

**AIRPORT INDUSTRIAL SITE
WETLAND DELINEATION REPORT**

**Linn County Tax Lots
12S02W16 2802 & 2804**

Prepared for
City of Lebanon

Site Description
56.34 acres farmed for annual rye grass seed and hay

Site Centroid
Latitude 44.529142° N
Longitude -122.933778° W

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A) Landscape Setting and Land Use

A.1 Site Description

The site is located on the north side of Airport Drive on the west side of the Lebanon urban growth boundary. The study area is the entire 56.34 acres that lie within Linn County tax lot 12S02W16 2802 & 2804 (see table below). Agricultural fields lie to the north, west and south with the Lebanon airport forming the east boundary and Airport Drive the southern boundary.

The site is cultivated for annual rye grass seed and has been used for agriculture for more than fifty years. Topographically, the site is flat sloping gently to the northwest with the highest elevation of 33 feet in the southeast corner and the lowest elevation of 331 feet in the northwest corner.

Site description	Lot size (acres)	Ownership	Address
12S02W16 2802	25.67	Kristine Holtzinger	Farm use – address not assigned
12S02W16 2804	30.67	Dale & Kathy Parker	36585 Airport Drive, Lebanon

Table 1: Tax Lot Information

Little Oak Creek, an intermittent 1st order tributary flows diagonally northwesterly across the southwest corner of the site. The only area not used for agriculture on the parcels is a small 1-acre area surrounding a single-family residence in the south end of tax lot 2804.

A.2 Vegetation

Vegetation consists of the annual rye grass over most of the site. Hedge rows along boundaries and on interior fences contain patches of blackberry thickets. Most of tax lot 2804 is not cultivated for annual rye grass and it is mowed and harvested for hay. Vegetation includes a mix of pasture grasses and weeds with dominant vegetation mostly *Agrostis capillaris*, *Anthoxanthum odoratum*, *Schedonorus arundinaceus* and *Hypochaeris radicata*. Vegetation associated with the intermittent tributary includes *Phalaris arundinacea* and *Mentha pulegium*.

A.3 Soil

Two soil types are mapped on the site by the Linn County Soil Survey:

- Clackamas variant silt loam gravelly silt loam (24): not hydric with hydric inclusions
- Dayton silt loam (33): hydric

Field visits occurred in August and all soil pits were dug at least 20 inches with a backhoe due to the hard ground. All colors recorded for soil plots refer to moist soil. Soil texture was mostly silty clay loam with lesser amounts of gravelly silt clay loams. Soil chroma was typically 10YR, hues were dominantly 3 with values of 2. Soil in upland areas and in the broad transitional zone between upland and wetland were typically 10YR 3/2 silty clay loams within 20” of the surface. In shallow depressions where saturation persisted for extended periods, hydric soil indicator F6 was most common.

A.4 Hydrology

Hydrology is provided exclusively by precipitation. Low soil permeability and flat topography retains water and the flat terraces stay saturated, occasionally ponded for extended periods in the springtime.

The site slopes very gently to the northwest but evidence of surface flow was not evident. The intermittent channel in the southwest corner is known as Little Oak Creek, a 1st order tributary to Oak Creek which flows into the Willamette River near Albany. Little Oak Creek is not known to contain fish due to a series of fish barrier culverts between the site and the Willamette River located about ten miles west.

B) Site Alterations

Site alterations were observed.

C) Precipitation Data and Analysis

The following table summarizes precipitation on the day of field visits, precipitation two weeks prior to the field investigation, the percent of normal rainfall for the water year to date, and the monthly percent of normal precipitation for each of the three months preceding the field investigation. All precipitation data is from the Corvallis Hyslop weather station (also referenced as “Corvallis State Univ.”). Elevations on the site range from 338 to 331 feet above mean sea level and the Hyslop weather station elevation is 230 feet. The subject property lies about 14.5 miles southeast of the Hyslop Farm where the US Weather Service Station is located.

Rainfall in the months preceding the August site was normal or above normal since the start of the water year and similar for the calendar year. The site visit was conducted during the dry season and as a result primary wetland hydrology indicators were not observed.

Date of Site Visit	PPT during site visit	PPT two weeks preceding	Recorded PPT since October (thru preceding month)	WETS Avg PPT for water year thru preceding month	% of Normal PPT for water year based on WETS Avg.	Monthly % of normal ppt for each of 3 months preceding site visit based on WETS avg.		
						Preceding month	2 nd preceding month	3 rd preceding month
8/14/17	0.04	0.15	58.43	41.46	141	0	106	75
8/17/17	0	0.19	58.43	41.46	141	0	106	75

Table 2: Precipitation preceding site visits

March 2018

Month	Rainfall recorded for Water Year	WETS* average rainfall	Rainfall relative to WETS* average	30% Chance rainfall will be		30% WETS range comparison to recorded rainfall
				Less than	More than	
October	12.15	3.02	402%	1.70	3.68	Above
November	7.78	6.94	112%	4.55	8.34	Within
December	5.16	7.43	69%	5.03	8.88	Within
January	5.33	6.46	83%	3.95	7.82	Within
February	12.48	5.71	219%	3.91	6.80	Above
March	8.11	4.59	177%	3.46	5.35	Above
April	4.14	2.98	139%	2.09	3.53	Above
May	1.73	2.30	75%	1.52	2.81	Within
June	1.55	1.46	106%	0.93	1.76	Within
July	0	0.57	0	0.17	0.68	below
TOTAL	58.43	41.46	141%	27.31	49.65	Above

*WETS Data from Corvallis State University WETS Station 1971-2000

Table 3: Precipitation Summary based on Corvallis Hyslop Weather Station data

D) Methods

For the office work that occurred prior to the site visit, we acquired a collection of recent orthophotos and wet season historical air photos. The information was used to prioritize areas for review during field visits. In addition, the site was reviewed using the Google Earth and Microsoft Bing websites. The areas to investigate were plotted as vector shapefiles to be used with the mobile GIS/GPS field equipment.

Normal circumstances exist on the site; however, the site visits occurred in the normally dry season of the year. As a result, hydrology was based on secondary indicators when present. Other information such as position in the landscape and hydric soil indicators was also used to aid in formulating a best professional judgement decision. In addition, procedures for difficult wetland situations from the Corps regional supplemental manual were followed when necessary because primary hydrology was not present. The following procedure from Chapter 5 of the Corps supplement regional manual was considered when necessary because the site visit occurred in the dry season of the year.

SITE VISIT DURING DRY SEASON

Chapter 5 – Difficult Wetland Situations

Problem area as a result of lack of wetland hydrology due to normal seasonal rainfall variability

Wetlands that periodically lack indicators of wetland hydrology

Step 1: Verify indicators of hydrophytic vegetation and hydric soil are present or absent.

FIELD OBSERVATION FOR WETLAND PLOT: Hydrophytic vegetation and hydric soil are present.

Step 2: Verify area is in landscape position likely to collect or concentrate water.

March 2018

FIELD OBSERVATION FOR WETLAND PLOT: Area is depression with a concave surface

Step 3: Site visits during the dry season

CONCLUSION: If the site visit occurred during the dry season on a site that contains hydric soils and hydrophytic vegetation and no significant hydrologic manipulation (e.g., no dams, levees, water diversions, land grading, etc., and the site is not within the zone of influence of any drainage ditches or subsurface drains), then consider the site to be a wetland.

Site visits occurred on August 14 and August 17, 2017. A backhoe was used to dig all the soil pits. The site has been farmed for more than 75 years so vegetation was considered less of a factor for determining wetland status. Fieldwork was guided by multiple information sources including recently flown, high-resolution orthophotography and LIDAR topographic data. Soil colors were recorded for moist soil. Digital georeferenced photographs were taken to document site conditions (Appendix C). More than 60 soil pits were dug and thirty-five (35) data plots are included to document the upland/wetland boundaries. Sample plots were completed for paired plots, depressions, suspect areas where micro-topography indicated the potential presence of wetland, and areas of possible saturation seen on early growing season aerials. The OHWM for the intermittent channel was located by identifying the top of the bank on each side of the channel.

The upland/wetland boundary and sample plot locations were mapped using a sub-meter resource grade GPS and a mobile GIS/GPS system that included a hand-held computer running ArcPad 10.0, linked by Bluetooth to the GPS receiver. All GPS mapping and field data were saved as ArcPad shape files, post-processed to ensure sub-meter accuracy, then downloaded to ArcGIS version 10.0 and MapInfo Professional version 12.5 GIS programs. All GPS data was post-processed using the Corvallis CORS station to sub-meter accuracy.

Field information including wetland/upland boundaries and accompanying figures meet the required DSL map precision standard of one meter precision for transferring boundaries of features on the ground to the maps included in this report. The GPS post-processing error estimate for the mapping precision is one meter.

E) Description of All Wetlands and Other Non-Wetland Waters

Two wetland areas were identified with a total of 43.42 acres of wetland. A 620-foot long section of Little Oak Creek flows through across the southwest corner of tax lot 2802. The study area is a mostly flat agriculture field with a single-family residence and two outbuildings present in the southeast corner of tax lot 2804. At the time of the site visit, the entire site had been mowed. Tax lot 2802 had been cultivated with annual rye grass and most of tax lot 2804 had not been cultivated but contained a mix of pasture grasses and weedy species. Fence rows around the property boundary and in the interior contained patches of blackberry thickets. The southeast corner is the highest elevation at 348 feet with the lowest elevation of 341 feet in the northwest corner, seven feet of gradient over more than 1,800 feet. Flat topography and poorly drained soils contribute to most of the site meeting wetland criteria. The study area covers approximately 56 acres with about 12 acres upland and the remainder wetland.

Wetland A is a 39.80-acre area on the north end of the study area. Four small isolated upland areas are present near the northern property boundary. The area around the residence, a narrow strip bordering the north side of the creek and a small area on the south side of the creek are the only other upland areas.

Wetland B is a 3.62-acre area that straddles a 620-foot long stretch of Little Oak Creek, a first order tributary to Oak Creek. The creek width to the top of bank varies from 4 feet to 20 feet. The intermittent creek is included in the wetland acreage because vegetation is present in the channel below the OHWM. The wetland is a seasonally saturated depressional feature with ponding persisting in small, deeper depressions.

Wetland extends off the site on the west, north and east side of Wetland A and wetland extends off the site on the west side of Wetland B. The intermittent creek enters the site at the south end from a culvert under Airport Drive.

Wetland Size	Wetland Category	Other Waters	Description
Wetland A: 39.80 acres	PEM		Farmed Wetland
Wetland B: 3.62 acres	PEM	620' section of Little Oak Ck.	
TOTAL: 43.42 acres wetland		0.20 acres Waters (included in wetland acres)	

Table 4: Summary of Wetland Areas

F) Deviation from LWI or NWI

The NWI does not identify wetland on the subject property but does identify Little Oak Creek as a R4SBC waterway. The current study identified Little Oak Creek as a vegetated intermittent channel in Wetland B.

G) Mapping Method

Mapping of the wetland boundary, sample plot locations and top of bank along Airport Industrial Creek was completed using a mobile GIS/GPS system that included a hand-held computer running ArcPad, linked by Bluetooth to a Geneq SXBlue II GNSS GPS receiver. All GPS mapping and field data was saved as ArcPad shapefiles, which were downloaded to ArcGIS and MapInfo Professional GIS programs. Field data was post-processed using the Corvallis CORS base station data and Effigis OnPoz EZSurv software to verify sub-meter horizontal accuracy.

Field information, including wetland/upland boundaries and sample plot locations on accompanying figures, meets the required DSL map precision standard of one-meter precision for transferring boundaries of features on the ground to the maps included in this report. The GPS post-processed horizontal mapping precision is sub-meter. Boundaries for the area investigated (shown on the delineation map) are based on GPS readings from visible property corners, and the Linn County GIS tax lot parcel database.

H) Additional Information

The study area is a farmed site so four early growing season aerials were reviewed. The high resolution 1998, 2005, and 2012 orthophotography (Figure 5A, 5C and 5D, 6 inch to 1 foot resolution) was provided by City of Lebanon GIS department. Linn County GIS Department provided the 2000 orthophoto (Figure 5B, 1 foot resolution). Aerial photography was useful to identify shading patterns that correlated with wetter areas. Shading indicative of wet areas was similar across the years, however, subtle differences exist between wet season aerials and the geometry and area of shaded patterns does not consistently correlate. Variability may be due to preceding rainfall, type of crop cover, height of vegetation, grass predation, plow patterns and location of seasonal drainage ditches.

The Willamette Valley Phase 1 LIDAR dataset was acquired from the Oregon Lidar Consortium and translated using ESRI ArcGIS and Spatial Analyst to produce a gridded dataset. The gridded data was used to generate 1-foot contour elevation lines (Figure 6A) and a bare earth 3-dimensional shaded relief raster image (Figure 5E).

March 2018

A previous wetland delineation completed by SWCA in 2006 (WD06-0234) identified 46.45 acres. Information from that report was used in the course of completing the current delineation. In 2012, Pacific Habitat Services completed a delineation "lite" evaluation (WD2013-0397) of the site for the Oregon Cascades West Council of Governments and identified 43.03 acres of wetland on the site. The wetland areas in the 2012 delineation are similar to those identified in the current study.

I) Results and Conclusions

The current delineation examined approximately 56.34 acres of a farmed site referenced as Linn County tax lots 12S02W16 2802 and 2804. The site lies outside the City of Lebanon city limits on the west side of the urban growth boundary. A single-family residence is present on tax lot 2804 with an address of 36585 Airport Drive. The site has been farmed for over 70 years.

Two wetland areas were identified with a total of 43.42 acres of wetland delineated. The wetlands are broad, flat depressions located in the alluvial flood plain of the Willamette Valley. A 1st order tributary, Little Oak Creek flows across the southwest corner of tax lot 2802.

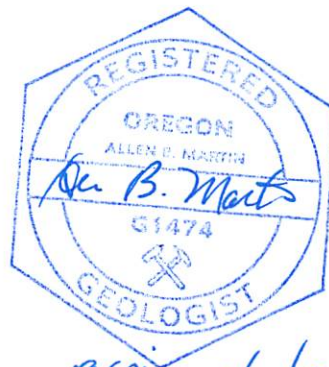
J) Disclaimer

This report documents the investigation, best professional judgment and conclusions of the investigator. It is correct and complete to the best of my 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.

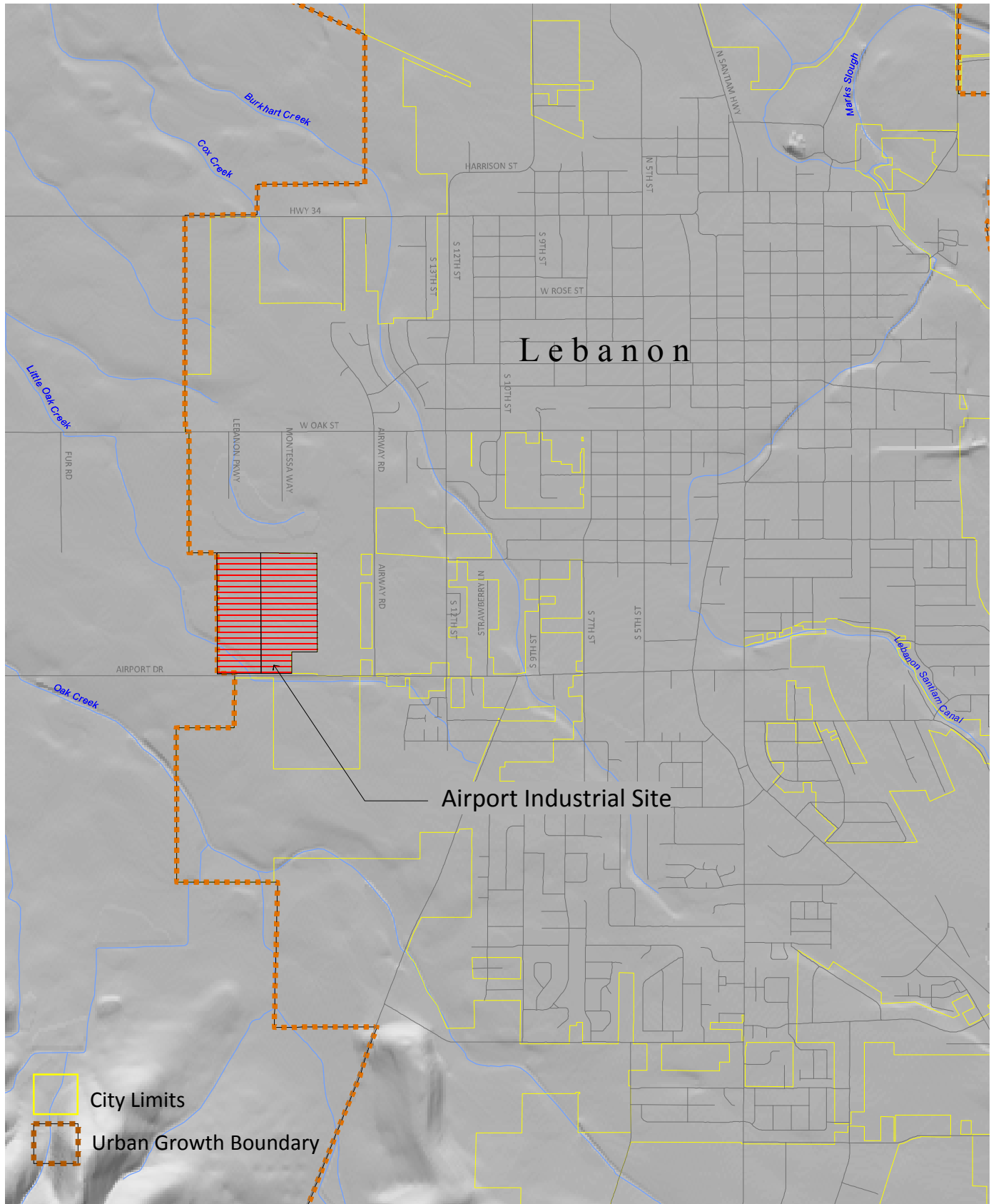


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exp. 12/31/18



Airport Industrial Site
 Linn County Assessor Map Map 12S02W16
 Lots 2802 & 2804
 36585 Airport Drive
 Lebanon, OR 97355

Geo Resources LLC

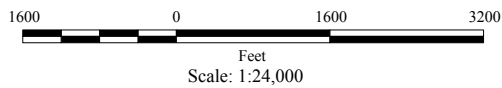
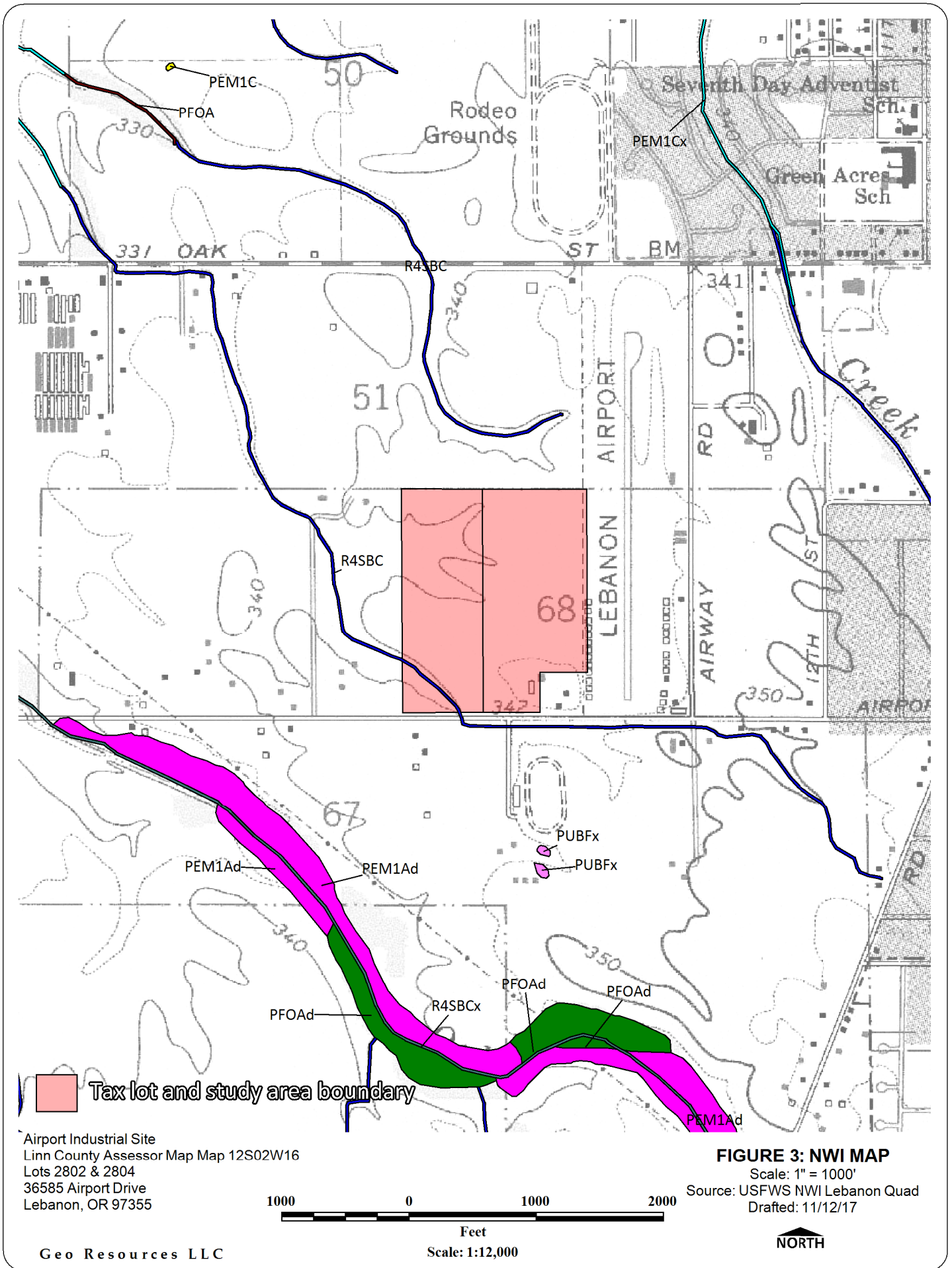


FIGURE 1: LOCATION MAP

Scale: 1" = 2,000'
 Source: MapInfo StreetPro, USGS
 10 meter DEM
 Drafted: 11/16/17







Airport Industrial Site
 Linn County Assessor Map Map 12S02W16
 Lots 2802 & 2804
 36585 Airport Drive
 Lebanon, OR 97355

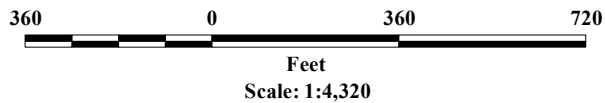


FIGURE 5A: 1998 AERIAL

Scale: 1" = 360'
 Source: City of Lebanon orthophoto
 Flown: March 1998, 1 ft resolution
 Drafted: 11/18/17



Airport Industrial Site
 Linn County Assessor Map Map 12S02W16
 Lots 2802 & 2804
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 Lebanon, OR 97355

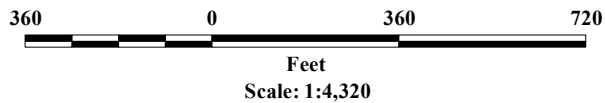
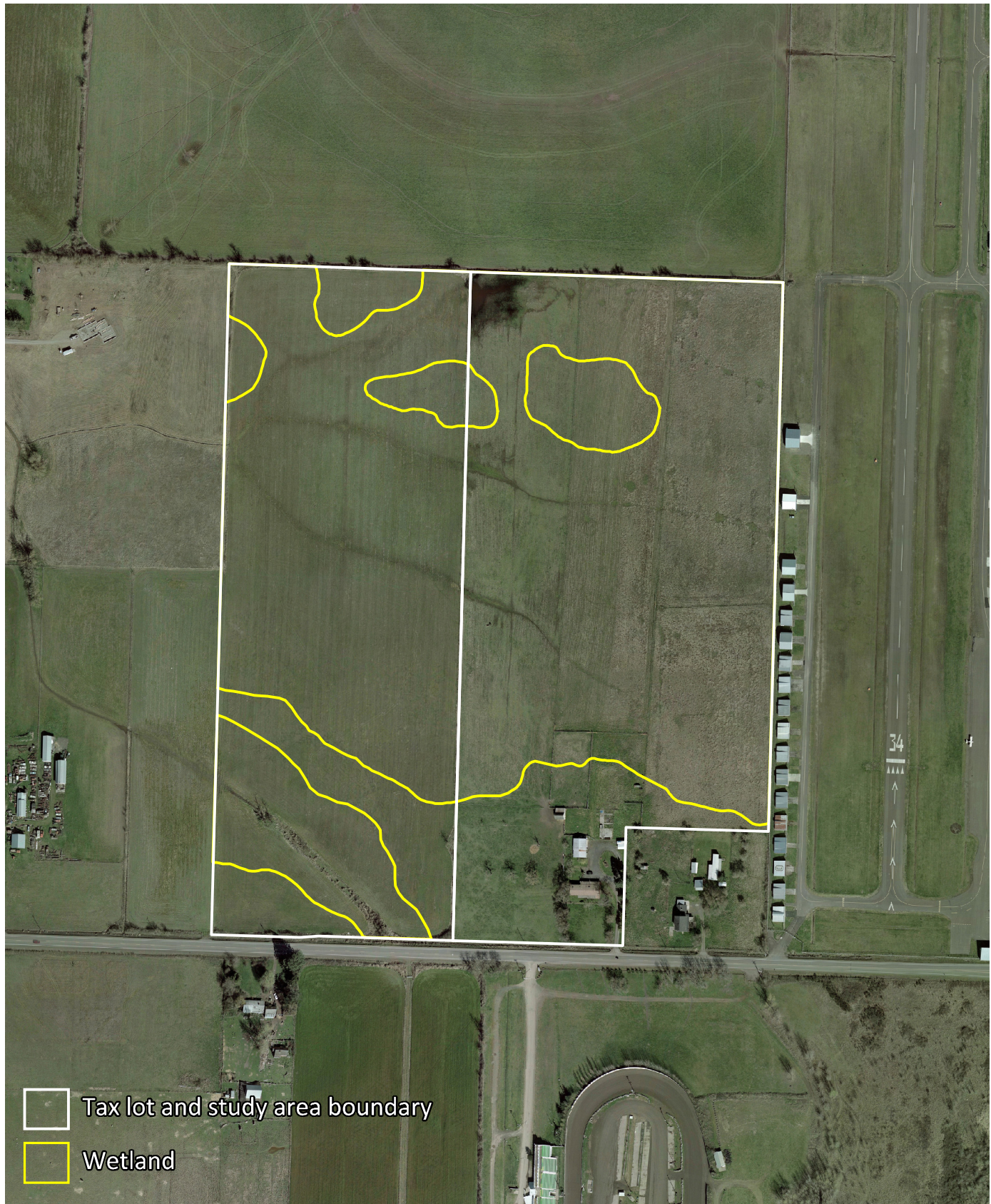


FIGURE 5B: 2000 AERIAL

Scale: 1" = 360'
 Source: Linn County orthophoto
 Flown: March, 2000, 1 ft resolution
 Drafted: 11/18/17



Airport Industrial Site
 Linn County Assessor Map Map 12S02W16
 Lots 2802 & 2804
 36585 Airport Drive
 Lebanon, OR 97355

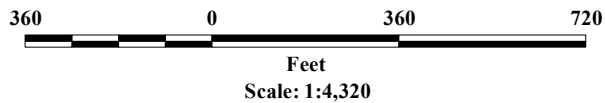


FIGURE 5C: 2005 AERIAL

Scale: 1" = 360'
 Source: City of Lebanon orthophoto
 Flown: March 8, 2005, 0.5 ft resolution
 Drafted: 11/18/17



Tax lot and study area boundary
 Wetland

Airport Industrial Site
 Linn County Assessor Map Map 12S02W16
 Lots 2802 & 2804
 36585 Airport Drive
 Lebanon, OR 97355

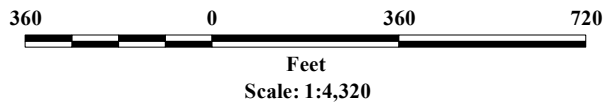
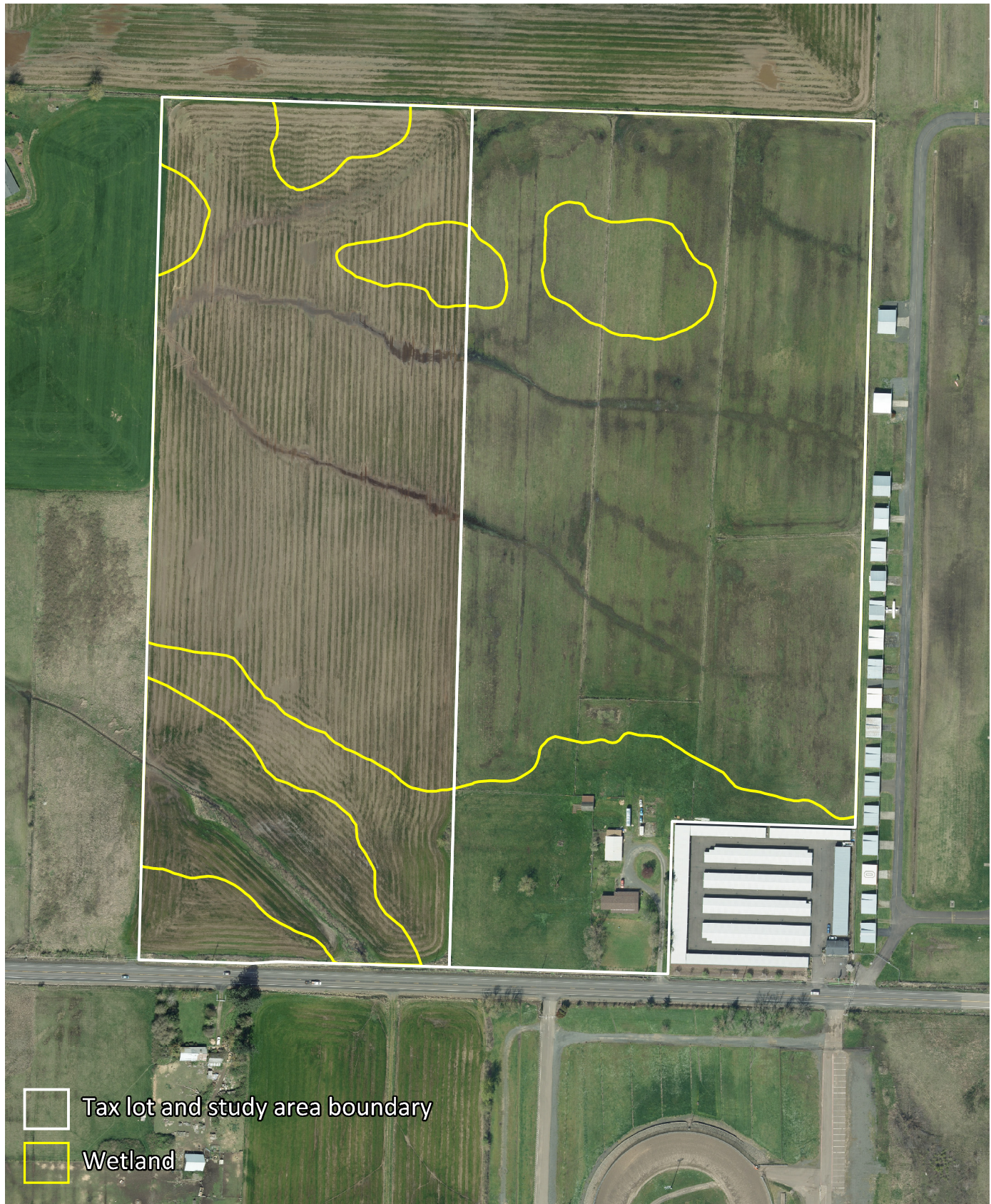


FIGURE 5D: 2012 AERIAL

Scale: 1" = 360'

Source: City of Lebanon orthophoto
 Flown: March 7, 2012, 3" resolution
 Drafted: 11/18/17



Tax lot and study area boundary
 Wetland

Airport Industrial Site
 Linn County Assessor Map Map 12S02W16
 Lots 2802 & 2804
 36585 Airport Drive
 Lebanon, OR 97355

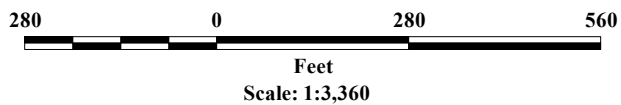


FIGURE 5E: 2017 AERIAL

Scale: 1" = 280'
 Source: City of Lebanon orthophoto
 Flown: April 2, 2017 with 3" resolution
 Drafted: 11/18/17



Tax lot and study area boundary
 Wetland

Airport Industrial Site
 Linn County Assessor Map Map 12S02W16
 Lots 2802 & 2804
 36585 Airport Drive
 Lebanon, OR 97355

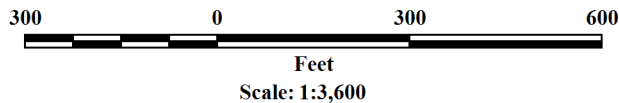
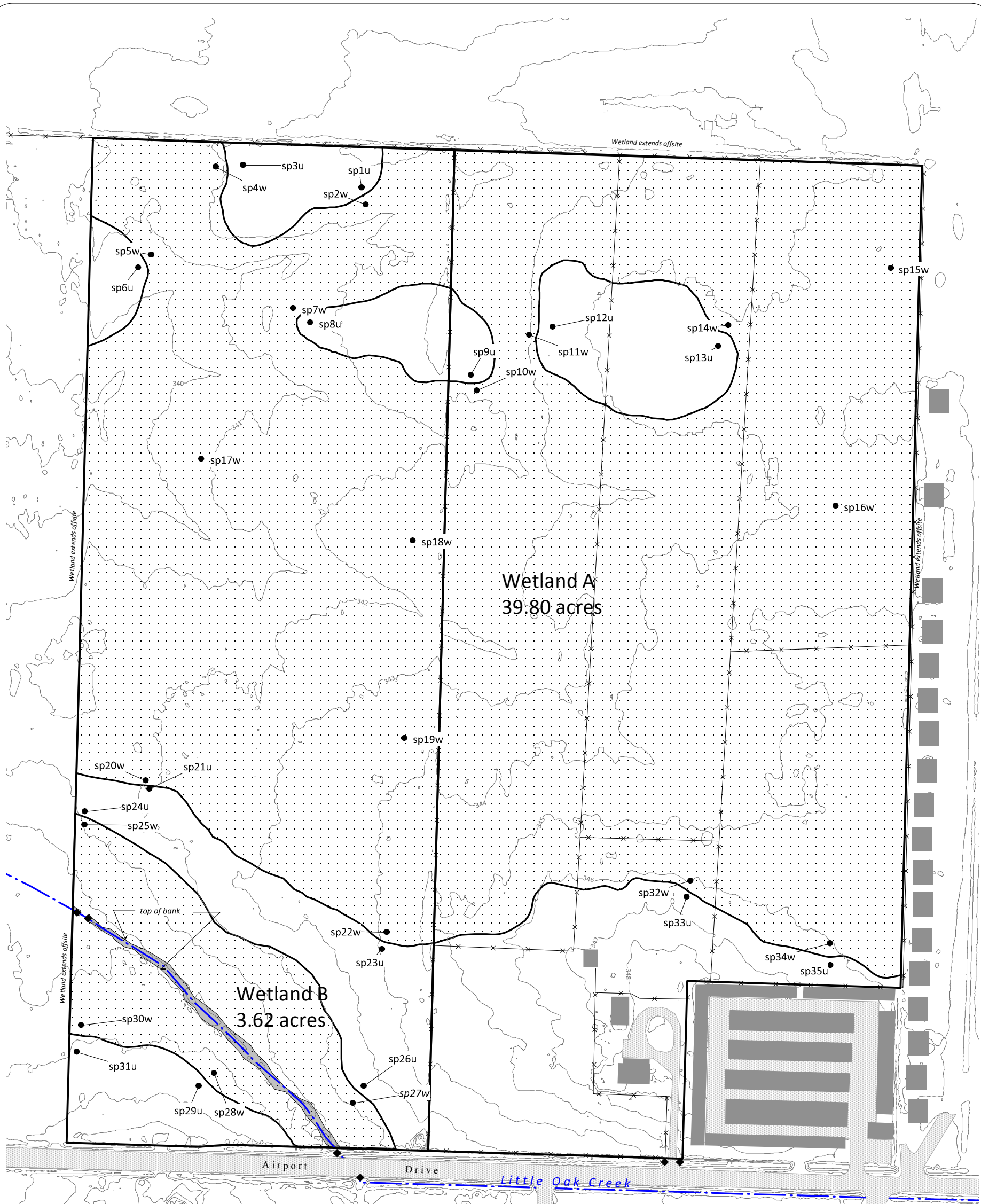


FIGURE 5F: SHADED RELIEF MAP

Scale: 1" = 300'
 Source: OR Lidar Consortium
 Flown: Spring 2009
 Drafted: 11/18/17

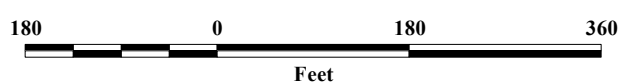


- Taxlot and study area boundary: 56.34 acres
- Wetland: 43.42 acres
- Other Waters (TOB): 0.20 acres - included in wetland acres
- Sample plot
- culvert
- Field fence

Tax lot boundary and area investigated based on Linn County GIS tax lot database and features visible on 2012 orthophoto.

Wetland/upland boundary, TOB and sample plots mapped using resource grade GPS receiver with sub-meter accuracy. The GPS post-processing precision is sub-meter.

Airport Industrial Site
 Linn County Assessor Map Map 12S02W16
 Lots 2802 & 2804
 36585 Airport Drive
 Lebanon, OR 97355

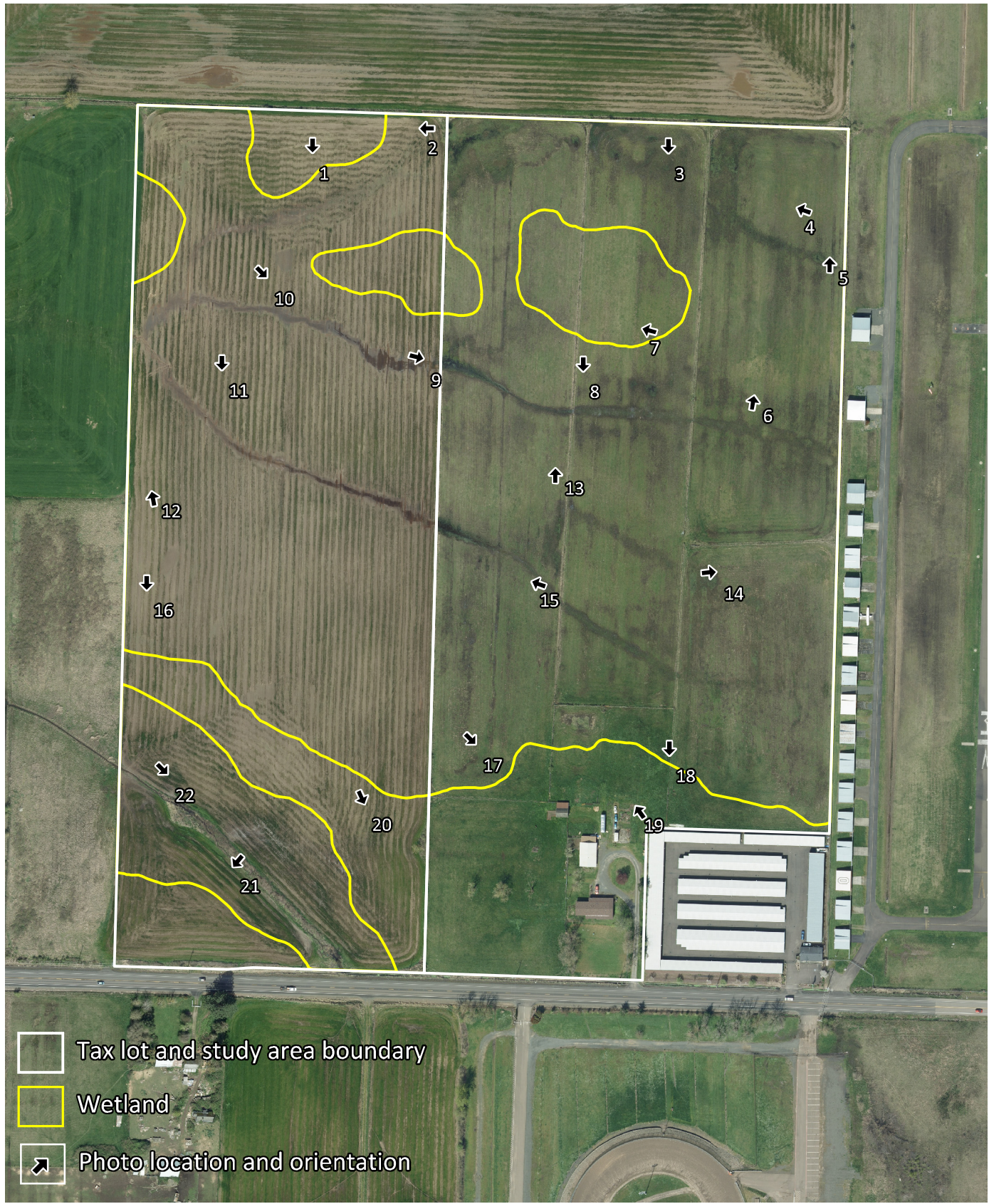


Scale: 1:2,160

FIGURE 6A: WETLAND MAP

Scale: 1" = 180'
 Source: Linn County GIS, OR DOGAMI Lidar
 Vertical datum: NAVD 88
 Drafted: 12/18/17





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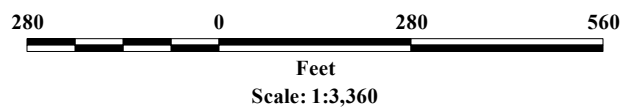


FIGURE 6B: PHOTO LOCATIONS

Scale: 1" = 280'
 Source: City of Lebanon orthophoto
 Flown: April 2, 2017, 3" resolution
 Drafted: 11/18/17

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

Project/Site: Airport Industrial City/County: Lebanon/Linn Sampling Date: 8/14/2017
 Applicant/Owner: City of Lebanon State: OR Sampling Point: SP-1
 Investigator(s): A. Martin Section, Township, Range: 16, T12S, R02W
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 0%
 Subregion (LRR): LRR A Lat: 44.529142° N Long: -123.Y21° W Datum: HARN NAD83
 Soil Map Unit Name: Dayton silt loam NWI classification: upland

Are Climatic / hydrologic conditions on the site typical for this time of year? Yes: x No: _____ (If no explain in remarks)
 Are Vegetation _____ Soil _____ or Hydrology _____ Significantly disturbed? Are "Normal Circumstances" present? Yes x No _____
 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>x</u>	No _____	Is the Sampled Area within a Wetland?		
Hydric Soil Present?	Yes _____	No <u>x</u>		Yes _____	No <u>x</u>
Wetland Hydrology Present?	Yes _____	No <u>x</u>		Yes _____	No <u>x</u>
Remarks: <u>Plot located in slightly crowned terrace at north end of TL 2802. Field cultivated for annual rye</u>					

VEGETATION - Use scientific names of plants.

Tree Stratum	(Plot size: <u>30 ft dia</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:
1. _____					Number of Dominant Species That are OBL, FACW, or FAC: _____ <u>1</u> (A) Total Number of Dominant Species Across All Strata: _____ <u>1</u> (B) Percent of Dominant Species That are OBL, FACW, or FAC: _____ <u>100</u> (A/B)
2. _____					
3. _____					
4. _____					
_____ = Total Cover					Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
Sapling/Shrub Stratum (Plot size: _____)					
1. _____					
2. _____					
3. _____					
4. _____					
5. _____					
_____ = Total Cover					
Herb Stratum (Plot size: <u>5 ft dia</u>)					
1. <u>Lolium multiflorum</u>		<u>80%</u>	<u>yes</u>	<u>FAC</u>	
2. _____					
3. _____					
4. _____					
5. _____					
6. _____					
7. _____					
8. _____					
9. _____					
10. _____					
11. _____					
_____ = Total Cover					
Woody Vine Stratum (Plot size: _____)					
1. _____					
2. _____					
_____ = Total Cover					
% Bare Ground in Herb Stratum <u>20</u>					
Hydrophytic Vegetation Indicators: _____ Rapid Test for Hydrophytic Vegetation <u>x</u> Dominance Test is >50% _____ Prevalence Index is <3.0 ⁽¹⁾ _____ Morphological Adaptations ⁽¹⁾ (Provide supporting data in Remarks or on a separate sheet) _____ Wetland Non-Vascular Plants ⁽¹⁾ _____ Problematic Hydrophytic Vegetation ⁽¹⁾ (Explain)					
(1) Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.					
Hydrophytic Vegetation Present? Yes <u>x</u> No _____					
Remarks: _____					

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features		Type (1)	Loc (2)	Texture	Remarks
	Color (moist)	%	Color (moist)	%				
0-9	10YR 3/2	100					sicl	
9-11	10YR 3/2	98%	10YR 4/4	2	C	M	sicl	
11-14	10YR 3/2	95%	10YR 4/4	5	C	M	sicl	
14-21	10YR 4/2	95%	10YR 4/4	5	C	M	sicl	

(1)Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. (2)Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators of Problematic Hydric Soils(3).

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	(3) indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

Restrictive layer (if present):

Type: _____	Hydric Soil Present? Yes _____ No <u> </u> x
Depth (inches): _____	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

Field Observations:

Surface Water Present? Yes _____ No <u> </u> x	Depth (inches): _____	Wetland Hydrology Present? Yes _____ No <u> </u> x
Water Table Present? Yes _____ No <u> </u> x	Depth (inches): _____	
Saturation Present? (includes capillary fringe) Yes _____ No <u> </u> x	Depth (inches): _____	

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

Remarks:

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

Project/Site: Airport Industrial City/County: Lebanon/Linn Sampling Date: 8/14/2017
 Applicant/Owner: City of Lebanon State: OR Sampling Point: SP-2
 Investigator(s): A. Martin Section, Township, Range: 16, T12S, R02W
 Landform (terrace, terrace, etc.): terrace Local relief (concave, convex, none): concave Slope (%): 0%
 Subregion (LRR): LRR A Lat: 44.529142° N Long: -123.933778° W Datum: HARN NAD83
 Soil Map Unit Name: Dayton silt loam NWI classification: upland

Are Climatic / hydrologic conditions on the site typical for this time of year? Yes: x No: _____ (If no explain in remarks)
 Are Vegetation _____ Soil _____ or Hydrology _____ Significantly disturbed? Are "Normal Circumstances" present? Yes x No _____
 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>x</u>	No _____	Is the Sampled Area within a Wetland?	Yes <u>x</u>	No _____
Hydric Soil Present?	Yes <u>x</u>	No _____			
Wetland Hydrology Present?	Yes <u>x</u>	No _____			
Remarks:	Plot located on edge of terrace on north end of TL 2802.				

VEGETATION - Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:	
1. _____	_____	_____	_____	Number of Dominant Species That are OBL, FACW, or FAC:	_____ 1 (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata:	_____ 1 (B)
3. _____	_____	_____	_____	Percent of Dominant Species That are OBL, FACW, or FAC:	_____ 100 (A/B)
4. _____	_____	_____	_____	Prevalence Index worksheet:	
_____ = Total Cover				Total % Cover of:	Multiply by:
<u>Sapling/Shrub Stratum</u> (Plot size: _____)				OBL species	_____ x 1 = _____
1. _____	_____	_____	_____	FACW species	_____ x 2 = _____
2. _____	_____	_____	_____	FAC species	_____ x 3 = _____
3. _____	_____	_____	_____	FACU species	_____ x 4 = _____
4. _____	_____	_____	_____	UPL species	_____ x 5 = _____
5. _____	_____	_____	_____	Column Totals:	_____ (A) _____ (B)
_____ = Total Cover				Prevalence Index = B/A = _____	
<u>Herb Stratum</u> (Plot size: <u>5 ft dia</u>)				Hydrophytic Vegetation Indicators:	
1. <u>Lolium multiflorum</u>	<u>80%</u>	<u>yes</u>	<u>FAC</u>	Rapid Test for Hydrophytic Vegetation	
2. _____	_____	_____	_____	<u>x</u> Dominance Test is >50%	
3. _____	_____	_____	_____	Prevalence Index is <3.0 ⁽¹⁾	
4. _____	_____	_____	_____	Morphological Adaptations ⁽¹⁾ (Provide supporting data in Remarks or on a separate sheet)	
5. _____	_____	_____	_____	Wetland Non-Vascular Plants ⁽¹⁾	
6. _____	_____	_____	_____	Problematic Hydrophytic Vegetation ⁽¹⁾ (Explain)	
7. _____	_____	_____	_____	(1) Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
8. _____	_____	_____	_____		
9. _____	_____	_____	_____		
10. _____	_____	_____	_____		
11. _____	_____	_____	_____		
_____ = Total Cover				Hydrophytic Vegetation Present?	
<u>Woody Vine Stratum</u> (Plot size: _____)				Yes <u>x</u> No _____	
1. _____	_____	_____	_____		
2. _____	_____	_____	_____		
_____ = Total Cover					
<u>% Bare Ground in Herb Stratum</u> <u>20</u>					

Remarks:

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SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features		Type (1)	Loc (2)	Texture	Remarks
	Color (moist)	%	Color (moist)	%				
0-7	10YR 3/2	100					sicl	
7-11	10YR 3/2	95%	10YR 4/4	5	C	M	sicl	
11-20	10YR 4/2	95%	10YR 5/4	5	C	M	sicl	

(1)Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered of Coated Sand Grains. (2)Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators of Problematic Hydric Soils(3).

<input type="checkbox"/>	Histosol (A1)	<input type="checkbox"/>	Sandy Redox (S5)	<input type="checkbox"/>	2 cm Muck (A10)
<input type="checkbox"/>	Histic Epipedon (A2)	<input type="checkbox"/>	Stripped Matrix (S6)	<input type="checkbox"/>	Red Parent Material (TF2)
<input type="checkbox"/>	Black Histic (A3)	<input type="checkbox"/>	Loamy Mucky Mineral (F1)	<input type="checkbox"/>	Other (Explain in Remarks)
<input type="checkbox"/>	Hydrogen Sulfide (A4)	<input type="checkbox"/>	(except MLRA 1)		
<input checked="" type="checkbox"/>	Depleted Below Dark Surface (A11)	<input type="checkbox"/>	Loamy Gleyed Matrix (F2)		
<input type="checkbox"/>	Thick Dark Surface (A12)	<input type="checkbox"/>	Depleted Matrix (F3)		
<input type="checkbox"/>	Sandy Mucky Mineral (S1)	<input checked="" type="checkbox"/>	Redox Dark Surface (F6)		
<input type="checkbox"/>	Sandy Gleyed Matrix (S4)	<input type="checkbox"/>	Depleted Dark Surface (F7)		
		<input type="checkbox"/>	Redox Depressions (F8)		

(3) indicators 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

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required: (check all that apply))

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Surface Soil Cracks (B6)
- Inundation Visible on Aerial imagery (B7)
- Sparsely Vegetated Concave Surface (B8)

- Water Stained Leaves (B9) (except MLRA 1,2,4A, and 4B)
- Salt Crust (B11)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent iron Reduction in Tilled Soils (C6)
- Stunted or Stressed Plants (D1) (LRR A)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- Water Stained Leaves (B9) (MLRA 1.2, 4A, and 4B)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Saturation Visible on Aerial Imagery (C9)
- Geomorphic Position (D2)
- Shallow Aquitard (D3)
- FAC-Neutral Test (D5)
- Raised Ant Mounds (D6) (LRR A)
- Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes _____ No Depth (inches): _____
 Water Table Present? Yes _____ No Depth (inches): _____
 Saturation Present? (includes capillary fringe) Yes _____ No Depth (inches): _____

Wetland Hydrology Present?

Yes No

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

Remarks:

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

Project/Site: Airport Industrial City/County: Lebanon/Linn Sampling Date: 8/14/2017
 Applicant/Owner: City of Lebanon State: OR Sampling Point: SP-3
 Investigator(s): A. Martin Section, Township, Range: 16, T12S, R02W
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 0%
 Subregion (LRR): LRR A Lat: 44.529142° N Long: -123.933778° W Datum: HARN NAD83
 Soil Map Unit Name: Clackamas variant silt loam NWI classification: upland

Are Climatic / hydrologic conditions on the site typical for this time of year? Yes: x No: _____ (If no explain in remarks)
 Are Vegetation _____ Soil _____ or Hydrology _____ Significantly disturbed? Are "Normal Circumstances" present? Yes x No _____
 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>x</u>	No _____	Is the 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: <u>plot located on west end of small terrace bordering north end of TL 2802</u>					

VEGETATION - Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: <u>30 ft dia</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That are OBL, FACW, or FAC: _____ 1 (A) Total Number of Dominant Species Across All Strata: _____ 1 (B) Percent of Dominant Species That are OBL, FACW, or FAC: _____ 100 (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
_____ = Total Cover				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
<u>Sapling/Shrub Stratum</u> (Plot size: _____)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover				
<u>Herb Stratum</u> (Plot size: <u>5 ft dia</u>)				Hydrophytic Vegetation Indicators: Rapid Test for Hydrophytic Vegetation 1 Dominance Test is >50% Prevalence Index is <3.0 ⁽¹⁾ Morphological Adaptations ⁽¹⁾ (Provide supporting data in Remarks or on a separate sheet) Wetland Non-Vascular Plants ⁽¹⁾ Problematic Hydrophytic Vegetation ⁽¹⁾ (Explain) (1) Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Lolium multiflorum</u>	<u>90%</u>	<u>yes</u>	<u>FAC</u>	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
_____ 90% = Total Cover				
<u>Woody Vine Stratum</u> (Plot size: _____)				Hydrophytic Vegetation Present? Yes <u>x</u> No _____
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
_____ = Total Cover				
% Bare Ground in Herb Stratum <u>10</u>				
Remarks:				

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features		Type (1)	Loc (2)	Texture	Remarks
	Color (moist)	%	Color (moist)	%				
0-10	10YR 3/2	100					sicl	
10-14	10YR 3/2	98%	10YR 3/4	2	C	M	sicl	
14-21	10YR 4/2	95%	10YR 5/4	5	C	M	sicl	

(1)Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered of Coated Sand Grains. (2)Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators of Problematic Hydric Soils(3).

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> (except MLRA 1)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Matrix (F3)	(3) indicators of hydrophytic vegetation
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Redox Dark Surface (F6)	and wetland hydrology must be present,
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Depleted Dark Surface (F7)	unless disturbed or problematic.
	<input type="checkbox"/> Redox Depressions (F8)	

Restrictive layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No x

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

Field Observations:

Surface Water Present?	Yes _____	No <u> x </u>	Depth (inches): _____	Wetland Hydrology Present? Yes _____ No <u> x </u>
Water Table Present?	Yes _____	No <u> x </u>	Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes _____	No <u> x </u>	Depth (inches): _____	

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

Remarks:

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

Project/Site: Airport Industrial City/County: Lebanon/Linn Sampling Date: 8/14/2017
 Applicant/Owner: City of Lebanon State: OR Sampling Point: SP-4
 Investigator(s): A. Martin Section, Township, Range: 16, T12S, R02W
 Landform (terrace, terrace, etc.): terrace Local relief (concave, convex, none): concave Slope (%): 0%
 Subregion (LRR): LRR A Lat: 44.529142° N Long: -123.933778° W Datum: HARN NAD83
 Soil Map Unit Name: Clackamas variant silt loam NWI classification: upland

Are Climatic / hydrologic conditions on the site typical for this time of year? Yes: x No: _____ (If no explain in remarks)
 Are Vegetation _____ Soil _____ or Hydrology _____ Significantly disturbed? Are "Normal Circumstances" present? Yes x No _____
 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>x</u>	No _____	Is the Sampled Area within a Wetland?	Yes <u>x</u>	No _____
Hydric Soil Present?	Yes <u>x</u>	No _____			
Wetland Hydrology Present?	Yes <u>x</u>	No _____			
Remarks: <u>Plot paired with SP3 at north end of TL 2802</u>					

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: <u>30 ft dia</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That are OBL, FACW, or FAC: _____ <u>1</u> (A) Total Number of Dominant Species Across All Strata: _____ <u>1</u> (B) Percent of Dominant Species That are OBL, FACW, or FAC: _____ <u>100</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
_____ = Total Cover				
Sapling/Shrub Stratum (Plot size: _____)				
1. _____	_____	_____	_____	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover				
Herb Stratum (Plot size: <u>5 ft dia</u>)				
1. <u>Lolium multiflorum</u>	<u>90%</u>	<u>yes</u>	<u>F</u>	Hydrophytic Vegetation Indicators: Rapid Test for Hydrophytic Vegetation x Dominance Test is >50% Prevalence Index is <3.0 ⁽¹⁾ Morphological Adaptations ⁽¹⁾ (Provide supporting data in Remarks or on a separate sheet) Wetland Non-Vascular Plants ⁽¹⁾ Problematic Hydrophytic Vegetation ⁽¹⁾ (Explain) (1) Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
<u>90%</u> = Total Cover				
Woody Vine Stratum (Plot size: _____)				
1. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes <u>x</u> No _____
2. _____	_____	_____	_____	
_____ = Total Cover				
% Bare Ground in Herb Stratum <u>10</u>				

Remarks: _____

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SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features		Type (1)	Loc (2)	Texture	Remarks
	Color (moist)	%	Color (moist)	%				
0-8	10YR 3/2	98	10YR 4/4	2	C	PL	sicl	2% OR
8-11	10YR 3/2	95%	10YR 4/4	5	C	M	sicl	
11-20	10YR 4/2	90%	10YR 4/6	10	C	M	cl	

(1)Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered of Coated Sand Grains. (2)Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators of Problematic Hydric Soils(3).

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> (except MLRA 1)	
<input checked="" type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input checked="" type="checkbox"/> Redox Dark Surface (F6)	(3) indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Depleted Dark Surface (F7)	
	<input type="checkbox"/> Redox Depressions (F8)	

Restrictive layer (if present):

Type: _____
 Depth (inches): _____

Hydric Soil Present? Yes No

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required: (check all that apply))

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Surface Soil Cracks (B6)
- Inundation Visible on Aerial imagery (B7)
- Sparsely Vegetated Concave Surface (B8)

- Water Stained Leaves (B9) (except MLRA 1,2,4A, and 4B)
- Salt Crust (B11)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent iron Reduction in Tilled Soils (C6)
- Stunted or Stressed Plants (D1) (LRR A)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- Water Stained Leaves (B9) (MLRA 1,2, 4A, and 4B)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Saturation Visible on Aerial Imagery (C9)
- Geomorphic Position (D2)
- Shallow Aquitard (D3)
- FAC-Neutral Test (D5)
- Raised Ant Mounds (D6) (LRR A)
- Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes _____ No Depth (inches): _____
 Water Table Present? Yes _____ No Depth (inches): _____
 Saturation Present? Yes _____ No Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present?

Yes No

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

Remarks:

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

Project/Site: Airport Industrial City/County: Lebanon/Linn Sampling Date: 8/14/2017
 Applicant/Owner: City of Lebanon State: OR Sampling Point: SP-5
 Investigator(s): A. Martin Section, Township, Range: 16, T12S, R02W
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 0%
 Subregion (LRR): LRR A Lat: 44.529142° N Long: -123.933778° W Datum: HARN NAD83
 Soil Map Unit Name: Clackamas variant silt loam NWI classification: upland

Are Climatic / hydrologic conditions on the site typical for this time of year? Yes: x No: _____ (If no explain in remarks)
 Are Vegetation _____ Soil _____ or Hydrology _____ Significantly disturbed? Are "Normal Circumstances" present? Yes x No _____
 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>x</u>	No _____	Is the Sampled Area within a Wetland?	Yes <u>x</u>	No _____
Hydric Soil Present?	Yes <u>x</u>	No _____			
Wetland Hydrology Present?	Yes <u>x</u>	No _____			
Remarks: <u>Plot located adjacent to small terrace near northwest end of TL 2802</u>					

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: <u>30 ft dia</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That are OBL, FACW, or FAC: _____ 1 (A) Total Number of Dominant Species Across All Strata: _____ 1 (B) Percent of Dominant Species That are OBL, FACW, or FAC: _____ 100 (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
_____ = Total Cover				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FACU species _____ x 3 = _____ UPL species _____ x 4 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
Sapling/Shrub Stratum (Plot size: _____)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover				Hydrophytic Vegetation Indicators: _____ Rapid Test for Hydrophytic Vegetation x _____ Dominance Test is >50% _____ Prevalence Index is <3.0 ⁽¹⁾ _____ Morphological Adaptations ⁽¹⁾ (Provide supporting data in Remarks or on a separate sheet) _____ Wetland Non-Vascular Plants ⁽¹⁾ _____ Problematic Hydrophytic Vegetation ⁽¹⁾ (Explain) (1) Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Herb Stratum (Plot size: <u>5 ft dia</u>)				
1. <u>Lolium multiflorum</u>	<u>80%</u>	<u>yes</u>	<u>F</u>	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
<u>80%</u> = Total Cover				
Woody Vine Stratum (Plot size: _____)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
_____ = Total Cover				
% Bare Ground in Herb Stratum <u>20</u>				
Remarks: _____				

SOIL

Profile Description: (Describe to the depth needed to document the indicator of confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features		Type (1)	Loc (2)	Texture	Remarks
	Color (moist)	%	Color (moist)	%				
0-6	10YR 3/2	100					sicl	
6-12	10YR 3/2	95%	10YR 4/6	5	C	M	sicl	
12-22	10YR 4/2	90%	10YR 5/4	10	C	M	cl	

(1)Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered of Coated Sand Grains. (2)Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators of Problematic Hydric Soils(3).

<input type="checkbox"/>	Histosol (A1)	<input type="checkbox"/>	Sandy Redox (S5)	<input type="checkbox"/>	2 cm Muck (A10)
<input type="checkbox"/>	Histic Epipedon (A2)	<input type="checkbox"/>	Stripped Matrix (S6)	<input type="checkbox"/>	Red Parent Material (TF2)
<input type="checkbox"/>	Black Histic (A3)	<input type="checkbox"/>	Loamy Mucky Mineral (F1)	<input type="checkbox"/>	Other (Explain in Remarks)
<input type="checkbox"/>	Hydrogen Sulfide (A4)	<input type="checkbox"/>	(except MLRA 1)		
<input checked="" type="checkbox"/>	Depleted Below Dark Surface (A11)	<input type="checkbox"/>	Loamy Gleyed Matrix (F2)		
<input type="checkbox"/>	Thick Dark Surface (A12)	<input type="checkbox"/>	Depleted Matrix (F3)		
<input type="checkbox"/>	Sandy Mucky Mineral (S1)	<input checked="" type="checkbox"/>	Redox Dark Surface (F6)		(3) indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/>	Sandy Gleyed Matrix (S4)	<input type="checkbox"/>	Depleted Dark Surface (F7)		
<input type="checkbox"/>		<input type="checkbox"/>	Redox Depressions (F8)		

Restrictive layer (if present):

Type: _____
 Depth (inches): _____

Hydric Soil Present? Yes No

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

Field Observations:

Surface Water Present? Yes No Depth (inches): _____
 Water Table Present? Yes No Depth (inches): _____
 Saturation Present? (includes capillary fringe) Yes No Depth (inches): _____

Wetland Hydrology Present? Yes No

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

Remarks:

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

Project/Site: Airport Industrial City/County: Lebanon/Linn Sampling Date: 8/14/2017
 Applicant/Owner: City of Lebanon State: OR Sampling Point: SP-6
 Investigator(s): A. Martin Section, Township, Range: 16, T12S, R02W
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): concave Slope (%): 0%
 Subregion (LRR): LRR A Lat: 44.529142° N Long: -123.933778° W Datum: HARN NAD83
 Soil Map Unit Name: Clackamas variant silt loam NWI classification: upland

Are Climatic / hydrologic conditions on the site typical for this time of year? Yes: x No: _____ (If no explain in remarks)
 Are Vegetation _____ Soil _____ or Hydrology _____ Significantly disturbed? Are "Normal Circumstances" present? Yes x No _____
 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>x</u>	No _____	Is the 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:	Plot in slightly higher terrace near northwest corner of TL 2802				

VEGETATION - Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:	
1. _____	_____	_____	_____	Number of Dominant Species That are OBL, FACW, or FAC:	_____ 1 (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata:	_____ 1 (B)
3. _____	_____	_____	_____	Percent of Dominant Species That are OBL, FACW, or FAC:	_____ 100 (A/B)
4. _____	_____	_____	_____		
_____ = Total Cover	_____	_____	_____		
<u>Sapling/Shrub Stratum</u> (Plot size: _____)				Prevalence Index worksheet:	
1. _____	_____	_____	_____	Total % Cover of:	<u>Multiply by:</u>
2. _____	_____	_____	_____	OBL species _____ x 1 = _____	
3. _____	_____	_____	_____	FACW species _____ x 2 = _____	
4. _____	_____	_____	_____	FAC species _____ x 3 = _____	
5. _____	_____	_____	_____	FACU species _____ x 4 = _____	
_____ = Total Cover	_____	_____	_____	UPL species _____ x 5 = _____	
	_____	_____	_____	Column Totals: _____ (A) _____ (B)	
<u>Herb Stratum</u> (Plot size: <u>5 ft dia</u>)				Prevalence Index = B/A = _____	
1. <u>Lolium multiflorum</u>	<u>90%</u>	<u>yes</u>	<u>FAC</u>		
2. _____	_____	_____	_____		
3. _____	_____	_____	_____		
4. _____	_____	_____	_____		
5. _____	_____	_____	_____		
6. _____	_____	_____	_____		
7. _____	_____	_____	_____		
8. _____	_____	_____	_____		
9. _____	_____	_____	_____		
10. _____	_____	_____	_____		
11. _____	_____	_____	_____		
_____ = Total Cover	<u>90%</u>	_____	_____		
<u>Woody Vine Stratum</u> (Plot size: _____)				Hydrophytic Vegetation Indicators:	
1. _____	_____	_____	_____	Rapid Test for Hydrophytic Vegetation	
2. _____	_____	_____	_____	<u>x</u> Dominance Test is >50%	
				Prevalence Index is <3.0 ⁽¹⁾	
				Morphological Adaptations ⁽¹⁾ (Provide supporting data in Remarks or on a separate sheet)	
				Wetland Non-Vascular Plants ⁽¹⁾	
				Problematic Hydrophytic Vegetation ⁽¹⁾ (Explain)	
				(1) Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
				Hydrophytic Vegetation Present?	
				Yes <u>x</u>	No _____
% Bare Ground in Herb Stratum	<u>10</u>				
Remarks:					

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features			Type (1)	Loc (2)	Texture	Remarks
	Color (moist)	%	Color (moist)	%					
0-9	10YR 3/2	100						sicl	
9-14	10YR 3/2	94%	10YR 4/4	6	C	M		sicl	
14-20	10YR 4/2	90%	10YR 4/6	10	C	M		cl	

(1)Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered of Coated Sand Grains. (2)Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators of Problematic Hydric Soils(3).

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> (except MLRA 1)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Depleted Dark Surface (F7)	
	<input type="checkbox"/> Redox Depressions (F8)	

(3) indicators 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:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required: (check all that apply))

Secondary Indicators (2 or more required)

<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water Stained Leaves (B9) (except MLRA 1,2,4A, and 4B)	<input type="checkbox"/> Water Stained Leaves (B9) (MLRA 1,2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Field Observations:

Surface Water Present? Yes _____ No x Depth (inches): _____
 Water Table Present? Yes _____ No x Depth (inches): _____
 Saturation Present? Yes _____ No x Depth (inches): _____
 (includes capillary fringe)

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 Mountain, Valleys, and Coast Region

Project/Site: Airport Industrial City/County: Lebanon/Linn Sampling Date: 8/14/2017
 Applicant/Owner: City of Lebanon State: OR Sampling Point: SP-7
 Investigator(s): A. Martin Section, Township, Range: 16, T12S, R02W
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): concave Slope (%): 0%
 Subregion (LRR): LRR A Lat: 44.529142° N Long: -123.933778° W Datum: HARN NAD83
 Soil Map Unit Name: Clackamas variant silt loam NWI classification: upland

Are Climatic / hydrologic conditions on the site typical for this time of year? Yes: x No: _____ (If no explain in remarks)
 Are Vegetation _____ Soil _____ or Hydrology _____ Significantly disturbed? Are "Normal Circumstances" present? Yes x No _____
 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>x</u>	No _____	Is the Sampled Area within a Wetland?	Yes <u>x</u>	No _____
Hydric Soil Present?	Yes <u>x</u>	No _____			
Wetland Hydrology Present?	Yes <u>x</u>	No _____			
Remarks: <u>Plot located in wetland adjacent to terrace that straddles fenceline between two parcels</u>					

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That are OBL, FACW, or FAC: _____ 1 (A) Total Number of Dominant Species Across All Strata: _____ 1 (B) Percent of Dominant Species That are OBL, FACW, or FAC: _____ 100 (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
_____ = Total Cover				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
Sapling/Shrub Stratum (Plot size: _____)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover				Hydrophytic Vegetation Indicators: _____ Rapid Test for Hydrophytic Vegetation <u>x</u> Dominance Test is >50% Prevalence Index is <3.0 ⁽¹⁾ _____ Morphological Adaptations ⁽¹⁾ (Provide supporting data in Remarks or on a separate sheet) _____ Wetland Non-Vascular Plants ⁽¹⁾ _____ Problematic Hydrophytic Vegetation ⁽¹⁾ (Explain) (1) Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Herb Stratum (Plot size: <u>5 ft dia</u>)				
1. <u>Lolium multiflorum</u>	<u>85%</u>	<u>yes</u>	<u>F</u>	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
<u>85%</u> = Total Cover				
Woody Vine Stratum (Plot size: _____)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
_____ = Total Cover				
% Bare Ground in Herb Stratum <u>15</u>				
Hydrophytic Vegetation Present? Yes <u>x</u> No _____				
Remarks:				

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features		Type (1)	Loc (2)	Texture	Remarks
	Color (moist)	%	Color (moist)	%				
0-5	10YR 3/2	100					sicl	
5-11	10YR 3/2	95%	10YR 4/4	5	C	M	sicl	2% OR
11-20	10YR 3/2	90%	10YR 4/4	10	C	M	sicl	

(1)Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered of Coated Sand Grains. (2)Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators of Problematic Hydric Soils(3).

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> (except MLRA 1)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input checked="" type="checkbox"/> Redox Dark Surface (F6)	(3) indicators of hydrophytic vegetation
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Depleted Dark Surface (F7)	and wetland hydrology must be present,
	<input type="checkbox"/> Redox Depressions (F8)	unless disturbed or problematic.

Restrictive layer (if present):

Type: _____
 Depth (inches): _____

Hydric Soil Present? Yes No

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required: (check all that apply))

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Surface Soil Cracks (B6)
- Inundation Visible on Aerial imagery (B7)
- Sparsely Vegetated Concave Surface (B8)

- Water Stained Leaves (B9) (except MLRA 1,2,4A, and 4B)
- Salt Crust (B11)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent iron Reduction in Tilled Soils (C6)
- Stunted or Stressed Plants (D1) (LRR A)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- Water Stained Leaves (B9) (MLRA 1.2, 4A, and 4B)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Saturation Visible on Aerial Imagery (C9)
- Geomorphc Position (D2)
- Shallow Aquitard (D3)
- FAC-Neutral Test (D5)
- Raised Ant Mounds (D6) (LRR A)
- Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes _____ No Depth (inches): _____
 Water Table Present? Yes _____ No Depth (inches): _____
 Saturation Present? Yes _____ No Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present?

Yes No

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

Remarks:

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

Project/Site: Airport Industrial City/County: Lebanon/Linn Sampling Date: 8/14/2017
 Applicant/Owner: City of Lebanon State: OR Sampling Point: SP-8
 Investigator(s): A. Martin Section, Township, Range: 16, T12S, R02W
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 0%
 Subregion (LRR): LRR A Lat: 44.529142° N Long: -123.933778° W Datum: HARN NAD83
 Soil Map Unit Name: Dayton silt loam NWI classification: upland

Are Climatic / hydrologic conditions on the site typical for this time of year? Yes: x No: _____ (If no explain in remarks)
 Are Vegetation _____ Soil _____ or Hydrology _____ Significantly disturbed? Are "Normal Circumstances" present? Yes x No _____
 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>x</u>	No _____	Is the 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:	Plot located on small terrace that straddles fenceline between two parcels.			

VEGETATION - Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:	
1. _____	_____	_____	_____	Number of Dominant Species That are OBL, FACW, or FAC:	<u>1</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata:	<u>1</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That are OBL, FACW, or FAC:	<u>100</u> (A/B)
4. _____	_____	_____	_____	Prevalence Index worksheet:	
_____ = Total Cover				Total % Cover of:	Multiply by:
<u>Sapling/Shrub Stratum</u> (Plot size: _____)				OBL species	_____ x 1 = _____
1. _____	_____	_____	_____	FACW species	_____ x 2 = _____
2. _____	_____	_____	_____	FAC species	_____ x 3 = _____
3. _____	_____	_____	_____	FACU species	_____ x 4 = _____
4. _____	_____	_____	_____	UPL species	_____ x 5 = _____
5. _____	_____	_____	_____	Column Totals:	_____ (A) _____ (B)
_____ = Total Cover				Prevalence Index = B/A =	_____
<u>Herb Stratum</u> (Plot size: <u>5 ft dia</u>)				Hydrophytic Vegetation Indicators:	
1. <u>Lolium multiflorum</u>	<u>90%</u>	<u>yes</u>	<u>FAC</u>	Rapid Test for Hydrophytic Vegetation	
2. _____	_____	_____	_____	<u>x</u> Dominance Test is >50%	
3. _____	_____	_____	_____	Prevalence Index is <3.0 ⁽¹⁾	
4. _____	_____	_____	_____	Morphological Adaptations ⁽¹⁾ (Provide supporting data in Remarks or on a separate sheet)	
5. _____	_____	_____	_____	Wetland Non-Vascular Plants ⁽¹⁾	
6. _____	_____	_____	_____	Problematic Hydrophytic Vegetation ⁽¹⁾ (Explain)	
7. _____	_____	_____	_____	(1) Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
8. _____	_____	_____	_____		
9. _____	_____	_____	_____		
10. _____	_____	_____	_____		
11. _____	_____	_____	_____		
_____ = Total Cover				Hydrophytic Vegetation Present?	
<u>Woody Vine Stratum</u> (Plot size: _____)				Yes <u>x</u>	No _____
1. _____	_____	_____	_____		
2. _____	_____	_____	_____		
_____ = Total Cover					
% Bare Ground in Herb Stratum <u>10</u>					
Remarks:					

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features		Type (1)	Loc (2)	Texture	Remarks
	Color (moist)	%	Color (moist)	%				
0-10	10YR 3/2	100					sicl	
10-20	10YR 3/2	94%	10YR 4/3	6	C	M	sicl	

(1)Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered of Coated Sand Grains. (2)Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators of Problematic Hydric Soils(3).

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> (except MLRA 1)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Matrix (F3)	(3) indicators of hydrophytic vegetation
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Redox Dark Surface (F6)	and wetland hydrology must be present,
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Depleted Dark Surface (F7)	unless disturbed or problematic.
	<input type="checkbox"/> Redox Depressions (F8)	

Restrictive layer (if present):

Type: _____
 Depth (inches): _____

Hydric Soil Present? Yes _____ No x

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required: (check all that apply))

Secondary Indicators (2 or more required)

<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water Stained Leaves (B9) (except MLRA 1,2,4A, and 4B)	<input type="checkbox"/> Water Stained Leaves (B9) (MLRA 1,2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Field Observations:

Surface Water Present? Yes _____ No x Depth (inches): _____
 Water Table Present? Yes _____ No x Depth (inches): _____
 Saturation Present? Yes _____ No x Depth (inches): _____
 (includes capillary fringe)

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 Mountain, Valleys, and Coast Region

Project/Site: Airport Industrial City/County: Lebanon/Linn Sampling Date: 8/14/2017
 Applicant/Owner: Airport Industrial State: OR Sampling Point: SP-9
 Investigator(s): A. Martin Section, Township, Range: 16, T12S, R02W
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 0%
 Subregion (LRR): LRR A Lat: 44.529142° N Long: -123.933778° W Datum: HARN NAD83
 Soil Map Unit Name: Clackamas variant silt loam NWI classification: upland

Are Climatic / hydrologic conditions on the site typical for this time of year? Yes: x No: _____ (If no explain in remarks)
 Are Vegetation _____ Soil _____ or Hydrology _____ Significantly disturbed? Are "Normal Circumstances" present? Yes x No _____
 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>x</u>	No _____	Is the 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:	Plot located near north end of TL 2804 in small upland terrace.			

VEGETATION - Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet: Number of Dominant Species That are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That are OBL, FACW, or FAC: <u>100</u> (A/B)
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	Hydrophytic Vegetation Indicators: Rapid Test for Hydrophytic Vegetation <u>x</u> Dominance Test is >50% Prevalence Index is <3.0 ⁽¹⁾ Morphological Adaptations ⁽¹⁾ (Provide supporting data in Remarks or on a separate sheet) Wetland Non-Vascular Plants ⁽¹⁾ Problematic Hydrophytic Vegetation ⁽¹⁾ (Explain) (1) Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
4. _____	_____	_____	_____	
_____ = Total Cover	_____	_____	_____	Hydrophytic Vegetation Present? Yes <u>x</u> No _____
<u>Sapling/Shrub Stratum</u> (Plot size: _____)	_____	_____	_____	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover	_____	_____	_____	
<u>Herb Stratum</u> (Plot size: <u>5 ft dia</u>)	_____	_____	_____	
1. <u>Agrostis capillaris</u>	<u>75%</u>	<u>yes</u>	<u>FAC</u>	
2. <u>Anthoxanthum odoratum</u>	<u>15</u>	_____	<u>FACU</u>	
3. <u>Holcus lanatus</u>	<u>10</u>	_____	<u>FAC</u>	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
_____ = Total Cover	<u>100%</u>	_____	_____	
<u>Woody Vine Stratum</u> (Plot size: _____)	_____	_____	_____	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
_____ = Total Cover	_____	_____	_____	
% Bare Ground in Herb Stratum _____	_____	_____	_____	

Remarks:

SOIL

Profile Description: (Describe to the depth needed to document the indicator of confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features		Type (1)	Loc (2)	Texture	Remarks
	Color (moist)	%	Color (moist)	%				
0-9	10YR 3/2	99	10YR 4/4	1	C	PL	sicl	1% OR
9-14	10YR 3/2	95%	10YR 4/4	5	C	M	sicl	
14-21	10YR 4/2	95%	10YR 5/4	5	C	M	cl	

(1)Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered of Coated Sand Grains. (2)Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators of Problematic Hydric Soils(3).

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> (except MLRA 1)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Matrix (F3)	(3) indicators of hydrophytic vegetation
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Redox Dark Surface (F6)	and wetland hydrology must be present,
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Depleted Dark Surface (F7)	unless disturbed or problematic.
	<input type="checkbox"/> Redox Depressions (F8)	

Restrictive layer (if present):

Type: _____
 Depth (inches): _____

Hydric Soil Present? Yes _____ No x

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required: (check all that apply))

Secondary Indicators (2 or more required)

<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water Stained Leaves (B9) (except MLRA 1,2,4A, and 4B)	<input type="checkbox"/> Water Stained Leaves (B9) (MLRA 1,2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Field Observations:

Surface Water Present? Yes _____ No x Depth (inches): _____
 Water Table Present? Yes _____ No x Depth (inches): _____
 Saturation Present? Yes _____ No x Depth (inches): _____
 (includes capillary fringe)

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 Mountain, Valleys, and Coast Region

Project/Site: Airport Industrial City/County: Lebanon/Linn Sampling Date: 8/14/2017
 Applicant/Owner: City of Lebanon State: OR Sampling Point: SP-10
 Investigator(s): A. Martin Section, Township, Range: 16, T12S, R02W
 Landform (terrace, terrace, etc.): terrace Local relief (concave, convex, none): concave Slope (%): 0%
 Subregion (LRR): LRR A Lat: 44.529142° N Long: -123.933778° W Datum: HARN NAD83
 Soil Map Unit Name: Clackamas variant silt loam NWI classification: upland

Are Climatic / hydrologic conditions on the site typical for this time of year? Yes: x No: _____ (If no explain in remarks)
 Are Vegetation _____ Soil _____ or Hydrology _____ Significantly disturbed? Are "Normal Circumstances" present? Yes x No _____
 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>x</u>	No _____	Is the Sampled Area within a Wetland?	Yes <u>x</u>	No _____
Hydric Soil Present?	Yes <u>x</u>	No _____			
Wetland Hydrology Present?	Yes <u>x</u>	No _____			
Remarks: <u>Plot located in wetland adjacent to small terrace on north end of TL 2804</u>					

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: <u>30 ft dia</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet: Number of Dominant Species That are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That are OBL, FACW, or FAC: <u>100</u> (A/B)
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
_____ = Total Cover				Hydrophytic Vegetation Indicators: Rapid Test for Hydrophytic Vegetation x Dominance Test is >50% Prevalence Index is <3.0 ⁽¹⁾ Morphological Adaptations ⁽¹⁾ (Provide supporting data in Remarks or on a separate sheet) Wetland Non-Vascular Plants ⁽¹⁾ Problematic Hydrophytic Vegetation ⁽¹⁾ (Explain) (1) Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
_____ = Total Cover				
Sapling/Shrub Stratum (Plot size: _____)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover				
Herb Stratum (Plot size: <u>5 ft dia</u>)				
1. <u>Agrostis capillaris</u>	<u>75%</u>	<u>yes</u>	<u>FAC</u>	
2. <u>Anthoxanthum odoratum</u>	<u>15</u>	_____	<u>FACU</u>	
3. <u>Hypochaeris radicata</u>	<u>10</u>	_____	<u>FACU</u>	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
_____ = Total Cover				
Woody Vine Stratum (Plot size: _____)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
_____ = Total Cover				
% Bare Ground in Herb Stratum _____				
Remarks: _____				

SOIL

Profile Description: (Describe to the depth needed to document the indicator of confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features		Type (1)	Loc (2)	Texture	Remarks
	Color (moist)	%	Color (moist)	%				
0-7	10YR 3/2	100					sicl	
7-12	10YR 3/2	95%	10YR 4/4	5	C	M	sicl	
12-20	10YR 4/2	94%	10YR 4/4	6	C	M	sicl	

(1)Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered of Coated Sand Grains. (2)Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators of Problematic Hydric Soils(3).

<input type="checkbox"/>	Histosol (A1)	<input type="checkbox"/>	Sandy Redox (S5)	<input type="checkbox"/>	2 cm Muck (A10)
<input type="checkbox"/>	Histic Epipedon (A2)	<input type="checkbox"/>	Stripped Matrix (S6)	<input type="checkbox"/>	Red Parent Material (TF2)
<input type="checkbox"/>	Black Histic (A3)	<input type="checkbox"/>	Loamy Mucky Mineral (F1)	<input type="checkbox"/>	Other (Explain in Remarks)
<input type="checkbox"/>	Hydrogen Sulfide (A4)	<input type="checkbox"/>	(except MLRA 1)		
<input checked="" type="checkbox"/>	Depleted Below Dark Surface (A11)	<input type="checkbox"/>	Loamy Gleyed Matrix (F2)		
<input type="checkbox"/>	Thick Dark Surface (A12)	<input type="checkbox"/>	Depleted Matrix (F3)		
<input type="checkbox"/>	Sandy Mucky Mineral (S1)	<input checked="" type="checkbox"/>	Redox Dark Surface (F6)		(3) indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/>	Sandy Gleyed Matrix (S4)	<input type="checkbox"/>	Depleted Dark Surface (F7)		
<input type="checkbox"/>		<input type="checkbox"/>	Redox Depressions (F8)		

Restrictive layer (if present):

Type: _____
 Depth (inches): _____

Hydric Soil Present? Yes No

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required: (check all that apply))

Secondary Indicators (2 or more required)

<input type="checkbox"/>	Surface Water (A1)	<input type="checkbox"/>	Water Stained Leaves (B9) (except MLRA 1,2,4A, and 4B)	<input type="checkbox"/>	Water Stained Leaves (B9) (MLRA 1,2, 4A, and 4B)
<input type="checkbox"/>	High Water Table (A2)	<input type="checkbox"/>	Salt Crust (B11)	<input type="checkbox"/>	Drainage Patterns (B10)
<input type="checkbox"/>	Saturation (A3)	<input type="checkbox"/>	Aquatic Invertebrates (B13)	<input type="checkbox"/>	Dry-Season Water Table (C2)
<input type="checkbox"/>	Water Marks (B1)	<input type="checkbox"/>	Hydrogen Sulfide Odor (C1)	<input checked="" type="checkbox"/>	Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/>	Sediment Deposits (B2)	<input type="checkbox"/>	Oxidized Rhizospheres along Living Roots (C3)	<input checked="" type="checkbox"/>	Geomorphic Position (D2)
<input type="checkbox"/>	Drift Deposits (B3)	<input type="checkbox"/>	Presence of Reduced Iron (C4)	<input type="checkbox"/>	Shallow Aquitard (D3)
<input type="checkbox"/>	Algal Mat or Crust (B4)	<input type="checkbox"/>	Recent iron Reduction in Tilled Soils (C6)	<input type="checkbox"/>	FAC-Neutral Test (D5)
<input type="checkbox"/>	Iron Deposits (B5)	<input type="checkbox"/>	Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/>	Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/>	Surface Soil Cracks (B6)	<input type="checkbox"/>	Other (Explain in Remarks)	<input type="checkbox"/>	Frost-Heave Hummocks (D7)
<input type="checkbox"/>	Inundation Visible on Aerial imagery (B7)				
<input type="checkbox"/>	Sparsely Vegetated Concave Surface (B8)				

Field Observations:

Surface Water Present? Yes _____ No Depth (inches): _____
 Water Table Present? Yes _____ No Depth (inches): _____
 Saturation Present? Yes _____ No Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present?

Yes No

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

Remarks:

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

Project/Site: Airport Industrial City/County: Lebanon/Linn Sampling Date: 8/14/2017
 Applicant/Owner: City of Lebanon State: OR Sampling Point: SP-11
 Investigator(s): A. Martin Section, Township, Range: 16, T12S, R02W
 Landform (terrace, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 0%
 Subregion (LRR): LRR A Lat: 44.529142° N Long: -123.933778° W Datum: OR State Plane N HARN NAD 83
 Soil Map Unit Name: Clackamas variant silt loam NWI classification: upland

Are Climatic / hydrologic conditions on the site typical for this time of year? Yes: x No: _____ (If no explain in remarks)
 Are Vegetation _____ Soil _____ or Hydrology _____ Significantly disturbed? Are "Normal Circumstances" present? Yes x No _____
 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>x</u>	No _____	Is the Sampled Area within a Wetland?	Yes <u>x</u>	No _____
Hydric Soil Present?	Yes <u>x</u>	No _____			
Wetland Hydrology Present?	Yes <u>x</u>	No _____			
Remarks: <u>Plot located on west side of small upland terrace at north end of TL2804.</u>					

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:
<u>Tree Stratum</u> (Plot size: _____)				Number of Dominant Species That are OBL, FACW, or FAC: <u>2</u> (A)
1. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>2</u> (B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
	_____ = Total Cover			Percent of Dominant Species That are OBL, FACW, or FAC: <u>100</u> (A/B)
<u>Sapling/Shrub Stratum</u> (Plot size: _____)				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
	_____ = Total Cover			
<u>Herb Stratum</u> (Plot size: <u>5 ft dia</u>)				Hydrophytic Vegetation Indicators: Rapid Test for Hydrophytic Vegetation <u>x</u> Dominance Test is >50% Prevalence Index is <3.0 ⁽¹⁾ Morphological Adaptations ⁽¹⁾ (Provide supporting data in Remarks or on a separate sheet) Wetland Non-Vascular Plants ⁽¹⁾ Problematic Hydrophytic Vegetation ⁽¹⁾ (Explain) (1) Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Agrostis capillaris</u>	<u>70%</u>	<u>yes</u>	<u>FAC</u>	
2. <u>Schedonorus arundinaceus</u>	<u>30</u>	<u>yes</u>	<u>FAC</u>	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
	<u>100%</u> = Total Cover			
<u>Woody Vine Stratum</u> (Plot size: _____)				Hydrophytic Vegetation Present? Yes <u>x</u> No _____
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
	_____ = Total Cover			
% Bare Ground in Herb Stratum _____				
Remarks:				

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features		Type (1)	Loc (2)	Texture	Remarks
	Color (moist)	%	Color (moist)	%				
0-6	10YR 3/2	100					sicl	
6-11	10YR 3/2	95%	10YR 4/6	5	C	M	sicl	
11-19	10YR 3/2	90%	10YR 4/6	10	C	M	sicl	

(1)Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered of Coated Sand Grains. (2)Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators of Problematic Hydric Soils(3).

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> (except MLRA 1)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input checked="" type="checkbox"/> Redox Dark Surface (F6)	(3) indicators of hydrophytic vegetation
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Depleted Dark Surface (F7)	and wetland hydrology must be present,
	<input type="checkbox"/> Redox Depressions (F8)	unless disturbed or problematic.

Restrictive layer (if present):

Type: _____
 Depth (inches): _____

Hydric Soil Present? Yes No

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required: (check all that apply))

Secondary Indicators (2 or more required)

<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water Stained Leaves (B9) (except MLRA 1,2,4A, and 4B)	<input type="checkbox"/> Water Stained Leaves (B9) (MLRA 1,2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input checked="" type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input checked="" type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Field Observations:

Surface Water Present? Yes _____ No Depth (inches): _____
 Water Table Present? Yes _____ No Depth (inches): _____
 Saturation Present? Yes _____ No Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present?
 Yes No

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

Remarks:

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

Project/Site: Airport Industrial City/County: Lebanon/Linn Sampling Date: 8/14/2017
 Applicant/Owner: City of Lebanon State: OR Sampling Point: SP-12
 Investigator(s): A. Martin Section, Township, Range: 16, T12S, R02W
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 0%
 Subregion (LRR): LRR A Lat: 44.529142° N Long: -123.933778° W Datum: HARN NAD83
 Soil Map Unit Name: Clackamas variant silt loam NWI classification: upland

Are Climatic / hydrologic conditions on the site typical for this time of year? Yes: x No: _____ (If no explain in remarks)
 Are Vegetation _____ Soil _____ or Hydrology _____ Significantly disturbed? Are "Normal Circumstances" present? Yes x No _____
 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>x</u>	No _____	Is the 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:	Plot located in small upland terrace at north end of TL 2804			

VEGETATION - Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>2</u> (B)
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	Percent of Dominant Species That are OBL, FACW, or FAC: <u>100</u> (A/B)
_____ = Total Cover				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
<u>Sapling/Shrub Stratum</u> (Plot size: _____)	1. _____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover				
<u>Herb Stratum</u> (Plot size: <u>5 ft dia</u>)	1. <u>Agrostis capillaris</u>	<u>65%</u>	<u>yes</u> <u>FAC</u>	Hydrophytic Vegetation Indicators: Rapid Test for Hydrophytic Vegetation <u>x</u> Dominance Test is >50% Prevalence Index is <3.0 ⁽¹⁾ Morphological Adaptations ⁽¹⁾ (Provide supporting data in Remarks or on a separate sheet) Wetland Non-Vascular Plants ⁽¹⁾ Problematic Hydrophytic Vegetation ⁽¹⁾ (Explain) (1) Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>Schedonorus arundinaceus</u>	<u>25</u>	<u>yes</u> <u>FAC</u>		
3. <u>Hypochaeris radicata</u>	<u>5</u>	<u>FACU</u>		
4. <u>Daucus carota</u>	<u>5</u>	<u>FACU</u>		
5. _____	_____	_____		
6. _____	_____	_____		
7. _____	_____	_____		
8. _____	_____	_____		
9. _____	_____	_____		
10. _____	_____	_____		
11. _____	_____	_____		
_____ = Total Cover				
<u>Woody Vine Stratum</u> (Plot size: _____)	1. _____	_____	_____	Hydrophytic Vegetation Present? Yes <u>x</u> No _____
2. _____	_____	_____	_____	
_____ = Total Cover				
% Bare Ground in Herb Stratum _____				
Remarks:				

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features		Type (1)	Loc (2)	Texture	Remarks
	Color (moist)	%	Color (moist)	%				
0-9	10YR 3/2	100					sicl	
9-14	10YR 3/2	95%	10YR 4/4	5	C	M	sicl	
14-20	10YR 3/2	90%	10YR 4/4	10	C	M	sicl	

(1)Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered of Coated Sand Grains. (2)Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators of Problematic Hydric Soils(3).

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> (except MLRA 1)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Matrix (F3)	(3) indicators of hydrophytic vegetation
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Redox Dark Surface (F6)	and wetland hydrology must be present,
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Depleted Dark Surface (F7)	unless disturbed or problematic.
	<input type="checkbox"/> Redox Depressions (F8)	

Restrictive layer (if present):

Type: _____
 Depth (inches): _____

Hydric Soil Present? Yes _____ No x

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required: (check all that apply))

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Surface Soil Cracks (B6)
- Inundation Visible on Aerial imagery (B7)
- Sparsely Vegetated Concave Surface (B8)

Secondary Indicators (2 or more required)

- Water Stained Leaves (B9) (except MLRA 1,2,4A, and 4B)
- Salt Crust (B11)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent iron Reduction in Tilled Soils (C6)
- Stunted or Stressed Plants (D1) (LRR A)
- Other (Explain in Remarks)
- Water Stained Leaves (B9) (MLRA 1,2, 4A, and 4B)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Saturation Visible on Aerial Imagery (C9)
- Geomorphic Position (D2)
- Shallow Aquitard (D3)
- FAC-Neutral Test (D5)
- Raised Ant Mounds (D6) (LRR A)
- Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes _____ No x Depth (inches): _____
 Water Table Present? Yes _____ No x Depth (inches): _____
 Saturation Present? Yes _____ No x Depth (inches): _____
 (includes capillary fringe)

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 Mountain, Valleys, and Coast Region

Project/Site: Airport Industrial City/County: Lebanon/Linn Sampling Date: 8/14/2017
 Applicant/Owner: City of Lebanon State: OR Sampling Point: SP-13
 Investigator(s): A. Martin Section, Township, Range: 16, T12S, R02W
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 0%
 Subregion (LRR): LRR A Lat: 44.529142° N Long: -123.933778° W Datum: HARN NAD83
 Soil Map Unit Name: Clackamas variant silt loam NWI classification: upland

Are Climatic / hydrologic conditions on the site typical for this time of year? Yes: x No: _____ (If no explain in remarks)
 Are Vegetation _____ Soil _____ or Hydrology _____ Significantly disturbed? Are "Normal Circumstances" present? Yes x No _____
 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>x</u>	No _____	Is the Sampled Area within a Wetland?		
Hydric Soil Present?	Yes _____	No <u>x</u>		Yes _____	No <u>x</u>
Wetland Hydrology Present?	Yes _____	No <u>x</u>			
Remarks: <u>Plot located on east side of small terrace in central field. Variety of non-native pasture grasses with weedy patches.</u>					

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:
<u>Tree Stratum</u> (Plot size: _____)				Number of Dominant Species That are OBL, FACW, or FAC: <u>2</u> (A)
1. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>3</u> (B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
_____ = Total Cover	_____			Percent of Dominant Species That are OBL, FACW, or FAC: <u>66</u> (A/B)
<u>Sapling/Shrub Stratum</u> (Plot size: _____)				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FACU species _____ x 3 = _____ UPL species _____ x 4 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover	_____			
<u>Herb Stratum</u> (Plot size: <u>5 ft dia</u>)				Hydrophytic Vegetation Indicators: _____ Rapid Test for Hydrophytic Vegetation x _____ Dominance Test is >50% _____ Prevalence Index is <3.0 ⁽¹⁾ _____ Morphological Adaptations ⁽¹⁾ (Provide supporting data in Remarks or on a separate sheet) _____ Wetland Non-Vascular Plants ⁽¹⁾ _____ Problematic Hydrophytic Vegetation ⁽¹⁾ (Explain) (1) Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Schedonorus arundinaceus</u>	<u>40%</u>	<u>yes</u>	<u>FAC</u>	
2. <u>Agrostic capillaris</u>	<u>40</u>	<u>yes</u>	<u>FAC</u>	
3. <u>Anthoxanthum odoratum</u>	<u>20</u>	<u>yes</u>	<u>FACU</u>	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
_____ = Total Cover	<u>100%</u>			
<u>Woody Vine Stratum</u> (Plot size: _____)				Hydrophytic Vegetation Present? Yes <u>x</u> No _____
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
_____ = Total Cover	_____			
% Bare Ground in Herb Stratum _____				
Remarks:				

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features		Type (1)	Loc (2)	Texture	Remarks
	Color (moist)	%	Color (moist)	%				
0-10	10YR 3/2	100					sicl	
10-20	10YR 3/2	95%	10YR 4/4	5	C	M	sicl	

(1)Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered of Coated Sand Grains. (2)Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators of Problematic Hydric Soils(3).

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> (except MLRA 1)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Matrix (F3)	(3) indicators of hydrophytic vegetation
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Redox Dark Surface (F6)	and wetland hydrology must be present,
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Depleted Dark Surface (F7)	unless disturbed or problematic.
	<input type="checkbox"/> Redox Depressions (F8)	

Restrictive layer (if present):

Type: _____
 Depth (inches): _____

Hydric Soil Present? Yes _____ No x

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required: (check all that apply))

Secondary Indicators (2 or more required)

<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water Stained Leaves (B9) (except MLRA 1,2,4A, and 4B)	<input type="checkbox"/> Water Stained Leaves (B9) (MLRA 1,2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Field Observations:

Surface Water Present? Yes _____ No x Depth (inches): _____
 Water Table Present? Yes _____ No x Depth (inches): _____
 Saturation Present? Yes _____ No x Depth (inches): _____
 (includes capillary fringe)

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 Mountain, Valleys, and Coast Region

Project/Site: Airport Industrial City/County: Lebanon/Linn Sampling Date: 8/14/2017
 Applicant/Owner: City of Lebanon State: OR Sampling Point: SP-14
 Investigator(s): A. Martin Section, Township, Range: 16, T12S, R02W
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): concave Slope (%): 0%
 Subregion (LRR): LRR A Lat: 44.529142° N Long: -123.933778° W Datum: HARN NAD83
 Soil Map Unit Name: Clackamas variant silt loam NWI classification: upland

Are Climatic / hydrologic conditions on the site typical for this time of year? Yes: x No: _____ (If no explain in remarks)
 Are Vegetation _____ Soil _____ or Hydrology _____ Significantly disturbed? Are "Normal Circumstances" present? Yes x No _____
 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>x</u>	No _____	Is the Sampled Area within a Wetland?	Yes <u>x</u>	No _____
Hydric Soil Present?	Yes <u>x</u>	No _____			
Wetland Hydrology Present?	Yes <u>x</u>	No _____			
Remarks: <u>Plot located on east side of small upland terrace near north end of TL 2804</u>					

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:
<u>Tree Stratum</u> (Plot size: _____)				Number of Dominant Species That are OBL, FACW, or FAC: <u>2</u> (A)
1. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>2</u> (B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
	_____ = Total Cover			Percent of Dominant Species That are OBL, FACW, or FAC: <u>100</u> (A/B)
<u>Sapling/Shrub Stratum</u> (Plot size: <u>10 ft dia</u>)				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
	<u>10%</u> = Total Cover			
<u>Herb Stratum</u> (Plot size: <u>5 ft dia</u>)				Hydrophytic Vegetation Indicators: Rapid Test for Hydrophytic Vegetation <u>x</u> Dominance Test is >50% Prevalence Index is <3.0 ⁽¹⁾ Morphological Adaptations ⁽¹⁾ (Provide supporting data in Remarks or on a separate sheet) Wetland Non-Vascular Plants ⁽¹⁾ Problematic Hydrophytic Vegetation ⁽¹⁾ (Explain) (1) Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Schedonorus arundinaceus</u>	<u>40%</u>	<u>yes</u>	<u>FAC</u>	
2. <u>Agrostis capillaris</u>	<u>40</u>	<u>yes</u>	<u>FAC</u>	
3. <u>Holcus lanatus</u>	<u>10</u>		<u>FAC</u>	
4. <u>Anthoxanthum odoratum</u>	<u>10</u>		<u>FACU</u>	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
	<u>100%</u> = Total Cover			
<u>Woody Vine Stratum</u> (Plot size: _____)				Hydrophytic Vegetation Present? Yes <u>x</u> No _____
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
	_____ = Total Cover			
% Bare Ground in Herb Stratum _____				
Remarks:				

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features			Type (1)	Loc (2)	Texture	Remarks
	Color (moist)	%	Color (moist)	%					
0-6	10YR 3/2	100						sicl	
6-15	10YR 3/2	95%	10YR 4/4	5	C	M		sicl	
15-20	10YR 3/1	95%	10YR 3/4	5	C	M		sicl	

(1)Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered of Coated Sand Grains. (2)Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators of Problematic Hydric Soils(3).

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> (except MLRA 1)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input checked="" type="checkbox"/> Redox Dark Surface (F6)	(3) indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Depleted Dark Surface (F7)	
	<input type="checkbox"/> Redox Depressions (F8)	

Restrictive layer (if present):

Type: _____
 Depth (inches): _____

Hydric Soil Present? Yes No

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required: (check all that apply))

Secondary Indicators (2 or more required)

<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water Stained Leaves (B9) (except MLRA 1,2,4A, and 4B)	<input type="checkbox"/> Water Stained Leaves (B9) (MLRA 1,2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input checked="" type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input checked="" type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Field Observations:

Surface Water Present? Yes _____ No Depth (inches): _____
 Water Table Present? Yes _____ No Depth (inches): _____
 Saturation Present? Yes _____ No Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present?
 Yes No

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

Remarks:

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

Project/Site: Airport Industrial City/County: Lebanon/Linn Sampling Date: 8/14/2017
 Applicant/Owner: City of Lebanon State: OR Sampling Point: SP-15
 Investigator(s): A. Martin Section, Township, Range: 16, T12S, R02W
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 0%
 Subregion (LRR): LRR A Lat: 44.529142° N Long: -123.933778° Datum: HARN NAD83
 Soil Map Unit Name: Dayton silt loam NWI classification: upland

Are Climatic / hydrologic conditions on the site typical for this time of year? Yes: x No: _____ (If no explain in remarks)
 Are Vegetation _____ Soil _____ or Hydrology _____ Significantly disturbed? Are "Normal Circumstances" present? Yes x No _____
 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>x</u>	No _____	Is the Sampled Area within a Wetland?	Yes <u>x</u>	No _____
Hydric Soil Present?	Yes <u>x</u>	No _____			
Wetland Hydrology Present?	Yes <u>x</u>	No _____			
Remarks:	Plot located on east side of TL 2804				

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: <u>30 ft dia</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>2</u> (B)
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	Percent of Dominant Species That are OBL, FACW, or FAC: <u>100</u> (A/B)
_____ = Total Cover				
Sapling/Shrub Stratum (Plot size: <u>10 ft dia</u>)				Prevalence Index worksheet:
1. _____	_____	_____	_____	Total % Cover of: _____ Multiply by: _____
2. _____	_____	_____	_____	OBL species _____ x 1 = _____
3. _____	_____	_____	_____	FACW species _____ x 2 = _____
4. _____	_____	_____	_____	FAC species _____ x 3 = _____
5. _____	_____	_____	_____	FACU species _____ x 4 = _____
_____ = Total Cover				UPL species _____ x 5 = _____
				Column Totals: _____ (A) _____ (B)
Herb Stratum (Plot size: <u>5 ft dia</u>)				Prevalence Index = B/A = _____
1. <u>Agrostis capillaris</u>	<u>60%</u>	<u>yes</u>	<u>FAC</u>	Hydrophytic Vegetation Indicators: Rapid Test for Hydrophytic Vegetation x Dominance Test is >50% Prevalence Index is <3.0 ⁽¹⁾ Morphological Adaptations ⁽¹⁾ (Provide supporting data in Remarks or on a separate sheet) Wetland Non-Vascular Plants ⁽¹⁾ Problematic Hydrophytic Vegetation ⁽¹⁾ (Explain) (1) Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>Schedonorus arundinaceus</u>	<u>40</u>	<u>yes</u>	<u>FAC</u>	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
_____ = Total Cover				
Woody Vine Stratum (Plot size: _____)				Hydrophytic Vegetation Present? Yes <u>x</u> No _____
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
_____ = Total Cover				
% Bare Ground in Herb Stratum _____				
Remarks:				

SOIL

Profile Description: (Describe to the depth needed to document the indicator of confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features		Type (1)	Loc (2)	Texture	Remarks
	Color (moist)	%	Color (moist)	%				
0-5	10YR 3/2	100					sicl	
5-10	10YR 3/2	90%	10YR 4/6	10	C	M	sicl	
10-20	10YR 4/1	90%	5YR 4/4	10	C	M	cl	

(1)Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered of Coated Sand Grains. (2)Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators of Problematic Hydric Soils(3).

<input type="checkbox"/>	Histosol (A1)	<input type="checkbox"/>	Sandy Redox (S5)	<input type="checkbox"/>	2 cm Muck (A10)
<input type="checkbox"/>	Histic Epipedon (A2)	<input type="checkbox"/>	Stripped Matrix (S6)	<input type="checkbox"/>	Red Parent Material (TF2)
<input type="checkbox"/>	Black Histic (A3)	<input type="checkbox"/>	Loamy Mucky Mineral (F1)	<input type="checkbox"/>	Other (Explain in Remarks)
<input type="checkbox"/>	Hydrogen Sulfide (A4)	<input type="checkbox"/>	(except MLRA 1)		
<input checked="" type="checkbox"/>	Depleted Below Dark Surface (A11)	<input type="checkbox"/>	Loamy Gleyed Matrix (F2)		
<input type="checkbox"/>	Thick Dark Surface (A12)	<input checked="" type="checkbox"/>	Depleted Matrix (F3)		
<input type="checkbox"/>	Sandy Mucky Mineral (S1)	<input checked="" type="checkbox"/>	Redox Dark Surface (F6)		
<input type="checkbox"/>	Sandy Gleyed Matrix (S4)	<input type="checkbox"/>	Depleted Dark Surface (F7)		
<input type="checkbox"/>		<input type="checkbox"/>	Redox Depressions (F8)		

(3) indicators 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

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required: (check all that apply))		Secondary Indicators (2 or more required)	
<input type="checkbox"/>	Surface Water (A1)	<input type="checkbox"/>	Water Stained Leaves (B9) (MLRA 1.2, 4A, and 4B)
<input type="checkbox"/>	High Water Table (A2)	<input type="checkbox"/>	Drainage Patterns (B10)
<input type="checkbox"/>	Saturation (A3)	<input type="checkbox"/>	Dry-Season Water Table (C2)
<input type="checkbox"/>	Water Marks (B1)	<input checked="" type="checkbox"/>	Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/>	Sediment Deposits (B2)	<input checked="" type="checkbox"/>	Geomorphic Position (D2)
<input type="checkbox"/>	Drift Deposits (B3)	<input type="checkbox"/>	Shallow Aquitard (D3)
<input type="checkbox"/>	Algal Mat or Crust (B4)	<input type="checkbox"/>	FAC-Neutral Test (D5)
<input type="checkbox"/>	Iron Deposits (B5)	<input type="checkbox"/>	Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/>	Surface Soil Cracks (B6)	<input type="checkbox"/>	Frost-Heave Hummocks (D7)
<input type="checkbox"/>	Inundation Visible on Aerial imagery (B7)	<input type="checkbox"/>	
<input type="checkbox"/>	Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/>	
<input type="checkbox"/>	Water Stained Leaves (B9) (except MLRA 1,2,4A, and 4B)		
<input type="checkbox"/>	Salt Crust (B11)		
<input type="checkbox"/>	Aquatic Invertebrates (B13)		
<input type="checkbox"/>	Hydrogen Sulfide Odor (C1)		
<input type="checkbox"/>	Oxidized Rhizospheres along Living Roots (C3)		
<input type="checkbox"/>	Presence of Reduced Iron (C4)		
<input type="checkbox"/>	Recent iron Reduction in Tilled Soils (C6)		
<input type="checkbox"/>	Stunted or Stressed Plants (D1) (LRR A)		
<input type="checkbox"/>	Other (Explain in Remarks)		

Field Observations:

Surface Water Present? Yes _____ No Depth (inches): _____
 Water Table Present? Yes _____ No Depth (inches): _____
 Saturation Present? (includes capillary fringe) Yes _____ No Depth (inches): _____

Wetland Hydrology Present?
 Yes No

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

Remarks:

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

Project/Site: Airport Industrial City/County: Lebanon/Linn Sampling Date: 8/14/2017
 Applicant/Owner: City of Lebanon State: OR Sampling Point: SP-16
 Investigator(s): A. Martin Section, Township, Range: 16, T12S, R02W
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 0%
 Subregion (LRR): LRR A Lat: 44.529142° N Long: -123.933778° W Datum: HARN NAD83
 Soil Map Unit Name: Clackamas variant silt loam NWI classification: upland

Are Climatic / hydrologic conditions on the site typical for this time of year? Yes: x No: _____ (If no explain in remarks)
 Are Vegetation _____ Soil _____ or Hydrology _____ Significantly disturbed? Are "Normal Circumstances" present? Yes x No _____
 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>x</u>	No _____	Is the Sampled Area within a Wetland?	Yes <u>x</u>	No _____
Hydric Soil Present?	Yes <u>x</u>	No _____			
Wetland Hydrology Present?	Yes <u>x</u>	No _____			
Remarks:	Plot located in east field to test slightly crowned area.				

VEGETATION - Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:	
1. _____	_____	_____	_____	Number of Dominant Species That are OBL, FACW, or FAC: _____	<u>2</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: _____	<u>2</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That are OBL, FACW, or FAC: _____	<u>100</u> (A/B)
4. _____	_____	_____	_____	Prevalence Index worksheet:	
_____ = Total Cover				Total % Cover of: _____	Multiply by: _____
<u>Sapling/Shrub Stratum</u> (Plot size: _____)				OBL species _____ x 1 = _____	
1. _____	_____	_____	_____	FACW species _____ x 2 = _____	
2. _____	_____	_____	_____	FAC species _____ x 3 = _____	
3. _____	_____	_____	_____	FACU species _____ x 4 = _____	
4. _____	_____	_____	_____	UPL species _____	
5. _____	_____	_____	_____	Column Totals: _____	(B)
_____ = Total Cover				Prevalence Index = B/A = _____	
<u>Herb Stratum</u> (Plot size: <u>5 ft dia</u>)				Hydrophytic Vegetation Indicators:	
1. <u>Agrostis capillaris</u>	<u>50%</u>	<u>yes</u>	<u>FAC</u>	Rapid Test for Hydrophytic Vegetation	
2. <u>Schedonorus arundinaceus</u>	<u>25</u>	<u>yes</u>	<u>FAC</u>	<u>x</u> Dominance Test is >50%	
3. <u>Anthoxanthum odoratum</u>	<u>15</u>		<u>FACU</u>	Prevalence Index is <3.0 ⁽¹⁾	
4. <u>Hypochaeris radicata</u>	<u>10</u>		<u>FACU</u>	Morphological Adaptations ⁽¹⁾ (Provide supporting data in Remarks or on a separate sheet)	
5. _____	_____	_____	_____	Wetland Non-Vascular Plants ⁽¹⁾	
6. _____	_____	_____	_____	Problematic Hydrophytic Vegetation ⁽¹⁾ (Explain)	
7. _____	_____	_____	_____	(1) Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
8. _____	_____	_____	_____		
9. _____	_____	_____	_____		
10. _____	_____	_____	_____		
11. _____	_____	_____	_____		
_____ = Total Cover					
<u>Woody Vine Stratum</u> (Plot size: _____)				Hydrophytic Vegetation Present?	
1. _____	_____	_____	_____	Yes <u>x</u> No _____	
2. _____	_____	_____	_____		
_____ = Total Cover					
<u>% Bare Ground in Herb Stratum</u> _____					
Remarks:					

SOIL

Profile Description: (Describe to the depth needed to document the indicator of confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features		Type (1)	Loc (2)	Texture	Remarks
	Color (moist)	%	Color (moist)	%				
0-8	10YR 3/2	100					sicl	
8-11	10YR 3/2	95%	10YR 4/4	5	C	M	sicl	
11-21	10YR 4/2	90%	10YR 5/4	10	C	M	cl	

(1)Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered of Coated Sand Grains. (2)Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators of Problematic Hydric Soils(3).

<input type="checkbox"/>	Histosol (A1)	<input type="checkbox"/>	Sandy Redox (S5)	<input type="checkbox"/>	2 cm Muck (A10)
<input type="checkbox"/>	Histic Epipedon (A2)	<input type="checkbox"/>	Stripped Matrix (S6)	<input type="checkbox"/>	Red Parent Material (TF2)
<input type="checkbox"/>	Black Histic (A3)	<input type="checkbox"/>	Loamy Mucky Mineral (F1)	<input type="checkbox"/>	Other (Explain in Remarks)
<input type="checkbox"/>	Hydrogen Sulfide (A4)	<input type="checkbox"/>	(except MLRA 1)		
<input checked="" type="checkbox"/>	Depleted Below Dark Surface (A11)	<input type="checkbox"/>	Loamy Gleyed Matrix (F2)		
<input type="checkbox"/>	Thick Dark Surface (A12)	<input type="checkbox"/>	Depleted Matrix (F3)		
<input type="checkbox"/>	Sandy Mucky Mineral (S1)	<input checked="" type="checkbox"/>	Redox Dark Surface (F6)		
<input type="checkbox"/>	Sandy Gleyed Matrix (S4)	<input type="checkbox"/>	Depleted Dark Surface (F7)		
		<input type="checkbox"/>	Redox Depressions (F8)		

(3) indicators 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

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required: (check all that apply))

Secondary Indicators (2 or more required)

<input type="checkbox"/>	Surface Water (A1)	<input type="checkbox"/>	Water Stained Leaves (B9) (except MLRA 1,2,4A, and 4B)	<input type="checkbox"/>	Water Stained Leaves (B9) (MLRA 1,2, 4A, and 4B)
<input type="checkbox"/>	High Water Table (A2)	<input type="checkbox"/>	Salt Crust (B11)	<input type="checkbox"/>	Drainage Patterns (B10)
<input type="checkbox"/>	Saturation (A3)	<input type="checkbox"/>	Aquatic Invertebrates (B13)	<input type="checkbox"/>	Dry-Season Water Table (C2)
<input type="checkbox"/>	Water Marks (B1)	<input type="checkbox"/>	Hydrogen Sulfide Odor (C1)	<input checked="" type="checkbox"/>	Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/>	Sediment Deposits (B2)	<input type="checkbox"/>	Oxidized Rhizospheres along Living Roots (C3)	<input checked="" type="checkbox"/>	Geomorphic Position (D2)
<input type="checkbox"/>	Drift Deposits (B3)	<input type="checkbox"/>	Presence of Reduced Iron (C4)	<input type="checkbox"/>	Shallow Aquitard (D3)
<input type="checkbox"/>	Algal Mat or Crust (B4)	<input type="checkbox"/>	Recent iron Reduction in Tilled Soils (C6)	<input type="checkbox"/>	FAC-Neutral Test (D5)
<input type="checkbox"/>	Iron Deposits (B5)	<input type="checkbox"/>	Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/>	Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/>	Surface Soil Cracks (B6)	<input type="checkbox"/>	Other (Explain in Remarks)	<input type="checkbox"/>	Frost-Heave Hummocks (D7)
<input type="checkbox"/>	Inundation Visible on Aerial imagery (B7)				
<input type="checkbox"/>	Sparsely Vegetated Concave Surface (B8)				

Field Observations:

Surface Water Present? Yes No Depth (inches): _____
 Water Table Present? Yes No Depth (inches): _____
 Saturation Present? (includes capillary fringe) Yes No Depth (inches): _____

Wetland Hydrology Present?

Yes No

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

Remarks:

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

Project/Site: Airport Industrial City/County: Lebanon/Linn Sampling Date: 8/14/2017
 Applicant/Owner: City of Lebanon State: OR Sampling Point: SP-17
 Investigator(s): A. Martin Section, Township, Range: 16, T12S, R02W
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): concave Slope (%): 0%
 Subregion (LRR): LRR A Lat: 44.529142° N Long: -123.933778° W Datum: HARN NAD83
 Soil Map Unit Name: Dayton silt loam NWI classification: upland

Are Climatic / hydrologic conditions on the site typical for this time of year? Yes: x No: (If no explain in remarks)
 Are Vegetation Soil or Hydrology Significantly disturbed? Are "Normal Circumstances" present? Yes x No
 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>x</u>	No <u> </u>	Is the Sampled Area within a Wetland?	Yes <u>x</u>	No <u> </u>
Hydric Soil Present?	Yes <u>x</u>	No <u> </u>			
Wetland Hydrology Present?	Yes <u>x</u>	No <u> </u>			
Remarks: <u>Plot located in cultivated rye grass field</u>					

VEGETATION - Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: <u> </u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	Number of Dominant Species That are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That are OBL, FACW, or FAC: <u>100</u> (A/B)
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u> = Total Cover				Prevalence Index worksheet: Total % Cover of: <u> </u> Multiply by: OBL species <u> </u> x 1 = <u> </u> FACW species <u> </u> x 2 = <u> </u> FAC species <u> </u> x 3 = <u> </u> FACU species <u> </u> x 4 = <u> </u> UPL species <u> </u> x 5 = <u> </u> Column Totals: <u> </u> (A) <u> </u> (B) Prevalence Index = B/A = <u> </u>
<u>Sapling/Shrub Stratum</u> (Plot size: <u> </u>)				
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u> = Total Cover				
<u>Herb Stratum</u> (Plot size: <u>5 ft dia</u>)				Hydrophytic Vegetation Indicators: <u> </u> Rapid Test for Hydrophytic Vegetation <u>x</u> Dominance Test is >50% Prevalence Index is <3.0 ⁽¹⁾ Morphological Adaptations ⁽¹⁾ (Provide supporting data in Remarks or on a separate sheet) Wetland Non-Vascular Plants ⁽¹⁾ Problematic Hydrophytic Vegetation ⁽¹⁾ (Explain) (1) Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Lolium multiflorum</u>	<u>90%</u>	<u>yes</u>	<u>FAC</u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
6. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
7. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
8. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
9. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
10. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
11. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u>90%</u> = Total Cover				
<u>Woody Vine Stratum</u> (Plot size: <u> </u>)				Hydrophytic Vegetation Present? Yes <u>x</u> No <u> </u>
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u> = Total Cover				
% Bare Ground in Herb Stratum <u>90</u>				
Remarks: <u> </u>				

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features		Type (1)	Loc (2)	Texture	Remarks
	Color (moist)	%	Color (moist)	%				
0-5	10YR 3/2	100					sicl	
5-11	10YR 3/2	95%	10YR 4/4	5	C	M	sicl	
11-19	10YR 4/2	90%	10YR 4/6	10	C	M	cl	

(1)Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered of Coated Sand Grains. (2)Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators of Problematic Hydric Soils(3).

<input type="checkbox"/>	Histosol (A1)	<input type="checkbox"/>	Sandy Redox (S5)	<input type="checkbox"/>	2 cm Muck (A10)
<input type="checkbox"/>	Histic Epipedon (A2)	<input type="checkbox"/>	Stripped Matrix (S6)	<input type="checkbox"/>	Red Parent Material (TF2)
<input type="checkbox"/>	Black Histic (A3)	<input type="checkbox"/>	Loamy Mucky Mineral (F1)	<input type="checkbox"/>	Other (Explain in Remarks)
<input type="checkbox"/>	Hydrogen Sulfide (A4)	<input type="checkbox"/>	(except MLRA 1)		
<input checked="" type="checkbox"/>	Depleted Below Dark Surface (A11)	<input type="checkbox"/>	Loamy Gleyed Matrix (F2)		
<input type="checkbox"/>	Thick Dark Surface (A12)	<input type="checkbox"/>	Depleted Matrix (F3)		
<input type="checkbox"/>	Sandy Mucky Mineral (S1)	<input checked="" type="checkbox"/>	Redox Dark Surface (F6)		
<input type="checkbox"/>	Sandy Gleyed Matrix (S4)	<input type="checkbox"/>	Depleted Dark Surface (F7)		
<input type="checkbox"/>		<input type="checkbox"/>	Redox Depressions (F8)		

(3) indicators 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

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required: (check all that apply))		Secondary Indicators (2 or more required)	
<input type="checkbox"/>	Surface Water (A1)	<input type="checkbox"/>	Water Stained Leaves (B9) (MLRA 1.2, 4A, and 4B)
<input type="checkbox"/>	High Water Table (A2)	<input type="checkbox"/>	Drainage Patterns (B10)
<input type="checkbox"/>	Saturation (A3)	<input type="checkbox"/>	Dry-Season Water Table (C2)
<input type="checkbox"/>	Water Marks (B1)	<input checked="" type="checkbox"/>	Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/>	Sediment Deposits (B2)	<input checked="" type="checkbox"/>	Geomorphic Position (D2)
<input type="checkbox"/>	Drift Deposits (B3)	<input type="checkbox"/>	Shallow Aquitard (D3)
<input type="checkbox"/>	Algal Mat or Crust (B4)	<input type="checkbox"/>	FAC-Neutral Test (D5)
<input type="checkbox"/>	Iron Deposits (B5)	<input type="checkbox"/>	Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/>	Surface Soil Cracks (B6)	<input type="checkbox"/>	Frost-Heave Hummocks (D7)
<input type="checkbox"/>	Inundation Visible on Aerial imagery (B7)	<input type="checkbox"/>	
<input type="checkbox"/>	Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/>	
<input type="checkbox"/>	Water Stained Leaves (B9) (except MLRA 1,2,4A, and 4B)		
<input type="checkbox"/>	Salt Crust (B11)		
<input type="checkbox"/>	Aquatic Invertebrates (B13)		
<input type="checkbox"/>	Hydrogen Sulfide Odor (C1)		
<input type="checkbox"/>	Oxidized Rhizospheres along Living Roots (C3)		
<input type="checkbox"/>	Presence of Reduced Iron (C4)		
<input type="checkbox"/>	Recent iron Reduction in Tilled Soils (C6)		
<input type="checkbox"/>	Stunted or Stressed Plants (D1) (LRR A)		
<input type="checkbox"/>	Other (Explain in Remarks)		

Field Observations:

Surface Water Present? Yes _____ No Depth (inches): _____
 Water Table Present? Yes _____ No Depth (inches): _____
 Saturation Present? (includes capillary fringe) Yes _____ No Depth (inches): _____

Wetland Hydrology Present? Yes No

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

Remarks:

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

Project/Site: Airport Industrial City/County: Lebanon/Linn Sampling Date: 8/14/2017
 Applicant/Owner: City of Lebanon State: OR Sampling Point: SP-18
 Investigator(s): A. Martin Section, Township, Range: 16, T12S, R02W
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): concave Slope (%): 0%
 Subregion (LRR): LRR A Lat: 44.529142° N Long: -123.933778° W Datum: HARN NAD83
 Soil Map Unit Name: Clackamas variant silt loam NWI classification: upland

Are Climatic / hydrologic conditions on the site typical for this time of year? Yes: x No: _____ (If no explain in remarks)
 Are Vegetation _____ Soil _____ or Hydrology _____ Significantly disturbed? Are "Normal Circumstances" present? Yes x No _____
 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>x</u>	No _____	Is the Sampled Area within a Wetland?	Yes <u>x</u>	No _____
Hydric Soil Present?	Yes <u>x</u>	No _____			
Wetland Hydrology Present?	Yes <u>x</u>	No _____			
Remarks: <u>Plot located in cultivated annual rye grass field</u>					

VEGETATION - Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:		
1. _____	_____	_____	_____	Number of Dominant Species That are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That are OBL, FACW, or FAC: <u>100</u> (A/B)		
2. _____	_____	_____	_____			
3. _____	_____	_____	_____			
4. _____	_____	_____	_____			
_____ = Total Cover				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FACU species _____ x 3 = _____ UPL species _____ x 4 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____		
<u>Sapling/Shrub Stratum</u> (Plot size: _____)						
1. _____	_____	_____	_____			
2. _____	_____	_____	_____			
3. _____	_____	_____	_____			
4. _____	_____	_____	_____			
5. _____	_____	_____	_____			
_____ = Total Cover				Hydrophytic Vegetation Indicators: _____ Rapid Test for Hydrophytic Vegetation x _____ Dominance Test is >50% _____ Prevalence Index is <3.0 ⁽¹⁾ _____ Morphological Adaptations ⁽¹⁾ (Provide supporting data in Remarks or on a separate sheet) _____ Wetland Non-Vascular Plants ⁽¹⁾ _____ Problematic Hydrophytic Vegetation ⁽¹⁾ (Explain) (1) Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.		
<u>Herb Stratum</u> (Plot size: <u>5 ft dia</u>)						
1. <u>Lolium multiflorum</u>	<u>95%</u>	<u>yes</u>	<u>FAC</u>			
2. _____	_____	_____	_____			
3. _____	_____	_____	_____			
4. _____	_____	_____	_____			
5. _____	_____	_____	_____			
6. _____	_____	_____	_____			
7. _____	_____	_____	_____			
8. _____	_____	_____	_____			
9. _____	_____	_____	_____			
10. _____	_____	_____	_____			
11. _____	_____	_____	_____			
<u>95%</u> = Total Cover						
<u>Woody Vine Stratum</u> (Plot size: _____)						
1. _____	_____	_____	_____			
2. _____	_____	_____	_____			
_____ = Total Cover						
<u>% Bare Ground in Herb Stratum</u> <u>5</u>						
<table border="0" style="width:100%;"> <tr> <td style="width:35%;">Hydrophytic Vegetation Present?</td> <td style="width:10%;">Yes <u>x</u></td> <td style="width:10%;">No _____</td> </tr> </table>				Hydrophytic Vegetation Present?	Yes <u>x</u>	No _____
Hydrophytic Vegetation Present?	Yes <u>x</u>	No _____				
Remarks: _____						

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features			Type (1)	Loc (2)	Texture	Remarks
	Color (moist)	%	Color (moist)	%					
0-8	10YR 3/2	100						sicl	
8-12	10YR 3/2	93%	10YR 4/4	7	C	M		sicl	
12-20	10YR 4/2	85%	10YR 4/4	15	C	M		cl	

(1)Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered of Coated Sand Grains. (2)Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators of Problematic Hydric Soils(3).

<input type="checkbox"/>	Histosol (A1)	<input type="checkbox"/>	Sandy Redox (S5)	<input type="checkbox"/>	2 cm Muck (A10)
<input type="checkbox"/>	Histic Epipedon (A2)	<input type="checkbox"/>	Stripped Matrix (S6)	<input type="checkbox"/>	Red Parent Material (TF2)
<input type="checkbox"/>	Black Histic (A3)	<input type="checkbox"/>	Loamy Mucky Mineral (F1)	<input type="checkbox"/>	Other (Explain in Remarks)
<input type="checkbox"/>	Hydrogen Sulfide (A4)	<input type="checkbox"/>	(except MLRA 1)		
<input checked="" type="checkbox"/>	Depleted Below Dark Surface (A11)	<input type="checkbox"/>	Loamy Gleyed Matrix (F2)		
<input type="checkbox"/>	Thick Dark Surface (A12)	<input type="checkbox"/>	Depleted Matrix (F3)		
<input type="checkbox"/>	Sandy Mucky Mineral (S1)	<input checked="" type="checkbox"/>	Redox Dark Surface (F6)		
<input type="checkbox"/>	Sandy Gleyed Matrix (S4)	<input type="checkbox"/>	Depleted Dark Surface (F7)		
<input type="checkbox"/>		<input type="checkbox"/>	Redox Depressions (F8)		

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

Restrictive layer (if present):

Type: _____
 Depth (inches): _____

Hydric Soil Present? Yes x No _____

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

Field Observations:

Surface Water Present? Yes _____ No x Depth (inches): _____
 Water Table Present? Yes _____ No x Depth (inches): _____
 Saturation Present? (includes capillary fringe) Yes _____ No x Depth (inches): _____

Wetland Hydrology Present?
 Yes x No _____

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

Remarks:

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

Project/Site: Airport Industrial City/County: Lebanon/Linn Sampling Date: 8/14/2017
 Applicant/Owner: City of Lebanon State: OR Sampling Point: SP-19
 Investigator(s): A. Martin Section, Township, Range: 16, T12S, R02W
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 0%
 Subregion (LRR): LRR A Lat: 44.529142° N Long: -123.933778° W Datum: HARN NAD83
 Soil Map Unit Name: Clackamas variant silt loam NWI classification: upland

Are Climatic / hydrologic conditions on the site typical for this time of year? Yes: x No: _____ (If no explain in remarks)
 Are Vegetation _____ Soil _____ or Hydrology _____ Significantly disturbed? Are "Normal Circumstances" present? Yes x No _____
 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>x</u>	No _____	Is the Sampled Area within a Wetland?	Yes <u>x</u>	No _____
Hydric Soil Present?	Yes <u>x</u>	No _____			
Wetland Hydrology Present?	Yes <u>x</u>	No _____			
Remarks:	Plot located in rye grass field				

VEGETATION - Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:	
1. _____	_____	_____	_____	Number of Dominant Species That are OBL, FACW, or FAC:	<u>1</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata:	<u>1</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That are OBL, FACW, or FAC:	<u>100</u> (A/B)
4. _____	_____	_____	_____	= Total Cover	
<u>Sapling/Shrub Stratum</u> (Plot size: _____)				Prevalence Index worksheet:	
1. _____	_____	_____	_____	Total % Cover of:	<u> </u> Multiply by: _____
2. _____	_____	_____	_____	OBL species	_____ x 1 = _____
3. _____	_____	_____	_____	FACW species	_____ x 2 = _____
4. _____	_____	_____	_____	FAC species	_____ x 3 = _____
5. _____	_____	_____	_____	FACU species	_____ x 4 = _____
= Total Cover				UPL species	_____ x 5 = _____
<u>Herb Stratum</u> (Plot size: <u>5 ft dia</u>)				Column Totals:	_____ (A) _____ (B)
1. <u>Lolium multiflorum</u>	<u>85%</u>	<u>yes</u>	<u>FAC</u>	Prevalence Index = B/A = _____	
2. _____	_____	_____	_____	Hydrophytic Vegetation Indicators:	
3. _____	_____	_____	_____	_____ Rapid Test for Hydrophytic Vegetation	
4. _____	_____	_____	_____	x _____ Dominance Test is >50%	
5. _____	_____	_____	_____	Prevalence Index is <3.0 ⁽¹⁾	
6. _____	_____	_____	_____	Morphological Adaptations ⁽¹⁾ (Provide supporting data in Remarks or on a separate sheet)	
7. _____	_____	_____	_____	Wetland Non-Vascular Plants ⁽¹⁾	
8. _____	_____	_____	_____	Problematic Hydrophytic Vegetation ⁽¹⁾ (Explain)	
9. _____	_____	_____	_____	(1) Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
10. _____	_____	_____	_____	= Total Cover	
11. _____	<u>85%</u>	_____	_____	= Total Cover	
<u>Woody Vine Stratum</u> (Plot size: _____)				Hydrophytic Vegetation Present?	
1. _____	_____	_____	_____	Yes <u>x</u> No _____	
2. _____	_____	_____	_____	= Total Cover	
% Bare Ground in Herb Stratum <u>15</u>					
Remarks:					

SOIL

Profile Description: (Describe to the depth needed to document the indicator of confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features		Type (1)	Loc (2)	Texture	Remarks
	Color (moist)	%	Color (moist)	%				
0-7	10YR 3/2	100					sicl	
7-13	10YR 3/2	95%	10YR 4/6	5	C	M	sicl	
13-19	10YR 3/1	90%	10YR 3/4	10	C	M	cl	

(1)Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered of Coated Sand Grains. (2)Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators of Problematic Hydric Soils(3).

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> (except MLRA 1)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input checked="" type="checkbox"/> Redox Dark Surface (F6)	(3) indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Depleted Dark Surface (F7)	
	<input type="checkbox"/> Redox Depressions (F8)	

Restrictive layer (if present):

Type: _____
 Depth (inches): _____

Hydric Soil Present? Yes No

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

Field Observations:

Surface Water Present? Yes _____ No Depth (inches): _____
 Water Table Present? Yes _____ No Depth (inches): _____
 Saturation Present? (includes capillary fringe) Yes _____ No Depth (inches): _____

Wetland Hydrology Present? Yes No

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

Remarks:

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

Project/Site: Airport Industrial City/County: Lebanon/Linn Sampling Date: 8/17/2017
 Applicant/Owner: City of Lebanon State: OR Sampling Point: SP-20
 Investigator(s): A. Martin Section, Township, Range: 16, T12S, R02W
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): concave Slope (%): 0%
 Subregion (LRR): LRR A Lat: 44.529142° N Long: -123.933778° W Datum: HARN NAD83
 Soil Map Unit Name: Clackamas variant silt loam NWI classification: upland

Are Climatic / hydrologic conditions on the site typical for this time of year? Yes: x No: _____ (If no explain in remarks)
 Are Vegetation _____ Soil _____ or Hydrology _____ Significantly disturbed? Are "Normal Circumstances" present? Yes x No _____
 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>x</u>	No _____	Is the Sampled Area within a Wetland?	Yes <u>x</u>	No _____
Hydric Soil Present?	Yes <u>x</u>	No _____			
Wetland Hydrology Present?	Yes <u>x</u>	No _____			
Remarks: <u>Plot located at south end of TL 2802 in depression on north side of elevated berm on north side of creek</u>					

VEGETATION - Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:		
1. _____	_____	_____	_____	Number of Dominant Species That are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That are OBL, FACW, or FAC: <u>100</u> (A/B)		
2. _____	_____	_____	_____			
3. _____	_____	_____	_____			
4. _____	_____	_____	_____			
_____ = Total Cover				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FACU species _____ x 3 = _____ UPL species _____ x 4 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____		
<u>Sapling/Shrub Stratum</u> (Plot size: _____)						
1. _____	_____	_____	_____			
2. _____	_____	_____	_____			
3. _____	_____	_____	_____			
4. _____	_____	_____	_____			
5. _____	_____	_____	_____			
_____ = Total Cover				Hydrophytic Vegetation Indicators: _____ Rapid Test for Hydrophytic Vegetation x _____ Dominance Test is >50% _____ Prevalence Index is <3.0 ⁽¹⁾ _____ Morphological Adaptations ⁽¹⁾ (Provide supporting data in Remarks or on a separate sheet) _____ Wetland Non-Vascular Plants ⁽¹⁾ _____ Problematic Hydrophytic Vegetation ⁽¹⁾ (Explain) (1) Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.		
<u>Herb Stratum</u> (Plot size: <u>5 ft dia</u>)						
1. <u>Lolium multiflorum</u>	<u>90%</u>	<u>yes</u>	<u>FAC</u>			
2. _____	_____	_____	_____			
3. _____	_____	_____	_____			
4. _____	_____	_____	_____			
5. _____	_____	_____	_____			
6. _____	_____	_____	_____			
7. _____	_____	_____	_____			
8. _____	_____	_____	_____			
9. _____	_____	_____	_____			
10. _____	_____	_____	_____			
11. _____	_____	_____	_____			
<u>90%</u> = Total Cover						
<u>Woody Vine Stratum</u> (Plot size: _____)						
1. _____	_____	_____	_____			
2. _____	_____	_____	_____			
_____ = Total Cover						
<u>% Bare Ground in Herb Stratum</u> <u>10</u>						
<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:35%;">Hydrophytic Vegetation Present?</td> <td style="width:10%;">Yes <u>x</u></td> <td style="width:10%;">No _____</td> </tr> </table>				Hydrophytic Vegetation Present?	Yes <u>x</u>	No _____
Hydrophytic Vegetation Present?	Yes <u>x</u>	No _____				
Remarks: _____						

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features		Type (1)	Loc (2)	Texture	Remarks
	Color (moist)	%	Color (moist)	%				
0-6	10YR 3/2	100					sicl	
6-10	10YR 3/2	95%	10YR 4/4	5	C	M	sicl	
10-12	10YR 3/2	85%	10YR 4/4	15	C	M	sicl	
12-20	10YR 4/2	90%	10YR 4/6	10	C	M	cl	

(1)Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered of Coated Sand Grains. (2)Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators of Problematic Hydric Soils(3).

<input type="checkbox"/>	Histosol (A1)	<input type="checkbox"/>	Sandy Redox (S5)	<input type="checkbox"/>	2 cm Muck (A10)
<input type="checkbox"/>	Histic Epipedon (A2)	<input type="checkbox"/>	Stripped Matrix (S6)	<input type="checkbox"/>	Red Parent Material (TF2)
<input type="checkbox"/>	Black Histic (A3)	<input type="checkbox"/>	Loamy Mucky Mineral (F1)	<input type="checkbox"/>	Other (Explain in Remarks)
<input type="checkbox"/>	Hydrogen Sulfide (A4)	<input type="checkbox"/>	(except MLRA 1)		
<input checked="" type="checkbox"/>	Depleted Below Dark Surface (A11)	<input type="checkbox"/>	Loamy Gleyed Matrix (F2)		
<input type="checkbox"/>	Thick Dark Surface (A12)	<input type="checkbox"/>	Depleted Matrix (F3)		
<input type="checkbox"/>	Sandy Mucky Mineral (S1)	<input checked="" type="checkbox"/>	Redox Dark Surface (F6)		(3) indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/>	Sandy Gleyed Matrix (S4)	<input type="checkbox"/>	Depleted Dark Surface (F7)		
<input type="checkbox"/>		<input type="checkbox"/>	Redox Depressions (F8)		

Restrictive layer (if present):

Type: _____
 Depth (inches): _____

Hydric Soil Present? Yes No

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required: (check all that apply))

Secondary Indicators (2 or more required)

<input type="checkbox"/>	Surface Water (A1)	<input type="checkbox"/>	Water Stained Leaves (B9) (except MLRA 1,2,4A, and 4B)	<input type="checkbox"/>	Water Stained Leaves (B9) (MLRA 1,2, 4A, and 4B)
<input type="checkbox"/>	High Water Table (A2)	<input type="checkbox"/>	Salt Crust (B11)	<input type="checkbox"/>	Drainage Patterns (B10)
<input type="checkbox"/>	Saturation (A3)	<input type="checkbox"/>	Aquatic Invertebrates (B13)	<input type="checkbox"/>	Dry-Season Water Table (C2)
<input type="checkbox"/>	Water Marks (B1)	<input type="checkbox"/>	Hydrogen Sulfide Odor (C1)	<input checked="" type="checkbox"/>	Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/>	Sediment Deposits (B2)	<input type="checkbox"/>	Oxidized Rhizospheres along Living Roots (C3)	<input checked="" type="checkbox"/>	Geomorphic Position (D2)
<input type="checkbox"/>	Drift Deposits (B3)	<input type="checkbox"/>	Presence of Reduced Iron (C4)	<input type="checkbox"/>	Shallow Aquitard (D3)
<input type="checkbox"/>	Algal Mat or Crust (B4)	<input type="checkbox"/>	Recent iron Reduction in Tilled Soils (C6)	<input type="checkbox"/>	FAC-Neutral Test (D5)
<input type="checkbox"/>	Iron Deposits (B5)	<input type="checkbox"/>	Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/>	Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/>	Surface Soil Cracks (B6)	<input type="checkbox"/>	Other (Explain in Remarks)	<input type="checkbox"/>	Frost-Heave Hummocks (D7)
<input type="checkbox"/>	Inundation Visible on Aerial imagery (B7)				
<input type="checkbox"/>	Sparsely Vegetated Concave Surface (B8)				

Field Observations:

Surface Water Present? Yes _____ No Depth (inches): _____
 Water Table Present? Yes _____ No Depth (inches): _____
 Saturation Present? (includes capillary fringe) Yes _____ No Depth (inches): _____

Wetland Hydrology Present? Yes No

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

Remarks:

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

Project/Site: Airport Industrial City/County: Lebanon/Linn Sampling Date: 8/14/2017
 Applicant/Owner: City of Lebanon State: OR Sampling Point: SP-21
 Investigator(s): A. Martin Section, Township, Range: 16, T12S, R02W
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 0%
 Subregion (LRR): LRR A Lat: 44.529142° N Long: -123.933778° W Datum: HARN NAD83
 Soil Map Unit Name: Clackamas variant silt loam NWI classification: upland

Are Climatic / hydrologic conditions on the site typical for this time of year? Yes: x No: _____ (If no explain in remarks)
 Are Vegetation _____ Soil _____ or Hydrology _____ Significantly disturbed? Are "Normal Circumstances" present? Yes x No _____
 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>x</u>	No _____	Is the 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:	Plot located on elevated berm on north side of creek			

VEGETATION - Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:	
1. _____	_____	_____	_____	Number of Dominant Species That are OBL, FACW, or FAC:	<u>1</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata:	<u>1</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That are OBL, FACW, or FAC:	<u>100</u> (A/B)
4. _____	_____	_____	_____	= Total Cover	
<u>Sapling/Shrub Stratum</u> (Plot size: _____)				Prevalence Index worksheet:	
1. _____	_____	_____	_____	Total % Cover of:	Multiply by:
2. _____	_____	_____	_____	OBL species _____ x 1 = _____	_____
3. _____	_____	_____	_____	FACW species _____ x 2 = _____	_____
4. _____	_____	_____	_____	FAC species _____ x 3 = _____	_____
5. _____	_____	_____	_____	FACU species _____ x 4 = _____	_____
_____ = Total Cover				UPL species _____ x 5 = _____	_____
<u>Herb Stratum</u> (Plot size: <u>5 ft dia</u>)				Column Totals:	_____ (A) _____ (B)
1. <u>Lolium multiflorum</u>	<u>100%</u>	<u>yes</u>	<u>FAC</u>	Prevalence Index = B/A = _____	
2. _____	_____	_____	_____	Hydrophytic Vegetation Indicators:	
3. _____	_____	_____	_____	Rapid Test for Hydrophytic Vegetation	
4. _____	_____	_____	_____	<u>x</u> Dominance Test is >50%	
5. _____	_____	_____	_____	Prevalence Index is <3.0 ⁽¹⁾	
6. _____	_____	_____	_____	Morphological Adaptations ⁽¹⁾ (Provide supporting data in Remarks or on a separate sheet)	
7. _____	_____	_____	_____	Wetland Non-Vascular Plants ⁽¹⁾	
8. _____	_____	_____	_____	Problematic Hydrophytic Vegetation ⁽¹⁾ (Explain)	
9. _____	_____	_____	_____	(1) Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
10. _____	_____	_____	_____	_____	
11. _____	_____	_____	_____	_____	
_____ = Total Cover				Hydrophytic Vegetation Present?	
<u>Woody Vine Stratum</u> (Plot size: _____)				Yes <u>x</u> No _____	
1. _____	_____	_____	_____	_____	
2. _____	_____	_____	_____	_____	
_____ = Total Cover				_____	
% Bare Ground in Herb Stratum _____				_____	

Remarks:

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features		Type (1)	Loc (2)	Texture	Remarks
	Color (moist)	%	Color (moist)	%				
0-10	10YR 3/2	100					sicl	
10-13	10YR 3/2	95%	10YR 4/4	5	C	M	sicl	
13-19	10YR 4/2	90%	10YR 4/6	10	C	M	cl	

(1)Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered of Coated Sand Grains. (2)Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators of Problematic Hydric Soils(3).

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> (except MLRA 1)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Matrix (F3)	(3) indicators of hydrophytic vegetation
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Redox Dark Surface (F6)	and wetland hydrology must be present,
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Depleted Dark Surface (F7)	unless disturbed or problematic.
	<input type="checkbox"/> Redox Depressions (F8)	

Restrictive layer (if present):

Type: _____
 Depth (inches): _____

Hydric Soil Present? Yes _____ No x

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required: (check all that apply))

Secondary Indicators (2 or more required)

<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water Stained Leaves (B9) (except MLRA 1,2,4A, and 4B)	<input type="checkbox"/> Water Stained Leaves (B9) (MLRA 1,2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Field Observations:

Surface Water Present? Yes _____ No x Depth (inches): _____
 Water Table Present? Yes _____ No x Depth (inches): _____
 Saturation Present? Yes _____ No x Depth (inches): _____
 (includes capillary fringe)

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 Mountain, Valleys, and Coast Region

Project/Site: Airport Industrial City/County: Lebanon/Linn Sampling Date: 8/17/2017
 Applicant/Owner: City of Lebanon State: OR Sampling Point: SP-22
 Investigator(s): A. Martin Section, Township, Range: 16, T12S, R02W
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 0%
 Subregion (LRR): LRR A Lat: 44.529142° N Long: -123.933778° W Datum: HARN NAD83
 Soil Map Unit Name: Clackamas variant silt loam NWI classification: upland

Are Climatic / hydrologic conditions on the site typical for this time of year? Yes: x No: _____ (If no explain in remarks)
 Are Vegetation _____ Soil _____ or Hydrology _____ Significantly disturbed? Are "Normal Circumstances" present? Yes x No _____
 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>x</u>	No _____	Is the Sampled Area within a Wetland?	Yes <u>x</u>	No _____
Hydric Soil Present?	Yes <u>x</u>	No _____			
Wetland Hydrology Present?	Yes <u>x</u>	No _____			
Remarks:	Plot located in wetland near south end of TL 2802				

VEGETATION - Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:	
1. _____	_____	_____	_____	Number of Dominant Species That are OBL, FACW, or FAC:	<u>1</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata:	<u>1</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That are OBL, FACW, or FAC:	<u>100</u> (A/B)
4. _____	_____	_____	_____	Prevalence Index worksheet:	
_____ = Total Cover				Total % Cover of:	Multiply by:
<u>Sapling/Shrub Stratum</u> (Plot size: _____)				OBL species	_____ x 1 = _____
1. _____	_____	_____	_____	FACW species	_____ x 2 = _____
2. _____	_____	_____	_____	FACU species	_____ x 3 = _____
3. _____	_____	_____	_____	FACU species	_____ x 4 = _____
4. _____	_____	_____	_____	UPL species	_____ x 5 = _____
5. _____	_____	_____	_____	Column Totals:	_____ (A) _____ (B)
_____ = Total Cover				Prevalence Index = B/A =	_____
<u>Herb Stratum</u> (Plot size: <u>5 ft dia</u>)				Hydrophytic Vegetation Indicators:	
1. <u>Lolium multiflorum</u>	<u>90%</u>	<u>yes</u>	<u>FAC</u>	_____ Rapid Test for Hydrophytic Vegetation	_____ x _____ Dominance Test is >50%
2. _____	_____	_____	_____	_____ Prevalence Index is <3.0 ⁽¹⁾	_____ Morphological Adaptations ⁽¹⁾ (Provide supporting data in Remarks or on a separate sheet)
3. _____	_____	_____	_____	_____ Wetland Non-Vascular Plants ⁽¹⁾	_____ Problematic Hydrophytic Vegetation ⁽¹⁾ (Explain)
4. _____	_____	_____	_____	(1) Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
5. _____	_____	_____	_____	_____	
6. _____	_____	_____	_____	_____	
7. _____	_____	_____	_____	_____	
8. _____	_____	_____	_____	_____	
9. _____	_____	_____	_____	_____	
10. _____	_____	_____	_____	_____	
11. _____	_____	_____	_____	_____	
_____ = Total Cover				Hydrophytic Vegetation Present?	
<u>Woody Vine Stratum</u> (Plot size: _____)				Yes <u>x</u>	No _____
1. _____	_____	_____	_____	_____	
2. _____	_____	_____	_____	_____	
_____ = Total Cover				_____	
% Bare Ground in Herb Stratum <u>10</u>				_____	

Remarks: _____

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SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features		Type (1)	Loc (2)	Texture	Remarks
	Color (moist)	%	Color (moist)	%				
0-8	10YR 3/2	100					sicl	
8-12	10YR 3/2	95%	10YR 4/4	5	C	M	sicl	
12-20	10YR 3/2	90%	10YR 4/4	10	C	M	sicl	

(1)Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered of Coated Sand Grains. (2)Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators of Problematic Hydric Soils(3).

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> (except MLRA 1)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Matrix (F3)	(3) indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input checked="" type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Depleted Dark Surface (F7)	
	<input type="checkbox"/> Redox Depressions (F8)	

Restrictive layer (if present):

Type: _____
 Depth (inches): _____

Hydric Soil Present? Yes No

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required: (check all that apply))

Secondary Indicators (2 or more required)

<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water Stained Leaves (B9) (except MLRA 1,2,4A, and 4B)	<input type="checkbox"/> Water Stained Leaves (B9) (MLRA 1,2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input checked="" type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input checked="" type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Field Observations:

Surface Water Present? Yes _____ No Depth (inches): _____
 Water Table Present? Yes _____ No Depth (inches): _____
 Saturation Present? Yes _____ No Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present?
 Yes No

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

Remarks:

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

Project/Site: Airport Industrial City/County: Lebanon/Linn Sampling Date: 8/17/2017
 Applicant/Owner: City of Lebanon State: OR Sampling Point: SP-23
 Investigator(s): A. Martin Section, Township, Range: 16, T12S, R02W
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 0%
 Subregion (LRR): LRR A Lat: 44.529142° N Long: -123.933778° W Datum: HARN NAD83
 Soil Map Unit Name: Clackamas variant silt loam NWI classification: upland

Are Climatic / hydrologic conditions on the site typical for this time of year? Yes: x No: _____ (If no explain in remarks)
 Are Vegetation _____ Soil _____ or Hydrology _____ Significantly disturbed? Are "Normal Circumstances" present? Yes x No _____
 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>x</u>	No _____	Is the 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:	Plot located on elevated berm on north side of creek			

VEGETATION - Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:	
1. _____	_____	_____	_____	Number of Dominant Species That are OBL, FACW, or FAC:	<u>1</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata:	<u>1</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That are OBL, FACW, or FAC:	<u>100</u> (A/B)
4. _____	_____	_____	_____	= Total Cover	
<u>Sapling/Shrub Stratum</u> (Plot size: _____)				Prevalence Index worksheet:	
1. _____	_____	_____	_____	Total % Cover of:	Multiply by:
2. _____	_____	_____	_____	OBL species _____	x 1 = _____
3. _____	_____	_____	_____	FACW species _____	x 2 = _____
4. _____	_____	_____	_____	FAC species _____	x 3 = _____
5. _____	_____	_____	_____	FACU species _____	x 4 = _____
_____ = Total Cover				UPL species _____	x 5 = _____
<u>Herb Stratum</u> (Plot size: <u>5 ft dia</u>)				Column Totals:	_____ (A) _____ (B)
1. <u>Lolium multiflorum</u>	<u>90%</u>	<u>yes</u>	<u>FAC</u>	Prevalence Index = B/A = _____	
2. _____	_____	_____	_____	Hydrophytic Vegetation Indicators:	
3. _____	_____	_____	_____	Rapid Test for Hydrophytic Vegetation	
4. _____	_____	_____	_____	x Dominance Test is >50%	
5. _____	_____	_____	_____	Prevalence Index is <3.0 ⁽¹⁾	
6. _____	_____	_____	_____	Morphological Adaptations ⁽¹⁾ (Provide supporting data in Remarks or on a separate sheet)	
7. _____	_____	_____	_____	Wetland Non-Vascular Plants ⁽¹⁾	
8. _____	_____	_____	_____	Problematic Hydrophytic Vegetation ⁽¹⁾ (Explain)	
9. _____	_____	_____	_____	(1) Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
10. _____	_____	_____	_____	_____ = Total Cover	
11. _____	_____	_____	_____	_____ = Total Cover	
<u>Woody Vine Stratum</u> (Plot size: _____)				Hydrophytic Vegetation Present?	
1. _____	_____	_____	_____	Yes <u>x</u> No _____	
2. _____	_____	_____	_____	_____ = Total Cover	
% Bare Ground in Herb Stratum <u>10</u>					
Remarks:					

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features		Type (1)	Loc (2)	Texture	Remarks
	Color (moist)	%	Color (moist)	%				
0-10	10YR 3/2	100					sicl	
10-16	10YR 3/2	95%	10YR 4/6	5	C	M	sicl	
16-20	10YR 3/2	90%	10YR 4/6	10	C	M	sicl	

(1)Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered of Coated Sand Grains. (2)Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators of Problematic Hydric Soils(3).

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Hydrogen Sulfide (A4)	(except MLRA 1)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Matrix (F3)	(3) indicators of hydrophytic vegetation
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Redox Dark Surface (F6)	and wetland hydrology must be present,
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Depleted Dark Surface (F7)	unless disturbed or problematic.
	<input type="checkbox"/> Redox Depressions (F8)	

Restrictive layer (if present):

Type: _____
 Depth (inches): _____

Hydric Soil Present? Yes _____ No x

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required: (check all that apply))

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Surface Soil Cracks (B6)
- Inundation Visible on Aerial imagery (B7)
- Sparsely Vegetated Concave Surface (B8)

- Water Stained Leaves (B9) (except MLRA 1,2,4A, and 4B)
- Salt Crust (B11)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent iron Reduction in Tilled Soils (C6)
- Stunted or Stressed Plants (D1) (LRR A)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- Water Stained Leaves (B9) (MLRA 1,2, 4A, and 4B)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Saturation Visible on Aerial Imagery (C9)
- Geomorphic Position (D2)
- Shallow Aquitard (D3)
- FAC-Neutral Test (D5)
- Raised Ant Mounds (D6) (LRR A)
- Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes _____ No x Depth (inches): _____
 Water Table Present? Yes _____ No x Depth (inches): _____
 Saturation Present? Yes _____ No x Depth (inches): _____
 (includes capillary fringe)

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 Mountain, Valleys, and Coast Region

Project/Site: Airport Industrial City/County: Lebanon/Linn Sampling Date: 8/17/2017
 Applicant/Owner: City of Lebanon State: OR Sampling Point: SP-24
 Investigator(s): A. Martin Section, Township, Range: 16, T12S, R02W
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 0%
 Subregion (LRR): LRR A Lat: 44.529142° N Long: -123.933778° W Datum: HARN NAD83
 Soil Map Unit Name: Clackamas variant silt loam NWI classification: upland

Are Climatic / hydrologic conditions on the site typical for this time of year? Yes: x No: _____ (If no explain in remarks)
 Are Vegetation _____ Soil _____ or Hydrology _____ Significantly disturbed? Are "Normal Circumstances" present? Yes x No _____
 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>x</u>	No _____	Is the 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:	Plot located on north side of wetland corridor that straddles creek.			

VEGETATION - Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:	
1. _____	_____	_____	_____	Number of Dominant Species That are OBL, FACW, or FAC:	<u>1</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata:	<u>1</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That are OBL, FACW, or FAC:	<u>100</u> (A/B)
4. _____	_____	_____	_____	Prevalence Index worksheet:	
_____ = Total Cover				Total % Cover of:	Multiply by:
<u>Sapling/Shrub Stratum</u> (Plot size: _____)				OBL species	_____ x 1 = _____
1. _____	_____	_____	_____	FACW species	_____ x 2 = _____
2. _____	_____	_____	_____	FAC species	_____ x 3 = _____
3. _____	_____	_____	_____	FACU species	_____ x 4 = _____
4. _____	_____	_____	_____	UPL species	_____ x 5 = _____
5. _____	_____	_____	_____	Column Totals:	_____ (A) _____ (B)
_____ = Total Cover				Prevalence Index = B/A =	_____
<u>Herb Stratum</u> (Plot size: <u>5 ft dia</u>)				Hydrophytic Vegetation Indicators:	
1. <u>Lolium multiflorum</u>	<u>100%</u>	<u>yes</u>	<u>FAC</u>	Rapid Test for Hydrophytic Vegetation	
2. _____	_____	_____	_____	<u>x</u> Dominance Test is >50%	
3. _____	_____	_____	_____	Prevalence Index is <3.0 ⁽¹⁾	
4. _____	_____	_____	_____	Morphological Adaptations ⁽¹⁾ (Provide supporting data in Remarks or on a separate sheet)	
5. _____	_____	_____	_____	Wetland Non-Vascular Plants ⁽¹⁾	
6. _____	_____	_____	_____	Problematic Hydrophytic Vegetation ⁽¹⁾ (Explain)	
7. _____	_____	_____	_____	(1) Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
8. _____	_____	_____	_____		
9. _____	_____	_____	_____		
10. _____	_____	_____	_____		
11. _____	_____	_____	_____		
_____ = Total Cover				Hydrophytic Vegetation Present?	
<u>Woody Vine Stratum</u> (Plot size: _____)				Yes <u>x</u> No _____	
1. _____	_____	_____	_____		
2. _____	_____	_____	_____		
_____ = Total Cover					
% Bare Ground in Herb Stratum _____					
Remarks:					

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features		Type (1)	Loc (2)	Texture	Remarks
	Color (moist)	%	Color (moist)	%				
0-11	10YR 3/2	100					sicl	
11-14	10YR 3/2	97%	10YR 3/4	3	C	M	sicl	
14-20	10YR 3/2	95%	10YR 4/4	5	C	M	sicl	

(1)Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered of Coated Sand Grains. (2)Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators of Problematic Hydric Soils(3).

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> (except MLRA 1)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Matrix (F3)	(3) indicators of hydrophytic vegetation
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Redox Dark Surface (F6)	and wetland hydrology must be present,
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Depleted Dark Surface (F7)	unless disturbed or problematic.
	<input type="checkbox"/> Redox Depressions (F8)	

Restrictive layer (if present):

Type: _____
 Depth (inches): _____

Hydric Soil Present? Yes _____ No x

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required: (check all that apply))

Secondary Indicators (2 or more required)

<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water Stained Leaves (B9) (except MLRA 1,2,4A, and 4B)	<input type="checkbox"/> Water Stained Leaves (B9) (MLRA 1,2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Field Observations:

Surface Water Present? Yes _____ No x Depth (inches): _____
 Water Table Present? Yes _____ No x Depth (inches): _____
 Saturation Present? Yes _____ No x Depth (inches): _____
 (includes capillary fringe)

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 Mountain, Valleys, and Coast Region

Project/Site: Airport Industrial City/County: Lebanon/Linn Sampling Date: 8/17/2017
 Applicant/Owner: City of Lebanon State: OR Sampling Point: SP-25
 Investigator(s): A. Martin Section, Township, Range: 16, T12S, R02W
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 6%
 Subregion (LRR): LRR A Lat: 44.529142° N Long: -123.933778° W Datum: HARN NAD83
 Soil Map Unit Name: Clackamas variant silt loam NWI classification: upland

Are Climatic / hydrologic conditions on the site typical for this time of year? Yes: x No: _____ (If no explain in remarks)
 Are Vegetation _____ Soil _____ or Hydrology _____ Significantly disturbed? Are "Normal Circumstances" present? Yes x No _____
 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>x</u>	No _____	Is the Sampled Area within a Wetland?	Yes <u>x</u>	No _____
Hydric Soil Present?	Yes <u>x</u>	No _____			
Wetland Hydrology Present?	Yes <u>x</u>	No _____			
Remarks: <u>Plot located in wetland bordering north side of creek</u>					

VEGETATION - Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That are OBL, FACW, or FAC: <u>100</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
_____ = Total Cover				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FACU species _____ x 3 = _____ UPL species _____ x 4 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
<u>Sapling/Shrub Stratum</u> (Plot size: _____)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover				Hydrophytic Vegetation Indicators: _____ Rapid Test for Hydrophytic Vegetation x _____ Dominance Test is >50% _____ Prevalence Index is <3.0 ⁽¹⁾ _____ Morphological Adaptations ⁽¹⁾ (Provide supporting data in Remarks or on a separate sheet) _____ Wetland Non-Vascular Plants ⁽¹⁾ _____ Problematic Hydrophytic Vegetation ⁽¹⁾ (Explain) (1) Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
<u>Herb Stratum</u> (Plot size: <u>5 ft dia</u>)				
1. <u>Lolium multiflorum</u>	<u>100%</u>	<u>yes</u>	<u>FAC</u>	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
<u>100%</u> = Total Cover				
<u>Woody Vine Stratum</u> (Plot size: _____)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
_____ = Total Cover				
<u>% Bare Ground in Herb Stratum</u> _____				
Hydrophytic Vegetation Present? Yes <u>x</u> No _____				

Remarks: _____

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features		Type (1)	Loc (2)	Texture	Remarks
	Color (moist)	%	Color (moist)	%				
0-8	10YR 3/2	100					sicl	
8-14	10YR 3/2	95%	10YR 4/4	5	C	M	sicl	
14-20	10YR 3/2	90%	10YR 4/4	10	C	M	sicl	

(1)Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered of Coated Sand Grains. (2)Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators of Problematic Hydric Soils(3).

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> (except MLRA 1)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input checked="" type="checkbox"/> Redox Dark Surface (F6)	(3) indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Depleted Dark Surface (F7)	
	<input type="checkbox"/> Redox Depressions (F8)	

Restrictive layer (if present):

Type: _____
 Depth (inches): _____

Hydric Soil Present? Yes No

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required: (check all that apply))	Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water Stained Leaves (B9) (except MLRA 1,2,4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Water Stained Leaves (B9) (MLRA 1,2, 4A, and 4B)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Sediment Deposits (B2)	<input checked="" type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Drift Deposits (B3)	<input checked="" type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Inundation Visible on Aerial imagery (B7)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)

Field Observations:

Surface Water Present? Yes _____ No Depth (inches): _____
 Water Table Present? Yes _____ No Depth (inches): _____
 Saturation Present? Yes _____ No Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present? Yes No

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

Remarks:

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

Project/Site: Airport Industrial City/County: Lebanon/Linn Sampling Date: 8/17/2017
 Applicant/Owner: City of Lebanon State: OR Sampling Point: SP-26
 Investigator(s): A. Martin Section, Township, Range: 16, T12S, R02W
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 5%
 Subregion (LRR): LRR A Lat: 44.529142° N Long: -123.933778° W Datum: HARN NAD83
 Soil Map Unit Name: Clackamas variant silt loam NWI classification: upland

Are Climatic / hydrologic conditions on the site typical for this time of year? Yes: x No: _____ (If no explain in remarks)
 Are Vegetation _____ Soil _____ or Hydrology _____ Significantly disturbed? Are "Normal Circumstances" present? Yes x No _____
 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>x</u>	No _____	Is the 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:	Plot located at south end of TL 2802 on north side of creek in upland			

VEGETATION - Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:	
1. _____	_____	_____	_____	Number of Dominant Species That are OBL, FACW, or FAC:	<u>1</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata:	<u>1</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That are OBL, FACW, or FAC:	<u>100</u> (A/B)
4. _____	_____	_____	_____	= Total Cover	
<u>Sapling/Shrub Stratum</u> (Plot size: _____)				Prevalence Index worksheet:	
1. _____	_____	_____	_____	Total % Cover of:	Multiply by:
2. _____	_____	_____	_____	OBL species _____ x 1 = _____	_____
3. _____	_____	_____	_____	FACW species _____ x 2 = _____	_____
4. _____	_____	_____	_____	FAC species _____ x 3 = _____	_____
5. _____	_____	_____	_____	FACU species _____ x 4 = _____	_____
_____ = Total Cover				UPL species _____ x 5 = _____	_____
<u>Herb Stratum</u> (Plot size: <u>5 ft dia</u>)				Column Totals:	_____ (A) _____ (B)
1. <u>Lolium multiflorum</u>	<u>100%</u>	<u>yes</u>	<u>FAC</u>	Prevalence Index = B/A = _____	
2. _____	_____	_____	_____	Hydrophytic Vegetation Indicators:	
3. _____	_____	_____	_____	_____ Rapid Test for Hydrophytic Vegetation	
4. _____	_____	_____	_____	x _____ Dominance Test is >50%	
5. _____	_____	_____	_____	Prevalence Index is <3.0 ⁽¹⁾	
6. _____	_____	_____	_____	Morphological Adaptations ⁽¹⁾ (Provide supporting data in Remarks or on a separate sheet)	
7. _____	_____	_____	_____	Wetland Non-Vascular Plants ⁽¹⁾	
8. _____	_____	_____	_____	Problematic Hydrophytic Vegetation ⁽¹⁾ (Explain)	
9. _____	_____	_____	_____	(1) Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
10. _____	_____	_____	_____	_____ = Total Cover	
11. _____	_____	_____	_____	_____ = Total Cover	
<u>Woody Vine Stratum</u> (Plot size: _____)				Hydrophytic Vegetation Present?	
1. _____	_____	_____	_____	Yes <u>x</u> No _____	
2. _____	_____	_____	_____	_____ = Total Cover	
% Bare Ground in Herb Stratum _____					
Remarks:					

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features		Type (1)	Loc (2)	Texture	Remarks
	Color (moist)	%	Color (moist)	%				
0-9	10YR 3/2	100					sicl	
9-20	10YR 3/2	95%	10YR 3/4	5	C	M	sicl	

(1)Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered of Coated Sand Grains. (2)Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators of Problematic Hydric Soils(3).

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> (except MLRA 1)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Matrix (F3)	(3) indicators of hydrophytic vegetation
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Redox Dark Surface (F6)	and wetland hydrology must be present,
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Depleted Dark Surface (F7)	unless disturbed or problematic.
	<input type="checkbox"/> Redox Depressions (F8)	

Restrictive layer (if present):

Type: _____
 Depth (inches): _____

Hydric Soil Present? Yes _____ No x

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required: (check all that apply))

Secondary Indicators (2 or more required)

<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water Stained Leaves (B9) (except MLRA 1,2,4A, and 4B)	<input type="checkbox"/> Water Stained Leaves (B9) (MLRA 1,2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Field Observations:

Surface Water Present? Yes _____ No x Depth (inches): _____
 Water Table Present? Yes _____ No x Depth (inches): _____
 Saturation Present? Yes _____ No x Depth (inches): _____
 (includes capillary fringe)

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 Mountain, Valleys, and Coast Region

Project/Site: Airport Industrial City/County: Lebanon/Linn Sampling Date: 8/17/2017
 Applicant/Owner: City of Lebanon State: OR Sampling Point: SP-27
 Investigator(s): A. Martin Section, Township, Range: 16, T12S, R02W
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): concave Slope (%): 0%
 Subregion (LRR): LRR A Lat: 44.529142° N Long: -123.933778° W Datum: HARN NAD83
 Soil Map Unit Name: Dayton silt loam NWI classification: upland

Are Climatic / hydrologic conditions on the site typical for this time of year? Yes: x No: _____ (If no explain in remarks)
 Are Vegetation _____ Soil _____ or Hydrology _____ Significantly disturbed? Are "Normal Circumstances" present? Yes x No _____
 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>x</u>	No _____	Is the Sampled Area within a Wetland?		
Hydric Soil Present?	Yes _____	No <u>x</u>		Yes <u>x</u>	No _____
Wetland Hydrology Present?	Yes _____	No <u>x</u>			
Remarks: <u>Plot located in wetland area on north side of creek.</u>					

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:
<u>Tree Stratum</u> (Plot size: _____)				Number of Dominant Species That are OBL, FACW, or FAC: <u>1</u> (A)
1. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>1</u> (B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
	_____ = Total Cover			Percent of Dominant Species That are OBL, FACW, or FAC: <u>100</u> (A/B)
<u>Sapling/Shrub Stratum</u> (Plot size: _____)				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FACU species _____ x 3 = _____ UPL species _____ x 4 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
	_____ = Total Cover			Hydrophytic Vegetation Indicators: _____ Rapid Test for Hydrophytic Vegetation x _____ Dominance Test is >50% _____ Prevalence Index is <3.0 ⁽¹⁾ _____ Morphological Adaptations ⁽¹⁾ (Provide supporting data in Remarks or on a separate sheet) _____ Wetland Non-Vascular Plants ⁽¹⁾ _____ Problematic Hydrophytic Vegetation ⁽¹⁾ (Explain) (1) Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
<u>Herb Stratum</u> (Plot size: <u>5 ft dia.</u>)				
1. <u>Lolium multiflorum</u>	<u>95%</u>			
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
	<u>95%</u> = Total Cover			
<u>Woody Vine Stratum</u> (Plot size: _____)				Hydrophytic Vegetation Present? Yes <u>x</u> No _____
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
	_____ = Total Cover			
% Bare Ground in Herb Stratum <u>5</u>				
Remarks:				

SOIL

Profile Description: (Describe to the depth needed to document the indicator of confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features		Type (1)	Loc (2)	Texture	Remarks
	Color (moist)	%	Color (moist)	%				
0-5	10YR 3/2	98	10YR 4/4	2	C	PL	sicl	2% OR
5-10	10YR 3/2	95%	10YR 4/4	5	C	M	sicl	
10-16	10YR 3/2	90%	10YR 4/4	10	C	M	sicl	
16-20	10YR 4/2	95%	10YR 5/4	5	C	M	cl	

(1)Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered of Coated Sand Grains. (2)Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators of Problematic Hydric Soils(3).

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> (except MLRA 1)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Matrix (F3)	(3) indicators of hydrophytic vegetation
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input checked="" type="checkbox"/> Redox Dark Surface (F6)	and wetland hydrology must be present,
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Depleted Dark Surface (F7)	unless disturbed or problematic.
	<input type="checkbox"/> Redox Depressions (F8)	

Restrictive layer (if present):

Type: _____
 Depth (inches): _____

Hydric Soil Present? Yes No

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required: (check all that apply))

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Surface Soil Cracks (B6)
- Inundation Visible on Aerial imagery (B7)
- Sparsely Vegetated Concave Surface (B8)

- Water Stained Leaves (B9) (except MLRA 1,2,4A, and 4B)
- Salt Crust (B11)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent iron Reduction in Tilled Soils (C6)
- Stunted or Stressed Plants (D1) (LRR A)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- Water Stained Leaves (B9) (MLRA 1.2, 4A, and 4B)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Saturation Visible on Aerial Imagery (C9)
- Geomorphic Position (D2)
- Shallow Aquitard (D3)
- FAC-Neutral Test (D5)
- Raised Ant Mounds (D6) (LRR A)
- Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes _____ No Depth (inches): _____
 Water Table Present? Yes _____ No Depth (inches): _____
 Saturation Present? Yes _____ No Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present?

Yes No

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

Remarks:

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

Project/Site: City of Lebanon City/County: Lebanon/Linn Sampling Date: 8/17/2017
 Applicant/Owner: Airport Industrial State: OR Sampling Point: SP-28
 Investigator(s): A. Martin Section, Township, Range: 16, T12S, R02W
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): concave Slope (%): 0%
 Subregion (LRR): LRR A Lat: 44.529142° N Long: -123.933778° W Datum: HARN NAD83
 Soil Map Unit Name: Clackamas variant silt loam NWI classification: upland

Are Climatic / hydrologic conditions on the site typical for this time of year? Yes: x No: _____ (If no explain in remarks)
 Are Vegetation _____ Soil _____ or Hydrology _____ Significantly disturbed? Are "Normal Circumstances" present? Yes x No _____
 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>x</u>	No	_____	Is the Sampled Area within a Wetland?	Yes	<u>x</u>	No	_____
Hydric Soil Present?	Yes	<u>x</u>	No	_____					
Wetland Hydrology Present?	Yes	<u>x</u>	No	_____					
Remarks: <u>Plot located on south side of creek</u>									

VEGETATION - Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:	
1. _____	_____	_____	_____	Number of Dominant Species That are OBL, FACW, or FAC:	<u>2</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata:	<u>2</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That are OBL, FACW, or FAC:	<u>100</u> (A/B)
4. _____	_____	_____	_____	Prevalence Index worksheet:	
_____ = Total Cover				Total % Cover of:	Multiply by:
<u>Sapling/Shrub Stratum</u> (Plot size: _____)				OBL species	_____ x 1 = _____
1. _____	_____	_____	_____	FACW species	_____ x 2 = _____
2. _____	_____	_____	_____	FAC species	_____ x 3 = _____
3. _____	_____	_____	_____	FACU species	_____ x 4 = _____
4. _____	_____	_____	_____	UPL species	_____ x 5 = _____
5. _____	_____	_____	_____	Column Totals:	_____ (A) _____ (B)
_____ = Total Cover				Prevalence Index = B/A =	_____
<u>Herb Stratum</u> (Plot size: <u>5 ft dia</u>)				Hydrophytic Vegetation Indicators:	
1. <u>Lolium multiflorum</u>	<u>80%</u>	<u>yes</u>	<u>FAC</u>	Rapid Test for Hydrophytic Vegetation	
2. <u>Schedonorus arundinaceus</u>	<u>20</u>	<u>yes</u>	<u>FAC</u>	<u>x</u> Dominance Test is >50%	
3. _____	_____	_____	_____	Prevalence Index is <3.0 ⁽¹⁾	
4. _____	_____	_____	_____	Morphological Adaptations ⁽¹⁾ (Provide supporting data in Remarks or on a separate sheet)	
5. _____	_____	_____	_____	Wetland Non-Vascular Plants ⁽¹⁾	
6. _____	_____	_____	_____	Problematic Hydrophytic Vegetation ⁽¹⁾ (Explain)	
7. _____	_____	_____	_____	(1) Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
8. _____	_____	_____	_____		
9. _____	_____	_____	_____		
10. _____	_____	_____	_____		
11. _____	_____	_____	_____		
_____ = Total Cover				Hydrophytic Vegetation Present?	
<u>Woody Vine Stratum</u> (Plot size: _____)				Yes	<u>x</u>
1. _____	_____	_____	_____	No	_____
2. _____	_____	_____	_____		
_____ = Total Cover					
<u>% Bare Ground in Herb Stratum</u> _____					
Remarks:					

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features		Type (1)	Loc (2)	Texture	Remarks
	Color (moist)	%	Color (moist)	%				
0-4	10YR 3/2	100					sicl	
4-8	10YR 3/2	95%	10YR 4/4	5	C	M	sicl	
8-18	10YR 3/2	90%	10YR 4/6	10	C	M	sicl	

(1)Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered of Coated Sand Grains. (2)Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators of Problematic Hydric Soils(3).

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> (except MLRA 1)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Matrix (F3)	(3) indicators of hydrophytic vegetation
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input checked="" type="checkbox"/> Redox Dark Surface (F6)	and wetland hydrology must be present,
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Depleted Dark Surface (F7)	unless disturbed or problematic.
	<input type="checkbox"/> Redox Depressions (F8)	

Restrictive layer (if present):

Type: _____
 Depth (inches): _____

Hydric Soil Present? Yes No

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

Field Observations:

Surface Water Present? Yes _____ No Depth (inches): _____
 Water Table Present? Yes _____ No Depth (inches): _____
 Saturation Present? Yes _____ No Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present? Yes No

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

Remarks:

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

Project/Site: Airport Industrial City/County: Lebanon/Linn Sampling Date: 8/17/2017
 Applicant/Owner: City of Lebanon State: OR Sampling Point: SP-29
 Investigator(s): A. Martin Section, Township, Range: 16, T12S, R02W
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 0%
 Subregion (LRR): LRR A Lat: 44.529142° N Long: -123.933778° W Datum: HARN NAD83
 Soil Map Unit Name: Clackamas variant silt loam NWI classification: upland

Are Climatic / hydrologic conditions on the site typical for this time of year? Yes: x No: _____ (If no explain in remarks)
 Are Vegetation _____ Soil _____ or Hydrology _____ Significantly disturbed? Are "Normal Circumstances" present? Yes x No _____
 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>x</u>	No _____	Is the Sampled Area within a Wetland?		
Hydric Soil Present?	Yes _____	No <u>x</u>		Yes _____	No <u>x</u>
Wetland Hydrology Present?	Yes _____	No <u>x</u>			
Remarks: <u>Plot located on slightly elevated terrace on south side of creek</u>					

VEGETATION - Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That are OBL, FACW, or FAC: <u>100</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
_____ = Total Cover				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
<u>Sapling/Shrub Stratum</u> (Plot size: _____)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover				
<u>Herb Stratum</u> (Plot size: <u>5 ft dia</u>)				
1. <u>Lolium multiflorum</u>	<u>70%</u>	<u>yes</u>	<u>FAC</u>	Hydrophytic Vegetation Indicators: Rapid Test for Hydrophytic Vegetation x Dominance Test is >50% Prevalence Index is <3.0 ⁽¹⁾ Morphological Adaptations ⁽¹⁾ (Provide supporting data in Remarks or on a separate sheet) Wetland Non-Vascular Plants ⁽¹⁾ Problematic Hydrophytic Vegetation ⁽¹⁾ (Explain) (1) Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>Schedonorus arundinaceus</u>	<u>30</u>	<u>yes</u>	<u>FAC</u>	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
<u>100%</u> = Total Cover				
<u>Woody Vine Stratum</u> (Plot size: _____)				
1. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes <u>x</u> No _____
2. _____	_____	_____	_____	
_____ = Total Cover				
<u>% Bare Ground in Herb Stratum</u> _____				
Remarks: _____				

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features		Type (1)	Loc (2)	Texture	Remarks
	Color (moist)	%	Color (moist)	%				
0-9	10YR 3/2	100					sicl	
9-17	10YR 3/2	95%	10YR 4/4	5	C	M	sicl	

(1)Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered of Coated Sand Grains. (2)Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators of Problematic Hydric Soils(3).

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> (except MLRA 1)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Matrix (F3)	(3) indicators of hydrophytic vegetation
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Redox Dark Surface (F6)	and wetland hydrology must be present,
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Depleted Dark Surface (F7)	unless disturbed or problematic.
	<input type="checkbox"/> Redox Depressions (F8)	

Restrictive layer (if present):

Type: _____
 Depth (inches): _____

Hydric Soil Present? Yes _____ No x

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required: (check all that apply))

Secondary Indicators (2 or more required)

<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water Stained Leaves (B9) (except MLRA 1,2,4A, and 4B)	<input type="checkbox"/> Water Stained Leaves (B9) (MLRA 1,2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Field Observations:

Surface Water Present? Yes _____ No x Depth (inches): _____
 Water Table Present? Yes _____ No x Depth (inches): _____
 Saturation Present? (includes capillary fringe) Yes _____ No x Depth (inches): _____

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 Mountain, Valleys, and Coast Region

Project/Site: Airport Industrial City/County: Lebanon/Linn Sampling Date: 8/17/2017
 Applicant/Owner: City of Lebanon State: OR Sampling Point: SP-30
 Investigator(s): A. Martin Section, Township, Range: 16, T12S, R02W
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 0%
 Subregion (LRR): LRR A Lat: 44.529142° N Long: -123.933778° W Datum: HARN NAD83
 Soil Map Unit Name: Clackamas variant silt loam NWI classification: upland
 Are Climatic / hydrologic conditions on the site typical for this time of year? Yes: x No: _____ (If no explain in remarks)
 Are Vegetation _____ Soil _____ or Hydrology _____ Significantly disturbed? Are "Normal Circumstances" present? Yes x No _____
 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>x</u>	No	_____	Is the Sampled Area within a Wetland?	Yes	<u>x</u>	No	_____
Hydric Soil Present?	Yes	<u>x</u>	No	_____					
Wetland Hydrology Present?	Yes	<u>x</u>	No	_____					
Remarks:	Plot located in wetland depression on south side of creek near site entrance.								

VEGETATION - Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:	
1. _____	_____	_____	_____	Number of Dominant Species That are OBL, FACW, or FAC:	<u>1</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata:	<u>1</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That are OBL, FACW, or FAC:	<u>100</u> (A/B)
4. _____	_____	_____	_____	= Total Cover	
<u>Sapling/Shrub Stratum</u> (Plot size: _____)				Prevalence Index worksheet:	
1. _____	_____	_____	_____	Total % Cover of:	Multiply by:
2. _____	_____	_____	_____	OBL species _____ x 1 = _____	_____
3. _____	_____	_____	_____	FACW species _____ x 2 = _____	_____
4. _____	_____	_____	_____	FAC species _____ x 3 = _____	_____
5. _____	_____	_____	_____	FACU species _____ x 4 = _____	_____
_____ = Total Cover				UPL species _____ x 5 = _____	_____
<u>Herb Stratum</u> (Plot size: <u>5 ft dia</u>)				Column Totals:	_____ (A) _____ (B)
1. <u>Lolium multiflorum</u>	<u>90%</u>	<u>yes</u>	<u>FAC</u>	Prevalence Index = B/A = _____	
2. _____	_____	_____	_____	Hydrophytic Vegetation Indicators:	
3. _____	_____	_____	_____	Rapid Test for Hydrophytic Vegetation	
4. _____	_____	_____	_____	<u>x</u> Dominance Test is >50%	
5. _____	_____	_____	_____	Prevalence Index is <3.0 ⁽¹⁾	
6. _____	_____	_____	_____	Morphological Adaptations ⁽¹⁾ (Provide supporting data in Remarks or on a separate sheet)	
7. _____	_____	_____	_____	Wetland Non-Vascular Plants ⁽¹⁾	
8. _____	_____	_____	_____	Problematic Hydrophytic Vegetation ⁽¹⁾ (Explain)	
9. _____	_____	_____	_____	(1) Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
10. _____	_____	_____	_____	_____	
11. _____	_____	_____	_____	_____	
_____ = Total Cover				Hydrophytic Vegetation Present?	
<u>Woody Vine Stratum</u> (Plot size: _____)				Yes <u>x</u> No _____	
1. _____	_____	_____	_____		
2. _____	_____	_____	_____		
_____ = Total Cover					
% Bare Ground in Herb Stratum <u>10</u>					

Remarks:

US Army Corps of Engineers Western Mountains, Valleys, and Coast – Version 2.0

SOIL

Profile Description: (Describe to the depth needed to document the indicator of confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features		Type (1)	Loc (2)	Texture	Remarks
	Color (moist)	%	Color (moist)	%				
0-7	10YR 3/2	100					sicl	
7-11	10YR 3/2	95%	10YR 4/4	5	C	M	sicl	
11-18	10YR 3/2	95%	10YR 4/6	5	C	M	sicl	

(1)Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered of Coated Sand Grains. (2)Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators of Problematic Hydric Soils(3).

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> (except MLRA 1)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input checked="" type="checkbox"/> Redox Dark Surface (F6)	(3) indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Depleted Dark Surface (F7)	
	<input type="checkbox"/> Redox Depressions (F8)	

Restrictive layer (if present):

Type: _____
 Depth (inches): _____

Hydric Soil Present? Yes No

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required: (check all that apply))

Secondary Indicators (2 or more required)

<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water Stained Leaves (B9) (except MLRA 1,2,4A, and 4B)	<input type="checkbox"/> Water Stained Leaves (B9) (MLRA 1,2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input checked="" type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input checked="" type="checkbox"/> Geomorphc Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Field Observations:

Surface Water Present? Yes _____ No Depth (inches): _____
 Water Table Present? Yes _____ No Depth (inches): _____
 Saturation Present? (includes capillary fringe) Yes _____ No Depth (inches): _____

Wetland Hydrology Present?

Yes No

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

Remarks:

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

Project/Site: Airport Industrial City/County: Lebanon/Linn Sampling Date: 8/17/2017
 Applicant/Owner: City of Lebanon State: OR Sampling Point: SP-31
 Investigator(s): A. Martin Section, Township, Range: 16, T12S, R02W
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 0%
 Subregion (LRR): LRR A Lat: 44.529142° N Long: -123.933778° W Datum: HARN NAD83
 Soil Map Unit Name: Clackamas variant silt loam NWI classification: upl

Are Climatic / hydrologic conditions on the site typical for this time of year? Yes: x No: _____ (If no explain in remarks)
 Are Vegetation _____ Soil _____ or Hydrology _____ Significantly disturbed? Are "Normal Circumstances" present? Yes x No _____
 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>x</u>	No _____	Is the 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:	Plot located on slightly elevated terrace on south side of creek			

VEGETATION - Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:	
1. _____	_____	_____	_____		Number of Dominant Species That are OBL, FACW, or FAC: _____ 1 (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: _____ 1 (B)	
3. _____	_____	_____	_____		
4. _____	_____	_____	_____	Percent of Dominant Species That are OBL, FACW, or FAC: _____ 100 (A/B)	
_____ = Total Cover					
<u>Sapling/Shrub Stratum</u> (Plot size: _____)				Prevalence Index worksheet:	
1. _____	_____	_____	_____		Total % Cover of: _____ Multiply by: _____
2. _____	_____	_____	_____	OBL species _____ x 1 = _____	
3. _____	_____	_____	_____	FACW species _____ x 2 = _____	
4. _____	_____	_____	_____	FAC species _____ x 3 = _____	
5. _____	_____	_____	_____	FACU species _____ x 4 = _____	
_____ = Total Cover				UPL species _____ x 5 = _____	
<u>Herb Stratum</u> (Plot size: <u>5 ft dia</u>)				Column Totals: _____ (A) _____ (B)	
1. <u>Lolium multiflorum</u>	100%	yes	FAC	Prevalence Index = B/A = _____	
2. _____	_____	_____	_____	Hydrophytic Vegetation Indicators:	
3. _____	_____	_____	_____		_____ Rapid Test for Hydrophytic Vegetation
4. _____	_____	_____	_____		<u>x</u> Dominance Test is >50%
5. _____	_____	_____	_____		Prevalence Index is <3.0 ⁽¹⁾
6. _____	_____	_____	_____		Morphological Adaptations ⁽¹⁾ (Provide supporting data in Remarks or on a separate sheet)
7. _____	_____	_____	_____		Wetland Non-Vascular Plants ⁽¹⁾
8. _____	_____	_____	_____		Problematic Hydrophytic Vegetation ⁽¹⁾ (Explain)
9. _____	_____	_____	_____		(1) Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
10. _____	_____	_____	_____		
11. _____	_____	_____	_____		
_____ = Total Cover					Hydrophytic Vegetation Present? Yes <u>x</u> No _____
<u>Woody Vine Stratum</u> (Plot size: _____)					
1. _____	_____	_____	_____	% Bare Ground in Herb Stratum _____	
2. _____	_____	_____	_____		
_____ = Total Cover					

Remarks:

US Army Corps of Engineers Western Mountains, Valleys, and Coast – Version 2.0

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features		Type (1)	Loc (2)	Texture	Remarks
	Color (moist)	%	Color (moist)	%				
0-10	10YR 3/2	100					sicl	
10-18	10YR 3/2	95%	10YR 3/4	5	C	M	sicl	

(1)Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered of Coated Sand Grains. (2)Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators of Problematic Hydric Soils(3).

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> (except MLRA 1)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Matrix (F3)	(3) indicators of hydrophytic vegetation
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Redox Dark Surface (F6)	and wetland hydrology must be present,
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Depleted Dark Surface (F7)	unless disturbed or problematic.
	<input type="checkbox"/> Redox Depressions (F8)	

Restrictive layer (if present):

Type: _____
 Depth (inches): _____

Hydric Soil Present? Yes _____ No x

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required: (check all that apply))

Secondary Indicators (2 or more required)

<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water Stained Leaves (B9) (except MLRA 1,2,4A, and 4B)	<input type="checkbox"/> Water Stained Leaves (B9) (MLRA 1,2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Field Observations:

Surface Water Present? Yes _____ No x Depth (inches): _____
 Water Table Present? Yes _____ No x Depth (inches): _____
 Saturation Present? Yes _____ No x Depth (inches): _____
 (includes capillary fringe)

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 Mountain, Valleys, and Coast Region

Project/Site: Airport Industrial City/County: Lebanon/Linn Sampling Date: 8/17/2017
 Applicant/Owner: City of Lebanon State: OR Sampling Point: SP-32
 Investigator(s): A. Martin Section, Township, Range: 16, T12S, R02W
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 2%
 Subregion (LRR): LRR A Lat: 44.529142° N Long: -123.933778° W Datum: HARN NAD83
 Soil Map Unit Name: Dayton silt loam NWI classification: PSSA

Are Climatic / hydrologic conditions on the site typical for this time of year? Yes: x No: _____ (If no explain in remarks)
 Are Vegetation _____ Soil _____ or Hydrology _____ Significantly disturbed? Are "Normal Circumstances" present? Yes x No _____
 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>x</u>	No _____	Is the Sampled Area within a Wetland?	Yes <u>x</u>	No _____
Hydric Soil Present?	Yes <u>x</u>	No _____			
Wetland Hydrology Present?	Yes <u>x</u>	No _____			
Remarks: <u>Plot located on east side of SA in east field</u>					

VEGETATION - Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That are OBL, FACW, or FAC: <u>100</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
_____ = Total Cover				
Prevalence Index worksheet:				
Total % Cover of: _____				Multiply by: _____
OBL species _____ x 1 = _____				
FACW species _____ x 2 = _____				
FAC species _____ x 3 = _____				
FACU species _____ x 4 = _____				
UPL species _____ x 5 = _____				
Column Totals: _____ (A) _____ (B)				
Prevalence Index = B/A = _____				
Hydrophytic Vegetation Indicators:				
Rapid Test for Hydrophytic Vegetation				
<u>x</u> Dominance Test is >50%				
Prevalence Index is <3.0 ⁽¹⁾				
Morphological Adaptations ⁽¹⁾ (Provide supporting data in Remarks or on a separate sheet)				
Wetland Non-Vascular Plants ⁽¹⁾				
Problematic Hydrophytic Vegetation ⁽¹⁾ (Explain)				
(1) Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.				
Hydrophytic Vegetation Present? Yes <u>x</u> No _____				
Remarks:				

Remarks:

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features		Type (1)	Loc (2)	Texture	Remarks
	Color (moist)	%	Color (moist)	%				
0-8	10YR 3/2	100					sicl	
8-20	10YR 3/2	95%	10YR 4/4	5	C	M	sicl	

(1)Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered of Coated Sand Grains. (2)Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators of Problematic Hydric Soils(3).

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> (except MLRA 1)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input checked="" type="checkbox"/> Redox Dark Surface (F6)	(3) indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Depleted Dark Surface (F7)	
	<input type="checkbox"/> Redox Depressions (F8)	

Restrictive layer (if present):

Type: _____
 Depth (inches): _____

Hydric Soil Present? Yes No

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

Field Observations:

Surface Water Present? Yes _____ No Depth (inches): _____
 Water Table Present? Yes _____ No Depth (inches): _____
 Saturation Present? (includes capillary fringe) Yes _____ No Depth (inches): _____

Wetland Hydrology Present?
 Yes No

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

Remarks:

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

Project/Site: Airport Industrial City/County: Lebanon/Linn Sampling Date: 8/17/2017
 Applicant/Owner: City of Lebanon State: OR Sampling Point: SP-33
 Investigator(s): A. Martin Section, Township, Range: 16, T12S, R02W
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 0%
 Subregion (LRR): LRR A Lat: 44.529142° N Long: -123.933778° W Datum: HARN NAD83
 Soil Map Unit Name: Clackamas variant silt loam NWI classification: PSSA

Are Climatic / hydrologic conditions on the site typical for this time of year? Yes: x No: _____ (If no explain in remarks)
 Are Vegetation _____ Soil _____ or Hydrology _____ Significantly disturbed? Are "Normal Circumstances" present? Yes x No _____
 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>x</u>	No _____	Is the 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:					

VEGETATION - Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet: Number of Dominant Species That are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That are OBL, FACW, or FAC: <u>100</u> (A/B)
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	= Total Cover
<u>Sampling/Shrub Stratum</u> (Plot size: _____)				
1. _____	_____	_____	_____	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover				Hydrophytic Vegetation Indicators: Rapid Test for Hydrophytic Vegetation <u>x</u> Dominance Test is >50% Prevalence Index is <3.0 ⁽¹⁾ Morphological Adaptations ⁽¹⁾ (Provide supporting data in Remarks or on a separate sheet) Wetland Non-Vascular Plants ⁽¹⁾ Problematic Hydrophytic Vegetation ⁽¹⁾ (Explain) (1) Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
<u>Herb Stratum</u> (Plot size: <u>5 ft dia</u>)				
1. <u>Schedonorus arundinaceus</u>	<u>70%</u>	<u>yes</u>	<u>FAC</u>	
2. <u>Agrostis capillaris</u>	<u>30</u>	<u>yes</u>	<u>FAC</u>	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
_____ = Total Cover				
<u>Woody Vine Stratum</u> (Plot size: _____)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
_____ = Total Cover				
% Bare Ground in Herb Stratum _____				
Hydrophytic Vegetation Present? Yes <u>x</u> No _____				
Remarks:				

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features		Type (1)	Loc (2)	Texture	Remarks
	Color (moist)	%	Color (moist)	%				
0-10	10YR 3/2	100					sicl	
10-19	10YR 3/2	95%	10YR 3/4	5	C	M	sicl	

(1)Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered of Coated Sand Grains. (2)Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators of Problematic Hydric Soils(3).

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> (except MLRA 1)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Matrix (F3)	(3) indicators of hydrophytic vegetation
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Redox Dark Surface (F6)	and wetland hydrology must be present,
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Depleted Dark Surface (F7)	unless disturbed or problematic.
	<input type="checkbox"/> Redox Depressions (F8)	

Restrictive layer (if present):

Type: _____
 Depth (inches): _____

Hydric Soil Present? Yes _____ No x

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required: (check all that apply))

Secondary Indicators (2 or more required)

<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water Stained Leaves (B9) (except MLRA 1,2,4A, and 4B)	<input type="checkbox"/> Water Stained Leaves (B9) (MLRA 1,2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Field Observations:

Surface Water Present? Yes _____ No x Depth (inches): _____
 Water Table Present? Yes _____ No x Depth (inches): _____
 Saturation Present? Yes _____ No x Depth (inches): _____
 (includes capillary fringe)

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 Mountain, Valleys, and Coast Region

Project/Site: Airport Industrial City/County: Lebanon/Linn Sampling Date: 8/17/2017
 Applicant/Owner: City of Lebanon State: OR Sampling Point: SP-34
 Investigator(s): A. Martin Section, Township, Range: 16, T12S, R02W
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 0%
 Subregion (LRR): LRR A Lat: 44.529142° N Long: -123.933778° W Datum: HARN NAD83
 Soil Map Unit Name: Clackamas variant silt loam NWI classification: PSSA

Are Climatic / hydrologic conditions on the site typical for this time of year? Yes: x No: _____ (If no explain in remarks)
 Are Vegetation _____ Soil _____ or Hydrology _____ Significantly disturbed? Are "Normal Circumstances" present? Yes x No _____
 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>x</u>	No _____	Is the Sampled Area within a Wetland?	Yes <u>x</u>	No _____
Hydric Soil Present?	Yes <u>x</u>	No _____			
Wetland Hydrology Present?	Yes <u>x</u>	No _____			
Remarks: <u>Plot located in lower terrace at southeast corner of TL 2804</u>					

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That are OBL, FACW, or FAC: <u>100</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
_____ = Total Cover				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
Sapling/Shrub Stratum (Plot size: _____) 1. _____ 2. _____ 3. _____ 4. _____ 5. _____ _____ = Total Cover				
Herb Stratum (Plot size: <u>5 ft dia</u>) 1. <u>Agrostis capillaris</u> <u>80%</u> <u>yes</u> <u>FAC</u> 2. <u>Holcus lanatus</u> <u>10</u> <u>_____</u> <u>FAC</u> 3. <u>Hypochaeris radicata</u> <u>5</u> <u>_____</u> <u>FACU</u> 4. <u>Daucus carota</u> <u>5</u> <u>_____</u> <u>FACU</u> 5. _____ 6. _____ 7. _____ 8. _____ 9. _____ 10. _____ 11. _____ _____ = Total Cover				
Woody Vine Stratum (Plot size: _____) 1. _____ 2. _____ _____ = Total Cover				
% Bare Ground in Herb Stratum _____				
Remarks: _____				Hydrophytic Vegetation Indicators: Rapid Test for Hydrophytic Vegetation x Dominance Test is >50% Prevalence Index is <3.0 ⁽¹⁾ Morphological Adaptations ⁽¹⁾ (Provide supporting data in Remarks or on a separate sheet) Wetland Non-Vascular Plants ⁽¹⁾ Problematic Hydrophytic Vegetation ⁽¹⁾ (Explain) (1) Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
				Hydrophytic Vegetation Present? Yes <u>x</u> No _____

SOIL

Profile Description: (Describe to the depth needed to document the indicator of confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features		Type (1)	Loc (2)	Texture	Remarks
	Color (moist)	%	Color (moist)	%				
0-6	10YR 3/2	100					sicl	
6-8	10YR 3/2	98%	10YR 4/4	2	C	PL	sicl	2% OR
8-18	10YR 3/2	95%	10YR 4/4	5	C	M	sicl	

(1)Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered of Coated Sand Grains. (2)Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators of Problematic Hydric Soils(3).

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> (except MLRA 1)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input checked="" type="checkbox"/> Redox Dark Surface (F6)	(3) indicators of hydrophytic vegetation
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Depleted Dark Surface (F7)	and wetland hydrology must be present,
	<input type="checkbox"/> Redox Depressions (F8)	unless disturbed or problematic.

Restrictive layer (if present):

Type: _____
 Depth (inches): _____

Hydric Soil Present? Yes No

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

Field Observations:

Surface Water Present? Yes _____ No Depth (inches): _____
 Water Table Present? Yes _____ No Depth (inches): _____
 Saturation Present? Yes _____ No Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present?
 Yes No

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

Remarks:

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

Project/Site: Airport Industrial City/County: Lebanon/Linn Sampling Date: 8/17/2017
 Applicant/Owner: City of Lebanon State: OR Sampling Point: SP-35
 Investigator(s): A. Martin Section, Township, Range: 16, T12S, R02W
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 6%
 Subregion (LRR): LRR A Lat: 44.529142° N Long: -123.933778° W Datum: HARN NAD83
 Soil Map Unit Name: Clackamas variant silt loam NWI classification: upl

Are Climatic / hydrologic conditions on the site typical for this time of year? Yes: x No: _____ (If no explain in remarks)
 Are Vegetation _____ Soil _____ or Hydrology _____ Significantly disturbed? Are "Normal Circumstances" present? Yes x No _____
 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>x</u>	No _____	Is the 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:	Plot located on slightly higher terrace in southeast corner of study area.				

VEGETATION - Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>3</u> (B)
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	Percent of Dominant Species That are OBL, FACW, or FAC: <u>67</u> (A/B)
_____ = Total Cover				
<u>Sapling/Shrub Stratum</u> (Plot size: _____)				Prevalence Index worksheet:
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	OBL species _____ x 1 = _____
3. _____	_____	_____	_____	FACW species _____ x 2 = _____
4. _____	_____	_____	_____	FAC species _____ x 3 = _____
5. _____	_____	_____	_____	FACU species _____ x 4 = _____
_____ = Total Cover				UPL species _____ x 5 = _____
<u>Herb Stratum</u> (Plot size: <u>5 ft dia</u>)				Column Totals: _____ (A) _____ (B)
1. <u>Agrostis capillaris</u>	<u>50%</u>	<u>yes</u>	<u>FAC</u>	Prevalence Index = B/A = _____
2. <u>Schedonorus arundinaceus</u>	<u>20</u>	<u>yes</u>	<u>FAC</u>	
3. <u>Anthoxanthum odoratum</u>	<u>20</u>	<u>yes</u>	<u>FACU</u>	Hydrophytic Vegetation Indicators:
4. <u>Daucus carota</u>	<u>5</u>		<u>FACU</u>	
5. <u>Hypochaeris radicata</u>	<u>5</u>		<u>FACU</u>	<u>x</u> Dominance Test is >50%
6. _____	_____	_____	_____	Prevalence Index is <3.0 ⁽¹⁾
7. _____	_____	_____	_____	Morphological Adaptations ⁽¹⁾ (Provide supporting data in Remarks or on a separate sheet)
8. _____	_____	_____	_____	Wetland Non-Vascular Plants ⁽¹⁾
9. _____	_____	_____	_____	Problematic Hydrophytic Vegetation ⁽¹⁾ (Explain)
10. _____	_____	_____	_____	(1) Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
11. _____	_____	_____	_____	
_____ = Total Cover				Hydrophytic Vegetation Present? Yes <u>x</u> No _____
<u>Woody Vine Stratum</u> (Plot size: _____)				
1. _____	_____	_____	_____	_____ = Total Cover
2. _____	_____	_____	_____	
_____ = Total Cover				
<u>% Bare Ground in Herb Stratum</u> _____				
Remarks:				

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features		Type (1)	Loc (2)	Texture	Remarks
	Color (moist)	%	Color (moist)	%				
0-10	10YR 3/2	100					sicl	
10-18	10YR 3/2	95%	10YR 3/4	5	C	M	sicl	

(1)Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered of Coated Sand Grains. (2)Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators of Problematic Hydric Soils(3).

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> (except MLRA 1)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Depleted Dark Surface (F7)	
	<input type="checkbox"/> Redox Depressions (F8)	

(3) indicators 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:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required: (check all that apply))

Secondary Indicators (2 or more required)

<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water Stained Leaves (B9) (except MLRA 1,2,4A, and 4B)	<input type="checkbox"/> Water Stained Leaves (B9) (MLRA 1,2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Field Observations:

Surface Water Present? Yes _____ No x Depth (inches): _____
 Water Table Present? Yes _____ No x Depth (inches): _____
 Saturation Present? Yes _____ No x Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present?
 Yes _____ No x

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

Remarks:



Photo 1: View looking south from north end of TL 2802 (8/14/17).



Photo 2: North end of TL 2802 looking west (8/14/17).



Photo 3: Looking south from north end of TL 2804 (8/17/17).



Photo 4: View of north end of TL 2804 looking west (8/17/17).



Photo 5: Looking north along east side of TL 2804 (8/17/17).



Photo 6: North end of TL 2804 (8/17/17).



Photo 7: Looking west across upland in north end of study area (8/17/17).



Photo 8: View looking south in weedy mowed field in TL 2804 (8/17/17).



Photo 9: View looking southeast at wetland swale near center of study area (8/17/17).



Photo 10: View of backhoe pits on north end of TL 2802 (8/14/17).



Photo 11: Looking south at wetland covering rye grass field on TL 2802 (8/14/17).



Photo 12: Wetland on west side of TL 2802 looking north (8/14/17).



Photo 13: Looking north in Tax Lot 2402 along fence line separating the two tax lots (8/17/17).



Photo 14: View of east side of TL 2404 looking to the east with airport buildings in the distance (8/17/17).



Photo 15: Looking west at wetland swale in TL 2402. (8/17/17).



Photo 16: View from west side of TL 2402 looking south (8/14/17).



Photo 17: View looking southeast at horse pasture, barn and residence in southeast corner of TL 2404 (8/17/17).



Photo 18: View of south end of TL 2404 with storage buildings on adjacent property in distance (8/17/17).



Photo 19: View looking north across upland area in small pasture north of residence (8/17/17).



Photo 20: View of upland in southeast corner of TL 2402 (8/17/17).



Photo 21: Looking across line of backhoe pits in southwest corner of TL 2404 (8/17/17).



Photo 22: Looking toward southeast corner of TL 2802 with intermittent tributary on photo right (8/14/17).

APPENDIX E: Literature Citations

Cowardin, Lewis M. et al., 1979, Classification of Wetlands and Deepwater Habitats of the United States. U.S. Fish and Wildlife Service, Washington, DC, 131 pp.

Environmental Laboratory, 1987, Corps of Engineers wetlands delineation manual, Technical Report Y-87-1: Vicksburg, MS: U.S. Army Engineer Waterways Experiment Station (online). (<http://el.ercd.usace.army.mil/wetlands/pdfs/wlman87.pdf>)

GretagMacbeth, 2016 production, Revised Washable Edition Munsell® Soil Color Charts: Grand Rapids, Michigan.

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