



Contaminated Media Management Plan

Troutdale Riverfront Redevelopment Property
302, 320, & 410 NW 257th Way
Troutdale, Oregon
Project #: 761M125855

Prepared for:

City of Troutdale

219 E. Historic Columbia River Hwy, Troutdale, Oregon 97060

1/12/2021

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1.0 Introduction

Wood Environment & Infrastructure Solutions, Inc. (Wood) has prepared and updated this Contaminated Media Management Plan (CMMP) on behalf of the City of Troutdale (City) for the properties located at 302, 320, and 410 NW 257th Way in Troutdale, Oregon (Site). The Site is also known as the Troutdale Urban Renewal Agency (URA) property and the Troutdale Riverfront Redevelopment Property (TRRP). Sampling data collected during multiple environmental assessment phases has adequately characterized conditions at the Site. A previous version of the CMMP was included as a requirement to the prospective purchaser agreement (PPA) between the City and the Oregon Department of Environmental Quality (DEQ) that was signed on February 8, 2018. This CMMP has been revised to reflect current conditions on Site following a comprehensive Site cleanup project to satisfy the PPA, occurring from August 2018 to January 2020.

1.1 Project Background

1.1.1 Site Location

The Site is located at 302, 320, and 410 NW 257th Way in Troutdale, Oregon as shown on Figure 1. The 19.57-acre Site is comprised of four Tax Lots (R320520 400; R320650 500; R320485 100; and R320654 600). The latitude and longitude of the Site are 45.5432 and 122.3866. The Site is located in Section 25, Township 1 North, and Range 3 East, Willamette Meridian. Adjoining properties include Interstate 84 to the north, the Sandy River to the East, railroad tracks to the south, and the Columbia Gorge Premium Outlet Stores to the west.

1.1.2 Site History

The western 11.87 acres of the Site (Tax Lots R320520 400 and R320650 500) was occupied by the former City publicly owned treatment works (POTW) which was developed in 1969. The POTW operated from 1969 to 2001. Following shut-down of the POTW, office space at the Site temporarily was used by the City's Parks and/or Facilities departments.

The eastern and southern portion of the Site (Tax Lots R320485 100; and R320654 600) totals 7.7 acres and was occupied by two warehouses, a water tower, two clarifiers, and other infrastructure associated with previous Site operations. Historical records indicate that an animal processing facility (slaughterhouse/rendering plant, and subsequently a wool pullery and meat packing facility), operated from the 1890s until the late 1960s at the Site. A cabinet making/woodworking business operated on the Site from the 1970s through 1999. The Site has been vacant since that time.

The Site cleanup and demolition occurred from August 2018 to January 2020 in accordance with the previously approved 2018 Site Cleanup CMMP (Wood, 2018c). Known and encountered soil contamination cleanup and hazardous building material management performed on-Site is documented within the Revised Remedial Investigation (RI) and Closure Report (Wood, 2020).

1.1.3 Site Environmental Conditions

Several phases of environmental assessment and remedial investigation have been completed for the Site, or portions of the Site, with major investigation work including:

- Phase I Environmental Site Assessment (ESA) and Phase II ESA by Kleinfelder, Inc. in 2006a;
- Targeted Brownfields Assessment by Ecology & Environment, Inc. in 2011 under contract to the United States Environmental Protection Agency (EPA); and,
- A Remedial Investigation conducted by Wood from 2012 to 2018.

- Additional characterization during demolition and cleanup activity onsite from August 2018 to January 2020.

The data collected during the multiple environmental assessments and remedial investigation phases has adequately characterized the Site as documented in the Revised RI and Closure Report (Wood, 2020). Contaminant concentrations in soil are below levels that pose a risk to people and wildlife, but exceed DEQ clean fill criteria and therefore must be disposed of at a permitted landfill, or under a solid waste letter of authorization, if removed from the property.

1.2 CMMP Objectives

The purpose of this CMMP is to provide site-specific information and guidance to contractors that may encounter contaminated media during Site redevelopment activities. Specifically, this document includes:

- Procedures for the management of unanticipated and unknown soil contamination, should any be encountered during redevelopment activities;
- Measures to control the Site during redevelopment activities;
- Measures to control the off-Site migration of contaminated soil via erosion and/or track-off; and
- Notification requirements to DEQ and other regulatory organizations as required, prior to and during redevelopment activities, including soil removal and offsite disposal.

1.3 Remedial Action Team

The remedial action team consists of the entities listed in the table below. Points of contact and responsibilities are shown in Table 1. Refer to contacts below regarding notification requires to DEQ and other regulatory organizations, as required, prior to and during development activities, including soil removal and offsite disposal.

Table 1. Remedial Action Team

Project Team Role	Project Team Member	Point of Contact and Title	Contact Number
Property Owner	City of Troutdale	Erich Mueller – Finance Director	(503)-674-7231 (office)
Environmental Management	Oregon Department of Environmental Quality	Rebecca Wells-Albers Dan Hafley	(503) 229-5585 (office) (503) 229-5417 (office)

2.0 Training Requirements for Contaminated Sites

Workers anticipated to handle or come into contact with contaminated media, except where noted, must meet the following requirements:

- Personnel expected to be in contact with contaminated media must have either completed the appropriate Hazardous Waste Operations and Emergency Response (HAZWOPER) training requirements specified in Title 29 Code of Federal Regulations (29 CFR) Part 1910.120(e) or be under the direct supervision of a HAZWOPER-trained competent person. HAZWOPER training consists of an initial 40-hour training course and subsequent annual 8-hour refresher training courses.
- Subcontractors assigned with the task of providing and operating specialized equipment will also be required to have HAZWOPER training.

- Each individual expected to be in contact with contaminated media will be trained by their employer on Site-specific management methods for preventing exposure to contaminated soil at the Site during remedial implementation.
- Each individual expected to be in contact with contaminated media will be required to wear appropriate personal protective equipment to protect against direct exposure to contaminated media during remedial implementation.
- It is the responsibility of the individual's employer to provide necessary medical surveillance if required.

3.0 Soil Management

The Site elevation has been maintained at or near the existing grade post demolition and cleanup. This elevation is consistent with surrounding development and infrastructure. Maintaining the existing elevation will ensure that adequate cover above any contamination remaining at the Site will not pose an unacceptable risk to current or future receptors as detailed in the Revised RI and Closure Report (Wood, 2020).

3.1 Classifications for Soil

This section presents a soil classification system to be used by contractors during Site activities. Classification of soil into one of the soil classes described below will be based on location, previous characterization, and/or physical characteristics. Soil at the Site will fall into one of the following two classes: 1) known contaminated soil; or 2) unanticipated and unknown contaminated soil.

Contaminants including metals, pesticides, and polycyclic aromatic hydrocarbons are below applicable risk-based concentrations that are protective for human health and the environment at the site. However, levels of contaminants exceed DEQ Clean Fill criteria. Therefore, with DEQ oversight and approval, site soils can be managed on-site, or transported off-site to a permitted disposal facility.

3.1.1 Known Contaminated Soil

Environmental sampling identified concentrations of arsenic and benzo(a)pyrene above applicable DEQ risk-based concentrations (RBCs). During the Site cleanup occurring from August 2018 to January 2020, all known contaminated soil above applicable RBCs were removed from the Site or protected with a clean-fill soil cover. Two soil covers on Site are shown on Figures 2 and 3. The centroid coordinates (in Oregon State Plane North (feet)) of the EP-03 cover and LW-2 cover are 7719319.92, 689499.26 and 7719120.08, 689382.70, respectively. All soil sampling analytical data for the Site is available in the Revised RI and Final Closure Report for the Site (Wood, 2020). With the exception of the two clean-fill soil covers, soil on Site does not meet DEQ clean-fill criteria and must be managed in accordance with local, state, and federal rule.

3.1.2 Unanticipated and Unknown Contaminated Soil

No assessment can be thorough enough to identify all areas and types of impact at properties where a hazardous substance release has occurred. Soil at any depth encountered during Site construction that exhibits an odor, staining, or volatile organic compound (VOC) vapor concentration in excess of 50 parts per million (ppm) measured with a photoionization detector (PID) will be classified as "unanticipated and unknown contaminated soil." Unanticipated and unknown contaminated soil must be tested, off-site disposal options evaluated, and DEQ approval granted before the soil is removed from the Site.

3.1.2.1 Animal Waste

If animal material is encountered during excavation activities, DEQ shall be notified immediately and a plan will be developed to appropriately characterize, excavate and dispose of the material in accordance with DEQ guidance and requirements. Odor suppression, lined trucks, dust suppression, secondary containment and other best management practices may be implemented if animal waste is encountered. Community outreach may also be required to inform the surrounding community of potential odor nuisance should excavation of animal waste be conducted.

3.2 Exclusion Zone and Decontamination

Before beginning soil excavation of known/encountered contaminated soil, the construction contractor must establish an exclusion zone around all excavation work areas. In addition to the exclusion zone, a contaminated soil excavation staging area will be established. Activities to occur in the exclusion zone also pertain to the excavation staging area. Personnel and vehicle entry into the exclusion zone must be limited. Equipment may move freely within the exclusion zone. Cleaning of equipment is not required for movement of equipment within the exclusion zone. Truck loading areas should be located at the boundary of the exclusion zone to minimize the need for entry and subsequent decontamination, if practicable. Trucks or other soil loading/transport vehicles must be cleaned before leaving the loading area. Loose soil will be removed from equipment using a broom, and significant quantities of soil adhered to equipment will be removed with hand tools. Decontamination procedures for personnel and equipment exiting the exclusion zone must be described in the site-specific health and safety plan prepared by the construction contractor.

3.3 Control of Excess Contaminated Soil

The contractor must use best practices to prevent off-Site migration of visible or measurable soils as airborne dust, track out, or stormwater runoff. Example methods include:

1. A water truck to wet dry soils to suppress airborne dust.
2. Broom cleaning of soil from exterior of vehicles before they leave soil loading areas or the Site. These areas will be periodically swept to ensure contaminated soil that falls on the ground as part of truck loading is properly disposed of.
3. Graveled aprons and/or a wheel wash at Site exit point(s).
4. Catch basin sediment filters installed in catch basins located in streets near the Site to prevent Site soils from entering the stormwater management system.
5. Silt fences or other erosion control devices to prevent Site soils suspended in stormwater from migrating off-Site. This should be managed in accordance with a Site-specific erosion and sediment control plan 1200-C permit.

3.4 Soil Excavation Observation and Monitoring

For redevelopment of the Site, including soil excavation and grading activities, an environmental consultant, in consultation with DEQ, will coordinate with contractor to observe for unanticipated and unknown contaminated soil. The environmental consultant will conduct oversight in consultation with DEQ. Site soil does not meet clean fill criteria. Therefore, any soil that is removed from the Site must be disposed of at a permitted landfill or under a Solid Waste Letter of Authorization and reported to DEQ. Additional characterization can be conducted (such as incremental sampling) for off-Site disposal considerations, provided that the frequency and spatial distribution of sampling provides a thorough evaluation of the material. In addition, soil from the upland portions of the Site (CDU-1 through CDU-8)

shall not be placed along the bankline area (IS-01 and IS-02) without prior DEQ consultation and approval. Figure 2 shows the locations of the decision units (including the bankline decision units).

The environmental consultant, in consultation with DEQ, will oversee the construction contractor during soil excavation and grading activities when managing known contaminated soil or when evaluating unanticipated and unknown contaminated soil. Criteria used by the DEQ in evaluating soils, and the procedures to be followed based on the evaluation, are described below:

1. Criterion: Observation of unusual soil staining or odors.

Procedure: The environmental consultant, in consultation with DEQ, will assist the construction contractor in deciding whether to directly load the soil into trucks and transport it to a disposal/treatment facility (if classified as known contaminated soil), or to stockpile the soil on Site so that it can be sampled and profiled for disposal/treatment (if classified as potential unanticipated and unknown contaminated soil).

2. Criterion: VOC vapor concentration in excess of 50 ppm as measured with a PID using soil sample head space. All potential unanticipated and unknown contaminated soil will be screened using a PID. PID readings will be collected at a frequency of one reading for each of the following:

- if visual evidence of impacted soil is noted;
- for each change in soil type;
- daily during soil removal activities; and
- for every 250 tons of soil removed.

Procedure: If a VOC vapor concentration in excess of 50 ppm is measured, the environmental consultant, in consultation with DEQ, will direct the construction contractor to stockpile the soil on Site so that it can be profiled for disposal/treatment.

The following procedure will be conducted while taking PID measurements of soil for classification:

- a. Place 1-2 cubic inches of soil in a quart-sized air-tight plastic bag;
- b. Seal the bag;
- c. Knead the soil for approximately 10 seconds;
- d. Poke the probe-end of the PID into the bag;
- e. Continue to knead the soil while observing the PID readout for a period of approximately 10 seconds; and
- f. Record the highest measurement observed during the 10-second period.

Any soil that fails one of the above criteria will be considered potential unanticipated and unknown contaminated soil and will be handled in accordance with the procedures described in this CMMP.

In areas where unanticipated and unknown contaminated soil is identified, the contractor will assist the environmental consultant, as needed, in collecting samples of the soil for laboratory analysis, in consultation with DEQ. The environmental consultant, in consultation with DEQ, will use the analytical data to evaluate whether the soil can remain in place. No excavation should be backfilled or otherwise made inaccessible until the environmental consultant, in consultation with DEQ, has completed soil sampling and has directed the construction contractor to initiate backfilling.

3.5 Staging of Excess Contaminated Soil

During Site activities, it is possible that excess soils will be generated. Temporary staging and or stockpiling of excess known contaminated soils by the construction contractor may be permitted in the excavation staging area. Excess known or managed as contaminated soil temporarily stockpiled on-Site must be covered with tarps during periods of rain, wind, or inactivity to prevent soil erosion. The edges of the tarps must be weighted down and may require berming to restrict runoff. Stockpiles must always be kept neat. The environmental consultant, in consultation with DEQ, must approve the location of any and all excess known or managed as contaminated soil stockpiles. Temporary stockpiles of known contaminated and unanticipated and unknown contaminated soil must be placed atop plastic sheeting (6-mil minimum) and surrounded by a berm or other best management practices included on Sheet C-7 of the Demolition and Cleanup Planning plan set (Wood, 2018b). The stockpile also must be covered with tarps during periods of rain, wind, or inactivity to prevent soil transport. The edges of the tarps must be weighted down. The contractor must mark each stockpile with a labeled flag or other marking to indicate its classification as known contaminated soil or unanticipated and unknown contaminated soil.

The environmental consultant, in consultation with DEQ, will collect samples of stockpiled unanticipated and unknown contaminated soil for laboratory analysis. Based on laboratory data, the environmental consultant, with consultation from DEQ, will evaluate whether unanticipated and unknown contaminated soil may remain on Site in accordance with DEQ regulations, or whether the soil must be disposed offsite.

3.6 Excavation and Loading of Contaminated Soil

Where disposal is required, the contractor must load soil using the following procedures:

1. Notify the environmental consultant, in consultation with DEQ, no less than 24 hours prior to beginning excavation of soil.
2. Use water as necessary to prevent the generation of visible dust during excavation and loading. To avoid unregulated discharge of water within areas where the levels of contamination exceed RBCs, the contractor will install perimeter erosion and sediment control measures consistent with 1200-C permit. The construction contractor will minimize equipment traffic through exclusion zone to prevent contaminated soils from being tracked to other parts of the Site, or off-Site.
3. Maintain excavation equipment in good working order. The contractor must immediately clean up any contaminated soil resulting from spilled hydraulic oils or other hazardous materials from equipment.
4. Locate loading areas for contaminated soil near or outside the edge of the exclusion zone.
5. Wet soils with free water will not be loaded into trucks.
6. Load trucks in a manner that prevents the spilling, tracking or dispersal of contaminated soils. Cover all loads prior to exiting the Site. All trucks transporting site soil must be covered prior to leaving the site.
7. Remove soil from the exterior of each truck before the truck leaves the loading area. Place any soil collected in the loading area back into the truck.
8. Establish specific truck haul routes before beginning off-Site soil transport. Use on-Site truck routes that minimize or prevent movement of trucks over known or managed as contaminated soils.
9. Ensure that loaded truck weights are within acceptable limits.

3.7 Transportation of Contaminated Material

The contractor must comply with any and all applicable federal, state, or local laws, codes, and ordinances that govern or regulate contaminated soil transportation. Prior to transportation, obtain all required permits and furnish all labor, materials, equipment, and incidentals required for soil transport. Ensure that all drivers hauling contaminated soil have in their possession during hauling all applicable state and local vehicle insurance requirements, valid driver's license, and vehicle registration and license. Inform all drivers of haul vehicles of the nature of the material being hauled; the route to and from the disposal site and/or disposal staging area; applicable city street regulations and requirements; and State of Oregon Department of Transportation codes, regulations and requirements; and the legal maximum load limits per vehicle.

The contractor will ensure that the following requirements are met:

- Truck inspections and cleanings will occur in the excavation staging area.
- Contaminated soil will not be spilled or tracked off-Site.
- No visible or measurable airborne soil (i.e., dust) will leave the Site.
- Each truck load of contaminated soil will be covered with a well-secured tarp prior to the truck leaving the Site.
- Soil on the exterior of trucks and other equipment will be removed using brooms and hand tools prior to the vehicle leaving the exclusion zone.
- Trucks will not exit the Site if liquids are draining from the load.
- The Contractor must be prepared to install a liner in the trucks upon request by the DEQ.
- Trucks used for transportation of contaminated soil will be substance-compatible, licensed, insured, and permitted pursuant to federal, state, and local statutes, rules, regulations, and ordinances.
- Provide to the environmental consultant, in consultation with DEQ, all weight tickets from any local scale and disposal facility within 2 days of disposal of contaminated soil.

3.8 Disposal of Contaminated Soils or Other Solid Wastes

All soil transported off Site above DEQ clean fill screening levels must be disposed of at a landfill. Prior to excavation, transportation, and disposal of contaminated soil, the contractor must obtain documentation from the landfill that it will accept the contaminated soil and submit the documentation to the DEQ for review and approval. As previously noted, all surface soil at the Site is assumed to exceed DEQ clean fill criteria. The landfill may request that new data be provided. If necessary, and with assistance from the contractor, the environmental consultant, in consultation with DEQ, will collect and test soil samples required as part of the landfill's approval process. Contaminated soil will be transported to a landfill permitted to accept contaminated soils at the concentrations documented at the Site. Only landfills that take title to the material may be used. Where they can reasonably be segregated, and as required, soils that are not contaminated will be transported to a landfill permitted to accept construction materials.

At least 14 days prior to transport of contaminated soil, the contractor must provide a contact name and solid waste permit number for each facility that will receive contaminated soil. The contractor must provide notice to the DEQ, via environmental consultant at least 72 hours prior to initial transport of contaminated soil off the Site, and at least 48 hours' notice for all subsequent soil transportation events. The DEQ reserves the right to prohibit use of a particular disposal facility based on facility construction details and performance record.

The contractor must properly prepare bills of lading and other related documents required by the landfill. All receipts for disposal must be submitted to the environmental consultant, in consultation with DEQ, within 2 days of receipt of the contaminated soil at the landfill.

3.9 Unanticipated and Unknown Contaminated Soil Management

The following procedure will be followed in response to encountering suspected unanticipated and unknown contaminated soil:

1. Upon discovery of suspected unanticipated and unknown contaminated soil, immediately suspend all activities in the vicinity and notify the environmental consultant, in consultation with DEQ.
2. Within 24 hours of notification, the environmental consultant, in consultation with DEQ, will evaluate whether potential unanticipated and unknown contaminated soil has been encountered. The DEQ may direct the collection and analysis of samples to complete this evaluation. The environmental consultant, in consultation with DEQ, also may direct the continued excavation and placement of excavated soil in temporary stockpiles.
3. Suspect unanticipated and unknown contaminated soils must be stockpiled separately from excess known contaminated soils. Temporary stockpiles will be located within the excavation staging area, prioritizing placement on the breezeway asphalt to restrict contaminant leaching potential. Suspect unanticipated and unknown contaminated soil must be placed atop plastic sheeting (6-mil minimum) and surrounded by a berm. The stockpile must also be covered with tarps during periods of rain, wind, or inactivity to prevent soil transport. The edges of the tarps must be weighted down, and the stockpile must be marked with a labeled flag or other marker as suspected unanticipated and unknown contaminated soil.

The stockpile(s) must always be kept neat.

1. In consultation with DEQ, the environmental consultant must approve the location of any and all suspected unanticipated and unknown contaminated soil stockpiles if placement within excavation staging area is not possible.

In the event that the environmental consultant, in consultation with DEQ, determines that the soil encountered is contaminated, the contractor will comply with the following requirements:

1. Secure the area as necessary to restrict and protect workers and the public from exposure.
2. Modify the Site-specific Health and Safety Plan (HASP), as necessary, to address new contaminated media concerns associated with the soils. The environmental consultant, in consultation with DEQ, will provide unanticipated and unknown contaminated soil sampling and analysis data to assist in making appropriate document modifications. The DEQ, via environmental consultant, will approve all document modifications.
3. Do not excavate, temporarily store, manage, load, haul, or dispose of unanticipated and unknown contaminated soil until directed by the environmental consultant, in consultation with DEQ. Once directed, perform all excavation, temporary storage, management, loading, hauling, and disposal of unanticipated and unknown contaminated soil in accordance with relevant sections of this CMMP.
4. Until authorized by the DEQ via environmental consultant, do not transport unanticipated and unknown contaminated soil off Site. The environmental consultant, in consultation with DEQ, will

direct the disposal of the unanticipated and unknown contaminated soil. If the contaminated soil is a federal or state hazardous waste, the Contractor must properly remove and dispose of the soil within 30 days of being directed by the environmental consultant in consultation with DEQ.

5. If underground storage tanks (USTs) are encountered, immediately inform the environmental consultant in consultation with DEQ, and manage according to Oregon Administrative Rules (OAR) 340-122. The contractor must provide complete written documentation of full compliance with all applicable UST regulatory requirements.

3.10 Imported Soil Management

Imported soil to be used as backfill material at the Site will be sourced from soil that meets the DEQ clean fill criteria only. Coordination with the environmental consultant, in consultation with DEQ, will be required to facilitate the import of material for backfill to ensure that Site conditions will remain protective of Site receptors after demolition and cleanup activities are completed. Specifically, the following procedure will be followed to identify sources of backfill, coordinate with the DEQ, remain protective of Site receptors, establish a sampling plan, sample the proposed material, evaluate the sample results, and transport the material to the Site.

1. The source of backfill material must be proposed by the contractor to the environmental consultant, in consultation with DEQ, in writing at least two weeks prior to anticipating import and must include the address of where the material was generated, approximate volume of the material, site contact, and any information related to site history.
2. In consultation with DEQ, the environmental consultant will determine appropriate methods to evaluate the proposed material. The City/Contractor will develop a separate "Material Evaluation Plan" for each unique source of proposed backfill material that will be presented by the environmental consultant and approved by the DEQ prior to implementation. The evaluation plan may include conducting research into historic uses of the property where the material was generated, conducting interviews from persons familiar with the property and/or developing a sampling plan to evaluate the proposed material for contaminant concentrations. The sampling plan will include specific sampling methods and an analyte list for each proposed source to ensure the material is adequately characterized.
3. If determined to be appropriate, the environmental consultant will sample material proposed for import to the Site as backfill material in accordance with a DEQ approved evaluation plan. Collected samples will be submitted to the analytical laboratory under standard chain-of-custody procedures and sample results will be compared to the DEQ Clean Fill Determinations (DEQ, 2014). The data and screening will be shared with the DEQ via the environmental consultant to determine if the material is suitable for import to the Site.
4. Backfill material that is approved by the DEQ can be imported to the Site as needed by the contractor as long as the evaluation procedures listed above remain representative of the material.

4.0 Hazardous Building Materials Management

The Revised RI and Closure Report documents the assessment, abatement, and disposal of all known hazardous material of the Site. It is expected that future development of the Site will not encounter legacy hazardous building material (Wood, 2020).

5.0 Groundwater Management

Based on existing analytical data from the Site, groundwater at the Site does not require special handling. Groundwater analytical data summary tables are available in the Revised RI and Final Closure Report for the Site (Wood, 2020).

6.0 Contractor Health and Safety

The Contractor must develop and implement a Site-specific HASP, designed to ensure compliance with all applicable worker protection regulatory requirements, including 29 CFR 1910.120, the Hazardous Waste Operations, and Emergency Response (“HAZWOPER”) rule promulgated by the US Occupational Safety and Health Administration (OSHA). The HASP must be submitted to the City at least 30 days prior to initiation of Site activities. The HASP will be reviewed by a Certified Industrial Hygienist. The City will provide comments on the HASP within 10 working days. The Contractor will then have 10 working days to revise the HASP and resubmit to City for final review and approval.

During construction activities, the contractor will bear full responsibility for the implementation of its own Site-specific HASP. The City will not bear any responsibility whatsoever for implementation and/or monitoring compliance with the HASP.

7.0 Permitting

This section does not present a comprehensive notation of permits required to complete the project but rather the permits that relate to the management of contaminated media. A Site-specific erosion and sediment control plan is required before any Site activity. A waste disposal permit must be obtained from any receiving facility that will be accepting waste to facilitate disposal of the known contaminated soil and hazardous building materials.

8.0 Known Residual Contamination

A residual risk assessment was completed by Wood to quantify potential risk of any remaining contaminant concentrations. The details of the residual risk assessment are presented in the Revised RI and Closure Report (Wood, 2020). Two areas of contamination remain on-Site with protective soil covers (LW-2 and EP-03) and remaining areas with residual contamination were determined to pose no potential risk to future Site human and ecological receptors. Following initial excavation of the top 3-feet of soil surface at LW-2 and the top 4.5-feet of soil surface at EP-03 arsenic contaminated areas, residual arsenic concentrations above urban residential RBCs remained at the leave surfaces. Protective covers with the DEQ clean-fill soil and geotextile demarcation layers were installed during the Site cleanup activities in 2019. An estimated 330 cubic yards and 75 cubic yards of residual arsenic-contaminated soil remains underneath the LW-2 and EP-03 soil covers, respectively. Figure 3 shows the locations of the two protective soil. DEQ notification is required should these protective covers be disturbed.

9.0 References

- AMEC 2014. Pre-Demolition Hazardous Building Materials Survey. Troutdale Riverfront Redevelopment Property. 302 NW 257th Way Troutdale, Oregon. Dated October 1, 2014.
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- Kleinfelder, Inc., 2006c. Hazardous Building Material Survey, City of Troutdale and Eastwind Development LLC Parcels. Dated May 11, 2006.
- Wood, 2018a Remedial Investigation Report. Troutdale Riverfront Redevelopment Property. Dated June 19, 2018.
- Wood, 2018b Troutdale Riverfront Redevelopment Property Demolition and Cleanup. Dated August 2018
- Wood, 2018c Contaminated Media Management Plan. Troutdale Riverfront Redevelopment Property. August 2018.
- Wood, 2020 Revised Remedial Investigation and Final Closure Report. Troutdale Riverfront Redevelopment Property ESCI #5224. Dated June 2020.

10.0 Limitations

This report was prepared exclusively for the City of Troutdale by Wood Environment & Infrastructure Solutions, Inc. The quality of information, conclusions, and estimates contained herein is consistent with the level of effort involved in Wood services and based on: i) information available at the time of preparation, ii) data supplied by outside sources, and iii) the assumptions, conditions, and qualifications set forth in this report. This Contaminated Media Management Plan is intended to be used by the City of Troutdale for the Troutdale Riverfront Redevelopment Property only, subject to the terms and conditions of its contract with Wood. Any other use of, or reliance on, this report by any third party is at that party's sole risk.

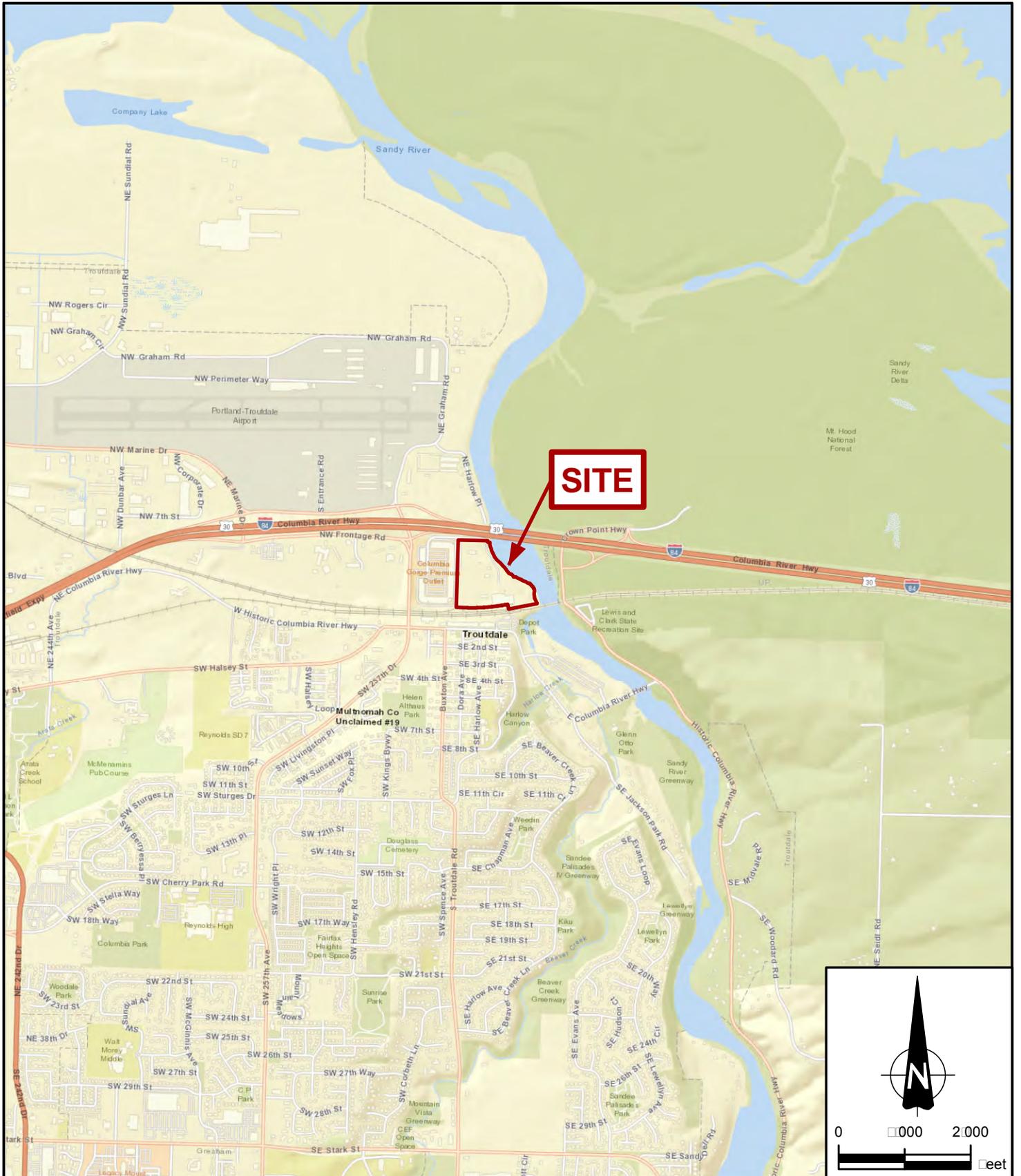
The findings contained herein are relevant to the dates of the Wood Site visit and should not be relied upon to represent conditions at later dates. In the event that changes in the nature, usage, or layout of the property or nearby properties are made, the conclusions and recommendations contained in this report may not be valid. If additional information becomes available, it should be provided to Wood so the original conclusions and recommendations can be modified as necessary.



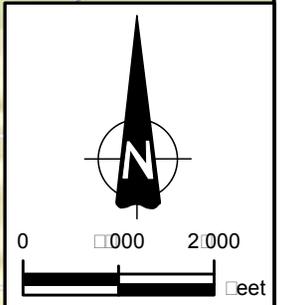
wood.

Figures





SITE



WOOD GROUP
 COMMERCIAL REAL ESTATE
 15862 SW 72nd Ave., Suite 150
 Portland, OR 97224



WOOD GROUP
 COMMERCIAL REAL ESTATE
 15862 SW 72nd Ave., Suite 150
 Portland, OR 97224

October 2020
 1" = 2,000 feet
 M2



LEGEND:

- Slope Edge
- Protective Soil Cover Location
- Site Boundary
- Stormwater Pipe
- Stormwater Pipe (approximate)*
- Taxlot and ID

NOTE: * Approximate location of laterals are from outfall pipe reconnaissance performed on July 1, 2014.

CITY OF TROUTDALE

Wood Environment &
Infrastructure Solutions, Inc.
15862 SW 72nd Ave., Suite 150
Portland, OR 97224



TROUTDALE RIVERFRONT
REDEVELOPMENT PROPERTY

SITE LAYOUT

DATE	DECEMBER 2020
SCALE	1" = 150'
PROJECT NO.	7-61M-125855
FIGURE	2

DRAWN BY: SD CHECKED BY: GT



DRAWN BY: SD CHECKED BY: GT

CITY OF TROUTDALE

Wood Environment &
 Infrastructure Solutions, Inc.
 7376 S.W. Durham Road
 Portland, OR 97224

wood.

TROUTDALE RIVERFRONT
 REDEVELOPMENT PROPERTY

PROTECTIVE SOIL COVER LOCATIONS

DATE
 DECEMBER 2020

SCALE
 1" = 75'

PROJECT NO.
 7-61M-125855

FIGURE
 3