

## **Exhibit L: Preliminary Natural Resources Assessment**

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# Grimms Fuel Storage Yard Tualatin, Washington County Tier 1 Site Assessment Report

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**Date:** January 2025

**Prepared for:** Grimm's Fuel Co  
18850 SW Cipole Rd  
Tualatin, OR 97062

**Prepared by:** AKS Engineering & Forestry, LLC  
Rebecca Schilling, Natural Resource Specialist  
Stacey Reed, PWS, Senior Wetland Scientist

**Site Information:** Washington County Assessor's Map 2S 1 21A,  
Tax Lot 2100  
Tualatin, Oregon

**AKS Job Number:** 11113



12965 SW Herman Road, Suite 100  
Tualatin, OR 97062  
(503) 563-6151

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## Introduction

AKS Engineering & Forestry, LLC (AKS) was contracted by Grimm's Fuel Co (Applicant) to conduct a site assessment located at 18867 SW 128th Avenue in Tualatin, Oregon, and consists of Tax Lot 2100 of Washington County Assessor's Tax Map 2S 1 21A. The purpose of this site assessment is to confirm the extent of the Clean Water Services (CWS) Vegetated Corridor (VC) associated with Water Quality Sensitive Areas for a gravel storage yard and water quality facility.

AKS Natural Resource Specialists conducted a site assessment on March 8, 2024 to document the current extent of Water Quality Sensitive Areas (wetlands and waters) on the tax lot. AKS delineated the on-site boundaries of a Palustrine Scrub-Shrub/Emergent (PSS/PEM) wetland referred to as Wetland A and a PEM wetland referred to as Wetland B. The top of bank of an intermittent water originating from Wetland B was also delineated. The slopes adjacent to features delineated on the site are less than 25-percent. Wetlands A and B require a 50-foot-wide VC. The intermittent water drains between 10 and 50 acres, requiring a 15-foot-wide VC. The condition of the VC was determined to mostly be in "degraded" condition, with areas of "good and marginal" condition. A wetland creation mitigation area is located within Wetland A associated with the City of Tualatin's 2012 SW Leveton Drive Extension project. The project avoids impacts to the wetland mitigation site.

Improvement to an existing gravel storage pad and gravel driveway occurred on the site sometime between 2023 and 2024. Small portions of the gravel placement resulted in VC encroachment beyond the existing gravel extents. The project consists of the replacement of existing gravel with asphalt and expanding the asphalt footprint to provide additional space. A stormwater facility is proposed in the outer edge of the VC adjacent to Wetland A to treat run-off from the asphalt. The encroachment into VC for the proposed stormwater facility and the gravel that was placed does not extend closer than 35 feet from the wetland boundary; meeting the conditions of a Tier 1 alternatives analysis. Temporary VC encroachment is necessary for the stormwater outfall. Temporary VC impacts will be restored to pre-existing contours and planted to "good" condition. A riprap stormwater outfall pad less than 100 square feet is proposed in "degraded" VC. This VC encroachment can be considered an allowed use according to Section 3.05.6 of CWS *Design and Construction Standards*. On-site replacement VC mitigation will offset the unavoidable permanent VC encroachment.

This report has been prepared to meet Clean Water Services (CWS) Standard Site Assessment requirements listed under Chapter 3 of CWS *Design and Construction Standards*, December 2019 (R&O 19-5).

## Existing Conditions and Background

A gravel quarry and office buildings are located in the western half of the Tax Lot. An open field, a gravel pad, and gravel driveway are in the eastern half of the Tax Lot. The project impacts are in the eastern half of the tax lot, which is bisected by SW 128<sup>th</sup> Avenue. The undeveloped portions of the site contain an Oregon white oak (*Quercus garryana*, FACU) grove with bentgrass (*Agrostis* species, assumed FAC), field meadow-foxtail (*Alopecurus pratensis*, FAC), and tall false rye grass (*Schedonorus arundinaceus*, FAC).

The surrounding land use is commercial. The topography is flat with gentle southerly slopes towards Wetland A.

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The following soil units are mapped within the study area, according to the Natural Resources Conservation Service (NRCS) Washington County Area Soil Survey Map (Figure 3):

- Cove silty clay loam, (Unit 13)-Hydric
- McBee silty clay loam (Unit 30)- Non-hydric
- Quatama loam, (Unit 37B), 3 to 7 percent slopes – Non-hydric
- Wapato silty clay loam, (Unit 43)– Hydric
- Huberly silt loam (Unit 2225A), 0 to 3 percent slopes- Hydric

According to the City of Tualatin's (City) DSL approved Local Wetland Inventory (LWI) map, two wetlands (referred to as Unit W-38) and a stream are present in the project tax lot (Figure 4). The wetlands and water delineated by AKS are located in the vicinity of features mapped on the LWI. No additional features were identified during the AKS site assessment.

## Water Quality Sensitive Areas

### Wetland Delineation Methodology

The methodology used to determine the presence of wetlands followed the *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory 1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region* (Environmental Laboratory 2010). The *National Wetland Plant List* (USACE 2022) was used to assign wetland indicator status for the appropriate region. Soils, vegetation and indicators of hydrology were recorded at eleven sample plots on standardized wetland determination data forms to document site conditions (Appendix A). Representative site photographs are included in Appendix C. References cited are included at the end of the report. The wetland and water boundaries and plot locations were flagged in the field and their locations were professionally land surveyed by AKS, as shown on attached Figures 6 through 6B.

### Precipitation Prior to Site Assessment

According to the Applied Climate Information System (ACIS) Climate Analysis for the Portland-Hillsboro AP weather station, no amount of rainfall was received on the day of the March 8, 2024 site visit and 4.07 inches within the two weeks prior. Since October 1, 2023, 36.80 inches of rainfall were received, which is 121% of normal. The Portland-Hillsboro AP weather station Wetland Tables (WETS) reports wetter than normal rainfall for three months prior to the March 8, 2024 site assessment.

### Previous Wetland Delineation Concurrence and Service Provider Letter

CH2MHill conducted a partial wetland delineation on the site in 2008 for the City of Tualatin's SW Leveton Extension (WD2008-0511). The 2008 delineation determined 0.40 acres of wetland within the vicinity of Wetland A delineated under this study.

The City of Tualatin's SW Leveton Extension project was previously covered under CWS Service Provider Letter (SPL) #09-00014 and DSL Permit Number 41674-RF for permanent wetland impacts. On-site mitigation included the creation of 0.18 acres of wetland. According to the 41674-RF Year 5 monitoring report, additional wetland outside of the as-built was created, which likely explains why the AKS 2024 delineation determined more wetland than CH2MHill's 2008 delineation. The extent of wetland mitigation per DSL Permit 41674-RF is shown on Figure 6A.

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### **Wetland A**

Wetland A is a PSS/PEM wetland with a seasonally flooded water regime wetland and receives its primary source of input from a direct precipitation and a seasonally high ground water table. The secondary hydrology input is from the upland runoff, surrounding stormwater runoff and discharge from the on-site intermittent water. Wetland conditions continue beyond the study area, off-site to the south. Wetland A is located at the base of a slope and has downhill sheet flow flowing off-site and eventually to Cummins Creek; therefore, Wetland A belongs to the Slope Valley Hydrogeomorphic (HGM) subclassification.

The on-site PEM portion of the wetland is dominated with the following vegetation: reed canary grass (FACW), spreading bent (*Agrostis stolonifera*, FACW), tall false rye grass (FAC), marsh primrose-willow (*Ludwigia palustris*, OBL) and knotty-leaf rush (*Juncus acuminatus*, FACW). The PSS portion of the wetland was dominant in: Douglas' meadowsweet (*Spiraea douglasii*, FACW), willow (*Salix* species, assumed FAC), black hawthorn (*Crataegus douglasii*, FAC), and patches of Himalayan blackberry (*Rubus armeniacus*, FAC).

Wetland A was delineated based on a distinct change in landform that coincided with a transition from facultative wetter vegetation (reed canary grass) in the wetland to facultative vegetation (field meadow-foxtail, tall false rye grass and bentgrass) and facultative-upland vegetation (ox-eye daisy (*Leucanthemum vulgare*), Queen Anne's-lace (*Daucus carota*) in the upland.

### **Wetland B**

Wetland B is a PEM wetland with a seasonally saturated water regime and belongs to the Slopes Valley Hydrogeomorphic (HGM) subclassification. Wetland B receives hydrology input from upland runoff, a seasonally high groundwater table and direct precipitation. Wetland conditions continue off-site to the north and east. The dominant vegetation within this wetland is reed canary grass (FACW).

The boundary of Wetland B was delineated based on a distinct change in landform that coincided with a transition from vegetation dominated with reed canary grass, a facultative wetter vegetation in the wetland to dominated with field meadow-foxtail a facultative vegetation with scattered dovefoot geranium (*Geranium molle*) and red-dead-nettle (*Lamium purpureum*) facultative upland vegetation, in the upland.

### **Intermittent water**

The intermittent water originates from Wetland B and flows southwest, discharging into Wetland A. The vegetation along the channel and within the channel was dominated by willow (assumed FAC), with scattered slough sedge (*Carex obnupta*, OBL) and English hawthorn (*Crataegus monogyna*, FAC). The channel is on average 3 feet wide with 1 foot tall banks and contained +/-4 inches deep scattered flow during the March 8, 2024 site visit. The substrate consisted of fine silt sediment with small gravels. According to Oregon's Streamflow Duration Assessment Method (SDAM), the water has an intermittent flow regime.

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## Extent and Condition of the Vegetated Corridor

### Pre-existing Site Development

An analysis of historic google earth imagery (refer to Appendix E) was conducted to confirm when gravel placement occurred on the site and the extent of gravel placement. Based on our review, it appears a gravel road was first constructed in 2006 and expanded in 2008. According to SPL#09-00014 the gravel was placed outside of VC. Figures A-C of Appendix E depict the limits of gravel from 2006-2008. Therefore, the gravel placed in 2006-2008 was considered preexisting conditions for this submittal, thus severing portions of the current 50-foot wide VC adjacent to Wetland A. Gravel recently placed beyond the preexisting gravel extent is depicted on Figures 6A and 6B. Replacement mitigation is proposed for the additional gravel placement in VC. A wellhouse was constructed in VC in 2010. A SPL was issued for the well house (SPL 10-000071).

### Extent of Vegetated Corridor

During the March 8, 2024 AKS site visit, the existing conditions of the VC within the project area was evaluated according to CWS standards outlined in Section 3.03.2 through 3.03.3 and Table 3-3. The VC standards are based on the percent of tree canopy and percent cover of native trees, shrubs, and herbs. Vegetated Corridor (VECO) Data Sheets are included in Appendix B. Representative photographs of the existing conditions of the VC are included in Appendix C. The extent and condition of the on-site VC and slope measurements confirming a 50-foot wide VC is included in Figures 5 through 5B.

### Existing Condition of Vegetated Corridor

**VECO Plot A** has a tree canopy dominated with seventy-five percent canopy cover of Oregon white oak (*Quercus garryana*, FACU) and five percent canopy cover of Douglas-fir (*Pseudotsuga menziesii*, FACU). VECO Plot A was determined to be in “good” condition because this plot has eighty percent tree canopy cover and greater than eighty percent overall native cover. This plot lacks a shrub layer and has an herb layer dominated with non-native tall false rye grass and shining geranium (*Geranium lucidum*, FAC).

**VECO Plot B** is located within the VC enhancement area outlined SPL#09-000014 and was planted to “good” condition in 2013 and maintained through 2018. VECO Plot B has a tree layer dominated by Ponderosa pine (*Pinus ponderosa*, FACU) and a shrub layer dominated with snowberry (*Symphoricarpos albus*, FACU). The herb layer is comprised of invasive reed canary grass and non-native Fuller’s teasel (*Dipsacus fullonum*, FACU). This plot was determined to be in “marginal” corridor condition due to a tree canopy cover of thirty-five percent and overall native cover of fifty-five percent.

**VECO Plot C** was determined to be in “degraded” condition corridor due to a lack of tree canopy cover and native cover. This plot is located along the northwestern edge of Wetland A boundary.

**VECO Plot D** is located adjacent to Wetland B and was determined to be in “degraded” condition because of having only fifteen percent tree canopy cover and overall native cover.



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## Project

### VC Impact Summary

Grimm's Fuel Company is expanding their vehicle storage spaces and constructing a new fenced parking yard that will be leased or otherwise used for storage of vehicles. Due to limitations in topography, existing utility depths and per CWS *Design and Construction Standards Manual for Sanitary Sewer and Surface Water Management*, the installation of the stormwater facility will result in unavoidable encroachment within the outermost edge of VC associated with Wetland A. The unavoidable permanent impacts to VC extending within thirty percent of the VC depth but no greater, require a Tier 1 Alternatives Analysis review. In addition, the gravel recently placed that extended beyond the previous extent of gravel requires Tier 1 Alternatives Analysis review. The temporary VC encroachment for the installation of the stormwater outfall will be planted to meet "good" condition criteria. The forty square feet of riprap outfall within VC does not require replacement mitigation per Section 3.05.6.

### Tier 1 Alternatives Analysis

*3.07.3.c.1 The proposed encroachment area is mitigated in accordance with Section 3.08.*

Permanent VC impacts will be mitigated through on-site replacement mitigation (See Figures 7-7B). VC replacement mitigation is located on-site continuous with existing VC adjacent to Wetland A. Necessary temporary VC impacts will be restored to "good" condition.

*3.07.3.c.2 and 3.07.4.c.3. Enhancement of the replacement area, if not already in Good Corridor Condition, and either the remaining Vegetated Corridor on the site or the first 50 feet of width closest to the resource, whichever is less, to a Good Corridor Condition.*

The replacement mitigation is in "degraded" condition and will be enhanced to "good" condition. All remaining "degraded and marginal" condition VC will be enhanced to "good" condition per CWS requirements. The enhancement area will include the removal of non-native, invasive species, and dense plantings of native tree and shrub species suitable for the conditions of the project site. The recommended planting tables are included in Appendix D.

*3.07.4.c.5. Location of the development and site planning minimizes incursion into the Vegetated Corridor.*

The project avoids impacts to Water Quality Sensitive Areas. VC impacts have been minimized to the greatest extent practical. Erosion control fencing is incorporated into the project design to minimize grading into VC.

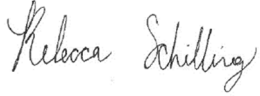
*3.07.4.c.6. No practicable alternative to the location of the development exists that will not disturb the Sensitive Area or Vegetated Corridor.*

This project is necessary to support the need for Grimm's Fuel Company to utilize the space available for leasing and storage purposes. Due to site topography constraints, there are no practical alternatives for placement of the water quality facility that avoid VC encroachment. There are no practical, available alternative site locations to achieve the project goal that does not disturb VC.



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## List of Preparers



Rebecca Schilling  
Natural Resource Specialist  
Fieldwork and Report Preparation



Margret Harburg  
Natural Resource Specialist  
Fieldwork

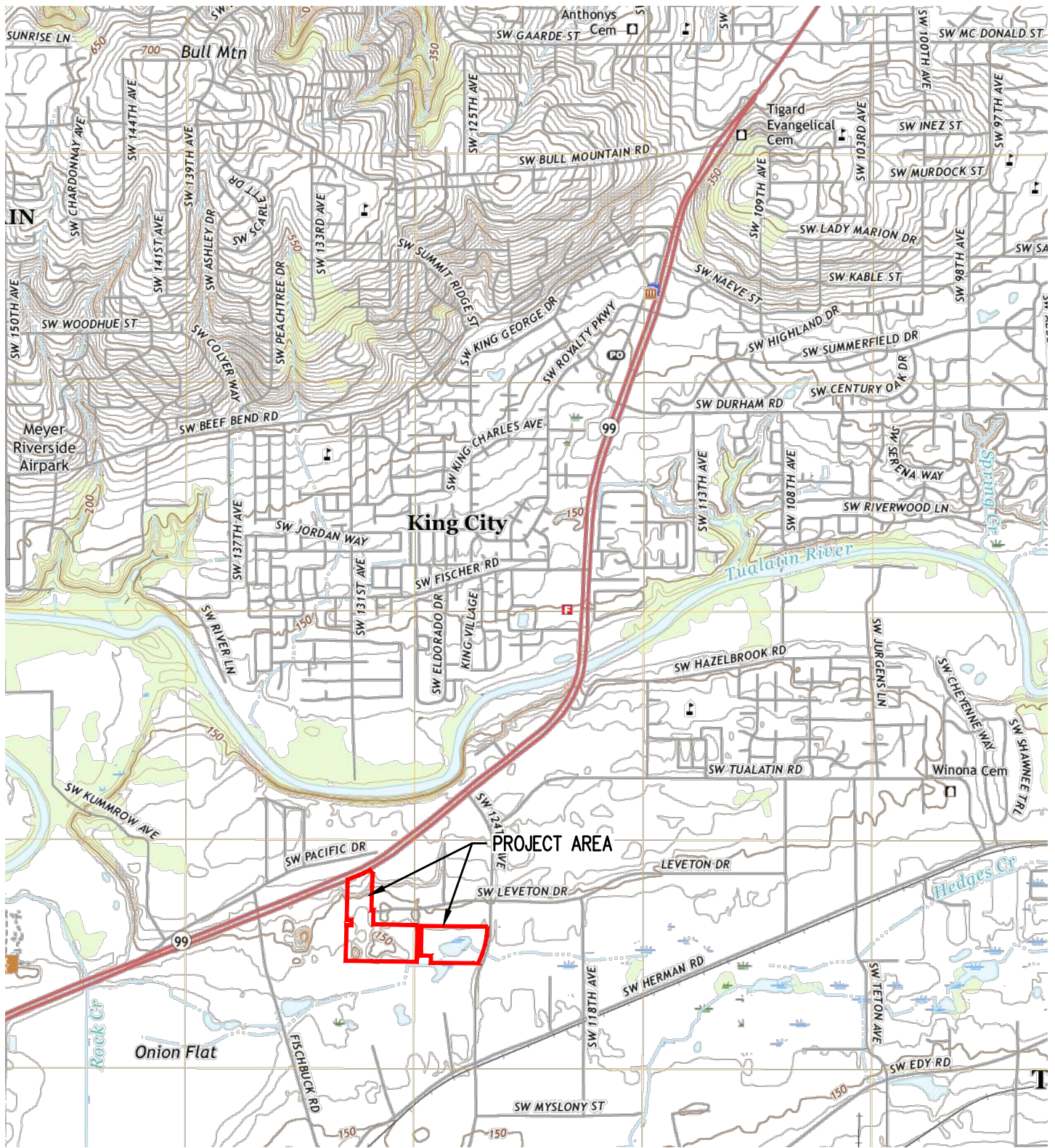


Stacey Reed, PWS  
Senior Wetland Scientist  
Report QA/QC

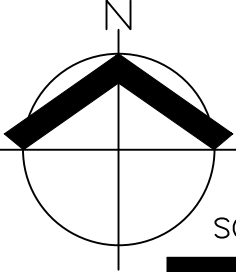
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USGS 7.5' TOPOGRAPHIC SERIES  
 QUADRANGLE: BEAVERTON, OR (2020)



SCALE: 1" = 2000 FEET



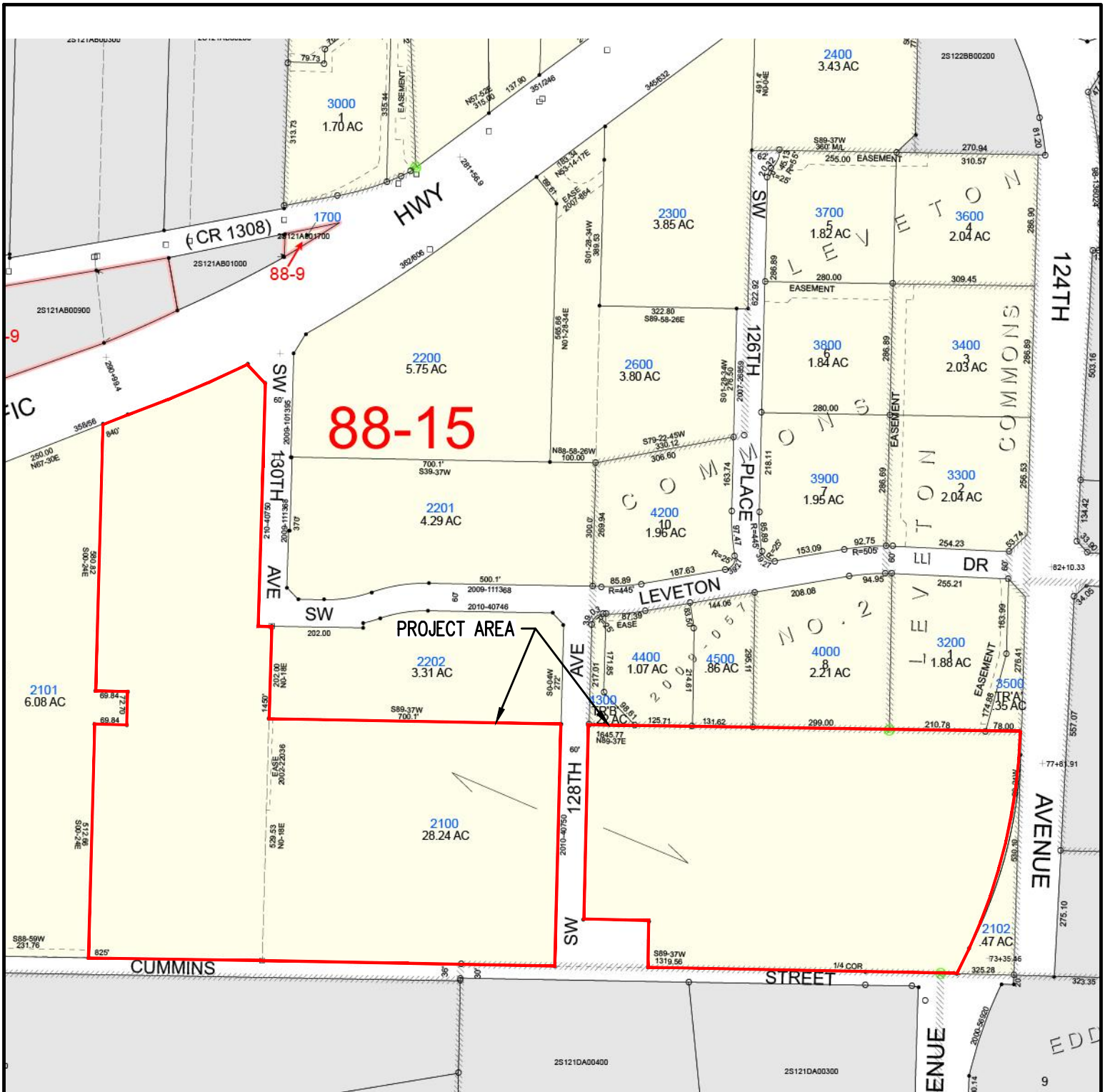
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DATE: 09/06/2024

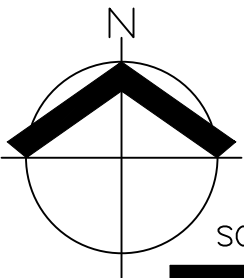
<b>USGS VICINITY MAP</b> <b>GRIMMS FUEL STORAGE YARD TIER 1 ALTERNATIVES ANALYSIS</b>		<b>FIGURE</b> <b>1</b>
<b>AKS ENGINEERING &amp; FORESTRY, LLC</b> 12965 SW HERMAN RD, STE 100 TUALATIN, OR 97062 503.563.6151 <a href="http://WWW.AKS-ENG.COM">WWW.AKS-ENG.COM</a>		DRWN: GPM CHKD: SKD AKS JOB: 11113



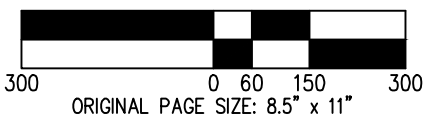




WASHINGTON COUNTY  
TAX LOT 2100  
TAX MAP 2S 1 21A



SCALE: 1" = 300 FEET



DATE: 09/06/2024

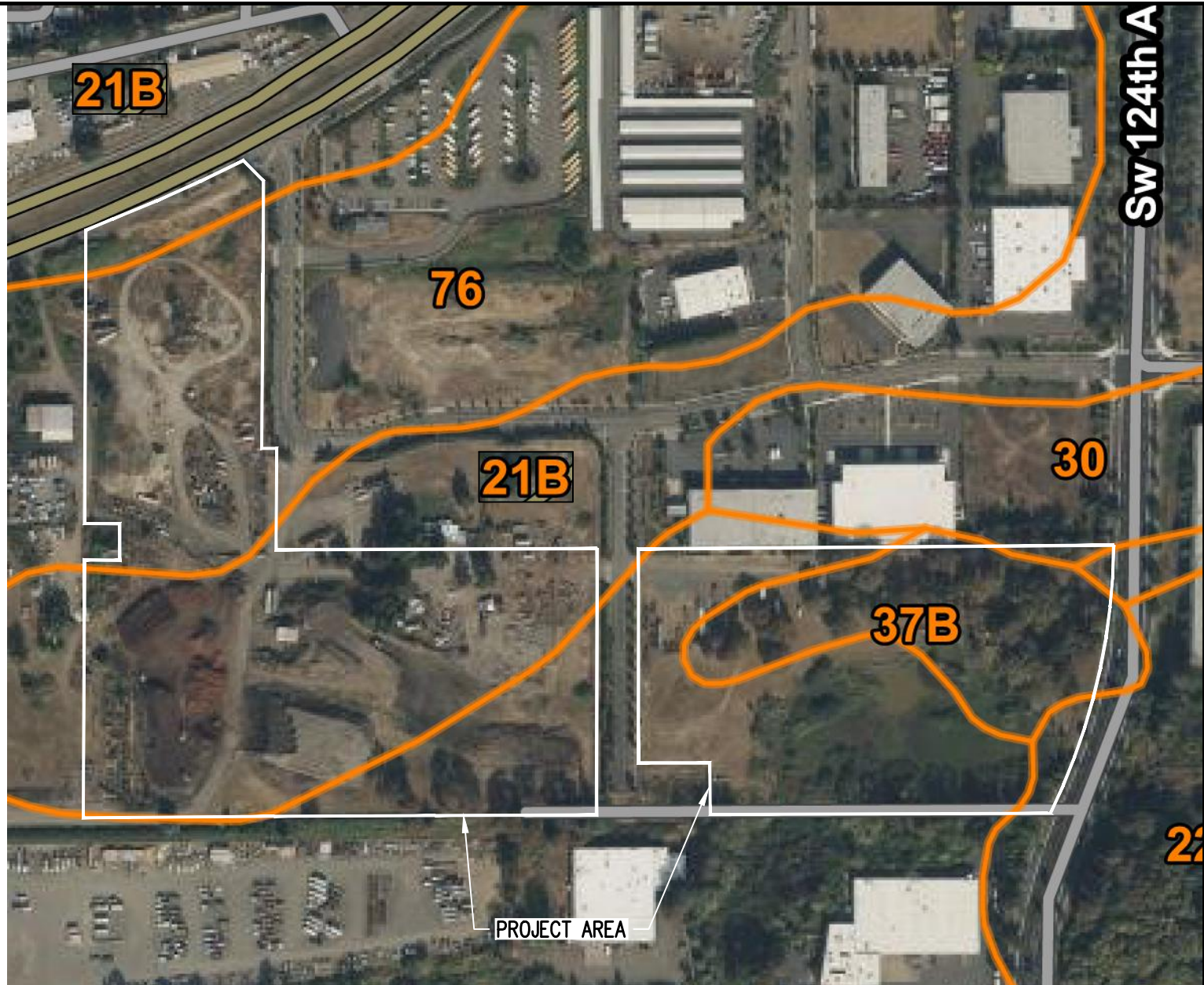
TAX MAP (MAP 2S 1 21A)  
GRIMMS FUEL STORAGE YARD TIER 1 ALTERNATIVES ANALYSIS

AKS ENGINEERING & FORESTRY, LLC  
12965 SW HERMAN RD, STE 100  
TUALATIN, OR 97062  
503.563.6151 WWW.AKS-ENG.COM



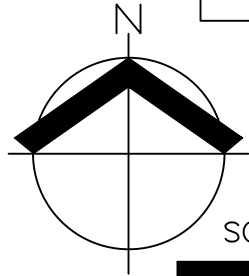
FIGURE  
**2**

DRWN: GPM  
CHKD: SKD  
AKS JOB:  
11113

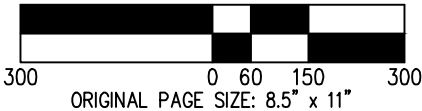


MAP UNIT SYMBOL	MAP UNIT NAME
13	COVE SILTY CLAY LOAM; HYDRIC
21B	HILLSBORO LOAM, 3% TO 7% SLOPES; NON-HYDRIC
30	MCBEE SILTY CLAY LOAM; NON-HYDRIC
37B	QUATAMA LOAM, 3% TO 7% SLOPES; NON-HYDRIC
43	WAPATO SILTY CLAY LOAM; HYDRIC
76	PITS
2225A	HUBERLY SILT LOAM, 0% TO 3% SLOPES; HYDRIC

NRCS WEB SOIL SURVEY FOR  
WASHINGTON COUNTY



SCALE: 1" = 300 FEET

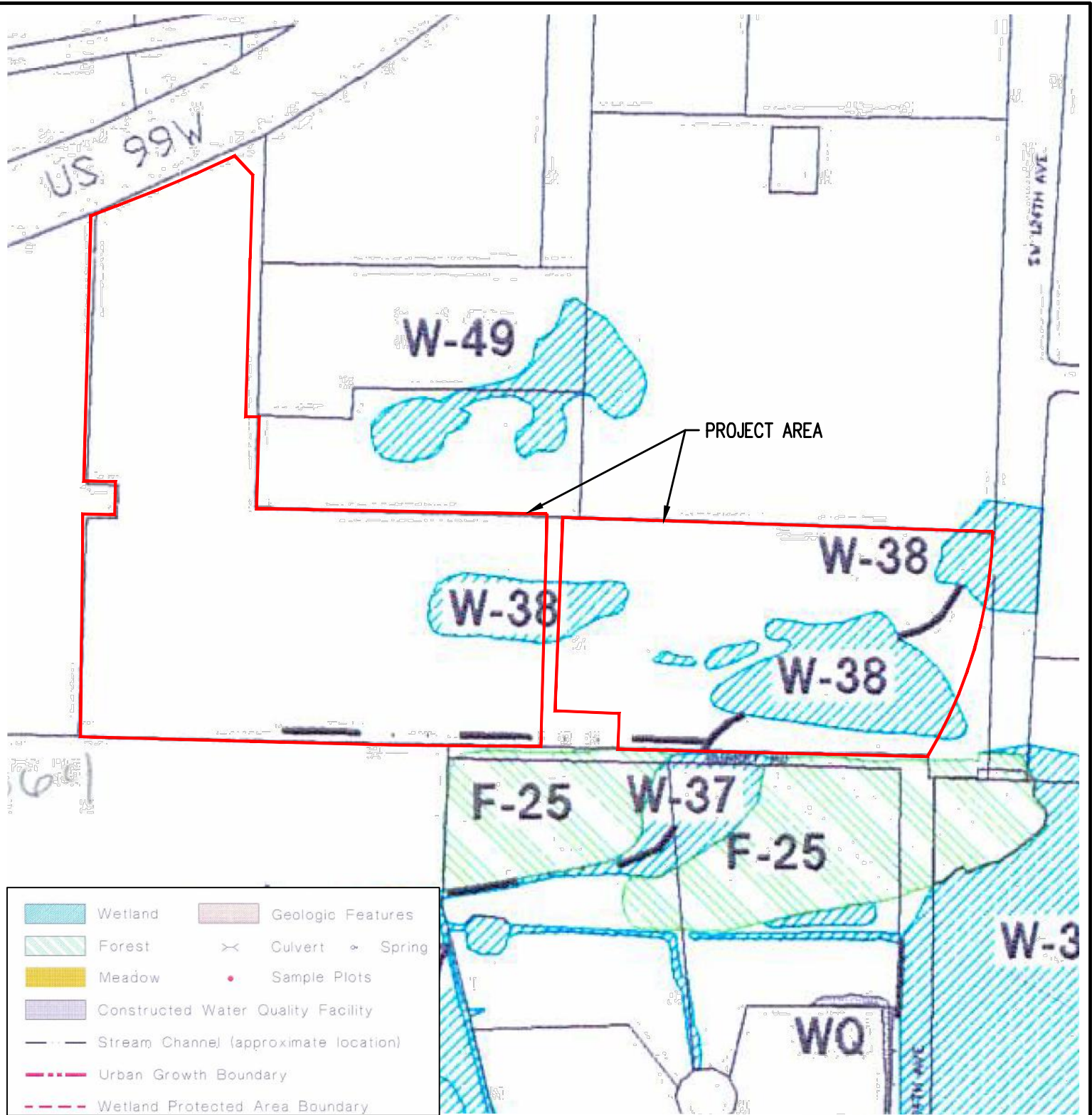


DATE: 09/06/2024

NRCS SOIL SURVEY MAP GRIMMS FUEL STORAGE YARD TIER 1 ALTERNATIVES ANALYSIS		FIGURE <b>3</b>
AKS ENGINEERING & FORESTRY, LLC 12965 SW HERMAN RD, STE 100 TUALATIN, OR 97062 503.563.6151 WWW.AKS-ENG.COM		DRWN: GPM CHKD: SKD AKS JOB: 11113

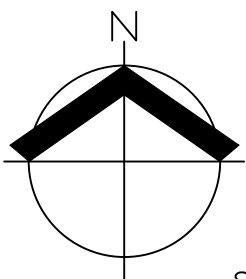




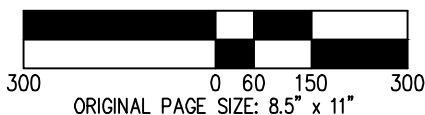


CITY OF TUALATIN  
LOCAL WETLAND INVENTORY (1995)

DATE: 09/06/2024



SCALE: 1" = 300 FEET



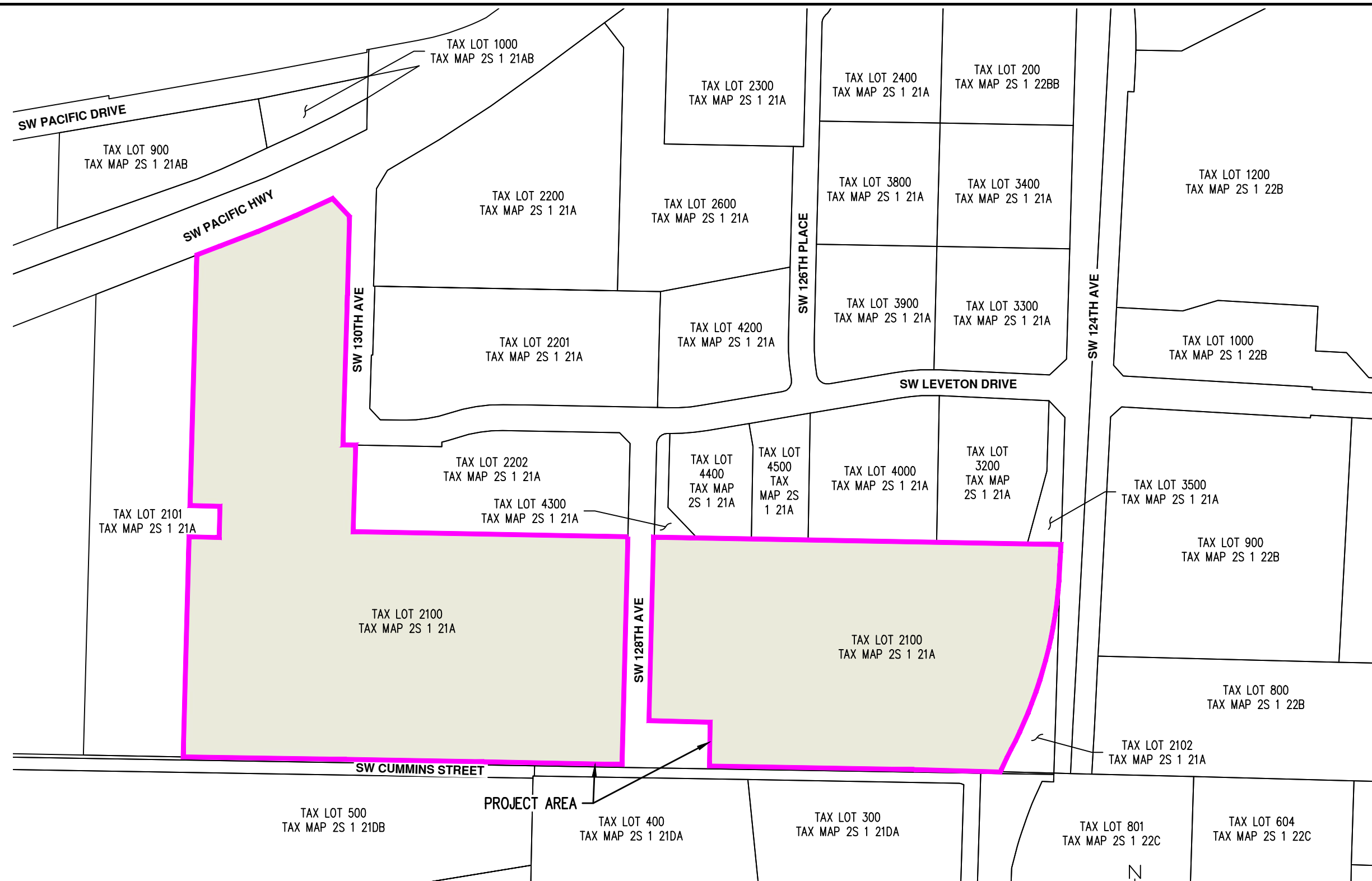
LOCAL WETLAND INVENTORY MAP  
GRIMMS FUEL STORAGE YARD TIER 1 ALTERNATIVES ANALYSIS

AKS ENGINEERING & FORESTRY, LLC  
12965 SW HERMAN RD, STE 100  
TUALATIN, OR 97062  
503.563.6151 WWW.AKS-ENG.COM



FIGURE  
4

DRWN: GPM  
CHKD: SKD  
AKS JOB:  
11113

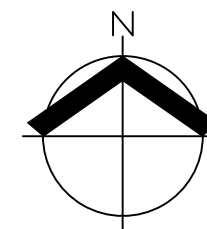


**LEGEND:**

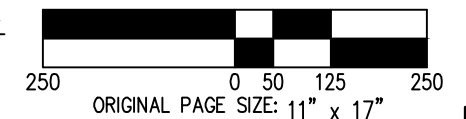
STUDY AREA BOUNDARY (28.83 ACRES±)

TAX LOT BOUNDARIES DERIVED FROM GIS DATA BASE  
RESULTING IN ±5FT ACCURACY.

LIMITS OF PROJECT AREA WERE DERIVED FROM AKS PROFESSIONAL LAND SURVEY (2024).



SCALE: 1" = 250 FEET



DATE: 09/05/2024

TAX MAP REFERENCE OF PROJECT AREA

GRIMMS FUEL STORAGE YARD TIER 1 ALTERNATIVES ANALYSIS

**AKS ENGINEERING & FORESTRY, LLC**  
12965 SW HERMAN RD, STE 100  
TUALATIN, OR 97062  
503.563.6151      WWW.AKS-ENG.COM

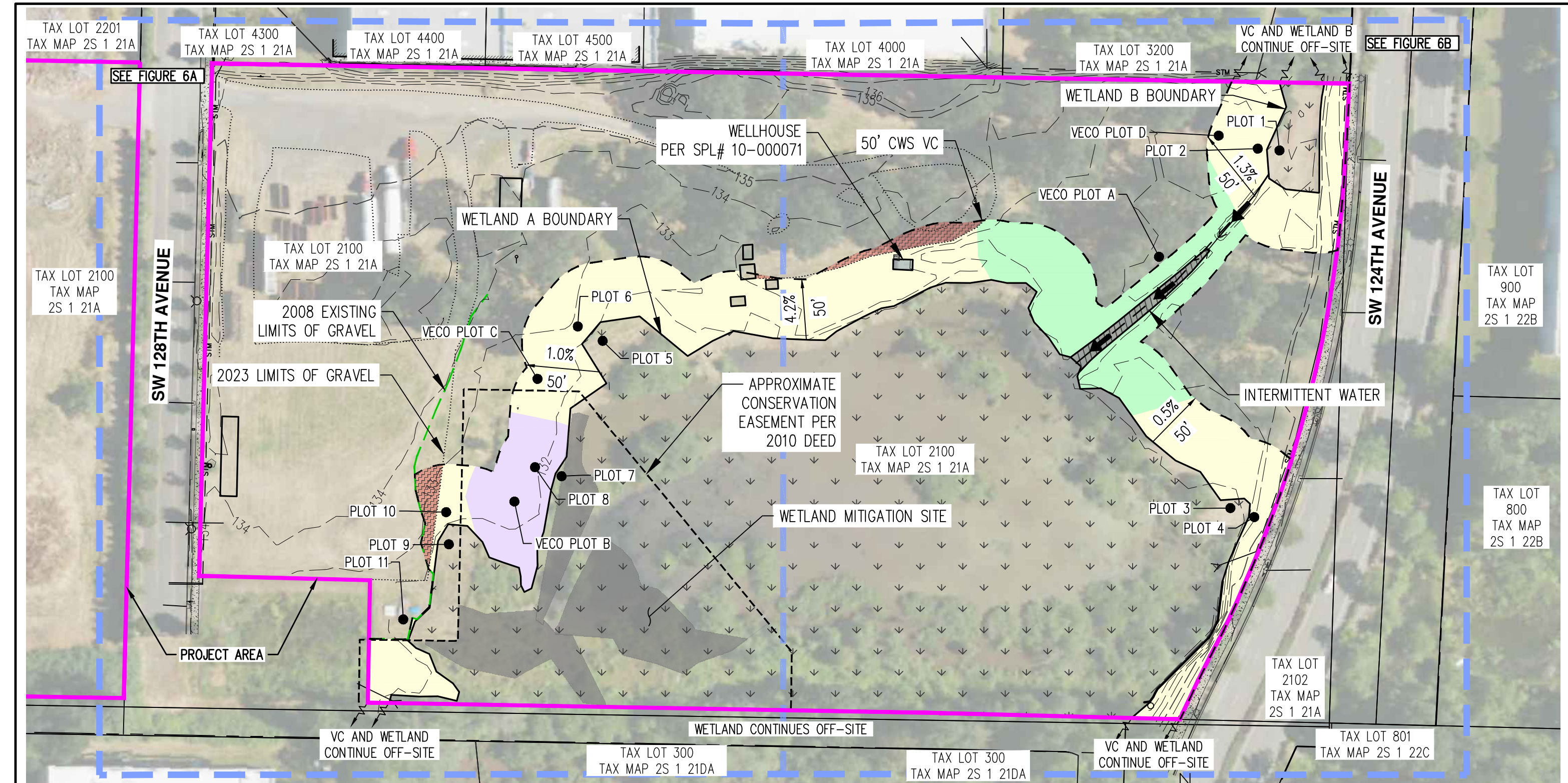


FIGURE

5

DRWN: RAS
CHKD: SAR
AKS JOB:
11113





**LEGEND:**

TOTAL ON-SITE WETLAND AREA: 182,056 SF± (4.18 ACRES ±)  
WETLAND A: 178,725 SF± (4.10 ACRES ±)  
WETLAND B: 3,331 SF± (0.08 ACRES ±)

TOTAL ON-SITE INTERMITTENT WATER AREA:  
1,326 SF± (0.03 ACRES ±)/ 187 LF±

VEGETATED CORRIDOR (VC) BOUNDARY

TOTAL ON-SITE VC AREA: 71,489 SF± (1.64 ACRES±)  
GOOD CONDITION VC AREA:  
15,081 SF± (0.35 ACRES±)

MARGINAL CONDITION VC AREA:  
7,155 SF± (0.16 ACRES±)

DEGRADED CONDITION VC AREA:  
46,889 SF± (1.13 ACRES±)

EXISTING PERMANENT VC AREA:  
2,364 SF± (0.05 ACRES±)

PLOT 1 PLOT LOCATION

PHOTO POINT LOCATION AND ORIENTATION

WETLANDS AND WATER BOUNDARIES AND PLOT LOCATIONS SHOWN WERE DELINEATED BY AKS ENGINEERING & FORESTRY, LLC (AKS) ON MARCH 8, 2024 AND WERE PROFESSIONALLY LAND SURVEYED BY AKS ON MARCH 13, 2024 WITH SUB-METER ACCURACY.

1-FOOT INTERVAL GROUND CONTOURS, EXISTING CONDITIONS, AND A PARTIAL TREE SURVEY OF TREES >6" DBH DERIVED FROM AKS PROFESSIONAL LAND SURVEY. STUDY AREA BOUNDARY DETERMINED PRIOR TO FIELDWORK BASED ON SURVEYED PROPERTY BOUNDARIES WITH SUB-METER ACCURACY.

SCALE: 1"= 80 FEET

ORIGINAL PAGE SIZE: 11" x 17"

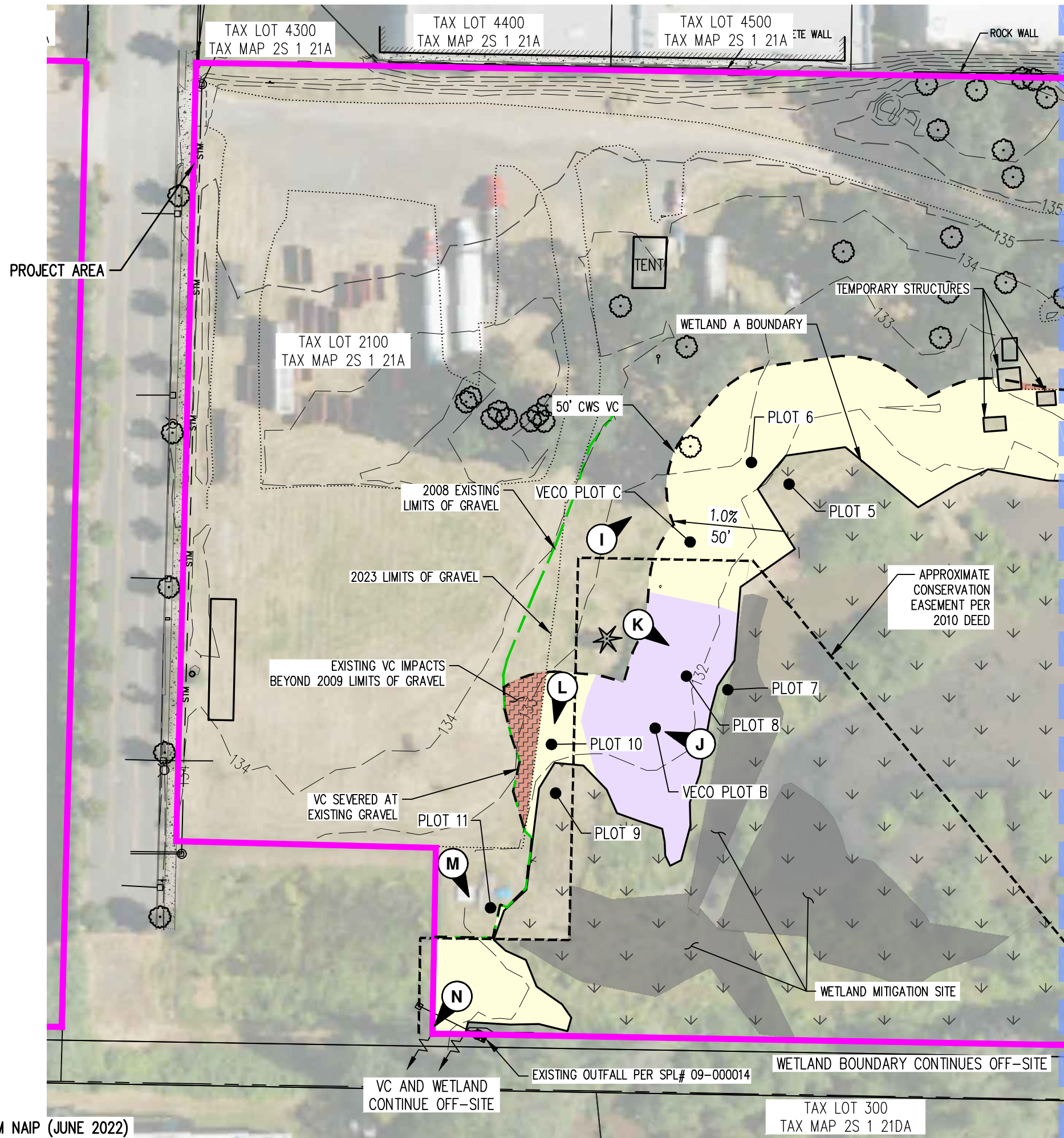
DATE: 09/05/2024

NATURAL RESOURCES EXISTING CONDITIONS OVERVIEW		FIGURE
GRIMMS FUEL STORAGE YARD TIER 1 ALTERNATIVES ANALYSIS		6
AKS ENGINEERING & FORESTRY, LLC 12965 SW HERMAN RD, STE 100 TUALATIN, OR 97062 503.563.6151    WWW.AKS-ENG.COM		DRWN: RAS CHKD: SAR AKS JOB: 11113

DWG: 11113 CWS UPDATED EXCOND | FIGURE 6

AERIAL DERIVED FROM NAIP (JUNE 2022)





MATCHLINE - SEE FIGURE 6B

**LEGEND:**



TOTAL ON-SITE WETLAND AREA: 182,056 SF± (4.18 ACRES ±)  
WETLAND A: 178,725 SF± (4.10 ACRES ±)  
WETLAND B: 3,331 SF± (0.08 ACRES ±)



TOTAL ON-SITE INTERMITTENT WATER AREA:  
1,326 SF± (0.03 ACRES ±)/ 187 LF±



VEGETATED CORRIDOR (VC) BOUNDARY



TOTAL ON-SITE VC AREA: 71,489 SF± (1.64 ACRES±)  
GOOD CONDITION VC AREA:  
15,081 SF± (0.35 ACRES±)



MARGINAL CONDITION VC AREA:  
7,155 SF± (0.16 ACRES±)



DEGRADED CONDITION VC AREA:  
46,889 SF± (1.13 ACRES±)



EXISTING PERMANENT VC AREA:  
2,364 SF± (0.05 ACRES±)



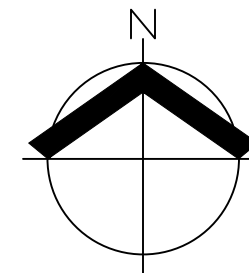
PLOT 1 PLOT LOCATION



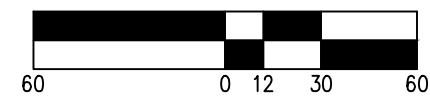
PHOTO POINT LOCATION AND ORIENTATION

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SCALE: 1"= 60 FEET



ORIGINAL PAGE SIZE: 11" x 17"

DATE: 09/05/2024

**NATURAL RESOURCES EXISTING CONDITIONS**

GRIMMS FUEL STORAGE YARD TIER 1 ALTERNATIVES ANALYSIS REPORT

AKS ENGINEERING & FORESTRY, LLC  
12965 SW HERMAN RD, STE 100  
TUALATIN, OR 97062  
503.563.6151 WWW.AKS-ENG.COM



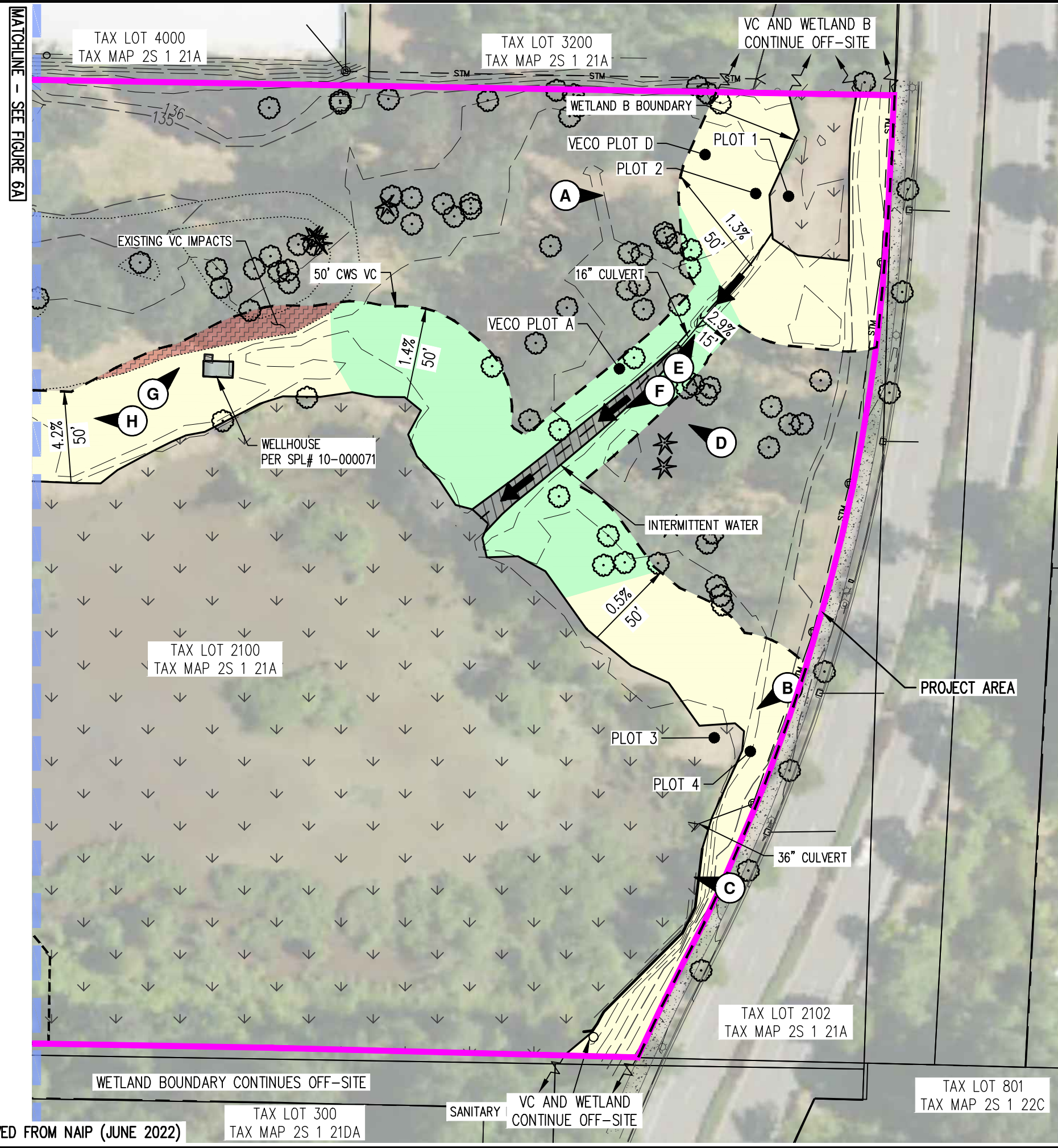
FIGURE

**6A**

DRWN: GPM  
CHKD: SKD  
AKS JOB:  
11113



DWG: 11113 CWS UPDATED EXCOND | FIGURE 6B

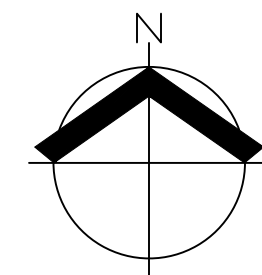


**LEGEND:**

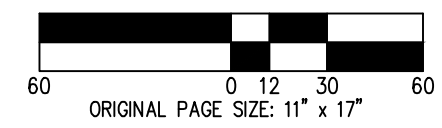
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- TOTAL ON-SITE INTERMITTENT WATER AREA:  
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7,155 SF± (0.16 ACRES±)
- DEGRADED CONDITION VC AREA:  
46,889 SF± (1.13 ACRES±)
- EXISTING PERMANENT VC AREA:  
2,364 SF± (0.05 ACRES±)
- PLOT 1 PLOT LOCATION
- PHOTO POINT LOCATION AND ORIENTATION

WETLANDS AND WATER BOUNDARIES AND PLOT LOCATIONS SHOWN WERE DELINEATED BY AKS ENGINEERING & FORESTRY, LLC (AKS) ON MARCH 8, 2024 AND WERE PROFESSIONALLY LAND SURVEYED BY AKS ON MARCH 13, 2024 WITH SUB-METER ACCURACY.

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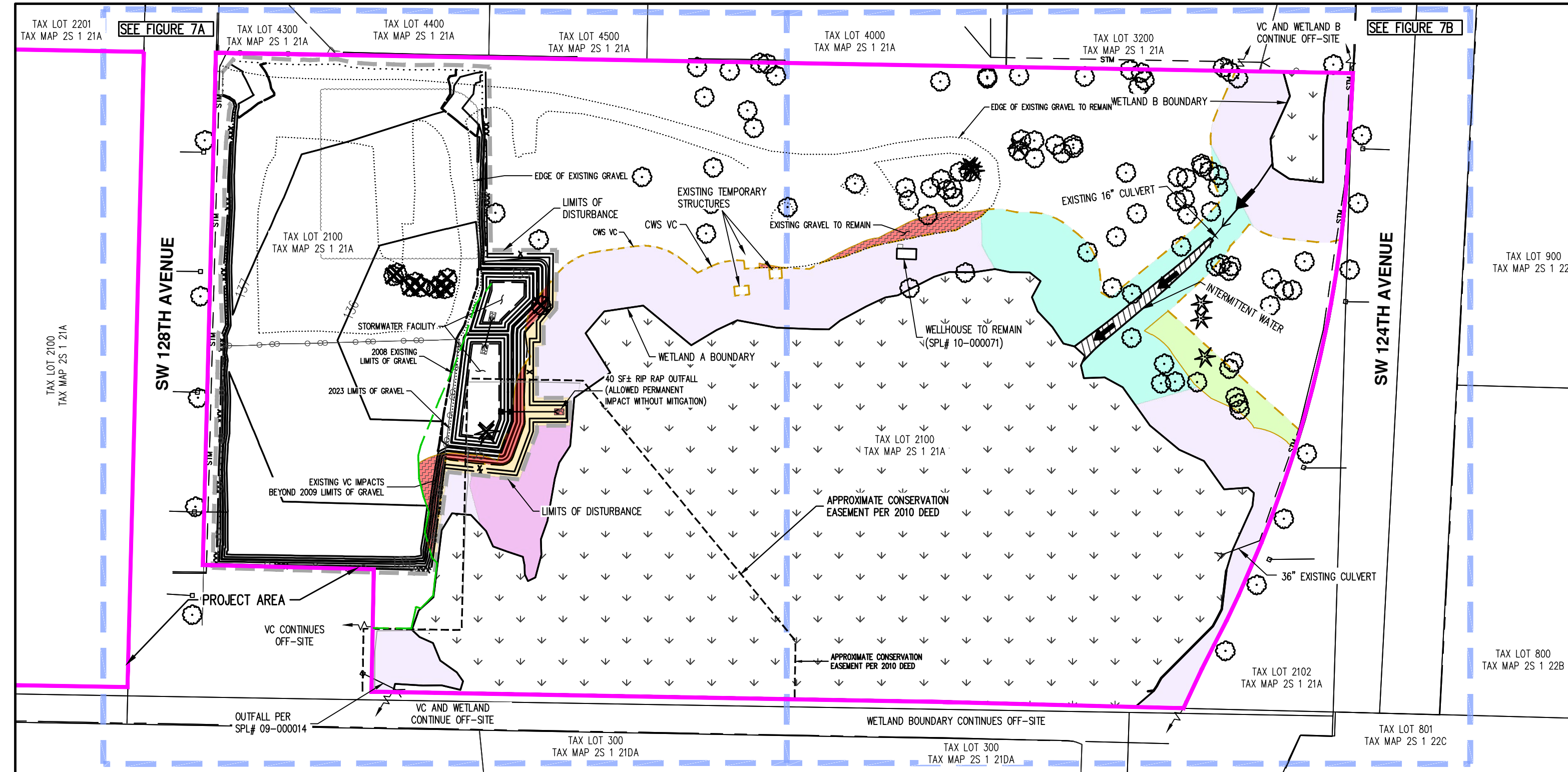
SCALE: 1"= 60 FEET



DATE: 09/05/2024

NATURAL RESOURCES EXISTING CONDITIONS		FIGURE
GRIMMS FUEL STORAGE YARD TIER 1 ALTERNATIVES ANALYSIS		6B
AKS ENGINEERING & FORESTRY, LLC 12965 SW HERMAN RD, STE 100 TUALATIN, OR 97062 503.563.6151 WWW.AKS-ENG.COM		DRWN: RAS CHKD: SAR AKS JOB: 11113





**LEGEND:**

TOTAL ON-SITE WETLAND AREA TO REMAIN: 182,056 SF± (4.18 ACRES ±)  
ON-SITE WETLAND A AREA TO REMAIN: 178,725 SF± (4.10 ACRES ±)  
ON-SITE WETLAND B AREA TO REMAIN: 3,331 SF± (0.08 ACRES ±)

ON-SITE INTERMITTENT WATER AREA TO REMAIN: 1,326 SF± (0.03 ACRES ±)/ 187 LF±

VEGETATED CORRIDOR (VC) BOUNDARY

ON-SITE VC AREA TO REMAIN IN GOOD CONDITION: 15,081 SF± (0.35 ACRES±)

ON-SITE MARGINAL CONDITION VC AREA TO BE ENHANCED TO GOOD CONDITION: 5,112 SF± (0.12 ACRES±)

ON-SITE DEGRADED CONDITION VC AREA TO BE ENHANCED TO GOOD CONDITION: 44,508 SF± (1.02 ACRES±)

TEMPORARY VC IMPACT AREA TO BE RESTORED TO GOOD CONDITION: 3,068 SF± (0.07 ACRES±)

EXISTING PERMANENT VC IMPACT AREA: 2,364 SF± (0.05 ACRES±)

WETLANDS AND WATER BOUNDARIES SHOWN WERE DELINEATED BY AKS ENGINEERING & FORESTRY, LLC (AKS) ON MARCH 8, 2024 AND WERE PROFESSIONALLY LAND SURVEYED BY AKS ON MARCH 13, 2024 WITH SUB-METER ACCURACY.

PROPOSED PERMANENT VC IMPACT AREA: 1,316 SF± (0.03 ACRES±)

ON-SITE VC REPLACEMENT MITIGATION AREA: 3,680 SF± (0.08 ACRES±)

PROPOSED PERMANENT VEGETATED CORRIDOR IMPACT AREA ALLOWED WITHOUT MITIGATION PER SECTION 3.05.6: 40 SF±

FLOW DIRECTION

TREES TO BE REMOVED

SCALE: 1"= 80 FEET

80 0 16 40 80

ORIGINAL PAGE SIZE: 11" x 17"

**NATURAL RESOURCES SITE PLAN OVERVIEW**

GRIMMS FUEL STORAGE YARD TIER 1 ALTERNATIVES ANALYSIS

**AKS ENGINEERING & FORESTRY, LLC**  
12965 SW HERMAN RD, STE 100  
TUALATIN, OR 97062  
503.563.6151 WWW.AKS-ENG.COM

**FIGURE**

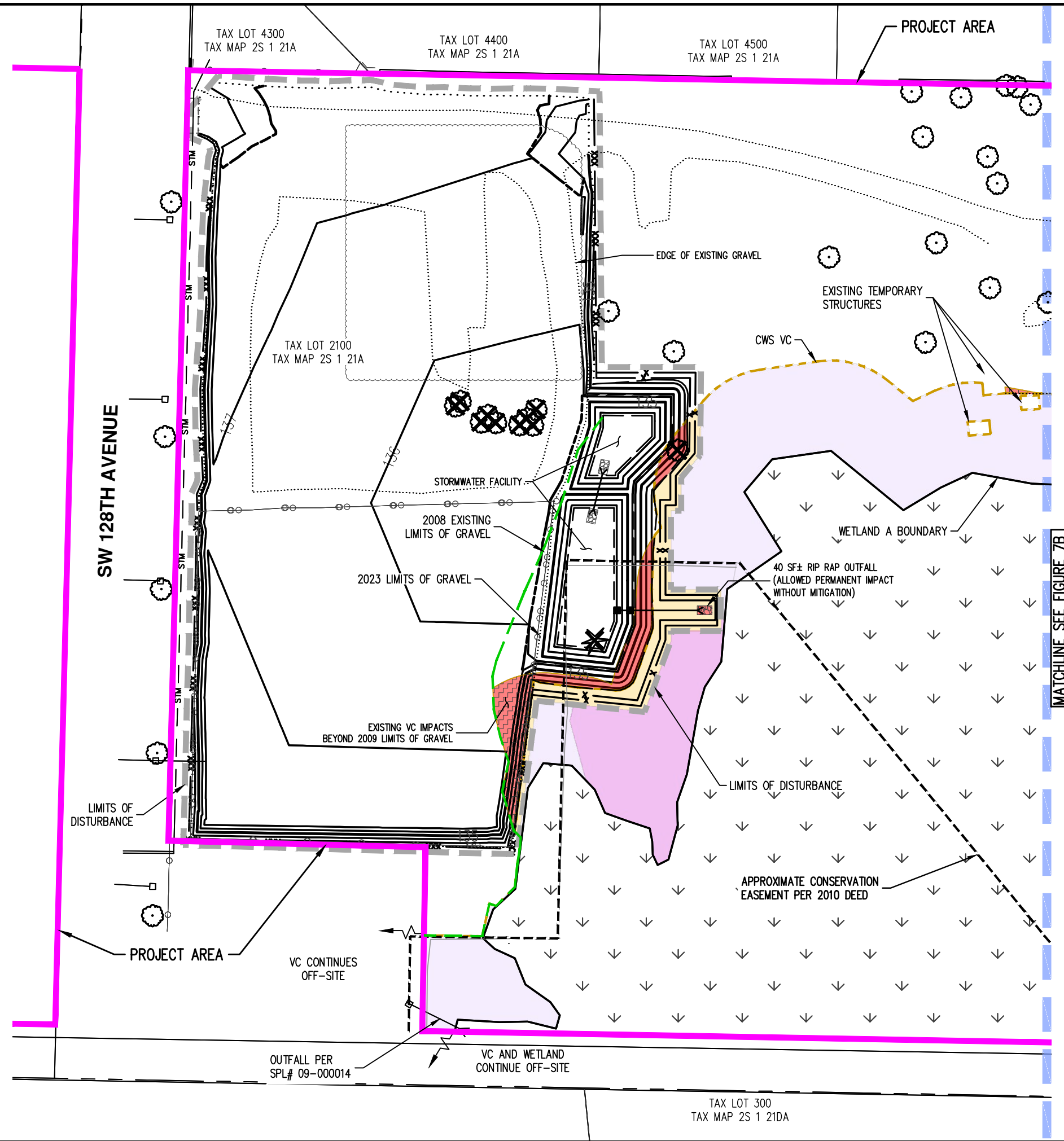
**7**

DRWN: GPM  
CHKD: RAS  
AKS JOB:  
11113

DWG: 11113 CWS UPDATED SITE PLAN | FIGURE 7



DWG: 11113 CWS UPDATED SITE PLAN | FIGURE 7A



**LEGEND:**



TOTAL ON-SITE WETLAND AREA TO REMAIN: 182,056 SF± (4.18 ACRES ±)  
ON-SITE WETLAND A AREA TO REMAIN:  
178,725 SF± (4.10 ACRES ±)  
ON-SITE WETLAND B AREA TO REMAIN:  
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1,326 SF± (0.03 ACRES ±)/ 187 LF±



VEGETATED CORRIDOR (VC) BOUNDARY



ON-SITE VC AREA TO REMAIN IN GOOD CONDITION:  
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PROPOSED PERMANENT VEGETATED CORRIDOR IMPACT AREA  
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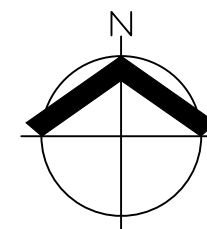


FLOW DIRECTION

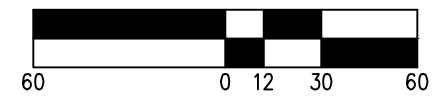


TREES TO BE REMOVED

WETLANDS AND WATER BOUNDARIES SHOWN WERE DELINEATED BY AKS ENGINEERING & FORESTRY, LLC (AKS) ON MARCH 8, 2024 AND WERE PROFESSIONALLY LAND SURVEYED BY AKS ON MARCH 13, 2024 WITH SUB-METER ACCURACY.



SCALE: 1"= 60 FEET



ORIGINAL PAGE SIZE: 11" x 17"

DATE: 09/06/2024

**NATURAL RESOURCES SITE PLAN**

GRIMMS FUEL STORAGE YARD TIER 1 ALTERNATIVES ANALYSIS

AKS ENGINEERING & FORESTRY, LLC  
12965 SW HERMAN RD, STE 100  
TUALATIN, OR 97062  
503.563.6151 WWW.AKS-ENG.COM

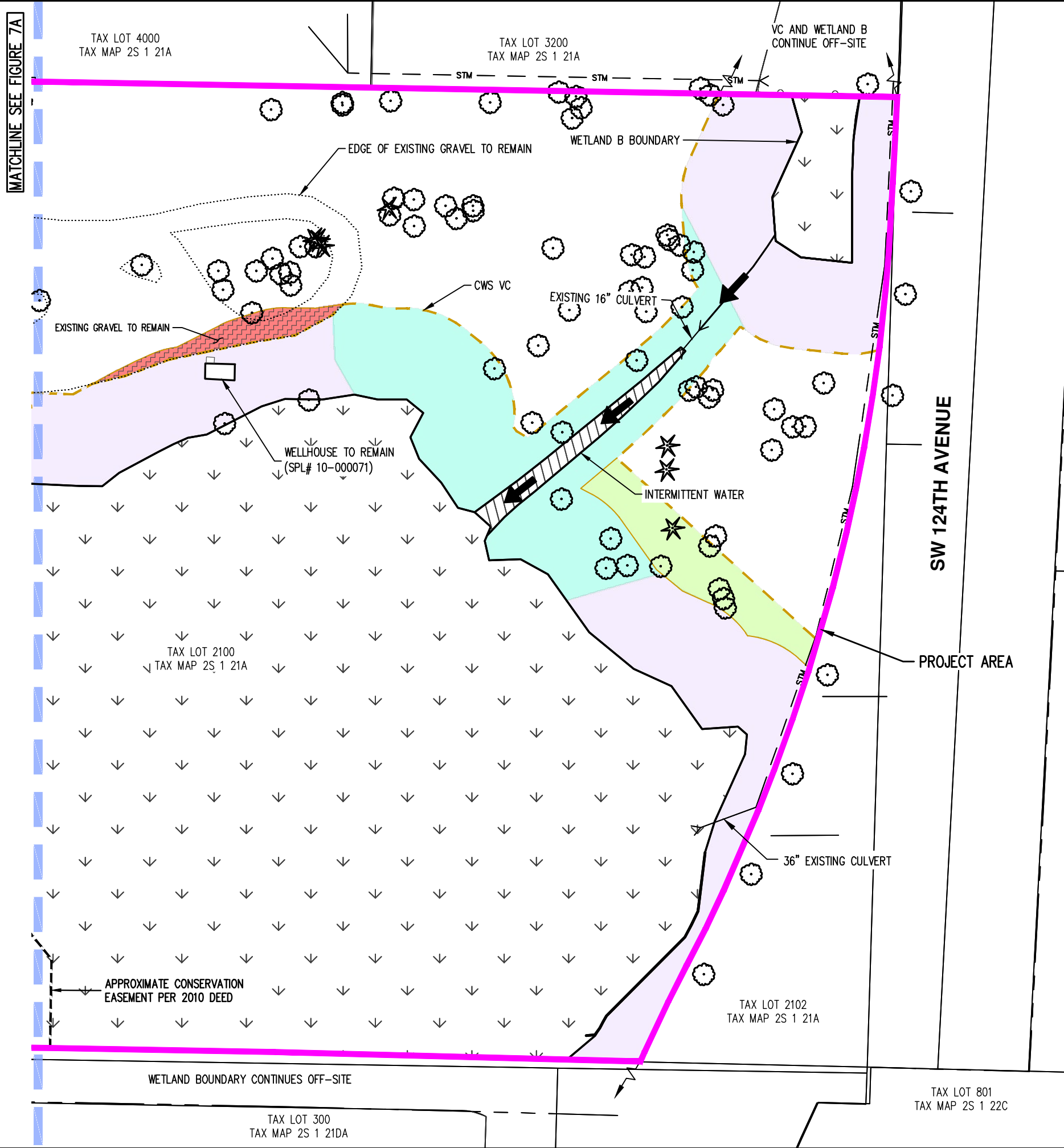


FIGURE

**7A**

DRWN: GPM  
CHKD: RAS  
AKS JOB:  
11113

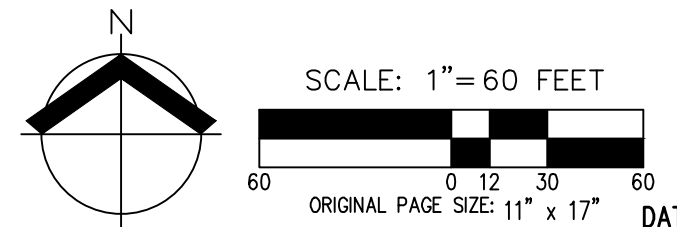
DWG: 11113 CWS UPDATED SITE PLAN | FIGURE 7B



**LEGEND:**

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- TREES TO BE REMOVED

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NATURAL RESOURCES SITE PLAN		FIGURE
GRIMMS FUEL STORAGE YARD TIER 1 ALTERNATIVES ANALYSIS		7B
AKS ENGINEERING & FORESTRY, LLC 12965 SW HERMAN RD, STE 100 TUALATIN, OR 97062 503.563.6151 WWW.AKS-ENG.COM		DRWN: GPM CHKD: RAS AKS JOB: 11113