

Appendix D

Aquatic Resources Delineation Report



ENGINEERING, REIMAGINED

Aquatic Resource Delineation Report
of
Interceptor 8253-327
for
Brown & Caldwell

February 2025

EXECUTIVE SUMMARY

Brown & Caldwell (B&C) is contracted with the Metropolitan Council Environmental Services (MCES) for the rehabilitation of Interceptor 8253-327, which is located in the cities of Shorewood and Chanhassen, Hennepin and Craver counties, Minnesota. KLJ completed a Level 2 aquatic resources delineation of the Project limits in accordance with the 1987 United States Army Corps of Engineers (USACE) Wetland Delineation Manual, USACE August 2010 Regional Supplement: Midwest Region (Version 2.0), and the 2015 Guidance for Submittal of Delineation Reports to the St. Paul District Army Corps of Engineers and Wetland Conservation Act Local Government Units in Minnesota (Version 2.0). The routine approach with onsite inspection was utilized, including the standard multi-parameter approach (vegetation, hydrology, and soils) for wetland identification. Areas identified on the United States Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) maps along with sites which visually supported a hydrophytic plant community were examined during the field survey. Three wetlands and ten wet ditches were identified and delineated within the Project limits.

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ACRONYMS AND ABBREVIATIONS

B&C	Brown & Caldwell
BSA	Bank Service Area
BWSR	Board of Water and Soil Resources
DNR	Department of Natural Resources
FAC	Facultative
FACU	Facultative Upland
FACW	Facultative Wetland
GPS	Global Positioning System
MCES	Metropolitan Council Environmental Services
MCWD	Minnehaha Creek Watershed District
NRCS	Natural Resources Conservation Service
NWI	National Wetland Inventory
OAR	Other Aquatic Resource
OBL	Obligate Wetland
PWI	Public Waters Inventory
ROW	Right of Way
SSURGO	Soil Survey Geographic Database
SWCD	Soil and Water Conservation District
TEP	Technical Evaluation Panel
TNW	Traditional Navigable Water
UPL	Upland
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service
WCA	Minnesota Wetland Conservation Act

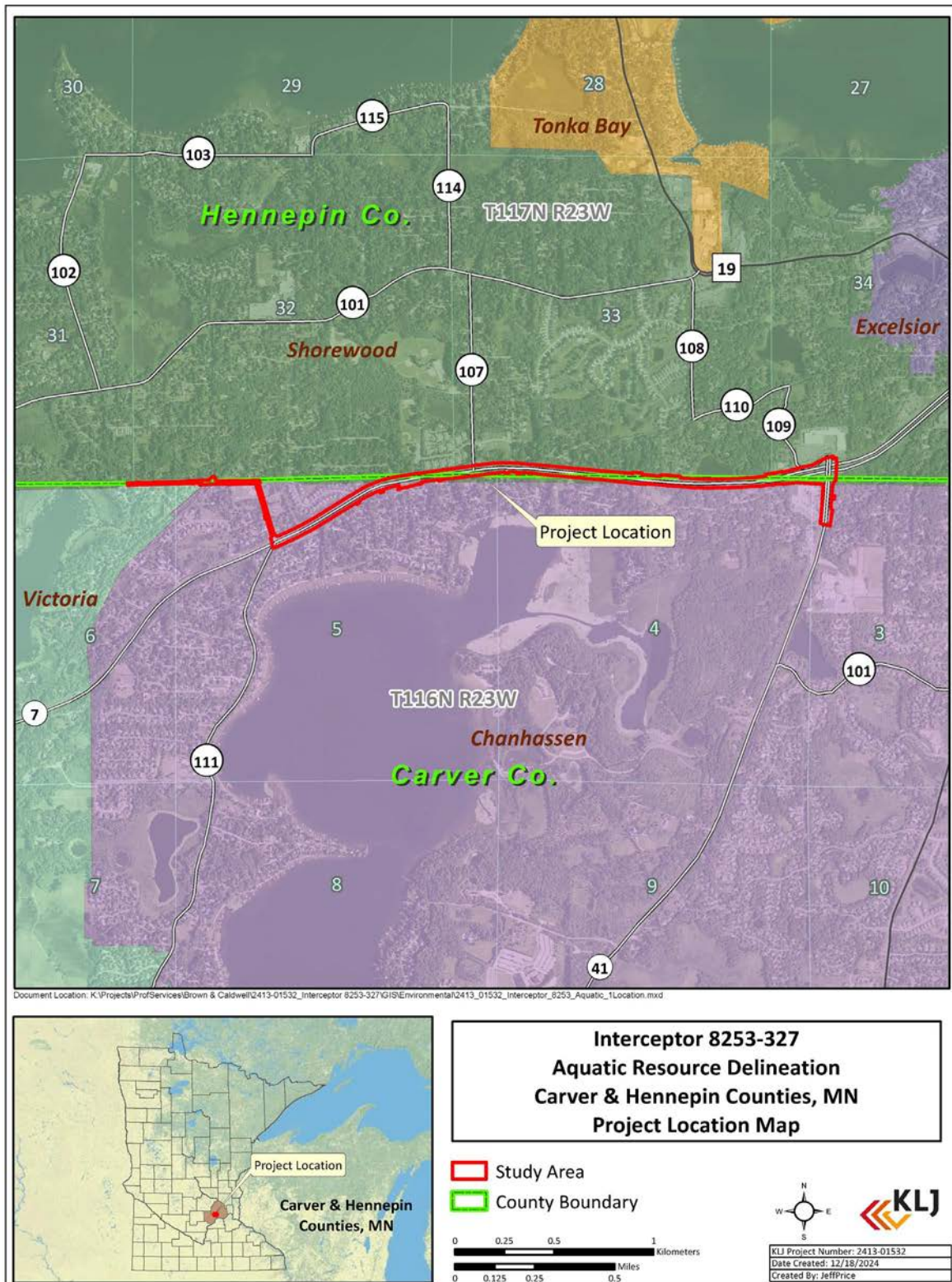
I. INTRODUCTION

KLI has prepared this Level 2 Aquatic Resources Delineation Report for the Interceptor 8253-327 Project (Project), located in the cities of Shorewood and Chanhassen, Hennepin and Carver counties, Minnesota. Starting on the east end of the Project corridor, the Project begins at the intersection of Hazeltine Boulevard / Chaska Road within the City of Chanhassen, extends approximately 0.15 miles north to Highway 7 / Hazeltine Boulevard intersection, continuing westward along Highway 7 for approximately 1.80 miles to the Highway 7 / Church Road intersection, extending northward approximately 0.20 miles to the Church Road / W 62nd Street intersection, and extending to the western termini of W 62nd Street within the City of Shorewood. The Project varies in width between 35 and 350 ft throughout. The Project area is comprised of roadways, county ROW, and woodland areas.

Land use adjacent to the Project includes commercial, residential, and forested areas. The Project area is located in Bank Service Area #7; the Mississippi River – Twin Cities major watershed; and an unnamed minor watershed.

Fieldwork was completed on November 14, 2024. This Aquatic Resource Delineation Report is provided to the City of Chanhassen, Minnehaha Creek Watershed District (MCWD), and US Army Corps of Engineers (USACE) for the purpose of approving the boundaries of wetlands and other aquatic resources and as a resource for the permitting process.

Figure 1. Project Location Map



II. PURPOSE OF REPORT

The purpose of this Aquatic Resource Delineation Report is to:

- » Present an accurate record of aquatic resources within the Project limits
- » Provide a document to guide the Technical Evaluation Panel (TEP) members in a field review
- » Solicit review and comment on aquatic resources from aquatic regulatory agencies early in the design process

This report is intended for the review of aquatic resource agencies such as the City of Chanhassen, MCWD, Hennepin County Environmental Services, Carver County Soil and Water Conservation District (SWCD), and Minnesota Board of Water and Soil Resources (BWSR), Minnesota Department of Natural Resources (DNR), and the USACE. This report is also intended to serve as a resource with which to guide a TEP in the wetland boundary verification exercise. As a result of the TEP, it is anticipated that the regulatory agencies will concur in agreement of the aquatic resources delineated and documented within the Project limits. This Aquatic Resource Delineation Report is intended so that engineers have the necessary information to avoid and minimize impacts to aquatic resources to the extent practicable.

III. REVIEW OF PUBLISHED RESOURCES

The review of published resources is relevant to any effort in assessing where wetland conditions may exist and their extents in an area. However, these resources should be considered only as a tool in identifying potential wetland conditions and should not substitute an on-site examination in the final determination of wetland conditions and their extents. Published resources used in the wetland delineation process of the Project included: LiDAR topography maps, Carver and Hennepin County Soil Surveys, the National Wetland Inventory (NWI) map, DNR Public Waters Inventory Map (PWI) for Carver and Hennepin Counties, precipitation data, and historical aerial photography.

LiDAR Topography Map

Topography for the Project was acquired from the DNR GIS Database (<http://arcgis.dnr.state.mn.us/maps/mntopo/>) and overlain on aerial photos to examine for indications of wetland conditions existing within the Project.

Carver and Hennepin County Soil Surveys

The Carver and Hennepin County Soil Surveys were examined for the Project. The Soil Survey Geographic Database (SSURGO) data were obtained and overlain on aerial photography for use during this review. Hydric soils are defined in the *Field Indicators of Hydric Soils in the United States: Guide for Identifying and Delineating Hydric Soils*, Version 8.2, 2018 (NRCS, 2018), *The 1987 Manual*, and the *Midwest Regional Supplement*.

Based on the Hydric Rating obtained from the Soil Surveys, soil types can be categorized into six categories:

- » All hydric – all components listed for a given map unit are rated as being hydric,
- » Predominantly hydric – 66% or more to less than 100% components are hydric,
- » Partially hydric – more than 33% to less than or equal to 65% of components are hydric,
- » Predominantly non-hydric – more than 0% and less than or equal to 33% of components are hydric,
- » Non-hydric – all components are rated as non-hydric and,
- » Unknown hydric – at least one component is not rated so a definitive rating for the map unit cannot be made.

Table 1 provides a summary of the mapped soil types within the Project.

Table 1. Mapped Soil Types within the Project

Map Unit Symbol	Map Unit Name	Hydric Soil Rating	Rating Description	Drainage Classification
CW	Cordova-Webster complex	100	Hydric	Poorly drained
KB	Kilkenny-Lester loams, 2 to 6 percent slopes	0	Non-hydric	Moderately well drained
KC	Lester-Kilkenny loams, 6 to 12 percent slopes	0	Non-hydric	Well drained
LS	Le Sueur loam, 1 to 3 percent slopes	15	Predominantly non-hydric	Somewhat poorly drained
L16A	Muskego, Blue Earth, and Houghton soils, ponded, 0 to 1 percent slopes	100	Hydric	Very poorly drained
L22C2	Lester loam, 6 to 10 percent slopes, moderately eroded	2	Predominantly non-hydric	Well drained
L22D2	Lester loam, 10 to 16 percent slopes, moderately eroded	0	Non-hydric	Well drained
L22E	Lester loam, 10 to 22 percent slopes	0	Non-hydric	Well drained
L23A	Cordova loam, 0 to 2 percent slopes	95	Predominantly hydric	Poorly drained
L24A	Glencoe clay loam, 0 to 1 percent slopes	100	Hydric	Very poorly drained
L25A	Le Sueur loam, 1 to 3 percent slopes	15	Predominantly non-hydric	Somewhat poorly drained
L36A	Hamel, overwash-Hamel complex, 0 to 3 percent slopes	45	Partially hydric	Somewhat poorly drained
L37B	Angus loam, 2 to 6 percent slopes	5	Predominantly non-hydric	Well drained

Map Unit Symbol	Map Unit Name	Hydric Soil Rating	Rating Description	Drainage Classification
L40B	Angus-Kilkenny complex, 2 to 6 percent slopes	5	Predominantly non-hydric	Well drained
L41C2	Lester-Kilkenny complex, 6 to 10 percent slopes, moderately eroded	5	Predominantly non-hydric	Well drained
L41D2	Lester-Kilkenny complex, 10 to 16 percent slopes, moderately eroded	5	Predominantly non-hydric	Well drained
U3B	Udorthents (cut and fill land), 0 to 6 percent slopes	0	Non-hydric	Well drained

National Wetland Inventory

Digital NWI data were obtained from the Minnesota Geospatial Commons website (<http://gisdata.mn.gov/>), overlain on aerial photography and depicted on maps used during this review of the Project. This report depicts the most up-to-date NWI map.

Table 2. NWI Mapped Wetland within the Project

Location	Cowardin Classification	Delineated Resource
Eastern portion of study area, southwest quadrant of Highway 7/Hazeltine Blvd intersection	PUBHx	Stormwater Pond 1
Eastern portion of study area, north of Highway 7 and approximately 593 feet northwest of Highway 7/Oriole Ave intersection	PEM1A/PUBH	Wetland 1
Eastern portion of study area, south of Highway 7 approximately 585 feet east of Highway 7/N Manor Dr intersection	PEM1A	None
Eastern portion of study area, south of Highway 7 approximately 46 feet east of Highway 7/N Manor Dr intersection	PEM1C	Wetland 2

DNR Public Waters / Public Water Wetlands

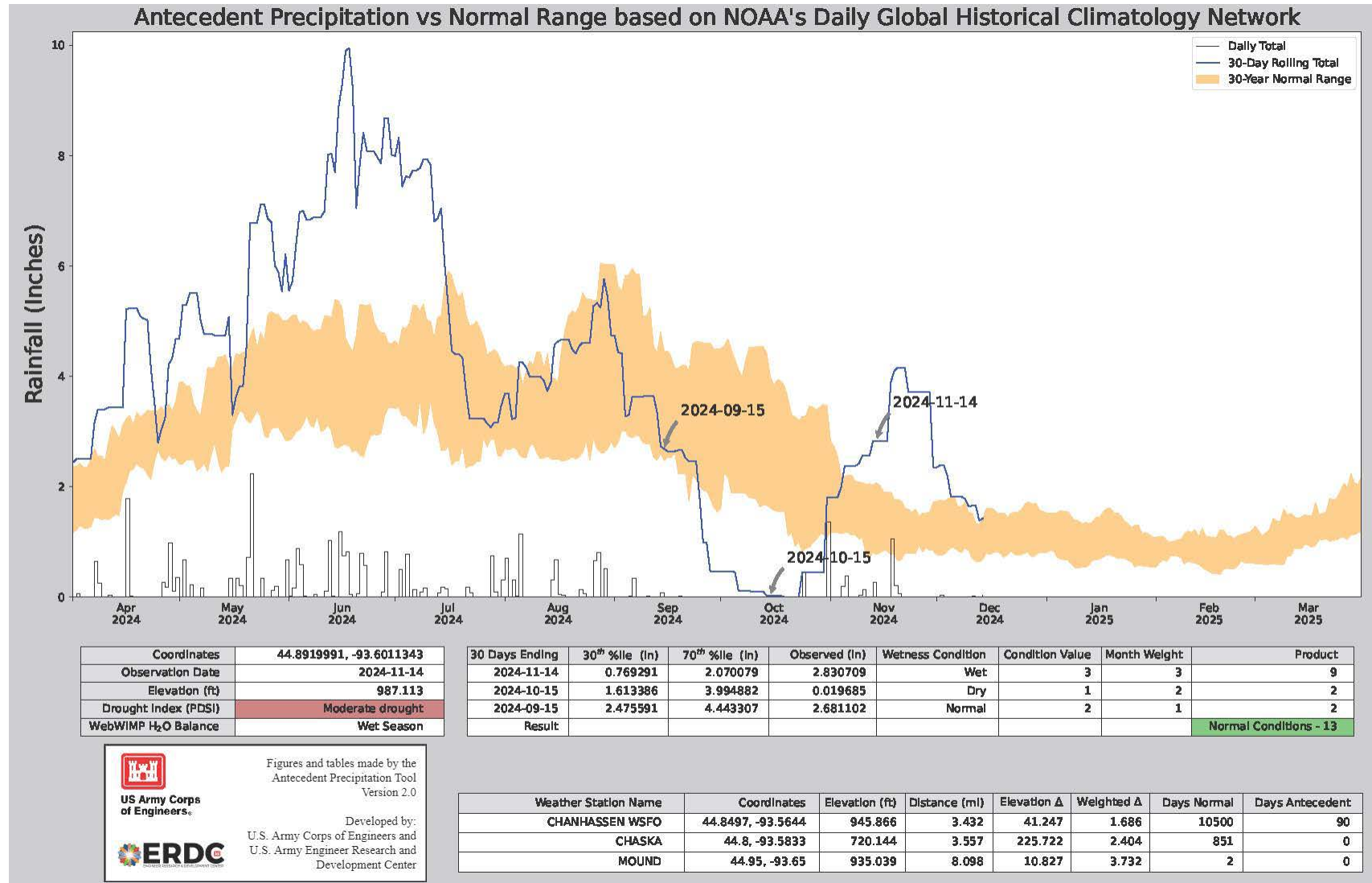
Public Waters and Public Waters Wetlands are aquatic resources indicated on the PWI map and regulated by the DNR and are specifically excluded from jurisdiction under the Minnesota Wetland Conservation Act (WCA). One Public Water, unnamed public water wetland (ID #27090000), was identified within the eastern portion of the Project limits, north of Highway 7 approximately 593 feet northwest of Highway 7/Oriole Ave intersection.

Antecedent Precipitation Data

Analysis of antecedent precipitation data pertinent to the Project helps to determine whether the delineation was completed during “normal climatic conditions” for that time of year. Normal precipitation is based on the 30-year average. Abnormal precipitation is considered to be that below the 30th percentile (drier than normal)

and above the 70th percentile (wetter than normal). For the purpose of this study, KLJ utilized the USACE Antecedent Precipitation Tool, which indicates that the antecedent precipitation as normal at the time of the field survey. This is inconsistent with the 30-day rolling total which indicated wetter than normal moisture conditions at the time of the November 14, 2024 field survey.

Table 3. Antecedent Precipitation Data



WETLAND DELINEATION

Methodology

KLJ conducted a field investigation of all aquatic resources located within the Project. Delineated aquatic resources are defined as one of the following categories.

Wetland: areas that are inundated or saturated by surface or ground water a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions

Wet Ditch: A wet ditch is a linear, aquatic resource that exhibits wetland characteristics (indicators of hydric soil and wetland hydrology and a dominance of hydrophytic vegetation), which was constructed in an area that was historically non-wetland and not for the purpose of creating a wetland

Other Aquatic Resource: an aquatic resource that includes a Traditional Navigable Water (TNW), rivers, streams, lakes, non-navigable tributaries of TNWs that are relatively permanent where the tributaries typically flow year-round, or have continuous flow at least seasonally (e.g. typically three months)

Stormwater Pond: a constructed pond designed to capture stormwater runoff from impervious surfaces (e.g. streets, sidewalks, roofs), which was constructed in an area that was historically non-wetland and not for the purpose of creating a wetland

The delineation of aquatic resources in undisturbed areas was conducted in accordance with the Level 2 routine determination method described in *The 1987 Manual*. Data on soils, hydrology, and vegetation (the three parameters mandated in *The 1987 Manual*) were collected at each potential wetland. One sampling transect was established at each wetland, which included one sample point clearly on the upland side of the wetland boundary and another sample point clearly on the wetland side of the wetland boundary. The wetland boundary was established at the line where one or more of the mandatory parameters (hydric soils, indicators of wetland hydrology, and a predominance of hydrophytic vegetation) were not present.

The definition of hydric soils is per *Field Indicators of Hydric Soils in the United States: Guide for Identifying and Delineating Hydric Soils, Version 8.2, 2018* (NRCS 2020). *The 1987 Manual* provides additional information relevant to the definition and characteristics of hydric soils. Digital soil data for Carver and Hennepin County were overlain on aerial photos and reviewed for locations of mapped hydric soils, potential inclusions of hydric soils and non-hydric soils within the Project. Soil map units considered hydric in Carver and Hennepin County were based on the hydric rating for each map unit. The definitions of wetland hydrology and predominance of hydrophytic vegetation follow *The 1987 Manual* and *The Regional Supplement: Midwest*. The designation of Wetland Plant Indicator Status for plants observed in wetland and upland sampling pits follows *The National List of Plant Species that Occur in Wetlands – 2020 Update*. Boundaries of undisturbed wetlands were recorded with a Juniper Geode GPS unit, which provides sub-meter accuracy.

Results

KLI implemented the Level 2 routine wetland delineation methodology and determined that three wetlands and ten wet ditches were present within the Project limits. Table 4 provides a summary of the aquatic resources that were delineated within the Project limits.

Table 4. Summary of Resources Delineated within the Project Limits

Resource ID	Location Description	Section, Township, Range	Area (acres)	Wetland Type Classification			Location (Decimal Degrees)
				Circular 39	Cowardin	Eggers & Reed	
Stormwater Pond 1	Eastern portion of study area, southwest quadrant of Highway 7/Hazeltine Blvd intersection	Sec. 3, 4, T116, R23W	0.29	Type 3	Shallow Marsh	PEM1Cx	44.891366, -93.581434
Wetland 1	Eastern portion of study area, north of Highway 7 and approximately 593 feet northwest of Highway 7/Oriole Ave intersection	Sec. 4, T116N, R23W	0.18	Type 2/ 5	Fresh (wet) meadow/ Shallow open water	PEM2B/ PUBH	44.891413, -93.587157
Wetland 2	Eastern portion of study area, south of Highway 7 and approximately 46 feet east of Highway 7/N Manor Dr intersection	Sec. 4, T116N, R23W	0.09	Type 1/2/5	Floodplain forest/ Fresh (wet) meadow/ Shallow open water	PFOA/ PEM2B/ PUBH	44.891258, -93.592027
Wet Ditch 1	Eastern portion of study area, southeast quadrant of the Highway 7/Hazeltine Blvd intersection	Sec. 3 & 34, T116 & 117N, R23W	0.06	Type 3	Shallow Marsh	PEM1C	44.891293, -93.580390
Wet Ditch 2	Eastern portion of study area, north of Highway 7 approximately 420 feet west of Highway 7/Hazeltine Blvd intersection	Sec. 34, T117N, R23W	0.01	Type 2	Fresh (wet) meadow	PEM2B	44.891784, -93.582472
Wet Ditch 3	Eastern portion of study area, north of Highway 7 approximately 580 feet west of Highway 7/Hazeltine Blvd intersection	Sec. 34, T117N, R23W	0.08	Type 3	Shallow Marsh	PEM1C	44.891735, -93.583040
Wet Ditch 4	Eastern portion of study area, north of Highway 7 approximately 550 feet east of Highway 7/N Manor Dr	Sec. 4, T116N, R23W	0.02	Type 3	Shallow Marsh	PEM1C	44.891437, -93.590187
Wet Ditch 5	Eastern portion of study area, south of Highway 7 approximately 35 feet west of Highway 7/N Manor Dr intersection	Sec. 4, T116N, R23W	0.13	Type 3	Shallow Marsh	PEM1C	44.891399, -93.593395

Resource ID	Location Description	Section, Township, Range	Area (acres)	Wetland Type Classification			Location (Decimal Degrees)
				Circular 39	Cowardin	Eggers & Reed	
Wet Ditch 6	Central portion of study area, north of Highway 7 approximately 64 feet north of Highway 7/Arbor Ln intersection	Sec. 33, T117N, R23W	0.03	Type 3	Shallow Marsh	PEM1C	44.892204, -93.601032
Wet Ditch 7	Western portion of study area, south of Highway 7 approximately 35 feet south of Highway 7/Shorewood Oaks Dr intersection	Sec. 5, T116N, R23W	0.07	Type 2/3	Fresh (wet) meadow/ Shallow marsh	PEM2B/ PEM1C	44.891244, -93.608558
Wet Ditch 8	Western portion of study area, south of Highway 7 approximately 30 feet east of Highway 7/Greenbriar Ave intersection	Sec. 5, T116N, R23W	0.09	Type 2/3	Fresh (wet) meadow/ Shallow marsh	PEM2B/ PEM1C	44.89088, -93.609984
Wet Ditch 9	Western portion of study area, south of Highway 7 approximately 60 feet southwest of Highway 7/Greenbriar Ave intersection	Sec. 5, T116N, R23W	0.46	Type 2/3	Fresh (wet) meadow/ Shallow marsh	PEM2B/ PEM1C	44.889546, -93.613208
Wet Ditch 10	Western portion of study area, north of Highway 7 approximately 75 feet east of Highway 7/Church Rd intersection	Sec. 5, T116N, R23W	0.16	Type 3	Shallow Marsh	PEM1C	44.889181, -93.614939

Stormwater Pond 1

Date of Delineation: November 14, 2024

Location: Eastern portion of study area, southwest quadrant of Highway 7/Hazeltine Blvd intersection

Section, Township, Range: Sec. 3, 4, T116, R23W

Description: Wetland 1 is an excavated depressional aquatic resource that consists of a shallow marsh community. Aerial imagery shows the pond was installed between 1991 and 2002 in an established upland area (see, Appendix C). The resource appears to be supported by a pipe and runoff from the surrounding landscape.

Delineated Wetland Type: Type 3, PEM1Cx, Shallow marsh

NWI: PUBHx

DNR Public Waters Map: None

Bank Service Area, Major Watersheds, Minor Watersheds: #7, Mississippi River – Twin Cities major watershed, unnamed minor watershed

Carver and Hennepin County Soil Survey: L41C2 – Lester-Kilkenny complex, 6 to 10 percent slopes, moderately eroded (Predominantly non-hydric) & KC – Lester-Kilkenny loams, 6 to 12 percent slopes (Non-hydric)

Dominant Vegetation of Wetland: *Typha x glauca* (Hybrid cattail) – OBL

Basis of Delineated Boundary: The boundary was based on change in topography, dominant vegetation, and hydric soils.

Data Sheets: SWP1-1WET and SWP1-1UP

Photo:



Southwest of feature facing northeast

Wetland 1

Date of Delineation: November 14, 2024

Location: Eastern portion of study area, north of Highway 7 and approximately 593 feet northwest of Highway 7/Oriole Ave intersection

Section, Township, Range: Sec. 4, T116N, R23W

Description: Wetland 2 is wetland resource that consists of a fresh (wet) meadow fringe within the Project limits with a shallow open water wetland beyond the Project limits. The resource appears to be supported by groundwater and supplemented by runoff from the surrounding landscape.

Delineated Wetland Type: Type 2/5, PEM2B/PUBH, Fresh (wet) meadow/Shallow open water

NWI: PUBH & PEM1A

DNR Public Waters Map: Unnamed Public Water Wetland (ID # 27090000)

Bank Service Area, Major Watersheds, Minor Watersheds: #7, Mississippi River – Twin Cities major watershed, unnamed minor watershed

Hennepin County Soil Survey: L41C2 – Lester-Kilkenny complex, 6 to 10 percent slopes, moderately eroded (Predominantly non-hydric)

Dominant Vegetation of Wetland: *Phalaris arundinacea* (Reed canary grass) – FACW

Basis of Delineated Boundary: The boundary was based on change in topography, dominant vegetation of reed canary grass in the wetland to Canadian goldenrod in the upland, and hydric soils.

Data Sheets: WET1-1WET and WET1-1UP

Photo:



Facing northeast

Wetland 2

Date of Delineation: November 14, 2024

Location: Eastern portion of study area, south of Highway 7 and approximately 46 feet east of Highway 7/N Manor Dr intersection

Section, Township, Range: Sec. 4, T116N, R23W

Description: Wetland 3 is wetland resource that consists of forest in the eastern portion of the basin and a fresh (wet) meadow, and shallow open water community in the remainder. The resource appears to be primarily supported by groundwater and supplemented with runoff from the surrounding landscape.

Delineated Wetland Type: Type 1/2/5, PFOA/PEM2B/PUBH, Forested/Fresh (wet) meadow/Shallow open water

NWI: PEM1C

DNR Public Waters Map: None

Bank Service Area, Major Watersheds, Minor Watersheds: #7, Mississippi River – Twin Cities major watershed, unnamed minor watershed

Carver County Soil Survey: KC – Lester-Kilkenny loams, 6 to 12 percent slopes (Non-hydric)

Dominant Vegetation of Wetland: *Ulmus americana* (American elm) – FACW, *Fraxinus pennsylvanica* (Green ash) – FACW, *Frangula alnus* (Glossy false buckthorn) – FACW, *Carex lacustris* (Lakebank sedge) – OBL, and *Typha x glauca* (Hybrid cattail) - OBL

Basis of Delineated Boundary: The boundary was based on change in topography, dominant vegetation of lakebank sedge and hybrid cattail in the wetland to Kentucky bluegrass in the upland, and hydric soils.

Data Sheets: WET2-1WET and WET2-1UP

Photo:



Facing southeast

Wet Ditch 1

Date of Delineation: November 14, 2024

Location: Eastern portion of study area, southeast quadrant of the Highway 7/Hazeltine Blvd intersection

Section, Township, Range: Sec. 3 & 34, T116 & 117N, R23W

Description: Wet Ditch 1 is ditch resource that consists of a shallow marsh community. The resource appears to be supported by runoff from the surrounding landscape and continues outside the project limits.

Delineated Wetland Type: Type 3, PEM1C, Shallow marsh

NWI: None

DNR Public Waters Map: None

Bank Service Area, Major Watersheds, Minor Watersheds: #7, Mississippi River – Twin Cities major watershed, unnamed minor watershed

Carver and Hennepin County Soil Survey: L41C2 – Lester-Kilkenny complex, 6 to 10 percent slopes, moderately eroded (Predominantly non-hydric) & KC – Lester-Kilkenny loams, 6 to 12 percent slopes (Non-hydric)

Dominant Vegetation of Wetland: *Typha x glauca* (Hybrid cattail) – OBL & *Phalaris arundinacea* (Reed canary grass) – FACW

Basis of Delineated Boundary: The boundary was based on change in topography and dominant vegetation.

Data Sheets: Reference WET DITCH 5-1WET and WET DITCH 5-1UP

Photo:



Facing south

Wet Ditch 2

Date of Delineation: November 14, 2024

Location: Eastern portion of study area, north of Highway 7 approximately 420 feet west of Highway 7/Hazeltine Blvd intersection

Section, Township, Range: Sec. 34, T117N, R23W

Description: Wet Ditch 2 is ditch resource that consists of a fresh (wet) meadow community. The resource appears to be supported by runoff from the surrounding landscape.

Delineated Wetland Type: Type 2, PEM2B, Fresh (wet) meadow

NWI: None

DNR Public Waters Map: None

Bank Service Area, Major Watersheds, Minor Watersheds: #7, Mississippi River – Twin Cities major watershed, unnamed minor watershed

Hennepin County Soil Survey: L41C2 – Lester-Kilkenny complex, 6 to 10 percent slopes, moderately eroded (Predominantly non-hydric)

Dominant Vegetation of Wetland: *Phalaris arundinacea* (Reed canary grass) – FACW

Basis of Delineated Boundary: The boundary was based on change in topography and dominant vegetation.

Data Sheets: Reference WET DITCH 7-1WET and WET DITCH 7-1UP

Photo:



Facing west

Wet Ditch 3

Date of Delineation: November 14, 2024

Location: Eastern portion of study area, north of Highway 7 approximately 580 feet west of Highway 7/Hazeltine Blvd intersection

Section, Township, Range: Sec. 34, T117N, R23W

Description: Wet Ditch 3 is ditch resource that consists of a shallow marsh community. The resource appears to be supported by runoff from the surrounding landscape and continues outside the project limits.

Delineated Wetland Type: Type 3, PEM1C, Shallow marsh

NWI: None

DNR Public Waters Map: None

Bank Service Area, Major Watersheds, Minor Watersheds: #7, Mississippi River – Twin Cities major watershed, unnamed minor watershed

Hennepin County Soil Survey: L41C2 – Lester-Kilkenny complex, 6 to 10 percent slopes, moderately eroded (Predominantly non-hydric)

Dominant Vegetation of Wetland: *Typha x glauca* (Hybrid cattail) – OBL & *Phalaris arundinacea* (Reed canary grass) – FACW

Basis of Delineated Boundary: The boundary was based on change in topography and dominant vegetation.

Data Sheets: Reference WET DITCH 5-1WET and WET DITCH 5-1UP

Photo:



Facing east

Wet Ditch 4

Date of Delineation: November 14, 2024

Location: Eastern portion of study area, north of Highway 7 approximately 550 feet east of Highway 7/N Manor Dr

Section, Township, Range: Sec. 4, T116N, R23W

Description: Wet Ditch 4 is ditch resource that consists of a shallow marsh community. The resource appears to be supported by runoff from the surrounding landscape.

Delineated Wetland Type: Type 3, PEM1C, Shallow marsh

NWI: None

DNR Public Waters Map: None

Bank Service Area, Major Watersheds, Minor Watersheds: #7, Mississippi River – Twin Cities major watershed, unnamed minor watershed

Hennepin County Soil Survey: L41C2 – Lester-Kilkenny complex, 6 to 10 percent slopes, moderately eroded (Predominantly non-hydric)

Dominant Vegetation of Wetland: *Typha x glauca* (Hybrid cattail) – OBL & *Phalaris arundinacea* (Reed canary grass) – FACW

Basis of Delineated Boundary: The boundary was based on change in topography and dominant vegetation.

Data Sheets: Reference WET DITCH 5-1WET and WET DITCH 5-1UP

Photo:



Facing east

Wet Ditch 5

Date of Delineation: November 14, 2024

Location: Eastern portion of study area, south of Highway 7 approximately 35 feet west of Highway 7/N Manor Dr intersection

Section, Township, Range: Sec. 4, T116N, R23W

Description: Wet Ditch 5 is ditch resource that consists of a shallow marsh community. The resource appears to be supported by runoff from the surrounding landscape.

Delineated Wetland Type: Type 3, PEM1C, Shallow marsh

NWI: None

DNR Public Waters Map: None

Bank Service Area, Major Watersheds, Minor Watersheds: #7, Mississippi River – Twin Cities major watershed, unnamed minor watershed

Carver County Soil Survey: KB – Kilkenny-Lester loams, 2 to 6 percent slopes (Non-hydric)

Dominant Vegetation of Wetland: *Typha x glauca* (Hybrid cattail) – OBL & *Phalaris arundinacea* (Reed canary grass) – FACW

Basis of Delineated Boundary: The boundary was based on change in topography, dominant vegetation, and hydric soils.

Data Sheets: WET DITCH 5-1WET and WET DITCH 5-1UP

Photo:



Facing east

Wet Ditch 6

Date of Delineation: November 14, 2024

Location: Central portion of study area, north of Highway 7 approximately 64 feet north of Highway 7/Arbor Ln intersection

Section, Township, Range: Sec. 33, T117N, R23W

Description: Wet Ditch 6 is ditch resource that consists of a shallow marsh community. The resource appears to be supported by runoff from the surrounding landscape and continues outside the project limits.

Delineated Wetland Type: Type 3, PEM1C, Shallow marsh

NWI: None

DNR Public Waters Map: None

Bank Service Area, Major Watersheds, Minor Watersheds: #7, Mississippi River – Twin Cities major watershed, unnamed minor watershed

Hennepin County Soil Survey: L24A – Glencoe clay loam, 0 to 1 percent slopes (Hydric) & L25A – Le Sueur loam, 1 to 3 percent slopes (Predominantly non-hydric)

Dominant Vegetation of Wetland: *Typha x glauca* (Hybrid cattail) – OBL

Basis of Delineated Boundary: The boundary was based on change in topography, dominant vegetation, and hydric soils.

Data Sheets: WET DITCH 6-1WET and WET DITCH 6-1UP

Photo:



Facing northwest

Wet Ditch 7

Date of Delineation: November 14, 2024

Location: Western portion of study area, south of Highway 7 approximately 35 feet south of Highway 7/Shorewood Oaks Dr intersection

Section, Township, Range: Sec. 5, T116N, R23W

Description: Wet Ditch 7 is ditch resource that consists of a fresh (wet) meadow and shallow marsh community. The resource appears to be supported by runoff from the surrounding landscape.

Delineated Wetland Type: Type 2/3, PEM2B/PEM1C, Fresh (wet) meadow/Shallow marsh

NWI: None

DNR Public Waters Map: None

Bank Service Area, Major Watersheds, Minor Watersheds: #7, Mississippi River – Twin Cities major watershed, unnamed minor watershed

Carver County Soil Survey: LS – Le Sueur loam, 1 to 3 percent slopes (Predominantly non-hydric)

Dominant Vegetation of Wetland: *Phalaris arundinacea* (Reed canary grass) – FACW

Basis of Delineated Boundary: The boundary was based on change in topography, dominant vegetation, and hydric soils.

Data Sheets: WET DITCH 7-1WET and WET DITCH 7-1UP

Photo:



Facing southwest

Wet Ditch 8

Date of Delineation: November 14, 2024

Location: Western portion of study area, south of Highway 7 approximately 30 feet east of Highway 7/Greenbriar Ave intersection

Section, Township, Range: Sec. 5, T116N, R23W

Description: Wet Ditch 8 is ditch resource that consists of a fresh (wet) meadow and shallow marsh community. The resource appears to be supported by runoff from the surrounding landscape.

Delineated Wetland Type: Type 2/3, PEM2B/PEM1C, Fresh (wet) meadow/Shallow marsh

NWI: None

DNR Public Waters Map: None

Bank Service Area, Major Watersheds, Minor Watersheds: #7, Mississippi River – Twin Cities major watershed, unnamed minor watershed

Carver County Soil Survey: LS – Le Sueur loam, 1 to 3 percent slopes (Predominantly non-hydric)

Dominant Vegetation of Wetland: *Phalaris arundinacea* (Reed canary grass) – FACW

Basis of Delineated Boundary: The boundary was based on change in topography and dominant vegetation.

Data Sheets: Reference WET DITCH 7-1WET and WET DITCH 7-1UP

Photo:



Facing southwest

Wet Ditch 9

Date of Delineation: November 14, 2024

Location: Western portion of study area, south of Highway 7 approximately 60 feet southwest of Highway 7/Greenbriar Ave intersection

Section, Township, Range: Sec. 5, T116N, R23W

Description: Wet Ditch 9 is ditch resource that consists of a fresh (wet) meadow and shallow marsh community. The resource appears to be supported by runoff from the surrounding landscape.

Delineated Wetland Type: Type 2/3, PEM2B/PEM1C, Fresh (wet) meadow/Shallow marsh

NWI: None

DNR Public Waters Map: None

Bank Service Area, Major Watersheds, Minor Watersheds: #7, Mississippi River – Twin Cities major watershed, unnamed minor watershed

Carver County Soil Survey: LS – Le Sueur loam, 1 to 3 percent slopes (Predominantly non-hydric)

Dominant Vegetation of Wetland: *Phalaris arundinacea* (Reed canary grass) – FACW

Basis of Delineated Boundary: The boundary was based on change in topography and dominant vegetation.

Data Sheets: Reference WET DITCH 7-1WET and WET DITCH 7-1UP

Photos:



Facing southwest



Facing northeast

Wet Ditch 10

Date of Delineation: November 14, 2024

Location: Western portion of study area, north of Highway 7 approximately 75 feet east of Highway 7/Church Rd intersection

Section, Township, Range: Sec. 5, T116N, R23W

Description: Wet Ditch 10 is ditch resource that consists of a shallow marsh community. The resource appears to be supported by runoff from the surrounding landscape and continues outside the project limits.

Delineated Wetland Type: Type 3, PEM1C, Shallow marsh

NWI: None

DNR Public Waters Map: None

Bank Service Area, Major Watersheds, Minor Watersheds: #7, Mississippi River – Twin Cities major watershed, unnamed minor watershed

Carver County Soil Survey: LS – Le Sueur loam, 1 to 3 percent slopes (Predominantly non-hydric)

Dominant Vegetation of Wetland: *Typha x glauca* (Hybrid cattail) – OBL

Basis of Delineated Boundary: The boundary was based on change in topography and dominant vegetation.

Data Sheets: Reference WET DITCH 6-1WET and WET DITCH 6-1UP

Photo:



Facing northeast

IV. CONCLUSION

Two wetlands, ten wet ditches, and one stormwater pond were delineated within the Interceptor 8253-327 Project limits in Chanhassen and Shorewood, Carver and Hennepin County, Minnesota. All of the aquatic resources were delineated based on the three-parameter approach in accordance with *The 1987 Manual*. Field activities were completed on November 14, 2024.

The above-described wetland delineation was performed by KLJ's Environmental Specialist, Evelyn Ostrowski. The delineation was performed in accordance with *The 1987 Manual* and *The Regional Supplement: Midwest*. The delineation meets the standards and criterion described in *The 1987 Manual* and conforms to applicable standards and regulations in place at the time the delineation was completed.

V. REFERENCES

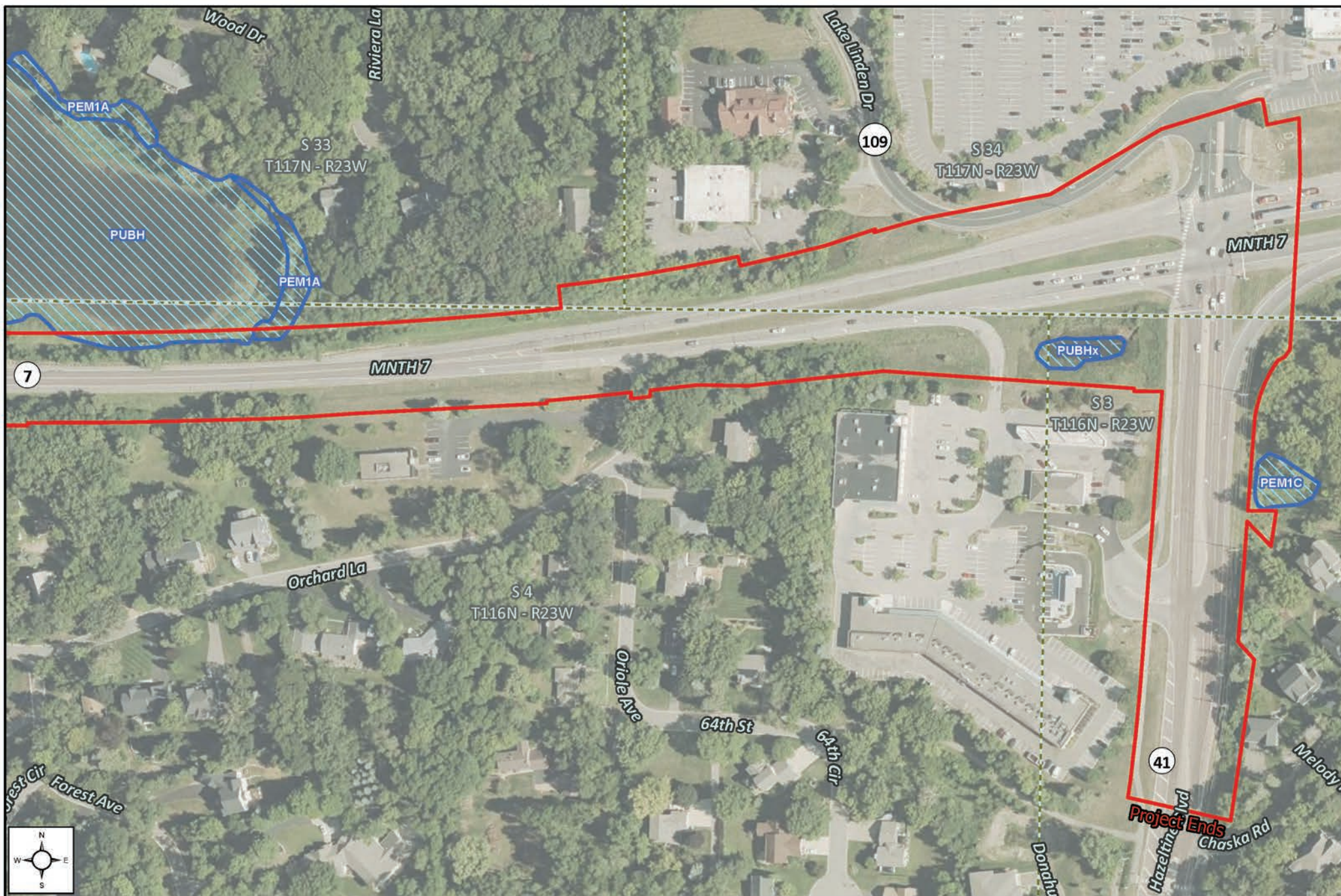
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VI. DELINEATOR CREDENTIALS

EVELYN OSTROWSKI	
Education	UW River Falls – Conservation and Environmental Planning
Certifications	Minnesota Wetland Professional In-Training Certification Program
Training	Minnesota Wetland Professional In-Training Certification Program: Successfully completed training requirements for Wetlands Professional In-Training Course offered by the Minnesota Wetland Professional Certification Program.
Professional Memberships	Minnesota Wetland Professionals Association

The background of the page features a photograph of a beach with gentle waves lapping at the shore. A large, semi-transparent grey arrow is superimposed on the image, pointing from the bottom left towards the top right. The text 'Appendix A: Figures' is centered over the middle of the page.

Appendix A: Figures



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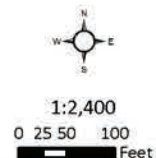
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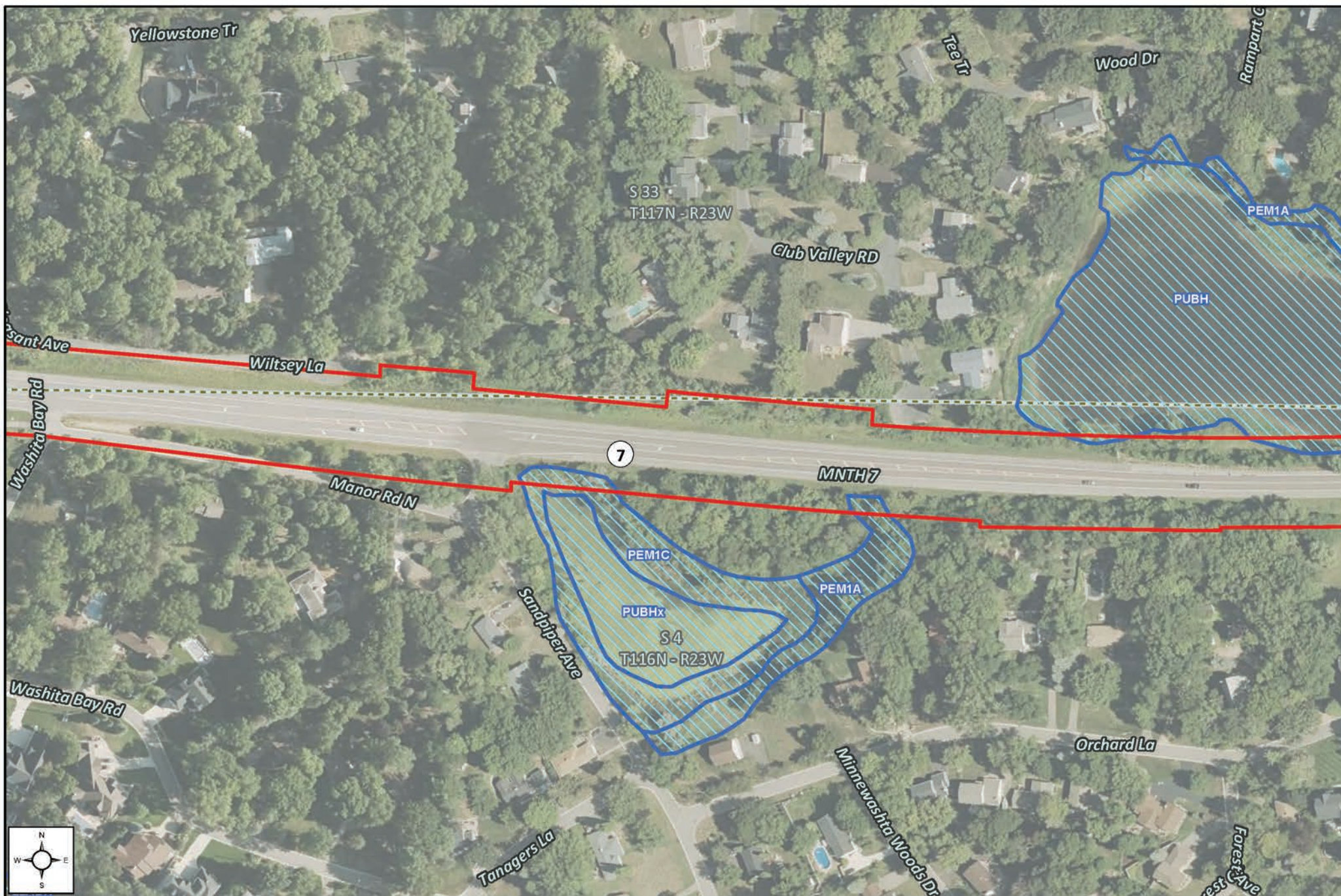
Page 1 of 6

Interceptor 8253-327 **Aquatic Resource Delineation** **Carver & Hennepin Counties, MN**

NWI Mapped Wetlands



- Study Area
- NWI
- Section Line
- Township Line



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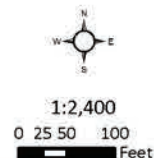
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Interceptor 8253-327 **Aquatic Resource Delineation** **Carver & Hennepin Counties, MN**

NWI Mapped Wetlands



- ▬ Study Area
- ▬ NWI
- ▬ Section Line
- ▬ Township Line



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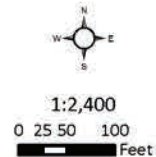
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Interceptor 8253-327
Aquatic Resource Delineation
Carver & Hennepin Counties, MN

NWI Mapped Wetlands



- Study Area
- NWI
- Section Line
- Township Line



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Interceptor 8253-327 **Aquatic Resource Delineation** **Carver & Hennepin Counties, MN**

NWI Mapped Wetlands



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Feet

- Study Area
- NWI
- Section Line
- Township Line



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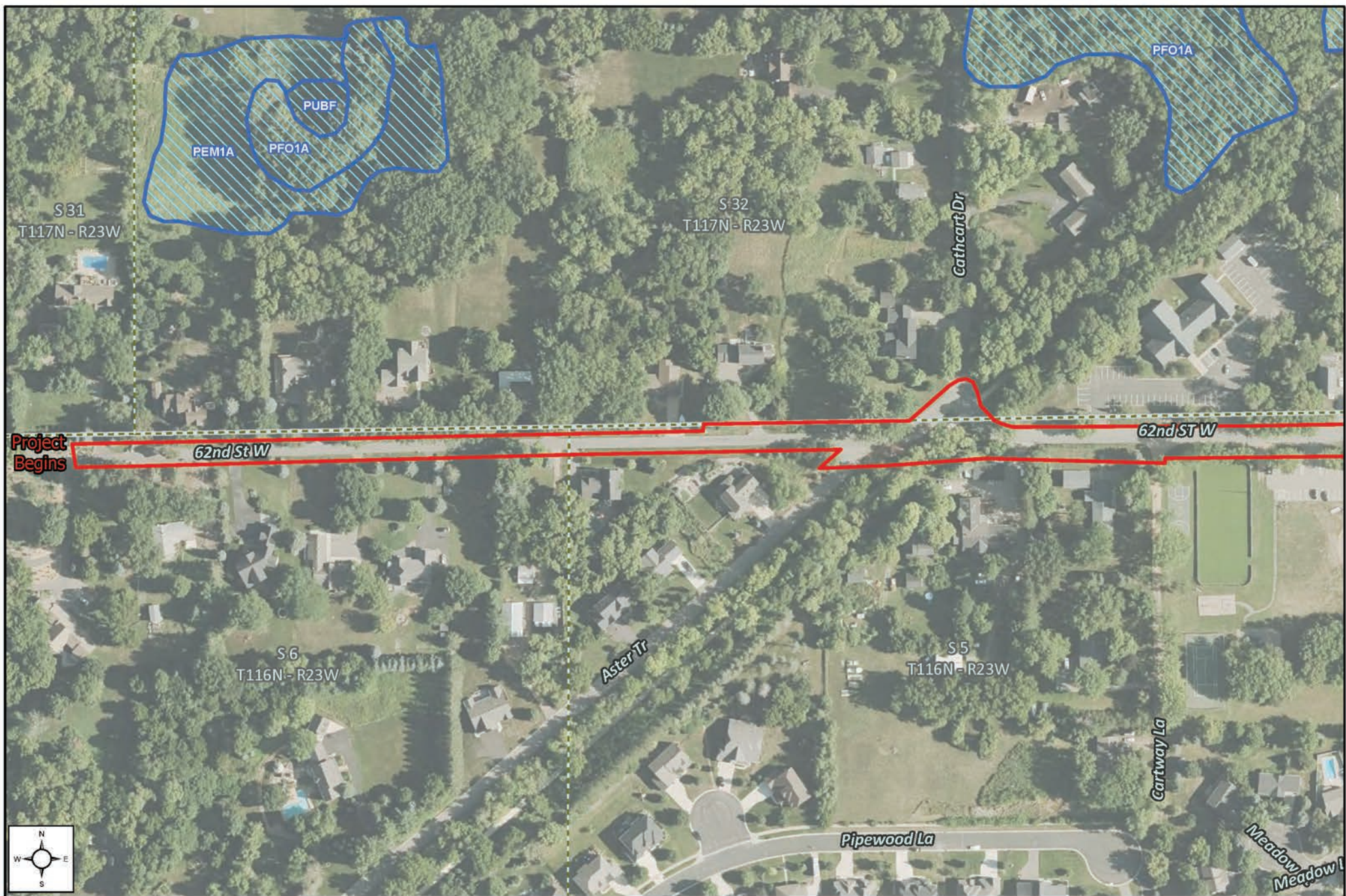
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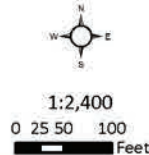


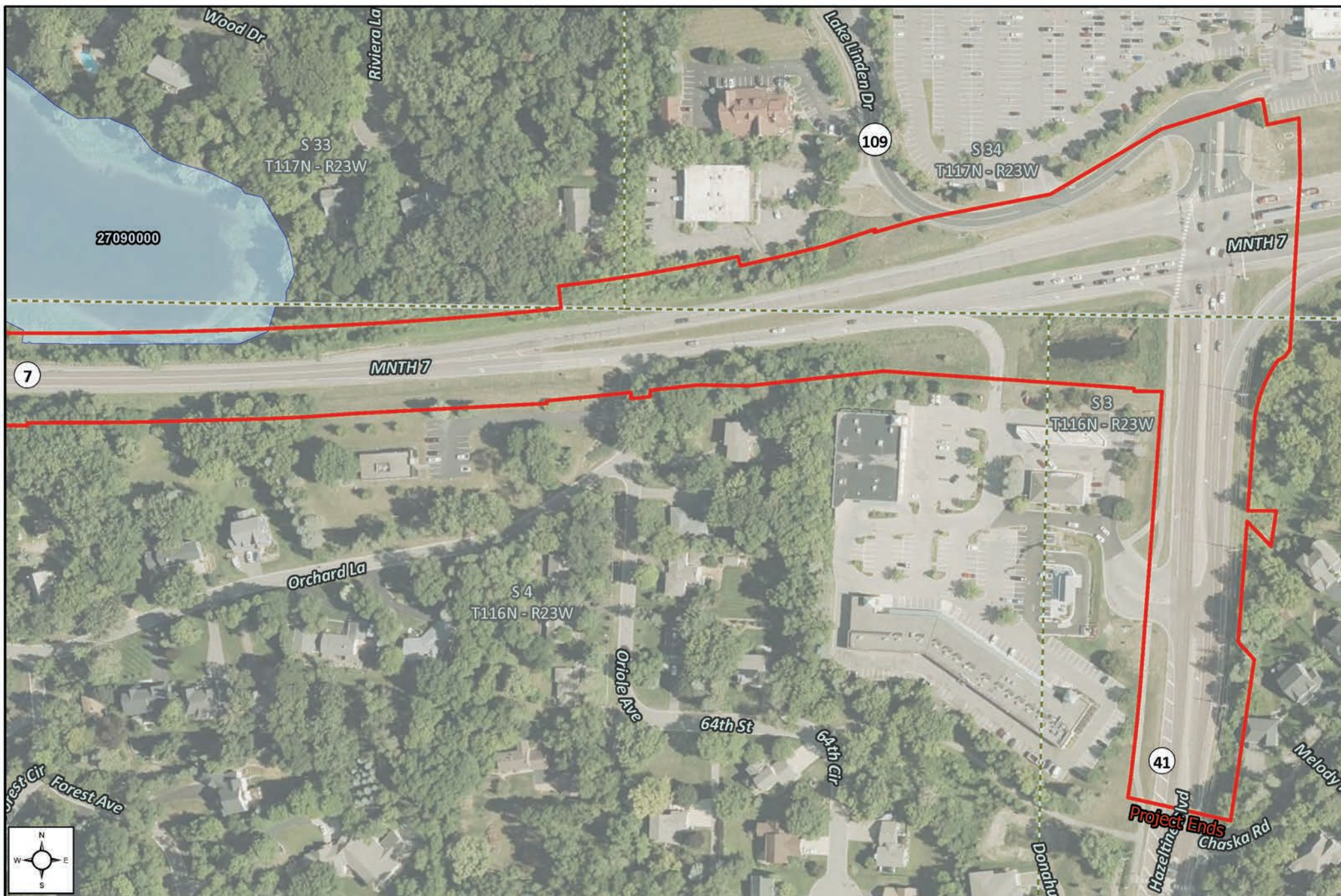
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- Study Area
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Page 1 of 6

Interceptor 8253-327 **Aquatic Resource Delineation** **Carver & Hennepin Counties, MN**

DNR Public Water Inventory



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Feet

- Study Area
- Public Waters Basins
- Section Line
- Township Line



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Interceptor 8253-327 **Aquatic Resource Delineation** **Carver & Hennepin Counties, MN**

DNR Public Water Inventory



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Feet

- Study Area
- Public Waters Basins
- Section Line
- Township Line



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Interceptor 8253-327 **Aquatic Resource Delineation** **Carver & Hennepin Counties, MN**

DNR Public Water Inventory



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Feet

- Study Area
- Public Waters Basins
- Section Line
- Township Line



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Interceptor 8253-327 **Aquatic Resource Delineation** **Carver & Hennepin Counties, MN** **DNR Public Water Inventory**



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Feet

- ▭ Study Area
- Section Line
- Township Line



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Interceptor 8253-327
Aquatic Resource Delineation
Carver & Hennepin Counties, MN
DNR Public Water Inventory



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 Study Area
 Section Line
 Township Line



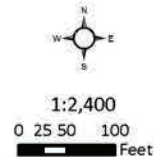
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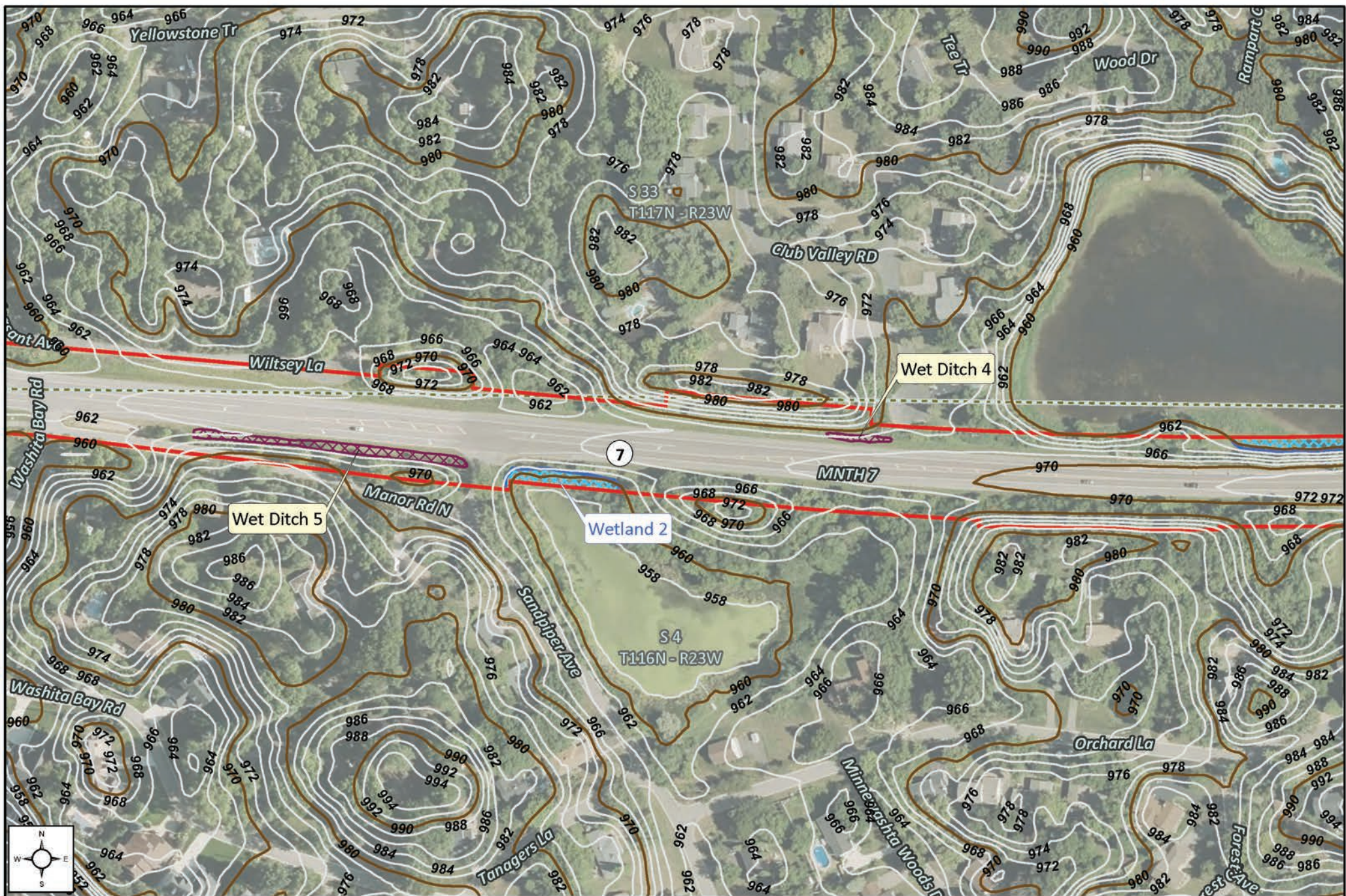
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Interceptor 8253-327 **Aquatic Resource Delineation** **Carver & Hennepin Counties, MN**

Lidar Contours



- | | |
|-----------------|---------------------------|
| Study Area | Index Contour (10') |
| Stormwater Pond | Intermediate Contour (2') |
| Wetland | Township Line |
| Wet Ditch | Section Line |



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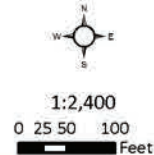
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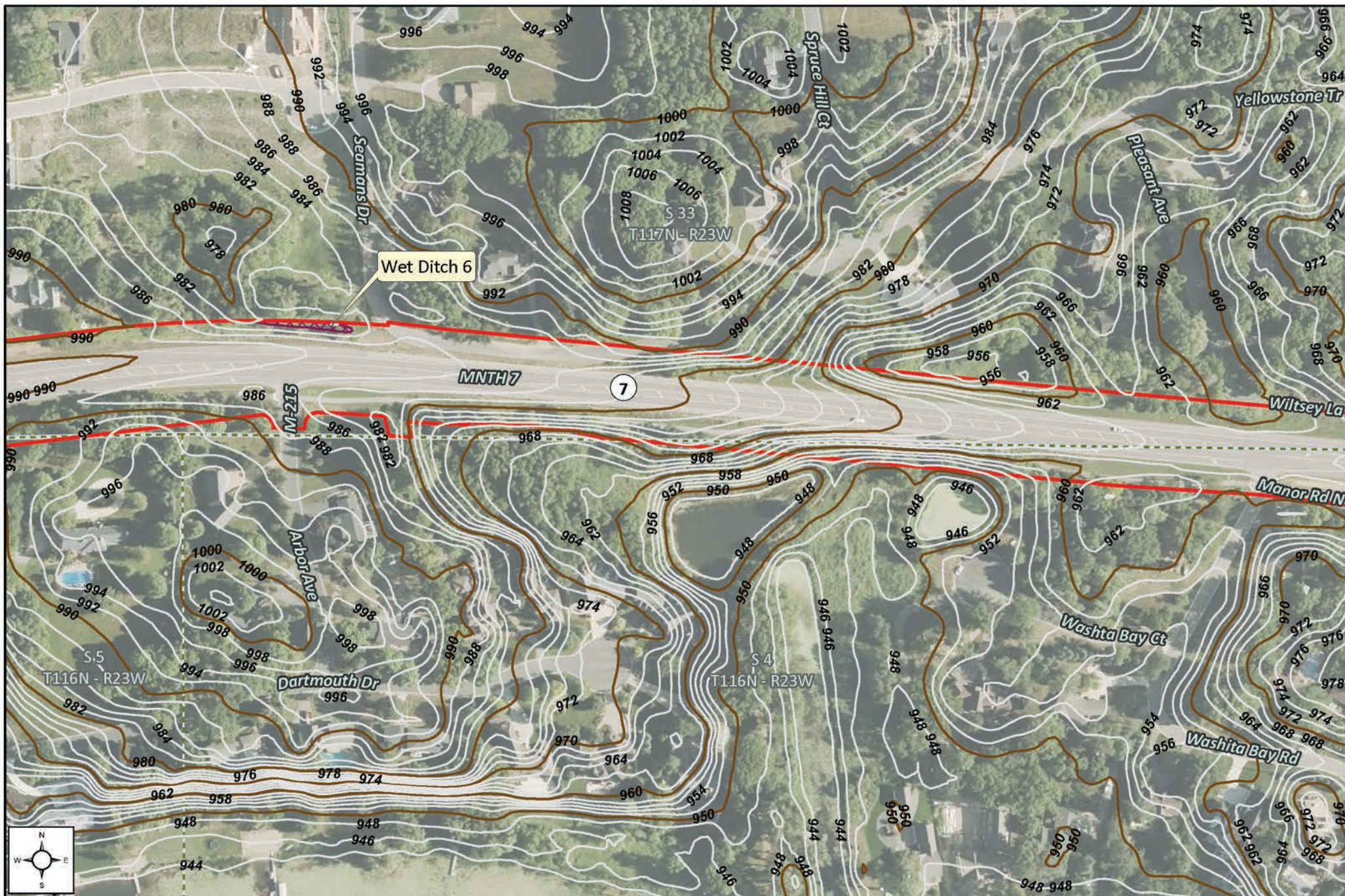
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Interceptor 8253-327
Aquatic Resource Delineation
Carver & Hennepin Counties, MN

Lidar Contours



- | | |
|---------------------|---------------------------|
| Study Area | Intermediate Contour (2') |
| Wetland | Township Line |
| Wet Ditch | Section Line |
| Index Contour (10') | |



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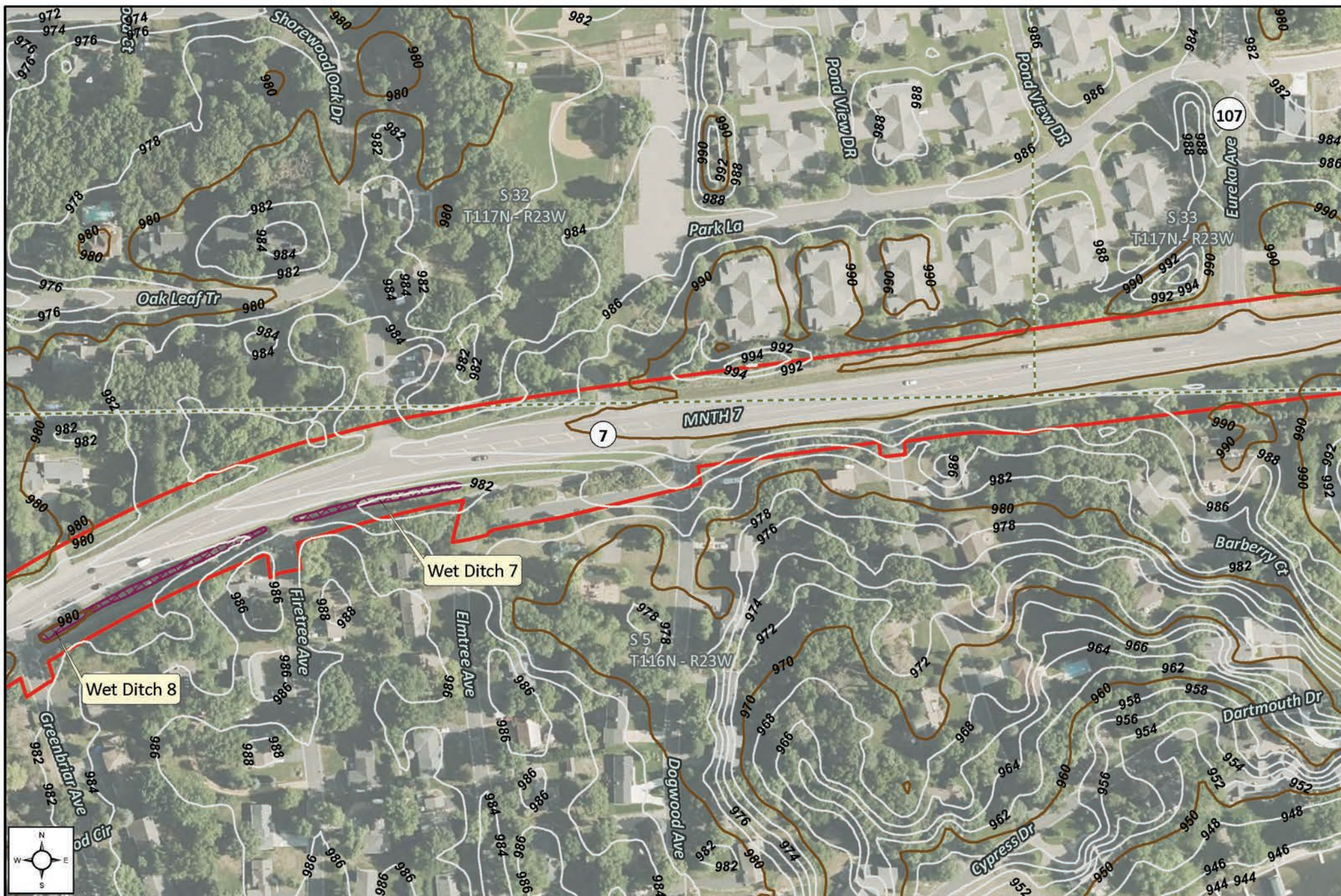
Interceptor 8253-327 **Aquatic Resource Delineation** **Carver & Hennepin Counties, MN**

Lidar Contours



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0 25 50 100
Feet

- Study Area
- Wet Ditch
- Index Contour (10')
- Intermediate Contour (2')
- Township Line
- Section Line



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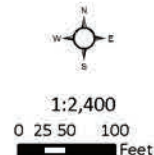
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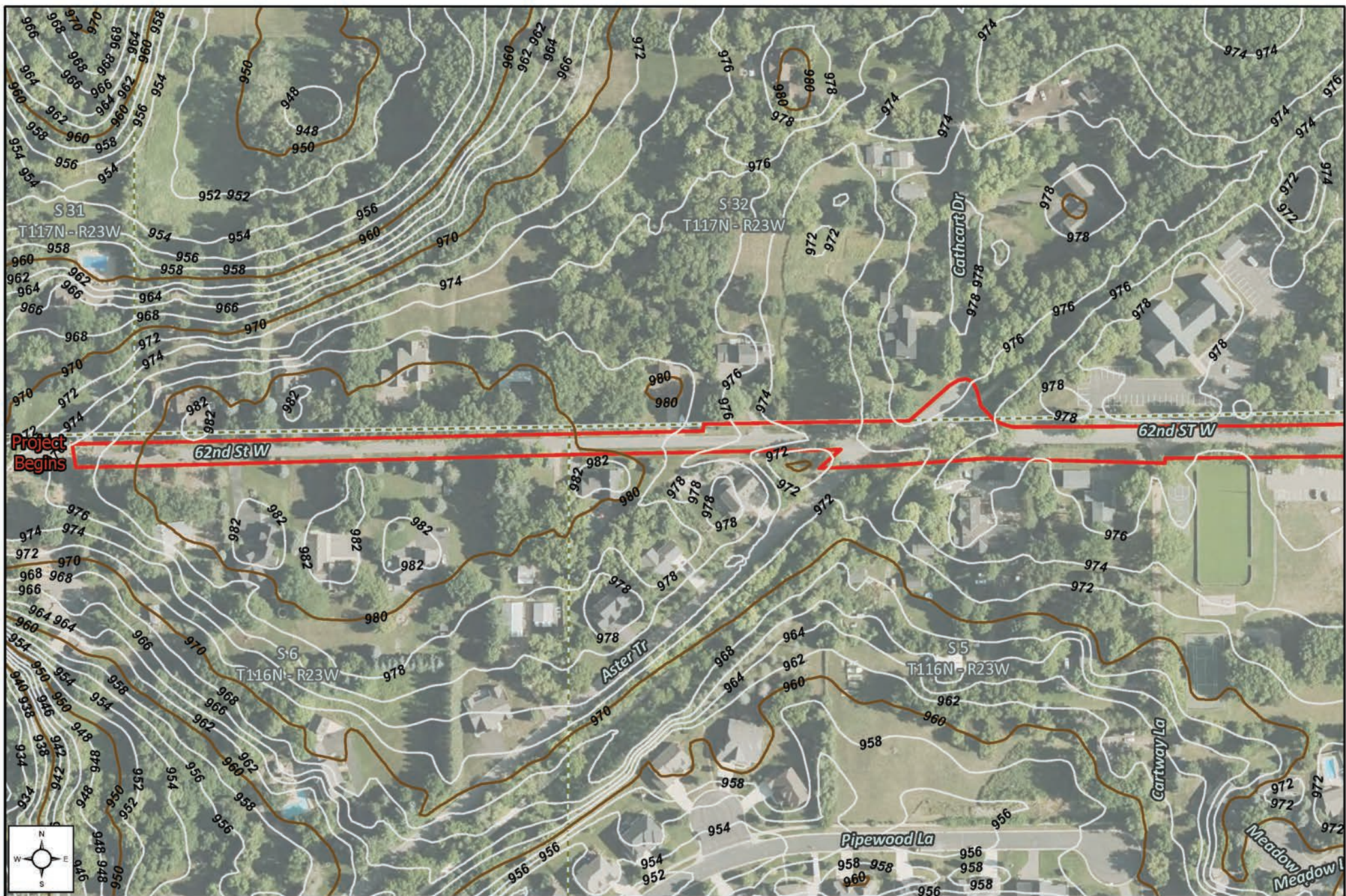
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Interceptor 8253-327 Aquatic Resource Delineation Carver & Hennepin Counties, MN

Lidar Contours



- Study Area
- Wet Ditch
- Index Contour (10')
- Intermediate Contour (2')
- Township Line
- Section Line



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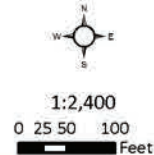
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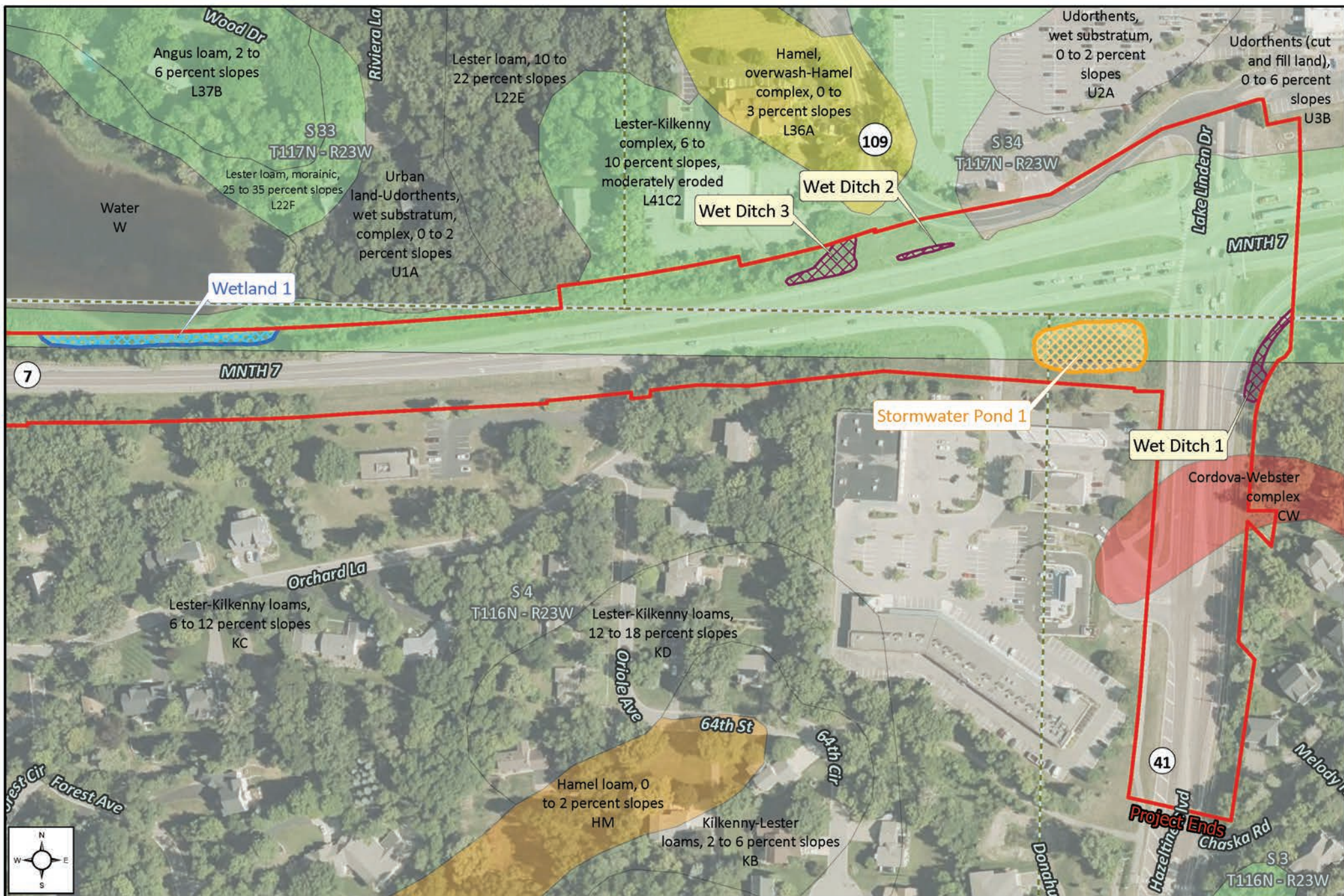
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Interceptor 8253-327 **Aquatic Resource Delineation** **Carver & Hennepin Counties, MN**

Lidar Contours



- Study Area
- Index Contour (10')
- Intermediate Contour (2')
- Township Line
- Section Line



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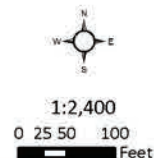
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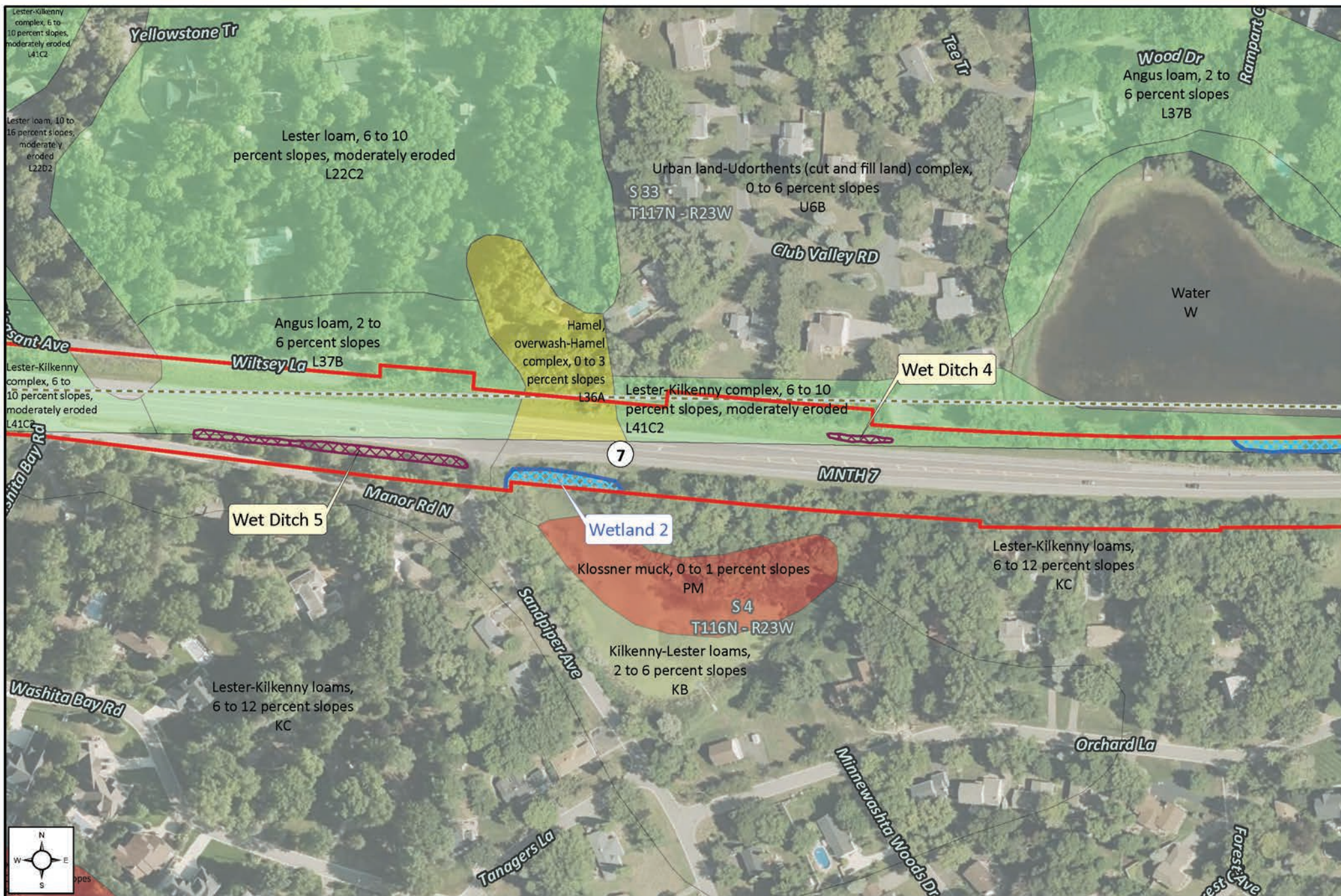
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Interceptor 8253-327 **Aquatic Resource Delineation** **Carver & Hennepin Counties, MN**

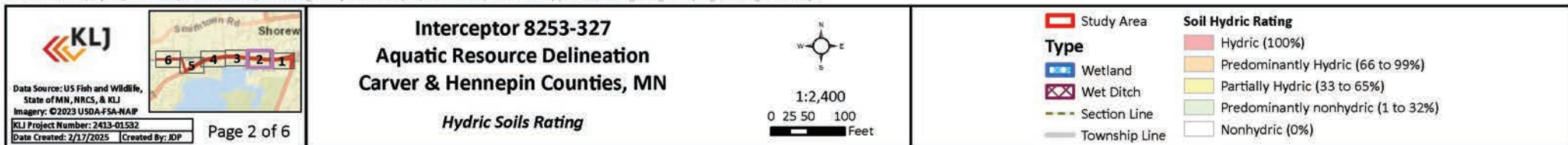
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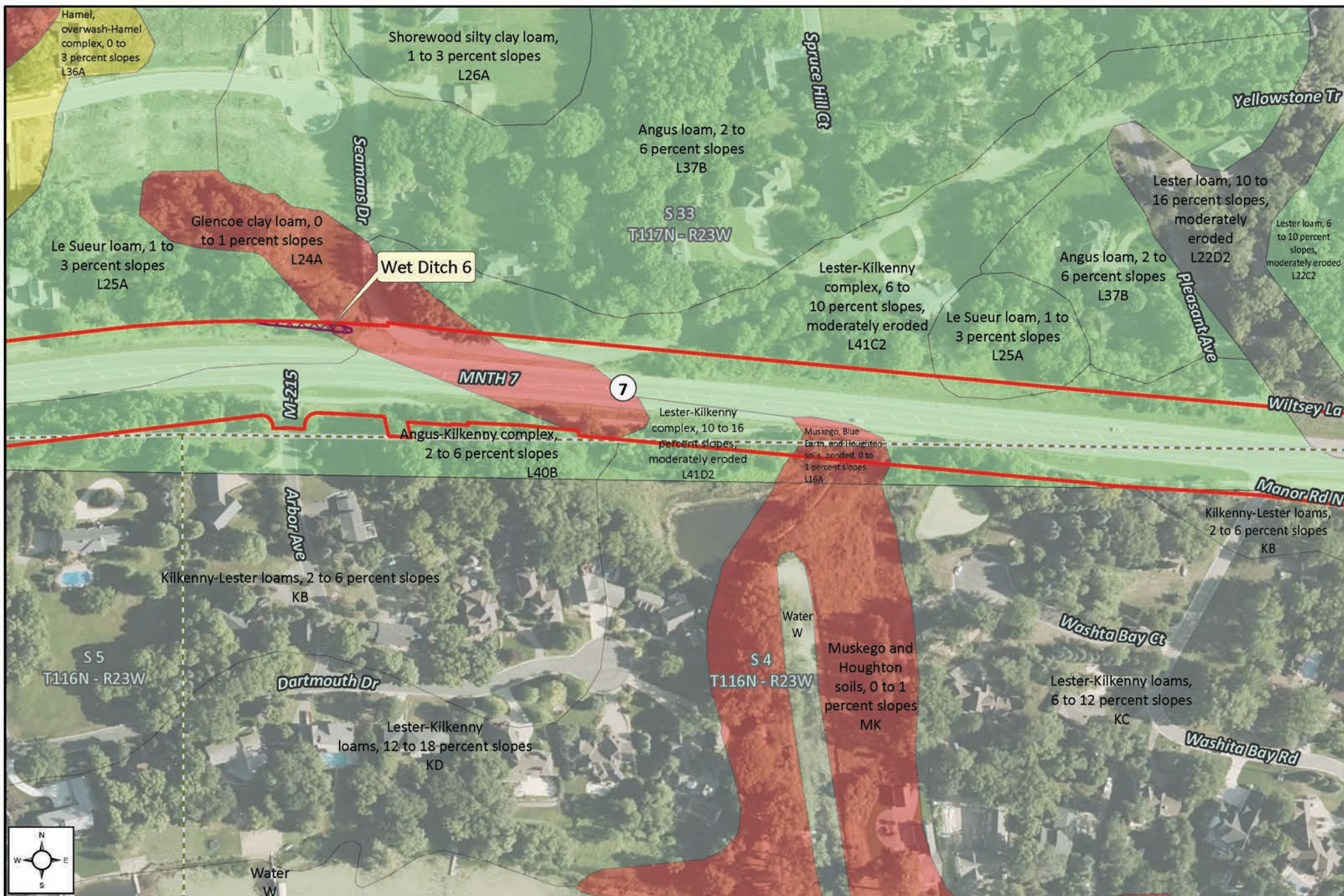
Study Area	Township Line
Type	Soil Hydric Rating
Stormwater Pond	Hydric (100%)
Wetland	Predominantly Hydric (66 to 99%)
Wet Ditch	Partially Hydric (33 to 65%)
Section Line	Predominantly nonhydric (1 to 32%)
	Nonhydric (0%)



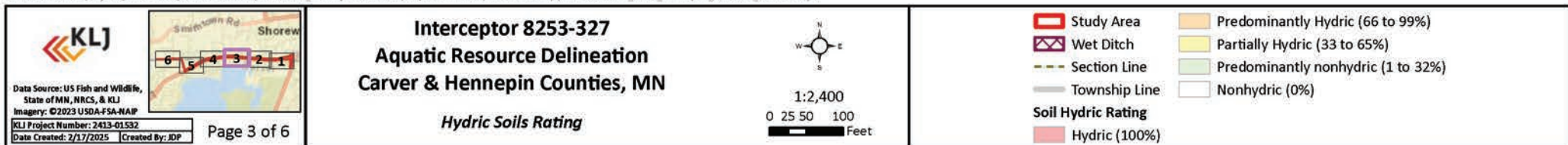
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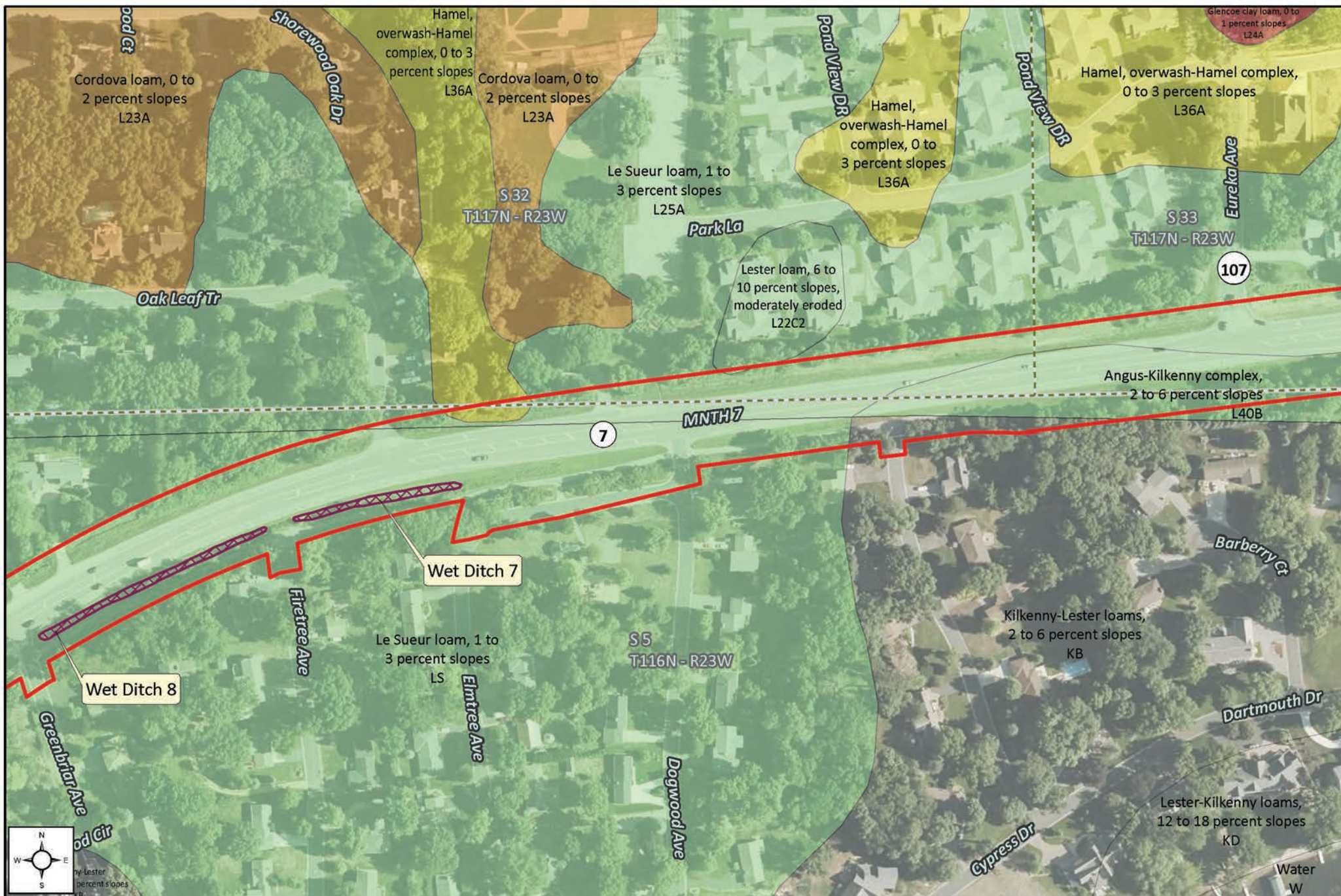


Hydric Soils Rating



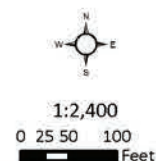
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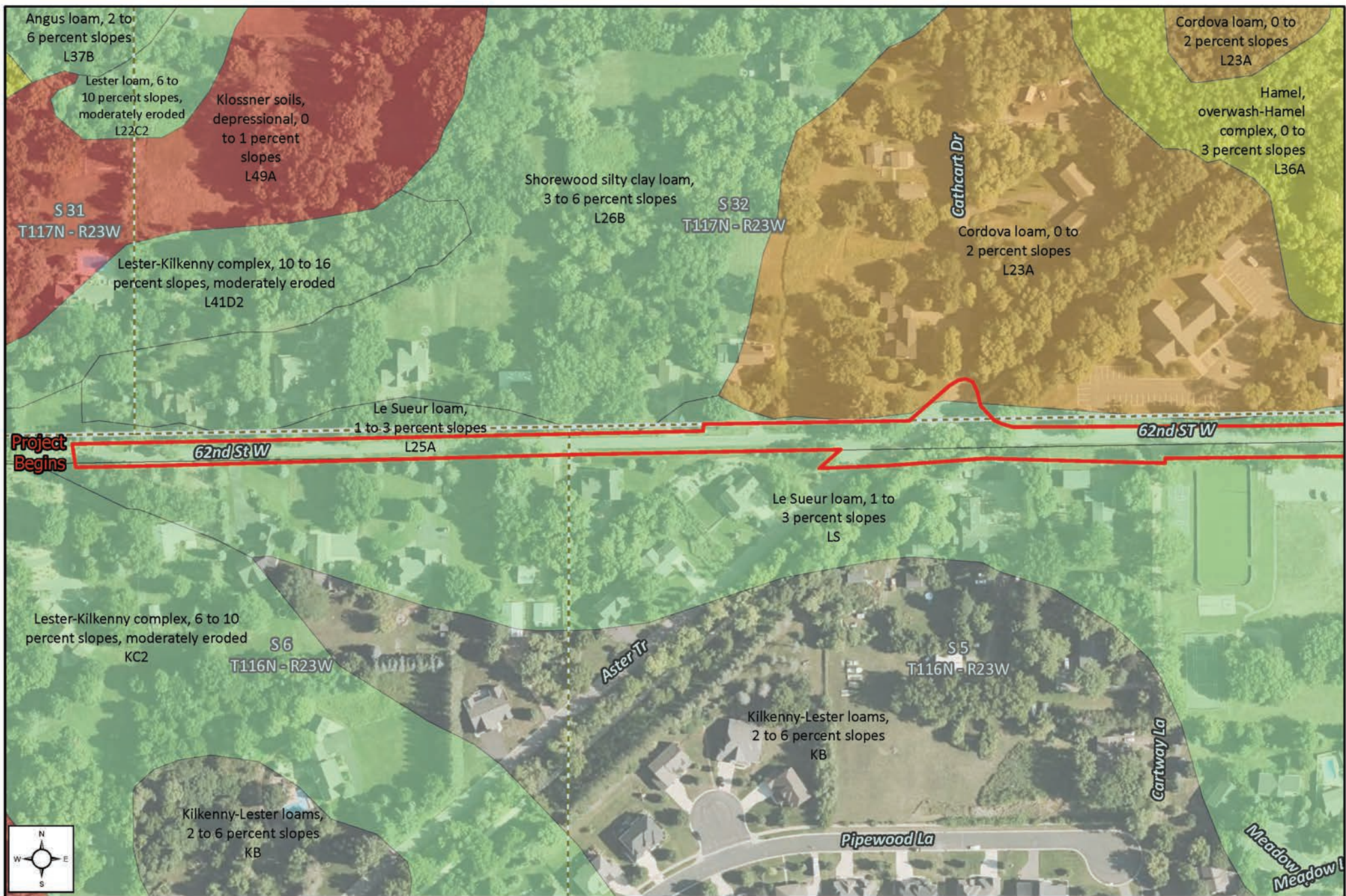


Interceptor 8253-327 **Aquatic Resource Delineation** **Carver & Hennepin Counties, MN**

Hydric Soils Rating



- Study Area
- Wet Ditch
- Section Line
- Township Line
- Soil Hydric Rating
- Hydric (100%)
- Predominantly Hydric (66 to 99%)
- Partially Hydric (33 to 65%)
- Predominantly nonhydric (1 to 32%)
- Nonhydric (0%)



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KLJ

Data Source: US Fish and Wildlife, State of MN, NRCS, & KLJ
Imagery: ©2023 USDA-FSA-NAP
KLJ Project Number: 2413-01532
Date Created: 2/14/2025 Created By: JDP

Interceptor 8253-327
Aquatic Resource Delineation
Carver & Hennepin Counties, MN

Hydric Soils Rating



1:2,400

0 25 50 100 Feet

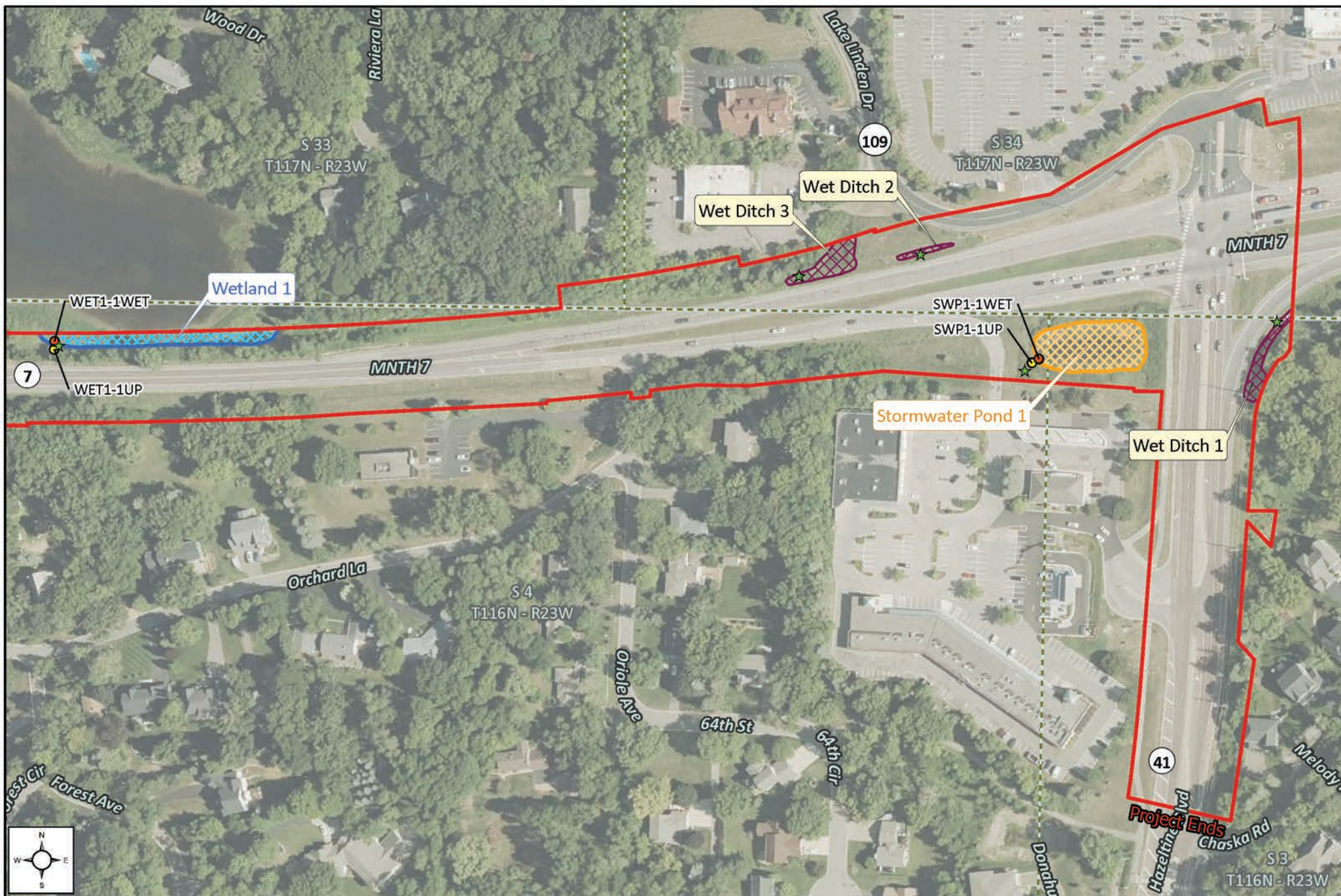
 Study Area	 Predominantly Hydric (66 to 99%)
 Section Line	 Partially Hydric (33 to 65%)
 Township Line	 Predominantly nonhydric (1 to 32%)
Soil Hydric Rating	 Nonhydric (0%)
 Hydric (100%)	

Page 6 of 6

Hydric Soils Rating

1:2,400

0 25 50 100 Feet



Document Path: K:\Projects\ProfServices\Brown & Caldwell\2413-01532_Interceptor 8253-327\GIS\Environmental\ArcPro WorkMap\Brown&Caldwell_MCES_Interceptor_8253-327_20250214.aprx

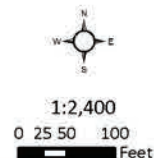
KLJ

Data Source: US Fish and Wildlife, State of MN, & KLJ
Imagery: ©2023 USDA-FSA-NAP
KLJ Project Number: 2413-01532
Date Created: 2/17/2025 Created By: JDP

Page 1 of 6

Interceptor 8253-327 **Aquatic Resource Delineation** **Carver & Hennepin Counties, MN**

Aquatic Resources



- | | | |
|---------------|-------------------|-----------------|
| Study Area | Photo Point | Stormwater Pond |
| Section Line | Upland Test Hole | Wetland |
| Township Line | Wetland Test Hole | Wet Ditch |



Document Path: K:\Projects\ProfServices\Brown & Caldwell\2413-01532_Interceptor 8253-327\GIS\Environmental\ArcPro WorkMap\Brown & Caldwell_MCES_Interceptor_8253-327_20250214.aprx



Data Source: US Fish and Wildlife,
State of MN, & KLJ
Imagery: ©2023 USDA-FSA-NAP

KLJ Project Number: 2413-01532
Date Created: 2/17/2025 Created By: JDP

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Interceptor 8253-327 **Aquatic Resource Delineation** **Carver & Hennepin Counties, MN**

Aquatic Resources



1:2,400
0 25 50 100
Feet

- Study Area
- Section Line
- Township Line
- ★ Photo Point
- Upland Test Hole
- Wetland Test Hole
- Wet Ditch



Document Path: K:\Projects\ProfServices\Brown & Caldwell\2413-01532_Interceptor 8253-327\GIS\Environmental\ArcPro WorkMap\Brown&Caldwell_MCES_Interceptor_8253-327_20250214.aprx

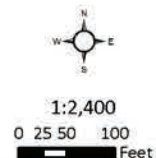
KLJ

Data Source: US Fish and Wildlife,
State of MN, & KLJ
Imagery: ©2023 USDA-FSA-NAP
KLJ Project Number: 2413-01532
Date Created: 2/17/2025 Created By: JDP

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Interceptor 8253-327
Aquatic Resource Delineation
Carver & Hennepin Counties, MN

Aquatic Resources



- Study Area
- Section Line
- Township Line
- ★ Photo Point
- Upland Test Hole
- Wetland Test Hole
- Wet Ditch



Document Path: K:\Projects\ProfServices\Brown & Caldwell\2413-01532_Interceptor 8253-327\GIS\Environmental\ArcPro WorkMap\Brown & Caldwell_MCES_Interceptor_8253-327_20250214.aprx



Data Source: US Fish and Wildlife,
State of MN, & KLJ
Imagery: ©2023 USDA-FSA-NAP
KLJ Project Number: 2413-01532
Date Created: 2/17/2025 Created By: JDP

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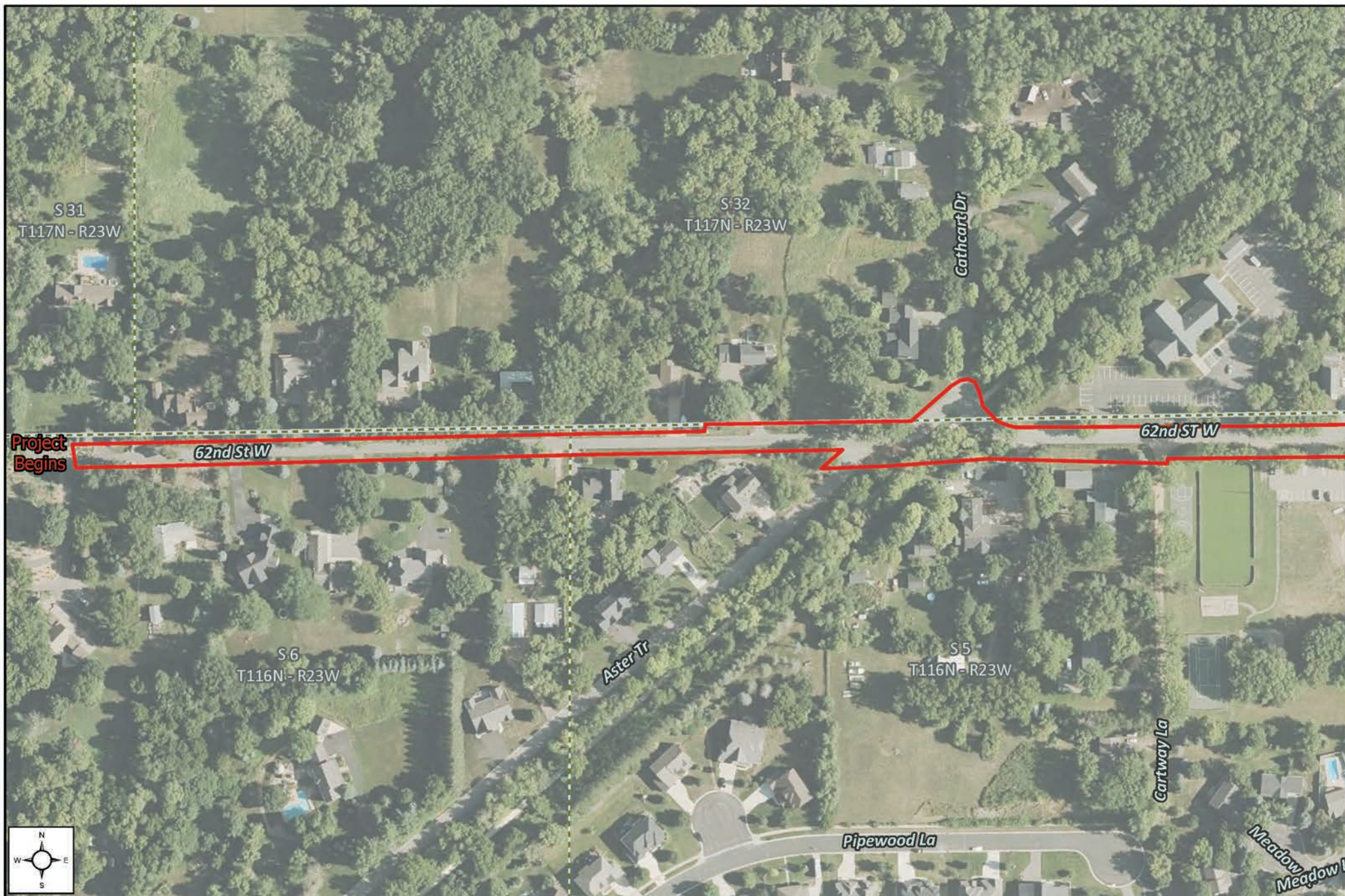
Interceptor 8253-327 **Aquatic Resource Delineation** **Carver & Hennepin Counties, MN**

Aquatic Resources



1:2,400
0 25 50 100
Feet

- Study Area
- Section Line
- Township Line
- ★ Photo Point
- Wet Ditch



Document Path: K:\Projects\ProfServices\Brown & Caldwell\2413-01532_Interceptor 8253-327\GIS\Environmental\ArcPro WorkMap\Brown & Caldwell_MCES_Interceptor_8253-327_20250214.aprx



Data Source: US Fish and Wildlife,
State of MN, & KLJ

Imagery: ©2023 USDA-FSA-NAP

KLJ Project Number: 2413-01532

Date Created: 2/14/2025 Created By: JDP

Page 6 of 6

Interceptor 8253-327 **Aquatic Resource Delineation** **Carver & Hennepin Counties, MN**

Aquatic Resources



1:2,400

0 25 50 100
Feet

- ▭ Study Area
- Section Line
- Township Line

The background of the page features a photograph of a beach with gentle waves washing onto the shore. A large, semi-transparent grey arrow is superimposed on the image, pointing from the bottom left towards the top right. The text is centered within the arrow.

Appendix B: Aquatic Resource Data Forms

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Interceptor 8253-327 City/County: Hennepin County Sampling Date: 2024-11-14
 Applicant/Owner: Brown & Caldwell State: Minnesota Sampling Point: SWP1-1WET
 Investigator(s): Evelyn Ostrowski Section, Township, Range: sec 04 T116N R023W
 Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave
 Slope (%): 0-2 Lat: 44.891317 Long: -93.581758 Datum: WGS84
 Soil Map Unit Name: Lester-Kilkenny complex, 6 to 10 percent slopes, moderately eroded NWI classification: PUBHx
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
 Are Vegetation ☐, Soil ☐, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ 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 ☐	Is the Sampled Area within a Wetland? Yes ☒ No ☐
Hydric Soil Present? Yes ☒ No ☐	
Wetland Hydrology Present? Yes ☒ No ☐	
Remarks: Sample point located in depression adjacent to roadway, in mapped NWI.	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30' radius</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>100.00</u> (A/B)																		
1. _____	_____	_____	_____																			
2. _____	_____	_____	_____																			
3. _____	_____	_____	_____																			
4. _____	_____	_____	_____																			
5. _____	_____	_____	_____	Prevalence Index worksheet: <table border="0"> <tr> <td>Total % Cover of:</td> <td>Multiply by:</td> </tr> <tr> <td>OBL species <u>95</u></td> <td>x 1 = <u>95</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>95</u> (A)</td> <td><u>95.00</u> (B)</td> </tr> <tr> <td colspan="4">Prevalence Index = B/A = <u>1.0</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>95</u>	x 1 = <u>95</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>95</u> (A)	<u>95.00</u> (B)	Prevalence Index = B/A = <u>1.0</u>			
Total % Cover of:	Multiply by:																					
OBL species <u>95</u>	x 1 = <u>95</u>																					
FACW species <u>0</u>	x 2 = <u>0</u>																					
FAC species <u>0</u>	x 3 = <u>0</u>																					
FACU species <u>0</u>	x 4 = <u>0</u>																					
UPL species <u>0</u>	x 5 = <u>0</u>																					
Column Totals: <u>95</u> (A)	<u>95.00</u> (B)																					
Prevalence Index = B/A = <u>1.0</u>																						
Sapling/Shrub Stratum (Plot size: <u>15' radius</u>)																						
1. _____	_____	_____	_____																			
2. _____	_____	_____	_____																			
3. _____	_____	_____	_____																			
4. _____	_____	_____	_____																			
5. _____	_____	_____	_____																			
Herb Stratum (Plot size: <u>5' radius</u>)																						
1. <u>Typha X glauca</u>	<u>95</u>	<u>Y</u>	<u>OBL</u>																			
2. _____	_____	_____	_____																			
3. _____	_____	_____	_____																			
4. _____	_____	_____	_____																			
5. _____	_____	_____	_____																			
6. _____	_____	_____	_____																			
7. _____	_____	_____	_____																			
8. _____	_____	_____	_____																			
9. _____	_____	_____	_____																			
10. _____	_____	_____	_____																			
Woody Vine Stratum (Plot size: <u>30' radius</u>)																						
1. _____	_____	_____	_____																			
2. _____	_____	_____	_____																			
0 = Total Cover																						
Remarks: (Include photo numbers here or on a separate sheet.)																						

SOIL

Sampling Point: SWP1-1WET

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		
0-4	10YR	2/1	100						MUCK	
4-10	10YR	4/2	90	10YR	5/6	10	C	M	CL	
10-24	10YR	5/2	90	10YR	5/6	10	C	M	SCL	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked 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 (TF12)
☐ 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:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Interceptor 8253-327 City/County: Hennepin County Sampling Date: 2024-11-14
 Applicant/Owner: Brown & Caldwell State: Minnesota Sampling Point: SWP1-1UP
 Investigator(s): Evelyn Ostrowski Section, Township, Range: sec 34 T117N R023W
 Landform (hillslope, terrace, etc.): Slope Local relief (concave, convex, none): Convex
 Slope (%): 3-7 Lat: 44.891336 Long: -93.581804 Datum: WGS84
 Soil Map Unit Name: Lester-Kilkenny complex, 6 to 10 percent slopes, moderately eroded NWI classification: 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> </u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>
Hydric Soil Present? Yes <u> </u> No <u>X</u>	
Wetland Hydrology Present? Yes <u> </u> No <u>X</u>	
Remarks: Sample point located on slope approximately 3 feet upslope from SWP1-1WET.	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30' radius</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</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>0.00</u> (A/B)														
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	Prevalence Index worksheet: <table border="0"> <tr> <td>Total % Cover of:</td> <td>Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>100</u></td> <td>x 4 = <u>400</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>100</u> (A)</td> <td><u>400.00</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>4.0</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>100</u>	x 4 = <u>400</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>100</u> (A)	<u>400.00</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>0</u>	x 2 = <u>0</u>																	
FAC species <u>0</u>	x 3 = <u>0</u>																	
FACU species <u>100</u>	x 4 = <u>400</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>100</u> (A)	<u>400.00</u> (B)																	
Sapling/Shrub Stratum (Plot size: <u>15' radius</u>)																		
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
Herb Stratum (Plot size: <u>5' radius</u>)																		
1. <u>Securigera varia</u>	<u>85</u>	<u>Y</u>	<u>FACU</u>															
2. <u>Solidago canadensis</u>	<u>15</u>	<u>N</u>	<u>FACU</u>															
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
6. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
7. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
8. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
9. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
10. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
Woody Vine Stratum (Plot size: <u>30' radius</u>)																		
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
0 = Total Cover				Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u> </u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
0 = Total Cover				Hydrophytic Vegetation Present? Yes <u> </u> No <u>✓</u>														
Remarks: (Include photo numbers here or on a separate sheet.)																		

SOIL

Sampling Point: SWP1-1UP

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		
0-9	10YR	3/2	100					SCL	
9-24	10YR	5/4	100					S	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked 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 (TF12)
- ☐ 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:

No hydrology indicators observed

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Interceptor 8253-327 City/County: Hennepin County Sampling Date: 2024-11-14
Applicant/Owner: Brown & Caldwell State: Minnesota Sampling Point: WET1-1WET
Investigator(s): Evelyn Ostrowski Section, Township, Range: sec 04 T116N R023W
Landform (hillslope, terrace, etc.): Floodplain Local relief (concave, convex, none): Concave
Slope (%): 0-2 Lat: 44.891371 Long: -93.587760 Datum: WGS84
Soil Map Unit Name: Lester-Kilkenny loams, 6 to 12 percent slopes NWI classification: 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 <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>
Hydric Soil Present? Yes <u>X</u> No <u> </u>	
Wetland Hydrology Present? Yes <u>X</u> No <u> </u>	
Remarks: Sample point located in floodplain area between road and pond, adjacent to mapped NWI.	

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: <u>30' radius</u>)	<u>Absolute % Cover</u>	<u>Dominant Species?</u>	<u>Indicator Status</u>	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>100.00</u> (A/B)																																
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>																																	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>																																	
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4. <u> </u>	<u> </u>	<u> </u>	<u> </u>																																	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>																																	
<u>0</u> = Total Cover																																				
<u>Sapling/Shrub Stratum</u> (Plot size: <u>15' radius</u>)	<u>Absolute % Cover</u>	<u>Dominant Species?</u>	<u>Indicator Status</u>	Prevalence Index worksheet: <table border="0"><tr><td colspan="2"><u>Total % Cover of:</u></td><td colspan="2"><u>Multiply by:</u></td></tr><tr><td>OBL species</td><td><u>0</u></td><td>x 1 =</td><td><u>0</u></td></tr><tr><td>FACW species</td><td><u>100</u></td><td>x 2 =</td><td><u>200</u></td></tr><tr><td>FAC species</td><td><u>0</u></td><td>x 3 =</td><td><u>0</u></td></tr><tr><td>FACU species</td><td><u>0</u></td><td>x 4 =</td><td><u>0</u></td></tr><tr><td>UPL species</td><td><u>0</u></td><td>x 5 =</td><td><u>0</u></td></tr><tr><td>Column Totals:</td><td><u>100</u> (A)</td><td></td><td><u>200.00</u> (B)</td></tr><tr><td colspan="4">Prevalence Index = B/A = <u>2.0</u></td></tr></table>	<u>Total % Cover of:</u>		<u>Multiply by:</u>		OBL species	<u>0</u>	x 1 =	<u>0</u>	FACW species	<u>100</u>	x 2 =	<u>200</u>	FAC species	<u>0</u>	x 3 =	<u>0</u>	FACU species	<u>0</u>	x 4 =	<u>0</u>	UPL species	<u>0</u>	x 5 =	<u>0</u>	Column Totals:	<u>100</u> (A)		<u>200.00</u> (B)	Prevalence Index = B/A = <u>2.0</u>			
<u>Total % Cover of:</u>		<u>Multiply by:</u>																																		
OBL species	<u>0</u>	x 1 =	<u>0</u>																																	
FACW species	<u>100</u>	x 2 =	<u>200</u>																																	
FAC species	<u>0</u>	x 3 =	<u>0</u>																																	
FACU species	<u>0</u>	x 4 =	<u>0</u>																																	
UPL species	<u>0</u>	x 5 =	<u>0</u>																																	
Column Totals:	<u>100</u> (A)		<u>200.00</u> (B)																																	
Prevalence Index = B/A = <u>2.0</u>																																				
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>																																	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>																																	
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4. <u> </u>	<u> </u>	<u> </u>	<u> </u>																																	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>																																	
<u>0</u> = Total Cover																																				
<u>Herb Stratum</u> (Plot size: <u>5' radius</u>)	<u>Absolute % Cover</u>	<u>Dominant Species?</u>	<u>Indicator Status</u>	Hydrophytic Vegetation Indicators: <u>X</u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																																
1. <u>Phalaris arundinacea</u>	<u>100</u>	<u>Y</u>	<u>FACW</u>																																	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>																																	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>																																	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>																																	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>																																	
6. <u> </u>	<u> </u>	<u> </u>	<u> </u>																																	
7. <u> </u>	<u> </u>	<u> </u>	<u> </u>																																	
8. <u> </u>	<u> </u>	<u> </u>	<u> </u>																																	
9. <u> </u>	<u> </u>	<u> </u>	<u> </u>																																	
10. <u> </u>	<u> </u>	<u> </u>	<u> </u>																																	
<u>100.0</u> = Total Cover																																				
<u>Woody Vine Stratum</u> (Plot size: <u>30' radius</u>)	<u>Absolute % Cover</u>	<u>Dominant Species?</u>	<u>Indicator Status</u>	Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>																																
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>																																	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>																																	
<u>0</u> = Total Cover																																				
Remarks: (Include photo numbers here or on a separate sheet.)																																				

SOIL

Sampling Point: WET1-1WET

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
0-4	10YR	3/2	100						SCL	
4-24	10YR	4/1	90	10YR	5/8	10	C	M/PL	CL	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked 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 (TF12)
- ☐ 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:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Interceptor 8253-327 City/County: Carver County Sampling Date: 2024-11-14
Applicant/Owner: Brown & Caldwell State: Minnesota Sampling Point: WET2-1UP
Investigator(s): Evelyn Ostrowski Section, Township, Range: sec 04 T116N R023W
Landform (hillslope, terrace, etc.): Slope Local relief (concave, convex, none): Convex
Slope (%): 8-15 Lat: 44.891364 Long: -93.587809 Datum: WGS84
Soil Map Unit Name: Lester-Kilkenny loams, 6 to 12 percent slopes NWI classification: 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.

<table style="width: 100%;"><tr><td style="width: 30%;">Hydrophytic Vegetation Present?</td><td style="width: 10%;">Yes <u> </u></td><td style="width: 10%;">No <u>X</u></td></tr><tr><td>Hydric Soil Present?</td><td>Yes <u> </u></td><td>No <u>X</u></td></tr><tr><td>Wetland Hydrology Present?</td><td>Yes <u> </u></td><td>No <u>X</u></td></tr></table>	Hydrophytic Vegetation Present?	Yes <u> </u>	No <u>X</u>	Hydric Soil Present?	Yes <u> </u>	No <u>X</u>	Wetland Hydrology Present?	Yes <u> </u>	No <u>X</u>	<table style="width: 100%;"><tr><td style="width: 60%;">Is the Sampled Area within a Wetland?</td><td style="width: 40%;">Yes <u> </u> No <u>X</u></td></tr></table>	Is the Sampled Area within a Wetland?	Yes <u> </u> No <u>X</u>
Hydrophytic Vegetation Present?	Yes <u> </u>	No <u>X</u>										
Hydric Soil Present?	Yes <u> </u>	No <u>X</u>										
Wetland Hydrology Present?	Yes <u> </u>	No <u>X</u>										
Is the Sampled Area within a Wetland?	Yes <u> </u> No <u>X</u>											
Remarks: Sample located on sloped wooded area, approximately 4 feet upslope from WET2-1WET.												

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30' radius</u>)	Absolute % Cover	Dominant Species?	Indicator Status															
1. <u>Fraxinus pennsylvanica</u>	25	Y	FACW	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>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50.00</u> (A/B)														
2. <u> </u>																		
3. <u> </u>																		
4. <u> </u>																		
5. <u> </u>																		
25.0 = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"><tr><td style="width: 40%;">Total % Cover of:</td><td style="width: 60%;">Multiply by:</td></tr><tr><td>OBL species <u>0</u></td><td>x 1 = <u>0</u></td></tr><tr><td>FACW species <u>25</u></td><td>x 2 = <u>50</u></td></tr><tr><td>FAC species <u>0</u></td><td>x 3 = <u>0</u></td></tr><tr><td>FACU species <u>65</u></td><td>x 4 = <u>260</u></td></tr><tr><td>UPL species <u>0</u></td><td>x 5 = <u>0</u></td></tr><tr><td>Column Totals: <u>90</u> (A)</td><td><u>310.00</u> (B)</td></tr></table> Prevalence Index = B/A = <u>3.44</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>25</u>	x 2 = <u>50</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>65</u>	x 4 = <u>260</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>90</u> (A)	<u>310.00</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>25</u>	x 2 = <u>50</u>																	
FAC species <u>0</u>	x 3 = <u>0</u>																	
FACU species <u>65</u>	x 4 = <u>260</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>90</u> (A)	<u>310.00</u> (B)																	
Sapling/Shrub Stratum (Plot size: <u>15' radius</u>)																		
1. <u> </u>																		
2. <u> </u>																		
3. <u> </u>																		
4. <u> </u>																		
0 = Total Cover																		
Herb Stratum (Plot size: <u>5' radius</u>)																		
1. <u>Solidago canadensis</u>	65	Y	FACU															
2. <u> </u>																		
3. <u> </u>																		
65.0 = Total Cover				Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u> </u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
Woody Vine Stratum (Plot size: <u>30' radius</u>)																		
1. <u> </u>																		
2. <u> </u>																		
0 = Total Cover																		
Remarks: (Include photo numbers here or on a separate sheet.)																		

SOIL

Sampling Point: WET2-1UP

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		
0-24	10YR	3/2	100					SCL	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked 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 (TF12)
- ☐ 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:

No hydrology indicators observed

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Interceptor 8253-327 City/County: Carver County Sampling Date: 2024-11-14
 Applicant/Owner: Brown & Caldwell State: Minnesota Sampling Point: WET2-1WET
 Investigator(s): Evelyn Ostrowski Section, Township, Range: sec 04 T116N R023W
 Landform (hillslope, terrace, etc.): Floodplain Local relief (concave, convex, none): Concave
 Slope (%): 0-2 Lat: 44.891230 Long: -93.592340 Datum: WGS84
 Soil Map Unit Name: Lester-Kilkenny loams, 6 to 12 percent slopes NWI classification: 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 <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>
Hydric Soil Present? Yes <u>X</u> No <u> </u>	
Wetland Hydrology Present? Yes <u>X</u> No <u> </u>	
Remarks: Sample point located in wooded floodplain, adjacent to road.	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30' radius</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>5</u> (A) Total Number of Dominant Species Across All Strata: <u>5</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.00</u> (A/B)														
1. <u>Ulmus americana</u>	<u>25</u>	<u>Y</u>	<u>FACW</u>															
2. <u>Fraxinus pennsylvanica</u>	<u>15</u>	<u>Y</u>	<u>FACW</u>															
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
<u>40.0</u> = Total Cover																		
Sapling/Shrub Stratum (Plot size: <u>15' radius</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Prevalence Index worksheet: <table border="0"> <tr> <td>Total % Cover of:</td> <td>Multiply by:</td> </tr> <tr> <td>OBL species <u>60</u></td> <td>x 1 = <u>60</u></td> </tr> <tr> <td>FACW species <u>60</u></td> <td>x 2 = <u>120</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>120</u> (A)</td> <td><u>180.00</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>1.5</u>	Total % Cover of:	Multiply by:	OBL species <u>60</u>	x 1 = <u>60</u>	FACW species <u>60</u>	x 2 = <u>120</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>120</u> (A)	<u>180.00</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>60</u>	x 1 = <u>60</u>																	
FACW species <u>60</u>	x 2 = <u>120</u>																	
FAC species <u>0</u>	x 3 = <u>0</u>																	
FACU species <u>0</u>	x 4 = <u>0</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>120</u> (A)	<u>180.00</u> (B)																	
1. <u>Frangula alnus</u>	<u>20</u>	<u>Y</u>	<u>FACW</u>															
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
<u>20.0</u> = Total Cover																		
Herb Stratum (Plot size: <u>5' radius</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Indicators: <u>X</u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
1. <u>Carex lacustris</u>	<u>45</u>	<u>Y</u>	<u>OBL</u>															
2. <u>Typha X glauca</u>	<u>15</u>	<u>Y</u>	<u>OBL</u>															
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
6. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
7. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
8. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
9. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
10. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
<u>60.0</u> = Total Cover																		
Woody Vine Stratum (Plot size: <u>30' radius</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>														
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
<u>0</u> = Total Cover																		
Remarks: (Include photo numbers here or on a separate sheet.)																		

SOIL

Sampling Point: WET2-1WET

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		
0-4	10YR	2/1	100					MUCK	
4-30	10YR	5/1	100					CL	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked 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 (TF12)
☐ 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:

Overcast/cloudy weather conditions

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)

Secondary Indicators (minimum of two required)

- ☐ 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)

- ☐ 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): 1
 Saturation Present? Yes ☒ No ☐ Depth (inches): 0
 (includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No ☐

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

Remarks:

Standing water approximately 1 foot from sample site

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Interceptor 8253-327 City/County: Carver County Sampling Date: 2024-11-14
 Applicant/Owner: Brown & Caldwell State: Minnesota Sampling Point: WET2-1UP
 Investigator(s): Evelyn Ostrowski Section, Township, Range: sec 04 T116N R023W
 Landform (hillslope, terrace, etc.): Shoulder Local relief (concave, convex, none): Convex
 Slope (%): 3-7 Lat: 44.891247 Long: -93.592414 Datum: WGS84
 Soil Map Unit Name: Lester-Kilkenny loams, 6 to 12 percent slopes NWI classification: 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 <u> </u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>
Hydric Soil Present? Yes <u> </u> No <u>X</u>	
Wetland Hydrology Present? Yes <u> </u> No <u>X</u>	
Remarks: Sample point located on shoulder adjacent to road, approximately 4 feet upslope from WET2-1WET.	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30' radius</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>66.67</u> (A/B)														
1. <u>Acer saccharinum</u>	<u>20</u>	<u>Y</u>	<u>FACW</u>															
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	Prevalence Index worksheet: <table border="1"> <thead> <tr> <th>Total % Cover of:</th> <th>Multiply by:</th> </tr> </thead> <tbody> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>20</u></td> <td>x 2 = <u>40</u></td> </tr> <tr> <td>FAC species <u>85</u></td> <td>x 3 = <u>255</u></td> </tr> <tr> <td>FACU species <u>30</u></td> <td>x 4 = <u>120</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>135</u> (A)</td> <td><u>415.00</u> (B)</td> </tr> </tbody> </table> Prevalence Index = B/A = <u>3.07</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>20</u>	x 2 = <u>40</u>	FAC species <u>85</u>	x 3 = <u>255</u>	FACU species <u>30</u>	x 4 = <u>120</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>135</u> (A)	<u>415.00</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>20</u>	x 2 = <u>40</u>																	
FAC species <u>85</u>	x 3 = <u>255</u>																	
FACU species <u>30</u>	x 4 = <u>120</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>135</u> (A)	<u>415.00</u> (B)																	
Sapling/Shrub Stratum (Plot size: <u>15' radius</u>)																		
1. <u>Juglans nigra</u>	<u>15</u>	<u>Y</u>	<u>FACU</u>															
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
Herb Stratum (Plot size: <u>5' radius</u>)																		
1. <u>Poa pratensis</u>	<u>85</u>	<u>Y</u>	<u>FAC</u>															
2. <u>Bromus inermis</u>	<u>15</u>	<u>N</u>	<u>FACU</u>															
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>														
6. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
7. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
8. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
9. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
10. <u> </u>	<u> </u>	<u> </u>	<u> </u>	Woody Vine Stratum (Plot size: <u>30' radius</u>)														
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
Remarks: (Include photo numbers here or on a separate sheet.)																		

SOIL

Sampling Point: WET2-1UP

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		
0-24	10YR	3/2	100					SCL	Traces of gravel

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked 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 (TF12)
- ☐ 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:

No hydrology indicators observed

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Interceptor 8253-327 City/County: Carver County Sampling Date: 2024-11-14
 Applicant/Owner: Brown & Caldwell State: Minnesota Sampling Point: WET DITCH 5-1WE1
 Investigator(s): Evelyn Ostrowski Section, Township, Range: sec 04 T116N R023W
 Landform (hillslope, terrace, etc.): Ditch Local relief (concave, convex, none): Concave
 Slope (%): 0-2 Lat: 44.891419 Long: -93.593683 Datum: WGS84
 Soil Map Unit Name: Kilkenny-Lester loams, 2 to 6 percent slopes NWI classification: 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 <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>
Hydric Soil Present? Yes <u>X</u> No <u> </u>	
Wetland Hydrology Present? Yes <u>X</u> No <u> </u>	
Remarks: Sample point located in ditch along road.	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30' radius</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.00</u> (A/B)																
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
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Total % Cover of:	Multiply by:																			
OBL species <u>20</u>	x 1 = <u>20</u>																			
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Column Totals: <u>85</u> (A)	<u>150.00</u> (B)																			
Prevalence Index = B/A = <u>1.76</u>																				
Sapling/Shrub Stratum (Plot size: <u>15' radius</u>)				Hydrophytic Vegetation Indicators: <u>X</u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain)																
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
Herb Stratum (Plot size: <u>5' radius</u>)				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
1. <u>Phalaris arundinacea</u>	<u>65</u>	<u>Y</u>	<u>FACW</u>																	
2. <u>Typha X glauca</u>	<u>20</u>	<u>Y</u>	<u>OBL</u>																	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
Woody Vine Stratum (Plot size: <u>30' radius</u>)				Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>																
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
15% bare ground/dead plant material																				

SOIL

Sampling Point: WET DITCH 5-1WE1

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
0-24	10YR	4/1	95	10YR	5/6	5	C	M	SCL	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked 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 (TF12)
- ☐ 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): 1
Saturation Present? Yes ☒ No ☐ Depth (inches): 0
(includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No ☐

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

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Interceptor 8253-327 City/County: Carver County Sampling Date: 2024-11-14
 Applicant/Owner: Brown & Caldwell State: Minnesota Sampling Point: WET DITCH 5-1UP
 Investigator(s): Evelyn Ostrowski Section, Township, Range: sec 04 T116N R023W
 Landform (hillslope, terrace, etc.): Slope Local relief (concave, convex, none): Convex
 Slope (%): 8-15 Lat: 44.891404 Long: -93.593678 Datum: WGS84
 Soil Map Unit Name: Kilkenny-Lester loams, 2 to 6 percent slopes NWI classification: 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 <u> </u> Hydric Soil Present? Yes <u> </u> No <u>X</u> Wetland Hydrology Present? Yes <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>
Remarks: Sample point located on slope, approximately 3 ft upslope from WET DITCH 5-1WET.	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30' radius</u>)	Absolute % Cover	Dominant Species?	Indicator Status															
1. <u>Rhamnus cathartica</u>	<u>15</u>	<u>Y</u>	<u>FAC</u>	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>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>66.67</u> (A/B)														
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
<u>15.0</u> = Total Cover																		
Sapling/Shrub Stratum (Plot size: <u>15' radius</u>)				Prevalence Index worksheet: <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 50%;">Total % Cover of:</th> <th style="width: 50%;">Multiply by:</th> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>10</u></td> <td>x 2 = <u>20</u></td> </tr> <tr> <td>FAC species <u>15</u></td> <td>x 3 = <u>45</u></td> </tr> <tr> <td>FACU species <u>100</u></td> <td>x 4 = <u>400</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>125</u> (A)</td> <td><u>465.00</u> (B)</td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>10</u>	x 2 = <u>20</u>	FAC species <u>15</u>	x 3 = <u>45</u>	FACU species <u>100</u>	x 4 = <u>400</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>125</u> (A)	<u>465.00</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>10</u>	x 2 = <u>20</u>																	
FAC species <u>15</u>	x 3 = <u>45</u>																	
FACU species <u>100</u>	x 4 = <u>400</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>125</u> (A)	<u>465.00</u> (B)																	
1. <u>Thuja occidentalis</u>	<u>10</u>	<u>Y</u>	<u>FACW</u>															
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
<u>10.0</u> = Total Cover																		
Herb Stratum (Plot size: <u>5' radius</u>)				Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
1. <u>Bromus inermis</u>	<u>85</u>	<u>Y</u>	<u>FACU</u>															
2. <u>Solidago canadensis</u>	<u>15</u>	<u>N</u>	<u>FACU</u>															
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
6. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
7. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
8. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
9. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
10. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
<u>100.0</u> = Total Cover																		
Woody Vine Stratum (Plot size: <u>30' radius</u>)				Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>														
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
<u>0</u> = Total Cover																		
Remarks: (Include photo numbers here or on a separate sheet.)																		

SOIL

Sampling Point: WET DITCH 5-1UP

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		
0-6	10YR	3/2	100					SCL	
6-24	10YR	3/2	65					SCL	Mixed matrix/traces of gravel
	10YR	2/2	35					SCL	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked 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 (TF12)
- ☐ 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:

No hydrology indicators observed

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Interceptor 8253-327 City/County: Hennepin County Sampling Date: 2024-11-14
 Applicant/Owner: Brown & Caldwell State: Minnesota Sampling Point: WET DITCH 6-1WE1
 Investigator(s): Evelyn Ostrowski Section, Township, Range: sec 33 T117N R023W
 Landform (hillslope, terrace, etc.): Ditch Local relief (concave, convex, none): Concave
 Slope (%): 0-2 Lat: 44.892203 Long: -93.601048 Datum: WGS84
 Soil Map Unit Name: Le Sueur loam, 1 to 3 percent slopes NWI classification: 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 <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>
Hydric Soil Present? Yes <u>X</u> No <u> </u>	
Wetland Hydrology Present? Yes <u>X</u> No <u> </u>	
Remarks: Sample point located in ditch along road.	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30' radius</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>100.00</u> (A/B)																
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	Prevalence Index worksheet: <table border="0"> <tr> <td>Total % Cover of:</td> <td>Multiply by:</td> </tr> <tr> <td>OBL species <u>95</u></td> <td>x 1 = <u>95</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>95</u> (A)</td> <td><u>95.00</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>1.0</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>95</u>	x 1 = <u>95</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>95</u> (A)	<u>95.00</u> (B)	Prevalence Index = B/A = <u>1.0</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>95</u>	x 1 = <u>95</u>																			
FACW species <u>0</u>	x 2 = <u>0</u>																			
FAC species <u>0</u>	x 3 = <u>0</u>																			
FACU species <u>0</u>	x 4 = <u>0</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>95</u> (A)	<u>95.00</u> (B)																			
Prevalence Index = B/A = <u>1.0</u>																				
Sapling/Shrub Stratum (Plot size: <u>15' radius</u>)				Hydrophytic Vegetation Indicators: <u>X</u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain)																
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
Herb Stratum (Plot size: <u>5' radius</u>)																				
1. <u>Typha X glauca</u>	<u>95</u>	<u>Y</u>	<u>OBL</u>																	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>																
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
6. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
7. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
8. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
9. <u> </u>	<u> </u>	<u> </u>	<u> </u>	Woody Vine Stratum (Plot size: <u>30' radius</u>)																
10. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
Woody Vine Stratum (Plot size: <u>30' radius</u>)																				
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	Remarks: (Include photo numbers here or on a separate sheet.)																
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
6. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
7. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	

SOIL

Sampling Point: WET DITCH 6-1WE1

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		
0-6	10YR	2/1	100					SCL	
6-24	10YR	4/2	95	10YR	5/6	5	C	M	SCL

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked 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 (TF12)
- ☐ 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): 8
Saturation Present? Yes ☒ No ☐ Depth (inches): 6
(includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No ☐

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

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Interceptor 8253-327 City/County: Hennepin County Sampling Date: 2024-11-14
 Applicant/Owner: Brown & Caldwell State: Minnesota Sampling Point: WET DITCH 6-1UP
 Investigator(s): Evelyn Ostrowski Section, Township, Range: sec 33 T117N R023W
 Landform (hillslope, terrace, etc.): Slope Local relief (concave, convex, none): Convex
 Slope (%): 8-15 Lat: 44.892182 Long: -93.601065 Datum: WGS84
 Soil Map Unit Name: Le Sueur loam, 1 to 3 percent slopes NWI classification: 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> </u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>
Hydric Soil Present? Yes <u> </u> No <u>X</u>	
Wetland Hydrology Present? Yes <u> </u> No <u>X</u>	
Remarks: Sample point located on slope, approximately 4 feet upslope from WET DITCH 6-1WET.	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30' radius</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</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>0.00</u> (A/B)														
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
<u>0</u> = Total Cover																		
Sapling/Shrub Stratum (Plot size: <u>15' radius</u>)																		
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	Prevalence Index worksheet: <table border="0"> <tr> <td>Total % Cover of:</td> <td>Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>3</u></td> <td>x 2 = <u>6</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>95</u></td> <td>x 4 = <u>380</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>98</u> (A)</td> <td><u>386.00</u> (B)</td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>3</u>	x 2 = <u>6</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>95</u>	x 4 = <u>380</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>98</u> (A)	<u>386.00</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>3</u>	x 2 = <u>6</u>																	
FAC species <u>0</u>	x 3 = <u>0</u>																	
FACU species <u>95</u>	x 4 = <u>380</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>98</u> (A)	<u>386.00</u> (B)																	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
<u>0</u> = Total Cover																		
Herb Stratum (Plot size: <u>5' radius</u>)																		
1. <u>Bromus inermis</u>	<u>75</u>	<u>Y</u>	<u>FACU</u>															
2. <u>Solidago canadensis</u>	<u>15</u>	<u>N</u>	<u>FACU</u>															
3. <u>Euphorbia maculata</u>	<u>5</u>	<u>N</u>	<u>FACU</u>															
4. <u>Phalaris arundinacea</u>	<u>3</u>	<u>N</u>	<u>FACW</u>															
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
6. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
7. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
8. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
9. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
10. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
<u>98.0</u> = Total Cover																		
Woody Vine Stratum (Plot size: <u>30' radius</u>)																		
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	Hydrophytic Vegetation Indicators: <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>2</u> - Dominance Test is >50% <u>3</u> - Prevalence Index is ≤3.0 ¹ <u>4</u> - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
<u>0</u> = Total Cover																		
Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>																		
Remarks: (Include photo numbers here or on a separate sheet.)																		

SOIL

Sampling Point: WET DITCH 6-1UP

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		
0-24	10YR	3/2	100					SCL	Traces of gravel

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked 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 (TF12)
- ☐ 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:

No hydrology indicators observed

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Interceptor 8253-327 City/County: Carver County Sampling Date: 2024-11-14
 Applicant/Owner: Brown & Caldwell State: Minnesota Sampling Point: WET DITCH 7-1WE1
 Investigator(s): Evelyn Ostrowski Section, Township, Range: sec 05 T116N R023W
 Landform (hillslope, terrace, etc.): Ditch Local relief (concave, convex, none): Concave
 Slope (%): 0-2 Lat: 44.891282 Long: -93.608374 Datum: WGS84
 Soil Map Unit Name: Le Sueur loam, 1 to 3 percent slopes NWI classification: 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 <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>
Hydric Soil Present? Yes <u>X</u> No <u> </u>	
Wetland Hydrology Present? Yes <u>X</u> No <u> </u>	
Remarks: Sample point located in ditch along road.	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30' radius</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>100.00</u> (A/B)														
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	Prevalence Index worksheet: <table border="0"> <tr> <td>Total % Cover of:</td> <td>Multiply by:</td> </tr> <tr> <td>OBL species <u>10</u></td> <td>x 1 = <u>10</u></td> </tr> <tr> <td>FACW species <u>85</u></td> <td>x 2 = <u>170</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>95</u> (A)</td> <td><u>180.00</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>1.89</u>	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 <u>0</u>	x 3 = <u>0</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>95</u> (A)	<u>180.00</u> (B)
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 <u>0</u>	x 3 = <u>0</u>																	
FACU species <u>0</u>	x 4 = <u>0</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>95</u> (A)	<u>180.00</u> (B)																	
Sapling/Shrub Stratum (Plot size: <u>15' radius</u>)																		
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
Herb Stratum (Plot size: <u>5' radius</u>)																		
1. <u>Phalaris arundinacea</u>	<u>80</u>	<u>Y</u>	<u>FACW</u>															
2. <u>Typha X glauca</u>	<u>10</u>	<u>N</u>	<u>OBL</u>															
3. <u>Urtica dioica</u>	<u>5</u>	<u>N</u>	<u>FACW</u>															
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
6. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
7. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
8. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
9. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
10. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
Woody Vine Stratum (Plot size: <u>30' radius</u>)																		
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
Remarks: (Include photo numbers here or on a separate sheet.)				Hydrophytic Vegetation Indicators: <u>X</u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														

SOIL

Sampling Point: WET DITCH 7-1WE1

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		
0-6	10YR	2/1	100					SCL	
6-24	10YR	4/2	65	10YR	5/6	5	C	M	Mixed matrix/Traces of gravel
	10YR	2/1	30					SCL	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked 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 (TF12)
☐ 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): 10
 Saturation Present? Yes ☒ No ☐ Depth (inches): 8
 (includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No ☐

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

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Interceptor 8253-327 City/County: Carver County Sampling Date: 2024-11-14
 Applicant/Owner: Brown & Caldwell State: Minnesota Sampling Point: WET DITCH 7-1UP
 Investigator(s): Evelyn Ostrowski Section, Township, Range: sec 05 T116N R023W
 Landform (hillslope, terrace, etc.): Slope Local relief (concave, convex, none): Convex
 Slope (%): 3-7 Lat: 44.891315 Long: -93.608350 Datum: WGS84
 Soil Map Unit Name: Le Sueur loam, 1 to 3 percent slopes NWI classification: 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> </u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>
Hydric Soil Present? Yes <u> </u> No <u>X</u>	
Wetland Hydrology Present? Yes <u> </u> No <u>X</u>	
Remarks: Sample point located on slope, approximately 2 ft upslope from WET DITCH 7-1WET.	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30' radius</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0.00</u> (A/B)														
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
<u>0</u> = Total Cover				Prevalence Index worksheet: <table border="0"> <tr> <td>Total % Cover of:</td> <td>Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>5</u></td> <td>x 3 = <u>15</u></td> </tr> <tr> <td>FACU species <u>90</u></td> <td>x 4 = <u>360</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>95</u> (A)</td> <td><u>375.00</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>3.95</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>5</u>	x 3 = <u>15</u>	FACU species <u>90</u>	x 4 = <u>360</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>95</u> (A)	<u>375.00</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>0</u>	x 2 = <u>0</u>																	
FAC species <u>5</u>	x 3 = <u>15</u>																	
FACU species <u>90</u>	x 4 = <u>360</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>95</u> (A)	<u>375.00</u> (B)																	
<u>0</u> = Total Cover																		
Sapling/Shrub Stratum (Plot size: <u>15' radius</u>)																		
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
<u>0</u> = Total Cover																		
Herb Stratum (Plot size: <u>5' radius</u>)																		
1. <u>Bromus inermis</u>	<u>60</u>	<u>Y</u>	<u>FACU</u>															
2. <u>Cirsium arvense</u>	<u>25</u>	<u>Y</u>	<u>FACU</u>															
3. <u>Solidago canadensis</u>	<u>5</u>	<u>N</u>	<u>FACU</u>															
4. <u>Setaria pumila</u>	<u>5</u>	<u>N</u>	<u>FAC</u>															
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
6. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
7. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
8. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
9. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
10. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
<u>95.0</u> = Total Cover																		
Woody Vine Stratum (Plot size: <u>30' radius</u>)																		
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
<u>0</u> = Total Cover																		
Remarks: (Include photo numbers here or on a separate sheet.)																		

SOIL

Sampling Point: WET DITCH 7-1UP

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		
0-12	10YR	3/2	100					SCL	
12-24	10YR	3/2						SCL	Mixed matrix/gravelly
	10YR	4/2						SCL	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked 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 (TF12)
- ☐ 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:

No hydrology indicators observed

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Interceptor 8253-327 City/County: Hennepin County Sampling Date: 2024-11-14
 Applicant/Owner: Brown & Caldwell State: Minnesota Sampling Point: NO1-1UP
 Investigator(s): Evelyn Ostrowski Section, Township, Range: sec 33 T117N R023W
 Landform (hillslope, terrace, etc.): Ditch Local relief (concave, convex, none): Concave
 Slope (%): 0-2 Lat: 44.892089 Long: -93.603062 Datum: WGS84
 Soil Map Unit Name: Le Sueur loam, 1 to 3 percent slopes NWI classification: 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 <u> </u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>
Hydric Soil Present? Yes <u> </u> No <u>X</u>	
Wetland Hydrology Present? Yes <u>X</u> No <u> </u>	
Remarks: Sample point located in mowed ditch along road with evidence of wetland vegetation.	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30' radius</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>100.00</u> (A/B)																
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	Prevalence Index worksheet: <table border="0"> <tr> <td>Total % Cover of:</td> <td>Multiply by:</td> </tr> <tr> <td>OBL species <u>45</u></td> <td>x 1 = <u>45</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>45</u> (A)</td> <td><u>45.00</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>1.0</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>45</u>	x 1 = <u>45</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>45</u> (A)	<u>45.00</u> (B)	Prevalence Index = B/A = <u>1.0</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>45</u>	x 1 = <u>45</u>																			
FACW species <u>0</u>	x 2 = <u>0</u>																			
FAC species <u>0</u>	x 3 = <u>0</u>																			
FACU species <u>0</u>	x 4 = <u>0</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>45</u> (A)	<u>45.00</u> (B)																			
Prevalence Index = B/A = <u>1.0</u>																				
Sapling/Shrub Stratum (Plot size: <u>15' radius</u>)				Hydrophytic Vegetation Indicators: <u>X</u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain)																
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
Herb Stratum (Plot size: <u>5' radius</u>)																				
1. <u>Typha X glauca</u>	<u>45</u>	<u>Y</u>	<u>OBL</u>																	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>																
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
6. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
7. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
8. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
9. <u> </u>	<u> </u>	<u> </u>	<u> </u>	Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>																
10. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
Woody Vine Stratum (Plot size: <u>30' radius</u>)																				
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
Remarks: (Include photo numbers here or on a separate sheet.) <u>Mowed down</u>																				

SOIL

Sampling Point: NO1-1UP

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		
0-6	10YR	2/1	100					SCL	
6-24	10YR	4/3	100					S	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked 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 (TF12)
- ☐ 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)

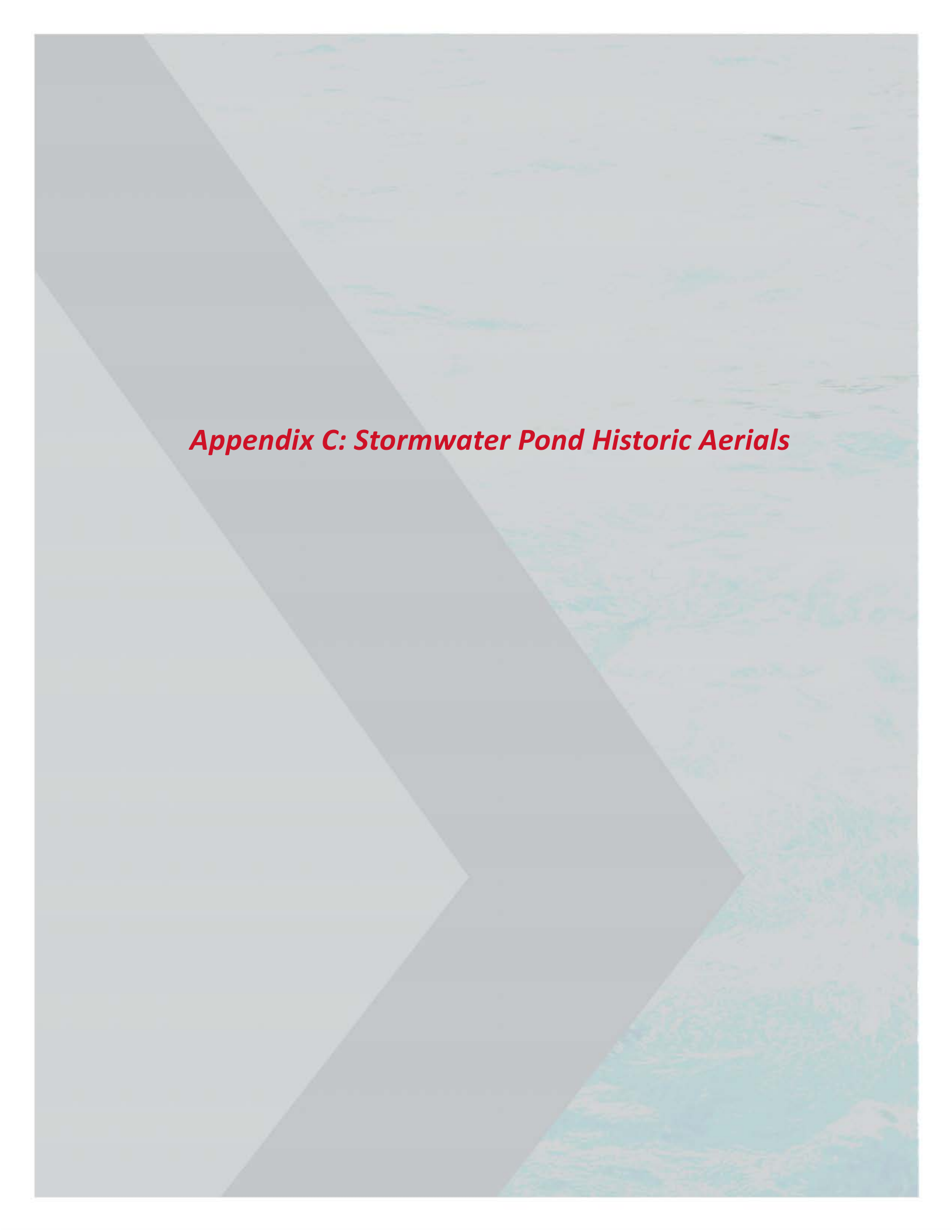
Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): _____
Water Table Present? Yes X No _____ Depth (inches): 12
Saturation Present? Yes X No _____ Depth (inches): 10
(includes capillary fringe)

Wetland Hydrology Present? Yes X No _____

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

Remarks:

The background of the page features a faded aerial photograph of a stormwater pond. A large, semi-transparent grey arrow is superimposed on the image, pointing from the top-left towards the bottom-right. The text is centered within this arrow.

Appendix C: Stormwater Pond Historic Aerials



Document Path: K:\Projects\ProfServices\Brown & Caldwell\2413-01532_Interceptor 8253-327\GIS\Environmental\ArcPro WorkMap\Brown&Caldwell_MCES_Interceptor_8253-327_20250217.aprx



Data Source: US Fish and Wildlife,
State of MN, MNDNR, & KLJ
Imagery: ©2023 USDA-FSA-NAP
KLJ Project Number: 2413-01532
Date Created: 2/17/2025 Created By: JDP

Page 1 of 1

Interceptor 8253-327
Aquatic Resource Delineation
Carver & Hennepin Counties, MN

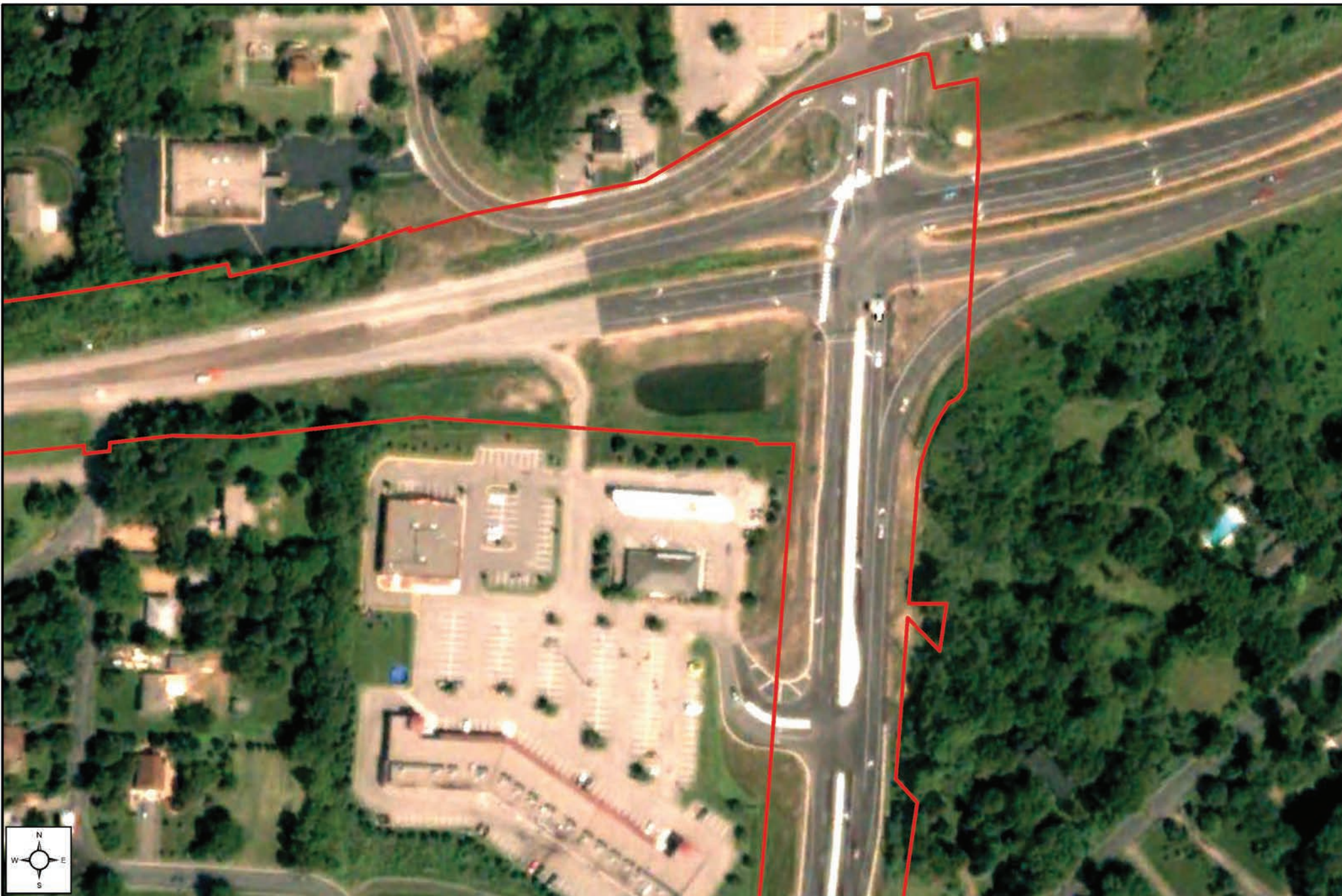
Historic Aerial - 04/20/1991



1:1,800

0 37.5 75 150
Feet

 Study Area



Document Path: K:\Projects\ProfServices\Brown & Caldwell\2413-01532_Interceptor 8253-327\GIS\Environmental\ArcPro WorkMap\Brown&Caldwell_MCES_Interceptor_8253-327_20250217.aprx



Data Source: US Fish and Wildlife,
State of MN, MNDNR, & KLJ
Imagery: ©2023 USDA-FSA-NAP

KLJ Project Number: 2413-01532
Date Created: 2/17/2025 Created By: JDP

Page 1 of 1



Interceptor 8253-327 **Aquatic Resource Delineation** **Carver & Hennepin Counties, MN**

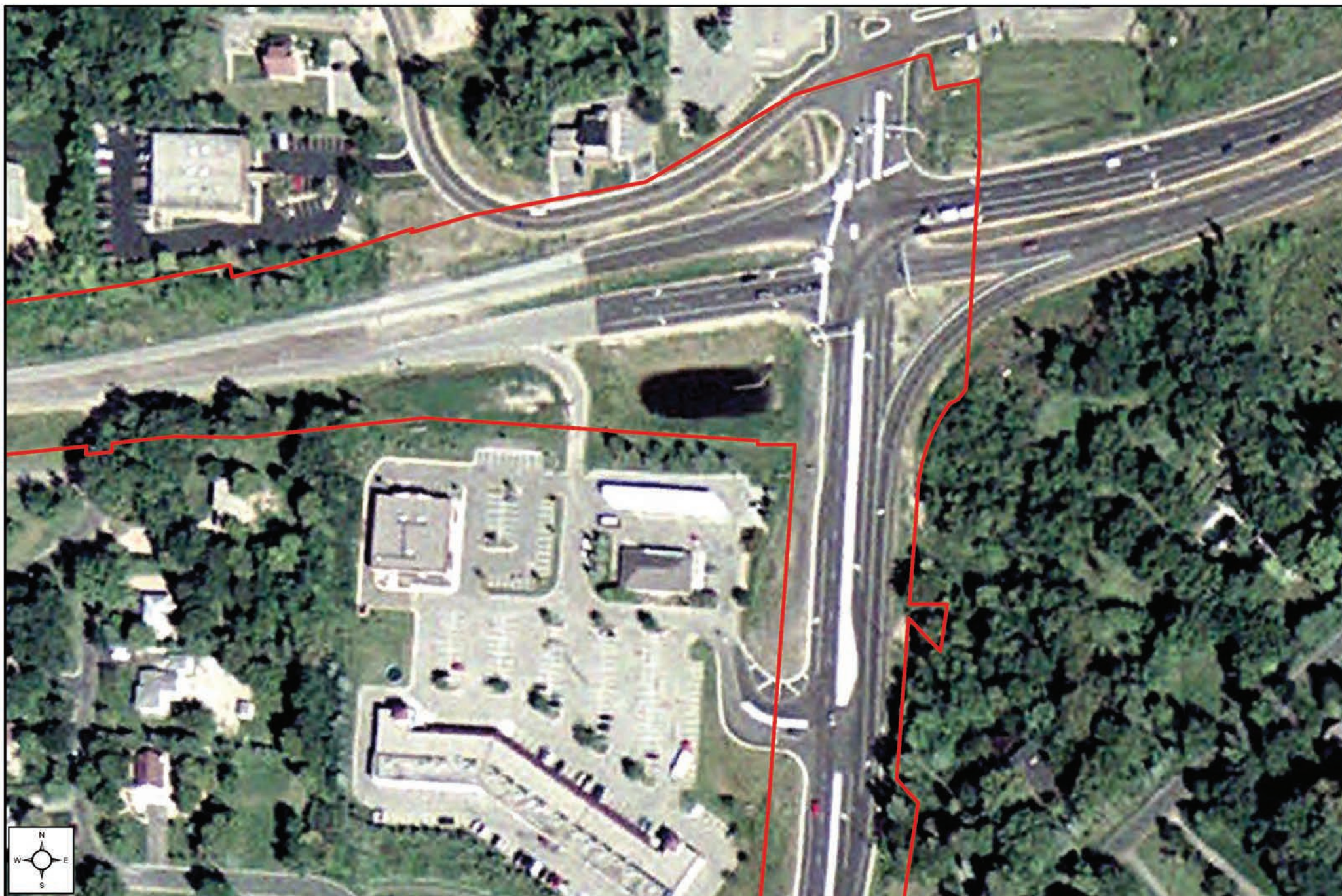
Historic Aerial - 08/27/2002



1:1,800

0 37.5 75 150
Feet

 Study Area



Document Path: K:\Projects\ProfServices\Brown & Caldwell\2413-01532_Interceptor 8253-327\GIS\Environmental\ArcPro WorkMap\Brown&Caldwell_MCES_Interceptor_8253-327_20250217.aprx



Data Source: US Fish and Wildlife,
State of MN, MNDNR, & KLJ
Imagery: ©2023 USDA-FSA-NAP
KLJ Project Number: 2413-01532
Date Created: 2/17/2025 Created By: JDP

Page 1 of 1

Interceptor 8253-327 **Aquatic Resource Delineation** **Carver & Hennepin Counties, MN**

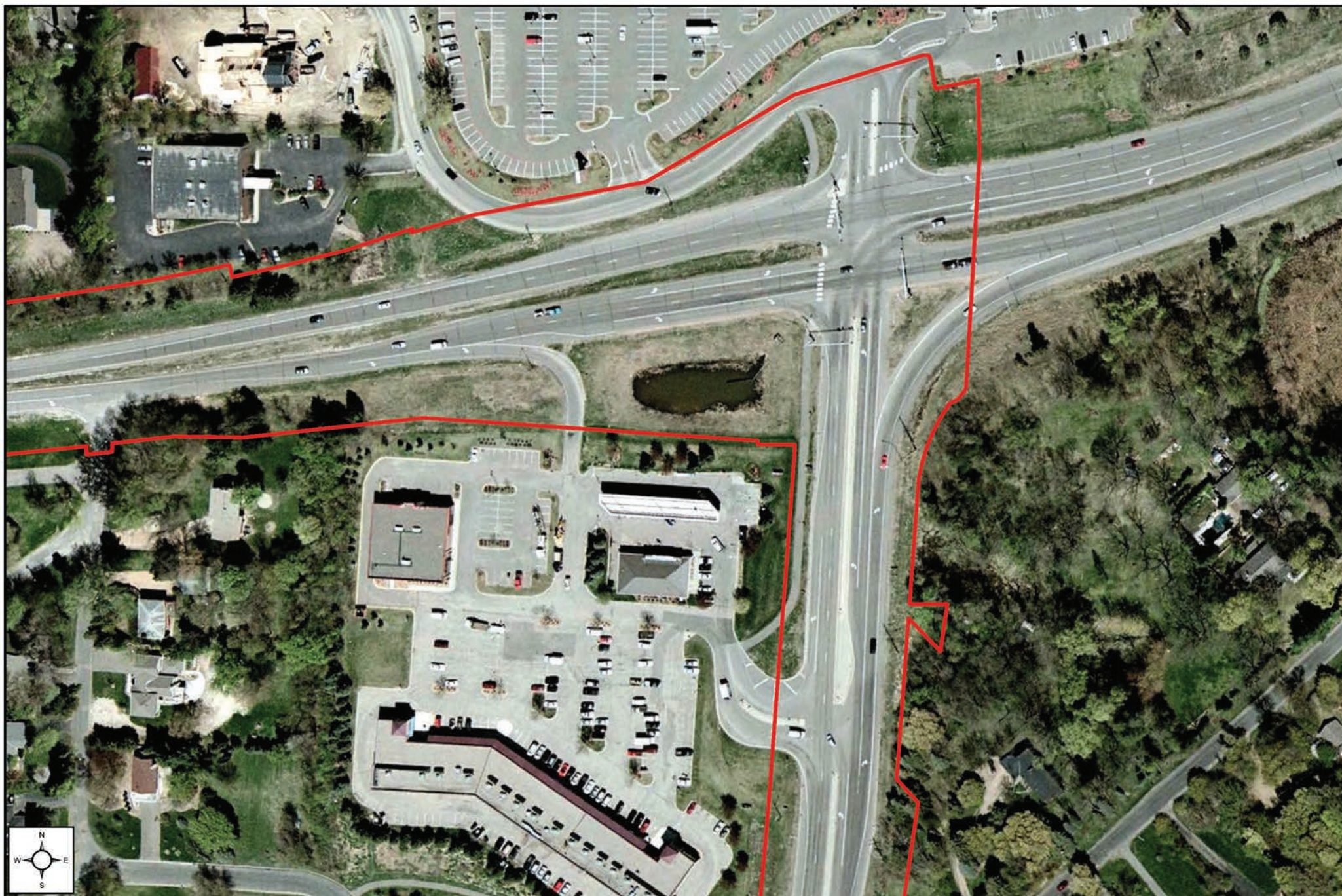
Historic Aerial - 03/31/2004



1:1,800

0 37.5 75 150
Feet

 Study Area



Document Path: K:\Projects\ProfServices\Brown & Caldwell\2413-01532_Interceptor 8253-327\GIS\Environmental\ArcPro WorkMap\Brown&Caldwell_MCES_Interceptor_8253-327_20250217.aprx

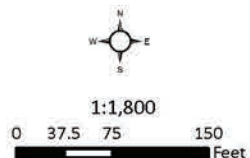
KLJ

Data Source: US Fish and Wildlife,
State of MN, MNDNR, & KLJ
Imagery: ©2023 USDA-FSA-NAP
KLJ Project Number: 2413-01532
Date Created: 2/17/2025 Created By: JDP

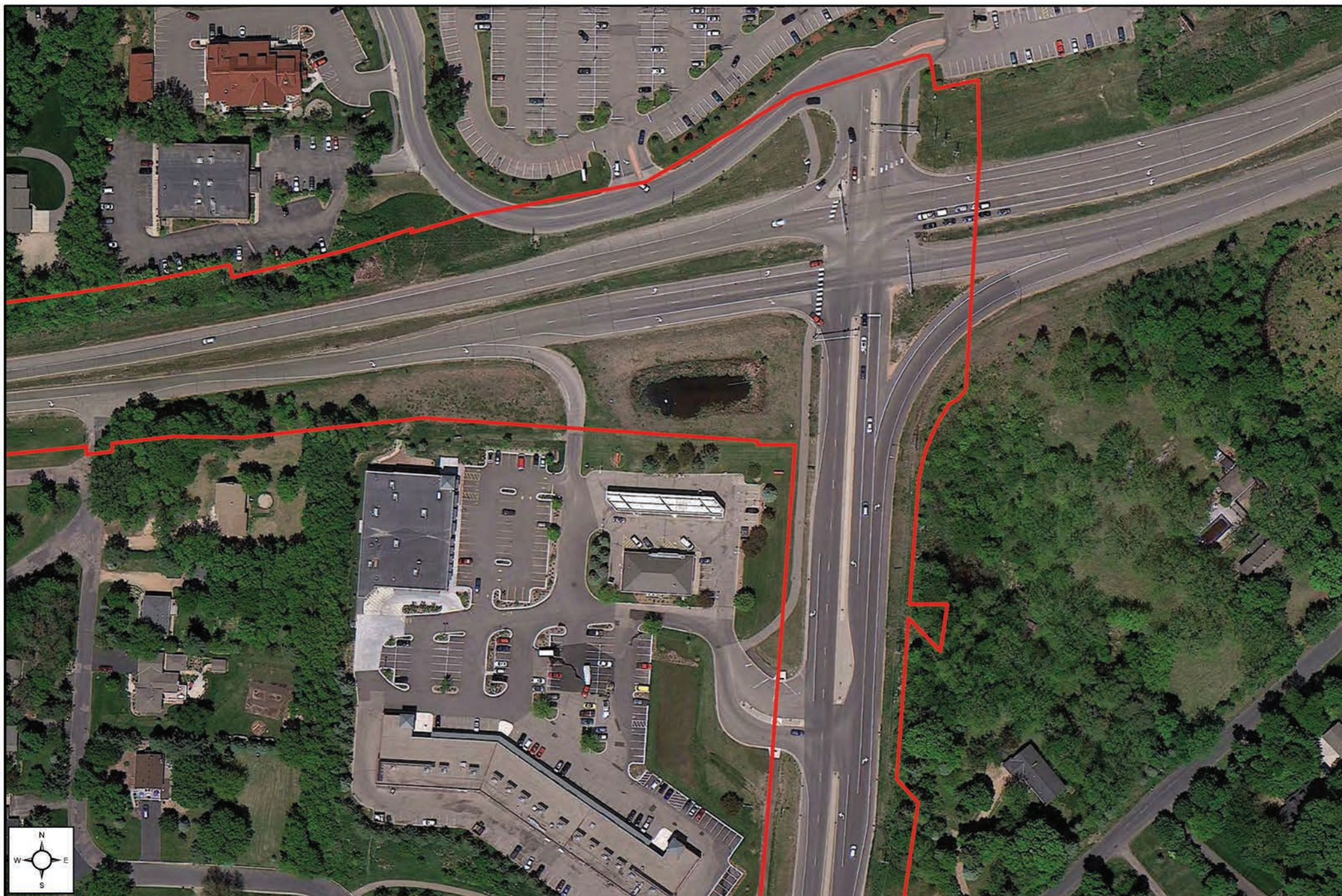
Page 1 of 1

Interceptor 8253-327
Aquatic Resource Delineation
Carver & Hennepin Counties, MN

Historic Aerial - 02/28/2006



 Study Area



Document Path: K:\Projects\ProfServices\Brown & Caldwell\2413-01532_Interceptor 8253-327\GIS\Environmental\ArcPro WorkMap\Brown & Caldwell_MCES_Interceptor_8253-327_20250217.aprx



Data Source: US Fish and Wildlife,
State of MN, MNDNR, & KLJ
Imagery: ©2023 USDA-FSA-NAP
KLJ Project Number: 2413-01532
Date Created: 2/17/2025 Created By: JDP

Page 1 of 1

Interceptor 8253-327
Aquatic Resource Delineation
Carver & Hennepin Counties, MN

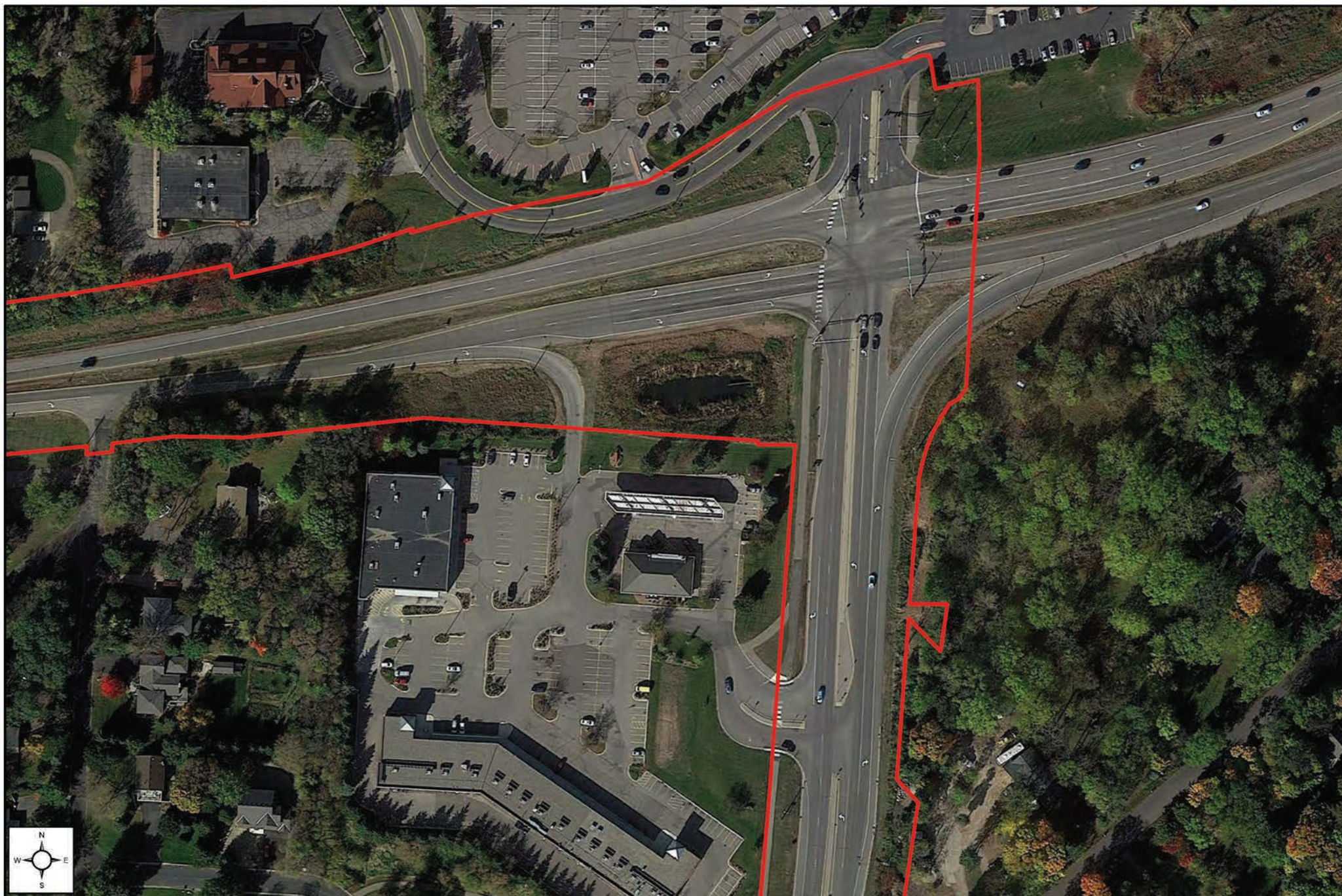
Historic Aerial - 05/18/2010



1:1,800

0 37.5 75 150
Feet

 Study Area



Document Path: K:\Projects\ProfServices\Brown & Caldwell\2413-01532_Interceptor 8253-327\GIS\Environmental\ArcPro WorkMap\Brown & Caldwell_MCES_Interceptor_8253-327_20250217.aprx



Data Source: US Fish and Wildlife,
State of MN, MNDNR, & KLJ
Imagery: ©2023 USDA-FSA-NAP

KLJ Project Number: 2413-01532
Date Created: 2/17/2025 Created By: JDP

Page 1 of 1

Interceptor 8253-327 **Aquatic Resource Delineation** **Carver & Hennepin Counties, MN**

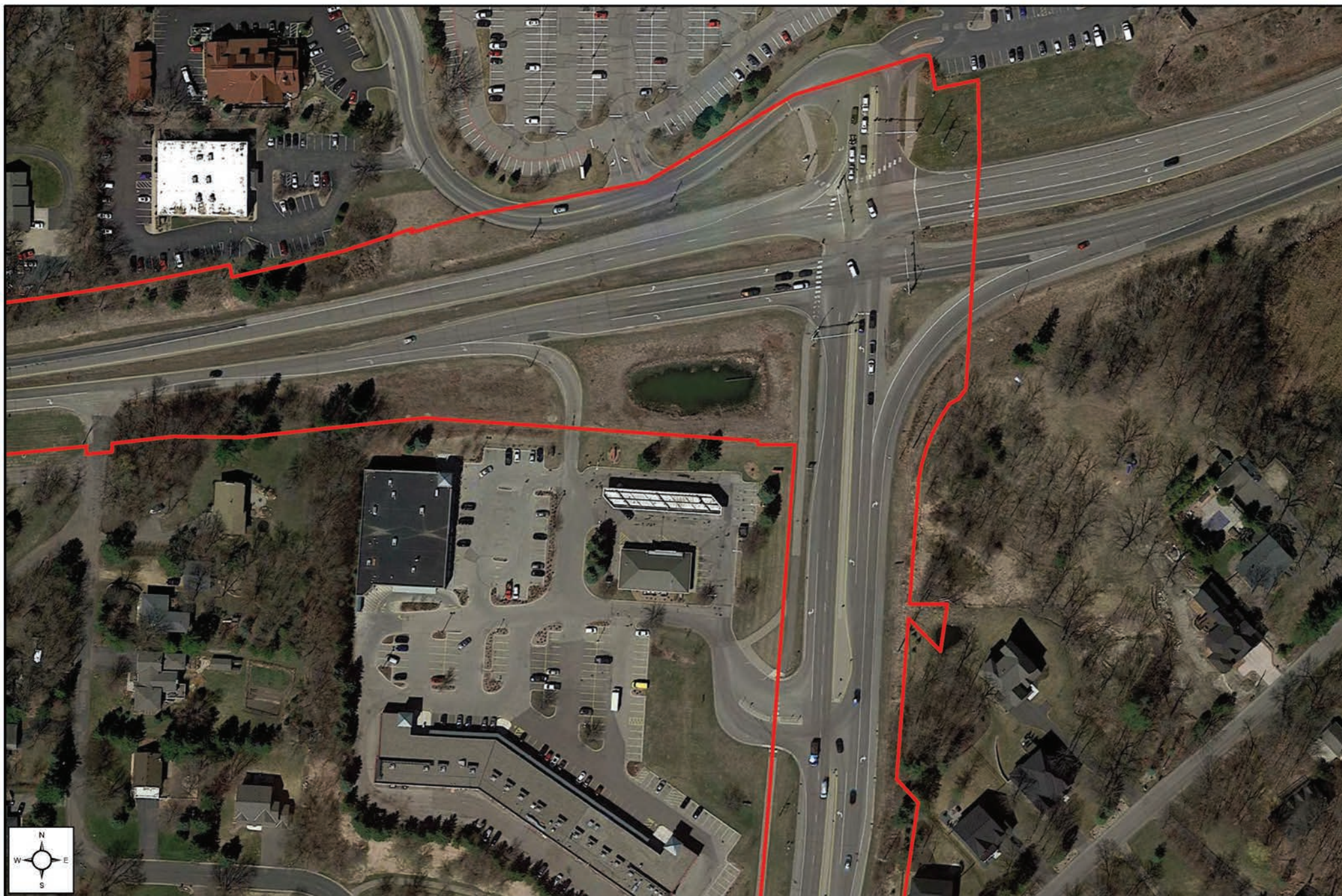
Historic Aerial - 10/11/2014



1:1,800

0 37.5 75 150
Feet

 Study Area



Document Path: K:\Projects\ProfServices\Brown & Caldwell\2413-01532_Interceptor 8253-327\GIS\Environmental\ArcPro WorkMap\Brown&Caldwell_MCES_Interceptor_8253-327_20250217.aprx



Data Source: US Fish and Wildlife,
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Imagery: ©2023 USDA-FSA-NAP
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Date Created: 2/17/2025 Created By: JDP

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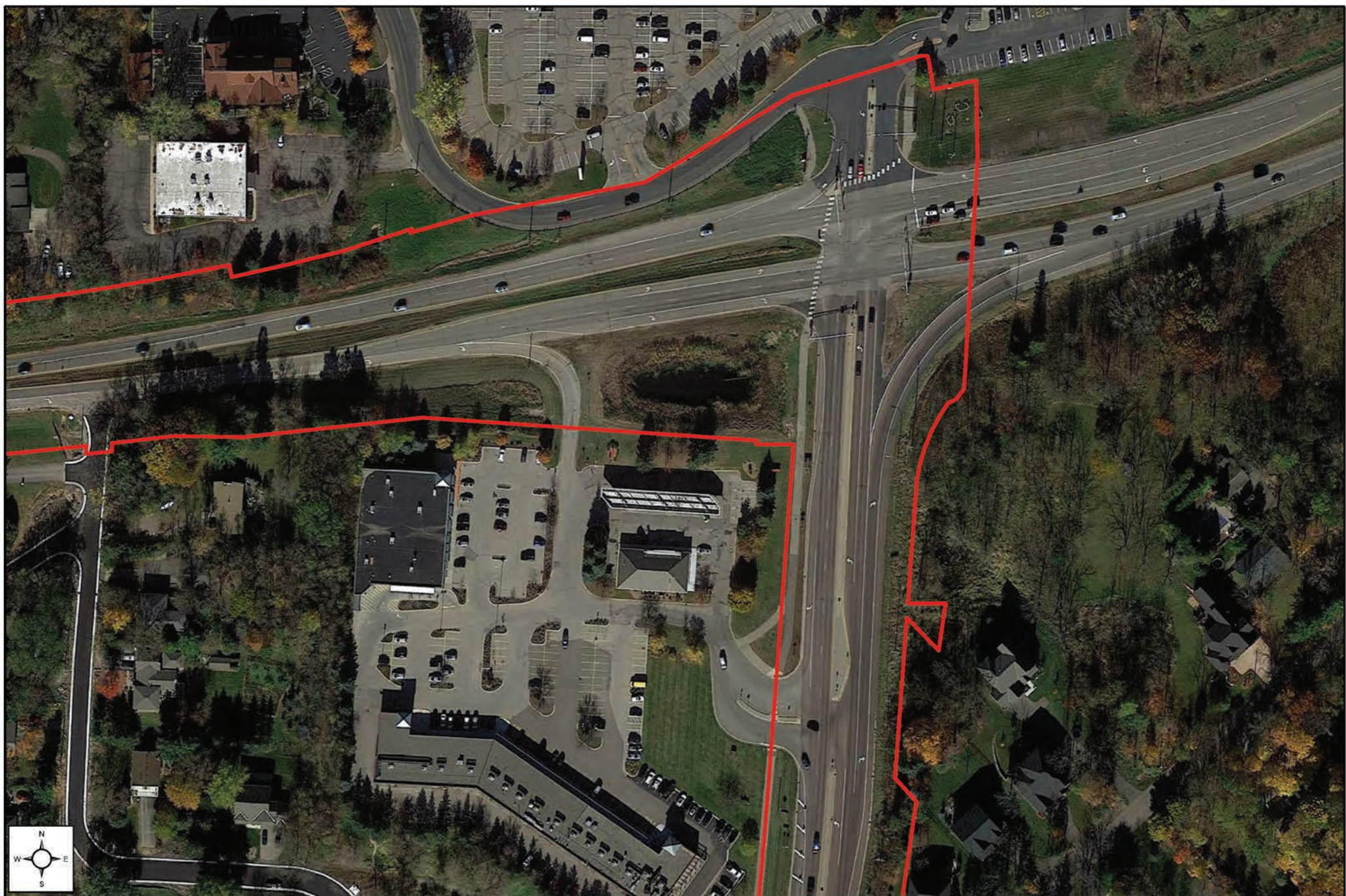
Interceptor 8253-327 **Aquatic Resource Delineation** **Carver & Hennepin Counties, MN**

Historic Aerial - 04/05/2017



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0 37.5 75 150
Feet

 Study Area



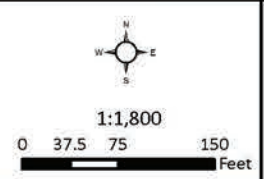
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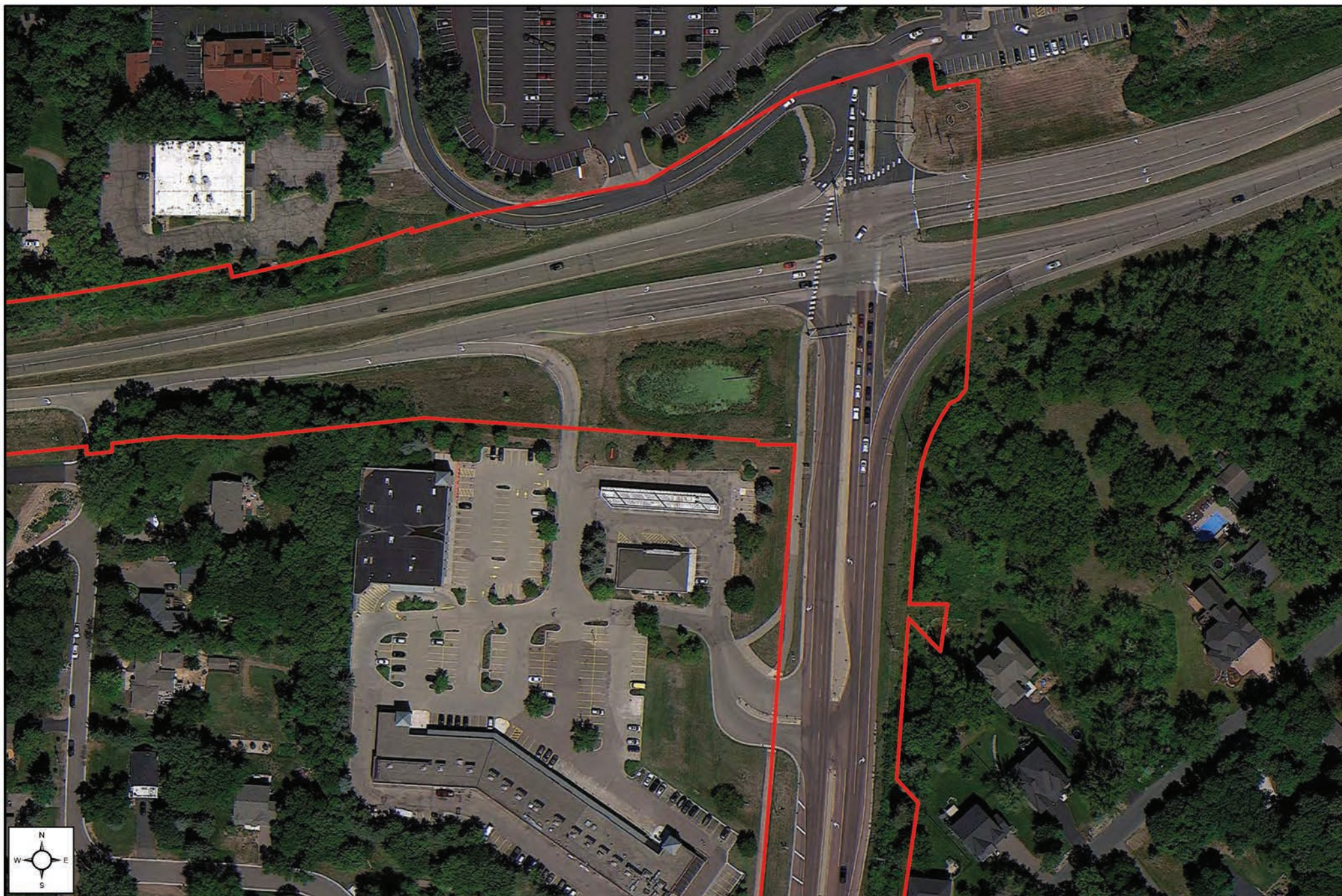
Data Source: US Fish and Wildlife,
State of MN, MNDNR, & KLJ
Imagery: ©2023 USDA-FSA-NAP
KLJ Project Number: 2413-01532
Date Created: 2/17/2025 Created By: JDP

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Interceptor 8253-327
Aquatic Resource Delineation
Carver & Hennepin Counties, MN
Historic Aerial - 10/25/2019



 Study Area



Document Path: K:\Projects\ProfServices\Brown & Caldwell\2413-01532_Interceptor 8253-327\GIS\Environmental\ArcPro WorkMap\Brown&Caldwell_MCES_Interceptor_8253-327_20250217.aprx



Data Source: US Fish and Wildlife,
State of MN, MNDNR, & KLJ
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KLJ Project Number: 2413-01532
Date Created: 2/17/2025 Created By: JDP

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Interceptor 8253-327 **Aquatic Resource Delineation** **Carver & Hennepin Counties, MN**

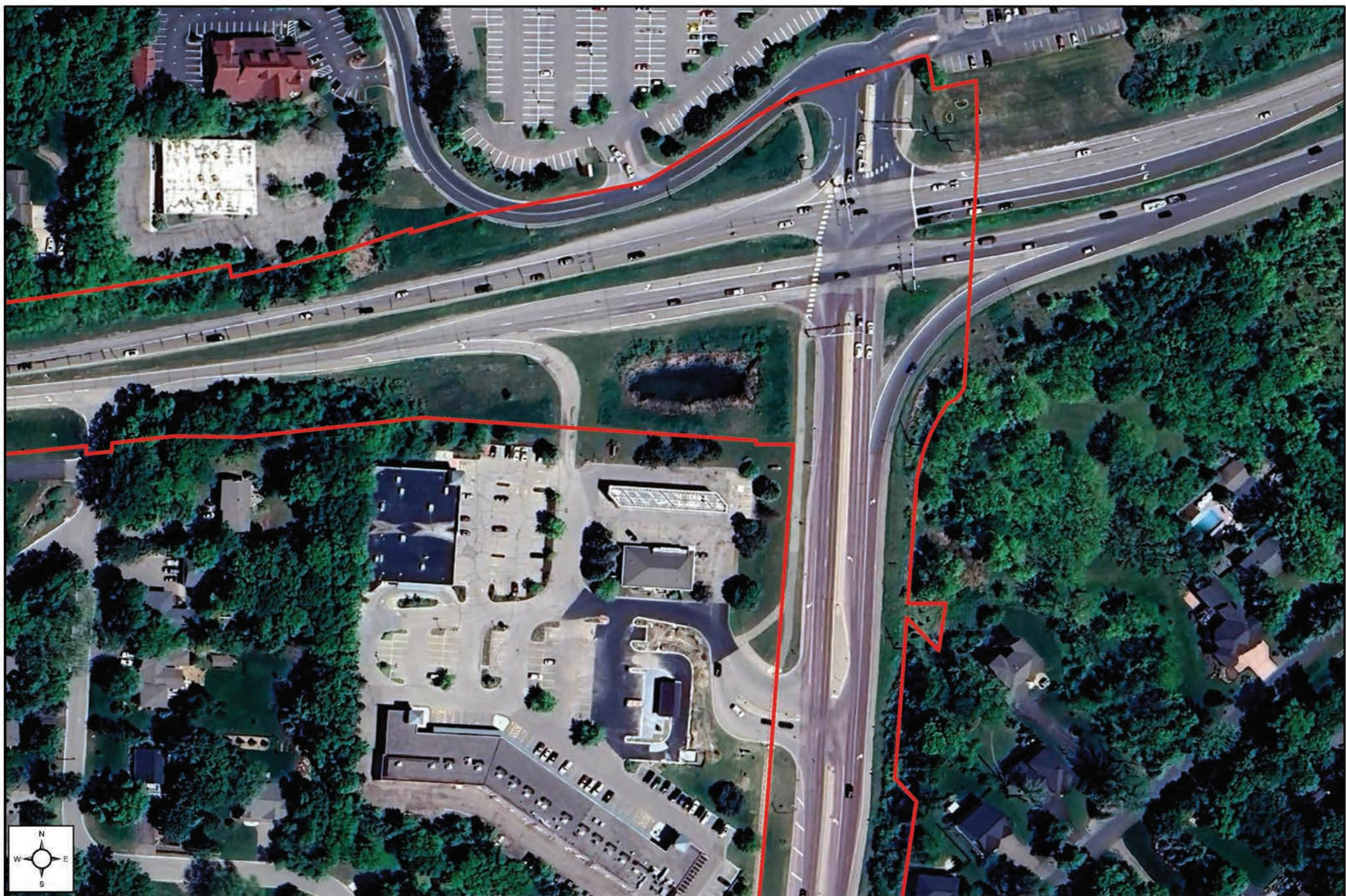
Historic Aerial - 08/13/2021



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Feet

 Study Area



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Data Source: US Fish and Wildlife,
State of MN, MNDNR, & KLJ
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KLJ Project Number: 2413-01532
Date Created: 2/17/2025 | Created By: JDP

Interceptor 8253-327
Aquatic Resource Delineation
Carver & Hennepin Counties, MN

Historic Aerial - 05/26/2023



1:1,800

0 37.5 75 150 Feet

 Study Area