

Aquatic EcoSolutions, Inc.

Ecological Solutions to Environmental Challenges

Lakes • Streams • Riparian • Wetlands • Watersheds

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Mankato Apartments Site

Mankato, Blue Earth County, Minnesota

for

Growth Holdings, LLC

Wetland Delineation Report

May 29, 2025

Number: 25024BJ

Mankato Apartments Site

Mankato, Blue Earth County, Minnesota
for

Growth Holdings, LLC

prepared by
Aquatic EcoSolutions, Inc.
Number: 25024BJ

The **Mankato Apartments Site** is located in the SE¼ of the NW¼ of Section 21, Township T 108 N., Range R 26 W., Mankato, Blue Earth County, Minnesota.

The property is located at the address of 901 S Victory Drive, immediately northeast of South Victory Drive and immediately south of 209th Street with an acute angle roundabout intersection at the northwest corner of the property. This site is located in the southeastern portion of Mankato.

The property examined appears to be PID R430921177001.

According to the BWSR “Land Resource Region Boundaries Fit to Closest Townships” map, Mankato is within the “Midwest” region.

The purpose of this project was to examine the site for wetlands, and delineate them if they are present.

The wetland delineation site visit occurred on May 27, 2025 by Robert J.F. Merila, *Wetland Delineator Certified* #1087.

Methodology

In Minnesota, wetlands are under two jurisdictions: State and Federal. The State jurisdiction guidelines were set by the Minnesota Wetland Conservation Act of 1991 (WCA). This State jurisdiction is administered by the Local Governmental Unit (LGU) with technical guidance provided by the Board of Water and Soil Resources (BWSR).

The Federal jurisdiction is administered by the U.S. Army Corps of Engineers (COE or Corps).

Starting in 1996, both jurisdictions agreed to use the ***Corps of Engineers Wetland Delineation Manual*** (Environmental Laboratory, 1987) along with supplemental guidance by the Corps. This manual is commonly referred to as the **1987 Manual**.

The wetland delineation method used on this site was the Plant Community Assessment Procedure of the Routine Onsite Determination Method. The Routine Onsite Determination Forms (located in the back of the report) detail the three technical criteria (hydrophytic vegetation, hydric soils, and wetland hydrology) as described in the 1987 Manual.

The wetland edge(s) were delineated where one, two, or all three of these technical criteria drop out. If no wetland conditions are observed within the area examined, no wetland edge is delineated.

Where wetlands are observed, one sample point transect perpendicularly crosses the delineated edge. This transect consists of one sample point above the edge and one sample point below the edge.

Results

Two roadside ditches that have wetland characteristics were identified and delineated on the site.

According to the Department of Natural Resources (DNR) **Protected Water Inventory (PWI) of Blue Earth County (page 1 of 1)**, there were no Protected Waters on or adjacent to the property.

The **Simplified HGM layer of MN Wetland Finder** identified a Depression polygon that coincided with Basin 1, but it was shaped to fit the previous intersection prior to the conversion into a roundabout intersection. Basin 2 was not identified.

The **National Wetlands Inventory (NWI)** identified a PEM1C polygon that coincided with the western portion of Basin 1 in a shape that matched the previous configuration of the roadway intersection at the northwest corner of the site. There was no polygon at the location of Basin 2.

The **Minnesota NWI** (Landview Interactive Map) identified a PEMC polygon that coincided with the far northwestern corner of the site at the location of the new roundabout. No other polygons were mapped on the site.

Information from the **Soil Survey of Blue Earth County (online version)** is used on the Data Sheets. Soils mapped on the parcel include:

106C	Lester loam, 6 to 10 percent slopes
110	Marna silty clay loam, 0 to 2 percent slopes
286	Shorewood silty clay loam, 1 to 6 percent slopes
539	Klossner muck, lake plain, depressional, 0 to 1 percent slopes
L113B	Reedslake-Le Sueur complex, 1 to 6 percent slopes

Hydrology

According to the Precipitation Worksheet Using Gridded Database for determining hydrology, the months leading up to the site examination was identified as being “normal.”

Edge Description

Basin 1 was a Landscape Depression roadside ditch Fresh (Wet) Meadow with Shallow Marsh portion (Type 3, PEM1Cx) wetland dominated by reed canary grass and narrow cattail along with some stinging nettle and hummock sedge located along the west and north sides of the site. It looks like the intersection of the roadways in the northwest corner of the site was rebuilt after the NWI was prepared.

The adjacent upland included excavated and restored roadside ditch banks and some kind of previous business that no longer exists at the location. Plant species observed included smooth brome, Kentucky bluegrass, green foxtail, common dandelion, butter and eggs, bull thistle, Canada thistle, poison ivy, burdock, alfalfa, tall goldenrod, Canada goldenrod, common milkweed, common mullein, thicket creeper, wild geranium, ground ivy, and Cleaver's bedstraw ground cover; Tartarian honeysuckle, red elder, red cedar, box elder, and cottonwood saplings/shrubs; and red cedar, box elder, and cottonwood trees.

Basin 2 was a Landscape Depression roadside ditch Fresh (Wet) Meadow (Type 2, PEM1Ax) wetland dominated by reed canary grass and narrow cattail along with some stinging nettle located along the east side of the site in the northeast corner, east of an entrance road from the north.

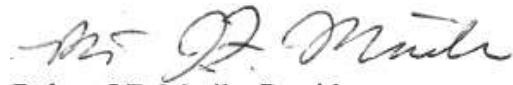
The adjacent upland included excavated and restored roadside ditch banks and some kind of previous business that no longer exists at the location. Plant species observed included smooth brome, Kentucky bluegrass, green foxtail, common dandelion, butter and eggs, bull thistle, Canada thistle, poison ivy, burdock, alfalfa, tall goldenrod, Canada goldenrod, common milkweed, common mullein, thicket creeper, wild geranium, ground ivy, and Cleaver's bedstraw ground cover; Tartarian honeysuckle, red elder, red cedar, box elder, and cottonwood saplings/shrubs; and red cedar, box elder, and cottonwood trees.

Conclusion

This wetland examination, determination, and report of the **Mankato Apartments Site** was performed in accordance with the generally accepted methodology of the 1987 Manual at the time of the services rendered. No warranty, express or implied, is made.

If unavoidable impacts to wetlands are planned on any project, permits or exemptions from **State** (WCA, DNR, Watershed District), **Federal** (Corps), and/or other applicable entities need to be granted before the impacts occur.

The wetland delineation was performed and report prepared by Robert J.F. Merila, *Wetland Delineator Certified #1087*.

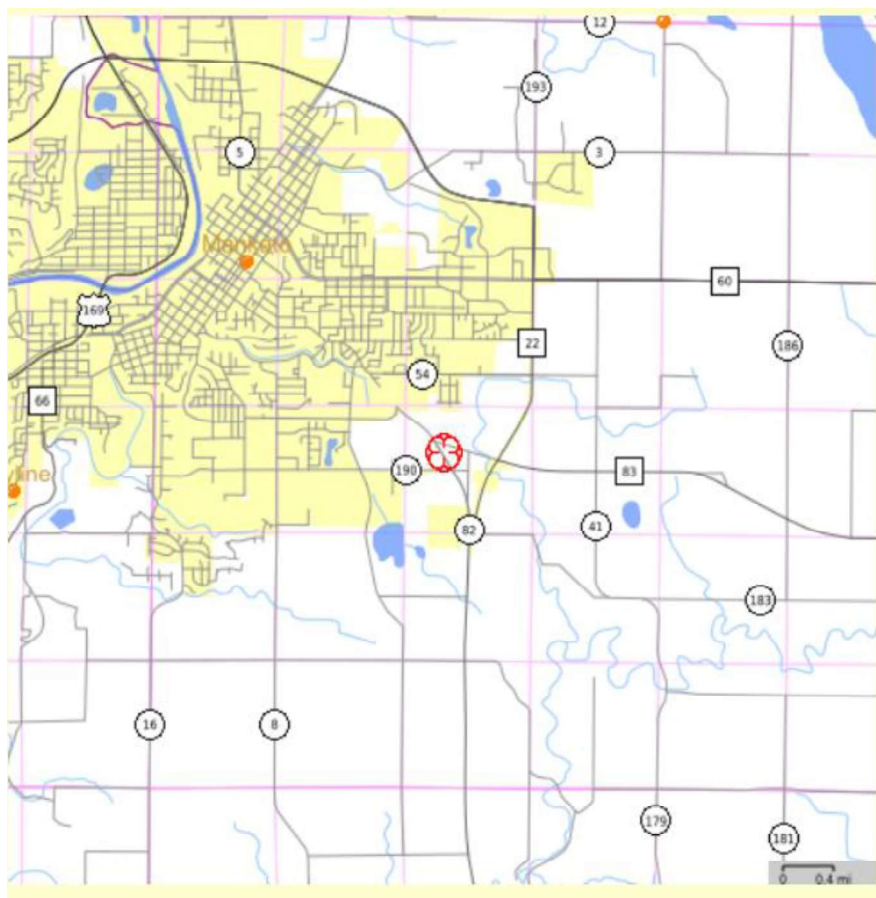


Robert J.F. Merila, President
Wetland Delineator, Certified #1087

May 29, 2025

Date

Site Location



Select by coordinates

Xutm Yutm

latitude longitude

township range section

ZIP code

county-township-place
Blue earth-Mankato-Mankato

on map click

pan zoom
only in out

☒ ☐ ☐

Precipitation Worksheet Using Gridded Database

Precipitation data for target wetland location:

county: **Blue Earth** township number: **108N**
 township name: **Mankato** range number: **26W**
 nearest community: **Mankato** section number: **21**

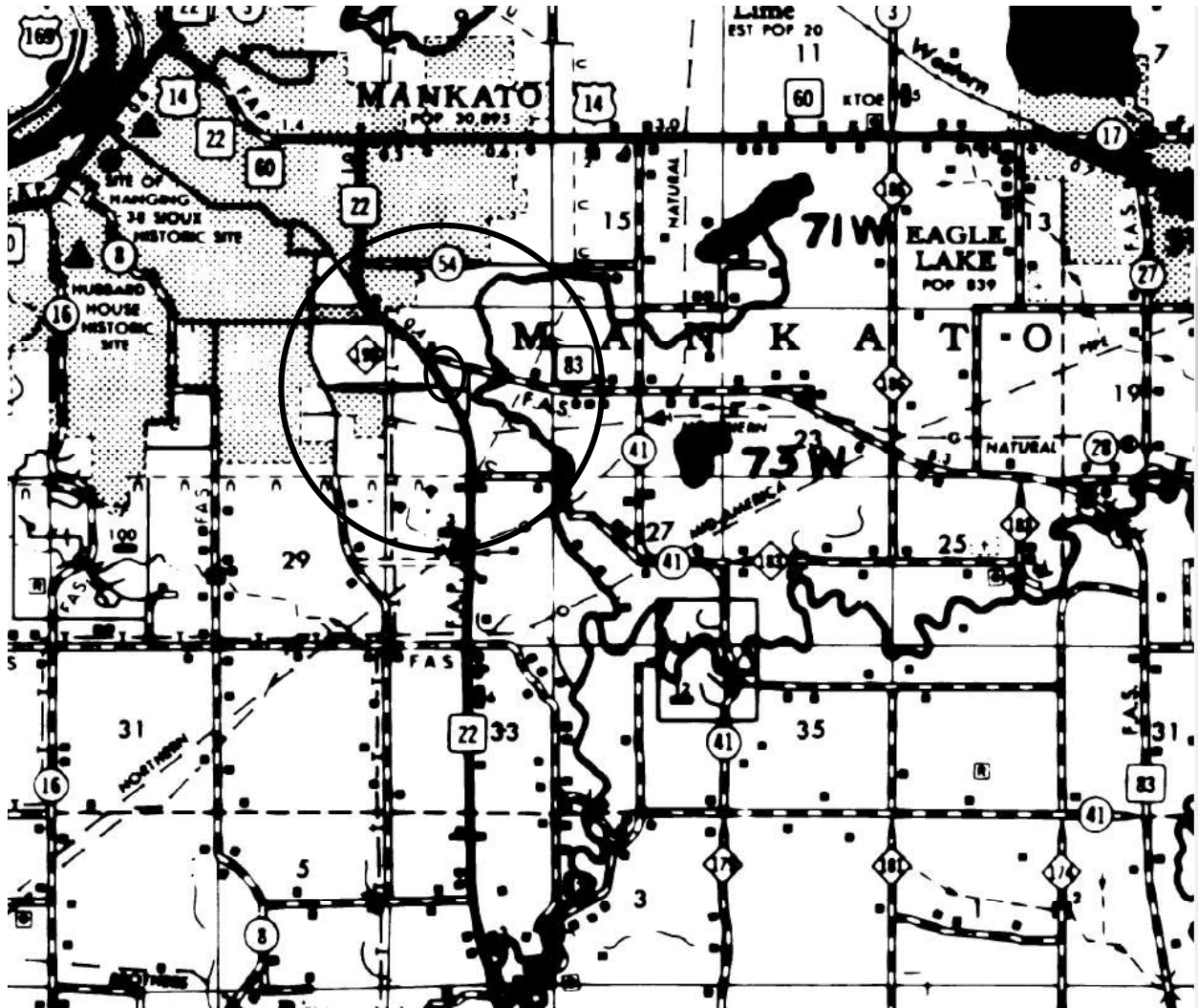
Aerial photograph or site visit date:

Wednesday, May 28, 2025

Score using 1991-2020 normal period

values are in inches A 'R' following a monthly total indicates a provisional value derived from radar-based estimates.	first prior month: April 2025	second prior month: March 2025	third prior month: February 2025
estimated precipitation total for this location:	3.66R	4.05R	0.23
there is a 30% chance this location will have less than:	1.98	1.46	0.59
there is a 30% chance this location will have more than:	4.05	2.42	1.29
type of month: dry normal wet	normal	wet	dry
monthly score	3 * 2 = 6	2 * 3 = 6	1 * 1 = 1
multi-month score: 6 to 9 (dry) 10 to 14 (normal) 15 to 18 (wet)	13 (Normal)		

Period-of-Record Summary Statistics															
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	WARM	ANN	WAT
30%	0.44	0.47	1.07	1.73	2.63	3.53	2.55	2.69	1.94	1.11	0.66	0.51	16.63	26.63	26.42
70%	1.03	1.13	2.24	3.27	4.36	5.48	4.89	4.70	3.83	2.57	1.98	1.25	21.31	32.54	32.10
mean	0.84	0.87	1.74	2.60	3.73	4.77	3.80	3.92	3.23	2.10	1.44	1.02	19.46	30.04	30.10
1991-2020 Summary Statistics															
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	WARM	ANN	WAT
30%	0.77	0.59	1.46	1.98	3.58	4.40	3.65	3.59	1.89	1.53	0.98	0.71	18.35	30.19	30.86
70%	1.26	1.29	2.42	4.05	4.73	5.58	5.80	5.29	4.52	3.30	1.93	1.63	25.19	36.76	37.54
mean	1.00	1.04	1.90	3.15	4.18	5.48	4.59	4.38	3.64	2.59	1.63	1.28	22.26	34.86	34.79
Year-to-Year Data															
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	WARM	ANN	WAT
2025	0.03	0.23	4.05R	3.66R											
2024	0.31	0.45	1.88	4.62	6.92	13.47	4.59	4.14	0.46	1.01	2.42	0.94	29.58	41.21	42.68
2023	2.88	2.33	2.42	1.84	6.41	2.34	2.61	4.07	2.45	3.97	0.09	1.78	17.88	33.19	31.34
2022	1.29	0.69	2.25	4.10	3.02	1.54	2.71	3.89	0.60	0.31	2.04	1.64	11.76	24.08	25.71
2021	1.03	0.62	3.16	1.34	2.79	2.75	3.37	3.78	1.37	3.34	0.73	1.55	14.06	25.83	25.22
2020	1.34	1.41	2.92	1.42	4.26	4.65	8.22	6.78	1.88	3.19	1.15	0.67	25.79	37.89	41.92
2019	1.23	3.06	2.89	4.55	6.26	4.61	8.85	1.92	5.67	5.38	2.21	1.45	27.31	48.08	45.53
2018	1.48	1.22	1.80	2.97	4.50	9.94	5.07	3.51	8.68	2.83	1.56	2.10	31.70	45.66	44.95
2017	1.06	1.13	1.13	3.90	4.19	4.07	5.69	5.19	2.16	4.95	0.08	0.75	21.30	34.30	35.50
2016	0.32	0.88	2.41	3.01	3.70	5.48	6.60	10.29	13.11	3.55	1.49	1.94	39.18	52.78	54.93
2015	0.77	0.59	0.78	2.50	6.50	5.11	6.09	6.07	5.34	1.90	4.05	3.18	29.11	42.88	37.81
2014	1.21	1.83	1.44	5.70	3.70	11.72	0.70	3.63	1.89	2.05	1.01	1.00	21.64	35.88	37.42
2013	0.81	1.38	2.36	5.81	4.23	5.25	4.26	2.43	2.42	3.66	0.71	1.23	18.59	34.55	32.52
2012	0.77	2.28	1.87	3.23	7.56	1.25	1.24	1.49	0.77	1.31	0.58	1.68	12.31	24.03	23.21
2011	1.66	1.63	2.43	3.00	4.25	5.48	5.71	1.07	0.96	0.92	0.19	1.64	17.47	28.94	32.53
2010	1.15	1.25	1.77	1.69	2.80	9.83	4.95	4.51	10.48	0.88	2.03	3.43	32.57	44.77	49.38
2009	0.76	1.24	2.75	1.87	1.46	3.58	2.21	3.92	1.01	6.46	1.52	2.97	12.18	29.75	25.11
2008	0.36	0.42	1.88	4.41	4.05	3.91	5.07	1.94	1.68	2.49	2.02	1.80	16.65	30.03	29.54
2007	1.54	1.78	3.08	1.00	2.47	2.25	3.99	8.69	3.49	4.26	0.21	1.35	20.89	34.11	31.96
2006	1.01	0.45	1.60	4.01	1.17	5.65	2.14	3.87	3.07	0.48	1.47	1.72	15.90	26.64	28.63
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	WARM	ANN	WAT
2005	1.01	1.40	1.34	4.38	5.25	3.06	1.89	4.69	5.35	2.49	1.69	1.48	20.24	34.03	30.98
2004	0.51	1.25	2.55	1.56	6.20	6.89	5.40	5.90	5.72	1.24	1.16	0.21	30.11	38.59	38.13
2003	0.38	0.64	1.99	1.88	4.02	3.14	3.99	1.44	2.21	0.68	0.75	0.72	14.80	21.84	23.35
2002	0.24	0.49	1.64	2.76	2.41	5.61	2.00	5.54	2.24	3.19	0.25	0.22	17.80	26.59	28.33
2001	1.57	1.88	1.33	5.57	4.41	3.82	2.85	1.70	2.13	1.60	3.25	0.55	14.91	30.66	31.24
2000	0.82	1.13	1.20	0.80	5.63	7.42	4.23	2.23	0.82	1.11	3.24	1.63	20.33	30.26	27.54
1999	1.53	0.25	1.47	6.18	5.51	5.56	6.11	3.66	0.72	2.27	0.67	0.32	21.56	34.25	36.60



Public Waters Inventory of Blue Earth County
Minnesota Department of Natural Resources
 (1"= 1 Mile Scale)



Mankato Apartments Site

Aquatic EcoSolutions, Inc.



**MN Wetland Finder Cowardin and PWI
MN DNR Interactive Map**



Mankato Apartments Site

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National Wetland Delineation (NWI)
US Geological Survey/US Fish & Wildlife Service



Mankato Apartments Site

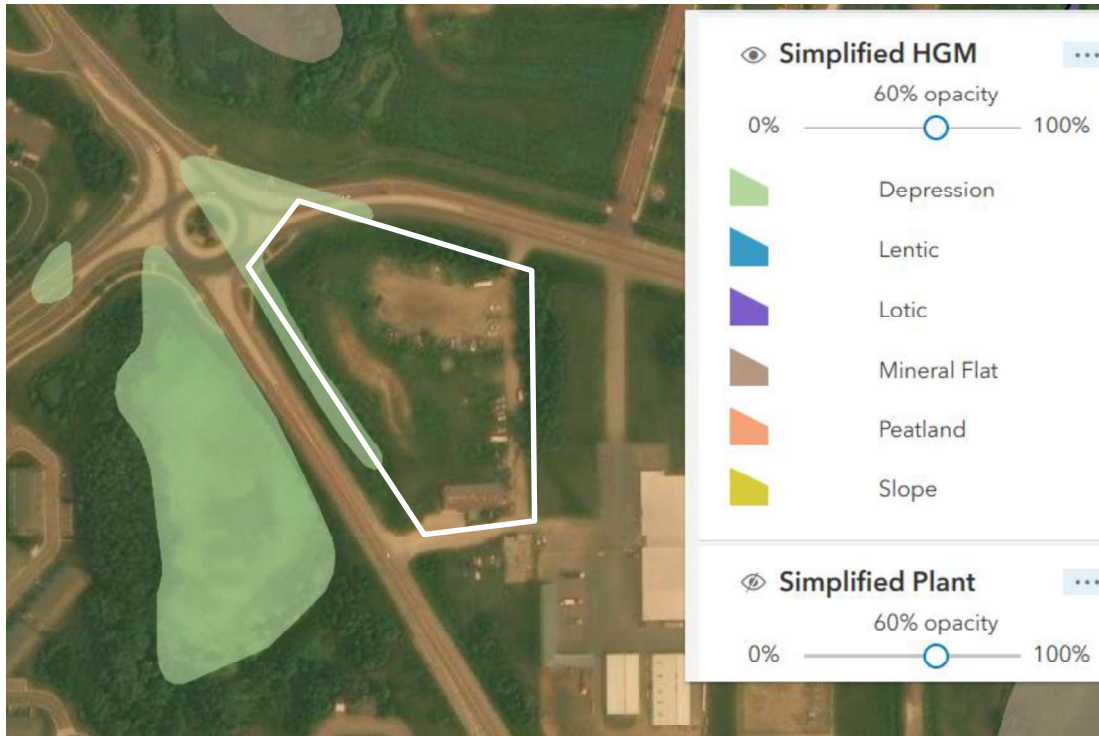
Aquatic EcoSolutions, Inc.



**Mn NWI Map
Landview Interactive Map**

↑N
Mankato Apartments Site

Aquatic EcoSolutions, Inc.



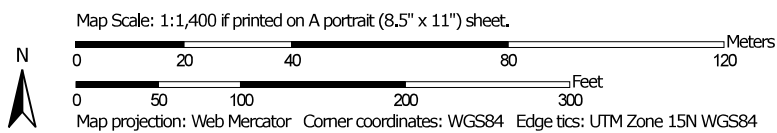
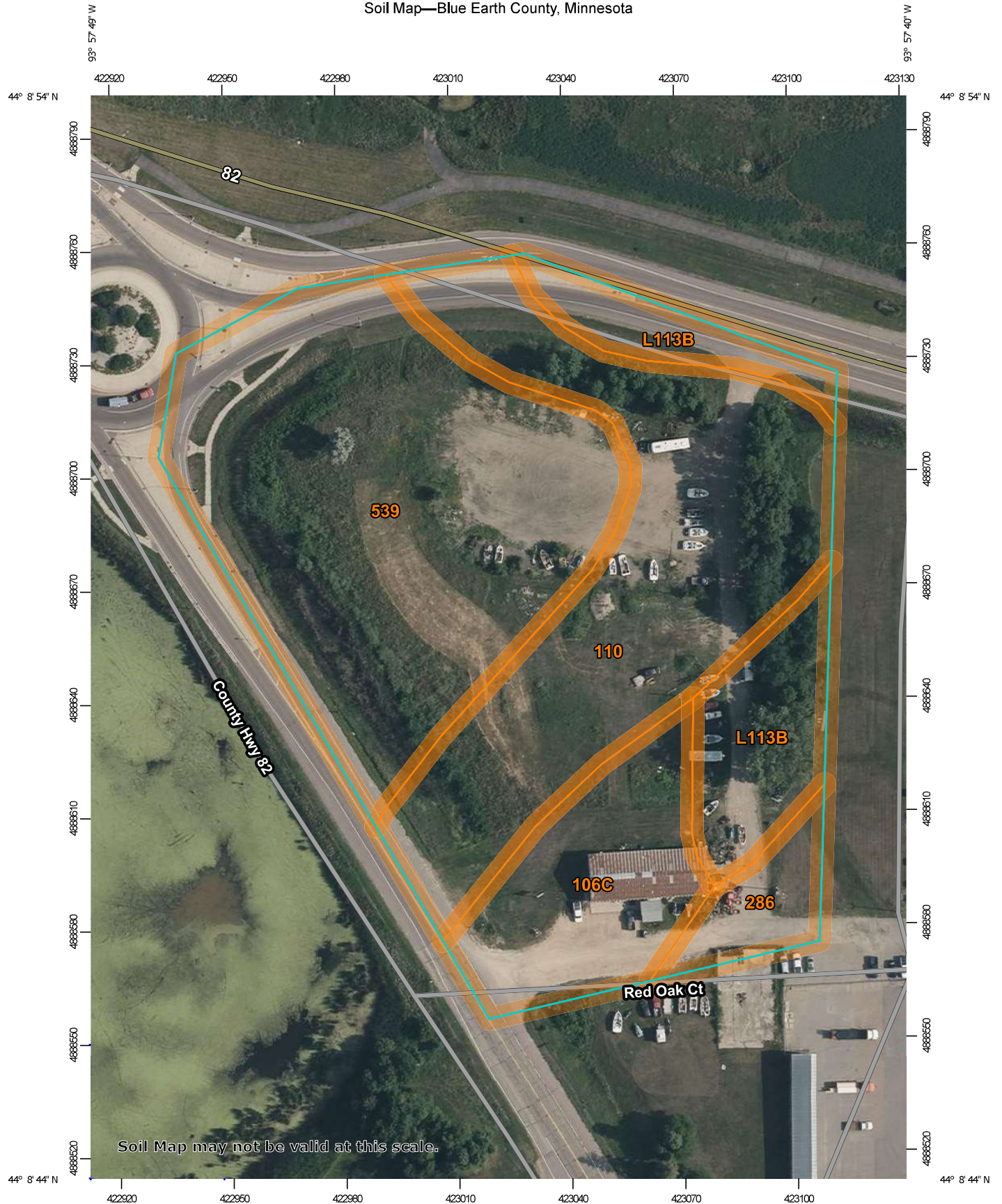
MN Wetland Finder Simplified HGM
MN DNR Interactive Map

↑N

Mankato Apartments Site

Aquatic EcoSolutions, Inc.

Soil Map—Blue Earth County, Minnesota



Natural Resources
Conservation Service

Web Soil Survey
National Cooperative Soil Survey

5/28/2025
Page 1 of 3

Soil Map—Blue Earth County, Minnesota

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features

 Blowout

 Borrow Pit

 Clay Spot

 Closed Depression

 Gravel Pit

 Gravelly Spot

 Landfill

 Lava Flow

 Marsh or swamp

 Mine or Quarry

 Miscellaneous Water

 Perennial Water

 Rock Outcrop

 Saline Spot

 Sandy Spot

 Severely Eroded Spot

 Sinkhole

 Slide or Slip

 Sodic Spot

 Spoil Area

 Stony Spot

 Very Stony Spot

 Wet Spot

 Other

 Special Line Features

Water Features

 Streams and Canals

Transportation

 Rails

 Interstate Highways

 US Routes

 Major Roads

 Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:12,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Blue Earth County, Minnesota

Survey Area Data: Version 22, Sep 7, 2024

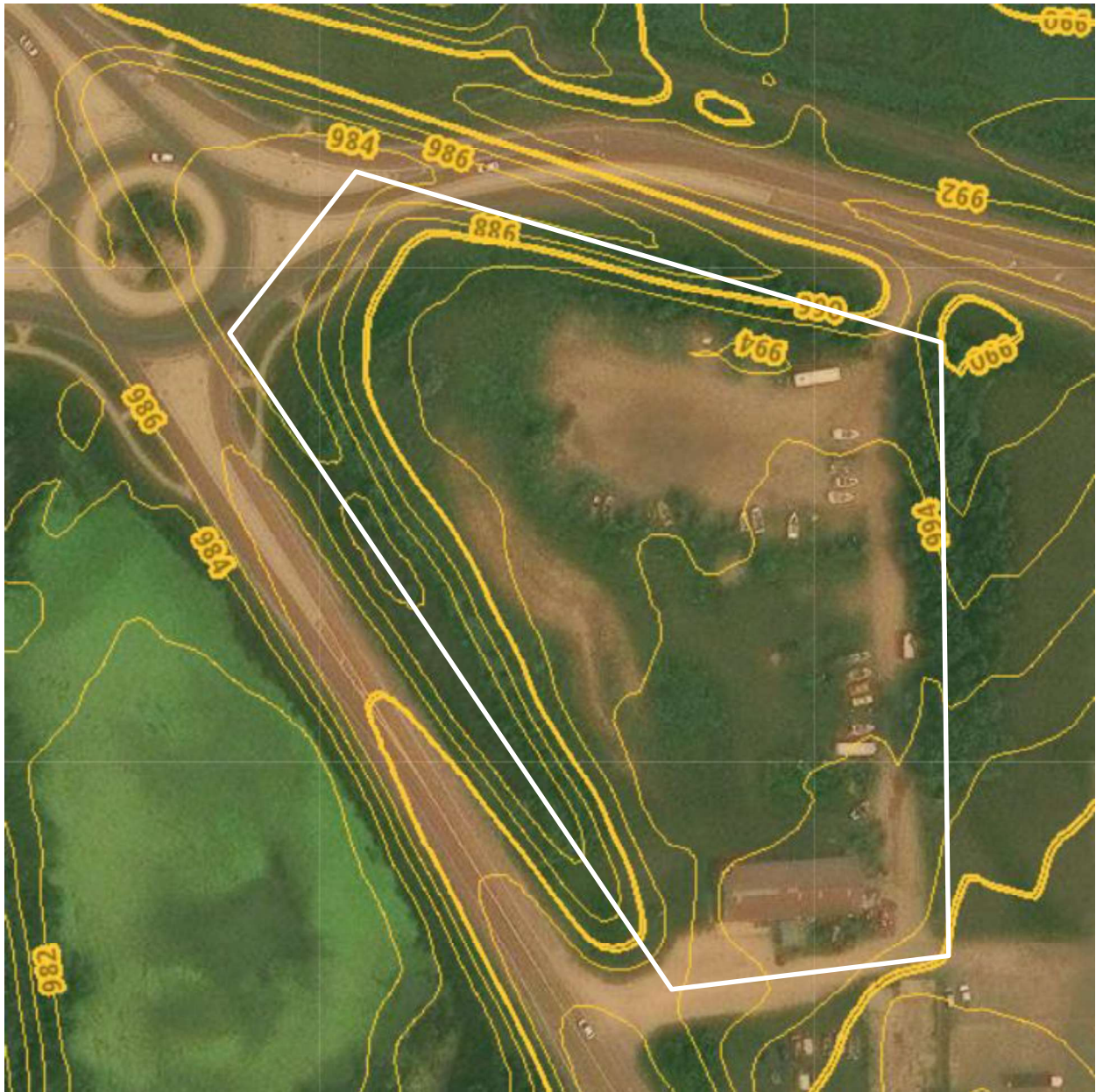
Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jul 2, 2023—Aug 8, 2023

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
106C	Lester loam, 6 to 10 percent slopes	0.8	12.4%
110	Marna silty clay loam, 0 to 2 percent slopes	2.1	32.7%
286	Shorewood silty clay loam, 1 to 6 percent slopes	0.3	3.9%
539	Klossner muck, lake plain, depressional, 0 to 1 percent slopes	2.6	39.4%
L113B	Reedslake-Le Sueur complex, 1 to 6 percent slopes	0.8	11.6%
Totals for Area of Interest		6.5	100.0%



**LiDAR Topography
MnTOPO Interactive Map**



Mankato Apartments Site

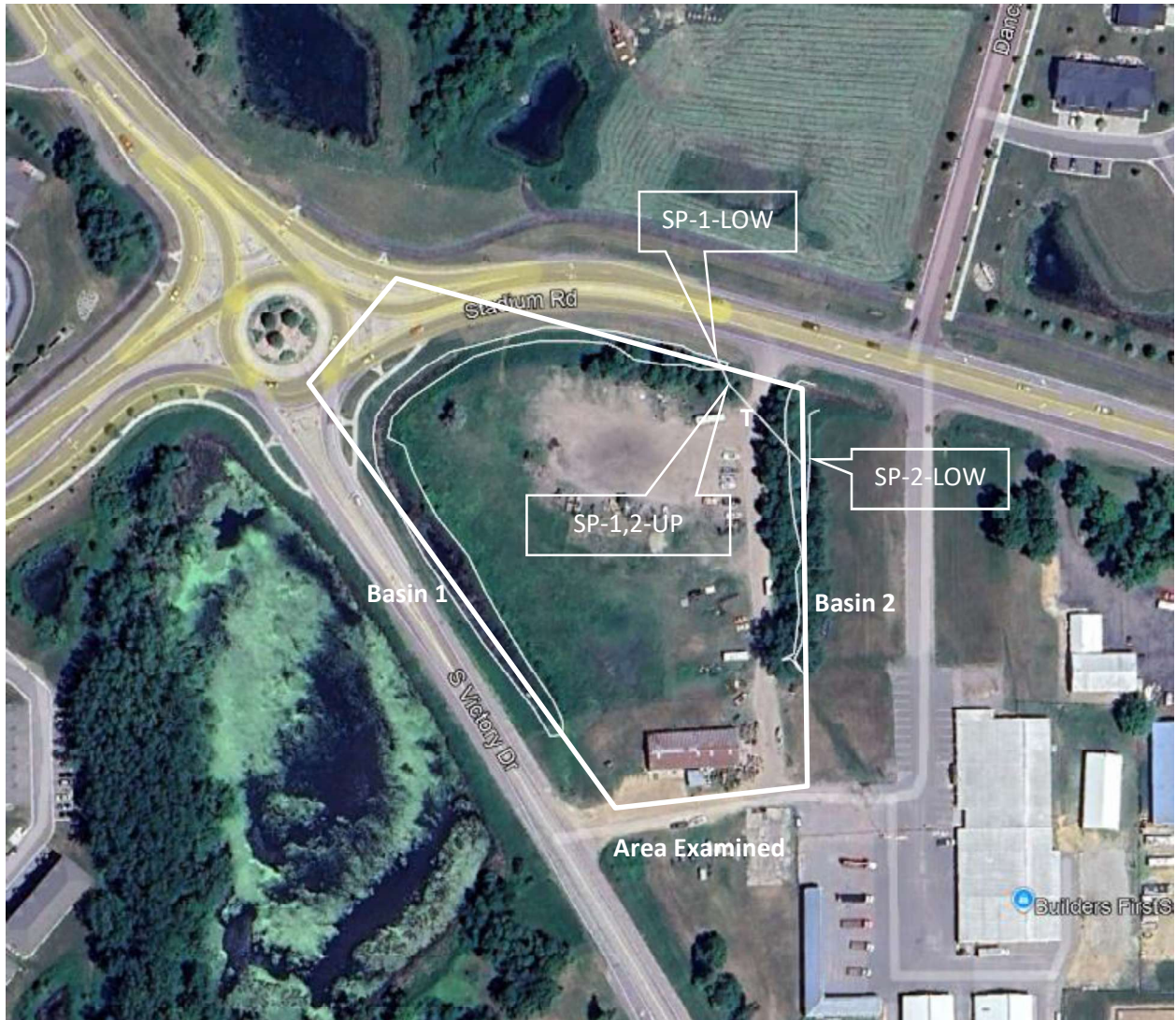
Aquatic EcoSolutions, Inc.



**Approximate Parcel Location and County LiDAR
Blue Earth County Interactive Map**

↑N
Mankato Apartments Site

Aquatic EcoSolutions, Inc.



Approximate Edge Locations
6/10/2023 Aerial Photograph



Mankato Apartments Site

Aquatic EcoSolutions, Inc.

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Mankato Apartments Site City/County: Mankato / Blue Earth County Sampling Date: 5 / 27 / 2025
 Applicant/Owner: Growth Holdings, LLC State: MN Sampling Point: 1 UP
 Investigator(s): Robert Merila, Aquatic EcoSolutions, Inc. Section, Township, Range: Sec 21, T 108 N, R 26 W
 Landform (hillslope, terrace, etc.): slope Local relief (concave, convex, none): none
 Slope (%): 3 Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: 110 Marna silty clay loam, 0 to 2 percent slopes NWI classification: none / none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes x No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes _____ No <u>x</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>x</u>
Hydric Soil Present?	Yes _____ No <u>x</u>	
Wetland Hydrology Present?	Yes _____ No <u>x</u>	
Remarks: (Explain alternative procedures here or in a separate report)		

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30</u>) 1. <u>Acer negundo</u> <u>20</u> <u>Y</u> <u>FAC</u> 2. <u>Juniper virginiana</u> <u>20</u> <u>Y</u> <u>FACU</u> 3. _____ 4. _____ 5. _____ <u>40</u> = Total Cover Sapling/Shrub Stratum (Plot size: <u>15'</u>) 1. <u>Juniperus virginiana</u> <u>10</u> <u>Y</u> <u>FACU</u> 2. <u>Acer negundo</u> <u>10</u> <u>Y</u> <u>FAC</u> 3. _____ 4. _____ 5. _____ <u>20</u> = Total Cover Herb Stratum (Plot size: <u>5'</u>) 1. <u>Parthenocissus inserta</u> <u>40</u> <u>Y</u> <u>FACU</u> 2. <u>Glechoma hederacea</u> <u>30</u> <u>Y</u> <u>FACU</u> 3. <u>Bromus inermis</u> <u>20</u> <u>Y</u> <u>FACU</u> 4. <u>Galium aparine</u> <u>5</u> <u>N</u> <u>FACU</u> 5. _____ 6. _____ 7. _____ 8. _____ 9. _____ 10. _____ <u>95</u> = Total Cover Woody Vine Stratum (Plot size: _____) 1. _____ 2. _____ _____ = Total Cover	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>7</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>29</u> (A/B) Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species <u>90</u> x 3 = <u>90</u> FACU species <u>125</u> x 4 = <u>500</u> UPL species _____ x 5 = _____ Column Totals: <u>155</u> (A) <u>590</u> (B) Prevalence Index = B/A = <u>3.81</u> Hydrophytic Vegetation Indicators: ___ Rapid Test for Hydrophytic Vegetation ___ Dominance Test is >50% ___ Prevalence Index is ≤3.0 ¹ ___ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Hydrophytic Vegetation Present? Yes _____ No <u>x</u>
Remarks: (include photo numbers here or on a separate sheet.)	

SOILSampling Point: 1 UP**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-14	7.5YR3/2	100					loam	
14-20	10YR4/3	100					silt loam	

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

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ 2 cm Muck (A10)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1)
☐ 5 cm Mucky Peat or Peat (S3)

- ☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)
☐ Loamy Mucky Mineral (F1)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils³:

- ☐ Coast Prairie Redox (A16)
☐ Dark Surface (S7)
☐ Iron-Manganese Masses (F12)
☐ Very Shallow Dark Surface (TF 12)
☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No x _____

Remarks:

HYDROLOGY**Wetland Hydrology Indicators:**Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
☐ High Water Table (A2)
☐ Saturation (A3)
☐ Water Marks (B1)
☐ Sediment Deposits (B2)
☐ Drift Deposits (B3)
☐ Algal Mat or Crust (B4)
☐ Iron Deposits (B5)
☐ Inundation Visible on Aerial Imagery (B7)
☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water Stained Leaves (B9)
☐ Aquatic Fauna (B13)
☐ True Aquatic Plants (B14)
☐ Hydrogen Sulfide Odor (C1)
☐ Oxidized Rhizospheres on Living Roots (C3)
☐ Presence of Reduced Iron (C4)
☐ Recent Iron Reduction in Tilled Soils (C6)
☐ Thin Muck Surface (C7)
☐ Gauge or Well Data (D9)
☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
☐ Drainage Patterns (B10)
☐ Dry-Season Water Table (C2)
☐ Crayfish Burrows (C8)
☐ Saturation Visible on Aerial Imagery (C9)
☐ Stunted or Stressed Plants (D1)
☐ Geomorphic Position (D2)
☐ FAC-Neutral Test (D5)

Field Observations:Surface Water Present? Yes _____ No x _____ Depth (inches): _____Water Table Present? Yes _____ No x _____ Depth (inches): _____Saturation Present? Yes _____ No x _____ Depth (inches): _____
(includes capillary fringe)**Wetland Hydrology Present?** Yes _____ No x _____

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

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Mankato Apartments Site City/County: Mankato / Blue Earth County Sampling Date: 5 / 27 / 2025
 Applicant/Owner: Growth Holdings, LLC State: MN Sampling Point: 1 LOW
 Investigator(s): Robert Merila, Aquatic EcoSolutions, Inc. Section, Township, Range: Sec 27, T 108 N, R 26 W
 Landform (hillslope, terrace, etc.): excavated roadside ditch Local relief (concave, convex, none): none
 Slope (%): 1 Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: L113B Reedslake-Le Sueur complex, 1 to 6 percent slopes NWI classification: none / none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes x No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes <u>x</u> No _____	Is the Sampled Area within a Wetland? Yes <u>x</u> No _____
Hydric Soil Present? Yes <u>x</u> No _____	
Wetland Hydrology Present? Yes <u>x</u> No _____	
Remarks: (Explain alternative procedures here or in a separate report) Excavated roadside ditch	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species <u>10</u> x 1 = <u>10</u> FACW species <u>85</u> x 2 = <u>170</u> FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: <u>95</u> (A) <u>180</u> (B) Prevalence Index = B/A = <u>1.90</u>
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover				
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>Phalaris arundinacea</u>	<u>85</u>	<u>Y</u>	<u>FACW</u>	
2. <u>Carex stricta</u>	<u>10</u>	<u>N</u>	<u>OBL</u>	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
_____ = Total Cover				
Woody Vine Stratum (Plot size: _____)				Hydrophytic Vegetation Indicators: ____ Rapid Test for Hydrophytic Vegetation <u>x</u> Dominance Test is >50% <u>x</u> Prevalence Index is ≤3.0 ¹ ____ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ____ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
_____ = Total Cover				
Remarks: (include photo numbers here or on a separate sheet.)				

SOIL

Sampling Point: 1 LOW

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-10	10YR2/1	100					loam	
10-17	10YR3/1	100					silt loam	
17-20	10YR4/1	100					silt loam	

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

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ 2 cm Muck (A10)
☐ Depleted Below Dark Surface (A11)
☒ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1)
☐ 5 cm Mucky Peat or Peat (S3)

- ☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)
☐ Loamy Mucky Mineral (F1)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils³:

- ☐ Coast Prairie Redox (A16)
☐ Dark Surface (S7)
☐ Iron-Manganese Masses (F12)
☐ Very Shallow Dark Surface (TF 12)
☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____
 Depth (inches): _____

Hydric Soil Present? Yes x No _____

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

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

- ☐ Water Stained Leaves (B9)
☐ Aquatic Fauna (B13)
☐ True Aquatic Plants (B14)
☐ Hydrogen Sulfide Odor (C1)
☐ Oxidized Rhizospheres on Living Roots (C3)
☐ Presence of Reduced Iron (C4)
☐ Recent Iron Reduction in Tilled Soils (C6)
☐ Thin Muck Surface (C7)
☐ Gauge or Well Data (D9)
☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
☐ Drainage Patterns (B10)
☐ Dry-Season Water Table (C2)
☐ Crayfish Burrows (C8)
☐ Saturation Visible on Aerial Imagery (C9)
☐ Stunted or Stressed Plants (D1)
☒ Geomorphic Position (D2)
☒ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes x No _____ Depth (inches): 1
 Water Table Present? Yes _____ No x Depth (inches): -
 Saturation Present? Yes _____ No x Depth (inches): -
 (includes capillary fringe)

Wetland Hydrology Present? Yes x No _____

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

Remarks:

Roadside ditch stormwater conveyance; water from recent rainfall.

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Mankato Apartments Site City/County: Mankato / Blue Earth County Sampling Date: 5 / 27 / 2025
 Applicant/Owner: Growth Holdings, LLC State: MN Sampling Point: 2 UP
 Investigator(s): Robert Merila, Aquatic EcoSolutions, Inc. Section, Township, Range: Sec 21, T 108 N, R 26 W
 Landform (hillslope, terrace, etc.): slope Local relief (concave, convex, none): none
 Slope (%): 3 Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: 110 Marna silty clay loam, 0 to 2 percent slopes NWI classification: none / none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes x No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes _____ No <u>x</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>x</u>
Hydric Soil Present?	Yes _____ No <u>x</u>	
Wetland Hydrology Present?	Yes _____ No <u>x</u>	
Remarks: (Explain alternative procedures here or in a separate report)		

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30</u>) 1. <u>Acer negundo</u> <u>20</u> <u>Y</u> <u>FAC</u> 2. <u>Juniper virginiana</u> <u>20</u> <u>Y</u> <u>FACU</u> 3. _____ 4. _____ 5. _____ <u>40</u> = Total Cover	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>7</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>29</u> (A/B)
Sapling/Shrub Stratum (Plot size: <u>15'</u>) 1. <u>Juniperus virginiana</u> <u>10</u> <u>Y</u> <u>FACU</u> 2. <u>Acer negundo</u> <u>10</u> <u>Y</u> <u>FAC</u> 3. _____ 4. _____ 5. _____ <u>20</u> = Total Cover	
Herb Stratum (Plot size: <u>5'</u>) 1. <u>Parthenocissus inserta</u> <u>40</u> <u>Y</u> <u>FACU</u> 2. <u>Glechoma hederacea</u> <u>30</u> <u>Y</u> <u>FACU</u> 3. <u>Bromus inermis</u> <u>20</u> <u>Y</u> <u>FACU</u> 4. <u>Galium aparine</u> <u>5</u> <u>N</u> <u>FACU</u> 5. _____ 6. _____ 7. _____ 8. _____ 9. _____ 10. _____ <u>95</u> = Total Cover	
Woody Vine Stratum (Plot size: _____) 1. _____ 2. _____ _____ = Total Cover	
Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species <u>90</u> x 3 = <u>90</u> FACU species <u>125</u> x 4 = <u>500</u> UPL species _____ x 5 = _____ Column Totals: <u>155</u> (A) <u>590</u> (B) Prevalence Index = B/A = <u>3.81</u>	
Hydrophytic Vegetation Indicators: ___ Rapid Test for Hydrophytic Vegetation ___ Dominance Test is >50% ___ Prevalence Index is ≤3.0 ¹ ___ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
Hydrophytic Vegetation Present? Yes _____ No <u>x</u>	
Remarks: (include photo numbers here or on a separate sheet.)	

SOILSampling Point: 2 UP**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-14	7.5YR3/2	100					loam	
14-20	10YR4/3	100					silt loam	

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

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ 2 cm Muck (A10)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1)
☐ 5 cm Mucky Peat or Peat (S3)

- ☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)
☐ Loamy Mucky Mineral (F1)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils³:

- ☐ Coast Prairie Redox (A16)
☐ Dark Surface (S7)
☐ Iron-Manganese Masses (F12)
☐ Very Shallow Dark Surface (TF 12)
☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____
Depth (inches): _____

Hydric Soil Present? Yes _____ No x

Remarks:

HYDROLOGY**Wetland Hydrology Indicators:**Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
☐ High Water Table (A2)
☐ Saturation (A3)
☐ Water Marks (B1)
☐ Sediment Deposits (B2)
☐ Drift Deposits (B3)
☐ Algal Mat or Crust (B4)
☐ Iron Deposits (B5)
☐ Inundation Visible on Aerial Imagery (B7)
☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water Stained Leaves (B9)
☐ Aquatic Fauna (B13)
☐ True Aquatic Plants (B14)
☐ Hydrogen Sulfide Odor (C1)
☐ Oxidized Rhizospheres on Living Roots (C3)
☐ Presence of Reduced Iron (C4)
☐ Recent Iron Reduction in Tilled Soils (C6)
☐ Thin Muck Surface (C7)
☐ Gauge or Well Data (D9)
☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
☐ Drainage Patterns (B10)
☐ Dry-Season Water Table (C2)
☐ Crayfish Burrows (C8)
☐ Saturation Visible on Aerial Imagery (C9)
☐ Stunted or Stressed Plants (D1)
☐ Geomorphic Position (D2)
☐ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? Yes _____ No x

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

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Mankato Apartments Site City/County: Mankato / Blue Earth County Sampling Date: 5 / 27 / 2025
 Applicant/Owner: Growth Holdings, LLC State: MN Sampling Point: 2 LOW
 Investigator(s): Robert Merila, Aquatic EcoSolutions, Inc. Section, Township, Range: Sec 27, T 108 N, R 26 W
 Landform (hillslope, terrace, etc.): excavated roadside ditch Local relief (concave, convex, none): none
 Slope (%): 1 Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: 110 Marna silty clay loam, 0 to 2 percent slopes NWI classification: none / none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes x No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes <u>x</u> No _____	Is the Sampled Area within a Wetland? Yes <u>x</u> No _____
Hydric Soil Present? Yes <u>x</u> No _____	
Wetland Hydrology Present? Yes <u>x</u> No _____	
Remarks: (Explain alternative procedures here or in a separate report) Excavated roadside ditch	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species <u>95</u> x 2 = <u>190</u> FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: <u>95</u> (A) <u>190</u> (B) Prevalence Index = B/A = <u>2.00</u>
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				Hydrophytic Vegetation Indicators: ____ Rapid Test for Hydrophytic Vegetation <u>x</u> Dominance Test is >50% <u>x</u> Prevalence Index is ≤3.0 ¹ ____ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ____ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes <u>x</u> No _____
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	Remarks: (include photo numbers here or on a separate sheet.)
_____ = Total Cover				
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>Phalaris arundinacea</u>	<u>95</u>	<u>Y</u>	<u>FACW</u>	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
_____ = Total Cover	<u>95</u>			
Woody Vine Stratum (Plot size: _____)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
_____ = Total Cover				

SOILSampling Point: **2 LOW****Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-3	10YR2/1	100					loam	
3-15	10YR3/1	100					silt loam	
15-20	10YR4/1	100					silty clay loam	

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

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ 2 cm Muck (A10)
☐ Depleted Below Dark Surface (A11)
☒ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1)
☐ 5 cm Mucky Peat or Peat (S3)

- ☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)
☐ Loamy Mucky Mineral (F1)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils³:

- ☐ Coast Prairie Redox (A16)
☐ Dark Surface (S7)
☐ Iron-Manganese Masses (F12)
☐ Very Shallow Dark Surface (TF 12)
☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

HYDROLOGY**Wetland Hydrology Indicators:**Primary Indicators (minimum of one is required; check all that apply)

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

- ☐ Water Stained Leaves (B9)
☐ Aquatic Fauna (B13)
☐ True Aquatic Plants (B14)
☐ Hydrogen Sulfide Odor (C1)
☐ Oxidized Rhizospheres on Living Roots (C3)
☐ Presence of Reduced Iron (C4)
☐ Recent Iron Reduction in Tilled Soils (C6)
☐ Thin Muck Surface (C7)
☐ Gauge or Well Data (D9)
☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
☐ Drainage Patterns (B10)
☐ Dry-Season Water Table (C2)
☐ Crayfish Burrows (C8)
☐ Saturation Visible on Aerial Imagery (C9)
☐ Stunted or Stressed Plants (D1)
☒ Geomorphic Position (D2)
☒ FAC-Neutral Test (D5)

Field Observations:Surface Water Present? Yes _____ No ☒ Depth (inches): _____Water Table Present? Yes _____ No ☒ Depth (inches): _____Saturation Present? Yes _____ No ☒ Depth (inches): _____
(includes capillary fringe)**Wetland Hydrology Present?** Yes ☒ No ☐

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

Remarks:

Roadside ditch stormwater conveyance.