

**MILWAUKIE PLANNING**

6101 SE Johnson Creek Blvd
Milwaukie OR 97206
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planning@milwaukieoregon.gov CITY OF MILWAUKIE

PLANNING DEPARTMENT

RECEIVED

SEP 14 2022

Application for Land Use Action

Primary File #: **NR-2022-002**

Review type*: ☐ I ☒ II ☐ III ☐ IV ☐ V

CHECK ALL APPLICATION TYPES THAT APPLY:

- | | | |
|---|---|--|
| <input type="checkbox"/> Amendment to Maps and/or
<input type="checkbox"/> Comprehensive Plan Map Amendment
<input type="checkbox"/> Zoning Text Amendment
<input type="checkbox"/> Zoning Map Amendment
<input type="checkbox"/> Code Interpretation
<input type="checkbox"/> Community Service Use
<input type="checkbox"/> Conditional Use
<input type="checkbox"/> Development Review
<input type="checkbox"/> Director Determination
<input type="checkbox"/> Downtown Design Review
<input type="checkbox"/> Extension to Expiring Approval
<input type="checkbox"/> Historic Resource:
<input type="checkbox"/> Alteration
<input type="checkbox"/> Demolition
<input type="checkbox"/> Status Designation
<input type="checkbox"/> Status Deletion | <input type="checkbox"/> Land Division:
<input type="checkbox"/> Partition
<input type="checkbox"/> Property Line Adjustment
<input type="checkbox"/> Replat
<input type="checkbox"/> Subdivision
<input type="checkbox"/> Miscellaneous:
<input type="checkbox"/> Barbed Wire Fencing
<input type="checkbox"/> Mixed Use Overlay Review
<input type="checkbox"/> Modification to Existing Approval
<input checked="" type="checkbox"/> Natural Resource Review**
<input type="checkbox"/> Nonconforming Use Alteration
<input type="checkbox"/> Parking:
<input type="checkbox"/> Quantity Determination
<input type="checkbox"/> Quantity Modification
<input type="checkbox"/> Shared Parking
<input type="checkbox"/> Structured Parking
<input type="checkbox"/> Planned Development | <input type="checkbox"/> Residential Dwelling:
<input type="checkbox"/> Manufactured Dwelling Park
<input type="checkbox"/> Temporary Dwelling Unit

<input type="checkbox"/> Transportation Facilities Review**
<input type="checkbox"/> Variance:
<input type="checkbox"/> Use Exception
<input type="checkbox"/> Variance
<input type="checkbox"/> Willamette Greenway Review
<input checked="" type="checkbox"/> Other: <u>HCA / WETLAND</u>
Use separate application forms for: <ul style="list-style-type: none"> • Annexation and/or Boundary Change • Compensation for Reduction in Property Value (Measure 37) • Daily Display Sign • Appeal |
|---|---|--|

RESPONSIBLE PARTIES:

APPLICANT (owner or other eligible applicant—see reverse): BRIAN HAVEMAN, TOR LLC

Mailing address: 14845 SW MURRAY SCHOLLS DR., Ste 110 PMB 612 State/Zip: BEAVERTON, OR 97007

Phone(s): 503-490-5137 Email: brian.haveman@gmail.com

Please note: The information submitted in this application may be subject to public records law.

APPLICANT'S REPRESENTATIVE (if different than above): MIKE STODER, 5 PAKESIDE DESIGN, INC.

Mailing address: 11109 SE 190th Ct. Damascus, OR 97089 State/Zip:

Phone(s): 971-563-1880 Email: mstoder@comcast.net

SITE INFORMATION:

Address: 11909 SE Stanley Ave MILWAUKIE, OR Map & Tax Lot(s):

Comprehensive Plan Designation: Zoning: Size of property:

PROPOSAL (describe briefly):

WETLAND DELINEATION, HCA

SIGNATURE: I attest that I am the property owner or I am eligible to initiate this application per Milwaukie Municipal Code Subsection 19.1001.6.A. If required, I have attached written authorization to submit this application. To the best of my knowledge, the information provided within this application package is complete and accurate.

Submitted by: MICHAEL SPOVAK

Date: 9/14/22

IMPORTANT INFORMATION ON REVERSE SIDE

*For multiple applications, this is based on the highest required review type. See MMC Subsection 19.1001.6.B.1.

** Natural Resource and Transportation Review applications may require a refundable deposit.

WHO IS ELIGIBLE TO SUBMIT A LAND USE APPLICATION (excerpted from MMC Subsection 19.1001.6.A):

Type I, II, III, and IV applications may be initiated by the property owner or contract purchaser of the subject property, any person authorized in writing to represent the property owner or contract purchaser, and any agency that has statutory rights of eminent domain for projects they have the authority to construct.

Type V applications may be initiated by any individual.

PREAPPLICATION CONFERENCE:

A preapplication conference may be required or desirable prior to submitting this application. Please discuss with Planning staff.

DEPOSITS:

Deposits require completion of a Deposit Authorization Form, found at www.milwaukieoregon.gov/building/deposit-authorization-form

REVIEW TYPES:

This application will be processed per the assigned review type, as described in the following sections of the Milwaukie Municipal Code:

- Type I: Section 19.1004
- Type II: Section 19.1005
- Type III: Section 19.1006
- Type IV: Section 19.1007
- Type V: Section 19.1008

THIS SECTION FOR OFFICE USE ONLY:

FILE TYPE	FILE NUMBER	AMOUNT (after discount, if any)	PERCENT DISCOUNT	DISCOUNT TYPE	DATE STAMP
Primary file	NR-2022-002	\$ 1,000			Initial materials received on 9/14/22; payment received on 10/07/22; revised materials received on 11/09/22
Concurrent application files		\$			
		\$			
		\$			
		\$			
Deposit (NR/TFR only)				<input type="checkbox"/> Deposit Authorization Form received	
TOTAL AMOUNT RECEIVED: \$			RECEIPT #:		RCD BY:
Associated application file #s (appeals, modifications, previous approvals, etc.):					
Neighborhood District Association(s): Linwood					
Notes: Application was initially submitted as Type I; staff determined it requires Type II review.					

City of Milwaukie Type II HCA Determination Report
Parcel Number 00098030 Tax Lot 12E31DA05500



Evaluated by: _____
John McConnaughey, PWS & Annakate Martin, NRS

DATE 10/5/2022
Revised 11/9/22

PREPARED FOR: Tor LLC
14845 SW Murray Scholls Dr
Ste 110 PMB 612
Beaverton, OR 97007

	<p>Environmental Technology Consultants 375 Portland Ave Gladstone, OR 97027 <i>A Division of Sisul Enterprises, Inc.</i> (360) 696-4403 Fax: (503) 657-5779 WA Landscape Contractors License #: ENVIRTCO23RB Web: www.etcEnvironmental.net Email: AnnakateM@etcEnvironmental.net</p>
<p><i>"Creating Tomorrow's Environment - Today"</i></p>	

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Cover Photo Looking across the property, evidence of past use as a back yard and vehicle storage. A circular trampoline in the clearing that is visible in recent aerial photographs. Owners have largely cleared brush from the property leaving the vegetation consisting of a number of mature trees and whatever herbaceous vegetation

INTRODUCTION

This is an addendum to the HCA report submitted to the City of Milwaukie OR dated August 17, 2022. This addendum is a Type II review as requested by the City to clarify the WQR features pertaining to wetlands and the offsite stormwater drainage ditch.

STUDY AREA

This investigation is for Parcel Number 00098030, (Tax Lot 12E31DA05500), and the surrounding areas as they pertain to the HCA mapping indicators shown on the property. The location is 11909 SE Stanley Avenue. As this report is concerned with HCA mapping on the property, this investigation focuses on habitats and water features on the property and surrounding area that create habitat mapping indicators affecting the property.

Historically the property has been undeveloped back yard to the adjoining house and is a degraded area of grasses, weeds and bare ground. The lot is gently slopes approximately 2-3% towards from North to South.

The entire property is on the Milwaukie's Habitat Conservation Area (HCA) and Water Quality Resource (WRQ) map. The subject site property is the only property on the map that is entirely mapped, none of its adjoining properties. Offsite to the south is a stormwater drainage ditch, the stormwater drain is at the southeast side of the property on SE Stanley Avenue, the stormwater drainage ditch is between the subject site and a rehab center, there do not appear to be any buffers along the rehab side of the ditch.

Code Requirements. The zoning is R-MD. The neighborhood is mostly single family homes with schools and churches, with the exception of the Prestige Rehab facility on the South side of the property.

MATERIALS AND METHODS

For this investigation ETC used Natural Resource Specialist Annakate Martin, who performed the site review according to the procedures outlined in Milwaukie Municipal Code chapter 19.402.

The methods employed in this investigation were a modification of the standard methodology used in a routine site analysis.

A wetland investigation was carried out in accordance with the guidelines set forth in the Corps of Engineers Wetland Delineation Manual (Technical Report Y-87-1, 1987) and its more recent 2010 update, version 2.0. (See Appendix D). Findings from that report, WD2022-0475, are referenced here.

Code Requirements from 19.402.15.A.2 Type II Boundary Verification.

The subject property functions as a backyard to the adjoining property, located at the physical address of 11909 SE Stanley. The house was built on the adjoining property in 1945 and it appears that there is fill material on the subject property from that build and years of being used as a back yard. There was evidence of cars being driven on the subject property from tire tracks and hub caps. The current owners said the neighbors said the previous owners would work on numerous cars on the subject property. ETC has determined there are no wetlands or streams on the subject property, we recommend removing the HCA designation per the code section below:

In the following, text from Milwaukie Title 19 is shown in Purple Agency 12 point font, and our responses are shown in this font, (Times New Roman 11 point).

19.402.15 Boundary Verification and Map Administration

The NR Administrative Map shows the locations of WQRs and HCAs. For WQRs, the NR Administrative Map is a general indicator of protected water features and their associated vegetated corridors; the location of actual WQRs is determined according to the parameters established in Table 19.402.15. With respect to HCA locations, the NR Administrative Map is assumed to be correct unless demonstrated otherwise.

RESPONSE: Yellow highlight shows our evaluation per Table 19.402.15, and the justifications are explained in the following sections.

Table 19.402.15			
Determination of WQR Location			
Protected Water Feature Type	Slope Adjacent to Protected Water Feature	Starting Point for Measurements from Protected Water Feature	Width of Vegetated Corridor¹
Primary Protected Water Features ²	< 25%	Bankfull stage (top of bank) or 2-year recurrence interval flood elevation Delineated edge of Title 3 wetland	50'

Primary Protected Water Features ²	≥ 25% for 150' or more ³	Bankful stage or 2-year flood elevation Delineated edge of Title 3 wetland	200'
Primary Protected Water Features ²	≥ 25% for less than 150' ³	Bankful stage or 2-year flood elevation Delineated edge of Title 3 wetland	Distance from starting point of measurement to top of ravine (break in ≥ 25% slope) ⁴ plus 50' ⁵
Secondary Protected Water Features ⁶	< 25%	Bankful stage or 2-year flood elevation	15'
Secondary Protected Water Features ⁶	≥ 25% ³	Bankful stage or 2-year flood elevation	50'

1 Vegetated corridor width shall be applied to the outer boundaries of water features, such as the edge of a wetland and both banks of a watercourse.

RESPONSE: Please see Figure H5.

2 Primary protected water features include: all perennial streams, streams draining 100 or more acres, Title 3 wetlands, and natural lakes and springs. See Section 19.201 for the full definition.

RESPONSE: The stormwater outfall discharges ephemeral flows during rain events. It is not perennial.

3 Vegetated corridors in excess of 50 ft for primary protected features, or in excess of 15 ft for secondary protected features, apply on steep slopes only in the uphill direction from the protected water feature.

RESPONSE: Slopes adjacent to the ditch are not steep, in the range of 5% or less.

4 Where the protected water feature is confined by a ravine or gully, the top of ravine is the break in the > 25% slope.

RESPONSE: Not applicable, there is no ravine or gully.

5 A maximum reduction of 25 ft may be permitted in the width of the vegetated corridor beyond the slope break if a geotechnical report demonstrates that the slope is stable. To establish the width of the vegetated corridor, slope should be measured in 25-ft increments away from the water feature until the slope is less than 25% (top of ravine).

RESPONSE: Not applicable, there is no slope break.

6 Secondary protected water features include intermittent streams draining 50 to 100 acres. See Section 19.201 for the full definition.

RESPONSE: The upstream drainage basin as estimated by a previous application involving the downslope lot 3000 determined the basin to be 64 acres and the flow to be intermittent. This makes the stream a secondary water feature.

A. Boundary Verification

To determine whether the standards of Section 19.402 apply to a proposed activity at any given location, the boundaries of any designated natural resource(s) on or near the site shall be verified.

Agreement with the accuracy of the NR Administrative Map does not constitute or require a land use decision. However, for activities proposed within 100 ft of a wetland or its associated vegetated corridor, the boundary verification process outlined in Subsection 19.402.15.A.2.a(1)(b) shall be followed to identify the specific location of wetlands on the subject property. The Planning Director may waive the requirement for official wetland delineation, depending on the specific circumstances of the site and the proposed activity. Such circumstances may include, but are not limited to, the scale and potential impacts of the proposed activity, the proximity of the proposed activity to the mapped resource, and the Director's confidence in the accuracy of the NR Administrative Map relative to the resource in question.

An applicant may challenge the accuracy of the NR Administrative Map through either of the boundary verification processes outlined in Subsections 19.402.15.A.1 and 2.

RESPONSE: We are challenging the accuracy of the NR Administrative map. Specifically:

- There are no wetlands on the subject property.
- HCA designations were applied incorrectly. There is no HCA on the subject property per the discussion below.
- WQR buffers for the water feature are shown as 50FT on the Administrative Map. Buffers for a secondary water feature per Table 19.402.15 are 15FT.

I. Type I Boundary Verification

The following minor corrections to mapped HCAs may be proposed according to one of the following procedures, and are subject to Type I review per Section 19.1004:

RESPONSE: This section is not applicable, the application is per Type II procedures, (below).

a. Simple Incongruities

In some cases, the vegetative cover data shown on the NR Administrative Map might not align with the location of existing legally established development or tree cover. An applicant who believes that the NR Administrative Map is inaccurate, based on such an obvious misalignment, shall submit the following information regarding the property:

- (1) A detailed property description and site plan of the property that includes all existing conditions plans listed on the City's Site Plan Requirements.
- (2) A copy of the applicable NR Administrative Map section.
- (3) The latest available aerial photograph of the property, with lot lines shown, at a scale of at least 1 map inch equal to 50 ft for lots of 20,000 or fewer square feet, and a scale of 1 map inch equal to 100 ft for larger lots.
- (4) A documented demonstration of the misalignment between the NR Administrative Map and the property's tax lot boundary lines and/or the location of existing legally established development.

(5) Any other factual information that the applicant wishes to provide to support boundary verification.

b. Legal Development Prior to Adoption Date

If a property was legally developed between the summer of 2002 (when the aerial photograph used to determine the regional habitat inventory was taken) and September 15, 2011, the effective date of Ordinance #2036, the applicant shall submit the following information regarding the property:

(1) The information described in Subsection 19.402.15.A.1.a.

(2) A summer 2002 aerial photograph of the property, with lot lines shown, at a scale of at least 1 map inch equal to 50 ft for lots of 20,000 or fewer square feet, and a scale of 1 map inch equal to 100 ft for larger lots.

(3) Any approved building permits or other development plans and drawings related to the development of the property that took place between summer 2002 and September 15, 2011, the effective date of Ordinance #2036.

(4) A clear explanation and documentation, such as supporting maps or drawings or a more recent aerial photograph, indicating the new development that has occurred and where previously identified habitat no longer exists because it is now part of a developed area.

2. Type II Boundary Verification

Corrections to mapped WQRs and/or detailed verification of mapped HCAs may be proposed according to the following procedures, and are subject to Type II review per Section 19.1005.

a. Corrections to WQRs

(1) Submittal Requirements

To propose a correction to a WQR shown on the NR Administrative Map, the applicant shall submit the following information, depending on the type of water feature in question:

19.402.15.A.2.a Drainages

In case of drainages; including rivers, streams, springs, and natural lakes; the applicant shall submit a report, prepared by a qualified scientist or professional engineer who specializes in hydrology, demonstrating whether or not the drainage meets the definition of a protected water feature. If the drainage is demonstrated to be a protected water feature, the applicant shall provide a topographic map of the site, with the contour intervals of **5 ft** or less, that shows the specific location of the drainage on the subject property.

RESPONSE: There are no wetlands, streams or other protected water features on the property. There is a stormwater drainage ditch on the adjoining the Prestige Rehab facility to the south. The inflow of this ditch is two stormwater outfalls identified by a sign on Stanley Avenue, "Stormwater Outfall 65028" and "Stormwater Outfall 65044". These stormwater outfalls appears to be the basis for stream and wetland HCA mapping layers that are addressed by this report.

The stream is identified in a previous wetland study that concerned lot 2900 to the south, (WD1994-0027). That study describes the stream as "...the remainder of the drainageway is not [jurisdictional, it is an] intermittent creek with no fishery values)." On the final map accepted by the Department of State Lands, the creek is labeled "non-jurisdictional creek". WD1994-0027 did not investigate the stream uphill of tax lots 2900 and 3000, and so did not investigate the stormwater outfall that is the source, nor does WD1994-0027 describe the stream as being a stormwater conveyance feature.

We followed the stream path down to lot 2900. The stream is channelized as it passes along the Prestige property, then broadens out as if flows into a grassy meadow on lot 2900. There is no distinct channel as the flow continues down to SE Railroad Avenue. With no channel, no sorted gravels, (etc)., the stream lacks indicators for being mapped as a stream on the lower portions of lot 2900.

There are no protected buffers on the stream, (except on maps). On the Prestige property, their parking lot abuts the stream. There are seven lots with single family houses along SE 56th Avenue where the stream forms the boundary between the houses and the Prestige facility. Property owners have made a variety of channelization projects over time to keep the stormwater from flooding their back yards.

19.402.15.A.2.b Wetlands

In case of wetlands, the applicant shall submit a wetland delineation report, prepared by a professional wetland specialist in accordance with the 1996 Oregon Freshwater Wetland Assessment Methodology and following the wetlands delineation process established by DSL, demonstrating the location of any wetlands on the site. The delineation report will be accepted only after approval by DSL. If the wetland is demonstrated to be a primary protected water feature, the applicant shall provide a topographic map of the site, with contour intervals of **5 ft** or less, that shows the specific location of the wetland on the subject property.

The planning director shall confer with DSL and Metro to confirm delineation and hydrology reports, as may be needed, prior to issuing a notice of decision on the requested map correction.

RESPONSE: A wetland delineation was conducted on August 17, 2022 and a report was submitted to DSL on September 1, 2022, (WD2022-0475). The wetland delineation is included in Appendix D. The conclusions of the report did not find a wetland located on the property.

Vegetated corridor width shall be applied to the outer boundaries of water features, such as the edge of a wetland and both banks of a watercourse.

RESPONSE: The only water feature is the above mentioned stormwater outfall. WD1994-0027 determined this feature is non-jurisdictional, and not subject to regulation under the State's remove/fill laws. Water flow in the storm swale is intermittent. Milwaukie's Title 19 defines "Primary protected water features" to include streams with year-around flow. Protected water features also includes drainages that drain more than 50 acres. We were unable to determine the upstream drainage area, nor if the drainage area should include only the natural drainage area or areas artificially piped to these outfalls which would naturally drain elsewhere.

While Milwaukie's Title 19 does not specifically exempt stormwater facilities from protection, such facilities are typically not protected by vegetated buffers. Also it is unusual for a wetland or stream created by a development on one property, to have buffers that radiate onto other properties.

Boundary Verification

To determine whether the standards of Section 19.402.15 apply to a proposed activity at any given location, the boundaries of any designated natural resource(s) on or near the site shall be verified.

Agreement with the accuracy of the NR Administrative Map does not constitute or require a land use decision. However, for activities proposed within 100 ft of a wetland or its associated vegetated corridor, the boundary verification process outlined in Subsection 19.402.15.A.2.a(1)(b) shall be followed to identify the specific location of wetlands on the subject property. The Planning Director may waive the requirement for official wetland delineation, depending on the specific circumstances of the site and the proposed activity. Such circumstances may include, but are not limited to, the scale and potential impacts of the proposed activity, the proximity of the proposed activity to the mapped resource, and the Director's confidence in the accuracy of the NR Administrative Map relative to the resource in question. An applicant may challenge the accuracy of the NR Administrative Map through either of the boundary verification processes outlined in Subsections 19.402.15.A.1 and 2.

I. Type I Boundary Verification

The following minor corrections to mapped HCAs may be proposed according to one of the following procedures, and are subject to Type I review per Section 19.1004:

a. Simple Incongruities

In some cases, the vegetative cover data shown on the NR Administrative Map might not align with the location of existing legally established development or tree cover. An applicant who believes that the NR Administrative Map is inaccurate, based on such an obvious misalignment, shall submit the following information regarding the property:

RESPONSE: This is not a minor correction per a Type I boundary verification. Our investigations found no wetlands or jurisdictional streams on or bordering the property. City maps show the entire parcel is mapped as a wetland, and as riparian habitat. This is a Type II boundary verification issue to remove these mapping indicators.

(1) A detailed property description and site plan of the property that includes all existing conditions plans listed on the City's Site Plan Requirements.

Tax lot 05500 is a degraded backyard that has patches of grasses and weeds, there are mature cherry trees, holly, and clusters of beaked hazelnut trees. There is development on all the adjoining properties surrounding this tax lot and it is questioned whether surface soils on this lot are native or fill material.

(2) A copy of the applicable NR Administrative Map section.

RESPONSE: We have presented the Natural Resource administrative maps in their separate constituent layers so it is more easily seen which layers are contributing to the current priority habitat mapping. See Figures H2, H3, H4, H9, and H10.

(3) The latest available aerial photograph of the property, with lot lines shown, at a scale of at least 1 map inch equal to 50 ft for lots of 20,000 or fewer square feet, and a scale of 1 map inch equal to 100 ft for larger lots.

RESPONSE: See Figure H6.

(4) A documented demonstration of the misalignment between the NR Administrative Map and the property's tax lot boundary lines and/or the location of existing legally established development.

RESPONSE: Not applicable. This is not a simple case of a misaligned map.

(5) Any other factual information that the applicant wishes to provide to support boundary verification.

RESPONSE: The tax lot does not have any qualities that make them ideal habitat for wildlife or vegetation. The backyard is not ideal for habitat as it is fenced off all the way around the property and there are no connecting properties that are not developed. The vegetation on the property is mostly degraded weeds but does have some mature trees, none of which are priority species. The only WQR within 300 ft of the property is an stormwater outfall and ditch that is about 10ft south of the south property line, and runs parallel to the south property line.

b. Legal Development Prior to Adoption Date If a property was legally developed between the summer of 2002 (when the aerial photograph used to determine the regional habitat inventory was taken) and September 15, 2011, the effective date of Ordinance #2036, the applicant shall submit the following information regarding the property:

RESPONSE: Not applicable, the property appears to have been developed around 1945 for the adjoining house and the tax lot 05500 has been used as a backyard since then. Surrounding properties have all been developed before 1980.

2. Type II Boundary Verification

Corrections to mapped WQRs and/or detailed verification of mapped HCAs may be proposed according to the following procedures and are subject to Type II review per Section 19.1005.

RESPONSE: ETC has attempted phone call and email communications with Portland Metro Mapping Services to obtain documentation of the original data that led to the HCA mapping on the property. Metro provided the wetland map, (Figure H3) and the stream map (Figure H4). We have asked specifically for data to support the wetland map, and we have been told that it is not available. ETC believes there is no basis for the wetland mapping shown in Figure H3 because our observations are that the entire property is upland, and probably never was a wetland area.

a. Corrections to WQRs

(i) Submittal Requirements

To propose a correction to a WQR shown on the NR Administrative Map, the applicant shall submit the following information, depending on the type of water feature in question:

(a) Drainages

In the case of drainages; including rivers, streams, springs, and natural lakes; the applicant shall submit a hydrology report, prepared by a professional engineer, demonstrating whether or not the drainage meets the definition of a protected water feature. If the drainage is demonstrated to be a protected water feature, the applicant shall provide a topographic map of the site, with contour intervals of 5 ft or less, that shows the specific location of the drainage on the subject property.

RESPONSE: The WQR in question is from stormwater outfalls #65028 and #65044. In this case information from the City's stormwater engineer is more appropriate for evaluating the upslope drainage characteristics, and for determining if the stormwater outflows and ditch meet the definition of a protected

water feature. The flow reaching the stormwater outfall is entirely piped, some from drains on Stanley Avenue, some from more distant sources to the Northeast. Stormwater maps available on the City's GIS website are difficult to interpret without a detailed knowledge of how the plumbing under the streets actually connects and works.

The resulting stream was determined to be non-jurisdictional by DSL in WD1994-0027, and jurisdictional by WD2017-0205. Both of these reports only looked at lots 3000 and 4000 on the South side of the Prestige Rehabilitation Center. Neither of these reports considered the source of the water in their evaluations.

Should a hydrology report be required, we first ask for resolution on questions on how to measure the upslope drainage area. Specifically, does Title 19 map the natural (pre development) basin, or is piped stormwater from outside the natural basin to be included in the upslope drainage area?

Also, the city stormwater maps available on Milwaukie's GIS website show a mesh of pipes with no indication of which direction water flows in the various pipes, making it difficult for any one other than the city engineer to determine what is actually the upslope area being drained by a particular pipe.

In ETC's opinion it is the intent of Title 19 to measure the natural drainage area for the purpose of determining the width of the vegetated corridor, (Table 19.402.15). Many jurisdictions look at a natural streams drainage area for determining the degree of protection, and they have similar tables to Table 19.402.15 that look at the area drained, and the slope adjacent to the stream, for determining buffer width. The basin threshold sizes, (usually 50 or 100 acres), is derived from the sizes of streams draining undeveloped basins, not from urban areas with a bunch of impermeable surfaces and piped stormwater running off said surfaces.

While there may be arguments to say that if a stream's basin is artificially expanded by stormwater piping, that this expanded area should be included for determining buffer protections. This is fine for public properties, but comes at cost to private properties, when said stormwater expansions increase the buffers and wetland areas on properties that receive this stormwater.

(b) Wetlands

In the case of wetlands, the applicant shall submit a wetland delineation report, prepared by a professional wetland specialist in accordance with the 1996 Oregon Freshwater Wetland Assessment Methodology and following the wetlands delineation process established by DSL, demonstrating the location of any wetlands on the site. The delineation report will be accepted only after approval by DSL. If the wetland is demonstrated to be a primary protected water feature, the applicant shall provide a topographic map of the site, with contour intervals of 5 ft or less, that shows the specific location of the wetland on the subject property. The Planning Director shall confer with DSL and Metro to confirm delineation and hydrology reports, as may be needed, prior to issuing a notice of decision on a requested map correction.

There were no wetlands found on the subject site, (WD2022-0475, in review as of this writing. Click on this link for current report status:

<https://lands.dsl.state.or.us/index.cfm?fuseaction=Wetlands.WetDetDetail-LF&id=18080>

(2) Approval Criteria

The City shall update the NR Administrative Map if the wetland or hydrology report submitted demonstrates any of the following:

(a) That there was an error in the original mapping.

(b) That the boundaries of the WQR have changed since the most recent update to the NR Administrative Map.

(c) That a primary protected water feature no longer exists because the area has been legally filled, culverted, or developed prior to January 16, 2003, the effective date of Ordinance #1912.

RESPONSE: The update to the administrative map should be as per (2)(a), that there was an error in the original mapping. It may be that (2)(c) also applies, as the entire area was developed prior to 2003, and drainages have been extensively modified and diverted in this process. Presumably the development was conducted legally, in accordance with statutes as they existed at the time.

b. Detailed Verification of HCAs

An applicant who believes that an HCA shown on the NR Administrative Map should be corrected for a reason other than those described in Subsections 19.402.15.A.1.a or b may propose a detailed verification.

(1) Submittal Requirements

The applicant shall submit a report prepared and signed by either a knowledgeable and qualified natural resource professional; such as a wildlife biologist, botanist, or hydrologist; or a civil or environmental engineer registered in Oregon to design public sanitary or storm systems, storm water facilities, or other similar facilities. The report shall include:

(a) A description of the qualifications and experience of all persons that contributed to the report and, for each person that contributed, a description of the elements of the analysis to which the person contributed.

QUALIFICATIONS OF JOHN MCCONNAUGHEY, PWS

I earned a Bachelor of Science degree from the University of Oregon in 1978 and in 1984 I earned a Masters of Fisheries Science degree from the University of Alaska at Juneau, (since renamed as the University of Alaska, Southeast). The Juneau curriculum specializes in the study of Pacific salmon. I held positions with agencies tasked with salmon research and management beginning with summer jobs in 1979 in Rogue River, the Oregon Dept of Fish and Wildlife, and then with the Alaska Department of Fish and Game in Ketchikan, Alaska in 1980. I worked on salmon projects with ADF&G in Anchorage and Juneau for 5 years before moving to American Samoa to serve as a fisheries projects leader for the Department of Marine and Wildlife Resources. Upon returning stateside, I worked for the Yakama/Klickitat Fisheries Project out of Yakima Washington for 5 years leading four research projects studying aspects of salmon supplementation projects in the Yakima River.

I have been employed with Environmental Technology Consultants since 2006. In 2010 I earned certification as a Professional Wetland Scientist, (PWS) from the Society of Wetlands Scientists, (SWS).

No part of my compensation is dependent on the outcome of my investigations or conclusions I may draw from the observed data.

QUALIFICATIONS OF ANNAKATE MARTIN, NRS

I received my Bachelor of Science degree in Natural Resources from Washington State University in 2002. In 2002 I worked for the University of Idaho on MAP tracking steelhead and salmon on the Snake River out of Clarkston, Washington. 2002-2003 I worked for Idaho Fish and Game as a field technician for identifying fish in remote streams in Idaho. In 2004, 2016 and currently I have worked for Environmental Technology Consultants conducting wetland delineations and all other environmental reports. From 2007-2014 I worked for 3 Kings Environmental conducting Phase I ESA reports, asbestos and lead surveys. In 2011 I started my own company primarily

providing erosion control services and conducting Phase I ESA habitat assessments. I was employed with Clark Public Utilities as a Watershed Coordinator in which I oversaw property restoration and maintained a nursery in 2017 before coming back to ETC in 2018.

I am currently working on getting my certification as a Professional Wetland Scientist from Portland State University. I have 20 years working in the environmental field specializing in many different areas.

No part of my compensation is dependent on the outcome of my investigations or conclusions I may draw from the observed data.

(b) The information described in Subsection 19.402.15.A.1.a.

RESPONSE: See subsection 19.402.15.A.1.a explained above.

(c) The information described in Subsection 19.402.15.A.1.b, if the applicant believes such information is relevant to the verification of habitat location on the subject lot or parcel.

RESPONSE: See subsection 19.402.15.A.1.a explained above.

(d) Additional aerial photographs, if the applicant believes they provide better information regarding the property, including documentation of the date and process used to take the photos and an expert's interpretation of the additional information they provide.

RESPONSE: Additional aerial photos are not informative. Map Figure H8 is probably most informative.

(e) A map showing the topography of the property shown by 2-ft vertical contours in areas of slopes less than 15%, and at 5-ft vertical contours of slopes 15% or greater.

RESPONSE: See Figure H5

(f) Any additional information necessary to address each of the detailed verification criteria provided in Subsection 19.402.15.A.2.b(2); a description of where any HCAs are located on the property, based on the application of the detailed verification criteria; and factual documentation to support the analysis.

RESPONSE: The HCAs are located on 100% of the tax lot, the only area not included is where the single-family residence is located, which isn't technically part of this report but is the adjoining property that has been using the subject property as a back yard. The area of the property that is in the HCA is degraded, weeds and grasses that have been used as a parking area and to drive on, there are mature trees and shrubs, *Prunus sp.*, *Coreylus cornuta*, *Illex aquifolium*. The soils were upland and there were no hydrological indicators.

(2) Approval Criteria

A boundary verification request submitted under Subsection 19.402.15.A.2.b shall be evaluated according to the following three-step process:

(a) Verify Boundaries of Inventoried Riparian Habitat. locating habitat and determining the riparian habitat class of the designated natural resource is a four-step process:

(i) Locate the water feature that is the basis for identifying riparian habitat. Locate the top of bank of all streams, rivers, and open water within 200 ft of the property. Locate all flood areas within 100 ft of the property.

RESPONSE: Wetland Delineation WD1994-0027 investigated 2 lots about 350' south of the subject parcel, (see Figure 7). That study describes a small non-jurisdictional creek that extends up towards the subject parcel, however the mapping in that report does not extend to the subject parcel. ETC did not observe such a creek on or visible from the subject parcel. It is possible the creek has been cut off from it's source, piped, diverted, or otherwise removed from the landscape by development activities. The Prestige Rehab facility was significantly expanded around 1994, it is possible the creek was removed at that time, and as it was considered non-jurisdictional, remove/fill permits would not have been required.

There are no other natural water features within 200' of the subject property, either observable on the ground, on current or historic maps. We conclude that mapping of riparian or wetland habitats is no longer appropriate.

Locate all wetlands within 150 ft of the property, based on the NR Administrative Map. Identified wetlands shall be further delineated consistent with methods currently accepted by DSL and the Corps.

RESPONSE: Please refer to WD2022-0475 and WD1994-0027. These studies found no wetlands on the subject property. No other wetland studies within 150ft of the subject property were found in our search.

(ii) Identify the vegetative cover status of all areas on the property that are within 200 ft of the top of bank of streams, rivers, and open water; are wetlands or are within 150 ft of wetlands; and are flood areas and within 100 ft of flood areas. Vegetative cover status shall be as identified on the latest Metro Vegetative Cover Map (available from the City and/or the Metro Data source Center). The vegetative cover status of a property may be adjusted only if: (1) the property was legally developed prior to September 15, 2011, the effective date of Ordinance #2036 (see subsection 19.402.15.A.1.b); or (2) an error was made at the time the vegetative cover status was determined. To assert the latter type of error, applicants shall submit an analysis of the vegetative cover on their property, using the aerial photographs on which the latest Metro Vegetative Cover Map is based and the definitions of the different vegetative cover types identified in Table 19.402.15.A.2.b(2)(a)(iv).

RESPONSE: The question of whether the property was legally developed prior to September 15, 2011 is difficult to answer for these reasons;

1. The stormwater outfall and ditch are entirely on the Prestige Rehabilitation facility's property, and likely was constructed as part of that development. It most likely is "legally developed prior to September 15, 2011". As the ditch is the WQR which may generate buffer protections under Title 19, should we consider the answer to this question to be "yes"?
2. "The property" includes both lots 5400 and 5500 as both are included in the applicant's development scenarios. Lot 5400 was developed in 1945, presumably legally at the time. If lot 5400 and 5500 are considered as a single project, then the answer to this question is "yes".
3. If "the property" includes only lot 5500, then the answer is likely "no" as the only structure on the property was apparently built without a permit. However, the property was used for many years as a back yard to lot 5400, and storage for a number of automobiles. Presumably this use was legal as it went on for many years. Does that use constitute a "development" for the purpose of this question?
4. All of the surrounding properties were developed, presumably legally, long before September 15, 2011. It seems all to reasonable to consider this as a developed area.

Metro shows no vegetation mapping on the property, (Figure H9A). Metro's vegetation mapping considers only areas within 300ft of a stream. Milwaukie GIS shows a vegetated corridor extending from the subject property south to SE Railroad Avenue, (Figure H9B). There are problems with this map layer as pointed out on Figure H9B.

The lot is 1.05 acres, of which is approximately 0.21 acres "Low structure vegetation or open soils", and approximately 0.84 acres "Forest Canopy". The "Low structure vegetation" area appears to be periodically brushed or mowed based a review of historical aerial photos, without those perturbations it would be expected to become "Forest Canopy". The "Forest Canopy" areas are similarly perturbed by the removal of shrub and herbaceous vegetation, (see photos Appendix A). The lot was used to store and service various vehicles for a long period of time, aerial photos show those vehicles mostly in the canopy areas, as late as 2018.

Section 19.402.15.A.2.b(2)(a)(iv) requires "Forest Canopy" areas to be a "contiguous grove of trees of 1 acre or larger in area within 200 ft of the relevant water feature." The forest canopy area is less than 1 acre, and is not within 200ft of a relevant water feature. It does not meet the mapping criteria for "Forest Canopy".

Section 19.402.15.A.2.b(2)(a)(iv) requires "Low structure vegetation or open soils" to be "contiguous area 1 acre or larger of grass, meadow, croplands, or areas of open soils located within 300 ft of a surface stream". It does not meet these criteria either for size or distance to a surface stream, and so does not meet the mapping criteria for "Low structure vegetation or open soils".

The subject sites were developed prior to 2011 and was established in 1945 as a backyard. The vegetative cover for the study area of these tax lots was misidentified on city maps in our professional opinions since the tax lots is degraded mowed yard grasses and non-native weeds, (See Plot P1 in the Wetland Delineation report. Aerial photos dating back to 2000 are included in Figure 3 of this report clearly showing the property as it is today, with the tree coverage it is hard to see parts of the yard.

In summary, ETC determines lot 5500 to be **not vegetated** for the purpose of answering this question. No correction to Metro's map is proposed. While we admit this conclusion may seem nonsensical, it does follow Milwaukie's Title 19. This is discussed in more detail following table 19.402.15.A.2.b(2)(a)(iv), (below).

(iii) Determine whether the degree that the land slopes upward from all streams, rivers, and open water within 200 ft of the property is greater than or less than 25%, using the methodology outlined in Table 19.402.15.

RESPONSE: Except for the stormwater ditch, there are no water features within 200ft of the property. Except for walls of the ditch itself, there are no slopes greater than 25% within 200ft of the property.

(iv) Identify the riparian habitat classes applicable to all areas on the property using Table 19.402.15.A.2.b(2)(a)(iv) and the data identified in Subsections 19.402.15.A.2.b(2)(a)(i) through (iii).

RESPONSE: The subject property is not a riparian area as the term is commonly used in ecological literature. This opinion is discussed in greater detail below. Yellow highlight is used to indicate the classification of riparian areas per Table 19.402.15.A.2.b(2)(a)(iv):

Table 19.402.15.A.2.b(2)(a)(iv)

Method for Determining Classification of Riparian Areas

Distance from Protected Water Feature	Development/Vegetation Status ¹		
	Low Structure Vegetation or Open Soils ²	Woody Vegetation (shrub and scattered forest canopy) ³	Forest Canopy (closed to open forest canopy) ⁴
Surface Streams			
0'-50'	Class I ⁵	Class I	Class I
51'-100'	Class II ⁶	Class I	Class I
101'-150'	Class II ⁶ if slope>25%	Class II ⁶ if slope>25%	Class II ⁶
151'-200'	Class II ⁶ if slope>25%	Class II ⁶ if slope>25%	Class II ⁶ if slope>25%
Wetlands (wetland feature itself is a Class I riparian area)			
0'-100'	Class II ⁶	Class I	Class I
101'-150'			Class II ⁶
Flood Areas			
Within 300' of river or surface stream	Class I	Class I	Class I
More than 300' from river or surface stream	Class II ⁶	Class II ⁶	Class I
0'-100' from edge of flood area		Class II ^{6, 7}	Class II ⁶

¹ The vegetative cover type assigned to any particular area was based on two factors: the type of vegetation observed in aerial photographs and the size of the overall contiguous area of vegetative cover to which a particular piece of vegetation belonged.

² "Low structure vegetation or open soils" means areas that are part of a contiguous area 1 acre or larger of grass, meadow, croplands, or areas of open soils located within 300 ft of a surface stream. Low structure vegetation areas may include areas of shrub vegetation less than 1 acre in size; if they are contiguous with areas of grass, meadow, croplands, orchards, Christmas tree farms, holly farms, or areas of open soils located within 300 ft of a surface stream; and if those contiguous areas together form an area of 1 acre in size or larger.

RESPONSE: There are no contiguous areas greater than 1 acre described as shrub, grass, meadow or croplands or orchards on the subject property.

³ "Woody vegetation" means areas that are part of a contiguous area 1 acre or larger of shrub or open or scattered forest canopy (less than 60% crown closure) located within 300 ft of a surface stream.

RESPONSE: There are no contiguous areas greater than 1 acre described as shrub or open scattered forest canopy on the subject property.

⁴ "Forest canopy" means areas that are part of a contiguous grove of trees of 1 acre or larger in area with approximately 60% or greater crown closure, irrespective of whether the entire grove is within 200 ft of the relevant water feature.

RESPONSE: There are no contiguous areas greater than 1 acre described as forest canopy on the subject property.

5 Except that areas within 50 ft of surface streams shall be Class II riparian areas if their vegetation status is "low structure vegetation or open soils," and they are high gradient streams. High gradient streams are identified on the Metro Vegetative Cover Map. If a property owner believes the gradient of a stream was incorrectly identified, then the property owner may demonstrate the correct classification by identifying the channel type using the methodology described in the Oregon Watershed Assessment Manual, published by OWEB, and appended to Metro's Riparian Corridor and Wildlife Habitat Inventories Report, Attachment I to Exhibit F to Metro Ordinance No. 05-1077C.

RESPONSE: There are no high gradient streams within 50FT of the subject property.

6 Areas that have been identified as habitats of concern, as designated on the Metro Habitats of Concern Map (on file in the Metro Council office), shall be treated as Class I riparian habitat areas in all cases; subject to the provision of additional information that establishes that they do not meet the criteria used to identify habitats of concern as described in Metro's Technical Report for Fish and Wildlife. Examples of habitats of concern include: Oregon white oak woodlands, bottomland hardwood forests, wetlands, native grasslands, riverine islands or deltas, and important wildlife migration corridors.

RESPONSE: Metro's Habitats of Concern map is not available. Please see the note on the first page of Appendix B, (Maps). For the purpose of this report it is probably safe to assume that this property is not so designated as it is not Oregon white oak woodlands, bottomland hardwood forests, wetlands, native grasslands, riverine islands or deltas, or an important wildlife migration corridor.

7 Only if within 300 ft of a river or surface stream.

RESPONSE: To the extent that a stormwater outfall and ditch conveying untreated stormwater can be considered a "surface stream", the ditch and outfall are within 300FT of the subject property.

(b) Determine the Property's Urban Development Value

The urban development value of property designated as regionally significant habitat is depicted on the Metro Habitat Urban Development Value Map (available from the Metro Data Resource Center).

RESPONSE: Metro's Habitat Urban Development Value map is not available, please see the note on the first page of Appendix B, (Maps).

(i) A property's urban development value designation shall be adjusted upward if the Metro 2040 Design Type designation for the property lot or parcel has changed from one with a lower urban development value to one with a higher urban development value. 2040 Design Type designations are identified on the Metro 2040 Applied Concept Map (available from the Metro Data Resource Center).

RESPONSE: Unable to locate the 2040 Applied Concept Map. Requesting Metro to provide.

(ii) Properties in areas designated on the 2040 Applied Concept Map as Central City, Regional Centers, Town Centers, and Regionally Significant Industrial Areas are considered to be of high urban development value; properties in areas designated as Main Streets, Station Communities, Other Industrial Areas, and Employment Centers are of medium urban development value; and properties in areas designated as Inner and Outer Neighborhoods and Corridors are of low urban development value.

RESPONSE: Although we do not have the map for reference, the subject property is in a residential neighborhood, not as described above.

(iii) As designated in Title 13 of the UGMFP, properties owned by a regionally significant educational or medical facility are designated as high urban development value.

RESPONSE: Although we do not have the map for reference, we note the Prestige Rehabilitation Center is a medical facility, though the subject property is not. We guess it is considered not high urban development value for the purpose of this question.

(c) Cross-Reference Habitat Class with Urban Development Value

City verification of the locations of HCAs shall be consistent with Table 19.402.15.A.2.b(2)(c).

RESPONSE: Our evaluation per Table 19.402.15.A.2.b(2)(c) is shown in yellow highlight below, and our rationale follows the table:

Table 19.402.15.A.2.b(2)(c)				
Method for Identifying Habitat Conservation Areas (HCAs)				
Fish & Wildlife Habitat Classification	High Urban Development Value ¹	Medium Urban Development Value ²	Low Urban Development Value ³	Other Areas: Parks and Open Spaces (no design types outside UGB)
Class I Riparian	HCA	HCA	HCA	HCA
Class II Riparian	HCA	HCA	HCA	HCA
Class A Upland Wildlife	No HCA	No HCA	No HCA	No HCA/HCA ⁴
Class B Upland Wildlife	No HCA	No HCA	No HCA	No HCA/HCA ⁴

According to Wikipedia a "riparian area" is described as follows:

"A riparian zone or riparian area is the interface between land and a river or stream.[1] Riparian is also the proper nomenclature for one of the terrestrial biomes of the Earth. Plant habitats and communities along the river margins and banks are called riparian vegetation, characterized by hydrophilic plants. Riparian zones are important in ecology, environmental resource management, and civil engineering because of their role in soil conservation, their habitat biodiversity, and the influence they have on fauna and aquatic ecosystems, including grasslands, woodlands, wetlands, or even non-vegetative areas. The word riparian is derived from Latin ripa, meaning "river bank".

The subject property is not considered "riparian" as the word is used in ecology. A constructed ditch that conveys stormwater is not considered a river or stream for these purposes. Typically, riparian areas are within the flood plane of a river or stream, and experience occasional or seasonal inundation as a result. They are generally flat or very low gradient, and the plant community is typically dominated by Cottonwood, Willows, Alder and sometimes Oak and Cedar in the PNW ecotone. Typically as one moves outside the riparian area, the land becomes sloped, and the native plant community outside of the

riparian area is dominated by large Douglas fir, Maple, and other more upland adapted species. The subject property is well away from a flood plane of a stream or river, and vegetation, although not natural, is not what we would typically find in a flood plane in the PNW ecotone. Per Table 19.402.15.A.2.b(2)(c) lot 5500 should be classified as **Class A or B Upland Wildlife**.

Without the correct Metro map we can not determine the Urban Development Value, although since the 2040 Growth Concept Map, (Figure H10), identifies the area as “neighborhood”, and that the property is not urban center, industrial, or medical, we suspect it rates as “Low Urban Development Value” for the purpose of Table 19.402.15.A.2.b(2)(c). However, the Urban Development Value does not affect the HCA designation as it is not a riparian area.

NOTE: The default urban development value of property is as depicted on the Metro Habitat Urban Development Value Map. The Metro 2040 Design Type designations provided in the following footnotes are only for use when a city or county is determining whether to make an HCA adjustment.

RESPONSE: We are not city or county, this section would seem not to apply.

- 1 Primary 2040 design type: Central City, Regional Centers, Town Centers, and Regionally Significant Industrial Areas.
- 2 Secondary 2040 design type: Main Streets, Station Communities, Other Industrial areas, and Employment Centers.
- 3 Tertiary 2040 design type: Inner and Outer Neighborhoods, Corridors.
- 4 All Class A and B upland wildlife habitat in publicly-owned parks and open spaces shall be considered HCA, except for parks and open spaces where the acquiring agency clearly identified that it was acquiring the property to develop it for active recreational uses.

(3) Notification to Metro and ODLCD

When an application for boundary verification proposes corrections to mapped HCAs that would result in a change in HCA designation of 1 acre or more, the City shall notify Metro and the Oregon Department of Land Conservation and Development within 7 days after the application has been deemed complete, in accordance with the Type II referral procedure outlined in Subsection 19.1005.3.A.

RESPONSE: This evaluation does change the HCA designation on 1.05 acres, therefore the City should notify Metro and the ODLCD within 7 days.

3. Type III or V Boundary Verification

RESPONSE: Not applicable, this is a Type II application.

Corrections to mapped WQRs or HCAs that are not subject to processing according to the provisions outlined in either of Subsection 19.402.15.A.1 or A.2, such as in cases where the City initiates the change without property owner authorization

and/or where the changes involve more properties than for which it is practicable to obtain all property owners' authorization, shall be processed in accordance with the procedures for zoning map amendments as provided in Subsection 19.902.6. Such corrections shall be processed with either Type III or Type V review, accordingly, but do not constitute amendments to the zoning map itself, only to the NR Administrative Map.

B. Map Administration

1. Updates to the NR Administrative Map

When a boundary verification, conducted in accordance with the standards of Subsection 19.402.15.A, demonstrates an error in the location of a WQR or HCA shown on the NR Administrative Map, the City shall update the NR Administrative Map to incorporate the corrected information as soon as practicable. Changes to the NR Administrative Map are not considered amendments to the City's Comprehensive Plan, to Comprehensive Plan Map 5 (Natural Resources), or to the Zoning Map.

2. Mapping Implications of Allowed Disturbances

a. WQRs

Permanent disturbances within a WQR, whether they occurred prior to the adoption of the Zoning Ordinance or are allowed according to the standards of Section 19.402, do not affect the way related WQRs are shown on the NR Administrative Map.

b. HCAs

When disturbances are allowed within HCAs, in accordance with the applicable standards of Section 19.402, the City may update the NR Administrative Map to show that the permanently disturbed area is no longer considered an HCA.

3. Designation of Annexed Areas

When land annexed to the City includes WQRs and/or HCAs, as designated by Clackamas County, those same designations shall be shown on the City's NR Administrative Map at the time of annexation. Verification of the boundaries of such WQRs and/or HCAs shall be processed in accordance with the applicable provisions established in Subsection 19.402.15.A; not necessarily at the time of annexation, but at such time as a new activity is proposed on the annexed property.

(Ord. 2218 § 2 (Exh. B), 2022; Ord. 2166 § 1, 2018; Ord. 2161 § 2, 2018; Ord. 2140 § 2, 2017; Ord. 2110 § 2 (Exh. G), 2015; Ord. 2036 § 3, 2011)

SUMMARY

- There is no HCA on the property.
- A WQR buffer of 15FT is shown on Figure H5

IMPACT EVALUATION

Lot 05500 adjoining the physical address of 11909 SE Stanley Ave does not have any impact due to water features on the property. The only impact would be to native trees on the subject property which some trees may be saved.

The applicants originally proposed to construct 20 town houses on the subject property, and this would impact the entire site. It is our understanding that this plan has been abandoned, and that a new plan has yet to be proposed.

Below is a table of construction disturbances based on the 20 town home plan and the HCA and WQR mapping on the current Administrative Map, and also based on our proposed corrections to the Administrative Map.

Table 1. Disturbed Areas (SQFT). Permanent disturbances include the paved areas of the roads, driveways and houses. The temporary disturbance is a 5' construction buffer which will be planted as part of the mitigation. The total project area is about 45,738 SQFT.			
Mapping	Permanent disturbance (SQFT)	Temporary disturbance (SQFT)	Total (SQFT)
WQR Admin Map	45,738	0	45,738
WQR Proposed revision	0	0	0
HCA Admin Map	45,738	0	45,738
HCA Proposed revision	0	0	0
Total	45,738	0	45,738

The current condition of the site is degraded and has many invasive species (Cat's ear dandelion, English ivy, Holly) The proposed plan would not have negative impacts to the property or the surrounding area as it is a degraded fenced in yard and is surrounded by development.

CONCLUSION

It is ETC's conclusion that there are no wetlands, jurisdictional waterways, vegetated corridors, Riparian corridors, on the subject site. There is a WQR that is offsite, and a 15FT buffer from it may project onto the site, depending on the City's interpretation as to what constitutes a protected water feature. We recommend that the mapping indicators be removed for this site.

APPENDIX A

PHOTOGRAPHS



Photo 1. This is a photo of the *Ranunculus repens* patch and *Corylus cornuta*, this area did not meet the wetland criteria for vegetation, soils and hydrology . ETC Photo: 8/19/22



Photo 2. This photo is looking southeast at the stormwater drainage ditch offsite and adjoining property parking lot. ETC Photo: 8/19/2022



Photo 3. This photo is looking southeast at the stormwater drainage ditch offsite and the North parking lot of the Prestige Rehab Center. ETC Photo: 8/19/2022



Photo 4 . Two stormwater outfalls bring offsite stormwater to the ditch on the North end of the Prestige Rehabilitation facility parking lot.



Photo 5 . Stormwater drain sends water to the stormwater ditch. The is one of two sources, the other is piped from the Lynwood Elementary School and possibly other more distant developments.



Photo 5 . A photo looking east at on the property. ETC Photo 8/19/2022

APPENDIX B

MAPS

Figure H1	Location Map
Figure H2	Metro Riparian Habitat Mapping
Figure H3	Metro Wetland Mapping
Figure H4	Metro Stream Mapping
Figure H5	Topo Map
Figure H6	2022 Aerial Photograph
Figure H7A	Stormwater Map
Figure H7B	Stormwater Map (larger view)
Figure H8	Wetland Delineation Map from WD1994-0027
Figure H9A	Metro Vegetative Cover map
Figure H9B	Milwaukie Vegetated Corridors map
Figure H10	Metro 2040 Growth Concept map

The following two maps are not included per email from Al Mowbray, Senior GIS Specialist with the Metro Data Resource Center:

“I’m fairly sure we haven’t updated the Habitats of Concern for a very long time and that we didn’t use them in the last Title 13 evaluation. Also, the Urban Development Value map layer is obsolete. It was a layer overlaid with the habitat inventory to get to the HCA designations. We get these kind of questions from landowners once in a while, but I’ve never been asked for or provided either of those maps. If the City continues to ask you for them, you can forward them my way. It shouldn’t be something they or you need to deal with.”

Figure H11	Metro Habitats of Concern map
Figure H12	Metro Habitat Urban Development Value map

11909 SE Stanley Ave, Milwaukie

Search

Help Print

Info Taxlots Layers

Other

Boundary

- ☐ City Boundaries
- ☐ Fire Districts
- ☐ Hauler Boundaries
- ☐ Metro Boundary
- ☐ Metro Council Districts
- ☐ Neighborhoods
- ☐ Park Districts
- ☐ School Districts
- ☐ Sewer Districts
- ☐ Transit Districts
- ☐ Urban Growth Boundary (UGB)
- ☐ Voter Precincts
- ☐ Water Districts
- ☐ Zipcodes

Other

- ☐ Building Footprints
- ☐ Light Rail
- ☐ 2013 Vacant Land
- ☐ Urban and rural reserves
- ☐ Generalized Zoning
- ☐ Sections
- ☐ Upland Habitat
- ☒ Riparian Habitat
 - ☒ Riparian Class I
 - ☐ Riparian Class II
 - ☐ Riparian Class III
- ☐ Multifamily Housing
- ☐ Trails
- ☐ Slopes > 10%
- ☐ Slopes > 25%
- ☐ Contours

Clear All Layers



REVISIONS

TOR LLC
14845 SW MURRAY
SCHOLLS DR
503-490-5137

METRO RIPARIAN
HABITAT MAP

environmental
technology
consultants



375 Portland Avenue
Gladstone, OR 97027
360-696-4403

DATE Nov 09, 2022

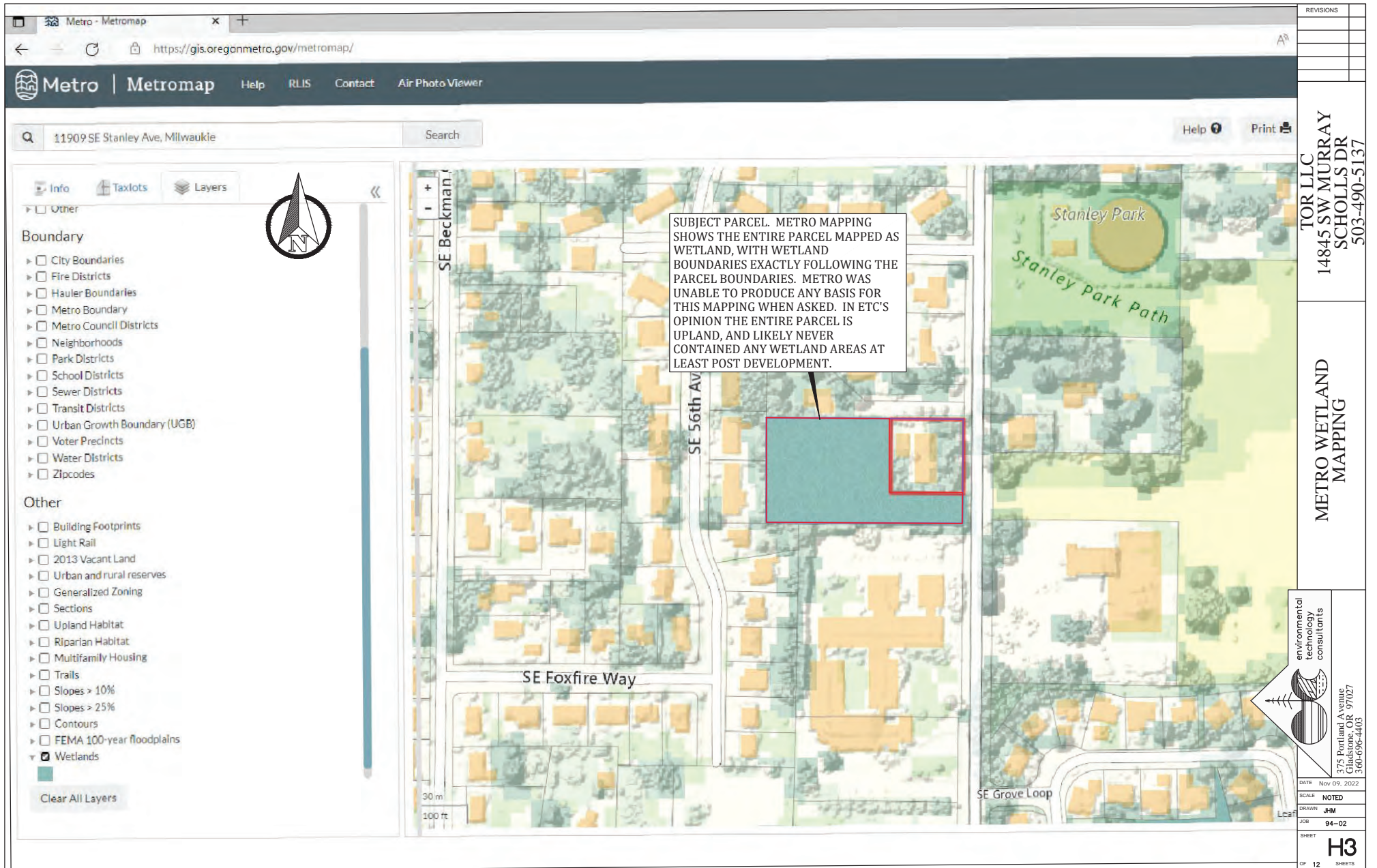
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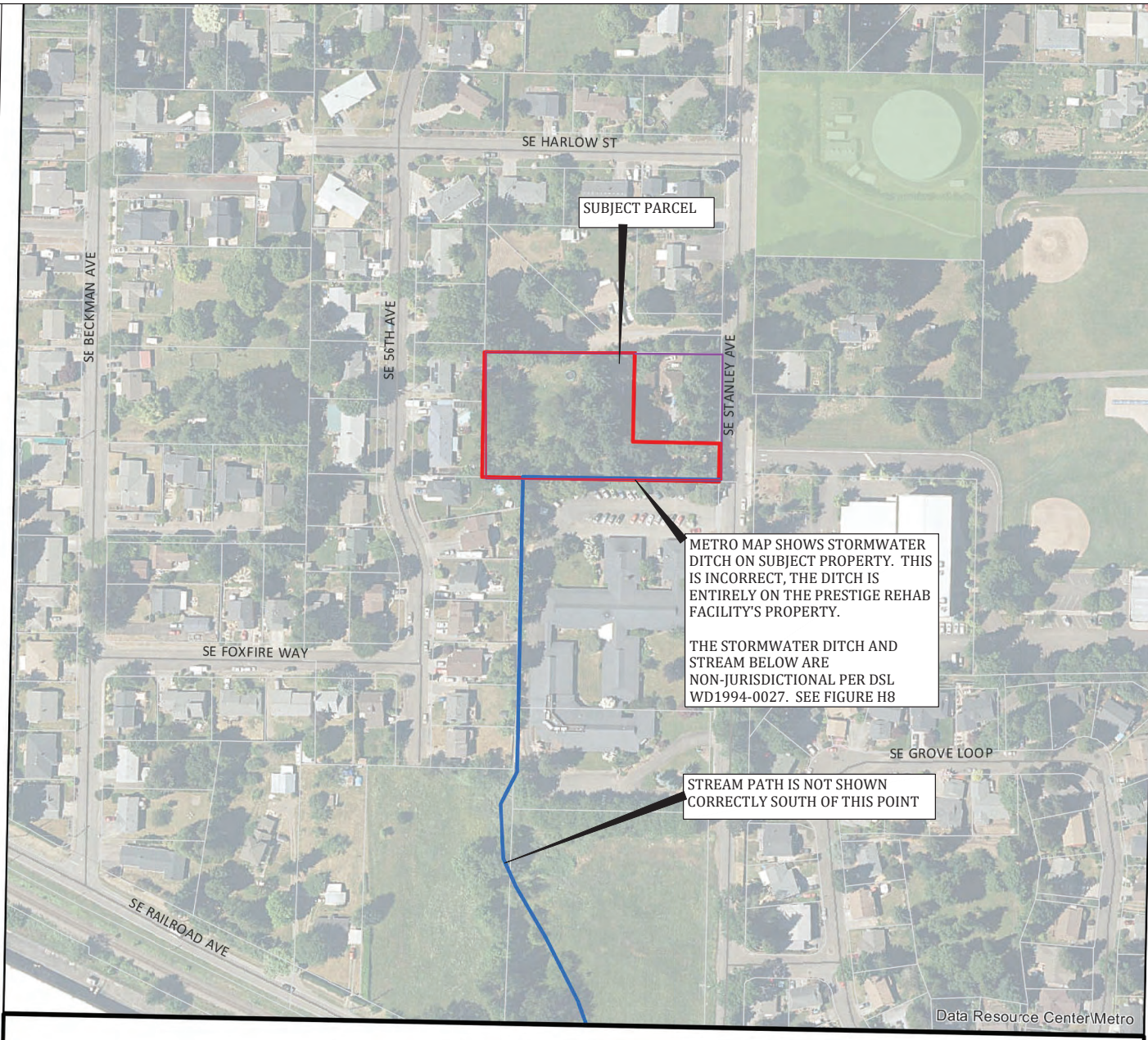
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SHEET

H2
OF 12 SHEETS





Data Resource Center Metro



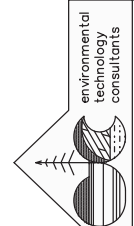
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Feet

PORTLAND METRO STREAM MAP
PROVIDED ON REQUEST BY
OREGONMETRO.GOV.

REVISIONS					

TOR LLC
14845 SW MURRAY
SCHOLLS DR
503-490-5137

METRO STREAM MAP



375 Portland Avenue
Gladstone, OR 97027
360-696-4403

DATE Nov 09, 2022

SCALE NOTED

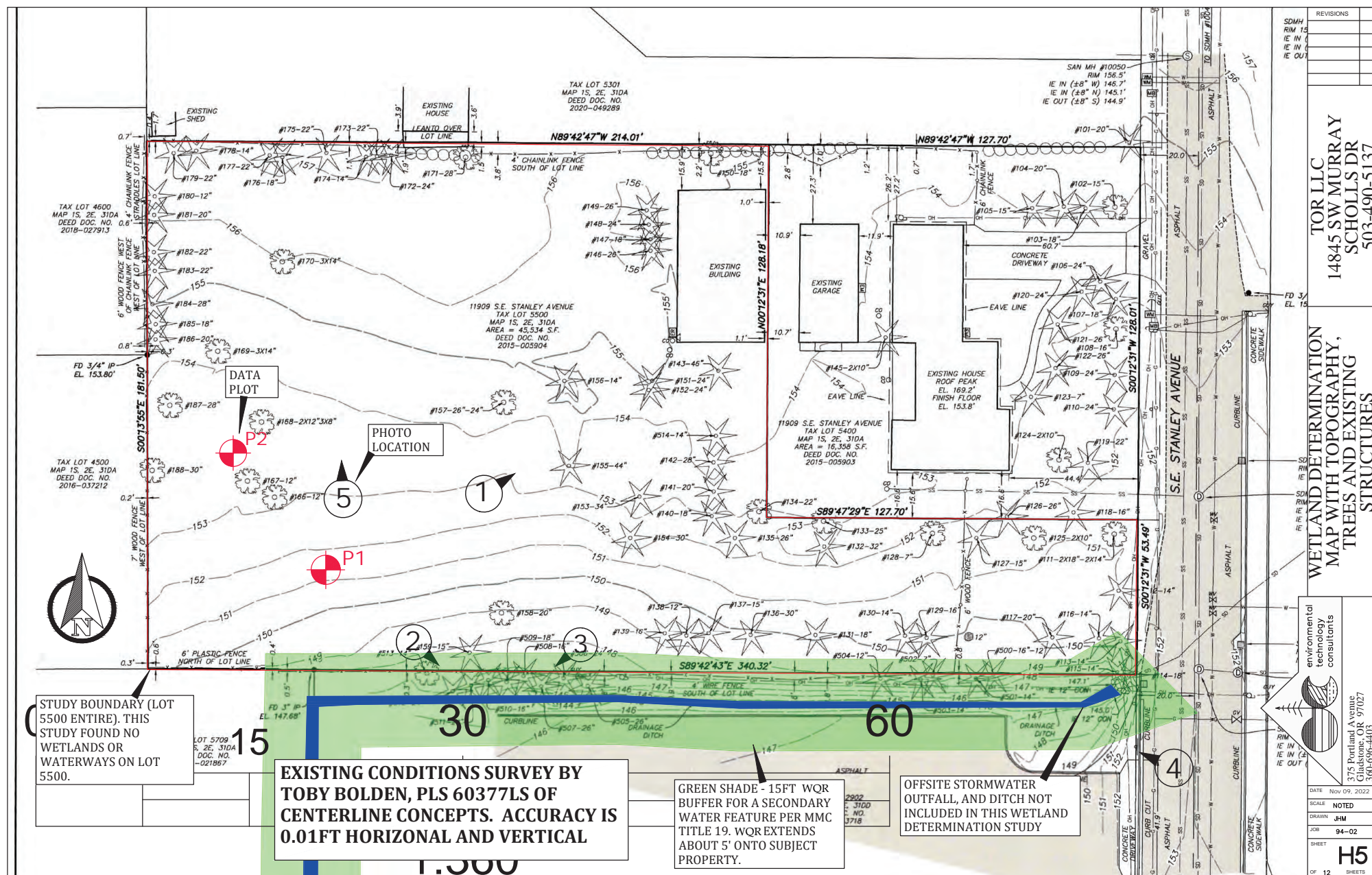
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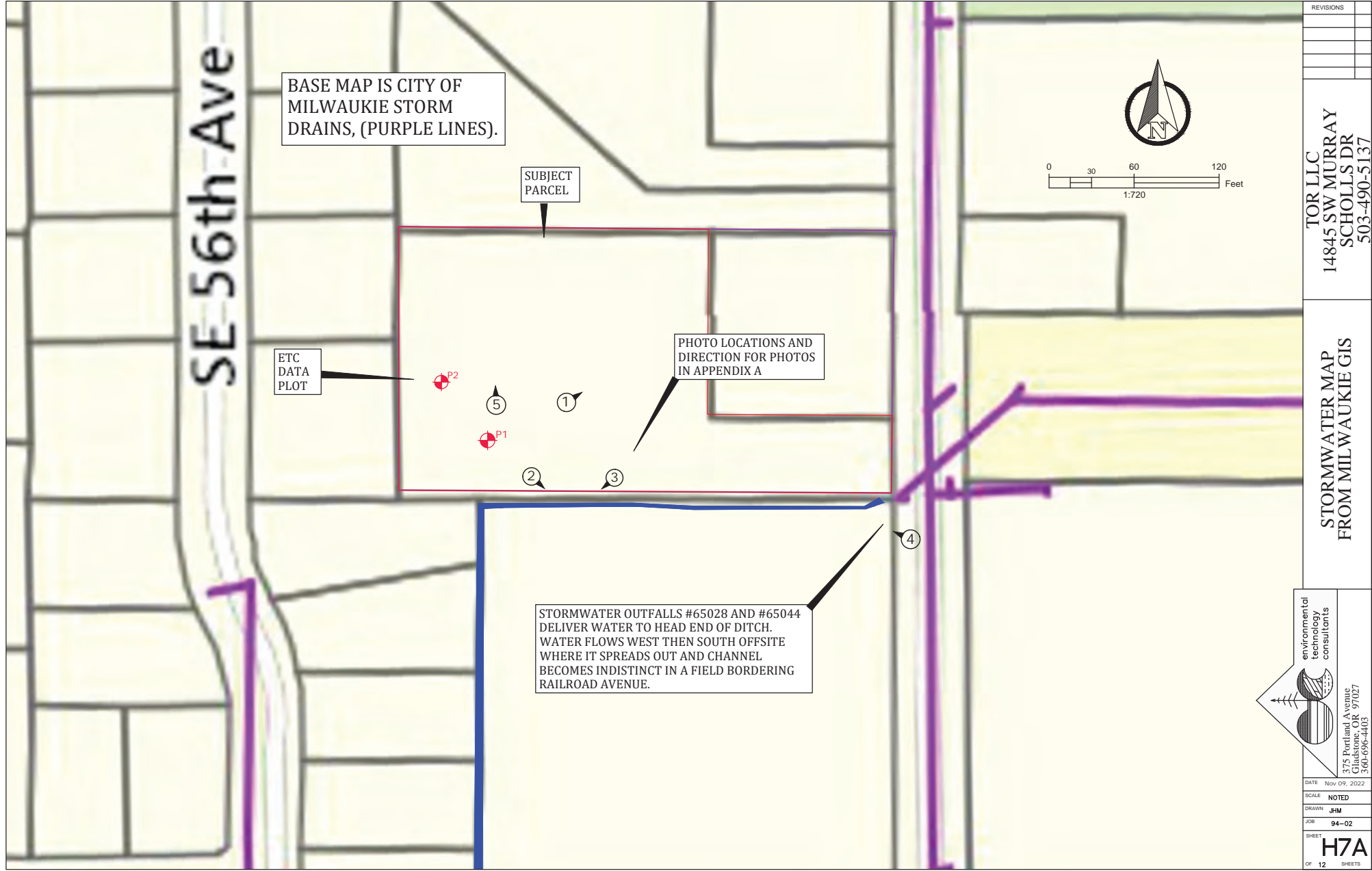
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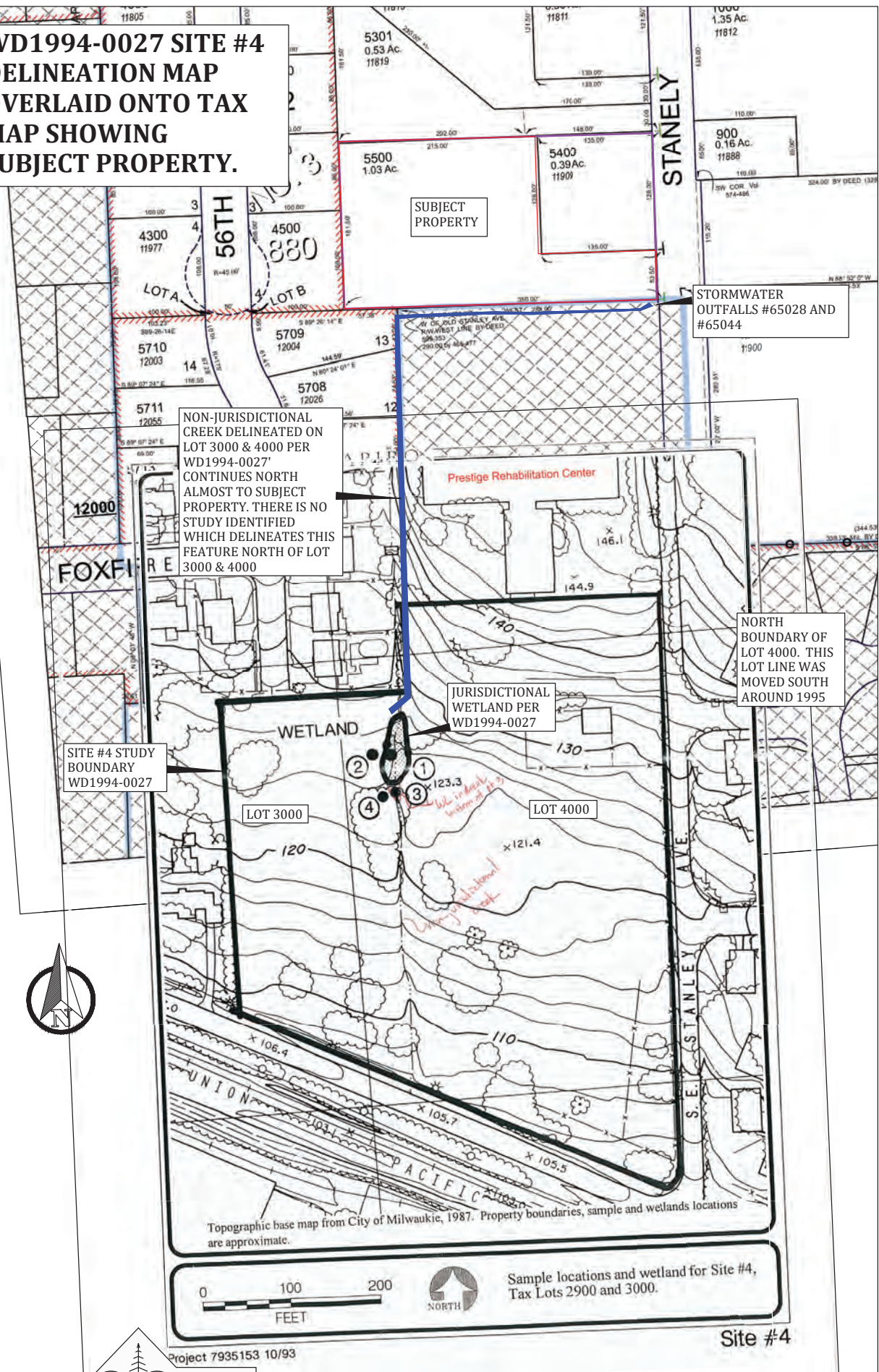
H4

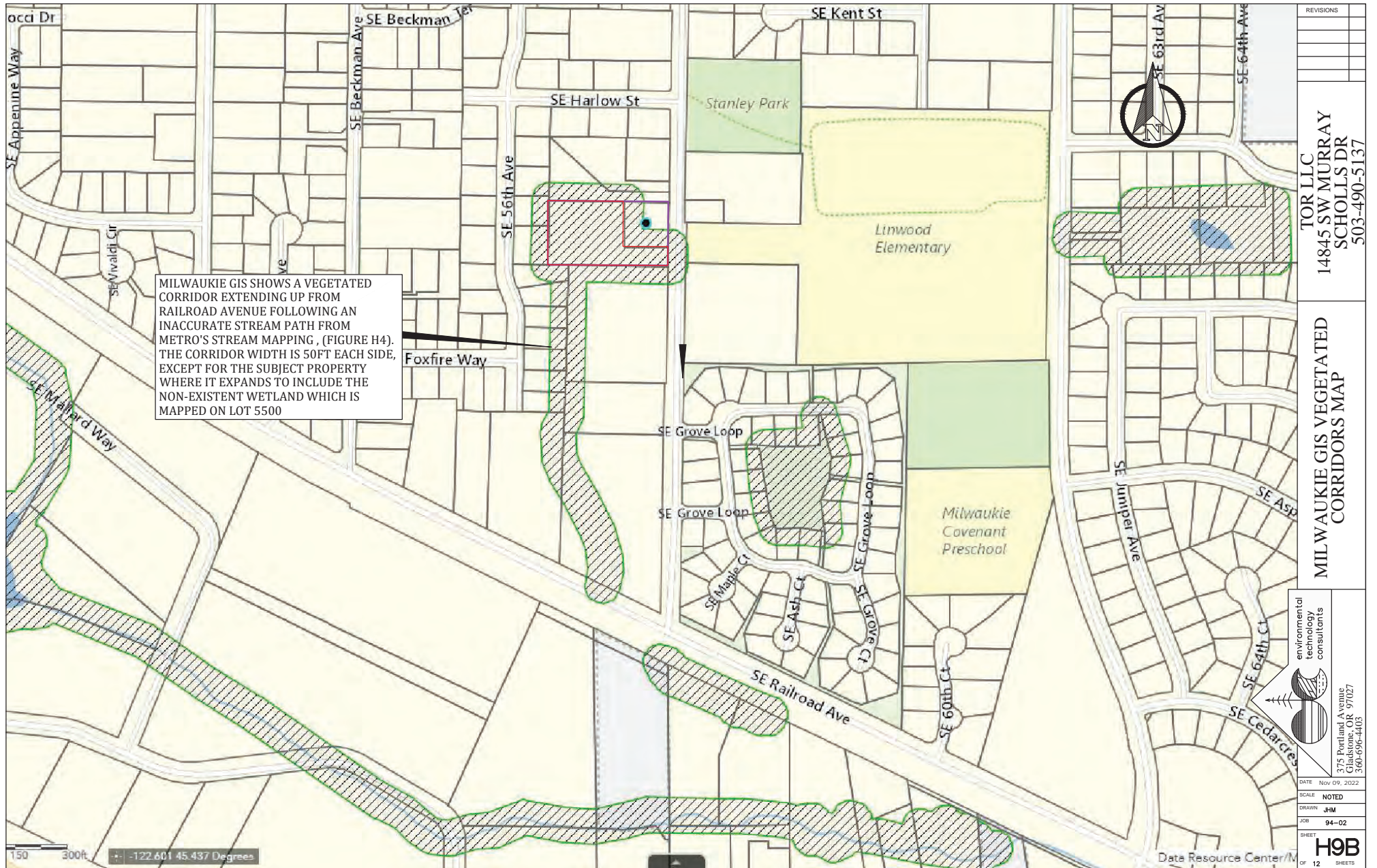
OF 12 SHEETS

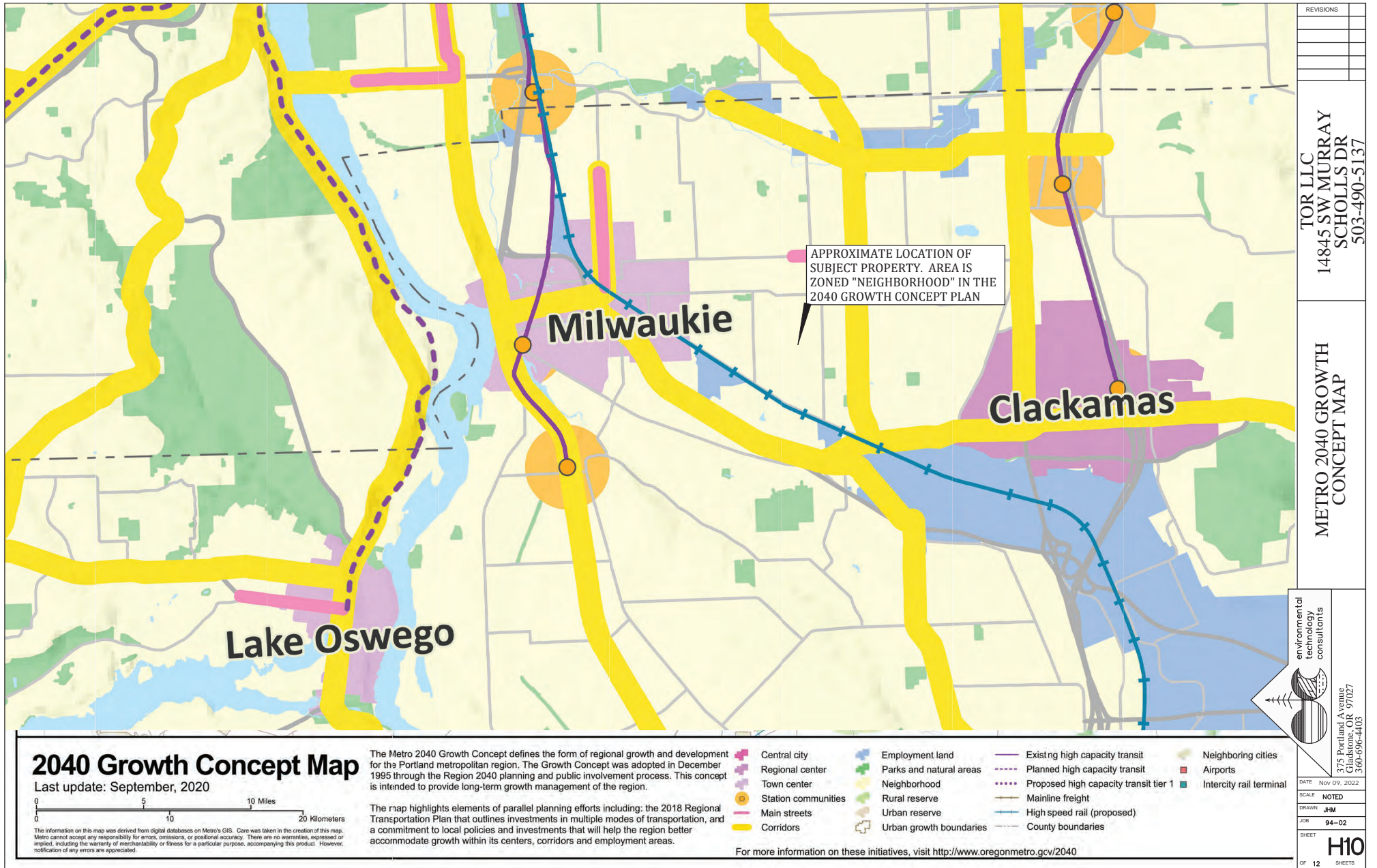




**WD1994-0027 SITE #4
DELINEATION MAP
OVERLAID ONTO TAX
MAP SHOWING
SUBJECT PROPERTY.**







This portion of
submittal received
on 9/14/2022

WETLAND DELINEATION / DETERMINATION REPORT COVER FORM

This form must be included with any wetland delineation report submitted to the Department of State Lands for review and approval. A wetland delineation report submittal is not "complete" unless the fully completed and signed report cover form and the required fee are submitted. Attach this form to the front of an unbound report or include a hard copy of the completed form with a CD/DVD that includes a 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 attachment 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 instructions on how to access the file from your ftp or other file sharing website. Fees can be paid by check or credit card. Make the check payable to the Oregon Department of State Lands. To pay the fee by credit card, call 503-986-5200.

<input checked="" type="checkbox"/> Applicant <input checked="" type="checkbox"/> Owner Name, Firm and Address: Tor LLC P14845 SW Murray Scholls Dr Beaverton, OR 97007	Business phone # 971-563-1880 Email: mstouder@comcast.net
<input checked="" type="checkbox"/> Authorized Legal Agent, Name and Address: Environmental Technology Consultants 375 Portland Ave, Gladstone, OR 97027	Mobile phone # 360.984.8767 E-mail: AnnakateM@etcEnvironmental.net
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.	
Typed/Printed Name: <u>Annakate Martin</u>	Signature: <u>Annakate Martin</u>
Date: <u>3/9/21</u>	Special instructions regarding site access: <u>Need permission to be on subject site</u>

Project and Site Information (using decimal degree format for lat/long of site or start & end points of linear project)

Project Name: <u>Milwaukie-Sisul</u>	Latitude: <u>N 45.2613°</u>	Longitude: <u>W -122.3614°</u>
Proposed Use: <u>20 Single family houses</u>	Tax Map # <u>12E31DA05500</u>	Map Parcel # <u>00098030</u>
Project Street Address (or other descriptive location): Subject site located behind the physical address of 11909 SE Stanley, AVE	Township 1S Range 2E Section 31 QQ	Tax Lot(s) <u>00098030</u>
City: <u>Milwaukie</u> County: <u>Clackamas</u>	Waterway: <u>Willamette</u> River Mile:	NWI Quad(s): <u>Milwaukie, OR</u>

Wetland Delineation Information

Wetland Consultant Name, Firm and Address: Annakate Martin, Senior Biologist Environmental Technology Consultants 375 Portland Ave, Gladstone, OR 97027 360-984-8767 cell		Mobile phone # 360-984-8767 E-mail: AnnakateM@etcEnvironmental.net
The information and conclusions on this form and in the attached report are true and correct to the best of my knowledge.		
Consultant Signature:	Date: August 23, 2022	
Primary Contact for report review and site access is <input checked="" 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 1.05 Acres Total Wetland Acreage: 0 Acres	

Check Box Below if Applicable:

Fees: \$500 (2022)

<input type="checkbox"/> R-F permit application submitted	<input checked="" type="checkbox"/> Fee payment submitted \$500
<input type="checkbox"/> Mitigation bank site	<input type="checkbox"/> Fee (\$100) for resubmittal of rejected report
<input type="checkbox"/> Wetland restoration/enhancement project (not mitigation)	<input type="checkbox"/> No fee for request for reissuance of an expired report
<input type="checkbox"/> Industrial Land Certification Program Site	
<input type="checkbox"/> Reissuance of a recently expired delineation	
Previous DSL # _____	

-Other Information:	Y	N
Has previous delineation/application been made on parcel?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Does LWI, if any, show wetland or waters on parcel?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

For Office Use Only

DSL Reviewer: _____	Fee Paid Date: ____/____/____	DSL WD # _____
Date Delineation Received: ____/____/____	DSL Project # _____	DSL Site # _____
Scanned: <input type="checkbox"/> Final Scan: <input type="checkbox"/>	DSL WN # _____	DSL App. # _____

RECEIVED

SEP 14 2022

CITY OF MILWAUKIE
PLANNING DEPARTMENT

WETLAND DELINEATION REPORT

Parcel number 00098030

T1S, R2E, Sec 31

Milwaukie, OR

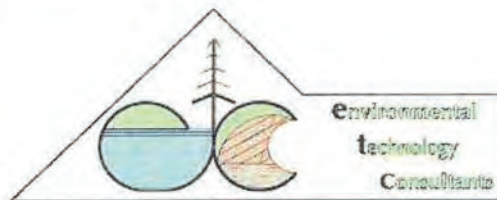
ETC Job EVA22-004



Evaluated by: Annakate Martin
Annakate Martin, NRS

August 23, 2022

Prepared for:
Tor LLC
14845 SW Murray Scholls Dr
Ste 110 PMB 612
Beaverton, OR 97007



"Creating Tomorrow's Environment - Today"

Environmental Technology Consultants
375 Portland Avenue
Gladstone, OR, 97027

A Division of Sisul Enterprises, Inc.

(360) 984-8767 Fax: (503) 657-5779

WA Landscape Contractors License #: ENVIRTCO23RB

Web: www.etcEnvironmental.net

Email: AnnakateM@etcEnvironmental.net

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Photo 1. (Cover Page). This picture is looking into the patch of *Ranunculus repens*.

INTRODUCTION

This study is for Mike Stouder, is seeking land use approval to construct a proposed twenty single-family dwellings on the subject property, which is located east of the adjoining property that has the physical addresses of 11909 SE Stanley Avenue, Milwaukie, Oregon, these properties were purchased together and the subject property is a back yard to the house. The legal description for the subject site is tax lot 05500, T1S R2E 31 and Parcel Number 00098030, this lot is 1.05 acres. The building class category for these lots is single family residence, zoned Metro UGB. The property is located on the west side of SE Stanley Avenue and south of SE Harlow Street ROW.

This report is intended to assist the permittee, the City of Milwaukie, and DSL to evaluate the application and determine what environmental conditions or mitigations may be required to move the project along.

STUDY AREA. The investigation includes the entire property tax lot 05500 and observation of the south side stormwater drainage ditch and adjoining house located at 11909 SE Stanley Avenue, Milwaukie, OR. Historically the property has been undeveloped back yard to the adjoining house and is a degraded area of grasses, weeds and bare ground. The lot is generally flat but on the southwest corner does slope towards the south.

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. If wetland boundaries are shown in this report, they 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 Land, Oregon Army Core of Engineers, or the local planning authority.

QUALIFICATIONS OF ANNAKATE MARTIN, NRS

I received my Bachelor of Science degree in Natural Resources from Washington State University in 2002. In 2002 I worked for the University of Idaho on MAP tracking steelhead and salmon on the Snake River out of Clarkston, Washington. 2002-2003 I worked for Idaho Fish and Game as a field technician for identifying fish in remote streams in Idaho. In 2004, 2016 and currently I have worked for Environmental Technology Consultants conducting wetland delineations and all other environmental reports. From 2007-2014 I worked for 3 Kings Environmental conducting Phase I ESA reports, asbestos and lead surveys. In 2011 I started my own company primarily providing erosion control services and conducting Phase I ESA habitat assessments. I was employed with Clark Public Utilities as a Watershed Coordinator in which I oversaw property restoration with native plants and maintained a nursery in 2017 before coming back to ETC in 2018.

I am currently working on getting my certification as a Professional Wetland Scientist from Portland State University. I have 20 years working in the environmental field specializing in many different areas.

No part of my compensation is dependent on the outcome of my investigations or conclusions I may draw from the observed data.

QUALIFICATIONS OF JOHN MCCONNAUGHEY

I earned a Bachelor of Science degree from the University of Oregon in 1978 and in 1984 I earned a Masters of Fisheries Science degree from the University of Alaska at Juneau, (since renamed the University of Alaska, Southeast). The Juneau curriculum specializes in the study of Pacific salmon. I held positions with agencies tasked with salmon research and management beginning with summer jobs in 1979 in Rogue River, the Oregon Dept of Fish and Wildlife, and then with the Alaska Department of Fish and Game in Ketchikan Alaska, in 1980. I worked on salmon projects with ADF&G in Anchorage and Juneau for 5 years before moving to American Samoa to serve as a fisheries project's leader for the Department of Marine and Wildlife Resources. Upon returning stateside, I worked for the Yakama/Klickitat Fisheries Project out of Yakima Washington for 5 years leading four research projects studying aspects of salmon supplementation projects in the Yakima River.

I have been employed with Environmental Technology Consultants for the past 6 years. In 2010 I earned certification as a Professional Wetland Scientists, (PWS) from the Society of Wetlands Scientists, (SWS).

No part of my compensation is dependent on the outcome of my investigations or conclusions I may draw from the observed data.

Landscape Setting and Land Use

GENERAL STUDY AREA and LANDSCAPE SETTING

The study area includes one tax lot 05500, 1.05 acres. The project is located east of west of SE Stanley Avenue, there do not appear to be any streams or creeks in the immediate vicinity of the tax lot as determined by the review of NWI, Tax, Soil, and general maps of the area. The stormwater inlet map for the City of Milwaukie did show the inlet on the southeast corner of the property where it feeds into a stormwater drainage ditch.

The property is zoned Metro UGB and is within the city limits of Milwaukie, it is surrounded by single family houses to the north and west, a rehab center to the south and a school to the east. The area slopes down gradually at a 3% slope from the north to south.

There were no mapped NWI or LWI on the property. The mapped soils for the property are 53A Latourell loam (Non-Hydric).

JURISDICTIONAL CONSIDERATIONS

- City of Milwaukie, Oregon
- Oregon Department of State Lands
- No mapped wetland on NWI.
- Milwaukie maps shows the entire site as wetland, habitat

PREVIOUS AND CURRENT LAND USES, & SITE ALTERATIONS

From aerial photos, the property appears to have been undeveloped land as it is in it's current state.

Methods

General Wetland Delineation Methodology: This investigation was carried out in accordance with the guidelines set forth in the Corps of Engineers Wetland Delineation Manual (Technical Report Y-87-1, 1987) and it's more recent 2010 update, version 2.0.

Site Specific Methodology: For this delineation, observing soils, hydrology and vegetation were used for determining wetland presence or absence using the Corps criteria.

The parcels are sloped downhill to the west at about 3-15% and is at an elevation of 70'.

Weather data

Precipitation in the last 8 months has been below average compared to the WETS tables.

TABLE 1. Recent Precipitation Compared to WETS averages. WETS Station: Oregon City, OR. WETS Average is computed from observations for 1971 through 2020.					
Month	2022 Precip	WETS Avg Precip	30% chance precip less than	30% chance precip more than	Recent compared to WETS avg
Jan	1.11	6.33	4.14	7.60	Below
Feb	3.17	4.70	3.13	5.62	Below
March	4.73	5.07	3.54	6.03	Below
April	2.00	3.52	2.34	4.22	Below
May	3.64	2.39	1.45	2.89	Above
June	0.04	1.67	1.01	2.03	Below
July	0	0.61	0.21	0.67	Below
August	0	0.85	0.24	0.89	Below
TOTAL	14.69	25.14	16.06	29.95	Below

Previous Studies

There are no previous studies that we know of on the subject property.

Mapping Method

There were no wetlands to flag, there were 2 data points taken in areas that had *Ranunculus repens* and we GPSed these locations.

We generated maps with AutoCad using reference maps and our GPS points.

Description of All Wetlands and Other Non-Wetland Waters

There were no wetlands or waters found on the subject property. There is a stormwater drainage ditch offsite to the south, approximately 10'.

Deviation from LWI, NWI and Previous Studies

The NWI map does not show streams or wetlands on the subject property. The Milwaukie habitat, NROD shows the entire property as wetland.

Results and Conclusions:

Hydrology. No hydrology was found on the property.

Plants. The study area consisted primarily of grasses and weeds, *Taraxacum officinale*, *Cirsium arvense*, and a patch of *Ranunculus repens*. The *Ranunculus* patch was found along with *Corylus cornuta* and *Ilex sp.*

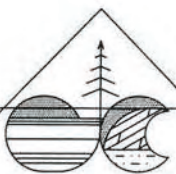
Soils. The soils were upland in each data plot. 0-10" 10YR 3/3 with no redox or minimum redox and 10-20" 7.5YR3/3.

J) Disclaimer: OAR141-090-0035(12)(j):

"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."

APPENDIX A: Figures

Figure 1:	Location Map
Figure 2:	Wetland Delineation
Figure 3:	NWI Map
Figure 4:	Soil Map
Figure 5:	Aerial Image 2012
Figure 6:	Aerial Image 2020
Figure 7:	Stormwater Inlet Map



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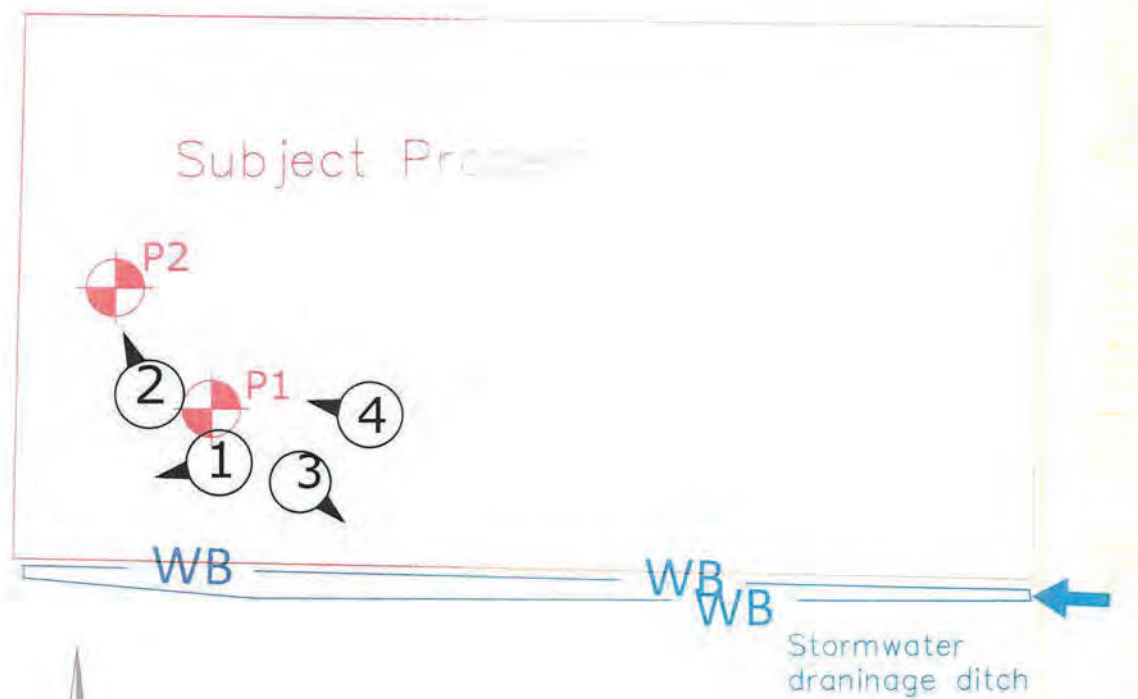
LOCATION MAP
PARCEL 00098030
MILWAUKIE, OR

Project 22-004
Milwaukie-Sisul
Tor LLC

Aug 30, 2022

SHEET

1



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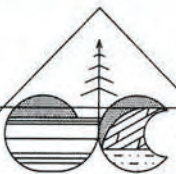
WETLAND DELINEATION
PARCEL 00098030
MILWAUKIE, OR

Project 22-004
Milwaukie-Sisul
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2

Sheet 1



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3

NWI MAP
PARCEL 00098030
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Milwuakie-Sisul
Tor LLC



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SOILS MAP
PARCEL 00098030
MILWAUKIE, OR

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Milwaukie-Sisul
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4

SHEET

Clackamas Maps



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AERIAL PHOTO 2012
PARCEL 00098030
MILWAUKIE, OR

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Milwaukie-Sisul
Tor LLC

Aug 30, 2022

SHEET
5



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Aug 30, 2022

6

375 Portland Avenue
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AERIAL PHOTO 2020
PARCEL 00098030
MILWAUKIE, OR

Project 22-004
Milwaukie-Sisul
Tor LLC

APPENDIX B Data Forms

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

Project Site: **Milwaukie-Sisul** County: **Milwaukie/Clatsop** Sampling Date: **8/19/22**
 Applicant/Owner: **Tor LLC** State: **OR** Sampling Point: **West_Mtns p1**
 Investigator(s): **Annakate Martin** County: **Clatsop** Highway: **31 T1S R2E**
 Landform (hillslope, terrace, etc.): **Flat neighborhood** Slope (%): **0**
 Subregion (LRR): **LRR A** Lat: **45.2613** Long: **-123.3914** Datum: **NAD 83**
 Soil Map Unit Name: **0001 Alluvium**
 Are climatic / hydrologic conditions on the site typical for this area? ☐ Yes ☐ No ☐ Enter text
 Are Vegetation ☐ Soil ☐ Or Hydrology ☐ ☒ No ☐ Yes
 Are Vegetation ☐ Soil ☐ Or Hydrology ☐ ☐ No ☐ Yes

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

Hydrophytic Vegetation Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Enter text
Hydric Soil Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Wetland Hydrology Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Remarks: While the property is normal circumstances there is no evidence of wetland hydrology. The neighbors say they used to work on cars on the property.		

VEGETATION – Use scientific names of plants

Tree Stratum (Plot Size: enter text)				Adaptation		Cover		Notes	
1.	2.	3.	4.	10	Y	FACU	3	(A)	
Total tree cover =				20%	20= Total Cover				
Shrub/Stratum (Plot Size: enter text)				Adaptation		Cover		Notes	
1.	2.	3.	4.	15	Y	FACU	9	(B)	
Total Shrub Cover				30 %	30= Total Cover				
Herb Stratum (Plot Size: enter text)				Adaptation		Cover		Notes	
1.	2.	3.	4.	25	Y	FAC	33%	(A/B)	
Total herb cover				107					
Woody Vine Stratum (Plot Size: enter text)				Adaptation		Cover		Notes	
1.	2.	3.	4.	0 %					
% Bare Ground in Herb Stratum				0%					

Remarks: Sampled in ranunculus patch, this was the area with the most vegetation.

SOIL	Project Site:	Sampling Point:	P1		
Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)					
Depth (inches)	Matrix	Texture (moist)			Remarks
	Color (moist)	%	Color (moist)	Texture	
0-10	10YR3/3	100			
10-20	7.5Yr 3/3	99	7.5YR4/6	2 C M	Silt loam Silt loam
<small>*Type: C= Concentration, D=Depletion, RM=Reduced Matrix, PL=Poor Living, M=Matrix</small>					
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted)				Indicators for Problematic Hydric Soils²:	
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Thin Dark Surface (A1)	<input type="checkbox"/> 2 cm Muck (A10)			
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Hypoxic Matrix (A1)	<input type="checkbox"/> Red Parent Material (TF2)			
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Heavy Mucky Muck (TF1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)			
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Yellowish Brown (A10)	<input type="checkbox"/> Other (Explain in Remarks)			
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Below (TF1)				
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Hydric LRRs (A10)				
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Undepleted Dark Surface				
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> White (Explain in Remarks)				
Restrictive Layer (if present): Type: _____ Depth (Inches): _____				Hydric Soils Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Remarks: _____					

HYDROLOGY

Wetland Hydrology Indicators:				Secondary Indicators (2 or more required)
Primary Indicators (minimum of one required; check all that apply):				
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-logged (MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-logged Leaves (B9) (MLRA 1, 2, 4A, and 4B)		
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Water-logged (B10)	<input type="checkbox"/> Dry-Season Water Table (C2)		
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Water-logged (B11)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)		
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Water-logged (B12)	<input type="checkbox"/> Geomorphic Position (D2)		
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Water-logged (B13)	<input type="checkbox"/> Shallow Anutard (D3)		
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Water-logged (B14)	<input type="checkbox"/> FAC Neutral Test (D5)		
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Water-logged (B15)	<input type="checkbox"/> Hanson Ant Mounds (D6) (LRR A)		
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Water-logged (B16)	<input type="checkbox"/> Frost-Heave Hummocks (D7)		
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Water-logged (B17)			
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Water-logged (B18)			
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Water-logged (B19)			
Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input type="checkbox"/> <small>(Explain in Remarks)</small> Water Table Present? Yes <input type="checkbox"/> No <input type="checkbox"/> <small>(Explain in Remarks)</small> Saturation Present? (includes capillary fringe) Yes <input type="checkbox"/> No <input type="checkbox"/> <small>(Explain in Remarks)</small>				Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, etc.): _____				
Remarks: No hydrology indicators				

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

Project Site: **Milwaukie-Sisul** County: **Milwaukie/Clackamas** Sampling Date: **8/19/22**
 Applicant/Owner: **Tor LLC** State: **OR** Sampling Point: **P2**
 Investigator(s): **Annakate Martin** Section / Township Range: **31 T15 R2E**
 Landform (hillslope, terrace, etc.): **Flat neighborhood** UTM Zone: **18Q** Slope (%): **0**
 Subregion (LRR): **LRR A** Lat: **45.2673** Long: **-122.3614** Elevation: **30m**
 Soil Map Unit Name: **TSWV (silt/clay)**

Are climatic / hydrologic conditions on the site typical for the area? ☐ Yes ☒ No ☐ Enter text
 Are Vegetation ☐ Soil ☐ Or Hydrology ☐ ☒ Yes ☐ No ☐
 Are Vegetation ☐ Soil ☐ Or Hydrology ☐ ☒ Yes ☐ No ☐

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

Hydrophytic Vegetation Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Is sampled area a wetland?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Hydric Soil Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Enter text	
Wetland Hydrology Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Remarks: While the property is normal circumstances there is no evidence of hydric soils, and old run caps. The neighbors say they used to work on cars on the property.			

VEGETATION - Use scientific names of plants

<u>Tree Stratum</u> (Plot Size: enter text)		Abundant % Cover	Frequency	Code	Comments - include Wetland?
1.					
2.	Prunus sp.	20	Y	FACU	1 (A)
3.					
4.					4 (B)
Total tree cover =		20%	20= Total Cover		25% (A/B)
<u>Sapling/Shrub Stratum</u> (Plot Size: enter text)					
1.					
2.	Corylus cornuta	10	Y	FAC	
3.					
4.					
5.					
Total Shrub Cover		10 %			
<u>Herb Stratum</u> (Plot Size: enter text)					
1.	Ranunculus repens	15	N	FAC	
2.	Hypochaeris radicata	30	Y	FACU	
3.	Bromus ciliatus	60	Y	FACU	
4.	Plantago lanceolata	10	N	FACU	
5.					
6.					
7.					
8.					
9.					
10.					
Total herb cover		115			
<u>Woody Vine Stratum</u> (Plot Size: enter text)					
1.	Hedera helix	0 %			
2.	Clematis spp.	0 %			
		0 %			
% Bare Ground in Herb Stratum		0 %			
Wetland Determination Criteria: <input type="checkbox"/> 1. Plant 1 nat to hydromorphic vegetation <input checked="" type="checkbox"/> 2. Unimproved forest > 50% <input type="checkbox"/> 3. Plant stress index < 3.0 <input type="checkbox"/> 4. Morphological Adaptations (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> 5. Wetland Indicator/Vascular Plants <input type="checkbox"/> 6. Wetland Hydrophytic Vegetation (Explain) (Absence of hydric soil and wetland hydrology must be present, unless doubted or problematic)					
Wetland Determination Criteria: Enter text: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>					
Remarks:					

SOIL		Project Site:		Sampling Point:		P2	
Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)							
Depth (inches)	Matrix	%	Color (moist)	Mn	Fe	Cu	Remarks
0-6	10YR3/3	100					Silt loam
6-20	7.5yr 3/3	99	7.5YR4/6	2	C	M	Silt loam
<small>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, S=Secondary, T=Transition, M=Matrix, P=Parent Material, L=Loam, S=Silt, CL=Clay, SL=Shale, M=Matrix</small>							
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted)				Indicators for Problematic Hydric Soils¹:			
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Organic Parent (A1)	<input type="checkbox"/> Organic Matter (A1)	<input type="checkbox"/> Organic Matter (A1)	<input type="checkbox"/> Organic Matter (A1)	<input type="checkbox"/> Organic Matter (A1)	<input type="checkbox"/> Organic Matter (A1)	<input type="checkbox"/> Organic Matter (A1)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Organic Matter (A2)	<input type="checkbox"/> Organic Matter (A2)	<input type="checkbox"/> Organic Matter (A2)	<input type="checkbox"/> Organic Matter (A2)	<input type="checkbox"/> Organic Matter (A2)	<input type="checkbox"/> Organic Matter (A2)	<input type="checkbox"/> Organic Matter (A2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Organic Matter (A3)	<input type="checkbox"/> Organic Matter (A3)	<input type="checkbox"/> Organic Matter (A3)	<input type="checkbox"/> Organic Matter (A3)	<input type="checkbox"/> Organic Matter (A3)	<input type="checkbox"/> Organic Matter (A3)	<input type="checkbox"/> Organic Matter (A3)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Organic Matter (A4)	<input type="checkbox"/> Organic Matter (A4)	<input type="checkbox"/> Organic Matter (A4)	<input type="checkbox"/> Organic Matter (A4)	<input type="checkbox"/> Organic Matter (A4)	<input type="checkbox"/> Organic Matter (A4)	<input type="checkbox"/> Organic Matter (A4)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Organic Matter (A11)	<input type="checkbox"/> Organic Matter (A11)	<input type="checkbox"/> Organic Matter (A11)	<input type="checkbox"/> Organic Matter (A11)	<input type="checkbox"/> Organic Matter (A11)	<input type="checkbox"/> Organic Matter (A11)	<input type="checkbox"/> Organic Matter (A11)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Organic Matter (A12)	<input type="checkbox"/> Organic Matter (A12)	<input type="checkbox"/> Organic Matter (A12)	<input type="checkbox"/> Organic Matter (A12)	<input type="checkbox"/> Organic Matter (A12)	<input type="checkbox"/> Organic Matter (A12)	<input type="checkbox"/> Organic Matter (A12)
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Organic Matter (S1)	<input type="checkbox"/> Organic Matter (S1)	<input type="checkbox"/> Organic Matter (S1)	<input type="checkbox"/> Organic Matter (S1)	<input type="checkbox"/> Organic Matter (S1)	<input type="checkbox"/> Organic Matter (S1)	<input type="checkbox"/> Organic Matter (S1)
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Organic Matter (S4)	<input type="checkbox"/> Organic Matter (S4)	<input type="checkbox"/> Organic Matter (S4)	<input type="checkbox"/> Organic Matter (S4)	<input type="checkbox"/> Organic Matter (S4)	<input type="checkbox"/> Organic Matter (S4)	<input type="checkbox"/> Organic Matter (S4)
Restrictive Layer (if present): Type: _____ Depth (Inches): _____				Hydric Soils Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>			
Remarks: Cracked soils, checking for hydrology but seems to be from extreme dry conditions.							

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one required; check all that apply)		Secondary Indicators (if or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Saturated Soils (A2) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Saturated Soils (A2) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Saturated Soils (A2) (except MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Soil Cracks (A3)	<input type="checkbox"/> Soil Cracks (A3)	<input type="checkbox"/> Soil Cracks (A3)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Organic Matter (A4)	<input type="checkbox"/> Organic Matter (A4)	<input type="checkbox"/> Organic Matter (A4)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Organic Matter (A5)	<input type="checkbox"/> Organic Matter (A5)	<input type="checkbox"/> Organic Matter (A5)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Organic Matter (A6)	<input type="checkbox"/> Organic Matter (A6)	<input type="checkbox"/> Organic Matter (A6)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Organic Matter (A7)	<input type="checkbox"/> Organic Matter (A7)	<input type="checkbox"/> Organic Matter (A7)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Organic Matter (A8)	<input type="checkbox"/> Organic Matter (A8)	<input type="checkbox"/> Organic Matter (A8)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Organic Matter (A9)	<input type="checkbox"/> Organic Matter (A9)	<input type="checkbox"/> Organic Matter (A9)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Organic Matter (A10)	<input type="checkbox"/> Organic Matter (A10)	<input type="checkbox"/> Organic Matter (A10)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Organic Matter (A11)	<input type="checkbox"/> Organic Matter (A11)	<input type="checkbox"/> Organic Matter (A11)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Organic Matter (A12)	<input type="checkbox"/> Organic Matter (A12)	<input type="checkbox"/> Organic Matter (A12)
Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input type="checkbox"/> Water Table Present? Yes <input type="checkbox"/> No <input type="checkbox"/> Saturation Present? (includes capillary fringe) Yes <input type="checkbox"/> No <input type="checkbox"/>		Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Describe Recorded Data (stream gauge, monitoring well, water table, etc.):			
Remarks: No hydrology indicators			

APPENDIX C - Ground Level Color Photographs:



Photo 1. This is a photo of the *Ranunculus repens* patch and *Corylus cornuta* . ETC Photo: 8/19/22



Photo 2. This photo is looking southeast at the stormwater drainage ditch offsite, ETC Photo: 8/19/2022



Photo 3. This is a photo of the color of the soil in the *Ranunculus* patch. ETC Photo: 8/19/2022

APPENDIX D) Literature Citations

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