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Improvement of U.S. 151
Jones County
Segment 3 - Anamosa to Monticello

Project Number
NHS-151-3(84)--19-57

ENVIRONMENTAL ASSESSMENT

Submitted Pursuant to 42 USC 4332(2)(c)

By The

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
and
IOWA DEPARTMENT OF TRANSPORTATION
Planning and Research Division
Office of Project Planning

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I. DESCRIPTION OF THE PROPOSED ACTION

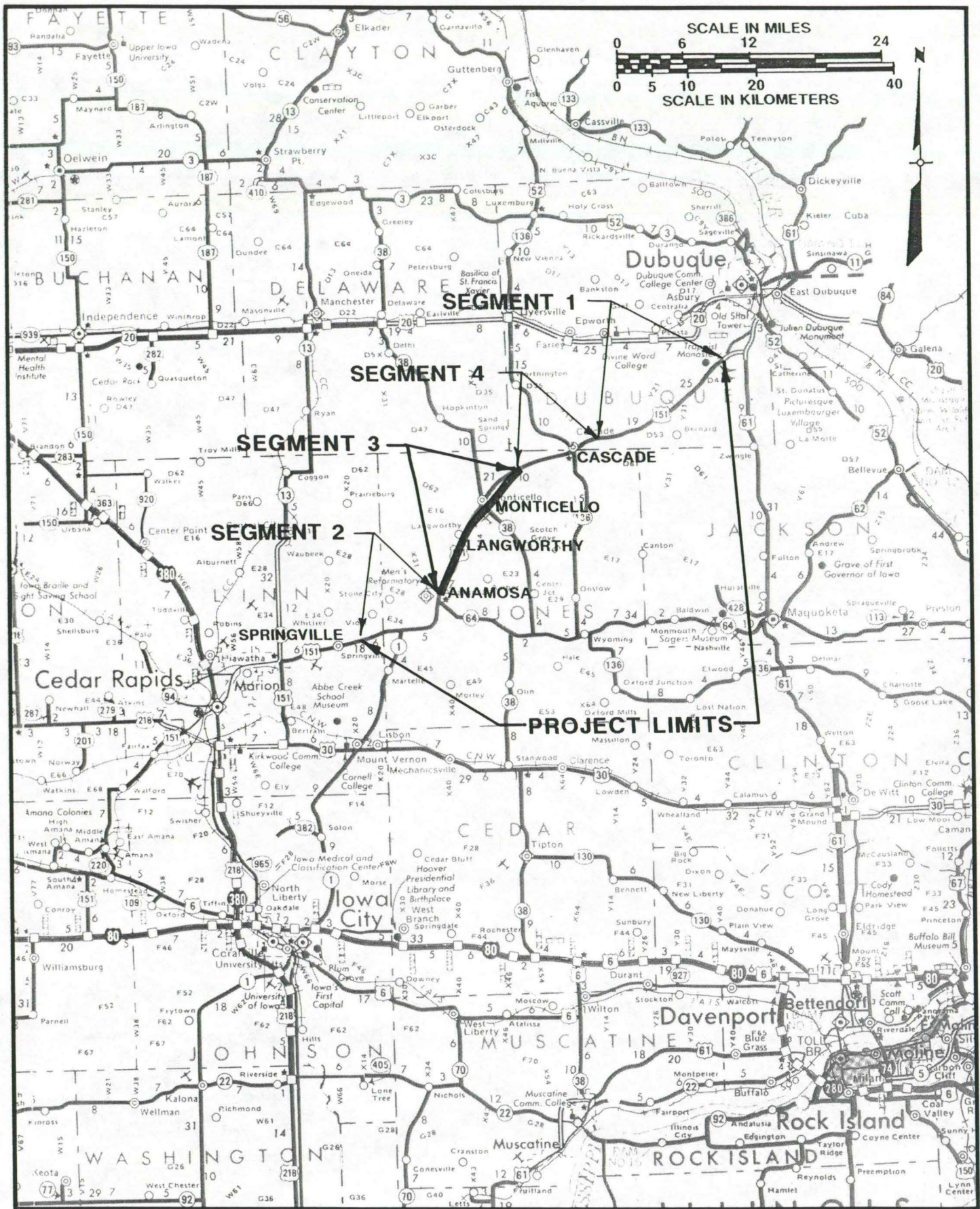
The proposed project (Segment 3) begins immediately north of the U.S. 151 and Iowa 64 interchange at Anamosa and extends north and east to 6 kilometers (3.7 miles) northeast of Monticello (Figure 1). This segment includes potential bypasses of Langworthy and Monticello. The project length is approximately 24 km (15 miles).

The proposed action would provide a 4-lane divided facility with a 20.8-meter (68-foot) median and 400-meter (1/4 mile) access spacing. Interchanges are proposed at County Road X-44, just south of Monticello and at Iowa Highway 38, and no access to the new highway would be allowed between the interchanges.

Segment 3 is part of four contiguous projects that would combine with existing 4-lane roadway on either end to provide a 4-lane facility between Cedar Rapids and Dubuque (Figure 1). Separate environmental documents are being prepared for each segment. The segments are divided as follows:

<u>Segment No.</u>	<u>Segment Limits</u>
1	1 km (0.7 Mile) East of Cascade to 3.6 km (2.3 Miles) West of U.S. 61; Segment Length 23.8 km (14.8 Miles)
2	3.3 km (2 Miles) East of Springville to Iowa 64; Segment Length 14 km (8.5 Miles)
3	Iowa 64 to 6 km (3.7 Miles) Northeast of Monticello; Segment Length 24 km (15 miles)
4	6 km (3.7 Miles) North of Monticello to 1 km (.7 Mile) East of Cascade; Segment Length 13 km (8 Miles)

The southern limit for Segment 3 is the northern edge of the proposed Iowa 64 interchange at Anamosa. The northern limit for this segment is located 6 km (3.7 miles) northeast of Monticello. This point was selected to encompass all proposed alternatives which would bypass Monticello.



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ANAMOSA TO MONTICELLO
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**FIGURE 1
PROJECT LOCATION**

II. PROJECT HISTORY

The U.S. 151 improvement from Springville north to U.S. 61 has been included in the planning study section of the Iowa DOT 5-Year Plan since 1991.

Public involvement for this segment of U.S. 151 began in 1991. In that year, a committee in Monticello consisting of city officials and other interested persons developed the U.S. 151 Detour Economic Impact Report. This report presented the results of an economic analysis of a proposed 2-year detour around Monticello. These results were presented to the Iowa Department of Transportation Commission on September 17, 1991.

In November, 1991, Iowa DOT held a public meeting to present information on the potential impacts of bypasses on communities and to discuss applicable constraints in locating bypass corridors around Monticello. In early 1992, Iowa DOT proposed two alternative Monticello bypass corridors to the Monticello Chamber of Commerce and the public.

In January and February, 1993, public information meetings were held in Anamosa, Monticello and Cascade, to inform local officials and residents of this project and to receive input from them early in the planning process. Input received during that meeting is described in the Comments and Coordination section later in this EA.

III. PROJECT NEED

The primary purpose of this project is to provide an improved level of service on U.S. 151 through the study corridor. Continued commercial and industrial development in the project corridor, along with the increase in through traffic, is predicted to increase future traffic volumes. Truck traffic is currently about 13 percent of the overall volume in the rural areas; this is projected to increase to 18 percent in some segments in the future.

U.S. 151 is a component of the state's Commercial and Industrial Highway Network. The purpose of that network is to improve the flow of commerce; to make travel more convenient, safe and efficient; and to better connect Iowa with regional, national and international markets. Under the plan, the commercial network would be rebuilt or modernized to the best 2-lane highway standards and, where traffic and economic growth warrant, to construct 4-lane highways. Urban bypasses would be constructed to improve traffic flow where feasible and prudent.

A 4-lane highway improvement, together with the proposed urban bypasses, would improve traffic service levels and safety throughout the corridor by reducing traffic congestion and the probability of accidents. The proposed project would improve traffic flow and provide a link to regional transportation improvements in northeast Iowa, including U.S. 30, U.S. 61 and the proposed Avenue of the Saints from St. Louis, Missouri, to St. Paul, Minnesota. These regional improvements would also enhance economic development opportunities.

A. Present Facility

The original construction of this road dates to 1928. Widening of the road occurred in 1960 and asphalt resurfacing of the various segments was last completed in 1982 and 1983. The current pavement width is 7.3 m (24 feet), with shoulders ranging in width from 0.9 m to 2.7 m (3 feet to 9 feet).

Access to the present highway is permitted at all public roads and at private entrances. The present spacing between access points ranges from 12 m (39 feet) to 1,430 m (4,691 feet).

B. Sufficiency Ratings

Sufficiency ratings in Iowa consist of three major components:

- The Roadway's Structural Adequacy
- Motorist's Safety
- Capability to Accommodate Traffic Volumes With a Minimum of Conflict

Sufficiency ratings are classified as follows:

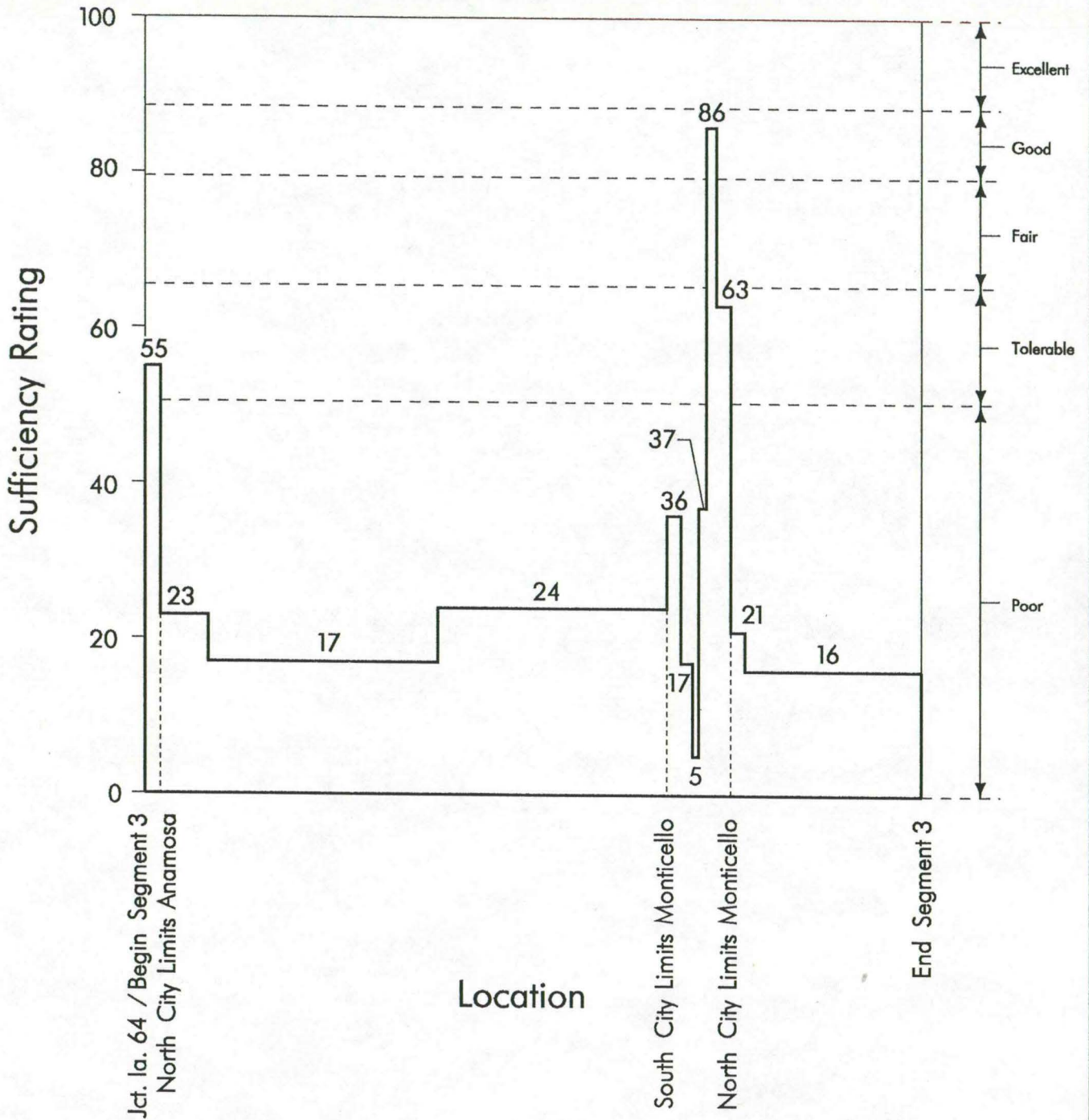
<u>Range</u>	<u>Descriptive Classification</u>
90-100	Excellent
80-89	Good
65-79	Fair
50-64	Tolerable
0-49	Poor

For this segment, sufficiency ratings are mostly in the "poor" range. Only three areas are rated higher, one in the "good" range and two in the "tolerable" range (Figure 2). These three areas are all located within the corporate limits of Anamosa and Monticello. These ratings do not reflect the 3-lane improvement to U.S. 151 in Monticello which took place in the summer of 1993.

C. Traffic Forecasts

The 1992 average daily traffic counts (ADT) range from 4,770 to 10,200 vehicles per day on U.S. 151 between Iowa Highway 64 and County Road D-65; 7 to 13 percent is truck traffic. Existing volumes and traffic forecasts for the year 2016 are presented in Figures 3A through 3C.

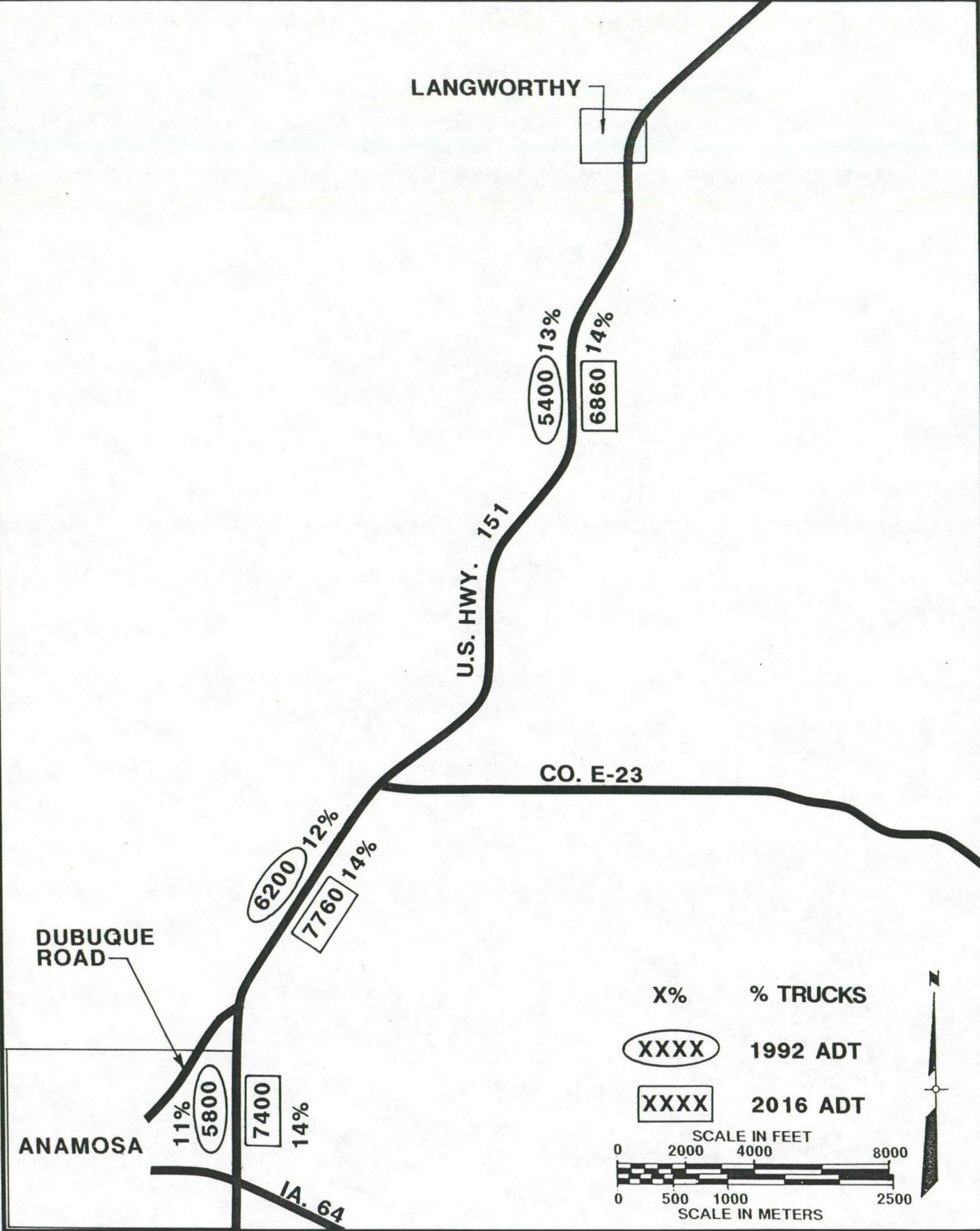
With any of the Monticello Bypass Alternatives, average daily traffic on U.S. 151 is expected to range from 3,240 to 7,760 in the year 2016. From 14 to 18 percent of the future traffic on U.S. 151 is projected to be truck traffic (Figures 3A and 3B). Several bypass alternatives are being considered, and the projected volumes vary slightly, depending on the alternative. If a bypass is constructed, traffic on existing U.S. 151 through Monticello is expected to be between 3,760 and 12,500 by the year 2016, with 5 to 13 percent truck traffic (Figure 3B).



SOURCE: Iowa Department of Transportation - Iowa Primary Road Sufficiency Log, 1993

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FIGURE 2
SUFFICIENCY RATINGS



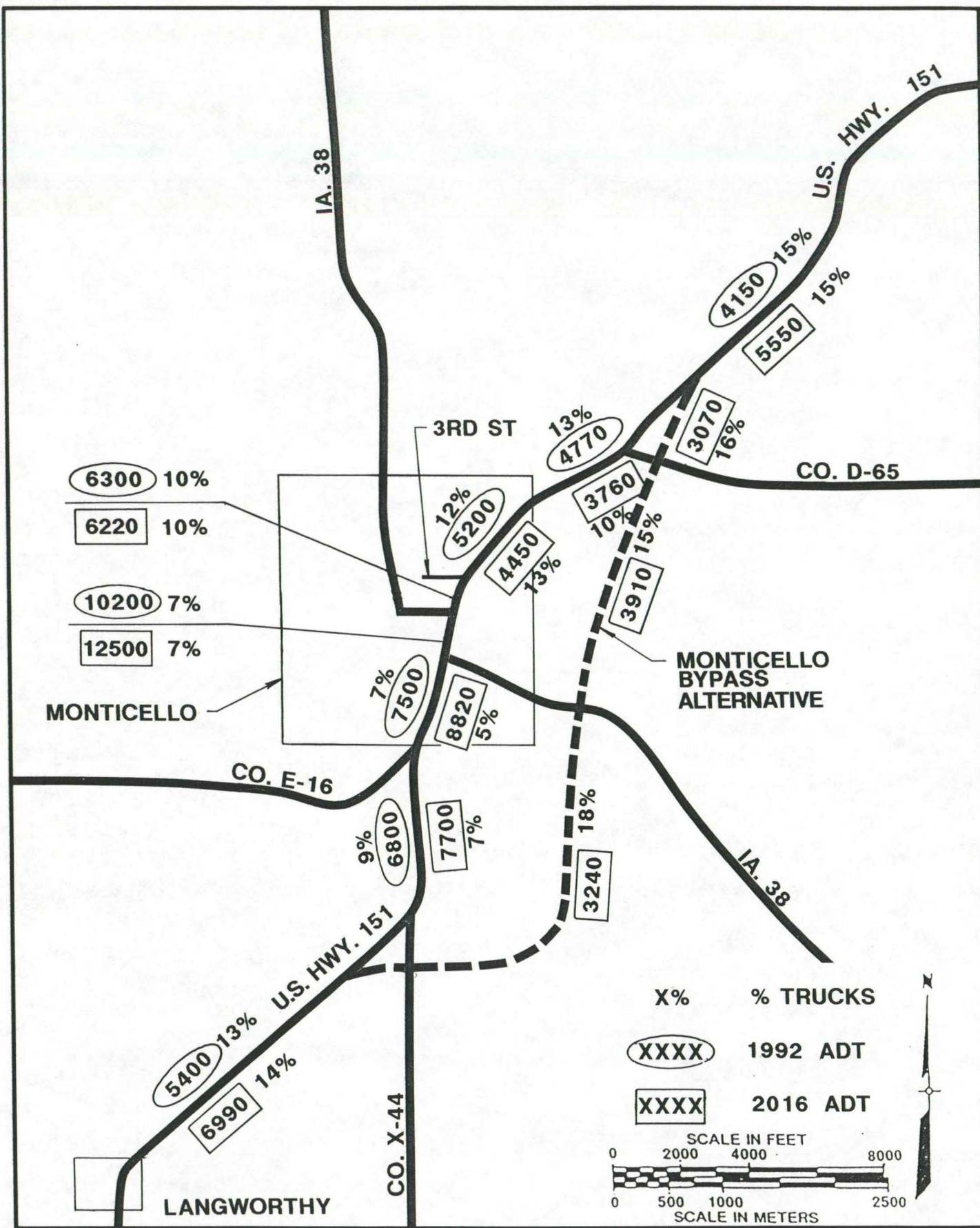
X%	% TRUCKS
(XXXX)	1992 ADT
[XXXX]	2016 ADT

SCALE IN FEET
0 2000 4000 8000

SCALE IN METERS
0 500 1000 2500

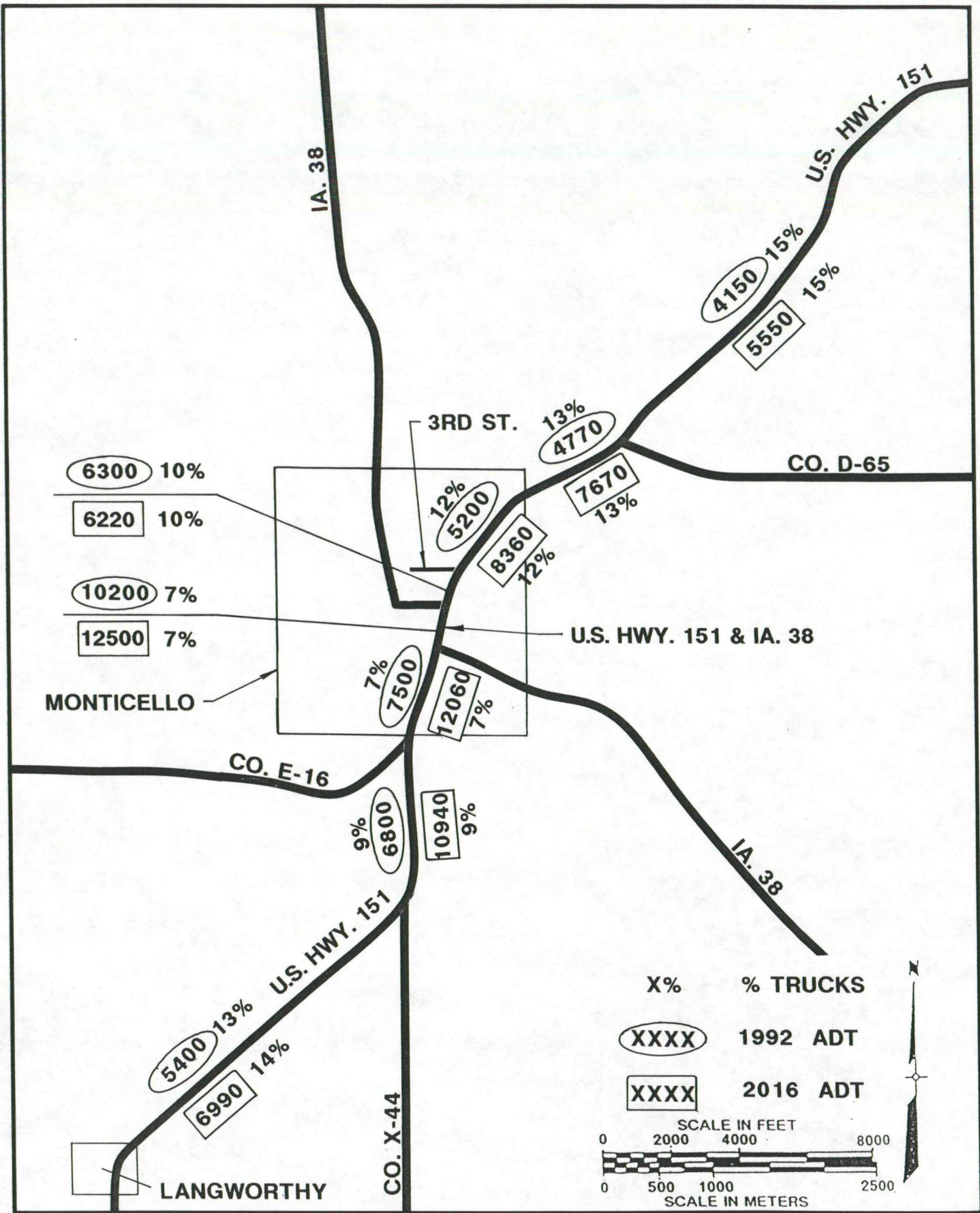
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FIGURE 3A
 AVERAGE DAILY TRAFFIC FORECASTS
 DIVISION 1



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FIGURE 3B
AVERAGE DAILY TRAFFIC FORECASTS
BYPASS ALTERNATIVES
DIVISION 2



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FIGURE 3C
 AVERAGE DAILY TRAFFIC FORECASTS
 IMPROVE EXISTING STREETS ALTERNATIVE
 DIVISION 2

With the Improve Existing Streets Alternative, traffic on existing U.S. 151 through Monticello is expected to increase to between 7,670 and 16,410 ADT in the year 2016 (Figure 3C).

D. Accident Data

Accident data for Segment 3 of U.S. 151 appear in Table 1 and Figure 4. Between July 1, 1987, and June 30, 1992, 324 accidents occurred in this segment, including two fatalities. Thirty of the accidents (9 percent) were animal-related.

The state of Iowa summarizes accident statistics according to roadway section. Four roadway sections occur in this segment of U.S. 151, as follows:

- Iowa Highway 64 to Dubuque Road (Located on the North Edge of Anamosa, Figure 3A)
- Dubuque Road to South City Limits of Monticello
- South City Limits to North City Limits of Monticello
- North City Limits of Monticello to End of Segment 3

The roadway sections of U.S. 151 outside of Monticello had accident rates of 152, 148 and 157 accidents per hundred million vehicle miles traveled (HMVM) for the 5-year period ending June 30, 1992 (Figure 4). This ranged from 14 percent to 21 percent higher than the statewide average for rural primary highways (130 accidents per HMVM). The section within the Monticello city limits had an accident rate of 757 per HMVM; this is 35 percent higher than the statewide average of 562 for municipal areas in Iowa.

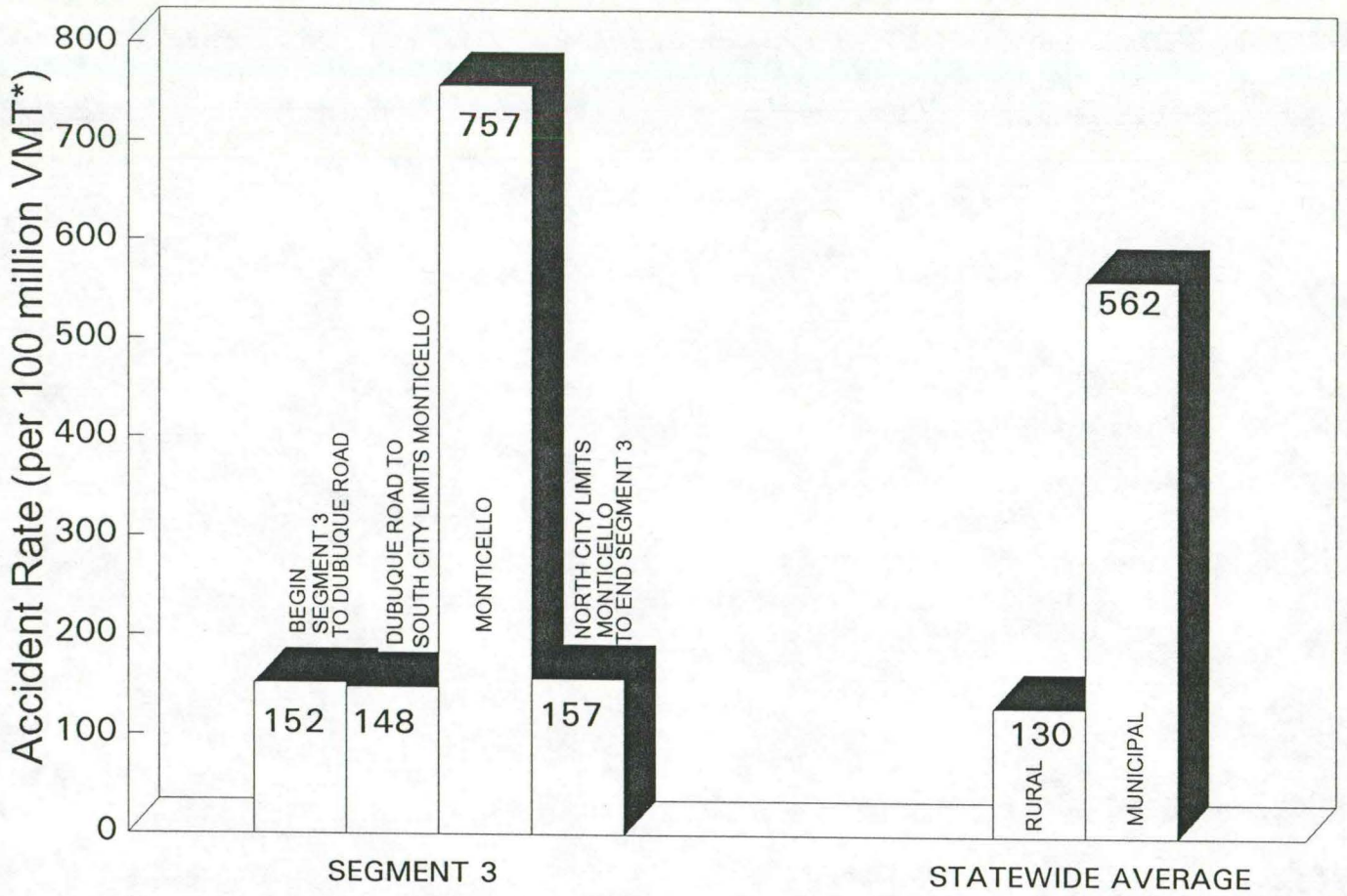
The three highest accident locations were in or near Monticello at the intersections of U.S. 151 with First Street, Washington Street and with County Route X-44 (25, 10 and 7 accidents, respectively). Within Monticello, 15 other intersections or business driveways had multiple accidents, ranging from 2 to 6 during the 5-year period.

TABLE 1
ACCIDENT SUMMARY
SEGMENT 3

Section**	Section Length Kilometers (Miles)	Total Accidents	Property Damage Accidents	Personal Injury Accidents	Fatal Accidents	Fatalities	Major Injuries	Minor Injuries	Possible Injuries	Accident Rate*	Total Value Loss
Begin Seg. 3 to Dubuque Rd. (M)	1.46 (0.91)	14	9	4	1	1	1	5	1	152.0	\$706,650
Dubuque Rd. to SCL Monticello (R)	14.76 (9.17)	136	88	47	1	1	18	37	28	148.0	\$2,354,750
SCL to NCL Monticello (M)	1.98 (1.23)	122	99	23	0	0	3	19	14	756.9	\$860,268
NCL Monticello to End Seg. 3 (R)	5.64 (3.51)	52	29	23	0	0	7	18	17	157.1	\$863,275
TOTAL	23.85 (14.82)	324	225	97	2	2	29	79	60	N/A	\$4,784,943

* Rate = Number of Accidents Per 100 Million Vehicle Miles

** SCL = South City Limits
NCL = North City Limits
R = Rural
M = Municipal



* VMT = Vehicle Miles Travelled

5 Year Average
Ending 6/30/92

E. Summary

The sufficiency ratings, accident data and traffic projections support the need for roadway improvements on U.S. 151. The conversion to a 4-lane divided facility would improve the level of service, reduce delays, reduce the likelihood of accidents and encourage economic growth in the corridor.

IV. PROPOSED ALTERNATIVES

A. Alternatives Retained for Final Evaluation

This segment has been subdivided into two divisions:

Division 1: From Anamosa to the beginning of the Monticello bypass alternatives (Figures 5 and 5A).

Division 2: Monticello bypass alternatives to the northern end of Segment 3 (Figures 5, 5B-D and Plates 1-12 in Appendix A).

Two alternatives are being considered at Langworthy in Division 1 and four at Monticello in Division 2. In addition, the "No Action" Alternative is under consideration for the entire segment. Table 2 summarizes the length, features and estimated costs for each alternative.

Access control categories for primary highways in Iowa are described in Table 3. The description of each alternative of U.S. 151 includes an access control designation. A typical cross section for this project is shown on Figure A2 at the end of Appendix A.

1. *Division 1*

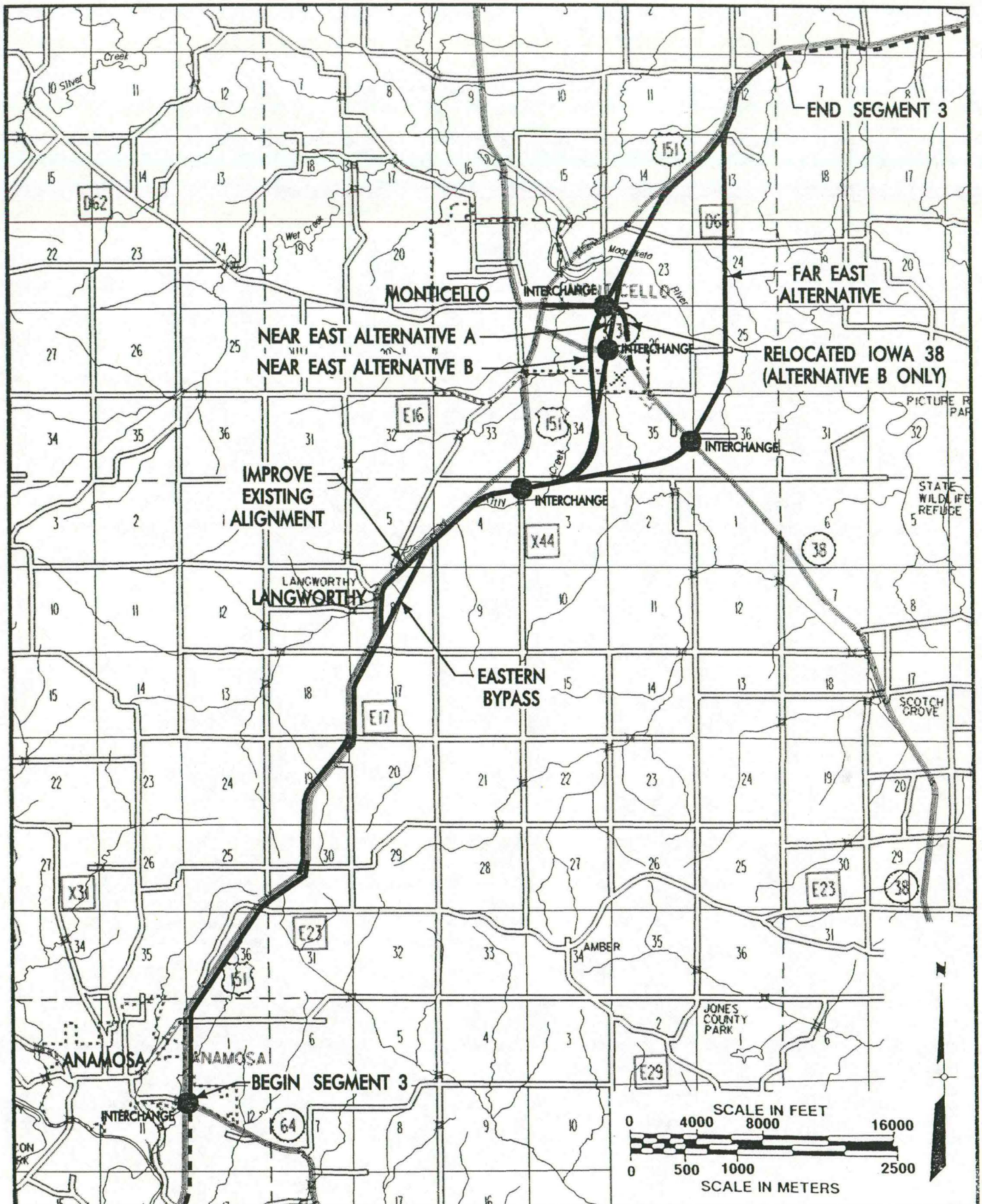
This unit extends from the U.S. 151-Iowa 64 intersection at Anamosa to a point 3.2 km (2 miles) southwest of Monticello (Figures 5A and 5B). The length of this section is approximately 12 km (7.5 miles). The two alternatives under consideration in this unit are described below.

a. Improve Existing Alignment

This alternative would add two lanes parallel to the existing highway from the U.S. 151-Iowa 64 intersection to the beginning of Division 2. The new lanes would cross over the existing highway twice (Figure 5A). These crossovers are necessary in order to reduce property impacts. Access to the highway would be provided at approximately 400 m (1/4 mile) spacing (Priority III Access Control; see Table 3).

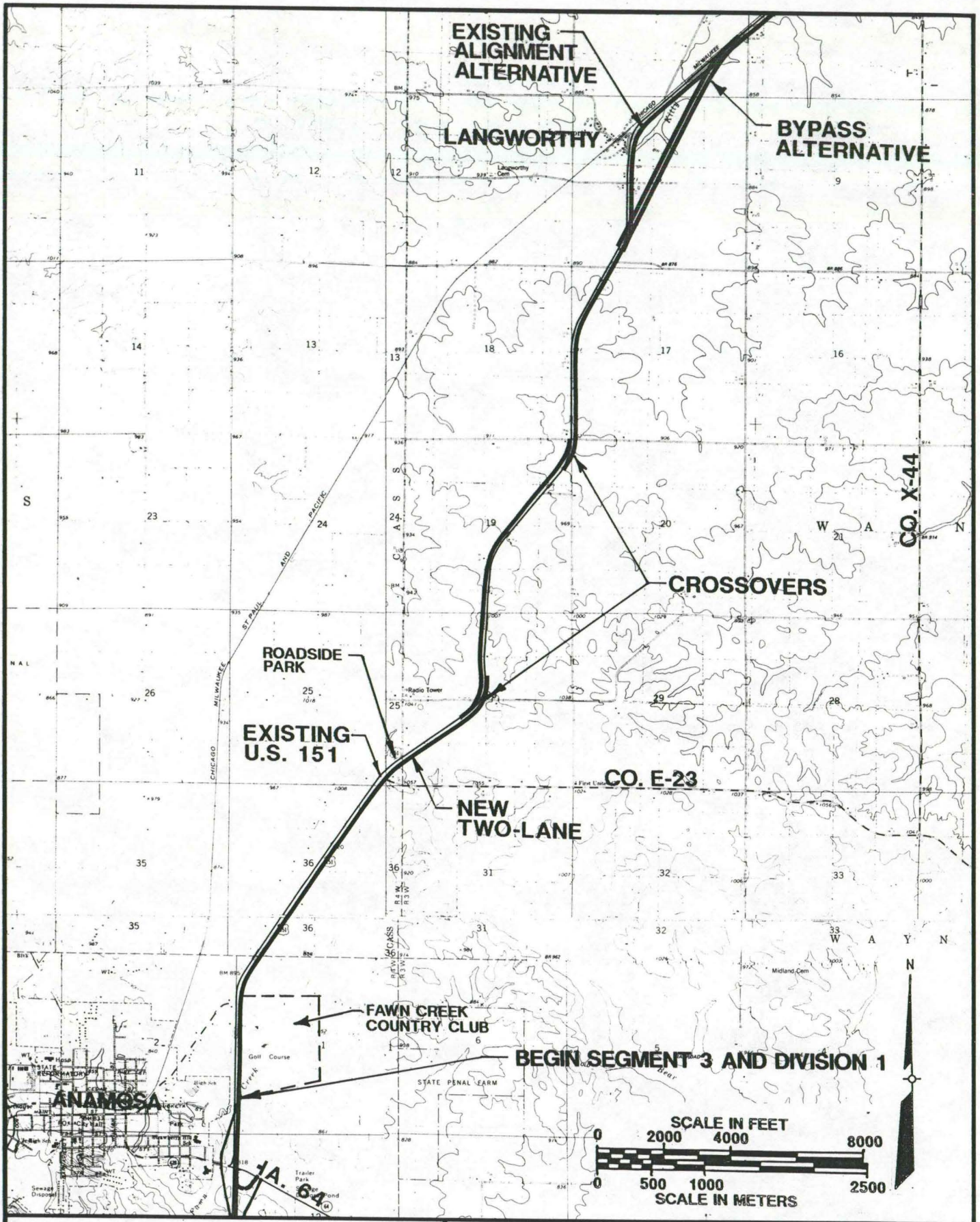
b. Eastern Bypass

This alternative follows the same alignment as the Improve Existing Alignment Alternative described above, except for a 2.4 km (1.5-



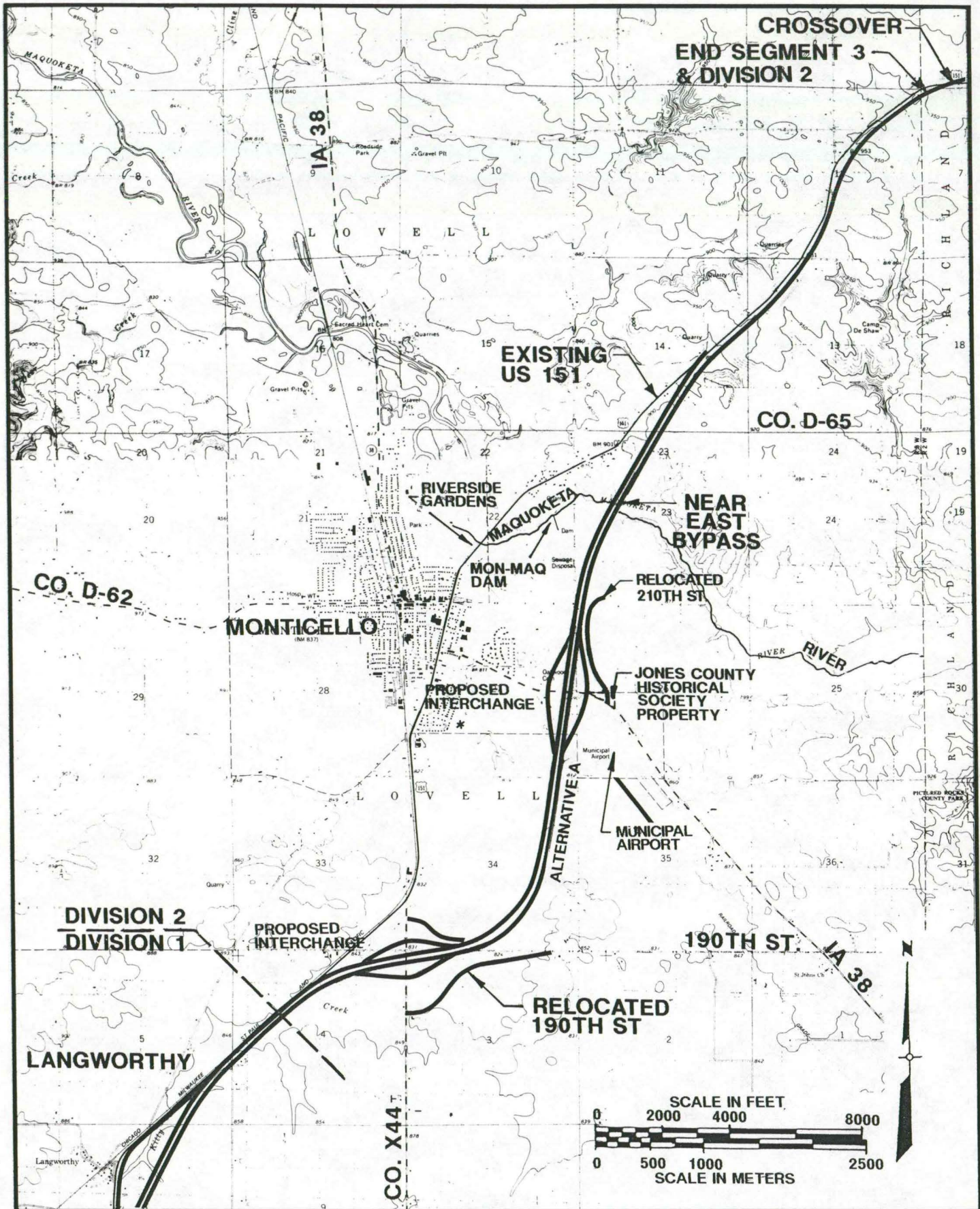
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FIGURE 5
 ALL ALTERNATIVES UNDER CONSIDERATION



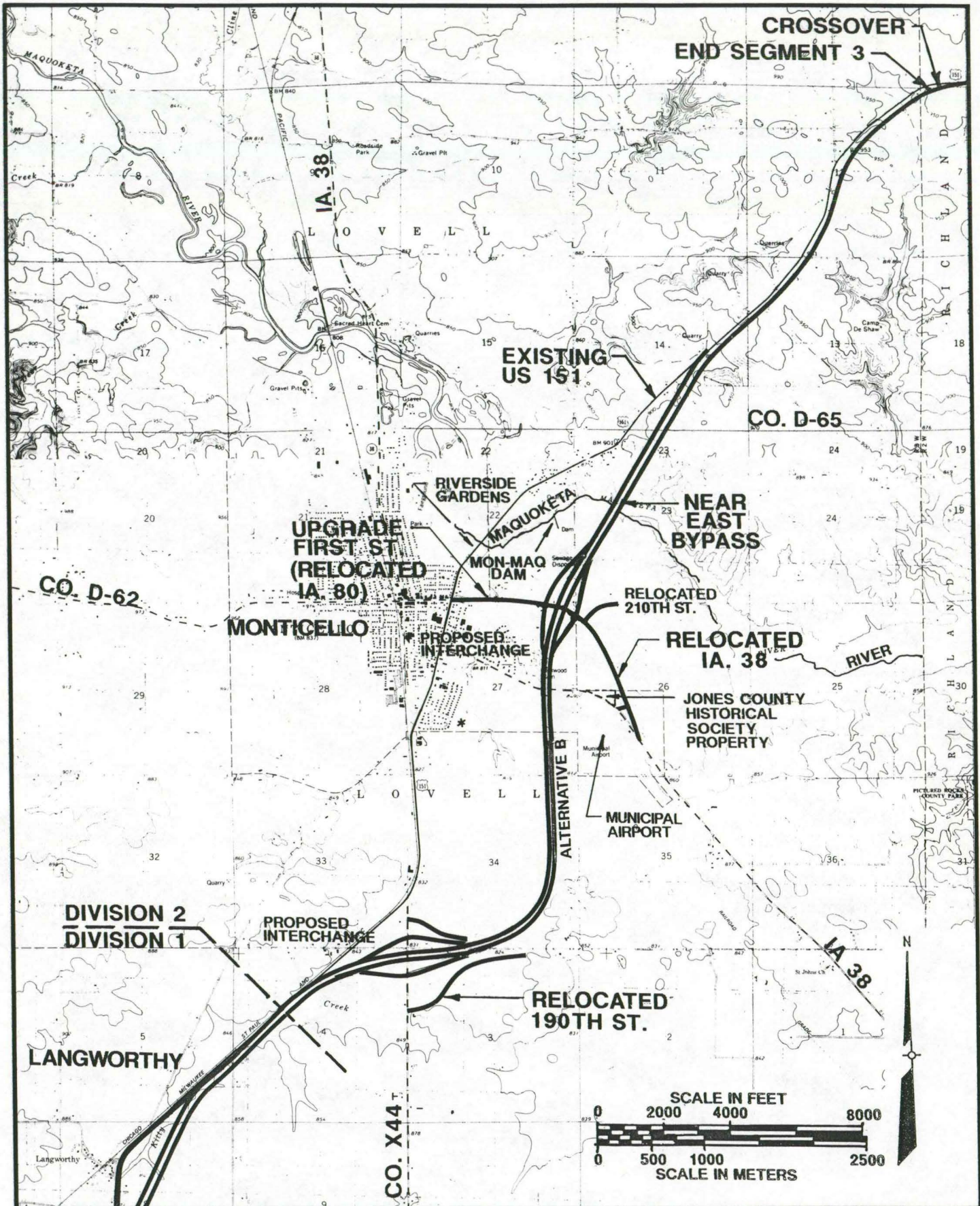
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**FIGURE 5A
DIVISION 1
LANGWORTHY ALTERNATIVES**



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**FIGURE 5B
DIVISION 2
NEAR EAST ALTERNATIVE A**



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FIGURE 5C
DIVISION 2
NEAR EAST ALTERNATIVE B

TABLE 2

PROJECT FEATURES AND ESTIMATED COSTS OF ALTERNATIVES RETAINED
U.S. 151, SEGMENT 3

Division	1		2			
	Improve Existing	Eastern Bypass	Near East A	Near East B	Far East	Widen Existing
Length in Kilometers (Miles)	12.9 (8.0)	12.7* (7.9)	11.9 (7.4)	12.1 (7.5)	13.0 (8.1)	11.6 (7.2)
Relocation of Iowa 38	---	---	No	Yes	No	No
Relocation of Monticello Airport Main Runway	---	---	Yes	No	No	No
Relocation of Monticello Airport Crosswind Runway	---	---	Yes	Yes	No	No
Access Control*	III	III	III-I-III	III-I-III	III-I-III	III-IV-III
Relocation of 190th Street	---	---	Yes	Yes	Yes	No
Relocation of 210th Street	---	---	Yes	Yes	No	No
No. of Interchanges	0	0	2	2	2	0
Channel Relocation of Kitty Creek	1,006 m (3,300 Ft)	427 m (1,400 Ft)	0	0	0	0
Estimated Highway Construction Cost**	\$7,399,000	\$8,747,000	\$17,355,000	\$19,425,000	\$20,233,000	\$7,582,000
Estimated Runway Relocation Cost	0	0	\$4,255,000	\$500,000	0	0
Estimated Right-of-Way Cost***	\$1,200,000	\$1,320,000	\$1,560,000	\$1,584,000	\$1,818,000	\$4,355,000
TOTAL ESTIMATED COST	\$8,599,000	\$10,067,000	\$23,170,000	\$21,509,000	\$22,051,000	\$11,937,000

* See Table 3 for types of access control.

** Estimates based on 1994 costs.

*** Right-of-way estimates are planning-level; not based on appraisals.

** See Table 3 for types of access control.

TABLE 3

HIGHWAY ACCESS CONTROL CLASSIFICATIONS

Classification	Description
Priority I Highway	Access to the highway is allowed only at interchange locations.
Priority II Highway	Access to the highway is allowed only at interchange and selected at-grade locations. The minimum allowable spacing between access locations is 0.8 km (1/2 mile).
Priority III Highway	Access to the highway is allowed at interchanges and at-grade locations. In rural areas, the minimum allowable spacing between access locations is 305 m (1,000 feet); 400 m (1/4 mile) spacing is preferable. In urban areas, the minimum allowable spacing between access locations is 183 m (600 feet).
Priority IV Highway	Access to the highway is allowed at at-grade locations. The minimum allowable spacing between access locations is 183 m (600 feet) in rural areas and 91 m (300 feet) in urban areas.

SOURCE: Iowa DOT Access Policy.

mile) portion which includes the eastern bypass of Langworthy. The bypass begins 1.0 km (0.6 mile) south of Langworthy and extends to 1.4 km (0.9 mile) north of town (Figure 5A); its overall length is 2.4 km (1.5 miles). Existing U.S. 151 at Langworthy will be used as an access to the community. The roadway on new alignment would be a 4-lane divided facility with Priority III Access Control (Table 3).

2. Division 2

This division begins 3.2 km (2 miles) southwest of Monticello and extends northeast to 6 km (3.7 miles) northeast of town to the end of Segment 3 (Figures 5B-5D and Plates 1-12 in Appendix A). This division, along with the rest of the project, would be a 4-lane divided facility with a 20.8 m (68-foot) edge-of-pavement to edge-of-pavement median. Priority I Access Control (no access allowed between interchanges) would be provided between County Road X-44 and Iowa 38 (see Table 3). The rest of this unit would have Priority III Access Control. This section includes three alternatives that would bypass Monticello and one alternative that would improve existing streets but not bypass the community. These 4 alternatives are:

- 2 Near East Bypass Alternatives (Alternatives A and B).
- 1 Far East Bypass Alternative.
- 1 Improve Existing Streets Alternative.

These 4 alternatives are described in the following paragraphs.

a. Near East Bypass Alternative A (Figure 5B and Plates 1-3 and 5-6 in Appendix A)

This bypass would begin 3.2 km (2 miles) southwest of Monticello near County Road X-44, then curve east 1.6 km (1 mile) (Plates 1 and 2). At this point, the bypass curves north-northeast, passing through and adjacent to the Monticello Municipal Airport, crossing the Maquoketa River and rejoining existing U.S. 151 2.7 km (1.7 miles) northeast of Monticello (Plates 2, 3 and 5). This would be a 4-lane divided facility with interchanges at County Road X-44 and Iowa 38. Access between the interchanges would be Priority I (no access allowed between interchanges). Access north of the Maquoketa River would be Priority III (access at 400 m (1/4 mile) spacing between access points) and would continue to the end of this segment.

This alternative would require the relocation of the Monticello Municipal Airport main and crosswind runways (Runways 13-31 and 5-23) to the southeast of their current locations (Plate 3).

Six sideroads will need to be relocated. The first, 190th Street, would be moved approximately 533 m (1,750 feet) south of its present alignment (Plate 1). This location would avoid the need for constructing an additional bridge at Kitty Creek. The second, County Road X-44, would be relocated slightly to provide a smooth transition onto U.S. 151. The third relocated sideroad would extend from 210th Street south to Iowa 38 (Plate 3). This relocation is necessary because 210th Street would be closed on both sides of the bypass, and properties at the end of this road need access. The last three sideroads would be shifted so that they intersect U.S. 151 at a 90° angle.

The original location for this alternative and Alternative B below went through an area of sand prairie known to be inhabited by a state threatened turtle species. These alternatives were shifted several hundred feet to the west to avoid affecting the turtle habitat.

b. *Near East Alternative B (Figure 5C and Plates 1-2 and 4-6 in Appendix A)*

This alternative would be similar to Alternative A in the vicinity of the interchange with County Road X-44. From there, the alignment would extend north and cross existing Iowa 38. It then would curve north-northeast and rejoin the Alternative A alignment near the Maquoketa River (Plate 5). This alternative would include the relocation of Iowa 38 approximately 0.8 km (1/2 mile) north to East First Street in Monticello (Plate 4). Alternative B also would include interchanges at County Road X-44 and relocated Iowa 38. Access control is the same as for Alternative A.

This alternative would require relocation of the Monticello Municipal Airport crosswind runway to the southeast of its current location, but the main runway would not be affected. Existing Iowa 38 would be closed on both sides of the bypass (Plate 4). The airport and other properties between the bypass and relocated Iowa 38 would have access at their current locations or from the relocated roadways.

This alternative would relocate 190th Street, County Road X-44 and shift the same three skewed sideroads as described for Alternative A (Plate 1).

c. **Far East Alternative (Figure 5D and Plates 7-12 in Appendix A)**

This bypass would be similar to Near East Alternatives A and B in its southwestern portion. However, it would proceed further east and curve north approximately 2.4 km (1.5 miles) east of Alternative A. It would rejoin existing U.S. 151 3.7 km (2.3 miles) northeast of Monticello, about 1 km (0.6 mile) further northeast than would Alternatives A and B.

This alternative also would be a 4-lane divided facility with interchanges at County Road X-44 and Iowa 38. Priority I Access Control would be provided from County Road X-44 through the Iowa 38 interchange (access allowed only at the interchanges). Priority III Access Control (access allowed at 400 m (1/4 mile) spacing) would be provided from just north of this interchange with Iowa 38 to the end of this segment.

Four sideroads would have to be relocated to provide access to adjacent properties. The first is County Road X-44 to U.S. 151. This road would be relocated slightly to provide a smooth transition onto U.S. 151. The second, 190th Street, would be relocated 533 m (1,750 feet) to the south (Plate 7). The third, 195th Street, would be closed at the intersection with Iowa 38, and would be relocated south to Iowa 38 (Plate 9). The fourth sideroad, Rock Road, would be relocated south to U.S. 151 (Plate 12). Other side roads would be connected to the bypass near their present locations.

The original location of this alternative fragmented a large tract of woods just north of the Maquoketa River. To avoid this impact, the proposed roadway was shifted a few hundred feet to the east.

d. **Improve Existing Streets**

Because of local interest and a request by local officials, this alternative and several other similar alternatives that would not bypass Monticello were examined by the project team. Nine different variations were examined and are described in Appendix B. Eight of the nine alternatives were deleted for various reasons, as discussed in Appendix B. The remaining Improve Existing Streets Alternative is described below.

This alternative would not include a bypass of Monticello, but instead would improve U.S. 151 in its current location. Within the city of Monticello, U.S. 151 is presently a 3-lane roadway between County Route E-16 and Washington Street. The center lane is a designated 2-way, left-turn lane. From Washington Street to Third Street, U.S. 151 is a 4-lane undivided roadway. North of Third Street, the highway drops one lane in each direction to return to a 2-lane facility as it leaves the northeast edge of the city (Figure 6).

This alternative would involve widening U.S. 151 to a 4-lane undivided facility all the way through Monticello, with access allowed at 91 m (300-foot) spacing within the urban area. This would allow side streets to remain open, but most property accesses would be closed or relocated to side streets.

Iowa 38 would remain in its present location. Relocation of Iowa 38 is not included in this alternative because it would increase the cost without significantly improving traffic operations on U.S. 151. The proposed 4-lane facility was determined to have sufficient capacity for the projected traffic volumes.

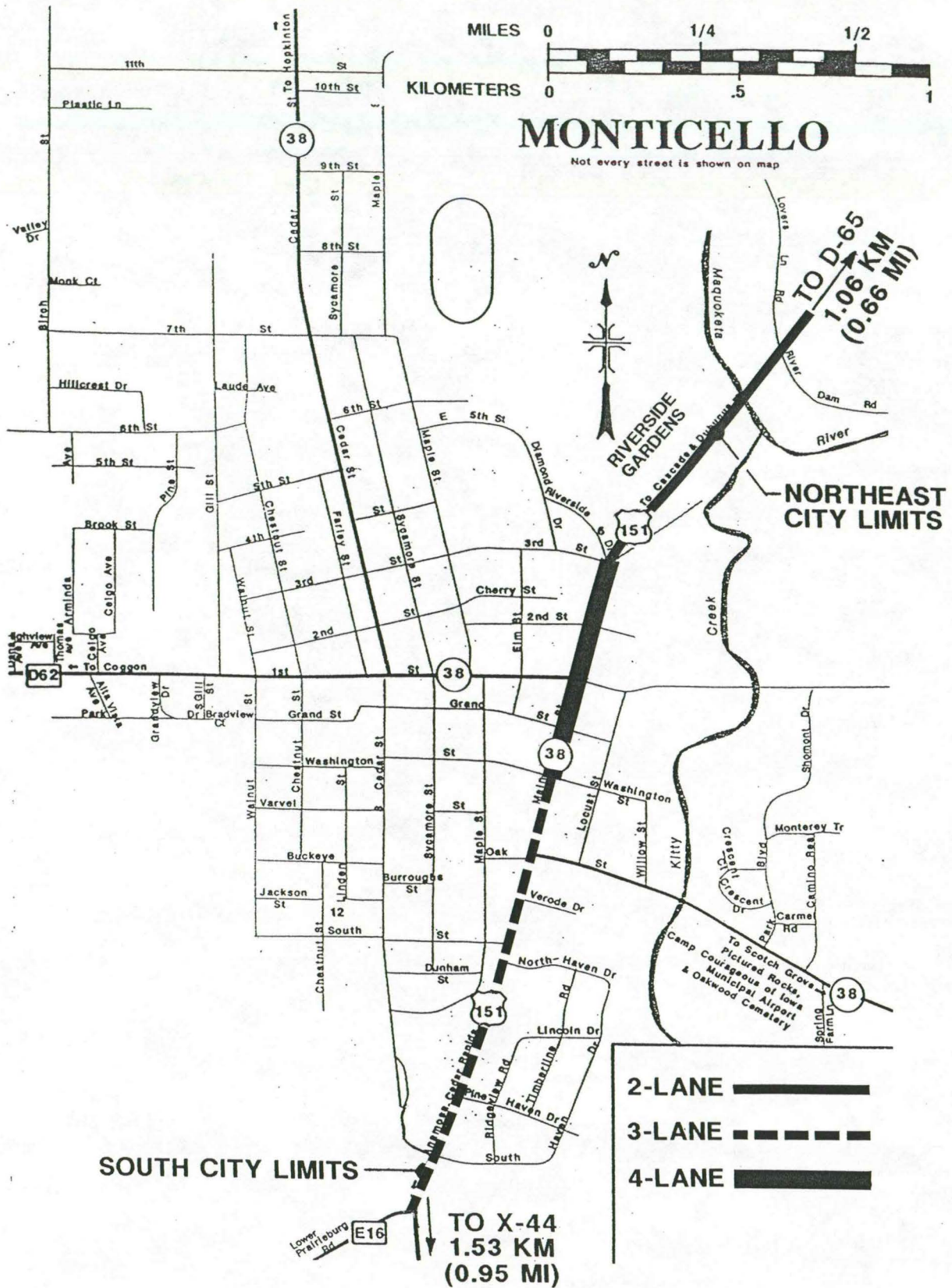
This alternative would require 2 traffic signals in addition to the 2 currently in place. With increasing traffic volumes, the current speed limits might be lowered in some areas.

3. No Action Alternative

The No Action Alternative accepts existing street and highway characteristics as they are at the present time. Therefore, no physical changes are included for pavement widths or grades, right-of-way widths, traffic circulation patterns or traffic control devices (traffic signals, signs and pavement markings).

Several areas with traffic congestion and poor levels of service occur within the existing street and highway network. If no changes are made to the existing network, it is expected that traffic congestion and traffic-related accidents will increase in proportion to future traffic volume increases.

In order to preserve the integrity of the existing street and highway system, existing pavements and traffic control devices will need to be maintained; maintenance costs will likely increase as traffic volumes increase.



ENVIRONMENTAL ASSESSMENT
U.S. 151 SEGMENT 3
ANAMOSA TO MONTICELLO
IOWA DEPARTMENT OF TRANSPORTATION

FIGURE 6
MONTICELLO STREET MAP

B. Alternatives Considered and Deleted

1. *Division 1*

In this division, the 2 alternatives described were the only alternatives developed.

2. *Division 2*

Several bypass alternatives, as well as several alternatives that would improve the existing U.S. 151 through Monticello, were examined and deleted as part of the planning process. These alternatives are described in detail in Appendix B.

V. PROJECT IMPACTS

A. Socioeconomic Impacts

Segment 3 of U.S. 151 is entirely in Jones County (population 19,444) and passes through two communities, Langworthy and Monticello. Table 4 summarizes population characteristics of this county; however, this segment covers only a portion of the entire county and census information is not available for these subdivisions. Therefore, the county and city data in Table 4 characterize this population as best as possible.

Land along this segment is devoted primarily to agricultural uses such as rowcrops and pasture. At Langworthy and Monticello, residential, commercial and industrial land uses are more common.

It is anticipated that the improvement of U.S. 151 will be completed under traffic with construction being staged to accommodate traffic at all times. Temporary inconveniences may occur during construction, but access through the area will be maintained for emergency vehicles and local traffic.

Access along the corridor will be provided at-grade at 400 m (0.25 mile) intervals, except for the Monticello bypass alternatives where access will be allowed only at interchanges. For the Improve Existing Streets Alternative in Monticello, access will be allowed at 91.4 m (300-foot) intervals. This will require relocation of some existing access to farms, homes and agricultural fields and will require the use of frontage roads to connect access points which are closer than 400 m (0.25 mile) apart. For some local property owners, this may increase distances and travel time to farm properties and other destinations.

The primary benefit of this project will be an increase in operational safety and an improved level of service. This 4-lane facility will also provide continuity, along with the planned 4-laning of the other segments from Springville to Dubuque. This project, including all segments, will result in a more efficient and safer highway than currently exists between Cedar Rapids and Dubuque. The improved access to communities along U.S. 151 may help attract new businesses to them.

1. *Right-of-Way Impacts*

a. *Division 1*

Preliminary right-of-way estimates show that 6 to 7 rural homes will be displaced in this division, some of which also have related farm

TABLE 4
POPULATION CHARACTERISTICS FOR
JONES COUNTY AND MONTICELLO

Population:	<u>Jones County</u>	<u>Monticello</u>
Total	19,444	3,522
Farm	3,659	---
Minority	1.8	.3
Income:		
% Below Poverty Level (All Persons)	11.5	12.9
Median Household Income	\$24,480	\$20,784
Employment:		
Total in Labor Force (16 Years and Older)	9,077	1,674
% Unemployed (Total Labor Force) ¹	6.8	N.A.

SOURCE: Census Data, 1990, Summary Tape Files 1A and 3A.

¹Unemployment rate as of February, 1994, provided from Job Service of Iowa.

buildings (Table 5). Right-of-way from 27 to 31 properties will be required, 23 to 25 of which are farm properties.

Division 1 will require 78.5 hectares (194 acres) of new right-of-way for the Improve Existing Alignment Alternative or 85 hectares (210 acres) for the Eastern Bypass alternative.

b. Division 2

Preliminary right-of-way estimates indicate that 6 homes will be displaced by any of the 3 bypass alternatives (Table 5). Right-of-way from 22 properties will be required by each bypass alternative, 19 of which are farm properties.

The bypass alternatives will require between 104.4 hectares (258 acres) to 121.4 hectares (300 acres) of new right-of-way. The Near East Alternative A bypass will require the least, while the Far East Alternative will require the most land of the 3 bypass alternatives.

The Improve Existing Alignment Alternative would displace 23 homes and 11 businesses. It would require right-of-way from 42 properties, 8 of which are farm properties. This alternative will require 73.6 hectares (182 acres) of new right-of-way.

Estimates for all alternatives are based on preliminary design and are subject to modification pending additional review. In places where feasible and prudent, alignment shifts will be made during the final design phase of this project to minimize right-of-way acquisitions and impacts to adjacent landowners.

It is the policy of the state of Iowa that displaced individuals receive fair and equitable treatment and do not suffer disproportionately from highway projects planned for the public as a whole. Persons required to move because of this or any highway project are eligible for relocation assistance services and may be eligible for moving assistance, supplemental replacement housing payments and reimbursement for other expenses incurred in purchasing replacement housing. A relocation assistance agent will work with each relocatee to smooth the transition.

The state of Iowa's acquisition and relocation program will be conducted in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Public Law 91-646), as amended by the Surface Transportation and Uniform Relocation

TABLE 5

SUMMARY OF RIGHT-OF-WAY AND FARMLAND IMPACTS

Division	Alternative	Total Hectares (Acres) of Right-of-Way Needed	Total Farmland Hectares (Acres)	Prime Farmland Hectares (Acres)	No. of Homes/Businesses Displaced	No. of Properties Affected	No. of Farm Properties Affected	No. of Properties With Diagonal Severances
1 Langworthy Area	Improve Existing Alignment	78.5 (194)	38.0 (95)	30.0 (73)	7/0	31	25	0
	Eastern Bypass	85.0 (210)	45.0 (110)	32.0 (80)	6/0	27	23	3
2 Monticello Area	Near East A	104.4 (258)	75.0 (185)	45.0 (111)	6/0	22	19	10
	Near East B	113.0 (280)	88.0 (218)	52.0 (128)	6/0	22	19	10
	Far East	121.4 (300)	138.0 (340)	88.0 (218)	6/0	22	19	9
	Improve Existing Streets	73.6 (182)	14.2 (35)	10.2 (25.2)	23/11	42	8	0

Assistance Act of 1987; this provides relocation resources to all residential and business relocatees without discrimination.

2. ***Farmland Protection Policy Act***

A Farmland Conversion Impact Rating Form AD-1006 was completed and sent to the Soil Conservation Service (SCS) for each alternative to determine impacts to prime and unique farmland in the project corridor. A copy of the form for each alternative appears in Appendix B. Table 5 summarizes the total and prime farmland that would be acquired for each alternative.

3. ***Farm Operation Impacts***

a. ***Division 1***

This portion of Segment 3 will affect 23 to 25 farm properties involving acquisition of approximately 38 to 45 hectares (95 to 110 acres) (Table 5). The Improve Existing Alignment Alternative will require less farmland than the Eastern Bypass alternative. However, the bypass will diagonally sever three properties leaving small, potentially unfarmable parcels in one of them. Either alternative will require less than .4 hectare (less than 1 acre) from some properties and up to 10 hectares (25 acres) from others. About 12.2 to 45.7 m (40 to 150 feet) from each property edge along the existing highway will be converted for right-of-way purposes.

b. ***Division 2***

This portion of Segment 3 will affect 8 to 19 farm properties involving acquisition of approximately 14.2 to 138 hectares (35 to 340 acres) of farmland. The Improve Existing Streets Alternative will have the least impact to agricultural land in terms of number of properties and amount of land acquired of all the alternatives (Table 5).

Near East Alternative A

This alternative will affect 19 farm properties involving acquisition of 75 hectares (185 acres) of farmland. This alternative will require 1.2 to 7.7 hectares (3 to 19 acres) from each property.

The most severe impact of this alternative is the diagonal severance of 10 properties. This will create parcels of land that may be

difficult to farm or unfarmable and may need to be acquired as part of the project.

Near East Alternative B

This alternative will affect 19 farm properties involving acquisition of 88 hectares (218 acres). It will require 0.8 hectare (2 acres) from some properties and up to 12.5 hectares (31 acres) from others.

The most serious impact of this alternative is the diagonal severance of 10 properties. These involve 9 of the same properties as for Alternative A discussed above.

Far East Alternative

This alternative would affect 19 farm properties involving acquisition of 138 hectares (340 acres) of farmland. Between 0.8 hectare (2 acres) to 16.2 hectares (40 acres) will be acquired from each property.

This alternative will diagonally sever 9 properties. One property in this alternative, bordered by the river to the south and County D-65 to the north, although not diagonally severed, would be divided in a way that would leave a portion of land on the west side of the proposed bypass inaccessible except through a neighboring property. This impact will be evaluated in more detail during the right-of-way negotiation phase. Access to the east side of the property would be indirect and would require some out-of-distance travel.

Improve Existing Streets

This alternative will affect 8 properties involving acquisition of 14.2 hectares (35 acres). It will require less than 0.4 hectare (less than 1 acre) from some properties to 1.6 hectares (4 acres) from others. Approximately 10.7 to 30.4 m (35 to 100 feet) will be acquired from each property edge. No properties would be diagonally severed.

4. Access to Local Properties

This roadway would be designed to meet the Iowa DOT Access Control Policy for Priority III Access Control, except in the Monticello Bypass Alternatives where access would be Priority I Access Control and a portion of the Improve Existing Alignment Alternative which has

Priority IV Access Control (Table 3). Construction of U.S. 151 to this standard would require the relocation and closure of 34 to 71 access points (Table 6).

Division 1

The Improve Existing Alignment Alternative in this portion of U.S. 151 would relocate 17 access points and close 2. The relocated accesses include field entrances, driveways and sideroads. Most of these accesses would be relocated only slightly (less than 30 m [100 feet]) to improve the intersection alignment or to be in compliance with Priority III Access Control. The 2 closed access points would include Shooting Star Road located approximately 2.4 km (1.5 miles) north of Anamosa and a frontage road at Langworthy.

The Eastern Bypass Alternative would relocate 15 accesses and close 2. The relocated access points are all the same as the accesses mentioned previously, except in the bypass area where there would be 2 fewer than for the Improve Existing Alternative. The 2 closed accesses would be Shooting Star Road and 170th Street.

Division 2

The Near East Bypass Alternative A would relocate 12 accesses and 5 others would be closed. The relocated accesses include 6 sideroads and 6 private entrances (Plates 1-3 and 5-6). The closed access points include small sections of U.S. 151 and 190th Street, First Street (210th Street) (2 places) and 135th Avenue (Plates 1, 3 and 6). The 5 closures should not result in much out of distance travel for property owners except those owners located at the end of First Street (210th Street). Access would be provided by relocating 210th Street south to Iowa 38. For these property owners, there would be some longer travel distances and times to get into Monticello.

The Near East Alternative B would relocate 13 access points and close 5. The relocated accesses would be the same as for Alternative A, with 3 exceptions. With Alternative B, Iowa 38 would be relocated instead of 210th Street as for Alternative A (Plates 3 and 4). The additional relocated access is located near 210th Street. The closed accesses include a portion of U.S. 151, 190th Street, Iowa 38 on both sides of the bypass, and 135th Avenue (Plates 1, 4 and 6). Iowa 38 would be relocated north to 210th Street.

The Far East Alternative would relocate 11 access points and close 4. The relocated accesses include 5 sideroads and 6 private entrances

TABLE 6
AFFECTED ACCESSSES ON U.S. 151
SEGMENT 3

Division	Alternative	# of Accesses Relocated*	# of Accesses Closed**	Total # of Affected Accesses
1 Langworthy Area	Improve Existing Alignment	17	2	19
	Eastern Bypass	15	2	17
2 Monticello Area	Near East A	12	5	17
	Near East B	13	5	18
	Far East	11	4	15
	Improve Existing Streets	25	28	53

* In Monticello corporate limits, all relocated accesses would be to side streets.

** Excludes accesses to displaced properties.

(Plates 9, 10 and 12) . The 4 closed access points include portions of U.S. 151 and 190th Street, 195th Street, and 135th Avenue. Access control will change back to Priority III north of the Iowa 38 interchange. Therefore, Meadowlark Road and a private access will remain unchanged and will have an at-grade intersection with the U.S. 151 bypass.

The Improve Existing Streets Alternative would affect the most accesses of all the alternatives. All of the existing side streets that currently intersect with U.S. 151 would maintain their current access point, with the exception of South Street which would be relocated. The other existing access points along U.S. 151 would be relocated or closed. The relocated access points would all be located on nearby side streets rather than onto U.S. 151. These include 8 homes and 8 businesses. The remaining access points would be closed and not allowed an entrance off of U.S. 151. These would include 5 homes and 22 businesses. The remaining relocated and closed accesses are public roads.

B. Air and Noise Impacts

1. Air Quality

Air quality impacts of this project are expected to be minor; changes should improve air quality. The improvement of overall traffic flow would reduce vehicular emissions, which are highest when traffic is congested and stalled. All of the bypass alternatives would reduce vehicular emissions to a greater degree than the existing alignment alternatives.

There would be temporary air quality impacts during construction of this project. Standard construction specifications require contractors to comply with state regulations, including limitations on generation of fugitive dust.

This project is in an area where the State Implementation Plan does not contain any transportation control measures. Therefore, the conformity procedures of 23 CFR 770 do not apply to this project.

2. Noise

The Federal Highway Administration has established noise abatement criteria for various types of land uses. When noise approaches or exceeds these criteria, mitigation (such as barriers) must be considered and included in the project plans where feasible. Along this project

corridor, the most restrictive land-use would be Category B (Residential), with a noise abatement criterion of 67 dBA (L_{eq}). L_{eq} can be generally described as the equivalent or average noise level discerned by the listener.

The residences on the side opposite the proposed widening would experience no increase in noise levels from the proposed action. Any increase in traffic projected for the year 2016 would be offset by shifting approximately 50 percent of the traffic further away from these residences.

To predict future noise levels with the project in place, two representative sites were selected to represent worst case impacts for homes along existing U.S. 151 (see Table 7). The first was a rural residence located on the side where widening is proposed. The home is located approximately 64 meters (210 feet) from the existing center line of U.S. 151. The proposed additional 2 lanes would be centered approximately 50 meters (164 feet) from the home. Noise levels would remain at the existing level of 59 dBA or increase to 61 dBA for any of the alternatives, including the No Action Alternative. This 2-decibel increase would not be noticeable to the average person and is below the 67 dBA criterion. Therefore, noise abatement is not proposed for these rural areas.

A second site is located within Monticello, approximately 15 m (50 feet) from the center line of U.S. 151. The existing noise level of 67 dBA would increase to 69 dBA under the No Action Alternative. With the Improve Existing Streets Alternative, the homes nearest to U.S. 151 would be displaced. The second tier of homes, located about 45 m (150 feet) from the existing center line of U.S. 151, would experience noise levels of 62 dBA. With any of the Monticello Bypass Alternatives, the noise level would increase by 1 decibel to 68 dBA and would be above the 67 dBA criterion. Noise level changes of less than 3 decibels are not discernable to the average human ear. A noise barrier would not be feasible because it would prevent access to U.S. 151. Therefore, noise mitigation is not proposed for this area.

Rural areas not presently exposed to highway traffic would be exposed to traffic noise under any of the bypass alternatives. One group of homes is located close to the Iowa 38 interchange exit ramp (Plate 3). Noise levels for these homes and other rural residences would increase by a maximum of 5 to 7 decibels up to a level of 57 dBA, depending on the alternative (Table 7). These levels are well below the 67 dBA criterion. Therefore, noise abatement is not proposed along the bypass alternatives in these areas.

TABLE 7

**NOISE IMPACT SUMMARY
 PROJECTED PEAK HOUR L_{eq}**

Site	Existing	No Action	Langworthy		Monticello		
			Improve Existing Alignment	Eastern Bypass	Near East	Far East	Improve Existing Streets
Rural Residences Along Existing U.S. 151	59	59	61	61	61	61	61
Monticello Residences Along Existing U.S. 151	67	69	NA	NA	68	68	62*
Rural Residences Along Monticello Bypass	50-55	50-55	NA	NA	50-57	52-55	50-55

NOTE: All values are in dBA (decibels, A-Scale). Future noise levels are for the year 2016.

* For this alternative, 20 homes near existing U.S. 151 would be displaced. This value represents noise levels at the second tier of homes.

The 67 dBA contour is estimated to be 20 meters (66 feet) from the new center line of U.S. 151. Therefore, it is recommended that noise sensitive development not occur within this distance from the highway. See the noise analysis form in Appendix C of this document for more information.

C. Threatened and Endangered Species

During early coordination for this project, Iowa Department of Natural Resources (DNR) indicated that they did not have any records of any federal or state threatened or endangered species in the project corridor. The U.S. Fish and Wildlife Service (FWS) listed several federal threatened and endangered plant and animal species with potential ranges within this part of Iowa. They are:

- Western Prairie Fringed Orchid - Threatened
- Prairie Bush Clover - Threatened
- Northern Wild Monkshood - Threatened
- Bald Eagle - Endangered
- Indiana Bat - Endangered
- Iowa Pleistocene Snail - Endangered
- Peregrine Falcon - Endangered

DNR records are more specific, whereas the FWS records are more regional, which accounts for the differences in the records of the two agencies. Letters from the above agencies appear in Appendix D.

During this study, landowner interviews suggested the presence of ornate box turtles (*Terrapene ornata*), a state threatened species, in the vicinity of both Near East Bypass Alternatives A and B. This species requires an open, sparsely vegetated, sandy habitat which was believed to occur in the Maquoketa River Valley.

Field surveys conducted by project biologists during June, 1993, confirmed the presence of ornate box turtles in the area. In addition, a reptile species of special concern with similar habitat requirements, the six-lined racerunner (*Cnemidophorus sexlineatus*), was also found in the same area. *T. ornata* and *C. sexlineatus* were observed and photodocumented in the area of the Near East Bypass Alternatives near the Maquoketa River. These specimens come from previously unknown Iowa localities for the two species.

The original Near East Bypass Alternative was shifted 152 m (500 feet) west to avoid impacting these populations and their habitat. However, because of the highway's proximity to the turtle habitat, turtle/vehicle

accidents may still occur. Table 8 summarizes the potential impacts before and after the alignment shift. No potential habitat for either of the two reptile species was found within the Far East bypass alternative or within the Improve Existing Streets Alternative in Monticello. A detailed report on the turtle survey done for this project has been provided to Iowa DNR as part of the coordination for this project.

The project botanist conducted rare plant surveys during November, 1992, and June and August, 1993. No rare, threatened or endangered plant species were found in any of the alternatives. This does not guarantee that rare, threatened or endangered species are absent; however, their presence is unlikely.

A rare moss (*Conardia compacta*) for Iowa was found by Dr. Diana Horton, University of Iowa bryologist, in a cave near the Maquoketa River. This was located on property about 457 m (1,500 feet) from the Near East Bypass Alternatives. This species' habitat requirements include heavily shaded rock outcrops with high humidity (similar to a cave). This habitat could occur along any of the Monticello bypass alternatives in the Maquoketa River Valley. This species is not listed on the state threatened or endangered list, which currently does not cover the mosses.

D. Natural Areas and Wildlife Habitat

Neither the U.S. Fish and Wildlife Service (FWS) nor the Iowa Department of Natural Resources (DNR) have records of any significant natural communities occurring in this area (see letters in Appendix D). Field surveys conducted by project biologists found a sand prairie (a unique natural community) near the Maquoketa River. The sand prairie is dominated by wild rye (*Elymus sp.*) and other prairie grasses and forbs suited to droughty conditions. This community is approximately 91-122 m (300-400 feet) outside the proposed right-of-way for the project and will not be affected. Another unique native community, oak savanna, was found near the Far East bypass alternative, but the project will not affect it.

A tract of about 2 hectares (5 acres) of restored prairie owned and maintained by the Jones County Historical Society is located on Iowa 38 north of the Monticello Airport. This prairie has approximately 30-40 species of grasses and forbs and is used by school classes for educational purposes and the general public. If the Near East Alternative A is selected, then approximately .4 hectare (.9 acre) would be acquired for right-of-way purposes. None of the other alternatives affect this property.

TABLE 8

SUMMARY OF PROJECT IMPACTS TO ORNATE BOX TURTLES (*TERRAPENE ORNATA*)
AND SIX-LINED RACERUNNERS (*CNEMIDOPHORUS SEXLINEATUS*)

Alternative	Acres Habitat Loss	Reptile Fragmentation	Impacts to Animal Movements
No Action	No Impacts	No Impacts	No Impacts
Near East Bypass Alternatives A and B (Prior to Alignment Shift to Avoid Habitat)	2.5 Acres Lost	16 Acres Fragmented	Increased Traffic Speed and Volume May Increase Turtle/Vehicle Accidents
Near East Bypass Alternatives A and B	No Impacts	No Impacts	Increased Traffic Speed and Volume May Increase Turtle/Vehicle Accidents
Far East Bypass	No Impacts	No Impacts	No Impacts
Improve Existing Streets	No Impacts	No Impacts	No Impacts

The most abundant habitat type in the project corridor is agricultural crops. Rowcrops, especially corn, provide ample food and shelter for deer and other wildlife.

The Maquoketa River and its flood plain provide habitat for both common and rare wildlife, including the ornate box turtle discussed previously in Section C. However, in many areas along the river, much of the natural riparian vegetation has been replaced by agricultural crops, and therefore wildlife diversity is fairly low. This is also true for areas adjacent to the existing highway.

Approximately 1.2 to 2 hectares (3 to 5 acres) of natural areas, including forests and wetlands, would be impacted in the Langworthy evaluation unit. Approximately 4 to 6.1 hectares (10 to 15 acres) of natural areas would be affected in the Monticello evaluation unit. Much of this area is concentrated near the Maquoketa River.

The Langworthy Eastern Bypass Alternative impacts 0.2 hectare (0.5 acre) more wetlands and about 0.6 hectare (1.5 acres) more woodlands than the Improve Existing Alignment Alternative.

Both Near East Monticello Bypass Alternatives would impact the same amount of woodland, 2.6 hectares (6.5 acres). Most of this is located near the Maquoketa River crossing. The Far East Bypass would impact the most woodland of the three alternatives, 3.6 hectares (9 acres). All three bypass alternatives were located to minimize both the taking of woodland and indirect impacts, such as fragmentation of large tracts. No large tracts of woodland would be fragmented by any alternative.

The alignments of these bypass alternatives cannot be shifted enough to avoid all woodlands as conflicts with other natural resources would occur. Constraints for the Near East Bypass Alternatives A and B include woodland to the west and a rare species habitat to the east. The Far East Bypass Alternative constraints include a large tract of woods to the west and wetlands to the east (Plate 10). Therefore, the most cost-effective and feasible location for these bypass alternatives are in the locations shown on Plates 5 and 10 in Appendix A.

The Monticello Improve Existing Streets Alternative would impact approximately 0.1 hectare (0.25 acre) of woodland located near the Maquoketa River.

E. Wetlands

Project biologists evaluated potential wetland impacts through inspection of U.S. FWS National Wetland Inventory Maps, SCS wetland maps and soil surveys, and field observations. Table 9 summarizes the wetland impacts of the project.

1. Division 1

Approximately 1 hectare (2.5 acres) of jurisdictional wetlands would be impacted by the Langworthy Eastern Bypass Alternative. The Improve Existing Alignment Alternative would impact 1.2 hectares (3 acres) of jurisdictional wetlands (Table 9). These wetlands are primarily palustrine emergent, but some are palustrine scrub-shrub. Palustrine wetlands, commonly called marshes, wet prairies, swamps and ponds, include all nontidal wetlands dominated by trees, shrubs and emergent vegetation, mosses or lichens. Emergent wetlands are palustrine wetlands that are dominated by herbaceous (nonwoody) plants such as sedges and cattails. Scrub-shrub wetlands are palustrine wetlands that are dominated by woody plants less than 6 m (20 feet) high, such as willows and alders.

The wetlands in the Langworthy section are found in road ditches and associated with drainageways. The emergent wetlands are dominated by reed canary grass (*Phalaris arundinacea*), cattail (*Typha latifolia*) and sedges (*Carex spp.*). Sandbar willow (*Salix exigua*) is the dominant species in scrub-shrub wetlands in the project area.

2. Division 2

In the Monticello area, the same 1.4 hectares (3.5 acres) of jurisdictional wetlands would be impacted by both Near East Alternatives and 2 hectares (5 acres) of jurisdictional wetlands would be impacted by the Far East Alternative. The wetlands that would be impacted by the three bypass alternatives are mostly forested (Table 9). Forested wetlands are dominated by woody plants greater than 6 m (20 feet) high, such as silver maple and green ash. Less than 0.4 hectare (1 acre) of emergent wetlands would be impacted by each alternative, and 0.4 hectare (1 acre) of scrub-shrub wetland would be impacted by the Far East Alternative (Table 9).

The Improve Existing Streets Alternative would affect 0.3 hectare (0.8 acre) of emergent and forested wetlands near the Maquoketa River in Monticello.

TABLE 9

SUMMARY OF JURISDICTIONAL WETLAND IMPACTS
 U.S. 151, SEGMENT 3

Type of Palustrine Wetland	Langworthy		Monticello			
	Improve Existing Alignment	Eastern Bypass	Near East A	Near East B	Far East	Improving Existing Streets
Emergent Hectares (Acres)	0.8 (2.0)	0.9 (2.25)	0.16 (0.4)	0.16 (0.4)	0.2 (0.5)	0.04 (0.1)
Scrub-Shrub Hectares (Acres)	0.2 (0.5)	0.3 (0.75)	0.0	0.0	0.4 (1.0)	0.0
Forested Hectares (Acres)	0.0	0.0	1.25 (3.1)	1.25 (3.1)	1.4 (3.5)	0.3 (0.7)
TOTAL Hectares (Acres)	1.0 (2.5)	1.2 (3.0)	1.4 (3.5)	1.4 (3.5)	2.0 (5.0)	0.3 (0.8)

The forested wetlands are associated with the Maquoketa River and are dominated by boxelder (*Acer negundo*), silver maple (*Acer saccharinum*) and cottonwood (*Populus deltoides*). The emergent and scrub-shrub wetlands are similar to those that occur in the Langworthy section.

The total amount of jurisdictional wetlands that could be impacted by Segment 3 of U.S. 151 ranges from 1.3 to 3.2 hectares (3.3 to 8 acres).

a. **Avoidance**

Some wetland impacts would be unavoidable because of the number and distribution of wetlands in the area, engineering and safety considerations in highway design, and prohibitive costs of a much longer route to avoid all wetlands. Areas where wetland impacts would be unavoidable include the Improve Existing Alternatives where the new 2 lanes would parallel the existing highway and the bypass alternatives at Langworthy and Monticello.

b. **Minimization**

Wetland impacts will be minimized by utilizing the least amount of right-of-way possible for new construction. Whenever feasible, slight alignment shifts will be made during the design phase to minimize wetland impact.

Erosion control and maintenance of wetland hydrology during construction will be important in maintaining the integrity of the wetlands. Upslope erosion control will be accomplished by avoiding or minimizing traffic, planting a vegetative cover, and mulching or using erosion control blankets. Silt fences would reduce the amount of eroded material entering the wetlands. Where possible, construction activities will remain outside of wetlands to prevent soil compaction. Where work in wetlands is unavoidable, consideration will be given to utilizing special construction techniques to minimize impacts to wetlands.

c. **Compensatory Mitigation**

For jurisdictional wetlands filled by this project, a Section 404 permit will be obtained from the U.S. Army Corps of Engineers (COE) prior to construction in compliance with the Federal Clean Water Act. The COE will likely require compensatory mitigation. The final environmental document will include a commitment to wetland replacement. Iowa DOT generally mitigates wetland losses at a ratio of 1:1.

d. Wetland Finding

The conversion of 1.3 to 3.2 hectares (3.3 to 8 acres) in this segment of U.S. 151 is an unavoidable impact of this project. No feasible or prudent alternative exists to avoid these areas. The new construction would be located adjacent to the existing highway, except in the bypass areas of Langworthy and Monticello which would be on new alignment. When design constraints allow, slight adjustments to minimize impacts to wetlands will be evaluated during the design phase.

F. **Water Quality**

Three streams occur in this segment: Fawn Creek near Anamosa, Kitty Creek between Monticello and Langworthy and the Maquoketa River at Monticello. Several unnamed drainageways also occur in this segment. In general, slopes of 5 percent or more are potentially highly erodible, particularly when vegetation is removed or when driven on by heavy equipment. These areas will require particular attention during construction. Approximately 4 hectares (10 acres) of such area is located in both Langworthy section alternatives. Approximately 14 hectares (35 acres) of potentially highly erodible soil is located along both of the Monticello Near East Bypass Alternatives, and approximately 24 hectares (60 acres) of such areas are in the Far East bypass alternative. Approximately 2.4 hectares (6 acres) of highly erodible soil occurs in the Improve Existing Streets Alternative.

Soil erosion during construction is of particular concern for water quality because siltation is the primary cause of water quality degradation in the region. Erosion control methods such as seeding with temporary or permanent vegetation cover and mulching will minimize erosion. Silt fences in place during construction will minimize silt deposition in streams and drainageways.

G. **Parks and Recreational Facilities**

A privately owned golf course, Fawn Creek Country Club, is located just north of Iowa 64 near Anamosa (Figure 5A). A narrower median than typically used will be considered in this area to minimize impacts to this golf course. A maximum of about 0.2 hectare (0.4 acre) of this course will be required for construction of U.S. 151 to 4 lanes. The project will be designed to avoid impacts to the functional parts of the golf course or to the row of trees along its western side.

A roadside park, owned by the state of Iowa, is located 2.25 km (1.4 miles) north of Iowa 64 on the west side of U.S. 151. Construction is planned for the east side of the highway, so this park will not be affected. Another park, Mon-Maq Dam, owned by Jones County, is located on the Maquoketa River on the east side of Monticello. It is outside the project corridor and will not be affected by the project.

Construction of the Improve Existing Streets Alternative in Monticello will affect Riverside Gardens, a city-owned park in Monticello. It is located just south of the Maquoketa River on the west side of U.S. 151. Approximately 0.16 hectare (0.4 acre) from the park's edge would be required for right-of-way purposes. Draft and Final Section 4(f) Statements will be completed for impacts to this park if this alternative is selected as the final one. This park attracts visitors from out of town and drive-by traffic. If a bypass alternative is selected, the number of visitors at Riverside Gardens would decrease. This is a concern of several persons active in maintaining and enhancing this park.

The Jones County Historical Society, a private non-profit group, owns land just north of the Monticello Municipal Airport (Plates 3 and 4). The restored prairie on the property is used for educational field trips by local schools and by the public. A relocated access (Near East Alternative A) would pass through the west edge of this property, acquiring approximately 0.4 hectare (0.9 acre) of it. The Jones County Historical Society expressed concern over the potential loss of a portion of their property. Much time and effort has gone into restoring the prairie currently there. Relocated Iowa 38 (Near East Alternative B) would pass close to this property but will not affect it. No other parks or recreational facilities occur in Segment 3 of U.S. 151.

H. Cultural Resources

This project involves the acquisition of new right-of-way; therefore, a Phase I Cultural Resource Survey will be completed after selection of a Preferred Alternative to determine project impacts within the study corridor. This study will be completed prior to making a final assessment of impacts and will be coordinated with the Iowa State Historic Preservation Officer.

I. Hazardous Waste

Hazardous waste is an important issue in highway projects since current legislation has required the identification of known sites where hazardous substances are present. Highway planners need to be aware of these sites

in locating highways so expensive cleanup liabilities and project delays can be avoided.

Information obtained from the U.S. Environmental Protection Agency (EPA) on CERCLA (Superfund) sites indicates that one site exists in Monticello on U.S. 151. The business is Energy Manufacturing, Inc., at 100 North Main Street (U.S. 151). It is not expected to affect this project since the only construction alternative through Monticello consists of a 4-lane undivided roadway. The existing roadway passing this business is already a 4-lane undivided section.

Twelve Resource Conservation and Recovery Act (RCRA) sites were shown for Monticello on the RCRA Notifiers List from the EPA Region VII Merge Database. Of these, 4 are located on U.S. 151. They are not expected to affect this project since road construction will not occur near them.

A drive-by assessment of this segment revealed a potential hazardous waste site in Langworthy. It is an old, abandoned gas station, just off U.S. 151. However, it is not expected to affect the project since highway construction is planned on the opposite side of the existing highway. Other potential hazardous waste sites were found along U.S. 151 in the vicinity of Monticello. These potential sites will not affect the project since they are not in areas that would undergo construction.

J. River and Flood Plain Crossings

Segment 3 originates in the Wapsipinicon River watershed in the northeastern limits of Anamosa. This segment, in extending along the existing alignment north toward Monticello, would cross into the Kitty Creek watershed approximately 4.0 km (2.5 miles) north of Anamosa. This watershed is a tributary to the Maquoketa River Basin and outlets to the Maquoketa River. The identified crossings of the alignment over Kitty Creek would be in the unincorporated areas of Jones County. The drainage area of Kitty Creek at the mouth is approximately 132 square km (51 square miles).

The Iowa Department of Natural Resources (DNR) requires flood plain construction permits for roadway structure crossings when the drainage area of the watershed exceeds 259 square km (100 square miles) in unincorporated areas of the state of Iowa. In incorporated areas of the state, the drainage area limit is only 5.2 square km (2 square miles) for flood plain permit reviews. The DNR will not require flood plain construction permits for the alignment's several Kitty Creek crossings. This

is also applicable to the crossings for the Monticello, Near East Bypass Alternatives A and B and the Far East Bypass Alternative.

In general, crossings adjacent to an existing highway alignment will have waterway crossings sized to provide equal conveyance area or opening as the existing structure opening. The general criterion for new waterway crossings in corridor alignments is to minimize backwater increases of flood events to standards set forth under DNR regulations for structures requiring permits. This provides consistent design standards for planners and engineers and for adjacent property owners affected by the corridor.

North of Langworthy, the corridor route will require relocation of segments of Kitty Creek that are located beside the existing alignment. DNR criteria establish that a flood plain construction permit is required when channel relocation associated with roadway improvements exceeds 500 feet in length on stream locations having an upstream drainage area of 10 square miles or greater. Two of the proposed creek relocations exceed the 500-foot limit and will require permit approval from the DNR.

The Monticello bypass alternatives would cross the Maquoketa River east and northeast of the community. The drainage area of the Maquoketa River in this reach of the river is approximately 1,709 square km (660 square miles). Each alignment crossing of the Maquoketa River (Improve Existing Streets, Near East A or B or Far East Bypass Alternatives) will require a DNR flood plain construction permit. Jones County participates in the National Flood Insurance Program but does not have a detailed flood plain information for county rivers or streams. Consequently, hydraulic criteria for the crossings will be governed by backwater increases allowable in the DNR flood plain permit criteria. These criteria limit water surface increases due to flood plain roadway encroachment to 0.23 m (0.75 foot) for the 50-year flood and 0.46 m (1.00 foot) for the 100-year flood. Specific crossing sizes that conform with the criteria are determined by hydraulic analyses involving evaluation of channel and flood plain flow conditions before and after fill and structure placement. Final structure sizes are based on the limits of allowable backwater or increased water surface generated as a result of the flood plain construction.

The Near East Bypass Alternatives A and B would cross the Maquoketa River where the flood plain is relatively narrow (Plate 5). The Far East Bypass Alternative alignment would cross a wider flood plain area. Although the detailed hydraulic studies have not been completed, it is likely that the Far East crossings will require a longer bridge crossing due to the wider flood plain limits. The Improve Existing Streets Alternative would require a bridge similar in length to the existing bridge.

The entire Segment 3 alignment and alternative bypass corridors cross numerous creeks and flood plain areas that are subject to review by the Corps of Engineers for compliance with the Section 404 permit program regarding flood plain fill, dredged materials or effect on existing wetlands. In addition, the state of Iowa maintains review authority for Section 401 Water Quality conditions under the Section 404 permit program. Generally, many of the corridor crossing locations not affecting wetland areas fall under nationwide 404 permit criteria and state 401 Water Quality certification. However, the entire corridor and selected bypass route(s) will be submitted as a whole to fully define potential mitigation measures required for compliance with Corps of Engineers and state of Iowa criteria.

Reference has been made to the participation of Jones County in the National Flood Insurance Program. The county standards are representative of DNR flood plain permit criteria. They can defer review of specific projects to the DNR for compliance with flood plain criteria but represent a local review and permitting entity by virtue of their flood plain ordinance. The preliminary and final designs for waterway and flood plain crossings in the selected corridor will need review and concurrence.

K. Airport Impacts

When new highway development is planned near an airport, it is crucial that the impacts on current and planned airport activities be identified. The Federal Aviation Administration (F.A.A.) defines several areas around airport runways for various levels of safety, some of which are described as follows:

- The *Runway Safety Area (RSA)* is a defined surface surrounding the runway prepared or suitable for reducing the risk of damage to airplanes in the event of an undershoot, overshoot or excursion from the runway.
- The *Object Free Area (OFA)* is a two-dimensional ground area surrounding runways, taxiways and taxilanes which is clear of objects except for objects whose location is fixed by function.
- The *Runway Protection Zone (RPZ)* is an area (formerly called the clear zone) used to enhance the safety of aircraft operations. It is at ground level beyond the runway end.

The size criteria of these areas are determined by the type and size of the aircraft using the facility. When the zones are established, objects in these zones not associated with airport functions are considered to be in conflict with airport usage and F.A.A. regulations. These safety zones, as they

relate to the Monticello Municipal Airport, are shown on Plates 3 and 4 in Appendix A.

The Near East Bypass Alternative A would require the relocation of the Monticello Municipal Airport main paved runway and crosswind turf runway because the proposed elevated interchange with Iowa 38 would be in conflict with the runway safety area, the object free area and the runway protection zone. Although existing Iowa 38 is currently also in conflict with these critical areas, the proposed elevated interchange would severely impact the airport safety.

The Near East Bypass Alternative B would only require relocation of the Monticello Municipal Airport crosswind turf runway. This proposed alternative would not conflict with the runway safety area or object free area of the main paved runway and would only have minor infringement on the outer limit of the runway protection zone.

The Far East Alternative and the Improve Existing Streets Alternative would not impact the Monticello Municipal Airport.

L. Geotechnical Overview

A preliminary geotechnical study of the Monticello bypass area was completed to determine any physical features which would affect the alignment or construction of a new roadway. The study revealed several areas of high groundwater elevation or shallow bedrock which would be further investigated during final design. According to the study, all on-site soils except for the organic soils at the surface would probably be suitable for construction of the roadways. No significant geotechnical constraints were identified for any of the proposed alignments. During the final design phase, more extensive soil exploration and testing would be conducted for the selected alternative.

VI. INDIRECT IMPACTS

Loss of drive-by traffic to highway-sensitive businesses is a potential negative impact of an urban bypass. To determine the potential for this impact to occur in Monticello along the part of existing U.S. 151 that would be bypassed, a telephone survey to obtain business owners' opinions on how the bypass might affect them was conducted in June, 1993. Information in this section is based on this phone survey.

Highway-sensitive businesses (i.e., businesses that depend on drive-by traffic for all or part of their sales) make up 23 of the 52 businesses located along existing U.S. 151 within the city limits of Monticello. It is likely that these highway-sensitive businesses along existing U.S. 151 would lose drive-by customers as a result of any of the bypass alternatives. These businesses include the following:

- 11 Restaurants
- 2 Motels
- 4 Service Stations/Auto Repair
- 2 Convenience Stores/Beverage Sales
- 2 Gift Shops
- 1 Greenhouse
- 1 Salvage and Scrapyard

The numbers of full- and part-time employees at these highway-sensitive businesses range from 0-20 full-time employees and 0-33 part-time employees. The total full-time employees for these businesses was 206, and total customers per day was estimated at 2,460.

The owners of these businesses indicated that their business would be affected by a bypass of Monticello. Table 10 summarizes the percent of nonlocal business generated by U.S. 151 as estimated by the business owners.

Some businesses support the bypass despite the fact that they feel business will be adversely affected. A common sentiment was that if there were a bypass, it should be close to town so Monticello would be visible from the highway. Several respondents commented that the highway and exit ramps should be well marked and well lighted, and that three exits into Monticello would be preferable. All 3 bypass alternatives were evaluated to determine if Monticello would be visible while traveling along them. The Far East Bypass Alternative would not allow a view of the city since it is too far from Monticello, while the 2 Near East Bypass Alternatives would allow good views from at least 1 point along their lengths.

TABLE 10

ESTIMATES OF NONLOCAL BUSINESS ALONG U.S. 151
BY OWNERS OF HIGHWAY-SENSITIVE BUSINESSES

Estimated Percentage of Their Non-Local Business Attributable to U.S. 151 Drive-By Traffic*	No. Businesses
Some; Unable to Estimate	3
0-10	1
11-20	2
21-30	4
31-40	1
41-50	6
51-60	1
61-70	1
71-80	2
81-90	0
91-100	2

* Business owners' estimate only; information not verified.

Some business owners expressed a preference for widening U.S. 151 through town rather than a bypass, as they felt this would eliminate the possibility of loss of business.

Many businesses in Monticello, like other bypassed communities, may be affected initially, but they will likely recover. According to reports by Wisconsin DOT (1988) and Iowa DOT (1992), communities are generally not affected as much as they anticipated, and many even see more business after a bypass is in place.

The six bypassed communities included in the 1988 Wisconsin survey report agreed that the bypass had little long-term effect and even increased the number of jobs in some of their communities. According to Iowa DOT's 1990 review, in bypassed Iowa communities with populations greater than 1,000, retail business either increased more than the state average or showed decreases smaller than those seen in surrounding areas.

Eleven businesses would be displaced with the Improve Existing Streets Alternative.

These displaced businesses would include:

- An Implement Dealer
- A Credit Union
- A Car Wash
- Energy Manufacturing Company
- A Gift Shop
- 2 Restaurants
- A Machine Shop
- 2 Vacant Commercial Buildings
- A Commercial Storage Building

VII. COMPARISON OF ALTERNATIVES

The impacts and general features of each alternative are summarized in Tables 11, 12 and 13. Below is a discussion of the positive and negative aspects of each alternative.

A. Division 1 - Improve Existing Alignment

1. *Positive Aspects*

- Uses existing right-of-way as much as possible.
- Requires less land for right-of-way than the eastern bypass.
- Less expensive than the eastern bypass.
- No diagonal severances of farm properties.

2. *Negative Aspects*

- Seven homes will be displaced.
- Affects 3 more properties than does the eastern bypass.
- Requires more channel relocation of Kitty Creek than the bypass alternative.
- Impacts more woodland and wetlands than does the eastern bypass.

B. Division 1 - Eastern Bypass

1. *Positive Aspects*

- Affects 3 fewer properties than the Improve Existing Alignment.
- Requires less channel relocation of Kitty Creek than the Improve Existing Alignment.
- Displaced 1 less home than does Improve Existing Alignment.

2. *Negative Aspects*

- Three farm properties will be diagonally severed.
- Impacts a greater amount of the prime farmland than the Improve Existing Alignment.

C. Division 2 - Near East Bypass Alternative A

1. *Positive Aspects*

- Affects fewer properties than Improve Existing Streets Alternative.
- No businesses displaced.

TABLE 11
SUMMARY OF IMPACTS
DIVISION 1
LANGWORTHY ALTERNATIVES
U.S. 151, SEGMENT 3

	Improve Existing Alignment	Eastern Bypass
Total New Right-of-Way Hectares (Acres)	78.5 (194)	85 (210)
Farmland Acquired Hectares (Acres)	38 (95)	45 (110)
Prime Farmland Acquired Hectares (Acres)	30 (73)	32 (80)
Impacts to Farm Operations	Minimal	Moderate Due to Diagonal Severances
Diagonal Severances of Farm Properties	0	3
No. Properties Affected	34	31
Residences Displaced	7	6
Access to Adjacent Properties (Total #, Includes Closed and Relocated)	19	17
Wetland Impacts Hectares (Acres)	1.2 (3)	1 (2.5)
Woodland Impacts Hectares (Acres)	0.8 (2)	0.2 (0.5)
River and Flood Plain Crossing	942 m (3,090 Feet) of Kitty Creek Channel Relocation	396 m (1,300 Feet) of Kitty Creek Channel Relocation

N.A. = Not Applicable.

TABLE 12
SUMMARY OF IMPACTS
DIVISION 2
MONTICELLO ALTERNATIVES
U.S. 151, SEGMENT 3

	Near East A	Near East B	Far East	Improve Existing Streets
Total New Right-of-Way Hectares (Acres)	104.4 (258)	113 (280)	121.4 (300)	73.6 (182)
Farmland Acquired Hectares (Acres)	75 (185)	88 (218)	138 (340)	14.2 (35)
Prime Farmland Acquired Hectares (Acres)	45 (111)	52 (128)	88 (218)	10.2 (25.2)
Impacts to Farm Operations	Severe for 2-3 Properties; Moderate for the Remainder	Severe for 2-3 Properties; Moderate for the Remainder	Severe for 1-2 Properties; Moderate for the Remainder	Minimal
Diagonal Severences of Farm Properties	10	10	9	0
No. Properties Affected	22	22	22	42
Residences Displaced	7	7	4	23
Businesses Displaced	0	0	0	11
Monticello Municipal Airport	Requires Relocation of Main and Crosswind Runways	Requires Relocation of Crosswind Runway	No Impact	No Impact
Access to Adjacent Properties (Total #, Includes Closed and Relocated)	17	18	15	53
Wetland Impacts Hectares (Acres)	1.4 (3.4)	1.4 (3.4)	2.1 (5.2)	0.3 (0.8)
Woodland and Prairie Impacts Hectares (Acres)	P - 0.4 (0.9) W - 2.6 (6.5)	P - 0 W - 2.6 (6.5)	P - 0 W - 3.6 (9)	P - 0 W - 0.1 (.25)
River and Flood Plain Crossing	2 Bridges Needed	2 Bridges Needed	Longer Bridge Than Other Bypass Alternatives - 2 Bridges Needed	1 Bridge Needed
Parks/Historic Society Property	0/Less Than 0.4 Hectare (1 Acre) From Edge of Property	0/0	0/0	Will Require .16 Hectare (.4 Acre) From Riverside Gardens in Monticello/0
View of Monticello From Bypass	Good View From High Point on Bypass	Good View From High Point on Bypass	Little or No View of the City	N.A.

TABLE 13

SUMMARY OF GENERAL FEATURES***
U.S. 151, SEGMENT 3

	Langworthy		Monticello			
	Improve Existing	Eastern Bypass	Near East A	Near East B	Far East	Improve Existing Streets
Length	12.9 (8.0)	12.7 (7.9)	11.9 (7.4)	12.1 (7.5)	13.0 (8.1)	11.6 (7.2)
Travel Time (Min.:Sec.)	8:44	8:37	8:04	8:11	8:50	9:25-10:30 ²
Roadway Type	4-Lane Divided	4-Lane Divided	4-Lane Divided	4-Lane Divided	4-Lane Divided	4-Lane ³ Undivided
Cost (1994 \$)**	\$8,599,000	\$10,067,000	\$23,170,000	\$21,509,000	\$22,051,000	\$11,937,000
Access Control ¹ (Priority Type):						
Begin Seg. 3 to X-44	III	III	III	III	III	III
X-44 to D-65	---	---	I	I	I	IV
D-65 to End. Seg. 3	---	---	III*	III*	III*	III
Speed Limit (mph)	55	55	55	55	55	35-55
No. of Traffic Signals	0	0	0	0	0	4

* Priority III Access Control begins north of Maquoketa River.

** Estimated Construction and right-of-way costs.

*** See Table 2 for more detailed list of features.

¹ See Table 3 for description of access control.

² Speed on existing alignment depends on speed limits, turning traffic, etc. (Lower end of range represents existing speed limits. Upper end represents reduced speed limits.)

³ Only through Monticello, balance of Segment 3 would be 4-lane divided.

- Requires fewest hectares (acres) for right-of-way of all the bypass alternatives.
- Provides view of city for travelers on bypass.
- Impacts the least amount of prime farmland.

2. Negative Aspects

- Requires relocation of Monticello Municipal Airport main and crosswind runways.
- Most expensive of all alternatives.
- Close to habitat for state protected ornate box turtle; potential for turtle road kills.
- Loss of some business for highway-sensitive businesses along existing U.S. 151.

D. Division 2 - Near East Bypass Alternative B

1. Positive Aspects

- No businesses displaced.
- Affects fewer properties than Improve Existing Streets Alternatives.
- Does not require relocation of main airport runway as for Near East A.
- Least expensive of bypass alternatives.
- Provides view of city for travelers on bypass.

2. Negative Aspects

- Requires more land than Near East A and Improve Existing Streets Alternatives.
- Requires relocation of Monticello Municipal Airport crosswind runway.
- Close to habitat for state protected ornate box turtle; potential for turtle road kills.
- Loss of some business for highway-sensitive businesses along existing U.S. 151.

E. Division 2 - Far East Bypass Alternative

1. Positive Aspects

- Affects fewer properties than Improve Existing Streets Alternatives.
- Fewest diagonal severances of farm properties of all bypass alternatives.
- No impact on Monticello Airport.

- Fewest residential displacements of all alternatives.
- Fewest changes in access of all alternatives.

2. Negative Aspects

- Longest route of the bypass alternatives.
- Largest amount of land needed for right-of-way purposes of the bypass alternatives.
- Affects largest amount of wetlands and woodlands of all alternatives.
- Loss of some business for highway-sensitive businesses along existing 151.
- Longest bridges required of all alternatives.
- View of Monticello not possible from bypass.

F. Division 2 - Improve Existing Streets

1. Positive Aspects

- Uses least amount of new right-of-way of all alternatives.
- Requires smallest amount of prime farmland for all alternatives.
- No diagonal severances of farm properties.
- Little or no impact to farm properties or farm operations.
- Takes the least amount of wetlands of all alternatives.
- Takes the least amount of woodlands of all alternatives.
- Least expensive of all alternatives.
- No impact on Monticello Airport.

2. Negative Aspects

- Displaces the most homes (23) of all alternatives.
- Displaces the most businesses (11) of all alternatives.
- Only alternative to acquire land from a park, Riverside Gardens.
- Changes access for many adjacent properties.
- Highest projected accident rate of all alternatives.
- Lowest operating speed and greatest traffic delay of all alternatives.

After evaluating the impacts and benefits of these final alternatives, Iowa DOT staff determined that the Improve Existing Streets Alternative in Division 2 should be dropped from further consideration because it would not provide the traffic service that is consistent with the remainder of the corridor (see project need section). In addition, it would have the most severe impacts to residences and businesses.

VIII. SUMMARY

This Environmental Assessment concludes that the proposed improvement is necessary for safe and efficient travel within the project corridor. The improvement will have no significant adverse social, economic or environmental impacts of a level that would warrant an environmental impact statement. Alternative selection will occur following completion of the public review period and corridor public hearing.

Unless significant impacts are identified as a result of public review or at the public hearing, then a Finding of No Significant Impact (FONSI) will be prepared for a selected proposed action as a basis for federal-aid corridor location approval.

IX. COMMENTS AND COORDINATION

A. Agency Coordination

Appropriate federal, state and local agencies were contacted on December 31, 1992, as part of early coordination for their comments concerning this project from Springville to Dubuque. Comment letters received are in Appendix E. Those agencies contacted are listed below:

- * U.S. Army Corps of Engineers
- * U.S. Department of the Interior, Fish and Wildlife Service
- * U.S. Environmental Protection Agency
- Federal Transit Administration
- Federal Emergency Management Agency
- U.S. Department of the Interior, National Park Service
- * U.S. Department of Agriculture, Soil Conservation Service
- * U.S. Department of the Interior, Office of Environmental Affairs
- Iowa Department of Economic Development
- Iowa State Historic Preservation Officer
- * Iowa Department of Natural Resources
- East Central Intergovernmental Association
- * East Central Iowa Council of Governments
- Linn County Conservation Board
- Jones County Conservation Board
- * Dubuque County Conservation Board
- Honorable Mayor Clay Gavin, Cascade, Iowa
- Cascade City Council
- * City of Cascade
- * Cascade Economic Development Corporation
- Honorable Mayor Glen Gabriel, Monticello, Iowa
- Monticello City Council
- * City of Monticello U.S. 151 Committee
- Honorable Mayor Ben Bailey, Springville, Iowa
- Springville City Council
- Linn County Board of Supervisors
- * Jones County Board of Supervisors
- Dubuque County Board of Supervisors
- Linn County Engineer
- * Jones County Engineer
- * Dubuque County Highway Department

* Indicates responding agencies

Comments received that pertain to this segment include:

- Controlling Soil Erosion
- Wetland Protection and Mitigation
- Stream Crossings
- Potential Threatened and Endangered Species
- Design of Intersections at Secondary Roads
- Favorable Review of the Project
- Opposition to Bypass of Monticello, But One Close to the City and With Three Access Points May be Acceptable

During the development of this project, coordination was continued with those agencies who had substantive comment, and meetings were held with local officials. On March 19, 1993, a meeting was held with the Monticello Highway 151 Committee (which includes local business owners and city officials) to discuss locally developed modifications to the alternatives presented at that time. They suggested using a braided interchange at each end of the bypass. They also proposed relocating Iowa 38 north to First Street (210th Street) as part of a bypass alternative. As a result of this meeting, the second suggestion (relocating Iowa 38) was incorporated into an alternative under consideration: Near East Alternative B.

On August 18, 1993, a meeting with the Monticello Municipal Airport Board was held to discuss impacts to the airport. The Airport Board expressed concern about the impact to the runways and access to the airport.

In March, 1994, the Jones County Historical Society was contacted to obtain comments and information concerning their property located adjacent to Iowa 38 near the Monticello Airport. They expressed concern about this property since a great deal of work has gone into establishing the prairie that grows there now. Also, it is used by the public, especially school classes, for educational purposes.

Discussions were held with staff of the Preserves and Ecological Services Bureau, Iowa DNR, regarding impacts to state threatened and endangered species. A copy of the field survey for threatened and endangered reptiles has been provided to this Bureau.

B. Public Coordination











A public information meeting was held in Monticello on February 2, 1993, to inform the public about the project, allow them to comment and ask questions pertaining to the project. The main comments and concerns received include:

- Number of Exits to Monticello
- Access to Individual Properties
- View of Monticello From the Bypass
- Safety on U.S. 151
- Emergency Vehicle Access at All Stages of the Project
- Funding for the Project and the Airport Runway Relocation
- Diagonal Severances, Access and Traffic Patterns Related to Agricultural Land
- Consider Upgrading the Rural Segments of U.S. 151 to 4-Lane Before Construction of the Monticello Bypass

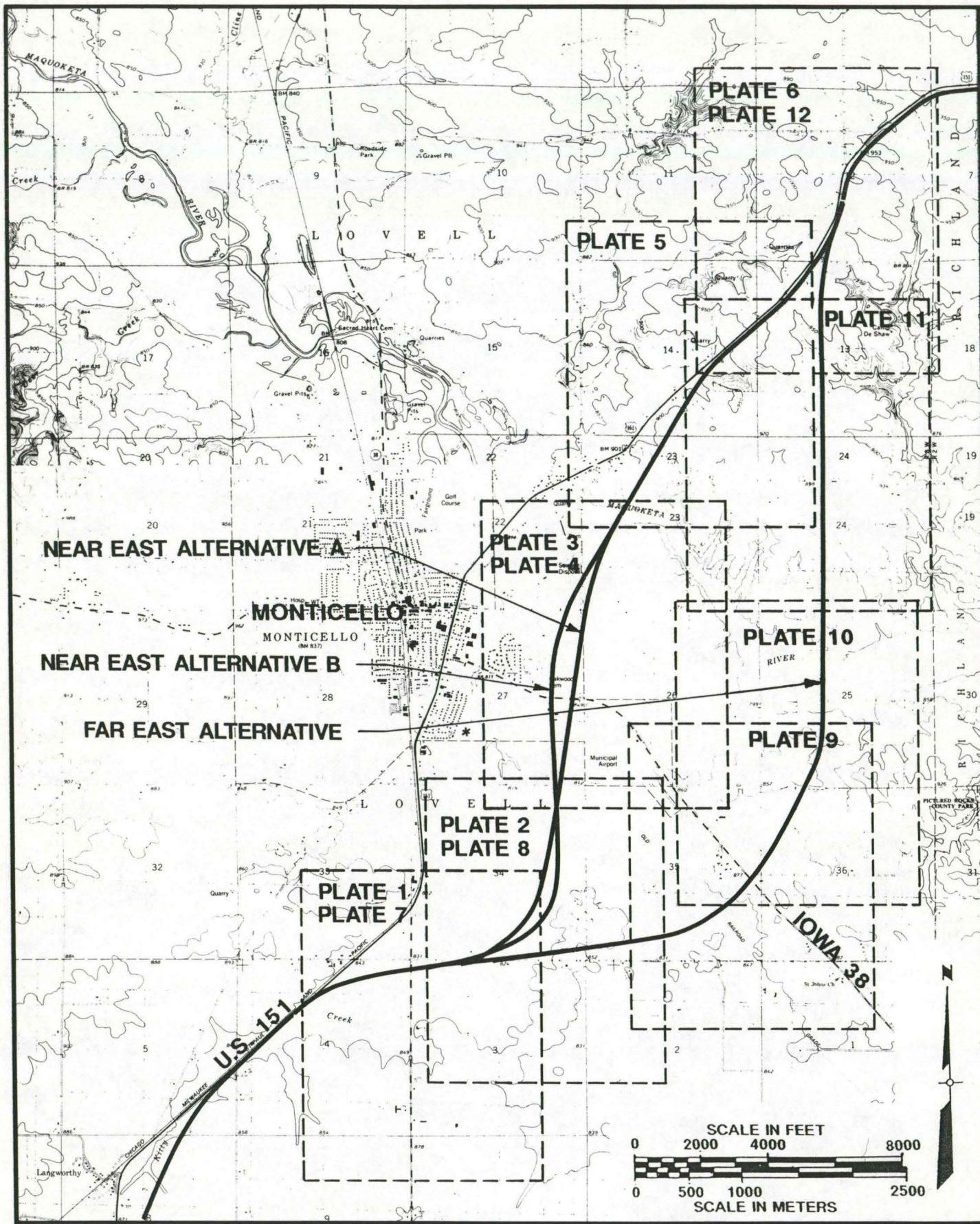
This document will be made available to all appropriate federal, state and local agencies for review and comment. These responses from reviewing agencies will be considered during further development of the project. Notification of the time and place of the public hearing for this segment of the project will be announced at the time the Environmental Assessment is made available for public review.

APPENDIX A
AERIAL PHOTOGRAPHS - MONTICELLO BYPASS ALTERNATIVES

LEGEND -- AERIAL PHOTOGRAPHS

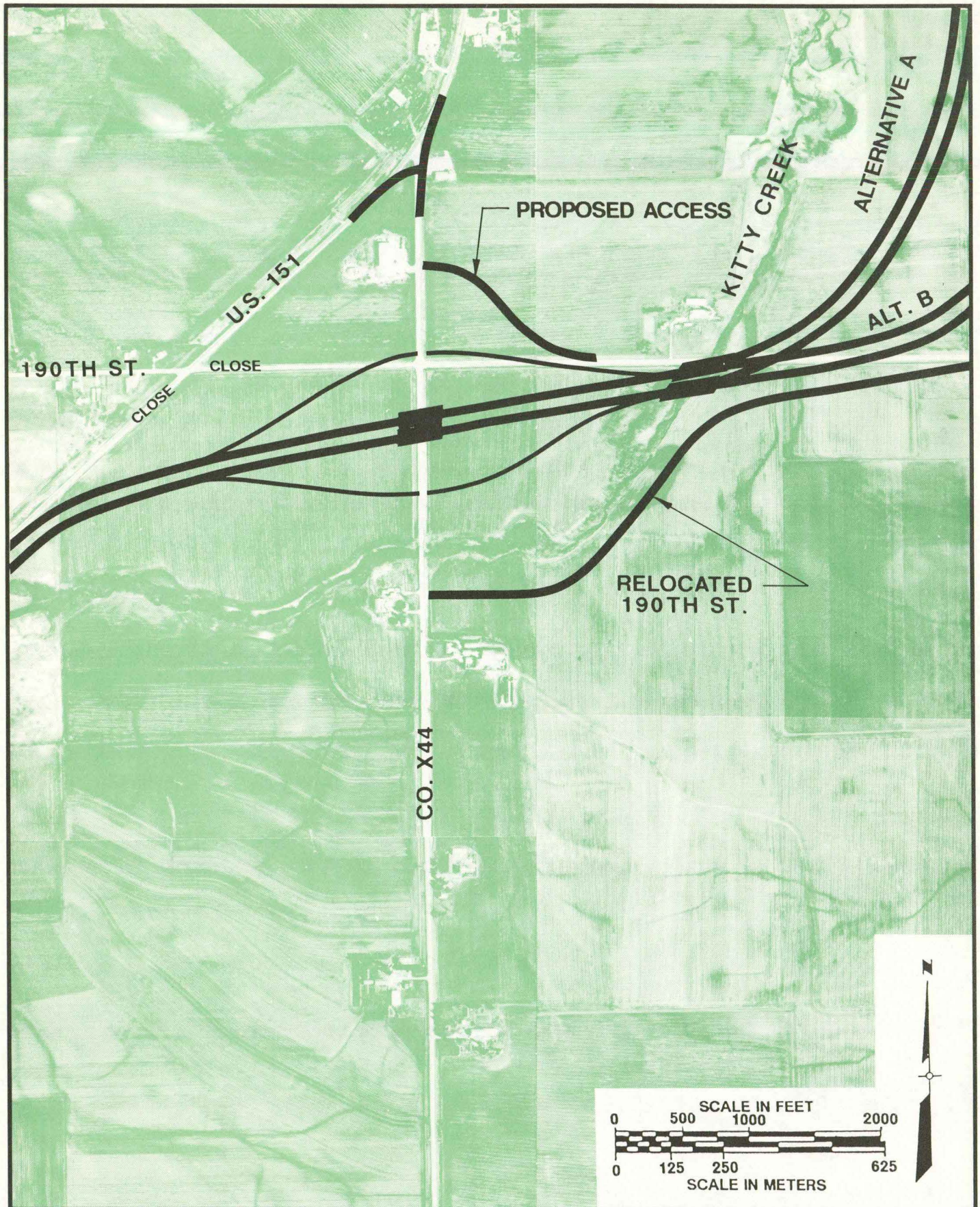
	U.S. 151 Reconstruction
	Proposed At-Grade Intersection
	Relocated Side Road
	New Bridges, Overpasses, or Underpasses
	Possible Displacement of Residences or Businesses
	Proposed Road Closure
	Monticello Corporate Limits
	Obstacle Free Area
	Runway Protection Zone
	Runway Safety Area

**NOTE : THE ABOVE SYMBOLS REPRESENT APPROXIMATE
LOCATIONS AND ARE NOT TO SCALE**



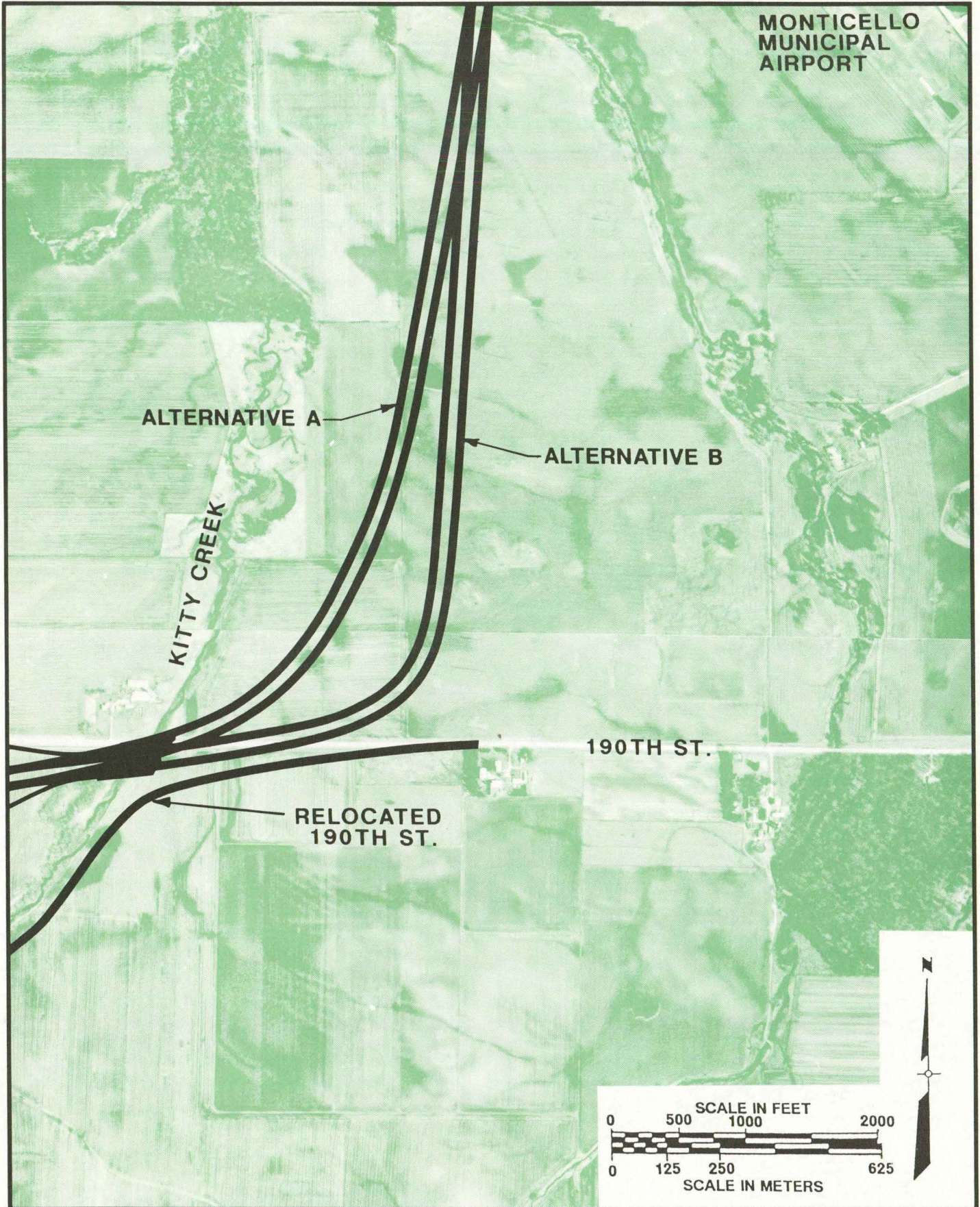
ENVIRONMENTAL ASSESSMENT
 U.S. 151 SEGMENT 3
 ANAMOSA TO MONTICELLO
 IOWA DEPARTMENT OF TRANSPORTATION

FIGURE A1
 PLATE INDEX MAP



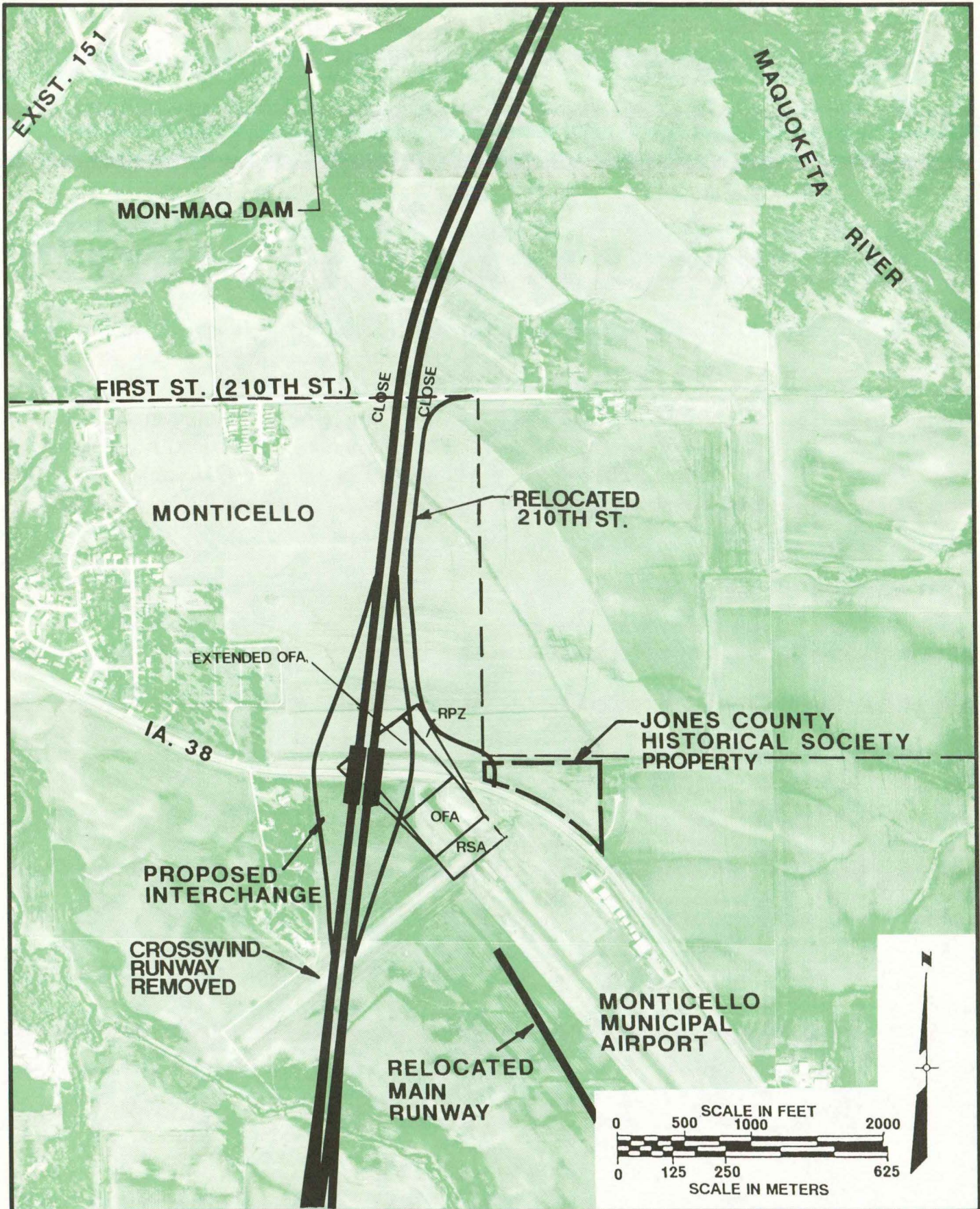
ENVIRONMENTAL ASSESSMENT
 U.S. 151 SEGMENT 3
 ANAMOSA TO MONTICELLO
 IOWA DEPARTMENT OF TRANSPORTATION

PLATE 1
 DIVISION 2
 NEAR EAST ALTERNATIVES A AND B



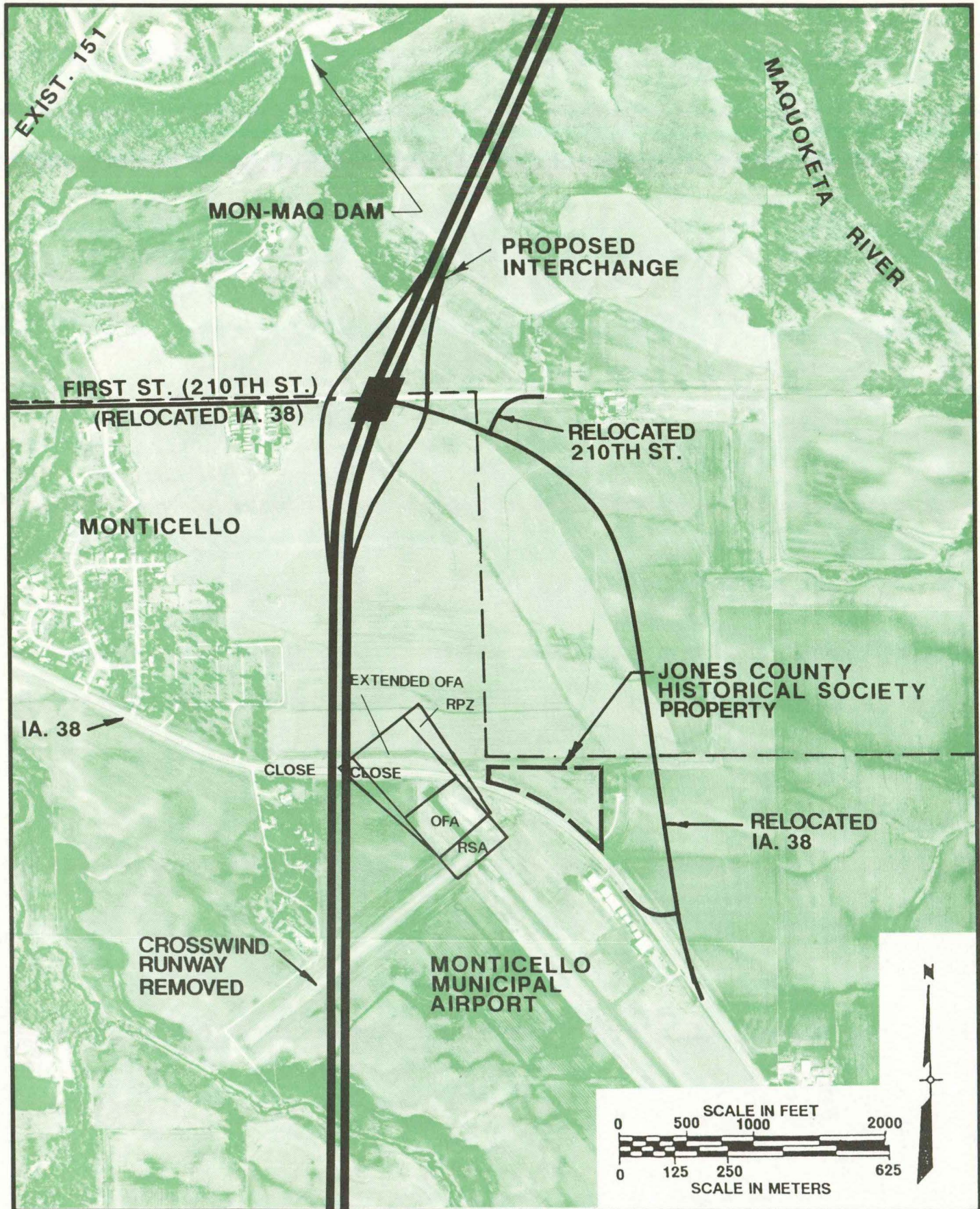
**ENVIRONMENTAL ASSESSMENT
U.S. 151 SEGMENT 3
ANAMOSA TO MONTICELLO
IOWA DEPARTMENT OF TRANSPORTATION**

**PLATE 2
DIVISION 2
NEAR EAST ALTERNATIVES A AND B**



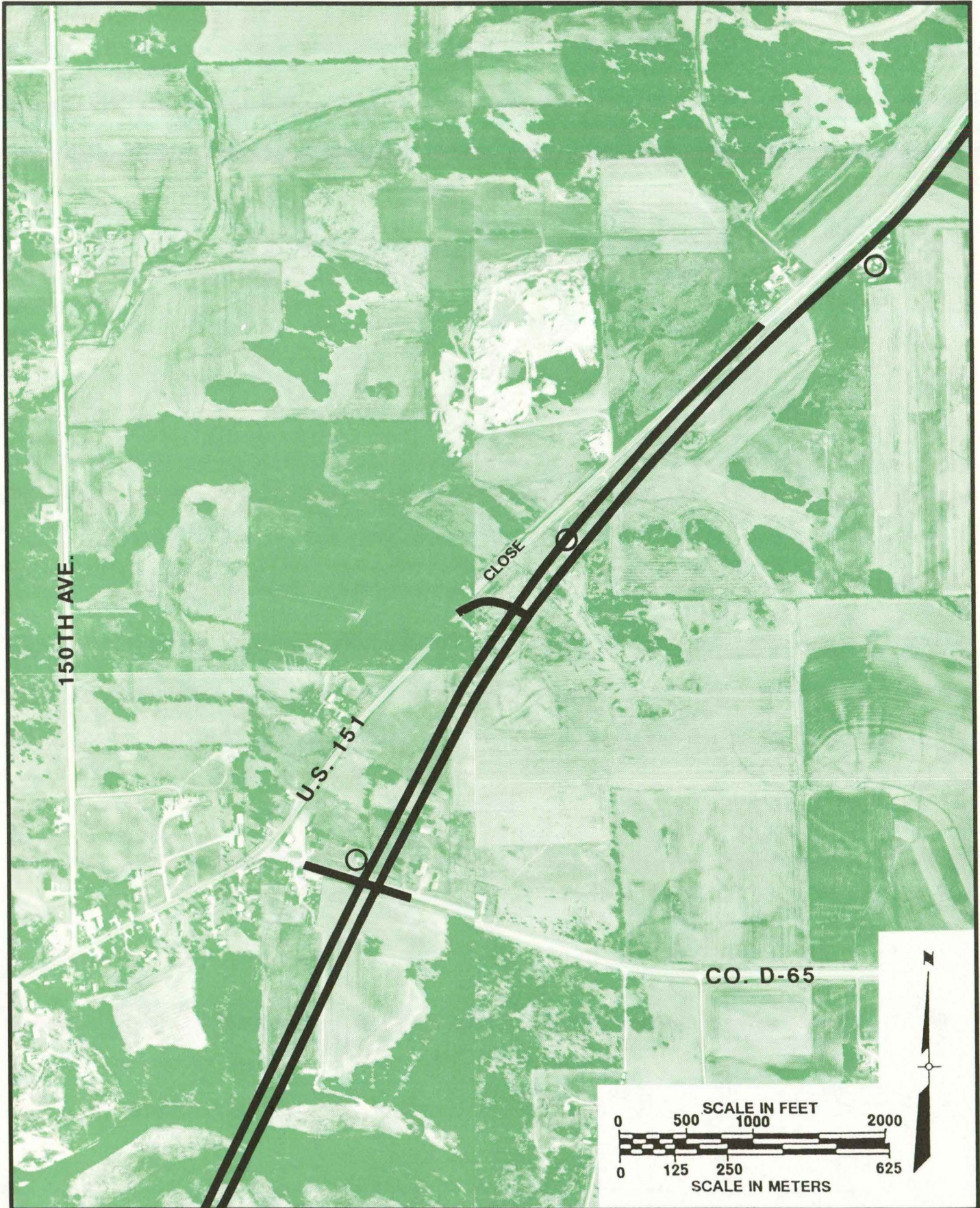
ENVIRONMENTAL ASSESSMENT
 U.S. 151 SEGMENT 3
 ANAMOSA TO MONTICELLO
 IOWA DEPARTMENT OF TRANSPORTATION

PLATE 3
 DIVISION 2
 NEAR EAST ALTERNATIVE A



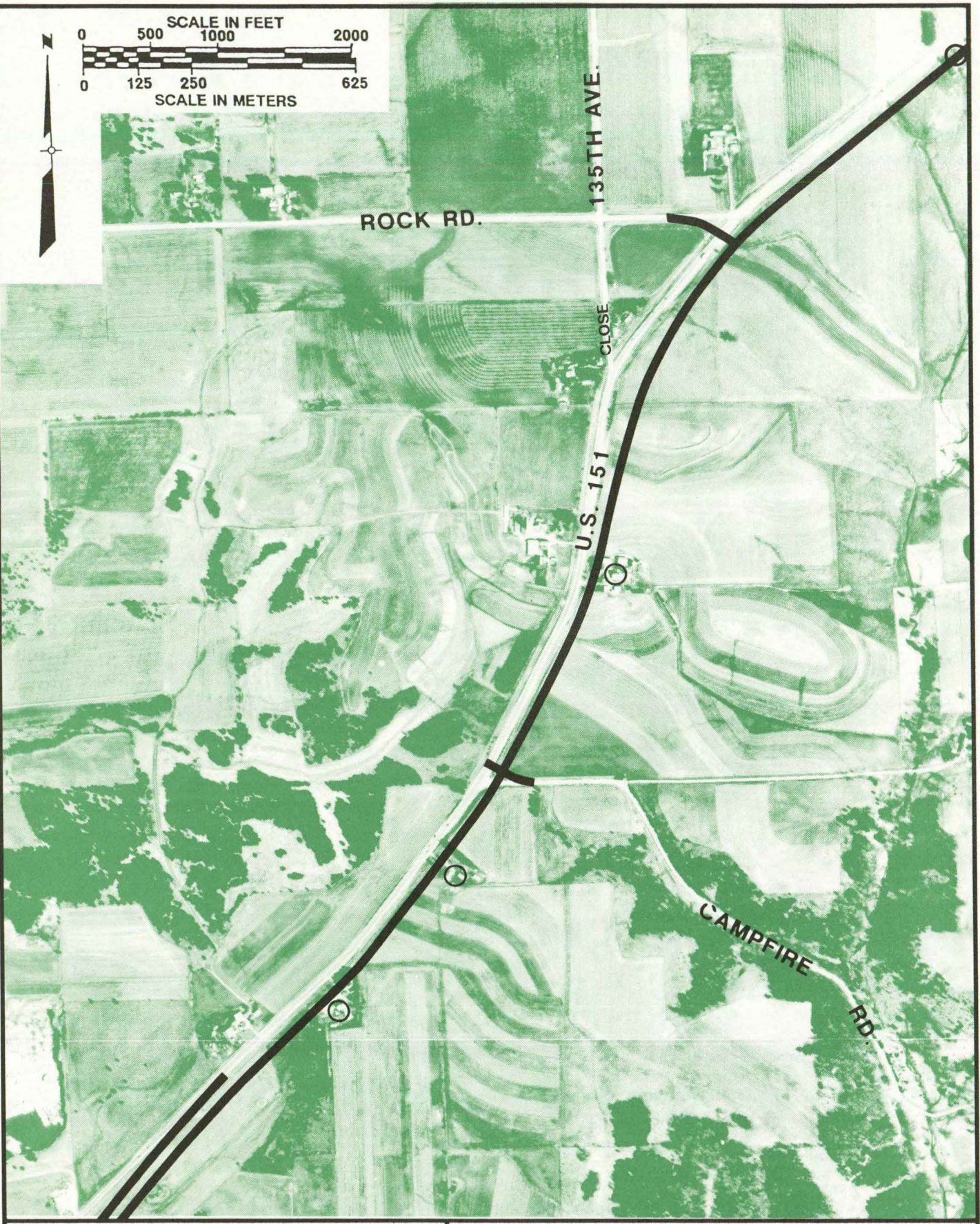
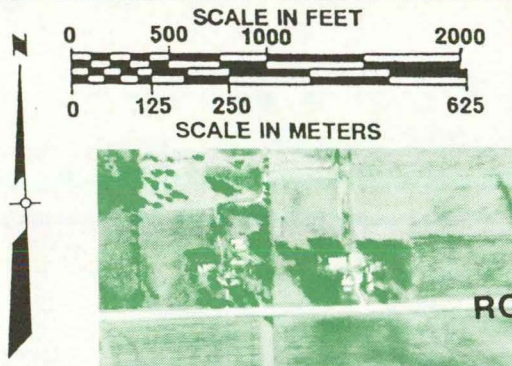
ENVIRONMENTAL ASSESSMENT
 U.S. 151 SEGMENT 3
 ANAMOSA TO MONTICELLO
 IOWA DEPARTMENT OF TRANSPORTATION

PLATE 4
 DIVISION 2
 NEAR EAST ALTERNATIVE B



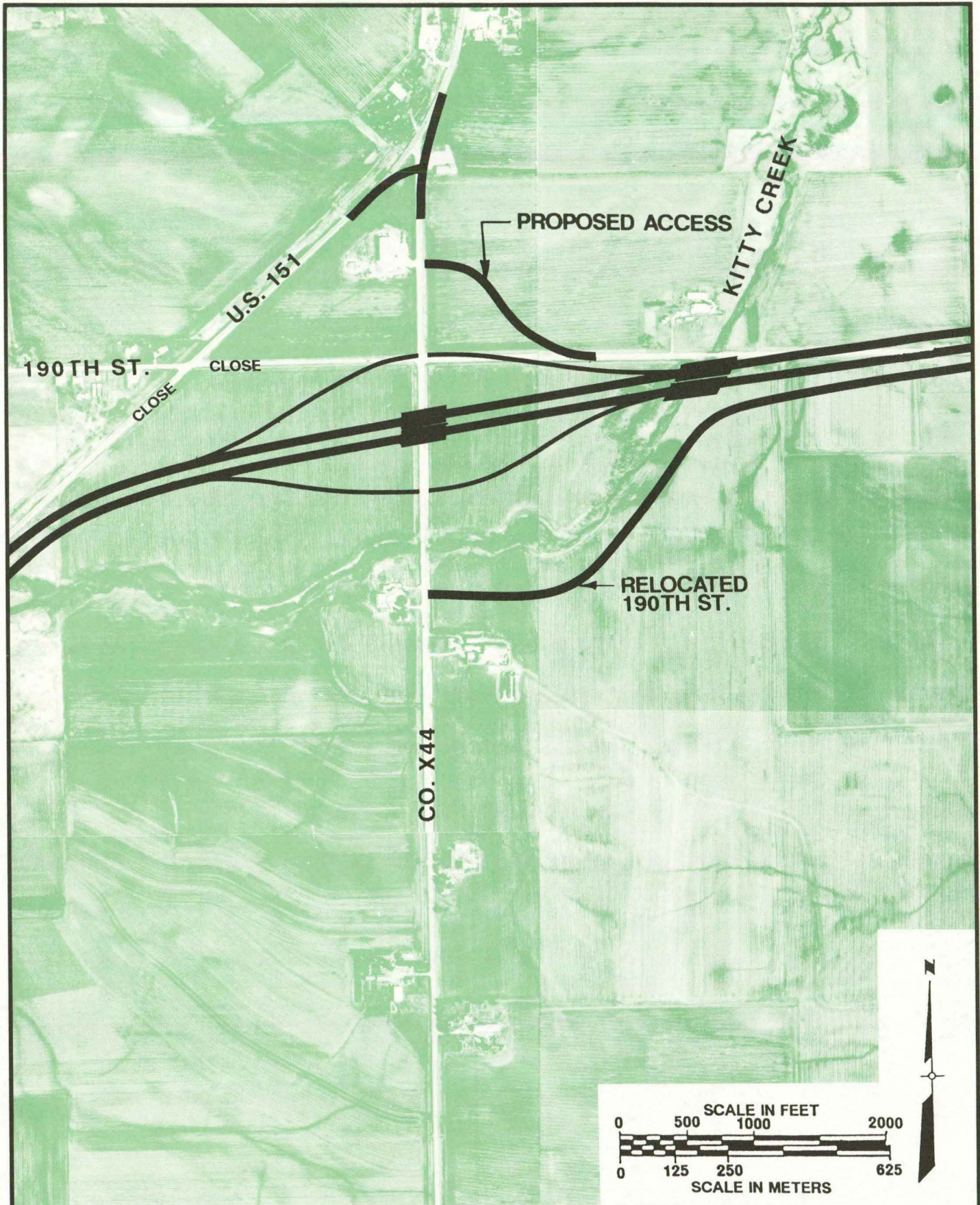
ENVIRONMENTAL ASSESSMENT
U.S. 151 SEGMENT 3
ANAMOSA TO MONTICELLO
IOWA DEPARTMENT OF TRANSPORTATION

PLATE 5
DIVISION 2
NEAR EAST ALTERNATIVES A AND B



ENVIRONMENTAL ASSESSMENT
U.S. 151 SEGMENT 3
ANAMOSA TO MONTICELLO
IOWA DEPARTMENT OF TRANSPORTATION

PLATE 6
DIVISION 2
NEAR EAST ALTERNATIVES A AND B



ENVIRONMENTAL ASSESSMENT
U.S. 151 SEGMENT 3
ANAMOSA TO MONTICELLO
IOWA DEPARTMENT OF TRANSPORTATION

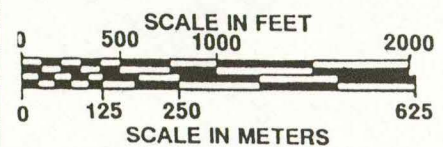
PLATE 7
DIVISION 2
FAR EAST ALTERNATIVE

**MONTICELLO
MUNICIPAL
AIRPORT**

KITTY CREEK

190TH ST.

**RELOCATED
190TH ST.**



**ENVIRONMENTAL ASSESSMENT
U.S. 151 SEGMENT 3
ANAMOSA TO MONTICELLO
IOWA DEPARTMENT OF TRANSPORTATION**

**PLATE 8
DIVISION 2
FAR EAST ALTERNATIVE**

**MONTICELLO
MUNICIPAL
AIRPORT**

**MEADOW
LARK RD.**

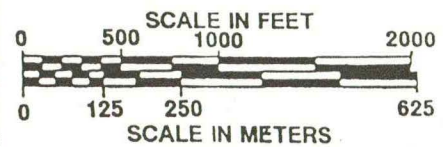
IA-38

CLOSE

195TH ST.

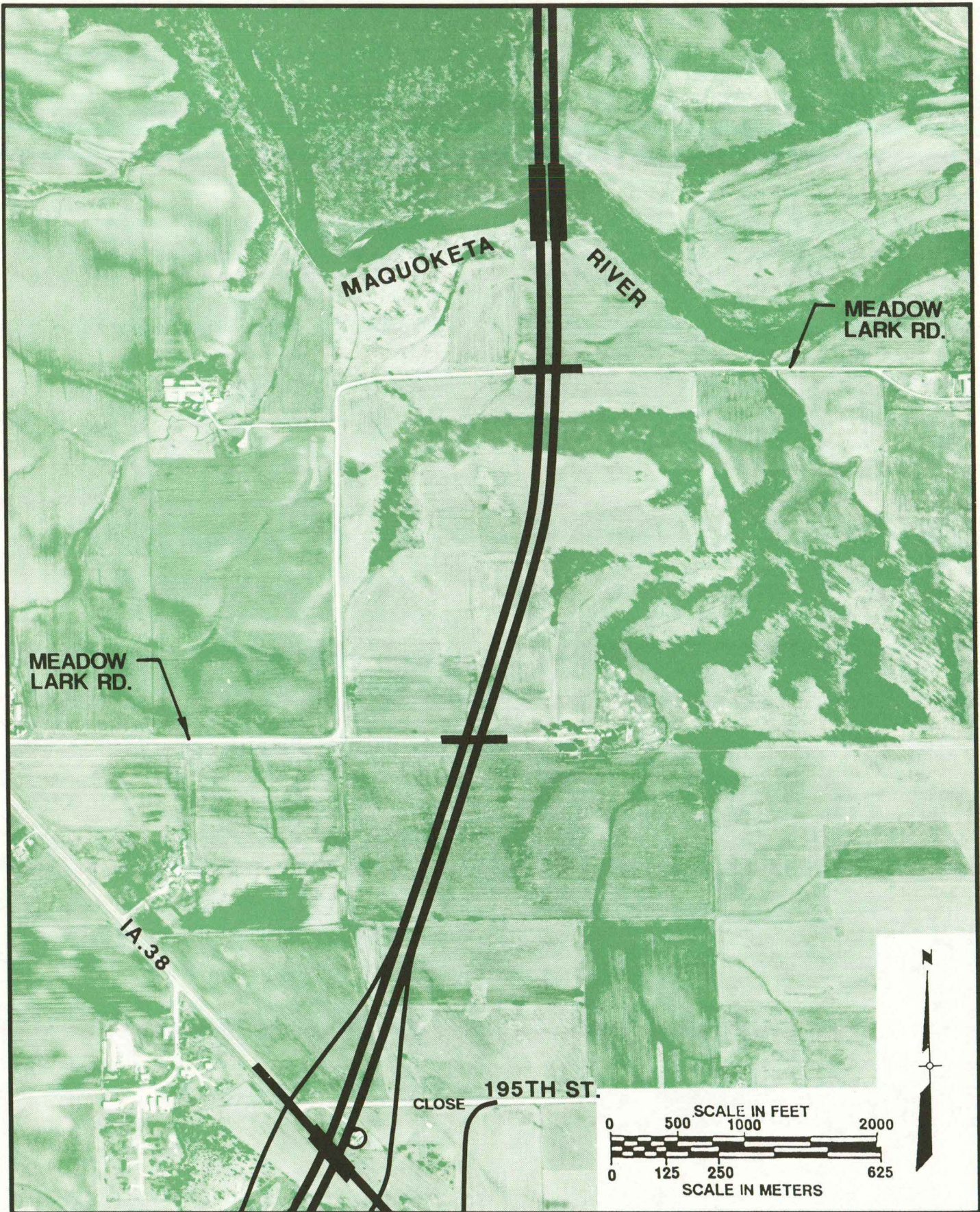
**RELOCATED
195TH ST.**

190TH ST.



**ENVIRONMENTAL ASSESSMENT
U.S. 151 SEGMENT 3
ANAMOSA TO MONTICELLO
IOWA DEPARTMENT OF TRANSPORTATION**

**PLATE 9
DIVISION 2
FAR EAST ALTERNATIVE**



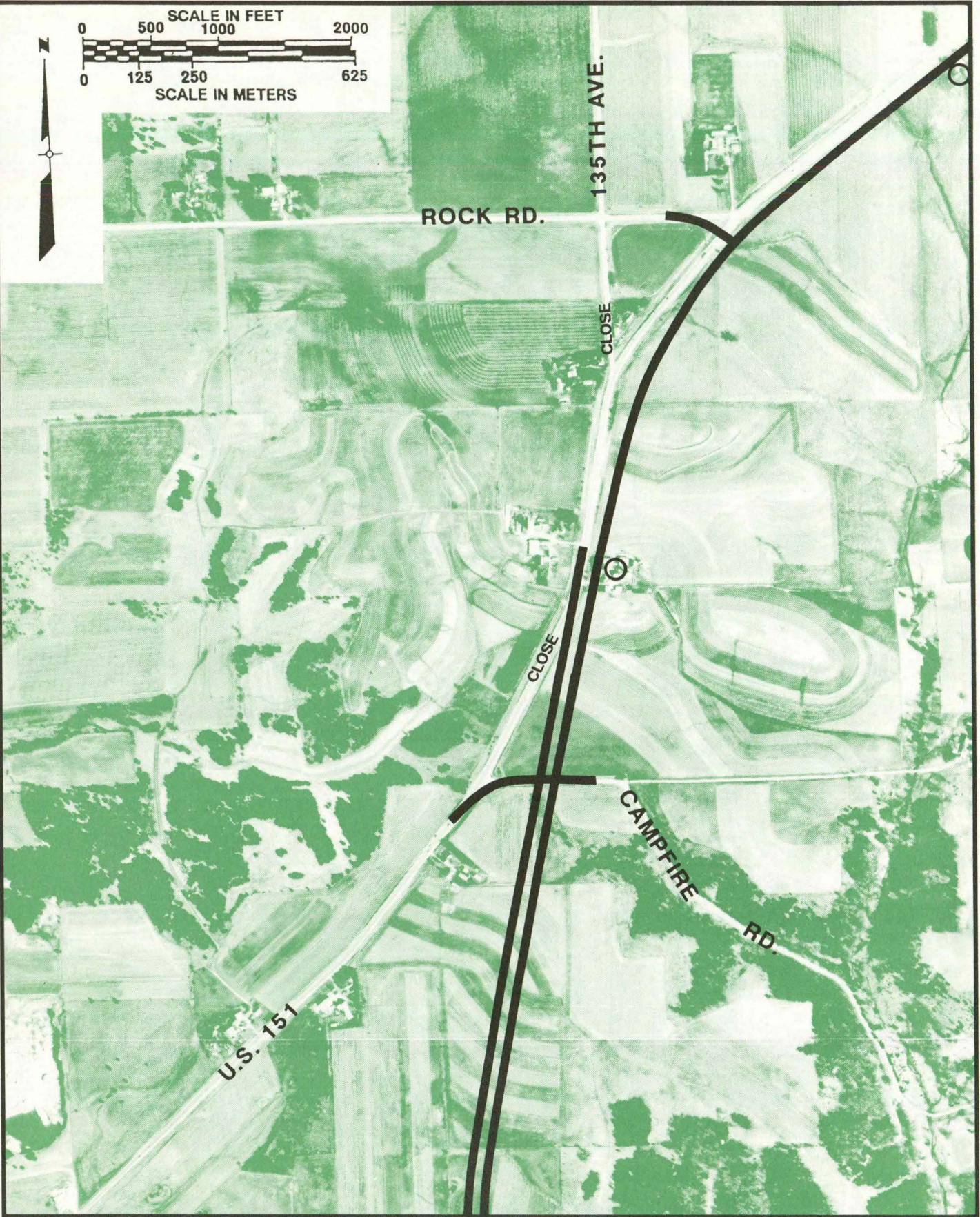
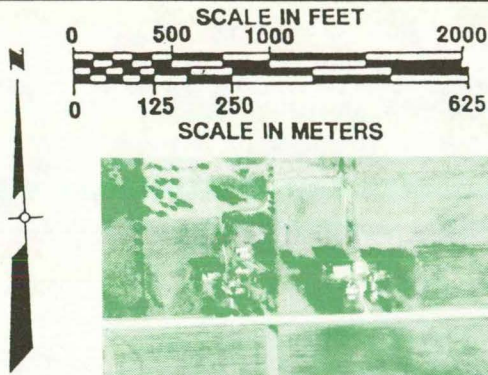
ENVIRONMENTAL ASSESSMENT
 U.S. 151 SEGMENT 3
 ANAMOSA TO MONTICELLO
 IOWA DEPARTMENT OF TRANSPORTATION

PLATE 10
 DIVISION 2
 FAR EAST ALTERNATIVE



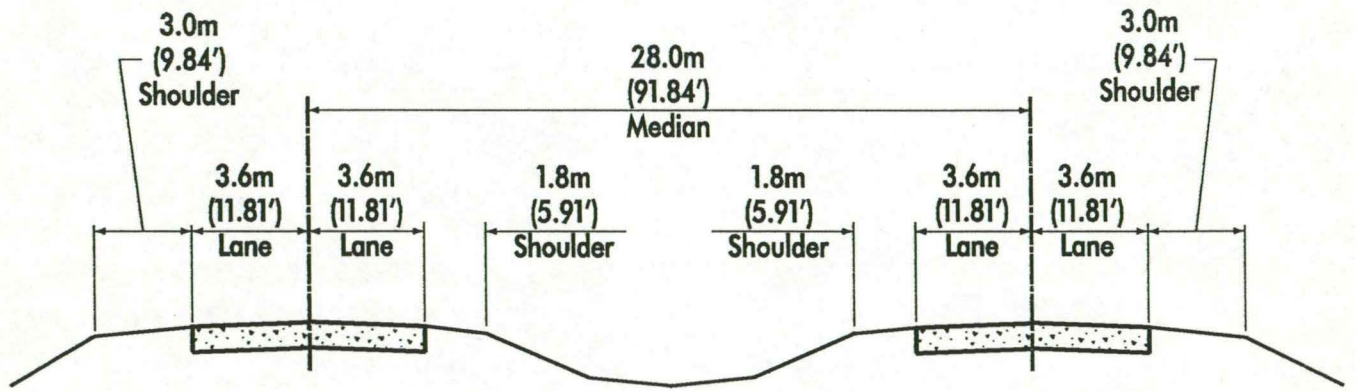
**ENVIRONMENTAL ASSESSMENT
U.S. 151 SEGMENT 3
ANAMOSA TO MONTICELLO
IOWA DEPARTMENT OF TRANSPORTATION**

**PLATE 11
DIVISION 2
FAR EAST ALTERNATIVE**



ENVIRONMENTAL ASSESSMENT
U.S. 151 SEGMENT 3
ANAMOSA TO MONTICELLO
 IOWA DEPARTMENT OF TRANSPORTATION

PLATE 12
DIVISION 2
FAR EAST ALTERNATIVE



ENVIRONMENTAL ASSESSMENT
 U.S. 151 SEGMENT 3
 ANAMOSA TO MONTICELLO
 IOWA DEPARTMENT OF TRANSPORTATION

FIGURE A2
 TYPICAL CROSS SECTION

APPENDIX B

DESCRIPTION OF ALTERNATIVES CONSIDERED AND DELETED

**APPENDIX B
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	2. Alternative 2	B.3
	3. Alternative 3	B.3
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- B2 Typical Cross Section, Monticello - Improve Existing Alternative
- B3 Highway 151 Committee Interchange Alternative
- B4 Early Interchange Variation

APPENDIX B

Following is a description of each alternative considered and deleted. Figure B1 shows the location of each alternative, and Table B-1 presents the major features of each alternative. Table B-2 summarizes the major impacts of each.

A. WEST BYPASS ALTERNATIVE A

This alternative would bypass Monticello on the west side beginning 1.2 km (3/4 mile) north of Langworthy and rejoin U.S. 151 6 km (3.7 miles) northeast of Monticello (Figure B1). Interchanges would be at Iowa 38 and County Road E-16. It would be a 4-lane divided facility with Priority I access control (access allowed only at interchanges). The remainder of this segment would have Priority III Access Control (400 m (1/4 mile) spacing allowed between access points).

This alternative was deleted because:

- Overall Construction Cost Would be an Estimated \$6 to \$8 Million Higher Than For the Other Alternatives
- Overall Length Would be 1.6 to 3.2 km (1 to 2 Miles) Longer Than Other Bypass Alternatives
- Approximately Twice the Acreage of Wetlands Would be Impacted
- Large Impacts to Woodlands
- A Large Amount of Agricultural Land Would be Impacted
- Approximately 20.2 Hectares (50 Acres) More Farmland Would be Affected Compared to the Eastern Bypass Alternatives

B. WEST BYPASS ALTERNATIVE B

Another alternative alignment was considered for a west bypass of Monticello (Figure B1). In the north-south portion, its alignment was 0.8 km (1/2 mile) west of the West Bypass Alternative A. It then curved to the east 1.2 km (3/4 mile) south of the West Bypass Alternative A (Figure B1). It had fewer impacts to existing roads but was deleted because of:

- Greater Impacts on Developed Properties Along County Road E-16
- More Rugged Topography Than for Alternative A
- More Wetland/Woodland Impacts Near the Maquoketa River Than Near East Bypass Alternatives
- Many Farm Property Impacts

TABLE B-1

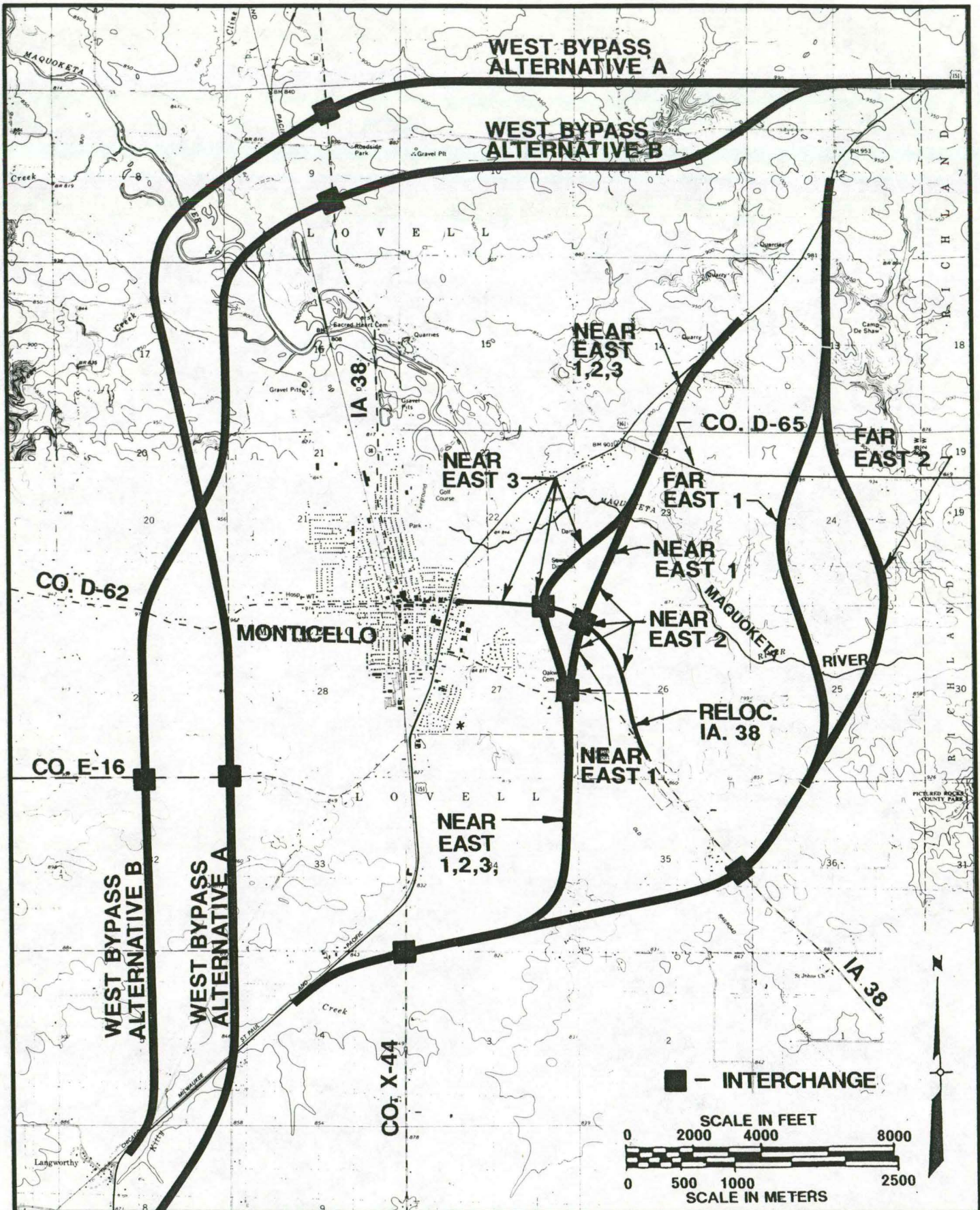
**MAJOR FEATURES AND IMPACTS OF ALTERNATIVES
CONSIDERED AND DELETED**

	Description	Major Impacts
<u>Bypass Alternatives*</u>		
West A	Ties to east bypass of Langworthy. Bypasses Monticello on the west.	Large amounts of farmland, wetland and woodland impacted. Longer and more costly than other bypass alternatives.
West B	Bypasses Monticello on the west.	Many farm properties and developed properties affected. Wetland and woodland impacts.
Near East 1	Bypasses Monticello on the east.	Relocates main airport runway and the crosswind runway.
Near East 2	Bypasses Monticello on the east. Would relocate Iowa 38.	Relocates main airport runway; high costs.
Near East 3	Bypasses Monticello on the east. Would relocate Iowa 38.	Impacts to a cemetery and mobile home court; poor design features; high costs.
Far East 1	Bypasses Monticello on the east. Curves west, north of the Maquoketa River.	Impacts to oak savanna; diagonal severance of farmland.
Far East 2	Bypasses Monticello to the east. Curves east, north of the Maquoketa River.	Diagonal severances of farmland and farm operation impacts.
<u>Interchange Alternatives**</u>		
Monticello Highway 151 Committee Alternative	Associated with Near East and Far East Bypasses. Partial interchanges south and north of Monticello would provide a direct flow of traffic to town rather than around town.	Severe right-of-way impacts, cost to construct higher than other bypass alternatives; operational problems.
Other Early Interchange Variation	Full interchanges south and north of Monticello.	Cost and right-of-way impacts higher than for other alternatives.
<u>Improve Existing Streets Alternatives***</u>		
Monticello - Improve Existing Alternatives 1-8	Eight alternatives with different cross sections and access control. All include relocation of Iowa 38.	Large numbers of homes, businesses and properties displaced or affected (see Table B-2).

* All are 4-lane divided facilities with at least 1 interchange and are shown on Figure B1.

** Shown on Figures B3 and B4.

*** Described on Table B-2 and shown on Figure B2.



ENVIRONMENTAL ASSESSMENT
U.S. 151 SEGMENT 3
ANAMOSA TO MONTICELLO
 IOWA DEPARTMENT OF TRANSPORTATION

FIGURE B1
BYPASS ALTERNATIVES
CONSIDERED AND DELETED

C. NEAR EAST BYPASS - U.S. 151/IOWA 38 INTERCHANGE ALTERNATIVES

The original layout for the Near East Alternative for the Monticello Bypass provided an interchange at Iowa 38, just west of the airport (Figure B1). The original alignment was a few hundred feet east of the alignments for the Near East Bypass Alternatives A and B under consideration at the Maquoketa River crossing. This interchange would require relocation of the main and crosswind runways. This relocation was expected to be compatible with the proposed location already under consideration by the Monticello Municipal Airport Board.

However, the project team determined that the proposed interchange location for this alternative would encroach on the required runway protection zone (RPZ) for the relocated runway and would require the runway to be relocated even farther to the south. The RPZ is an area (formerly called the clear zone) used to enhance the safety of aircraft operations. It is at ground level beyond the runway end.

During a meeting on March 18, 1993, the Monticello 151 Committee suggested an alternative that would relocate Iowa 38 approximately 0.8 km (1/2 mile) to the north. This relocation would allow the project to avoid encroachment on the RPZ.

In addition to the airport, a state threatened turtle was found to inhabit an area on the north side of the Maquoketa River. The bypass alternative was located directly through this turtle habitat. The main-lines of all the Near East alternatives were shifted west to avoid the turtle population.

Based on the above considerations, four variations of the Near East Alternative were developed for the U.S. 151/Iowa 38 interchange (Figure B1). These subalternatives consisted of variations in the locations of the main-line of U.S. 151 and the Iowa 38/151 interchange and were evaluated based on their estimated cost and impact to the airport. Three of these subalternatives were deleted for reasons described below. The fourth is the one that is included in the Near East Alternative B described in the Alternatives Retained for Final Evaluation.

1. Alternative 1

The first subalternative would have an interchange at the crossing of existing Iowa 38 and the original Near East alignment of U.S. 151 discussed above. At this location, the proposed highway interchange and ramps would conflict with the Runway Protection Zone (RPZ) for both existing Runway 13-31 and proposed Runway 15-33 at the Monticello Airport.

To avoid this conflict, proposed Runway 15-33 could be shifted approximately 182 m (600 feet) southeast along the proposed alignment. However, this shift would require approximately 731 m (2,400 feet) of a local road to be

relocated to avoid conflict with the RPZ at the southeast end of proposed Runway 15-33.

This alternative was deleted because:

- Cost of Relocating the Airport Runway
- Cost of Relocating the Local Road
- Total Cost Would be \$2.2 Million More Than That of the Proposed Near East Alternative B That Was Selected as a Final Alternative (See Page 8)

2. Alternative 2

The second subalternative would involve relocating Iowa 38 approximately 0.8 km (1/2 mile) to the north and connecting with an existing city street (First Street, also called 210th Street) which is an easterly projection of Iowa 38 through downtown Monticello. This would also relocate the U.S. 151/Iowa 38 interchange approximately 0.8 km (1/2 mile) to the north. Impacts to the airport's RPZ would be less than those for Subalternative 1. However, proposed Runway 15-33 would still need to be shifted approximately 122 m (400 feet) to the southeast to meet full design standards. The local road south of Runway 15-33 would require approximately 609 m (2,000 feet) of realignment. First Street (210th Street) would need to be upgraded, including a new bridge across Kitty Creek, in order to meet minimum primary road standards.

This alternative was also deleted because:

- Cost of Relocating the Runway
- Cost of Relocating the Local Road
- Total Cost Would be \$3.9 Million More Than That of the Proposed Near East Alternative B That Was Selected as a Final Alternative (See Page 8)

3. Alternative 3

The third subalternative would involve the relocation of Iowa 38 and its interchange, similar to that for Subalternative 2. It would also shift the alignment of U.S. 151 to the west to avoid conflicts with the RPZ for both existing Runway 13-31 and proposed Runway 15-33. This westward shift of U.S. 151 is limited to approximately 91 m (300 feet) by an existing residential development.

This alternative was deleted because:

- Poor Horizontal Alignment
- High Construction Costs
- Possible Right-of-Way Impacts to Oakwood Cemetery and a Mobile Home Court

D. FAR EAST BYPASS ALTERNATIVES

Three alternative alignments in the Far East corridor were considered. The one still under consideration is described in the Alternatives Retained for Final Evaluation section on page 9. The other two were eastern and western variations and are described below.

1. Far East Alternative 1

This variation begins near the Maquoketa River. The alignment would curve to the west approximately 244 m (800 feet), then curve back to the northeast approximately .8 km (.5 mile) north of County Road D-65 (Figure B1). This alternative was deleted from consideration because:

- Added Additional Curves to the Roadway
- Lengthened the Bypass
- Acquired Oak Savanna Habitat
- Had 2 Diagonal Severances to Farmland

2. Far East Alternative 2

This variation begins approximately 0.8 km (1/2 mile) south of the Maquoketa River. It extends on a northeasterly tangent away from the Iowa 38 interchange for about 2.4 km (1.5 miles). It then curves back to the northwest approximately 61 m (200 feet) south of County Road D-65 (Figure B1). This alternative was also deleted because:

- Added Additional Curves to the Roadway
- Lengthened the Bypass
- Severe Farm Operation Impacts
- Had 3 Diagonal Severances to Farmland

E. MONTICELLO - IMPROVE EXISTING ALTERNATIVES

The team examined eight additional alternatives which would keep U.S. 151 on its present alignment through Monticello. These alternatives are discussed below and summarized in Table B-2. Figure B2 shows typical cross sections of each type of

TABLE B-2

**SUMMARY OF MAJOR FEATURES AND IMPACTS FOR
MONTICELLO - IMPROVE EXISTING ALTERNATIVES**

Design Cross Section* Access Control	Alternative							
	1	2	3	4**	5	6	7	8
	Ex ¹ IV ⁵	Ex III ⁶	4-U ² Ex ⁷	4-U IV	4-U III	4-D ³ IV	4-D III	4-D FR ⁴ III
No. of Traffic Signals	4	4	4	4	4	4	4	4
Wetlands (Hectares) (Acres)	0.0 0.0	0.0 0.0	0.3 0.8	0.3 0.8	0.3 0.8	1.3 3.2	1.3 3.2	1.3 3.2
Woodland Impacts (Hectares) (Acres)	0 0	0 0	.08 .20	.08 .20	.08 .20	.10 .25	.10 .25	.10 .25
Riverside Gardens Park (Hectares) (Acres)	0.0 0.0	0.0 0.0	0.16 0.4	0.16 0.4	0.16 0.4	0.0 0.0	0.0 0.0	0.0 0.0
Strip R-O-W Acquisition (No. of Properties)	0	0	62	42	32	32	27	28
Residences Displaced	20	26	0	20	26	25	27	27
Businesses Displaced	11	18	0	11	18	18	24	16
Relocated Access (No. of Properties)- Residential	2	1	0	2	1	1	0	0
Relocated Access (No. of Properties)- Business	16	17	0	17	17	11	13	21
Construction Cost ⁸	3,370,000	3,370,000	5,925,000	6,020,000	6,015,000	8,293,000	8,298,000	8,982,000

¹Ex - Existing

²4-U - 4-Lane Undivided

³4-D - 4-Lane Divided

⁴4-D FR - 4-Lane Divided With a Frontage Road

⁵IV - Property access would be allowed only every 91.4 m (300 feet).

⁶III - Property access would be allowed only every 182.8 m (600 feet).

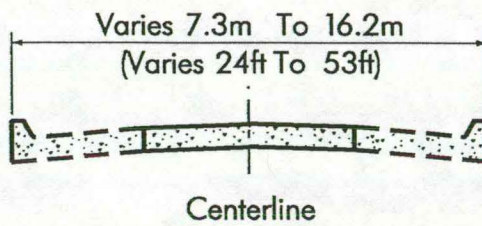
⁷Ex - Existing access (access allowed at each property).

⁸Construction costs are based on 1994 values and includes paving, grading and drainage.

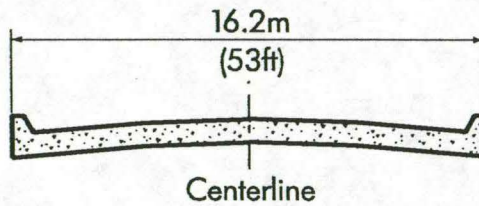
* See Figure B-2 for typical cross sections of each alternative.

** This alternative is similar to the Monticello Improve Existing Streets Alternative (impacts, etc.), with the exception of relocated Iowa 38.

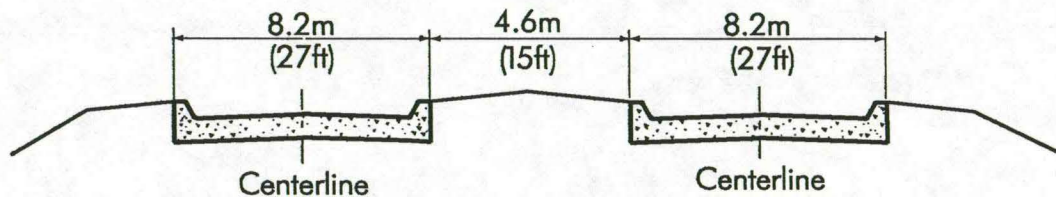
NOTE: All alternatives include the relocation of Iowa 38.



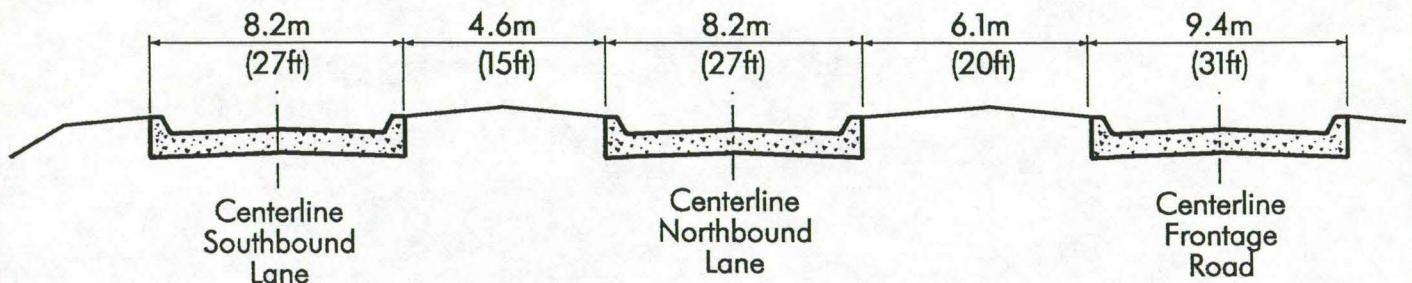
EXISTING (2, 3 OR 4 LANE)



4 - LANE UNDIVIDED



4 - LANE DIVIDED



4 - LANE DIVIDED W /FRONTAGE ROAD

alternative discussed here. Each alternative described below includes the relocation of Iowa 38 north to First Street (210th Street). This relocation would eliminate the overlap of U.S. 151 and Iowa 38 which presently exists between Oak Street and First Street.

Alternatives 1 and 2 would not alter the existing roadway through Monticello, but would close many residential and commercial driveways.

Alternatives 3, 4 and 5 consist of widening the existing roadway to a 4-lane undivided facility (Figure B2). Alternatives 4 and 5 also would close access points similar to Alternatives 1 and 2, respectively.

Alternatives 6, 7 and 8 consist of a 4-lane divided facility (Figure B2). All three alternatives would include adding a 2-lane pavement to the east side of existing U.S. 151 from south of Monticello to the vicinity of North Haven Drive. From there, Alternatives 6 and 7 would cross over (to minimize impacts to businesses) and add 2 lanes to the west of existing U.S. 151 to near Third Street. Alternative 8 would add 4 lanes to the west of U.S. 151 and utilize existing U.S. 151 as a frontage road on the east between North Haven Drive and Third Street. From Third Street to north of Monticello, Alternatives 6, 7 and 8 would be similar, and would cross over to the east side in order to avoid Riverside Gardens. Another cross over near county road D-65 would be required at the end of this segment.

1. Impacts

A preliminary comparison of impacts was completed for the purpose of screening the eight alternatives. Impacts of the various "improve existing" alternatives are described below and summarized in Table B-2.

a. *Right-of-Way*

Alternatives 1 and 2 would use the existing roadway cross-section. Therefore, there would be no strip right-of-way acquisition.

Alternatives 3, 4 and 5 would require some strip right-of-way acquisition to widen existing 2- or 3-lane pavement to 4 lanes. A 4-lane undivided roadway would require a minimum right-of-way width of approximately 23 to 26 m (75 to 85 feet), depending on whether sidewalks are included. Widening the existing U.S. 151 right-of-way to this width would involve the loss of some existing front or side yards, parking areas, industrial storage areas, park lands and wetlands.

Alternatives 6 and 7 would require a right-of-way width of approximately 30 m (100 feet) to construct the divided highway.

Alternative 8, in the segment with the frontage road, would need up to 45 m (150 feet) of total right-of-way. These alternatives would displace 25 to 27 residences and 18 to 24 businesses (refer to Table B-2). Strip right-of-way from other adjacent properties would also be wider and more damaging than that required for Alternatives 3, 4 and 5.

b. Access

Alternative 3 would not impact any existing access points. All other alternatives would have significant impacts to access, many requiring the removal of all existing access.

Alternatives 1 and 4 would close many access points along U.S. 151 to meet the 300-foot minimum urban spacing requirement for Priority IV access control. This would include accesses at 2 of the 20 residences and 16 or 17 (Alternatives 1 or 4, respectively) of the 27 or 28 businesses (see Table B-2). About half of the affected businesses are or could be made accessible from side roads. Under Priority IV access control, all existing street connections with U.S. 151 could be maintained.

Alternatives 2 and 5 would include all of the access closings described in Alternative 1 or 4, plus some additional driveway or street closings to meet the 600-foot minimum urban spacing requirement for Priority III access control. Nearly all of the residential accesses (27 of 29) would be closed, along with access to 35 businesses. About half of the affected businesses are or could be made accessible from side roads. Alternative 6 would remove access from 3 of the 6 homes that would not be displaced. One of these 3 could have access relocated to a sideroad. Alternatives 6, 7 and 8 would require the acquisition of the parking lot to the east of Monticello High School.

Eighteen business accesses would be closed under Alternative 6, while 24 or 16 would be closed under either Alternative 7 or Alternative 8. Relocated access could be provided to 11 or 13 businesses under Alternative 6 or 7, respectively. Alternative 8, with the frontage road, could provide relocated access to 21 of the businesses.

Access to U.S. 151 from the following streets would be closed under Priority III Access Control (Alternatives 2, 5, 7 and 8).

- South Haven Drive/South Cedar Street
- South Street

- Grand Street
- Second Street

c. *Traffic*

Improvements to access control would improve traffic flow through Monticello, somewhat reducing the delays caused by turning traffic. All alternatives, except Alternative 3, would achieve this improvement.

Traffic flow characteristics, such as delay and congestion, on U.S. 151 are projected to drop below normally accepted standards in portions of the 3-lane segment, based on future traffic volumes. Those alternatives that would provide four lanes for through traffic (Alternatives 3 through 8) would provide adequate capacity for normal urban operating conditions, while Alternatives 1, 2 and 3 would not. Alternatives 6, 7 and 8 would provide the best operation and would accommodate left-turning lanes at each intersection.

Under Alternatives 1 or 2, the U.S. 151 roadway would transition from 4 lanes outside of Monticello to the existing 2- or 3-lane roadway within the urban area. The lane drops would occur at a location where traffic volumes are increasing rather than decreasing. A careful analysis of this design would be required if one of these alternatives were selected.

d. *Safety*

The frequency of accidents on an urban roadway is related to many factors, some of which include roadside obstacles, parking, pedestrians, speed limits, intersections, driveways and other points of traffic conflict. Although it is not possible to predict accident rates for any of the alternatives, the access control in Alternatives 1, 2 and 4-8 will reduce accident potential. The median provided in Alternatives 6-8 would further reduce conflicts by separating traffic and providing designated left-turn lanes. The lane drops which would occur in Alternatives 1 and 2, where the roadway narrows to 2 or 3 lanes, would introduce a significant traffic conflict not present on the existing highway.

e. *Impacts to Section 4(f) Properties*

Alternatives 1 or 2 would not impact Riverside Gardens, a city park. Alternatives 6, 7 or 8 would widen existing U.S. 151 to the east and would likewise not require right-of-way from Riverside Gardens. Alternatives 3, 4, 5 would add 1 lane to each side of existing U.S. 151

and would encroach into the park, requiring a Section 4(f) evaluation of park impacts and replacement land for the land taken by the widening.

f. *Constructability and Cost*

To be consistent with other segments of U.S. 151, at least two lanes of through traffic must be maintained at all times during construction. Alternatives 1 and 2 would provide the easiest construction staging, although some disruption would occur during sideroad and access construction. The other alternatives would involve more difficult construction staging plans to accommodate material deliveries, and storm sewer and roadway construction adjacent to the live traffic lanes. Alternatives 6, 7 and 8 would involve the most difficult staging plans due to the three crossovers.

Estimated cost to construct each alternative is shown in Table B-1.

All eight alternatives were deleted. The major reasons for their deletion include:

- Large Number of Residences Displaced
- Large Number of Businesses Displaced
- Traffic Service Not Significantly Improved Over Existing Conditions
- Likelihood of Accidents Not Significantly Reduced

F. MONTICELLO BYPASS INTERCHANGE ALTERNATIVES

This section describes additional interchange alternatives which were suggested by the Monticello Highway 151 Committee, which is made up of city officials and other interested persons. A variation developed during early stages of the project (Figure B3) is also described.

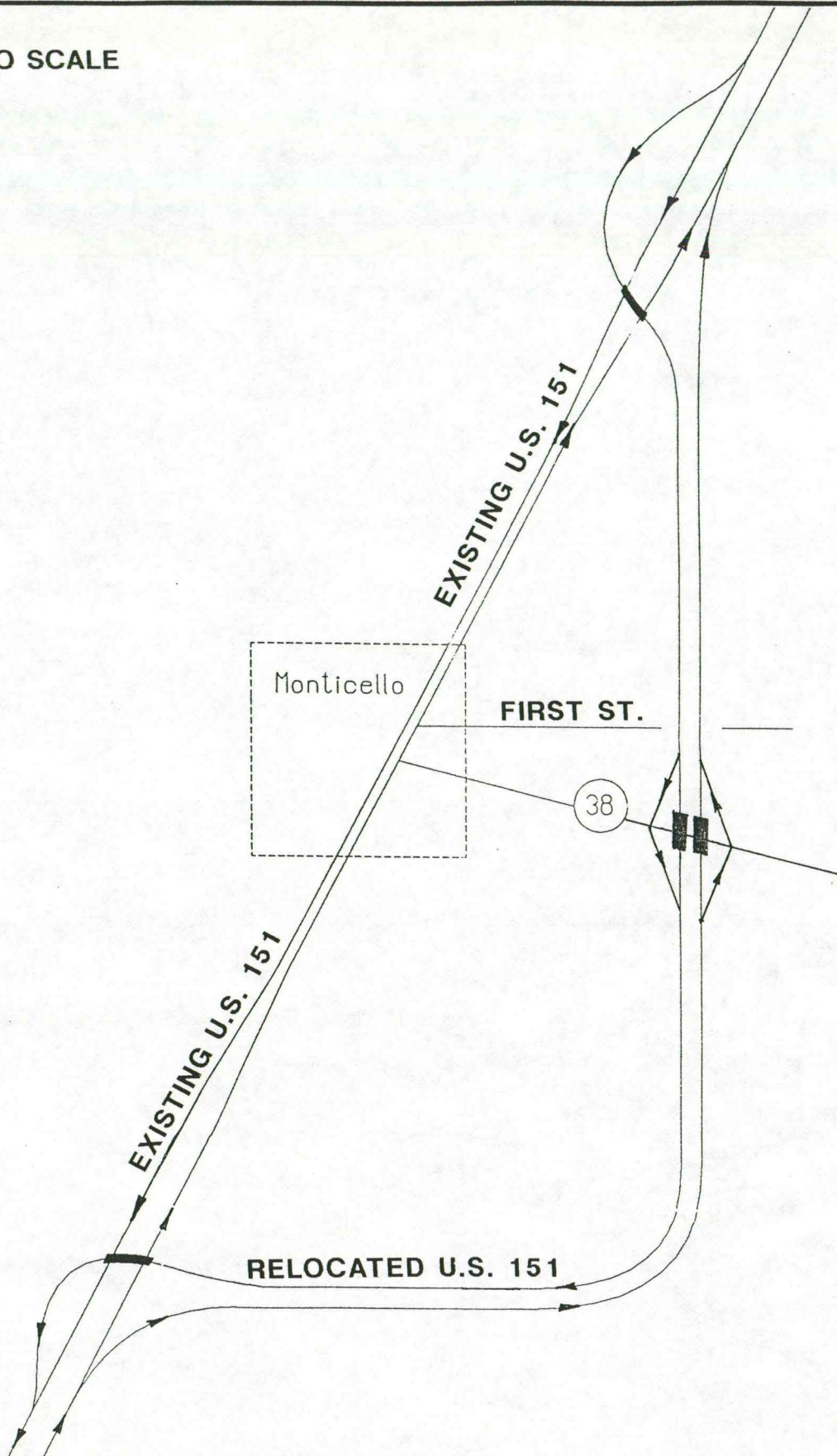
1. Monticello Highway 151 Committee Alternative

The concept suggested by the 151 Committee provides for two partial interchanges on U.S. 151, located north and south of Monticello (Figure B3). The purpose of this design would be to provide more direct access into Monticello than would a normal diamond interchange design. The traffic operational considerations for this concept include the following.

- a. The proposed concept would require all U.S. 151 traffic, both northbound and southbound, to traverse an exit ramp and an entrance ramp in order to stay on the marked highway. The through traffic



NOT TO SCALE



ENVIRONMENTAL ASSESSMENT
U.S. 151 SEGMENT 3
ANAMOSA TO MONTICELLO
IOWA DEPARTMENT OF TRANSPORTATION

FIGURE B3
HIGHWAY 151 COMMITTEE
INTERCHANGE ALTERNATIVES

would thereby be required to travel the lower speed and higher conflict components of the roadway. This may be a particular concern for truck traffic desiring to bypass Monticello.

- b. The proposed concept does not accommodate all movements at the two partial interchanges. Normal design practices would require all movements be accommodated at each interchange. It appears that the proposed design would require considerable out-of-distance travel for certain trips.

This design would also include a diamond interchange at Iowa 38, consistent with all of the other alternatives under consideration. Due to the closely spaced interchanges, the logical access control would be Priority I (fully controlled access) between the north and south ends of the bypass. All other local roadways and private access points in this segment would need to be served by frontage roads, accessways, or overpasses/underpasses.

This design would provide more direct traffic movements for any traffic desiring to enter or exit the city from U.S. 151. County Road X-44 south of Monticello would need to be closed or overpassed; the proximity of County X-44 to the proposed south interchange would preclude any direct connection between this road and the U.S. 151 bypass. The proposed interchanges at each end of the bypass would require closure or relocation of several other existing access points beyond the interchanges, to avoid access points within the ramp taper areas and within 1,000 feet of the ends of these tapers.

The proposed concept would provide a more direct routing of traffic into and out of the city than would a full interchange; this is consistent with the objective of the city of Monticello. Other operational characteristics and accommodation of access for this alternative are significantly inferior to the other alternatives under consideration. The cost of the proposed concept is expected to be substantially higher than the other alternatives under consideration, due to the addition of 1 interchange and increases in right-of-way acquisition and accessway construction. Typically, the cost to construct an interchange is \$2 to \$3 million.

This alternative was dropped from further consideration for the following reasons:

- Severe Right-of-Way Impacts
- Large Number of Relocated Accesses
- Cost to Construct Would be Approximately \$2 Million More Than Other Bypass Alternatives Under Consideration
- Would Not Meet the Operational Characteristics of a Full Interchange

2. Other Early Interchange Variation

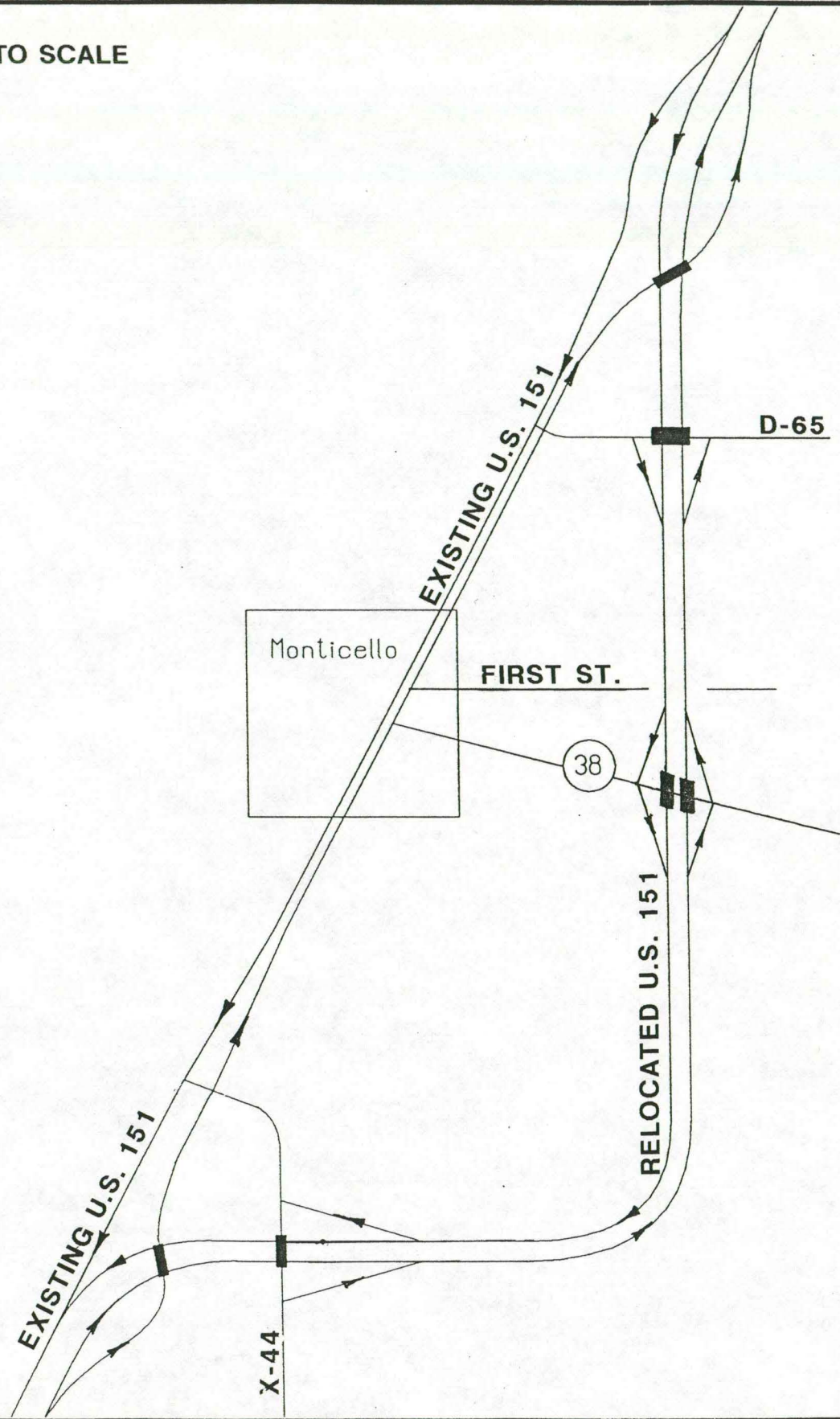
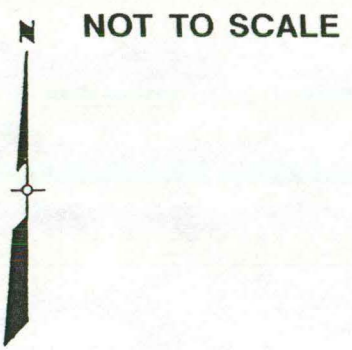
Another alternative interchange concept was considered which would solve the operational problems of the previous alternative (Figure B4). This concept would provide a full interchange design at each end of Monticello, in addition to the Iowa 38 interchange. This alternative was deleted from further consideration for reasons listed below:

- Had Greater Right-of-Way Impacts Than Other Bypass Alternatives Under Consideration
- Cost to Construct Would be Approximately \$3 Million Higher Than Other Bypass Alternatives Under Consideration

G. SUMMARY

The major reasons for the deletion of each alternative is summarized in Table B-3. Three of the most frequent reasons for deleting an alternative are high costs, right-of-way impacts and undesirable engineering features.

R/US151/Seg3EA.App



ENVIRONMENTAL ASSESSMENT
U.S. 151 SEGMENT 3
ANAMOSA TO MONTICELLO
IOWA DEPARTMENT OF TRANSPORTATION

FIGURE B4
EARLY INTERCHANGE VARIATION

TABLE B-3

**SUMMARY OF REASONS FOR DELETION OF ALTERNATIVES
IN DIVISION 2**

Alternative*	Reason for Deletion				
	High Costs	Traffic Service Level Not Improved	Undesirable Engineering Features	Impacts to Natural Features	Right-of-Way Impacts
West Bypass: Alternative A	X			X	X
Alternative B	X			X	X
Near East Bypass: Alternative 1	X				X
Alternative 2	X				X
Alternative 3	X		X		X
Far East Bypass: Alternative 1			X		
Alternative 2			X		
Monticello - Improve Existing Alternatives		X	X		X
Bypass Interchange Variations	X		X		X

*See Figures B1, B3 and B4 for locations of these alternatives.

APPENDIX C
FARMLAND CONVERSION IMPACT RATING FORMS

FARMLAND CONVERSION IMPACT RATING

PART I (To be completed by Federal Agency) Date Of Land Evaluation Request: 10/18/93

Name Of Project: U.S. 151 Segment 3 (Langworthy Section)
 Proposed Land Use: Highway Construction
 Federal Agency Involved: Federal Highway Administration
 County And State: Jones County, Iowa

PART II (To be completed by SCS) Date Request Received By SCS: 10/20/93

Does the site contain prime, unique, statewide or local important farmland? (If no, the FPPA does not apply - do not complete additional parts of this form). Yes No
 Acres Irrigated: 0 Average Farm Size: 298
 Major Crop(s): Corn-Soybeans Farmable Land In Govt. Jurisdiction: Acres: 311,310 %84 Amount Of Farmland As Defined in FPPA: Acres: 170,290 %46
 Name Of Land Evaluation System Used: Jones County Name Of Local Site Assessment System: None Date Land Evaluation Returned By SCS: 11/2/93

PART III (To be completed by Federal Agency)	Alternative Site Rating			
	Site A *	Site B **	Site C	Site D
A. Total Acres To Be Converted Directly	40	45		
B. Total Acres To Be Converted Indirectly	55	65		
C. Total Acres In Site	95	110		

PART IV (To be completed by SCS) Land Evaluation Information	Site A *	Site B **	Site C	Site D
A. Total Acres Prime And Unique Farmland	72.9	79.2		
B. Total Acres Statewide And Local Important Farmland	0	0		
C. Percentage Of Farmland In County Or Local Govt. Unit To Be Converted	0.04	0.05		
D. Percentage Of Farmland In Govt. Jurisdiction With Same Or Higher Relative Value	39	35		
V (To be completed by SCS) Land Evaluation Criterion Relative Value Of Farmland To Be Converted (Scale of 0 to 100 Points)	72	74		

PART VI (To be completed by Federal Agency)	Maximum Points	Site A *	Site B **	Site C	Site D
Site Assessment Criteria (These criteria are explained in 7 CFR 658.5(b))					
1. Area In Nonurban Use	15	15	15		
2. Perimeter In Nonurban Use	10	10	10		
3. Percent Of Site Being Farmed	20	20	20		
4. Protection Provided By State And Local Government	20	20	20		
5. Distance From Urban Builtup Area	0	0	0		
6. Distance To Urban Support Services	0	0	0		
7. Size Of Present Farm Unit Compared To Average	10	10	10		
8. Creation Of Nonfarmable Farmland	25	3	1		
9. Availability Of Farm Support Services	5	5	5		
10. On-Farm Investments	20	5	5		
11. Effects Of Conversion On Farm Support Services	25	0	0		
12. Compatibility With Existing Agricultural Use	10	0	0		
TOTAL SITE ASSESSMENT POINTS	160	88	86		

PART VII (To be completed by Federal Agency)	Maximum Points	Site A *	Site B **	Site C	Site D
Relative Value Of Farmland (From Part V)	100	88	86		
Total Site Assessment (From Part VI above or a local site assessment)	160	86	88		
TOTAL POINTS (Total of above 2 lines)	260	160	160		

Site Selected: _____ Date Of Selection: _____ Was A Local Site Assessment Used? Yes No

Re. For Selection: _____

* Includes widen existing alternative only.
 ** Includes Langworthy bypass alternative only.

FARMLAND CONVERSION IMPACT RATING

PART I (To be completed by Federal Agency)		Date Of Land Evaluation Request 10/18/93	
Name Of Project U.S. 151 Segment 3 (Monticello Section)		Federal Agency Involved Federal Highway Administration	
Proposed Land Use Highway Construction		County And State Jones County, Iowa	
PART II (To be completed by SCS)		Date Request Received By SCS 10/20/93	

Does the site contain prime, unique, statewide or local important farmland? (If no, the FPPA does not apply - do not complete additional parts of this form).		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Acres Irrigated 0	Average Farm Size 298
Major Crop(s) Corn-Soybeans	Farmable Land In Govt. Jurisdiction Acres: 311,310 %84		Amount Of Farmland As Defined in FPPA Acres: 170,290 %46		
Name Of Land Evaluation System Used Jones County	Name Of Local Site Assessment System None		Date Land Evaluation Returned By SCS 11/2/93		

PART III (To be completed by Federal Agency)	Alternative Site Rating			
	Site A*	Site B**	Site C***	Site D
A. Total Acres To Be Converted Directly	75	80	135	
B. Total Acres To Be Converted Indirectly	110	120	205	
C. Total Acres In Site	185	200	340	

PART IV (To be completed by SCS) Land Evaluation Information				
A. Total Acres Prime And Unique Farmland	110.7	116.7	217.5	
B. Total Acres Statewide And Local Important Farmland	0	0	0	
C. Percentage Of Farmland In County Or Local Govt. Unit To Be Converted	0.07	0.07	0.13	
D. Percentage Of Farmland In Govt. Jurisdiction With Same Or Higher Relative Value	62	70	55	
PART V (To be completed by SCS) Land Evaluation Criterion Relative Value Of Farmland To Be Converted (Scale of 0 to 100 Points)				
	59	57	63	

PART VI (To be completed by Federal Agency)				
Site Assessment Criteria (These criteria are explained in 7 CFR 658.5(b))	Maximum Points			
1. Area In Nonurban Use	15	15	15	15
2. Perimeter In Nonurban Use	10	10	10	10
3. Percent Of Site Being Farmed	20	20	20	20
4. Protection Provided By State And Local Government	20	20	20	20
5. Distance From Urban Builtup Area	0	0	0	0
6. Distance To Urban Support Services	0	0	0	0
7. Size Of Present Farm Unit Compared To Average	10	10	10	10
8. Creation Of Nonfarmable Farmland	25	2	3	4
9. Availability Of Farm Support Services	5	5	5	5
10. On-Farm Investments	20	20	20	20
11. Effects Of Conversion On Farm Support Services	25	25	25	25
12. Compatibility With Existing Agricultural Use	10	10	10	10
TOTAL SITE ASSESSMENT POINTS	160	137	138	139

PART VII (To be completed by Federal Agency)				
Relative Value Of Farmland (From Part V)	100	59	57	63
Total Site Assessment (From Part VI above or a local site assessment)	160	137	138	139
TOTAL POINTS (Total of above 2 lines)	260	196	195	202

Site Selected:	Date Of Selection:	Was A Local Site Assessment Used? Yes <input type="checkbox"/> No <input type="checkbox"/>
----------------	--------------------	---

Re. For Selection:

* Includes Near East Alternative A only.
 ** Includes Near East Alternative B only.
 *** Includes Far East Alternative only.

FARMLAND CONVERSION IMPACT RATING

ART I (To be completed by Federal Agency)		Date Of Land Evaluation Request 11/10/93	
Name Of Project U.S. 151 Segment 3 - Monticello Section		Federal Agency Involved FHWA	
Proposed Land Use Highway Construction		County And State Jones County, Iowa	
ART II (To be completed by SCS)		Date Request Received By SCS 11/18/93	
Does the site contain prime, unique, statewide or local important farmland? (If no, the FPPA does not apply - do not complete additional parts of this form).		Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Acres Irrigated 0
		Average Farm Size 298	
Major Crop(s) Corn - Soybeans	Farmable Land In Govt. Jurisdiction Acres: 311,310 % 84	Amount Of Farmland As Defined in FPPA Acres: 170,290 % 46	
Name Of Land Evaluation System Used Jones County	Name Of Local Site Assessment System None	Date Land Evaluation Returned By SCS 11/22/93	
ART III (To be completed by Federal Agency)		Alternative Site Rating	
		Site A *	Site B
A. Total Acres To Be Converted Directly		14	
B. Total Acres To Be Converted Indirectly		21	
C. Total Acres In Site		35	
ART IV (To be completed by SCS) Land Evaluation Information			
A. Total Acres Prime And Unique Farmland		25.2	
B. Total Acres Statewide And Local Important Farmland		---	
C. Percentage Of Farmland In County Or Local Govt. Unit To Be Converted		0.01	
Percentage Of Farmland In Govt. Jurisdiction With Same Or Higher Relative Value		53	
V (To be completed by SCS) Land Evaluation Criterion Relative Value Of Farmland To Be Converted (Scale of 0 to 100 Points)		66	
ART VI (To be completed by Federal Agency)			
Assessment Criteria (These criteria are explained in 7 CFR 658.5(b))	Maximum Points		
1. Area In Nonurban Use	15	15	
2. Perimeter In Nonurban Use	10	10	
3. Percent Of Site Being Farmed	20	20	
4. Protection Provided By State And Local Government	20	20	
5. Distance From Urban Builtup Area	0	0	
6. Distance To Urban Support Services	0	0	
7. Size Of Present Farm Unit Compared To Average	10	9	
8. Creation Of Nonfarmable Farmland	25	1	
9. Availability Of Farm Support Services	5	5	
10. On-Farm Investments	20	5	
11. Effects Of Conversion On Farm Support Services	25	0	
12. Compatibility With Existing Agricultural Use	10	0	
TOTAL SITE ASSESSMENT POINTS	160	85	
ART VII (To be completed by Federal Agency)			
Relative Value Of Farmland (From Part V)	100	66	
Total Site Assessment (From Part VI above or a local site assessment)	160	85	
TOTAL POINTS (Total of above 2 lines)	260	151	
Site Selected:	Date Of Selection	Was A Local Site Assessment Used? Yes <input type="checkbox"/> No <input type="checkbox"/>	

For Selection:

*Includes improve existing U.S. 151 alternative.

APPENDIX D
TRAFFIC NOISE ANALYSIS FORM FOR
LOW IMPACT HIGHWAY PROJECTS

Iowa Department of Transportation
Office of Project Planning
Traffic Noise Analysis Form for Low Impact Highway Projects

This form has been prepared to provide summary noise data for highway projects processed with Environmental Assessment (EA) procedures and where traffic noise effects are not extensive nor are special noise abatement strategies normally recommended. The following data were developed in accordance with the Procedures set out in Federal Aid Highway Program Manual 7-7-3 using the Federal Highway Administration traffic noise prediction model.

Project Description: U.S. 151 - Anamosa to Monticello

Adjacent Noise Sensitive Land Use: Rural-Widely Scattered Residential

Number and Type of Sensitive Receiver Sites: Residences

For Worst Case Receiver:

Distance From Existing Near Lane Centerline: 64 m (210 Feet)

Existing Noise Level (Estimated/Measured): 59 dBA L_{eq} (H)

Distance From Proposed Near Lane Centerline: 50 m (164 Feet)

Predicted Design Year (2016) Hourly L_{eq} Noise Level: 61 dBA

Predicted Peak Design Year Hourly L_{eq} , No Build: 59 dBA

Calculated Maximum Distance From Project Median:

Centerline to Design Year 67 dBA L_{eq} Contour: 20 m (66 Feet) It is recommended that future noise sensitive development occur beyond this distance from the highway.

Discussion and Recommendation

APPENDIX E
COMMENT LETTERS



IN REPLY REFER TO:

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Rock Island Field Office (ES)
4469 - 48th Avenue Court
Rock Island, Illinois 61201



309/793-5800

January 30, 1993

Ms. Martha A. Maxon
Brice, Petrides-SEC Donohue
501 Sycamore Street, Suite 222
P.O. Box 1497
Waterloo, Iowa 50704-1497

Dear Ms. Maxon:

We have reviewed your December 31, 1992, request for information concerning any environmental impacts as well as impacts to federally listed endangered species as a result of proposed improvements and/or relocation of U.S Highway 151 from approximately 3.5 miles west of the intersection of U.S. 151 and State Highway 1 in Linn County, Iowa to approximately 13 miles east of Cascade in Dubuque County, Iowa. We understand that approximately 51 miles are under study for expansion to four lane roadway.

With respect to federally listed and proposed threatened or endangered species, the proposed project is within the range or the potential range of the following species:

<u>Classification</u>	<u>Common Name</u>	<u>Scientific Name</u>	<u>Habitat</u>
Threatened	Western prairie fringed orchid	<u>Platanthera praeclara</u>	Wet grassland
Threatened	Prairie bush-clover	<u>Lespedeza leptostachya</u>	Dry to mesic prairies with gravelly soil
Endangered	Bald eagle	<u>Haliaeetus leucocephalus</u>	Potential breeding
Endangered	Indiana bat	<u>Myotis sodalis</u>	Caves and Riparian corridors

Threatened	Northern wild monkshood	<u>Aconitum noveboracense</u>	North-facing slopes
Endangered	Iowa Pleistocene snail	<u>Discus macclintocki</u>	Algific talus slopes
Endangered	Peregrine falcon	<u>Falco peregrinus</u>	Potential breeding

Due to the nature of your proposed actions we do not anticipate any impacts to Federally listed species when utilizing existing right-of-ways, such as road ditches. However, portions of the U.S. 151 relocation may cross tracts of remnant natural habitats which may contain habitat for threatened plant species. If suitable habitat will be impacted, a biological survey by a qualified botanist will be required to ensure that the construction does not impact existing plant populations.

In addition, a review of the National Wetlands Inventory maps for the area indicates that wetlands are present within the project boundary (including crossing three river systems). The Corps of Engineers is the federal agency responsible for wetland determinations and we recommend you contact them for assistance in delineating the wetland types and acreage within the project boundary. Priority consideration should be given during the planning process to avoid impacts to these wetland areas. Unavoidable impacts will require a mitigation plan to compensate for any unavoidable losses of wetland functions and values.

To assist in further impact analysis we would like to know the locations of the borrow areas and an approximate cubic yard value of fill required for the project. A potential method of offsetting wetland impacts due to the four lane expansion could be wetland creation within the borrow areas used for the project. We would also recommend that native grasses be utilized where possible to the road ditches.

Thank you for the opportunity to provide comments early in the planning process. This letter only provides comments pursuant to the Endangered Species Act of 1973, as amended, and does 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, nor does it represent the review comments of the U.S. Department of the Interior on any forthcoming environmental statement.

If you have any additional questions or concerns, please contact Mr. Joe Slater of my staff at (309) 793-5800.

Sincerely,

Wayne A. Fischer

Per

Richard C. Nelson
Field Supervisor

cc: NPS (Cedarstrom)
IADNR (Howell)

JS:jp



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VII
726 MINNESOTA AVENUE
KANSAS CITY, KANSAS 66101

January 15, 1993

Martha A. Maxon, Ph.D.
SEC Donohue
P. O. Box 1497
Waterloo, Iowa 50704-1497

Dear Dr. Maxon:

RE: U. S. 151, NHS-151-3(84)--19-57, BPSD Project No. 50722.030

We are in receipt of your project description, dated December 31, 1992. We have reviewed the materials provided, and we have no comment at this time. However, we request that you provide us with a copy of the draft EA as it becomes available.

If you have any questions, please write to me or call Dewayne Knott at (913) 551-7299. Thank you for the opportunity to be a part of the early coordination process.

Sincerely,

A handwritten signature in cursive script, appearing to read "Gene Gunn".

Gene Gunn, Chief
Environmental Review and
Coordination Section

cc: Mr. C. I. MacGillivray, Director
Planning and Research Division
Iowa Department of Transportation
Ames, Iowa 50010

Mr. H. A. Willard, Division Administrator
Federal Highway Administration
Ames, Iowa 50010



United States Department of the Interior



OFFICE OF THE SECRETARY
Office of Environmental Affairs
230 S. Dearborn, Suite 3422
Chicago, Illinois 60604

January 26, 1993

Dr. Martha A. Maxon
Brice, Petrides-SEC Donohue
501 Sycamore Street, Suite 222
P.O. Box 1497
Waterloo, IA 50704-1497

Dear Dr. Maxon:

This is in response to your December 31, 1992 request for comments on the Location Study and Environmental Assessment for the Iowa Department of Transportation's improvement of U.S. Highway 151.

This office has/will have no comment during your consultation process. However, you should continue coordination with the Interior bureaus listed in your letter. These bureaus will respond directly concerning any impacts to resources under our jurisdiction and expertise, and provide technical assistance as needed.

If I can be of further assistance, please contact me at (312) 353-6612.

Sincerely,

Sheila Minor Huff
Regional Environmental Officer



REPLY TO
ATTENTION OF:

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

January 12, 1993

Operations Division

Dr. Martha A. Maxon
Brice, Petrides-SEC Donohue
Post Office Box 1497
Waterloo, Iowa 50704-1497

Dear Dr. Maxon:

Our office reviewed your letter dated December 31, 1992, concerning the proposed improvements to U.S. Highway 151 in Linn, Jones and Dubuque Counties, Iowa.

Your proposed project will cross numerous streams. In addition, National Wetland Inventory Maps show numerous potential wetlands along the proposed alignment. The placement of fill material into waters of the United States (including wetlands) will require Department of the Army (DA) authorization under Section 404 of the Clean Water Act.

Enclosed for your use is a joint application packet entitled "Protecting Iowa Waters." The packet contains the necessary application forms, drawing sheets, instructions, and information for DA and State of Iowa permits to perform work in waters within the State of Iowa. When your project plans are sufficiently developed, please complete and return the application to the appropriate agencies.

Detailed instructions for completing the application are located on pages 3 through 6 in the Joint Application Packet. In addition, the application form and drawing sheets are on self-copying paper, so please press down firmly with a hard point pen when completing them, or please type them.

The copies of the application form and drawing sheets are identified at the bottom of each page as to which agency should receive which copy. The copy of the completed application form and drawings marked "Corps of Engineers" should be sent to:

U.S. Army Engineer District, Rock Island
ATTN: CENCR-OD-S
Clock Tower Building - Post Office Box 2004
Rock Island, Illinois 61204-2004

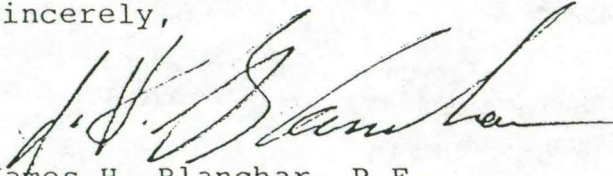
The copies of the completed application marked "Iowa Department of Natural Resources, Attention: Floodplain Permits Section, and Sovereign Lands", should be sent to:

Iowa Department of Natural Resources
Wallace State Office Building
900 East Grand Avenue
Des Moines, Iowa 50319-0034

Please forward a copy of all approvals to this office when you receive them.

Should you have any questions, please contact our Regulatory Functions Branch by letter, or telephone Mr. Mike Hayes, 309/788-6361, extension 6367.

Sincerely,



James H. Blanchar, P.E.
Chief, Operations Division

Enclosures

Copies Furnished:

Mr. Jack Riessen (2)
Iowa Department of Natural Resources
Flood Plain Section
Henry A. Wallace Building
900 East Grand Avenue
Des Moines, Iowa 50319-0034 (w/o enclosures)

Mr. Richard C. Nelson
Field Supervisor
U.S. Department of the Interior
Fish and Wildlife Service
Rock Island Field Office (ES)
4469 48th Avenue Court
Rock Island, Illinois 61201 (w/o enclosures)

Ms. Diane Hershberger
Chief, Wetlands Protection Section
U.S. Environmental Protection Agency
Region VII
726 Minnesota Avenue
Kansas City, Missouri 66101 (w/o enclosures)



United States
Department of
Agriculture

Soil
Conservation
Service

210 Walnut Street
693 Federal Building
Des Moines, IA 50309

February 1, 1993

Ms. Martha A. Maxon
Brice, Petrides
SEC Donohue
501 Sycamore Street
Suite 222
P.O. Box 1497
Waterloo, IA 50704-1497

Dear Ms. Maxon:

We have received and reviewed your information describing proposed work by the Iowa Department of Transportation for the improvement of U.S. Highway 151 in Linn, Jones, and Dubuque Counties, Iowa.


I would like to address two areas of environmental concern, soil erosion and wetlands, that could be impacted by this proposed work.

The proposed expansion of the existing two lane highway to four lanes and possible bypass construction will require extensive movement of soil. This could provide the opportunity for significant soil erosion. This project could be especially sensitive to erosion since some of the landscape contains significant surface slopes easily degraded by surface runoff. Both temporary and permanent vegetative cover will be needed.

This project could destroy existing wetlands through placement of fill material or by compaction of heavy equipment. Additionally, the general cut and fill methods in this type of construction could drain wetland otherwise not impacted by fill placement or equipment compaction. In each of these scenarios the wetland hydrology is impacted.

The Soil Conservation Service can provide planning assistance with specific construction impacts, soil functions and soil resource protection. Please contact the Soil and Water Conservation District in each respective county after the final alignment has been determined if you have further questions.

Sincerely,

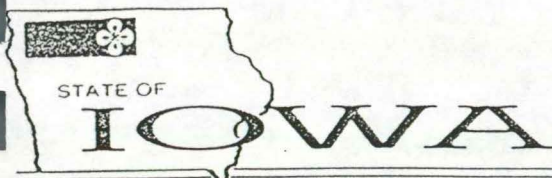


Jeffrey R. Vonk
State Conservationist



The Soil Conservation Service
is an agency of the
Department of Agriculture

AN EQUAL OPPORTUNITY EMPLOYER



TERRY E. BRANSTAD, GOVERNOR

DEPARTMENT OF NATURAL RESOURCES
LARRY J. WILSON, DIRECTOR

January 25, 1993

Ms. Martha A. Maxon, Ph. D.
Brice, Petrides, SEC Donohue
501 Sycamore Street - Suite 222
Waterloo, Iowa 50703

Re: U.S. 151
NHS-151-3(84)--19-57
BPSD Project No. 50722.030


Dear Ms. Maxon:

The Iowa Department of Natural Resources reviewed your letter of December 31, 1992 initiating a Location Study and Environmental Assessment for the Iowa Department of Transportation (DOT) for the improvement of U.S. Highway 151. The project extends from approximately 3.5 miles west of the intersection of U.S. 152 and State Highway 1 in Linn County to approximately 13 miles east of Cascade in Dubuque County and is approximately 51 miles long.

During this review no concerns relative to impacts on fish, wildlife or vegetation were identified. Our current records also did not indicate the presents of any threatened or endangered species or unique natural area's were in the planned alignment.

Thank you for the opportunity to review and comment on these proposed improvements and keep use informed if a new corridor is selected.

Sincerely,



LARRY J. WILSON, DIRECTOR
IOWA DEPARTMENT OF NATURAL RESOURCES

LJW:dlh

East Central Iowa Council of Governments

Building EC5 - 6301 Kirkwood Blvd. SW
P.O. Box 2068
Cedar Rapids, Iowa 52406
Telephone (319) 398-1266 FAX (319) 398-5432

IOWA INTERGOVERNMENTAL REVIEW SYSTEM ECICOG Regional Clearinghouse Review

This memorandum is to alert you that a notice of intent to apply for a state or federally assisted project has been received by ECICOG. In accordance with applicable regulations set forth under the Iowa Intergovernmental Review System, the ECICOG Board forwards the following review of this application:

Applicant: Federal Highway Administration/Iowa DOT

App. Title: U.S. 151 Highway Improvements 1993-1997

IIRS Number: IA930010-044

Funding:	Federal:	\$	64,800,000
	Applicant:		
	State:		16,200,000
	Local:		81,000,000
	Other:		
	Prog. Income:		0.00
	TOTAL:	\$	111,000,000 81,000,000.00

This form and any attached comments must be submitted with your application as evidence that the review has been performed.

The ECICOG Regional Clearinghouse makes the following review regarding this application:

<input checked="" type="checkbox"/>	Favorable Review	<input type="checkbox"/>	No Comments
<input type="checkbox"/>	Unfavorable Review	<input checked="" type="checkbox"/>	Comments Attached BELOW:

THE ECICOG BOARD FEELS THAT THE "NO ACTION" ALTERNATIVE IS INAPPROPRIATE.


East Central Iowa Council of Governments

cc: Applicant
State Clearinghouse
IIRS File

ECICOG is the Region 10 planning agency serving local governments in the counties of Benton, Iowa, Johnson, Jones, Linn, and Washington.

OFFICE OF
THE
COUNTY ENGINEER

JONES COUNTY COURTHOUSE

PHONE
319-462-3785

ANAMOSA, IOWA 52205

Box 368

January 5, 1993

Dr. Martha A. Maxon, Ph. D.
Brice, Petrides, SEC Donahue
PO Box 1491
Waterloo, Iowa 50704-1497

RE: U. S. Highway 151 Reconstruction

Dear Dr. Maxon:

The Jones County Secondary Road Department and the Board of Supervisors feel the upgrading of this highway to four lanes is very important to the future development of Jones County's Transportation System.

We are especially interested in our Secondary Road intersections. Several now are high accident locations. We would like to be contacted in the designs of all connections. We realize that some may have to be eliminated, but want our traffic to be adequately served.

Should we be requested to take over responsibility of old sectors of Hwy 151 or parallel new roads, we expect to be reimbursed either through the "Needs System" or other financing.

Very truly yours,



Earl B Beisell, P.E.
Jones County Engineer

EBB/csl

cc. Board of Supervisors



DUBUQUE COUNTY

HIGHWAY DEPARTMENT

13063 SEIPPEL ROAD

(319) 557-7283

DUBUQUE, IOWA 52002

MARK C. JOBGEN, P.E.
COUNTY ENGINEER

January 6, 1993

Martha A. Maxon, Ph.D.
Brice, Petrides-SEC Donohue
501 Sycamore Street
Suite 222 P.O. Box 1497
Waterloo, Iowa 50704-1497

Dear Ms. Maxon:

I have received your memo regarding the proposed improvement of U.S. Highway 151 in Dubuque County. From the information in your memo, it is apparent that there are certain criteria that, as of yet, have not been approved.

The designation of this 4-lane as an expressway or freeway would be of primary interest to Dubuque County. From past experience we know the designation effects the intersection of county roads with the highway. Also, the designation may require the county to assume additional mileage of frontage roads.

Dubuque County also will be effected differently should a bypass of Cascade be to the north or the south.

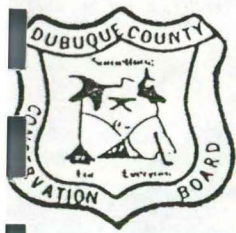
Maybe this is too early to discuss, but a past concern of the county has been the location of turn lanes or deceleration lanes at the intersections with county roads.

We have no objections to the proposal and only have these few concerns that we can think of at this time. If you need any further information or any other comments, please feel free to contact our office.

Sincerely,

Mark C. Jobgen, P.E.
Dubuque County Engineer

MCJ:mm



DUBUQUE CO. CONSERVATION BOARD

13768 SWISS VALLEY ROAD
PEOSTA, IOWA 52068
319-556-6745

Robert J. Walton, Director

BOARD MEMBERS

Ralph Klein
Richard Molony
Elaine Vonderhaar
Harold Hedrick
Yvonne Nauman

1 February 1993

From: Robert J. Walton, Executive Director
Dubuque County Conservation Board
13768 Swiss Valley Rd.
Peosta, IA 52068

To: Brice, Petrides-SEC Donohue
501 Sycamore Street
Suite 222, P.O. Box 1497
Waterloo, IA 50704-1497

Re: U.S. 151, NHS-151-3(84)--19-57, BPSD Project No. 50722.030

Dear Sirs,

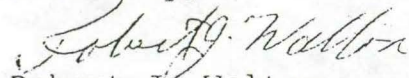
This letter is written in response to your request asking our comments in regard to the proposed expansion of the current 2-lane highway 151 into a 4-lane highway.

The Dubuque County Conservation Board owns and operates the Fillmore Recreation Area which is located directly adjacent to highway 151 near the town of Fillmore. Our main concern would be that patrons utilizing the area for golfing or other recreational activities would continue to have good access to the park during all phases of roadway construction. We may also need to make some adjustments to our first tee on the golf course to prevent errant golf balls from striking motor vehicles utilizing the new 4-lane alignment.

Following completion of the project, our agency feels that an improved highway has the potential of increasing recreational usage of the Fillmore Recreational Area and should have no adverse affects on the recreational services offered at the site.

Please feel free to contact me should you need any additional information from us. Thank you for the advance opportunity to comment on this project.

Sincerely,


Robert J. Walton

RJW/clf



City of Monticello
200 EAST FIRST STREET
MONTICELLO, IOWA 52310
(319) 465-3577

January 21, 1993

Martha A. Maxon, Ph. D.
Brice, Petrides - SEC Denonhus
501 Sycamore Street
Suite 222
P.O. Box 1497
Waterloo, Iowa 50704-1497

Re: U.S. 151
NHS - 151-3(84)-19-57
SPSD Project No. 50722.030

Dear Martha,

The City of Monticello, in response to your request for comments in regard to the above named project, would like to offer the following.

We are opposed to a bypass around Monticello until such time as the four lanes are completed between Cedar Rapids and Dubuque.

At such time, if a bypass becomes necessary, we would request a route that would be of the closest proximity to Monticello and propose that there be construction of three exits on U.S. 151 to serve the community.

Respectfully,

Mark Anderson
City Administrator

STATE LIBRARY OF IOWA



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