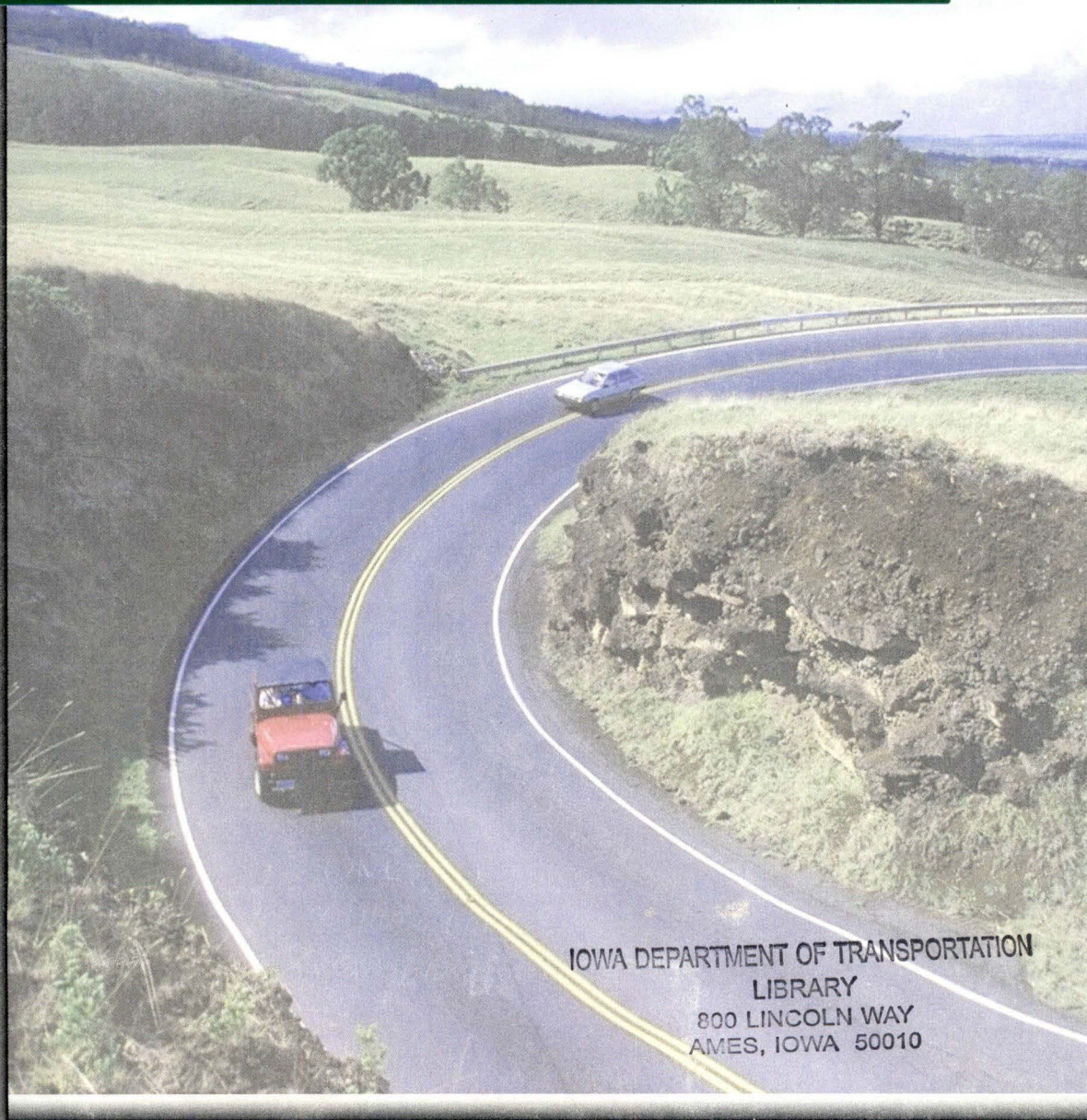




Environmental Assessments: A How-To Manual



IOWA DEPARTMENT OF TRANSPORTATION
LIBRARY
800 LINCOLN WAY
AMES, IOWA 50010



Iowa Department
of Transportation

Prepared by

EARTH  TECH

A **tyco** INTERNATIONAL LTD. COMPANY

TD195
.R63
E58
2001

Environmental Assessments: A How-To Manual

Prepared For:
Iowa Department of Transportation

Prepared By:
Earth Tech

June, 2001

NOTE: The following flow chart shows the general steps of the environmental assessment process needed to gain location approval. Although not specifically shown, DOT does all Cultural Resources coordination with SHPO and all Environmental Assessment coordination with FHWA.

Project Authorization

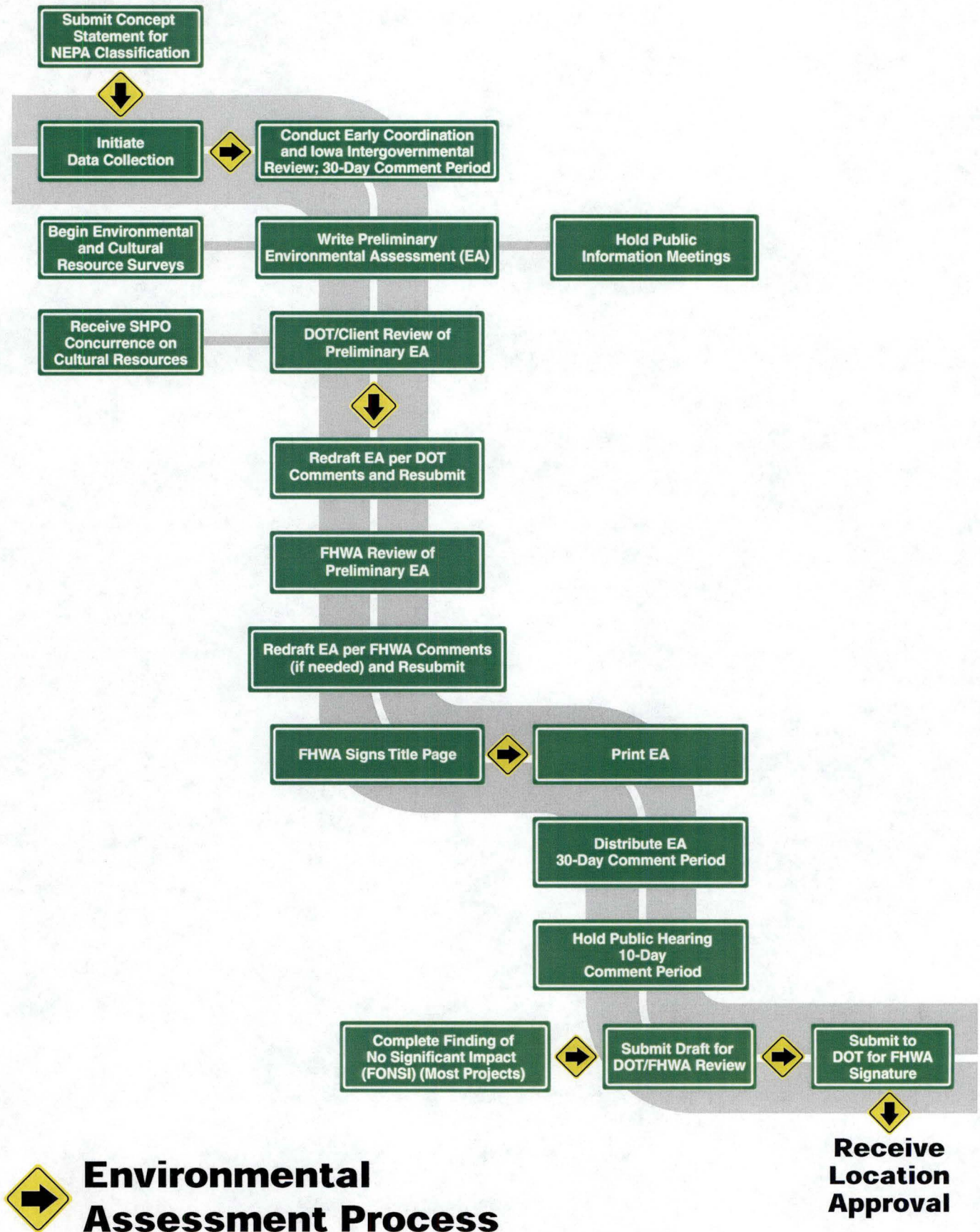


TABLE OF CONTENTS
ENVIRONMENTAL ASSESSMENTS: A HOW-TO MANUAL
IOWA DEPARTMENT OF TRANSPORTATION

	<u>Page</u>
I. INTRODUCTION	1
II. DETERMINATION OF ENVIRONMENTAL DOCUMENTATION	3
ENVIRONMENTAL IMPACT STATEMENT (EIS)	3
CATEGORICAL EXCLUSION (CE).....	3
ENVIRONMENTAL ASSESSMENT (EA)	4
Finding of No Significant Impact (FONSI).....	4
SECTION 4(f) STATEMENTS	4
III. GUIDELINES FOR THE PREPARATION OF ENVIRONMENTAL ASSESSMENTS.....	6
EARLY COORDINATION	6
PREPARATION OF ENVIRONMENTAL ASSESSMENTS	7
Cover Sheet	8
Table of Contents	8
Description of the Proposed Action.....	8
Project History	8
Project Purpose and Need.....	9
Alternatives.....	9
Project Impacts	9
Socioeconomic Impacts.....	9
Air Quality and Noise Impacts	10
Threatened and Endangered Species	13
Natural Areas and Wildlife Habitat	14
Wetlands	14
Woodlands.....	16
Water Quality	16
Parks and Recreational Facilities.....	17
Cultural Resources.....	17
Hazardous Waste	18
River and Flood Plain Crossings	18
Other Potential Impacts	18
Comparison of Alternatives.....	19
Disposition.....	20
Comments and Coordination.....	21
Appendices	21

ENVIRONMENTAL ASSESSMENT PREPARATION AND DISTRIBUTION	21
PUBLIC INVOLVEMENT.....	22
PUBLIC HEARINGS	23
PREPARATION OF THE FINDING OF NO SIGNIFICANT IMPACT (FONSI).....	25

LIST OF APPENDICES

Appendix

- A Environmental Laws and Regulations
- B Address List of Agencies for Early Coordination
- C Example Finding of No Significant Impact and Environmental Assessment
- D Farmland Protection Form and Instructions
- E Public Involvement Materials



NEPA's Intent

*Assess Project Impacts on
the Human and Natural
Environment*

Addressed in NEPA Documents

- *Socioeconomic Impacts*
- *Environmental Justice*
- *Air Quality and Noise Impacts*
- *Threatened and Endangered Species*
- *Natural Areas and Wildlife Habitat*
- *Wetlands*
- *Water Quality*
- *Park and Recreational Facilities*
- *Hazardous Waste*
- *River and Flood Plain Crossings*

I. INTRODUCTION

This manual is intended to provide complete but concise information on how to prepare an Environmental Assessment in accordance with Federal Highway Administration (FHWA) regulations. These regulations incorporate the requirements of the U.S. Department of Transportation Order 5610.1C, "Procedures for Considering Environmental Impacts," as found in 23 CFR 771 (Federal Regulations (F.R.) August 28, 1987) and the "Regulations for Implementing the Procedural Provisions of the Environmental Policy Act," as set forth by the Council on Environmental Quality (i.e., 40 CFR Part 1500-1508).

NATIONAL ENVIRONMENTAL POLICY ACT

The National Environmental Policy Act (NEPA), signed into law by President Richard Nixon on January 1, 1970, articulated national policy and goals for the nation, established the Council on Environmental Quality (CEQ) and, among other things, required all federal agencies to assess the environmental impacts of and alternatives to proposals for major federal actions significantly affecting the quality of the human environment (**Appendix A**).

The Council on Environmental Quality, charged with the duty of overseeing the implementation of NEPA, developed guidelines to aid federal agencies in assessing the environmental impacts of their proposals. A combination of agency practice, judicial decisions and CEQ guidance resulted in the development of what is commonly referred to as "**the NEPA process**."

NEPA makes environmental protection a part of the mandate of every federal agency and department. NEPA requires a detailed statement on the environmental impact of any proposed action, by the lead federal agency, using a systematic, interdisciplinary approach to environmental planning and evaluation of projects to assess the effect on the environment.

Part of the interdisciplinary approach includes addressing, in the NEPA document, other federal laws such as Section 106 of the Historic Preservation Act for cultural resources, Sections 404/401 of the Clean Water Act for wetlands, Section 6(f) of the Land and Water Conservation Act (LAWCON) and Section 4(f) of the U.S. Department of Transportation Act for public parks and historic sites, and Section 7 of the Threatened and Endangered Species Act. These detailed statements are completed when federal actions are required for the project and may take the form of Environmental

***Specific Federal
Legislation Addressed in
NEPA Documents***

- ***Section 106:***
Cultural Resources
- ***Section 404/401***
Wetlands
- ***Section 4(f):***
*Public Parks,
Recreation Areas and
Historic Sites*
- ***Section 6(f):***
*Parks with LAWCON
Funds*
- ***Section 7:***
*Threatened and
Endangered Species*

Assessments (EA) or Environmental Impact Statements (EIS), depending upon the type of federal action.

This manual will focus on the preparation of Environmental Assessments. Discussion regarding the preparation of Environmental Impact Statements and Categorical Exclusions is not included in this document. Information relevant to the preparation of these documents can be found in 23 CFR 771.123 and 23 CFR 771.117.



II. DETERMINATION OF ENVIRONMENTAL DOCUMENTATION

The level of documentation required varies for each individual project. Major actions that will significantly affect the environment will require an Environmental Impact Statement (EIS), while those projects that are minor and do not have a significant impact are prepared as a Categorical Exclusion. Environmental Assessments are prepared when the environmental impact is not clearly established or to rule out the need for an EIS. This section will briefly discuss each type of documentation. Detailed information can be found in 23 CFR 771.115.

ENVIRONMENTAL IMPACT STATEMENT (EIS)

An EIS is a detailed written statement as required by Section 102(2)(c) of NEPA. It is a document that is processed in two steps. The first step is a ***“Draft Environmental Impact Statement”*** which includes the significant impacts a federal action will have upon the quality of the natural environment. The second step is the ***“Final Environmental Impact Statement”*** which essentially contains the same supporting information as required in a Draft EIS, except it identifies a preferred alternative and includes appropriate revisions to reflect comments received from circulation of the Draft EIS and the public involvement process. Further information regarding EIS preparation can be found in 23 CFR 771.123, 125 and 127.

CATEGORICAL EXCLUSION (CE)

CEs are activities that meet the definition in 23 CFR 771.117(a) and, based on FHWA's past experience, do not have significant environmental impacts. They are very short, form-type documents that can be completed in a relatively short amount of time. Categorical exclusions will not be discussed in this manual, but further information regarding the preparation of CEs can be found in 23 CFR 771.117.

ENVIRONMENTAL ASSESSMENT (EA)

An EA is prepared when there is uncertainty as to the significance of the impacts of the project. An EA is a concise public document which is prepared for each action that is not a CE and does not clearly require the preparation of the EIS or where, in the opinion of the FHWA, the EA would assist in determining the need for an EIS.

Specific information regarding the preparation of an EA is discussed in **Section III**.

Finding of No Significant Impact (FONSI)

A FONSI is a document prepared for the Federal Highway Administration (FHWA) after the public hearing for the EA has been held and the comment period has ended. It briefly presents the reasons why an action will not have a significant effect on the human and natural environment and for which an EIS will not be prepared. The FONSI is attached to the front of the EA, or a summary of it, and shall note any other environmental documents related to it. If the EA is included, the FONSI need not repeat any discussion in it, but may incorporate the EA by reference (**Appendix C**).

SECTION 4(f) STATEMENTS

Section 4(f) refers to 49 U.S.C. 303 and 23 U.S.C. 138. This documentation is required only when a project needs to acquire property from a publicly owned/publicly used park, recreational area, wildlife refuge area or historic site. If prepared at the same time as the EA, the two are bound together and distributed for comment as one document. However, these two can be circulated by themselves if the Section 4(f) resource was not discovered or impacted at the time the EA was prepared.

The initial approach regarding a Section 4(f) resource is to first consider how to avoid the resource. Avoidance must be addressed and given serious analysis. If avoidance is not possible, a range of alternatives to minimize the impact must be considered and documented. Mitigation plans need to be established following minimization.

For federally funded projects, Section 6(f) involvement automatically means a Section 4(f) document is also required.

Section 4(f)

- *Avoidance*
- *Minimization*
- *Mitigation*

Section 6(f) of the Land and Water Conservation Fund Act prohibits the conversion of any property acquired or developed with the assistance of the fund to anything other than public outdoor recreation use without the approval of the Secretary of the Department of the Interior.

Coordination with Iowa DNR, National Park Service and the local agency with jurisdiction over the park will be required. Replacement land must be identified, if at all possible, in order to obtain a conversion-in-use for the impacted land.



III. GUIDELINES FOR THE PREPARATION OF ENVIRONMENTAL ASSESSMENTS

EARLY COORDINATION

- Mail Early Coordination Letter and map(s) to federal, state and local agencies.
- Iowa Intergovernmental Review receives Letter of Intent, project description and maps of the project.
- Allow 30 calendar days for comment period; include 2 to 3 days for mailing time.

Early Coordination

*Important First Step in
Gathering Input and Data
Relevant to the Project*

The goal of early coordination is to gather information about the project area that is obtainable only from specific agencies. Examples include endangered species - U.S. Fish and Wildlife Service (USFWS) and Iowa Department of Natural Resources, or flood insurance studies - Federal Emergency Management Agency, etc.

A letter containing a brief description of the project, who it is for (i.e., Iowa DOT, City or County), a request for comments and/or specific information (i.e., endangered species), and the response date should be mailed, along with maps of the proposed project, to federal, state, and local agencies. Iowa Intergovernmental Review should receive a Letter of Intent, project description and maps of the project (Appendix B). A 30-day comment period should be allowed.

Agencies to be Contacted as Part of Early Coordination*

U.S. Department of Housing and Urban Development
U.S. Department of Agriculture, Natural Resources
Conservation Service (NRCS)
U.S. Environmental Protection Agency (EPA)
U.S. Army Corps of Engineers, Rock Island District or Omaha
District
U.S. Department of the Interior, Office of Environmental Policy
and Compliance
U.S. Fish and Wildlife Service (USFWS)
National Park Service (NPS)
Federal Emergency Management Agency (FEMA)
Federal Aviation Administration (FAA) (Where Applicable)
Federal Highway Administration (FHWA)
State Historical Society of Iowa, Department of Cultural Affairs
Iowa Department of Natural Resources (Iowa DNR)
Iowa Department of Economic Development
Iowa Geological Survey Bureau
County Board of Supervisors
County Conservation Board
County Engineer
County Clerk
City Clerk
City Mayor
City Council
County Historical Societies (Where Applicable)
Chambers of Commerce
Local Interest Groups (Local Economic Groups, Bicycle
Groups, Environmental Groups, Etc.)

* See **Appendix B** for complete address list.

PREPARATION OF ENVIRONMENTAL ASSESSMENTS

This section describes the various components of an EA and the information they should include.

The primary purpose of an EA is to help the FHWA, Iowa DOT and other decision-makers decide whether or not an EIS is needed. Therefore, the EA should only address those resources or features which the FHWA and Iowa DOT decide will have a likelihood for being significantly impacted. The EA should be a concise document and should not contain long descriptions or detailed information that may have been gathered, or analyses which may

have been conducted for the proposed action. Although the regulations do not set page limits, the CEQ recommends EAs usually be less than 15 pages. To keep it concise, the EA should use good-quality maps and figures and incorporate by reference or summary the technical analyses which support the alternatives and their impacts.

Environmental Assessment sections to include:

- Cover Sheet
- Table of Contents
- Description of Proposed Action
- Project History
- Project Purpose and Need
- Alternatives
- Project Impacts
- Comparison of Alternatives
- Summary
- Disposition (Conclusion) of EA
- Comments and Coordination
- Appendices

The following format and content is suggested:

Cover Sheet – The cover sheet should include the project number and a brief description of the proposed action. See Example Environmental Assessment in **Appendix C**.

Table of Contents – Should include all sections covered in the EA as well as a list of appendices, tables and figures.

Description of the Proposed Action – Describe the length, termini, access control, proposed improvements, etc. The description should specifically describe the preferred alternative, if one has been identified. If one has not been identified, usually a preferred alternative will be identified and included in the Finding of No Significant Impact. Figures and diagrams of the project location should be included to better illustrate the project.

Project History – Briefly summarize the history of the project, including early planning stages, agency involvement, and a brief account of public or agency meetings. If the proposed project is part of a larger corridor project, this should be discussed briefly with a description of how the proposed project fits into the larger, overall project.

Describe Project

- Length
- Termini
- Access Control
- Improvements Proposed

Address Project Need

- *Traffic Volumes*
 - *Existing*
 - *Future*
- *Accident History*
- *Current Roadway Conditions*
- *Existing Access*

Right-of-Way Issues to Address

- *Homes*
- *Businesses*
- *Total Right-of-Way*
- *Farmland*

Agricultural Impacts

- *Complete Form AD-1006 Early in the EA Process*
- *Minimize Diagonal Severances*
- *Address Impacts to Farm Operations*

Project Purpose and Need – This is an important section.

Identify and describe the problem for which the proposed action is designed to correct. Existing and forecasted traffic volumes, accident data, existing roadway descriptions, traffic safety and local access may be used to support the need for the project. It should be clearly written so that the need can be understood by readers unfamiliar with the project.

Alternatives – Discuss the preferred alternative, as well as the reasonable alternatives to the proposed action that were considered, including the no-build alternative. You will need to clearly document why any alternatives were eliminated. Usually, a limited number of alternatives are considered (less than 10) and can include other modes of transportation.

Project Impacts - This section of the EA documents impacts of the project on numerous human and natural resources. A thorough but concise description of the impacts created by the preferred alternative, and any other alternatives still under consideration, should be included.

Socioeconomic Impacts

Land Use – Land-use plans, including comprehensive plans and zoning ordinances, for the project area should be consulted to verify that the project will concur with current and future land-use plans. A site visit should be performed to confirm these findings.

Right-of-Way Impacts – A site visit should be conducted to determine the number of homes, businesses and properties that will be affected by the project. Plans need to be developed to a sufficient stage to estimate the amount of land being acquired for new right-of-way. For many projects, it is possible to use a “nominal right-of-way width” to estimate new right-of-way needs. However, such need lines should be examined in more detail whenever local conditions or topography would require greater accuracy.

Impacts to Agricultural Lands - The Farmland Protection Policy Act of 1981 (FPPA) has as its purpose “to minimize the extent to which Federal programs contribute to the unnecessary and irreversible conversion of farmland to non-agricultural uses, and to assure that Federal programs are administered in a manner that, to the extent practicable, will be compatible with State, unit of local government, and private programs and policies to protect farmland.”

The document used to comply with the final FPPA rule (published in the Federal Register July 5, 1984) is Form AD-1006. These

***Environmental Justice
Addresses Impacts To:***

- *Low-Income Persons*
- *Minority Populations*

forms are available through the Natural Resources Conservation Service (NRCS) of each county. A separate form needs to be completed for each county covered by the project. A complete explanation of how to fill out these forms is found in **Appendix D**.

Impacts to farm operations and farmsteads, as well as farmland, need to be evaluated. The location of the new roadway in relation to the farm can have detrimental effects on the operation of the farm. An aerial photograph covering a 1- to 6-mile radius may help to identify travel patterns and other uses. These impacts should be minimized, if possible, and addressed in the EA. It is the policy of the state of Iowa that diagonal routes through cultivated land should be avoided if feasible and prudent alternatives consistent with efficient movement of traffic exist (Iowa Code 2001: Section 306.9). Diagonal severances are a negative impact that can create unfarmable parcels. The number of diagonal severances should be tallied and included in the EA.

Environmental Justice - On February 11, 1994, President William Clinton issued Executive Order on Environmental Justice 12898. The Executive Order states that, to the extent practicable and permitted by law, **neither minority nor low-income populations may receive disproportionately high and adverse impacts as a result of a proposed project**. It also requires that representatives of any low-income or minority populations that could be affected by the project in the community be given the opportunity to be included in the impact assessment and public involvement process. These efforts need to be documented.

By using the latest data available from the U.S. Census Bureau, the EA can demonstrate if low-income and minority populations are receiving disproportionately high and adverse impacts as a result of the project in comparison to the benefits of the project they may receive.

Air Quality and Noise Impacts

Air Quality – Air quality impacts are generally expected to be minor for most highway projects; however, there would be temporary impacts during construction. Standard construction specifications require contractors to comply with state regulations, including limitations on generation of fugitive dust (Iowa DOT Construction Manual, Section 2.12). Carbon monoxide and suspended particulate levels cannot exceed National Ambient Air Quality Standards. Air quality modeling may need to be conducted in project corridors that contain nonattainment or maintenance areas.

When evaluating impacts to air quality, the State Implementation Plan should be looked at to determine whether or not transportation

control measures are in-place within the project area. The procedures of 23 CFR 770 do not apply to projects where the State Implementation Plan does not contain transportation control measures.

Noise Impacts - Traffic noise is generally not an issue along undeveloped corridors. For projects to be constructed in developed areas, traffic noise issues must be addressed.

This section provides guidelines for preparing traffic noise impact assessments. The general procedure involves determination of existing and projected future noise levels at noise-sensitive locations in the corridor, which are then compared in order to determine impacts. This section also discusses general considerations related to noise abatement measures and corridor preservation.

- **FHWA Regulations** - The FHWA has developed Noise Abatement Criteria (NAC) and procedures to be used in the planning and design of highways. These criteria and procedures are set forth in Title 23 of the Code of Federal Regulations, Part 772 (23 CFR 772). The criteria define various land-use categories and associated noise levels that serve as guidance to determine when noise abatement measures must be considered. As defined in the FHWA standards, traffic noise impacts are considered to occur when the predicted traffic noise levels approach or exceed the applicable noise abatement criterion or when predicted noise levels substantially exceed existing noise levels.

FHWA NOISE ABATEMENT CRITERIA		
Activity Noise Abatement Criteria (dBA)		Description of Land-Use Category
Land-Use Category	L _{eq} (h) (dBA)	
A	57 (Exterior)	Lands on which serenity and quiet are of extraordinary significance and serve an important public need, and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.
B	67 (Exterior)	Picnic area, recreation areas, playgrounds, active sports areas and parks not included in Category A, and residences, motels, hotels, public meeting rooms, schools, churches, libraries and hospitals.
C	72 (Exterior)	Developed lands, properties or activities not included in Categories A and B above.
D	---	Undeveloped lands.
E	52 (Interior)	Residences, motels, public meeting rooms, churches, libraries, hospitals and auditoriums.

- **Iowa DOT Policy** - The Iowa DOT policy on Highway Traffic Noise Analysis and Abatement implements the FHWA policy in Iowa (**Appendix A**). The policy defines an "approach" as occurring when noise levels of one dBA less than the

**Noise Impacts
Require Knowledge Of:**

- STAMINA/OPTIMA
- Traffic Noise Model (TNM)

applicable noise abatement criterion are predicted. The policy defines a "substantial increase" as a predicted noise level of 10 dBA or more above the existing noise level. If either or both criteria are violated, noise abatement measures, such as noise walls, must be considered.

Determination of Traffic Noise Levels - Locations for traffic noise analyses should be selected based on their representativeness of the entire area to be studied. Existing noise levels may be determined by field measurement or by applying a traffic noise prediction model. If appreciable existing traffic noise is absent, an estimate of existing ambient noise may be made based on existing land use or professional noise monitoring experience.

The future traffic noise level should represent traffic conditions during the "design year" of a project, which is typically about 20 years after project completion. The future traffic is used in applying the current FHWA traffic noise prediction model or an approved alternate prediction method. The FHWA has developed the Highway Traffic Noise Prediction Model and the newer Traffic Noise Model to estimate highway traffic noise levels. The STAMINA/OPTIMA and TNM computer programs, respectively, are based on these models. Either program is currently acceptable for use in modeling existing or future traffic noise.

The EA should include a map showing the locations of all noise-sensitive locations included in the noise analysis. A table listing each location should include existing noise levels and future noise levels for each project alternative.

The document should include a brief statement of surrounding land use, give locations of modeled receivers and summarize the results of the noise analysis. It should state which locations are impacted and how many residential or commercial units are represented at each impacted location.

Traffic Noise Abatement - When traffic noise impacts occur, measures to reduce or eliminate impacts should be considered where such measures are determined feasible and reasonable. Noise barriers are feasible where terrain, access, safety or other physical constraints do not preclude them and where they can provide at least 5 dBA of noise reduction (i.e., insertion loss). The Iowa DOT maintains guidelines on noise barrier usage; current guidelines state that construction of noise barriers must provide a 5 dBA insertion loss at a cost of no more than \$20,000 per dwelling unit to be considered reasonable. In general, noise barriers will not be constructed for individual residences. However, determining the feasibility and

reasonableness of noise abatement involves the use of professional judgment. The Iowa DOT policy on *Highway Traffic Noise Analysis and Abatement* provides further guidance on this matter.

Although a 5-dBA insertion loss is required as a condition of feasibility, every reasonable effort should be made to achieve a substantial (at least 8 to 10 dBA) noise reduction. To limit aesthetic intrusion, the maximum height of noise walls is set at 16 feet above grade for extended distances. In residential areas where severe (at least 75 dBA) noise impacts are expected to occur and where normal abatement measures are not reasonable or feasible, extraordinary abatement measures, such as the purchase of private dwellings from willing sellers, may be appropriate.

The EA should indicate whether noise barriers are feasible or reasonable to provide noise abatement in impacted areas. If barriers are feasible, a detailed barrier analysis should be presented. This analysis should include an assessment of whether barriers are reasonable and if they are recommended as part of the project.

Corridor Preservation Considerations - The Iowa DOT policy also addresses noise-sensitive residential and commercial developments that are planned, designed and programmed in areas near a highway project. Special noise abatement measures will generally not be considered for such developments if they are planned, designed and programmed after the date of FHWA approval of the final environmental document.

For this reason, the environmental document should indicate locations near the project where traffic noise impacts would be likely and state that future noise-sensitive development should not occur in those areas.

Threatened and Endangered Species

To facilitate compliance with Section 7(c) of the Endangered Species Act of 1973, as amended, federal agencies are required to obtain from the U.S. Fish and Wildlife Service (USFWS) information concerning any federal and state threatened and endangered species which may be present in the project corridor. Early coordination should be conducted through USFWS and the Iowa Department of Natural Resources (DNR). DNR records are more specific, whereas USFWS records are more regional. This may account for any differences in the records of these two agencies. USFWS or DNR may require that field surveys be conducted for any listed species if they feel there is potential for its occurrence in the project area. A biologist specializing in that

Biological Resources

- *Field Surveys by a Qualified Biologist*
- *Includes Threatened and Endangered Species*
 - *Natural Areas*
 - *Wildlife Habitat*
 - *Wetlands*

species should conduct the specific survey (i.e., herpetologist for Ornate Box Turtles).

Natural Areas and Wildlife Habitat

Coordinate with DNR and USFWS to identify any unique or significant natural resources in the project area. A site visit/field review should be conducted by a qualified biologist to verify the presence of any significant natural communities within the project area.

Wetlands

The federal government regulates wetlands under two laws -- the Rivers and Harbors Act and the Clean Water Act (**Appendix A**). The Rivers and Harbors Act focuses on navigable waters and deals more with disposal of dredged material and construction of potential hazards to navigation. The Clean Water Act, specifically Section 404, is more expansive and is mainly concerned with deposition of fill in waters of the U.S. Waters of the U.S are defined as:

- 1) The territorial seas with respect to the discharge of fill material.
- 2) Coastal and inland waters, lakes, rivers and streams that are navigable waters of the United States, including their adjacent wetlands.
- 3) Tributaries to navigable waters of the United States, including adjacent wetlands.
- 4) Interstate waters and their tributaries, including adjacent wetlands.
- 5) All other waters of the United States not identified above, such as isolated wetlands and lakes, intermittent streams, prairie potholes and other waters that are not a part of a tributary system to interstate waters or navigable waters of the United States, the degradation or destruction of which could affect interstate commerce.

Section 404

- *Avoidance*
- *Minimization*
- *Mitigation*

The Environmental Protection Agency (EPA) and the U.S. Army Corps of Engineers (COE) jointly administer the Section 404 program, with the COE responsible for issuing permits and the EPA providing program oversight. Section 404 requires that wetlands must first be avoided if a feasible and practicable alternative exists. If no feasible and practicable alternative exists, the impacts to wetlands must be minimized as much as possible. Lastly, wetland impacts that are unavoidable must be mitigated for.

Section 401 of the Clean Water Act (Water Quality Certification) requires any applicant for a federal license or permit that may result in a discharge of a pollutant into waters of the U.S. to obtain

**Permit Levels Under
Section 404**

- *Impact Under 0.10 Acre - "Nationwide Permit 14"*
- *From 0.10 to 0.50 Acre - "Reconstruction Notification to COE"*
- *Over 0.50 Acre - "Individual Permit"*

certification from the state that the discharge will comply with applicable effluent limitations and water quality standards (**Appendix A**). The Iowa DNR is responsible for issuing Section 401 permits.

If waters of the U.S. will be impacted by the project, a Section 404 permit may be required. The type of permit required is dependent on the extent of the wetland impacts. As of June 5, 2000, wetland impacts under 0.1 acre are covered by Nationwide Permit 14 (NWP 14) and do not require notification to the U.S. Army, Corps of Engineers (COE).

Impacts between 0.1 and 0.5 acre are generally covered by NWP 14, which require a Reconstruction Notification be submitted to the COE.

Impacts greater than 0.5 acre require an individual permit. Any wetland impact greater than 0.1 acre will require compensatory mitigation.

Executive Order 11990, Protection of Wetlands, requires federal agencies conducting certain activities to avoid, to the extent possible, the adverse impacts associated with the destruction or loss of wetlands and to avoid support of new construction in wetlands if a practicable alternative exists.

For the purposes of the EA, all wetlands within the project corridor that meet criteria in the COE 1987 Wetland Delineation Manual (including isolated wetlands not regulated by the COE), as well as all other waters of the U.S., need to be identified and characterized using "Classification of Wetlands and Deepwater Habitats of the United States (Cowardin et al., 1979). National Wetlands Inventory (NWI) maps, aerial photographs and USDA soil surveys should be used to identify locations of potential wetlands.

A site visit, conducted by a qualified wetland scientist, should be made to verify the presence of wetland in the project corridor. Once a wetland determination has been made, the area of wetland impacted by the project should be estimated using NWI maps, field data and any other applicable information. A formal wetland delineation is not needed at the EA level, but will take place prior to final design.

The EA should contain a discussion of the types of wetland resources and relative quality present in the project corridor and the amount of wetland that will be impacted by each alternative. In addition, it should include a discussion of why it is not possible for the wetlands to be avoided and conclude with a statement such as:

For wetlands filled by this project, a Section 404 permit will be obtained from the U.S. Army Corps of Engineers prior to construction in compliance with the Clean Water Act. A wetland mitigation plan will be developed during the final design stage of the process.

Woodlands

The EA should contain a discussion of the types of woodland resources and relative quality present in the project corridor and the amount of woodland that would be impacted by each alternative.

In order to provide for the protection and preservation of woodlands, woodlands are covered by Iowa Code 314.23, Environmental Protection, as follows:

Woodlands. Woodland removed shall be replaced by plantings as close as possible to the initial site, or by acquisition of an equal amount of woodland in the general vicinity for public ownership and preservation, or by other mitigation deemed to be comparable to the woodland removed, including, but not limited to, the improvement, development, or preservation of woodland under public ownership.

Water Quality

A site visit should be conducted to identify any drainageways occurring in the project area. Erosion control and other water quality concerns can be further addressed during construction. Erosion control plans should be included in the EA.

A State 401 Water Quality Certification is issued by the Iowa Department of Natural Resources (DNR) pursuant to Section 401 of the Clean Water Act. State Certification is required by the Army Corps of Engineers before a Section 404 permit can be issued. Section 401 Certification represents the DNR's concurrence that the project certified is consistent with the Water Quality Standards of the state of Iowa as set forth in Chapter 61, Iowa Administrative Code.

Twelve (12) general conditions are required by DNR to assure that proposed activities would not violate Iowa water quality standards. These conditions are found in Appendix A.

***Parks and Recreational
Facilities and
National Register-
Eligible Historic Sites***

- *Determine Boundaries*
- *Coordinate With
Appropriate Agency*
- *Look at Avoidance
Alternatives*

Parks and Recreational Facilities

Coordinate with the National Park Service (NPS), Iowa DNR and local units of government to determine any parks, trails or other recreational facilities in the project area. A site visit should be conducted to verify information acquired through early coordination. Any impacts to these types of areas would likely require a Section 4(f) Statement. Avoidance of these areas must be given a priority.

Cultural Resources

FHWA projects must comply with Section 106 of the National Historic Preservation Act of 1966, as amended and implemented by the "Procedures for the Protection and Enhancement of Historic and Cultural Properties" (36 CFR 800).

Archaeology and historic architecture surveys should be conducted early in the project to avoid delays. Information specific to the project should be provided to a qualified archaeologist/historian. This information should include project corridor width, side road relocations, borrow site locations, and any other pertinent information available.

Initially, a Phase I investigation for archaeology and historic architecture to determine impacts and significance is conducted. The resulting reports are forwarded to DOT who sends them to the State Historical Society of Iowa (SHPO) for their review. Phase II investigations may be needed on certain sites surveyed during Phase I to determine if these sites are eligible for the National Register of Historic Places (NRHP). This Phase II report also must be reviewed by SHPO. Report summaries, as well as any letters accompanying these reports, should be included as part of the Environmental Assessment.

Any National Register of Historic Places eligible historic architecture sites or certain significant archaeology sites which cannot be avoided will require documentation (Phase III), a Memorandum of Agreement (MOA) must be prepared, along with a data recovery plan used to document the process involved in data recovery. The MOA is an agreement between FHWA, Iowa DOT and SHPO for the mitigation of impacts to these sites.

Any impacts to NR-eligible historic sites would require a Section 4(f) Statement. Avoidance of these areas must be given priority. Avoidance alternatives must also be considered for NR-eligible archaeology sites even though a Section 4(f) Statement is not done for impacts to them.

Hazardous Waste

Information should be obtained from EPA and Iowa DNR regarding CERCLA/CERCLIS (Superfund) listed sites, Resource Conservation and Recovery Act (RCRA) sites and landfills within the project area. Information obtained from RCRA should include registered large and small generators of hazardous waste. Verify the location of any underground storage tanks (UST) or leaking underground storage tanks (LUST) in the project area.

List sites in the EA found through these searches and note their proximity to the project to determine potential impacts. Often, a Phase I Environmental Site Assessment (ASTM 1527) will be done concurrently with the EA process.

River and Flood Plain Crossings

The location of river crossings and flood plain impacts should be determined by reviewing FEMA flood insurance maps and USGS 7.5-minute quadrangle maps. Early agency coordination with the Iowa DNR and the Federal Emergency Management Agency (FEMA) should be done. The length of the crossing, as well as impacts to the flood plain that occur as a result of the proposed project, should be addressed in as much detail as possible in the EA.

During final design, when the exact location of the crossing has been determined, an Iowa DNR Flood Plain Construction Permit, and potentially a Section 404 Permit, will be required.

Other Potential Impacts

Note that as project specific circumstances dictate, the following sections may need to be addressed.

Visual Impacts - This discussion should include an assessment of the visual impacts of the proposed action, including the "view from the road" and "view of the road." Where relevant, the EA should document the consideration given to design quality, art and architecture in the project planning. These values may be particularly important for facilities located in sensitive urban settings.

Pedestrian/Bikeway - Current pedestrian or bicycle facilities should be identified to determine any potential impacts of the proposed project. For those facilities that cannot be avoided by the project, preparation of a Section 4(f) Statement will be required.

Future land use and trail plans for the project area should be obtained to determine if future trails or bike facilities are planned. Local officials should be contacted to determine timelines of their plans and if there is the potential for incorporation of planned trail facilities as part of the proposed project.

Secondary and Cumulative Impacts - *Secondary Impacts* are any unintentional project impacts (both positive and negative) that would affect the human and natural environment beyond the right-of-way. These impacts may be caused by the action and are later in time or farther removed in distance, but are reasonably foreseeable. These secondary impacts may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems (40 CFR 1508.8).

Area adjacent to and beyond the project area should be studied to determine where it is reasonable to expect secondary development or other impacts to occur. Land-use plans and zoning ordinances should be obtained. Windshield surveys and/or interviews with local officials should also be conducted to determine if there will be any changes in land use.

Cumulative Impacts are defined as "the impact on the environment which results from the incremental impact of the action when added to other past, present and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions" (40 CFR 1508.7).

Cumulative impact analysis should assess impacts to wetlands, farmland, floodplains, upland forests and public use lands as well as any other natural community that may be prominent within the study area. Land-use plans and zoning ordinances should again be studied. As with secondary impacts, windshield surveys and/or communication with local officials should be conducted.

Comparison of Alternatives - This section summarizes the final comparison between a *Preferred Alternative* (if one has been chosen), other remaining alternatives and the *No-Build Alternative*. Information regarding impacts and general features of each alternative are best represented in table format.

Information covered in the table may include:

- Project Length
- Total New Right-of-Way
- Farmland Impacts
- Environmental Justice
- Number of Properties Affected
- Homes and Businesses Displaced
- Wetland Impacts
- River and Flood Plain Crossings
- Woodland Impacts
- Noise
- Hazardous Waste Impacts
- Estimated Traffic Volume
- Estimated Costs

Other information should be included in this comparison when applicable to the project (i.e., Threatened and Endangered Species, Section 4(f) resources).

Disposition – Briefly discusses what happens next with the proposed project. If no significant adverse impacts are expected to occur as a result of the project, the following paragraphs should be used:

This Environmental Assessment concludes that the proposed project is necessary for safe and efficient travel within the project corridor and that the proposed project complements the purpose and need. The project 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 public hearing.

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

Comments and Coordination – Describe early coordination efforts, include a list of all federal, state and local agencies contacted as part of early coordination, and indicate which agencies responded. Comment letters from responding agencies should also be included in an appendix in the EA. Public coordination efforts should also be described. A brief summary of public comments and concerns generated as part of the public information meeting should be included.

Appendices - Several appendices may be needed in the EA to provide additional or supporting information to the reader. Some of these will contain required information. These include:

- Early Agency Coordination Letters
- Aerial Photos of the Project Corridor
- Farmland Conversion Impact Rating Form
- Cultural Resources Coordination Letters

Examples of other appendices that may be useful, depending on the specific project, include:

- Details of Public Involvement Meetings
- Supporting Traffic Data
- Supporting Alternative Analysis
- Threatened and Endangered Species Survey Reports

ENVIRONMENTAL ASSESSMENT PREPARATION AND DISTRIBUTION

Environmental Assessments (EAs) are distributed after FHWA has signed the title page and the documents have been printed. Distribution of the EA is intended to allow agencies and individuals the opportunity to provide final comments on the EA. A Notice of Environmental Assessment Availability must be published in local newspapers announcing the availability of the EA for public review and comment:

- Mail the EA to the same agencies as early coordination. Include local libraries and any individuals who have made a special request.
- Allow 30 calendar days for comment.
- Publish Notice of Environmental Assessment Availability in local newspapers on or about the same day as the EAs are mailed to the agencies. If Corridor Public Hearing is to be held, hearing notice and Notice of Availability for EA can be done together.
- Members of the public may review the EA at local libraries and city halls, or request a personal copy.

The deadline for receipt of comments on the EA is coordinated to end when the minimum 10-day comment period following the public hearing ends. The main reasons to coordinate the two comment periods are to save cost (run one ad for EA availability and public hearing notice), convenience (more efficient to place one ad and gather all comments), and to eliminate confusion as to when comments are due on the EA and public hearing.

PUBLIC INVOLVEMENT

Public involvement plans are project-specific and could vary greatly depending on the level of consensus, urban versus rural characteristics, level of impacts, etc. Some examples of public involvement methods are:

- Formal Meetings/Hearings
- Informal Open House
- Neighborhood Meetings
- One-on-One Meetings
- City Council Presentations
- Newsletters
- Web Sites

Public Information Meetings generally are held before the EA is completed. Benefits of early public meetings:

- Provide Information to Public About the Project
- Solicit Public Comments/Questions Before Decisions Are Made
- Assist in Identifying Issues/Stakeholders

Public Involvement

- *Begin Early in the Project*
- *Consensus Building*
- *Responsiveness*
- *Meetings Tailored to Project-Specific Needs*

A public meeting may be held to assess general corridor conditions and to allow the public to propose alternatives. Survey forms and comment sheets may be distributed at this meeting for public input.

Public Information Meetings are typically held in an open-house format. Brief presentations are optional; however, staff representatives are always available to answer questions. Large-scale maps showing the project limits should be displayed. The meeting should be held in a community within the project area for the convenience of local interested persons. A notice should be published in local newspapers to announce the upcoming meeting (**Appendix E**).

The Office of Design, Corridor Development Hearing Section, should be contacted prior to scheduling any public hearing or meeting for a primary highway project.

PUBLIC HEARINGS

A Location or Location-Design Public Hearing is held approximately 20 to 30 days after the EA is distributed. This is to allow agencies and affected persons time to comment or develop questions. The goal is to present the findings of the EA and allow the public an opportunity to comment on either the EA document or project before final decisions are made. Sometimes, changes are made to the concept addressed in the EA as a result of these comments. These changes should be addressed in the FONSI.

The hearing can be formal or informal in format. Written comments and the project statement are bound together to form the hearing transcript. If a formal presentation is made, the narrative is also included in the transcript.

A Project Statement (**Appendix E**) should be prepared and distributed at the Public Hearing. The Project Statement is a concise summary of the Environmental Assessment and includes a prepaid, addressed comment sheet for ease of use by the interested public. This statement should include the following information:

Public Hearing

- Present EA Findings
- Provide Written Project Statement
- Display Large, Clearly Labeled Maps
- Obtain Oral and Written Comments

- An introduction that briefly explains the purpose of the hearing.
- Hearing format and process overviews.
- A brief project description; maps of the proposed project area should be included.
- Need for the project.
- Alternatives considered and preferred alternative (if known).
- Schedule and anticipated costs for the project.
- Environmental considerations/mitigation needs.
- Discussion of right-of-way process and relocation assistance services.
- Public participation is encouraged; comment sheets are attached to the project statement for submittal of questions and comments.

Large, clearly labeled display maps should be on tables or walls so that they are easily viewed by those attending the hearing. Other supporting maps may be useful, such as regional maps or site-specific areas to show detail.

Allow a minimum of 10 days following the hearing for persons to submit their written comments. These comments become part of the transcript for the hearing.

The Office of Design, Corridor Development Hearing Section, should be contacted prior to scheduling any public hearing or meeting for a primary highway project.

PREPARATION OF THE FINDING OF NO SIGNIFICANT IMPACT (FONSI)

The EA is submitted by the Iowa DOT, Office of Environmental Services, to FHWA along with a copy of the public hearing transcript, a recommendation of the preferred alternative, and a request that a Finding of No Significant Impact be made. After review of the EA and any other appropriate information, the FHWA may determine that the proposed action has no significant impacts.

The basis for the Finding of No Significant Impact (FONSI) should be adequately documented in the EA and any attachments. This is documented by attaching to the EA a brief separate statement that clearly sets forth the FHWA conclusions. If necessary, the FHWA may expand the FONSI to identify the basis for the decision, uses of land from Section 4(f) properties, wetland finding, etc. Any errors discovered in the EA can be listed on an errata page in the FONSI. Figures that change from the EA can be included in the FONSI.

Included as part of the FONSI cover page will be a discussion of the FHWA determination of the project. The following statement can be made regarding this determination.

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

Information to be addressed in the FONSI should include the following.

- Discussion of the Comments and Coordination phase of the EA. This should include any agency comment letters received on the EA and any necessary responses to these comments (see Appendix C).

FONSI

- *Complete After Public Hearing*
- *Contains EA Comment Letters From Agencies*
- *Summarizes Major Issues of the Hearing*
- *Distribute to Libraries and Agencies - Local and Those Who Commented on the EA*

- Information received as part of any public meetings or hearings. The date the EA became available for public review should be indicated here, as well as the length and end date of the review period. If applicable, changes in project concept or design as a result of the public review process should be discussed here.
- **“Special Conditions Associated with Location Approval.”**
This section should reiterate any issues discussed in the EA that will require further permitting, mitigation or right-of-way acquisition.
- Discussion regarding the Iowa DOT Commission’s review of the project, including a determination of a Preferred Alternative, if applicable.

After the FONSI has been signed by FHWA, it should be bound on top of the original EA and distributed to all commenting agencies, local units of government and public libraries. See **Appendix C** for an example FONSI.

The FONSI/EA should document compliance with NEPA and other applicable environmental laws, Executive Orders and related requirements. If full compliance with these other requirements is not possible by the time the FONSI is prepared, the documents should reflect consultation with the appropriate agencies and describe when and how the requirements will be met.

However, if significant issues arise during the EA comment period or public hearing, a FONSI may not be appropriate. Consultation between Iowa DOT and FHWA will determine if an Environmental Impact Statement (EIS) is warranted. Preparation of an EIS is more complex than for an EA. Guidelines for EIS preparation can be found in 23 CFR 771.123.

Appendix A - Applicable Environmental Laws

- *National Environmental Policy Act*
- *Clean Water Act - Section 404*
- *Clean Water Act - Section 401*
- *Rivers and Harbors Act of 1899 - Section 10*
- *Procedures for Abatement of Highway Traffic Noise and Construction Noise - As Implemented by Iowa Entitled Highway Traffic Noise Analysis and Abatement*
- *FHWA EA Guidelines - Title 23 - Highways*
- *General Conditions for Water Quality*

APPLICABLE ENVIRONMENTAL LAWS

National Environmental Policy Act of 1969, 91st Congress, S. 1075,
January 1, 1970 83 Stat. 852

An Act - To establish a national policy for the environment, to provide for the establishment of a Council on Environmental Quality, and for other purposes.

National Environmental Policy Act of 1969 - *Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled*, that this act may be cited as the "National Environmental Policy Act of 1969."

Purpose - Sec. 2. The purposes of this Act are: to declare a national policy which will encourage productive and enjoyable harmony between man and his environment; to promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man; to enrich the understanding of the ecological systems and natural resources important to the nation; and to establish a Council on Environmental Quality.

TITLE I

DECLARATION OF NATIONAL ENVIRONMENTAL POLICY

Policies and Goals

Sec. 101.

(a). The Congress, recognizing the profound impact of man's activity on the inter-relations of all components of the natural environment, particularly the profound influences of population growth, high-density urbanization, industrial expansion, resource exploitation, and new and expanding technological advances and recognizing further the critical importance of restoring and maintaining environmental quality to the overall welfare and development of man, declares that it is the continuing policy of the Federal Government, in cooperation with state and local governments, and other concerned public and private organizations, to use all practicable means and measures, including financial and technical assistance, in a manner calculated to foster and promote the general welfare, to create and maintain conditions under which man and nature can exist in productive harmony, and fulfill the social, economic and other requirements of present and future generations of Americans.

(b). In order to carry out the policy set forth in this Act, it is the continuing responsibility of the Federal Government to use all practicable means, consistent with other essential considerations of national policy, to improve and coordinate Federal plans, functions, programs and resources to the end that the Nation may:

- 1) Fulfill the responsibilities of each generation as trustee of the environment for succeeding generations;
- 2) Assure for all Americans safe, healthful, productive and aesthetically and culturally pleasing surroundings;
- 3) Attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences;
- 4) Preserve important historic, cultural and natural aspects of our national heritage, and maintain, wherever possible, an environment which supports diversity and variety of individual choice;
- 5) Achieve a balance between population and resource use which will permit high standards of living and a wide sharing of life's amenities; and
- 6) Enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.

(c) The Congress recognizes that each person should enjoy a healthful environment and that each person has a responsibility to contribute to the preservation and enhancement of the environment.

Administration

Sec. 102.

The Congress authorizes and directs that, to the fullest extent possible:

1) the policies, regulations and public laws of the United States shall be interpreted and administered in accordance with the policies set forth in this Act, and 2) all agencies of the Federal Government shall:

(a) Utilize a systematic, interdisciplinary approach which will insure the integrated use of the natural and social sciences and the environmental design arts in planning and in decisionmaking which may have an impact on man's environment.

(b) Identify and develop methods and procedures, in consultation with the Council on Environmental Quality established by Title II of this Act, which will insure that presently unquantified environmental amenities and values may be given appropriate consideration in decisionmaking along with economic and technical considerations.

(c) Include in every recommendation or report on proposals for legislation and other major Federal actions significantly affecting the

quality of the human environment, a detailed statement by the responsible official on:

- i) the environmental impact of the proposed action,
- ii) any adverse environmental effects which cannot be avoided should the proposal be implemented,
- iii) alternatives to the proposed action,
- iv) the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity, and
- v) any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented.

Prior to making any detailed statement, the responsible federal official shall consult with and obtain the comments of any federal agency which has jurisdiction by law or special expertise with respect to any environmental impact involved. Copies of such statement and the comments and views of the appropriate federal, state and local agencies, which are authorized to develop and enforce environmental standards, shall be made available to the President, the Council on Environmental Quality and to the public as provided by Section 552 of Title 5, United States Code, and shall accompany the proposal through the existing agency review processes.

(d) Study, develop and describe appropriate alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources.

(e) Recognize the worldwide and long-range character of environmental problems and, where consistent with the foreign policy of the United States, lend appropriate support to initiatives, resolutions and programs designed to maximize international cooperation in anticipating and preventing a decline in the quality of mankind's world environment.

(f) Make available to states, counties, municipalities, institutions and individuals, advice and information useful in restoring, maintaining and enhancing the quality of the environment.

(g) Initiate and utilize ecological information in the planning and development of resource-oriented projects.

(h) Assist the Council on Environmental Quality established by Title II of this Act.

Review

Sec. 103.

All agencies of the Federal Government shall review their present statutory authority, administrative regulations and current policies and

procedures for the purpose of determining whether there are any deficiencies or inconsistencies therein which prohibit full compliance with the purposes and provisions of this Act and shall propose to the President not later than July 1, 1971, such measures as may be necessary to bring their authority and policies into conformity with the intent, purposes and procedures set forth in this Act.

Sec. 104.

Nothing in Sections 102 or 103 shall, in any way, affect the specific statutory obligations of any federal agency 1) to comply with criteria or standards of environmental quality, 2) to coordinate or consult with any other federal or state agency, or 3) to act, or refrain from acting contingent upon the recommendations or certification of any other federal or state agency.

Sec. 105.

The policies and goals set forth in this Act are supplementary to those set forth in existing authorizations of federal agencies.

Section 404 of the Clean Water Act (33 U.S.C. 1251 et seq.) requires authorization from the Secretary of the Army, acting through the Corps of Engineers, for the discharge of dredged or fill material into all waters of the United States, including wetlands, both adjacent and isolated. Discharges of fill material generally include, without limitation: placement of fill that is necessary for the construction of any structure, or impoundment requiring rock, sand, dirt or other material for its construction; site development fills for recreational, industrial, commercial, residential and other uses; causeways or road fills; dams and dikes; artificial islands; property protection or reclamation devices such as riprap, groins, seawalls, breakwaters and revetments; beach nourishment; levees; fill for intake and outfall pipes and subaqueous utility lines; fill associated with the creation of ponds; and any other work involving the discharge of fill or dredged material. A Corps permit is required whether the work is permanent or temporary. Examples of temporary discharges include dewatering of dredged material prior to final disposal, and temporary fills for access roadways, cofferdams, storage and work areas.

Section 401 of the Clean Water Act (33 U.S.C. 1341) requires any applicant for a federal license or permit to conduct any activity that may result in a discharge of a pollutant into waters of the United States to obtain a certification from the state in which the discharge originates or would originate or, if appropriate, from the interstate water pollution control agency having jurisdiction over the affected waters at the point where the discharge originates or would originate, that the discharge will comply with the applicable effluent limitations and water quality standards. A certification obtained from the construction of any facility must also pertain to the subsequent operation of the facility.

Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 401-413) requires authorization from the Secretary of the Army, acting through the Corps of Engineers, for the construction of any structure in or over any navigable water of the United States. Structures or work outside the limits defined for navigable waters of the United States require a Section 10 permit if the structure or work affects the course, location or condition of the water body. The law applies to any dredging or disposal of dredged materials, excavation, filling, rechannelization, or any other modification of a navigable water of the United States, and applies to all structures, from the smallest floating dock to the largest commercial undertaking. It further includes, without limitation, any wharf, dolphin, weir, boom breakwater, jetty, groin, bank protection (e.g. riprap, revetment, bulkhead), mooring structures such as pilings, aerial or subaqueous power transmission lines, intake or outfall pipes, permanently moored floating vessel, tunnel, artificial canal, boat ramp, aids to navigation, and any other permanent, or semi-permanent obstacle or obstruction.



POLICIES AND PROCEDURES MANUAL

Title Highway Traffic Noise Analysis and Abatement		Policy No. 500.07
Responsible Office(s) Office of Project Planning		Related Policies and Procedures
Effective/Revision Date(s) 12-5-75/4-21-97	Approval(s)	

Authority: Directors of the Planning and Programming Division and Project Development Division in accordance with 23 CFR Part 772.

Contents: This policy establishes the Department's policies and interoffice responsibilities and procedures for highway traffic noise analysis and abatement.

Affected Offices: Transportation Centers; Offices of Bridges and Structures; Construction, Design, Project Planning and Right-of-Way.

Definitions:

dba - Equivalent noise level in decibels measured on the A weighting network of a standard sound level meter.

Noise Abatement - The reduction of traffic noise effects in sensitive locations through physical structures, limitations on construction activities or alternative measures.

Type I Project - Noise abatement accomplished in conjunction with a construction or reconstruction project on a section of federal-aid highway, as designated in 23 CFR Part 772.

Type II Project - Noise abatement on an existing section of a federal-aid highway which does not include construction or reconstruction, as designated in 23 CFR Part 772.

Forms: None

Policy and Procedure:

I. Policy

This policy and procedure is intended to be consistent with the FHWA's *Procedures for Abatement of Highway Traffic Noise and Construction Noise*, 23 CFR Part 772. Following are the policies of the Department in applying the FHWA standards.

A. General

1. It is the policy of the Department to reduce, where feasible and economically reasonable, excessive noise from highway traffic and highway construction.

2. The Department recognizes both Type I and Type II traffic noise abatement projects.
3. Locations for traffic noise analyses shall be selected based on their representativeness of the entire residential area to be studied.
4. The date a development is *planned, designed and programmed* will be determined through coordination with the local land-use planning jurisdiction. Strong evidence of probable development, such as a building permit, may be required in some cases to firmly establish such a date.
5. The date the public is officially notified of the adoption of the location of a proposed highway project is the date of FHWA approval of the final environmental document. Special traffic noise abatement will generally not be considered if a sensitive development is planned, designed and programmed *after* this "date of public knowledge" of the location of a proposed highway project.

B. Determination of Traffic Noise Level

1. The existing noise level shall be determined by field measurement or estimated by applying a traffic noise prediction model. If appreciable existing traffic noise is absent, an estimate of existing traffic noise may be made based on existing land use and professional noise monitoring experience.
2. The future traffic noise level shall be determined using traffic parameters expected 20 years after project completion (design year) as inputs in applying the current FHWA traffic noise prediction model or an approved alternate prediction method.

C. Traffic Noise Impact. As defined in the FHWA noise standards, traffic noise impacts occur when the predicted traffic noise levels approach or exceed the noise abatement criteria or when the predicted traffic noise levels substantially exceed the existing noise levels.

A measured or predicted traffic noise level of one dBA less than the noise abatement criteria in the FHWA standards constitutes *approaching* the noise abatement criteria. Also, a predicted traffic noise level of 10 dBA or more above the existing noise level *substantially exceeds* the existing noise level. Absolute noise levels may also be considered in assessing the impacts associated with this increase in noise level.

D. Traffic Noise Abatement

1. A *substantial noise reduction* is an 8 to 10 dBA reduction.
2. A reasonable cost per residence (any dwelling unit) benefited is \$20,000, based on 1996 costs.
3. A benefited residence is one where the noise level at its commonly used outdoor space is expected to be reduced by 5 dBA or more.

4. Determining the reasonableness and feasibility of noise abatement involves the use of professional judgment to weigh on a case-by-case basis the overall benefits of noise abatement against the overall adverse social, economic and environmental effects of noise abatement. Factors to be considered include, but are not limited to, the following:
 - a. The amount of noise reduction expected to be provided. If a 5 dBA reduction cannot be expected, then an effective noise barrier is not feasible.
 - b. The number of residences benefited. Noise barriers shall generally not be constructed for individual residences.
 - c. The cost of abatement.
 - d. The opinions of affected residents. Noise barriers shall not be constructed if they are clearly unwanted.
 - e. The absolute noise level.
 - f. The change in noise level.
 - g. The timing of development adjacent to the highway as compared to the time of initial construction of the highway. Noise barriers shall generally not be constructed for developments occurring after original highway construction.
 - h. Differences between the expected future traffic noise level and both existing and expected future *no build* noise levels.
 - i. The use of meaningful professional judgment to weigh these factors on a case-by-case basis for the overall public good.
5. For solid wall noise barriers, an expected 5 dBA reduction is required, but every reasonable effort shall be made to achieve a substantial (8 to 10 dBA) noise reduction. To limit aesthetic intrusiveness, the maximum height of noise walls shall be 16 feet above grade for extended distances.
6. For residential areas where severe (75+ dBA) traffic noise impacts occur and where normal abatement measures are physically infeasible or economically unreasonable, extraordinary abatement measures, such as the purchase of private dwellings from willing sellers, may be appropriate. These situations will be considered on a case-by-case basis in accordance with FHWA guidelines.
7. The Department reserves the right to consider all FHWA guidance, the Department's own experience in traffic noise abatement, and professional judgment in making responsible traffic noise abatement decisions when individual project circumstances not specifically addressed in this policy arise.

II. Responsibilities

- A. The Office of Project Planning shall perform all traffic noise analyses and prepare preliminary noise abatement recommendations. These analyses shall include information regarding future noise levels for use by local land-use planning jurisdictions. The environmental document containing the noise analysis will be provided to the local land-use planning agencies. As needed, this office shall also explain the purpose of traffic noise abatement plans at public information meetings or hearings.
- B. The Office of Design shall prepare final design plans, including landscaping, for traffic noise abatement projects.
- C. The Offices of Bridges and Structures and Right-of-Way shall assist with the development and design of traffic noise abatement projects when required.
- D. The Office of Construction and the Transportation Centers shall coordinate and supervise the completion of traffic noise abatement projects and enforce any construction noise limitations.

III. Procedures

A. Type I Projects

When a section of federal-aid highway is being constructed or reconstructed, the traffic noise analysis and traffic noise abatement plan are integral parts of the Department's established planning, design and construction process for highway projects.

B. Type II Projects

1. Prospective Type II projects are initiated by means of a petition to the Department by the affected residents or city officials.
2. If traffic noise abatement is warranted, the Office of Project Planning shall present to staff the results of the noise analysis and a recommended traffic noise abatement plan based on this analysis. The remainder of project development and completion follows the established planning, design and construction process for highway projects.

C. Construction Noise

When a special plan for controlling construction noise in a sensitive location is needed, the Office of Project Planning shall, in consultation with the Office of Construction, the Office of Design and the Transportation Center, develop the plan for inclusion in the contract documents.

FHWA EA GUIDELINES

TITLE 23 -- HIGHWAYS

SECTION 771.119 - ENVIRONMENTAL ASSESSMENTS

(a) An EA shall be prepared by the applicant in consultation with the Administration for each action that is not a CE and does not clearly require the preparation of an EIS, or where the Administration believes an EA would assist in determining the need for an EIS.

(b) For actions that require an EA, the applicant, in consultation with the Administration, shall, at the earliest appropriate time, begin consultation with interested agencies and others to advise them of the scope of the project and to achieve the following objections: determine which aspects of the proposed action have potential for social, economic or environmental impacts; identify alternatives and measures which might mitigate adverse environmental impacts; and identify other environmental review and consultation requirements which should be performed concurrently with the EA. The applicant shall accomplish this through an early coordination process (i.e., procedures under Sec. 771.111) or through a scoping process. Public involvement shall be summarized in the results of agency coordination shall be included in the EA.

(c) The EA is subject to Administration approval before it is made available to the public as an Administration document. The UMTA applicants may circulate the EA prior to Administration approval provided that the document is clearly labeled as the applicant's document.

(d) The EA need not be circulated for comment but the document must be made available for public inspection at the applicant's office and at the appropriate Administration field offices in accordance with paragraphs (e) and (f) of this section. Notice of availability of the EA, briefly describing the action and its impacts, shall be sent by the applicant to the affected units of federal, state and local government. Notice shall also be sent to the State Intergovernmental review contacts established under Executive Order 12372.

(e) When a public hearing is held as part of the application for federal funds, the EA shall be available at the public hearing and for a minimum of 15 days in advance of the public hearing. The notice of the public hearing in local newspapers shall announce the availability of the EA and where it may be obtained or reviewed. Comments shall be submitted in writing to the applicant or the Administration within 30 days of the availability of the EA unless the Administration determines, for good cause, that a different

[{Page 3831}]

period is warranted. Public hearing requirements are as described in Section 771.111.

(f) When a public hearing is not held, the applicant shall place a notice in a newspaper(s) similar to a public hearing notice and at a similar stage of development of the action, advising the public of the availability of the EA and where information concerning the action may be obtained. The notice shall invite comments from all interested parties. Comments shall be submitted in writing to the applicant or the Administration within 30 days of the publication of the notice unless the Administration determines, for good cause, that a different period is warranted.

(g) If no significant impacts are identified, the applicant shall furnish the administration a copy of the revised EA, as appropriate; the public hearing transcript, where applicable; copies of any comments received and responses thereto; and recommend a FONSI. The EA should also document compliance, to the extent possible, with all applicable environmental laws and Executive Orders, or provide reasonable assurance that their requirements can be met.

(h) When the Administration expects to issue a FONSI for an action described in Sec. 771.115(a), copies of the EA shall be made available for public review (including the affected units of government) for a minimum of 30 days before the Administration makes its final decision (see 40 CFR 1501.4(e)(2)). This public availability shall be announced by a notice similar to a public hearing notice.

(i) If, at any point in the EA process, the Administration determines that the action is likely to have a significant impact on the environment, the preparation of an EIS will be required.

FHWA EA GUIDELINES

TITLE 23 -- HIGHWAYS

SECTION 772.1 - PURPOSE

To provide procedures for noise studies and noise abatement measures to help protect the public health and welfare, to supply noise abatement criteria, and to establish requirements for information to be given to local officials for use in the planning and design of highways approved pursuant to Title 23 U.S.C.

SECTION 772.3 - NOISE STANDARDS

The highway traffic noise prediction requirements, noise analyses, noise abatement criteria, and requirements for informing local officials in this regulation constitute the noise standards mandated by 23 U.S.C. 109(I). All highway projects which are developed in conformance with this regulation shall be deemed to be in conformance with the Federal Highway Administration (FHWA) noise standards.

SECTION 772.7 - APPLICABILITY

(a) Type I Projects. This regulation applies to all Type I projects unless it is specifically indicated that a section applies only to Type II projects.

(b) Type II Projects. The development and implementation of Type II projects are not mandatory requirements of 23 U.S.C. 109(I) and are, therefore, not required by this regulation. When Type II projects are proposed for federal-aid highway participation at the option of the highway agency, the provisions of Secs. 772.9(c), 772.13 and 772.19 of this regulation shall apply.

SECTION 772.9 - ANALYSIS OF TRAFFIC NOISE IMPACTS AND ABATEMENT MEASURES

(a) The highway agency shall determine and analyze expected traffic noise impacts and alternative noise abatement measures to mitigate these impacts, giving weight to the benefits and cost of abatement, and to the overall social, economic and environmental effects.

(b) The traffic noise analysis shall include the following for each alternative under detailed study:

- (1) Identification of existing activities, developed lands, and undeveloped lands for which development is planned, designed and programmed, which may be affected by noise from the highway;
- (2) Prediction of traffic noise levels;
- (3) Determination of existing noise levels;

- (4) Determination of traffic noise impacts; and
 - (5) Examination and evaluation of alternative noise abatement measures for reducing or eliminating the noise impacts.
- (c) Highway agencies proposing to use federal-aid highway funds for Type II projects shall perform a noise analysis of sufficient scope to provide information needed to make the determination required by Sec. 772.13(a) of this chapter.

SECTION 772.11 - NOISE ABATEMENT

(a) In determining and abating traffic noise impacts, primary consideration is to be given to exterior areas. Abatement will usually be necessary only where frequent human use occurs and a lowered noise level would be of benefit.

(b) In those situations where there are no exterior activities to be affected by the traffic noise, or where the exterior activities are far from or physically shielded from the roadway in a manner that prevents an impact on exterior activities, the interior criterion shall be used as the basis of determining noise impacts.

(c) If a noise impact is identified, the abatement measures listed in Sec. 772.13(c) of this chapter must be considered.

(d) When noise abatement measures are being considered, every reasonable effort shall be made to obtain substantial noise reductions.

(e) Before adoption of a final environmental impact statement or finding of no significant impact, the highway agency shall identify:

- (1) Noise abatement measures which are reasonable and feasible and which are likely to be incorporated in the project, and

- (2) Noise impacts for which no apparent solution is available.

(f) The views of the impacted residents will be a major consideration in reaching a decision on the reasonableness of abatement measures to be provided.

(g) The plans and specifications will not be approved by FHWA unless those noise abatement measures which are reasonable and feasible are incorporated into the plans and specifications to reduce or eliminate the noise impact on existing activities, developed lands, or undeveloped lands for which development is planned, designed and programmed.

SECTION 772.15 - INFORMATION FOR LOCAL OFFICIALS

In an effort to prevent future traffic noise impacts on currently undeveloped lands, highway agencies shall inform local officials within whose jurisdiction the highway project is located of the following:

- (a) The best estimation of future noise levels (for various distances from the highway improvement) for both developed and

undeveloped lands or properties in the immediate vicinity of the project,

(b) Information that may be useful to local communities to protect future land development from becoming incompatible with anticipated highway noise levels, and

(c) Eligibility for federal-aid participation for Type II projects as described in Sec. 772.13(b) of this chapter.

SECTION 772.17 - TRAFFIC NOISE PREDICTION

(a) Any traffic noise prediction method is approved for use in any noise analysis required by this regulation if it generally meets the following two conditions:

(1) The methodology is consistent with the methodology in the FHWA

[{Page 395}]

Highway Traffic Noise Prediction Model (Report No. FHWA-RD-77-108).*

*These documents are available for inspection and copying as prescribed in 49 CFR Part 7, Appendix D.

(2) The prediction method uses noise emission levels obtained from one of the following:

i. National Reference Energy Mean Emission Levels as a Function of Speed (Appendix A).

ii. Determination of reference energy mean emission levels in Sound Procedures for Measuring Highway Noise: Final Report, DP-45-1R.*

(b) In predicting noise levels and assessing noise impacts, traffic characteristics which will yield the worst hourly traffic noise impact on a regular basis for the design year shall be used.

GENERAL CONDITIONS FOR WATER QUALITY

1. Permittee is responsible for securing and for compliance with such other permits or approvals as may be required by this department, federal or local governmental agencies for the project activities described.
2. Clearing of vegetation, including trees located in or immediately adjacent to waters of the state, shall be limited to that which is absolutely necessary for construction of the project. All vegetative clearing material shall be removed to an upland, non-wetland disposal site.
3. All construction debris shall be disposed of on land in such a manner that it cannot enter a waterway or wetland.
4. Construction equipment, activities and materials shall be kept out of the water to the maximum extent possible.
5. Equipment for handling and conveying materials during construction shall be operated to prevent dumping or spilling the material into waterbodies, streams or wetlands, except as approved herein.
6. Care shall be taken to prevent any petroleum products, chemicals or other deleterious materials from entering waterbodies, streams or wetlands.
7. Construction activities shall be conducted during low to normal flows and the applicant shall employ controls to reduce the erosiveness of land adjacent to surface waters and wetlands, including establishment and maintenance of the erosion controls during and after construction and revegetation of all disturbed areas upon project completion.
8. Buffer strips and all disturbed areas not covered by riprap shall be seeded with native grasses consistent with those included in the NRCS Critical Areas Seeding Mixture, excluding reed canary grass, during an optimal seeding period. If excavation and construction are completed outside an optimal seeding period, temporary erosion control protection shall be implemented immediately upon completion of excavation and construction and shall be maintained until such time as seeding can be completed during an optimal period. The applicant shall monitor revegetated areas continuously to assure success of revegetation.

9. If rye is initially planted to stabilize the soil, then native warm season grasses shall be planted during the following growing season.
10. Temporary structures and fills shall involve the least damaging and minimum amount of disturbance/impacts to waters of the state and appropriate measures must be taken to maintain near normal downstream flows and minimize flooding. Fills shall be constructed of clean aggregate of suitable size to prevent washing out of the structure by high flows. All temporary fills shall be completely removed to an upland, nonwetland site and the area restored to pre-project conditions within 30 days of the end of their use.
11. All earthwork on shore shall be carried out in such a manner that sediment runoff and soil erosion to waterbodies, streams or wetlands are controlled.
12. Material to be used as riprap, rock flumes, riffle structures, etc., shall consist of native field stone, quarry run rock or clean broken concrete. If broken concrete is used, all reinforcement material shall be completely removed from it; if removal is not possible, said reinforcement material shall be cut flush with the flat surface of the concrete. It shall be the applicant's responsibility to maintain the riprap such that any reinforcement material that becomes exposed in the future is removed. The concrete pieces shall be appropriately graded and no piece shall be larger than 3 feet across the longest flat surface. No asphalt or petroleum based material shall be used as or included in riprap material.

Appendix B - Early Coordination

- *Addresses of Agencies*
- *Letter of Intent*

**ADDRESS LIST OF FEDERAL AND STATE AGENCIES
TO BE INCLUDED IN EARLY COORDINATION**

FEDERAL AGENCIES

Federal Highway Administration
105 Sixth Street
Ames, Iowa 50010-6337

Director
Office of Environmental Policy and Compliance
U.S. Department of the Interior
Main Interior Building MS2340
1849 C Street N.W.
Washington, D.C. 20240

United States Department of the Interior
Office of Environmental Policy and Compliance
P.O. Box 25007
Denver, Colorado 80225-0007

District Engineer
U.S. Army Corps of Engineers
Rock Island District
Clock Tower Building
P.O. Box 2004
Rock Island, Illinois 61204-2004

District Engineer
U.S. Army Corps of Engineers
Omaha District
215 North 17th Street
Omaha, Nebraska 68102-4978

Environmental Review Section
U.S. Environmental Protection Agency
901 North 5th Street
Kansas City, Kansas 66101

State Conservationist
U.S. Department of Agriculture
Natural Resources Conservation Service
210 Walnut Street
Des Moines, Iowa 50309

Environmental Officer
U.S. Department of Housing and Urban Development
10909 Mill Valley Road
Omaha, Nebraska 68154-3955

U.S. Fish and Wildlife Service
4469 - 48th Avenue Court
Rock Island, Illinois 61201

Chief, Division of Planning and Environmental Quality
Regional Director
National Park Service
1709 Jackson Street
Omaha, Nebraska 68102-3571

Federal Emergency Management Agency
2323 Grand Boulevard
Suite 900
Kansas City, Missouri 64108-2670

Federal Aviation Administration
Des Moines FSDO 61
3021 Army Post Road
Des Moines, Iowa 50321

STATE AGENCIES

Iowa Department of Transportation
800 Lincoln Way
Ames, Iowa 50010

Director
State Historical Society of Iowa
Department of Cultural Affairs
East 12th and Grand Avenue
Des Moines, Iowa 50309

Iowa Department of Natural Resources
900 East Grand
Des Moines, Iowa 50309

Federal Funds Coordinator
Iowa Department of Economic Development
600 East Court Avenue, Suite A
Des Moines, Iowa 50309

Iowa Geological Survey Bureau
109 Trowbridge Hall
Iowa City, Iowa 52242-1319

40913/02.002/HowToAddress.doc

Iowa Intergovernmental Review System
LETTER OF INTENT

PROJECT APPLICANT: Iowa Department of Transportation

Submitted By: Earth Tech, Representing Iowa Department of Transportation

PROJECT LOCATION: Story - Marshall Counties, Iowa

PROJECT DATA:

Highway No.: U.S. 30

Type: Highway Improvement

Purpose: To Improve U.S. 30 Through Construction of an Additional Two Lanes Adjacent and Parallel to the Existing Lanes

Length: Approximately 15 Miles

Project Costs: A. Federal Request - To Be Determined
B. State Request - To Be Determined

Total Estimated Project Costs:
\$12.8 Million
(\$15.3 Million With Interchange)

Project No.: NHS-30-5(155)--19-85
NHS-30-5(156)--19-64

FEDERAL AGENCY AND
PROGRAM:

A. Federal Highway Administration, Department of Transportation
B. Highway Trust Fund

ESTIMATED APPLICATION
DATE:

2005

APPLICATION MANAGER:

Bobby Blackmon, Division Administrator
Federal Highway Administration
Ames, Iowa 50010

PROJECT DESCRIPTION

The Iowa Department of Transportation (Iowa DOT) has initiated planning and preliminary design studies for the improvement of U.S. 30 in Story and Marshall Counties. The proposed project begins at the U.S. 65 interchange near Colo, Iowa, and extends east to the Iowa 330 interchange. The proposed concept would widen the existing two-lane highway to four lanes by adding two additional traffic lanes parallel on the north side. Access control would be Priority I (access allowed only at interchanges) in the vicinity of any interchanges and Priority III (1/4-mile spacing) with at-grade intersections in rural areas. An interchange at State Center may be included as part of the proposed project. A project map is attached.

An Environmental Assessment (EA) will be prepared for the proposed project. The EA will consider several alternatives, including alternatives for an interchange at State Center, improvements to the existing roadway and a No-Action alternative.

ANTICIPATED IMPACTS

During the course of study, potential impacts to a wide spectrum of resources will be evaluated, including wetlands, threatened and endangered species, floodplains, homes and businesses, socioeconomic resources and air quality. Impacts would vary depending on elements of the final design.

As part of the proposed project, the previously purchased right-of-way will be used whenever practical but some additional right-of-way impacts are possible. Precise right-of-way impacts, as well as potential project impacts on noise levels, air quality, cultural resources, natural resources, parks or recreation facilities and the natural environment, will be determined as planning and design activities continue.

DEVELOPMENT PROCEDURES

This project is being developed for federal funding participation. A determination by the Iowa DOT and the Federal Highway Administration has identified this project as a Type II Action which will require preparation of an environmental assessment (EA). If, after completing the EA, it is determined that the project will cause significant impacts, an environmental impact statement (EIS) will be prepared and circulated. If the conclusion is that project construction will have no significant impacts, then a finding of no significant impact (FONSI) will be prepared.

Current regulations governing development of federally funded highway improvements require early coordination with units of government who may have interests in the project or its potential impacts. This Letter of Intent is intended to provide early notification of the proposed project and to solicit comments regarding the potential impacts of such an action. Other formal opportunities to comment on the project will follow at a later date. Several federal, state and local agencies will also be contacted directly to request their early input as part of the project impact identification process.

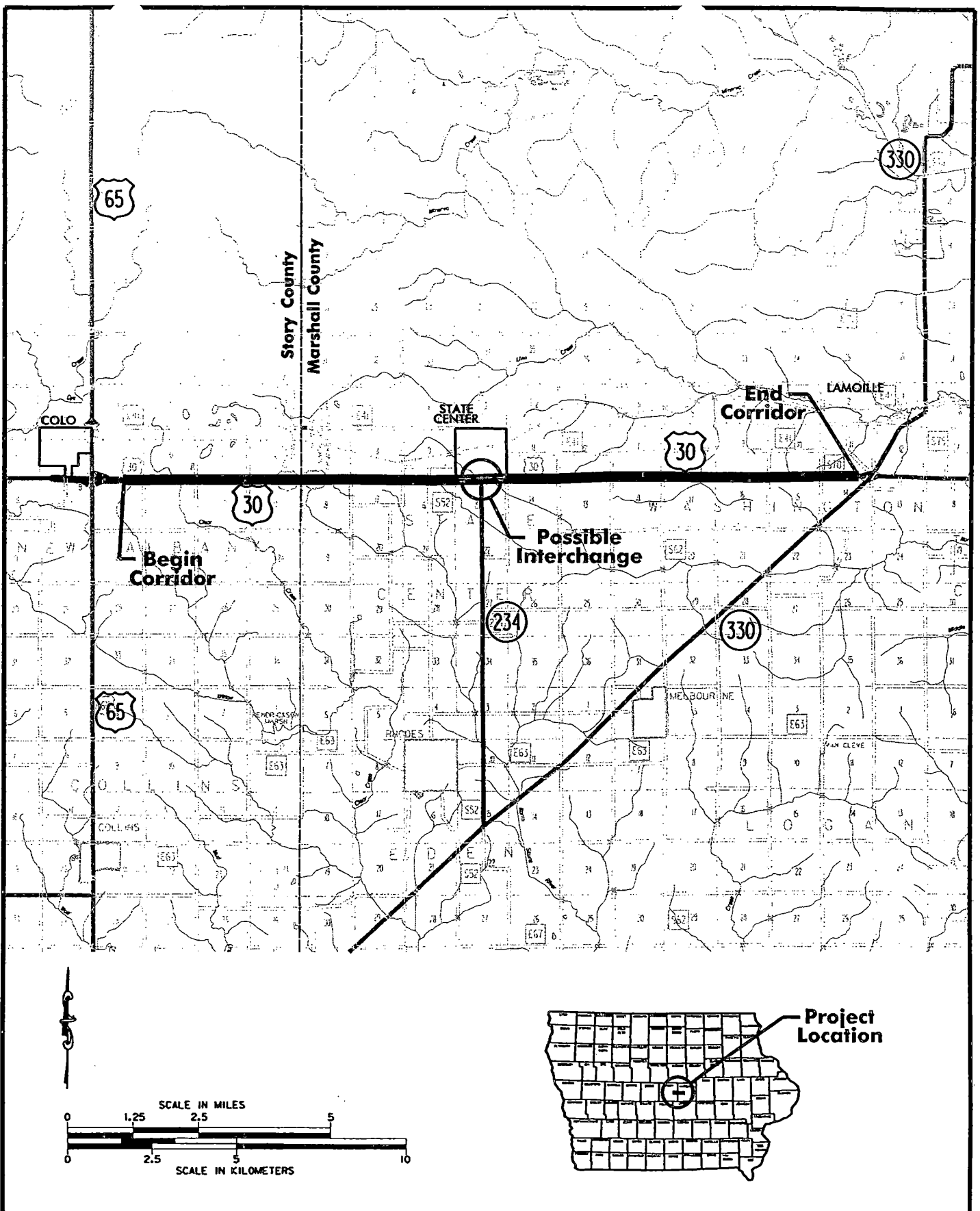


Figure 1
U.S. 30 Project Location

U.S. 30 Improvements
 Near Colo to Iowa 330 Interchange
 Iowa Department of Transportation

Feb. 2001

40913

***Appendix C -
Example of Finding of No Significant Impact
and Environmental Assessment***

**FEDERAL HIGHWAY ADMINISTRATION
FINDING OF NO SIGNIFICANT IMPACT
FOR
N.W. 86TH STREET CORRIDOR
IOWA 141 TO N. W. BEAVER DRIVE
POLK COUNTY**

Notification of the availability of this Environmental Assessment was forwarded to state and area-wide clearinghouses on November 19, 1998. Public availability of the document was published on February 8, 1999. The review period expired on March 22, 1999. Ten comment letters were received on the Environmental Assessment. Each is attached with its response. A public hearing was held on this project on March 11, 1999, in Ankeny, Iowa.

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

June 10, 1999
Date

Donald L. Kennedy
For the Division Administrator
Federal Highway Administration

COMMENTS AND COORDINATION

On March 11, 1999, a Location Public Hearing was held at Des Moines Area Community College in Ankeny, Iowa. It was attended by 67 people. Four persons left comments on the tape recorder provided. Eighteen comment letters were received prior to the hearing and 39 were received following the hearing.

A majority of the letters received before and after the hearing were in support of the Preferred Alternative. Most of the persons who were opposed supported the previous Preferred Alternative. This alternative would have extended existing N.W. 86th Street north through Camp Dodge to the Mile Long Bridge.

Other major issues raised in letters and statements included:

- Some property owners expressed concern regarding the increase in noise levels at their homes.
- One property owner was concerned about the impact of the interchange ramps and overall size on their property.
- Some persons were concerned about access to local roads and adjacent properties.
- Opposition to the Preferred Alternative.
- Support for the Preferred Alternative.
- Property impacts, such as, loss of farmland, buildings and homes were a concern to some persons.
- Several persons and business representatives expressed concerns about loss of business or reduced economic development in the city of Johnston without the former Preferred Alternative 86th Street extension north.

SPECIAL CONDITIONS ASSOCIATED WITH CONTINUED PROJECT DEVELOPMENT

There were no issues raised concerning project development or its potential impacts as a result of either the EA review period, public availability or resource/regulatory agency review of the planned action. Polk County will remain alert, however, for any changes in impacts during final design or construction which could warrant additional environmental evaluation.

New right-of-way for this project will be acquired in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended.

Wetland impacts discussed in the EA are estimates based on preliminary design. The exact amount of wetland impact will be determined during final design. Wetland boundary delineations in cropland will be done using the USDA Food Security Act Manual. All other wetland areas will be delineated using the 1987 Corps of Engineers' Delineation Manual. Compensatory mitigation plans will be developed at that time using a ratio of 1:1.



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

December 21, 1998

Planning, Programs, and
Project Management Division

Mr. Mark Wandro
Assistant Polk County Engineer
5885 Northeast 14th Street
Des Moines, Iowa 50313

Dear Mr. Wandro:

I am writing in response to Earth Tech's letter dated November 19, 1998, with attached Environmental Assessment (EA), concerning Polk County NW. 86th Street Extension, Earth Tech Project No. 102717, Des Moines, Iowa.

Rock Island District staff reviewed the EA, and we have the following comments:

a. Our Engineering Division had no technical comments at this time. However, since this project is adjacent to the Saylorville Lake project area and may have potential impacts for aspects of that project, we wish to review the final design plans, particularly as they relate to Northwest Beaver Drive and Mile Long Bridge. Please contact Mr. Mark Hoague at our address above when those plans are ready for review.

b. On pages 5-5 and 5-6, the discussion on wetlands appears to be contradictory. You first state that the NRCS has not made a wetland determination on potential farmed wetlands and "Other wetlands not immediately apparent from the field review and not on the NWI maps could be present." Later, you state that "conversion of 0.17 ha (0.41 ac) of jurisdictional wetlands for the Preferred Alternative is an unavoidable impact of this project." A wetland delineation utilizing the USDA Food Security Act Manual will be required for all cropland in the preferred alignment corridor. For undisturbed or naturally vegetated areas, the 1987 Corps of Engineers' Delineation Manual should be used. These impacts should be addressed in the EA along with your proposed wetland mitigation plan to compensate for any unavoidable wetland losses.

c. It appears that the preferred alternative will have fewer wetland and/or other "waters of the United States" impacts than previous alternative alignments. It is unclear at this time what type of Department of the Army authorization will be required (nationwide or individual permit). You should include the wetland delineation report and incorporate these impacts, along with impacts to other waters of the United States in your project plans when applying for a Department of the Army permit. Please call Mr. John Betker of our Regulatory Division for assistance in this matter at 309/794-5380.

Coordination with Corps of Engineers regarding the Mile Long Bridge will occur during the design phase.

The discussion of wetland impacts in the environmental assessment was based on preliminary design and will be subject to further refinement as final design details are completed. The data shown was intended to show the "worst case" scenario; although, as noted, final design features frequently result in minor project impact changes. In this case, delineations of wetlands in the footprint of the proposed roadway will be evaluated after final design plans have been completed, using the appropriate manual for each type of land use.

Additionally, any wetland impact changes that result from final design activities will be summarized as part of the Section 404 permit process and will be included in the project wetland mitigation plan.

-2-

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

Sincerely,

A handwritten signature in cursive script, appearing to read "Kenneth A. Barr".

Kenneth A. Barr
Acting Chief, Environmental Analysis Branch

Copy Furnished:

Ms. Brenda J. Durbahn
Earth Tech, Inc.
501 Sycamore Street, Suite 222
P.O. Box 1497
Waterloo, Iowa 50703



28 OCT 1998

NGB-ARE (200-1a)

MEMORANDUM FOR The Rust Environmental & Infrastructure Incorporation, ATTN: Ms. Brenda J. Durbahn, 501 Sycamore Street, Suite 222, Waterloo, Iowa 50703

SUBJECT: Draft Environmental Assessment (EA) for the Extension of NW 86th Street Corridor, Iowa 141 to NW Beaver Drive, Polk County, Iowa

1. References:

- a. Draft EA, 6 November 1998, subject as above.
- b. AR 200-2, 23 December 1988, Environmental Effects of Army Actions.
- c. Memorandum, NGB-ARE, 21 October 1997, subject: Revised Guidance for Environmental Documentation, (All States Log Number P98-004).

2. The National Guard Bureau Staff has reviewed the Draft EA dated 6 November 1998, which analyzes the NW 86th Street Improvement and Extension Project, Phase III of Polk County, Iowa. The proposed project consists of a new two lane rural roadway, approximately 2.3 km in length, as well as a new interchange at Iowa Highway 141 at the beginning of the new roadway. We find the EA will be legally sufficient and meet the requirements of the Army National Guard (ARNG) once our comments, as set forth below, are addressed.

a. Section IV, Alternatives. The Preferred Alternatives states, "Access would be allowed along the new roadway to serve adjacent properties. The exact location of access points and future roadways in this area will be determined as part of final design." When these exact locations are determined, a discussion of the environmental impacts of these new access points and roadways should be included in the Final EA.

b. Affected Environment. The EA did not include a very clear discussion of the affected environment (i.e., baseline conditions). In this regard, the baseline conditions were haphazardly addressed in Section V, "Project Impacts." While it is not necessary to include an entirely separate section discussing the affected environment, the EA should clearly delineate those sections that discuss baseline conditions. For example, under Section V, Project Impacts, Air Quality, the EA could include a subparagraph titled "Existing Conditions."

c. Cultural Resources. Section V, Project Impacts, Cultural Resources. The EA did not address the action recommended in the 29 October 1998 concurrence provided by the Iowa

Exact locations of access points will be determined during final design and presented to the public at the Design Hearing. Conceptual locations of access points, such as side road relocations and individual accesses, were included in calculating the estimated right-of-way impacts.

The format used to prepare this EA is consistent with FHWA Technical Advisory 6640.8A, Guidance for Preparing and Processing Environmental and Section 4(f) Documents, October 30, 1987. Also, CEQ guidelines recommend that technical reports, field notes, etc., used to establish baseline conditions (where appropriate) of a project area be summarized in the Environmental Assessment. Further, FHWA recommends the focus of the environmental document be on the more important impacts with less discussion on areas with little or no impact in an effort to produce documents that are concise, clear and to the point. Although baseline data on less important aspects of project impacts has generally not been discussed at length in the report, this information was obtained and remains part of the administrative record for the improvement. This record establishes the supporting evidence that necessary analyses have been made to sustain the conclusions discussed in the EA.

This property was surveyed. The SHPO comment letter pertaining to it was signed on September 14, 1998.

NGB-ARE

SUBJECT: Draft Environmental Assessment (EA) for the Extension of NW 86th Street Corridor, Iowa 141 to NW Beaver Drive, Polk County, Iowa

State Historic Preservation Office (SHPO). Specifically, that office recommended, "an architectural study of standing structures at the Kraber farmstead should be conducted." While analysis of any cultural preservation issues must occur before federal funds are spent, it makes sense to address the issues as part of the NEPA process.


d. Wetlands. The discussion of wetlands contained in Section V, Project Impacts, Wetlands, appears to be fairly general. The EA indicates that "when design constraints allow, slight adjustments to minimize impacts to wetlands will be evaluated during the design phase." When more information regarding roadway design is available, the EA should be revised to include a more detailed analysis of wetland impacts and proposed mitigation. This more detailed discussion needs to address the comments provided by the U.S. Fish and Wildlife Service in their 17 April 1998 letter responding to the preparer's request for early coordination.

e. Final Design Phase of the Project. Throughout the EA, there is a reference to a "final design phase of the project," which is to occur sometime in the future. This office assumes the EA will be revised to include an analysis of any impacts resulting from changes to the design.

f. Environmental Justice. The EA did not include an assessment of the potential for children, minorities, and low-income populations to be disproportionately exposed to adverse environmental health and safety risks, as required by Executive Order (EO) 13045, "Protection of Children from Environmental Health Risks and Safety Risks", and EO 12898, "Federal Actions to Address Environmental Justice in Minority and Low-income Population," respectively. The EA should include a discussion of potential adverse environmental impacts on children and minority and low-income populations, as required by the above referenced Executive Orders.

3. The point of contact for this action is Mr. Chris Williams who can be reached at commercial 703-607-7985.

FOR THE CHIEF, NATIONAL GUARD BUREAU:


STEVEN R. DE KRAMER
COL, NGB
Chief, Environmental
Programs Division

Coordination with the Corps of Engineers will be conducted to determine the proper mitigation and permit needed during the design phase.

If changes occur during final design that are significant, FHWA can require an EA Addendum be produced to address new impacts.

Population data was collected for this project. There was an insignificant population of low income and minority persons in the project area and these populations would not be disproportionately impacted; therefore, Environmental Justice was not discussed.



TERRY E. BRANSTAD, GOVERNOR

DEPARTMENT OF NATURAL RESOURCES
LARRY J. WILSON, DIRECTOR

December 28, 1998

Mark Wandro
Assistant Polk County Engineer
5885 Northeast 14th Street
Des Moines, Iowa 50313

RE: Environmental Assessment for NW 86th Street Corridor, Iowa 141 to NW
Beaver Drive, Polk County, Iowa

Dear Mr. Wandro:

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

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

No response necessary.

This letter is a record of review for protected species and rare natural communities in the project area. It does not constitute a permit and before proceeding with the project you may need to obtain permits from the DNR or other state and federal agencies.

If you have any questions about this letter or if you require further information, please contact Kim Bogen Schutz at (515) 281-8675.

Sincerely,

LARRY J. WILSON, DIRECTOR
IOWA DEPARTMENT OF NATURAL RESOURCES

LJW:ksb

cc: Brenda J. Durbahn, Earth Tech
98-621L.DOC



TERRY E. GRANSTAD, GOVERNOR

Iowa Department of Natural Resources
GEOLOGICAL SURVEY BUREAU
109 Trowbridge Hall Iowa City, Iowa 52242-3319
Phone (319) 335-1575
FAX (319) 335-2764

DEPARTMENT OF NATURAL RESOURCES
LARRY J. WILSON, DIRECTOR

November 24, 1998

Mr. Mark Wandro
Assistant Polk County Engineer
5885 NE 14th Street
Des Moines, Iowa 50313

Re: NW 86th Street Corridor Environmental Assessment, Polk County, Iowa

Mr. Wandro,

I am replying to your request for information related to the NW 86th Street extension in Polk County. Our office is currently involved in wetland hydrologic studies on the Camp Dodge National Guard base near the previously proposed NW 86th Street alternative road extension. The wetland closest to this proposed extension is located in the center of the north ½ of Sec 27, T 80N, R 25W. For comments from our office regarding the previously proposed extension you are referred to our letter to the Rock Island District Corps of Engineers dated November 14, 1996, and a letter to Martha Maxon of Rust Environmental and Infrastructure, Inc., dated April 20, 1998.

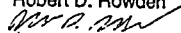
If the "Preferred Alternative" for the NW 86th Street extension is used, it will not pass through Camp Dodge near the study area, and will not impact the wetlands under study discussed in previous communications from our office. According to the environmental assessment dated November 6, 1998, the "Preferred Alternative" will pass near five emergent wetlands totaling 2.4 acres. If the land use is currently agricultural in the area of these wetlands, and these wetlands were not observed during the field investigation, I assume these areas are being farmed. If these areas have been tilled, the natural condition of the wetlands has already been disturbed. If this is the case, it would appear that the impact from the "Preferred Alternative" to these wetlands would be less significant than the impact of the original NW 86th Street extension upon the wetlands within Camp Dodge.

The concerns relative to road construction effects upon any wetland setting are the following: Surface runoff both during construction and operation can lead to changes in the hydroperiod of wetlands. Inputs of sediment and chemicals, particularly salt, can have deleterious effects on the water quality of wetlands. Depending on where the road is constructed relative to a wetland, or wetlands, further hydrologic impacts can occur. Removal of material in the area near a wetland can also lead to an alteration in the local hydrology.

If wetlands are near proposed construction, measures will be taken to limit runoff and other hydrologic impacts.

Thank you for the opportunity to comment on this plan. I would also note that because of ongoing studies at Camp Dodge, we have a good deal of stratigraphic and water quality data for the base, although at present not in easily transferable form. If we can be of any further assistance, please contact our office.

Thank You,

Robert D. Rowden

Research Geologist

THE MPO

DES MOINES AREA METROPOLITAN PLANNING ORGANIZATION

ARGONNE ARMORY - 602 EAST FIRST STREET
DES MOINES, IOWA 50309-1881 - PHONE: (515) 237-1366 - FAX: (515) 237-1303

December 15, 1998

Ms. Brenda J. Durbahn
Earth Tech
501 Sycamore Street, Suite 222
P.O. Box 1497
Waterloo, IA 50703

Dear Ms. Durbahn:

SUBJECT: N.W. 86th STREET CORRIDOR ENVIRONMENTAL ASSESSMENT

In response to your letter of November 19, 1998, the Des Moines Area Metropolitan Planning Organization (MPO) staff has reviewed the *N.W. 86th Street Corridor Environmental Assessment* (EA). The MPO staff appreciates the opportunity to review the EA, and offers the following comments:

1. Overall, the EA has a logical flow, and is written clearly.
2. The improvement to the 86th Street corridor, as originally proposed, was a connection from 86th street to the Mile Long Bridge. The Preferred Alternative extends from Iowa 141 to the Mile Long Bridge, and has no connection to 86th Street. While the MPO staff is familiar with the history of the project, we suspect that those not familiar with the project might find this transition confusing. An explanation at the beginning of the report might alleviate some confusion.
3. On Page 4-2, in the second to last paragraph, please note that the name of our organization is the Des Moines Area Metropolitan Planning Organization.
4. On Page 4-3, in the fourth bullet, there is a reference to the existence of a natural prairie pothole. A map, or more specific description of the location of the prairie pothole, would be helpful.
5. On Page 4-4, in the last paragraph, there is a reference to increased traffic congestion with the No Action Alternative. While the MPO staff is aware of the traffic analysis that was performed, other readers might wonder which facilities are expected to become congested with the No Action Alternative.

A history is provided starting on page 2-1.

The error is noted on the errata page.

The prairie pothole is located in Sec 27 T80N R25W.

The streets referred to on page 4-4 which would experience increased traffic congestion under the "No Action" alternative including the existing county roads between the Mile Long Bridge and Iowa 141, which is the current route serving the Mile Long Bridge. These streets include a portion of N.W. Beaver Drive, N.W. 106th Avenue, and N.W. 114th Street.

DURBAHN.WPD

Durbahn/Gilchrist
December 15, 1998
Page 2

6. The original alignment for the 86th Street extension is part of the highway element of the MPO's long-range transportation plan, the *Horizon Year 2020 Transportation Development Report* (HY2020 TDR). The Preferred Alternative is not included in the HY2020 TDR. The MPO staff suggests that the Preferred Alternative be included in the update of the MPO's long-range transportation plan to the year 2025.

No response necessary.

If you have any questions regarding these comments, please contact me at 237-1316.

Sincerely,



Kevin Gilchrist
Senior Planner

cc: Tom Kane, MPO Executive Director

GRIMES

Discover the Possibilities

November 25, 1998

Mr. Mark Wandro
Assistant Polk County Engineer
5885 NE 14th Street
Des Moines, IA 50313

RE: Polk County NW 86th Street Extension
Environmental Assessment
Earth Tech Project No. 102717

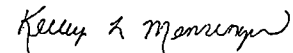
Dear Mark:

Thank you for inviting our comments on the above referenced project.

Although the City of Grimes does not have the expertise to comment on all aspects of this proposed project, the City and the Grimes Economic Development Commission is in general support of the Preferred Alternative beginning at Iowa Highway 141 and extending to N.W. Beaver Drive just south of the Mile-Long Bridge.

We will have a representative present at the next public hearing to gain additional information and to hear other comments and/or concerns.

Very truly yours,



Kelley L. Mensinger
City Administrator/Clerk
City of Grimes

No response necessary.



City of Polk City

P.O. Box 426
112 Third Street
Polk City, Iowa 50226
Telephone: 515-984-6233

March 22, 1999

Mark Wandro
Asst. County Engineer
5885 NE 14th St.
Des Moines, Iowa 50313

Dear Mr. Wandro,

As Mayor of Polk City I would like to take this opportunity to express my comments on the 86th Street Corridor project.

The Council and I have been actively involved in this project from the beginning. We were disappointed when the Original Phase III to connect to 86th Street was altered, but we still remain supportive of the plan to connect Highway 141 to the Mile Long Bridge.

As our City continues to grow it is important that we have better access to West Des Moines and northern Polk County, and this will also serve as a connector to Highway 415 for smoother traffic flow.

We greatly appreciate Polk County's active involvement in establishing a solution on this project, and look forward to seeing construction begin.

Sincerely,

M. E. Burton
Mayor
City of Polk City

No response necessary.

Polk County Conservation Board

Members of the Board

JANE CLARK
LA-MONTIE GAUSE
PETE LEONETTI
JUDY PERSON
TOM RODD

JESTER PARK
GRANGER, IOWA 50109

Ben Van Gundy, Director
Telephone Numbers / Area Code 515
Administrative Office 999-2557
FAX / 999-2709
Naturalist Programs 999-2557
Jester Park 999-2559
Jester Park Golf Course 999-2903
Chichaqua Wildlife Area 967-2596
Easter Lake Park 285-7612
Fort Des Moines Park 285-7612
Great Western Trail 285-7612
Brown's Woods 285-7612
Thomas Mitchell Park 967-4889
Chichaqua Valley Trail 967-4889
Yellow Banks Park 266-1563

March 19, 1999

Mark Wandro, Assistant County Engineer
5885 N. E. 14th Street
Des Moines, Iowa 50313

RE: 86TH STREET CORRIDOR LOCATION
PUBLIC HEARING MARCH 11, 1999

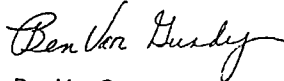
Dear Mr. Wandro:

The staff of the Polk County Conservation Board has reviewed the Environmental Assessment presented for the 86th Street Corridor. It is the consensus of our staff that the preferred alternate is an acceptable routing for the new roadway. It addresses the concerns that we had expressed regarding the previously proposed routes.

No response necessary.

This route appears to avoid major ecological impacts, maintain the integrity of Camp Dodge, cost less, and accomplishes the primary purpose of providing safe transportation to the northwest portion of Polk County. The PCCB staff supports your new preferred alternative as the most economical and ecological way to accomplish those goals.


Sincerely,



Ben Van Gundy
Director

Polk City Development Corporation

TO: Mark Wandro, Asst. County Engineer
Polk County
5885 NE 14th St. Des Moines, IA 50313

FROM: Robert J. Miller, President 

RE: NW 86th St. Corridor
Location Public Hearing
March 11, 1999

DATE: March 19, 1999

COMMENTS:

After years of involvement with this project and after reviewing the Project Statement and attending the hearing on 3-11-99, I'm writing on behalf of the board of directors and membership of Polk City Development Corporation (PCDC) in support of the project. As we have stated previously, we feel strongly that this project is an important link in improving transportation in northwestern Polk County.

It is safe to say that PCDC is disappointed that the previously preferred alternative route (A) is not the preferred alternative at this point in the project process. We feel a connection between the Mile Long Bridge and the previously completed Phases I and II of the 86th St. makes sense. The new route connecting the mile long bridge to Highway 141 does offer good access between the western suburbs (and the interstate) and the Polk City/Saylorville Lake recreational area complex. This new roadway will offer much improved travel conditions and access to both daily commuters and seasonal recreators.

From an economic development standpoint PCDC has felt strongly, and continues to, that this project will have important impact on the Polk City area and northwestern Polk County. The project not only offers improved access, but fills a missing link throughout northwestern Polk County connecting Interstate 80, Highway 141, the Mile Long Bridge, Highway 415, and Interstate 35.

With the apparent environmental problems encountered on the Camp Dodge property and the apparent unwillingness of Camp Dodge to accept other routes through their training area, the preferred alternative connecting to Highway 141 rather than 86th St. appears best. PCDC supports this project and appreciates the efforts of Polk County to facilitate a solution on this project.

No response necessary.



Johnston Economic Development Corporation

March 22, 1999

Mr. Mark Wandro
Assistant Polk County Engineer
5885 N.E. 14th Street
Des Moines, IA 50313

Re: NW 86th Street Phase III Extension Project

Dear Mark:

Johnston Economic Development Corporation (JEDCO) has concerns and/or comments about the proposed NW 86th Street Phase III project currently being considered by Polk County. JEDCO has retained Stanley Consultants to review the environmental assessment document entitled "NW 86th Street Corridor, Iowa HWY 141 to NW Beaver Drive, Polk County, Iowa." A copy of Stanley's review, which is made a part of our comments, is included with this letter. Our concerns and/or comments are as follows:

1. The project as proposed is not an alternative to the extension of NW 86th Street. The route does nothing to alleviate the current or future traffic demands of NW Beaver Drive or 86th Street. We believe the traffic counts in your model are incorrect with today's use and are certainly not an accurate picture of the year 2020. If the project proceeds as proposed, the project must include the cost of improving NW 70th between Highway 141 and 86th Street, and the cost of improving NW Beaver Drive between the Mile Long Bridge and Merle Hay Road. These improvements are required because they were to be the chief beneficiaries of the NW 86th Phase III Extension. Without these improvements, the proposed option has very little merit.
2. We do not believe the traffic model being used to plan the project is accurate. Pioneer Hi-Bred International has 1800 employees and John Deere Credit will be employing about 1200 in the City of Johnston. Both companies attract many employees from areas North of Johnston. The traffic counts do not appear to reflect this employment base in addition to the traffic demand we all know already exists. As an example, I invite you to attempt to turn west from NW 86th Street on to NW 70th in the morning between 7:00 AM and 9:00 AM or the afternoon between 4:00 PM and 6:00 PM. Once you have tried this, you will question the traffic model as well.

POLK COUNTY PUBLIC WORKS DEPARTMENT

ENGINEERING DIVISION
5885 N.E. 14TH STREET

TELEPHONE 515-286-3705

FAX 515-286-3437

RICHARD E. VAN GUNDY, P.E., L.S.
COUNTY ENGINEER AND PUBLIC WORKS DIRECTOR

DES MOINES, IOWA 50313

April 26, 1999

Mr. Christopher D. Manning, President
Johnston Economic Development Corporation
5967 Mapletree Circle
Johnston, Iowa 50131

Re: Polk County N.W. 86th Street Corridor

Dear Mr. Manning:

Thank you for your letter of March 22, 1999, regarding the above project. I will try to respond to your key concerns and comments.

1. The traffic projections for this project were developed by the Des Moines Area Metropolitan Planning Organization (MPO), using a computerized model which they have developed and calibrated over the course of many years. Such models provide the best tools we have available to project future traffic volumes, although we realize that these are planning tools, and are not expected to be 100% accurate.

You noted correctly that the cost of improving other streets was not included in the construction cost estimates in the Environmental Assessment. This is consistent with the cost estimates shown for the original 86th Street alternative, which also did not include the widening of connecting streets or of improving N.W. 86th Street north of I-80/35. To fully serve the year 2020 development and traffic volumes, we agree that many other street improvements in Johnston and throughout the metropolitan area will be required. The costs of these improvements would be developed in the future when these projects are initiated.

Please note that the traffic forecasts do not indicate a need to widen N.W. Beaver Drive for any of the alternatives, although normal maintenance would be required on this street regardless of which alternative is selected for the N.W. 86th Street Corridor.

2. The Des Moines Area MPO will be updating their transportation model for the year 2025. If the city has new information such as employment numbers, we recommend that they coordinate with the MPO so that the transportation model will continue to be as accurate as possible.

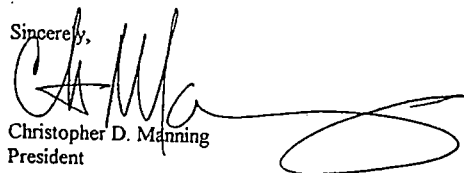
Mr. Mark Wandro
March 22, 1999
Page Two

3. The 86th Street Phase III Extension project as planned for the past ten years would have a definite positive economic impact on the City of Johnston and the 86th Street Corridor. The project, as currently proposed, will have very little positive impact. The project will have a negative impact unless additional work is included for NW 70th Avenue and NW Beaver Drive.

Long term, it is our belief the extension should be built from NW 86th Street to connect to the Mile Long Bridge. This is the favored alternative from our perspective. Many years have been spent planning this project and it is disappointing to see the route change. If the route must be built connecting Highway 141 to the Mile Long Bridge, we strongly urge you to include funding to improve NW Beaver Drive and NW 70th Avenue so they can safely handle the increased traffic which they will receive.

The members of JEDCO are ready to discuss our thoughts in greater detail with you as you plan the project further. Thank you for your consideration.

Sincerely,



Christopher D. Manning
President

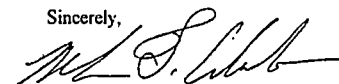
3. The intent of the Environmental Assessment is to examine the environmental impacts of various alternatives, and to determine how well they would serve the traffic demands between the Mile Long Bridge and the metropolitan area. This study showed that the predominant traffic movements would be served well by the diagonal alternative, with minimal environmental impacts.

The diagonal alternative would not appear to have a significant impact, either positive or negative, on streets such as N.W. 70th Avenue or N.W. Beaver Drive. Traffic on those streets would be approximately the same as the "Do Nothing" alternative. The original alternative for the N.W. 86th Street Extension would have substantially increased the traffic volumes on N.W. 86th Street between I-80/35 and N.W. 70th Avenue.

The Environmental Assessment does not attempt to fully evaluate the economic development impact of the project. Such studies are beyond the scope and requirements of an Environmental Assessment.

A copy of your letter and this response will be included in the Public Hearing Transcript. Please contact us if you have any additional comments or questions.

Sincerely,



Mark F. Wandro, P.E., L.S.
Assistant County Engineer

ERRATA

P.4-2, first paragraph under Traffic Service, last sentence should read:

Origins and destinations of vehicles using the Mile-Long Bridge were examined by the Des Moines Area Metropolitan Planning Organization using their computerized traffic model.

**N.W. 86TH STREET CORRIDOR
IOWA 141 TO N.W. BEAVER DRIVE
POLK COUNTY, IOWA**

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
AND
POLK COUNTY, IOWA**

November 6, 1998

Date of Approval for Public Availability

Derald L. Kennedy

For the Division Administrator
Federal Highway Administration

The following persons may be contacted for additional information:

Mr. Bobby W. Blackmon
Division Administrator
Federal Highway Administration
105 - 6th Street
Ames, Iowa 50010
Telephone: 515-233-7300

Mr. LeRoy H. Bergmann
Urban Systems Engineer
Iowa Department of Transportation
Project Development Division
Office of Local Systems
Ames, Iowa 50010
Telephone: 515-239-1506

Mr. Mark Wandro
Assistant Polk County Engineer
5885 N.E. 14th Street
Des Moines, Iowa 50313
Telephone: 515-286-3705

TABLE OF CONTENTS

	<u>Page</u>
I. DESCRIPTION OF THE PROPOSED ACTION	1-1
II. PROJECT HISTORY	2-1
III. PROJECT NEED	3-1
TRAFFIC VOLUMES	3-1
TRAFFIC SERVICES AND ACCESS TO MILE-LONG BRIDGE	3-1
Traffic Volumes	3-1
Existing Road System	3-1
Proposed Improvements	3-2
ROADWAY SYSTEM CONTINUITY	3-2
Roadway System Improvements	3-2
Travel Distance Reduction	3-2
TRAFFIC SAFETY	3-3
LOCAL ACCESS	3-3
SUMMARY	3-3
IV. ALTERNATIVES	4-1
PREFERRED ALTERNATIVE	4-1
OTHER ALTERNATIVES	4-2
Alternative A	4-2
Traffic Service	4-2
Environmental Impacts	4-3
Impacts to Camp Dodge	4-3
Alternative B	4-3
Alternative C	4-3
Alternative D	4-4
No Action Alternative	4-4

	<u>Page</u>
V. PROJECT IMPACTS	5-1
SOCIOECONOMIC IMPACTS	5-1
Right-of-Way Impacts	5-1
Farmland Protection Policy Act	5-2
Farm Operations Impacts	5-2
AIR AND NOISE IMPACTS	5-2
Air Quality	5-2
Noise	5-2
Land Use	5-2
Noise Fundamentals	5-3
Methodology	5-3
Impacts and Mitigation	5-3
Northeast Subdivision	5-3
Iowa 141	5-4
THREATENED AND ENDANGERED WILDLIFE	5-4
NATURAL AREAS AND WILDLIFE HABITAT	5-5
WETLANDS	5-5
Avoidance Alternatives	5-6
Minimization	5-6
Compensatory Mitigation	5-6
Wetland Findings	5-6
WATER QUALITY	5-6
PARKS AND RECREATIONAL FACILITIES	5-6
CULTURAL RESOURCES	5-7
HAZARDOUS WASTE	5-7
RIVER AND FLOOD PLAIN CROSSINGS	5-7
VI. COMPARISON OF ALTERNATIVES	6-1
VII. SUMMARY	7-1

	<u>Page</u>
VIII. COMMENTS AND COORDINATION	8-1
AGENCY COORDINATION	8-1
PUBLIC COORDINATION	8-2

LIST OF TABLES

Table

- 1 Population Characteristics for Polk County, Johnston and Polk City
- 2 Noise Levels at Noise-Sensitive Sites
- 3 Summary of Impacts, N.W. 86th Street Corridor Alternatives

LIST OF FIGURES

Figure

- 1 Project Location
- 2 Preferred Alternative
- 3 Typical Cross Section
- 4 Traffic Volumes
- 5 Traffic Volume History on Iowa 141
- 6 Other Alternatives Considered
- 7 Noise-Sensitive Sites in the Project Area

LIST OF APPENDICES

Appendix

- A Aerial Photographs
- B Farmland Impact Conversion Rating Form
- C Comment Letters Received
- D Comment Letters Received to the 1996 Corps of Engineers Environmental Assessment

I. DESCRIPTION OF THE PROPOSED ACTION

The proposed project consists of a new 2-lane rural roadway, approximately 2.3 km (1.4 mi) in length, located in an unincorporated area of Polk County, northwest of the Des Moines metropolitan area (Figure 1). The proposed alignment passes through an undeveloped area which is presently farmed and which is planned for future development. The project would begin near the existing intersection of Iowa Highway 141 and N.W. 114th Street and would end at N.W. Beaver Drive, just south of the Mile-Long Bridge (Figure 2).

The new roadway would consist of a 2-lane rural cross section with 7.2 m (24 ft) wide pavement and 3.0 m wide granular shoulders (Figure 3). The roadway would include side ditches and culverts as needed to accommodate drainage.

The proposed action provides for a new interchange at Iowa Highway 141 at the beginning of the new roadway. This interchange would be located in the vicinity of the existing N.W. 114th Street/Iowa 141 intersection. Iowa 141 is an existing 4-lane north-south highway which begins at I-35/80 and serves the northwest portion of the Des Moines metropolitan area. Iowa 141 presently includes other interchanges at N.W. 70th Avenue and I-35/80, in addition to several at-grade intersections.

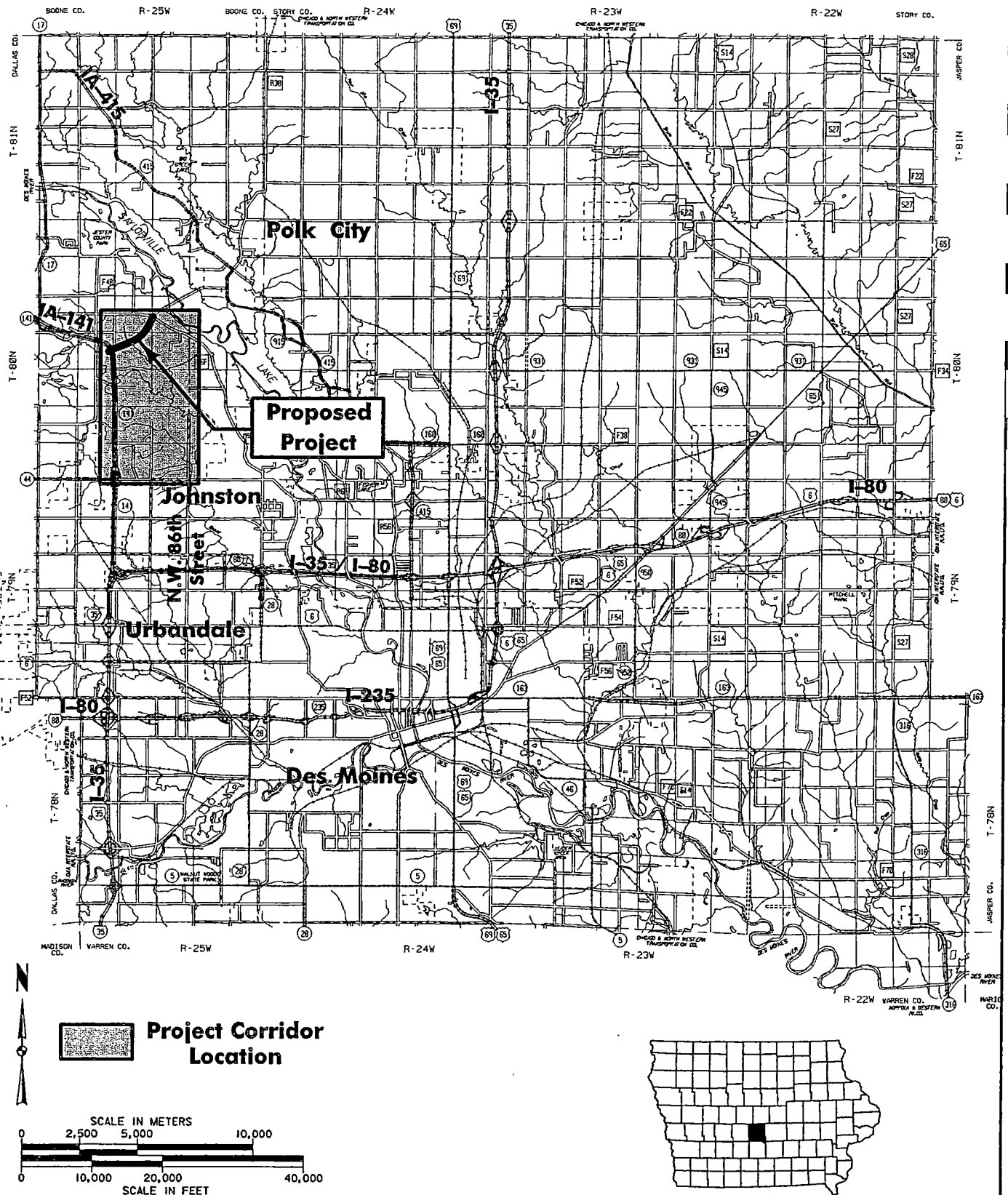
It is proposed that the new roadway would overpass Iowa 141 on a new bridge in the vicinity of N.W. 114th Street. A new interchange would be constructed at this location, with new ramps constructed in the northwest, southwest and southeast quadrants of the interchange (see Plate 1 in Appendix A for the proposed interchange layout). No ramp would be constructed in the northeast quadrant of the interchange to avoid three recently constructed homes in that area. Instead, an entrance loop-ramp would be constructed in the southeast quadrant to accommodate this traffic.

The proposed action would include two side road relocations to facilitate construction of the interchange (refer to Plate 1).

- N.W. 114th Street would be relocated approximately 80 m (260 ft) to the east of its present location.
- N.W. Rowe Drive, a gravel road south of the interchange, would be relocated approximately 210 m (690 ft) to the south of its present location.

The proposed project would provide access to existing properties on both sides of the new roadway. On Iowa Highway 141, no access would be permitted within the interchange area or within 300 m (984 ft) of the ramps. Existing driveways within these limits would be relocated outside of the interchange area.

prf = \\NS059\DATA\PL0T\PL463P\B0\FIG1.PRF



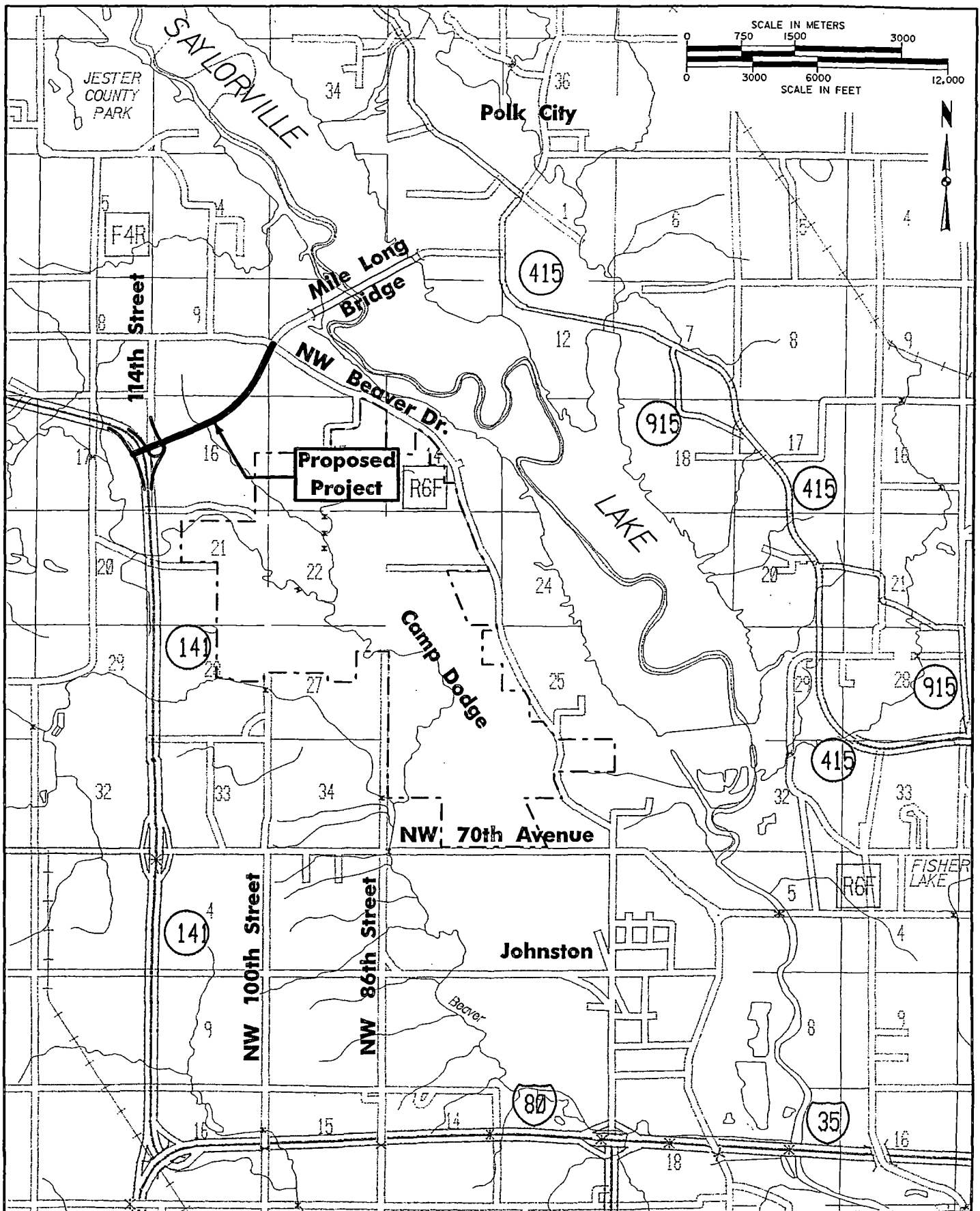
**Environmental Assessment
N.W. 86th Street Corridor
Polk County, Iowa**

**Figure 1
Project Location
Within Polk County, Iowa**

November 1998

102717

prf = \\NS059\DATA\PL0T\PL463P\B0\FIG2.PRF

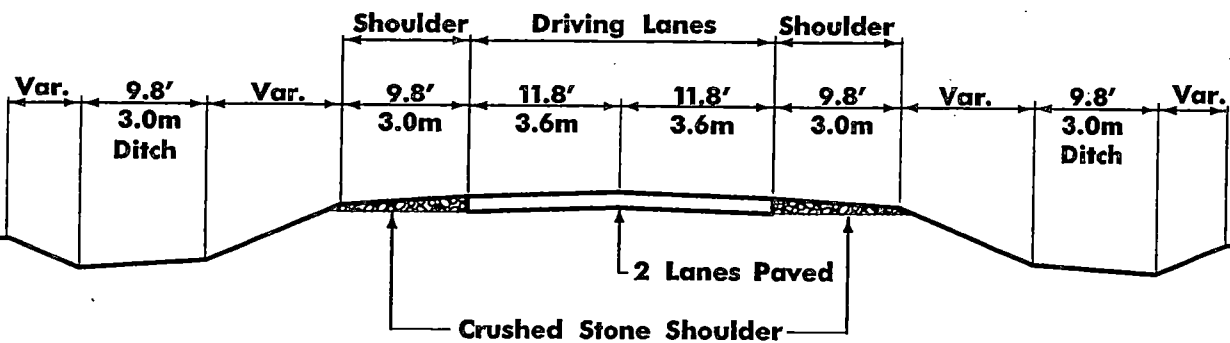


**Environmental Assessment
N.W. 86th Street Corridor
Polk County, Iowa**

**Figure 2
Preferred Alternative**

November 1998

102717



Environmental Assessment
N.W. 86th Street Corridor
Polk County, Iowa

Figure 3
Typical Cross-Section

November 1998

102717

II. PROJECT HISTORY

Planning for improvements in the N.W. 86th Street corridor has been ongoing since the late 1980s. The overall N.W. 86th Street corridor is approximately 13.7 km (8.5 mi) in length, extending from West Aurora Avenue in Urbandale (about 1 mile south of I-35/80) and ending at the Mile-Long Bridge. The project was divided into three phases, of which Phase I and Phase II have already been constructed.

- Phase I included improvements to N.W. 86th Street between West Aurora Avenue and N.W. 54th Avenue, and included construction of a new interchange with I-35/80.
- Phase II included the reconstruction of N.W. 86th Street between N.W. 54th Avenue and N.W. 70th Avenue.

The primary purpose of Phases I and II was to improve access to the Camp Dodge Army National Military Reservation by providing an improved route between their main entrance on N.W. 70th Avenue and the interstate highway system. Camp Dodge is the headquarters for the Iowa National Guard and includes a large area for outdoor training maneuvers. Phases I and II were a joint effort between the Iowa National Guard, Polk County and the cities of Johnston, Polk City and Urbandale. Construction on Phases I and II was completed in 1994.

Phase III is the final link in a system of improvements to the N.W. 86th Street corridor. The N.W. 86th Street Phase III project was authorized in Section 111, Public Law 94-587 (*Water Resources Development Act of 1976*), dated 22 October, 1976. Section 111 provides "... for the full development of campground and other recreational sites and access thereto for the Lake Red Rock and Saylorville Lake projects at Federal cost, including the improvement of existing county or state roads outside the project limits to provide better access into recreation areas." Additionally, the Conference Report (*Congressional Record-House*, dated September 15, 1992) for the *FY 93 Energy and Water Development Appropriation Act* states that, "... Within available funds, the Corps of Engineers' is directed to use up to \$10,000,000 for the continuation of the N.W. 86th Street Extension to I-35/80 at the Saylorville Lake project in Iowa."

The U.S. Army Corps of Engineers was originally the lead agency for the Phase III portion of the project and in 1996 prepared an Environmental Assessment for a Preferred Alternative that passed through a portion of Camp Dodge Army National Military Reservation just to the west of Beaver Creek. A final determination on the status of the project was not made, however, and the project was later transferred to the jurisdiction of Polk County.

In early 1998, Polk County resumed work on the Environmental Assessment and continued the evaluation of design alternatives in the N.W. 86th Street corridor. In March 1998, a public information meeting was held in Ankeny to inform local officials and residents of the status of the

project and to receive public input. Comments received during that meeting are summarized in the Comments and Coordination section of this document.

Meetings were also held with representatives of Camp Dodge, Polk County, Iowa Department of Transportation, Federal Highway Administration and others. Based on input received from this coordination, several variations of the previous alignment, as well as new alternatives for the N.W. 86th Street corridor, have been investigated. The "Preferred Alternative" described in this document is the result of this investigation.

III. PROJECT NEED

The primary purpose of this segment of the N.W. 86th Street corridor is to provide an improved traffic route between I-35/80 and the Mile-Long Bridge and to serve growing traffic volumes in the northwest portion of Polk County. The improved route is needed to accommodate increasing traffic volumes to the Mile-Long Bridge, to improve roadway continuity in this portion of the county, to improve traffic safety within the corridor and to provide local access for a developing area along the route.

TRAFFIC VOLUMES

Traffic volumes have been increasing substantially on existing streets in this area. As an example, traffic volumes on Iowa Highway 141 have increased approximately 40 percent between 1990 and 1996. The existing road system between Iowa 141 and the Mile-Long Bridge does not adequately provide the needed capacity, roadway continuity and design standards to serve future traffic volumes. Refer to Figures 4 and 5 for traffic volumes in the project area.

The proposed project would fit well into the overall transportation system in northwest Polk County and would serve the following functions.

TRAFFIC SERVICE AND ACCESS TO MILE-LONG BRIDGE

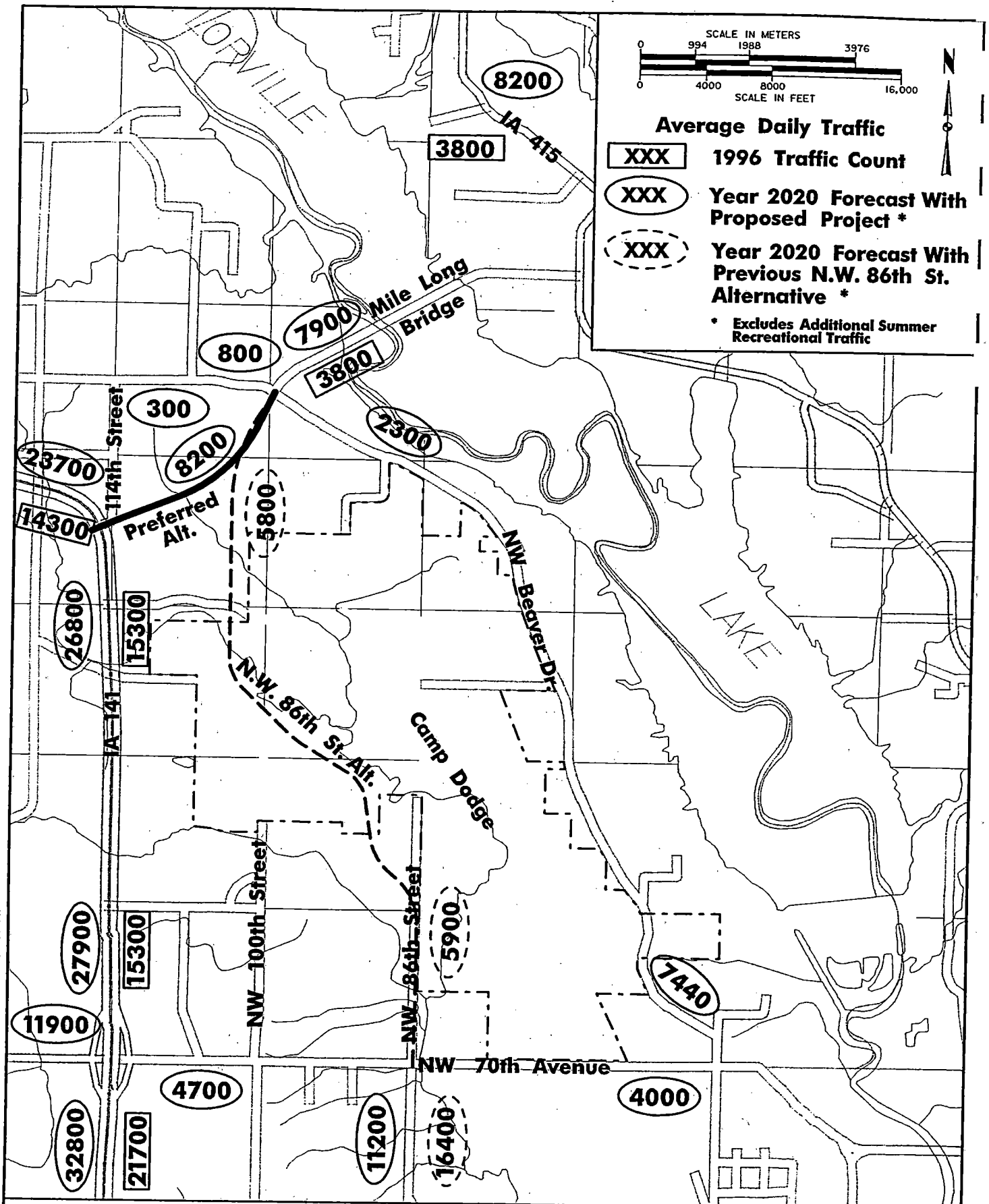
The Mile-Long Bridge is a 2-lane roadway crossing Saylorville Lake and providing access to Polk City, the east side of Saylorville Lake, Iowa Highway 415 and other destinations northeast of Saylorville Lake. Saylorville Lake is a U.S. Army Corps of Engineers reservoir on the Des Moines River and is approximately 1.6 km (1 mi) wide at this location. It forms a natural barrier to travel in this portion of the county, with the next closest bridge being located about 9.7 km (6 mi) to the south. The Mile-Long Bridge, therefore, provides the only feasible crossing point for many travel destinations in Polk City and surrounding areas to the north of the lake.

Traffic Volumes

In 1997, the Mile-Long Bridge carried an annual average daily traffic volume of 4,200 vehicles per day. Traffic volumes in the summer are approximately 1,800 vehicles per day higher than the winter volumes and include a substantial volume of recreational vehicles, boat trailers, etc. (Summer traffic volumes in 1997 averaged 5,200 vehicles per day, while winter volumes averaged 3,400 vehicles per day.) These traffic volumes increased 6 percent between 1996 and 1997 and are forecast to continue increasing. By 2020, the average daily volume is expected to reach 7,900 vehicles per day.

Existing Road System

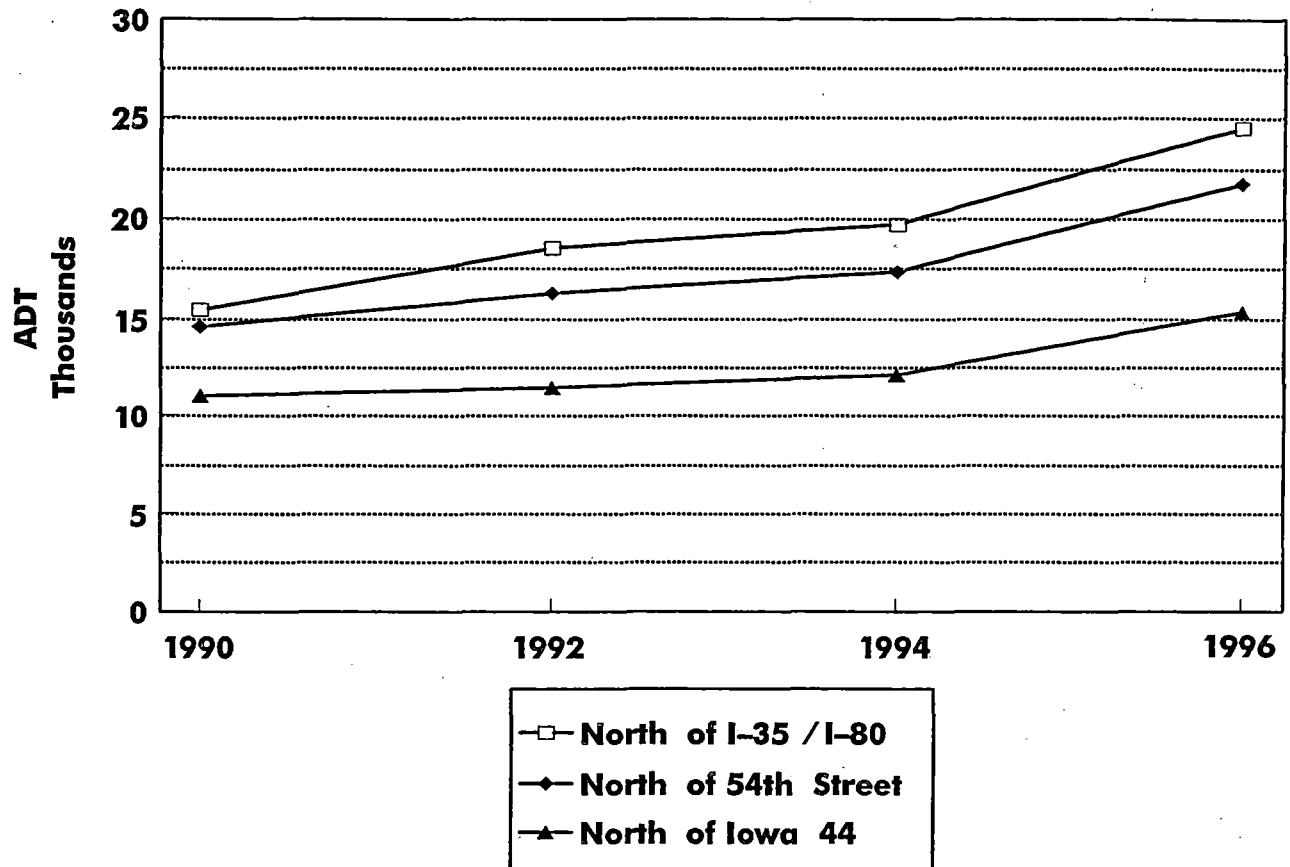
The existing roads connecting the Mile-Long Bridge with Iowa Highway 141 include N.W. Beaver Drive and N.W. 114th Street. Portions of these roadways are narrow county roads with substandard



Environmental Assessment
 N.W. 86th Street Corridor
 Polk County, Iowa

Figure 4
Traffic Volumes

Traffic Counts on Iowa Highway 141 Average Daily Traffic Volumes (ADT)



**Environmental Assessment
N.W. 86th Street Corridor
Polk County, Iowa**

Figure 5
**Traffic Volume History
on Iowa Highway 141**
November 1998

102717

shoulder widths. These roads also include several right-angle turns and frequent driveways. This route connects with Iowa Highway 141 at an at-grade intersection, located in the middle of a curve.

The existing road system is not adequate to safely carry the projected traffic volume of over 8,000 vehicles per day in this corridor. However, due to the presence of Saylorville Lake, there are no other roads which presently serve this growing traffic volume. The increasing traffic volume is due to continuing development and traffic demand to the northeast of Saylorville Lake, which is expected to increase whether or not this project is built.

Proposed Improvements

The proposed project would provide a new grade-separated interchange on Iowa Highway 141 and a direct connection between Iowa 141 and the Mile-Long Bridge, eliminating an at-grade intersection on Iowa 141 and three right-angle turns on the present roadways.

ROADWAY SYSTEM CONTINUITY

The proposed project would improve the continuity of the north-south roadway system in the project corridor. As noted above and illustrated in Figure 2, the existing road system connecting the Mile-Long Bridge with I-35/80 consists of several county roads with frequent intersections, curves, stops, right-angle turns, driveways and substandard design features.

Traffic origins and destinations were reviewed to determine the travel patterns in this area. A review of the traffic forecasts shows that approximately 80 percent of the traffic on the Mile-Long Bridge is south- and westbound (with destinations west of N.W. 100th Street), while approximately 20 percent of the traffic has a destination east of N.W. 100th Street. Accordingly, an improvement in the roadway system to the southwest of the Mile-Long Bridge would serve the majority of this traffic.

Roadway System Improvements

The proposed project would provide a direct and shortened connection between Iowa Highway 141 and the Mile-Long Bridge. As an added improvement in roadway system continuity, it would provide a direct connection between Iowa Highway 141 and Iowa Highway 415 on the east side of Saylorville Reservoir.

Travel Distance Reduction

Travel distances would be reduced substantially by the proposed project. The new roadway would reduce the travel distance for each vehicle by approximately 1.0 km (0.62 mi) compared to the existing conditions. Based on an average traffic volume of 8,200 vehicles per day, the proposed project would reduce overall travel by approximately 3,000,000 vehicle-km per year (1,850,000 vehicle miles per year), compared to the existing roadway system. This reduction would translate into substantial savings in gasoline consumption, road-user costs and accident potential.

TRAFFIC SAFETY

The proposed project is expected to greatly improve the traffic safety conditions in the project corridor. The new roadway would eliminate many of the right-angle turns, stops, driveways and narrow road sections from the current route, all of which would improve the safety characteristics of the roadway. In addition, the reduction in travel distance as noted above would further reduce the frequency of traffic accidents.

One location particularly susceptible to traffic accidents is the at-grade intersection of Iowa Highway 141 and N.W. 114th Street. Accident reports show that a total of nine traffic accidents and eight injuries occurred at this intersection between 1994 and 1996. In the absence of new improvements, accident rates are expected to increase in this area along with increasing traffic volumes. The proposed project would eliminate the at-grade intersection on Iowa 141 and provide a full interchange, greatly reducing the traffic accident potential.

LOCAL ACCESS

The proposed project passes through an area approximately 4 square km (1.5 square mi) in size which is targeted for future development according to the Polk County Land-Use Plan. Portions of this area have already been developed for residential use.

The proposed project would serve as an arterial street through this area, providing connections to a future street system to serve local access. By providing this function, the project would facilitate the economic development of the area surrounding the new road.

SUMMARY

The need for this project is supported by the increasing traffic volumes (traveling between the Mile-Long Bridge and the Des Moines metropolitan area), the poor continuity and condition of the existing roadway system, the need for improved traffic safety, and the need for improved access. An improved roadway connection between Iowa Highway 141 and the Mile-Long Bridge would satisfy all of these functions.

IV. ALTERNATIVES

The N.W. 86th Street corridor for this segment extends from N.W. 70th Avenue to the Mile-Long Bridge, approximately 8 km (5 mi) in length. A corridor approximately 3.2 km (2.0 mi) in width was examined, extending from Iowa Highway 141 on the west to N.W. 86th Street on the east.

Some of the major design considerations in this corridor include Beaver Creek and adjacent wooded areas, several wetlands, and the Camp Dodge military training area. These factors are major considerations in determining the location of new roadways in the corridor. Traffic patterns and forecasts were also studied in depth to determine roadway locations which will best serve the traveling public.

The following sections describe the Preferred Alternative resulting from these studies, as well as the other alternatives which were considered and deleted.

PREFERRED ALTERNATIVE

This alternative consists of constructing a 2-lane roadway on new alignment. Beginning at Iowa Highway 141, the new roadway extends northeast approximately 2.3 km (1.4 mi) to N.W. Beaver Drive just south of the Mile-Long Bridge (Figure 2 and Plates 1 and 2 in Appendix A).

An interchange would be added at Highway 141. A 3-quadrant interchange is proposed to avoid impacts to residential houses in the northeast quadrant. By moving the northbound entrance-ramp from the northeast quadrant to an entrance loop in the southeast quadrant, right-of-way impacts to several residential houses can be avoided. The proposed layout for this interchange is shown on Plate 1, Appendix A.

Two side roads near Iowa Highway 141 would be relocated to facilitate construction of the interchange. A portion of N.W. 114th Street would be relocated about 80 m (260 ft) to the east of its present location. A portion of N.W. Rowe Drive would be relocated about 210 m (690 ft) south of its present location.

Access would be allowed along the new roadway to serve adjacent properties. The exact location of access points and future roadways in this area will be determined as part of final design.

The following list shows the major reasons this alternative was selected over other alternatives considered:

- Less Intrusive Environmentally
- Projected to Serve 8,200 Vehicles Per Day
- Lower Cost Than Other Alternatives
- Shortest, Most Direct Route Between Iowa 141 and the Mile-Long Bridge

- Avoids Camp Dodge to the South
- Avoids Residential Area to the North

OTHER ALTERNATIVES

In addition to the Preferred Alternative, several other alternatives were evaluated and subsequently deleted from consideration for various reasons, including traffic impacts, environmental impacts or impacts to Camp Dodge. These alternatives are shown in Figure 6 and are described below.

Alternative A

This alternative would begin at the intersection of N.W. 70th Avenue and N.W. 86th Street and extend north along existing N.W. 86th Street north for approximately 1.6 km (1 mi). It would turn northwest on new right-of-way crossing over Beaver Creek and continuing north to N.W. Beaver Drive.

A portion of the alignment passing through Camp Dodge would be fenced on both sides and would include two bridges to allow crossing by troops and military equipment. This portion of the project was closely coordinated with Camp Dodge officials, and it was determined that the road would be compatible with the required training areas. This alternative would, however, allow public traffic to pass through a portion of the military training area and would create a barrier to free movement within the military training area.

Alternative A would provide a good connection between Des Moines and Polk City and would improve the continuity of the present roadway system. N.W. 86th Street is one of the few north-south arterial streets in the metropolitan area which runs continuously between I-35/80 and I-235, with interchanges at both facilities. Alternative A would provide a continuation of this major arterial to the north.

After a thorough review of the environmental and traffic considerations, and after completing the public informational meeting, Alternative A was deleted in favor of the Preferred Alternative for the following reasons:

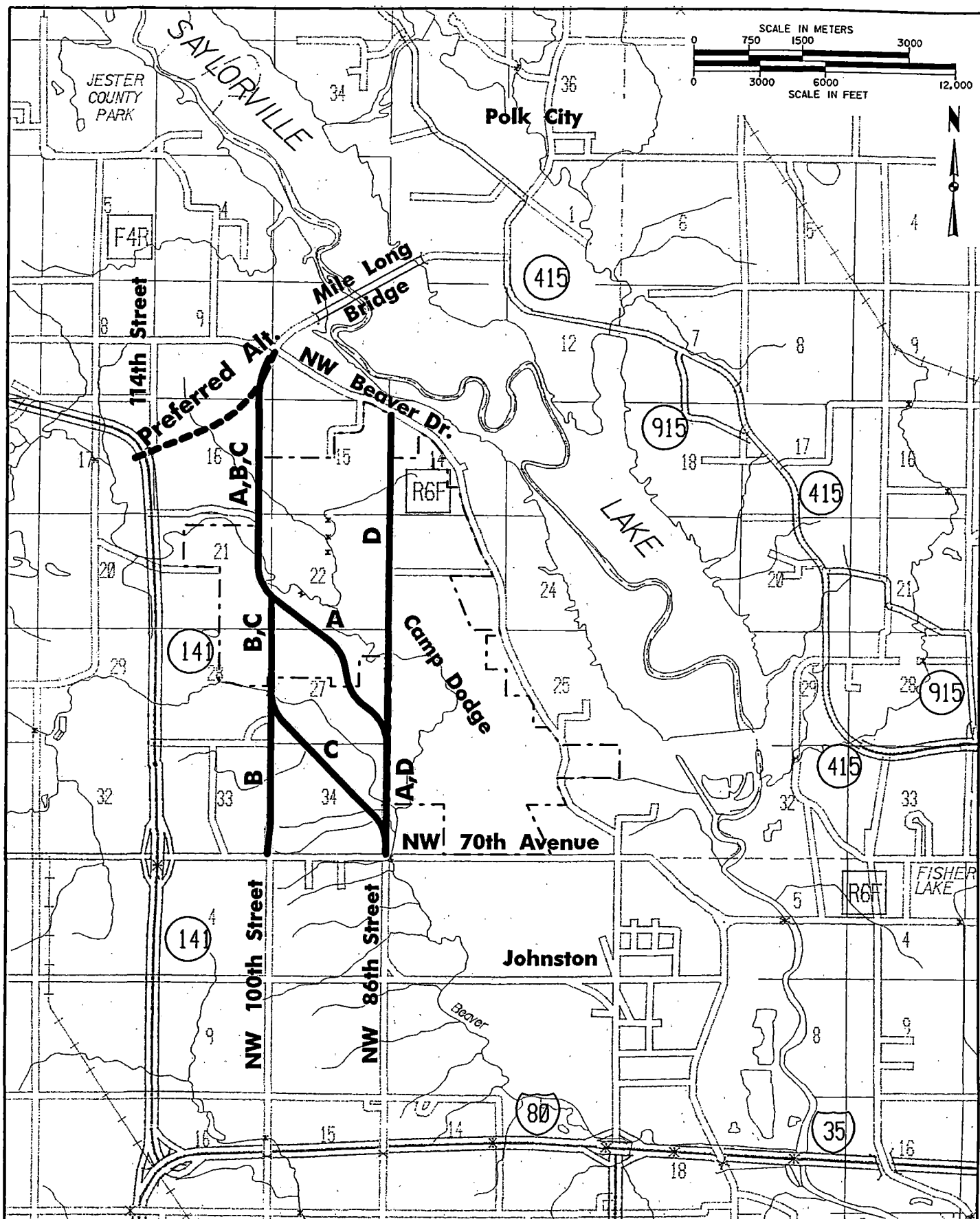
Traffic Service

A detailed analysis of traffic patterns in the project corridor was conducted. Existing traffic counts, historical growth trends and future traffic forecasts were evaluated. Origins and destinations of vehicles using the Mile-Long Bridge were examined by the Des Moines Metropolitan Planning Organization using their computerized traffic model.

The traffic analysis included the following findings:

- The majority of traffic using the Mile-Long Bridge (approximately 80 percent of the total) has a destination west of N.W. 100th Street. Alternative A would route this traffic easterly to N.W. 86th Street, requiring each vehicle to backtrack about 3.2 km (2 mi).

prf = \\NS059\DATA\LOT\PL463P\BQ\FIG6.PRF



**Environmental Assessment
N.W. 86th Street Corridor
Polk County, Iowa**

Figure 6

Other Alternatives Considered

November 1998

102717

- Alternative A would load approximately 5,200 additional vehicles per day onto N.W. 86th Street. Portions of this roadway would become overloaded and require widening north of I-35/80.
- Alternative A would not significantly relieve traffic volumes on N.W. Beaver Drive or Merle Hay Road to the east of this project.
- The Preferred Alternative provided a more direct route for the majority of traffic.

Environmental Impacts

Some of the significant environmental impacts for Alternative A included:

- Wetland impacts, including construction near a natural prairie pothole.
- Fragmentation of the Beaver Creek corridor, which is the location of significant wildlife habitat and wildlife movement.
- Traffic noise and other impacts to residential properties along N.W. 86th Street.

Impacts to Camp Dodge

Although this alternative was determined to be compatible with the military training areas and function of Camp Dodge, it would create a barrier through part of their property and inhibit the free usage of a large portion of Camp Dodge west of Beaver Creek. The roadway would also introduce public traffic into a presently inaccessible portion of Camp Dodge which is used for military training exercises.

Alternative B

This alternative would consist of extending existing N.W. 100th Street north through Camp Dodge, then continuing north of Camp Dodge on new right-of-way to N.W. Beaver Drive.

This alternative was deleted in favor of the Preferred Alternative because of adverse effects on Camp Dodge training operations. It was determined by Camp Dodge officials that this alternative would not allow the necessary size, shape and location of training areas which are required for their military training exercises.

Alternative C

The northern portion of this alternative would be similar to Alternative B beginning at N.W. Beaver Drive and connecting with N.W. 100th Street. This alternative would avoid some of the residential impacts along N.W. 100th Street by constructing a new diagonal roadway south of Camp Dodge connecting with N.W. 86th Street.

This alternative was deleted because it had the same negative impacts to Camp Dodge training operations and would have the same traffic impacts as Alternative A.

Alternative D

This alternative would follow existing N.W. 86th Street north into Camp Dodge, following the original historical alignment of N.W. 86th Street. North of Camp Dodge property, Alternative D would continue north on new right-of-way to N.W. Beaver Drive.

This alternative was deleted in favor of the Preferred Alternative because of adverse effects on Camp Dodge training operations. In meeting with Camp Dodge officials, it was confirmed that no new roadway construction can be permitted east of Beaver Creek without severely impacting their present facilities and operation.

No Action Alternative

The No Action Alternative would be the continuation of the existing street and highway system as it exists at the present time. No physical changes would be made in the pavement widths or grades, right-of-way widths, traffic lanes or traffic circulation patterns.

If no changes are made to the existing street and highway network, it is expected that traffic congestion and traffic-related accidents will continue to increase in proportion to future traffic volume increases. The existing roadways west and south of the Mile-Long Bridge are particularly incapable of handling the future traffic volumes. Existing at-grade intersections are also incapable of safely handling the future traffic volumes.

V. PROJECT IMPACTS

SOCIOECONOMIC IMPACTS

The project corridor is located in Polk County (population 327,140) near the communities of Johnston (population 4,702) and Polk City (population 1,908). The project passes through approximately 2.4 km (1.5 mi) of Polk County. Census information is not available for this rural subdivision of the county; therefore, the data in Table 1 is presented to characterize the population as best as possible.

Access along the corridor would be provided at-grade at 400 m (0.25 mi) intervals, except for the connection to Iowa 141 where access would be limited to the interchange. This would require relocation of some existing access to farms, homes and agricultural fields. In addition, side roads and access points along Iowa 141 south of the proposed interchange would need to be relocated to a minimum of 300 m (1,000 ft) beyond the ramp tapers. For some local property owners, this may increase distances and travel time to farm properties and other destinations. The distances are expected to be minimal, however.

Overall, this proposed action is not expected to cause significant adverse impacts to the social and economic character of the area. The economy of the area may be enhanced by this project through improved access and decreased travel time between destinations which may attract new businesses and residential communities to the area. The improved connection between Polk City and the western suburbs of Des Moines may make Polk City a more attractive place to reside and visit, which will have an overall positive impact on the area. In addition, access to the recreational facilities at Saylorville Lake will be improved for those individuals traveling from the south and west.

Land Use

Within the project corridor, land is devoted primarily to agricultural uses, with the majority in rowcrops. Residential land use is found north of the proposed roadway and near Iowa 141. Camp Dodge is located to the south of the project corridor. Land there is used for military training exercises.

Right-of-Way Impacts

Preliminary right-of-way estimates show that two rural homes and related farm buildings would be displaced by the 3-quadrant interchange at Iowa 141 (see plates in Appendix A). Right-of-way from eight properties would be required, all of which are farm properties.

The Preferred Alternative is anticipated to require approximately 16.6 ha (41 ac) of new right-of-way. These estimates are based on preliminary design and are subject to modification pending additional review. In places where feasible and prudent, alignment shifts to minimize right-of-way

TABLE 1
POPULATION CHARACTERISTICS FOR
POLK COUNTY, JOHNSTON AND POLK CITY

	Polk County	Johnston	Polk City
Population:			
Total	327,140	4702	1908
% Minority	9.2	1.7	1.3
Income:			
% Below Poverty Level (All Persons)	9.0	5.1	5.0
Median Household Income	31,221	43,036	35,197
Employment:			
Total Labor Force (16 Years and Older)	210,700	N.A.	N.A.
% Unemployed (Total Labor Force) ¹	1.9	N.A.	N.A.

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

¹ Unemployment rate as of April, 1998, provided by Job Service of Iowa.

acquisitions and impacts to adjacent landowners will be made during the final design phase of the project.

Farmland Protection Policy Act

A Farmland Conversion Impact Rating Form, AD-1006, was completed to determine impacts to prime and unique farmland in the project corridor. A copy of the form is attached in Appendix B. The Preferred Alternative is expected to use approximately 16.2 ha (40 ac) of farmland; 15.4 ha (38 ac) of the right-of-way are considered prime farmland by the U.S. Department of Agriculture, Natural Resources Conservation Service (NRCS).

Farm Operations Impacts

The project would affect 10 parcels of land and require approximately 16.2 ha (40 ac) of farmland. Individual properties would lose from 0.25 ha (0.66 ac) to 7.12 ha (17.6 ac). The project would diagonally sever three properties. Diagonal severance may result in decreased production in some of those parcels. Large equipment that is generally used today cannot effectively work in small areas that require tight turns.

AIR AND NOISE IMPACTS

Air Quality

Air quality impacts of this project are expected to be very minor. 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.

Noise

This section presents the analysis of the potential noise impacts generated from the proposed project. A comparison of existing and future (design year 2020) noise levels is made.

Land Use

Residences are generally in the southwest part of the project area along Iowa 141 and in a subdivision in the northeast part of the project area. Much of the project travels through undeveloped private land. The terrain surrounding the corridor is largely level or gently rolling hills.

Noise Fundamentals

Noise from individual vehicles is generated by the engine, exhaust, tire-roadway interaction, brakes, vehicle vibration and air disturbance. Roadway traffic noise is influenced by vehicle speed, vehicle volume, auto-truck mix and roadway geometrics. The effect of traffic noise on surrounding areas depends on the noise levels generated, the background noise levels, intervening terrain and the nature of the land uses where the noise is heard.

A wide range of noise levels is audible to the human ear. For this reason, noise levels are described by a logarithmic scale in units of decibels (dB). The human ear perceives noises of different frequencies in different ways. For instance, lower frequencies are filtered out more than mid-range or higher frequencies. The A-weighted decibel scale (dBA) approximates human perception of the overall noise spectrum and is therefore used in most noise studies. To quantify the noise level, an average noise level over a 1-hour period (the $L_{eq(h)}$) is commonly used. All noise levels in this report are given in peak hour dBA L_{eq} . Small changes in noise levels (3 dBA or less) are not noticeable by the average person; a 10 dBA increase is generally perceived as a doubling of the noise level.

Methodology

The FHWA has developed Noise Abatement Criteria (NAC) and procedures to be used in the planning and design of highways. These criteria and procedures are set forth in Title 23 of the Code of Federal Regulations, Part 772 (23 CFR 772).

The Iowa Department of Transportation (DOT) policy on Highway Traffic Noise Analysis and Abatement implements the FHWA policy in the state of Iowa. In keeping with the DOT's policy, traffic noise impacts were considered to occur when the predicted noise levels equaled or exceeded 66 dBA or when predicted noise levels exceeded the existing noise levels by 10 dBA or more.

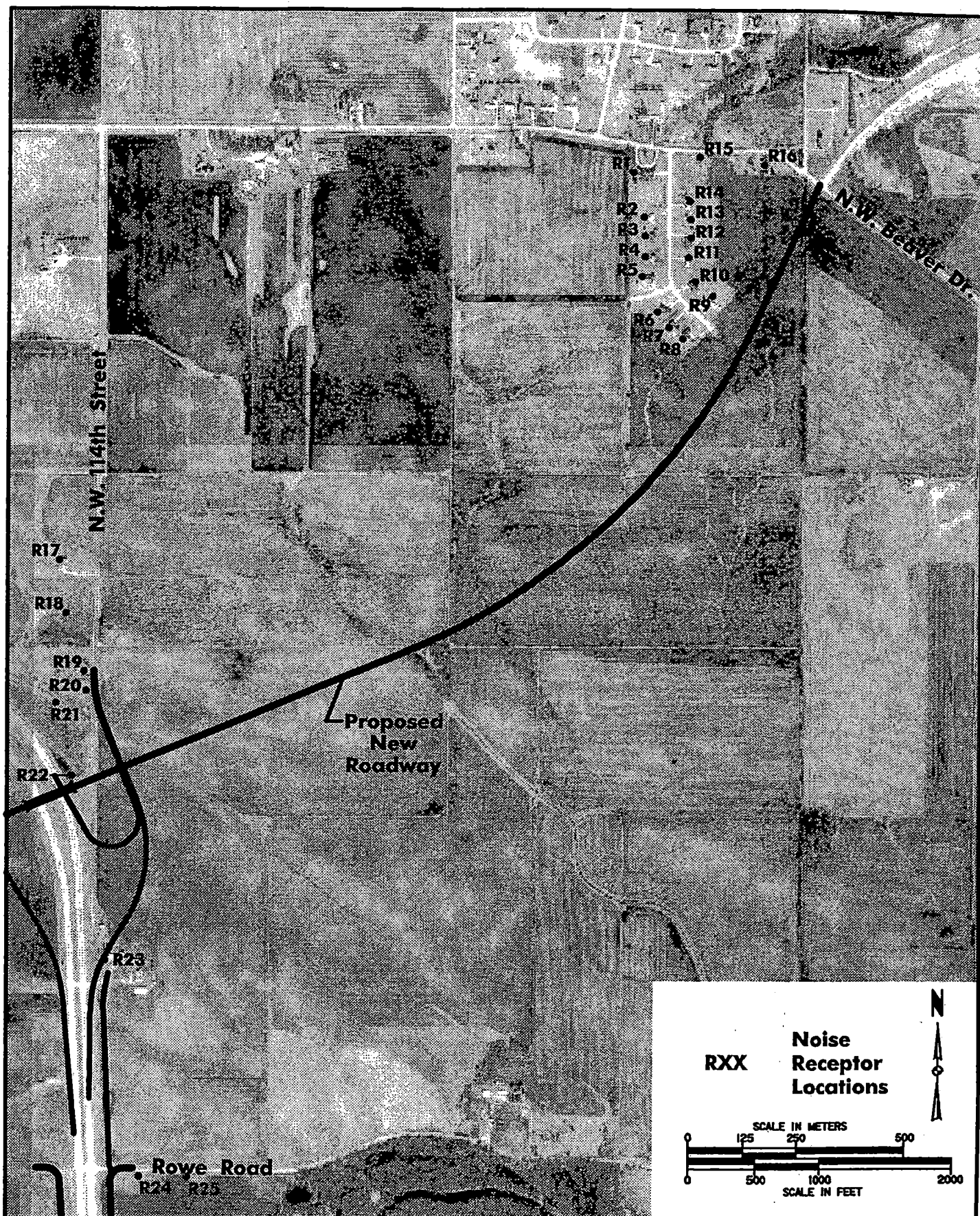
The FHWA has developed the Highway Traffic Noise Prediction Model to estimate highway traffic noise levels. The STAMINA/OPTIMA computer program is based on this model and was used in this analysis to estimate existing and future noise levels at 25 noise-sensitive sites (Figure 7). Comparison of the modeled future noise levels with the modeled existing levels and with the NAC is assumed to indicate the degree of noise impacts to be experienced at the noise-sensitive sites. No ambient noise monitoring was conducted for this project.

Impacts and Mitigation

Estimated existing and projected future noise levels are presented in Table 2 and are described below.

Northeast Subdivision

Sites R1 through R16 (Figure 7 and Table 2) represent 16 residences in and near a subdivision located just west of the intersection of the Preferred Alternative and N.W. Beaver Drive. Estimated



**Environmental Assessment
N.W. 86th Street Corridor
Polk County, Iowa**

Figure 7

Noise Receptor Locations

November 1998

102717

TABLE 2
NOISE LEVELS AT NOISE-SENSITIVE SITES*

Receiver	Alternative		
	Existing	No Action	Build (Preferred)
R1	64	65	59
R2	53	55	51
R3	51	53	50
R4	49	51	50
R5	48	50	50
R6	47	48	52
R7	46	48	53
R8	46	47	55
R9	46	48	56
R10	48	50	53
R11	49	51	52
R12	51	53	52
R13	53	55	52
R14	55	57	53
R15	64	66	60
R16	65	67	61
R17	52	54	54
R18	55	57	57
R19	57	59	59
R20	58	60	60
R21	60	62	62
R22	63	65	67
R23	65	68	Acq.
R24	63	66	66
R25	59	61	61

* All noise levels are given in peak hour dBA L_{eq} .
Acq. = Acquired by the project.

existing peak hour noise levels in this area range from approximately 47 dBA at the south edge of the subdivision to about 65 dBA at locations near N.W. Beaver Drive.

Under the No Action Alternative, design year noise levels at these sites would increase by a generally unnoticeable 1 or 2 dBA to between 47 and 67 dBA. Two locations along N.W. Beaver Drive, Sites R15 and R16, would experience noise levels of at least 66 dBA.

Under the Preferred Alternative, traffic noise levels would decrease by 1 to 5 dBA to 50 to 61 dBA at seven sites near N.W. Beaver Drive (Sites R1 through R3 and R13 through R16). At Sites R4, R5 and R12, noise levels would increase by a generally unnoticeable 1 or 2 dBA to between 50 and 52 dBA. At Sites R6 through R11, noticeable increases of 3 to 10 dBA to between 52 and 56 dBA are expected to occur. Only Site R9 is anticipated to experience an increase in traffic noise of at least 10 dBA. Construction of a noise barrier to mitigate noise impacts at this site would not be cost effective and is not recommended as part of this project. However, it is anticipated that a slight shift in the alignment of the proposed roadway away from the subdivision would effectively reduce the noise level for the impacted residence.

Iowa 141

Sites R17 through R25 (Figure 7 and Table 2) represent nine residences in the west part of the project area near Iowa 141. Estimated existing peak hour noise levels in this area range from approximately 52 dBA to about 65 dBA.

Under the No Action Alternative, design year noise levels at these sites would increase by a generally unnoticeable 2 or 3 dBA to between 54 and 68 dBA. Two locations along Iowa 141, Sites R23 and R24, would experience noise levels of at least 66 dBA.

Under the Preferred Alternative, traffic noise levels would decrease by a generally unnoticeable 2 dBA to between 54 and 62 dBA at five sites near the west end of the proposed roadway (Sites R17 through R21 and Site R25). At Sites R22 and R24, noticeable increases of 4 or 3 dBA, respectively, (to 67 and 66 dBA) are expected to occur; noise impacts would occur at both sites. Construction of noise barriers to mitigate noise impacts at these isolated rural sites would not be cost effective and is not recommended as part of this project.

THREATENED AND ENDANGERED WILDLIFE

The Iowa Department of Natural Resources (DNR) does not have records of any federal or state threatened and endangered species in the project corridor. The absence of records does not guarantee that there are no threatened or endangered species that occur here.

The U.S. Fish and Wildlife Service (USFWS) listed several federal threatened and endangered plant and animal species with ranges within this region of Iowa. They are:

- Western Prairie Fringed Orchid - Threatened
- Prairie Bush Clover - Threatened
- Bald Eagle - Threatened
- Indiana Bat - Endangered

DNR records are more specific, whereas the USFWS records are more regional, which accounts for the differences in the records of the two agencies. Based on field reviews by the project biologist, there is no potential habitat for these species in the project corridor.

Letters from the above agencies appear in Appendix C.

NATURAL AREAS AND WILDLIFE HABITAT

The U.S. Fish and Wildlife Service and the Iowa Department of Natural Resources have no records of any unique or significant natural resources occurring in this area (see letters in Appendix C). A field review conducted by the project biologist did not locate any significant natural communities within the project corridor.

The most abundant wildlife habitat type within the project corridor is agricultural crops. Rowcrops, especially corn, provide both food and shelter for common species such as white-tailed deer, crows and ring-necked pheasants.

A great blue heron nesting colony is located in the riparian woodland along Beaver Creek approximately one-quarter mile west of the proposed Iowa 141 interchange. The heronry is not within the project corridor, but great blue heron nesting colonies are known to be sensitive to construction activities. Due to the close proximity of existing Iowa 141, and the limited construction proposed west of Iowa 141, the proposed interchange should not significantly impact the heronry.

WETLANDS

The project biologist evaluated the potential wetland impacts through inspection of U.S. Fish and Wildlife Service National Wetland Inventory (NWI) maps and a field inventory. NWI maps indicate five emergent wetlands totaling approximately 1 ha (2.4 ac) in the area of the project corridor (see Appendix A for locations). The largest of these sites is approximately 0.4 ha (1 ac). The potential wetlands are located as follows:

- Two sites southwest of the intersection of the Mile-Long Bridge and N.W. Beaver Drive.
- One site along N.W. 114th Street along the proposed realignment of N.W. 114th Street.
- Two sites west of Highway 141 along the proposed southbound entrance ramp.

Land use is currently agricultural in the area of wetlands indicated on NWI maps, and the wetlands were not observed during the field investigation. The Natural Resources Conservation Service

(NRCS) has not made a wetland determination on these sites that could contain farmed wetlands (NRCS, personal communication, June, 1998). Farmed wetlands are only delineated by NRCS using the USDA manual at the request of the landowner. Other wetlands not immediately apparent from the field review and not on the NWI maps could be present.

Avoidance Alternatives

In future phases of the project, an identification to determine the presence of any wetlands will occur. Based on this survey, a delineation of wetland boundaries within the Preferred Alternative would determine the exact area impacted. In places where feasible and prudent, alignment shifts to minimize wetland impacts will be made during the final design phase of the project.

Minimization

Erosion control and maintenance of wetland hydrology during construction are important to maintaining the integrity of wetlands. Erosion control measures will be put into place to protect wetlands that occur adjacent to construction. Heavy equipment will remain outside wetlands whenever feasible to minimize wetland soil compaction and damage to them.

Compensatory Mitigation

For 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 Clean Water Act. Compensatory mitigation may be required by the COE generally at a ratio of 1:1. The final environmental document will include a commitment to a wetland replacement.

Wetland Findings

The conversion of 0.17 ha (0.41 ac) of jurisdictional wetlands for the Preferred Alternative is an unavoidable impact of this project. No feasible or prudent alternative exists to avoid these areas. When design constraints allow, slight adjustments to minimize impacts to wetlands will be evaluated during the design phase.

WATER QUALITY

No drainageways occur within the project corridor. Water quality concerns will be addressed during construction and an erosion control plan will be implemented where necessary to maintain water quality.

PARKS AND RECREATIONAL FACILITIES

No parks or recreational facilities occur within the project corridor.

CULTURAL RESOURCES

A Phase I historic architecture survey was conducted in July, 1998, to determine if any standing structures within the impact area of the project are National Register-eligible. The results of this survey found that none of the structures are National Register-eligible. A concurrence letter from the State Historic Preservation Officer (SHPO) is in Appendix C.

A Phase I archaeological survey was completed in September, 1998. Two sites were found but neither were considered significant. A concurrence letter from SHPO is in Appendix C.

HAZARDOUS WASTE

Hazardous waste is an important issue in highway projects since current legislation requires the identification of known sites where hazardous substances are present. To avoid costly cleanup liabilities and project delays, early location of any hazardous sites should be brought to the attention of highway planners.

Information obtained from the Iowa Department of Natural Resources (DNR) on CERCLA (Superfund) and Resource Conservation and Recovery Act (RCRA) sites indicates there are no hazardous waste sites within the project corridor. In addition, no underground storage tanks or leaking underground storage tanks are located within the project corridor. Only one RCRA site, Camp Dodge, is located close to the project corridor.

A drive-by site assessment of the project corridor did not reveal any potential waste sites such as gas stations, ag-chemical businesses or storage facilities or other similar land uses.

RIVER AND FLOODPLAIN CROSSINGS

No river crossings are included in the project corridor, and impacts to the Beaver Creek floodplain are not expected.

VI. COMPARISON OF ALTERNATIVES

This section summarizes the final comparison between the current Preferred Alternative and the previously proposed extension of N.W. 86th Street which was studied in 1996. The impacts and general features of each alternative are summarized in Table 3.

TABLE 3
SUMMARY OF IMPACTS
N.W. 86TH STREET CORRIDOR ALTERNATIVES

	Preferred Alternative	N.W. 86th Street Extension Alternative
Length km (mi)	2.4 (1.5)	8.6 (5.3)
Total New Right-of-Way ha (ac)	16.6 (41)	79.1 (195)
Farmland Acquired ha (ac)	16.2 (40)	56.8 (142)
Prime Farmland Acquired ha (ac)	15.4 (38)	56.8 (142)
Impacts to Farm Operations	Moderate Due to Diagonal Severances	Moderate Due to Diagonal Severances
Diagonal Severances of Farm Properties	3	2
No. Properties Affected	8	10
Residences Displaced	2	0
Impacts to Camp Dodge Operations	None	Moderate
Wetland Impacts ha (ac)	1 (2.4)	3.2 (7.9)
River and Floodplain Crossing	None	3.2 ha of Beaver Creek Flood Plain Lost Due to Bridge Construction
Estimated Traffic Volume South of N.W. Beaver Drive (Year 2020)	8,200 Vehicles Per Day	5,800 Vehicles Per Day
Estimated Construction Cost (Year 2000 Costs, Construction Only)		
<u>Mainline and Side Roads</u>		
• Grading	\$ 660,000	\$1,524,000
• Surfacing and Shoulders	1,075,000	3,399,000
• Bridges and Box Culverts	70,000	1,190,000
• Drainage and Miscellaneous	590,000	1,845,000
<u>Interchange at Iowa 141</u>		
• Bridge	1,765,000	0
• Ramps	<u>1,660,000</u>	<u>0</u>
Total Construction Cost	\$5,820,000	\$7,958,000

VII. SUMMARY

This Environmental Assessment concludes that the proposed project is necessary for safe and efficient travel within the project corridor. The project 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, a Finding of No Significant Impact (FONSI) will be prepared for this proposed action as a basis for federal-aid corridor location approval.

VIII. COMMENTS AND COORDINATION

AGENCY COORDINATION

Appropriate federal, state and local agencies were contacted on March 19, 1998, as part of early coordination for their comments concerning this project. Comment letters received are in Appendix C. Those agencies contacted are listed below:

- U.S. Department of Housing and Urban Development
- U.S. Department of Agriculture, Soil Conservation Service
- U.S. Environmental Protection Agency
- U.S. Army Corps of Engineers, Rock Island District
- Natural Resources Conservation Service
- Federal Transit Administration
- Advisory Council on Historic Preservation
- U.S. Department of Energy, Division of NEPA Affairs
- U.S. Fish and Wildlife Service
- Office of Environmental Policy and Compliance, U.S. Department of Interior
- Federal Emergency Management Agency
- Federal Aviation Administration
- National Park Service
- Federal Highway Administration
- Army National Guard Readiness Center
- Iowa Army National Guard
- Environmental Specialist, Building B61 Camp Dodge
- State Historical Society of Iowa, Department of Cultural Affairs
- Iowa Department of Natural Resources
- Iowa Department of Economic Development
- Iowa Geological Survey Bureau
- Iowa Department of Transportation
- Des Moines Area MPO
- Polk County Board of Supervisors
- Polk County Conservation Board
- Polk County Clerk
- City Clerk - Johnston
- City Clerk - Urbandale
- City Clerk - Polk City
- City Clerk - Des Moines
- City Clerk - West Des Moines
- City Clerk - Grimes
- Polk County Historical Society
- Chamber of Commerce of Greater Des Moines
- Des Moines Audubon Society

Comments received include:

- Potential Threatened and Endangered Species
- Wetland Protection and Mitigation

PUBLIC COORDINATION

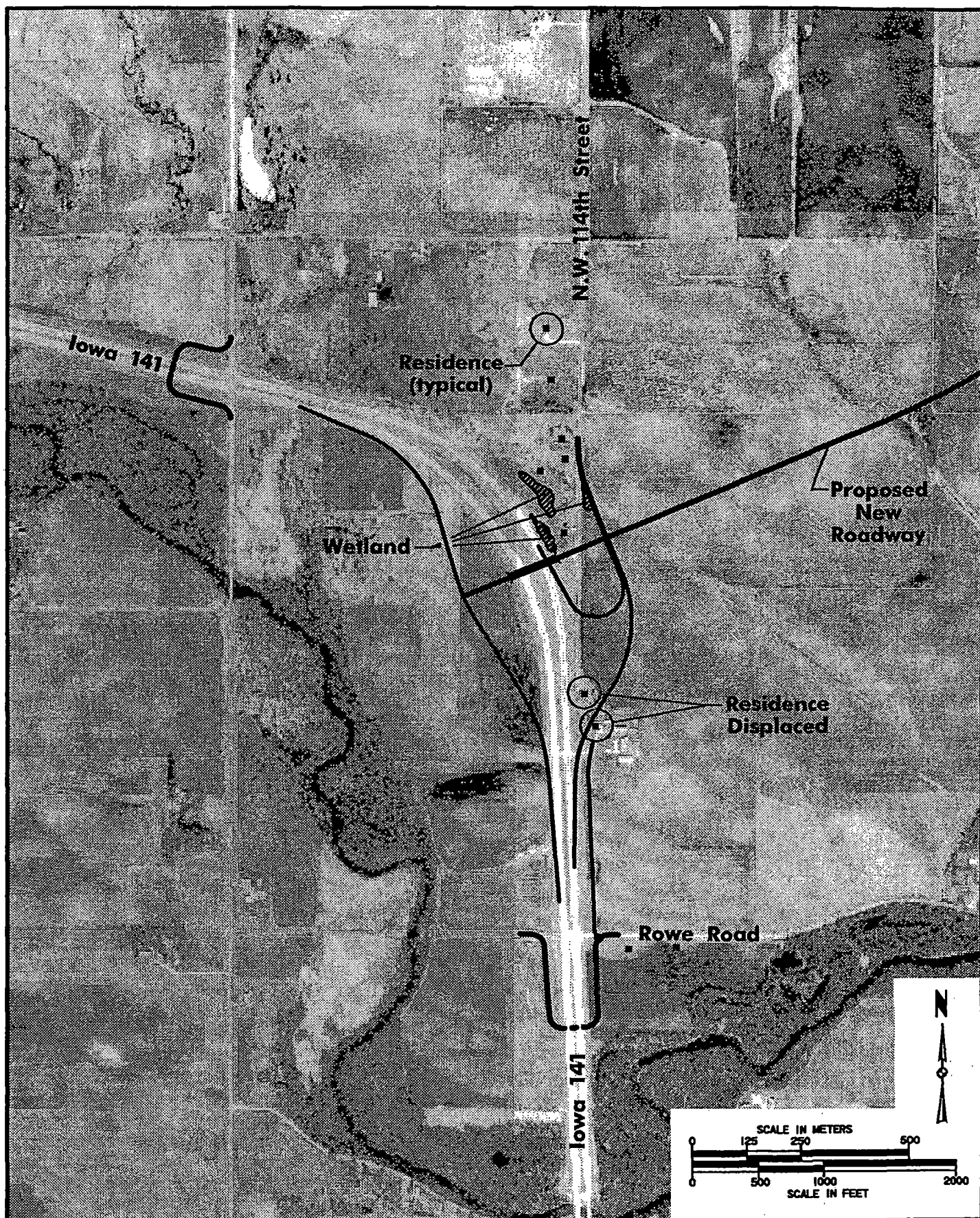
A public information meeting was held in Ankeny on March 26, 1998, to inform the public about the project and to allow them to comment and ask questions pertaining to the project. The main comments and concerns received include:

- Impacts to natural resources within Camp Dodge, including a natural prairie pothole and riparian woodlands along Beaver Creek.
- Impacts to Camp Dodge training operations.
- The need to look at other alternatives in addition to the 1996 Preferred Alternative.
- Proximity of the proposed road to existing houses.
- Cost of the project.
- The need for an arterial connection to Polk City and improved access to Saylorville Lake.
- Concern over increasing traffic on existing N.W. 86th Street.
- Access and traffic patterns related to agricultural land.

In addition to the public meeting, a meeting was held in Ames on March 25, 1998, with professors and graduate students from Iowa State University that have been conducting research on the natural resources of Camp Dodge. At the meeting, the professors and students expressed their concern regarding the environmental impacts of the 1996 Preferred Alternative on the natural prairie pothole and the Beaver Creek greenbelt located within Camp Dodge.

This document will be made available to all appropriate federal, state and local agencies for review and comment. The 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 project will be announced at the time the Environmental Assessment is made available for public review.

APPENDIX A
AERIAL PHOTOGRAPHS



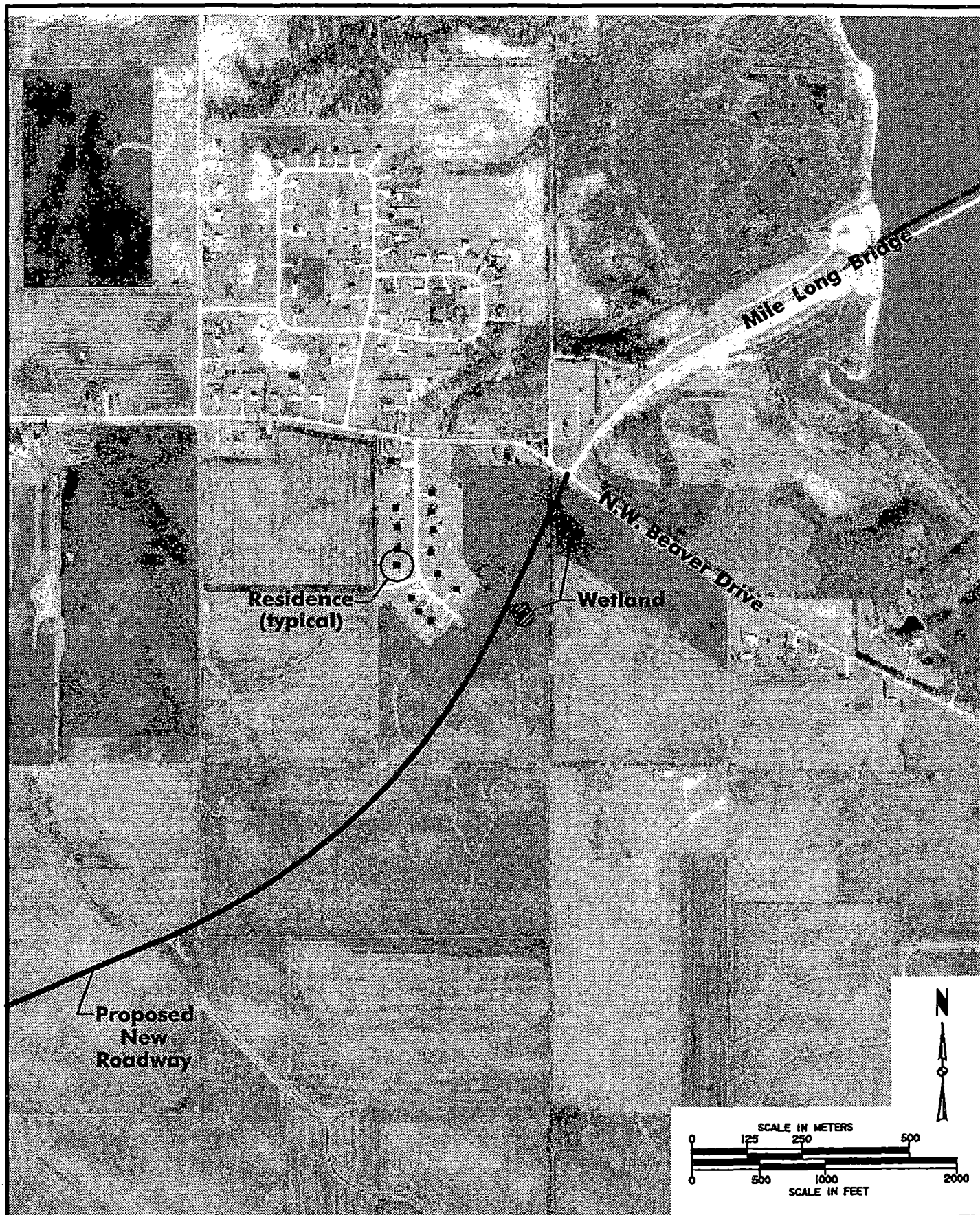
**Environmental Assessment
N.W. 86th Street Corridor
Polk County, Iowa**

Plate 1

Preferred Alternative

November 1998

102717



**Environmental Assessment
N.W. 86th Street Corridor
Polk County, Iowa**

Plate 2

Preferred Alternative

November 1998

102717

APPENDIX B

FARMLAND IMPACT CONVERSION RATING FORM

FARMLAND CONVERSION IMPACT RATING

ART I (To be completed by Federal Agency)

Date Of Land Evaluation Request

6/2/98

Name Of Project

NW 86th Street Extension

Federal Agency Involved

FHWA

Proposed Land Use

Rural 2-Lane Highway Construction

County And State

Polk County, Iowa

PART II (To be completed by SCS)

Date Request Received By SCS

Does the site contain prime, unique, statewide or local important farmland?

Yes No

(If no, the FPPA does not apply - do not complete additional parts of this form)

☒ ☐

Acres Irrigated

Average Farm Size

250 Acres

Major Crop(s)

Corn

Farmable Land In Govt. Jurisdiction

Acres: 245,000

% 47.0

Amount Of Farmland As Defined in FPPA

Acres: 149,000

% 30

Name Of Land Evaluation System Used

None

Name Of Local Site Assessment System

FPPA

Date Land Evaluation Returned By SCS

7/22/98

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

35

B. Total Acres To Be Converted Indirectly

5

C. Total Acres In Site

40

ART IV (To be completed by SCS) Land Evaluation Information

A. Total Acres Prime And Unique Farmland

38

B. Total Acres Statewide And Local Important Farmland

C. Percentage Of Farmland In County Or Local Govt. Unit To Be Converted

.01

D. Percentage Of Farmland In Govt. Jurisdiction With Same Or Higher Relative Value

15

PART V (To be completed by SCS) Land Evaluation Criterion

Relative Value Of Farmland To Be Converted (Scale of 0 to 100 Points)

88.4

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

2. Perimeter In Nonurban Use

10

6

3. Percent Of Site Being Farmed

20

20

4. Protection Provided By State And Local Government

20

0

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

5

9. Availability Of Farm Support Services

5

5

10. On-Farm Investments

20

10

11. Effects Of Conversion On Farm Support Services

25

0

12. Compatibility With Existing Agricultural Use

10

6

TOTAL SITE ASSESSMENT POINTS

160

76

ART VII (To be completed by Federal Agency)

Relative Value Of Farmland (From Part V)

100

88.4

Total Site Assessment (From Part VI above or a local site assessment)

160

76

TOTAL POINTS (Total of above 2 lines)

260

164.8

e Selected:

Date Of Selection

Was A Local Site Assessment Used?

Yes ☐No ☐

He For Selection:

APPENDIX C
COMMENT LETTERS RECEIVED

APPENDIX C
INDEX

COMMENT LETTERS RECEIVED

U.S. Department of Interior, Office of the Secretary
U.S. Department of Interior, Fish and Wildlife Service
U.S. Department of Transportation, Federal Highway Administration
U.S. Department of Transportation, Federal Aviation Administration
Iowa Department of Natural Resources
Iowa Department of Natural Resources, Geological Services Bureau
State Historical Society of Iowa



United States Department of the Interior

OFFICE OF THE SECRETARY
Office of Environmental Policy and Compliance
Denver Federal Center, Building 56, Room 1003
P.O. Box 25007 (D-108)
Denver, Colorado 80225-0007

March 25, 1998

Ms. Martha A. Maxon, Ph.D.
Rust Environment & Infrastructure Inc.
501 Sycamore Street, Suite 222
Waterloo, Iowa 50703

Dear Ms. Maxon:

Thank you for your recent letter regarding the preparation of an environmental assessment for the extension of N.W. 86th Street in the west-central part of Polk County, Iowa.

If you have not already done so, you should contact the U.S. Fish and Wildlife Service, U.S. Geological Service, and the National Park Service whose comments will assist you in preparing your assessment. Their addresses are as follows:

National Park Service
Midwest Regional Office
1709 Jackson St.
Omaha, NE 68102

U.S. Fish and Wildlife Service
Ecological Services
Federal Building, Ft. Snelling
Twin Cities, MN 55111

District Chief
U.S. Geological Survey
Federal Bldg, Room 269
400 S. Clinton Street
Iowa City, IA 55240

If we can be of further service or you have any questions, please contact me (303) 445-2500.

Sincerely,

Robert F. Stewart
Regional Environmental Officer

cc: FWS/Twin Cities
USGS/Iowa
NPS/Omaha



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

Tel: 309/793-5800 Fax: 309/793-5804

April 17, 1998

Martha A. Maxon, Ph.D.
Rust Environment and Infrastructure, Inc.
501 Sycamore Street, Suite 222
Waterloo, Iowa 50703

Dear Ms. Maxon:

This letter is in response to your request for early coordination regarding the preparation of an Environmental Assessment for the N.W. 86th Street Improvement and Extension Project, Phase III in Polk County, Iowa. The project design of Phase III includes improving the existing roadway from 70th Street and extending it northward to connect with the Mile Long Bridge. The purpose of the project is to provide improved north/south continuity and relief of traffic congestion in the northwest part of the metropolitan area.

To facilitate compliance with Section 7(c) of the Endangered Species Act of 1973, as amended, Federal agencies are required to obtain from the Fish and Wildlife Service information concerning any species, listed or proposed to be listed, which may be present in the area of a proposed action. Therefore, we are furnishing you the following list of species which may be present in the Polk County:

<u>Classification</u>	<u>Common Name (Scientific Name)</u>	<u>Habitat</u>
Threatened	Bald eagle (<i>Haliaeetus leucocephalus</i>)	Wintering
Endangered	Indiana bat (<i>Myotis sodalis</i>)	Caves, mines; small stream corridors with well developed riparian woods; upland forests
Threatened	Prairie bush clover (<i>Lespedeza leptostachya</i>)	Dry to mesic prairies with gravelly soil
Threatened	Western prairie fringed orchid (<i>Plantanthera praeclara</i>)	Mesic to wet prairies

The threatened bald eagle (*Haliaeetus leucocephalus*) is listed as wintering along large rivers, lakes and reservoirs in Polk County. During the winter, this species feeds on fish in the open water areas created by dam tailwaters, the warm water effluents of power plants and municipal and industrial discharges, or in power plant cooling ponds. The more severe the winter, the greater the ice coverage and the more concentrated the eagles become. They roost at night in groups in large trees adjacent to the river in areas that are protected from the harsh winter elements. They perch in large shoreline trees to rest or feed on fish. There is no critical habitat designated for this species. The eagle may not be harassed, harmed or disturbed when present nor may nest trees be cleared.

The Fish and Wildlife Service lists the Indiana bat (*Myotis sodalis*) as potentially occurring in the project area. The larger, scaly bark of some mature silver maple trees may provide nursery habitat for female Indiana bats and their young. We recommend clearing of trees greater than 11 inches in diameter at breast height be limited to a time window between August 31 and May 1. This will avoid impacting federally endangered Indiana bats that may inhabit the area during the late spring and summer months. If this is not feasible with construction schedules, a mist net bat survey will be required to determine if Indiana bats are in the project area before clearing can begin.

The prairie bush clover (*Lespedeza leptostachya*) is listed as threatened in Iowa. It is considered to potentially occur statewide in Iowa based on historical habitat. It occupies dry to mesic prairies with gravelly soil. There is no critical habitat designated for this species. Federal regulations prohibit any commercial activity involving this species or the destruction, malicious damage or removal of this species from Federal land or any other lands in knowing violation of State law or regulation, including State criminal trespass law. This species should be searched for whenever prairie remnants are encountered.

The western prairie fringed orchid (*Platanthera praeclara*) is listed as threatened in Iowa. It is considered to potentially occur statewide based on historical records and habitat distribution. It occupies wet grassland habitats. There is no critical habitat designated for this species. Federal regulations prohibit any commercial activity involving this species or the destruction, malicious damage or removal of this species from Federal land or any other lands in knowing violation of State law or regulation, including State criminal trespass law. This species should be searched for whenever wet prairie remnants are encountered.

The following constitutes comments from earlier coordination with the Corps of Engineers. These comments reflect our concerns regarding impacts to wetland areas that should be addressed in the Environmental Assessment you are preparing. The project area to be impacted is the crossing at Beaver Creek. In Phase III, project development will cross both Little Beaver Creek and Beaver Creek. Primarily young, second or recent growth floodplain tree species, dominated by silver maple and river birch, would be cleared to accommodate the crossing.

Martha A. Maxon, Ph.D.


3.

Project impacts will be limited to the removal of trees and temporary exposure of soils and impacts to wetland areas at the Little Beaver Creek and Beaver Creek crossings. Most of the wetlands to be impacted are associated with the Beaver Creek bridge crossing. Surrounded by intensive agriculture and urbanization, the remaining habitats are of value primarily to resident wildlife populations. Tree removal and wetland alterations at the Beaver Creek crossing will impact remaining habitat by creating further fragmentation of the existing creek corridor. Approximately 12.05 acres (per earlier coordination estimates) of palustrine emergent (both seasonal and temporary) and forested wetlands will be impacted.

Unavoidable impacts to wetlands will require a mitigation plan (in-kind is recommended). Wetland replacement near the vicinity of the project where acceptable created wetlands may be constructed or enhanced is preferred. Forested wetland impacts will need to be mitigated at a ratio of at least 1.5:1. This ratio should be higher if proposed wetland impacts are to be mitigated through enhancement of existing wetland areas to be acquired. A tree planting plan is recommended and should include a monitoring and replanting plan to ensure success of the plantings. In addition, we encourage the development of the mitigation plan concurrent with the preparation of the Final Environmental Assessment during the planning process.

This letter provides comments under the authority of and in accordance with provisions of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.); and the Endangered Species Act of 1973, as amended. We appreciate the opportunity to provide these comments and look forward to continued coordination. If you have any questions, please contact Ms. Heidi Woeber of my staff at (309) 793-5800, ext. 517.

Sincerely,


for Richard C. Nelson
Supervisor

cc: IADNR (Peterson, Joens, Howell)
USEPA (Knott)
Polk County Conservation Board (Van Gundy)

HW:sjg



U.S. Department
of Transportation

Federal Highway
Administration

Region 7
Iowa, Kansas
Missouri, Nebraska

Iowa Division
105 Sixth Street
Ames, Iowa 50010-6337
Internet Address:
iowa.FHWA@fhwa.dot.gov

April 16, 1998

Ms. Brenda Durbahn
RUST Environment and Infrastructure
P.O. Box 1497
Waterloo, IA 50704-1497

Dear Ms. Durbahn:

This letter is in response to your request for our comments on issues and concerns that should be addressed in the Environmental Assessment (EA) for Phase III of the 86th St. project in Polk County.

Regarding the EA, we expect three primary elements:

- 1) **Purpose and Need**--A well-defined purpose and need are essential elements of any proposed transportation improvement. The purpose and need define the intent of the project. What purpose is the project to serve? What transportation issues need to be resolved? Once the purpose and need are defined and clearly stated, the alternatives to be examined are those alternatives that directly address the purpose and need of the project.
- 2) **Alternatives**--A thorough and objective examination of reasonable alternatives that would satisfy the stated purpose and need is another essential element. In most cases, there can be many solutions to a transportation concern or "problem." The full exploration of alternatives allows the reviewing agencies and the commenting public a complete range of options to examine and discuss. If an alternative is excused from further examination because it is deemed to be not reasonable, then the reasons for dismissal must be fully supported.
- 3) **Impacts**--A discussion of the associated possible impacts of each alternative is also important. This includes impacts to Camp Dodge operations and impacts to the natural environment. In this case, we realize that a wetland of special concern exists near the alignment that Polk County has established. We expect the anticipated impacts to that wetland, if any, would be addressed appropriately.

As the project progresses, we encourage further and continuous public involvement. We also encourage inter-agency coordination with this office, the Iowa DOT, the National Guard, and any involved resource agencies.

We appreciate the opportunity to comment.

Sincerely yours,

Brian A. Parker
Planning and Research Engineer

cc:

Mark Wandro, Polk County
Steve Larson, Iowa DOT
Scott Dockstader, Iowa DOT
LeRoy Bergmann, Iowa DOT



U.S. Department
of Transportation
**Federal Aviation
Administration**

APR 20 1998

Dr. Martha A. Maxon
Rust Environmental & Infrastructure Inc.
P.O. Box 1497
Waterloo, Iowa 50704-1497

Dear Dr. Maxon:

The Federal Aviation Administration (FAA) reviews other federal agency environmental statements from the perspective of the FAA's areas of responsibility; that is, whether the proposal will have effects on aviation and other FAA responsibilities. We generally do not provide comments from an environmental standpoint. Therefore, we have reviewed the material furnished with your letter of March 19, 1998, concerning the Environmental Assessment and Public Information Meeting Notice, N.W. 86th Street, Phase 3, Polk County, Iowa, REI Project No. 102717, and have no comments regarding environmental matters.

However, we remind you that you will need to consider whether or not the project will require formal notice and review from an airspace utilization standpoint. The requirements for this notice may be found in Federal Aviation Regulations (FAR) Part 77, Objects Affecting Navigable Airspace. This regulation is contained under Subchapter E, Airspace of Title 14 of the Code of Federal Regulations. We would like to remind you that if any part of the project exceeds notification criteria under FAR Part 77, notice should be filed at least 30 days prior to the proposed construction date. Questions concerning notification criteria should be directed to Ms. Kathy Randolph at (816) 426-3408.

Sincerely,

A handwritten signature in cursive script that reads "Moira D. Keane".

Moira D. Keane
Environmental Program Manager



TERRY E. BRANSTAD, GOVERNOR

DEPARTMENT OF NATURAL RESOURCES
LARRY J. WILSON, DIRECTOR

April 2, 1998

**Martha Maxon
Rust Environment and Infrastructure Inc.
501 Sycamore Street, Suite 222
P.O. Box 1497
Waterloo, Iowa 50704-1497**

**RE: N.W. 86th Street, Phase III, Polk County
REI Project No. 102717**

Dear Ms. Maxon:

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

You are referred to our letter to Jodi Staebell of the Rock Island District Corps of Engineers dated May 28, 1996, in response to the Environmental Assessment for the Extension of Northwest 86th Street Phase III and our letter to Colonel Cox of the Rock Island District Corps of Engineers dated November 18, 1996, in response to the Design Memorandum with Environmental Assessment for the N.W. 86th Street Phase III Project. We have no additional comments at this time.

This letter is a record of review for protected species and rare natural communities in the project area. It does not constitute a permit and before proceeding with the project, you may need to obtain permits from the DNR or other state and federal agencies.

If you have any questions about this letter or if you require further information, please contact Kim Bogenschutz at (515) 281-8675.

Sincerely,

**LARRY J. WILSON, DIRECTOR
IOWA DEPARTMENT OF NATURAL RESOURCES**

LJW:ksb

98-148L.DOC



TERRY E. BRANSTAD, GOVERNOR

GEOLOGICAL SURVEY BUREAU
109 Trowbridge Hall
Iowa City, IA 52242-1319
319/335-1575
FAX: 319/335-2754

DEPARTMENT OF NATURAL RESOURCES
LARRY J. WILSON, DIRECTOR

April 20, 1998

Martha Maxon
RUST Environment and Infrastructure, Inc.
501 Sycamore Street
Suite 222
Waterloo, IA 50703

Re: Polk County, 86th Street EA

Dear Ms. Maxon,

I am replying to your request for information related to the 86th Street project in Polk County. I have been involved in wetland hydrologic studies on the Camp Dodge National Guard base near the proposed road extension. The wetland closest to the proposed road is located in the center of the north ½ of Sec 27, T 80N, R 25W.

The wetland is part of a linked depression system which can be explained as the product of a stagnant, wasting glacier. As the ice slowly retreated, tunnels within the stagnant ice functioned as an internal drainage network. Eventually, these tunnels became clogged with stratified deposits of silt, sand and gravel, and then were covered with poorly sorted sediments. Shallow, porous sand and gravel bodies now occupy the former glacial tunnels and function as subsurface links between modern-day, semi-closed depressions on the land surface and successively larger surface-drainage routes. These conditions are common on the Des Moines Lobe and are referred to as linked drainage areas. The "linkage" is generally not visible from the land surface, but is present in the subsurface which has important hydrological implications. The existing wetland is located in an upland, semi-closed depression which would be a former low-order tunnel.

Our analysis of this wetland indicates that it is primarily maintained by precipitation, but that groundwater inflow and surface runoff also contribute to the overall water budget. The sediments to the north of the wetland are a complex series of glacial deposits, with loess on top of a sandy till unit which can be quite permeable thus allowing recharge to the wetland through this unit. The data from the existing wetland site is consistent with the ephemeral nature of the basin. Groundwater levels are often below the surface during late summer, indicating net seepage out of the wetland. Surface water is often 3-4 feet deep in the wetland during this time, indicating a slow rate of seepage out of the basin. Overall flow direction supports the hypothesis of a linked-depression wetland. Flow is directed to the subsurface drainage outlet at the southeast edge of the wetland.

The concerns relative to road construction are the following: Surface runoff both during construction and operation could lead to changes in the hydroperiod of the wetland. Inputs of sediment and chemicals, particularly salt, could have deleterious effects on the water quality of this wetland. Water quality studies show it at present to be a relatively pristine site. Depending on where the

road climbs up on the ridge from the valley to the northeast, further hydrologic impacts could occur. We suspect that there is a subsurface channel composed of sand and gravel which connects this wetland to the Beaver Creek valley. Drainage in this area could lead to an increased hydrologic gradient and accelerate the drainage of this site. This could drastically affect the wetland hydroperiod. This is also an area where plans have shown a borrow pit. The plans which I have seen are unclear where or how these materials will be removed, but it is in the area where outflow from this wetland is directed. Removal of material could also lead to an alteration in hydrology.

Thank you for the opportunity to comment on this plan. I would also note that because of ongoing studies at Camp Dodge, we have a good deal of stratigraphic and water quality data for the base, although at present not in easily transferable form. If you are interested in any of this or if you wish to discuss my comments, please contact me.

Sincerely,



Carol A. Thompson
Research Geologist

CAT:mph



Iowa Department of Transportation

800 Lincoln Way, Ames, Iowa 50010

515-239-1795

FAX 515-239-1982

August 25, 1998

Ref. No STP-S-77(81)--5E-77
aka: 86th St Corridor Extension
Polk County
Local

Lowell Soike
Review and Compliance
Bureau of Historic Preservation
State Historical Society of Iowa
600 East Locust
Des Moines, IA 50319

980877116

Dear Lowell:

RE: Connection of IA 141 to Mile Long Bridge

Enclosed for your review and comment is the historic architectural investigation report for the above mentioned project. The project proposes to construct an interchange at IA 141 and NW 114th St and construct a new roadway alignment to the Mile Long Bridge over Sailorville Lake. Two historic properties, #77-01809 & #77-01810 were evaluated and determined not eligible for the National Register.

If you agree that the project will not affect cultural resources, please sign the concurrence line below, add your comments and return this letter.

If you should require more information to determine the effects of the project upon the resources in the area or if you have any questions, please do not hesitate to contact me.

Sincerely,

Judy McDonald
Office of Project Planning
jmc dona@ladot.e-mail.com

JM

Enclosure

cc: LeRoy Bergmann, Local Systems
Steve Larson, Project Planning
Frank Howell, FHWA
Leah Rogers, PI

Concur:

SHPO reviewer

Comments:

September 14, 1998
Date

RECEIVED
OFFICE OF PROJECT PLANNING

SEP 17 1998

OCT - 6 1998



Iowa Department of Transportation

800 Lincoln Way, Ames, Iowa 50010

FAX

515-239-1795

515-239-1982

September 30, 1998

Ref. No STP-S-77(81)--5E-77
aka: 86th St Corridor Extension
Polk County
Local

Doug Jones/Kira Kaufmann
Review and Compliance
Bureau of Historic Preservation
State Historical Society of Iowa
600 East Locust
Des Moines, IA 50319

R&C# 980877116

Dear Doug/Kira:

RE: NW 114th interchange and Mile Long Bridge connector

Enclosed for your review and comment is the archaeological investigation for the above mentioned project. The project proposes to construct an interchange at IA 141 and NW 114th St. at W1/4 section 16, T80N-R25W; a new roadway extending northeast to NW Beaver Dr. near the Mile Long Bridge over Sailorville Lake; and turn lanes at Rowe Dr and IA 141.

A total of 58.90 acres were investigated by utilizing background research, a pedestrian survey and subsurface testing. Two sites were recorded and determined not to be significant. No further work is recommended.

If you agree with the findings and recommendation, please sign the concurrence line below, add your comments and return this letter.

If you should require more information to determine the effects of the project upon the resources in the area or if you have any questions, please do not hesitate to contact me.

Sincerely,

Judy McDonald
Office of Project Planning
jmcdona@IADOT.e-mail.com

JM

Enclosure

cc: LeRoy Bergmann, Local Systems
Brenda Durbahn, ~~RUST~~ Earth Tech.
Steve Larson, Project Planning
Mark Wondro, Polk County Engineer's Office
Randy Withrow, LBA

Concur:

SHPO

Comments: we agree with the Recommendation also that,

"an architectural study of standing structures at the Kraber Farmstead should be conducted ... Cchadderdon and Butler 1992"

Date

10-29-98

APPENDIX D

**COMMENT LETTERS RECEIVED TO THE 1996
CORPS OF ENGINEERS ENVIRONMENTAL ASSESSMENT**

APPENDIX D
INDEX

COMMENT LETTERS RECEIVED TO THE 1996
CORPS OF ENGINEERS ENVIRONMENTAL ASSESSMENT

U.S. Army, Office of the Adjutant General, Camp Dodge
U.S. Department of the Interior, National Park Service
U.S. Environmental Protection Agency
Iowa Department of Natural Resources
Iowa Department of Natural Resources
Iowa Department of Natural Resources, Geological Services Bureau
Iowa State University, Professors and Students
Dr. James Dinsmore, Iowa State University
Polk County Conservation Board
Polk County Conservation Board



HEADQUARTERS IOWA NATIONAL GUARD

Office of The Adjutant General

Camp Dodge

7700 Northwest Beaver Drive
Johnston, Iowa 50131-1902



AGIA-FAC

25 November 1996

MEMORANDUM FOR Chief, Planning Division, ATTN: Mr. Hess, Rock Island District, Corps
of Engineers, Clock Tower Building, PO Box 2004, Rock Island, IL
61204-2004

SUBJECT: Design Memorandum, Phase III, 86th Street

1. The Iowa Army National Guard, Facilities and Construction Office, has completed its review of the Design Memorandum for Phase III of the 86th Street Project. The following comments reflect questions and concerns about this draft document.
2. The road will pass through several environmentally sensitive areas. The details of the selection of roadside and borrow site revegetation methods and plant materials are of concern, and appear to be too general in nature to analyze from the current specifications. The use of the wrong species could create an imbalance or "invader species" scenario in areas where rare and infrequent species exist, especially in the wetland areas. A more detailed specification would allow evaluation of revegetation plans in relation to the Camp Dodge Integrated Natural Resource Management Plan.
3. The southernmost crossing (the troop crossing) will not be effective without access roads and a fording/bridge site over Beaver Creek. Development at this site may also further impact Beaver Creek and the pothole wetland. Further evaluation of this site and its development is recommended.
4. The design memorandum states that a portion of gas line will require relocation. There may be a concern as to the new location of this line and its effect on training activities.
5. The crossing site located under the bridge appears to cross to the north. If this is the case, the crossing will require access roads or trails, which will create further wetland impacts. In addition, now that the path of the road has been moved toward the western boundary, it is not clear that a crossing at this point would assist in accessing the training area. Further evaluation of this site and its development is recommended.
6. Page 7 of the introduction, section b(1) has a narrative description of the Federally Owned Land to be used in this project. The last sentence states, "The Iowa National Guard continues to support this project." This seems to be incomplete in the scope of this paragraph and could imply financial support. This could be interpreted incorrectly by the public. A more appropriate statement may be, "While the Iowa National Guard is not the proponent or has financial contribution to this project, it will continue to cooperate in the development of the most practical resolution to both training and environmental problems."

AGIA-FAC

SUBJECT: Design Memorandum, Phase III, 86th Street

7. The document distribution list did not appear to include property owners who will be affected by this action. In keeping with the public notification requirements of the National Environmental Policy Act, it may be appropriate to include them in the direct distribution of subsequent documents.

8. The cost estimates for moving existing houses and establishing them on new sites appear to be inadequate. Relocation costs will most likely be much higher than the estimates provided.

9. Contact person for the environmental comments is Curt Madsen at (515) 252-4557; property comments should be directed to SSG Tim Milligan at (515) 252-4484.

FOR THE ADJUTANT GENERAL:

A handwritten signature in black ink, appearing to read "Lennie J. Jave", is written over the typed name.

LENNIE J. JAVE
COL, GS, Iowa ARNG
Facilities Management Officer



United States Department of the Interior

NATIONAL PARK SERVICE

Great Plains Systems Office

1709 Jackson Street

Omaha, Nebraska 68102-2571

IN REPLY REFER TO:

ER96/0715

NOV 8 1996

Colonel Charles S. Cox
Rock Island District
U.S. Army Corps of Engineers
Clock Tower Building
Rock Island, Illinois 61204-2004

Dear Col. Cox:

We have reviewed the Design Memorandum with Environmental Assessment for the construction of approximately 2 miles of road southwest of Saylorville Reservoir in Polk County, Iowa. We have no comments on the document. Please note that we have reviewed the project on a technical assistance basis and our views do not necessarily reflect the views and comments of the Department of the Interior.

Sincerely,

Francis A. Calabrese
Superintendent

PDE



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VII
726 MINNESOTA AVENUE
KANSAS CITY, KANSAS 66101

October 18, 1996

Colonel Charles Cox
Rock Island District, Corps of Engineers
Clock Tower Building
P.O. Box 2004
Rock Island, Illinois 612094-2004

Dear Colonel Cox:

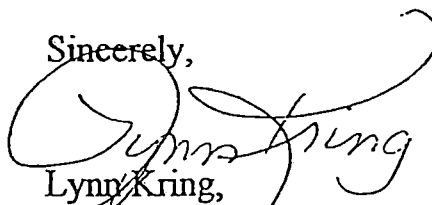
I appreciate the opportunity to review the Design Memorandum and Environmental Assessment for your project, "N.W. 86th Street Phase III, Saylorville Lake, Iowa". Due to the large numbers of documents that we receive, I was able to conduct only a brief review of the project rather than the constructive evaluation which your effort warrants.

Based on my limited review I have concluded that I have no comments to offer at this time. If, however, conditions change or any problems arise with your project, please contact me at 913/551-7456 and I will work with you to resolve those issues.

Again, thank you for accommodating our involvement with your efforts.

PD-E

Sincerely,


Lynn Kring,
NEPA Program Manager



TERRY E. BRANSTAD, GOVERNOR

DEPARTMENT OF NATURAL RESOURCES
LARRY J. WILSON, DIRECTOR

May 28, 1996

Department of the Army
Rock Island District, Corps of Engineers
ATTN: Jodi Staebell
Clock Tower Bldg. - P.O. Box 2004
Rock Island, IL 61204-2004

RE: Environmental Assessment for the Extension of Northwest 86th Street
Phase III, Polk County, Iowa

Dear Ms. Staebell:

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

We have searched our records of the project area and found no records of rare species or significant natural communities. While our data are not the result of thorough field surveys, based on our knowledge of the site and the project, we do not think the project will affect protected species or rare natural communities. Thus, we do not recommend further field surveys of the site.

This letter is a record of review for protected species and rare natural communities in the project area. It does not constitute a permit and before proceeding with the project, you may need to obtain permits from the DNR or other state and federal agencies.

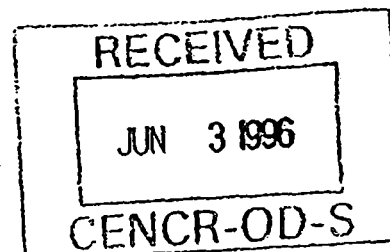
If you have any questions about this letter or if you require further information, please contact Daryl Howell at (515) 281-8524.

Sincerely,

LARRY J. WILSON, DIRECTOR
IOWA DEPARTMENT OF NATURAL RESOURCES

LJW:slb

PD-E



November 18, 1996

Colonel Charles S. Cox, District Engineer
U.S. Army Corps of Engineers
Rock Island District
Clock Tower Building
Rock Island, IL 61204-2004

Dear Colonel Cox:

We have reviewed the "Design Memorandum With Environmental Assessment for the N.W. 86th Street Phase III Project" dated October, 1996. We have several concerns about this project as detailed by the following comments.

- The report indicates that it contains a discussion of alternatives and an environmental assessment. However, an environmental assessment is only provided for the preferred alternative. The environmental assessment should address all the alternatives to allow for comparison of impacts.
- The introduction (page 1) states that the project will be constructed entirely on land owned by the federal government. Your maps, however, show that at least one-half of the project will be constructed on private land.
- The project purpose (page 2) states that the purpose of the project is to improve an existing county road. Your maps, however, clearly show that approximately four of the project's 5 miles will require new right-of-way traversing what is presently open space.
- Appendix A (page A-18) contains a brief discussion of the seven alignments which were considered. Six of the alternatives were dismissed in a single paragraph while selecting a preferred alternative. We feel this does not adequately document the selection process.
- Of the seven alternatives, Alternative 5 appears to be the least environmentally intrusive. It also makes maximum use of existing roadways and would require the acquisition of the least amount of new right-of-way.
- Appendix A (pages A-18, A-22, A-25,) indicates that the preferred alignment would impact approximately 12.05 acres of wetland. The description of the mitigation plan (pages A-29, A-40, A-41, B-3, B-5), however, addresses only 8 acres of impacted wetlands. This discrepancy needs to be explained and corrected.
- It appears that the wetland delineation consisted only of examining National Wetland Inventory maps and documenting these sites. No other wetland identification effort is evident in the EA. As pointed out in EPA

letter (page A-3), substantial areas of hydric soil exist along the preferred route and alternative routes. EPA further suggested that a formal delineation be performed. We find no evidence of a formal delineation in the documents.

- The wetland mitigation area is identified as Beaver Creek floodplain near the intersection of N.W. 86th Street and N.W. 70th Avenue. The mitigation plan calls for excavating sediments from old oxbows and tree planting on adjacent uplands (page A-30, A-40, B-5). We consider the proposed mitigation sites to be wetland already. Therefore, the mitigation plan consists of enhancing an existing wetland and does not qualify as replacement for wetland losses. An acceptable mitigation plan will need to be submitted before 401 Certification can be issued.
- It has been brought to our attention that a significant wetland exists adjacent to the preferred alignment in Section 27. This wetland will likely be impacted by sedimentation and chemical contamination during construction, and later on from routine maintenance. The plan does not identify this wetland or address potential impacts that may occur. This plan should consider new information resulting from studies performed on this wetland by Iowa State University, the University of Iowa, and the DNR - Geological Survey Bureau in an effort to avoid impacts to this area.
- The Iowa DNR's comment letter dated May 28, 1996, (page A-21) simply states that we have no prior records of rare species or significant natural communities on file. It does not constitute a determination that the project would have no effect on protected species or sensitive communities as stated in Appendix B - Section 404(B)(1) Evaluation (page B-3).

Based on further analysis of this project, we recommend that Alternative 5 be reconsidered as the preferred alternative. An adequate mitigation plan that identifies true replacement will need to be developed regardless of the alternative selected.

Sincerely,



LARRY J. WILSON
DIRECTOR



TERRY E. BRANSTAD, GOVERNOR

GEOLOGICAL SURVEY BUREAU
109 Trowbridge Hall
Iowa City, IA 52242-1319
319/335-1575
FAX: 319/335-2754

DEPARTMENT OF NATURAL RESOURCES
LARRY J. WILSON, DIRECTOR

November 14, 1996

Department of the Army
Rock Island District, Corps of Engineers
Clock Tower Building
PO Box 2004
Rock Island, Illinois 61204-2004

Attn: Planning Division

Re: Saylorville Lake, 86th Street, Design Memorandum

We have the following comments relative to the extension of 86th street. Our interests lie within the Camp Dodge National Guard base where we are conducting long-term scientific studies on the hydrogeology of a wetland. The wetland in question is located to the NW of borrow area 2 (Vol. 2, A-8, E-3). Specific concerns relate to the impact of the proposed construction on this wetland. Surface runoff during construction and operation are of concern. Inputs of sediment and chemicals, particularly salt, could have deleterious effects on the water quality of this wetland. Water quality studies show it at present to be a relatively pristine site with both surface and groundwater inputs.

A second area of concern regards the borrow pit. It is unclear where or how these materials will be removed, but it is in the area where outflow from this wetland is directed. We suspect that there is a subsurface channel composed of sand and gravel which connects this wetland to the Beaver Creek valley. Drilling will be done in this area next spring to further elucidate the wetland stratigraphic relationships. Removal of material could lead to an increased hydrologic gradient and accelerate the drainage of this site. This could drastically affect the wetland hydroperiod.

Although wetland mitigation is discussed, it is unclear what area is being considered for impact. I do not know if potential impacts on this pothole wetland have been considered.

Thank you for the opportunity to comment on this plan. I would also note that because of ongoing studies at Camp Dodge, we have a good deal of stratigraphic and water quality data for the base. If you are interested in any of this or if you wish to discuss my comments, please contact me.

Sincerely,

Carol A. Thompson, PhD
Research Hydrogeologist

PD

✓ PD-E

IOWA STATE UNIVERSITY
OF SCIENCE AND TECHNOLOGY

Charles S. Cox
Colonel, U.S. Army
District Engineer Department of the Army
Rock Island District, Corps of Engineers
ATTN: Planning Division
Clock Tower Building-P.O. Box 2004
Rock Island, Illinois 61204-2004

College of Agriculture
College of Liberal Arts and Sciences
Department of Zoology and Genetics
339 Science II
Ames, Iowa 50011-3223
515 294-3908
FAX 515 294-8457

November 7, 1996

Dear Colonel Cox,

We would like to respond to the Design Memorandum with Environmental Assessment and Finding of No Significant Impact (FONSI) regarding the Saylorville Lake N.W. 86th Street Extension Phase III Polk County, Iowa, dated October 1996.

We are a group of concerned Iowa State University scientists who have been studying the flora and fauna at Camp Dodge for the past two to four years. The results of our study indicate that a prairie pothole of some importance, especially with regard to its breeding amphibians, aquatic plants, and bird life could be seriously impacted by the preferred road alignment that would place the road between Beaver Creek and the "emergent wetland", herein referred to as the prairie pothole.

This wetland is the southern-most prairie pothole in Iowa. It has been in existence for 11300 years. It is one of the few remaining wetlands of this type in central Iowa. It is unique in being located near a metropolitan area while remaining relatively protected from human impact. There are no roads in the immediate vicinity. This is one of the few places in the state where animal behavior and acoustic recording of calls can be obtained for research and educational purposes in the absence of noise from highway traffic. It currently receives no agricultural runoff. It is protected from the public by the military, and the military has it ear-marked as a wildlife area and so it is protected from military use as well. In short this natural wetland is as pristine as can be found anywhere in central Iowa. The Iowa Army National Guard is reconstructing a marsh to the west of the pothole. Money and effort is being devoted to marsh reconstruction while a natural pothole, with its well established and diverse flora and fauna, is being threatened by a road project in the same area.

There are many reasons to insure the continued protection of the pothole. It has a diverse population of herpetofauna including eight species of amphibians and at least two turtle species. Amphibians require fishless, ephemeral water as breeding sites. Amphibians are declining throughout the world and in Iowa. Northern leopard frogs have experienced serious declines in northern Iowa wetlands and probably elsewhere in Iowa since the 1800s. Cricket frogs have in recent years disappeared from the northern two tiers of Iowa counties, but breed in the pothole. Minnesota and southeastern Iowa frogs are being found with reduced reproductive success and abnormal limbs. Environmental pollution is probably the cause of limb abnormalities in Minnesota frogs. Habitat destruction in central Iowa has severely reduced the number of suitable breeding habitats. Considering the global amphibian decline, the probable impact of environmental pollutants on amphibians, the local decline of some amphibian species in Iowa, and the history of habitat destruction in the state, this pothole wetland becomes important as a refugium for breeding amphibians.

The Iowa Army National Guard recently constructed a hibernaculum for snakes near the pothole and several fox snakes from a destroyed hibernaculum in Ankeny were relocated in the vicinity.

The pothole provides breeding habitat for over 10 bird species including sora rails, marsh wren, least bittern, yellow-headed blackbirds, and Great-Tailed Grackle. Nesting is dependent on vegetation and one concern of ours is how runoff would affect vegetation and nesting sites. At least 50 species of migratory birds, including Wilson's phalaropes, use the pothole as a stopover site.

The pothole has a rich and diversified flora. Seven of the plant species are on the Iowa rare and infrequent list. Perhaps the best feature of this wetland is the diverse structure of its vegetation which is not dominated by cattails and reed canary grass. This structure probably encourages use by a variety of nesting and migratory birds.

The pothole has additional value for its research and educational potential. It is a principal focus of an ongoing, integrated study of all natural features including water, soils, plant and animal life by 18 scientists from the Iowa DNR, Geological Survey Bureau, Iowa State University Departments of Animal Ecology, Botany and Zoology and Genetics and the University of Iowa Biology and Geology Departments. Any degradation of this community will compromise the effectiveness of this study as a model illustration of

the interaction of natural features in supporting a complex native community.

The affective use of this area by the Iowa Army National Guard, as part of the current expansion of their youth outreach education program, will also be compromised by the pothole's diminished quality and accessability. The National Guard personnel are working through their own Starbase Program, with the scouts and local schools and, in the future, with adult education at the wetlands. A web page is being contructed on the World Wide Web, in collaboration with the Iowa DNR, to educate web-users about wetlands, soils and hydrology.

We are very concerned that the road project will negatively impact the pothole. Our major concerns about the road and its proximity to the pothole include the following: 1) runoff of salts and other road pollutants impacting water quality and altering vegetation; 2) silt from road construction and runoff from the finished road filling in the pothole; and 3) impact of traffic on the fauna. Roads are notorius for killing amphibians and reptiles that warm themselves on the road at night or migrate across the road when searching for breeding and hibernating sites. Vehicle lights and noise could affect use of the pothole by migratory birds.

We favor the No Action Alternative Proposed by the Iowa National Guard in a letter to you dated November 30, 1995. We hope that you will reconsider your environmental assessment of no significant impact and save the future of this significant prairie pothole.

Sincerely,

CF: PD-E

200-2-2001
772-4646
294-7669
Eugenia Farrar *Eugenia Farrar*
L. Suzanne Gucciardo *L. Suzanne Gucciardo*
Donald Farrar *Donald Farrar*
Glenn Fuchs *Glenn Fuchs*
James Dinsmore *James Dinsmore*
Ruth Herzberg *Ruth Herzberg*
Paul Wetzel *Paul Wetzel*
Arnold van der Valk *Arnold van der Valk*
Jane Schuster *Jane Schuster*
William Norris *William Norris*
Denise Friedrich *Denise Friedrich*
Dick Williams *Dick Williams*

IOWA STATE UNIVERSITY

OF SCIENCE AND TECHNOLOGY

12 November 1996

Colonel Charles S. Cox
District Engineer
U.S Army Engineer District
Clock Tower Building
P. O. Box 2004
Rock Island, IL 61204-2004

Department of Animal Ecology

124 Science II

Ames, Iowa 50011-3221

515 294-6148

FAX 515 294-7874

294-7669

Dear Colonel Cox:

We are writing to comment on the proposed extension of NW 86th Street, Phase III, through the Camp Dodge property in Polk County.

We are mainly concerned with the environmental assessment of this project. We believe that the assessment is superficial and does not adequately discuss the possible impacts of this road on wetlands, in particular the prairie pothole wetland in section 27 just west of the proposed route. Although the road does pass to the east of this wetland, the design as currently outlined does not indicate that adequate steps will be taken to safeguard that wetland. The wetland itself is one of a mere handful of unaltered prairie wetlands left in Polk County and central Iowa. The wetland still contains a diverse fauna and flora, providing habitat for a broad range of both plant and animal species native to this area. This includes a number of species of plants which are rare in the area. The animal list also includes many species which are dependent on such habitat and cannot exist elsewhere. The environmental assessment discusses a number of wildlife species, most of which are quite broad in their habitat needs (e.g., white-tailed deer, raccoon, opossum) and ignores most of the wetland species of birds, amphibians, and reptiles which depend upon wetland habitat for their survival. The degradation of this wetland by the road project could have serious and perhaps permanent harmful effects on that habitat and the wildlife and plants that inhabit it.

A major concern of the proposed route is that adequate permanent steps must be incorporated into the design of the road to guarantee that the road has minimal effect on the wetland and its integrity. In particular, this includes safeguards to insure that drainage from the roadway does not allow harmful chemicals to enter the wetland and

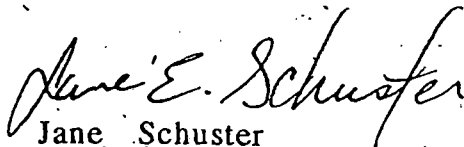
that construction of the road itself be undertaken in a manner that will prohibit any degradation of the wetland.

Elsewhere the assessment discusses mitigation for wetland losses. Although newly created wetlands do have some value as wildlife habitat, these new wetlands in no way fully replace natural wetlands, either in the diversity of organisms they contain or in their function in the ecosystem. This has been well documented here in Iowa for both plant communities and bird communities. We have been involved in research on wetland bird communities in central Iowa this past year and one of us (Dinsmore) has been involved with such work for eight years. Although restored wetlands may superficially seem to be an adequate replacement for natural wetlands, they generally lack some species found in natural, undisturbed wetlands (like the pothole at Camp Dodge) and do not fully replace naturally occurring wetlands. If a road must be built across Camp Dodge (and our first choice would be to look at other alternatives), we strongly support selecting a route that will take the road away from the prairie pothole or, at worst, a road design that would prevent any degradation of that wetland.

Sincerely,



James J. Dinsmore
Professor of Animal Ecology



Jane Schuster
Graduate Assistant, Animal Ecology

Polk County Conservation Board

Members of the Board

STEVEN ROTTLER
JUDY PERSON
PETE LEONETTI
TOM RODD
JANE CLARK

JESTER PARK
GRANGER, IOWA 50109

Ben Van Gundy, Director
Telephone Numbers / Area Code 515
Administrative Office 999-2557
FAX / 999-2709
Naturalist Programs 999-2557
Jester Park 999-2559
Jester Park Golf Course 999-2903
Chichaqua Wildlife Area 967-2596
Easter Lake Park 285-7612
Easter Lake Beach 243-9647
Fort Des Moines Park 285-7612
Great Western Trail 285-7612
Brown's Woods 285-7612
Thomas Mitchell Park 967-4889
Mally's Park 967-4889
Chichaqua Valley Trail 967-4889
Yellow Banks Park 266-1563

November 11, 1996

Department of the Army
Planning Division
Rock Island District, Corps of Engineers
Clock Tower Building - PO Box 2004
Rock Island, Illinois 61204-2004

Dear Sir or Madam:

RE: SAYLORVILLE LAKE NW 86 STREET EXTENSION PHASE III POLK
COUNTY, IOWA

Thank you for the opportunity to comment on this project. Although we are very supportive of the mitigation effort, we were surprised the plan obligated the Polk County Conservation Board (PCCB) to manage and monitor the mitigation site. It was never communicated to us that we were to be responsible for management of the site.

As a result, we do not have our board's approval nor funds to carryout such a task. We also have many questions about the environmental impact of the project that the "draft" environmental assessment does not appear to address. For example, the "draft" environmental assessment does not address the probable loss of wildlife habitat and open space resulting from the likely subsequent development. Also, the mitigation plan calls for planting woody vegetation in grassland habitat. Is it wise to displace grassland wildlife species with woody vegetation species and call it mitigation?

We also feel a detailed roadside management and planting plan should be included in the final documents.

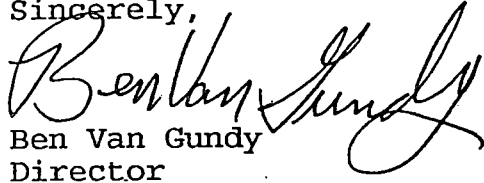
At this time we cannot agree to monitor or manage the mitigation site. We also do not feel comfortable with the "draft" environmental assessment. We are, of course, supportive of mitigation efforts and will be glad to assist when more information is available.

Department of the Army
Page 2
November 11, 1996

Perhaps it would be advantageous to discuss the mitigation plan at a meeting. Please let me know if you would like to meet with us.

Again, thanks for the opportunity to comment on this project.

Sincerely,



Ben Van Gundy
Director

c11

c: PCCB
Dick Van Gundy

Polk County Conservation Board

Members of the Board

STEVEN ROTTLER
JUDY PERSON
PETE LEONETTI
TOM RODD
JANE CLARK

JESTER PARK
GRANGER, IOWA 50109

Ben Van Gundy, Director
Telephone Numbers / Area Code 515
Administrative Office 999-2557
FAX / 999-2709
Naturalist Programs 999-2557
Jester Park 999-2559
Jester Park Golf Course 999-2903
Chichaqua Wildlife Area 967-2596
Easter Lake Park 285-7612
Easter Lake Beach 243-9647
Fort Des Moines Park 285-7612
Great Western Trail 285-7612
Brown's Woods 285-7612
Thomas Mitchell Park 967-4889
Mally's Park 967-4889
Chichaqua Valley Trail 967-4889
Yellow Banks Park 266-1563

November 14, 1996

Department of the Army
Planning Division
Rock Island District, Corps of Engineers
Clock Tower Building - PO Box 2004
Rock Island, Illinois 61204-2004

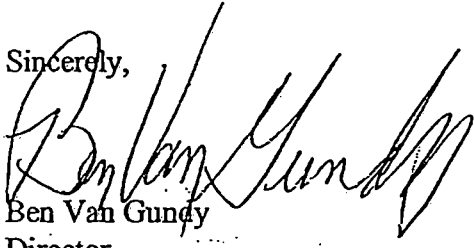
Dear Sir or Madam:

RE: SAYLORVILLE LAKE NW 86 STREET EXTENSION PHASE III POLK
COUNTY, IOWA

On November 11, 1996, I sent a reply to the draft copy of the Environmental Assessment documents provided for our review concerning the above-referenced issue. That letter still reflects our concerns; however, there is one additional comment we had intended to make concerning the project and feel it necessary to send this correspondence as an addenda to that letter.

The item that was overlooked in our previous letter is the high quality wetland in Section 27. It is a very high quality wetland, and the siting of the new road would most certainly impact the quality of that wetland and have an adverse effect of the use of the area by wildlife, especially the more sensitive species. Possible impacts might be road chemicals, noise, and mortality of reptiles and amphibians due to traffic.

Sincerely,


Ben Van Gundy
Director
cll

PD

/ PD-E

***Appendix D -
Farmland Protection Form and Instructions***

FARMLAND CONVERSION IMPACT RATING

PART I (To be completed by Federal Agency)		Date Of Land Evaluation Request	
Name Of Project		Federal Agency Involved	
Proposed Land Use		County And State	
PART II (To be completed by SCS)		Date Request Received By SCS	
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 type="checkbox"/> No <input type="checkbox"/>	Acres Irrigated Average Farm Size
Major Crop(s)	Farmable Land In Govt. Jurisdiction Acres: %	Amount Of Farmland As Defined in FPPA Acres: %	
Name Of Land Evaluation System Used	Name Of Local Site Assessment System	Date Land Evaluation Returned By SCS	
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			
B. Total Acres To Be Converted Indirectly			
C. Total Acres In Site			
PART IV (To be completed by SCS) Land Evaluation Information			
A. Total Acres Prime And Unique Farmland			
B. Total Acres Statewide And Local Important Farmland			
C. Percentage Of Farmland In County Or Local Govt. Unit To Be Converted			
D. Percentage Of Farmland In Govt. Jurisdiction With Same Or Higher Relative Value			
PART V (To be completed by SCS) Land Evaluation Criterion			
Relative Value Of Farmland To Be Converted (Scale of 0 to 100 Points)			
PART 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			
2. Perimeter In Nonurban Use			
3. Percent Of Site Being Farmed			
4. Protection Provided By State And Local Government			
5. Distance From Urban Builtup Area			
6. Distance To Urban Support Services			
7. Size Of Present Farm Unit Compared To Average			
8. Creation Of Nonfarmable Farmland			
9. Availability Of Farm Support Services			
10. On-Farm Investments			
11. Effects Of Conversion On Farm Support Services			
12. Compatibility With Existing Agricultural Use			
TOTAL SITE ASSESSMENT POINTS	160		
PART VII (To be completed by Federal Agency)			
Relative Value Of Farmland (From Part V)	100		
Total Site Assessment (From Part VI above or a local site assessment)	160		
TOTAL POINTS (Total of above 2 lines)	260		
Selected:	Date Of Selection	Was A Local Site Assessment Used? Yes <input type="checkbox"/> No <input type="checkbox"/>	
Re: For Selection:			

STEPS IN THE PROCESSING THE FARMLAND AND CONVERSION IMPACT RATING FORM

Step 1 — Federal agencies involved in proposed projects that may convert farmland, as defined in the Farmland Protection Policy Act (FPPA) to nonagricultural uses, will initially complete Parts I and III of the form.

Step 2 — Originator will send copies A, B and C together with maps indicating locations of site(s), to the Soil Conservation Service (SCS) local field office and retain copy D for their files. (Note: SCS has a field office in most counties in the U.S. The field office is usually located in the county seat. A list of field office locations are available from the SCS State Conservationist in each state).

Step 3 — SCS will, within 45 calendar days after receipt of form, make a determination as to whether the site(s) of the proposed project contains prime, unique, statewide or local important farmland.

Step 4 — In cases where farmland covered by the FPPA will be converted by the proposed project, SCS field offices will complete Parts II, IV and V of the form.

Step 5 — SCS will return copy A and B of the form to the Federal agency involved in the project. (Copy C will be retained for SCS records).

Step 6 — The Federal agency involved in the proposed project will complete Parts VI and VII of the form.

Step 7 — The Federal agency involved in the proposed project will make a determination as to whether the proposed conversion is consistent with the FPPA and the agency's internal policies.

INSTRUCTIONS FOR COMPLETING THE FARMLAND CONVERSION IMPACT RATING FORM

Part I: In completing the "County And State" questions list all the local governments that are responsible for local land controls where site(s) are to be evaluated.

Part III: In completing item B (Total Acres To Be Converted Indirectly), include the following:

1. Acres not being directly converted but that would no longer be capable of being farmed after the conversion, because the conversion would restrict access to them.
2. Acres planned to receive services from an infrastructure project as indicated in the project justification (e.g. highways, utilities) that will cause a direct conversion.

Part VI: Do not complete Part VI if a local site assessment is used.

Assign the maximum points for each site assessment criterion as shown in §658.5(b) of CFR. In cases of corridor-type projects such as transportation, powerline and flood control, criteria #5 and #6 will not apply and will be weighed zero, however, criterion #8 will be weighed a maximum of 25 points, and criterion #11 a maximum of 25 points.

Individual Federal agencies at the national level, may assign relative weights among the 12 site assessment criteria other than those shown in the FPPA rule. In all cases where other weights are assigned, relative adjustments must be made to maintain the maximum total weight points at 160.

In rating alternative sites, Federal agencies shall consider each of the criteria and assign points within the limits established in the FPPA rule. Sites most suitable for protection under these criteria will receive the highest total scores, and sites least suitable, the lowest scores.

Part VII: In computing the "Total Site Assessment Points", where a State or local site assessment is used and the total maximum number of points is other than 160, adjust the site assessment points to a base of 160. Example: if the Site Assessment maximum is 200 points; and alternative Site "A" is rated 180 points:

Total points assigned Site A = $180 \times 160 = 144$ points for Site "A."

Maximum points possible 200

FARMLAND PROTECTION FORM INSTRUCTIONS

1. Complete Parts I and II of Form AD-1006.
2. Fill out Part VI of the form, assigning points to the alternates (usually one) according to the attached instruction. If Part VI totals less than 60 points, show 100 points in Part V, complete the first page of the attached instruction and forward it and Form AD-1006 to us. No submittal to the local SCS office is needed and we will not forward the Form AD-1006 to the FHWA.
3. While we do not expect to ever see a county project which scores greater than 60 points in Part VI, submittal to the local SCS office and then to us for FHWA review is required in those cases.

* * *

As indicated in the "Supplemental Guidance for Implementation of Farmland Protection Act" provided by the Iowa Division Administrator, FHWA, on February 14, 1985:

Form AD-1006 need not be submitted to the SCS in cases where the site assessment criteria (Part VI) score is less than 60 points for each project alternative [based on 7 CFR 658.4(c)(2)] . . . The SCS agrees that where all project alternatives are scored less than 160 points there is little or no benefit to be derived from submitting Form AD-1006 to its field offices for coordination. To document compliance with the SCS regulation, the state highway agency need only complete Parts I, III, V (assign 100 points), and VI and place the completed form in the project files.

Form AD-1006 has been completed as described above and is attached. Total impact rating points are shown to be less than 160, indicating that this site should receive a minimal level of consideration for protection. Based on this analysis, this project is expected to have a very minor effect on Iowa's farmland and does not require specific SCS review. This documents compliance with the Farmland Protection Policy Act as it applies to above-referenced project.

Criteria for Assessing Prime Farmland Impacts

Source: Federal Register, Vol. 49, No. 130 (July 5, 1984); 7 CFR 658.5(b)

658.5(b) Site Assessment Criteria. Federal agencies are to use the following criteria to assess the suitability of each proposed site or design alternative for protection as farmland along with the score from the land evaluation criterion described in 858.5(a). Each criterion will be given a score on a scale of 1 to the maximum points shown. Conditions suggesting top, intermediate and bottom scores are indicated for each criterion. The agency would make scoring decisions in the context of each proposed site or alternative action by examining the site, the surrounding area, and the programs and policies of the state or local unit of government in which the site is located. Where one given location has more than one design alternative, each design should be considered as an alternative site. The site assessment criteria are:

(1) How much land is in non-urban use within a radius of 1.0 mile from where the project is intended?

More Than 90 Percent..... 15 Points
90 to 20 Percent 14 to 1 Point(s)
Less Than 20 Percent..... 0 Points

(2) How much of the perimeter of the site borders on land in farming use?

More Than 90 Percent..... 10 Points
90 to 20 Percent 9 to 1 Point(s)
Less Than 20 Percent..... 0 Points

(3) How much of the site has been farmed (managed for a scheduled harvest or timber activity) more than five of the last 10 years?

More Than 90 Percent..... 20 Points
90 to 20 Percent 19 to 1 Point(s)
Less Than 20 Percent..... 0 Points

(4) Is the site subject to state or unit of local government policies or programs to protect farmland or covered by private programs to protect farmland?

Site is Protected 20 Points
Site is Not Protected 0 Points

(5) Criteria 5 is not considered for projects having a linear or corridor-type site configuration connecting two distant points and crossing several different tracts of land (i.e., highways).

(6) Criteria 6 is not considered for projects having a linear or corridor-type site configuration connecting two distant points, and crossing several different tracts of land (i.e., highways).

(7) Is the farm unit(s) containing the site (before the project) as large as the average-size farming unit in the county? (Average farm sizes in each county are available from the SCS field offices in each state. Data are from the latest available Census of Agriculture, Acreage of Farm Units in Operation with \$1,000 or more in sales.)

As Large or Larger..... 10 Points

Below Average - Deduct 1 Point

for Each 5 Percent Below the

Average, Down to 0 Points if

50 Percent or More Below

Average..... 9 to 0 Points

(8) If this site is chosen for the project, how much of the remaining land on the farm will become non-farmable because of interference with land patterns?

Acreage Equal to More Than 25

Percent of Acres Directly Con-

verted by the Project 25 Points

Acreage Equal to Between 25 and

5 Percent of the Acres Directly

Converted by the Project..... 24 to 1 Point(s)

Acreage Equal to Less Than 5

Percent of the Acres Directly

Converted by the Project..... 0 Points

(9) Does the site have available adequate supply of farm support services and markets; i.e., farm suppliers, equipment dealers, processing and storage facilities and farmer's markets?

All Required Services Are

Available..... 5 Points

Some Required Services Are

Available..... 4 to 1 Point(s)

No Required Services Are

Available..... 0 Points

(10) Does the site have substantial and well-maintained on-farm investments such as barns, other storage buildings, fruit trees and vines, field terraces, drainage, irrigation, waterways, or other soil and water conservation measures?

High Amount of On-Farm

Investment..... 20 Points

Moderate Amount of On-Farm
Investment..... 19 to 1 Point(s)

No On-Farm Investment 0 Points

(11) Would the project at this site, by converting farmland to nonagricultural use, reduce the demand for farm support services so as to jeopardize the continued existence of these support services and thus, the viability of the farms remaining in the area?

Substantial Reduction in Demand
for Support Services if the Site
is Converted 25 Points

Some Reduction in Demand for
Support Services if the Site is
Converted..... 24 to 1 Point(s)

No Significant Reduction in
Demand for Support Services if
the Site is Converted 0 Points

(12) Is the kind and intensity of the proposed use of the site sufficiently incompatible with agriculture that it is likely to contribute to the eventual conversion of surrounding farmland to nonagricultural use?

Proposed Project is Incompatible
With Existing Agricultural Use of
Surrounding Farmland 10 Points

Proposed Project is Tolerable to
Existing Agricultural Use of
Surrounding Farmland 9 to 1 Point(s)

Proposed Project is Fully Com-
patible With Existing Agricultural
Use of Surrounding Farmland..... 0 Points

***Appendix E -
Public Involvement Materials***

**POLK COUNTY, IOWA
NOTICE OF PUBLIC HEARING**

**N.W. 86th Street Corridor Project
Iowa Highway 141 to N.W. Beaver Drive**

TO WHOM IT MAY CONCERN:

Notice is hereby given to all interested persons that an Open Forum Location Public Hearing will be held on Thursday, March 11, 1999, from 5:00 - 7:00 p.m., at Building No. 5, Des Moines Area Community College, 2006 S. Ankeny Blvd., Ankeny, Iowa, to discuss the proposed alternatives for N.W. 86th Street Corridor improvements between Iowa Highway 141 and N.W. Beaver Drive in Polk County, Iowa.

This public hearing will be conducted utilizing an open forum format. Polk County staff members will be present with displays and related information to discuss the project. Interested individuals are encouraged to attend the hearing anytime between 5:00 and 7:00 p.m. to review project materials, express their views and ask questions about the proposed alternatives. Oral and written statements will also be accepted at the public hearing. There will not be a formal presentation at the hearing.

The "Preferred Alternative," as described in the Environmental Assessment, consists of a new 2-lane rural roadway, approximately 1.4 miles in length, located in an unincorporated area of Polk County, northwest of the Des Moines metropolitan area. The project would begin near the existing intersection of Iowa Highway 141 and N.W. 114th Street and would end at N.W. Beaver Drive, just south of the Mile-Long Bridge.

The "Preferred Alternative" also includes a new interchange at Iowa Highway 141, located near the existing intersection of N.W. 114th Street and Iowa 141. The proposed new roadway would overpass Iowa 141 on a new bridge in the vicinity of N.W. 114th Street. New ramps would be constructed in the northwest, southwest and southeast quadrants of the interchange.

The "Preferred Alternative" would provide access to existing properties on both sides of the new roadway. On Iowa Highway 141, no access would be permitted within the interchange area or within approximately 1,000 feet of the ramps. Existing driveways and side roads within these limits, including N.W. 114th Street and N.W. Rowe Drive, would be relocated outside of the interchange area.

Other alternatives in addition to the "Preferred Alternative" were evaluated as part of the Environmental Assessment and will be shown at the hearing. Pertinent information, including the Draft Environmental Assessment, which has been prepared by Polk County in the planning of this project, will be available for inspection at the hearing.

The "Draft Environmental Assessment" is available for review at your Public Library or at the Polk County Engineer's Office, located at 5885 N.E. 14th Street, Des Moines, Iowa, 50313, telephone 515-286-3705. Please submit your comments regarding this document to Mr. Mark Wandro, Assistant County Engineer, at the above address. A deadline of March 22, 1999, has been established for receipt of comments to be considered in the final Public Hearing transcript.

Written statements and related exhibits, in place or in addition to oral statements made at the public hearing, will be accepted at the hearing or may be submitted to the Polk County Engineer's Office, 5885 N.E. 14th Street, Des Moines, Iowa, 50313. All written material received by March 22, 1999, will be included in the hearing transcript.

All persons interested in the project are invited to attend this hearing. The meeting room is accessible for persons with disabilities. However, if you require special accommodations at the hearing, please notify Mr. Mark Wandro, Polk County Engineer's Office, 515-286-3705, by March 4, 1999, so arrangements can be made.

Mark Wandro, Assistant County Engineer
Polk County, Iowa

PUBLIC MEETING

POLK COUNTY

will hold a

CORRIDOR PUBLIC HEARING

to discuss the proposed alternatives for

**NW 86th Street Corridor between
Iowa Highway 141 and NW Beaver Drive.**

on

**Thursday, March 11, 1999, 5:00-7:00 p.m.
Building 5, Des Moines Area Community College
2006 S. Ankeny Blvd., Ankeny, Iowa**

The "Preferred Alternative" for this project is a new 2-lane rural roadway, approximately 1.4 miles in length, connecting Iowa Highway 141 with the Mile-Long Bridge., including a new interchange at Iowa Highway 141, near N.W. 114th Street. Other alternatives in addition to the "Preferred Alternative" were evaluated as part of the Environmental Assessment and will be shown at the hearing.

For additional information, contact Mr. Mark Wandro, Assistant County Engineer, Polk County Engineer's Office, 5885 NE 14th Street, Des Moines, Iowa, 50313. Telephone 515-286-3705. All persons interested in the project are invited to attend this hearing. The meeting room is accessible for persons with disabilities. However, if you required special accommodations at the meeting, please notify Mr. Mark Wandro, at 515-286-3705.

PROJECT STATEMENT

LOCATION PUBLIC HEARING

N.W. 86TH STREET CORRIDOR
IOWA HIGHWAY 141 TO N.W. BEAVER DRIVE
POLK COUNTY, IOWA

HEARING LOCATION:
DES MOINES AREA COMMUNITY COLLEGE
BUILDING 5
2006 SOUTH ANKENY BOULEVARD
ANKENY, IOWA 50021

MARCH 11, 1999

Prepared by:
POLK COUNTY, IOWA

LOCATION PUBLIC HEARING

Polk County, Iowa

Date of Hearing: March 11, 1999

Mark Wandro, Assistant County Engineer

5885 N.E. 14th Street

Des Moines, Iowa 50313

515-286-3705

INTRODUCTION

Polk County is conducting this Location Public Hearing to acquaint the citizens of Polk County and surrounding areas with the proposed location of a new roadway between Iowa Highway 141 and N.W. Beaver Drive, located just southwest of the "Mile-Long Bridge." This project is referred to as the "N.W. 86th Street Corridor."

This public hearing offers mutual benefits. It gives the County an opportunity to explain the project, and allows the public to express their opinions regarding the proposed improvement. Consideration will be given to all suggestions.

This is your opportunity to express views either as an individual or a group representative. The County encourages oral and written statements pertinent to the project. Written statements and exhibits may be given to the hearing moderator or mailed to Mark Wandro at the above address. Deadline for receipt of statements or exhibits for inclusion in the printed transcript is March 22, 1999; however, all correspondence received after this date will be included in the project file and reviewed as this project is developed. Information regarding the proposed project is available for public inspection.

This hearing satisfies the public involvement required by federal and state regulations and helps assure that social, economic and environmental effects are identified. For this reason, we will provide a tape recording station to receive oral comments at the hearing.

Hearing transcripts are provided to County staff and elected officials and to the Federal Highway Administration for their review before the project is approved for development. A copy will be available at the County Engineer's office for inspection.

HEARING FORMAT

This public hearing is used to present factual information about the proposed project, to hear the views of the public and to correlate this information into a final highway improvement that will best serve the public.

The following procedure will be used in the public hearing:

1. Individual discussion with County staff. Display maps will be available at the hearing to review specific questions about the project.
2. Acceptance of oral and written statements from citizens at the hearing. Oral statements will be accepted at the tape recording station. Written statements should be presented to the staff person near the entry.
3. Submittal of written statements following the hearing. Those received by March 22, 1999, will become a part of the public hearing transcript.

PROJECT DESCRIPTION

The proposed project consists of a new 2-lane rural roadway, approximately 1.4 miles in length, located in an unincorporated area of Polk County, northwest of the Des Moines metropolitan area (Figure 1). The project would begin near the existing intersection of Iowa Highway 141 and N.W. 114th Street and would end at N.W. Beaver Drive, just south of the Mile-Long Bridge (Figure 2).

The new roadway would consist of a 2-lane rural cross section with a 24-foot wide pavement and 10-foot wide granular shoulders. The roadway would include side ditches and culverts as needed to accommodate drainage.

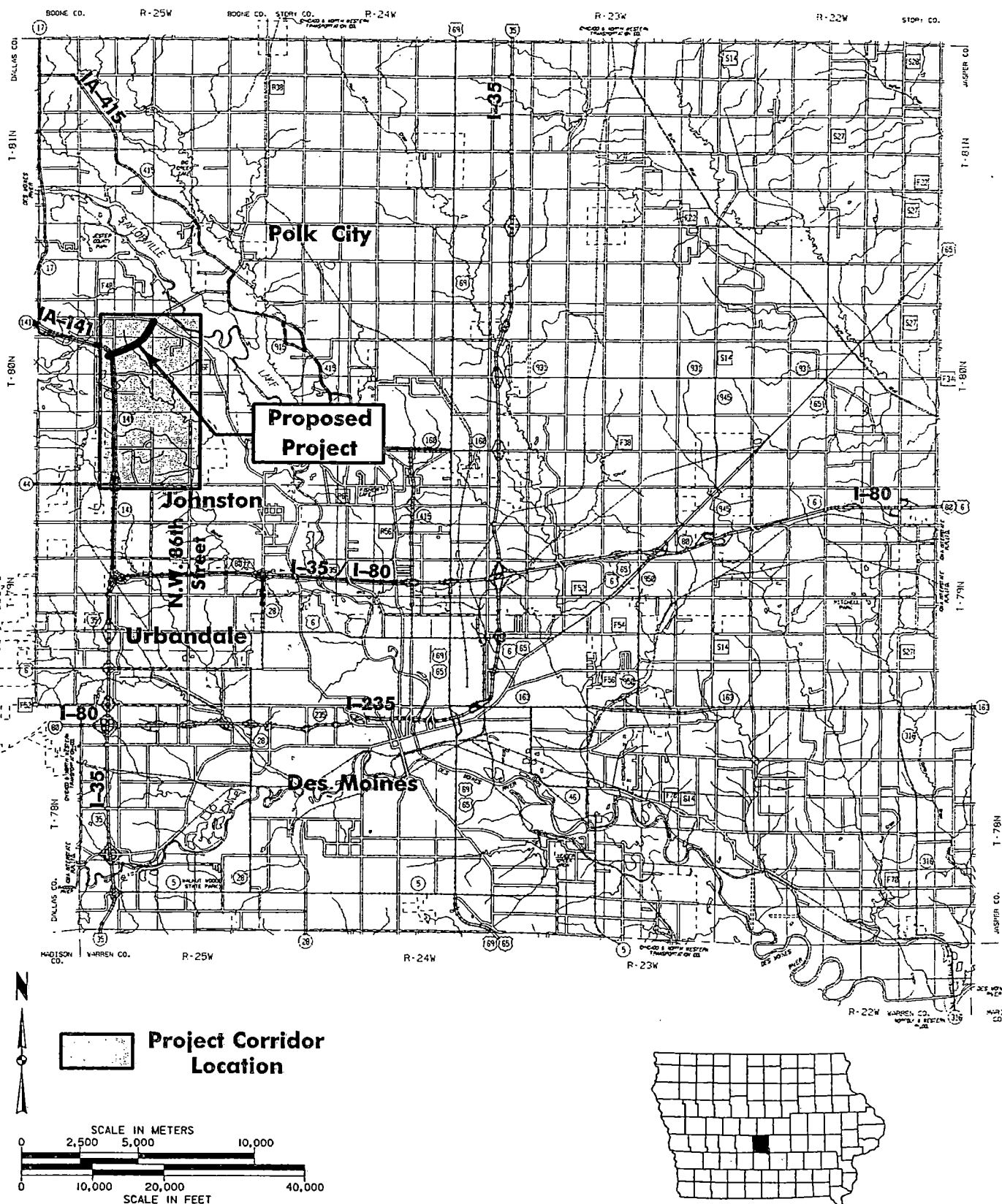
The proposed project also includes a new interchange at Iowa Highway 141, located in the vicinity of the existing N.W. 114th Street/Iowa 141 intersection.

The new roadway would overpass Iowa 141, and new ramps would be constructed in the northwest, southwest and southeast quadrants of the interchange (Figure 2).

The project would include relocation of three side roads to facilitate construction of the interchange.

- N.W. 114th Street would be relocated approximately 260 feet to the east of its present location.
- N.W. Rowe Drive would be relocated approximately 690 feet to the south of its present location.
- N.W. 121st Street would be relocated approximately 450 feet to the west of its present location.

The proposed project would provide access to existing properties on both sides of the new roadway. On Iowa Highway 141, no access would be

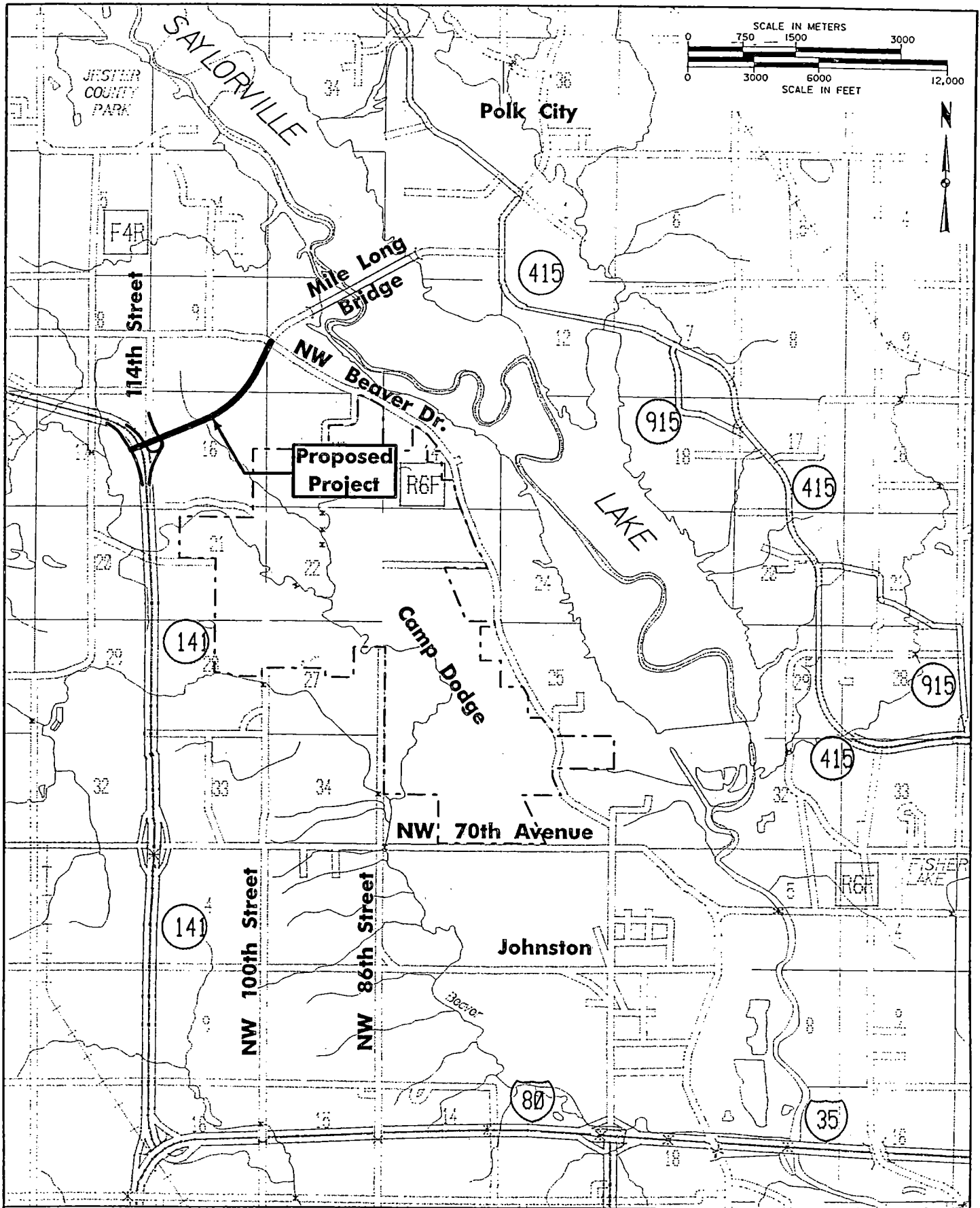


N.W. 86th Street Corridor Polk County, Iowa

Figure 1

Project Location
Within Polk County, Iowa

prf = \\NS059\\DATA\\PLOT\\PL463P\\B0\\FIG2.PRF



**N.W. 86th Street Corridor
Polk County, Iowa**

**Figure 2
Preferred Alternative**

permitted within the interchange area or within approximately 1,000 feet of the ramps. Existing side roads and driveways within these limits would be relocated outside of the interchange area.

NEED FOR THE PROJECT

The purpose of the N.W. 86th Street Corridor project is to provide an improved traffic route between I-35/80 and the Mile-Long Bridge and to serve growing traffic volumes in the northwest portion of Polk County. The proposed roadway will also improve roadway continuity in this portion of the county, improve traffic safety for the increasing traffic volumes in this area, and provide local access along the route.

TRAFFIC FORECASTS

A major consideration in designing transportation improvements is the volume of traffic expected to use the facility. Average daily traffic volumes are used to measure present-day traffic and to forecast future traffic volumes.

In 1997, the Mile-Long Bridge carried an annual average daily traffic volume of 4,200 vehicles per day. These traffic volumes increased 6 percent between 1996 and 1997 and are forecast to continue increasing. By 2020, the average daily volume is expected to reach 7,900 vehicles per day.

Most of the traffic from the Mile-Long Bridge is expected to use the proposed new roadway. Other local traffic would also use the new road. The total traffic on the proposed new roadway is estimated to reach 8,200 vehicles per day by the year 2020.

ALTERNATIVES CONSIDERED

Several alternatives were evaluated for the N.W. 86th Street Corridor project. These alternatives are illustrated in Figure 3 and included several possible alignments connecting with Iowa Highway 141, N.W. 100th Street, N.W. 86th Street and N.W. Beaver Drive.

SCHEDULE

The N.W. 86th Street Corridor project is included in Polk County's current 5-year plan, with initial construction planned for the year 2001. Right-of-way acquisition is anticipated in the year 2000, prior to construction. The proposed schedules are reviewed annually and may be revised by Polk County officials.

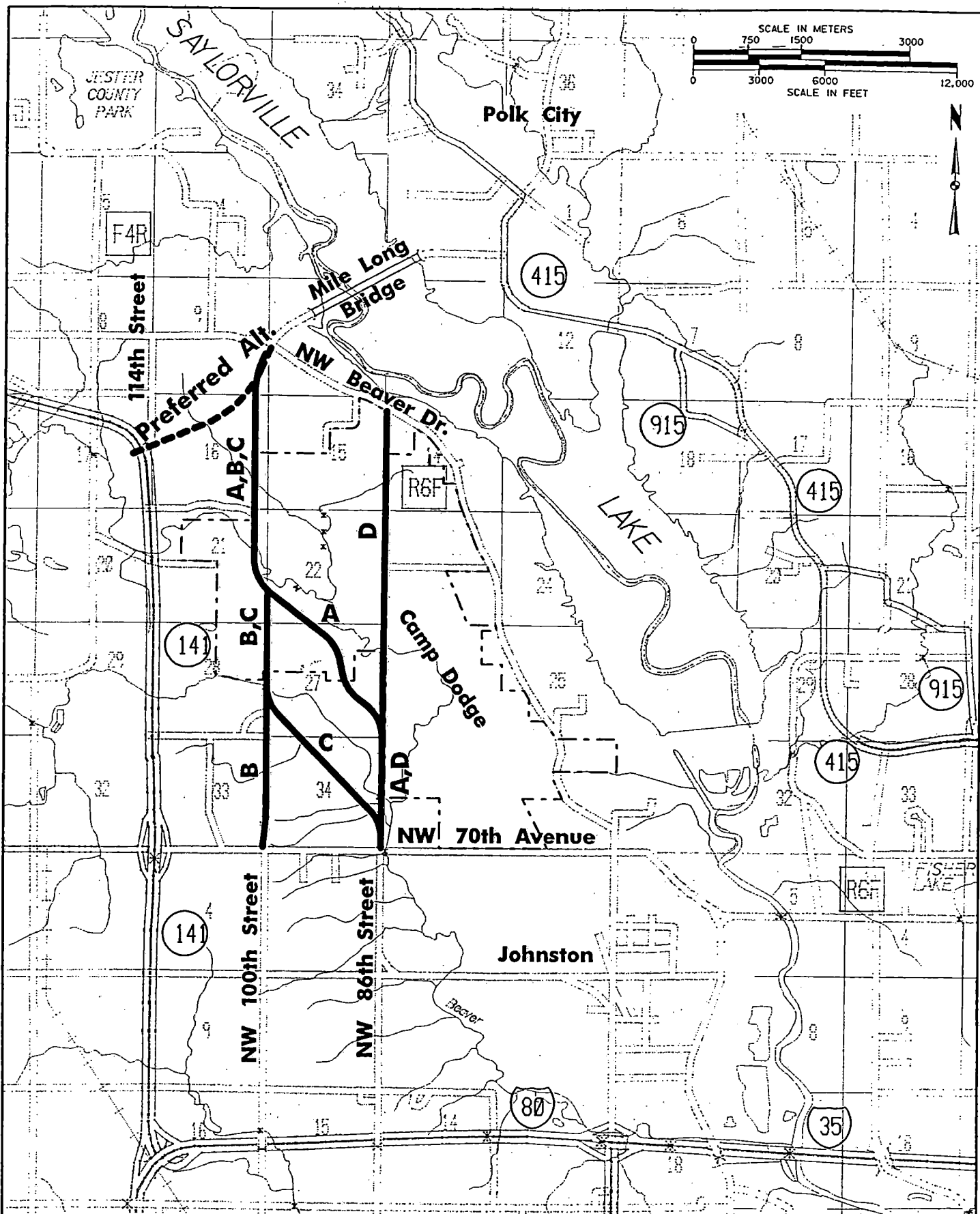
ENVIRONMENTAL CONSIDERATIONS

A Draft Environmental Assessment (EA) has been written for this improvement. The Draft EA was made available for review to state and local planning agencies and the public on November 20, 1998. The review period for the Draft EA ends on March 22, 1999, which corresponds to the public hearing comment period.

Summary of Environmental Effects

The Draft EA presents a written evaluation of the expected social, economic and environmental effects of the proposed project. Some of the significant impacts which have been identified in the Draft EA are as follows:

- Right-of-way would be required from approximately eight properties.



**N.W. 86th Street Corridor
Polk County, Iowa**

**Figure 3
Other Alternatives Considered**

- Two homes are expected to be displaced.
- Approximately 40 acres of farmland would be acquired. Some farm properties would be affected by a diagonal severance due to the new roadway.
- Traffic noise at some nearby properties would increase.
- Approximately 0.4 acres of wetlands would be affected.

Public Comment

Copies of the written Draft EA are available at this hearing for your inspection. All persons are invited to review the Draft EA and submit their written comments.

RIGHT-OF-WAY

Polk County's policy provides for appraisal of property and/or property rights needed for each project. These appraisals use professional techniques and methods to determine "just compensation" in accordance with federal and state constitutions, laws and regulations. The appraisals are prepared to assure fair treatment for both the property owner and the public.

After the appraisals are completed, each owner is contacted by a right-of-way agent for the purpose of explaining the plans and appraisals and for contracting the required right-of-way. In instances where an agreement cannot be reached through negotiations, the property may be acquired by the laws of eminent domain.

RELOCATION ASSISTANCE

Polk County'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 Assistance Act of 1987 and provides relocation resources to all residential and business relocatees without discrimination.

If you are required to move as a result of a highway construction project, whether an owner or tenant, you will be eligible for relocation assistance advisory services. You may be eligible for moving assistance, supplemental replacement housing payments and reimbursement for certain expenses incurred in purchasing replacement housing.

It is the intent of Polk County to ensure that displaced individuals receive fair and equitable treatment and do not suffer disproportionately from highway programs designed for the whole public. Any person, family, business or farm displaced by a highway project shall be offered relocation assistance services for locating suitable replacement property. Relocation payments and advisory assistance are offered in addition to the county's purchase of your property.

Questions or problems concerning relocation assistance should be directed to Mark Wandro, Assistant County Engineer, Telephone - 515-286-3705.

PUBLIC PARTICIPATION

If you have any comments on the proposed project or questions about its development, please make your comments known at this hearing or

forward them on the attached Citizen Comment form. All comments received by March 22, 1999, will be included in the public hearing transcript.

Thank you for your participation in this hearing.

