

**APPENDIX D**

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**EXECUTIVE ORDER 11990 WETLAND FINDING**

Federal Highway Administration  
South Dakota Department of Transportation  
City of Sioux Falls

Solberg Avenue-Tallgrass Avenue Overpass  
IM 2292(88)0 PCN # 01QT  
P 1344(01) PCN # 02J0  
Executive Order 11990 Wetland Finding

This action complies with Executive Order 11990, Protection of Wetlands

Approved \_\_\_\_\_  
FHWA Environmental Engineer Date

Approved \_\_\_\_\_  
SDDOT Environmental Supervisor Date

**Federal Highway Administration  
South Dakota Department of Transportation  
City of Sioux Falls**

**Solberg Avenue-Tallgrass Avenue Overpass  
Executive Order 11990 Wetland Finding**

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This statement set forth the basis for a preliminary finding that there is no practical, prudent or economical alternative to the placing of fill for highway construction in certain wetlands within the future right-of-way of the proposed Solberg Avenue to Tallgrass Avenue overpass of I-229 in Sioux Falls. The Solberg Avenue-Tallgrass Avenue Environmental Assessment (EA) has satisfactorily addressed project effects on wetlands in accordance with Executive Order 11990 on “No Net Loss” of wetlands.

Projected effects and impacts on wetlands were determined by following Federal Highway Administration (FHWA) guidance and policies, and the wetland sequencing and permitting requirements of the U.S. Army Corps of Engineers (USACE), U.S. Environmental Protection Agency (USEPA), the U.S. Fish and Wildlife Service (USFWS), and state agencies responsible for wetland impact review.

### **Project Description**

The proposed project is located in the southern portion of Sioux Falls, South Dakota along a proposed Solberg Avenue/Tallgrass Avenue alignment between 59<sup>th</sup> Street and 69<sup>th</sup> Street (**Figure 1 of the EA**). The purpose of the project is to improve the connectivity of developing areas in the southwest area of Sioux Falls to the existing arterial street network by providing an extension of Solberg Avenue south of 59<sup>th</sup> Street to Tallgrass Avenue at 69<sup>th</sup> Street. The extension of Solberg Avenue includes an overpass of Interstate 229 (I-229), which would be located approximately ¼ mile east of Interstate 29 (I-29) and one mile west of Louise Avenue. The proposed cross section of the Solberg Avenue corridor is a four-lane divided road with:

- Left and right turn lanes provided at 69<sup>th</sup> Street.
- Left and right turn lanes provided at 59<sup>th</sup> Street.

### **Alternatives Considered**

As part of the I-29 Corridor Study, two Build Alternatives for the Solberg Avenue to Tallgrass Avenue connection were evaluated relative to traffic, adjacent impacts and construction costs. The alternatives included in the corridor study were an underpass of I-229 and an overpass of I-229, which both followed essentially the same alignment. The overpass alternative was carried into this EA for more detailed evaluation. The underpass option was eliminated due to the potential for impacts to the interstate mainline operations during construction and constructability complications relative to the overpass.

The overpass option advanced cannot avoid wetlands because of the relatively short distance between the required arterial connections of Solberg Avenue-Tallgrass Avenue on the north at 59<sup>th</sup> Street and on the south at 69<sup>th</sup> Street. The short distance eliminates reasonably locating Solberg Avenue-Tallgrass Avenue on an alignment that would avoid the wetlands and provide the required arterial connections. Design considerations will minimize wetland impacts to the extent that a safe alignment can be implemented that meets traffic and construction standards.

The Build Alternative results in approximately 4.9 acres of wetland impacts. The estimates are based on determination of wetland boundaries via a review of National Wetland Inventory maps and field confirmation. The EA presents additional details on project effects and proposed avoidance/minimization and mitigation measures.

### **Basis for Determining the Proposed Action Includes All Practicable Measures to Minimize Harm to Wetlands**

During the design phase for the project, all affected wetlands will be delineated following the methods of the USACE 1987 Manual on Identifying Wetlands in the United States and field typed in accordance with the methods of USFWS “Classification of Wetlands and Deepwater Habitats of the United States” (Cowardin et al. 1979), to provide accurate and up-to-date wetland determinations and impact acreages resulting from the project. Wetland impact sequencing measures will also be implemented during the preliminary design phase after the completion of the wetland delineations and field typing. Sequencing implementation includes the following in order; 1) wetland avoidance; 2) wetland impact minimization; and 3) wetland mitigation. Wetland mitigation opportunities will be developed prior to or concurrent with construction of the Solberg Avenue-Tallgrass Avenue overpass.

### **Mitigation**

Wetlands which cannot be avoided will be appropriately mitigated based on the function and quality to the extent possible. The proposed wetland impact mitigation concept for the proposed Solberg Avenue-Tallgrass Avenue overpass is to purchase units from the Tetonka Wetland Mitigation Bank located in Grand Meadow Township, Minnehaha County. Offsite mitigation is being proposed because the immediate impact area is not conducive for mitigation. This conclusion is based on:

- It is difficult to maintain quality small mitigation sites in or directly adjacent to Interstate right-of-way because of all the sediments, salts and typical road runoff. The Tetonka Bank provides wetland credits of known quality and value per USACE regulatory purview and does not require 3-5 years to reach full functionality.
- Neither the SDDOT nor the City owns any land that is suitable for wetland development in the project area.
- Onsite wetland creation would have to be approximately 10 acres of wetlands with buffer. Land adjacent to this property will cost more than \$25,000 per acre. Finding

less expensive land outside the project area that is better suited for wetland development would entail additional planning and engineering costs.

- The current 33 CFR Chapter II 332.3 General compensatory mitigation requirements states, “the environmentally preferable compensatory mitigation may be provided through mitigation banks ...”. Tetonka is a suitable bank near Hartford.

Mitigation to the Tetonka Wetland Mitigation Bank is the most expedient mitigation process, because mitigating at the bank requires:

- No acquisition of land
- No inventory of existing condition of mitigation site
- No wetland planning or engineering
- No wetland construction
- No filing of a deed restriction
- No maintenance for five years after construction
- No monitoring for five years

The mitigation ratio is 1.5 to 1 at the bank versus 2 to 1 ratio for creating a new wetland and the wetland bank accepts all responsibility and risk for the wetland establishment.

A Hydro geomorphic (HGM) Assessment will be completed on the jurisdictional and non-jurisdictional wetlands that will be impacted. The HGM Assessment will result in an estimate of the number of credits that will be purchased to replace the function and quality of the impacted wetlands in the study area. The unique complex of riverine and pothole wetlands of the Tetonka bank makes it possible to use the HGM assessment to develop a universal mitigation plan for the different wetland types in the project watershed.

At this point in the planning process, determining impacts and mitigation requirements are impractical to predict. From experience it is generally found that wetlands in ditches can have a value as low 2 credits per acre. In other more isolated conditions, the HGM value can be as high as 6 credits per acre. The Tetonka Wetland Bank has over 170 credits available. Thus, has substantial capacity to allow time for the HGM Assessment to be completed in the final Design stage.

## **Coordination**

This project and wetland finding has been and will continue to be coordinated with the following agencies:

- US Fish and Wildlife Service
- SD Dept. of Game, Fish, and Parks
- SD Dept. of Environment and Natural Resources

The wetland permit applications will be submitted to the responsible permitting agencies for review and approval prior to construction of the Solberg Avenue-Tallgrass Avenue overpass

in anticipation of issuance of a Section 404/401 Individual Permit under the Federal Clean Water Act. The USACE and/or the FHWA will act as the lead approval agency of the wetland permit application for the Solberg Avenue-Tallgrass Avenue overpass.

### **Finding**

In accordance with Executive Order 11990, NEPA and the Federal Highway Act it has been determined that there is no feasible or practical alternative to the proposed construction. All practical measures to minimize harm have been considered and initiated. Should it become necessary to modify or otherwise revise this preliminary finding with the completion of wetland delineation associated with the projects design phases, and updated Wetland Finding will be prepared and circulated for review and concurrence.