RECORD OF DECISION

Interstate 74 Quad Cities Corridor Study

Scott County, Iowa and Rock Island County, Illinois

Project Number IM-74-1(122)0-13-82

FHWA-IOWA-EIS-09-01-F

1. Decision

The Federal Highway Administration (FHWA) and the Iowa and Illinois Departments of Transportation (Iowa DOT and IDOT) have identified the Selected Alternative for improving Interstate 74 (I-74) from its southern terminus at Avenue of the Cities (23rd Avenue) in Moline, Illinois to its northern terminus one mile north of the I-74 interchange with 53rd Street in Davenport, Iowa. The Selected Alternative identified and discussed in this Record of Decision is the preferred alternative identified in the Final Environmental Impact Statement (FEIS).

The purpose of the proposed improvements is to improve capacity, travel reliability, and safety along I-74 between its termini, and provide consistency with local land use planning goals. The need for the proposed improvements to the I-74 corridor is based on a combination of factors related to providing better transportation service and sustaining economic development. In particular, the proposed action is intended to meet the following needs:

- Traffic demand and service
- Improved roadway geometry
- Improved safety considerations
- Dependability of travel
- Improved transportation connections
- Improved infrastructure condition
- Support of economic development

The proposed work consists of upgrading the 4-lane interstate by providing mainline capacity improvements, modifications to the interchanges in downtown Moline and Bettendorf, Middle Road, U.S. 6/Spruce Hills Drive, and 53rd Street, and realigning I-74 across the Mississippi River. A more detailed description of the Selected Alternative is located in Section 2.2 of this ROD and in the FEIS in Section 2.5, *Identification of the Preferred Alternative*, and Section 2.6, *Modifications to the Preferred Alternative Since Publication of the DEIS*.

The remainder of this document identifies the rationale for identifying the Selected Alternative and responds to comments received on the project's FEIS. FHWA's and Iowa and Illinois DOTs' identification of the Selected Alternative was based upon consideration of environmental and socioeconomic impacts, guidance from resource agencies, and the results from an intensive public involvement process that included multiple public outreach activities.

This Record of Decision complies with the regulations for implementing the National Environmental Policy Act (NEPA) under 40 CFR 1505.2 and 23 CFR 771.

2. Alternatives Considered

A broad array of alternatives was considered to address the transportation needs and objectives defined for the I-74 corridor study. Alternatives were developed to address the identified design, traffic, and safety needs of the corridor; to meet established planning and design criteria and standards; to avoid or minimize impacts to environmental resources; and to sustain economic development opportunities along the corridor.

The alternative improvement strategies developed considered highway capacity improvements, transportation system management strategies, and improvements to other modes of transportation, including public transit services and bicycle/pedestrian facilities. Options for reusing the existing Mississippi River Bridges were explored, Mississippi River crossing location and lane arrangement options were evaluated, and interchange location and type options were examined. A No-Action alternative was also identified.

Given the differing nature of improvement requirements through the corridor, the study area was divided into three separate analysis sections; the South Section (from Avenue of the Cities [23rd Avenue] to 12th Avenue), the Central Section (from 12th Avenue in Illinois to Lincoln Road in Iowa), and the North Section (from Lincoln Road to one mile north of 53rd Street).

2.1 Other Alternatives Considered

Alternatives developed at a conceptual stage and then screened based on their ability to meet the project's purpose and need included roadway alternatives such as providing additional travel lanes, reconfiguring existing service interchanges, and improving arterial roadways. Those that had the ability to satisfy the purpose and need and minimized environmental impacts along the I-74 corridor were developed into build alternatives. A variety of non-roadway improvements—such as transit, transportation system management, and bicycle and pedestrian improvements—were also considered. While these alternatives would not satisfy the purpose and need as stand-alone alternatives, they were retained and evaluated for their potential to be combined with other build alternatives.

2.1.1 No-Action Alternative

The No-Action Alternative, defined as no new major construction along the I-74 corridor, was carried forward for comparison with the build alternatives, although it does not meet the project's purpose and need. See Section 2.3.5 of the FEIS, *No-Action Alternative*, for details.

2.1.2 Build Alternatives

The build alternatives presented in the Draft Environmental Impact Statement (DEIS) meet the project purpose and need and accommodate the required safety, geometric, and capacity improvements while minimizing potential adverse environmental and community impacts. Build alternatives were developed on the basis of current design

standards and the most current, available traffic forecast data for the original project design year of 2025. The project design year has been extended to 2035 since the publication of the DEIS. See Section 2.2.1.1, *Design Year and LOS,* in the FEIS for details.

For more details about the alternatives discussed below, see Section 2.4 of the FEIS, *Build Alternatives Retained for Detailed Evaluation in the DEIS.*

South Section. One build alternative was investigated in the South Section and discussed in the DEIS and FEIS. Improvements would involve reconstruction of the existing facility and widening to include a third 12-foot through lane in each direction and a 12-foot auxiliary lane between Avenue of the Cities (23rd Avenue) and 7th Avenue in the northbound direction. The I-74 bridges over the 19th Street collector and 12th Avenue, and the Avenue of the Cities (23rd Avenue) bridge over I-74 would be reconstructed or repaired and widened to accommodate the proposed roadway improvements and provide adequate vertical clearance. Minor design improvements are proposed at entrance and exit ramp terminals and at the ramp intersections along Avenue of the Cities (23rd Avenue).

Central Section. In the Central Section, two options were considered for the mainline alignment, interchanges in downtown Moline and Bettendorf, U.S. 67 connector, and local roadway underpass in Bettendorf.

- The two mainline alignment alternatives, Alignment E and Alignment F, shift the mainline alignment to the east, locating them roughly 230 feet and 780 feet east of the existing roadway, respectively. Two variations were proposed for improving the 7th Avenue and River Drive interchanges in downtown Moline (Variations M1 and M2) and the U.S. 67 interchange in downtown Bettendorf (Variations B1 and B2). Variations were designed to accommodate current and projected traffic demand, improve safety, and comply with current design standards. The interchange variations could be used with either alignment alternative. The proposed interchanges in downtown Bettendorf improve U.S. 67, a one-way couple, to a two-way street near I-74. Two design variations were developed for connecting the segments of U.S. 67 that would become a two-way street with the existing one-way couple on the east and west sides of the interchange. Both variations—the diagonal connector variation and 90-degree connector variation—are compatible with both mainline alignment alternatives and both interchange types. Two local roadway underpass design variations were considered to retain accessibility to downtown Bettendorf. An improved Holmes Street/Mississippi Boulevard underpass and an improved Kimberly Road underpass option were presented as potential build alternatives.
- In response to public interest and local transportation plans, three options for an exclusive bicycle and pedestrian trail across the Mississippi River were presented as elements of build alternatives in the DEIS. The three options include no bicycle/pedestrian accommodations on I-74 bridges, a new bicycle/pedestrian trail on the existing Iowa-bound bridge, and a new bicycle/pedestrian trail on a new I-74 bridge.

North Section. In the North Section, one alternative was considered for the mainline and two alternatives were considered at the U.S. 6/Spruce Hills Drive and 53rd Street interchanges. The mainline alternative involves reconstructing and widening the mainline to accommodate three 12-foot through lanes in each direction through 53rd Street. Twelve-foot auxiliary lanes would be constructed between Grant Street (in the Central Section) and U.S. 6 in both the southbound and northbound directions. The I-74 bridges over Middle Road, Duck Creek, and U.S. 6/Spruce Hills Drive would be reconstructed to provide adequate vertical and lateral clearance and to accommodate design improvements. The 53rd Street bridge would be re-used and widened to accommodate the expansion from a four-lane to a six-lane cross section along 53rd Street.

2.2 Description of the Selected Alternative

The Iowa and Illinois DOTs, in consultation with FHWA, identified the Preferred Alternative presented in the FEIS as the Selected Alternative. The elements of the Selected Alternative are shown in Table 1 and described in the following paragraphs. For details, see Sections 2.5 and 2.6 of the FEIS, *Identification of the Preferred Alternative* and *Modifications to the Preferred Alternative Since Publication of the DEIS*, respectively.

TABLE 1
Elements of the Selected Alternative

Section	Selected Alternative
South Section	The one build alternative considered in the South Section
Central Section	Alignment Alternative F with interchange variations M1 and B1
	The Holmes Street/Mississippi Boulevard Underpass
	The U.S. 67 Diagonal Connector
North Section	The one build alternative considered in the North Section
	Interchange variation 2 at both U.S. 6 and 53rd Street

South Section. In the South Section, the single build alternative was selected. Improvements are intended to add capacity, improve the infrastructure, and comply with current design standards.

Central Section. In the Central Section, Alternative F was selected for the mainline alignment; M1 was selected for the downtown Moline interchange alternative; B1 was selected for the downtown Bettendorf interchange alternative; the diagonal configuration of the U.S. 67 connector was selected; and Holmes Street/Mississippi Boulevard was selected for the local roadway underpass location. The Selected Alternative in the Central Section will add capacity, meet current design standards, improve the facility's infrastructure, and improve the economic vitality of the area by improving traffic flow through the downtown areas. A new bicycle/pedestrian trail on the new I-74 bridge was also selected.

North Section. In the North Section, the one build alternative was selected for the mainline, and Variation 2 was selected for both the U.S. 6 and 53rd Street interchanges. As with the South Section, the Selected Alternative in the North Section is intended to

increase capacity, improve the infrastructure, and bring the facility up to current design standards.

2.3 Environmental and Socioeconomic Impacts

Table 2 summarizes the environmental and socioeconomic impacts of the Selected Alternative. The Selected Alternative and the environmental constraints are shown on the Aerial Photo Exhibit in Appendix B of the FEIS. The No-Action Alternative would have minimal impact on the environment. A description of the measures to minimize harm for the Selected Alternative's impacts is found in Section 4 of this document.

TABLE 2
Impacts of the Selected Alternative

Resource Issue	Units	Impact
Land Conversions		
Net Increase in Highway ROW[a]	Acres	27.9
Residential Converted to ROW	Acres	4.6
Commercial Converted to ROW	Acres	25.8
Real Estate		
Residential Structures Required	Number	21[b]
Businesses Required	Number	39
Churches Required	Number	1
Environmental Issues		
Wetlands Impacted	Acres	1.21
Floodplain Crossings	Number (type)	2 (transverse [c])
Stream/River Crossings	Number	2
Endangered Species	Yes/No	[d]
Historic Properties	Number	6
Parks	Number	1[f]
Archaeological Sites	Number	0
Design Year Noise	Receivers affected[e]	56
Contaminated Sites	Number	28

[a] After the existing facility is demolished, there will be areas that can be converted from highway ROW to private use. These areas are subtracted from the amount of new ROW required to construct the proposed improvements to result in a net increase in highway ROW.
[b] Two structures are multifamily; one has two units and the other has eight units.
[c] Transverse Floodplain crossing is a crossing of a floodplain at an angle of 30 to 90 degrees.
[d] Surveys for mussels will be completed at a time more proximate to the construction of the proposed improvements in order to obtain the most accurate information on the locations of the mussels.
[e] Receivers are locations at which noise levels were monitored.
[f] Bill Glynn Memorial Park. The park is available for public use but is not considered a 4(f) property because it is an excess parcel owned by Iowa DOT.

2.4 Environmentally Preferred Alternative

The Selected Alternative is the environmentally preferred alternative. The impacts of the alternatives considered in the DEIS and FEIS are similar or the same for many resources, including floodplain impacts, water body crossings, parks, displacements, and noise receivers. However, the selected alternative will impact fewer acres of wetlands and fewer historic structures. Additionally, the F alignment is located farther away from the Sylvan Slough natural area and the potential locations of mussel beds in the Mississippi River. For these reasons, the selected alternative was also identified as the environmentally preferred alternative.

3. Section 4(f)

The U.S. Department of Transportation's Section 4(f) law (49 USC 303) states that federal funds may not be approved for projects that use land from a significant publicly owned park, recreation area, wildlife or waterfowl refuge, or any significant historic site unless it is determined that there is no feasible and prudent alternative to the use of land from such properties, and the action includes all possible planning to minimize harm to the property resulting from such use.

3.1 Section 4(f) Properties

The Selected Alternative impacts four properties in Moline, Illinois and two properties in Bettendorf, Iowa. In Moline, the Knights of Pythias Lodge Hall and Davenport, Rock Island and Northwestern Railroad Depot will be removed and a temporary easement will be required from the Scottish Rite Cathedral and C. I. Josephson House. In Bettendorf, Iowa, the Iowa-Illinois Memorial Bridge and Monument and the Iowana Farms Milk Company will be removed. All properties are considered eligible for listing on the National Register of Historic Places, except for the monument, which is considered a contributing element to the historic Iowa-Illinois Memorial Bridge. The Section 4(f) properties and impacts to the properties are described in more detail in the Final Section 4(f) Statement.

3.2 Section 4(f) Summary

3.2.1 No Prudent and Feasible Alternatives

The impacted 4(f) properties are located proximate to the existing I-74 facility. The proposed improvements were designed to utilize as much existing right-of-way as possible to minimize impacts to surrounding resources. However, to optimize the ability of the proposed action to address the project's purpose and need, improvements are required outside of the existing right-of-way, specifically where the impacted 4(f) resources are located. A No-Action alternative and several build alternatives were considered. The No-Action alternative was dismissed because it does not meet the project's purpose and need. Alternatives that avoid the 4(f) resources by shifting the mainline or interchange ramp alignment were also considered, but were dismissed because they were unreasonable, did not meet the purpose and need, or impacted other sensitive resources, including 4(f) resources.

The Iowa-Illinois Memorial Bridge would be avoided if the No-Action or non-roadway improvement alternatives were chosen. Non-roadway improvement alternatives include diversion of I-74 traffic to other area interstate facilities, diversion of I-74 traffic to the local road system to accommodate traffic with local destinations, and transit and transportation system management strategies. However, these alternatives would not serve the project purpose and need and were therefore dismissed from further consideration.

3.2.2 Planning to Minimize Harm

As noted in the FHWA Section 4(f) policy paper, "In addition to determining that there are no feasible and prudent alternatives to avoid the use of 4(f) resources, the project approval process requires the consideration of all possible planning to minimize harm on the 4(f) resource. Minimization of harm entails both alternative design modifications that lessen the impact on 4(f) resources and mitigation measures that compensate for residual impacts." Minimization measures were applied to reduce impact to two properties eligible for listing on the National Register of Historic Places, the Scottish Rite Cathedral and the C. I. Josephson Property. The proposed improvements include the construction of a retaining wall, which will avoid permanent use of the Scottish Rite Cathedral property. Selection of Interchange Alternative M1 avoids permanent use of any of the C. I. Josephson property. Rather, a temporary easement will be required for construction purposes.

Minimization options were considered for the four properties that will be permanently impacted by the proposed improvements. Minimizing impact to the Knights of Pythias Lodge Hall, the Davenport, Rock Island and Northwestern Railroad Depot, and the Iowana Farms Milk Company by shifting the interchange ramps that impact the buildings was considered, but determined to not be feasible.

Alternatives were also considered for minimizing impact to the Iowa-Illinois Memorial Bridge. These included making physical alterations to the existing bridges that may affect the setting or aesthetic qualities of the existing bridges, but which did not require demolition of the existing structures. As the exact location of the Iowa-Illinois Memorial Bridge Monument is not considered critical to its historic status (it has previously been relocated), relocation of the monument from its current position in Bill Glynn Memorial Park has been considered acceptable. Coordination with the Iowa SHPO will be undertaken to determine where the monument might be relocated. Leach Park may represent a desirable relocation opportunity since it is next to the river and bridges.

Where impacts cannot be minimized, mitigation measures have been developed by the Iowa and Illinois SHPOs, FHWA and the DOTs. Per the Memorandum of Agreement (MOA) signed by FHWA, Iowa SHPO, and Iowa DOT, the Iowana Farms Milk Company and Iowa-Illinois Memorial Bridge will be documented in accordance with the recordation plan detailed in the MOA and the Iowa-Illinois Memorial Bridge Monument will be moved to an appropriate public site in Bettendorf, preferably close to the original bridge site, to continue to commemorate the bridge. As stipulated in the MOA between FHWA, Illinois SHPO and Illinois DOT signed in May 2008, the Knights of Pythias Lodge Hall and Davenport, Rock Island and Northwestern Railroad Depot will be documented in accordance with the Illinois Historic American Building Survey/Historic

American Engineering Record (IL HABS/ HAER) standards, and coordinated through the Illinois DOT.

For additional details about efforts to minimize harm to Section 4(f) resources, see Section 6 of the Final Section 4(f) Evaluation.

3.2.3 Formal Coordination

Coordination with the SHPO for both Iowa and Illinois occurred throughout the study process. The results of the historic and archaeological surveys were coordinated with the SHPO for each state to obtain concurrence for the properties under their jurisdiction. These concurrence findings reported on the types and locations of NRHP-eligible properties.

Illinois SHPO concurred with Iowa DOT's findings of adverse effect on historic properties impacted by the proposed improvements on January 10, 2006. FHWA and the Illinois SHPO signed a Memorandum of Agreement on May 21, 2008, regarding impacts to historic properties on the Illinois side of the project corridor and the appropriate mitigation measures to be taken. On May 6, 2008, FHWA and the Iowa SHPO signed a Memorandum of Agreement that identifies historic properties impacted on the Iowa side of the corridor and the appropriate measure to be taken to mitigate the impacts. FHWA notified the Advisory Council on Historic Preservation (ACHP) of the Finding of Adverse Effect on the four historic properties. ACHP responded with a determination that the agency's participation in the process for resolving adverse effects was unnecessary and that filing the MOAs and any related documentation with the ACHP will satisfy the requirements of Section 106 of the National Historic Preservation Act.

3.2.4 Basis for Section 4(f) Approval

Because both build alternatives use land from 4(f) resources, Section 4(f) regulations require that an analysis be performed to determine which alternative results in the least overall harm. The least overall harm is determined by comparing the impacts of Alternatives F and E to the factors listed below, which are found in 23 U.S.C. 774.3 (Section 4(f) Approvals):

- **The ability to mitigate adverse impacts to each Section 4(f) property.** There would be no difference between the mitigation concepts for Alternatives F and E.
- **The severity of the proposed impacts to the Section 4(f) properties after mitigation.** Alternative F affects six of the seven historic structures affected by Alternative E. The severity of the impact to the six historic structures affected by Alternatives F and E are the same. The notable difference between the two alternatives concerning this criterion is that Alternative F avoids the Eagle Signal building in Moline and Alternative E would displace it.
- **The relative significance of the Section 4(f) properties.** Because Alternative F affects six of the same historic buildings affected by Alternative E, there is no difference in the significance of the Section 4(f) properties affected by the two alternatives.

- **The views of agencies with jurisdiction over the 4(f) properties.** The FHWA signed separate memoranda of agreement with the Illinois and Iowa SHPOs in spring 2008.
- **The degree to which each alternative meets the project's purpose and need.** Alternatives F and E are equally able to meet the project's purpose and need.
- **The degree to which non-4(f) resources are affected by the alternatives after mitigation.** There are relatively minor differences between the alternatives' quantifiable impacts; Alternative F will affect approximately 2 fewer acres of wetlands than Alternative E and have one fewer commercial displacement. Alternative E would displace three fewer residences than Alternative F. After mitigation, those minor differences would essentially be non-issues. There is, however, a qualitative difference between Alternatives F and E that is worth noting. Alternative F will locate the I-74 bridge farther from Sylvan Slough where the federally endangered Higgins' eye pearly mussel is located. This location will also minimize the potential to contribute sediment loading to Sylvan Slough during bridge construction because sediment will have more time to disperse before being deposited on the river substrate. In their comments on the DEIS, USEPA requested that Alignment F be selected for this reason.
- **The cost differences between the alternatives.** There are no notable differences between the costs of Alternatives F and E.

The least harm comparison indicates that Alternatives F and E have similar effects on the project's historic buildings; however, Alternative F will avoid one historic structure (Eagle Signal building) that Alternative E would displace. In addition, Alternative F will have a lesser qualitative impact on the Sylvan Slough and Higgins' eye pearly mussel; therefore, Alternative F has the least overall harm.

Based upon the above considerations, there is no feasible and prudent alternative to the use of lands from the Knights of Pythias Lodge Hall, the Davenport, Rock Island and Northwestern Railroad Depot, the Iowana Farms Milk Company, and the Iowa-Illinois Memorial Bridge, and the proposed action includes all possible planning to minimize harm to the properties resulting from such use.

4. Measures to Minimize Harm

4.1 Transportation Impacts

A sequence for implementing the proposed improvements was devised to minimize the amount of disruptions (lane and ramp closures and detours) that motorists will endure during construction. Along the mainline, two lanes in each direction will remain open during construction. If additional lane closures are necessary, they will occur briefly and during nonpeak hours.

4.2 Noise Impacts

Traffic noise levels were evaluated using the FHWA Traffic Noise Model version 2.5 computer program. Based on the noise analysis documented in Section 4.3.4, *Noise*

Impacts, of the FEIS, a noise barrier analysis was conducted to evaluate the effectiveness and reasonableness of providing noise barriers within the project area. Four barrier locations (two in Iowa and two in Illinois) are proposed for placement to minimize expected noise increases. Construction of any noise barriers will depend on public input and final design considerations.

4.3 Water Quality and Surface Water Impacts

The proposed bridge type will require fewer piers than the existing structure. Construction of the new piers will result in temporary water quality impacts and increased turbidity during construction. For additional details about efforts to minimize impacts during construction, see *Construction and Operational Impacts* later in this section. See also the *Designated Natural Areas* discussion for a discussion about efforts to reduce water quality impacts to the Mississippi River—Moline Natural Area.

4.4 Wetland Impacts

The Selected Alternative will affect four individual wetlands totaling 1.21 acres. Impacts to wetlands within the project corridor were minimized by selecting the Build Alternative across the Mississippi River that avoids an entire wetland. Where practicable, efforts were also made to span wetlands and steepen slopes to minimize encroachment into wetland areas.

The project has been developed pursuant to Executive Order 11990, Protection of Wetlands. The evaluation of alternatives concluded that there is no practicable alternative to the proposed construction in wetlands and that the proposed action includes all practicable measures to minimize harm to wetlands that may result from such action. A detailed discussion of this finding and the mitigation of wetland impacts is presented in Section 4.3.21 of the FEIS, *Only Practicable Alternative Finding for Impacts to Wetlands*.

4.5 Floodplain Impacts

The proposed improvements to I-74 will cross the 100-year floodplain associated with the Mississippi River and Duck Creek and run parallel to the 100-year floodplain of a tributary of Duck Creek. Proposed floodplain encroachments will be designed to be consistent with national, state and local floodplain goals and objectives. Proposed structure openings will be sized using HEC-RAS or other appropriate computer models to ensure that backwater increases are within state and local standards. Access points will be limited near floodplain crossings to ensure that the project does not promote development within the floodplain.

Following construction, the roadway sideslopes will be reseeded with fast-growing grasses to prevent sedimentation in the floodplain, Mississippi River, Duck Creek and its tributaries. In addition, construction debris will be kept out of the floodplain and river. Impacts to natural and beneficial floodplain values, beyond those associated with construction will be minimized by strict access control along the construction alignments.

4.6 Designated Natural Areas

As discussed in Section 4.10.1 of the DEIS, *Mississippi River – Moline Natural Area,* the Mississippi River—Moline Natural Area, home to listed mussel species, is crossed by existing and proposed Mississippi River bridges on the Illinois side. USEPA and Illinois DNR, in their comments on the DEIS, expressed concern regarding the potential impacts a new river crossing will have on the Natural Area and the listed mussel species inhabiting it. An analysis was undertaken to determine to what extent stormwater effluent into the Mississippi River should be limited in order to minimize impact to surface waters, especially the Natural Area. Extensive coordination with Illinois DNR, USEPA, and USFWS (Appendix C of the FEIS, *Correspondence*) resulted in the following findings:

- The new bridge will be located farther upstream, providing more distance than currently exists for dilution of the stormwater pollutants.
- The Moline Water Treatment Facility has an outlet directly into Sylvan Slough.
- The cost to construct and difficulty to maintain a system to capture the stormwater from the bridge and pipe it offsite outweigh the benefit to water quality that would result.
- After considering multiple structural options for handling stormwater effluent, it was determined that best management practices will be employed in order to minimize water quality impacts. These practices will include nonstructural measures, such as sweeping after snow events, standard sweeping practices, and use of environmentally-friendly deicing materials, as they become less expensive over time.

4.7 Threatened and Endangered Species

In the agency's comment on the DEIS, USEPA requested that more detailed information on mussel impacts and mitigation strategies (e.g., number of individual mussel species impacted, specific mussel relocation plans) be included in the FEIS. However, USFWS together with the Iowa and Illinois DNRs, agreed that the surveys required to gather this information before publication of the FEIS were unnecessary and should instead be undertaken prior to the proposed period of construction of the Mississippi River bridges.

USFWS expressed concern about potential water quality impacts the proposed project will have on the mussels. Coordination with the agency was undertaken to identify the best methods to limit such impacts. USFWS identified the following measures for minimizing water quality impacts that may adversely affect the mussel population: sweeping after snow events, standard sweeping practices, and use of environmentally-friendly deicing materials as they become less expensive over time (Appendix C of the FEIS, *Correspondence*). Coordination with USFWS will occur during the mussel surveying to ensure that the requirements of Section 7 of the Endangered Species Act are met.

Impact avoidance, minimization, and mitigation strategies for the mussel species were identified in the Detailed Action Report prepared during the development of the DEIS (see Appendix D of the DEIS, *Detailed Action Report*). The Illinois DNR, in its March 21, 2003, response to the Detailed Action Report, (see Appendix C of the DEIS,

Correspondence), recommended that the Illinois DOT seek an Incidental Take Authorization (ITA) before proceeding with the I-74 improvements. As such, a Conservation Plan has been prepared to address a number of aspects: the impact of the proposed taking; measures to minimize and mitigate the impact; funding that will be available to undertake environmental mitigation; alternative actions that would avoid potential takes; data and information that show the proposed taking will not reduce the likelihood of the survival of the species; and an agreement between the Illinois DNR and Illinois DOT to carry out the elements of the plan.

4.8 Public Use Lands - Trails

Although users may be temporarily diverted to alternate routes, all trails will remain open during construction.

4.9 Cultural Resources

Potential impacts to three cultural resources have been minimized through engineering efforts or alternatives selection (see Table 4-10 in the FEIS, *Summary of Minimization Measures for Specific Properties*). Impacts to the Scottish Rite Cathedral were minimized through the use of retaining walls and by reducing roadway underpass structure depth adjacent to the property. Impacts to the C.I. Josephson property have been minimized by selecting interchange option M1, which requires only temporary use of the front of the property during construction. Finally, impacts to the Iowa-Illinois Bridge Monument have been minimized by agreement to relocate the monument to another location near the site of the existing I-74 bridges, potentially identified as Leach Park.

Mitigation for unavoidable impacts has been developed in consultation with the Iowa and Illinois SHPOs and documented in the MOAs between each state's DOT and SHPO (see Appendix 4(f)-6 of the Final 4(f) Statement, *Memoranda of Agreement*). For impacted historic buildings, the proposed mitigation involves documenting and photographing the structures for historic archives.

4.10 Special Waste

Any demolition or construction waste must be recycled or delivered to a permitted waste disposal/treatment facility. The Illinois EPA has classified this type of material as Clean Construction Demolish Debris (CCDD) and allows it to go to properties as long as they meet Illinois DOT specifications.

4.11 Visual Impacts / Aesthetics

The Iowa and Illinois DOTs, in coordination with the I-74 Advisory Committee, formed a Corridor Aesthetics Advisory Team (CAAT) to develop an aesthetic theme and aesthetic design guidelines for the I-74 corridor through the preliminary design phase. The public has been involved in the development of the aesthetic concepts, and the DOTs will continue to engage the communities through the final design phase. The implementation of the aesthetic concepts the team suggests relies on future funding availability.

4.12 Construction and Operational Impacts

4.12.1 Air Quality and Noise

Illinois DOT's Standard Specifications for Road and Bridge Construction include provisions for dust control. Under those provisions, dust and airborne dirt generated by construction will be managed through dust control procedures or a specific dust control plan, when warranted. The contractor and Illinois DOT will meet to review the nature and extent of dust-generating activities and will cooperatively develop specific types of control techniques appropriate to the specific situation. Techniques that may warrant consideration include measures such as minimizing track-out of soils onto nearby publicly traveled roads, reducing speed on unpaved roads, covering haul vehicles, and applying chemical dust suppressants or water to exposed surfaces, particularly those on which construction vehicles travel. Iowa DOT's standard construction specifications require contractors to comply with state regulations, including limitations on generation of fugitive dust (Iowa DOT Construction Manual, Section 2.12) and equipment emissions. With the application of appropriate measures to limit dust emissions during construction, this project will not cause any notable, short-term particulate matter air quality impacts.

Construction Noise will be controlled in accordance with article 107.35 of the Illinois DOT Standard Specifications for Road and Bridge Construction and Iowa DOT Policy 500.07. Construction noise will be minimized by the use of mufflers on construction equipment. Air compressors will meet federal noise level standards and will, if possible, be located away or shielded from residences and other sensitive noise receivers.

4.12.2 Water Quality and Erosion Control

For the portion of the project within Illinois, the Illinois DOT's *Joint Design/Construction Procedure Memorandum on Erosion and Sediment Control* will be followed to ensure that proper erosion control methods will be employed to minimize erosion and sedimentation. Erosion control devices will be installed before the onset of construction work that could cause erosion. Temporary or permanent erosion control methods will include silt fences, retention basins, detention ponds, interceptor ditches, seeding and sodding, rip-rap on exposed banks, erosion mats, and mulching. Disturbance of streamside vegetation will be kept to a minimum. Disturbed areas will be seeded or stabilized upon completion of construction.

For the portion of the project that lies within Iowa, the Iowa DOT's *Construction Manual* requires contractors to reduce the amount of soil leaving the project site by using preventative measures such as silt fences, ditch checks, and other silt control devices. Stabilized crop seeding is identified as the most effective erosion control device and will be applied during the grading process. Under these guidelines, the contractor is required to submit an erosion control work plan. This plan should list the materials and equipment to be used; the location and timing of installation of silt fences, silt basins, and other temporary erosion control measures outlined on Standard Road Plans RL-9; and the schedule for placement of stabilizing crop seeding and fertilizing.

Section 4.5.1 of the DEIS, *Construction Impacts to Surface Water,* discusses impacts to surface water resources as a result of construction of the proposed improvements. The identification of Alignment F as the Selected Alternative will minimize the amount of

sediment loading to the Sylvan Slough, a known location of the federally endangered Higgins' eye pearly mussel (*Lampsilis higginsii*), during bridge construction because it is farther upstream from the other mainline alternative and therefore the sediment has more time to disperse before being deposited on the river substrate.

Potential bridge demolition techniques were evaluated as part of this study (see Section 4.3.16.4 of the FEIS, *Navigation*, for a description). In the agency's comments on the DEIS, USEPA requested that if the existing bridges are removed, demolition be conducted in a manner that releases the least amount of heavy metals into the environment. When determining the appropriate demolition technique for the I-74 bridges, consideration will be given to those alternatives that will minimize the release of heavy metals and other potentially harmful substances into the environment.

4.12.3 Navigation

Construction of the bridge substructure and superstructure has implications for river navigation interests. During construction, building equipment and materials will need to be placed in the river channel, thereby reducing the horizontal clearance available for navigation. The duration of the reduction in horizontal clearance is dependent upon the specific foundation type selected and the specific methods of construction employed. Work tugs and material barges will be operating near the construction site. Depending on the type of construction, temporary closure of the river channel may be required so that the work tug, material barge and crane barge can operate in the channel.

Demolition of the existing structure may also require temporary closure of the channel. Several potential bridge demolition techniques have been considered as part of this study. A final determination about demolition methodology will be made during final design, and in consultation with the U.S. Coast Guard.

5. Monitoring and Enforcement

The proposed action involves impacts to resources regulated by state and federal agencies with jurisdiction. Coordination with these agencies has occurred during the development of the project. As a result of this coordination, the following permits or actions have been identified as requirements:

- A permit from the U.S. Army Corps of Engineers under Section 404 of the Clean Water Act
- A permit from the Coast Guard under Section 9 of the Rivers and Harbors Act
- Water quality certification from the Iowa Department of Natural Resources (DNR) and the Illinois Environmental Protection Agency (Illinois EPA) under Section 401 of the Clean Water Act
- A permit from the Illinois DNR, Office of Water Resources for Construction in Floodways of Rivers, Lakes, and Streams and a floodplain permit from the Iowa DNR

- A National Pollution Discharge Elimination System (NPDES) permit coordinated between the Iowa DNR and Iowa DOT in Iowa and Illinois EPA and Illinois DOT in Illinois
- A Memorandum of Agreement with the Illinois and Iowa State Historic Preservation Offices detailing mitigation requirements for impacts to cultural resources, including historic resources governed by Section 4(f) of the Transportation Act of 1966, as amended, is included in the FEIS
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, will be followed during the acquisition and relocation of displaced residents
- An Incidental Take Permit in accordance with the Endangered Species Act of 1973

Further activities to be considered in future phases of the project are described below.

5.1 Wetland Mitigation

Illinois DOT is proposing to purchase credits at the Andalusia Slough Wetland bank to mitigate for wetland impacts on the Illinois side of the corridor (see the Wetland Impact Evaluation Form in Appendix D of the FEIS, *Wetland Impact Evaluation Form*). The Andalusia Slough Wetland Bank is offsite but within the Mississippi River Basin. As a result of the wetland being affected by a new alignment, the mitigation procedures are being processed as a Standard Action. Because the wetland (site 6) occurs within an Illinois designated natural area, a mitigation ratio of 5.5:1.0 applies.

The Iowa DOT will mitigate wetland impacts on the Iowa side of the corridor in accordance with the Corps of Engineers rules for compensatory mitigation. The Iowa DOT will purchase mitigation credits from an approved wetland mitigation bank or in-lieu fee program, if available, or will perform permittee-responsible mitigation at an off-site location.

5.2 Mussel Survey

Completion of a mussel survey at the location of the existing and proposed bridges over the Mississippi River is required closer to the construction date to more accurately determine the mussel populations' location and abundance. Additionally, the activities identified in the Conservation Plan (see Appendix E of the FEIS, *Incidental Take Authorization*) must be followed to limit the disruption to the mussels and their habitat and to maximize their ability to thrive once the proposed improvements have been implemented. A review of the Bald Eagle nest sites is also required prior to construction to accurately identify their locations.

6. Comments on the Final EIS

Several federal and state agencies provided comments on the FEIS. Their comments are discussed below. Copies of their comment letters and, where applicable, DOT response, are attached to this ROD. Although no members of the public submitted comments on

the FEIS, several comments on the project were received from the public at a public information meeting held during the circulation of the FEIS. A summary of those comments is included at the end of this section.

6.1 Federal and State Agencies

6.1.1 U.S. Department of Housing and Urban Development

The U.S. Department of Housing and Urban Development stated that it does not expect any detrimental effects on any of its own projects as a result of the project.

6.1.2 U.S. Department of Homeland Security, United States Coast Guard

The United States Coast Guard noted that the FEIS addressed the concerns that the agency expressed in its comments on the DEIS.

6.1.3 Natural Resources Conservation Service

The Natural Resources Conservation Service stated that it had no comments or concerns regarding this project.

6.1.4 U.S. Army Corps of Engineers

The U.S. Army Corps of Engineers (Corps) commented that the project does not involve Rock Island District administered land; therefore, real estate coordination will not be required. The Corps also noted that the project will require a Section 404 permit and additional coordination, as part of the Section 404 process, will be required, including coordination regarding with the State Historic Preservation Officers of Iowa and Illinois and the U.S. Fish and Wildlife Service. The Corps also noted that the emergency management agencies of Iowa and Illinois should be contacted to determine if the project may impact the regulated floodplain or floodway. Finally, the Corps requested that the project sponsors contact the Rock Island District's Emergency Management Office to determine whether the project may affect local flood control projects.

The Iowa and Illinois Departments of Transportation will apply for the required Section 404 permit and will continue to coordinate with the appropriate federal and state resource/regulatory agencies as the project moves into the design phase.

6.1.5 U.S. Environmental Protection Agency

The U.S. Environmental Protection Agency (EPA) noted that its comments on the 2003 DEIS pertained to the disposition of the existing bridge as well as affects to natural areas, water quality, business relocations, and wetlands. The EPA expressed its appreciation for the additional investigation and analysis provided for those issues. Relative to the FEIS, the EPA commented on the commitment to provide a 10-foot clearance zone around bridge piers during construction to protect mussel species in the Mississippi River. The EPA recommended that similar protection be provided during demolition of the existing bridge. The EPA also suggested that the project sponsors consider the use of centrifugal particle separators, filtration drains, or other pollution control mechanisms in the bridge design, as well as placing the bridge runoff discharge points in locations that will minimize impacts to mussel beds. Finally, the EPA suggested that the project sponsors continue to consult with the Iowa and Illinois agencies with jurisdiction over

air quality to keep abreast of current air quality monitoring and control measures that may be employed as part of the project.

The Iowa and Illinois Departments of Transportation will continue to consider the comments provided by the EPA as the project moves into the design phase and will apply these suggestions where practicable.

6.1.6 Iowa Department of Natural Resources

The Iowa Department of Natural Resources (Iowa DNR) noted that the Mississippi River is on the impaired waters list and that a December 2003 letter from Iowa DNR was not included in the appendix of the FEIS, along with other agency letters. The Iowa DNR provided a copy of that letter, which is included in the appendix of this ROD. The Iowa DNR also requested that the project sponsors use best management practices to control erosion and protect water quality.

The Conservation and Recreation Division of Iowa DNR also commented on the project. In their letter, they concurred with the FEIS in the potential for state- and federally-listed threatened or endangered mussel species to be present in the Mississippi River near the project location. The letter stated that a mussel survey will be required prior to issuing a Sovereign Lands Construction Permit. In the FEIS, the project sponsors committed to conducting a mussel survey prior to construction, in compliance with agency requirements.

6.2 Letters from Local Governments

6.2.1 Moline Plan Commission

The Moline Plan Commission submitted a letter requesting that the project sponsors consider placing I-74 on structure through downtown Moline rather than using fill. The Illinois Department of Transportation will continue to work with the City of Moline as the project proceeds through the design phase.

6.3 Letters and Comments Received from the Public

No comments on the FEIS were submitted by members of the general public. However, a total of 23 individuals provided comments on the project during a public information meeting that was held during the FEIS comment period. These comments are summarized in Table 3.

TABLE 3
Summary of Public Comments

Comment	No. of Comments Received on this Issue
Concern about constructing I-74 on fill in downtown Moline, rather than on structure	3
General support for including a bicycle/pedestrian path with the project	4

TABLE 3
Summary of Public Comments

Comment	No. of Comments Received on this Issue
Request to extend the limits of bicycle/pedestrian path along I-74 corridor beyond the river crossing	2
Request that the bridge design allow motorist to see up- and downriver while driving across the bridge	2
Expression of general support for the project	2
Support for including aesthetic elements in the project design	1
Suggestion that the bridge be designed to allow future lane additions	1
Concern about noise impacts or a request for noise mitigation	3
Request for information about where displacements will occur	1
Request that the project sponsors consider a 16' bicycle/pedestrian path rather than a 10’ path	1
Request for copies of specific preliminary plan sheets displayed at the public meeting	2
Request that access ramp for the bicycle/pedestrian path be designed so it can be ridden and not require that bicycles be walked	1
Suggestion that land no longer needed for transportation use be turned over to the cities and be maintained as open/green space	1
Request for information about how the type of road surface (concrete or asphalt) will be determined	1
Suggestion that the project plans be posted online	1
Suggestion that construction status (road closings, etc.) be posted online	1
Question about who will have responsibility for clearing snow from the trail	1
Question about traffic volumes on a local road near the I-74 corridor	1
Concern about impacts to personal property near the project	1

7. Conclusion

The environmental record for the Interstate 74 Quad Cities Corridor Study includes the previously referenced Draft EIS and Draft Section 4(f) Evaluation (December 2003) and the Final EIS and Final Section 4(f) Evaluation (January 2009). These documents, incorporated here by reference, constitute the statements required by the National Environmental Policy Act (NEPA) and Title 23 of the United States Code (U.S.C.).

Having carefully considered the environmental record noted above, the mitigation measures as required herein, the written and oral comments offered by other agencies

and the public on this record, and the written responses to comments, the FHWA determined that (1) adequate opportunity was offered for the presentation of views by all parties with a significant economic, social, or environmental interest; (2) fair consideration has been given to the preservation and enhancement of the environment and to the interests of the communities in which the project is located; and (3) all reasonable steps have been taken to minimize adverse environmental effects of the proposed project.

It is the decision of FHWA to advance the project. In so doing, FHWA concludes that the Interstate 74 Quad Cities Corridor Study project complies with all applicable provisions of the National Environmental Policy Act, specifically 42 U.S.C. 4332.

The Record of Decision for the Interstate 74 Quad Cities Corridor Study Project is hereby approved.

29 April 09
Date of Approval

For Federal Highway Administration

U.S. Department of Housing and Urban Development
Iowa State Office
Federal Building
210 Walnut Street, Room 239
Des Moines, Iowa 50309-2155

February 3, 2009

James P. Rost, Director
Office of Location and Environment
Iowa Department of Transportation
800 Lincoln Way
Ames, IA 50010

Subject: Project Number IM-74-1(122)0-13-82
Interstate 74 Quad Cities Corridor Study
Scott County, Iowa and Rock Island County, Illinois

Dear Mr. Rost:

We have received your inquiry to the subject location for Environmental Assessment Documentation and have reviewed such.

We do not contemplate any detrimental effects on any of our projects in the area under review.

Sincerely,

James P. Ryan, Director
Des Moines Multifamily
Program Center

U.S. Department of Homeland Security

United States Coast Guard

Commander
Eighth Coast Guard District

1222 Spruce Street
St. Louis, MO 63103
Staff Symbol: (dwb)
Phone: 314-269-2381
Fax: 314-269-2737
Email: David.H.Studt@uscg.mil

16591.1/485.51 UMR
February 26, 2009

Mr. James Rost
Director, Office of Location & Environment
Iowa Department of Transportation
800 Lincoln Way
Ames, IA 50010

Subj: PROPOSED IOWA-ILLINOIS MEMORIAL DUAL BRIDGE REPLACEMENT, MILE 485.81, UPPER MISSISSIPPI RIVER

Dear Mr. Rost:

The Coast Guard reviewed the documents submitted for comment in Ms. Janet Vine's letter dated January 16, 2009. We have determined that the FEIS addresses the concerns we expressed in our letter of December 1, 2003.

If there are any questions, please contact Mr. David Studt at the above number.

Sincerely,

ROGER K. WIEBUSCH
Bridge Administrator
By direction of the District Commander

United States Department of Agriculture

NRCS
Natural Resources Conservation Service
210 Walnut Street, Room 693
Des Moines, IA 50309-2180

January 26, 2009

Mr James Rost, Director
Office of Location & Environment
Iowa DOT
800 Lincoln Way
Ames, IA 50010

Dear Mr. Rost

Thank you for the opportunity to comment on the Final Environmental Impact Statement for the Interstate 74 Quad Cities Corridor Study. The Natural Resources Conservation Service has no concerns or comments at this time.

If we can be of any further assistance, feel free to contact John Myers, State Resource Conservationist, at 515 323-2223, or by email at john.myers@ia.usda.gov.

Sincerely,

John Myers for
Richard Sims
State Conservationist

cc: Bruce Trautman, Assistant State Conservationist (FO), NRCS, Fairfield, IA
Paul Viner, District Conservationist, NRCS, Davenport, IA

DEPARTMENT OF THE ARMY
ROCK ISLAND DISTRICT. CORPS OF ENGINEERS
CLOCK TOWER BUILDING - P.O. BOX 2004
ROCK ISLAND, ILLINOIS 61204-2004

REPLY TO
ATTENTION OF:

March 4, 2009

Planning, Programs, and
Project Management Division

Ms. Janet M. Vine
Iowa Department of Transportation
800 Lincoln Way
Ames, Iowa 50010

Dear Ms. Vine:

I received your letter dated January 16, 2009, requesting comments regarding the *Final Environmental Impact Statement* (FEIS) and Final 4(f) Statement for the improvement of Interstate-74 in Scott County, Iowa and Rock Island County, Illinois. Rock Island District Corps of Engineers staff reviewed the information you provided and have the following comments:

1. Your proposal does not involve Rock Island District administered land; therefore, no further Rock Island District real estate coordination is necessary.

2. Based on the information included in the FEIS, this project will require authorization under Section 404 of the Clean Water Act. A complete application for the project should be submitted as soon as possible. The application should include final wetland delineations, details of impacts to wetlands and other waters of the United States, and types and relative functions of any wetlands to be impacted.

The application must include a mitigation plan to replace any wetland or stream functions that will be adversely impacted due to this project. The mitigation plan must include:

- the manner in which the resource functions of the compensatory mitigation project will address the needs of the watershed, eco-region, physiographic province, or other geographic area of interest;

- a description of the factors considered during the mitigation site selection process. This should include consideration of watershed needs, on-site alternatives where applicable, and the practicability of accomplishing ecologically self-sustaining aquatic resource restoration;

- a description of the legal arrangements and instrument, including site ownership, that will be used to ensure the long-term protection of the compensatory mitigation project site;

- a description of the baseline ecological characteristics of the proposed compensatory mitigation project site and the impact site. The baseline information should also include a delineation of waters of the United States on the proposed compensatory mitigation project site.;

- an explanation of how the compensatory mitigation project will provide the required compensation for unavoidable impacts to aquatic resources resulting from the permitted activity;

- a mitigation work plan with detailed written specifications and work descriptions for the compensatory mitigation project, including, but not limited to, the geographic boundaries of the project; construction methods, timing, and sequence; source(s) of water, including connections to existing waters and uplands; methods for establishing the desired plant community; plans to control invasive plant species; the proposed grading plan, including elevations and slopes of the substrate; soil management; and erosion control measures. For tributary compensatory mitigation projects, the mitigation work plan may also include other relevant information, such as planform geometry; channel form (e.g., typical channel cross-sections); watershed size; design discharge; and riparian area plantings;

- a maintenance plan including a description and schedule of maintenance requirements to ensure the continued viability of the resource once initial construction is completed;

- ecologically-based performance standards that will be used to determine whether the compensatory mitigation project is achieving its objectives;

- a description of parameters to be monitored in order to determine if the compensatory mitigation project is on track to meet performance standards and if adaptive management is needed. A schedule for monitoring and reporting on monitoring results to the district engineer must be included;

- a long-term management plan describing how the compensatory mitigation project will be managed after performance standards have been achieved to ensure the long-term sustainability of the resource, including long-term financing mechanisms and the party responsible for long-term management; and

- an adaptive management plan that describes a management strategy to address unforeseen changes in site conditions or other components of the compensatory mitigation project, including the party or parties responsible for implementing adaptive management measures. The adaptive management plan will guide decisions for revising compensatory mitigation plans and implementing measures to address both foreseeable and unforeseen circumstances that adversely affect compensatory mitigation success.

3. As this project includes both Iowa and Illinois, the Responsible Federal Agency should coordinate with both the Illinois and Iowa State Historic Preservation Agencies to determine impacts to historic properties.

Ms. Anne Haaker
Illinois State Historic Preservation Officer
1 Old State Capitol Plaza
Springfield, Illinois 62704

Ms. June Strand
Iowa Historic Preservation Agency,
ATTN: Review and Compliance Program
State Historical Society of Iowa
600 East Locust, State Historic Building
Des Moines, Iowa 50319

4. The Rock Island Field Office of the U.S. Fish and Wildlife Service should be contacted to determine if any federally-listed endangered species are being impacted and, if so, how to avoid or minimize impacts. The Rock Island (County) Field Office address is: 1511 - 47th Avenue, Moline, Illinois 61265. Mr. Rick Nelson is the Field Supervisor. You can reach him by calling 309/757-5800.

5. The Iowa and Illinois Emergency Management Divisions should be contacted to determine if the proposed project may impact the regulated floodplain, especially areas designated as floodway, or may need to meet stormwater management regulations. Their contact information is below:

Mr. Bill Cappuccio
Iowa Department of Natural Resources
Wallace State Office Building
502 E. 9th Street
Des Moines, Iowa 50319
(515) 281-8942

Mr. Ron Davis
State of Illinois Emergency Mgmt Agency
1035 Outer Park, 2nd Floor
Springfield, Illinois 62704
(217) 782-8719

6. Based on the information provided, the project is in the critical area of local flood control projects for Bettendorf, Iowa. Enclosed is a checklist provided by the District's Emergency Management Office that may help you when developing your final project plans and local flood coordination. When detailed plans, specifications and "as-builts" are completed, please submit to our Emergency Management Office so that the impacts to local flood control projects can be determined. If you need more information, please call Sarah Jones of the Emergency Management Division, telephone 309/794-5206.

No other concerns surfaced during our review. Thank you for the opportunity to comment on your proposal. If you need more information, please call Mrs. Rachel Perrine of our Economic and Environmental Analysis Branch, telephone 309/794-5557.

You may find additional information about the Corps' Rock Island District on our website at **http://www.mvr.usace.army.mil**. To find out about other Districts within the Corps, you may visit: **http://www.usace.army.mil/howdoi/civilmap.htm**.

Sincerely,

John P. Carr (for)

Kenneth A. Barr
Chief, Economic and Environmental
Analysis Branch

Enclosure

CHECKLIST
CONSTRUCTION IN THE CRITICAL AREA OF FLOOD CONTROL PROJECTS CONSTRUCTED BY THE CORPS OF ENGINEERS

GENERAL INFORMATION

☐ ☐ ☐ (1) Project general description, including project purpose.

☐ ☐ ☐ (2) Construction schedules, duration of work.

☐ ☐ ☐ (4) For permit purposes, drawings, topographic maps, and pictures of the existing location before any work is done.

☐ ☐ ☐ (5) Vicinity map, site plan and general plan view showing the location of the project tied to the flood control works stationing, range landside or riverside, boring locations, construction equipment and material storage location, borrow areas if in the critical area of the flood control project, temporary flood control location.

☐ ☐ ☐ (6) Subsurface investigations, including boring logs, in-situ and laboratory testing and geotechnical recommendations.

PROJECT CONSIDERATIONS

☐ ☐ ☐ **1. EXCAVATIONS**

☐ ☐ ☐ **A. EXCAVATIONS WITHIN THE LEVEE EMBANKMENT**

Design Considerations

☐ ☐ ☐ (1) Stability analysis including assumptions used, basis for selection of soil parameters, failure surfaces, and factors of safety for levee excavation.

☐ ☐ ☐ (2) Design recommendations for excavation support system.

☐ ☐ ☐ (3) Design recommendation for pressure relief and dewatering control, including dewatering and relief wells design and complete modeling studies for dewatering system.

SUBMITTED NOT SUBMITTED NOT APPLICABLE

Encl

☐ ☐ ☐ (4) Design recommendation for temporary flood control system, including stability analyses for proposed ring levee.

Specifications

☐ ☐ ☐ (1) Excavation and excavation support.

☐ ☐ ☐ (2) Backfill, including materials, compaction requirements, and testing (including any boring holes, wells, and any other hole details).

☐ ☐ ☐ (3) Dewatering and pressure relief system, (dewatering wells, pressure relief wells), ground water control (piezometers), and pump test plan for dewatering and relief wells.

☐ ☐ ☐ (4) Soil stabilization.

☐ ☐ ☐ (5) Hydraulic fill.

☐ ☐ ☐ (6) Slope protection repair including stone protection and seeding and mulching.

☐ ☐ ☐ (7) Levee crown restoration.

☐ ☐ ☐ (8) Sources of rock materials for riprap, bedding, and aggregate surfacing.

Construction drawings

☐ ☐ ☐ (1) Limits of proposed excavation, excavation details, excavation support, cross sections and profiles.

☐ ☐ ☐ (2) Backfill details including backfill materials.

☐ ☐ ☐ (3) Details of foundation soil stabilization.

☐ ☐ ☐ (4) Proposed dewatering and pressure relief system, seepage cut-off and ground water control (piezometers) location and construction details.

☐ ☐ ☐ (5) Slope protection repair details.

☐ ☐ ☐ (6) Levee crown repair details.

☐ ☐ ☐ (7) Copies of any standard drawings referred to in the design or plans.

SUBMITTED NOT SUBMITTED NOT APPLICABLE

☐ ☐ ☐ **B. EXCAVATIONS RIVERSIDE OF THE FLOOD CONTROL PROJECT, WITHIN CRITICAL AREA**

Design Considerations

☐ ☐ ☐ (1) Design analysis and recommendations for retaining walls, and excavation support system.

☐ ☐ ☐ (2) Stability analysis containing assumption used, bases for selection of soil parameters, failure surfaces and factors of safety for deep excavation affecting the flood control project.

☐ ☐ ☐ (4) Design recommendation for pressure relief and dewatering control, including dewatering and relief wells design and complete modeling studies for dewatering system.

Specifications

☐ ☐ ☐ (1) Excavation and excavation support requirements.

☐ ☐ ☐ (2) Backfill, including materials, compaction requirements, testing, backfill and sealing of boring holes, power poles, wells, and any other hole details.

☐ ☐ ☐ (3) Soil stabilization.

☐ ☐ ☐ (4) Hydraulic fill.

☐ ☐ ☐ (5) Demolition and removal specifications.

Construction Drawings

☐ ☐ ☐ (1) Limits of proposed excavation, grading plans, excavation details, excavation support, cross sections and profiles for excavation and grading plans.

☐ ☐ ☐ (2) Backfill of boring holes, power poles and any other holes details.

☐ ☐ ☐ (3) Details of foundation soil stabilization.

☐ ☐ ☐ (4) Copies of any standard drawings referenced to in the design or plans.

☐ ☐ ☐ (5) Demolition and removal plans.

SUBMITTED NOT SUBMITTED NOT APPLICABLE

☐ ☐ ☐ **C. EXCAVATION LANDSIDE OF FLOOD CONTROL PROJECTS, WITHIN CRITICAL AREA**

Design Considerations

☐ ☐ ☐ (1) Underseepage analysis including river stages and permeability ratios considered, hydraulic grade line determination, piping and heave considerations.

☐ ☐ ☐ (2) Stability analysis containing assumption used, basis for selection of soil parameters, failure surfaces and factors of safety for deep excavation which may affect the stability of the flood control project.

☐ ☐ ☐ (3) Design recommendations for excavation support system.

☐ ☐ ☐ (4) Design recommendation for pressure relief and dewatering control, including dewatering and relief well design and complete modeling studies for the dewatering system.

Specifications

☐ ☐ ☐ (1) Excavation and excavation support.

☐ ☐ ☐ (2) Backfill, including materials, compaction requirements, testing (including pipes bedding, backfill and sealing of boring holes, power poles, wells and any other hole details).

☐ ☐ ☐ (3) Dewatering and pressure relief system, (dewatering wells, pressure relief wells), dewatering control (piezometers), ground water monitoring.

☐ ☐ ☐ (4) Soil stabilization.

☐ ☐ ☐ (5) Hydraulic fill.

Construction drawings

☐ ☐ ☐ (1) Limits of proposed excavation, excavation details, excavation support, cross sections and profiles for excavation and grading plans.

☐ ☐ ☐ (2) Backfill details including backfill materials, compaction requirements.

☐ ☐ ☐ (3) Details of foundation soil stabilization.

☐ ☐ ☐ (4) Proposed dewatering and pressure relief system, seepage cut-off and ground water control (piezometers) location and construction details.

SUBMITTED NOT SUBMITTED NOT APPLICABLE

☐ ☐ ☐ (5) Copies of any standard drawings referred to in the design or plans.

☐ ☐ ☐ **2. PIPING SYSTEM**

Design Considerations

☐ ☐ ☐ (1) In general, piping should not penetrate the levee embankment or its foundation but should be placed within the freeboard zone of the levee crest. Construction of a piping system through the levee embankment or the levee foundation must be justified and appropriate design information submitted.

☐ ☐ ☐ (2) Uplift calculations for pipes and other construction related to the piping system, based on underseepage analysis.

☐ ☐ ☐ (3) Loading cases for pipes and other construction related to the piping system.

☐ ☐ ☐ (4) Bedding requirements, and compatibility with the levee "critical area" soil zone requirements.

Specifications

☐ ☐ ☐ (1) Backfill, including materials, compaction requirements, testing.

☐ ☐ ☐ (2) Pipes and culverts including class of pipes and culverts, thickness, modulus of elasticity, SDR, type of pipe joints, length of pipe sections, bedding and backfill for pipes.

☐ ☐ ☐ (3) Flowable backfill.

☐ ☐ ☐ (4) Type of precast concrete manhole joints, details of the required O-ring.

☐ ☐ ☐ (5) Sluice and flap gates including design seating and unseating head.

☐ ☐ ☐ (6) Field joint testing requirements for reinforced concrete pipes.

☐ ☐ ☐ (7) Demolition and removal of existing structures.

☐ ☐ ☐ (8) Grouting requirements.

☐ ☐ ☐ (9) Sources of rock materials for concrete aggregate.

SUBMITTED NOT SUBMITTED NOT APPLICABLE

Construction drawings

☐ ☐ ☐ (1) Backfill details including backfill materials.

☐ ☐ ☐ (2) Details of pipelines and other utility lines including excavation, excavation support, backfill materials, bedding materials, closure devices.

☐ ☐ ☐ (3) Grouting details, showing cross sections and limits.

☐ ☐ ☐ (4) Details of concrete pipe cradles including reinforcing details and details next to gatewell structures.

☐ ☐ ☐ (5) Pipe connections to existing structures.

☐ ☐ ☐ (6) Details showing concrete collars connecting dissimilar pipes.

☐ ☐ ☐ (7) Details showing air vents and vacuum breaks for pipe siphons and locations.

☐ ☐ ☐ (8) Waterstop details.

☐ ☐ ☐ (9) Construction, contraction and monolith joints details.

☐ ☐ ☐ (10) Precast concrete manhole to cast in place base slab details, if any.

☐ ☐ ☐ (11) Demolition and removal plans.

☐ ☐ ☐ (12) Copies of any standard drawings referred to in the design or plans.

3. STRUCTURES

Design Considerations

☐ ☐ ☐ (1) Uplift calculations based on underseepage analysis.

☐ ☐ ☐ (2) Loading cases for construction and appropriate factors of safety.

☐ ☐ ☐ (3) Design of shallow or deep foundations, including bearing capacity and settlement analysis if the construction is located within the levee embankment, or in the critical area of flood control projects and creates potential seepage problems

☐ ☐ ☐ (4) Design of reinforced concrete substructure walls and earth bearing structural floor slabs. Identify appropriate lateral earth loads.

SUBMITTED NOT SUBMITTED NOT APPLICABLE

☐ ☐ ☐ (5) Design recommendations for foundations on expansive soils.

☐ ☐ ☐ (6) Design analysis for retaining walls and excavation support system.

Specifications

☐ ☐ ☐ (1) Backfill, including materials, compaction requirements, and testing.

☐ ☐ ☐ (2) Spread footings, mat foundations, deep foundations, including drilled piers, and pile foundations if the constructions is located within the levee embankment, or in the critical area of flood control projects and creates potential seepage problems.

☐ ☐ ☐ (3) Flowable backfill.

☐ ☐ ☐ (4) Roughened horizontal construction joints for substructure reinforced concrete walls.

☐ ☐ ☐ (5) Demolition and removal of existing structures.

☐ ☐ ☐ (6) Grouting requirements.

☐ ☐ ☐ (7) Sources of rock materials for concrete aggregate (if a flood protection structure), riprap, and bedding.

☐ ☐ ☐ (8) Type of precast concrete manhole joints.

Construction drawings

☐ ☐ ☐ (1) Backfill details including backfill materials, compaction requirements, testing.

☐ ☐ ☐ (2) Shallow and deep foundation details including drilled piers and piles, foundation filling and backfilling, hydraulic fill, construction techniques and remedial details for slab foundations and drilled shaft foundation, control of pile driving operations, field pile tests including axial tests and monotonic lateral load test for constructions located within the levee embankment, or in the critical area of flood control projects which can create potential seepage problems.

☐ ☐ ☐ (3) Grouting details.

☐ ☐ ☐ (4) Reinforcement details for substructure walls and slabs, piles, etc.

☐ ☐ ☐ (5) Waterstop details.

SUBMITTED NOT SUBMITTED NOT APPLICABLE

☐ ☐ ☐ (6) Construction, contraction and monolith joints details.

☐ ☐ ☐ (7) Details of soil subgrade for structure slab.

☐ ☐ ☐ (8) Demolition and removal plans.

☐ ☐ ☐ (9) Copies of any standard drawings referred to in the design or plans.

☐ ☐ ☐ (10) Details of retaining walls.

☐ ☐ ☐ (11) Buried tank including concrete slabs and hold down straps.

☐ ☐ ☐ (12) Pressure relief valves details and locations in structural floor slab of large tanks, etc.

4. DIRECTIONAL DRILLING

Directional drilling is not allowed in the levee embankment and in the flood control project foundation. If directional drilling is proposed on the riverside or landside of the flood control project, the following should be included in the submittal.

Specifications

☐ ☐ ☐ (1) Plan of operation and schedule.

☐ ☐ ☐ (2) Drilling fluid.

☐ ☐ ☐ (3) Pilot hole drilling procedures.

☐ ☐ ☐ (4) Bit pressures.

☐ ☐ ☐ (5) Plan for insertion and pullback.

☐ ☐ ☐ (6) Hydrostatic tests.

Construction Drawings

☐ ☐ ☐ (1) Sealing of annular space between the pipeline and directional drilled shaft.

☐ ☐ ☐ (2) Plan for insertion of the prepared bore hole. dewatering drying and purging, depth of drilling, entrance and exit points, backfill at the entry and exit sites, coating protection.

SUBMITTED NOT SUBMITTED NOT APPLICABLE

☐ ☐ ☐ 5. INTERIM FLOOD PROTECTION AND CONTINGENCY PLAN

Design Considerations

☐ ☐ ☐ (1) Stability analysis containing assumptions used, basis for selection of soil parameters, failure surfaces and factors of safety for temporary flood control projects.

☐ ☐ ☐ (2) Design recommendation for pressure relief and dewatering control, including dewatering and relief wells design and complete modeling studies for the dewatering system.

Specifications

☐ ☐ ☐ (1) Backfill, including materials, compaction requirements and testing.

☐ ☐ ☐ (2) Levee slope protection repair including stone protection and seeding and mulching after removal of temporary flood control project.

☐ ☐ ☐ (3) Flood contingency plan if no other temporary flood control is provided, including: measures proposed to protect area under construction, monitoring of river level, river stage at which plan will be activated, materials and equipment to be used to activate plan, and personnel contact and telephone number to activate plan.

Construction drawings

☐ ☐ ☐ (1) Temporary flood control details.

☐ ☐ ☐ 6. HYDRAULIC CONSIDERATIONS

Design Considerations

☐ ☐ ☐ (1) Description of project impact to water quality and the runoff hydrographs.

☐ ☐ ☐ (2) Calculations for pump station hydraulic design including support calculations for expected inflows, ponding areas and outlet design.

☐ ☐ ☐ (3) Plots of energy and hydraulic grade lines.

☐ ☐ ☐ (4) Description of hydraulic and hydrologic models/analysis used and model sensitivity, data sources for hydraulic models, design assumptions, plot of energy and hydraulic grade lines, H&H coefficient selection, if the project has any impact on FEMA floodway/floodplain.

SUBMITTED
NOT SUBMITTED
NOT APPLICABLE

SUBMITTED	NOT SUBMITTED	NOT APPLICABLE	
☐	☐	☐	(5) Calculations for hydraulic jump location and magnitude.
☐	☐	☐	(6) Scour computations for bridges located in the foreshore area of flood control projects. Calculations should be included for contraction, abutment, and pier scour.
☐	☐	☐	(7) Scour calculations for utility poles and other features to be located riverside of the flood control projects.
			Construction Drawings
☐	☐	☐	(1) Plans for temporary and permanent erosion control.
☐	☐	☐	(2) Water surface elevations for the design flood and 100 year event clearly shown on profiles and sections for construction affecting FEMA floodplain/floodway or having an impact on the existing hydraulic/hydrology.
☐	☐	☐	(3) Plans for temporary and permanent erosion control.
☐	☐	☐	(4) Bridge general layout and details in the vicinity of the levee.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 7
901 NORTH 5TH STREET
KANSAS CITY, KANSAS 66101

16 MAR 2009

Mr. James Rost
Director, Office of Location & Environment
Iowa Department of Transportation
800 Lincoln Way
Ames, IA 50010

Dear Mr. Rost:

RE: Final Environmental Impact Statement for the Interstate 74 Quad Cities Corridor Study Scott County, Iowa and Rock Island County, Illinois

Regions 5 and 7 of the U.S. Environmental Protection Agency have reviewed the Final Environmental Impact Statement for the Interstate 74 Quad Cities Corridor Study. This FEIS documents the analysis and coordination undertaken for the replacement of the I-74 Bridge and improvements to the Interstate Corridor in Davenport and Bettendorf, Iowa and Moline, Illinois. Our review is provided pursuant to the National Environmental Policy Act 42 U.S.C. 4231, Council on Environmental Quality regulations 40 C.F.R. Parts 1500-1508, and Section 309 of the Clean Air Act. The FEIS was assigned the CEQ number 20090019.

Our review of the December 2003 Draft Environmental Impact Statement for this project resulted in a rating of Environmental Concerns-2 (Insufficient Information). In EPA's official correspondence we offered comments pertaining to the Existing Bridge Disposition, Natural Areas, Water Quality Impacts, Business Relocations and Wetlands. EPA appreciates the additional investigation and analysis given to these issues.

Pertaining to this FEIS, EPA notes a commitment in Section 4.3.9.1 to provide a 10 foot clearance zone around bridge piers to protect mussels during construction. EPA recommends that adequate protection is likewise provided in demolition operations. Also, the FEIS describes cleaning and maintenance measures that will be employed to reduce the potential for contaminants to be carried into the Mississippi River via runoff water. While these efforts may result in positive benefit, the ultimate goal of protecting vulnerable mussel colonies must be kept in focus. EPA urges project designers to continually review the status of ongoing mussel monitoring, and to evaluate incorporation of centrifugal particle separators, filtration drains, and/or other pollution-control mechanisms as necessary. We further recommend placing the runoff discharge points from the bridge piers where they will minimize impacts to the mussel beds.

During the time span between the DEIS and FEIS, results of air quality monitoring has caused increased scrutiny of fine particulate matter sources in counties that encompass the project area. EPA suggests that the Transportation Departments of Iowa and Illinois continue to consult with their respective state air quality officials to keep abreast of current monitoring and any control measures that may be employed.

The EPA commends the work of all those persons and agencies involved in developing this FEIS.

If you have any questions, please contact me at 913-551-7565, or via email at cothern.joe@epa.gov.

Sincerely,

Larry Shepard

for Joseph E. Cothern
Environmental Services Division
NEPA Team Leader

cc: Norman West, EPA, Region 5, Chicago, IL
Kenneth Westlake, EPA, Region 5, Chicago, IL

Iowa Department of Transportation
800 Lincoln Way, Ames, Iowa 50010
515-239-1467
Fax: 515-239-1726

March 30, 2009

Mr. Joseph E. Cothern, NEPA Team Leader
Environmental Services Division, Region 7
U. S. Environmental Protection Agency
901 North 5th Street
Kansas City, KS 66101

Dear Mr. Cothern:

I am responding to your March 16, 2009, letter commenting on the Final Environmental Impact Statement (FEIS) for the Interstate 74 Quad Cities Corridor Study in Scott County, Iowa, and Rock Island County, Illinois.

In the FEIS, Section 4.3.9.1, Mitigation for Threatened and Endangered Species, references the Conservation Plan that was developed to address potential impacts to mussels and measures to minimize and mitigate the impacts. As part of that Plan, the Iowa and Illinois Departments of Transportation (DOT) committed to removing mussels from within 10 feet of each existing bridge pier (prior to demolition of the bridges) and from within 10 feet of the area where piers are proposed to be located for the new bridges. The mussels would be relocated according to an approved mussel relocation plan.

Section 4.3.9.1 of the FEIS also describes the DOT's commitment to employ cleaning and maintenance measures that are expected to reduce the potential for contaminants to be discharged into the Mississippi River via runoff water. Your letter recommends that we continue to evaluate methods to minimize potential water quality impacts to mussels. As design of the project progresses, and as the locations of mussel populations are identified during surveys conducted closer to construction time, the DOT will consider additional pollution control mechanisms and runoff discharge points in order to minimize impacts to mussel colonies.

Iowa and Illinois will continue to coordinate with our respective state air quality agencies to stay informed about current monitoring and control measures for fine particulates.

Thank you for your comments on the FEIS. If you have any questions, please call me at (515) 239-1225.

Sincerely,

James Rost

James P. Rost, Director
Office of Location and Environment

JPR/JV/mrj

copies: Norman West, EPA, Region 5
Kenneth Westlake, EPA Region 5
Andy Wilson, FHWA, Iowa Division
Mike Hine, FHWA, Illinois Division
Charles Perino, IL DOT
Donna Matulac, IA DOT

Fields of Opportunities

STATE OF IOWA

CHESTER J. CULVER, GOVERNOR
PATTY JUDGE, LT. GOVERNOR

DEPARTMENT OF NATURAL RESOURCES
RICHARD A. LEOPOLD, DIRECTOR

March 4, 2009

Mr. James Rost
Iowa Department of Transportation
800 Lincoln Way
Ames, IA 50010

Subject: Final EIS for the I-74 Quad Cities Corridor Study, Scott County, Iowa and Rock Island, Illinois

Dear Mr. Rost:

Thank you for inviting our comments on the impact of the above referenced project. We have reviewed the information and have the following comments:

The Mississippi River is all on the impaired waters list for Iowa. The impaired water list can be found at http://wqm.igsb.uiowa.edu/WQA/303d.html . The most current surface water classification can be found at http://www.iowadnr.com/water/standards/files/06mar_swc.pdf .

On December 22, 2003, I provided comments on the Draft EIS for this project, but the letter was not included in the Final EIS. I've attached a copy of this letter for your files.

We would ask that Best Management Practices be used to control erosion and protect water quality at and near the project. We appreciate all your efforts to avoid and minimize impacts to wetlands and waters of the U.S. Mitigation for unavoidable stream and wetland impacts will be required.

If you have any questions or require additional information from us, please write me at the address shown below or call me at (515) 281-6615.

Sincerely,

Christine M. Schwake

Christine M. Schwake
Environmental Specialist

Fields of Opportunities

STATE OF IOWA

THOMAS J. VILSACK, GOVERNOR
SALLY J. PEDERSON, LT. GOVERNOR

DEPARTMENT OF NATURAL RESOURCES
JEFFREY R. VONK, DIRECTOR

December 22, 2003

Mr. James Rost
Iowa Department of Transportation
800 Lincoln Way
Ames, IA 50010

RE: Comments regarding the Draft EIS for the I-74 Quad Cities Corridor Study Project, Scott County, Iowa and Rock Island County, Illinois

Dear Mr. Rost:

Thank you for inviting our comments on the impact of the above referenced project on protected species and rare natural communities. As stated in the Draft EIS, there are several state-listed mussel species in the project area. A mussel survey will be required prior to the issuance of Iowa Department of Natural Resources (IDNR) permits/certificate. Further coordination between the Iowa Department of Transportation, IDNR, and U.S. Fish and Wildlife Service may be necessary depending upon the species found during the survey. The information obtained during the mussel survey will be used by the IDNR to determine our preferred alternative.

In the project area, the Mississippi riverbed from the ordinary high water line to the Iowa border with Illinois is sovereign land; therefore, a Sovereign Lands Construction Permit will be required for this project.

This letter is a record of review for protected species, rare natural communities, state lands and waters in the project area, including review by personnel representing state parks, preserves, recreation areas, wetlands, fisheries and wildlife. It does not constitute a permit and before proceeding with the project, you may need to obtain permits from the DNR or other state and federal agencies.

Effective March 10, 2003, any construction activity that bares the soil of an area greater than or equal to 1 acre including clearing, grading or excavation may require a storm water discharge permit from the Department. Construction activities may include the temporary or permanent storage of dredge material. For more information regarding this matter, please contact Ruth Rosdail at 515/281-6782.

The Department administers regulations that pertain to fugitive dust IAW Iowa Administrative Code 567-23.3(2)"c". All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of property during construction, alteration, repairing or demolishing of buildings, bridges or other vertical structures or haul roads. All questions regarding fugitive dust regulations should be addressed to Jim McGraw at 515/242-5167.

If you have any questions about this letter or if you require further information, please contact me the address shown below or at (515) 281-6615.

Sincerely,

Christine M. Schwake

Christine M. Schwake
Environmental Specialist

Fields of Opportunities

STATE OF IOWA

CHESTER J. CULVER, GOVERNOR
PATTY JUDGE, LT. GOVERNOR

DEPARTMENT OF NATURAL RESOURCES
RICHARD A. LEOPOLD, DIRECTOR

March 11, 2009

Dave Claman
Iowa Department of Transportation
800 Lincoln Way
Ames, IA 50010

RE: Environmental Review for Natural Resources
Mussel Survey Request
Interstate 74 Bridge Replacement
Project Number: IM-74-1(122)0-13-82
Mississippi River Mile 486
Scott County
Section 32, 33, Township 78N, Range 4E

Dear Mr. Claman:

Thank you for inviting Department comments on the impact of the above referenced project. The Department is in receipt of the FEIS for this project and concurs with the IDOT finding that there are federally- and state-listed mussel species recorded from mussel beds near the I-74 Bridge. These species include the federally- and state-endangered Higgin's-eye Pearly Mussel (*Lampsilis higginsii*), state-endangered Spectaclecase (*Cumberlandia monodonta*), state-endangered Sheepnose (*Plethobasus cyphyus*), and state-threatened Butterfly (*Ellipsaria lineolata*).

The Department is also in receipt of the Joint Application Form for this project. Prior to the issuance of a Sovereign Lands Construction Permit for the proposed project, the results of a mussel survey for the area of construction must be submitted to the Department.

If you have questions about this letter or require further information, please contact Daryl Howell at (515) 281-8524.

Sincerely,

Diane Ford-Shivvers
Deputy Division Administrator
Conservation and Recreation Division

FILE COPY: Inga Foster
Tracking Number: 3164

CC: James Rost, IDOT, 800 Lincoln Way, Ames, IA 50010
Richard Nelson, U.S. Fish and Wildlife Service, Rock Island Field Office, 1511 47th Ave., Moline, IL 61265-7022
Kirk Hansen, Fisheries Bureau, Iowa DNR
Christine Schwake, Water Quality Bureau, Iowa DNR