

SR 305 Winslow Ferry to Hostmark Street – Safety Improvements

Working Group Update
September 18, 2019

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SR 305, Winslow to Hostmark

Agenda

- Summary of June 11th through August 26th Meetings
- PE Costs Update
- Design Update – West Port Madison and Adas Will
- Day Road
 - Post VE Design
 - Stormwater Options
 - Recommendation of Preferred Option
- Suquamish Way Update
- Public Outreach – FAQ's and project website updates
- Next Steps



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Meeting Summaries

- June 11th Working Group Meeting Summary - *See Handout*
- July 1st Technical Team Meeting Summary - *See Handout*
- July 18th Non-Motorized Meeting Summary - *See Handout*
- July 18th Value Engineering Recommendations - Day Rd
- July 25th Internal Value Engineering Recommendations - Adas Will & West Port Madison
- August 26th Technical Team Meeting Summary - *See Handout*



SR 305, Winslow to Hostmark - Background

Legislative Description

Constructs safety and mobility improvements on SR 305 from the Bainbridge Ferry Terminal to Hostmark Street.

Purpose and Need:

Congestion along the SR 305 Corridor from Poulsbo to the Winslow Ferry terminal affects travel times, traveler safety and economic vitality. Performance based strategies are needed to:

- Improve corridor safety and mobility
- Address the constraints of the existing Agate Pass bridge
- Provide multi-modal incorporation through and across the corridor
- Increase the ability to move people and improve the corridor capacity overall
- Provide travel time reduction and reliability
- Address access needs for adjacent properties
- Protect and enhance the environment



HIGHEST PERFORMING IMPROVEMENTS



Score	Improvements	Construction Phase
Highest ↑	Squamish Way Roundabout*	3
	Day Road	2
	Adas Will/Agatewood Road	2
	Johnson Road	1
	Port Madison Road	2
	Totten Road	3
	Seminole Road	2
	Masi Shop/Sandy Hook	3
	Noll Road	2
	Sol Vei/Tollefson/Delate	2
Lower ↓	Sportsman Club Road Left Turn Lane	3
	Squamish Way Left Turn Lane*	3
	Access Modifications	3

\$36.5M Total Budget

- Scores based on achieving corridor goals
- Implementation schedule based on readiness and budget availability

Corridor Performance Goals

Congestion Reduce congestion and improve mobility	Transit Improve transit travel time and reliability	Access Manage needs through access management
Safety Improves safety	Non-motorized Improves non-motorized safety	Environment Improves the environment

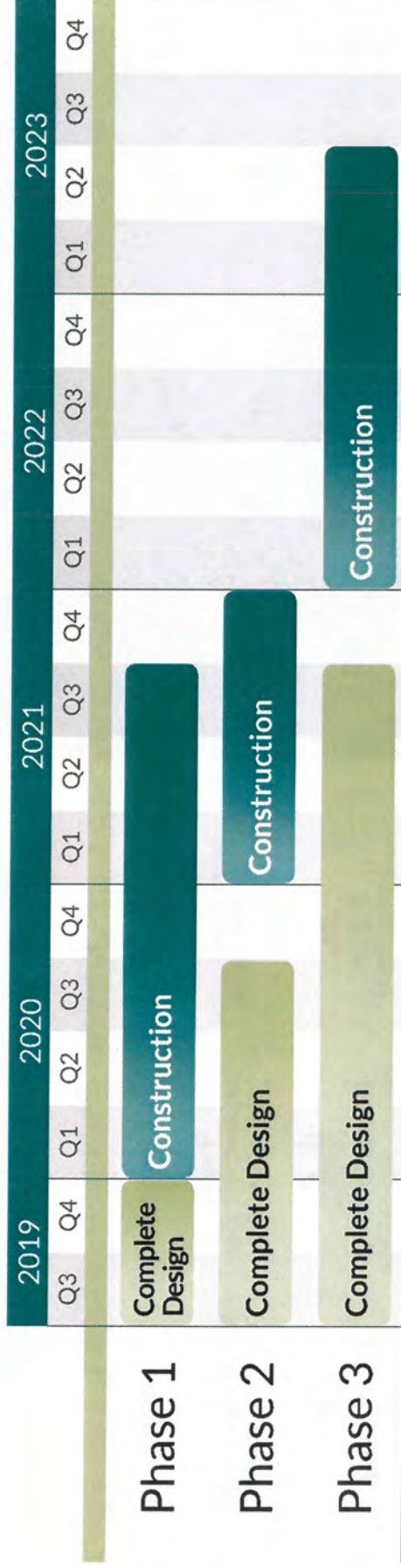
*1 of the 2 Squamish Way options will be implemented.



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Updated Delivery Plan – Schedule

1	Project 1: Johnson Road	2	Project 2: Day Rd Project 3: West Port Madison/Adas Will/Agatewood	3	Project 4: Suquamish RBT or Totten Rd
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PE costs through July 2019

Preliminary Engineering Costs

Jan 2018 thru July 2019 (19 months)

Consultant Services	Public Engagement	\$ 245,000	9%	20%
	Tech Team and WG Meetings	\$ 280,000	11%	
	Survey, Mapping, R/W	\$ 315,000	12%	12%
	Fish Passages	\$ 115,000	4%	4%
	Day Road	\$ 490,000	19%	
	W Port Madison/Adas Will/Agatewood	\$ 380,000	14% *	
	Suquamish Way	\$ 250,000	9%	
	Totten Rd	\$ 220,000	8%	
	Masi / Sandy Hook	\$ 190,000	7%	
	Sportsman Club Rd	\$ 80,000	3%	
	Seminole/Noll/Access Mods	\$ 80,000	3%	
	SubTotal	\$ 2,645,000	100%	100%
	WSDOT		\$ 805,000	
Total		\$ 3,450,000		

* includes 2 roundabouts



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July 18th Value Engineering Workshop -Day Rd

- **Purpose**
Examine cost reduction opportunities and make recommendations
- **Participants (22)**
WSDOT, City of Bainbridge Island, Kitsap Transit, Bainbridge Island Land Trust, North Kitsap Trails Association
- **Approach**
Traffic operations and safety. Right-of-way and access control, Construction and constructability, Grading and walls, and Stormwater



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July 18th Value Engineering Workshop for Day Rd

- VE Team Recommendations
 - Adjust roundabout to reduce stormwater impacts to TDA2 by utilizing existing pavement.
 - Eliminate soldier-pile retaining wall at SW corner
 - Utilize Park and Ride for stormwater control and treatment
 - Revise layout for traffic operations and safety
 - Develop options that accommodate stormwater - Identify and evaluate impacts for each option
- Post VE Evaluation and Findings
 - Existing features and conditions constrain design
 - Requirements for stormwater control and treatment are significant
 - Developed and evaluated range of options that avoid or minimize impacts
 - R/W acquisitions are needed at all 4 corners
 - Technical Team reviewed and refined options to carry forward to WG



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July 25th Internal Value Engineering Workshop - Adas Will & West Port Madison

- **Purpose**
Examine cost reduction opportunities following what we learned from Day Rd VE study
- **Participants (10)**
WSDOT, Parametrix
- **Approach**
Right-of-way and access control, Construction and constructability, Grading and walls, and Stormwater



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Adas Will - Post Internal VE Design

Total Savings: \$1.2 million



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West Port Madison - Post Internal VE Design

Total Savings: \$800,000

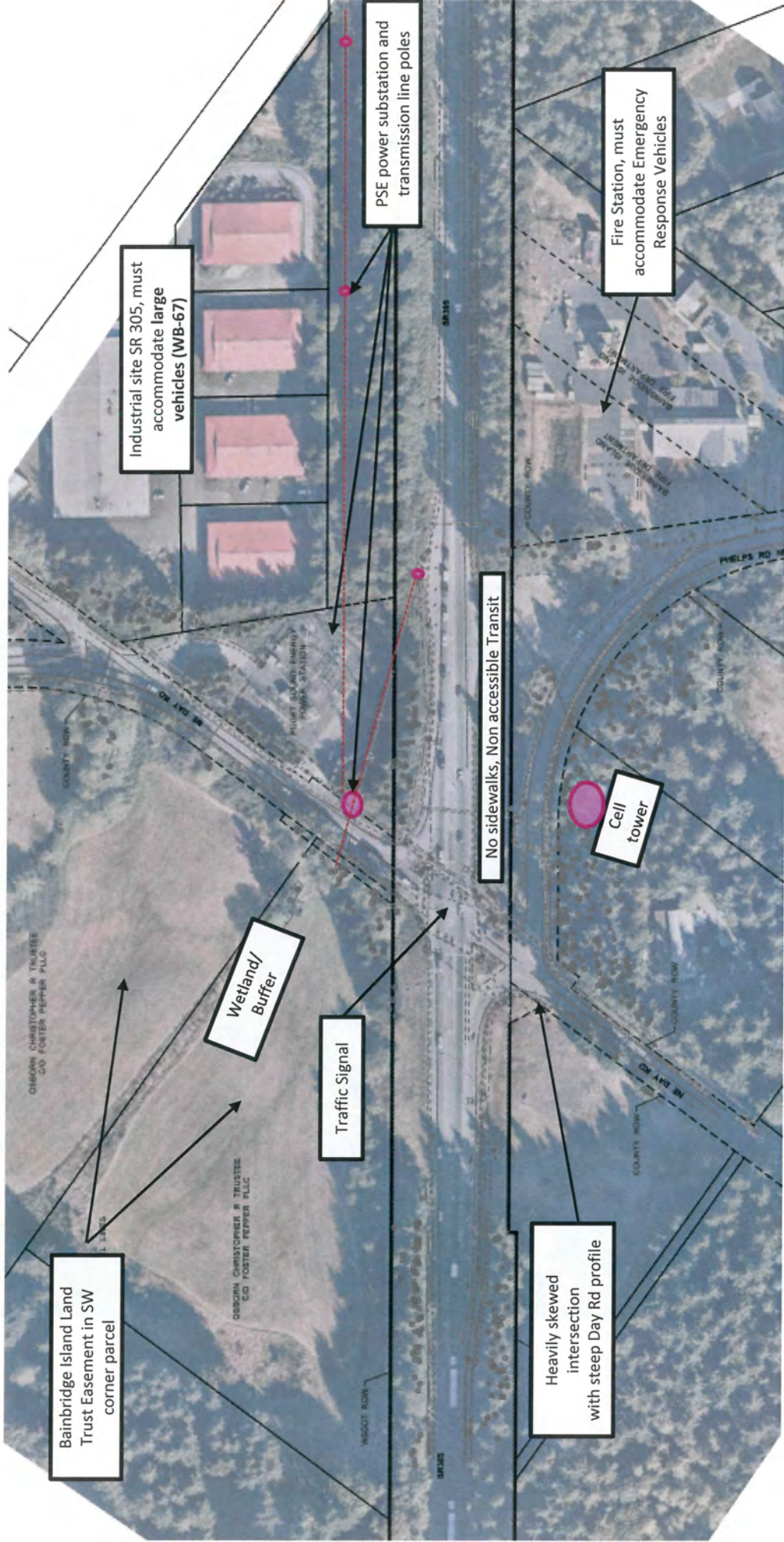


Day Road – Post VE Design Options and Impacts



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Day Road – Existing Intersection



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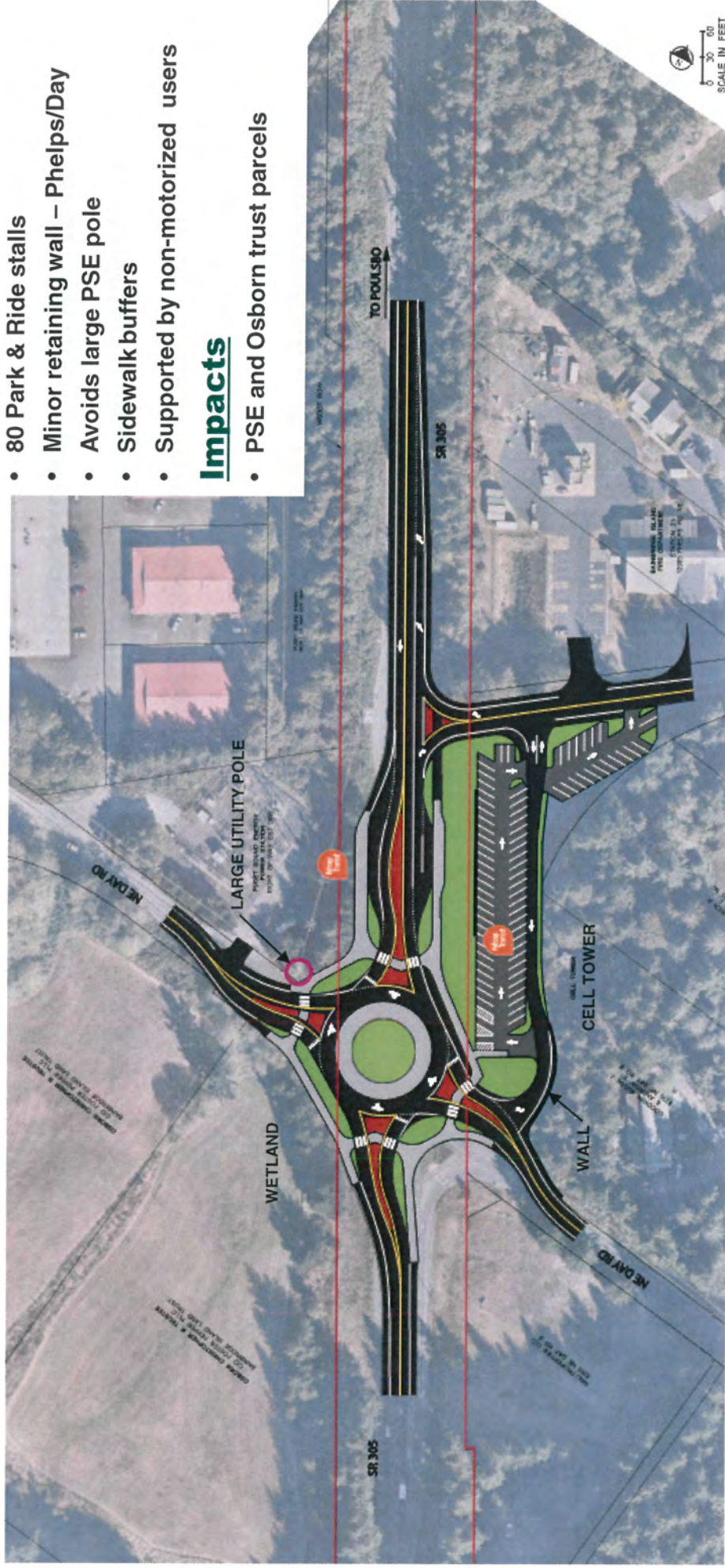
Day Road - Post VE Design

Benefits

- Reduced entry speeds improve safety
- 80 Park & Ride stalls
- Minor retaining wall – Phelps/Day
- Avoids large PSE pole
- Sidewalk buffers
- Supported by non-motorized users

Impacts

- PSE and Osborn trust parcels



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Stormwater control and treatment requirements

Stormwater management objectives:

- Maintain safe driving conditions and protect the roadway
- Manage stormwater discharges to protect the environment

Stormwater is managed by **Controlling Runoff Flows** and providing **Water Quality Treatment** prior to discharging it to the natural system.

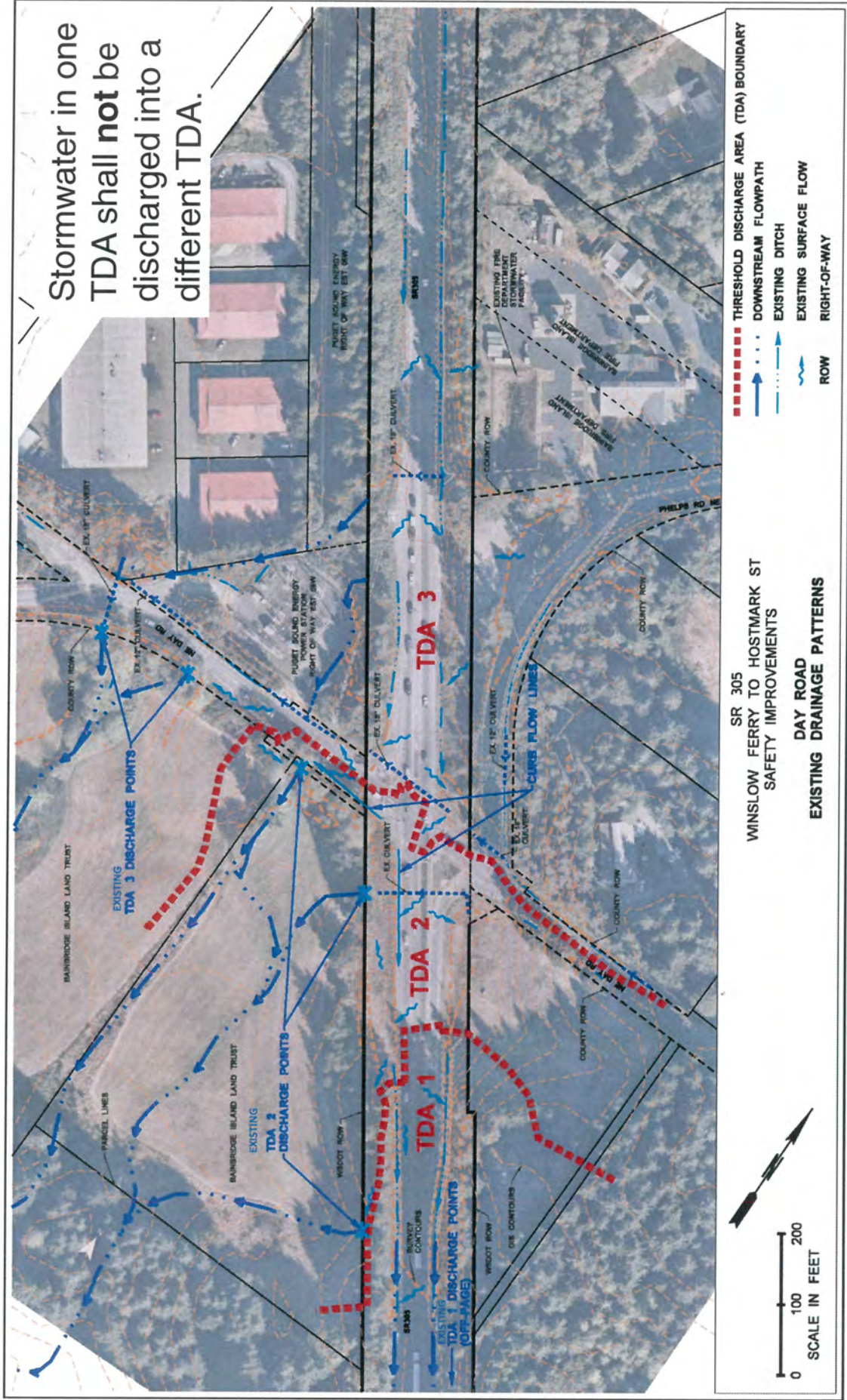
Each **Threshold Discharge Area (TDA)** within a project has a separate natural discharge location.



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Day Road – Existing Drainage Patterns

Stormwater in one TDA shall not be discharged into a different TDA.



SR 305, Winslow to Hostmark Stormwater control and treatment requirements

Stormwater Minimum Requirements:

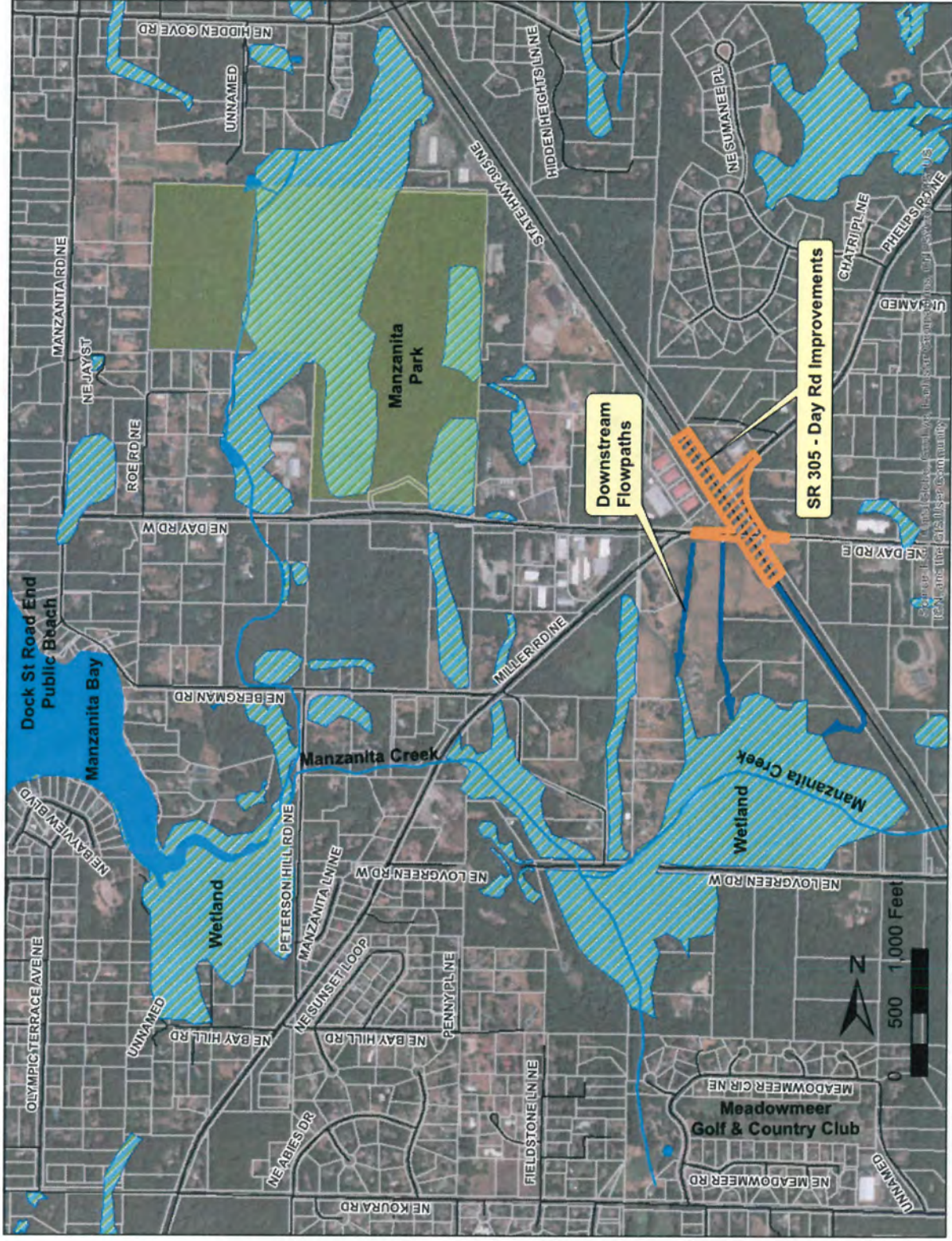
- Maintain the Natural Drainage Patterns
- Provide **Water Quality Treatment** to remove pollutants
- Provide **Flow Control** to prevent impacts from increased stormwater runoff volumes and flow rates on streams
- Protect Wetlands

Project Thresholds:

- All projects must maintain the natural drainage patterns.
- All TDA's within a project adding 5,000 square feet or more of new pollution generating impervious surface (surfaces vehicles will be driving on) must provide water quality treatment.
- All TDA's within a project adding 10,000 square feet of new impervious surface must provide flow control.



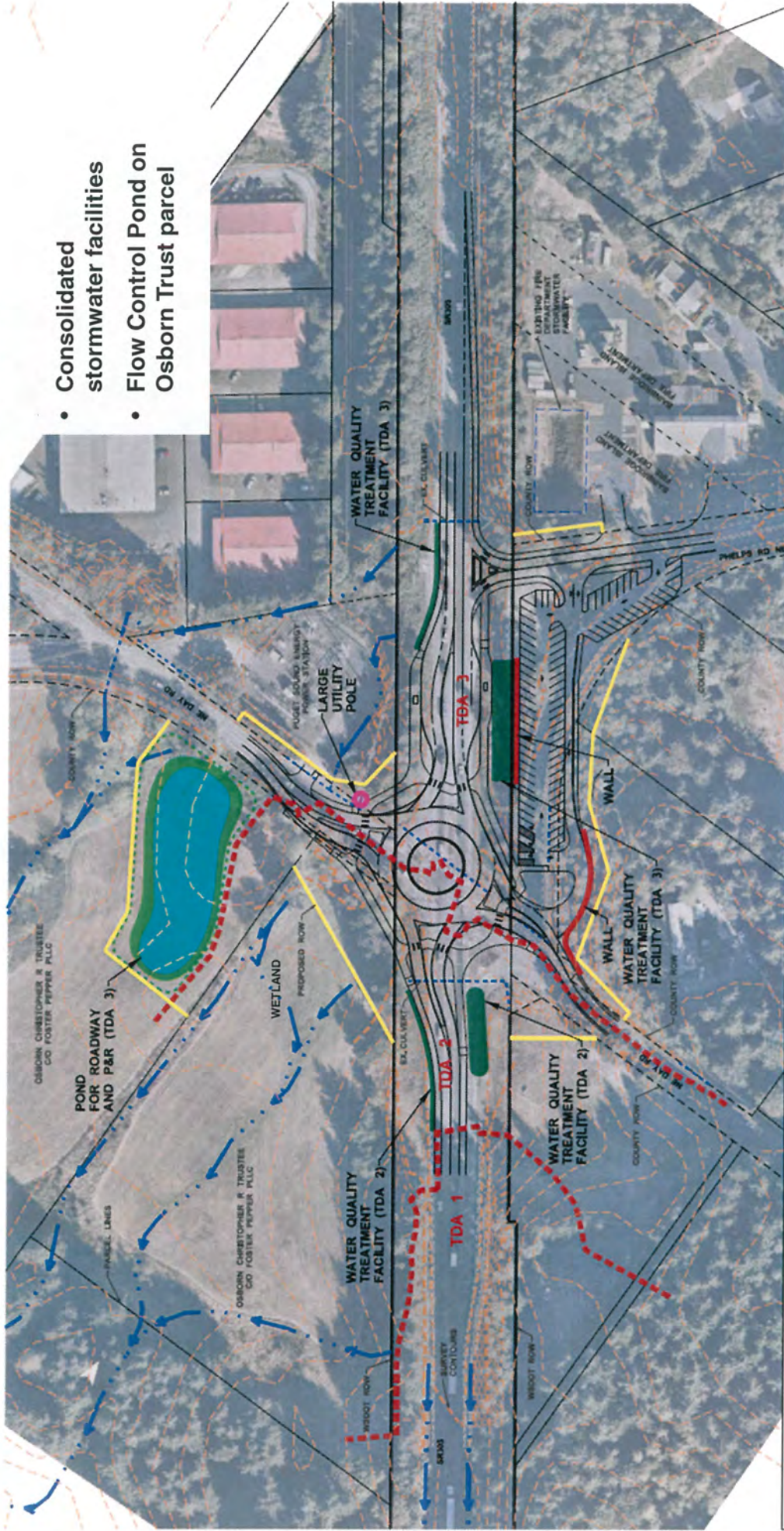
SR 305, Winslow to Hostmark Day Road – Downstream Drainage Patterns



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Day Road - Drainage Option 1 - Flow Control Pond

- Consolidated stormwater facilities
- Flow Control Pond on Osborn Trust parcel



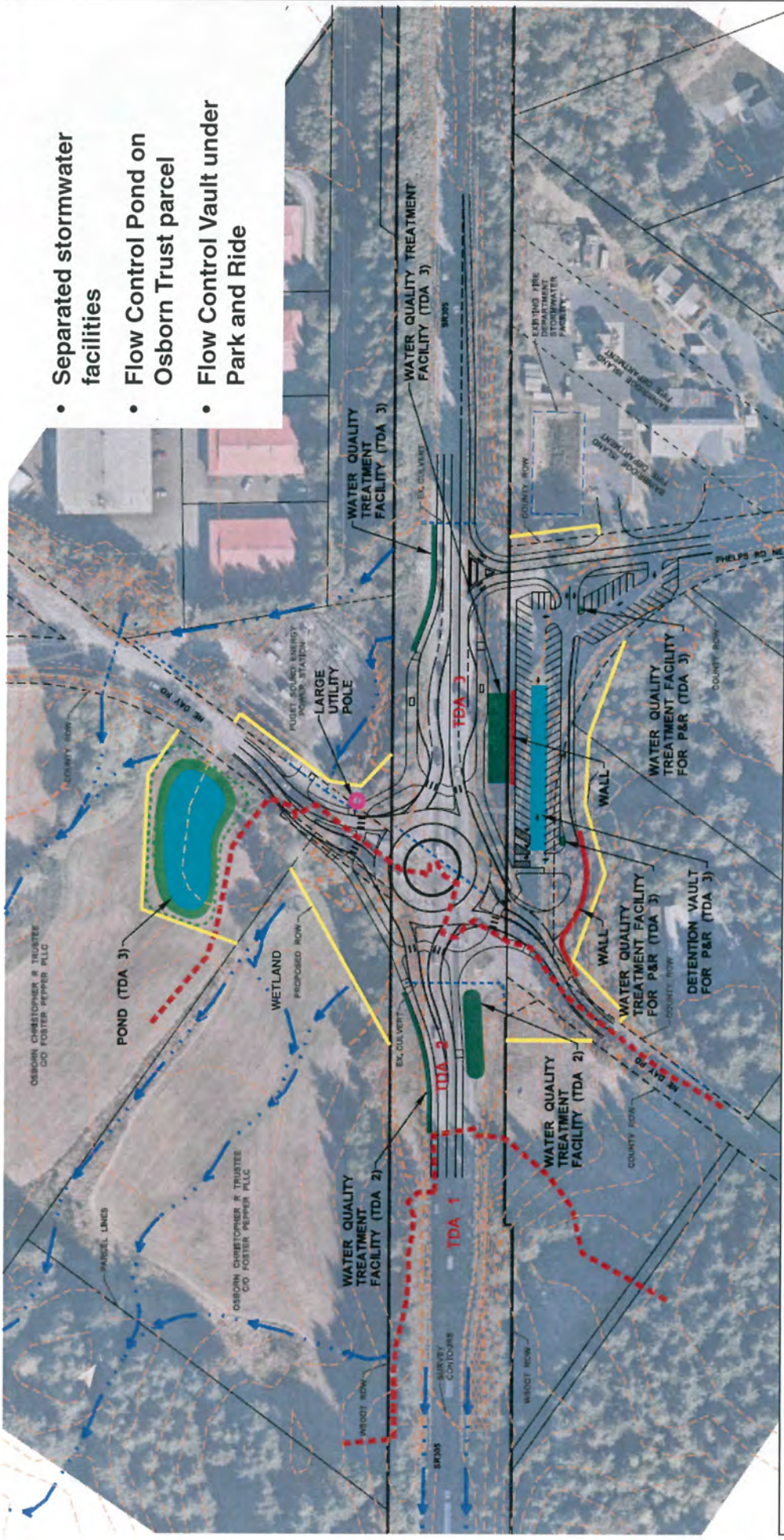
- NATIVE PLANT BUFFER
- GRASSY SWALE
- THRESHOLD DISCHARGE AREA (TDA) BOUNDARY
- DOWNSTREAM FLOWPATH
- ROW
- RIGHT-OF-WAY

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 WINSLOW FERRY TO HOSTMARK ST
 SAFETY IMPROVEMENTS
 DAY ROAD - STORMWATER OPTION 1
 (PRELIMINARY)



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Day Road – Drainage Option 2 – Flow Control Pond and Vault



- Separated stormwater facilities
- Flow Control Pond on Osborn Trust parcel
- Flow Control Vault under Park and Ride

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 SAFETY IMPROVEMENTS
 DAY ROAD - STORMWATER OPTION 2
 (PRELIMINARY)

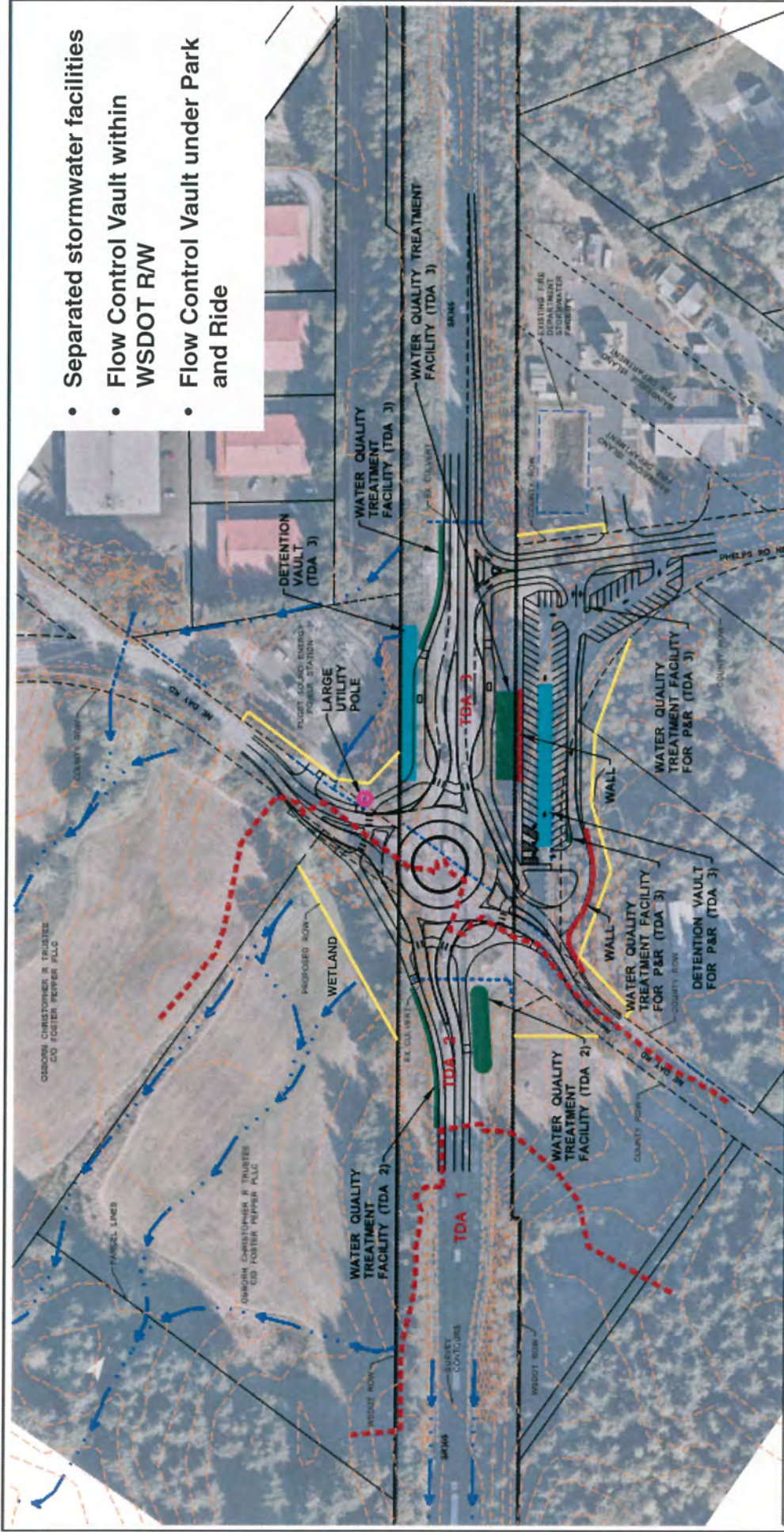
NATIVE PLANT BUFFER
 GRASSY SWALE
 THRESHOLD DISCHARGE AREA (TDA) BOUNDARY
 DOWNSTREAM FLOWPATH
 ROW
 RIGHT-OF-WAY

0 100 200
 SCALE IN FEET

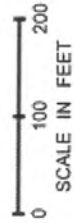
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Day Road – Drainage Option 3 – Flow Control Vaults

- Separated stormwater facilities
- Flow Control Vault within WSDOT R/W
- Flow Control Vault under Park and Ride



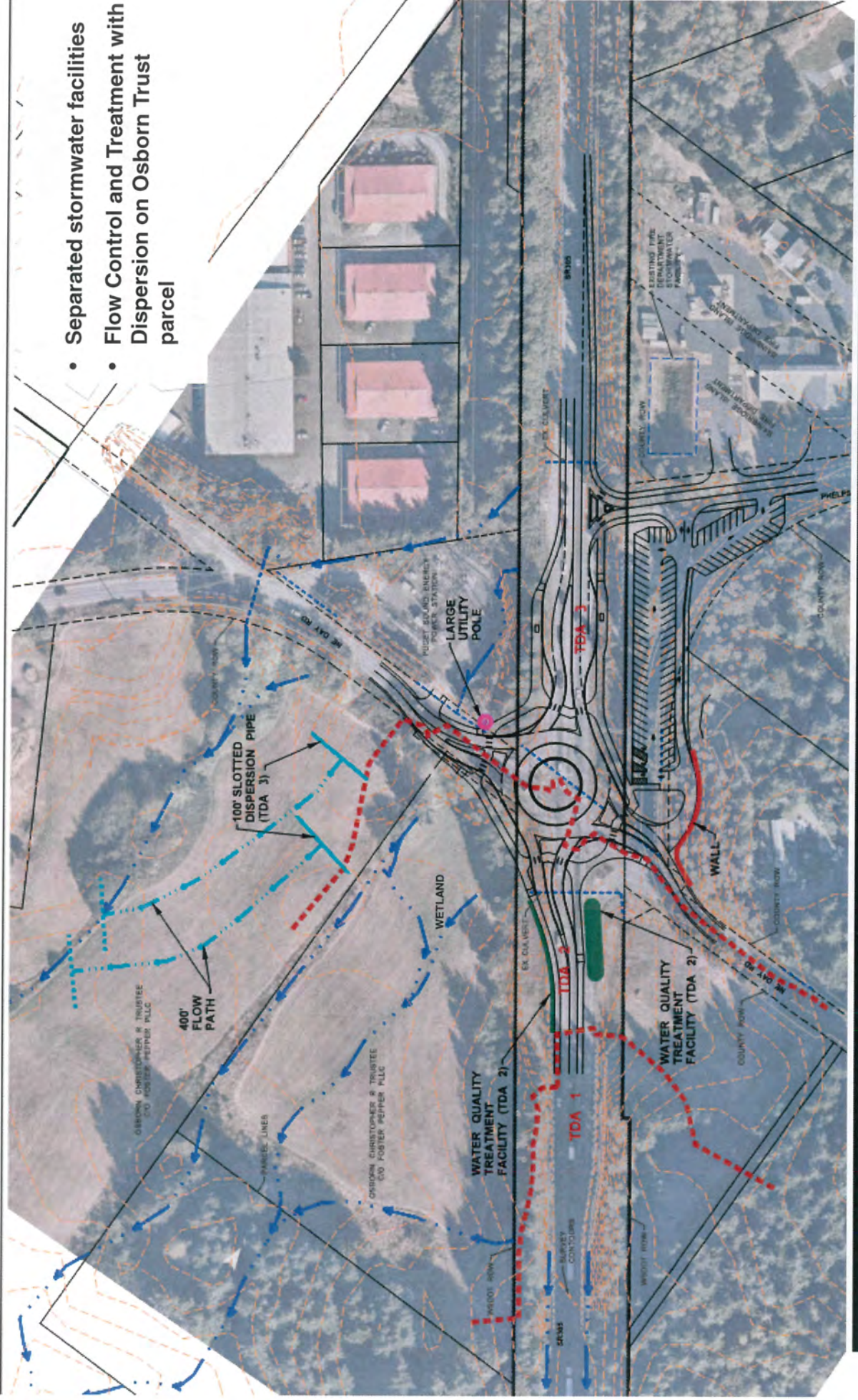
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 SAFETY IMPROVEMENTS
 DAY ROAD - STORMWATER OPTION 3
 (PRELIMINARY)



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Day Road – Drainage *Option 4* – Dispersion

- Separated stormwater facilities
- Flow Control and Treatment with Dispersion on Osborn Trust parcel



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Highway Runoff Manual - Dispersion Criteria

1. Flows must be dispersed across a well-vegetated area
2. Dispersion area will be set aside in perpetuity
3. Dispersion provides flow control and water quality treatment
4. Dispersion flow path length required = 6.5' x pavement width (assumed pavement width of 60 feet and type C/D soils)
5. Dispersion area slope in direction of flow must be 2% - 33%
6. Dispersion area slope perpendicular to direction of flow must be $\leq 15\%$
7. There should be no existing flow paths through the dispersion area
8. Dispersion area should not discharge to a conveyance system or Category I or II wetlands
9. Final organic content of soil in dispersion area should be 5%



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Proposed Delivery Plan Update – Option 1 – Flow Control Pond

Performance Score	INTERSECTION	Total Estimated Project Cost	Project	Phase			Fish Barrier	Projects 1-4 Total	Declining Balance
				1	2	3			
5.15	* SUQUAMISH WAY RBT	\$ 9,209,510	4			X	Klebeal	\$ 27,390,490	
4.2	DAY ROAD RBT and Park and Ride	\$ 9,711,428	2		X			\$ 17,679,062	
4.02	ADAS WILL RBT/Agatewood	\$ 5,465,844	3a		X			\$ 12,213,218	
3.99	JOHNSON ROAD RBT	\$ 5,871,062	1	X				\$ 6,342,156	
3.97	WEST PORT MADISON RBT	\$ 3,486,951	3b		X			\$ 2,855,205	
3.94	TOTTEN ROAD RBT	\$ 7,075,206	4			X	Sam Snyder		
3.91	MASI SHOP/SANDY HOOK RBT	\$ 5,838,829							
3.85	NOLL ROAD	\$ 287,797				X		\$ 2,567,408	
3.92	SEMINOLE ROAD	\$ 2,277,051				X		\$ 290,357	
3.85	SOL VEI/ TOLLEFSON/DELATE	\$ 690,713							
3.83	SPORTSMAN CLUB ROAD	\$ 3,689,560					Murden		
LOWEST	ACCESS MOD	\$ 2,294,319							
	TOTAL	\$ 55,898,270							

* Design is at 10% level; Cost estimate range: (\$8-10mil); mid-point used in table

Note: Either Suquamish or Totten will be implemented



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Proposed Delivery Plan Update – Option 2 – Pond and Vault

Performance Score	INTERSECTION	Total Estimated Project Cost	Project	Phase			Fish Barrier	Projects 1-4 Total	Declining Balance
				1	2	3			
5.15	* SUQUAMISH WAY RBT	\$ 9,209,510	4			X	Klebeal	\$ 27,390,490	
4.2	DAY ROAD RBT and Park and Ride	\$ 11,305,252	2		X			\$ 16,085,238	
4.02	ADAS WILL RBT/Agatewood	\$ 5,465,844	3a		X			\$ 10,619,394	
3.99	JOHNSON ROAD RBT	\$ 5,871,062	1	X				\$ 4,748,332	
3.97	WEST PORT MADISON RBT	\$ 3,486,951	3b		X			\$ 1,261,381	
3.94	TOTTEN ROAD RBT	\$ 7,075,206	4			X	Sam Snyder		
3.91	MASI SHOP/SANDY HOOK RBT	\$ 5,838,829							
3.85	NOLL ROAD	\$ 287,797				X		\$ 973,584	
3.92	SEMINOLE ROAD	\$ 2,277,051							
3.85	SOL VEI/ TOLLEFSON/DELATE	\$ 690,713				X		\$ 282,871	
3.83	SPORTSMAN CLUB ROAD	\$ 3,689,560					Murden		
LOWEST	ACCESS MOD	\$ 2,294,319							
	TOTAL	\$ 57,492,094							

* Design is at 10% level; Cost estimate range: (\$8-10mil); mid-point used in table

Note: Either Suquamish or Totten will be implemented



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Proposed Delivery Plan Update – Option 3 – Vaults

Performance Score	INTERSECTION	Total Estimated Project Cost	Project	Phase			Fish Barrier	Projects 1-4 Total	Declining Balance
				1	2	3			\$ 36,600,000
5.15	* SUQUAMISH WAY RBT	\$ 9,209,510	4			x	Klebeal	\$ 36,390,404	\$ 27,390,490
4.2	DAY ROAD RBT and Park and Ride	\$ 12,357,038	2		x				\$ 15,033,453
4.02	ADAS WILL RBT/Agatewood	\$ 5,465,844	3a		x				\$ 9,567,609
3.99	JOHNSON ROAD RBT	\$ 5,871,062	1	x					\$ 3,696,546
3.97	WEST PORT MADISON RBT	\$ 3,486,951	3b		x				\$ 209,596
3.94	TOTTEN ROAD RBT	\$ 7,075,206	4			x	Sam Snyder	See Note	\$ (6,865,610)
3.91	MASI SHOP/SANDY HOOK RBT	\$ 5,838,829							
3.85	NOLL ROAD	\$ 287,797							
3.92	SEMINOLE ROAD	\$ 2,277,051							
3.85	SOL VEI/ TOLLEFSON/DELADE	\$ 690,713							
3.83	SPORTSMAN CLUB ROAD	\$ 3,689,560					Murden		
LOWEST	ACCESS MOD	\$ 2,294,319							
TOTAL		\$ 58,543,880							
* Design is at 10% level; Cost estimate range: (\$8-10mil); mid-point used in table									
Note: Either Suquamish or Totten will be implemented									



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Proposed Delivery Plan Update – Option 4 – Dispersion

Performance Score	INTERSECTION	Total Estimated Project Cost	Project	Phase			Fish Barrier	Projects 1-4 Total	Declining Balance
				1	2	3			
5.15	* SUQUAMISH WAY RBT	\$ 9,209,510	4			X	Klebeal	\$ 36,600,000	
4.2	DAY ROAD RBT and Park and Ride	\$ 9,578,940	2		X			\$ 27,390,490	
4.02	ADAS WILL RBT/Agatewood	\$ 5,465,844	3a		X			\$ 17,811,550	
3.99	JOHNSON ROAD RBT	\$ 5,871,062	1	X				\$ 12,345,706	
3.97	WEST PORT MADISON RBT	\$ 3,486,951	3b		X			\$ 6,474,644	
3.94	TOTTEN ROAD RBT	\$ 7,075,206	4			X	Sam Snyder	\$ 2,987,693	
3.91	MASI SHOP/SANDY HOOK RBT	\$ 5,838,829							
3.85	NOLL ROAD	\$ 287,797							
3.92	SEMINOLE ROAD	\$ 2,277,051							
3.85	SOL VEI/ TOLLEFSON/DELATE	\$ 690,713							
3.83	SPORTSMAN CLUB ROAD	\$ 3,689,560					Murden		
LOWEST	ACCESS MOD	\$ 2,294,319							
	TOTAL	\$ 55,765,782							

* Design is at 10% level; Cost estimate range: (\$8-10mil); mid-point used in table

Note: Either Suquamish or Totten will be implemented

