

TECHNICAL MEMORANDUM

JH Baxter Removal Action – 2023 Offsite Removal Action Scope

То:	Don Hanson, Oregon Department of Environmental Quality Susan Turnblom, Oregon Department of Environmental Quality
From:	Chris Martin, GSI Water Solutions, Inc. Josh Bale, GSI Water Solutions, Inc.
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Attachments:	 Figure 1. Site Location Figure 2. Surface Soil Removal Depths Figure 3. Excavation Details Attachment 1. Offsite Removal Action - 210 Baxter Street (DU-09) Attachment 2. Offsite Removal Action - 220 Baxter Street (DU-10) Attachment 3. Offsite Removal Action - 215 Baxter Street (DU-11) Attachment 4. Offsite Removal Action - 225 Baxter Street (DU-15) Attachment 5. Offsite Removal Action - 240 Baxter Street (S0-06) Attachment 6. Offsite Removal Action - 235 Baxter Street (S0-07) Attachment 7. Offsite Removal Action - 242 Alva Park Drive (AP-01)
Date:	October 10, 2023

Introduction

This memorandum (memo) describes the property-specific scopes for surface soil removal action (RA) at seven residential properties north of the former JH Baxter & Co. (Baxter) facility in Eugene, Oregon (Figure 1). The seven properties are presented on Figure 2. The scope of the RA has been determined following offsite sampling activities conducted to characterize polychlorinated dibenzo-p-dioxin and polychlorinated dibenzofuran (PCDD/F) concentrations in surface soils.

Analytical Data

The depth of soil removal at each property has been determined from laboratory analysis of soil samples collected between 2021 and 2023. This data is presented in the Offsite Investigation Report (GSI, 2023a).

Removal Action Scope

The scope and procedures for completing the RA are provided in the RA Work Plan (GSI, 2023b). In general, the RA scope includes removing up to two feet of soil from identified residential yards. It also includes moving temporary features, structures no longer needed, or relocatable or replaceable structures to access soil underneath. Where fixed features, such as foundations, driveways, and paved pads, are present, surface soil will be removed up to edge of these features. Excavation offsets are provided in the attached standard detail drawing (Figure 3), where necessary.

Import material will include topsoil, general fill, and ¾-inch-minus gravel. Topsoil generally has higher organic content and is essential to promote vegetative growth. Topsoil will be used to replace soil removed from the top 6-inches (0-6 inches below ground surface [bgs]). General fill contains less organic material and is more compactable than topsoil. For replacing soil from 6 to 12 inches bgs, either topsoil or general fill dirt may be used. General fill will be imported to replace soil deeper than 12 inch bgs in removal areas with deeper excavations. Residents have requested import gravel fill in areas used for storage or as additional parking areas. ¾-inch gravel is readily available and a standard compactable gravel used for base course, roadways, and gravel parking areas. Gravel may be imported for areas requesting gravel fill for depths up to 12-inches bgs. Deeper than 12-inches bgs will require fill dirt as mentioned above. Detail 4 on Figure 3 presents the various surface restoration scenarios.

Import soil sources have been identified and tested for contaminants of concern, including PCDD/F, to provide the earthwork contractor with pre-approved backfill soil sources for the RA. DEQ has entered into an agreement with Lane County to provide approximately 400 cubic yards of clean soil generated during a wetland mitigation project near Short Mountain Landfill in Eugene, Oregon. The soil generated by Lane County is considered topsoil for the purposes of this RA but will only be available prior to the start of the rain season so will likely be unavailable for residential backfill. Regardless, additional backfill sources would be needed and DEQ has approved a general fill source from Lane Forest Products and Rexius described as Loam, a topsoil source from Rexius described as Primary Soil, and a topsoil source from Delta Sand & Gravel described as Screened Loam, which would require a 25% blend of Rexius Primary Soil to increase organic content.

Specific RA details pertaining to each of the seven residential properties and the removal scope for each of these properties are included as attachments to this memo.

References:

GSI. 2023a. Offsite Investigation Report, Former JH Baxter & Co. Facility, Eugene, Oregon, ECSI No. 55. June 2023.

GSI. 2023b. Offsite Removal Action Work Plan, Former JH Baxter & Co. Facility, Eugene, Oregon, ECSI No. 55. August 2023.





Eugene, OR





Date: October 10, 2023 Data Sources: BLM, ESRI, ODOT, USGS, Aerial Photo 2019, City of Eugene Jocument Path: Y:12060_DECQ1005_JH_BaxterlSource_Figures\Scope_Memo_Earthwork\Figure2_SurfaceSoilRemoval_Depths.mxd, iramos

18-inch 24-inch



Soil descriptions are included in the 2023 Offsite Remedial Action Scope Memorandum

NOTES





Attachment 1 - Offsite Removal Action – 210 Baxter Street (DU-09)

This attachment to the *JH Baxter Removal Action – 2023 Offsite Removal Action Scope Technical Memorandum* (memo) describes the property-specific scope for soil removal and restoration activities at 210 Baxter Street in Eugene, Oregon (see Figures 1 and 2 of the memo). This property is included in the 2023 offsite soil removal action (RA) being conducted by Oregon Department of Environmental Quality (DEQ). Excavation details for the RA are shown on Figure 3 of the memo. Current conditions and soil removal depths are presented on Figure A1-1. The restoration plan (Figure A1-2) presents the finish surfaces and planting plan for the property.

DU Description: 210 Baxter Street in Eugene, Oregon, has been given the designation of Decision Unit 9 (DU-09). The boundaries of the DU are defined as Lane County tax lot 5602 (Figures A1-1 and A1-2). DU-09 contains a single-story residential structure and an asphaltic concrete shared driveway with the 216 Baxter Street residence. A thin strip of grass is located along the edge of the shared driveway leading to the residence. This DU also includes a concrete-paved side yard (east side) that leads to a concrete slab patio and an alternative dwelling unit (ADU) in the backyard. The ADU is constructed on pier blocks and will remain inplace during the RA. A small above-ground wooden deck is located behind the ADU that spans to the back fence. This wooden deck will be removed and disposed of during the RA and not replaced. The backyard contains a small, prefabricated shed that will be removed and disposed of during the RA and not replaced. Two significant trees in the backyard have been removed by a vegetation clearing firm prior to completing the RA, but stumps and roots remain that will need removed to reach the excavation depth. A utility pole is also located in the northeast corner of the DU. GSI Water Solutions, Inc. (GSI) (the oversight contractor) and DEQ met with the property owner on June 29, 2023, to discuss the removal and/or replacement of vegetation, the owner's preference for removing structures from the DU prior to soil removal, and preferred replacement surface material (i.e., sod, seeding, gravel).

Excavation: Excavation is to 1.5 feet (18 inches) below ground surface (bgs) across the entire DU where pavement or asphaltic concrete is not present. Excavation of six inches will be completed within the City ROW adjacent to the DU (Figure A1-1). The following slope protections will be implemented when excavating near surface structures.

- The top six inches of soil will be removed across the entire extent of the DU regardless of whether the boundary is adjacent to a structure, public roadway, driveway, or utility. However, excavations adjacent to power poles must comply with the requirements of the utility provider. There is an exception for excavating adjacent to the ADU pier blocks described below.
- For excavations adjacent to non-load bearing permanent structures (i.e., concrete pads, fence posts, driveways), the excavation will be completed vertically to the target depth of the RA, unless otherwise determined unsafe by the earthwork subcontractor or GSI. This includes concrete pads that support HVAC systems.

- Excavations adjacent to structural foundations will be excavated to a minimum of 6-inches bgs at the foundation. The depth of the foundation will be determined by the earthwork subcontractor. Soil removal along the foundation will continue to approximately 6-inches above the bottom of the foundation footing, or the bottom extent of the RA, whichever is shallower. Once 6-inches above the base of the foundation, and if necessary, the excavation will be stepped out 1 foot before sloping or benching the excavation at a 1 foot horizontal to 1 foot vertical (1:1) slope to the total depth of excavation (Figure 3).
- DU-09 includes a permanent residential outbuilding that is constructed on pier blocks placed on the ground surface. The identified structure is not planned to be moved or deconstructed. Due to safety concerns, soil removal will not be completed up to the pier blocks or under the structure. Excavation will begin one foot away from the pier blocks or parallel to the outer edge of the structure at this boundary and completed to the depth requirement of the RA.

Vegetation: Two significant trees were identified by GSI's arborist consultant. These include two large evergreen trees (Douglas fir, and Coastal redwood) in the backyard. While a vegetation clearing contractor removed these trees, stump removal will be a requirement of the excavation contractor. The stumps and root structures of these trees will be removed during the RA to reach excavation depth. This DU also contained significant blackberry brambles and young walnut trees. These were removed, with the exception of the stumps and root matter. Grubbed woody debris such as tree stumps and roots of removed trees will be disposed of as contaminated media.

A decorative plum tree was removed from the front yard prior to the RA. This tree will be replaced by the earthwork contractor or their landscape subcontractor during site restoration. The contractor will replace the decorative plum with similar stock (or as large as is readily obtainable) as part of the restoration planting.

Structures: A prefabricated metal shed is located in the backyard. A small deck is located behind the ADU. The shed and deck will be removed and disposed of to perform soil removal and replacement will not be required for either structure. An overhead covering exists between the residence back door and the outbuilding. If removal of the covering is required to perform work, the covering shall be re-constructed or replaced in like-kind. Wooden privacy fence dividing the front and backyards along the west side of the DU should be removed to provide access to the backyard and to access soil along the fence line. Further, excavation shall be performed to the property boundaries and may require additional fencing removal to complete excavation activities. Fencing will be replaced in like-kind, if removed.

Access: The front yard of the DU is accessible from the shared driveway. The backyard is completely fenced in and accessible through an approximately 8-foot-wide double swinging gate along the east side of the DU leading to a paved side yard; however, this side of the DU is paved. Access to the non-paved backyard is provided by an approximately 6-foot wide fence with 2.5-foot-wide gate on the western side of the property. The front-facing fence along the western side will require removal to complete soil excavation.

As the neighboring property to the east (DU-10) is proposed for removal at the same time as DU-09, the chain link fence along the driveway and front yards should be removed to access soil to the full depth along the property line. All fencing will be replaced in like-kind,

Utilities: Figure A1-1 shows the <u>approximate</u> location of utilities observed during site reconnaissance visits and from previous utility locating efforts. The precise route of utilities will be identified and confirmed by the contractor prior to removal activities. The following descriptions are derived from observations made during visits to the property.

Utilities may be encountered due to the depth of soil removal. If necessary, utility lines will be removed to reach the excavation depth and reconstructed following RA. Underground roof drains will also be replaced, if

damaged during RA. Any utility damaged or removed during the RA will be repaired or replaced in accordance with State of Oregon and local building code, as applicable.

- **Electricity**. Electricity is provided from the utility pole in the backyard. Electricity conveyance from the power pole to the residence is underground. Several wires can be observed descending the pole and transitioning underground. A utility box is also located in the backyard near the power pole.
- **Communication**. Communication lines are present overhead extending from the utility pole to the north of the property to the western peak of the roofline. Additional communication lines may be present underground, if so, they likely follow the same route as electrical lines.
- Sewer. A sewer cleanout is located within the shared driveway. Service line location is unknown.
- **Stormwater**. Three roof drains have been observed conveying stormwater underground. A segment of roof drainpipe can be observed along the western foundation. Stormwater is likely conveyed to the front yard. It is unknown if stormwater is combined with sewer or infiltrates.
- **Water**. A water meter has been observed at the entrance to the shared driveway along Baxter Street. Service line location is unknown.
- Natural Gas. No gas utilities or service meters were observed but should be confirmed.
- **Overhead Utilities.** While electricity is provided underground to the residence, a utility pole is located on the property. This pole is one in a series of utility poles that pass along the northern DU boundary. Numerous overhead lines are present above the DU at the northern DU boundary. Excavation work near the utility pole must be performed in consultation with the utility provider.

Surface Restoration: The surface restoration has been determined in consultation with the property owner. The surface will be finished with sod for a majority of the DU. The exceptions are the northeast corner of the backyard behind the ADU (currently covered by a deck), the small area at the northeast corner of the property where the utility pole is located, and the thin strip along the driveway, which shall be finished with no less than 6 inches of ³/₄-inch minus crushed gravel compacted to a non-yielding state underlain by a minimum of 8 oz non-woven geotextile. See Detail 4 on Figure 3 and Figure A1-2 for surface restoration details.

A decorative plum (*Prunus*) will be planted in the front yard, where shown on Figure A1-2. This tree will be a direct replacement for a tree that was removed prior to the RA. The replacement tree will measure approximately 7 feet tall with a crown spread of 8 feet (or as close in size as obtainable).

Special Conditions: There is a residential ADU in the backyard and a porch in the front yard that are constructed on concrete piers. These structures will not be moved to access soil beneath.

DU-09 contains areas of soil to be removed adjacent to the residential outbuilding that are 3-feet wide (or less) by approximately 25 feet long. A utility pole and underground power utilities are located in the northeast corner of the property. This area may need to be excavated in consultation with the utility provider to ensure that electricity is safely managed and no underground utilities interfere with the soil removal.

Excavation within the southeast corner of the DU near Baxter Street is within the critical root zone of a large Douglas fir tree within the City of Eugene (City) right-of-way (ROW) that will be retained. A City urban forester will be onsite at the beginning of excavation of this property. Excavation in this area will be completed with care in accordance with the City urban forester's recommendations. Excavation by hand, an air or water assisted pressurized system, or a vactor excavator are approved methods. No heavy equipment should be operated or staged within this area, unless approval for tree removal is obtained by the City forester. After the excavation, the exposed roots should be covered as soon as possible either with a tarp, burlap, mulch, or new soil and moisture shall be maintained on the roots. New topsoil should be added within a couple of days.

Soil removal within the City ROW will be completed to a 6-inch depth as shown on Figure A1-1.

Estimated Areas: The estimated surface area of exposed soil identified for removal is 2,250 square feet. This does not include any hardscape or immovable structures within the DU. The estimated volume of soil removal is 125 in-place cubic yards.

- Sod Surface. The majority of the DU will be finished with sod. The estimated area of sod is 1,810 ft².
- **Gravel Surface.** Portions of the DU will be surface finished with ³/₄-inch minus crushed gravel. The estimated area of gravel is 440 ft².



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Attachment 2 - Offsite Removal Action – 220 Baxter Street (DU-10)

This attachment to the JH Baxter Removal Action – 2023 Offsite Removal Action Scope Technical Memorandum (memo) describes the property-specific scope for soil removal and restoration activities at 220 Baxter Street in Eugene, Oregon (see Figures 1 and 2 of the memo). This property is included in the 2023 offsite soil removal action (RA) to be completed by Oregon Department of Environmental Quality (DEQ). Excavation details for the RA are shown on Figure 3 of the memo. Current conditions and soil removal depths are presented on Figure A2-1. The restoration plan (Figure A2-2) presents the finish surfaces and planting plan for the property. DU Description: 220 Baxter Street in Eugene, Oregon, has been given the designation of Decision Unit 10 (DU-10). The boundaries of the DU are defined as Lane County tax lot 5501 (Figures A2-1 and A2-2). DU-10 includes an asphaltic concrete driveway connecting Baxter Street with a carport attached to a single-story residential structure. The DU includes a shed and pergola in the backyard near the northwest corner of the property that will be removed and disposed or recycled during the RA and not replaced. A lean-to cover has been erected along the west side of the house and is connected to the western fence of the DU. This covered area has gates on either side. Soil within the covered area will be removed during the RA. The overhead cover and/or gates may need to be temporarily removed to access soil under the covered area. These will be replaced during site restoration. A chain-link fence divides the front and back yard on the south side of the residence. This fence will be removed during the RA and not replaced. A large fir tree is located within the Baxter Street City of Eugene (City) right-of-way (ROW). This tree will be protected during the RA (see Special Conditions below). A utility pole is also located within the ROW near the northeast corner of the DU. GSI Water Solutions, Inc.(GSI) (the oversight contractor) and DEQ met with the property owner on June 29, 2023, to discuss the removal and/or replacement of vegetation, the owner's preference to removing structures from the DU prior to soil removal, and discuss preferred replacement surface material (i.e., sod, seeding, gravel).

Excavation: Excavation is to 1.5 feet (18 inches) below ground surface (bgs) in the front yard and 1.0 foot (12 inches) bgs in the backyard where pavement or asphaltic concrete is not present. Excavation of six inches will be completed within the City ROW adjacent to the DU (Figure A2-1). The following slope protections will be implemented when excavating near surface structures.

- The top six inches of soil will be removed across the entire extent of the DU regardless of whether the boundary is adjacent to a structure, public roadway, driveway, or utility. However, excavations adjacent to power poles, the contractor will must comply with the requirements of the utility provider.
- For excavations adjacent to non-load bearing permanent structures (i.e., concrete pads, fence posts, driveways), the excavation will be completed vertically to the target depth of the RA unless otherwise determined unsafe by the earthwork subcontractor or GSI. This includes concrete pads that support HVAC systems.
- Excavations adjacent to structural foundations will be excavated to a minimum of 6-inches bgs at the foundation. The depth of the foundation will be determined by the earthwork subcontractor. Soil removal along the foundation will continue to approximately 6-inches above the base of the foundation footing, or

the bottom extent of the RA, whichever is shallower. Once 6-inches above the base of the foundation, and if necessary, the excavation will be stepped out 1 foot before sloping or benching the excavation at a 1 foot horizontal to 1 foot vertical (1:1) slope to the total depth of excavation (Figure 3).

Vegetation: One significant tree was identified by GSI's arborist consultant, the large Douglas fir that is within the City's ROW. This tree will be protected during the RA. This DU contained rose bushes, young walnut trees, and other shrubs that have been removed, with the exception of the stumps and root matter. Grubbed woody debris such as tree stumps and roots of removed trees will be disposed of as contaminated media.

A Japanese maple, four rose bushes, and a lilac bush will be replaced during site restoration with similar stock (or as large as is readily obtainable) as part of the restoration planting.

Structures: Wooden fencing will be removed to provide access to the northside backyard. Fencing will be replaced in like-kind. Further, excavation shall be performed to the property boundaries and may require fencing removal to complete excavation activities. A wooden shed is located in the backyard and will be removed and disposed to perform soil removal. Replacement will not be required. A small pergola is located on the north side of the house near the shed. The pergola will be removed and disposed and not replaced. A covered storage area is located along the west side of the residence. This covered area contains chain-link gates on either end. Soil within this covered area will be removed. The gates and/or the covered structure may need to be removed to access the soil. Gates and/or cover will be replaced if removed. A chain-link fence approximately 10 feet wide is located along the southern property, which will be removed to provide access to the backyard and replacement will not be required.

Access: The front yard of the DU is accessible from Baxter Street. The backyard is completely fenced in and accessible through an approximately 12-foot-wide wooden fence along the north side of the DU. The fence will be removed to provide access to the backyard. This fence will be replaced in like-kind. Access to the south side of the backyard is through an approximately 10-foot wide chain link fence. This fence will be removed at the request of the property owner and not replaced.

Utilities: Figure A2-1 shows the <u>approximate</u> location of utilities observed during site reconnaissance visits and from previous utility locating efforts. The precise route of utilities will be identified and confirmed by the contractor prior to removal action. The following descriptions are derived from observations made during visits to the property. Utilities may be encountered due to the depth of soil removal. If necessary, utility lines will be removed to reach the excavation depth and reconstructed following RA. Underground roof drains will also be replaced, if damaged during RA. Any utility damaged or removed during the RA will be repaired or replaced in accordance with State of Oregon and local building code, as applicable.

Electricity. Electricity to the residence is provided overhead directly from the utility pole adjacent to the property.

- **Communication**. Communication lines are located overhead extending to the residence from the utility pole adjacent to the property.
- **Sewer/Stormwater.** Previous utility locating services identified two sewer/stormwater lateral lines crossing the property. It is unknown if both of these lines service the property.
- Water. A water meter is located within the ROW roughly in line with the front door. Service line location is unknown.
- **Natural Gas.** A natural gas service meter is located near the front door of the residence. The natural gas lateral line was marked as extending towards Baxter Street from the service meter.
- **Overhead Utilities.** The utility pole located adjacent to the property distributes power and communication lines to multiple residences. Numerous overhead utility lines emanate from this pole especially along the east and north property boundaries.

Surface Restoration: The surface restoration has been determined in consultation with the property owner. The surface finish will be seeded with a micro-clover lawn alternative over topsoil for a majority of the DU. The exceptions are the northeast quadrant of the property that is used for RV storage, a 2-foot-wide strip along the north side of the residence for a pathway, a small covered area that is used for outdoor storage, and the City ROW where no less than 6 inches of ³/₄-inch minus crushed gravel compacted to a non-yielding state underlain by a minimum of 8 oz non-woven geotextile will be placed. See Detail 4 on Figure 3 and Figure A2-2 for surface restoration details.

A red Japanese Maple (*Acer palmatum*) will be planted during site restoration. This tree will be a direct replacement for a tree that was removed prior to the RA. The replacement tree will measure approximately 2-inch diameter trunk, 3 feet tall with a crown spread of 3 feet (or as close in size as is readily obtainable). Four rose bushes and a lilac bush will be planted as part site restoration where shown on Figure A2-2.

Special Conditions: Excavation within the east side of the DU is within the critical root zone of a large Douglas fir tree with a diameter of 47", height of 85', and a crown spread of 40'. This tree is within the ROW and will be protected during the RA. A City urban forester will be onsite at the beginning of excavation of this property. Excavation in this area will be completed with care in accordance with the City urban forester's recommendations. Excavation by hand, an air or water assisted pressurized system, or a vactor excavator are approved methods. No heavy equipment should be operated or staged within this area unless tree removal is approved by the City forester. After the excavation and prior to backfilling, the exposed roots should be covered as soon as possible either with a tarp, burlap, mulch, or new soil and moisture shall be maintained on the roots. New topsoil should be added within a couple of days. Figure A2-1 shows the location of this protected tree.

A lawn alternative micro-clover seed mix, tackifier, and fertilizer will be applied over the topsoil in accordance with supplier recommendations. **Estimated Areas:** The estimated area of exposed soil identified for removal is 4,970 square feet. This does not include any hardscape or immovable structures within the DU. The estimated volume of soil removal is 160 in-place cubic yards.

- Seeded Surface. The majority of the DU will be finished with seed. The estimated area of seeding is 2,890 ft².
- **Gravel Surface.** Portions of the DU will be surface finished with ³/₄-inch minus crushed gravel. The estimated area of gravel is 2,090 ft².









ATTACHMENT 3 - Offsite Removal Action – 215 Baxter Street (DU-11)

This attachment to the *JH* Baxter Removal Action – 2023 Offsite Removal Action Scope Technical *Memorandum* (memo) describes the property-specific scope for soil removal and restoration activities at 215 Baxter Street in Eugene, Oregon (see Figures 1 and 2 of the memo). This property is included in the 2023 offsite soil removal action (RA) to be completed by Oregon Department of Environmental Quality (DEQ). Excavation details are shown on Figure 3 of the memo. Current conditions and soil removal depths are presented on Figure A3-1. The restoration plan (Figure A3-2) presents the finish surfaces and planting plan for the property.

DU Description: 215 Baxter Street in Eugene, Oregon, has been given the designation of Decision Unit 11 (DU-11). The boundaries of the DU are defined as Lane County tax lot 2400 (Figures A3-1 and A3-2). DU-11 contains an asphaltic concrete driveway connecting Baxter Street to a single-story residential structure. DU-11 contains a fully fenced-in backyard and unfenced front yard. Four trees and a concrete slab patio are present within the backyard of the DU. Five significant trees were removed but stumps and roots remain that will need removal to reach the excavation depth. GSI Water Solutions, Inc.(GSI) (the oversight contractor) and DEQ met with the property owner on June 29, 2023 to discuss the removal and/or replacement of vegetation and discuss preferred replacement surface material (i.e., sod, clover seed, gravel).

Excavation: Excavation is to 2 feet (24 inches) below ground surface (bgs) in the front yard and south side of the backyard. The remainder of the backyard will be excavated to 1 foot (12 inches) bgs where pavement or asphaltic concrete is not present. Excavation of six inches bgs will be completed within the City ROW adjacent to the DU (Figure A3-1). The following slope protections will be implemented when excavating near surface structures.

- The top six inches of soil will be removed across the entire extent of the DU regardless of whether the boundary is adjacent to a structure, public roadway, driveway, or utility.
- For excavations adjacent to non-load bearing permanent structures (i.e., concrete pads, fence posts, driveways), the excavation will be completed vertically to the target depth of the RA unless otherwise determined unsafe by the earthwork subcontractor or GSI. This includes concrete pads that support HVAC systems.
- Excavations adjacent to structural foundations will be excavated to a minimum of 6-inches bgs at the foundation. The depth of the foundation will be determined by the earthwork subcontractor. Soil removal along the foundation will continue to approximately 6-inches above the base of the foundation footing, or the bottom extent of the RA, whichever is shallower. Once 6-inches above the base of the foundation, and if necessary, the excavation will be stepped out 1 foot before sloping or benching the excavation at a 1 foot horizontal to 1 foot vertical (1:1) slope to the total depth of excavation (Figure 3).

Vegetation: Five significant trees were identified by GSI's arborist consultant. These include a large Blue spruce tree in the front yard and a Douglas fir, Black walnut, Bigleaf maple, and English hawthorn in the backyard. While a vegetation clearing contractor removed these trees ahead of the RA, stump removal will be a requirement of the excavation contractor. The stumps and root structures of these trees will be removed during the RA to reach excavation depth. Grubbed woody debris such as tree stumps and roots of removed trees will be disposed of as contaminated media.

Two trees will be replaced during site restoration activities, a black tupelo in front yard and an Oregon white oak in backyard, as shown in Figure A3-2.

Structures: Fencing along the south and north will be removed to provide access to this, and adjacent DUs. Further, excavation shall be performed to the property boundaries and may require additional fencing removal to complete excavation activities, including the removal of gates and gate posts. Fence and gates will be replaced in like-kind, if removed. There are no additional structures present on the property to be removed.

Access: The front yard of the DU is accessible from Baxter Street. The backyard is completely fenced in and accessible through an approximately 8-foot-wide double swinging gate along the south side of the DU. Additional access to the backyard is provided by a 2.5-foot-wide gate on the north side of the property. Access to the backyard and access to the backyard to the north (DU-15) will be thoroughly obtained by at a minimum removing the backyard fence along the south and north sides of the property. All fencing will be replaced in like-kind,

Utilities: Figure A3-1 shows the <u>approximate</u> location of utilities observed during site reconnaissance visits and from previous utility locating efforts. The precise route of utilities will be identified and confirmed by the contractor prior to removal activities. The following descriptions are derived from observations made during visits to the property.

Utilities may be encountered due to the depth of soil removal. If necessary, utility lines will be removed to reach the excavation depth and reconstructed following RA. Underground roof drains will also be replaced, if damaged during RA. Any utility damaged or removed during the RA will be repaired or replaced in accordance with State of Oregon and local building code, as applicable.

- **Electricity**. Electricity to the residence is provided overhead from the utility pole located across Baxter Street.
- **Communication**. Communication lines are located overhead extending to the residence from a utility pole across Baxter Street.
- Sewer/Stormwater. Previous utility locating services identified a sewer/stormwater lateral line crossing the front yard of the property near the northern extent of the residence. The precise service line locations are unknown. City geographic information system (GIS) database indicates that a segment of 12-inch diameter stormwater pipe is present crossing the southern property boundary in the backyard of the DU (Figure A3-1). The segment is not shown to connect to any other service lines.
- Water. Previous utility locating services identified a water lateral line crossing the front yard of the property near the front door to the residence. The precise service line locations are unknown.
- **Natural Gas.** A natural gas service meter is located along the southern wall of the residence. The natural gas lateral line was marked as extending towards Baxter Street from the service meter.
- **Overhead Utilities.** A utility pole located adjacent to the property (across Baxter Street) distributes power and communication lines to the property.

Surface Restoration: The surface restoration material is sod for a majority of the DU. The exception is a small triangle of exposed soil along the back side of the residence that will be finished with bare soil. An area south of the asphaltic pavement driveway to the southern property line will be finished with no less than 6 inches of ³/₄-inch minus crushed gravel underlain by 8 oz non-woven geotextile. This approximately 10-foot strip of gravel will continue along the entire length of the southern fence line from Baxter Street to the east side of the backyard. See Detail 4 on Figure 3 and Figure A3-2 for surface restoration details.

The City of Eugene ROW along Baxter Street and connecting street between Baxter Street and Alva Park Drive will be finished with sod.

Special Conditions: Utilities may be encountered due to the depth of soil removal. If necessary, utility lines will be removed to reach the excavation depth and reconstructed following RA. Underground roof drains will also be replaced, if damaged during RA.

Estimated Areas: The estimated area of exposed soil identified for removal is 10,005 square feet. This does not include any hardscape within the DU. The estimated volume of soil removal is 470 in-place cubic yards.

- Sod Surface. The majority of the DU will be finished with sod. The estimated area of sod is 9,380 ft².
- **Gravel Surface.** Portions of the DU will be surface finished with ³/₄-inch minus crushed gravel. The estimated area of gravel is 625 ft².









ATTACHMENT 4 - Offsite Removal Action – 225 Baxter Street (DU-15)

This attachment to the *JH Baxter Removal Action – 2023 Offsite Removal Action Scope Technical Memorandum* (memo) describes the property-specific scope for soil removal and restoration activities at 225 Baxter Street in Eugene, Oregon (see Figures 1 and 12 of the memo). This property is included in the 2023 offsite soil removal action (RA) to be completed by Oregon Department of Environmental Quality (DEQ). Excavation details are shown on Figure 3 of the memo. Current conditions and soil removal depths are presented on Figure A4-1. The restoration plan (Figure A4-2) presents the finish surfaces and planting plan for the property.

DU Description: 225 Baxter Street in Eugene, Oregon, has been given the designation of Decision Unit 15 (DU-15). The boundaries of the DU are defined as Lane County tax lot 2500 (Figures A4-1 and A4-2). DU-15 contains an asphaltic concrete driveway connecting Baxter Street to a single-story residential structure. DU-15 contains a fully fenced backyard and unfenced front yard. A large fir tree is located within the City of Eugene (City) right-of-way (ROW), this tree will be protected during the RA. This DU contained trees of various sizes that were removed by a vegetation clearing firm (trees described below). While the trees were removed, sumps and roots remain that will need removed. A three-sided covered structure (pergola) is located in the backyard and is constructed on concrete pier footings. This structure will be deconstructed by the earthwork subcontractor prior to the RA and reassembled or replaced as part of the site restoration activities of the RA. GSI Water Solutions, Inc.(GSI) (the oversight contractor) and DEQ met with the property owner on June 29, 2023 to discuss the removal and/or replacement vegetation, the owner's preference to removing structures from the DU prior to soil removal, and discuss preferred replacement surface material (i.e., sod, bare dirt, gravel),

Excavation: Excavation is to 1 foot (12 inches) below ground surface (bgs) across the entire DU where pavement or asphaltic concrete is not present. Excavation of six inches bgs will be completed within the City ROW adjacent to the DU (Figure A4-1). The following slope protections will be implemented when excavating near surface structures.

- The top six inches of soil will be removed across the entire extent of the DU regardless of whether the boundary is adjacent to a structure, public roadway, driveway, or utility. For excavations adjacent to power poles, the contractor will comply with the requirements of the utility provider.
- For excavations adjacent to non-load bearing permanent structures (i.e., concrete pads, fence posts, driveways), the excavation will be completed vertically to the target depth of the RA unless otherwise determined unsafe by the earthwork subcontractor or GSI. This includes concrete pads that support HVAC systems.

Excavations adjacent to structural foundations will be excavated to a minimum of 6-inches bgs at the foundation. The depth of the foundation will be determined by the earthwork subcontractor. Soil removal along the foundation will continue to approximately 6-inches above the base of the foundation footing, or the bottom extent of the RA, whichever is shallower. Once 6-inches above the base of the foundation, and if necessary, the excavation will be stepped out 1 foot before sloping or benching the excavation at a 1 foot horizontal to 1 foot vertical (1:1) slope to the total depth of excavation (Figure 3).

Vegetation: Sixteen trees were identified by GSI's consultant. These include a Douglas fir (within the City ROW) and common holly tree within the main northern section of the front yard, three sapling Coastal redwoods/California incense cedar trees on the southern property line along the driveway (within the City ROW), a large Black walnut tree in the southeast corner of the property, two small Coastal redwood trees, a Douglas fir, and seven fruit trees in the backyard. Three areas with shrubs were also identified. The Douglas fir within the ROW will be protected during RA activities. All other trees within the DU were removed. While a vegetation clearing contractor removed these trees, stump removal will be a requirement of the excavation contractor and will be removed during the RA to reach excavation depth. Grubbed woody debris such as tree stumps and roots of removed trees will be disposed of as contaminated media.

Seven fruit trees will be replaced by the earthwork contractor or their landscape subcontractor during site restoration.

A few native shrubs (2 currants, 1 manzanita); will be replaced by the earthwork contractor or their landscape subcontractor during site restoration with similar stock following soil removal action.

Structures: A three-sided pergola constructed on pier footings is located in the backyard. This structure measures approximately 6-feet long by 5-feet wide and 6 feet tall. The walls consist of 4" by 4" and 2" by 4" framing and lattice panels. The roof is corrugated plastic sheets. This structure will be disassembled by the earthwork subcontractor prior to the RA and reassembled or re-constructed by the earthwork subcontractor following as part of site restoration activities of the RA.

Fencing along the south and north of the backyard will be removed to provide access to this and adjacent DUs. Excavation shall be performed to the property boundaries and may require additional fencing removal to complete excavation activities. All fencing will be replaced in like-kind, if removed. There are no additional structures present on the property to be removed.

Access: The front yard of the DU is accessible from Baxter Street. The backyard is completely fenced in and accessible through an approximately 3-foot-wide gate along the south side of the DU. Access to the backyard and access to the backyards to the north and south will be obtained by at a minimum removing the backyard fences along the north and south sides of the DU. All fencing will be replaced in like-kind,

Utilities: Figure A4-1 shows the <u>approximate</u> location of utilities observed during site reconnaissance visits and from previous utility locating efforts. The precise route of utilities will be identified and confirmed by the contractor prior to removal activities. The following descriptions are derived from observations made during visits to the property.

Utilities may be encountered due to the depth of soil removal. If necessary, utility lines will be removed to reach the excavation depth and reconstructed following RA. Underground roof drains will also be replaced, if damaged during RA. Any utility damaged or removed during the RA will be repaired or replaced in accordance with State of Oregon and local building code, as applicable.

- **Electricity**. Electricity to the residence is provided overhead from the utility pole located across Baxter Street.

- **Communication**. Communication lines are located overhead extending to the residence from a utility pole across Baxter Street.
- **Sewer/Stormwater.** Previous utility locating services identified a sewer/stormwater lateral line crossing the front yard of the property near the northern extent of the residence.
- Water. Previous utility locating services identified a water lateral line crossing the front yard of the property near the front door to the residence.
- **Natural Gas.** A natural gas service meter is located along the northern wall of the residence. The natural gas lateral line was marked as extending towards Baxter Street from the service meter.
- **Overhead Utilities.** A utility pole located adjacent to the property (across Baxter Street) distributes power and communication lines to the property.

Surface Restoration: The surface restoration has been determined in consultation with the property owner. The surface will be finished with a lawn alternative micro clover seed blend over bare soil for a majority of the DU. The micro-clover seed mix, tackifier, and fertilizer will be applied over the topsoil in accordance with supplier recommendations. The exception is along the south side of the driveway and an area approximately 25 feet long by 10 feet wide behind the southside gate that will be finished with no less than 6 inches of ³/₄- inch minus crushed gravel underlain by 8 oz non-woven geotextile. The City ROW along Baxter Street will be finished with sod.

Seven fruit trees with trunks at least 1-inch in diameter, 6-feet tall, and with a 5-foot crown will be planted in the backyard as part of surface restoration. Two native currents and a native manzanita will be planted in the front yard near the driveway. See Detail 4 of Figure 3 and Figure A4-2 for surface restoration details.

Special Conditions: The area within a 17' radius of the Douglas fir tree in the Baxter Street right-of-way will be protected during the RA. A City urban forester will be onsite at the beginning of excavation of this property. Excavation in this area will be completed with care in accordance with the City urban forester's recommendations. Excavation by hand, an air or water assisted pressurized system, or a vactor excavator are approved methods. No heavy equipment should be operated or staged within this area. After the excavation, the exposed roots should be covered as soon as possible either with a tarp, burlap, mulch, or new soil and moisture shall be maintained on the roots. New topsoil should be added within a couple of days. Figure A4-1 shows the location of this protected tree.

Estimated Areas: The estimated area of exposed soil identified for removal is 8,070 square feet. This does not include any hardscape within the DU. The estimated volume of soil removal is 300 in-place cubic yards.

- Seeded Surface. The entirety of the DU will be finished with bare soil and seeded with clover. The estimated area of bare soil is 7,335 ft².
- **Gravel Surface.** Portions of the DU will be surface finished with ³/₄-inch minus crushed gravel. The estimated area of gravel is 735 ft².



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ATTACHMENT 5 - Offsite Removal Action – 240 Baxter Street (SO-06)

This attachment to the *JH* Baxter Removal Action – 2023 Offsite Removal Action Scope Technical *Memorandum* (memo) describes the property-specific scope for soil removal and restoration activities at 240 Baxter Street in Eugene, Oregon (see Figures 1 and 2 of the memo). Excavation details for the RA are shown on Figure 3 of the memo. This property is included in the 2023 offsite soil removal action (RA) to be completed by Oregon Department of Environmental Quality (DEQ). Current conditions and soil removal depths are presented on Figure A5-1. The restoration plan (Figure A5-2) presents the finish surfaces and planting plan for the property.

DU Description: 240 Baxter Street in Eugene, Oregon, has been given the designation of Step-Out Decision Unit 6 (S0-06). The boundaries of the decision unit are defined as Lane County tax lot 5404 (Figures 5A-1 and 5A-2). S0-06 contains a single-story residential structure and an asphaltic concrete driveway. S0-06 contains a fully fenced in front yard. This residence has a side yard, but no separate backyard. Four trees and a shrub hedge were removed by a vegetation clearing firm. A 40-foot long shipping container and plastic prefabricated garden shed are present in the front yard along Baxter Street. These will be moved off of the property during soil removal and replaced during site restoration. A utility pole is also present in the northwest corner of the property. GSI Water Solutions, Inc.(GSI) (the oversight contractor) and DEQ met with the property owner on June 29, 2023 to discuss the removal and/or replacement of vegetation, the owner's preference to removing structures from the DU, and discuss preferred replacement surface material (i.e., sod, bare dirt, gravel).

The property owner is preparing to remodel the yard. This will include adding concrete pads and relocating portions of the chain-link fence. The plans for this remodel have been taken into consideration during RA planning and site restoration.

Excavation: The top six inches of soil will be removed across the entire extent of the DU where pavement or asphaltic concrete is not present. Excavation of six inches below ground surface (bgs) will be completed within the City ROW adjacent to the DU (Figure A5-1). For excavations adjacent to power poles, the contractor will comply with the requirements of the utility provider.

Vegetation: Four significant trees were identified within the DU by GSI's arborist consultant. This included three trees along Baxter Street (two English hawthorns and a common hazel) and one black walnut tree in the northwest corner of the DU. A row of shrubs were present along the south and east sides of the DU.

All trees and shrubs within the DU were removed. While a vegetation clearing contractor removed these trees, stump removal will be a requirement of the excavation contractor to reach excavation depth. Grubbed woody debris such as tree stumps and roots of removed trees will be disposed of as contaminated media.

There are also four trees (two Douglas firs, one Blue spruce, and one Sitka spruce) on the property to the north with root structures within the DU. The excavation in this area must be completed with oversight by the arborist to minimize impacts to these sensitive trees (described below).

Structure: A prefabricated plastic shed is located in the yard. This shed is placed on wooden pallets and will need to be moved and replaced during the RA to access soil beneath. A 40-foot shipping container is also present in the yard. This will be moved, stored, and replaced following the RA. Chain link fencing will be removed to provide access to the yard and to access soil along the fence line. Fencing will be replaced or rebuilt in like-kind, if removed.

Access: A majority of the DU is fenced-in with the exception of the driveway and a narrow side yard. An approximately 8-foot-wide gate is located along Baxter Street that can provide access to the fenced-in portion of the property. The property owner will remove the fence along the west side of the yard prior to the RA. Additionally, a portion of or the entire fence on the southeast side of the DU will likely need to be removed to move the shipping container. All fencing will be replaced in like-kind,

Utilities: Figure A5-1 shows the <u>approximate</u> location of utilities observed during site reconnaissance visits and from previous utility locating efforts. The precise route of utilities will be identified and confirmed by the contractor prior to removal action. The following descriptions are derived from observations made during visits to the property.

Utilities may be encountered due to the depth of soil removal. If necessary, utility lines will be removed to reach the excavation depth and reconstructed following RA. Underground roof drains will also be replaced, if damaged during RA. Any utility damaged or removed during the RA will be repaired or replaced in accordance with State of Oregon and local building code, as applicable.

- **Electricity.** Electricity to the residence is provided overhead from the utility pole located in the northwest corner of the DU.
- Communication. Communication lines are located overhead extending to the residence from a utility pole along Baxter Street. Additionally, communication lines to a neighboring property cross along the southern DU boundary.
- Sewer/Stormwater. Sewer/stormwater utilities have not been observed. Service line location is unknown.
- Water. Multiple water meters have been observed along Baxter Street near the DU; however, the lateral lines leading to the residence have not been observed. Service line location is unknown.
- **Natural Gas.** A natural gas service stub is located along the northern wall of the SO-06 residence. The natural gas lateral line has not been identified. Service line location is unknown.
- Overhead Utilities. A series of utility poles are located along the northern DU boundary with one pole located within the DU. These poles distribute power and communication lines to SO-06 and surrounding properties. Excavation work near the utility pole must be performed in consultation with the utility provider.

Surface Restoration: The surface restoration has been determined in consultation with the property owner. The surface will be finished with sod for a majority of the DU. The exceptions are where the property owner plans on installing concrete pads along the front of the residence. In these areas, approximately 3-inches of ³/₄-inch minus crushed gravel underlain by 8 oz non-woven geotextile will be placed. The property owner will have a concrete slab poured in these areas following the RA. A strip outside of the fence along the south edge of the property, the area west of the residence, and a 40-foot-long by 10-foot-wide area along the eastern property line where the shipping container will be placed will be finished with no less than 6 inches of ³/₄-inch minus crushed gravel underlain by 8 oz non-woven geotextile. The City of Eugene ROW will be finished with ³/₄-inch minus crushed gravel underlain by 8 oz non-woven geotextile. See Detail 4 on Figure 3 and Figure A5-2 for surface restoration details.

Special Conditions: Excavation near the north side of the DU is within the critical root zone of four trees on the neighboring property that will be retained. Excavation completed 15 feet from the north property boundary (15

feet from tree trunks on neighboring property) will be excavated by hand, an air or water assisted pressurized system, or a vactor excavator in accordance with arborist recommendations. No heavy equipment should be operated or staged within this area. After the excavation, the exposed roots should be covered as soon as possible either with a tarp, mulch, or new soil. New soil should be added within a couple of days. Figure A6-1 shows the location of this protected tree.

A utility pole and underground power utilities are located in the northwest corner of the property. This area may need to be excavated by hand. Excavation work near the utility pole must be performed in consultation with the utility provider.

Estimated Areas: The estimated area of exposed soil identified for removal is 8,325 square feet. This does not include any hardscape structures within the DU. The estimated volume of soil removal is 120 in-place cubic yards.

- Sod Surface. The majority of the DU will be finished with sod. The estimated area of sod is 4,550 ft².
- **Gravel Surface.** Portions of the DU will be surface finished with ³/₄-inch minus crushed gravel. The estimated area of gravel is 2,780 ft².
- **Base Course (Gravel) Surface.** The homeowner intends on installing a concrete patio to the south of the residential structure. This area has been delineated on the attached figure. For this area, a 3-inch thick layer of ³/₄-inch-minus gravel will be placed to provide a base course for the future concrete pad. The estimated area of base course surface is 995 ft².



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ATTACHMENT 6 - Offsite Removal Action – 235 Baxter Street (SO-07)

This attachment to the *JH Baxter Removal Action – 2023 Offsite Removal Action Scope Technical Memorandum* (memo) describes the property-specific scope for soil removal and restoration activities at 235 Baxter Street in Eugene, Oregon (see Figures 1 and 2 of the memo). This property is included in the 2023 offsite soil removal action (RA) to be completed by Oregon Department of Environmental Quality (DEQ).Excavation details are shown on Figure 3 of the memo. Current conditions and soil removal depths are presented on Figure A6-1. The restoration plan (Figure A6-2) presents the finish surfaces and planting plan for the property.

DU Description: 235 Baxter Street in Eugene, Oregon, has been given the designation of Step-Out Decision Unit 7 (SO-07). The boundaries of the decision unit are defined as Lane County tax lot 5404 (Figure A6-1). SO-07 contains an asphaltic concrete driveway connecting Baxter Street to a single-story residential structure. SO-07 contains a fully fenced-in backyard. This residence has an unfenced front yard, a fenced in and covered north side yard used for storage, and a south side yard, which mostly consists of permanent outbuilding structures. Trees, a covered greenhouse, a covered chicken coop, and a chain-link fence pen are all present within the backyard of the DU. GSI Water Solutions, Inc.(GSI) (the oversight contractor) and DEQ met with the property owner on June 29, 2023 to discuss the removal and/or replacement of trees and shrubs, discuss the owner's preference to removing structures from the DU, and discuss preferred replacement surface material (i.e., sod, seed cover, gravel).

Excavation: Excavation is to 1 foot (12 inches) below ground surface (bgs) in the front yard and south side of the backyard and six inches bgs for the majority of the backyard where pavement or asphaltic concrete is not present. Excavation to six inches bgs will be completed within the City ROW adjacent to the DU (Figure A6-1). The following slope protections will be implemented when excavating near surface structures.

• The top six inches of soil will be removed across the entire extent of the DU regardless of whether the boundary is adjacent to a structure, public roadway, driveway, or utility.

For excavations adjacent to non-load bearing permanent structures (i.e., concrete pads, fence posts, driveways), the excavation will be completed vertically to the extent of the RA unless otherwise determined unsafe by the earthwork subcontractor, GSI, or DEQ. This includes concrete pads that hold HVAC systems.

Excavations adjacent to structural foundations will be excavated to a minimum of 6-inches bgs at the foundation. The depth of the foundation will be determined by the earthwork subcontractor. Soil removal along the foundation will continue to approximately 6-inches above the base of the foundation footing, or the bottom extent of the RA, whichever is shallower. Once 6-inches above the base of the foundation, and if necessary, the excavation will be stepped out 1 foot before sloping or benching the excavation at a 1 foot horizontal to 1 foot vertical (1:1) to the total depth of excavation.

Vegetation: Five significant trees were identified by GSI's arborist consultant. These included a large Sugar maple (within the City ROW), a small Japanese maple in the front yard, two apple trees, and an Amur maple in the backyard. Shrubs, including blueberries, were also identified along the north fence line. The sugar maple tree in the front yard will be protected during soil removal actions. The Japanese maple, two apple trees, and the Amur maple tree were removed by the vegetation clearing contractor. While a vegetation clearing contractor removed these trees and shrubs, stump removal will be a requirement of the excavation contractor to reach excavation depth. . Grubbed woody debris such as tree stumps and roots of removed trees will be disposed of as contaminated media.

A Japanese maple, two apple trees, and three blueberry bushes will be replaced during site restoration with similar stock (or as large as is readily obtainable) as part of the restoration planting.

Structures: Four structures are located within the backyard this property. Three of these will require disassembly and reassembly to complete the RA. A newly constructed covered rabbitry in the southeast corner of the backyard will remain in place. Twelve inches of existing soil was previously removed from this area and replaced by the property owner during construction. The removed soil has been stockpiled near the rabbitry and will be removed during the RA.

A chain-link fence chicken pen is located on the south side of the backyard. This fence will be removed by the earthwork contractor to provide access to the backyard from the south. This structure will be replaced or rebuilt in like-kind following the RA. A greenhouse (approximately 20 feet by 40 feet) is located in the center of the backyard. The soil within the greenhouse will be removed as part of the RA. A portion, or all of this greenhouse will be removed to provide access. The greenhouse will be reconstructed following the RA. Additionally, multiple hydroponic totes are located within the greenhouse that will be removed by the earthwork contractor prior to implementing the RA. The property owner will drain the tanks prior to the RA. The totes will be replaced by the earthwork contractor following RA. Certain totes are full of gravel. The gravel may need to be removed to move the totes. If removed, gravel will be replaced by the earthwork contractor. The north side yard is fenced-in on all sides and covered. This area is used for storage. The soil within this area will be replaced during the RA. The fences and possibly the cover will be removed prior to the RA for access. These will be replaced following the RA.

Four steel poles are located within the backyard (laundry poles). These poles will be removed during the RA and replacement will not be necessary.

The wood fence along the south side of the property will be removed during the RA to provide equipment access directly from the adjacent property to the south (DU-15). Fencing will be replaced in like-kind.

Access: The front yard of the DU is accessible from Baxter Street. The backyard is completely fenced in with no access for equipment as is. To provide equipment access to the backyard, the south fence will be removed. The fenced-in area on the north side of the house will be opened up to remove soil from this area. Equipment access could be through the north side yard, if necessary.

Utilities: Figure 2 shows the <u>approximate</u> location of utilities observed during site reconnaissance visits and from previous utility locating efforts. The precise route of utilities will be identified and confirmed by the contractor prior to removal action. The following descriptions are derived from observations made during visits to the property. Utilities, including irrigation lines, may be encountered due to the depth of soil removal. If necessary, utility lines will be removed to reach the excavation depth and reconstructed following RA. Underground roof drains will also be replaced, if damaged during RA. Any utility damaged or removed during the RA will be repaired or replaced in accordance with State of Oregon and local building code, as applicable.

Electricity. Electricity to the residence is provided overhead from the utility pole located in the northwest corner of the property.

- **Communication**. Communication lines are located overhead extending to the residence from a utility pole along Baxter Street. Additionally, communication lines to a neighboring property cross along the southern property boundary.
- Sewer. Sewer utility likely comes directly from Baxter Street but has not been observed. Service line location is unknown.
- Stormwater. Stormwater drains have not been observed. Service line location is unknown.
- **Water**. Multiple water meters have been observed along Baxter Street near the property; however, the lateral lines leading to the residence have not been observed. Service line location is unknown.
- **Natural Gas.** A natural gas service stub is located along the northern wall of the residence. The natural gas lateral line has not been identified.
- **Overhead Utilities.** A series of utility poles are located along the northern property boundary with one pole located within the property. These poles distribute power and communication lines to SO-07 and surrounding properties.
- **Irrigation**. Irrigation lines are present throughout the front and backyards. These lines and access points will be removed and replaced during the RA. The precise location of irrigation lines are unknown.

Surface Restoration: The surface restoration has been determined in consultation with the property owner. The surface finish will be sod for a majority of the DU. The exceptions are a strip in front of the residence that is approximately 4 feet by 24 feet and within the greenhouse where bare soil will be the finish surface. South of the driveway to the southern property line will be finished with no less than 6 inches of ³/₄-inch minus crushed gravel underlain by 8 oz non-woven geotextile will be placed. The City ROW will be finished with sod.

A red Japanese Maple (*Acer palmatum*) will be planted during site restoration. This tree will be a direct replacement for a tree that was removed prior to the RA. The replacement tree will measure approximately 2-inch diameter trunk, 3 feet tall with a crown spread of 5 feet (or as large as is readily obtainable). Two apple trees and three blueberry bushes will be planted as part of site restoration where shown on Figure A6-2.

Special Conditions: Excavation in the north side of the front yard is within the critical root zone of a Sugar maple with a diameter of 14", height of 35', and a crown spread of 30'. This tree is (within the City ROW and will be protected. A City of Eugene urban forester will be onsite at the beginning of excavation of this property. Excavation in this area will be completed with care in accordance with the City of Eugene urban forester's recommendations. Excavation by hand, an air or water assisted pressurized system, or a vactor excavator are approved methods. No heavy equipment should be operated or staged within this area. After the excavation, the exposed roots should be covered as soon as possible either with a tarp, mulch, or new soil. New soil should be added within a couple of days.

Irrigation lines are present within the front and backyard. The precise location of the irrigation access ports will be noted by the earthwork contractor prior to earthwork activities. Due to the depth of removal, irrigation lines are likely to be encountered and will need to be removed to reach the excavation depth. The irrigation lines will be replaced with new material if removed or damaged during the RA.

Six inches of topsoil will be removed from within the greenhouse. A portion, or all, of the greenhouse cover or siding may need to be removed to provide access. Hydroponic totes are located within the greenhouse that will be removed by the earthwork contractor to access soil. These will be replaced following the RA.

Soil within the rabbitry in the SE corner of the property has been replaced to 12-inches below grade and will not be further excavated during the RA. The structure will be protected during the RA.

The chain-link fence chicken run will be removed to provide access to the backyard and replaced in like kind following the RA.

The fenced in portion of the north side yard is used for storage. To access soil in this area, materials in this area will need to be removed and stored off-site in a storage unit.. The storage unit will be provided by the earthwork contractor prior to the RA and movers subcontracted by the earthwork contractor will be responsible for transferring material to the storage unit and returning material following the RA.

The property owner has indicated that family pets have been buried in the northeast corner of the backyard. Six inches of soil will be removed from the area (approximately 8 feet by 8 feet) with care to not go deeper than the required 6-inches bgs.

Estimated Areas: The estimated area of exposed soil identified for removal is 7,665 square feet. This does not include any hardscape or immovable structures within the DU. The estimated volume of soil removal is 190 inplace cubic yards.

- Sod Surface. The majority of the DU will be finished with sod. The estimated area of sod is 6,200 ft².
- **Gravel Surface.** Portions of the DU will be surface finished with ³/₄-inch minus crushed gravel. The estimated area of gravel is 725 ft².
- **Bare Soil.** A planter area in the front yard and the area within the greenhouse will be finished with bare soil. The estimated area of bare soil is 740 ft².



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ATTACHMENT 7 - Offsite Removal Action – 242 Alva Park Drive (AP-01)

This attachment to the *JH* Baxter Removal Action – 2023 Offsite Removal Action Scope Technical *Memorandum* (memo) describes the property-specific scope for soil removal and restoration activities at 242 Alva Park Drive in Eugene, Oregon (see Figures 1 and 2 of the memo). Excavation details are shown on Figure 3 of the memo. This property is included in the 2023 offsite soil removal action (RA) to be completed by Oregon Department of Environmental Quality (DEQ). Current conditions and soil removal depths are presented on Figure A7-1. The restoration plan (Figure A7-2) presents the finish surfaces and planting plan for the property.

DU Description: 242 Alva Park Drive in Eugene, Oregon, has been given the designation of Alva Park Decision Unit 01 (AP-01). The boundaries of the DU are defined as Lane County tax lot 2500 (Figures A7-1 and A7-2). AP-01 contains a concrete driveway connecting Alva Park Drive to a single-story residential structure. AP-01 contains a fully fenced-in backyard and unfenced front yard. A large cedar tree is located within the City of Eugene (City) right-of-way (ROW), which will be protected during the RA. This DU contained four trees in the backyard, three of which were removed by a vegetation clearing firm (trees described below). While the trees were removed, sumps and roots will remain that will need removed to reach the excavation depth. GSI Water Solutions, Inc. (GSI) (the oversight contractor) and DEQ met with the property owner on June 29, 2023 to discuss the removal and/or replacement of trees and shrubs, discuss the owner's preference to removing structures from the DU prior to soil removal, and the preferred replacement surface material (i.e., sod, bare soil, gravel).

Excavation: The top six inches of soil will be removed across the entire extent of the DU where pavement is not present. Excavation of six inches will be completed within the City ROW.

Vegetation: Five significant trees were identified within the DU by the arborist consultant. These include a Port Orford cedar tree within the City ROW along Alva Park Drive and four trees (Crabapple, Black walnut, California privet, and Common hazel) in the backyard. The large cedar tree within the City ROW and the black walnut in the southwest corner of the property will be protected during the RA. The remaining three trees were removed by the vegetation clearing contractor. While a vegetation clearing contractor removed these trees, stump removal will be a requirement of the excavation contractor to reach excavation depth. Grubbed woody debris such as tree stumps and roots of removed trees will be disposed of as contaminated media.

Four rose bushes, two artichokes, two hazelnut trees, and two additional trees will be replaced with similar stock during site restoration activities.

This DU also contained significant blackberry brambles and young walnut trees. These were also removed by the vegetation clearing firm.

Structures: A two-story playhouse is located in the backyard that will be partially demolished. The earthwork contractor will need to complete demolition and remove and dispose of the materials. The property owner will need assistance to remove furniture and toys throughout the property prior to initiating the RA. The earthwork contractor will provide a storage container and moving firm to move furniture and toys from the DU to access

soil. Once the RA is complete, the earthwork contractor and movers will return toys and furniture to the property. Fencing will be removed to provide access to the backyard. Fencing will be replaced or rebuilt in like-kind once removed.

The driveway and walkway will be removed within the property limits but removal within the City ROW will not be performed. As such, the concrete will require saw cutting at the approximately ROW boundary and the driveway within the property limited will be removed and disposed of to allow for an unpaved area in place of a driveway.

Access: The front yard of the DU is accessible from Alva Park Drive. The backyard is completely fenced in and accessible through an approximately 3-foot-wide gate along the north side of the DU. Fence panels dividing the front and backyards will be removed to provide access to the backyard and access soil along the fence line. All fencing will be replaced in like-kind,

Utilities: Figure A7-1 shows the <u>approximate</u> location of utilities observed during site reconnaissance visits and from previous utility locating efforts. The precise route of utilities will be identified and confirmed by the contractor prior to RA. The following descriptions are derived from observations made during visits to the property.

Utilities may be encountered due to the depth of soil removal. If necessary, utility lines will be removed to reach the excavation depth and reconstructed following RA. Underground roof drains will also be replaced, if damaged during RA. Any utility damaged or removed during the RA will be repaired or replaced in accordance with State of Oregon and local building code, as applicable.

- **Electricity**. Electricity to the residence is provided overhead from the utility pole located across Baxter Street.
- **Communication**. Communication lines are located overhead extending to the residence from a utility pole across Baxter Street.
- **Sewer/Stormwater.** Previous utility locating services identified a sewer/stormwater lateral line crossing the front yard of the property near the northern extent of the residence.
- Water. Previous utility locating services identified a sewer/stormwater lateral line crossing the front yard of the property near the front door to the residence.
- **Natural Gas.** A natural gas service meter is located along the northern wall of the residence. The natural gas lateral line was marked as extending towards Baxter Street from the service meter.
- **Overhead Utilities.** A utility pole located adjacent to the property (across Baxter Street) distributes power and communication lines to the property.

Preferred Surface Restoration Method: The preferred finish material is micro-clover alternative lawn mix seed over bare soil for the entire property.

Four rose bushes, two artichokes, and two trees will be planted to replace vegetation removed during the RA. These will be similar stock to vegetation removed.

Special Conditions: The concrete driveway and walkway to the front entry steps will be removed as part of the RA to access soil underneath. The driveway and the walkway will not be replaced following the RA. The entire DU will be finished with bare soil and micro-clover alternative lawn mix to match the surrounding grade. The micro-clover seed mix, tackifier, and fertilizer will be applied over the topsoil in accordance with supplier recommendations.

The property owner noted that there was a galvanized steel pipe sticking vertically approximately 8-inches above ground in the backyard near the rear fence. The purpose of this pipe is unknown. The earthwork contractor will avoid damaging the pipe during earthwork.

Excavation within the east side of the DU is within the critical root zone of a large cedar tree with a diameter of 29", height of 80', and a crown spread of 40'. This tree is within the City ROW and will be protected. A City urban forester will be onsite at the beginning of excavation of this property. Excavation in this area will be completed with care in accordance with the City of Eugene's urban forester's recommendations. Excavation by hand, an air or water assisted pressurized system, or a vactor excavator are approved removal methods. The southwest corner of the DU is within the critical root zone of a black walnut tree with a diameter of 18", height of 40', and crown spread of 35'. Excavation by hand, an air or water assisted pressurized system, or a vactor excavator are approved removal methods in this area. No heavy equipment should be operated or staged within this area. After the excavation, the exposed roots should be covered as soon as possible either with a tarp, mulch, or new soil. New soil should be added within a couple of days. Figure A7-1 shows the location of these protected trees.

Estimated Areas and Volumes: The estimated area of exposed soil identified for removal is 8,410 square feet. This does not include any hardscape or immovable structures within the DU. The estimated volume of soil removal is 190 in-place cubic yards.

- Seeded Surface. The entirety of the DU will be finished with bare soil and seeded with clover. The estimated area is 8,410 ft².



