Hazardous Materials Corridor Study
NE Jackson School Road
(NE Grant Street to NW Evergreen Road)
Project No. 100216
Hillsboro, Oregon

September 18, 2014



GEOTECHNICAL AND ENVIRONMENTAL CONSULTANTS



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TABLE OF CONTENTS

EXE	ECUTIV	/E SUMI	MARY		iii	
1.0	INTR	ODUCT	ION		1	
2.0	PHYS			UND		
	2.1					
	2.2			Orainage		
	2.3					
	2.4					
	2.5	Region	al and Loc	al Vicinity Groundwater	3	
3.0	HIST			S		
	3.1			rance Maps		
	3.2	Aerial	Photograph	1S	4	
	3.3			S		
	3.4	-				
		3.4.1		son School Road		
		3.4.2		rgreen Road		
	3.5	Pesticio	de Use on A	Agricultural Land	9	
4.0	ENVI	RONME	ENTAL RE	CORDS REVIEW	9	
	4.1	Regulatory Database Search				
		4.1.1	Standard	Federal Records Sources	10	
			4.1.1.1	EPA CERCLIS	10	
			4.1.1.2	RCRA Facilities (including CORRACTS, non-CORRAC	TS	
				TSD Facilities, and RCRA Generators)	10	
			4.1.1.3	Emergency Response Notification System (ERNS)	11	
			4.1.1.4	Federal Institutional/Engineering Control Registries	11	
		4.1.2	Standard	State Records		
			4.1.2.1	Environmental Cleanup Site Information Database		
			4.1.2.2	Solid Waste Facilities		
			4.1.2.3	Leaking Underground Storage Tanks	12	
			4.1.2.4	Underground Storage Tank Sites		
			4.1.2.5	Aboveground Storage Tanks		
			4.1.2.6	State Institutional/Environmental Control Registries	13	
			4.1.2.7	Voluntary Cleanup Sites		
			4.1.2.8	Brownfield Sites		
			4.1.2.9	EDR Other Ascertainable Records		
	4.2			Records		
		4.2.1		Auto Stations		
		4.2.2		Dry Cleaner		
	4.3	Additio	onal State a	nd Local Environmental Sources	14	

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	4.4	4.3.1Oregon Health Department144.3.2Oregon State Fire Marshall's Incidents15Summary of Database Findings15
5.0	SITE I 5.1 5.2 5.3	RECONNAISSANCE
6.0	CONC	ELUSIONS
7.0	RECO	MMENDATIONS
8.0	LIMIT	ATIONS18
9.0	REFE	RENCES CITED21
		TABLES
	1 2 3	Summary of Sites Identified in Database Searches ECSI Sites Located Within 1.0 Miles of the Project Corridor Active LUST Sites Located Within 0.5 Miles of the Project Corridor
		FIGURES
	1 2	Vicinity Map Potential Contaminant Source
		APPENDICES
	A B C D E F G H I J	Shannon & Wilson Hazardous Material Corridor Study Scope of Services County Assessor Maps Oregon Water Resources Department Well Logs Sanborn Fire Insurance Map Report Historical Aerial Photographs Historical Topographical Maps EDR-City Directory Image Report EDR Radius Map Report and EPA, DEQ, & OSFM Database Files Site Photographs and Initial Site Assessment Checklist Important Information About Your Environmental Site Assessment/Evaluation Report

EXECUTIVE SUMMARY

Shannon & Wilson, Inc., conducted a Modified Level 1 Hazardous Materials Corridor Study (HMCS) for the NE Jackson School Road (NE Grant Street to NW Evergreen Road) Project Corridor (the Project Corridor) on behalf of Washington County (the County) and the Quincy Engineering project design team (Quincy). The purpose of the assessment was to identify potential hazardous material conditions that could impact project design and construction. A detailed project description is included in Section 2.0 of this report.

We did observe one Recognized Environmental Condition (REC) in connection with the proposed Project Corridor. Our research identified a historical automotive station located approximately 185 feet east of the Project Corridor at 738 NE Cambrey Court. While there are no reported incidents or spills at this site, potential contaminants of concern to the Project Corridor would include petroleum hydrocarbons. Due to this site's location cross-gradient from the Project Corridor, we have considered this to be a REC.

However, given the anticipated shallow excavation work along the Project Corridor, we believe there is little risk of encountering contaminated groundwater and/or soil from the historical auto station located at 738 NE Cambrey Court during reconstruction planned for the NE Jackson School Road Project Corridor. In our opinion, no further investigation is warranted.

HAZARDOUS MATERIALS CORRIDOR STUDY NE JACKSON SCHOOL ROAD (NE GRANT STREET TO NW EVERGREEN ROAD) PROJECT NO. 100216 HILLSBORO, OREGON

1.0 INTRODUCTION

Shannon & Wilson, Inc., conducted a Modified Level 1 Hazardous Materials Corridor Study (HMCS) for the NE Jackson School Road (NE Grant Street to NW Evergreen Road) Project Corridor (the Project Corridor) on behalf of Washington County (the County) and the Quincy Engineering project design team (Quincy). The general vicinity of the project is presented in Figure 1.

This HMCS has been performed in general accordance with American Association of State Highway and Transportation Officials (AASHTO) guidance and generally conforms to the scope and limitations of, but does not represent, a full Phase I Environmental Site Assessment per American Society for Testing and Materials (ASTM) E 1527-13: *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*. Our scope of services for the preparation of this HMCS is included in Appendix A.

The objective of this HMCS is to develop a professional opinion as to the potential presence of Recognized Environmental Conditions (REC). The term "recognized environmental conditions" means the presence or likely presence of regulated hazardous or dangerous wastes and/or substances, including petroleum products, under conditions that indicate an existing release, a past release, or a material threat of a release into the structures on the Project Corridor or into the ground, groundwater, or surface water of the Project Corridor. Examples of RECs include leaking underground storage tanks (LUSTs), transformers, undocumented fill material, dry cleaners, automotive repair/maintenance facilities, and hazardous materials spills.

2.0 PHYSICAL BACKGROUND

2.1 Project Location

The Project Corridor is located in Sections 31, 30, and 19 in Township 1 North and Range 2 West (Sec 31,30,19 / T1N / R2W) of the Willamette Meridian (WM), in the City of Hillsboro, Washington County, Oregon (Figure 1). The approximate center of the Project Corridor is at

Latitude 45.5390° North and Longitude -122.9796° West. The Project Corridor begins at the intersection of NE Grant Street and runs north to NW Evergreen Road, approximately 8,000 feet in length. County Assessor maps for properties adjacent to the Project Corridor are provided in Appendix B for reference. A plan of the alignment is shown in Figure 2, Potential Contaminant Sources.

2.2 Topography and Drainage

The project study area is located at ranges from an elevation of 193 feet above mean sea level (msl) at the intersection of NW Evergreen Road to 169 feet msl near the intersection of NE Arrington Road. The Project Corridor is relatively flat, with the exception of two creek crossings located 1,230 feet south of NW Evergreen Road and 200 feet south of the intersection of NE Arrington Road.

The two creek crossings along NE Jackson School Road are tributaries to McKay Creek, located west of the Project Corridor. McKay Creek feeds into the Tualatin River, located approximately 2 miles south of NE Jackson School Road, which flows west to east toward the Willamette River. The Tualatin watershed basin drains approximately 712 square miles, including the greater area of Hillsboro.

2.3 Soils

Existing soils within the Project Corridor vicinity consist of Amity silt loam, Cove silty loam, Dayton silt loam, Verboort silty clay loam, and Woodburn silt loam. The Amity silt loam soils are found in slopes of 0 to 3 percent all along the Project Corridor. This soil is composed of loamy alluvium parent material and is somewhat poorly drained. The Cove silty clay loam is found on slopes of 0 to 1 percent in floodplains along the northern stream crossing along the Project Corridor. The Cove silty loam soil is composed of recent clayey alluvium that is poorly drained and is considered a hydric soil. The Dayton silt loam is found on slopes of 0 to 1 percent on terraces. It is composed of older alluvium parent material and is poorly drained. This soil is also considered a hydric soil. The Verboort silty clay loam is located in floodplains at slopes of 0 to 3 percent near the southern creek crossing along the Project Corridor. It is composed of stratified, moderately fine and fine textured alluvium parent material and is poorly drained. This soil is classified as a hydric soil. Lastly, the Woodburn silt loam is found on slopes of 0 to 3 percent on terraces. The soil is composed of alluvium and is moderately well drained.

2.4 General Geology

Hillsboro is located in the Tualatin Basin, a structural depression created by complex folding and faulting of the basement rocks. The basement, or structural floor of the basin, comprises middle-Miocene Age (17 to 6 million years old) lava flows of the Columbia River Basalt Group (CRBG). Surface exposures of CRBG rocks are observed in the Tualatin Mountains (also known as the "Portland Hills" or the "West Hills"), which separate the Portland Basin from the Tualatin Basin. The ancestral Columbia, Willamette, and Tualatin Rivers have contributed a broad and deep section of alluvial sediment, which overlies the CRBG basement in both basins.

In the Tualatin Basin, the CRBG basement is mantled by up to 1,500 feet of Miocene to Pliocene Age (6 to 1.8 million years old) sedimentary fill termed "Sandy River Mudstone Equivalent" by Madin (1990). This sedimentary fill consists of moderately to poorly lithified mudstone, siltstone, claystone, and sandstone beds, with occasional gravels. The term "Sandy River Mudstone Equivalent" reflects the similarity of these deposits to the Sandy River Mudstone, which overlies the CRBG basement in the Portland Basin.

Variable thicknesses of Quaternary sediments (deposited less than 1.8 million years ago) overlie the Sandy River Mudstone Equivalent in the Tualatin Basin. The majority of the Quaternary overburden consists of sediment deposited by a series of late-Pleistocene catastrophic glacial outburst flood episodes called the Missoula Floods, which occurred between 18,000 and 12,800 years ago (Allen and others, 2009). The catastrophic glacial outburst floods overwhelmed the Columbia River system and back-flooded up the Willamette and Tualatin Valleys, depositing thick blankets of silt, clayey silt, and sand.

Locally within the Tualatin Valley, some of the Pleistocene catastrophic flood deposits have been eroded away along creeks and streams, and several feet of recent alluvial sediments have been deposited in their place along present-day floodplains.

The Project Corridor lies on Catastrophic Flood Deposits that consist of fine-grained facies sand and silt derived from the Missoula Floods.

2.5 Regional and Local Vicinity Groundwater

As stated above, the Project Corridor crosses two tributaries to McKay Creek. Groundwater is found in confined and unconfined conditions in the alluvial deposits of this area.

A search of Oregon Water Resources Department (OWRD) files was performed in an attempt to locate records of water supply wells in or near the Project Corridor. According to the OWRD

database, at least 13 water well logs were identified as representative groundwater data along the Project Corridor. Copies of selected well logs from the OWRD database are included in Appendix C. Based on information gleaned from the OWRD well logs, groundwater in the vicinity of the Project Corridor was encountered at depths ranging from 20 to 105 feet below ground surface (bgs). Static water levels also varied, ranging in depth from 4 feet bgs near the creek crossings and 15 feet bgs at higher points along the Project Corridor. There is evidence of deeper groundwater south of the Project Corridor.

Groundwater in the vicinity of the Project Corridor is anticipated to flow slowly toward the creek tributaries, but generally west and/or south toward McKay Creek and the Tualatin River.

3.0 HISTORICAL RECORDS

3.1 Sanborn Fire Insurance Maps

Because of the setting of the Project Corridor (rural/suburban area away from populated city center), Sanborn[®] fire insurance maps were not available for the Project Corridor area (refer to Appendix D).

3.2 Aerial Photographs

Historical aerial photographs dated 1936, 1947, 1955, 1963, 1970, 1980, 1990, 1998, and 2009 were obtained from the University of Oregon (U of O) Map and Aerial Photo Library. Aerial photographs of the project area prior to 1936 were not available from the U of O library. Each of the photographs obtained covered the proposed Project Corridor. All photographs have been geo-referenced using a geographic information system (ArcGIS 10.2). Copies of the aerial photographs are included in Appendix E. Brief summaries of our observations and findings from the photographs are as follows.

▶ 1936 – In the 1936 aerial photograph, NE Jackson School Road, NW Evergreen Road, and NE Grant Street roadway alignments existed. However, NE Fifth Avenue that spurs off from NE Jackson School Road had not yet been built. Land use along NE Jackson School Road consisted of farming and vacant land. There were some orchards along NE Jackson School Road located on the northwestern side of the Project Corridor. Additional residential development was apparent south of the Project Corridor. Two McKay Creek tributaries crossed the Project Corridor at similar locations seen today. A larger farm and homestead was located near the intersection of NE Arrington Road. A homestead was located north of the intersection of NW Evergreen Road and NE Jackson School Road.

- ➤ 1947 The 1947 aerial photograph displayed similar features as the 1936 photograph. NE Fifth Avenue was constructed south of the Project Corridor, connecting NE Jackson School Road and NE Grant Street. Additional orchards and farming were apparent adjacent to the Project Corridor to the east, and there additional residential development existed near the intersection of NE Hood Street and NE Jackson School Road.
- ➤ <u>1955</u> The 1955 aerial photograph showed similar features to the 1947 aerial, with the exception of more residential and farming development south of the Project Corridor.
- ➤ <u>1963</u> In 1963, residential development was increasing at the southern end of the Project Corridor. NE Arrington Road was developed into residential from NE Jackson School Road to NE Delsey Road. The northern half of the Project Corridor had similar features to the 1955 aerial.
- ➤ <u>1970</u> The 1970 aerial showed additional residential development southeast of the Project Corridor and along NE Jackson School Road. The general area north of NE Arrington Road is primarily farmland.
- ➤ <u>1980</u> By 1980, the area south of NE Sunrise Lane was residential. NE Harewood Street was being constructed from NE Jackson School Road west. Farming activity was decreasing along NE Jackson School Road, with primarily residential buildings located on the east side. A school had been built east of the intersection of NW Evergreen Road and NE Jackson School Road along NW Evergreen Road.
- ➤ 1990 In the 1990 aerial, residential development had increased in the northern direction to approximately NE Josephine Street, along NE Jackson School Road, and in the surrounding area. Jackson Elementary School had been built on the west side of NE Jackson School Road, north of NE Estate Drive A church had been built on the east side of NE Jackson School Road, south of the school.
- ➤ <u>1998</u> All of the area along the Project Corridor and surrounding area had been residentially developed by 1998. Land use north of NW Evergreen Road continued to consist of farming.
- ➤ <u>2009</u> The 2009 aerial photograph features resembled those shown in the 1998, with the exception of additional residential development in the surrounding area.

3.3 Topographic Maps

Historical topographic maps were obtained from the U.S. Geological Survey (USGS). USGS topographic maps of the Hillsboro Quadrangle dated 1915 (15 minute), 1940 (15 minute), 1954 (7.5 minute), 1961 (7.5 minute), 1961 (15 minute), 1970 (7.5 minute), 1975 (7.5 minute), 1985

(7.5 minute), and 1990 (7.5 minute) were provided by EDR. Each of these historical maps covered the Project Corridor, but at differing scales. Copies of the historical topographic maps are included in Appendix F. Brief summaries of our observations and findings from each topographic map are included below.

- ➤ 1915 The 1915 (15-minute) topographic map of the Hillsboro Quadrangle was at a large scale of 1:62,500 and therefore showed the Project Corridor in little detail. The map displayed the Project Corridor as it is currently aligned with NW Evergreen Road and NE Grant Street running east to west at either end of the Project Corridor. There were limited homes located along NE Jackson School Road. NE Sunrise Lane was present in 1915.
- ➤ <u>1940</u> The 1940 (15-minute) topographic map of the Hillsboro Quadrangle is shown at a scale of 1:50,000. The Project Corridor appeared similar as the 1915 map.
- ➤ <u>1954</u> The 1954 (7.5-minute) topographic map of the Hillsboro Quadrangle showed the Project Corridor in more detail at a scale of 1:24,000. In 1954, NE Jackson School Road was shown as a major arterial between NW Evergreen Road and NE Grant Street. There were several orchards located east of NE Jackson School Road.
- ➤ 1961 The 1961 (7.5-minute) topographic map of the Hillsboro Quadrangle showed the Project Corridor in more detail at a scale of 1:24,000. NE Arrington Road had been built and residential development had increased east of NE Jackson School Road. The road with orchards east of the Project Corridor was labeled NE Sunrise Lane in 1961 and consisted primarily of residential development. Land use north of NE Sunrise Lane along NE Jackson School Road was primarily farm or vacant vegetated land.
- ➤ <u>1961</u> The 1961 (15-minute) topographic map of the Hillsboro Quadrangle showed the Project Corridor in less detail but with similar features as the 1961 7.5-minute topographic map.
- ➤ <u>1970</u> The 1970 (7.5-minute) topographic map of Hillsboro Quadrangle showed the Project Corridor at a scale of 1:24,000 and designated the area southeast of the intersection of NE Arrington Road and NE Jackson School Road as entirely residential. The area north of NE Sunrise Lane in the 1970 topographic map appeared similar to the 1961 topographic map.
- ➤ <u>1975</u> The 1975 (7.5-minute) topographic map of Hillsboro Quadrangle showed similar features for the Project Corridor as in the 1970 topographic map, with the exception of an

increase in residential home and street development along NE Sunrise Lane and south of the Project Corridor.

- ➤ <u>1985</u> The 1985 (7.5-minute) topographic map of Hillsboro Quadrangle showed an increase in residential development along NE Sunrise Lane and on the western side of the Project Corridor near NE Harewood Street. Evergreen Middle School had been built along NW Evergreen Road, west of the Project Corridor.
- ➤ <u>1990</u> The 1990 (7.5-minute) topographic map of Hillsboro Quadrangle showed another increase in residential development along the entire Project Corridor alignment. An athletic field is shown on the southwest corner of NE Jackson School Road and NW Evergreen Road.

3.4 City Directories

A search of available historical city directory data was completed by EDR. The EDR City Directory Image Report is included as Appendix G. This report identifies the name and the corresponding occupant at five-year intervals for adjoining properties along NE Jackson School Road and NW Evergreen Road. City directory research sources included Cole Information Services, Polk City Directory, and Johnson's City Directory. Information on NW Evergreen Road was found for 2013, 2008, 2003, 1999, and 1996. Information on properties located along NE Jackson School Road was found for 2013, 2008, 2003, 1999, 1996, and 1964. Listings were returned on the following properties that are relevant to the Project Corridor.

3.4.1 NE Jackson School Road

- ➤ 691 NE Jackson School Road: The identified user in 1996, 1999, and 2008 was Microbase Development Corp.
- ➤ <u>735 NE Jackson School Road:</u> The identified user in 1996, 2003, and 2008 was Malibu Pacific General Contractors.
- > 809 NE Jackson School Road: The identified user in 2008 was NW Home Revisions.
- ➤ 1026 NE Jackson School Road: The identified user in 2008 was John's Woodworking.
- ➤ <u>2858 NE Jackson School Road:</u> The identified user in 2008 was Fredrickson Chryl Graphic Design.
- ➤ <u>2864 NE Jackson School Road:</u> The identified user in 2008 was Juxaposted Productions LLC.

- ➤ <u>2894 NE Jackson School Road:</u> The identified user in 2003 was Girard Investments Limited Partnership.
- ➤ 2920 NE Jackson School Road: The identified user in 2008 was Herb Family LTD Partnership.
- ➤ 2929 NE Jackson School Road: The identified user in 2003 and 2008 was Cleanflicks Northwest LLC, Maid to Shine Cleaning Services Inc.
- ➤ <u>3100 NE Jackson School Road:</u> The identified user in 2008 was Easton Development LLC.
- ➤ <u>3751 NE Jackson School Road:</u> The identified user in 2008 was While Away Construction.
- ➤ <u>3787 NE Jackson School Road:</u> The identified user in 2003 was Precision Rapid Tooling Inc.
- ➤ <u>3850 NE Jackson School Road:</u> The identified user in 2008 was Jackson Development LLC.
- ➤ 3865 NE Jackson School Road: The identified user in 2008 was Earl West Rentals.
- ➤ 3905 NE Jackson School Road: The identified user in 2003 was West Brook Properties LLC.
- ➤ 3940 NE Jackson School Road: The identified user in 2003 was Northcoast Industries Inc.

3.4.2 NW Evergreen Road

- ➤ <u>25300 NW Evergreen Road:</u> The identified user in 2013 was Royal Moore Auto Center.
- ➤ 30033 NW Evergreen Road: The identified user in 2013 was Landservices Inc.
- ➤ 30295 NW Evergreen Road: The identified user in 2008 and 2013 was Badger Tree Services Inc.
- ➤ <u>26020 NW Evergreen Road:</u> The identified user in 2008 was Trugreen Limited Partnership.
- ➤ <u>26185 NW Evergreen Road:</u> The identified user in 1996 and 2008 was Anitas Elder Care Referral Service.
- ➤ <u>30585 NW Evergreen Road:</u> The identified user in 2003 and 2008 was Westside Underground Utilities.
- ➤ <u>26185 NW Evergreen Road:</u> The identified user in 1999 and 2003 was MSE Northwest Manufacturing Systems.

- ➤ <u>28475 NW Evergreen Road:</u> The identified user in 1996 and 1999 was Wallace Gayle Striping, Watkins Direct Distribution.
- ➤ <u>27930 NW Evergreen Road:</u> The identified user in 1996 and 2003 was Millers Mini Mix Concrete Inc.
- ➤ 29230 NW Evergreen Road: The identified user in 2003 was Total Molding Systems Inc.
- ➤ <u>23467 NW Evergreen Road:</u> The identified user in 1996 was Electrical Systems Inc.

3.5 Pesticide Use on Agricultural Land

Historical aerial photograph and topographic map research conducted as part of this assessment identified historical agricultural land use along the Project Corridor. Historical farming and orchards were present in the residential areas to the south and east of the Project Corridor, primarily along NE Sunrise Lane. Fruit and Christmas tree orchards, as well as nursery stock, are commonly associated with the use of pesticides and herbicides. In addition, there was evidence of farming activity in the open fields surrounding the Project Corridor since 1936, prior to the residential development. Therefore, the possible historical use of pesticides/herbicides adjacent to, or within, the Project Corridor cannot be completely ruled out.

4.0 ENVIRONMENTAL RECORDS REVIEW

4.1 Regulatory Database Search

Standard federal (Environmental Protection Agency, or EPA) and state (Oregon Department of Environmental Quality, or DEQ) environmental records were researched consistent with the approximate minimum search radii set forth in Section 8.2.1 of the Phase I ASTM Standard for pertinent information regarding the environmental condition of the Project Corridor, adjacent parcels, and properties in the vicinity. These records were received electronically through EDR and supplemented with records obtained from the DEQ Facility Profiler. The EDR Radius Report and DEQ Facility Profiler query summaries are included in Appendix H. Additional sources (See Section 4.1.3) were also reviewed in an effort to locate all possible information relevant to the identification of RECs with respect to the Project Corridor. A summary of sites identified in the database searches is presented in Table 1 and in the following paragraphs.

4.1.1 Standard Federal Records Sources

4.1.1.1 EPA CERCLIS

The Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) database is used by the EPA to track activities conducted under its Superfund program. Sites that come to EPA's attention, because of a potential for releasing hazardous substances into the environment, are added to the CERCLIS inventory. EPA learns of the "discovery" of these sites through notification by the owner, citizen complaints, state and local government identifications, and investigations by EPA programs other than Superfund.

CERCLIS contains data on potentially hazardous waste sites that have been reported to the EPA and are either proposed to be listed or are listed on the National Priorities List (NPL). Once a site is added to CERCLIS, the next step in evaluating the potential problem is the completion of a preliminary assessment (PA). The purpose of the PA is to determine whether the site warrants further investigation. The PA is typically an information-gathering phase during which sampling does not take place. A PA is usually completed within one year of a site being listed in CERCLIS.

Based on the conclusions of the PA, a site could be recommended for (a) no further action under the EPA Superfund program; (b) a sampling Site Investigation (SI) to collect data for further evaluation and possible nomination to the NPL; or (c) an emergency or time-critical removal (short-term cleanup). Since February 1995, sites that have been assessed and designated "No Further Remedial Action Planned" (NFRAP) are removed from CERCLIS and archived as historical records. NFRAP sites are reviewed by the states in which they are located, and can be returned to CERCLIS if new data identifies contamination problems at the site.

Our regulatory search did not identify any NPL, CERCLIS, or CERCLIS-NFRAP sites within their respective search radii of the Project Corridor.

4.1.1.2 RCRA Facilities (including CORRACTS, non-CORRACTS TSD Facilities, and RCRA Generators)

The Resource Conservation and Recovery Act (RCRA) regulates the handling and management of hazardous materials. It requires a cradle-to-grave manifest system for all responsible parties who generate, transport, or dispose of hazardous waste. RCRA mandates specific requirements for all hazardous waste treatment, storage, and disposal (TSD) facilities. The Corrective Action Tracking System (CORRACTS) database is a list of facilities that are

found to have had hazardous waste releases and require RCRA corrective action activity, which can range from site investigations to remediation.

Our regulatory search identified two Conditionally Exempt Small Quantity Generators (CESQGs) sites within 0.25-mile radius of the Project Corridor. CESQGs are defined by RCRA as generating less than 100 kilograms of hazardous waste, or less than 1 kilogram of acutely hazardous waste per month. These sites are listed below:

- ➤ Peter Boscow Elementary School (former) 452 NE Third Avenue, approximately 1,008 feet southwest of the Project Corridor.
- ➤ Evergreen Middle School 29850 NW Evergreen Road, approximately 1,080 feet west of the Project Corridor.

4.1.1.3 Emergency Response Notification System (ERNS)

ERNS is an EPA database with oil and hazardous substances spill reports. There were no incidents reported within a 0.25-mile radius of the Project Corridor.

4.1.1.4 Federal Institutional/Engineering Control Registries

Institutional controls are non-engineering measures and may consist of easements, restrictive covenants, and/or zoning ordinances that are used as limited-action remedial alternatives to prevent or limit exposure of critical receptors to a source of contamination. Engineering controls are physical measures designed to prevent or limit the exposure of critical receptors to contaminants. Engineering controls may include but are not limited to fencing, capping, barriers, hydraulic controls, and alternative water supplies. No federal institutional / engineering controls were identified within a 0.5-mile radius of the Project Corridor.

4.1.2 Standard State Records

4.1.2.1 Environmental Cleanup Site Information Database

The Environmental Cleanup Site Information (ECSI) database is used by DEQ to track sites that are, or may be, contaminated and could require cleanup. The ECSI list is considered a state equivalent to the CERCLIS and NPL lists. ECSI includes hazardous waste sites for investigation/remediation, landfills, and solid waste disposal sites. Our regulatory search identified 16 ECSI sites within 1 mile of the Project Corridor. Of the 16 sites, one is currently reported on the Confirmed Release List (CRL) and detailed as follows, and four are

suspect sites that require further investigation. The remaining sites have been granted or are pending no further action (NFA) status.

Professional and Budget Dry Cleaners, located at 126 S. First Avenue, is on the CRL. Professional and Budget Dry Cleaners is located down-gradient of the Project Corridor approximately 3,060 feet southwest. The site operated as a drycleaner from 1990 to 2000. Prior to 1990, the site operated as an automotive service shop and printing and graphics business. A site assessment concluded that tetrachloroethylene (PCE) was present in the soil and groundwater and benzene in the groundwater. The City of Hillsboro has made an agreement with DEQ to voluntarily clean up the site and has installed a venting system for PCE vapors. After 474 tons of soil and 4,000 gallons of groundwater were removed, low levels of PCE and petroleum still remain onsite. The site has been granted a conditional No Further Action (NFA) status with the understanding that any future construction must act as a cap for residual contamination.

The four ECSI suspect sites are also located down-gradient from the Project Corridor. Information on all 16 ECSI sites is summarized in Table 2.

4.1.2.2 Solid Waste Facilities

Oregon maintains a Solid Waste Facilities/Landfill Sites list (SWF/LF), which it develops from DEQ's Closure and Regular Solid Waste Active/Disposal Permits database. According to DEQ and the EDR Report, no DEQ-permitted landfill solid waste facilities were identified in the database search within 0.5-mile of the Project Corridor boundaries.

4.1.2.3 Leaking Underground Storage Tanks

The EDR report found 81 Leaking Underground Storage Tank (LUST) sites within 0.5-mile of the Project Corridor. An additional 15 LUST sites were identified through DEQ Profiler. Of these 96 total LUST sites, 29 properties are listed as undergoing active cleanup, none of which are located adjacent to the Project Corridor. Cleanup at the remaining 67 sites is listed as complete. Information on the 29 active LUST sites is summarized in Table 3.

4.1.2.4 Underground Storage Tank Sites

The EDR report identified one registered Underground Storage Tank (UST) site within 0.25-mile radius of the Project Corridor. The Bus Garage, located 910 feet southwest of the Project Corridor at 512 NE Third Avenue, contains two underground storage tanks, one of

which has been decommissioned. No information was provided on the size or contents of either UST.

4.1.2.5 Aboveground Storage Tanks

The Aboveground Storage Tank (AST) database contains registered ASTs. The data comes from the list of ASTs reported to the Office of State Fire Marshall. The database search did not identify any AST sites within a 0.25-mile radius of the Project Corridor.

4.1.2.6 State Institutional/Environmental Control Registries

Institutional controls are non-engineering measures and may consist of easements, restrictive covenants, and/or zoning ordinances that are used as limited-action remedial alternatives to prevent or limit exposure of critical receptors to a source of contamination. Engineering controls are physical measures designed to prevent or limit the exposure of critical receptors to contaminants. Engineering controls may include but are not limited to fencing, capping, barriers, hydraulic controls, and alternative water supplies. No state institutional / engineering controls were identified within a 0.5-mile radius of the Project Corridor.

4.1.2.7 Voluntary Cleanup Sites

DEQ's Voluntary Cleanup Program (VCP) provides oversight to property owners and others wishing to investigate and clean up hazardous substance sites in a voluntary, cooperative manner. The EDR report identified two VCP Sites, which include the following:

- ➤ Ellinwood Construction 445 E. Main Street, approximately 2,380 feet south of the Project Corridor.
- ➤ Bank/4th Main 350 E. Main Street, approximately 2,485 feet south of the Project Corridor.

4.1.2.8 Brownfield Sites

Brownfield sites are abandoned, or underused, industrial and commercial facilities available for reintroduction into beneficial land use. Expansion or redevelopment of such a facility may be complicated by real or perceived environmental contamination. The EDR report identified one Brownfield site within a 0.5-mile radius of the Project Corridor, listed as Bank/4th Main, located approximately 2,485 feet south of the Project Corridor at 350 E. Main Street. This site has had past petroleum and heating oil releases on-site but has received an NFA.

4.1.2.9 EDR Other Ascertainable Records

The EDR records review includes "Additional Environmental Records" in its database research and provided a review of hazardous waste MANIFEST sites that records and tracks hazardous waste from the generator facility to the off-site waste management facility. The EDR report identified two hazardous waste MANIFEST sites within a 0.25-mile radius of the Project Corridor, located at Peter Boscow Elementary School (former), approximately 1,008 feet southwest of the Project Corridor at 452 NE Third Avenue. The second site is Evergreen Middle School, approximately 1,080 feet west of the Project Corridor at 29850 NW Evergreen Road. No other records were provided. For more information on these sites, see Appendix H.

4.2 Other Historical Records

The EDR report searches selected national collections of business directories and has collected listing of potential gas station/filling station/service station sites and potential dry cleaner sites. These records are catalogued as EDR High Risk Historical Records.

The EDR Report identified four historical auto stations and one historical dry cleaner within a 0.25-mile radius of the Project Corridor. A list of these sites is included below. For more information regarding these sites, see Appendix H.

4.2.1 Historic Auto Stations

- > 738 NE Cambrey Court Approximately 185 feet east of the Project Corridor.
- > 947 NE Hood Street Approximately 855 feet east of the Project Corridor.
- ➤ 2769 NE Ninth Drive Approximately 1,210 feet east of the Project Corridor.
- > 906 NE Third Avenue Approximately 930 feet southwest of the Project Corridor.

4.2.2 Historic Dry Cleaner

➤ 600 NE Third Avenue – Approximately 845 feet south of the Project Corridor.

4.3 Additional State and Local Environmental Sources

4.3.1 Oregon Health Department

The Oregon Building Codes Division and the Oregon Health Department (OHD, 2012) maintain a database of uninhabitable properties due to clandestine drug laboratory and/or storage activities. No listings were reported for properties within or adjacent to the Project Corridor.

4.3.2 Oregon State Fire Marshall's Incidents

According to the Oregon State Fire Marshall's (OSFM) Incident List, there was one hazardous substance incident, or spill response, identified in the vicinity of the Project Corridor. A natural gas leak was found and repaired at 616 NE Sundance Court. Information obtained on the identified OSFM Incident List is included in Appendix H

4.4 Summary of Database Findings

Each of the sites identified in the regulatory database search were evaluated in this study, and most were found to pose low risk to the project because of their distance from the project areas, their relative location (i.e., down-gradient from the project), the reason the site was listed (the site may use hazardous materials, but no spills or leaks have been reported), and/or the cleanup status (cleanup activities have been completed). Criteria for assessing minimal-risk sites are included below for the following categories:

- ➤ Active and confirmed EPA CERCLIS and/or DEQ ECSI sites greater than 1,500 feet from the project limits,
- ➤ LUST sites that are cross- or down-gradient from the project alignment and where cleanup has been completed any distance from the proposed project boundaries,
- Active up-gradient LUST and/or RCRA sites and OSFM spill incidents greater than 500 feet from the proposed project boundary.

Sites that meet the above criteria are not discussed further in this study. Sites included on the EPA's CERCLIS list, DEQ's ECSI, LUST, or SPILLS lists, or on the OSFM's Hazardous Materials list, which are located within the search limits previously described above, are judged to have the potential to impact the project study area.

There are four active LUST sites and one historic auto station within 500 feet of the Project Corridor. These sites are listed as follows.

Active LUST Sites

- > 532 NE 5th Avenue Approximately 290 feet south of the Project Corridor
- > 556 NE 5th Avenue Approximately 175 feet south of the Project Corridor
- ➤ 543 NE 6th Avenue Approximately 380 feet southeast of the Project Corridor

Historic Auto Station

> 738 NE Cambrey Court – Approximately 185 feet east of the Project Corridor

5.0 SITE RECONNAISSANCE

Shannon & Wilson's representative, Michael S. Reynolds, PE, conducted a reconnaissance of the Project Corridor on August 13, 2014. The reconnaissance consisted of systematically traversing and observing properties adjacent to the Project Corridor from roadways and public-access areas.

Land use observed within and adjacent to the Project Corridor is predominantly residential (single-family and multi-family dwellings) mixed with municipal (parks and schools) and commercial (churches) land use. Land use at the north end of the Project Corridor across NW Evergreen Road is agricultural. Tributaries to McKay Creek cross the Project Corridor at two locations: approximately 1,230 feet south of NW Evergreen Road and approximately 200 feet south of the intersection of NE Arrington Road.

An Initial Site Assessment Checklist and photographs of observations made during the reconnaissance are included in Appendix I.

5.1 Observations Within and Adjacent to the Project Corridor

- NW Fifth Avenue merges with NE Jackson School Road at the south end of the project area north of NE Grant Street (Appendix I, Photos 1 & 2). The Harold Eastman Memorial Rose Garden occupies the triangular area bounded by NW Fifth Avenue, NE Jackson School Road, and NW Grant Street. The former school south of NE Grant Street across from NW Jackson School Road (Photo 1) now operates as the Peter Boscow Conference Center.
- ➤ Older single-family residences are present adjacent to NE Jackson School Road from north of the spilt with NE Fifth Avenue through the bend south of NE Arrington Road (Appendix I, Photos 3 through 6).
- ➤ The Cavalry Lutheran Church and UJ Hamby Park are adjacent west of NE Jackson School Road near the intersection with NE Arrington Road (Appendix I, Photos 7 & 8). A tributary to McKay Creek passes under NE Jackson School Road at the south end of the park property (Appendix I, Photo 9).
- ➤ Single-family residences are present adjacent to NE Jackson School Road through the intersections of NE Baldwin Road, NE Hood Road, and NE Sunrise Road (Appendix I, Photos 10 through 14). Roadside ditches observed are intermittent.
- Newer residential development is present adjacent to NE Jackson School Road through the intersections of NE Kathryn Road, NE Harewood Road, NE Estate Drive, and NE Rogahn Drive (Appendix I, Photos 15 through 26). The Church of Jesus Christ of Latter-day Saints is adjacent east of the Project Corridor between NE Harewood Road and NE Estate Drive (frontage shown in Photo 20). Jackson Elementary School is

- adjacent west of the Project Corridor at NE Estate Drive (Photos 22, 23, and 25). Roadside ditches observed are intermittent.
- ➤ Older single-family residences are present in the vicinity of a tributary to McKay Creek (Appendix I, Photos 27 and 28).
- Newer residential development is present adjacent to NE Jackson School Road north of the McKay Creek tributary to NW Evergreen Road (Appendix I, Photos 29 through 34). Open space currently exists southeast of the NE Jackson School Road intersection with NW Evergreen Road (Photos 32 and 33).
- A homestead and active farmland are present at the north end of the project area, north of NW Evergreen Road (Appendix I, Photos 35 and 36).
- ➤ Treated timber power poles with minor soil surface staining were observed throughout the Project Corridor
- > Pole-mounted transformers were observed along the east side of NE Jackson School Road.
- ➤ No UST fill ports, ASTs, or storage containers were observed from the public right-of-way.
- No monitoring wells were observed along the project corridor alignment.
- ➤ No staining or distressed vegetation was observed.

5.2 Observations in the Vicinity of the Project Corridor

The Project Corridor is north of the town of Hillsboro, which has historically been surrounded by farmland. Development in the area has generally progressed northward as the Portland metropolitan area's urban growth boundary has expanded. Farmland is present north and west of the Project Corridor. The Hillsboro airport and several industrial businesses (e.g., Intel and Solarworld) are present east of the Project Corridor. Older residential and commercial development in and around the town of Hillsboro is present south of the Project Corridor.

5.3 Summary of Site Observations

The site reconnaissance did not identify any sites within or adjacent to the Project Corridor that have RECs with the potential to impact the project. Potential impacts to surface soil due to historical agricultural practices in the area of the Project Corridor were likely mitigated by development. Roadside ditches may be sinks for non-point pollution from heavy vehicle use on NE Jackson School Road. Older residences immediately adjacent to NE Jackson School Road potentially used heating oil, but evidence was not readily observable from the public right-of-way.

6.0 CONCLUSIONS

This HMCS has identified one recognized environmental concern (REC) along the NE Jackson School Road Project Corridor which lies between NE Grant Street and NW Evergreen Road. The sole REC is the site of an historical auto station listed at 738 NE Cambrey Court, located approximately 185 feet east and cross-gradient to the Project Corridor. Contaminants of concern are petroleum hydrocarbons. Due to this site's close proximity to the Project Corridor and potential contaminants of concern, we have identified this site as an REC.

7.0 RECOMMENDATIONS

Given the anticipated shallow excavation work along the Project Corridor, we believe there is little risk of encountering contaminated groundwater and/or soil from the historical auto station located at 738 NE Cambrey Court during reconstruction planned for the NE Jackson School Road Project Corridor. In our opinion, no further investigation is warranted.

However, contaminated soil pockets and/or localized "hotspots" could be encountered during construction at other locations within the proposed project areas other than those identified and discussed in this report. If contaminated soils are suspected, they must be temporarily stockpiled, sampled, and analyzed. Once characterized, they must be hauled to an appropriate disposal facility. The responsibility of soil characterization is retained by the owner/generator or their designee. If groundwater dewatering is necessary, then the water must also be characterized for possible contaminants of concern prior to disposal. If groundwater removal is required prior to completion of the characterization, it must be pumped into a temporary storage tank until characterization is completed. Once characterized, it must also be disposed of in accordance with all applicable regulations. The responsibility for groundwater characterization is retained by the owner/generator or their designee.

8.0 LIMITATIONS

This Hazardous Materials Corridor Study was conducted to render a professional opinion about the likelihood of regulated contaminants being present on, in, or beneath the NE Jackson School Road Project Corridor at the time services were performed. This study was conducted according to American Association of State Highway and Transportation Officials (AASHTO) criteria for a HMCS and does not represent an ASTM Phase I Environmental Site Assessment.

Performance of an HMCS is intended to reduce, but not eliminate, uncertainty regarding the existence of environmental conditions. The AASHTO practice is intended primarily as an

approach to identifying potential sources of contamination that could impact the project. Based on the AASHTO guide, this HMCS constitutes appropriate inquiry into current and past uses of properties within the NE Jackson School Road Project Corridor and is consistent with good commercial or customary practice. However, no environmental assessment can wholly eliminate uncertainty regarding the potential for environmental conditions in connection with a project.

Shannon & Wilson has reviewed historical records and conducted a visual reconnaissance of the Project Corridor and adjacent properties. We have examined and relied on documents referenced in this report. With the exception of our own report, Shannon & Wilson has not conducted an independent examination of the facts contained in referenced materials and statements. We have assumed that these documents are genuine, and that the information and statements provided in these documents are true and accurate. We have no knowledge or indication to the contrary unless otherwise stated in the body of this report.

Data generated from the site reconnaissance reflect what can be reasonably inferred or what is obvious by direct visual observation. Shannon & Wilson assumes no responsibility for identifying characteristics of the NE Jackson School Road Project Corridor that were not readily identifiable by visual reconnaissance at the time of our site visit.

Shannon & Wilson has prepared this report in a professional manner, using that level of skill and care normally exercised for similar projects under similar conditions by reputable and competent environmental consultants currently practicing in the area, and in accordance with the terms and conditions set forth in our contract with Quincy Engineering, Inc. and Washington County. Shannon & Wilson is not responsible for conditions or consequences arising from relevant facts that were concealed, withheld, or not fully disclosed at the time this report was prepared. We also note that the facts and conditions referenced in this report may change over time, and that the conclusions set forth here are applicable to the facts and conditions as described at the time of this report. Conclusions were made within the operative constraints of the scope, budget, and schedule for the Project. We believe that the conditions stated here are factual, but no guarantee is made or implied.

This report is for the use of Quincy Engineering, Inc. and Washington County. Any reliance on the report by other parties shall require written permission, and is subject to the same contract provisions as apply to the client. Shannon & Wilson has prepared Appendix J, "Important Information About Your Environmental Site Assessment/Evaluation Report," to help you and others understand the use and limitations of our reports.

SHANNON & WILSON, INC.

This Hazardous Materials Corridor Study was performed by:



Michael Reynolds, PE Environmental Engineer Alia T. Hubbard Environmental Scientist

ATH/MSR:GLP/amn

9.0 REFERENCES CITED

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TABLE 1: SUMMARY OF SITES IDENTIFIED IN DATABASE SEARCHES

Database Record	Search Radius (miles)	Total Sites Identified	Within or Adjoining Subject Properties
National Priorities List (NPL)	1.0	0	0
Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS)	0.5	0	0
Resource Conservation and Recovery Act (RCRA) CORRACTS Facilities	1.0	0	0
RCRA Non-CORRACTS TSD Facilities	0.5	0	0
RCRA Generators	0.25	2	0
Emergency Response Notification System (ERNS)	Site	0	0
Federal and State Institutional/Engineering Controls Registries	0.5	0	0
Environmental Cleanup Site Information (ECSI) System	1.0	16	0
Solid Waste Disposal Sites	0.5	0	0
Leaking Underground Storage Tanks (LUSTs)	0.5	96	3
Registered Underground Storage Tanks (USTs)	0.25	1	0
Above Ground Storage Tanks (ASTs)	0.25	0	0
Voluntary Cleanup Program (VCP)	0.5	2	0
Brownfield Sites	0.5	1	0
MANIFEST	0.25	2	0
EDR High Risk Historical Records	0.25	5	1
OSFM Hazardous Substance Spill Incidents	Site & Adjoining	1	0

TABLE 2: ECSI SITES LOCATED WITHIN 1.0 MILE OF THE PROJECT CORRIDOR

ECSI Site Name & Address	Approximate Distance (feet) and Direction from Subject Properties	ECSI Number	Description and Regulatory Status
Brian's Auto Repair 495 E Main Street Hillsboro, Oregon 97124	~2,350 feet south	370	This service station had a leak of approximately 1,000 gallons of unleaded product on site in 1987. PEMCO came onto the site and removed the underground storage tanks (USTs) and excavated the contaminated soil. The site still requires a No Further Action (NFA) letter from DEQ. (DEQ, 2014)
Ellingwood Construction LLC 445 E Main Street Hillsboro, Oregon 97124	~2,380 feet south	5282	This property is located west of Brian's Auto Repair, Bank of America to the east. A heating oil tank was installed on the north/northwest corner of the building on the property and was supposedly removed without any documentation. Testing during 2009 showed diesel contamination in the soil and groundwater. The property appears to meet protective levels of human health and environment and requires no further action (NFA). (DEQ, 2014)
Rite-Way Body & Paint 365 E Main Street Hillsboro, Oregon 97124	~2,460 feet southwest	3832	This property was occupied by Rite-Way Body & Paint during World War II and operated for over 30 years. The USTs beneath the building on the property were used for auto body wastes/petroleum in the 1950's and 60's. It is suspected that product and paint waste may still remain in the USTs. The site is registered as suspect with DEQ. (DEQ, 2014)
Bank/4th Street 350 E Main Street Hillsboro, Oregon 97124	~2,485 feet southwest	5694	There are historic releases of petroleum at the site related to heating oil tanks. There are four zones of soil contamination on the site that include approximately 2,500 cubic yards of which 500 cubic yards may contain chemical concentrations (oil and/or benzo(a)pyrene). The areas of contamination have been delineated. The site is registered as a Brownfield site and a NFA status. (DEQ, 2014)

TABLE 2: ECSI SITES LOCATED WITHIN 1.0 MILE OF THE PROJECT CORRIDOR

ECSI Site Name & Address	Approximate Distance (feet) and Direction from Subject Properties	ECSI Number	Description and Regulatory Status
Tri-Met Westside Light Rail - Hillsboro Central SE Washington Street Hillsboro, Oregon 97124	~2,580 feet south	2141	In 1997, an underground concrete vault was discovered during excavation that contained soil with elevated concentrations of total petroleum hydrocarbons (TPH), polychlorinated biphenyls (PCBs), volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), and arsenic. 45 tons of excavated material was removed and disposed. DEQ determined that any residual contaminants left in place were below levels of concern after cleanup but NFA is still required to document the site status. (DEQ, 2014)
Tri-Met Westside Light Rail - Railroad Tracks SE Washington Street Hillsboro, Oregon 97124	~2,580 feet south	2170	In 1996, Tri-Met discovered treated railroad ties and ballast material beneath asphalt. Petroleum hydrocarbons were found in the gravel/soil ballast material used to support the tracks. Tri-Met disposed of the ballast material, concrete, and railroad ties. DEQ has issued a NFA at the site. (DEQ, 2014)
Washington County 150 N 1st Avenue Hillsboro, Oregon 97124	~2,585 feet southwest	3287	The site was previously a graphics business. In 1996, both soil and groundwater contaminated with tetrachloroethylene (PCE) was found on the site. There are four LUST files associated with the property, all containing heating oil and gasoline, which were removed by 1988. Contaminated soils were removed and vapor barriers were constructed in the area once occupied by the Professional and Budget Cleaners in 2004. There was continued air sampling in the new Civic building on site until 2007. DEQ issued the site a NFA in 2009. See ECSI file 2100, and LUST files 34-88-0108, 34-97-0224, 34-96-0710, and 34-90-0095 for further information. (DEQ, 2014)

TABLE 2: ECSI SITES LOCATED WITHIN 1.0 MILE OF THE PROJECT CORRIDOR

ECSI Site Name & Address	Approximate Distance (feet) and Direction from Subject Properties	ECSI Number	Description and Regulatory Status
Chapman's Service Station 109-155 N 1st Street Hillsboro, Oregon 97124	~2,920 feet southwest	369	The site was contaminated with fuel from USTs that was discovered by the Fire Marshal when an odor and sheen from the sanitary sewer system was reported. Five abondoned tanks may exist on the site. Site Assessments have closed the site and granted the site a NFA status. (DEQ, 2014)
Owen Property (Former) 13885 NE Cornell Road Hillsboro, Oregon 97124	~2,975 feet southeast	5765	Two groundwater wells are located on this property. These two wells were abondoned in 2013 due to contaminants detected in groundwater, including polynuclear aromatic hydrocarbons (PAHs) and heptachlor epoxide above DEQ-published Risk Based Concentrations. This site has been granted an NFA status. (DEQ, 2014)
Hillsboro Law Center 247 SE Washington Street Hillsboro, Oregon 97124	~3,040 feet southwest	2121	Contamination at this site is believed to have migrated via groundwater from an undetermined off-site location. Petroleum hydrocarbons were detected in the soil and groundwater as well as (PAHs) and (PCE) in the groundwater. Stoddard solvent contamination was defined as a second source of contamination which presented petroluem constituents observed during the 1997 Tri-Met investigation. The site has been issued a NFA status by DEQ due to levels of contaminants being below the site -specific RBCs. (DEQ, 2014)

TABLE 2: ECSI SITES LOCATED WITHIN 1.0 MILE OF THE PROJECT CORRIDOR

ECSI Site Name & Address	Approximate Distance (feet) and Direction from Subject Properties	ECSI Number	Description and Regulatory Status
Professional & Budget Dry Cleaners 126 S 1st Avenue Hillsboro, Oregon 97124	~3,060 feet southwest	2100	This site was previously occupied by Professional & Budget Dry Cleaners from 1990 to 2000. Prior to that, the site was an automotive service center and printing / graphics business. In 1997, PCE was found in the soil and groundwater as well as benzene in the groundwater, a result of a gasoline leak from an UST. The City of Hillsboro proposed to clean up the site using it own contractor. The site is currently listed on the CRL and has been granted a conditional NFA status with the understanding that future construction must act as a cap for residual contamination. (DEQ, 2014)
Hillsboro Extension Light Rail - SW Adams, West side of SW Adams between Baseline and Oak Streets Hillsboro, Oregon 97124	~4,095 feet southwest	2198	This site was used as a staging area for the TriMet Light Rail construction and encountered a petroleum release that resulted in 27 tons of petroleum contaminated soil (PCS) removal in 1999. During excavation, older, deeper PCS was encountered below the geotextile fabric that had been present prior to TriMet's use on the site. Due to the depth of the contamination, exposure is currently limited. The site is still suspect and requires further investigation. (DEQ, 2014)
Southern Pacific Railroad - Hillsboro Station 145 SE Cedar St Hillsboro, Oregon 97124	~4,720 feet south	2129	According to a DEQ Spill Report, the railroad bed was stained with oil in two locations. After cleanup, lube-oil remains were found in the soil at up to 12,600 ppm. This site is suspect and requires further investigation. (DEQ, 2014)
Portland & Western Trackside Dumping Site Intersection fo SE Cedar & S 1st Avenue Hillsboro, Oregon 97124	~4,780 feet southwest	4577	This site contained 16 damaged and cracked railroad signal batteries that were discarded and unearthed along th railroad line located in the Union Pacific right-of-way. After soil sampling was done, DEQ determined there was no health threats and issued the site a NFA status. (DEQ, 2014)

TABLE 2: ECSI SITES LOCATED WITHIN 1.0 MILE OF THE PROJECT CORRIDOR

ECSI Site Name & Address	Approximate Distance (feet) and Direction from Subject Properties	ECSI Number	Description and Regulatory Status
Intel Corp. 2111 NW 25th Avenue Hillsboro, Oregon 97124	~4,965 feet east	125	A UST on site released an estimated gallon of waste solvent sometime between 1982 and 1984 that resulted in a monitoring well contamination. The UST was decommissioned in 1985. Future testing of the groundwater monitoring well showed evidence of decreased TCA levels. DEQ has issued a NFA letter to Intel in 1989. (DEQ, 2014)
Silgan Containers Corp. 669 S 1st Avenue Hillsboro, Oregon 97124	~5,290 feet southwest	1002	In 1983, Carnation Can Division (former operator) reported to DEQ a clean up of spilled product by the large bulk storage tank. Product is unknown. Site is suspect and requires further investigation. (DEQ, 2014)

TABLE 3: ACTIVE LUST SITES LOCATED WITHIN 0.5 MILES OF THE PROJECT CORRIDOR

LUST Site Name and Address	Approximate Distance (feet) and Direction from Project Corridor	
556 NE 5th Avenue Hillsboro, Oregon 97124	~175 feet south	LUST 34-96-0041 Soil contaminated with heating oil was discovered during a site assessment. Cleanup began January 1996.
532 NE 5th Avenue Hillsboro, Oregon 97124	~290 feet south	LUST 34-99-0981 Soil contaminated with miscellaneous oil was discovered during a site assessment. Cleanup began August 1999.
543 NE 6th Avenue Hillsboro, Oregon 97124	~380 feet southeast	LUST 34-94-5188 Soil contaminated with heating oil was discovered during a site assessment. Information was received October 1994. Status is unknown.
439 NE 5th Avenue Hillsboro, Oregon 97124	~630 feet south	LUST 34-98-0926 Soil contaminated with heating oil was discovered during decommissioning. Information was received October 1998. Status is unknown.
452 NE 3rd Avenue Hillsboro, Oregon 97124	~660 feet southwest	LUST 34-12-0783 Soil contaminated with heating oil, waste oil and gas was discovered during a site assessment. Information was received July 2012. Status is unknown.
696 NE 3rd Avenue Hillsboro, Oregon 97124	~750 feet west	LUST 34-13-1010 Soil contaminated with heating oil was discovered during a site assessment. Information was received July 2013. Status is unknown.
525 NE Edison Street Hillsboro, Oregon 97124	~760 feet south	LUST 34-97-0422 No data or cleanup date reported.
840 NE 3rd Avenue Hillsboro, Oregon 97124	~1,050 feet west	LUST 34-12-1157 Soil contaminated with heating oil was discovered during a site assessment. Information was received September 2012. Status is unknown.
457 NE Birtchwood Terrace Hillsboro, Oregon 97124	~1,100 feet south	LUST 34-13-0464 Soil contaminated with heating oil was discovered during a site assessment. Information was received April 2013. Status is unknown.

TABLE 3: ACTIVE LUST SITES LOCATED WITHIN 0.5 MILES OF THE PROJECT CORRIDOR

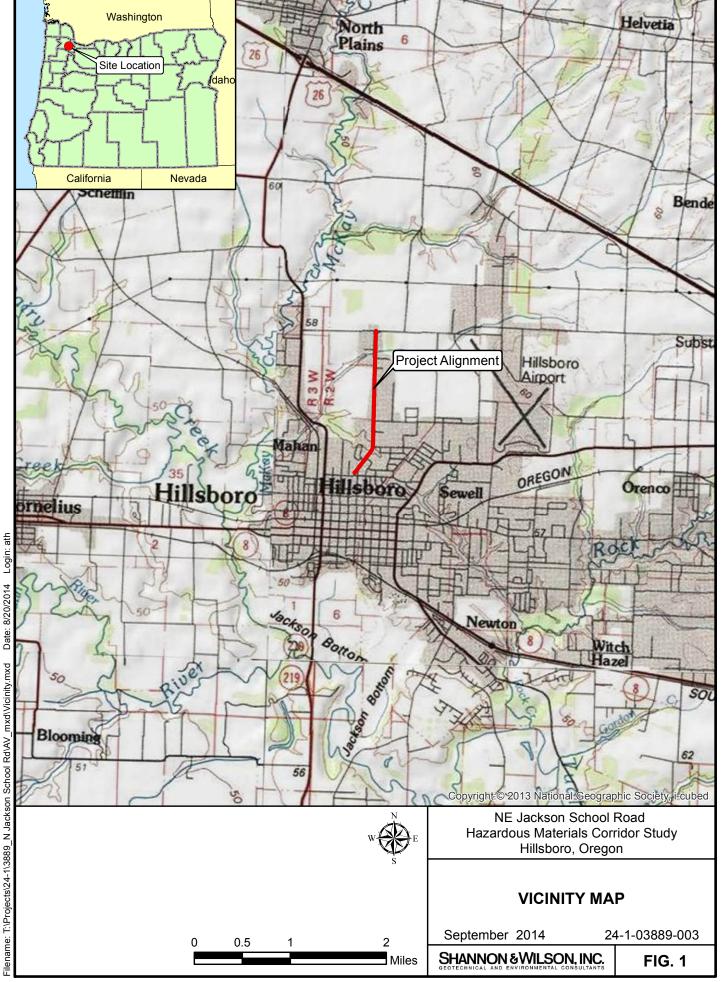
LUST Site Name and Address	Approximate Distance (feet) and Direction from Project Corridor	Description and Regulatory Status
976 NE 3rd Avenue Hillsboro, Oregon 97124	~1,190 feet west	LUST 34-06-0285 Soil contaminated with heating oil was discovered during decommissioning. Cleanup started June 2001.
1162 NE 3rd Avenue Hillsboro, Oregon 97124	~1,265 feet west	LUST 21-09-0857 Soil contaminated with heating oil was discovered during decommissioning. Information was received September 2009. Status is unknown.
511 NE Birchwood Circle Hillsboro, Oregon 97124	~1,275 feet southeast	LUST 34-97-0259 Soil contaminated with heating oil was discovered during a site assessment. Information was received April 1997. Status is unknown.
254 NE 4th Avenue Hillsboro, Oregon 97124	~1,406 feet south	LUST 34-03-2250 Soil contaminated with heating oil was discovered during decommissioning. Cleanup started October 2003.
29940 NW Evergreen Road Hillsboro, Oregon 97124	~1,475 feet west	LUST 34-99-0668 Soil contaminated with heating oil was discovered during decommissioning. Information was received June 1999. Status is unknown.
271 NE Jackson Street Hillsboro, Oregon 97124	~1,500 feet southwest	LUST 34-01-5517 Soil contaminated with heating oil was discovered during a site assessment. Cleanup started March 2001.
421 NE Birchwood Road Hillsboro, Oregon 97124	~1,615 feet southeast	LUST 34-12-1129 Soil contaminated with heating oil was discovered during a site assessment. Information was received Septebmer 2012. Status is unknown.
919 NE Grant Street Hillsboro, Oregon 97124	~1,800 feet east	LUST 34-09-0797 Soil and groundwater contaminated with heating oil was discovered during a site assessment. Information was received August 2009. Status is unknown.

TABLE 3: ACTIVE LUST SITES LOCATED WITHIN 0.5 MILES OF THE PROJECT CORRIDOR

LUST Site Name and Address	Approximate Distance (feet) and Direction from Project Corridor	Description and Regulatory Status
472 NE Birchwood Road Hillsboro, Oregon 97124	~1,820 feet southeast	LUST 34-14-0414 Soil contaminated with heating oil was discovered during a site assessment. Information was received April 2014. Status is unknown.
1125 NE 3rd Avenue Hillsboro, Oregon 97124	~1,850 feet west	LUST 34-95-0106 Soil contaminated with heating oil was discovered during decommissioning. Information was received May 1995. Status is unknown.
175 NE 7th Avenue Hillsboro, Oregon 97124	~1,930 feet south	LUST 34-05-1149 Soil contaminated with heating oil was discovered during a tightness test. Cleanup began June 2005.
334 NE Birchwood Road Hillsboro, Oregon 97124	~1845 feet southeast	LUST 34-14-0342 No data or cleanup date reported.
495 E Main Street Hillsboro, Oregon 97124	~2,010 feet south	LUST 34-05-0790 Soil contaminated with miscellaneous gas was discovered during a site assessment. Cleanup started in April 2005.
301 E Main Street Hillsboro, Oregon 97124	~2,250 feet southwest	LUST 34-97-0598 Soil contaminated with heating oil was discovered during decommissioning. Information was received August of 1997. Status is unknown.
614 E Main Street Hillsboro, Oregon 97124	~2,290 feet south	LUST 34-02-0944 Soil contaminated with heating oil was discovered during a site assessment. Information was received December 2011. Status is unknown.
336 NE 9th Place #334 Hillsboro, Oregon 97124	~2,355 feet southeast	LUST 34-96-0336 Soil contaminated with heating oil was discovered during decommissioning. Cleanup started May 1996.
142 SE 6th Avenue Hillsboro, Oregon 97124	~2,490 feet south	LUST 34-99-0307 Soil and groundwater contaminated with heating oil was discovered during decommissioning. Information was received April 1999. Status is unknown.

TABLE 3: ACTIVE LUST SITES LOCATED WITHIN 0.5 MILES OF THE PROJECT CORRIDOR

LUST Site Name and Address	Approximate Distance (feet) and Direction from Project Corridor	
136 SE 3rd Avenue Hillsboro, Oregon 97124		LUST 34-98-0292 Soil contaminated with miscellaneous gas was discovered during decommissioning. Cleanup began in April of 1998.
133 SE 3rd Avenue Hillsboro, Oregon 97124	~2,525 feet southwest	LUST 34-98-0403 Soil contaminated with deisel and solvent was discovered during decommissioning. Cleanup began June 1998.



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