



# Oregon

Kate Brown, Governor

## Department of State Lands

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**State Land Board**

Kate Brown

Governor

Shemia Fagan

Secretary of State

Tobias Read

State Treasurer

## Exhibit 1

**Crook County**

**May 5 2022**

**Planning Dept**

May 2, 2022

Avangrid Renewables, LLC  
Attn: Rachel Walker  
1125 NW Couch St., Suite 700  
Portland, OR 97209

Re: WD # 2021-0542 **Approved**  
Wetland Delineation Report for Empire Solar Project  
Crook County; T16S R15E 00, TLs 2300, 2301, 2400, 2800  
Portions of TLs 300, 800, 1800, 1900, 2000, 2100

Dear Rachel Walker:

The Department of State Lands has reviewed the wetland delineation report prepared by Tetra Tech for the site referenced above. Please note that the study area includes only a portion of the tax lots described above (see the attached maps). Based upon the information presented in the report and additional information submitted upon request, we concur that there are no jurisdictional wetlands or other waters of the state within the study area, as indicated on the attached Table A-1, Table A-2, and Figure 6, and 6.1 through 6.16. Please replace all copies of the preliminary wetland maps with these final Department-approved maps.

Within the study area, 2 artificially created wetlands (WET-A and WET-B) and 11 ephemeral streams (ST-01 through ST-11) were identified. These features are exempt per OAR 141-085-0515 (6) and OAR 141-085-0510 (49); therefore, they are not jurisdictional and not subject to the state's Removal-Fill Law permit requirements. However, Federal, other state agencies, or local permit requirements may apply.

This concurrence is based on information provided to the agency. The jurisdictional determination is valid for five years from the date of this letter unless new information necessitates a revision. Circumstances under which the Department may change a determination are found in OAR 141-090-0045 (available on our web site or upon request). In addition, laws enacted by the legislature and/or rules adopted by the Department may result in a change in jurisdiction; individuals and applicants are subject to the regulations that are in effect at the time of the removal-fill activity or complete permit application. The applicant, landowner, or agent may submit a request for reconsideration of this determination in writing within six months of the date of this letter.

Thank you for having the site evaluated. If you have any questions, please contact the Jurisdiction Coordinator for Crook County, Jessica Salgado, at (541) 388-6421.

Sincerely,

A handwritten signature in black ink, appearing to read "P. Ryan", with a stylized flourish at the end.

Peter Ryan, SPWS  
Aquatic Resource Specialist

Enclosures

ec: Ed Strohmaier, Tetra Tech  
Crook County Planning Department  
Anita Andazola, Corps of Engineers  
Jackson Morgan, DSL

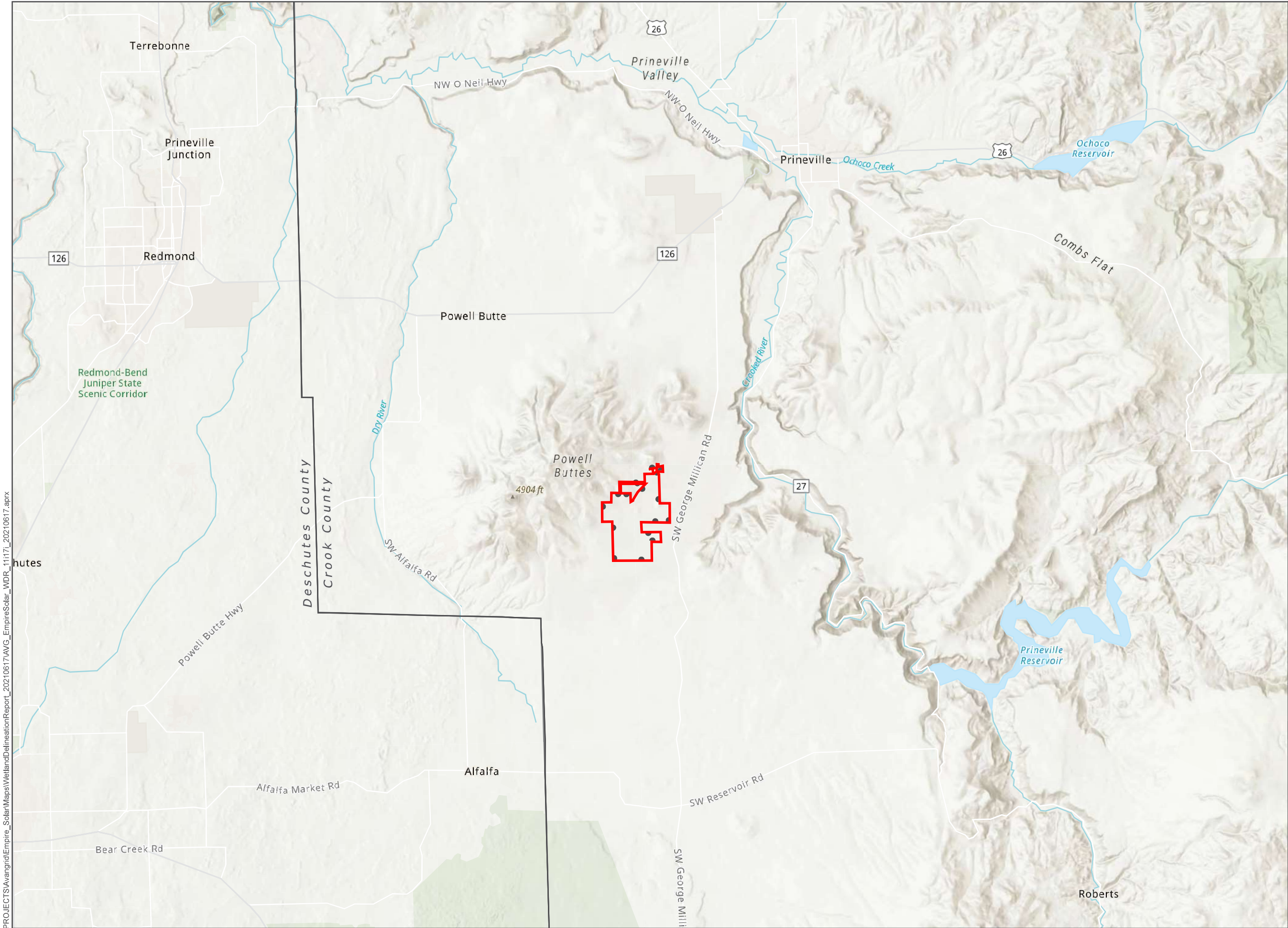
# WETLAND DELINEATION / DETERMINATION REPORT COVER FORM

Fully completed and signed report cover forms and applicable fees are required before report review timelines are initiated by the Department of State Lands. Make checks payable to the Oregon Department of State Lands. To pay fees by credit card, go online at: <https://apps.oregon.gov/DSL/EPS/program?key=4>.

Attach this completed and signed form to the front of an unbound report or include a hard copy with a digital version (single PDF file of the report cover form and report, minimum 300 dpi resolution) and submit to: **Oregon Department of State Lands, 775 Summer Street NE, Suite 100, Salem, OR 97301-1279**. A single PDF of the completed cover form and report may be e-mailed to: **Wetland\_Delineation@dsl.state.or.us**. For submittal of PDF files larger than 10 MB, e-mail DSL instructions on how to access the file from your ftp or other file sharing website.

Contact and Authorization Information			
<input checked="" type="checkbox"/> Applicant <input type="checkbox"/> Owner Name, Firm and Address: Rachel Walker, Senior Permitting and Environmental Manager Avangrid Renewables, LLC 1125 NW Couch St., Suite 700 Portland, OR 97209		Business phone # (763) 233-2111 Mobile phone # (optional) E-mail: rachel.walker@avangrid.com	
<input type="checkbox"/> Authorized Legal Agent, Name and Address (if different):		Business phone # Mobile phone # (optional) E-mail:	
I either own the property described below or I have legal authority to allow access to the property. I authorize the Department to access the property for the purpose of confirming the information in the report, after prior notification to the primary contact.			
<b>Typed/Printed Name:</b> Rachel Durkee Walker		<b>Signature:</b> Rachel Durkee Walker <small>Digitally signed by Rachel Durkee Walker Date: 2021.09.29 14:46:21 -05'00'</small>	
Date: 09/29/2021		Special instructions regarding site access: Please contact Avangrid for site access.	
Project and Site Information			
Project Name: Empire Solar Project		Latitude: 44.170523 Longitude: -120.937012 <b>decimal degree</b> - centroid of site or start & end points of linear project	
Proposed Use: Solar renewable energy project.		Tax Map # See wetland delineation report Table 1 and Figure 2 Tax Lot(s) Tax Map # Tax Lot(s)	
Project Street Address (or other descriptive location): Project borders the west side of the Gala Solar Project site, located at 12515, SW Millican Rd., Prineville, OR 97754		Township 16S Range 15E Section 15,16,24 QQ Use separate sheet for additional tax and location information	
City: County: Crook		Waterway: None River Mile:	
Wetland Delineation Information			
Wetland Consultant Name, Firm and Address: Tetra Tech 1750 SW Harbor Way, Ste. 400 Portland, OR 97201		Phone # (503) 721-7234 Mobile phone # (if applicable) (503) 320-6917 E-mail: ed.strohmaier@tetrattech.com	
The information and conclusions on this form and in the attached report are true and correct to the best of my knowledge.			
<b>Consultant Signature:</b> <i>Ed Strohmaier</i>		Date: 09/17/2021	
<b>Primary Contact</b> for report review and site access is <input type="checkbox"/> Consultant <input type="checkbox"/> Applicant/Owner <input type="checkbox"/> Authorized Agent			
Wetland/Waters Present? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Study Area size: 1553 acres Total Wetland Acreage: 0.0400	
Check Applicable Boxes Below			
<input type="checkbox"/> R-F permit application submitted <input type="checkbox"/> Mitigation bank site <input type="checkbox"/> Industrial Land Certification Program Site <input type="checkbox"/> Wetland restoration/enhancement project (not mitigation) <input type="checkbox"/> Previous delineation/application on parcel If known, previous DSL # _____		<input type="checkbox"/> Fee payment submitted \$ _____ <input type="checkbox"/> Fee (\$100) for resubmittal of rejected report <input type="checkbox"/> Request for Reissuance. See eligibility criteria. (no fee) DSL # _____ Expiration date _____ <input type="checkbox"/> LWI shows wetlands or waters on parcel Wetland ID code _____	
For Office Use Only			
DSL Reviewer: JS		Fee Paid Date: ____ / ____ / ____	
Date Delineation Received: 9 / 29 / 21		Scanned: <input type="checkbox"/> Electronic: <input checked="" type="checkbox"/>	
DSL WD # 2021-0542		DSL App.# _____	







**Empire  
Solar Project**

**Figure 1  
Project Location**

**CROOK COUNTY, OR**

-  Study Area
-  County Boundary

The Study Area is not a mapped boundary and is based on a combination of tax lot spatial data maintained by the Crook County Assessor and obtained in March 2021, lease boundaries determined in coordination with underlying landowners, aerial photography and lidar surveys contracted by Avangrid and completed in June 2020, and land survey results contracted by Avangrid, completed in January 2021.



Data Sources

Avangrid-Project Infrastructure; Tiger-Roads;  
ESRI-Topographic

Reference Map



1:150,000

WGS 1984 UTM Zone 10N

0 0.5 1 2 3 4 Miles

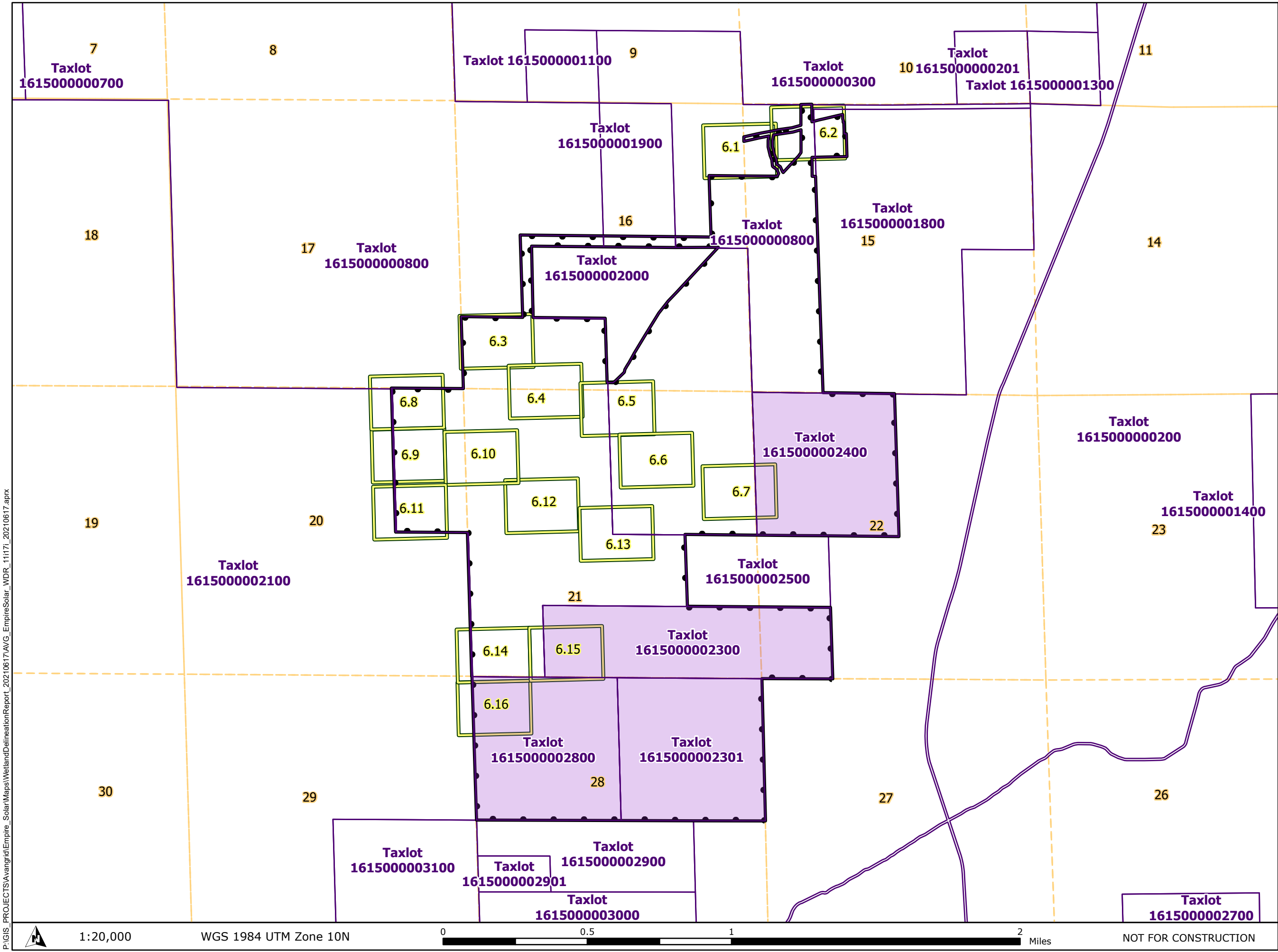
NOT FOR CONSTRUCTION



**Table 1. Tax Maps - Tax Lots**

<b>Tax Map</b>	<b>Tax Lot Numbers</b>	<b>Tax Lot Intersects Study Area</b>
16S15E	1615000002000	Portion of Tax Lot Within Study Area
16S15E	1615000002800	Full Extent of Tax Lot Within Study Area
16S15E	1615000002300	Full Extent of Tax Lot Within Study Area
16S15E	1615000002400	Full Extent of Tax Lot Within Study Area
16S15E	1615000002301	Full Extent of Tax Lot Within Study Area
16S15E	1615000001900	Portion of Tax Lot Within Study Area
16S15E	1615000000800	Portion of Tax Lot Within Study Area
16S15E	1615000002100	Portion of Tax Lot Within Study Area
16S15E	1615000001800	Portion of Tax Lot Within Study Area
16S15E	1615000000300	Portion of Tax Lot Within Study Area






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# Empire Solar Project

## Figure 2 Tax Lot Map

CROOK COUNTY, OR

-  Figure 6 Index Map Grid
-  Study Area
-  Township 16S Range 15E Section
-  Taxlot Boundary
-  Full Extent of Taxlot Within Study Area

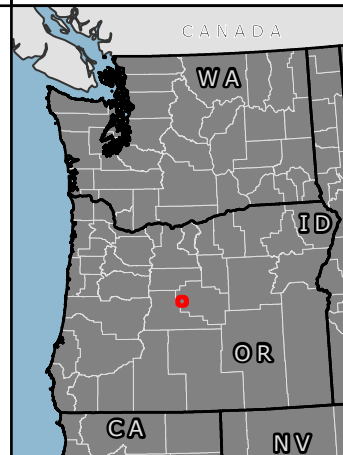
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Data Sources

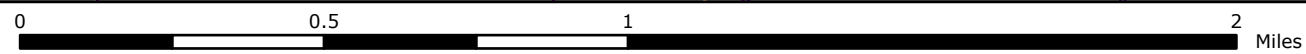
Avangrid-Project Infrastructure; Tiger-Roads; ESRI-Aerial; Lane County-Taxlots

Reference Map



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WGS 1984 UTM Zone 10N



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Table A-1. Delineated Wetlands

Feature Code	Map Number	Acres Delineated	Cowardin/HGM	Sample Plots	Photo Number	Additional Notes	Access Yes/No	Artificially Created
WET-A	6.4, 6.4.1	0.038	PUBFx/Depressional	SP-01, SP-02	71	<p>Feature is located on a hillslope, and was apparently excavated in the past, presumably for stock watering and/or irrigation. The bottom of the depression is about 4-5 feet lower than the surrounding upland. The area has been heavily grazing based on disturbed surface and vegetation conditions, and the presence of a coral downslope from the wetland. Abandoned plastic and metal pipes were observed near the depression, as was an old water trough observed on the downhill, south side of the depression. USGS has a mapped water well in the vicinity of WET-A and WET-B. However, aside from the abandoned pipe, and old pieces of wood and concrete scattered around the site, there was no remnant well structure observed. Nearby delineated ephemeral streams are all lower in elevation than WET-A.</p> <p>Boundary determination method: Abrupt break in vegetation, soils, and hydrology. Visible change in vegetation community. At the time of the site visit, there was no saturation down to 20” depth. The wetland is completely contained within the Study Area.</p>	Yes	Yes
WET-B	6.4, 6.4.1	0.003	PUBFx/Depressional	SP-03, SP-04	73	<p>This feature is much smaller than WET-A and was also excavated in the past. The lowest portion of the depression is 5-6 feet below the surrounding upland. The bottom of the depression was mostly unvegetated. Boundary determination method: Abrupt break in vegetation, soils, and hydrology. The wetland sample plot was located at the lowest point in the depression. Soil was saturated at 8” and water was present at 14”. Area has been heavily grazed. Mapped ephemeral streams are all lower in elevation than WET-B. The wetland is completely contained within the Study Area.</p>	Yes	Yes



Table A-2. Delineated Non-Wetland Waters

Feature Name	Map Number	OHWL Width (feet)	Flow Duration	Flow Direction	Photo Number	Additional Notes	Access Yes/No	Artificially Created/Modified	SDAM Form
ST-01	6.1	2	Ephemeral	Northeast	6, 7	Feature originates in and flows out of the Study Area. Riparian vegetation is absent. No SAV, FACW, or OBL plants observed. All upland vegetation in and bordering the shallow channel. No macroinvertebrates or casings observed.	Yes	The lower segment of the stream runs through a culvert under the existing access road in the study Area, and continues outside of the Study Area.	Yes
ST-02	6.1, 6.2	1	Ephemeral	East	10, 11, 12, 13, 14	Feature flows into and out of the Study Area. Riparian vegetation is absent. No SAV, FACW, or OBL plants observed. All upland vegetation in and bordering the shallow channel. No macroinvertebrates or casings observed.	Yes	One ranch access road and a maintenance road for the existing transmission line that runs along the east side of the Study Area, bisect ST-02.	Yes
ST-03	6.3, 6.4, 6.4.1	2	Ephemeral	Southeast	19, 20, 21, 22, 23	Feature flows into and terminates inside the Study Area. Riparian vegetation is absent. No SAV, FACW, or OBL plants observed. All upland vegetation in and bordering the channel. No macroinvertebrates or casings observed.	Yes	No	Yes
ST-04	6.3, 6.4, 6.4.1, 6.5, 6.6	2	Ephemeral	Southeast	4, 23, 33, 64, 65, 66, 68, 69	Feature flows into and terminates inside the Study Area. Riparian vegetation is absent. No SAV, FACW, or OBL plants observed. All upland vegetation in and bordering the channel. No macroinvertebrates or casings observed.	Yes	One ranch access road bisects ST-04 at a location about 0.10-mile SE of WET-A.	Yes
ST-04b	6.4, 6.5	2	Ephemeral	Southeast	67, 69	Feature originates in the Study Area and connects to ST-04. Riparian vegetation is absent. No SAV, FACW, or OBL plants observed. All upland vegetation in and bordering the channel. No macroinvertebrates or casings observed.	Yes	No	–
ST-04c	6.7	2	Ephemeral	East	60, 61, 63	Feature is an isolated segment of channel that terminates inside the Study Area. There was no apparent surface channel connection to ST-04. Riparian vegetation is absent. No SAV, FACW, or OBL plants observed. All upland vegetation in and bordering the channel. No macroinvertebrates or casings observed.	Yes	No	–
ST-05	6.14, 6.15	2	Ephemeral	East	40, 41, 42, 43, 44, 45	Feature flows into and terminates inside the Study Area. Feature flows into and terminates inside the Study Area. Riparian vegetation is absent. No SAV, FACW, or OBL plants observed. All upland vegetation in and bordering the channel. No macroinvertebrates or casings observed.	Yes	No	Yes
ST-06	6.11	1	Ephemeral	Southeast	47	Feature flows into and terminates inside the Study Area. Feature originates in and flows out of the Study Area. Riparian vegetation is absent. No SAV, FACW, or OBL plants observed. All upland vegetation in and bordering the channel. No macroinvertebrates or casings observed.	Yes	No	Yes
ST-07	6.10, 6.12, 6.13	1	Ephemeral	Southeast	48, 49, 50, 53, 54	Feature originates in and terminates inside the Study Area. There was no channel observed connecting ST-07 to ST-09 east of the existing ranch access road. Riparian vegetation is absent. No SAV, FACW, or OBL plants observed. All upland vegetation in and bordering the channel. No macroinvertebrates or casings observed.	Yes	No	Yes
ST-08	6.9	1	Ephemeral	Southeast	30, 31	Feature flows into and terminates inside the Study Area. Riparian vegetation is absent. No SAV, FACW, or OBL plants observed. All upland vegetation in and bordering the channel. No macroinvertebrates or casings observed.	Yes	No	Yes
ST-09	6.8	6	Ephemeral	Southeast	27	Feature flows into and terminates inside the Study Area. Riparian vegetation is absent. No SAV, FACW, or OBL plants observed. All upland vegetation in and bordering the channel. No macroinvertebrates or casings observed.	Yes	The middle section of the stream runs through a culvert under the existing access road in the study area.	Yes
ST-10	6.8	2	Ephemeral	Southeast	29	Feature flows into and terminates inside the Study Area. Riparian vegetation is absent. No SAV, FACW, or OBL plants observed. All upland vegetation in and bordering the channel. No macroinvertebrates or casings observed.	Yes	No	Yes

Feature Name	Map Number	OHWL Width (feet)	Flow Duration	Flow Direction	Photo Number	Additional Notes	Access Yes/No	Artificially Created/Modified	SDAM Form
ST-11	6.10	1	Ephemeral	East	48	Feature originates in the Study Area and connects to ST-07. There was no channel observed connecting ST-11 to ST-08 east of the existing ranch access road. Riparian vegetation is absent. No SAV, FACW, or OBL plants observed. All upland vegetation in and bordering the shallow channel. No macroinvertebrates or casings observed.	Yes	No	-



Empire  
Solar Project

Figure 6  
Wetland Delineation  
Index Map

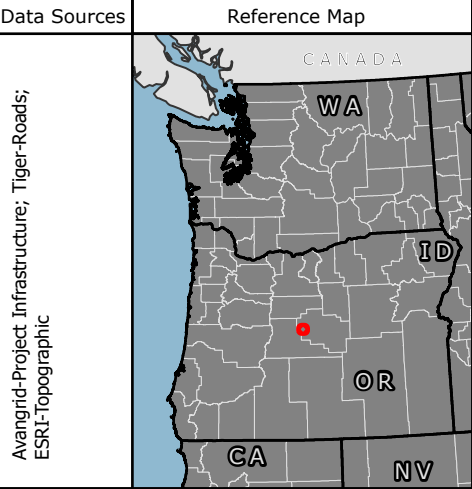
CROOK COUNTY, OR

- Figure 6 Index Map Grid
- Study Area
- Field Delineated Stream\*  
(Maximum OHWL Width)
- Field Delineated Wetland\*

DSL WD # 2021-0542  
Approval Issued 5/2/2022  
Approval Expires 5/2/2027

Wetland and stream channel boundaries, sample plots, and photo points were collected using sub-meter grade GPS devices collecting real-time, sub-meter GNSS data. Mapped features are  $\leq 1$  meter of the ground location.

The Study Area is not a mapped boundary and is based on a combination of tax lot spatial data maintained by the Crook County Assessor and obtained in March 2021, lease boundaries determined in coordination with underlying landowners, aerial photography and lidar surveys contracted by Avangrid and completed in June 2020, and land survey results contracted by Avangrid, completed in January 2021.



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WGS 1984 UTM Zone 10N



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DSL WD # 2021-0542  
Approval Issued 5/2/2022  
Approval Expires 5/2/2027

# Empire Solar Project

## Figure 6.1 Wetland Delineation Map

CROOK COUNTY, OR

- Study Area
- Taxlot Boundary
- Township 16S Range 15E Section
- Field Delineated Stream\* (Maximum OHWL Width)
- Photo Point (# Photo Number)

*\*All delineated wetlands are considered to be completely contained within the Study Area. Streams are considered to extend outside of the study area unless otherwise noted. Delineated streams that are completely contained within the Study Area are noted on the figure next to their feature names.*

*Wetland and stream channel boundaries, sample plots, and photo points were collected using sub-meter grade GPS devices collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.*

The Study Area is not a mapped boundary and is based on a combination of tax lot spatial data maintained by the Crook County Assessor and obtained in March 2021, lease boundaries determined in coordination with underlying landowners, aerial photography and lidar surveys contracted by Avangrid and completed in June 2020, and land survey results contracted by Avangrid, completed in January 2021.

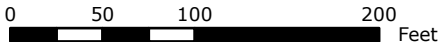


Data Sources	Reference Map
NWN-Project Infrastructure; Tiger-Roads; ESRI-Aerial; Lane County-Taxlots	



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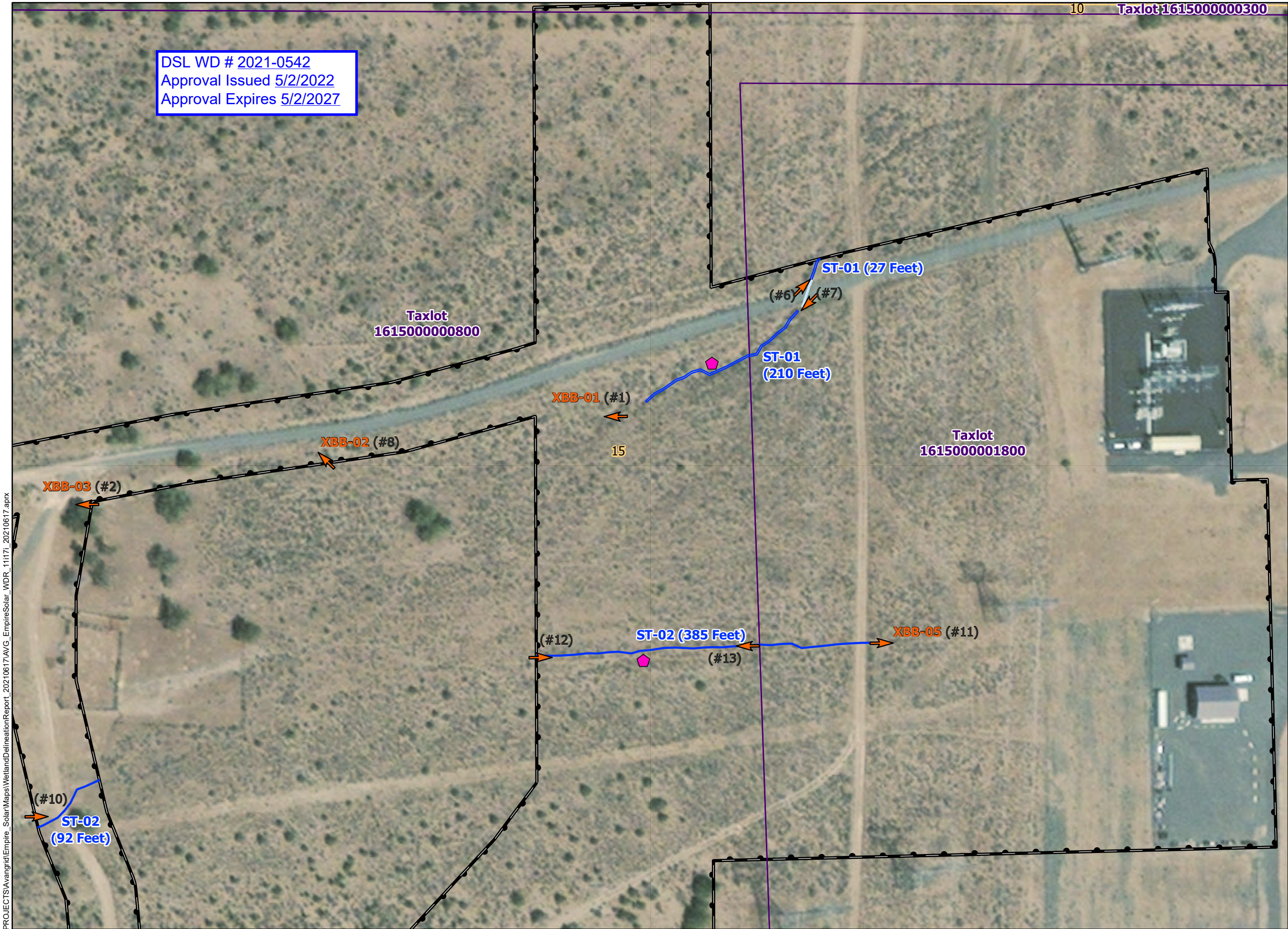
WGS 1984 UTM Zone 10N



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# Empire Solar Project

**Figure 6.2**  
**Wetland Delineation Map**

CROOK COUNTY, OR

- Study Area
- Taxlot Boundary
- Township 16S Range 15E Section
- Culvert
- Field Delineated Stream\* (Maximum OHWL Width)
- SDAM Point
- Photo Point (# Photo Number)

*\*All delineated wetlands are considered to be completely contained within the Study Area. Streams are considered to extend outside of the study area unless otherwise noted. Delineated streams that are completely contained within the Study Area are noted on the figure next to their feature names.*

*Wetland and stream channel boundaries, sample plots, and photo points were collected using sub-meter grade GPS devices collecting real-time, sub-meter GNSS data. Mapped features are  $\leq$  1 meter of the ground location.*

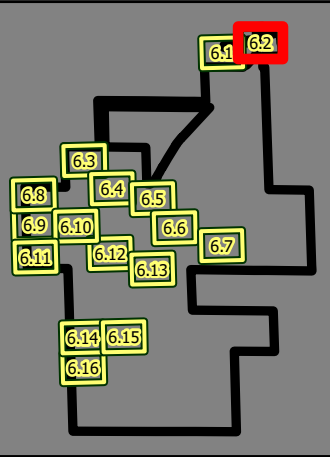
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Data Sources

Reference Map

NWN-Project Infrastructure: Tiger-Roads;  
ESRI-Aerial; Lane County-Taxlots



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WGS 1984 UTM Zone 10N

0 50 100 200 Feet

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# Empire Solar Project

## Figure 6.3 Wetland Delineation Map

CROOK COUNTY, OR

- Study Area
- Taxlot Boundary
- Township 16S Range 15E Section
- Field Delineated Stream\* (Maximum OHWL Width)
- SDAM Point
- Photo Point (# Photo Number)

*\*All delineated wetlands are considered to be completely contained within the Study Area. Streams are considered to extend outside of the study area unless otherwise noted. Delineated streams that are completely contained within the Study Area are noted on the figure next to their feature names.*

*Wetland and stream channel boundaries, sample plots, and photo points were collected using sub-meter grade GPS devices collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.*

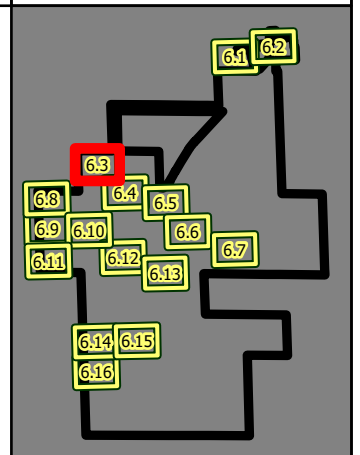
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Data Sources

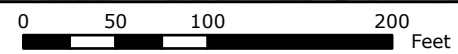
NWN-Project Infrastructure: Tiger-Roads;  
ESRI-Aerial; Lane County-Taxlots

Reference Map



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WGS 1984 UTM Zone 10N



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DSL WD # 2021-0542  
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Approval Expires 5/2/2027

# Empire Solar Project

Figure 6.4  
Wetland Delineation Map

CROOK COUNTY, OR

- Detailed Map Grid
- Study Area
- Taxlot Boundary
- Township 16S Range 15E Section
- Field Delineated Stream\* (Maximum OHWL Width)
- Field Delineated Wetland\*
- Sample Plot
- Photo Point (# Photo Number)

\*All delineated wetlands are considered to be completely contained within the Study Area. Streams are considered to extend outside of the study area unless otherwise noted. Delineated streams that are completely contained within the Study Area are noted on the figure next to their feature names.

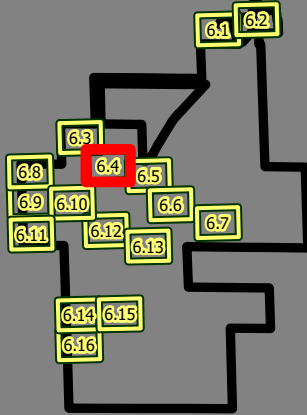
Wetland and stream channel boundaries, sample plots, and photo points were collected using sub-meter grade GPS devices collecting real-time, sub-meter GNSS data. Mapped features are < /= 1 meter of the ground location.

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Data Sources Reference Map

NWN-Project Infrastructure: Tiger-Roads;  
ESRI-Aerial; Lane County-Taxlots



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WGS 1984 UTM Zone 10N

0 50 100 200 Feet

NOT FOR CONSTRUCTION



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**Empire  
Solar Project**

**Figure 6.4.1  
Wetland Delineation Map**

**CROOK COUNTY, OR**

- Field Delineated Stream\*  
(Maximum OHWL Width)
- Field Delineated Wetland\*
- Sample Plot
- Photo Point (# Photo Number)

**DSL WD # 2021-0542**  
**Approval Issued 5/2/2022**  
**Approval Expires 5/2/2027**

*\*All delineated wetlands are considered to be completely contained within the Study Area. Streams are considered to extend outside of the study area unless otherwise noted. Delineated streams that are completely contained within the Study Area are noted on the figure next to their feature names.*

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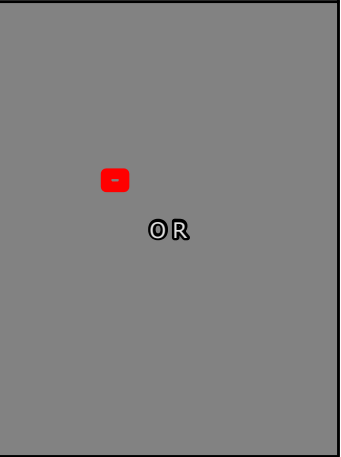
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Data Sources

Reference Map

Avangrid-Project Infrastructure; Tiger-Roads;  
ESRI-Topographic



1:500

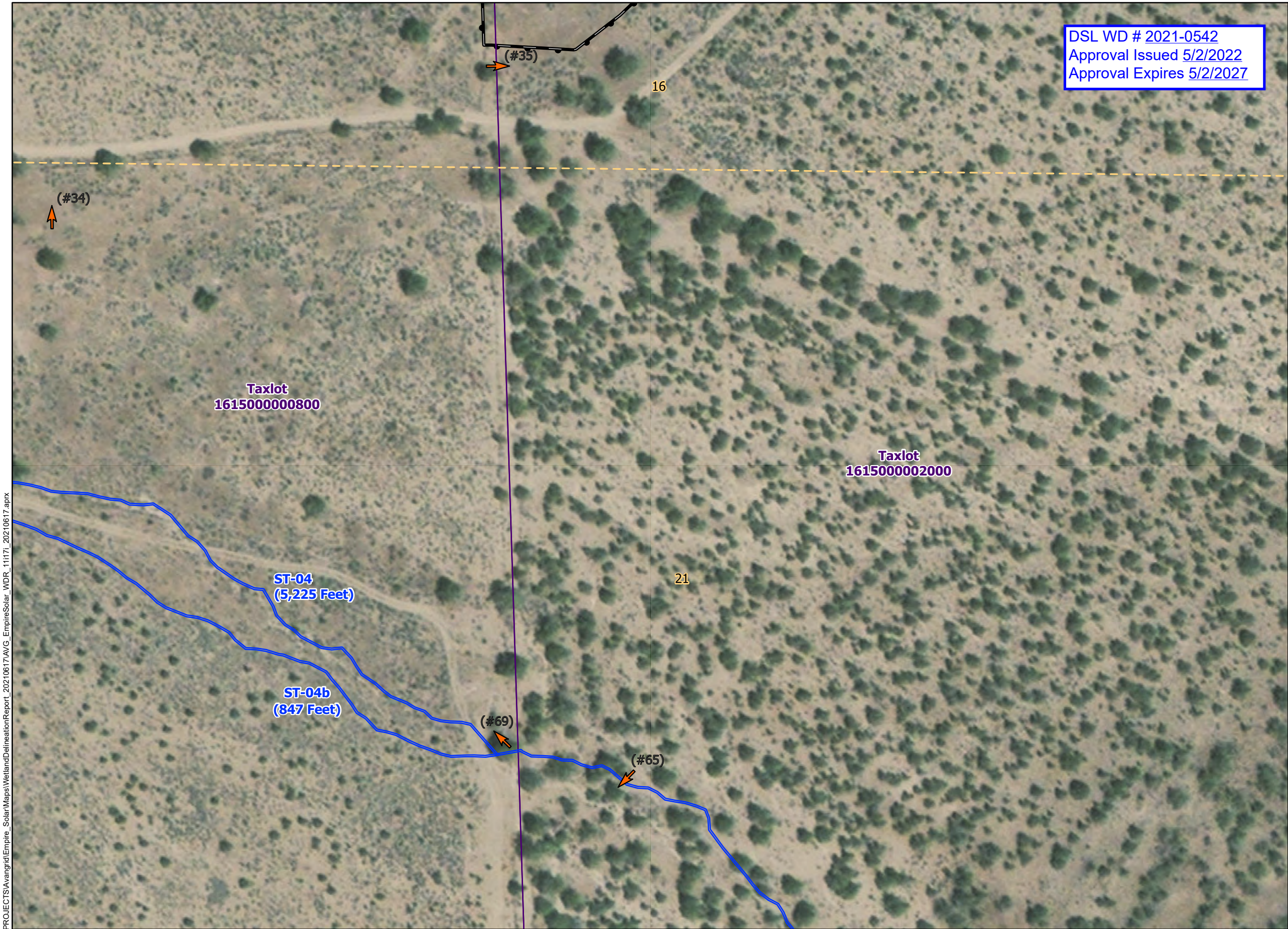
WGS 1984 UTM Zone 10N

0 50 100 200 Feet

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**Empire  
Solar Project**

**Figure 6.5  
Wetland Delineation Map**

**CROOK COUNTY, OR**

- Study Area
- Taxlot Boundary
- Township 16S Range 15E Section
- Field Delineated Stream\* (Maximum OHWL Width)
- Photo Point (# Photo Number)

*\*All delineated wetlands are considered to be completely contained within the Study Area. Streams are considered to extend outside of the study area unless otherwise noted. Delineated streams that are completely contained within the Study Area are noted on the figure next to their feature names.*

*Wetland and stream channel boundaries, sample plots, and photo points were collected using sub-meter grade GPS devices collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.*

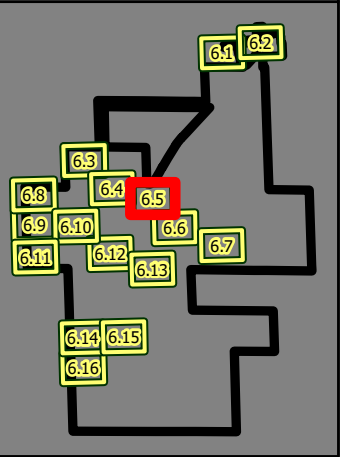
The Study Area is not a mapped boundary and is based on a combination of tax lot spatial data maintained by the Crook County Assessor and obtained in March 2021, lease boundaries determined in coordination with underlying landowners, aerial photography and lidar surveys contracted by Avangrid and completed in June 2020, and land survey results contracted by Avangrid, completed in January 2021.



Data Sources

Reference Map

NWN-Project Infrastructure: Tiger-Roads;  
ESRI-Aerial; Lane County-Taxlots



1:1,250

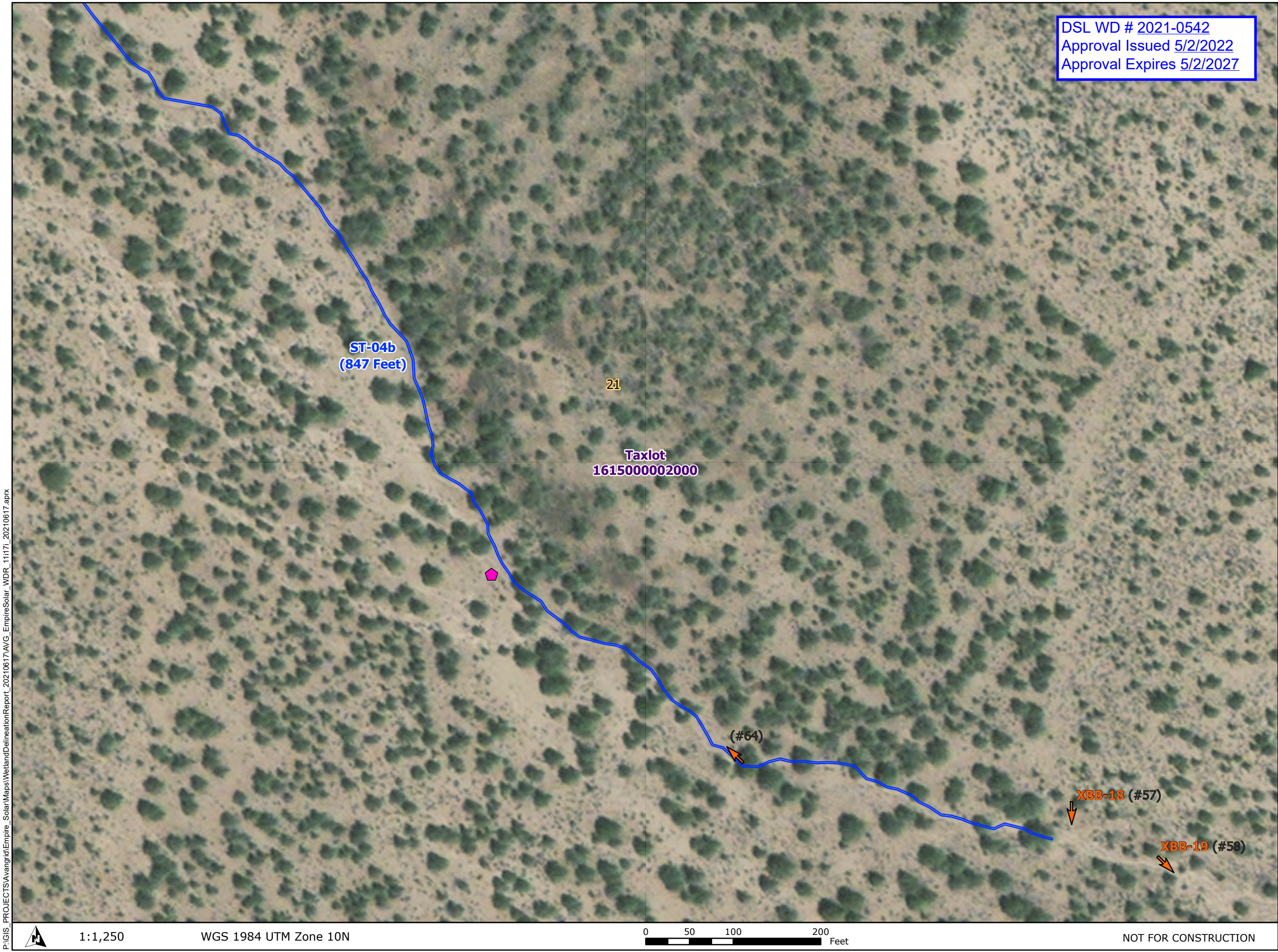
WGS 1984 UTM Zone 10N



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# Empire Solar Project

## Figure 6.6 Wetland Delineation Map

CROOK COUNTY, OR

- Study Area
- Taxlot Boundary
- Township 16S Range 15E Section
- Field Delineated Stream\* (Maximum OHWL Width)
- SDAM Point
- Photo Point (# Photo Number)

*\*All delineated wetlands are considered to be completely contained within the Study Area. Streams are considered to extend outside of the study area unless otherwise noted. Delineated streams that are completely contained within the Study Area are noted on the figure next to their feature names.*

*Wetland and stream channel boundaries, sample plots, and photo points were collected using sub-meter grade GPS devices collecting real-time, sub-meter GNSS data. Mapped features are < /= 1 meter of the ground location.*

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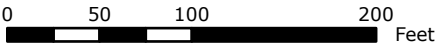


Data Sources	Reference Map
NWN-Project Infrastructure: Tiger-Roads; ESRI-Aerial; Lane County-Taxlots	



1:1,250

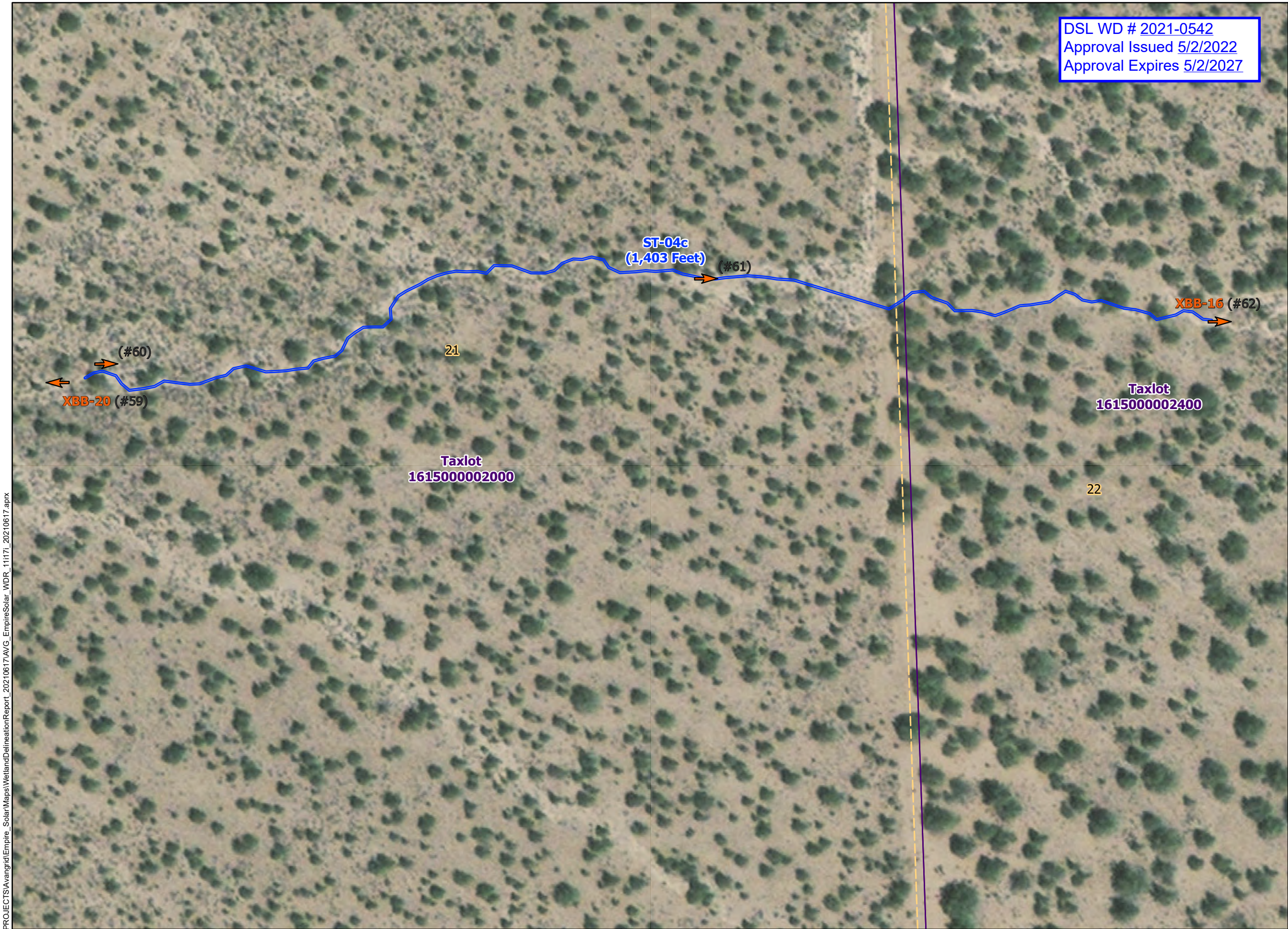
WGS 1984 UTM Zone 10N



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# Empire Solar Project

**Figure 6.7**  
**Wetland Delineation Map**

CROOK COUNTY, OR

- Study Area
- Taxlot Boundary
- Township 16S Range 15E Section
- Field Delineated Stream\* (Maximum OHWL Width)
- Photo Point (# Photo Number)

*\*All delineated wetlands are considered to be completely contained within the Study Area. Streams are considered to extend outside of the study area unless otherwise noted. Delineated streams that are completely contained within the Study Area are noted on the figure next to their feature names.*

*Wetland and stream channel boundaries, sample plots, and photo points were collected using sub-meter grade GPS devices collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.*

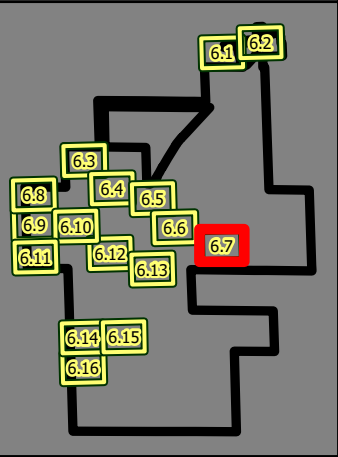
The Study Area is not a mapped boundary and is based on a combination of tax lot spatial data maintained by the Crook County Assessor and obtained in March 2021, lease boundaries determined in coordination with underlying landowners, aerial photography and lidar surveys contracted by Avangrid and completed in June 2020, and land survey results contracted by Avangrid, completed in January 2021.



Data Sources

Reference Map

NWN-Project Infrastructure: Tiger-Roads;  
ESRI-Aerial; Lane County-Taxlots



1:1,250

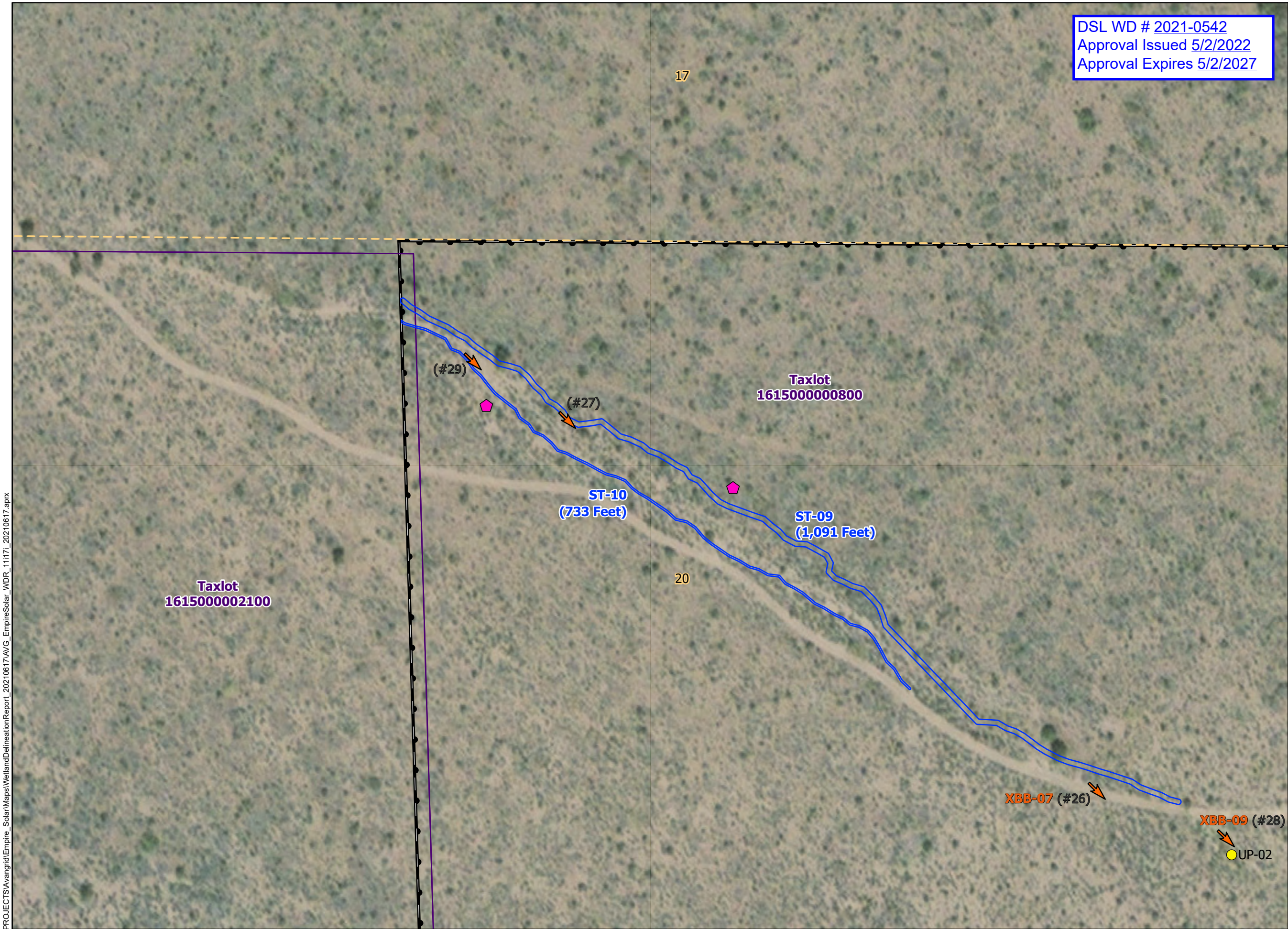
WGS 1984 UTM Zone 10N

0 50 100 200 Feet

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# Empire Solar Project

Figure 6.8  
Wetland Delineation Map

CROOK COUNTY, OR

- Study Area
- Taxlot Boundary
- Township 16S Range 15E Section
- Field Delineated Stream\* (Maximum OHWL Width)
- Sample Plot
- SDAM Point
- Photo Point (# Photo Number)

*\*All delineated wetlands are considered to be completely contained within the Study Area. Streams are considered to extend outside of the study area unless otherwise noted. Delineated streams that are completely contained within the Study Area are noted on the figure next to their feature names.*

*Wetland and stream channel boundaries, sample plots, and photo points were collected using sub-meter grade GPS devices collecting real-time, sub-meter GNSS data. Mapped features are < /= 1 meter of the ground location.*

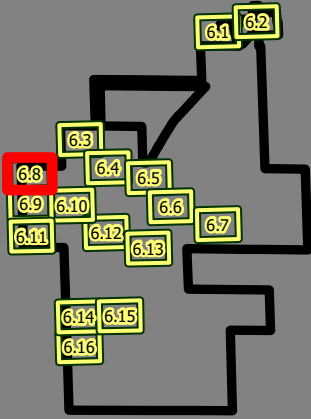
The Study Area is not a mapped boundary and is based on a combination of tax lot spatial data maintained by the Crook County Assessor and obtained in March 2021, lease boundaries determined in coordination with underlying landowners, aerial photography and lidar surveys contracted by Avangrid and completed in June 2020, and land survey results contracted by Avangrid, completed in January 2021.



Data Sources

NWN-Project Infrastructure; Tiger-Roads;  
ESRI-Aerial; Lane County-Taxlots

Reference Map



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WGS 1984 UTM Zone 10N

0 50 100 200 Feet

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**Empire  
Solar Project**

**Figure 6.9  
Wetland Delineation Map**

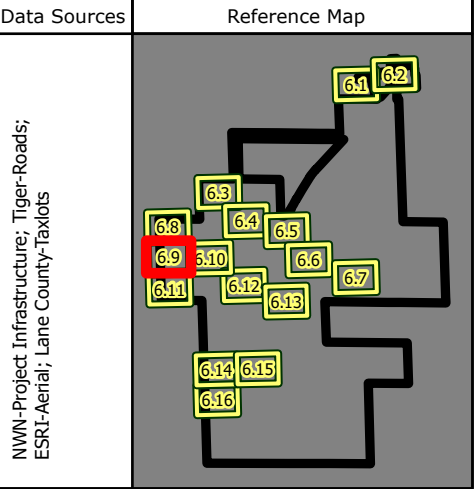
**CROOK COUNTY, OR**

- Study Area
- Taxlot Boundary
- Township 16S Range 15E Section
- Field Delineated Stream\* (Maximum OHWL Width)
- Sample Plot
- SDAM Point
- Photo Point (# Photo Number)

*\*All delineated wetlands are considered to be completely contained within the Study Area. Streams are considered to extend outside of the study area unless otherwise noted. Delineated streams that are completely contained within the Study Area are noted on the figure next to their feature names.*

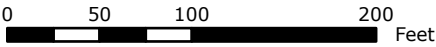
*Wetland and stream channel boundaries, sample plots, and photo points were collected using sub-meter grade GPS devices collecting real-time, sub-meter GNSS data. Mapped features are  $\leq$  1 meter of the ground location.*

The Study Area is not a mapped boundary and is based on a combination of tax lot spatial data maintained by the Crook County Assessor and obtained in March 2021, lease boundaries determined in coordination with underlying landowners, aerial photography and lidar surveys contracted by Avangrid and completed in June 2020, and land survey results contracted by Avangrid, completed in January 2021.



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# Empire Solar Project

**Figure 6.10**  
**Wetland Delineation Map**

CROOK COUNTY, OR

- Study Area
- Taxlot Boundary
- Township 16S Range 15E Section
- Field Delineated Stream\* (Maximum OHWL Width)
- SDAM Point
- Photo Point (# Photo Number)

*\*All delineated wetlands are considered to be completely contained within the Study Area. Streams are considered to extend outside of the study area unless otherwise noted. Delineated streams that are completely contained within the Study Area are noted on the figure next to their feature names.*

*Wetland and stream channel boundaries, sample plots, and photo points were collected using sub-meter grade GPS devices collecting real-time, sub-meter GNSS data. Mapped features are < /= 1 meter of the ground location.*

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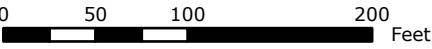


Data Sources	Reference Map
NWN-Project Infrastructure: Tiger-Roads; ESRI-Aerial; Lane County-Taxlots	



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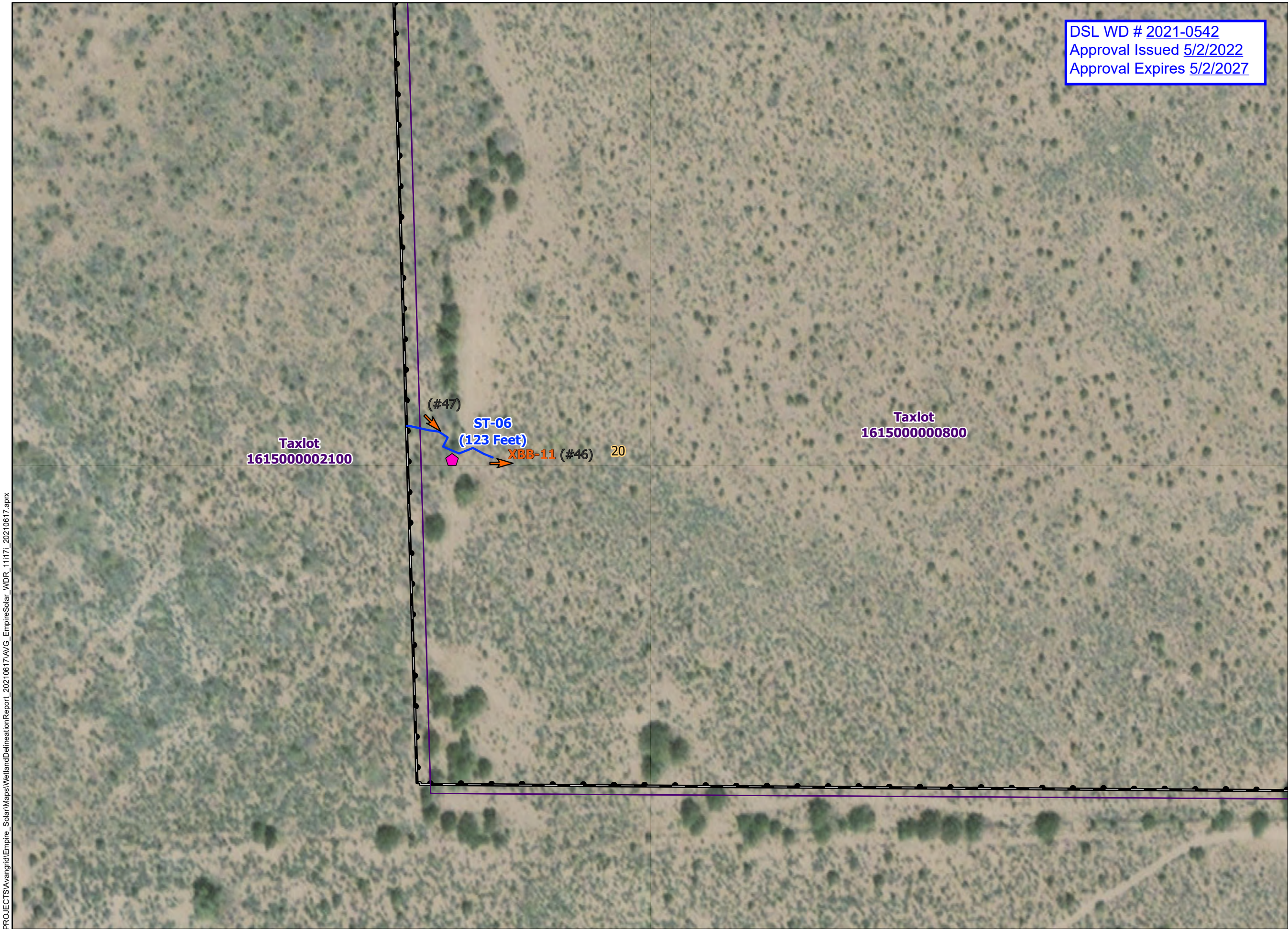
WGS 1984 UTM Zone 10N



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**Empire  
Solar Project**

**Figure 6.11  
Wetland Delineation Map**

**CROOK COUNTY, OR**

- Study Area
- Taxlot Boundary
- Township 16S Range 15E Section
- Field Delineated Stream\* (Maximum OHWL Width)
- SDAM Point
- Photo Point (# Photo Number)

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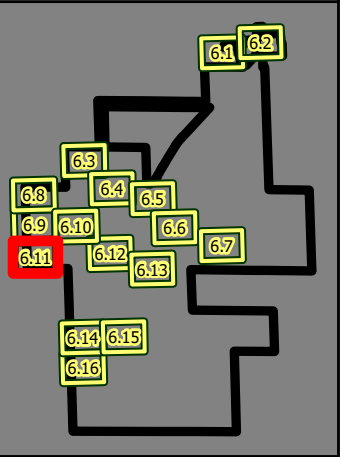
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Data Sources

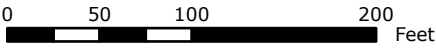
NWN-Project Infrastructure; Tiger-Roads;  
ESRI-Aerial; Lane County-Taxlots

Reference Map



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# Empire Solar Project

**Figure 6.12**  
**Wetland Delineation Map**

CROOK COUNTY, OR

- Study Area
- Taxlot Boundary
- Township 16S Range 15E Section
- Field Delineated Stream\* (Maximum OHWL Width)
- Photo Point (# Photo Number)

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*Wetland and stream channel boundaries, sample plots, and photo points were collected using sub-meter grade GPS devices collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.*

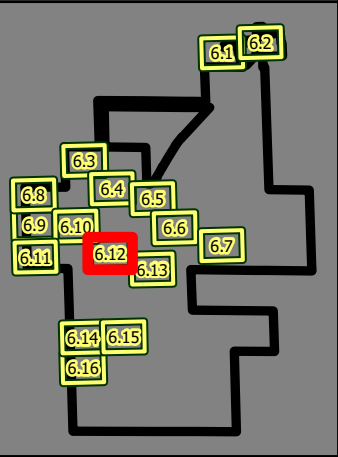
The Study Area is not a mapped boundary and is based on a combination of tax lot spatial data maintained by the Crook County Assessor and obtained in March 2021, lease boundaries determined in coordination with underlying landowners, aerial photography and lidar surveys contracted by Avangrid and completed in June 2020, and land survey results contracted by Avangrid, completed in January 2021.



Data Sources

Reference Map

NWN-Project Infrastructure: Tiger-Roads;  
ESRI-Aerial; Lane County-Taxlots



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# Empire Solar Project

## Figure 6.13 Wetland Delineation Map

CROOK COUNTY, OR

- Study Area
- Taxlot Boundary
- Township 16S Range 15E Section
- Field Delineated Stream\* (Maximum OHWL Width)
- Photo Point (# Photo Number)

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*Wetland and stream channel boundaries, sample plots, and photo points were collected using sub-meter grade GPS devices collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.*

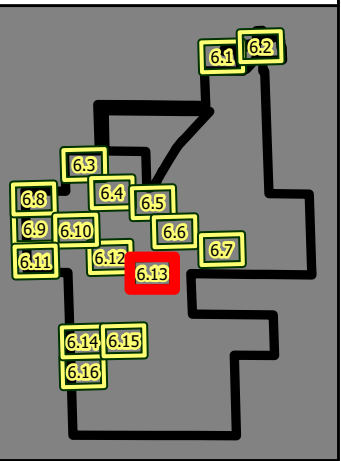
The Study Area is not a mapped boundary and is based on a combination of tax lot spatial data maintained by the Crook County Assessor and obtained in March 2021, lease boundaries determined in coordination with underlying landowners, aerial photography and lidar surveys contracted by Avangrid and completed in June 2020, and land survey results contracted by Avangrid, completed in January 2021.



Data Sources

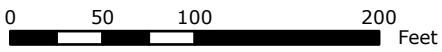
NWN-Project Infrastructure; Tiger-Roads;  
ESRI-Aerial; Lane County-Taxlots

Reference Map



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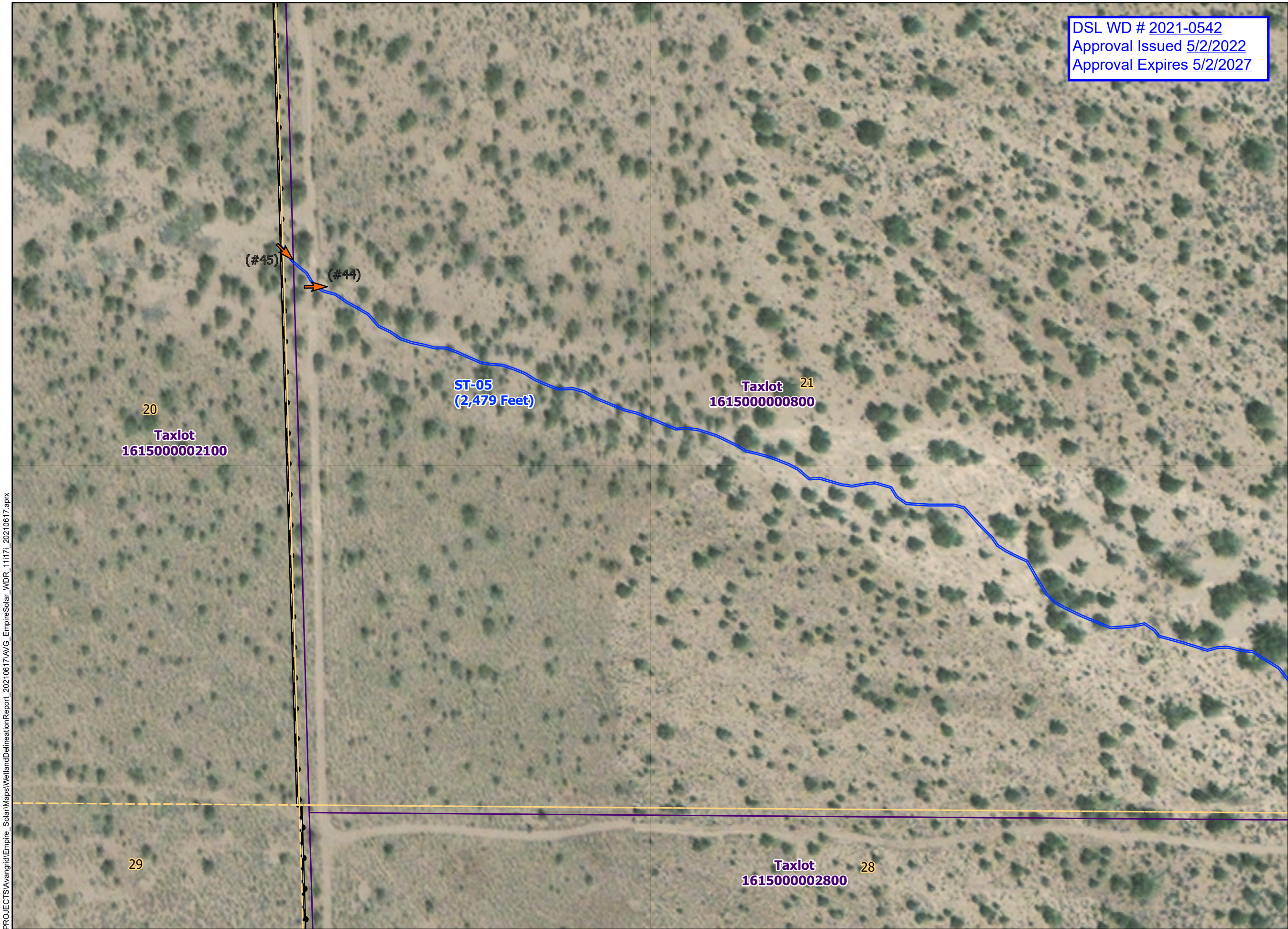
WGS 1984 UTM Zone 10N



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**Empire  
Solar Project**

**Figure 6.14  
Wetland Delineation Map**

**CROOK COUNTY, OR**

- Study Area
- Taxlot Boundary
- Township 16S Range 15E Section
- Field Delineated Stream\* (Maximum OHWL Width)
- Photo Point (# Photo Number)

*\*All delineated wetlands are considered to be completely contained within the Study Area. Streams are considered to extend outside of the study area unless otherwise noted. Delineated streams that are completely contained within the Study Area are noted on the figure next to their feature names.*

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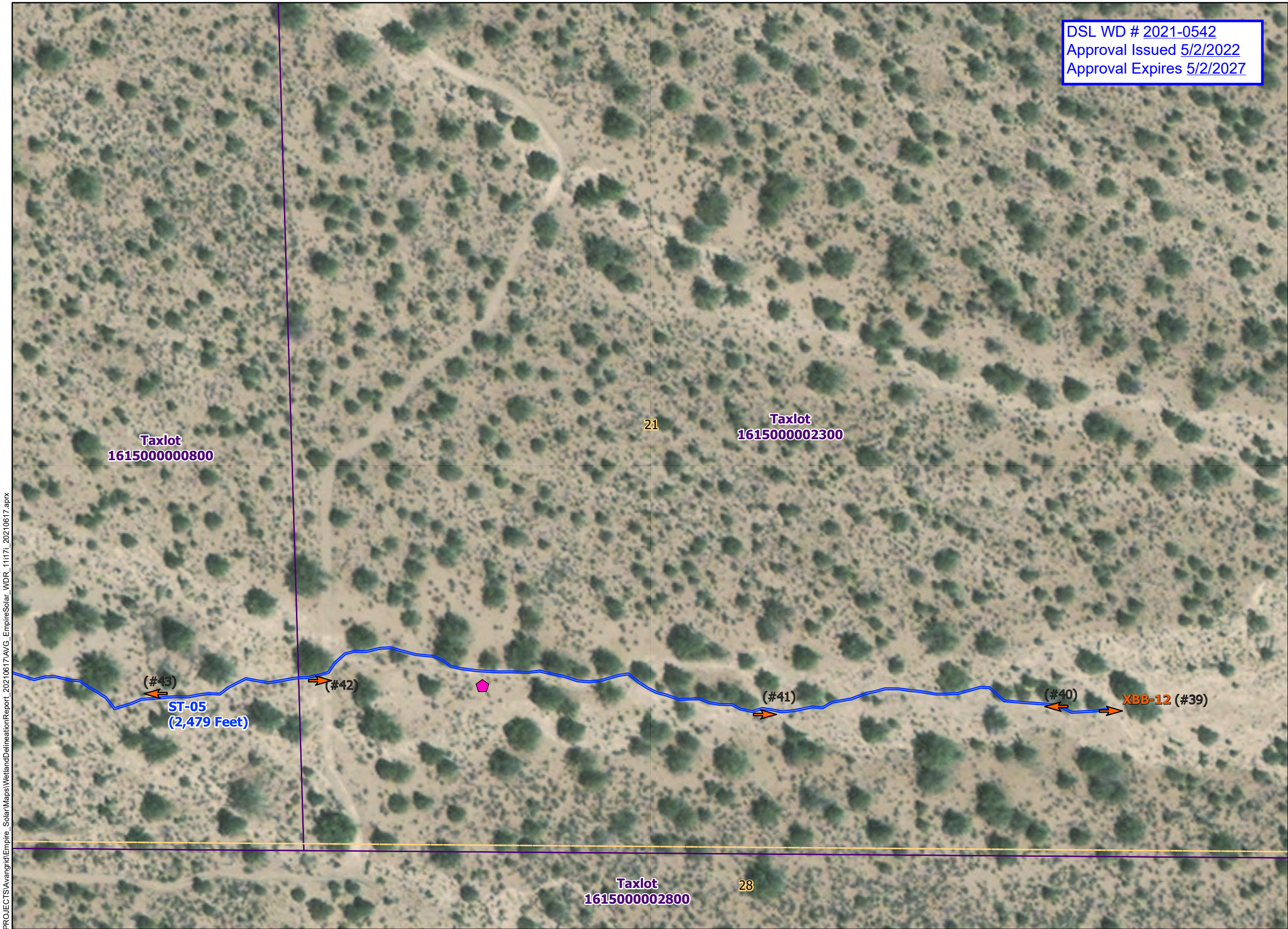
The Study Area is not a mapped boundary and is based on a combination of tax lot spatial data maintained by the Crook County Assessor and obtained in March 2021, lease boundaries determined in coordination with underlying landowners, aerial photography and lidar surveys contracted by Avangrid and completed in June 2020, and land survey results contracted by Avangrid, completed in January 2021.



Data Sources	Reference Map
NWN-Project Infrastructure; Tiger-Roads; ESRI-Aerial; Lane County-Taxlots	



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# Empire Solar Project

Figure 6.15  
Wetland Delineation Map

CROOK COUNTY, OR

- Study Area
- Taxlot Boundary
- Township 16S Range 15E Section
- Field Delineated Stream\* (Maximum OHWL Width)
- SDAM Point
- Photo Point (# Photo Number)

*\*All delineated wetlands are considered to be completely contained within the Study Area. Streams are considered to extend outside of the study area unless otherwise noted. Delineated streams that are completely contained within the Study Area are noted on the figure next to their feature names.*

*Wetland and stream channel boundaries, sample plots, and photo points were collected using sub-meter grade GPS devices collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.*

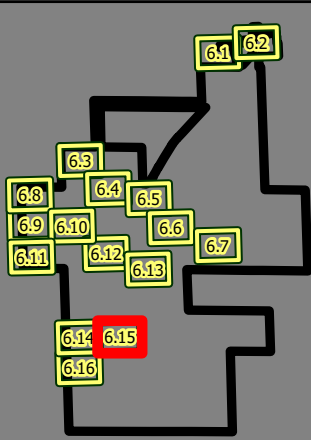
The Study Area is not a mapped boundary and is based on a combination of tax lot spatial data maintained by the Crook County Assessor and obtained in March 2021, lease boundaries determined in coordination with underlying landowners, aerial photography and lidar surveys contracted by Avangrid and completed in June 2020, and land survey results contracted by Avangrid, completed in January 2021.



Data Sources

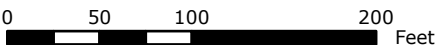
Reference Map

NWN-Project Infrastructure: Tiger-Roads;  
ESRI-Aerial; Lane County-Taxlots



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# Empire Solar Project

**Figure 6.16**  
**Wetland Delineation Map**

CROOK COUNTY, OR

- Study Area
- Taxlot Boundary
- Township 16S Range 15E Section
- Sample Plot
- Photo Point (# Photo Number)

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Data Sources	Reference Map
NWN-Project Infrastructure: Tiger-Roads; ESRI-Aerial; Lane County-Taxlots	

