

APPENDIX D

COMMUNITY HEALTH AND SAFETY PLAN

Terminal 117 Cleanup

Port of Seattle and City of Seattle

FINAL COMMUNITY HEALTH AND SAFETY PLAN ADJACENT STREETS AND STORMWATER

**Lower Duwamish Waterway Superfund Site
Terminal 117 Early Action Area**



October 1, 2014

FINAL COMMUNITY HEALTH AND SAFETY PLAN

Adjacent Streets and Stormwater Lower Duwamish Waterway Superfund Site Terminal 117 Early Action Area

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ACRONYMS AND ABBREVIATIONS

CHASP	community health and safety plan
CIP	community involvement plan
City	City of Seattle
dB(A)	decibel
EAA	early action area
EPA	U.S. Environmental Protection Agency
HASP	health and safety plan
LDW	Lower Duwamish Waterway
Leq	equivalent constant sound level
NTCRA	non-time-critical removal action
PCB	polychlorinated biphenyl
Port	Port of Seattle
RAWP	removal action work plan
SMC	Seattle Municipal Code
T-117	Terminal 117

EMERGENCY CONTACTS

General Emergency (Fire, Police, Ambulance)	911
Terminal 117 Cleanup Hotline, Nanda Guajardo (active one week prior to construction)	(877) 999-8117
EPA's Remedial Project Manager, Piper Peterson	(206) 719-0740
City's Project Coordinator, Mary Mitchener	(206) 369-3132
City's Engineer of Record, Eric Pilcher	(253) 370-5894
City's Resident Engineer, TBD	TBD
City's Health and Safety Officer, Zach Estela	(206) 631-9899
Contractor's Health and Safety Supervisor, TBD	TBD
Seattle Police Department (Non-Emergency)	(206) 625-5011
National Response Center Hotline	(800) 424-8802
Washington Poison Control Center	(800) 222-1222
Sea Mar Community Health Center (8720 14th Avenue S.)	(206) 762-3730
Highline Medical Center Emergency Room (16251 Sylvester Road SW)	(206) 431-5314
South Seattle Veterinary Hospital (11033 1st Avenue S.)	(206) 242-8338

1 INTRODUCTION

The Terminal 117 (T-117) cleanup area is an early action area (EAA) within the Lower Duwamish Waterway (LDW) Superfund Site in Seattle, Washington (Figure 1-1). The City of Seattle (City) is conducting a non-time-critical removal action (NTCRA) to address contaminants of concern in the Adjacent Streets near the T-117 site. Preparation of a community health and safety plan (CHASP) is one of the required design elements under the Administrative Settlement Agreement and Order on Consent (USEPA 2011) for the NTCRA at T-117.

The T-117 EAA includes the following cleanup areas: Sediment area, Upland area, and Adjacent Streets and Residential Yards area. The cleanup is being conducted in two coordinated phases: the Sediment and Upland cleanup (Phase 1), performed by the Port of Seattle (Port), and the Adjacent Streets and Residential Yards cleanup (Phase 2), performed by the City. In addition, Phase 2 is being conducted in two steps as follows:

- The Residential Yards cleanup, which includes the cleanup of eight residential yards, the planting strips on S. Cloverdale Street, and the alleyway between S. Cloverdale Street and S. Donovan Street. The Residential Yards cleanup was completed in March 2013 and is documented in the Residential Yards removal action completion report (Integral 2013a).
- The Adjacent Streets cleanup, which includes portions of the rights-of-ways of 16th Avenue S., 17th Avenue S., Dallas Avenue S., and S. Donovan Street; and construction of new stormwater infrastructure.

The Adjacent Streets portion of the Phase 2 removal action is the subject of this CHASP (also referred to below as “Phase 2 CHASP”). This portion of the cleanup is anticipated to begin in spring 2015 after the Phase 1 work at the T-117 site is completed. Community protection measures and outreach activities related to the overall T-117 EAA cleanup are ongoing under the direction of the Port and the City, in coordination with the U.S. Environmental Protection Agency (EPA).

1.1 PURPOSE

The Adjacent Streets portion of the T-117 NTCRA is an environmental cleanup project that includes excavation of soil within City rights-of-way; the installation of a new storm sewer system; and street restoration. As with any construction project, heavy equipment and trucks generate noise, light, dust, odors, and traffic that may be a temporary inconvenience to nearby businesses and residents. Because of the nature of the work involved, this project also presents potential risk for injury to the public and property damage. With this in mind, the activities

described in this Phase 2 CHASP are designed to minimize impacts to the community, and communicate the precautions that will be taken to protect public and private property, while completing this work. This Phase 2 CHASP specifically addresses activities related to the Adjacent Streets.

This Phase 2 CHASP has been prepared to document the approaches the City and EPA will use to protect community health, to minimize inconveniences to the community, and to prevent and respond to accidents involving the community. Fact sheets or flyers will periodically be distributed to identify potential impacts to the community (e.g., parking restrictions, street closures, anticipated work hours, etc.), present health and safety measures to be implemented, provide updates to the project schedule, and inform the community on communication tools for contacting the construction team.

The purpose of this Phase 2 CHASP is to outline measures designed to reduce the likelihood of project-related accidents and impacts that may affect the local community. This CHASP includes the following elements:

- Descriptions of the removal activities to be performed (Section 2)
- An assessment of potential impacts to the community and descriptions of mitigation measures to be employed to control those impacts (Section 3)
- The expected project schedule (Section 4)
- Emergency response procedures (Section 5)
- The identification of available community outreach information and project team member communications information (Section 6).

The Adjacent Streets cleanup has been designed in general accordance with applicable federal, state, and local regulations. These regulations include control of fugitive dust in accordance with Puget Sound Clean Air Agency and protection of worker health and safety through the Washington State Division of Occupational Safety and Health.

This CHASP addresses potential project-related quality of life impacts, injuries, and property damage to the community, including residents of the South Park neighborhood. Criteria and goals used in the Phase 2 CHASP are equal to, or more protective than, those cited in the regulations. This CHASP will be released for public consideration at least 30 days prior to the start of construction activities and revised to address community comments as necessary. The final CHASP will be available electronically on the T-117 cleanup web site (www.t117.com), and the City's resident engineer will keep a hard copy onsite during construction.

1.2 DESCRIPTION OF SITE TASKS

The Adjacent Streets cleanup includes demolition of pavement and excavation and offsite disposal of underlying soils, the installation of a new storm sewer system, and street restoration using clean backfill and new pavement. Within planting strips, existing plants and grasses will be removed, the soil excavated, and the landscaping will be restored by placement of clean backfill and installation of replacement plants and grasses. While some permanent roadside changes are necessary to meet current City standards, disruptions to residents and businesses due to loss of on-street parking and temporary street closures will be minimized to the extent practicable. The City team will attempt to contact each potentially affected business, property owner, and tenant individually to communicate the likely temporary and long-term outcomes of construction in their neighborhood.

The Adjacent Streets cleanup will remove soil containing polychlorinated biphenyls (PCBs) and polychlorinated dibenzo-*p*-dioxins and polychlorinated dibenzofurans (dioxin/furans) to the limits approved by EPA and identified in the removal action design report (Integral 2013b). Additional excavation will be performed as needed to accommodate new stormwater infrastructure and replacement pavement. The estimated total volume of soil within Adjacent Streets areas is approximately 11,000 cubic yards, with contamination depths varying from 0.5 to 6 feet below ground surface.

Details regarding the construction site layout, equipment use, construction procedures, and construction schedule will be developed by the contractor in the removal action work plan (RAWP). The RAWP will be developed in conjunction with the City, taking into consideration community input, and approved by EPA. The final RAWP will be available electronically at the T-117 cleanup web site (www.t117.com), and the City's resident engineer will keep a hard copy onsite during construction.

1.3 RELATED DOCUMENTS

This Phase 2 CHASP is one of several documents in the Adjacent Streets cleanup design package. The following is a brief description of other project documents that describe construction elements that relate to this Phase 2 CHASP.

1.3.1 Community Involvement Plan

The community involvement plan (CIP; HSPA and Integral 2012) describes outreach and information dissemination to the South Park neighborhood. Although the CIP is broader than this Phase 2 CHASP (which focuses on health and safety issues), many aspects of the CIP are included in Section 6 of this Phase 2 CHASP. The City team will work cooperatively with EPA

to apply the CIP principles throughout the project, to make sure the community is kept informed of project progress, and to respond to community questions and feedback.

1.3.2 Fact Sheet

Updated Adjacent Streets fact sheets will be released as necessary and distributed to the community prior to and during construction. They will describe the construction activities, schedule, and measures the City will take to protect the community during construction. They will also provide important contact information, including a toll-free hotline: (877) 999-8117, and e-mail: SCL_T117_Streets@seattle.gov, for the community to voice concerns and ask questions. The City team will respond to calls to the hotline and e-mails as soon as practical. Calls and e-mails received outside of work hours will be returned on the following business day. The City will also maintain a field office at a location to be determined.

2 SITE LAYOUT AND TASKS TO BE PERFORMED

Areas to be excavated within the Adjacent Streets portion of the Phase 2 cleanup area are shown on Figure 2-1. Additional excavations will be performed as needed to accommodate new pavement and new stormwater infrastructure as shown on Figure 2-2. The following tasks are planned to be performed during the Adjacent Streets cleanup:

Community notification(s). Prior to and during the progress of construction activities, the City will provide updates to the community through the use of flyers (e.g., fact sheets), notifications to the South Park listserv, and/or community briefings.

Establishment of work zone controls. Prior to land disturbance (i.e., after sawcutting, but prior to pavement demolition), the contractor will place temporary security fencing and visible signage around exclusion zones and contamination reduction zones to demarcate where excavation will take place. Fencing and signage around active work zones will remain in place after hours to prevent access by non-project personnel. During work hours, a designated worker will advise bystanders to avoid work zones as appropriate. Pollution control facilities such as wheel cleaning stations and other erosion and sediment control best management practices will also be provided.

Clearing and demolition. After site controls have been established, surface vegetation within removal areas will be cleared. Other obstructions such as traffic signs, utility poles, and mailboxes will either be temporarily moved or marked for protection. Existing asphalt and concrete pavement will be sawcut at the limit of work and broken up into manageable pieces for removal. Equipment such as tree service booms and backhoe mounted jackhammers may be present on site. In addition to vehicle traffic, hazards may include falling tree limbs or airborne rock chips from demolition operations.

Soil excavation, transport, and disposal. Soil will be excavated, loaded into haul trucks or roll-off containers, and transported to an approved landfill for disposal. Excavation will be phased to limit the amount of exposed area at any one time. Excavators and haul trucks will be present onsite. In addition to vehicles, hazards will include open excavations and exposure to contaminated soil.

Installation of storm drainage system and outfall. New storm sewer piping and other underground utility work, including an outfall to the Lower Duwamish Waterway, will be installed. A schematic layout of the planned stormwater drainage system improvements is shown on Figure 2-2. Excavators and haul trucks will be present on site. In addition to vehicles, hazards will include open utility trenches.

Backfilling of excavated areas. Excavated areas will be backfilled with clean import material as soon as practicable to accommodate the work. Dump trucks and/or conveyor trucks will be

used to spread import material into excavations. In addition to vehicles, hazards may include airborne rocks from backfilling operations.

Installation of sidewalks, curbs, and pavements. Concrete curbing and sidewalks will be formed and poured following backfill (see Figure 1-1). Asphalt paving will be performed after the new curbs have had time to cure. Cement mixers and asphalt pavers will be present onsite.

Installation of bioretention systems and landscaping. Upon completion of concrete work and paving, final placement of soil and installation of plant materials will be performed within planting strips and bioretention systems. Conveyor trucks will be used to spread topsoil into excavations.

Demobilize equipment and remove site controls. After active site construction activities have been completed the contractor will remove access restriction barriers and demobilize construction equipment.

Maintenance of restored areas. Continued maintenance of temporary stormwater pollution controls and landscaping will be performed by the contractor after completion of the construction activities, until vegetation in the planting strips and bioretention systems is established. Routine maintenance following the establishment period will be performed by the City.

3 ASSESSMENT AND CONTROL OF POTENTIAL IMPACTS TO COMMUNITY

The City team recognizes that the Adjacent Streets cleanup will impact the residents and businesses of the surrounding neighborhood in a number of ways. This section identifies and assesses potential health and safety hazards and other impacts to community quality of life that may be caused by the Adjacent Streets cleanup. Potential impacts and hazards caused by the Adjacent Streets cleanup are identified and evaluated to establish ways that they might be prevented or mitigated.

Each of the following subsections describes measures or procedures required by the contractor during construction activities to maintain the health and safety of the public. These measures and procedures are also intended to mitigate the impacts of the cleanup project to nearby residents and businesses. The City and EPA will perform oversight of all removal action construction activities and associated community protection measures.

3.1 AIR QUALITY

During construction, there is a potential for the airborne migration of fugitive dust (potentially contaminated with PCBs), engine exhaust beyond the active construction area, and cigarette smoke.

3.1.1 Fugitive Dust

The following controls may be used, as necessary, to reduce potential air quality impacts related to fugitive dust emissions.

- Worksite controls such as ceasing excavation during weather events that produce visible dust or limiting open excavations to one manageable area at one time
- Using water sprays to suppress dust (excess water will be contained, as appropriate)
- Cleaning vehicles leaving work zones to remove dirt or dust from wheel treads and exterior
- Revising traffic haul routes
- Transporting Subtitle C soil in lined and covered containers
- Covering truck beds carrying other soil leaving the work zones, if necessary due to dry, dusty conditions.

During all activities, a qualitative standard of “no visible dust” at the site perimeter and within the neighborhood (i.e., no dust from trucks) will be the evaluation method. Residents may observe whether best management practices are being implemented and operating as designed to keep dust to a minimum and are provided with a toll-free hotline, (877) 999-8117, to express concerns (see Emergency Contacts). The City’s resident engineer will respond as appropriate.

In the event that visible dust generated from construction activities or excavated soil is apparent at the site, mitigation measures such as the following will be initiated:

- Cease excavation until controls are in place and are proven effective
- Reduce vehicle and equipment speed
- Reduce the pace of work to limit the number and size of excavations open at any one time
- Provide water suppression to prevent dust and contain waste water where appropriate
- Provide wind shields or other enclosures to curtail high winds.

3.1.2 Engine Exhaust

To control air quality effects from engine exhaust, excavation equipment will not be allowed to idle unattended for more than five minutes. Haul trucks will not be allowed to idle while parked or queued on neighborhood streets prior to loading and unloading. Please note that this does not apply to equipment in active use. For example, haul trucks may have their engines running during loading and unloading operations such that drivers are able to maneuver the vehicle as necessary. Because of the limited duration of the Adjacent Streets cleanup, no air monitoring for engine exhaust is proposed; however, anyone who notices a potential exhaust problem may report it to the cleanup hotline, (877) 999-8117.

3.1.3 Cigarette Smoke

Workers will only be allowed to smoke within designated areas. Designated areas will be established in locations that are at least 25 feet from a building entrance, outside of designated work zones, and not in front of residential properties. Quantitative monitoring for cigarette smoke is impractical; therefore, visual observation will be used to ensure that workers are complying with smoking restrictions.

3.2 NOISE

This section summarizes the local noise ordinance and hours under which the work may be performed. Seattle Municipal Code (SMC) Chapter 25.08 (City of Seattle 2012) sets limits on construction site noise within residential areas. Specifically, the allowable sound level is based

on SMC 25.08.410, which sets a 60 decibel (dB(A)) limit for industrial related noise generation (i.e., construction activities) adjacent to residential properties, based on a time-varying, A-weighted, equivalent constant sound level (Leq) of one minute for a constant sound source or one hour for a non-continuous sound source. SMC 25.08.425 specifies that exterior sound level limits are measured from the property lines or at a distance of 50 feet from the construction equipment generating the noise, whichever is greater. It also allows a 25 dB(A) increase for construction activities at distances of up to 50 feet, making the maximum permissible Leq 85 dB(A) between the hours of 7:00 a.m. and 7:00 p.m. on weekdays. This noise level is similar in volume to running a vacuum cleaner or standing next to a garbage disposal or dishwasher.

In addition, noise generated by impact equipment (e.g., pavement breakers and jackhammers) may exceed Leq 85 dB(A) for any one hour period between 8:00 a.m. and 5:00 p.m. on weekdays. The allowable increase for impact equipment is on a sliding scale based on length of time the noise is generated. The following limits are imposed:

- Leq 90 dB(A) for continuous use
- Leq 93 dB(A) for 30 minutes each hour
- Leq 96 dB(A) for 15 minutes each hour
- Leq 99 dB(A) for 7.5 minutes each hour.

Noise-generating construction activities will generally be restricted to between 7:00 a.m. and 7:00 p.m. Monday through Friday to minimize disturbance to residents. Some weekend and/or night work may be necessary to perform certain construction tasks (e.g., installation of the new stormwater outfall during low tide). In the event that such work becomes necessary, the work hours will be coordinated in advance with the City, EPA, and residents. Emergency responders (e.g., police and fire department) will be notified of any night/weekend work.

Individual residents or businesses adjacent to the work area may request modifications to this schedule to accommodate special circumstances using the toll free hotline: (877) 999-8117, or e-mail: SCL_T117_Streets@seattle.gov to coordinate with the construction team and resident engineer. During the initial operation of loud construction equipment, a hand-held sound level meter will be used to perform a 1-minute initial assessment. If readings during the assessment period indicate potential noise exceedances, additional data will be collected for the representative time-weighted average sound pressure levels to verify that readings are within the noise ordinance. In the event of an exceedance, the City will coordinate with potentially affected residents and businesses to determine the ideal time that work can proceed to minimize the inconvenience. Once a baseline has been established, noise monitoring may be suspended unless specifically requested by the construction oversight team or in response to community complaints.

3.3 TRAFFIC AND PARKING

Trucks and worker vehicles will be used to move materials, equipment, and workers during construction activities. These vehicles will temporarily, but unavoidably, add to traffic on local streets and highways and will increase demand for parking in the area. However, the policies outlined below will be implemented to reduce the number of vehicles used on neighborhood streets, limit when and where vehicles travel through neighborhoods, and require that safety procedures intended to reduce the likelihood of accidents are followed. The types and purposes of project vehicles include the following:

- Trucks, flatbeds, and other large vehicles to transport construction materials, heavy equipment, excavated soil, backfill, and debris
- Heavy equipment, such as backhoes, loaders, and compactors maneuvering from flatbed trucks to work zones or travelling between work zones
- Small trucks and cars to transport construction workers, sampling teams, regulatory oversight personnel, authorized visitors, and others needed to perform the work.

The primary means of minimizing impacts from traffic and parking involve the following design and staging considerations:

- Trucks traveling to and from the neighborhood will use the haul routes identified on Figure 3-1. Based on the total volume of excavation and backfill within the T-117 Streets cleanup area, approximately 1,500 dump trucks with “pup” trailers are expected over a 5-month time period.
- Trucks and project vehicles will comply with local speed limits, traffic laws, and regulations regarding maintenance, placards, securing loads, and other safety measures.
- Dedicated flaggers and spotters will be present to direct all truck and equipment operations in all active work zones, and as needed on 14th Avenue S., throughout the duration of the work.
- Construction vehicles and earthmoving equipment are required by the Washington Industrial Safety and Health Act to have audible backup alarms to warn workers and the public of moving equipment. Low-frequency backup alarms are encouraged and may be used when available.
- Traffic and access restrictions will be identified on fact sheets and distributed throughout the neighborhood as site conditions change. Updates will also be made to the South Park listserv.
- Drivers of diesel trucks and other equipment must obey all Washington traffic laws. In addition, equipment will not be permitted to idle longer than 5 minutes when not in active use.

- Trucks will be queued in a designated staging area (e.g., the vacant lot at the northwest corner of Dallas Avenue S. and 14th Avenue S.; see Figure 3-2) while awaiting access to and from the work area. The contractor will have a traffic control plan to ensure safety and business continuity in the local neighborhood.
- Workers will be encouraged to carpool to the site to reduce the strain on parking and traffic. Workers will park in or around the designated staging area. It is anticipated that up to 25 workers involved in the Adjacent Streets cleanup may be onsite at any one time; this includes construction crew members, surveyors, monitoring and testing personnel, supervisors, and oversight personnel.
- Visitors observing construction activities may park in designated public spaces around the site for brief periods of time.

On-street parking and access to driveways will be temporarily unavailable within active construction areas during the Adjacent Streets cleanup. “No Parking” signage will be placed along portions of the right-of-way where work will occur, 72-hours prior to street or lane closure. In the event that vehicles have not been moved within that time frame, the City team will attempt to locate and contact the vehicle owners. If the vehicle owner cannot be reached, towing may become necessary. Please note that temporary road closures may also “trap” vehicles parked on private property until the construction activities are complete. The City team will similarly attempt to locate and contact vehicle owners and/or leave flyers on vehicles as necessary to prevent “trapping.”

3.4 SITE CONTROL

To protect human health and the environment, areas containing contaminated soil and heavy machinery will be kept under strict control to minimize public access. General descriptions of site controls to be implemented during construction are described below.

Prior to the start of excavation activities, the contractor will implement measures to maintain security and control access to the site. The contractor will demarcate areas of operations for restricted access. The perimeter of these areas will be secured using temporary security fencing and warning signage. By demarcating excavation and loading areas as exclusion zones, the public will be made aware of areas to be avoided. Hazards within the exclusion zones include open excavations, moving equipment, and contaminated soil; therefore, only properly trained and authorized workers will be permitted to enter them. Exclusion zone access restrictions will be maintained 24 hours per day until soil has been removed and the excavations backfilled to grade. This information will be reiterated within the Adjacent Streets fact sheets.

Construction will be phased to limit the extent of street closure at any given time. When construction activities are occurring, driveways and on-street parking along property frontages will be temporarily unavailable. Residents will receive information 48 hours in advance of

when construction activities are occurring on a street fronting their property. Efforts will be made to keep property access available for general use and to not impede access by residents or emergency responders (e.g., fire and ambulance service); however, temporary road closures will be necessary. Temporary street closures will be processed through the Seattle Department of Transportation to ensure that the information is available to emergency responders.

After excavations have been backfilled, but before final landscaping or paving has been completed, there may be a 6 to 24-in. drop-off from sidewalks, pavement edges, etc. This is a potential fall hazard for residents, pets, and visitors. Temporary barricades, yellow caution tape, and stanchions will be used to warn against these construction hazards, and residents are cautioned not to venture into work areas after work hours. Excavations will generally be backfilled within 24 to 48 hours but final street paving may not be completed for several weeks pending the completion of removal and storm water improvement activities.

If unintentional access occurs by those who fail to notice restricted access barriers, the contractor may increase the visibility and integrity of the barriers. Should unlawful trespassers be discovered on project equipment or in work areas, security may be increased and local authorities notified.

3.5 SPILL PREVENTION

Prior to excavation, the contractor will establish an exclusion zone around the area of work, which will include the area to be excavated and a designated loading zone. The loading zone and travel pathway from the excavation area to the loading zone will be covered with plastic sheeting and protected by plywood or metal plates. Any material spilled within the exclusion zone will be swept and disposed of on a regular basis, so that it will not be tracked into clean areas.

The contractor will maintain a fully stocked spill kit onsite containing absorbent pads and socks, loose absorbent material, trash bags, shovels, brooms, dust pan, and sufficient personal protective equipment.

Fueling of construction vehicles and equipment will not be performed on residential streets. Construction vehicles will be refueled at commercial filling stations. Other equipment will be refueled in a designated area within the construction staging area, with appropriate spill protection measures in place.

3.6 INJURY PREVENTION

There is a potential safety risk for residents, pets, visitors, or curious individuals who may enter project work areas, inadvertently or otherwise. To minimize the potential for unintentional

access, work areas will be clearly marked and secured as stated in Section 3.4 and signage will be regularly inspected for visibility and relevance to current work areas and activities. A designated worker will be present at each work area, as stated in Section 2.

All workers will attend morning daily safety briefings, conducted by the contractor, which will discuss the tasks to be performed that day and reiterate safety concerns such as providing verbal warnings during work hours to alert non-workers about access-restricted areas. Work activities will be halted as necessary to prevent injury, until unauthorized personnel have left the work areas.

During work hours, the project team will provide audible and visual warnings (e.g., verbal alerts, whistle and/or air horn blasts, safety flags, hand signs/gestures, etc.) to alert project team members of potential emergency situations and/or the presence of non-workers in the project vicinity.

It is recommended that residents keep pets away from active work zones. Pets should be walked on a leash and should remain under the control of the owner, both during and after work hours. In the event that an unsecured animal enters a work zone, work will be halted until the animal is retrieved and secured. Owners will be asked to either call the pet or authorize a worker to retrieve the pet from the work zone, rather than entering the work zone themselves. If the animal's owner cannot be identified, animal control may be called, if necessary.

3.7 PROPERTY DAMAGE PREVENTION

Prior to any land disturbance, a pre-excavation walkthrough will be performed and existing conditions documented (e.g., digital photography). The contractor will be responsible for repairing any damage to public or private property caused by or during construction activities. The City will take appropriate actions on behalf of the property owner and/or tenants to ensure that damaged property is returned to pre-construction conditions or that impacted parties are otherwise compensated.

All heavy equipment will be turned off, locked, and secured when not in use, and smaller equipment and tools will be locked inside of contractor trailers when not in use. This will protect both the contractor from damage to equipment and the community by deterring vandalism-related activities.

4 PROJECT SCHEDULE

The Adjacent Streets cleanup is tentatively scheduled to begin in spring 2015 and extend into fall 2015. Onsite construction activities will generally take place during typical daytime work hours (7:00 a.m. to 7:00 p.m.), five days per week. However, offsite activities, such as truck travel on roads surrounding the site and construction staging activities within the contractor's designated area, may occur outside of these times. Work is not expected to be performed at night, on weekends, or major holidays; however, it may be necessary to accommodate certain tasks (e.g., stormwater outfall installation during low tide).

5 EMERGENCY RESPONSE PLAN

This section describes the plans and procedures for responding to emergencies that may affect the local community during the course of construction. Responsibilities and response procedures for foreseeable potential emergencies are described. Although not all emergencies can be anticipated, this section provides the framework for response, regardless of the type or severity of the emergency.

5.1 RESPONSIBILITIES AND CONTACTS

The City is responsible for implementing and overseeing the Adjacent Streets cleanup and executing the construction contract. The City's construction oversight team includes a site health and safety officer, responsible for monitoring and verifying that all Phase 2 CHASP protocols are effectively implemented. The removal action construction contractor is responsible for managing the response to construction-related emergencies; confirming that safety equipment (e.g., first aid kit, eye wash, fire extinguisher, spill containment kit, spare personal protective equipment) is available and functioning properly; and informing appropriate authorities and response agencies in the event of an accident. Residents or the general public who witness, or are involved in, an accident should alert any onsite project personnel of the emergency (who will then implement response procedures) and, if appropriate, call 911.

In the event of an emergency, maps and directions to the closest walk-in clinic and the closest hospital emergency room are provided as Figures 5-1 and 5-2, respectively.

5.2 EMERGENCY SCENARIOS

Emergency response covers a number of events that may occur at the project site that could impact the surrounding community. These events include emergencies by equipment failure or by human error. The types of emergencies that could impact the community include the following:

- Vehicle or heavy equipment accident
- Fire or explosion
- Spills.

In the event of an accident, personnel involved will immediately notify emergency personnel by calling 911. Following the 911 call, the same personnel will notify the City's resident engineer or quality assurance officer and the contractor's health and safety supervisor. In addition, appropriate emergency measures will immediately be taken by site personnel to assist those

who have been injured and to protect others from hazards. These measures may include contacting the relevant authorities (depending on the nature of the emergency) and health care facilities and moving those involved to a secure location, as appropriate.

The EPA, resident engineer, quality assurance representative, and the health and safety supervisor will determine whether and at what levels community exposure occurred, the cause of the exposure, and the means to be taken to prevent similar incidents from occurring in the future. The health and safety supervisor will also direct notification, response, and follow-up actions in accordance with the procedures established in the construction HASP, to be provided with the RAWP.

5.2.1 Vehicle or Heavy Equipment Accident

As previously described in Section 3.3, trucks and worker vehicles will be used to move materials, equipment, and workers during construction activities. These vehicles will temporarily, but unavoidably, add to traffic on local streets and highways and will result in the potential for accidental collisions with pedestrians and other vehicular traffic.

The contractor's traffic control plan (to be provided in the RAWP) will describe the procedures to be implemented for using speed limits, flaggers, and signals for controlling traffic and ensuring pedestrian safety. If an accident occurs, the general procedures for emergency response discussed above will be followed.

5.2.2 Fire or Explosion

The potential for a fire or explosion is unlikely because excavated soils contain insignificant levels of volatile compounds. In addition, haul trucks operate on diesel fuel, which is not explosive under normal operating conditions. However, if a fire or explosion were to occur, it has the potential to affect the community.

As previously described in Section 3.1.3, smoking will be prohibited within 25 feet from a building entrance, within designated work zones, and in front of residential properties. Open containers of flammable or explosive materials will not be transported on project equipment, and fire extinguishers will be located in each haul truck, in the office trailer, and on each piece of heavy equipment.

The health and safety supervisor will contact the fire department prior to any work that may impede emergency vehicle access to the area (e.g., temporary street closures to accommodate removal and storm drainage improvement installation activities).

If a fire occurs, the health and safety supervisor will contact fire department response personnel. If the fire cannot be controlled with an extinguisher, the area will be evacuated immediately.

If any fires or explosions occur, the City will reevaluate current preventive measures, and will work with local emergency responders to ensure that the proper fire prevention controls are in place.

5.2.3 Emergency Spill Response

If an accidental release occurs, contaminated soil or fuel could be released to residential streets or properties. It is possible that a spill or release of a petroleum product could occur because of a failure in equipment (e.g., broken fuel line, ruptured hydraulic line) or because of damage to a vehicle as a result of an incident. Such a spill or release could impact the community. The contractor's pollution control and mitigation plan (to be provided in the RAWP) will include a detailed spill prevention control and countermeasures plan for the project.

Prior to mobilizing equipment to work areas, the contractor will check the integrity of equipment components most likely to fail and cause a spill or release (e.g., hydraulic lines, fuel lines, truck tailgates). If spills or releases of contaminated soils or fuel occur because of equipment failure or accidents, the contractor will follow the procedures established in the spill prevention control and countermeasures plan to immediately contain and clean up all spilled materials.

The health and safety supervisor will notify the City and EPA of any spills that occur. Additional verbal notifications and reporting will be made to the National Response Center and Washington State Department of Ecology in the event of a spill that exceeds the hazardous substance reportable quantities requirements of Section 103 of the Comprehensive Environmental Response, Compensation and Liability Act. For PCB-contaminated soil having concentrations at the level identified during pre-confirmation sampling, the reportable quantity is roughly 15 cubic yards. Any sheen released into the LDW as a result of construction activities will be reported to EPA, the U.S. Coast Guard, and Ecology.

5.2.4 Natural Disaster

In the event of a natural disaster, such as an earthquake, flood, or dangerous weather conditions, the contractor will cease all work activities. The health and safety supervisor will call 911, as necessary, in the event that personnel, the public, or property are imperiled. All onsite personnel will be accounted for and sent home if warranted by conditions. The health and safety supervisor will notify EPA and the resident engineer of the work stoppage. The work zones will be secured, so that the community is protected from preventable spills and unsecured equipment.

6 CONSTRUCTION COMMUNICATION PLAN

The goals of the construction communication plan are as follows:

1. Provide timely and understandable project information to the public
2. Make project information easily accessible by the public
3. Quickly disseminate information about project emergencies.

To further these goals, a CIP has been developed for the Adjacent Streets and Residential Yards area cleanup (HSPA and Integral 2012). This section summarizes the means and methods described in the CIP for achieving these goals.

6.1 KEY MILESTONES

Key milestones and updates may include, but are not limited to the following:

- Selection of a contractor
- Selection of, and revisions to, haul route(s) and anticipated traffic flows
- Revised work hours
- Construction schedule, including when major activities begin and end
- Periodic fact sheets with information on construction progress.

6.2 INFORMING THE COMMUNITY (OUTREACH)

As described in the CIP, technical details of the Adjacent Streets cleanup, decisions made by the project team, and announcements regarding potential impacts to the community require information and educational outreach from the project team. The project team will provide accurate and understandable information to the community through several key communication tools. A variety of the following may be utilized to present information to the community:

- South Park listserv (<https://groups.yahoo.com/neo/groups/yoursouthpark/info>)
- South Park web site (<http://allaboutsouthpark.com/>)
- The South Park News (<http://thesouthparknews.com/about-tspn/>)
- South Park Facebook (<https://www.facebook.com/southparkseattle>)
- South Park Twitter (<https://twitter.com/SouthParkWA>)
- Community briefings

- Flyers (e.g., fact sheets)
- Presence at food bank, fairs, festivals
- Website/online journals and updates
- Frequently asked questions (FAQs)
- Media coordination.

6.3 ENGAGING THE COMMUNITY (INREACH)

As described in the CIP, the City will engage the community to consider the input of the affected residents and other community members. Topics such as haul routes, the CHASP, air quality, noise, and road closures are important inreach opportunities for the project team. Project team members will be available through scheduled community meetings, one-on-one meetings as requested, and through the construction hotline: (877) 999-8117 or e-mail: SCL_T117_Streets@seattle.gov.

6.4 COMMUNITY RESPONSE

Community members will be able to communicate with the project team in several ways, including the following:

- Construction hotline: (877) 999-8117. The hotline will be monitored during business hours prior to construction and will be actively monitored during construction.
- E-mail to City of Seattle outreach team (SCL_T117_Streets@seattle.gov)
- Verbal communication at events and local meetings.
- Project web site (submitting a comment form):
<http://www.t117.com/submitComment.aspx>

All communication will follow the project response protocol, beginning with recording the name and contact information of the community member and the time, date, and nature of the concern, as well as the requested response mechanism (i.e., does the community member request a call back?). Recording these incoming communications will create a “communications log,” giving the project team the ability to track and review comments. All incoming communications will be assigned a status (open or closed). “Open” communications will be flagged for follow up, while “closed” communications have been sufficiently addressed.

All communications will be acknowledged by a team member as soon as practical or on the following business day. If the request or concern of the caller cannot be resolved with the initial communication, the T-117 liaison will describe the steps being taken to address the issue, as

well as an expected response time. Ongoing follow up will occur until the communication is sufficiently resolved and recorded as “closed.”

Should a call to the hotline be deemed an emergency, the caller will be directed to 911 immediately. The T-117 liaison will then place a call to the project team and onsite team to notify them of the emergency call.

7 REFERENCES

City of Seattle. 2012. Municipal Code for Noise Control. Title 25 Environmental Protection and Historic Preservation. Chapter 25.08. Available at: <http://clerk.seattle.gov/public/toc/25-08.htm>. City of Seattle, Seattle, WA.

HSPA and Integral. 2012. Terminal 117 Cleanup, Community Involvement Plan, Adjacent Streets and Residential Yards Area Cleanup, Terminal 117 Early Action Area, Lower Duwamish Waterway Superfund Site. Harris & Smith Public Affairs, Seattle, WA, and Integral Consulting Inc., Seattle WA. September 7.

Integral. 2013a. Removal Action Completion Report, Residential Yards Area, LDW Superfund Site, Terminal 117 Early Action Area. Prepared for the City of Seattle. Integral Consulting Inc., Seattle, WA. May 31.

Integral. 2013b. Removal Action Design Report, Adjacent Streets Area, LDW Superfund Site, Terminal 117 Early Action Area. Prepared for the City of Seattle. Integral Consulting Inc., Seattle, WA. September 13.

USEPA. 2011. Administrative Settlement Agreement and Order on Consent for Removal Action Implementation. U.S. Environmental Protection Agency Region 10, Seattle, WA. June 9.

FIGURES

T-117 Early Action Cleanup Site Overview

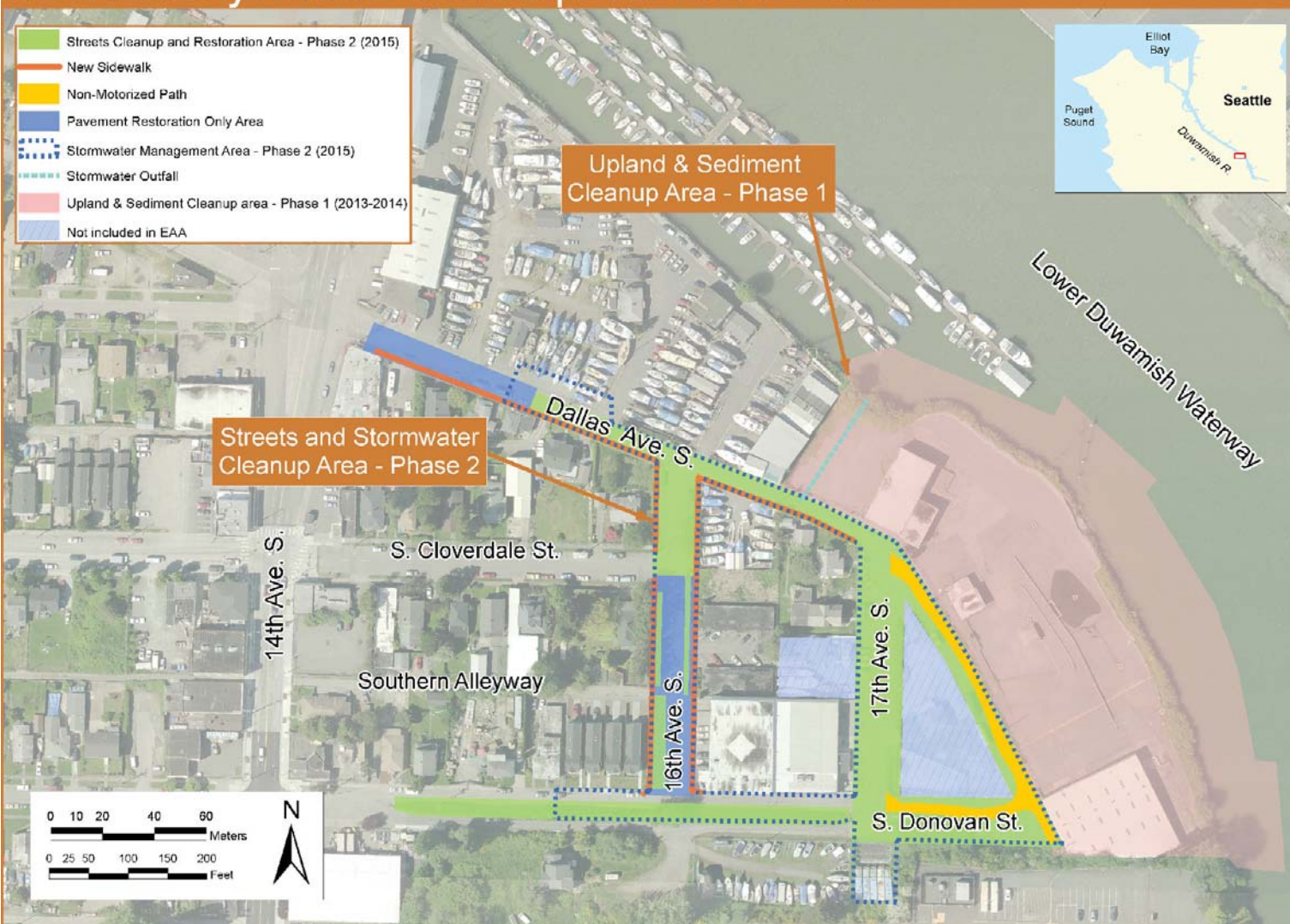


Figure 1-1.
T-117 Early Action Cleanup Site Overview
Lower Duwamish Superfund Site – Terminal 117 Early Action Area

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Figure 2-1.
Soil Excavation Boundaries for Adjacent Streets
Lower Duwamish Superfund Site - Terminal 117 Early Action Area

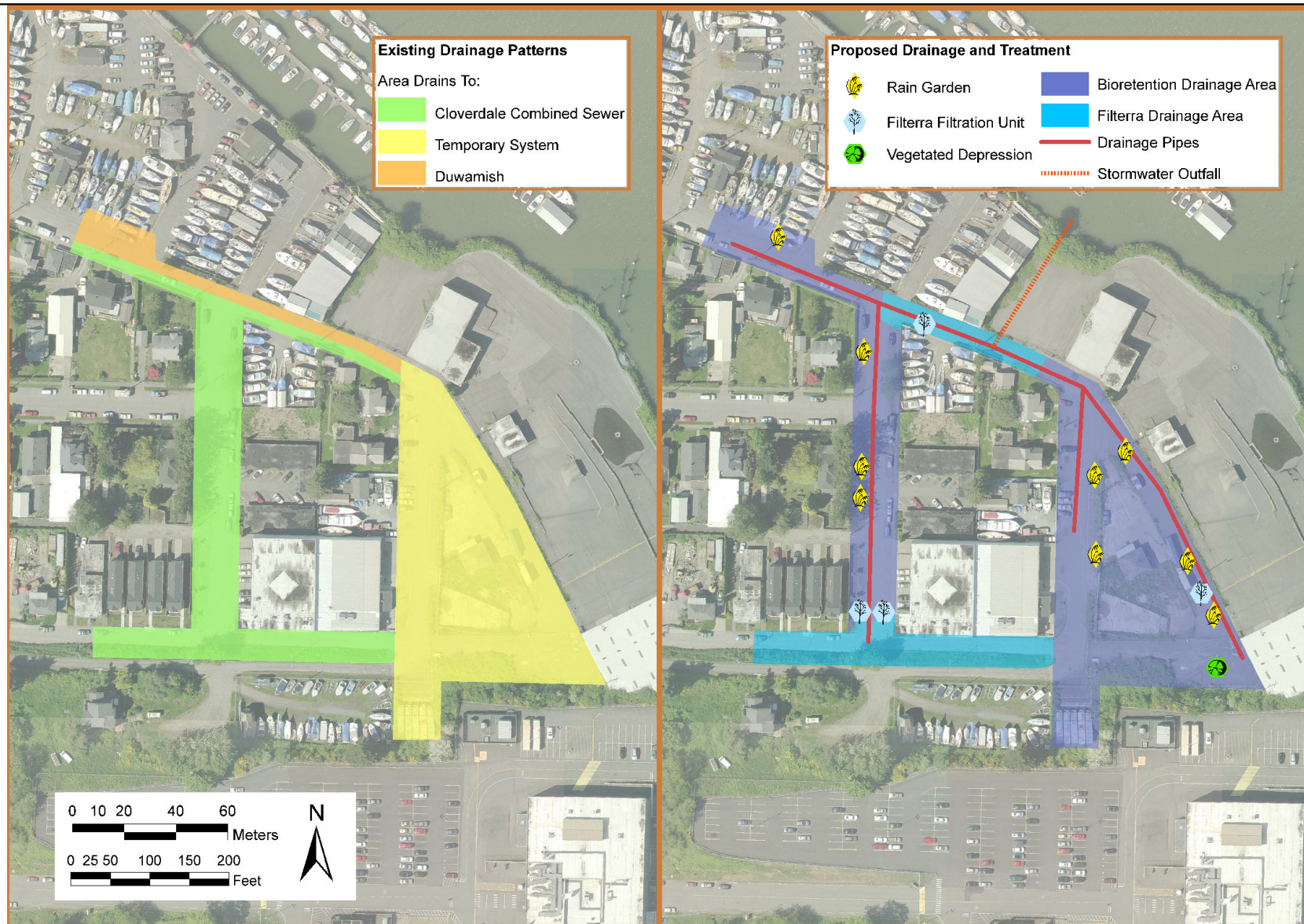


Figure 2-2.
Stormwater Infrastructure for Adjacent Streets
Lower Duwamish Superfund Site – Terminal 117 Early Action Area

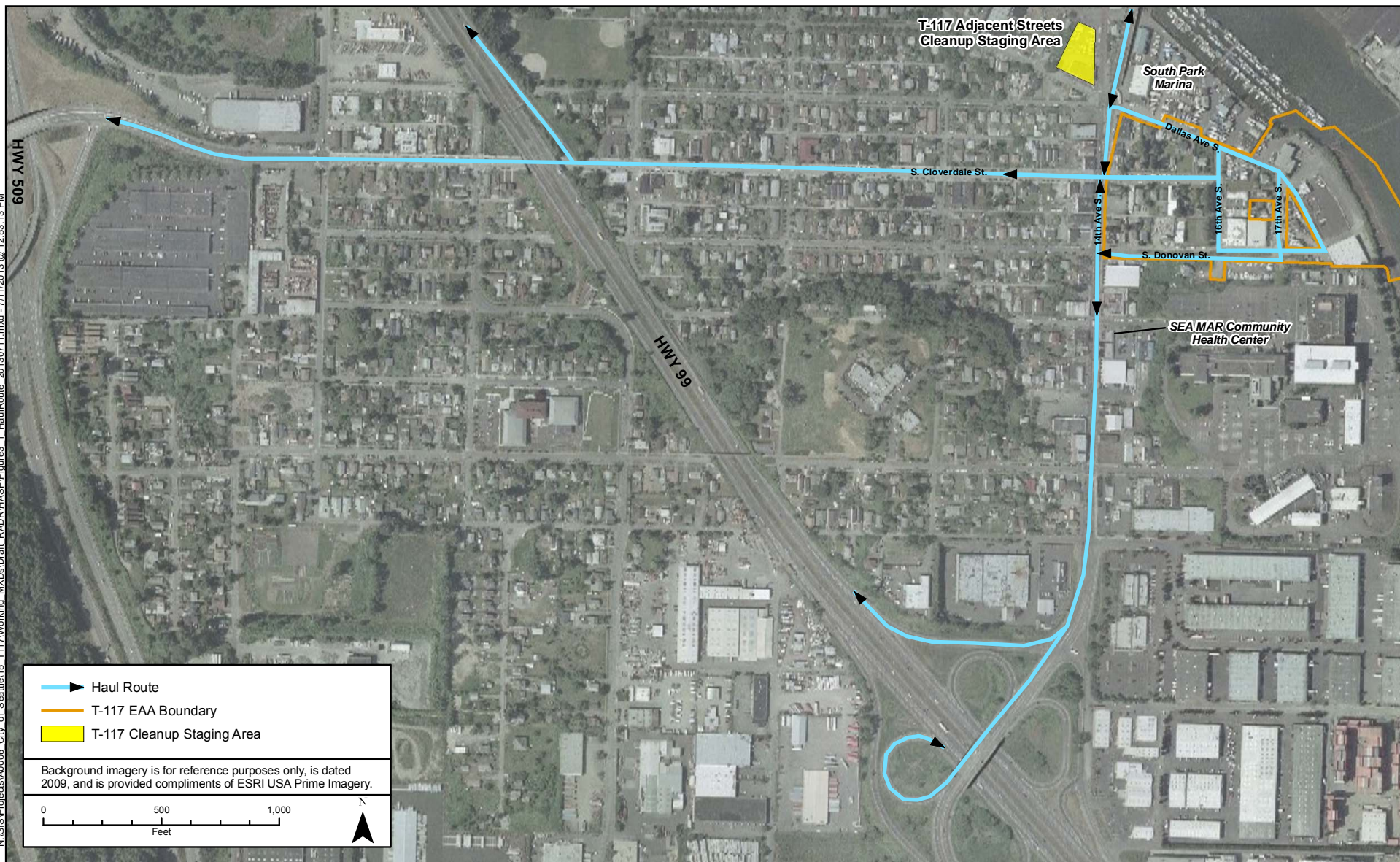


Figure 3-1.
Haul Route from T-117 to Highway
Lower Duwamish Waterway - Terminal 117 Early Action Area



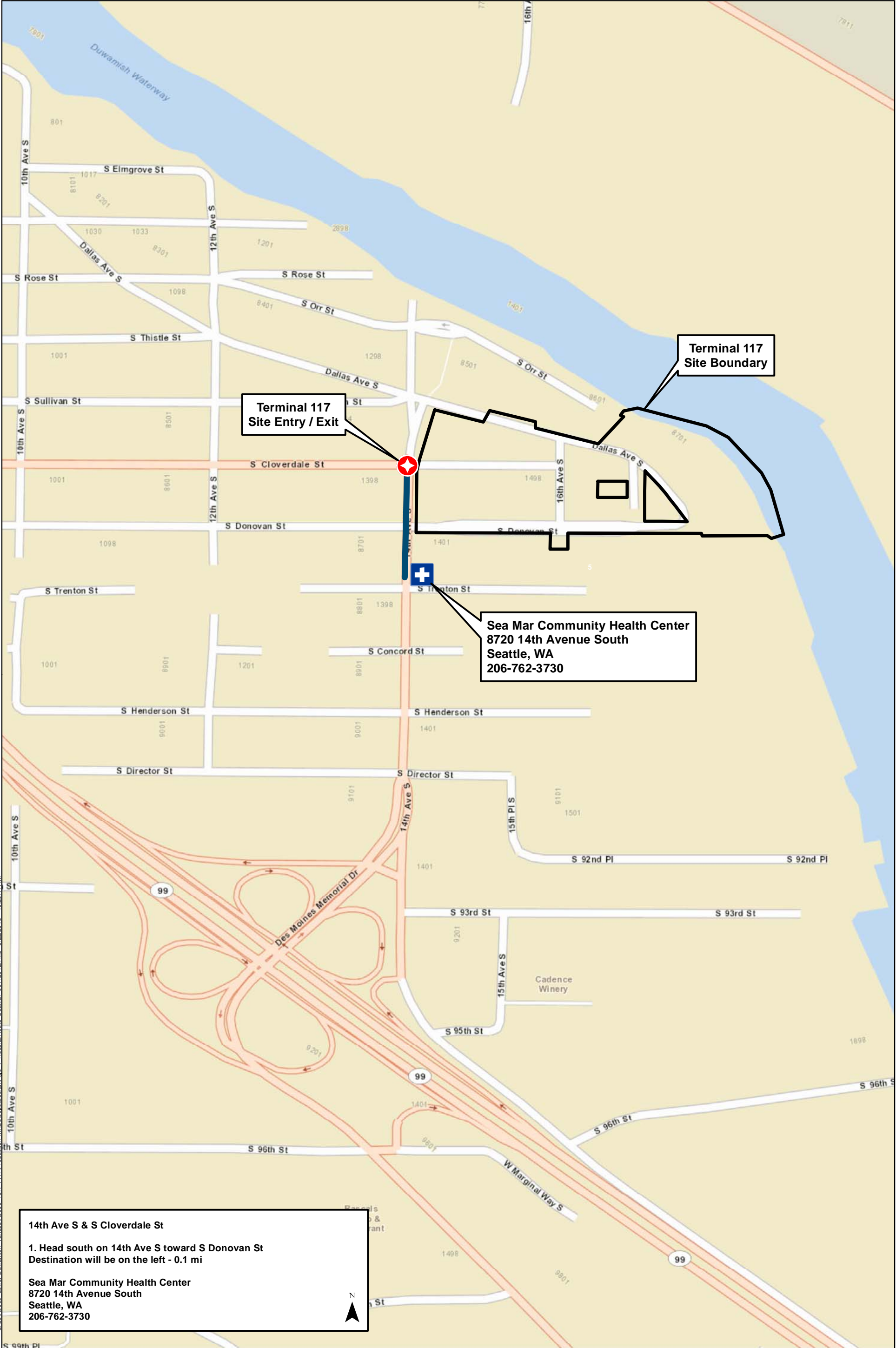


Figure 5-1.
Sea Mar Community Health Center Route Map
Lower Duwamish Superfund Site – Terminal 117 Early Action Area

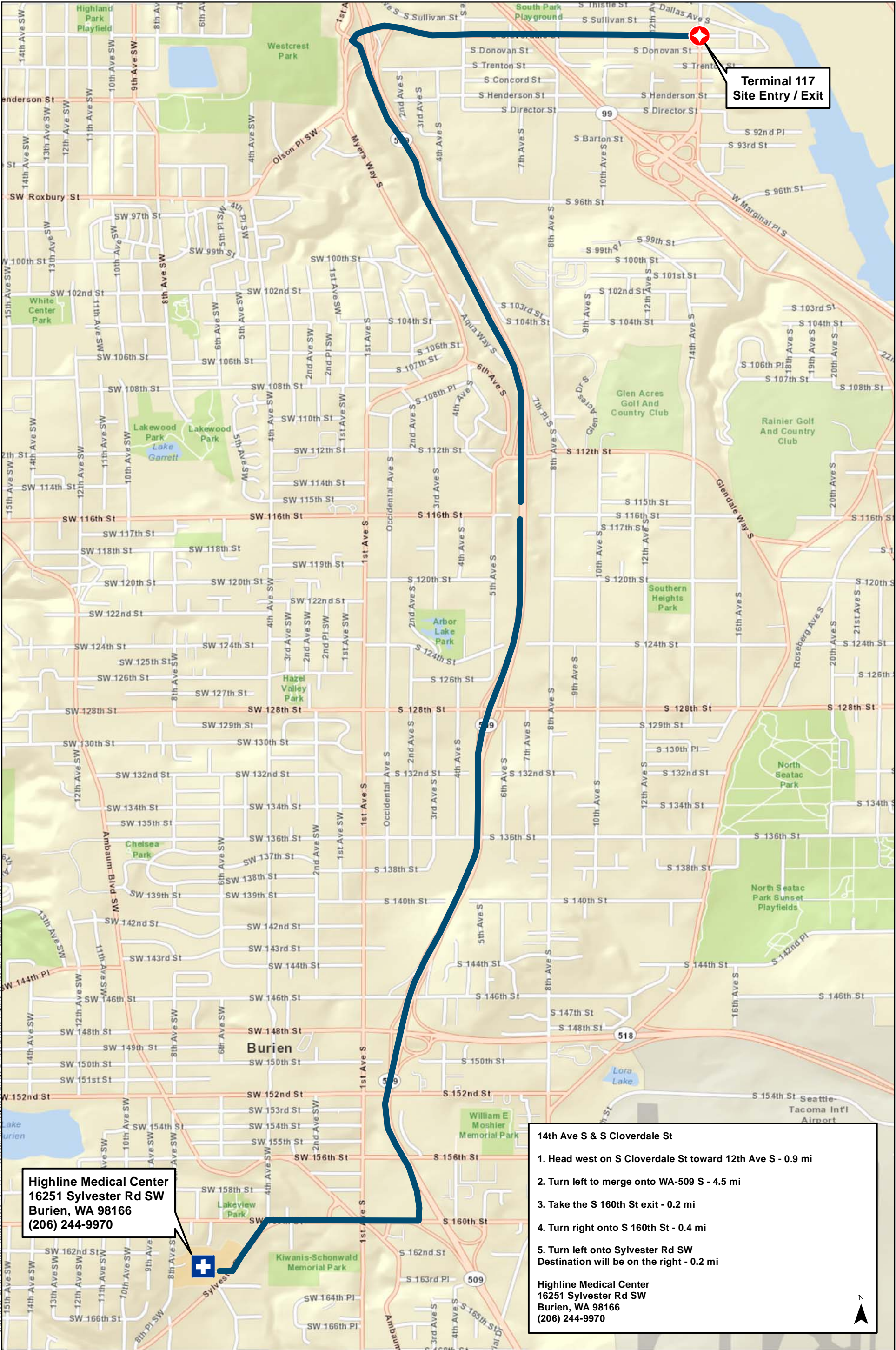


Figure 5-2.
Highline Medical Center Hospital Route Map
Lower Duwamish Superfund Site – Terminal 117 Early Action Area