Information for File #2013-00676-SEW

Applicant: Minnesota Department of Transportation (MnDOT), District 2; c/o Ms. Staci Cann

Corps Contact: Sarah Wingert, U.S. Army Corps of Engineers, 180 5th Street East, Suite 700, St. Paul, MN, 55101-1678; 651-290-5358; sarah.e.wingert@usace.army.mil

Primary County: Beltrami

Location: Wilton/Eckles Township in Sections 27-28 and 34, Township 147N., Range 34W.

Information Complete On: January 28, 2015

Posting Expires On: February 10, 2015

Authorization Type: Section 404 Clean Water Act via LOP-5-MN

This application is being reviewed in accordance with the practices for documenting Corps jurisdiction under Sections 9 & 10 of the Rivers and Harbor Act of 1899 and Section 404 of the Clean Water Act identified in Regulatory Guidance Letter 07-01. We have made a preliminary determination that the aquatic resources that would be impacted by the proposed project are regulated by the Corps of Engineers under Section 404 of the Clean Water Act. Our jurisdictional review and final jurisdictional determination could result in modifications to the scope of the project's regulated waterbody/wetland impacts and compensatory mitigation requirements identified above.

PROJECT INVOLVES:

1) *Linear Project*: The project would occur at the intersection of US Trunk Highway 2 (US 2) and Minnesota TH 89 (TH 89), located approximately 5 miles west of Bemidji.

PROJECT DESCRIPTION AND PURPOSE: MnDOT proposes to construct a new partial cloverleaf interchange at the intersection of US 2 and TH 89. In the project area, US 2 is a 65 mile-per-hour (mph) principal expressway consisting of a divided four-lane roadway with 10-foot wide paved shoulders and a 48-foot wide median, and TH 89 is a two-lane undivided highway with a speed limit of 55 mph and 10-foot wide shoulders near the US 2 intersection. The existing intersection is a tee configuration, with US 2 facilitating traffic in an east-west direction, and TH 89 facilitating traffic in a north-south direction and terminating at US 2 from the north side of US 2. Currently, US 2 has an eastbound left turn lane onto northbound TH 89, and a high-speed, free right turn lane from westbound US 2 to northbound TH 89. The northbound lane intersects with the free right turn lane from westbound US 2, and is controlled with a stop sign where the northbound lane meets the free right turn lane. There is also a stop sign for traffic moving from southbound TH 89 to US 2. Pete's Place, a grocery and convenience store, is located on the south side of US 2 on the southeast side of the intersection, and currently has full movement access. Intersection improvements are needed because MnDOT has determined that this intersection experiences more crashes and a higher severity rate than the statewide average or similar intersections. Particularly, MnDOT found that the crash rate data indicated the intersection has a high probability of a safety deficiency.

The new interchange would involve constructing a one-lane ramp bridge that would elevate southbound TH 89 over the US 2 travel lanes. The ramp bridge would culminate in a loop in the southwest quadrant of the intersection that would carry traffic onto eastbound US 2 via a full-length acceleration lane. The bridge would be about 350-450 feet long, and would be 30 feet wide. The southwest quadrant ramp would be about 30 feet width with two lanes, including one 8-foot wide and one 10-foot wide lane, a 6-foot wide shoulder, a four-foot wide

shoulder, and 1V:4H sideslopes. The US 2 eastbound left turn movement to northbound TH 89 and the US 2 westbound right turn movement to northbound TH 89 would be relocated to the Pete's Lane access and would be constructed as an at-grade intersection. The right turn lane movement from US 2 westbound to northbound TH 89 would be converted to a low-speed channelized free right turn lane onto a one-way northbound ramp. Southbound TH 89 to westbound US 2 would be constructed as a southbound right turn lane onto a westbound one-way ramp with a tapered entrance.

NAME, AREA AND TYPES OF WATERS (INCLUDING WETLANDS) SUBJECT TO LOSS: As proposed, the project would result in approximately 1.30 acres of permanent fill impacts to a shrub swamp wetland associated with Grant Creek for the construction of the cloverleaf ramp int the southwest quadrant of the intersection. To reduce impacts to the wetland, MnDOT shifted the proposed cloverleaf ramp to the west. To minimize impacts to the wetland, a broken-back slope would be used in the wetland, including 1V:4H sideslopes in the clear zone and 1V:3H sideslopes outside the clear zone. A 24-inch diameter, 220-foot long reinforced concrete pipe culvert would be installed in the wetland area to allow for the movement of water.

Additionally, approximately 0.21 acre of the same wetland would be impacted by temporary fill placement for berm construction and vegetation removal. The berm would be used for temporary erosion control. The applicant estimates that the wetland would be temporarily impacts for a maximum of five months. The portion of the wetland affected by temporary impacts would be restored by returning the excavated topsoil to the wetland and restoring the wetland to preconstruction contours, elevations, and conditions.

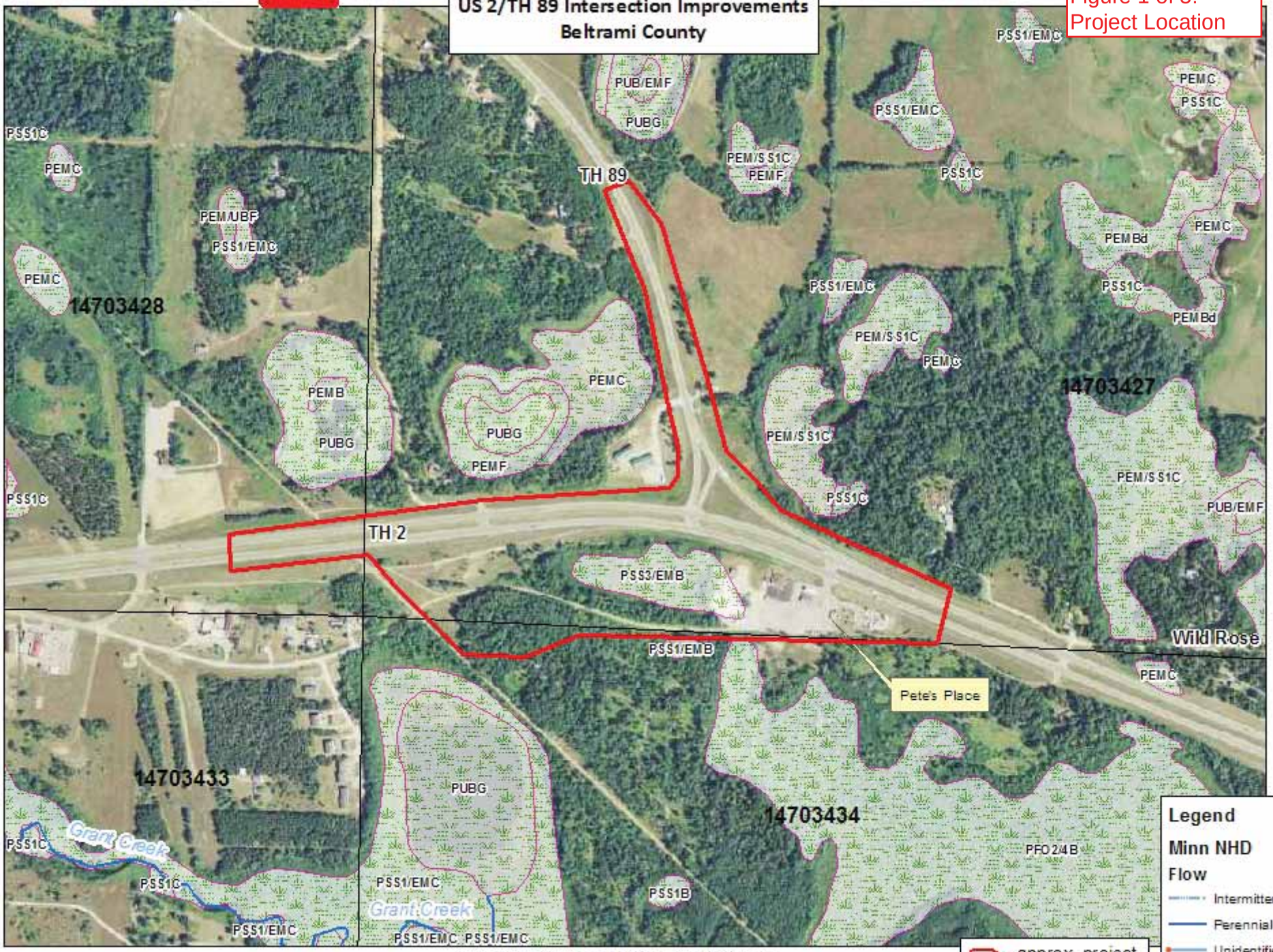
COMPENSATORY MITIGATION: The applicant proposes to compensate for unavoidable, permanent, adverse wetland impacts by debiting credits from state wetland bank account 1097 (Vesledahl), which is Corps-approved and located in major watershed 61 (Sandhill River), Polk County, Bank Service Area 3. The proposed impacts are located in major watershed 7 (Mississippi River headwaters), Bank Service Area 5.

DRAWINGS: See attached figures labeled "2013-00676-SEW, Figures 1-5 of 5".

U.S. Army Corps of Engineers
St. Paul District

2013-00676-SEW
US 2/TH 89 Intersection Improvements
Beltrami County

2013-00676-SEW, Figure 1 of 5: Project Location



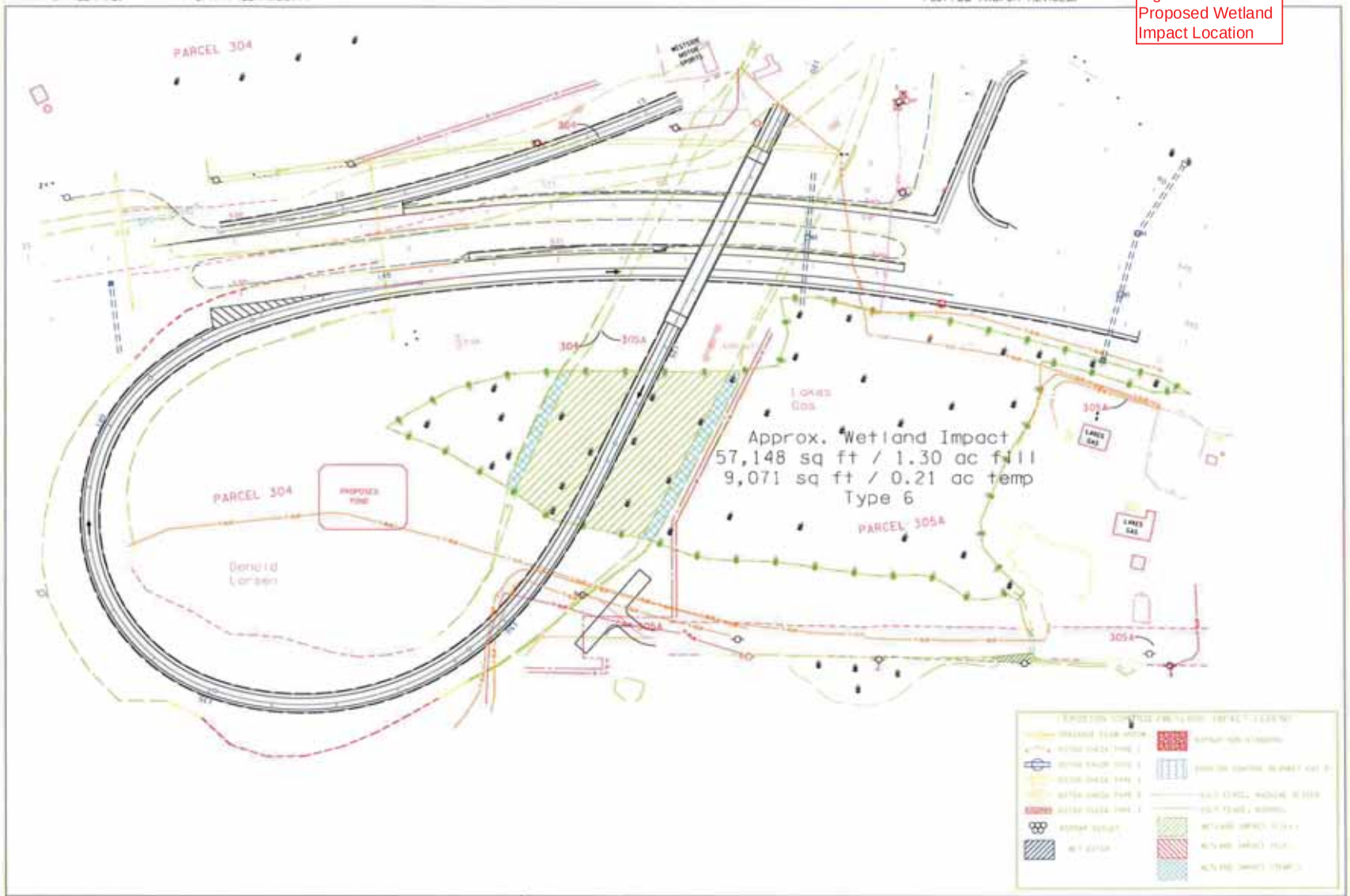
Base Map Source: MnGeo WMS Service, FSA 2013 aerial photograph

2013-00676-SEW,
Figure 2 of 5: Proposed
Project Layout

2013-00676-SEW, Figure 3 of 5: Proposed Wetland Impact Location

$$DISTRICT$$
IPLOT NAME: $$$IPLOTNAME$$$
PATH & FILENAME: $$$$PATHFILENAME$$$$

PLOTTED AND/OR REVISED:

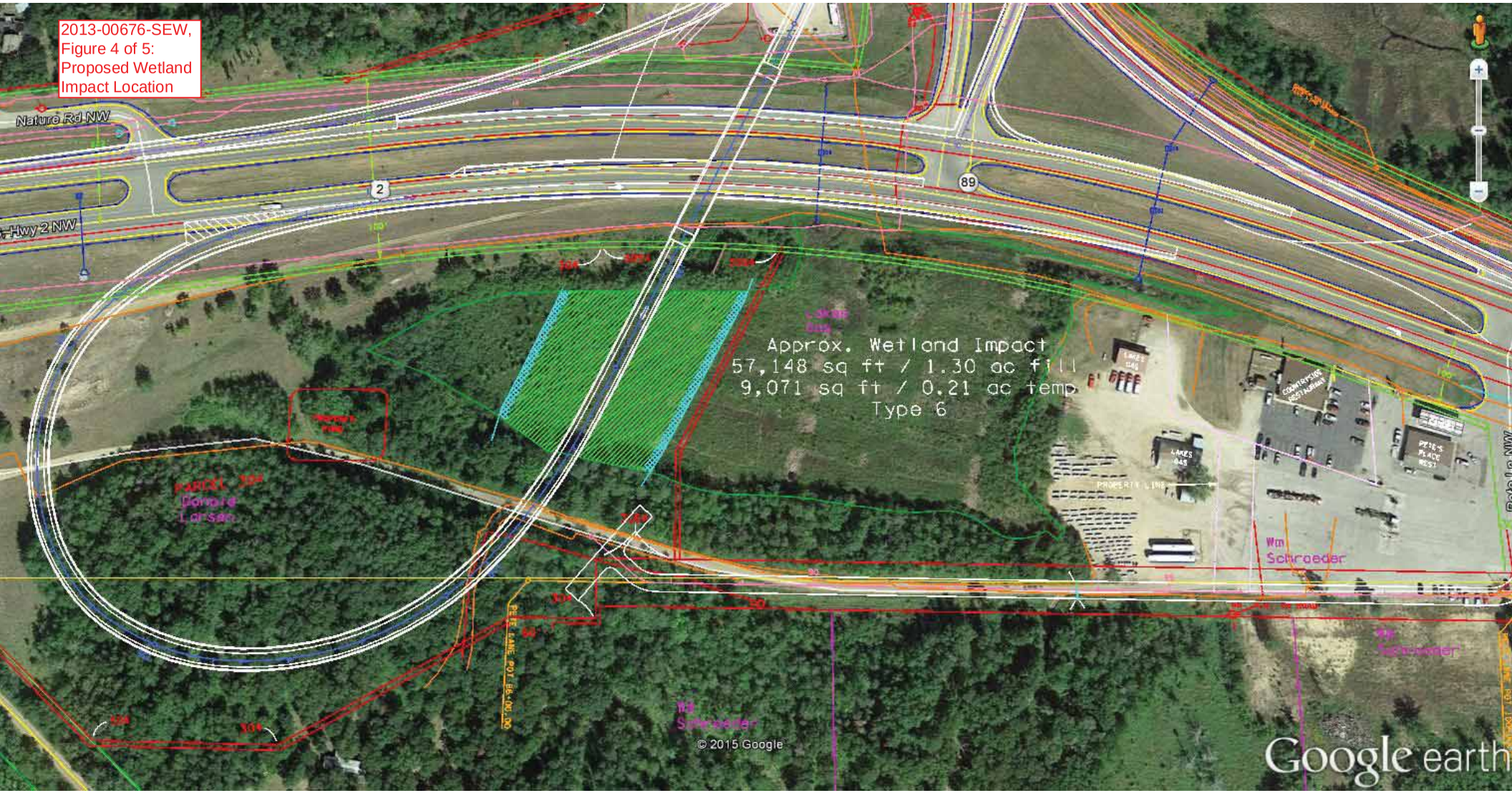


I HEREBY CERTIFY THAT THIS PLAN SHEET WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

ENGINEER Jeremy W Radvanna LIC. NO. 44291

S.P. 0406-59 US 2 &TH 89

SHEET OF SHEETS


2013-00676-SEW,
Figure 4 of 5:
Proposed Wetland
Impact Location
Nature Rd NW
Hwy 2 NW
2
89
Approx. Wetland Impact
57,148 sq ft / 1.30 ac fill
9,071 sq ft / 0.21 ac temp
Type 6
PARCEL
Donald
Larson
Wm
Schroeder
Wm
Schroeder
Wm
Schroeder
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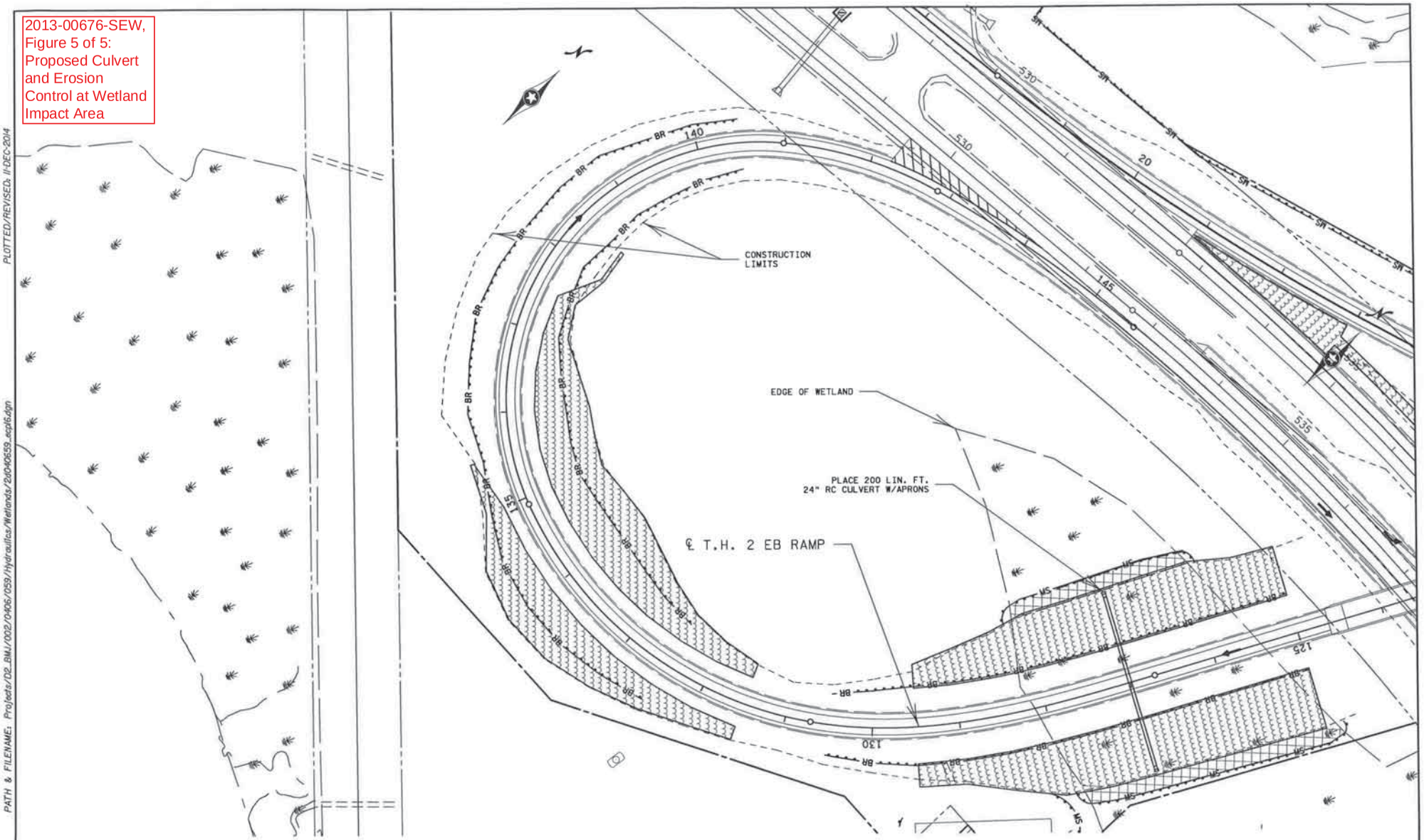
Google earth

2013-00676-SEW, Figure 5 of 5: Proposed Culvert and Erosion Control at Wetland Impact Area



TEMPORARY EROSION CONTROL LEGEND	PERMANENT EROSION CONTROL LEGEND
BR — SEDIMENT CONTROL LOG TYPE WOOD FIBER	EROSION CONTROL BLANKET CAT 3
MS — SILT FENCE, TYPE MS	
— — CONSTRUCTION LIMIT	

I HEREBY CERTIFY THAT THIS PLAN SHEET WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

ENGINEER Jeremy W Radmaw LIC. NO. 44291

EROSION CONTROL/TURF ESTABLISHMENT

STATE PROJ. NO. 0406-59 (TH 2) SHEET NO. OF SHEETS

DISTRICT *: BEMIDJI
IPLOT NAME: 2d040659_ecp6
PATH & FILENAME: Projects/D2_BMJ/002/0406/059/Hydraulics/Wetlands/2d040659_ecp6.dgn
PLOTTED/REVISED: 11-DEC-2014