

GEOTECHNICAL BASELINE REPORT

I-405, Brickyard to SR 527 Improvement Project

XL5446, I-405, MP 21.4 – 27.1



Washington State Department of Transportation
Multimodal Development & Delivery
Construction Division
Geotechnical Office
1655 2nd Avenue SW
Tumwater, WA 98512-6951

March 16, 2023

This geotechnical baseline report (GBR) is issued as part of the Request for Proposals (RFP) for the subject project. The GBR has been prepared to provide geotechnical baselines for use by the Design-Builder, as described in Chapter 1 of the RFP. It should not be used, in part or in whole, for other purposes, without contacting the WSDOT Geotechnical Office for a review of the applicability of such reuse.



March 16, 2023

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1 INTRODUCTION

2 1.1 GENERAL

3 This Geotechnical Baseline Report (GBR) is issued as part of the Request for Proposals
4 (RFP) for the design and construction of the I-405, Brickyard to SR 527 Improvement
5 Project (Project) on Interstate 405 (I-405) between milepost (MP) 21.40 and MP 27.10
6 (see Figure 1).

7 Funded by Move Ahead Washington and Sound Transit, the Project will create a dual
8 express toll lane (ETL) system from south of the I-405/SR 522 interchange to the I-
9 405/SR 527 interchange.

10 The Project will include multiple retaining and noise walls to support roadway
11 improvements. In addition, six fish barriers with restored stream connections will be
12 constructed as well as stream improvements. The Project will also include drainage
13 improvements, tolling gantries, signing, and intelligent transportation system (ITS)
14 elements with associated cabinets.

15 The Project will remove bridge piers near SR 522, and new and widened bridges will be
16 constructed.

17 The Project will construct a new median transit stop south of the NE 160th Street
18 interchange, including Bus Rapid Transit (BRT) elements, elevators, and stairwells. In
19 addition, a new pedestrian structure will be constructed across I-405, connecting the
20 east side and Brickyard Park and Ride to the new median transit stop.

21 The I-405/SR 522 interchange will be reconfigured, and direct access ramps with BRT
22 stations and a transit hub will be constructed.

23 New direct access ramps will be constructed at 17th Ave NE. This will include new BRT
24 stations, reconfiguring the Canyon Park, Park and Ride, and partial
25 demolition/reconstruction of the existing pedestrian bridge over I-405. In addition, the
26 Project will install tolling gantries, signing, and intelligent transportation system (ITS)
27 elements with associated cabinets.

28 The GBR provides contractual representations of the subsurface conditions that are
29 anticipated for the Project. Contractual representations in this GBR referred to as
30 "baselines," are derived from geotechnical information and data collected specifically for
31 the RFP through subsurface exploration, testing, and analysis, as well as a review of
32 other preexisting data. The Project subsurface explorations and laboratory testing results
33 are presented in the Geotechnical Data Reports (GDR). Professional opinions have also
34 been used to help establish the baselines.

35 The Design-Builder shall not use the GBR baselines in isolation for the planning or
36 performance of any aspects of their Work, including and without limitation as to means

1 and methods, techniques, sequences, and procedures of construction, and safety
2 precautions to be employed by the Design-Builder. The Design-Builder shall undertake
3 an independent review and evaluation of the Contract Documents, available data, and
4 additional subsurface information obtained by the Design-Builder as part of the Work.

5 The GBR was prepared based on the geometry and physical location of the Project
6 anticipated in the Conceptual Plans provided in the RFP. References to project feature
7 designations in this report are for clarity and are only applicable to this GBR. Baseline
8 statements included herein do not apply to alternate locations of the Project features that
9 may be proposed by the Design-Builder, or alternatives that do not conform to the
10 conceptual plans. All elevations presented in this GBR are referenced to the North
11 American Vertical Datum of 1988.

12 Baselines presented in this GBR were developed from existing geotechnical information
13 but shall not be used for design or construed as a guarantee or warranty that those
14 conditions will be encountered precisely as described during the construction process.
15 Ground behavior during construction and performance of the designed project elements
16 will depend on the construction means, methods, and sequences used by the Design-
17 Builder, including equipment and materials.

18 Where no baseline statement is provided, the Design-Builder shall use the data in the
19 GDR and perform additional explorations to develop bid and design assumptions and
20 constructed means, methods, and sequences.

21 Refer to Chapter 1 of the RFP for a description of the contractual relationship between
22 the GBR and the GDR, limitations of the subsurface information, the Design-Builder's
23 responsibility for additional subsurface exploration, and constraints on the use of this
24 GBR concerning Alternative Technical Concepts and Differing Site Conditions.

25 **1.2 PURPOSE AND SCOPE**

26 WSDOT prepared this GBR to provide baselines for the purpose of bidding to support
27 the geotechnical design and construction of the Project. The scope of this GBR is limited
28 to bridge foundations, earth retaining structures (i.e., cut and fill walls), noise walls, fish
29 passage structures, ground improvement or reinforcement, and vaults classified as a
30 structure. Throughout this GBR, these features collectively will be referred to as
31 "structures." Other aspects of the design and construction of the Project, including but
32 not limited to at-grade sections (including cuts and fills), pavements, vaults, and utility
33 excavations, are explicitly excluded from the scope of this GBR.

34 This GBR provides an interpretation of the anticipated physical geotechnical conditions
35 that could be encountered during the Project's design and construction, which may affect
36 the Design-Builder's cost, schedule, and selection of construction means and methods.
37 This GBR is the contractual description of physical conditions the Design-Builder could
38 encounter concerning identifying and allocating geotechnical risks to prepare its
39 Proposal.

2 SUBSURFACE CONDITIONS

2.1 INFORMATION AND DATA SOURCES

The geotechnical data collected for the Project is provided in the GDR. The GDR includes Project specific exploration logs, test data, and groundwater data used in the preparation of the GBR are located in Appendix G. The subsurface investigations for this Project were conducted to provide the data needed for the Design-Builder to develop an informed cost proposal for the Work. However, the explorations contained in the GDR are not sufficient to comply with the WSDOT Geotechnical Design Manual (M46-03) and the AASHTO requirements for the Project. Therefore, the Design-Builder shall be required to perform additional explorations for Contract compliance.

Understanding the geologic history and the depositional processes that produced the soil stratigraphy in the Project area helps evaluate the engineering characteristics and behavior of the deposits encountered along the Project alignment and interpret the stratigraphic correlation between subsurface explorations. Therefore, a reference document has been compiled to include data and information sources from past projects. The reference document contains geological, geotechnical, and regional geology information for the Project area and is provided in Appendix G of the RFP. The reference document is information for the Design-Builder but is expressly not part of the Contract.

3 CONTRACTUAL BASELINE STATEMENTS AND CONDITIONS

3.1 BACKGROUND

To establish baseline statements and conditions, the Project has been divided into four main areas:

- Brickyard area
- Hillside area
- Sammamish River Valley area
- Canyon Park area

Within each main area, subareas have also been defined. Figures 2 and 3 identify the location of each main area and subarea along the Project alignment. WSDOT is performing additional explorations and analyses within the Hillside area, and the information will be provided to the Design Builders in a follow-on supplement.

1 3.2 BASELINE CONDITIONS

2 This section describes the anticipated physical ground conditions that could be
3 encountered within the Project limits, which may affect design and construction
4 decisions and, therefore, influence cost, schedule, and the selection of construction
5 means and methods. Ground behavior is the responsibility of the Design-Builder as it is
6 a function of a specific design and construction alternative selected. Based on an
7 interpretation of the Project information, baseline physical conditions have been
8 categorized as follows:

- 9 • Obstructions
- 10 • Abandoned structures
- 11 • Liquefaction
- 12 • Slope stability
- 13 • Groundwater
- 14 • Reuse of material
- 15 • Poor ground

16 A description of each baseline condition is provided below. The purpose is to give the
17 Design-Builder knowledge of what baseline physical geotechnical conditions may be
18 encountered to bid and prepare a Proposal. The baseline conditions represent physical
19 conditions that may be encountered in any design and construction alternative. The
20 descriptions below apply only to the areas indicated in Table 1.

21 3.2.1 OBSTRUCTIONS

22 The Project is located along the west-facing slopes of a glacially carved trough occupied
23 by Lake Washington. Several glacial periods within the past 2 million years have
24 dominated the recent geologic history of the Puget Sound Lowland region. Post-glacial
25 deposits and human modification, including fill, are also present throughout the Project.

26 Based on historical information (documented in Contract Appendix E and other parts of
27 the Contract), area development before and in the 1960s was generally agricultural land
28 with rural residential. However, since the late 1960s, improvements to the I-405 system
29 have been made, including new bridges and roadway widening.

30 The naturally occurring deposits and human modifications indicate that large-sized
31 natural and artificial materials are expected in the Work. Naturally occurring cobbles,
32 boulders, and miscellaneous natural and artificial debris are present within the Project
33 limits that can cause difficulty in construction. A cobble is a rock that will pass through a
34 12-inch-square opening but not through a 3-inch-square opening in any orientation. A
35 boulder is a rock that will not pass through a 12-inch-square opening in any direction.

1 Miscellaneous debris includes, but is not limited to, materials such as lumber, wood,
2 concrete, metal, and brick.

- 3 • Rip-rap and quarry spalls are incidental to all work at the surface or buried.
- 4 • Cobbles are incidental to all Work
- 5 • Boulders up to 4 feet (passing through a 4-foot square opening in any
6 orientation) are incidental to all Work
- 7 • All miscellaneous debris with individual pieces up to a volume of 64 cubic feet is
8 considered incidental to the Work

9 3.2.2 ABANDONED STRUCTURES

10 Abandoned structures are pylons, pilings, construction debris, and any deleterious
11 material from prior activities of any size shall be the responsibility of the Design-Builder.

12 In the Sammamish River baseline area, the Sammamish River was a major
13 transportation route between Lake Washington and Lake Sammamish and historic
14 bridges crossed the river. Accordingly, for baseline conditions, underground objects may
15 be encountered including but not limited to wooden piling, historic docking, bridge and
16 other foundations.

17 In the Hillside baseline area, a variety of underground objects from historic roadways
18 and landslide mitigation will be encountered, including but not limited to piles,
19 foundations, drainage systems, and rip rap rock.

20 3.2.3 LIQUEFACTION

21 The Project will be designed in accordance with the current versions of the WSDOT
22 GDM, the WSDOT Bridge Design Manual, and the American Association of State
23 Highway and Transportation Officials (AASHTO) Load and Resistance Factor Design
24 Bridge Design Specifications. Based on these documents, the proposed structures will
25 require a seismic design. A seismic design includes but is not limited to the development
26 of ground motions and the assessment of liquefaction. Liquefaction effects include
27 ground settlement, reduced shear strength, flow failure, lateral spreading, and pseudo-
28 static slope instability.

29 Saturated silt to silty-fine sand, sand, and gravel will liquefy during the design
30 earthquake. Liquefaction will result in a reduction in soil strength to residual strength
31 values to a depth of 80 feet below the ground surface. Soils between 80 and 120 feet
32 below the ground surface will experience a reduction in strength but will not degrade to
33 residual strength. Glacially overridden soils are not susceptible to liquefaction. Plastic silt
34 to clay and organic silt will experience a reduction in strength due to the design
35 earthquake. Liquefiable soils will experience post-seismic volumetric strains resulting in
36 ground surface settlement, differential settlement, and down-drag loads on deep
37 foundations. Liquefied soils are unstable and susceptible to lateral spread and flow

1 failure that will impose lateral loads and or/lateral soil displacements on Project
2 elements.

3 3.2.4 SLOPE STABILITY

4 Steep and unstable slopes will be encountered within the Project limits. In addition to
5 topography that has resulted in steep and unstable slopes from the region's geological
6 conditions, the ground stability within the Project limits has been impacted by
7 commercial, industrial, residential, and infrastructure development. Specific physical
8 features included in the slope instability baseline are:

- 9 • Ancient landslide locations
- 10 • Locations where prior failures have been observed
- 11 • Locations where ongoing maintenance actions have been required
- 12 • Locations where engineering activities may affect adjacent properties
- 13 • Locations where underground utilities may be impacted
- 14 • Locations where ground conditions, including but not limited to Glaciolacustrine
15 deposits, indicate a higher likelihood of slope failure

16 Regardless of what is indicated in Table 1, this baseline condition does not include
17 cases where the Design Builder's design assumptions lead to unacceptable factors of
18 safety for static or seismic conditions.

19 3.2.5 GROUNDWATER

20 Variable groundwater conditions will be encountered within the Project limits. Specific
21 issues associated with groundwater that may affect design and construction alternatives
22 include shallow groundwater where excavations or base stability may be affected,
23 seepage from slopes influencing stability, high groundwater inflows, and over-pressured
24 or artesian conditions. In addition, perched, isolated, and continuous groundwater zones
25 will be encountered within the Project limits.

26 Within a baselined area, the groundwater shall be taken to be at the ground surface.
27 Groundwater zones may have piezometric pressure heads above the top of the
28 saturated soil unit, as high as above the ground surface.

29 Groundwater will affect design and construction alternatives. For example, dewatering
30 during construction, short-term stability, and long-term impacts.

1 3.2.6 REUSE OF MATERIAL

2 For all areas except those explicitly noted in Table 1, materials from roadway
3 excavation, structure excavation, and all other excavations may or may not be suitable
4 for reuse as fill or embankment material on the Project.

5 3.2.7 POOR GROUND

6 Variable and poor ground conditions will be encountered within the Project limits. Poor
7 ground conditions are defined as loose granular soil, soft cohesive soil, and organic soil
8 (i.e., including but not limited to peat) that can create the likelihood of immediate and
9 long-term settlement, inadequate bearing strength, and instability during or following the
10 completion of construction. Baselined areas where poor ground conditions are likely to
11 be encountered are identified in Table 1.

12 Poor ground conditions are defined to occur where uncorrected standard penetration
13 resistance (SPT) blow counts are less than or equal to 10 for non-cohesive soils and
14 less than or equal to four for cohesive soils and all organic soils. Where these physical
15 conditions are encountered, the ground behavior will be controlled by the design and
16 construction decisions of the Design-Builder. Therefore, it shall be the Design-Builder's
17 responsibility to assess these poor ground conditions and their related significance to the
18 structure and the overall design performance to be achieved.

19 3.3 BASELINES BY AREA

20 Table 1 defines where the baseline conditions will apply. The locations of the Project
21 components and outlined baseline areas are shown in Figures 2 and 3.

22 3.4 BASELINE BOUNDARIES

23 Soil stratigraphy varies in extent, continuity, and thickness. Therefore, there are not
24 enough explorations available in most locations to reliably interpolate between
25 explorations or extrapolate beyond the available explorations.

26 The baseline conditions in this GBR (Including Table 1) apply to each Project feature
27 type within a boundary as follows:

- 28 • Bridge foundations: A lateral distance of 100 feet from the exterior dimensions of
29 the bridge foundation element.
- 30 • Earth retaining systems, including retaining walls: A perpendicular distance of 90
31 feet from the face of the wall, 1.5 times the maximum height of the retaining
32 structures, or the lateral extent of soil anchors, whichever is greater.
- 33 • Fish passage structures: A lateral distance of 10 feet from the structure, plus 1.5
34 times the conceptual depth of the structure, plus another additional 10 feet.

- 1 • Noise wall: A lateral distance of 50 feet from the outer edge of the wall foundation
2 element.
- 3 • Vaults: A lateral distance of 10 feet from the structure, plus 1.5 times the
4 conceptual depth of the structure, plus another additional 10 feet.
- 5 Should the Design Builder elect to move any of the Project features such that permanent
6 or temporary construction occurs outside the baseline boundaries described above, the
7 Design-Builder shall assume and be responsible for any risk of a Differing Site
8 Condition.
9

Table 1: Baseline Conditions

Areas	Approximate Mileposts ¹		Baseline Conditions to be Encountered ²						
	From	To	Obstructions	Abandoned Structures	Liquefaction	Slope Stability	Groundwater	Poor Ground	Reuse of Soil
Brickyard									
	21 40	21 85			NP	NP		✓ ³	✓ ⁴
Juanita Creek fish passage	21 85	21 95	✓		✓	✓	✓	✓	No Reuse
	21 95	22 40			NP	NP		✓ ³	✓ ⁴
Brickyard Transit Station	22 40	22 50			NP	NP		✓ ³	✓ ⁴
	22 50	22 74			NP	NP		✓ ³	✓ ⁴
	22 74	23 10			✓	✓	✓	✓	No Reuse
Hillside ⁵									
	23 10	23 59	✓	✓	✓	✓		✓	No Reuse
Sammamish River Valley									
	23 59	24 00	✓	✓	✓	✓	✓	✓	No Reuse
Canyon Park									
	24 00	24 95			✓	NP	✓	✓	No Reuse
Stream 25	24 95	25 10			✓	✓	✓	✓	No Reuse
	25 10	25 50			✓	✓	✓	✓	✓ ⁴
	25 50	26 10			NP	✓	✓	✓ ³	✓ ⁴
228th St SE	26 10	26 40			✓		✓	✓	No Reuse
	26 40	27 10			✓		✓	✓	No Reuse

NP - Not present

1 - See outlines on Figures 2 and 3

2 - If a part of the table is blank, this condition is not baselined; see Section 1.1. All conditions must be evaluated for design according to the Contract even if a condition is noted in the table as not present.

3 - As a baseline condition, poor ground is not present deeper than 10 feet below the existing ground surface

4 - As a baseline condition, soil may be reused if it meets WSDOT specifications and design assumptions for its use. All soil moisture conditions are fully the responsibility of the Design Builder.

5 - See Technical Requirements, Section 2.6

1 **4 LIMITATIONS**

2 This GBR has been prepared for exclusive use on this Project. The data contained
3 herein is based on site conditions that existed during the field explorations. Within the
4 scope, schedule, and budget limitations, the data presented in this report was collected
5 and presented in accordance with the generally accepted professional geotechnical
6 practice in this area at the time this report was prepared. No other warranty, expressed
7 or implied, is made.

8 This report was completed to provide prospective Design-Build bidders with geotechnical
9 information. No design recommendations or interpretive information is provided herein.

10 **5 REFERENCES**

11 American Association of State Highway and Transportation Officials, 2020, AASHTO
12 Guide Specifications for LRFD Seismic Bridge Design 2nd Edition, American
13 Association of State Highway and Transportation Officials, Washington, DC.

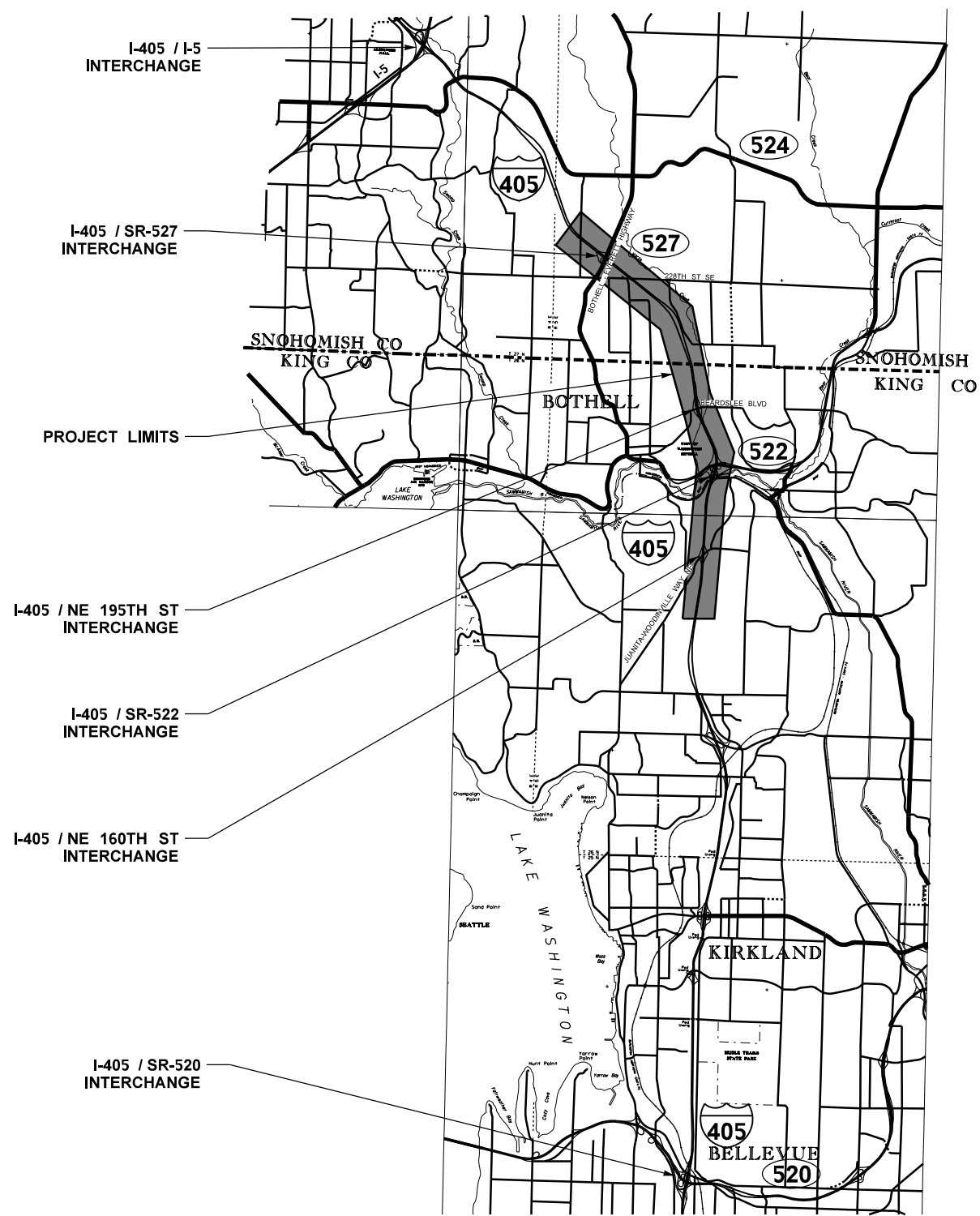
14 Washington State Department of Transportation, 2022, Geotechnical Design Manual.
15 Publication M 46-03.11. Washington State Dept. of Transportation, Olympia, WA.

16

FIGURES

- 1 Figure 1: Vicinity Map
- 2 Figure 2: Geotechnical Baseline Overview
- 3 Figure 3: Project Baseline Areas (Sheets 1-18)


I-405 BRICKYARD TO SR 527 IMPROVEMENT PROJECT



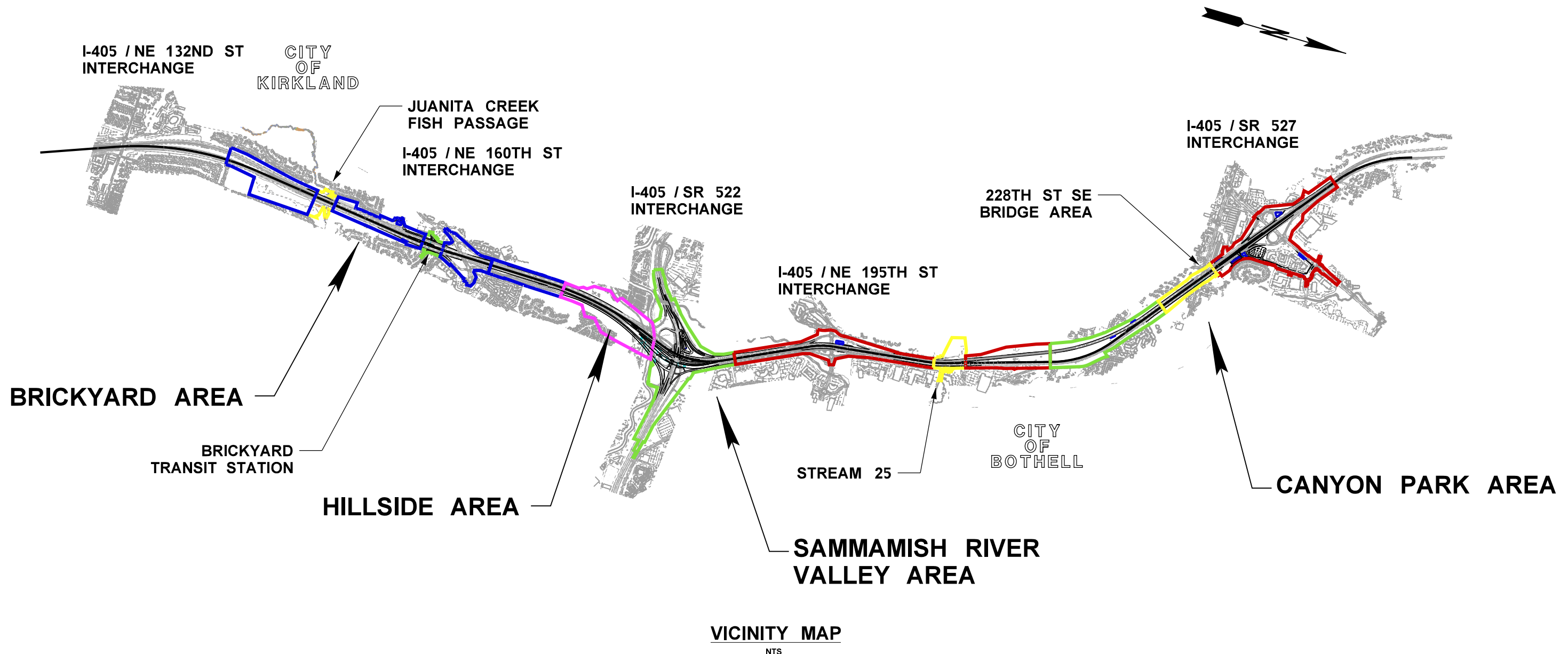
PROJECT LOCATION MAP
NTS




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 Washington State Department of Transportation	I-405 SR 522 VICINITY TO SR 527 EXPRESS TOLL LANES IMPROVEMENT PROJECT	SHEET 1 OF 1 SHEETS
	FIGURE 1: VICINITY MAP	

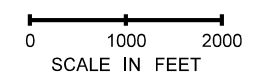
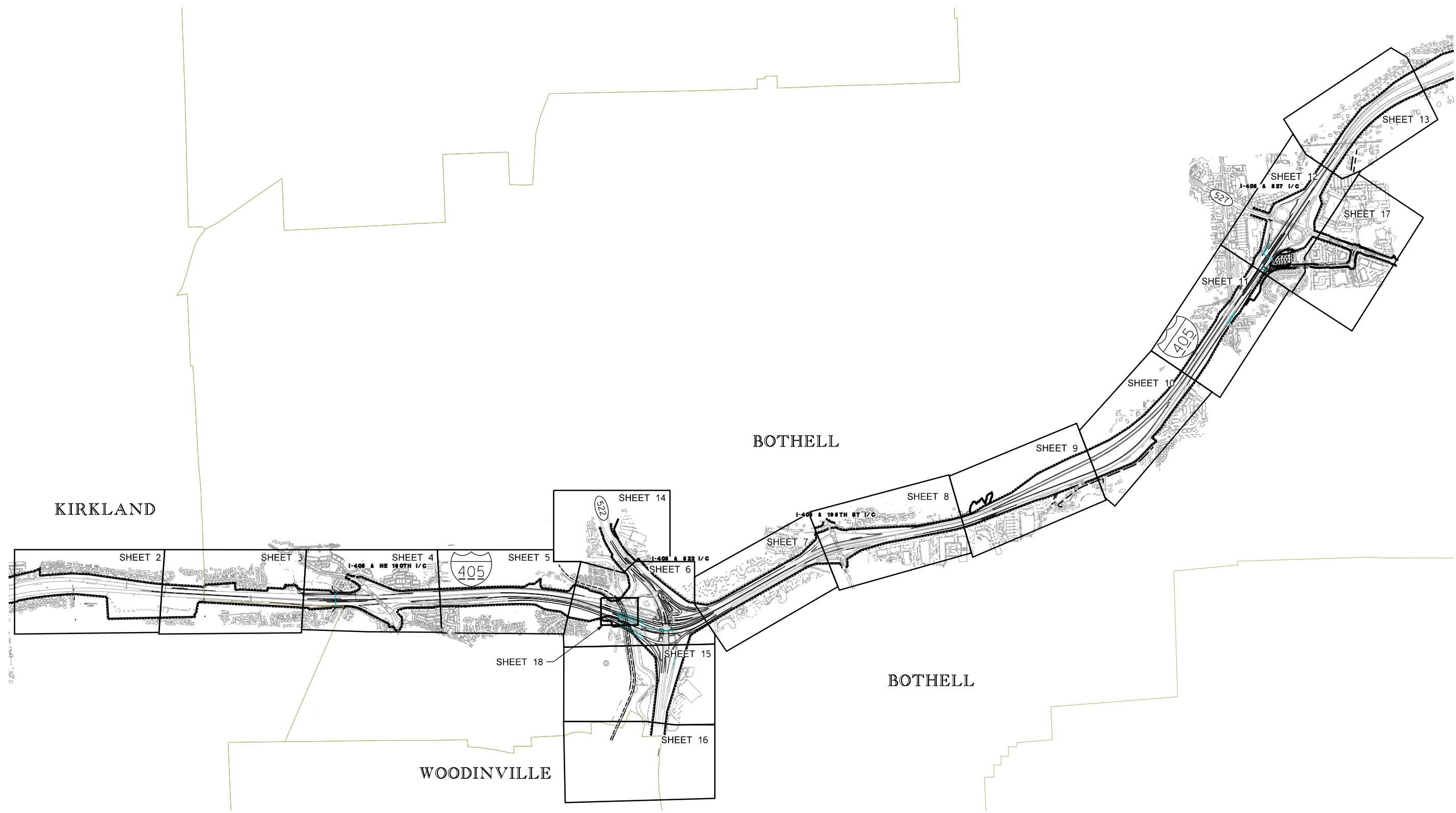
I-405 BRICKYARD TO SR 527 IMPROVEMENT PROJECT




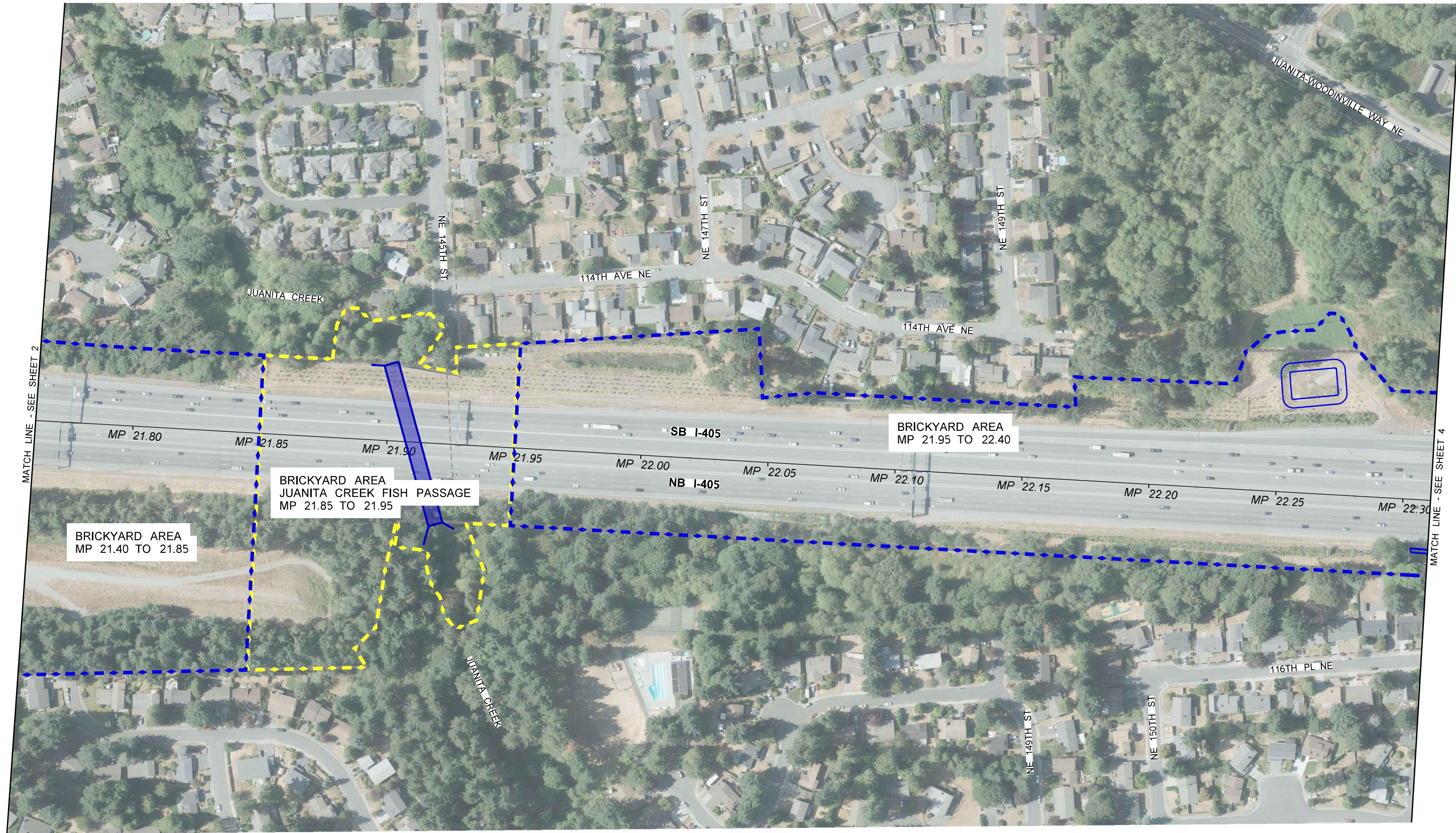
VICINITY MAP
NTS

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TIME 12:18:15 PM	DATE 10/24/2022	JOB NUMBER		LOCATION NO. XL5446	SR 522 VICINITY TO SR 527 EXPRESS TOLL LANES IMPROVEMENT PROJECT			SHEET		
PLOTTED BY taylorsu	DESIGNED BY	ENTERED BY	CHECKED BY	PROJ. ENGR.	GEOTECHNICAL BASELINE OVERVIEW			OF SHEETS		
REGIONAL ADM.	REVISION	DATE	BY	CONTRACT NO.		P.E. STAMP BOX	DATE			SHEETS

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 <p>Washington State Department of Transportation</p>	<p>I-405 SR 522 VICINITY TO SR 527 EXPRESS TOLL LANES IMPROVEMENT PROJECT</p>	<p>SHEET 1 OF 17 SHEETS</p>
	<p>FIGURE 3: PROJECT BASELINE AREAS</p>	

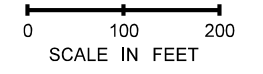


MATCH LINE - SEE SHEET 2

MATCH LINE - SEE SHEET 4

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LEGEND	
	LIMITED ACCESS & EXISTING ROW
	PROPOSED RIGHT OF WAY
	PROPOSED TURNBACK LINE
	NEW RETAINING WALL (FILL)
	NEW RETAINING WALL (CUT)
	FISH PASSAGE AND DRAINAGE STRUCTURES
	NEW BRIDGE
	BASELINE AREA
	NEW NOISE WALL
	DETENTION POND

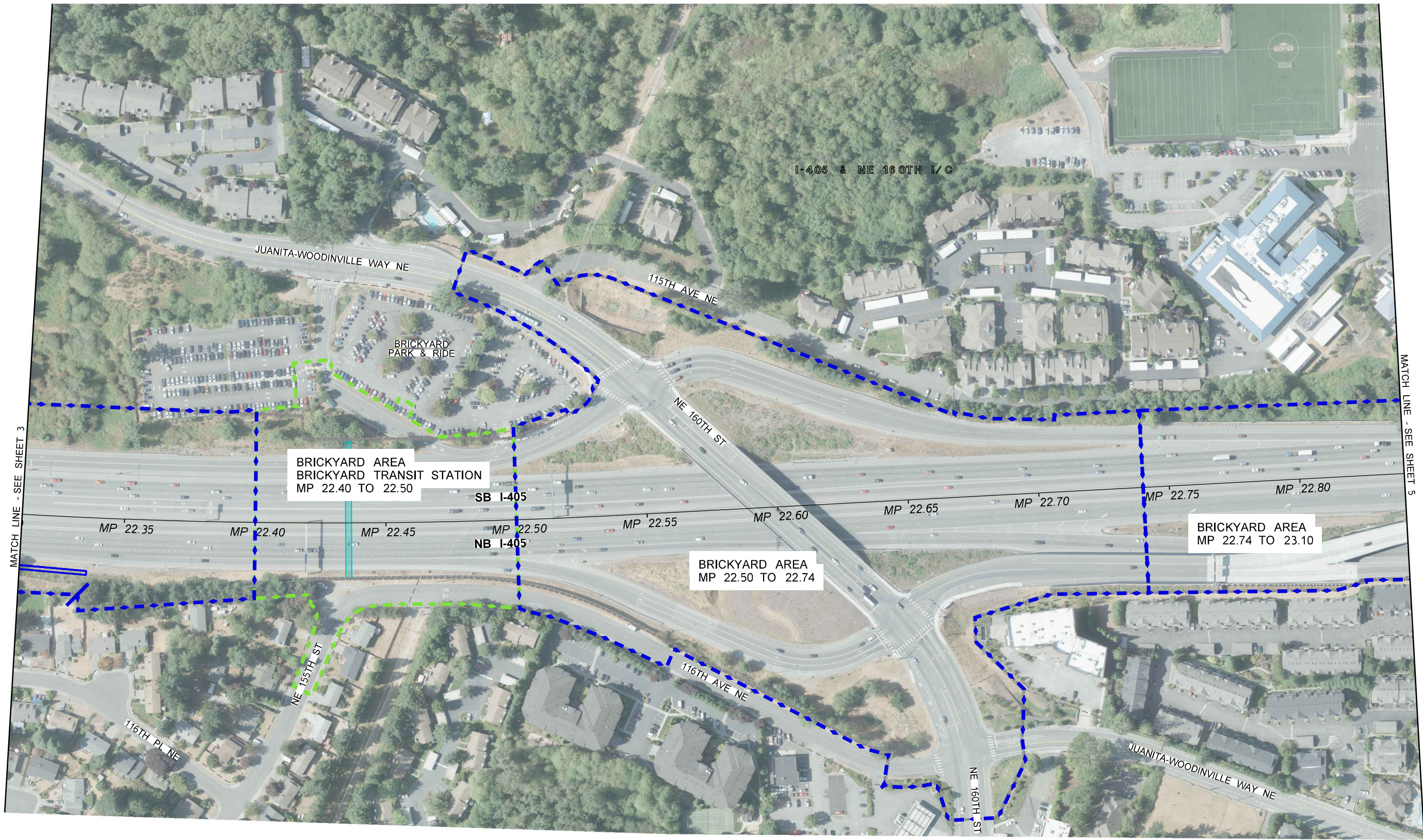


I-405
SR 522 VICINITY TO SR 527 EXPRESS
TOLL LANES IMPROVEMENT PROJECT

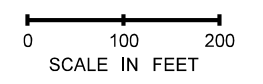
FIGURE 3: PROJECT BASELINE AREAS

SHEET
3
OF
17
SHEETS

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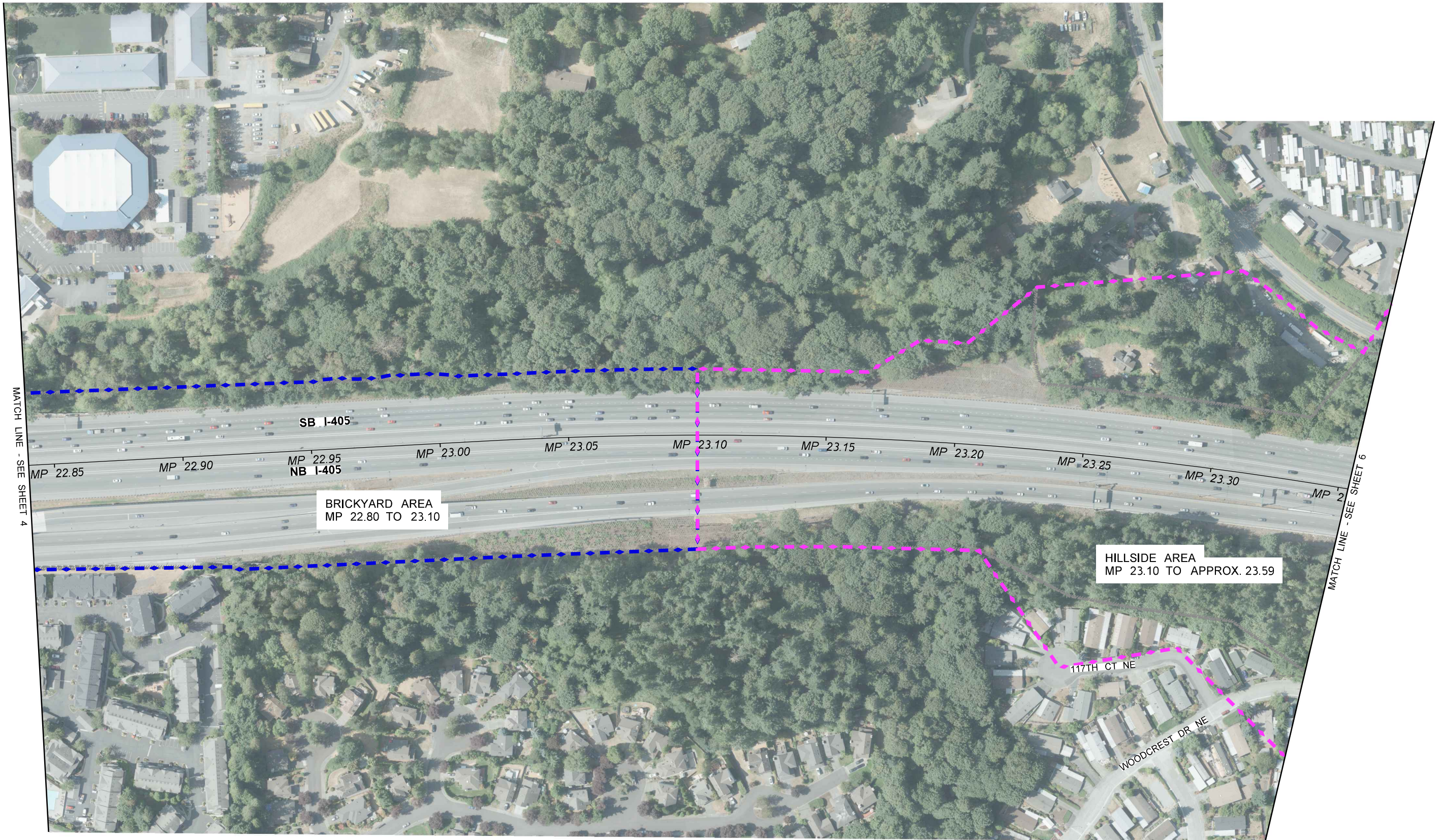
LEGEND	
	LIMITED ACCESS & EXISTING ROW
	PROPOSED RIGHT OF WAY
	PROPOSED TURNBACK LINE
	NEW RETAINING WALL (FILL)
	NEW RETAINING WALL (CUT)
	FISH PASSAGE AND DRAINAGE STRUCTURES
	NEW BRIDGE
	BASELINE AREA
	NEW NOISE WALL
	DETENTION POND



I-405
SR 522 VICINITY TO SR 527 EXPRESS
TOLL LANES IMPROVEMENT PROJECT

FIGURE 3: PROJECT BASELINE AREAS

SHEET
4
OF
17
SHEETS



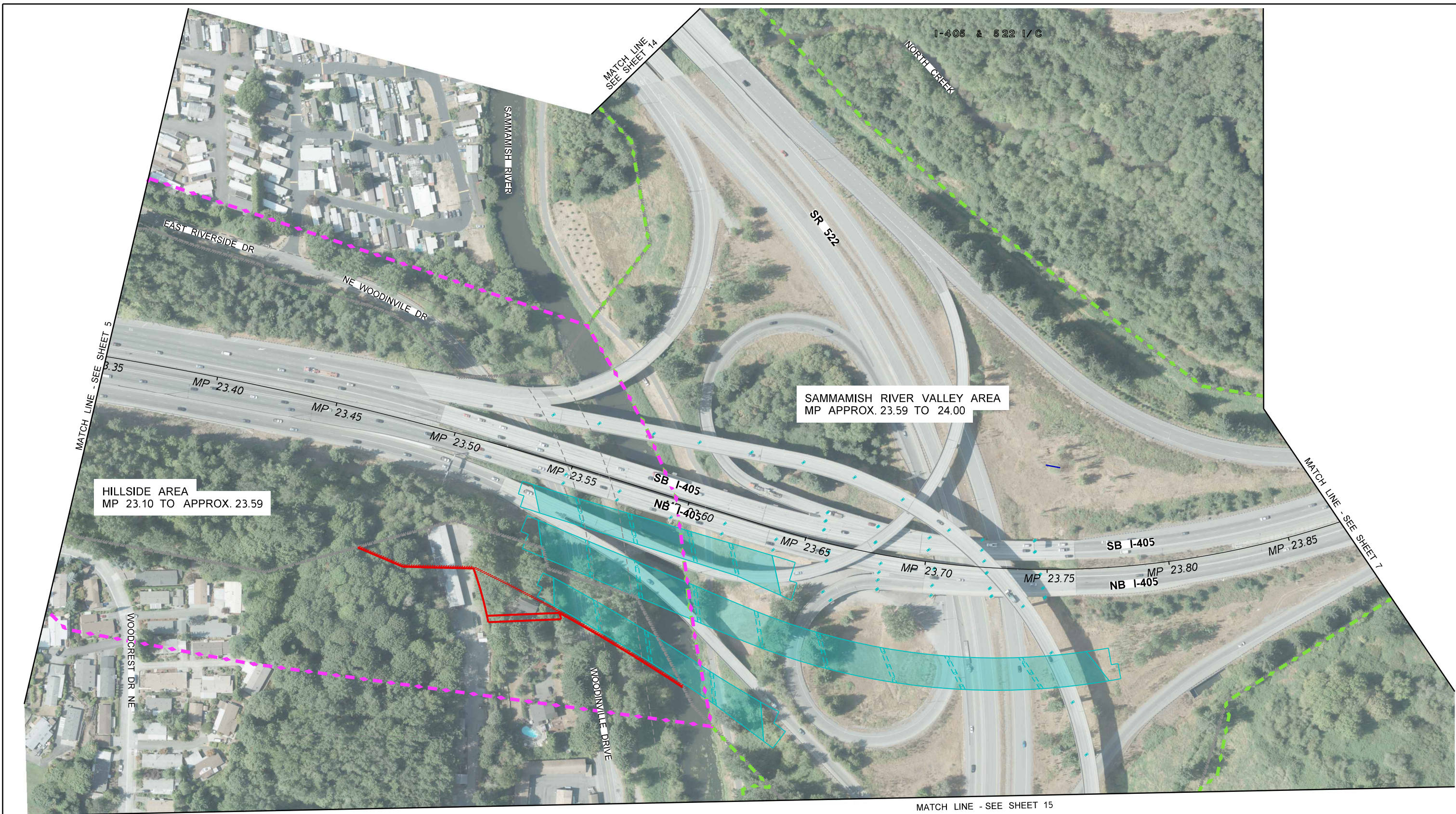
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LEGEND	
	LIMITED ACCESS & EXISTING ROW
	PROPOSED RIGHT OF WAY
	PROPOSED TURNBACK LINE
	NEW RETAINING WALL (FILL)
	NEW RETAINING WALL (CUT)
	FISH PASSAGE AND DRAINAGE STRUCTURES
	NEW BRIDGE
	BASELINE AREA
	NEW NOISE WALL
	DETENTION POND



I-405
 SR 522 VICINITY TO SR 527 EXPRESS
 TOLL LANES IMPROVEMENT PROJECT

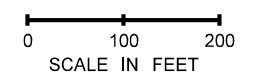
FIGURE 3: PROJECT BASELINE AREAS



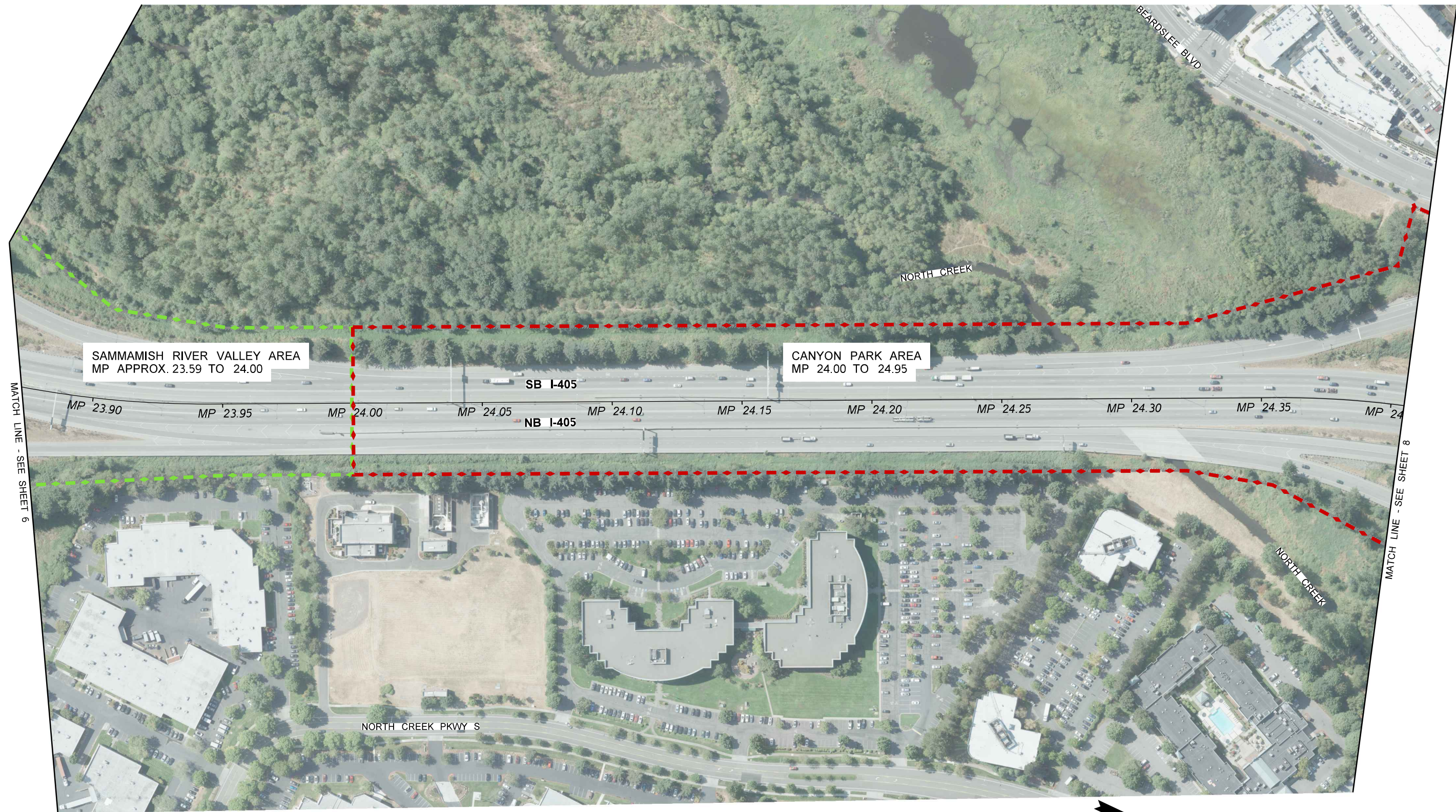
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LEGEND			
	LIMITED ACCESS & EXISTING ROW		FISH PASSAGE AND DRAINAGE STRUCTURES
	PROPOSED RIGHT OF WAY		NEW BRIDGE
	PROPOSED TURNBACK LINE		BASELINE AREA
	NEW RETAINING WALL (FILL)		NEW NOISE WALL
	NEW RETAINING WALL (CUT)		DETENTION POND

MATCH LINE - SEE SHEET 15



I-405 SR 522 VICINITY TO SR 527 EXPRESS TOLL LANES IMPROVEMENT PROJECT	
FIGURE 3: PROJECT BASELINE AREAS	
SHEET 6 OF 17 SHEETS	



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LEGEND			
	LIMITED ACCESS & EXISTING ROW		FISH PASSAGE AND DRAINAGE STRUCTURES
	PROPOSED RIGHT OF WAY		NEW BRIDGE
	PROPOSED TURNBACK LINE		BASELINE AREA
	NEW RETAINING WALL (FILL)		NEW NOISE WALL
	NEW RETAINING WALL (CUT)		DETENTION POND



I-405
 SR 522 VICINITY TO SR 527 EXPRESS
 TOLL LANES IMPROVEMENT PROJECT

FIGURE 3: PROJECT BASELINE AREAS

SHEET
 7
 OF
 17
 SHEETS



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LEGEND			
	LIMITED ACCESS & EXISTING ROW		FISH PASSAGE AND DRAINAGE STRUCTURES
	PROPOSED RIGHT OF WAY		NEW BRIDGE
	PROPOSED TURNBACK LINE		BASELINE AREA
	NEW RETAINING WALL (FILL)		NEW NOISE WALL
	NEW RETAINING WALL (CUT)		DETENTION POND

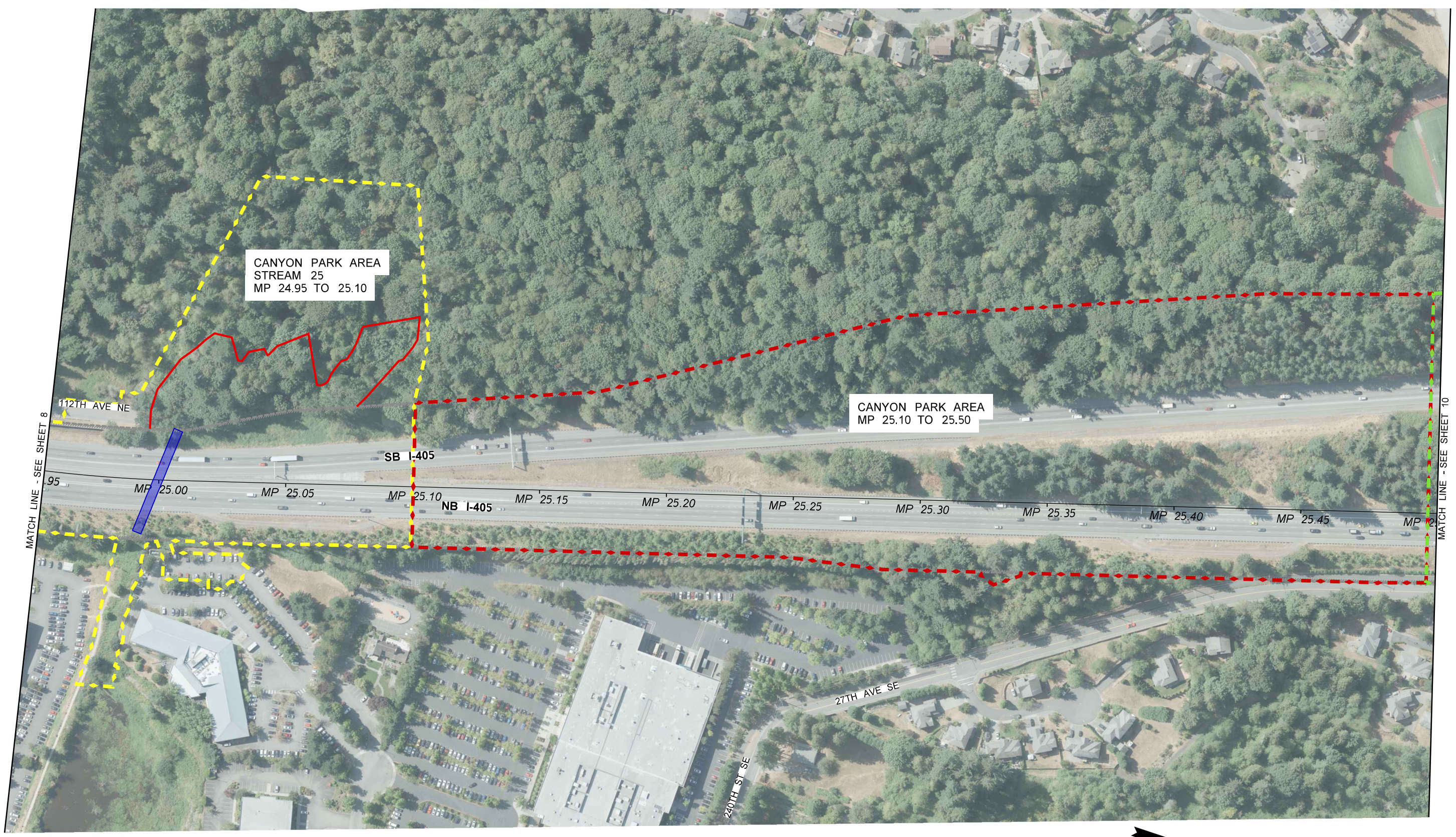


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TOLL LANES IMPROVEMENT PROJECT

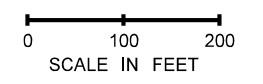
FIGURE 3: PROJECT BASELINE AREAS

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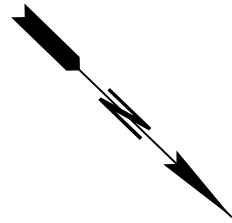
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LEGEND	
	LIMITED ACCESS & EXISTING ROW
	PROPOSED RIGHT OF WAY
	PROPOSED TURNBACK LINE
	NEW RETAINING WALL (FILL)
	NEW RETAINING WALL (CUT)
	FISH PASSAGE AND DRAINAGE STRUCTURES
	NEW BRIDGE
	BASELINE AREA
	NEW NOISE WALL
	DETENTION POND

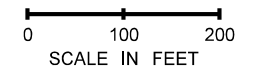


<p>Washington State Department of Transportation</p>	<p>I-405 SR 522 VICINITY TO SR 527 EXPRESS TOLL LANES IMPROVEMENT PROJECT</p>	<p>SHEET 9 OF 17 SHEETS</p>
	<p>FIGURE 3: PROJECT BASELINE AREAS</p>	

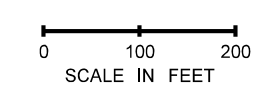
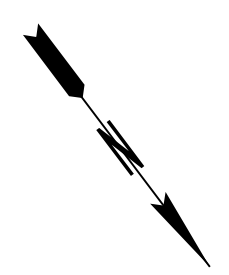
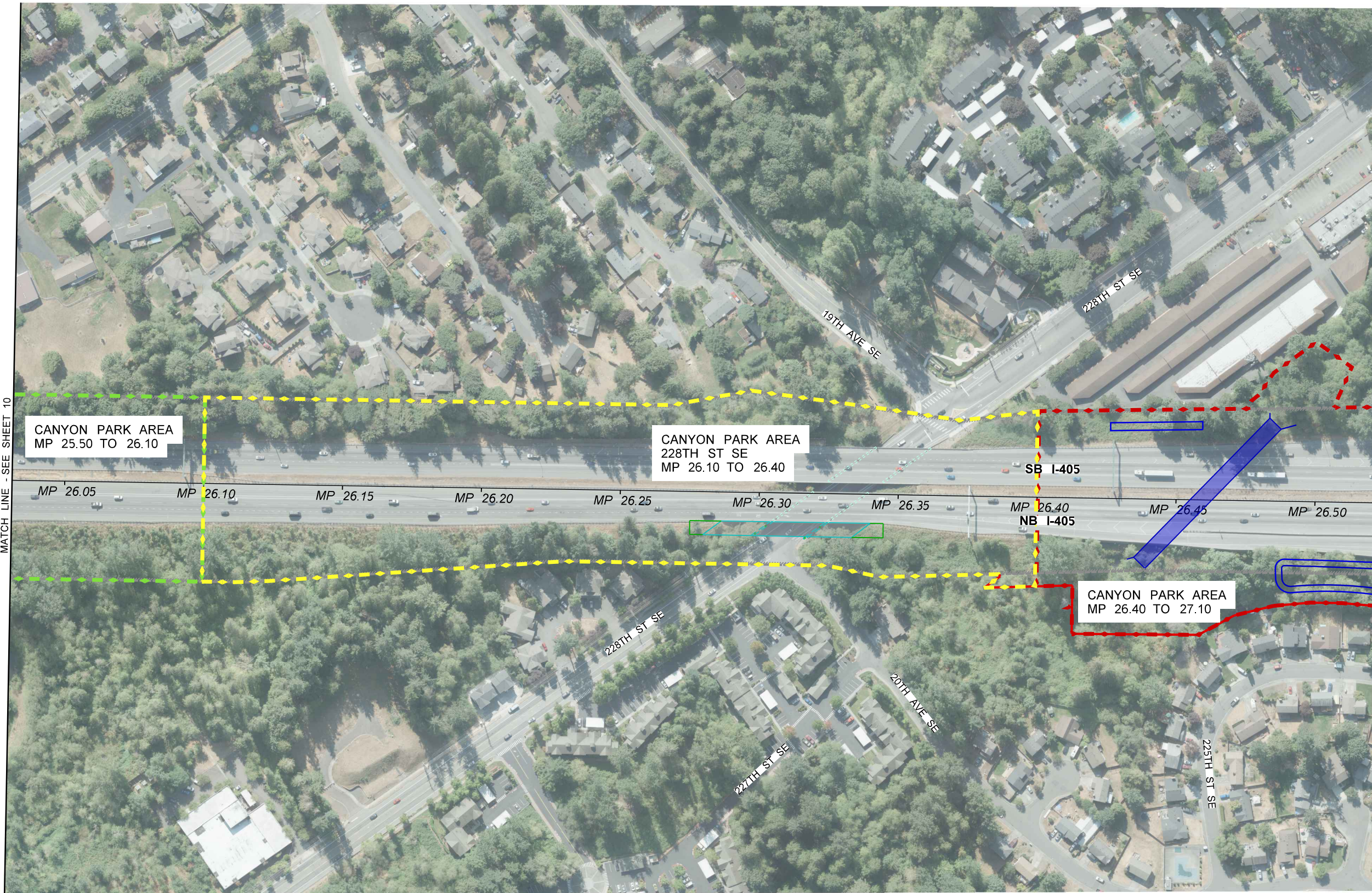


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LEGEND	
	LIMITED ACCESS & EXISTING ROW
	PROPOSED RIGHT OF WAY
	PROPOSED TURNBACK LINE
	NEW RETAINING WALL (FILL)
	NEW RETAINING WALL (CUT)
	FISH PASSAGE AND DRAINAGE STRUCTURES
	NEW BRIDGE
	BASELINE AREA
	NEW NOISE WALL
	DETENTION POND



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FIGURE 3: PROJECT BASELINE AREAS	
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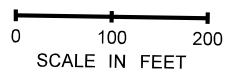
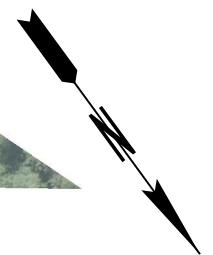
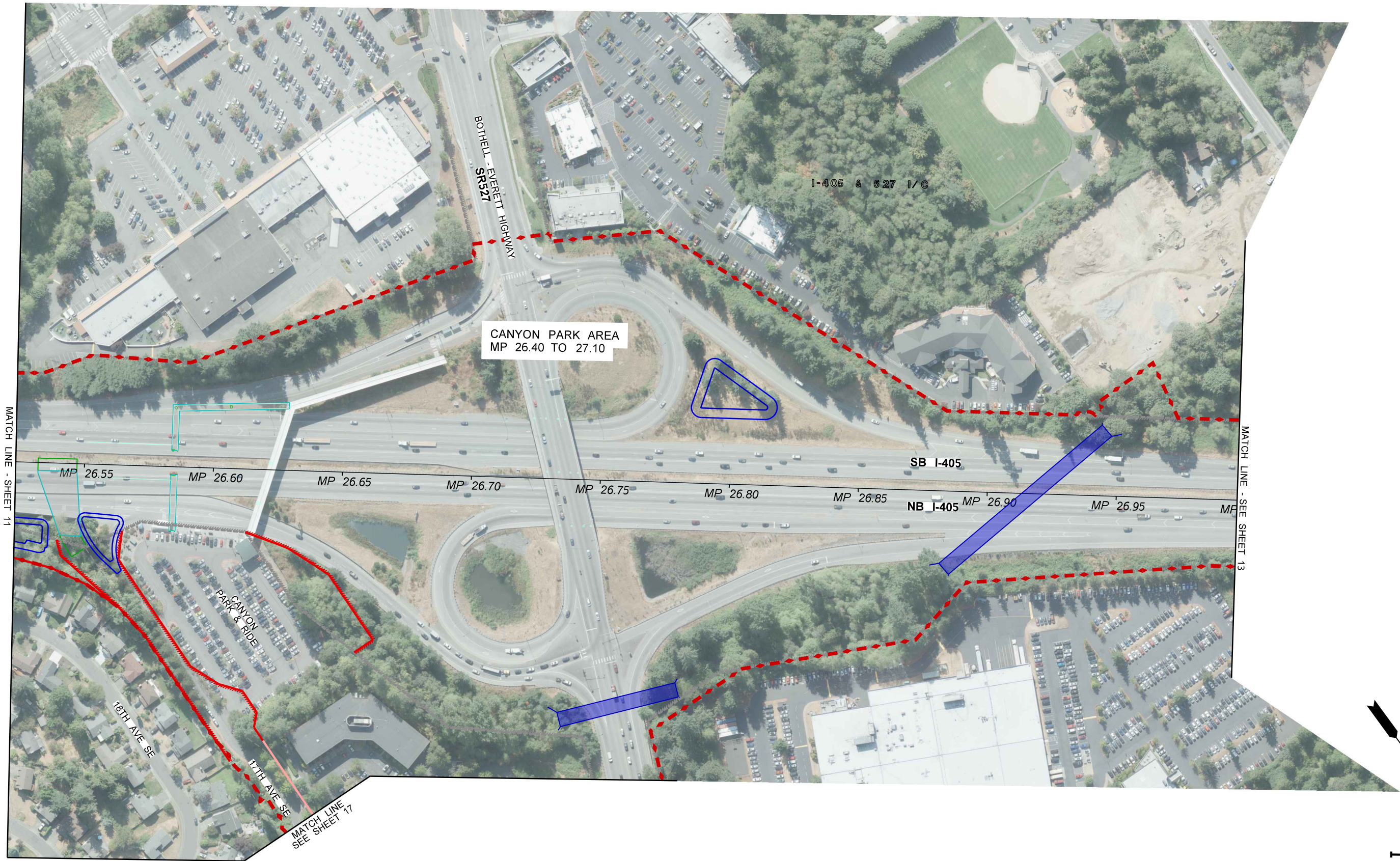
LEGEND	
	LIMITED ACCESS & EXISTING ROW
	PROPOSED RIGHT OF WAY
	PROPOSED TURNBACK LINE
	NEW RETAINING WALL (FILL)
	NEW RETAINING WALL (CUT)
	FISH PASSAGE AND DRAINAGE STRUCTURES
	NEW BRIDGE
	BASELINE AREA
	NEW NOISE WALL
	DETENTION POND



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TOLL LANES IMPROVEMENT PROJECT

FIGURE 3: PROJECT BASELINE AREAS

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LEGEND

	LIMITED ACCESS & EXISTING ROW		FISH PASSAGE AND DRAINAGE STRUCTURES
	PROPOSED RIGHT OF WAY		NEW BRIDGE
	PROPOSED TURNBACK LINE		BASELINE AREA
	NEW RETAINING WALL (FILL)		NEW NOISE WALL
	NEW RETAINING WALL (CUT)		DETENTION POND



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TOLL LANES IMPROVEMENT PROJECT

FIGURE 3: PROJECT BASELINE AREAS

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SHEETS

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LEGEND			
	LIMITED ACCESS & EXISTING ROW		FISH PASSAGE AND DRAINAGE STRUCTURES
	PROPOSED RIGHT OF WAY		NEW BRIDGE
	PROPOSED TURNBACK LINE		BASELINE AREA
	NEW RETAINING WALL (FILL)		NEW NOISE WALL
	NEW RETAINING WALL (CUT)		DETENTION POND



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 TOLL LANES IMPROVEMENT PROJECT











FIGURE 3: PROJECT BASELINE AREAS

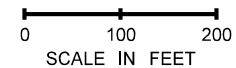
SHEET
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 SHEETS



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LEGEND

- | | | | |
|---|-------------------------------|---|--------------------------------------|
|  | LIMITED ACCESS & EXISTING ROW |  | FISH PASSAGE AND DRAINAGE STRUCTURES |
|  | PROPOSED RIGHT OF WAY |  | NEW BRIDGE |
|  | PROPOSED TURNBACK LINE |  | BASELINE AREA |
|  | NEW RETAINING WALL (FILL) |  | NEW NOISE WALL |
|  | NEW RETAINING WALL (CUT) |  | DETENTION POND |



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 TOLL LANES IMPROVEMENT PROJECT

FIGURE 3: PROJECT BASELINE AREAS

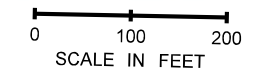
SHEET
 14
 OF
 17
 SHEETS

MATCH LINE - SEE SHEET 6



MATCH LINE - SEE SHEET 16

LEGEND			
	LIMITED ACCESS & EXISTING ROW		FISH PASSAGE AND DRAINAGE STRUCTURES
	PROPOSED RIGHT OF WAY		NEW BRIDGE
	PROPOSED TURNBACK LINE		BASELINE AREA
	NEW RETAINING WALL (FILL)		NEW NOISE WALL
	NEW RETAINING WALL (CUT)		DETENTION POND



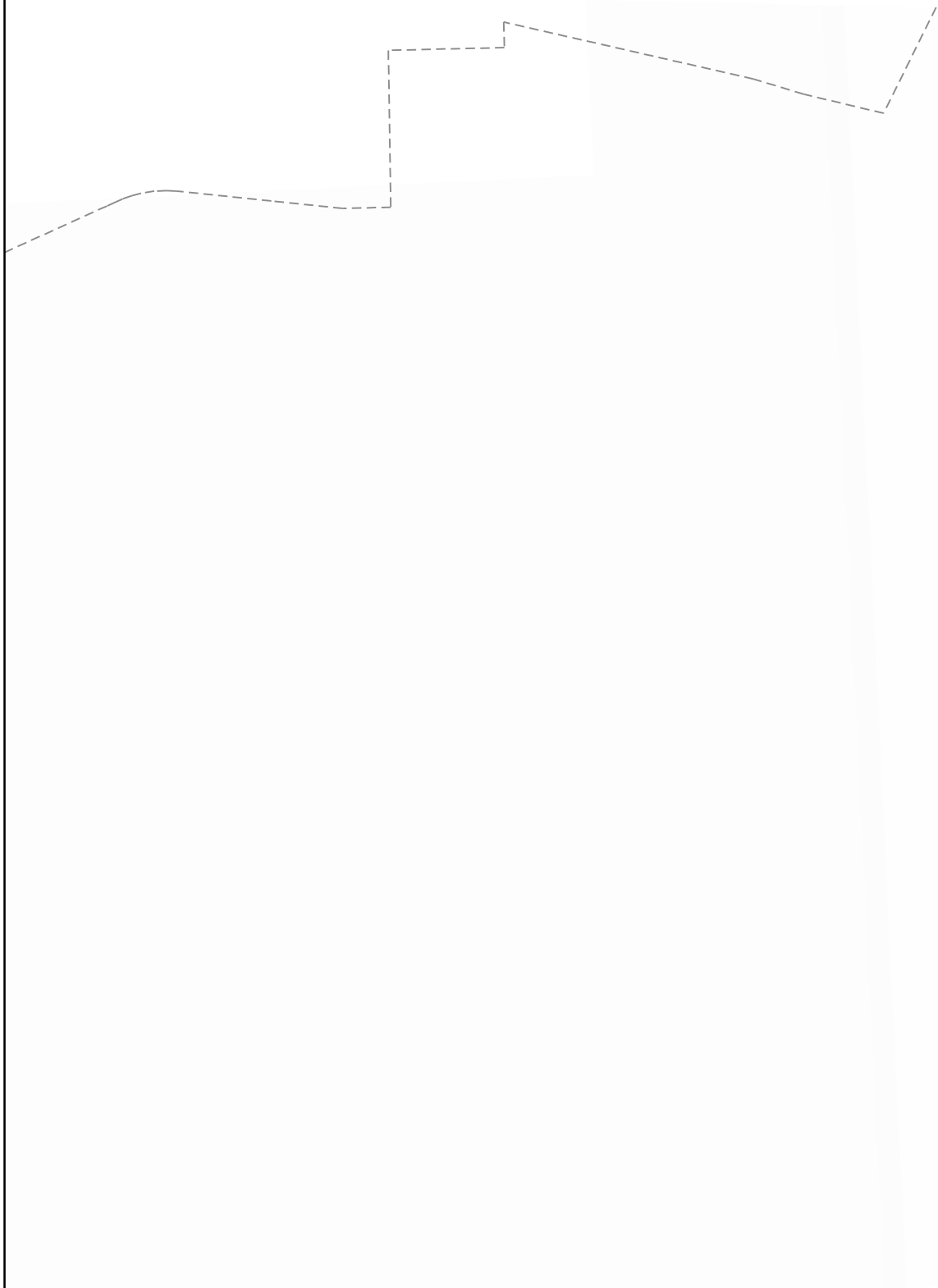
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 SR 522 VICINITY TO SR 527 EXPRESS
 TOLL LANES IMPROVEMENT PROJECT

FIGURE 3: PROJECT BASELINE AREAS











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LEGEND

- | | | | |
|---|-------------------------------|---|--------------------------------------|
|  | LIMITED ACCESS & EXISTING ROW |  | FISH PASSAGE AND DRAINAGE STRUCTURES |
|  | PROPOSED RIGHT OF WAY |  | NEW BRIDGE |
|  | PROPOSED TURNBACK LINE |  | BASELINE AREA |
|  | NEW RETAINING WALL (FILL) |  | NEW NOISE WALL |
|  | NEW RETAINING WALL (CUT) |  | DETENTION POND |



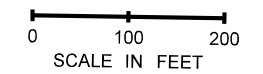
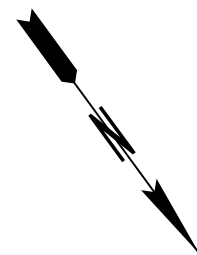
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TOLL LANES IMPROVEMENT PROJECT

FIGURE 3: PROJECT BASELINE AREAS

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LEGEND			
	LIMITED ACCESS & EXISTING ROW		FISH PASSAGE AND DRAINAGE STRUCTURES
	PROPOSED RIGHT OF WAY		NEW BRIDGE
	PROPOSED TURNBACK LINE		BASELINE AREA
	NEW RETAINING WALL (FILL)		NEW NOISE WALL
	NEW RETAINING WALL (CUT)		DETENTION POND



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 TOLL LANES IMPROVEMENT PROJECT

FIGURE 3: PROJECT BASELINE AREAS

SHEET
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 OF
 17
 SHEETS

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