WSDOT

U. S. Department of Transportation
Federal Highway Administration

April 2018

I-405, Downtown Bellevue Vicinity Express Toll Lanes Project (MP 11.9 to 14.6)

Attachment H: Hazardous Materials Technical Memorandum

DESKTOP CORRIDOR-LEVEL HAZARDOUS MATERIALS ANALYSIS
I-405, DOWNTOWN BELLEVUE VICINITY EXPRESS TOLL LANES PROJECT (MP 11.9 TO 14.6), BELLEVUE WA

Prepared for:

Washington State Department of Transportation
I-405 Project Office

Attention: Allison Hanson

Prepared by:
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Washington State Department of Transportation

April 2018

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EXECUTIVE SUMMARY

The Washington State Department of Transportation (WSDOT) Hazardous Materials (HazMat) Program has performed a Desktop Corridor-Level Hazardous Materials Analysis, located within the Hazardous Materials Study Area (Study Area) extending from milepost (MP) 11.9 to 13.7 and MP 14.6 of Interstate 405 (I-405) for the proposed I-405, Downtown Bellevue Vicinity Express Toll Lanes Project (MP 11.9 to 14.6) (referred to in this report as "the Project") and within Township 25N, Range 5E, Sections 20, 28, 29, 32 and 33, and Township 24N, Range 5E, Sections 4 and 9. The HazMat Program conducted the Analysis in general accordance with Chapter 447 of WSDOT's Environmental Manual, and specific sections of the American Society for Testing and Materials Standard Practice for Environmental Site Assessments: Phase I Environmental Assessment Process, Designation: E 1527-13 (ASTM 1527-13). This Analysis is considered a right-sized, low-level report and for National Environmental Policy Act (NEPA)/State Environmental Policy Act (SEPA) environmental documentation, this assessment provides the appropriate level of investigation necessary to identify potential contaminated sites that may pose a significant impact to the Study Area.

The purpose of this analysis was to evaluate the existence of Recognized Environmental Conditions (RECs[1]) resulting from past or present land use within the Project limits, or potential RECs within the Study Area that could potentially affect project design, construction, and the environment. Identifying hazardous material sites prior to construction decreases the possibility of exposing the public and the environment to hazardous substances that may be a threat to human health or the environment. The information from this survey may minimize cleanup costs and/or reduce unanticipated project delays. In addition, this Analysis provides information needed to determine whether any supplementary hazardous material investigations should be conducted to evaluate potential risk and liability to the Project.

The Study Area can primarily be characterized as a state highway with numerous intersecting and arterial roadways surrounded by residential and commercial properties in all four cardinal directions. Historically, the Burlington Northern Railroad was located primarily to the east and occasionally west of present-day I-405.

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[1] The term Recognized Environmental Condition is defined in ASTM E1527-13 as "the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, ground water, or surface water of the property. The term includes hazardous substances or petroleum products even under conditions in compliance with laws. The term is not intended to include *de minimis* conditions that generally do not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. Conditions determined to be *de minimis* are not recognized environmental conditions." Hazardous or dangerous wastes or substances and release reporting requirements are defined by the Washington State Model Toxics Control Act (MTCA), Washington Administrative Code (WAC) 173-340, and the Washington Dangerous Waste Regulations, WAC 173-303.

Based on the results of the Washington State Department of Ecology online investigation and project description, a total of 85 sites from adjacent properties, the Burlington Northern Railroad, and two properties proposed for acquisition were identified as potential RECs. Out of the 85 sites, 78 sites were eliminated from further consideration as presented in Sections 4 and 5; however, the remaining six sites do qualify as RECs because of historical land use, confirmed or suspected past releases that have the potential of being encountered during construction, and/or properties proposed to be acquired that are known or suspected of having contamination. Based on the risk analyses performed for the seven RECs, four sites (Chevrolet of Bellevue, United Communications Systems Inc., Burlington Northern Railroad, and OR Bellevue Properties) were assigned a Low impact ranking and three sites (Eastside Chrysler Jeep, Rabanco LTD, and Meydenbauer Center) were assigned a Low-Moderate ranking that could impact the Project corridor.

Environmental impacts during construction may include potential impacts to sensitive receptors such as wetlands, groundwater, public drinking water systems, and surface waters, all requiring special protection against spills, and releases and alteration of contaminant migration. Soil and groundwater contamination have been documented on adjacent sites at specific locations throughout the Study Area. With the exception of drilled shafts, the majority of excavations associated with the Project construction are expected to be no greater than 15 feet below ground surface (bgs).

Direct construction effects may include potential effects to construction due to site-specific hazardous materials such as contaminated soil and/or groundwater, asbestos-containing material (ACM), lead-based paint, and liabilities associated with property acquisition. Potential contaminants that may be found in the soil and groundwater at depth and surface soils for the Project may include petroleum hydrocarbons, heavy metals, carcinogenic polycyclic aromatic hydrocarbons (cPAHs), and associated solvents. The potential effects of the identified RECs on the construction activities are unknown but would likely be minor, based on the amount of planned excavation.

Mitigation measures can be implemented during different stages of project development and construction to help avoid or reduce effects to the Project associated with environmental concerns, construction issues, and/or potential property acquisition. For sites that are Low to Moderate risk and straightforward to manage, the Project may use WSDOTs standard impact and mitigation measures as referenced in the Guidance & Standard Methodology for WSDOT Hazardous Material Discipline Reports.

The following conclusions are based on the summary findings of the investigation, opinions provided above, and the Project description. The HazMat Program concludes that no adverse cumulative effects on hazardous materials are anticipated for the Project, and the Program expects no significant, unavoidable adverse effects to result from the Project because the potential of encountering contaminated soil and/or groundwater could be avoided by design decisions, or mitigated through proper remediation during construction.

No further investigation is warranted at this time for the Study Area, except possibly between MP 12.5 and MP 12.6 where the stormwater treatment pond is anticipated to be constructed. This

proposed stormwater treatment facility lies between a known contaminated site with arsenic and petroleum, as well as the present location of the I-405 highway which may have contributed contamination such as heavy metals, petroleum and cPAHs from the combustion of motor vehicles. The costs to conduct additional investigations in order to better define the level and extent of contamination within the remaining portions of the Study Area where construction is proposed would likely be far greater than those associated with change orders or potential delays associated with encountering contamination during project construction. The primary contaminants of concern in these locations anticipated to be encountered are petroleum hydrocarbons and their associated metals, and solvents. These constituents are easily identifiable using general field screening techniques, which consist of visual observations and olfactory detection for the presence of contamination, water sheen testing, and organic vapor monitoring using a PID.

The following recommendations are provided as a result of the findings and conclusions of this assessment.

- The HazMat Program recommends that the construction contract include specifications advising contractors of the appropriate handling and disposal of identified or suspected contamination that may be encountered during excavations or soil disturbances near or on the Study Area. WSDOT routinely uses General Special Provisions or Special Provisions to account for uncertainties of hazardous materials, such as the removal and disposal of unanticipated hazardous materials. (An example of a provision would be to stockpile suspected contaminated soils for laboratory analysis prior to reuse or disposal.) The HazMat Program can assist in creating these contract provisions, if necessary.
    - Specifically for the proposed stormwater treatment facility between MP 12.5 and 12.6, it is recommended that the contract specifications include language directing the Contractor to stockpile and characterize all disturbed soils and/or groundwater prior to any reuse or disposal. Another option would be to conduct preliminary soil and groundwater field screening and/or sampling prior to construction to evaluate proper disposal methods if necessary, and provide sufficient information for contract bidding purposes.

- If acquisitions of entire properties are anticipated, the HazMat Program recommends that a Phase I or Phase II ESA be conducted prior to any purchase agreement. If any buildings will be acquired as part of the purchase agreement, we recommend that prior to demolition or renovation, an Asbestos Hazard Emergency Response Act (AHERA) Building Inspector conducts a Good Faith Asbestos Survey with the intent of complying with and providing an AHERA-level assessment in accordance with U.S. Environmental Protection Agency, 40 CFR 763, and Washington State Department of Labor and Industries standards, WAC 296-62-07721(2)(b)(ii).

- The HazMat Program recommends that an environmental reevaluation be conducted if subsequent project changes are made, such as project realignment or changes to the proposed

property acquisitions, which could potentially alter the conclusions made in this preliminary investigation.

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Exhibits

Tables

List of Appendices

Acronyms and Abbreviations

ACM	asbestos-containing material
AHERA	Asbestos Hazard Emergency Response Act
ASTM E 1527-13	American Society for Testing and Materials Standard Practice for Environmental Site Assessments: Phase I Environmental Assessment Process, Designation: E 1527-13
bgs	below ground surface
CERCLIS	Comprehensive Environmental Response, Compensation, Liability Information System
cPAHs	carcinogenic polycyclic aromatic hydrocarbons
CSCSL	Confirmed and Suspected Contaminated Sites List
CUL	Cleanup Level
Ecology	Washington State Department of Ecology
ESA	Environmental Site Assessment
ESO	Environmental Services Office
ETL	express toll lanes
FHWA	Federal Highway Administration
FS ID	Facility Site Identification
HazMat Program	Hazardous Materials and Solid Waste Program
HQ	Headquarters
HOV	high-occupancy vehicle
L&I	Labor and Industries
LUST	leaking underground storage tank
MP	milepost
MTCA	Model Toxics Control Act
MW	monitoring well
NEPA	National Environmental Policy Act
NFA	No Further Action
NPL	National Priorities List
PID	photoionization detector
RCRA	Resource Conservation and Recovery Act
REC	Recognized environmental condition
ROD	Record of Decision
SEPA	State Environmental Policy Act
TSD	Transporters, Storage and Disposal
USEPA	United States Environmental Protection Agency
USGS	United States Geological Survey
UST	Underground storage tank
VCP	Voluntary Cleanup Program
WAC	Washington Administrative Code
WSDOT	Washington State Department of Transportation

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1.0 INTRODUCTION

1.1 Purpose of this Report

This letter report presents the results of a Desktop Corridor-Level Hazardous Materials Analysis (Analysis) prepared by the Washington State Department of Transportation (WSDOT) Headquarters (HQ) Environmental Services Office (ESO) at the request of Allison Hanson of the Interstate 405 (I-405) Project Office, and associated with the I-405, Downtown Bellevue Vicinity Express Toll Lanes Project (MP 11.9 to 14.6) (referred to in this report as "the Project"). The Project limits for this review extend from milepost (MP) 11.9 to 13.7 and MP 14.6 on I-405 and is located within Township 25N, Range 5E, Sections 20, 28, 29, 32 and 33; and Township 24N, Range 5E, Sections 4 and 9. The Project limits and associated footprint is herein referred to as the Study Area. Refer to Exhibit 1, sheets 1, 2 and 3 for a Site Vicinity Map of the Study Area.

1.2 What improvements are proposed with the Project?

The Project extends along I-405 approximately 2.7 miles from just north of the I-90 interchange (MP 11.9) to north of the NE 6th Street interchange (MP 14.6). The Project proposes the following improvements, as shown in Exhibit 1-1, sheets 1 and 2:

- **Northbound I-405 (MP 11.9 to MP 13.7) –** Develop approximately 1.6 miles of new lane in the northbound direction by widening or restriping I-405 from MP 11.9 to MP 13.5. In this same section of I-405, convert the existing HOV lane to an ETL. The new lane coupled with the existing HOV lane will create a dual ETL. Between MP 13.5 and MP 13.7, convert the existing HOV lane to an ETL. The ETL will connect to the existing ETLs from downtown Bellevue to Lynnwood. Westward expansion of I-405 is proposed south of SE 8th Street, and eastward expansion is proposed north of SE 8th Street.
- **Southbound I-405 (MP 11.9 to MP 13.7) –** From MP 11.9 to MP 12.5, reconfigure the existing outside HOV lane to the inner roadway and convert both of the existing HOV lanes to ETLs. From MP 12.5 to MP 13.5, develop a new lane by widening or restriping. This new lane coupled with the existing HOV lane will result in a dual ETL south of NE 4th Street. Between MP 13.5 and MP 13.7, convert the existing HOV lane to an ETL. The ETL will connect to the existing ETLs from downtown Bellevue to Lynnwood. Where new pavement is needed, eastward expansion is proposed.
- **Eastside Rail Corridor Overpass (MP 12.4) –** Build a new northbound I-405 bridge structure adjacent to the existing I-405 structure over the Eastside Rail Corridor Regional Trail. The new structure will carry the two ETLs and the GP lanes will remain on the existing structure.
- **Eastside Rail Corridor Regional Trail (MP 12.09 to MP 12.49) –** Construct a new bridge for non-motorized travel over southbound I-405 near MP 12.15. Build a section of non-motorized trail to connect with the Eastside Rail Corridor Regional Trail.
- **SE 8th Street Interchange (MP 12.78) –** Widen the northbound I-405 overpass over SE 8th Street.
- **Main Street Overpass (MP 13.31) –** Reconstruct the Main Street bridge over I-405.
- **Northbound I-405 to SR 520 Ramp (MP 14.6) –** Widen the existing northbound off-ramp to SR 520 from two lanes to three lanes for approximately 600 feet beginning where the NE 10th Street on-ramp merges onto the I-405 ramp.

- **Stormwater –** Build new flow control and runoff treatment facilities.
- **Other Improvements –** Provide pavement markings, drainage improvements, permanent signing, illumination, intelligent transportation systems, barriers, and tolling gantries.
- **Context Sensitive Solutions –** Incorporate CSS to enhance mobility, safety, the natural and built environment, and aesthetics throughout the Project corridor.
- **Property Acquisitions –** Acquire portions of five commercial and public properties to accommodate the Project.
- **Minimization Measures –** Implement avoidance and minimization measures or compensate for unavoidable effects to the environment, as described in Chapter 6.

1.3 How will the Express Toll Lanes Work?

At this time, the Washington State Transportation Commission (WSTC) has not established operational hours, user exemptions, occupancy requirements, and operating parameters for ETLs proposed with the Project. The WSTC will set operational requirements for the Project prior to opening day. For this analysis, we assumed the same operational requirements for the current I-405 to Lynnwood ETL system would be used for the Project. These assumptions, listed below, represent the most recent operating guidance from the WSTC for ETLs:

- **Limited Access –** The system will have designated entry and exit points, with a buffer between the ETLs and the GP lanes. These access points will vary in length, depending on the location.
- **Dynamic Pricing –** Toll rates will vary based on congestion within the corridor to maintain performance. Electronic signs will be used to communicate the current toll rate for drivers. The driver's price is set when they enter the system. Drivers will pay the rate they see upon entering the ETLs to reach their destination, even if they see a different toll rate for their destination farther down the road.
- **Destination Pricing –** Toll rates will vary based on destination to optimize capacity within the system.
- **Operating Hours –** The ETL system is expected to operate from 5 a.m. to 7 p.m. on weekdays, with the system toll-free and open to all at other hours and on major holidays.
- **Occupancy Requirements –** During the peak periods (5 a.m. to 9 a.m. and 3 p.m. to 7 p.m.), transit vehicles and carpools with three or more persons (HOV 3+) would be able to use the lanes for free. From 9 a.m. to 3 p.m., the system would be open toll-free to those with two or more passengers (HOV 2+). Motorcycles ride toll-free in the ETLs with a motorcycle pass, which is a sticker that adheres to your motorcycle headlamp and can be obtained for free.
- **Vehicle Weight –** Vehicles over 10,000 pounds gross vehicle weight will be prohibited, which is consistent with HOV lane restrictions throughout Washington.
- **Electronic Tolling –** Payments will be made via electronic tolling, with optional photo billing. Eligible HOV users will be required to set the proper transponder in HOV mode to avoid photo billing charges.

Exhibit 1 | Proposed Improvements | Sheet 1 of 2

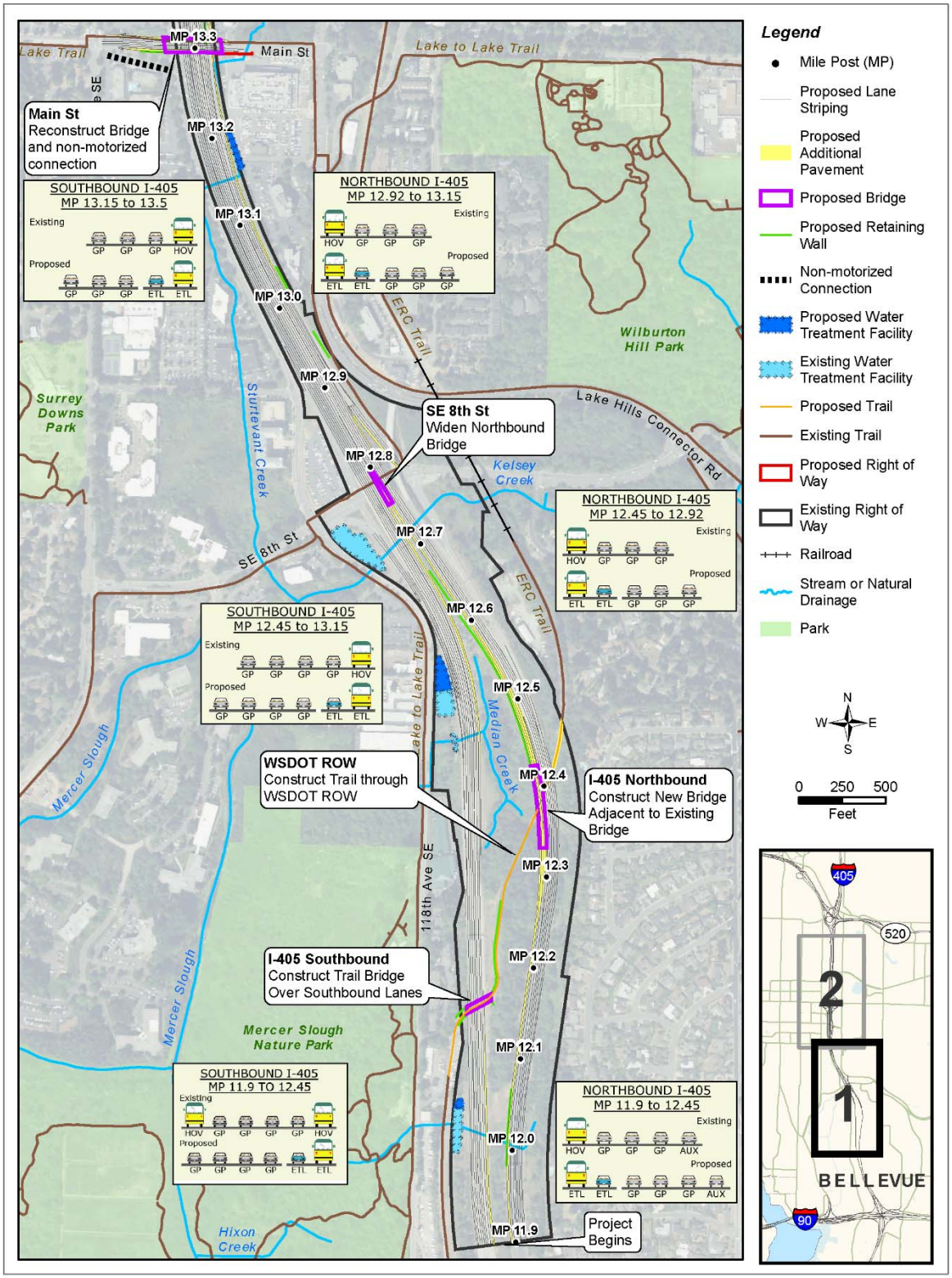
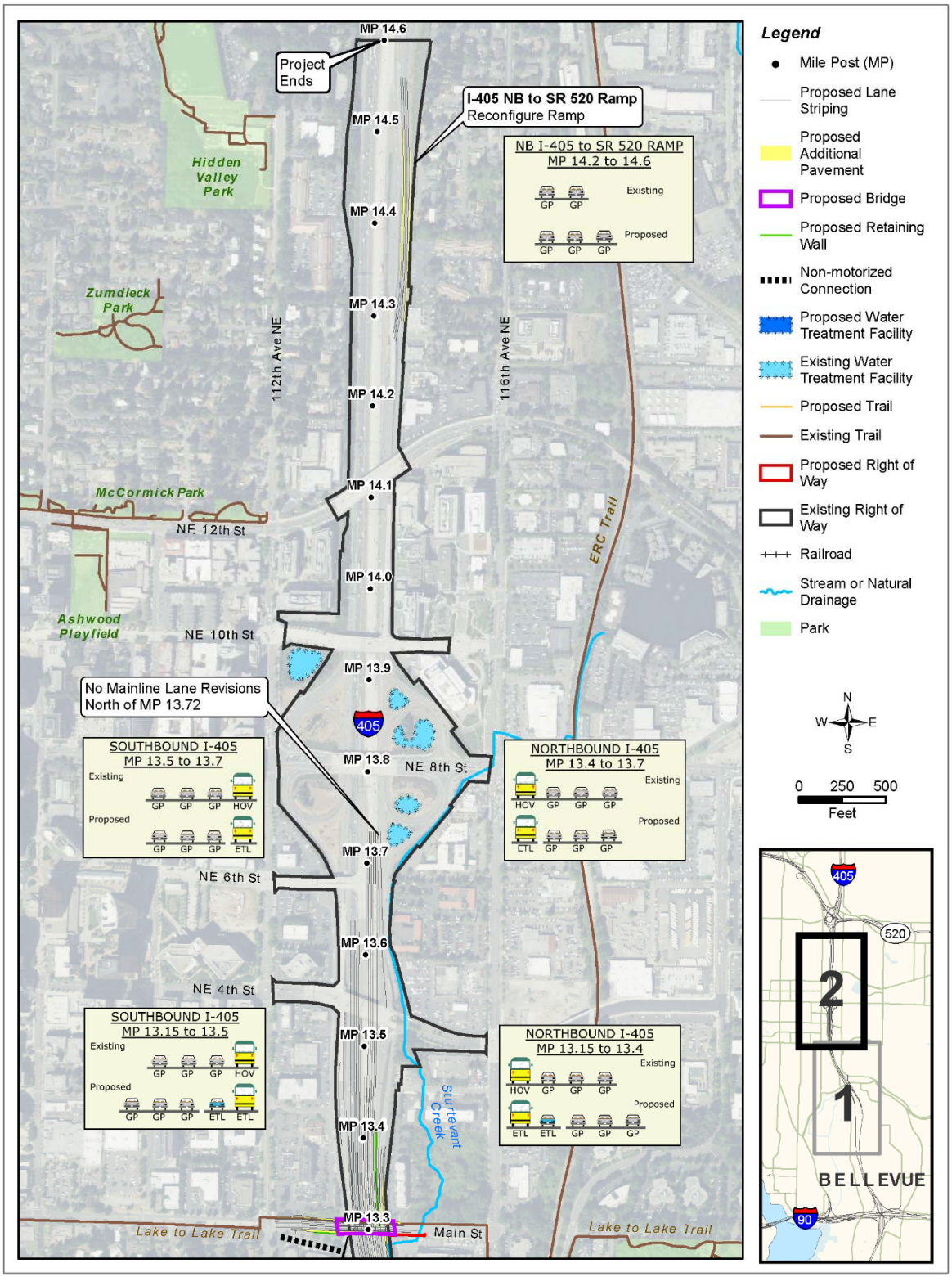


Exhibit 1 | Proposed Improvements | Sheet 2 of 2



1.4 How would tolling revenue be used?

Federal law and state law provide specific requirements on how toll revenues can be used. Federal law regarding the use of toll revenues is contained in 23 United States Code (USC) Section 129 (a)(3). This law states that all toll revenues received from operation of the toll facility are used for such things as debt service, a reasonable return on investment for any private financers of the Project, operations and maintenance costs, and payments associated with any public-private partnership agreements.

In addition to these federal requirements, the Revised Code of Washington (RCW) 47.56.820 requires that all revenue from an eligible toll facility must be used only to construct, improve, preserve, maintain, manage, or operate the eligible toll facility on or in which the revenue is collected. Similar to the federal law, expenditures of toll revenues must be approved by the Legislature and must be used only to cover operations and maintenance costs; to repay debt, interest and other financing costs; and to make improvements to the eligible toll facilities. As required by state law, all toll revenue generated from the Project will be used to construct, improve, preserve, maintain, manage, or operate the toll facility.

1.5 Construction schedule

Construction of the Project is expected to last up to 5 years beginning in 2019 and ending in 2024.

1.6 Purpose of Analysis

The purpose of this Analysis is to evaluate the existence of Recognized Environmental Conditions (RECs[1]) resulting from past or present land use of the Study Area, or potential RECs within the Study Area that could potentially affect project design, construction, and the environment. Identifying hazardous material sites prior to construction decreases the possibility of exposing the public and the environment to hazardous substances that may be a threat to human health or the environment. The information from this survey may minimize cleanup costs and/or reduce unanticipated project delays. In addition, this Analysis provides information needed to determine whether any supplementary hazardous material investigations should be conducted to evaluate potential risk and liability to the Project.

The WSDOT Hazardous Materials (HazMat) Program conducted the Analysis in general accordance with Chapter 447 of WSDOT's *Environmental Manual* and specific sections of the American Society for Testing and Materials Standard Practice for Environmental Site

[1] The term Recognized Environmental Condition is defined in ASTM E1527-13 as "the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, ground water, or surface water of the property. The term includes hazardous substances or petroleum products even under conditions in compliance with laws. The term is not intended to include *de minimis* conditions that generally do not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. Conditions determined to be *de minimis* are not recognized environmental conditions." Hazardous or dangerous wastes or substances and release reporting requirements are defined by the Washington State Model Toxics Control Act (MTCA), Washington Administrative Code (WAC) 173-340, and the Washington Dangerous Waste Regulations, WAC 173-303.

Assessments: Phase I Environmental Assessment Process, Designation: E 1527-13 (ASTM 1527-13). This Analysis is considered a right-sized, low-level report and for National Environmental Policy Act (NEPA) / State Environmental Policy Act (SEPA) environmental documentation, this report provides the appropriate level of documentation and analysis necessary to identify potential contaminated sites that might pose a significant effect on the Study Area.

The following is the general agreed upon scope of work for this Analysis, which consisted of the following work tasks:

- Reviewing the results of a federal, state, and tribal environmental database search accessed by the Washington State Department of Ecology's (Ecology) online databases for listings of sites with known or suspected environmental conditions on or near the Study Area within the recommended search distances specified by ASTM E 1527-13.
- Reviewing if accessible, online regulatory agency files regarding listed sites of potential environmental concern relative to the Study Area.
- Reviewing, if accessible, historical aerial photographs, fire insurance maps, Sanborn maps, still photographs, and county assessor site and tax assessor records, to identify past development history on and adjacent to the Study Area relative to the possible use, generation, storage, release, or disposal of hazardous substances.
- Providing a brief preliminary summary of the results of the environmental Analysis and identified RECs, including an opinion regarding the potential for encountering hazardous materials at the Study Area during construction, and a recommendation regarding further investigations.

1.7 Significant Assumptions

The conclusions of this analysis are based on research of readily available current and historical information sources. The HazMat Program cannot and does not warrant or guarantee that the information provided by these sources is accurate or complete. Whenever possible, the Program researched more than one information source to substantiate the findings and conclusions of this assessment.

1.8 Limitations and Exceptions

This Analysis was prepared for the exclusive use of the WSDOT I-405 Project Office. This Analysis is intended to provide the authorized user with an understanding of the potential environmental liabilities associated with the properties as evaluated in this report. The opinions and conclusions set forth in this report are strictly limited to the scope of our services at the time they were conducted. Determining whether environmental conditions defined in this report indicate the presence of contamination at levels of concern is a matter of judgment. Liabilities associated with contaminated sites are defined in part by CERCLA, and for properties located in Washington State, by the Models Toxics Control Act (MTCA).

1.9 Users Reliance

No other party other than the WSDOT I-405 Project Office is entitled to rely on the information, conclusions, and recommendations included in this report without the express written consent of the HazMat Program. The reuse of the information, conclusions, and recommendations provided

in this Analysis outside its intended purpose, and without review and authorization by the HazMat Program, shall be at the user's sole risk. No warranty or other conditions expressed or implied should be understood.

Any electronic form, facsimile, or hard copy of the original document, whether email, text, and/or exhibit, if provided, and any attachments are only a copy of the original document. The original document is stored by the HazMat Program and will serve as the official document of record.

2.0 SITE DESCRIPTION

2.1 LOCATION, LEGAL DESCRIPTION, AND SETTING

General site information, including property use and environmental setting of the Project corridor, is summarized in Table 1.

Table 1. Project Corridor General Site Information

Topographic Map	**U.S. Geological Survey, 7.5 x 15 minute Bellevue South Quadrangle, Washington topographic quadrangle map, dated 1983.** ***(www.geonames.usgs.gov)***
Township, Range and Section	Township 25N, Range 5E, Sections 20, 29, 32 and 33; and Township 24N, Range 5E, Sections 4 and 9
General Site Location	MP 11.9 to 14.6
Site Existing Use	State highway/right-of-way / residential and commercial lands
Geologic Setting	Bellevue South Quadrangle. See Section 2.2 for more detailed information of the geologic and hydrologic settings for the Study Area.
Nearest Major Water Bodies	The Project corridor is between Lake Washington to the west and Lake Sammamish to the east.
Approximate Surface Elevation	Surface elevation ranges from approximately 85 to 170 feet (ft.) above mean sea level, depending on location.
Soil and Geologic Conditions	Subsurface conditions are described in Section 2.2.
Depth to Groundwater	Depth to groundwater in the vicinity generally ranges from approximately 6 to 40 ft. below ground surface (bgs) in the shallow perched water table and 70 to 120 ft. bgs in the deeper aquifer.
Inferred Direction of Shallow Ground Water Flow	Based on topography and site location, groundwater is inferred to flow either in a south to southwest direction towards Lake Washington / Meydenbauer Bay and Mercer Slough or easterly towards Lake Sammamish.

The HazMat Program's knowledge of the general physiographic setting, geology, and groundwater occurrence in the Study Area is based on their review of maps, reports, and our general experience in the area. The reference to "upgradient," "downgradient," and "cross-gradient," with respect to the direction of groundwater flow, is inferred based on the information in Section 2.2 and assumptions of the relative proximity of significant water bodies in the vicinity.

2.2 GEOLOGIC AND HYDROLOGIC SETTING

This section describes the general geologic setting and subsurface conditions in the Study Area. The HazMat Program used this information to determine the potential for contamination to migrate through the soils and groundwater and impact the Study Area.

The current topography of the Study Area consists primarily of Alderwood sandy loams with gravelly glaciofluvial deposits, along with minor amounts of Everett gravelly sandy loams and Indianola loamy sands as the result of glacial and fluvial processes[2]. Engineered highway fill underlies much of the existing roadway in the Study Area. Engineered fill is compacted soil

[2] NRCS, 2016

placed according to designed specifications during the construction of roads, structures, or buildings[3].

Based on topography and site location, groundwater is inferred to flow either in a south to southwest direction towards major waterbodies such as Lake Washington / Meydenbauer Bay and Mercer Slough or in an easterly direction towards Lake Sammamish. In addition, there are a couple minor water receptors such as Sturtevant Creek, which flows east to west, and Kelsey and Richards Creek, which flows east to west to the Mercer Slough. Based on our review of Ecology's Well Log database, accessed on April 4, 2016, and historic environmental assessments, the HazMat Program determined that groundwater in the Study Area ranges from 6 to 40 feet bgs in regional shallow perched groundwater tables and approximately 70 to 120 feet bgs for the regional groundwater aquifer, depending on the well location.

2.3 Current Use of the Property

The segment of I-405 within the Study Area is currently a state highway both northbound and southbound, with intersecting arterial roadways.

[3] WSDOT 2006

3.0 STUDY AREA HISTORY

3.1 HISTORICAL RESOURCES

The objective of reviewing historical documentation is to develop a history of previous land uses within the Study Area and to assess these uses for potential hazardous materials impacts that may constitute an REC. Our understanding of the history of the Project corridor is based on a review of the information from the historical resources listed in Table 2.

Table 2. Historical Resources Reviewed

Description	Provider or Interviewee	Dates of Coverage or Dates of Site Knowledge	Date Reviewed or Contacted	Comment (See Section 4.2 for findings)
Historical Aerial Photographs[1]	gismaps.kingcounty www.historicaerial.com Google.com	1930 1964,1969 and 1980 2016	4/2016	See Section 3.2 for additional details regarding the aerial photograph review.
Historical City Directories	--	--	--	No city directories were identified that were readily accessible as part of this investigation of the Study Area.
Sanborn/Metsker Maps	--	--	--	No historical Sanborn/Metsker maps were identified that were readily accessible as part of this investigation of the Study Area.
Historic Topographic Maps	geonames.usgs.gov www.historicaerial.com	1954, 1969 and 1983	4/2016	See Section 3.2 for additional details regarding the topographic map review.
Historic Real Estate Maps / Plan Sheets	WSDOT Real Estate Maps	1970 and 1984	4/2016	See Section 3.2 for additional details regarding the plan sheet review / real estate maps.
King County Tax Assessor Records	Online Review	Recent	4/2016	See Section 3.2 for additional details regarding the Study Area.

[1]The scale of the photographs reviewed allowed for an interpretation of general site development/configuration, such as identifying most structures, roadways and clearings. However, the scale of the photographs and/or pictures did not always allow for identification of specific site features, such as fuel pumps, wells, or chemical storage areas on the sites, if any.

3.2 HISTORICAL SITE USE SUMMARY

The Study Area can primarily be characterized as a state highway with numerous intersecting and arterial roadways surrounded by residential and commercial properties in all four cardinal directions. Historically, the Burlington Northern Railroad was located primarily to the east and occasionally west of present-day I-405.

3.2.1 HISTORICAL WSDOT REAL ESTATE MAPS / PLAN SHEET

Historical real estate maps provide an overview of the Study Area relative to potential previous land uses prior to construction, including proposed property acquisitions. The HazMat Program reviewed a total of six real estate maps/plan sheets dated 1970 and 1984. The plan sheets, which the HazMat Program obtained from WSDOT's internal online database on April 4, 2016, can be viewed in Appendix B.

1970 Real Estate Map / Plan Sheets

The review identified three 1970 maps/plan sheets titled "SR 405 Wilburton Interchange (MP 12.11 to 13.04)," found on Sheets 1 of 3, 2 of 3, and 3 of 3, showing the proposal for the current overpass and interchange at this location. Numerous residential buildings are located to the east

and west of the Study Area. Sheet 1 of 3 displays both the location of an undercrossing and overcrossing of SR 405/I-405 in relation to the Burlington Northern Railroad.

1984 Real Estate Map / Plan Sheets
The review identified three 1984 maps/plan sheets titled "SR 405 Bellevue: NE 4th Street Interchange (MP 13.03 to 13.82)" found on Sheets 1 of 3, 2 of 3, and 3 of 3. Sheet 1 of 3 shows the butterfly interchange called Midlakes and the proposal for an exit ramp at NE 4th Street. Sheet 2 of 3 shows a few abandoned shops and houses east of the northbound I-405/NE 4th Street off- ramp, and numerous office and commercial buildings to the east and west of the Project. Sheet 3 of 3 shows Sturtevant Creek being relocated, the proposal to acquire land for construction easement and right-of-way, and residential properties to the east and commercial businesses to the east and west of the Study Area.

3.2.2 Historical Topographic Maps
Historical topographic maps provide an overview of the study area relative to potential previous land uses. The HazMat Program reviewed historical topographic maps dated 1954, 1969, and 1983 for the Study Area. These maps were viewed from the U.S. Geological Survey's United States Board on Geographic Names website (USGS, 2016) and the Historical Aerials website (Historical Aerials, 2016). All obtainable maps can be viewed in Appendix C.

1954 Map
The 1954 historical map shows the Study Area and surrounding areas in the vicinity of the Project as lightly populated, with minimal residential/farm houses and primitive roadways before the construction of I-405.

1969 and 1983 Maps
Both the 1969 and 1983 maps show the surrounding areas with an increase in both residential and commercial buildings and the construction of much of I-405.

3.2.3 Aerial Photographs
Historical aerial photographs are valuable for an environmental assessor to review features on and near the subject property over a significant period of time. The HazMat Program viewed aerials photographs dated 1936, 1964, 1980, and 2002 and recorded from King County's Parcel Viewer website (King County, 2016) and the Historical Aerials website (Historical Aerials, 2016). The 1936 aerial photographs show that much of the area surrounding the Study Area consisted of open farm lands and forested lands and was lightly populated with residential/farm houses. The 1964 aerial photograph show an increase in residential neighborhoods and businesses in the vicinity of the Study Area. The 1980 and 2002 aerial photographs show the construction of the I-405 highway and a significant increase in residential and commercial properties both to the east and west of the Study Area. All obtainable photographs can be viewed in Appendix D.

4.0 ENVIRONMENTAL REVIEW

4.1 Department of Ecology Website Database Review

The HazMat Program conducted an online review of Ecology's Facility/Site Database website[4] (Ecology, 2016) to identify possible RECs. The federal, state, and tribal environmental databases that were searched, and their associated ASTM E 1527-13 minimum search distances, are set forth in section 8.2.1 of ASTM E 1527-13, and described in Table 3.

Table 3: ASTM E 1527 -13 Standard Environmental Record Sources

Record Source (Abbreviation)	Agency	Search Distances	Description
Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS)	USEPA	1/2 mile	The CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies, and private persons and lists sites that are either proposed for or on the National Priorities List.
National Priorities List (NPL)	USEPA	1 mile	The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund program.
CERCLIS No Further Remedial Action Planned (NFRAP)	USEPA	1/2 mile	The CERCLIS-NFRAP contains data on CERCLIS sites that have been listed for no further remedial action is planned.
Resource Conservation and Recovery Act (RCRA)	USEPA	1 mile	The RCRA database includes selective information on large and small quantity (RCRA SQG and RCRA LQG) generators of hazardous waste as well as treatment, storage, and disposal facilities as defined by the RCRA. If a site is identified as a RCRA generator, it does not mean that a release of hazardous materials has occurred at the site; however, the presence of these materials at a site increases the potential that a release could occur.
RCRA non-Corrective Action Report (CORRACTS) TSD (Transporter, Storage and Disposal)/RCRA-TSDF (RCRA- Treat, Store and Dispose)	USEPA	1/2 mile	RCRA non-CORRACTS TSD database identifies sites which generate, transport, store, treat or dispose of hazardous waste as defined by RCRA.
RCRA CORRACTS	USEPA	1 mile	The CORRACTS database identifies hazardous waste handlers with RCRA corrective action activity.
US Institutional/Engineering Controls (US INST CONTROL or US ENG CONTROLS)	USEPA	Property only	The US INST CONTROL or US ENG CONTROLS is listing of sites with institutional or engineering controls in place.

[4]The Facility/Site Database identifies Ecology-regulated facilities such as State Cleanup sites, Federal Superfund sites, Hazardous Waste Generators, Solid Waste Facilities, Underground Storage Tanks, and Dairies.

Table 3: ASTM E 1527 -05 Standard Environmental Record Sources (Continued)			
Record Source Abbreviation	Agency	Search Distances	Description
Emergency Response Notification System (ERNS)	USEPA	Property only	The ERNS records and stores information on reported releases of oil and hazardous substances.
Confirmed and Suspected Contaminated Sites List (CSCSL)/State Hazardous Waste Site (SHWS)	Ecology	1/2 mile	The CSCSL/SHWS is a listing of the State Hazardous Waste Sites, which is Washington's equivalent to the federal CERCLIS list. The sites have known or suspected contamination. The type of media affected and type of contaminant are typically listed in the database.
Landfill & Solid Waste Facilities (State Landfill)	Ecology	1/2 mile	The state landfill records contain an inventory of solid waste disposal facilities or landfills in Washington. These may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.
Underground Storage Tank (UST) Database	Ecology	Property & adjoining properties	USTs are regulated by Subtitle I of RCRA and most must be registered with Ecology. The UST database contains information on the site location, number of tanks present, materials stored, dates of installation and removal, and other pertinent information for registered USTs. Sites identified in this database include only those registered with Ecology as containing regulated substances. This database does not include underground residential heating fuel tanks or tanks used for farm applications.
Leaking Underground Storage Tank (LUST) Site List	Ecology	1/2 mile	The LUST list contains an inventory of reported leaking UST incidents. The LUST list may also identify the type of material released and the affected media (e.g., air, soil, or water).
Washington Independent Cleanup Report (WA ICR) Voluntary Cleanup Program Sites (VCP)	Ecology	1/2 mile	The WA ICR lists sites that have submitted independent remedial action reports to Ecology. The VCP database includes sites that have entered into the state VCP or its predecessor Independent Remedial Action Program.
Brownfield sites	Ecology	1/2 mile	A listing of Brownfield sites included in the CSCSL/SHWS. Brownfield sites are abandoned, idle, or underused commercial or industrial properties, where the expansion or redevelopment is hindered by real or perceived contamination.

The area the HazMat Program evaluated for the Project Analysis is within a 1/4-mile radius of the Study Area where construction is anticipated to occur. The 1/4-mile radius was selected because it reasonably encompasses the areas from which contamination could be expected to migrate from known or suspected sites of concern into the Study Area based on topographic and hydrologic conditions.

The Ecology online database review identified 83 listed sites within a 1/4-mile radius search of the Study Area that potentially qualified as an REC and could potentially affect the Project during construction. A site map and listed sites identified as potential RECs are shown in Table 3. In addition, the HazMat Program also evaluated the Burlington Northern Railroad as a potential REC because of its proximity to the Study Area and historical land use. Based on the historical records, land use, and regulatory database review, 78 of the 83 sites were deemed unlikely to have an effect on the Project and were immediately eliminated from further consideration due to one or more of the following reasons.

- Sites listed only on the RCRA, Facility Index System/Facility Registry System (FINDS), Facility Site Identification System (ALLSITE), and National Pollutant Discharge Elimination

System databases were eliminated. Inclusion on these databases indicates that a site uses or generates regulated materials as part of their business practice, but gives no indication of a hazardous materials release.

- Sites listed only on spills reported to the Spills Prevention, Preparedness, and Response Division (SPILLS) database were eliminated. Inclusion on this list indicates that a one-time spill has occurred. These sites are not included on other lists that indicate soil and/or groundwater contamination is present.
- Sites listed only on the UST database and are not anticipated to be acquired and/or are not located immediately adjacent to the Study Area.
- Sites located greater than 1/4-mile from the Study Area were eliminated due to the low likelihood of contamination migrating from this distance to the Project corridor in concentrations exceeding cleanup levels.
- Sites have been remediated below MTCA cleanup levels and issued a No Further Action (NFA) or the site was listed with contaminated soil only and/or was not immediately adjacent to the Study Area.
- The sites did not appear to pose a significant potential for hazardous material-related risks (such as UST closure/removal with no documented spills or leaks or RCRA-hazardous materials generators)

The remaining five sites (Chevrolet of Bellevue – Facility Site (FS) Identification (ID) # 33818696, Eastside Chrysler Jeep – FS ID # 2497, United Communications Systems Inc. – FS ID # 97749385, Rabanco LTD – FS ID # 9271127 and the Burlington Northern Railroad) qualified as RECs and were further evaluated using a risk analysis to determine the sites' level of potential impact to the Study Area and potential for cleanup liability during construction, either by excavation and/or dewatering. The HazMat Program assigned each site as a Low, Moderate, or High impact ranking. These sites, which the HazMat Program reviewed on Ecology's Toxics Cleanup Program Web Reporting website (Ecology, 2016) and mapped in Appendix A, are discussed in further detail below.

Type of Impact

Low Impact: This risk level identifies RECs where the likelihood for the site to affect the Study Area is low because there was no evidence to suggest that groundwater from the REC has affected or the contamination from off-site migration is not expected to affect the Study Area. Low risk sites may also include potentially contaminated sites where remediation has previously occurred, but limited excavation is anticipated near the site and/or disposal of excavated soils or groundwater is considered relatively straightforward.

Moderate Impact: This risk level identifies RECs where the likelihood for the site to affect the Study Area is moderate due to the type or extent of contaminant, groundwater from the REC is impacted and has the potential to affect the Study Area from off-site migration, but there is no conclusive evidence. Moderate risk sites may also include sites that have the potential to be contaminated and would be acquired by WSDOT, but remediation of contamination, if present, is considered relatively straightforward.

High Impact: This risk level identifies RECs where the likelihood for the site to affect the Study Area is high, contamination is known to be extensive, and conclusive evidence has indicated that the REC has directly affected the Project. Sites may also have a high risk if WSDOT anticipates acquiring all of the property or the specific portion where the source of contamination is or was located.

Based on the risk analyses the HazMat Program performed for the four potential RECs, three sites (Chevrolet of Bellevue, United Communications Systems Inc., and the Burlington Northern Railroad) were assigned a Low impact ranking and two sites (Eastside Chrysler Jeep and Rabanco LTD) were assigned a Low-Moderate ranking and could impact the Project corridor.

4.2 Details of the RECs / Sites of concern

- **Site Map Number 1 – Chevrolet of Bellevue, FS ID # 33818696**
  - The Chevrolet of Bellevue site is listed on Ecology's Voluntary Cleanup Program (VCP) and State Cleanup Site. The site was identified as having confirmed contaminated groundwater and soils with benzene, methyl tertiary-butyl ether, non-halogenated solvents, diesel, and gasoline. According to Dale Myers of Northwest Ecology Toxic Cleanup Program, the site has been terminated as a VCP site because of inactivity. The site is considered a **Low risk** because of its proximity to the Study Area and the uncertainty of whether contaminated groundwater has migrated off site into the Study Area, and is hydraulically both upgradient and cross-gradient. The complexity of the potential impact to the Project is **straightforward** because the constituents are easily identifiable using general field screening techniques, which could consist of visual observations and olfactory detection for the presence of contamination, water sheen testing, and organic vapor monitoring using a photoionization detector (PID).

- **Site Map Number 2 – Eastside Chrysler Jeep, FS ID # 2497**
  - The Eastside Chrysler Jeep site is listed in Ecology's Independent Remedial Action Program. The site was identified as having confirmed contaminated groundwater and soils with metals and non-halogenated solvents. According to Ecology's Periodic Review dated October 2014, numerous environmental investigations have been conducted at the site from 1993 to 1999. In 1996, the existing building was demolished and approximately 2,600 cubic yards of petroleum- impacted soils were excavated and removed off site for disposal. Upon completion of the soil remediation, Dames and Moore installed and sampled four monitoring wells and five existing monitoring wells to delineate the lateral and vertical extent. A single monitoring well (MW-13) located on the southern side of the site exceeds MTCA Cleanup Levels (CULs) for 1,4-dichlorobenzene with an unknown source. In addition, concentrations of Bis-(2-ethylhexyl) phthalate exceed MTCA CULs in MW-20S located on the west site of the site. The report indicates that this analytical result appeared to be anomalous because it is a common laboratory contaminant. Ecology awarded an NFA in conjunction with a Restrictive Covenant. The HazMat Program retrieved the Periodic Review for this site at Ecology's Toxics Cleanup Program Web Reporting website (Ecology, 2016).

The site is considered a **Low-Moderate risk** because of its proximity to the Study Area and the uncertainty whether contaminated groundwater has migrated off site into the Study Area. The site is located potentially hydraulically upgradient and cross-gradient from the Study Area. The complexity of the potential impact to the Project is **straightforward** because the constituents are easily identifiable using general field screening techniques, which could consist of visual observations and olfactory detection for the presence of contamination, water sheen testing, and organic vapor monitoring using a PID. All groundwater that is encountered during construction in the immediate vicinity of this site will require proper management to include characterization prior to reuse, infiltration, or disposal.

- **Site Map Number 3 – United Communications Systems Inc., FS ID # 97749385**
  - The United Communications Systems Inc. site is listed in Ecology's UST and State Cleanup databases. The site was listed with confirmed soil contamination of petroleum hydrocarbons—gasoline, benzene, and other non-halogenated organics. G-Logics, Inc. prepared a UST Removal and Site Assessment Report dated May 21, 2015. In April and May of 2015, four USTs (a 1,000-gallon diesel UST, two 10,000-gallon gasoline USTs, and an 8,000-gallon gasoline UST; Tanks 1, 2, 3, and 4; respectively) were decommissioned. Approximately 730 tons of suspected and confirmed petroleum-contaminated soil was removed from the area surrounding Tanks 1 through 3. Petroleum contamination was observed in the perched groundwater approximately 7 to 8 feet bgs, and contamination above MTCA Method A CULs remains on site. The site was observed to be approximately 100 feet east of the Project corridor. We retrieved the UST Removal and Site Assessment Report and additional information at Ecology's Toxics Cleanup Program Web Reporting website (Ecology, 2016).

This site is considered a **Low risk** because of its proximity to the Project and the uncertainty whether contaminated groundwater has migrated off site into the Project limits and is hydraulically both upgradient and cross-gradient. The complexity of the potential impact to the Project is **straightforward** because the constituents are easily identifiable using general field screening techniques, which could consist of visual observations and olfactory detection for the presence of contamination, water sheen testing, and organic vapor monitoring using a PID. All groundwater that is encountered during construction in the immediate vicinity of this site will require proper management to include characterization prior to reuse, infiltration, or disposal.

- **Site Map Number 4 – Burlington Northern Railroad**
  - The Burlington Northern Railroad is parallel to I-405 on the west and east side, depending on location, and intermittently under and over cross-sections of I-405 and/or right-of-way. Historically, railroads are known to have contaminated soils with petroleum hydrocarbons, heavy metals, cPAHs, and naphthalenes. Additionally, there are environmental concerns directly related to railroad maintenance and operations, such as spraying herbicides along tracks and easements to control weeds. Subsurface contamination could come from the leaching of wood preservatives from the railroad ties and fragments present in the ballast and fill beneath and alongside the tracks, unreported

spills, or inadvertent leaking of oils. Based off of proposed construction activities, the Project may encounter contamination at the following locations.

MP 12.4 – Eastside Rail Corridor/I-405 northbound overpass replacement. The Burlington Northern Railroad is considered a **Low risk** because of its proximity to the Study Area and the proposed construction activities. The complexity of the potential impact to the Project is **straightforward** because the primary constituents associated with railroads are typically identifiable using general field screening techniques, which could consist of visual observations and olfactory detection for the presence of contamination, water sheen testing, and organic vapor monitoring using a PID.

- Site Map Number 5 – Rabanco LTD, FS# 9271127
  - The historic Rabanco LTD site was formerly owned and operated as an eastside disposal and transfer station from 1959 to 2011. The property is currently owned by Buss Investments LLC, and is presently being leased to a landscaping and supply company. This site was listed in Ecology's LUST and VCP databases. The site was listed with confirmed soil and groundwater contamination of petroleum hydrocarbons—gasoline, benzene, arsenic, and other non-halogenated organics related to historic leaking underground storage tanks. Multiple remedial investigations have been completed which included the removal of four USTs ranging from 500 gallons to 10,000 gallons storing diesel or gasoline. The groundwater on site continues to exceed MTCA Method A CULs for arsenic. According to the Remedial Action Report and the Monitoring Installation and Sampling Letter Report dated January 2013 and June 2013, respectively, groundwater ranges from approximately 4 ft. bgs to 6 ft. bgs, and appears to migrate west to southwest, away from the Project study area. There was no mention of an upgradient well being installed; therefore, it is unknown if contamination has migrated onto the Study Area. We retrieved the UST Removal and Site Assessment Report and additional information at Ecology's Toxics Cleanup Program Web Reporting website (Ecology, 2016).

This site is considered a **Low - Moderate risk** because of the proximity to the Study Area anticipated for a stormwater treatment facility between MP 12.5 and MP 12.6, and the uncertainty whether contaminated groundwater has migrated off site into the Project limits which is hydraulically both upgradient and cross-gradient. The complexity of the potential impact to the Project is **straightforward** because the constituents are easily identifiable using general field screening techniques, which could consist of visual observations and olfactory detection for the presence of contamination, water sheen testing, and organic vapor monitoring using a PID.

4.3 Ecology File Reviews

The HazMat Program did not conduct any Ecology file reviews on behalf of this Desktop Analysis because the site locations were either not listed on Ecology's databases, additional information was already researched online, or the initial investigation determined there was no further information available to review.

5.0 PROPOSED PROPERTY ACQUISITIONS

5.1 PARTIAL ACQUISITIONS

The Project is proposed to include partial acquisitions of five properties shown in Table 4 and mapped on Figure 4. The five sites proposed for acquisitions that qualify as potential RECs are listed on Figure 3.

Table 4. Properties Proposed for Acquisition

Map #	King County Parcel #	Name	Address	Structures on site
31	3225059003	Northwest Building	700 112th Ave. NE	Yes
992	3225059160	OR Bellevue Properties	101 116th Ave. SE	Yes
35	3225059182	Meydenbauer Center	Lot 5 Bellevue #05-126538	No
30	3225059201	Legacy of Bellevue	530 112th Ave NE	Yes
33	3225059216	City of Bellevue	11101 NE 6th Street	No

5.2 POTENTIAL RECS FROM PROPOSED PROPERTY ACQUISITIONS

- **Site Map Number 6 – Meydenbauer Center, Acquisition Map # 35 and King County Parcel Number 3225059182**
    - Review of an Ecology opinion letter dated July 14, 2011, indicated that a site called Bravern Phase II, FS ID 22571, located immediately adjacent to the Meydenbauer Center Lot 5, is listed because of elevated carcinogenic cPAHs exceeding the MTCA Method A CULs found in material at the site location. The source of the contamination was unknown and delineated to depths of 3 to 4 feet bgs. It was Ecology's opinion that the construction by Bravern Development of a multi-story condominium has appropriately mitigated the site during the Phase II Environmental Site Assessment (ESA) and cleanup. This Meydenbauer Center site is considered a **Low-Moderate risk** because of the potential of acquiring and/or encountering contaminated fill material with cPAHs. The HazMat Program viewed the Ecology opinion letter at the Toxics Cleanup Program Web Reporting website (Ecology, 2016).

- **Site Map Number 7 – OR Bellevue Properties, Acquisition Map # 992 and King County Parcel Number 3225059160**
    - According to the King County Site Assessor online database, this site includes the historical Bellevue City Hall, which was identified on Ecology's LUST database and listed with FS ID # 45864671. Review of an Ecology opinion letter dated July 14, 2011, indicated that the site was contaminated with petroleum hydrocarbons in both the soil and groundwater; however, it was awarded an NFA because remedial cleanup has mitigated the site to MTCA Method A CULs. According to Ecology's online database, the historical release was closer to 116th Avenue SE and, therefore, not immediately adjacent to the Study Area. This site is considered a **Low risk** to the Project if the proposed acquisition is minor and in the immediate vicinity of the Study Area, and/or the source of any unknown or undocumented

contamination will not be acquired. The HazMat Program viewed the Ecology opinion letter at the Toxics Cleanup Program Web Reporting website (Ecology, 2016).

6.0 SUMMARY OF FINDINGS AND OPINIONS

The WSDOT HazMat Program has performed a Desktop Corridor-Level Hazardous Materials Analysis, located within the Study Area extending from mile post (MP) 11.9 to 13.7 and MP 14.6 on the I-405 corridor and within Township 25N, Range 5E, Sections 20, 28, 29, 32 and 33; and Township 24N, Range 5E, Sections 4 and 9. The Analysis was conducted in general accordance with Chapter 447 of WSDOT's Environmental Manual and specific sections of the American Society for Testing and Materials Standard Practice for Environmental Site Assessments: Phase I Environmental Assessment Process, Designation: E 1527-13 (ASTM 1527-13). This Analysis is considered a right-sized, low-level report and for NEPA/SEPA environmental documentation, this assessment provides the appropriate level of investigation necessary to identify potential contaminated sites which may pose a significant impact to the Project Study Area.

Based on the results of the Ecology online investigation and project description, 85 sites were identified as potential RECs for the Project. Out of these 85 sites, which consist of adjacent properties within a 1/4-mile radius of the Study Area (the Burlington Northern Railroad, and two properties proposed for acquisition), 78 sites were eliminated from further consideration as presented in Sections 4 and 5. However, each of the remaining seven sites do qualify as an REC because of historical land uses, confirmed or suspected past releases that have the potential of being encountered during project construction, and/or proposed acquisition of properties known or suspected of having contamination. Based on the risk analyses performed for the six RECs, four sites (Chevrolet of Bellevue, United Communications Systems Inc., Burlington Northern Railroad, and OR Bellevue Properties) were assigned a Low impact ranking and three sites (Eastside Chrysler Jeep, Rabanco LTD and Meydenbauer Center) were assigned a Low-Moderate ranking, which could affect the Study Area.

Environmental impacts during construction may include potential impacts to sensitive receptors such as wetlands, groundwater, public drinking water systems, and surface waters, which all require special protection against spills, and releases and alteration of contaminant migration. With the exception of drilled shafts, the majority of excavations associated with project construction is expected to be no greater than 15 feet bgs and could encounter perched shallow groundwater.

Direct construction effects may include potential impacts from site-specific hazardous materials such as contaminated soil and/or groundwater, ACM, lead-based paint, and liabilities associated with property acquisition. Potential contaminants that may be found in the soil and groundwater at depth and surface soils for the Project could include petroleum hydrocarbons, heavy metals, cPAHs, and associated solvents. The potential effects of these sites on the construction activities are unknown, but will likely be minor, based on the amount and location of planned excavation.

WSDOT can implement mitigation measures during different stages of project development and construction to help avoid or reduce effects to the Project associated with environmental concerns, construction issues, and/or potential property acquisition. For sites that are Low to Moderate risk and are straightforward to manage, the Project may use WSDOTs standard impact and mitigation measures, as referenced online in the Guidance & Standard Methodology for WSDOT Hazardous Material Discipline Reports (WSDOT, 2016).

7.0 CONCLUSIONS

The following conclusions are based on the summary findings of the investigation, opinions provided above, and the Project description. The HazMat Program concludes that no adverse cumulative effects on hazardous materials are anticipated for the Project, and no significant, unavoidable adverse effects are expected to result from the Project because the potential of encountering contaminated soil and/or groundwater could be avoided by design decisions or mitigated through proper remediation during construction.

No further investigation is warranted at this time for the Study Area, except possibly between MP 12.5 and MP 12.6 where the stormwater treatment pond is anticipated to be constructed. This proposed stormwater treatment facility lies between a known contaminated site with arsenic and petroleum, as well as the present location of the I-405 highway which may have contributed contamination such as heavy metals, petroleum and cPAHs from the combustion of motor vehicles. The costs to conduct additional investigations in order to better define the level and extent of contamination within the remaining portions of the Study Area where construction is proposed would likely be far greater than those associated with change orders or potential delays associated with encountering contamination during project construction. The primary contaminants of concern in these locations anticipated to be encountered are petroleum hydrocarbons and their associated metals, and solvents. These constituents are easily identifiable using general field screening techniques, which consist of visual observations and olfactory detection for the presence of contamination, water sheen testing, and organic vapor monitoring using a PID.

8.0 RECOMMENDATIONS

The following recommendation is based on the findings and conclusions of this assessment.

- The HazMat Program recommends that the construction contract include specifications advising contractors of the appropriate handling and disposal of identified or suspected contamination that may be encountered during excavations or soil disturbances near or on the Study Area. WSDOT routinely uses General Special Provisions or Special Provisions to account for uncertainties of hazardous materials, such as the removal and disposal of unanticipated hazardous materials. (An example of a provision would be to stockpile suspected contaminated soils for laboratory analysis prior to reuse or disposal.) The HazMat Program can assist in creating these contract provisions, if necessary.
    - Specifically for the proposed stormwater treatment facility between MP 12.5 and 12.6, it is recommended that the contract specifications include language directing the Contractor to stockpile and characterize all disturbed soils and/or groundwater prior to any reuse or disposal. Another option would be to conduct preliminary soil and groundwater field screening and/or sampling prior to construction to evaluate proper disposal methods if necessary, and provide sufficient information for contract bidding purposes.

- If acquisitions of entire properties are anticipated, the HazMat Program recommends that a Phase I or Phase II ESA be considered prior to any purchase agreement. If any buildings will be acquired as part of the purchase agreement, is the Program recommends that prior to demolition or renovation, an Asbestos Hazard Emergency Response Act (AHERA) Building Inspector conducts a Good Faith Asbestos Survey with the intent of complying with and providing an AHERA-level assessment in accordance with U.S. Environmental Protection Agency 40 CFR 763, and Washington State Department of Labor and Industries standards, WAC 296-62-07721(2)(b)(ii).

- The HazMat Program recommends that an environmental reevaluation be conducted if subsequent project changes are made, such as project realignment or changes to the proposed property acquisitions, which could potentially alter the conclusions made in this preliminary investigation.

9.0 REFERENCES

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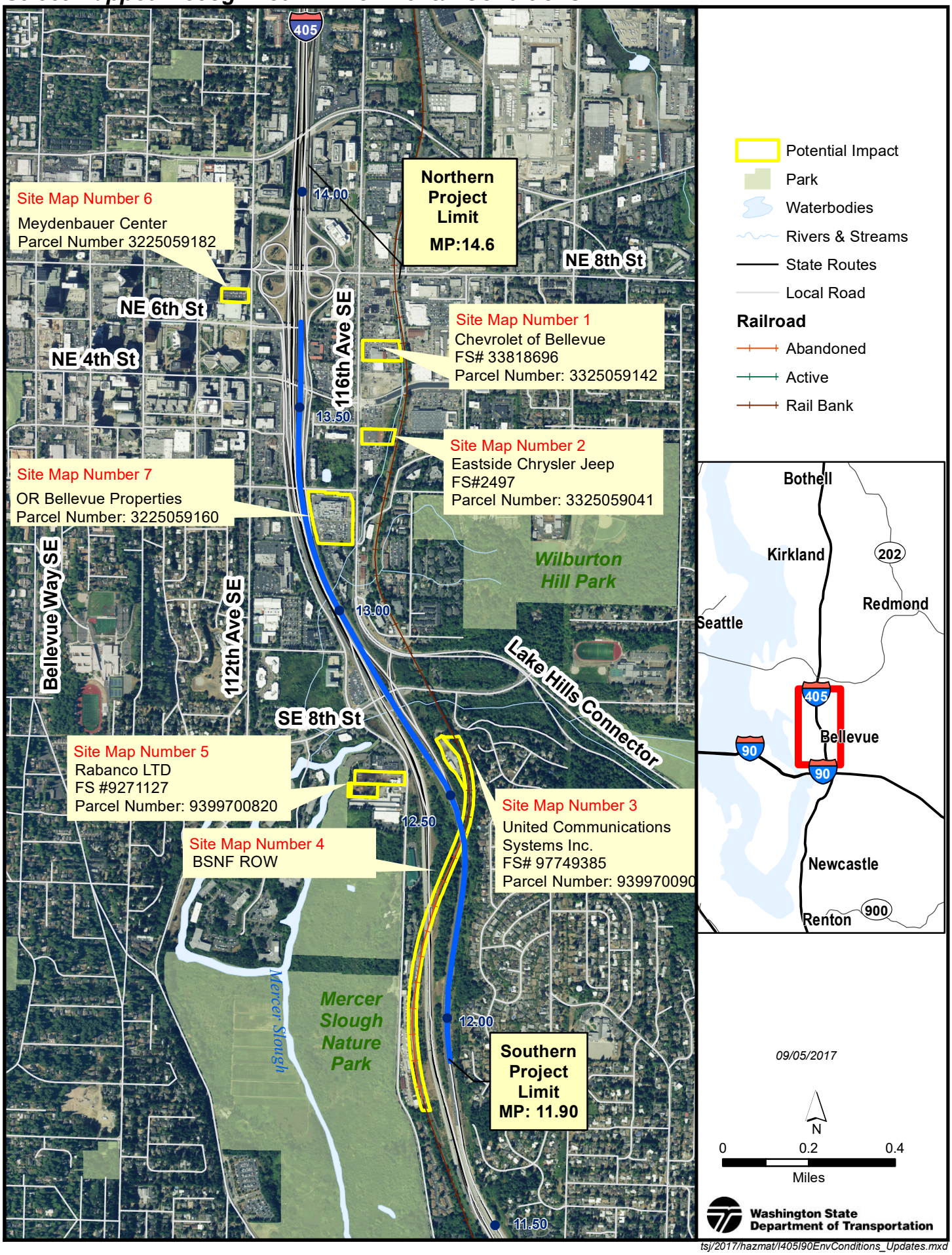
Appendix A: Mapped Recognized Environmental Conditions

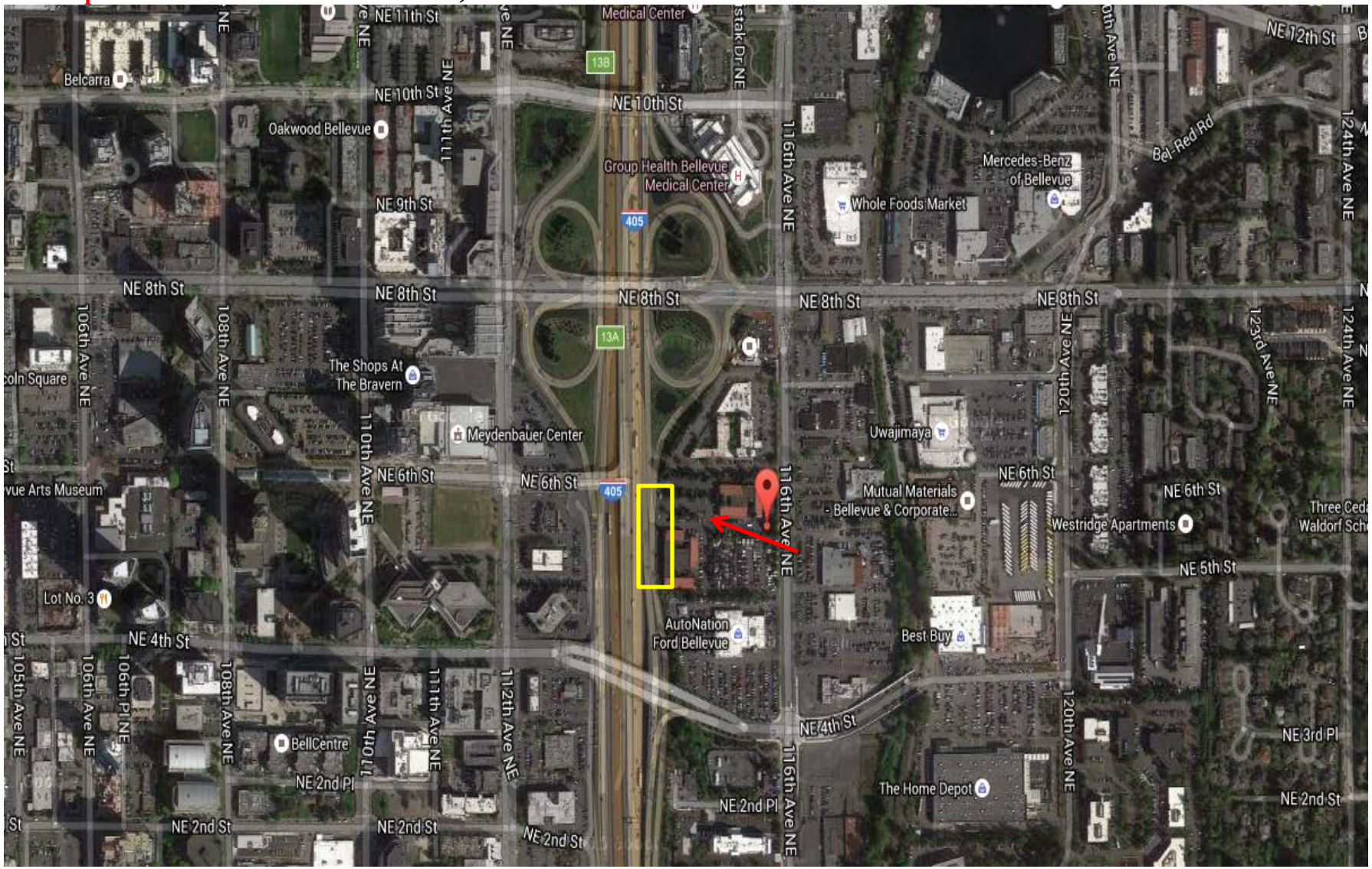
Figure 2: I-405, Downtown Bellevue Vicinity Express Toll Lanes Project (MP 11.9 to 14.6) Street Mapped Recognized Environmental Conditions



tsj/2017/hazmat/I405I90EnvConditions_Updates.mxd

Site Map Number 1 – Chevrolet of Bellevue, FS# 33818696

Google Maps



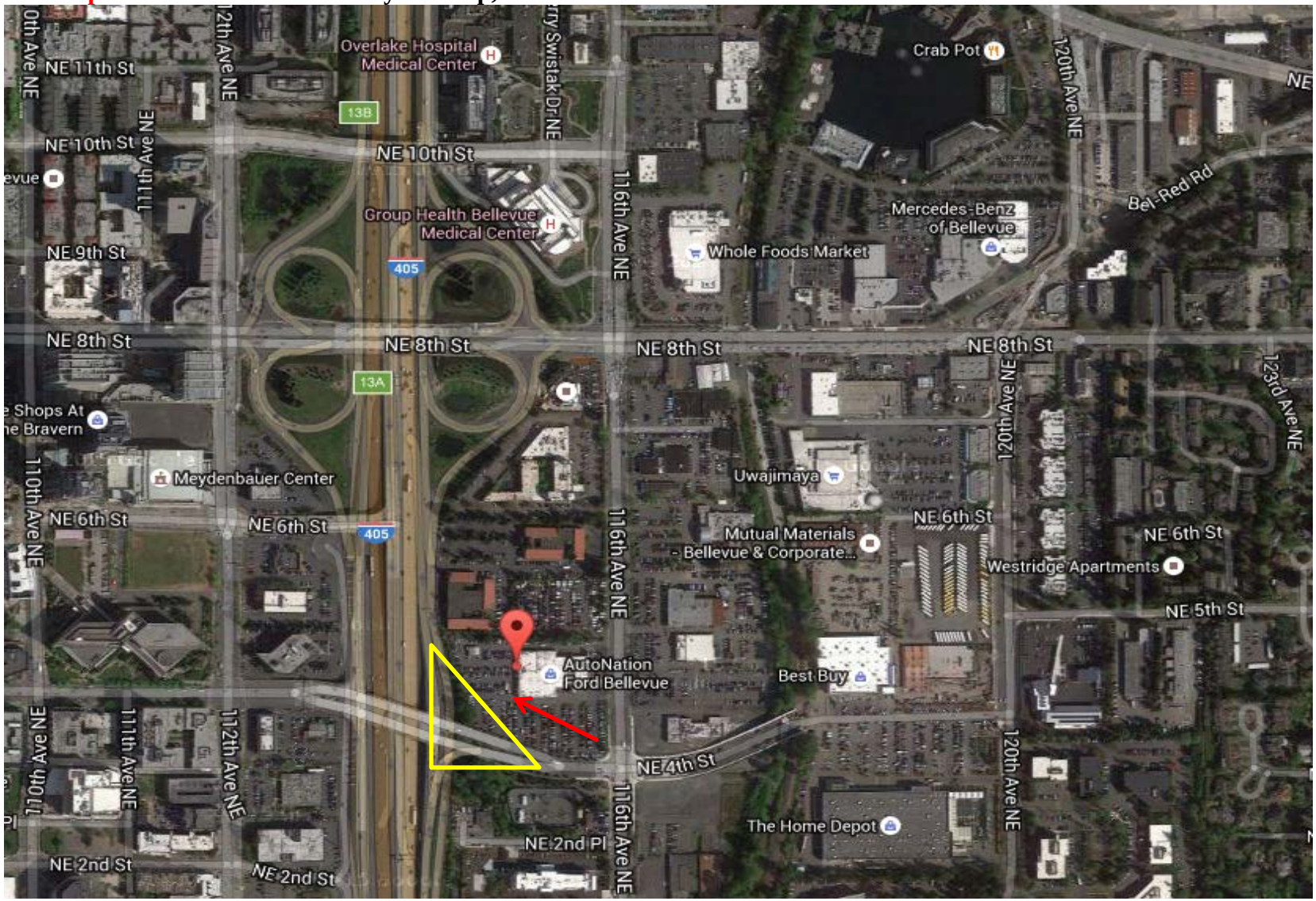
Area of potential impact during construction

Site Location

N

Site Map Number 2 – Eastside Chrysler Jeep, FS# 2497

Google Maps



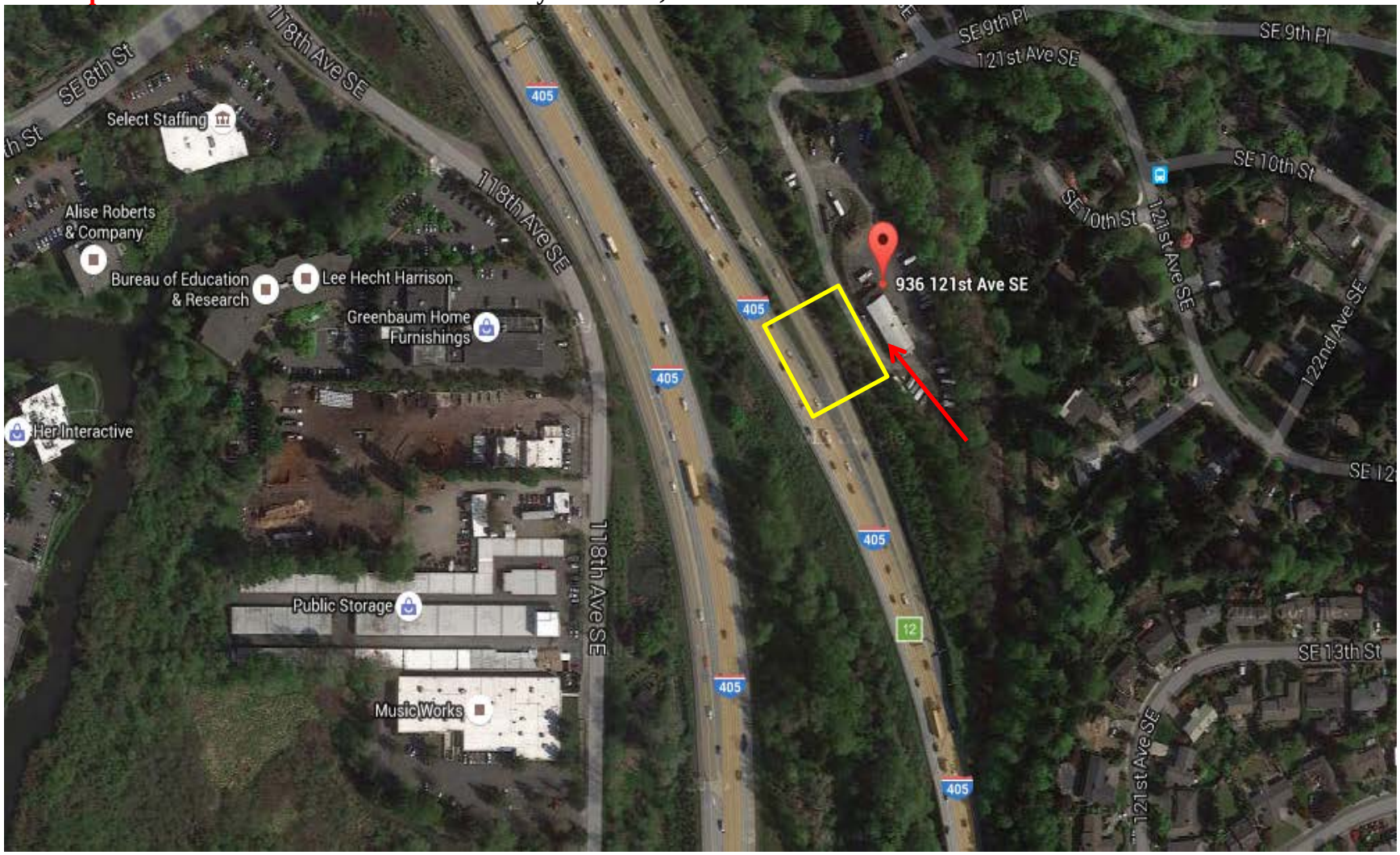
Area of potential impact during construction

Site Location

N

Site Map Number 3 – United Communications Systems Inc., FS# 97749385

Google Maps



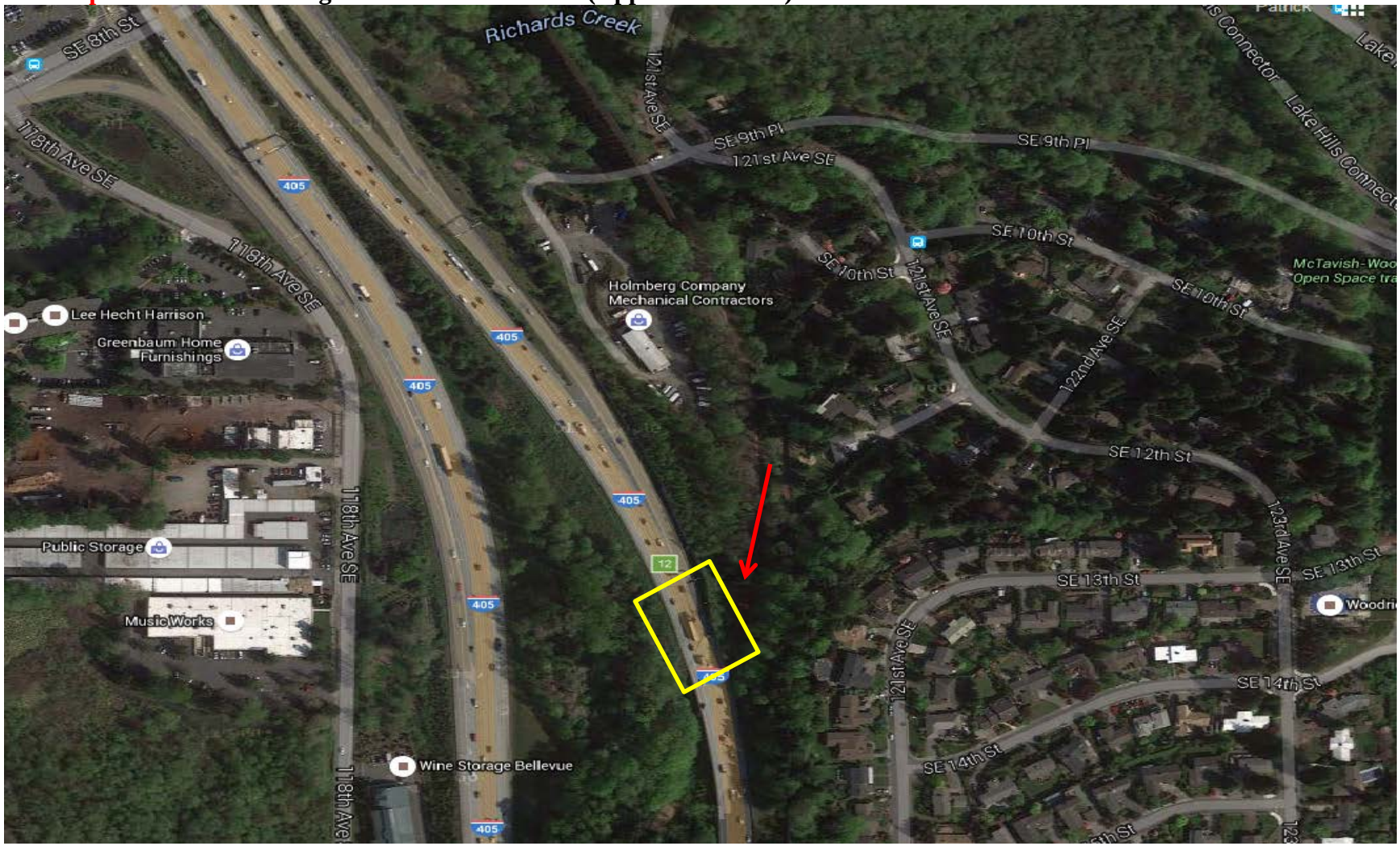
Area of potential impact during construction

Site Location

N

Site Map Number 4 – Burlington Northern Railroad (Approx. MP 12.4)

Google Maps



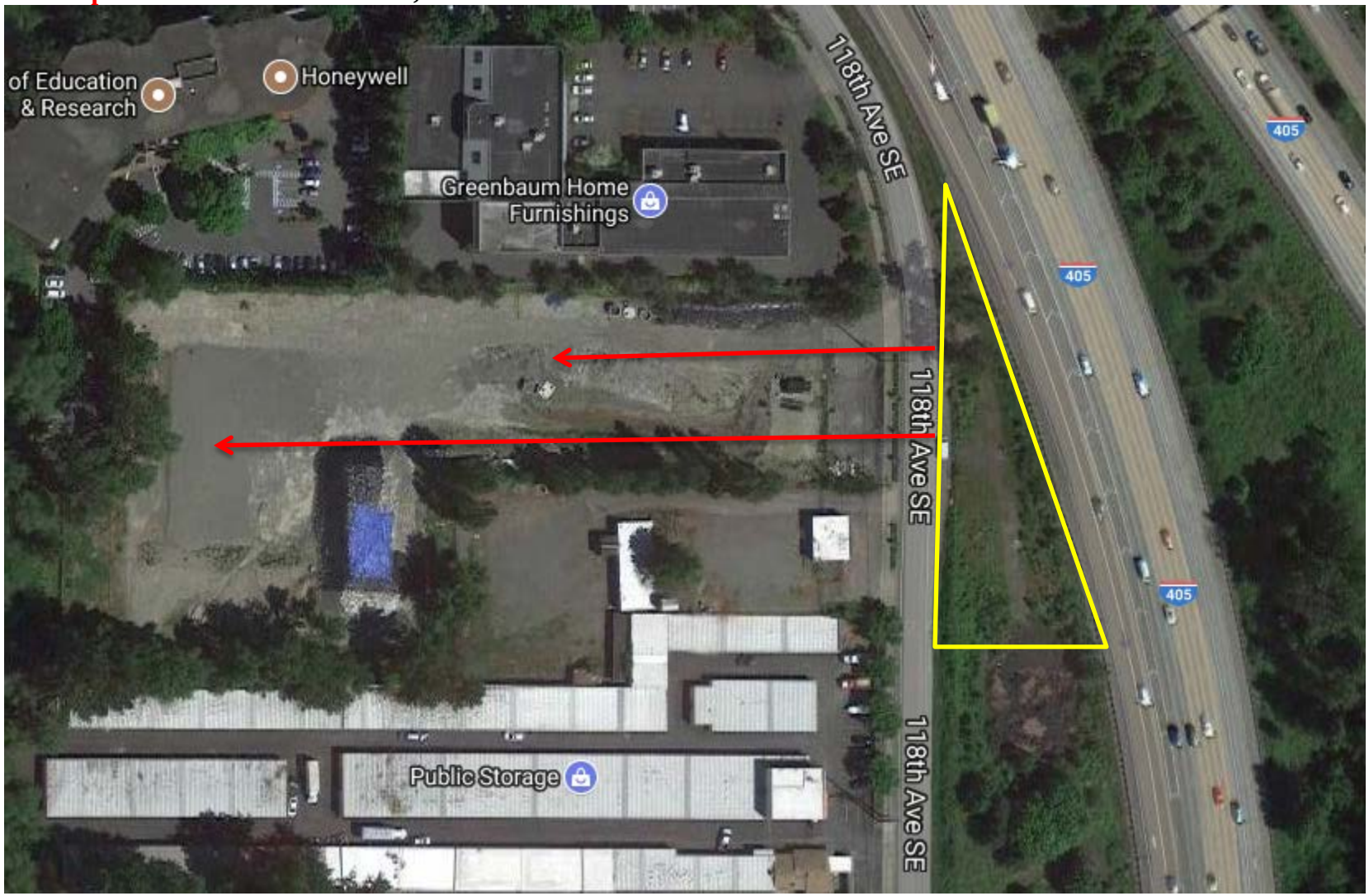
Area of potential impact during construction

Site Location

N

Site Map Number 5 – Rabanco LTD, FS# 9271127

Google Maps



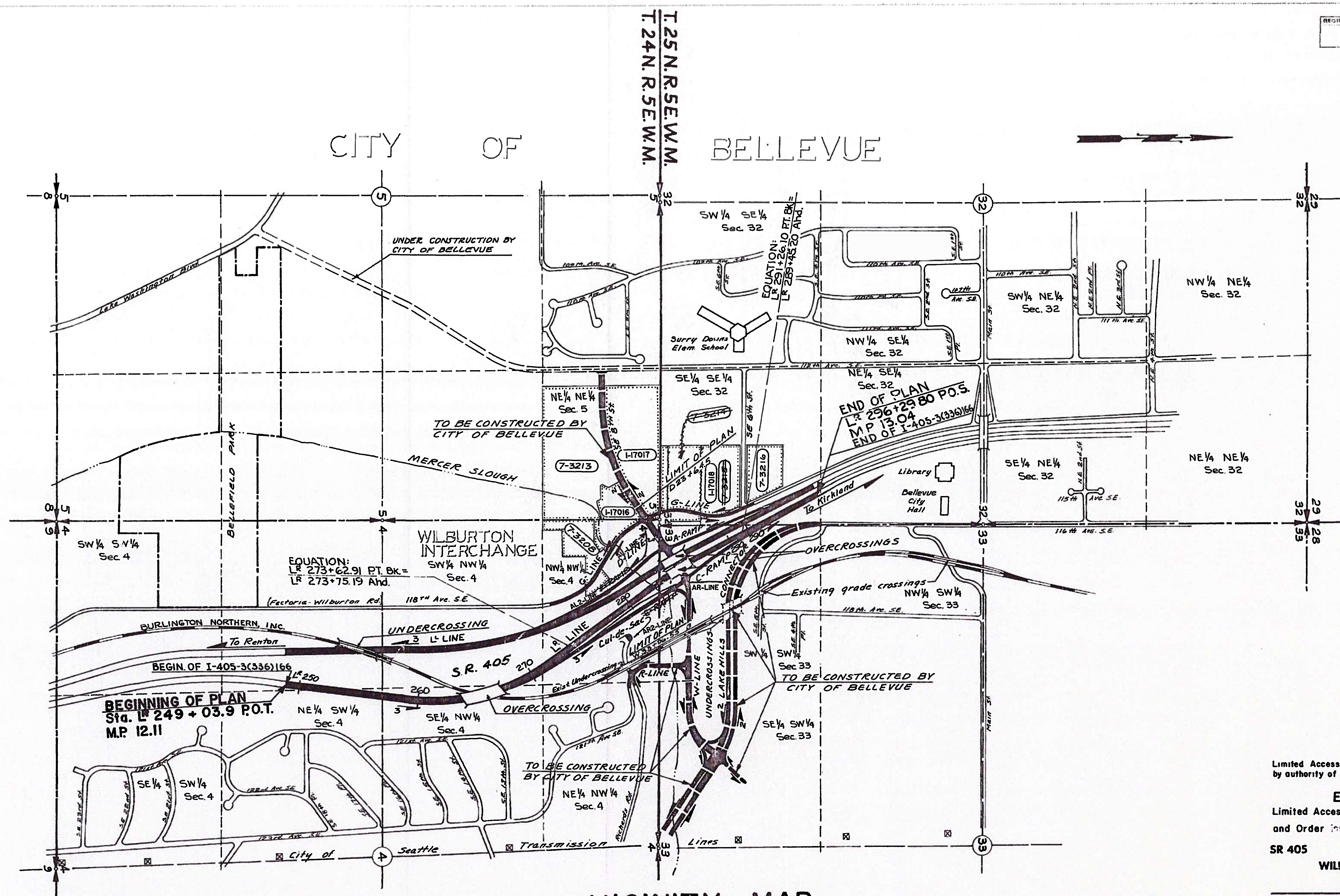
Area of potential impact during construction

Site Location

N

Appendix **B** – Historic Real Estate Map / Plan Sheets

REGION NO.	STATE	FED. AID PROJECT NO.	SHEET NO.
8	WASH	I-405-3(336)166	



LEGEND

Property Ownership Numbers	7-3200
Property Lines	
Improved Streets and Roads	

400' 0 400' 800' 1200' 1600'
SCALE IN FEET

VICINITY MAP
AND TOTAL PARCEL DETAILS
TOTAL PROJECT LENGTH = 0.93 MILE

AUTHORITY	DATE	SUBSEQUENT APPROVAL	BY
Letter 4-25-01	5-18-01	Added AL Line, AL2 Line, AR Line, and AR2 Line; Deleted E Ramp and F Ramp	AMC
Letter 2-02-01	02-23-01	Added parcels I-17016, thru I-17018; Deleted parcels 7-3214 and 7-3215	HEP
Letter 11-7-86	11-14-86	Deleted Profile Sht.s 4,5,&6 ; Revised Total Sht. No.	DRS
Letter 7-30-71	8-13-71	Revised boundary parcel 7-3213	RLS

Limited Access Features Tentatively Approved JUNE 4, 1970 by authority of Washington State Highway Commission.

EXHIBIT A

Limited Access established by Commission Findings and Order issued October 26, 1970.

SR 405 MP 12.11 TO MP 13.04

WILBURTON INTERCHANGE

KING COUNTY

VICINITY MAP AND TOTAL PARCEL DETAILS

WASHINGTON STATE HIGHWAY COMMISSION
DEPARTMENT OF HIGHWAYS
OLYMPIA, WASHINGTON

ASSISTANT DIRECTOR FOR HIGHWAY DEVELOPMENT

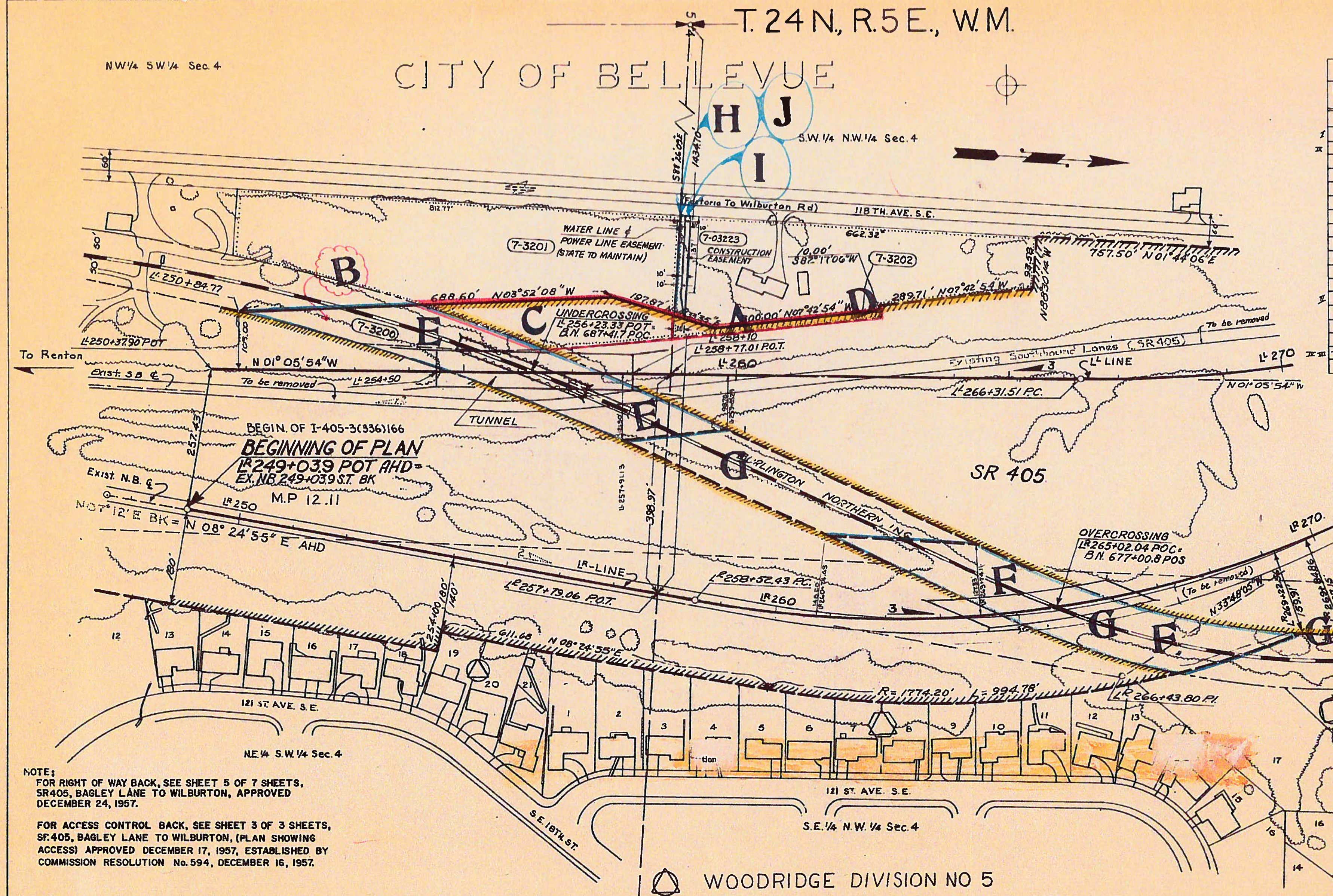
DATE JUNE 4, 1970
SHEET 1 OF 3 SHEETS

Designated for Limited Access Control by Commission Resolution No 95, July 23, 1953.

R/ D-3 SR 405/

REGION NO.	STATE	FED. AID PROJECT NO.	SHEET NO.
8	WASH.	I-405-3(336)166	

T.24N., R.5E., W.M.



NOTE:
FOR RIGHT OF WAY BACK, SEE SHEET 5 OF 7 SHEETS, SR405, BAGLEY LANE TO WILBURTON, APPROVED DECEMBER 24, 1957.

FOR ACCESS CONTROL BACK, SEE SHEET 3 OF 3 SHEETS, SR.405, BAGLEY LANE TO WILBURTON, (PLAN SHOWING ACCESS) APPROVED DECEMBER 17, 1957, ESTABLISHED BY COMMISSION RESOLUTION No. 594, DECEMBER 16, 1957.

OWNERSHIPS							
PARCEL NO.	NAME	TOTAL AREA	TAKE	REMAINDER LT.	REMAINDER RT.	CONSTRUCT. EASEMENT	WATER LINE POWER LINE EASEMENT
7-3200	BURLINGTON NORTHERN, Inc.	CROSSING EASEMENT					
I 7-3201	FRANCK (STERNOFF)	3.69 Ac.	0.64 Ac.	3.05 Ac.			
III 7-3202	GUNDERSON (EVANS)	2.39 Ac.	0.13 Ac.	2.26 Ac.			~~3077 S.F.~~
7-3203	SEE SHEET 2 OF RIGHT OF WAY PLAN AHEAD						
7-3204							
7-3205	SEE SHEET 3 OF RIGHT OF WAY PLAN AHEAD						
7-3206							
7-3207	HUTCHINS	68,958	1,087	67,871			
7-3208	HANSEN (PERKINS)	144,974	26,325	118,649			
7-3209	AZTEC, INC.	600	600	0			
7-3210	MC GRATH	1,650	970	680			
7-3211	AZTEC, INC.	73,590	24,637	48,953			
7-3212	HUMBLE OIL CO.	19,130	19,130	0			
II 7-3213	MEDGARD (VOLOTIN)	1,134,380	20,195	1,114,185			
7-3214	SHEPPARD	167,183	38,420	128,763			
7-3215	WIRTH (NAKATA)	171,613	23,075	148,538			
7-3216	MEDGARD (KODANI)	120,179	78	120,101			
IV III 7-03223	GUNDERSON (EVANS)	2.26 AC.				1630 S.F.	2047 S.F.

NOTE:
ALL BEARINGS AND DISTANCES FOLLOWED BY AN ASTERISK ARE TAKEN FROM TITLE REPORTS OR PLAT MAPS

SUPERSEDED

STA. LR 249+03.9 TO STA. LR 296+29.80 SUPERSEDED BY SR 405, S.E. 30TH ST. VIC. TO N.E. 40TH ST. VIC., SHEET 6 THRU 16 OF 36 SHEETS, APPROVED AND ADOPTED FEBRUARY 11, 2005

CENTER LINE RECORDED
VOLUME 4 HIGHWAY PLATS,
PAGE 189 AUD. FILE# 6721708
RECORDS OF COUNTY SHOWN
RW 2016

WOODRIDGE DIVISION NO 5
WOODRIDGE DIVISION NO. 6
WOODRIDGE DIVISION NO. 3

ACCESS NOTE:
NO ACCESS WILL BE PERMITTED BETWEEN THE BURLINGTON NORTHERN AND THE TRAVELED HIGHWAY LANES, STATION L[L] 254+70 TO L[L] 257+58 AND STATION L[R] 264+05 TO L[R] 266+08

CURVE DATA				
P.I. STATION	Δ	R	T	L
L[L] 272+49.04	27°45'00" Lt.	2500.00	617.53	1210.82
L[R] 266+43.80	42°13'00" Lt.	2050.00	791.37	1510.48

LEGEND
SCALE IN FEET: 100 0 100 200 300 400
ACCESS TO BE PROHIBITED SHOWN THUS
PROPERTY LINES
EXISTING STREETS
PROPERTY OWNERSHIP NUMBERS (7-3201)

STRUCTURES
MAINLINE
LOCAL ROADS

	AUTHORITY	DATE	SUBSEQUENT APPROVAL	BY
	Letter 3-1-05	3-18-05	Superseded Plan Sta. LR 249+03.9 to LR 271+00	[illegible]
IV	I.D.C. 8-21-73	8-31-73	Rev Water Line & Power Line Easemt. & Added Construct. Easemt. & Areas Parcel 7-03223	ALB
III	Letter 7-19-73	8-3-73	Deleted easement area parcel 7-3202, added parcel 7-03223	RLS
	Letter 11-8-71	11-19-71	Added easement vic. Sta. L[L] 259+00 on Lt; del. structure - added tunnel Sta. L[L] 258+23.33	RLH
II	Letter 7-30-71	8-13-71	Revised areas parcel 7-3213	RLS
I	Letter 11-18-70	12-3-70	Revised areas parcel 7-3201	RLS

Limited Access Features Tentatively Approved JUNE 4, 1970 by authority of Washington State Highway Commission.

EXHIBIT A

Limited Access established by Commission Findings and Order issued October 26, 1970.

SR 405 **MP 12.11 TO MP 13.04**

WILBURTON INTERCHANGE

KING COUNTY

RIGHT OF WAY AND LIMITED ACCESS
FULLY CONTROLLED
Station LR 249+03.9 to Station LR 271+00

WASHINGTON STATE HIGHWAY COMMISSION
DEPARTMENT OF HIGHWAYS
OLYMPIA WASHINGTON

ASSISTANT DIRECTOR FOR HIGHWAY DEVELOPMENT

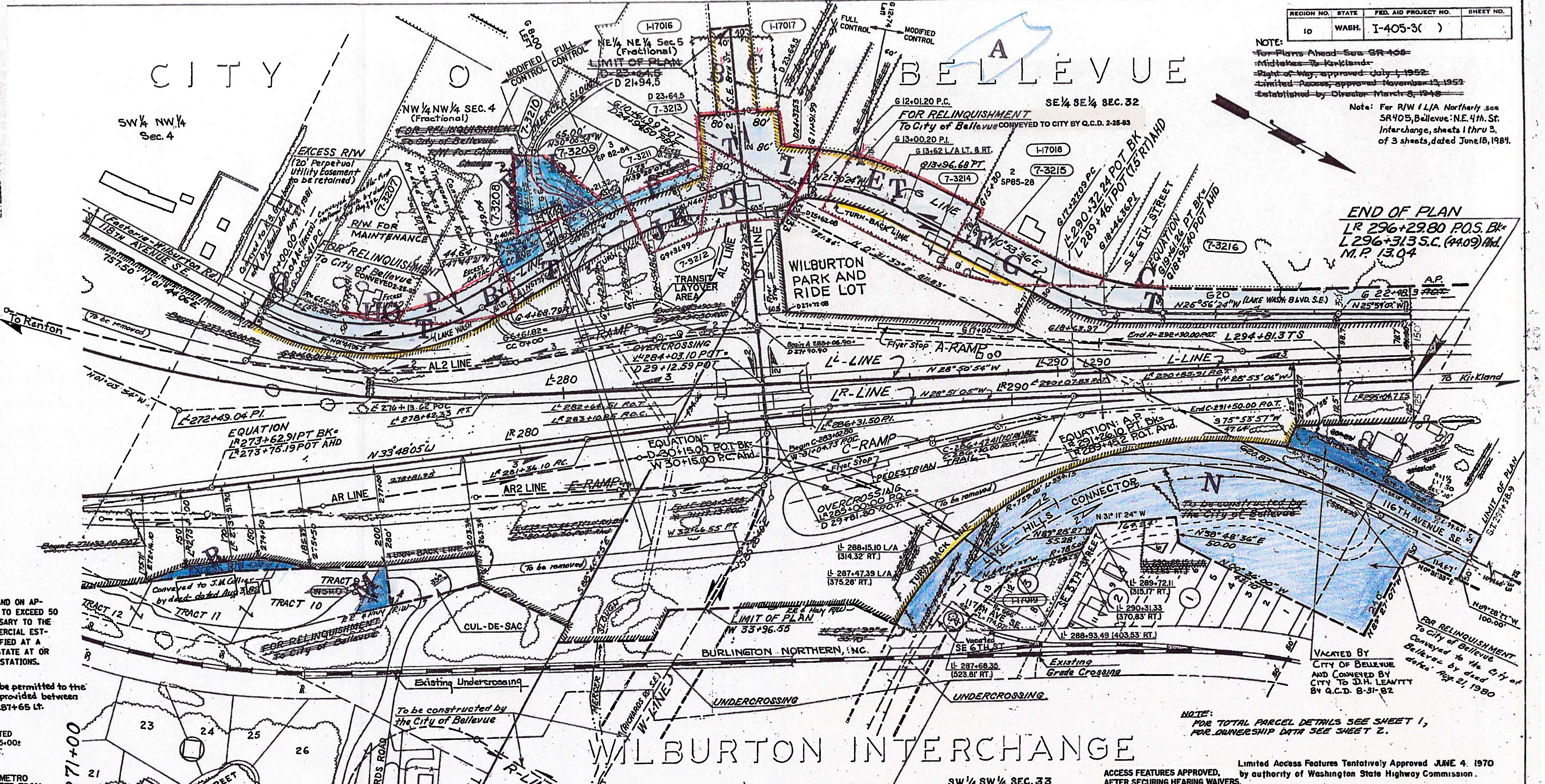
DATE JUNE 4 1970
SHEET 2 OF 3 SHEETS

Designated for Limited Access Control by Commission Resolution No. 95, July 23, 1953.

REGION NO.	STATE	FED. AID PROJECT NO.	SHEET NO.
10	WASH.	I-405-3( )	

NOTE:
~~For Plans Ahead See SR 405~~
~~Midlakes To Kirkland.~~
~~Right of Way approved July 1, 1952~~
~~Limited Access, approved November 13, 1952~~
~~Established by Director March 8, 1948~~

Note: For R/W & L/A Northerly see SR405, Bellevue: N.E. 4th St. Interchange, sheets 1 thru 3, of 3 sheets, dated June 18, 1984.



NOTE:
FOR TOTAL PARCEL DETAILS SEE SHEET 1,
FOR OWNERSHIP DATA SEE SHEET 2.

ACCESS NOTES:

TYPE D APPROACH IS AN OFF AND ON APPROACH IN LEGAL MANNER NOT TO EXCEED 50 FEET IN WIDTH FOR USE NECESSARY TO THE NORMAL OPERATION OF A COMMERCIAL ESTABLISHMENT. IT MAY BE SPECIFIED AT A POINT SATISFACTORY TO THE STATE AT OR BETWEEN DESIGNATED HIGHWAY STATIONS.

Access for pedestrians will be permitted to the Flyer Stops on walkways as provided between Sta. D 26+00 Lt. and Sta. L^L 287+65 Lt.

ACCESS FOR PEDESTRIANS WILL BE PERMITTED TO THE TRAIL DESIGNATED ON THE RIGHT BETWEEN STA. LR 285+00± AND LR 292+12 AT STA. LR 292+12 RT.

ACCESS NOTE: ACCESS FOR METRO BUSES ONLY WILL BE PERMITTED FROM THE LAYOVER AREA ON F-RAMP TO G-LINE AT STATION 4+84± (30' RT.)

NO. 21 THE PRIVILEGE OF SERVICING THE UTILITY LOCATED WITH THE RIGHT OF WAY WILL BE PERMITTED TO THE UTILITY SPECIFIED, SUBJECT TO THE CONDITIONS OF THE FRANCHISE OR PERMIT SPECIFIED.

** THIS APPROACH SHALL NOT EXCEED 50 FEET IN WIDTH, AND ALL PARTS OF THIS APPROACH SHALL BE LOCATED NORTH OF STATION G 12+74. USE OF THIS APPROACH IS LIMITED TO SERVICE VEHICLES ONLY.

OWNERSHIPS

PARCEL NO.	NAME	TOTAL AREA	R/W	LT.	REMAINDER RT.	EASMT	STATION	TYPE
I-17016	SPIEKER PROPERTIES	122,660 S.F.	ACCESS ONLY				G 7+75 LT.	D
I-17017	SPIEKER PROPERTIES	403,060 S.F.	ACCESS ONLY					
I-17018	THE OVERLAKE FUND	304,448 S.F.	ACCESS ONLY					D **
I-17019	NOT USED							

TOTAL AREA TAKEN FROM TITLE REPORTS OR RECORDED PLATS UNLESS NOTED OTHERWISE

ACCESS APPROACH SCHEDULE

ROAD APPROACH SCHEDULE

SPECIFIED USER	STATION ON ROADWAY	TYPE
Puget Sound Power & Lt. Co.	G 21+75 & G 18+90 Rt. - anchors - permit 7432	21

SW¼ SW¼ SEC. 33
LIMITED ACCESS FEATURES SHOWN ON REVISION DATED FEBRUARY 23, 2001 TENTATIVELY APPROVED BY THE RIGHT OF WAY PLANS ENGINEER

ACCESS FEATURES APPROVED, AFTER SECURING HEARING WAIVERS, BY STATE DESIGN ENGINEER ON JANUARY 4, 2002

Limited Access Features Tentatively Approved JUNE 4 1970 by authority of Washington State Highway Commission.

EXHIBIT A

Limited Access established by Commission Findings and Order issued October 26, 1970.

SR 405 MP 12.11 TO MP 13.04

WILBURTON INTERCHANGE

KING COUNTY

RIGHT OF WAY AND LIMITED ACCESS
FULL AND MODIFIED CONTROL
Station LR 271+00 to Station LR 296+29.8

WASHINGTON STATE HIGHWAY COMMISSION
DEPARTMENT OF HIGHWAYS
OLYMPIA WASHINGTON

ASSISTANT DIRECTOR FOR HIGHWAY DEVELOPMENT

DATE JUNE 4, 1970
SHEET 3 OF ~~6~~ 3 SHEETS

Designated for Limited Access Control by Commission Resolution No. 95, July 23, 1953.

CURVE DATA

P.I. STATION	Δ	R	T	L
L^L 272+49.04	27°45'00" Lt.	2500.00	617.53	1210.82
L^R 266+43.80	42°13'00" Lt.	2050.00	791.37	1510.48
L^R 286+31.50	4°57'00" Rt.	11,460.00	495.40	990.00
G- 2+60.01	59°00'00" Lt.	450.00	254.60	463.38
G- 7+98.74	10°45'00" Rt.	600.00	56.45	112.57
G- 13+00.20	22°24'00" Rt.	500.00	99.00	195.48
G- 18+46.36	26°50'00" Lt.	500.00	119.27	234.17
W- 31+45.09	36°01'55" Rt.	400.00	130.09	251.55

SPIRAL CURVE DATA

P.I. STATION	Δ	CΔ	D	R	T	L	δ	des	Ls
L 305+50.2	29°10' Rt.	26°55'	1°30'	3820.0	1068.9	1794.5	1	1°0.15'	1.5

LEGEND

ACCESS TO BE PROHIBITED SHOWN THUS ///////
PROPERTY LINES
EXISTING STREETS
WASHINGTON STATE HIGHWAY DEPARTMENT (WSHD)
PROPERTY OWNERSHIP NUMBERS (7-3200)

SCALE IN FEET

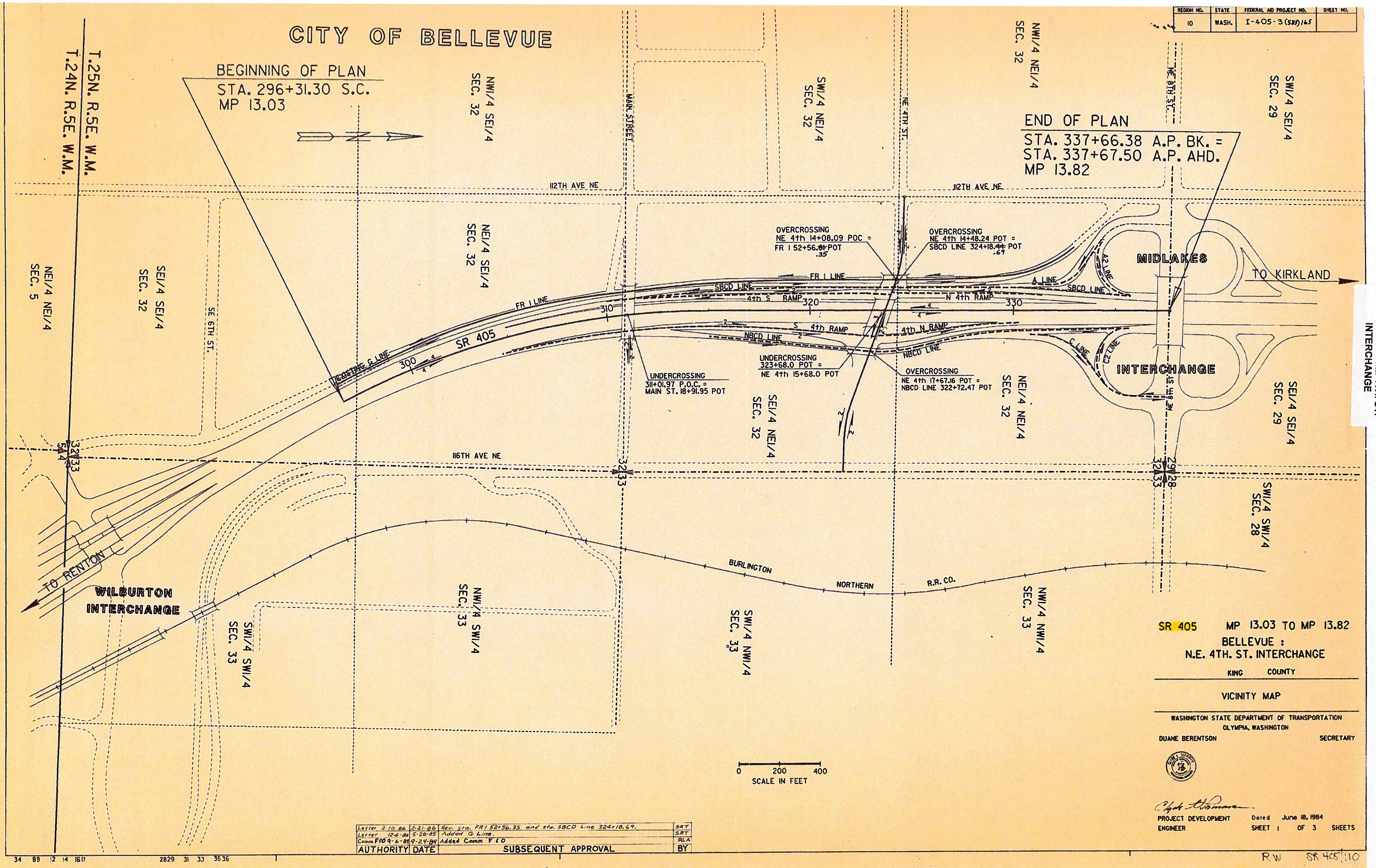
SUPERSEDED

STA. LR 249+03.9 TO STA. LR 296+29.80 SUPERSEDED BY SR 405, S.E. 30TH ST. VIC. TO N.E. 40TH ST. VIC., SHEET 6 THRU 16 OF 36 SHEETS, APPROVED AND ADOPTED FEBRUARY 11, 2005

AUTHORITY	DATE	SUBSEQUENT APPROVAL	BY
Letter 3-1-05	3-18-05	Superseded Plan Sta. LR 271+00 to LR 296+29.80	[illegible]
Letter 11-20-01	1-4-02	Added ** Approach Note to Parcel I-17018; Deleted Parcel I-17019; Deleted * Note; Added Hearing Waivers Note	[illegible]
Letter 4-25-01	5-18-01	Deleted Access on Rt. Sta. L 287+68.35 to L 290+68.15; Added Type D Approach Sta. G 13+10.5 Lt.; Revised Full Control to Modified Control Sta. G 12+74 Lt.	AMC
Letter 2-02-01	02-23-01	Added parcels I-17016 thru I-17019; Added L/A on Lt. Sta. G 6+77 to G 9+31.99 and on Lt. and Rt. Sta. G 11+91.99 to G 13+62 and Sta. D 21+94.5 to D 23+64.5 and on Rt. Sta. L^L 287+68.35 to L^L 290+68.15; Added AR Line, AR2 Line, AL Line and AL2 Line; Added Type D approach Sta. G 7+75 Lt.; Added Tentative Approval Note	HEP
Letter 7-1-91	5-22-92	Added Transit layover area on Lt. vic. Sta. F-280+00; Added Access note	HEP
Letter 10-3-89	10-13-89	Revised R/W on Rt. Sta L 293+70± To Sta L 296+80±; Noted Vacated And Conveyed Land By City of Bellevue.	BSM
Letter 6-13-89	9-29-89	Added Pedestrian Access note for trail on Rt. L^R 285+00± to L^R 292+12	DRS
Letter 12-6-84	5-28-85	Extended G Line from Sta. G 22+48.3 AP to End of Plan	SRT
Letter 5-4-81	6-12-81	Revised R/W & noted excess R/W on Lt. G 0+00 to G 9+85±; added CC Line	RLS
Letter 2-26-80	3-21-80	Revised R/W, L/A & turnback line, added Wilburton Park & Ride Lot, flyer stops on Rt. G 9+31.99 to G 17+00; pedestrian access permitted to flyer stops D 26+00 Lt. to L^L 287+65 Lt.	RLS
Ltrs. 8-20 & 9-12-74	10-1-74	Added metes & bounds for exist R/W 116th Ave. SE vic. L^R 295 on Rt.	PLS
Letter 3-17-72	3-31-72	Revised offset distance to turnback line on Lt. Sta. L 296+31.3 S.C.	RLS
Comm. Res. 2307	2-25-71	Privilege to service P.S.P.&L. anchors added, permit 7432 Sta. G 21+75 & G 18+90 on Rt.	RLS

SR 90 WILBURTON INTERCHANGE
KING COUNTY
I-3188 CS 17450
SHEET 3 OF 6 SHEET

D-3 SR405/4



REGION NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.
10	WASH.	I-405-3(581)165	

AUTHORITY	DATE	SUBSEQUENT APPROVAL	BY
Letter 2-10-86	2-21-86	Rev. sta. FR I 52+56.35 and sta. SBCD Line 324+18.69.	SRT
Letter 12-6-84	5-28-85	Added G Line.	SRT
Comm F109-6-84	9-24-84	Added Comm F10	RLA

SR 405 MP 13.03 TO MP 13.82
BELLEVUE :
N.E. 4TH. ST. INTERCHANGE
KING COUNTY

VICINITY MAP

WASHINGTON STATE DEPARTMENT OF TRANSPORTATION
OLYMPIA, WASHINGTON
DUANE BERENTSON SECRETARY

PROJECT DEVELOPMENT ENGINEER Dated June 18, 1984
SHEET 1 OF 3 SHEETS

RW SR 405.10
D-3

BELLEVUE : N.E. 4TH. ST. INTERCHANGE

CURVE DATA

P.I. STATION	DELTA	RADIUS	TANGENT	LENGTH	SPIRALS CA	SPIRALS θ	SPIRALS de	SPIRALS L
305+50.20	29° 10'00"RT.	3820.00'	1068.90'	1794.50'	26'55"	1	01 07'30"	1.5
~~FR132+31.47~~	[illegible]	[illegible]	[illegible]	[illegible]				
~~FR144+08.26~~ FRI 44+08.25	07° 10'42"RT.	~~3031.00'~~ 6627.86'	~~310.85'~~ 415.73'	~~631.06'~~ 830.38'				
FRI 35+28.50	12°05'20"RT.	2600.00'	275.31'	548.58'				
G 27+61.76	06°59'20"RT.	3910.00'	238.84'	477.08'				
~~R14+45.18~~	~~03°12'31"RT.~~	~~3839.53'~~	~~107.54'~~	~~216.03'~~				
R14+45.16	03°12'32"RT.	3839.26'	107.54'	215.02'				

T. 25 N. R. 5 E. W.M.

CITY OF BELLEVUE

ACCESS NOTE:

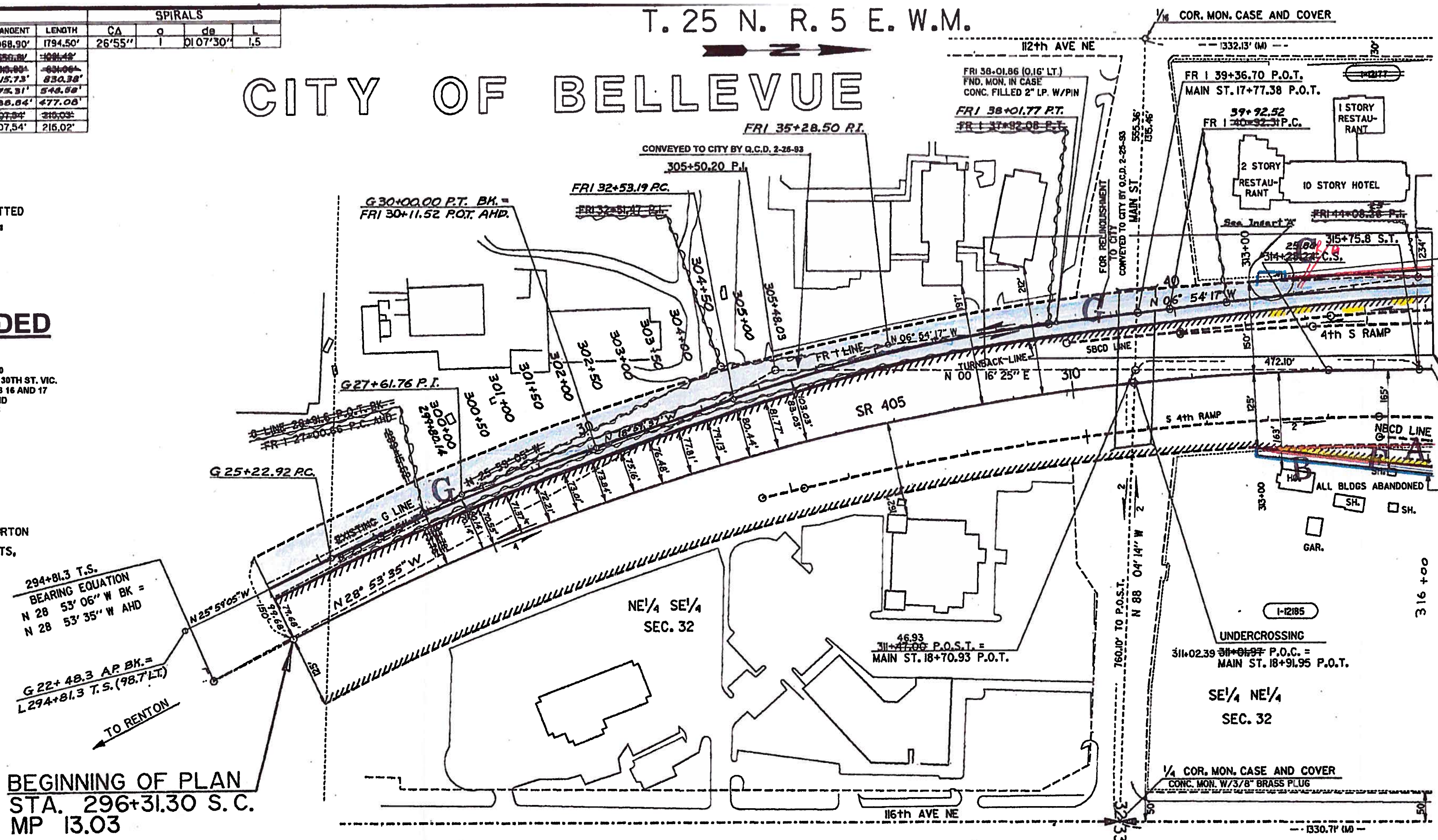
TRAFFIC MOVEMENT WILL BE PERMITTED OVER THE HIGHWAY STRUCTURE AT: STA. 311+01.97 (MAIN STREET).

SUPERSEDED

STA. 296+31.30 TO STA. 316+00 SUPERSEDED BY SR 405, S.E. 30TH ST. VIC. TO N.E. 40TH ST. VIC., SHEETS 16 AND 17 OF 36 SHEETS, APPROVED AND ADOPTED FEBRUARY 11, 2005

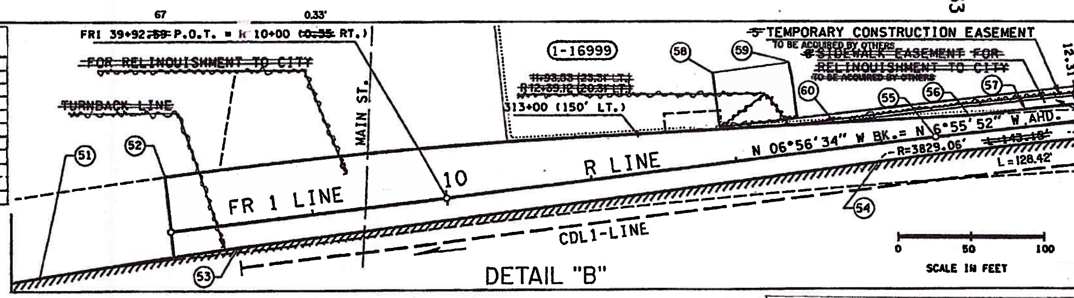
NOTE:

FOR RIGHT OF WAY AND LIMITED ACCESS SOUTH, SEE SR 405, WILBURTON INTERCHANGE, SHEET 3 OF 6 SHEETS, APPROVED JUNE 4, 1970



BEGINNING OF PLAN
STA. 296+31.30 S.C.
MP 13.03

◯	DESCRIPTION
51	FRI 37+03.76 (20' RT.)
52	FRI 38+01.77 P.T. (37.91 LT., 18.17' RT.)
53	310+29.85 (95.46' LT.)
54	310+59.35 (126.23' LT.)
55	R 13+37.62 P.C.
56	R 13+62.31 (12.31' LT.)
57	R=3851.56', L=80.62'
58	R 11+91.70 (23.43' LT., 63.70' LT.)
59	R 12+44.90 (63.70' LT., 23.31' LT.)
60	R 12+69.73 (18.31' LT.)



LIMITED ACCESS FEATURES SHOWN ON REVISION DATED DECEMBER 28, 2001 TENTATIVELY APPROVED BY THE RIGHT OF WAY PLANS ENGINEER

R/W TO BE AQUIRED BY OTHERS

SIDEWALK, LANDSCAPE, LIGHTING AND UTILITY EASEMENT TO BE ACQUIRED BY OTHERS

** SEWER EASEMENT
≠ STRUCTURE EASEMENT
+ SLOPE EASEMENT
≠ SLOPE & DRAINAGE EASEMENT
⊖ AIRSPACE CORRIDOR
* CONSTRUCTION PERMIT
* ~~UTILITIES & STRUCTURE~~ EASEMENT UTILITY

▣ FOR AREAS SEE SR 405, N.E. 2ND ST. VIC. TO N.E. 8TH ST., SHEET 2 OF 7 SHEETS, APPROVED AND ADOPTED DECEMBER 28, 2001

PARCEL NO.	NAME	TOTAL AREA	R/W	LT. REMAINDER	RT. REMAINDER	EASM'T
I-16999	▣					
I-12192	PUGET WESTERN W/ LSE. TO BETA DEV.	20,083	95		19,988	+ 1104
I-12191	NORTHMOUNT CAMP SERV.LTD.	193,952	6490		187,462	** 3550
I-12190	BROADWAY NOVELTY CO.	257,969	65,642		192,327	≠3150 **3540 ≠1000
I-12189	OLSON	12,908			12,908	** 554
I-12188	PUGET WESTERN W/ CONT. P.S.P.&L.	50,048			50,048	≠355 **756 +4775
I-12187	CITY OF BELLEVUE	81,811	78,677		3134	** 1500
I-12186	PAC. NATL. BANK et. al	36,870	13,177		23,693	** 2312
I-12185	CITY OF BELLEVUE	SEE SHEET 2				
I-12184	WRG ASSOC. FIVE	33,221	1439	31,782		*1364
I-12183	WALL & REDEKOP	72,610	8248	64,362		* 2093
I-12182	ALASKA LABORERS RET. FUND.	86,828	12,238	74,590		*3606 *4184 ⊖3988
I-12181	MALASPINA (SABEY)	32,115	8661	23,454		*3016 ⊖48
I-12180	112th ST. ASSOC.	50,689	4940	45,749		*1442
I-12179	MANUFACTURERS LIFE INS. CO.	76,747	6052	70,695		
I-12178	TALLY BELLEVUE N.V.	89,503	9455		80,048	
I-12177	BARTON ST. CORP. et. al	SEE SHEET 2				

ALL AREAS SHOWN ARE IN SQUARE FEET **OWNERSHIPS** FOR SHEET NO. 3

* UTILITY EASEMENT
* CONSTRUCTION PERMIT
** SEWER EASEMENT

PARCEL NO.	NAME	TOTAL AREA	R/W	LT. REMAINDER	RT. REMAINDER	EASM'T
I-12185	CITY OF BELLEVUE	300,751	8,693		292,058	** 3626
I-12177	BARTON ST. CORP. et al	219,851	2,727	217,124		* 500 * 520

ALL AREAS SHOWN ARE IN SQUARE FEET OWNERSHIPS

REF.	AUTHORITY	DATE	SUBSEQUENT APPROVAL	BY
	Letter 3-10-05	3-18-05	Superseded Plan Sta. 296+31.30 to Sta. 316+00	[illegible]
	Letter 11-27-02	12-03-02	Revised sidewalk easement to sidewalk, landscape, lighting and utility easement; Added survey cross reference note; Revised radius and length for point 57; Revised curve data PI Sta. R 14+45.16	HEP
	Letter 9-27-02	10-16-02	Revised Temporary Construction Easement Sta. R 11+91.70 to R 12+44.90	[illegible]
	Letter 6-5-02	6-25-02	Revised and Noted To Be Acquired by Others Temporary Construction Easement, and Sidewalk Easement on Lt. Sta. R 11+93.53 to 316+00; Revised Undercrossing Sta. 311+02.39 and Sta. 311+46.93; Deleted Turnback Line and Area for Relinquishment on FRI Line; Added Exhibit A and F&O Notes	[illegible]
	Letter 11-02-01	12-28-01	Revised R/W and L/A Sta. FRI 37+03.76 Rt. to 316+00 Lt.; Revised R/W on Lt. Sta. R 13+62.18 to R 14+40±; Added sidewalk easement on Lt. Sta. R 12+69.60 to R 14+40±; Added temporary construction easement on Lt. Sta. R 12+39.12 to R 14+40±; Added parcel I-16999; Added Tentative Note; Added DETAIL "B"	HEP
	Letter 7-18-86	12-11-86	Rev. Areas Pcl. I-12181 & I-12182.	DRS
	Letter 7-10-86 10-8-86	11-7-86	Rev. Area Pcl. I-12177; Added Insert "A", Utility Easement on Lt. Sta. L313+18.74 to L313+57.22.	DRS
	Letter 2-10-86	2-21-86	Rev. alignment FR I Line sta. FRI 39+92.52 P.C. to FRI 44+30±.	SRT
	Letter 12-6-84	5-28-85	Rev. R/W & L/A on Lt. Sta. 296+31.30 to 309+90±, G-Line & FR I Line Alignment Sta. G 24+03± to FR I 38+01.77, and Sta. 314+25.80.	SRT
Letter 8-20-84	Comm. F&O 9-6-84	9-24-84	Added Comm. F&O; Added sewer easm't Rt. Sta. 313+00 to 316+00; Exibit A note added; Added sewer easm't area parcel I-12185	RLA

10 | WASH. | I-405-3 (F&P)165

LEGEND

ACCESS TO BE PROHIBITED SHOWN THUS ////////
PROPERTY OWNERSHIP NUMBERS (I-12177)
PROPERTY LINES

0 100 200
SCALE IN FEET

FOR CENTERLINE SURVEY RETRACEMENT INFO BY INCA ENGINEERS, INC. SEE RECORD OF SURVEY FILED UNDER AUDITOR'S FILE #20021127900008

FOR R/W AND L/A NORTH, SEE SR 405, N.E. 2ND ST. VIC. TO N.E. 8TH ST., SHEETS 2 AND 3 OF 7 SHEETS, APPROVED AND ADOPTED JUNE 25, 2002

EXHIBIT A

LIMITED ACCESS ESTABLISHED BY DIRECTOR, ENVIRONMENTAL AND ENGINEERING PROGRAMS FINDINGS AND ORDER ADOPTED JUNE 21, 2002

EXHIBIT A

LIMITED ACCESS ESTABLISHED BY COMMISSION FINDINGS AND ORDER ADOPTED SEPT. 6, 1984

LIMITED ACCESS FEATURES TENTATIVELY APPROVED JUNE 18, 1984 BY PROJECT DEVELOPMENT ENGINEER.

SR 405 MP 13.03 TO MP 13.82
BELLEVUE : N.E. 4TH. ST. INTERCHANGE

KING COUNTY

RIGHT OF WAY AND LIMITED ACCESS PLAN
FULL CONTROL

STATION 296+31.3 TO STATION 316+00

WASHINGTON STATE DEPARTMENT OF TRANSPORTATION
OLYMPIA, WASHINGTON

DUANE BERENTSON SECRETARY

PROJECT DEVELOPMENT ENGINEER

Dated June 18, 1984
SHEET 2 OF 3 SHEETS

DESIGNATED FOR LIMITED ACCESS CONTROL BY COMM. RES. NO. 95, JULY 23, 1953.

R/W SR 405/110

3

AUTHORITY	DATE	SUBSEQUENT APPROVAL	BY
Letter 7-10-86 7-23-86 10-8-86	12-11-86	Deleted Insert "C"; Added Insert "F"; Added Airspace Corridor on Rt. Vic. Sta. N.E. 4th 12+80; Rev. Const. Permit on Lt. Vic. Sta. N.E. 4th 12+30; Added Const. Permit on Lt. Sta. N.E. 4th 12+20± to N.E. 4th 13+63±; Rev. R/W & Added Airspace Corridor Sta. N.E. 4th 12+30± to N.E. 4th 14+00± & Sta. N.E. 4th 13+80± to N.E. 4th 14+80±; Rev. Util. & Struct. Easm't to Struct. Easm't on Lt. Sta. N.E. 4th 10+35.07 to N.E. 4th 13+70±	DRS
Letter 3-13-91	3-29-91	Added easement beneath airspace corridor	HEP
Letter 9-17-91	12-27-91	Rev. R/W and L/A on Lt. Sta. 335+42.34 to 337+80±	HEP
Letter 9-17-96	9-27-96	Revised R/W as acquired on Lt. vicinity Sta. 332+00	HEP
Letter 6-5-02	6-26-02	Superseded Plan Sta. 316+00 to 337+66.38; Noted Conveyances; Added Exhibit A and F&O Notes	

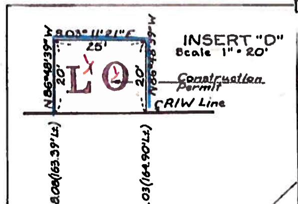
SUPERSEDED

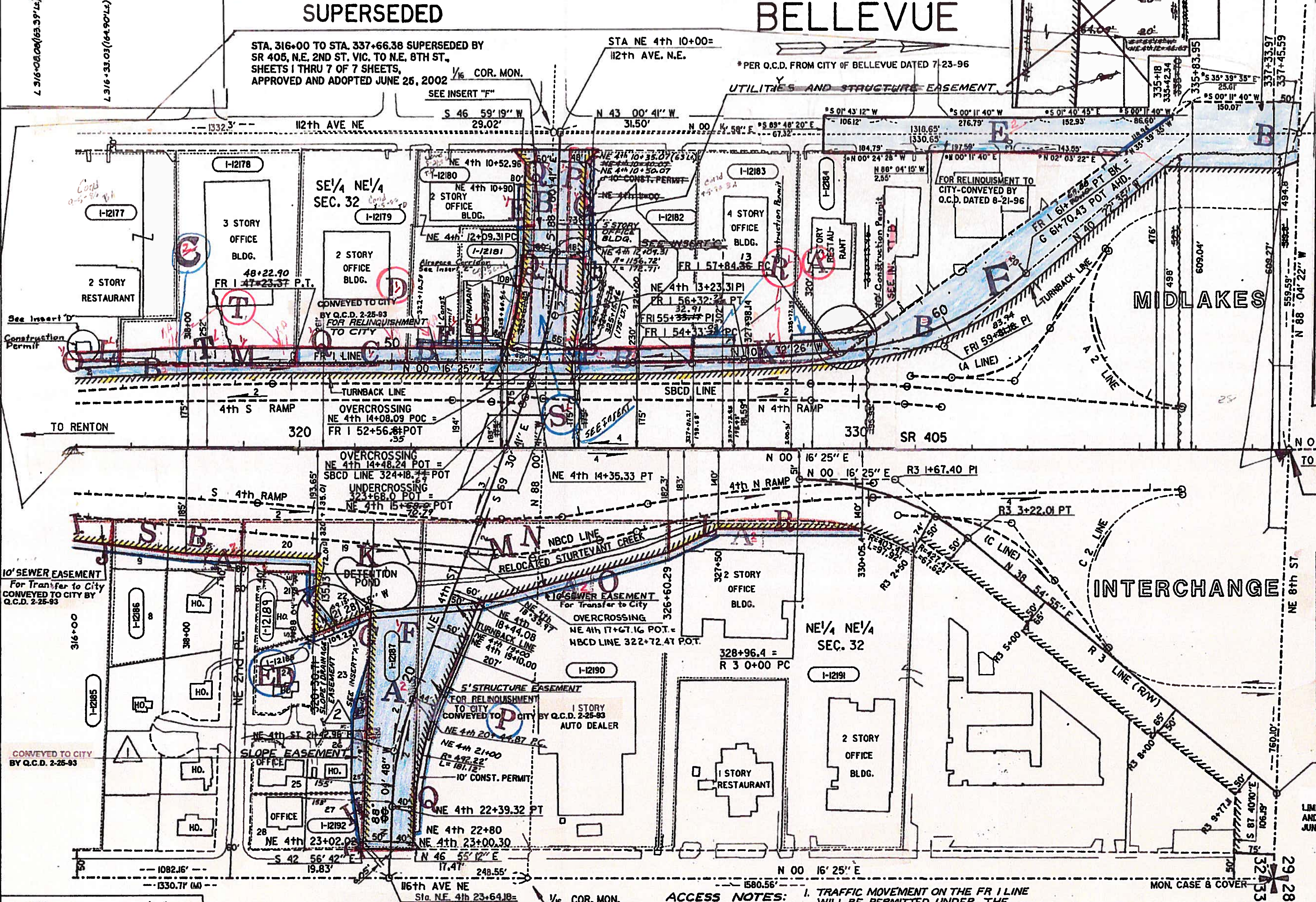
STA. 316+00 TO STA. 337+66.38 SUPERSEDED BY SR 405, N.E. 2ND ST. VIC. TO N.E. 8TH ST., SHEETS 1 THRU 7 OF 7 SHEETS, APPROVED AND ADOPTED JUNE 26, 2002

T. 25 N. R. 5 E. W.M.
CITY OF BELLEVUE

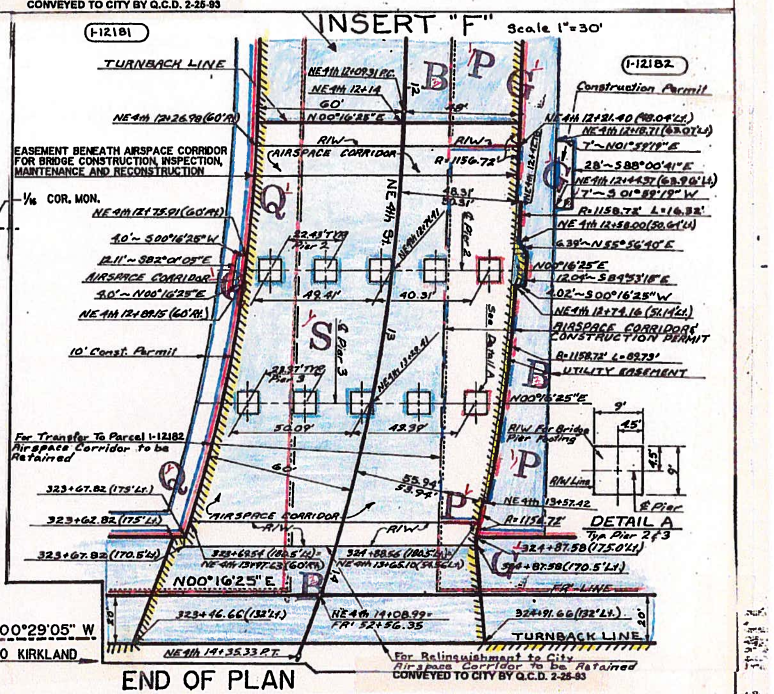
*PER Q.C.D. FROM CITY OF BELLEVUE DATED 7-23-96

REGION NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.
10	WASH.	I-405-3 (583)165	



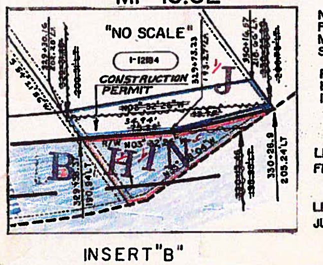


SEE INSERT "F"
1/16 COR. MON.
STA NE 4th 10+00=
112th AVE. N.E.
UTILITIES AND STRUCTURE EASEMENT
112th AVE NE
S 46° 59' 19" W
N 43° 00' 41" W
SE1/4 NE1/4
SEC. 32
3 STORY OFFICE BLDG.
2 STORY OFFICE BLDG.
2 STORY RESTAURANT
4 STORY OFFICE BLDG.
STORY RESTAURANT
CONVEYED TO CITY BY Q.C.D. 2-25-93
FOR RELINQUISHMENT TO CITY
FOR RELINQUISHMENT TO CITY-CONVEYED BY Q.C.D. DATED 8-21-96
See Insert "D"
Construction Permit
TURNBACK LINE
SBCD LINE
4th S RAMP
N 4th RAMP
OVERCROSSING
NE 4th 14+08.09 POC
FR 1 52+56.81 POT
TO RENTON
320
330
SR 405
MIDLAKES
(A LINE)
A 2 LINE
TO KIRKLAND
N 00°29'05" W
OVERCROSSING
NE 4th 14+48.24 POT =
SBCD LINE 324+18.24 POT
UNDERCROSSING
S 4th RAMP
4th N RAMP
NE 4th 14+35.33 PT
R3 1+67.40 PI
R3 3+22.01 PT
NBCD LINE
RELOCATED STURTEVANT CREEK
DETENTION POND
10' SEWER EASEMENT
For Transfer to City
CONVEYED TO CITY BY Q.C.D. 2-25-93
OVERCROSSING
NE 4th 17+67.16 P.O.T. =
NBCD LINE 322+72.47 P.O.T.
2 STORY OFFICE BLDG.
328+96.4 =
R 3 0+00 PC
NE1/4 NE1/4
SEC. 32
C 2 LINE
(C LINE)
INTERCHANGE
R 3 LINE (R/W)
NE 8th ST
5' STRUCTURE EASEMENT
1 STORY AUTO DEALER
1 STORY RESTAURANT
2 STORY OFFICE BLDG.
SLOPE EASEMENT
NE 2nd PL.
NE 4th 22+39.32 PT
NE 4th 22+80
NE 4th 23+00.30
NE 4th 23+02.08
10' CONST. PERMIT
116th AVE NE
Sta. NE 4th 23+64.18=
116th Ave. N.E.
1/16 COR. MON.
MON. CASE & COVER
R 3 10+33.4
CONVEYED TO CITY BY Q.C.D. 2-25-93



INSERT "F" Scale 1" = 30'
CONVEYED TO CITY BY Q.C.D. 2-25-93
TURNBACK LINE
EASEMENT BENEATH AIRSPACE CORRIDOR FOR BRIDGE CONSTRUCTION, INSPECTION, MAINTENANCE AND RECONSTRUCTION
AIRSPACE CORRIDOR
Construction Permit
10' Const. Permit
For Transfer to Parcel 1-12182 Airspace Corridor to be Retained
DETAIL A
For Relinquishment to City Airspace Corridor to be Retained
CONVEYED TO CITY BY Q.C.D. 2-25-93

END OF PLAN
STA. 337+66.38 A.P. BK.=
STA. 337+67.50 A.P. AHD.
MP 13.82



INSERT "B"

NOTE:
FOR RIGHT OF WAY NORTH, SEE SR 405, MID LAKES TO KIRKLAND, SHEET 2 OF 27 SHEETS, APPROVED JULY 1, 1952.

FOR L/A NORTH SEE SR 405, MIDLAKES TO KIRKLAND PLAN SHOWING ACCESS, SHEET 1 OF 3 SHEETS APPROVED NOV. 13, 1957.

EXHIBIT A
LIMITED ACCESS ESTABLISHED BY COMMISSION FINDINGS AND ORDER ADOPTED SEPT. 6, 1984.

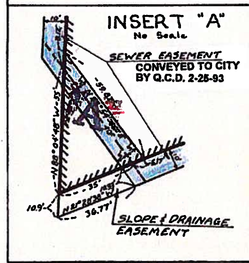
LIMITED ACCESS FEATURES TENTATIVELY APPROVED JUNE 18, 1984 BY PROJECT DEVELOPMENT ENGINEER.

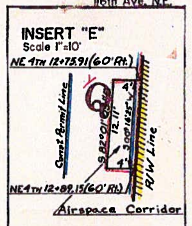
EXHIBIT A
LIMITED ACCESS ESTABLISHED BY DIRECTOR, ENVIRONMENTAL AND ENGINEERING PROGRAMS FINDINGS AND ORDER ADOPTED JUNE 21, 2002

SR 405 MP 13.03 TO MP 13.82
BELLEVUE :
N.E. 4TH. ST. INTERCHANGE
KING COUNTY
RIGHT OF WAY AND LIMITED ACCESS PLAN
FULL CONTROL
STATION 316+00 TO STATION 337+66.38
WASHINGTON STATE DEPARTMENT OF TRANSPORTATION
OLYMPIA, WASHINGTON
DUANE BERENTSON SECRETARY

PROJECT DEVELOPMENT ENGINEER
Dated June 18, 1984
SHEET 3 OF 3 SHEETS

DESIGNATED FOR LIMITED ACCESS CONTROL BY COMM. RES. NO. 95, JULY 23, 1953.





LEGEND
ACCESS TO BE PROHIBITED SHOWN THUS
PROPERTY OWNERSHIP NUMBERS (1-12345)
PROPERTY LINES
SCALE IN FEET 0 100 200

CURVE DATA

P.I. STATION	DELTA	RADIUS	TANGENT	LENGTH
FR1 44+08.25	07 10'42"RT.	6,627.86'	415.73'	830.38'
FR1 55+32.91	03 48'51"LT.	3000.00'	99.89'	199.71'
FR1 59+83.94	36 50'09"LT.	600.00'	199.81'	385.75'
NE 4th 13+23.31	18 30'00"RT.	700.00'	114.00'	226.02'
NE 4th 21+42.96	18 34'07"LT.	600.00'	98.09'	194.45'
R3 1+67.40	38 38'30"RT.	477.47'	167.40'	322.01'

ACCESS NOTES:
1. TRAFFIC MOVEMENT ON THE FR I LINE WILL BE PERMITTED UNDER THE STRUCTURE AT: N.E. 4th STA. 14+08.09.
2. ACCESS WILL BE PERMITTED BETWEEN STATION L320+33 (266' RT.) TO STATION L 320+69 (314' RT.) FOR MAINTENANCE AND OPERATION OF THE SANITARY SEWER LINE BY THE CITY OF BELLEVUE SEWER DEPARTMENT. NO ACCESS WILL BE ALLOWED TO THE TRAVELED HIGHWAY LANES OR RAMPS.

Moved Revision Block

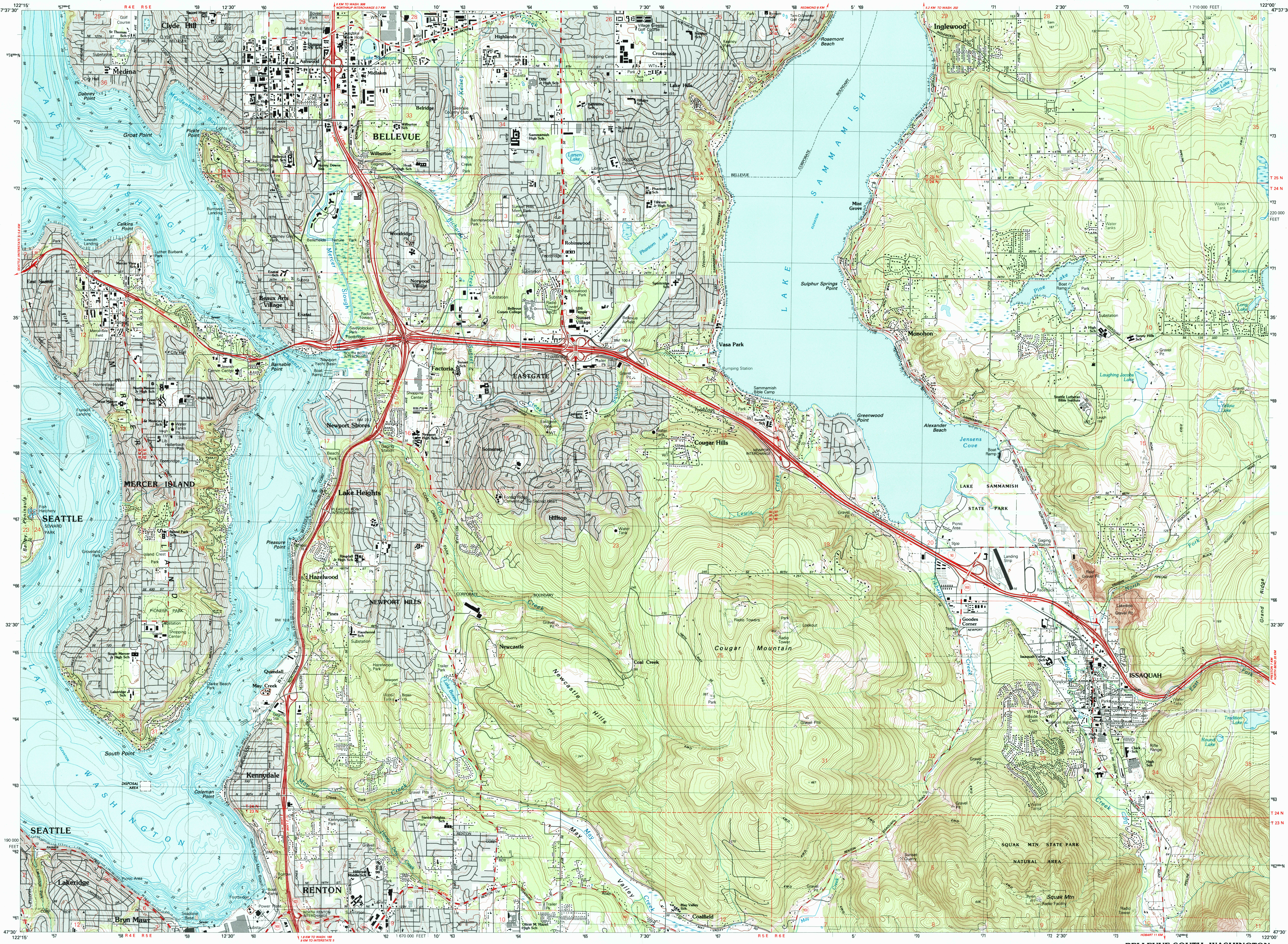
REF.	AUTHORITY	DATE	SUBSEQUENT APPROVAL	BY
	Letter 7-10-86 10-8-86	11-7-86	Rev. Area's Pcl's 1-12178 thru 1-12181, 1-12183 & 1-12184; Added Inserts "D" & "E" Const. Permit on Lt. Sta. L 316+08.08 to L 316+33.03, Airspace Corridor on Rt. NE 4th 12+75.91 to NE 4th 12+82.15	DRS
	Letter 3-13-86	3-21-86	Rev. sta. NE 4th 15+70.79; Rev. areas Pcl. 1-12190.	SRT
	Letter 2-10-86	2-21-86	Rev. alignment FR 1 Line sta. FR 1 44+30± to FR 1 48+22.90, sta. FR 1 54+33.02 to FR 1 56+32.73, and sta. FR 1 57+84.13 to FR 1 61+69.88; Deleted Const. Permit on Lt. sta. NE 4th 10+40.07 to 324+97.74; Added Utilities and Structure Esm't. on Lt. sta. NE 4th 10+35.07 to 325+15.46; Added Insert "C"; Rev. areas Pcl's. 1-12182 & 1-12187, Rev. Sta. FR1 52+56.35 & Sta. SBCD Line 324+18.69.	SRT
	Letter 12-11-85	12-20-85	Added Slope / Drainage Easement Vic. sta. 320+50 Rt.	SRT
	Letter 7-2-85	7-19-85	Rev. Const. Permit on Lt. Sta. 322+10.50 to 323+60.46 and Sta. 328+77.58 to 330+26.9; Added Const. Permit on Lt. Sta. 327+01.21 to 327+73.85; Rev. R/W on Lt. Sta. 329+73.23 to 330+26.9; Rev. areas Parcel 1-12180, 1-12181, 1-12183 & 1-12184	
	Letter 2-7-85 Letter 12-6-84	5-28-85	Rev Const. Permit on Lt. Sta. 329+73.23 to 330+25.20, Const. Permit on Lt. Sta. NE 4th 10+40.07 to NE 4th 11+00, Areas Pcl's. 1-12181, 1-12182, 1-12184, 1-12187, 1-12188, 1-12190 and 1-12192; Added Structure Easement on Lt. Sta. NE 4th 19+00 to NE 4th 21+00, Slope Easement on Rt. Sta. NE 4th 20+00± to NE 4th 23+05±, and Access Note 2.	SRT
Ltr. 8-20-84	Comm. F&O 9-6-84	9-24-84	Added Comm. F&O; Added sewer easm't Rt. Sta. 316+00 to 330+05.4; Added Const. Permit Lt. Sta 329+31.46 to 330+25.20; Exhibit A note added; Added sewer easm't area Parcels 1-12186, 1-12187, 1-12188, 1-12190, 1-12191 and added Parcel 1-12189, revised area Parcel 1-12182, added Construction Permit area Parcel 1-12184	RLA

RW SR 405 110

Appendix C – Historic Topographic Maps

BELLEVUE SOUTH, WASHINGTON KING COUNTY

7.5x15 MINUTE SERIES (TOPOGRAPHIC-BATHYMETRIC)



122°15' 47°30' 57 58 R 4 E R 5 E 59 12'30" 60 62 1 670 000 FEET 10' 63 64 65 7'30" 67 R 5 E R 6 E 5' 70 71 72 2'30" 73 74000m E 75 122°00' 47°30'

INTERIOR—GEOLOGICAL SURVEY, RESTON, VIRGINIA—1983

SCALE 1:25 000

KILOMETERS 1 .5 0 1 2 3 4

MILES 1 .5 0 1 2

1 CENTIMETER ON THE MAP REPRESENTS 250 METERS ON THE GROUND

CONTOUR INTERVAL 5 METERS

500 0 1000 2000 3000 4000 5000 METERS

1000 0 2000 4000 6000 8000 10 000 12 000 14 000 16 000 FEET

BELLEVUE SOUTH, WASHINGTON

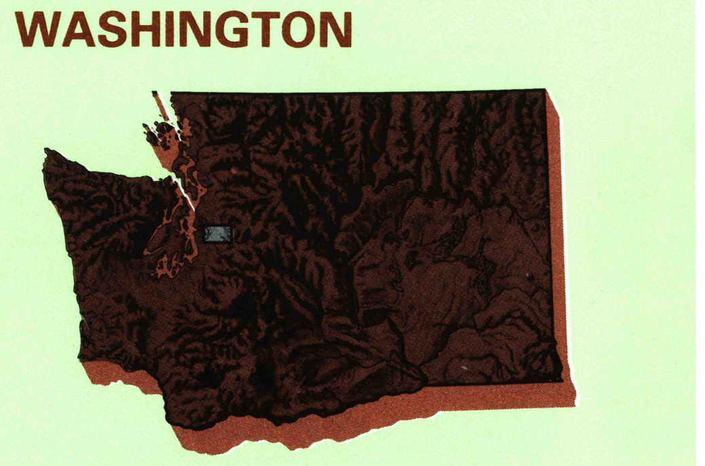
N4730—W12200/7.5X15

1983

USGS
science for a changing world

1:25 000-scale *metric*
topographic-bathymetric map of

Bellevue South
WASHINGTON



7.5 X 15 MINUTE QUADRANGLE SHOWING

Contours and elevations in meters
Highways, roads and other manmade structures
Water features
Woodland areas
Geographic names
Bathymetric contours in meters

U. S. GEOLOGICAL SURVEY
NATIONAL OCEAN SERVICE
1983

Produced by the United States Geological Survey and the National Ocean Service

Control by USGS, NOS/NOAA, USCE and King County Engineer Office

Compiled by photogrammetric methods from aerial photographs taken 1977. Field checked 1979. Map edited 1983

Supersedes Mercer Island and Issaquah 1:24 000-scale maps dated 1950

Bathymetry compiled by the National Ocean Service from tide-coordinated hydrographic surveys. This information is not intended for navigational purposes

Mean low water (dotted) line and mean high water (heavy solid) line compiled by NOS from tide coordinated aerial photographs

Projection and 1000-meter grid, zone 10, Universal Transverse Mercator
10,000-foot grid ticks based on Washington coordinate system, north zone
1927 North American Datum
To place on the predicted North American Datum 1983 move the projection lines 22 meters north and 93 meters east

Grey tint indicates areas in which only landmark buildings are shown

There may be private inholdings within the boundaries of the National or State reservations shown on this map

CONTOUR INTERVAL 5 METERS
NATIONAL GEODETIC VERTICAL DATUM OF 1929
BATHYMETRIC CONTOUR INTERVAL 2 METERS WITH SUPPLEMENTARY 1 METER CONTOURS-DATUM IS LOW WATER OF LAKE WHICH IS 20 FEET ABOVE THE PLANE OF MEAN LOWER LOW WATER IN PUGET SOUND
THE RELATIONSHIP BETWEEN THE TWO DATUMS IS VARIABLE
CONTROL ELEVATIONS SHOWN TO THE NEAREST 0.1 METER
OTHER ELEVATIONS SHOWN TO THE NEAREST METER

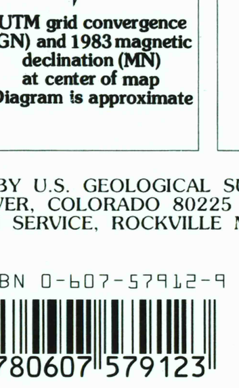
BASE MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS. BATHYMETRIC SURVEY DATA COMPLIES WITH INTERNATIONAL HYDROGRAPHIC ORGANIZATION (IHO) SPECIAL PUBLICATION 44 ACCURACY STANDARDS AND/OR STANDARDS USED AS OF THE DATE OF THE SURVEYS

CONVERSION TABLE

Meters	Feet
1	3.2808
2	6.5617
3	9.8425
4	13.1234
5	16.4042
6	19.6850
7	22.9659
8	26.2467
9	29.5276
10	32.8084

To convert meters to feet multiply by 3.2808
To convert feet to meters multiply by 0.3048

DECLINATION DIAGRAM



UTM grid convergence (GN) and 1983 magnetic declination (MN) at center of map
Diagram is approximate

ADJOINING MAPS

1	2	3
4		5
6	7	8

1 Seattle North
2 Bellevue North
3 Carnation*
4 Seattle South
5 Fall City*
6 Burien
7 Renton
8 Hobart*
*1:24 000

FOR SALE BY U.S. GEOLOGICAL SURVEY
DENVER, COLORADO 80225
AND NATIONAL OCEAN SERVICE, ROCKVILLE, MARYLAND 20852

ISBN 0-607-57912-9

Topographic Map Symbols

- Primary highway, hard surface
- Secondary highway, hard surface
- Light-duty road, hard or improved surface
- Unimproved road; trail
- Route marker: Interstate; U. S.; State
- Railroad: standard gage; narrow gage
- Bridge; drawbridge
- Footbridge; overpass; underpass
- Built-up area: only selected landmark buildings shown
- House; barn; church; school; large structure
- Boundary:
  - National, with monument
  - State
  - County, parish
  - Civil township, precinct, district
  - Incorporated city, village, town
  - National or State reservation; small park
  - Land grant with monument; found section corner
  - U. S. public lands survey: range, township; section
  - Range, township; section line: location approximate
- Fence or field line
- Power transmission line, located tower
- Dam; dam with lock
- Cemetery; grave — Cem
- Campground; picnic area; U. S. location monument
- Windmill; water well; spring
- Mine shaft; prospect; adit or cave
- Control: horizontal station; vertical station; spot elevation
- Contours: index; intermediate; supplementary; depression
- Distorted surface: strip mine, lava; sand
- Bathymetric contours: index; intermediate
- Perennial lake and stream; intermittent lake and stream
- Rapids, large and small; falls, large and small
- Swamp; marsh
- Submerged marsh; land subject to controlled inundation
- Woodland; scattered trees
- Scrub; mangrove
- Orchard; vineyard

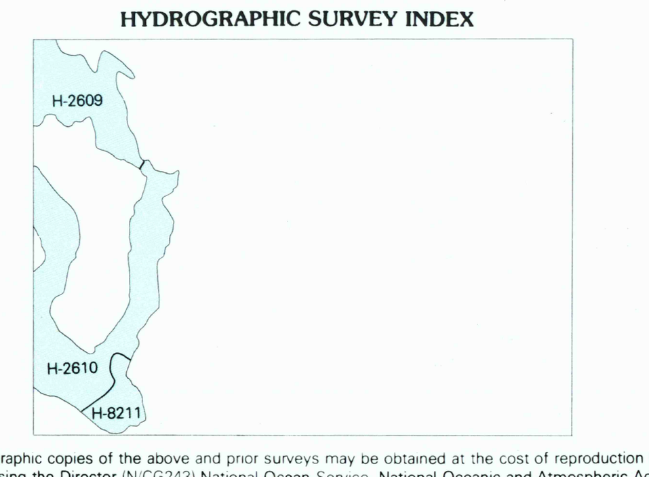
A pamphlet describing topographic maps is available on request

20% TOTAL RECOVERED FIBER

HYDROGRAPHIC SURVEY INFORMATION

SURVEY NUMBER	SURVEY DATE	SURVEY SCALE	SURVEY LINE SPACING (NAUT. MILES)
H-2609	1902	1:10,000	.06-.25
H-2610	1902	1:10,000	.04-.23
H-8211	1956	1:10,000	.02-.04

HYDROGRAPHIC SURVEY INDEX

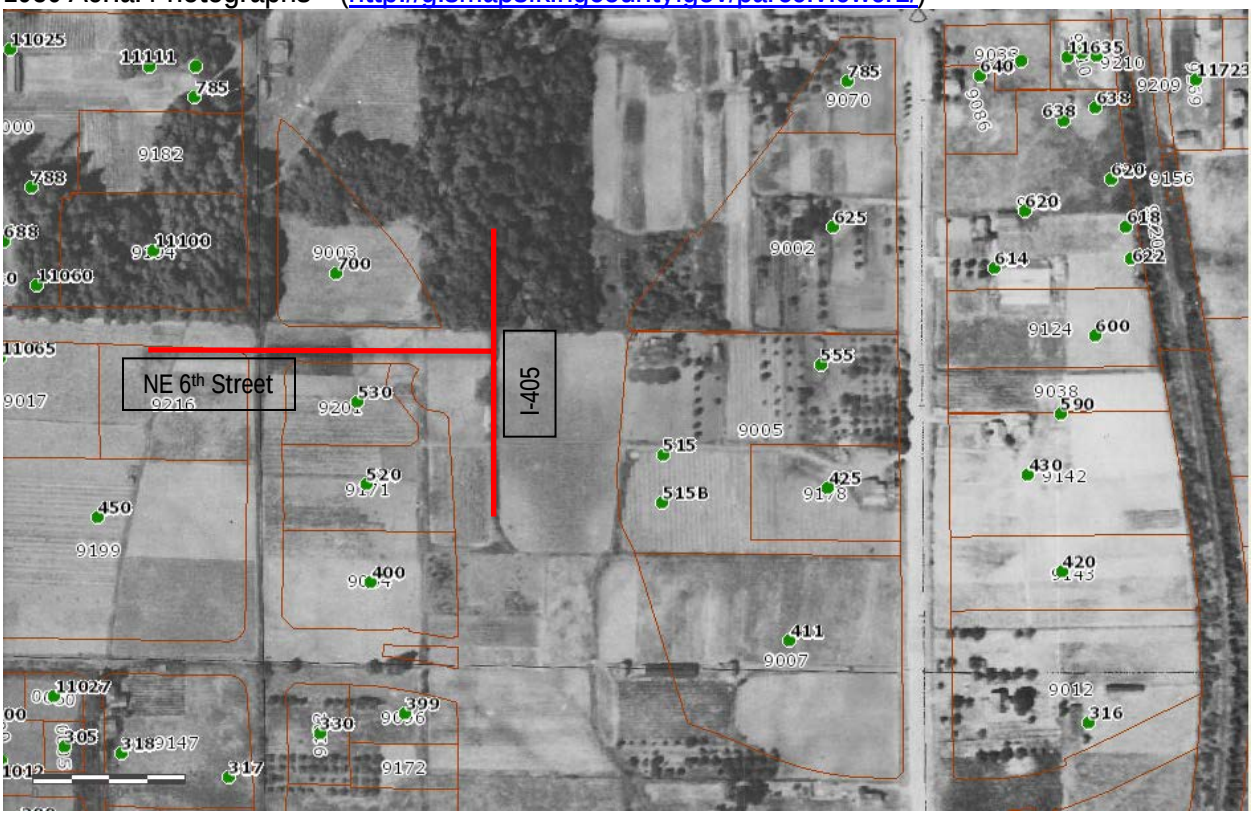


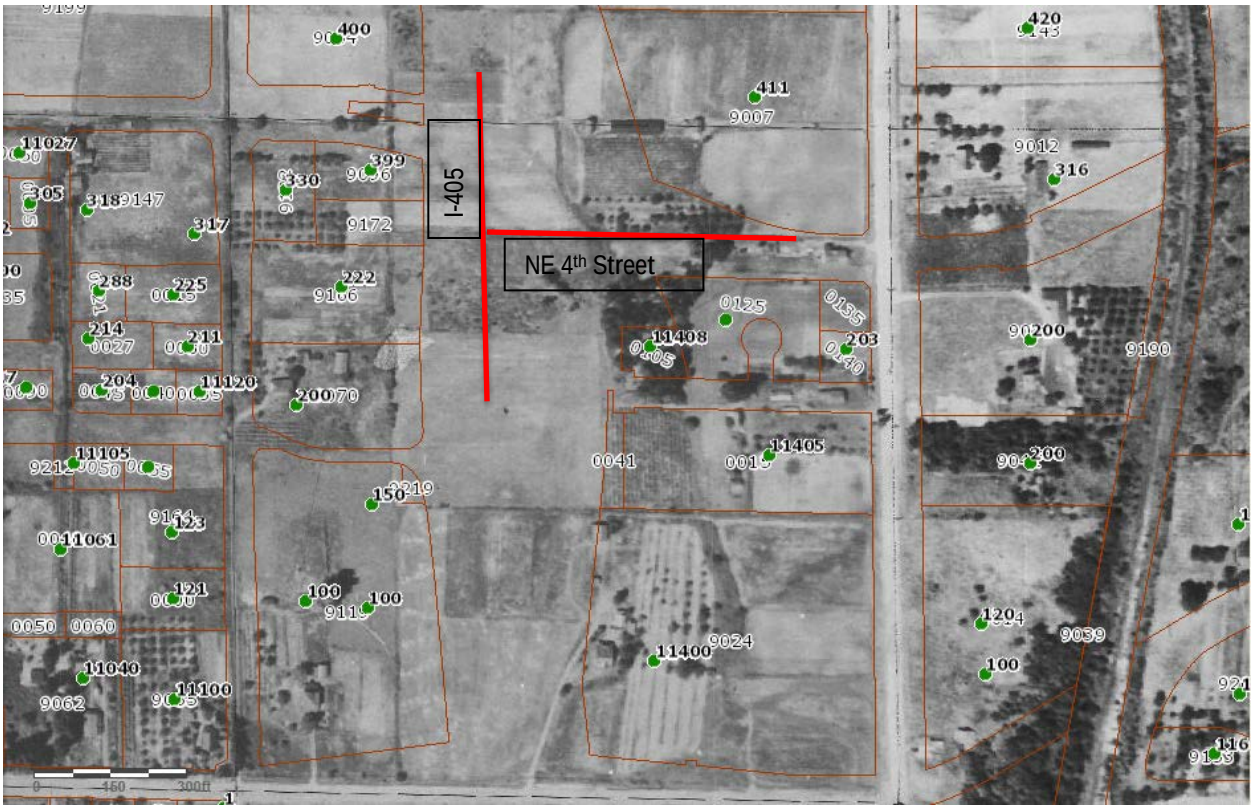
Photographic copies of the above and prior surveys may be obtained at the cost of reproduction by addressing the Director (N/CG243) National Ocean Service, National Oceanic and Atmospheric Administration, Rockville, Maryland 20852

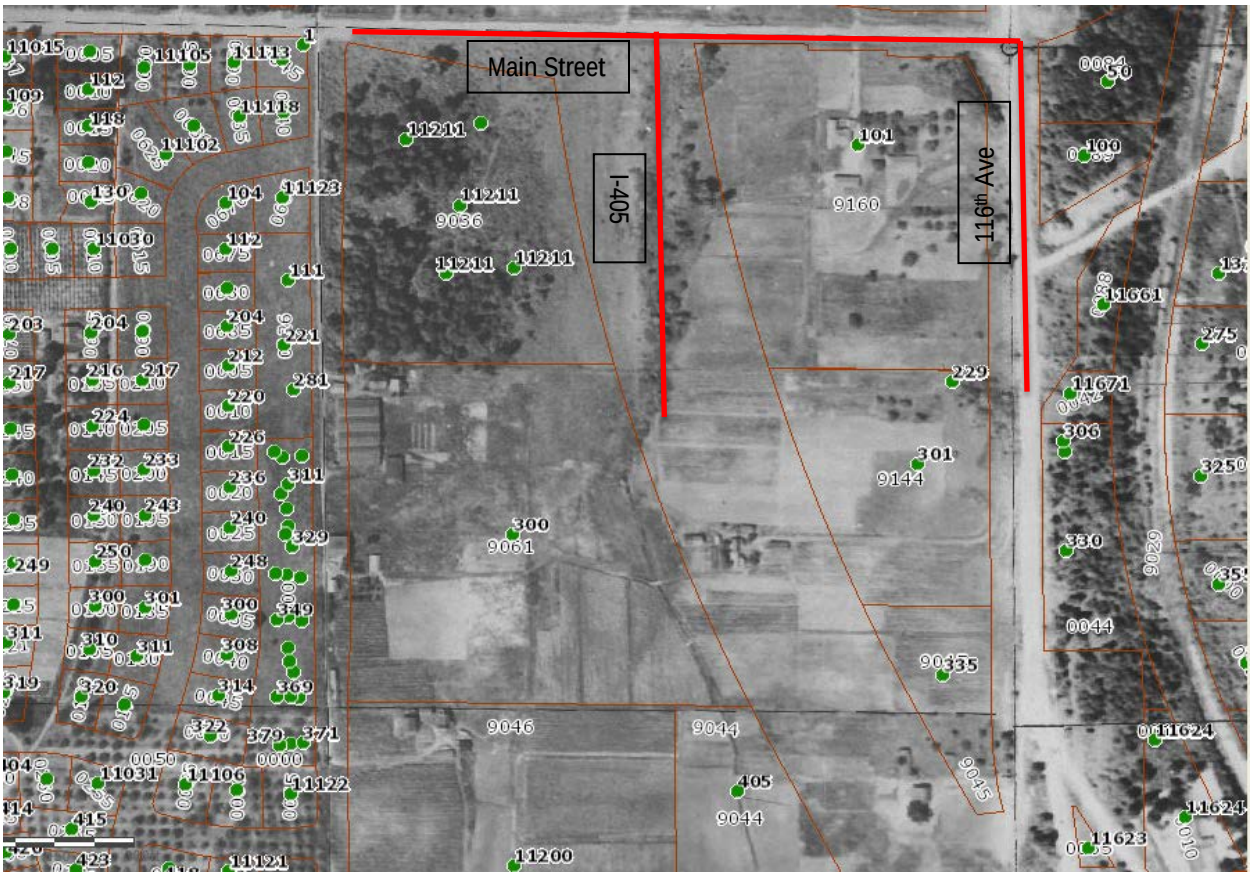
Meters		Feet
	LAND	
0	DEPTH GRADIENT	
50		164
	Maximum depth	

Appendix **D** – 1936 Aerial Photograph

1936 Aerial Photographs – (http://gismaps.kingcounty.gov/parcelviewer2/)






Main Street
I-405
116th Ave


I-405
SE 6th Street


SE 8th Street
I-405
UNKN
TRCT
TRCT
0050
300ft


I-405
9009
9010
9031
9017
9205


I-405
9111
9005
9052
9125
2560
2600
2630
2640
2660
2680
2670
2720
2740
2802
3000
9139
3032
3028
3024
3020
3014
3050
3000
3060
2525
2530
2527
2561
2524
2535
12106
2539
2530
2601
2604
12127
12101
12103
12117
0265
2622
0500
0420
2603
2628
12124
2635
2700
12109
2703
2709
12115
12121
2727
2761
2743
TRCT
UNKN
2737
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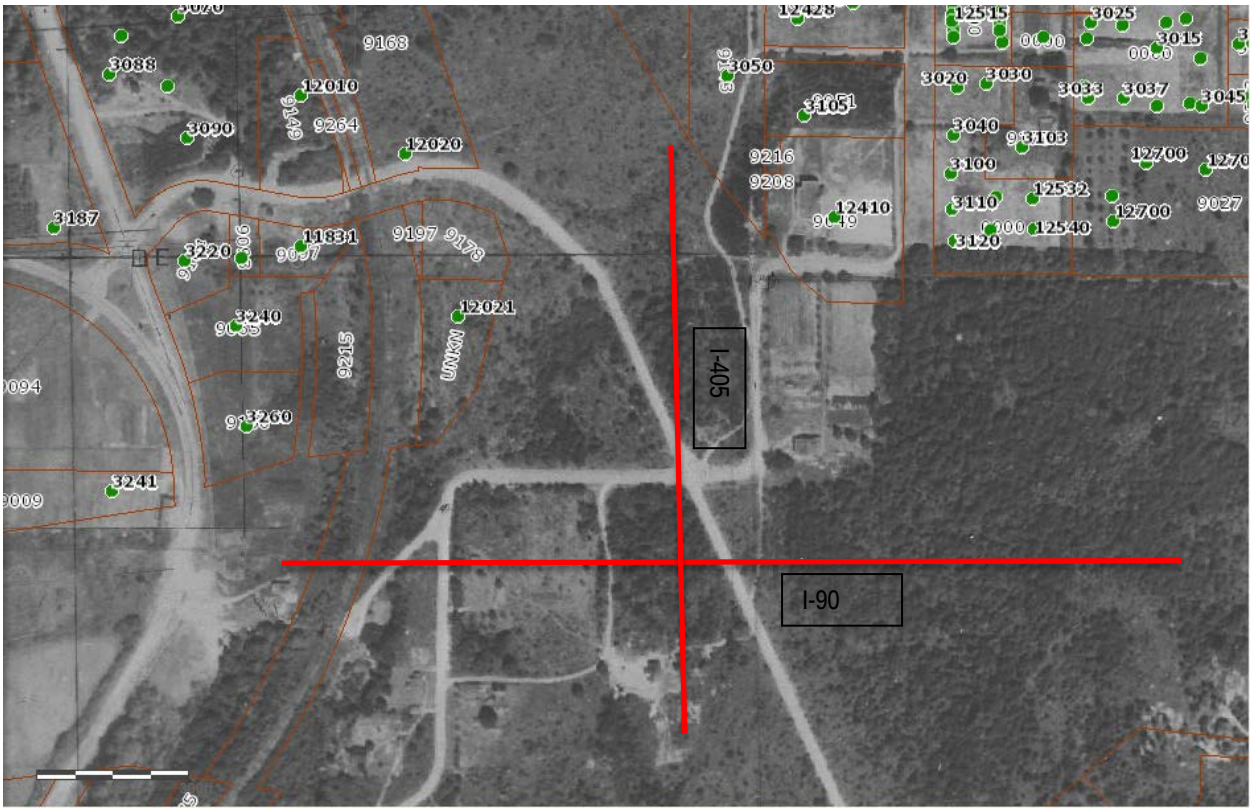
12112
12110
9047
12114
12118


I-405
I-90
9168
3088
12010
3090
9264
12020
3187
11831
9197
9178
3220
9047
3240
12021
9215
3260
3241
3050
3051
3020
3030
3033
3037
3040
3100
3110
3120
9216
9208
12410
9049
12532
12540
12700
9027
3025
3015