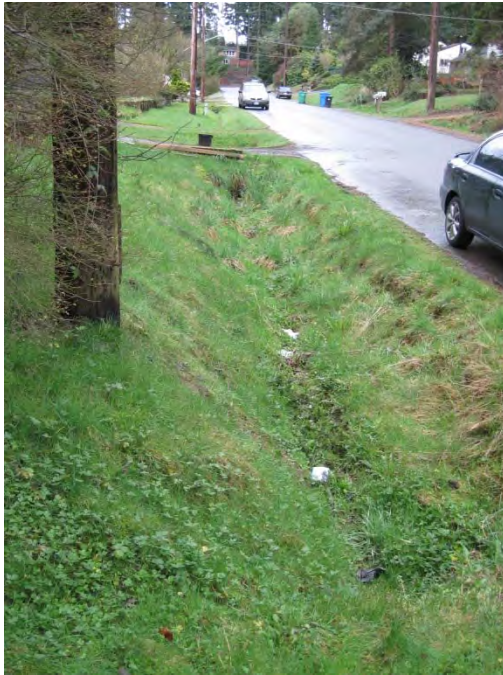


APPENDIX C
Stream Photographs



Photograph 1. Thornton Creek near I-5 facing upstream (north).



Photograph 2. Stream SSH3 along 200th Street, west of I-5 facing upstream (west).



Photograph 3. McAleer Creek from culvert facing downstream (south).



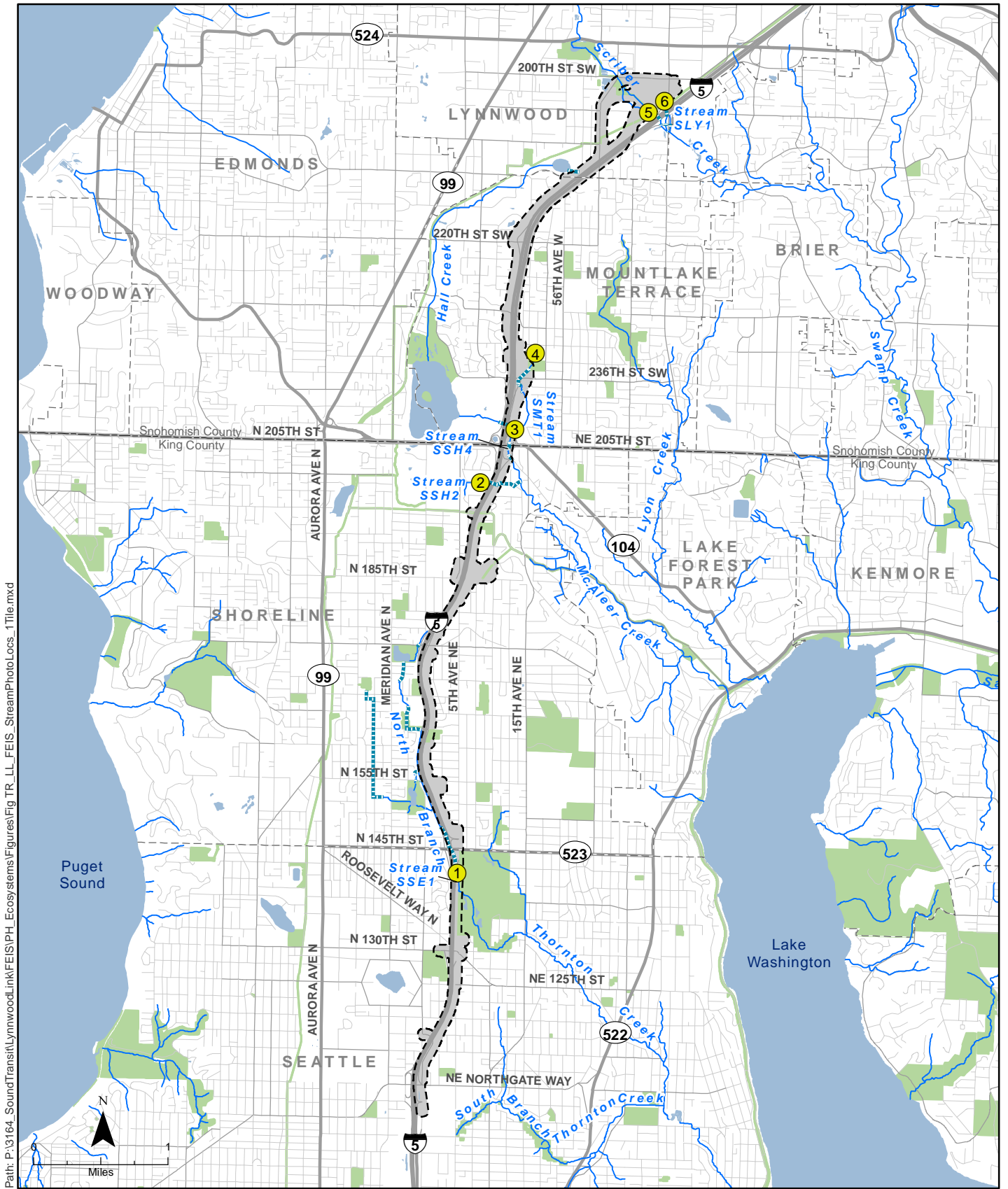
Photograph 4. Stream SMT1 in the park from inlet at north end facing downstream (south).



Photograph 5. Scriber Creek facing downstream (south).



Photograph 6. Stream (SLY1) approximately 100 feet downstream from inlet facing upstream (north).



Path: P:\3164_SoundTransit\LynnwoodLink\FEIS\PH_Ecosystems\Figures\Fig TR_LL_FEIS_StreamPhotoLocs_1Tile.mxd

Data Sources: (King County, Snohomish County, WSDOT, Sound Transit)

- Study Area
- Roadway
- Local Street
- Photo Location
- Open Stream
- Piped Stream
- Waterbody
- City Boundary
- County Boundary
- Park

Figure C-1
Stream Photo Locations

Lynnwood Link Extension

APPENDIX D

Wetland and Stream Impacts

Tables D-1, D-2, and D-3 present estimates of the area of wetlands and wetland buffers that would be subjected to long-term impacts under each project alternative in Segments A, B, and C.

Tables D-4 and D-5 present estimates of the area of wetlands and wetland buffers that would be subjected to temporary, construction-related impacts under each project alternative in Segments B and C. Note that no construction-related impacts were identified in Segment A. Because most of the alignment and associated features for the Segment A alternatives are situated on or adjacent to currently developed areas, it was assumed for this analysis that no additional construction areas in wetlands or buffers would be required outside of the analytical buffer that was used to estimate long-term impacts.

Estimates of impact areas are based on a GIS analysis of the intersection between project limits and ecosystem resource base maps, as depicted in the figures that make up the remainder of this appendix. Blank cells indicate a lack of impacts. Please note that these estimates do not distinguish between at-grade and elevated guideways, even though the intensity and area of effects associated with these two types of structures could differ substantially at any given location. The actual impacts of any of the alternatives would depend on the final alternative design, construction footprint and methods, BMPs implemented during construction, performance of post-construction restoration of temporarily disturbed wetlands and buffers, and performance of compensatory mitigation for impacts on areas protected under local Critical Areas Ordinances.

Table D-1. Estimated Long-Term Impacts on Wetlands and Wetland Buffers in Segment A, by Project Alternative

Wetland ID	Wetland Area Affected (acres)							Wetland Buffer Area Affected (acres)						
	Preferred Alternative	A1	A3	A5	A7	A10	A11	Preferred Alternative	A1	A3	A5	A7	A10	A11
WSE1								0.01	0.01	0.01	0.01	0.01	0.01	0.01
WSE3	0.05*	0.05*	0.05*	0.05*	0.05*	0.05*	0.05*							
WSE4								0.03	0.03	0.03	0.03	0.03	0.03	0.03
WSE5	0.26*	0.26*	0.26*	0.26*	0.26*	0.26*	0.26*							
WSE6	0.08*	0.08*	0.08*	0.08*	0.08*	0.08*	0.08*							
WSE7								0.03	0.01	0.01	0.03	0.03	0.01	0.01
WSE8								0.06	0.09	0.09	0.09	0.09	0.09	0.09
WSH1	0.06*	0.06*	0.06*				0.06*				0.11	0.11		
WSH2	0.37*	0.37*	0.37*	0.37*	0.37*	0.37*	0.37*							
WSH3	0.06*	0.06*	0.06*	0.06*	0.06*	0.06*	0.06*							
PWSH4	0.07	0.05	0.05	0.10	0.10	0.05	0.05	0.21	0.19	0.20	0.39	0.39	0.19	0.20
PWSH5											0.20	0.20		
Total	0.95	0.93	0.93	0.92	0.92	0.93	0.93	0.34	0.33	0.34	0.86	0.86	0.33	0.34

* Asterisks denote wetlands that would be completely lost as a result of project construction under a particular alternative. Note that no buffer impacts are associated with such wetlands because loss of a wetland would render moot the need to mitigate for impacts to that wetland's buffer.

Table D-2. Estimated Long-Term Impacts on Wetlands and Wetland Buffers in Segment B, by Project Alternative

Wetland ID	Wetland Area Affected (acres)					Wetland Buffer Area Affected (acres)				
	Preferred Alternative	Pref. Alt. with 220th St. SW Station option	B1	B2A	B4	Preferred Alternative	Pref. Alt. with 220th St. SW Station option	B1	B2A	B4
WSH5	0.03	0.03	0.02	0.02	0.05	0.24	0.24	0.20	0.20	0.28
WMT1					0.10	0.27	0.27	0.26	0.26	0.21
WMT2					0.03	0.10	0.10	0.09	0.09	0.21
WMT3						0.20	0.20	0.25	0.25	
WMT5	0.34*			0.34*						
WMT6	0.32	0.35		1.12*		0.24	0.25			
WMT7	0.10	0.10		0.11		0.25	0.21		0.25	
WMT9										0.03
WMT10					0.03*	0.15	0.24	0.12	0.12	
WMT11						0.01	0.01	0.01	0.01	
PWLY3						0.10	0.10		0.08	
Total	0.79	0.48	0.02	1.59	0.21	1.56	1.62	0.93	1.26	0.73

* Asterisks denote wetlands that would be completely lost as a result of project construction under a particular alternative. Note that no buffer impacts are associated with such wetlands because loss of a wetland would render moot the need to mitigate for impacts to that wetland's buffer.

Table D-3. Estimated Long-Term Impacts on Wetlands and Wetland Buffers in Segment C, by Project Alternative

Wetland ID	Wetland Area Affected (acres)							Wetland Buffer Area Affected (acres)						
	Preferred Alternative	C1M	C1W	C2M	C2W	C3M	C3W	Preferred Alternative	C1M	C1W	C2M	C2W	C3M	C3W
WLY3	0.17		0.14		0.18		0.16	0.49	0.14	0.56	0.14	0.62		0.61
WLY4	0.52	0.04	0.04	0.94	0.94	0.14	0.14	0.28	0.53	0.53	0.45	0.45	0.55	0.55
WLY7	0.03							0.21					0.07	0.07
WLY8													0.21	0.21
PWLY1						0.02	0.02						0.23	0.23
PWLY3										0.01		0.01		0.01
PWLY5								<0.01	<0.01					
Total	0.72	0.04	0.18	0.94	1.12	0.16	0.32	0.98	0.67	1.10	0.59	1.08	1.06	1.68

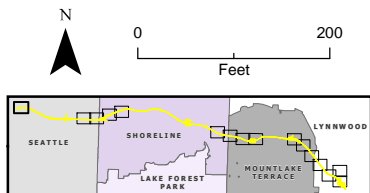
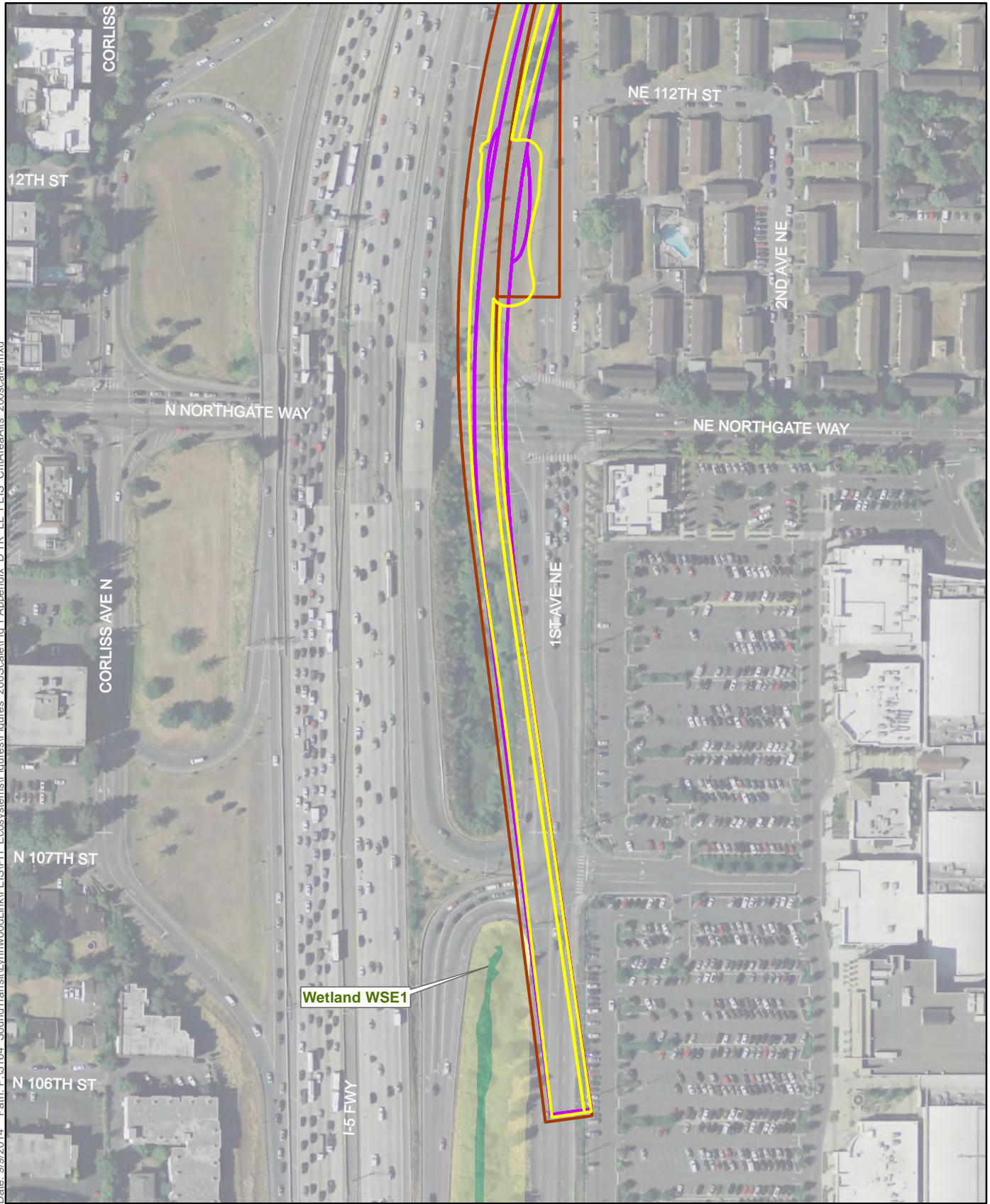
Table D-4. Estimated Construction Impacts on Wetlands and Wetland Buffers in Segment B, by Project Alternative

Wetland ID	Wetland Area Affected (acres)					Wetland Buffer Area Affected (acres)				
	Preferred Alternative	Pref. Alt. with 220th St. SW Station option	B1	B2A	B4	Preferred Alternative	Pref. Alt. with 220th St. SW Station option	B1	B2A	B4
WSH5	0.01	0.01				0.06	0.06			
WMT1	0.00	0.00				0.07	0.07			
WMT2						0.04	0.04			
WMT3						0.04	0.04	0.06	0.06	
WMT5										
WMT6	0.05	0.06				0.04	0.06			
WMT7	0.05	0.05				0.03	0.03			
WMT9						0.04	0.04			
WMT10						0.01	0.01	0.02	0.02	0.07
WMT11										
PWLY3						0.03	0.03			
Total	0.11	0.12	0.00	0.00	0.00	0.36	0.38	0.08	0.08	0.07

Table D-5. Estimated Construction Impacts on Wetlands and Wetland Buffers in Segment C, by Project Alternative

Wetland ID	Wetland Area Affected (acres)							Wetland Buffer Area Affected (acres)						
	Preferred Alternative	C1M	C1W	C2M	C2W	C3M	C3W	Preferred Alternative	C1M	C1W	C2M	C2W	C3M	C3W
WLY3	0.11				0.04			0.04				0.07		0.07
WLY4	0.15							0.09			0.22	0.22		
WLY7	0.02							0.07						
WLY8														
PWLY1														
PWLY3														
PWLY5														
Total	0.28	0.00	0.00	0.00	0.04	0.00	0.00	0.20	0.00	0.00	0.22	0.29	0.00	0.07

Date: 9/9/2014 Path: P:\3164_SoundTransit\LynnwoodLink\FEIS\PH_Ecosystems\Figures_200Scale\Fig 1 Appendix D TR LL FEIS CritAreaAtis_200scale.mxd



Data Sources:
(King & Snohomish
County, WSDOT,
Streamnet, City of
Seattle, City of
Shoreline, ESA,
Aerials Express.)

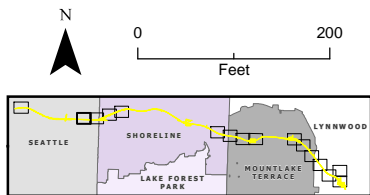
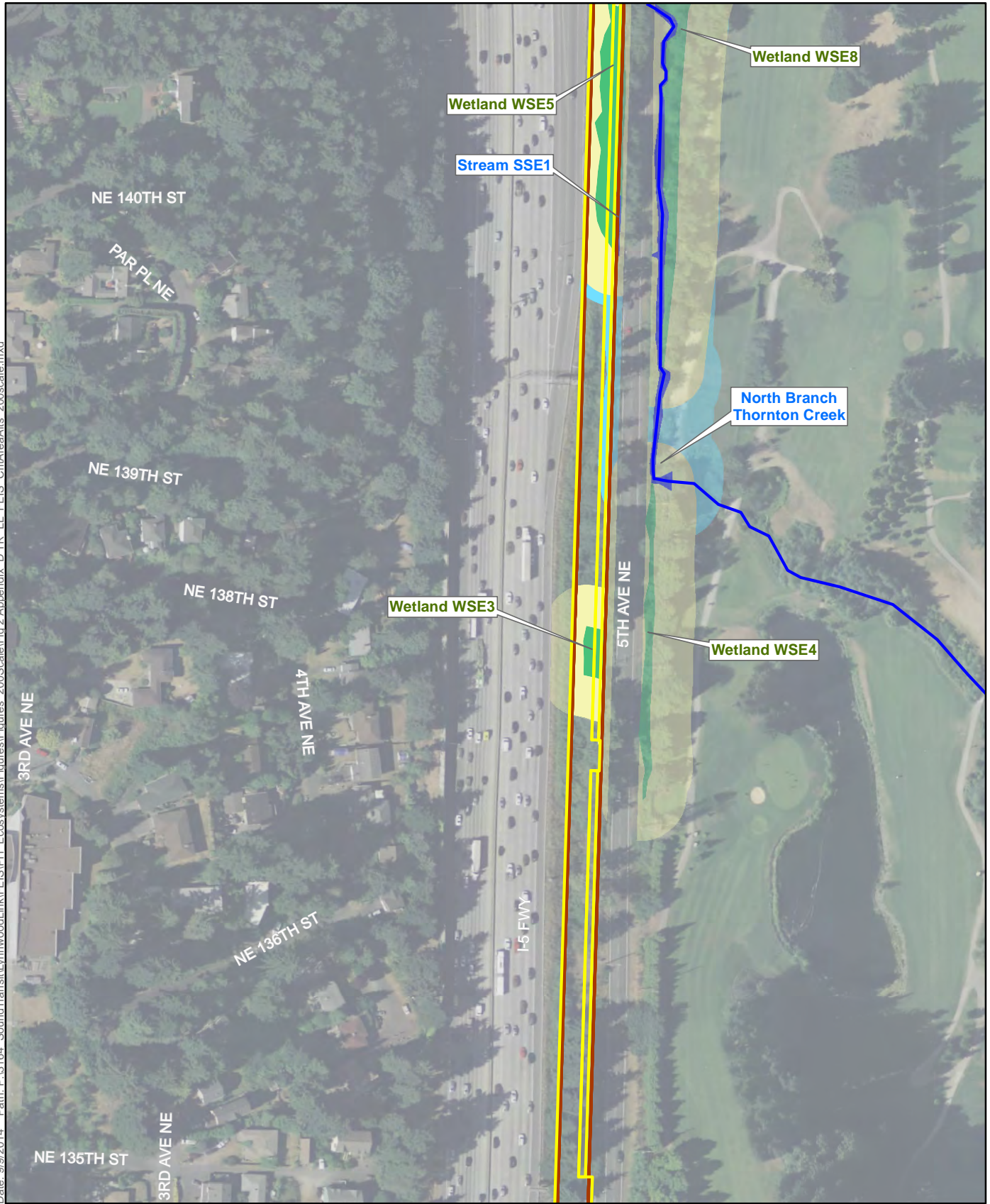
- Stream
- Stream Buffer
- Wetland
- Wetland Buffer
- Open Stream
- - - Piped Stream

- Preferred Alternative
- A1
- A3; A5; A7; A10; A11

Appendix D
Figure 1
Wetland and Stream
Impacts

Lynnwood Link Extension

Date: 9/9/2014 Path: P:\3164_SoundTransit\LynnwoodLink\FEIS\PH_Ecosystems\Figures_200Scale\Fig 2 Appendix D TR LL FEIS CritAreaA1s_200scale.mxd



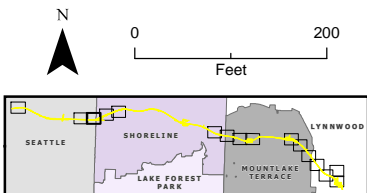
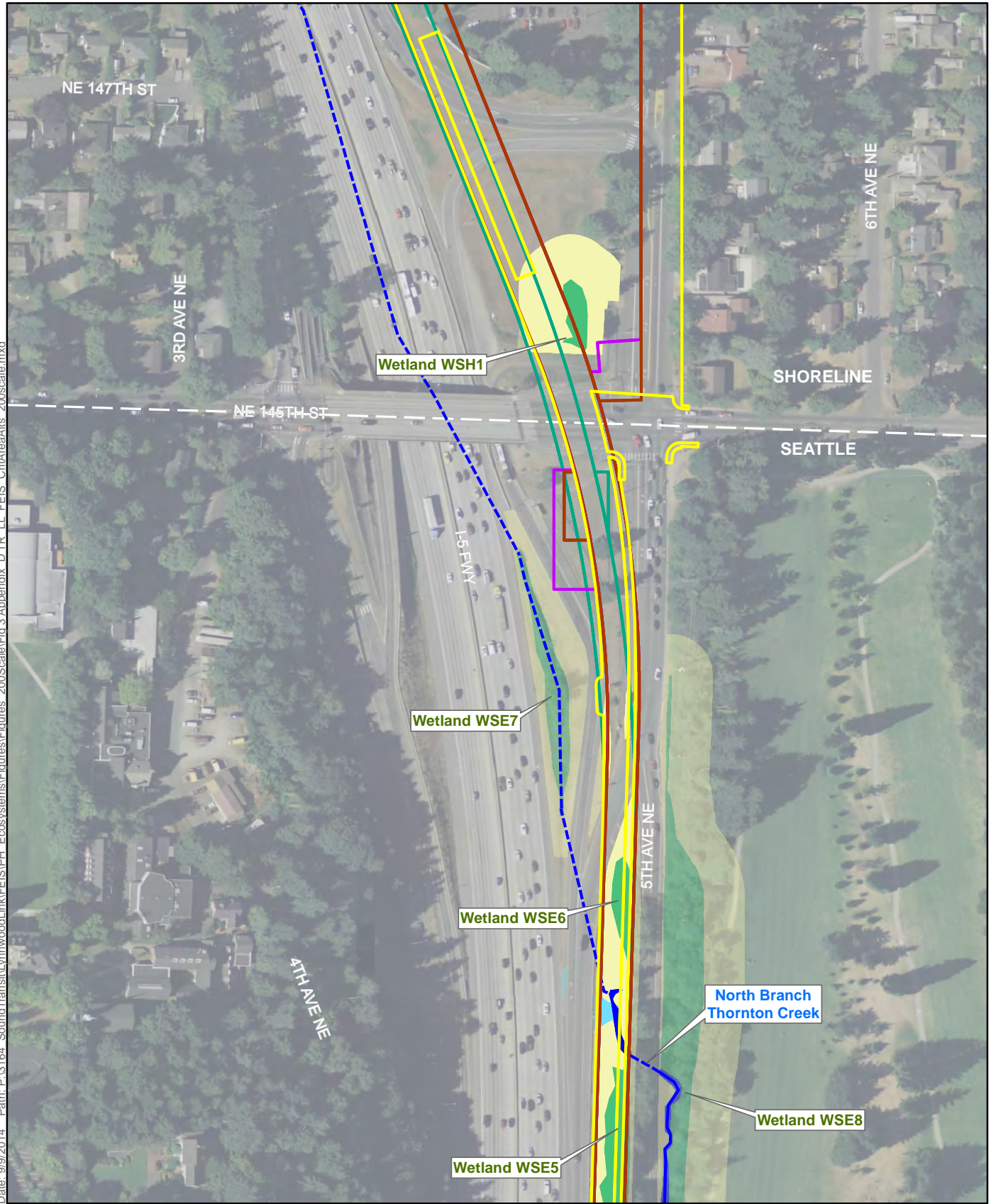
Data Sources:
(King & Snohomish
County, WSDOT,
Streamnet, City of
Seattle, City of
Shoreline, ESA,
Aerials Express.)

- Stream
- Stream Buffer
- Wetland
- Wetland Buffer
- Open Stream
- - - Piped Stream
- Preferred Alternative
- A1; A3; A5; A7; A10; A11

**Appendix D
Figure 2**
Wetland and Stream
Impacts

Lynnwood Link Extension

Date: 9/9/2014 Path: P:\3164_SoundTransit\LynwoodLink\FEIS\PH_Ecosystems\Figures_200Scale\Fig 3 Appendix D TR LL FEIS CritAreaAtis_200scale.mxd



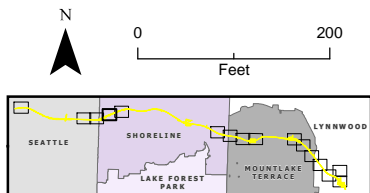
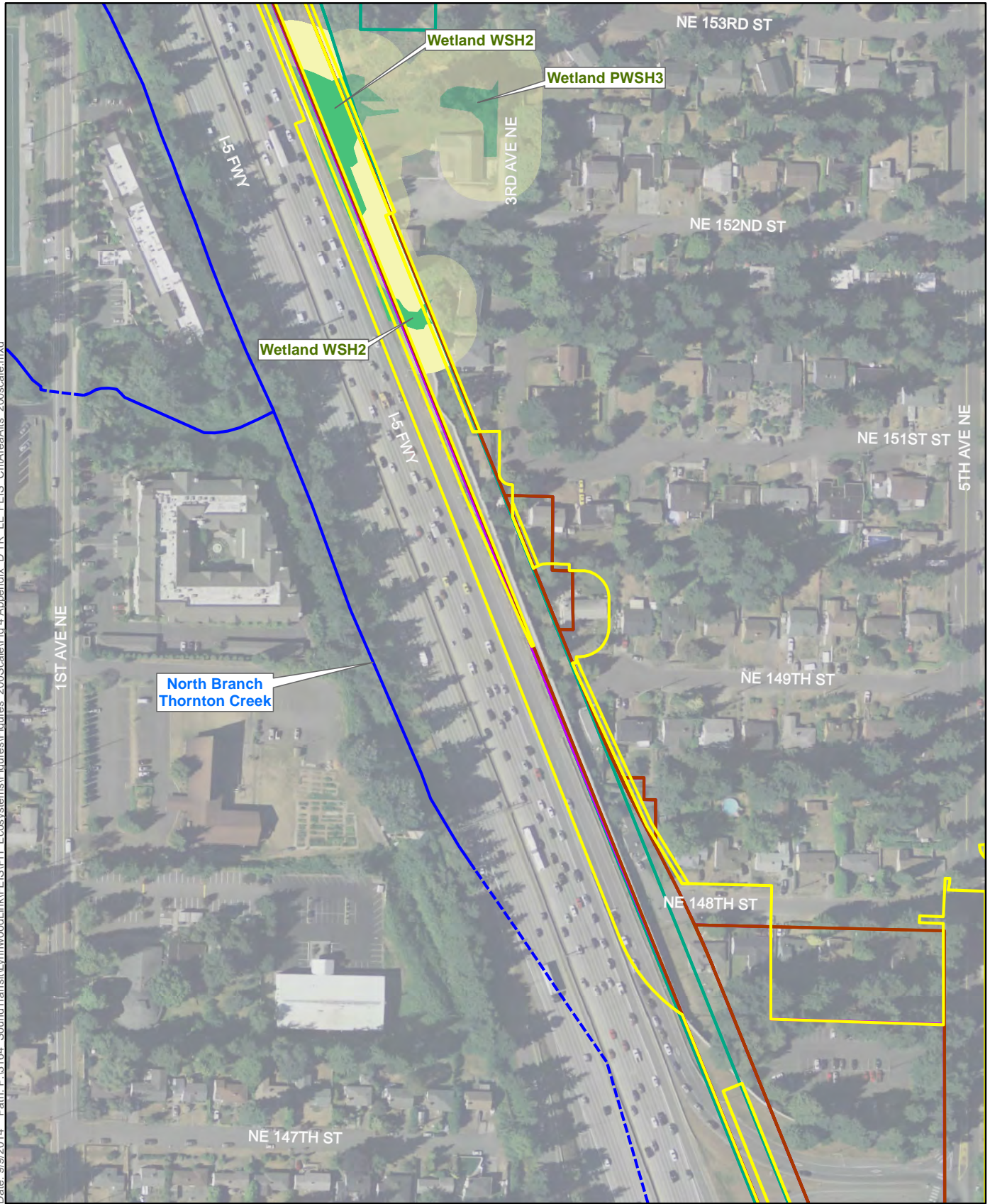
Data Sources:
(King & Snohomish
County, WSDOT,
Streamnet, City of
Seattle, City of
Shoreline, ESA,
Aerials Express.)

- | | | | |
|--|----------------|--|-----------------------|
| | Stream | | Preferred Alternative |
| | Stream Buffer | | A1; A10 |
| | Wetland | | A3; A11 |
| | Wetland Buffer | | A5; A7 |
| | Open Stream | | |
| | Piped Stream | | |

Appendix D
Figure 3
Wetland and Stream
Impacts

Lynwood Link Extension

Date: 9/9/2014 Path: P:\3164_SoundTransit\LynnwoodLink\FEIS\PH_Ecosystems\Figures\200Scale\Fig 4 Appendix D TR LL FEIS CritAreaAtts_200scale.mxd



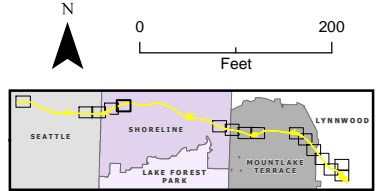
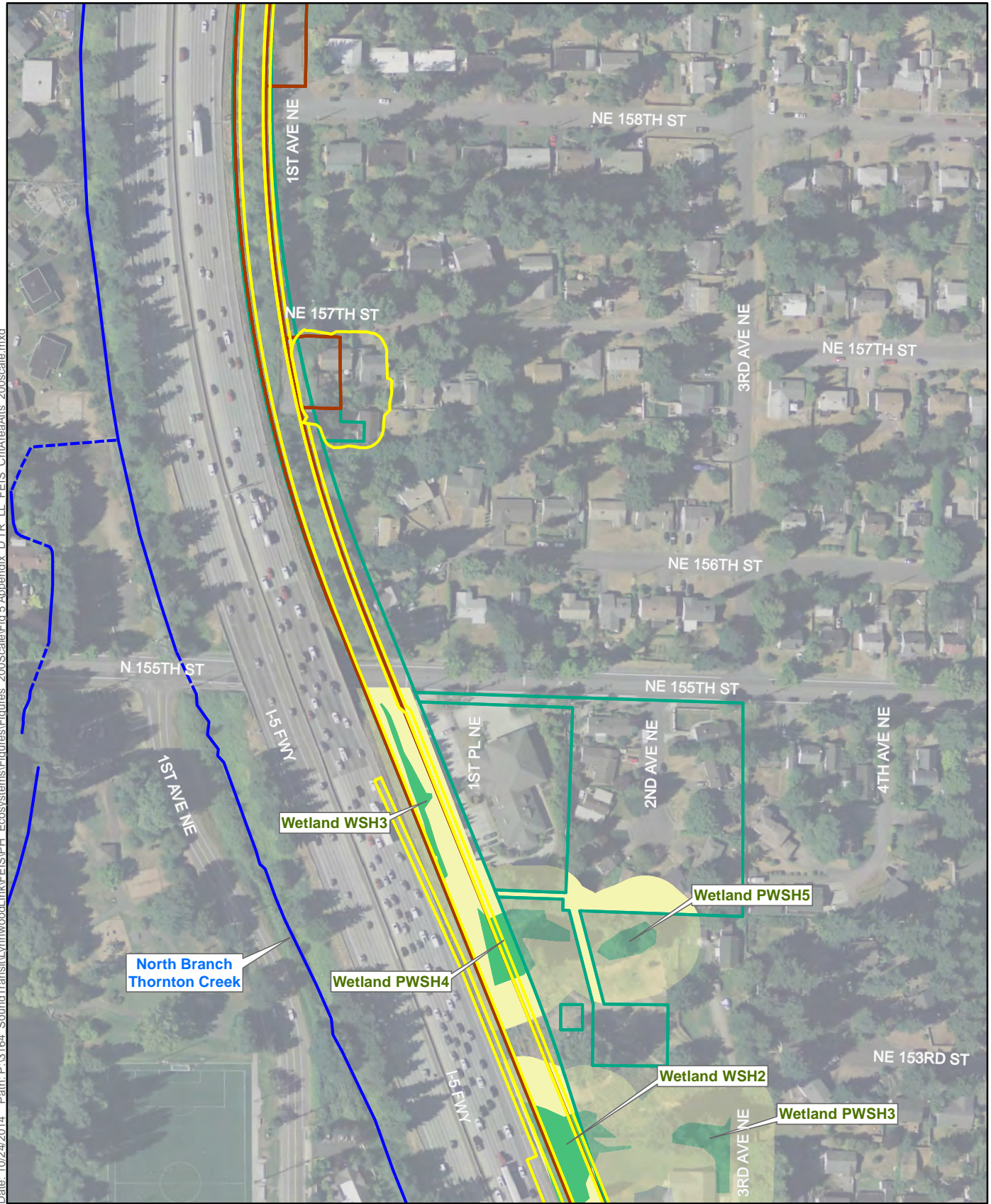
Data Sources:
(King & Snohomish
County, WSDOT,
Streamnet, City of
Seattle, City of
Shoreline, ESA,
Aerials Express.)

- | | | | |
|--|----------------|--|-----------------------|
| | Stream | | Preferred Alternative |
| | Stream Buffer | | A1; A10 |
| | Wetland | | A3; A11 |
| | Wetland Buffer | | A5; A7 |
| | Open Stream | | |
| | Piped Stream | | |

**Appendix D
Figure 4
Wetland and Stream
Impacts**

Lynnwood Link Extension

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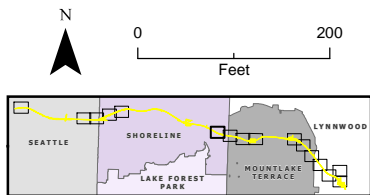
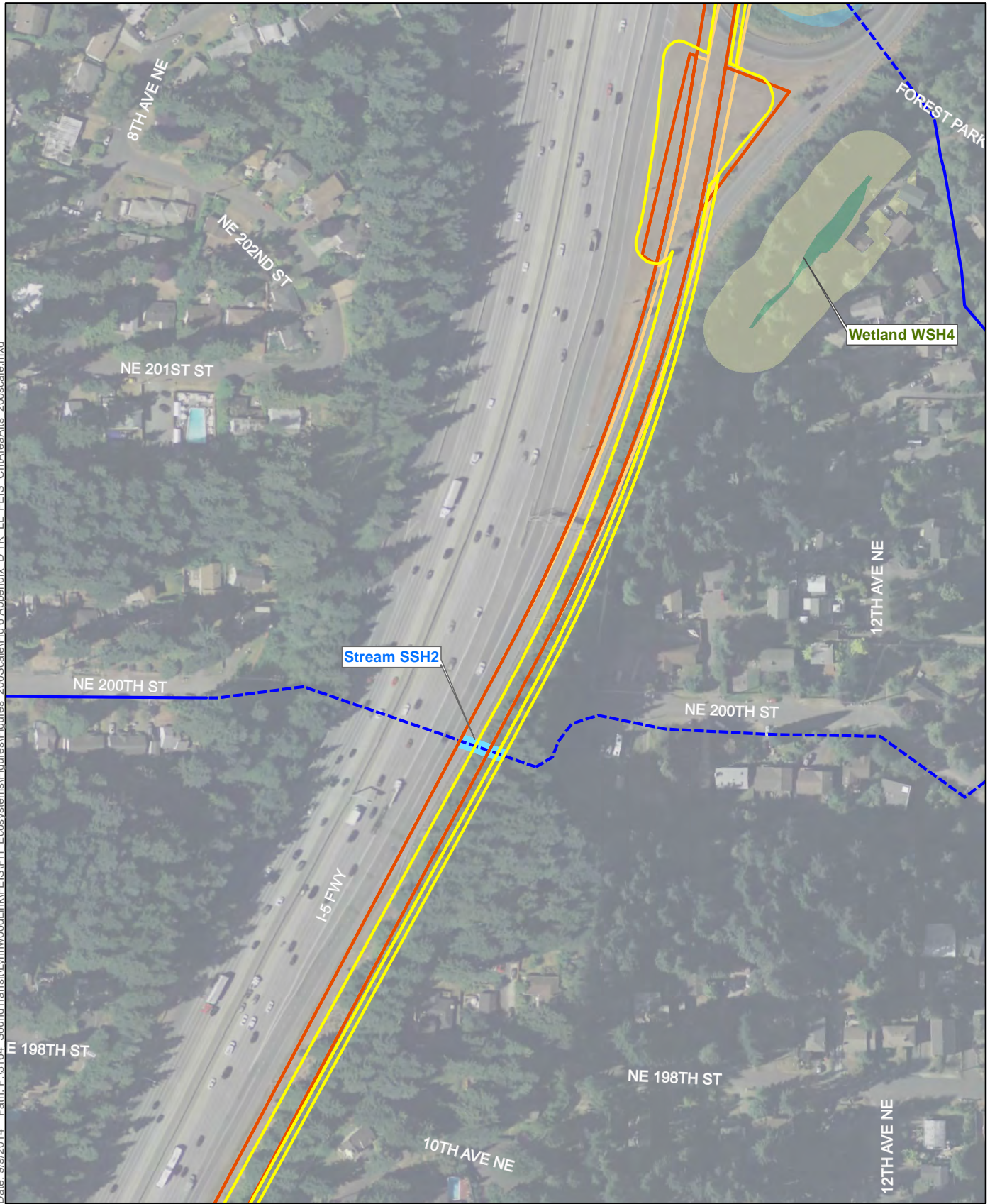
Data Sources:
(King & Snohomish County, WSDOT, Streamnet, City of Seattle, City of Shoreline, ESA, Aerials Express.)

- Stream
- Stream Buffer
- Wetland
- Wetland Buffer
- Open Stream
- Piped Stream
- Preferred Alternative
- A1; A3; A10; A11
- A5; A7





Appendix D
Figure 5
Wetland and Stream Impacts

Lynnwood Link Extension

Date: 9/9/2014 Path: P:\3164_SoundTransit\LynnwoodLink\FEIS\PH_Ecosystems\Figures_200Scale\Fig 6 Appendix D TR LL FEIS CritAreaAirs_200scale.mxd



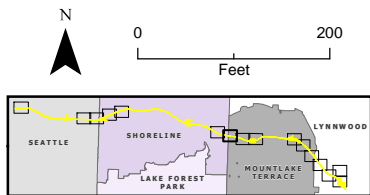
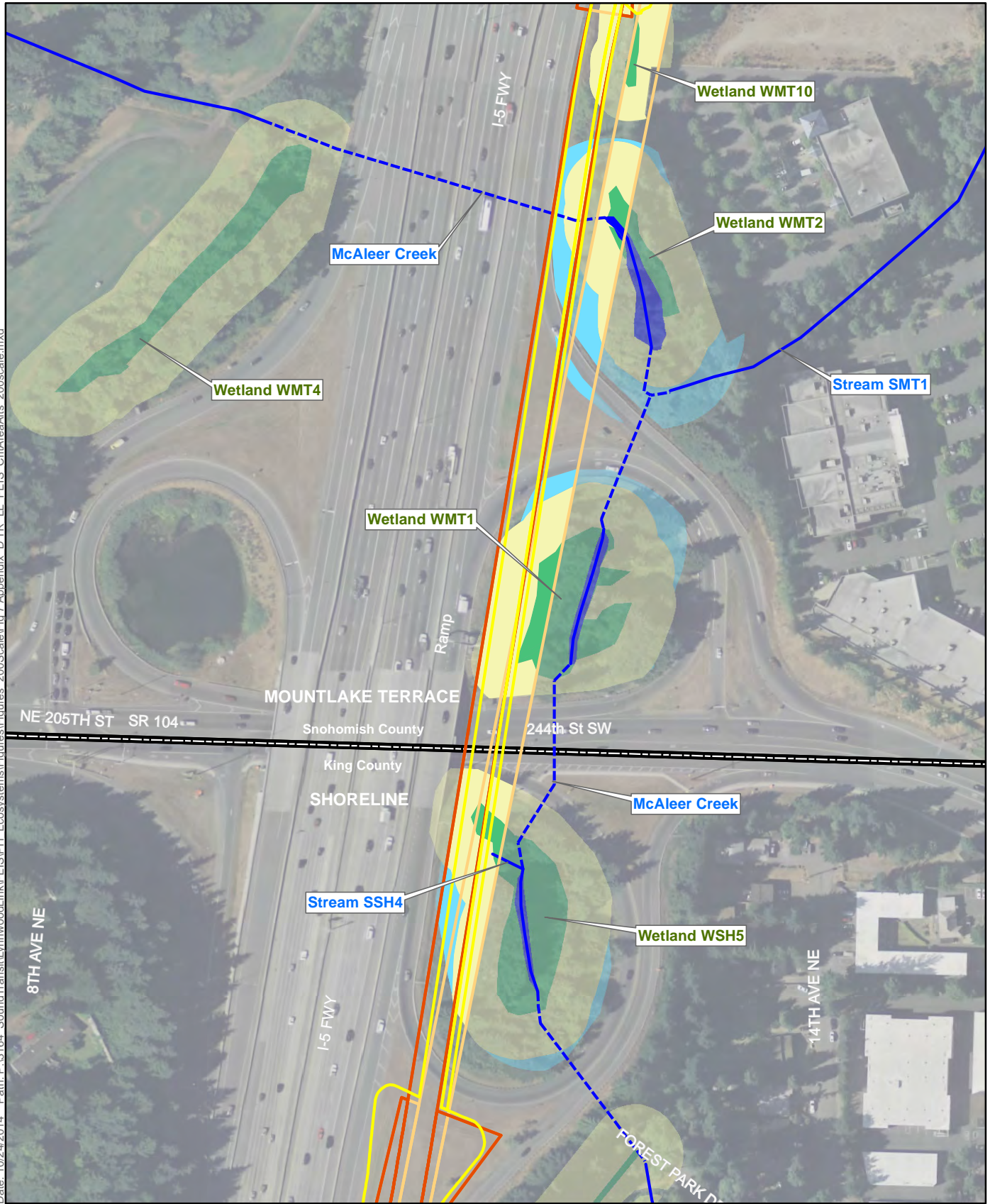
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(King & Snohomish
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Streamnet, City of
Seattle, City of
Shoreline, ESA,
Aerials Express.)

- | | | | |
|---|----------------|---|-----------------------|
|  | Stream |  | Preferred Alternative |
|  | Stream Buffer |  | B1; B2A |
|  | Wetland |  | B4 |
|  | Wetland Buffer | | |
|  | Open Stream | | |
|  | Piped Stream | | |

Appendix D
Figure 6
Wetland and Stream
Impacts

Lynnwood Link Extension

Date: 10/24/2014 Path: P:\3164_SoundTransit\Lynnwood\link\FEIS\PH_Ecosystems\Figures_200Scale\Fig 7 Appendix D TR LL FEIS CritAreaAlts_200scale.mxd



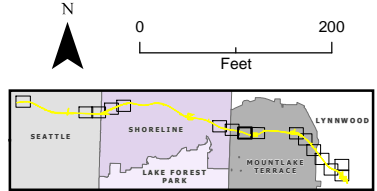
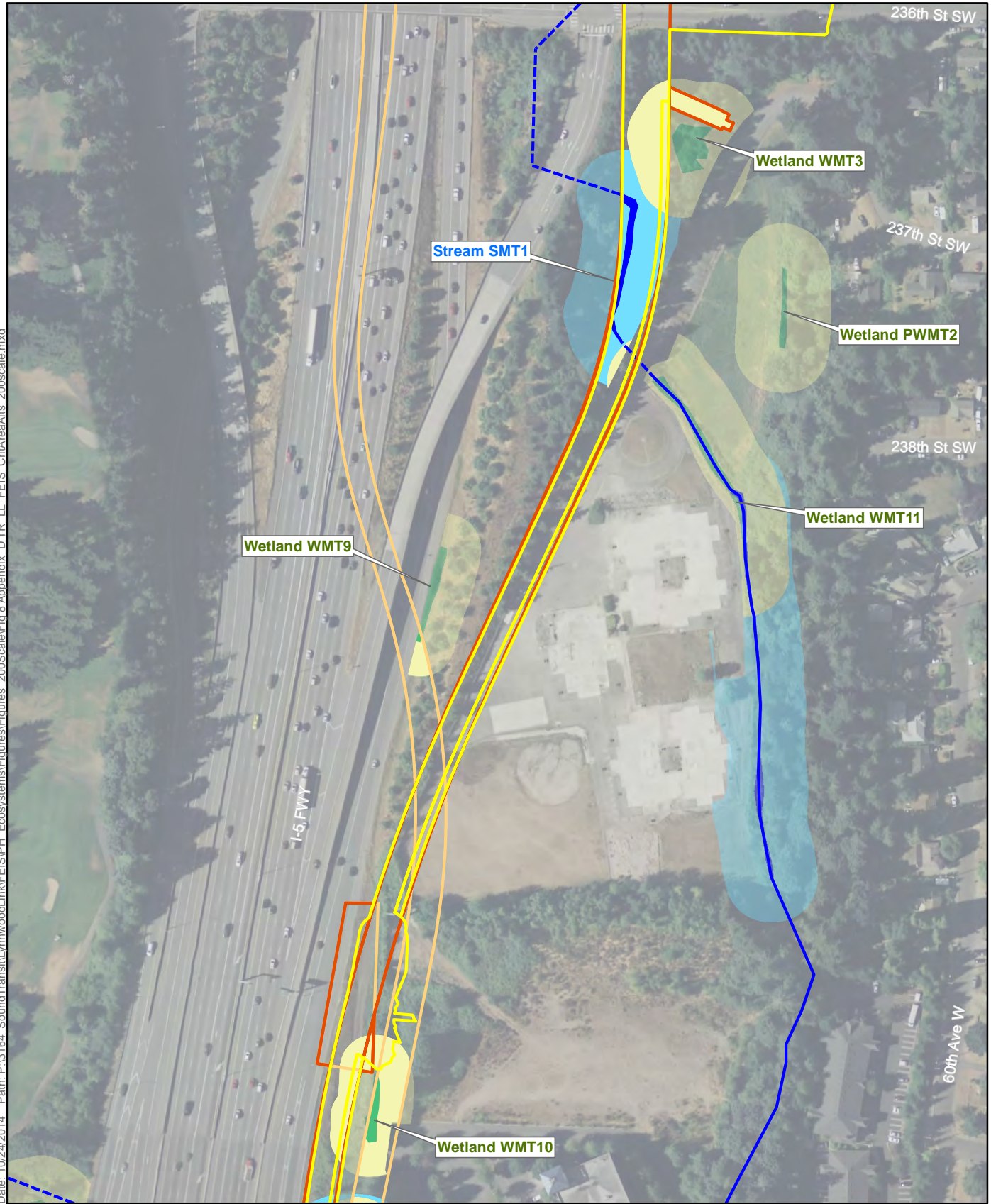
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Shoreline, ESA,
Aerials Express.)

- | | | | |
|--|----------------|--|-----------------------|
| | Stream | | Preferred Alternative |
| | Stream Buffer | | B1; B2A |
| | Wetland | | B4 |
| | Wetland Buffer | | |
| | Open Stream | | |
| | Piped Stream | | |

Appendix D
Figure 7
Wetland and Stream
Impacts

Lynnwood Link Extension

Date: 10/24/2014 Path: P:\3164_SoundTransit\Lynnwood\link\FEIS\PH_Ecosystems\Figures_200Scale\Fig 8 Appendix D TR LL FEIS CritAreaAlts_200scale.mxd



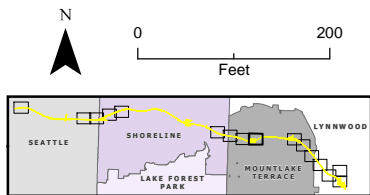
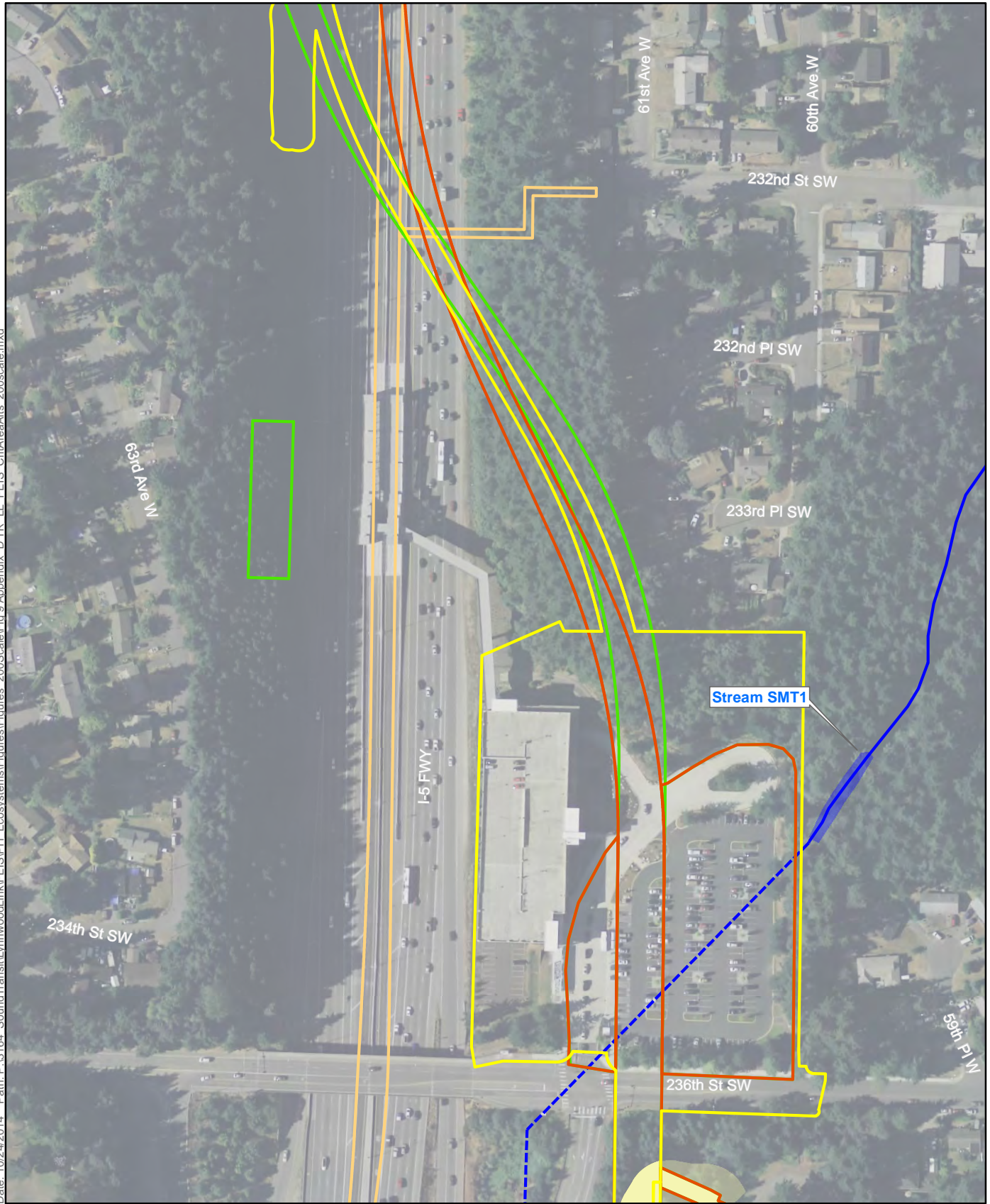
Data Sources:
(King & Snohomish
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Streamnet, City of
Seattle, City of
Shoreline, ESA,
Aerials Express.)

- Stream
- Stream Buffer
- Wetland
- Wetland Buffer
- Open Stream
- Piped Stream
- Preferred Alternative
- B1; B2A
- B4

Appendix D
Figure 8
Wetland and Stream
Impacts

Lynnwood Link Extension

Date: 10/24/2014 Path: P:\3164_SoundTransit\Lynnwood\link\FEIS\PH_Ecosystems\Figures_200Scale\Fig 9 Appendix D TR LL FEIS CritAreaAlts_200scale.mxd



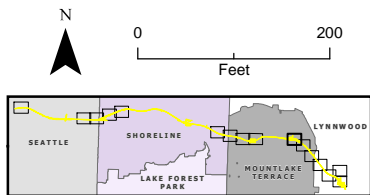
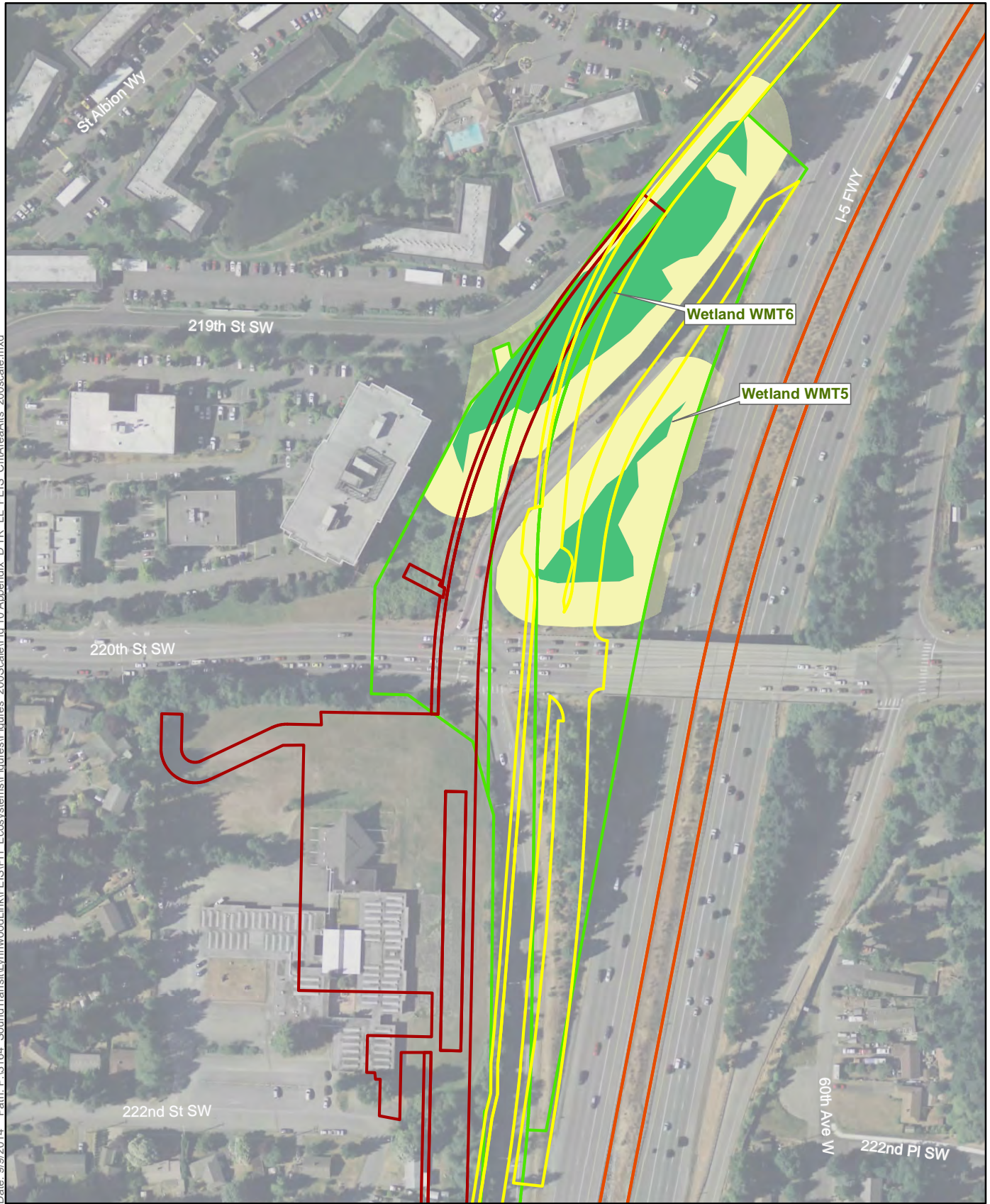
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Aerials Express.)

- | | | | |
|--|----------------|--|-----------------------|
| | Stream | | Preferred Alternative |
| | Stream Buffer | | B1 |
| | Wetland | | B2A |
| | Wetland Buffer | | B4 |
| | Open Stream | | |
| | Piped Stream | | |

Appendix D
Figure 9
Wetland and Stream
Impacts

Lynnwood Link Extension

Date: 9/9/2014 Path: P:\3164_SoundTransit\LynnwoodLink\FEIS\PH_Ecosystems\Figures\200Scale\Fig_10_Appendix D_TR_LL_FEIS_CritAreaAIs_200scale.mxd



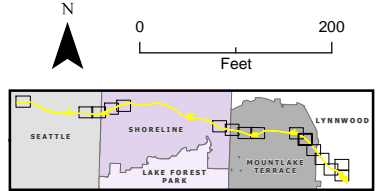
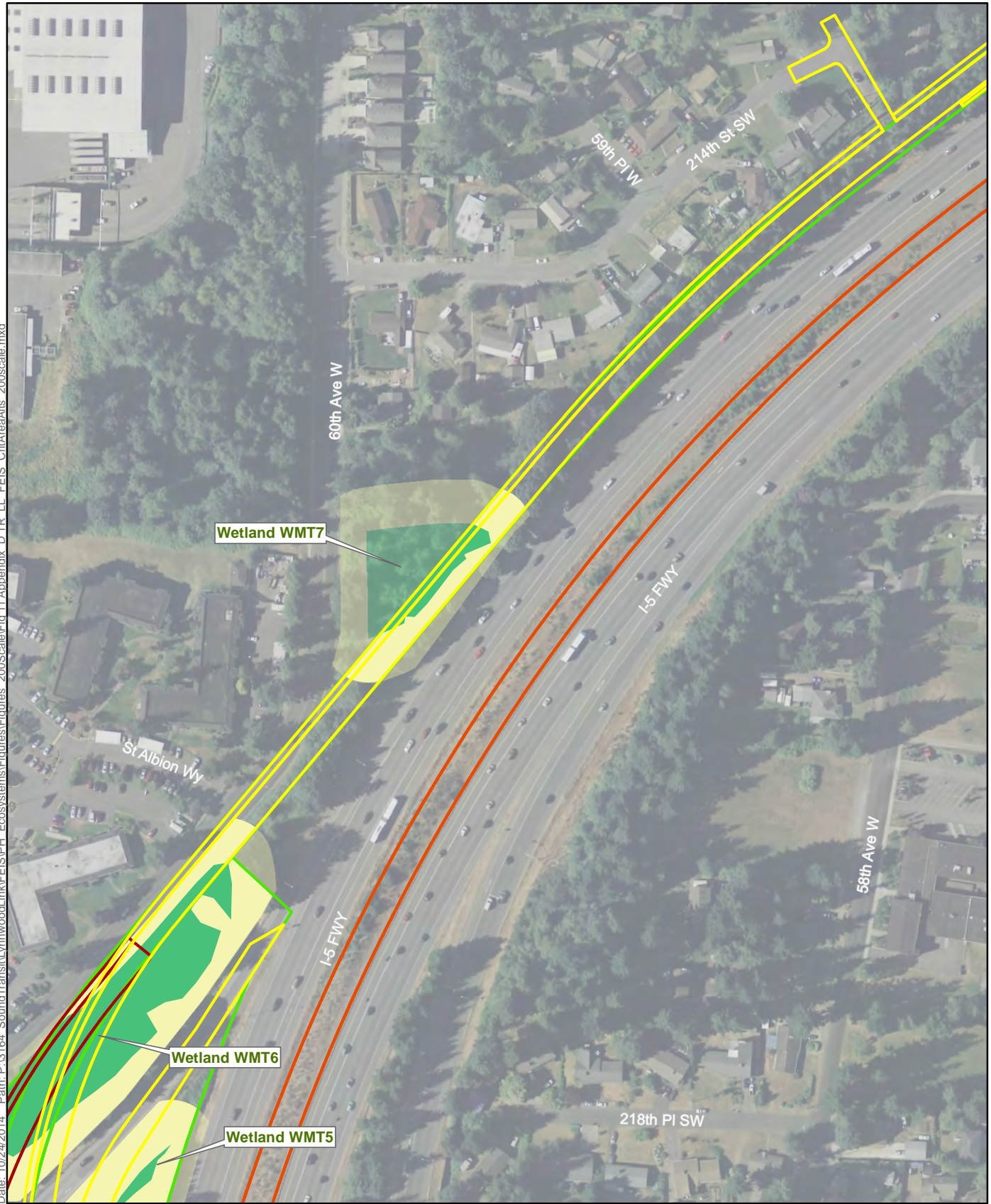
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Streamnet, City of
Seattle, City of
Shoreline, ESA,
Aerials Express.)*

- | | |
|---|--|
| ■ Stream | Preferred Alternative |
| ■ Stream Buffer | 220th Street SW Station Option |
| ■ Wetland | B1; B4 |
| ■ Wetland Buffer | B2A |
| — Open Stream | |
| - - - Piped Stream | |

**Appendix D
Figure 10
Wetland and Stream
Impacts**

Lynnwood Link Extension

Date: 10/24/2014 Path: P:\3164_SoundTransit\Lynnwood\ink\FEIS\PH_Ecosystems\Figures_200Scale\Fig.11 Appendix D TR LL FEIS CritArea\Altis_200scale.mxd

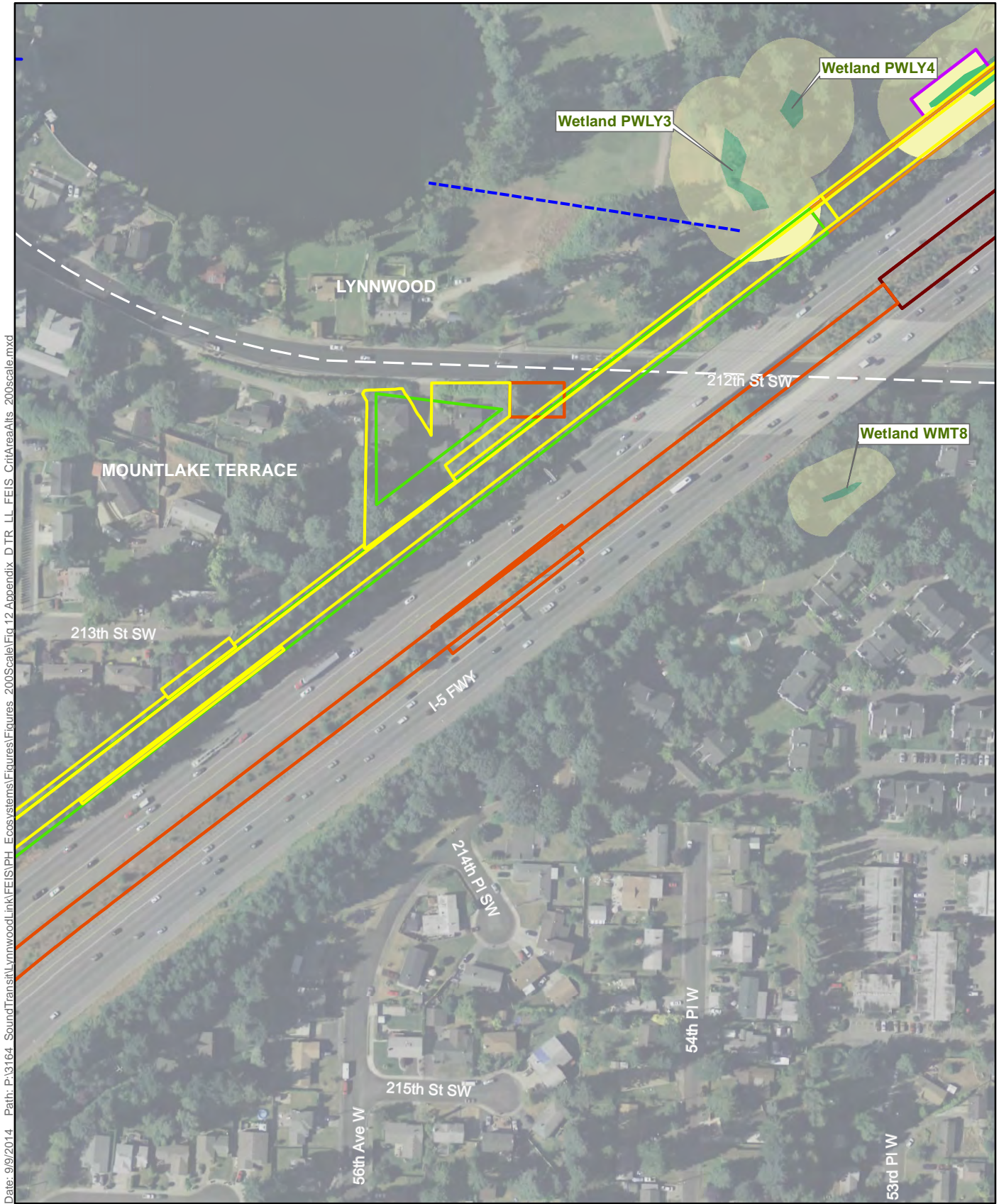


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Shoreline, ESA,
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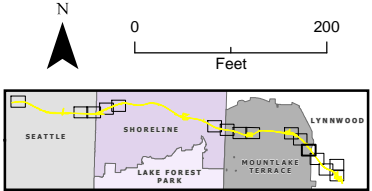
- Stream
- Stream Buffer
- Wetland
- Wetland Buffer
- Open Stream
- Piped Stream
- Preferred Alternative
- 220th Street SW Station Option
- B1; B4
- B2A

Appendix D
Figure 11
Wetland and Stream
Impacts

Lynnwood Link Extension



Date: 9/9/2014 Path: P:\3164_SoundTransit\LynnwoodLink\FEIS\PH_Ecosystems\Figures\Figures\Fig_12_Appendix_D_TR_LL_FEIS_CritAreaAis_200scale.mxd



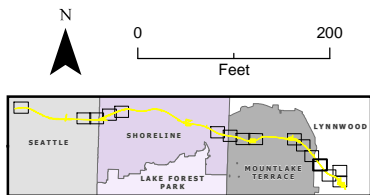
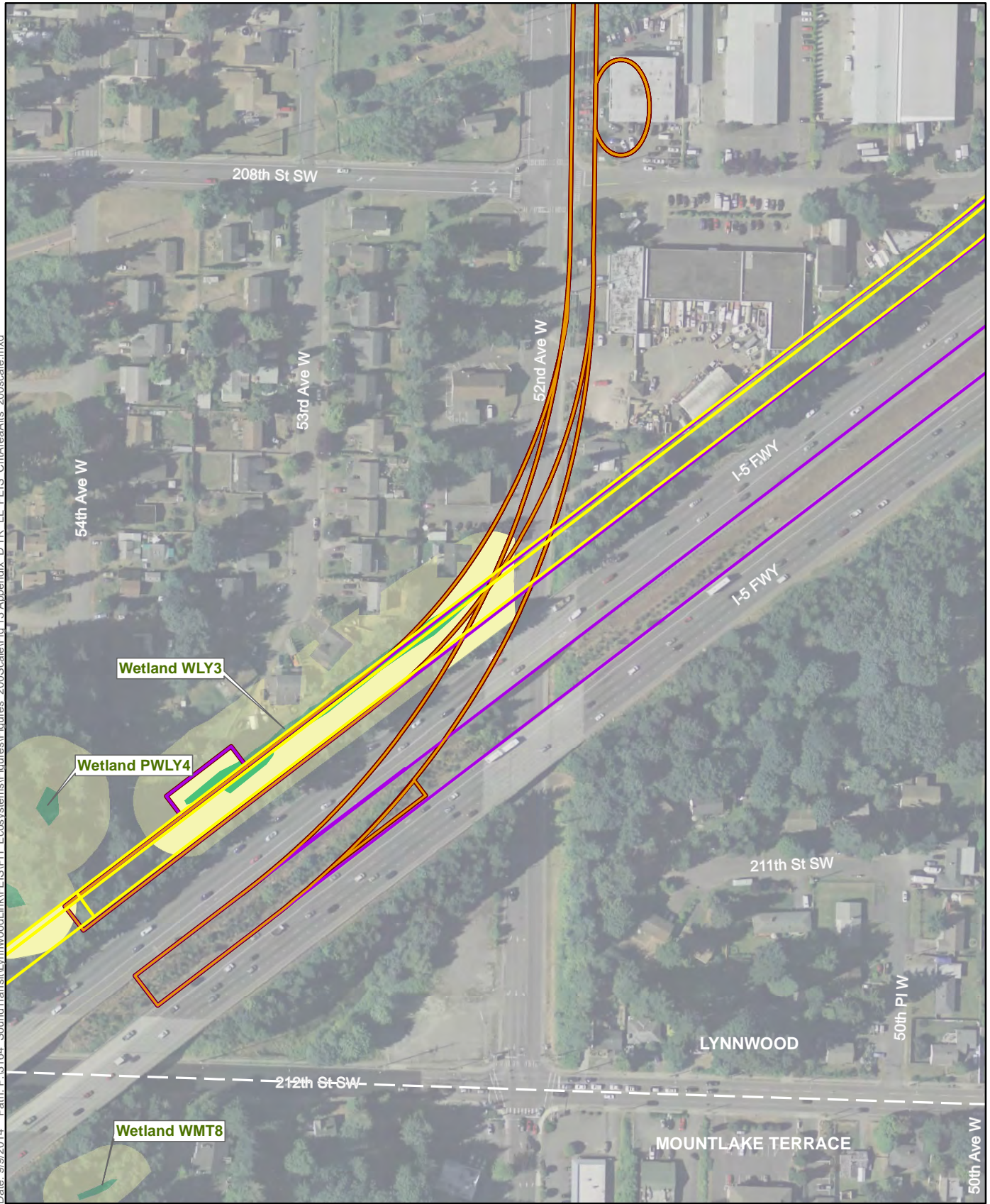
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 County, WSDOT,
 Streamnet, City of
 Seattle, City of
 Shoreline, ESA,
 Aerials Express.)

- | | | | |
|--|----------------|--|-----------------------|
| | Stream | | Preferred Alternative |
| | Stream Buffer | | B1; B4 |
| | Wetland | | B2A |
| | Wetland Buffer | | C1W |
| | Open Stream | | C2W; C3W |
| | Piped Stream | | C1M; C2M; C3M |

Appendix D
Figure 12
 Wetland and Stream
 Impacts

Lynnwood Link Extension

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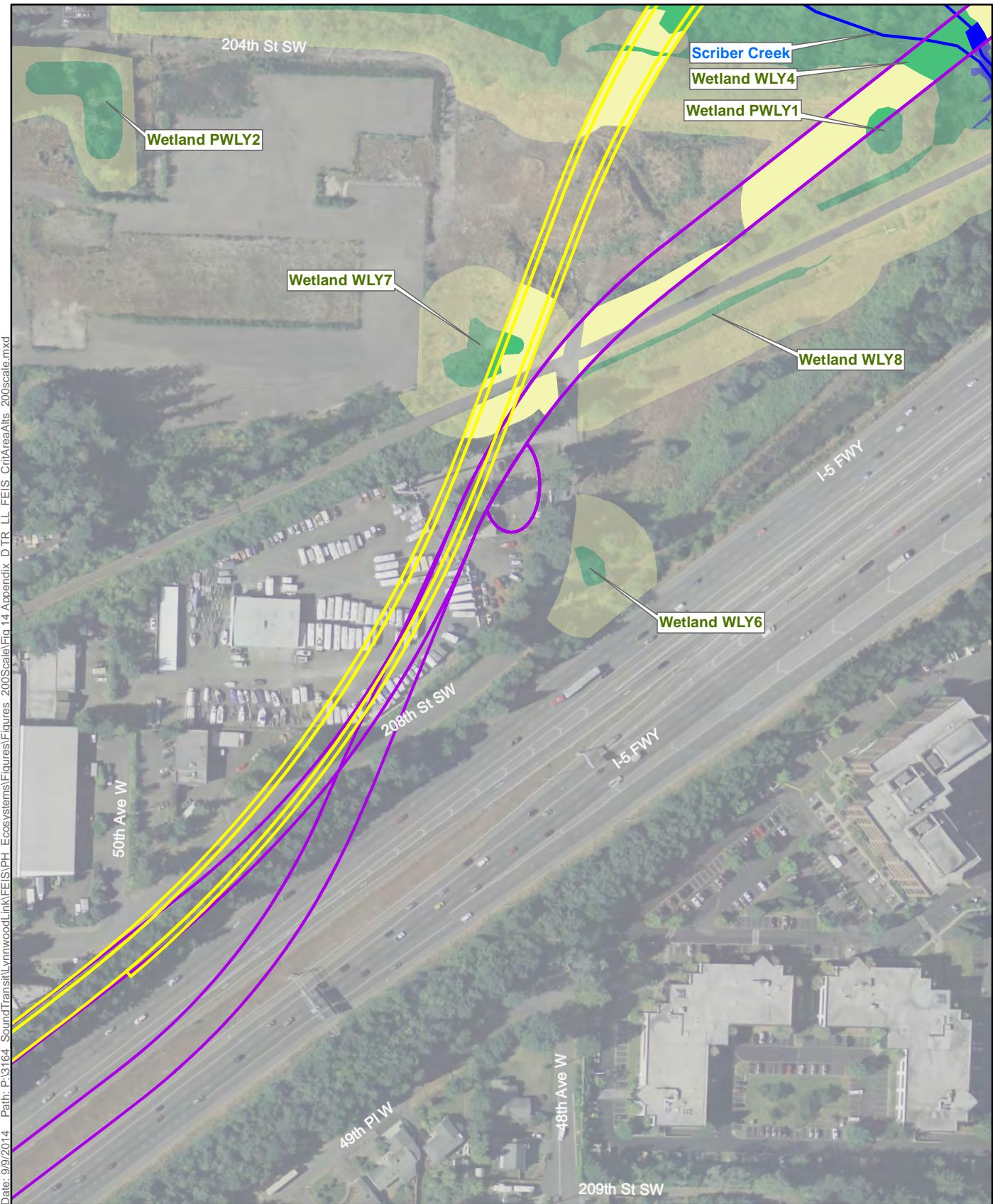


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 Aerials Express.)

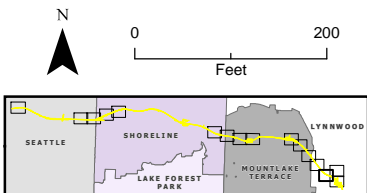
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|--|----------------|--|-----------------------|
| | Stream | | Preferred Alternative |
| | Stream Buffer | | C1M; C1W |
| | Wetland | | C2M; C2W |
| | Wetland Buffer | | C3M; C3W |
| | Open Stream | | |
| | Piped Stream | | |

Appendix D
Figure 13
 Wetland and Stream
 Impacts

Lynnwood Link Extension



Date: 9/9/2014 Path: P:\3164_SoundTransit\LynnwoodLink\FEIS\PH_Ecosystems\Figures\200Scale\Fig.14_Appendix D TR_LL_FEIS_CritAreaAIs_200scale.mxd



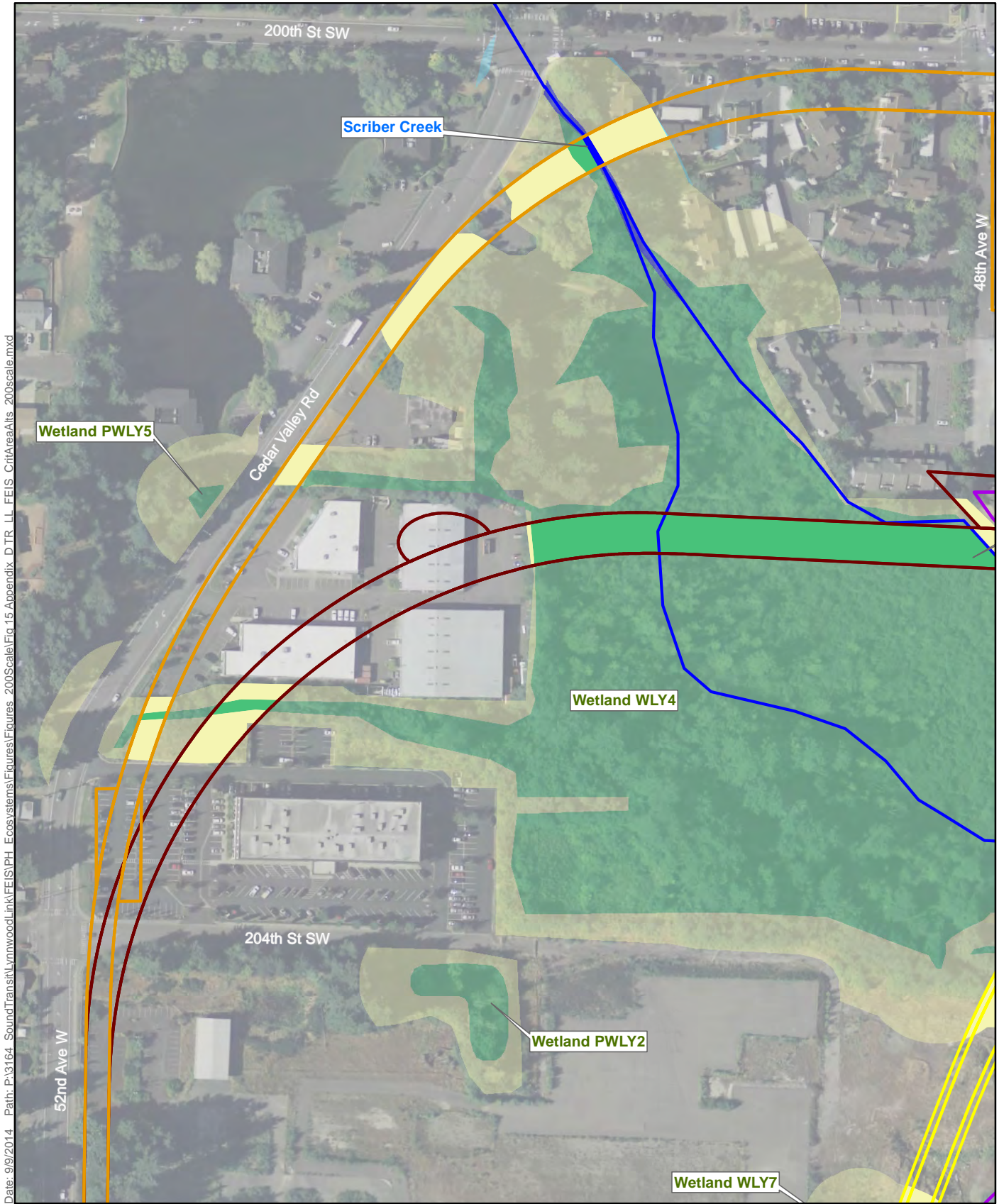
Data Sources:
(King & Snohomish
County, WSDOT,
Streamnet, City of
Seattle, City of
Shoreline, ESA,
Aerials Express.)

- | | | | |
|--|----------------|--|-----------------------|
| | Stream | | Preferred Alternative |
| | Stream Buffer | | C3M; C3W |
| | Wetland | | |
| | Wetland Buffer | | |
| | Open Stream | | |
| | Piped Stream | | |

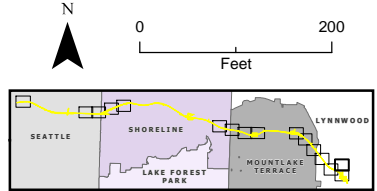
Appendix D
Figure 14
Wetland and Stream
Impacts

Lynnwood Link Extension

Note: Based on input provided by Ecology staff who collaborated on field delineations in July 2014, the ordinary high water mark of Scriber Creek where it has not been mapped (i.e., through the Scriber Creek wetland complex, Wetland WLY4) is generally defined as coinciding with the delineated wetland boundary.



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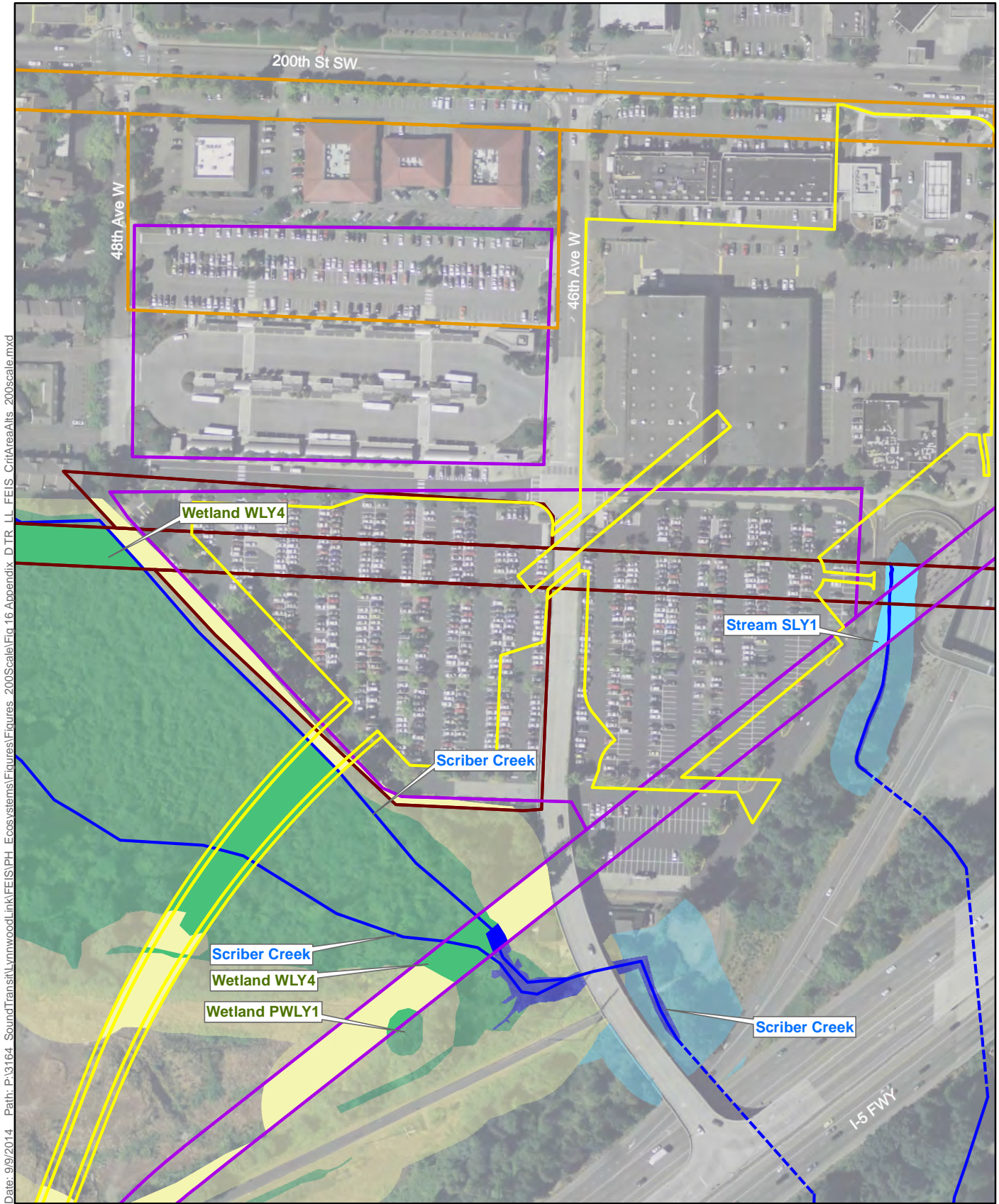
*Data Sources:
(King & Snohomish
County, WSDOT,
Streamnet, City of
Seattle, City of
Shoreline, ESA,
Aerials Express.)*

- | | |
|----------------|-----------------------|
| Stream | Preferred Alternative |
| Stream Buffer | C1M; C1W |
| Wetland | C2M; C2W |
| Wetland Buffer | C3M; C3W |
| Open Stream | |
| Piped Stream | |

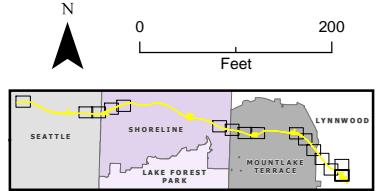
**Appendix D
Figure 15
Wetland and Stream
Impacts**

Lynnwood Link Extension

Note: Based on input provided by Ecology staff who collaborated on field delineations in July 2014, the ordinary high water mark of Scriber Creek where it has not been mapped (i.e., through the Scriber Creek wetland complex, Wetland WLY4) is generally defined as coinciding with the delineated wetland boundary.



Date: 9/9/2014 Path: P:\3164_SoundTransit\Lynnwood\Link\FEIS\PH_Ecosystems\Figures\200Scale\Fig.16 Appendix D TR_LL_FEIS_CritAreaAIs_200Scale.mxd



*Data Sources:
(King & Snohomish
County, WSDOT,
Streamnet, City of
Seattle, City of
Shoreline, ESA,
Aerials Express.)*

- Stream
- Stream Buffer
- Wetland
- Wetland Buffer
- Open Stream
- Piped Stream
- Preferred Alternative
- C1M; C1W
- C2M; C2W
- C3M; C3W

**Appendix D
Figure 16
Wetland and Stream
Impacts**

Lynnwood Link Extension

Note: Based on input provided by Ecology staff who collaborated on field delineations in July 2014, the ordinary high water mark of Scriber Creek where it has not been mapped (i.e., through the Scriber Creek wetland complex, Wetland WLY4) is generally defined as coinciding with the delineated wetland boundary.