



PACIFIC HABITAT SERVICES, INC.

9450 SW Commerce Circle, Suite 180
Wilsonville, OR 97070

(800) 871-9333 • (503) 570-0800 • Fax (503) 570-0855

December 7, 2021

Brian M. Candau
Phelan Development Company
6750 SW Bradbury Ct.
Portland OR, 97224

RE: Wetland Determination at 4375 Turner Road SE, Salem, OR
PHS #7374

Pacific Habitat Services, Inc. (PHS) conducted a wetland determination on October 21 and November 15, 2021, on City of Salem parcel no. 082W07C000200, consisting of 10.12 acres and located at 4375 Turner Road SE in Salem, Oregon (Township 8 South, Range 2 West, Section 7) (See attached Figures 1-2). The result of the wetland determination is that **a wetland confined to a ditch is located at the western boundary of the parcel. No other wetlands are present.**

Existing Conditions

The overall study area topography is flat; however, four borrow pits and several drainage ditches are present. Courtney gravelly silty clay loam, 0-3 percent slopes, a hydric is mapped within a portion of the property. Drainage ditches are located adjacent to Turner Road SE; however, these are located in Sifton gravelly loam soils, which are not mapped as hydric, and no wetlands are present. The borrow pits do not have wetlands and are located in Clackamas gravelly loam soils, which are also not mapped as hydric.

Dominant vegetation for most of the site includes ruderal grasses and forbs including dove's-foot geranium (*Geranium molle*, UPL), tall fescue (*Schedonorus arundinaceus*, FAC), Queen Anne's lace (*Daucus carota*, FACU), curly dock (*Rumex crispus*, FAC), Canada thistle (*Cirsium arvense*, FAC), and bull thistle (*Cirsium vulgare*, FACU). There are several large Oregon oak trees (*Quercus garryana*, FACU) near the northern property boundary and balsam poplar trees (*Populus balsamifera*, FAC) adjacent to the southern property boundary.

A drainage ditch containing wetlands runs parallel to the property's western boundary and captures runoff from the railroad west of the study area.

On-site Determination of Wetlands or Waterways

Prior to the field investigation, precipitation information from the Salem Airport (McNary Field) WETS station was examined to determine hydrological conditions, which were determined to be below normal range for the water year, two of the previous three months, and the two weeks preceding the October 21, 2021, wetland determination field work. Precipitation was normal for two of the preceding three months and well above normal for the two weeks preceding the November 15, 2021, fieldwork (Table 1).

Table 1. Average Monthly and observed precipitation for Silverton (NRCS WETS Table)

Month	Average Precipitation ¹	30% chance will have		Observed Precipitation ¹	Percent of Normal
		Less than ¹	More than ¹		
July	0.57	0.17	0.63	0.02	4
August	0.68	0.21	0.72	0.02	3
September	1.43	0.53	1.68	2.89	202
October	3.03	1.61	3.70	2.71	89

Notes: ¹ Source: NRCS WETS Table for Salem Airport: <http://agacis.rcc-acis.org/?fips=41047>

Recorded precipitation for the two weeks preceding the October 21 fieldwork was 0.52 inches, which is 36 percent of normal (1.46 inches). Recorded precipitation for the water year (October 1, 2020 – September 30, 2021) was 36.75 inches, which is 92 percent of normal (40.08 inches). Precipitation for the two weeks preceding the November 15 fieldwork was 4.26 inches, which is 189 percent of normal (2.25 inches). A record of 1.05 inches fell on November 11, four days prior to the fieldwork.

Sample points 1-3 were collected on October 21. Below normal conditions for this effort were not seen as affecting the wetland determination, as no indirect wetland hydrology indicators including oxidized rhizospheres along living roots, sediment deposits, surface soil cracks, and FAC-neutral test were observed. None of the sample points met a hydric soil indicator; however, soils appeared to have been disturbed in recent years and likely included fill. Sample point 4 was collected on November 15, following much higher-than normal rainfall for the preceding two weeks.

Sample point 1 was placed in a disturbed area in the eastern part of the study area with mapped Courtney clay loam soils. The dominant vegetation is dove's-foot geranium, tall fescue, and Queen Anne's lace. Wetland hydrology was not present; however, soils met the requirements for a depleted matrix, although the upper five inches of the soil had a high chroma (10YR 3/3) indicating that it was possibly fill.

Sample point 2 was taken in a borrow pit midway between the eastern and western study area boundaries in the southern portion of the study area. Hydrophytic vegetation, hydric soils, and wetland hydrology were not present.

Sample point 3 was taken in a drainage ditch adjacent to Turner Road SE. The dominant vegetation was shiny geranium. Hydrophytic vegetation, hydric soils, and wetland hydrology were not present.

Sample point 4 was taken in a slight topographic depression in the northeastern portion of the study area is mapped Courtney clay loam soils. Wetland vegetation, soils, and hydrology were not present, and the soil profile appeared to be a mixture of native soil and fill.

No data was taken in the drainage ditch at the western boundary of the study area; however standing water was observed for its entire length.

Results and Conclusions

As described above, PHS observed a single wetland located in a ditch along the western boundary of the study area adjacent to an existing railroad track.

Required Disclaimer

This letter documents the investigation, best professional judgment, and conclusions of the investigators. It is correct and complete to the best of our knowledge. It should be considered a Preliminary Jurisdictional Determination of wetlands and other waters and used at your own risk unless it has been reviewed and approved in writing by the Oregon Department of State Lands in accordance with OAR 141-090-0005 through 141-090-0055.

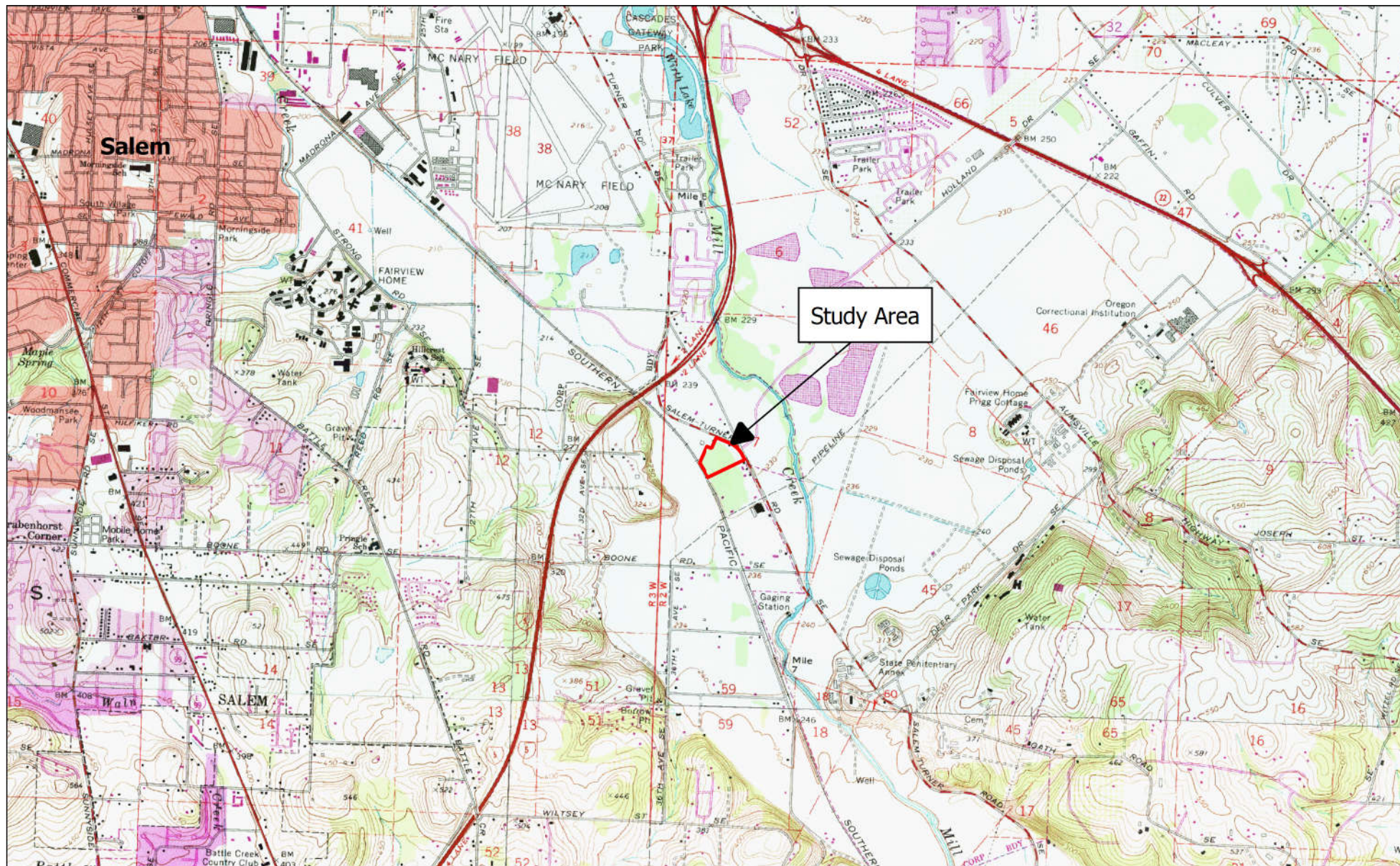
Feel free to contact me directly should you require any additional information pertinent to this determination memo.

Sincerely

A handwritten signature in cursive script that reads "Joe Thompson".

Joe Thompson, PWS

Enclosures: Figures 1-6
 Wetland Determination Data Forms
 Site Photos



#7374

11/23/2021

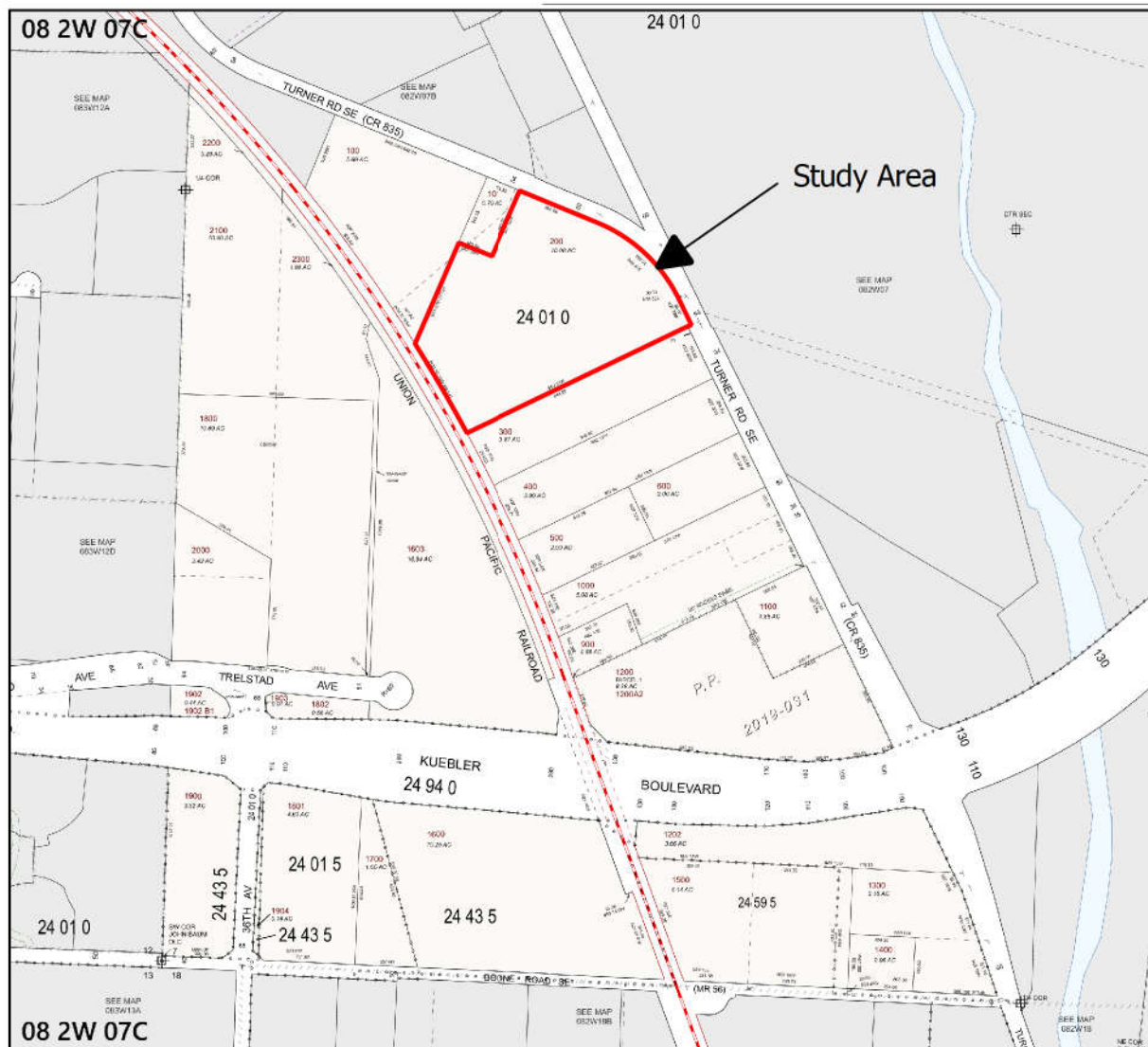


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4375 Turner Road SE, Salem, OR
Location and Topography
Caltopo.com

FIGURE

1



08 2W 07C
SALEM



MARION COUNTY, OREGON
SW1/4 SEC7 T8S R2W W.M.
SCALE 1" = 200'

LEGEND

LINE TYPES	
Taxlot Boundary	Historical Boundary
Road Right-of-Way	Easement
Railroad Right-of-Way	Railroad Centerline
Private Road ROW	Access Line
Subdivision/Plot Boundary	Map Boundary
Waterline	Waterline
	Non Study

CORNER TYPES	
1/16TH Section Cor	1/4 Section Cor
SW 1/4 Corner	15 15
	Section Corner
	21 22

NUMBERS
Tax Code Number
00 00 0
ACRES: All areas listed are Net Acres, excluding any portions of the tract within public ROWs.

NOTES
Tick Mark: A tick mark in the road indicates that the reported dimension exceeds into the public ROW.

CANCELLED NUMBERS

1901
1902
1903
1904
1905
1906
1907
1908
1909
1910
1911
1912
1913
1914
1915
1916
1917
1918
1919
1920

DISCLAIMER: THIS MAP WAS PREPARED FOR ASSESSMENT PURPOSES ONLY

FOR ADDITIONAL MAPS VISIT OUR WEBSITE AT
www.co.marion.or.us

PLOT DATE: 4/27/2021

SALEM
08 2W 07C

#7374
11/23/2021

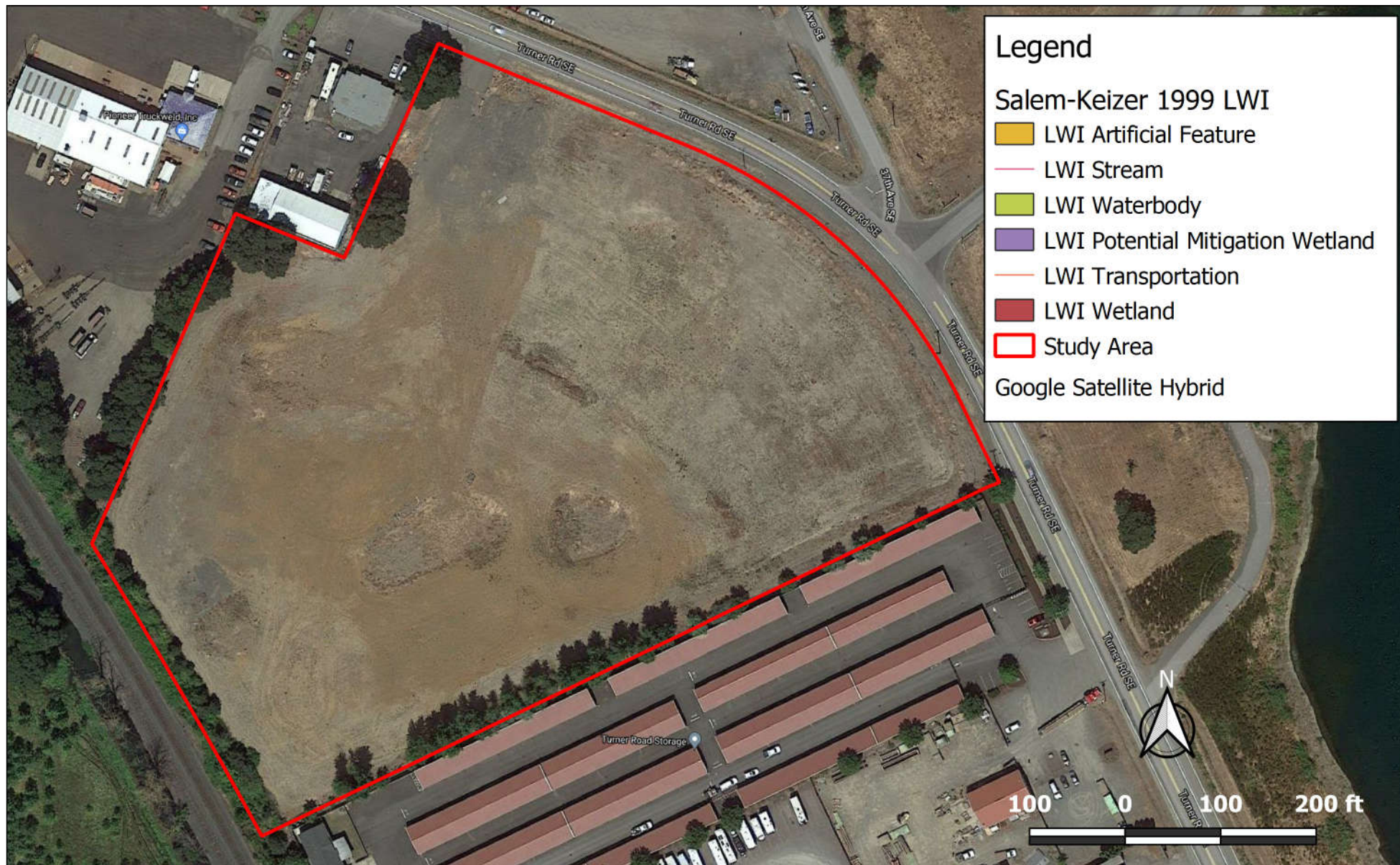


Pacific Habitat Services, Inc.
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4375 Turner Road SE, Salem, OR
Tax Lot Map

FIGURE

2



#7374

11/23/2021



Pacific Habitat Services, Inc.
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4375 Turner Road SE, Salem, OR
Salem-Keizer Local Wetlands Inventory

FIGURE

3



#7374
11/23/2021

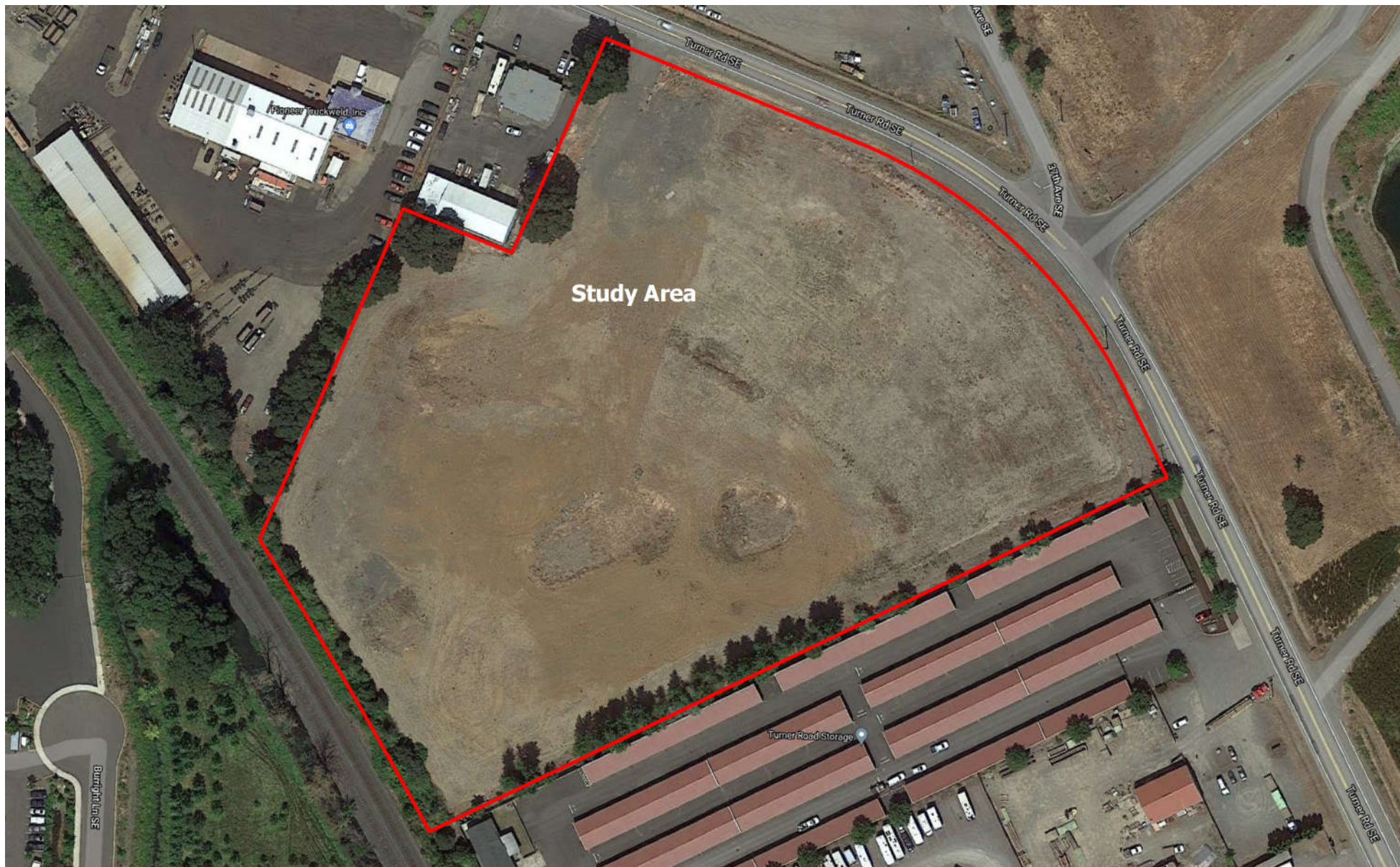


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4375 Turner Road SE, Salem, OR
Soils

FIGURE

4



#7374

11/23/2021

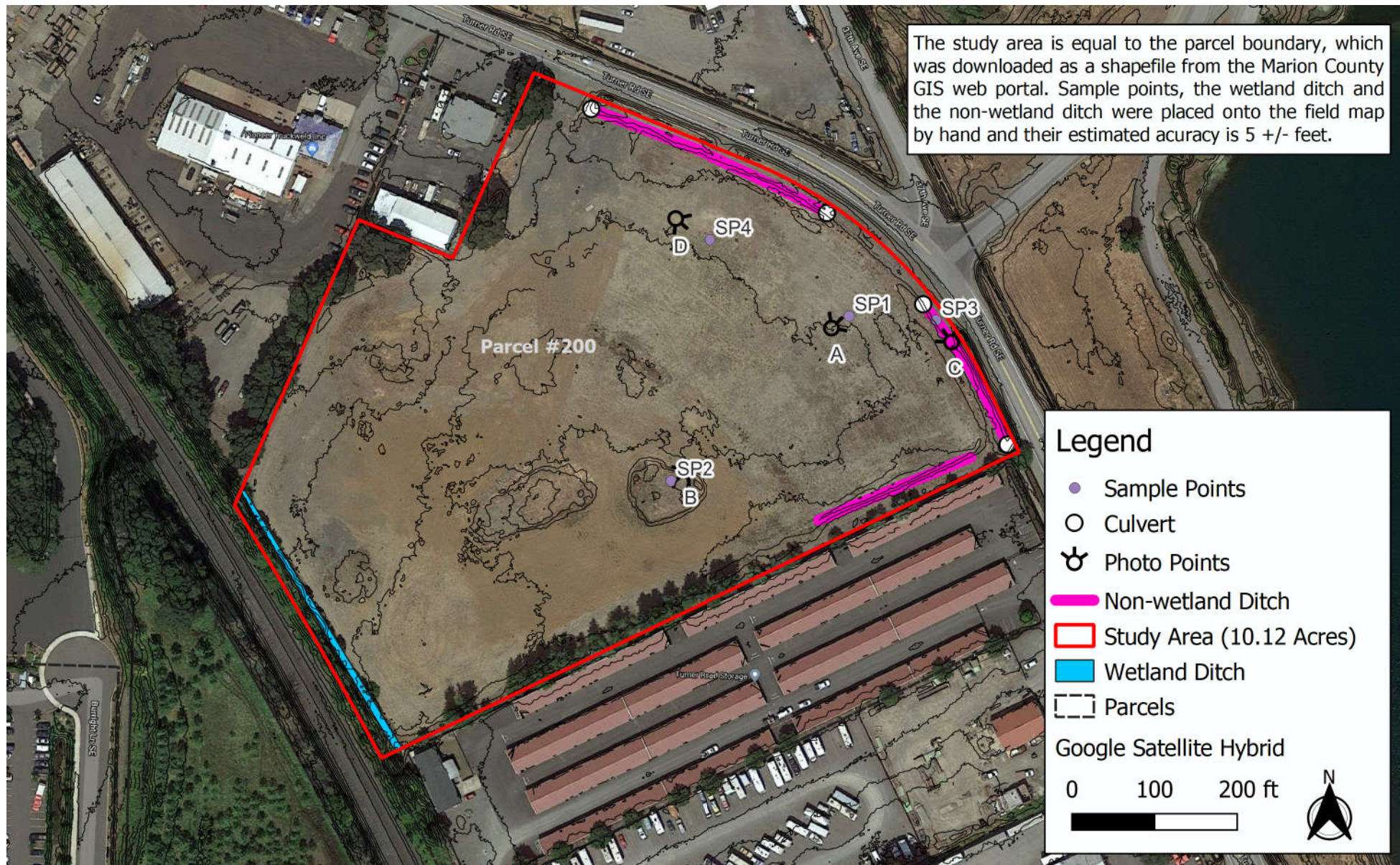


Pacific Habitat Services, Inc.
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4375 Turner Road SE, Salem, OR
August 2020 Google Earth Satellite Photo

FIGURE

5



#7374
11/22/2021



Pacific Habitat Services, Inc.
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4375 Turner Road SE, Salem, OR
Wetland Determination

FIGURE

6

Legend

 Study Area

May 1994 Aerial Photo



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11/12/2021



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4375 Turner Road SE, Salem, OR
May 1994 Google Earth Historic Aerial Photo

EXHIBIT

A

Legend

 Study Area

March 2008 Aerial Photo



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11/12/2021



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4375 Turner Road SE, Salem, OR
March 2008 Google Earth Historic Aerial Photo

EXHIBIT

B

Legend

 Study Area

July 2012 Aerial Photo



#7364

11/12/2021



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4375 Turner Road SE, Salem, OR
July 2012 Google Earth Historic Aerial Photo

EXHIBIT

C

Legend

 Study Area

October 2017 Aerial Photo



#7374

1/12/2021



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4375 Turner Road SE, Salem, OR
October 2017 Google Earth Historic Aerial Photo

EXHIBIT

D



Photo A:

Looking east at Sample Point 1

Photo taken on October 21, 2021

Photo B:

Looking southwest at Sample Point 2, located within a borrow pit.

Photo taken on October 21, 2021



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Photo documentation

4375 Turner Road SE, Salem, OR



Photo C:

Looking north at Sample Point 3,
located within a roadside ditch.

Photo taken on October 21, 2021

Photo D:

Looking northwest at Sample
Point 4.

Photo taken on November 15, 2021



Project #7374

11/23/2021



Pacific Habitat Services, Inc.
9450 SW Commerce Circle, Suite 180
Wilsonville, OR 97070

Photo documentation

4375 Turner Road SE, Salem, OR

WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

Project/Site: Turner Rd SE City/County: Salem/Marion Sampling Date: 10/21/2021

Applicant/Owner: Phelan Development State: OR Sampling Point: 1

Investigator(s): JT Section, Township, Range: Section 7, Township 8 South, Range 2 West

Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): None Slope (%): ~1

Subregion (LRR): LRR A Lat: 44.8894 Long: -122.9839 Datum: WGS84

Soil Map Unit Name: Courtney gravelly silty clay loam, 0-3 percent slopes NWI Classification: _____

Are climatic/hydrologic conditions on the site typical for this time of year? Yes _____ No X (if no, explain in Remarks)

Are vegetation _____ Soil X or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? (Y/N) N

Are vegetation _____ Soil _____ or Hydrology _____ naturally problematic? If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No <u>X</u>	Is Sampled Area within a Wetland? Yes _____ No <u>X</u>
Hydric Soil Present?	Yes <u>X</u>	No _____	
Wetland Hydrology Present?	Yes _____	No <u>X</u>	

Remarks:
Aerial photography indicates that the ground has been disturbed multiple times since 2008. The upper 5 inches of the soil may include fill. Wetland hydrology is below normal; however, no indirect indicators of hydrology such as geomorphic position are present, likely due to fill.

VEGETATION - Use scientific names of plants.

	absolute % cover	Dominant Species?	Indicator Status	
Tree Stratum (plot size: _____)				Dominance Test worksheet:
1 _____				Number of Dominant Species
2 _____				That are OBL, FACW, or FAC: <u>1</u> (A)
3 _____				Total Number of Dominant
4 _____				Species Across All Strata: <u>3</u> (B)
	<u>0</u>	= Total Cover		Percent of Dominant Species
Sapling/Shrub Stratum (plot size: _____)				That are OBL, FACW, or FAC: <u>33%</u> (A/B)
1 _____				Prevalence Index Worksheet:
2 _____				Total % Cover of _____ Multiply by: _____
3 _____				OBL Species _____ x 1 = <u>0</u>
4 _____				FACW species _____ x 2 = <u>0</u>
5 _____				FAC Species _____ x 3 = <u>0</u>
	<u>0</u>	= Total Cover		FACU Species _____ x 4 = <u>0</u>
Herb Stratum (plot size: <u>5</u>)				UPL Species _____ x 5 = <u>0</u>
1 <u>Geranium molle</u>	<u>40</u>	<u>X</u>	<u>(UPL)</u>	Column Totals <u>0</u> (A) <u>0</u> (B)
2 <u>Schedonorus arundinaceus</u>	<u>20</u>	<u>X</u>	<u>FAC</u>	Prevalence Index =B/A = <u>#DIV/0!</u>
3 <u>Daucus carota</u>	<u>20</u>	<u>X</u>	<u>FACU</u>	Hydrophytic Vegetation Indicators:
4 <u>Agrostis sp</u>	<u>10</u>		<u>(FAC)</u>	_____ 1- Rapid Test for Hydrophytic Vegetation
5 <u>Erodium sp</u>	<u>10</u>		<u>(FAC)</u>	_____ 2- Dominance Test is >50%
6 _____				_____ 3-Prevalence Index is ≤ 3.0 ¹
7 _____				_____ 4-Morphological Adaptations ¹ (provide supporting
8 _____				data in Remarks or on a separate sheet)
	<u>100</u>	= Total Cover		_____ 5- Wetland Non-Vascular Plants ¹
Woody Vine Stratum (plot size: _____)				_____ Problematic Hydrophytic Vegetation ¹ (Explain)
1 _____				¹ Indicators of hydric soil and wetland hydrology must be present, unless
2 _____				disturbed or problematic.
	<u>0</u>	= Total Cover		Hydrophytic
% Bare Ground in Herb Stratum <u>5</u>				Vegetation Yes _____ No <u>X</u>
Remarks:				Present?
Arrhenatherum elatius and Rumex crispus compose less than 1% of the herbaceous layer. Bare areas within and outside of the sample area indicate likely disturbance from several years ago.				

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-5	10YR 3/3	99	10YR 4/6	1	C	M	Silty Clay Loam	Fine
5-9	10YR 4/1	98	10YR 5/8	2	C	M	Silty Clay Loam	Fine
9-14	10YR 4/1	90	10YR 5/8	10	C	M	Silty Clay Loam	Large

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils ³ :
☐ Histosol (A1)	☐ Sandy Redox (S5)	☐ 2 cm Muck (A10)
☐ Histic Epipedon (A2)	☐ Stripped Matrix (S6)	☐ Red Parent Material (TF2)
☐ Black Histic (A3)	☐ Loamy Mucky Mineral (F1) (except MLRA 1)	☐ Very Shallow Dark Surface (TF12)
☐ Hydrogen Sulfide (A4)	☐ Loamy Gleyed Matrix (F2)	☐ Other (explain in Remarks)
☐ Depleted Below Dark Surface (A11)	☒ Depleted Matrix (F3)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
☐ Thick Dark Surface (A12)	☐ Redox Dark Surface (F6)	
☐ Sandy Mucky Mineral (S1)	☐ Depleted Dark Surface (F7)	
☐ Sandy Gleyed Matrix (S4)	☐ Redox Depressions (F8)	

Restrictive Layer (if present): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes ☒ No ☐
--	---

Remarks:

The upper layer (0-5 inches) appears to be fill and may have been brought over from borrow pits in the western part of the study area.

HYDROLOGY

Wetland Hydrology Indicators:		
Primary Indicators (minimum of one required; check all that apply)		Secondary Indicators (2 or more required)
☐ Surface Water (A1)	☐ Water stained Leaves (B9) (Except MLRA 1, 2, 4A, and 4B)	☐ Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B)
☐ High Water Table (A2)	☐ Salt Crust (B11)	☐ Drainage Patterns (B10)
☐ Saturation (A3)	☐ Aquatic Invertebrates (B13)	☐ Dry-Season Water Table (C2)
☐ Water Marks (B1)	☐ Hydrogen Sulfide Odor (C1)	☐ Saturation Visible on Aerial Imagery (C9)
☐ Sediment Deposits (B2)	☐ Oxidized Rhizospheres along Living Roots (C3)	☐ Geomorphic Position (D2)
☐ Drift Deposits (B3)	☐ Presence of Reduced Iron (C4)	☐ Shallow Aquitard (D3)
☐ Algal Mat or Crust (B4)	☐ Recent Iron Reduction in Plowed Soils (C6)	☐ Fac-Neutral Test (D5)
☐ Iron Deposits (B5)	☐ Stunted or Stressed Plants (D1) (LRR A)	☐ Raised Ant Mounds (D6) (LRR A)
☐ Surface Soil Cracks (B6)	☐ Other (Explain in Remarks)	☐ Frost-Heave Hummocks (D7)
☐ Inundation Visible on Aerial Imagery (B7)		
☐ Sparsely Vegetated Concave Surface (B8)		

Field Observations: Surface Water Present? Yes ☐ No ☒ Water Table Present? Yes ☐ No ☒ Saturation Present? Yes ☐ No ☒ Depth (inches): Depth (inches): 14 Depth (inches): 14	Wetland Hydrology Present? Yes ☐ No ☒
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Hydrology was re-examined on November 15, 2021 after two weeks of above normal rainfall and still did not have surface water, a high water table, or saturation.

WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

Project/Site: Turner Rd SE City/County: Salem/Marion Sampling Date: 10/21/2021

Applicant/Owner: Phelan Development State: OR Sampling Point: 2

Investigator(s): JT Section, Township, Range: Section 7, Township 8 South, Range 2 West

Landform (hillslope, terrace, etc.): Pit Local relief (concave, convex, none): Concave Slope (%): 0

Subregion (LRR): LRR A Lat: 44.8888 Long: -122.9847 Datum: WGS84

Soil Map Unit Name: Clackamas gravelly loam NWI Classification: N/A

Are climatic/hydrologic conditions on the site typical for this time of year? Yes No X (if no, explain in Remarks)

Are vegetation Soil X or Hydrology significantly disturbed? Are "Normal Circumstances" present? (Y/N) Y

Are vegetation Soil or Hydrology naturally problematic? If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u> </u>	No <u>X</u>	Is Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>
Hydric Soil Present?	Yes <u> </u>	No <u>X</u>	
Wetland Hydrology Present?	Yes <u> </u>	No <u>X</u>	
Remarks: Soils are not mapped as hydric and there's no evidence that wetlands were present before excavating this pit, or any of the three others that are mapped within the Clackamas gravelly loam soils.			

VEGETATION - Use scientific names of plants.

	absolute % cover	Dominant Species?	Indicator Status	
Tree Stratum (plot size: <u> </u>)				Dominance Test worksheet:
1 <u> </u>	<u> </u>	<u> </u>	<u> </u>	Number of Dominant Species
2 <u> </u>	<u> </u>	<u> </u>	<u> </u>	That are OBL, FACW, or FAC: <u>0</u> (A)
3 <u> </u>	<u> </u>	<u> </u>	<u> </u>	Total Number of Dominant
4 <u> </u>	<u> </u>	<u> </u>	<u> </u>	Species Across All Strata: <u>1</u> (B)
	<u>0</u>	= Total Cover		Percent of Dominant Species
Sapling/Shrub Stratum (plot size: <u> </u>)				That are OBL, FACW, or FAC: <u>0%</u> (A/B)
1 <u> </u>	<u> </u>	<u> </u>	<u> </u>	Prevalence Index Worksheet:
2 <u> </u>	<u> </u>	<u> </u>	<u> </u>	Total % Cover of <u> </u> Multiply by: <u> </u>
3 <u> </u>	<u> </u>	<u> </u>	<u> </u>	OBL Species <u> </u> x 1 = <u>0</u>
4 <u> </u>	<u> </u>	<u> </u>	<u> </u>	FACW species <u> </u> x 2 = <u>0</u>
5 <u> </u>	<u> </u>	<u> </u>	<u> </u>	FAC Species <u> </u> x 3 = <u>0</u>
	<u>0</u>	= Total Cover		FACU Species <u> </u> x 4 = <u>0</u>
Herb Stratum (plot size: <u>5</u>)				UPL Species <u> </u> x 5 = <u>0</u>
1 <u>Geranium molle</u>	<u>82</u>	<u>X</u>	<u>(UPL)</u>	Column Totals <u>0</u> (A) <u>0</u> (B)
2 <u>Cirsium arvense</u>	<u>5</u>	<u> </u>	<u>FAC</u>	Prevalence Index =B/A = <u>#DIV/0!</u>
3 <u>Cirsium vulgare</u>	<u>5</u>	<u> </u>	<u>FACU</u>	Hydrophytic Vegetation Indicators:
4 <u>Elymus repens</u>	<u>3</u>	<u> </u>	<u>FAC</u>	<u> </u> 1- Rapid Test for Hydrophytic Vegetation
5 <u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u> 2- Dominance Test is >50%
6 <u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u> 3-Prevalence Index is ≤ 3.0 ¹
7 <u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u> 4-Morphological Adaptations ¹ (provide supporting
8 <u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u> data in Remarks or on a separate sheet)
	<u>95</u>	= Total Cover		<u> </u> 5- Wetland Non-Vascular Plants ¹
Woody Vine Stratum (plot size: <u> </u>)				<u> </u> Problematic Hydrophytic Vegetation ¹ (Explain)
1 <u> </u>	<u> </u>	<u> </u>	<u> </u>	¹ Indicators of hydric soil and wetland hydrology must be present, unless
2 <u> </u>	<u> </u>	<u> </u>	<u> </u>	disturbed or problematic.
	<u>0</u>	= Total Cover		Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>
% Bare Ground in Herb Stratum <u>5</u>				
Remarks: Cirsium vulgare is less than 1%.				

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-13	7.5YR 3/1	100					Silt Loam	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils ³ :
☐ Histosol (A1)	☐ Sandy Redox (S5)	☐ 2 cm Muck (A10)
☐ Histic Epipedon (A2)	☐ Stripped Matrix (S6)	☐ Red Parent Material (TF2)
☐ Black Histic (A3)	☐ Loamy Mucky Mineral (F1) (except MLRA 1)	☐ Very Shallow Dark Surface (TF12)
☐ Hydrogen Sulfide (A4)	☐ Loamy Gleyed Matrix (F2)	☐ Other (explain in Remarks)
☐ Depleted Below Dark Surface (A11)	☐ Depleted Matrix (F3)	
☐ Thick Dark Surface (A12)	☐ Redox Dark Surface (F6)	
☐ Sandy Mucky Mineral (S1)	☐ Depleted Dark Surface (F7)	
☐ Sandy Gleyed Matrix (S4)	☐ Redox Depressions (F8)	

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes No X

Remarks:
Excavated

HYDROLOGY

Wetland Hydrology Indicators:		
Primary Indicators (minimum of one required; check all that apply)		Secondary Indicators (2 or more required)
☐ Surface Water (A1)	☐ Water stained Leaves (B9) (Except MLRA 1, 2, 4A, and 4B)	☐ Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B)
☐ High Water Table (A2)	☐ Salt Crust (B11)	☐ Drainage Patterns (B10)
☐ Saturation (A3)	☐ Aquatic Invertebrates (B13)	☐ Dry-Season Water Table (C2)
☐ Water Marks (B1)	☐ Hydrogen Sulfide Odor (C1)	☐ Saturation Visible on Aerial Imagery (C9)
☐ Sediment Deposits (B2)	☐ Oxidized Rhizospheres along Living Roots (C3)	☒ Geomorphic Position (D2)
☐ Drift Deposits (B3)	☐ Presence of Reduced Iron (C4)	☐ Shallow Aquitard (D3)
☐ Algal Mat or Crust (B4)	☐ Recent Iron Reduction in Plowed Soils (C6)	☐ Fac-Neutral Test (D5)
☐ Iron Deposits (B5)	☐ Stunted or Stressed Plants (D1) (LRR A)	☐ Raised Ant Mounds (D6) (LRR A)
☐ Surface Soil Cracks (B6)	☐ Other (Explain in Remarks)	☐ Frost-Heave Hummocks (D7)
☐ Inundation Visible on Aerial Imagery (B7)		
☐ Sparsely Vegetated Concave Surface (B8)		

Field Observations:

Surface Water Present? Yes No X

Water Table Present? Yes No X

Saturation Present? Yes No X

(includes capillary fringe)

Depth (inches): N/A

Depth (inches): >13

Depth (inches): >13

Wetland Hydrology Present? Yes No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

Project/Site: Turner Rd SE City/County: Salem/Marion Sampling Date: 10/21/2021

Applicant/Owner: Phelan Development State: OR Sampling Point: 3

Investigator(s): JT Section, Township, Range: Section 7, Township 8 South, Range 2 West

Landform (hillslope, terrace, etc.): Ditch Local relief (concave, convex, none): _____ Slope (%): _____

Subregion (LRR): LRR A Lat: 44.8894 Long: -122.9835 Datum: WGS84

Soil Map Unit Name: Sifton gravelly loam NWI Classification: N/A

Are climatic/hydrologic conditions on the site typical for this time of year? Yes _____ No X (if no, explain in Remarks)

Are vegetation _____ Soil _____ or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? (Y/N) Y

Are vegetation _____ Soil _____ or Hydrology _____ naturally problematic? If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No <u>X</u>	Is Sampled Area within a Wetland? Yes _____ No <u>X</u>
Hydric Soil Present?	Yes _____	No <u>X</u>	
Wetland Hydrology Present?	Yes _____	No <u>X</u>	

Remarks:

The ditch is very old and does not appear to have been constructed in wetlands.

VEGETATION - Use scientific names of plants.

	absolute % cover	Dominant Species?	Indicator Status	
Tree Stratum (plot size: _____)				Dominance Test worksheet:
1 _____	_____	_____	_____	Number of Dominant Species
2 _____	_____	_____	_____	That are OBL, FACW, or FAC: <u>0</u> (A)
3 _____	_____	_____	_____	Total Number of Dominant
4 _____	_____	_____	_____	Species Across All Strata: <u>2</u> (B)
	<u>0</u>	= Total Cover		Percent of Dominant Species
Sapling/Shrub Stratum (plot size: _____)				That are OBL, FACW, or FAC: <u>0%</u> (A/B)
1 _____	_____	_____	_____	Prevalence Index Worksheet:
2 _____	_____	_____	_____	Total % Cover of _____ Multiply by: _____
3 _____	_____	_____	_____	OBL Species _____ x 1 = <u>0</u>
4 _____	_____	_____	_____	FACW species _____ x 2 = <u>0</u>
5 _____	_____	_____	_____	FAC Species _____ x 3 = <u>0</u>
	<u>0</u>	= Total Cover		FACU Species _____ x 4 = <u>0</u>
Herb Stratum (plot size: <u>5</u>)				UPL Species _____ x 5 = <u>0</u>
1 <u>Geranium molle</u>	<u>50</u>	<u>X</u>	<u>(UPL)</u>	Column Totals <u>0</u> (A) <u>0</u> (B)
2 <u>Daucus carota</u>	<u>25</u>	<u>X</u>	<u>FACU</u>	Prevalence Index =B/A = <u>#DIV/0!</u>
3 <u>Raphanus sylvestris</u>	<u>5</u>		<u>(UPL)</u>	Hydrophytic Vegetation Indicators:
4 <u>Vulpia myuros</u>	<u>3</u>		<u>FACU</u>	_____ 1- Rapid Test for Hydrophytic Vegetation
5 <u>Cirsium arvense</u>	<u>2</u>		<u>FAC</u>	_____ 2- Dominance Test is >50%
6 _____	_____	_____	_____	_____ 3-Prevalence Index is ≤ 3.0 ¹
7 _____	_____	_____	_____	_____ 4-Morphological Adaptations ¹ (provide supporting
8 _____	_____	_____	_____	_____ data in Remarks or on a separate sheet)
	<u>85</u>	= Total Cover		_____ 5- Wetland Non-Vascular Plants ¹
Woody Vine Stratum (plot size: _____)				_____ Problematic Hydrophytic Vegetation ¹ (Explain)
1 _____	_____	_____	_____	¹ Indicators of hydric soil and wetland hydrology must be present, unless
2 _____	_____	_____	_____	disturbed or problematic.
	<u>0</u>	= Total Cover		Hydrophytic
% Bare Ground in Herb Stratum <u>15</u>				Vegetation
Remarks:				Present? Yes _____ No <u>X</u>

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-12	7.5YR 3/2	100						Rocky

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)			Indicators for Problematic Hydric Soils ³ :		
☐ Histosol (A1)		☐ Sandy Redox (S5)	☐ 2 cm Muck (A10)		
☐ Histic Epipedon (A2)		☐ Stripped Matrix (S6)	☐ Red Parent Material (TF2)		
☐ Black Histic (A3)		☐ Loamy Mucky Mineral (F1) (except MLRA 1)	☐ Very Shallow Dark Surface (TF12)		
☐ Hydrogen Sulfide (A4)		☐ Loamy Gleyed Matrix (F2)	☐ Other (explain in Remarks)		
☐ Depleted Below Dark Surface (A11)		☐ Depleted Matrix (F3)			
☐ Thick Dark Surface (A12)		☐ Redox Dark Surface (F6)			
☐ Sandy Mucky Mineral (S1)		☐ Depleted Dark Surface (F7)			
☐ Sandy Gleyed Matrix (S4)		☐ Redox Depressions (F8)			

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type:

Depth (inches):12

Hydric Soil Present? YesNoX

Remarks:
Graded. Refusal at 12 inches due to rocks.

HYDROLOGY

Wetland Hydrology Indicators:		
Primary Indicators (minimum of one required; check all that apply)		Secondary Indicators (2 or more required)
☐ Surface Water (A1)	☐ Water stained Leaves (B9) (Except MLRA 1, 2, 4A, and 4B)	☐ Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B)
☐ High Water Table (A2)		
☐ Saturation (A3)	☐ Salt Crust (B11)	☐ Drainage Patterns (B10)
☐ Water Marks (B1)	☐ Aquatic Invertebrates (B13)	☐ Dry-Season Water Table (C2)
☐ Sediment Deposits (B2)	☐ Hydrogen Sulfide Odor (C1)	☐ Saturation Visible on Aerial Imagery (C9)
☐ Drift Deposits (B3)	☐ Oxidized Rhizospheres along Living Roots (C3)	☒ Geomorphic Position (D2)
☐ Algal Mat or Crust (B4)	☐ Presence of Reduced Iron (C4)	☐ Shallow Aquitard (D3)
☐ Iron Deposits (B5)	☐ Recent Iron Reduction in Plowed Soils (C6)	☐ Fac-Neutral Test (D5)
☐ Surface Soil Cracks (B6)	☐ Stunted or Stressed Plants (D1) (LRR A)	☐ Raised Ant Mounds (D6) (LRR A)
☐ Inundation Visible on Aerial Imagery (B7)	☐ Other (Explain in Remarks)	☐ Frost-Heave Hummocks (D7)
☐ Sparsely Vegetated Concave Surface (B8)		

Field Observations:

Surface Water Present? YesNoXDepth (inches):

Water Table Present? YesNoXDepth (inches):>12

Saturation Present? YesNoXDepth (inches):>12

(includes capillary fringe)

Wetland Hydrology Present? YesNoX

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

Project/Site: Turner Rd SE City/County: Salem/Marion Sampling Date: 11/15/2021

Applicant/Owner: Phelan Development State: OR Sampling Point: 4

Investigator(s): JT Section, Township, Range: Section 7, Township 8 South, Range 2 West

Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): Slightly concave Slope (%): 0

Subregion (LRR): LRR A Lat: 44.8896 Long: -122.9846 Datum: WGS84

Soil Map Unit Name: Courtney gravelly silty clay loam, 0-3 percent slopes NWI Classification: N/A

Are climatic/hydrologic conditions on the site typical for this time of year? Yes No X (if no, explain in Remarks)

Are vegetation Soil X or Hydrology significantly disturbed? Are "Normal Circumstances" present? (Y/N) X

Are vegetation Soil or Hydrology naturally problematic? If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u> </u>	No <u>X</u>	Is Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>
Hydric Soil Present?	Yes <u> </u>	No <u>X</u>	
Wetland Hydrology Present?	Yes <u> </u>	No <u>X</u>	

Remarks:
Google historic aerial photos show this area to have been disturbed numerous times over the past 13 or so years. Precipitation for the preceding 14 days is 4.26 inches, which is 189 percent of normal (2.25 inches). Annual and previous 3 months rainfall are below normal.

VEGETATION - Use scientific names of plants.

	absolute % cover	Dominant Species?	Indicator Status	
Tree Stratum (plot size: <u> </u>)				Dominance Test worksheet:
1				Number of Dominant Species
2				That are OBL, FACW, or FAC: <u>1</u> (A)
3				Total Number of Dominant
4				Species Across All Strata: <u>2</u> (B)
	<u>0</u>	= Total Cover		Percent of Dominant Species
Sapling/Shrub Stratum (plot size: <u> </u>)				That are OBL, FACW, or FAC: <u>50%</u> (A/B)
1				Prevalence Index Worksheet:
2				Total % Cover of <u> </u> Multiply by: <u> </u>
3				OBL Species <u> </u> x 1 = <u>0</u>
4				FACW species <u> </u> x 2 = <u>0</u>
5				FAC Species <u> </u> x 3 = <u>0</u>
	<u>0</u>	= Total Cover		FACU Species <u> </u> x 4 = <u>0</u>
Herb Stratum (plot size: <u>5</u>)				UPL Species <u> </u> x 5 = <u>0</u>
1	<u>50</u>	<u>X</u>	<u>(UPL)</u>	Column Totals <u>0</u> (A) <u>0</u> (B)
2	<u>50</u>	<u>X</u>	<u>(FAC)</u>	Prevalence Index =B/A = <u>#DIV/0!</u>
3				Hydrophytic Vegetation Indicators:
4				<u> </u> 1- Rapid Test for Hydrophytic Vegetation
5				<u> </u> 2- Dominance Test is >50%
6				<u> </u> 3-Prevalence Index is ≤ 3.0 ¹
7				<u> </u> 4-Morphological Adaptations ¹ (provide supporting
8				<u> </u> data in Remarks or on a separate sheet)
	<u>100</u>	= Total Cover		<u> </u> 5- Wetland Non-Vascular Plants ¹
Woody Vine Stratum (plot size: <u> </u>)				<u> </u> Problematic Hydrophytic Vegetation ¹ (Explain)
1				¹ Indicators of hydric soil and wetland hydrology must be present, unless
2				disturbed or problematic.
	<u>0</u>	= Total Cover		Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>
% Bare Ground in Herb Stratum <u>15</u>				
Remarks: Bellis perennis and Erodium cicutarium each constitute <1 percent in the herbaceous layer. Unidentified grass is a single species and is recently sprouted. Grass species in the vicinity include Schedonorus arundinaceus and Lolium perenne.				

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-3	2.5Y 4/3	100					Silty Clay Loam	Rocky
3-7	2.5Y 4/3	90					Silty Clay Loam	Mixed
3-7	2.5YR 3/4	10					Silt Loam	Mixed - probably fill
7-11	2.5Y 3/3	10					Silty Clay Loam	Mixed
7-11	2.5Y 3/4	90					Silt Loam	Mixed - probably fill
11-14	2.5Y 3/3	100					Silt Loam	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils ³ :
☐ Histosol (A1)	☐ Sandy Redox (S5)	☐ 2 cm Muck (A10)
☐ Histic Epipedon (A2)	☐ Stripped Matrix (S6)	☐ Red Parent Material (TF2)
☐ Black Histic (A3)	☐ Loamy Mucky Mineral (F1) (except MLRA 1)	☐ Very Shallow Dark Surface (TF12)
☐ Hydrogen Sulfide (A4)	☐ Loamy Gleyed Matrix (F2)	☐ Other (explain in Remarks)
☐ Depleted Below Dark Surface (A11)	☐ Depleted Matrix (F3)	
☐ Thick Dark Surface (A12)	☐ Redox Dark Surface (F6)	
☐ Sandy Mucky Mineral (S1)	☐ Depleted Dark Surface (F7)	
☐ Sandy Gleyed Matrix (S4)	☐ Redox Depressions (F8)	

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type:

Depth (inches):12

Hydric Soil Present? Yes NoX

Remarks:
Highly disturbed soil profile. Red material appears to be imported soil with red parent material rather than redox. Soil profile from 0-11 inches is rocky.

HYDROLOGY

Wetland Hydrology Indicators:		
Primary Indicators (minimum of one required; check all that apply)		Secondary Indicators (2 or more required)
☐ Surface Water (A1)	☐ Water stained Leaves (B9) (Except MLRA 1, 2, 4A, and 4B)	☐ Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B)
☐ High Water Table (A2)	☐ Salt Crust (B11)	☐ Drainage Patterns (B10)
☐ Saturation (A3)	☐ Aquatic Invertebrates (B13)	☐ Dry-Season Water Table (C2)
☐ Water Marks (B1)	☐ Hydrogen Sulfide Odor (C1)	☐ Saturation Visible on Aerial Imagery (C9)
☐ Sediment Deposits (B2)	☐ Oxidized Rhizospheres along Living Roots (C3)	☒ Geomorphic Position (D2)
☐ Drift Deposits (B3)	☐ Presence of Reduced Iron (C4)	☐ Shallow Aquitard (D3)
☐ Algal Mat or Crust (B4)	☐ Recent Iron Reduction in Plowed Soils (C6)	☐ Fac-Neutral Test (D5)
☐ Iron Deposits (B5)	☐ Stunted or Stressed Plants (D1) (LRR A)	☐ Raised Ant Mounds (D6) (LRR A)
☐ Surface Soil Cracks (B6)	☐ Other (Explain in Remarks)	☐ Frost-Heave Hummocks (D7)
☐ Inundation Visible on Aerial Imagery (B7)		
☐ Sparsely Vegetated Concave Surface (B8)		

Field Observations:

Surface Water Present? YesNoX

Water Table Present? YesNoX

Saturation Present? YesNoX

(includes capillary fringe)

Depth (inches):

Depth (inches):>12

Depth (inches):>12

Wetland Hydrology Present? YesNoX

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
Although fiewldwork was conducted early in the rainy season, precipitation for past 14 days is 189 percent of normal; therefore, surface water, a high water table, or saturation would be expected for this area to meet a primary indicator.