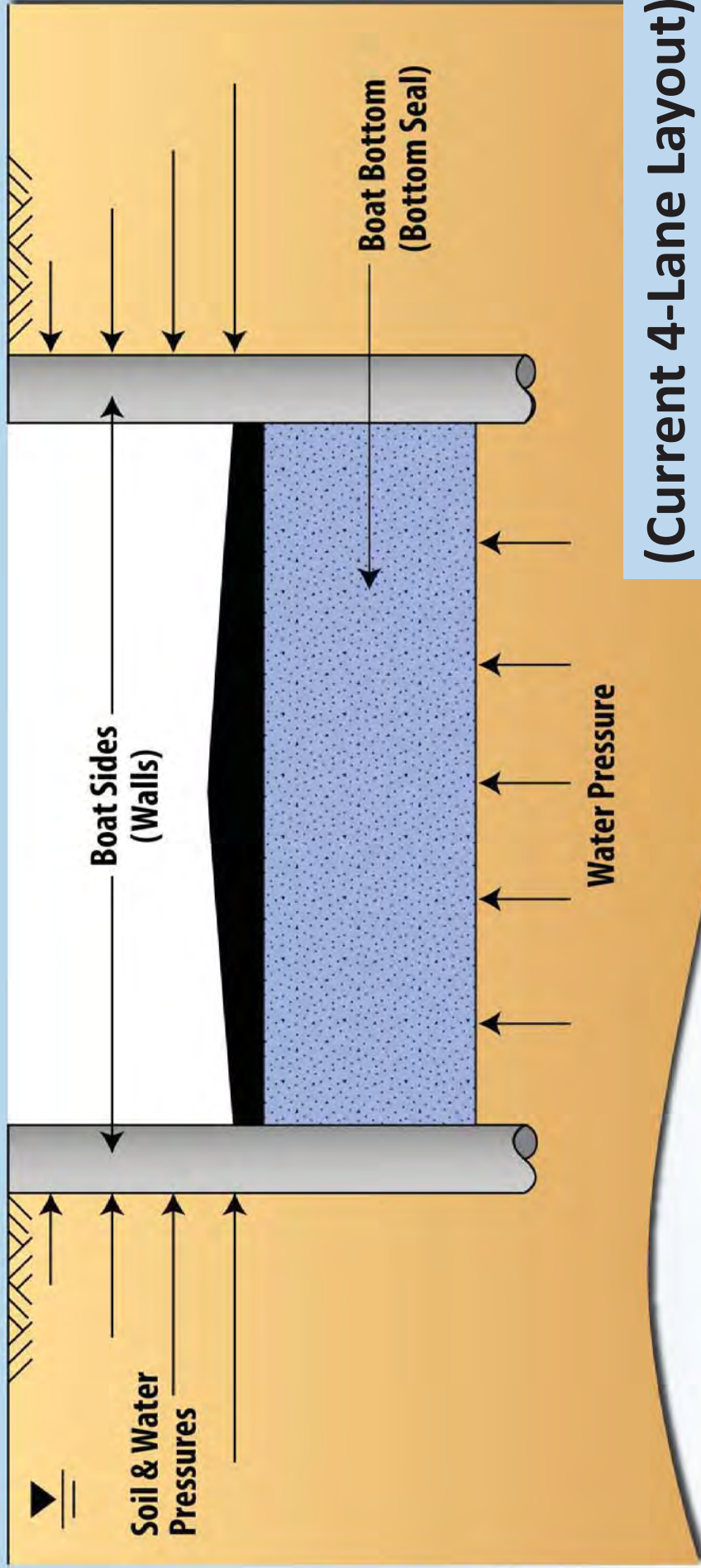
Strander Boulevard Extension

Groundwater Management Issues



Strander Boulevard Extension

Watertight Underpass Terminology



Strander Boulevard Extension

Watertight Underpass Example

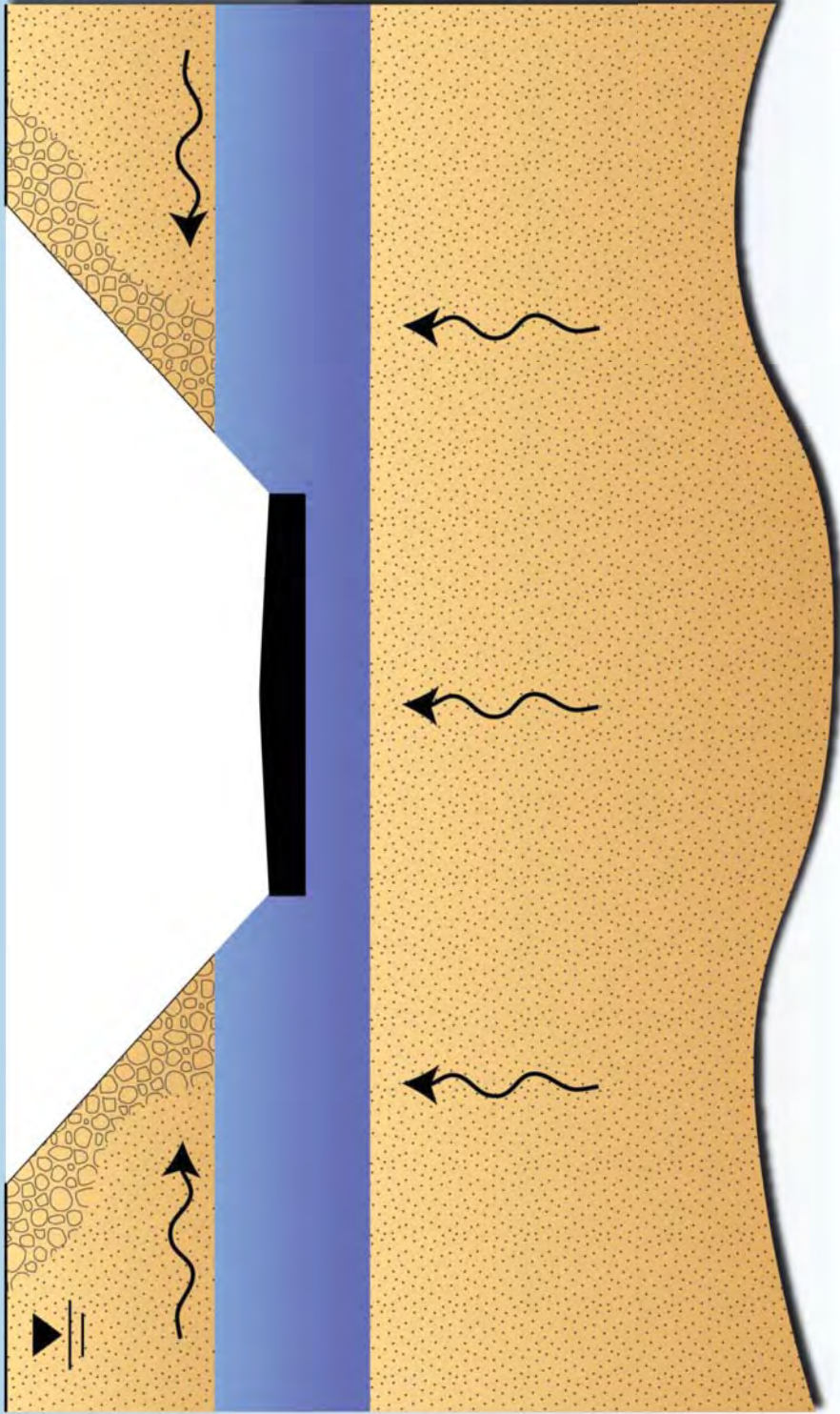


South 180th Street
City of Tukwila
Project Cost – **\$22.4 Million**
Project Completion – **June 2003**
Roadway Width – **65 ft**
Project Length – **1107 ft**
In-Grade – **6%**
Out-Grade – **5%**



Strander Boulevard Extension

Unsealed Underpass (Partially)



Strander Boulevard Extension

Unsealed Underpass Example



Strander Boulevard Extension

Current Project Funding Status

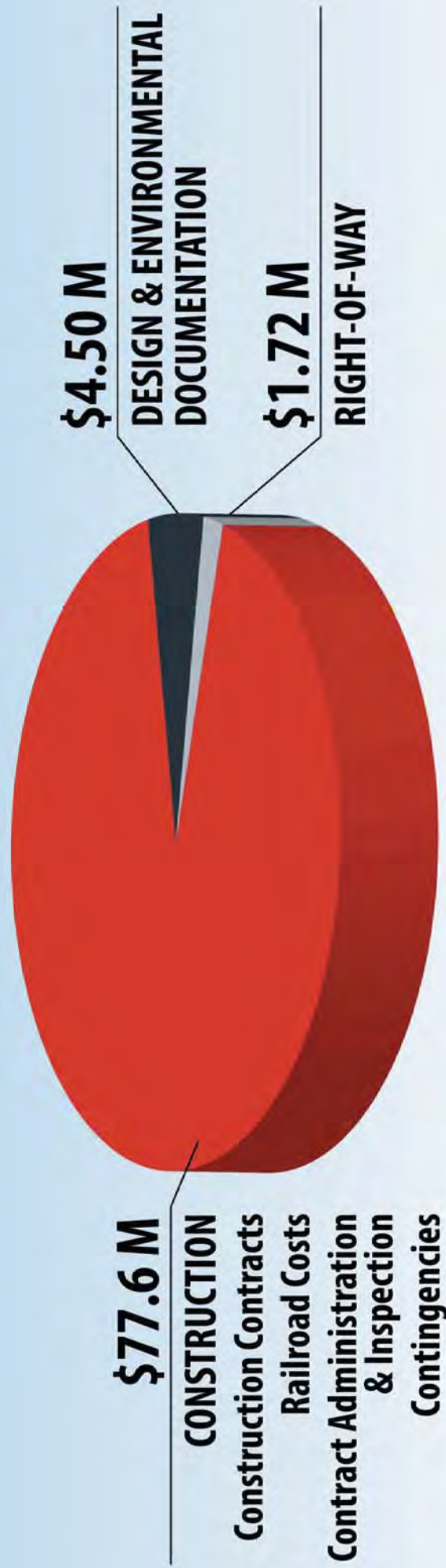


PHASE 3 FUNDING	PE	ROW	CONSTRUCTION	TOTAL	NOTES
City of Tukwila	\$607,500	\$195,750	\$1,196,750	\$2,000,000	Secured
PSRC (STPUL)	\$3,892,500	\$1,254,250	\$-	\$5,146,750	Secured (Obligate ROW by 11/19)
FASTLANE			\$5,000,000	\$5,000,000	Secured (Award Const. by 11/19)
State Funding		\$270,166	\$229,834	\$500,000	Secured
FMSIB			\$5,000,000	\$5,000,000	Secured
TIB			\$-	\$-	
State Legislative Funding			\$-	\$-	
City of Renton			\$-	\$-	
Additional City of Tukwila			\$-	\$-	
Additional PSRC (STP)			\$-	\$-	
Sound Transit			\$-	\$-	
Port of Seattle			\$-	\$-	
UPRR			\$-	\$-	
BNSF			\$-	\$-	
Other Federal Grants (BUILD)			\$-	\$-	
Subtotal	\$4,500,000	\$1,720,166	\$10,229,834	\$17,646,000	
Phase 3 Costs	\$4,500,000	\$1,720,166	\$77,561,460	\$83,781,626	Current Estimate for Phase 3



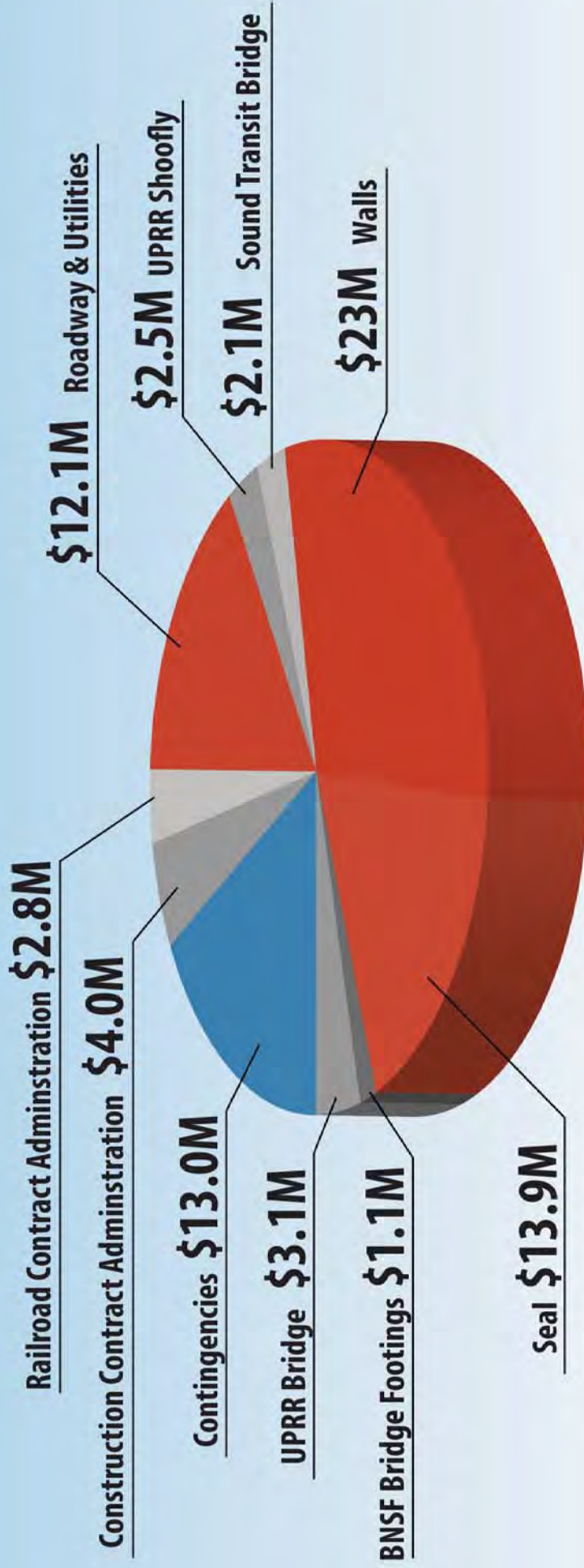
Strander Boulevard Extension

Current Project Funding Status



Strander Boulevard Extension

Current Project Funding Status



Strander Boulevard Extension

Cost Comparison to Similar Projects



PROJECT	CONSTRUCTION COST	CONSTRUCTION YEAR 2019	WIDTH (ft)	LENGTH (ft)
		<i>Inflation = 3.0%</i>	85	1,500
South 180th Street	\$22.4	2003 \$36	65 \$47	1,107 \$64
Lincoln Avenue	\$21.6	2012 \$27	50 \$45	915 \$74
MLK Boulevard	\$15.6	2014 \$18	50 \$31	915 \$50



Strander Boulevard Extension

VE Team Proposals



CITY OF TUKWILA
 STRANDER BOULEVARD EXTENSION – PHASE 3
 VALUE ENGINEERING
 JANUARY 24th, 2019



Value Engineering Team:
 Eric Meng, CVS, Team Leader
 Timothy Buckley, VMA, Assistant Team Leader
 Adam Wirthlin, Cost
 Jeff Faunce, Construction
 Kevin O'Brien, Environmental and Permitting
 Manuel Feliberti, Roadway Engineer
 Patrick Montemarlo, Railroad Specialist
 Nate Wong, Drainage and Civil
 Sarah Partap, VE Project Manager
 Andrea Vielma, VE Project Coordinator
 Cam Iseri, VE Project Coordinator

MENG Analysis



Strander Boulevard Extension

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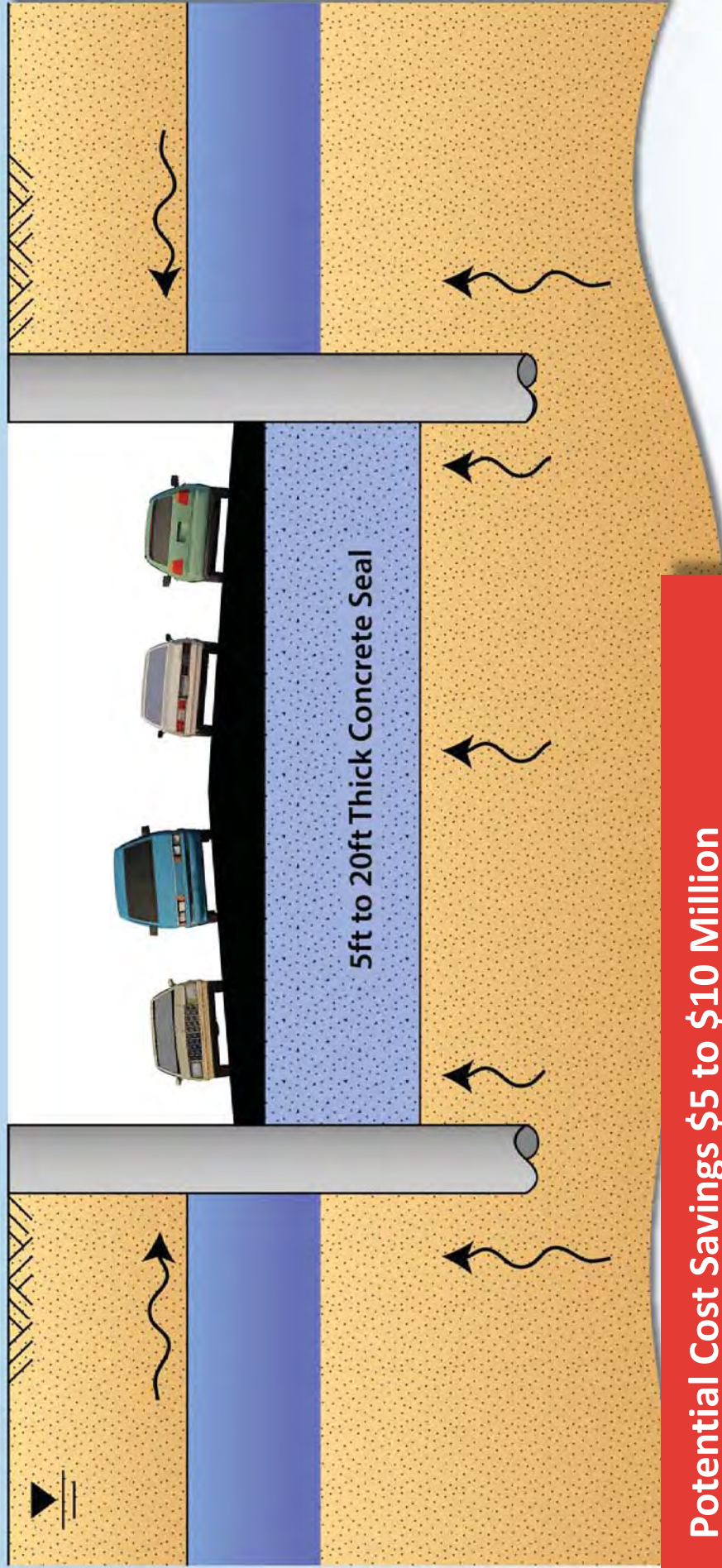
Recommendations



- Option No. 1: Continue With Current Design of 4-Lane Road (\$5M to \$10M potential Cost Savings)
- Option No. 2: Incorporate VE Proposals of 2-Lane Road, No Seal, if Possible and Continue Design (\$10 to \$25M potential Cost Savings) – *Recommendation by City Administration*
- Option No. 3: Stop Work (Return Grant Funding & Reimburse Federal Funds Spent to Date)



Option 1 (Current 4-Lane Layout)

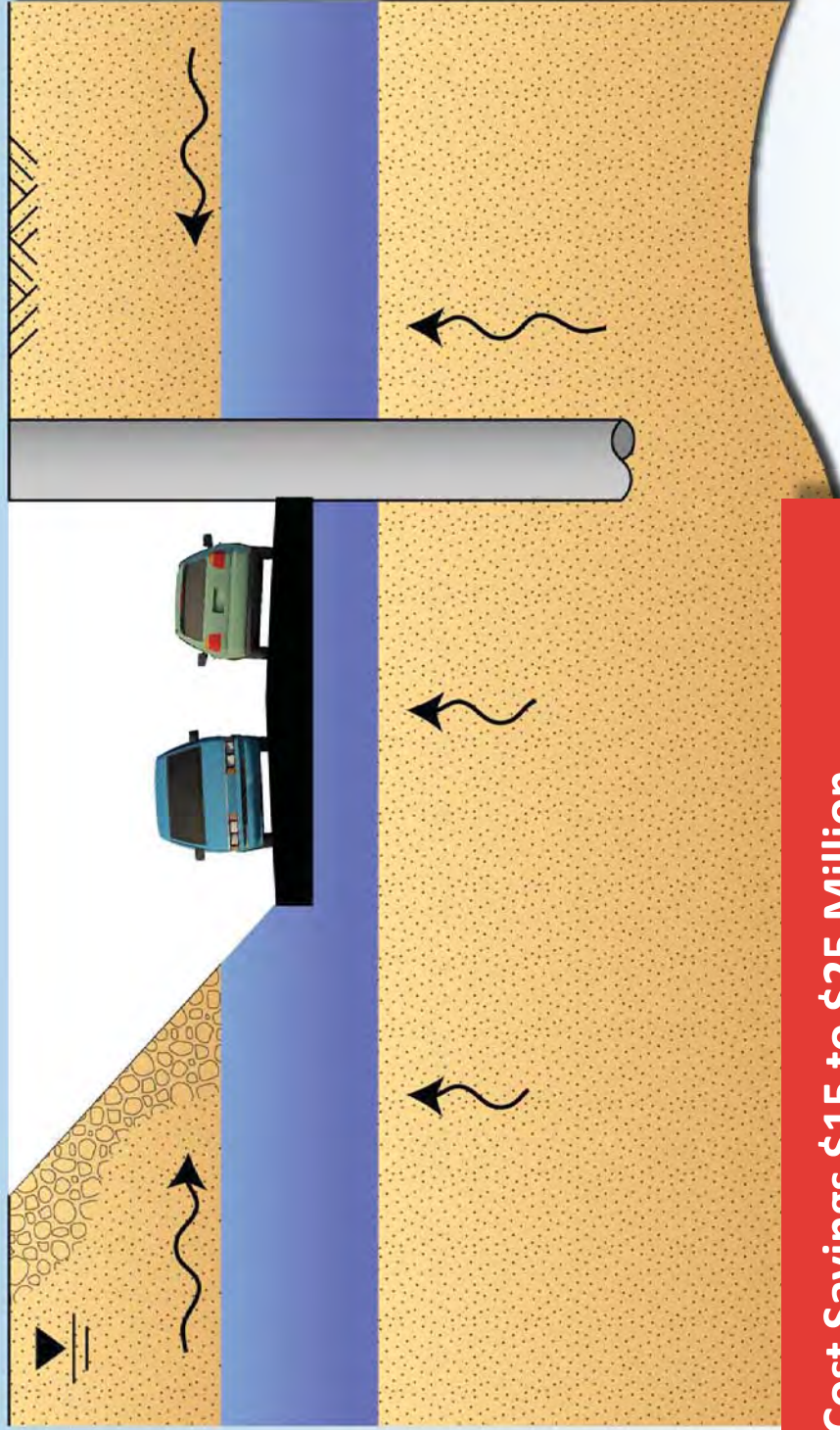
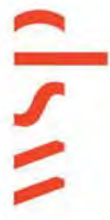


Potential Cost Savings \$5 to \$10 Million



Strander Boulevard Extension

Option 2 (2-Lane Layout)

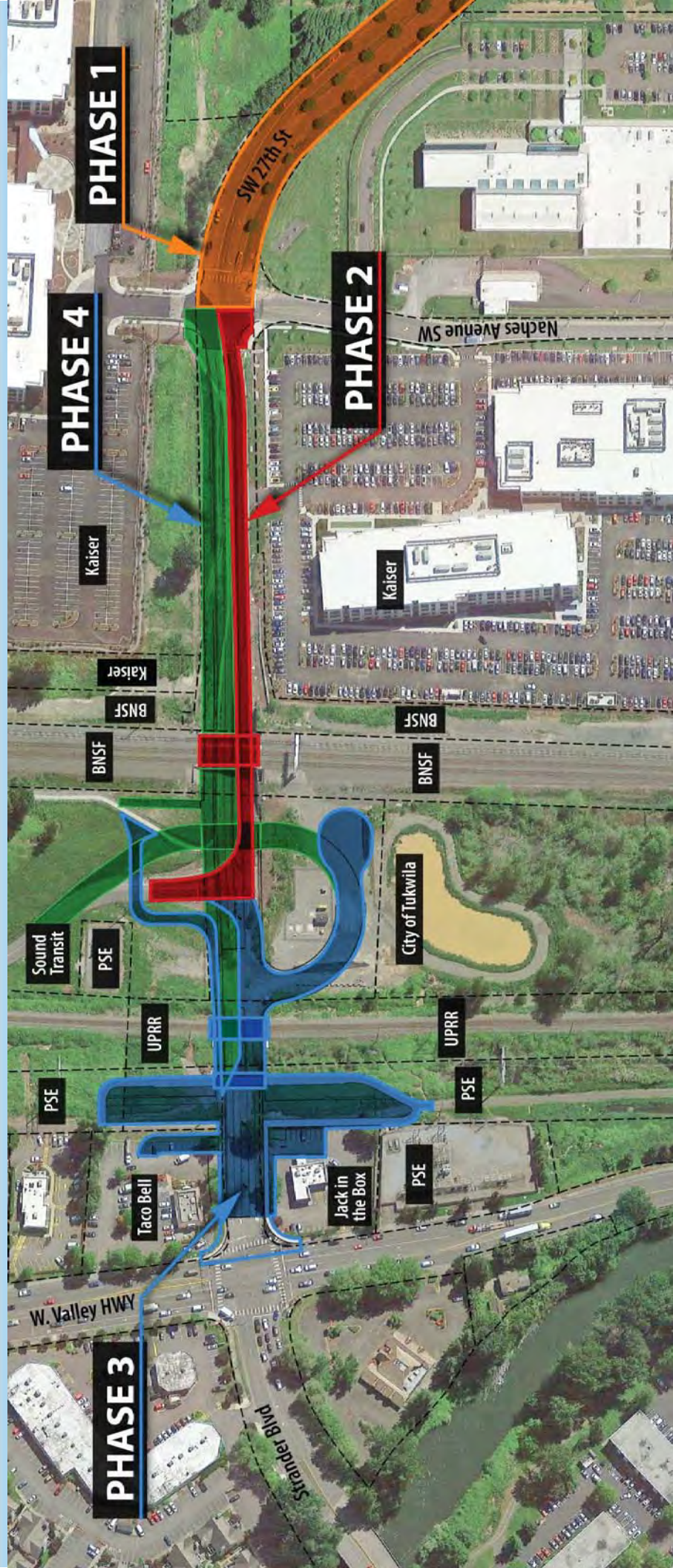


Potential Cost Savings \$15 to \$25 Million



Strander Boulevard Extension

Proposed Project Phasing



Strander Boulevard Extension

VE Team Proposals – Third Party Impacts

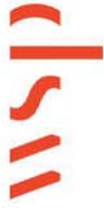


- Adjacent Property Owners
- UP and BNSF Railroad
- PSE
- SPU
- KING COUNTY



Strander Boulevard Extension

Option 2 – Possible Funding Scenario



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POTENTIAL FUNDING SOURCES					
State Legislative Funding			\$20,000,000	\$20,000,000	Potential
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OTHER FUNDING SOURCES					
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Additional City of Tukwila			\$4,000,000	\$4,000,000	Possible
UPRR			\$0	\$0	
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Phase 3 Costs	\$4,500,000	\$1,720,166	\$55,000,000	\$61,220,166	2-Lane concept Cost



Strander Boulevard Extension

Phase 4 – Differed Construction Costs



Current 4-Lane Option	\$83.8 M
Proposed 2-Lane Option	\$61.2 M
Cost Delta =	\$22.6 M

Phase 4 is Expected to cost lot more in the future with additional costs such as inflation, traffic control, permitting and other costs



Strander Boulevard Extension

Questions?



Strander Boulevard Extension