FINDING OF NO SIGNIFICANT IMPACT and **FINAL SECTION 4(f) STATEMENT**

for the

CAPACITY IMPROVEMENT OF U.S. 20 ACROSS THE MISSISSIPPI RIVER DUBUQUE COUNTY, IOWA AND JO DAVIESS COUNTY, ILLINOIS

by the

FEDERAL HIGHWAY ADMINISTRATION and **IOWA DEPARTMENT OF TRANSPORTATION** and **ILLINOIS DEPARTMENT OF TRANSPORTATION**

Cooperating Agency: U.S. Coast Guard, District 8

Iowa DOT Project Number BRF-20-9(149)-38-31

Notice of the availability of the Environmental Assessment and Draft Section 4(f) Evaluation was forwarded to state and area-wide clearinghouses on March 19, 2002. Copies of this document were also provided to selected resource/regulatory agencies for their review and comment. Public availability of the document was published in local newspapers on March 21 and 22 and April 18 and 19, 2002. The review and comment period expired on May 6, 2002. The review period was extended to May 20, 2002 for public agencies which required additional time to comment. A public hearing was held for this project on April 25, 2001 in East Dubuque, Illinois. A summary of the hearing, public and agency comments, responses, coordination, resolutions, and errata are included in the FONSI document.

The FHWA has determined that this project will not have any significant impact on the human environment. This Finding of No Significant Impact (FONSI) is based on the attached Environmental Assessment which has been independently evaluated by the FHWA and determined to adequately and accurately discuss the need, environmental issues, impacts of the proposed project and appropriate mitigation measures. It provides sufficient evidence and analysis for determining that an Environmental Impact Statement is not required. The FHWA takes full responsibility for the accuracy, scope and content of the attached Environmental Assessment.

Date

7/11/02 7/15/02

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James P. Rost, Director Office of Location and Environment Iowa Department of Transportation

Michael L. Hine, Engineer of Design and Environment Bureau of Design and Environment Illinois Department of Transportation

Bobby W. Blackmon, Iowa Division Administrator Federal Highway Administration

FINDING OF NO SIGNIFICANT IMPACT FOR THE CAPACITY IMPROVEMENT OF U.S. 20 ACROSS THE MISSISSIPPI RIVER DUBUQUE COUNTY, IOWA AND JO DAVIESS COUNTY, ILLINOIS

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COMMENTS AND COORDINATION

The Environmental Assessment and Draft Section 4(f) Evaluation were forwarded on March 19, 2002 to resource and regulatory agencies for review. Seventeen comment letters were received from agencies. The comments and associated responses are summarized below, and the agency comment letters are provided at the end of the FONSI.

U. S. COAST GUARD COMMENTS – APRIL 18, 2002

- 1. The D4f should have the following statement included: "There are no feasible and prudent alternatives and the proposed project includes all possible planning to minimize harm to Section 4(f) resources."
 - Response: The following statement has been added to the Final Section 4(f)Evaluation. "It has been determined that there are no feasible and prudent alternatives resulting in lesser impacts to the Section 4(f)properties identified than the recommended alternative, and the proposed project includes all possible planning to minimize harm to Section 4(f)resources."
- 2. It was noted that there doesn't seem to be much coordination with the Illinois State Historic Preservation Officer (ILSHPO) reflected in the D4f. Example: The EA states there will be no adverse effect upon the Julien Dubuque Bridge. This was based upon coordination with the Iowa SHPO. However, there is no mention of whether or not the ILSHPO agrees. Since the bridge is an interstate one, both SHPO's comments should be given.
 - Response: Coordination with the ILSHPO has been ongoing. The Iowa SHPO has jurisdiction of the Julien Dubuque Bridge and therefore has been the lead agency in determining the effects of this project on the bridge. Iowa SHPO has also requested concurrence from the ILSHPO throughout the course of the study. Correspondence from both SHPOs has been included in Appendix D.

<u>ILLINOIS DEPARTMENT OF NATURAL RESOURCES OFFICE OF WATER</u> <u>RESOURCES COMMENTS – MARCH 28, 2002</u>

1. As was noted on page 5-32 of the assessment, a permit is required from this office for the construction of the proposed project.

The existing levees along the Mississippi River are considered to have already constrained the river such that all the allowable increase in water surface profiles have been utilized. Therefore, it will be important in the design of the new bridge to prevent any new obstruction to flood flows unless the impacts of the new obstruction are mitigated. The design for the placement of the piers for the new bridge downstream of

the piers for the existing upstream bridge may prevent additional obstruction if it can account for the flow patterns at this bend in the river.

We are willing to meet with the designers prior to submittal of the application for permit to discuss the proposed alignment and our regulatory requirements, if desired.

Response: Comment noted. See number 11 in the errata of the FONSI.

U.S. DEPARTMENT OF AGRICULTURE - NATURAL RESOURCES CONSERVATION SERVICE COMMENTS – MARCH 26, 2002

1. Erosion control during construction and the protection of historic properties and sites within the proposed corridors must be considered while developing any development plans.

Response: A commitment for erosion control during construction has been made. See commitment 3 of the FONSI.

IOWA DEPARTMENT OF NATURAL RESOURCES COMMENTS – APRIL 1, 2002

1. At this time the U.S. EPA does not have any proposed criteria pollutant requirements to prevent construction; however, we are unable to predict future EPA requirements. Demolition of any buildings will trigger the National Emission Standards for Hazardous Air Pollutants (NESHAPS) for asbestos [and associated regulations]. Please also keep in mind the current state requirements on open burning and fugitive dust.

Response: Comment noted. No response necessary.

DUBUQUE AREA CHAMBER OF COMMERCE COMMENTS – MAY 6, 2002

1. Our board of directors has identified the bridge project as a strategic priority for the business community in the Dubuque area. The Chamber agrees with the report in that the preferred alternative is to build an additional two-lane bridge structure parallel to the current Julien Dubuque Bridge. Please know that the Dubuque Area Chamber of Commerce would like to continue to be of resource to the Iowa and Illinois Departments of Transportation as the bridge project moves forward.

Response: Comment noted. No response necessary.

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY COMMENTS - MAY 3, 2002

1. The Agency has reviewed this submission and has no comments or objections to the proposed project at this time. Please contact the Corps of Engineers for any permit requirements for dredge and fill activities under Section 404 of the Clean Water Act. In addition, a construction site stormwater NPDES permit is required from IEPA. A permit

will also be required from the Division of Public Water Supplies for relocation of water due to proposed construction.

Response: Comment noted. No response necessary.

ILLINOIS DEPARTMENT OF AGRICULTURE BUREAU OF LAND AND WATER RESOURCES COMMENTS – MAY 3, 2002

1. The IDA requests written notification if the proposed mitigation site changes. Further coordination would be required in order to evaluate the potential impacts to agricultural land prior to the selection of an alternative site. The selection of a wetland mitigation site that avoids Prime farmland that is viable for long-term agricultural use is a practicable way that farmland conversion impacts can be avoided or at least minimized.

The IDA has learned that the City of East Dubuque previously acquired FEMA land (the Shore Acres Hazard Mitigation Program area) that must be maintained as open space. The area is less than one-half mile due west from the proposed mitigation area. Because the City must maintain the FEMA property as open space, East Dubuque is very interested in utilizing this site for mitigation purposes. As in past projects, the IDA prefers to see existing public land used for mitigation purposes rather than purchasing privately owned Prime farmland for such use.

Response: A commitment has been made by the Iowa and Illinois Departments of Transportation to mitigate wetland impacts in accordance with state and federal wetland policies and to coordinate the mitigation plan with the resource agencies prior to project construction. See the Commitments section of the FONSI.

U. S. ENVIRONMENTAL PROTECTION AGENCY REGION 5 COMMENTS – MAY 2, 2002

1. We are concerned because the EA does not provide Level of Service (LOS) data for the study area to support the stated need to address increasing traffic demand on U.S. Route 20.

Response: Level of Service data has been summarized and included in the FONSI. See number 2 in the errata of the FONSI.

2. According to the EA, three alternatives are feasible to meet the purpose and need for the project (Alternatives 1A, 1B, and 2). Since the EA only evaluates the environmental impacts of the preferred alternative, we are unable to compare the impacts of the other feasible alternatives presented by the EA.

Response: A summary table of the environmental impacts of the alternatives has been provided in the FONSI for comparison. See number 3 in the errata of the FONSI.

3. We are concerned because the EA does not describe the avoidance and minimization strategies used to mitigate wetland impacts. The EA does state that wetland impacts have been avoided or minimized to the extent practicable, but it does not describe how this was achieved. Therefore, we are unable to determine the effectiveness of such avoidance and mitigation strategies.

Response: A more detailed avoidance and minimization discussion has been included in the FONSI. See number 6 in the errata of the FONSI.

4. We are concerned about the EA's lack of a comprehensive description of possible wetland mitigation sites under consideration. If the project proponents are considering other possible wetland mitigation sites, then they should have been identified in the EA. Currently, we are not able to compare the viability of possible wetland mitigation sites under consideration.

Response: A commitment has been made by the Iowa and Illinois Departments of Transportation to mitigate wetland impacts in accordance with state and federal wetland policies, and to coordinate the mitigation plan with the resource agencies prior to project construction.

5. We are concerned about possible impacts to the Higgens' eye pearly mussel, a federally listed endangered species. The EA indicates that two specimens of this species were found during a survey of the preferred corridor study area. However, the EA does not include a plan to mitigate construction impacts to this mussel. The EA must coordinate with the U. S. Fish and Wildlife Service in order to adequately address this issue.

Response: A commitment by the Iowa DOT has been made in the FONSI to conduct an additional mussel survey, and to coordinate with the FWS prior to the construction of the bridge. If threatened or endangered mussel species are located, a mitigation plan for construction impacts of the bridge will be prepared.

CITY OF EAST DUBUQUE COMMENTS – MAY 6, 2002

1. Mr. Mick Michel, City Manager of the City of East Dubuque, has several comments and/or suggestions relating to 1) the proposed wetland mitigation area, 2) the proposed stormwater collection system, 3) the proposed impacts on the municipal utility system, 4) the proposed impacts on accesses and roadways, and 5) the proposed impacts on the central business district. Refer to the letter dated May 6, 2002 from the City of East Dubuque at the end of the FONSI for specific comments.

Response: The Illinois Department of Transportation, in cooperation with the Iowa Department of Transportation, responded in writing to Mr. Michel on June 13, 2002. See the letter at the end of the FONSI for the responses.

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U. S. DEPARMENT OF HOUSING AND URBAN DEVELOPMENT COMMENTS – MARCH 22, 2002

1. As this office no longer has the staff expertise to review the attached document, we are returning it to you without comment.

Response: No response necessary.

<u>IOWA DEPARTMENT OF ECONOMIC DEVELOPMENT COMMENTS – APRIL 19,</u> 2002

- 1. The Iowa State Clearinghouse has performed the required review of your grant application for the Environmental Study for U.S. 20 Capacity Improvements funding in accordance with the Iowa Intergovernmental Review System. The review includes a letter dated April 8, 2002 from Iowa DNR, found no serious environmental problems which may result from the project or program, indicated that the proposal conforms to pertinent planning to this area, and did not show that the proposal would result in duplicating any existing activity or project. The Clearinghouse is pleased to recommend that the application be approved for funding. A copy of this letter must be sent to the federal agency as evidence that the review has been performed.
 - Response: Comment noted. No response necessary; however, the Clearinghouse letter will be forwarded to the Federal Highway Administration within the FONSI.

IOWA DEPARTMENT OF NATURAL RESOURCES COMMENTS – APRIL 8, 2002

 We have searched our records of the project area and found no records of rare species or significant natural communities. However, our data are not the result of thorough field surveys. Based on the information provided, we do not think the project will affect
 protected species or rare natural communities. If listed species or rare communities are found during the planning or construction phases, additional studies and/or mitigation may be required.

Response: Comment noted. No response necessary.

U. S. DEPARTMENT OF THE INTERIOR COMMENTS – MAY 2, 2002

1. A review of the Upper Mississippi River National Wildlife and Fish Refuge boundary as depicted in figure 4.2B of the Draft Section 4(f) Evaluation (as well as in Plate B of Appendix A) reveals that the refuge boundary is in error. The correct boundary map was provided in earlier coordination with the Refuge Office but apparently was not incorporated into the draft documentation. According to the Savanna Refuge Office, the land impacted by the construction of the new bridge is owned by the Corps of Engineers

(Corps) but is not managed by the FWS as part of the Refuge. Therefore, no FWS refuge land will be impacted by the preferred alternative. Continued coordination with the Corps, Rock Island District, is recommended since the land impacted by the bridge is still in public ownership and may still be subject to a Section 4(f) Evaluation depending on a determination of primary land functions.

Response: The U. S. Army Corps of Engineers Rock Island District was contacted for accurate mapping of the parcel in question. The figures in the FONSI and Final Section 4(f) Evaluation have been corrected to depict U.S. Army Corps Administered Lands and Refuge boundaries.

2. A potential, wetland mitigation area is discussed in Section 5.3 of the Draft Section 4(f) Evaluation and shown in Figure 5.3. This figure and discussion of the potential, wetland mitigation site and/or any new site information should be incorporated, or appropriately referenced in the final EA.

Response: A commitment has been made by the Iowa and Illinois Departments of Transportation to mitigate wetland impacts in accordance with state and federal wetland policies and to coordinate the mitigation plan with the resource agencies prior to project construction.

3. Given the lengthy time frame between the planning and construction phases of highway projects in general, the FWS will require an additional mussel survey and agency coordination prior to the actual construction of the bridge. This survey request will need to be incorporated into the final EA document along with a discussion that a review of current and/or newly listed species will be made by the FWS prior to construction of the project.

Response: A commitment by the Iowa DOT has been made in the FONSI to conduct an additional mussel survey, and to coordinate with the FWS prior to the construction of the bridge.

4. The draft EA indicates that a permit from the Corps under Section 404 of the Clean Water Act will be required for the proposed project. The Department's comments on the draft EA and Section 4(f) Evaluation do not preclude separate evaluation and comment by the FWS when reviewing any forthcoming permit applications. The FWS may concur, with or without stipulations, or recommend denial of the permit depending upon effects. The FWS has indicated it would likely not object to issuance of such a permit if applicable mitigation measures were incorporated into final project plans.

Response: Comment noted.

U. S. ARMY CORPS OF ENGINEERS ROCK ISLAND DISTRICT COMMENTS – MAY 24, 2002

1. Your document needs additional clarification describing Corps lands managed by the U.S. Fish and Wildlife Service (FWS) and Corps lands managed by the Corps located within the project area.

Response: Clarification has been added to the errata of the FONSI and Final Section 4(f) Evaluation regarding lands managed by the U.S. Fish and Wildlife Service and Corps Administered Lands.

2. Any proposed placement of fill or dredged material into waters of the United States (including wetlands) requires Department of the Army (DA) authorization. When detailed plans are available, please complete and submit an application packet to the Rock Island District for processing. You will also need to coordinate with the Department of Natural Resources in both Iowa and Illinois for Clean Water Act Section 401 Certification.

Response: Comment noted. No response necessary.

3. Hydraulic concerns related to navigation and flood protection. Clear descriptions of impacts or statements of no impact for both areas must be provided within your document. Your document also needs to clearly state that the project does not increase the water surface profile. Also, if the Coast Guard has investigated and is satisfied, further navigation impacts evaluation using numeric or physical modeling may not be necessary. Flood protection should be addressed by the applicant (Department of Transportation), certifying that the level of protection for the Dubuque levee project's design event (i.e., 200-year and 362,000 cubic feet per second) will not be reduced.

Response: See number 11 and 12 in the errata of the FONSI.

- 4. The Iowa Emergency Management Division should be contacted to determine if the proposed project may impact areas designated as floodway in Iowa.
 - Response: No impacts, other than bridge pier construction, will occur to any areas designated as floodway since the levee system will not change and the bridge will span floodway areas. The Federal Emergency Management Agency (FEMA) Region VII was contacted during early coordination. No response or comments were received from FEMA.
- 5. The Illinois Emergency Management Agency should be contacted to determine if the proposed project may impact areas designated as floodway in Illinois.

Response: No impacts, other than bridge pier construction, will occur to any areas designated as floodway since the levee system will not change and the bridge will span floodway areas. The Federal Emergency Management

Agency (FEMA) Region VII was contacted during early coordination. No response or comments were received from FEMA.

6. The U.S. Environmental Protection Agency, Region 5 office, has raised some concerns that the document may require additional information. If the project results in a request for easements on Corps land, the Corps will adopt your EA as part of the required documentation for that action. Before we can do that, your documentation will need to adequately address all of the above items.

Response: Comment noted. No response necessary.

U. S. ARMY CORPS OF ENGINEERS ROCK ISLAND DISTRICT COMMENTS – JUNE, 2002

1. Enclosures 1 and 2 contain information taken from the Corps' LUAP (*Land Use Allocation Plan*) and may be incorporated into your document. This information shows that the bridge and road alignment, as proposed in your EA, crosses, and may potentially impact, land administered by the Corps for "Recreation-Intensive Use" (Tract FI-81 and Tract FI-82) in Illinois. Tract FI-81 is Corps land administered by the FWS under a cooperative agreement and may also be impacted by your project. If this is the case, it should be addressed in your document. Additional information received from you indicates that approximately 5.1 acres of riparian corridor on Corps land would be adversely impacted by construction of access roads and bridge construction.

Response: Information from the Corps' LUAP plan has been incorporated into the Final Section 4(f) Evaluation. Currently, 5.0 acres of Corps Administered Land will be impacted by the recommended alternative and 0.1 acre of land managed by the U.S. Fish and Wildlife Service will be impacted.

2. The Section 4(f) portion of your document should discuss potential impacts to Corps lands. Those discussions should include area and/or size of impacts and current land use within area of impact. Cultural resources on Corps lands should be addressed there also.
The results of your cultural survey report and the Illinois Historic Preservation Agency (IHPA) log number from the SHPO's response letter should be cited.

Response: A discussion of Corps' Administered Lands has been added to the Final Section 4(f) Evaluation with a reference to cultural resources and the IHPA log number for the project (02122898).

3. The discussion concerning impacts to natural resources should include an approximate number of trees to be removed (and when) as well as any wetlands that may be filled as a result of the project. Monetary compensation for removal of marketable trees will be required as well as appropriate mitigation (minimum of 1.5 to 1.0) for natural resource impacts to the riparian corridor. Discussions of proposed mitigation should include number of acres at mitigation site (11 acres minimum), why the selected site is appropriate for use as mitigation, native species list of trees proposed (hard mast-

producing trees preferred), size of tree stock proposed for planting, trees per acre, management and monitoring requirements to guarantee success of mitigation site.

Response: Discussions relating to tree impacts in the riparian corridor and the appropriate mitigation will be addressed with the wetland mitigation plan. A commitment has been made by the Iowa and Illinois Departments of Transportation to mitigate wetland impacts in accordance with state and federal wetland policies prior to project construction.

- 4. The FWS has indicated a desire to acquire management of the mitigation site which would be adjacent to FWS refuge lands. The FWS will further investigate to determine what will be required for that transaction to be completed and coordinate with you as needed.
 - Response: Comment noted. Coordination with the U.S. Fish and Wildlife Service and the U.S. Army Corps of Engineers will continue throughout the mitigation planning during the design phase of this study.

ILLINOIS DEPARTMENT OF TRANSPORTATION COMMENTS – MAY 20, 2002

ENVIRONMENTAL CONSEQUENCES OF THE PREFERRED ALTERNATIVE

1. Page 5-2, 5.2, Farmland, paragraph 2, sentence 1. It should be noted that the project is also exempt from Federal USDA/NRCS coordination via the "Farmland Protection Policy Act".

Response: See number 5 in the errata of the FONSI.

2. Page 5-11, paragraph 2, sentence 3. The first half of this sentence should be deleted. The sentence will then read as follows:

The proposed roadway has been designed to minimize any slope erosion in the vicinity of this mound.

Response: See number 7 in the errata of the FONSI.

3. Page 5-12, paragraph 4, sentences 2-3. These sentences should be rewritten to read as follows:

The two SHPOs have concurred that the preferred alternative will have No Effect on significant archaeological resources. A Memorandum of Agreement has been prepared for the Adverse Effect to the Beck/Fockler House (see Section 8). A statement of No Adverse Effect has been prepared for the Julien Dubuque Bridge. Appendix D contains SHPO correspondence.

Response: See number 8 in the errata of the FONSI.

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4. Page 5-18, 5.10 Public Lands, last sentence. From a construction perspective, is the right-of-way available for a large retaining wall adjacent to the Sixth Street Park without impacting the park?

Response: It is anticipated that there is adequate existing right-of-way to construct a retaining wall adjacent to the Sixth Street Park. Additional right-of-way will be required for the project on the opposite side of Sixth Street. Detailed plans will be developed during the design phase.

5. Page 5-19, 5.12.1, Carbon Monoxide Analysis, paragraph 3, sentence 2. The words "commercial and" should be deleted.

Response: See number 10 in the errata of the FONSI.

6. Page 5-20, Table 5.4 Air Quality Analysis. Normally, the "Existing Year" is the year that the NEPA document is released (e.g., 2002).

Response: Comment noted. Efforts were made during the study to keep the Existing Year as close to the release date of the EA as possible.

7. Page 5-29, 5.15.1 Noise Model Results, paragraph 1. While this statement may have been true for Alternative 1B, the noise contours shown on Plate B of Appendix A would indicate that impacted areas have changed.

Response: See numbers 13, 14, and 15 in the errata of the FONSI for the updated noise receptor analysis.

- 8. Page 5-29, Table 5.7 Noise Receptor Analysis and 5-30, Table 5.7 Noise Receptor Analysis (continued). It appears that these tables are not one, as indicated, but actually two. Some of the noise levels reported are inconsistent and may have represented an alternative other than the preferred. The information in this table should be clarified.
 - Response: Table 5.7 has been updated to be consistent with the text. See number 14 in the errata of the FONSI.

DRAFT SECTION 4(f) EVALUATION

- 9. Page 1-3, 1.5.2 Social and Economic Conditions, sentence 3. Use of the U.S. 61 bridge stated to create 2 miles of adverse travel. EA Section 2.2.2 states that this option will create 20 miles of adverse travel, while EA Section 2.2.3 states that it will create a 7-mile detour. The information should be consistent.
 - Response: This information has been verified and corrected for consistency, the detour using the U.S. 61 bridge will create a seven mile one-way detour or a 14 mile round trip detour.

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- 10. Page 2-2, 2.0 Section 4(f) Properties. This section and Figure 4.1 of the EA need to be consistent. In Figure 4.1, there is an area labeled as "Park/Open Space" in Dubuque that is shown within the study corridor of the project. However, it is not shown in any other figure nor is it discussed in this section. What is the park, what are its boundaries and what recreational amenities does it offer?
 - Response: The park, as noted in Figure 4.1 of the EA, was formerly Cleveland Park and was located on top of the bluff. The figure, as taken from the Dubuque Comprehensive Plan, is in error since no right-of-way will be required from a park at this location. The park is abandoned and has no recreational amenities.
- 11. Page 5-6, 5.3 Upper Mississippi National Wildlife and Fish Refuge. The last paragraph does not indicate the same concept as the first full paragraph on page 5-9 of the EA. Therefore, the U.S. Fish and Wildlife Service concurrence that is indicated and referenced may not exist.
 - Response: Coordination with the U.S. Fish and Wildlife Service (USFWS) and the U.S. Army Corps of Engineers will continue throughout the wetland mitigation planning process during the design phase of this project. Both agencies have concurred to have USFWS acquire management of the mitigation as long as it is located adjacent to refuge property (see Corps letter, dated June 10, 2002).
- 12. Figure 5.3 Additional Right-Of-Way Required. This figure does not indicate right-ofway requirements from the Upper Mississippi River National Wildlife and Fish Refuge.

Response: A small area along Sixth Street in East Dubuque (0.1 acre) requires rightof-way from the Refuge.

13. Section 8, Memorandum of Agreement. The draft joint MOA should be removed and replaced with IL MOA to the Beck/Fockler House and the Iowa "Statement of No Adverse Effect" for the bridge.

Response: The Memorandum of Agreement (MOA) has been replaced with a signed copy of Illinois' MOA and Iowa's Memorandum of Understanding.

APPENDICES

14. Appendix B Agency Coordination. The Illinois DNR letter dated May 6, 2002 (to James Rost) closing consultation should be included in Appendix B.

Response: The Illinois DNR letters dated May 6 and January 4, 2002 have been included in Appendix B.

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- Inquiries regarding landscaping and green space.
- Inquiries regarding the design of the Plum Street extension.

For more information regarding the public hearing and public comments, refer to the Public Hearing Transcript.

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hearings recenting future access to properties.

PERMITS

Permits regarding water quality will be required for the preferred alternative. The following permits are anticipated to be required.

- A Federal Clean Water Act Section 404 Individual Permit will be required from the Rock Island District Corps of Engineers for discharge of dredge or fill material into waters of the United States, including wetlands.
- Section 401 Water Quality Certification will be required from the Illinois Environmental Protection Agency and the Environmental Protection Division of the Iowa Department of Natural Resources for discharge of dredge or fill material into waters of the United States.
- Section 402 (NPDES) permit will be required from the Illinois Environmental Protection Agency and the Environmental Protection Division of the Iowa Department of Natural Resources for construction activities that result in the disturbance of five acres or more of surface vegetation.
- Permits from the Illinois Department of Natural Resources Office of Water Resources will be required for flood plain encroachment.
- A Section 9 Permit from the U.S. Coast Guard will be required for a bridge crossing of a navigable waterway under the River and Harbors Act of 1899.
- A permit will be required from the IEPA Division of Public Water Supplies for relocation of water mains due to proposed construction.

COMMITMENTS

- An additional mussel survey will be conducted prior to the construction of the bridge. The Iowa Department of Transportation will coordinate the mussel survey with the U.S. Fish and Wildlife Service (FWS). The FWS will review current and/or newly listed threatened and endangered species prior to construction of the project.
- 2. Mitigation for impacts to 7.3 acres of wetlands will be completed prior to construction in accordance with state and federal policies. The Iowa and Illinois Departments of Transportation will coordinate with the Illinois Department of Natural Resources, FWS, and the IDOA. Since all wetland impacts occur within Illinois, the ILDOT Wetlands Action Plan will be followed. At this time a wetland mitigation site has not been chosen. See Section 5.4 of the EA for more information.

A Wetland/Riparian Restoration Plan will be developed and will include:

- Wetland impacts and an approximate number of trees to be removed and when they will be removed.
- Monetary compensation to the U.S. Army Corps of Engineers for removal of marketable trees.
- Appropriate mitigation (minimum 1.5 to 1.0) for natural resource impacts to the riparian corridor.
- Number of acres proposed for the mitigation site (11 acres minimum) and reasons why the site is appropriate for use as mitigation.
- Native species list of trees proposed, size of the tree stock proposed for planting and trees per acre.
- Management and monetary requirements to guarantee success of the mitigation.
- 3. Erosion control measures will be implemented during project construction.
- 4. The conditions and stipulations of Iowa's Memorandum of Understanding and Illinois' Memorandum of Agreement will be followed concerning impacts to historically significant structures, (i.e., the Julien Dubuque Bridge, Beck/Fockler house). The Beck/Fockler house will require documentation to Level III Standards of the Illinois Historic American Building Survey prior to construction.
- 5. During the design phase of the project, bridge plans and specifications will be coordinated with the U.S. Coast Guard and IDNR, Office of Water Resources for compliance with navigation and floodway construction rules.
- 6. Retaining walls are proposed to avoid impacts to Sixth Street Park in East Dubuque.

ERRATA FOR THE ENVIRONMENTAL ASSESSMENT

1. Section 2.2.2, page 2-2, first paragraph. Third sentence should read:

The use of this bridge would increase adverse travel for Illinois residents by about 14 miles for each round trip.

2. Section 2.2.3, page 2-3. Add between the last and second last paragraph:

A level-of service (LOS) is a grading system whereby the quality of operation on a street system can be identified. LOS's range from an "A", the best traffic operation, to "F", the poorest. It is generally accepted that for urbanized areas, the minimum acceptable LOS is Level D.

The LOS for the U.S. 20 at Locust intersection was calculated in accordance with the 1994 Highway Capacity Manual (HCM). Abbreviated definitions for each LOS are defined in Table 2.1 as follows:

LOS	Description	Traffic Loading % of Roadway Capacity
A	Free flowing traffic	<50%
В	Low-density stable traffic	51% - 70%
C	Medium density stable traffic flow	71% - 80%
D	High density stable traffic flow	81% - 90%
E	Unstable flow at or near capacity levels	91% - 100%
F	Breakdown of traffic flow	>100%

Table 2.1. Level-of-Service Description

Table 2.2 shows the LOS for signalized intersections, based on the average stopped delay per vehicle, in seconds. Under this system, the intersection would be level C if the average stopped delay per vehicle was between 15.1 and 25 seconds. Average stopped delay greater than 60 seconds a vehicle would result in a LOS F.

For unsignalized, two way stop-controlled intersections, main line traffic does not stop, so the capacity criterion is based on reserve capacity of the side street, ranging from greater than 400 vehicles reserved capacity for level A to zero vehicles reserve capacity for level F.

LOS	Stopped Delay per Vehicle (sec)
A	<= 5.0
В	5.1 to 15.0
C	15.1 to 25.0

Table 2.2.	Signalized	Intersection	LOS	Criteria

D	25.1 to 40.0
E	40.1 to 60.0
F	>60.0

Table 2.3 below shows the LOS in 1998 for the intersection during the a.m. and p.m. peak hours. The results indicate that the Locust Street intersection currently operates at an acceptable LOS during peak hours, level C or better. Table 2.3 also shows the projected level of service in the design year (2025) at Locust Street if the recommended improvement is not constructed, and if the recommended alternative is constructed.

Table 2.3. U.S. 20 at Locust Street Intersection LOS

Location	A.M. Peak Hour LOS	P.M. Peak Hour LOS
U.S. 20 at Locust Street 1998	С	С
U.S. 20 at Locust Street (at-grade intersection) 2025	F	F
U.S. 20 at Locust Street (single point interchange) 2025	С	С

Table 2.4 below shows the level of service on the Julien Dubuque Bridge: current, nobuild, and with construction of the recommended improvement.

Table 2.4.	U.S. 20	at the Julien	Dubuque Bridge LOS
		and ave O convert	

Location	A.M. Peak Hour LOS	P.M. Peak Hour LOS
Julien Dubuque Bridge 1998	D	E
Julien Dubuque Bridge 2025 No- Build	Е	Е
Julien Dubuque Bride 2025 Preferred Improvement	В	В

3. Section 3.6, page 3-13. Add Table 5.8 to end of Section 3.6

Table 5.8. Impact Summary of Alternatives 1A, 1B, and 2

Impact	Alternative 1A	Alternative 1B	Alternative 2
Right-of-Way Acquisition	14.9 acres	53.6 acres	48.0 acres
Farmland	None	11.3 acres	11.3 acres
Waters of the U.S.	7.4 acres	11.7 acres	17.4 acres
Wetland	7.3 acres	23.1 acres	19.9 acres
Upland Forest	3.7 acres	3.0 acres	1.5 acres
Forbland	None	2.5 acres	2.5 acres
Non-native grassland	2.6 acres	18.8 acres	21.6 acres
Threatened and Endangered Species	None	None	None

Archaeological Resources	None	None	None
Historic Properties	2	3	2
Potential Hazardous Waste Sites	17 properties	21 properties	13 properties
Flood Plain Encroachment	15.5 acres	47.8 acres	68.1 acres
Displacements (residential, commercial & other buildings)	59	89	141
Public Areas/Parks	1	1	2

4. Section 4.7, page 4-9. Add to the end of the section:

Indian tribal representatives and councils were notified of the proposed project during early coordination. See Appendix E for the coordination letter and tribal response letters.

5. Section 5.2, page 5-2, second paragraph. The first sentence should read:

The entire project area is located within the 1.5 mile planning radius of East Dubuque; therefore, formal coordination with the Illinois Department of Agriculture and U.S. Department of Agriculture/Natural Resources Conservation Service is not required, and the project is exempt from the Farmland Preservation Act and Farmland Protection Policy Act.

6. Section 5.4, page 5-8. Add to the first paragraph after the first sentence:

Avoidance of wetland impacts occurred during the project study when it was decided to evaluate constructing the initial stage of Alternative 1 as a stand-alone alternative. This alternative was designated Alternative 1A. Alternative 1 was re-designated Alternative 1B. Wetland impacts from Alternative 1B (Full Build) were estimated at 23.1 acres, which is much higher than the 7.3 acres impacted by Alternative 1A. Alternative 1A avoids almost all impacts to wetlands south of the railway adjacent to U.S. 20 on the Illinois side.

7. Section 5.7, page 5-11, second paragraph. The third sentence should read:

The proposed roadway has been designed to minimize any slope erosion in the vicinity of this mound.

8. Section 5.7, page 5-12, fourth paragraph. The second and third sentences should read:

The two SHPOs have concurred that the preferred alternative will have No Effect on significant archaeological resources. A Memorandum of Agreement has been prepared for the Adverse Effect to the Beck/Fockler House (see Section 9 of the Final Section 4(f) Evaluation). A statement of No Adverse Effect has been prepared for the Julien Dubuque Bridge. Appendix D contains SHPO correspondence.

9. Section 5.10, page 5-18. Paragraph should read:

The preferred alternative will impact U.S. Army Corps of Engineers (Corps) Administered Lands and a portion of the National Upper Mississippi River Wildlife and Fish Refuge. The Refuge property is owned by the Corps but is operated by the U.S. Fish and Wildlife Service. These impacts constitute a Section 4(f) impact under the Department of Transportation Act of 1966. Approximately 5.0 acres of Corps Administered Lands and 0.1 acre of Refuge property would be converted to highway use as a result of the construction of the preferred alternative. This impact is limited to property adjacent to existing U.S. 20 right-of-way and railroad right-of-way. Expanding the existing rights-of-way is considered to be less of an impact than fragmenting Corps Administered Land and the Refuge at a new location. Refer to the Draft Section 4(f) Evaluation bound with this Draft EA for more detailed information and mitigation measures. Retaining walls will be used to avoid impacting the Sixth Street Park in East Dubuque (see Appendix A, Plate B).

- 10. Section 5.12.1, page 5-19, third paragraph, second sentence. The words "commercial and" should be deleted.
- 11. Section 5.13.1, page 5-22. The section should read:

The existing Julien Dubuque Bridge consists of an 845-foot long main span and a series of approach spans. The structure crosses over the levees on both sides of the river, and the bridge abutments and approach embankment are outside the limits of the 100-year flood plain. The only obstructions in the floodway are the bridge piers. The new two-lane companion bridge will be located immediately downstream from the existing bridge.

In a letter dated March 28, 2002, the Illinois Department of Natural Resources stated the following: "The existing levees along the Mississippi River are considered to have already constrained the river such that all the allowable increase in water surface profiles has been utilized. Therefore, it will be important in the design of the new bridge to prevent any new obstruction to flood flows unless the impacts of the new obstruction are mitigated. The design for the placement of the piers for the new bridge downstream of the piers for the existing upstream bridge may prevent additional obstruction if it can account for the flow patterns at this bend in the river."

It is recommended that the new adjacent structure have approximately the same span lengths as the existing bridge, and that the new piers be approximately the same thickness as the existing piers, and be located in line with the flow patterns directly downstream from the existing piers. If the final design is consistent with this recommendation, the new bridge will provide the same opening to the floodway as the existing bridge. The increase in the base flood elevation due to construction of the new bridge would be negligible. This issue of transverse encroachment will need to be re-examined during final design.

12. Section 5.13.3, page 5-23. The section should read:

The project will result in fill being placed in the flood plain. All of this fill will be in the flood fringe and will result in minimal storage loss. The total volume of fill placed below the 100-year flood elevation of 610.5 and above the ordinary high water of 592.0 is estimated to be less than 20,000 cubic yards.

This loss of flood plain storage will be re-evaluated during final design, and compensatory mitigation will be evaluated, if necessary, in conjunction with wetland mitigation planning.

13. Section 5.15.1, page 5-29. Section 5.15.1 should read:

Two receptors exceed the FHWA NAC for noise abatement.

Residential Receptor 2 is located approximately 180 feet northwest of existing U.S. 20 (refer to Appendix A, Plate A). This receptor location represents a single family residence and has a modeled design year Leq(h) of 67 dBA, which is 1 dBA over the existing modeled noise level.

Residential Receptor 6 is located approximately 60 feet east of existing U.S. 20 (refer to Appendix A, Plate B). This receptor location represents 12 single family residences and has a modeled design year Leq(h) of 68 dBA, which is 3 dBA lower than the existing modeled noise level (71 dBA). The decrease in the predicted noise level is attributed to the elevated roadway proposed in this area.

14. Section 5.15.2, page 5-29. Section 5.15.2 and Table 5.7 should read:

An evaluation of possible noise abatement measures was conducted along the alignment at Receptor 2 and Receptor 6 where noise levels meet abatement criteria (Table 5.7). Two types of noise abatement measures are available for this project area: physical barriers and traffic management measures. Noise measures were considered for each receptor location.

Receptor Number ⁽¹⁾ Distance to Centerline (feet)		Receptor Number ⁽¹⁾	erline	Туре	Represents	NAC ⁽²⁾	Existing Year (1999) Leq(h)	(2025) H	n Year Predicted) dBA	dBA ⁽³⁾ Change (Build)
L YAL	No- Build	Build			dBA ⁽³⁾	dBA ⁽³⁾	No- Build	Build		
N-1	368	393	Residential	6 homes	67	60	63	63	+3	
N-2	204	179	Residential	3 homes	67	66	67	67	+1	
N-3	382	233	Residential	4 homes	67	60	59	58	-2	
N-4	555	120	Residential	12 homes	67	56	58	58	+2	
N-5	100	498	Residential	6 homes	67	68	60	62	-6	
N-6	60	60	Residential	12 homes	67	71	71	68	-3	

Table	5.7.	Noise	Recep	otor	Analysis	

- 1) See Appendix A for receptor locations.
- 2) Noise Abatement Criteria
- 3) DBA = A weighted decibel
- 15. Section 5.15.4, page 5-31. The following paragraph should be inserted after the first paragraph:

Receptor 6 is predicted to approach or exceed the NAC with a modeled design year Leq(h) of 68 dBA. This receptor is located approximately 60 feet from the centerline of the existing and proposed highway. Residential receptors will not have direct access onto the highway. A barrier at this location would benefit 12 residential homes. This barrier would need to be a minimum length of about 3,018 feet to provide a sufficient screen to lower the Leq(h) to 65 dBA. Total barrier costs associated with a structure at \$25.00/sq. feet would be approximately \$754,700 or about \$62,892 per residence. The low number of receptors benefiting from a noise barrier with the associated costs makes construction of a noise barrier not reasonable at this receptor location. Although only a 3 dBA reduction was achieved, usually an eight dBA reduction is required for a noise barrier analysis. A cost of about \$24,000 per residence would normally be acceptable noise abatement mitigation.

16. Section 5.19, page 5-35, last paragraph. The fifth sentence should read:

These include the Julien Dubuque Bridge, the Beck/Fockler House and U.S. Army Corps publicly owned lands.

17. Section 5.19, page 5-36, Table 5.8. Entry should read in the first column under Section 4(f) Properties:

U.S. Army Corps Administered Lands/Upper Mississippi River National Wildlife and Fish Refuge

18. Section 5.19, page 5-36. Fourth sentence on should read:

Approximately 5.0 acres of Corps Administered Lands and 0.1 acre of the Upper Mississippi River National Wildlife and Fish Refuge property will be converted to the proposed roadway. These impacts have been minimized by utilizing the existing roadway corridor rather than by fragmenting the publicly owned lands at a new location. The U.S. Army Corps of Engineers has jurisdiction over these lands. The Corps has indicated that a land exchange of the wetland mitigation area selected for the project will provide adequate mitigation for these impacts if adjacent to U.S. Fish and Wildlife Service administered lands. The U.S. Fish and Wildlife Service has indicated a desire to acquire management of the mitigation site if it is located adjacent to Refuge lands. The attached Final Section 4(f) Evaluation contains further information regarding these properties.

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RESPONSE LETTER

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Illinois Department of Transportation District 2

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U.S. Department of Transportation

United States Coast Guard



Commander Eighth Coast Guard District

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APR 2 4 2002

1222 Spruce Street St. Louis, MO 63103-2832 Staff Symbol: obr Phone: (314)539-3900 Ext 379 FAX: (314)539-3755

16591.1/579.29 UMR 18 April 2002

OFFICE OF ENVIRONMENTAL SERVICES

Mr. James P. Rost, Director Office of Environmental Services Iowa Department of Transportation 800 Lincoln Way Ames, IA 50010

Subj: PROPOSED DUBUQUE HIGHWAY BRIDGE REPLACEMENT, MILE 579.29, UPPER MISSISSIPPI RIVER

Dear Mr. Rost:

This is in reply to Hanson Professional Services (HPS), Inc., letter of March 19, 2002, inviting us to comment on the Environment Assessment/Draft Section 4(f) Evaluation (EA/D4f) for the subject project. Our specific interest in this project is the possible impact upon navigation on the Upper Mississippi River presented by the construction and operation of a new bridge or changes to any existing bridges.

The navigation portions of the EA will support an application for a Coast Guard Bridge Permit. However, the D4f should have the following statement included:

"There are no feasible and prudent alternatives and the proposed project includes all possible planning to minimize harm to Section 4(f) resources."

It was noted that there doesn't seem to be much coordination with the Illinois State Historic Preservation Officer (ILSHPO) reflected in the D4f. Example: The EA states there will be no adverse effect upon the Julien Dubuque Bridge. This was based upon coordination with the Iowa SHPO. However, there is no mention of whether or not the ILSHPO agrees. Since the bridge is an interstate one, both SHPO's comments should be given.

We appreciate the opportunity to comment on this project. Please contact me at the above telephone number if you have questions regarding our comments or requirements.

Bruce L. Me Jaron Sincerely.

BRUCE L. MCLAREN **Project Manager** By direction of the District Commander

Copy: FHWA/IA Division

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OFFICE OF ENVIRONMENTAL SERVICES

http://dnr.state.il.us



Office of Water Resources

Natural Resources

One Natural Resources Way . Springfield, Illinois 62702-1271

George H. Ryan, Governor • Brent Manning, Director

March 28, 2002

Illinois

SUBJECT: Capacity Improvement of U.S. 20 Across the Mississippi River JoDaviess County, Illinois

Mr. James P. Rost, Director Office of Environmental Services Iowa Department of Transportation Ames, Iowa 50010

Dear Mr. Rost:

We have reviewed the "Environmental Assessment and Draft Section 4(f) Evaluation" transmitted with the March 19, 2002 letter from Mr. James W. Moll of Hanson Professional Services, Inc. The comments provided by this office reflect our review of the project as it relates to the Illinois "Rivers, Lakes and Streams Act" (615 ILCS 5) and the rules which have been promulgated under that act. The specific rules which are applicable to this project are entitled "Construction in Floodways of River, Lakes and Streams" and "Regulation of Public Waters." As was noted on page 5-32 of the assessment, a permit is required from this office for the construction of the proposed project.

Based on the information in the assessment, page 5-22 and 23, the proposed project includes an additional bridge across the Mississippi River just downstream of the existing bridge which will have: 1) approximately the same span lengths as the existing bridge, 2) piers located directly downstream from the existing piers with approximately the same thickness as the existing piers, and 3) the same opening to the floodway as the existing bridge. The existing levees along the Mississippi River are considered to have already constrained the river such that all the allowable increase in water surface profiles has been utilized. Therefore, it will be important in the design of the new bridge to prevent any new obstruction to flood flows unless the impacts of the new obstruction are mitigated. The design for the placement of the piers for the new bridge downstream of the piers for the existing upstream bridge may prevent additional obstruction if it can account for the flow patterns at this bend in the river.

Thank you for the opportunity to comment on this important project. We are willing to meet with the designers prior to submittal of the application for permit to discuss the proposed alignment and our regulatory requirements, if desired.

Sincerely,

Robert H. Dalton, P.E. Chief, Downstate Regulatory Programs

RHD:crw cc: James W. Moll

United States Department of Agriculture

ONRCS

Natural Resources Conservation Service 210 Walnut Street 693 Federal Building Des Moines, IA 50309-2180

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MAR 2 7 2002 OFFICE OF ENVIRONMENTAL SERVICES

March 26, 2002

Ref:

Environmental Assessment/Draft Section 4(f) Evaluation Capacity Improvement of U.S. 20 Across the Mississippi River Dubuque County, Iowa/Jo Davies County, Illinois

Mr. James P. Rost Director Office of Environmental Services Iowa Department of Transportation 800 Lincoln Way Ames, Iowa 50010

Dear Mr. Rost:

I have reviewed the proposed Draft Assessment document for U.S. 20 through Dubuque, Iowa and East Dubuque, Illinois. The proposed work will occur mostly within the city limits of the communities. Erosion control during construction and the protection of historic properties and sites within the proposed corridors must be considered while developing any development plans. Sincerely,

State Conservationist

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MAY-07-2002 11:55 HANSON MAY-07-2002 11:56 FROM IA DOT PROJECT PLANNING TO 217 788 2503 P.05/22 912177882503 P.05/22



STATE OF IOWA

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

DEPARTMENT OF NATURAL RESOURCES JEFFREY R. VONK, DIRECTOR

April 1, 2002

OFFICE OF ENVIRONMENTAL SERVICES

James P. Rost, Director Office of Environmental Services Iowa Department of Transportation Ames, Iowa 50010

Re: Environmental Assessment/Draft Section 4(f) Evaluation Capacity Improvement of U.S. 20 Across the Mississippi River Dubuque County, Iowa/Jo Daviess County, Illinois

Dear Mr. Rost:

I am writing in response to the recent correspondence that was received concerning the above referenced project.

The area is in attainment for all criteria pollutants as mandated in the Clean Air Act of 1990. Current requirements would not impede construction. At this time the Environmental Protection Agency (EPA) does not have any proposed criteria pollutant requirements to prevent construction, however, we are unable to predict future EPA requirements.

Demolition of any buildings will trigger the National Emission Standards for Hazardous Air Pollutants (NESHAPS) for asbestos. Regulations apply before renovation and demolition projects begin. Before renovation or demolition, a thorough asbestos inspection is required. Thorough inspection means all suspect asbestos containing materials require sampling and laboratory analysis or are assumed to contain asbestos and handled in accordance with the regulation. All facility demolitions require submission of a two-page demolition notification form to the Department of Natural Resources (DNR), even if no asbestos is found. Upon postdate of submitted forms, ten working days must pass before any disturbance of asbestos containing material takes place. Before demolition or renovation occurs, asbestos-containing materials must be removed.

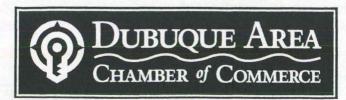
Please also keep in mind the current state requirements on open burning and fugitive dust, 567 Iowa Administrative code Chapter 23.2 and 23.3 (2) "c", respectively. The most recent version of the IAC is available at http://www.legis_state.ia.us/IAC.html.

The Department's Asbestos Program Coordinator is Marion Burnside, (515) 281-8443. If you have any additional questions, please feel free to contact me at (515) 281-6061 or via e-mail at corey.mccoid@dnr.state.ia.us.

Sincerely,

Corey McCoid Environmental Specialist

7900 Hickman Road, Suite 1 / Urbandale, Iowa 50322 --- Report Smoking Vehicles 1-866-TAILPIPE 515-242-5100 FAX 515-242-5094 http://www.iowacleanair.com/



May 6, 2002

Mr. James P. Rost Office of Environmental Services Iowa Department of Transportation Ames, IA 50010

RECEIVED MAY 0 8 2002 OFFICE OF ENVIRONMENTAL SERVICES

Re: Environmental Assessment/Draft Section 4(f) Evaluation Capacity Improvement of U.S. 20 Across the Mississippi River Dubuque County, Iowa/Jo Daviess County, Illinois

Dear Mr. Rost:

Please accept this letter of public comment regarding the aforementioned referenced project on behalf of the Dubuque Area Chamber of Commerce and our nearly 1,100 members.

Transportation issues are of critical importance to the business community as quality roads and highways allow our companies to move their products efficiently and safely throughout the Dubuque area and to the rest of the world. In recent years, the Dubuque area has seen a tremendous increase in traffic along the U.S. 20 corridor. The increased traffic has brought congestion and safety concerns for our businesses that rely on Highway 20. To fully realize the growth potential of our community, the improvements that were made on Dodge Street from Devon Drive to Locust Street must also extend to the west to Peosta and to the east to Galena and beyond. The expansion of the current two-lane bridge facility to a four-lane bridge facility is the next critical step in the process of building a four-lane U.S. 20 that will connect all of Iowa to Rockford and into Chicago. As such, our board of directors has identified the bridge project as a strategic priority for the business community in the Dubuque area.

The Chamber agrees with the report in that the preferred alternative is to build an additional twolane bridge structure parallel to the current Julien Dubuque Bridge. The Environmental Assessment (EA) states that one of the needs for the project is linking of U.S. 20 to other recently improved facilities such as U.S. 61 and U.S. 151 in Iowa and Wisconsin. In addition, the EA makes reference to the current studies underway in Illinois regarding the expansion of U.S. 20 to a four-lane facility from Illinois 84 to the Freeport bypass and the studies underway for improvements to Dodge Street from Devon Drive to the Peosta Interchange in Iowa. Without a four-lane bridge facility, the Mississippi River crossing at U.S. 20 will effectively bottleneck the free flow of eastbound and westbound traffic on U.S. 20.

Please know that the Dubuque Area Chamber of Commerce would like to continue to be of resource to the Iowa and Illinois Departments of Transportation as the bridge project moves

300 MAIN STREET SUITE 200 P.O. BOX 705 DUBUQUE, IA 52004-0705 (563)557-9200 (563)557-1591 E-mail: office@DubuqueChamber.com Web site: www.DubuqueChamber.com forward. As the primary advocate for the business community in the Dubuque area, we have an obligation to speak on behalf of business concerns regarding the impacts of constructing an additional two-lane bridge span across the Mississippi River.

In addition, our organization is well prepared to disseminate information on the bridge project to the business community in the Dubuque area. Please consider our organization, our staff, volunteers and members as a resource as the public involvement portion of the bridge project continues.

I appreciate your consideration of this letter and look forward to the working with you on the U.S. 20 Mississippi River Bridge expansion project.

Sincerely,

J. Steven Horman President & CEO



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, Springfield, Illinois 62794-9276 Renee Cipriano, Director

217/782-0547

May 3, 2002

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MAY 0 6 2002 OFFICE OF ENVIRONMENTAL SERVICES

Mr. James P. Rost, Director Office of Environmental Services Iowa Department of Transportation Ames, Iowa 50010

Re: Environmental Assessment/Draft Section 4(f) Evaluation Capacity Improvement of U.S. 20 Across the MississippiRiver Dubuque County, Iowa/Jo Daviess County, Illinois

Dear Mr. Rost:

Thank you for the opportunity to comment on the Environmental Assessment and Draft Section 4(f) Evaluation for the capacity improvement of U.S. 20.

The Agency has reviewed this submission and has no comments or objections to the proposed project at this time. Please contact the Corps of Engineers for any permit requirements for dredge and fill activities under Section 404 of the Clean Water Act. In addition, a construction site stormwater NPDES permit is required from IEPA. Please contact Alan Keller, Division of Water Pollution, at 217/782-0610 for specific permit requirements.

A permit will also be required from the Division of Public Water Supplies for relocation of water mains due to proposed construction. Please contact Jerry Kuhn at 217/782-9470 for more information.

Sincerely,

B. P. Killian

Bernard P. Killian Deputy Director

GEORGE H. RYAN, GOVERNOR

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George H. Ryan, Governor • Joe Hampton, Director

Bureau of Land and Water Resources

State Fairgrounds • P.O. Box 19281 • Springfield, IL 62794-9281 • 217/782-6297 • TDD 217/524-6858 • Fax 217/557-0993

May 3, 2002

Mr. James P. Rost, Director Office of Environmental Services Iowa Department of Transportation Ames, Iowa 50010

Re: Environmental Assessment/Draft Section 4(f) Evaluation Capacity Improvement of US 20 Across the Mississippi River Dubuque County, Iowa/JoDaviess County, Illinois

Dear Mr. Rost:

The Illinois Department of Agriculture (IDA) has examined the Illinois portion of the abovereferenced project for its potential impact to agricultural land in order to determine its compliance with the Illinois Farmland Preservation Act (505 ILCS 75/1 et seq.). Our analysis also relates to the federal Farmland Protection Policy Act (7 USC 4201 et seq.) which specifies that federal actions affecting farmland conversion shall be consistent with state and local programs to protect farmland.

The proposed action consists of increasing the capacity of U.S. Route 20 by constructing a new two-lane bridge adjacent to the existing Julien Dubuque Bridge to serve as a one-way couple. The project's western terminus is west of Locust Street in Dubuque, lowa and the eastern terminus is Barge Terminal Road, located east of East Dubuque, Illinois.

The City of East Dubuque enforces its 1.5 mile extra territorial zoning jurisdiction and possesses a recent comprehensive land use plan. Because the bridge and highway improvement project falls within the City's 1.5 mile planning jurisdiction, the project is exempt from the IDA's necessity to prepare a Study of Agricultural Impacts, per Section 2.c and 2.d of the IDA-IDOT Cooperative Working Agreement on the protection of Illinois farmland. The IDA has determined that the project meets the intent of the IDOT's Agricultural Land Preservation Policy and complies with the Illinois Farmland Preservation Act.

The IDA requests written notification if the proposed mitigation site changes. Further coordination would be required in order to evaluate the potential impacts to agricultural land prior to the selection of an alternative site. The selection of a wetland mitigation site that avoids Prime farmland that is viable for long-term agricultural use is practicable way that farmland conversion impacts can be avoided or at least minimized.

Mr. James P. Rost, Director Page 2 May 3, 2002

The IDA has learned that the City of East Dubuque previously acquired FEMA land (the Shore Acres Hazard Mitigation Program area) that must be maintained as open space. The area is less than one-half mile due west from the proposed mitigation area. Because the City must maintain the FEMA property as open space, East Dubuque is very interested in utilizing this site for mitigation purposes. As in past projects, the IDA prefers to see existing public land used for mitigation purposes rather than purchasing privately owned Prime farmland for such use.

Should you have any questions regarding our review of the project's Environmental Assessment or our comments contained herein, please call Ms. Terry Savko of my staff at 217-785-4458.

Sincerely

Steve Frank, Chief Bureau of Land and Water Resources

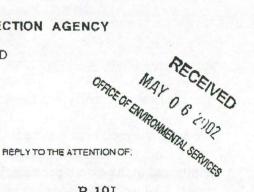
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cc: ^{\Composed James W. Moll, Hanson Professional Services Inc. Les Johnson, JoDaviess County SWCD Agency Project File}



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION5 77 WEST JACKSON BOULEVARD CHICAGO, IL 60604-3590

MAY 0 2 2002



B-19J

Bobby Blackmon, Division Administrator Federal Highway Administration 105 Sixth Street Ames, Iowa 50010-6337

> Re: Environmental Assessment for the Proposed Capacity Improvement of U.S. Route 20 Across the Mississippi River – Dubuque County, Iowa and Jo Daviess County, Illinois

Dear Mr. Blackmon:

The Environmental Protection Agency (U.S. EPA) has reviewed the Environmental Assessment (EA) for the proposed capacity improvement of U.S. Route 20 across the Mississippi River, in Dubuque County, Iowa, and Jo Daviess County, Illinois. Under the preferred alternative: (1) two lanes would be added to the existing roadway between points near Locust Street in Dubuque, Iowa, and Timmerman Road in East Dubuque, Illinois, (2) a single-point diamond interchange would be constructed at the intersection of U.S. Route 20 and Locust Street, and (3) a bridge would be constructed over the Mississippi River to accommodate the two extra lanes. According to the EA, the proposed project is needed to address the following issues: (1) system linkage, (2) social and economic conditions, (3) traffic demand, (4) roadway deficiencies, (5) bicycle and pedestrian accommodation, (6) East Dubuque rail traffic, (7) transportation planning, and (8) legislation. Based on our review of the EA, we have developed the following comments.

We are concerned because the EA does not provide Level of Service (LOS) data for the study area to support the stated need to address increasing traffic demand on U.S. Route 20. The EA indicates that current LOS data and LOS estimates for the future are included in two separate technical memorandums. A summary of this information would have supported the stated need. However, this information was not included for our review.

We are concerned because the EA only evaluates the preferred alternative in detail. According to the EA, three alternatives are feasible to meet the purpose and need for the project (Alternatives 1A, 1B, and 2). However, the EA only examines the environmental impacts of the preferred alternative (Alternative 1A). Under the National Environmental Policy Act (NEPA), the EA must evaluate the environmental impacts caused by feasible alternatives in order to determine the least environmentally damaging practical alternative. Since the EA only evaluates the environmental impacts of the preferred alternative, we are unable to compare the impacts of the

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other feasible alternatives presented by the EA.

We are concerned because the EA does not describe the avoidance and minimization strategies used to mitigate wetland impacts. The EA does state that wetland impacts have been avoided or minimized to the extent practicable, but it does not describe how this was achieved. Therefore, we are unable to determine the effectiveness of such avoidance and mitigation strategies.

We are concerned about the EA's lack of a comprehensive description of possible wetland mitigation sites under consideration. The EA shows a potential wetland mitigation area in an aerial photograph (Figure 5.1), but it doesn't include information about the area's size, hydrologic support, or soil types. Therefore, we cannot determine the viability of area as a potential wetland mitigation site. Also, the EA doesn't list any other possible sites under consideration. If the project proponents are considering other possible wetland mitigation sites, then they should have been identified in the EA. Currently, we are not able to compare the viability of possible wetland mitigation sites under consideration.

We are concerned about possible impacts to the Higgins' eye pearly mussel, a federally listed endangered species. The EA indicates that two specimens of this species were found during a survey of the preferred corridor study area. However, the EA does not include a plan to mitigate construction impacts to this mussel. The EA must coordinate with the U.S. Fish and Wildlife Service in order to adequately address this issue.

In summary, we are concerned about the absence of the following information: (1) LOS data, (2) environmental analysis for all feasible alternatives, (3) avoidance and minimization strategies used to mitigate wetland impacts, (4) a comprehensive description of possible wetland mitigation sites under consideration, and (5) a mitigation strategy for the Higgins' eye pearly mussel. We suggest that the project proponents supplement the EA with this information before issuing a Finding of No Significant Impact.

Thank you for the opportunity to review and provide comments on the EA. If you have any questions or comments, please feel free to contact Newton Ellens, of my staff, at (312) 353-5562.

Sincerely yours,

11/11 Call

Kenneth A. Westlake, Chief Environmental Planning and Evaluation Branch Office of Strategic Environmental Analysis

cc:

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James Rost Office of Environmental Services Iowa Department of Transportation

Joe Cothern U.S. Environmental Protection Agency, Region 7

22

-

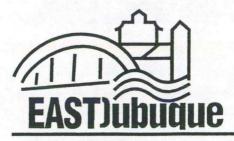
Randy Kraciun Environmental Analysis Branch **Rock Island District** Army Corps of Engineers

Joe Slater Rock Island Field Office (ES) U.S. Fish and Wildlife Service

RECEIVED

MAY 0 9 2002

OFFICE OF ENVIRONMENTAL SERVICES



May 6, 2002

Mr. James R. Rost, Director Office of Environmental Services Iowa Department of Transportation Ames, IA 50010

Re: U.S. 20 Capacity Improvement Across the Mississippi River Environmental Assessment Report/Draft 4(f) Evaluation Dubuque County, Iowa/Jo Daviess County, Illinois BRF-20-9(149)-38-31

Dear Mr. Rost:

I received a letter and an enclosed copy of the Environmental Assessment Statement (EAS) and Draft Section 4(f) Evaluation for the capacity improvement of U.S. 20 across the Mississippi River located in Dubuque, IA and East Dubuque, IL from Mr. James Moll, Assistant Vice President of Hanson Professional Services, dated March 19, 2002. I have reviewed the documentations and have the following comments and/or suggestions:

1.0 Proposed Wetland Mitigation Area.

- 1.1 Figure 5.1 of the EAS proposes that the agricultural field west of Badger Road would be used as a proposed wetland mitigation area. The city of East Dubuque (city) disagrees with a wetland mitigation area being placed at this particular site. The city's comprehensive plan, adopted on December 17, 2001, addresses the future land use at this site as a corridor for commercial development.
- 1.2 Iowa and Illinois Department of Transportation (IDOT) should work with the city to develop and select some other alternative wetland areas that would best fit within the city's comprehensive plan.
- 1.3 The city, in the next several years, will have land available through its hazard mitigation program or through its stormwater detention program that may work as possible sites for wetland areas. IDOT should work with the city on these areas before exploring other site locations.

303 Sinsinawa Avenue • East Dubuque, IL 61025 Phone: 815.747.3416 • Fax: 815.747.2973

2.0 Proposed Stormwater Collection System.

- 2.1 Section 5.3, *Water Resources*, of the EAS proposes that drainage from the mainline and ramps on the eastside of the Julien Dubuque (J.D.) Bridge in East Dubuque will be directed to a curb and gutter collection system with catch basins for capture along the pavement edges. The catch basins will be connected with a storm sewer system that will pipe the stormwater to an outlet in Lake Lacoma. The city disagrees with IDOT's stormwater proposal because it does not necessarily follow the NPDES permit approach on Phase II Stormwater Regulations and the city's stormwater management plan.
- 2.2 The city is concerned that IDOT will not design for stormwater impacts, such as flooding, volume control and designing for 100year event. IDOT should work with the city on these areas to develop and select a stormwater proposal that would best fit within the NPDES permit requirements and the city's stormwater management plan.
- 2.3 The city is concerned that IDOT will not design a stormwater system that would move water to safe areas. IDOT should have a design on Jersey Barriers that would move water safely and if pumps are used, the pump stations should be oversized.
- 2.4 The city is concerned with stormwater impacts within the Flats area (a residential subdivision protected by the East Dubuque levee system).
 - 2.4.1 The 3rd Street Channel should be the discharge point of stormwater for the U.S. 20 project. The Channel will empty pollutant stormwater into a wet detention site between 2nd Street and Menominee Avenue/Desoto Avenue. The wet detention site will filter the pollutants and empty the clean stormwater into the Mississippi River.
 - 2.4.2 The compensatory storage within the Flats area should be reduced by the relocation of the Hill Street 21" stormwater pipe. The stormwater should be relocated into IDOT's stormwater collection system.
 - 2.4.3 The pump house located at 6th Street should have a modern design that will process stormwater out of the Flats area.

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2.4.4 Lake Lacoma should be dredged to increase stormwater volume and reduce future flood risk.

3.0 Proposed Impacts on the Municipal Utility System.

- 3.1 Section 5.3, *Water Resources*, of the EAS proposes that the two municipal wells for East Dubuque will have little impact on the proposed upgrade to the U.S. 20 project. The city disagrees the EAS because both municipal wells are gravel packed wells. These wells may experience substantial fill from the project that may adversely impact the city's ability to produce water for its customers.
- 3.2 The proposed upgrade to U.S. 20 will significantly impact the wellhead protection locations of 400 feet, causing the municipality to pay more in annual licensing fees to Illinois Environmental Protection Agency (IEPA), plus the additional daily testing costs to meet IEPA regulation compliance.
- 3.3 The proposed upgrade to U.S. 20 will allow little to no access for the city to conduct daily inspections and future service upgrades to the two municipal wells.

4.0 Proposed Impacts on Accesses and Roadways.

- 4.1 The city is agreeable to the proposed extension to Plum Street from the corner of Hill Street to U.S. 20. This would allow the city a better emergency response time. However, the city is not agreeable to the current design of the intersections.
 - 4.1.1 The intersection at U.S. 20 should be moved closer to the property line to allow future commercial development on the property.
 - 4.1.2 The intersection at the corner of Hill Street should be lined up with the existing Plum Street intersection.
- 4.2 The city is agreeable to the railroad closure at 4th Street only if a road is built from 3rd Street to Menominee Avenue.
 - 4.2.1 This will allow better traffic flow from the downtown area to the Flats area.
 - 4.2.2 This will also allow adequate public safety response time to residents and businesses who are located at the proposed

dead end street between 5^{th} and 6^{th} Streets and Menominee Avenue.

- 4.3 The city is concerned with Desoto Avenue not having access to 6th Street. Fire Station #2 is located on Desoto Avenue and it needs to have easy access onto 6th Street.
 - 4.3.1 Fire Station #2 should be relocated to the 6th Street Playground, which should have a two level building. The high level will allow easy access off 6th Street and the lower level will allow easy access to the Flats area.
 - 4.3.2 The municipal well site located at 6th Street should be relocated to allow Desoto Avenue access onto 6th Street.
 - 4.3.3 The 6th Street Playground should be moved to the current location of Fire Station #2.
- 4.4 The city is concerned with EAS's location of the pedestrian bridge. The increased pedestrian traffic at this location will have to cross the railroad tracks at 2nd Street to get to the downtown area.
 - 4.4.1 A 4-gate crossing should be constructed at 2nd Street to ensure that pedestrians will not travel across the tracks when a train approaches.
 - 4.4.2 The pedestrian bridge location should be moved closer to Boat Ramp Road to allow a pedestrian overpass to be built across the 2nd Street railroad tracks.
- 4.5 The city is concerned with an access road/off street parking for five residential properties located between 6th Street and Butternut Street. The U.S. 20 project allows an access road for, one residential property and the other four residential properties will lose their off street parking because of the business relocation of a gas station at 6th Street.
 - 4.5.1 The residential properties should be relocated and move the gas station to this location.
 - 4.5.1.1 This will minimize commercial impacts of the project.
 - 4.5.1.2 This will best fit within the city's comprehensive plan.

4.5.1.3 This will eliminate the need for the construction of a roadway for four residential properties.

- 4.6 The city is concerned with off street parking for the community center located at the corner of U.S. 20 and IL 35. The two-way traffic will make it difficult for patrons to park in front of the community center.
 - 4.6.1 Off street parking should be constructed in either the rear or the side of the community center for its patrons.
- 4.7 The city is concerned with public safety and public works access to the Merry House building and residential properties located in the alleyway. The U.S. 20 project will eliminate an entrance at the Merry House building that will not allow fire apparatuses and public works vehicles access to this property and other properties in the alleyway.
 - 4.7.1 A street should be constructed from U.S. 20 to the alleyway to allow for public safety and public works access to the Merry House building and other properties.

5.0 **Proposed Impacts to the Central Business District.**

- 5.1 The city is concerned with the business relocation of a gas station and of a liquor store located at the corner of U.S. 20 and 5th Street.
 - 5.1.1 The city suggests that one of the businesses remain at this location.
 - 5.1.1.1 This will minimize the commercial impacts of the project.
 - 5.1.1.2 This will best fit within the city's comprehensive plan.
 - 5.1.1.3 This will allow the municipality to recapture some of its tax base that would of otherwise been lost as a result of the business relocation.
- 5.2 The city is concerned that the downtown business district will be negatively impacted because of the U.S. 20 project.
 - 5.2.1 The downtown is important as a symbol of the historic identity and image of the community. In essence, it is everybody's neighborhood that serves the community with

shopping, entertainment, employment, public services and tax base. It is a reflection of the community and its values, history and character.

- 5.2.1.1 IDOT should work with the city to develop and fund the projects that will enhance the historical significance of the current bridge and that enhance the central business district as outlined in the city's comprehensive plan and market study.
- 5.2.2 The city suggests the following elements to minimize the impacts to the downtown area.

5.2.2.1 Gateway Treatments and Signage-

- 5.2.2.1.1 Implement directional signs with a distinct visual image to direct people on U.S. 20 and IL 35 to the downtown area.
- 5.2.2.1.2 Create a visually interesting structure, sculpture, garden or other feature across from the Community Center at the south end of Sinsinawa Avenue and at its northern terminus.

5.2.2.2 Gateway Park and Pedestrian Promenade—

- 5.2.2.2.1 Develop a rest area, visitor's information and welcome center, expanded boat launch area, and attractive family oriented park along the river north of the J.D. Bridge to serve both visitors and local residents about the historical nature of the J. D. Bridge.
- 5.2.2.2.2 Create a dramatic structure, sculpture, fountain or other esthetic feature to attract people to the gateway park.
- 5.2.2.3 Develop a roadway from Sinsinawa Avenue to Boat Ramp Road to move traffic from point to point.
- 5.2.2.4 Develop an interesting pedestrian promenade linking the Gateway Park along the river to the downtown area.

- 5.2.2.2.5 Build a new public dock south of the J.D. Bridge to provide an opportunity for recreationists along the river to stop, shop and enjoy downtown East Dubuque.
- 5.2.2.2.6 Implement the pedestrian promenade and bike path connection between the marina, the development site north of the marina, the Gateway Park and downtown.
- 5.2.2.3 Pedestrian Oriented Retail Core and Streetscape Enhancements—
 - 5.2.2.3.1 Implement upgrading and enhancement of the downtown streetscape with thematic lighting, landscaping, masonry pavers, and street furniture such as benches, trash receptacles and bike racks.

These are the primary concerns, which surfaced during our review. Thank you for the opportunity to comment on the EAS. If you have any concerns relating to the above-referenced comments and/or suggestions, please feel free to call me at 815.747.3416 or email me at <u>mmichel@edmail.com</u>.

Sincerely, Mick J. Michel.

City Manager

CC: Geoff Barklow, Mayor City Council

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U.S. Department of Housing and Urban Development

Nebraska State Office Executive Tower Centre 10909 Mill Valley Road Omaha, Nebraska 68154-3955

March 22, 2002

MEMORANDUM FOR: Agencies Requesting Comments Regarding Environmental Reviews/Findings

FROM: Gregory A. Bevirt, Director, Community Planning and Development Division

SUBJECT: Draft Environmental Assessment/Draft Environmental Impact Statement

As this Office no longer has the staff expertise to review the attached document, we are returning it to you without comment. We regret any inconvenience this might cause.



April 19, 2002

Mr. James Moll P.E.,S.E., Assistant Vice President Illinois Department of Transportation %Hanson Professional Services, Inc. 1525 S 6th Street Springfield, IL 62703-2886

RE: IA020319-395

Dear Mr. Moll:

The Iowa State Clearinghouse has performed the required review of your grant application for the Enviornmental Study for U.S. 20 Capacity Improvements funding in accordance with the Iowa Intergovernmental Review System.

The review:

- -- includes a letter dated April 8, 2002 from Iowa Department of Natural Resources.
- found no serious environmental problems which may result from the project or program.
- -- indicated that the proposal conforms to pertinent planning to this area.
- did not show that the proposal would result in duplicating any existing activity or project.

The Clearinghouse is pleased to recommend that the application be approved for funding. A copy of this letter must be sent to the federal agency as evidence that the review has been performed.

Sincerely,

Steven R. - M. Cam

Steven McCann Federal Funds Coordinator 515/242-4719

SRM:rao

THOMAS J. VILSACK, GOVERNOR

SALLY J. PEDERSON, LT. GOVERNOR



STATE OF IOWA

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

DEPARTMENT OF NATURAL RESOURCES JEFFREY R. VONK, DIRECTOR

April 8, 2002

Mr. Steve McCann Iowa Department of Economic Development 200 East Grand Avenue Des Moines, IA 50309-1827

02-03-19-395

RE: Environmental assessment and draft section 4(f) evaluation for the capacity improvement of U.S. 20 across the Mississippi River by constructing a new two-lane bridge adjacent to the existing Julien Dubuque Bridge, Dubuque County

Dear Mr. McCann:

Thank you for inviting our comments on the impact of the above referenced project on protected species and rare natural communities.

We have searched our records of the project area and found no records of rare species or significant natural communities. However, our data are not the result of thorough field surveys. Based on the information provided, we do not think the project will affect protected species or rare natural communities. If listed species or rare communities are found during the planning or construction phases, additional studies and/or mitigation may be required.

This letter is a record of review for protected species and rare natural communities in the project area. 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.

If you have any questions about this letter or if you require further information, please contact Keith Dohrmann at (515) 281-8967.

Sincerely.

MIKE BRANDRUP IOWA DEPARTMENT OF NATURAL RESOURCES

MB:kd

02-901L

WALLACE STATE OFFICE BUILDING / DES MOINES, IOWA 50319 515-281-5918 TDD 515-242-5967 FAX 515-281-6794 WWW.STATE.IA.US/DNR 45



United States Department of the Interior

OFFICE OF THE SECRETARY Washington, D.C. 20240



RECEIVED MAY 0 7 2002

OFFICE OF ENVIRONMENTAL SERVICES

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MAY 0 7 2002

Mr. Bobby W. Blackmon **Division** Administrator Federal Highway Administration 105 Sixth Street Ames, Iowa 50010-6337

OFFICE OF ENVIRONMENTAL SERVICES

Dear Mr. Blackmon:

As requested, the Department of the Interior (Department) has reviewed the Draft Environmental Assessment (EA) and Section 4(f) Evaluation for the US-20 capacity improvement project across the Mississippi River; Dubuque County; Iowa and Jo Daviess County, Illinois. The Department offers the following comments and recommendations for your consideration.

Section 4(f) Comments

The Department concurs with the Federal Highway Administration (FHWA) that there are no feasible and prudent alternatives to the proposed project resulting in no impacts to Section 4(f) properties. However, at this time we can not concur that all possible planning has been done to minimize potential harm to these resources.

The proposed project is intended to increase traffic capacity of US-20 across the Mississippi River, near Dubuque, Iowa. The preferred alternative is constructing a new bridge adjacent to the existing Julien Dubuque Bridge. Several alternative locations were explored. The document identifies three properties subject to a Section 4(f) Evaluation. These are the Julien Dubuque Bridge, the Beck/Fockler House, and the Upper Mississippi River National Wildlife and Fish Refuge.

The alternative analysis was sufficient to demonstrate no prudent and feasible alternatives. The FHWA proposed mitigation for impacts by the preferred alternative to Section 4(f) properties. The FHWA proposed to rehabilitate and restore the historic bridge for future use, construct the new bridge south of the historic bridge to minimize the visual impacts, and construct the new bridge to mirror the look of the historic bridge. For the Beck/Fockler House, the FHWA has recommended to fully record the Beck/Fockler House and salvage architectural features, if necessary. The evaluation details the consultation with the State Historic Preservation Officers of Illinois and Iowa (SHPOs) and demonstrated that the SHPOs have concurred, at least initially, with these mitigation measures. The document presents a final draft of a Memorandum of Agreement as evidence of concurrence. However, the document has not yet been signed, and, therefore, the process is not yet completed.

The U.S. Fish and Wildlife Service's (FWS) Rock Island, Illinois, Field Office and Savanna, Illinois, Refuge Office have reviewed the proposed project and concur with the selection of alternative 1A as the preferred alternative with the least environmental impact to fish and wildlife resources. The remaining alternatives either result in greater resource impacts or are not economically feasible. However, a review of the Mississippi River National Wildlife and Fish Refuge boundary as depicted in figure 4.2B of the

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Draft Section 4(f) Evaluation (as well as in plate B of appendix A) reveals that the refuge boundary is in error. The correct boundary map was provided in earlier coordination with the Refuge Office but apparently was not incorporated into the draft documentation. According to the Savanna Refuge Office, the land impacted by the construction of the new bridge is owned by the Corps of Engineers (Corps) but is not managed by the FWS as part of the Refuge. Therefore, no FWS refuge land will be impacted by the preferred alternative. Continued coordination with the Corps, Rock Island District, is recommended since the land impacted by the bridge is still in public ownership and may still be subject to a Section 4(f) Evaluation depending on a determination of primary land functions. If the waters, lands, and interests therein that would be impacted by the preferred alternative have been acquired, at least in part, for mitigation purposes pursuant to the authority of the Fish and Wildlife Coordination Act (16 USC. 661-

Environmental Assessment Comments

The Department has several issues regarding federally listed endangered species, wetland impacts, and mitigation planning that need to be discussed in greater detail in the final documents. The draft EA indicates that the preferred alternative will impact approximately 7.3 acres of wetland habitat. Section 5.4 discusses the process of developing compensatory mitigation for these wetland impacts but indicates that a wetland mitigation option has not been chosen. A potential, wetland mitigation area is discussed in section 5.3 of the Draft Section 4(f) Evaluation and shown in figure 5.3. This figure and discussion of the potential, wetland mitigation site and/or any new site information should be incorporated, or appropriately referenced in the final EA.

667e), the Department considers them to be subject to a Section 4(f) Evaluation.

Endangered Species Act Comments

Regarding the discussion of impacts to threatened and endangered species in section 5.6 of the draft EA, the FWS concurs that there would be no impact to the federally listed Higgins' eye pearly mussel, based on recent mussel survey data. However, the mussel is present in the project area, and the FWS is concerned with future impacts that may occur to this species. Given the lengthy time frame between the planning and construction phases of highway projects in general, the FWS will require an additional mussel survey and agency coordination prior to the actual construction of the bridge. This survey request will need to be incorporated into the final EA document along with discussion that a review of current and/or newly listed species will be made by the FWS prior to construction of the project.

This precludes the need for further consultation on this project at this time as required under Section 7 of the Endangered Species Act of 1973, as amended. However, should new information arise pertaining to project plans or a revised species list be published, it will be necessary for the Federal agency to reinitiate consultation with the FWS.

Fish and Wildlife Coordination Act Comments

The draft EA indicates that a permit from the Corps under Section 404 of the Clean Water Act will be required for the proposed project. The Department's comments on the draft EA and Section 4(f) Evaluation do not preclude separate evaluation and comment by the FWS when reviewing any forthcoming permit applications. The FWS may concur, with or without stipulations, or recommend denial of the permit depending upon effects. The FWS has indicated it would likely not object to issuance of such a permit if applicable mitigation measures were incorporated into final project plans.

Summary Comments

The Department has no objection to Section 4(f) approval of this project, contingent upon final resolution between the FHWA and the SHPOs of the issues surrounding the Julien Dubuque Bridge and the Beck/Fockler House. A copy of the executed agreement should be part of the documentation in the final statement to demonstrate the agreement with the additional measures to minimize harm, as recommended under the Section 4(f) Evaluation comments above.

The Department has a continuing interest in working with the FHWA and Iowa and Illinois Departments of Transportation to ensure that project impacts to resources of concern to the Department are adequately addressed. For matters related to Section 4(f), please contact the Regional Environmental Coordinator, National Park Service, 1709 Jackson Street, Omaha, Nebraska 68102, telephone (402) 221-7286. For matters related to fish and wildlife resources and federally listed threatened and endangered species, please continue to coordinate with the Field Supervisor, FWS, 4469 48th Avenue Court, Rock Island, Illinois 61201, telephone: (309) 793-5800.

We appreciate the opportunity to provide these comments.

Sincerely. 1a

Willie R. Taylor Director, Office of Environmental Policy and Compliance

CC:

1

Mr. James P. Rost, Director Office of Environmental Services Iowa Department of Transportation Ames, Iowa 50010



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

May 24, 2002

Planning, Programs, and Project Management Division

Mr. James W. Moll, P.E., S.E. Assistant Vice President Hanson Professional Services Inc. 1525 South Sixth Street Springfield, Illinois 62703

Dear Mr. Moll:

I received your letter dated March 19, 2002, with enclosed Environmental Assessment (EA) and draft Section 4(f) Evaluation concerning capacity improvement of U.S. 20 across the Mississippi River, Dubuque County, Iowa, and Jo Daviess County, Illinois (Iowa DOT Project Number BRF-20-9(149)-38-31). Rock Island District staff reviewed the information you provided and have the following comments:

a. Your document addresses Upper Mississippi River Fish and Wildlife Refuge lands and describes them as being owned by the U.S. Army Corps of Engineers (Corps). In addition to the refuge, there are also lands in the area that are designated for recreational uses in the vicinity of the Julien Dubuque Bridge, including the East Dubuque River access that are owned and managed by the Corps. These lands are not addressed in your document. Your document needs additional clarification describing Corps lands managed by the U.S. Fish and Wildlife Service (FWS) and Corps lands managed by the Corps located within the project area.

The Section 4(f) portion of your document discusses coordination with the FWS regarding impacts to Upper Mississippi River National Wildlife and Fish Refuge lands, including an agreed to mitigation. Section 4(f) coordination for potential impacts and potential mitigation to Corps lands not under FWS management also needs to be performed and addressed in your document. If you have any questions regarding Corps real estate issues, please contact Mr. Dick Mattson of our Real Estate Division. You may reach Mr. Mattson by writing to our address above, ATTN: Real Estate Division (Dick Mattson), or by telephoning 309/794-5263.

b. Any proposed placement of fill or dredged material into waters of the United States (including wetlands) requires Department of the Army (DA) authorization. Our previous comments located on pages B-3 thru B-5 of your document, are still valid. Your document's alternatives analysis is consistent with discussions we had at a previous meeting. When detailed plans are available, please complete and submit an application packet to the Rock Island District for processing. You will also need to coordinate with the Department of Natural Resources in both Iowa and Illinois for Clean Water Act Section 401 Certification.

c. Hydraulic concerns relate to navigation and flood protection. Clear descriptions of impacts or statements of no impact for both areas must be provided within your document. Your document also needs to clearly state that the project does not increase the water surface profile. Also, if the Coast Guard has investigated and is satisfied, further navigation impacts evaluation using numeric or physical modeling may not be necessary. Flood protection should be addressed by the applicant (Department of Transportation), certifying that the level of protection for the Dubuque levee project's design event (i.e., 200-year and 362,000 cubic feet per second) will not be reduced.

d. The Iowa Emergency Management Division should be contacted to determine if the proposed project may impact areas designated as floodway in Iowa. Mr. Dennis Harper is the Iowa State Hazard Mitigation Officer. His address is: Hoover State Office Building, Level A, Des Moines, Iowa 50319. You can reach him by calling 515/281-3231.

e. The Illinois Emergency Management Agency should be contacted to determine if the proposed project may impact areas designated as floodway in Illinois. Ms. Jan Horton is the Illinois State Hazard Mitigation Officer. Her address is: 110 East Adams Street, Springfield, Illinois 62701-1109. You can reach her by calling 217/782-8719.

f. The U.S Environmental Protection Agency, Region 5 office, has raised some concerns that the document may require additional information. If the project results in a request for easements on Corps land, the Corp will adopt your EA as part of the required documentation for that action. Before we can do that, your document will need to adequately address all of the above items.

No other concerns surfaced during our review. Thank you for the opportunity to comment on your document. If you need more information, please call Mr. Randy Kraciun of our Economic and Environmental Analysis Branch, telephone 309/794-5174.

You may find additional information about the Corps' Rock Island District on our web site at http://www.mvr.usace.army.mil. To find out about other Districts within the Corps, you may visit web site: http://www.usace.army.mil/divdistmap.html.

Sincerely,

Keeth or Bar

Kenneth A. Barr Chief, Economic and Environmental Analysis Branch

Copies Furnished:

Mr. James P. Rost Director Office of Environmental Services Iowa Department of Transportation Ames, Iowa 50010

Mr. Newton Ellens U.S. Environmental Protection Agency Region 5 (B-19J) 77 West Jackson Boulevard Chicago, Illinois 60604-3590



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

June 10, 2002

Planning, Programs, and Project Management Division

Mr. Kevin Seals. Project Engineer Hanson Professional Services Inc. 1525 South Sixth Street Springfield, Illinois 62703

Dear Mr. Seals:

This letter is in response to telephone conversations that you had with the U.S. Army Corps of Engineers (Corps) between May 28 and May 30, 2002, to clarify land issues as they were presented in your Environmental Assessment (EA) and draft Section 4(f) Evaluation concerning capacity improvement of U.S. 20 across the Mississippi River, Dubuque County, Iowa, and Jo Daviess County, Illinois (Iowa DOT Project Number BRF-20-9(149)-38-31).

In our letter dated May 24, 2002, we pointed out that your document addressed Upper Mississippi River Fish and Wildlife Refuge lands, but failed to describe lands owned by the Corps that would potentially be impacted by your project. The information provided in those telephone conversations and this letter should resolve any confusion. Enclosures 1 and 2 contain information taken from the Corps' LUAP (*Land Use Allocation Plan*) and may be incorporated into your document. This information shows that the bridge and road alignment, as proposed in your EA, crosses, and may potentially impact, Corps land administered by the Corps for "Recreation-Intensive Use" (Tract FI-81 and Tract FI-82) in Illinois. Tract FI-81 is Corps land administered by the U.S. Fish and Wildlife Service (USFWS) under a cooperative agreement and may also be impacted by your project. If this is the case, it should also be addressed in your document. Additional information received from you indicates that approximately 5.1 acres of riparian corridor on Corps land would be adversely impacted by construction of access roads and bridge construction.

The Section 4(f) portion of your document should discuss potential impacts to Corps lands. Those discussions should include area and/or size of impacts and current land use within area of impact. Cultural resources on Corps lands should be addressed there also. The results of your cultural survey report and the Illinois Historic Preservation Agency (IHPA) log number from the SHPO's response letter should be cited. The discussion concerning impacts to natural resources should include an approximate number of trees to be removed (and when) as well as any wetlands that may be filled as a result of the project. Monetary compensation for removal of marketable trees will be required, as well as appropriate mitigation (minimum of 1.5 to 1.0) for natural resource impacts to the riparian corridor. Discussions of proposed mitigation should include number of acres at mitigation site (11 acres minimum), why the selected site is appropriate for use as mitigation, native species list of trees proposed (hard mast-producing trees preferred), size of tree stock proposed for planting, trees per acre, management and monitoring requirements to guarantee success of mitigation site.

You also raised the question of who would manage the mitigation site after it was completed. We have briefly discussed this with the USFWS and they have indicated a desire to acquire management of the mitigation site which would be adjacent to USFWS refuge lands. The USFWS will further investigate to determine what will be required for that transaction to be completed and coordinate with you as needed.

If you have any questions or need additional information, please call Mr. Randy Kraciun of our Economic and Environmental Analysis Branch, telephone 309/794-5174.

Sincerely,

Donene A. Bollman

Chief, Economic and Environmental Analysis Branch

Enclosures

Copies Furnished:

Mr. Rick Nelson Field Supervisor U.S. Fish and Wildlife Service 4469 - 48th Avenue Court Rock Island, Illinois 61201 (with enclosures) Copies Furnished (Continued):

Ms. Pam Steinhaus
Savanna District of the Upper Mississippi National Wildlife & Fish Refuge
U.S. Fish and Wildlife Service
7071 Riverview Road
Thompson, Illinois 61285 (with enclosures)



May 20, 2002

Mr. James P. Rost, Director Office of Environmental Services Iowa Department of Transportation 800 Lincoln Way Ames, Iowa 50010

Re: Environmental Assessment/Draft Section 4(f) Evaluation Capacity Improvement of U.S. 20 Across the Mississippi River Dubuque County, Iowa/Jo Daviess County, Illinois

Dear Mr. Rost:

Thank you for allowing us the opportunity to review the above referenced EA. We offer the following comments, arranged by section.

ENVIRONMENTAL CONSEQUENCES OF THE PREFERRED ALTERNATIVE

- 1. Page 5-2, 5.2, <u>Farmland</u>, paragraph 2, sentence 1. It should be noted that the project is also exempt from Federal USDA/NRCS coordination via the "Farmland Protection Policy Act".
- 2. Page 5-11, paragraph 2, sentence 3. The first half of this sentence should be deleted. The sentence will then read as follows:

"The proposed roadway has been designed to minimize any slope erosion in the vicinity of this mound."

3. Page 5-12, paragraph 4, sentences 2-3. These sentences should be rewritten to read as follows:

"The two SHPOs have concurred that the preferred alternative will have No Effect on significant archaeological resources. A Memorandum of Agreement has been prepared for the Adverse Effect to the Beck/Fockler House (see Section 8). A statement of No Adverse Effect has been prepared for the Julien Dubuque Bridge. Appendix D contains SHPO correspondence."

4. Page 5-18, 5.10 <u>Public Lands</u>, last sentence. From a construction perspective, is the right-of-way available for a large retaining wall adjacent to the Sixth Street Park without impacting the park?

U.S. 20 Capacity Improvement EA/Draft Section 4(f) Evaluation May 20, 2002 Page 2

- 5. Page 5-19, 5.12.1, <u>Carbon Monoxide Analysis</u>, paragraph 3, sentence 2. The words "commercial and" should be deleted.
- 6. Page 5-20, Table 5.4 **Air Quality Analysis**. Normally, the "Existing Year" is the year that the NEPA document is released (e.g., 2002).
- 7. Page 5-29, 5.15.1 <u>Noise Model Results</u>, paragraph 1. While this statement may have been true for Alternative 1B, the noise contours shown on Plate B of Appendix A would indicate that impacted areas have changed.
- 8. Page 5-29, Table 5.7 Noise Receptor Analysis and 5-30, Table 5.7 Noise Receptor Analysis (continued). It appears that these tables are not one, as indicated, but actually two. Some of the noise levels reported are inconsistent and may have represented an alternate other than the preferred. The information in this table should be clarified.

DRAFT SECTION 4(f) EVALUATION

- 9. Page 1-3, 1.5.2 <u>Social and Economic Conditions</u>, sentence 3. Use of the U.S. 61 bridge stated to create 2 miles of adverse travel. EA Section 2.2.2 states that this option will create 20 miles of adverse travel, while EA Section 2.2.3 states that it will create a 7-mile detour. The information should be consistent.
- 10. Page 2-1, 2.0 <u>Section 4(f) Properties</u>. This section and Figure 4.1 of the EA need to be consistent. In Figure 4.1, there is an area labeled as "Park/Open Space" in Dubuque that is shown within the study corridor of the project. However, it is not shown in any other figure nor is it discussed in this section. What is the park, what are its boundaries and what recreational amenities does it offer?
- 11. Page 5-6, 5.3 <u>Upper Mississippi National Wildlife and Fish Refuge</u>. The last paragraph does not indicate the same concept as the first full paragraph on page 5-9 of the EA. Therefore, the U.S. Fish and Wildlife Service concurrence that is indicated and referenced may not exist.
- 12. Figure 5.3 Additional Right-Of-Way Required. This figure does not indicate right-ofway requirements from the Upper Mississippi River National Wildlife and Fish Refuge.
- 13. Section 8, <u>Memorandum of Agreement</u>. The draft joint MOA should be removed and replaced with IL MOA to the Beck/Fockler House and the Iowa "Statement of No Adverse Effect" for the bridge.

APPENDICES

14. Appendix B <u>Agency Coordination</u>. The Illinois DNR letter dated May 6, 2002 (to James Rost) closing consultation should be included in Appendix B.

U.S. 20 Capacity Improvement EA/Draft Section 4(f) Evaluation May 20, 2002 Page 3

Please contact Mike Bruns at (217) 782-7077 if you have questions concerning these comments.

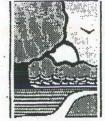
Very truly yours,

Michael L. Hine, Engineer of Design and Environment

By: Larry L. Piche, P.E. Environment Section Chief

cc: Roger Rocke

Attn: Kevin Marchek



Illinois Department of Natural Resources

RECEIVED

MAY 1 3http://www.state.il.us

524 South Second Street, Springfield, Illinois 62701-1787

George H. Ryan, GOLOFENVIRGUEL Manning, Director

May 6, 2002

Mr. James P. Rost, Director Office of Environmental Services Iowa Department of Transportation Ames, Iowa 50010 RE: Environmental Assessment Draft Sec. 4(f) Evaluation Capacity Improvement of U.S. 20 across Mississippi R. JoDaviess Co., Illinois

Dear Mr. Rost:

The Illinois Department of Natural Resources (IDNR) has reviewed the Environmental Assessment and Draft Section 4(f) Evaluation for the capacity improvement of U.S. 20 across the Mississippi River located in Dubuque County and Jo Daviess County, Illinois.

Biological Resources:

This project as described will not have any adverse impacts on Illinois Endangered and Threatened Species, Nature Preserves or Illinois Natural Areas Inventory sites. A reminder that the database reviews are good for a three year time period and need to be updated should this time elapse before the project is initiated.

Wetland Resources:

The Illinois Department of Natural Resources (IDNR) reviewed the wetland impact assessment portion of the document and find it to be sufficient for the Interagency Wetland Policy Act (IWPA). The alignment does meet the avoid and minimize requirements and it does qualify as a programmatic action even though it is a large project. The Department feels that additional design changes or refinements can be made to further reduce wetland impacts in the design stage. IDNR has concerns about the ability to locate a suitable wetland compensation site in the vicinity of the project. However, IDOT has made a commitment to coordinate wetland issues with IDNR prior to construction of the project. Since this is a statutory requirement and may prove difficult to locate, IDNR would encourage giving high priority to locating a suitable compensation site, continue to coordinate with the IDNR and provide the wetland mitigation prior to construction.

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In keeping with the resource policies established by the Illinois Department of Natural Resources, the Interagency Wetland Policy Act allows a three year time period for wetland impact determinations and wetland compensation plans to be implemented before having to be re-evaluated. This same three year time period applies to the reviews for compliance with the state Endangered Species Protection Act and resource studies relative to the project.

If you have any questions on the above, please contact me at 217-785-5500.

Sincerely,

Atere Hamen

Steve Hamer Transportation Review Program Division of Natural Resource Review

cc: Tom Flattery, IDNR Steve Davis, IDNR Pat Malone, IDNR Carolyn Grosboll, INPC File Richard Nelson, USFWS Newton Ellens, USEPA John Betker, USACOE J.D. Stevenson, FHWA JUN-13-2002 13:40 Jun.13. 2002 12:54PM HANSON IDOT D2 S&P SECTION 217 788 2503 P.02/05 No.4745 P. 2/5



Illinois Department of Transportation

Division of Highways / District 2 819 Depot Avenue / Dixon, Illinois / 61021-3500 Telephone 815/284-2271

PROGRAM DEVELOPMENT STUDIES AND PLANS FAP Route 301 (US Route 20) Section 2B Job No. P-92-106-98 US 20 Capacity Study/ Mississippi River Bridge East Dubuque JoDaviess County

June 13, 2002

Mr. Mick J. Michel City Manager City of East Dubuque 303 Sinsinawa Avenue East Dubuque, IL 61025

Dear Mr. Michel:

We are responding in coordination and cooperation with the lowa Department of Transportation, the lead agency for the US 20 Capacity Improvement project between East Dubuque, Illinois and Dubuque, Iowa to your May 6, 2002 Environmental Assessment Statement comments. Please find attached a copy of your letter for reference.

Following are responses addressing the five questions submitted in your letter.

East Dubuque EA Comment Responses US 20 Mississippi River Crossing Question No. 1

ANSWER: The Illinois Department of Transportation Central Office has stated that it wishes the consultant to find another mitigation site that contains at least a majority of hydric soil. Therefore, the Department will review the project corridor for other suitable sites.

East Dubuque EA Comment Responses US 20 Mississippi River Crossing Question No. 2

ANSWER: The Department does not intend to change storm water flow other than how it exists currently. At this point in our design, we are not far enough along to be able to determine how our design impacts East Dubuque's stormwater management plan. The Department would like to request that a copy of the plan be sent to the District 2 Office for use in our design. HANSON IDOT D2 S&P SECTION 217 788 2503 P.03/05 No.4745 P. 3/5

Mr. Mick J. Michel City of East Dubuque Page 2

East Dubuque EA Comment Responses US 20 Mississippi River Crossing Question No. 3

- 3.1 Answer. The wells do not significantly recharge through surface water infiltration in the vicinity of the well. The placement of fill in the wellhead protection zone will not likely adversely affect groundwater supplies in this area. Fill material will also not restrict groundwater infiltration.
- 3.2 Answer: The roadway is not considered a new route or source of groundwater contamination within a wellhead protection area (see Illinois Groundwater Protection Act). Therefore the municipality will not have to pay more in annual licensing fees to the Illinois Environmental Protection Agency nor for additional daily testing to meet IEPA regulations. It is merely a misfortunate use of the word "route" that seems to imply a roadway when in fact it does not.
- 3.3 Answer. The Department will provide reasonable access to the two wells.

East Dubuque EA Comment Responses US 20 Mississippi River Crossing Question No. 4

- 4.1.1 Answer: We have investigated a southern shift of Plum St. to maximize the remaining parcel. Hanson Professional Services developed an alternate alignment and associated cross sections. Based upon this review, the impact to the cemetery burial mound at the top of the ridge is within protection limits of the mound. IDOT has committed to not impact the cemetery burial mound. The Plum Street relocation will remain as shown at the April 25, 2002 public meeting.
- 4.1.2 Answer: The intersection was not lined up in order to avoid taking the apartment building located in the southeast quadrant of the intersection. This would have created additional displacements and the building can be avoided. A reverse curve alignment will be investigated to align existing and proposed Plum Street.
- 4.2.1 & 4.2.2 Answer: Second Street and Menominee Avenue will both remain open. A bridge pier at Menominee Avenue will be designed to not block the street. Downtown traffic can access the flats from Second Street or Sixth Street.
- 4.3.1 Answer: We could investigate a proposed service drive connecting southwesterly from the fire station entrance along the north side of the City Park. This would allow immediate access to Wyota Ave. just prior to the first access onto reconstructed Sixth St. The problem is that Federal Parkland Protection Laws, Section 4f, would have to be followed to determine if this is a feasible option. Reasonable access is available via Desota Ave., 5th St., and Wyota Ave. The fire station was built to serve the Flats area and will remain serving that area. The new 6th Street overpass will allow the other stations to immediately back up Station 2 and vice versa.
- 4.3.2 & 4.3.3 Answer: Desoto Ave. access is being prohibited due to the proposed elevation difference of 8'+/- from Desoto Ave. to reconstructed Sixth Street. The development of a roadway profile along Desoto Ave. would impact the existing City Park and result in impacts to adjacent properties along Desoto Ave. which include Fire Station #2 and the municipal well site. The grade raise profile along Desoto Ave. would also leave any remainder of the Fire Station #2 parcel well below the Desoto Ave. roadway, limiting what could be left for use as a playground. Also, the reconstruction of 6th Street with the overpass will greatly improve response time on a permanent basis since emergency vehicles will no longer need to wait for the railroad crossing or slow to cross the tracks. A retaining wall is proposed along the 6th St. alignment to minimize impact to the well site.

Mr. Mick J. Michel City of East Dubuque Page 3

- 4.4.1 Answer: We will have the consultant investigate the gate controlled crossing to prevent pedestrian crossing during times of train traffic.
- 4.4.2 Answer: A pedestrian bridge across the tracks would be cost prohibitive due to the height of the structure, needing 23'-6" of vertical clearance for the tracks. This structure would need to be of significant length in order to meet ADA requirements, thus resulting in high cost and impact to the surrounding area. The at-grade pedestrian crossing with gates is identical to the existing situation since today the tracks must be crossed at grade. The gate will provide added protection to this situation.
- 4.5 Answer: There are only four parcels remaining from Butternut Street to the Sixth Street overpass. Parcel 114 already has access to Butternut which will remain. Parcel 111 has a proposed driveway. Parcels 112 & 113 do not have driveways. We therefore will have the consultant investigate an off street parking area with a shared use driveway in the remaining triangular piece of right-of-way fronting parcels 111, 112, 113. This also eliminates any right-of-way take on the parcels, therefore they can remain as they currently exist. Any future commercial development of these parcels will require an access permit from the Department.
- 4.6 Answer: Off street parking will be investigated in the southwest quadrant of IL 35 and US 20. The proposed signalized intersection will have marked crosswalks and pedestrian push buttons with walk/don't walk signs.
- 4.7 Answer: The alley next to the Captain Merry House will be left in place. Access to the residential properties will remain as exists today. Frontage from the Captain Merry House to the City Library will remain roughly at the same curb elevation as exists today.

East Dubuque EA Comment Responses US 20 Mississippi River Crossing Question No. 5

- 5.1 Answer: Both these businesses must be displaced as they interfere with construction. Although excess land remains after project completion, it cannot be put up for auction until after all construction is completed on the highway project, a 2-3 year prospect. Neither business could financially survive such a wait. Also, the remaining area will be investigated for additional parking or for the physical construction of the project.
- 5.2.1 Answer: State law constrains the expenditure of highway funds to specifically designated highway usage. Thus funding of improvements to downtown areas are outside the scope of highway funding allowed by law.
- 5.2.2.1.1 Answer: Signing for the downtown will follow all current policies and procedures per the Illinois Department of Transportation's Bureau of Operations.
- 5.2.2.1.2 Answer: The Department is not allowed to fund structures or sculpture for enhancement from Highway Funds. However, the Department will incorporate a Landscape Study in Phase II.
- 5.2.2.2.1 Answer: As the design of the east end of the bridge is for an ultimate freeway, any rest area or visitor's center would have to be designed to freeway (interstate) standards. The ramps for such a design do not fit nor do they meet spacing policy with the other proposed ultimate ramps at this location. The Division of Highways is not allowed to fund boat launching ramps or parks. Application needs to be made to the Department of Natural Resources.

Mr. Mick J. Michel City of East Dubuque Page 4

- 5.2.2.2 Answer: The Department can only review the permit application for the construction of this type of amenity on highway right-of-way by a local government agency, as the Department is not allowed to fund such non-highway amenities.
- 5.2.2.3 Answer: Such a road would be a local road not necessary to be built with the US 20 construction. Such a street or road would therefore be locally funded, as the Department is not allowed to build local streets unless they are affected by construction of a highway.
- 5.2.2.4 Answer: As described, such a sidewalk would be built along the river and therefore not within the right-of-way of a State highway. Therefore, this would be locally funded, as the Department financially participates only in sidewalks along IDOT highways.
- 5.2.2.5 Answer: The Department is not authorized to build docks except for use with a Department operated ferry boat.
- 5.2.2.2.6 Answer: As described, such a sidewalk is outside the limits of the State highway right-ofway. Therefore, this would be locally funded as the Department only participates in sidewalks along IDOT highways.
- 5.2.2.3.1 Answer: Except for IL Route 35, none of the downtown streets are under IDOT jurisdiction. Therefore, we cannot fund such a proposal except for normal roadway amenities within the right-of-way of IL Route 35. Some of these items may be included with the project at the City's expense.

We have investigated each of your concerns as requested in your May 6, 2002 letter to Mr. Rost, Director, Office of Environmental Services, Iowa Department of Transportation. On behalf of the Illinois and Iowa Departments of Transportation, we appreciate you taking time to provide your comments and allowing us to address these areas of concern.

If you have any further questions, please feel free to contact Mr. Kevin Marchek, Studies and Plans Engineer, at 815-284-5351 or Mr. Anthony Baratta, Senior Project Studies Engineer, at 815-284-5513.

Sincerely,

Roger E. Rocke District Engineer

trenslig

By: Daryl Stienstra Engineer of Program Development

 c: Roger Larsen- Iowa DOT Jim Moll- Hanson Professional Services
 ST/US 20 E Dubuque/ab-0906/sb Capacity Improvement of U.S. 20 Across the Mississippi River Dubuque County, Iowa and Jo Daviess County, Illinois

> IOWA DOT Project Number BRF-20-9(149)-38-31

FINAL SECTION 4(f) STATEMENT

Submitted Pursuant to 49 USC 303

BY THE U.S. DEPARTMENT OF TRANSPORTATION Federal Highway Administration and IOWA DEPARTMENT OF TRANSPORTATION Highway Division Environmental Services

The following persons may be contacted for additional information concerning this document:

Bobby W. Blackmon, Division Administrator Federal Highway Administration 105 Sixth Street Ames, Iowa 50010-6337 Telephone: (515) 233-7300 James P. Rost, Director Office of Environmental Services Iowa Department of Transportation Ames, Iowa 50010 Telephone: (515) 239-1225

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SECTION 1.0 PROPOSED ACTION

1

SECTION 1.0 PROPOSED ACTION

1.1 DESCRIPTION AND LOCATION OF THE PROPOSED ACTION

The proposed action consists of improving the capacity of U.S. 20 across the Mississippi River in the vicinity of Dubuque, Iowa. The location of the project is shown in Figure 1.1. U.S. 20 currently crosses the Mississippi River on the two-lane Julien Dubuque Bridge. Alternatives evaluated for additional capacity include providing a new four-lane bridge near the existing bridge location, providing a new two-lane bridge adjacent to the existing bridge to serve as a one-way couple, providing a new four-lane bridge north or south of the urban area, in addition to the No-Build Alternative. The west terminus of the study is U.S. 61 at Locust Street in Dubuque County, Iowa. The east terminus is U.S. 20 near Barge Terminal Road in Jo Daviess County, Illinois.

1.2 PROJECT HISTORY

In recent years, Dubuque, East Dubuque, and surrounding areas have experienced rapid economic growth which has increased traffic volume within the U.S. 20 study corridor. Developments on the Dubuque riverfront have also increased traffic in and through the central business districts and contributed to increased volumes on U.S. 20. Extension of the Northwest Arterial, located on Dubuque's northwest side, and the planned Southwest Arterial, will likely lead to additional development of the area, increasing the need for higher traffic capacity on U.S. 20 within the existing corridor.

In response, the Iowa Department of Transportation (IADOT) has expanded U.S. 20 to four lanes through much of eastern and central Iowa to accommodate this area's existing and future traffic needs. IADOT has also improved U.S. 61 and the U.S. 20/Locust Street intersection in Dubuque. The Illinois Department of Transportation (ILDOT) also has plans to

1-1

upgrade U.S. 20 to a four-lane expressway from Barge Terminal Road east of East Dubuque to Rockford, Illinois in response to increased traffic demands within the existing U.S. 20 corridor.

Given the established need for additional capacity, the Dubuque Metropolitan Area Transportation Study (DMATS) in cooperation with the IADOT and ILDOT, retained Hanson Engineers Incorporated in 1997 to evaluate alternatives to improve the capacity of U.S. 20 within the corridor under study, and to prepare appropriate environmental documentation for any proposed improvements. Subsequently, in response to the transportation needs of the Dubuque metropolitan area, the United States Congress appropriated a total of 28 million dollars for initial work as part of the Transportation Equity Act for the 21st century (TEA-21).

1.3 PROJECT STATUS

The project study began in November 1998. The first public informational meeting was held on December 10, 1998 in Dubuque. The first project newsletter was published in November 1998, a second newsletter in May 1999, a third newsletter in October 1999 and a fourth newsletter in March 2002. Second public informational meetings were held May 6, 1999 in Dubuque and June 1, 1999 in East Dubuque. Preliminary alternatives were displayed at these meetings. No organized opposition to the project was presented at these meetings.

A resource agency coordination meeting was held in July 1999 to obtain concurrence on the purpose and need for the study, the recommendation of the preferred corridor and elimination of further study of the south corridor, and the preparation of an Environmental Assessment rather than an Environmental Impact Statement for the project. The resource agencies in attendance at the meeting concurred on all of these points (see Section 6.0 of the EA).

The Environmental Assessment and Draft Section 4(f) Evaluation completed a 45-day public review period and agency comment process on May 20, 2002. A public hearing was held within this review period on April 25, 2002. An open house format was used, and no formal presentations were given. Exhibits of the preferred alternative, environmental impacts, typical sections, aerial photographs, and traffic volumes were displayed. Copies of the Environmental

1-2

Assessment and Draft Section 4(f) Evaluation were provided for review. All in attendance were given a project statement, which included a comment sheet, and the U.S. 20 Connection newsletter.

The public hearing was advertised on March 21 and April 18, 2002 in the *Dubuque Telegraph Herald* and on March 22 and April 19, 2002 in the *East Dubuque Register*. In addition to the legal notice, the notices were posted on both sides of the river.

The hearing was attended by 138 people. Representatives of the Iowa and Illinois Departments of Transportation, Hanson Professional Services Inc. and IIW Engineers & Surveyors were present to receive input, provide information and answer questions. A majority of comments received during the public hearing were in support of the preferred alternative. Other general comments received were landowner and relocation assistance questions primarily concerning the Illinois side and questions regarding the start of construction and land acquisition. A summary of the public hearing can be reviewed in the Public Hearing Transcript prepared for this project. Based upon the studies and comments received to date, a Finding of No Significant Impact (FONSI) has been prepared for this project.

1.4 <u>PURPOSE OF THE PROPOSED PROJECT</u>

The purpose of the project is to improve the capacity of U.S. 20 across the Mississippi River. The capacity improvement is intended to improve safety and reduce traffic congestion at the existing river crossing (the Julien Dubuque Bridge at Dubuque, Iowa), accommodate anticipated increases in traffic, and provide the most direct route for traffic crossing the river.

1.5 NEED FOR THE PROPOSED PROJECT

Improvement of the capacity of U.S. 20 across the Mississippi River is needed for the following reasons:

1.5.1 System Linkage

IADOT has improved U.S. 20 to four lanes through much of eastern and central Iowa as part of Iowa's commercial and economic system. In addition, significant improvements have been made to U.S. 61 and U.S. 20 in Dubuque as well as portions of U.S. 20 in Illinois. The Julien Dubuque Bridge is a two-lane segment in the center of a 200-mile long four-lane link through Iowa and Illinois. U.S. 20 in East Dubuque is currently a two-lane arterial roadway with numerous access points which reduce capacity due to turning movements and slower traffic speeds.

1.5.2 Social and Economic Conditions

The existing bridge provides the primary link between Illinois and the employment, retail, and recreational attractions in Dubuque. The closest alternative bridge to Dubuque is located north along U.S. 61 in Wisconsin. The use of this bridge would increase adverse travel for Illinois residents by about 14 miles for each round trip, and is not a viable option to draw traffic volumes away from the U.S. 20 corridor. Major barge terminals are located in Illinois and Iowa near each end of the Julien Dubuque Bridge. Rail facilities are also located at each end of this bridge. Capacity improvements on U.S. 20 within the study corridor are necessary to maintain quality access to these intermodal facilities as traffic demands increase.

Additionally, residents in East Dubuque and Jo Daviess County rely on Dubuque for medical facilities. Hospital or emergency care facilities are not available in East Dubuque. The existing U.S. 20 bridge is a critical link in providing these emergency services and accordingly, capacity improvements to the existing crossing are necessary to maintain and improve future access to these facilities for East Dubuque residents.

1.5.3 Traffic Demand

Dubuque and the surrounding areas have experienced rapid growth in recent years. Planned highway improvements in Dubuque, including extension of the Northwest Arterial to

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U.S. 52 and the proposed Southwest Arterial, will encourage additional commercial and light industrial development. Developments such as barge terminals, casinos and restaurants on the Dubuque riverfront have also served to increase traffic into and through the central business district.

The ability to accommodate current and future traffic volumes is one indication of the need for highway improvements. This ability can be determined by analyzing relationships between the highway's average daily traffic (ADT) and design hourly volume (DHV) and the roadway's physical characteristics for current and future years. The average daily traffic consists of the total traffic volume passing a point on a highway on an average day. The design hourly volume is the forecast of traffic volumes for a selected hour.

The current ADT at the Julien Dubuque Bridge is 20,300. The design hourly traffic volume in the current year is 1,700 (see Figure 1.2). The projected daily traffic at the bridge is estimated to be about 35,000 vehicles in the design year (2025). The projected design hourly traffic volume is 2,900 vehicles. A capacity analysis in accordance with the Transportation Research Board's Highway Capacity Manual, as required by IADOT and the American Association of State Highway and Transportation Officials (AASHTO), indicates that four lanes are warranted for this volume, and indicates the need for capacity improvements to accommodate the projected traffic volumes. AASHTO is the national standards setting group for highway design, their policies are adopted by the states.

1.5.4 Roadway Deficiencies

The existing facility has a number of deficiencies. The existing bridge was completed in 1943. Some of the approach spans were replaced in the early 1990s. The roadway on the existing bridge is 28 feet wide face-to-face of barriers (Figure 1.3), and it does not have a shoulder to provide for errant or disabled vehicles. Twelve-foot wide lanes with 4-foot wide shoulders (face-to-face of barriers) are required to meet current design criteria.

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The roadway tapers from four lanes to two lanes at the east and west approaches to the bridge. The east approach has very short westbound entrance and eastbound exit ramps (less than 100 feet), with very tight curves (50 feet radius), and sight distance less than AASHTO Standards. Also, the bike/pedestrian path extending across the bridge does not meet current AASHTO standards for bicyclists. The current posted speed is 30 mph in East Dubuque. The proposed posted speed is 45 mph.

The age of the existing bridge, coupled with high traffic volumes, also results in the need for frequent maintenance. When the bridge is inspected, it is necessary to close one lane of traffic, resulting in delays to motorists relying on the structure for access to the Dubuque metro area.

1.5.5 Bicycle and Pedestrian Accommodation

The existing bridge has a 4 feet, 6 inch wide walkway on the south side of the structure. There are no bicycle accommodations, bicyclists must share the roadway with motorists or the walkway with pedestrians. The AASHTO recommended minimum width for a shared pedestrian/bicycle path is 10 feet, 0 inches.

1.5.6 East Dubuque Rail Traffic

As many as 80 trains per day use the tracks through East Dubuque. In addition to the safety hazards at the grade crossings, this causes delays. There is no other access to the residential areas south of the tracks, and accordingly, when trains block these grade crossings, emergency vehicles cannot get to this area. In discussions with representatives of East Dubuque, they expressed a need for a grade separation at the tracks, and requested that this be included as part of the project.

1.5.7 Transportation Planning

Metropolitan Planning Organizations (MPO's) are established to maintain a cooperative, continuous and comprehensive framework for making transportation investment decisions in metropolitan areas. Program oversight is a Joint Federal Highway Administration and Federal Railroad Administration responsibility. The MPO is made up of local elected officials and transportation professionals who, in cooperation with the states and transit operators, remain responsible for determining the best mix of transportation investments to meet metropolitan transportation needs. The Dubuque Metropolitan Area Transportation Study (DMATS) included a four-lane improvement of U.S. 20 across the river in their transportation plan adopted in January 1995, and it is included in the revised plan adopted August 17, 2000. Therefore, the proposed project is consistent with local land use and transportation planning. Response from the local community regarding the proposed improvements has been very supportive.

1.5.8 Legislation

The Transportation Efficiency Act for the 21st Century (TEA-21) included the capacity improvement of U.S. 20 at the Mississippi River as a high priority project. Funding of \$28 million was included in TEA-21. This funding is mandated by congress to address transportation needs in the Dubuque metro area. Additional funds will likely be needed to complete the capacity improvement project.

1-7

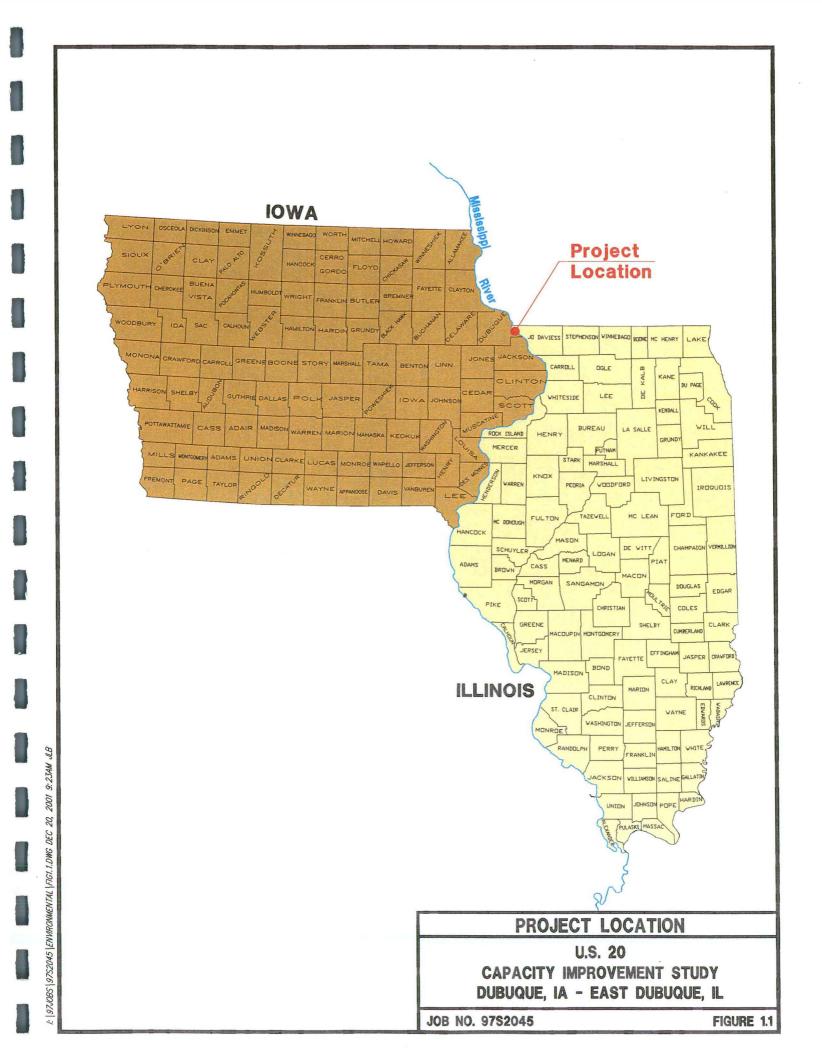
1.5.7 Transportation Planning

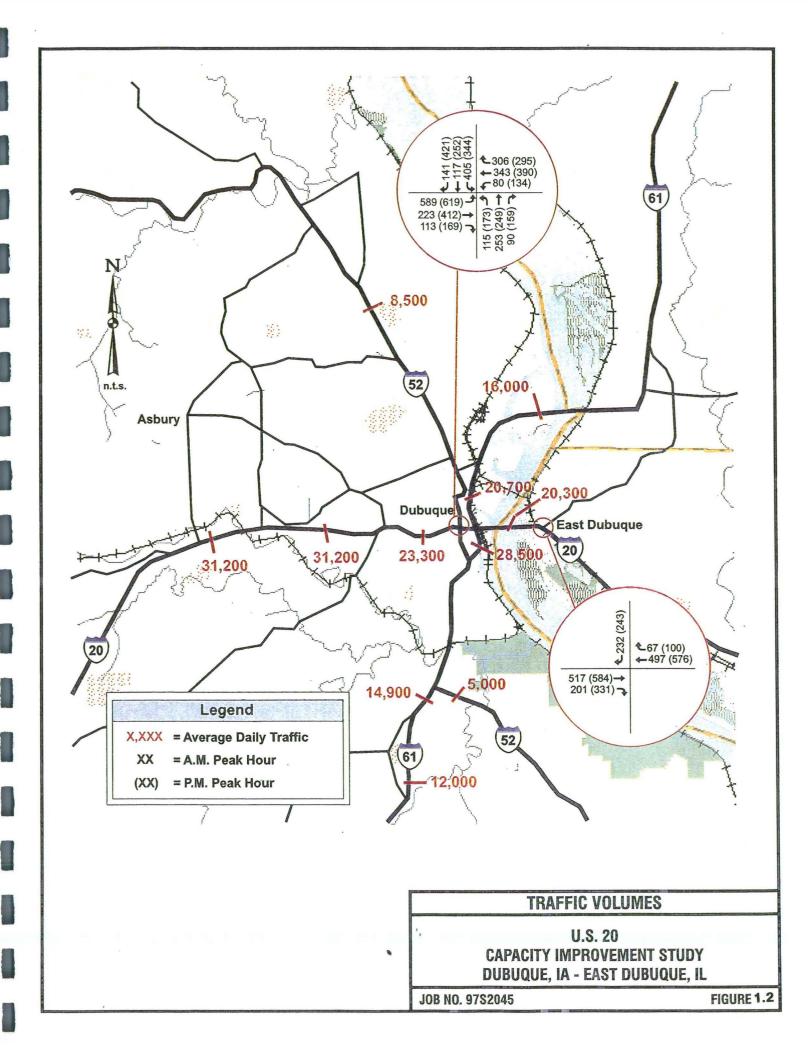
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FIGURE 1.3

SECTION 2.0 SECTION 4(f) PROPERTIES

SECTION 2.0 SECTION 4(f) PROPERTIES

2.1 JULIEN DUBUQUE BRIDGE

The Julien Dubuque Bridge is a continuous tied arch bridge that has a 845-foot channel span bridging the Mississippi River along U.S. 20 at Dubuque, Iowa and East Dubuque, Illinois (see Figure 2.1). While technically jointly owned by the states of Iowa and Illinois, Iowa takes the lead in maintenance and oversight of this bridge. The Iowa State Historical Society is the jurisdictional agency for the bridge. Project development has been coordinated with the Iowa SHPO and they concur with the proposed action (see Memorandum of Understanding in Section 9.0).

The Julien Dubuque Bridge was built in 1941-1943 as a two-lane highway bridge. When built it was the second-longest span over the Mississippi River and the longest continuous tied arch bridge in the world. It is also only the second example of a tied arch bridge in the United States. The Julien Dubuque Bridge is listed on the National Register of Historic Places as a nationally significant structure.

2.2 BECK/FOCKLER HOUSE

The Beck/Fockler House and its associated barn are located at 519 Sinsinawa Avenue in East Dubuque (see Figure 2.2). This structure is eligible for the National Register of Historic Places under Criterion C for its architectural significance. The Beck/Fockler House is not associated with a historic district. The Illinois State Historic Preservation Agency is the jurisdictional agency for this structure. Project development has been coordinated with the Illinois SHPO and they concur with the proposed action (see Memorandum of Agreement in Section 9.0).

This Greek Revival style house was built in 1865. It is a two-story, front-gabled building with one-story wings off both sides of the two-story core. The west side ell has a low-pitched hip roof with a roofline that extends out over the porch area which wraps around the entire ell and is supported by round Tuscan wooden columns. The east side ell has a gabled roofline with eave overhang and decorative wood friezeband. The main two-story core has bracketed eaves, a porch supported by Tuscan columns, and a monumental Classical enframement of the front door. The enframement includes a simple entablature and several Classical pilasters to either side. The front door itself has a large pane of glass and is difficult to see behind the storm door which is a later addition to the doorway. The house is constructed of brick and has an asphalt-shingled roof and limestone foundation. The windows are tall and narrow and appear original to the house construction. There are some 1/1 windows in the east gable ell that are likely replacement windows. Also of note are the old stone and brick additions to the rear of the house. The limestone retaining wall in front of the property is also of note. The property is currently privately owned.

A small barn is banked into the slope behind the house and along Hill Street. The barn has a rubble limestone foundation, an asphalt-shingled roof, and horizontal drop siding. It functioned as a carriage house and horse barn and may have been built c. 1910.

2.3 UPPER MISSISSIPPI RIVER NATIONAL WILDLIFE AND FISH REFUGE

The Upper Mississippi River National Wildlife and Fish Refuge (Refuge) is the longest wildlife refuge in the lower 48 states (see Figure 2.3). It extends 261 miles along the Mississippi River from the Chippewa River in Wisconsin to nearly Rock Island, Illinois. The Refuge was established in 1924 to protect bottomland habitat for migratory birds and fish. It encompasses approximately 194,000 acres in parts of Minnesota, Wisconsin, Iowa, and Illinois. The Refuge is divided into four management districts with offices located at: Winona, Minnesota; La Crosse, Wisconsin; McGregor, Iowa; and Savanna, Illinois. The U.S. 20 project area is within the Savanna district (see Figure 2.4).

The Upper Mississippi River provides essential habitat for a wide variety of plants, fish, migratory birds and other animals. Presently, the Refuge annually supports 3.5 million visitors and contributes an estimated \$1 billion in recreational benefits to the region. Its attractiveness to recreationalists is directly related to its rich fish and wildlife populations and natural scenic beauty.

In the fall of 1997, the American Bird Conservancy designated the Upper Mississippi River National Fish and Wildlife Refuge as a *Globally Important Bird Area in the United States*. This honor is the highest level in the designation scheme of the American Bird Conservancy's United States Important Bird Areas program. It indicates the importance of the extensive wetland and flood plain forest complex which these refuges provide for migratory waterfowl, songbirds, shorebirds and resident species such as Bald Eagles. The Refuge is owned by the U.S. Army Corps of Engineers and managed by the U.S. Fish and Wildlife Service.

2.4 U.S. ARMY CORPS OF ENGINEERS' ADMINISTERED LANDS

The U.S. Army Corps of Engineers owns and manages lands within the proposed project area under the jurisdiction of the Rock Island District (see Figure 2.5). These lands were acquired for the Upper Mississippi River Nine-Foot Channel Navigation Project. Management guidelines are in accordance with Federal regulations and policies concerning natural resource practices, and are directed toward optimum use of these resources in the overall interests of the general public and the Nation.

Each parcel of project-owned land has been evaluated to determine its most appropriate land use classification. Evaluation was based upon historic use, present physical conditions, current references, adjacent use, public access, and potential future needs in relation to resource management objectives and priorities. Objectives considered in plan development involved navigation, recreation, fish and wildlife, forestry, cultural, environmental, and flood plain management.

2-3

The parcels affected by the project are classified as "Recreation-Intensive Use." Lands in this classification are for developed public use areas or future recreation sites having controlled intensive recreation activities. Areas include those provided by commercial concessionaires (marinas), public agencies, and civic organizations. No agricultural uses are permitted on these lands except on an interim basis to maintain open space and/or scenic values. No private recreational mooring facilities are permitted within these areas. Lands in this classification are considered public recreational areas for shoreline management purposes.

Each of the properties mentioned above are protected resources, and project impacts will be subject to evaluation under the provisions of Title 49, U.S.C., Section 303, commonly referred to as Section 4(f). The Iowa FHWA determined, and resource agencies concurred, in a coordination meeting held in July 1999, that the above-mentioned resources are protected as Section 4(f) resources. The Upper Mississippi River provides essential habitat for a wide variety of plants, fish, migratory birds and other animals. Presently, the Refuge annually supports 3.5 million visitors and contributes an estimated \$1 billion in recreational benefits to the region. Its attractiveness to recreationalists is directly related to its rich fish and wildlife populations and natural scenic beauty.

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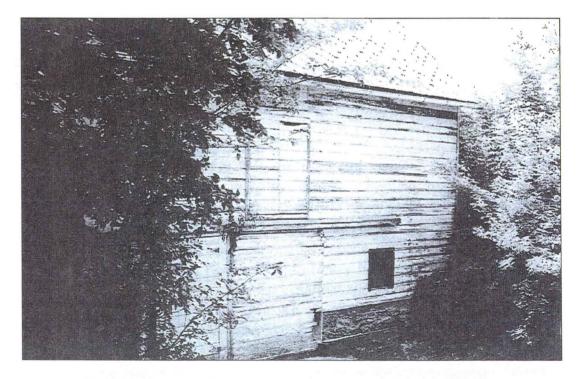
Beck/Fockler House, 519 Sinsinawa, viewing east.

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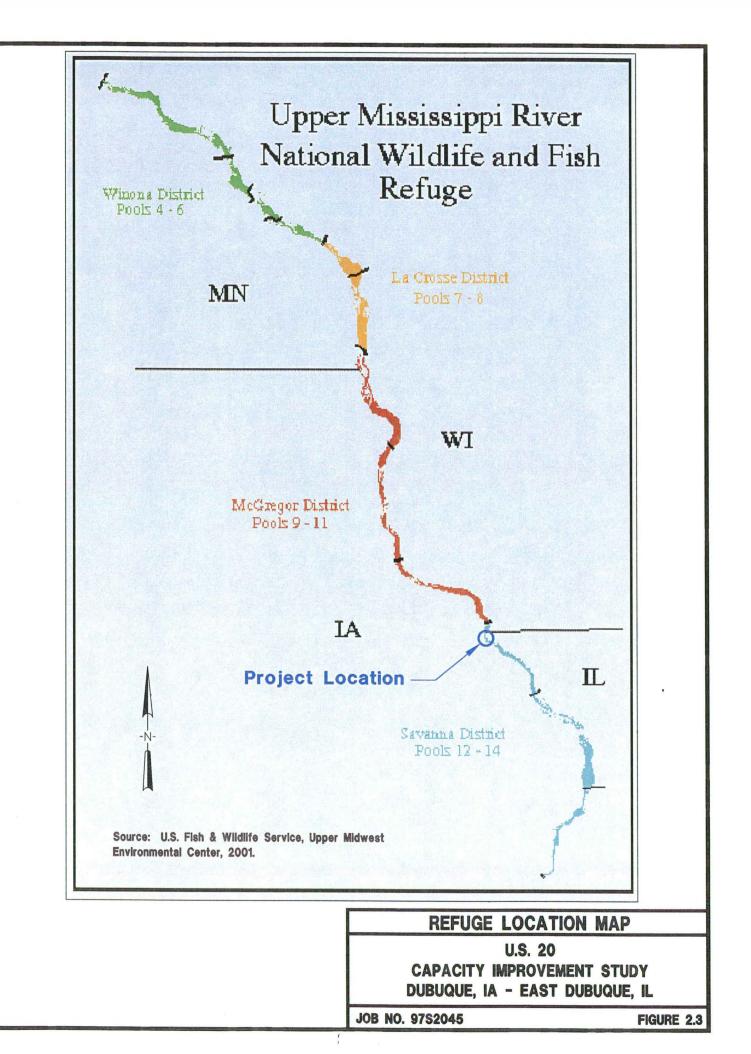
Beck/Fockler Barn, located behind house, viewing east-southeast.

BECK/FOCKLER HOUSE

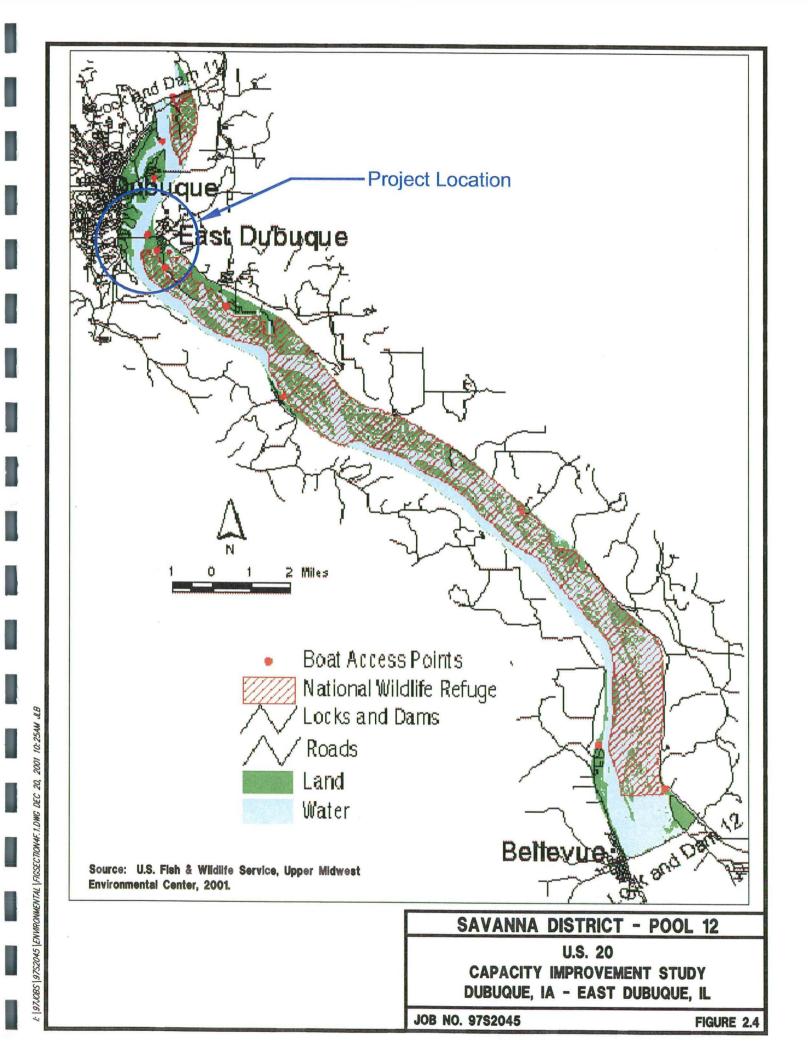
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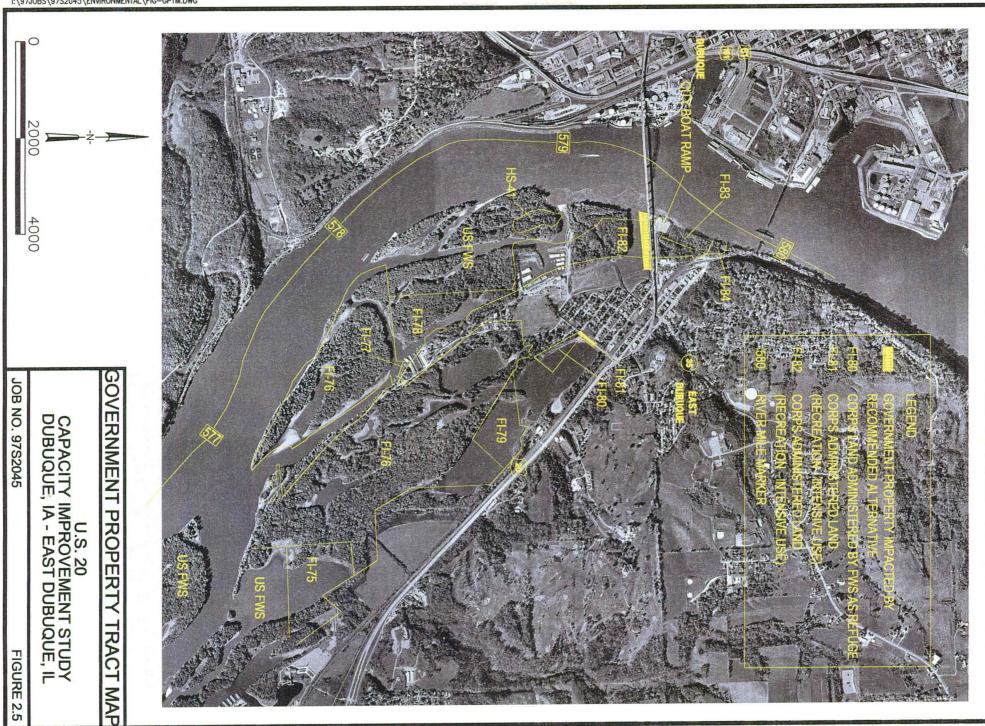
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FIGURE 2.2



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SECTION 3.0 IMPACTS TO THE SECTION 4(f) PROPERTIES

SECTION 3.0 IMPACTS ON THE SECTION 4(f) PROPERTIES

3.1 JULIEN DUBUQUE BRIDGE

The Julien Dubuque Bridge is listed in the National Register of Historic Places. This structure would be visually impacted by the construction of a companion bridge that would block particular views of the Julien Dubuque structure. However, the Iowa SHPO has determined that this impact does not constitute an Adverse Effect if the conditions of the Memorandum of Understanding (MOU) are adhered to (see Section 9.0). The Iowa SHPO has determined that this project will have a No Adverse Effect if the construction of a companion bridge is similar in appearance to the Julien Dubuque Bridge and is compatible with the Secretary of Interior's Standards. However, the Iowa SHPO may consider an alternative bridge design, one that does not conform to the stipulations of the MOU, to be an Adverse Impact. Accordingly, if an alternative bridge design (with features other than that discussed in the MOU) is selected and is not compatible with the Secretary of the Interior's Standards, a "taking" under U.S.C. 303, Section 4(f) occurs, and the IADOT and the Iowa SHPO must mitigate the adverse effects to the Julien Dubuque Bridge.

3.2 BECK/FOCKLER HOUSE

This house and its barn are located within the construction zone of the recommended alternative for the U.S. 20 Capacity Improvement project. The Beck/Fockler house and barn would be removed as a result of project construction under the recommended alternative.

3.3 UPPER MISSISSIPPI RIVER NATIONAL WILDLIFE AND FISH REFUGE

Approximately 0.1 acres of Refuge property will be required for additional right-of-way of the recommended alternative to be converted to highway use. The Refuge property required for additional right-of-way is adjacent to Sixth Street in East Dubuque. Expanding the existing

right-of-way is less of a direct impact than fragmenting the Refuge at a different location. The quality of the Refuge property at this location is degraded roadway embankment; however, the proximity of the existing roadway (Sixth Street) has contributed to this degradation. This portion of the Refuge is subjected to littering, noise, frequent flooding, and human activity. The existing use of the Refuge at this location includes primarily flood storage for the Mississippi River and minimal habitat for wildlife. There are no recreational uses of the Refuge at this location. This impact to the Refuge will impact a minuscule amount of the total area of Refuge lands.

3.4 U.S. ARMY CORPS OF ENGINEERS' ADMINISTERED LANDS

Approximately 5.0 acres of Corps Administered Land will be required for additional right-of-way of the recommended alternative. The Corps Administered Land to be affected is located on two parcels: Tract FI-82 is located at the bridge crossing nearest to the river in East Dubuque; and Tract FI-81 is located along Sixth Street in East Dubuque (see Figure 2.5).

The current land use of Tract FI-82 consists of forested wetland comprised predominately of silver maple trees, and a public boat access located north of the existing Julien Dubuque Bridge. The boat access will not be affected by the proposed project. The habitat quality of this parcel is degraded as it is subjected to noise, littering, and frequent flooding. No recreational facilities will be impacted by the project.

The proposed direct impacts to this parcel include clearing most of the trees for a construction haul road to construct eight piers for the new bridge. It is anticipated that the piers will be designed to align with the piers of the existing bridge.

Tract FI-81 is currently the roadway embankment of Sixth Street in East Dubuque. This small tract contains no trees but possibly allows for bank fishing into a backwater lake of the river. No recreational facilities are located in this tract. Habitat quality is minimal as the area is adjacent to the roadway and does not contain any habitat suitable for wildlife.

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The proposed project will slightly encroach into this tract by the placement of fill material for raising Sixth Street over the railroad tracts.

SECTION 4.0 AVOIDANCE AND RECOMMENDED ALTERNATIVES

SECTION 4.0

AVOIDANCE AND RECOMMENDED ALTERNATIVES

4.1 INTRODUCTION

Alternatives considered which avoid the Section 4(f) properties impacted by the recommended alternative (i.e., Julien Dubuque Bridge, Beck/Fockler House, Upper Mississippi River National Wildlife and Fish Refuge, and Corps of Engineers' Administered Lands) include: the No-Build Alternative, using other modes of transportation, and other four-lane build alternatives. Each of these alternatives is discussed in detail below.

4.2 NO-BUILD ALTERNATIVE

The No-Build Alternative would include maintaining the existing federal, state, county, and township roadways located within the study area. If the No-Build Alternative is selected, the existing road system would remain, receiving only routine maintenance and minor improvements. However, some improvements, such as intersection improvements on U.S. 20 in East Dubuque, could require the acquisition of right-of-way. Impacts to the Section 4(f) properties would be avoided because of the small amount of land required for grade changes, shoulder widening, or drainage improvements.

However, the traffic across the Julien Dubuque Bridge will gradually increase. As discussed earlier, the volume of vehicles using the bridge is steadily increasing. As the areas adjacent to the bridge and its surroundings develop, both commercially and/or residentially, the number of motorists using the bridge will rise.

The No-Build Alternative would fail to meet any of the items listed as the purpose and need for the project since the capacity of U.S. 20 across the river would not be improved and existing deficiencies would remain. This alternative also fails to improve system linkage resulting in a section of low-capacity roadway within a four-lane corridor. U.S. 20 would

continue to lack traffic capacity across the Mississippi River. The opportunity for economic development of the study area may be lowered by the increased delays in crossing the river. The safety concerns, geometric problems and other pertinent aspects described in the purpose and need would remain unchanged. Therefore, the No-Build Alternative is not a reasonable solution to avoiding the Section 4(f) properties.

4.3 USING OTHER MODES OF TRANSPORTATION

Regular, scheduled public transportation only exists on the Dubuque side of the river and does not currently exist within the remaining portions of the study area to provide an alternate mode of transportation. There are on-demand transit systems operated by the City of East Dubuque and by Jo Daviess County. If a public transportation system would be extended across the river, it is unlikely that it would result in a sufficient reduction in traffic to eliminate the need for capacity improvement. If bus service was extended to East Dubuque a four-lane improvement would enhance the operations. Amtrak does not have any stops in the area. A general aviation airport is located on the south side of Dubuque and offers commercial airline service. Traffic on the Julien Dubuque Bridge is primarily composed of motorists traveling between Dubuque and the rural areas of Jo Daviess and adjacent counties in Illinois. These trips are not.long enough to be feasible for commercial airline service. They are typically too long to be replaced by pedestrian or bicycle trips. The population of the counties in Illinois is too dispersed to support a bus system. Therefore, other modes will not address transportation demands in the corridor. For these reasons, alternate modes of transportation are not viable and do not meet the purpose and need for the project.

4.4 **BUILD ALTERNATIVES**

Three corridors shown in Figure 4.1 were evaluated to determine which best meets the project purpose and need while avoiding and minimizing costs and environmental impacts including impacts to the Section 4(f) properties. The Section 4(f) properties affected by the recommended alternative include the Julien Dubuque Bridge, the Beck/Fockler house and barn, the Upper Mississippi River National Wildlife and Fish Refuge, and the Corps of Engineers'

Administered Lands. The preferred corridor follows existing U.S. 20 from Locust Street to Barge Terminal Road. The north corridor extends north of U.S. 20 along U.S. 61 and crosses the Mississippi River between the U.S. 61 Bridge and the railroad bridge. This corridor continues up the river bluff and across the uplands in Illinois and reconnects to U.S. 20 near Badger Road. The south corridor connects on the west with U.S. 61 at the proposed southwest arterial. It extends well south of the developed area to minimize displacements and to avoid the Mines of Spain State Recreation Area (which would also likely be protected by Section 4(f)), and connects to U.S. 20 east of Barge Terminal Road in Illinois.

4.4.1 North Corridor

The study team evaluated alternatives within the north corridor located north of existing U.S. 20. An alignment within this corridor would avoid a visual impact to the Julien Dubuque Bridge since its location would be north of the railroad bridge and around a slight bend in the river to the east. Impacts to the Upper Mississippi River National Wildlife and Fish Refuge would also be avoided since there is no refuge land in this immediate area. Corps of Engineers' Administered Lands would be slightly minimized since there is not as much land to traverse in this area. The Corps Administered Land consists of open water at this location, therefore, a roadway is not as much of an impact to the wildlife resources as a roadway which would impact the Corps lands and the Refuge's islands and shoreline located further to the south. A north alternative would also avoid the Beck/Fockler house and barn, however impacts to other historic structures and historic districts in Dubuque would be likely. These alignments would result in higher costs, more adverse travel and significantly more right-of-way required than the recommended alternative.

Existing U.S. 20 follows the south face of the Mississippi River bluff. A north corridor would require the roadway to cut through the bluff to cross the river. Immediately east of East Dubuque the property on top of the bluff is occupied by a cemetery, golf course and large subdivisions. To avoid these resources a north corridor would need to divert from the U.S. 20 alignment somewhere in the vicinity of Badger Road, about three miles east of East Dubuque. This additional three miles of new roadway would increase the project cost by approximately

\$25 million, and increase the additional right-of-way required by about 150 acres. It is likely that a corridor in this area requiring this much additional right-of-way would generate significant public controversy.

The location of river crossing corridors north of existing U.S. 20 is constrained by the U.S. 61 crossing between Iowa and Wisconsin about 1.5 miles north of the U.S. 20 crossing, and the railroad bridge located about one-half mile north of the U.S. 20 crossing. A new bridge would need to be located between these existing bridges. A new bridge located one mile north of the existing bridge would add two miles to the length of 78 percent of the trips across the bridge. With an average daily traffic of 20,300 this would represent a total adverse travel of 31,700 vehicle miles per day. This would result in an average additional fuel consumption of over 750,000 gallons per year. Traffic volume growth will increase this figure to over 1,300,000 gallons by the year 2025. Total additional vehicle operating costs for a north corridor will be at least \$125 million greater than the preferred corridor over the next 25 years.

A north corridor connection with U.S. 20 in Dubuque would require construction of approximately one mile of widening to U.S. 61 and two new interchanges. This would cost approximately \$40 million and require the purchase of at least 50 acres of additional right-of-way in a densely developed urban and industrial area.

North corridor alternatives fail to meet the purpose and need for the project since they do not provide the most direct route for traffic crossing the Mississippi River. If the Julien Dubuque Bridge remains in place, along with a new bridge in the north corridor, the new bridge would not attract sufficient traffic to justify four lanes. If the Julien Dubuque Bridge is removed, then a bridge in the north corridor would result in an indirect route and adverse travel for the majority of traffic.

For these reasons north corridor alternatives are not being advanced for further consideration since they are not considered reasonable and do not fulfill the requirements of the purpose and need for the project.

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4.4.2 South Corridor

The study team also evaluated alternatives within a south corridor located south of existing U.S. 20. An alignment within the south corridor would avoid the visual impact to the Julien Dubuque Bridge since its location would be south of the Dubuque City limits and around a meander of the river. An alignment in this corridor would also avoid any impacts to the Beck/Fockler house and barn, and the Corps of Engineers' Administered Lands since it would connect with U.S. 20 south of East Dubuque near Barge Terminal Road. A south alignment cannot, however, avoid the Upper Mississippi River National Wildlife and Fish Refuge because of the numerous islands and other Refuge lands which are located in this general area.

The traffic study which was conducted for this project indicated that downtown Dubuque and East Dubuque are the major beneficiaries of the current bridge location. Accordingly, a new bridge within the south corridor would benefit only about 15 percent of the current bridge traffic. A bridge to the south would not attract sufficient traffic to warrant a four-lane facility. Traffic growth and congestion problems would remain at the existing bridge. Similarly, the safety issues noted in East Dubuque (i.e., access blockages due to rail movements) would also not be addressed.

A new alignment in the south corridor would also be longer and unreasonably expensive. The bridge would be almost twice as long since the river is wider south of the Mines of Spain State Recreation Area. There would still be congestion on the Julien Dubuque Bridge. A bridge in the south corridor is not viable in meeting the project purpose and need as would a bridge in the existing U.S. 20 corridor.

Other issues associated with a south corridor would include significant increases in direct environmental impacts than the preferred corridor. The impacts would include: wetlands, wildlife refuge lands, endangered species habitat, agricultural impacts, and archaeological resources.

Numerous wetlands, up to 50 acres, would be affected by a southern alignment. These wetlands occur primarily within the flood plain of the Mississippi River. The numerous islands within the river at this location have been designated as wetlands by the U.S. Fish and Wildlife

Service. These islands, and most of the undeveloped land within the flood plain, are also part of the Upper Mississippi River Wildlife and Fish Refuge. Impacts to the Refuge at this location would be approximately 50 acres. A southern alignment would also fragment the Refuge at a new location.

The U.S. Fish and Wildlife Service and the Iowa and Illinois Departments of Natural Resources provided information regarding endangered and threatened animal or plant species. The south corridor is near or within areas that have been identified as containing endangered and threatened species. Some of these species include river otter habitat, endangered mussel beds, heron rookeries and other bird species, and numerous plant species.

An alignment in the south corridor will also require about 500 acres of new right-of-way and impact many acres in agricultural production. Since there are not many east-west roads within the south corridor there is not much existing road right-of-way to utilize. Therefore, a new roadway would traverse many farming operations leaving severed parcels, uneconomical remnants, and additional adverse travel for farmers needing to get to their severed parcels.

Based on the archaeological significance of the Mines of Spain State Recreation Area it is assumed that the area immediately south, within the south corridor, would also contain a high percentage of prehistoric and early historic sites. Indian burial mounds are included within these potential sites, which would occur within the south corridor.

Based on this analysis, all southern corridor alternatives were eliminated from further study. A south alignment would not meet the purpose and need since it does not improve the capacity of U.S. 20 across the river while providing a direct route for traffic. A new bridge on a south alignment would not attract sufficient traffic to warrant its construction, and it would not attract sufficient traffic from the existing structure to eliminate the need to add lanes in the future. The south alternative would also have a higher construction cost of about \$250 million, and much more significant impacts to environmental resources including wetlands, threatened and endangered species habitat, cultural resources, farmland, and additional Section 4(f) lands. Because of these reasons, a southern corridor would not meet the purpose and need.

4.5 RECOMMENDED ALTERNATIVE

The recommended alternative will consist of constructing a single point diamond interchange at Locust Street in Dubuque (see Figure 4.2). This will replace the existing at-grade intersection and significantly improve capacity. U.S. 20 will cross over Locust Street. A new two-lane bridge for eastbound traffic will be constructed south of the existing bridge. The Julien Dubuque Bridge will be left in place to carry westbound traffic.

In Illinois, existing U.S. 20 will be widened from the bridge to just east of Timmerman Drive. The widening will consist of adding an at-grade intersection at Sixth Street and constructing a left turn lane west of Timmerman Drive where U.S. 20 will transition back to its existing cross section. This at-grade intersection will have sufficient capacity to accommodate anticipated traffic through the design year. Improvements from there to Barge Terminal Road will consist of pavement repairs and overlay.

Road closures that will be part of this project include Hill Street, Fourth Street, Wall Street, and Menominee Avenue in East Dubuque.

Hill Street in East Dubuque will be closed immediately north of the Fifth Street/Sinsinawa Avenue intersection. Hill Street will not be connected to this intersection. The existing grade on Hill Street is greater than 15 percent. The realignment of Sinsinawa Avenue will require a significant increase in the Hill Street grade to connect it to this intersection. The safety and drainage problems associated with the very steep grade on Hill Street make a connection to Sinsinawa Avenue undesirable for safety reasons. Furthermore, the Sinsinawa/Fifth Street intersection functions much better as a three-legged intersection than it would with a fourth leg.

Since Hill Street and Wisconsin Avenue provide the primary means of access to the top of the bluff in East Dubuque, and since Wisconsin Avenue has frequent flooding problems, the City of East Dubuque has requested an additional connection to replace Hill Street. The need to provide adequate response time for emergency vehicles is one of the primary reasons. To

4-7

replace Hill Street, Plum Street will be extended down the bluff and connected to U.S. 20 east of the Sixth Street grade separation.

The Fourth Street railroad grade crossing will be closed. Access will be provided by the new Sixth Street grade separation. Menominee Avenue will be closed at its east end and will not have a direct connection to Sixth Street. Wall Street will be closed between Second Street and Sixth Street.

This alternative achieves the project purpose and need of improving the capacity of U.S. 20 and has independent utility since it has adequate capacity to accommodate projected traffic through the design year. This alternative also minimizes construction costs and environmental impacts. This "recommended" alternative will be constructed in a manner that will allow construction of the extension at some time in the future, if the funding situation changes.

An alternative within the preferred corridor cannot reasonably be expected to avoid the Section 4(f) properties, including the Julien Dubuque Bridge, the Upper Mississippi River National Wildlife and Fish Refuge and the Beck/Fockler house and barn. However, the following avoidance measures have been assessed.

4.5.1 Julien Dubuque Bridge

The recommended alternative will visually impact the Julien Dubuque Bridge by placing a companion structure near the bridge. The visual impacts cannot be avoided because, as previously stated, other corridor alternatives fail to meet the project purpose and need. Corridors at locations other than in the vicinity of the existing bridge do not attract sufficient traffic to eliminate future congestion at the existing bridge. The option of constructing a parallel tunnel, instead of a parallel bridge, to avoid the visual impact was considered and eliminated because the high cost (more than twice the cost of a bridge) made the alternative not reasonable or prudent. Minimization of this impact is proposed through the construction of a complementary structure in a similar style to the Julien Dubuque Bridge.

4.5.2 Beck/Fockler House

Avoiding the Beck/Fockler house and barn would require that Sinsinawa/Sixth Streets be shifted 100 feet closer to U.S. 20. This would not allow sufficient distance between the Sinsinawa and U.S. 20 intersections on Fifth Street to provide for safe and functional traffic operations on Fifth Street. The intersections would only be about 150 feet apart. This would also necessitate raising the elevation of the Fifth Street intersection, making the resulting grades unacceptably steep according to ILDOT design standards.

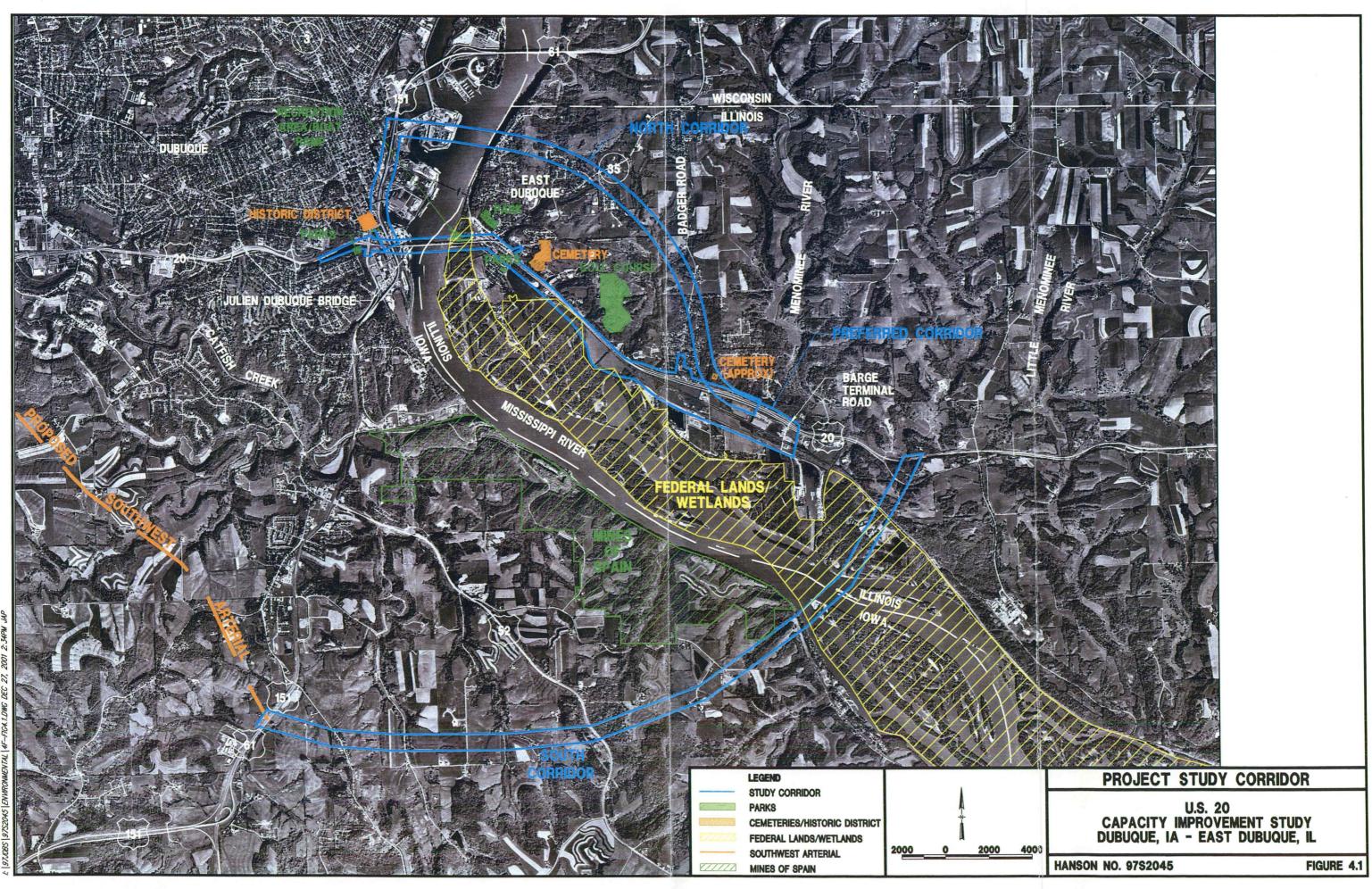
Shifting the alignment north of the house would not be feasible since the house sits on the south face of a very steep and high bluff. Over 500,000 cubic yards (2.3 billion pounds) of rock excavation would result, and six additional homes on either side of the Beck/Fockler house would be displaced. Locating the house and barn within the "infield" at the intersection would eliminate access to the house since any driveway would be within the limits of the turn lanes. Since it is not reasonable to avoid impacting this property, the impacts will have an Adverse Effect on this architecturally significant property.

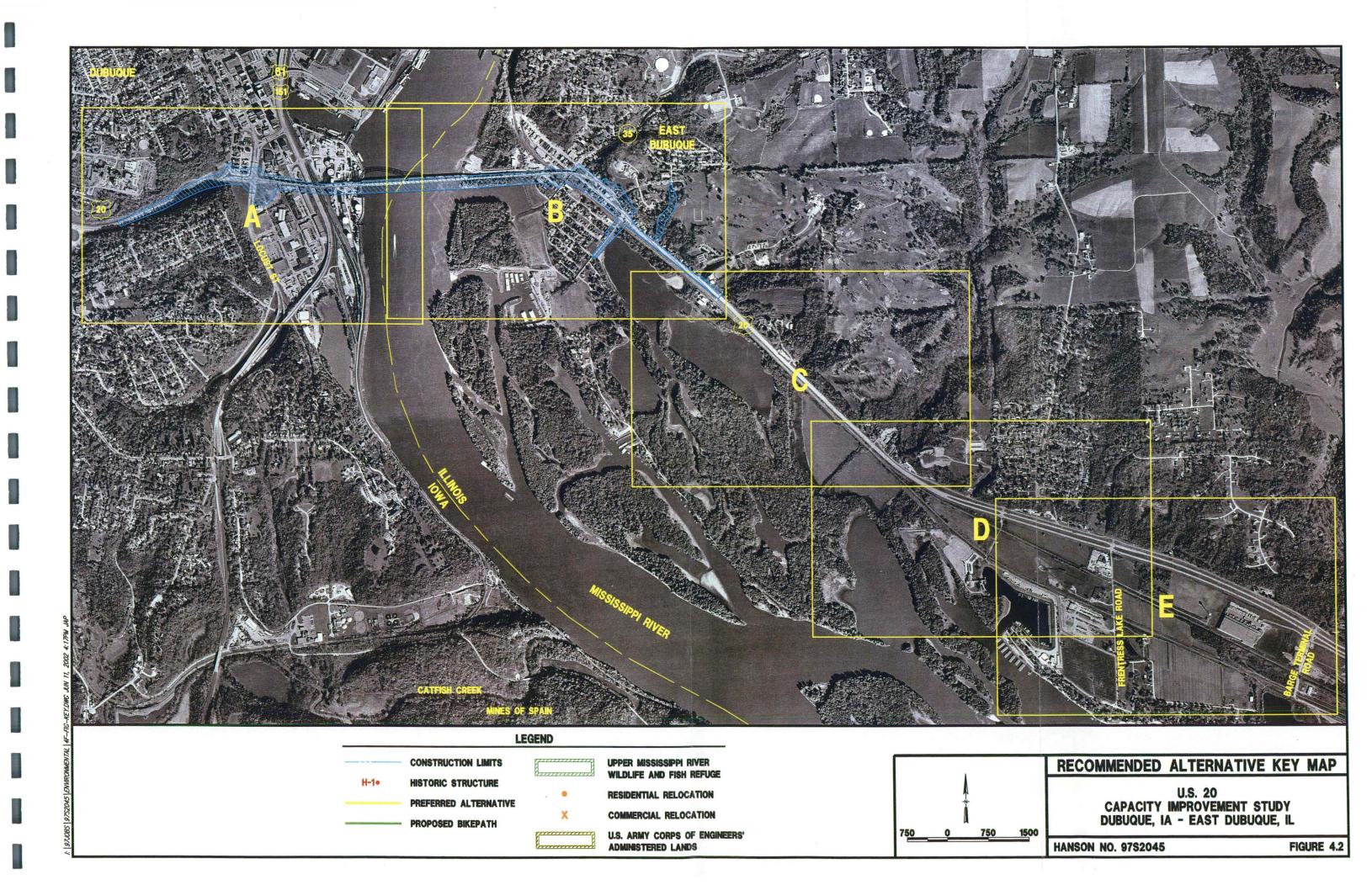
4.5.3 Upper Mississippi River National Wildlife and Fish Refuge

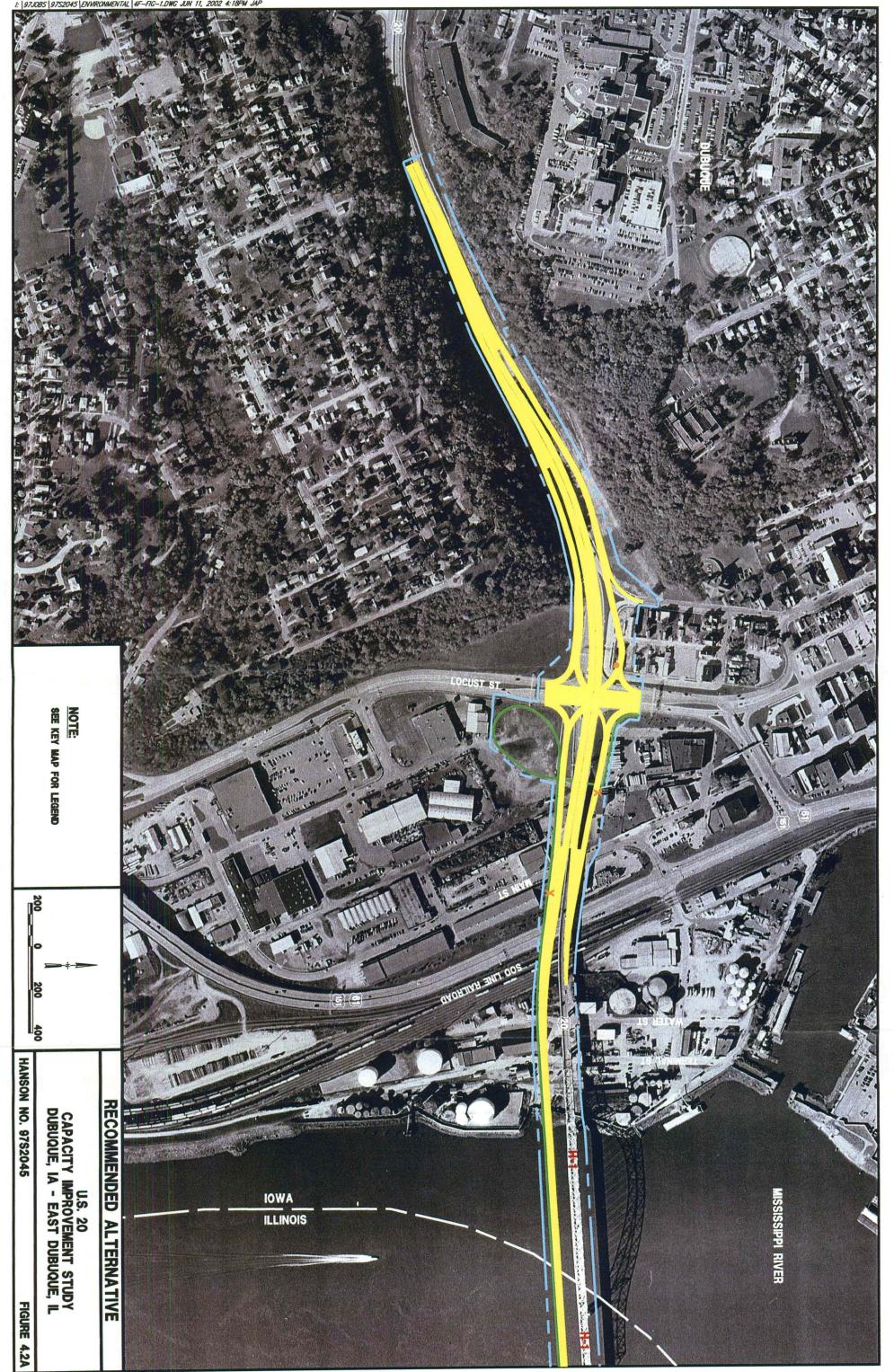
Since the refuge extends for about 261 miles along the Mississippi River from Minnesota to Rock Island, Illinois, it is not reasonable to avoid impacts to the refuge. However, the recommended alternative does avoid more significant impacts to the refuge by not fragmenting the refuge at a new location, allowing for human intrusion into a previously undisturbed area. Tunneling under the Mississippi River and the refuge was also considered, however the cost and maintenance of a tunnel would be more than twice the cost of constructing a bridge, therefore this alternative was not deemed reasonable.

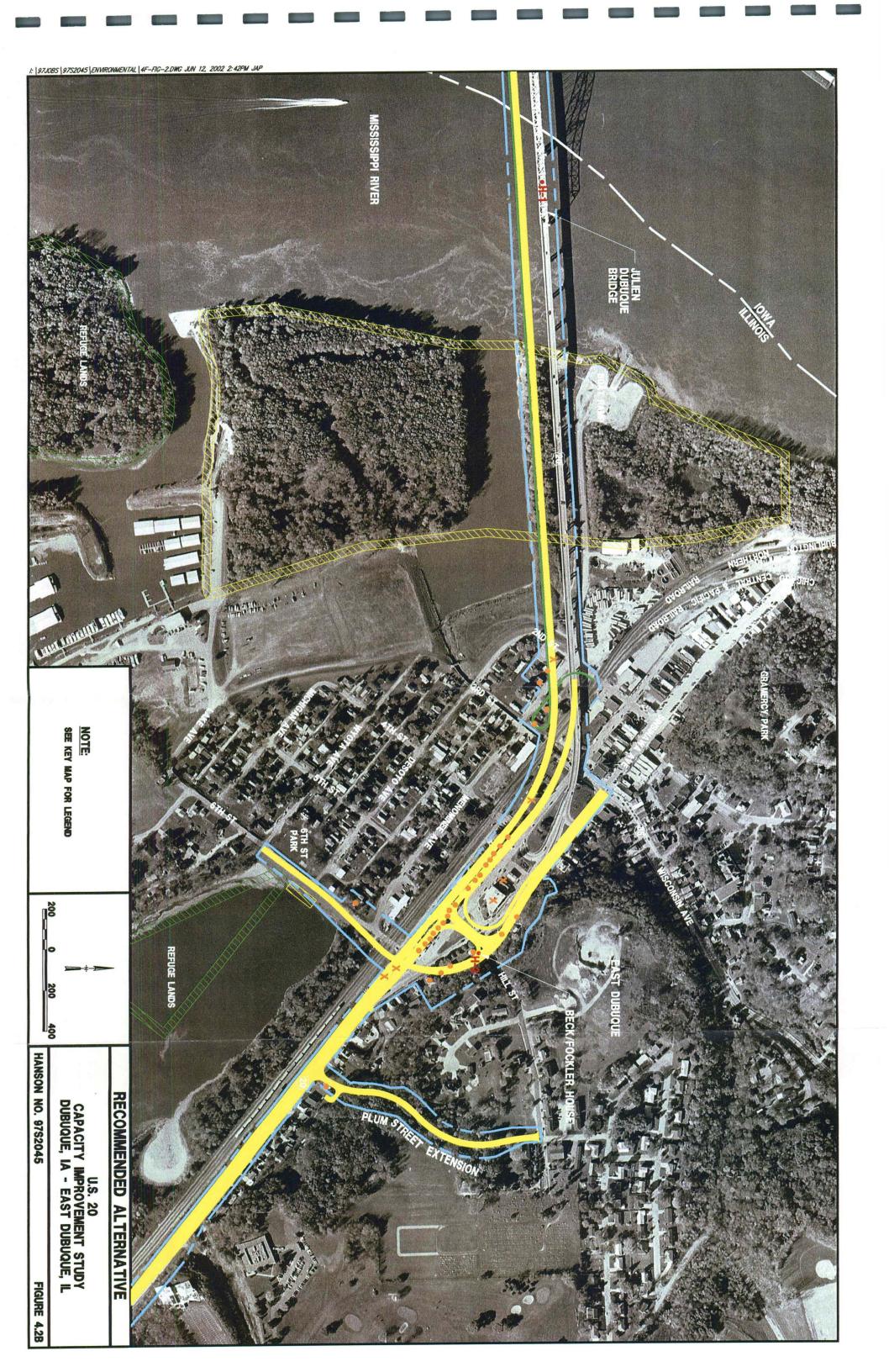
4.5.4 U.S. Army Corps of Engineers' Administered Lands

Avoidance of Corps Administered Lands would require a more significant take of Upper Mississippi River National Wildlife and Fish Refuge lands. The recommended alternative does however avoid the recreational facilities associated with Tract FI-82, the public boat access. The project has been designed to avoid recreational facilities associated with these public lands and to minimize any impacts to public land by routing the project through undeveloped, marginally suitable habitat for wildlife.

















SECTION 5.0 MEASURES TO MINIMIZE HARM AND TO MITIGATE

SECTION 5.0

MEASURES TO MINIMIZE HARM AND TO MITIGATE

5.1 JULIEN DUBUQUE BRIDGE

It has been determined that the bridge must remain in place and will carry the west-bound lanes of the eventual four-lane roadway along U.S. 20 between Dubuque, Iowa and East Dubuque, Illinois. The main physical impacts will be the reconfiguration/reconstruction of the approach spans on both the east and west sides of the bridge. The existing bridge has a 4-foot, 6 inch sidewalk located along the south side. The proposed plan is to widen the sidewalk to 10 feet to create a bicycle/pedestrian path to meet current design standards.

The physical impacts to the approach spans and the deck and lower chords of the bridge have already been considered mitigated by the HABS/HAER documentation compiled in 1991. Since the bridge is listed in the National Register of Historic Places, the effect of moving the sidewalk from one side of the bridge to the other is considered a No Adverse Effect as long as the move conforms to the Secretary of the Interior's Standards for Rehabilitation (as revised in 1990), (see Appendix D, IADOT letter dated October 12, 1999). The reason for this conclusion is that, if the standards are followed, the move of the sidewalk will have no adverse effect on the bridge's essential character or on the features which have made it significant. Thus, the proposed physical impacts, as they are now proposed, will have No Adverse Effect on the National Register status of the bridge.

It has also been determined by IADOT, that the proposed change in traffic flow across the historic bridge constitutes a No Adverse Effect. The current U.S. 20 Capacity Improvement Study has determined that the most reasonable alternative to improve the capacity of U.S. 20 at this crossing is to leave this bridge standing and build a companion structure to safely and adequately accommodate the need for two additional lanes of traffic. As a result, the change in traffic flow on the historic bridge is an unavoidable effect but could be viewed as an acceptable effect because it will mean that the historic bridge will remain standing and in use. The change

5-1

in traffic flow will have the effect of limiting the vehicular views of the bridge, while on the bridge, to west-bound views only; however, the overall effect will not diminish the bridge's essential character or the features which make it significant. As a result, it is concluded that the change in traffic flow will have a No Adverse Effect on the National Register status of the Julien Dubuque Bridge.

Also, the construction of a new bridge on the south side of the existing bridge in order to carry the two east-bound lanes across the river has been determined by the Iowa SHPO to be a No Adverse Effect as a visual impact, with obstruction of viewsheds of the historic bridge being the primary concern (see Appendix D, IADOT letter dated November 2, 2001).

The centerline of the new bridge will be sited a minimum distance of 135 feet from the centerline of the existing Julien Dubuque Bridge, but cannot be sited too far from the Julien Dubuque Bridge for the following reasons:

- The channel constrictions of the Mississippi River at this point, and the tight turning space between the Julien Dubuque Bridge and the current railroad swing bridge just upriver, requires that any new bridge be placed as close as possible to the existing bridge, and that this new bridge be constructed on the south side of the Julien Dubuque Bridge. This was determined by the U.S. Coast Guard at a project meeting held June 29, 1999, based on the current barge traffic requirements along this segment of the river. Figure 5.1 depicts the navigation channel location for barge traffic around the Julien Dubuque Bridge.
- 2. The existence of a private marina/harbor development on the Illinois side of the river just off the southeast corner of the Julien Dubuque Bridge will require that the new bridge be sited close enough to the existing bridge so that the mouth of the harbor is not cut off or unduly constricted by that construction.

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The construction of a new bridge alongside the existing bridge offers the potential of creating a visual impact, which could have a negative impact or adverse effect if the design of the new bridge introduces visual elements that are out of character with the Julien Dubuque Bridge or significantly alters the setting of this bridge. The following recommendations to minimize any potential adverse effects to the Julien Dubuque Bridge were derived from consultations with the State Historical Society of Iowa. These recommendations have been briefly summarized in the Memorandum of Understanding (see Section 9.0).

- 1. Rehabilitate and restore the Julien Dubuque Bridge as needed in the future to assure its continuing future use and to extend its life-span. The recent refurbishment of the deck system and lower chords have helped in this regard.
- 2. Minimize the visual impacts in the design of the approach ramps and in the placement of the new bridge, so that most of the traditional views of the historic bridge are not significantly altered or impeded (i.e., the north side and east and west end views of the bridge). In this way, the only view that will be impacted is from the south, although the main viewshed obstruction will be to those actually on the river heading upstream. Views from the west shoreline are sufficiently high in the south Dubuque area so that much of the old bridge could still be seen from the southwest. The view from the southeast in Illinois is either already restricted by the presence of the wooded islands and sloughs that impede access to the shoreline in this area or is also sufficiently high from the blufftops so that the historic bridge could be seen at least in part.
- 3. Design the new bridge along the same design as the historic bridge, with the nature of the detailing and/or connections reflective of today's technology rather than a pure replica. Surfaces could be sleeker, ornamentation subtly different, and even the color could either be different or the same. A further possibility is to design the new bridge in a clearly

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contemporary design but having a similar scale and height and having the same spans as the historic bridge, so that the new bridge is compatible with the design and look of the old. However, a contemporary, yet compatible, design is a tremendous design challenge, and therefore more problematic than a new bridge of the same design as the old. It is recommended, therefore, that the new bridge follow the design of the old, but still be discernible as new construction.

There was discussion about the feasibility of a new bridge design using a standard I-beam bridge with a Jersey barrier, which would be a low-profile bridge and would, in theory, block less of the view of the historic bridge than a bridge of similar design. However, the engineering realities of such a design would require that the beam of the bridge be about 45 feet deep in order to carry the bridge load across an 845 feet span to match the existing span length of the Julien Dubuque Bridge. It is important to match the span lengths in order to avoid adding any additional barriers to barge traffic on the river at this point and to lessen the visual impact to the historic bridge. However, a 45 feet deep beam that matched the deck height of the Julien Dubuque Bridge would block barge traffic underneath. Thus, to make such a deep beam work, the new bridge would have to be raised about 50 feet or more and would pose problems on the roadway connections on both sides of the river. Each of the approach ramps would have to be raised, thus impacting more land and buildings on both sides (Personal communication with Hanson Engineers, August 1999). The end result would be an even greater visual impact on the Julien Dubuque Bridge. Therefore, such a bridge design does not appear feasible and is not recommended as a means of mitigating the visual impacts of a new bridge to the historic bridge.

It is concluded that the careful placement and design of a new companion bridge with a similar appearance as the Julien Dubuque Bridge will minimize any potential visual impacts of

5-4

constructing a new bridge adjacent to the historic bridge (see Figure 5.2). Project clearance is recommended since a No Adverse Effect has been determined with the stipulation that these design features will be incorporated into the project plans.

5.2 <u>BECK/FOCKLER HOUSE</u>

Alternatives, previously discussed, to minimize impacts to this property included taking only the house and leaving the barn in place or vice/versa. These alternatives were eliminated for the same reasons described earlier for avoidance. Slight shifts in the alignment at this location will result in significant rock excavation. Minimization cannot be accomplished so a mitigation plan has been developed (see Section 9.0 – Memorandum of Agreement).

This well preserved example of a Greek Revival-style house in East Dubuque is eligible for the National Register under Criterion C for its architectural significance. It may have some additional significance for its association with Charles and Roccena Beck and perhaps Henry and Susan Fockler; however, their significance in the community is not yet clear from research conducted to date. Therefore, significance under Criterion B is deferred. The barn is a later addition to this property and would likely be considered non-contributing to the property unless additional research extends the period of significance for this property into the 1910s and/or some connection can be made between this wagon/buggy barn and Fockler's wagon/buggy manufactory.

The age and construction of the Beck/Fockler House make the relocation of these structures infeasible, as 1) significant structural damage would likely occur and 2) the cost to relocate these structures also makes such a proposition infeasible. Mitigation for the loss of the Beck/Fockler House is recommended by the completion of a Historic American Buildings Survey documentation study. Architectural salvage of significant pieces from the Beck/Fockler house will be recommended. The Illinois State Historic Preservation Agency (IHPA) has concurred through their review of the Memorandum of Agreement, that an Adverse Effect to this property, due to demolition, will result from the construction of the recommended alternative (see Appendix D, IHPA letter dated September 14, 2000).

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5.3 UPPER MISSISSIPPI RIVER NATIONAL WILDLIFE AND FISH REFUGE

There are no reasonable build alternatives to avoid impacts to the Upper Mississippi River National Wildlife and Fish Refuge. Efforts have been made to minimize the impacts to the Refuge by utilizing existing roadway right-of-way to the extent practicable. Also, following the existing U.S. 20 alignment avoids further fragmentation of the Refuge at a new location which would create an additional barrier to wildlife movement.

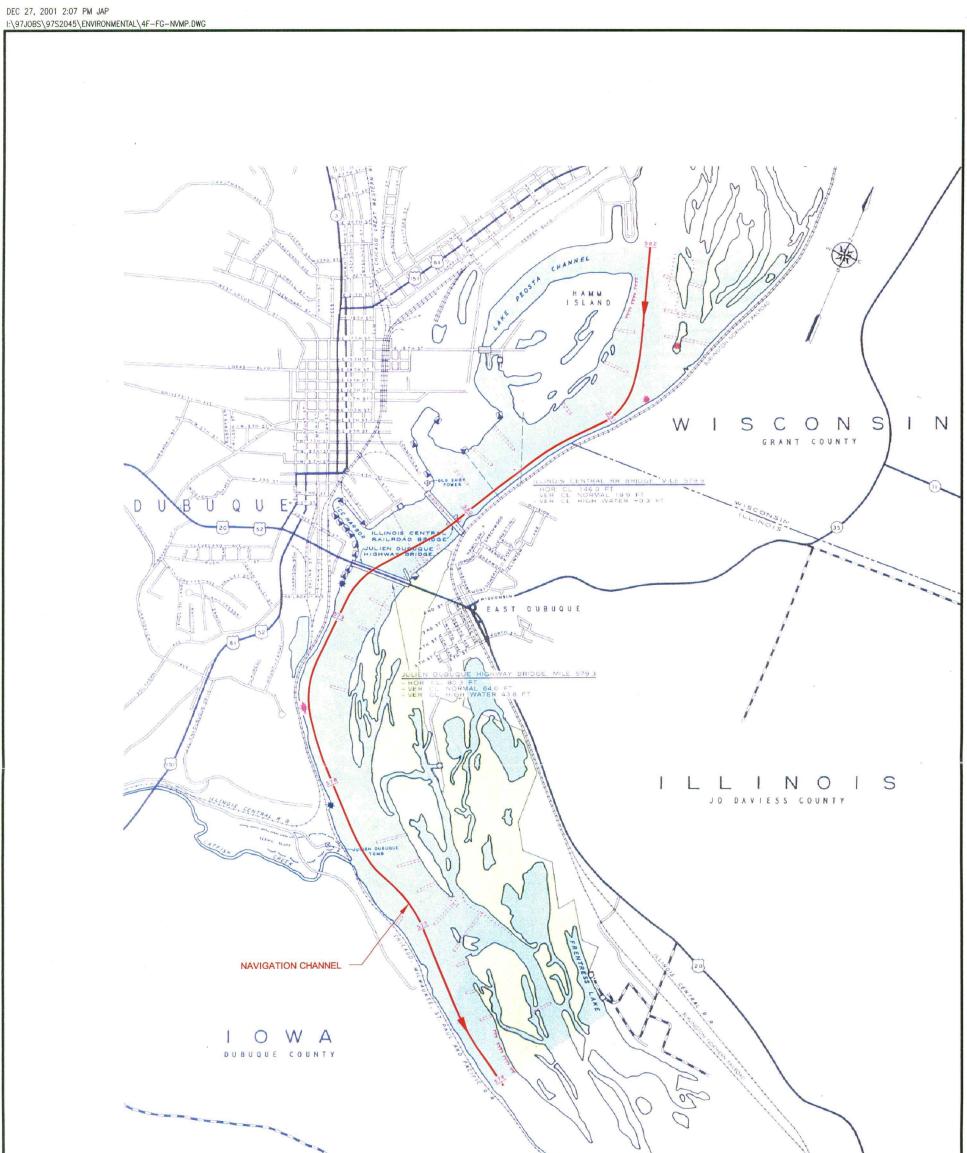
The area selected for wetland mitigation will be turned over to the Refuge as mitigation for this Section 4(f) impact. A letter from the U.S. Fish and Wildlife Service dated April 4, 2000 concurs that a land exchange of wetland mitigation would be considered as appropriate mitigation (see Appendix B, page B-2). Also see the Corps of Engineers letter dated June 10, 2002.

5.4 U.S. ARMY CORPS OF ENGINEERS' ADMINISTERED LANDS

There are no reasonable build alternatives to avoid impacts to Corps Administered Lands. Existing roadway right-of-way at Sixth Street has been utilized to the greatest extent practicable. Also, all recreational facilities associated with these lands have been avoided. Most of the impact to Tract FI-82, at the bridge crossing, will be on piers elevating the structure above the landscape allowing for wildlife passage, similar to the Julien Dubuque Bridge.

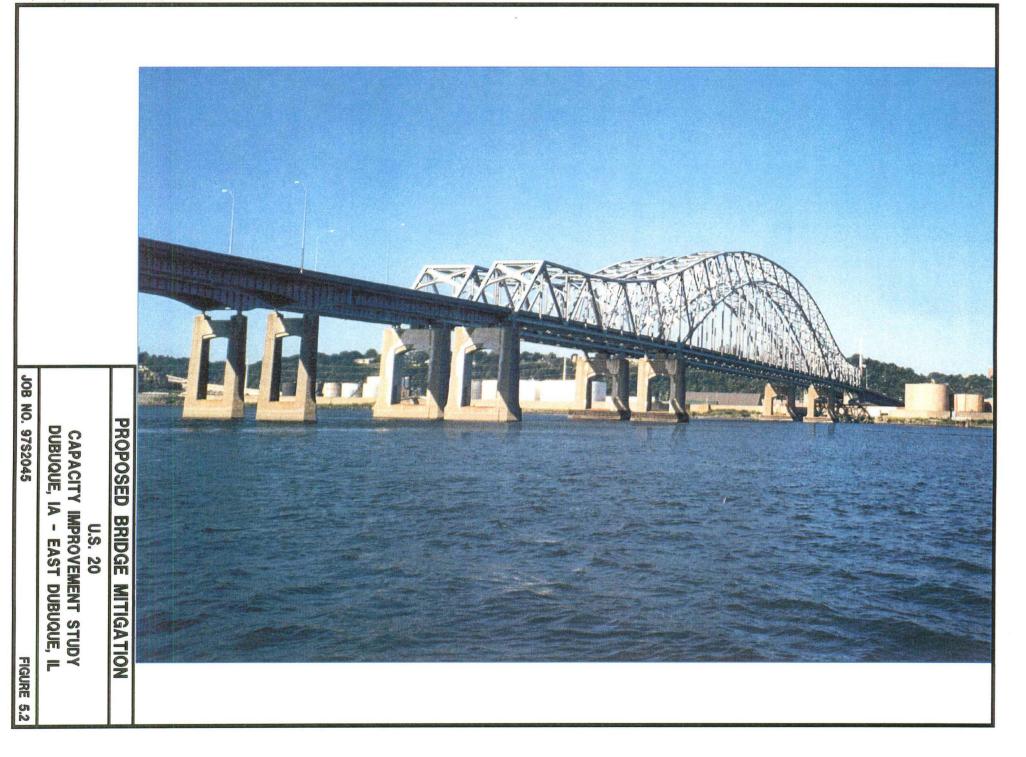
The area selected for wetland mitigation will be turned over to the Upper Mississippi River National Wildlife and Fish Refuge as mitigation for this Section 4(f) impact. A letter from the U.S. Fish and Wildlife Service dated April 4, 2000 concurs that a land exchange of wetland mitigation would be considered as appropriate mitigation (see Appendix B, page B-2). Also see the Corps of Engineers letter dated June 10, 2002.

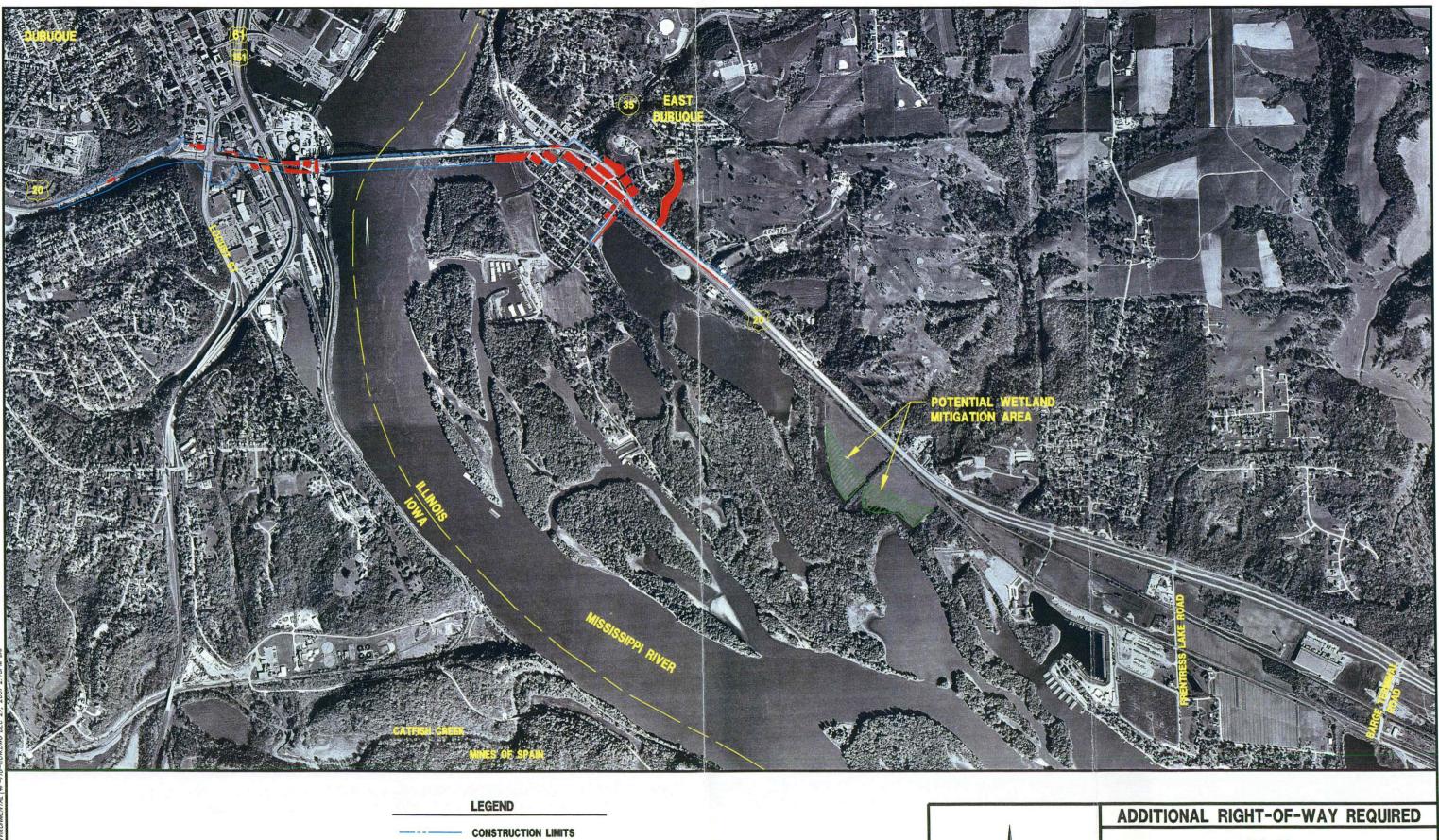
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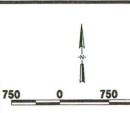






ADDITIONAL R.O.W.

RECOMMENDED WETLAND MITIGATION AREA



1500

U.S. 20 Capacity improvement study Dubuque, IA - East Dubuque, IL

HANSON NO. 97S2045

FIGURE 5.3

SECTION 6.0 COORDINATION

B

SECTION 6.0 COORDINATION

A coordination meeting was held in July 1999 to discuss the study alternatives and describe the associated impacts to the resource agencies in attendance (see Section 6.0 of the EA). Meeting minutes of this meeting were forwarded to the Iowa and Illinois state historic preservation offices (SHPO) for their review. The Iowa and Illinois SHPOs have reviewed the Intensive Survey and Evaluation of Architectural Properties in Dubuque and East Dubuque prepared by Leah Rogers in 1999. This review process has initiated the coordination for the Julien Dubuque Bridge and the Beck/Fockler House. Coordination with the U.S. Army Corps of Engineers and the U.S. Department of the Interior is continuing as part of the negotiation process with impacts associated with the Corps of Engineers' Administered Lands and the Upper Mississippi River Wildlife and Fish Refuge, respectively. Review of the Finding of No Significant Impact (FONSI) and Final Section 4(f) Evaluation will continue formal coordination with the public officials having jurisdiction over these Section 4(f) properties.

The Draft Section 4(f) Evaluation was made available to the public and resource/regulatory agencies as part of the Environmental Assessment public availability process, and copies were made available to local units of government for review and comment. A Public Hearing was also held on April 25, 2002 to discuss the proposed action with interested parties. Responses from reviewing agencies, local governments and interested parties are included in the FONSI and Public Hearing Transcript prepared for this project. Comment letters and correspondence received from the agency coordination process are included in Appendix B.

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SECTION 7.0

SUMMARY AND DISPOSITION OF THE FINAL SECTION 4(f) EVALUATION

SECTION 7.0

SUMMARY AND DISPOSITION OF THE FINAL SECTION 4(f) EVALUATION

7.1 SUMMARY

This Final Section 4(f) Evaluation describes a proposed capacity improvement project within the existing U.S. 20 corridor between Dubuque, Iowa and East Dubuque, Illinois. The recommended action consists of constructing a new bridge adjacent to the existing structure along with certain interchange improvements to the approaches on each side of the river.

These improvements are being carried out in cooperation with both FHWA and the Iowa and Illinois Departments of Transportation. Further, the proposed action is consistent with local and regional transportation planning goals. Finally, the planned action has been recognized by the Congress of the United States, which has provided a special appropriation for the project as part of the Transportation Equity Act for the 21st Century (TEA-21).

This document also establishes applicability of 49 U.S.C. 303, commonly referred to as Section 4(f), to certain resources within the corridor under study. These include the existing U.S. 20 Julien Dubuque Bridge over the Mississippi River, the Beck/Fockler House in East Dubuque, Illinois, the Upper Mississippi River National Wildlife and Fish Refuge, and the U.S. Army Corps of Engineers' Administered Lands which includes the majority of the Mississippi River area in the vicinity of the existing bridge crossing. Additionally, this document provides a record of coordination efforts with officials having jurisdiction over the resources cited above, discusses alternative locations that avoid the use of the protected resources, and identifies measures that will minimize/mitigate harm to these resources.

The purpose and need for the proposed action has been expressed in terms of an action that will improve both capacity and safety within the <u>existing U.S.</u> 20 corridor. U.S. 20 is an established transportation corridor within the bi-state metropolitan area, and as such is a critical surface transportation link. Although required avoidance alternatives were evaluated, they did

SECTION 8.0 CONCLUSIONS

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SECTION 8.0 CONCLUSIONS

It has been determined that there are no feasible and prudent alternatives resulting in lesser impacts to the Section 4(f) properties identified than the recommended alternative, and the proposed project includes all possible planning to minimize harm to Section 4(f) resources. Considering the lack of controversy regarding planned improvements either from the public, resource/regulatory agencies or agencies with jurisdiction over the protected resources cited, it is the intent of the FHWA and Iowa and Illinois Department's of Transportation, to proceed with project development within the existing corridor.

This project will result in direct impacts to protected Section 4(f) resources discussed in this report; however, mitigation has been approved by the State Historic Preservation Office of Iowa and Illinois, and a completed Memorandum of Agreement and Memorandum of Understanding 1s attached in Section 9.0 regarding the disposition of the potential resources.

A public hearing was held on April 25, 2002 to discuss this proposed action with the public, and copies of the EA/Section 4(f) evaluation were made available to the public and resource/regulatory agencies for review and comment. Results of this effort are documented in the FONSI/Final Section 4(f) Evaluation prepared for this project.

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Division Administrator Federal Highway Administration

7/15/02

Date

SECTION 9.0 MEMORANDUM OF UNDERSTANDING AND MEMORANDUM OF AGREEMENT

MEMORANDUM OF UNDERSTANDING

for

the Julien Dubuque Bridge in the Cities of Dubuque, Iowa, and East Dubuque, Illinois

Construction of U.S. 20 Capacity Improvement Across the Mississippi River BRF-20-9(149)--38-31

WHEREAS, the Federal Highway Administration (FHWA), the Iowa Department of Transportation (IaDOT) and the Illinois Department of Transportation (ILDOT) propose to work in partnership in constructing a companion bridge to the Julien Dubuque Bridge over the Mississippi River and construct a four-lane highway through East Dubuque, and have consulted with the Iowa State Historic Preservation Officer (IaSHPO) and the Illinois State Historic Preservation Officer (ILSHPO) pursuant to 36 CFR Part 800.6, regulations implementing Section 106 of the National Historic Preservation Act (16 U.S.C. Section 470f);

WHEREAS, the construction of a companion bridge to the historic Julien Dubuque Bridge has been found to have No Adverse Effect with the stipulation that the approved design concept has been determined to be compatible with the Secretary of Interior's Standards;

WHEREAS, no other resources, historical, architectural or archaeologically eligible for the National Register within Iowa jurisdiction will be impacted by the proposed project;

WHEREAS, the historic cultural resources impacted by the project that are located within the jurisdiction of the state of Illinois will be managed by the ILDOT and ILSHPO;

WHEREAS, the IaDOT, will let and construct the proposed undertaking, has participated in the consultation with FHWA and IaSHPO and has been invited to concur in this Memorandum of Understanding;

WHEREAS, to the best of our knowledge and belief, no human remains, associated or unassociated funerary objects or sacred objects, or objects of cultural patrimony as defined in the Native American Graves Protection and Repatriation Act (25 USC 3001), are expected to be encountered within the project corridor within the Iowa boarders;

WHEREAS, the FHWA, IaSHPO and IaDOT have consulted with the Kickapoo Tribe, Menominee Tribe and the Ho-Chunk Nation and no objection has been raised to work proposed within the Iowa jurisdiction; and

NOW, THEREFORE, FHWA, IaDOT, and the IaSHPO agree that the undertaking shall be implemented in accordance with the following stipulations in order to take into account the effect of the undertaking on historic properties.

STIPULATIONS

FHWA will ensure that the following measures are carried out:

- A. Historic Julien Dubuque Bridge
 - 1. Any plans to alter the existing Julien Dubuque Bridge, shall be developed in consultation with the IaSHPO and submitted to the IaSHPO for approval. If the alteration is not compatible with the Secretary of Interior's Standard, the parties will proceed according to 36CFR800.6 to resolve adverse effects.
 - 2. If the final design for the companion bridge is different than the design concept previously approved by SHPO, the new design will be submitted to the IaSHPO for review and approval to assure design compatibility in terms of scale, massing, color, materials and responsiveness to the recommended approaches to new construction set forth in the *Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings*. If the chosen design is not compatible with the Secretary of Interior's Standard, the parties will proceed according to 36CFR800.6 to resolve adverse effects.
 - 3. The Julien Dubuque Bridge was documented according to HAER standards in 1991; therefore, further documentation will not be required.
- B. Unexpected Discoveries
 - 1. If construction work should uncover previously undetected archaeological materials within the areas subject to IaSHPO's jurisdiction, the IaDOT will cease construction activities involving subsurface disturbances in the area of the resource and notify the IaSHPO of the discovery and precede with the following procedure.
 - a. The IaSHPO, or an archaeologist retained by the IaDOT that meets the Secretary of the Interior's Standards for archeology, will immediately inspect the work site and determine the extent of the affected archaeological resource. Construction work may continue in the area outside the archaeological resource as it is defined by the IaSHPO or by IaSHPO in consultation with the IaDOT's retained archaeologist.
 - b. Within 14 days of the original notification of discovery, the IaDOT, in consultation with the IaSHPO, will determine the National Register eligibility of the resource. The IaDOT may extend this 14-day calendar

period one time by an additional 7 days by providing written notice to the IaSHPO prior to the expiration date of said 14-day calendar period.

- c. If the resource is determined eligible for the National Register, the IaDOT shall submit a plan for its avoidance, protection, recovery of information, or destruction without data recovery to IaSHPO for review and comment. The IaDOT will notify all consulting parties including interested tribes of the unanticipated discovery and provide the proposed treatment plan for their consideration. The IaSHPO and consulting parties will have 7 days to provide comments on the proposed treatment plan to the IaDOT and FHWA upon receipt of the information.
- d. Work in the affected area shall resume upon either:
 - i. the development and implementation of an appropriate data recovery plan or other recommended mitigation procedures, or
 - ii. the determination by IaSHPO that the newly located archaeological materials are not eligible for inclusion on the National Register.
- 2. In the event that human remains or burials are encountered during additional archaeological investigations or construction activities, the IaDOT shall cease work in the area, take appropriate steps to secure the site, and notify the Office of the State Archaeologist and the Office of Locations and Environment.

If the remains appear to be ancient (i.e., older than 150 years), the state agency responsible for ancient burials shall have jurisdiction to ensure NAGPRA and the implementing regulations (43CFR10) are observed. The deposition of the remains will be determined in consultation with the culturally affiliated tribe(s) if known. If the remains appear to be less than 150 years old, the remains will be buried according to state law.

- C. Administrative Conditions
 - 1. Modifications, amendments or termination of this agreement as necessary shall be accomplished through consultation and written agreement of all the signatories.
 - 2. Disputes regarding the completion of the terms of this agreement shall be resolved by the signatories. If the signatories cannot agree regarding a dispute, any one of the signatories may request the participation of the Council to assist in resolving the dispute according to 36CFR 800.7.
 - 3. This agreement shall be null and void if its terms are not carried out within five (5) years from the date of its execution, unless the signatories agree in writing to an extension for carrying out its terms.

Execution of this Memorandum of Understanding by FHWA, IaDOT and the IaSHPO is evidence that FHWA has taken into account the effects of the undertaking on historic properties.

Memorandum of Understanding For Julien Dubuque Bridge

Signatories:

Federal Highway Administration

5/6/22 Iowa Division Administrator

Iowa State Historic Preservation Officer

los May 1, 2002 Date Iowa SHPO

Iowa Department of Transportation

ame

4/29/02 Date

Director, Office of Location and Environment

Iowa Department of Transportation

5/3/02 Date Director, Office of Bridge Design

If tribes are interested in participating

Memorandum of Understanding For Julien Dubuque Bridge

[Name of Tribe]

Tribal Concurrence Page

Tribal Representative

Date

(Print or type name and title of signer)

MEMORANDUM OF AGREEMENT

Between the Federal Highway Administration And the Illinois State Historic Preservation Officer

For Improvements to U. S. ROUTE 20 JO DAVIESS COUNTY ILLINOIS

WHEREAS, the Federal Highway Administration (FHWA) has determined that the proposed improvement of U. S. 20 in Jo Daviess County, Illinois, being planned as part of a project which includes the construction of a companion bridge to the Julien Dubuque Bridge_over the Mississippi River, will have an adverse effect upon the Beck / Fockler House in East Dubuque, a property eligible for inclusion in the National Register of Historic Places, and has consulted with the Illinois State Historic Preservation Officer (SHPO) pursuant to the regulations (36 CFR Part 800) implementing Section 106 of the National Historic preservation Act (16 U.S.C. par 470f), and

WHEREAS, no other sites of historical, architectural, or archaeological significance will be impacted by the proposed improvement, and

WHEREAS, the Illinois Department of Transportation (IDOT) participated in the consultation and has been invited to concur in this Memorandum of Agreement,

NOW, THEREFORE, FHWA and the Illinois SHPO agree that the improvement of U. S. 20 shall be implemented in accordance with the following stipulations in order to take into account the effect of the undertaking on historic properties.

STIPULATIONS

FHWA, in coordination with the IDOT, shall ensure that the following measures are carried out:

- 1. The structure described as the Beck / Fockler House will be purchased and demolished as part of the improvement of U. S. 20 in East Dubuque.
- Construction activities may not commence until the Illinois SHPO indicates in writing that it accepts IDOT documentation of the Beck / Fockler House to Level III Standards of the Illinois Historic American Building Survey in accordance with Attachment A.
- 3. The SHPO shall provide FHWA with a list of the names and addresses of the appropriate local and state archives to receive copies of the final documentation reports to be prepared in compliance with Attachment A.

Execution of this Memorandum of Agreement by FHWA and implementation of its terms, demonstrate that FHWA has afforded the Illinois SHPO an opportunity to comment on this undertaking and its effects on historic properties and that FHWA has taken into account the effects of the undertaking on historic properties in Illinois.

FEDERAL HIGHWAY ADMINISTRATION

enenson Date 4/23/02 By:

ILLINOIS STATE HISTORIC PRESERVATION OFFICER

Inne EHaat Date 4-19-02 Bv

Concur:

ILLINOIS DEPARTMENT OF TRANSPORTATION

977 Paul L. Hun Date 4-22.57 Bv:

Attachment A

Historic Property Study Memorandum of Agreement FHWA / IL SHPO U. S. 20 Beck / Fockler House

The documentation identified below is for a historic property concluded to be of national, state, and/or local significance. This property is the Beck / Fockler House in East Dubuque, Illinois. In addition to the Historic Property Study, the Beck / Fockler House will be documented to the Level III standards of the Illinois Historic American Buildings Survey (IHABS). The Julien Dubuque Bridge was listed in the National Register of Historic Places in 1999 under the Highway Bridges in Iowa Multiple Property Submission. In 1991, the bridge was documented to Historic American Engineering Record (HAER) standards and, therefore, will not require further documentation.

The documentation is to be written for a broad public audience - simple, direct, and free of technical and academic jargon – with information presented (i.e., edited, catalogued and packaged) in accordance with the guidelines of the State Historical Society of Iowa and the Illinois Historic Preservation Agency. The character of the documentation produced – its content, quality, materials, and presentation – will meet the Secretary of Interior's four standards for architectural and historical documentation (48 FR 44731).

The purpose of the report will be to place the property in architectural and historical perspective explaining how the story of this property played out against the background of related local, state or national trends. The research emphasis will be placed on recovering information about the construction, design, growth, and development of this property based on primary sources to the greatest extent possible. Thus, the weight of total effort is to be given not to elaborate architectural description or structure photography, but on amplifying what is known about the story of the property as grasped through research in local archives, courthouse records, and with persons knowledgeable about the property's past. The test of responsiveness to documentation projects under this historic property study series will be more on the depth of local historical sources consulted than on the numbers of site photographs produced.

The Beck/Fockler House is an impressive Greek Revival-style brick house situated at the intersection of Hill Street and Sinsinawa Avenue in East Dubuque. It was built in the 1850s-1860s and appears to have been associated first with Charles and Roccena Beck and later with Henry and Susan Fockler. Charles Beck was a member of the City Council in 1868. Henry Fockler was a manufacturer of buggies and wagons in the 1880s. This well-preserved, outstanding example of a Greek Revival-style house in the Dunleith/East Dubuque community is eligible for the National Register under Criterion C for its architectural significance. It may have some additional significance for its association with Charles and Roccena Beck and perhaps Henry and Susan Fockler; however, their significance in the community is not yet clear.

The documentation prepared must meet the requirements as specified below. The State Historical Society of Iowa and the Illinois Historic Preservation Agency retain the right to

refuse to accept documentation when that documentation does not meet these requirements.

Documentation

1. Inventory Numbers and Historic Architectural Data Base (HADB) Numbers: Any inventory numbers previously assigned to these properties by the Phase I Architectural History Survey report completed for the U. S. 20 Capacity Improvement Project (Rogers 1999a, 1999b), will be cited in the report, appear on reference maps and site plans, and be identified on photographic prints, slides, etc.

2. *Photographs:* Available historic photographs or illustrations that reveal the historic property early in its history and as it changed through time should be appropriately reproduced and included in the report. Historic views should be sought of the overall placement of the property on the landscape and closer views of the property.

In addition, contemporary photographs of the current state and condition of the property are required. The purpose of the number and kind of views taken will be to succiciently illustrate what was significant, valuable, or informative about the property as if one were intending the views to be used in a brief visual presentation on the story of the property. The following views will be taken at a minimum:

- a. Overall view of the building or structure in its larger setting.
- b. A view of the property from the exterior and showing each of the four sides or views of the property.
- c. Interior views where appropriate to tell the story of the property.
- d. limited detail views of important elements on the property.

Unless stipulated elsewhere, the coverage will be copy-stand photography, with each view taken in both black and white film and Kodachrome 64 color slides. The black and white photographs shall be on fiber-based papers or on resin-coated papers of double or medium-weight paper that have been processed in trays in order to meet guidelines outlined in National Register Bulletin 16A.

3. Drawings: Unless stipulated elsewhere, the standard coverage will comprise straightforward, one-line drawings no larger that 8 $\frac{1}{2} \times 11$ inches in size showing elements in correct relation and proportion to one another, with label, north arrow, overall dimensions, and the date sketched. The drawings include:

- a. A site plan of the Beck / Fockler House showing the layout of the surrounding lot, the placement of the building on the lot, the location of extant outbuildings, and the location of any known former outbuildings or features, such as wells, cisterns, etc.
- b. Floor plans of each floor of the Beck / Fockler House to show the current layout of this property, with notations made as to any known modifications of the original layout.

4. *Narrative Report* printed on archival bond paper of approximately eight to ten pages with statements within the narrative cited as to their sources, where appropriate. The format for presentation is stated below:

Cover Page: Includes report title, governmental entity or source of support for sponsoring the survey, author/authors, name of affiliated firm or research organization, date of report.

Acknowledgements (if applicable): This might include acknowledgement of valuable oral informants, or recognition of those who provided useful research leads, or tendered special library assistance of helped local and access useful courthouse archives.

Table of Contents:

Introduction: The project's purpose is described, including the time frames when research and field work occurred, and limitations of the project.

Part I: Current State. The current state of the property will include a description of its general appearance and arrangement, and important physical characteristics of its setting, buildings, and landscape features that influenced the way things developed at this site.

Part II: Historical Background steps back to describe the character and course of history during the time when the property was built and developed. The property will need to be placed within the context of local, regional, state, and national developments and trends as pertinent to the history of the property.

Part III: Property History will narrate the particular history of the property using as much as possible primary sources as outlined above.

Part IV: Construction History will document, to the greatest extent possible, the physical construction and evolution of the property noting alterations, modifications, additions or demolitions that affected the property. At a minimum, specific items to be discussed include the materials and methods of construction; the source or influence of the design; the sequence of construction, alterations, additions, replacements, demolition or losses due to fire; and identification of individuals or companies who designed, engineered, and built this property.

Part V: Significance explains how this property helps relates to, or represents, the course of local, state or national history, pointing out those features of this property that illustrate important designs or reflect important trends. Photographs, illustrations, or site plans may be integrated into the narrative as needed to help convey the property's interpretive value.

Part VI: References Cited. This should include all primary and secondary sources consulted during the research phase of this study. The format should follow that specified in National Register Bulletin 16A (pages 52-53).

Part VII: Appendices. The information placed here, if not placed elsewhere in the report, should include, but not be limited to the following:

- a. A site plan of the property.
- b. Maps showing location of the property in the county/town, changes in property

size, etc.

- c. A 5X7 inch enlargement of each black and white view taken to satisfy specifications above, arranged sequentially, from the most general view to the most detailed view. Each photograph is to be labeled on the back as to building/structure name, inventory number, view taken, and roll/frame number with a No. 1 (soft) pencil or photographically archival-stable pen, and placed in Print-File (57-4P), or equivalent, sleeve.
- d. At least one 8X10 enlargement of representative views of the property. Each photograph is to be labeled as noted under item 3.
- e. A photograph catalog sheet completed for each sleeve of black and white negatives and color slides.
- f. Negatives of 35mm (ASA 125 or less) black and white film in Print-File (35-7B), or equivalent, sleeves.
- g. A contact print sheet for each roll of black and white film places in a Print-File (810-1B), or equivalent, sleeve.
- Kodachrome-64 slides properly labeled (property name, inventory number, and slide sleeve number/slot number) and placed in Print/File (2X2-20B), or equivalent, 20-slot sheet sleeves.
- i. Completed Historical Architectural Data Base (IHADB) form(s).
- j. Other relevant information (e.g. photocopy of biographical information about a noteworthy owner, architect or building associated with this property, remaining sketch plans and drawings that were not integrated into the report).

References Cited

Fraser, Clayton B., and Carl W. McWilliams

1991 Historical Documentation: Julien Dubuque Bridge. Copy on file Community Programs Bureau, State Historical Society of Iowa, Des Moines.

Rogers, Leah D.

- 1999a Intensive Survey and Evaluation of Architectural Properties of Dubuque, Iowa for the U.S. 20 Capacity Improvement Study, Dubuque, Iowa, and East Dubuque, Illinois (ILDOT Project No. BRF-20-9(149)-38-31). Prepared for Hanson Engineers, Inc., Springfield, Illinois, and the Iowa Department cf Transportation, Ames.
- 1999b Intensive Survey and Evaluation of Architectural Properties in East Dubuque, Illinois, for the U.S. 20 Capacity Improvement Study, Dubuque, Iowa, and East Dubuque, Illinois. Prepared for Hanson Engineers, Inc., Springfield, Illinois, and the Illinois Department of Transportation.

Capacity Improvement of U.S. 20 Across the Mississippi River Dubuque County, Iowa and Jo Daviess County, Illinois

> Iowa DOT Project Number BRF-20-9(149)-38-31

ENVIRONMENTAL ASSESSMENT

and

Draft Section 4(f) Evaluation

Submitted Pursuant to 42 USC 4332(2)(c) and 49 USC 303

BY THE

U.S. DEPARTMENT OF TRANSPORTATION Federal Highway Administration and IOWA DEPARTMENT OF TRANSPORTATION Highway Division Environmental Services

2/15/02

Date of Approval For Public Availability

marler 1

For the Division Administrator Federal Highway Administration

The following persons may be contacted for additional information concerning this document:

Bobby W. Blackmon, Division Administrator Federal Highway Administration 105 Sixth Street Ames, Iowa 50010-6337 Telephone: (515) 233-7300 James P. Rost, Director Office of Environmental Services Iowa Department of Transportation Ames, Iowa 50010 Telephone: (515) 239-1225

ENVIRONMENTAL ASSESSMENT AND DRAFT SECTION 4(f) EVALUATION CAPACITY IMPROVEMENT OF U.S. 20 ACROSS THE MISSISSIPPI RIVER DUBUQUE COUNTY, IOWA JO DAVIESS COUNTY, ILLINOIS TABLE OF CONTENTS

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SECTION 1.0 INTRODUCTION

SECTION 1.0 INTRODUCTION

1.1 DESCRIPTION AND LOCATION OF THE PROJECT

The proposed action consists of improving the capacity of U.S. 20 across the Mississippi River in the vicinity of Dubuque, Iowa. The location of the project is shown in Figure 1.1. U.S. 20 currently crosses the Mississippi River on the two-lane Julien Dubuque Bridge. Alternatives considered to provide for additional capacity include the No-Build Alternative, providing a new four-lane bridge near the existing bridge location, providing a new two-lane bridge adjacent to the existing bridge to serve as a one-way couple, or providing a new four-lane bridge south of the urban area.

The west terminus of the study is U.S. 61 at Locust Street in Dubuque County, Iowa. The east terminus is U.S. 20 near Barge Terminal Road in Jo Daviess County, Illinois. The study area is divided into two corridors. The preferred corridor follows existing U.S. 20 from U.S. 61 (Locust Street) in Dubuque to U.S. 20 near Barge Terminal Road in Illinois. The south corridor extends from U.S. 61 near the proposed Southwest Arterial to U.S. 20 east of Barge Terminal Road. The study corridors are shown in Figure 1.2.

1.2 PROJECT HISTORY

In recent years, Dubuque, East Dubuque, and surrounding areas have experienced rapid growth. Developments on the Dubuque riverfront have also increased traffic in and through the central business districts. Extension of the Northwest Arterial, located on Dubuque's northwest side, and the planned Southwest Arterial would lead to additional development of the area.

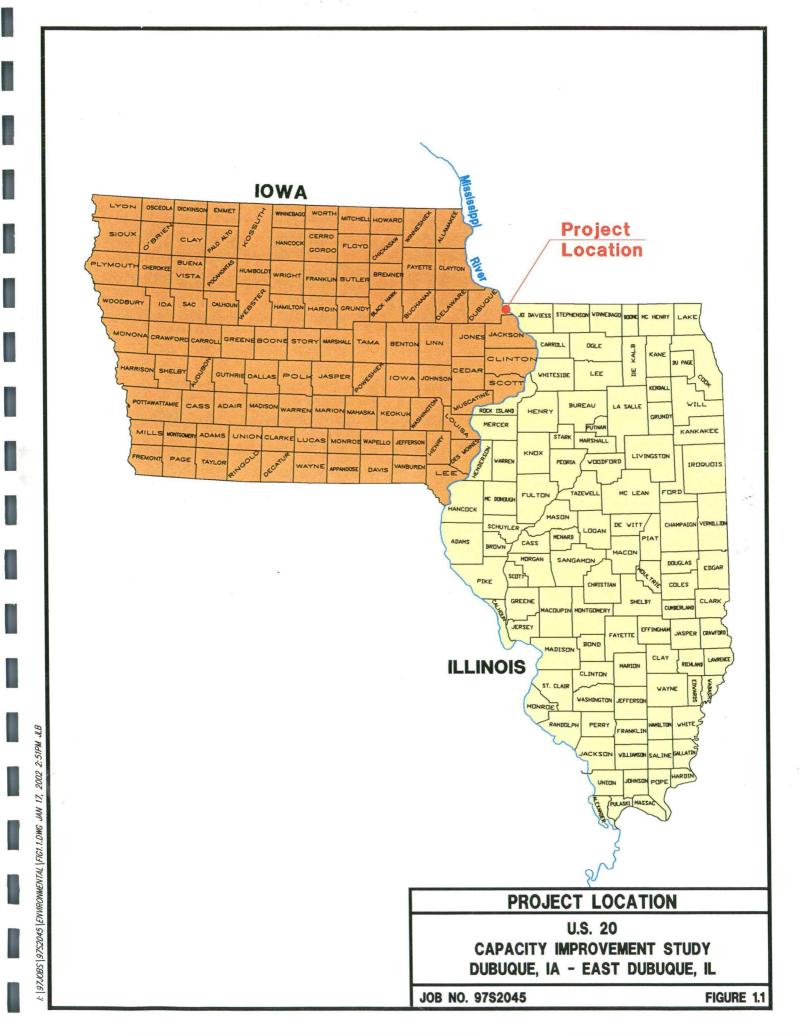
The Iowa Department of Transportation (IADOT) has expanded U.S. 20 to four lanes through much of eastern and central Iowa to accommodate this area's existing and future traffic needs. IADOT has also improved U.S. 61 and the U.S. 20/Locust Street intersection in

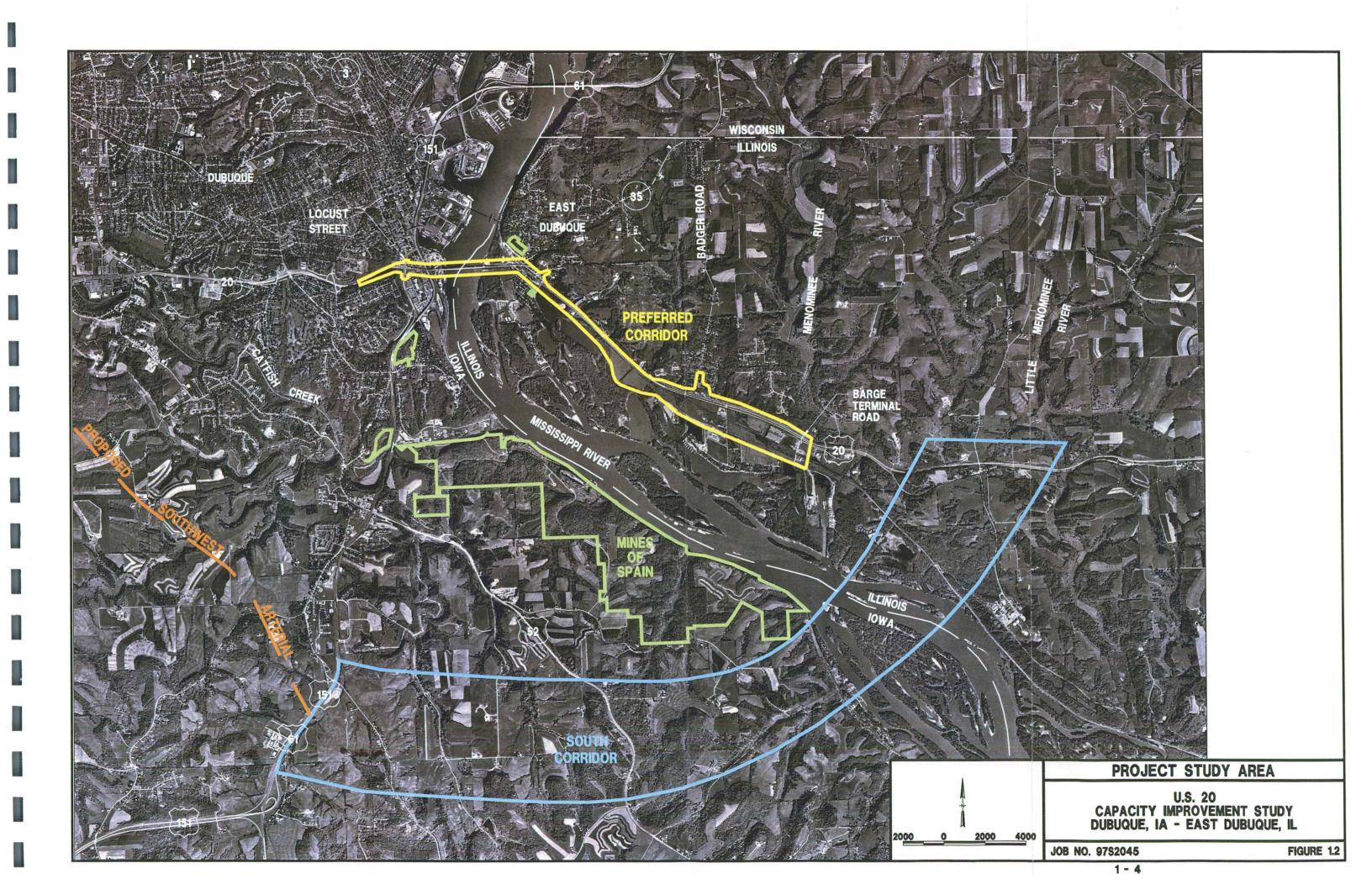
Dubuque. The Illinois Department of Transportation (ILDOT) plans to upgrade U.S. 20 to a four-lane expressway from Barge Terminal Road east of East Dubuque to Rockford, Illinois.

In 1997 the Dubuque Metropolitan Area Transportation Study (DMATS) in cooperation with the IADOT and ILDOT retained Hanson Engineers Incorporated to study alternatives to improve the capacity of U.S. 20.

A total of \$28 million has been appropriated by Congress for this improvement project with the passage of the Transportation Equity Act for the 21st Century (TEA-21).

A Notice of Intent to prepare an Environmental Impact Statement for this study was published in the Federal Register on December 11, 1998. On September 9, 1999 a Notice of Intent to cancel the Environmental Impact Statement and prepare an Environmental Assessment was issued (see Appendix C). This decision, made during an agency coordination meeting held in July 1999, was based on selecting an alternative within the preferred corridor avoiding potentially significant environmental impacts associated with an alternative in the southern corridor.





SECTION 2.0 PURPOSE AND NEED FOR THE PROJECT

SECTION 2.0 PURPOSE AND NEED FOR THE PROJECT

2.1 PURPOSE OF THE PROPOSED PROJECT

The purpose of the project is to improve the capacity of U.S. 20 across the Mississippi River. The capacity improvement is intended to reduce traffic congestion at the existing river crossing (the Julien Dubuque Bridge at Dubuque, Iowa), accommodate anticipated increases in traffic, and provide the most direct route for traffic crossing the river.

2.2 NEED FOR THE PROPOSED PROJECT

Improvement of the capacity of U.S. 20 across the Mississippi River is needed for the following reasons:

2.2.1 System Linkage

IADOT has improved U.S. 20 to four lanes through much of eastern and central Iowa. In addition, significant improvements have been made to U.S. 61 and U.S. 20 in Dubuque. IADOT is currently studying an upgrade of U.S. 20 on the far west side of Dubuque. ILDOT is studying the replacement of the existing four-lane expressway between Barge Terminal Road and IL 84 with a full freeway. Additionally, ILDOT is studying the construction of a four-lane roadway between IL 84 and Freeport. An upgrade of the existing, partially constructed Freeport Bypass Expressway is being studied to a conversion to a four-lane freeway. This will result in a four-lane freeway/expressway connecting Interstate 380 at Waterloo, Iowa and Interstate 35 near Ames, Iowa with Interstates 39 and 90 at Rockford, Illinois (see Figure 2.1).

The Julien Dubuque Bridge is a two-lane segment in the center of this 200 mile long four-lane link. U.S. 20 in East Dubuque is currently a two-lane arterial roadway with numerous access points. It is the only remaining two-lane link not under study. In addition, IADOT

recently improved U.S. 61 to four lanes from Dubuque to the Quad Cities where it connects to Interstates 80 and 74. U.S. 151 also connects Cedar Rapids, the Avenue of the Saints, I-80, and South Central Iowa.

U.S 20 in Dubuque, east of Kennedy Drive, was recently (1990) rebuilt to a partially access controlled expressway with interchanges where capacity could not be achieved with intersections. The proposed improvement would have a posted speed 45 mph, interchange geometry, typical section and access control consistent with the recently reconstructed segments in Dubuque.

2.2.2 Social and Economic Conditions

The existing bridge provides the primary link between Illinois and the employment, retail, and recreational attractions in Dubuque. The closest alternative bridge to Dubuque is located north along U.S. 61 in Wisconsin. The use of this bridge would increase adverse travel for Illinois residents by about 20 miles for each round trip. Major barge terminals are located in Illinois and Iowa near each end of the bridge. Rail facilities are also located at each end of the bridge. Capacity improvements are necessary to maintain quality access to these intermodal facilities.

Residents in East Dubuque and Jo Daviess County rely on Dubuque for medical facilities. Hospital or emergency care facilities are not available in East Dubuque. The existing bridge is a vital link in providing these emergency services. Improvements to the existing crossing would improve future access to these facilities for East Dubuque residents.

2.2.3 Traffic Demand

Dubuque and the surrounding areas have experienced rapid growth in recent years. Planned highway improvements in Dubuque, including extension of the Northwest Arterial to U.S. 52 and the proposed Southwest Arterial, will likely encourage additional commercial and light industrial development. Developments such as barge terminals, casinos and restaurants on the Dubuque riverfront have also served to increase traffic into and through the central business district.

Improvements to U.S. 20 outside of Dubuque will likely result in increased trips across the Mississippi River. The result will be increased traffic congestion at the existing river crossing. The nearest adjacent crossing is U.S. 61/151 from Iowa to Wisconsin. Use of this crossing by U.S. 20 traffic requires approximately a seven-mile detour, much of it on low capacity two-lane highway.

The ability to accommodate current and future traffic volumes is one indication of the need for highway improvements. This ability can be determined by analyzing relationships between the highway's average daily traffic (ADT) and design hourly volume (DHV) and the roadway's physical characteristics for current and future years. The average daily traffic consists of the total traffic volume passing a point on a highway on an average day. The design hourly volume is the forecast of traffic volumes for a selected hour.

The current ADT at the Julien Dubuque Bridge is 20,300. The thirtieth highest hour of traffic in the current year is 1,700 (see Figure 2.2). Traffic projections at the bridge are estimated to be about 35,000 in the design year (2025). The projected DHV is 2,900, a capacity analysis indicates that four lanes are warranted for this volume. These projections indicate the need for capacity improvements to accommodate the anticipated traffic. Capacity improvements could be provided by alternate routes or additional lanes.

The areas along existing U.S. 20 are projected to develop into commercial and residential properties generating local trips precluding the use of air or rail facilities for public transport. The City of Dubuque's Keyline Transit provides bus service along U.S. 20 as far east as Locust Street. Scheduled bus service to Illinois is not provided.

For Level of Service (LOS) studies, refer to "U.S. 20 Capacity Improvement Across the Mississippi River, Technical Memorandum Number One: Results of Origin Destination Study and Initial Traffic Forecasts and Technical Memorandum Number Two: Future Traffic

Forecasts, Existing Corridor" by Crawford, Bunte, Brammeier, December 1998 and August 1999.

2.2.4 Roadway Deficiencies

The existing facility has a number of deficiencies. The existing bridge was completed in 1943. Some of the approach spans were replaced in the early 1990s. The roadway on the existing bridge is 28 feet wide face-to-face of barriers (Figure 2.3). It does not have a shoulder to provide for errant or disabled vehicles. Twelve-foot wide lanes with 4-foot wide shoulders (face-to-face of barriers) would be required to meet current design criteria.

The roadway tapers from four lanes to two lanes at the east and west approaches to the bridge. The east approach has very short westbound entrance and eastbound exit ramps (less than 100 feet) with very tight curves (50 feet radius) and sight distance less than the American Association of State Highway and Transportation Officials (AASHTO) Standards. Also, the bike/pedestrian path extending across the bridge does not meet current AASHTO standards for bicyclists. The current posted speed is 30 mph in East Dubuque. The proposed posted speed is 45 mph, with a proposed design speed of 50 mph.

The age of the existing bridge, coupled with high traffic volumes, results in the need for frequent maintenance. It is necessary to close one lane of traffic to inspect the bridge, resulting in further impacts to traffic flow.

2.2.5 Bicycle and Pedestrian Accommodation

The existing bridge has a 4 feet, 6 inches wide walkway on the south side of the structure. AASHTO requires a minimum width of 4 feet, 0 inches There are no bicycle accommodations, bicyclists must share the roadway with motorists or the walkway with pedestrians.

2.2.6 East Dubuque Rail Traffic

As many as 80 trains per day use the tracks through East Dubuque. In addition to the safety hazards at the grade crossings, this causes delays. There is no other access to the residential areas south of the tracks. In discussions with representatives of East Dubuque, they expressed a need for a grade separation at the tracks.

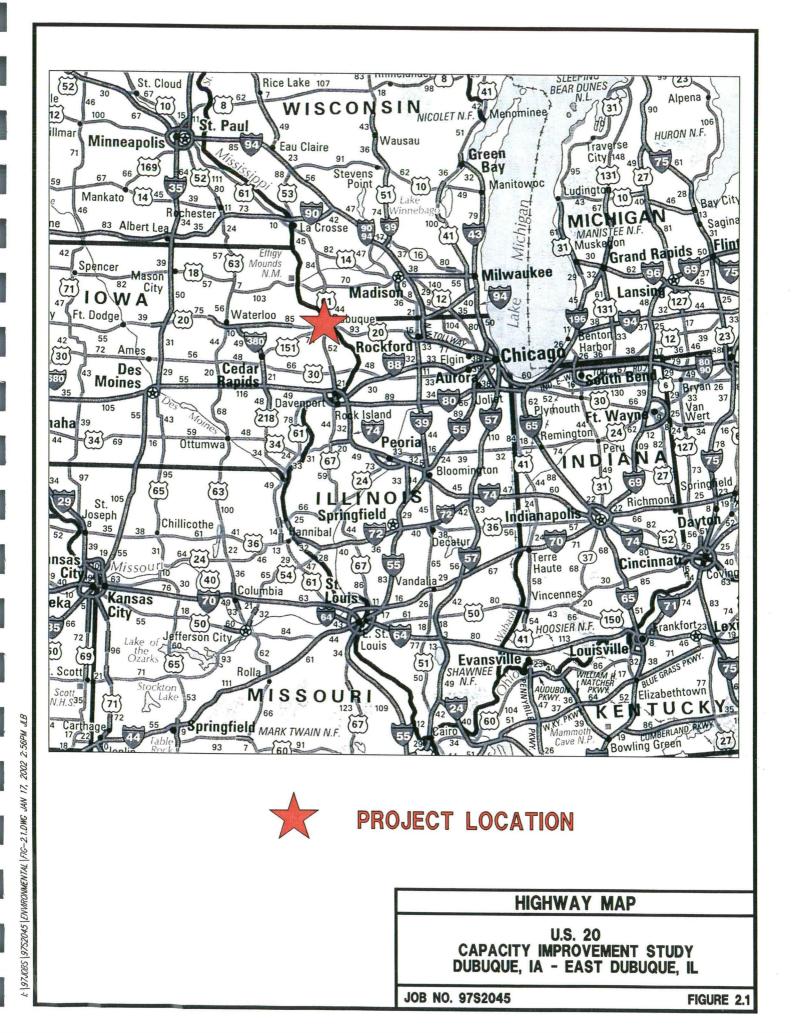
2.2.7 Transportation Planning

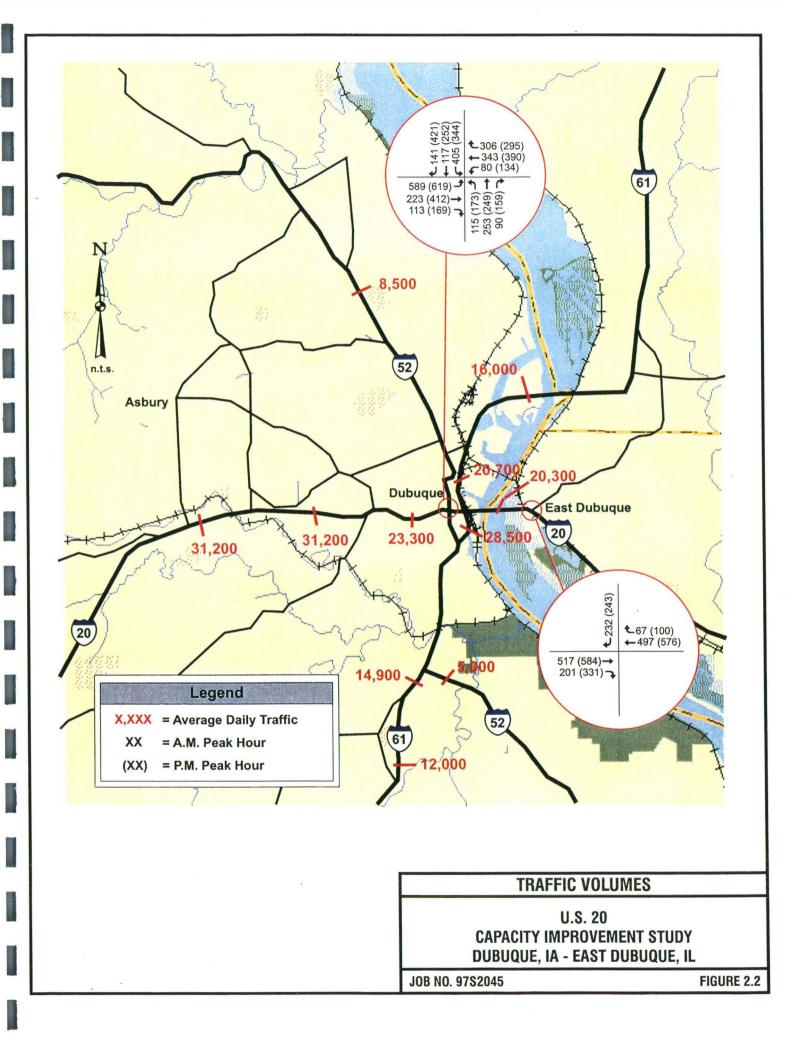
The Dubuque Metropolitan Area Transportation Study (the local metropolitan planning organization) included a four-lane improvement of U.S. 20 across the river in their transportation plan adopted in January 1995, and it is included in the revised plan adopted August 17, 2000. Therefore, the proposed project is consistent with local land use and transportation planning. Response from the local community regarding the proposed improvements has been very supportive.

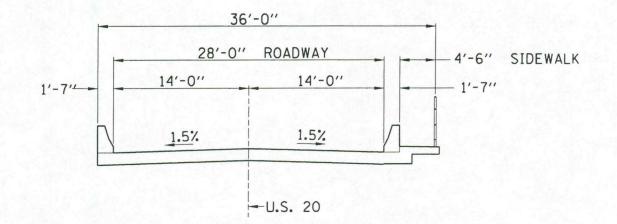
2.2.8 Legislation

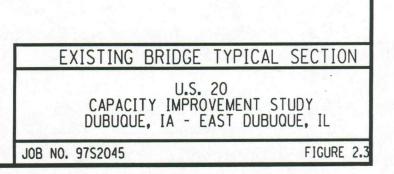
The Transportation Efficiency Act for the 21st Century (TEA-21) included the capacity improvement of U.S. 20 at the Mississippi River as a high priority project. Funding of \$28 million was included in TEA-21.

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SECTION 3.0 ALTERNATIVES CONSIDERED

SECTION 3.0 ALTERNATIVES CONSIDERED

3.1 INTRODUCTION

Alternatives considered to meet the transportation needs identified for the project include: No-Build, using other modes of transportation, and a number of four-lane build alternatives. Each of these alternatives is discussed in detail below.

3.2 NO-BUILD ALTERNATIVE

The No-Build Alternative would include maintaining the existing federal, state, county, and township roadways located within the study area. If the No-Build Alternative is selected, the existing road system would remain, receiving only routine maintenance and minor improvements. However, some improvements, such as intersection improvements on U.S. 20 in East Dubuque, could require the acquisition of right-of-way. Impacts would be minimal because of the small amount of land required for grade changes, shoulder widening, or drainage improvements. No residences or commercial businesses would likely be taken for highway use, and access to adjacent properties and travel patterns would remain unchanged.

However, the traffic across the Julien Dubuque Bridge will gradually increase. As discussed in Section 2.2.3, the volume of vehicles using the bridge is steadily increasing. As the areas adjacent to the bridge and its surroundings develop, both commercially and/or residentially, the number of motorists using the bridge will rise.

The No-Build Alternative would fail to meet any of the items listed as the purpose and need for the project since the capacity of U.S. 20 across the river would not be improved and existing deficiencies would remain. This alternative also fails to improve system linkage resulting in a section of low-capacity roadway within a four-lane corridor. U.S. 20 would continue to lack traffic capacity across the river. The opportunity for economic development of

the study area may be lowered by the increased delays in crossing the river. The safety concerns, geometric problems and other pertinent aspects described under purpose and need would remain unchanged. Therefore, the No-Build Alternative has been eliminated from further study, but will be used as a comparison for other alternatives.

3.3 USING OTHER MODES OF TRANSPORTATION

Regular, scheduled public transportation only exists on the Dubuque side of the river and does not currently exist within the remaining portions of the study area to provide an alternate mode of transportation. There are on-demand transit systems operated by the City of East Dubuque and by Jo Daviess County. If a public transportation system would be extended across the river, it is unlikely that it would result in a sufficient reduction in traffic to eliminate the need for capacity improvement because of the convenience of vehicular transportation within the area. If bus service was extended to East Dubuque a four-lane improvement would enhance the operations. Amtrak does not have any stops in the area. A general aviation airport is located on the south side of Dubuque and offers commercial airline service.

3.4 BUILD ALTERNATIVES

The following general guidelines were established for developing construction alternatives:

- 1. IADOT has recently improved U.S. 20 west of Locust Street. The typical urban section, design speed, and maximum grade in this area will not change.
- 2. ILDOT plans to upgrade U.S. 20 to a freeway or expressway from Barge Terminal Road east to Freeport. This improvement will likely include both reconstruction of existing U.S. 20 and construction on new alignment. Any improvements to U.S. 20 within the project limits in Illinois must be compatible with a future upgrade to a freeway or expressway.

- A south alignment should connect to U.S. 61 at the location of the proposed IA 32 (Southwest Arterial) to provide for system linkage.
- 4. A north alignment should connect to existing U.S. 20 immediately west of Locust Street and continue to east of Barge Terminal Road to link the recently upgraded sections of U.S. 20 in both Iowa and Illinois portions of the project.

3.4.1 Alternatives

An origin and destination (O&D) (Results of Origin and Destination Study and Initial Traffic Forecasts, 1999) study conducted for this project provided a clear snapshot of the current traffic characteristics on the Julien Dubuque Bridge (see Figure 3.1). Key points from the study include the following:

- Most trips are made entirely within the region or are external trips to internal trips. Very few trips are external to external (less than 14 percent);
- This trip pattern is consistent with a regional center such as Dubuque that is not on the interstate system; and
- Both the Dubuque and East Dubuque downtown areas are among the biggest benefactors of the existing bridge location, not just in primary trips but passby trips as well.

3.4.1.1 South Corridor

The south corridor extends from U.S. 61 near the proposed Southwest Arterial to U.S. 20 east of Barge Terminal Road (see Figure 1.2). Based on the information from the O&D survey, it is possible to determine how many trips might potentially be attracted to a southern bypass if a new facility were built. These estimates assume that the existing structure would remain. Removal of the existing structure would split trips between U.S. 61 crossing to the north and a

new span to the south, but as many as 80 percent of these trips would be adversely affected by taking longer to get to their destination than they currently do.

A maximum of 15.6 percent of the average daily trips would benefit from a new southern alignment. These are trips that either currently have to go the furthest out of their way by crossing at the current location now, or trips that would benefit from a quicker alignment to the west side of Dubuque.

Closure of the existing facility would result in nearly all of the existing bridge traffic diverting to the southern alignment, although as much as 3,100 would likely divert north to the U.S. 61/U.S. 151 bridge. This would leave a total of approximately 17,195 on the southern alignment. This would be enough volume to justify this facility, but it would most likely have a serious negative impact on the downtown areas of both Dubuque and East Dubuque.

Both Dubuque and East Dubuque downtown areas are currently the biggest benefactors of the existing bridge location. This is because both rely on the quick access provided by the existing facility for both their work population and for pass-by trips that terminate in the downtown area. Downtown Dubuque has almost 3,000 pass-by trips terminate, of which approximately 2,250 were on their way to somewhere else.

Based on the origin and destination study and the potential for significant environmental impacts, it was recommended by the study team during a resource agency meeting held in July 1999 that all southern alignment alternatives be eliminated from further study. All of the resource agencies in attendance concurred with the recommendation. A south alignment does not achieve the purpose and need since it does not improve the capacity of U.S. 20 across the river while providing a direct route for traffic. A new bridge on a south alignment would not attract sufficient traffic to warrant its construction, and it would not attract sufficient traffic from the existing structure to eliminate the need to add lanes in the future. The south alternative would also have a higher construction cost and a much higher probability of impacts to environmental resources including wetlands, threatened and endangered species habitat, cultural resources, farmland, and Section 4(f) lands.

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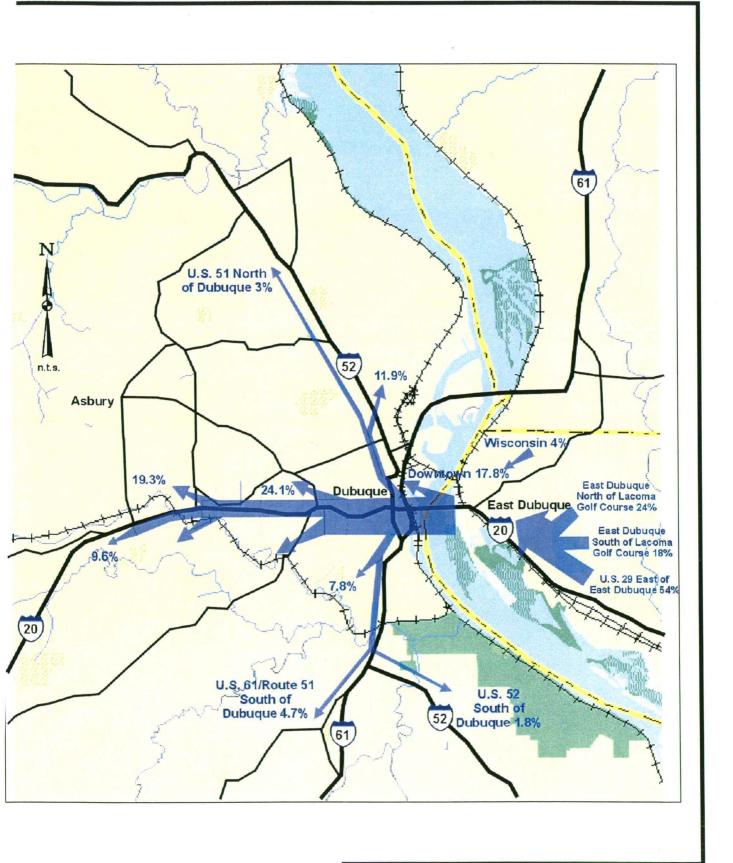
3.4.1.2 Preferred Corridor

The preferred corridor follows existing U.S. 20 from U.S. 61 (Locust Street) in Dubuque to U.S. 20 near Barge Terminal Road in Illinois (see Figure 1.2). To determine the solution that best meets the purpose and need for the project, 17 concepts in the preferred corridor were considered, 14 of which involved the East Dubuque portion of U.S. 20, and three that would improve the Dubuque side. Table 3.1 contains a short description of each of the initial concepts.

Alternative	Type	Description	
A Dubuque	Partial Cloverleaf Interchange	• Parclo interchange with junction at U.S. Routes 20, and 151/61	
		Outer connection ramps	
		Full access control	
B Dubuque	At-grade Intersection	• Improvement of existing at-grade intersection to include dual left turn lanes, dual thru lanes, and dedicated right turn lanes at each corner	
		No access control	
C Dubuque	Single Point Urban Interchange	• Single point diamond interchange to replace existing at- grade intersection	
		Full access controlled	
D East Dubuque	At-Grade and Freeway	• Two entirely new bridge approaches that, in the interim, will function as the eastbound and westbound lanes into and out of East Dubuque, and then later as on/off ramps for a future freeway/expressway section	
		Grade-separation at Sixth Street	
		 No access control in interim 	
		Construct future four-lane expressway/freeway southwest of the railroad tracks	
		• Existing U.S. 20 would remain in interim with the addition of left turn lanes east of Sixth Street and significant downtown improvements	

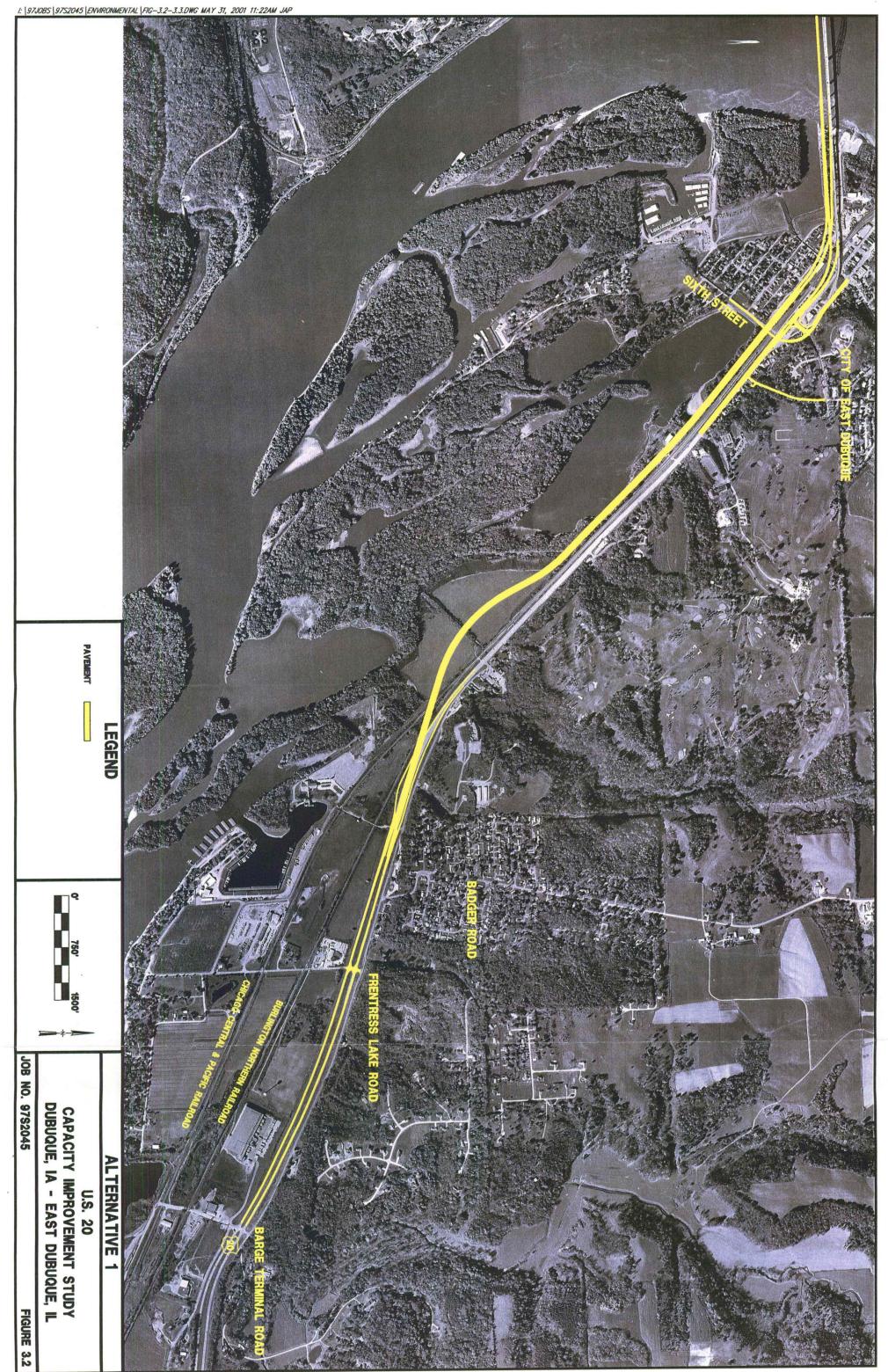
 Table 3.1: Alternative Concepts (Preferred Corridor)

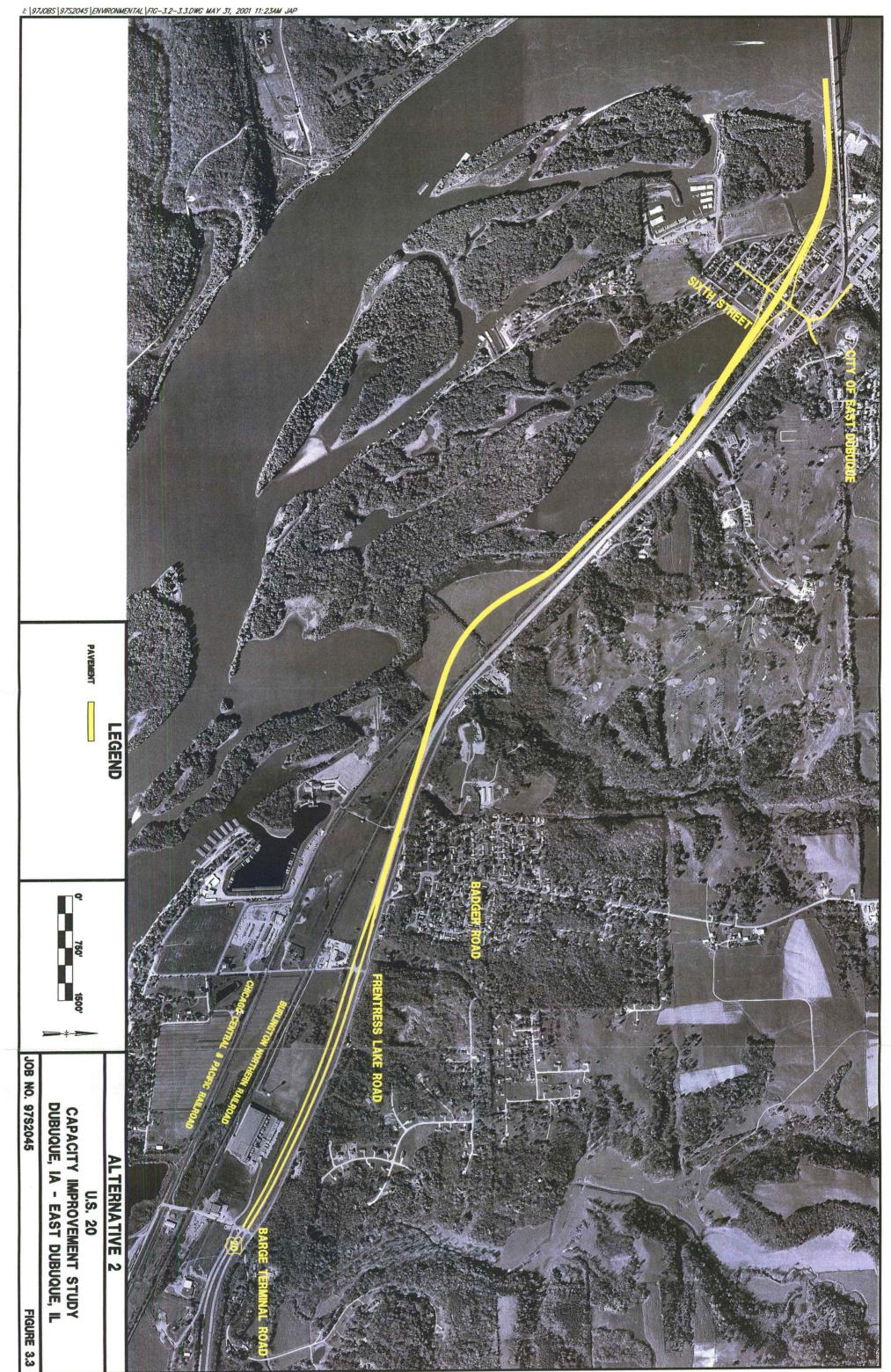
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ORIGIN AND DESTINATION RESULTS U.S. 20 CAPACITY IMPROVEMENT STUDY DUBUQUE, IA - EAST DUBUQUE, IL JOB NO. 97S2045 FIGURE 3.1

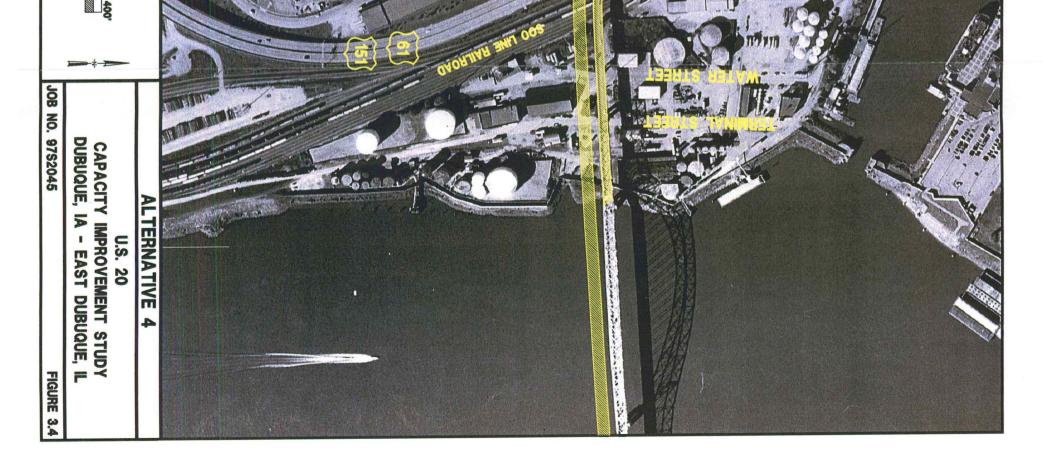


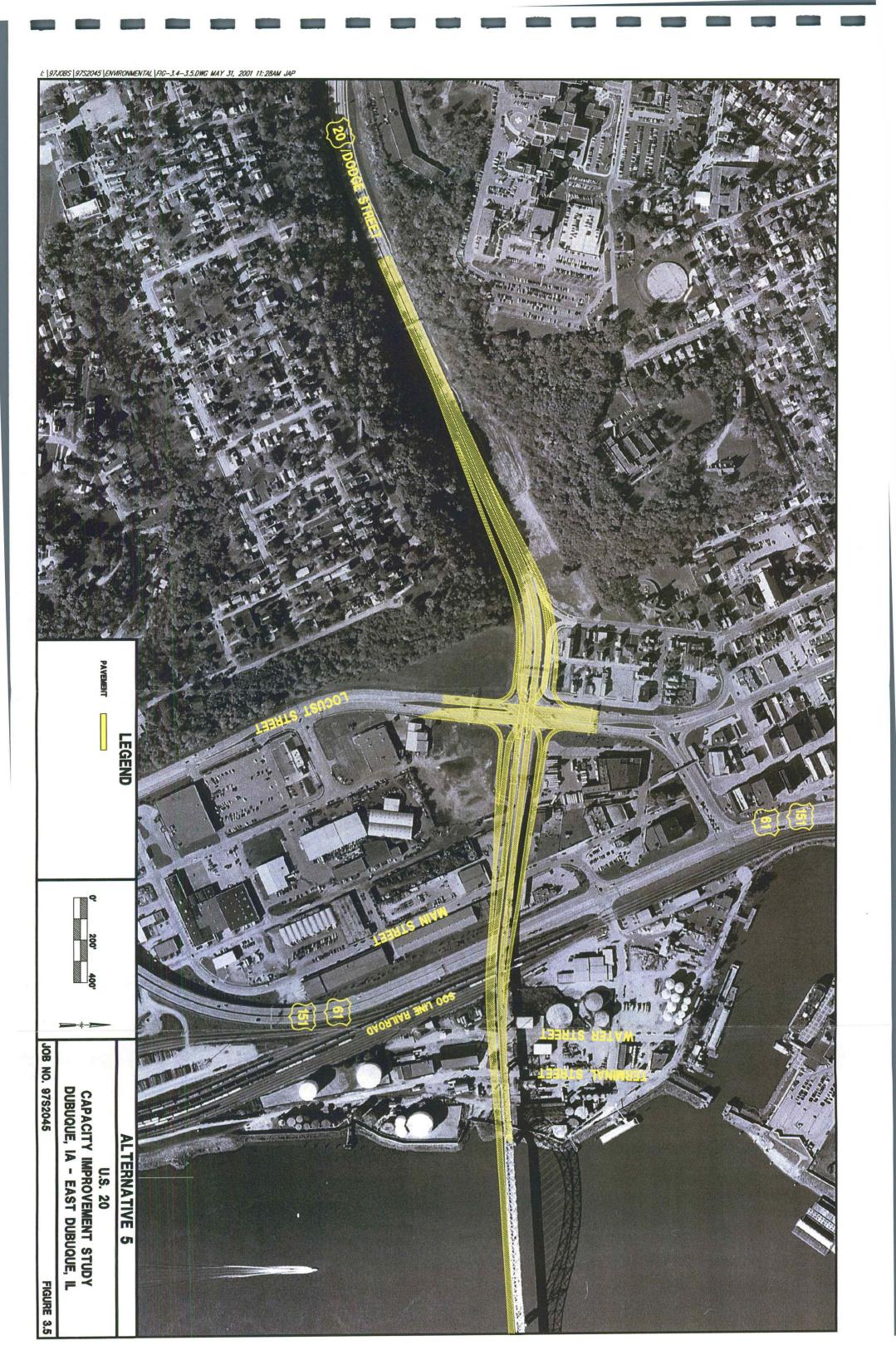


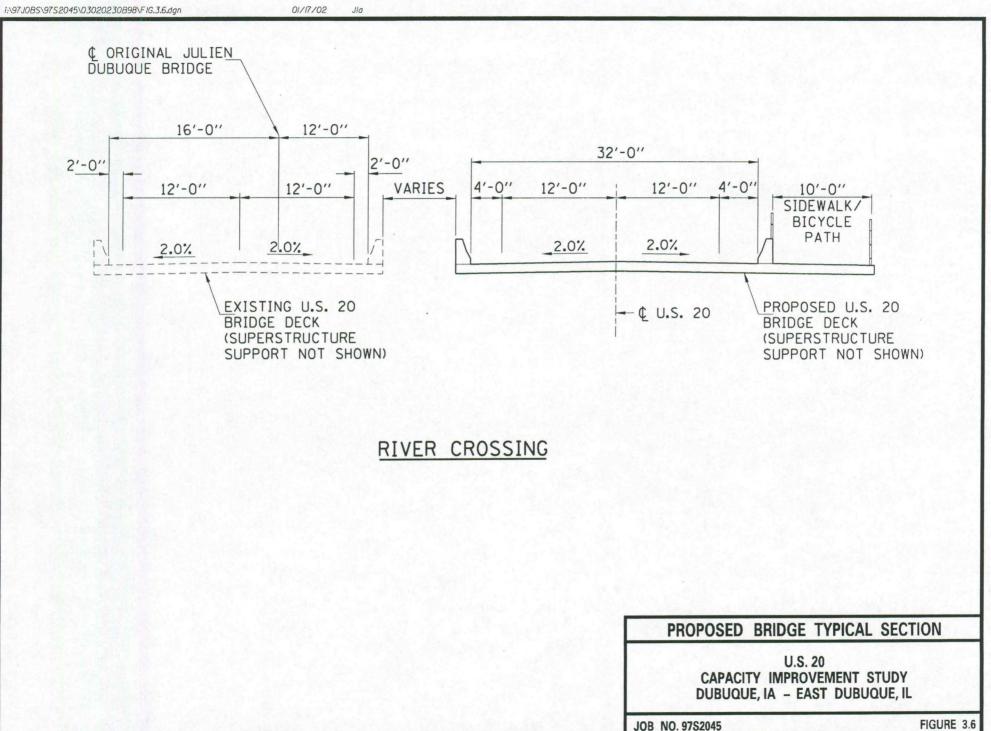


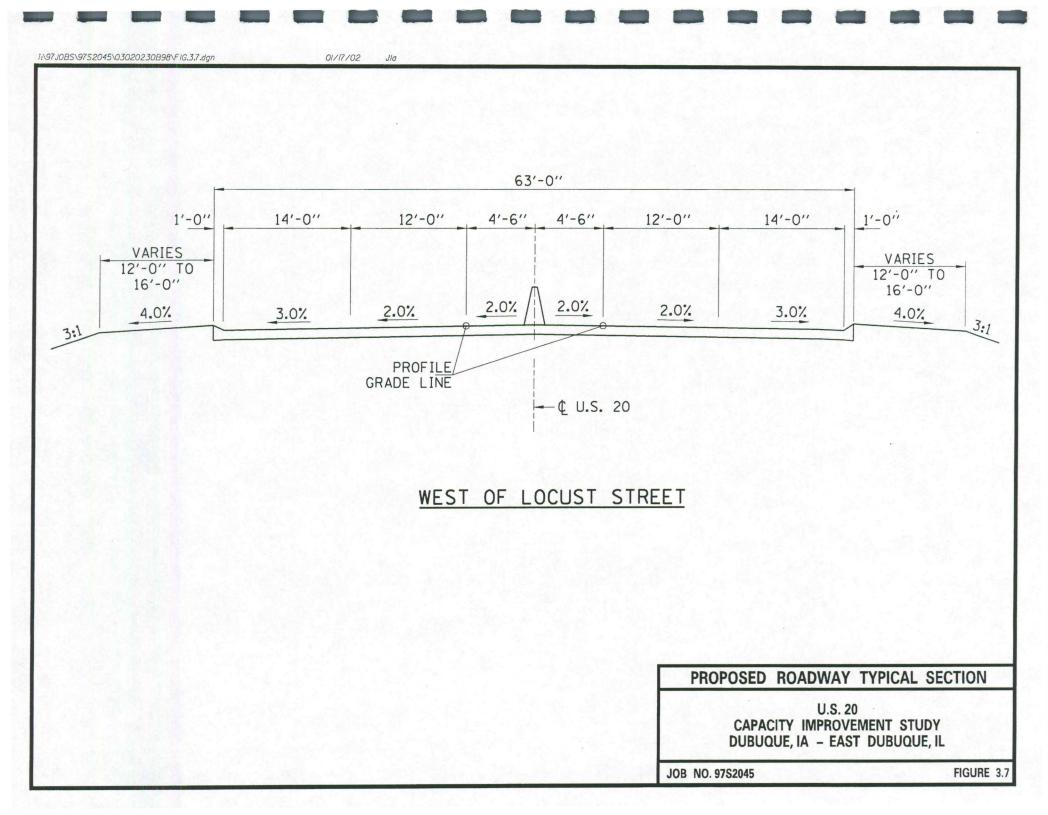


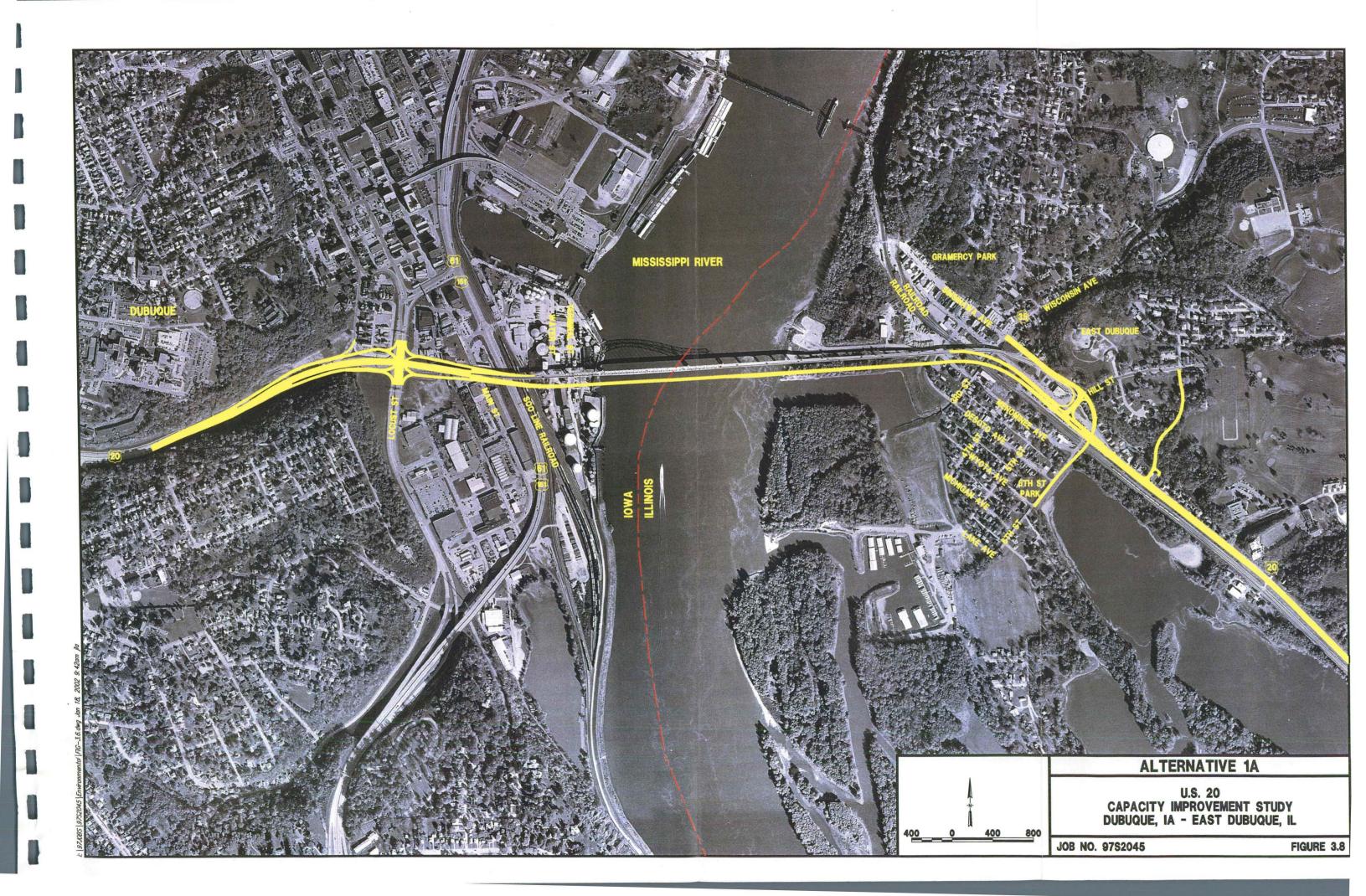
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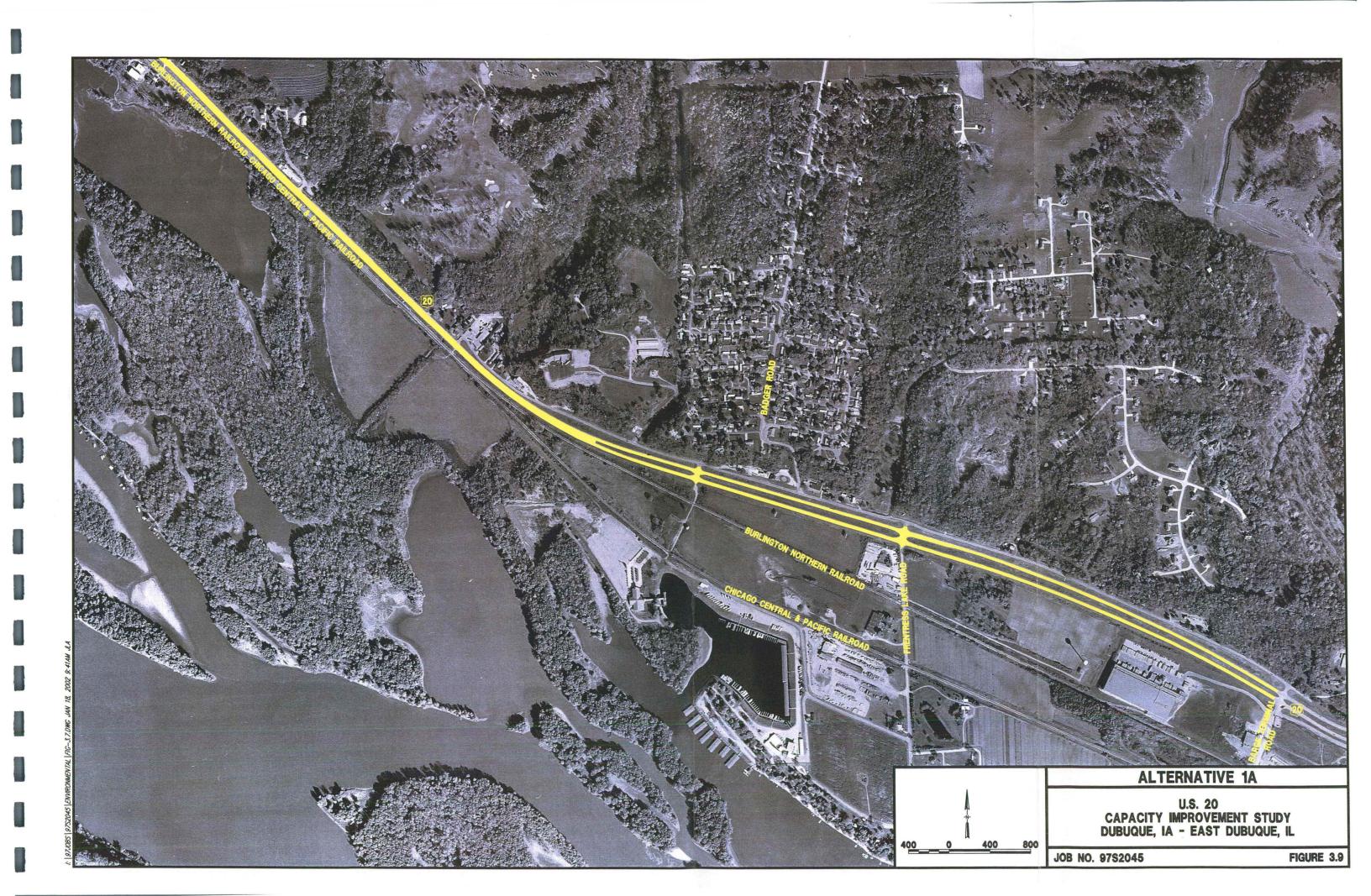


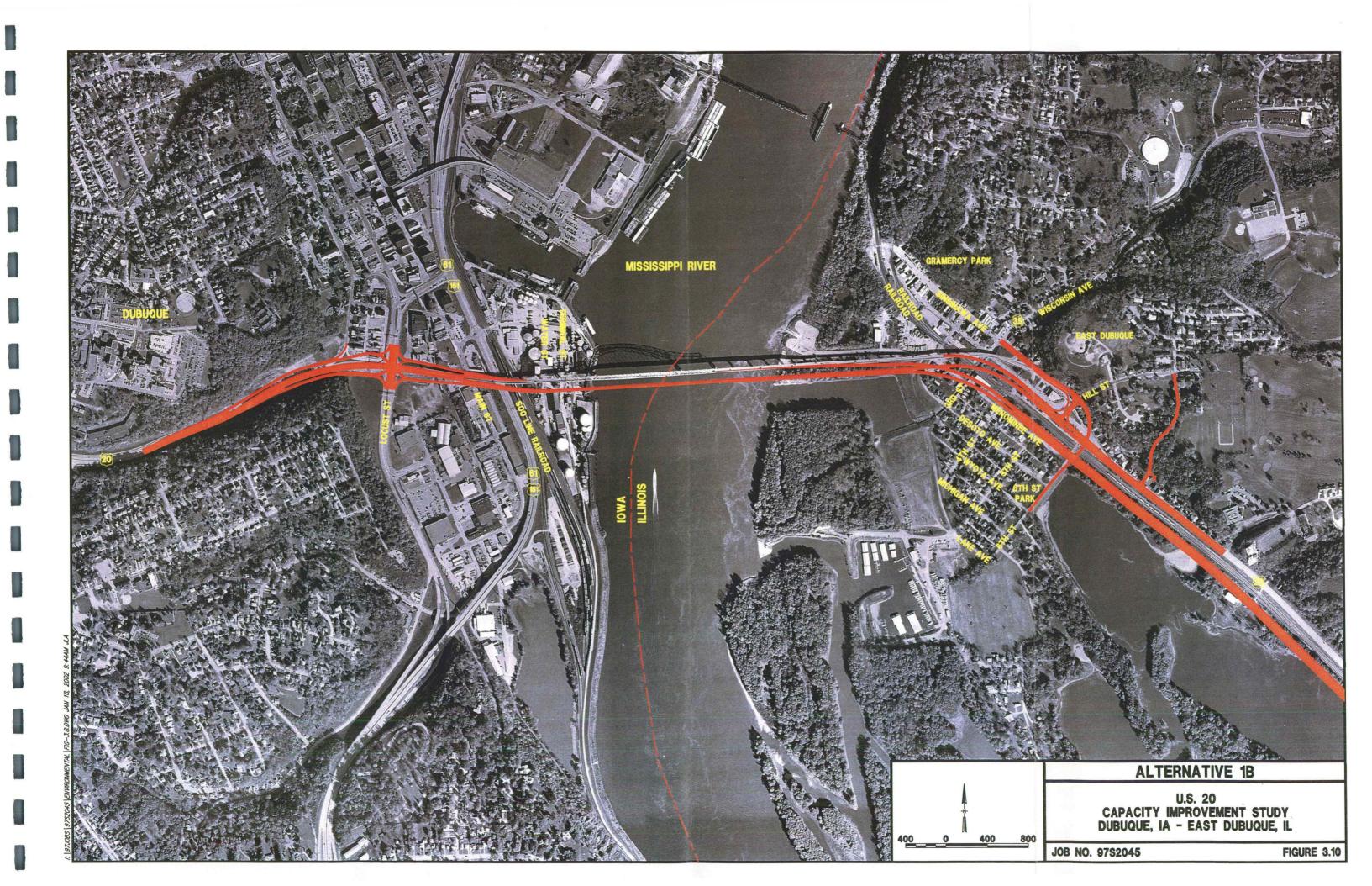


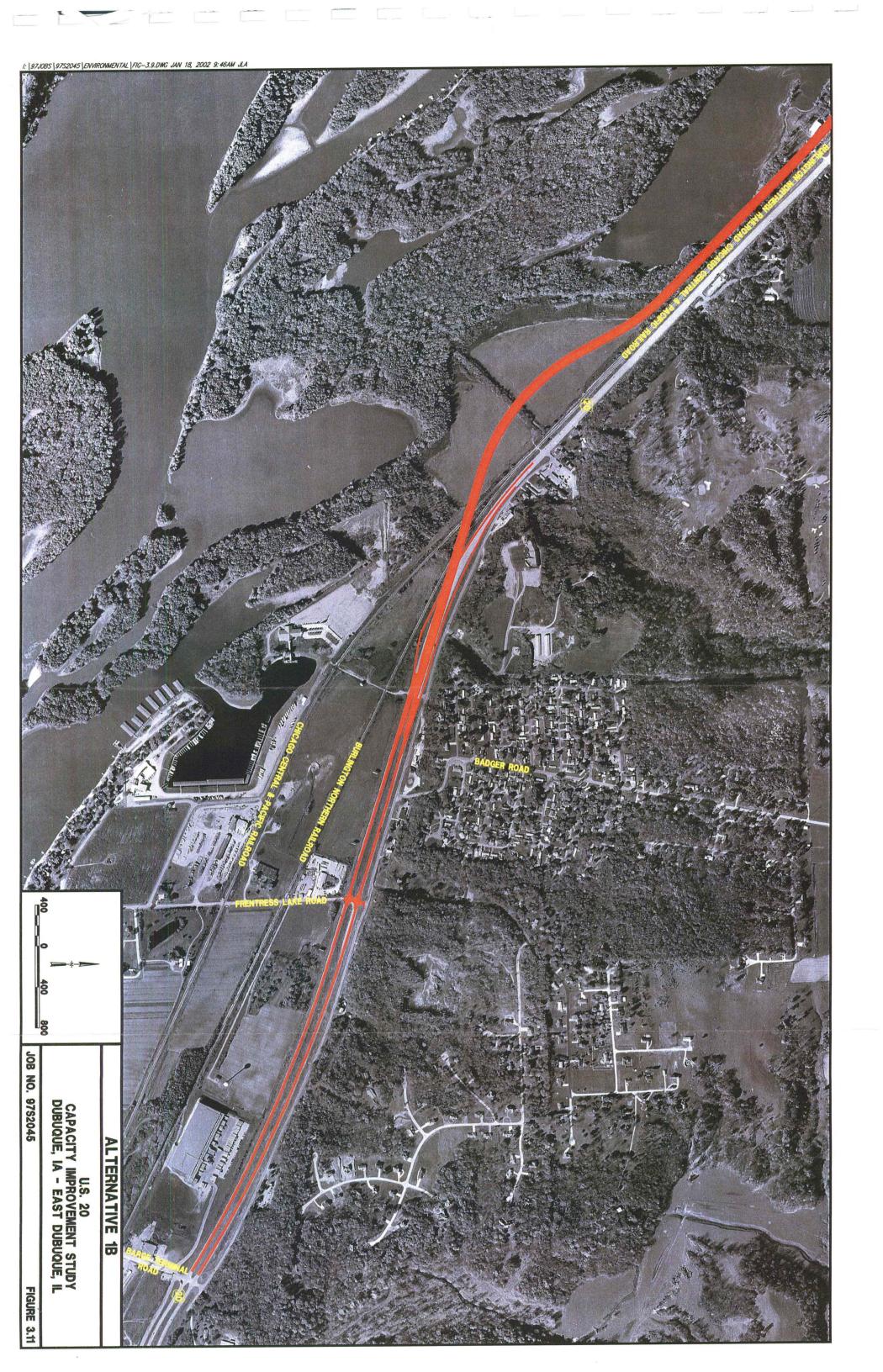












SECTION 4.0 AFFECTED ENVIRONMENT

1

SECTION 4.0 AFFECTED ENVIRONMENT

The preferred corridor consists primarily of the urban area of Dubuque, Iowa and East Dubuque, Illinois. The southern corridor consists primarily of agricultural land, pasture and forest. Both project corridors are bisected by the Mississippi River (see Figure 1.2).

An early coordination document was sent to federal, state and local agencies describing the purpose and need for the project, the project location, and the potential environmental impacts. The purpose of the document was to notify the agencies of the project and solicit information on significant environmental resources within the project study area so that they could be avoided and impacts minimized during the alternative selection process. Agency coordination will continue throughout the study process until the environmental documentation is approved.

4.1 LAND USE

Existing land use within the study area consists primarily of an urban environment within Dubuque and East Dubuque consisting of commercial, industrial and residential zoned areas. The surrounding area is characterized by gently rolling hills of residential, pasture land and wooded areas. The project area is bisected by the Mississippi River and its flood plain. The flood plain contains numerous islands of bottomland forest intertwined with backwater lakes of various sizes. See Figures 4.1 and 4.2 for existing land use and future land use plans.

The project study area contains several notable natural resources including the Mississippi River, the Mines of Spain State Recreation Area, Catfish Creek Preserve, the National Upper Mississippi Wildlife and Fish Refuge, along with various historic landmarks and state geological natural areas (see Figure 1.2).

The Mines of Spain State Recreation Area and the adjacent Catfish Creek Preserve contain about 2,000 acres of forested Mississippi River bluffland. This area, located immediately south of Dubuque and extending about 3.5 miles along the river bluff, contains the Julien Dubuque Monument, built in 1897, former lead mines and dolomite quarries, an interpretive center, 14 miles of hiking trails, and numerous threatened and endangered animal and plant species. The Mines of Spain was dedicated as a state recreation area in 1981.

All build alternatives would cross the Upper Mississippi National Wildlife and Fish Refuge. The Refuge extends for 261 miles along the Mississippi River through portions of Minnesota, Wisconsin, Iowa and Illinois. The Refuge encompasses almost 194,000 acres of river, wetlands and bottomland forests and provides habitat for numerous endangered and threatened species. Approximately 3.5 million guests visit the Refuge annually. All of the build alternatives crossing the Mississippi River will impact a portion of this refuge land.

4.2 FARMLAND

Dubuque County, Iowa is primarily agricultural, supporting a range of grain crops and livestock. Jo Daviess County, Illinois also supports a considerable amount of agriculture, mostly corn, small grains, pasture, hay, and livestock. The project corridor follows a more urban setting, minimizing the potential impacts to agriculture.

4.3 WATER RESOURCES

The project area contains one significant, permanent water resource. The Mississippi River bisects the project area and is an important resource for commercial navigation, fishing, recreation, and wildlife habitat (see Figure 1.2). The <u>Illinois Water Quality Report 2000</u> (IEPA) lists this segment of the Mississippi River as having full overall use, full aquatic life, full drinking water supply use, and partial support fish consumption.

The Mississippi River is considered to be a Class I stream in Illinois because it contains habitat for the Federally endangered Higgins' eye pearly mussel and other mussel fauna. There

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are no other Class I streams or high quality surface water resources located within the right-ofway of the preferred alternative. Other than the Mississippi River, none of the surface water resources are wild and scenic rivers, candidates for such designation, state natural areas or nature preserves, or threatened or endangered species habitat.

The preferred alternative would require crossing only the Mississippi River. An unnamed tributary to the Mississippi River extends along Third Street in East Dubuque and two lakes adjacent to U.S. 20 located south of East Dubuque also occur within the project area. No known water quality information exists for these water resources.

The communities of Dubuque and East Dubuque rely on groundwater wells in the vicinity of the river to supply potable water. The groundwater wells for Dubuque are located north of the project area. No sole source aquifers exist in the project area. However, two wellhead protection recharge areas for the municipal wells of East Dubuque occur in the project area. Well No. 2, located at the northeast quadrant of Second Street and Menominee Street, has its protection area crossed by U.S. 20 at the eastern end of the Julien Dubuque Bridge. The Well No. 3 protection area, located along the northwestern side of Sixth Street between Menominee and DeSoto Streets, is also currently crossed by U.S. 20.

4.4 WETLANDS

Highway construction projects reflect the national goal of no overall net loss of wetlands. State DOTs must meet Federal requirements of avoiding and minimizing the loss of wetlands, and must also meet Iowa Code Section 314.23 and the Illinois Interagency Wetland Policy Act of 1989. The Interagency Wetland Policy Act of 1989 implemented the State Wetland Mitigation Policy, which directs that Illinois state agencies shall preserve, enhance, and create wetlands where possible and avoid adverse impacts to wetlands from construction. If no feasible alternatives exist and adverse wetland impacts are unavoidable, then a Wetland compensation Plan must be developed to adequately compensate for the wetland impacts incurred by the recommended action. All feasible actions were taken to avoid wetland impacts. In cases where wetland impacts were unavoidable, the degree of impact was minimized to the extent possible. Wetlands within the right-of-way of the preferred alternative were identified in accordance with the <u>1987 Corps of Engineers Wetlands Delineation Manual</u> during the summer of 1999. Only the areas that met the three parameters required by the manual, i.e., hydrophytic vegetations, hydric soils, and wetland hydrology, were determined to be wetlands. Most of the National Wetlands Inventory (NWI) designated wetlands were determined to be regulated (jurisdictional) wetlands because of the presence of all three parameters.

The U.S. Fish and Wildlife Service's National Wetlands Inventory (NWI) mapping depicts numerous wetlands within the project study area (Figure 4.3). The Illinois portion of the Dubuque South Quadrangle NWI map depicts over 2,000 acres of wetlands. Most of these wetlands occur on the islands and within the flood plain of the Mississippi River. Wetlands identified on the NWI mapping outside of the Mississippi River flood plain are predominately isolated man-made ponds for agricultural purposes and streams. The predominant wetland types located within the Mississippi River flood plain include bottomland forested and scrub-shrub wetlands. A lesser amount of emergent wetlands occur within the flood plain. A wetlands determination survey was conducted within the preferred corridor to identify jurisdictional wetlands which may be impacted by the proposed project. The wetlands identified in the project area are all similar in their physical attributes and functionality as the wetlands impacted by the preferred alternative (see Table 5.2).

4.5 NATURAL RESOURCES

Two Illinois Geological Natural Areas, the East Dubuque Geological Area and the Dixon Creek North Geological Area, are reported by the Illinois Department of Natural Resources as occurring within the vicinity of the project area (Appendix B). Both geological areas occur outside of the project area.

A large portion of the land within the U.S. 20 project area is agricultural or urban and provides low-quality habitat for most mammals. However, there are areas consisting of pasture, hayfields, and fallow field interspersed with patches of upland and bottomland forest. Many

larger mammals are habitat generalists and typically occur in a mosaic of agricultural and wooded areas. Examples are the badger (*Taxidea taxus*), Virginia oppossum (*Didelphis virginiana*), Eastern cottontail (*Sylvilagus floridanus*), red fox (*Vulpes vulpes*), raccoon (*Procyon lotor*), and white-tailed deer (*Odocoileus virginianus*). Several small grassland mammals, such as the least shrew (*Cryptotis parva*), deer mouse (*Peromyscus maniculatus*), prairie vole (*Microtus ochrogaster*), and meadow jumping mouse (*Zapus hudsonuis*), are tolerant of disturbed conditions and occur in open areas such as pastures, hayfields, old field and roadsides. Although the forests within the project are highly fragmented, they are suitable for many mammals including the Eastern chipmunk (*Tamius striatus*), fox squirrel (*Scuirus niger*) and gray fox (*Urocyon cinereoargenteus*).

Most bats are migratory and individuals inhabiting the project area would likely spend winters elsewhere, most hibernating in caves or mines. Backwater areas of the Mississippi River, streams, drainage ditches and ponds provide suitable habitat for beaver (*Castor canadensis*), muskrat (*Ondatra zibethica*) and mink (*Mustela vison*). The old world house mouse (*Mus musculus*) and Norway rat (*Rattus norvegicus*) are commonly found in association with humans and are likely present around farmsteads and residential areas of the project area.

4.6 THREATENED AND ENDANGERED SPECIES

The U.S. Fish and Wildlife Service and the Iowa and Illinois Departments of Natural Resources have responded to the project early coordination document by providing lists of endangered, threatened and state special concern species and areas of rare, natural communities (see Appendix B). The U.S. Fish and Wildlife Service listed the following Federally protected species that may occur within the project study area.

The Federally threatened bald eagle (*Haliaeetus leucocephalus*) is listed as breeding in Dubuque County, Iowa and Jo Daviess County, Illinois. It is also listed as wintering along large rivers, lakes and reservoirs in both of the above-mentioned counties. During the winter, this species feeds on fish in the open water areas created by dam tailwaters, the warm water effluents of power plants and municipal and industrial discharges, or in power plant cooling ponds. They perch in large shoreline trees to rest or feed on fish. There is no critical habitat designated by the U.S. Fish and Wildlife Service for this species within the project study area. The bald eagle may not be harassed, harmed or disturbed when present, nor may nest trees be cleared without coordination with the U.S. Fish and Wildlife Service. The bald eagle is a common winter resident in the project area. There are no known night roosts in the project area. Construction of the new bridge will not impact foraging or resting perches utilized by the eagle. There are no known nesting sites within the project area. Therefore, the project will not impact the bald eagle.

The Federally endangered Iowa pleistocene snail (*Discus macclintocki*) is found on north-facing slopes of the driftless area in Dubuque County, Iowa and Jo Daviess County, Illinois. It occupies algific (cold producing) talus slopes at the outlet of underground ice caves along limestone bluffs within a narrow regime of soil moisture and temperature. There is no critical habitat designated by the U.S. Fish and Wildlife Service within the project study area. This species must not be harmed, harassed, or disturbed. There is no known suitable habitat for the Iowa Pleistocene snail in the project area. The project will not impact this species.

The prairie bush clover (*Lespedeza leptostachya*) is listed as Federally threatened in Iowa where it is considered to potentially occur statewide based on historical habitat. It occupies dry to mesic prairies with gravelly soil. There is no critical habitat designated by the U.S. Fish and Wildlife Service for this species within the project study area.

The northern monkshood (*Aconitum novaboracense*) is listed as Federally threatened in Dubuque County, Iowa. It occupies north-facing slopes in the driftless area of northeast Iowa and one slope along the Iowa River. The U.S. Fish and Wildlife Service has designated no critical habitat for this species within the project study area. There is no known suitable habitat for the northern monkshood in the project area. The project will not impact this species.

The western prairie fringed orchid (*Platanthera praeclara*) is listed as Federally threatened and is considered to potentially occur statewide based on historical records and habitat distribution. It occupies wet grassland habitats. The U.S. Fish and Wildlife Service has designated no critical habitat for this species within the project study area. There is no known

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suitable habitat for the western prairie fringed orchid in the project area. The project will not impact this species.

The Federally endangered Higgins' eye pearly mussel (*Lampsilis higginsi*) is listed for the Mississippi River north of Lock and Dam 20, which includes Jo Daviess County, Illinois and Dubuque County, Iowa. This species prefers sand/gravel substrates with a swift current and is most often found in the main channel border or an open, flowing side channel. There is no agency designated critical or essential habitat for this species within the project study area. However, there have been documented populations recorded upstream and downstream of the existing Julien Dubuque Bridge. A mussel survey was conducted in the Mississippi River at the proposed bridge location. There is suitable habitat for the Higgins' eye pearly mussel in the project area. A single live individual was located approximately 400 feet north of the existing Julien Dubuque Bridge. This individual was located on the Iowa side of the river in 35 feet of water. The substrate at this location consisted of sand, gravel and rubble and was fairly firm and stable. A shell of this species was also found under the Julien Dubuque Bridge on the Iowa side of the river.

The Iowa Department of Natural Resources (IADNR) listed the following state-listed species as potentially occurring within the project study area.

The Higgins' eye pearly mussel is listed as both Federally and state endangered. The river otter (*Lutra canadensis*) is listed as state threatened in Iowa. The major portion of the population occurs along the backwaters of the Mississippi River. Important characteristics of river otter habitat include: waterways isolated from the large river channels, riparian habitat with extensive woodlands, good water quality, and the presence of suitable den sites and open water during winter. There is no known suitable habitat for the river otter in the project area. The project will not impact this species.

Plant species include the glandular wood fern (*Dryopteris intermedia*), jeweled shooting star (*Dodecatheon amethystinum*), and leathery grape fern (*Botrychium multifidum*) as state threatened species and great plains ladies tresses (*Spiranthes magnicamporum*) as a state special

concern species. The glandular wood fern occurs in moist, shaded sandstone crevices and wooded swamps. The jeweled shooting star is found on moist, shaded river bluffs. The leathery grape fern occurs in mesic forests, sand savannas, and successional habitats. The great plains ladies tresses is typically found on dry bluff or hill prairies over limestone or dolomite. There are no known suitable habitats for these four species in the project area. The project area will not impact these species.

The Illinois Department of Natural Resources (ILDNR) reviewed their Natural Heritage Database for the presence of endangered or threatened species, Illinois Nature Preserves, and Illinois Natural Areas Inventory (INAI) sites. Three INAI sites are located in the project vicinity along with three state endangered or threatened species.

The project area is within five miles of the East Dubuque Geological Area and the Dixon Creek North Geological Area INAI sites. Two state endangered plants species have been documented as occurring near the project area; these include meadow horsetail (*Equisetum pratense*) and hairy woodrush (*Luzula acuminata*). The meadow horsetail occurs on north-facing slopes of dry-mesic sand forests. The hairy woodrush occurs on forested St. Peter's Sandstone outcrops. Also, the longnose dace (*Rhinichthys cataractae*) which has been found in the Menominee River, about two miles south of East Dubuque, is listed as an Illinois watch list species. The longnose dace prefers small streams and sometimes is found living in turbulent waters. There is no known suitable habitat for these three species in the project area. The project will not impact these species.

4.7 CULTURAL RESOURCES

Cultural resources include significant archaeological and standing properties. The project study area includes numerous cultural resources that have been previously documented and has the potential to include many additional archaeological sites that have not yet been discovered or documented.

Historic districts in the project study area include the Old Main Street District and the Cathedral and Washington Park historic districts. Near the Julien Dubuque Bridge the old ice harbor contains the Diamond Jo Boat Store and Office, which is listed in the National Register of Historic Places. The Julien Dubuque Bridge is itself listed on the National Register.

There is a high potential for sites of National Register status in the areas immediately to the north, west, and south. Bluff areas along a major river valley have a high potential for archaeological sites dating from the prehistoric and early historic periods. An archaeological and historic structure survey was conducted within the project area to identify significant resources. This information is presented in Section 5.7.

4.8 HAZARDOUS WASTE SITES

A review of readily available hazardous materials information indicates the presence of several potentially contaminated sites in the project area. The project area passes through the industrial and commercial areas of Dubuque and East Dubuque; therefore, it has a greater potential for hazardous materials sites. Various sites included in the September 13, 2001 Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) database, Leaking Underground Storage Tank (LUST) database, and Resource Conservation and Recovery Act database (RCRA) are located within the project corridor. Most of these sites are located within 1.0 mile of existing U.S. 20 and are primarily associated with leaking underground storage tanks. Section 5.8 discusses each of these properties in greater detail.

4.9 VISUAL

The visual environment of the U.S. 20 project area is comprised primarily of urban, industrial and commercial development with scattered residential areas within the northern corridor and rolling hills interspersed with tracts of forest and agricultural land within the southern corridor. Both corridors are bisected by the Mississippi River and a majority of the

proposed roadway would be located within the river's flood plain. Most of the islands in the river are forested as are the steep bluffs on either side of the flood plain.

4.10 PUBLIC LANDS

No properties were identified within the project study area that utilized funds from the Land and Water Conservation fund (Section 6(f)) or the Open Space Lands Acquisition and Development (OSLAD) Act funds. However, many public recreational facilities exist within the project area which constitute Section 4(f) lands. Some of these in the project vicinity include the Mines of Spain State Recreation Area, Catfish Creek Preserve, the National Upper Mississippi River Wildlife and Fish Refuge, and many city parks and historic sites.

4.11 PEDESTRIAN AND BICYCLE FACILITIES

There is currently a pedestrian facility crossing the Mississippi River within the U.S. 20 study area. This facility extends along the south side of U.S. 20 across the Julien Dubuque Bridge. This existing facility is about 4.5-foot wide and provides access for pedestrian traffic. There is no bicycle facility crossing the river. This facility does not meet the AASHTO requirements for a 10-foot wide joint-use facility. The existing gradeline does not meet current ADA standards since it exceeds 5 percent. Bicycle facilities are incorporated into the project plans for the preferred alternative (see Section 5.11).

4.12 FLOOD PLAINS

Flood plains function as wildlife habitat, food chain support, nutrient retention and removal through plant uptake, erosion control through sediment trapping, and most importantly for flood desynchronization. Flood desynchronization and erosion control are important functions that benefit human populations primarily during storm events. The dissipation of storm water over the flood plains reduces flow velocity and results in the retention of waterborne silt and the desynchronization of storm water. Flood plains also serve as important wildlife corridors for larger animal species such as white-tailed deer. Wildlife will use the cover of

riparian habitat along streams to roam within their home range. The deposition of nutrient rich silt is also a valuable resource to farmers and agricultural production. These values make flood plains an important resource within the study corridor. Impacts to flood plains have the potential to affect these resources and to alter the natural elevations of seasonal flooding.

The project area contains several waterways that have been designated 100-year flood plains by the Federal Emergency Management Agency (FEMA). The preferred alternative will impact the Mississippi River 100-year flood plain. The 100-year floodplain is depicted in Appendix A.

4.13 SOCIAL/ECONOMIC RESOURCES

The cities of Dubuque, Iowa and East Dubuque, Illinois are the only cities within the project study area. The economic region of this area has been characterized as the Dubuque Metropolitan Statistical Area (MSA). Statistics provided for the Dubuque MSA are taken from the <u>1999 County and City Extra Annual Metro, City and County Data Book, 1999</u>. Statistics for the Cities of Dubuque and East Dubuque are taken from the most recent available Census data.

The estimated 1997 total population of the Dubuque MSA was 88,084 of which 98.8 percent are Caucasian. There were 30,799 households in the Dubuque MSA with an average of 2.67 persons per household. Of all persons 25 years and older, 77.7 percent have a high school diploma and 16.8 percent graduated from college with a bachelor's or higher degree.

The total population of Dubuque for the year 2000 was 57,686 of which 96.2 percent were Caucasian. The total population for East Dubuque was 1,995, of which 99.1 percent were Caucasian. See Table 4.1 for general demographic and education characteristics of the project study area.

	Dubuque, IA (2000)	East Dubuque, IL (2000)	Dubuque MSA (1997)
Population	57,686	1,995	88,084
% Caucasian	96.2	99.1	98.8
# of households	22,560	864	30,799
Avg. persons/households	2.37	2.31	2.67
Persons 25 yrs. and older	(1990)	(1990)	
% w. high school degree or higher	78.4	71.6	77.7
% w. bachelor's degree or higher	19.4	5.7	16.8

 Table 4.1: General Demographic and Education Characteristics

The 1996 per capita income for all employees was \$22,096. Between 1979 and 1989 there was a 13 percent decrease per household in constant dollars. In 1990, 2.4 percent of the households achieved an income greater than \$100,000. In 1995, 8.6 percent of all persons in the Dubuque MSA were below the poverty level. This percentage increases to 11.7 percent for persons under 18 years of age. In 1989, 10.9 percent of all persons in Dubuque and 8.2 percent of all persons in East Dubuque were below the poverty level. 7.6 percent of all families from Dubuque were below the poverty level, and 6.6 percent of all families from East Dubuque were below the poverty level.

The median household income in 1990 was \$27,027 for the City of Dubuque and \$25,264 for East Dubuque. The median family income in 1990 was \$32,881 for Dubuque and \$30,625 for East Dubuque. See Table 4.2 for income and poverty characteristics of the project study area.

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Satisfies and the second	Dubuque, IA (1989)	East Dubuque, IL (1989)	Dubuque MSA (1996)
Median household income (dollars)	27,027	25,264	
Median family income (dollars)	32,881	30,625	
Per capital income (dollars)	12.377	11.727	22,096
			(1990)
Households: # w. income > \$100,000	2.2	1.8	2.4
			(1989)
Persons: % below poverty level	10.9	8.2	10.3
Families: % below poverty level	7.6	6.6	7.5

The 1997 civilian labor force for the Dubuque MSA was 49,604. The civilian labor force decreased 1.7 percent from 1995 to 1996. Unemployment in 1997 was 3.9 percent. The civilian labor force in 1990 was 42,025 persons, indicating a rise in the labor force until approximately 1995, with a slight decrease thereafter.

In 1996 the number of business establishments within the Dubuque MSA was 2,595. Within the City of East Dubuque and the immediate area there are approximately 100 business establishments for a total of 2,695 in the economic region. Nonfarm employment in 1996 totaled 47,701 employees of which 12,912 jobs were in manufacturing, 9,536 were in retail, 1,843 were in finance, insurance and real estate, and 17,142 were in services.

There were 32,053 dwelling units in 1990 of which 30,799 were occupied. 71.2 percent of the units were owner occupied and had a median value of \$53,600. The median monthly rent in 1990 was \$314.

4.14 <u>NOISE</u>

The existing noise in the project area is generated primarily by motor vehicles operating along the existing state highways and the railroad tracks along U.S. 20 on the Illinois portion of the project area. Noise levels in the project area vary throughout the day according to the activity of the source and the proximity of the receptor.

The Federal Highway Administration (FHWA) has established noise abatement criteria (NAC) for various types of land uses. Traffic noise analyses must be sufficient to identify traffic noise impacts and, if necessary, consider abatement measures. The residential land use is classified as Category B and has a noise abatement criterion of 67 dBA Leq. Areas included in this category are picnic areas, recreational areas, active sports areas, parks, residences, hotels, motels, schools, churches, libraries, and hospitals.

Noise sensitive receptors within the project area include residences, parks and natural areas. Areas south of Dubuque would have greater impact to existing noise levels in the area

since it would be completely on new right-of-way. Alternatives following U.S. 20 would have a minimal noise increase since this area currently experiences highway and railroad traffic and is located within an industrial and commercial zoned area. Receptors significantly affected by increases in noise along the preferred alternative are discussed in Section 5.15.1 and shown in the Preferred Alternative Exhibits in Appendix A.

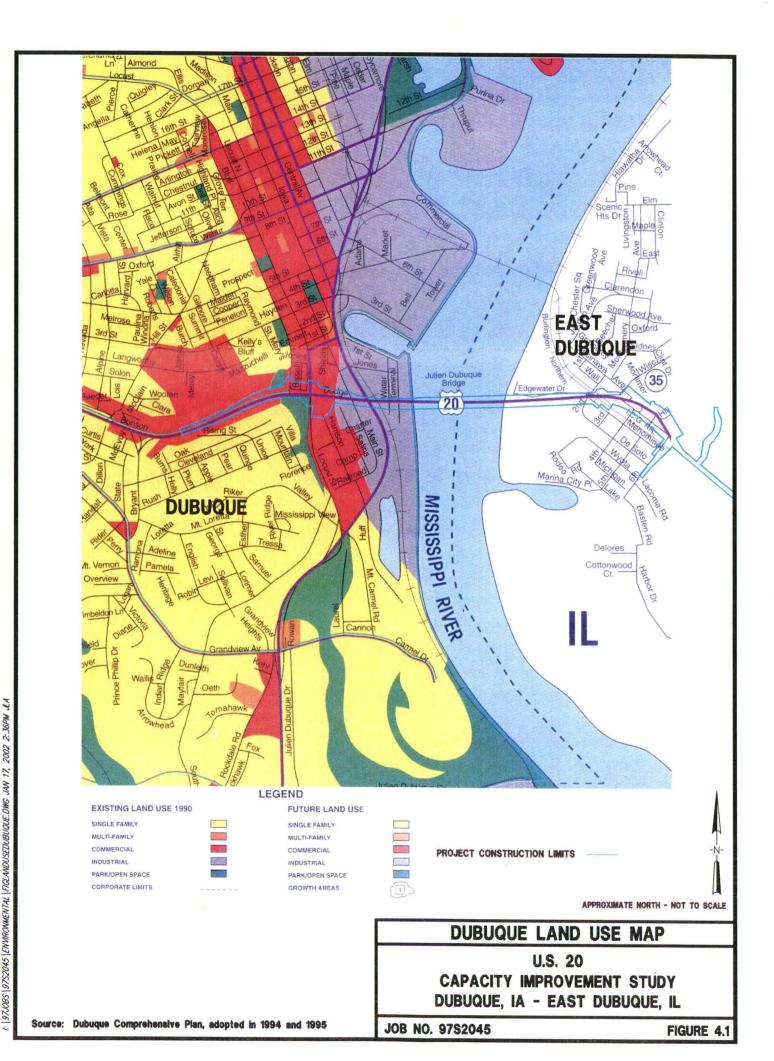
4.15 NAVIGATION

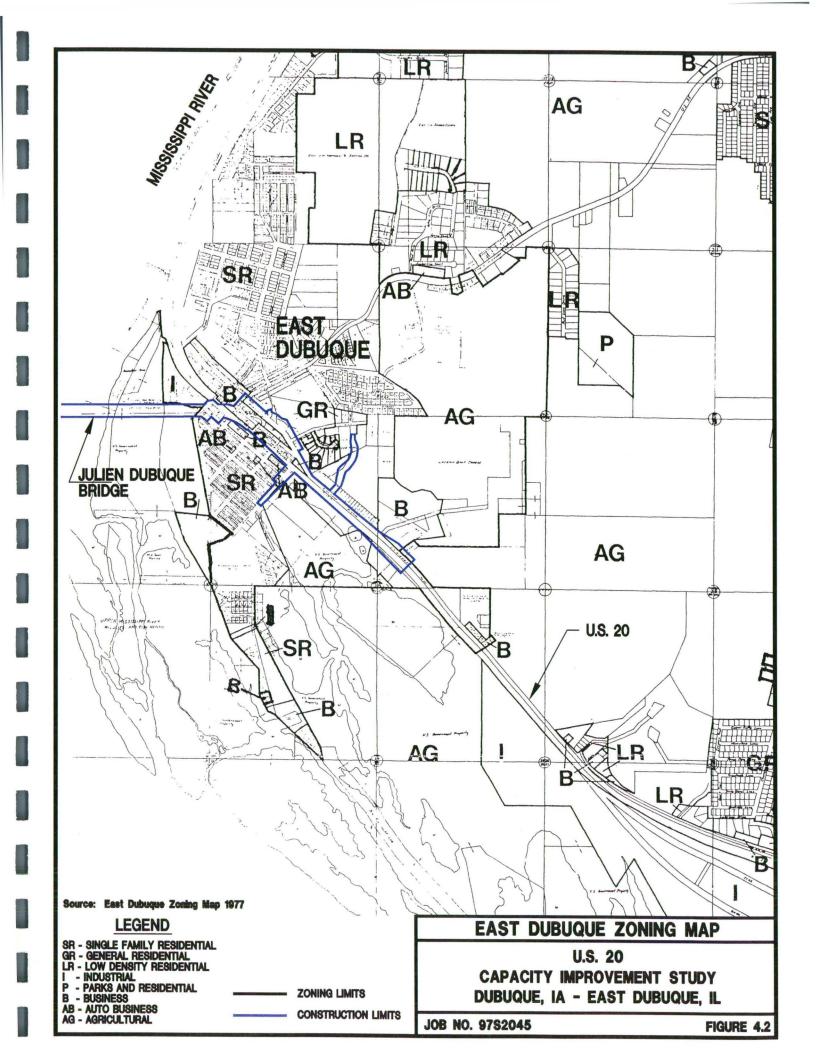
The Julien Dubuque Bridge is located at river mile 579.3. The navigation channel is located beneath the main span on the west side of the river. Based on information provided by the U.S. Coast Guard, the low steel elevation of the bridge is 657.5 feet above sea level in the middle of the navigation span. The two percent flowline is 602.37 feet. The two percent flowline is the water surface elevation that is not expected to be exceeded more than two percent of the time at a particular location. The normal pool elevation, the water surface elevation normally maintained for navigation, is 592.0 feet. The minimum vertical clearance is 64.0 feet. The horizontal clearance between the faces of the channel piers is 803 feet. The guide clearance for bridges over the Upper Mississippi River in this reach of the river is 52 feet above the two percent flowline or 60 feet above the normal pool, whichever is greater (see Figure 4.4).

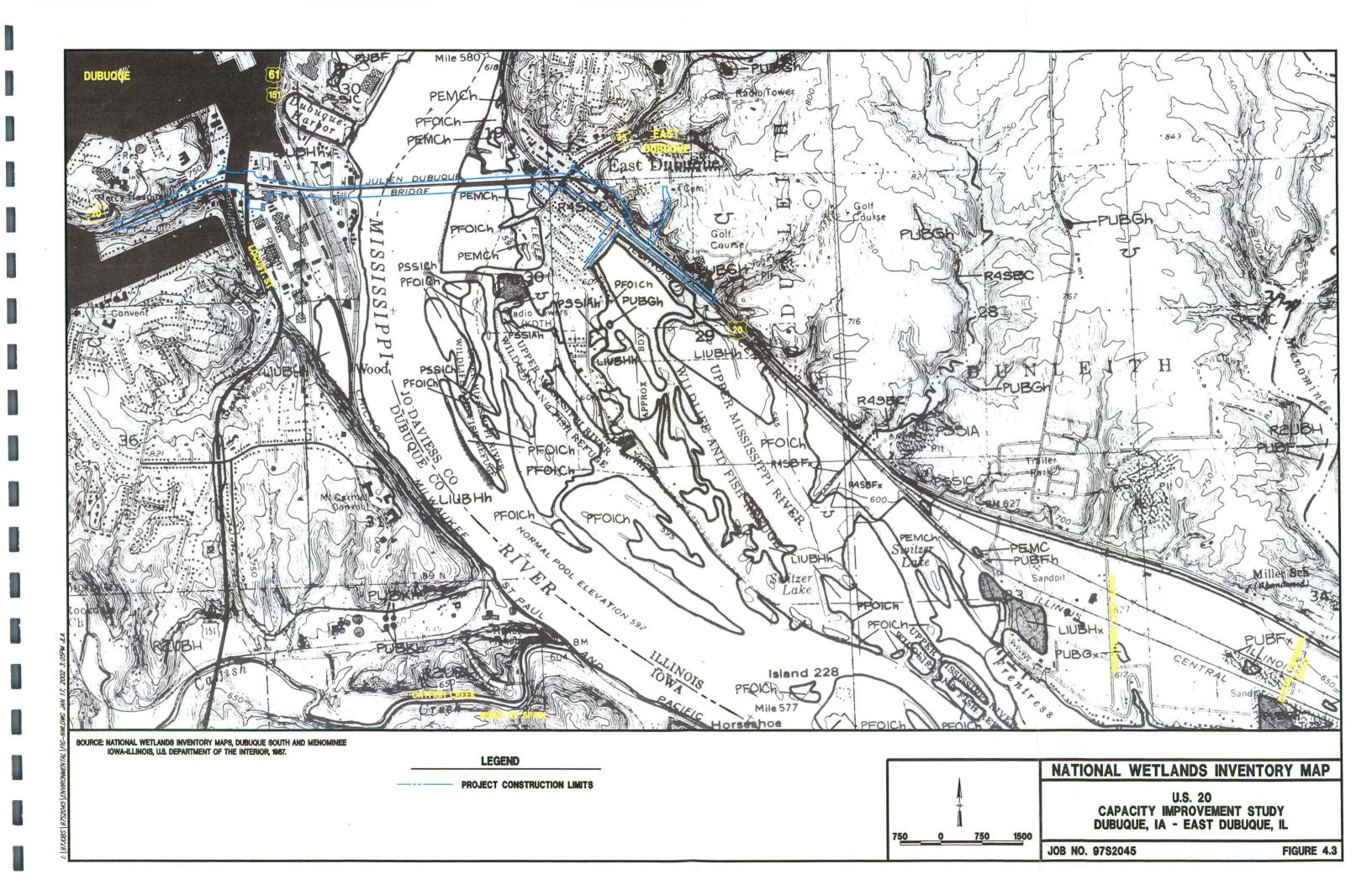
A railroad bridge is located immediately upstream of the Julien Dubuque Bridge at river mile 579.9. This bridge is a swing span with a horizontal clearance of 146.0 feet. The navigation span is located on the east side of the river at this location.

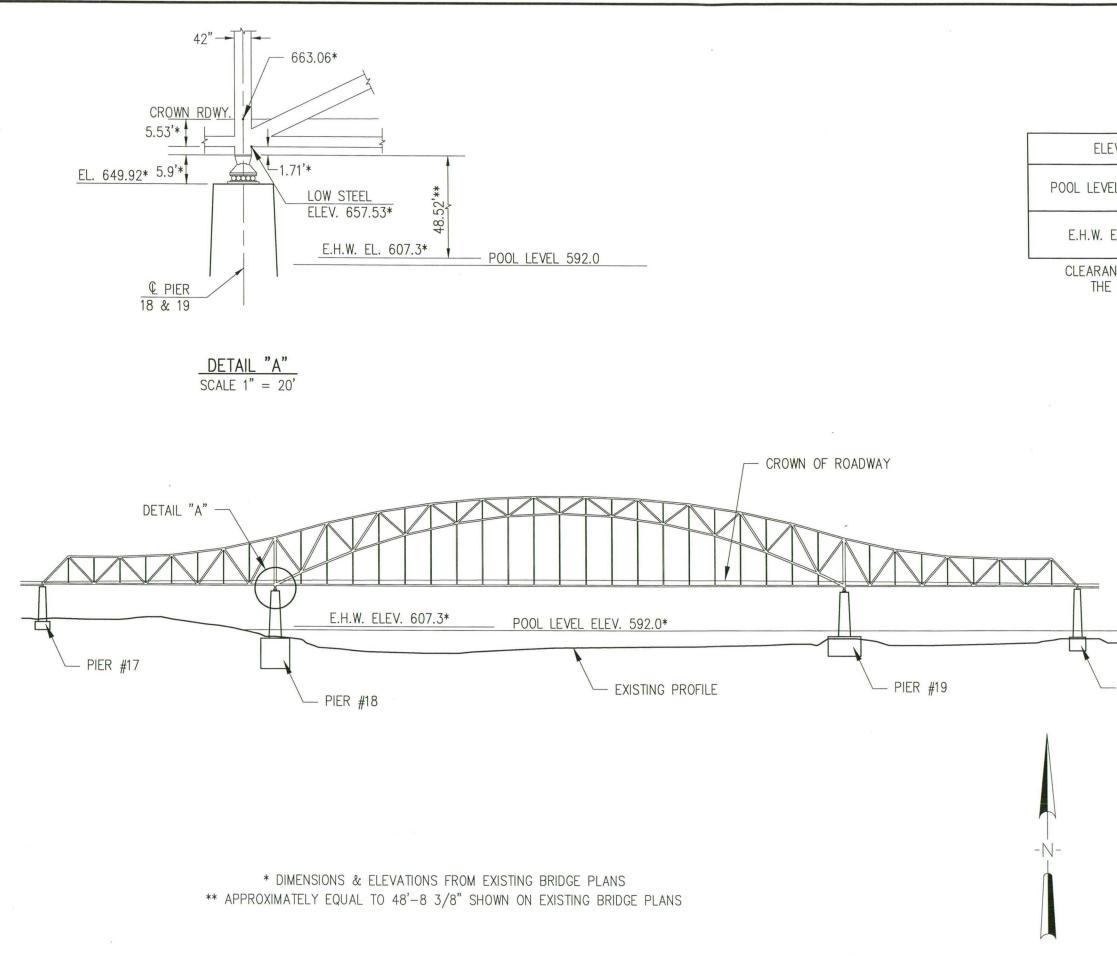
Lock and Dam No. 11 is located upstream at river mile 582.8. The midchannel sailing line for barge tows moving downstream follows the east bank from river mile 581 through the railroad bridge navigation span at river mile 579.9. The midchannel sailing line then crosses to the west bank to pass beneath the Julien Dubuque Bridge navigation span. This shift across the channel from east bank to west in a distance of less than 1 mile requires a difficult flanking maneuver, especially for tows moving downstream. They must move far enough to the west to clear the east navigation channel pier of the Julien Dubuque Bridge.

River traffic data for 1998 obtained from the U.S. Coast Guard indicates that about 10,893 vessels were recorded passing upstream of the Dubuque area and about 11,874 vessels were recorded heading downstream. The total 1998 commodity tonnage through the Dubuque area was about 21,143,020 tons. The bulk of this tonnage is comprised of corn, soybeans and coal.









95|9752045|03020230898|DESIGN|FIG4.2.DWG JAN 17, 2002 2:25PM JLA

ELEVATION	CLEARANCE	
EVEL ELEV. 592.0	65.5'	
W. ELEV. 607.3	50.2'	

CLEARANCES ARE MEASURED FROM THE LOW STEEL ELEVATION

– PIER #20

JULIEN DUBUQUE NAVIGATIONAL CLEARANCES

U.S. 20 CAPACITY IMPROVEMENT STUDY DUBUQUE, IA - EAST DUBUQUE, IL.

JOB NO. 97S2045

FIGURE 4.4

SECTION 5.0

ENVIRONMENTAL CONSEQUENCES OF THE PREFERRED ALTERNATIVE

SECTION 5.0

ENVIRONMENTAL CONSEQUENCES OF THE PREFERRED ALTERNATIVE

5.1 LAND USE

The preferred alternative will encompass about 68.6 acres, which includes about 53.1 acres of existing highway right-of-way and about 15.5 acres of additional right-of-way that will be required (Figure 5.1). Over 50 percent of the total right-of-way is within a developed land use type such as residential, commercial, or industrial use. An additional 9 percent of the right-of-way consists of non-native grassland and upland forest which has been established along existing U.S. 20 and other developed lawns and open space. Jurisdictional wetlands and waters of the United States comprise about 21.4 percent of the total right-of-way; however some of this acreage includes the area required for the bridge crossing. Much of the right-of-way of the Mississippi River will only be impacted by pier placement across the river. Habitat types within the right-of-way of the preferred alternative are depicted in Table 5.1.

IADOT and ILDOT have enacted policies to protect, preserve, and augment roadside trees. Trees within the right-of-way will be protected to the fullest extent possible consistent with standards of highway safety. Where tree removal is required, an effort will be made to replace this lost resource. Trees to be removed for project construction will be identified and tree replacement will be incorporated in the project plans and specifications by the Design Phase (Phase II) consultant. Trees (defined as woody perennial plants with a diameter of 6 inches or more measured at 3 feet above the ground surface) will be replaced at a ratio of one to one with bare root or balled and burlapped saplings or at a ratio of three to one with seedlings.

The U.S. 20 Capacity Improvement project is in conformance with local land use plans. The Dubuque Metropolitan Area Transportation Study adopted a transportation plan in January 1995 and revised the plan in August 2000. The plan included a four-lane improvement of U.S. 20 across the Mississippi River.

	Existing U.S. 20 Right-of-Way	Additional Right-of-Way Needed	Preferred Alternative Right-of-Way
Habitat Type	Acres	Acres	Acres
Residential/Commercial/Industrial	36.0	11.6	47.6
Upland Forest	1.1	2.6	3.7
Non-native Grassland	2.6	0.0	2.6
Jurisdictional Wetlands	6.0	1.3	7.3
Waters of the United States	7.4	0.0	7.4
Total Area	53.1	15.5	68.6

Table 5.1: Habitat Types Within The Preferred Alternative

5.2 FARMLAND

Agricultural impacts have been avoided to the extent practicable consistent with sound engineering practice and safety by using existing right-of-way, wherever possible, following existing property lines, and minimizing right-of-way requirements by reducing curve radii, steepening slopes, and reducing median widths, where possible.

The entire project area is located within the 1.5 mile planning radius of East Dubuque; therefore, formal coordination with the Illinois Department of Agriculture is not required, and the project is exempt from the Farmland Protection Act. The preferred alternative (1A) does not directly impact any farmland. However, about 11.0 acres of existing agricultural land within the Mississippi River flood plain may potentially be used for wetland mitigation. Efforts will be made to minimize the use of agricultural lands for mitigation.

5.3 WATER RESOURCES

The Mississippi River is the primary water resource in the project area and is the only significant surface water resource impacted by the preferred alternative. The Mississippi River is an important navigable river to the region and supports wildlife and recreation.

The preferred alternative will impact the river by the construction of piers for a companion bridge and placement of fill in associated wetlands for expansion of the approach roads. A Section 9 permit from the U.S. Coast Guard will be required for the placement of bridge piers in the Mississippi River. An Individual Section 404 permit from the U.S. Army Corps of Engineers Rock Island District will also be required for placing fill material within wetlands located within the flood plain of the Mississippi River. The total volume of fill is estimated to be approximately 5,000 cubic yards.

The unnamed tributary that extends along Third Street in East Dubuque is routed through a storm drain beneath the street. No additional impacts to this stream are anticipated. Also, there are no anticipated impacts to the two backwater lakes along U.S. 20 immediately south of East Dubuque.

The project will also require a National Pollutant Discharge Elimination System (NPDES) permit from the Illinois Environmental Protection Agency and the Environmental Protection Division of the Iowa Department of Natural Resources. A stormwater pollution prevention plan will be developed during final design of the project to identify potential sources of pollution and detail practices to minimize the pollutants in discharges associated with the construction activities.

Construction impacts are related to the locations of the stream crossings and the types of instream work (pier placement, bank shaping, construction haul roads, channel changes, riprap placement). For those waterways not crossed, the proximity to the construction activities and the drainage patterns determine the kind of impacts. Operating impacts result from traffic and maintenance activities.

Short-term increases in sedimentation and turbidity levels within surface waters may be expected during construction in proportion to the proximity of excavated sites to surface water and the frequency of storms. However, turbidity and sedimentation are expected to return to baseline levels soon after construction.

Measures to control erosion and minimize impacts to the water quality of receiving waters will be implemented. Iowa and Illinois DOT's standard special provisions for Erosion Control will be implemented at construction sites. Contractors will be responsible for the use of silt fencing, hay bales, or mulch materials on exposed soils to minimize soil erosion. They will also be responsible for keeping construction stockpiles away from surface waters and wetlands. Construction materials will be properly disposed of so that surface waters and wetlands are not blocked or drainage impaired. The discharge of pollutants or dredged/excavated material into remaining surface waters and wetlands will not be allowed at anytime during or after construction. Any dredged materials will be properly disposed of at an upland site to ensure that the sediments do not re-enter surface waters. After construction is completed, permanent erosion control measures such as the revegetation of exposed areas with native species will be required.

At stream or ditch crossings, the culverts will be designed to accommodate high and low flow velocities in order to minimize channel construction or potential blockage. To minimize adverse impacts to the natural movement or migration of aquatic organisms, all box and pipe culvert installation will maintain existing stream slopes and elevations to the extent practicable and within such standard hydraulic operating constraints as minimum velocity and scouring restrictions. The culvert invert will not be placed at an elevation which reduces the normal dry weather water depth necessary to such movement or migration. Properly designed culverts should reduce permanent siltation impacts by allowing increased flow velocity.

The City of East Dubuque has expressed concern that the proposed improvement not increase drainage problems in the City, especially in the residential area south of the tracks.

Drainage from the mainline and ramps on the east side of the Julien Dubuque Bridge in East Dubuque will be directed to a curb and gutter collection system with catch basins for capture along the pavement edges. The catch basins will be connected with a storm sewer system that continues along the new alignment to the approximate location of the intersection with the extension of Plum Street. At this location a new pipe will be extended under the railroad tracks to outlet in the Mississippi River. Drainage from bridge superstructure drains will be captured by deck drains and connected to a piping system that connects drains directly to the

Mississippi River outside of the East Dubuque Levee system, or into the new storm sewer system.

Drainage of the Sixth Street overpass in East Dubuque, the pavements of the intersections of the entrance/exit ramps with Hill Street, and connections to the existing street system in East Dubuque will all be directed by curb and gutter to catch basins and connected to the proposed storm sewer system in the new alignment of U.S. 20.

The existing 48 inch wide culvert under the railroad could provide adequate drainage for the storm sewer capture of the Fifth Street intersection, which presently drains into the residential area south of the tracks and must be pumped. Feasibility for this option will depend on final profile design within the captured drainage area near Hill Street and the ramps. However, due to the age of the structure and the history of flooding on U.S. 20 in East Dubuque, all storm sewer should be connected to a new pipe under the railroad for a more reliable system, and the existing culvert reserved for excess capacity.

Surface drainage outside of the pavement follows the existing surface drainage patterns. The primary sources of stormwater runoff are four drainage areas: Hill Street, the bluff area just east of the highway, and two major drainageways near the proposed Plum Street intersection.

The proposed design presents an opportunity to capture all the runoff before it can get to the pavement surface. Hill Street right-of-way will be vacated, and allow the installation of a high efficiency inlet capture before the surface flows can reach the new pavement. The proposed Plum Street alignment will allow capture of the drainageway before it flows onto the surface of the street, and runoff onto the street surface can be captured with catch basin inlets. The easterly drainage area near Plum Street can also be captured and directed in the storm sewer system before it gets to the street surface.

All other existing drainage in East Dubuque outside of the project construction limits will remain unchanged.

Increased pollution loading to surface water resources is an indirect impact that is typically associated with the operation and maintenance phase of a roadway facility. Motor vehicle traffic and application of de-icing salts and herbicides are typical sources of pollutants. Anticipated pollutants that are associated with motor vehicle operations are toxic heavy metals, slowly biodegradable petroleum products, rubber, oil and grease, and nutrients. Highway runoff pollution may affect water quality of necessary waters through acute or chronic effects. Grassed ditches will aid in reducing roadway pollution by filtering runoff. However, most stormwater runoff will be conveyed to storm sewers. FHWA research investigating pollutant loading from highway stormwater runoff has shown that the levels of several pollutants increase significantly when ADTs are significantly above 30,000. However, because the projected traffic volumes on U.S. 20 during the design year (2025) are estimated at about 35,000 ADT, pollutant loading is not expected to be significant.

The preferred alternative crosses two wellhead protection recharge areas for the municipal wells for East Dubuque. Neither of these wellhead protection locations will be significantly impacted as a result of the proposed upgrade to U.S. 20. The preferred alternative is greater than 200 feet from a water source and will not impact either community's municipal water supplies.

5.4 WETLANDS

The preferred alternative will impact 7.3 acres of wetlands (see Appendix A). All wetland losses are located within the Illinois portion of the project. Waters of the U.S., including the Mississippi River, will be impacted by the placement of fill material for pier locations. Compensation of wetland loss will be required, as well as Section 404 permits from the U.S. Army Corps of Engineers.

Two areas of wetlands will be affected by construction of the preferred alternative. These areas are depicted on the exhibits in Appendix A. Table 5.2 summarizes the wetlands impacts of the preferred alternative. All of the wetlands impacted by the project occur within the flood plain of the Mississippi River. The wetlands which would be impacted by the proposed action are bottomland forested wetlands. These areas are designated as palustrine, forested, broad-leaved deciduous, seasonally flooded, diked wetlands (PF01Ch) on the NWI map. The dominant vegetation of these wetlands consists of silver maple (*Acer saccharinum*), box elder (*Acer negundo*), Eastern cottonwood (*Populus deltoides*) and green ash (*Fraxinus pennsylvanicum*). Most of the herbaceous vegetation was inundated by high-water due to above normal rainfall. Soils within this portion of the Mississippi River flood plain consist primarily of Wakeland silt loam and Birds silty clay loam. Both of these soil types are considered to be hydric or contain hydric inclusions by the Natural Resources Conservation Service. Hydrologic indicators were observed by the present of standing water, drift lines and sediment deposits. The floristic quality of these wetlands is less than 10.0 for all areas. This indicates a low plant diversity and lower quality wetlands from a vegetational aspect. Wetlands with a floristic integrity index greater than 20.0 are considered to be high quality wetlands according to the Illinois Interagency Wetlands Policy Act.

Table 5.2: Wetlands Impacts of the Preferred Alternative Wetland NWI Wetland Dominant Floristic Soil Wetlands $ID^{(1)}$ Classification Affected Vegetation Quality Hydrology Type Index acres W-2 PEMCh Silver maple 8.14 Wakeland silt Standing 6.8 loam Water W-3 PF01Ch Box elder 7.84 Wakeland/Birds 0.5 Drift silt loam Lines

1) See Appendix A.

The functions and values of these wetlands were determined by their value to wildlife, recreation, capacity to store flood waters, ability to filter sediments and organic matter, and productivity. The larger flood plain wetlands serve to store and dissipate flood waters, as well as to provide habitat; however, due to the proximity of these wetlands to the existing highway and commercial and residential development, the value of this habitat is limited.

Impacts on wetlands from highway construction and operations were assessed within the recommended right-of-way of the preferred alternative. Construction impacts may include

vegetation removal, increased turbidity, sedimentation, chemical pollution, changes in water retention and size of wetland, soil compaction. Operational impacts include roadway runoff from vehicles, highway litter, and noise. Many of these impacts currently exist from traffic utilizing U.S. 20.

Wetland impacts have been avoided or minimized to the extent practicable in accordance with Executive Order 11990, Protection of Wetlands. The preferred alternative maximizes the use of existing right-of-way, minimizes wetland impacts, and minimizes relocations. The recommended action design will incorporate safety standards which will result in unavoidable impacts to wetlands. It is not possible to reduce these impacts without compromising design and safety standards. No practicable alternatives to the proposed action exist which would satisfy the purpose and need for this project. Federal and state resource agencies from Iowa and Illinois have been kept informed throughout the study of alternatives under consideration and potential wetland impacts. In addition, a coordination meeting was held during the study with resource agencies. The resource agencies concurred that the preferred alternative has the least amount of impacts to wetlands versus the other build alternatives. All practicable measures to minimize harm to wetlands, including modification of design criteria to reduce impacts to wetlands while maintaining facility safety, have been incorporated into the project.

Federal and state policies include processes to mitigate adverse impacts to wetlands. Compensation includes consideration of restoration of new wetlands of comparable functional type and size before creation of wetlands is considered. Wetland restoration is far easier to establish and less costly than creation and is preferred. Wetland compensation will comply with all federal and state acts, regulations, and policies unless otherwise indicated.

Since wetland impacts occur exclusively within Illinois, wetland compensation planning for this project will be based upon ILDOT's agreement with the Illinois Department of Natural Resources which implements the requirements of the Illinois Interagency Wetland Policy Act of 1989. Under this agreement the project qualifies as a Programmatic Review Action. This project qualifies for the lower mitigation ratios of 1.5 to 1.0 for on-site mitigation and 2.0 to 1.0 for off-site mitigation. Coordination of these wetland impacts with the Illinois Department of

Natural Resources and the U.S. Fish and Wildlife Service will be conducted by the Illinois Department of Transportation.

Since all wetland impacts occur within Illinois, the ILDOT Wetlands Action Plan will be followed. At this time a wetland mitigation option (on-site or off-site) has not been chosen. The loss of 7.3 acres of wetlands will require a wetland replacement acreage of 10.95 acres (on-site) or 14.60 acres (off-site). The wetland mitigation site will be selected and coordinated with the natural resource and regulatory agencies before the project is let for construction.

5.5 NATURAL RESOURCES

It is not anticipated that the preferred alternative will have a significant impact on wildlife resources within the project area. The preferred alternative essentially follows the existing U.S. 20 alignment. No new areas of forest fragmentation or encroachment into pristine natural areas will occur. There are also no impacts to any existing prairie habitat. The area impacted by the preferred alternative has experienced development and human disturbance for many years. Field surveys for threatened and endangered species, wetlands, and cultural resources were conducted during the summer of 1999.

5.6 THREATENED AND ENDANGERED SPECIES

A mussel survey was conducted on August 27 and 28, 1999 to identify mussel species inhabiting the preferred corridor study area. A corridor 800 feet wide centered on the existing Julien Dubuque Bridge was sampled with three transects: the first 400 feet upstream of the bridge, the second under the existing bridge, and the third 400 feet downstream of the bridge (see Appendix A).

The survey revealed that most of the Mississippi River being crossed by the project does not provide quality habitat for mussels. The river substrate in most of the area comprises predominantly of silt, shifting sand, boulders or zebra mussels. Two specimens of the federally endangered Higgins' eye pearly mussel (*Lampsilis higginsi*) were located along the northern transect. A single live specimen was found approximately 200 feet from the Iowa shore in 35 feet of water. The substrate at this location consisted of a mix of sand, gravel and rubble and was fairly firm and stable. A second specimen, found under the existing bridge 100 feet from the Iowa shore, was dead and represented only by the shell. No state listed (Iowa or Illinois) mussel species were located during the survey. The other native species collected during the survey included: the threeridge (*Amblerna p. plicata*), fragile papershell (*Leptodea fragilis*), mapleleaf (*Quadrula quadrula*), threehorn wartyback (*Obliquaria reflexa*), washboard (*Megalonaias nervosa*), giant floater (*Anodonta grandis*), pimpleback (*Quadrula pustulosa*), and plain pocketbook (*Lampsilis cardium*). A total of 19 live mussel specimens were collected during the survey. A Mussel Survey Technical Report was prepared for this project and can be referenced for additional information.

In general, the substrate within the study area is unsuitable for native mussel species. The most suitable substrate was located near the Iowa side of the river and consisted of firmer silt. However, these locations were inundated with vast quantities of zebra mussels and zebra mussel shells. The area where the federally endangered Higgins' eye pearly mussel was captured was a small area of marginal habitat located about 400 feet upstream of the existing Julien Dubuque Bridge and about 150 to 200 feet from the Iowa shore. Since the proposed new bridge structure is located downstream of the existing bridge, no direct or secondary impacts to this mussel population is anticipated. This U.S. Fish and Wildlife Service and Iowa and Illinois DNR's have concurred in the finding that the proposed project has no impact on the Higgins' eye pearly mussel (Appendix B).

5.7 <u>CULTURAL RESOURCE PRESERVATION</u>

A Phase I Archaeological Investigation and Geomorphological Investigation and an Intensive Survey and Evaluation of Architectural Properties was conducted throughout the project area to locate archaeological and architectural properties of cultural significance. The survey evaluated the properties in the corridor for prehistoric or historic significance and eligibility for the National Register of Historic Places.

Historic document research, interviews, and field investigations were conducted to locate prehistoric and historic archaeological sites that may be impacted by the preferred alternative. The preferred alternative would not require right-of-way from any of the sites located. Most of the located sites, in Illinois, are ineligible for the National Register due to poor site integrity, mainly the result of previous excavation and development, or lack of prehistoric/historic cultural significance.

One site which is eligible for the National Register of Historic Places has been recommended for avoidance. This site is a prehistoric burial mound. There could be some potential for slope erosion depending upon the type of road construction, but the proposed roadway has been designed to minimize any slope erosion in the vicinity of this mound. The mound location has been intentionally omitted from project mapping.

An inventory of 175 architectural properties also was conducted to identify any structures along the preferred alternative that may be listed in or eligible for the National Register of Historic Places. The inventory concluded that one structure of significance would be adversely impacted by the preferred alternative (Table 5.3). See Appendix A for the location of these structures.

Resource		NRHP Basis for			
Map No. ⁽¹⁾	Name	Status	National Register	Impacts	Effects
H-1	Julien Dubuque Bridge	Listed	Longest continuous tied arch bridge in the world. ⁽²⁾	Visually Obstructed	No Adverse Effect
H-3	Beck/Fockler House	Eligible	Well preserved Greek Revival-style house.	Demolition	Adverse Effect

 Table 5.3: NRHP – Effected Eligible Resources

1) See Appendix A.

2) When it was constructed.

The Julien Dubuque Bridge carrying U.S. 20 across the Mississippi River is listed in the National Register. This structure would be visually impacted by the construction of a companion bridge that would block particular views of the Julien Dubuque structure. Mitigation to minimize this impact is proposed through the construction of a complementary structure with a similar appearance to the Julien Dubuque Bridge. The Iowa SHPO has concurred with this mitigation and determined a No Adverse Effect to the Julien Dubuque Bridge (see Appendix D).

The Beck/Fockler House, located at the intersection of Hill Street and Sinsinawa Avenue in East Dubuque, is eligible for the National Register of Historic Places. This structure is an example of Greek Revival-style architecture and may be connected with two influential families in the history of East Dubuque. The preferred alternative would require removal of the structure for construction of the east-side bridge approach. This structure cannot be practically avoided because 1) the spacing between the intersections of the Fifth and Sinsinawa Avenue and Fifth and U.S. 20 must be maintained for the facility to function safely and 2) moving Sixth Street/Sinsinawa Avenue to the north would require a massive rock cut into the Mississippi River bluff which is not a cost effective or environmentally sensitive solution.

The age and construction of the Beck/Fockler House make the relocation of this structure not cost effective, as significant structural damage would likely occur. The cost to relocate this structure is also not a cost effective solution for mitigation. Mitigation for the loss of the Beck/Fockler House is recommended by the completion of an Historic American Buildings Survey documentation. Architectural salvage of significant pieces from the Beck/Fockler house has been recommended.

The Iowa and Illinois state historic preservation agencies have reviewed the archaeological and architectural resources technical reports prepared for this project. The two SHPOs have concurred that the preferred alternative will have No Effect on significant archaeological resources; however, a Memorandum of Agreement has been prepared for an Adverse Effect to the Beck/Fockler House and a No Adverse Effect to the Julien Dubuque Bridge. Appendix D contains the SHPO correspondence. The attached Draft Section 4(f)

Evaluation discusses avoidance alternatives, minimization options and mitigation plans to these resources.

5.8 HAZARDOUS WASTE SITES

No CERCLIS site(s) will be involved nor impacted by the project. However, the Key City Gas Company, located at 10 Bluff Road in Dubuque, occurs in the CERCLIS database. Clean-up of the site was completed in 1995 according to September 27, 2001 USEPA records.

A Phase I Environmental Site Assessment of properties in the vicinity of the preferred alternative was completed to identify properties that may be contaminated with a controlled waste. The assessment resulted in the identification of seven properties on the Iowa side that may be contaminated. Five sites in Dubuque have documented contamination and two others have the potential for site contamination. The Iowa properties that have documented contamination include:

- Pixler Electric/Holiday Oil/Former Derby Station This site is located at 605 Dodge Street in Dubuque. Sampling conducted in 1995 as part of a LUST assessment revealed elevated levels of fuel component compounds. The underground storage tanks have been removed from this site and remediation has been proposed in conjunction with the Key City Gas Site (see Appendix A, Site 1). The site is owned by the State of Iowa. All structures have been demolished.
- Amoco at the Bridge/Key City Coal Gas Plant Located at 351 Dodge Street, this site was a manufactured gas plant around the turn of the 20th century. A remediation plan for this site has been developed and is in the pilot stage (see Appendix A, Site 2).

- Metz Baking Company Located at 25 Main Street, this is a LUST site. A recent site monitoring report has indicated elevated levels of benzene (see Appendix A, Site 3).
- Inland Molasses Company Located west of Water Street and north of U.S. 20, this is a LUST site where a tank was removed on September 7, 1990. Contaminated soil was excavated, but testing indicates that some contamination remains (see Appendix A, Site 4).
- 5. Mulgrew Oil Located west of Water Street and south of U.S. 20, this was the site of a 900 gallon gasoline spill and an apparent LUST site. The contaminated soil from the spill was excavated and the UST was removed, but contamination is still present (see Appendix A, Site 5).

The two Dubuque sites that have the potential for contamination include Arby's Q-Mart and Sitco (see Appendix A, Sites 6 and 7, respectively). These two sites have the potential for contamination based on the presence or presumed presence of underground storage tanks. No records of soil testing at these locations are available.

A Preliminary Environmental Site Assessment for special waste was conducted for the Illinois portion of the project by the Illinois State Geological Survey. The assessment concluded that the preferred alternative could involve sites potentially impacted with regulated substances in Illinois. Further, it has been determined that not all of the sites can be avoided. The sites which cannot be avoided include:

 Mississippi River at the site of the bridge replacement project – Spills of petroleum and other materials have been documented in this section of the Mississippi River. Arsenic exceeded the ingestion value for the IEPA Tier 1 residential TACO objectives in soil samples taken from the site (see Appendix A, Site 8).

- 2. Former City Garage Located at 300 Boat Ramp Road, this parcel contained the garage for the City of East Dubuque. This facility is a former UST site and is currently a LUST site. One UST reportedly had been drained and abandoned in 1984 due to gasoline odors in a basin west of the tank. Both groundwater and soils were found to be impacted. All contaminated soil except that in and under the floodwall was removed. The City has yet to receive a No Further Action (NFR) letter from the State of Illinois acknowledging the remediation (see Appendix A, Site 9).
- 3. Former Chicago Dubuque Foundry Corporation Located at 210 2nd Street, this parcel originally contained an Illinois Central Railroad roundhouse that was converted to a foundry and later demolished. This lot is a former UST and former RCRA site. The UST was used to store diesel fuel and has been removed. A spill of Isoset 4437 occurred in 1991 and was contained. According to RCRA documents, the foundry generated two hazardous wastes: baghouse dust (cadmium and lead) and waste solvent. Arsenic and lead exceeded the ingestion value for the IEPA Tier 1 residential TACO objectives in soil samples taken from the site. Lead exceeded the TCLP migration to Class I groundwater values for the IEPA Tier 1 residential TACO objectives in soil samples taken from this site (see Appendix A, Site 10).
- Residence with garage Located at 295 Menominee Avenue, this address is contained on the IEPA BOL Inventory. No files were available from the IEPA concerning this event (see Appendix A, Site 11).
- 5. J&L Vending Located at 300-303 Menominee Avenue, this building is reportedly the second oldest building in East Dubuque and has formerly been the location for several industrial businesses. This parcel is a possible former AST site and was being used as an illegal dump in 1973. By January 1974, the refuse had been removed from the parcel. Arsenic exceeded the ingestion

value for the IEPA Tier 1 residential TACO objectives in soil samples taken from the site (see Appendix A, Site 12).

- Molo Big 10 Mart Located at 448 Sinsinawa Avenue, this gasoline station is included on the OSFM UST list with five tanks in an active status. Spills of gasoline at this site have been documented (see Appendix A, Site 13).
- 7. Van's Liquor Store parking lot Located at 540 Sinsinawa Avenue, this former UST site serves as a parking lot for a liquor store located on the west side of 5th Street. A gasoline station once occupied this parcel. According to Sanborn maps, three gasoline tanks were located on the eastern half of the parcel. This site is not on the OSFM UST list, nor was any evidence of USTs observed during the field investigation (see Appendix A, Site 14).
- 8. Liebold Brothers Auto Center Located at 620 Sinsinawa Avenue, this business is a gasoline station and an automotive service garage. The business is contained on the OSFM UST list with eight tanks in an active status. Four of the tanks have been removed. This parcel is also a LUST site. Six tanks, formerly used to store gasoline, waste oil, and diesel fuel, were removed after the LUST event was discovered on October 11, 1991. Significant contamination was noted. The area beneath the dispenser island and around the tanks was excavated. The IEPA issued an NFR letter on April 21, 1992 (see Appendix A, Site 15).
- Custom Auto Repair and Service Located at 501 Menominee Avenue, this parcel is a former RCRA site and was formerly the site of Hudspeth Auto, which is contained on the IEPA BOL Inventory. An auto repair shop and car wash now occupies the lot (see Appendix A, Site 16).
- 10. Obie's Foreign & Domestic Auto Repair Located at 21375 Route 20 West, this site contains a residence and an automotive service and body repair

business. This business is contained on the IEPA BOL Inventory. Information obtained from the IEPA pertains to waste tire activity and inspections for waste and used tires (see Appendix A, Site 17).

VOCs significantly above the background levels were detected in the headspace of soil samples and in immunoassay analyses of soil samples taken from all ten of the above-mentioned Illinois sites except for Site 8.

As right-of-way needs are determined prior to acquisition and construction, the property lines of these properties will be identified to determine the potential right-of-way required from each property. Phase II investigations have been recommended for the Illinois properties in which right-of-way or excavation is required that have the potential for contamination (see Appendix B, ILDOT PESA Review Memorandum). Phase II investigations are recommended for the Iowa properties which have the potential for contamination if it is determined that right-of-way will be required.

Other environmental issues must also be considered when encountering residential property. Buildings constructed prior to 1970 may have asbestos-containing material as components in floor tile, wall and pipe insulation, roofing materials, patching or paint compounds, ceiling materials, and stove/furnace insulation. Asbestos discovered in any buildings to be demolished will require special removal prior to demolition.

5.9 VISUAL

Consideration of aesthetic compatibility is important when constructing a highway. In order to maintain environmental continuity, highways are constructed to be compatible with the local terrain, thus limiting aesthetic impacts. Harmony with existing topography, consideration of the motorist's view from the road and the view of the road from residences are major factors that can determine a highway's aesthetic acceptability.

The preferred alternative primarily follows existing U.S. 20. The viewshed of this alternative begins after a descent from the upland bluffs of Dubuque into the Mississippi River flood plain. Viewing historic Dubuque and crossing the Mississippi River is an aesthetically pleasing experience. The Illinois portion of the project extends along the toe of the river bluff within the river's flood plain. Overall, the preferred alternative should provide an aesthetically pleasing view across the flood plain of the Mississippi River.

5.10 PUBLIC LANDS

The preferred alternative will impact a portion of the National Upper Mississippi River Wildlife and Fish Refuge. This impact constitutes a Section 4(f) impact under the Department of Transportation Act of 1966. Approximately 5.1 acres of Refuge property would be converted to highway use as a result of the construction of the preferred alternative. This impact is limited to Refuge property adjacent to existing U.S. 20 right-of-way and railroad right-of-way. Expanding the existing rights-of-way is considered to be less of an impact than fragmenting the Refuge at a new location. Refer to the Draft Section 4(f) Evaluation bound with this Draft EA for more detailed information and mitigation measures. Retaining walls will be used to avoid impacting the Sixth Street Park in East Dubuque (see Appendix A, Plate B).

5.11 PEDESTRIAN AND BICYCLE FACILITIES

The inclusion of a bicycle and pedestrian facility will be provided along the preferred alternative to provide access across the Mississippi River. The proposed facility will meet current AASHTO standards as well as American Disability Act (ADA) requirements. The proposed facility will allow two-way pedestrian/bicycle traffic to access the East Dubuque downtown area via Fifth Street and Sinsinawa Avenue. The facility will be accessed at the southeast corner of Sinsinawa and Wisconsin Avenues. The facility will extend about 9,100 feet adjacent to the southernmost lane of the proposed eastbound lane of the U.S. 20 preferred alternative. The facility will continue to extend adjacent to the eastbound on-ramp in Dubuque, terminating at the limits of construction along Locust Street (refer to Plates A and B in Appendix A).

5.12 AIR QUALITY

5.12.1 Carbon Monoxide Analysis

The Illinois Department of Transportation requires a carbon monoxide analysis on projects which have greater than 16,000 vehicles per day.

Worst case carbon monoxide levels were determined for three locations using Mobile 5-B and CAL3QHC for the preferred and no-build alternatives. The worst case receptors were selected based on proximity to the new intersections, projected traffic volumes, estimated traffic speed, and road geometry.

Worst case carbon monoxide (CO) levels were calculated for the selected receptors (see Appendix A). These locations represent the worst case commercial and residential receptors under the preferred alternative.

Calculated eight-hour carbon monoxide (CO) levels for the preferred and no-build alternatives are given in Table 5.4. The concentrations include a 2 part per million (ppm) background concentration of CO added to the calculated worst case one-hour levels converted by a factor 0.7 as outlined in the U.S. EPA <u>Guideline for Modeling Carbon Monoxide From</u> <u>Roadway Intersections</u> November 1992. The National Ambient Air Quality Standards (NAAQS) will not be exceeded for carbon monoxide for the preferred alternative or the no-build alternative.

8-HOUR MICE	ROSCALE	CARBON MONO	OXIDE ANALYSIS	5
			[CO] (PPM)	
		Residential House	Residential House	Residential House
Build Alternative		A-1	A-2	A-3
Existing Year	(2001)	N/A	N/A	N/A
Time of Completion	(2010)	3.7	5.6	5.2
Time of Completion + 10 Year	(2020)	4.2	5.8	5.2
Design Year	(2025)	4.2	6.3	5.6
No-Build Alternative				
Existing Year	(2001)	2.3	2.4	2.4
Time of Completion	(2010)	2.3	2.6	2.6
Time of Completion + 10 Year	(2020)	2.3	2.6	2.6
Design Year	(2025)	2.3	2.6	2.6

Table 5.4: Air Quality Analysis

The preferred alternative modeled years depict the highest increase at 3.7 ppm in CO concentration over ambient conditions. The largest increases will occur during the design year. The highest concentration of carbon monoxide will affect Air Quality Receptor 2 (see Appendix A, Plate B). Although, the CO concentrations almost double from existing to design year conditions, these projected levels are below the 8 hour National Ambient Air Quality Standard of 9.0 ppm for the preferred alternative. Therefore, no mitigation/attenuation efforts are planned for this project.

5.12.2 Air Quality Conformity

No portion of the project area is within a designated nonattainment area for any of the air pollutants for which the USEPA has established standards. Accordingly, a conformity determination under 40 CFR Part 93 ("Criteria and Procedures for Determining Conformity to State or Federal Implementation Plans of Transportation Plans, Programs, and Projects Funded or Approved Under Title 23 U.S.C. or the Federal Transit Act") is not required.

The National Ambient Air Quality Standards (NAAQS), established by the U.S. Environmental Protection Agency, set maximum allowable concentration limits for six criteria air pollutants. Areas in which air pollution levels persistently exceed the NAAQS may be designated as "non-attainment." States in which a non-attainment area is located must develop and implement a State Implementation Plan (SIP) containing policies and regulations that will bring about attainment of the NAAQS.

All areas of Illinois currently are in attainment of the standards for four of the six criteria pollutants: carbon monoxide, nitrogen dioxide, sulfur dioxide, and lead. Chicago and Metro-East St. Louis are classified as non-attainment for the 1-hour ozone standard. In addition, Cook, DuPage, Kane, Lake, McHenry, and Will Counties and Aux Sable and Goose Lake Townships in Grundy County and Oswego Township in Kendall County have been classified as a severe ozone non-attainment area. Lake Calumet and McCook in Cook County have been designated as non-attainment for the particulate matter (PM_{10}) standard. The sources of particulate matter that prompted the non-attainment classification are unrelated to transportation. All other areas of Illinois currently are in attainment for the ozone and PM_{10} standards.

All areas of Iowa currently are in attainment of the standards for all six criteria pollutants.

No portion of this project is located within a designated non-attainment area.

5.13 FLOOD PLAINS

Portions of the project will be constructed within the 100-year base flood plain of the Mississippi River. This will include bridge piers and embankment. The Flood Insurance Rate Maps for Dubuque, Iowa (1989), East Dubuque, Illinois (1983), and Jo Davie'ss County, Illinois (1984) were examined. The limits of the 100-year flood plain, as indicated on these maps, are shown in Appendix A. The preferred alternative will require a transverse encroachment at the bridge crossing and a longitudinal encroachment for the embankment from Third Street in East Dubuque to Timmerman Drive, for a distance of approximately 1,400 feet.

The existing Julien Dubuque Bridge and the proposed bridge are located at approximately river mile 579.3. According to the Flood Insurance Rate Map for Dubuque, Iowa (195 180 0006 B) dated September 6, 1989, the 100-year flood elevation is approximately 610.5. According to

the Corps of Engineers, the upper Mississippi River water surface profiles indicate the 100-year flood at this location at 609.8. The record flood, recorded in 1965, had a peak discharge of 304,000 cfs, and a recorded flood elevation of 611.76. The river drainage area at this location is approximately 81,600 square miles. To maintain a 3 foot freeboard, the minimum roadway elevation, where not protected by a levee, is 613.5. The Mississippi River is constrained within levees at the proposed bridge crossing. On the Dubuque side a seawall was constructed in the 1970s to protect the city. The top of the wall at the bridge is at elevation 618.5. An earth levee protects the city of East Dubuque, Illinois from flood waters. The top of this levee is at approximately elevation 614.0.

On the west side of the river, the levee continues to approximately river mile 578.5. The west flood plain is very narrow south of mile 578.5. On the east side the levee ends at Sixth Street in East Dubuque, approximately 1,500 feet downstream from the Julien Dubuque Bridge. The flood plain is very wide on the east side, downstream of East Dubuque and consists of numerous islands and sloughs. The east boundary of the flood plain consists of the Burlington Northern Santa Fe (BNSF) Railroad and U.S. 20 highway embankment at the base of the river bluff.

The area inside the East Dubuque levee is subject to flooding from local runoff, primarily from the drainage channel on Wisconsin Avenue (Ill. Rte. 35). When the river is above flood stage, these local flows must be pumped over the levee from a pump station located at the end of Third Street.

5.13.1 Bridge Crossing, Transverse Encroachment

The existing Julien Dubuque Bridge consists of an 845-foot long main span and a series of approach spans. The structure crosses over the levees on both sides of the river, and the bridge abutments and approach embankment are outside the limits of the 100-year flood plain. The only obstructions in the floodway are the bridge piers. It is anticipated that the new two-lane companion bridge will be located immediately downstream from the existing bridge. Because of aesthetic and engineering limitations, the new adjacent structure will have approximately the

same span lengths as the existing bridge. The new piers will be approximately the same thickness as the existing piers, and will be located directly downstream from the existing piers. The new bridge will provide the same opening to the floodway as the existing bridge. The increase in the base flood elevation due to construction of the new bridge will be negligible.

5.13.2 Approach Roadway, Longitudinal Encroachment

All of the approach roadwork in Iowa is constructed outside the limits of the 100-year flood plain. In Illinois, portions of the approach roadwork embankment are constructed in the 100-year flood plain. This longitudinal encroachment extends from near Third Street in East Dubuque to near Frentress Lake Road. The segment from Third Street to Sixth Street in East Dubuque is behind the East Dubuque levee and does not restrict Mississippi River flows.

The encroachment from Sixth Street to Frentress Lake Road consists of embankment retaining wall for approximately the first 3,000 feet constructed immediately adjacent to the BNSF railroad track. This railroad track is the current flood plain boundary. This encroachment is unavoidable since there is insufficient width to construct the improvement between the BNSF track and the bluff.

The embankment construction in the flood plain is in the flood fringe and outside of the floodway. The flood plain is approximately 7,000 feet wide through the project area. The embankment is very narrow in comparison to the overall flood plain width and is located on the east edge of the flood plain. The resulting loss of conveyance and backwater increase will be negligible and the encroachment is not significant.

5.13.3 Flood Plain Storage

The project will result in fill being placed in the flood plain. All of this filling will be in the flood fringe and will result in minimal storage loss. The total volume of fill placed below the 100-year flood elevation of 610.5 and above the ordinary high water of 592.0 is about 390,000 cubic yards.

5.14 SOCIAL/ECONOMIC RESOURCES

5.14.1 Community Cohesion

Community cohesion within an urban setting like Dubuque and East Dubuque consists of participation in community organizations, socializing and common use of community facilities, which are all activities shared by rural residents throughout the project study area.

Adverse impacts to community cohesion are not expected to occur within Dubuque or East Dubuque since the preferred alternative essentially follows existing U.S. 20 and a railroad line. These existing facilities already bisect East Dubuque. It is not anticipated that the proposed action will adversely isolate any neighborhood any further than existing U.S. 20 and the railroad line through Dubuque and East Dubuque.

5.14.2 Environmental Justice

"Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations," provides that "each Federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations." The Executive Order makes clear that its provisions apply fully to programs involving Native Americans.

The 1990 census data reports the racial composition of the Dubuque MSA, and each of its geographic components are identified in Table 5.5. Over 96 percent of the population, in all categories, are Caucasian. The City of East Dubuque, Illinois has the highest number and percentage of persons and dwelling units that would potentially need to be relocated as a result of this project. It is also the area with the highest percentage of the population that is Caucasian. In the City of Dubuque, Iowa the estimated affected population as a percent of total population is statistically so insignificant that there would be no adverse effects. There appears to be no

adverse human health or environmental effects to minority populations within the impact area of the preferred alternative.

RacialDubuqueCategoryMSA(1)		Dubuque City ⁽²⁾		East Dubuque ⁽²⁾		Jo Daviess County ⁽³⁾		
	#	%	#	%	#	%	#	%
1. Total Population	88,084		57,686		1,995		5,020	
2. Caucasian Population	87,027	98.8	56,395	96.2	1,720	99.1	4,995	99.5
3. Black Population	352	0.4	700	1.2	3	0.2	7	0.1
4. American Indian Pop.	88	0.1	112	0.2	1	0.1	7	0.1
5. Asian or Pacific Islander	617	0.7	455	0.8	4	0.2	11	0.2
6. Hispanic Origin ⁽⁴⁾	705	0.8	911	1.6	21	1.1	13	0.3

Table 5.5: Racial Composition by Number and Percent

1) 1999 County and City Extra Annual Metro, City and County Data Book, 1999.

2) U.S. Census 2000.

3) Within Census Tract 202, 1990 U.S. Census.

4) Hispanic Origin (of any race) is distributed in the above ethnic categories.

The median house value within the City of East Dubuque was \$42,700 in 1990. Nearly 44 dwelling units are located in the area south of the railroad tracks within the flood fringe, and consequently, tend to be of lesser value. The median house value within this area appears to be less than for the City of East Dubuque. East Dubuque has a median value that is less than the median value for the City of Dubuque.

The total population in the City of East Dubuque was 1,995 in 2000. Poverty level information is not available for East Dubuque; however, the percentage of persons below poverty level in the region (Census Tract 202) of Jo Daviess County, is 7.3 percent which, if taken as the percentage of the total population of East Dubuque is 146 persons. The value of all homes in the study corridor outside of the area south of the railroad tracks in East Dubuque would indicate that most of the residents are above the poverty level. Three relocations are anticipated for residents located in the area south of the railroad tracks.

The potential exists for low-income residents to be relocated by the proposed action within East Dubuque. However, additional public informational meetings, project newsletters, website and toll-free phone service have been made available to residents in East Dubuque to ensure local participation and awareness of the project. Public involvement activities did not exclude anyone based on income, race or disability. No organized opposition to the project has been identified. Most of the comments from the residents of East Dubuque regarding the project were in favor of the roadway improvement, despite the possibility of being relocated.

There are no minority populations within the project area (see demographics discussion in Section 4.15). Groups of low-income residents are located in East Dubuque, south of the railroad tracks. While no groups of non-low-income residents have been avoided to the detriment of low-income populations within the project area or region, the project may cause adverse effects to some low-income residents; however, these impacts are not believed to be disproportionately high. No workable alternative exists to satisfy the purpose and need of the project and avoid the project's limited impacts on low-income residents of East Dubuque. Adverse impacts include relocation, noise impacts to residents who remain and access changes.

5.14.3 Relocations

The preferred alternative will displace 30 homes, 8 businesses and about 21 other buildings which consist primarily of garages and sheds (Table 5.6). Twenty-nine of the 30 relocated homes are located in East Dubuque with one being located in Dubuque. Twenty-three of the 30 homes are owner-occupied and seven homes are renter occupied. Based upon a review of East Dubuque zoning maps, most of the proposed relocations are believed to be single-family homes.

Туре	Number
Homes	30
Commercial and Industrial Businesses	8
Other Buildings (i.e., garages and sheds)	21

 Table 5.6: Preferred Alternative Relocations

Six of the eight affected businesses are located in East Dubuque, with two located in Dubuque. The two in Dubuque include one industrial and one service business, which employ 29 and seven persons, respectively. Affected businesses in East Dubuque include a bank (nine employees), a dental office (two employees), two gas stations (eight employees total), and two retail stores (ten employees total).

In accordance with the Uniform Relocation and Real Property Acquisition Policies Act of 1970 (as amended), a program of relocation assistance and payment is available through the Iowa and Illinois Departments of Transportation. Policies implemented by the Iowa and Illinois DOTs attempt to ensure that displaced persons receive fair and equitable treatment without discrimination and that the construction of any highway project designed for the benefit of the public will not result in undue hardship to any individual or group. Payments covering moving costs, supplemental housing and advisory assistance services are offered in addition to the state's payment for real property. Comparable housing is available in the Dubuque/East Dubuque area for ownership or rentals. Almost 60 percent of the 29 home relocations in East Dubuque occur along Wall Street. The average market value of these 13 houses is \$49,517. A recent realty search of houses for sale under \$75,000 in the East Dubuque area alone listed 15 houses available for purchase. However, if comparable decent, safe, and sanitary housing is unavailable at the time of displacement, relocation payments based on last resort housing may be necessary.

5.15 NOISE

The purpose of the noise study was to determine existing noise levels at sensitive receptor locations along the preferred alternative, and to predict noise levels at the same locations for the design year (2025) with and without construction of the freeway. According to 23 CFR Part 772, a traffic noise impact occurs when design year traffic noise levels approach or exceed the noise abatement criteria (NAC) or "substantially exceed" existing noise levels. The modeled noise levels for the design year are compared to the modeled noise levels for existing conditions to determine whether traffic noise impacts will occur.

In implementing the FHWA procedures, traffic generated noise impacts occur under the following circumstances: 1) design-year traffic noise levels are greater than or equal to 1 dBA less than the NAC; or 2) design-year traffic noise levels are greater than 10 dBA above existing traffic-generated noise levels. These criteria are not regulatory standards, but are rather

guidelines by which project planners can determine whether noise abatement measures should be considered for a planned project. Predicted noise levels which exceed, meet, or closely approach these criteria as a result of the project indicate a situation where noise abatement measures should be evaluated.

Equivalent existing noise levels (Leq(h)) were calculated for each of the receptor locations. These existing noise levels were predicted using the Federal Highway Administration Highway Traffic Noise Prediction Model for the Personal Computer (FHWA model). This model arrives at predicted noise levels through a series of adjustments to a reference sound level. The reference sound level, also called the "reference energy mean emission level," is based on the sound levels of different classes of vehicles (cars, medium trucks, and heavy trucks). Adjustments are made for predicted traffic flow by the sampling point (design year traffic flow); sampling point distance from the alignment, including whether the intervening ground is hard (parking lot, or a body of water) or soft (grass or soil); finite roadway length (the receptor is only exposed to a finite length of the roadway); and shielding (trees or rows of houses between the receptor and the alignment).

The following assumptions were used in calculating traffic noise:

- Peak hourly traffic flow was based on 10 percent of the existing or projected Average Daily Traffic (ADT) (calculated from existing ADT).
- Peak hourly flow for existing ADT was based on 92 percent automobiles, with the remaining 8 percent being half medium trucks and half heavy trucks. Peak hourly flow for the freeway was based on 92 percent automobiles, 4 percent medium trucks, and 4 percent heavy trucks.
- The distance measurement is a single-lane equivalent distance from the receptor to each of the west and eastbound sides of the freeway. If the roadway was not separated, the distance measurement is the distance from the receptor to the single-lane equivalent centerline location of the roadway.
- Site conditions were determined from aerial photographs. Most receptor locations were considered "hard" sites for a worst case scenario.

• The distance between the receptor and the centerline of the road was at least 50 feet.

5.15.1 Noise Model Results

Only one receptor exceeds the FHWA NAC for noise abatement.

Residential Receptor 2 is located approximately 180 feet northwest of existing U.S. 20 (refer to Appendix A). This receptor location represents a single family residence and has a modeled design year Leq(h) of 67 dBA, which is 1 dBA over the existing modeled noise level.

5.15.2 Noise Abatement

An evaluation of possible noise abatement measures was conducted along the alignment at Receptor 2 where noise levels meet abatement criteria (Table 5.7). Two types of noise abatement measures are available for this project area: physical barriers and traffic management measures. Noise abatement measures were considered for receptor location.

	- 10 Mar			Design	Year (2025) Hour Traffic ⁽¹⁾	Peak
Receptor Number ⁽¹⁾	Type Feet	Represents Feet	NAC ⁽²⁾		Predic	ted
State States	Residential	Build	dBA	Existing	No-Build	Build
N-1	368 Residential	393 (6 homes)	67	60	63	63
N-2	204 Residential	179 (3 homes)	67	66	67	67
N-3	382 Residential	233 (4 homes)	67	60	59	58
N-4	555 Residential	120 (12 homes)		58	58	58
N-5	100 Residential	498 (6 homes)		60	60	62

Table 5.7: Noise Receptor Analysis

1) See Appendix A for receptor locations.

2) Noise Abatement Criteria.

	Ν	Noise Analysis Resul	ts	
		Design Year (2025) No Build	Design Year (2025) Build	
Receptor	Existing ⁽¹⁾	Predicted Leq(h)	Predicted Leq(h)	
Number ⁽³⁾	Leq(h) $(dBA)^{(2)}$	dBA ⁽²⁾	dBA ⁽²⁾	dBA ⁽²⁾ Change
N-1	60	63	63	+3
N-2	66	67	67	+1
N-3	60	59	58	-2
N-4	56	58	58	0
N-5	68	60	62	+2

Table 5.7: Noise Receptor Analysis (continued)

1) Existing Year = 1999

2) dBA = A weighted decibel.

3) See Appendix A for receptor locations.

5.15.3 Traffic Management Measures

Altering or lowering the noise source may be accomplished by realignment, lower speed limits, or the prohibition of louder vehicles such as heavy trucks. Environmental and engineering constraints make realignment impractical for the proposed project. Lowering speed limits or prohibiting trucks also would be impracticable since U.S. 20 is expected to be a major east-west highway and either option could deleteriously affect the movement of traffic over the Mississippi River.

5.15.4 Physical Barriers

Receptor 2 is predicted to approach or exceed the NAC with a modeled design year Leq(h) of 67 dBA. This receptor is located approximately 140 feet from the centerline of the existing highway and approximately 179 feet from the centerline of the proposed highway. Residential receptors will not have direct access onto the highway. A barrier at this location would benefit three residential receptors. This barrier would need to be a minimum length of about 2,877 feet to provide a sufficient screen to lower the Leq(h) to 62 dBA. Total barrier costs associated with a structure at \$25.00/sq. feet would be approximately \$935,025 or about \$311,675 per residence. The low number of receptors benefiting from a noise barrier with the

associated costs makes construction of a noise barrier not reasonable at this receptor location. Although only a 5 dBA reduction was achieved, usually an eight dBA reduction is required for a noise barrier analysis. A cost of about \$24,000 per residence would normally be acceptable noise abatement mitigation.

5.15.5 Construction Noise

Trucks and heavy machinery used during construction will produce noise which may affect some land uses and activities. IADOT and ILDOT specifications require all construction machinery to be equipped with adequate, properly maintained mufflers in constant use and limit all construction within 1,000 feet of an occupied residence, motel, hospital or similar receptor to the period between 7:00 a.m. and 10:00 p.m.

5.16 NAVIGATION

The U.S. Coast Guard has indicated that they prefer a two-lane companion structure be built downstream of the existing bridge. A new bridge upstream would reduce the length for barge traffic to maneuver after passing through the railroad bridge. If a new companion structure was constructed upstream of the existing bridge, the navigation channel would probably need to be considerably longer so that the east pier of the existing bridge would remain as the navigation control point.

The proposed action is to construct a two-lane companion structure downstream from the existing bridge to carry eastbound traffic. The existing bridge will remain in place to carry westbound traffic. The proposed piers will be constructed directly downstream from the existing piers, resulting in a horizontal clearance that matches the existing horizontal clearance. The vertical clearance will be a minimum of 52 feet above the 2 percent flow line or 60 feet above the normal pool, whichever is greater. The clearance will be measured at 25 feet from the channelward face of the piers in the navigation span.

The proposed navigation channel piers will be approximately the same size and configuration as the existing piers. They will be constructed inside of steel sheet pile cofferdams. In order to evaluate the navigation effects of a new parallel downstream structure the U.S. Coast Guard installed buoys at the location of the proposed pier cofferdam and requested tow boat pilots to evaluate the location. The Coast Guard's survey reported that no unreasonable hazard to navigation was present with the proposed pier cofferdam. No adverse effect upon navigation is anticipated from this project.

5.17 PERMITS

Permits regarding water quality will be required for the preferred alternative. The following permits are anticipated to be required.

- A Federal Clean Water Act Section 404 Individual Permit will be required from the Rock Island District Corps of Engineers for discharge of dredge or fill material into waters of the United States, including wetlands.
- Section 401 water quality certification will be required from the Illinois Environmental Protection Agency and the Environmental Protection Division of the Iowa Department of Natural Resources for discharge of dredge or fill material into waters of the United States.
- Section 402 (NPDES) permit will be required from the Illinois Environmental Protection Agency and the Environmental Protection Division of the Iowa Department of Natural Resources for construction activities that result in the disturbance of five acres or more of surface vegetation.
- Permits from the Illinois Department of Natural Resources Office of Water Resources will be required for flood plain crossing and encroachment.
- A Section 9 Permit from the U.S. Coast Guard will be required for a bridge crossing of a navigable waterway under the River and Harbors Act of 1899.

5.18 SECONDARY AND CUMULATIVE IMPACTS

Secondary impacts are defined as; "caused by an action and are later in time or farther removed in distance but are still reasonably foreseeable" (40 CFR 1508.8). Cumulative impacts "result from the incremental consequences of an action when added to other past and reasonably foreseeable future-actions" (40 CFR 1508.7). Secondary and cumulative impacts can be both difficult to identify and evaluate. The study team identified potential secondary and cumulative impacts as a result of construction of the preferred alternative.

Increasing the capacity of U.S. 20 across the Mississippi River will likely facilitate urban development within and outside of the Dubuque and East Dubuque metropolitan areas. Local planning organizations have identified through land use and zoning documents an outline for locations of future development. The areas along existing U.S. 20 are projected to develop into commercial and residential properties. Other planned highway improvements in Dubuque, including extension of the Northwest Arterial to U.S. 52 and the proposed Southwest Arterial, will likely encourage additional commercial and light industrial development. Additional residential growth can be expected to occur in association with accessibility of undeveloped land, employment centers, utilities, retail facilities and other services.

Secondary and cumulative impacts could occur due to new growth that can be directly attributed to the presence of the improved bridge and roadway. Potential impacts resulting from development include loss of wetlands, flood plain encroachments, Section 4(f) land impacts (namely to the Upper Mississippi River National Wildlife and Fish Refuge), and loss of agricultural lands located along U.S. 20 south of East Dubuque. A comprehensive mitigation program to minimize impacts and replace impacted wetlands and flood plain encroachment is essential in reducing cumulative impacts. Planning urban development along existing right-of-way and preventing isolated parcels can reduce secondary impacts to outlying agricultural lands. Regulatory laws protecting Section 4(f) lands and natural areas will be the best protection against any secondary impacts resulting from possible development along the Upper Mississippi River National Wildlife and Fish Refuge.

Secondary and cumulative impacts may also occur to the water resources of the Mississippi River as a result of similar highway improvement projects or newly constructed roadways along the Mississippi River outside of the study area. However, since projected traffic volumes (ADT) on U.S. 20 during the design year are not estimated to be significantly greater than 30,000, impacts in the Dubuque and East Dubuque study area are not anticipated. However, cumulative impacts to the Mississippi River downstream of the study area as a result of similar projects in the future could occur from significant runoff pollution. In light of the upcoming Clean Water Act Section 303(d) regulations regarding TMDLs (Total Maximum Daily Load) for waterbodies, mitigation for or prevention of any adverse pollutional effects to the Mississippi River from runoff will likely be addressed in a future watershed implementation plan.

5.19 SUMMARY

This Environmental Assessment describes a proposed capacity improvement within the existing U.S. 20 corridor between Dubuque, Iowa and East Dubuque, Illinois. The proposed action consists of constructing a new bridge adjacent to the existing Julien Dubuque Bridge along with interchange improvements to the approaches on each side of the Mississippi River.

These roadway improvements are being implemented in cooperation with FHWA and the Iowa and Illinois Departments of Transportation. Further, the proposed action is consistent with local and regional transportation planning goals. Finally, the proposed action has been recognized by the Congress of the United States, which has provided a special appropriation for the project as part of the Transportation Equity Act for the 21st Century (TEA-21).

The purpose and need for the proposed action has been expressed in terms of an action that will improve both capacity and safety within the existing U.S. 20 corridor. U.S. 20 is an established transportation corridor within the bi-state metropolitan area, and as such is a critical surface transportation link. Although other alternatives were evaluated, they did not address the need to increase capacity or safety within the existing corridor, nor would other alternatives sufficiently draw traffic volumes away from existing U.S. 20 so that the existing bridge could retain viable capacity. Safety concerns involving access to medical facilities in Dubuque from

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the East Dubuque side of the river were also an important issue. Currently, train traffic frequently impedes access from the south side neighborhood in East Dubuque from access to U.S. 20. When trains are present in East Dubuque, access to medical and/or emergency services (all located in Dubuque, Iowa) is cut off for residents in the south neighborhood of East Dubuque.

Environmental impacts resulting from construction of the proposed action have been avoided and minimized to the greatest extent practicable through engineering design, consideration of public input, and elimination of alternatives that do not achieve the purpose and need and created a greater extent of adverse impacts on the environment.

Table 5.8 summarizes the environmental impacts associated with the preferred alternative. The preferred alternative will require the acquisition of 15.5 acres of right-of-way in addition to the existing 53.1 acres for a total right-of-way of 68.6 acres. The preferred alternative does not directly impact any farmland; however, about 11.0 acres of non-prime farmland may be used for wetland compensation. A wetlands compensation plan will be prepared during the Phase II design phase of this project. The preferred alternative impacts 7.3 acres of jurisdictional wetlands. These wetlands will be replaced with 11.0 acres of on-site mitigation or 14.6 acres if the mitigation is located off-site or greater than 1.0 mile from the project area.

Approximately 3.7 acres of trees will be impacted by construction of the preferred alternative. This equates to about 925 trees which will be replaced at a 1 to 1 ratio. There are no impacts to any known threatened or endangered species or archaeological sites. However, three Section 4(f) properties will be affected by the proposed action. These include the Julien Dubuque Bridge, the Beck/Fockler House and the Upper Mississippi River National Wildlife and Fish Refuge. The Julien Dubuque Bridge will be affected by the potential for visual impacts of constructing an adjacent bridge. The Iowa SHPO has determined that this impact will be a No

	Impact	Mitigation
Right-of-Way Acquisition	14.9 acres	N/A
Farmland	Potentially 11.0 acres for wetland mitigation	Use of non-prime, frequently-flooded soils
Waters of the U.S.	5,000 cubic yards of fill material	See Wetland Mitigation
Wetland	7.3 acres	11.0 acres on-site or 14.6 acres off-site replacement
Natural Resources: Upland Forest	3.7 acres	1:1 tree replacement
Threatened and Endangered Species	None	N/A
Archaeological Resources	None	N/A
Section 4(f) Properties:		
Julien Dubuque Bridge	No Adverse Effect	Complimentary bridge structure
Beck/Fockler House	Adverse Effect	Historic documentation/ Architectural salvage
Upper Mississippi River National Wildlife and Fish Refuge	5.1 acres	Land exchange
Potential Hazardous Waste Sites	17 properties	Phase II surveys recommended
Air Quality	No residents impacted	N/A
Floodplain Storage Loss	390,000 cubic yards	No additional flood storage required
Displacements:		
Residential	30	Relocation assistance/ Compensation
Commercial	8	Relocation Assistance/ Compensation
Other Buildings	21	Compensation
Noise	3 residential impacts	Barriers unreasonable

Table 5.8: Impact Summary of the Preferred Alternative

Adverse Effect if a companion bridge of similar appearance is constructed to match the existing historic bridge. There are no reasonable alternatives to avoid demolition of the Beck/Fockler House and its associated barn. This impact will be mitigated by historic documentation of the structure and architectural salvage. Approximately 5.1 acres of the Upper Mississippi River National Wildlife and Fish Refuge will be converted to the proposed roadway. This impact has been minimized by utilizing the existing roadway corridor rather than by fragmenting the refuge at a new location. The U.S. Fish and Wildlife Service has jurisdiction over the refuge and has concurred that a land exchange of the wetland mitigation area selected for the project will

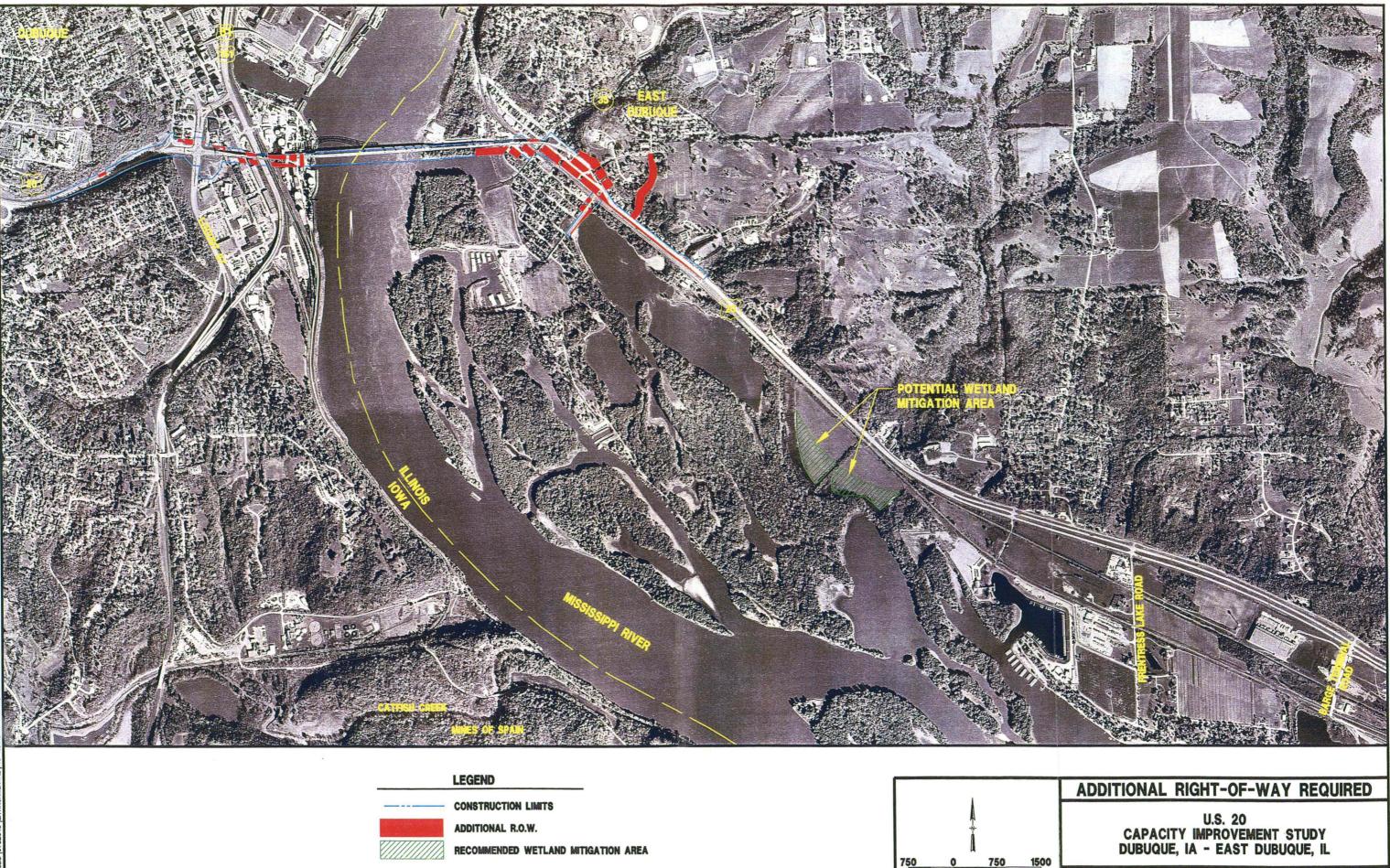
provide adequate mitigation for this impact. The attached Draft Section 4(f) Evaluation contains further information regarding these properties.

Seventeen properties have been identified as having the potential for hazardous contamination within Dubuque and East Dubuque. Phase II investigations have been recommended for the properties in which right-of-way acquisition is necessary. These Phase II investigations will be conducted during the Phase II design phase of this project when specific right-of-way requirements are determined.

Approximately 390,000 cubic yards of fill material will be placed within the 100-year flood elevation of the Mississippi River. Since the Mississippi River has such a large drainage area this amount of fill is considered to be minimal and no additional flood storage is required. There will be no air quality receptors impacted by the proposed improvements; however, three residential homes will be slightly affected by increased noise levels. A barrier analysis for these noise impacts was conducted and determined that a noise barrier would not effectively reduce noise levels and the cost for the barriers was unreasonable.

The proposed action will create the relocation of 30 residents, 8 commercial businesses and 21 garages and sheds. Relocation assistance will be offered to the displaced residents and comparable housing is available in the Dubuque/East Dubuque area.

Based on the above discussion, and considering the lack of controversy regarding planned improvements either from the public, resource/regulatory agencies or agencies with jurisdiction over the projected resources cited, it is the intent of the FHWA and Iowa and Illinois Department's of Transportation, to proceed with project development within the existing U.S. 20 corridor. A public hearing will be held to discuss this proposed action with the public, and copies of this Environmental Assessment/Draft Section 4(f) Evaluation will be made available to the public and resource/regulatory agencies for review and comment. Results of this effort will be documented in the final environmental document prepared for this project.



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FIGURE 5.1

SECTION 6.0 COMMENTS AND COORDINATION

SECTION 6.0 COMMENTS AND COORDINATION

A Notice of Intent to prepare an Environmental Impact Statement for this study was published in the Federal Register on December 11, 1998 (see Appendix C). An early coordination document informing appropriate federal, state, and local agencies of the proposed project and requesting comments was also distributed in December 1998. The following agencies received a solicitation for comments document. Refer to Appendix B for agency coordination. An asterisk indicates that comments were received:

Federal Agencies

- U.S. Coast Guard*
- Federal Highway Administration Illinois Division*
- U.S. Army Corps of Engineers*
- U.S. Environmental Protection Agency Region V and Region VII
- U.S. Department of the Interior Fish and Wildlife Service*
- U.S. Department of the Interior National Park Service*
- Division of NEPA Affairs Department of Energy
- Federal Railroad Administration
- Federal Emergency Management Agency

State Agencies

- Iowa Department of Natural Resources*
- Iowa Department of Agriculture and Land Stewardship
- Iowa State Historical Society
- Iowa Geological Survey Bureau
- Iowa Department of Economic Development
- Illinois State Geologic Survey*

- Illinois Department of Agriculture*
- Illinois Department of Natural Resources*
- Illinois Environmental Protection Agency*
- Illinois Historic Preservation Agency*
- Illinois Department of Transportation Division of Aeronautics*
- League of Illinois Bicyclists

Local Agencies

- Keystone Area Education Agency*
- City of Dubuque, City Manager*
- East Dubuque City Hall City of East Dubuque
- Greater Dubuque Development Corporation
- Jo Daviess County Chamber of Commerce
- Dubuque Area Chamber of Commerce
- Jo Daviess Zoning Office
- Dubuque County Engineer
- West Side Business and Professional Association
- East Dubuque Zoning Administrator
- Dubuque County Health & Zoning
- Jo Daviess County Engineer
- Galena/Jo Daviess Convention Bureau
- Dunleith Township Road Commissioner

A resource agency meeting was held in July 1999 to review the status of the project. The meeting was held in Dubuque and the following agencies and others attended:

- Iowa Federal Highway Administration
- Illinois Federal Highway Administration
 - U.S. Army Corps of Engineers

- U.S. Coast Guard
- U.S. Fish and Wildlife Service
- U.S. Environmental Protection Agency
- Iowa Department of Transportation
- Iowa Department of Natural Resources
- Illinois Department of Transportation
- Illinois Department of Natural Resources
- Dubuque Metropolitan Area Transportation Study (DMATS)
- Hanson Engineers Incorporated
- IIW Engineers & Surveyors, P.C.
- Cultural Resources Subconsultant

The coordination meeting resulted in the agencies concurring on: 1) eliminating the southern corridor from further study, based on environmental impacts and not meeting the purpose and need; 2) an alternative within the preferred corridor along existing U.S. 20; and 3) decision to prepare an Environmental Assessment instead of an Environmental Impact Statement based on avoiding significant environmental impacts with the preferred alternative.

On September 9, 1999 a Notice of Intent to cancel the Environmental Impact Statement and prepare an Environmental Assessment was issued (see Appendix C). This decision was based on selecting a preferred alternative within the preferred corridor avoiding significant environmental impacts associated with an alternative in the southern corridor.

Public involvement for this project was established via a series of public informational meetings, project newsletters, a project website, and a telephone message center. Public informational meetings were held in Dubuque, Iowa on December 10, 1998 and May 6, 1999. The first of these two meetings were held at the Holiday Inn Five Flags, the second at Washington Junior High School. An additional public meeting was held in East Dubuque, at the East Dubuque City Hall, June 1, 1999. Exhibits displayed the typical sections under consideration; and alternative alignments. An aerial photo mosaic having a scale of 1:2500 was also displayed.

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An announcement of the first public meeting was published in the <u>Dubuque Telegraph</u> <u>Herald</u> and the <u>East Dubuque Register</u> on December 4, 1998. The announcement of the second and third public informational meetings was faxed to the newspapers: <u>Dubuque Telegraph</u> <u>Herald, East Dubuque Register, Galena Gazette</u>, and local radio and television stations: KDTH-KATF and KFXB-TV for release to the public.

Handouts containing project summary information and a comment sheet were distributed at all meetings. A total of 37 people attended the first meeting, 41 the second, and 50 the third. These individuals were also able to review the U.S. 20 Capacity Improvement Study exhibits and comment on the proposed alternatives. Thirteen comment sheets were returned following the first meeting, one after the second, and 14 following the third.

Representatives from the cities of Dubuque, Iowa and East Dubuque, Illinois, the Departments of Transportation of the States of Illinois and Iowa, Hanson Engineers Incorporated, and IIW Engineers & Surveyors were available to answer questions and receive input from the public. A majority of the persons attending the public informational meetings in Dubuque and East Dubuque favored the preferred alternative. Public opposition to the southern corridor also was a factor in its elimination from further study.

The first project newsletter was published in November 1998, a second newsletter in May 1999 and a third newsletter in October 1999.

This Environmental Assessment will be distributed to Federal, state, and local agencies, and the public for review and comment. Any comments will be considered to further develop the document for the anticipated Finding of No Significant Impact (FONSI) or preparation of an Environmental Impact Statement. At the time of public release of this document, the date and time for a public hearing on this proposed project will be established.

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6.1 PROJECT DISPOSITION

This study began in November 1998. The first public informational meeting was held on December 10, 1998 in Dubuque. The first project newsletter was published in November 1998, a second newsletter in May 1999 and a third newsletter in October 1999. Second public informational meetings were held May 6, 1999 in Dubuque and June 1, 1999 in East Dubuque. Preliminary alternatives were displayed at these meetings.

The Environmental Assessment will undergo a 45-day public review period and agency review process. A public hearing will be held within this review period. It is anticipated based upon the studies and comments received to date, that the project will result in a Finding of No Significant Impact (FONSI), unless new information is presented from the public hearing or agency review process.

SECTION 7.0 LIST OF PREPARERS

SECTION 7.0 LIST OF PREPARERS

Name

Affiliation

Jim Moll Kevin Seals Jeff Ball Rodger Anderson Leah Rogers

Don Helms Dennis Waugh Julie Neebel Susan Miller

Becky Hiatt Manu Chacko Roger Larsen Steve Larson Russell Sinram Larry Hill Mike Bruns Hanson Engineers Incorporated Hanson Engineers Incorporated Hanson Engineers Incorporated Hanson Engineers Incorporated Historic Preservation Consultant

Helms & Associates IIW Engineers & Surveyors IIW Engineers & Surveyors IIW Engineers & Surveyors

Iowa FHWA Iowa FHWA Iowa DOT Iowa DOT Iowa DOT Illinois DOT-District 2 Illinois DOT-Central Office Primary Responsibility

Project Manager Environmental Lead **Technical Specialist Technical Specialist** Architectural & Archaeological Survey Mussel Survey Local Coordination **Technical Specialist** Phase I Environmental Site Assessment **Document Reviewer Document Reviewer** Project Manager **Document Reviewer Document Reviewer Document Reviewer Document Reviewer**

Capacity Improvement of U.S. 20 Across the Mississippi River Dubuque County, Iowa and Jo Daviess County, Illinois

> IOWA DOT Project Number BRF-20-9(149)-38-31

DRAFT SECTION 4(f) EVALUATION

Submitted Pursuant to 49 USC 303

BY THE U.S. DEPARTMENT OF TRANSPORTATION Federal Highway Administration and IOWA DEPARTMENT OF TRANSPORTATION Highway Division Environmental Services

The following persons may be contacted for additional information concerning this document:

Bobby W. Blackmon, Division Administrator Federal Highway Administration 105 Sixth Street Ames, Iowa 50010-6337 Telephone: (515) 233-7300 James P. Rost, Director Office of Environmental Services Iowa Department of Transportation Ames, Iowa 50010 Telephone: (515) 239-1225

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SECTION 1.0 PROPOSED ACTION

SECTION 1.0 PROPOSED ACTION

1.1 DESCRIPTION AND LOCATION OF THE PROPOSED ACTION

The proposed action consists of improving the capacity of U.S. 20 across the Mississippi River in the vicinity of Dubuque, Iowa. The location of the project is shown in Figure 1.1. U.S. 20 currently crosses the Mississippi River on the two-lane Julien Dubuque Bridge. Alternatives evaluated for additional capacity include providing a new four-lane bridge near the existing bridge location, providing a new two-lane bridge adjacent to the existing bridge to serve as a one-way couple, providing a new four-lane bridge north or south of the urban area, in addition to the No-Build Alternative. The west terminus of the study is U.S. 61 at Locust Street in Dubuque County, Iowa. The east terminus is U.S. 20 near Barge Terminal Road in Jo Daviess County, Illinois.

1.2 **PROJECT HISTORY**

In recent years, Dubuque, East Dubuque, and surrounding areas have experienced rapid economic growth which has increased traffic volume within the U.S. 20 study corridor. Developments on the Dubuque riverfront have also increased traffic in and through the central business districts and contributed to increased volumes on U.S. 20. Extension of the Northwest Arterial, located on Dubuque's northwest side, and the planned Southwest Arterial, will likely lead to additional development of the area, increasing the need for higher traffic capacity on U.S. 20 within the existing corridor.

In response, the Iowa Department of Transportation (IADOT) has expanded U.S. 20 to four lanes through much of eastern and central Iowa to accommodate this area's existing and future traffic needs. IADOT has also improved U.S. 61 and the U.S. 20/Locust Street intersection in Dubuque. The Illinois Department of Transportation (ILDOT) also has plans to

upgrade U.S. 20 to a four-lane expressway from Barge Terminal Road east of East Dubuque to Rockford, Illinois in response to increased traffic demands within the existing U.S. 20 corridor.

Given the established need for additional capacity, the Dubuque Metropolitan Area Transportation Study (DMATS) in cooperation with the IADOT and ILDOT, retained Hanson Engineers Incorporated in 1997 to evaluate alternatives to improve the capacity of U.S. 20 within the corridor under study, and to prepare appropriate environmental documentation for any proposed improvements. Subsequently, in response to the transportation needs of the Dubuque metropolitan area, the United States Congress appropriated a total of 28 million dollars for initial work as part of the Transportation Equity Act for the 21st century (TEA-21).

1.3 PROJECT STATUS

The project study began in November 1998. The first public informational meeting was held on December 10, 1998 in Dubuque. The first project newsletter was published in November 1998, a second newsletter in May 1999 and a third newsletter in October 1999. Second public informational meetings were held May 6, 1999 in Dubuque and June 1, 1999 in East Dubuque. Preliminary alternatives were displayed at these meetings. No organized opposition to the project was presented at these meetings.

A resource agency coordination meeting was held in July 1999 to obtain concurrence on the purpose and need for the study, the recommendation of the preferred corridor and elimination of further study of the south corridor, and the preparation of an Environmental Assessment rather than an Environmental Impact Statement for the project. The resource agencies in attendance at the meeting concurred on all of these points (see Section 6.0 of the EA).

The Environmental Assessment and Draft Section 4(f) Evaluation will undergo a 45-day public review period and agency comment process. A public hearing will be held within this review period. It is anticipated based upon the studies and comments received to date, that the project will result in a Finding of No Significant Impact (FONSI), unless new information is

presented from the public hearing or agency comment process. A Final Section 4(f) Evaluation is expected to be submitted with the FONSI.

1.4 <u>PURPOSE OF THE PROPOSED PROJECT</u>

The purpose of the project is to improve the capacity of U.S. 20 across the Mississippi River. The capacity improvement is intended to improve safety and reduce traffic congestion at the existing river crossing (the Julien Dubuque Bridge at Dubuque, Iowa), accommodate anticipated increases in traffic, and provide the most direct route for traffic crossing the river.

1.5 <u>NEED FOR THE PROPOSED PROJECT</u>

Improvement of the capacity of U.S. 20 across the Mississippi River is needed for the following reasons:

1.5.1 System Linkage

IADOT has improved U.S. 20 to four lanes through much of eastern and central Iowa as part of Iowa's commercial and economic system. In addition, significant improvements have been made to U.S. 61 and U.S. 20 in Dubuque as well as portions of U.S. 20 in Illinois. The Julien Dubuque Bridge is a two-lane segment in the center of a 200-mile long four-lane link through Iowa and Illinois. U.S. 20 in East Dubuque is currently a two-lane arterial roadway with numerous access points which reduce capacity due to turning movements and slower traffic speeds.

1.5.2 Social and Economic Conditions

The existing bridge provides the primary link between Illinois and the employment, retail, and recreational attractions in Dubuque. The closest alternative bridge to Dubuque is located north along U.S. 61 in Wisconsin. The use of this bridge would increase adverse travel for Illinois residents by about 2 miles for each round trip, and is not a viable option to draw

traffic volumes away from the U.S. 20 corridor. Major barge terminals are located in Illinois and Iowa near each end of the Julien Dubuque Bridge. Rail facilities are also located at each end of this bridge. Capacity improvements on U.S. 20 within the study corridor are necessary to maintain quality access to these intermodal facilities as traffic demands increase.

Additionally, residents in East Dubuque and Jo Daviess County rely on Dubuque for medical facilities. Hospital or emergency care facilities are not available in East Dubuque. The existing U.S. 20 bridge is a critical link in providing these emergency services and accordingly, capacity improvements to the existing crossing are necessary to maintain and improve future access to these facilities for East Dubuque residents.

1.5.3 Traffic Demand

Dubuque and the surrounding areas have experienced rapid growth in recent years. Planned highway improvements in Dubuque, including extension of the Northwest Arterial to U.S. 52 and the proposed Southwest Arterial, will encourage additional commercial and light industrial development. Developments such as barge terminals, casinos and restaurants on the Dubuque riverfront have also served to increase traffic into and through the central business district.

The ability to accommodate current and future traffic volumes is one indication of the need for highway improvements. This ability can be determined by analyzing relationships between the highway's average daily traffic (ADT) and design hourly volume (DHV) and the roadway's physical characteristics for current and future years. The average daily traffic consists of the total traffic volume passing a point on a highway on an average day. The design hourly volume is the forecast of traffic volumes for a selected hour.

The current ADT at the Julien Dubuque Bridge is 20,300. The design hourly traffic volume in the current year is 1,700 (see Figure 1.2). The projected daily traffic at the bridge is estimated to be about 35,000 vehicles in the design year (2025). The projected design hourly traffic volume is 2,900 vehicles. A capacity analysis in accordance with the Transportation

Research Board's Highway Capacity Manual, as required by IADOT and the American Association of State Highway and Transportation Officials (AASHTO), indicates that four lanes are warranted for this volume, and indicates the need for capacity improvements to accommodate the projected traffic volumes. AASHTO is the national standards setting group for highway design, their policies are adopted by the states.

1.5.4 Roadway Deficiencies

The existing facility has a number of deficiencies. The existing bridge was completed in 1943. Some of the approach spans were replaced in the early 1990s. The roadway on the existing bridge is 28 feet wide face-to-face of barriers (Figure 1.3), and it does not have a shoulder to provide for errant or disabled vehicles. Twelve-foot wide lanes with 4-foot wide shoulders (face-to-face of barriers) are required to meet current design criteria.

The roadway tapers from four lanes to two lanes at the east and west approaches to the bridge. The east approach has very short westbound entrance and eastbound exit ramps (less than 100 feet), with very tight curves (50 feet radius), and sight distance less than AASHTO Standards. Also, the bike/pedestrian path extending across the bridge does not meet current AASHTO standards for bicyclists. The current posted speed is 30 mph in East Dubuque. The proposed posted speed is 45 mph.

The age of the existing bridge, coupled with high traffic volumes, also results in the need for frequent maintenance. When the bridge is inspected, it is necessary to close one lane of traffic, resulting in delays to motorists relying on the structure for access to the Dubuque metro area.

1.5.5 Bicycle and Pedestrian Accommodation

The existing bridge has a 4 feet, 6 inch wide walkway on the south side of the structure. There are no bicycle accommodations, bicyclists must share the roadway with motorists or the walkway with pedestrians. The AASHTO recommended minimum width for a shared pedestrian/bicycle path is 10 feet, 0 inches.

1.5.6 East Dubuque Rail Traffic

As many as 80 trains per day use the tracks through East Dubuque. In addition to the safety hazards at the grade crossings, this causes delays. There is no other access to the residential areas south of the tracks, and accordingly, when trains block these grade crossings, emergency vehicles cannot get to this area. In discussions with representatives of East Dubuque, they expressed a need for a grade separation at the tracks, and requested that this be included as part of the project.

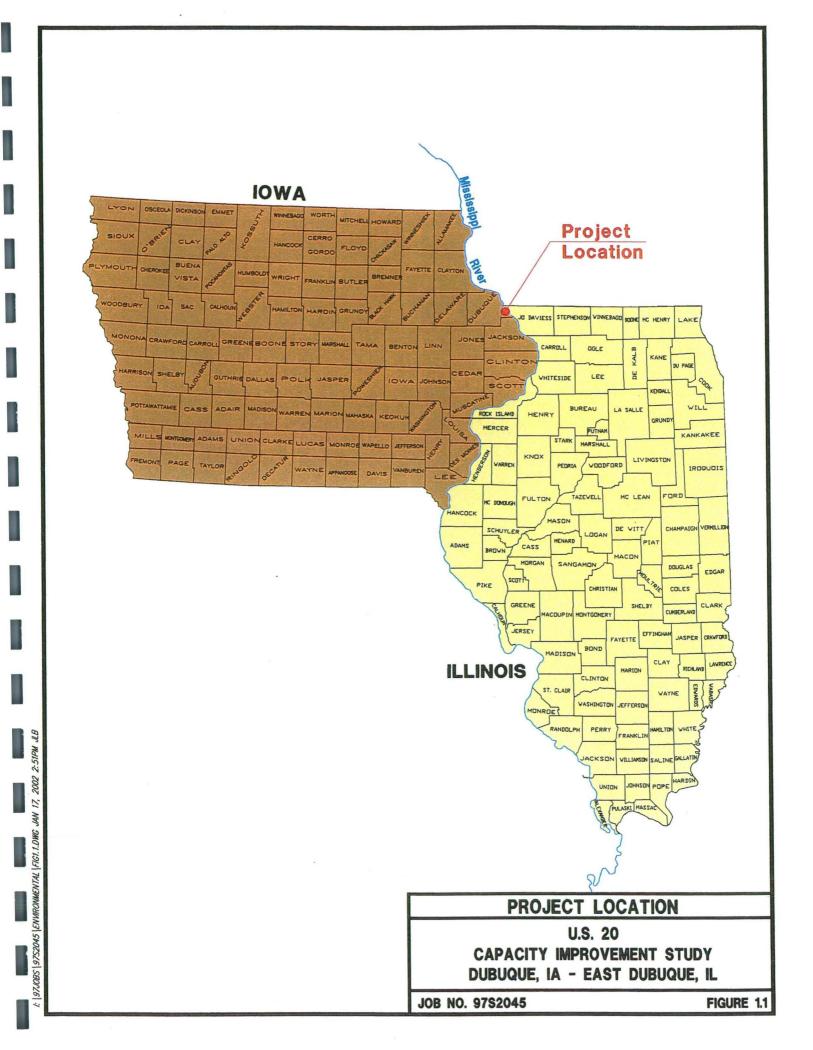
1.5.7 Transportation Planning

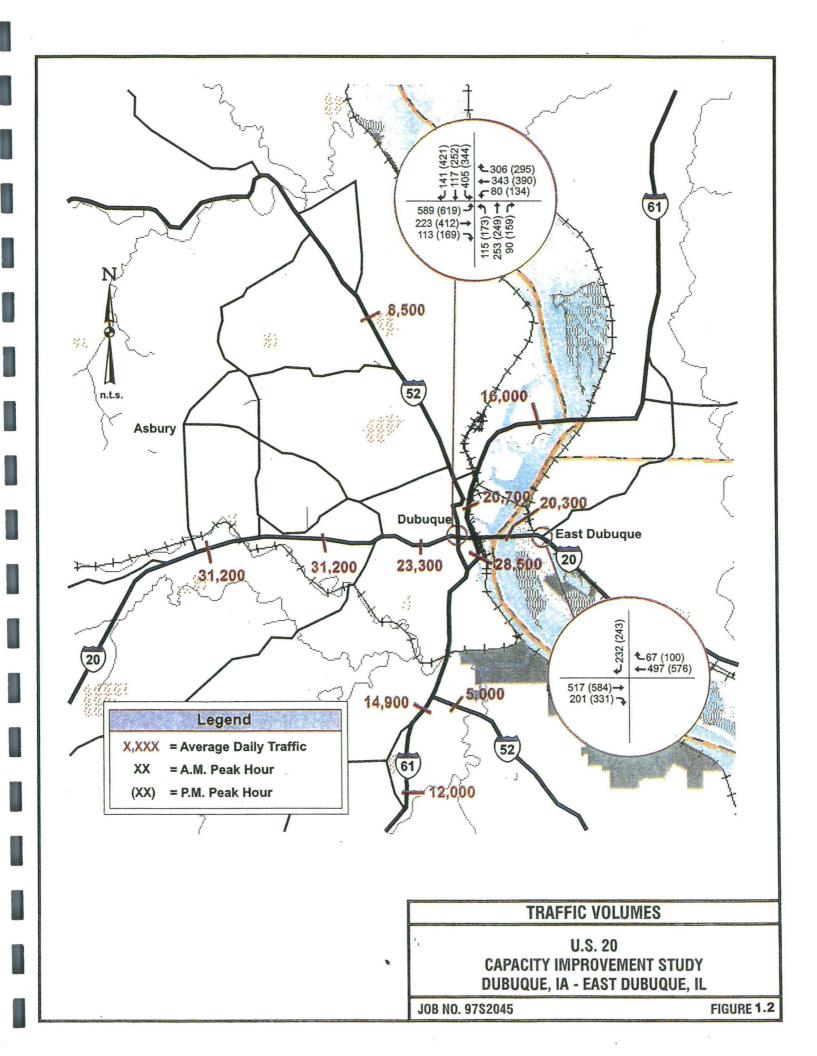
Metropolitan Planning Organizations (MPO's) are established to maintain a cooperative, continuous and comprehensive framework for making transportation investment decisions in metropolitan areas. Program oversight is a Joint Federal Highway Administration and Federal Railroad Administration responsibility. The MPO is made up of local elected officials and transportation professionals who, in cooperation with the states and transit operators, remain responsible for determining the best mix of transportation investments to meet metropolitan transportation needs. The Dubuque Metropolitan Area Transportation Study (DMATS) included a four-lane improvement of U.S. 20 across the river in their transportation plan adopted in January 1995, and it is included in the revised plan adopted August 17, 2000. Therefore, the proposed project is consistent with local land use and transportation planning. Response from the local community regarding the proposed improvements has been very supportive.

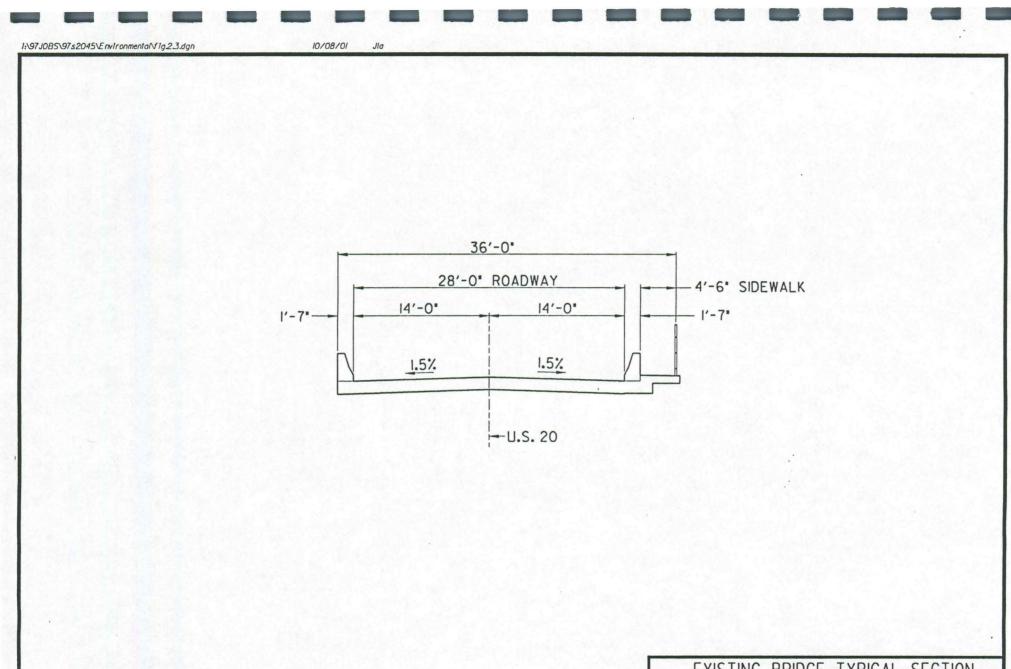
1.5.8 Legislation

The Transportation Efficiency Act for the 21st Century (TEA-21) included the capacity improvement of U.S. 20 at the Mississippi River as a high priority project. Funding of \$28 million was included in TEA-21. This funding is mandated by congress to address transportation

needs in the Dubuque metro area. Additional funds will likely be needed to complete the capacity improvement project.







	The family states									
	EXISTING	BRIDGE	TYPICAL	SECTION						
U.S. 20 CAPACITY IMPROVEMENT STUDY DUBUQUE, IA - EAST DUBUQUE, IL										
JOB	NO. 97S2045		Sec. Contraction	FIGURE 1.3						

SECTION 2.0 SECTION 4(f) PROPERTIES

SECTION 2.0 SECTION 4(f) PROPERTIES

2.1 JULIEN DUBUQUE BRIDGE

The Julien Dubuque Bridge is a continuous tied arch bridge that has a 845-foot channel span bridging the Mississippi River along U.S. 20 at Dubuque, Iowa and East Dubuque, Illinois (see Figure 2.1). While technically jointly owned by the states of Iowa and Illinois, Iowa takes the lead in maintenance and oversight of this bridge. The Iowa State Historical Society is the jurisdictional agency for the bridge. Project development has been coordinated with the Iowa SHPO and they concur with the proposed action (see Appendix D).

The Julien Dubuque Bridge was built in 1941-1943 as a two-lane highway bridge. When built it was the second-longest span over the Mississippi River and the longest continuous tied arch bridge in the world. It is also only the second example of a tied arch bridge in the United States. The Julien Dubuque Bridge is listed on the National Register of Historic Places as a nationally significant structure.

2.2 <u>BECK/FOCKLER HOUSE</u>

The Beck/Fockler House and its associated barn are located at 519 Sinsinawa Avenue in East Dubuque (see Figure 2.2). This structure is eligible for the National Register of Historic Places under Criterion C for its architectural significance. The Beck/Fockler House is not associated with a historic district. The Illinois State Historic Preservation Agency is the jurisdictional agency for this structure. Project development has been coordinated with the Illinois SHPO and they concur with the proposed action (see Appendix D).

This Greek Revival style house was built in 1865. It is a two-story, front-gabled building with one-story wings off both sides of the two-story core. The west side ell has a low-pitched hip roof with a roofline that extends out over the porch area which wraps around the entire ell

and is supported by round Tuscan wooden columns. The east side ell has a gabled roofline with eave overhang and decorative wood friezeband. The main two-story core has bracketed eaves, a porch supported by Tuscan columns, and a monumental Classical enframement of the front door. The enframement includes a simple entablature and several Classical pilasters to either side. The front door itself has a large pane of glass and is difficult to see behind the storm door which is a later addition to the doorway. The house is constructed of brick and has an asphalt-shingled roof and limestone foundation. The windows are tall and narrow and appear original to the house construction. There are some 1/1 windows in the east gable ell that are likely replacement windows. Also of note are the old stone and brick additions to the rear of the house. The limestone retaining wall in front of the property is also of note. The property is currently privately owned.

A small barn is banked into the slope behind the house and along Hill Street. The barn has a rubble limestone foundation, an asphalt-shingled roof, and horizontal drop siding. It functioned as a carriage house and horse barn and may have been built c. 1910.

2.3 UPPER MISSISSIPPI RIVER NATIONAL WILDLIFE AND FISH REFUGE

The Upper Mississippi River National Wildlife and Fish Refuge (Refuge) is the longest wildlife refuge in the lower 48 states (see Figure 2.3). It extends 261 miles along the Mississippi River from the Chippewa River in Wisconsin to nearly Rock Island, Illinois. The Refuge was established in 1924 to protect bottomland habitat for migratory birds and fish. It encompasses approximately 194,000 acres in parts of Minnesota, Wisconsin, Iowa, and Illinois. The Refuge is divided into four management districts with offices located at: Winona, Minnesota; La Crosse, Wisconsin; McGregor, Iowa; and Savanna, Illinois. The U.S. 20 project area is within the Savanna district (see Figure 2.4).

The Upper Mississippi River provides essential habitat for a wide variety of plants, fish, migratory birds and other animals. Presently, the Refuge annually supports 3.5 million visitors and contributes an estimated \$1 billion in recreational benefits to the region. Its attractiveness to

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recreationalists is directly related to its rich fish and wildlife populations and natural scenic beauty.

In the fall of 1997, the American Bird Conservancy designated the Upper Mississippi River National Fish and Wildlife Refuge as a *Globally Important Bird Area in the United States*. This honor is the highest level in the designation scheme of the American Bird Conservancy's United States Important Bird Areas program. It indicates the importance of the extensive wetland and flood plain forest complex which these refuges provide for migratory waterfowl, songbirds, shorebirds and resident species such as Bald Eagles. The Refuge is owned by the U.S. Army Corps of Engineers and managed by the U.S. Fish and Wildlife Service.

Each of the properties mentioned above are protected resources, and project impacts will be subject to evaluation under the provisions of Title 49, U.S.C., Section 303, commonly referred to as Section 4(f). The Iowa FHWA determined, and resource agencies concurred, in a coordination meeting held in July 1999, that the above-mentioned resources are protected as Section 4(f) resources.

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FIGURE 2.1	TEN	AVE BRIDGE								

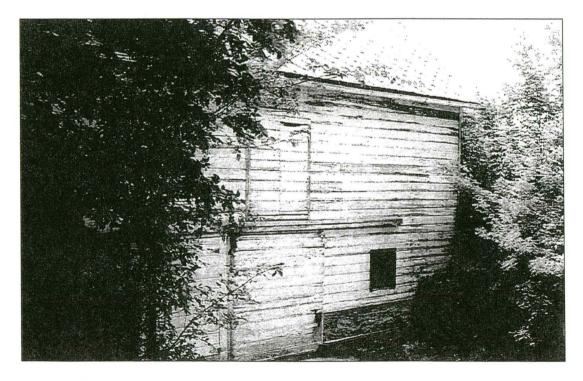


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Beck/Fockler House, 519 Sinsinawa, viewing east.



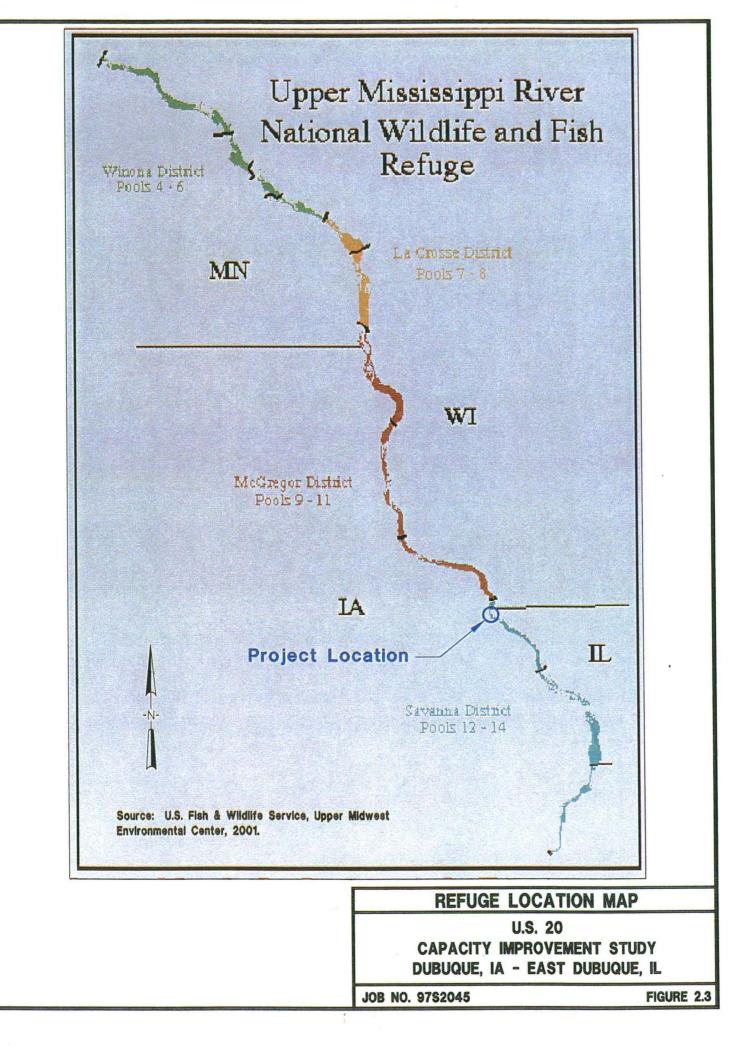
Beck/Fockler Barn, located behind house, viewing east-southeast.

BECK/FOCKLER HOUSE

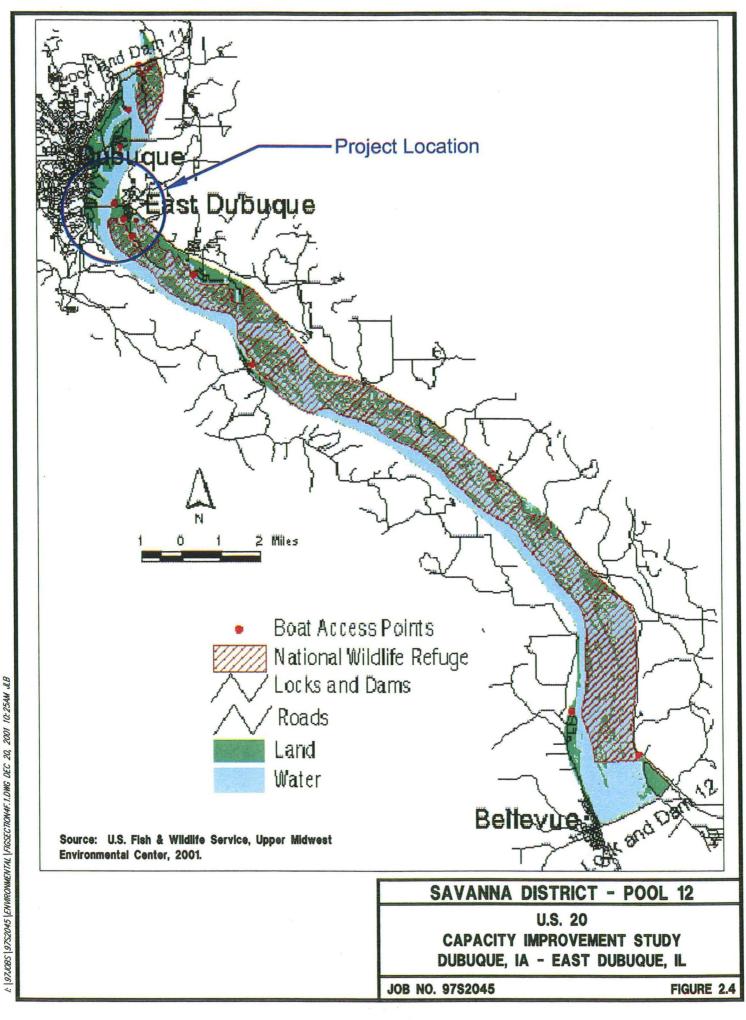
U.S. 20 Capacity improvement study Dubuque, IA - East Dubuque, IL

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FIGURE 2.2



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SECTION 3.0 IMPACTS TO THE SECTION 4(f) PROPERTIES

SECTION 3.0 IMPACTS ON THE SECTION 4(f) PROPERTIES

3.1 JULIEN DUBUQUE BRIDGE

The Julien Dubuque Bridge is listed in the National Register of Historic Places. This structure would be visually impacted by the construction of a companion bridge that would block particular views of the Julien Dubuque structure. However, the Iowa SHPO has determined that this impact does not constitute an Adverse Effect if the conditions of the Memorandum of Agreement (MOA) are adhered to (see Section 8.0). The Iowa SHPO has determined that this project will have a No Adverse Effect if the construction of a companion bridge is similar in appearance to the Julien Dubuque Bridge and is compatible with the Secretary of Interior's Standards. However, the Iowa SHPO may consider an alternative bridge design, one that does not conform to the stipulations of the MOA, to be an Adverse Impact. Accordingly, if an alternative bridge design (with features other than that discussed in the MOA) is selected and is not compatible with the Secretary of the Interior's Standards, a "taking" under U.S.C. 303, Section 4(f) occurs, and the IADOT and the Iowa SHPO must mitigate the adverse effects to the Julien Dubuque Bridge.

3.2 BECK/FOCKLER HOUSE

This house and its barn are located within the construction zone of the preferred alternative for the U.S. 20 Capacity Improvement project. The Beck/Fockler house and barn would be removed as a result of project construction under the preferred alternative.

3.3 UPPER MISSISSIPPI RIVER NATIONAL WILDLIFE AND FISH REFUGE

Approximately 5.1 acres of Refuge property would be required for additional right-ofway of the preferred alternative to be converted to highway use. The Refuge property required for additional right-of-way is adjacent to the existing U.S. 20 right-of-way and the railroad right-

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of-way. Expanding the existing right-of-way is less of a direct impact than fragmenting the Refuge at a different location. The quality of the Refuge property at this location is degraded; however, the proximity of the existing roadway (U.S. 20) and the railroad line have contributed to this degradation. This portion of the Refuge is subjected to littering, noise, frequent flooding, and human activity. The existing use of the Refuge at these locations includes primarily flood storage for the Mississippi River and marginal habitat for wildlife. There are no recreational uses of the Refuge at these locations. This impact to the Refuge will impact only 0.003 percent of the total area of Refuge lands.

SECTION 4.0 AVOIDANCE AND PREFERRED ALTERNATIVES

SECTION 4.0

AVOIDANCE AND PREFERRED ALTERNATIVES

4.1 INTRODUCTION

Alternatives considered which avoid the Section 4(f) properties impacted by the preferred alternative (i.e., Julien Dubuque Bridge, Beck/Fockler House, and Upper Mississippi River National Wildlife and Fish Refuge) include: the No-Build Alternative, using other modes of transportation, and other four-lane build alternatives. Each of these alternatives is discussed in detail below.

4.2 <u>NO-BUILD ALTERNATIVE</u>

The No-Build Alternative would include maintaining the existing federal, state, county, and township roadways located within the study area. If the No-Build Alternative is selected, the existing road system would remain, receiving only routine maintenance and minor improvements. However, some improvements, such as intersection improvements on U.S. 20 in East Dubuque, could require the acquisition of right-of-way. Impacts to the Section 4(f) properties would be avoided because of the small amount of land required for grade changes, shoulder widening, or drainage improvements.

However, the traffic across the Julien Dubuque Bridge will gradually increase. As discussed earlier, the volume of vehicles using the bridge is steadily increasing. As the areas adjacent to the bridge and its surroundings develop, both commercially and/or residentially, the number of motorists using the bridge will rise.

The No-Build Alternative would fail to meet any of the items listed as the purpose and need for the project since the capacity of U.S. 20 across the river would not be improved and existing deficiencies would remain. This alternative also fails to improve system linkage resulting in a section of low-capacity roadway within a four-lane corridor. U.S. 20 would

The location of river crossing corridors north of existing U.S. 20 is constrained by the U.S. 61 crossing between Iowa and Wisconsin about 1.5 miles north of the U.S. 20 crossing, and the railroad bridge located about one-half mile north of the U.S. 20 crossing. A new bridge would need to be located between these existing bridges. A new bridge located one mile north of the existing bridge would add two miles to the length of 78 percent of the trips across the bridge. With an average daily traffic of 20,300 this would represent a total adverse travel of 31,700 vehicle miles per day. This would result in an average additional fuel consumption of over 750,000 gallons per year. Traffic volume growth will increase this figure to over 1,300,000 gallons by the year 2025. Total additional vehicle operating costs for a north corridor will be at least \$125 million greater than the preferred corridor over the next 25 years.

A north corridor connection with U.S. 20 in Dubuque would require construction of approximately one mile of widening to U.S. 61 and two new interchanges. This would cost approximately \$40 million and require the purchase of at least 50 acres of additional right-of-way in a densely developed urban and industrial area.

North corridor alternatives fail to meet the purpose and need for the project since they do not provide the most direct route for traffic crossing the Mississippi River. If the Julien Dubuque Bridge remains in place, along with a new bridge in the north corridor, the new bridge would not attract sufficient traffic to justify four lanes. If the Julien Dubuque Bridge is removed, then a bridge in the north corridor would result in an indirect route and adverse travel for the majority of traffic.

For these reasons north corridor alternatives are not being advanced for further consideration since they are not considered reasonable and do not fulfill the requirements of the purpose and need for the project.

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4.4.2 South Corridor

The study team also evaluated alternatives within a south corridor located south of existing U.S. 20. An alignment within the south corridor would avoid the visual impact to the Julien Dubuque Bridge since its location would be south of the Dubuque City limits and around a meander of the river. An alignment in this corridor would also avoid any impacts to the Beck/Fockler house and barn since it would connect with U.S. 20 south of East Dubuque near Barge Terminal Road. A south alignment cannot, however, avoid the Upper Mississippi River National Wildlife and Fish Refuge because of the numerous islands and other refuge lands which are located in this general area.

The traffic study which was conducted for this project indicated that downtown Dubuque and East Dubuque are the major beneficiaries of the current bridge location. Accordingly, a new bridge within the south corridor would benefit only about 15 percent of the current bridge traffic. A bridge to the south would not attract sufficient traffic to warrant a four-lane facility. Traffic growth and congestion problems would remain at the existing bridge. Similarly, the safety issues noted in East Dubuque (i.e., access blockages due to rail movements) would also not be addressed.

A new alignment in the south corridor would also be longer and unreasonably expensive. The bridge would be almost twice as long since the river is wider south of the Mines of Spain State Recreation Area. There would still be congestion on the Julien Dubuque Bridge. A bridge in the south corridor is not viable in meeting the project purpose and need as would a bridge in the existing U.S. 20 corridor.

Other issues associated with a south corridor would include significant increases in direct environmental impacts than the preferred corridor. The impacts would include: wetlands, wildlife refuge lands, endangered species habitat, agricultural impacts, and archaeological resources.

Numerous wetlands, up to 50 acres, would be affected by a southern alignment. These wetlands occur primarily within the floodplain of the Mississippi River. The numerous islands within the river at this location have been designated as wetlands by the U.S. Fish and Wildlife

Service. These islands, and most of the undeveloped land within the floodplain, are also part of the Upper Mississippi River Wildlife and Fish Refuge. Impacts to the refuge at this location would be approximately 50 acres. A southern alignment would also fragment the refuge at a new location.

The U.S. Fish and Wildlife Service and the Iowa and Illinois Departments of Natural Resources provided information regarding endangered and threatened animal or plant species. The south corridor is near or within areas that have been identified as containing endangered and threatened species. Some of these species include river otter habitat, endangered mussel beds, heron rookeries and other bird species, and numerous plant species.

An alignment in the south corridor will also require about 500 acres of new right-of-way and impact many acres in agricultural production. Since there are not many east-west roads within the south corridor there is not much existing road right-of-way to utilize. Therefore, a new roadway would traverse many farming operations leaving severed parcels, uneconomical remnants, and additional adverse travel for farmers needing to get to their severed parcels.

Based on the archaeological significance of the Mines of Spain State Recreation Area it is assumed that the area immediately south, within the south corridor, would also contain a high percentage of prehistoric and early historic sites. Indian burial mounds are included within these potential sites, which would occur within the south corridor.

Based on this analysis, all southern corridor alternatives were eliminated from further study. A south alignment would not meet the purpose and need since it does not improve the capacity of U.S. 20 across the river while providing a direct route for traffic. A new bridge on a south alignment would not attract sufficient traffic to warrant its construction, and it would not attract sufficient traffic from the existing structure to eliminate the need to add lanes in the future. The south alternative would also have a higher construction cost of about \$250 million, and much more significant impacts to environmental resources including wetlands, threatened and endangered species habitat, cultural resources, farmland, and additional Section 4(f) lands. Because of these reasons, a southern corridor would not meet the purpose and need.

4.5 PREFERRED ALTERNATIVE

The preferred alternative will consist of constructing a single point diamond interchange at Locust Street in Dubuque (see Figure 4.2). This will replace the existing at-grade intersection and significantly improve capacity. U.S. 20 will cross over Locust Street. A new two-lane bridge for eastbound traffic will be constructed south of the existing bridge. The Julien Dubuque Bridge will be left in place to carry westbound traffic.

In Illinois, existing U.S. 20 will be widened from the bridge to just east of Timmerman Drive. The widening will consist of adding an at-grade intersection at Sixth Street and constructing a left turn lane west of Timmerman Drive where U.S. 20 will transition back to its existing cross section. This at-grade intersection will have sufficient capacity to accommodate anticipated traffic through the design year. Improvements from there to Barge Terminal Road will consist of pavement repairs and overlay.

Road closures that will be part of this project include Hill Street, Fourth Street, Wall Street, and Menominee Avenue in East Dubuque.

Hill Street in East Dubuque will be closed immediately north of the Fifth Street/Sinsinawa Avenue intersection. Hill Street will not be connected to this intersection. The existing grade on Hill Street is greater than 15 percent. The realignment of Sinsinawa Avenue will require a significant increase in the Hill Street grade to connect it to this intersection. The safety and drainage problems associated with the very steep grade on Hill Street make a connection to Sinsinawa Avenue undesirable for safety reasons. Furthermore, the Sinsinawa/Fifth Street intersection functions much better as a three-legged intersection than it would with a fourth leg.

Since Hill Street and Wisconsin Avenue provide the primary means of access to the top of the bluff in East Dubuque, and since Wisconsin Avenue has frequent flooding problems, the City of East Dubuque has requested an additional connection to replace Hill Street. The need to provide adequate response time for emergency vehicles is one of the primary reasons. To

replace Hill Street, Plum Street will be extended down the bluff and connected to U.S. 20 east of the Sixth Street grade separation.

The Fourth Street railroad grade crossing will be closed. Access will be provided by the new Sixth Street grade separation. Menominee Avenue will be closed at its east end and will not have a direct connection to Sixth Street. Wall Street will be closed between Second Street and Sixth Street.

This alternative achieves the project purpose and need of improving the capacity of U.S. 20 and has independent utility since it has adequate capacity to accommodate projected traffic through the design year. This alternative also minimizes construction costs and environmental impacts. This "preferred" alternative will be constructed in a manner that will allow construction of the extension at some time in the future, if the funding situation changes.

An alternative within the preferred corridor cannot reasonably be expected to avoid the Section 4(f) properties, including the Julien Dubuque Bridge, the Upper Mississippi River National Wildlife and Fish Refuge and the Beck/Fockler house and barn. However, the following avoidance measures have been assessed.

4.5.1 Julien Dubuque Bridge

The preferred alternative will visually impact the Julien Dubuque Bridge by placing a companion structure near the bridge. The visual impacts cannot be avoided because, as previously stated, other corridor alternatives fail to meet the project purpose and need. Corridors at locations other than in the vicinity of the existing bridge do not attract sufficient traffic to eliminate future congestion at the existing bridge. The option of constructing a parallel tunnel, instead of a parallel bridge, to avoid the visual impact was considered and eliminated because the high cost (more than twice the cost of a bridge) made the alternative not reasonable or prudent. Minimization of this impact is proposed through the construction of a complementary structure in a similar style to the Julien Dubuque Bridge.

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4.5.2 Beck/Fockler House

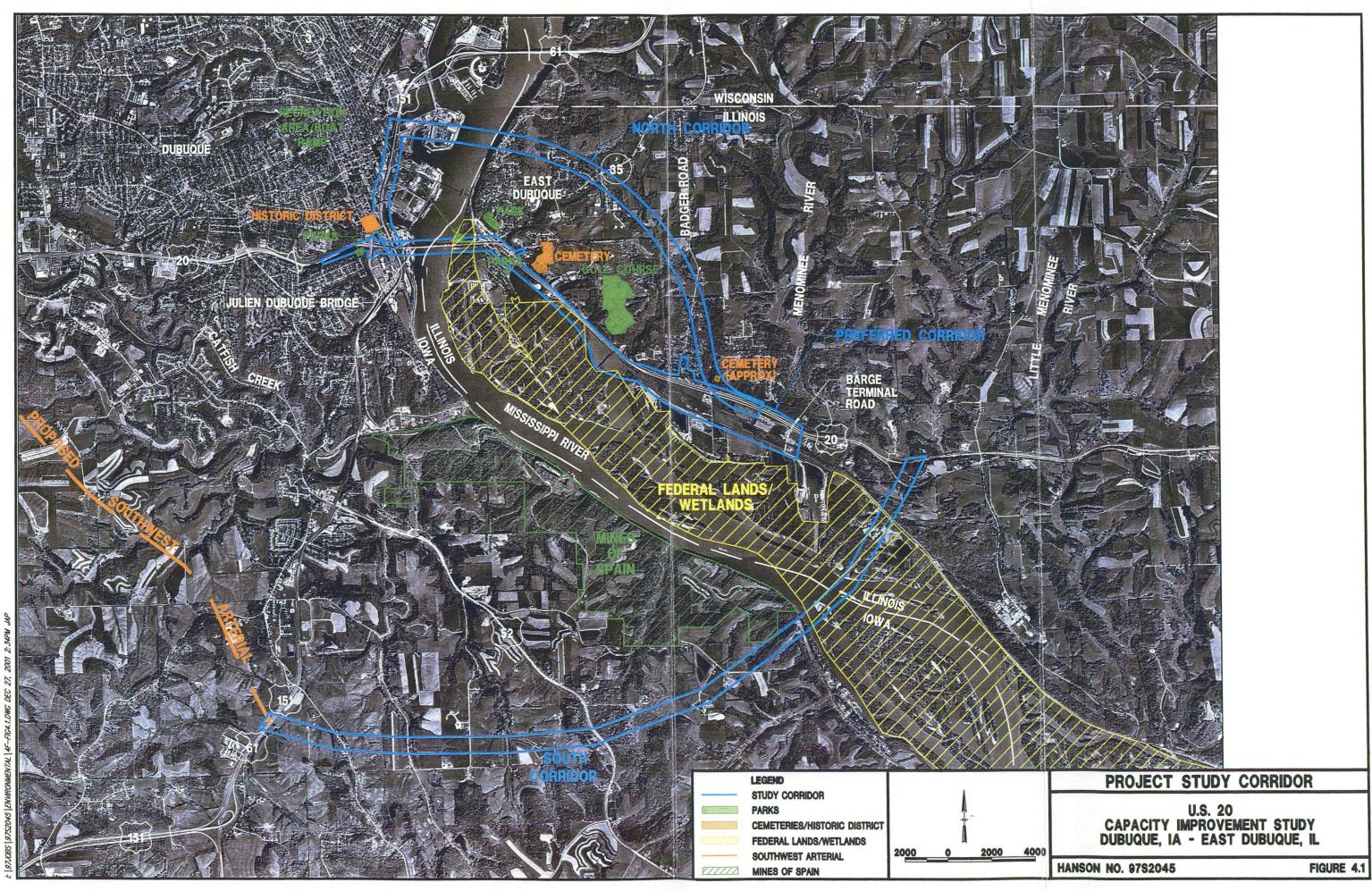
Avoiding the Beck/Fockler house and barn would require that Sinsinawa/Sixth Streets be shifted 100 feet closer to U.S. 20. This would not allow sufficient distance between the Sinsinawa and U.S. 20 intersections on Fifth Street to provide for safe and functional traffic operations on Fifth Street. The intersections would only be about 150 feet apart. This would also necessitate raising the elevation of the Fifth Street intersection, making the resulting grades unacceptably steep according to ILDOT design standards.

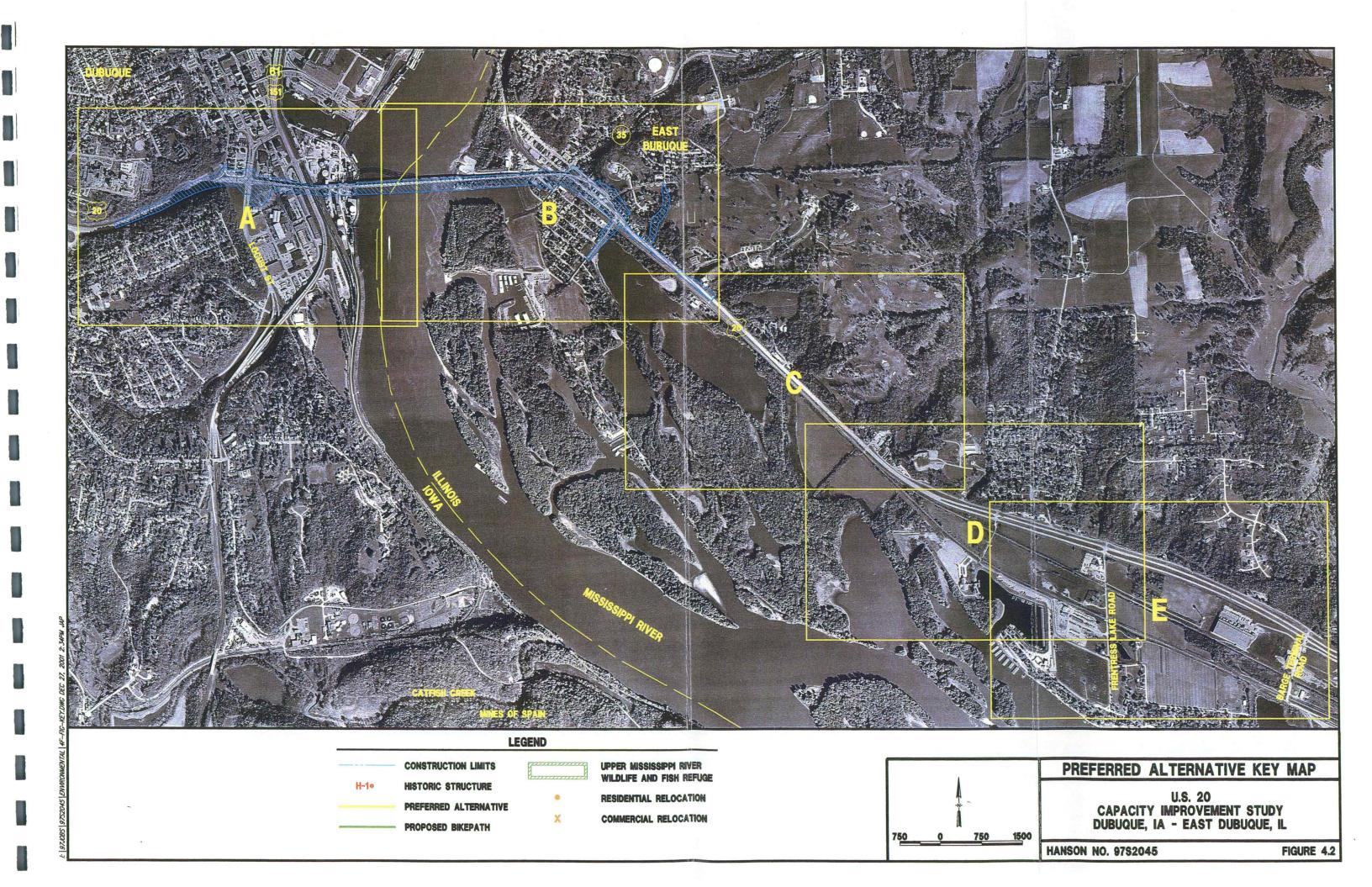
Shifting the alignment north of the house would not be feasible since the house sits on the south face of a very steep and high bluff. Over 500,000 cubic yards (2.3 billion pounds) of rock excavation would result, and six additional homes on either side of the Beck/Fockler house would be displaced. Locating the house and barn within the "infield" at the intersection would eliminate access to the house since any driveway would be within the limits of the turn lanes. Since it is not reasonable to avoid impacting this property, the impacts will have an Adverse Effect on this architecturally significant property.

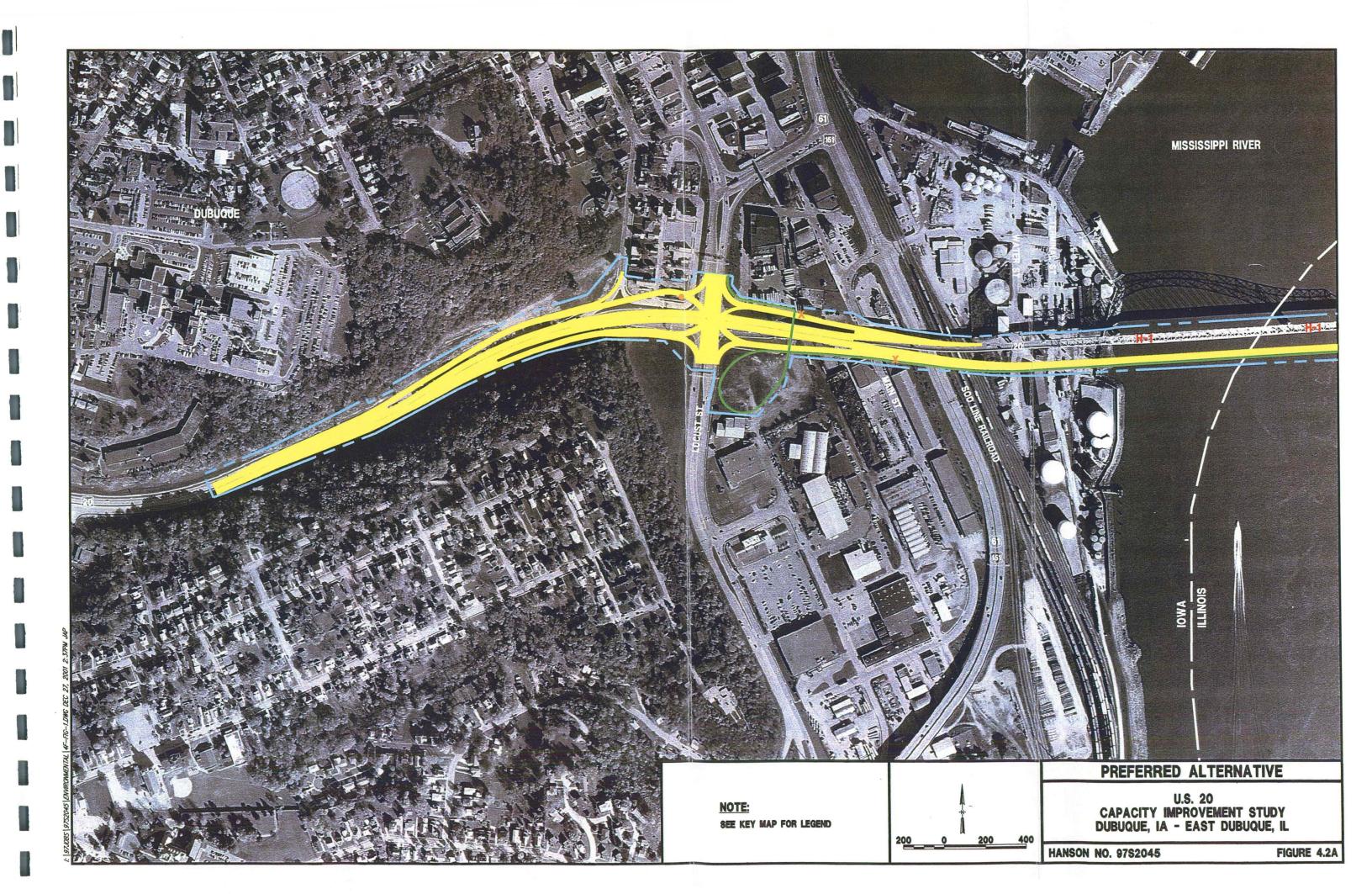
4.5.3 Upper Mississippi River National Wildlife and Fish Refuge

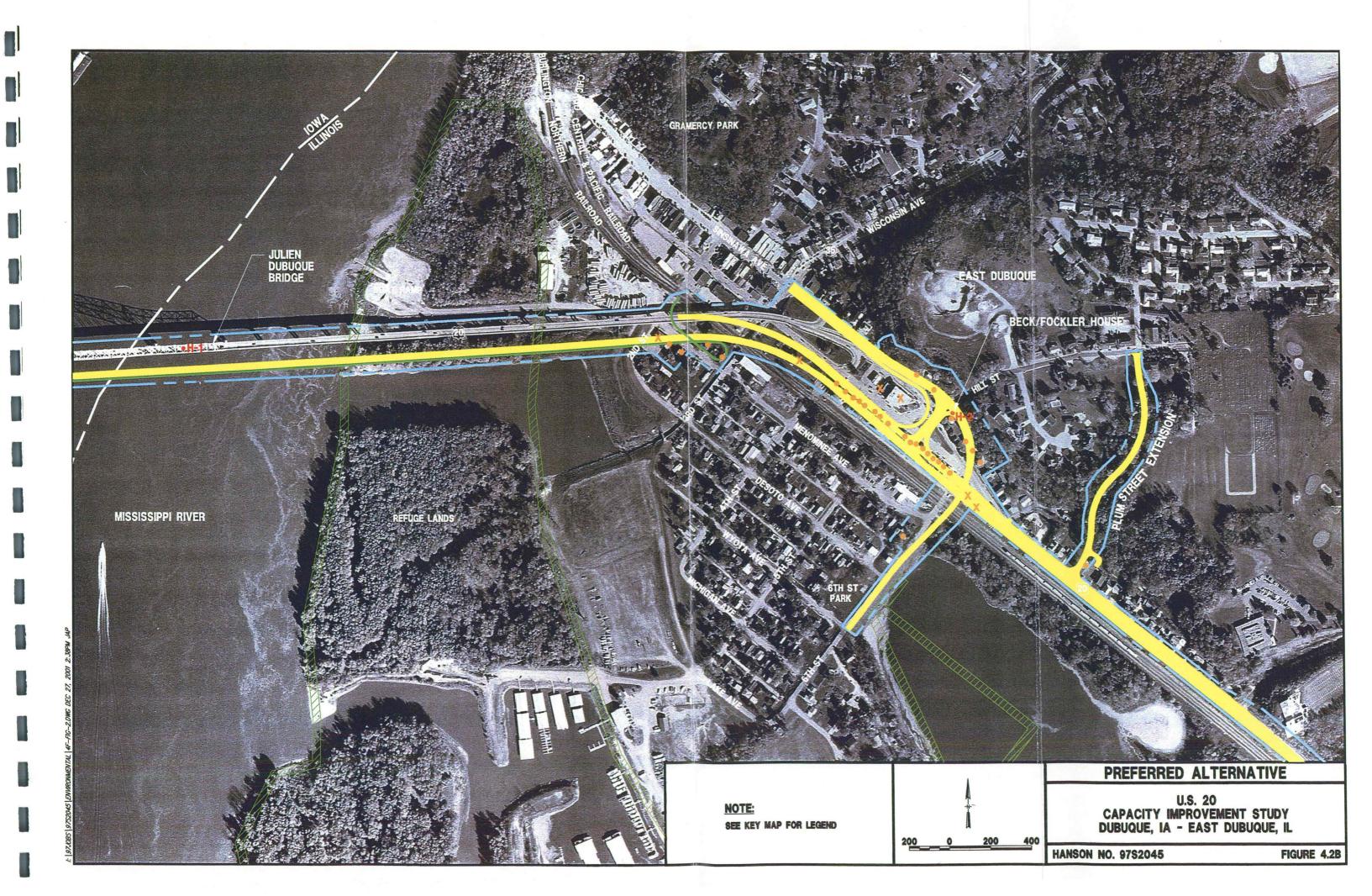
Since the refuge extends for about 261 miles along the Mississippi River from Minnesota to Rock Island, Illinois, it is not reasonable to avoid impacts to the refuge. However, the preferred alternative does avoid more significant impacts to the refuge by not fragmenting the refuge at a new location, allowing for human intrusion into a previously undisturbed area. Tunneling under the Mississippi River and the refuge was also considered, however the cost and maintenance of a tunnel would be more then twice the cost of constructing a bridge, therefore this alternative was not deemed reasonable.

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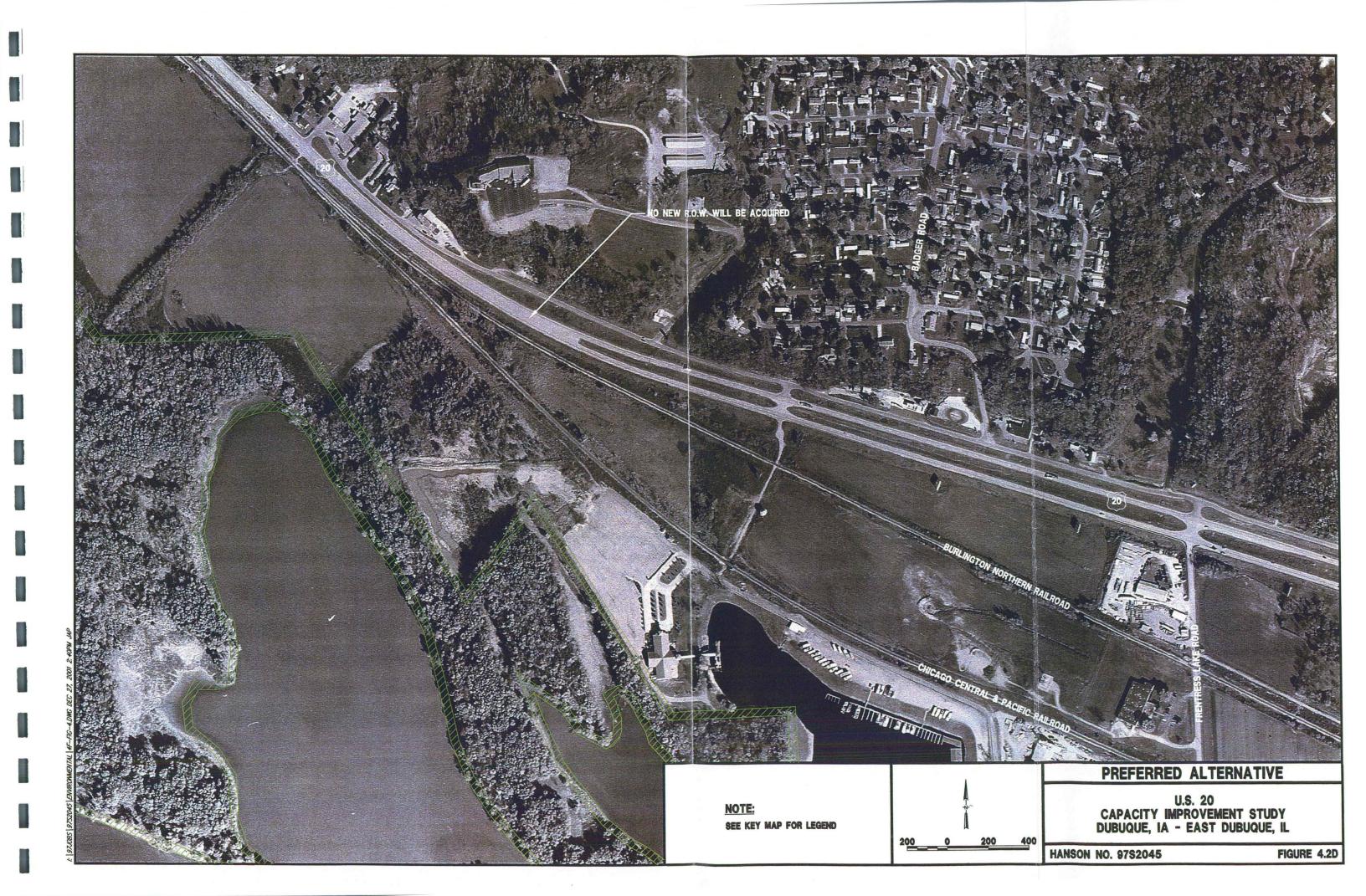


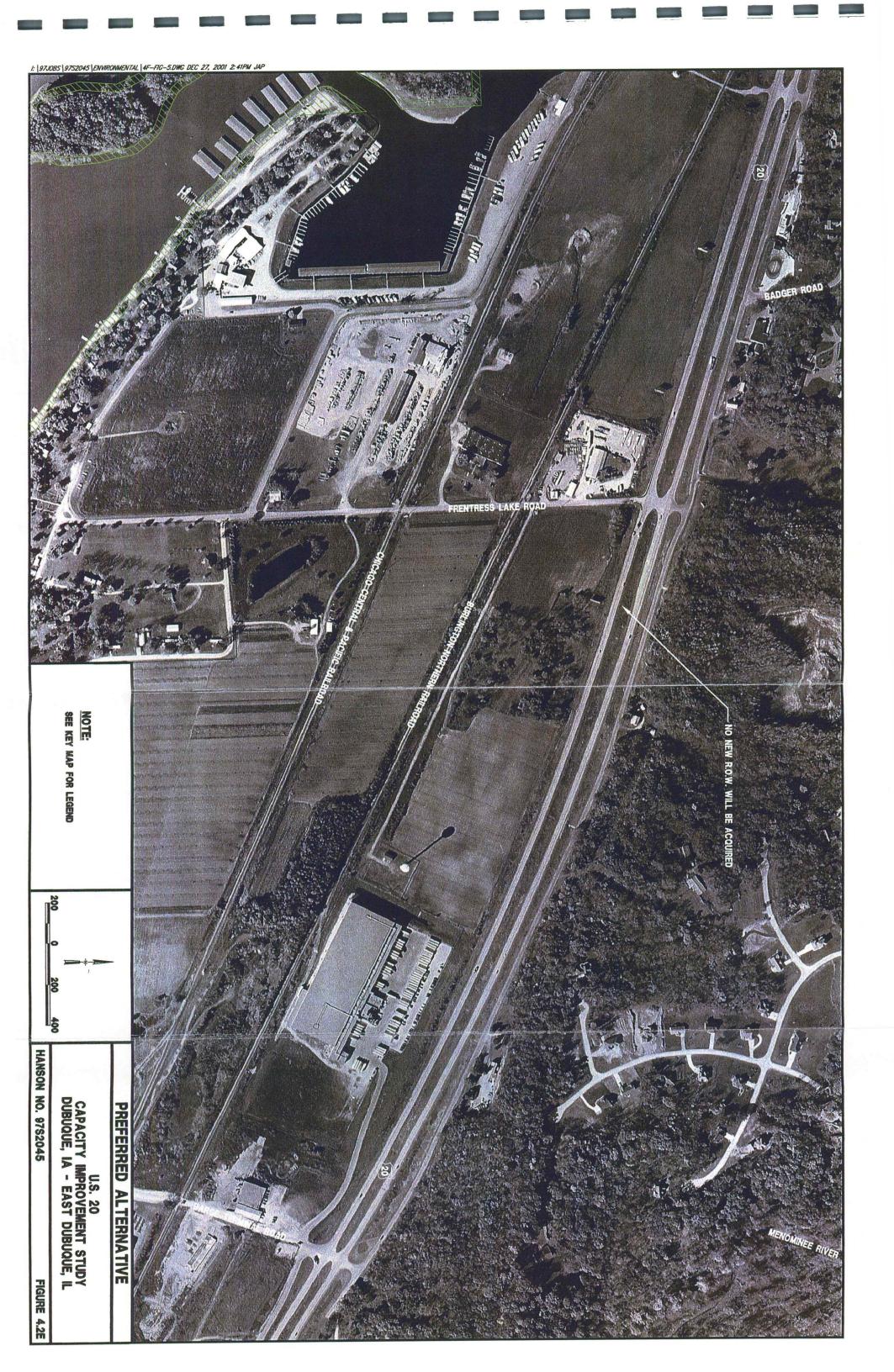












SECTION 5.0

MEASURES TO MINIMIZE HARM AND TO MITIGATE

in traffic flow will have the effect of limiting the vehicular views of the bridge, while on the bridge, to west-bound views only; however, the overall effect will not diminish the bridge's essential character or the features which make it significant. As a result, it is concluded that the change in traffic flow will have a No Adverse Effect on the National Register status of the Julien Dubuque Bridge.

Also, the construction of a new bridge on the south side of the existing bridge in order to carry the two east-bound lanes across the river has been determined by the Iowa SHPO to be a No Adverse Effect as a visual impact, with obstruction of viewsheds of the historic bridge being the primary concern (see Appendix D, IADOT letter dated November 2, 2001).

The centerline of the new bridge will be sited a minimum distance of 135 feet from the centerline of the existing Julien Dubuque Bridge, but cannot be sited too far from the Julien Dubuque Bridge for the following reasons:

- The channel constrictions of the Mississippi River at this point, and the tight turning space between the Julien Dubuque Bridge and the current railroad swing bridge just upriver, requires that any new bridge be placed as close as possible to the existing bridge, and that this new bridge be constructed on the south side of the Julien Dubuque Bridge. This was determined by the U.S. Coast Guard at a project meeting held June 29, 1999, based on the current barge traffic requirements along this segment of the river. Figure 5.1 depicts the navigation channel location for barge traffic around the Julien Dubuque Bridge.
- 2. The existence of a private marina/harbor development on the Illinois side of the river just off the southeast corner of the Julien Dubuque Bridge will require that the new bridge be sited close enough to the existing bridge so that the mouth of the harbor is not cut off or unduly constricted by that construction.

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The construction of a new bridge alongside the existing bridge offers the potential of creating a visual impact, which could have a negative impact or adverse effect if the design of the new bridge introduces visual elements that are out of character with the Julien Dubuque Bridge or significantly alters the setting of this bridge. The following recommendations to minimize any potential adverse effects to the Julien Dubuque Bridge were derived from consultations with the State Historical Society of Iowa. These recommendations have been briefly summarized in the Memorandum of Agreement (see Section 8.0).

- Rehabilitate and restore the Julien Dubuque Bridge as needed in the future to assure its continuing future use and to extend its life-span. The recent refurbishment of the deck system and lower chords have helped in this regard.
- 2. Minimize the visual impacts in the design of the approach ramps and in the placement of the new bridge, so that most of the traditional views of the historic bridge are not significantly altered or impeded (i.e., the north side and east and west end views of the bridge). In this way, the only view that will be impacted is from the south, although the main viewshed obstruction will be to those actually on the river heading upstream. Views from the west shoreline are sufficiently high in the south Dubuque area so that much of the old bridge could still be seen from the southwest. The view from the southeast in Illinois is either already restricted by the presence of the wooded islands and sloughs that impede access to the shoreline in this area or is also sufficiently high from the blufftops so that the historic bridge could be seen at least in part.
- 3. Design the new bridge along the same design as the historic bridge, with the nature of the detailing and/or connections reflective of today's technology rather than a pure replica. Surfaces could be sleeker, ornamentation subtly different, and even the color could either be different or the same. A further possibility is to design the new bridge in a clearly

contemporary design but having a similar scale and height and having the same spans as the historic bridge, so that the new bridge is compatible with the design and look of the old. However, a contemporary, yet compatible, design is a tremendous design challenge, and therefore more problematic than a new bridge of the same design as the old. It is recommended, therefore, that the new bridge follow the design of the old, but still be discernible as new construction.

There was discussion about the feasibility of a new bridge design using a 4. standard I-beam bridge with a Jersey barrier, which would be a low-profile bridge and would, in theory, block less of the view of the historic bridge than a bridge of similar design. However, the engineering realities of such a design would require that the beam of the bridge be about 45 feet deep in order to carry the bridge load across an 845 feet span to match the existing span length of the Julien Dubuque Bridge. It is important to match the span lengths in order to avoid adding any additional barriers to barge traffic on the river at this point and to lessen the visual impact to the historic bridge. However, a 45 feet deep beam that matched the deck height of the Julien Dubuque Bridge would block barge traffic underneath. Thus, to make such a deep beam work, the new bridge would have to be raised about 50 feet or more and would pose problems on the roadway connections on both sides of the river. Each of the approach ramps would have to be raised, thus impacting more land and buildings on both sides (Personal communication with Hanson Engineers, August 1999). The end result would be an even greater visual impact on the Julien Dubuque Bridge. Therefore, such a bridge design does not appear feasible and is not recommended as a means of mitigating the visual impacts of a new bridge to the historic bridge.

It is concluded that the careful placement and design of a new companion bridge with a similar appearance as the Julien Dubuque Bridge will minimize any potential visual impacts of

constructing a new bridge adjacent to the historic bridge (see Figure 5.2). Project clearance is recommended since a No Adverse Effect has been determined with the stipulation that these design features will be incorporated into the project plans.

5.2 <u>BECK/FOCKLER HOUSE</u>

Alternatives, previously discussed, to minimize impacts to this property included taking only the house and leaving the barn in place or vice/versa. These alternatives were eliminated for the same reasons described earlier for avoidance. Slight shifts in the alignment at this location will result in significant rock excavation. Minimization cannot be accomplished so a mitigation plan has been developed (see Section 8.0 – Memorandum of Agreement).

This well preserved example of a Greek Revival-style house in East Dubuque is eligible for the National Register under Criterion C for its architectural significance. It may have some additional significance for its association with Charles and Roccena Beck and perhaps Henry and Susan Fockler; however, their significance in the community is not yet clear from research conducted to date. Therefore, significance under Criterion B is deferred. The barn is a later addition to this property and would likely be considered non-contributing to the property unless additional research extends the period of significance for this property into the 1910s and/or some connection can be made between this wagon/buggy barn and Fockler's wagon/buggy manufactory.

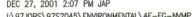
The age and construction of the Beck/Fockler House make the relocation of these structures infeasible, as 1) significant structural damage would likely occur and 2) the cost to relocate these structures also makes such a proposition infeasible. Mitigation for the loss of the Beck/Fockler House is recommended by the completion of a Historic American Buildings Survey documentation study. Architectural salvage of significant pieces from the Beck/Fockler house will be recommended. The Illinois State Historic Preservation Agency (IHPA) has concurred through their review of the Memorandum of Agreement, that an adverse effect to this property, due to demolition, will result from the construction of the preferred alternative (see Appendix D, IHPA letter dated September 14, 2000).

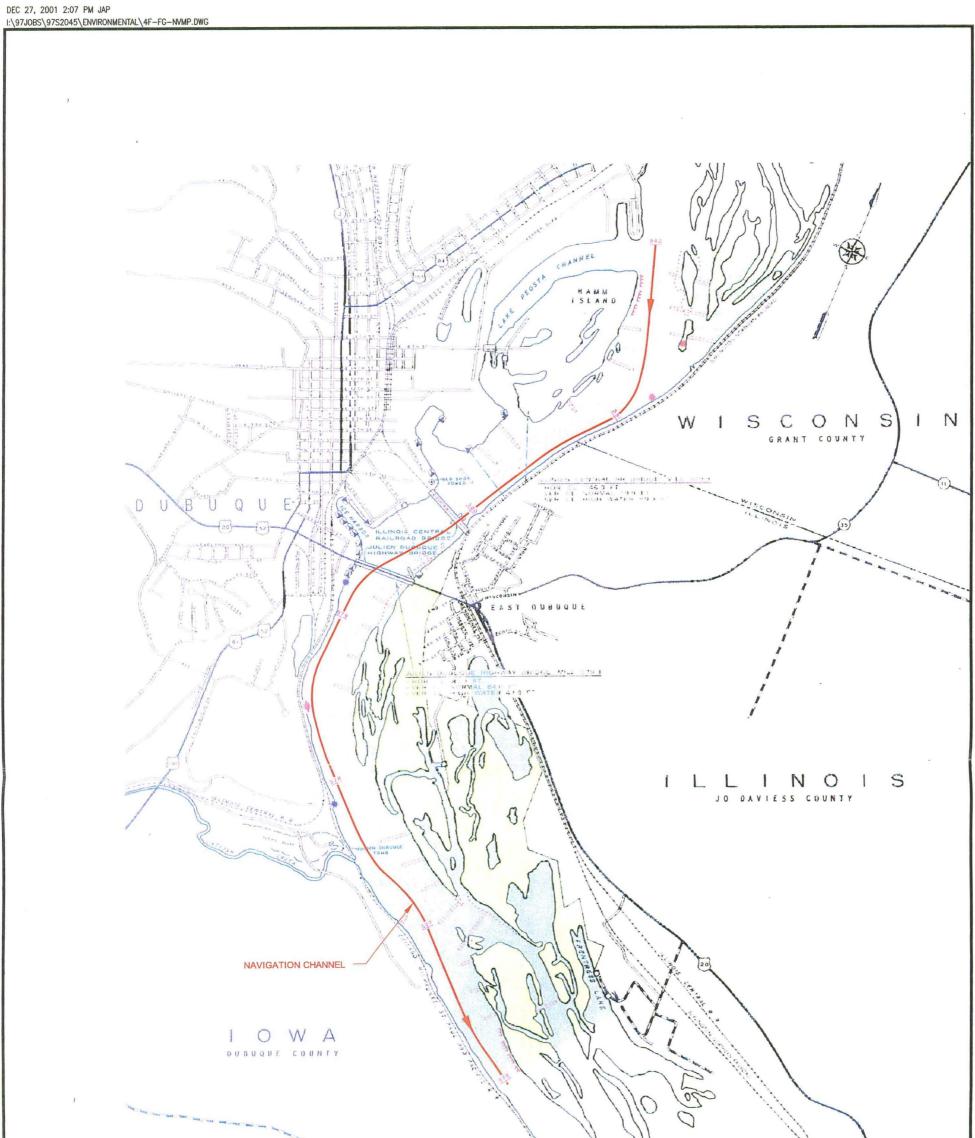
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5.3 UPPER MISSISSIPPI RIVER NATIONAL WILDLIFE AND FISH REFUGE

There are no reasonable build alternatives to avoid impacts to the Upper Mississippi River National Wildlife and Fish Refuge. Efforts have been made to minimize the impacts to the Refuge by utilizing existing highway right-of-way to the extent practicable. Also, following the existing U.S. 20 alignment avoids further fragmentation of the Refuge at a new location which would create an additional barrier to wildlife movement. A portion of the impact to the Refuge lands is for the new bridge construction. Much of this section will be on piers elevating the structure above the landscape allowing for wildlife passage, similar to the existing Julien Dubuque Bridge.

If the area proposed for potential wetland mitigation (see Figure 5.3) is utilized, the property will be turned over to the Refuge as mitigation for this Section 4(f) impact. A letter from the U.S. Fish and Wildlife Service dated April 4, 2000 concurs that a land exchange of wetland mitigation would be considered as appropriate mitigation (see Appendix B, page B-2).

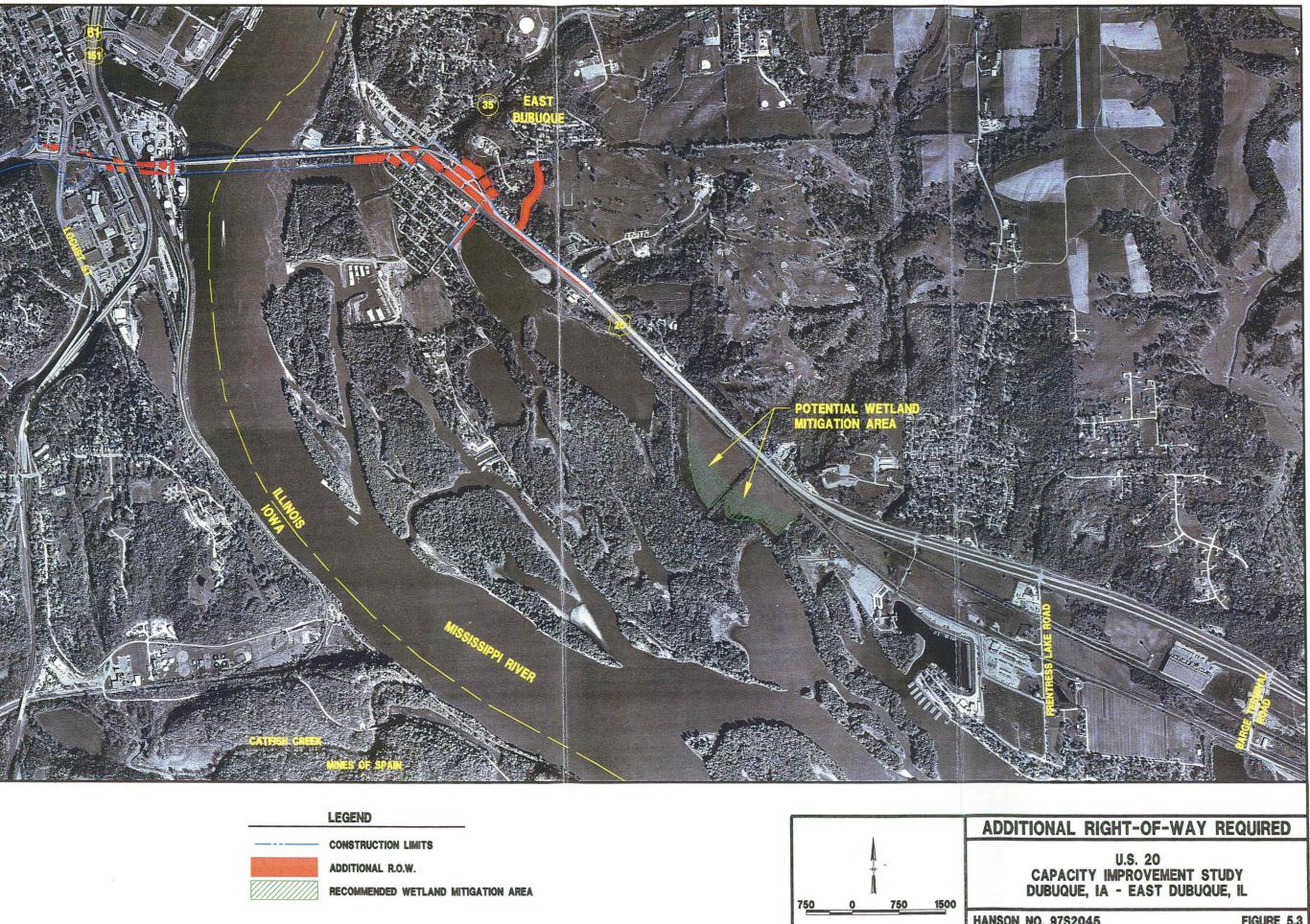




U.S. 20 CAPACITY IMPROVEMENT STUDY DUBUQUE, IA - EAST DUBUQUE, IL HANSON NO. 97S2045 FIGURE NO	MISSISSIPPI RIVER NAVIGATION N	GOVERNMENT PROPERTY WILDLIFE SANCTUARY* WINC DAM SANCE ROAD GRAVEL ROAD UNIMPROVED ROAD UNIMPROVED ROAD UNIMPROVED ROAD SLATE HIGHWAY COUNTY ROAD	STATUTE MILES	BIVER GAGE GOVERNMENT LIGHT GOVERNMENT DAYMARK GOVERNMENT DAYMARK GOVERNMENT UGHT-DAYMARK GOVERNMENT LIGHTED DUOY MICHRINEN LIGHTED DUOY MICHRINEN LIGHTED DUOY MICHRINEL SAILING LINE CURRENT SUBMERGED BANK PROTECTION SUBMERGED FATURE SUBMERGED PIPE OR CABLE	
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PROPOSED BRIDGE MITIGATION	
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FIGURE 5.3

SECTION 6.0 COORDINATION

SECTION 6.0 COORDINATION

A coordination meeting was held in July 1999 to discuss the study alternatives and describe the associated impacts to the resource agencies in attendance (see Section 6.0 of the EA). Meeting minutes of this meeting were forwarded to the Iowa and Illinois state historic preservation offices (SHPO) for their review. The Iowa and Illinois SHPOs have reviewed the Intensive Survey and Evaluation of Architectural Properties in Dubuque and East Dubuque prepared by Leah Rogers in 1999. This review process has initiated the coordination for the Julien Dubuque Bridge, and the Beck/Fockler House. Coordination with the U.S. Department of the Interior is continuing as part of the negotiation process with impacts associated with the Upper Mississippi River Wildlife and Fish Refuge. Review of the Environmental Assessment and Draft Section 4(f) Evaluation will continue formal coordination with the public officials having jurisdiction over these Section 4(f) properties.

This Draft Section 4(f) Evaluation will be made available to the public and resource/regulatory agencies as part of the Environmental Assessment public availability process, and copies will be made available to local units of government for review and comment. A Public Hearing will also be held to discuss the proposed action with interested parties. Responses from reviewing agencies, local governments and interested parties will be included in the Final Section 4(f) Evaluation prepared for this project. Comment letters and correspondence received from the agency coordination process are included in Appendix B.

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SECTION 7.0

SUMMARY AND DISPOSITION OF THE DRAFT SECTION 4(f) EVALUATION

SECTION 7.0

SUMMARY AND DISPOSITION OF THE DRAFT SECTION 4(f) EVALUATION

7.1 SUMMARY

This Draft Section 4(f) Evaluation describes a proposed capacity improvement project within the existing U.S. 20 corridor between Dubuque, Iowa and East Dubuque, Illinois. The recommended action consists of constructing a new bridge adjacent to the existing structure along with certain interchange improvements to the approaches on each side of the river.

These improvements are being carried out in cooperation with both FHWA and the Iowa and Illinois Departments of Transportation. Further, the proposed action is consistent with local and regional transportation planning goals. Finally, the planned action has been recognized by the Congress of the United States, which has provided a special appropriation for the project as part of the Transportation Equity Act for the 21st Century (TEA-21).

This document also establishes applicability of 49 U.S.C. 303, commonly referred to as Section 4(f), to certain resources within the corridor under study. These include the existing U.S. 20 Julien Dubuque Bridge over the Mississippi River, the Beck/Fockler House in East Dubuque, Illinois, and the Upper Mississippi River National Wildlife and Fish Refuge which includes the majority of the Mississippi River area in the vicinity of the existing bridge crossing. Additionally, this document provides a record of coordination efforts with officials having jurisdiction over the resources cited above, discusses alternative locations that avoid the use of the protected resources, and identifies measures that will minimize/mitigate harm to these resources.

The purpose and need for the proposed action has been expressed in terms of an action that will improve both capacity and safety within the <u>existing</u> U.S. 20 corridor. U.S. 20 is an established transportation corridor within the bi-state metropolitan area, and as such is a critical surface transportation link. Although required avoidance alternatives were evaluated, they did

7-1

not respond to the need to increase capacity/safety within the existing corridor, nor would avoidance corridors have sufficiently drawn traffic volumes away from present U.S. 20 so that the existing bridge could retain viable capacity. Safety concerns involving access to medical facilities in Dubuque from the East Dubuque side of the river were also an important issue. Currently, train traffic frequently impedes access from the south side neighborhood in East Dubuque from access to U.S. 20. When trains are present in East Dubuque, access to medical and/or emergency services (all located in Dubuque, Iowa) is cut off for residents in the south neighborhood of East Dubuque.

Proposed resolution of the need to increase capacity within the existing U.S. 20 corridor and associated impacts to protected resources is as follows:

<u>U.S. 20 Julien Dubuque Bridge:</u> Construction of a companion bridge with similar appearance has been determined to have a No Adverse Effect by the Iowa SHPO, provided the measures in the Memorandum of Agreement are carried out (construction of a new bridge that is designed to be compatible and similar in appearance with the present U.S. 20 structure).

<u>Beck/Fockler House:</u> Avoidance/minimization of impacts to this structure are not considered reasonable. The Illinois SHPO concurs with measures designed to mitigate the effects of project construction. In general, this would result in formal documentation.

<u>Upper Mississippi River National Wildlife and Fish Refuge:</u> Avoidance is not considered reasonable given the scope of this resource. Accordingly, minimization by constructing within the existing transportation corridor is considered to be the least intrusive alternative. The U.S. Fish and Wildlife Service has concurred that a land exchange for wetlands impacts associated with the proposed action will be appropriate mitigation for project impacts.

Other issues of concern: Site 11JD701, burial mound in East Dubuque has been avoided by proposed project construction.

Based on the discussion above, and considering the lack of controversy regarding planned improvements either from the public, resource/regulatory agencies or agencies with jurisdiction over the protected resources cited, it is the intent of the FHWA and Iowa and Illinois Department's of Transportation, to proceed with project development within the existing U.S. 20 corridor. A public hearing will be held to discuss this proposed action with the public, and copies of the Environmental Assessment/Draft Section 4(f) Evaluation will be made available to the public and resource/regulatory agencies for review and comment. Results of this effort will be documented in the final environmental document prepared for this project.

7.2 **DISPOSITION**

This Draft Section 4(f) Evaluation will be circulated with the Environmental Assessment prepared for the U.S. 20 Capacity Improvement Study Across the Mississippi River. A 45-day review and comment period will be provided for the public and resource agencies review. Following the review period, it is anticipated that a Final Section 4(f) Evaluation will be prepared and circulated with the anticipated FONSI prepared for this project. Comments received on the draft documents and during the public availability period will be presented in the final documents.

for the Division Administrator Federal Highway Administration

2/15/02

Date

SECTION 8.0 MEMORANDUM OF AGREEMENT

MEMORANDUM OF AGREEMENT

for

the Julien Dubuque Bridge, the Beck/Fockler House in the Cities of Dubuque, Iowa, and East Dubuque, Illinois and Protection for Site 11JD701

Construction of U.S. 20 Capacity Improvement Across the Mississippi River BRF-20-9(149)--38-31

WHEREAS, the Federal Highway Administration (FHWA), the Iowa Department of Transportation (IaDOT) and the Illinois Department of Transportation (ILDOT) propose to aid in constructing a companion bridge to the Julien Dubuque Bridge over the Mississippi River and construct a four-lane highway through East Dubuque, and have consulted with the Iowa State Historic Preservation Officer (IaSHPO) and the Illinois State Historic Preservation Officer (ILSHPO) pursuant to 36 CFR Part 800.6, regulations implementing Section 106 of the National Historic Preservation Act (16 U.S.C. Section 470f);

WHEREAS, construction of the proposed undertaking was found to have an Adverse Effect upon the historic Beck/Fockler House, properties which are considered eligible for listing or have been listed in the National Register of Historic Places;

WHEREAS, the construction of a companion bridge to the historic Julien Dubuque bridge has been found to have No Adverse Effect because the IaSHPO approved design concept has been determined to be compatible with the Secretary of Interior's Standards;

WHEREAS, FHWA has determined that the proposed project will have a No Effect on Site 11JD701, a burial mound sacred to Native American Indians, based on the implementation of the conditions established in Stipulation C;

WHEREAS, no other resources of historic, architectural or archaeological significance will be impacted by the proposed project;

WHEREAS, the IaDOT, will let and construct the proposed undertaking, has participated in the consultation with FHWA, ILDOT, ILSHPO and IaSHPO and has been invited to concur in this Memorandum of Agreement;

WHEREAS, the FHWA, ILDOT and the ILSHPO have invited the Kickapoo Tribe, Menominee Tribe and the Ho-Chunk Nation to consult and concur in this MOA as these tribes may attach religious or cultural importance to site 11JD701; and

NOW, THEREFORE, FHWA, ILDOT, IaDOT, ILSHPO and the IaSHPO agree that the undertaking shall be implemented in accordance with the following stipulations in order to take into account the effect of the undertaking on historic properties.

STIPULATIONS

FHWA will ensure that the following measures are carried out:

- A. Historic Julien Dubuque Bridge
 - 1. Any plans to alter the existing Julien Dubuque Bridge, shall be developed in consultation with the IaSHPO and submitted to the IaSHPO for approval.
 - 2. If the final design for the companion bridge is different than the design concept previously approved by SHPO, the new design will be submitted to the IaSHPO for review and approval to assure design compatibility in terms of scale, massing, color, materials and responsiveness to the recommended approaches to new construction set forth in the *Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings*. If the chosen design is not compatible with the Secretary of Interior's Standard, the parties will proceed according to 36CFR800.6 to resolve adverse effects.
 - 3. The Julien Dubuque Bridge was documented according to HAER standards in 1991; therefore, further documentation will not be required other than as local historical information as required for the booklet in stipulation B.1(a).
- B. Historic Structure in East Dubuque
 - 1. Prior to the disturbance of the Beck/Fockler House,
 - a. ILDOT will publish the story of the development of the Mississippi River crossing between Dubuque, Iowa and East Dubuque, Illinois, and the Beck/Fockler House in relation to the early residential and transportation history of East Dubuque in a booklet, at least 20 pages in length, to increase public awareness and appreciation of the history of East Dubuque. The booklet will be prepared as described in Attachment A.
 - b. ILDOT will document the architectural features and history of the Beck/Fockler House according to the Historic Property Study as described in Attachment B and to Level III standards of the Illinois Historic American Buildings Survey. Prior to construction, the photographs, drawings and site-specific field research will be reviewed and accepted by the ILSHPO.

- 2. It is mutually agreed that the booklet will not be subject to copyright. The publication will be unrestricted for public educational purposes.
- The ILDOT shall ensure that the historic recordation cited in stipulation B.1(a)&(b) shall be performed by a person or firm whose education and professional experience meets the Secretary of the Interior's Professional Qualification Standards (48FR44738-9) for historians.
- 4. The ILDOT will provide the ILSHPO with a draft manuscript of the publication for review for professional and technical compliance with the recordation plan included in stipulation B.1(a) and with the Secretary of Interior's guidelines. ILSHPO will review the mock up of the publication as well as the photos and illustrations. If the ILSHPO does not comment within forty-five (45) days from receipt, preparation of the final draft may proceed.
- 5. The ILDOT shall submit all field photography work and the recording of architectural and site information to ILSHPO for acceptance prior to dismantling or demolition of the historic structures. If the ILSHPO does not comment within forty-five (45) days from receipt, the demolition may proceed.

C. Site 11JD701, Burial Mound

- 1. The ILDOT shall take measures to protect Site 11JD701 from potential impacts. These measures shall include fencing the between the right of way and the site prior to any construction activities in the area and prohibiting all vehicular and pedestrian traffic across the site and deposition of construction material or debris in the designated site area. Additional protective measures will be taken if, and as, necessary during the course of construction.
- 2. The ILDOT shall take measures to protect the site from future erosion and slumping by applying ground stabilization measures as a project cost.
- D. Administrative Conditions
 - 1. Modifications, amendments or termination of this agreement as necessary shall be accomplished through consultation and written agreement of all the signatories.
 - 2. Disputes regarding the completion of the terms of this agreement shall be resolved by the signatories. If the signatories cannot agree regarding a dispute, any one of the signatories may request the participation of the Council to assist in resolving the dispute according to 36CFR 800.7.

3. This agreement shall be null and void if its terms are not carried out within five (5) years from the date of its execution, unless the signatories agree in writing to an extension for carrying out its terms.

Execution of this Memorandum of Agreement by FHWA, IaDOT, ILDOT, ILSHPO and the IaSHPO, submission of a copy to the Council and implementation of its terms, evidence that FHWA has taken into account the effects of the undertaking on historic properties.

Memorandum of Agreement For The Julien Dubuque Bridge and the Beck/Fockler House in the Cities of Dubuque, Iowa and East Dubuque, Illinois

Signatories:

 Iowa Division Administrator
 Date

 Illinois State Historic Preservation Officer
 Date

 Illinois SHPO
 Date

 Iowa State Historic Preservation Officer
 Date

 Iowa SHPO
 Date

 Illinois Department of Transportation
 Date

 Bureau of Design and Environment
 Date

Iowa Department of Transportation

Federal Highway Administration

Director, Office of Environmental Services

US 20 Mississippi River Crossing MOA

Memorandum of Agreement For The Julien Dubuque Bridge and the Beck/Fockler House in the Cities of Dubuque, Iowa and East Dubuque, Illinois

Tribal Concurrence Page

Kickapoo Tribe

Tribal Representative

Date

(Print or type name and title of signer)

Memorandum of Agreement For The Julien Dubuque Bridge and the Beck/Fockler House in the Cities of Dubuque, Iowa and East Dubuque, Illinois

Tribal Concurrence Page

Menominee Tribe

Tribal Representative

Date

(Print or type name and title of signer)

Memorandum of Agreement For The Julien Dubuque Bridge and the Beck/Fockler House in the Cities of Dubuque, Iowa and East Dubuque, Illinois

Tribal Concurrence Page

Ho Chunk Nation

Tribal Representative

Date

(Print or type name and title of signer)

Final Draft

Attachment A Historical Study Booklet The Story of the Mississippi River Crossing and the Beck/Fockler House

for the

U.S. 20 Capacity Improvement Across the Mississippi River Project, Dubuque County, Iowa, and Jo Daviess County, Illinois Iowa DOT Project No. BRF-20-9(149)-38-31

1. Booklet: The publication will tell the story of the Mississippi River crossing between Dubuque, Iowa, and East Dubuque, Illinois, and the Beck/Fockler House in East Dubuque, Illinois. The Beck/Fockler House was part of the early residential history of East Dubuque, or Dunleith as it was first known, while the Julien Dubuque Bridge spanning the Mississippi River between Iowa and Illinois, represents a later era in the development of East Dubuque and highway transportation in this region linking East Dubuque with Dubuque, Iowa. Both the Julien Dubuque Bridge and the Beck/Fockler House will be adversely effected by the proposed U.S. 20 Capacity Improvement project. The booklet will detail the history of these individual properties and their impact on, or reflection of, the development and growth of East Dubuque and its place in the region's history. Details of this story, based on newspaper, archival records, and photographic research, will be presented in an attractively illustrated informational booklet produced for the public.

The publication is anticipated to be approximately twenty (20) pages in length. It is to be authored by a professional historian with demonstrated writing ability and familiarity with historical research, professionally edited and produced by a professional graphic artist consultant, and produced by a printing firm capable of producing high quality materials. The booklet will be equivalent in readability, graphic design, quality of cover and paper, to William C. Page and Leah D. Rogers, *Walking to Work: Victorian Life in Des Moines* (1997).

At least 2,000 copies of this publication will be printed. Distribution will be made as indicated in Section 4 below. In order to help gain further public awareness of the significance of these Dubuque, Iowa-East Dubuque, Illinois, properties, the manuscript with accompanying illustrative material will also be submitted to *Iowa Heritage Illustrated* (formerly *The Palimpsest*) and *Historic Illinois* (published by the Illinois Historic Preservation Agency) as an article in these magazines of popular history.

The publication shall be prepared in accordance with the following guidelines:

- 2. Contents:
 - a. The body of the text will contain at least four sections.
 - (1) The area as it is today and how the historic properties are currently being used.
 - (2) The settlement and growth of East Dubuque including examination of the residential development of this town. The history and significance of the Beck/Fockler House in the architectural and residential history of the community.
 - (3) The development of road transportation and river crossings at this location culminating in the construction history of the Julien Dubuque Bridge.
 - (4) The significance of these two properties to East Dubuque and the region's history.

Photographs, historical photographs of the properties, and/or other illustrative drawings or maps of East Dubuque, will be incorporated into the text. Following the narrative will be a bibliographic discussion of major sources consulted and an extensive list of where the reader might find further information of interest on the topic.

- b. The publication shall credit reference sources to scholarly standards through footnotes or endnotes.
- c. Interspersed within the publication will be illustrations such as appropriate maps, drawings, historic and current photographs (color and/or black and white) that can effectively help convey significant aspects of the neighborhood and history.
- 3. *Production:* A copy of the draft text and photographs/illustrations will be submitted to the Illinois State Historic Preservation Officer (ILSHPO) for approval. All comments received from ILSHPO shall be addressed in writing. If the ILSHPO does not comment within forty-five (45) days from receipt, preparation of the final draft and layout of the booklet may proceed.

Using the final draft manuscript, a mock-up of the booklet will be produced for the ILSHPO review and approval. If the ILSHPO does not comment within forty-five (45) days from receipt, preparation of the final booklet publication may proceed.

4. *Distribution of copies:* The ILDOT will distribute copies of the publication will be according to the attached distribution list.

Booklet Distribution List	#copies
IL SHPO	100
la SHPO	100
Il State Historical Library	100
Dubuque Historic Preservation Commission	100
Jo Daviess County Historical Society	100
Dubuque Public Library	5
laDOT	100
IDOT	100
FHWA	100
City of East Dubuque	400
City of Dubuque	400
Hanson Engineering & sub-consultants	90
Area-wide Educational Agencies	
Iowa regional and/or State Universities	lea
Ill. regional and/or State Universities	lea
Community Colleges	lea
Regional libraries - Iowa and Illinois	lea
Local and regional newspapers in Dubuque area	lea
Total	2000

Attachment B Historic Property Study for the

U.S. 20 Capacity Improvement Across the Mississippi River Project, Dubuque County, Iowa, and Jo Daviess County, Illinois Iowa DOT Project No. BRF-20-9(149)-38-31

The documentation identified below is for a historic property concluded to be of national, state and/or local significance. This property is the Beck/Fockler House in East Dubuque, Illinois. In addition to the Historic Property Study, the Beck/Fockler House will be documented to Level III standards of the Illinois Historic American Buildings Survey (IIHABS). The Julien Dubuque Bridge was listed in the National Register of Historic Places in 1999 under the Highway Bridges in Iowa Multiple Property Submission. In 1991, the bridge was documented to Historic American Engineering Record (HAER) standards and, therefore, will not require further documentation.

The documentation is to be written for a broad public audience—simple, direct, and free of technical and academic jargon—with the information presented (i.e., edited, catalogued and packaged) in accordance with the guidelines of the State Historical Society of Iowa and the Illinois Historic Preservation Agency. The character of the documentation produced—its content, quality, materials, and presentation—will meet the Secretary of Interior's four standards for architectural and historical documentation (48 FR 44731).

The purpose of the report will be to place the property in architectural and historical perspective explaining how the story of this property played out against the background of related local, state or national trends. The research emphasis will be placed on recovering information about the construction, design, growth, and development of this property based on primary sources to the greatest extent possible. Thus, the weight of total effort is to be given not to elaborate architectural description or structure photography, but on amplifying what is known about the story of the property as grasped through research in local archives, courthouse records, and with persons knowledgeable about the property's past. The test of responsiveness to documentation projects under this historic property study series will be more on the depth of local historical sources consulted than on the numbers of site photographs produced.

The Beck/Fockler House is an impressive Greek Revival-style brick house situated at the intersection of Hill Street and Sinsinawa Avenue in East Dubuque. It was built in the 1850s-1860s and appears to have been associated first with Charles and Roccena Beck and later with Henry and Susan Fockler. Charles Beck was a member of the City Council in 1868. Henry Fockler was a manufacturer of buggies and wagons in the 1880s. This well-preserved, outstanding example of a Greek Revival-style house in the Dunleith/East Dubuque community is eligible for the National Register under Criterion C for its architectural significance. It may have some additional significance for its association with Charles and Roccena Beck and perhaps Henry and Susan Fockler; however, their significance in the community is not yet clear.

The documentation prepared must meet the requirements as specified below. The State Historical Society of Iowa and the Illinois Historic Preservation Agency retain the right to refuse to accept documentation when that documentation does not meet these requirements.

Kinds of Documentation to be Gathered:

- Inventory Numbers and Historic Architectural Data Base (HADB) Numbers: Any inventory numbers
 previously assigned to these properties by the Phase I Architectural History Survey report completed
 for the U.S. 20 Capacity Improvement project (Rogers 1999a, 1999b), will need to be cited in the
 report, appear on reference maps and site plans, and be identified on photographic prints, slides, etc.
 A HADB form or forms will also need to be completed and included in the appendix of the report. In
 Iowa, the State Historical Society of Iowa assigns HADB numbers.
- 2. *Photographs:* Available historic photographs or illustrations that reveal the historic property early in its history and as it progressed through time should be appropriately reproduced and included in the report. Historic views should be sought of the overall placement of the property on the landscape and closer views of the property.

In addition to historic photographs and illustrations, photographs of the current state of the property must also be taken. The purpose of the number and kind of views taken will be to sufficiently illustrate what was significant, valuable, or informative about the property as if one were intending the views to be used in a brief visual presentation on the story of the property. The following views will be taken at a minimum:

- a. Overall view of the building or structure in its larger setting.
- b. A view of the property from the exterior and showing each of the four sides or views of the property.
- c. Interior views where appropriate to tell the story of the property.
- d. Limited detail views of important elements on the property.

Unless stipulated elsewhere, the coverage will be copy-stand photography, with each view taken in both 35 mm black and white film and Kodachrome 64 color slides. The black and white photographs shall be on fiber-based papers or on resin-coated papers of double or medium-weight paper that have been processed in trays in order to meet guidelines outlined in National Register Bulletin 16A.

- 3. Drawings: Unless stipulated elsewhere, the standard coverage will comprise straightforward, one-line drawings no larger than 8-1/2 x 11 inches in size showing elements in correct relation and proportion to one another, with label, north arrow, overall dimensions, and the date sketched. The drawings include:
 - a. A site plan map of the Beck/Fockler House showing the layout of the surrounding lot, the placement of the building on the lot, the location of extant outbuildings, and the location of any known former outbuildings or features, such as wells, cisterns, etc.
 - b. Floor plans of each floor of the Beck/Fockler House to show the current layout of this property, with notations made as to any known modifications of the original layout.
- 4. *Narrative Report* printed on archival bond paper of approximately eight to ten pages with statements within the narrative footnoted as to their sources, where appropriate. The format for presentation is stated below.

Final Draft

Format for the Narrative, Report:

Cover Page: Includes report title, governmental entity or source of support for sponsoring the survey, author/authors, name of affiliated firm or research organization, date of report.

Acknowledgments (if applicable): This might include acknowledgment of valuable oral informants, or recognition of those who provided useful research leads, or tendered special library assistance of helped local and access useful courthouse archives.

Table of Contents:

Introduction: The project's purpose is described, including the time frame when research and field work occurred, and limitations of the project.

Part I: Current State. The current state of the property will include a description of its general appearance and arrangement, and important physical characteristics of its setting, buildings, and landscape features that influenced the way things developed at the site.

Part II: Historical Background steps back to describe the character and course of history during the time when the property was built and developed. The property will need to be placed within the context of local, regional, state, and national developments and trends as pertinent to the history of the property.

Part III: Property History will narrate the particular history of the property using as much as possible primary sources as outlined above.

Part IV: Construction History will document, to the greatest extent possible, the physical construction and evolution of the property noting alterations, modifications, additions or demolitions that affected the property. At a minimum, specific items to be discussed include the materials and methods of construction; the source or influence of the design; the sequence of construction, alterations, additions, replacements, demolition or losses due to fire; and identification of individuals or companies who designed, engineered, and built this property.

Part V: Significance explains how this property helps explain or represents the course of local, state or national history, pointing out those features of this property that illustrate important designs or reflect important trends. Photographs, illustrations, or site plans may be integrated into the narrative as needed to help convey the property's interpretive value.

Part VI: References Cited. This should include all primary and secondary sources consulted during the research phase of this study. The format should follow that specified in National Register Bulletin 16A (pages 52-53).

Part VII: Appendices. The information placed here—if not placed elsewhere in the report—should include, but not be limited to, the following:

- 1. A site plan of the property.
- 2. Maps showing location of the property in the county/town, changes in property size, etc.
- 3. A 5x7 inch enlargement of each black and white view taken to satisfy specifications above, arranged sequentially, from the most general view to the most detailed view. Each photograph is to be labeled on the back as to building/structure name, inventory number, view taken, and roll/frame number with a No. 1 (soft) pencil or photographically archival-stable pen, and placed in Print-File (57-4P), or equivalent, sleeve.

- 4. At least one 8x10 enlargement of representative views of the property. Each photograph is to be labeled as noted under item 3.
- 5. A photograph catalog sheet completed for each sleeve of black and white negatives and color slides.
- 6. Negatives of 35 mm (ASA 125 or less) black and white film in Print-File (35-7B), or equivalent, sleeves.
- 7. A contact print sheet for each roll of black and white film placed in a Print-File (810-1B), or equivalent, sleeve.
- 8. Kodachrome-64 slides properly labeled (property name, inventory number, and slide sleeve number/slot number) and placed in Print-File (2x2-20B), or equivalent, 20-slot sheet sleeves.
- 9. Completed Historical Architectural Data Base (HADB) form(s).
- 10. Other relevant information (e.g., photocopy of biographical information about a noteworthy owner, architect or building associated with this property, remaining sketch plans and drawings that were not integrated into the report).

NOTE: The narrative, illustrations, and selected photographs from the Historic Property Study should be used as the basis for the booklet as outlined in Attachment A.

REFERENCES CITED HEREIN:

Fraser, Clayton B., and Carl W. McWilliams

- 1991 *Historical Documentation: Julien Dubuque Bridge*. Copy on file Community Programs Bureau, State Historical Society of Iowa, Des Moines.
- Rogers, Leah D.
- 1999a Intensive Survey and Evaluation of Architectural Properties in Dubuque, Iowa, for the U.S. 20 Capacity Improvement Study, Dubuque, Iowa, and East Dubuque, Illinois (ILDOT Project No. BRF-20-9(149)—38-31). Prepared for Hanson Engineers, Inc., Springfield, Illinois, and the Iowa Department of Transportation, Ames.
- 1999b Intensive Survey and Evaluation of Architectural Properties in East Dubuque, Illinois, for the U.S. 20 Capacity Improvement Study, Dubuque, Iowa, and East Dubuque, Illinois. Prepared for Hanson Engineers, Inc., Springfield, Illinois, and the Illinois Department of Transportation.

APPENDIX A TRECOMMENDED ALTERNATIVE EXHIBITS



	CONSTRUCTION LIMITS
	100-YEAR FLOOD PLAIN
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-10	NOISE RECEPTOR

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HISTORIC	H-1•
HAZ	1
MUSSEL S	

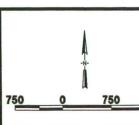
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S	T	RU	CTU	RF		

HAZARDOUS MATERIALS	
SSEL SURVEY LOCATION	

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TE	Contractor (WILDLIF
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PLATE MAP
upper Mississippi River Wildlife and Fish Refu
RESIDENTIAL RELOCATION
COMMERCIAL RELOCATIO

67 72	NOISE CONTOURS
	PROPOSED BIKEPATH
	U.S. ARMY CORPS OF ENGINEERS' ADMINISTERED LANDS



1500

JOB NO. 97S2045

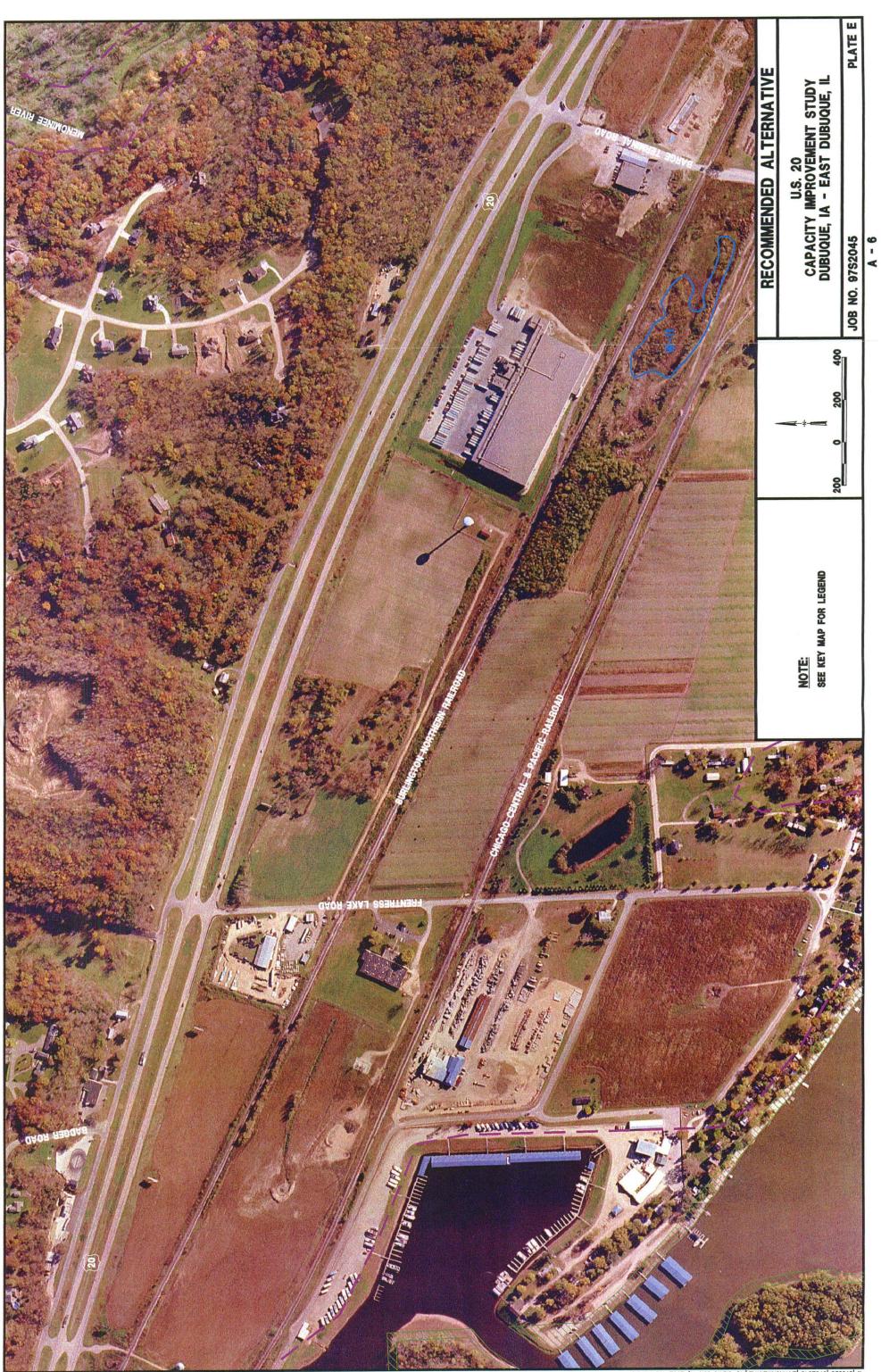
KEY MAP





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APPENDIX B AGENCY COORDINATION

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APPENDIX B

AGENCY COORDINATION

Agency

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United States Department of the Interior



FISH AND WILDLIFE SERVICE Upper Mississippi River National Wildlife and Fish Refuge 7071 Riverview Rd Thomson, IL 61285 815-273-2732

April 4, 2000

Mr. Kevin Seals Hanson Engineers Inc. 1525 S. 6th St. Springfield, IL 62703-2886

Dear Mr. Seals;

I am writing in regard to the letter requesting a response from the U.S. Fish and Wildlife Service regarding impacts to the Upper Mississippi River National Wildlife and Fish Refuge by the Hwy 20 Capacity Improvement Project.

After reviewing the maps, the only location that would affect the Refuge is along the east side of a wetland that lies north of Switzer lake. This property falls under a cooperative management agreement with the U.S. Corps of Engineers. Under this agreement the U.S. Fish and Wildlife Service manages the land in order to conserve, maintain and manage wildlife resources and habitat.

Alternative 1, the preferred alternative, has the least environmental disturbance of the two alternatives, however we are concerned about the loss of refuge land and wetland loss. There will need to be mitigation efforts made to replace the loss of wetland habitat. We would consider a land exchange to offset the loss of refuge habitat.

If you have any questions, please call me at the above number.

Sincerely,

Pam Steinhaus Refuge Operations Specialist



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

March 2, 1999

Planning, Programs, and Project Management Division

Mr. James Moll Project Manager Hanson Engineers Incorporated 1525 South Sixth Street Springfield, Illinois 62703-2886

Dear Mr. Moll:

I received your letter dated December 24, 1998, concerning the Scoping Process, US 20 Capacity Improvement Across the Mississippi River, Dubuque County, Iowa/Jo Daviess County, Illinois (HEI No.97S2045). Rock Island District staff reviewed the information you provided and have the following comments:

a. Most of the wildlife refuge lands in the corridors defined by your project map are Corps of Engineers (Corps) lands administered by the U.S. Fish and Wildlife Service by virtue of a cooperative agreement. Therefore, your project would likely cross Corps lands and will require easements from us. You will need to submit a request to our Real Estate Division for easements to authorize any right-of-way required for crossing Corps lands. Any right-of-way request must include legal descriptions and plats of the right-of-way required, as well as details of the construction proposed in the right-of-way. Temporary right-of-way required for construction should be identified and described separately, along with the length of time the temporary right-of-way will be needed. The Corps will need to certify that environmental documentation for your project satisfies Corps standards before any easements can be granted. The Corps lands impacted by your project will also likely meet the criteria for Section 4(f) lands. You may contact Mr. Dick Mattson of our Real Estate Division by writing to our address above, or you may call him at 309/794-5263. You may contact Mr. Randy Kraciun of our Environmental Analysis Branch for information regarding Corps environmental requirements by writing to the above address, or you may call him at 309/794-5174.

b. Discharges of dredged or fill material landward of the bridge abutments, into waters of the United States (including wetlands), requires Department of the Army authorization under Section 404 of the Clean Water Act. Any work riverward of the abutments will require Coast Guard approval under Section 9 of the Rivers and Harbors Act of 1899. When detailed information is available, please complete and submit an application packet to the Rock Island District for processing. The application should include determinations of wetlands and other waters of

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the United States, size estimations of impacts to those areas, wetland types and relative functions, plan view and cross-sectional drawings on 8-1/2 by 11-inch paper, and any other pertinent information to describe your project. Prior to completing the permit review process and in compliance with the Clean Water Act Section 404(b)(1) guidelines, we also require sequential mitigation involving an alternatives analysis, minimization of impacts, and compensatory mitigation for any unavoidable impacts. The alternatives analysis must demonstrate how you will avoid impacts by selecting the least environmentally damaging practicable alternative based on wetland sizes, locations, types, and relative functions. Minimization of impacts should consist of a list of appropriate and practicable steps to minimize unavoidable adverse impacts. Compensatory mitigation must include plans to restore or create wetlands to mitigate unavoidable project wetland impacts. If your project involves unavoidable wetland impacts, you should submit a detailed wetland mitigation plan along with your application. You may contact Mr. John Betker of our Regulatory Division by writing to our address above, or you may call him at 309/794-5380.

c. Your project may cross the Dubuque Local Flood Protection Project (LFPP). You should therefore be coordinating with the city of Dubuque. Mr. Terry Stieger, Chief of the Corps' Emergency Management Division, also should be included early in your review process. He will need to see detailed plans of the project to determine what impacts (both immediate and future) may occur to the Dubuque LFPP. Mr. Stieger also requires that you submit a set of "as built" plans upon completion of the project so that he may update our O&M manual, if required. He may be contacted by writing to our address above, or you may call him at 309/794-5325.

d. Your coordination should include the Illinois State Historic Preservation Officer, Old State Capitol, Springfield, Illinois 62701 and the Iowa State Historic Preservation Officer, Capitol Complex, Des Moines, Iowa 50319 to determine impacts to historic properties.

e. You should contact the Rock Island Field Office of the U.S. Fish and Wildlife Service to determine if any federally listed endangered species are being impacted and, if so, how to avoid or minimize impacts. The Rock Island Field Office address is: 4469 - 48th Avenue Court, Rock Island, Illinois 61201. Mr. Rick Nelson is the Field Supervisor. You can reach him by calling 309/793-5800 (x 519).

f. You also should contact the Savanna District of the Upper Mississippi River National Wildlife & Fish Refuge to determine impacts to refuge lands in the Dubuque area. The Refuge Office address is: P.O. Box 336, Savanna, Illinois 61074. Mr. Ed Britton is the District Manager. You can reach him by calling 815/273-2732.

g. At your earliest convenience, you should contact the Director, Western Rivers Operations (OB), United States Coast Guard, 1222 Spruce Street, St. Louis, Missouri 63103 to obtain the necessary authorization for the proposed bridge. The Coast Guard may also wish to participate as a cooperating agency. h. Illinois State offices that should also be contacted early in your coordination process include: Mr. Bob Dalton, Illinois Department of Natural Resources (DNR), Office of Water Resources, 524 South 2nd Street, Springfield, Illinois, 62701; Mr. Dan Sallee, Conservation Project Manager, Illinois DNR, Boundary Rivers Program, P.O. Box 149 Aledo, Illinois 62131; and Mr. Bruce Yurdin, Illinois EPA, Permits Sec. Division of Water Pollution Control, 1021 North Grand Avenue East, Springfield, Illinois 62794.

i. As stated previously, your environmental documentation must sufficiently address any impacts to areas involving our jurisdictional responsibilities if we are to adopt your National Environmental Policy Act document. Early involvement of the Rock Island District staff mentioned above is key to success in this area. Incorporating our input early in the environmental process, and specifically identifying the Corps authorizations required for the project, and addressing any issues or concerns involving those authorizations in your environmental documentation, should reduce the potential for delays later in your schedule. While we, the Corps, decline to be a signatory cooperating agency on your environmental documentation, we will participate in early review of your documentation to assure that it is adequate for regulatory, real estate, and other areas of Corps expertise. Additional areas of Corps interest that you should adequately address in your documentation are as follows:

- impacts to flood heights
- sediment and ice movement at the bridge
- bridge clearance for navigation

• impacts to channel alignment and navigation conditions (numeric modeling of velocity vectors may be required)

• bank erosion/stabilization in the vicinity of the bridge

These are the primary concerns, which surfaced during our review. Thank you for the opportunity to comment on your proposal. If you need more information, please call Mr. Randy Kraciun of our Environmental Analysis Branch, telephone 309/794-5174.

Sincerely,

Donne & Fallman

Dorene A. Bollman Acting Chief, Environmental Analysis Branch

Copies Furnished:

Mr. Roger Larsen Project Manager Iowa Department of Transportation 800 Lincoln Way Ames, Iowa 50010

Ms. Anne Haaker Deputy State Historic Preservation Officer Illinois Historic Preservation Agency Old State Capitol Springfield, Illinois 62701-1507

Ms. Patricia Ohlerking Chief, Community Programs Bureau Review and Compliance Program State Historical Society of Iowa Capitol Complex Des Moines, Iowa 50319.

Director

Western Rivers Operations (OB) United States Coast Guard 1222 Spruce street St. Louis, Missouri 63103

Mr. Rick Nelson U.S. Fish and Wildlife Service 4469 - 48th Avenue Court Rock Island, Illinois 61201

Mr. Ed Britton Savanna District Upper Mississippi River National Wildlife & Fish Refuge P.O. Box 336 Savanna, Illinois 61074 Copies Furnished (Continued):

Mr. Bob Dalton Illinois DNR, Office of Water Resources 524 South 2nd Street Springfield, Illinois, 62701

Mr. Dan Sallee Conservation Project Manager Illinois Department of Natural Resources Boundary Rivers Program P.O. Box 149 Aledo, Illinois 62131

Mr. Bruce Yurdin Illinois Environmental Protection Agency Permits Section, Division of Water Pollution Control 1021 North Grand Avenue East Springfield, Illinois 62794.



IN REPLY REFER TO:

United States Department of the Interior

NATIONAL PARK SERVICE Midwest Support Office 1709 Jackson Street Omaha, Nebraska 68102-2571

19-00421 (MWSO-P/G) 19-00997

FEB - 5 1999

Mr. Roger Larsen Project Manager Iowa Department of Transportation 800 Lincoln Way Ames, Iowa 50010

Dear Mr. Larsen:

Thank you for including us in the scoping process to review the proposed action to provide additional capacity on U.S. Route 20 across the Mississippi River in Dubuque County, Iowa and Jo Daviess County, Illinois.

Our records indicate there are two Land and Water Conservation Fund (L&WCF) projects located within the southern corridor of the study area. The city of Dubuque acquired approximately 34 acres of land to establish Lyons Park in project 19-00421. The Department of Natural Resources acquired approximately 1,220 acres of land to preserve the Mines of Spain in project 19-00997. The proposed alternative to provide a new four lane crossing south of the existing bridge and south of the urban area of Dubuque could impact both of these L&WCF-assisted sites. Section 6(f)(3) of the L&WCF Act, as amended, states:

"No property acquired or developed with assistance under this section shall, without the approval of the Secretary [of the Interior], be converted to other than public outdoor recreation uses. The Secretary shall approve such conversion only if he finds it to be in accord with the then existing comprehensive statewide outdoor recreation plan and only upon such conditions as he deems necessary to assure the substitution of other recreation properties of a least equal fair market value and of reasonable equivalent usefulness and location . . ."

We suggest that the Department of Transportation bring the proposed highway construction to the attention of Mrs. Kathleen Moench, Budget and Grants Bureau, Department of Natural Resources, Wallace State Office Building, East Ninth Street and Grand Avenue, Des Moines 50319, telephone 515-281-3013.

Sincerely,

Robert Anderson Program Leader Partnerships/Grants



United States Department of the Interior

IN REPLY REFER TO:

FWS/RIFO

FISH AND WILDLIFE SERVICE Rock Island Field Office (ES) 4469 - 48th Avenue Court Rock Island, Illinois 61201 Tel: 309/793-5800 Fax: 309/793-5804

January 25, 1999

Mr. Bruce Mazke Assistant Division Administrator Federal Highway Administration 105 6th Street Ames, Iowa 50010-6337

Dear Mr. Mazke:

This reponds to the Notice of Intent to Prepare an Environmental Impact Statement (EIS) for a proposed capacity improvement of US Route 20, Dubuque County, Iowa, and Jo Daviess County, Illinois. The notice was published in the Federal Register on December 11, 1998. This letter also responds to a letter from Mr. James Moll, Project Manager, of Hansen Engineers Incorporated, dated December 24, 1998, soliciting our comments on the Scoping Document for the same project.

We recently provided Mr. Rodger H. Anderson of Hansen Engineers Incorporated, with technical assistance on the same project in a letter dated December 11, 1998 (copy enclosed). In that letter we included information about federally listed threatened and endangered species that may be present in the project area, and copies of maps from the Resources Inventory for the Upper Mississippi River (March, 1984) showing documented fisheries, wildlife, and mussel habitats. However, the Resource Inventory maps included with our previous letter did not include the southern corridor. Therefore, the applicable maps covering river miles 570 to 582 are enclosed with this letter.

The Resource Inventory maps are currently being updated by the Fish and Wildlife Service (Service) in conjunction with the Upper Mississippi and Illinois River Navigation Study and will be available later this year. We encourage the planning team to contact the Departments of Natural Resources in both Iowa and Illinois, if you have not already done so, as well as the Savanna District of the Upper Mississippi National Wildlife and Fish Refuge for site specific information on important fish and wildlife habitats in the project corridors.

We concur with the general statements in the Scoping Document provided with Mr. Moll's letter regarding impacts to natural resources. Because our concerns are primarily with impacts to fish and wildlife resources, we encourage utilization of existing alignments of Highway 20 to the degree possible consistent with fulfilling the project purpose. Note that

Mr. Bruce Mazke

much of the floodplain, main channel border, side channel, and backwater areas in the southern corridor are important wildlife habitat and/or important fisheries habitat. In addition, there are several State or County owned recreation areas in the southern corridor that may have Section 4(f) implications.

These comments provide technical assistance only and do not constitute the report of the Secretary of the Interior on the project within the meaning of Section 2(b) of the Fish and Wildlife Coordination Act, do not fulfill the requirements under Section 7 of the Endangered Species Act, nor do they represent the review comments of the U.S. Department of the Interior on any forthcoming environmental statement.

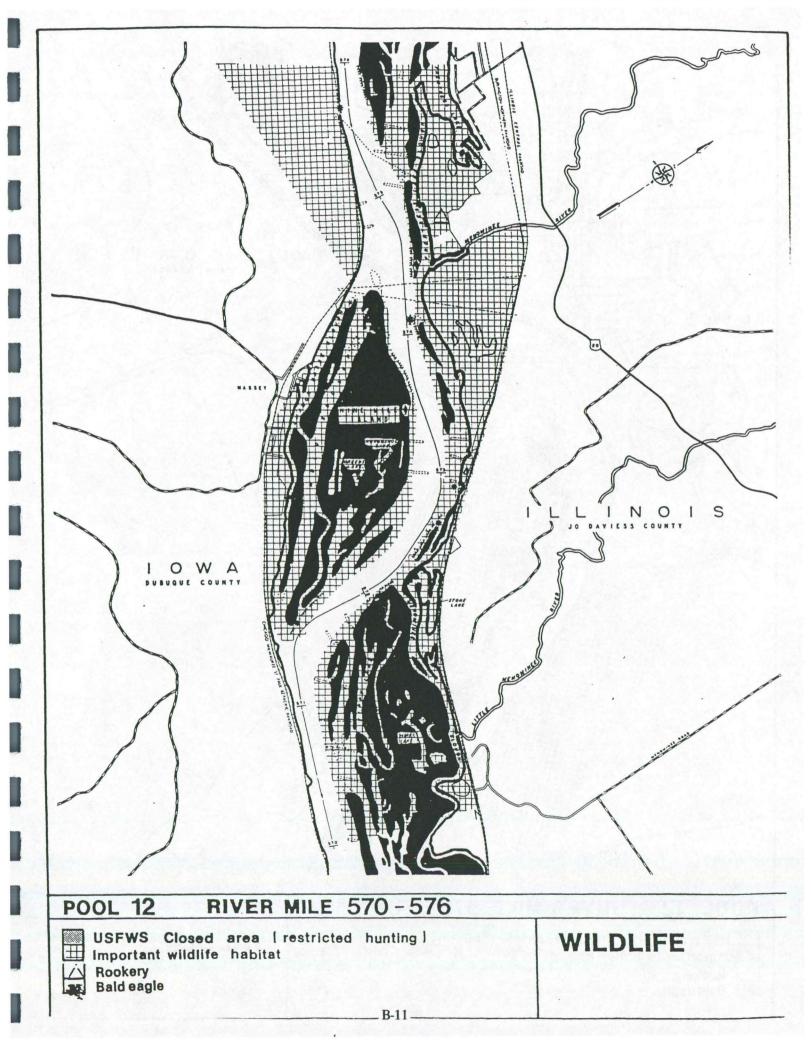
For purposes of the proposed study and the EIS, this office will be the point of contact for the Service. However, questions about realty actions necessary to locate the proposed improvements on Service fee title or U.S. Army Corps of Engineers General Purpose lands managed under cooperative agreement with the Service should be directed to the Savanna District. We appreciate the opportunity to provide these comments early in the planning process. We look forward to providing assistance as the study proceeds. If you have any questions regarding our comments, please contact Joe Slater or Wayne Fischer, of my staff.

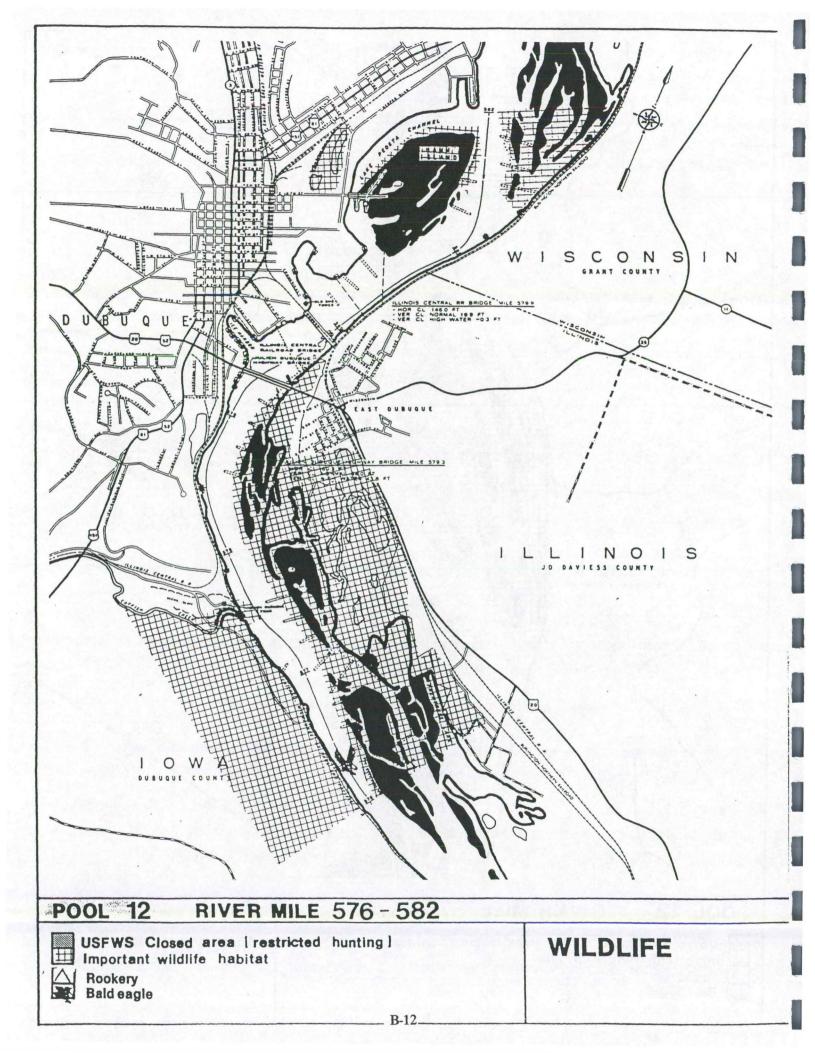
Sincerely Richard C. Nelson

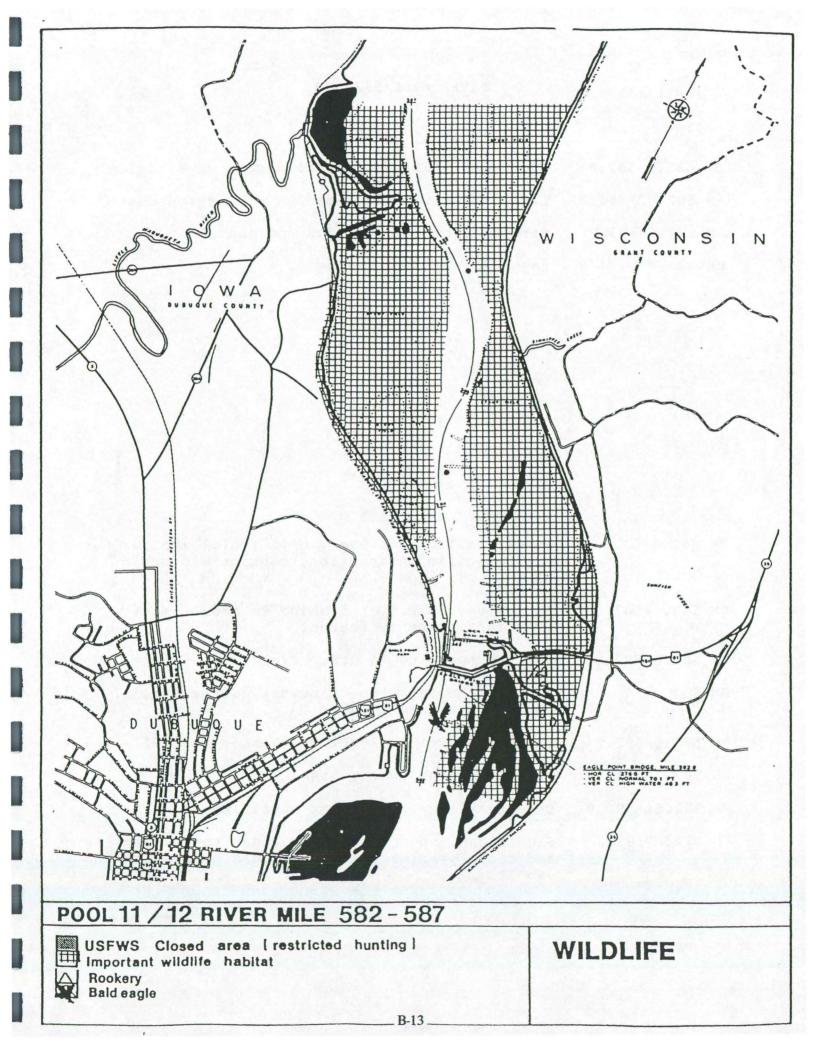
Supervisor

Enclosures

cc: OEPC (Martin) UMNWFR (Britton, Fisher) R-3 AES(MacLean) Hanson Engineers, Inc. (Moll, Anderson) IDOT (Larson)







RIVER MILE 582-587

Structures and Hazards

RM 585.3-587.0	High wind area, subject to strong wave action
RM 582.0R-586.3R	Bank protection not shown on navigation chart
RM 582.6-583.0	Strong current below lock and dam 11
RM 582.8	Eagle Point Bridge removed

Fisheries

RM	582.0-587.0	Mussel collections every mile (Thiel 1981). For site specific information, contact Wisconsin DNR.
RM	583.0-587.0	Extensive commercial fishing in area. Most important areas indicated.
RM	583.0-587.0	Catfish spawning in stump fields.
RM	583.0	Approximate location of mussel collection, 17 species (Mathiak 1979)
RM	583.0-587.0	Various mussel collections (Gunsolly 1979).
RM	583.0L-583.3L	Yellow perch spawning area.
RM	582.6L-582.9L	O'Leary's lake, important sportfishery.
RM	582.0-582.8	Significant sportfishing area due to easy access and close proximity to tailwaters below lock and dam 11.

RIVER MILE 582-587

Wildlife

RM	582.0R-587.0R	Major waterfowl resting and hunting area. Furbearer production and trapping area.				
RM	583.0-587.0	Area included in COE forest, fish and wildlife master plan (U.S. Army 1982).				
RM	582.2L-583.0L	Bald eagle feeding area (Eagle Valley Environmentalists 1982, Nelson 1980).				

Recreation

RM	583.3L	Sinnippee Public Use Area
RM	583.0R .	Eagle Point City Park and Overlook
RM	583.0R	Lock and Dam 11 viewing area
RM	583.0L	Boat access upstream of dam
RM	582.9L	O'Leary's Lake Public Access (pulic ramp)
RM	582.9L	Commercial fishing float
RM	582.1R	Eagle Point Park boat landing
RM	582.0R	Dubuque Marina

RIVER MILE 576-582

Structures and Hazards

	RM	581.4	New U.S. Highway 61 bridge.
	RM	580.5R-581.2R	Bank protection not shown on navigation chart.
		580.6R	Barge fleeting area (Hines 1979).
	RM	580.4R	Dubuque Power Plant, Dubuque, IA. Service: coal.
		580.4	Aerial transmission line.
		580.3R	Conti-Carries, Dubuque, IA. Service: transfer bulk
			commodities.
	RM	580.3	Aerial tranmission line.
		580.3R	Dubuque Tank Terminal Co., Dubuque, IA. Service:
		500.51	transfer bulk fertilizer, salt, coal and storage.
	DM	580.1R	Conti-Carries and Terminals, Inc., Dubuque, IA.
		300.IR	Service: transfer and storage of fertilizer, salt,
			steel, grain , and dry, bulk, and packaged goods.
	DM	580.1R	Koch Asphalt Terminal, Inc., Dubuque, IA. Service:
	W1.1	500.1K	transfer of asphalt and light oil.
	DM	580.0R	The Pillsbury Co., Dubuque, IA. Service: transfer
	RM	300.0R	and storge of bulk materials and grain loading.
	DM	579.5R-579.9R	Bank protection not shown on navigation chart.
		579.7	Submerged pipeline or cable.
		579.6R	Barge fleeting area (Hines 1980).
	RM	579.5R	Dubuque Sand and Gravel Co., Dubuque, IA. Service:
			transfer and storage of sand and gravel and
			commercial boat fueling.
	RM	579.4R	Dubuque Tank Terminal Co., Dubuque, IA. Service:
2m	57	9.3 JD BRIDGE	transfer and storage of molasses, salt, fertilizer,
pri			fish soluables and tallow/annimal fat.
	RM	579.2R	Koch Asphalt Terminal II, Dubuque, IA. Service:
			transfer and storage of asphalt and light oil.
		579.0L	Barge fleeting area (Hines 1979).
		578.5L	Barge fleeting area (Hines 1979).
		577.4R-577.6R	Occasional strong currents below Catfish Creek.
	RM	577.5L	Barge fleeting area.
	RM	576.0L-576.5L	Barge fleeting area (Hines 1979).
			Fisheries

Fisheries

RM	580.7R-581.9R	Peosta Channel is relatively deep which provides excellent wintering area for fish and is an important winter commercial fishing area.				
RM	580.2R-581.7R	Wing dams provide good sport and commercial fisheries.				
RM	581.5	Winter biology transect sample (Cawley, undated a).				
RM	580.9-581.5	Mussel bed, 25 species, (Cawley 1978c, Perry 1979)				
		including Lampsilis higginsi.				
RM	578.8L-579.8L	Benthic survey (Cawley 1977).				
RM	579.5R	Benthic survey (Cawley 1977).				
RM	576.0R-579.1R	Area is excellent for commercial fishing when river				
		stage is less than 7 feet.				
RM	578.0R-578.5R	No mussels collected (Perry 1979).				
RM	576.8-578.4	Various mussel collections (Davis 1975).				
RM	578.0L-578.2L	Probable winter fish habitat.				
RM	577.9L-578.0L	Probable winter fish habitat.				
	B-16					
Continued on following page.						

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Wildlife

RM	581.0L-583.0L	Area included in COE forest, fish and wildlife master
		plan (U.S. Army 1982).
RM	580.8R-581.9R	The north one third of Chaplain Schmitt Memorial (City) Island is characterized by low floodplain
		timber with shallow backwaters providing important
		wildlife production and resting areas.
-	501 F	
	581.5	Winter biology transect sampling (Cawley, undated a).
RM	576.0L-579.8L	Bowfin-Frentress Bridge area included in COE forest,
		fish and wildlife master plan (U.S. Army 1982).
RM	576.0L-579.0L	River otter, Illinois threatened species, sightings
		(Anderson 1982). Also, extensive backwater
		production and harvest habitat for furbearer and
		waterfowl species.
DM	577.6R	River otters, a State of Iowa threatened species,
RH	577.08	
		occur at mouth of Catfish Creek. Possible bald eagle
		winter roost site (Eagle Valley Environmentalists
		1982).
RM	576.0R-577.5R	
RM	576.1L	East Dubuque great blue heron colony, 100 [±] nests
		(Kleen 1983).

Recreation

RM RM RM RM RM RM RM RM	581.6R 580.8R 580.7R 579.6L 578.2L 578.0L 576.0R-578.0R 577.5R 577.1L 576.3L 576.3L	Riverview City Park City boat ramp and Dubuque Yacht Basin Chaplain Chmitt Boat Harbor East Dubuque ramp (public ramp) Mid-Town Marina Bent-Prop Marina (private ramp) Mines of Spain Recreation Area Catfish Creek Access (undeveloped) Bowfin Yacht Club Association Frentress Lake Marina (public ramp) Charlies Boat Dock
RM	5/0.5L	Fisheries Continued
RM	576.0R-577.5R	Area is a deep cut bank which has been documented as habitat for paddlefish. Gravel bar adjacent to Catfish Creek is probable spawning habitat for paddlefish (Southall 1982).
RM	576.5L-577.1L	Switzer Lake, probable winter fish habitat. Also, important sportfishery of largemouth bass bluegill, crappie, and bullhead (Bertrand 1974). Spawning habitat for bluegill, largemouth bass, crappie and buffalo.
RM	576.0L-577.0L	Side channel, spawning habitat for white bass, crappie, sauger. Also, probable winter fish habitat.
BM	576.0-577.0	Main channel border habitats on both banks, important sportfishery of channel catfish and smallmouth bass. Also, spawning habitat for white bass and smallmouth bass.
RM	576.5L-576.8L	Commercial fishing and winter habitat.
	576.0L-576.8R	Frentress Lake, important sport fishery of largemouth bass, crappie, white bass, bullhead, walleye, and sauger (Bertrand 1974). Spawning habitat for bluegill, largemouth bass and crappie.
RM	1 576.0L-576.5L	Frentress Lake Slough, sample station for National Pesticide Monitoring Program.

RIVER MILE 570-576

Structures and Hazards

RM 571.5R-574.5R Sand and gravel operation in Shawon Dasse Slough

RM 574.4 Submerged pipeline or cable.

RM 574.3 Submerged pipeline or cable.

RM 572.9L NREN Corp., E. Dubuque, IL. Service: transfer and storage of anhydrous ammonia, U.A.N. solutions.

Fisheries

RM	575.6R-576.0R	Area has a deep cut bank which has been documented as a loafing area for paddlefish (Southhall 1982).
RM	574.5L-575.5L	Frentress Slough, spawning habitat for white bass and sauger. Also, probable winter fish habitat.
RM	570.0-575.5	Various mussel collections (Davis 1975).
	575.0L-575.3L	Commercial fishing and winter habitat in
		Frentress Slough.
	574.2L-574.5L	Benthic sampling (Cawley 1978b).
RM	571.5R-574.4R	Nine Mile Island complex, important sportfishery of bluegill and crappie (Bertrand 1974).
RM	571.5R-574.3R	Benthic survey (Cawley 1977).
	573.8L-574.2L	Commercial fishing and winter habitat between
		island and from main channel to shore.
RM	573.9R-574.0R	Commercial fishing and winter habitat at upper
		end of riprapped shore.
RM	571.5R-573.1R	Molo Slough (lower end), commercial fishing, sportfishing, and winter habitat.
RM	572.2	Winter biology transect sample (Cawley, undated a).
RM	571.8R-572.2R	Nine Mile Island, commercial fishing,
		sportfishing, and winter habitat.
RM	572.0L	Stone lake, important sportfishery of northern
		pike, bullhead, bluegill, largemouth bass, and
	encongrade "mu	crappie. Also, spawning habitat for bluegill, largemouth bass and crappie.
RM	570.0L-572.0L	Commercial fishing and winter habitat in
	510000 512002	backwaters and adjacent to wing dams.
RM	570.0R-571.5R	Mussel bed, identified by commercial clammers
		(Perry 1978).
RM	570.7L-571.4L	Tippy Lake, probable winter fish habitat and
		popular ice sportfishing area.

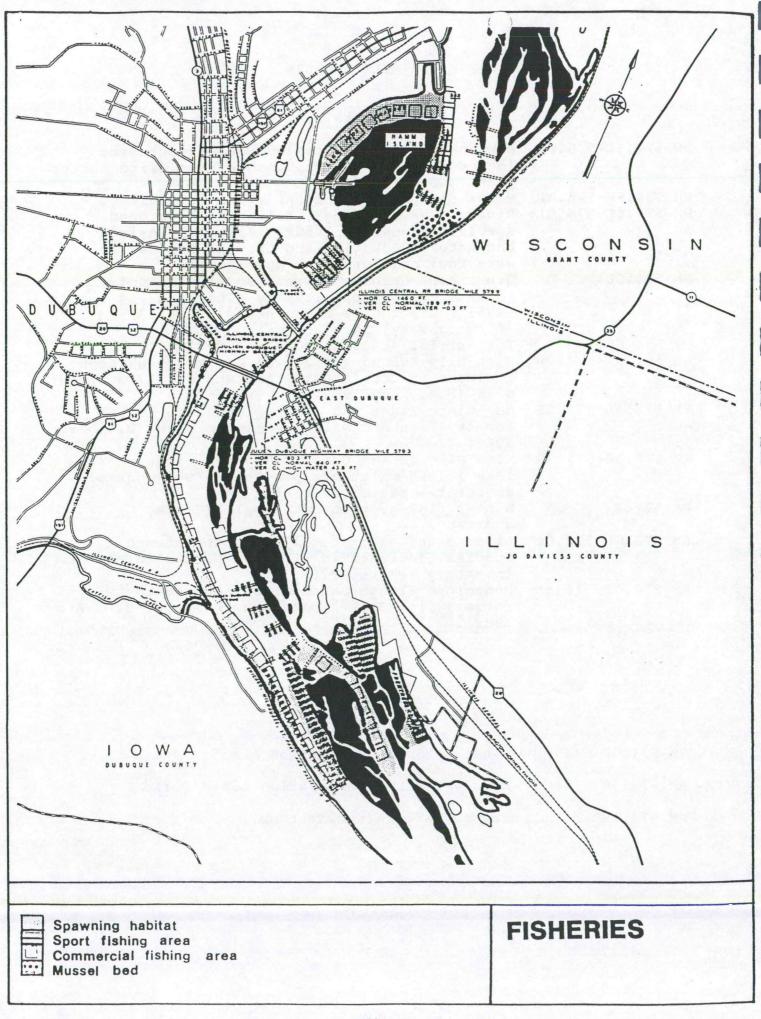
RIVER MILE 570-576

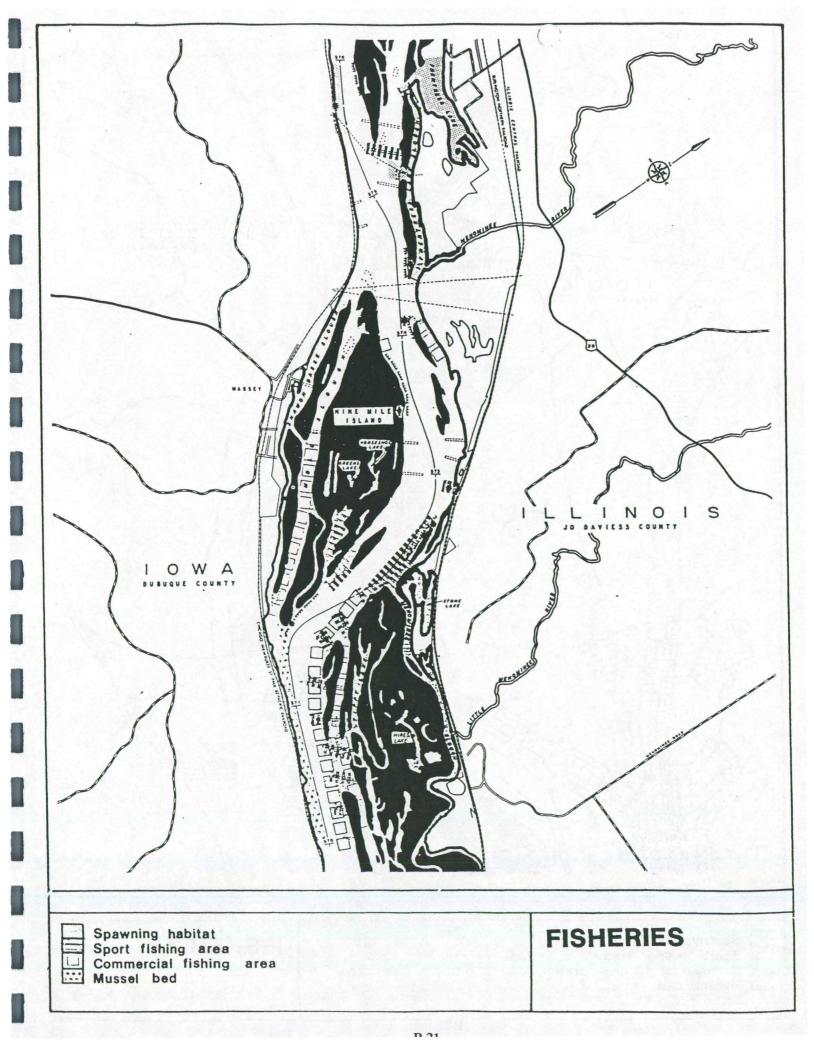
Wildlife

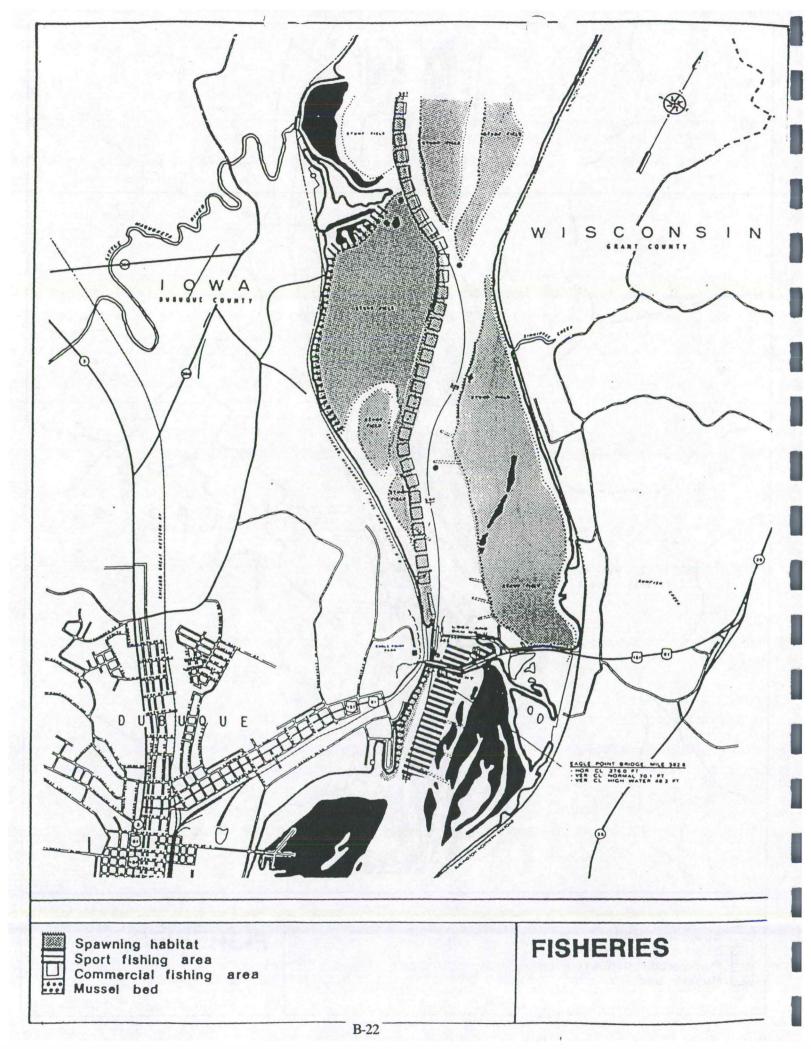
RM	574.5L-576.0L	Bowfin-Frentress-Julien Dubuque Bridge area included in COE forest, fish and wildlife master plan (U.S. Army 1982).
RM	574.5R-576.0R	Mines of Spain, important wildlife habitat.
	570.0L-576.0L	River otter sightings, Illinois threatened species, (Anderson 1982). Also, extensive
		backwater production and harvest habitat for
		waterfowl and furbearer species.
RM	574.8L	Great blue heron and great egret, Illinois
		threatened species, rookery (Thompson and Landin 1978). Great blue heron nests in 1983
		(L. Wargowsky, pers, comm.).
RM	574.6L	Terrestrial sampling (Cawley 1978).
RM	571.5R-574.5R	Nine Mile Island and Shawan Dasse Slough area
		included in COE forest, fish and wildlife master plan (U.S. Army 1982).
RM	573.0L-574.5L	Menominee River and islands included in COE
		forest, fish and wildlife master plan (U.S. Army 1982).
RM	572.0R-574.3R	Nine Mile Island Complex has associated narrow
		lake inlets which are productive wetlands of
		emergent aquatic vegetation.
RM	572.2	Winter biology transect sample (Cawley,
		undated a.).
RM	570.0L-572.0L	River otter habitat, Illinois threatened
		species, included in Illinois Natural Areas
	1993년 - 1993년 1월 1993년 - 19 1997년 - 1997년 - 19 1997년 - 1997년 - 19	Inventory (White 1978).
RM	570.0L-571.5L	Menominee Slough South area included in COE
10.1	5,0.01 5,1.01	forest, fish and wildlife master plan (U.S. Army
		1982).

Recreation

RM	574.5R-576.0R	Mines o	of Spair	Recreat	ion A	Area	
RM	573.8R	Massey	County	Conserva	tion	Board	Park
RM	573.7R	Massey	Marina	(public	ramp)	







U.S. Department of Transportation Commandant United States Coast Guard BRIDGE BRANCH 1222 SPRUCE STREET ST. LOUIS, MO 63103 Staff Symbol: (OB) Phone: 314 539-3900 EXT 378 FAX: 314 539 3755

16592/579.31UMR January 22, 1999

Mr. James W. Moll Hanson Engineers Incorporated 1525 S. Sixth Street Springfield, IL 62703-2886

Subj: PROPOSED NEW DUBUQUE HIGHWAY BRIDGE, MILE 579.31, UPPER MISSISSIPPI RIVER

Dear Mr. Moll:

Please refer to your letter dated December 23, 1998 concerning the subject bridge project.

I appreciate you contacting this office early in the project to ensure the navigational issues are properly addressed. In order for us to provide you the necessary information we will need to know the crossing locations of the new bridge. Horizontal clearances of bridges are determined on a case by case basis and are dependent upon proper pier placement. As soon as the crossings are known we can provide information on pier placement and horizontal clearances.

A bridge at the proposed location across the Upper Mississippi River must provide a minimum vertical; clearance of at least 52 feet above the 2% flowline (not 50 year flood) elevation or 60 feet above normal pool, whichever is greater. The exact clearance required will be determined based on specifics of the area and needs of navigation.

As soon as additional information is submitted, we will be able to provide the navigational information you need. Please contact me if you have any questions.

Sincerely,

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

Copy: R. Genthner, WV DOT



U.S. Department of Transportation

Federal Highway Administration Illinois Division

3250 Executive Park Drive Springfield, Illinois 62703

December 30, 1998

HPP-IL

Mr. James Moll Project Manager Hanson Engineers Incorporated 1525 South Sixth Street Springfield, Illinois 62703

Dear Mr. Moll:

Subject: Scoping Process for U.S. 20 Improvement Across the Mississippi River

We received your December 24, 1998 letter requesting comments on the scoping document for the above project. We do not have any comments at this time; however, we appreciate the opportunity to review the document. Also, we are pleased that you are taking the initiative to begin the scoping process at such an early time.

Please keep us informed as the project develops. '

Sincerely yours,

Serin L. Park Transportation Engineer

For: Ronald C. Marshall, P.E. Division Administrator



United States Department of the Interior

IN REPLY REFER TO:

FWS/RIFO

FISH AND WILDLIFE SERVICE Rock Island Field Office (ES) 4469 - 48th Avenue Court Rock Island, Illinois 61201 Tel: 309/793-5800 Fax: 309/793-5804

December 11, 1998

Mr. Rodger H. Anderson Hanson Engineers, Inc. 1525 South Sixth Street Springfield, Illinois 62703-2886

Dear Mr. Anderson:

This responds to your letter of November 10, 1998, requesting our comments on your plans for proposed highway improvements to U. S. 20 in Dubuque County, Iowa, and JoDaviess County, Illinois.

To facilitate compliance with Section 7(c) of the Endangered Species Act of 1973, as amended, Federal agencies are required to obtain from the Fish and Wildlife Service information concerning any species, listed or proposed to be listed, which may be present in the area of a proposed action. Therefore, we are furnishing you the following list of species which may be present in the concerned area:

Classification	Common Name	Scientific Name	Habitat
Threatened	Bald eagle	Haliaeetus Leucocephalus	Breeding, Wintering
Endangered	Pleistocene snail	Discus macclintocki	North-facing algific talus slopes
Ţhreatened	Prairie bush clover	Lespedeza leptostachya	Dry to mesic prairies with gravelly soil
Threatened	Northern monkshood	Aconitum novaboracense	North-facing slopes of the driftless area; hillside seeps

Mr. Rodger H. Anderson

Classification	Common Name	Scientific Name	Habitat
Threatened	Western prairie fringed orchid	Platanthera leucophaea	Mesic to wet prairies
Endangered	Higgins' eye pearly mussel	Lampsilis higginsi	Rivers

Page 2.

The threatened bald eagle (*Haliaeetus leucocephalus*) is listed as breeding in Dubuque County, Iowa, and JoDaviess County, Illinois. It is also listed as wintering along large rivers, lakes and reservoirs in both of the above-mentioned counties. During the winter, this species feeds on fish in the open water areas created by dam tailwaters, the warm water effluents of power plants and municipal and industrial discharges, or in power plant cooling ponds. The more severe the winter, the greater the ice coverage and the more concentrated the eagles become. They roost at night in groups in large trees adjacent to the river in areas that are protected from the harsh winter elements. They perch in large shoreline trees to rest or feed on fish. There is no critical habitat designated for this species. The eagle may not be harassed, harmed or disturbed when present nor may nest trees be cleared.

The endangered Iowa pleistocene snail (*Discus macclintocki*) is found on north-facing slopes of the driftless area in Dubuque County, Iowa and JoDaviess County, Illinois. It occupies algific (cold producing) talus slopes at the outlet of underground ice caves along limestone bluffs within a narrow regime of soil moisture and temperature. There is no critical habitat designated. It must not be harmed, harassed or disturbed.

The prairie bush clover (*Lespedeza leptostachya*) is listed as threatened in Iowa where it is considered to potentially occur statewide based on historical habitat. It occupies dry to mesic prairies with gravelly soil. There is no critical habitat designated for this species. Federal regulations prohibit any commercial activity involving this species or the destruction, malicious damage or removal of this species from Federal land or any other lands in knowing violation of State law or regulation, including State criminal trespass law. This species should be searched for whenever prairie remnants are encountered.

The northern monkshood (*Aconitum novaboracense*) is listed as threatened in Dubuque County, Iowa. It occupies north-facing slopes in the driftless area of northeast Iowa and one slope along the Iowa River. There is no critical habitat designated for this species. Federal regulations prohibit any commercial activity involving this species or the destruction, malicious damage or removal of this species from Federal land or any other lands in knowing violation of State law or regulation, including State criminal trespass law.

The western prairie fringed orchid (*Platanthera praeclara*) is listed as threatened and is considered to potentially occur statewide based on historical records and habitat distribution. It occupies wet grassland habitats. There is no critical habitat designated for this species.

Mr. Rodger H. Anderson

Federal regulations prohibit any commercial activity involving this species or the destruction, malicious damage or removal of this species from Federal land or any other lands in knowing violation of State law or regulation, including State criminal trespass law. This species should be searched for whenever wet prairie remnants are encountered.

The endangered Higgins' eye pearly mussel (*Lampsilis higginsi*) is listed for the Mississippi River north of Lock and Dam 20 which includes JoDaviess, Henderson, and Rock Island counties, Illinois and Allamakee, Clayton, Clinton, Des Moines, Dubuque, Jackson, Lee, Louisa, Muscatine, and Scott counties, Iowa. In addition, it is known from the Rock River downstream of the Steel Dam, Rock Island County, Illinois. Potentially, it may also occur in Adams, Carroll, Hancock, Pike and Whiteside counties, Illinois upstream of Lock and Dam 22 on the Mississippi River. This species prefers sand/gravel substrates with a swift current and is most often found in the main channel border or an open, flowing side channel.

While there is no designated critical habitat, the Higgins' eye Recovery Team has designated habitats essential to the recovery of the species. These areas include Allamakee County, Iowa (river miles 655.7-658.3R); Harper's Slough area, Allamakee County, Iowa (river mile 639-644R); Marquette-McGregor area, Clayton County, Iowa (river mile 633.3-637); McMillan Island area, Clayton County, Iowa (river mile 616.5-619R); Cordova, Rock Island County, Illinois (river mile 503-505.4L; and Sylvan Slough, Rock Island, Illinois (river mile 485.4-486L).

The State of Illinois has also designated certain mussel refuge areas that contain this species. Their regulations would affect the commercial harvest of mussels on these refuges. If project is located near a known Higgins eye mussel bed, it may be necessary to conduct a survey to determine the presence of the species.

Enclosed is a copy of the Resources Inventory for the Upper Mississippi River (March, 1984) indicating documented fisheries, wildlife and mussel habitats within the proposed project boundary.

The Corps of Engineers is the Federal agency responsible for wetland determinations, and we recommend that you contact them for assistance in delineating any wetland types and acreages within the project boundary. Priority consideration should be given to avoid impacts to any wetland areas. Any future activities in the project area that would alter wetlands may require a Section 404 permit. Unavoidable impacts will require a mitigation plan to compensate for any losses of wetland functions and values. The U.S. Army Corps of Engineers, Clock Tower Building, P.O. Box 2004, Rock Island, Illinois, 61201, should be contacted for information about the permit process.

These comments provide technical assistance only and do not constitute the report of the Secretary of the Interior on the project within the meaning of Section 2(b) of the Fish and

Mr. Rodger H. Anderson

on any forthcoming environmental statement.

Thank you for the opportunity to provide comments early in the planning process. If you have any additional questions or concerns, please contact Mr. Joe Slater of my staff.

Sincerely, 1 Richard C. Nelson

Page 4.

Supervisor

Enclosure

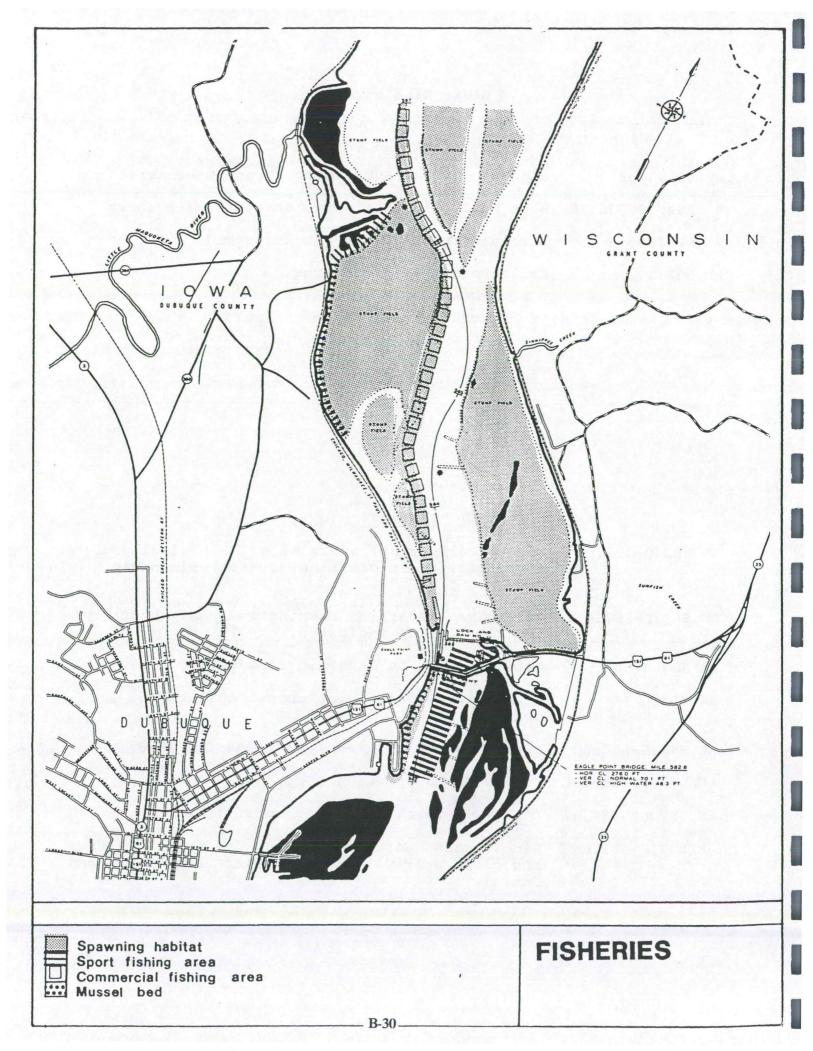
RIVER MILE 582-587

Structures and Hazards

RM 585.3-587.0	High wind area, subject to strong wave action
RM 582.0R-586.3R	Bank protection not shown on navigation chart
RM 582.6-583.0	Strong current below lock and dam ll
RM 582.8	Eagle Point Bridge removed.

Fisheries

RM	582.0-587.0	Mussel collections every mile (Thiel 1981). For site specific information, contact Wisconsin DNR.
RM	583.0-587.0	Extensive commercial fishing in area. Most important areas indicated.
RM	583.0-587.0	Catfish spawning in stump fields.
RM	583.0	Approximate location of mussel collection, 17 species (Mathiak 1979)
RM	583.0-587.0	Various mussel collections (Gunsolly 1979).
RM	583.0L-583.3L	Yellow perch spawning area.
RM	582.6L-582.9L	O'Leary's lake, important sportfishery.
RM	582.0-582.8	Significant sportfishing area due to easy access and close proximity to tailwaters below lock and dam 11.



RIVER MILE 582-587

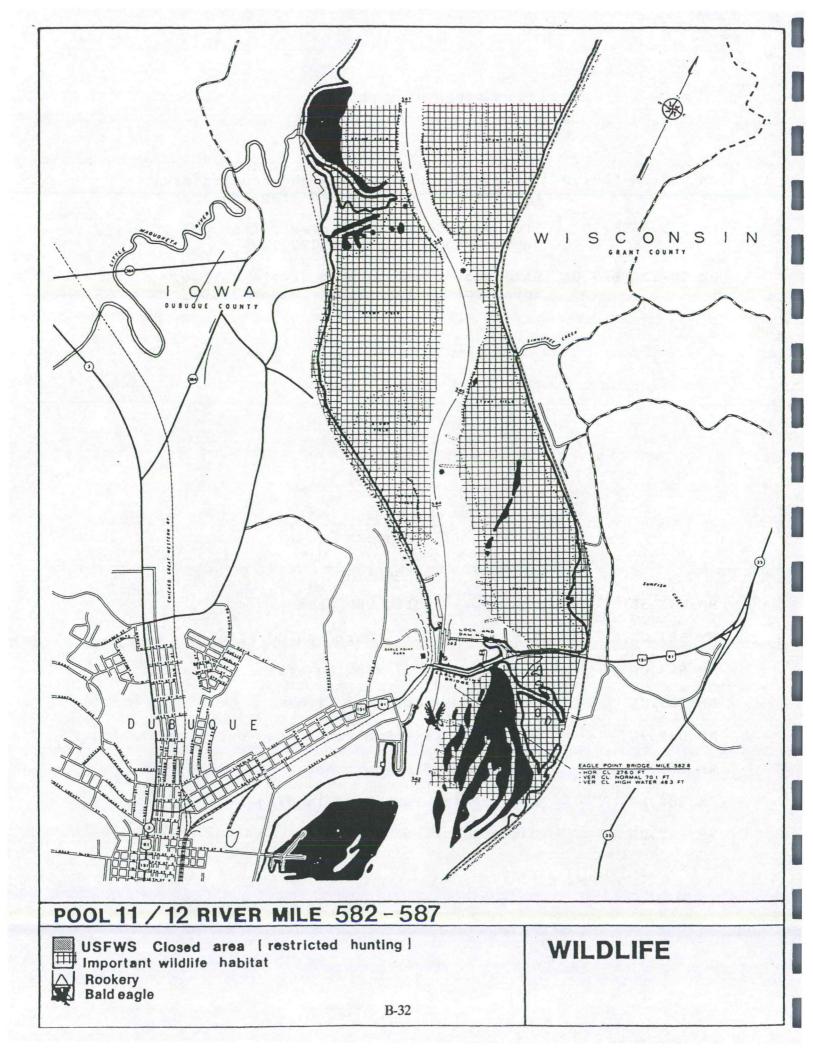
Wildlife

RM	582.0R-587.0R	Major waterfowl resting and hunting area. Furbearer production and trapping area.
RM	583.0-587.0	Area included in COE forest, fish and wildlife master plan (U.S. Army 1982).
RM	582.2L-583.0L	Bald eagle feeding area (Eagle Valley Environmentalists 1982, Nelson 1980).

Recreation

RM	583.3L	Sinnippee Public Use Area
RM	583.0R	Eagle Point City Park and Overlook
RM	583.0R	Lock and Dam 11 viewing area
RM	583.0L	Boat access upstream of dam
RM	582.9L	O'Leary's Lake Public Access (pulic ramp)
RM	582.9L	Commercial fishing float
RM	582.1R	Eagle Point Park boat landing
RM	582.0R	Dubuque Marina

B-31





TERRY E. BRANSTAD, GOVERNOR

GEOLOGICAL SURVEY BUREAU 109 Trowbridge Hall Iowa City, IA 52242-1319 319/335-1575 FAX: 319/335-2754

DEPARTMENT OF NATURAL RESOURCES LARRY J. WILSON, DIRECTOR

January 19, 1999

OFFICE OF PROJECT PLANNING

JAN 2 1 1998

Mr. Roger Larsen Project Manager Iowa Dept. of Transportation 800 Lincoln Way Ames, IA 50010

Dear Mr. Larsen:

I received a letter and the Scoping Document from Hanson Engineers, Inc. regarding "U.S. 20 Capacity Improvement Across the Mississippi River."

I write to inform you that, as a unit of the Department of Natural Resources, our review comment(s) will be incorporated within the Department's response.

Sincerely,

Don Koch

Donald L. Koch State Geologist and Bureau Chief

DLK:mph



DEPARTMENT OF NATURAL RESOURCES LARRY J. WILSON, DIRECTOR

January 7, 1999

Roger Larsen Iowa Department of Transportation 800 Lincoln Way Ames, Iowa 50010

RE: Scoping Document for US 20 Capacity Improvement Across the Mississippi River, Dubuque County, Iowa/Jo Daviess County, Illinois HEI No. 97S2045

Dear Mr. Larsen:

Thank you for inviting our comments on the impact of the above referenced project on protected species and rare natural communities.

You are referred to our letter to Mr. Rodger Anderson of Hanson Engineering Incorporated dated December 1, 1998, in response to a request for natural areas data and threatened and endangered species data for the US 20 location study. We indicated in that letter that two protected animal species and four protected plant species have been recorded in the project area: Higgin's-eye pearly mussel, Lamsilis higginsi, federal- and state-endangered; river otter, Lutra canadensis, state-threatened; glandular wood fern, Dryopteris intermedia, statethreatened; jeweled shooting star, Dodecatheon amethystinum, state-threatened; leathery grape fern, Botrychium multifidum, state-threatened; and great plains ladies tresses, Spiranthes magnicamporum, state special concern. Please contact us for survey requirements when specific corridor alternatives are selected for study.

We also identified two public natural areas within the project area: the Upper Mississippi River National Fish and Wildlife Refuge and Mines of Spain State Recreation Area. If impacts to these natural areas or any of the species listed above are unavoidable, additional studies and/or mitigation may be required.

This letter is a record of review for protected species and rare natural communities in the project area. 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.

JAN 14 1999

98-661L.DOC

Roger Larsen January 7, 1999

If you have any questions about this letter or if you require further information, please contact Kim Bogenschutz at (515) 281-8675.

Sincerek pri son

ARRY J. WILSON, DIRECTOR IOWA DEPARTMENT OF NATURAL RESOURCES

LJW:ksb

cc: James Moli, Hanson Engineers Incorporated

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY



1021 North Grand Avenue East, P.O. Box 19276, Springfield, Illinois 62794-9276

217/782-0547

February 1, 1999

OFFICE OF DEO JECT PLANNING

FEB 5 1999

Mr. Roger Larsen Project Manager Iowa Department of Transportation 800 Lincoln Way Ames, Iowa 50010

Re: Scoping Process U.S. 20 Capacity Improvement Across the Mississippi River Dubuque County, Iowa/Jo Daviess County, Illinois HEI No. 97S2045

Dear Mr. Larsen:

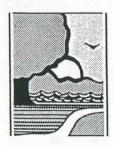
Thank you for the opportunity to comment on the U.S. 20 Capacity Improvement project.

The Agency has reviewed this submission and has no comments or objections to the proposed project at this time. Agency comments will be provided as necessary during the review of the draft Environmental Impact Statement. Section 401 water quality certification will be required from the Illinois EPA as part of the Corps of Engineers permit process under Section 404 of the Clean Water Act. The certification will be required prior to construction to insure that the project complies with the applicable water quality standards. Please contact Bruce Yurdin at 217/782-0610 for further assistance.

Sincerely,

Remard P. Killian

Bernard P. Killian Deputy Director



ILLINOIS DEPARTMENT OF NATURAL RESOURCES

524 South Second Street, Springfield 62701-1787

Jim Edgar, Governor
Brent Manning, Director

January 28, 1999

Mr. James Moll Project Manager Hanson Engineers Incorporated 1525 South Sixth Street Springfield, Illinois 62703-2886 RE: Scoping Process U.S. 20 Capacity Improvement Across Mississippi River JoDaviess County

Dear Mr. Moll:

The Department of Natural Resources has reviewed the Illinois Natural Heritage Database for the presence of endangered or threatened species, Illinois Nature Preserves, or Illinois Natural Areas Inventory sites. There are known occurrences of these resources within the vicinity of the project area referenced above. Below are the general location and species occurrence in the specified corridor.

North Corridor:

T29N, R2W; S19	East Dubuque Geological Area INAI site
T29N, R2W, S35	Dixon Creek North Geological Area INAI site, River Otter
	(This site is south and adjacent to U.S. 20)
T28N, R2W, S2	Meadow Horsetail and Hairy Woodrush
	(Both of these plants occur along Whisky Hollow and Rt. 20)
South Corridor:	
T28N, R2W, S4	Rookery (Great Egret) near Mississippi River Mile 576
T28N, R2W, S3	Red Shouldered Hawk
T28N, R2W, S2	Yellow-headed Blackbird and Veery
T28N, R2W, S11	River Otter
T28N, R2W, S12 &13	Northern portion of JoDaviess County River Otter habitat
	and INAI site
T28N, R2W, S24	Butterfly Mussel (Mississippi River Mile 571.5)
T28N, R2W, S12	Common Juniper and Cliff Goldenrod plus habitat areas along the Illinois Central Railroad

When a specific corridor and alignments within have been identified, it would be best to provide a more detailed map so location of these species can be better identified.

Please be aware that the Illinois Natural Heritage Database cannot provide a conclusive statement on the presence, absence or condition of significant features in any part of Illinois. The reports only summarize the existing information regarding the natural features or locations in question known to the Division of Natural Heritage at the time of inquiry. The reports should not be regarded as final statements on the site being considered, nor should they be a substitute for field surveys required for environmental assessments.

If you have any questions on the above, please contact me at 217-785-5500.

Sincerely,

Ateve Hamen

Steve Hamer Transportation Review Program Division of Natural Resource Review and Coordination



Illinois Department of Transportation

Division of Aeronautics One Langhorne Bond Drive/Capital Airport Springfield, Illinois 62707-8415

January 26, 1999

Mr. Roger Larsen Project Manager Iowa Department of Transportation 800 Lincoln Way Ames, Iowa 50010

Re: Scoping Process U.S. 20 Capacity Improvement Across the Mississippi River Dubuque County, Iowa/Jo Daviess County, Illinois HEI No. 97S2045

Dear Mr. Larsen:

This is in regards to the scoping process of the capacity improvements to U.S. Route 20 in the northern corridor that was received by our office.

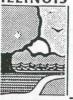
In review of our records for the Jo Daviess County there doesn't appear to be any airports, RLA's or Heliports within the Northern Corridor where the improvement to U.S. Route 20 is to take place. As a result, we do not find it within the agency's interest to review the scoping process and comment on defining the significant environmental factors. Attached is the scoping process for U.S. Route 20 that was sent to our office.

Sincerely,

- Birdili

James Bildilli Chief Engineer

ILLINOIS STATE GEOLOGICAL SURVEY



Natural Resources Building 615 East Peabody Drive Champaign, IL 61820-6964 217/333-4747 FAX 217/244-7004



DEPARTMENTOF

OFFICE OF PROJECT PLANNING

JAN 2 5 1998

Mr. Roger Larsen Project Manager Iowa Department of Transportation 800 Lincoln Way Ames, IA 50010

20 January 1999

Dear Mr. Larsen,

I have been asked to respond to your request of December 24, 1998 regarding the proposed improvements to U.S. Route 20 across the Mississippi River between Dubuque, Iowa, and East Dubuque, Illinois.

The nature of the geologic materials and the hydrogeology of the area should be considered in determining potential impacts on proposed construction work. Geologic information for Illinois is available in publications of the ISGS as listed below. You may have many of these in the University of Iowa library. To order any of these publications, please contact our public information office at (217) 333-4747. Well records give information on specific geologic materials that have been encountered in drilling, and indicate the geologic units from which water is obtained. These records can be examined by you or a member of your staff in the Geologic Records Unit of the ISGS between 8 and 5, Monday through Friday.

- Berg, R.C., Kempton, J.P., and Cartwright, K. (1984). Potential for contamination of shallow aquifers in Illinois. Illinois State Geological Survey Circular 532, 30 pp. \$3.75.
- Berg, R.C., and Kempton, J.P. (1988). Stack-unit mapping of geologic materials in Illinois to a depth of 15 meters. Illinois State Geological Survey Circular 542, 23 pp. \$9.75.
- Lineback, J.A. (1979). Quaternary deposits of Illinois. Illinois State Geological Survey map, 1:500,000. \$3.00.
- Willman, H.B., and Frye, J.C. (1970). Pleistocene stratigraphy of Illinois. Illinois State Geological Survey Bulletin 94, 204 pp. \$4.75.

Willman, H.B., et al. (1975). Handbook of Illinois stratigraphy. Illinois State Geological Survey Bulletin 95, 261 pp. \$4.75.

Willman, H.B., et al. (1967). Geologic map of Illinois. Illinois State Geological Survey map, 1:500,000. \$3.00.

Potential natural and man-made hazards may be present along the proposed corridor. These may include, but are not limited to, the following. If you wish further information about any of these factors, we would be pleased to discuss topics with your staff.

- Risk of flooding. The corridor crosses the 100-year floodplains of the Mississippi and Menominee Rivers as mapped for the Federal Emergency Management Agency's National Flood Insurance Program.
- Man-made hazards. These include, but are not limited to, the following:
 - CERCLIS (Superfund) sites
 - Leaking underground storage tanks
 - Landfills
 - Hazardous materials use at commercial or industrial facilities

Additionally, the Illinois Department of Transportation has conducted environmental studies in parts of the proposed corridor along U.S. 20 that have identified specific potential environmental hazards. Please contact John R. Washburn, Geologic and Waste Assessment Unit Chief, Bureau of Design and Environment, Illinois Department of Transportation, 2300 S. Dirksen Parkway, Springfield, IL 62764, (217) 782-7074, if you are interested in information from these studies.

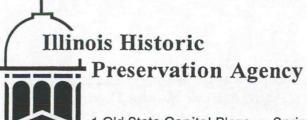
If you have any questions, please feel free to contact me at (217) 244-2502 or <u>erdmann@isgs.uiuc.edu</u>. Additionally, staff of the ISGS would be pleased to meet with you or the staff of Hansen Engineers concerning this project if you wish.

Sincerely,

Ann & Sul

Anne Erdmann Environmental Geologist and Head Environmental Site Assessments Section

xc: B. L Herzog



1 Old State Capitol Plaza • Springfield, Illinois 62701-1507 • (217) 782-4836 • TTY (217) 524-7128

JoDaviess County East Dubuque IDOT-Improve

IDOT-Improve Capacity of U.S. Route 20 across Mississippi River (SN 043-0001); HEI No. 97S2045; IHPA Log #02122898

January 19, 1999

James Moll, Project Manager Hanson Engineers Incorporated 1525 South Sixth Street Springfield, IL 62703-2886

Dear Mr. Moll:

Thank you for requesting comments from our office concerning the possible effects of your project on cultural resources. Our comments are required by Section 106 of the National Historic Preservation Act of 1966, as amended, and its implementing regulations, 36 CFR 800: "Protection of Historic Properties". Our staff has reviewed the information provided in your December 24, 1998 letter regarding the referenced project. We understand that the Illinois Department of Transportation has already begun archaeological investigation of the Illinois side of the corridor. Please contact John Walthall, at 217/785-2831, concerning the status of this work and location of burial sites and National Register eligible sites. In the planning stage, we request that all reasonable attempts in terms of engineering and economic feasibility be made to avoid all known cemetery/burial sites of any age (including Indian mounds), as well as all sites formally listed in the National Register of Historic Places.

Additionally, the Julien Dubuque Bridge (SN 043-0001) is listed on the Illinois Department of Transportation's Historic Bridge Survey. We have enclosed copies of the relevant forms for your use. The historic significance of this bridge should be taken into account, as alternatives are assessed. If you have any questions regarding the bridge or other standing structures, please contact Tracey A. Sculle, Cultural Resource Manager, 217/785-3977. Please contact Dr. Mark E. Esarey, Chief Archaeologist, 217/785-4999 with any questions regarding archaeology.

Sincerely,

Anne E. Haaker' V Deputy State Historic Preservation Officer

enclosures AEH:TAS c: Mark Esarey, IHPA John Walthall, IDOT

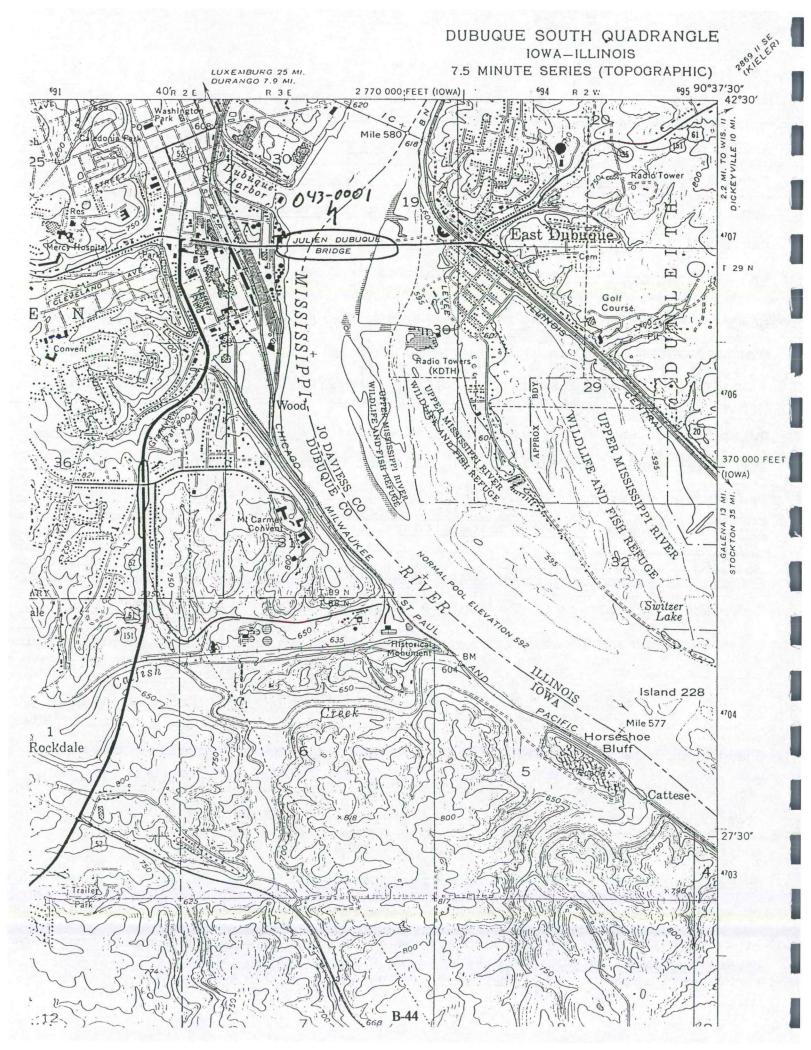
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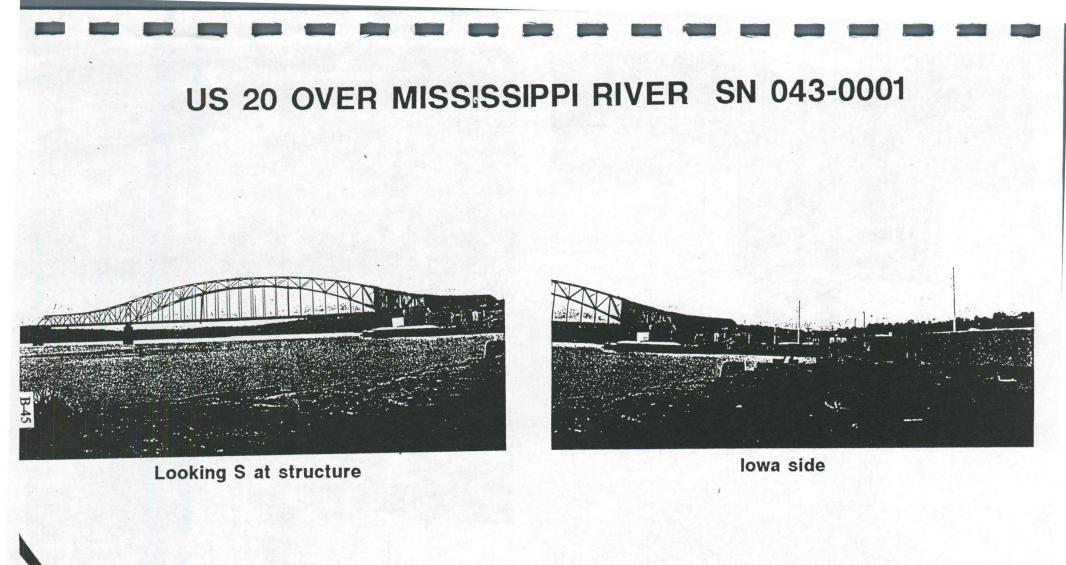
***** Record 56 in Historic_Bridges *****

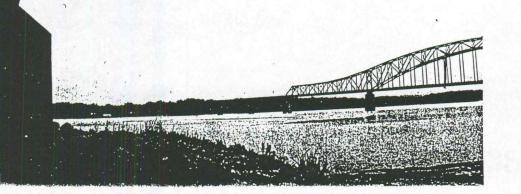
ILLINOIS DEPARTMENT OF TRANSPORTATION HISTORICAL BRIDGE DATA SHEET

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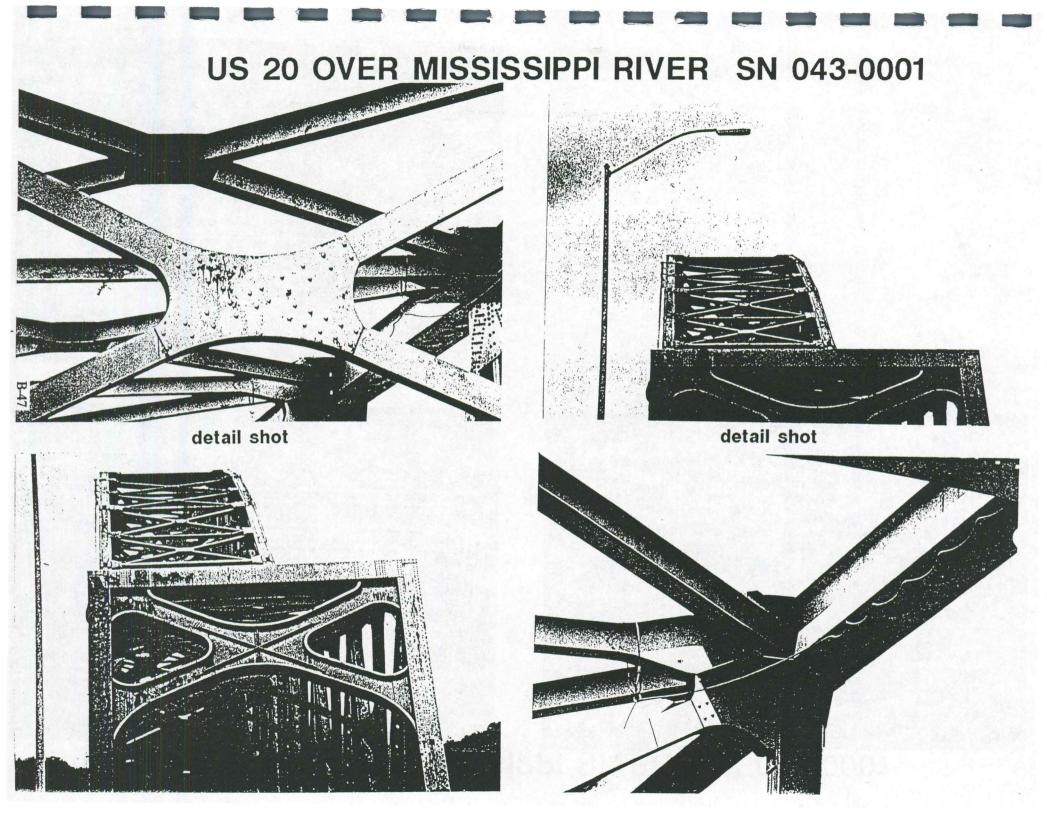
Bridge name(s): Julien Dubuque	Structure No.: 043-00
Type: Steel cantilevered tied arch	Year Constructed: 194
Municipality (Nearest): E. Dubuque and, in Iowa, Dubuque	County: Jo Daviess
Carries U.S. 20 over Miss. Riv	., Il. 35
Owner: Iowa Legal Descr: Q SW,NW S	19,30 T 29N R 3E
Quad. Bridge cros Quadrangle: <u>Dubuque South</u> Scale: <u>7.5</u> (other coun	ses into ty or state): <u>lowa</u>
UTM REFERENCES 1 5 20ne 6 9 2 8 5 1 4 7 0 6 8 2 0 Northing	Plans Available:
Total bridge length: 5760.4 No. of Spans: 3	Roadway Width: 24
Structural Condition: poor Abutment Material: co	ncrete
Description of Bridge: Main span, 845 ft., flanked by 34 Concrete spill-through piers. Deck height of 50 ft. abo approach viaducts of steel plate girders.	7-ft. anchor spans. ve MHW requires 40
Legend:(3 additional plaque te	xts on reverse)
Nameplate present? <u>yes</u> Legend: <u>TO THOSE AMERICANS OF</u> <u>WHO HAVE VALIANT</u> <u>THEIR COUNTRY IN THE C</u> FROM THE NATION' <u>UNTO THIS PRES</u> <u>THIS MEMORIAL IS REVER</u> V.F.WAMERICAN LEGION	LY SERVED AUSE OF FREEDOM S FOUNDING ENT HOUR ENTLY DEDICATED
Changes in location, design, function? (Describe c	on reverse side)
Fabricator \underline{Y} / Designer \underline{Y} : Bethlehem Steel Co., Chicago;	Ned Ashton, Iowa City,
Erector, contractor: Bethlehem Steel Co., Chicago; Fred	Robers
Additional historic notes? yes (See Reverse)	
On National Register? Date: pending	
Eligible for National Register: yes Date: Indiv	vidual: yes Dist.:
Significance: World's longest continuous tied arch span; truss, any type, in US. Received American Institute of S annual merit award, 1943, for "most beautiful steel brid Almanac: a "Notable Bridge of No. America." Iowa SHPO: N	Steel Construction's



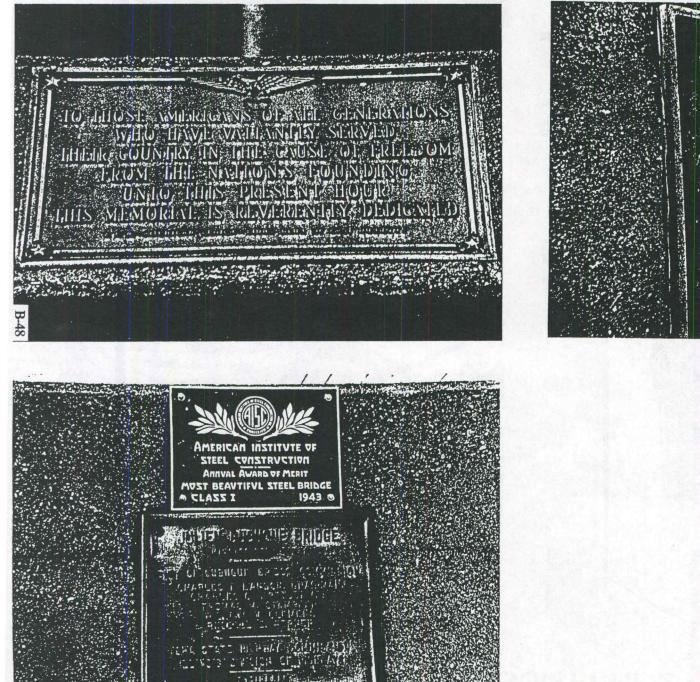




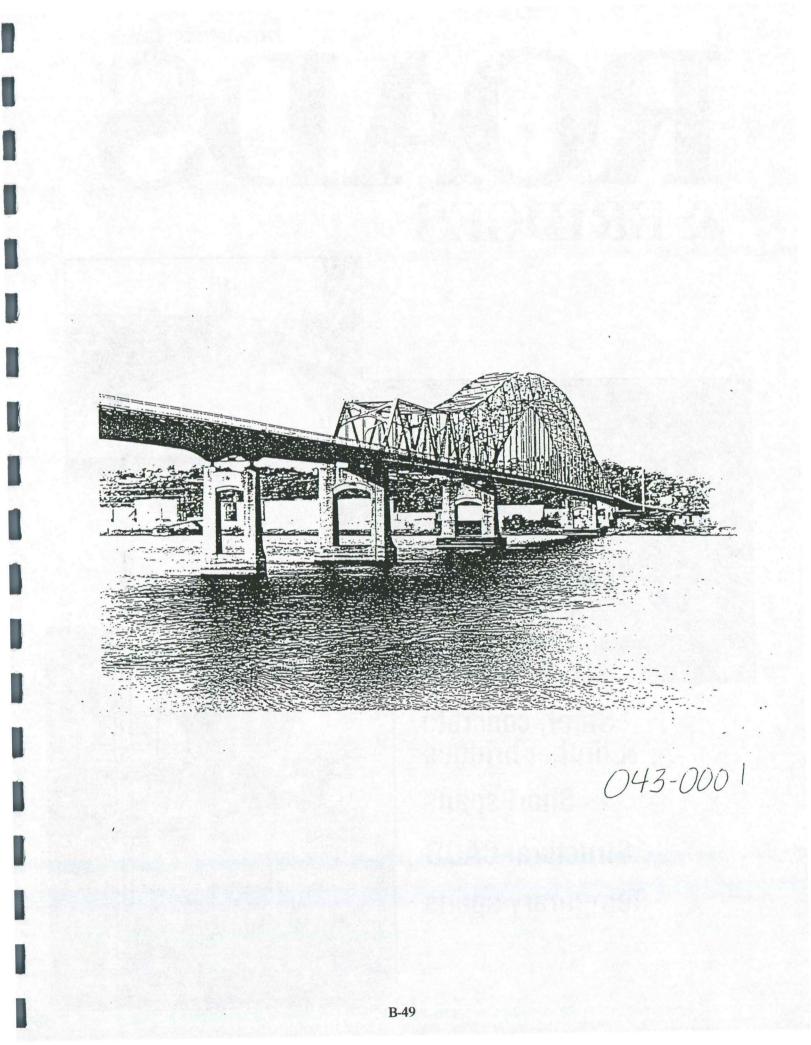




US 20 OVER MISSISSIPPI RIVER SN 043-0001

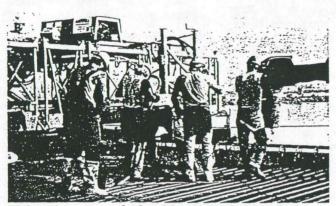


FATHER OF WATERS, PASSED HIRE JOURNEY OR HERE IN 1690. NICHOLAS PERPIT FULL INT TRADING POST. HERE, IN 1788. AT THE SITE OF THE CITY. INCORPORATED IN 1933. JEFFING HIS NAME, JULIEN DUBUQUE FOUNDERFING HIS NAME, JULIEN DUBUQUE FOUNDERFING HIS NEATH THE SHADOW OF HIS TOMB NID CRACCY BLUFFS RICH. IN (INDIAN LORE, WHERE ERRY COMMERCE FERRIED THE MISSISSIFT. IS BUILT THIS JULIEN DUBUQUE BRIDGE. FIRST CONSENSE IN A COMMITTEE OF DUBUQUE AMERICAN LEGISM NA COMMITTEE OF DUBUQUE AMERICAN LEGISM POST NO. 6. THIS BRIDGE A SYMBOL OF TEACEFUL PROGRESS. IS DEDICATED TO THOSE AMERICAN FIGHTING AND DYING ON TCREICH SOIL TO VEEP

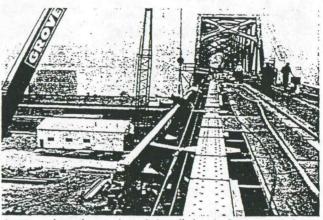




Steel, concrete & timber bridges Short spans Structural CADD Temporary spans



Workers place concrete for first slab on Julien Dubuque Bridge



A new north roadway stringer is installed at the Iowa approach

Rehabilitation revitalizes Mississippi River bridge

Utilizing cast-in-place deck replacement and strengthening techniques, lowa DOT and engineers enable the Julien Dubuque Bridge to sustain increased traffic

by Dr. Arthur W. Hedgren, and William Schmitt, P.E.s

Mr. Hedgren and Mr. Schmitt are engineers in the Pittsburgh office of HDR Engineering, Inc. Information for this article was provided by HDR's Bridgeline. Edited by Larry Flynn

A fter 48 years of transporting motorists back and forth across the Mississippi River between Dubuque, Iowa, and East Dubuque, Ill., Iowa and Illinois DOT officials had to decide whether to replace or rehabilitate the historic Julien Dubuque Bridge. Rehabilitation was selected.

The bridge, which is on the National Historic Register, was in need of deck replacement and rehabilitation of a significant amount of the floor system. The bridge's 24-ft roadway was also found to be functionally substandard in its ability to handle the 19,000 vehicles per day which cross it. HDR Engineering, Inc. was chosen to provide services to the Iowa Department of Transportation (IDOT) in three distinct phases: Study, Design and Construction services.

Phase I included the preparation of

DOADO & DDIDOCOMOVEMBER 1991

a design study report for deck replacement, strengthening and structural repairs of the bridge. The company also performed an in-depth field inspection of the bridge and prepared an inspection report documenting load rating and assessing rehabilitation potential. Phase II included preparation of contract documents for deck replacement, widening of the deck, member strengthening and structural repairs. Phase III is ongoing and includes providing consulting services and construction engineering during the remodeling phase of the project.

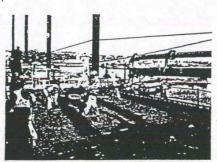
Remodeling of the bridge is being performed by Johnson Bros. Corp., Litchfield, Minn. The bridge was closed to all traffic on Feb. 4 and is to be reopened on Dec. 1.

The total length of the bridge, part of U.S. 20, is approximately 5,760 ft including 1,448 ft of girder approach spans on the Iowa side, a three-span through arched truss unit 1,539 ft long over the river, and 2,773 ft of girder spans on the Illinois approach. In addition to the existing 24-ft roadway, a 5-ft concrete pedestrian sidewalk is provided on the north side and a steel safety walk on the south side. The remodeled curb to curb width will be 2δ ft with 4-ft widening on the north side. A 4-6-ft sidewalk will be located on the south side of the remodeled structure.

The westernmost 512 ft of the Iowa approach spans are being entirely reconstructed. The roadway deck, sidewalk, safety walk and railings are to be removed and the bridge is to be remodeled in the remaining 5,248-ft length of the bridge.

After considering various deck alternatives, and results of the structural analyses, Iowa DOT chose to use normal weight cast-in-place concrete for remodeling of the structure for cost and durability reasons. The other deck alternatives included precast concrete, orthotropic steel, exodermic steel grid, and partially filled steel grid deck systems. The final selection of the deck was predicated on the requirement to complete all construction activity during one construction season.

Selection of the normal weight deck required a larger number of truss members be strengthened and considerably thicker strengthening plates be used to bring the live load capacity to HS20 loading from its original H20.



Concrete placement for the last slab in the truss unit was completed in September

Another significant modification was to increase the existing 24-ft roadway to a 28-ft section by moving the sidewalk outboard of the through truss.

Design criteria

The Service Load Design Method was used in the analysis of main truss members. The Strength Design Method (Load Factor) was used for girder spans and the floor system of the truss spans. Carbon steel ASTM A-7 or silicon steel ASTM A-94 were used for the existing structural components with yield strengths of 33,000 psi and 45,000 psi, respectively. Ten silicon steel test samples were taken at various truss member locations to determine if the yield strength could be increased to 50,000 psi for the silicon steel. Since test results indicated yields between 45,000 and 50,000 psi, the analysis for strengthening the silicon steel members is based on 45,000 psi.

Member strengthening

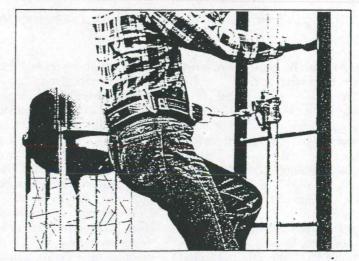
Many details were necessary to strengthen the different members with deficient load capacity. Girders in the approach spans were strengthened by adding and/or increasing the lengths of top flange cover plates and by providing shear connectors to obtain a composite designed section. Also, struts were added to brace bottom flanges adjacent to piers.

Upgrading the live load from H20 to HS20 required strengthening of all floorbeams in the truss and girder spans. Floorbeams in the truss spans were strengthened by the addition of shear connectors. Floorbeams in the approach spans were strengthened by adding only a bottom flange cover plate, as the stringers are continuous over the floorbeams. Because the deck beams on truss spans prevented adding plates to the top of the top flange of the stringers, the existing south stringer was strengthened by adding web side plates near the top of the stringer and a bottom flange plate. The addition of a new stringer on the north side eliminated the need to strengthen the existing north stringer.

The bridge strengthening, widening and rehabilitation of deteriorated steel sections required approximately 950 tons of new steel. Nearly all existing built-up members and connections are riveted. High strength bolts are used for all new connections. More information on products and/ or services mentioned is available by writing in the appropriate reader service number in this issue.

Structural design	
HDR Engineering, Inc	1040
Deck finisher	
Bid-Well Corp	1016
Rough terrain crane	
Grove Manufacturing Co	1017
Epoxy-coated rebar	
Concrete Reinforcing Steel	
Institute-	1018

THIS COULD BE HIS ONLY LINK BETWEEN LIFE AND DEATH.

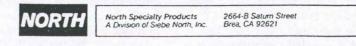


Climbers rely on the fall prevention you specify to keep them safe. You could specify a cage; but the fact is that cages can allow a climber to fall 30 feet or more! What you should specify is fall prevention that provides real protection.

Give climbers the real protection of SAF-T-CLIMB[®] fall prevention systems. Saf-T-Climb systems meet ALL OSHA regulations and have been saving climbers' lives for over 38 years.

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Write in 774

NPS Form 10-900 (Oct. 1990)

United States Department of the Interior National Park Service

National Register of Historic Places Registration Form

This form is for use in nominating or requesting determinations for individual properties and districts. See instructions in *How to Complete the National Register of Historic Places Registration Form* (National Register Bulletin 16A). Complete each item by marking "x" in the appropriate box or by entering the information requested. If an item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, architectural classification, materials, and areas of significance, enter only categories and subcategories from the instructions. Place additional entries and narrative items on continuation sheets (NPS Form 10-900a). Use a typewriter, word processor, or computer, to complete all items.

1. Name of Property

historic name	Julien Dubuque Bridge	
other names/site number _		
2. Location		100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100
street & number	U.S. Highway 20 over Mississippi Ri	ver not for publication
city or town	Dubuque	vicinity
state Iowa/Illinois	code county Dubuque/Jo D	vaviess code 061/085 zip code 45302
3. State/Federal Agency	Certification	
request for determination of Historic Places and me property meets do	y under the National Historic Preservation Act, as amend on of eligibility meets the documentation standards for re- ets the procedural and professional requirements set for bes not meet the National Register criteria. I recommend locally. (See continuation sheet for additional co	gistering properties in the National Register rth in 36 CFR Part 60. In my opinion, the that this property be considered significant
Signature of certifying offic	ial/Title	Date
State or Federal agency a	nd búreau	
In my opinion, the property comments.)	meets does not meet the National Register criterie	a. (See continuation sheet for additional
Signature of certifying offic	ial/Title	Date
State or Federal agency a	nd bureau	
4. National Park Service	Certification	
I hereby certify that the pr	Register	
☐ determined eligible for ☐ See continuation s	the National Register	Contraction of the second second second
	e for the National Register	
removed from the Nati	onal Register	
□ other, (explain):		

Julien Dubuque Bridge		Dubuque County; Iowa		
5. Classification				
Ownership of Property (Check as many boxes as apply)	Category of Property (Check only one box)	Number of Resources within Property (Do not include previously listed resources in the count)		
 private public-local public-State public-Federal 	 building(s) district site structure 	Contributing 0 0	g Noncontributing 0 0 0	buildings sites
and the second s	□ object	1 0	0	structures objects
		1	0	Total
Name of related multiple property listing (Enter *N/A* if property is not part of a multiple property listing) Highway Bridges of Iowa			contributing resources onal Register	previously listed
6. Function or Use Historic Functions (Enter categories from instructions)		Current Fu (Enter categori	nctions es from instructions)	
TRANSPORTATION/rc	oad-related	TRANSPORTATION/road-related		
7. Description				
Architectural Classification (Enter categories from instructions)		Materials (Enter categori	es from instructions)	
other: cantilevered tied arch		foundation	N/A	
		wallsN/A		
		roof	N/A ·	
		other	N/A	

Narrative Description

(Describe the historic and current condition of the property on one or more continuation sheets)

Located in Dubuque, the Julien Dubuque Bridge spans Mississippi River in an urban setting that has changed little since the structure's period of significance. A description of the structure follows:

span number: span length:		construction date:	1943 \$3,175,341.63
total length:	5760.0'	current condition:	good
roadway wdt.:	29.0	alterations:	none

superstructure: steel cantilevered tied arch, with plate deck girder approach spans substructure: concrete abutments and spill-through piers floor/decking: concrete deck over steel stringers other features: aluminum guardrails

Other than maintenance-related repairs, the bridge remains essentially unaltered as it continues to carry vehicular traffic. The Julien Dubuque Bridge today retains a high degree of integrity of location, design, setting, materials, workmanship, feeling and association.

Julien Dubuque Bridge

8. Statement of Significance

Applicable National Register Criteria

(Mark ** in one or more boxes for the criteria qualifying the property for National Register listing)

- A Property is associated with events that have made a significant contribution to the broad patterns of our history.
- B Property is associated with the lives of persons significant in our past.
- C Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.
- D Property has yielded, or is likely to yield, information important in prehistory or history.

Criteria Considerations

(Mark "x" in all the boxes that apply)

- Property is:
- A owned by a religious institution or used for religious purposes.
- B removed from its original location.
- C a birthplace or grave.
- $\Box \cdot D$ a cemetery.
- E a reconstructed building, object, or structure.
- F a commemorative property.
- □ G less than 50 years of age or achieved significance within the past 50 years.

Narrative Statement of Significance (Explain the significance of the property on continuation sheets.)

9. Major Bibliographical References

Bibliography

(Cite the books, articles, and other sources used in preparing this form on one or more continuation sheets.)

Previous documentation on file (NPS):

- preliminary determination of individual listing (36 CFR 67) has been requested
- previously listed in the National Register
- previously determined eligible by the National Register
- designated a National Historic Landmark
- recorded by Historic American Buildings Survey
- recorded by Historic American Engineering Record

Dubuque County; Iowa

Areas of Significance (Enter categories from instructions)

TRANSPORTATION

Period of Significance

1943

- (The period of significance is derived
- from the original construction date.)

Significant Dates

1943 (construction date)

Significant Person

(Complete if Criterion B is marked above)

N/A

Cultural Affiliation

N/A

Architect/Builder

fabricator

builder:

Ned Ashton, Iowa City IA

Bethlehem Steel Company, Chicago IL

Bethlehem Steel Company; Fred Robers

Primary location of additional data:

- State Historic Preservation Office
- other State agency
- □ Federal agency
- Local government
- □ University
- □ other
 - name of repository:

Julien Dubuque Bridge

Dubuque County; Iowa

10. Geographical Data

less than one acre Acreage of Property

UTM References

(Place additional UTM references on a continuation sheet)

1	15	692940	4706810	
	zone	easting	northing	

15 693740 4706810

northing

easting

zone

Verbal Boundary Description (Describe the boundaries of the property)

The nominated property is a rectangular-shaped parcel measuring 33 feet by 5,760 feet, which is centered on the UTM point(s) listed above. Included within this rectangular parcel are the bridge's superstructure, substructure, approach spans and floor system.

Boundary Justification

(Explain why the boundaries were selected)

The nominated structure includes the bridge's superstructure, substructure, floor system, any approach spans and the property on which they rest. These boundaries encompass, but do not exceed, all of the property that has been historically associated with the bridge.

11. Form Prepared By

name/title	Clayton B. Fraser	1 Million Should an		Contravel Spring Ac
organization	Fraserdesign	date	31 August	1994
street & number	1269 Cleveland Avenue	telephone	303-669-7	969
city or town	Loveland	state	Colorado	_ zip code _ 80537

Additional Documentation

Submit the following items with the completed form:

Continuation Sheets

Maps

A USGS map (7% or 15 minute series) indicating the property's location

A Sketch map for historic districts and properties having large acreage or numerous resources

Photographs

Representative black and white photographs of the property

Additional Items

(Check with the SHPO or FPO for any additional items)

Property Owner			144 A R 22 1		
(Complete this item a	t the request of SHPO or FPO)			1	
name/title	Iowa Department of Transportation	Contra Secu	1. 19 A.		Station -
street & number	800 Lincoln Way	telephone	515-239-	1251	
city or town	Ames	state	Iowa	zip code	50010

Paperwork Reduction Act Statement: This information is being collected for applications to the National Register of Historic Places to nominate properties for listing or determine eligibility for listing, to list properties, and to amend existing listings. Response to this request is required to obtain a benefit in accordance with the National Historic Preservation Act, as amended (16 U.S.C. 470 et seq.).

Estimated Burden Statement: Public reporting burden for this form is estimated to, average 18.1 hours per response including time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding this burden estimate or any aspect of this form to the Chief, Administrative Services Division, National Park Service, P.O. Box 37127, Washington, DC 20013-7127; and the 1204-0018), Washington, DC 20503. Office of Management and Budget, Paperwork Reductions Project

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Section Number 8

Page 1

Julien Dubuque Bridge

Dubuque County; Iowa

Dubuque, like other towns along the upper Mississippi River, prospered in the industrialized years after the end of the Civil War. As a major transportation nexus, Dubuque was one of the first cities to receive a Congressional charter to erect a railroad bridge over the Mississippi. The all-iron structure built here in 1868 by the Duluth and Dunleith Bridge Company (a subsidiary of the Illinois Central Railroad) carried a single track; like many of the other early bridges, it was dedicated strictly to rail traffic. A bridge to carry wagon traffic had actually been planned three years earlier, with the formation of the East Dubuque Bridge Company in 1865. Envisioning a pontoon bridge at the site, the company obtained Congressional approval for the project. But despite the governmental go-ahead, actual construction did not begin until two decades later. In the interim the bridge company's franchise was taken over by the Dubuque Pontoon Bridge Company, and the pontoon structure was abandoned in favor of a multiple-span truss design. Built in 1886-87, the High Bridge, as it was called, was Iowa's first Mississippi River structure built to carry wagon traffic exclusively. Dubuque's second highway bridge over the Mississippi was built in 1901-02. Located upstream from the other two spans, the structure was erected at a promontory known as Eagle Point and crossed over the river into Wisconsin's southwest corner.

Despite the proliferation of the automobile in the 1910s and 1920s, only one other vehicular bridge was built over the Mississippi into Iowa between 1902 and the early 1930s. This was the MacArthur Bridge [DESM01] at Burlington, a three-span, cantilevered high truss built in 1917. By the 1930s, some of the upper Mississippi's early highway bridges, such as the spans at Muscatine (1890) and Clinton (1892), were beginning to show signs of wear. As the oldest of the highway bridges into Iowa, Dubuque's High Bridge was one of those most in need of repair or replacement.

By 1936 the need for a new structure seemed clear, and Dubuque's business and political leaders began to work in earnest toward that goal. That year the city's American Legion post formulated a plan to erect a new toll bridge over the river. In April 1938 the Legion and the Dubuque Chamber of Commerce appointed a committee to organize efforts toward the construction of a new bridge. After lobbying by the committee, Iowa Senator Guy M. Gillette and Congressman William S. Jacobson introduced twin bills authorizing the City of Dubuque Bridge Commission to buy or build a bridge and collect tolls for passage over it. The bills passed both houses of Congress in June, only to be vetoed by President Roosevelt because they provided for the issuance of tax exempt bonds. Delayed but not defeated, the two representatives redrafted the proposed legislation, removing the tax exempt bond provision, and resubmitted the bill the following year. Congress once again voted its approval, and on July 18, 1939, Roosevelt signed the bill into law.

Two months later the commission contracted with the Kansas City engineering firm of Howard, Needles, Tammen and Bergendoff (HNTB) to design and supervise construction of the new bridge. Ned Ashton, the firm's chief designer, was placed in charge. He soon started the project's preliminary stages of promotion and development, beginning by estimating the

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worth of the existing High Bridge for its purchase by the bonding company. For much of the next year Ashton and a team of engineers at HNTB considered a number of alternative designs. Original estimates called for a maximum span length of from 400 to 600 feet, based on the supposition that the requirements for Dubuque would be similar to those for the Centennial Bridge at Rock Island, completed in July 1940. As chief designer for the Rock Island bridge, Ashton considered its two 540-foot tied arch spans over the river's channel to be both structurally efficient and aesthetically successful. For the Dubuque bridge, he initially proposed a similar configuration, comprised of two 600-foot, plate girder tied arches over the river's navigable channel. The structure would be located at the foot of Dodge Street, just downriver from the existing High Bridge.

When objections were received about the span length and pier placement of the proposed bridge, however, the Army Corps of Engineers stipulated an 800-foot clear span to allow adequate clearance for navigation. This forced HNTB to reconsider the bridge's configuration and location. "The great length of bridge at the Dodge street location," Ashton stated, "eliminated any further consideration of a wide modern four lane bridge on some more other more advantageous location, so [a] 24-foot roadway with one sidewalk was adopted as final. The two lane bridge was considered adequate for the present with the logic that if and when dual highways are built, then they can build the dual bridge." HNTB studied the feasibility of at least three other locations for the bridge: at Sixth Street, Third Street and Jones Street, all of which carried less stringent length requirements by the Corps of Engineers. Dodge Street was perhaps the least desirable of the four sites because of the crossing's proximity to the wharfs on the Iowa shore. But the Iowa State Highway Commission was at that time rerouting Highway 20 from the west along Dodge Street, and ISHC engineers favored the bridge site here to carry the highway across the river. In the end, the bridge commission concurred with the highway commission and selected the Dodge Street location, despite the effect it would have on the bridge's cost.

The 800-foot clear span required at this location effectively eliminated a tied arch design. The HNTB design team then considered a suspension bridge and a conventional cantilevered through truss, similar to the just-completed Mississippi River bridge HNTB had engineered at Greenville, Mississippi. Eventually, Ashton arrived at a modified version of the original tied arch design. The arches on the Rock Island Bridge were simply supported. But by cantilevering them, Ashton could increase the efficiency of the bridge and extend its span length considerably. "Since the tie, in a three span continuous tied arch truss layout, has the same effect as an extra pier in the middle of the long span and eliminates the need of special anchorages," he later stated, "and since the arched trusses are lighter and advantageous in erection as compared to the cantilever, it was agreed to try the tied arches for the final design providing only that they would cost no more than the estimates for the cantilever [Greenville-type] trusses."

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Julien Dubuque Bridge

Dubuque County; Iowa

The problem was, no one had ever built a continuous tied-arch bridge of this magnitude. In fact, in the United States, only one other bridge of this type had ever been erected: a threespan highway bridge over the Meramec River near St. Louis. Consisting of a 264-foot tied arch center span, flanked on both sides by 192-foot anchor spans, the Meramec River structure had itself been patterned by the Missouri Highway Department after a bridge over the St. Lawrence River near Montreal. The critical difference between this configuration and other, simply supported tied arches was the continuity between the arch and its flanking spans. The two bridge types generally resembled each other with their arched forms, but the calculations involved in analyzing their stress patterns were entirely different. "The continuity of the trusses and the action of the arch tie produce a structure which is threefold indeterminate," engineer Howard Mullins explained about the Meramec River Bridge in Engineering News-Record. "A condition of single redundancy was also produced by the double intersection diagonals at the center of the arch truss. These double diagonals were used to permit a pleasing truss outline."

Ashton and the HNTB design team studied the Missouri bridge closely and compared the theoretical cost of a similar, but much larger, structure at Dubuque with the cost of a comparable cantilevered through truss. The plate girder arch ribs of Ashton's original design were dropped in favor of Meramec-type spandrel braced ribs comprised of two trussed chords. As a result, the revised plan for Dubuque much more closely resembled the Missouri precedent than Ashton's earlier tied arch bridge at Rock Island. The primary difference in appearance between the Dubuque and Meramec bridges - and a minor difference, at that - was the composition of their arch rib trusses. The Meramec River structure used a Warren truss configuration for the anchor spans and a Pratt truss for the arch itself. The Dubuque bridge used Warren trusses throughout.

HTNB developed the design throughout 1940 and into 1941. With the design work yet to be finalized in late March 1941, the Dubuque Bridge Commission solicited bids to build both the superstructure and substructure. Proposals were received a month later and contracts for the work subsequently awarded in mid-May. The Bethlehem Steel Company was contracted to fabricate and erect the superstructure for \$1,588,618.00; an \$831,895.00 contract for the substructure was awarded jointly to the Fred J. Robers Construction Company of Burlington, Wisconsin, and the La Crosse [La Cross] Dredging Corporation of Minneapolis.

The substructure contractors began excavating on June 18th. By early autumn, Bethlehem Steel had begun to erect the superstructure. Erection of the tied arch began simultaneously on both sides of the river early in 1942. On the Iowa shore, a bridge crew assembled the anchor span over traditional timber falseworks and then began extending the cantilevered arms of the main span from the concrete pier. The east side of the bridge over the river's channel was built using a novel balancing process, in which steel for the anchor span - delivered by barge - was assembled at the same time as steel for the cantilevered span, using only the concrete pier and a single temporary pile bent for support. In October 1942 the delicate-

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National Register of Historic Places Continuation Sheet

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ly balanced construction reached a critical stage: after the anchor span had been extended to the next pier but before the closure of the main span. At that point the slender concrete pier carried almost 3.3 million pounds of material and equipment in a carefully choreographed operation. Later that year as the two halves of the main span were almost joined, the steelworkers had to compensate for some 43 inches of cantilever deflection, "by pulling down the outer ends of the spans until the central portion is back up to grade and then the two halves are joined by moving one half horizontally on rollers until it matches the other side," according to Ashton. After the main span was coupled, the suspenders were added and the floor system assembled.

When construction began, the bridge commission had proclaimed that the new structure would be completed by September 1942. But with the United States' entry into World War II in late 1941, this optimistic goal was soon abandoned. Materials delays and labor shortages held up the bridge's completion by about a year. At one point, Bethlehem Steel was forced to pull its force of steelworkers from the job for several weeks to build a munitions plant. But because the bridge was on a defense system highway, materials and labor for the project were assured. Although not fully completed until April 1944, the Julien Dubuque Bridge began to carry traffic in late August 1943. On August 31st several dignitaries gathered in a ceremony - kept brief due to the war - to dedicate and formally open the bridge to traffic.

As built, the Dubuque bridge has an overall length of 5,760 feet. Extending 1,539 feet, the spans over the river's channel are comprised of the 845-foot cantilevered arch, flanked by two 347-foot anchor spans. The bridge's deck carries two 12-foot traffic lanes and a single 5-foot sidewalk, and is situated some 50 feet above the high water mark. To reach this height from the river-level connecting highways requires extensive steel girder viaducts on both sides. Made up of variable-depth, plate deck girders with spans ranging from 43 feet to 187 feet, these viaducts total 40 spans: 17 on the Iowa side with an overall length of 1,448 feet, and 23 on the Illinois side with an overall length of 2,757 feet. The immense superstructure of the main spans consumed 3,850,100 pounds of silicon steel and 4,583,975 pounds of carbon steel. Some 6,410,492 pounds of structural steel were used in the girder spans. The sub-structure required 34,087 cubic yards of concrete, 2,463,500 pounds of reinforcing steel and 2,909 timber piles.

The 845-foot channel span of the Julien Dubuque Bridge is distinguished as the second-longest span over the Mississippi River at the time of its completion. It is also the longest continuous tied arch in the world and only the second example of its type in the United States, preceded only by the Meramec River Bridge. As he considered the design alternatives in 1940, Ned Ashton had wanted "a bridge that would be architecturally beautiful as well as economical." The Julien Dubuque Bridge reflects his dual concerns. The meticulous planning by HNTB and Bethlehem Steel and the novel procedures used in erecting the tremendous structure were the subject of extensive discussion within the engineering community at the

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Section Number 8 Page 5 Julien Dubuque Bridge Dubuque County; Iowa

time, and the bridge has since been regarded widely as among the world's most technologically noteworthy spans. With its single symmetrical arch supported high above the water by slender concrete piers, the bridge forms one of the most graceful spans erected over the Mississippi River. In recognition of this, the American Institute of Steel Construction designated the Julien Dubuque Bridge as the most beautiful bridge in its class for 1943.

The aggregate cost for the structure was reported as \$3,175,341.63. Funding was provided by a revenue bond issue and by the U.S. Bureau of Public Roads, through the Iowa State Highway Commission and the Illinois Department of Highways. It was originally estimated that a toll charge would be needed for 25 years before the bonds could be retired. The bond loan, however, was later refinanced at a lower interest rate, and toll revenues in the post-war period greatly exceeded projections. As a result, the bridge commission was able to retire the bonds almost 14 years ahead of schedule. Tolls were charged for the last time on December 27, 1954. When the City of Dubuque Bridge Commission was dissolved seven months later, management of the structure was taken over jointly by the states of Iowa and Illinois. The bridge has remained a free crossing since that time.

The Julien Dubuque Bridge has carried vehicular traffic, largely unaltered, since its opening in 1943. By early 1990, however, the nearly-fifty-year-old structure was beginning to show signs of age. To rectify this, the Iowa Department of Transportation has planned a major rehabilitation of the structure: Included in the proposed work are a new deck, guardrails, and replacement of some of the approach spans on the Iowa side of the river. Plans also call for removing the sidewalk and increasing the roadway width from 24 to 28 feet. A new sidewalk will be cantilevered outside the truss's south web. When completed, the rehabilitation is expected to ensure the bridge's serviceability for many more years, while at the same time preserving its structural integrity.

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Section Number	9	Page	6	Julien Dubuque Bridge	Dubuque County; Iowa
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Iowa Department of Transportation, Structure Inventory and Appraisal: Structure Number 023880.

Fraserdesign, "Julien Dubuque Bridge," documentation produced under contract with the Iowa Department of Transportation, July 1991.

The History of Dubuque County, Iowa (Chicago: Western Historical Company, 1880).

"A Three-Span Continuous Truss Bridge With the Middle Span a Tied Arch," Engineering News-Record, 25 February 1943, pages 43-47.

Ned L. Ashton, "The Design of a 1540-Foot, Three Span Continuous Tied Arch Truss," The Transit, 48 (April 1944): cover, pages 5-11, 14-17, 20, 22.

Balog, Louis. "Mississippi River Bridge at Dubuque, Iowa," American Society of Civil Engineers - Proceedings, 75 (May 1949): pages 692-702.

R.N. Bergendoff and Josef Sorkin, "Mississippi River Bridge at Dubuque, Iowa," American Society of Civil Engineers - Proceedings, 73 (June 1947): pages 761-782.

"Bridge Deck Paved With Pumped Concrete On Plywood Forms," Construction Methods, April 1943, pages 52-53, 133-134, 136.

"Cantilever Methods Erect Three-Span Continuous Truss Bridge With Tied Arch Middle Span," Construction Methods, March 1943, pages 48-51, 114, 118, 121, 124, 126, 128, 130.

Richard FitzGerald, "Bridges Are His Business," The Iowa Alumni Review, December 1958, pages 12-17.

"Julien Dubuque Bridge Given A.I.S.C. Award For Beauty," Wood Preserving News, 27 (March 1949): pages 30-31.

"Pump Delivers Concrete For Dubuque Bridge Deck," [Bombay] Indian Concrete Journal, 17 (October 1943): pages 301-302.

"Sand Fill Reduces Weight of Bridge Pier," Engineering News-Record, 27 August 1942, pages 60-62.

"Substructure Complete for Mississippi River Bridge at Dubuque," Engineering News-Record, 8 January 1942, page 3.

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7

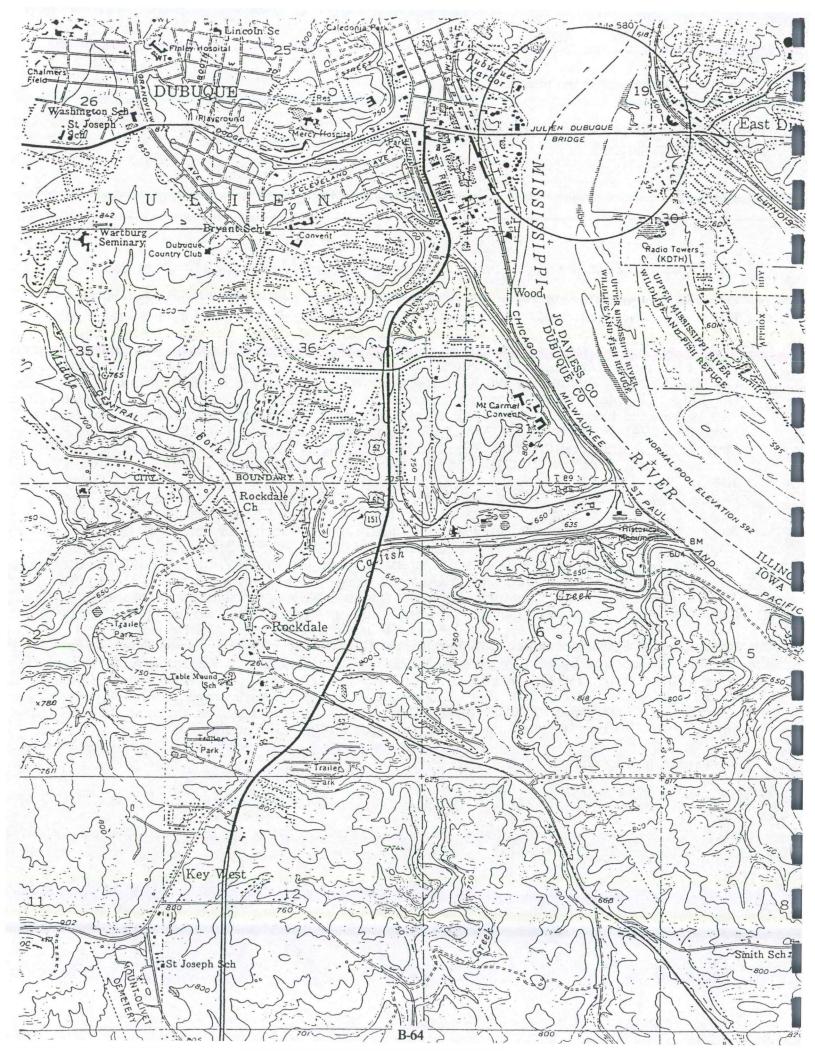
Julien Dubuque Bridge

Dubuque County; Iowa

"Tied Arches To Span the Mississippi," Engineering News-Record, March 1940, pages 366-370.

Dubuque Telegraph-Herald: "New Bridge to East Dubuque Proposed" (3 March 1935); "Bridge Plans with New Highway 20" (27 April 1937); "U.S. Senate Passes Bill for Free Bridge at Dubuque" (27 May 1938); "President Vetoes Bill" (27 June 1938); "House of Representatives Passes Bill Setting up Commission" (6 July 1939); "Bridge Bill Signed - Commission Holds Meeting and Organizes" (19 July 1939); "10 Companies Expected to Bid on Bridge" (28 March 1941); "Preliminary Work on Bridge Starts" (22 April 1941); "\$831,895 Bid Low On Bridge" (14 May 1941); "Contract Awarded for Substructure" (15 May 1941); "Bridge Pact Is Awarded Here" (15 May 1941); "Dubuque Bridge Commission Asks For Hearing" (6 November 1941); "New Bridge Across Mississippi River Begins to Take Shape Here" (15 March 1942); "Informal Program Opens Bridge" (29 August 1943); "Bridge to Be Free For Fifteen Hours" (29 August 1943); "Span Location Due to Highway 20 Change" (29 August 1943); "Many Obstacles Licked to Make Span Reality" (29 August 1943); "War to Delay Paying Off Bridge Bonds" (29 August 1943); "Cost of New Bridge Totals More Than Three Millions" (29 August 1943); "Dismantling Is No Small Task" (29 August 1943); "Bridge Story Dates Listed - Chronological History of Julien Dubuque Span" (29 August 1943); "Ellwanger Family Linked to Two Bridges" (29 August 1943); "Wagon Bridge Once Dubuque's Ambition" (29 August 1943); "Plenty of Material Used In Construction of Span" (29 August "Brief Ceremony Opens Julien Dubuque Bridge Linking Iowa, Illinois" (31 August 1943);"New Span Now Open For Use" (31 August 1943); "Story of Accomplishment -1943);Many Obstacles Cleared Before Success Insured" (26 December 1954); "Bridge Traffic Nearly Double That of 1943" (26 December 1954); "Tolls Gone, Also Jobs" (26 December 1954); "Chronological History of Julien Dubuque Bridge" (26 December 1954); "Some Favored Fixing Up Old Dubuque Span" (26 December 1954); "Plan Changes On Approach At E. Dub-uque" (26 December 1954); "A Free Bridge" (26 December 1954); "Ellwanger Family Connected With Bridge Work Since 1880" (26 December 1954); "Rain Dampens Bridge-Freeing Ceremony" (27 December 1954); "Bridge Group to Go Out Of Business on June 30" (23 June 1955); "Planner Recalls First Days of Dubuque Bridge" (5 September 1976)

Field inspection by Clayton Fraser, July 1991.





Bureau of Land and Water Resources • State Fairgrounds • P.O. Box 19281 • Springfield, IL 62794-9281 217/782-6297 • TDD 217/524-6858 • Fax 217/524-4882

January 14, 1999

Mr. James Moll, Project Manager Hanson Engineers Incorporated 1525 South Sixth Street Springfield, Illinois 62703-2450

Re: U.S. 20 Capacity Improvement Across the Mississippi River SCOPING PROCESS Dubuque County, Iowa / JoDaviess County, Illinois HEI No. 97S2045

Dear Mr. Moll:

Enclosed is a list of information which the Illinois Department of Agriculture (IDOA) requires from the consultant/agency when we conduct our study of agricutlural impacts for a highway project's potential impact to agricultural land as well as its compliance with Illinois' Farmland Preservation Act.

This list contains the resource concerns which the IDOA customarily requests to be addressed; in detail, in any environmental documents produced for the U.S. 20 Mississippi River bridge project in Jo Daviess County, Illinois.

We look forward to working with you in the future. Should you have any questions, please don't hesitate to call me at 217-782-6297.

Sincerely,

Teres Q. Savho

Teresa J. Savko Bureau of Land and Water Resources

/TJS

Enclosure

JAN 15 1999

AGRICULTURAL REVIEW CRITERIA

FOR MAJOR

HIGHWAY AND BRIDGE IMPROVEMENT PROJECTS

The items listed below are areas of concern which need to be addressed in order for the Illinois Department of Agriculture to conduct an in-depth review of the agricultural impacts associated with the construction of major highway and bridge improvement projects. This information must be provided for each alternative proposed.

Major projects would include highways and bridges on new alignments, upgrading highways from 2-lane to 4-lane facilities, new interchanges on freeways and expressways, bridges over major rivers, etc.

- 1. Project description.
- 2. The location of the project plotted on a county highway map, plat map, or other map of equal or better quality.
- 3. <u>Total acres, acres of each soil type, existing land use</u>, and <u>location</u> of all land to be acquired in fee for the following purposes. Please provide the following information separately for each of the uses listed below.
 - A. Mainline
 - B Frontage, access, and cross roads, etc.
 - C. Borrow materials.
 - D. Wetland mitigation.
 - E. Tree replacement.
 - F. Floodplain compensatory storage.
 - G. Any other miscellaneous fee acquisitions.
- Length of the project (in feet or miles).
- 5. What percent of the roadway will be constructed . . .
 - A. On the centerline of the existing roadway?
 - B. Parallel and adjacent to the existing roadway?
 - C. On entirely new alignment?
- 6. Are design standards being utilized that will minimize the need to acquire right-of-way? If "yes," please explain how the design standards being utilized will reduce the right-of-way take. If "no," please explain why such design standards are not being utilized.

- 7. Will the surface and subsurface drainage of adjacent fields be maintained so as to function as well or better after construction as before construction? If not, please explain.
- 8. <u>Number</u> and <u>type</u> of building relocations required.
- 9. <u>Number</u> and <u>acreage</u> of each of the following that will be created:
 - A. Uneconomical remnants.
 - B. Severed parcels.
 - C. Landlocked parcels.
- 10. Will any permanent adverse travel be generated? If so, please provide the following information:
 - A. Number of farm operators incurring adverse travel.
 - B. Feet or miles of adverse travel each operator will sustain per round trip.
 - c. Explain how the operators will be compensated for their adverse travel. If they are not to be compensated, explain why they will not be compensated.
- 11. <u>Acreage</u> and <u>location</u> of any agricultural land to be acquired in fee that will remain available for agricultural use. Please state why this land is not being offered for sale to an adjacent landowner.
- 12. If any utility lines need to be relocated on privately-owned land, please provide the following information:
 - A. Nature of the relocation(s) required.
 - B. Distance the utility line(s) will be located from the edge of the highway right-of-way on privately owned land.
 - C. Why will the utility line(s) not be relocated on the highway right-of-way in order to minimize the project's agricultural impacts?
- 13. Specific actions that will be taken to minimize the project's agricultural impacts. Please provide a discussion of:
 - A. Actions that will be taken to minimize the taking of Prime farmland via fee simple acquisition for right-of-way purposes.
 - B. Actions that will be taken to minimize or eliminate the taking of Prime farmland for the purpose of avoiding or mitigating other natural resource impacts. For example:
 - Avoidance of Prime farmland if <u>off-site</u> land must be purchased for creating (A) borrow areas, (B) wetland mitigation areas, © tree replacement areas, and (D) floodplain compensatory storage areas.
 - 2. Combining borrow areas, wetland mitigation areas, tree replacement areas, and/or floodplain compensatory storage areas.

- 3. Use of uneconomical remnants and landlocked parcels as sources of borrow and for use in mitigating impacts to other natural resources and floodplains.
- 4. Mitigating wetland and woodland impacts at banks that have been established for this purpose or on state or federally owned property.
- 5. Use of wetland mitigation ratios that are commensurate with the quality of wetlands impacted.
- C. Actions that will be taken to minimize or eliminate:
 - 1. Uneconomical remnants.
 - 2. Severed parcels.
 - 3. Landlocked parcels.
 - 4. Adverse travel.
- D. Other actions that will be taken to mitigate the project's agricultural impacts.

... Notes ...

<u>Agricultural land</u> and <u>farmland</u> means all land in farms including cropland, hayland, pastureland, forestland, corrals, gardens, orchards, land used for farmsteads, buildings, barns, and machinery sheds, adjacent yards or corrals, pens, waste lagoons, feedlots, windbreaks, grain bins, lanes for farm residences and fields, ponds, commercial feedlots, greenhouses, nurseries, broiler facilities, and farm landing strips.

<u>Prime and Important farmland</u> can be identified by contacting the appropriate county Soil and Water Conservation District.

If an Environmental Assessment or an Environmental Impact Statement will be prepared assessing the impacts of a project on the environment, the IDOA requests that Prime and Important farmland be considered a natural resource and not just a land use. Such documents should contain a thorough assessment of the project's impacts to the agricultural resources and the means by which those impacts will be minimized.

123098 jh



 Donald W. Mueller, Ph.D. Administrator Bob E. Shaw, Ph.D. Administrative Assistant

> Administration 1400 2nd St. NW • Elkader, IA 52043–9564 Phone: 319–245–1480 • FAX: 319–245–1484

January 29, 1999

Roger Larsen, Project Manager Iowa Department of Transportation 800 Lincoln Way Ames, IA 50010

Dear Mr. Larsen:

Please accept this response to your December 24, 1998, letter, reporting your process or study for improvements to the capacity of U.S. Highway 20 across the Mississippi River in Dubuque.

I assume I received your study here in Elkader since we have our largest Keystone AEA sector office in Dubuque. I shared your materials with the Agenty's board president, John "Fritz" Ganshirt, a resident of Dubuque, who researched further.

He and I conclude that your project is the right direction, and our only or major concern is similar to the concerns of the city manager of Dubuque (see enclosure), to be watchful that a redesigned Highway 20 will be a major improvement and is projected to be a major throughway that will need futurist design.

Thank you for the opportunity for input.

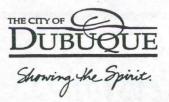
Sincerely,

al DII) muller

Donald W. Mueller, Ph.D. Administrator

DWM:cb Enclosure

cc: Fritz Ganshirt Mr. James Moll, Hanson Engineers, Inc.



City Manager's Office 50 West 13th Street Dubuque, Iowa 52001-4864 Phone (319) 589-4110 FAX (319) 589-4149

January 19, 1999

Mr. Roger Larsen Project Manager Iowa Department of Transportation 800 Lincoln Way Ames IA 50010

Mr. James Moll Hanson Engineers, Inc. 1525 S. Sixth St. Springfield IL 62703

Dear Mr Larsen and Mr. Moll:

This is in response to your December 24, 1998, letter on the scoping process for the U.S. 20 Capacity Improvement Across the Mississippi River.

The only area I have a comment on is related to system linkage and traffic counts. I know that a destination study was recently done in Dubuque. One concern I have is that when Highway 20 is four-lane from Rockford to Interstate 35, and Highway 151 is four-lane from Madison, Wisconsin to Highway 380 in Cedar Rapids, Highway 20 will carry many more through trips. This route will be seen as the preferred route west for Madison and Milwaukee, Wisconsin, Rockford, and the north and northwest areas of Chicago, Illinois.

I believe your traffic modeling needs to take this into account.

Thank you for soliciting my input.

Sincerely,

Michael C. Van Milligen City Manager

JAN 25 1999

Service

People Integrity

Responsibility

B-70

Illinois Department of Transportation

File /

Memorandum

То:	Roger Rocke	Attn: John H. Wegmeyer
From:	Michael L. Hine	
Subject:	PESA Review	
Date:	February 5, 2001	Michael L. Hine
Refer to:	Job No. P-92-106-98 US 20 Mississippi River Cross Replacement of Existing 2-La JoDaviess & Dubuque Count	sing Location Study ane Bridge W/4-Lane Crossing

Attached is a copy of the Preliminary Environmental Site Assessment conducted by the Illinois State Geological Survey (ISGS) for the subject project as described in your Special Waste Survey Request.

Volatile organic and metals testing was done for this project and the attached (ISGS) report indicates possible detection of contamination at sixteen sites. The report has assessed a **high** risk for this project and recommends that further soil boring and sample analysis needs to be performed to determine the precise nature and extent of the contamination if excavation or additional right-of-way is required at these locations.

It is the opinion of this office, in consultation with the Chief Counsel's Office, that if rightof-way acquisition includes a parcel with an underground storage tank(s) and Land Acquisition Procedures are followed and if construction excavation and utility relocation do not exceed the maximum testing depth at each site and does not exceed

no grading or excavation at Mississippi River at site of this bridge replacement project (Site 1167-1);

0.9 meters (3 feet) within 15 meters (50 feet) of soil boring 1167-2b at former City Garage, 300 Boat Ramp Rd.;

no grading or excavation at former Chicago Dubuque Foundry Corp. (Site 1167-3), 210 2nd St.;

0.9 meters (3 feet) within 15 meters (50 feet) of soil boring 1167-4a at Residence with garage, 295 Menominee Ave.;

no grading or excavation at J&L Vending (Site 1167-5), 300-303 Menominee Ave.;

2.4 meters (8 feet) within 15 meters (50 feet) of soil boring 1167-6a and 1.8 meters (6 feet) within 15 meters (50 feet) of soil boring 1167-6b at Molo Big 10 Mart, 448 Sinsinawa Ave.;

2.7 meters (9 feet) within 15 meters (50 feet) of soil boring 1167-7b at Van's Liquor Store parking lot, 540 Sinsinawa Ave.;

Page 2 February 5, 2001

0.9 meters (3 feet) within 15 meters (50 feet) of soil borings 1167-8a and 1167-8c at Liebold Brothers Auto Center, 620 Sinsinawa Ave.;

0.9 meters (3 feet) within 15 meters (50 feet) of soil boring 1167-9a at Custom Auto Repair and Service, 501 Menominee Ave.;

0.9 meters (3 feet) within 15 meters (50 feet) of soil boring 1167-10a at Obie's Foreign & Domestic Auto Repair, 21375 Route 20 West;

2.7 meters (9 feet) within 15 meters (50 feet) of soil boring 1167-11a and 0.9 meters (3 feet) within 15 meters (50 feet) of soil boring 1167-11b at Family Beer & Liguor, 20200 Route 20 West;

1.8 meters (6 feet) within 15 meters (50 feet) of soil boring 1167-12a and 2.7 meters (9 feet) within 15 meters (50 feet) of soil boring 1167-12b at Kieffer Body Shop, 20100 Route 20 West;

0.3 meters (one foot) at Kieffer Construction storage yard (Site 1167-13), 20100 Route 20 West:

0.9 meters (3 feet) between and 15 meters (50 feet) either side of soil borings 1167-14a, 1167-14b, 1167-14c at Ampride gasoline station/Steward Construction Co., 19650 Route 20 West;

0.9 meters (3 feet) within 15 meters (50 feet) of soil boring 1167-16a and 1.8 meters (6 feet) within 15 meters (50 feet) of soil boring 1167-16b at North Central Farm Lines repair shop, SE quadrant of US 20 and Barge Terminal Rd.;

no grading or excavation at Burlington Northern Santa Fe Railroad (Site 1167-17) within 15 meters (50 feet) of the sample site 1167-17F located in front (east side) of the entrance door to the northern and older bungalow (see Attachment 2AC),

then no additional preliminary testing for the project is necessary. In addition, please note that this project is located in a karst region.

If the above stipulations can be met, then the project will be in compliance with Departmental Hazardous Waste Policy LEN-13. If the stipulations cannot be met, then the statewide consultant should be requested to perform additional investigations. Please notify this office of any actions you may decide to take concerning these sites (i.e., avoidance, further investigation, etc.). The attached transmittal form is provided for your convenience.

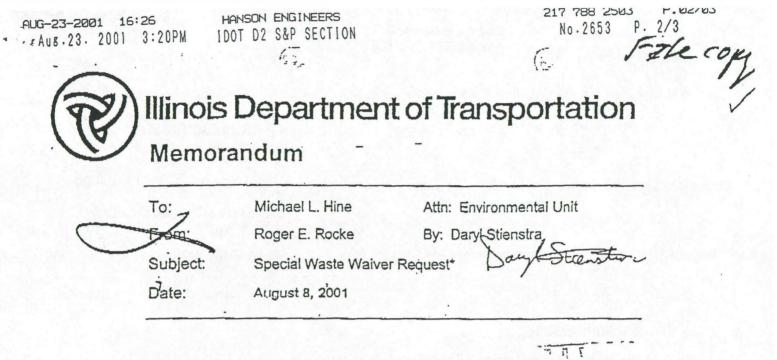
If you have any questions regarding this report or the tasking of the statewide consultant, please contact John Washburn at 217/782-7074 or Steven Gobelman at 217/785-4246.

Attachment

Randy Schick CC: District Bureau of Land Acquisition District Utility Coordinator Scott Stitt

Central Bureau of Land Acquisition **Todd Hummert**

S:\GEN\WPDOCS\MEHRA\PHASEI\DISTR2\1167.doc



FAP Route 301 (US 20) Section 2B Job No. P-92-106-88 US 20 Mississippi River Crossing Study JoDaviess & Dubuque County ISGS #1167

We are requesting approval to waive waiting for the results of further special waste investigations prior to design approval per the BDE Manual Section 27-2.06, Item 4. According to the PESA Review Memos for ISGS#1167 dated February 5,2001,the ISGS detected contamination at several sites. Proposed excavation for drainage improvement, traffic signal improvements and utility relocations may exceed the depth stipulations at one or more of these sites. This proposed improvement will occur mostly on the existing alignment and does not include the purchase of any underground storage tanks. Also since the Pollution Control Board (PCB) recently raised the maximum levels for arsenic to background levels, the only sites that are involved are contaminated with petroleum only. Excavation in any contaminated areas will not commence until the PSI, or subsequent studies, are completed. This project is currently programmed for a September 15, 2001 design approval date/and is not yet scheduled for letting.

Concur: John R. Washburn

Chief, Geological and Waste Assessment Unit

Date: Discuss:

Note: The following applies if PESA date is six months old or more: Our district office has reevaluated the project area for new releases (LUST and CERCLIS Sites), and new land uses of potential concern and has found none.

P-105

CC: C.O. LAND ADGUESITION

HANSON ENGINEERS

217 788 2503 P.03/03 No.2653 P. 3/3

FAP Route 301(US20) Section 2B Job No. P-92-106-88 US 20 Mississippi River Crossing Study JoDaviess & Dubuque County ISGS #1167

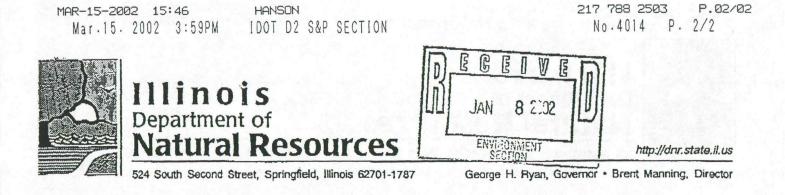
6.-

Site Involvement

The following is the estimated cubic yards from each site:

	ISGS	LOCATION	INVOLVEMENT
1.)	11674a	Residence, 295 Menominec Ave	100cy -ROW required
2.)	1167-8	Liebold Brothers Auto Center	150cy-ROW required
3.)	1167-9	Custom Auto Repair & Service	100cy-ROW required

US20DubuqueBridge.doc



January 4, 2002

Mr. Michael Hine Illinois Department of Transportation 2300 South Dirksen Parkway Springfield, Illinois 62701-1787 RE: U.S. 20 Capacity Improvement Study Mississippi River at Dubuque Dubuque, Co. / Jo Daviess Co.

ATTN: Charles Perino

Dear Mr. Hine:

The Department of Natural Resources has reviewed the Mussel Survey (9/20/99) and based on the selection of the North Corridor for further analysis on the project referenced above, concerns for adverse resource impacts have been addressed. Based on this information, consultation is closed on this project.

The Illinois Department of Natural Resources is awaiting the results of the wetland surveys for review and comment. These impacts need to be coordinated per the IWPA.

In keeping with the resource policies established by the IDNR, the Interagency Wetland Policy Act allows a three year time period for wetland impact determinations and wetland compensation plans to be implemented before having to be re-evaluated. This same three year time period applies to the reviews for compliance with the state Endangered Species Protection Act and resource studies relative to the project.

If you have any questions on the above, please contact me at 217-785-5500.

Sincerely,

Ateve Dame

Steve Hamer Transportation Review Program Division of Natural Resource Review and Coordination



Illinois Department of Natural Resources

RECEIVED MAY 1 3mill Oppr.state.il.us

524 South Second Street, Springfield, Illinois 62701-1787

George H. Ryan, Coron ENVIRENTAL SERVICES

May 6, 2002

Mr. James P. Rost, Director Office of Environmental Services Iowa Department of Transportation Ames, Iowa 50010 RE: Environmental Assessment Draft Sec. 4(f) Evaluation Capacity Improvement of U.S. 20 across Mississippi R. JoDaviess Co., Illinois

Dear Mr. Rost:

The Illinois Department of Natural Resources (IDNR) has reviewed the Environmental Assessment and Draft Section 4(f) Evaluation for the capacity improvement of U.S. 20 across the Mississippi River located in Dubuque County and Jo Daviess County, Illinois.

Biological Resources:

This project as described will not have any adverse impacts on Illinois Endangered and Threatened Species, Nature Preserves or Illinois Natural Areas Inventory sites. A reminder that the database reviews are good for a three year time period and need to be updated should this time elapse before the project is initiated.

Wetland Resources:

The Illinois Department of Natural Resources (IDNR) reviewed the wetland impact assessment portion of the document and find it to be sufficient for the Interagency Wetland Policy Act (IWPA). The alignment does meet the avoid and minimize requirements and it does qualify as a programmatic action even though it is a large project. The Department feels that additional design changes or refinements can be made to further reduce wetland impacts in the design stage. IDNR has concerns about the ability to locate a suitable wetland compensation site in the vicinity of the project. However, IDOT has made a commitment to coordinate wetland issues with IDNR prior to construction of the project. Since this is a statutory requirement and may prove difficult to locate, IDNR would encourage giving high priority to locating a suitable compensation site, continue to coordinate with the IDNR and provide the wetland mitigation prior to construction. In keeping with the resource policies established by the Illinois Department of Natural Resources, the Interagency Wetland Policy Act allows a three year time period for wetland impact determinations and wetland compensation plans to be implemented before having to be re-evaluated. This same three year time period applies to the reviews for compliance with the state Endangered Species Protection Act and resource studies relative to the project.

If you have any questions on the above, please contact me at 217-785-5500.

Sincerely,

Atere Namer

Steve Hamer Transportation Review Program Division of Natural Resource Review

cc: Tom Flattery, IDNR Steve Davis, IDNR Pat Malone, IDNR Carolyn Grosboll, INPC File Richard Nelson, USFWS Newton Ellens, USEPA John Betker, USACOE J.D. Stevenson, FHWA

APPENDIX C NOTICE OF INTENT

[Federal Register: December 11, 1998 (Volume 63, Number 238)]
[Notices]
[Page 68498-68499]
From the Federal Register Online via GPO Access [wais.access.gpo.gov]
[DOCID:fr11de98-88]

DEPARTMENT OF TRANSPORTATION

Federal Highway Administration

Environmental Impact Statement: Dubuque County, IA/Jo Daviess County, IL

AGENCY: Federal Highway Administration (FHWA), DOT.

ACTION: Notice of intent.

[[Page 68499]]

SUMMARY: The FHWA is issuing this notice to advise the public that an environmental impact statement will be prepared for a proposed highway capacity improvement project in Dubuque County, Iowa and Jo Daviess County, Illinois.

FOR FURTHER INFORMATION CONTACT: Rebecca Hiatt, Environmental. Coordinator, Federal Highway Administration, 105 Sixth Street, Ames, Iowa 50010-6337, Telephone (515) 233-7300. Roger Larsen, Project Manager, Iowa Department of Transportation, 800 Lincoln Way, Ames, Iowa 50010, Telephone (515) 239-1791.

SUPPLEMENTARY INFORMATION: The FHWA, in cooperation with the Iowa Department of Transportation, will prepare an environmental impact statement (EIS) on a proposal to improve the capacity of U.S. Route 20 (U.S. 20) in Dubuque County, Iowa and Jo Daviess County, Illinois. The proposed improvement would involve upgrading or re-routing existing U.S. 20 between Iowa and Illinois for a distance up to seven miles.

Improvements to U.S. 20 are considered necessary to provide for the existing and projected traffic demand and safety considerations. This proposal will also include a connection of U.S. 20 across the Mississippi River. Alternatives under consideration include: (1) taking no action; (2) using alternative travel improvements; (3) widening the existing two-lane highway to four lanes; and (4) constructing a four-lane highway on a new location. Variations of facility type, grade, and alignment will be incorporated into and studied with various build alternatives.

An informal scoping process will be initiated as part of this project. Letters describing the proposed action and soliciting comments will be sent to appropriate Federal, State, and local agencies, and to private organizations and citizens who have previously expressed or are known to have interest in this proposal. A series of public meetings will be held in Dubuque and East Dubuque. In addition, a public hearing will be held upon completion of the draft EIS. Public notice will be given of the time and place of the meetings and hearing. The Draft EIS will be available for public and agency review and comment prior to the public hearing. No formal scoping meeting is planned at this time.

To ensure that the full range of issues related to this proposed action are addressed and all significant issues identified, comments and suggestions are invited from all interested parties. Comments or questions concerning this proposed action and the EIS should be directed to the FHWA or Iowa DOT at the addresses provided above.

(Catalog of Federal Domestic Assistance Program Number 20.205, Highway Planning and Construction. The regulations implementing Executive Order 12372 regarding intergovernmental consultation on Federal programs and activities apply to this program)

Issued on: November 24, 1998. Bruce E. Mazke, Assistant Division Administrator, Federal Highway Administration, Ames, Iowa. [FR Doc. 98-32849 Filed 12-10-98; 8:45 am] BILLING CODE 4910-22-M [Federal Register: September 9, 1999 (Volume 64, Number 174)]
[Notices]
[Page 49047]
From the Federal Register Online via GPO Access [wais.access.gpo.gov]
[DOCID:fr09se99-94]

DEPARTMENT OF TRANSPORTATION

Federal Highway Administration

Environmental Impact Statement: Dubuque County, Iowa/ Jo Daviess County, Illinois.

AGENCY: Federal Highway Administration (FHWA), DOT.

ACTION: Notice of intent (cancellation).

SUMMARY: The FHWA is issuing this notice to advise the public that the Notice of Intent (NOI) to prepare an Environmental Impact Statement (EIS) for a proposed highway capacity improvement project in Dubuque County, Iowa and Jo Daviess County, Illinois is cancelled. The NOI was originally published in the Federal Register on December 11, 1998. The cancellation is based on a decision to complete an Environmental Assessment (EA) for this project.

FOR FURTHER INFORMATION CONTACT: Rebecca Hiatt, Environmental Coordinator, Federal Highway Administration, 105 Sixth Street, Ames, Iowa 50010-6337, Telephone (515) 233-7300. Roger Larsen, Project Manager, Iowa Department of Transportation, 800 Lincoln Way, Ames, Iowa 50010, Telephone (515) 239-1791.

SUPPLEMENTARY INFORMATION:

Electronic Access

An electronic copy of this document may be downloaded using a modem and suitable communications software from the Government Printing Office's Electronic Bulletin Board Service at (202)512-1661. Internet users may reach the office of the Federal Register's home page at: http://www.nara.gov/fedreg and the Government Printing Office's database at http://www.access.gpo.gov/nara.

Background

The NOI was originally published in the Federal Register on December 11, 1998 63FR68498. The cancelled EIS included alternatives located in a new corridor south of Dubuque and East Dubuque. Any alternative in this location would have significant environmental impacts. However, the study alternatives have been reduced to alignments following existing U.S. Route 20 (U.S. 20), and potentially significant environmental impacts have been avoided. Therefore, the Federal Highway Administration along with Federal and State resource agencies, has determined that an Environmental Assessment is the appropriate investigative process for this project. The FHWA, in cooperation with the Iowa Department of Transportation, will prepare an EA on a proposal to improve the capacity of U.S. 20 in Dubuque County, Iowa and Jo Daviess County, Illinois.

Comments or questions concerning this proposed action and EA should

be directed to the FHWA or Iowa DOT at the addresses provided in the caption FOR FURTHER INFORMATION CONTACT.

(Catalog of Federal Domestic Assistance Program Number 20.205, Highway Planning and Construction. The regulations implementing Executive Order 12372 regarding intergovernmental consultation on Federal programs and activities apply to this program.)

(Authority: 23 U.S.C. 315; 49 CFR 1.48)

Issued on: August 30, 1999. Bobby W. Blackmon, Division Administrator. [FR Doc. **99-23405 Filed** 9-8-**99**; 8:45 am] BILLING CODE 4910-22-P

APPENDIX D

STATE HISTORIC PRESERVATION OFFICE CORRESPONDENCE

Í



lowa Department of Transportation 515-239-1795

800 Lincoln Way, Ames, Iowa 50010

FAX 515-239-1726

April 29, 2002

Ref No BRF-20-9(149)--38-31 Dubuque County Primary 981231084 **R&C#**

Ralph Christian **Review and Compliance** Community Programs Bureau State Historical Society of Iowa 600 East Locust Des Moines, IA 50319

Dear Ralph:

RE: MOU for the Julien Dubuque Bridge

Enclosed for SHPO signature is Memorandum of Understanding (MOU) to document the stipulations that accompany the finding of no adverse affect for the construction of a companion bridge to the historic Julien Dubuque Bridge.

In February 2002 your office was sent a draft MOA to deal with the affects the project will have on historic properties in Iowa and Illinois. Because Iowa and Illinois have policies and procedures that are specific to their state laws and jurisdictions, it has been determined that the project can be better served by each state preparing its own Section 106 agreements with its respective State Historic Preservation Officers for the impacted historic properties within its jurisdiction.

Illinois is preparing a Memorandum of Agreement with the Illinois SHPO and FHWA to satisfy the Section 106 requirements for any affected historic properties within that jurisdiction. The Julien Dubuque Bridge is the only National Register property affected by the project within the Iowa jurisdiction.

If you agree with the MOU, please have the appropriate SHPO officer sign and return it to me. When all signatures are collected, I will send you a copy for your file.

If you have any questions, please do not hesitate to contact me.

Sincerely,

Judy McDonald Office of Location and Environment judy.mcdonald@dot.state.ia.us

JM

Enclosure

Dick Kautz, District 6 cc:

Steve Larson, Office of Location & Environment Roger Larson, Office of Location & Environment Kevin Seals, Hanson Engineering

lowa Department of Transportation

IOWA DEPARTMENT OF TRANSPORTATION

To Office	Federal Highway Administration	Date	May 3, 2002
Attention	Bobby Blackmon	Ref. No.	BRF-20-9(149)-38-31 Dubuque Co., IA and
From	Jim Rost, Director		Jo Daviess Co., IL
Offiœ	Office of Location and Environment		Primary
Subject	Project Description for US 20 Capacity Improveme No Adverse Effect: Julien Dubuque Bridge	nt Projec	pt .

The Iowa Department of Transportation (DOT) proposes to use federal funds for the U.S. 20 Capacity Improvement project in Dubuque County, Iowa, and Jo Daviess County, Illinois. The project has been determined to have no adverse effect on the National Register-listed property (the Julien Dubuque Bridge).

The DOT and Federal Highway Administration (FHWA) have entered into consultation with the State Historic Preservation Officer and the tribes to develop a Memorandum of Understanding to establish the conditions that will validate a finding of No Adverse Effect and a course of events if the conditions cannot be met.

This memo is to request that the FHWA sign and file the MOU. The Advisory Council has been notified of the affects the project in accordance with 36 CFR 800.6(a)(1) along with the project summary documentation as required under 36 CFR 800.11(e).

If you have any questions, please contact Judy McDonald at 239-1795.

Mitch Dillavou, Director Engineering Division

orl mus him Rost, Director

Office of Location and Environment

SQL:JR:JAM Attachment cc: Dick Kautz, District 6 Stephen Larson, OLE Norm McDonald, Bridge

Mani



U.S. Department of Transportation

Federal Highway Administration Illinois Division

3250 Executive Park Drive Springfield, Illinois 62703

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OFFICE OF ENVIRONMENTAL SERVICES

HPP-IL

April 23, 2002

Mr. Don L. Klima, Director Office of Federal Agency Programs Advisory Council on Historic Preservation The Old Post Office Building 1100 Pennsylvania Avenue, N.W., Suite 809 Washington, D.C. 20004

APR 2 6 2002 FHWA, AMES, IA

Dear Mr. Klima:

Subject: Memorandum of Agreement (MOA) U.S. Route 20 Improvements Beck/Fockler House in East Dubuque JoDaviess County, Illinois

We are forwarding a copy of the fully executed MOA for your information and filing. The MOA reflects a proposal to demolish the Beck/Fockler House located in East Dubuque, Jo Daviess County, Illinois in association with planned improvements to U.S. 20, which include the construction of a companion bridge to the Julien Dubuque Bridge over the Mississippi River. The Beck/Fockler House is eligible for listing on the National Register of Historic Places. The Council was advised of the adverse effect to the Beck/Fockler House in a January 29, 2002 letter from the Federal Highway Administration Iowa Division, which has the lead on the U.S. 20 improvement project. The MOA, which was developed in consultation with the Illinois state Historic Preservation Officer and the Illinois Department of Transportation, stipulates that the Beck/Fockler House will be documented to Level Ill Standards of the Illinois Historic American Building Survey prior to its demolition.

If you have any questions please contact me at (217) 492-4638.

Sincerely yours,

/s/ J.D. Stevenson

J.D. Stevenson Environmental Programs Engineer

For: Norman R. Stoner, P.E. Division Administrator

Enclosure

cc: Manu Chacko, FHWA lowa Division

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Preservation Agency

OFFICE OF ENVIRONMENTAL SERVICES

1 Old State Capitol Plaza • Springfield, Illinois 62701-1507 • (217) 782-4836 • TTY (217) 524-7128

JoDaviess County

East Dubuque Burt Machine Works Building, US 20 Capacity Improvement Alternative South Corner of 3rd St. and Menominee Ave. IADOT - BRF-20-9(149)--38-31 IHPA LOG #0204010018WJD

April 18, 2002

Judy McDonald Iowa Department of Transportation 800 Lincoln Way Ames, IA 50010

Illinois Historic

Dear Ms. McDonald:

We have reviewed the information provided, dated March 26, 2002, for the above referenced project. We concur with your determination that this property is considered eligible for listing on the National Register of Historic Places. Based upon the information provided, no historic properties will be affected. We, therefore, have no objection to the undertaking proceeding as planned and no further coordination with this office will be necessary for the Burt Machine Works Building.

The Illinois Department of Transportation is preparing a Memorandum of Agreement in consultation with this office to mitigate the effects of the US 20 capacity improvement on the Beck/Fockler House in East Dubuque, Illinois.

If you have any further questions, please contact Cody Wright, Cultural Resources Manager, Illinois Historic Preservation Agency, 1 Old State Capitol Plaza, Springfield, IL 62701, 217/785-3977.

Sincerely,

0

Anne E. Haaker Deputy State Historic Preservation Officer

AEH: CW: ly

Cc: John Walthall, Illinois Dept. of Transportation

Iowa Department of Transportation

300 Lincoln Way, Ames, Iowa 50010

515-239-1795 FAX 515-239-1726

March 26, 2002

Ref. No BRF-20-9(149)--38-31 Dubuque County Primary

Mr. Cody Wright Illinois Historic Preservation Agency 500 E Madison Springfield, Illinois 62702

Dear Mr. Wright:

Re: No Adverse Effect Determination Request for the Burt Machine Works Building; Capacity Improvement of U.S. 20 Across the Mississippi River Dubuque County, Iowa/Jo Daviess County, Illinois

Our previous correspondence to your office indicated that a historic building (Burt Machine Works), eligible for the National Register of Historic Places, would likely be impacted by the preferred alternative of the U.S. 20 capacity improvement study across the Mississippi River. Recent modifications to this alternative have resulted in the avoidance of this property.

The Burt Machine Works building, located on the southeast corner of Third and Menominee Streets south of the railroad tracks in East Dubuque, Illinois, would be impacted by right-of-way requirements of Alternative 1B, or the Full Build Alternative, as described in the previous version of the Environmental Assessment. The Full Build Alternative consisted of freeway to be constructed on the south side of the railroad tracks in East Dubuque.

Since there is no current funding available to complete Alternative 1B, the Full Build Alternative, to Barge Terminal Road in Illinois, ILDOT has not identified this project as a future funding priority. Therefore, it has been decided to construct the initial stage, Alternative 1A, of the Full Build Alternative, as a stand-alone alternative. Alternative 1A does not include a freeway south of the railroad tracks, and avoids impacts to the Burt Machine Works building.

The Burt Machine Works building was constructed in 1864 and is eligible for the National Register of Historic Places under Criterion A for its historical significance representing an early industry in the area. This stone building is banked into the slope and has two levels, one at-grade with the adjacent railroad tracks and the other at basement level, which is open on the lower ground level on the west side and south end. The main entryway is on the upper level in the north gable end. This front-gabled building currently

Ms. Haaker 3/27/02 US 20 Julien Dubuque Bridge

has a sheet metal roof, limestone rubble wall construction, and a limestone foundation. Most of the windows have been boarded over on the upper level, and the windows on the east side basement level are bricked-in. The upper level windows are also bricked-in on the interior. The only exposed window is a single modern insert on the upper floor. The window lintels and sills are wood timbers. There is some concrete block infill under the east side doors, and the doors have been covered with wood panels in more recent years.

We are requesting concurrence from your office on a No Adverse Effect determination to the Burt Machine Works building for this proposed project. To indicated concurrence, please sign and date the concurrence line provided below and return a copy of this letter to me for file. If you should prefer, you may comment by separate letter. Please contact me if you have any questions or require any additional information.

Sincerely,

Umald

/Judy McDonald Office of Environmental Services judy.mcdonald@dot.state.ia.us

KH:JM

Enclosure

cc: Dick Kautz, District 6
 Steve Larson, Environmental Services
 Roger Larson, Corridor Location
 Kevin Seals, Hanson Engineering
 Ralph Christian, Ia SHPO

Concur:

IL SHPO Comments: Date

lowa Department of Transportation

800 Lincoln Way, Ames, Iowa 50010

515-239-1795 FAX 515-239-1726

February 12, 2002

Ref. No BRF-20-9(149)--38-31 **Dubuque** County Primary

Ms. Anne Haaker Deputy State Historic Preservation Officer Illinois Historic Preservation Agency Old State Capitol Springfield, Illinois 62702

Dear Ms. Haaker:

RE: Final Draft MOA for the US 20 Improvement across the Mississippi River at Dubuque

Enclosed for your review and comment is a final draft MOA to mitigate the adverse affect the above-mentioned project will have on the Beck/Fockler House. The project proposes to construct a companion bridge down stream from the National Register listed Julien Dubuque Bridge and relocate a four-lane approach to the bridges through East Dubuque.

The final draft reflects the comments we received from the first draft. The final draft also has incorporated the changes to the project design that have evolved in the past year. The MOA has been written a manner that deals with future refinements of the design. The no adverse effect on the Julien Dubuque Bridge is based on the final design being compatible with the Secretary of Interior's Standards; thus it is mentioned in the MOA with an avenue to reopen the 106 process if the design is not compatible.

We also recognized in the MOA that the mound is avoided and protected. Iowa recognizes the importance of partnering with the Indian tribes that have sacred areas within or in very close proximity to highway projects. Iowa feels it is appropriate to assure the tribes that we are committed to the protection of such sites. The final draft is being sent to the tribes for their review and signature.

Unless we hear the need for a number of changes, the final MOA will be circulated for signature by March 1. If you have any questions, please do not hesitate to contact me.

Sincerely.

h Wonald Judy McDonald

Office of Environmental Services judy.mcdonald@dot.state.ia.us

JM

Enclosure Dick Kautz, District B cc: Steve Larson, Environmental Services Kevin Seals, Hanson Engineering Lowell Soike, Ia SHPO John Walthall, IL DOT

Advisory Council On Historic Preservation

The Old Post Office Building 1100 Pennsylvania Avenue, NW, #809 Washington, DC 20004

FEB 2 1 2002

Mr. Manu Chacko Transportation Engineer Federal Highway Administration Iowa Division 105 Sixth Street Ames, IA 50010-6337

RECEIVED

MAR 1 0 2002

OFFICE OF ENVIRONMENTAL SERVICES

REF: Proposed US 20 Capacity Improvement Project Dubuque County, Iowa and Jo Daviess County, Illinois

Dear Mr. Chacko:

On February 3, 2002, the Council received your notification and supporting documentation regarding the adverse effects of the referenced projects on properties listed on and eligible for listing on the National Register of Historic Places. Based upon the information you provided, we have concluded that Appendix A, *Criteria for Council Involvement in Reviewing Individual Section 106 Cases*, of our regulations, "Protection of Historic Properties" (36 CFR Part 800) does not apply to this undertaking. Accordingly, we do not believe that our participation in the consultation to resolve adverse effects is needed. However, should circumstances change and you determine that our participation is required, please notify us.

Pursuant to 36 CFR 800.6(b)(iv), you will need to file the final Memorandum of Agreement (MOA), developed in consultation with the Iowa State Historic Preservation Officer (SHPO), and related documentation at the conclusion of the consultation process. The filing of this MOA with the Council is required in order for the FHWA to complete its compliance responsibilities under Section 106 of the National Historic Preservation Act.

Thank you for providing us with your notification of adverse effect. If you have any questions or require the further assistance of the Council, please contact Karen Theimer Brown at 202-606-8505.

Don L. Klima Director Office of Planning and Review

Sincerely,

Many RECEIVED FEB 2 & 2002 FHWA, AMES, JA

JAN-25-2002 09:03 HANSON Jan.25. 2002 9:16AM, 100T D2 S&P SECTION 217 788 2503 P.03/03 No.3629 P. 3/3

Illinois Department of Transportation

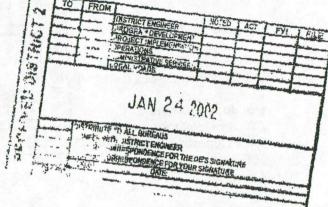
2300 South Dirksen Parkway / Springfield, Illinois / 62764

January 16, 2002

Jo Daviess County US 20 Plum Street Extension

IHPA # 02122898

FEDERAL 106 PROJECT



Ms. Anne Haaker Deputy State Historic Preservation Officer Illínois Historic Preservation Agency Springfield, Illinois 62701

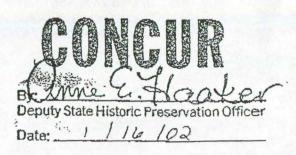
Dear Ms. Haaker:

Enclosed are two copies of Archaeological Reports and Phase I documentation completed by Hanson Professional Services and University of Illinois personnel concerning historical and archaeological properties and sites potentially to be impacted by the proposed project referenced above. Archaeological survey in the 5.6 acre project area resulted in the discovery of two archaeological sites, 11-JD-701 and 702. Site 11-JD-702 is a scatter of late historic cultural materials associated with dumping from nearby residences. This site does not meet the criteria for listing on the National Register. Site 11-JD-701 is a prehistoric bluff crest mound which likely contains intact burial features and human remains. This mound is currently on property owned by the Dunleith Township Cemetery Association and is situated in a registered cemetery. The cemetery and mound are located above and well outside of the proposed project boundaries and will not be impacted by construction associated with the Plum Street Extension. Illinois DOT District 2 engineers have designed this project so that no erosion or other construction related activities will impact the bluff crest and the mound.

In accordance with the established procedure for coordination of Illinois Department of Transportation projects, we request the concurrence of the State Historic Preservation Officer in our determination that no sites subject to protection under Section 106 of the National Historic Preservation Act of 1966, as amended, will be impacted by this project.

Very truly yours, Auchter

John A. Walthall, PhD Cultural Resources Unit Bureau of Design and Environment



Jan-25-2002 09:03 HANSON Jan-25. 2002 9:16AM IDOT D2

IDOT D2 S&P SECTION

Illinois Department of Transportation

2300 South Dirksen Parkway / Springfield, Illinois / 62764

January 22, 2002

Jo Daviess County US 20, Plum Street Extension

Ms. Judy McDonald Office of Environmental Service lowa Department of Transportation 800 Lincoln Way Ames, IA 50010

Dear Ms. McDonald:

Enclosed are copies of Archaeological Reports and Phase I documentation completed by Hanson Professional Services and University of Illinois personnel concerning historical and archaeological properties and sites potentially to be impacted by the proposed project referenced above. Archaeological survey in the 5.6 acre project area resulted in the discovery of two archaeological sites, 11-JD-701 and 702.

Site 11-JD-702 is a scatter of late historic cultural materials associated with dumping from nearby residences. This site does not meet the criteria for listing on the National Register. Site 11-JD-701 is a prehistoric bluff crest mound which likely contains intact burial features and human remains. This mound is currently on property owned by the Dunleith Township Cemetery Association and is situated in a registered cemetery. The cemetery and mound are located above and well outside of the proposed project boundaries and will not be impacted by construction associated with the Plum Street Extension. Illinois DOT District 2 engineers have designed this project so that no erosion or other construction related activities will impact the bluff crest and the mound.

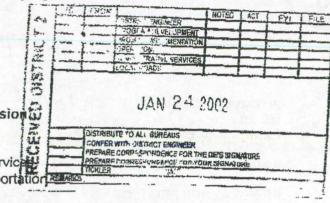
The attached letter of concurrence to our finding of "No Effect" from the Illinois State Historic Preservation Officer completes the Section 106 coordination for the Plum Street extension project.

Very truly yours,

Apulthal

John A. Walthall, PhD Chief Archaeologist

Cc: J. D. Stevenson, FHWA Curtis Simon, Kickapoo Tribe Samantha House, Ho-Chunk Nation



lowa Department of Transportation

800 Lincoln Way, Ames, Iowa 50010

515-239-1795 FAX 515-239-1726

November 2, 2001

Review and Compliance

Des Moines, IA 50319

Bureau of Historic Preservation

State Historical Society of Iowa

Ref. No BRF-20-9(149)--38-31 Dubuque County Primary

R&C# 981231084

RECEIVED

DEC - 4 2001

OFFICE OF ENVIRONMENTAL SERVICES

Dear Lowell:

600 East Locust

Lowell Soike

RE: Determination of affect for the US 20 Improvement across the Mississippi River at Dubuque

The project proposes to construct a companion bridge down stream from the Julien Dubuque Bridge and relocate a four-lane approach to the bridges through East Dubuque. Your review of the concept, plans and computer-simulated photo of the new bridge determined the new structure to be compatible in design and satisfies the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings.

Based on our telephone conversation November 2, 2001 and your review, the Iowa Department of Transportation has determined the project finding should be changed from adverse effect to No Adverse Effect on the Julien Dubuque Bridge. If you agree, please sign the concurrence line below. If you have any questions, please do not hesitate to contact me.

Sincerely,

udy millmald

Judy McDonald Office of Environmental Services Judy.mcdonald@dot.state.ia.us

JM Enclosure

cc: Dick Kautz, District 2 Steve Larson, Environmental Services Kevin Seals, Hanson Engineering

Concur:

Nonthe Salle

November 192001

Preservation Agency

Illinois Historic

1 Old State Capitol Plaza • Springfield, Illinois 62701-1507 • (217) 782-4836 • TTY (217) 524-7128

JoDaviess County East Dubuque IDOT-Improve Capacity U.S. Route 20 across Mississippi River (SN 043-0001) IHPA Log #02122898

September 14, 2000

RECEIVED

Judy McDonald Iowa Department of Transportation Office of Environmental Services 800 Lincoln Way Ames, IA 50010 SEP 2 0 2000 OFFICE OF ENVIRONMENTAL SERVICES

Dear Ms. McDonald:

Our office has reviewed the additional information provided for the above referenced project. We accept the mitigation of this project in regards to the adverse effect on the Julien Dubuque Bridge (SN 043-0001).

The MOA should be modified to include the following language:

WHEREAS, no other resources of historic, architectural, or . archaeological significance will be impacted by the proposed project;

Regarding the use of brochures, we are unsure if 1,500 will be adequate. What is the number that your office usually prepares? One additional Illinois historical journal to which the text could be submitted would be Historic Illinois, which is published by the publications division of our agency.

Prior to the beginning of demolition, structural documentation shall be submitted to the ILSHPO to the Level III standards of the Illinois HIstoric American Buildings Survey. Upon acceptance of the documentation by the ILSHPO and prior to construction, the Advisory Council on Historic Preservation will be notified of the ILSHPO acceptance. Any questions in regards to the HABS should be directed to Stephen A. Thompson, Resource Protection Manager, at 217/782-8168. IHPA Log #02122898 September 14, 2000 Page 2

If you have any questions, please contact Cody Wright, Cultural Resources Manager, at 217/785-3977.

Sincerely, me Anne E. Haaker

Deputy State Historic Preservation Officer

AEH:CW:ly

cc: Lowell Soike, Iowa SHPO John Walthall, IL DOT The Historical Division of the Department of Cultural Affairs

STATE HISTORICAL SOCIETY OF IOWA

Where past meets future

August 28, 2000

In reply refer to: R&C#: 981231084

Judy McDonald Office of Environmental Services Iowa Department of Transportation 800 Lincoln Way Ames, IA 50010

RE: FHWA – BRF-20-9(149)—38-31, DUBUQUE COUNTY, PRIMARY, DRAFT MOA FOR THE PROPOSED US 20 IMPROVEMENT ACROSS THE MISSISSIPPI RIVER AT DUBUQUE

Dear Judy:

We have received and reviewed the draft memorandum of agreement for the above referenced project. The various changes and deletions you propose to Attachments A and B help clarify the intent of the mitigation effort and we are in agreement with them. The only suggestion we offer is that you consider expanding the length of the booklet described in Appendix A from twelve to twenty pages. This would allow for the various buildings and events to be adequately discussed and avoid producing an overly superficial product.

With respect to the plans for the new bridge as provided in the written description, computer-simulated photo, and plan sheets, we are pleased with the resulting design. Accordingly, we recommend that the new bridge be considered compatible in design and satisfy the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings.

Should you have any questions regarding our findings and recommendations, please feel free to contact me (515) 281-3306.

Toolesboro Indian Mounds Toolesboro

Western Historic Trails Center Council Bluffs

Sincerely,

Lowell J. Soike, Ph.D. Historian, Community Programs Bureau e-mail: Lowell.Soike@dca.state.ia.us

cc: Dick Kautz, District 2
 Steve Larson, Environmental Services
 Roger Larson, Corridor Location
 ✓ Kevin Seals, Hanson Engineering

IOWA HISTORICAL BUILDING 600 East Locust • Des Moines, l'owa 50319-0290 Phone: (515) 281-6412 • Fax: (515) 242-6498 or (515) 282-0502 www.uiowa.edu/~shsi/index.htm

American Gothic House Eldon

Blood Run NHL Larchwood

Centennial Building Iowa City

Matthew Edel Blacksmith Shop Marshalltown

Abbie Gardner Cabin Arnolds Park

Iowa Historical Building Des Moines

Montauk Governor's Home Union Sunday School Clermont Museum Clermont

Plum Grove Governor's Home Iowa City

r Cabin B help



Illinois Department of Transportation

Division of Highways / District 2 819 Depot Avenue / Dixon, Illinois / 61021-3500 Telephone 815/284-2271

PROGRAM DEVELOPMENT Studies & Plans Environment FAP Route 301 (US 20) Section 2B Mississippi River Crossing JoDaviess County

November 9, 1999

Mr. Jim Moll, Project Director Hanson Engineers, Incorporated 1525 South Sixth Street Springfield, IL 62703-2886

Dear Mr. Moll:

We enclosed two pieces of correspondence for the cultural resource clearance process for this project. The first is the letter from the Illinois SHPO stating that the project has the clearance of the Illinois SHPO for archaeological resources in Illinois. Secondly, we have the response of our Department (dated October 6, 1999) as to which structures have potential to be declared eligible for the National Register of Historic Places. Since they represent the findings for Illinois cultural resources, you must be sure that the lowa portion of the job is reviewed by the lowa SHPO office (on their delegated authority) to ensure their concurrence on the lowa portion of this project.

The Illinois stamped SHPO sign for archaeology dated October 20, 1999, should be included as a figure in the environmental report, as well as an Iowa archaeological sign-off. The IDOT memorandum of October 6, 1999, should be a guide to minimize impact to these listed structures. This memo should be a figure in the environmental report, along with a future final SHPO sign-off. Equivalent approvals from Iowa SHPO will also need to be included.

Finally the historic status of the existing US 20 bridge over the Mississippi River should be obtained from the Iowa SHPO, along with a determination of the project on the historic status of this structure.

Jim Moll Hanson Engineers November 9, 1999 Page Two

Please let us know when we will have the projects impacts determined to each of the listed structures that are in Illinois so that we can pursue final Illinois SHPO sign-off for our portion of the project. If you have any questions, please call Larry Hill at IDOT, District 2 at 815.284.5450.

Sincerely,

Roger E. Rocke District Engineer

semerer. m t

By: John H. Wegmeyer Engineer of Program Development

LH.bc.sap.j.moll.hansen

c: Roger Larson - Iowa Department of Transportation

Illinois Department of Transportation

Memorandum

To:	R. Rocke	Attn: K. Marchek	
From:	W. T. Sunley	By: J.A. Walthall	
Subject:	Cultural Resource Concurrence *		
Date:	October 20, 1999		

JoDaviess County FAP 5, U.S. 20 Mississippi River Bridge Approaches

Attached is a letter of concurrence from the State Historic Preservation Officer indicating that the proposed project referenced above will have no effect on significant **ARCHAEOLOGICAL** resources.

This completes the necessary coordination relative to evaluating the impact of this project on significant **ARCHAEOLOGICAL** resources.

Stowatthall

Attachment

JAW:km

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October 15, 1999

JoDaviess County US 20, FAP 5 Mississippi River Bridge Approaches IHPA # 02122898 ARCHAEOLOGICAL RESOURCES

348 Acree 5 sita 2 Avrited, 3 nd eligible CONCUR, NO effort to Anchadogial proputers ME 10.20-89

Ms. Anne Haaker Deputy State Historic Preservation Officer Illinois Historic Preservation Agency Springfield, Illinois 62701

Dear Ms. Haaker:

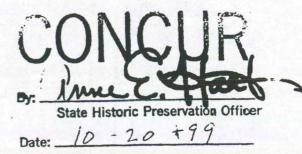
Enclosed are two copies of an Archaeological Report and Phase I and II documentation completed by Leah Rogers working under contract to Hanson Engineers concerning historical and archaeological properties and sites potentially to be impacted by the proposed project referenced above. Archaeological survey in the 348 acre project area resulted in the location of 5 sites (11-JD 643 - 647). Sites JD-644 and 646 are located outside of the project area and will not be impacted. The remaining sites are light surface scatters of non-diagnostic lithic materials or remains of disturbed late $19^{th} - 20^{th}$ century historic period occupations.

In accordance with the established procedure for coordination of Illinois Department of Transportation projects, we request the concurrence of the State Historic Preservation Officer in our determination that no archaeological historic properties subject to protection under Section 106 of the National Historic Preservation Act of 1966, as amended, will be affected by the proposed construction activities.

Very truly yours,

Andthall

John A. Walthall, PhD Cultural Resources Unit Bureau of Design and Environment



Iowa Department of Transportation

800 Lincoln Way, Ames, Iowa 50010

515-239-1795 FAX 515-239-1982

October 12, 1999

Ref. No BRF-20-9(149)--38-31 PIN 99-31020-1 Dubuque County Primary

Lowell Soike Review and Compliance Bureau of Historic Preservation State Historical Society of Iowa 600 East Locust Des Moines, IA 50319

R&C# 9812 31 084

Dear Lowell:

RE: Companion bridge to the Julien Dubuque Bridge

Enclosed for your review and comment is the historic architectural report for the above mentioned project. To improve traffic flow across the Mississippi River on US 20, the project proposes to construct a companion bridge south of the existing Julien Dubuque Bridge between Dubuque, la and East Dubuque, II. The area of potential effect in Iowa extends from the Dodge St./Locust St. intersection - west 2200 ft., east 2000 ft. to the river, north 350 ft. and south 500 ft. for a total of 62 acres.

A number of historic studies have been conducted in Dubuque over the past 25 years resulting in four resources listed on or nominated for the National Register. The Julien Dubuque bridge nomination is being processed. The current investigation examined 29 buildings or structures, 16 of which were previously recorded. Three properties are determined eligible for the National Register - Julien Dubuque Bridge, Midland Laboratories and a brick house at 19 Locust St. Two properties, a double house at 27-29 Locust St. and the aging walt for a defunct brewery are found potentially eligible for the National Register. Of the significant properties, only the Julien Dubuque Bridge is in the area of potential effect.

The project will visually have an adverse affect on the bridge. Physical impacts to the approach spans have been previously mitigated by HAER documentation in the 1990's when the west approach ramp, deck system and lower chord wcrc improved. A sidewalk was also added to the south side of the bridge. Moving the sidewalk to the north side of

97%

Lowell Soike October 12, 1999 Julien Dubuque Companion Bridge

the bridge will not adversely affect the historic features of the bridge. To mitigate the visual impact to the bridge, the following is recommended.

1) As recently done, in the future rehabilitate and restore the historic bridge to assure continuous future use.

2) Minimize visual impact of the approach spans and placement of the new bridge so not to impede the traditional view of the historic bridge.

3) Design the new bridge similar to the historic bridge with the detailing and fastenings reflective of modern technology. Design the new bridge in a similar scale, height and number of spans as the historic bridge.

Based on the results of the historic architectural report, the determination is Adverse Effect. The Department will continue to work in consultation with SHPO to avoid, minimize and mitigate the affect according to 36CFR_800.6. If you concur, please sign the concurrence line below, add your comments and return this letter.

If you have any questions, please do not hesitate to contact me.

Sincerely,

Judy In Elmald

Judy McDonald Office of Project Planning jmcdona@iadot.e-mail.com

JM

Enclosure

cc: Dick Kautz, East Central Iowa Transportation Center Dave Skogerboe, Road Design Steve Larson, Project Planning Leah Rogers, Cultural Resource Consultant

Concur: opo

SHPO historian Comments:

November 18, 1999

15150000500

007

Illinois Lepartment of Trar. portation

Memorandum

To:

Attn: J. H. Wegmeyer

From: William T. Sunley By: J. A. Walthall

Subject: Cultural resource review*

W. D. Ost

Date: October 6, 1999

*FAP 301, US 20 Section 2B Mississippi River at East Dubuque Jo Daviess County

Buildings shown in the following photos in the architectural report prepared by Leah D. Rogers are considered by our cultural resources staff as potentially eligible for listing in the National Register of Historic Places.

2, 19, 40-43, 103, 104, 108, 111, 116, and 132

Please keep us informed concerning possible negative impacts to any of those properties.

JAW/JJ

xc: M. T. Bruns

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APPENDIX E

INDIAN TRIBAL COORDINATION



800 Lincoln Way, Ames, Iowa 50010

515-239-1795 FAX 515-239-1726

April 29, 2002

Ref. No BRF-20-9(149)--38-31 Dubuque County Primary

Mr. David Grignon Tribal Historic Preservation Officer Menominee Indian Tribe of Wisconsin P.O. Box 910 Keshena, WI 54135-0910

Dear Mr. Grignon:

RE: US 20 Improvement across the Mississippi River at Dubuque

Thank you for your letter in response to a proposed Memorandum of Agreement to resolve affects on historic properties impacted by the above-mentioned project. The project has been designed to avoid impacts to significant archaeological and sacred sites.

As requested, enclosed are archaeology reports for the project. In 1999, an intensive survey on 348 acres was conducted in Illinois and on 62 acres in Iowa. In Illinois, five sites were recorded with two located outside the area of potential affect. The remaining three sites were determined to be light surface scatters of non-diagnostic lithic materials or remains of 19th-20th century historic period occupations. The Illinois SHPO concurred with the finding No Historic Properties Affected, on October 20, 1999. In Iowa, seven historic period sites and no prehistoric sites were recorded.

In 2001, an additional survey was conducted in a 5.4-acre area needed for the Plum Street extension to connect with the US 20 improvement. Two sites were newly recorded, an historic scatter and a mound, which had been previously disturbed. The project was designed to assure avoidance of any further disturbance to the mound site.

I understand your concern for inadvertently unearthing remains when there is a mound in the vicinity. The mound is located in Illinois. I have checked with the Illinois DOT about how they deal with an unexpected discovery and with the Illinois Law. The ILDOT put a specification (107.21) on every plan that says if a discovery of aboriginal records and antiquities is made during construction, work at the location will cease and not resume until the engineer and Illinois Historic Preservation Agency have granted permission in writing. The Illinois Law (20 ILCS 3440/1-16) that protects burial sites is the Human Skeletal Remains Protection Act. The Illinois Historic Preservation Agency has jurisdiction over the procedures.

When remains or archaeological material are discovered on the Iowa side of the river, very similarly, work stops in the vicinity, appropriate steps to secure the site are taken and SHPO and the Iowa State Archaeologist are notified as is the Iowa DOT. They will

Mr. Curtis Simon US 20 Mississippi River Crossing 4/29/02

Iowa Division, 105 6th Street, Ames, Iowa 50010 or to me, Judy McDonald, at the Office of Location and Environment, Iowa Department of Transportation, 800 Lincoln Way, Ames, IA 50010. We appreciate your time and interest in our project.

Sincerely,

/Judy McDonald Office of Locations and Environment judy.mcdonald@dot.state.ia.us

JM

Enclosure

 cc: Gerry Kennedy, FHWA Iowa Office
 JD Stevens, FHWA Illinois Office
 Lowell Soike, Ia SHPO
 Anne Haaker, IL SHPO
 Steve Larson, Environmental Services
 John Walthall, IL DOT
 Kevin Seals, Hanson Engineering

Hitter's in integer (cp) - Managuta Larrent Agreenteen with as 24 IPO and FUW V to satisfy the Vection 400 requirements for any affected historic properties within that jurisdiction. If you have any columnais descriptions about historic properties within 18 mois? Jurisficularif States thruch 20 Sie cars. Environmental Propriot. Engineer: FUW V Binnes Division, 2026 Executive Predably ive, Sarina field. II, 60793.

The Julian Debugen Bridge is the only Elizional Regimentation of affected by the project within the Project diction. Jowa has no known preficiente properties inspirated by this project. Business the lower SHPC has phildly signification a functing of up with end of lotted lower has the distinct the attracted Memoryandum Difference (Briden). July and the set of lotted to business Bridge (Bridge).

We broke you to review and a transmitten the MOM and a Gam while participate in the MOU. Please and at nota separable (your wormlesse if Gerald Granach at N1977



lowa Department of Transportation 200 Lincoln Way, Ames. Jowa 50010 515-239-1795

800 Lincoln Way, Ames, Iowa 50010

FAX 515-239-1726

April 25, 2002

Mr. George Garvin Ho Chunk Nation P.O. Box 667 - 405 Airport Road Black River Falls, WI 54615

Ref. No BRF-20-9(149)--38-31 **Dubuque** County Primary

Dear George:

RE: US 20 Improvement across the Mississippi River at Dubuque

Thank you for your response to a proposed Memorandum of Agreement to resolve affects on historic properties impacted by the above-mentioned project. The project has been designed to avoid impacts to National Register archaeological and sacred sites. One National Register historic site will be adversely affected.

Because Iowa and Illinois have policies and procedures that are specific to their state laws and jurisdictions, it has been determined that the project can be better served by each state preparing its own Section 106 agreements with its respective State Historic Preservation Officers for the impacted historic properties within its jurisdiction.

Illinois is preparing a Memorandum of Agreement with its SHPO and FHWA to satisfy the Section 106 requirements for any affected historic properties within that jurisdiction. If you have any comments or concerns about historic properties within Illinois' jurisdiction, please contact JD Stevens, Environmental Program Engineer, FHWA Illinois Division, 3250 Executive Park Drive, Springfield, IL 62703.

The Julien Dubuque Bridge is the only National Register property affected by the project within the Iowa jurisdiction. Iowa has no known prehistoric properties impacted by this project. Because the Iowa SHPO has placed stipulation on a finding of no adverse effect, Iowa has drafted the attached Memorandum of Understanding for the historic Julien Dubuque Bridge. We invite you to review and comment on the MOU and if you wish, participate in the MOU. Please send, as soon as possible, your comments to Gerald Kennedy at FHWA Iowa Division, 105 6th Street, Ames, Iowa 50010 or to me, Judy McDonald, at the Office of Location and Environment, Iowa Department of Transportation, 800 Lincoln Way, Ames, IA 50010. We appreciate your time and interest in our project.

Sincerely,

mellmald Judy McDonald

Office of Locations and Environment judy.mcdonald@dot.state.ia.us

JM

Enclosure

Gerry Kennedy, FHWA Iowa Office cc: Lowell Soike, Ia SHPO Steve Larson, Environmental Services Kevin Seals, Hanson Engineering

JD Stevens, FHWA Illinois Office Anne Haaker, IL SHPO John Walthall, IL DOT



lowa Department of Transportation

800 Lincoln Way, Ames, Iowa 50010

515-239-1795 FAX 515-239-1726

February 12, 2002

Ref. No BRF-20-9(149)--38-31 Dubuque County Primary

Mr. Chad Waukechon Cultural Planner, Historic Preservation Minominee Indian tribe of Wisconsin P.O. Box 910 Keshena, WI 54135-0910

Dear Mr. Waukechon:

RE: Final Draft MOA for the US 20 Improvement across the Mississippi River at Dubuque

As an interested party in the outcome of the project design for the above-mentioned project, your tribe is invited to review and sign the MOA to resolve the effects of the project.

The project proposes to construct a companion bridge down stream from the National Register listed Julien Dubuque Bridge and relocate a four-lane approach to the bridges through East Dubuque. As part of the project, Plum Street needs to be connected to US 20 in East Dubuque.

During the environmental investigations, a mound was recorded adjacent to the right of way needed for Plum Street. This information was sent to you in October 2001. The Federal Highway Administration and the Department of Transportations in Iowa and Illinois recognize the importance to protect sacred areas within or in very close proximity to highway projects. Measures taken to avoid and protect the sacred site are written into the Memorandum of Agreement. Note the fourth "WHEREAS" and Stipulation C.

You are invited to review and comment on this MOA. If your tribe wishes to sign the final document, please return the enclosed tribal notification form with the last box checked and your name. If you have questions or comments, feel free to write them on the form, send a letter or contact me by phone or e-mail. We plan to send the MOA out for signature by the first of March.

Thank you for your time and interest in our project.

Sincerely, millarald Judy McDonald

Office of Environmental Services judy.mcdonald@dot.state.ia.us

JM Enclosure cc: Gerry Kennedy, FHWA Anne Haaker, IL SHPO Lowell Soike, Ia SHPO John Walthall, IL DOT Steve Larson, Environmental Services Curtis Simon Kickapoo of Kansas Tribe Route 1, Box 157 Horton, KS, 66349

Ms. Samantha House Cultural Resource Division Ho-Chunk Nation P.O. Box 667 Black River Falls, WI 54615

Mr. Chad Waukechon Cultural Planner, Historic Preservation Minominee Indian tribe of Wisconsin P.O. Box 910 Keshena, WI 54135-0910

P C Box 667 Black River Falls, W1 54615 Ph. 715284.7181 Fax 715284 7449



Heritage Preservation – Cultural Resources Division

October 10, 2001

Roger Larsen, Project Coordinator Department of Transportation, State of Iowa 800 Lincoln Way Ames, IA, 50010

Dear Mr. Larsen:

The Ho-Chunk Nation has learned of the East Dubuque Project, specifically the Plum Street relocation aspect of the project. The confirmed presence of an Indian burial ground and or mounds in the planned immediate project area is what has inspired this correspondence. The Ho-Chunk Nation is deeply concerned for the preservation of the burial grounds in lieu of the project. Dubuque and East Dubuque are within the boundaries of aboriginal Ho-Chunk homelands. The Nation therefore, is an interested party in the East Dubuque project per Section 106 of the National Historic Preservation Act of 1966, Consultation with Indian Tribes.

To ensure that the area in question is properly preserved and intact throughout the East Dubuque project, the Nation would like to participate and remain abreast of all phases of the project. Samantha House, Ho-Chunk Researcher for the Nation's Cultural Resources Division, will be your contact from the Nation on the East Dubuque Project. Mrs. House may be reached at: Samantha House, Cultural Resources Division, Ho-Chunk Nation, P.O. Box 667, Black River Falls, WI 54615, Ph. (800) 561-9918, Fax (715) 284-7449.

If you may have any questions or concerns regarding the Ho-Chunk Nation's interest and participation in this project, please contact Mrs. House directly. Thank you.

Sincerely,

Susette LaMere, Manager Cultural Resources Division

cc: Jim Moll, Consultant, Hanson Engineering Tony Berretta, East Dubuque Project Engineer Larry Hill, Environmental Unit Chief

protect and monarchie cultural religious and Alstoric resources of the Ho Chunk Nation!

KICKAPOO TRIBE IN KANSAS

Office: 913-486-2131 • Fax: 913/486-2801

29-Jul-99

Leah D Rogers Historic Preservation Consultant 217 NW 5th Street Mt. Vernon, IA. 52314

RE: Comments on Proposed Bridge Const.

Dear Mr. Rogers,

We received your letter, about the construction of a bridge in Dubuque, Iowa and East Dubuque, Ill., on 21-July-99.

I am writing on behalf of the Kickapoo Tribe in Ks., and the Kickapoo Tribe in Ks. NAGPRA Program. At this time neither the Tribe or the NAGPRA Program have any comments or concerns about the placement of the bridge, however we would like to be kept informed in the case of inadvertent discoveries of either human remains or other artifacts. The contact person for the Tribe is; Curtis Simon, Director Kickapoo Tribe in Ks., NAGPRA Program and you can reach me at (785) 486-2131 or mail to P.O. Box 271 Horton, Ks. 66439-0271. We thank you for your time and attention in this matter.

Sincerely

Curtis Simon Director, Kickapoo Tribe in Ks., NAGPRA Program

LEAH D. ROGERS 217 NW 5th Street Mt. Vernon, IA 52314 HISTORIC PRESERVATION CONSULTANT email: LDRog215@AOL.com (319) 895-8330

July 14, 1999

To All Concerned Tribal Representatives and Councils:

I am contacting you in accordance with Section 800.2(c)(3) of the National Historic Preservation Act as revised in 1999. The Iowa and Illinois Departments of Transportation are undertaking a preliminary study of a road and bridge improvement project spanning the Mississippi River at or very near the current location of the Julien Dubuque Bridge/Highway 20 crossing at Dubuque, Iowa, and East Dubuque, Illinois. The Federal Highway Administration (FHWA) is the lead agency for this project, which will largely following the existing alignment of Highway 20 and will involve the construction of a new companion bridge alongside the existing bridge. The attached map shows the general study area within which several alternative construction corridors are under consideration. The actual construction impact zone will be a narrow corridor within this larger study area. There will be no impacts to bluff top locations on either side of the river. Likewise, the immediate bluff base locations appear to be out of any potential construction zone. Much of the area to be impacted is urban development in the south part of Dubuque and the southwest part of East Dubuque.

We are seeking your comments about this project. Should your tribe have any concerns about traditional cultural properties which may be affected by our proposed project, please provide written comments to me at the above address by August 10, 1999. I am the Consultant in charge of completing the cultural resources investigations for the study area, both archaeological and architectural.

I thank you very much for your time and consideration. If you have additional questions or concerns, please contact Gerry Kennedy at the FHWA (515-233-7317; U.S. DOT, FHWA Iowa Division Office, 105 Sixth Street, Ames, 50010-6337) or Randall Faber at the Iowa DOT (Office of Project Planning, 800 Lincolnway, Ames, Iowa 50010; 515-239-1215).

Sincerely,

entre Roya

Leah D. Rogers Historic Preservation Consultant