FHWA-IOWA-EIS-78-04-FS/4(f)

Iowa 100 Extension West of Cedar Rapids
Linn County, Iowa

Iowa DOT Project Number: NHS-100-1(36)--19-57

FINAL SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT
And Section 4(f) Evaluation

Prepared in Accordance with:
The National Environmental Policy Act, as amended
42 USC 4332(2)(c)
and
Section 4(f) of the U.S. Department of Transportation Act, as amended
49 USC 303

by the
U.S. DEPARTMENT OF TRANSPORTATION,
FEDERAL HIGHWAY ADMINISTRATION, and
IOWA DEPARTMENT OF TRANSPORTATION

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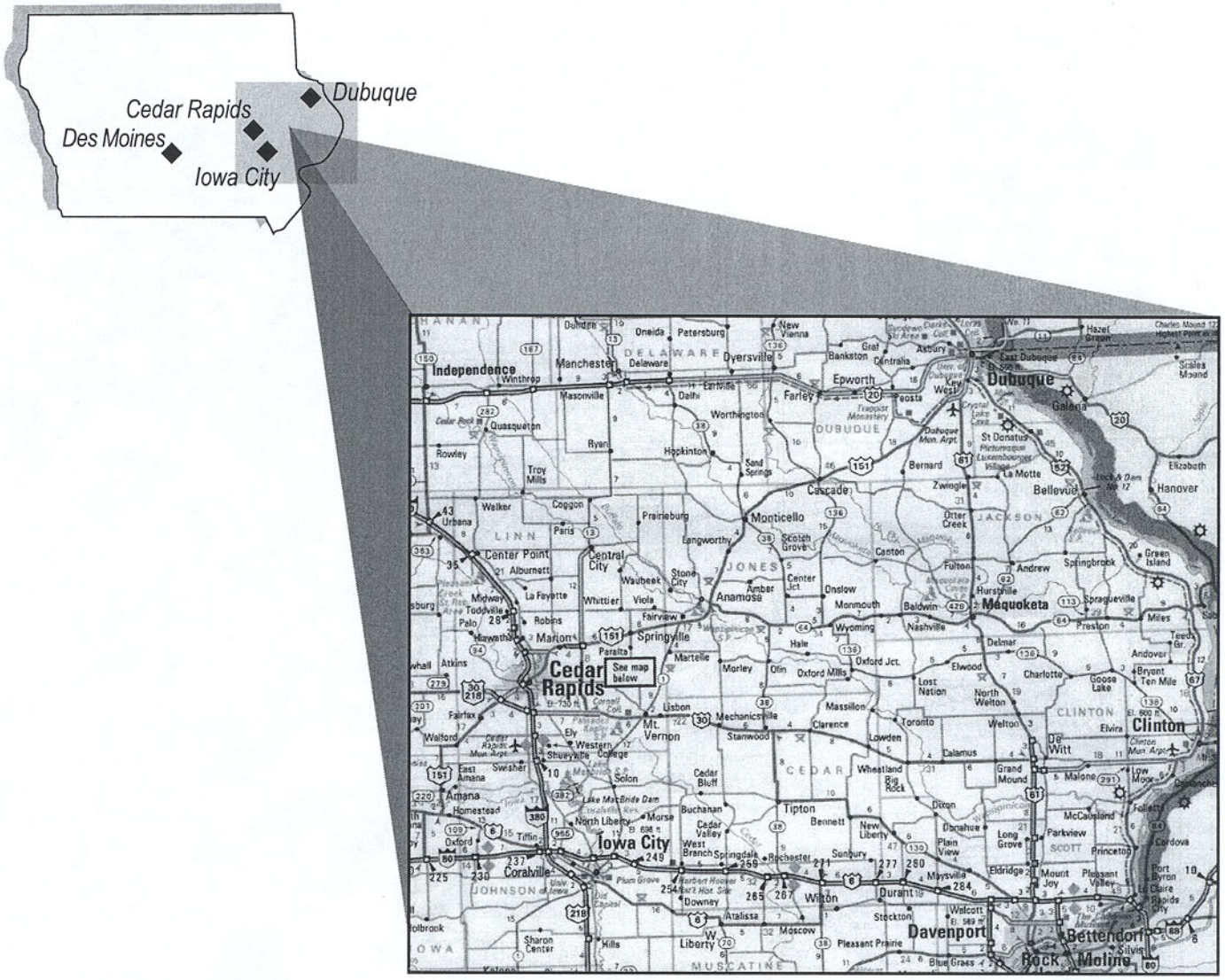
The proposed action consists of extending Iowa 100 on new alignment from its terminus at Edgewood Road to US Highway 30 southwest of Cedar Rapids (Linn County). The proposed extension would accommodate planned growth and associated travel demand increases on the west side of Cedar Rapids, provide an efficient connection between the west side of Cedar Rapids (and beyond) to I-380 and the city's northeast side, and reduce congestion and associated problems on the road network in the general project area. This Final Supplemental EIS is a follow-up document to the Draft Supplemental EIS which was approved in July 2001. It identifies IDOT's and FHWA's Preferred Alternative and describes changes in the study area since publication of the 2001 document that influenced the selection of the preferred alternative. This document also summarizes the results of the September 2001 public hearing, responds to agency comments on the Draft Supplemental EIS, and describes the agency coordination and public involvement since September 2001.

Project Location

Project NHS-100-1(36)-19-57

Proposed Extension of Iowa 100
Linn County



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Foreword

This Final Supplemental Environmental Impact Statement (FSEIS) for the Iowa 100 Extension West of Cedar Rapids has been prepared to identify the potential environmental effects associated with the proposed action—the extension of Iowa 100 around the west side of Cedar Rapids—in accordance with the National Environmental Policy Act (NEPA), the 1978 Council on Environmental Quality (CEQ) regulations, and the Federal Highway Administration (FHWA) and Iowa Department of Transportation (DOT) guidelines.

On July 9, 2001, the FHWA and Iowa DOT approved a Draft Supplemental Environmental Impact Statement (DSEIS) for the Iowa 100 Corridor. The document supplemented the 1979 FEIS which identified the approved Iowa 100 extension corridor. The DSEIS discussed socioeconomic and environmental resources, existing and future traffic trends, a range of improvement alternatives (within and outside the approved 1979 corridor) and their impacts, the consequences of the No-Build Alternative, and agency coordination and public involvement activities. The Iowa DOT held a public hearing on September 12, 2001, after making the DSEIS available for public review. The Iowa DOT identified Alternative 1 as the recommended alternative (Figure F-1a-c). Alternative 1 was located within the approved 1979 corridor, which confirmed the location decision made in the 1979 FEIS.

The FSEIS summarizes input received as a result of the 2001 public hearing and availability of the DSEIS for review, and it identifies the Iowa DOT's 2007 preferred alternative and the basis for its selection. It also describes changes to the preferred alternative alignment and environmental features along the preferred alternative not identified in the DSEIS that influenced the selection of the preferred alternative.

Format and Content

As noted in the DSEIS, there is no required format for a SEIS. The SEIS should "provide sufficient information to briefly describe the proposed action, the reason(s) why a supplement is being prepared, and the status of the previous draft or final EIS. The supplemental EIS needs to address only those changes or new information that are the basis for preparing the supplement and were not addressed in the previous EIS (23 CFR 771.130(a))." As permitted by 23 CFR 771.130(a), this document's format is similar to the format of a condensed Final EIS. In describing a condensed Final EIS, FHWA's Technical Advisory T6640.8A (Section VI B) notes, "The crux of this approach is to briefly reference and summarize information from the draft EIS which has not changed and to focus the final EIS discussion on changes in the project, its setting, impacts, technical analysis, and mitigation that have occurred since the draft EIS was circulated." The "Information and Changes Addressed in this Final Supplemental Environmental Impact Statement" subsection on page F-iv summarizes the areas of change since the DSEIS that are the focus of this FSEIS. The entire DSEIS is available on the CD at the back of this document for reference purposes. The 1978 Draft EIS and the 1979 Final EIS are also available on the CD at the back of the document.

It is critical that the reader understand the difference in intent between an EIS and a supplemental EIS. According to 40 CFR 1502.1 (*CEQ Regulations for Implementing NEPA*), an EIS "shall provide full and fair discussion of significant environmental impacts and shall inform decision makers and the public of the reasonable alternatives which would avoid or minimize adverse impacts or enhance the quality of the human environment. Agencies shall focus on significant environmental issues and alternatives." Shedding additional light on the alternatives that an EIS must address, FHWA's Technical Advisory (Section V, E) notes that "the draft EIS must discuss a range of alternatives, including all "reasonable alternatives" under consideration and "other alternatives" that were eliminated from detailed study (23 CFR 771.123(c)). A supplemental EIS is prepared "whenever there are changes, new information, or further developments on a project which result in significant environmental impacts not identified in the most recently distributed version of the draft or final EIS (40 CFR 1502.9 (c))." "The supplemental EIS needs to address only those changes or new information that are the basis for preparing the supplement and were not addressed in the previous EIS (23 CFR 771.130(a))." This last point was largely missed by some resource agencies and some citizens who expected the DSEIS to serve the same function as an EIS with respect to alternatives development and evaluation.

Having made the decision to supplement the 1979 FEIS (see DEIS, page xi), the regulations required Iowa DOT to determine whether its two proposed changes to the project approved in 1979 would result in significant impacts that had not been evaluated in the 1979 FEIS. The two proposed changes are:

- To the typical section—In the 1979 FEIS, Iowa 100 was proposed to be a two-lane rural facility from US 30 to Covington Road. Between Covington Road and Ushers Ferry Road it was to be a rural four-lane divided facility, and between Ushers Ferry Road and I-380, Iowa 100 was to be a urban four-lane divided facility. The current proposal is for Iowa 100 to be a four-lane divided rural facility from US 30 to the west side of the Cedar River. East of the Cedar River it would be a four-lane divided urban facility.

- To the type of access control—In the 1979 FEIS, assuming the CMStP&P railroad right-of-way would be available for Iowa 100, interchanges were proposed at Covington Road and Edgewood Road if economic and design criteria permitted. Access control was proposed to be Class III, which is planned controlled access in which through traffic is given primary consideration. The current proposal is for interchanges at E Avenue, Covington Road and Edgewood Road. Access control is Priority I which is fully-controlled (interchange only).

Iowa DOT's decision to prepare a supplemental EIS did not negate the FHWA's Location Approval for the project on December 9, 1980, nor did it commit Iowa DOT to evaluate new alternatives outside the approved 1980 corridor. The fact that the DSEIS evaluated alternatives outside the approved 1980 corridor is evidence of Iowa DOT's responsiveness to agency and public concerns.

History

In early 1978, the Iowa DOT began an environmental and location study to identify a connection between Iowa 100 and US 30. The study culminated in the publication of a Draft

Environmental Impact Statement (DEIS) and Location Study Report in November 1978, and a Final Environmental Impact Statement (FEIS) in September 1979. The DEIS and FEIS are found on a CD at the back of this document. The FHWA approved a combined FEIS and Location Study Report (Project Number F-100-1) for Iowa 100 on October 6, 1980. The FHWA granted Location Approval for the project on December 9, 1980. No Record of Decision was required as part of the National Environmental Policy Act in 1980.

As noted in the 1979 FEIS, "The Recommended Alternate begins on Fairfax Road at the interchange with relocated US 30 and proceeds northerly along the general alignment of Fairfax Road to the intersection with County Road E44. The new facility will then tie to the abandoned section of the Chicago, Milwaukee, St. Paul and Pacific alignment (CMSTP&P Railroad) and will continue along the railroad alignment to just west of the tri-level interchange with I-380." The 1979 FEIS went on to note that, "In the event the CMStP&P Railroad right-of-way is not made available through abandonment procedures, Variation B will be constructed on an alignment north of the railroad tracks." The 1979 Recommended Alternate also included part of US 30 from roughly 2 miles west of Stoney Point Road southeast on relocation to Stoney Point Road roughly 1 mile south of present US 30 (Figure F-2).

The approved Iowa 100 extension identified in the 1979 FEIS consisted of a 2-lane rural highway from the interchange of US 30 and Fairfax Road north to Iowa 94. The segment of the project between Iowa 94 and Ushers Ferry Road consisted of a rural four-lane divided facility with a depressed median. The section between Ushers Ferry Road and I-380 was identified as an urban four-lane divided facility with a raised median. The proposed Iowa 100 extension would have Class III access control, planned controlled access for which through traffic is given primary consideration. Interchanges were proposed at Iowa 94 (currently Covington Road) and Edgewood Road if they were determined to be warranted by economic and design criteria.

Following FHWA's location approval for the Iowa 100 extension project in 1980, the majority of the project was put on hold because of transportation funding limitations and because Cedar Rapids' growth had been slowed by the poor regional economy. Two small sections of the original project were constructed, however. In 1983, a section from Edgewood Road to I-380 was constructed as part of the I-380 construction. A section of US 30 (including an interchange) was constructed from Morgan Bridge Road to Stoney Point Road, completing the bypass of Cedar Rapids by US 30. The remainder of the original project was stalled by funding limitations.

In 1999, the FHWA and Iowa DOT began discussions about restarting the design of the Iowa 100 project that was approved by FHWA in December 1980. Funding for the design phase was obtained by the City of Cedar Rapids from the 1998 Transportation Equity Act for the 21st Century. As required by CFR 771.129(c), Iowa DOT consulted with FHWA prior to the restart to establish whether the approved DEIS and FEIS required updating before beginning design. Given the length of time since the 1979 Final EIS approval and the project's last segment of construction in 1985, and Iowa DOT's desire to change the approved Iowa 100 typical section and level of access control, FHWA decided that Iowa DOT should prepare a SEIS to document whether changes to the proposed action would result in significant environmental impacts that were not evaluated in the 1979 FEIS.

During the alternatives analysis process for the DSEIS, Iowa DOT evaluated corridors west of the 80th Street corridor, three alternatives within the 1980 approved corridor, and five alternatives outside the corridor, with the object to avoid impacts to the 20-acre Rock Island State Preserve (Figure F-3). Four of the five alternatives outside the 1980 approved corridor and the three alternatives within it avoided the Rock Island State Preserve. During the alternatives screening process, the five alternatives outside the approved corridor were eliminated from further consideration either because of their inability to meet the project purpose and need or because of their potential impacts. See Section 2 of the DSEIS for more information. The three alternatives within the 1980 corridor advanced as reasonable alternatives, and Alternative 1 was identified as the recommended alternative in the approved 2001 DSEIS. As noted, the DSEIS was signed on July 9, 2001, and the public hearing was held on September 12, 2001. Figure F-4 shows the timeline of project activities from the 1970s to the public hearing in 2001. A timeline of the project history between the 2001 public hearing and the present is found in the Final Section 4(f) Evaluation following Section 5.

Information and Changes Addressed in the Final Supplemental Environmental Impact Statement

Information that has been updated since the 2001 DSEIS is summarized below.

Summary

The Summary has been revised to identify the preferred alternative and summarize its impacts.

Section 1—Purpose of and Need for the Proposed Action

Section 1 has been revised to include information about Iowa DOT's 2004 study that evaluated the impact of the Iowa 100 extension on the Cedar Rapids' road network. Information has also been added concerning the state and national designations assigned to Iowa 100.

Section 2—Alternatives

This section discusses the new US 30 interchange alternative that replaced the two interchange options (Alternatives III and IV) discussed in the DSEIS. It also identifies adjustments to the Iowa 100 alignment from the proposed US 30 interchange to the west side of the Cedar River. This section describes the nine new alternatives between the west side of the Cedar River and Ushers Ferry Road that were developed to minimize impacts to state protected species and the Rock Island Preserve. The impacts of the 2001 Recommended Alternative on state protected species are also evaluated. This section identifies Iowa DOT's preferred alternative but refers the reader to the Final Section 4(f) Evaluation for a description of the alternatives screening process for the nine new alternatives and the 2001 recommended alternative.

Section 3—Affected Environment

Section 3 summarizes the findings of the field studies for the byssus skipper, ornate box turtle, Blanding's turtle, and Northern panic grass conducted after the September 2001 public hearing. The "Parks, Recreational Areas, and Other Public Use Lands" text has been

updated to discuss the addition of the 100-acre County Preserve to the Rock Island Preserve. Information about new residential development near the Iowa 100 extension is also discussed in this section.

Section 4—Environmental Consequences

The environmental consequences of the 2007 preferred alternative are updated in Section 4 using the updated resource studies conducted from 2002 through 2005. The project's latest mitigation concepts are also discussed in this section.

Section 5—Comments and Coordination

Section 5 summarizes comments received during the September 2001 public hearing and public comment period and responds to agency comments on the 2001 DSEIS. It describes agency coordination and public involvement activities between the 2001 public hearing and the present.

Final Section 4(f) Evaluation

The Final Section 4(f) Evaluation is new, and a follow-on to the Draft Section 4(f) Evaluation distributed for agency review in December 2006. It describes how nine new alternatives developed to avoid impacts to state-protected species and the Rock Island Preserve from west of the Cedar River to Ushers Ferry Road were screened to one alternative that became part of the 2007 preferred alternative. This section also describes the agency coordination conducted during the Section 4(f) process and the proposed mitigation plan for unavoidable impacts to the Rock Island Preserve.

Other Updates

Since the publication of the 2001 DSEIS a number of biological studies were conducted in and near the Rock Island Preserve to characterize the plant, butterfly, herptile (reptiles and amphibians), small mammals, and bird species (Figure F-5). The studies, which are listed in Table F-1 on page F-vi, were sponsored by the State Preserves Advisory Board, Iowa DOT and the LCCB. In addition to the biological studies, the cultural resource investigations described below were also conducted after the publication of the DSEIS and the public hearing.

- In January 2002, the project historian revisited the Gibney barn north of Ellis Road and west of 80th Street. In the 2001 DSEIS, the barn would be displaced by the proposed Iowa 100 extension. After additional analysis, the project historian confirmed that while the barn is not eligible for the National Register of Historic Places, the hay carrier in the barn would be eligible. As a result of this finding, Iowa 100 was shifted east to avoid the barn.

Additional archaeological investigations were conducted in the area north of the railroad crossing of the Cedar River and in areas identified in the 2001 DSEIS as potential borrow sites. One site, identified as a Late Woodland period site, was identified as potentially eligible for the NRHP. This site is avoided by the preferred alternative.

TABLE F-1
Biological Investigations Since the 2001 Public Hearing

Study Sponsor	Area Studied	Resource Studied	Study Completed
State Preserves Advisory Board	State Preserve	Plants	June 2003
Iowa DOT	Corridor	Plants	December 2002
State Preserves Advisory Board	State and County Preserve	Butterflies	June 2003
Iowa DOT	Corridor	Butterflies	October 2002
State Preserves Advisory Board	State Preserve	Herptiles	June 2003
Iowa DOT	Corridor	Herptiles	November 2002
Iowa DOT	County Preserve	Herptiles	June 2003
LCCB	County Preserve	Herptiles	June 2003
State Preserves Advisory Board	State Preserve	Mammals	June 2003
LCCB	County Preserve	Mammals	June 2003
State Preserves Advisory Board	State Preserve	Birds	June 2003
Independent Academic Project	County Preserve	Plants	June 2004

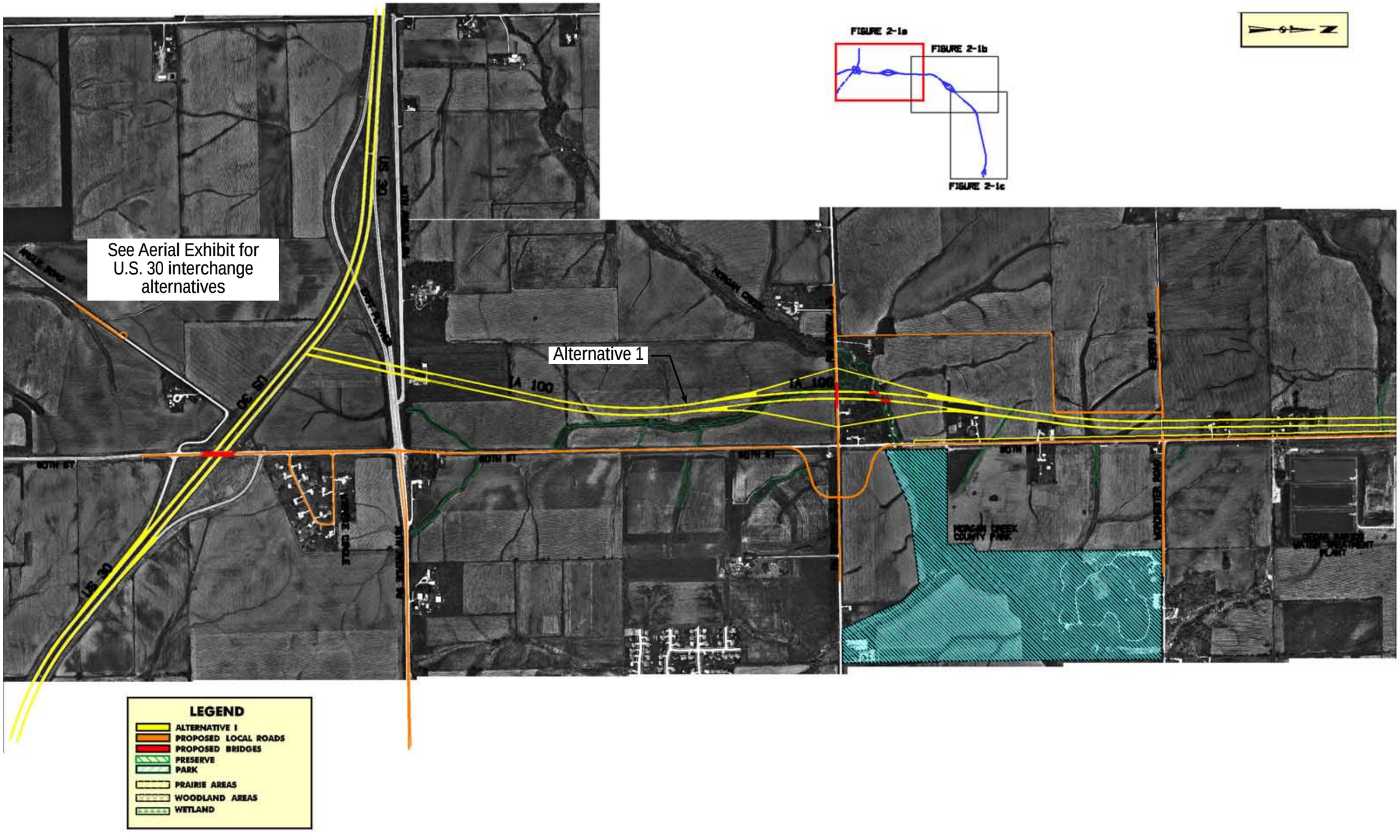


FIGURE F-1a
Alternative 1—2001 Recommended Alternative

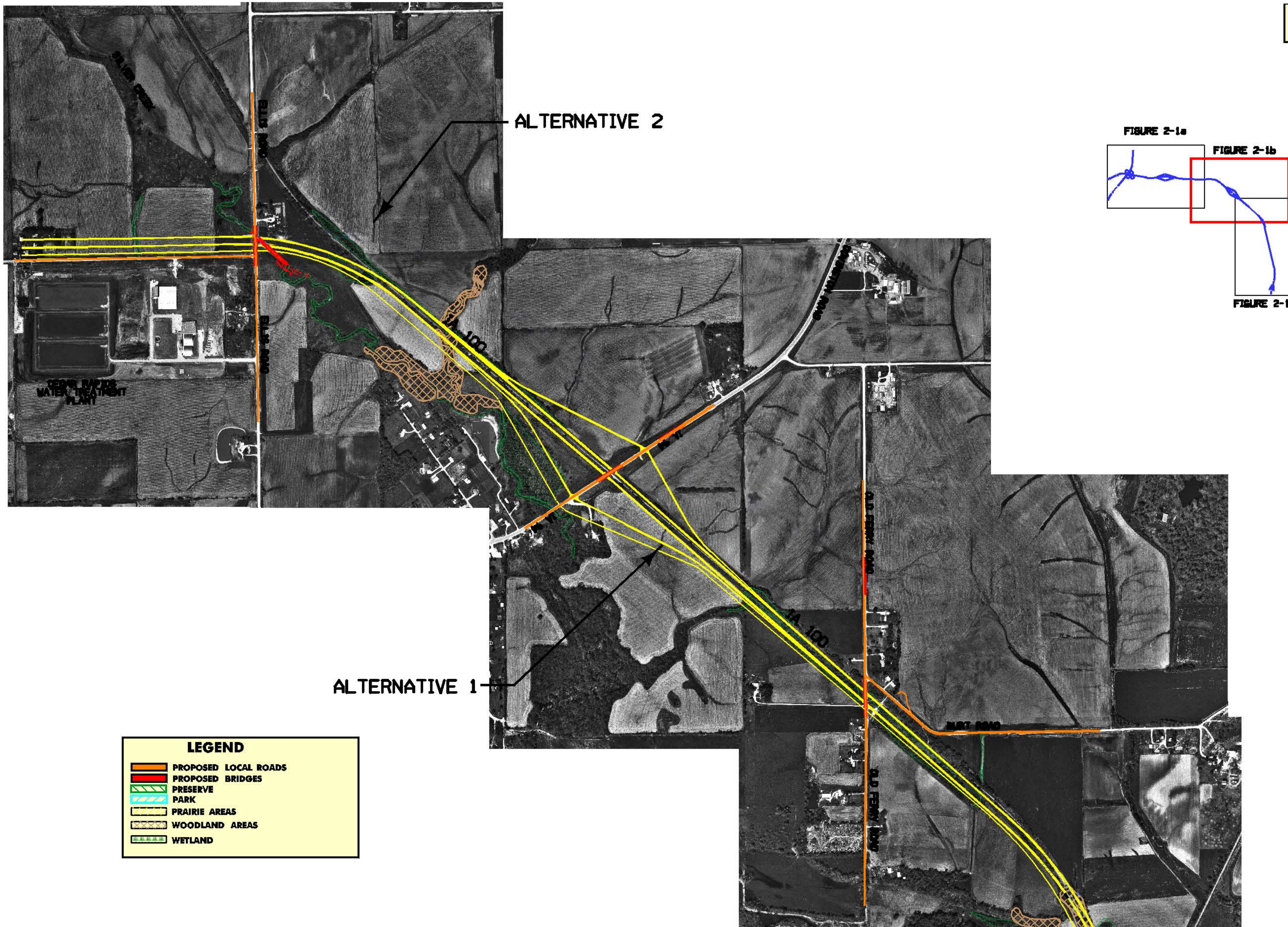
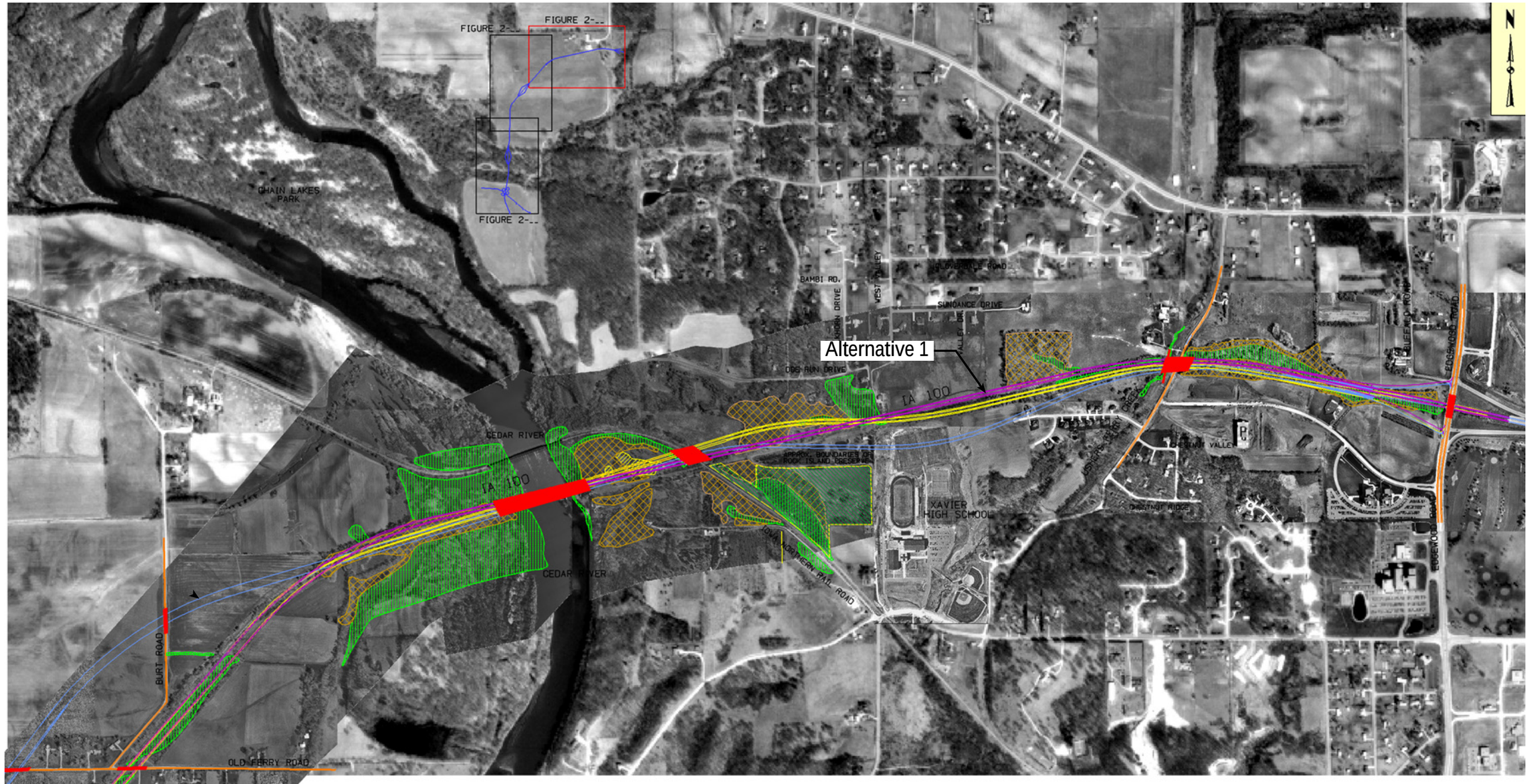


FIGURE F-1b
Alternative 1—2001
Recommended Alternative



LEGEND

- PROPOSED LOCAL ROADS
- PROPOSED BRIDGES
- PRESERVE
- PARK
- PRAIRIE AREAS
- WOODLAND AREAS
- WETLAND

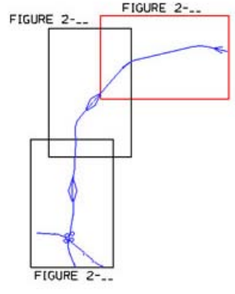
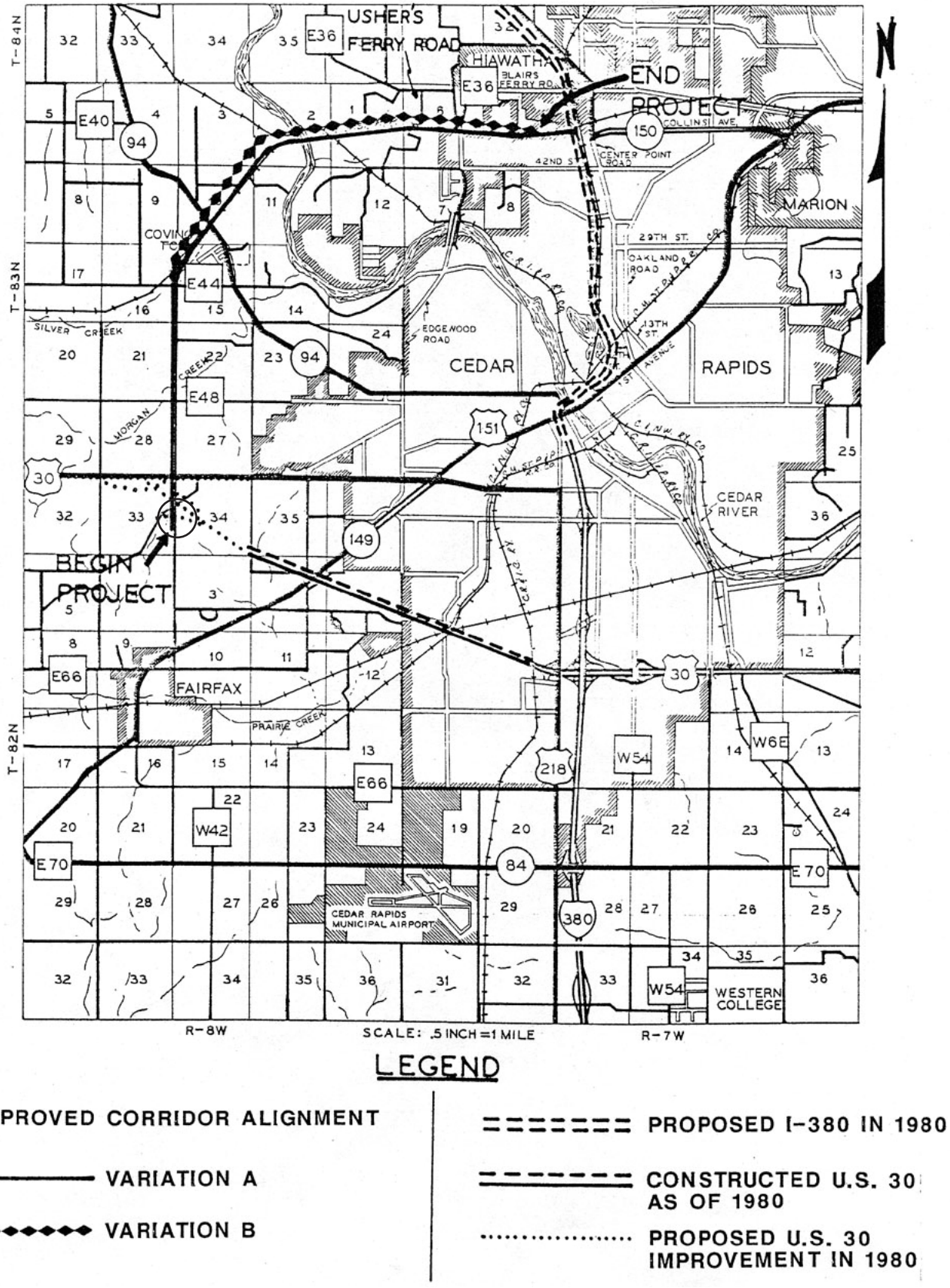


FIGURE F-1c
Alternative 1—2001 Recommended Alternative



LEGEND

1980 APPROVED CORRIDOR ALIGNMENT

VARIATION A

VARIATION B

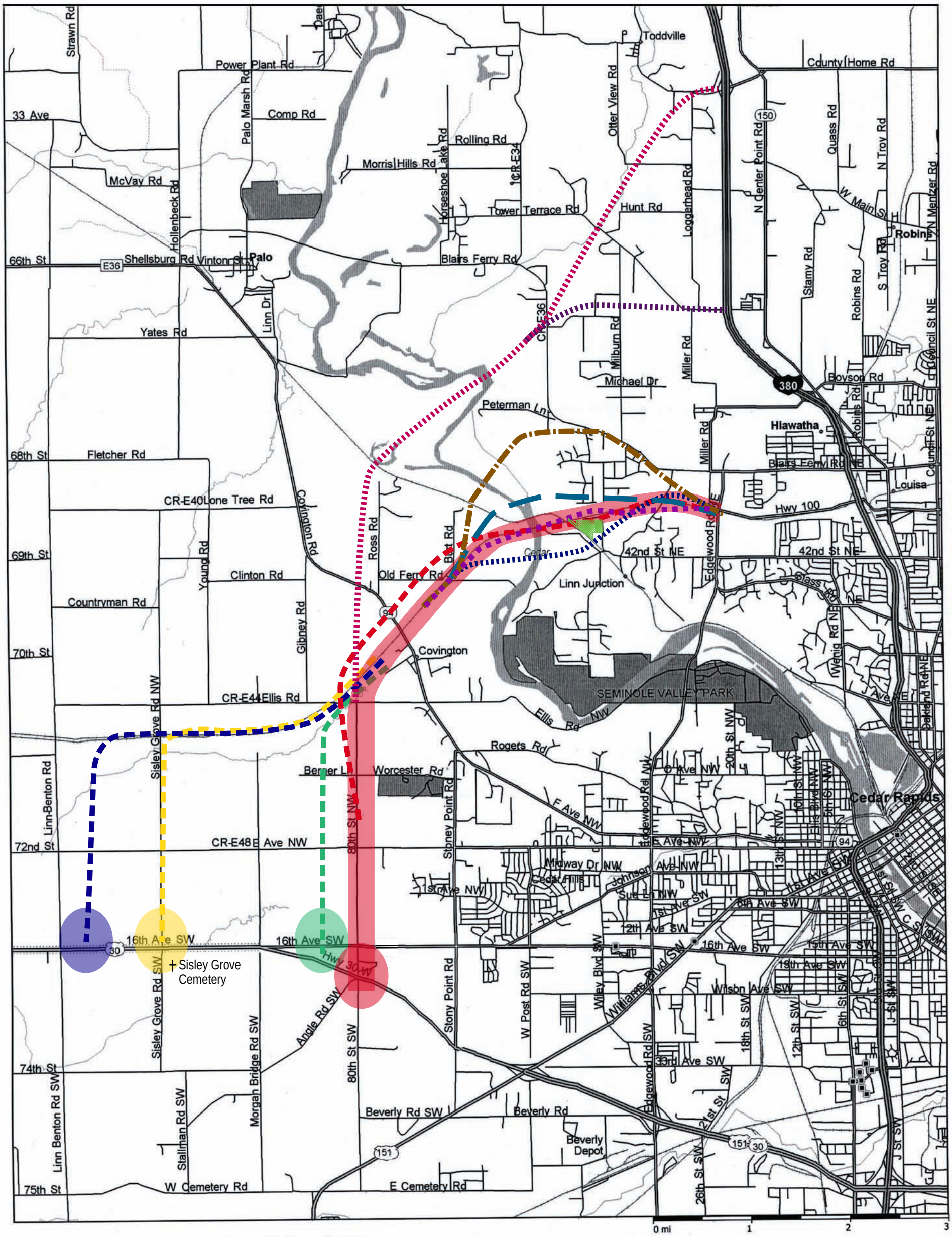
PROPOSED I-380 IN 1980

CONSTRUCTED U.S. 30 AS OF 1980

PROPOSED U.S. 30 IMPROVEMENT IN 1980

Source: 1979 Final EIS

FIGURE F-2
Iowa 100 and U.S. 30
Recommended Alternate



LEGEND

- Alignment Alternative 1 Corridor
- Alignment Alternative 2
- Alignment Alternative 3
- "Far West" Alignment Alternative
- "Near West" Alignment Alternative
- "Half-Section Line" Alignment Alternative
- Railroad Corridor North Alternative
- Railroad Corridor South Alternative
- Blairs Ferry Road Alternative
- Tower Terrace Road Alternative
- County Home Road Alternative
- Rock Island State Preserve

Figure F-3
Alternatives Considered in the DSEIS

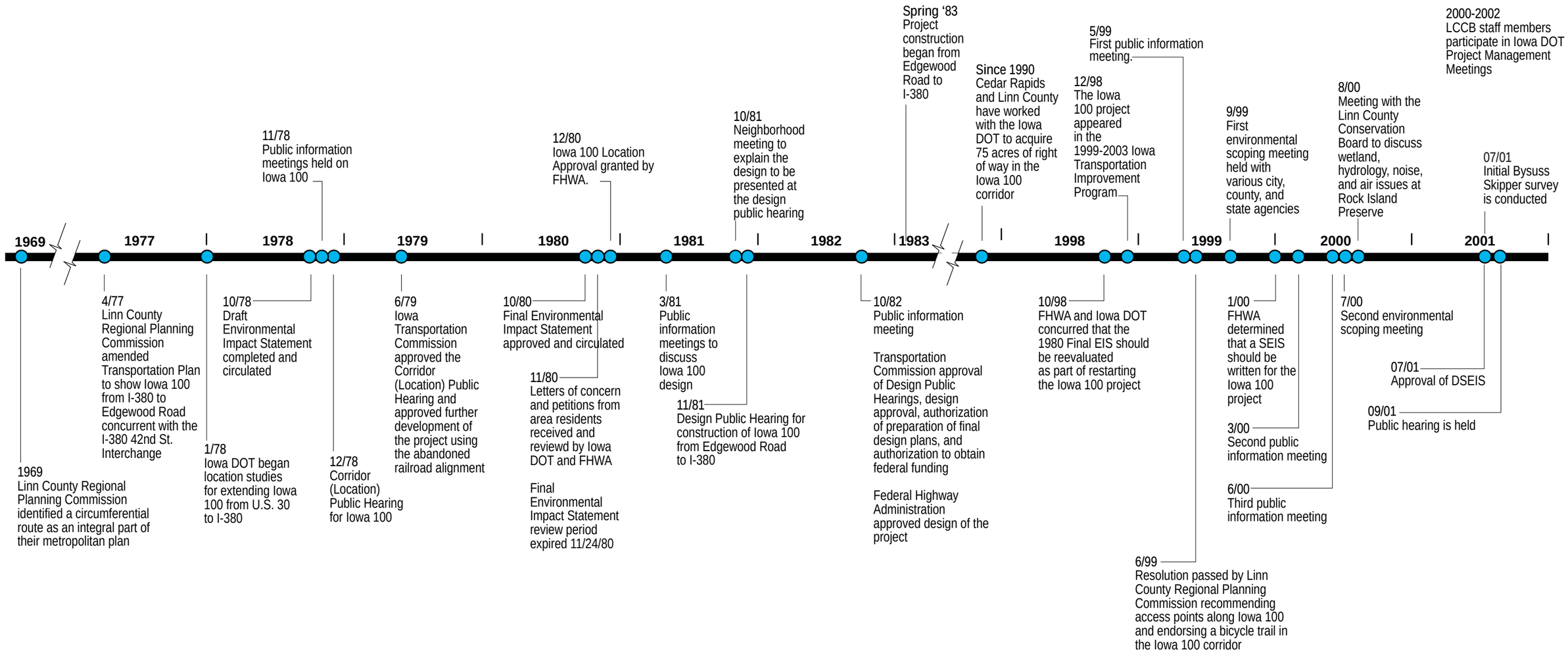


FIGURE F-4
Chronology of the Iowa 100 Project Through the 2001 Public Hearing

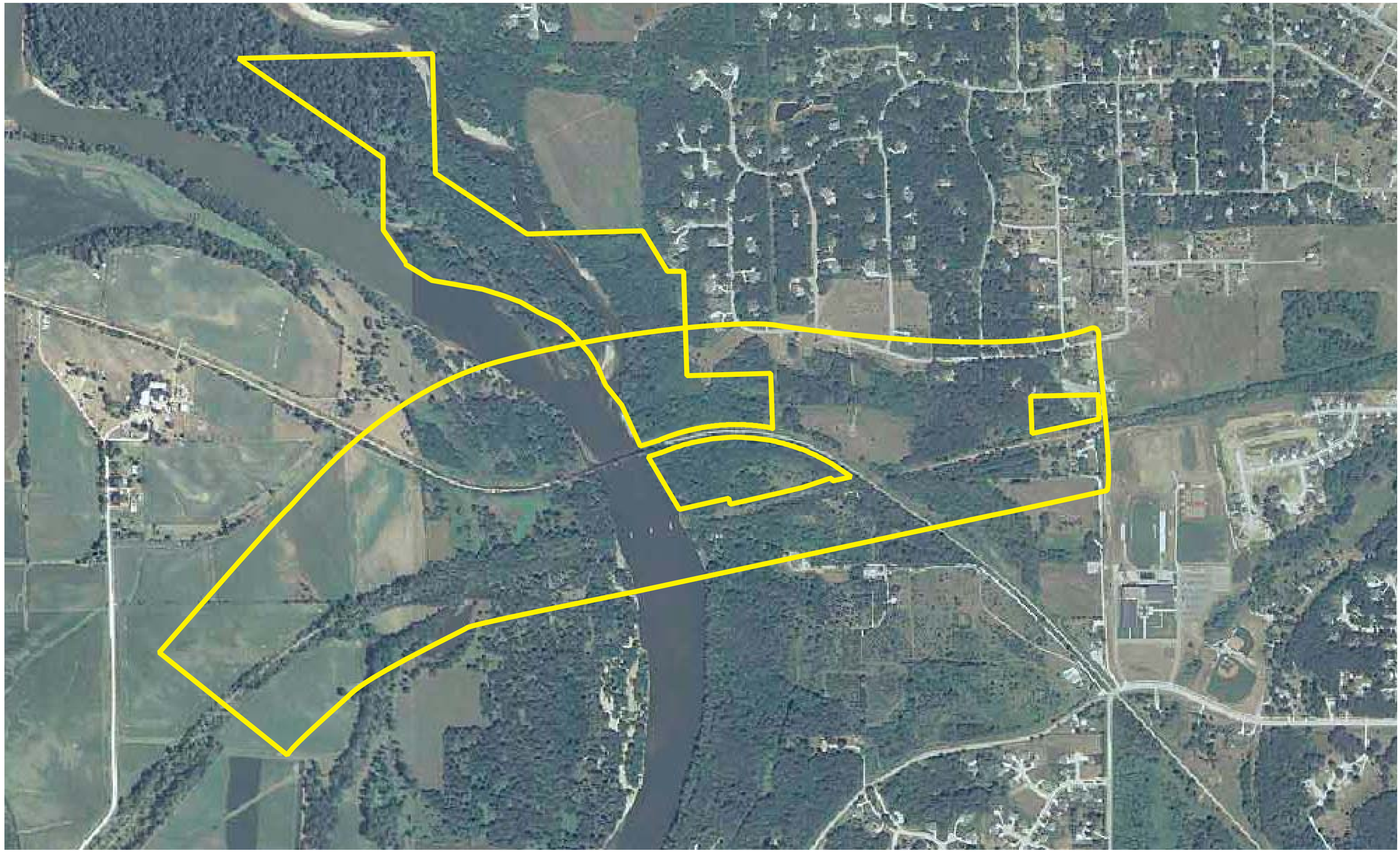


FIGURE F-5
2002-2004 Field Study Areas

Summary

Summary of Project Location

The Iowa 100 extension study area is located on the west side of Cedar Rapids in Linn County in east central Iowa. The arcing 8-mile project corridor would connect Edgewood Road (the terminus of Iowa 100) on the northeast and US 30 on the southwest (Figure S-1).

Summary of Proposed Action

The FHWA and Iowa DOT propose to extend Iowa 100 as an access-controlled, four-lane divided facility on new location from US 30 southwest of Cedar Rapids to Edgewood Road. Beginning at US 30, Iowa 100 would be a four-lane divided, rural facility parallel with 80th Street to near Ellis Road. North of Ellis Road, the Iowa 100 extension would generally follow an abandoned railroad right-of-way to near the west side of the Cedar River. The Iowa 100 extension would cross the Cedar River just north of the Iowa Northern Railroad bridge and curve southeast passing between the east unit of the Rock Island County Preserve and the Rock Island State Preserve. East of there it would follow the former railroad right-of-way to the project terminus at Edgewood Road.

Iowa 100 would transition from a four-lane divided, rural highway to an urban four-lane divided highway on the east side of the Cedar River. Interchanges are being studied at US 30, E Avenue, Covington Road (formerly Iowa 94), and Edgewood Road.

Summary of Purpose and Need for Proposed Action

The proposed Iowa 100 extension has the following objectives:

- Reduce congestion and associated problems on the road network in the area adjacent to the proposed Iowa 100 extension.
- Provide an efficient connection between the west side of Cedar Rapids (and beyond) to I-380, the city's northeast side, and the City of Marion.
- Provide transportation improvements to accommodate planned growth and associated travel demand increases on the west side of Cedar Rapids.
- Provide an alternate route for through traffic in the event of major traffic stoppages on I-380 or Edgewood Road.

The need for the proposed action is based on a combination of factors related to:

- **Travel demand—** As noted in the 2030 Plan, travel on metropolitan area streets and highways grew from 1.85 million vehicle miles of travel per day in 1980 to about 3.3 million vehicle miles of travel per day in 1994. The 2040 Plan indicates that 4 million vehicle miles of travel were logged per day in 2000. This growth in daily vehicle miles of

travel is expected to continue at roughly 2 percent per year to the year 2040, reaching nearly 8 million vehicle miles of travel per day. With increasing traffic volumes in the metropolitan area expected to continue through 2030, travel times on the network adjacent to the Iowa 100 extension would be expected to increase. The greatest changes would be on Edgewood Road (from Blairs Ferry Road to F Avenue).

- **System and route continuity—** Because of its southwest to northeast alignment, the extension of Iowa 100 would be a major highway providing north-south and east-west access linking western Cedar Rapids (and areas beyond) with I-380 and other parts of northern Cedar Rapids. The Iowa 100 extension would serve as a backbone for several major east-west arterials such as Iowa 94, Ellis Road, E Avenue, and 16th Avenue. Iowa 100 extended would provide an important connection between the north side of Cedar Rapids and destinations along US 151, US 6, and I-80 southwest of Cedar Rapids. It would also complete a gap in the existing river crossings in the metropolitan area, especially on the northwest side where development has been increasing historically and is planned for the future. Existing Iowa 100 and the proposed Iowa 100 extension are part of Iowa's National Highway System and the state's commercial industrial network. Both designations reflect the importance of the Iowa 100 extension's importance not only to the Cedar Rapids' area, but also to the state's highway network.
- **Transportation and land use planning—** The Iowa 100 extension was first identified as a transportation need by the LCRPC in 1969 as part of its long-range metropolitan plan. The LCRPC's 2040 Transportation Plan identified the extension of Iowa 100 as a major street improvement priority "intended to address forecasted short and long range automotive travel demands in the metro area." The transportation element of the city's Comprehensive Plan identifies the Iowa 100 extension as a "freeway" that would serve as a backbone for a network of major arterials. The land use element of the Plan considers the extension of Iowa 100 as an important component in the continued orderly development of Cedar Rapids.
- **Safety—** The increasing traffic volumes on the roadway network in the Cedar Rapids area correspond to potential increases in crash rates. As historical crash rates demonstrate, four-lane divided highway facilities traditionally have lower crash rates than two-lane primary roads and city streets. Diversion of traffic from the local network to a four-lane divided highway would be expected to limit the increase in crashes as traffic volumes in the metropolitan area continue to grow.

See Section 1 for more detailed information on the project's purpose and need.

Summary of Alternatives

The 2001 Draft Supplemental Environmental Impact Statement (DSEIS) examined a number of alternatives within and outside the FHWA-approved 1980 project corridor. Those alternatives are not reexamined here. A description of those alternatives is found in Section 2 of the DSEIS on the CD at the back of this document. Section 2 of this document describes Iowa DOT's 2007 preferred alternatives and the alternatives developed in the vicinity of the Rock Island Preserve after the September 2001 public hearing. The screening process for those alternatives is described in the Final Section 4(f) analysis which follows Chapter 5.

No-Build Alternative

Under the No-Build Alternative, no additional capacity would be provided to Iowa 100 (Collins Road) or other west side arterials unless they are part of the LCRPC's existing and committed network, as described in the *2040 Transportation Plan for the Cedar Rapids Iowa Metropolitan Area* (see Chapter 7 of the Plan, Major Streets).

The No-Build Alternative would fail to address purpose and need with respect to future traffic demand and safety concerns. As traffic volumes and congestion increase under the No-Build Alternative, safety problems would worsen. Further, it would not be consistent with the Cedar Rapids Comprehensive Plan, which documents the importance of Iowa 100 to serve planned development on the city's west side.

Preferred Alternative

The 2007 preferred alternative is a refinement of Alternative 1, the recommended alternative in the 2001 DSEIS and the recommended alternative from 1979. The preferred alternative, as described below, is located within the corridor FHWA approved on December 9, 1980. It is important to note that the preferred alternative meets the project's revised Purpose and Need (see Section 1 for more information) within the originally approved Iowa 100 corridor.

The preferred alternative begins at the proposed US 30 interchange. North of the interchange it is aligned west of 80th Street to near Ellis Road. A diamond interchange is proposed at E Avenue. Iowa 100 would pass over Ellis Road and Silver Creek on structure. North of Ellis Road and Silver Creek, Iowa 100 would cross the former railroad right-of-way before curving northeast toward the Cedar River. Iowa 100 would pass under Covington Road where a diamond interchange is proposed. North of the proposed Covington Road interchange, Iowa 100 continues northeast and crosses under Old Ferry Road and over the active Iowa Northern Railroad and the Cedar River on an approximately 1,650-foot-long structure about 800 feet north of the 2001 recommended alternative crossing. East of the Cedar River, Iowa 100 would be located just north of the Iowa Northern Railroad right-of-way. After passing through the Rock Island County Preserve, Iowa 100 would continue southeast. East of the Rock Island State Preserve, Iowa 100 would continue east along the north side of the former railroad right-of-way and pass under Ushers Ferry Drive. East of Ushers Ferry Road Iowa 100 would pass over Edgewood Road where a diamond interchange is proposed. The Iowa 100 extension would tie into the existing alignment east of the proposed interchange.

The preferred alignment addresses the transportation needs on Cedar Rapids' west side by providing the best long-term transportation service for the City of Cedar Rapids and the metropolitan area. It provides balance among social, economic, and natural resource impacts, and is consistent with local transportation and land use planning objectives. The extension of Iowa 100 is supported by the City of Cedar Rapids and the Linn County Regional Planning Commission. It has also received general public support although the local chapter of the Sierra Club and other members of the public are opposed to the project because of its alignment through the Rock Island County Preserve. The preferred alternative was supported by state and federal review agencies during a coordination meeting on June 26, 2007.

Summary of Environmental Impacts

Impacts that have been quantified for the preferred alternative and its proposed interchanges are summarized in the Impact Summary Table (Figure S-2).

The preferred alternative would acquire property from the Rock Island County Preserve, a Section 4(f) resource. The land for the County Preserve was donated to the Linn County Conservation Board (LCCB) in 2002 after the recommended alternative was identified and presented to the public at the September 2001 public hearing. The County Preserve and the original Rock Island State Preserve were designated as Section 4(f) resources in 2005. A Draft Section 4(f) Evaluation was prepared and distributed for agency review in December 2006. A copy of that evaluation is on the CD at the back of this document. The Final Section 4(f) Evaluation is found after Section 5 of this FSEIS. It describes the screening process used to refine the nine new alternatives developed in the area of the Rock Island Preserve to one alternative. The mitigation plan for impacts to the County Preserve is also described. The Iowa DOT will continue to coordinate with the LCCB about the mitigation plan in future stages of project development.

The proposed project would impact potential habitat for the ornate box turtle and the Blanding's turtle, both state-threatened species. Mitigation is proposed for the habitat of both species. Further coordination will occur with the Iowa Department of Natural Resources concerning these species in future stages of project development.

Other potential Iowa 100 impacts include noise impacts and potential erosion and sedimentation during construction. See Section 4. The project's natural resource and socioeconomic impacts are also discussed in Section 4.

Based on the field studies from 2000 to 2005 and the analysis of the preferred alternative, it was determined that neither the changes that have occurred in the project area nor the impacts of the preferred alternative should alter the corridor-location decision as approved by the Federal Highway Administration in 1980.

Period for Proposed Action

Following completion of this Final Supplemental EIS and Record of Decision, the project will be ready to move into the next stage of project development. No timetable for the completion of roadway design plans, real estate acquisition, or construction has been established at the time of FSEIS printing.

Lead Agency

The lead agency for purposes of the Final Supplement to the 1979 FEIS is the Federal Highway Administration in consultation with the Iowa DOT.

Other Government Agency Actions

The proposed improvement of Iowa 100 is one of numerous transportation projects the Linn County Regional Planning Commission has identified in their 2040 Transportation Plan for the

metropolitan area (see Table S-1). The range of improvements recommended by the Planning Commission, which are based in part on traffic model results, are designed to safely accommodate existing and future traffic volumes in the metropolitan area. As can be seen by the number of projects and their distribution across the metropolitan area, any individual project will have limited impact on correcting travel deficiencies throughout the network. The range of projects is designed to work together to address deficiencies throughout the network.

TABLE S–1
Listing of Recommended Roadway Improvements and Additions

Corridor Improvement Projects (include intersection improvements where needed)	New Roadways and Extensions (include intersection improvements where needed)
Blairs Ferry Rd NE, Edgewood to Milburn (5 lanes)	IA Hwy 100, US Hwy 30 to Edgewood Rd (access controlled highway)
Edgewood Rd NE, 42nd St to Blairs Ferry (6 lanes and turn lanes)	Tower Terrace Rd, Blairs Ferry Rd to IA Hwy 13 (5-lane roadway)
Collins Rd NE, 1st Ave E to Council (6 lanes)	Artesian Rd, Alburnett Rd to IA Hwy 13 (2-lane roadway)
42nd St NE, Interstate 380 to Northwood (Center Turn Lane)	Alburnett Rd Marion, Edinburgh Ave to Marion Blvd (2-lane roadway)
1st Ave East, 40th St to Lindale Entrance (7 lanes)	35th St Marion, 29th Ave to Lucore (2-lane roadway)
Interstate 380, On- and Off-Ramps at 7th and 8th Streets NE (dual lanes)	Edgewood Rd Hiawatha, Blairs Ferry Rd to Tower Terrace (5-lane Roadway)
Williams Blvd SW, US Hwy 30 through Fairfax (5 lanes)	60th Ave SW, 6th St to Kirkwood Blvd at 66th St (2-lane roadway)
Edgewood Rd NW, O Ave to Crestwood (Center turn lane and access control)	Armar Dr Marion, Existing Armar to IA Hwy 100 (2-lane roadway)
Wright Brothers Blvd SW, 6th St to C St (5 lanes)	
County Home Rd, Interstate 380 to IA Hwy 13 (turn lanes)	
Rosedale Rd SE, Squaw Ridge Rd to Mt Vernon Rd (realign, improve)	
7th Ave Marion, 14th St to 31st St (center turn lane)	
8th Ave Marion, Lindale Dr to N 10th St (center turn lane)	
N 10th St Marion, 7th Ave to Tower Terrace Rd (center turn lane)	
Center Point Rd Hiawatha, Boyson to Tower Terrace (center turn lane)	
Center Pt Rd Robins, Tower Terrace to County Home (center turn lane)	
Main St Robins, Robins Rd to Westfield School (center turn lane)	
Boyson Rd NE, Edgewood Rd to I-380 (turn lanes)	
6th St SW, US30 to Wright Brothers Blvd (5 lanes)	

Note: Final design of improvements may vary, but each project is expected to result in accident and/or capacity improvements equivalent to those of the improvements shown.

Source: Department of Community Development, Linn County Regional Planning Commission. *2040 Transportation Plan for the Cedar Rapids Iowa Metropolitan Area*.

The proposed improvements presented in the table above are presented as a package to address existing and future transportation deficiencies. These projects are not directly related to the location decision proposed in this study; however, they are components of the transportation plan developed for the area.

Other Activities Required

Surface water and wetland impacts associated with the preferred alternative are subject to permits from the Army Corps of Engineers under Section 404 of the Clean Water Act and associated water quality certification (Section 401) from the Iowa DNR. A Section 402 National Pollutant Discharge Elimination System (NPDES) Construction Permit from the Iowa DNR will also be required. Mitigation for impacts to Blanding's turtle and ornate box turtle habitat would require coordination with the Iowa Department of Natural Resources.

Relocation assistance plans for potentially displaced businesses would require approval before being implemented. The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, provides for payment of just compensation for property acquired for a federal aid project. The relocation program provides assistance to displaced persons in finding comparable housing that is decent, safe, and sanitary. This applies to businesses, farms, nonprofit organizations, and residential properties.

Regulatory Compliance

The planning, agency coordination, public involvement, and impact evaluation for the project have been coordinated in accordance with the National Environmental Policy Act, the Clean Water Act, the Clean Air Act, the Farmland Protection Policy Act, Executive Order 11988 on Wetland and Floodplain Protection, Executive Order on Environmental Justice 12898, Executive Order 11990, Protection of Wetlands, Executive Order 11988 on Floodplain Management, the Fish and Wildlife Coordination Act, the Endangered Species Act, the National Historic Preservation Act, the 1899 Rivers and Harbor Act, and other state and federal laws, policies and procedures for environmental impact analyses, and preparation of environmental documents.

This document is in compliance with U.S. Department of Transportation and FHWA policies to determine whether a proposed project will have disproportionate impact on minority or low-income populations. It meets the requirements of the Presidential Executive Order on Environmental Justice 12898, "Federal Actions to Address Environmental Justice in Minority and Low-Income Populations." Neither minority nor low-income populations would receive disproportionately adverse impacts with the preferred alternative.

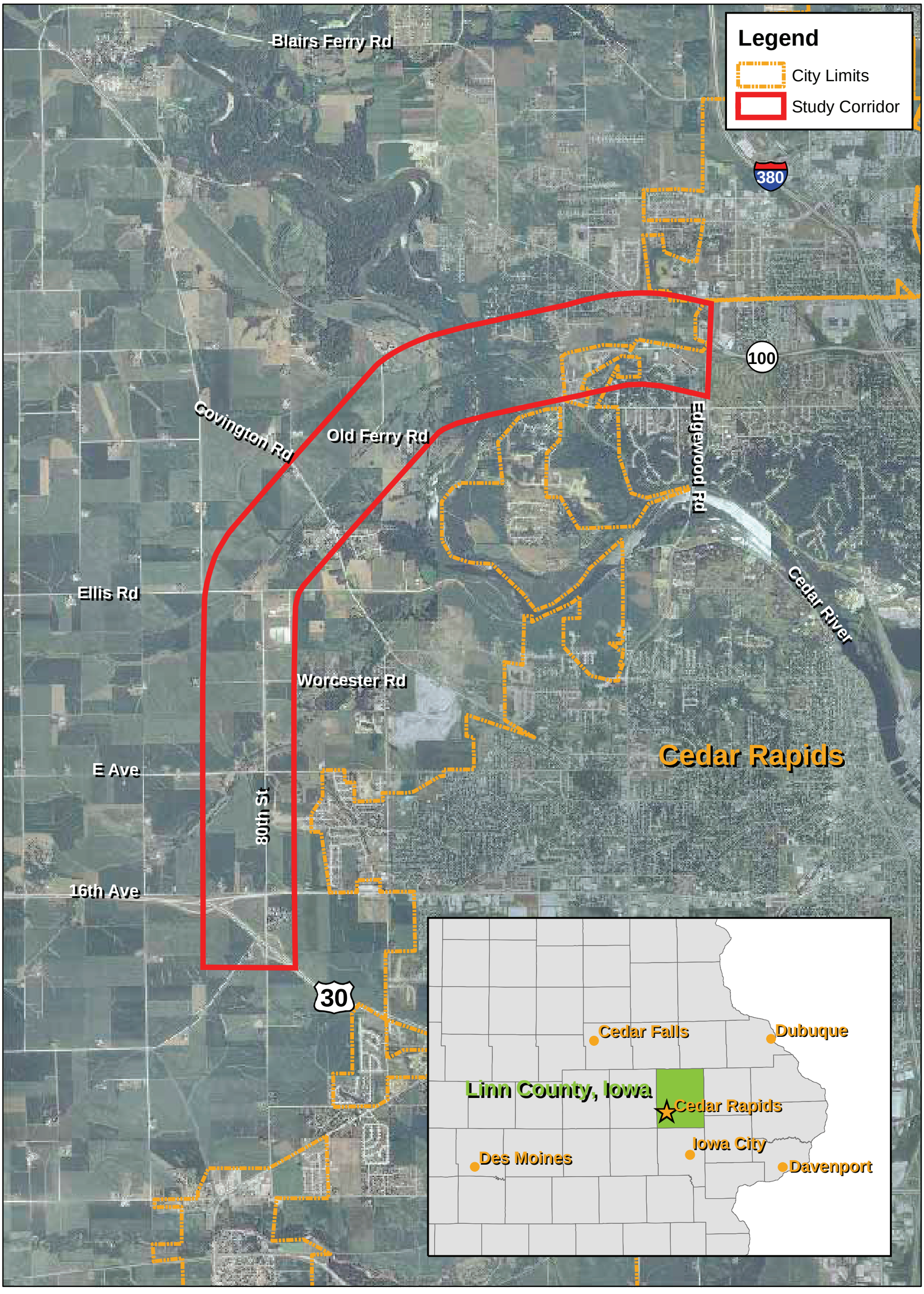


FIGURE S-1
Project Location Map

Environmental Issue	Unit of Measure	Preferred Alternative
Project Length	Miles	8
Cost		
Construction	Million $	$128 M
Right-of-Way Required		
Total Area Required	Acres	432.3
New Area Converted to ROW	Acres	306.6
Existing ROW Used	Acres	125.7
Land Conversion		
Residential Property Converted to ROW	Acres	12.8
Agricultural Property Converted to ROW	Acres	272.7
Preserve / Open Space Converted to ROW	Acres	6.4
Other Land Uses	Acres	52.3
Real Estate		
Number of Farms Affected	Number	21
Area Required from Farm Operations	Acres	272.7
Housing Units Required (including farmhouses)	Number	13
Businesses Required	Number	1
Environmental Issues		
Floodplain Crossings	Number	4
Stream/River Crossings	Number	4
State Threatened & Endangered Species	Yes/No	Yes
Historic & Archaeological Properties	Number	0
Design Year Noise Receptors Impacted	Number	50
Contaminated Sites	Number	0
Wetlands Impacted	Acres	27.9
Forest/Upland Impacted	Acres	12.7

Notes: The impact summary table presents only those impact comparisons that have been quantified.
Preliminary planning-level cost estimate (year 2007 dollars) includes construction, structures, right-of-way, real estate, utility relocations, administrative/engineering and contingency cost.
Acqusition of wetlan mitigration sites is not included in the cost estimate.
Approximately 75 acres of ROW is already in public ownership. Some of this acreage is included in the calculations of the "Other" category listed above.
"Other" land uses includes some property in public ownership, utility buildings, the water treatment plant, and similar uses.

Figure S-2
Impact Summary Table