

Information for File #2014-03106-SEW

Applicant: Minnesota Department of Transportation (MnDOT), District 3; c/o Mr. Robert Nibbe

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: Mille Lacs

Location: Kathio (North) Township in Section 33, Township 43N., Range 27W.

Information Complete On: January 23, 2015

Posting Expires On: February 5, 2015

Authorization Type: Section 404 Clean Water Act via LOP-10-R

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) *Tribal Trust or Other Resources:* The project is located within the Mille Lacs Reservation.
- 2) *FEMA 100-Year Floodplain:* The project crosses approximately 1,400 feet of the Rum River's 100-year floodplain. MnDOT indicated there are no known flooding issues at the Rum River crossing under consideration. A hydraulic analysis was completed and found that the project would not result in a stage increase at the Rum River. Appropriate erosion control and turf establishment procedures would be utilized in the project area, and MnDOT has determined that there would be no significant impacts to the floodplain.
- 3) *A Listed State-Impaired Water:* The project crosses a section of the Rum River ("Headwaters, Lake Mille Lacs to Ogechie Lake", ID number 07010207-506) that is listed on the Minnesota Pollution Control Agency's 2012 303(d) list as impaired for aquatic consumption by mercury in fish tissue.
- 4) *Linear Project:* The project would occur on approximately 0.284 miles of US 169 from approximately 100 feet south of Twilight Road on the south end of the project to Vineland Road on the north side of the project.

PROJECT DESCRIPTION AND PURPOSE: MnDOT proposes to replace a deficient bridge over the Rum River on US 169, located adjacent to Mille Lacs Kathio State Park. In the project area, US 169 has an estimated 2015 ADT of 11,350. The project area is about 1.4 miles south of Grand Casino Mille Lacs, and the shortest detour around the project area to the Casino is about 20 miles. In this location, the Rum River is considered a state water trail. The existing bridge, Bridge 6657, is concrete slab span bridge supported on timber piles and is approximately 26.3-feet long and 36.5-feet wide with two 12-foot wide travel lanes and 3-foot wide shoulders. The bridge was built in 1951 and has a sufficiency rating of 51.4, is load-posted

for 45 tons, and is functionally obsolete due to narrow shoulder widths. The existing roadway approaches support two 12-foot wide travel lanes with 8-9 foot wide shoulders.

The bridge would be replaced with a prestressed concrete beam single span bridge structure that is about 84.5 feet long, 47.3 feet wide and installed on the existing alignment. The stream channel would be excavated to a 40-foot bottom width to better match the stream's bankfull elevation. Approximately 68 linear feet of riprap would be placed along both stream banks at the bridge abutments for scour protection. The bridge would support two 12-foot wide travel lanes and 10-foot wide shoulders, with about 2 feet of additional width on either side to support the bridge railings. Approximately 500 linear feet of the road approaches on either side of the bridge would be reconstructed. Guardrail would be installed along roughly 300 feet of the road approaches directly on either side of the bridge, and the road approaches would include two 12-foot wide travel lanes, 10-foot wide paved shoulders (graded to a 13.5-foot width to accommodate the guardrail posts), and 1V:3H sideslopes. The road approaches outside the guardrail section would be modified to include two 12-foot wide travel lanes with 8-foot wide paved shoulders (graded to a ten-foot width) and 1V:4H sideslopes.

An approximately 1,650-foot long, 30-foot wide temporary road bypass with 14-foot lanes, concrete side barriers, and 1V:3H sideslopes would be required to avoid the need for a lengthy detour around the project area to the Grand Casino Mille Lacs. The bypass would be located on the east side of the bridge, and would consist of clean granular material placed on top of geotextile fabric and two 10-foot by 8-foot box culverts at the river crossing. Temporary sheet piling would be installed upstream and downstream of the temporary box culverts. Approximately 18 inches of peat topsoils would be removed from the work area and stockpiled at the toe of slope of the temporary bypass road. The topsoil stockpiles would be stabilized with geotextile fabric during project construction. MnDOT estimates the temporary fill and box culverts needed for the bypass road would be in place for about 90 days. Once US 169 is re-opened, the temporary bypass road, soil stockpiles, and geotextile fabric would be removed, the subsoils would be tilled and the topsoils would be returned to the disturbed area. The temporary box culverts and sheetpile would also be removed from the river.

The bridge would be lengthened to better accommodate the Rum River's morphology, and to accommodate a wild rice restoration effort taking place in Ogechie Lake, which is located just west (downstream) of the project area. The Buckmore Dam is planned to be lowered 3 feet at the outlet of Ogechie Lake, and a new rock riffle weir structure was installed at Mille Lacs Lake just upstream of the proposed bridge by the Minnesota Department of Natural Resources (MnDNR) and the Mille Lacs Band of Ojibwe in an effort to restore wild rice to Ogechie Lake. By lengthening the Rum River bridge, the rock riffle weir structure would meet the no rise in flood stage requirement for Mille Lacs Lake, as required by the weir's dam safety permit. The bridge would also be raised three feet above the existing bridge elevation in order to accommodate a minimum clearance of three feet from the ordinary high water level to the low member of the bridge; this is needed for navigational clearance for recreational canoes and kayaks, as requested by the MnDNR.

NAME, AREA AND TYPES OF WATERS (INCLUDING WETLANDS) SUBJECT TO LOSS: As proposed, the project would result in 0.28 acre of permanent fill impacts to a shallow marsh wetland adjacent to the Rum River. Additionally, approximately 0.86 acre of the shallow marsh wetland would be impacted by temporary fill placement for the construction of the temporary bypass road and topsoil storage during construction. The applicant estimates that the wetland would be impacted by the temporary fill for a maximum of 90 days, and the wetlands would be restored after the removal of the temporary bypass road. Also, the project would result in 0.16 acre (150 linear feet) of temporary impacts to the Rum River for the temporary bypass road, temporary box culvert placement, and Rum River bridge replacement work. Approximately 68

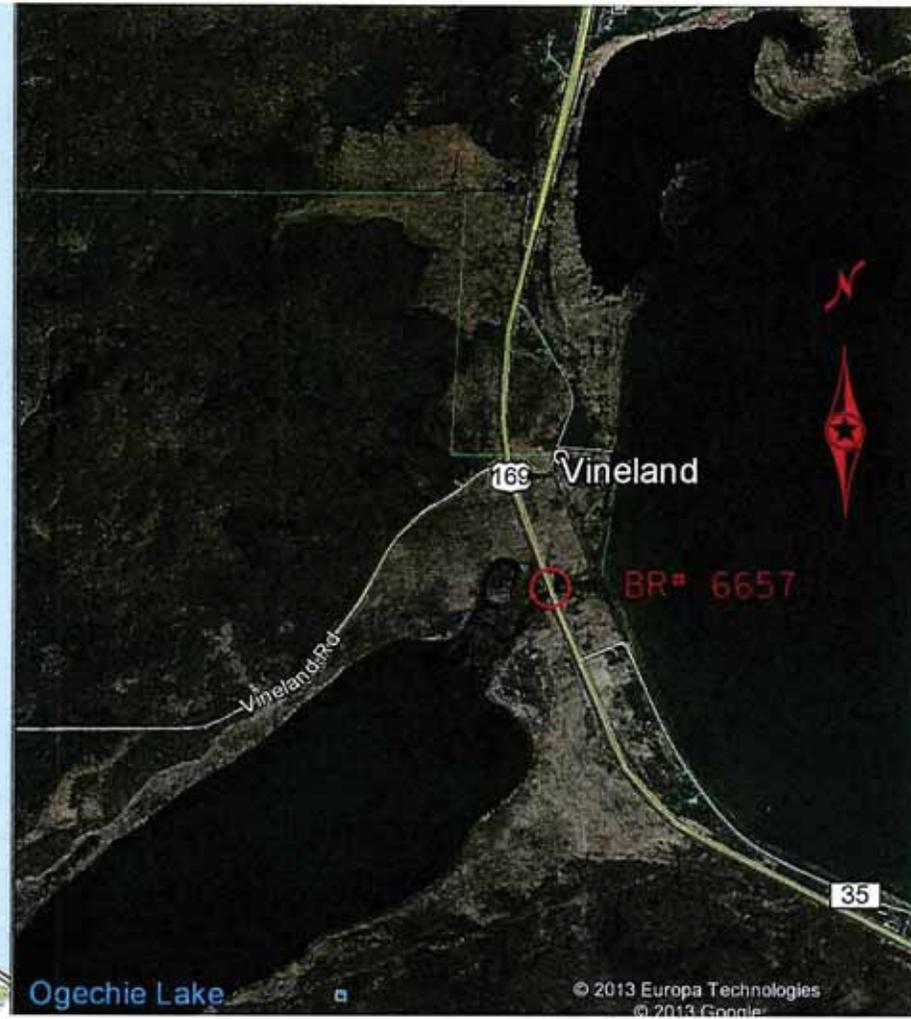
linear feet of the Rum River would be permanently impacted by the excavation to bankfull width and placement of 50 cubic yards of riprap as described above.

COMPENSATORY MITIGATION: The applicant proposes to compensate for unavoidable, permanent, adverse wetland impacts by debiting credits from the state wetland bank using a Corps-approved, MnDOT-owned bank account.

DRAWINGS: See attached figures labeled "2014-03106-SEW, Figures 1-3 of 3".

2014-03106-SEW,
Figure 1 of 3:
Project Location

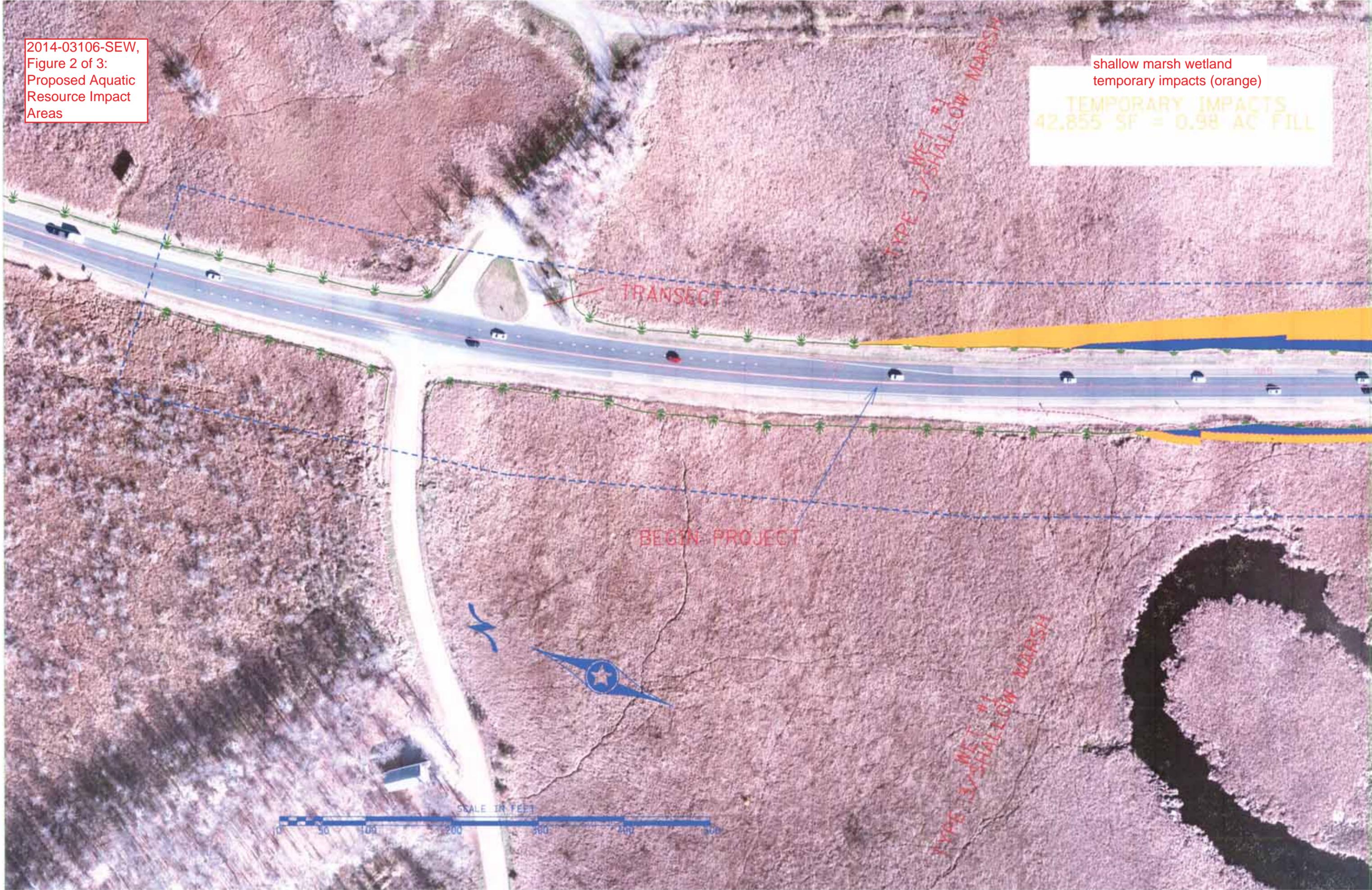
TH169 4814-52
R.P. 223+008 MILLE LACS COUNTY
REPLACE RUM RIVER BRIDGE #6657



2014-03106-SEW,
Figure 2 of 3:
Proposed Aquatic
Resource Impact
Areas

shallow marsh wetland
temporary impacts (orange)

TEMPORARY IMPACTS
42,855 SF = 0.98 AC FILL



Rum River,
temporary impacts

STREAM IMPACTS
APPROX 150' X 60'

TYPE 3/SHALLOW MARSH

TYPE 2/FRESH MEADOW

TYPE 6/STRIP CARR



PERMANENT IMPACTS
12,585 SF = 0.29 AC FILL
shallow marsh wetland
permanent impacts (blue)

END PROJECT

TYPE 3/SHALLOW MARSH

