EAST 1ST STREET INTERCHANGE AND I-35 WIDENING FROM MP 94.3 TO ORALABOR ROAD POLK COUNTY, IOWA Project # IM-035-4(140)92--13-77

ENVIRONMENTAL ASSESSMENT AND SECTION 4(f) *DE MINIMIS* IMPACT FINDING

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

By The

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION And IOWA DEPARTMENT OF TRANSPORTATION OFFICE OF LOCATION AND ENVIRONMENT And CITY OF ANKENY, IOWA

The signatures are considered acceptance of the general project location and concepts described in the environmental document unless otherwise specified by the approving officials. However, such approval does not commit to approve any future grant requests to fund the preferred alternative.

For the Iowa Division Administrator Federal Highway Administration For the Office of Location and Environment Iowa Department of Transportation

For the Public Works Department City of Ankeny, Iowa

Date of Approval for Public Availability

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PREFACE

The Transportation Equity Act of the 21st Century (TEA-21) (23 CFR) mandated environmental streamlining in order to improve transportation project delivery without compromising environmental protection. In accordance with TEA-21, the environmental review process for this project has been documented as a Streamlined Environmental Assessment (EA). This document addresses only those resources or features that apply to the project. This allowed study and discussion of resources present in the study area, rather than expend effort on resources that were either not present or not impacted. Although not all resources are discussed in the EA, they were considered during the planning process and are documented in the Streamlined Resource Summary, shown in Appendix A.

The following table shows the resources considered during the environmental review for this project. The first column with a check means the resource is present in the project area. The second column with a check means the impact to the resource warrants more discussion in this document. The other listed resources have been reviewed and are included in the Streamlined Resource Summary.

SOCIO	ECONOMIC	NATURAL ENVIRONMENT				
	Land Use			Wetlands		
	Community Cohesion	\checkmark	\checkmark	Surface Waters and Water Quality		
	Churches and Schools			Wild and Scenic Rivers		
	Environmental Justice	\checkmark	\checkmark	Floodplains		
	Economic	\checkmark		Wildlife and Habitat		
	Joint Development	\checkmark	\checkmark	Threatened and Endangered Species		
	Parklands and Recreational Areas	\checkmark	\checkmark	Woodlands		
	Bicycle and Pedestrian Facilities	\checkmark	\checkmark	Farmlands		
	Right-of-Way					
	Relocation Potential					
	Construction and Emergency Routes					
	Transportation					
CULTU	RAL	PHY	YSIC	AL		
	RAL Historical Sites or Districts	PHY	VSIC	AL Noise		
CULTU						
	Historical Sites or Districts			Noise		
	Historical Sites or Districts Archaeological Sites	<u>।</u>	▼	Noise Air Quality		
	Historical Sites or Districts Archaeological Sites	ব্ব		Noise Air Quality Mobile Source Air Toxics (MSATs)		
	Historical Sites or Districts Archaeological Sites	বেব		Noise Air Quality Mobile Source Air Toxics (MSATs) Energy		
	Historical Sites or Districts Archaeological Sites	র র র র র	 I I	Noise Air Quality Mobile Source Air Toxics (MSATs) Energy Contaminated and Regulated Materials Sites		
	Historical Sites or Districts Archaeological Sites			Noise Air Quality Mobile Source Air Toxics (MSATs) Energy Contaminated and Regulated Materials Sites Visual		

Table 1: Resources Considered

Section 4(f): Heritage Park, a Section 4(f) and Section 6(f) resource, would have 0.89 acres of temporary impacts and 0.069 acres of permanent impacts due to the construction of a multiuse recreational trail along the southern and eastern boundary of the park. The multiuse trails on East 1st Street and Delaware Avenue would be relocated.

TABLE OF CONTENTS

1.	Desc	criptio	n of the Proposed Action	1
2.	Proj	ect Hi	story	9
3.	Purp	oose ai	nd Need for Action	11
	3.1.	Pur	pose	11
	3.2.	Nee	ed For Proposed Action	11
	2	3.2.1.	Improving Traffic Operations within the Project Area	11
		3.2.2.	Improving Traffic Safety on Local Streets and the Interstate Corridor	13
4.	Alte	rnativ	es	
4	.1.	No	Build Alternative	15
4	.2.	Alte	ernatives Considered but Dismissed	15
	2	4.2.1.	Alternative 1 – Compressed Diamond	16
	2	4.2.2.	Alternative 2 – Single Point Urban	16
	2	4.2.3.	Alternative 3 – Partial Cloverleaf	16
	2	4.2.4.	Alternative 4 – Partial Cloverleaf/Single Loop	16
	4	4.2.5.	Alternative 5 - Compressed Diamond/Partial Cloverleaf – Single Loop	17
4	.3.	Pret	ferred Alternative	17
5.	Envi	ironm	ental Analysis	27
5	.1.	Soc	ioeconomic Impacts	27
	4	5.1.1.	Land Use	27
	4	5.1.2.	Community Cohesion	28
	4	5.1.3.	Economic	29
	4	5.1.4.	Parklands and Recreational Areas	30
	4	5.1.5.	Bicycle and Pedestrian Facilities	31
	4	5.1.6.	Right-of-Way	32
	4	5.1.7.	Construction and Emergency Routes	33
	4	5.1.8.	Transportation	34
5.	.2.	Cul	tural Impacts	35
	4	5.2.1.	Historical Sites or Districts	36
	4	5.2.2.	Archaeological Sites	36
5.	.3.	Nat	ural Environment Impacts	37
	4	5.3.1.	Wetlands	37
	4	5.3.2.	Surface Waters and Water Quality	
	4	5.3.3.	Floodplains	41
	4	5.3.4.	Threatened and Endangered Species	41
	4	5.3.5.	Woodlands	43
	4	5.3.6.	Farmlands	44
5.	.4.	Phy	sical Impacts	44

	5.4.1. Noise	
	5.4.2. Contaminated and Regulated Materials Sites	46
	5.4.3. Utilities	49
5.5.	Cumulative Impacts	
5.6.	Streamlined Resource Summary	
6. Di	sposition	74
6.1.	Federal Agencies	74
6.2.	State Agencies	74
6.3.	Local Agencies	74
6.4.	Locations where this Document is Available for Public Review	75
6.5.	Potential Permit Requirements	75
6.6.	Statewide Transportation Improvement Program and Surface Transporta	U
6.7.	Status	
	Planned Construction Schedule	
7. CC	omments and Coordination	//
7.1.	Agency and Tribal Coordination	77
7.2.	Public Involvement	
	7.2.1. Public Meetings	78
	7.2.2. Correspondence	78
	7.2.3. Future Public Involvement	79

LIST OF FIGURES

- Figure 1-1 Project Location
- Figures 1-2 to 1-7 Project Area
- Figure 4-1 Compressed Diamond Alternative
- Figure 4-2 Single Point Alternative
- Figure 4-3 Partial Cloverleaf Alternative
- Figure 4-4 Partial Cloverleaf/Single Loop Alternative
- Figure 4-5 Compressed Diamond/Partial Cloverleaf Single Loop Alternative
- Figure 4-6 Preferred Alternative
- Figure 5-1 to 5-13 Environmental Constraints
- Figure 5-14 Existing Land Use Map
- Figure 5-15 Adjacent Neighborhoods Map
- Figure 5-16 Parks and Recreation
- Figure 5-17 Floodplain and Floodway
- Figure 5-18 Traffic Noise Analysis
- Figure 5-19 Planned Roadway Projects

LIST OF TABLES

- Table 1Resources Considered
- Table 2
 Relevant Studies completed in or near the Project Area
- Table 3 Average Daily Traffic
- Table 4Level of Service Definitions
- Table 5 LOS Summary, 2004 Conditions and 2030 No Build
- Table 6 Alternatives Comparison
- Table 7Potential Impacts to Wetlands
- Table 8Potential Impacts to Surface Waters
- Table 9 Threatened and Endangered Species in Polk County
- Table 10 Noise Levels at Representative Project Receptors
- Table 11 Facilities Listed on EPA or IDNR Environmental Records Databases
- Table 12 Present and Reasonably Foreseeable Actions
- Table 13 Potential Cumulative Effects
- Table 14 Summary of Impacts
- Table 15 Agency & Tribal Early Coordination

APPENDICES

- Appendix A Streamlined Resource Summary
- Appendix B Agency and Tribal Coordination
- Appendix C Farmland Protection Form

SECTION 1 DESCRIPTION OF THE PROPOSED ACTION

This Environmental Assessment (EA) has been prepared in compliance with the requirements of the National Environmental Policy Act of 1969 (NEPA). This EA informs the public and interested agencies of the proposed action and alternatives to the proposed action in order to gather feedback on the improvements under consideration.

The City of Ankeny, in conjunction with the Iowa Department of Transportation (DOT) and Federal Highway Administration (FHWA), is proposing to reconstruct the East 1st Street/Interstate 35 (I-35) interchange, widen and add lanes to approximately four (4) miles of I-35, and widen and improve approximately one (1) mile of East 1st Street.

Proposed Action

The proposed action consists of reconstructing the East 1st Street/I-35 interchange with a Diverging Diamond interchange, widening I-35 from four (4) lanes to six (6) lanes, and widening East 1st Street from four (4) lanes to five (5) lanes from Delaware Avenue to Frisk Drive. The project also proposes to reconstruct the intersections of East 1st Street/Creekview Drive and East 1st Street/Frisk Drive. **Figure 1-1** *Project Location* shows the general location of the proposed action.

Project Area

The project area for this EA (see **Figures 1-2 to 1-7** *Project Area*) includes the north/south limits along I-35:

- From the northern merge/diverge points of the NE 36th Street/I-35 interchange located approximately two (2) miles north of the East 1st Street/I-35 interchange.
- To the southern merge/diverge point of the Oralabor Road/I-35 interchange located approximately two (2) miles south of the East 1st Street/I-35 interchange.

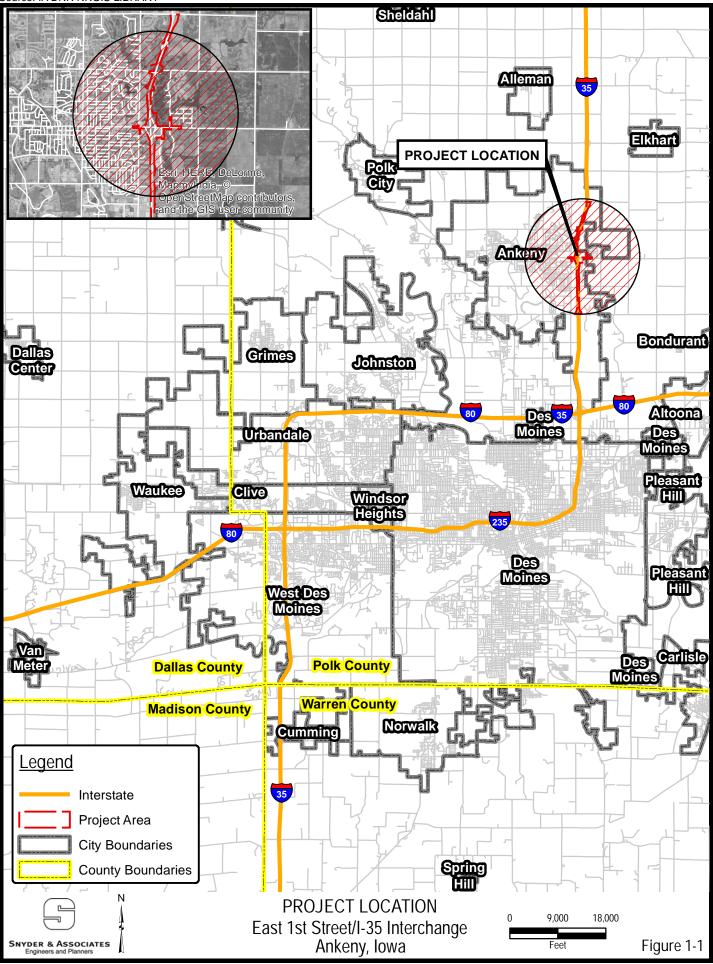
The east/west limits along East 1st Street:

- From the East 1st Street/Hayes Drive intersection located approximately 0.4 miles west of the East 1st Street/I-35 interchange.
- To approximately 0.6 miles east of the East 1st Street/I-35 interchange.

The existing I-35 roadway currently is a four (4) lane divided freeway facility with a diamond interchange configuration at East 1st Street. The existing East 1st Street roadway is currently four (4) lanes west of the I-35 interchange and two (2) lanes east of the I-35 interchange. Also included in the project area are the Creekview Drive/East 1st Street and the Frisk Drive/East 1st Street intersections. Creekview Drive and Frisk Drive are currently two (2) lane, undivided roadways.

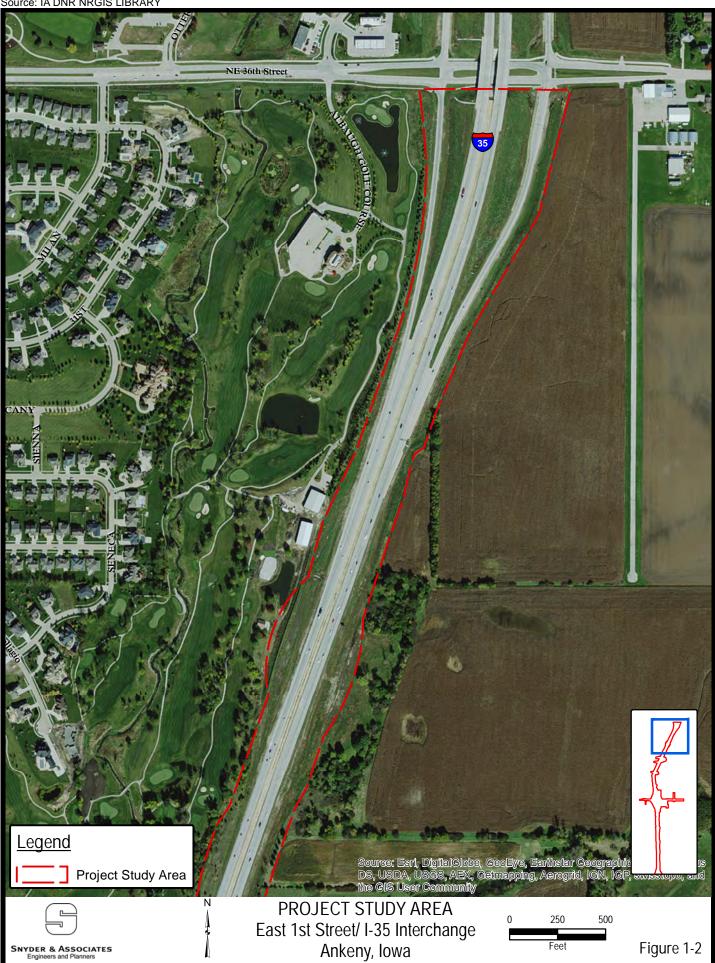
The project area encompasses all the build alternatives including the Preferred Alternative. The study area was expanded to include the sensitive areas around Fourmile Creek as it intersects I-35 and the area around an unnamed intermittent stream that is a tributary to Fourmile Creek as it intersects I-35. The project area boundaries represent the logical limits for the infrastructure improvements and environmental review.

Source: IA DNR NRGIS LIBRARY

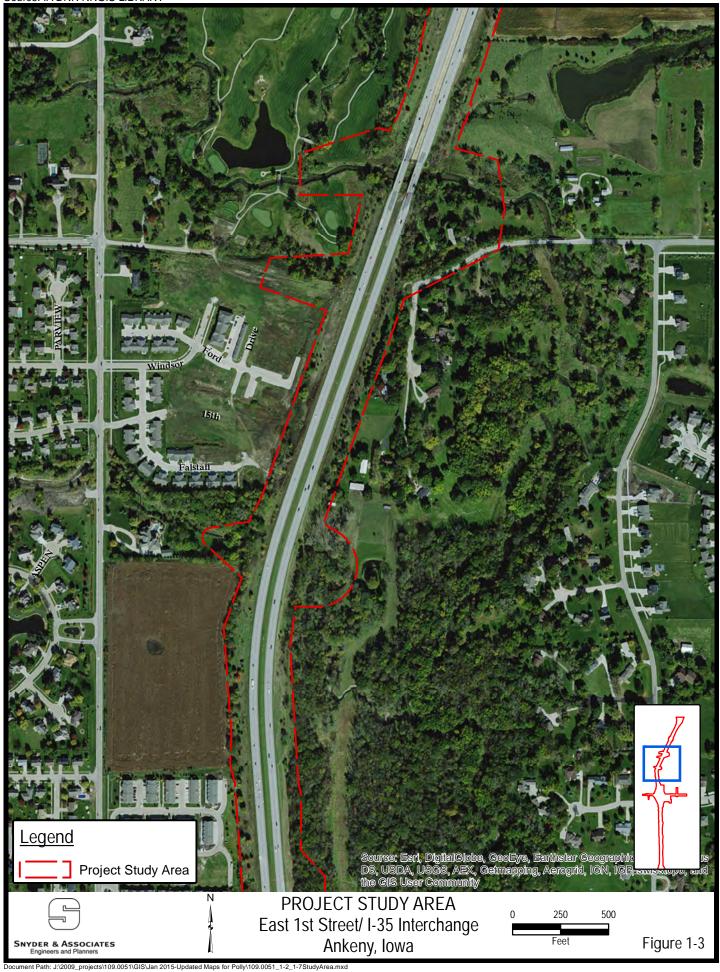


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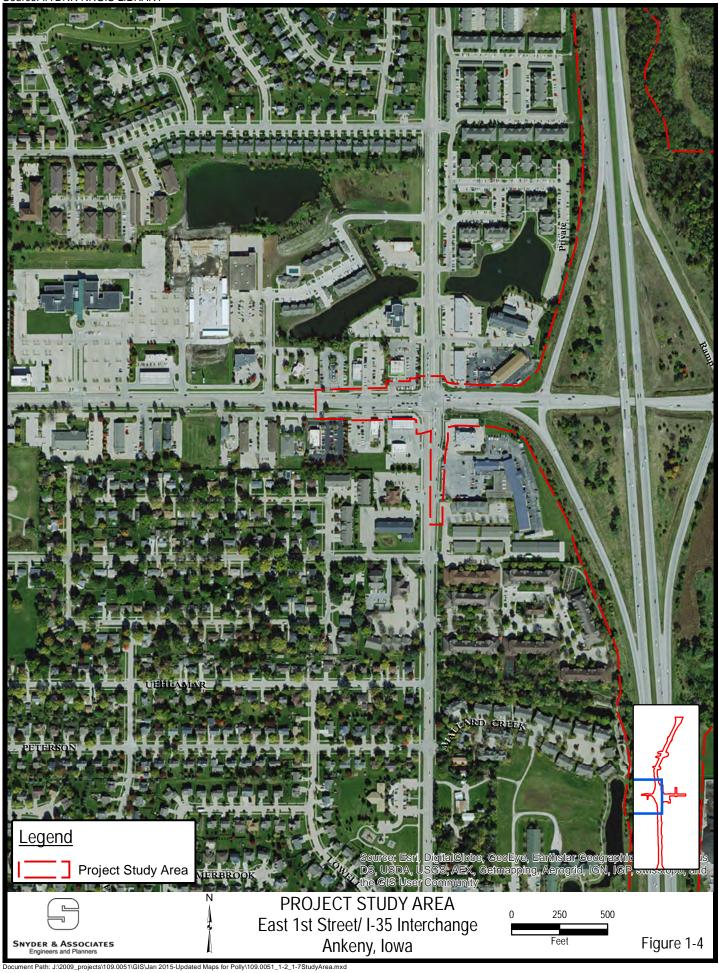
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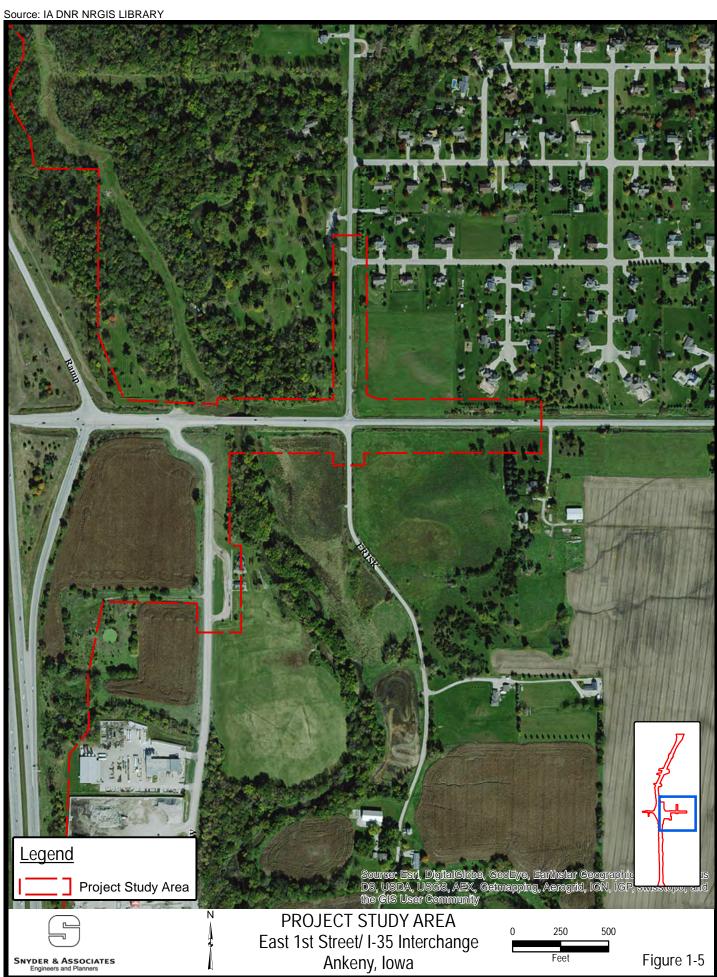
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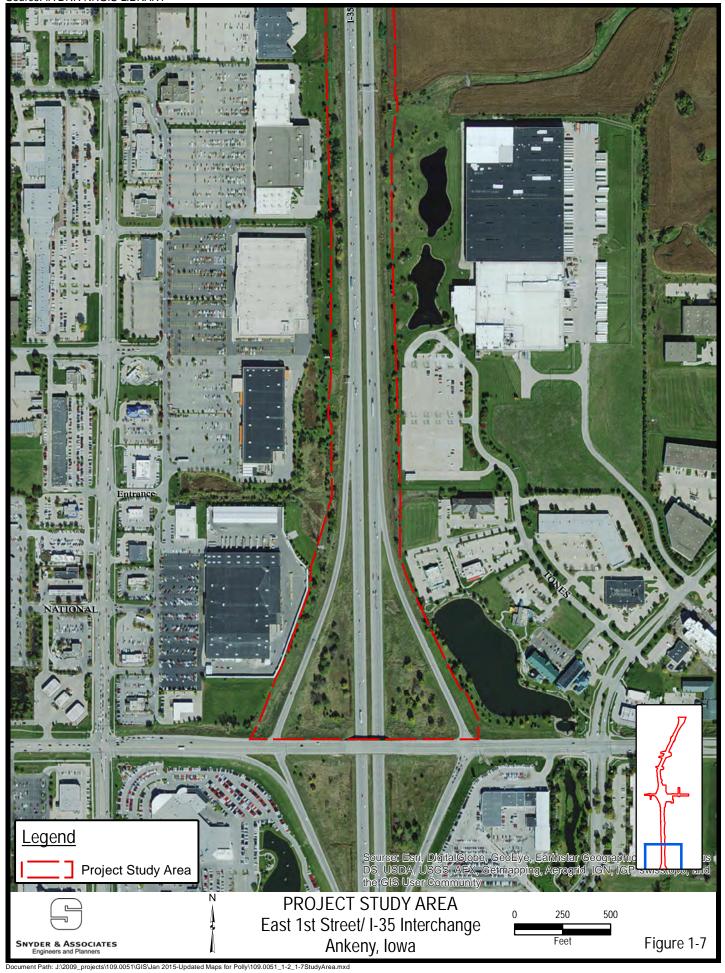


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SECTION 2 PROJECT HISTORY

This section describes the project background and events leading up to the proposed action.

The City of Ankeny is the largest northern suburb of the Des Moines metropolitan area, with an estimated population of 51,567 in 2013. I-35 is a north-south interstate located along the eastern boundary of the city, serving as an important metropolitan, regional, and interstate route, as well as an important freight route extending from Mexico and Canada.

Travel demands have been increasing and recent traffic studies determined that capacity improvements are necessary to the I-35 corridor in Ankeny (see studies listed in **Table 2**: *Relevant Studies Completed in or near the Project Area*). Studies have focused primarily on the East 1st Street/I-35 interchange, the construction of an interchange at NE 36th Street/I-35, and improvements to major arterial roadways. FHWA's *Policy on Access to the Interstate System* provides the requirements for justification to any proposed changes in access to the Interstate System. The intent of the policy is to insure that the Interstate System provides the highest level of safety and mobility to travelers while maintaining adequate control of the access points.

An evaluation in the *Interchange Justification Report* (IJR), prepared by HR Green, Inc. in March 2008, provided the necessary documentation to justify the proposed improvements to the East 1st Street/I-35 interchange, the NE 36th Street/I-35 interchange, and other local roadways in order to improve current and future traffic operations. As a result, FHWA approved construction of the NE 36th Street/I-35 interchange in June 2008. The interchange was completed in November 2012 and is currently open to traffic.

Anticipated funding constraints and construction staging prevented the construction of the interchange at NE 36th Street/I-35 and improvements to the East 1st Street/I-35 interchange from being accomplished simultaneously. The 2008 IJR proposed options for staging the improvements to I-35. The preferred staging options recommended by the 2008 IJR, consistent with the Des Moines Area Metropolitan Planning Organization's (DMAMPO) Long Range Transportation Plan (LRTP), are as follows:

Stage 1: Construct the new NE 36th Street/I-35 Interchange

<u>Stage 2</u>: Widen I-35 between East 1st Street and NE 36th Street

Stage 3: Reconstruct the East 1st Street/I-35 interchange

The newly constructed NE 36th Street/I-35 interchange would provide adequate interim capacity during reconstruction of the East 1st Street/I-35 interchange and associated roadway improvements. The No Build traffic operations analysis, documented in the 2008 IJR, identified the need to widen I-35 from the interchange with I-235 and I-80 to approximately two (2) miles north of the NE 36th Street/I-35 interchange.

The Amendment to Interchange Justification Report, January 2014, used updated DMAMPO 2035 LRTP traffic volumes forecasts to evaluate a Diverging Diamond interchange configuration for the East 1st Street/I-35 interchange against the Single Loop Partial Cloverleaf, the Preferred Alternative in the 2008 IJR. The Diverging Diamond interchange configuration could provide additional traffic carrying capacity and reduce the interchange footprint, resulting in reduced right-of-way impacts and cost.

The projected traffic volumes increased for the 2035 traffic forecast when compared to the 2008 IJR 2030 traffic volumes forecast. Given the higher forecasted traffic volumes, the conclusions reached in the 2008 IJR regarding traffic operations needs remain valid.

The 2014 IJR analysis demonstrated the proposed Diverging Diamond interchange alternative would provide the safety and operational improvements identified in the 2008 IJR. However, the interchange operations were improved with the Diverging Diamond configuration; it also required fewer I-35 access points than the Single Loop Partial Cloverleaf, improving expected safety within the interchange.

Study	Summary
<i>I-35 and E. 1st Street/NE 36th Street Interchanges,</i>	An amendment and supplement to the information
Amendment to Interchange Justification Report,	provided in the 2008 IJR for I-35 and the East 1 st
2008. Prepared by HR Green, Inc. January 2014.	Street and NE 36 th Street interchanges.
Environmental Assessment for Interstate 35 and	Discusses environmental and socioeconomic
<i>NE 36th Street Interchange</i> . Prepared by Howard	impacts for the new NE 35 th Street/I-35
R. Green Company, August 2008.	interchange.
Environmental Assessment for Northeast 18 th	Discusses environmental impacts for the
Street Extension from NE Delaware Avenue to NE	construction of an overpass to accommodate an
Frisk Drive/NE 102 nd Street. Prepared by Snyder	east/west connection without using East 1 st Street
and Associates, Inc., October 2008.	or Oralabor Road.
<i>I-35 and E. 1st Street/NE 36th Street Interchange</i>	Discusses the justification of proposed
Justification Report. Prepared by Howard R.	improvements to I-35/East 1 st Street interchange
Green Company, March 2008.	and a new interchange at I-36/NE 36 th Street.
<i>I-35 & NE 36th Street and I-35 & E. 1st Street</i>	Analyzes the need for interchange improvements
Interchange Justification Report – Phase I.	along I-35 in the Ankeny area.
Prepared by H. R. Green Company, January 2004.	
Interchange Justification Report, Interstate 35	Analyzes the need for an interchange at I-35 and
and NE 62 nd /66 th Street. Prepared by Snyder &	NE 66 th Avenue.
Associates, Inc., September 2001.	
NE Delaware Avenue Traffic Projections.	Evaluates future (2025) traffic and land use at
Prepared by Snyder & Associates, Inc., June	Delaware Avenue/East 1 st Street intersection.
2001.	
Configuration Study NE Interchange, Phase II	Alternatives for NE Mixmaster of I-35, I-80, and
<i>Report.</i> Prepared by HDR Engineering, Inc., July	I-235 are examined.
2001.	
Application for Traffic Safety Improvement	Application for funding intersection
Program - 1 st Street and Delaware Avenue	improvements at Delaware Avenue and East 1st
Improvements. Prepared by Snyder & Associates,	Street.
Inc., December 1999.	
I-35 Trade Corridor Study, Recommended	Alternatives and recommendations for improving
Corridor Investment Strategies. Prepared by	the I-35 corridor from Duluth, Minnesota to
HNTB Corporation, Wilbur Smith Associates,	Laredo, Texas are discussed.
HDR Engineering, Hicks & Company, Sylva	
Engineering, WHM Transportation, McCray	
Research, and CJ Petersen & Associates,	
September 1999.	

Table 2: Relevant Studies Completed in or near the Project Area

SECTION 3 PURPOSE AND NEED FOR ACTION

This section describes the purpose and need for the proposed action based on the transportation system deficiencies that currently exist in the study area. This section details the substandard nature of the existing interstate, interchange and adjacent roadways.

3.1 Purpose of the Proposed Action

The purpose of the proposed project is to provide adequate current and long-term roadway operations within the project area and to provide efficient and safe access to the interstate from the adjacent arterial street network.

3.2 Need for the Proposed Action

The proposed project is needed to improve traffic operations and local street safety. Specifically the proposed action would address the following issues:

- Improving traffic operations within the project area; and
- Improving traffic safety on local streets and the interstate corridor within project area.

3.2.1 Improving Traffic Operations within the Project Area

East 1st Street and I-35 are experiencing increased traffic due to population growth, and residential and commercial development. The 2014 *Interchange Justification Report* (IJR) provided the projected 2035 traffic volumes within the East 1st Street/I-35 project area (see **Table 3:** *Average Daily Traffic*). Traffic volumes on I-35 are projected to nearly double from 2008 and 2012 traffic volumes by 2035 and significant increases are expected in traffic volumes on East 1st Street. I-35 currently experiences a substantial amount of regional travel including 12% to 13% freight truck traffic (2014 IJR).

Roadway Segment	2008 ADT (vehicles/day)	2012 ADT (vehicles/day)	2035 ADT (vehicles/day)
I-35, South of East 1 st Street	53,000	57,900	100,300
I-35, North of East 1 st Street	39,200	39,900	77,600
East 1 st Street	15,400	18,100	28,500

 Table 3: Average Daily Traffic

Note: Based on Iowa DOT provided information.

Ankeny's population in 2013 was 51,567. The City's 2010 Comprehensive Plan estimates the population will nearly double to 109,246 by the year 2035. Approximately 70% of workers living in Ankeny commute to employment centers outside of the City, relying on I-35 to commute south to Des Moines and north to Ames (2014 IJR). Additionally, areas east of I-35 have been identified as growth areas in the City's 2010 Comprehensive Plan, to be used for commercial and residential development. Located north of East 1st Street, Greenwood Acres and Deer Creek Estates are among the first residential developments east of I-35. Residents in these developments have access to I-35 at the East 1st Street interchange.

The project area also serves a regional retail center along Delaware Avenue. Parallel to I-35, Delaware Avenue is located approximately 1,000 feet west of the interstate. This commercial area includes major "big box" retailers that generate large volumes of vehicle and freight traffic. As population growth and residential and commercial development continues to generate increased traffic on the local streets in the project area, the operations of the connections to I-35 are expected to impact Interstate System operations.

The effectiveness of a roadway segment in serving traffic demands is measured in level of service (LOS). The LOS is defined with letter designations from A through F, with LOS A representing the best operating conditions and LOS F representing the worst. LOS is typically used to describe roadway capacity and usage. LOS A through LOS C represents traffic conditions under which speeds are not impeded by other vehicles and maneuverability within the traffic stream is good. LOS D describes traffic patterns that are generally moving, but borders on a threshold at which small increases in traffic may cause increases in delays and decreases in speed. LOS E and LOS F are indicative of stop and go conditions, significant delays, and reduced travel speeds, which can lead to recurrent traffic flow breakdowns (see **Table 4:** *Level of Service Definitions*).

Level of Service (LOS)	Operating Conditions
A	Free flow
В	Reasonably free flow
С	Stable flow
D	Approaching unstable flow
E	Unstable flow
F	Forced or breakdown flow

 Table 4: Level of Service (LOS) Definitions

In 2004, the LOS on the East 1st Street/I-35 interchange was adequate (LOS C or better), although the northbound exit ramp experienced unacceptable LOS during the PM peak period (LOS E). Traffic queuing along the NB exit ramp causes traffic on I-35 to slow up to one (1) mile in advance of the exit. In the 2030 No Build scenario provided in the 2008 IJR, LOS for East 1st Street, I-35 and the interchange declined beyond an acceptable LOS (see **Table 5**: *LOS Summary, 2004 Conditions and 2030 No Build*).

East 1 st Street Intersections	2004 Co	nditions	2030 No Build		
East 1 Street Intersections	AM Peak	PM Peak	AM Peak	PM Peak	
NE Delaware Avenue	С	С	F	F	
West Ramp to I-35	С	С	F	Е	
East Ramp to I-35	В	Е	С	F	

Table 5: LOS Summary, 2004 Conditions and 2030 No Build

East 1 st Street Intersections	2004 Co	nditions	2030 No Build		
East 1 Street Intersections	AM Peak	PM Peak	AM Peak	PM Peak	
SE Creekview Drive	А	А	F	F	

L 25 Segments	2004 Co	nditions	2030 No Build		
I-35 Segments	AM Peak	PM Peak	AM Peak	PM Peak	
NB, Mainline south of East 1 st Street	А	В	В	D	
NB, Mainline north of East 1 st Street	А	В	С	D	
NB, East 1 st Street ramp - diverge	А	В	В	D	
NB, East 1 st Street ramp - merge	А	В	В	F	
SB, Mainline south of East 1 st Street	В	А	В	D	
SB, Mainline north of East 1 st Street	А	В	D	С	
SB, East 1 st Street ramp - diverge	А	В	D	С	
SB, East 1 st Street ramp - merge	В	А	F	В	

Note: NB = northbound, SB = southbound

Does not meet LOS Criteria

As traffic volumes increase, poor intersection LOS could impact interstate operations by backing exit ramp traffic onto the I-35 mainline, reducing capacity on I-35 and creating safety concerns as high speed traffic meets stopped or slowing vehicles at the ramp diverge point. Entrance ramp traffic would also back into through-lanes on East 1st Street, limiting access to I-35 by preventing vehicles from accessing the entrance ramp. This could result in congestion, delays, uneven traffic flow, and frequent slowing. Travel times in the project area under these conditions would not be predictable, with more travel demand than roadway capacity.

3.2.2 Improving Traffic Safety on Local Streets and the Interstate Corridor

Crash data for the five-year period from 2010-2014 were reviewed. I-35 north of the Oralabor Road interchange and south of the NE 36^{th} Street interchange had a crash rate below the statewide average for similar municipal interstate segments (project area = 68 crashes/hundred million vehicle miles traveled (cr/HMVMT), statewide average = 100 cr/HMVMT). One (1) fatality was reported in this four (4) mile segment. It was a single vehicle crash involving a tractor-trailer traveling southbound on I-35 north of East 1st Street, with a major cause of "ran off road – right".

At the East 1st Street intersections in the project area, both of the East 1st Street and I-35 ramp intersections were below the statewide average for similar municipal primary roadways with city street intersections (I-35 NB Ramp = 0.28 crash/million entering vehicles (cr/MEV), I-35 SB Ramp = 0.42 cr/MEV, statewide average = 0.9 cr/MEV). However, the East 1st Street/Delaware Avenue intersection had a crash rate above the statewide average for municipal city streets (East 1st Street/Delaware Avenue = 1.28 cr/MEV, statewide average = 0.8 cr/MEV). No fatalities were reported at the intersection, although, one (1) major injury was reported at the East 1st Street/Delaware Avenue intersection.

The efficient distribution of traffic would improve the overall safety of the transportation system within the project area. As traffic volumes increase, the likelihood of vehicle crashes increases. When congestion occurs, higher numbers of vehicles are interacting in the same amount of space, increasing vehicle conflicts and reducing overall traffic safety. Congested roadways may also foster aggressive driving conditions as drivers increase the number of risks they take which can result in increased numbers of crashes, which in turn contributes to further congestion. Also, growth and development, increased traffic, and congestion in the project area may increase the risk for pedestrians and cyclists interacting with the traffic at the East 1st Street/Delaware Avenue intersection.

SECTION 4 ALTERNATIVES

This section discusses the alternatives investigated to address the purpose and need for the proposed action. A range of alternatives were developed in the 2014 IJR identifying alternative interchange configurations. A screening process was used to narrow the range of alternatives. The No Build Alternative, the Alternatives Considered but Dismissed, and the Preferred Alternative being carried forward in the EA are discussed in the following sections.

4.1 No Build Alternative

The No Build Alternative would maintain the I-35 project segment in its current configuration consisting of four (4) lanes. The East 1st Street/I-35 interchange would remain in its current diamond configuration and the interchange would not be reconstructed. The East 1st Street project segment would remain in its current configuration. The existing intersections of East 1st Street/Creekview Drive and East 1st Street/Frisk Drive would remain in their current configurations and new intersections would not be constructed.

The No Build Alternative would include required maintenance and repairs of the I-35 and East 1st Street project segments. However, this alternative would not improve traffic operations or provide improved safety to I-35 or East 1st Street.

For these reasons, the No Build Alternative does not meet the purpose and need. However, this alternative was carried forward to provide a baseline for comparing the potential impact of the alternatives being considered, as required by Council on Environmental Quality (CEQ) regulations for implementing NEPA (40 CFR 1500-1508).

4.2 Alternatives Considered but Dismissed

In addition to the No Build Alternative, a full range of build alternatives was developed by the City of Ankeny, in coordination with the Iowa DOT, to address the transportation needs for the East 1st Street and I-35 roadways and interchange. The alternatives considered in this EA are based on alternatives developed as part of the 2008 and 2014 IJRs.

To provide additional capacity to East 1st Street and I-35 all the build alternatives include widening approximately four (4) miles of I-35, widening East 1st Street from Delaware Avenue to Frisk Drive, and reconstructing the intersections of East 1st Street/SE Creekview Drive and East 1st Street/Frisk Drive. However, each build alternative considered a different interchange configuration to improve traffic operations and safety. Interchange configurations considered included the following:

- Alternative 1 Compressed Diamond
- Alternative 2 Single Point Urban
- Alternative 3 Partial Cloverleaf
- Alternative 4 Partial Cloverleaf Single Loop
- Alternative 5 Compressed Diamond/Partial Cloverleaf-Single Loop

Each of the alternatives was evaluated in terms of project purpose and need, environmental resources, geometric features, right-of-way and public involvement. Due to the area's urban nature, LOS C was considered an acceptable LOS for the propose project. Alternatives

considered but dismissed and the reason for dismissing them are summarized in the following sections. **Table 6:** *Alternatives Comparison* provides a comparison of the alternatives considered.

Environmental Resource	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Preferred Alternative
Heritage Park Impact	No	No	Yes	Yes	Yes	No
Level of Service (LOS)	D	D	С	С	С	В
Meets Purpose and Need	No	No	Yes	Yes	Yes	Yes
Commercial/Residential Right-of-way Impacts	No	No	Yes	Yes	Yes	No

 Table 6: Alternatives Comparison

4.2.1 Alternative 1 – Compressed Diamond

The Compressed Diamond interchange is similar to the existing diamond interchange configuration but requires less right-of-way, resulting in fewer environmental impacts. This alternative would operate at LOS C at the interchange terminals. However, the northbound exit ramp traffic movement would operate at LOS D. It is necessary for the preferred interchange to provide a LOS C or better to meet the purpose and need. For this reason this alternative was dismissed from further consideration. See **Figure 4-1** *Alternative 1 – Compressed Diamond*.

4.2.2 Alternative 2 – Single Point Urban

The Single Point Urban interchange is a grade separated (overpass) interchange with all interchange movements converging at one (1) signalized area. This alternative was developed to minimize right-of-way impacts and increase interchange capacity. This interchange would operate at an overall LOS D with limited expandability. All the merge/diverge sections of this interchange operate at LOS D or better. It is necessary for the preferred interchange to provide a LOS C or better to meet the purpose and need. Also, the design of this alternative resulted in heavy, unbalanced left turns onto the northbound exit ramp. For these reasons this alternative was dismissed from further consideration. See **Figure 4-2** Alternative 2 – Single Point Urban.

4.2.3 Alternative 3 – Partial Cloverleaf

The Partial Cloverleaf interchange uses a combination of diagonal ramps and loop ramps to accommodate traffic movements. This interchange would operate at LOS C, an adequate LOS to meet the purpose and need. However, this alternative was dismissed from further consideration due to limited distance between Delaware Avenue and the west ramp terminals. Also, right-of-way requirements in the northeast quadrant would impact Heritage Park, a Section 4(f) resource. See **Figure 4-3** *Alternative 3 – Partial Cloverleaf*.

4.2.4 Alternative 4 – Partial Cloverleaf/Single Loop

The Partial Cloverleaf/Single Loop alternative would provide a LOS C or better, an adequate LOS to meet the purpose and need. This alternative would also add approximately 250 vehicles

per hour capacity to the northbound exit ramp. However, the configuration of this interchange contained a loop in the northeast quadrant that would impact Heritage Park, a Section 4(f) resource. As a result, this alternative was dismissed from further consideration. See **Figure 4-4** *Alternative 4 – Partial Cloverleaf/Single Loop*.

4.2.5 Alternative 5 – Compressed Diamond/Partial Cloverleaf-Single Loop

A hybrid of the Compressed Diamond and the Partial Cloverleaf/Single loop, this alternative has a loop located in the southeast quadrant of the interchange. This alternative would provide a LOS C or better, an adequate LOS to meet the purpose and need. This alternative would also increase the distance between the west ramps and the East 1^{st} Street/Delaware Avenue intersection. However, this alternative would impact Heritage Park, a Section 4(f) resource. This alternative also requires five (5) access points to the interstate, one (1) more access point than all the other alternatives which require four (4) access points. For these reasons this alternative was dismissed from further consideration. See Figure 4-5 Alternative 5 – Compressed Diamond/Partial Cloverleaf – Single Loop.

4.3 Preferred Alternative – Diverging Diamond

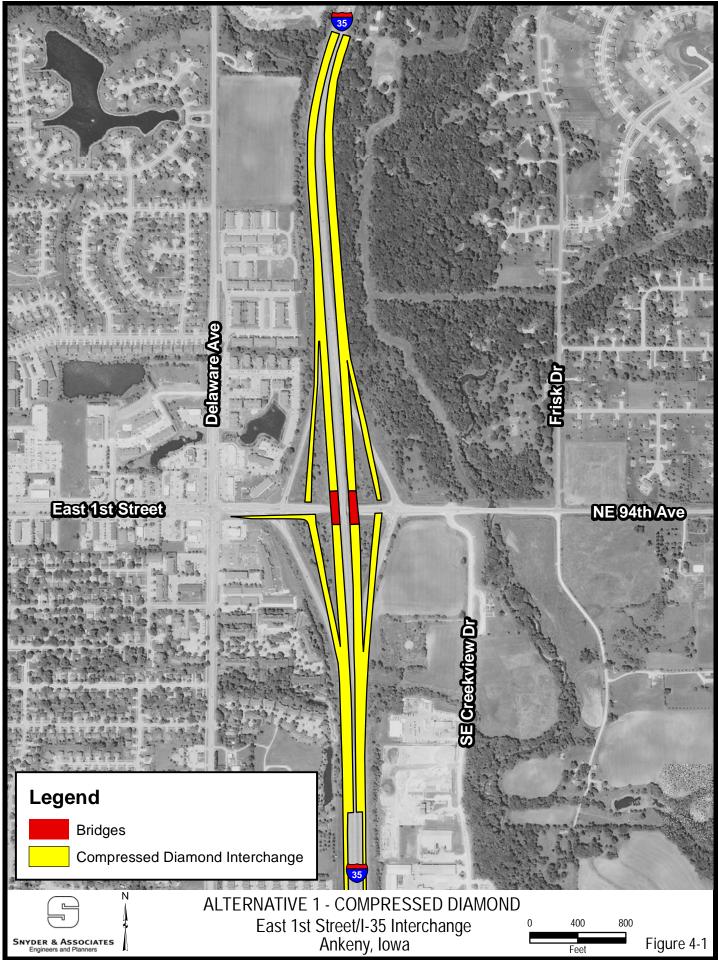
The Preferred Alternative includes a Diverging Diamond interchange configuration. The 2014 IJR analysis concluded that interchange operations were improved with the Diverging Diamond configuration when compared to the Single Partial Cloverleaf configuration with an overall interchange LOS B or better. Also, the Preferred Alternative would provide superior ramp queuing conditions.

With four (4) access points to I-35, the Diverging Diamond configuration improves expected safety within the interchange. The Preferred Alternative requires the least amount of right-of-way of all the alternatives, minimizing environmental impacts and reducing cost. This alternative also has the least amount of impacts to Heritage Park.

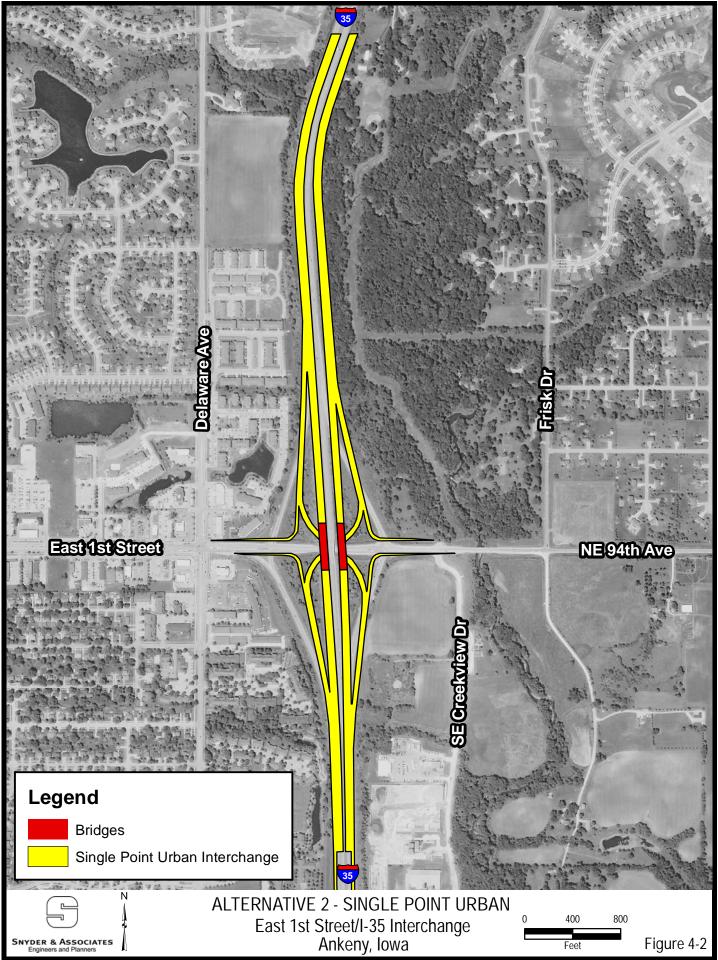
This alternative is carried forward in the EA for further study and evaluation as the Preferred Alternative. As with the other alternatives, the Preferred Alternative would include widening approximately four (4) miles of I-35 from four (4) lanes to six (6) lanes and widening East 1st Street from four (4) lanes to five (5) lanes from Delaware Avenue to Frisk Drive to provide additional capacity to East 1st Street and I-35. Also, the intersections of East 1st Street/SE Creekview Drive and East 1st Street/Frisk Drive would be reconstructed. See **Figure 4-6** *Preferred Alternative – Diverging Diamond*. See **Figure 4-7** *Preferred Alternative Ultimate Build*.

Source: IA DNR NRGIS LIBRARY

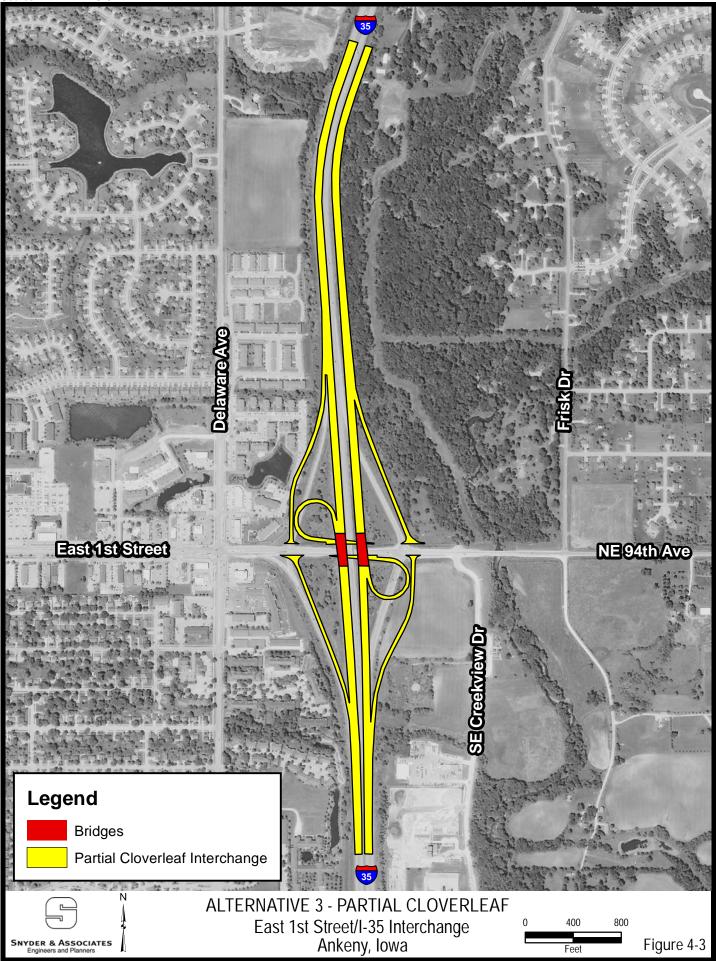
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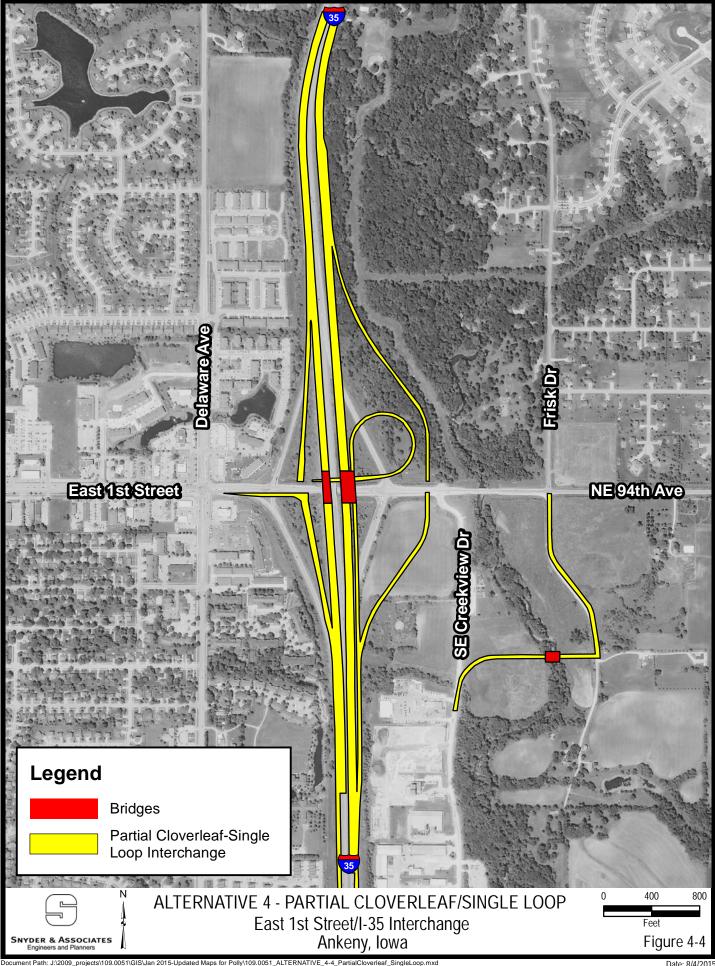
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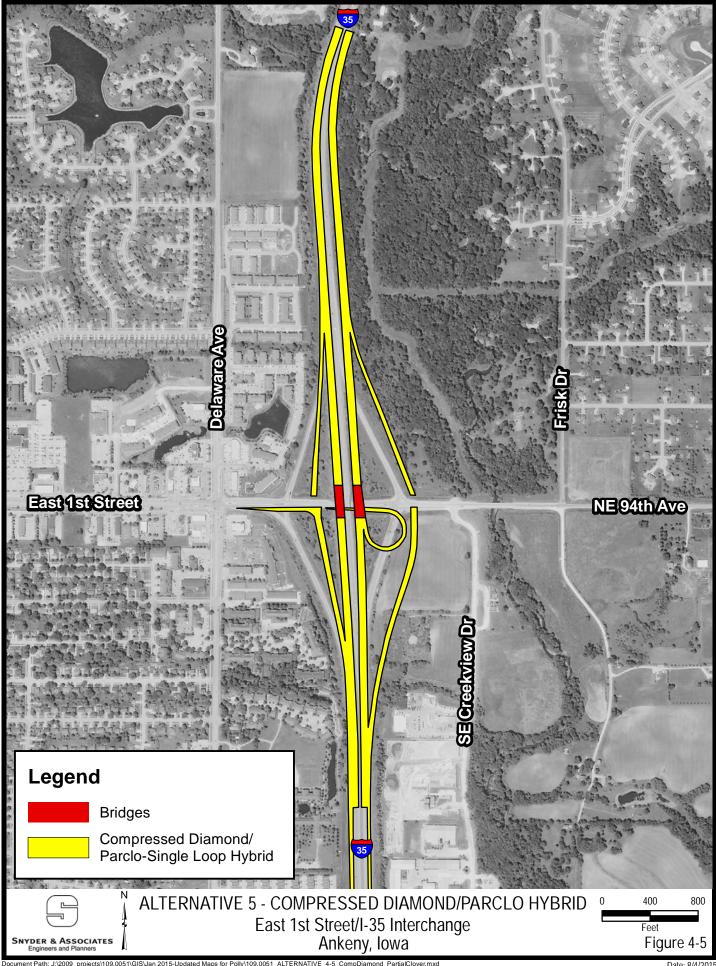
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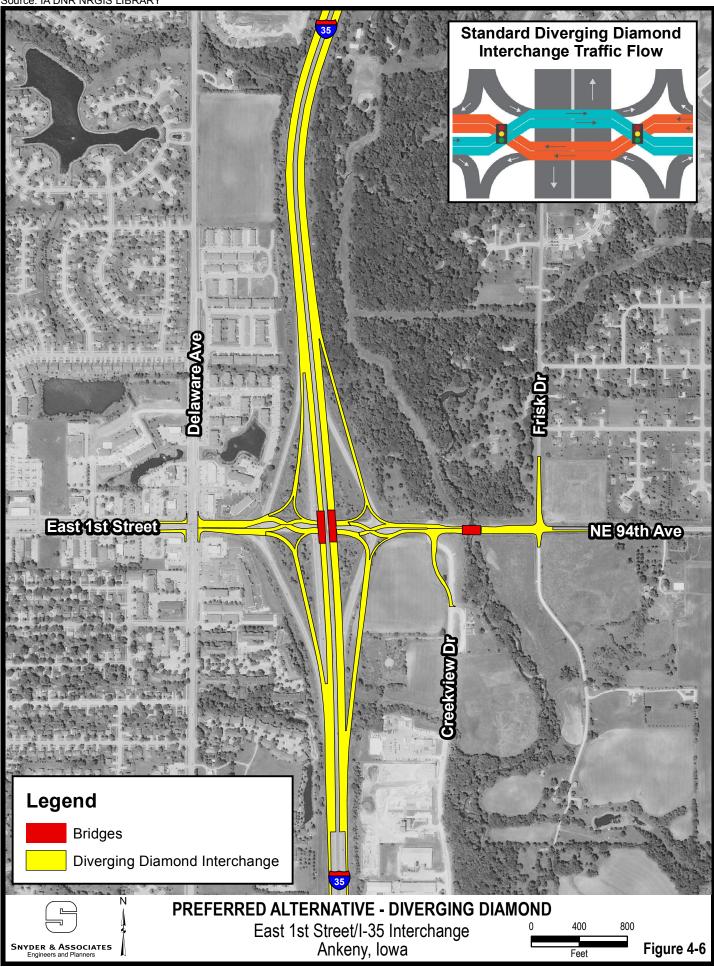
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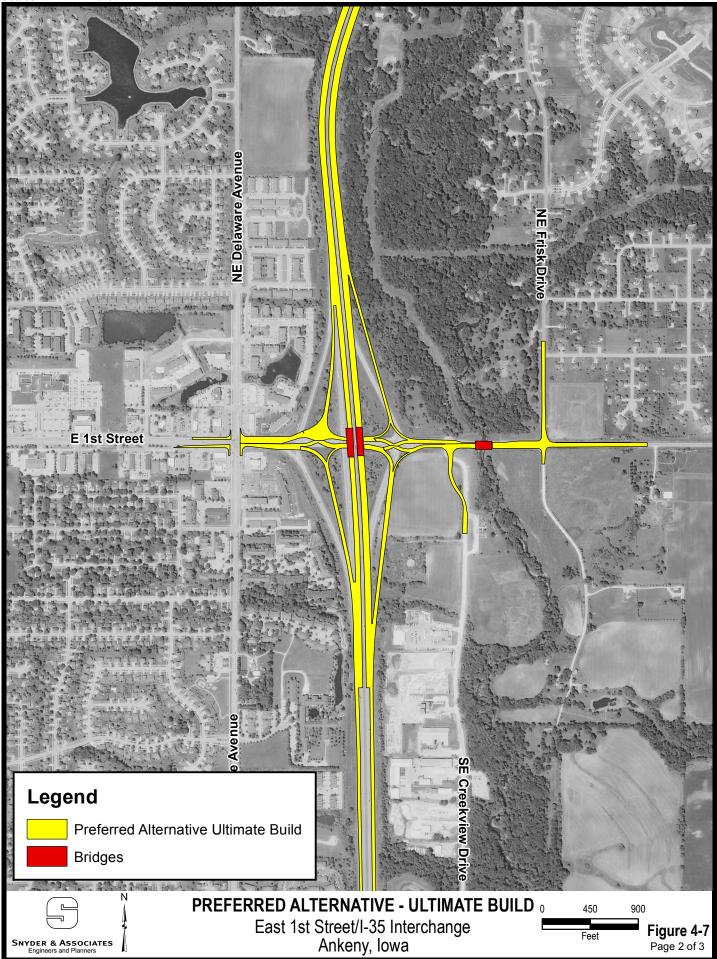
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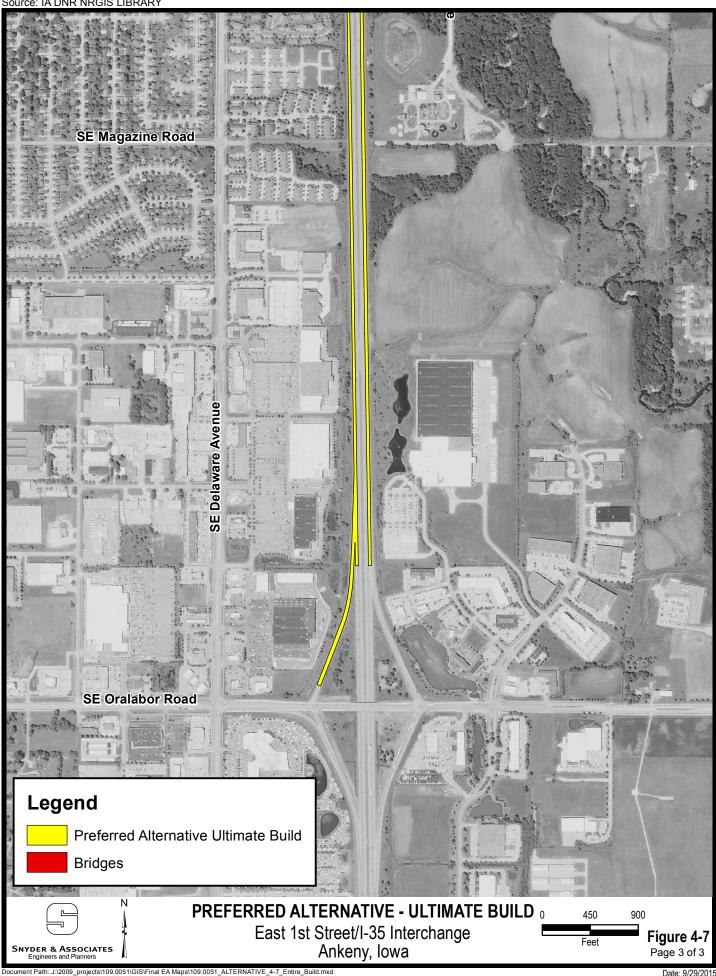


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SECTION 5 ENVIRONMENTAL ANALYSIS

This section discusses the existing socioeconomic, cultural, natural, and physical environments that may be affected by the Preferred Alternative. The resources with a check in the first and second columns in **Table 1** *Resources Considered* located in the Preface are discussed below.

Each resource section includes an analysis of the impacts of the No Build Alternative and the Preferred Alternative. Because it is early in the design process, a preliminary NEPA impact area was used for estimating direct and indirect impacts to the evaluated environmental resources. The preliminary NEPA impact area includes roadway right-of-way needs and the areas where construction could occur. The area actually impacted by the proposed project would likely be less than what is portrayed within the preliminary NEPA impact area, and some impacts to resources are expected to be minimized or avoided as the project design is refined. Consequently, the potential impacts discussed in this section of the EA are conservative, as efforts to minimize direct and indirect impacts would be made during final design.

5.1 Socioeconomic Impacts

Evaluating the direct and indirect impacts that a transportation project has on socioeconomic resources requires consideration of impacts to land use and the project's consistency with development and planning by a city or other public entity.

5.1.1 Land Use

Evaluation of land use as it relates to transportation projects refers to the determination of direct and indirect effects on existing land uses, such as agricultural, residential, commercial/retail and industrial, as well as consistency with regional development and land use planning. Direct effects on existing and future land uses were determined by comparing the preliminary impact area to the existing land uses. Indirect effects were determined by evaluating potential access restrictions, out-of-distance travel, and induced development.

The project area is located primarily within the City of Ankeny's corporate limits with areas east of I-35 located in unincorporated Polk County. In the northern portion of the immediate project area the existing land use is retail/commercial, low/medium density residential, agricultural and private golf course. Existing land use in the southern portion of the study area includes a mix of low, medium and high density residential, retail/commercial, nursing home, public facilities/utilities, and industrial. Parks/recreational use is identified along Fourmile Creek east of I-35, including Heritage Park (see **Figure 5-14** *Existing Land Use Map*).

The Polk County 2030 Comprehensive Plan indicates future land use in the area east of I-35 as low and medium-density residential and areas of "agricultural transition". Areas designated as agricultural transition are areas adjacent to growing cities with agricultural land use patterns, but due to development pressures would likely be developed at urban densities. The designation prevents the infilling of these areas with large residential lots served by on-site septic systems. Polk County is extending the Fourmile Creek interceptor sewer from Des Moines to Ankeny. The extension of these utilities would enable development east of I-35.

East 1st Street/Delaware Avenue is located in an area that has become a regional retail center. At the same time, employment and business centers have expanded along the I-35 corridor. Ankeny

has also experienced growth and new residential construction at one of the highest rates of all of metro Des Moines communities. The City of Ankeny has extended various utilities to the areas north and east of the City to facilitate growth and development.

The City of Ankeny 2010 Comprehensive Plan identifies potential areas of growth and proposes the following future roadway improvements:

- Improve connectivity across I-35
- Extend arterial corridors, such as East 1st Street, into developing areas
- Address areas with high traffic or frequent accidents,
- Expand system of trails

The proposed interchange and widening of both East 1st Street and I-35 would not only support existing and planned development, but also local transportation and comprehensive plans.

Impacts of the No Build Alternative

The No Build Alternative would result in the continued use of the I-35 and East 1st Street corridors. This continued use would not affect the overall land use of the study area. The No Build Alternative would be consistent with zoning and future land use plans for Ankeny and no adverse impacts would occur.

Impacts of the Preferred Alternative

The Preferred Alternative is consistent with existing land use and future land use plans adjacent to the I-35 and East 1st Street corridors. This alternative is consistent with the DMAMPO's LRTP to manage and optimize transportation infrastructure. Construction of the Preferred Alternative would facilitate future commercial, industrial and residential development consistent with Ankeny's Comprehensive Plan and would accommodate local and regional transportation needs.

Improved access and traffic flow anticipated with the proposed project may result in the indirect impact on the rate of development east of I-35. An increased rate of development east of I-35 could result in a change in population density, growth rate and related effects on air quality, water quality and other natural systems.

5.1.2 Community Cohesion

Community cohesion is a term for patterns of social networking within a neighborhood or community. The impacts of transportation projects on community cohesion may be beneficial or detrimental. Impacts on community cohesion can include bisecting neighborhoods, social isolation of a portion of a neighborhood, decrease in neighborhood size, changes in community access, or separation of residences from community facilities. Potential impacts to public safety, including police, fire, emergency management services, hospitals, and emergency routes are important aspects of community cohesion. Potential impacts were evaluated for the creation of real or perceived barriers that limit the ability of the project area to maintain community cohesion.

Eight (8) residential neighborhoods are located within or immediately adjacent to the project area including Briar Creek, Windsor Village, Delaware Park, Hayes Acres, Triplett Village, Delaware Village, Metro North, and Greenwood Acres (see **Figure 5-15** *Adjacent Neighborhoods Map*). These are primarily single-family and multi-family communities.

Community facilities located within the project area include:

- Heritage Park
- Des Moines Area Regional Transit (DART): Express Route 98, Mercy North Park & Ride
- Pedestrian/bicycle facilities: East 1st Street, Delaware Avenue

Community resources located adjacent to the project area include:

- Mercy North Urgent Care
- Mill-Pond retirement and assisted living community
- Iowa Department of Human Services

Impacts of the No Build Alternative

The No Build Alternative would not result in adverse community cohesion impacts. No changes in accessibility to community resources would occur under the No Build Alternative.

Impacts of the Preferred Alternative

The Preferred Alternative does not divide or isolate any existing communities or established neighborhoods and there is no separation of residents from community facilities. Under the Preferred Alternative, neighborhoods adjacent to the corridor would be temporarily affected during construction activities. The City of Ankeny and Iowa DOT are committed to working with the affected property owners during final design and construction to maintain and optimize access to impacted neighborhoods. Modified accesses would not affect existing community facilities.

The Preferred Alternative is expected to increase safety and mobility, as a result of roadway widening and interchange reconstruction improvements, which would enhance the quality of life for the existing residents. The Preferred Alternative would also have a positive effect on community cohesion by providing a pedestrian/bicycle facility connecting areas east of I-35 to areas west of I-35 on East 1st Street.

No issues are anticipated to inhibit existing community cohesion as a result of the Preferred Alternative. This project has been developed in accordance with the Civil Rights Act of 1964, as amended by Title VIII of the Civil Rights Act of 1968 and related statues.

5.1.3 Economic

This section addresses the economic characteristics of the project area. The southern Delaware Avenue corridor, including East 1st Street and Delaware Avenue, has become a regional retail center. As a result, over 100 businesses are located adjacent to the project area. Businesses in this area provide a variety of goods and services to the community, including several national and local restaurants, large and small retail establishments, banks, home improvement/builder supply businesses, automotive repair, and gas station/convenience stores. Specifically located within the study area are the following: one (1) pharmacy, one (1) liquor store, four (4) hotels, one (1) gas station/convenience store, and six (6) restaurants including dine-in, fast-food chain, and locally-owned establishments.

Polk County property tax statements indicate that the total tax base for the county is \$32.2 billion for fiscal year (FY) 2012 and \$32.7 billion for FY 2014.

Impacts of the No Build Alternative

Under the No Build Alternative commercial and residential displacements would not occur. The tax base under the No Build Alternative would reflect historic and current growth rates, with no reasonably foreseeable substantial increases in taxable property.

Impacts of the Preferred Alternative

Under the Preferred Alternative commercial and residential displacements would not occur. The tax base under this alternative would reflect historic and current growth rates. However, there would be a minor tax base reduction as result of partial property acquisitions that would reduce land area of several parcels adjacent to the existing right-of-way, reducing the land value, and associated taxes of the affected parcels. The land area reductions would be minimal and the tax base reduction would not negatively affect the tax base of Ankeny.

During construction of the Preferred Alternative, businesses in the vicinity of the project area would be affected by temporary modification to access. The impacts of construction activities on businesses would be dependent on individual customers' preferences regarding shopping at a business near a construction site. Short-term economic impacts to businesses may occur. Access to businesses would be temporarily altered during construction, including temporary detours for businesses and patrons of businesses. However, access to businesses would be maintained throughout the duration of construction. Construction activities would be limited to the construction period in the area of each business and is not expected to cause long-term adverse effects on the income of businesses located along the corridor.

Short-term economic benefits would be derived from construction of the Preferred Alternative through an increase in construction-related employment and increased economic activity from construction workers patronizing local businesses and service establishments along the project corridor.

Construction of the Preferred Alternative would have a long-term beneficial impact on access to businesses in the vicinity of the project area due to improved traffic flow, fewer traffic delays, and safer access.

The construction of the proposed project may result in an indirect effect to the tax base that may increase more quickly as a result of improved access to the project area.

5.1.4 Parkland and Recreational Areas

Section 4(f) of the U.S. Department Transportation Act of 1966 (U.S. DOT ACT) was enacted as a means of protection for publically owned parks, recreation areas, wildlife refuges, and historic sites of local, state or national significance from conversion to transportation uses. The provision states that the Secretary of the U.S. DOT may approve a transportation project requiring the use of publically owned land of a public park, recreation area, or wildlife and waterfowl refuge, or land from an historic site of national, state, or local significance if:

- There is no feasible and prudent alternative to using that land, or
- The project includes all possible planning to minimize harm to a Section 4(f) property, or
- The Section 4(f) use is *de minimis*.

Two (2) parks/recreational facilities were identified within the project area. Coordination with FHWA was conducted to determine the Section 4(f) status of these resources. The first, Talons

of Tuscany Golf Course, is a 19 hole golf course located adjacent to the project area on the west side of I-35, south of NE 36th Street. The golf course is privately-owned and is not open to the general public. This resource is ineligible for Section 4(f) protection as determined by FHWA due to its private ownership.

The second is Heritage Park, located adjacent to the northeast quadrant of the East 1st Street/I-35 interchange. Heritage Park is a 21 hole disc golf course, owned and operated by the City of Ankeny. The park is opened sunrise to sunset with amenities that include horseshoe pits, grills, picnic tables, a picnic shelter, and portable toilets. This 36.1 acre recreational facility was determined to be subject to Section 4(f) protection by FHWA. Heritage Park was purchased with federal funds from the Land & Water Conservation Fund (LWCF); therefore it is also protected under Section 6(f) of the LWCF Act.

Impacts of the No Build Alternative

No construction activities would occur with the No Build Alternative. Therefore, under the No Build Alternative no recreational facilities would be impacted.

Impacts of the Preferred Alternative

Construction of the Preferred Alternative would require 0.89 acres of temporary easement and 0.065 acres of permanent easement along the south and east boundary of Heritage Park (see **Figure 5-16** *Parks and Recreation*). On January 28, 2015, FHWA determined the park is a 4(f) resource and is proposing a *de minimis* impact to the property (Appendix B). The City of Ankeny has been informed of FHWA's intent to make a *de minimis* impact determination. A final determination would be made following a public hearing.

With regard to Section 6(f) protection, coordination was conducted with the Iowa DNR resulting in a letter dated December 24, 2014 (Appendix B). The letter documents that the proposed project does not "take" any property from the Heritage Park boundary, but includes the construction of a 10-foot wide pedestrian/bicycle facility along the south and east boundary of the park property to provide a safe route for pedestrians and cyclists to travel across I-35. The pedestrian/bicycle facility is considered an enhancement to the City's park system and to Heritage Park.

5.1.5 Bicycle and Pedestrian Facilities

Currently within the project area there are pedestrian/bicycle facilities along the north side of East 1st Street and along the west side of Delaware Avenue (see **Figure 5-1 to 5-13** *Environmental Constraints*). As part of the proposed widening of East 1st Street, the existing sidewalk would be relocated and a 10-foot wide pedestrian/bicycle facility would be constructed to extend through the East 1st Street/I-35 interchange to provide pedestrians and cyclists a safe connection from the existing pedestrian/bicycle facilities west of I-35 to areas east of I-35.

Impacts of the No Build Alternative

Under the No Build Alternative sidewalks within the project area would remain the same. There would be no connectivity of the pedestrian/bicycle facilities west of I-35 to the areas east of I-35 on East 1st Street.

Impacts of the Preferred Alternative

Under the Preferred Alternative sidewalks would be temporarily closed during construction and permanently relocated to match the geometry of the improved East 1st Street/Delaware Avenue intersection design. Beneficial improvements to the pedestrian/bicycle facilities include extending the existing East 1st Street sidewalk on the west side of I-35 with a 10-foot wide pedestrian/bicycle facility to the areas east of I-35. The East 1st Street and Delaware Avenue sidewalks would be temporarily impacted and relocated during construction of the proposed project.

5.1.6 Right-of-Way

As part of the proposed improvements under the Preferred Alternative, additional right-of-way would be required. This section provides information regarding the right-of-way requirements. Within the project area East 1st Street and I-35 currently have four (4) travel lanes. The East 1st Street/Frisk Drive and East 1st Street/Creekview Drive intersections, as well as the East 1st Street/I-35 interchange, would be reconstructed with the proposed action. A pedestrian/bicycle facility would also be constructed to connect existing pedestrian/bicycle facilities on East 1st Street and Delaware Avenue to areas east of I-35. Much of the proposed improvements would occur within existing Iowa DOT right-of-way.

Impacts of the No Build Alternative

No construction activities would occur with the No Build Alternative. Therefore, under the No Build Alternative there would be no acquisition of right-of-way.

Impacts of the Preferred Alternative

The right-of-way requirement for the Preferred Alternative was estimated using the preliminary impact area for the conceptual design. The Preferred Alternative would require approximately 20.3 acres of public and private right-of-way including residential, commercial, and industrial properties from a total of 54 parcels. Approximately 2.78 acres of temporary easements and approximately 17.56 acres of permanent easement/fee title will be acquired. Total right-of-way acquisition needs would be determined in the final roadway design phase. However, no residential, commercial, or industrial structures would be displaced by construction of the Preferred Alternative.

Short term impacts to residents, businesses and industries located in the vicinity of the project may occur as a result of work activities, and construction detours associated with roadway and interchange improvements. Traffic would also be affected by temporary road closures on East 1st Street as the interchange is reconstructed.

Property owners would be compensated for property acquisitions as determined by Iowa DOT and FHWA guidelines and process of right-of-way acquisitions. Right-of-way acquisitions would be conducted in accordance with the Real Property Acquisition Policies Act of 1970, as amended by the Surface Transportation Assistance Act of 1987 and 49 Code of Federal Regulations, Part 24, effective April 1989. In addition, a continually updated construction schedule for the proposed interchange would be made available to the public and distributed to local media sources.

5.1.7 Construction and Emergency Routes

This section addresses potential impact from construction of the proposed project and impacts on emergency routes. It is necessary that emergency response vehicles and services have adequate roadway access to all residential, commercial, and industrial structures. Police and emergency responders use routes that are designated to reduce response time. Construction activities can require altering access that may result in lengthened emergency response times. Nursing homes, hospitals, schools, daycares, and industries that handle hazardous materials are especially sensitive to delays in emergency response times.

Construction

Traffic delays due to congestion in and around construction zones and temporary lane closures are expected during construction activities of the Preferred Alternative. Two (2) lanes of traffic would be maintained on I-35 and interchange movements would be maintained during construction. Minor traffic delays are anticipated and temporary lane closures may be required for bridge construction activities. In order to minimize impacts, construction may take place during the night-time hours to minimize traffic delays and lane closures during peak hours.

Properties with access to East 1st Street within the project area would be temporarily impacted by construction activities. However, alternative access points onto Delaware Avenue, Frisk Drive or East 1st Street outside of the construction area would be possible. The newly constructed interchange at NE 36th Street would also aid in minimizing the impacts from the East 1st Street/I-35 interchange construction activities. Impacts to emergency response vehicles and services are expected to be minor.

Emergency Routes

Emergency service providers that serve the project area include the City of Ankeny's Emergency Medical Services (EMS) Division of the Ankeny Fire Department. EMS services are provided by the Ankeny Fire Department with three (3) ambulances and two (2) fire engines equipped with parametric facilities. The nearest hospitals that provide trauma or emergency care are located in Des Moines.

Impacts of the No Build Alternative

Under the No Build Alternative access to and from emergency services would continue along the routes currently used. It would be necessary to use I-35 to transport persons with injuries and illnesses requiring trauma or emergency care to facilities in downtown Des Moines. Emergency response times could be adversely affected by using the increasingly congested local arterial roadways and interstate.

Impacts of the Preferred Alternative

Construction of the proposed action may be phased to minimize disruption to businesses and residences. Temporary pavement may be used to maintain traffic circulation and access to properties. Detailed construction staging and phasing would be developed during final design of the proposed project and be provided in construction staging plans. It is anticipated that the Preferred Alternative would have minimal impact to traffic movement and access, although temporary lane closures may be necessary.

The public safety facilities would not be directly impacted by the Preferred Alternative. Impacts to emergency services are anticipated to be minimal and additional coordination with emergency

service providers would occur during construction of the project in order to facilitate planning alternate routes for emergency vehicles. At a minimum, temporary access would be provided so that fire protection, law enforcement, and other emergency services could be maintained for all businesses and residences.

5.1.8 Transportation

Transportation resources for movement of people and materials within the project area include passenger and freight vehicles, pedestrian, bicycle and public transit buses. There are not water modes or rail modes of transportation within the study area.

The nearest air transportation facilities are Ankeny Regional Airport, approximately one (1) mile southeast of the study area, and Todd Field Airport, a privately owned and operated airport located adjacent to the northern study area boundary. The airspace of the Ankeny Regional Airport is controlled by the Federal Aviation Regulations (FAR) Part 77, Objects Affecting Navigable Airspace. Airspace of Todd Field Airport is not controlled by FAR.

Vehicle and Freight Operations

According to the 2014 IJR the percentage of truck traffic on I-35 traveling northbound is 12% and those travelling southbound is 13%, indicating the corridor can generate a significant amount of freight traffic. The percentage of trucks using the ramps at the East 1^{st} Street/I-35 interchange is 4%.

The 2014 IJR provided the 2008 and the projected 2035 traffic volumes in the project area (see **Table 3:** *Average Daily Traffic* in Section 3.2.1). Traffic volumes on I-35 are projected to nearly double by 2035 and significant increases are expected in traffic volumes along East 1st Street.

Pedestrian and Bicycle Facilities

The former Chicago and North Western (CNW) railroad corridor that has been converted to a multiuse recreational trail, the High Trestle Trail, is located approximately one (1) mile west of the study area. An off-street pedestrian/bicycle facility extends from the High Trestle Trail along the north side of East 1st Street to Delaware Avenue. An off-street pedestrian/bicycle facility is also located along the west side of Delaware Avenue within the project area.

Public Transit Service

Public transit services are provided through the project area weekdays from 6:00 am to 12:45 pm. The Des Moines Area Regional Transit Authority (DART) Express Route 98 services Ankeny and the Des Moines Area Community College (DMACC) campus in Ankeny. Within the project area, Express Route 98 travels east on East 1st Street, south onto I-35 and continues into Des Moines. There are scheduled stops at the Mercy North Park and Ride located immediately west of the project area.

Impacts of the No Build Alternative

Under the No Build Alternative roadways, intersections, the East 1st Street/I-35 interchange and pedestrian/bicycle facilities in the project area would remain unchanged. Traffic volumes on East 1st Street and I-35 would likely continue to increase while roadway capacity would remain the same. In addition, no pedestrian/bicycle facility would be constructed connecting pedestrians and cyclists in areas east of the project area to pedestrian/bicycle facilities on East 1st Street and Delaware Avenue to better serve this mode of travel.

Impacts of the Preferred Alternative

Construction of the Preferred Alternative would result in temporary roadway disruptions in the project area. Through traffic would be maintained on I-35, Delaware Avenue and Creekview Drive at all times. Through traffic would be maintained on East 1st Street at all times, except during the I-35 bridge removal and replacement activities. Temporary single-lane closures on I-35 may occur during off-peak travel times. However, there would be no lane closures on I-35 during peak times.

Temporary closing of the interchange during reconstruction would require emergency response vehicles to use alternate routes to access areas east of I-35. The nearest alternative routes to the East 1st Street/I-35 interchange include the NE 36th Street/I-35 interchange, two (2) miles north, and the Oralabor Road/I-35 interchange, two (2) miles south. It would also be necessary for transit bus Express Route 98, passenger and freight vehicle traffic to use an alternate interchange to access the project area during I-35 bridge removal and replacement activities. Closure of the interchange would be kept to a minimum.

Ankeny Regional Airport and Todd Field airspace would not be affected by construction of the proposed project.

Reconstruction of the East 1st Street/I-35 interchange would improve interchange operations and provide safe access to and from I-35. Additional lanes and intersection improvements on East 1st Street would also improve traffic movement and reduce congestion throughout the project area. Passenger vehicles, freight traffic, and emergency responders would benefit from increased efficiency of the roadways and intersections in the project area.

Construction of a 10-foot wide pedestrian/bicycle facility through the East 1st Street/I-35 interchange would provide pedestrians and cyclists with a safe connection from the existing pedestrian/bicycle facilities on East 1st Street and Delaware Avenue to areas east of I-35.

Access to properties along East 1st Street, Creekview Drive and NE Frisk Drive would be maintained at all times. However, residential and commercial access within the project area may be temporarily impacted by traffic delays and detours during the construction of the Preferred Alternative.

The Preferred Alternative is consistent with local and regional transportation planning.

5.2 Cultural Impacts

This section identifies existing historic and archaeological resources and the potential impact of the Preferred Alternative on these resources. According to Title 36 CFR, Part 800.8, federal agencies are encouraged to coordinate compliance of Section 106 to meet requirements for NEPA. Title 36 CFR, Part 800.8 requires federal agencies to take into consideration the potential effects of federally funded projects on historical properties (buildings, structures, sites, districts or objects) listed or eligible for listing on the National Register of Historic Places (NRHP). Section 106 coordination took place early in the process of this proposed action to fulfill these requirements.

The East 1st Street/I-35 project area was assessed to determine whether historic cultural resources are present and whether temporary or permanent easements would impact historically significant properties.

5.2.1 Historical Sites or Districts

In partial fulfillment of the requirements of Section 106 of the National Historic Preservation Act, archaeological investigations conducted within and adjacent to the boundaries of the proposed project area were reviewed. Phase 1 archeological and architectural surveys were conducted of portions of the project area in 2004 and 2009.

- Phase 1 Cultural Resources Survey Interstate 35, Ankeny to Elkhart Road, June 2004
- Phase 1 Archaeological Investigation I-35/1st Street Interchange, September 2009.

No historic structures or sites eligible for the NRHP were identified within the portions of the proposed project area covered by these investigations.

Two (2) segments are located outside the coverage of previous studies. One (1) segment is on the east end of the project area on Frisk Drive and one (1) segment is on the west end of the project area Delaware Avenue. These areas outside of the previous archaeological/architectural investigations are located in heavily disturbed urban areas. As a result, on December 22, 2014 the Iowa DOT determined the two (2) segments have low potential to contain intact archaeological resources and no further investigation was required.

Impacts of the No Build Alternative

No known resources are located within the project area and no construction would occur under the No Build Alternative. Therefore, no historic sites or districts would be impacted under the No Build Alternative.

Impacts of the Preferred Alternative

Iowa DOT determined no historic properties or NRHP-eligible sites would be affected by the proposed project in the areas included in the 2004 and 2009 archaeological investigations. Iowa SHPO concurred with this determination on October 30, 2009 (Appendix B). On December 22, 2014 the Iowa DOT determined the two (2) areas lack any evidence of historic structures.

In the event that previously unidentified cultural resources are discovered during construction, all construction and excavation activities would cease, the area would be secured to prevent disturbance and the Iowa DOT, and the Iowa SHPO or the Office of the State Archaeologist (OSA) would be contacted immediately.

5.2.2 Archaeological Sites

The 2004 and 2009 archaeological investigations described in Section 5.2.1 consisted of pedestrian surveys, shovel testing, and soil probing. The 2004 investigation resulted in the identification of three (3) newly recorded archaeological sites. However, the sites were not located within the current proposed project area. No new archaeological sites were located during the 2009 investigation and no further investigation was recommended at the time.

The areas located outside of the previous archaeological investigations are located in heavily disturbed urban area. As a result, on December 22, 2014 the Iowa DOT determined the areas have low potential to contain intact archaeological resources and no further investigation was required.

Impacts of the No Build Alternative

The No Build Alternative would not result in the widening of East 1st Street and I-35 in the project area. No construction activities would occur with the No Build Alternative, therefore, no archaeological sites would be impacted.

Impacts of the Preferred Alternative

The Iowa DOT determined no archaeological sites would be affected by the proposed project in the areas included in the 2004 and 2009 archaeological investigations. Iowa SHPO concurred with this determination on October 30, 2009 (Appendix B). Because the areas located outside of the previous investigations have a low potential for containing undiscovered archaeological resources, the Iowa DOT concluded no archaeological resources would likely be affected by the proposed project and no further work is warranted.

In the event that previously unidentified cultural resources are discovered, all construction and excavation activities would cease, the area would be secured to prevent disturbance, and the Iowa DOT, and Iowa SHPO or OSA would be contacted immediately.

Human remains and mortuary features have not been identified within the project area. It is not anticipated that items of this nature would be encountered during construction of the proposed action. However, human remains, mortuary features, and grave-associated funerary objects discovered within the project area are protected by Iowa Codes 114.34 and 263B.9, and the Iowa Administrative Code Section 685, Chapter 11. In accordance with the Iowa Code, construction and excavation activities would cease and the area secured to prevent disturbance if items of this nature are encountered. The Iowa DOT, Iowa SHPO or the OSA Director of the Burials Program would be contacted immediately.

5.3 Natural Environment Impacts

This section characterizes the natural resources in the project area and addresses potential impacts of the No Build Alternative and the Preferred Alternative. The resources discussed are wetlands, surface waters and water quality, floodplains, threatened and endangered species, woodlands and farmland.

5.3.1 Wetlands

Waters of the U.S., including wetlands, waterways, lakes, natural ponds, and impoundments, are regulated by the U.S. Army Corps of Engineers (USACE) under Section 404 of the Clean Water Act (CWA), which requires a permit to authorize the discharge of dredged or fill material into Waters of the U.S. (33 USC 1251 et seq.). Executive Order 11990, Protection of Wetlands, requires federal agencies to implement "no net loss" measures for wetlands (42 Federal Register 26951). During final design and permitting, implementation of "no net loss" measures would include a phase approach. The phase approach would begin with wetland impact avoidance, followed by minimization of impacts if wetlands cannot be avoided, and finally mitigation.

Iowa DOT's Office of Location and Environment (OLE) conducted a wetland review of the project area and prepared a summary of the findings dated October 22, 2013. Due to the project design modifications, OLE conducted a revised wetland review and prepared a revised summary of findings dated August 29, 2014. Twenty-nine (29) wetlands were identified within the project

area covering a total of 1.41 acres including approximately 1.24 acres of emergent wetland, 0.05 acre of shrub-scrub wetland and 0.12 acre of forested wetland.

Table 7: *Potential Impacts to Wetlands* lists the wetlands identified by their type, size, and area of impact (see Figure 5-1 to 5-13 *Environmental Constraints* for wetland locations).

Wetland ID	Wetland Type	Wetland Size (acres)	Area Impacted (acres)
1	Emergent	0.002	0.002
2	Emergent	0.005	0.005
3	Emergent	0.006	0.006
4	Emergent	0.006	0.006
5	Emergent	0.009	0.009
6	Emergent	0.121	0.093
7	Emergent	0.006	0.004
8	Emergent	0.013	0.008
9	Emergent	0.034	0.034
10	Emergent	0.024	0.024
11	Emergent	0.028	0.002
12	Emergent	0.054	0.026
13	Shrub-scrub	0.013	0.005
14	Forested	0.016	0.000
15	Forested	0.029	0.000
16	Forested	0.005	0.004
17	Forested	0.016	0.001
18	Emergent	0.046	0.006
19	Emergent	0.212	0.029
20	Emergent	0.201	0.000
21	Shrub-scrub	0.045	0.045
22	Emergent	0.205	0.022
23	Emergent	0.074	0.000
24	Forested	0.085	0.023
25	Emergent	0.006	0.000
26	Emergent	0.005	0.000
27	Emergent	0.034	0.000
28	Emergent	0.095	0.000
29	Emergent	0.017	0.000
	Total	1.41	0.35

Table 7: Potential Impacts to Wetlands

Impacts of the No Build Alternative

No construction activities would occur with the No Build Alternative. Therefore, the No Build Alternative would not impact wetlands in the project area.

Impacts of the Preferred Alternative

The current design for the Preferred Alternative anticipates construction activity may impact 20 of the 29 wetlands in the project area, a total of approximately 0.35 acres.

The Preferred Alternative would result in the placement of fill material into jurisdictional wetlands and a Section 404 permit would be required from the USACE prior to construction. This permit would be submitted as a part of the Joint Application Form during final project design. A wetland mitigation plan would also be required per USACE guidelines. Mitigation for wetland impacts would be determined during the permitting process and can include measures such as mitigation banking, on-site mitigation, and off-site mitigation. The project is located within the service area of the Voas Mitigation Bank.

5.3.2 Surface Waters and Water Quality

Water resources include rivers, lakes, ponds, and other surface water bodies. For the purpose of this analysis, the topic of water quality is also assumed to apply to groundwater. Important criteria in evaluating surface water and groundwater are adequate quantity and quality of these waters. Surface water features in the project area were determined through the use of aerial photography and topographic mapping.

The project area is located entirely in the Fourmile Creek Watershed. Fourmile Creek is a 116 square-mile watershed that begins in southern Boone County and drains much of north-central Polk County. The banks of Fourmile Creek are heavily wooded along most of the channel. Fourmile Creek flows through eastern Des Moines and eventually empties into the Des Moines River (see **Figure 5-1 to 5-13** *Environmental Constraints*).

During field reviews conducted in 2013 and 2014, Fourmile Creek and four (4) of its tributaries were observed within the project area. Fourmile Creek is a perennial stream that flows under existing bridges on I-35 and East 1st Street. Additionally, the four (4) unnamed intermittent tributaries to Fourmile Creek flow through existing culverts under I-35. All of these streams meet criteria to be identified as Waters of the U.S. (WUS).

Fourmile Creek was listed in 2002 as impaired waters under Section 303(d) of the 1972 CWA for low biotic index. Section 303(d) waters are those that are not meeting water quality standards by Iowa DNR and the Environmental Protection Agency (EPA). No other water bodies in the project area are included on the Section 303(d) list of impaired waters.

Impacts of the No Build Alternative

No construction activities would occur with the No Build Alternative. Therefore, the No Build Alternative would not cause any impacts to surface waters or water quality beyond those that may be occurring under existing conditions.

Impacts of the Preferred Alternative

Construction of the Preferred Alternative would not require any new stream crossings. However, the Preferred Alternative would impact approximately 261 linear feet of Fourmile Creek under I-35. The existing I-35 bridge over Fourmile Creek is 151 ft. long by 30 ft. wide. This bridge would be replaced by a dual 176 ft. long by 75 ft. wide bridge. Also, the existing 40 ft. wide East 1st Street bridge over Fourmile Creek would be widened to 71 ft., impacting approximately 180 linear feet of stream. The unnamed tributaries to Fourmile Creek that flow under I-35 would be impacted as a result of box culvert extensions. The Preferred Alternative would potentially

impact a total of 1,687 linear feet of stream (see **Table 8**: *Potential Impacts to Surface Waters* and **Figure 5-1 to 5-13** *Environmental Constraints*).

		Potential Impacts		
Stream Name	Туре	No-Build Alternative	Preferred Alternative	
		Linear Feet	Linear Feet in Preliminary Impact Area	
Fourmile Creek (I-35)	Perennial	0	261	
Fourmile Creek (East 1 st Street)	Perennial	0	180	
#1 Unnamed Tributary to Fourmile Creek (Tributary A on FIRM Maps)	Intermittent	0	336	
#2 Unnamed Tributary to Fourmile Creek	Intermittent	0	451	
#3 Unnamed Tributary to Fourmile Creek	Intermittent	0	243	
#4 Unnamed Tributary to Fourmile Creek	Intermittent	0	216	
	Total	0	1,687	

Table 8: Potential Impacts to Surface Waters

If the proposed action involves the discharge of dredged or fill material into jurisdictional waterways, a Section 404 permit would be acquired prior to any activities within the project area. The USACE is authorized to issue Section 404 Permits for activities that result in the discharge of dredged or fill material in WUS. As discussed in Section 5.3.1, the Section 404 Permit Application for impacts to WUS would require a phase approach including avoidance, minimization, and mitigation. Mitigation for stream impacts would be determined by the USACE during the permitting process.

The project construction activities would comply with conditions of the Section 401 Water Quality Certification, administered by the Iowa DNR pursuant to Section 401 of the Clean Water Act. The Section 401 Certificate insures that impacts to water quality, such as soil erosion, sedimentation, and construction pollutants are minimized and it also represents the Iowa DNR's concurrence that the project is consistent with Iowa's Water Quality Standards, set forth in Chapter 61, Iowa Administrative Code 567. This can include measures to minimize disturbance to stream banks and riparian zones, and seeding and mulching graded areas with native plant species. During final design, a Joint Application Form would be submitted to the Iowa DNR and the USACE to obtain a Section 404 and a Section 401 Water Quality Certification.

Land disturbance activities involving more than one (1) acre require a National Pollutant Discharge Elimination System (NPDES) permit from the Iowa DNR. This stormwater runoff permit requires slope designs that prohibit or minimize erosion, and also requires standard erosion control devices be installed, inspected, and maintained throughout the construction process. The NPDES permit requires the preparation of a Storm Water Pollution Prevention Plan (SWPPP) which includes specific measures to control soil erosion, sedimentation and construction pollutants. Best Management Practices (BMPs) would be followed to avoid and minimize soil erosion including seeding, mulching, and geotextiles to stabilize soil, diverting run-off from undisturbed areas before it reaches disturbed areas, installation of sediment basins, berms, silt fence and slope drains.

Iowa DOT would obtain and comply with all necessary permits and would employ BMPs throughout construction activities. Therefore, no impacts are anticipated to surface water and water quality.

5.3.3 Floodplains

Executive Order 11988, Floodplain Management (42 FR 26951) requires that federal agencies assess the impacts of encroachment on human health, safety and welfare; and on the natural, beneficial values of the floodplain. Federal Emergency Management Agency (FEMA) mandates that projects within a regulatory floodway can cause no rise in the published base flood elevation (BFE) and a one-foot cumulative rise for projects in the base (100-year) floodplain.

FEMA Flood Insurance Rate Maps (FIRM) 1902260006B, 1902260004C, and 1909010110C, were used to identify floodplains in the project area. Fourmile Creek, Tributary A, and three (3) unnamed tributaries to Fourmile Creek are located within the project area. The three (3) unnamed tributaries have no associated floodplains. Fourmile Creek and Tributary A have 100-year floodplains identified on the FIRM (see **Figure 5-17** *Floodplain and Floodway*).

Impacts of the No Build Alternative

No construction activities would occur with the No Build Alternative. Therefore, the No Build Alternative would not impact to the floodplains or regulatory floodways in the project area.

Impacts of the Preferred Alternative

The Preferred Alternative includes widening the existing East 1st Street bridge over Fourmile Creek from 40 ft. to 54 ft. Piers would match the existing design in both width and alignment. The proposed action also includes the removal and replacement of the dual I-35 bridges over Fourmile Creek. The existing 159 ft. long, 30 ft. wide dual pre-tensioned, pre-stressed concrete beam (PPCB) bridges would be replaced with dual 176 ft. long, 75 ft. wide PPCB bridges. The proposed bridges would be designed to meet no-rise criteria based on hydraulic analysis.

Widening I-35 would also include replacement of the existing twin 8 ft. wide, 10 ft. long reinforced concrete box culvert (RCBC) with a triple 8 ft. wide, 12 ft. long RCBC at the crossing of Tributary A. This larger drainage structure would also be designed to meet no-rise criteria based on hydraulic analysis.

During final design, the Preferred Alternative would require a Joint Application Form and supporting hydraulic calculations be submitted to the Iowa DNR to obtain a Floodplain Construction Permit. Efforts would be made to minimize or reduce floodplain impact as the project proceeds into final design.

5.3.4 Threatened and Endangered Species

Section 7(c) of the Endangered Species Act of 1973 (ESA), as amended, requires federal agencies to consult with the Secretaries of the Interior and Commerce to ensure that actions are "not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of the critical habitat of such species."

Consultations were conducted with the USFWS and the Iowa DNR regarding a determination of potential effects to listed species.

A review was conducted of the USFWS list of federally-listed species, and the Iowa DNR Natural Areas Inventory (NAI) to determine the likelihood that threatened and/or endangered species would be impacted due to the construction of the proposed project. In a letter dated May 26, 2015 the USFWS identified three (3) federally listed threatened or endangered species: the western prairie fringed orchid, Indiana bat and northern long-eared bat (see **Table 9:** *Threatened and Endangered Species for Polk County*). The 2011 Iowa DNR NAI database indicated no documented occurrences of threatened or endangered species within a one-mile radius of the project.

Common Name	Scientific Name	Preferred Habitat	Federal Status	Iowa Status
Western prairie fringed orchid	Platanthera praeclara	Wet prairies and sedge meadows	Threatened	Threatened
Indiana bat	Myotis sodalis	Caves, mines (hibernacula); small stream corridors with well-developed riparian woods; upland forests (foraging)	Endangered	Endangered
Northern long-eared bat	Myotis septentrionalis	Caves, mines (hibernacula); wooded areas, upland forests (roosting, foraging)	Threatened	N/A

 Table 9: Threatened and Endangered Species for Polk County

Source: U.S. Fish and Wildlife Service, Rock Island Field Office

The bald eagle (*Haliaeetus leucocephalus*) was removed from the federal list of threatened species in 2007. However, the bald eagle is protected under the Bald and Golden Eagle Protection Act of 1940 and the Migratory Bird Treaty Act of 1918. This species breeds along large rivers, lakes and reservoirs. The eagle feeds in open water and roosts in large shoreline trees. Potentially suitable habitat for the bald eagle does not exist within the project area.

According to the USFWS, western prairie fringed orchid occurs in mesic to wet unplowed tallgrass prairies and meadows. Potentially suitable habitat for the western prairie fringed orchid does not exist within the project area.

The project falls within a county designated by the Iowa DNR and USFWS as summer range for the Indiana bat (*Myotis sodalis*) and the northern long-eared bat (*Mytosis septentrionalis*). The project area contains both greater than 15% forest cover and permanent water within a ¹/₂-mile radius, thus suitable habitat for the Indiana bat and northern long-eared bat may be present. On July 11, 2013 a field survey was conducted of the project area to search for suitable bat roost trees. The field survey determined a total of 16 potential roost trees are present in the project area.

Impacts of the No Build Alternative

No construction activities would occur with the No Build Alternative. Therefore, under the No Build Alternative would not impact rare, threatened or endangered plants or animals in the project area.

Impacts of the Preferred Alternative

Sixteen trees suitable for Indiana bat and northern long-eared bat summer roosting and foraging habitat were identified within the project area (see **Figure 5-1 to 5-13** *Environmental Constraints*). Potential harmful effects to the Indiana bat and northern long-eared bat and their preferred habitat would be minimized by conducting necessary tree removal activities after September 30th and before April 1st.

Based on literature, data review and field surveys for the project, the Iowa DOT has determined, under the delegation authority provided by FHWA, that the proposed project is not likely to adversely affect federal or state-listed species or result in the destruction or adverse modification of federally designated habitat. The USFWS concurred with this determination on July 28, 2015.

5.3.5 Woodlands

According to the Iowa DOT an area is considered woodland if:

- The area consists of three (3) acres or greater of forested land having at least 200 trees (3-inch diameter at breast height [dbh] or greater) per acre; or
- The area consist of 0.5 acres of forested land having at least 200 trees (3-inch dbh or greater) per acre and is connected to a larger tract of forested land with the entire area being greater than three (3) acres (not including treed fence rows, property lines, etc)

The Iowa DOT does not consider woodland impacts to occur if the area of impact is less than two (2) acres.

Woodlands within the project area occur along the riparian area adjacent to the Fourmile Creek in the north and east portions of the project area (see **Figure 5-1 to 5-13** *Environmental Constraints*). This riparian area is characterized by floodplain woodlands that are dominated by tree species such as box-elder, hickory, cottonwood, and American elm. Approximately 10.22 acres of woodlands are located within the project area.

Impacts of the No Build Alternative

No construction activities would occur with the No Build Alternative. Therefore, the No Build Alternative would have no impact on the identified woodland area.

Impacts of the Preferred Alternative

Of the approximately 10.22 acres of woodland located within the project area, approximately 1.75 acres are within the preliminary impact area for the Preferred Alternative (see **Figure 5-1 to 5-13** *Environmental Constraints*). According to the Iowa DOT standard, woodland mitigation would not be required with the Preferred Alternative because the woodland impacts are less than two (2) acres. However, in accordance with Iowa Code 314.23, *Environmental Protection*, woodland removed is required to be replaced by planting 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. The City of Ankeny is considering various options to mitigate for impacts due to the proposed action and would commit to and implement the mitigation.

5.3.6 Farmlands

The Farmland Protection Policy Act of 1981 (FPPA) requires federal agencies to consider project impacts to farmland and consider steps to minimize the unnecessary and irreversible conversion of farmland to other uses. Prime and unique farmland classification is based on soil type, slope and current land uses. Important farmlands consist of prime farmland, unique farmland, and farmland of statewide or local importance. Land that is in or committed to urban development or water storage does not qualify as farmland and is not subject to the FPPA.

Approximately 11.85 acres of farmland is located in the project area.

Impacts of the No Build Alternative

No construction activities would occur with the No Build Alternative. Therefore, the No Build Alternative would have no impact to farmland.

Impacts of the Preferred Alternative

Of the 11.85 acres of farmland located in the project area the Preferred Alternative would directly convert approximately 6.2 acres to right-of-way. In accordance with the FPPA, Form AD-1006 *Farmland Conversion Impact Rating* was completed and submitted to the Natural Resource Conservation Service (NRCS) to evaluate potential impacts to prime farmland (Appendix C). The evaluation resulted in a rating of 107, a rating less than 160. Based on this rating, impacts to prime farmland are not expected to be significant.

5.4 **Physical Impacts**

This section characterizes physical resources in the project area and addresses potential impacts of the No Build Alternative and the Preferred Alternative. The resources discussed are noise, contaminated and regulated materials sites, and utilities.

5.4.1 Noise

A traffic noise impact analysis was completed at 14 receptor locations along the proposed project corridor in October 2009 (see **Figure 5-18** *Noise Traffic Analysis*). The analysis was conducted in accordance with the FHWA Noise Standard, 23 CFR Part 772 requirements and the Iowa DOT's traffic noise policy. The purpose of the noise impact analysis was to determine the noise levels in the project area and to predict the impact of traffic noise relative to the Noise Abatement Criteria (NAC) noise levels established in FHWA regulations.

A receptor is defined as a location of a noise sensitive area. A receptor is considered to have a project related traffic noise impact if noise levels approach or exceed the NAC. A noise level of 1 dB(A) less than the NAC constitutes approaching the NAC. Noise impact areas are identified with noise values greater than 67 dB(A) for parks/residential areas or 72 dB(A) for developed lands/commercial areas.

According to the Iowa DOT traffic noise policy, noise abatement must be evaluated for feasibility and reasonableness if traffic noise impacts are identified. Feasibility refers to the ability to provide abatement in a given location considering the acoustic and engineering limitations of the site. A noise abatement option must achieve a 5 dB(A) traffic noise reduction at an impacted receptor to be considered feasible. In addition, each of the following three (3) factors must be met in order for noise abatement to be considered reasonable:

- Noise abatement measures shall not exceed a cost of \$40,000 per benefitted receptor.
- Noise abatement measures must provide a benefit of a minimum of 10 dB(A) for at least one (1) benefitted receptor.
- Viewpoints must be obtained of owners and residents considered benefitted by a noise abatement option that meets the above criteria.

Noise impacts from the proposed action were projected using the FHWA Traffic Noise Model (TNM) 2.5. **Table 10:** *Noise Levels at Representative Project Receptors* below summarizes the TNM noise level results for the representative receptors and compares 2009 existing conditions with build conditions for the proposed action.

Receptor ID	Land Use	Existing Conditions 2009 Traffic [dB(A)]	No Build Alternative 2030 Traffic [dB(A)]	Preferred Alternative 2030 Traffic [dB(A)]	Existing vs. No Build [dB(A)]	Existing vs. Preferred [dB(A)]
1	Residential	67	71	70	4	3
2	Residential	70	75	75	5	5
3	Residential	65	70	69	5	4
4	Residential	76	79	78	3	2
5	Residential	71	75	74	4	3
6	Residential	66	67	66	1	0
7	Residential	65	71	71	6	6
8	Park	55	56	56	1	1
9	Park	56	57	57	1	1
10	Park	62	62	62	0	0
11	Residential	61	61	61	0	0
12	Residential	62	63	62	1	0
13	Golf Course	65	68	67	3	2
14	Residential	62	63	63	1	1

 Table 10: Noise Levels at Representative Project Receptors

Note: Noise levels in "bold" approach or exceed the NAC.

Impacts of the No Build Alternative

Five (5) receptors approach or exceed the NAC under 2009 existing conditions. Under the No Build Alternative, noise levels in 2030 are predicted to be between 0 and 6 dB(A) higher than the 2009 existing noise levels. Of the 14 receptors analyzed, eight (8) would approach or exceed the NAC under the No Build Alternative.

Impacts of the Preferred Alternative

Under the Preferred Alternative noise levels in 2030 are predicted to be between 0 and 6 dB(A) higher than the 2009 existing noise levels. Of the 14 receptors analyzed, eight (8) receptors would approach or exceed the NAC.

Consideration of noise abatement design features is required by federal and state policy for the locations with noise impacts exceeding NAC levels. Noise abatement is used where it is

reasonable and feasible. Determining reasonableness and feasibility of noise abatement is accomplished by weighing the overall benefits against overall adverse social, economic and environmental affects. Factors considered include the number of residences benefitted, cost, opinions of affected residents, absolute noise level, change in noise level, and timing of adjacent land use construction. Noise abatement features are not likely to be included in the final design for the proposed project due to the following factors (as listed in the Iowa DOT's "*Highway Traffic Noise: Analysis and Abatement*"):

- 1. *Timing of Adjacent Land Use Construction*: The timing of development adjacent to the highway compared to the time of initial construction of the highway was considered. The Iowa DOT does not generally construct noise barriers for developments occurring after the original highway construction. The adjacent developments were built well after I-35, which was constructed in the 1960's.
- 2. *The Change in Noise Level*: As seen in Table 10 above, the majority of receptors experienced a projected traffic noise decrease if the proposed project were built (the 2030 No Build projected noise levels are slightly higher than the 2030 Preferred Alternative projected noise levels). The Preferred Alternative would move the southbound off-ramp and on-ramp away from some receptors resulting in reduced noise levels.

Because the land uses adjacent to I-35 were developed many years after the original construction of I-35 and because the Preferred Alternative is projected to slightly reduce traffic noise levels below those projected for the No Build Alternative, it is likely that no special noise abatement features would be included in the final project design.

During construction of the propose action, noise from construction equipment and construction activities would add to the noise environment in the immediate project area. Operation of construction equipment would generate ground vibrations, although, the vibrations are not expected to be of a sufficient magnitude to affect normal activities of occupants in the project area. Construction equipment would conform to specifications requiring the contractor to comply with local noise control rules, regulations and ordinances.

Although construction noise impacts would be temporary, best management practices (BMPs) would be implemented to minimize noise impacts including limiting operation of heavy equipment to non-sleeping hours, maintaining effective mufflers on equipment and limiting unnecessary idling of equipment. In addition, community members would be informed of the possible inconvenience related to the project and its approximate duration. It is the policy of the Iowa DOT that information concerning upcoming project construction be submitted to all local news media.

5.4.2 Contaminated and Regulated Materials Sites

Properties in the project area where hazardous materials have been stored may present a future risk if spills or leaks have occurred. Contaminated or potentially contaminated properties are of concern for transportation projects because of the associated liability of acquiring the property through ROW purchase, the potential cleanup costs, and safety concerns related to exposure to contaminated soil, surface water, or groundwater.

A Phase 1 Environmental Site Assessment (ESA) for hazardous materials was performed to identify sites within the project area that are contaminated or potentially contaminated with

hazardous materials. The ESA involved data collection for the area within one (1) mile of the proposed project, including a review of available federal, state, local and tribal records.

The U.S. Environmental Protection Agency (EPA) in Kansas City, Kansas was contacted to identify regulated materials sites within or adjacent to the project area. The following types of sites were requested to be identified through this environmental assessment:

- Resource Conservation and Recovery Information System (RCRIS) sites, in support of the Resource Conservation and Recovery Act (RCRA);
- Toxic Release Inventory (TRI) sites;
- Permit Compliance System (PCS) sites, in support of the National Pollutant Discharge Elimination System (NPDES);
- Aerometric Information Retrieval System (AIRS) sites;
- Comprehensive Environmental Response Compensation and Liability Act (CERCLA) sites, also known as Superfund sites; and
- Any other known regulated materials sites that fall under the jurisdiction of the EPA.

In addition to the EPA, a radius report identifying sites of environmental concern was obtained from Environmental Data Resources (EDR). Iowa DNR files were also examined regarding hazardous materials, spills, underground storage tank (UST), leaking underground storage tanks (LUSTs), hazardous substance disposal sites, and permanent solid waste related activities. Information found during the review of the identified sources can be found in **Table 11**: *Facilities Listed on EPA or Iowa DNR Environmental Records Databases*.

Facility	Address	Search Distance*	Environmental Records Database	Recognized Environmental Condition (REC)
C Drothor's I TD	1024 NE 1 st Street	Project area	RCRA - NonGen	No
S Brother's LTD Casey's General		1 lojeet alea	LUST	No
Store			HIST LUST	No
			UST	No
Kum & Go #92	1025 East 1 st Street	Project area	RCRA - NonGen	No
			LUST	Yes
			HIST LUST	No
I-35 Standard	113 SE Delaware Avenue	Droigat grag	RCRA - NonGen	No
1-55 Standard	115 SE Delaware Avenue	Project area	LUST	No
			HIST LUST	No
			UST	No
			HIST UST	No
City of Ankeny	101 SE Delaware Avenue	Project area	UST	No
		-	HIST UST	No

Table 11: Facilities Listed on EPA or Iowa DNR Environmental Records Databases

Facility	Address	Search Distance*	Environmental Records Database	Recognized Environmental Condition (REC)
AIRGAS North	410 SE Creekview Drive	Project area	RCRA - NonGen	No
Central		5	TRIS	No
			AIRS	No
East Treatment Plant	210 SE Creekview Drive	Project area	HIST UST	No
		-	UST	No
QuikTrip #514	802 East 1 st Street	0.15 miles	UST	No
			LUST	No
Cargill, Inc.	728 SE Creekview Drive	0.05 miles	UST	No
			HIST UST	No

*ASTM-Specified distance

The UST and LUST sites do not pose an immediate risk to the project area. Kum & Go #92, located at 1025 East 1st Street, is determined to be a Recognized Environmental Condition (REC) site within the project area. The site has undergone the Iowa DNR Tier 2 process, identifying "groundwater vapor to enclosed space" and "soil vapor to enclosed space." The site is currently classified by the Iowa DNR as "low risk." Construction activities would make every effort to avoid impacts to contaminated soil at the site.

Field surveys were conducted in October 2009 and May 2013. No evidence of additional regulated materials sites was identified during the field surveys.

Impacts of the No Build Alternative

The No Build Alternative would not involve construction of the proposed action and regulated materials sites would not be affected. Any contamination at sites has the potential to migrate. Petroleum contamination could possibly degrade naturally over time.

Impacts of the Preferred Alternative

In the event of a release of a hazardous substance in an amount equal to or greater than the reportable quantity established by the EPA, the responsible party would contact the EPA's National Response Center. Details of the incident would be reported and measures would be taken to reduce the effects of the release.

Other than waste generated during normal construction and demolition activities, the project would not generate any regulated materials. All known and unknown hazardous materials encountered during roadway construction would be handled according to federal, state, and local laws and regulations. Where hazardous material or solid waste is identified in the required right-of-way acquisitions, resolution with the property owner would be conducted prior to purchase. If an unknown site is encountered during construction, the Iowa DOT and the Iowa DNR would be contacted and appropriate laws and EPA regulations would be followed to eliminate or minimize any adverse environmental consequences.

5.4.3 Utilities

The potential for the proposed project to affect utilities within the project area was considered by identifying utility locations and orientations in relationship to East 1st Street and I-35. Potential effects were evaluated with respect to major utilities nearby, or located within the right-or-way of the Preferred Alternative. The utilities within the project area include storm sewer, sanitary sewer, water, electric, natural gas, telephone, cable television, and internet. These utilities include:

- MidAmerican Energy electric, natural gas
- Black Hills Energy electric, natural gas
- Mediacom cable
- City of Ankeny sanitary sewer
- Windstream internet, phone
- Iowa Network Services internet, phone
- Des Moines Water Works water
- Northern Natural Gas natural gas
- Century Link internet, phone
- Iowa Communications Network fiber optic internet, phone

Impacts of the No Build Alternative

No construction activities would occur with the No Build Alternative. Therefore, the No Build Alternative would have no impact to utilities.

Impacts of the Preferred Alternative

As detailed design plans are developed for the Preferred Alternative, construction activities would be coordinated with public utilities to avoid potential conflicts and to minimize planned interruptions to service. When service interruptions are unavoidable effort would be made to limit their duration.

5.5 Cumulative Impacts

This section considers the potential cumulative impacts of the proposed action combined with other past, present and reasonably foreseeable future actions.

A cumulative impact is 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. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time" (40CFR 1508.7). This includes impacts as a result of other federal, state, and private actions. Reasonably foreseeable actions are not speculative, are likely to occur based on reliable sources, and typically are characterized in planning documents.

Cumulative impacts of the proposed action were evaluated in accordance with CEQ guidance. The assessment focused on several resources susceptible to cumulative impacts. The timelines of foreseeable major projects and the timeframe of the proposed action were compared to assess the combined effects on resources. The cumulative impact assessment also considered the region's resources to determine whether any regionally significant impact could occur.

Roadway projects that are planned, under construction, or recently completed in or near the study area are listed below. Construction of these projects may not occur during the same period as the proposed project, however, they are included in the following list of actions being considered with the cumulative impacts assessment. See **Figure 5-19** *Planned Roadway Projects*.

The Preferred Alternative has been designed to avoid and minimize impacts to resources to the greatest extent possible. Remaining impacts that cannot be avoided would be mitigated. The construction of the Preferred Alternative would be a beneficial impact for the safe and efficient movement of passengers and freight vehicular traffic, transit, and pedestrian traffic. In addition, it would have a positive effect on the commercial and economic productivity of the corridor as the community improves access to commercial businesses within the corridor.

The City of Ankeny has a comprehensive plan in place to allow for the development that is consistent with the goals of the community. The City has been coordinating with the Iowa DOT on the proposed action to ensure that it is consistent with local land use plans, goals and objectives, connecting roadway facilities and adjacent residential, commercial and industrial land uses. As a result, the overall cumulative impact of the proposed action to the social and environmental resources has been evaluated and is not considered to be collectively significant.

Previous Actions

Residential development has resulted in increased traffic volumes in areas within and adjacent to the proposed project. The area east of the proposed project is experiencing a conversion of agricultural land to low and medium density residential development. Agricultural and undeveloped land still remains north and east of the project area. In order to accommodate growth and development, the infrastructure has been extended into areas surrounding the project vicinity.

The following list of recent infrastructure improvements has made the community more accessible and enables continued residential and commercial development while accommodating capacity demands on local and regional roadways.

- East 1st Street widening from four (4) lanes to five (5) lanes, undivided, from Trilein Drive to Delaware Avenue.
- I-35 widening from four (4) lanes to six (6) lanes divided from East 1st Street to NE Mixmaster.
- Corporate Woods Drive new interchange
- Corporate Woods Drive realign two (2) lanes, SE Delaware Avenue to NE 29th Street
- I-35/NE 36th Street new interchange
- SW Irvinedale Drive reconstruction, Phase 3

Present and Reasonably Foreseeable Actions

The projects listed in **Table 12**: *Present and Reasonably Foreseeable Actions* are programmed in the State Transportation Improvement Program (STIP) or planned with local funds.

Present and Reasonably Foreseeable Actions				
2015				
Road	Jurisdiction	Planned	Project	
State Street/ West 1 st Street	Ankeny	Planned	Intersection improvements	
NW 72 nd Place	Polk County	Planned	Bridge replacement over Saylor Creek	
2016		I		
Road	Jurisdiction	Status	Project	
I-35/ NE 54 th Avenue	Iowa DOT	Planned	Bridge replacement	
NE 22 nd / Delaware Ave	Iowa DOT	Planned	Bridge replacement over I-80/I-35	
Oralabor Road/ Delaware Avenue	Ankeny	Planned	Oralabor Road/Delaware Avenue intersection improvements	
2017	I			
Road	Jurisdiction	Status	Project	
NE 36 th Street	Iowa DOT	Planned	Reconstruction, widening, US-69 to Delaware Boulevard	
I-35	Iowa DOT	Planned	Bridge Replacement, CO RD E-57 over I-35	
2018			1	
Road	Jurisdiction	Status	Project	
Delaware Avenue	Ankeny	Planned	Widen, 5 th Street to 18 th Street	
2025			·	
Road	Jurisdiction	Status	Project	
Oralabor Road	Ankeny	Planned	Widen from two (2) lanes to four (4) lanes, I-35 and NE 29 th Street	
SW Magazine Road	Ankeny	Planned	Add four (4) lanes, SW State Street to South Ankeny Boulevard	
I-35/I-80	Iowa DOT	Planned	Widen from six (6) lanes to eight (8) lanes, NE Mixmaster Interchange to West Mixmaster Interchange	

Table 12: Present and Reasonably Foreseeable Actions

2035			
Road	Jurisdiction	Status	Project
East 1 st Street	Ankeny	Planned	Widen from four (4) lanes to five (5) lanes from Ankeny Boulevard to East Trilein Drive
East 1 st Street	Ankeny	Planned	Widen from two (2) lanes to four (4) lanes from SE Fourmile Drive to I-35
Irvinedale Drive	Ankeny	Planned	Widen from two (2) lanes to four (4) lanes between NW 36 th Street and SW Oralabor Road
NE 36 th Street	Ankeny	Planned	Widen from two (2) lanes to four (4) lanes from NE Delaware Avenue to NW Irvinedale Drive
NE Delaware Avenue	Ankeny	Planned	Widen from two (2) lanes to four (4) lanes from NE 36 th Street to NE 5 th Street
SE Magazine Road	Ankeny	Planned	Add two (2) lanes from SE Delaware Avenue to SE Fourmile Drive
North Ankeny Boulevard	Ankeny/ Iowa DOT	Planned	Widen from three (3) lanes to five (5) lanes from NE 54 th Street to NE 36 th Street
I-35	Iowa DOT	Planned	Widen from six (6) lanes to eight (8) lanes from the NE Mixmaster to NE 1 st Street

Land in the project area and adjacent to I-35 is planned for mixed development. As development continues in Ankeny's fringe and rural areas, an increase in traffic volumes, traffic noise, surface water runoff, and land use conversion could occur as agricultural and undeveloped land convert to planned urban use. It is uncertain at what rate development would occur or if development would increase due to the proposed action.

The Preferred Alternative is projected to alleviate the existing queue onto the mainline of I-35, and coupled with the proposed arterial road improvements, is projected to improve the LOS within the area and provide safer travel through northern Ankeny. The proposed action coupled with the other planned projects is projected to improve the LOS for the East 1st Street/I-35 interchange and allow less congestion on the arterial roads associated with the interchange.

Table 13: *Potential Cumulative Effect* summarizes specific anticipated cumulative effects of the project.

Resource Affected	Direct and Indirect Effects of Preferred Alternative	Potential Cumulative Effects
Bicycle and Pedestrian Facilities	Extension of one (1) pedestrian/bicycle facility on East 1 st Street.	Increased accessibility for pedestrians and cyclists in project area
Farmland/Right-of-Way	Acquisition of approximately	Other reasonable foreseeable

 Table 13: Potential Cumulative Effect

Resource Affected	Direct and Indirect Effects of Preferred Alternative	Potential Cumulative Effects
Acquisition	20.3 acres of right-of-way, including the conversion of approximately 6.2 acres of farmland to transportation right- of-way.	projects may result in conversion of farmland. Right- of-way acquisition would be minimized to extent possible.
Wetlands	Approximately 0.35 acres of wetlands converted to transportation right-of-way.	Potential loss of habitat and loss of water quality. Impacts minimized to the extent possible through mitigation and using best management practices.
Floodplains/Surface Waters/Water Quality	Improvements to bridges and culverts at stream crossings would result in impacts to approximately 1,687 linear feet of stream and the associated floodplain.	Increased sedimentation and pollutant loading, altered hydrology; increase in stormwater runoff. Impacts minimized to the extent possible through best management practices.
Woodlands	Approximately 1.75 acres of woodlands converted to transportation-right-of-way.	Potential loss of habitat. Impacts minimized to extent possible through mitigation and using best management practices.

In summary, the overall cumulative impact o the project are not considered to be collectively significant.

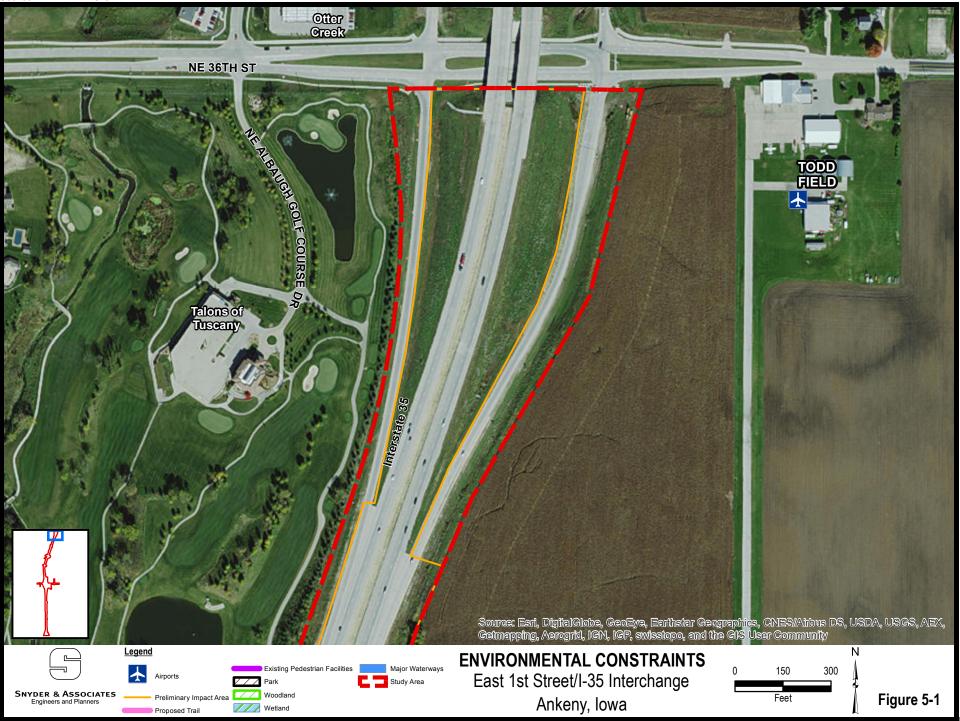
5.6 Streamlined Resources Summary

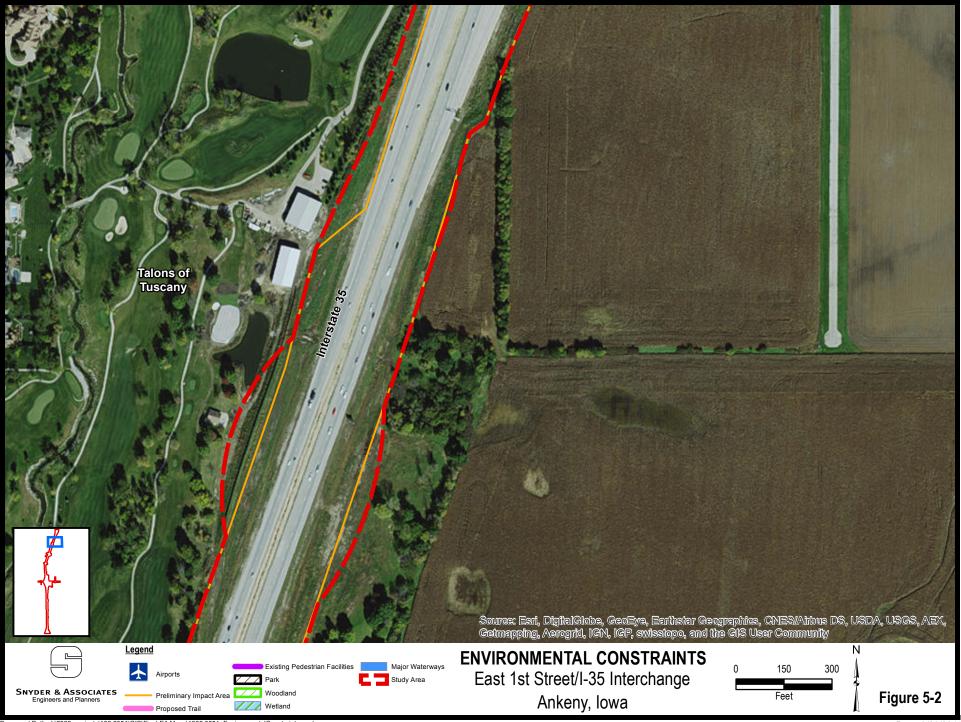
The streamline process developed by the Iowa DOT and FHWA was used to focus the analysis on those resources potentially affected by the project and to eliminate or decrease the description and impact analysis of resources not affected by the project. Appendix A contains a Streamlined Resource Summary indicating the process used to identify resources that are not within the project area or would not be affected by the proposed project. It also includes rationale for performing only limited analysis on resources not described or analyzed in Section 5. **Table 14:** *Summary of Impacts* summarizes the differences in impacts on resources which would result from the No Build Alternative and the Preferred Alternative. The table does not list resources for which the anticipated impact would not differ substantially.

Resource	No Build Alternative	Preferred Alternative
Approximate length	4,900 feet	4,900 feet
Economic	No change in current trends	Improved, safer access to businesses.
Parkland and Recreation	No impact	0.069 acre, approximately

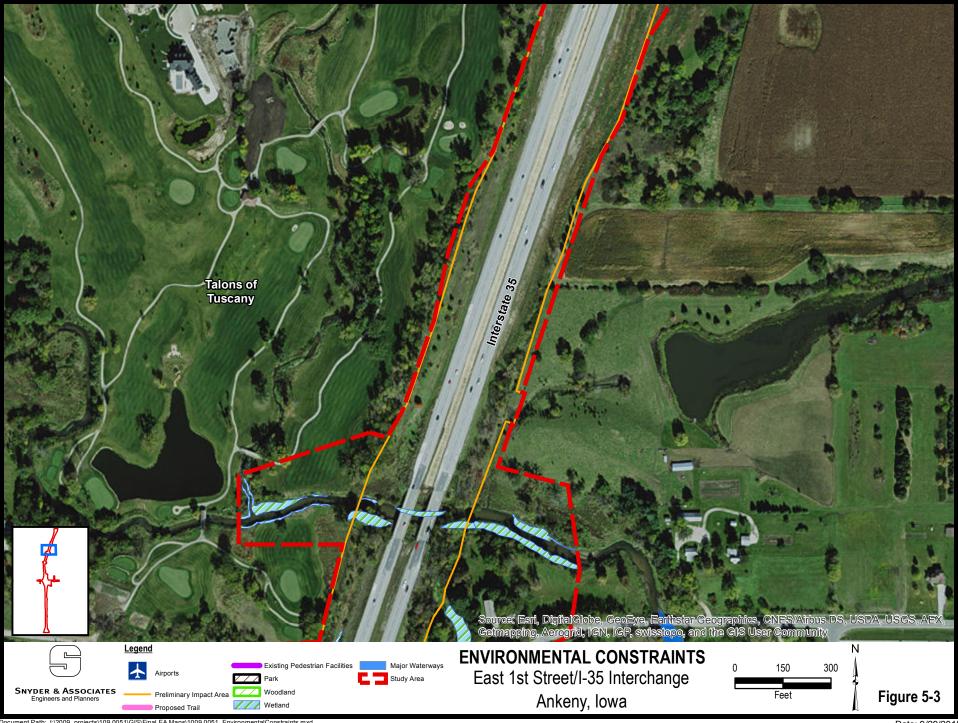
Table 14:	Summarv	of Impacts
	S annual y	or impacts

Resource	No Build Alternative	Preferred Alternative
Areas		
Bicycle and Pedestrian Facilities	No impact	1 – extension of pedestrian/bicycle facility
Right-of-way Acquisition	No impact	Acquisition of approximately 20.3 acres of additional right-of-way.
Relocation Potential	No impact	No impact
Construction and Emergency Routes	No impact	Temporary increase in congestion, delays. Long-term improved access along corridor.
Transportation	Increased congestion with increased traffic volumes	Increase safety, improved traffic flow. Decreased delays and queue lengths. Improved access.
Historical Sites or Districts	No impact	No impact
Archaeological Sites	None	None
Wetlands	None	0.35 acres
Surface Waters and Water Quality	No impact	Temporary increase in soil erosion, stormwater runoff from construction activities.
Floodplains	None	None (Snyder & Associates, Inc., 2014d)
Wildlife and Habitat	None	None (Snyder & Associates, Inc., 2014e)
Threatened and Endangered Species	None	None (Snyder & Associates, Inc., 2014f)
Woodlands	No impact	1.75 acres
Farmlands	None	None
Noise	No impact	No impact
Contaminated and Regulated Materials Sites	No impact	8 – sites
Utilities	No impact	Potential limited disruption of utility service during construction.

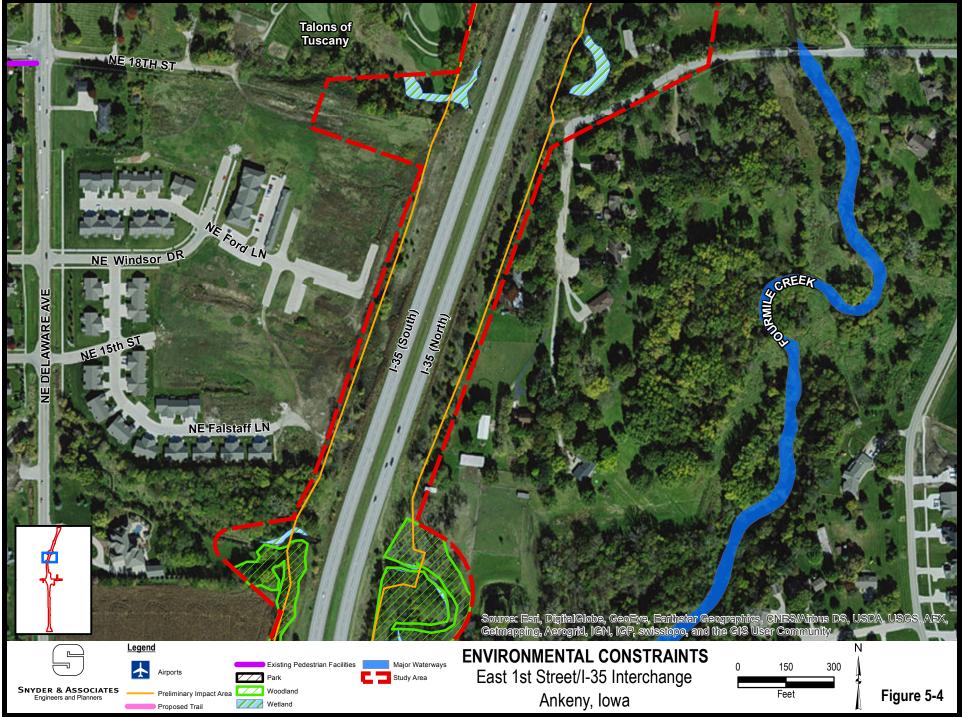


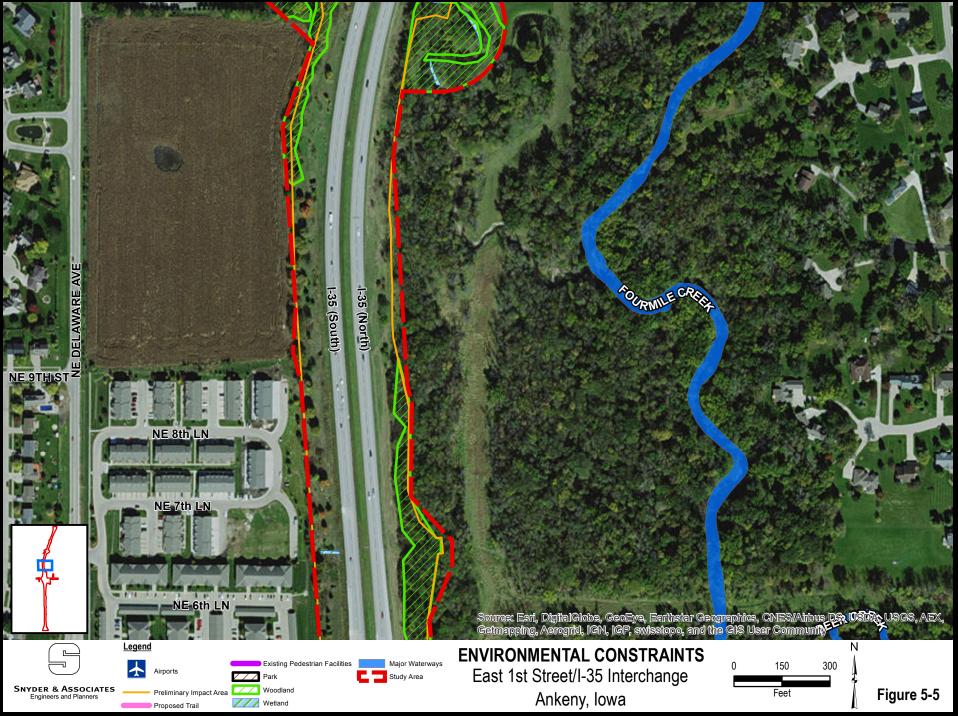


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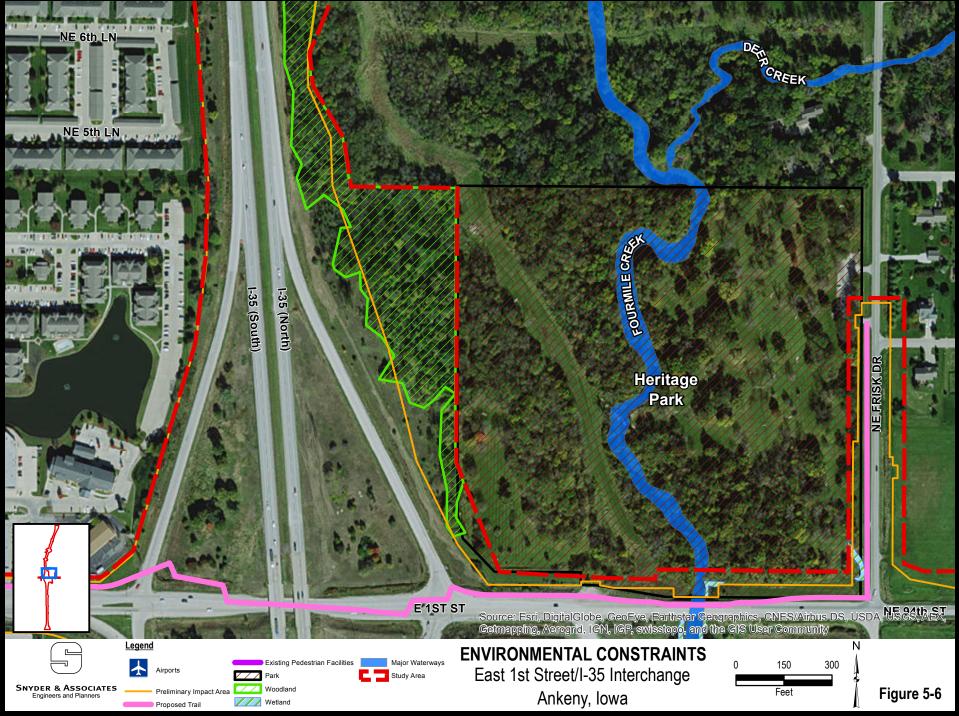


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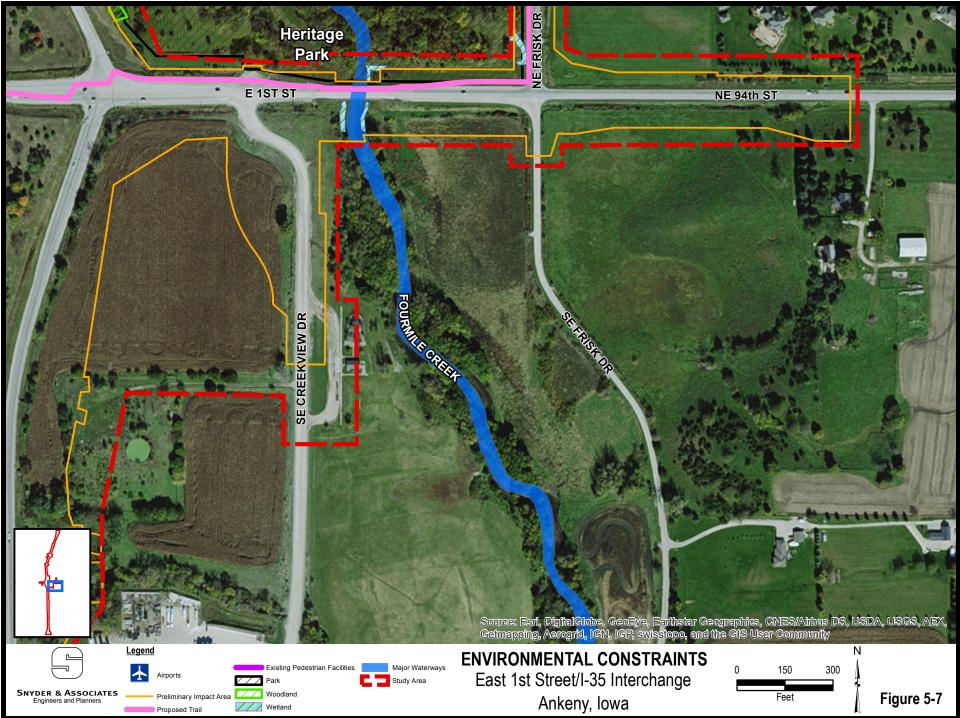




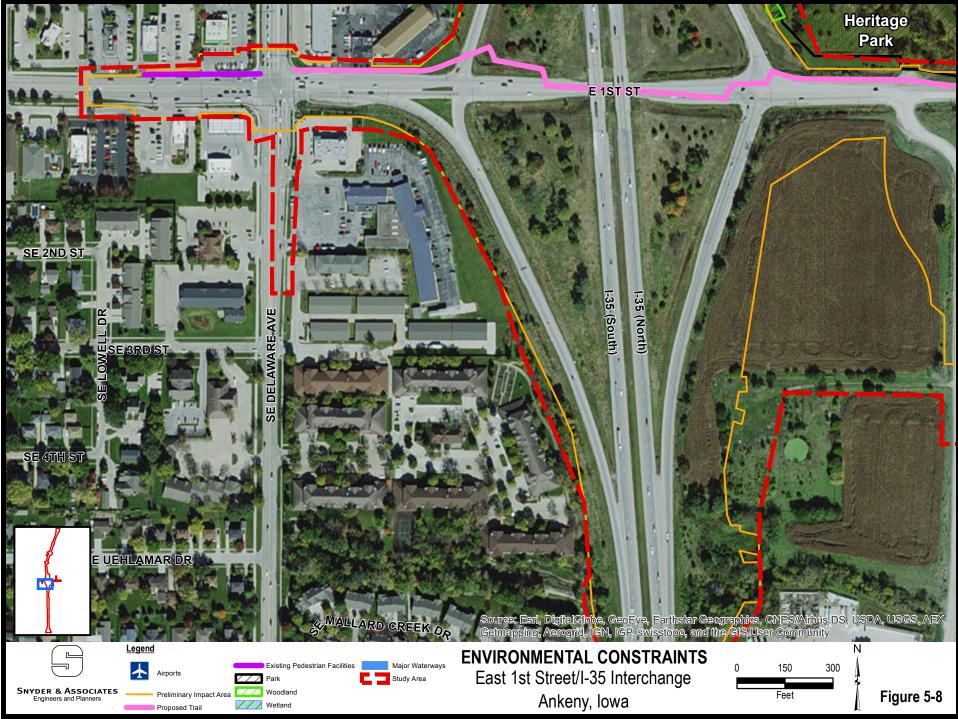
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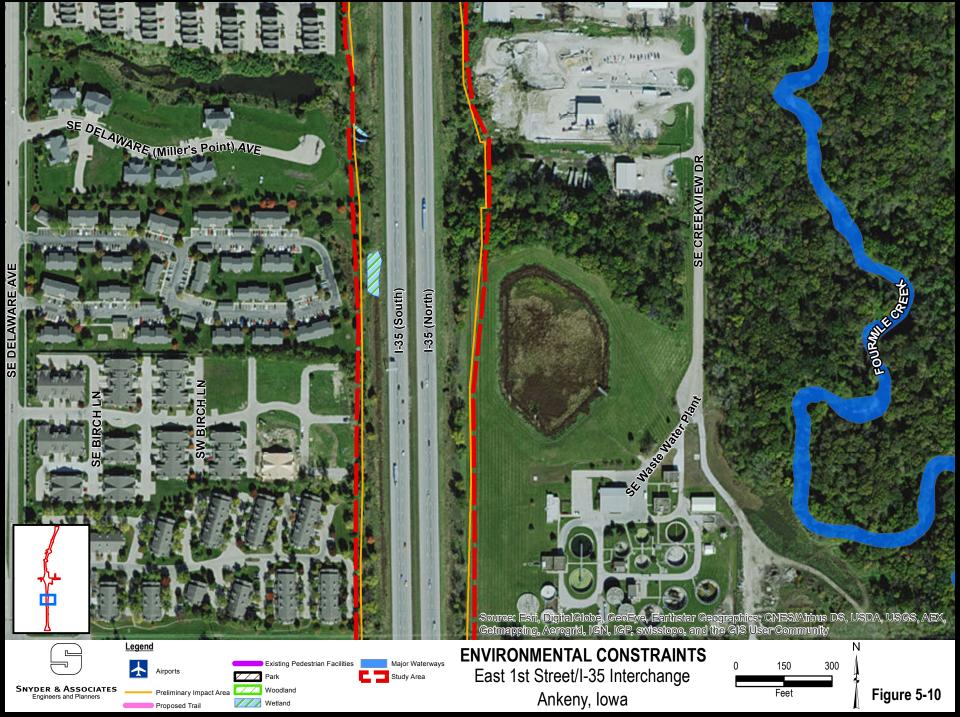


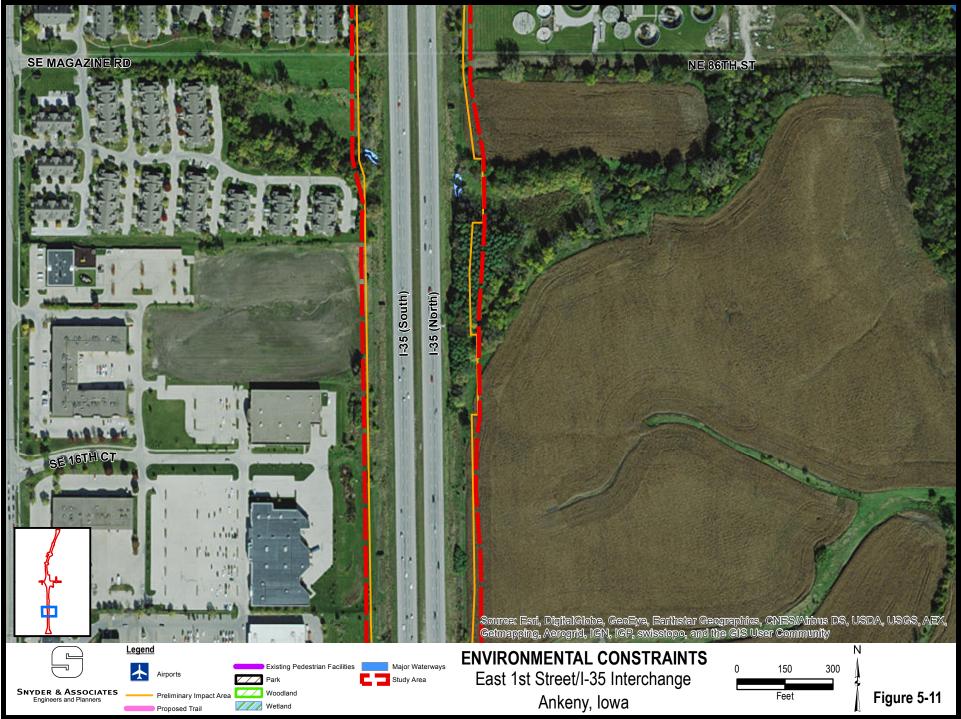
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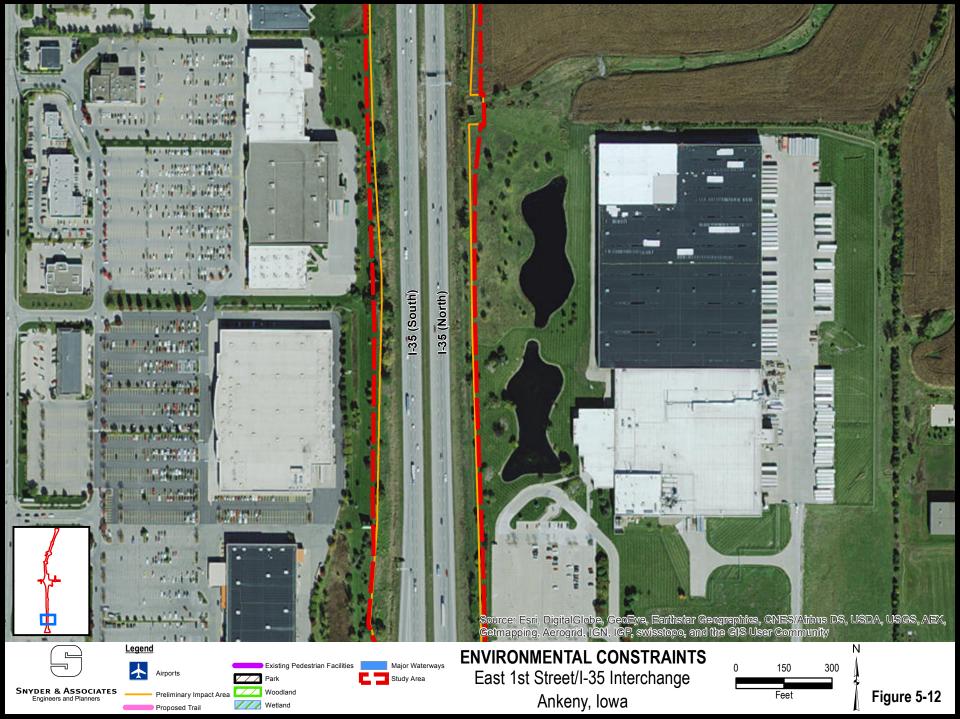






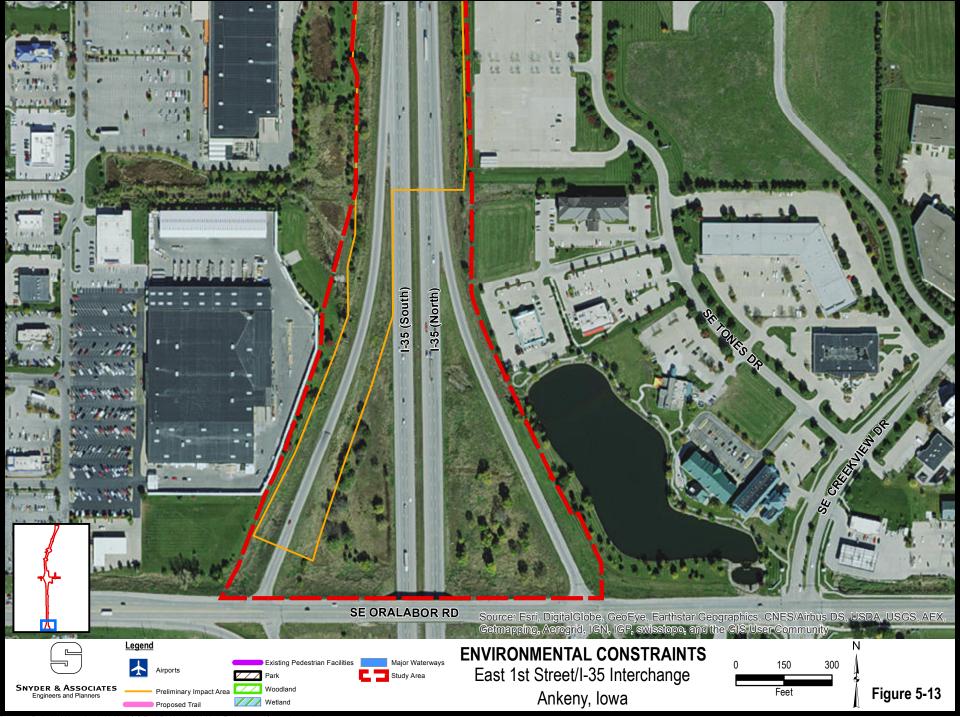
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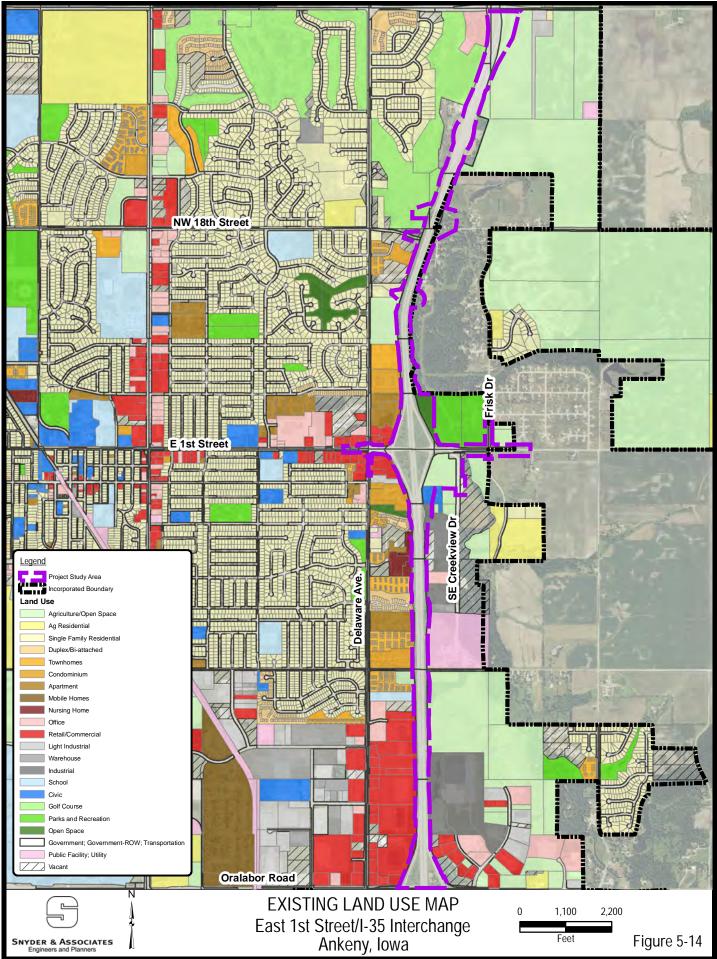
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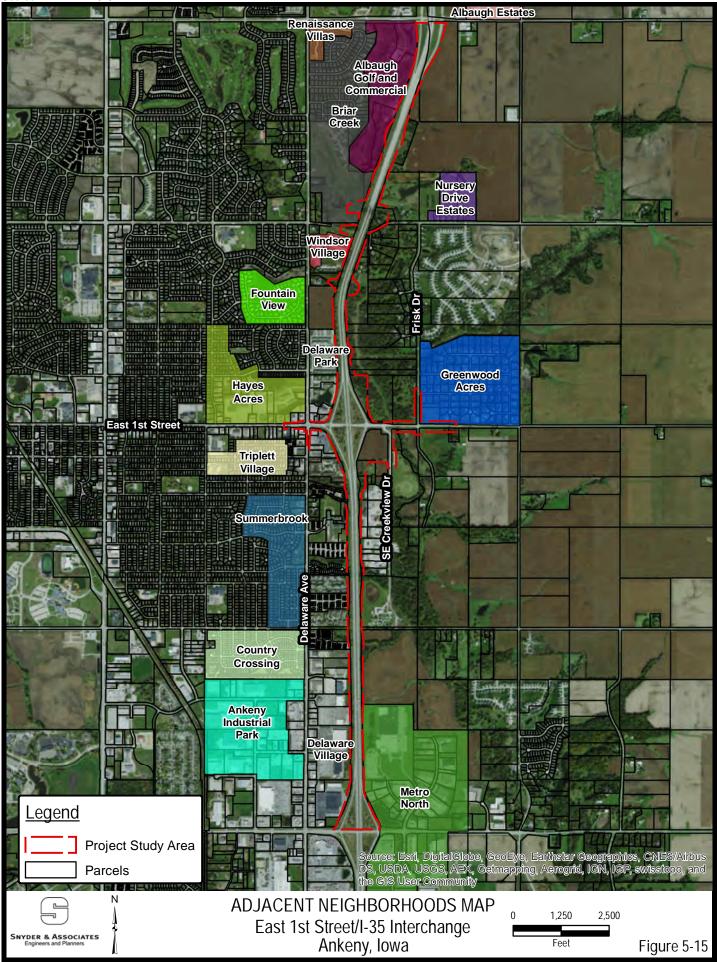


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Source: CITY OF ANKENY GIS DEPARTMENT



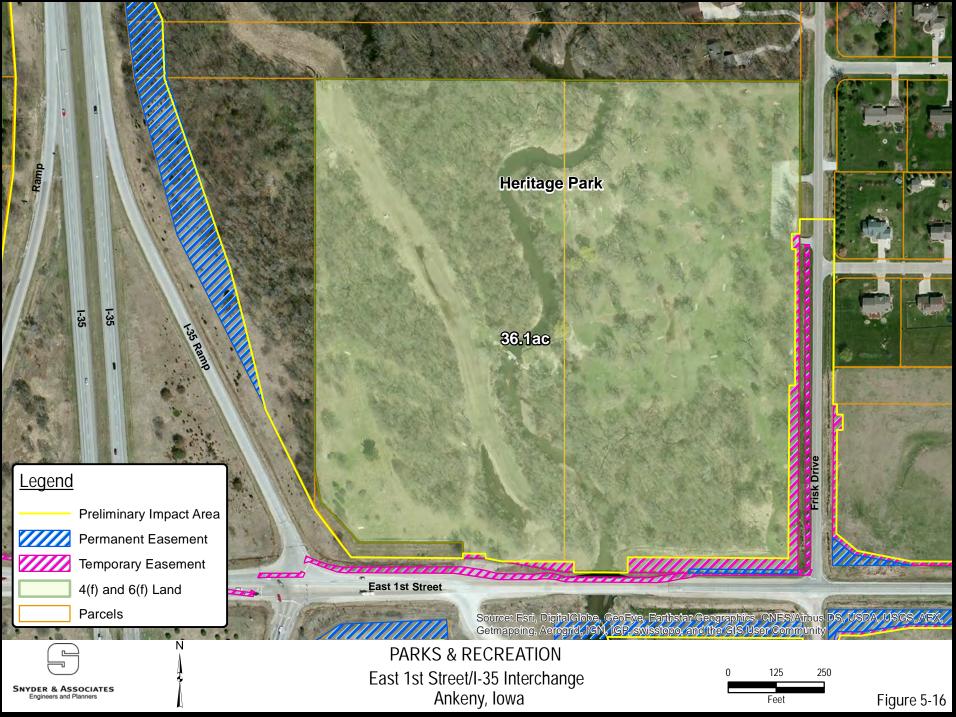
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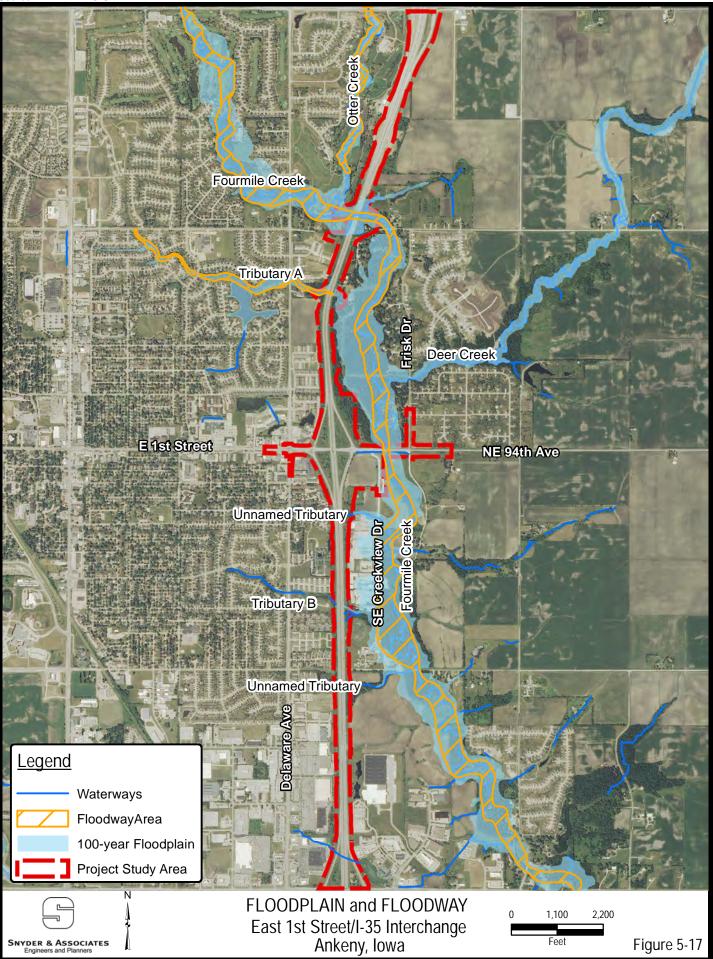


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Date: 8/4/2015

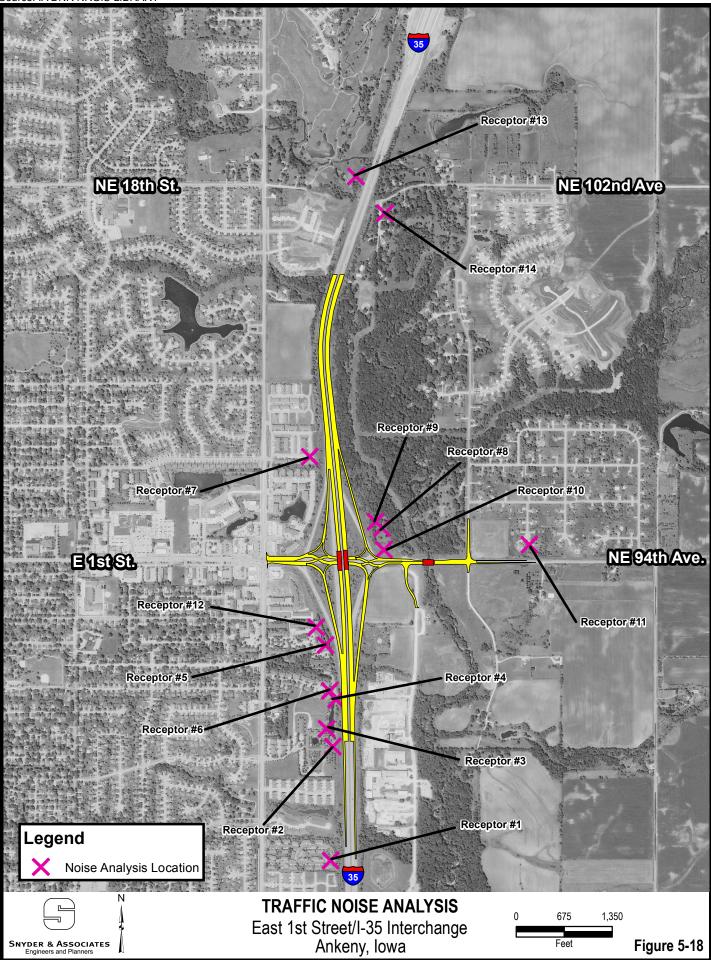
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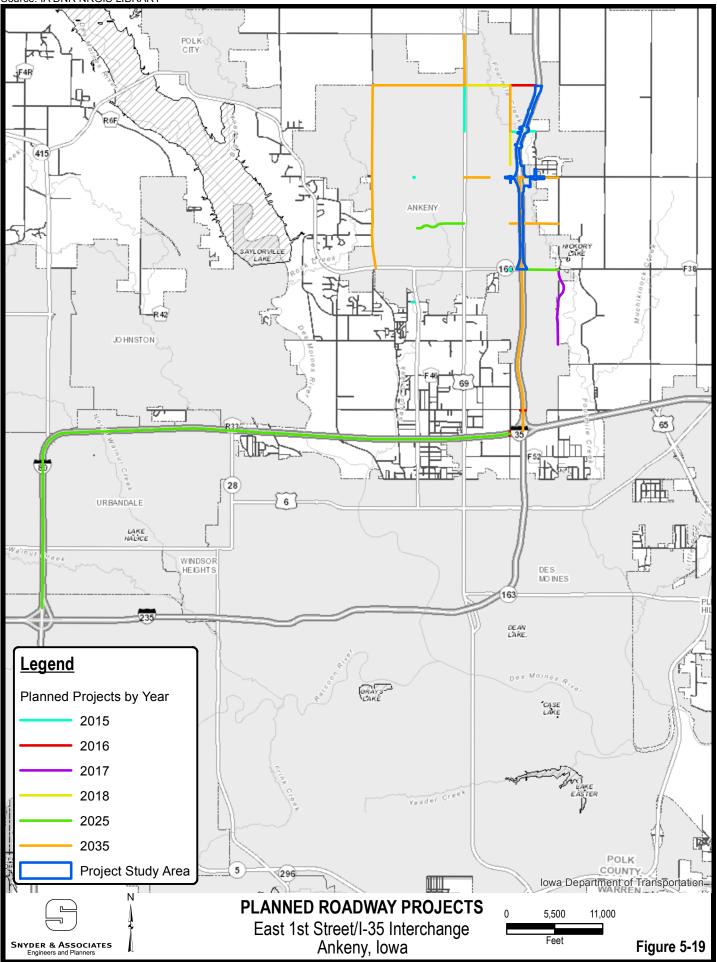


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SECTION 6 DISPOSITION

This Streamlined EA concludes that the proposed project is necessary for safe and efficient travel within the project corridor and that the project meets the purpose and need. The project would have no significant adverse social, economic, or environmental impact on a level that would warrant an environmental impact statement. Alternative selection would occur following the completion of the public review period and public hearing. Unless significant impacts are identified as a result of the public review or at the public hearing, a Finding of No Significant Impact would be prepared for the Preferred Alternative.

This EA is being distributed to the following agencies and organizations. Individuals receiving the EA are not listed for privacy reasons.

6.1 Federal Agencies

Federal Aviation Administration (FAA)
Federal Emergency Management Agency (FEMA)
Federal Highways Administration – Iowa Division
Federal Transit Administration
U.S. Army Corp of Engineers (USACE) – Rock Island District
U.S. Department of Agriculture (USDA) – Natural Resources Conservation Service (NRCS)
U.S. Department of Housing and Urban Development (HUD)
U.S. Department of the Interior – Office of Environmental Policy and Compliance
U.S. Environmental Protection Agency (EPA) – Region 7
U.S. Fish and Wildlife (USFWS) – Rock Island Field Office

6.2 State Agencies

Iowa Department of Natural Resources (Iowa DNR) – State Office and Field Office #5 Iowa Department of Transportation (Iowa DOT) State Historical Society of Iowa

6.3 Local Agencies

Ankeny Area Chamber of Commerce City of Ankeny Planning Department Des Moines Area Metropolitan Planning Organization Des Moines Area Regional Transit Authority Polk County Public Works Department Polk County Conservation Board Polk County Board of Supervisors Central Iowa Regional Transportation Planning Alliance

6.4 Locations where this Document is Available for Public Review

Federal Highway Administration 105 6th Street Ames, Iowa 50010

Iowa Department of Transportation 800 Lincoln Way Ames, Iowa 50010

Ankeny Public Library 1210 NW Prairie Ridge Drive Ankeny, Iowa 50021

Online at Iowa DOT: http://www.iowadot.gov/ole/OLESite/nepadocuments.aspx

6.5 **Potential Permits Required**

The following permits may be required for this project:

- Section 404 Permit from U.S. Army Corp of Engineers, Rock Island District and a Section 401 Water Quality Certificate from Iowa Department of Natural Resources (Joint Application Form for Protecting Iowa Waters) for stream impacts.
- Iowa Department of Natural Resources Floodplain Construction Permit.
- Iowa Department of Natural Resources National Pollution Discharge Elimination System General Permit for stormwater discharge associated with construction activities.

6.6 Statewide Transportation Improvement Program and Surface Transportation Program Status

The proposed project is currently included in the following:

- Draft 2016-2019 Iowa Statewide Transportation Improvement Program (STIP) under the National Highway Performance Program (NHPP); \$30,405,000.
- City of Ankeny's 2015-2019 Capital Improvement Project (CIP) as STR-11-004; \$2,000,000
- Des Moines Area Metropolitan Planning Organization's Long Range Transportation Plan; \$63,266,000.

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

6.7 Planned Construction Schedule

The proposed project would be constructed during the 2018-2020 construction seasons. During the 2018 construction season, northbound I-35 would be graded, northbound I-35 bridges over East 1st Street and Fourmile Creek would be constructed, and the East 1st Street bridge over Fourmile Creek would be widened. During the 2019 construction season, northbound I-35 would be paved, as well as portions of East 1st Street that are located outside of the interchange footprint. Lastly, during the 2020 construction season, southbound I-35, as well as the remaining portions of East 1st Street and adjacent side roads, would be graded and paved, and the southbound I-35 bridges over East 1st Street and Fourmile Creek would be constructed.

SECTION 7 COMMENTS AND COORDINATION

This section includes a summary of agency coordination, public involvement, and tribal coordination that has occurred during the development of the East 1st Street/I-35 EA. Future public involvement efforts that are planned for the project are also discussed. Appendix C contains agency coordination letters and comments received during the NEPA process for the project.

7.1 Agency and Tribal Coordination

Early coordination commenced in April 2009, through letters to local, state, and federal government agencies to announce the initiation of the East 1st Street/I-35 interchange reconstruction project and to solicit feedback from agencies on relevant areas of expertise. The entities listed in **Table 15**: *Agency & Tribal Early Coordination* were contacted as part of the early coordination process. The list of agencies and tribes contacted and their response date, if applicable, is shown in the table below. Written responses to the early coordination requests are provided in Appendix C.

Agency Type	Agency	Date of Response
Federal	Federal Aviation Administration	5/19/2009
Federal	Federal Emergency Management Agency	None
Federal	Federal Highway Administration	4/23/2009
Federal	Federal Railroad Administration	None
Federal	Federal Transit Administration	None
Federal	U.S. Department of Housing and Urban Development	6/1/2009
Federal	National Park Service	None
Federal	U.S. Army Corps of Engineers, Rock Island District	6/17/2009
Federal	U.S. Department of Interior	None
Federal	U.S. Environmental Protection Agency	5/27/2009
Federal	U.S. Fish and Wildlife Service	6/24/2009
Federal	U.S. Department of Agriculture, Natural Resource Conservation Service	5/21/2009
Federal	U.S. Geological Survey	5/18/2009
State	State Historical Society	10/19/2009
State	Iowa Department of Natural Resources, Environmental Services	None
State	IDNR, Section 6(f) Funds	5/14/2009
State	IDNR, Conservation and Recreation	5/18/2009
State	IDNR, Geological Survey and Land Quality	5/18/2009
State	Iowa Department of Agriculture and Land Stewardship	5/14/2009

Table 15: Agency & Tribal Early Coordination

Agency Type	Agency	Date of Response
State	IDNR, Air Quality Bureau	6/10/2009
State	IDNR, Water Quality	6/9/2009
State	Iowa Department of Transportation	4/10/2009
State	Iowa Department of Management	None
Local	City of Ankeny	5/22/2009
Local	Ankeny Parks and Recreation	5/21/2009
Tribal	Sac & Fox Nation	None
Tribal	Ho-Chunk Nation	None
Tribal	Winnebago Tribe	None
Tribal	Otoe-Missouria Tribe	5/26/2009

Important issues identified or raised as a result of the early coordination process included the following:

- Potential 4(f) and 6(f) impacts
- Potential taking of Mill Pond Retirement Development land and/or elevated noise levels
- Potential disturbance to USTs and LUSTs
- Identification of federal and state threatened and endangered species of concern both flora and fauna
- Proximity or impacts to existing airports

Under Section 106 of the National Historic Preservation Act of 1966, states are required to coordinate with Native American tribes if a project could affect lands with cultural or religious significance. Iowa employs a four (4) step process, beginning with early coordination. Appendix B contains agency and tribal responses to the early coordination request.

7.2 **Public Involvement**

A public involvement program was conducted during project development to effectively engage the general public and interested parties in the project. The key components of this program are outlined in the following sections.

7.2.1 Public Meetings

As part of the ongoing NEPA process, two (2) public information meetings (PIM) have been provided for the public to view project progress and provide input on the proposed involvements.

7.2.2 Correspondence

Throughout the course of the project, correspondence was received from the public through a variety of means, including the PIMs, telephone calls, questionnaires, letters, emails, and one-on-one meeting. All public correspondence was logged.

7.2.3 Future Public Involvement

A public hearing would be held to present the findings of this EA and to obtain public comment on the EA and the proposed project. Exhibits would be available for review, staff would be available to discuss the project, and written comments would be accepted.

APPENDIX A

STREAMLINED RESOURCE SUMMARY

SOCIOECONOMIC IMPACTS SECTION:

Land Use			
Evaluation:	Resource is discussed in Section 5 of the Resource Analysis		
Method of Evaluation:	Database		
Completed by and Date:	Consultant, 1/8/2015		
Community Cohesion			
Evaluation:	Resource is discussed in Section 5 of the Resource Analysis		
Method of Evaluation:	Database		
Completed by and Date:	Consultant, 1/8/2015		
Churches and Schools			
Evaluation:	Resource is not in the study area		
Method of Evaluation:	Database		
Completed by and Date:	Consultant, 1/8/2015		
Environmental Justice			
Evaluation:	Resource is not in the study area		
Method of Evaluation:	Report		
Completed by and Date:	Consultant, 2/25/2015		
Economic			
Evaluation:	Resource is discussed in Section 5 of the Resource Analysis		
Method of Evaluation:	Database		
Completed by and Date:	Consultant, 1/8/2015		
Joint Development			
Evaluation:	Resource is not in the study area		
Method of Evaluation:	Database		
Completed by and Date:	Consultant, 2/4/2015		
Parklands and Recreational	Areas		
Evaluation:	Resource is discussed in Section 5 of the Resource Analysis		
Method of Evaluation:	Field Review/Field Study		
Completed by and Date:	Consultant, 12/18/2014		
Bicycle and Pedestrian Facili	ties		
Evaluation:	Resource is discussed in Section 5 of the Resource Analysis		
Method of Evaluation:	Database		
Completed by and Date:	Consultant, 12/18/2014		
Right-of-Way			
Evaluation:	Resource is discussed in Section 5 of the Resource Analysis		
Method of Evaluation:	Database		
Completed by and Date:	Consultant, 1/21/2015		
Relocation Potential			
Evaluation:	Resource is not in the study area		
Method of Evaluation:	Database		
Completed by and Date:	Consultant, 1/21/2015		

SOCIOECONOMIC IMPACTS SECTION Continued:

Construction and Emergency Routes			
Evaluation:	Resource is discussed in Section 5 of the Resource Analysis		
Method of Evaluation:	Database		
Completed by and Date:	Consultant, 2/2/2015		
Transportation			
Evaluation:	Resource is discussed in Section 5 of the Resource Analysis		
Method of Evaluation:	Database		
Completed by and Date:	Consultant, 2/2/2015		

CULTURAL IMPACTS SECTION:

Historic Sites or Districts		
Evaluation:	Resource is discussed in Section 5 of the Resource Analysis	
Method of Evaluation:	Field Review/Field Study	
Completed by and Date:	Subconsultant, 12/22/2014	
Archaeological Sites		
Evaluation:	Resource is discussed in Section 5 of the Resource Analysis	
Method of Evaluation:	Field Review/Field Study	
Completed by and Date:	Subconsultant, 12/22/2014	
Cemeteries		
Evaluation:	Resource is not in the study area	
Method of Evaluation:	Database	
Completed by and Date:	Consultant, 1/8/2015	

Wetlands			
Evaluation:	Resource is discussed in Section 5 of the Resource Analysis		
Method of Evaluation:	Field Review/Field Study		
Completed by and Date:	IA DOT NEPA Manager, 8/29/2014		
Surface Waters and Water	Quality		
Evaluation:	Resource is discussed in Section 5 of the Resource Analysis		
Method of Evaluation:	Field Review/Field Study		
Completed by and Date:	IA DOT NEPA Manager, 8/29/2014		
Wild and Scenic Rivers			
Evaluation:	Resource is not in the study area		
Method of Evaluation:	Database		
Completed by and Date:	Consultant, 1/8/2015		
Floodplains			
Evaluation:	Resource is discussed in Section 5 of the Resource Analysis		
Method of Evaluation:	Database		
Completed by and Date:	Consultant, 2/10/2015		
Wildlife and Habitat			
Evaluation:	Resource is discussed in Section 5 of the Resource Analysis		
Method of Evaluation:	Field Review/Field Study		
Completed by and Date:	IA DOT NEPA Manager, 7/11/2013		
Threatened and Endangered	1 Species		
Evaluation:	Resource is discussed in Section 5 of the Resource Analysis		
Method of Evaluation:	Field Review/Field Study		
Completed by and Date:	IA DOT NEPA Manager, 7/11/2013		
Woodlands			
Evaluation:	Resource is discussed in Section 5 of the Resource Analysis		
Method of Evaluation:	Field Review/Field Study		
Completed by and Date:	IA DOT NEPA Manager, 7/11/2013		
Farmlands			
Evaluation:	Resource is discussed in Section 5 of the Resource Analysis		
Method of Evaluation:	Database		
Completed by and Date:	Consultant, 1/4/2010		

NATURAL ENVIRONMENT IMPACTS SECTION:

Noise			
Evaluation: Resource is discussed in Section 5 of the Resource Analysis			
Method of Evaluation:	Field Review/Field Study		
Completed by and Date:	Consultant, 10/14/2009		
Air Quality			
Evaluation:	Resource is in the study area but will not be impacted		
Method of Evaluation:	Database		
Completed by and Date:	Consultant, 1/22/2015		
MSATs			
Evaluation:	This project has been determined to generate minimal air quality impacts for CAAA criteria pollutants and has not been linked with any special MSAT concerns. As such, this project would not result in changes in traffic volumes, vehicle mix, basic project location, or any other factor that would cause an increase in MSAT impacts of the project from that of the no-build alternative.		
	Moreover, EPA regulations for vehicle engines and fuels will cause overall MSAT emissions to decline significantly over the next several decades. Based on regulations now in effect, an analysis of national trends with EPA's MOBILE6.2 model forecasts a combined reduction of 72% in the total annual emission rate for the priority MSAT from 1999 to 2050 while vehicle-miles of travel are projected to increase by 145%. This will both reduce the background level of MSAT as well as the possibility of even minor MSAT emissions from this project.		
Method of Evaluation:	FHWA Interim Guidance Update on Mobile Source Air Toxic Analysis in NEPA Documents, September 30, 2009		
Completed by and Date:	IA DOT NEPA Manager, 9/30/2009		
Energy			
Evaluation:	Resource is in the study area but will not be impacted		
Method of Evaluation:	Database		
Completed by and Date:	Consultant, 1/7/2015		
Contaminated and Regulate	d Materials Sites		
Evaluation:	Resource is discussed in Section 5 of the Resource Analysis		
Method of Evaluation:	Field Review/Field Study		
Completed by and Date:	Consultant, 5/20/2013		
Visual			
Evaluation:	Resource is in the study area but will not be impacted		
Method of Evaluation:	Database		
Completed by and Date:	Consultant, 1/5/2015		
Utilities			
Evaluation:	Resource is discussed in Section 5 of the Resource Analysis		
Method of Evaluation:	Database		
	Consultant, 2/18/2015		

PHYSICAL IMPACTS SECTION:

APPENDIX B

AGENCY AND TRIBAL COORDINATION



United States Department of the Interior

FISH AND WILDLIFE SERVICE Rock Island Ecological Services Field Office ROCK ISLAND ECOLOGICAL SERVICES FIELD OFFICE, 1511 47TH AVE MOLINE, IL 61265 PHONE: (309)757-5800 FAX: (309)757-5807



Consultation Code: 03E18000-2015-SLI-0251 Event Code: 03E18000-2015-E-00168 Project Name: East 1st street May 26, 2015

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The attached species list identifies any federally threatened, endangered, proposed and candidate species that may occur within the boundary of your proposed project or may be affected by your proposed project. The list also includes designated critical habitat if present within your proposed project area or affected by your project. This list is provided to you as the initial step of the consultation process required under section 7(c) of the Endangered Species Act, also referred to as Section 7 Consultation.

Section 7 of the Endangered Species Act of 1973 requires that actions authorized, funded, or carried out by Federal agencies not jeopardize federally threatened or endangered species or adversely modify designated critical habitat. To fulfill this mandate, Federal agencies (or their designated non-federal representative) must consult with the Service if they determine their project "may affect" listed species or critical habitat.

Under 50 CFR 402.12(e) (the regulations that implement Section 7 of the Endangered Species Act) the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally. You may verify the list by visiting the ECOS-IPaC website http://ecos.fws.gov/ipac/ at regular intervals during project planning and implementation and completing the same process you used to receive the attached list. As an alternative, you may contact this Ecological Services Field Office for updates.

Please use the species list provided and visit the U.S. Fish and Wildlife Service's Region 3 Section 7 Technical Assistance website at -

http://www.fws.gov/midwest/endangered/section7/s7process/index.html. This website contains step-by-step instructions which will help you determine if your project will have an adverse effect on listed species and will help lead you through the Section 7 process.

For all wind energy projects and projects that include installing towers that use guy wires or are over 200 feet in height, please contact this field office directly for assistance, even if no federally listed plants, animals or critical habitat are present within your proposed project or may be affected by your proposed project.

Although no longer protected under the Endangered Species Act, be aware that bald eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 et seq.) and Migratory Bird Treaty Act (16 U.S.C. 703 et seq), as are golden eagles. Projects affecting these species may require measures to avoid harming eagles or may require a permit. If your project is near an eagle nest or winter roost area, see our Eagle Permits website at http://www.fws.gov/midwest/midwestbird/EaglePermits/index.html to help you determine if you can avoid impacting eagles or if a permit may be necessary.

We appreciate your concern for threatened and endangered species. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment



Project name: East 1st street

Official Species List

Provided by:

Rock Island Ecological Services Field Office ROCK ISLAND ECOLOGICAL SERVICES FIELD OFFICE 1511 47TH AVE MOLINE, IL 61265 (309) 757-5800

Consultation Code: 03E18000-2015-SLI-0251 **Event Code:** 03E18000-2015-E-00168

Project Type: TRANSPORTATION

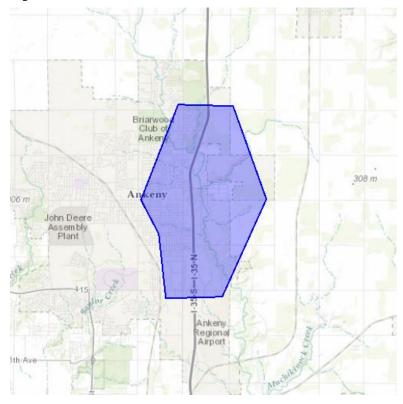
Project Name: East 1st street **Project Description:** I-35/East 1st Street

Please Note: The FWS office may have modified the Project Name and/or Project Description, so it may be different from what was submitted in your previous request. If the Consultation Code matches, the FWS considers this to be the same project. Contact the office in the 'Provided by' section of your previous Official Species list if you have any questions or concerns.



Project name: East 1st street

Project Location Map:



Project Coordinates: MULTIPOLYGON (((-93.54515075683594 41.731995438997004, -93.55957031249999 41.76196504908719, -93.58308792114258 41.762477228495065, -93.59922409057617 41.73173922818722, -93.59132766723633 41.720721196637136, -93.58858108520508 41.70021750568944, -93.56420516967773 41.700602010054766, -93.54515075683594 41.731995438997004)))

Project Counties: Polk, IA



Project name: East 1st street

Endangered Species Act Species List

There are a total of 3 threatened or endangered species on your species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Critical habitats listed under the **Has Critical Habitat** column may or may not lie within your project area. See the **Critical habitats within your project area** section further below for critical habitat that lies within your project. Please contact the designated FWS office if you have questions.

Flowering Plants	Status	Has Critical Habitat	Condition(s)
Western Prairie Fringed Orchid (Platanthera praeclara)	Threatened		
Mammals			
Indiana bat (<i>Myotis sodalis</i>) Population: Entire	Endangered		
Northern long-eared Bat (Myotis septentrionalis)	Threatened		



Project name: East 1st street

Critical habitats that lie within your project area

There are no critical habitats within your project area.

http://ecos.fws.gov/ipac, 05/26/2015 08:39 AM



IN REPLY REFER

United States Department of the Interior

FISH AND WILDLIFE SERVICE Rock Island Field Office 1511 47th Avenue Moline, Illinois 61265 Phone: (309) 757-5800 Fax: (309) 757-5807



June 24, 2009

Mr. Robert Leavell Snyder & Associates 2727 S.W. Snyder Boulevard Ankeny, Iowa 50023

Dear Mr. Leavell:

This responds to your letter of May 6, 2009, requesting our comments on the proposed First Street Interchange Reconstruction and I-35 Widening Project in Ankeny, Polk County, Iowa.

Section 7 of the Endangered Species Act of 1973 requires that actions authorized, funded, or carried out by Federal agencies not jeopardize federally threatened or endangered species or adversely modify designated critical habitat. To fulfill this mandate, Federal agencies (or their designated non-federal representative) must consult with the U.S. Fish and Wildlife Service (Service) if they determine their project and associated actions "may affect" listed species or critical habitat. If Federal agencies or their non-federal representatives determine their project and associated actions will have "no effect" on listed species, their habitats, or designated critical habitat, consultation is not required. However, if a "no effect" is determined we recommend that you maintain a written record in support of your conclusion.

We invite you to use a new tool the Service has designed to help with the consultation process – the Section 7(a)(2) Technical Assistance webpage found at

(<u>http://www.fws.gov/midwest/endangered/section7/s7process/index.html</u>). The webpage will provide you with: a) guidance to help you determine the limits of your action area, b) a list of endangered species that may occur in your project area, and c) guidelines to determine if your project and associated actions "may affect" listed species. You will also find several products on the site that can streamline the consultation process for this and future projects, including up-to-date county-specific species lists for all of the states in Region 3 and example letters for documenting your findings related to endangered species.

For your reference, we are enclosing a current list of threatened and endangered species and their associated habitat descriptions for Polk County. You may use these descriptions to help

you determine if there are endangered species and/or associated habitat within your project action area.

These comments are provided as technical assistance in accordance with the Endangered Species Act of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 <u>et seq</u>).

If you have any questions regarding our comments, please contact Amber Andress of my staff at (309) 757-5800, extension 222.

Sincerely,

Richard C. Nelson

Richard C. Nelson Field Supervisor

Enclosure

S:\Office Users\Amber\Technical Assistance \I-35 Ankeny Widening Project, 06-04-09.doc

Habitat Descriptions for Federal Threatened and Endangered Species in Polk County, Iowa

The endangered **Indiana bat** (*Myotis sodalis*) has been noted as occurring in several Iowa counties. It could potentially occur in all counties south of Interstate 80, including Polk County.

Indiana bats migrate seasonally between winter hibernacula and summer roosting habitats. Winter hibernacula include caves and abandoned mines. Females form nursery colonies under the loose bark of trees (dead or alive) and/or cavities, where each female gives birth to a single young in June or early July. A single colony may utilize a number of roost trees during the summer, typically a primary roost tree and several alternates. The species or size of tree does not appear to influence whether Indiana bats utilize a tree for roosting provided the appropriate bark structure is present.

During the summer, the Indiana bat frequents the corridors of small streams with riparian woods as well as mature upland forests. It forages for insects along stream corridors, within the canopy of floodplain and upland forests, over clearings with early successional vegetation (old fields), along the borders of croplands, along wooded fencerows, over farm ponds, and in pastures.

Suitable summer habitat in Iowa is considered to have the following characteristics within a $\frac{1}{2}$ mile radius of a project site:

- 1) forest cover of 15% or greater;
- 2) permanent water;
- 3) one or more of the following tree species: shagbark and shellbark hickory that may be dead or alive, and dead bitternut hickory, American elm, slippery elm, eastern cottonwood, silver maple, white oak, red oak, post oak, and shingle oak with slabs or plates of loose bark;
- 4) potential roost trees with 10% or more peeling or loose bark

If the project site contains any habitat that fits the above description, it may be necessary to conduct a survey to determine whether the bat is present. In addition a search for this species should be made prior to any cave-impacting activities. If habitat is present or Indiana bats are known to be present, they must not be harmed, harassed or disturbed, and this field office should be contacted for further assistance.

The **prairie bush clover** (*Lespedeza leptostachya*) is listed as threatened and considered to potentially occur statewide in Iowa based on historical records and habitat distribution, although we have no record of occurrences in Polk County. 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 threatened **western prairie fringed orchid** (*Platanthera praeclara*) is listed as occurring in Polk County and considered to potentially occur statewide in Iowa based on historical records and habitat distribution. It occupies wet to mesic 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 **least tern** (*Sterna antillarum*) is listed as endangered in Polk County. It nests on bare alluvial or dredged spoil islands and sand/gravel bars in or adjacent to rivers, lakes, gravel pits, and cooling ponds. It nests in colonies with other least terns and sometimes with the piping plover. There is no critical habitat designated for this species. It must not be harmed, harassed, or disturbed when present.

The project lies within the range of the freshwater sheepnose mussel (*Plethobasus cyphyus*) that is declining throughout its national range and is currently a Federal Candidate species. It is known to occur in Polk County. Significant declines relative to its historical distribution and its small isolated remaining populations continue to be threatened due to habitat loss and degradation. Your proactive efforts to conserve these species now may help avoid the need to list the species under the Endangered Species Act in the future. We encourage early project coordination to avoid potential impacts to this mussel and its habitat.

The sheepnose mussel is primarily a larger-stream species occurring mainly in shallow shoal habitats with moderate to swift currents over coarse sand and gravel but includes mud, cobble, and boulders as well. This includes larger rivers with deep runs, while those specimens found in streams occur mainly in stable flow refuges with little sediment turbidity. At a minimum, project evaluations should contain delineations of whether or not sheepnose mussel habitat occurs within project boundaries. In cases where the species is known to occur or potential habitat is rated moderate to high, surveys may be necessary. Please contact this office for further information should this species or their habitat be suspected.



August 24, 2015

Nick Lenox Director, Ankeny Parks & Recreation Department 210 South Ankeny Boulevard Ankeny, Iowa 50023

RE: Notice of Intent to make a De Minimis Impact Finding – Heritage Park East 1st Street Interchange and I-35 Widening IM-035-4(140)92--13-77

Dear Mr. Lenox,

The City of Ankeny, in coordination with the Iowa Department of Transportation (Iowa DOT) and Iowa Division Federal Highway Administration (FHWA), is notifying the Ankeny Parks & Recreation Department of its intent to make a de minimis finding according to 23 CFR 774, also commonly referred to as Section 4(f) of the DOT Act of 1966.

The Administration may not approve the use, as defined in \$774.17, of Section 4(f) property unless a determination is made that:

There is no feasible and prudent avoidance alternative, as defined in §774.17, to the use of land from the property; and

The action includes all possible planning, as defined in §774.17, to minimize harm to the property resulting from such use; or

The Administration determines that the use of the property, including any measures(s) to minimize harm (such as any avoidance, minimization, mitigation, or enhancement measures) committed to by the applicant, will have a de minimis impact, as defined in *§*774.17, on the property.

The attached figure shows the existing alignment of East 1st Street and I-35 and the impact areas the proposed project will have to the Heritage Park property.

The public will be given the opportunity to review and comment on the Environmental Assessment (EA) and the intent to make a de minimis finding. The EA will discuss the effect of the East 1st Street / I-35 interchange reconstruction project on the protected activities, features, or attributes of Heritage Park.

As the official having jurisdiction over the Section 4(f) resource, following the public review and comment period we will ask you to concur in writing that the East 1st Street / I-35 interchange reconstruction project will not adversely affect the activities, features, or attributes that make the property eligible for Section 4(f) protection.

You may contact me at 515-963-3522 or at <u>mmueller@ankenyiowa.gov</u> if you have any questions or concerns.

Sincerely,

Mark Mueller

Mark Mueller, P.E. City of Ankeny, Director of Public Works

Attachment: Figure - Section 4(f) Impacts

cc: Joe Jurasic, FHWA – Iowa Division
 Tony Gustafson, Iowa DOT – District 1
 Jorge Zamora, Iowa DOT – OLE
 Polly Ready, Snyder & Associates, Inc.



TERRY E. BRANSTAD, GOVERNOR KIM REYNOLDS, LT. GOVERNOR

STATE OF IOWA

DEPARTMENT OF NATURAL RESOURCES CHUCK GIPP, DIRECTOR

August 17, 2015

Polly Ready Snyder & Associates, Inc. 227 SW Snyder Boulevard Ankeny, IA 50023

Dear Ms. Ready:

This letter is in response to the documentation you emailed regarding the potential impacts associated with the reconstruction of the 1st Street Interchange and I-35 Widening Project in Ankeny, Iowa and how the project relates to the Federal Land & Water Conservation Fund (LWCF). Heritage Park LWCF Project #19-00408, located on the NE corner of the interchange, is a 37 acre park acquired with LWCF funds.

As a condition in accepting the Federal LWCF grant, the grantee (City of Ankeny) agrees to keep the acquired or developed land as parkland in perpetuity. The entire park is covered under the protections of the federal grant. Recreational enhancements may be made to the park, facilities replaced, and obsolete facilities removed. However, if the land is used for purposes other than outdoor recreation, or a portion of the land is parceled off and sold or used for other city purposes, a 6(f)(3) conversion will be considered to have taken place.

The interchange reconstruction as described in the documents included does not "take" any property from the park boundary, but will include the construction of a 10' wide trail along the southern and eastern edge of the park property for a safe route for pedestrians to travel from both sides of the Interstate. This trail development is considered an enhancement to the City's park system and this property, and does not constitute a 6(f)(3) conversion of use. As required, state Historical Review has been completed on the project for the reconstruction and trail project. I've attached their concurrence you provided as evidence of this.

No further action is required by the DNR. I will place this documentation in the City's permanent file for this project. The Department appreciates your coordination of the process. Please don't hesitate to contact me with any questions, 515-725-8213.

Sincerely,

Kathleen Moench

Kathleen Moench IDNR, Budgets & Finance Bureau

Roger Knowlton, National Park Service Nick Lenox, City of Ankeny, Parks

> 502 EAST 9th STREET / DES MOINES, IOWA 50319-0034 PHONE 515-725-8200 FAX 515-725-8201 www.iowadnr.gov



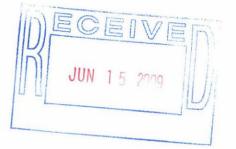
CHESTER J. CULVER, GOVERNOR PATTY JUDGE, LT. GOVERNOR

STATE OF IOWA

DEPARTMENT OF NATURAL RESOURCES RICHARD A. LEOPOLD, DIRECTOR

June 10, 2009

Robert Leavell Snyder & Associates, Inc. 2727 SW Snyder Blvd. Ankeny, Iowa 50023



Dear Mr. Leavell:

The Iowa Department of Natural Resources (DNR) Air Quality Bureau received your announcement dated May 6, 2009, of early coordination in preparation for an environmental assessment for a project to widen I-35 in Ankeny, Iowa.

Polk County Public Works is the delegated permitting and enforcement authority for most air quality requirements within Polk County. This includes issuing air construction and operating permits, issuing open burning permits, and conducting fugitive dust enforcement. If you have not already done so, please provide a copy of your request to Mr. Jeremy Becker, Program Manager, Polk County Public Works Air Quality Division, for his review.

The DNR is the regulatory authority for building renovations, demolitions and training fires are potentially subject to the asbestos release prevention efforts under the National Emission Standards for Hazardous Air Pollutants (NESHAP) for asbestos [40 Code of Federal Regulations (CFR) Part 61, subpart M].

The asbestos NESHAP rules apply **before** renovation or demolition begin, and often require a thorough inspection and lab analysis of suspect asbestos containing material, notification to the DNR and, in some cases, proper removal and disposal. For more information, you may wish to visit our website at <u>http://www.iowadnr.gov/air/prof/asbestos/asbestos.html</u>. You may also contact the DNR

Asbestos NESHAP Coordinator, Marion Burnside, at 515-281-8443.

If you have any questions, feel free to contact me by phone at 515-242-5154 or by email at <u>christine.paulson@dnr.iowa.gov</u>.

Sincerely,

"hustine M. Paulser

Christine M. Paulson Environmental Specialist Senior



May 22, 2009

Robert Leavell Environmental Scientist / Planner Snyder & Associates, Inc. 2727 SW Snyder Blvd. Ankeny, Iowa 50023



RE: First Street Interchange Reconstruction and I-35 Widening Project IM-035-4(140)92—13-77 EA Impact Comments

Dear Robert:

In response to your letter dated May 6, 2009; I have the following comments to offer regarding the impacts of the referenced project.

As documented in the Interchange Justification Report, the reconstruction of the First Street Interchange, and the corresponding widening of Interstate 35, is needed to insure adequate long-term operations of the interstate within Ankeny. These improvements are also needed to provide safe and efficient access to and from the interstate on Ankeny's arterial street network.

If the interchange and widening improvements are not completed, continued development of this area will increase the already critical traffic demands on the corridor. Specifically, the northbound off-ramp and the southbound on-ramp will break down, causing unacceptable travel delays coupled with vehicle back-ups onto Interstate 35 and First Street.

The reconstruction of this interchange is included as one of the targeted high priority projects within "The Ankeny Plan". This is our comprehensive development plan that was approved in 2004 and has since been updated. The project is also included in Ankeny's 5-year Capital Improvements Plan.

The compressed orientation of the proposed parclo single loop interchange will provide the necessary capacity without undue disturbance and impacts to the adjacent properties. It also lengthens the distance along First Street between the west ramp terminals and the intersection with Delaware Avenue. The added length between the ramps and this major municipal feeder street will substantially improve the traffic flows and capacities on the adjacent street system. The negative impacts of the interchange reconstruction and interstate lane widening to the surrounding properties is viewed as minimal. The ramp terminals on the west side of the interstate are proposed to move east, away from the existing commercial properties. There will be some property acquired in the southeast quadrant of the interchange, but this is an open undeveloped parcel today. There will also be a minimal amount of property acquired in the northeast quadrant of the interchange, which is a city park. A separate letter from Parks and Recreation Director Todd Redenius addresses this minor impact. Also, it appears that the widening of this reach of Interstate 35 will generally remain within the existing roadway corridor.

In summary, the development of the First Street Interchange Reconstruction and I-35 Widening Project appears to minimize the impacts on to the adjacent properties, and will serve both the City of Ankeny as well as the Interstate 35 corridor in the long-term. Thank you.

Sincerely,

City of Ankeny

Paul Moritz, P.E.

Director of Public Works

cc: Carl Metzger, City manager Dick Ash, Assistant City Manager Todd Redenius, Parks & Recreation Director



Chester J. Culver, governor Patty Judge, Lt. governor

STATE OF IOWA

DEPARTMENT OF NATURAL RESOURCES RICHARD A. LEOPOLD, DIRECTOR

May 14, 2009

Robert Leavell Snyder & Associates, Inc. 227 SW Snyder Boulevard Ankeny, IA 50023



Dear Mr. Leavell:

This letter is in response to your request for informatioin on potential impacts associated with an Environmental Assessment (EA) for the 1st Street Interchange Reconstruction and I-35 Widening Project in Ankeny, Iowa and how the project relates to the Federal Land & Water Conservation Fund (LWCF).

The City of Ankeny has one park within the vicinity map that has received Federal funds and has the potential to be impacted by the improvements. LWCF Project #19-00408, Heritage Park, funded in part with LWCF funds, was for the acquisition of 37 acres of park land. Heritage Park is located on the north east side of the I-35 & NE 94th Avenue interchange.

As a condition in accepting the Federal LWCF grant, the grantee (City of Ankeny) has agreed to keep the acquired or developed land as parkland in perpetuity. The entire park is covered under the protections of the federal grant. Enhancements may be made to the park, facilities replaced, and obsolete facilities removed. If the land is used for purposes other than outdoor recreation, or a portion of the land is parceled off and sold or used for other city purposes, a 6(f)(3) conversion will be considered to have taken place.

If a conversion will take place on the property, that protion of the park must be mitigated with new parkland. Repayment of the grant is not an option. Replacement property must be of equal or greater value, as determined by an approved appraisal, and can not be existing parkland.

The early coordination process is very helpful to our office and the National Park Service as we both are responsible for ensuring LWCF projects remain in outdoor recreation, and conversions are kept to a minimum.

If you have any questions, please contact me at 515-281-3013.

Sincerely,

attle moench

Kathleen Moench Budget & Finance Bureau



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

May 18, 2009

Robert Leavell Snyder and Associates, Inc. 2727 SW Snyder Blvd. Ankeny, IA 50023



STATE OF IOWA

DEPARTMENT OF NATURAL RESOURCES

RICHARD A. LEOPOLD, DIRECTOR

RE: Environmental Review for Natural Resources 1st Street Interchange Reconstruction and I-35 Widening – Environmental Assessment IM-035-4(140)92—13-77 Polk County Section 7, 18, 19, 30, Township 80N, Range 23W

Dear Mr. Leavell:

Thank you for inviting the Department's comments on the impact of this project. The Department has searched for records of rare species and significant natural communities in the project area and found no site-specific records that would be impacted by this project. However, these records and data are not the result of thorough field surveys. If listed species or rare communities are found during the planning or construction phases, additional studies and/or mitigation may be required.

This letter is a record of review for protected species, rare natural communities, state lands and waters in the project area, including review by personnel representing state parks, preserves, recreation areas, fisheries and wildlife but does not include comment from the Environmental Services Division of this Department. This letter does not constitute a permit. Other permits may be required from the Department or other state or federal agencies before work begins on this project.

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

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

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

Sincerely, toth Inga Foster

Environmental Specialist Conservation and Recreation Division

FILE COPY: Inga Foster Tracking Number: 3531

502 EAST 9th STREET / DES MOINES, IOWA 50319-0034 PHONE 515-281-5918 FAX 515-281-6794 www.iowadnr.gov



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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

27 MAY mag

Robert Leavell Snyder & Associates, Inc. 2727 SW Snyder Boulevard Ankeny, IA 50023

Dear Mr. Leavell:

This letter responds to your correspondence, dated May 6, 2009, concerning the proposed reconstruction of an interchange at the intersection of 1st Street and I-35, as well as the widening of a section of I-35, located in Ankeny, Polk County, Iowa. Thank you for involving the U.S. Environmental Protection Agency during the consideration of environmental impacts either to or from this project.

In evaluating this action, I referred to EPA Region 7's SiteMapper database for spatial relationships of environmentally regulated facilities and remediation sites. There are several businesses located in or near the project area that are currently listed as EPA regulated facilities for air emissions as well as one facility within the project area, City of Ankeny STP, which is shown on the SiteMapper map as a Minor National Pollutant Discharge Elimination System (NPDES) facility. The enclosed map shows the results of this inquiry.

Your correspondence stated that the City of Ankeny is initiating the preparation of an environmental assessment of the project. EPA would like to ask that we please be kept informed of the results of said assessment.

If you have any other questions, you can contact me at 913-551-7565, or via email at <u>tucker.amber@epa.gov</u> or you may contact Joe Cothern, NEPA Team Leader, at 913-551-7148 or via email at <u>cothern.joe@epa.gov</u>.

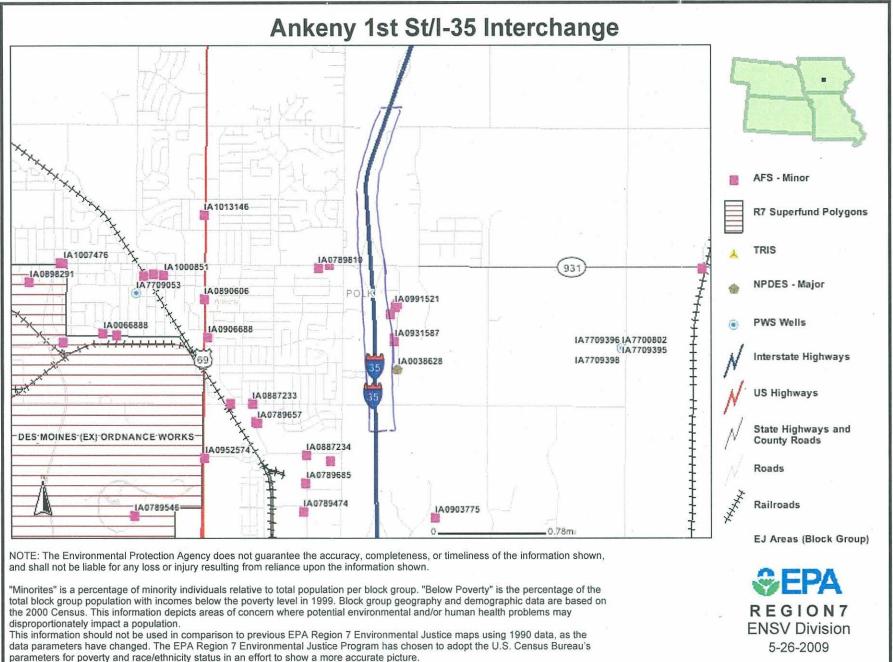
Sincerely,

Amper Ducker

Amber Tucker NEPA Reviewer Environmental Services Division

Enclosure







Federal Aviation Administration

May 19, 2009

Mr. Robert Leavell Snyder & Associates. Inc. 2727 S.W. Snyder Blvd. Ankeny, IA 50023

Central Region Iowa, Kansas Missouri, Nebraska

901 Locust Kansas City, Missouri 64106-2325

Re: 1st Street Interchange Reconstruction and I-35 Widening – Environmental Assessment Im-035-4(140)92-13-77

Dear Mr. Leavell:

The Federal Aviation Administration (FAA) reviews other federal agency environmental documents from the perspective of the FAA's area 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 notice, concerning the above referenced project, and have no comments regarding environmental matters.

Airspace Considerations

We remind you that the project may require formal notice and review from an airspace standpoint. The requirements for this notice may be found at: http://oeaaa.faa.gov under "Who Needs to File" at the bottom of the main page. You need to know where the public – use or military airports are in the project area in order to judge whether a project requires airspace review. We note that the Ankeny Regional Airport is a mile south-southeast from your site.

If you determine that formal notice is required, follow instructions on the main page for efiling your proposal with the FAA. Advisory Circular 70/7460-2K states that notification is to be submitted 30 days prior construction. Given the time required to conduct an aeronautical study, we recommend a 60-day notification to accommodate the review process and issue our determination letter.

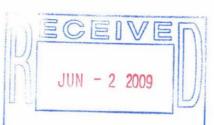
More information on this process may be found at: http://www.faa.gov/airports_airtraffic/airports/regional_guidance/central/construction/part77/ If you have questions, please contact me at glenn.helm@faa.gov or 816-329-2617.

Sincerely,

Du Klu

Glenn Helm, P.E. Environmental Specialist





U.S. Department of Housing and Urban Development

Iowa State Office Federal Building 210 Walnut Street, Room 239 Des Moines, Iowa 50309-2155

June 1, 2009

Mr. Robert Leavell Snyder & Associates, Inc. 2727 S.W. Snyder Blvd. Ankeny, IA 50023

Subject: 1st Street Interchange Reconstruction and I-35 Widening – Environmental Assessment IM-35-4(140)92—13-77

Dear Mr. Leavell:

Thank you for the opportunity for our agency to provide early coordination comments regarding the above proposed undertaking. HUD does currently have an existing insured housing project in its portfolio called Mill Pond Retirement Community located at 1201 SE Mill Pond Court, Ankeny, Iowa. The Mill Pond project backs up to the western I-35 ROW, south of the 1st Street interchange.

HUD notes that Mill Pond development in the mid 1990's required the installation of an earthen berm to shield the eastern wing of the project from excessive noise levels generated from close proximity to I-35 traffic.

Two major causes of concern to HUD would include the potential for taking Mill Pond land and/or elevated road traffic noise levels to the Mill Pond project due to the associated I-35 Widening/Interchange reconstruction.

Sincerely,

James P. Ryan, Director Des Moines Multifamily Program Center



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

June 9, 2009

Robert Leavell Snyder & Associates 2727 SW Snyder Boulevard Ankeny, IA 50023

STATE OF IOWA

DEPARTMENT OF NATURAL RESOURCES RICHARD A. LEOPOLD, DIRECTOR



Dear Mr. Leavell:

This letter is in response to the May 6th letter concerning the Polk County First Street Ankeny I35 project. After a cursory review by our program staff, we have the following comments. You are welcome to visit our offices and conduct a more thorough review of our records.

Water Quality

Waters of the United States (includes wetlands) should not be disturbed if a less environmentally damaging alternative exists. Unavoidable adverse impacts should be minimized to the extent practicable. Any remaining adverse impacts should be compensated for through restoration, enhancement, creation and/or preservation activities.

We would ask that Best Management Practices be used to control erosion and protect water quality near the project.

Contaminated Sites

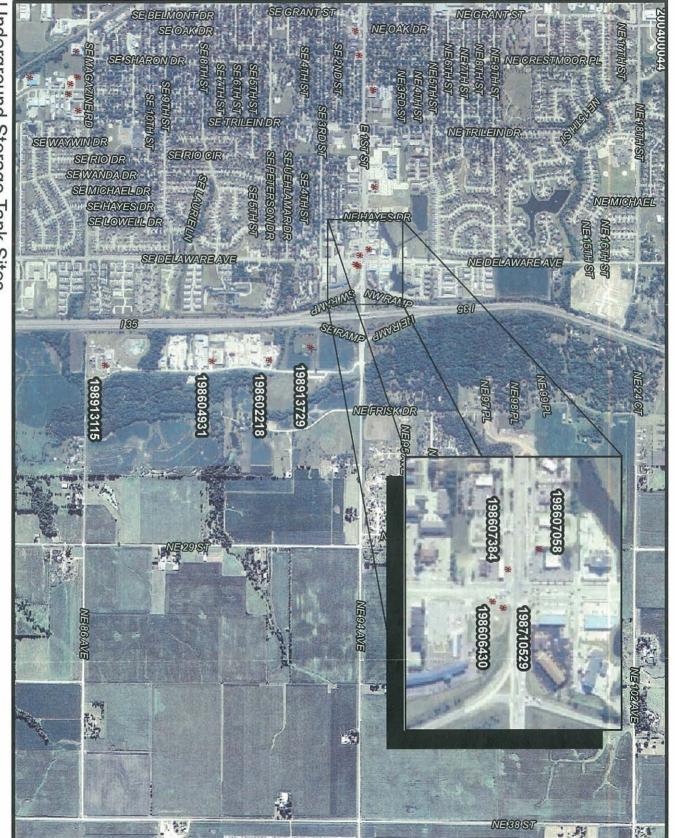
After reviewing the records for the Contaminated Sites Section, there appear to be no contaminated sites located in the project area. Please note that the above comments are based on the information available in the Contaminated Sites database and may not be applicable to other sections/units of the Department. Furthermore, all contaminated sites might not be accounted for through the sections' database or the Departments' records; therefore, the lack of contaminated sites in our records does not necessarily mean that none exist at or near the project area.

Underground Storage Tanks

The registered underground storage tank/leaking underground storage tank projects in the vicinity of this project are identified on the attached map.



Ankeny, IA 1st Street Interchange Reconstruction and I-35 Widening Project Underground Storage Tank Sites







May 21, 2009

Mr. Robert Leavell Snyder & Associates, Inc. 2727 SW Snyder Boulevard Ankeny, IA 50023

Dear Mr. Leavell:

Thank you for the opportunity to comment on the 1st Street Interchange Reconstruction and I-35 Widening Project in Ankeny, Iowa. The Natural Resources Conservation Service has no concerns or comments at this time. If applicable, please take into account the loss of prime farmland associated with this undertaking. See enclosed Form AD-1066, "Farmland Conversion Impact Rating" if necessary.

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

Sincerely,

John Myers State Resource Conservationist

Enclosure

cc: Paul Miller, District Conservationist, NRCS, Ankeny, IA

Helping People Help the Land

An Equal Opportunity Provider and Employer

Iowa Department of Transportation800 Lincoln Way, Ames, Iowa 50010515-239-1795Fax 515-239-1725

October 19, 2009

Ref. No: IM-035-(140)-13-77 Ankeny **Polk County** Primary

Doug Jones/Ralph Christian **Review and Compliance Bureau of Historic Preservation** State Historical Society of Iowa 600 East Locust Des Moines, IA 50319-0290

R&C: 090577060

Dear Doug:

RE: I-35 / 1st Street Interchange Redesign in Ankeny

Enclosed for your review and comment are the Phase I Archaeological and Architectural Surveys for the above referenced project. The City of Ankeny proposes to redesign the interchange at 1st Street in Ankeny. The entrance and exit ramps will be improved, 1st St widened, and Creekview Drive and SE Frisk Drive resurfaced. The potential area of affect is an irregularly shaped area south of 1st Street and east of I-35. A total of 101 4 acres were surveyed.

The archaeological investigation included literature search, field investigation, and subsurface testing. No sites were recorded No further work is recommended. The architectural investigation did not find significant structural resources within the APE The Brazelton Farmstead, although a century farm, does not retain integrity of the complex to qualify for the National Register

The Department has determined that the proposed project will have No Historic Properties Affected by the proposed project. If you concur, please sign the concurrence line below, add your comments, and return this letter. If you have any questions, please contact me.

Sincerely,

Judy McDonald Office of Location and Environment Judy McDonald@dot iowa.gov

JM Enclosure

cc: Dee Ann Newell, NEPA / OLE Tony Gustaphson, District 1 Robert Leavell, Snyder & Associates, Inc.

_____ Date: 10/30/2009 glas W. Jones Concur: SHPO



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

June 17, 2009

Planning, Programs, and Project Management Division

Mr. Robert Leavell Snyder & Associates, Inc. 2727 S.W. Snyder Boulevard Ankeny, Iowa 50023



Dear Mr. Leavell:

I received your letter dated 13 May, 2009, concerning request for comments for the proposed environmental assessment for the 1st Street Interchange and I-35 widening, Ankeny, Iowa (IM-035-4(140)92--13-77). Rock Island District Corps of Engineers staff reviewed the information you provided and have the following comments:

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

2. Any proposed placement of dredged or fill material into waters of the United States (including jurisdictional wetlands) requires Department of the Army authorization under Section 404 of the Clean Water Act. We require additional details of your project before we can make a final determination of permit requirements. When detailed plans are available, please complete and submit the enclosed application packet to the Rock Island District for processing (enclosure).

3. The Responsible Federal Agency should coordinate with Ms. June Strand, Iowa Historic Preservation Agency, ATTN: Review and Compliance Program, State Historical Society of Iowa, 600 East Locust, State Historic Building, Des Moines, Iowa 50319 to determine impacts to historic properties.

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

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

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

You may find additional information about the Corps' Rock Island District on our website at <u>http://www.mvr.usace.army.mil</u>. To find out about other Districts within the Corps, you may visit: <u>http://www.usace.army.mil/about/Pages/Locations.aspx</u>.

Sincerely,

Kent Ban

Kenneth A. Barr Chief, Economic and Environmental Analysis Branch

Enclosure



May 14, 2009

SNYDER & ASSOCIATES, INC. 2727 S.W. SNYDER BOULEVARD ANKENY IA 50023

Dear Mr. Leavell:

This letter is to acknowledge receipt of your May 6, 2009 correspondence relative to the City of Ankeny project.

We have not given this proposal thorough review, but do acknowledge having received materials and being given the opportunity to review and comment if we so choose. This acknowledgment is not an indication of approval on our part.

If you have not already done so, I suggest that a copy of your proposal also be mailed to:

Polk SWCD 151 N. Ankeny Blvd., Ste Ankeny, IA 50021

We appreciate the consideration you have given us in this matter.

Sincerely,

chuch Gop

Chuck Gipp, Director Division of Soil Conservation Ph: 515-281-5851

CRG:klf

Henry A. Wallace Building • Des Moines, Iowa 50319 • 515-281-5321

The Iowa Department of Agriculture and Land Stewardship is an equal opportunity employer and provider.

Robert Leavell

From: Rob G Middlemis-Brown [rgbrown@usgs.gov]

- Sent: Monday, May 18, 2009 7:07 AM
- To: Robert Leavell
- Cc: robert_f_stewart@ios.doi.go
- Subject: USGS response: 1st Street Interchange Reconstruction and I-35 Widening Environmental Assessment

Mr. Leavell,

The U.S. Geological Survey (USGS) has reviewed the proposed project for the 1st Street Interchange Reconstruction and I-35 Widening Project. Thank you for opportunity to review and comment on the proposed project. After reviewing the project information, USGS has no comment on the environmental assessment of the project as the proposed construction does not affect USGS concerns in the area.

Sincerely,

Rob

Rob Middlemis-Brown Director USGS Iowa Water Science Center 319-358-3600

APPENDIX C

FARMLAND PROTECTION FORM AD-1006

U.S. Department of Agriculture

FARMLAND CONVERSION IMPACT RATING

PART I (To be completed by Federal Agency)		Date Of La	Date Of Land Evaluation Request 10/23/09					
Name Of Project E. 1st Street Interchange/I-35 Widening			Federal Agency Involved Iowa DOT					
Proposed Land Use Interchange and Highway ROW			County And State Polk County, Iowa					
PART II (To be completed by NRCS)		Date Requ	est Received By	/ NRC	S 12/21/09)		
Does the site contain prime, unique, statewide or local important far (If no, the FPPA does not apply do not complete additional parts		mland? of this form)	nland? Yes N of this form).		Acres Irrigated Average F 0.0 250		arm Size	
Major Crop(s) Corn	Farmable Land In Govt. Juris Acres: 282,514		% 75		Amount Of Farmland As Defined in FPPA Acres: 212,447 % 56			
Name Of Land Evaluation System Used Polk County, Iowa	Name Of Local Site None - FPPA	ystem		Date Land Evaluation Returned By NRCS 1/4/10				
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		6.2 0.0	0.					
C. Total Acres In Site			6.2	0.0		0.0	0.0	
PART IV (To be completed by NRCS) Land Evaluation Information			0.2	0.	0	0.0	0.0	
			5.0					
A. Total Acres Prime And Unique Farmland			5.6					
B. Total Acres Statewide And Local Important Farmland C. Percentage Of Farmland In County Or Local Govt. Unit To Be C			0.6					
 D. Percentage Of Farmland In Govt. Jurisdiction With Same Or Higher Relative V 			43.5	-				
 PART V (To be completed by NRCS) Land Evaluation Criterion Relative Value Of Farmland To Be Converted (Scale of 0 to 1 PART VI (To be completed by Federal Agency) Site Assessment Criteria (These criteria are explained in 7 CFR 658.5(b) 		00 Points) Maximum Points	83	0		0	0	
1. Area In Nonurban Use		15	5					
2. Perimeter In Nonurban Use		10	4					
3. Percent Of Site Being Farmed		20	3					
4. Protection Provided By State And Local Government		20	0					
5. Distance From Urban Builtup Area		15	0					
6. Distance To Urban Support Services		15	0					
7. Size Of Present Farm Unit Compared To Average		10	0					
8. Creation Of Nonfarmable Farmland		10	5	_				
9. Availability Of Farm Support Services 10. On-Farm Investments		5 20	4	_				
11. Effects Of Conversion On Farm Support Services		20 10	0	-				
12. Compatibility With Existing Agricultural Use		10	1	-				
TOTAL SITE ASSESSMENT POINTS		160	24 0			0	0	
PART VII (To be completed by Federal Agency)				-		~		
Relative Value Of Farmland (From Part V)		100	83 0			0	0	
Total Site Assessment (From Part VI above or a local site assessment)		160	24 0			0	0	
TOTAL POINTS (Total of above 2 lines)		260	107 0			0	0	
Site Selected: A Date Of Selection 1/5/1) Was A Local Site Assessment Used? Yes 🔲 No 🔳					

Reason For Selection: Less than significant farmland impacts for the proposed action.