US 20
PROPOSED DYERSVILLE INTERCHANGE
DELAWARE AND DUBUQUE COUNTIES, IOWA
NHSN-020-9(195)—2R-31

ENVIRONMENTAL ASSESSMENT

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

By The

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

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.

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Iowa Department of Transportation

1/6/2011
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.

Table 1: Resources Considered

SOCIOECONOMIC		NATURAL ENVIRONMENT	
☑	☑ Land Use	☑	☐ Wetlands
☑	☐ Community Cohesion	☑	☑ Surface Waters and Water Quality
☑	☐ Churches and Schools	☐	☐ Wild and Scenic Rivers
☐	☐ Environmental Justice	☑	☐ Floodplains
☑	☑ Economic	☑	☐ Wildlife and Habitat
☐	☐ Joint Development	☐	☐ Threatened and Endangered Species
☐	☐ Parklands and Recreational Areas	☐	☐ Woodlands
☐	☐ Bicycle and Pedestrian Facilities	☑	☑ Farmlands
☑	☑ Right-of-Way		
☑	☑ Relocation Potential		
☑	☑ Construction and Emergency Routes		
☑	☑ Transportation		
CULTURAL		**PHYSICAL**	
☐	☐ Historical Sites or Districts	☑	☑ Noise
☐	☐ Archaeological Sites	☑	☐ Air Quality
☐	☐ Cemeteries	☑	☐ Mobile Source Air Toxics (MSATs)
		☑	☐ Energy
		☑	☐ Contaminated and Regulated Materials Sites
		☑	☑ Visual
		☑	☑ Utilities
☑	**CONTROVERSY POTENTIAL** Five relocations.		
☐	**Section 4(f): Park or Recreation Areas** No Section 4(f) properties are located within the study area, a new city park is tentatively planned adjacent to the study area. Should this park be developed, a constructive use is not anticipated due to the proposed location of the park and interchange.		

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DESCRIPTION OF THE PROPOSED ACTION

SECTION 1
DESCRIPTION OF THE PROPOSED ACTION

This Environmental Assessment (EA) is being 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.

1.1 Proposed Action

The Iowa Department of Transportation (Iowa DOT), in coordination with the City of Dyersville, Iowa (the City) and the Federal Highway Administration (FHWA), is proposing to construct an interchange over U.S. Highway 20 (US 20) in Delaware and Dubuque counties, Iowa (the Project). There is currently no grade separation or interchange at this location. Figure 1-1 shows the general location of the Project. Section 4.2.2, Build Alternative, describes the proposed improvements, including the location, termini, and configuration of the Project.

1.2 Study Area

Most of the area investigated for the Project (the Study Area) is in Delaware County, and a small portion is located in Dubuque County. The irregular-shaped Study Area is roughly bounded by 320th Avenue on the west, 6th Avenue Southwest (SW) on the north, the Delaware/Dubuque County line on the east, and 225th Street on the south (Figure 1-2). The Study Area primarily consists of agricultural land; it also includes some farmsteads and residences as well as a commercial development under construction southwest of the 330th Avenue intersection with US 20.

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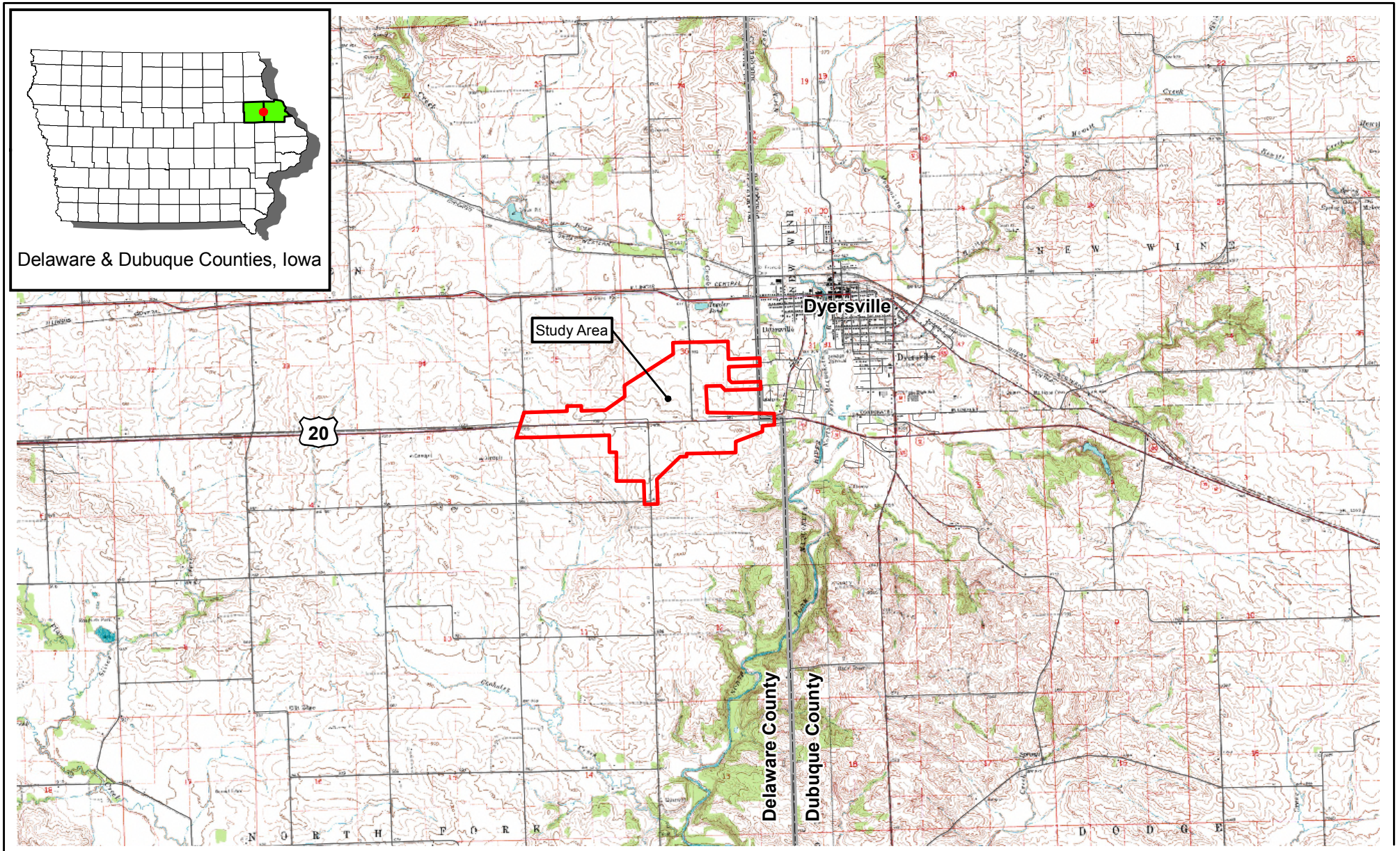

Base Map: USDA-NRCS-NCGC Digital Raster Graphic, Delaware County, Iowa

HDR

Project Location

U.S. 20 Dyersville Interchange
Delaware and Dubuque Counties, Iowa
Environmental Assessment

Iowa Department of Transportation

DATE
December 2010

FIGURE
1-1

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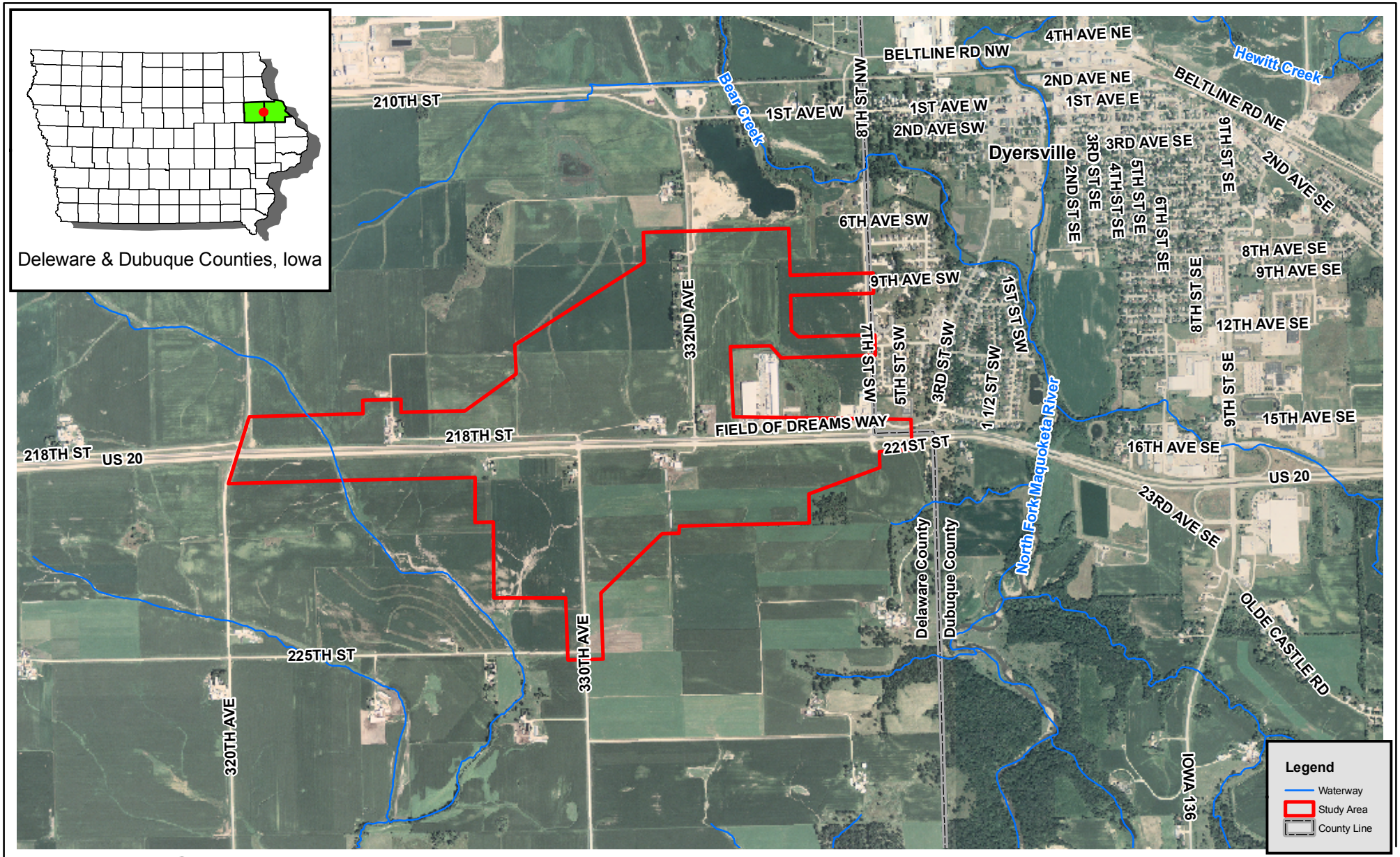

SECTION 2

PROJECT HISTORY

SECTION 2
PROJECT HISTORY

This section describes the events leading up to the proposed action and discusses other projects in or near the Study Area.

2.1 Project Background and Events Leading to the Proposed Action

In 2009, based on anticipated increases in traffic volumes and growing safety concerns in the southwest area of the City, traffic and safety issues were evaluated to identify options for construction of a new US 20 Interchange (IIW, July 2009). The study identified and evaluated eight interchange options within the transportation network from Beltline Road to US 20 and from 320th Avenue to 9th Street Southeast (SE) (Iowa Highway 136 [IA 136]) (Figure 1-2). Additional information regarding the options in the 2009 study is provided in Section 4, Alternatives.

The evaluation of a new US 20 interchange in or near Dyersville began in early 2009. It involves conducting this EA and related studies, and preparing the preliminary design of the eventually selected alternative. Iowa DOT conducted a public meeting on September 30, 2009, prior to initiation of the NEPA process. The meeting was held to obtain input on public concerns with regard to the study and to acquire background information on potential constraints in the Study Area. A second public information meeting was conducted on August 3, 2010 to provide project information to the public and to gather public feedback on the project. Section 7, Comments and Coordination, includes a summary of public and resource agency input on the study.

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SECTION 3

PURPOSE AND NEED FOR ACTION

SECTION 3
PURPOSE AND NEED FOR ACTION

3.1 Purpose of the Proposed Action

The purpose of the proposed action is to improve safety and to provide more efficient traffic flow in the southwest area of the City to accommodate development that is planned and is occurring today.

3.2 Need for the Proposed Action

The need for the proposed action is based on a combination of deficiencies:

- Safety – Since 2005, the intersection at US 20 and 7th Street SW has been the site of four crashes that have resulted in five fatalities.
- Capacity – The current at-grade intersections are not sufficient to meet the anticipated traffic capacity resulting from planned and occurring development.
- Direct access across US 20 – No direct access across US 20 is currently present.

These deficiencies are discussed in more detail below.

3.2.1 Safety

A crash analysis was performed for the Study Area along US 20 from 320th Avenue to 9th Street SE (IA 136) in Dyersville and its crossing roadways (HDR Engineering, Inc. [HDR], June 2010). Crashes were analyzed for the five-year period from 2005 to 2009. The Iowa DOT crash analysis software, Safety Analysis, Visualization, and Exploration Resource (SAVER) was used for the crash analysis.

Crash rates were calculated for three segments along US 20 and at the intersections within the Study Area. Figure 1-2 shows the roadways and intersections noted below. The Study Area was divided into three segments because of the transition from a rural to a municipal environment and the associated variations in state crash rates:

- Segment 1 – 320th Avenue to 330th Avenue (including crashes at the 320th Avenue intersection but excluding crashes at the 330th Avenue intersection)
- Segment 2 – 330th Avenue to 7th Street SW (including crashes at the 330th Avenue and 332nd Avenue intersections but excluding crashes at the 7th Street SW intersection)
- Segment 3 – 7th Street SW to 9th Street SE (IA 136) (including crashes at the 7th Street SW intersection but excluding crashes at the IA 136 ramp terminal intersections)

Segments 1 and 2 are rural, but current development plans are for Segment 2 to transition to a municipal environment. Segment 3 is municipal.

Tables 3-1 and 3-2 show the results of the crash analysis. Table 3-1 shows the results for all crashes, while Table 3-2 shows the results for fatal accidents only. The first three columns identify the length of the segment, the number of crashes that occurred during from 2005 to 2009, and the average daily traffic (ADT), or average number of vehicles that use the segment on a daily basis. The 5-year crash rate indicates how many crashes have occurred in the segment for every 100 million vehicle miles (MVM) travelled in the segment. The total 100 MVM column is the miles travelled in the segment during the period from 2005 to 2009; in Segment 1, for example, there were 0.138 100 MVM, or 13,800,000 vehicle miles, travelled from 2005 to 2009. The crashes/100 MVM column converts the 5-year crash rate, which is calculated by MVM, to 100 MVM. The Statewide Crashes/100 MVM column provides the statewide average for similar road segments throughout Iowa. The crashes/100 MVM and statewide crashes/100 MVM values are compared to determine if the Project segment crash rate is below, at, or above the statewide average.

The crash rate for all three Segments is below the statewide average (Table 3-1); however, the fatal crash rate for Segment 3 is well above (approximately 10 times) the statewide average fatal crash rate (Table 3-2). In addition to the crashes in the five-year analysis period, a crash that occurred in June 2010 resulted in one fatality and one injury.

Table 3-1
Segment Crash Rates

Location	Length (miles)	Number of Crashes	ADT[1]	5-Year Crash Rate[2]	Total 100 MVM	Crashes/ 100 MVM	Statewide Crashes/ 100 MVM[3]
Segment 1 – US 20 320th Avenue to 330th Avenue	0.96	10	7,900	0.723	0.138	72	95
Segment 2 – US 20 330th Avenue to 7th Street SW	0.83	10	8,200	0.805	0.124	81	95
Segment 3 – US 20 7th Street SW to 9th Street SE (IA 136)	1.50	41	8,600	1.742	0.235	174	294

Source: HDR, June 2010, based on 2005 to 2009 crash data provided by the Iowa DOT Office of Traffic and Safety, May 2010.
Notes:
[1] 2008 average daily traffic volumes provided in SAVER database.
[2] Average crash rate per MVM.
[3] Iowa DOT Office of Traffic and Safety, April 22, 2010, Crash Rates and Crash Densities in Iowa by Road System 2001 – 2009.

Table 3-2
Segment 3 Fatal Crash Data

Location	Length (miles)	Number of Fatal Crashes	ADT[1]	5-Year Fatal Crash Rate[2]	Total 100 MVM	Fatal Crashes/ 100 MVM	Statewide Fatal Crashes/ 100 MVM[3]
Segment 3 – U.S. 20 7th Street SW to 9th Street SE (IA 136)	1.50	3	8,600	0.127	0.235	13	1.29

Source: HDR, June 2010, based on 2005 – 2009 crash data provided by the Iowa DOT Office of Traffic and Safety, May 2010.
Notes:
[1] 2008 ADT volumes provided in SAVER database.
[2] Average fatal crash rate per MVM.
[3] Iowa DOT Office of Traffic and Safety, April 22, 2010, Crash Rates and Crash Densities in Iowa by Road System 2001 – 2009.

All of the crashes involving a fatality occurred at the intersection of US 20 and 7th Street SW. One crash was the result of a southbound vehicle failing to yield the right-of-way to traffic on US 20, causing a broadside collision. The second crash was the result of an improper turn for a westbound vehicle onto 7th Street SW, causing the vehicle to roll. The third fatal crash and the 2010 fatal crash were the result of a southbound vehicle failing to yield the right-of-way to a westbound vehicle on US 20, causing a broadside collision. The intersection of US 20 and 7th Street SW is ranked 31st in the Iowa DOT 2001–2008 Safety Improvement Candidate Locations.

3.2.2 Capacity

Dyersville and the surrounding unincorporated area have been growing in population in the recent past and are projected to continue growing. Consequently, future traffic volumes and patterns were projected by means of a traffic analysis for the Study Area along US 20 from 320th Avenue to 9th Street SE (IA 136) in Dyersville including the crossing roadways on US 20 (HDR, September 2010). The traffic projections were provided by Iowa DOT for the A.M. and P.M. peak hours for 2015 (the Program Year) and 2035 (the Design Year). The Study Area intersections were analyzed using the future year traffic projections and the Highway Capacity Manual 2000 methodology (Transportation Research Board, 01 January 2000. At the intersections of US 20 and 320th Avenue, 330th Avenue, 332nd Avenue, and 7th Street SW, traffic is controlled by stop signs on the side street approach. Using the projected year 2035 traffic volumes, it was determined that traffic on the side street approaches at the intersections of US 20/330th Avenue and US 20/7th Street SW would experience excessive delay in the future.

Based on projected traffic volumes and turning movements, the Study Area intersections were evaluated to determine whether changes to the intersections were warranted. The intersections of US 20/330th Avenue and US 20/7th Street SW were determined to meet the criteria for a traffic signal. However, US 20 does not include any traffic signals along this section. Although an improvement is warranted to handle the increased volumes and turning movements, a traffic signal would create a safety concern because it would not be expected

by drivers along this portion of the US 20 expressway. US 20 is part of Iowa's Commercial and Industrial Network of highways, and, other than in Dubuque, there are currently no traffic signals along US 20 in eastern Iowa.

3.2.3 Direct Access Across US 20

Currently, there is no direct access from Dyersville on the north side of US 20 to the industrial center under construction south of US 20. The most direct way to travel is to take 332nd Avenue or 7th Street SW south to US 20, turn right and merge onto US 20, merge to the left lane of US 20, and turn left onto 330th Avenue. The distance travelled on US 20 is approximately 2,000 feet from 332nd Avenue or 4,500 feet from 7th Street SW. The turn movements are reversed for motorists travelling from the new industrial center to Dyersville north of US 20.

The lack of a direct crossing of US 20 results in slow-moving vehicles as well as frequent lane changes and turn movements on US 20 in the Study Area. As the industrial center and Dyersville expand, the number of slow-moving vehicles, lane changes, and turn movements is expected to increase.

SECTION 4

ALTERNATIVES

SECTION 4
ALTERNATIVES

This section will discuss the alternatives investigated to address the Project's purpose and need. A range of alternatives was developed, including various interchange locations. The No Build Alternative, the alternatives considered but dismissed, and the Proposed Alternative are discussed below.

4.1 No Build Alternative

Under the No Build Alternative, a new interchange near Dyersville would not be constructed. The road network would continue to be used in its existing configuration. This alternative would not improve safety, would not improve the level of service to meet the anticipated future traffic capacity, and would not provide direct access for vehicles crossing US 20.

4.2 Alternatives Considered but Dismissed

As discussed in Section 3, Purpose and Need for Action, the area proposed for improvement has safety concerns, the at-grade intersections are not sufficient to meet the anticipated traffic capacity, and there is no direct access for vehicles crossing US 20. An interchange location evaluation was completed to determine if an additional US 20 interchange is warranted (HDR, March 2009). The evaluation included the transportation network from Beltline Road to US 20 and from 320th Avenue to 9th Street SE (IA 136) (Figure 1-2). This evaluation took into account traffic and access, environmental constraints, and geometric considerations. The following potential interchange locations and interchange configurations were evaluated:

- 320th Avenue – standard diamond
- 330th Avenue – standard diamond, folded diamond, and three-quadrant partial cloverleaf
- 332nd Avenue – standard diamond and folded diamond
- 7th Street SW – standard diamond and folded diamond

An interchange at 320th Avenue would provide access to the western part of anticipated development and could provide indirect access to other anticipated development. However, most of the trips are expected to be from the east toward Dyersville and Dubuque. Consequently, this location was eliminated from further consideration due to the distance from Dyersville and the out-of-distance travel (greater than 2 miles) that would be required at this location (thus reducing the traffic demand). Additionally, building the interchange at this location would require closing the at-grade crossings between 320th Avenue and 7th Street SW. Although an interchange at this location would create a direct access across US 20, the out-of-distance travel required would reduce the traffic demand to the point that the benefit of

the direct crossing would be lost; an interchange at this location would not meet the purpose and need.

Several interchange configurations were evaluated for 330th Avenue and 332nd Avenue, including configurations that would tie into 330th Avenue south of US 20 and into 332nd Avenue north of US 20. An interchange at 330th Avenue would require closure of accesses to US 20 at 332nd Avenue and at 7th Street SW. With an interchange at 332nd Avenue, it is anticipated that access to US 20 at 320th Avenue would remain open but access at 330th Avenue and 7th Street SW would need to be closed. Ultimately, the interchange configurations that would use 330th Avenue or 332nd Avenue alone were dismissed from further consideration because the interchange configurations using both 330th Avenue and 332nd Avenue would result in substantially better traffic patterns. The traffic patterns resulting from an interchange at 330th Avenue or 332nd Avenue alone would not improve safety sufficiently to meet the purpose and need.

By using only 330th Avenue or 332nd Avenue and continuing north or south, another parallel roadway would be created with relatively close spacing, resulting in additional roadways connecting 330th Avenue to 332nd Avenue. These connector roads between the avenues would result in 90 degree turns for most of the traffic. Because the development and traffic patterns are from 330th Avenue on the south and 332nd Avenue on the north, the interchange configurations that use both 330th Avenue and 332nd Avenue would provide greater connectivity than interchanges along only one avenue. These configurations also would maintain the traffic demand and would minimize the amount of frontage roads needed; however, the creation of additional 90 degree turns for most traffic pose a safety concern that is contrary to the purpose and need.

An interchange at 7th Street SW would provide direct access to southwest Dyersville but would not provide sufficient access to the anticipated development west of Dyersville as indicated in the City of Dyersville Annexation Plan (ECIA, 2003). This location was eliminated from further consideration because of the close proximity to the US 20 and 9th Street SE (IA 136) interchange (the north-south streets are 1 mile apart, and access roads would be less than 1 mile apart). Another reason for eliminating this interchange location is the existing development around 7th Street SW; the folded diamond configuration would require commercial relocations, and the standard diamond configuration would require commercial and residential relocations. Additionally, the access at 332nd Avenue would need to be closed. Considering the proximity of the US 20 and 9th Street SE (IA 136), an interchange at 7th Street SW would not meet the safety component of the purpose and need.

Operationally, a standard diamond is preferred over a folded diamond because standard diamonds are the most commonly used and drivers expect this configuration. The folded diamond alternative has several disadvantages: the exit ramp comes after the cross road, which is not typical; the loop exit ramps require significant speed reductions from the mainline speeds to the exit speeds (slowing down to 25 miles per hour [mph]); the entrance loop also requires greater acceleration to reach mainline speeds than is the case with a standard diamond interchange. In addition, the folded diamond alternative would require northbound traffic desiring to head eastbound on US 20 to turn left; thus, drivers would need

to turn left to go right, which is not intuitive. The folded diamond interchange was eliminated from further consideration because of the safety concerns associated with the non-intuitive turn movements and speed restrictions.

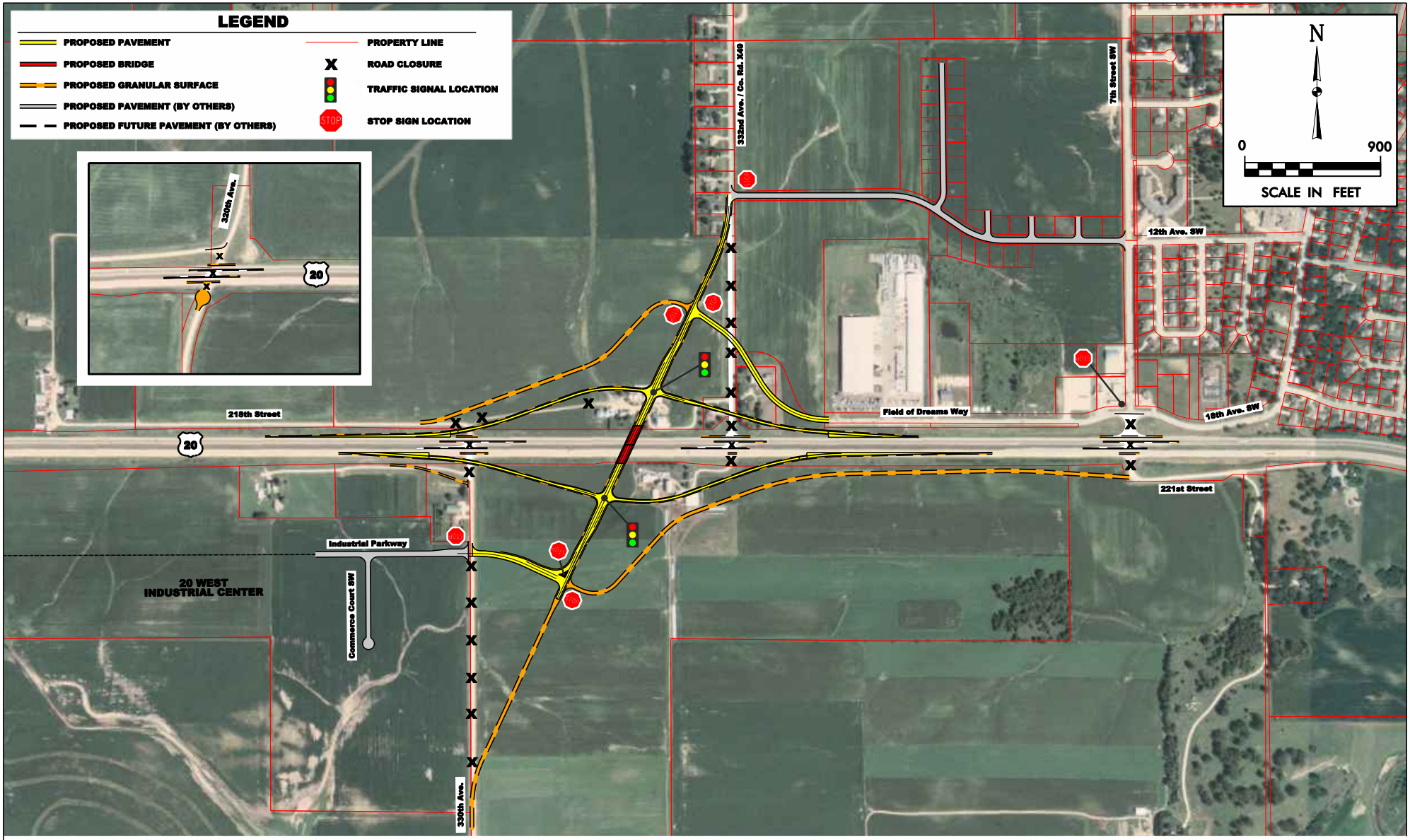
4.3 Proposed Alternative

One Build Alternative is proposed to be carried forward for further analysis. The Build Alternative would result in the construction of a new interchange. The configuration would be a standard diamond, which would begin approximately 0.5 mile west of 330th Avenue, connect 330th Avenue to 332nd Avenue, and end about 500 feet west of 7th Street SW.

The standard diamond alternative (Figure 4-1) would involve the construction of a standard diamond interchange between the existing 330th Avenue and 332nd Avenue. Interchange ramps would be constructed, and both 330th Avenue and 332nd Avenue would be reconstructed to align with the interchange. The realigned roadway would cross US 20 at a skewed angle in order to provide direct access across US 20. Although the at-grade crossing for 7th Street SW would be closed with this alternative, direct access to the interchange would be provided via the extension of 12th Avenue SW and Field of Dreams Way west to 332nd Avenue and the extension of 221st Street to the east.

An interim construction configuration for this alternative was also considered (Figure 4-2). The interim configuration would not involve construction of the diamond interchange ramps or the 221st Street extension but would involve construction of the interchange overpass, extensions of Field of Dreams Way and Industrial Parkway, and closure of the US 20/320th Avenue intersection. The at-grade crossings of US 20/330th Avenue, US 20/332nd Avenue, and US 20/7th Street SW would remain open, but only for right-in/right-out turn movements; left turns and through movements across US 20 would be prohibited.

Iowa DOT has identified the Build Alternative as the preferred alternative. The public and resource agencies will have the opportunity to comment on the Build Alternative during the NEPA process. Final selection of an alternative would not occur until Iowa DOT and FHWA evaluate all comments received as a result of the public hearing on the US 20 Dyersville Interchange EA. Following public and agency review of this EA, FHWA and Iowa DOT would determine if an environmental impact statement (EIS) is required. If one is not required, the selected alternative would be identified in a Finding of No Significant Impact (FONSI) document. If an EIS is required, then a preferred alternative would be selected through that process.



Aerial Imagery: 2008 NAIP Delaware & Dubuque Counties, Iowa

HDR

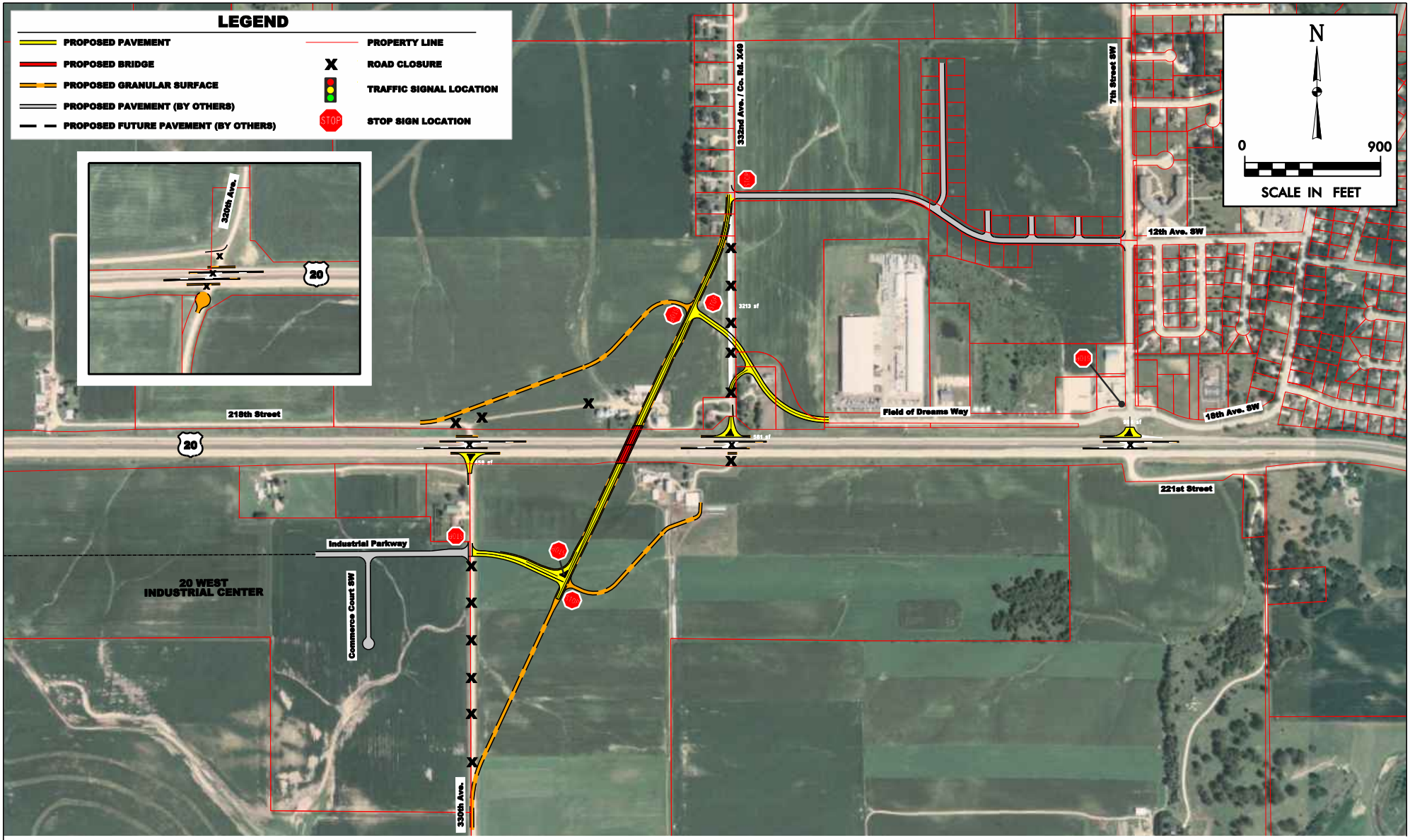
Build Alternative Standard Diamond Interchange

U.S. 20 Dyersville Interchange
Delaware and Dubuque Counties, Iowa
Environmental Assessment

Iowa Department of Transportation

DATE
December 2010

FIGURE
4-1



Aerial Imagery: 2008 NAIP Delaware & Dubuque Counties, Iowa

HDR

Build Alternative Interim Configuration

U.S. 20 Dyersville Interchange
Delaware and Dubuque Counties, Iowa
Environmental Assessment

Iowa Department of Transportation

DATE
December 2010

FIGURE
4-2

SECTION 5

ENVIRONMENTAL ANALYSIS

SECTION 5
ENVIRONMENTAL ANALYSIS

This section will describe the existing socioeconomic, natural, and physical environments in the project corridor that would be affected by the Proposed Alternative (Build Alternative). The resources with a check in the second column in Table 1, located at the beginning of this document, are discussed below.

Each resource section below includes an analysis of the impacts of the two alternatives carried forward for detailed study: the No Build Alternative and Build Alternative. In addition, when warranted, each resource is evaluated for measures to avoid, minimize, or mitigate adverse impacts.

Section 5.4, Cumulative Impacts, addresses reasonably foreseeable projects (including relevant ones identified in the 2003 City of Dyersville Annexation Plan (ECIA, 2003), and their potential for impacting the same resources as those the Project is expected to impact.

5.1 Socioeconomic Impacts

Evaluating the direct and indirect impacts that a transportation project has on socioeconomic resources requires consideration of impacts on land use (see Section 5.1.1) as well as 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, and commercial/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 area of potential impact to the existing land uses. Indirect effects were determined by evaluating potential access restrictions, out-of-distance travel, and induced development.

The Study Area is predominately agricultural. There are rural farmsteads adjacent to US 20 and several residential properties west of 332nd Avenue. An established industrial and agricultural service center is located within the Study Area at 1440 Field Of Dreams Way. New development includes a residential development under construction in the northeast portion of the Study Area. The approximately 46-acre area has been platted for development and includes 37 residential lots, each averaging 0.3 acres. Access to the development will be via an access road connecting 332nd Avenue and 12th Avenue SW. Additional development in the area is a 185-acre 20 West Industrial Center, located one block south of US 20. The first phase of the industrial center, currently under construction, will be accessed by a road extending west from 330th Avenue.

No Build Alternative

The No Build Alternative would result in continued use of US 20, 330th Avenue, and 332nd Avenue, along with the at-grade crossing of 7th Street SW. This continued use would not affect the overall land use. The residential area and industrial center would continue development without construction of an interchange.

Build Alternative

The Build Alternative would be constructed in an area that is currently agricultural and residential. As described in detail in Section 4.2.2, the Build Alternative would require the realignment of 320th and 330th avenues to connect them with the new standard diamond interchange, the construction of new access roads, and the closure of several at-grade intersections with US 20 (Figure 5-1). Construction of the Build Alternative would result in the direct conversion of 11.8 acres of residential land, including farmsteads, and 74.3 acres of agricultural land to transportation use. No land in industrial use or under development would be converted by the Build Alternative. The Project is consistent with existing land use plans; future land use is not projected to change. Induced development is not expected to occur because future development was planned prior to consideration of the Project.

5.1.2 Economic

This section addresses the economic character of the Study Area. The sources of information are a site visit and the Delaware and Dubuque County Assessors' databases (Vanguard Appraisals, Inc., 2010; Beacon, 2010).

As described in Section 5.1.1, Land Use, the Study Area is predominantly agricultural, with farmsteads, residential properties, and an industrial and agricultural service center consisting of two businesses: Tek Supply and Farm Tek. Both businesses supply the Dyersville area with tension fabric structures, heating and cooling products, and agricultural and building products. In addition, residential development and an industrial center are under construction.

No Build Alternative

The No Build Alternative would result in continued use of the existing 330th Avenue, 332nd Avenue, and 7th Street SW at-grade crossings of US 20. The residential and industrial developments are expected to expand with or without construction of another US 20 interchange.

Build Alternative

Businesses in the vicinity of a road project would be affected by restrictions in access to roads affected by closures and by detours during construction[1] as well as the long-term access route

[1] Although no US 20 detours are proposed under the Project, detours along 330st and 332nd avenues would be required during construction.

modifications from the proposed action. The impact of roadway construction on local businesses depends on individual customers' decisions to shop at businesses near construction sites. These decisions are based on the availability of substitute products and locations; the convenience of access during construction; the duration of the project; environmental factors such as visibility, dust, and noise; and a range of other factors that can vary by customer. The impact of construction on businesses in the Study Area would be minor. Completion of construction would have a beneficial impact on access to businesses in and near the Study Area from improved and safer access.

After construction, overall access would be improved by addressing a safety concern for crossing US 20 that could keep some prospective business clients away from this area. Access to existing businesses would change after construction, with some businesses having quicker access from different locations, and other businesses having increased distance for customers from certain locations. Because the area businesses serve destination customers rather than impulse customers, no adverse effects to business income are projected to occur.

As noted in Sections 5.1.3, Right-of-Way, and 5.1.4, Relocation Potential, ROW for the Project would need to be acquired from residential landowners. Consequently, the amount of tax revenue from the affected properties would decrease. Given the City's tax base and projected steady growth, the decrease in revenue would be insignificant in both the short and long term (ECIA, 2003).

5.1.3 Right-of-Way

To assess the potential impacts associated with the alternatives, ROW acquisition and property relocations were evaluated based on existing ROW, private and public property boundaries, and future ROW needs.

The existing US 20 ROW in the Study Area ranges from approximately 200 feet to 250 feet wide. Multiple property owners exist in the Study Area, including private individuals and the City of Dyersville. As described in Section 5.1.1, Land Use, the Study Area is primarily an agriculture area with residential properties located north of US 20 along 332nd Avenue. Section 5.4, Cumulative, describes the planned development in the area including a school, park, residential and industrial areas that are adjacent to or in the vicinity of the current US 20 ROW.

No Build Alternative

The No Build Alternative would not require acquisition of any ROW along US 20 or 330th and 332nd avenues.

Build Alternative

The Build Alternative would result in the acquisition of 86.8 acres of private and City land for ROW from a total of 12 landowners. Five relocations (addressed in Section 5.1.4 Relocation Potential) and a frontage impact would be required for the Build Alternative. The property located at 2169 332nd Avenue would experience the frontage impact, which would

result from the connection between the realigned 332nd Avenue and the extended 12th Avenue. ROW acquisition and relocations would be conducted in accordance with the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970.

5.1.4 Relocation Potential

To assess the potential impacts associated with the Build Alternative, ROW acquisition and property relocations were evaluated based on the conceptual design for the proposed US 20 interchange near Dyersville. The affected area for this analysis is the preliminary impact area.

Existing properties within the preliminary impact area are agricultural farmsteads and residential properties located along 332nd Avenue and adjacent to US 20. The farmsteads are located on properties ranging in size from 2.2 to 146 acres and are assessed at values ranging from $5,400 to $278,900. The residential properties range in size from 0.85 to 1 acre and have assessed home values ranging from approximately $131,000 to nearly $160,000. (Delaware County, 2010).

No Build Alternative

The No Build Alternative would not require relocation or acquisition of any property.

Build Alternative

Five relocations would be required and would involve the acquisition of approximately 77.6 acres of property, including farmland associated with the acquired farmsteads. Four of the properties to be relocated are along 332nd Avenue; two are farmsteads (2194 and 2193 332nd Avenue), and two are residential (2195 and 2171 332nd Avenue). The fifth property to be relocated is a farmstead property along US 20 (3332 US 20). Two of the farmsteads requiring relocation would be able to relocate on the current property not affected by the proposed interchange. The other farmstead and the two residential properties could potentially be relocated within the Dyersville area. A property search conducted on November 16, 2010 identified two farms/ranches, 5 open parcels, and 37 single family homes for sale (National Association of REALTORS, November 16, 2010).

The interim construction configuration would have a total impact on three properties (located at 2193, 2194, and 2171 332nd Avenue) and one frontage impact (located at 2169 332nd Avenue).

Relocations would be conducted in accordance with the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 and Iowa Code 316, the "Relocation Assistance Law," that establishes a uniform policy for the fair and equitable treatment of displaced persons that serves to minimize the hardships of relocation.

5.1.5 Construction and Emergency Routes

This section addresses potential impacts from construction routes and impacts on emergency routes. Emergency vehicles (ambulances, fire trucks, and police cruisers) respond to events

using routes that are designated to reduce response times and to account for access limitations.

Five other construction projects are ongoing within the Study Area: a residential development in the northeast section of the Study Area, an industrial center in the southwest portion of the Study Area, a school in the middle of the Study Area, rehabilitation of the 1st Avenue Bridge, and the 12th Avenue SW extension. Cumulative impacts of reasonably foreseeable projects in conjunction with the US 20 Dyersville Interchange are addressed in Section 5.4.

Transportation projects have the potential to impact emergency routes during and subsequent to construction. For the emergency routes, locations of public service providers (hospitals, fire departments, and police departments) within or near the Study Area were reviewed using public databases.

There are no hospitals or emergency service facilities within the Study Area, but emergency response service routes from nearby facilities extend through the Study Area. Mercy Medical Center is located at 1111 3rd Street SW, less than 0.25 miles east of the Study Area. The nearest fire department is located at 1503 6th Street SE, approximately 1 mile east of the Study Area. The closest Dyersville Police Department station is located at 338 1st Avenue E, approximately 1 mile northeast of the Study Area.

No Build Alternative

Under the No Build Alternative, construction of the US 20 interchange and realignment of 332nd and 330th avenues would not occur, resulting in the continued use of at-grade crossings and increasing the risk of vehicle crashes. The increased risk of at-grade crashes would potentially require occasional detours off US 20 during emergency situations. Access to and from emergency service providers would continue along the same routes.

Build Alternative

Construction of the Build Alternative would not require a detour route for vehicles traveling along US 20. Localized shifts in traffic would be required for the realignment of 330th and 332nd avenues, as both avenues would likely need to be closed during construction; vehicles intending to use 330th and 332nd avenues would be detoured to adjacent roadways. Traffic traveling north on 330th Avenue would use 225th Street and go west to 320th Avenue. Vehicles traveling south on 332nd Avenue would use 210th Street to travel west and then turn south on 320th Avenue; alternatively, they would use 1st Avenue to travel east into town and then turn south on 7th Street SW. The US 20/7th Street SW intersection would remain open until construction of the standard diamond interchange is complete.

The introduction of construction equipment would add slightly to the level of traffic within the Study Area. Movement of the equipment would occur throughout the period of construction, but is not anticipated to adversely affect traffic operations. Construction of the standard diamond interchange would result in temporary closure of 330th Avenue and 332nd Avenue. Construction also would impact the direct access of emergency vehicles that normally use the at-grade crossings at the US 20/330th Avenue and US 20/332nd Avenue

intersections. Emergency vehicles traveling south on 330th Avenue from US 20 or north on 332nd Avenue from US 20 would be forced to find alternate routes. Alternate routes include using the US 20/320th Avenue intersection or the US 20/7th Street SW intersection.

To evaluate the impact of the Build Alternative and the interim configuration on emergency services, travel distances were calculated from Mercy Medical Center, the fire department, and the police station to 20 West Industrial Center. The 20 West Industrial Center location was selected for analysis because it is south of US 20, whereas all of the emergency services are located north of US 20.

With fewer turns and stops along the Build Alternative and interim configuration routes from Mercy Medical Center, the fire department, and the police station to 20 West Industrial Center, the travel time is expected to be less than under existing conditions.

When construction is complete, the new interchange would provide a direct and safe route for emergency vehicles to cross and gain access to US 20. In the long term, access for emergency vehicles would improve because fewer turns would be required to cross US 20. Changes to emergency vehicle travel distances and times under the Build Alternative would vary based on the specific destination, but access to and from emergency services is expected to improve for the majority of residents. Emergency access to some properties would change as the result of the Project, but access timeframes are expected to be similar.

5.1.6 Transportation

Transportation resources include roadways, railroads, airports, as well as the equipment used (such as public transit buses) for the movement of people and materials. The transportation resources in the Study Area include US 20, 320th Avenue, 330th Avenue, 332nd Avenue, 7th Street SW, 9th Avenue SW, 12th Avenue SW, 218th Street, Field of Dreams Way, and 221st Street.

Public (bus, paratransit, etc), rail and water transportation are not present in the Study Area and are not discussed in this EA.

The Federal Aviation Administration (FAA) in accordance with 14 CFR 77, Objects Affecting Navigable Airspace, requires the sponsor of a proposed construction project to notify FAA of any potential obstruction resulting from construction (including temporary construction equipment) that could potentially interfere with airspace. This notification requirement includes any construction or alteration of greater height than an imaginary surface extending outward and upward at one of the following slopes:

- 100 to 1 for a horizontal distance of 20,000 feet from the nearest point of the nearest runway of a public use airport with at least one runway more than 3,200 feet in actual length;

- 50 to 1 for a horizontal distance of 10,000 feet from the nearest point of the nearest runway of a public use airport with its longest runway no more than 3,200 feet in actual length;

- 25 to 1 for a horizontal distance of 5,000 feet from the nearest point of the nearest landing and takeoff area of a public use heliport.

The Monticello Regional Airport, with a 4,400-foot runway, and the Manchester Municipal Airport, with a 3,465-foot runway, are 20 miles north and 20 miles east of the Project, respectively, and airspace at these airports would not be obstructed by the Project; no FAA notification is required. Dyersville Area Aviation, although privately owned, is a public use airport south of Vine Road in Dyersville approximately 1.75 miles north of the Study Area. The single runway at this airport is 2,700 feet long (FAA, June 8, 2009).

US 20 is a four-lane divided, free-flowing highway for nearly 200 miles in Iowa, including the section on the south side of the City. The only interchange on US 20 in Dyersville is at 9th Street SE (IA 136) on the east side of town. All other access to US 20 in Dyersville is through at-grade intersections at 320th Avenue, 330th Avenue, 332nd Avenue, and 7th Street SW. The average daily traffic (ADT) on US 20 from 330th Avenue intersection to the 7th Street SW intersection is 8,200 vehicles per day (VPD) (Iowa DOT Office of Traffic and Safety, April 2010). These intersections have been the site of numerous crashes (see Section 3.2.1, Safety). Since 2005, the intersection at US 20 and 7th Street SW has been the site of four crashes that resulted in five fatalities.

No Build Alternative

Without construction of the Project, the intersections of US 20/320th Avenue, US 20/330th Avenue, US 20/332nd Avenue, and US 20/7th Street SW would remain open and the risk of crashes would continue. Traffic in western Dyersville would likely continue to use the US 20/7th Street SW intersection to accommodate their need to travel east and west on US 20. Currently, there is no direct, grade-separated access from Dyersville on the north side of US 20 to the industrial center under construction south of US 20. The lack of a direct-access crossing of US 20 results in slow-moving vehicles and frequent lane changes and turn movements on US 20 in the Study Area. As the industrial center and the City expand, the number of slow-moving vehicles, lane changes, and turn movements is expected to increase. The frequency of crashes is also expected to increase. Aircraft operations from the three airports would be unaffected.

Build Alternative

Construction of the standard diamond interchange would result in the closing of the 320th Avenue, 330th Avenue, 332nd Avenue, and 7th Street SW intersections with US 20. The closure of the 7th Street SW intersection with US 20 would require motorists who reside in the neighborhood bordered by 7th Street SW to the west and Beaver Creek to the east and motorists who are employed by Mercy Health Services and Ellen Kennedy Living Center to use the proposed interchange or the existing 9th Street SE (IA 136) interchange to access US 20, instead of the current 7th Street SW intersection with US 20. To access US 20 via the proposed interchange, the motorists traveling from this neighborhood would use the 12th Avenue SW extension that is proposed as part of the construction of the residential development in the northeast section of the Study Area. The 12th Avenue SW extension

would connect 7th Street SW to 332nd Avenue and would allow drivers to access US 20 from the proposed standard diamond interchange.

Although some individuals would incur out-of-distance travel, as noted below, most vehicles would incur reduced out-of-distance travel based on their point of origin or, in some cases, reduced travel distances. The actual amount of out-of-distance travel would vary based on the point of origin of each vehicle.

The Build Alternative would also result in a beneficial impact on the transportation network of the Study Area by creating a safe and direct route of travel from Dyersville north of US 20 to the industrial center currently under construction south of US 20. The industrial center is expected to increase traffic movements along 332nd and 330th Avenue, and construction of the interchange would create a safe and direct route for motorists traveling across US 20.

The interim construction would result in only right-in/right-out turn movements from US 20/320th Avenue, US 20/330th Avenue, US 20/332nd Avenue, and US 20/7th Street SW intersections. The elimination of left turns and through movements would impact vehicles that normally use these at-grade intersections for such movements. Out-of-distance travel required during interim construction would be greater than after interchange construction is complete.

Although several routes will be longer as a result of the proposed action, the Project meets a key need by providing safer transport across US 20.

The FAA Notice Criteria Tool was used to determine potential obstruction of airspace in accordance with 14 CFR 77 (FAA, November 24, 2010). Construction equipment operating at the Project site would obstruct airspace associated with the Dyersville Area Airport; FAA notification would be required. Because the runway orientation of the Dyersville Area Airport is approximately perpendicular to the orientation of the proposed interchange and the runway is approximately 1.75 miles away from the interchange, it is not anticipated that the constructed Project would adversely affect flight operations. During final design, coordination would occur with FAA through the notification process, and result in a determination on whether the interchange would have any effects on flight operations.

5.2 Natural Environment Impacts

This section characterizes the natural resources in the Study Area and addresses potential impacts of the No Build Alternative and the Build Alternative. The resources discussed are surface waters and water quality, and farmlands.

5.2.1 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 Study Area were determined through the use of aerial photography and topographic mapping. Groundwater in the Study Area was evaluated through background research. Potential impacts on surface water, groundwater, and water

quality (of both surface water and groundwater) were evaluated by considering the proximity of the Project to water resources and the aspects of the Project. Under Section 303(d) of the Clean Water Act (33 USC 1251 et seq.), states are required to develop lists of impaired waters that do not meet water quality standards in the state. The Iowa Department of Natural Resources (Iowa DNR) has responsibility for water quality programs and standards in Iowa.

The primary sources of hydrology within the Study Area are small agricultural drainages, roadway drainage ditches, runoff from adjacent landforms, and groundwater. No linear waters that are considered potentially jurisdictional by the U.S. Army Corps of Engineers (USACE) under Section 404 of the Clean Water Act were identified in the Study Area. Several agricultural drainage sloughs and erosion features were examined, but none met jurisdictional channel criteria. The U.S. Geological Survey (USGS) quad map Dyersville West (USGS, 2010) displays an unnamed intermittent stream that is located in the eastern portion of the Study Area, flows from north to south, and crosses under US 20 through a culvert outlet. This unnamed intermittent stream was investigated as part of the wetland delineation site visit, and it was determined that the stream did not qualify as a water of the U.S. (HDR, February 2010). The unnamed stream is a vegetated drainage swale flowing through an agricultural field. The site visit also revealed a recently excavated man-made pond in the southern portion of the Study Area (Figure 5-1).

According to the U.S. Department of Agriculture – Natural Resources Conservation Service (USDA NRCS) Web Soil Survey for Delaware and Dubuque counties (USDA NRCS 2009), land within the Study Area has a depth to groundwater ranging from 0 inches to greater than 79 inches. The Iowa Geological Survey has records of 25 wells within or adjacent to the Study Area (Figure 5-1). The drill dates of the wells range from 1950 to 2009, and the well depths range from 56 to 720 feet (Iowa DNR, 2010).

No Build Alternative

Under the No Build Alternative, no impacts on local groundwater or drainageways would occur. The No Build Alternative would not affect the quality of surface water or groundwater in the Study Area. Use of the existing 320th Avenue, 330th Avenue, 332nd Avenue, and 7th Street SW at-grade crossings is not expected to have an adverse impact on water quality in the Study Area.

Build Alternative

Construction of the standard diamond alternative would not have an impact on any waters of the U.S., as none are located within the Study Area. The man-made pond identified during the site visit is not within the preliminary impact area and would not be affected by construction of the interchange. Based on the current impact area, nine groundwater wells are likely to be impacted. Iowa DOT requires proper capping and sealing of any wells on property to be acquired. A certified well contractor would be required to cap and seal the wells. Proper capping would eliminate the potential for introduction of contamination down the well into the groundwater. The Build Alternative is not expected to generate long-term impacts on groundwater.

Approximately 86.6 acres are expected to be graded for the Project, with approximately 7.3 acres of new pavement constructed and 2.2 acres of pavement removed for a net increase of 5.1 acres of pavement. Surface water runoff would slightly increase after construction is completed because the surface area of the new interchange and roadway would be slightly larger than that of the existing at-grade crossings. Compared to runoff from existing paved areas in the Study Area, the increase would be negligible. Pollutants from street runoff (oil, grease, salt, metals) would also increase slightly. Because the increase in runoff would be negligible, the increase in pollutants would be negligible and would not adversely impact water quality.

The contractor would be required to implement Iowa DOT's Construction Manual to minimize temporary impacts on water quality during construction. Iowa DNR administers the Federal National Pollutant Discharge Elimination System (NPDES) program and issues general permits for stormwater discharges from construction activities. The purpose of the program is to improve water quality by reducing or eliminating contaminants in stormwater. The NPDES program requires preparation of a Stormwater Pollution Prevention Plan (SWPPP) for construction sites of more than 1 acre.

The specific sediment, erosion control, and spill prevention measures would be developed during the detailed design phase and would be included in the plans and specifications. The SWPPP would address requirements specified by Iowa DOT in its Construction Manual, which are often implemented to meet measures anticipated by Iowa DNR. Although it is not possible to speculate on specific details of the SWPPP at this stage in the design process, the SWPPP is likely to include installation of silt fences, buffer strips, or other features to be used in various combinations as well as the stipulation that drums of petroleum products be placed in secondary containment to prevent leakage onto ground surfaces. A standard construction best management practice (BMP) is revegetation and stabilization of roadside ditches to provide opportunities for the runoff from the impermeable area to infiltrate, to reduce the runoff velocities, and to minimize increases in sedimentation. Iowa DOT would require the contractor to comply with measures specified in the SWPPP.

5.2.2 Farmlands

A Federal project, program, or other activity that requires acquisition of right-of-way must comply with the provisions of the Farmland Protection Policy Act (FPPA). The purpose of the FPPA is to "minimize the extent to which Federal programs contribute to the unnecessary and irreversible conversion of farmland to nonagricultural uses, and to assure that Federal programs are administered in a manner that, to the extent practicable, will be compatible with State, unit of local government, and private programs and policies to protect farmland" (7 U.S. Code [USC] 4201(b)).

The FPPA governs impacts on farmland only. The FPPA defines farmland as prime farmland, unique farmland, or farmland that is of state or local importance. Land that is already in or committed to urban development or water storage does not qualify as farmland and is therefore not subject to the FPPA.

No Build Alternative

Under the No Build Alternative, no impacts on farmland or farm facilities would occur.

Build Alternative

Early in the engineering design process, the USDA NRCS Farmland Conversion Impact Rating for Corridor Type Projects Form (NRCS-CPA-106) was completed for the generalized corridor to assess the effects of this conversion on farming and farm-related services in the area. At the time of analysis, a backage road for the extension of 221st Street was included in the proposed concept. This assessment considers the effects of the conversion of farmland as a result of a project on existing and future land use, the amount of existing farmable land in the county, the creation of economically non-farmable parcels, impacts on other on-farm investments, and effects on local farm services. Sites receiving a score of less than 160 points need not be given further consideration for protection. At the time the NRCS-CPA-106 form was completed, the Project received a score of 183 out of the possible 260 points (see Appendix C). Based on this score, the Project warrants an in-depth site review for concerns in conjunction with the FPPA. Because the score was more than 160 points, potential means to reduce the impact on farmland for revision of the NRCS-CPA-106 Form were evaluated.

The conceptual design was revised based on survey information to account for vertical profiles. Consequently, the evaluation of the potential impacts of the Build Alternative on farmland was based on a possible worst-case-scenario cross section. The cross section was a generalized corridor using the maximum width of impact from grading (for cuts and fills) for each segment of the roadway. The total amount of farmland affected by the Project was estimated at 83.5 acres after determining the limits of construction (LOC).

The standard diamond alternative would directly impact 74.5 acres of farmland and would create 9 acres of non-farmable land. The acres of non-farmable land created by the standard diamond alternative would result primarily from the sectioning of land by the realignment of 330th Avenue and the extension of 221st Street. However, as discussed in more detail in Section 5.1.1, Land Use, the majority of the area in the vicinity of the proposed interchange has been platted for residential or industrial development, as documented in existing land use plans. The construction of the proposed interchange is also consistent with existing land use plans. Unaffected farmland in close proximity to the Project would remain accessible by public roads for continued agricultural use.

The interim construction would initially affect less farmland. Development of the interim standard diamond alternative would not include the extension of 221st Street west to the realigned 330th Avenue, thereby delaying approximately 20.5 acres of farmland impact. The delayed construction of the interchange ramps would also initially avoid additional farmland impacts. Impacts on farmland associated with the interim construction configuration would be initial impacts; the total impacts associated with the full build of the standard diamond interchange would be realized at a later date, pending adequate funding.

The potential to use a frontage road as opposed to a backage road to create the extension of 221st Street was evaluated as an option to reduce farmland impacts. The use of a frontage

road would reduce the construction footprint on farmland south of US 20 from in comparison with acreage requirements for a backage road; this option has been adopted in the current design. Because the LOC are based on conceptual design and represent the worst-case scenario, the designers may be able to reduce the LOC and further minimize farmland impacts. To do so, the designers may consider reducing the profile of the interchange and/or the access roads and/or reducing the access road design speed to 45 mph, which would reduce the overall footprint of the access roads while better matching the existing terrain.

5.3 Physical Impacts

This section characterizes physical resources in the Study Area and addresses potential impacts of the No Build Alternative and the Build Alternative. The resources discussed are noise, visual resources and aesthetics, and utilities.

5.3.1 Noise

Sound levels are measured in units called decibels (dB). Because the human ear does not respond equally to all frequencies (or pitches) measured, sound levels are often adjusted, or weighted, to correspond to the frequency response of human hearing and the human perception of loudness. The weighted sound level is expressed in units called A-weighted decibels (dBA) and is measured with a calibrated sound level meter. Sound levels that correlate with the human perception are also expressed with the descriptor L_{eq}, defined as energy-equivalent sound level.

Typical quiet urban environments have a background noise level of about 50 dBA. The dominant noise source in the Study Area is vehicular traffic on US 20 and connecting roads. Traffic noise consists of vehicular engine noise, exhaust noise, and tire noise from contact with the roadway surface. Other noise sources include aircraft overflights and traffic on other local roadways. Land uses in the Study Area likely to be sensitive to noise include agricultural farmsteads and residential properties located along 332nd and 330th avenues and US 20. Industrial and commercial land uses would generally be less sensitive to noise. FHWA has developed Noise Abatement Criteria (NAC) based on land use activity. For residential areas, the Noise Abatement Criterion is 67 dBA, and for businesses it is 72 dBA. The Iowa DOT noise policy defines a noise impact as occurring when levels approach or exceed the NAC. Iowa DOT defines "approach" as coming within 1 dBA of the NAC, which is 66 dBA for residential areas and 71 dBA for businesses.

Traffic noise for the existing and future environment was predicted by roadway categories and other factors and a detailed noise study (HDR, August 2010). The purpose of the noise study was to identify current noise levels in the Study Area and to quantify the impacts of the Build Alternative relative to the NAC noise levels. Traffic noise levels were estimated using the FHWA Traffic Noise Model, Version 2.5, based on traffic volume forecasts for peak hours in 2035 because these volumes would correspond to the highest projected noise levels.

As discussed in Section 5.1.1, Land Use, the Study Area is primarily agricultural, with five farmsteads located along US 20. Residential properties in the Study Area are located west of

332nd Avenue. In addition to the current residential properties, an approximate 46-acre residential development is currently under construction east of 7th Street SW. South of the residential development is an area platted for a new Dyersville elementary school. Construction of the school began in late summer 2010, with completion targeted for the 2011-2012 school year. The industrial service center located along Field of Dreams Way and within the Study Area would be adjacent to the proposed interchange.

Noise-sensitive receptors in the vicinity of the Project are residences located along 332nd Avenue and US 20 and the industrial service center located approximately 500 feet east of 332nd Avenue. Four farmsteads and one residence would be acquired to construct the interchange, and one residence would be partially acquired for the realignment of 332nd Avenue. There are a total of 11 noise-sensitive receivers within the Study Area and adjacent to the proposed US 20 interchange: nine residential properties, one industrial property, and one commercial property. Three of the residential receivers located along US 20 would be acquired to construct the proposed interchange.

No Build Alternative

Under the No Build Alternative, noise levels in 2035 are predicted to be between 3 and 11 dBA higher than the existing noise levels (HDR, August 2010). Of the 11 sensitive receivers in the Study Area, three residential properties would exceed the NAC under the No Build Alternative.

Build Alternative

Under the Build Alternative, noise levels would be between 2 and 9 dBA higher than existing noise levels in the Study Area. The noise levels predicted for the Build Alternative in 2035 varied between 7 dBA lower to 6 dBA higher than the noise levels predicted for the No Build Alternative. Traffic noise levels generated from the Build Alternative would vary from 61 dBA (468 feet from centerline) to 66 dBA (1,451 feet from centerline). Two of the three receivers affected by the No Build Alternative would be relocated under the Build Alternative. As a result, the Build Alternative would impact only one residential receiver, located along 332nd Avenue. This residential property is predicted to experience a traffic noise level of 66 dBA. Noise abatement in the form of a noise barrier was considered for this receiver but was determined not to be feasible or reasonable because the necessary breaks in the barrier to access 332nd Avenue would render the barrier ineffective.

During the construction phase of the Project, noise from on-site construction equipment and construction activities would add to the noise environment in the immediate Study Area. The driving and operation of construction equipment would also generate ground vibrations. The vibrations are not projected to be of a sufficient magnitude to affect normal activities of occupants in the Study Area. Increased truck traffic on area roadways would also generate noise associated with the transport of heavy materials and equipment. The noise increase and vibrations from construction activities would be temporary in nature and are expected to occur during normal daytime working hours. Equipment operating at the Project site would conform to contractual specifications requiring the contractor to comply with all local noise

control rules, regulations, and ordinances. Although construction noise impacts would be temporary, the following BMPs would be implemented to minimize such impacts:

- Whenever possible, limit operation of heavy equipment and other noisy procedures to non-sleeping hours.
- Install and maintain effective mufflers on equipment.
- Limit unnecessary idling of equipment.

5.3.2 Visual

Transportation projects are prominent features in the landscape that can affect the visual quality of the natural and built environment. As such, visual impacts must be taken into consideration when assessing a project. A visual impact affects an aesthetic component of an area not only by changing the way the environment is seen by the viewer but also by impacting the character and quality of the area or a visually sensitive resource. Replacement of the 330th and 332nd Avenue at-grade crossings with an interchange was considered when evaluating the future viewshed.

The Study Area is located in a rural environment dominated by agriculture land uses. In addition, there are several single-family houses and farmsteads within the Study Area.

No Build Alternative

No visual impacts are expected to occur under the No Build Alternative. The existing at-grade crossings at 330th and 332nd avenues would be left in place. Views from US 20 and from surrounding road networks would remain essentially the same as they currently are. However, reasonably foreseeable future projects in or near the Study Area (see Section 5.4, Cumulative Impacts) would occur regardless of whether the Project is constructed and may impact the visual environment. The future impacts include the construction of the 20 West Industrial Center south of US 20 and a residential development and extension of 12th Avenue SW north of US 20, in the northeast portion of the Study Area.

Build Alternative

Construction of a new standard diamond interchange and associated access roads would result in direct impacts on the visual environment where the grades are raised to form ramps and a bridge structure extending over US 20. At-grade crossings at 330th and 332nd avenues and at 7th Street SW would be closed. No significant natural features, such as rivers, streams, or forests, would be visually affected. The proposed interchange would result in the relocation of three farmsteads and two residential properties, directly impacting the views of vehicular traffic traveling east and west on US 20 west of Dyersville. Residents located on 332nd and 330th avenues would also experience a visual impact as a result of the diamond

interchange. The Project would directly convert 74.5 acres and indirectly convert[2] 9 acres of farmland into ROW for the Project, thereby directly affecting the visual aesthetics of the area, which is predominantly rural.

5.3.3 Utilities

The potential for the Project to affect utilities in the Study Area was considered by identifying utility locations and orientation in relation to US 20, 320th Avenue, 330th Avenue, 332nd Avenue, 218th Street, 221st Street, and 7th Street SW. Potential effects were evaluated with respect to major utilities crossed by or located within the ROW for the Build Alternative.

The following utility companies and municipalities provide service to the Study Area:

- Water and sewer: City of Dyersville
- Electricity and gas: Alliant Energy, Aquila/Black Hills Energy, and Maquoketa Valley Electric Cooperative
- Telecommunications: Iowa Telecom and Mediacom

No Build Alternative

Under the No Build Alternative, the US 20 Interchange would not be constructed and utility lines would not be affected. If future development occurs independently of the Project, construction of utility line connections could occur.

Build Alternative

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

5.4 Cumulative

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" (40 CFR 1508.7). Cumulative impacts include the direct and indirect impacts of a project together with impacts from reasonably foreseeable future actions of others. For a project to be reasonably foreseeable, it must have advanced far enough in the planning process that its implementation

[2] Indirect conversion results from lack of access, such as the farmland between the new interchange ramp and the existing US 20.

is likely. The impacts of reasonably foreseeable future actions not associated with a new interchange include the impacts of other Federal, state, and private actions. Reasonably foreseeable actions are not speculative, are likely to occur based on reliable sources, and are typically characterized in planning documents.

The assessment of the cumulative impacts of Federal, state, and private actions is required by Council of Environmental Quality (CEQ) regulations developed for implementing NEPA. Cumulative impacts of the Project were evaluated in accordance with CEQ guidance (CEQ, January 1997; CEQ, June 2005) and other sources, including FHWA's "Interim Guidance: Questions and Answers Regarding Indirect and Cumulative Impact Considerations in the NEPA Process" (FHWA, January 2003) and FHWA's "Position Paper: Secondary and Cumulative Impact Assessment in the Highway Project Development Process" (FHWA, April 1992).

The assessment focused on several resources susceptible to cumulative impacts. Additionally, the analysis compared the timelines of other reasonably foreseeable major projects that would likely occur in the time frame of the Project in order to assess the combined effects of these projects on the target resources. The cumulative impact assessment also considered the baseline conditions of the target resources and the region's resources, and determined whether any regionally significant cumulative impacts could occur.

Local Projects

Several other projects are located in close proximity to the proposed action addressed in this EA. Local projects near the Study Area are at various stages of study and/or implementation. Table 5-1 identifies these projects, describes the projects, and indicates the current status and whether the projects are reasonably foreseeable. Figure 5-2 shows the locations of these projects in relation to the Study Area.

Key Resources Affected

The analysis of cumulative impacts focuses on the key resources potentially affected by the Project and other reasonably foreseeable actions in the Study Area whose impacts overlap with those of the Project. Specifically, the analysis focuses on transportation and farmland. The Project would occur within a transportation corridor in an area in transition from rural to urban and would involve an increase in ROW to accommodate the interchange. The Project would alter transportation flow and would reduce available farmland in the Study Area.

Transportation

Construction of the proposed interchange would have a beneficial impact on transportation in the Dyersville area by improving the safety of crossing or merging onto US 20 and creating direct, grade-separated access across US 20. The proposed interchange is designed to be compatible with the other reasonably foreseeable projects. Most of the reasonably foreseeable projects would result in additional residential or industrial development that would increase transportation needs in the area. Public (bus, paratransit, etc), rail, air, and

water transportation are not present in or near the Study Area so there would be no cumulative impact on these modes of transportation.

Although the overall impact is beneficial for vehicular transportation, closure of the at-grade intersections with US 20 at 320th Avenue, 330th Avenue, 332nd Avenue, and 7th Street SW would result in a long-term increase in out-of-distance travel for some vehicles. In addition, the combination of the proposed interchange and the 12th Avenue SW extension would be beneficial by enhancing the transportation network in the Dyersville area. When the Project is considered in conjunction with the other reasonably foreseeable projects in the area, the offsetting impacts of the various projects would minimize the potential for any cumulatively significant beneficial or adverse impacts on transportation.

Table 5-1
Projects Near the Study Area

Project	Lead Agency	Project Description	Status
Dyersville Annexation Plan and Associated Development	City of Dyersville	Four of 13 areas targeted for annexation (I, J, L, and M) are within or adjacent to the Study Area and planned for development in the 5 to 10 year timetable established by the City in 2003.	Planning stages
Residential Development	Private Development	The area, approximately 46 acres, has been platted with 37 lots averaging 0.3 acres. The development will be connected by an extension of 12th Avenue SW west to 332nd Avenue.	Under construction
Dyersville Elementary School	Western Dubuque Community School District	The Western Dubuque County Community School Board will locate a new pre-K through 4th grade elementary school at the corner of 7th Street SW and 12th Avenue SW.	Construction began in September 2010, with completion targeted for the 2011-2012 school year.
Dyersville Park	City of Dyersville	A new park is proposed to be constructed on the 15.89-acre parcel purchased by the Western Dubuque County Community School Board. The parcel is adjacent to the new elementary school at the corner of 7th Street SW and 12th Avenue. The park will be built east of the detention pond and immediately southwest of the new elementary school. Facilities may include a playground and soccer fields.	Early stages of planning and design
20 West Industrial Center		Phase 1 of 2 of the industrial park is 55 acres. The City owns 185 acres, part of which will be used for the industrial park, plus land on the north side of US 20 (40 acres) for future use. There is currently no plan to develop the area north of US 20, but the land does have water and sewer capabilities. Construction of the industrial park is not expected to be complete until 2035.	First phase is under construction
1st Avenue Bridge Rehabilitation	City of Dyersville	Rehabilitation of the 1st Avenue Bridge between 3rd and 4th streets.	Under construction – Rehabilitation began in April 2010 and scheduled for completion in 2010
12th Avenue SW	City of Dyersville	12th Avenue SW would be extended through the new residential development to 332nd Avenue. The City is looking into a Revitalize Iowa's Sound Economy (RISE) grant for extending it from the west end of the residential development to 332nd Avenue.	East half was constructed in 2010. West half is scheduled for construction in 2011.

Farmland

Construction of the proposed interchange would result in a net loss of available farmland, but as discussed in Section 5.2.2, efforts would be made to minimize impacts to the extent practicable as design advances. The other reasonably foreseeable projects in the vicinity of the Study Area would also result in a net loss of available farmland. However, the proposed interchange and other reasonably foreseeable projects are all in compliance with the City's long-range development plans. Although there would be a reduction of available farmland in the vicinity of the Study Area and on the west side of the current Dyersville city limits, farmland would remain west of the Study Area and the area surrounding Dyersville. Because of the other available farmland in the vicinity, the cumulative impact on farmlands, while adverse, is not considered significant.

5.5 Streamlined Resource Summary

As noted in the introduction to Section 5, a streamlined process developed by 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 Study Area or would not be affected by the Project. It also includes the rationale for performing only limited analysis on resources not described or analyzed in Section 5. Table 5-2 summarizes the differences in impacts on resources which would result from the No Build Alternative and the Build Alternative. Resources for which the anticipated impact would not substantially differ are not listed in the table.

Table 5-2
Summary of Impacts

Resource	No Build Impacts	Build Impacts
Land Use	No change	Conversion of 74.3 acres agricultural and 11.8 acres residential land to transportation use
Economic Resources	No change in current trends	Access to businesses would be safer
Right-of-way	None	86.8 acres
Potential Relocations	None	Five total impact[a]; One frontage impact[b]
Construction and Emergency Routes	No construction impacts or change in emergency routes	Increase in travel distance for emergency routes during construction; long-term increase in some emergency route distances but with improved access across US 20
Transportation	No change Temporary road closures due to accidents at at-grade interchanges would continue.	Increased safety and improved access across US 20
Surface Waters	No impact	Slight increase in surface water runoff

Resource	No Build Impacts	Build Impacts
and Water Quality		due to additional paved surfaces
Farmland	No impact	74.3 acres directly incorporated; 9.0 acres no longer farmable
Noise	Three receivers affected (Receivers 3, 4, and 6 in Figure 5-1)	One receiver affected (Receiver 6 in Figure 5-1)
Visual Resources and Aesthetics	No impact	New interchange in visual environment
Utilities	No impact	Utility relocations may be required

Notes:
[a] Two of the properties could have residences and other structures moved/reconstructed on remaining property.

b Structures are potentially within the construction footprint; detailed work to determine potential avoidance measures is pending detailed design.

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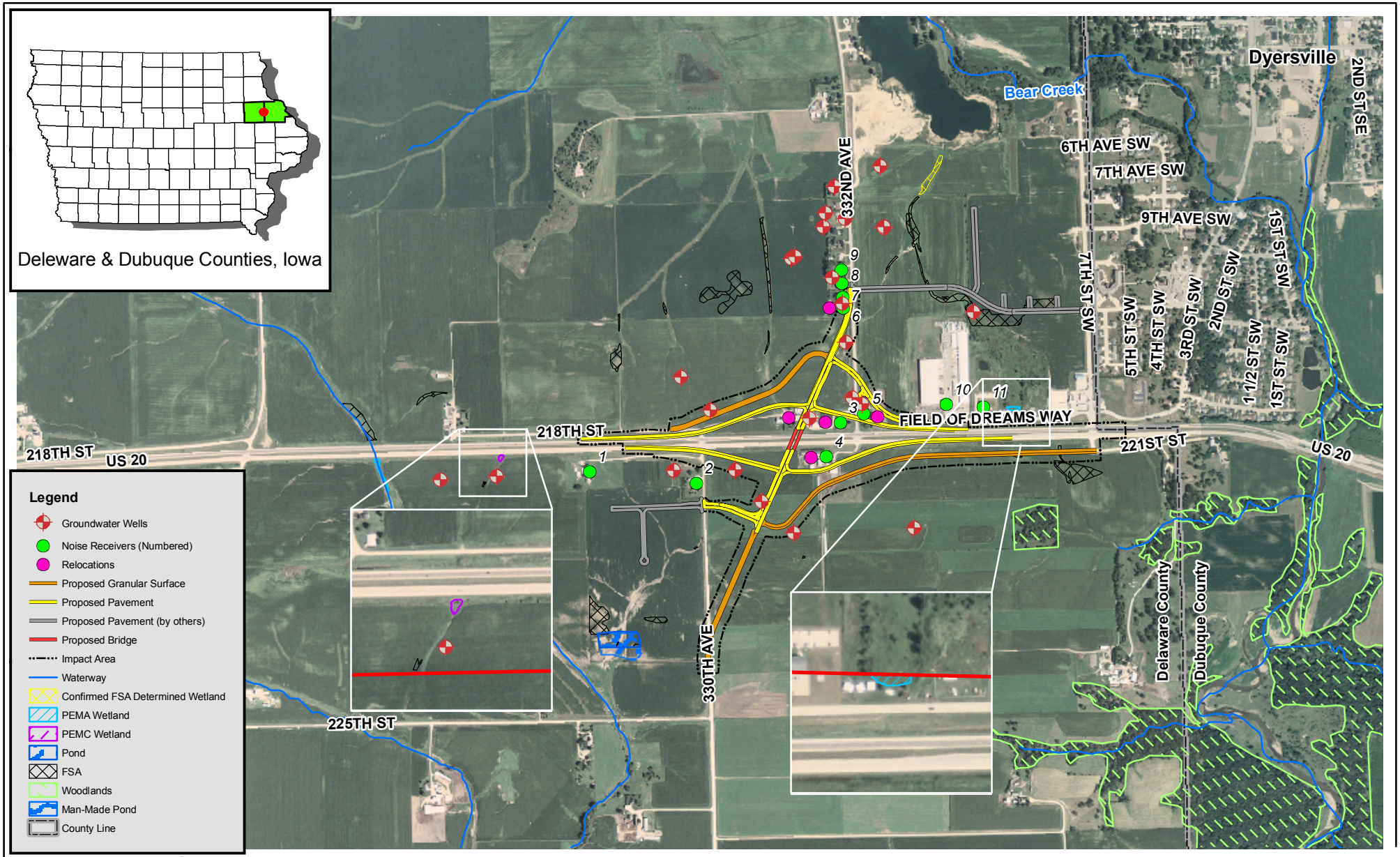

Aerial Imagery: 2008 NAIP Delaware & Dubuque Counties, Iowa

HDR

Environmental Constraints and Impacts

U.S. 20 Dyersville Interchange
Delaware and Dubuque Counties, Iowa
Environmental Assessment

Iowa Department of Transportation

DATE
December 2010

FIGURE
5-1

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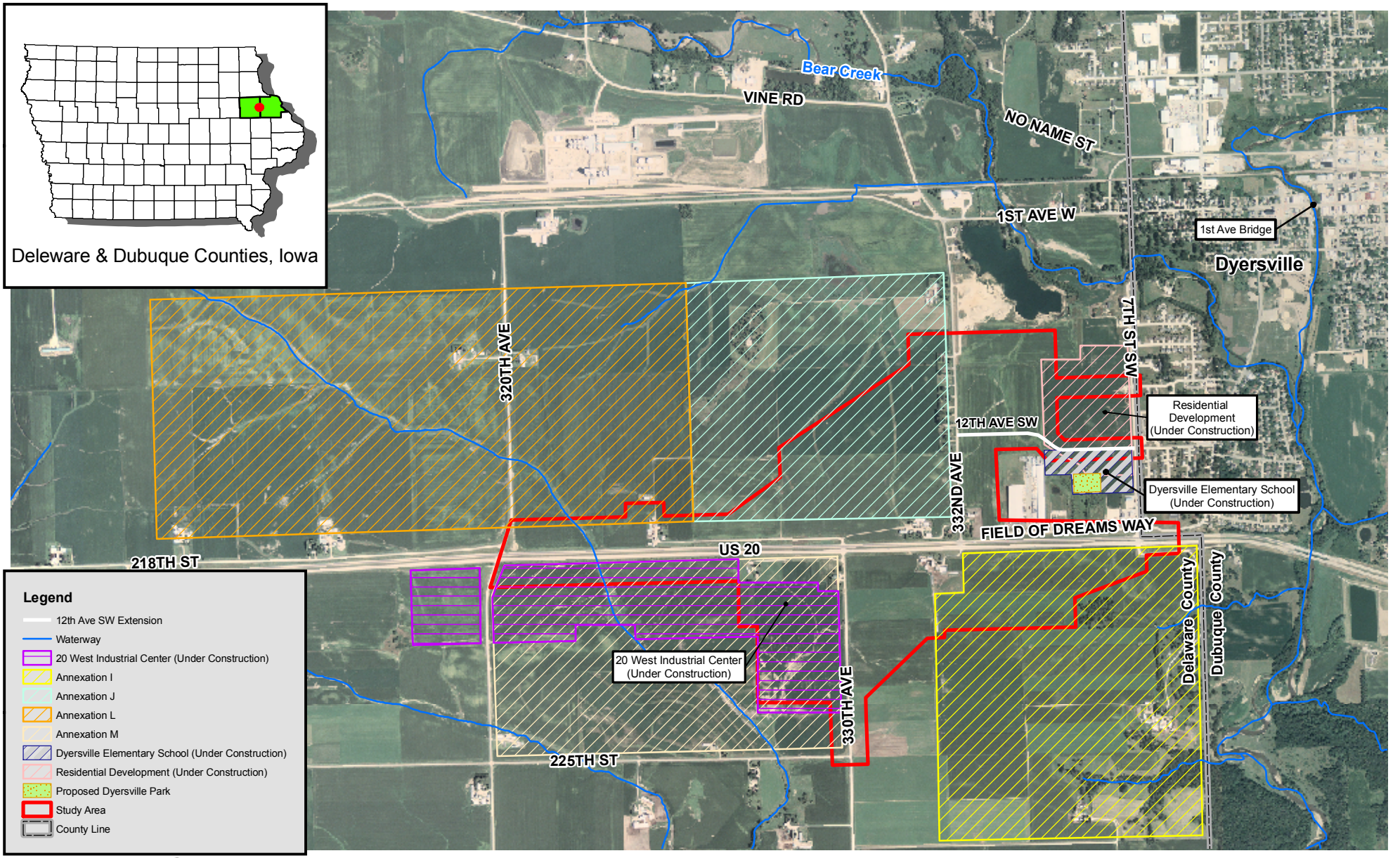

Aerial Imagery: 2008 NAIP Delaware & Dubuque Counties, Iowa

HDR

Projects in or Near Study Area

U.S. 20 Dyersville Interchange
Delaware and Dubuque Counties, Iowa
Environmental Assessment

Iowa Department of Transportation

DATE
December 2010

FIGURE
5-2

SECTION 6

DISPOSITION

SECTION 6
DISPOSITION

This streamlined EA concludes that the 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 impacts of a level that would warrant an EIS. Selection of the alternative to implement would occur following completion of the public review period and public hearing.

This EA is being distributed to the agencies and organizations listed in Sections 6.1 and 6.2, below. Individuals receiving this EA are not listed for privacy reasons.

6.1 Federal Agencies

Federal Highway Administration – Iowa Division
U.S. Army Corps of Engineers – Rock Island District
U.S. Department of Agriculture – Natural Resources Conservation Service
U.S. Department of Housing and Urban Development
U.S. Department of the Interior – Office of Environmental Policy and Compliance
U.S. Environmental Protection Agency – Region 7, National Environmental Policy Act Team
U.S. Fish & Wildlife Service – Rock Island Field Office

6.2 State Agencies

Iowa Department of Agriculture and Land Stewardship
Iowa Department of Natural Resources – State Office and Field Office #1 (Manchester)
Iowa Department of Transportation
State Historical Society of Iowa

6.3 Local/Regional Units of Government

City of Dyersville – Mayor, Public Works Director, Parks and Recreation Director, Planning and Zoning Department
Delaware County Board of Supervisors
Delaware County Conservation Board
Delaware County Engineer
Delaware County Historical Society
Delaware County Soil and Water Conservation District
Dubuque County Board of Supervisors
Dubuque County Conservation Board
Dubuque County Engineer
Dubuque County Historical Society
Dubuque County Planning and Zoning
Dubuque County Soil and Water Conservation District

Dyersville Area Chamber of Commerce
Dyersville Area Historical Society
East Central Intergovernmental Association
Limestone Bluffs Resource Conservation and Development

6.4 Locations Where this Document Is Available for Public Review

James Kennedy Public Library
320 1st Avenue East
Dyersville, Iowa 52040

Federal Highway Administration
105 6th Street
Ames, IA 50010

Iowa Department of Transportation
800 Lincoln Way
Ames, IA 50010

Iowa Department of Transportation
8723 Northwest Boulevard
Davenport, IA 52809

6.5 Potential Permits Required for the Project

The Project would require a National Pollutant Discharge Elimination System General Stormwater Discharge Permit for Construction Activities.

6.6 Statewide Transportation Improvement Program and Transportation Improvement Program Status

The Project is currently not included in the Draft Iowa Statewide Transportation Improvement Program (STIP) 2011-2014 (Iowa DOT, 2010) or in the Transportation Improvement Program (TIP) prepared by the East Central Intergovernmental Association on behalf of the Dubuque Metropolitan Area Transit Study (DMATS) for fiscal years 2008 to 2011 (ECIA, August 2008). However, based on the crash rate and local interest in the interchange, Iowa DOT District 6 is working to include the Project in a future STIP.

SECTION 7

COMMENTS AND COORDINATION

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 this EA. Future public involvement efforts that are planned for the Project are also discussed. Appendix B contains agency coordination letters and comment letters received during the NEPA process for the Project.

7.1 Agency and Tribal Coordination

Early agency coordination began on February 10, 2010, with letters sent to the Federal, state, and local government agencies listed below to announce the initiation of the environmental assessment process for the US 20 Proposed Dyersville Interchange and to solicit feedback from the agencies on their relevant areas of expertise. Written responses to the request for early coordination are provided in Appendix B:

Federal Agencies

- Federal Aviation Administration
- Federal Emergency Management Agency
- Federal Railroad Administration
- Federal Transit Administration
- National Park Service
- U.S. Army Corps of Engineers (USACE) – Omaha District
- USACE – Rock Island District
- U.S. Coast Guard
- U.S. Department of Agriculture – Natural Resources Conservation Service
- U.S. Department of Housing and Urban Development
- U.S. Department of the Interior – Office of Environmental Policy and Compliance
- U.S. Environmental Protection Agency (U.S. EPA) – Region 7
- U.S. Fish & Wildlife Service (USFWS) – Grand Island Field Office
- USFWS – Rock Island Field Office

State Agencies

- Iowa Department of Agriculture and Land Stewardship
- Iowa Department of Natural Resources
- State Historical Society of Iowa

Local/Regional Units of Government

- City of Dyersville – Mayor, Public Works Director, Parks and Recreation Director, Planning and Zoning Department
- Delaware County Board of Supervisors
- Delaware County Conservation Board
- Delaware County Engineer
- Delaware County Historical Society
- Delaware County Soil and Water Conservation District
- Dubuque County Board of Supervisors
- Dubuque County Conservation Board
- Dubuque County Engineer
- Dubuque County Historical Society
- Dubuque County Planning and Zoning
- Dubuque County Soil and Water Conservation District
- Dyersville Area Chamber of Commerce
- Dyersville Area Historical Society
- Limestone Bluffs Resource Conservation and Development

Tribes

- Iowa Tribe of Kansas and Nebraska
- Iowa Tribe of Oklahoma
- Otoe-Missouri Tribe
- Sac & Fox Nation of Mississippi in Iowa
- Sac & Fox Nation of Missouri
- Sac & Fox Nation of Oklahoma
- Winnebago Tribe of Nebraska
- Ho-Chunk Nation of Wisconsin

Letters from agencies are provided in Appendix B. No tribes commented on the Project. The comments received are summarized as follows:

- Consider whether or not the Project would require formal notice and review from an airspace standpoint.
- No records of rare species or significant natural communities were found during a search by Iowa DNR. However, if listed species or rare communities are found during the design or construction phases, additional studies and/or mitigation may be required. A stormwater discharge permit for construction would be required if the Project would disturb more than 1 acre. Visible emissions of fugitive dust should be managed to prevent their transport into adjacent properties.
- The Iowa Emergency Management Division should be contacted to determine if the proposed Project would affect any areas designated as a floodway.
- It is necessary to coordinate with the USFWS Rock Island Field Office concerning potential impacts on Federally listed species and to coordinate with the State Historical Society of Iowa to determine potential impacts on historic properties.
- There would be no effect on historic properties as a result of the Project.
- Any proposed placement of dredged or fill material into waters of the U.S., including wetlands, requires a Department of the Army authorization under Section 404 of the Clean Water Act. USACE requires additional details of the Project before a final determination of permit requirements can be made. Impacts should be avoided if a less damaging alternative exists.
- The proposed Study Area map shows numerous surface water drainage patterns that should be maintained. In most cases, a grassed waterway with adequate capacity could control erosion from surface water runoff. Any wetland areas in the Study Area should be maintained for water quality benefits or should be mitigated if avoidance is not possible.
- As this area becomes more developed, stormwater storage will need to be provided. The City of Dyersville experiences flooding problems. Any stormwater runoff that can be stored on uplands with controlled outflow would benefit downstream properties.
- The EPA Region 7 NEPAssist database for spatial relationships of environmentally regulated facilities and remediation sites identified no issues that should interfere with the Project.
- Iowa DNR records indicate that there are no contaminated sites located in the Study Area The records did identify several registered underground storage tanks/leaking underground storage tank projects in the vicinity of the Project, but no areas of concern were identified.
- Iowa DNR determined that there are no parks within the area of potential impact.

7.2 NEPA/404 Merge Consultation

As part of Iowa DOT's NEPA/404 Merge Process, agencies were asked to participate in a meeting to address concurrence point 1 (purpose and need) and concurrence point 2 (alternatives to be considered). The meeting was held at Iowa DOT headquarters on April 28, 2010. Agencies in attendance were the U.S. EPA, USACE, USFWS, and Iowa DNR. Either at the meeting or through subsequent correspondence, the agencies concurred with the proposed purpose of and need for the Project and the range of alternatives considered. In addition, the agencies concurred that there was no need to conduct another meeting to address concurrence point 3 (alternatives to be carried forward) and concurrence point 4 (preferred alternative) due to the minimal impacts of the proposed interchange.

7.3 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.

7.3.1 Public Meetings

An initial public information meeting (PIM) was held on September 9, 2009, to provide information to the public and to gather public feedback. Seven written comment forms were submitted to Iowa DOT. The following is a summary of public comments received, with the response to each comment in italics following the comment:

- US 20/7th Street SW intersection is dangerous. – *Response: The City of Dyersville and Iowa DOT have proposed the Project to address safety issues of the noted intersection.*
- US 20/332nd Avenue Intersection is dangerous because of reduced visibility to the west because of a hill. – *Response: The Project addresses this issue by taking northbound and southbound traffic along 330th Avenue and 332nd Avenue above and over US 20, and eliminating southbound left turning traffic at the 332nd Avenue intersection intersection.*
- Interchange/overpass at 320th Avenue is a practical option to provide access while leaving room for residential and commercial growth. – *Response: Placing an interchange at 320th Avenue is a solution that was initially considered. It would close all access between 320th Avenue and Iowa Highway 136, and would require anyone wanting to access US 20 (north and south of US 20) to do so only at those two locations. This option would introduce extensive out-of-distance travel and delay emergency services in several areas, so it was not carried forward for further consideration by the project management team.*
- Instead of spending the money to construct an interchange, close the median on US 20 at 7th Street SW or close the US 20/7th Street SW intersection altogether. – *Response: Closure of the median or intersection has been considered without an interchange, but would likely lead to additional traffic crossing or entering US 20 at 332nd Avenue, which has sight distance limitations. The Project is proposed as the best solution to*

improve safety and to provide more efficient traffic flow in the southwest area of the City to accommodate development that is planned and is occurring today.

- How soon can it be done? – *Response: Although the Project is currently not included in the five-year Iowa Transportation Improvement Program, based on the crash rate and local interest in the interchange, Iowa DOT District 6 is working to include the Project in a future program. It would be a minimum of several years before the project could be approved, funded, and constructed.*
- Safety improvements are needed. – *Response: The City of Dyersville and Iowa DOT have proposed the Project to address safety issues of the US 20/7th Street SW intersection, to provide more efficient traffic flow in the southwest area of the City, and to accommodate development that is planned and is occurring today.*
- Add more lighting on the corners of the US 20/7th Street SW intersection as visibility is poor. – *Response: A flashing light has been added to alert vehicles on 7th Street SW of approaching westbound traffic. The Iowa DOT has a very limited budget available statewide for roadway lighting improvements and has no current plans to add roadway lighting at this intersection.*

A second PIM was held from 4:00 to 6:00 p.m. on August 3, 2010, at the Dyersville City Hall, City Council Chambers to provide information to the public and to gather public feedback. Representatives from the City and the consultant design team of HDR were present to discuss the Project. On display were a number of informational displays that provided information on the Project. The boards included information on the study elements for the Project and indicated how the public can become involved in the Project. Attendees were able to provide comments verbally and in writing at the meeting as well as by sending their comments after the meeting. Eleven comment forms were submitted to Iowa DOT.

The following is a summary of public comments received with the response to each comment in italics following the comment:

- Is the interchange included in the next 20-year program? – *Response: Although the Project is currently not included in the five-year Iowa Transportation Improvement Program, based on the crash rate and local interest in the interchange, Iowa DOT District 6 is working to include the Project in a future program.*
- How soon will 12th Avenue SW be completed to 332nd Avenue? If completed in the next 2 years, an interchange isn't necessary if traffic is required to exit at 332nd Avenue and the US 20/7th Street SW intersection is closed. Construct longer exit lanes at 332nd Avenue. – *Response: The extension of 12th Avenue SW to 332nd Avenue is a local improvement initiative and it is anticipated that this would be in-place prior to the interchange being built. Although this may relieve some traffic from 7th Street SW, it will not likely provide adequate access for the future anticipated traffic volumes. Restricting traffic to right-in/right-out turn movements at 7th Street SW is a potential interim solution, but the interchange is a more viable long-term solution to address the operational issues in the area. Longer exit lanes would require additional ROW, costing more without providing any evident benefit.*

- Too many people have been killed at the US 20/7th Street SW intersection. – *Response: Safety is Iowa DOT's number one priority. The Project is proposed as the best solution to improve safety and to provide more efficient traffic flow in the southwest area of the City to accommodate development that is planned and is occurring today.*
- The US 20/7th Street SW intersection is dangerous because it is difficult to see oncoming vehicles going west when you are trying to turn left to go east on US 20. – *Response: The Project is proposed to only allow righ-in/right-out turn movements at the US 20/7th Street SW intersection; left turns and through movements across US 20 would be prohibited.*
- Left turns should be forbidden at the US 20/7th Street SW intersection immediately. – *Response: Selecting and implementing interim measures is dependent on when proposed improvements are funded. Currently, if this was implemented, there is no other option for connectivity to alternate roads. There would likely be vehicles accelerating, slowing down to make U turns, and accelerating in the opposite direction. These vehicle movements would be less safe than the current situation.*
- Put a stoplight at the US 20/7th Street SW intersection until the interchange is completed. – *Response: Introducing traffic signals where they aren't expected or warranted may change the type of accidents, but often increase crash frequency.*
- Add a lane on US 20 westbound west of 7th Street SW for merging traffic. – *Response: Because of the traffic speed, there would need to be sufficient length of a merge lane for gradual acceleration. Consequently, the cost of this option would be expensive, and also not address the problem of traffic through the interchange and left turns.*
- Closing all four intersections and constructing an overpass is the safe way to proceed. – *Response: The 7th Street SW intersection has a higher crash rate than other intersections in the corridor, and Iowa DOT will continue to look for opportunities to make it a safer environment in both the short and long term. Construction of the Project would provide access across US 20. The at-grade crossings of US 20/330th Avenue, US 20/332nd Avenue, and US 20/7th Street SW would remain open, but only for right-in/right-out turn movements; left turns and through movements across US 20 would be prohibited.*
- The interchange should be placed at the US 20/320th Avenue intersection because there are no structures in the way and the alignment of the current crossroads is good. – *Response: Placing an interchange at 320th Avenue is a solution that was initially considered. It would close all access between 320th Avenue and Iowa Highway 136, and would require anyone wanting to access US 20 (north and south of US 20) to do so only at those two locations. This option would introduce extensive out-of-distance travel and delay emergency services in several areas, so was not carried forward for further consideration by the project management team.*
- The proposed backage road at 221st Street and 7th Street SW would split up the existing farm and create a new public road on the south side of the property. Why is

the proposed access not running parallel to US 20? Instead, require the private property owners to go east only to eliminate the need for the access road to save land and reduce development cost. – *Response: Iowa DOT has considered both frontage and backage road options and both are viable solutions to provide access from the interchange to the east. The current option proposed is a frontage road paralleling US 20. Iowa DOT would negotiate the location with the property owner of record at the time a purchase is made. Allowing private driveways direct access to US 20 for right-in/right-out turn movements would not resolve safety concerns for traffic traveling on US 20.*

- Why was no land taken from the Dyersville Economic Development Corporation? – *Response: In keeping with NEPA, who owns a particular property is not a consideration as to what improvement options are more or less appropriate for a proposed project. Iowa DOT considered several design options for the proposed improvements to US 20 near Dyersville. Ultimately, the Project Management Team recommended the technically preferred project design for the alternative that they believe best meets the purpose and need for the Project.*
- It appears the Project was intentionally designed to do the greatest amount of damage to property possible. Two family farms and two residences are completely destroyed by this design. – *Response: The Project is being designed to minimize the footprint of impact while providing for standard turning radii and other factors considered to promote safer travel along and across US 20. Several options for locating an interchange were considered and connecting 330th Avenue and 332nd Avenue was determined to best satisfy the purpose and need for the Project.*
- Since the City of Dyersville desires an interchange for the 20 West Industrial Park, the City should be approached about donating ground needed in the industrial park for right of ways. – *Response: Iowa DOT reviewed multiple locations for an interchange and determined that connecting 330th Avenue and 332nd Avenue could use an existing roadway network and best met the purpose and need for the Project. A more western location near the industrial park would not generate adequate use, cause more out-of-distance travel, and would also require more ROW for a street network.*

7.3.2 Correspondence

Throughout the course of the Project, correspondence was received from the public through a variety of means, including the PIM, telephone calls, letters, and email. All public correspondence was logged.

7.3.3 Future Public Involvement

A public hearing on the Signature EA is anticipated for February 2011.

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SECTION 8

REFERENCES

SECTION 8
REFERENCES

14 CFR 77. Objects Affecting Navigable Airspace.

40 CFR 1502.14. Alternatives including the Proposed Action.

40 CFR 1508.7. Cumulative Impact.

40 CFR 1508.8. Effects.

7 U.S.C. 4201(b). Findings, Purpose, and Definitions.

33 USC 1251 et seq. Clean Water Act, as amended.

42 USC 4321-4347. National Environmental Policy Act of 1969, as amended.

42 USC 4601 et seq. Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970.

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HDR. February 11, 2010. Memo: Determination of Woodlands.

HDR. February 12, 2010. Memo: Site Visit for Threatened and Endangered Species Habitat.

HDR. June 25, 2010. Crash Analysis Memorandum.

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HDR. September 9, 2010. Draft HCM Capacity Analysis Technical Memorandum.

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APPENDIX A

STREAMLINED RESOURCE SUMMARY

SOCIOECONOMIC IMPACTS SECTION:

Land Use	
Evaluation:	Resource is discussed in Section 5 of the Resource Analysis
Method of Evaluation:	Field Review/Field Study
Completed by and Date:	Consultant, 3/30/2010
Community Cohesion	
Evaluation:	Resource is in the study area but will not be impacted
Method of Evaluation:	Report
Completed by and Date:	Consultant, 3/30/2010
Churches and Schools	
Evaluation:	Resource is in the study area but will not be impacted
Method of Evaluation:	Field Review/Field Study
Completed by and Date:	Consultant, 9/3/2010
Environmental Justice	
Evaluation:	Resource is not in the study area
Method of Evaluation:	Database
Completed by and Date:	Consultant, 3/29/2010
Economic	
Evaluation:	Resource is discussed in Section 5 of the Resource Analysis
Method of Evaluation:	Field Review/Field Study
Completed by and Date:	Consultant, 7/13/2010
Joint Development	
Evaluation:	Resource is not in the study area
Method of Evaluation:	Other
Completed by and Date:	Consultant, 3/30/2010
Parklands and Recreational Areas	
Evaluation:	Resource is not in the study area
Method of Evaluation:	Field Review/Field Study
Completed by and Date:	Consultant, 3/26/2010
Bicycle and Pedestrian Facilities	
Evaluation:	Resource is not in the study area
Method of Evaluation:	Field Review/Field Study
Completed by and Date:	Consultant, 3/26/2010
Right-of-Way	
Evaluation:	Resource is discussed in Section 5 of the Resource Analysis
Method of Evaluation:	Field Review/Field Study
Completed by and Date:	Consultant, 8/12/2010
Relocation Potential	
Evaluation:	Resource is discussed in Section 5 of the Resource Analysis
Method of Evaluation:	Field Review/Field Study
Completed by and Date:	Consultant, 8/12/2010

SOCIOECONOMIC IMPACTS SECTION Continued:

Construction and Emergency Routes	
Evaluation:	Resource is discussed in Section 5 of the Resource Analysis
Method of Evaluation:	Field Review/Field Study
Completed by and Date:	Consultant, 7/8/2010
Transportation	
Evaluation:	Resource is discussed in Section 5 of the Resource Analysis
Method of Evaluation:	Field Review/Field Study
Completed by and Date:	Consultant, 8/3/2010

CULTURAL IMPACTS SECTION:

Historic Sites or Districts	
Evaluation:	Resource is not in the study area
Method of Evaluation:	Report
Completed by and Date:	Subconsultant, 1/29/2010
Archaeological Sites	
Evaluation:	Resource is not in the study area
Method of Evaluation:	Report
Completed by and Date:	Subconsultant, 2/1/2010
Cemeteries	
Evaluation:	Resource is not in the study area
Method of Evaluation:	Field Review/Field Study
Completed by and Date:	Consultant, 3/26/2010

NATURAL ENVIRONMENT IMPACTS SECTION:

Wetlands	
Evaluation:	Resource is in the study area but will not be impacted
Method of Evaluation:	Field Review/Field Study
Completed by and Date:	Consultant, 2/11/2010
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:	Consultant, 2/11/2010
Wild and Scenic Rivers	
Evaluation:	Resource is not in the study area
Method of Evaluation:	Database
Completed by and Date:	Consultant, 3/1/2010
Floodplains	
Evaluation:	Resource is in the study area but will not be impacted
Method of Evaluation:	Field Review/Field Study
Completed by and Date:	Consultant, 3/29/2010
Wildlife and Habitat	
Evaluation:	Resource is in the study area but will not be impacted
Method of Evaluation:	Field Review/Field Study
Completed by and Date:	Consultant, 2/12/2010
Threatened and Endangered Species	
Evaluation:	Resource is not in the study area
Method of Evaluation:	Database
Completed by and Date:	Consultant, 2/12/2010
Woodlands	
Evaluation:	Resource is not in the study area
Method of Evaluation:	Field Review/Field Study
Completed by and Date:	Consultant, 5/11/2010
Farmlands	
Evaluation:	Resource is discussed in Section 5 of the Resource Analysis
Method of Evaluation:	Field Review/Field Study
Completed by and Date:	Consultant, 8/31/2010

PHYSICAL IMPACTS SECTION:

Noise	
Evaluation:	Resource is discussed in Section 5 of the Resource Analysis
Method of Evaluation:	Report
Completed by and Date:	Consultant, 8/2/2010
Air Quality	
Evaluation:	Resource is in the study area but will not be impacted
Method of Evaluation:	Database
Completed by and Date:	Consultant, 3/29/2010
MSATs	
Evaluation:	This project will not result in any meaningful changes in traffic volumes, vehicle mix, location of the existing facility, or any other factor that would cause an increase in emissions impacts relative to the no-build alternative. As such, FHWA has determined that this project will generate minimal air quality impacts for Clean Air Act criteria pollutants and has not been linked with any special MSAT concerns. Consequently, this effort is exempt from analysis for MSATs. Moreover, EPA regulations for vehicle engines and fuels will cause overall MSATs to decline significantly over the next 20 years. Even after accounting for a 64 percent increase in VMT, FHWA predicts MSATs will decline in the range of 57 percent to 87 percent, from 2000 to 2020, based on regulations now in effect. This will both reduce the background level of MSATs as well as the possibility of even minor MSAT emissions from this project.
Method of Evaluation:	FHWA Interim Guidance on Air Toxic Analysis in NEPA Documents, February 3, 2006
Completed by and Date:	Consultant, 3/29/2010
Energy	
Evaluation:	Resource is in the study area but will not be impacted
Method of Evaluation:	Field Review/Field Study
Completed by and Date:	Consultant, 3/29/2010
Contaminated and Regulated Materials Sites	
Evaluation:	Resource is not in the study area
Method of Evaluation:	Database
Completed by and Date:	Resource Agency, 2/10/2010
Visual	
Evaluation:	Resource is discussed in Section 5 of the Resource Analysis
Method of Evaluation:	Field Review/Field Study
Completed by and Date:	Consultant, 8/10/2010
Utilities	
Evaluation:	Resource is discussed in Section 5 of the Resource Analysis
Method of Evaluation:	Field Review/Field Study
Completed by and Date:	Consultant, 7/7/2010

APPENDIX B

AGENCY AND TRIBAL COORDINATION

IOWA DEPARTMENT OF AGRICULTURE AND LAND STEWARDSHIP

Bill Northey, Secretary of Agriculture

February 15, 2010

Iowa Department of Transportation
DeeAnn L. Newell
NEPA Document Manager
800 Lincoln Way
Ames, IA 50010

Dear Ms. Newell,

SUBJECT: U.S. 20 Dyersville Proposed Interchange – Environmental Assessment NHSN-020-9(195)-2R-31

This letter is to acknowledge receipt of your correspondence relative to your U.S. 20 Dyersville Proposed Interchange.

We have not given this proposal thorough review, but do acknowledge having received materials and being given the opportunity to provide information and mapping regarding resources that might be affected within the corridor. This acknowledgment is not an indication of approval on our part.

We respectfully suggest that a copy of your proposal be mailed to:

Delaware SWCD
200 S 12th St.
Manchester, IA 52057

Dubuque SWCD
210 Bierman
Epworth, IA 52045-9529

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

Sincerely,

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

CRG:klf

STATE HISTORICAL SOCIETY of IOWA

A Division of the Iowa Department of Cultural Affairs

February 20, 2010

In reply refer to:
R&C#: 100231070

DeeAnn L. Newell, NEPA Document Manager
Office of Location and Environment
Planning & Research Division
Iowa Department of Transportation
800 Lincoln Way
Ames, IA 50010

RE: FHWA – DUBUQUE COUNTY – NHSN-020-9(195)—2R-31 – US HWY 20 DYERSVILLE INTERCHANGE – PROPOSED ENVIRONMENTAL ASSESSMENT PREPARATION (EA) FOR PROJECT

Dear Ms. Newell,

Thank you for notifying our office about the above referenced proposed project. We understand that this project will be a federal undertaking for the Federal Highway Administration (FHWA) and will need to comply with Section 106 of the National Historic Preservation Act (NHPA) of 1966 and its implementing regulations, 36 CFR Part 800 (revised, effective August 5, 2004) and with the National Environmental Policy Act (NEPA).

It is our understanding that cultural resource studies have not yet been completed for this undertaking and it is currently unknown whether any significant historic properties will be affected by the proposed undertaking. Per our programmatic agreement, our office understands that the appropriate cultural resources investigations will be implemented and conducted to determine whether any historic properties will be affected by the proposed undertaking. If during your scoping process, a cultural resource issue is identified, our agency can provide further technical assistance to your agency.

Our office will be a consulting party to the responsible federal agency and your agency acting on behalf of FHWA in accordance with our Programmatic Agreement as part of the Section 106 consultation process. We request that all correspondence related to this undertaking for Section 106 consultation be provided to our office through the Office of Location and Environment at the Iowa Department of Transportation in accordance with our Programmatic Agreement.

We look forward to consulting with your office and the Federal Highway Administration on the Area of Potential Effect for this proposed project and whether this project will affect any significant historic properties under 36 CFR Part 800.4. We will need the following types of information for our review:

- The Area of Potential Effect (APE) for this project needs to be adequately defined (36 CFR Part 800.16 (d)).
- Information on what types of cultural resources are or may be located in the APE (36 CFR Part 800.4).

- The significance of the historic properties in the APE in consideration of the National Register of Historic Places Criteria.
- A determination from the responsible federal agency of the undertaking's effects on historical properties within the APE (36 CFR Part 800.5).

Also, the responsible federal agency will need to identify and contact all potential consulting parties that may have an interest in historic properties within the project APE (36 CFR 36 Part 800.2 (c)).

Please reference the Review and Compliance Number provided above in all future submitted correspondence to our office for this project. We look forward to further consulting with your agency and the Federal Highway Administration on this project. Should you have any questions please contact me at the number below.

Sincerely,

Douglas W. Jones

Douglas W. Jones, Archaeologist and Review and Compliance Program Manager
State Historic Preservation Office
State Historical Society of Iowa
(515) 281-4358

cc: Mike La Pietra, FHWA
Randall Faber, OLE, IDOT, Ames
Ralph Christian, Historian, State Historical Society of Iowa

U.S. Department
Of Transportation

**Federal Aviation
Administration**

Central Region
Iowa, Kansas
Missouri, Nebraska

901 Locust
Kansas City, Missouri 64106-2325

February 24, 2010

DeeAnn L. Newell
Iowa Department of Transportation
NEPA Project Manager
800 Lincoln Way
Ames, IA 50010

Re: US 20 Dyersville Proposed Interchange – Environmental Assessment
NHSH-020-9(195)-2R-31

Dear Ms. Newell:

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 letter dated February 10, 2010, and have no comments regarding environmental matters.

Airspace Considerations
If there is any construction or alteration of more than 200 feet in height above the ground level at its site (including temporary structures such as cranes), then the project will require formal notice and review under Federal Aviation Regulation (FAR) Part 77, Objects Affecting Navigable Airspace.

Given the time required to conduct an aeronautical study, we recommend a 120-day notification to accommodate the review process and issue our determination letter.
Proposals may be filed at http://oeaaa.faa.gov (requires free registration).

More information on this process may be found at:
http://www.faa.gov/airports/central/engineering/part77/

If you have questions, please contact me at glenn.helm@faa.gov or 816-329-2617.

Sincerely,

Glenn Helm, P.E.
Environmental Specialist

United States Department of Agriculture

NRCS
Natural Resources Conservation Service
200 South 12th Street
Manchester, Iowa 52057
563-927-4590 Ext 3 FAX 563-927-4535

February 25, 2010

DEE ANN L NEWELL
IOWA DEPARTMENT OF TRANSPORATION
800 LINCOLN WAY
AMES IA 50010

Dear Ms. Newell:

I have reviewed the information you sent in regards to the proposed U.S. Highway 20 Interchange west of Dyersville, Iowa.

As always we recommend any construction project involving soil disturbance take appropriate measures for reduced soil erosion and sediment control from leaving the construction site. The proposed project area map shows numerous surface water drainage patterns that should be maintained. In most cases a grassed waterway with adequate capacity should control the erosion from surface water runoff.

Any wetland areas in the project area should be maintained for water quality benefits. If the wetlands can not be maintained as part of the project, mitigation would also be an option.

As this area becomes more developed it will be important to provide storm water storage. The City of Dyersville does experience flooding problems. Any storm water runoff that can be stored on the uplands with a controlled out flow would be a benefit to downstream properties.

This appears to be a very interesting project. I hope this information is helpful as you move forward with the project plans. If I can be of any future assistance, please feel free to contact the NRCS office.

Sincerely,

Keith Krause

Keith Krause
District Conservationist

Newell, Deeann [DOT]

From: Karla Thompson [kthompson@dyersville.org]
Sent: Monday, March 01, 2010 2:31 PM
To: Newell, Deeann [DOT]
Subject: Dyersville, IA- US 20

DeeAnn~
The Dyersville Area Chamber of Commerce does not have any knowledge of concern impacting the US 20 interchange. This is a project that is essential in the safety of our community and area. We would be happy to assist in any way possible to continue the progress of this project.

St. Pat's Festivities - March 13
Gaelic Gallop 10:30
Ride the Shamrock 10:00
Parade 1:30

Karla Thompson, Executive Director
Dyersville Area Chamber of Commerce
1100 16th Ave CT SE
Dyersville, IA 52040
563-875-2311
fax: 563-875-8391
kthompson@dyersville.org
www.dyersville.org

Dubuque County
Board of Supervisors

COURTHOUSE - 720 CENTRAL AVENUE
DUBUQUE, IOWA 52001-7079
www.dubuquecounty.org

Donna L. Smith
dsmith@dbqco.org
Eric Manternach
emanternach@dbqco.org
Wayne Demmer
wdemmer@dbq.org

Phone: 563-589-4441
Fax: 563-587-3836

March 2, 2010

DeeAnn L. Newell
Iowa Department of Transportation
800 Lincoln Way
Ames, IA 50010

Re: US 20 Dyersville Proposed Interchange

Dear Ms. Newell;

At our recent meeting, we reviewed and discussed the content of your February 10, 2010 correspondence regarding the US 20 Dyersville Proposed Interchange - Environmental Assessment and related attachments.

We have no objection to the nature of the project or the location of the proposed roadway improvement. We ask for your assistance to expedite this project in a timely manner due to our safety concerns regarding this intersection.

Sincerely,

Eric Manternach

Eric Manternach, Chairperson
Dubuque County Board of Supervisors

cc: Mike Felderman, Dubuque County Engineer

PLANNING & ZONING COMMISSION MEETING

CITY OF DYERSVILLE

March 8, 2010

Meeting called to order by Chairman Dan Olberding at 7:00 P.M.

Roll Call: **Present:** Commission Members: Dave Kronlage, Robert Meinert, Mike Murphy, Dan Olberding, Jim Willenbring
Absent: Chuck Geers, Pat Graham, Tony Scherbring, Bec Willenborg

1st Item: Approve Minutes of the January 11, 2010 meeting.

Chairman Olberding asked for comments and questions and there were none.

Meinert made a motion to Approve the Minutes of the January 11, 2010 meeting. Motion seconded by Willenbring.

Roll Call Vote: **Aye:** Kronlage, Meinert, Murphy, Olberding, Willenbring
Nays:

Motion Carried

2nd Item: Approve Plat of Survey of Rahe Farm Subdivision, Plat No. 2, Dubuque County, Iowa.

Dewayne & Krystal Rahe were present and advised they plan to build a house and when applying for the building permit with the county they found the legal descriptions did not match the property lines. They had the parcel surveyed to match the property lines. They surveyed off 5 acres around the buildings in case they would want to sell them.

City Administrator Mick Michel was not present. Recording Secretary Lori Panton stated to the Committee that the City did not have any problems with the plat.

Kronlage made a motion to Approve Plat of Survey of Rahe Farm Subdivision, Plat No. 2. Motion seconded by Meinert.

Roll Call Vote: **Aye:** Kronlage, Meinert, Murphy, Olberding, Willenbring
Nays:

Motion Carried

3rd Item: Correspondence from IDOT regarding US 20 Dyersville Proposed Interchange.

In the absence of the City Administrator, Recording Secretary Lori Panton told the Committee that the letter is just correspondence from the DOT stating they are beginning an environmental assessment for the location of a proposed interchange on highway 20. The map shows the area under consideration. Per the City Administrator, there will be more detailed information and meetings in the future. The Committee needs to confirm receipt of the letter.

The Committee had some discussion and stated they would like to be kept informed of future meetings and developments on the project. They stated the DOT would like comments regarding the project. I advised I would note their comments in the minutes and send a copy to the DOT.

In general the committee is OK with the area under consideration and has acknowledged receipt of the letter. The Committee wants to be kept informed of future developments and would the opportunity at that time to provide comments. They would also like to be kept informed of future meetings regarding this project.

Kronlage made a motion to receive and file the correspondence from the IDOT regarding US 20 Dyersville proposed interchange along with comments. Motion seconded by Willenbring.

Roll Call Vote: **Aye:** Kronlage, Meinert, Murphy, Olberding, Willenbring
Nays:

Motion Carried

The meeting adjourned at 7:13 P.M. on a motion by Meinert , seconded by Murphy.

Lori A Panton

Lori A. Panton – Recording Secretary

3/8/2010
Date

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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

MAR 10 2010

RECEIVED
MAR 15 2010
OFFICE OF LOCATION & ENVIRONMENT

DeeAnn L. Newell
NEPA Document Manager
Iowa Department of Transportation
800 Lincoln Way
Ames, IA 50010

Dear Ms. Newell:

This letter responds to your correspondence, dated February 10, 2010, concerning the impending preparation of an environmental assessment regarding the construction of an interchange along US 20 in Dyersville, Delaware and Dubuque Counties, Iowa.

In evaluating this action, I referred to EPA Region 7's NEPAssist database for spatial relationships of environmentally regulated facilities and remediation sites. No issues were found that should interfere with the planned project. The attached map shows the results of this inquiry.

Thank you for involving the U.S. Environmental Protection Agency (EPA) during the consideration of environmental impacts either to or from this project. EPA would like to ask that we please be kept informed of future documents, in particular the EA, pertaining to this project.

If you have any other questions, you can contact me at 913-551-7565, or via email at tucker.amber@epa.gov.

Sincerely,

Amber Tucker

Amber Tucker
NEPA Reviewer
Environmental Services Division

Enclosure

http://r7arcims.r7comp.epa.gov/NEPAVEtools/NepaCall/analysis.aspx
Last updated on Tuesday, March 09, 2010

NEPAssist

You are here: EPA Home NEPAssist Home

Map

Area of digitized polygon	2.47 sq mi
R7 Layers	
Within 1000 meters of an impaired stream?	yes
Within 1000 meters of an airport?	no
Within an EJ COOCCURRENCE (Minority/Poverty/Both) blockgroup?	no
Within 500 meters of a National Historic Place?	yes
Within 500 meters of a National Heritage T/E Hexagon?	no
Within 500 meters of an AIRS/AFS site?	no
Within 500 meters of a CERCLIS site?	no
Within 500 meters of a RCRA facility?	no
Within 500 meters of a LQG RCRA facility?	no
Within 500 meters of a PCS (NPDES) Major facility?	no
Within 500 meters of a PCS facility?	no
Within 500 meters of a SWDIS facility?	no
NatureServe data	
Within an area with known rare, endangered, or at-risk species?	click here

Environmental Justice Analysis

Download XML

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

March 11, 2010

REPLY TO
ATTENTION OF

Planning, Programs, and
Project Management Division

Ms. DeeAnn L. Newell
NEPA Document Manager
Iowa Department of Transportation
800 Lincoln Way
Ames, Iowa 50010

Dear Ms Newell:

I received your letter dated February 10, 2010, concerning the proposed interchange of US 20 at Dyersville, Iowa (NHSN-020-9(195)—2R-31). 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 an application packet to the Rock Island District for processing.

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. John Wagman is the Iowa State Hazard Mitigation Team Leader. His address is: 7105 NW 70th Avenue, Camp Dodge-Building W4, Johnston, Iowa 50131. You can reach him by calling 515/725-3231.

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 Environmental and Economics Branch, telephone 309/794-5174.

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

Sincerely,

Kenneth A. Barr
Chief, Environmental and
Economics Branch

Fields of Opportunities

STATE OF IOWA

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

DEPARTMENT OF NATURAL RESOURCES
RICHARD A. LEOPOLD, DIRECTOR

March 11, 2010

DeeAnn L. Newell, NEPA Document Manager
Iowa Department of Transportation
800 Lincoln Way
Ames, IA 50010

RECEIVED
MAR 17 2010
OFFICE OF LOCATION & ENVIRONMENT

RE: Environmental Review for Natural Resources
US 20 Dyersville Proposed Interchange, NHSN-020-9(195)-2R-31
Delaware County

Dear DeeAnn Newell:

Thank you for inviting Department comment 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,

John Pearson
Environmental Specialist
Conservation and Recreation Division

FILE COPY: Inga Foster
Tracking Number: 4570

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

Iowa
Fields of Opportunities

STATE OF IOWA

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

DEPARTMENT OF NATURAL RESOURCES
RICHARD A. LEOPOLD, DIRECTOR

March 12, 2010

DeeAnn Newell
Iowa Department of Transportation
800 Lincoln Way
Ames, IA 50010

Dear Ms. Newell:

This letter is in response to the February 10th letter concerning the Dyersville 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.

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.

It is our policy that companies and their consultants conduct their own review for these sites. If you need advice for locating relevant information, please call me at (515)281-7276.

Sincerely,

Christine Spackman
Business Assistance Coordinator

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

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Legend

UST Sites

US 20 Dyersville Proposed Interchange
Underground Storage tank Sites

0 400 800
Meters

DUBUQUE COUNTY CONSERVATION BOARD
13606 Swiss Valley Rd.
Peosta, IA 52068
563-556-6745
563-589-7813 fax
www.dubuquecounty.org

March 16, 2010

DeeAnn Newell
Iowa Department of Transportation
800 Lincoln Way
Ames, IA 50010

Dear DeeAnn Newell,

The Dubuque County Conservation Board met in regular monthly session on February 23, 2010, at the Swiss Valley Nature Center. The board reviewed the correspondence regarding US 20 Dyersville Proposed Interchange- Environmental Assessment NHSH-020-9(195)-2R-31.

The Dubuque County Conservation Board does not believe that the project will have a negative environmental impact on the land in Dubuque County. Please let me know if you have any questions or need additional information.

Sincerely,

Brian Preston, Director
Dubuque County Conservation Board

Farrell, Kelly

From: Newell, Deeann [DOT] [DeeAnn.Newell@dot.iowa.gov]
Sent: Monday, March 22, 2010 8:06 AM
To: Farrell, Kelly
Subject: FW: US 20 Dyersville Proposed Interchange - EA NHSN-20-9(195)---2R-31

==========
DeeAnn L. Newell
NEPA Section Leader
==========

From: Moench, Kathleen [DNR]
Sent: Friday, March 19, 2010 9:32 AM
To: Newell, Deeann [DOT]
Subject: US 20 Dyersville Proposed Interchange - EA NHSN-20-9(195)---2R-31

DeeAnn,

I just had the time to look at your early coordination letter for this project. I've looked through my files to determine if any park property might be affected, and have determined there are no parks within the area of potential impact. I apologize for the lateness of this response. Kathleen

_____
Kathleen Moench
Iowa Department of Natural Resources
502 E. 9th Street
Des Moines, IA 50319
Phone 515-281-3013 Fax 515-281-6794
kathleen.moench@dnr.iowa.gov
Visit us at: www.iowadnr.gov

DELAWARE COUNTY SECONDARY ROAD DEPARTMENT

2139 Highway 38
MANCHESTER, IA 52057

Office Telephone 563-927-3505 **Fax No. 563-927-3102**
Shop Telephone 563-927-3700 **email: co-engr@co.delaware.ia.us**

Anthony Bardgett, P.E. — County Engineer
Craig Davis — Assistant To Engineer
Pat Oberbroeckling — Maintenance Foreman
Linda Schaul — Office Manager

March 24, 2010

DeeAnn L. Newell
Iowa Department of Transportation
NEPA Document Manager
800 Lincoln Way
Ames, Iowa 50010

Re: US 20 Dyersville Proposed Interchange – Environmental Assessment
NHSN-020-9(195)—2R-31

Dear Ms. Newell:

I apologize for the delay regarding the above subject. I reviewed the proposed Dyersville interchange and I cannot think of any issues to point out at this time. If something comes up I will be sure to contact you. Please keep me updated as the project progresses. Thank you.

Sincerely,

Anthony Bardgett

Anthony Bardgett, P.E.
Delaware County Engineer

Fields of Opportunities

STATE OF IOWA

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

DEPARTMENT OF NATURAL RESOURCES
RICHARD A. LEOPOLD, DIRECTOR

March 23, 2010

RECEIVED
MAR 25 2010
OFFICE OF LOCATION & ENVIRONMENT

DeeAnn Newell
Iowa Department of Transportation
800 Lincoln Way
Ames, Iowa 50010

SUBJECT: US 20 Dyersville Proposed Interchange – Environmental Assessment
NHSN-020-9(195)-2R-31

Dear Ms. Newell:

In response to your letter of February 10, 2010 concerning the above noted project we have reviewed our files and databases to determine if any areas of concern with regards to contaminated sites, spills, underground storage tanks, or similar environmental concerns were located within the project boundaries. Our review indicated no areas of concern. Please note that a review for threatened and endangered species was not part of this review.

If you need additional assistance as this project progresses please feel free to contact me at 563-927-2640.

Sincerely,

Joe Sanfilippo
Environmental Program Supervisor

File Delaware County General
EFile: 28 MISC IDOT Dyersville 032310 ltr jps

Field Office 1, 909 West Main Suite 4, Manchester, IA 52057
563-927-2640 FAX 563-927-2075 www.iowadnr.gov

APPENDIX C

FARMLAND PROTECTION FORM

U.S. DEPARTMENT OF AGRICULTURE
Natural Resources Conservation Service

NRCS-CPA-106
(Rev. 1-91)

FARMLAND CONVERSION IMPACT RATING FOR CORRIDOR TYPE PROJECTS

PART I *(To be completed by Federal Agency)*

3. Date of Land Evaluation Request: 7/21/10
4. Sheet 1 of _____

1. Name of Project: **US 20 Dyersville Interchange**
5. Federal Agency Involved: **Federal Highway Administration**
2. Type of Project: **Highway Interchange**
6. County and State: **Delaware County, Iowa**

PART II *(To be completed by NRCS)*

1. Date Request Received by NRCS: **8/2/10**
2. Person Completing Form: **Robert J. Vobora**
3. Does the corridor contain prime, unique statewide or local important farmland? (If no, the FPPA does not apply - Do not complete additional parts of this form). YES ☑ NO ☐
4. Acres Irrigated: **0** | Average Farm Size: **244**
5. Major Crop(s): **Corn - Soybeans**
6. Farmable Land in Government Jurisdiction: Acres: **320869** % **61**
7. Amount of Farmland As Defined in FPPA: Acres: **226260** % **61**
8. Name Of Land Evaluation System Used: **Delaware County, Iowa**
9. Name of Local Site Assessment System: **None**
10. Date Land Evaluation Returned by NRCS: **8/23/10**

PART III *(To be completed by Federal Agency)*	Alternative Corridor For Segment _____			
	Corridor A	**Corridor B**	**Corridor C**	**Corridor D**
A. Total Acres To Be Converted Directly	52			
B. Total Acres To Be Converted Indirectly, Or To Receive Services	12			
C. Total Acres In Corridor	64	0	0	0
PART IV *(To be completed by NRCS) Land Evaluation Information*				
A. Total Acres Prime And Unique Farmland	55			
B. Total Acres Statewide And Local Important Farmland	9			
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted	0			
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value	32			
PART V *(To be completed by NRCS) Land Evaluation Information Criterion Relative value of Farmland to Be Serviced or Converted (Scale of 0 - 100 Points)*	74			

PART VI *(To be completed by Federal Agency) Corridor Assessment Criteria (These criteria are explained in 7 CFR 658.5(c))*	**Maximum Points**				
1. Area in Nonurban Use	15	11			
2. Perimeter in Nonurban Use	10	6			
3. Percent Of Corridor Being Farmed	20	17			
4. Protection Provided By State And Local Government	20	20			
5. Size of Present Farm Unit Compared To Average	10	3			
6. Creation Of Nonfarmable Farmland	25	24			
7. Availablility Of Farm Support Services	5	5			
8. On-Farm Investments	20	20			
9. Effects Of Conversion On Farm Support Services	25	0			
10. Compatibility With Existing Agricultural Use	10	3			
TOTAL CORRIDOR ASSESSMENT POINTS	160	109	0	0	0
PART VII *(To be completed by Federal Agency)*					
Relative Value Of Farmland (From Part V)	100	74			
Total Corridor Assessment (From Part VI above or a local site assessment)	160	109	0	0	0
TOTAL POINTS *(Total of above 2 lines)*	260	183	0	0	0

1. Corridor Selected:	2. Total Acres of Farmlands to be Converted by Project:	3. Date Of Selection:	4. Was A Local Site Assessment Used?
	64		YES ☐ NO ☑

5. Reason For Selection:

Signature of Person Completing this Part: | DATE

NOTE: Complete a form for each segment with more than one Alternate Corridor

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