

# US-69 CORRIDOR

## CRAWFORD COUNTY, KANSAS

### KDOT PROJECT NO.

69-19 K-7290-03

69-19 K-8320-01

69-19 K-8320-02

160-19 K-8320-03

69-19 K-8320-04

### FEDERAL PROJECT NO.

HPD-K729(003)

STP-K832(011)

HPD-K832(002)

HPD-K832(003)

HPD-K832(004)

## FINDING OF NO SIGNIFICANT IMPACT

DECEMBER 2012

PREPARED FOR



**NOTE:** This information is available in alternative accessible formats. To obtain an alternative format, contact Transportation Information, Eisenhower Building, 700 SW Harrison, 2nd Floor West, Topeka, KS, 66603-3754, or (785) 296-3585 (Voice)/Hearing Impaired - 711.

<u>KDOT Project No.</u>	<u>FHWA Project No.</u>
69-19 K-7290-03	HDP-K729(003)
69-19 K-8320-01	STP-K832(011)
69-19 K-8320-02	HDP-K832(002)
160-19 K-8320-03	HDP-K832(003)
69-19 K-8320-04	HDP-K832(004)

**US-69 Corridor  
Crawford County, Kansas**

**Finding of No Significant Impact**

Submitted Pursuant to 42 U.S.C. 4332 (2) (c)  
By the

**U.S. Department of Transportation  
Federal Highway Administration  
And  
Kansas Department of Transportation**

*Cooperating Agencies*

U.S. Environmental Protection Agency  
U.S. Army Corps of Engineers  
U.S. Fish and Wildlife Service

The Federal Highway Administration (FHWA) has determined that this project will not have any significant impact on the human environment. This FONSI is based on the Environmental Assessment (EA) dated July 2012, and the enclosed "Attachment to the EA," which has been evaluated by the FHWA and determined to adequately discuss the need, environmental issues, and impacts of the proposed project and the appropriate mitigation measures. It provides sufficient evidence and analysis for determining that an environmental impact statement is not required.

12/10/2012  
Date of Approval

  
\_\_\_\_\_  
J. Michael Bowen, P.E.  
Division Administrator  
FHWA Kansas Division

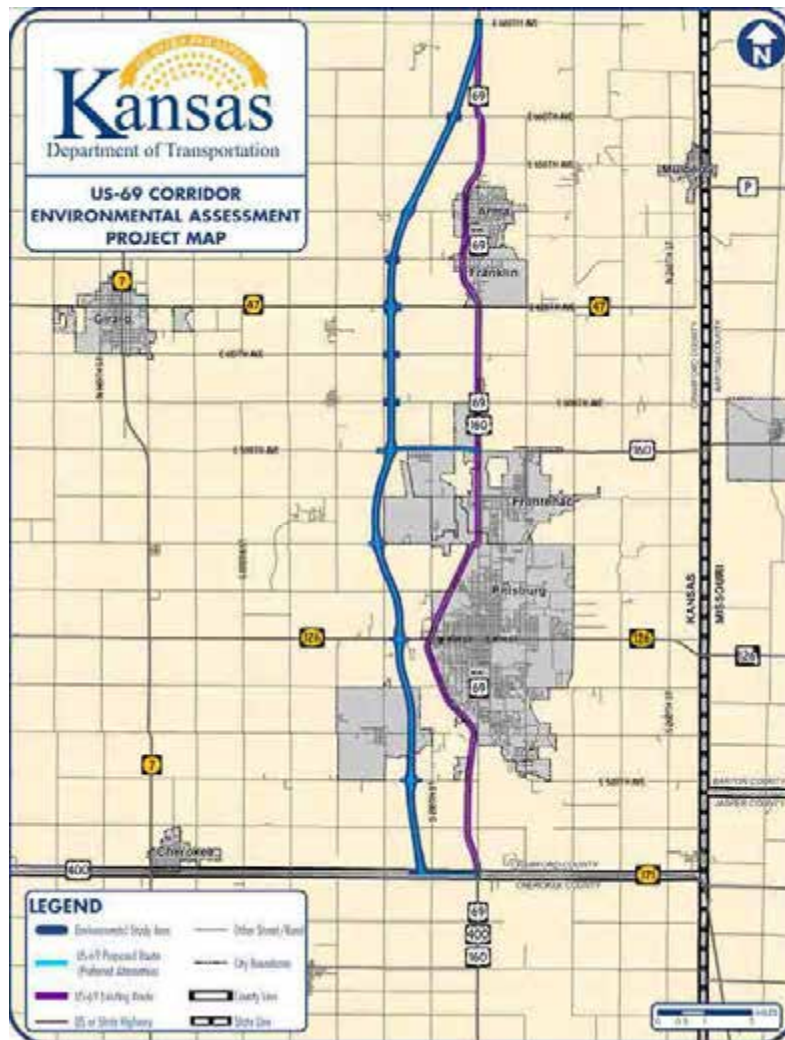
The FHWA takes full responsibility for the accuracy, scope, and content of the attached EA and enclosed attachments.

## Rationale for the Finding of No Significant Impact

### Project Description

The Kansas Department of Transportation (KDOT) and the Federal Highway Administration (FHWA) are proposing to improve US-69 Highway in Crawford County from US-400 to three miles north of Arma. Existing US-69 passes through or is adjacent to the cities of Pittsburg, Frontenac, and Arma. The Proposed Action is to construct a new four-lane access-controlled route around the cities of Pittsburg and Arma in Crawford County, Kansas.

The following map shows the project location, environmental study area, and the Proposed Route (preferred alternative).





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Attachment to Environmental Assessment  
US-69 Corridor

## Project Purpose

Safety and commerce are driving the improvements. US-69 provides an interstate connection between Kansas City, Tulsa, and Dallas and serves as a major arterial for Pittsburg and the surrounding communities. Current and future local and regional needs will be served by improving the safety and efficiency of US-69.

The project is being developed to:

- Provide an access controlled route around the cities of Pittsburg and Arma.
- Provide capacity that will serve existing and future traffic demands.
- Provide route continuity with uniform operational characteristics.
- Provide a route that is consistent with current design criteria.
- Improve the overall safety of the highway corridor.

The Proposed Action did not meet the criteria for a Categorical Exclusion (CE), which necessitated the development of an Environmental Assessment (EA) to determine how the project might affect the local environment. The EA has not identified project impacts of great enough significance to require the development of an Environmental Impact Statement (EIS). Therefore, this Finding of No Significant Impact (FONSI) has been prepared.

## Summary of Potential Impacts and Mitigation Measures

### Right-of-Way Impacts

#### Potential Impacts:

- The project may require the acquisition of up to 44 residences or about two houses per project mile.
- The project may require the acquisition of two to three commercial/industrial operations.

#### Considerations:

- There are ample residential properties readily available for purchase or rent to absorb displaced residents in the Crawford County area real estate market.
- The local supply of commercial/industrial buildings and developable properties throughout Crawford County will accommodate any displaced businesses.

#### Mitigation:

- Displaced residents and businesses will be relocated according to KDOT's relocation policies, which conform to the *Uniform Relocation Assistance and Real Property Acquisition Policies Act* of 1970 as amended.

### Floodplain Impacts

#### Potential Impacts:

- The project may impact up to 188 acres of 100-year floodplains.

#### Considerations:

- The Kansas Division of Water Resources considers it an unreasonable effect to increase the elevation of the design and base flood within a floodway, or increase the elevation of the design and base flood profiles more than one foot at any location outside of a floodway.

#### Mitigation:

- The final design will minimize the area of impacted floodplain with perpendicular crossings.
- Floodplain fill, bridge structures, and other appurtenances will be calculated and sized appropriately.

### Stream and Wetland Impacts

#### Potential Impacts:

- Up to 4,587 feet of existing stream may be impacted by realignment or channelization.
- A total of 23.43 acres of wetland is located in the preliminary right-of-way for the proposed project.

### Attachment to Environmental Assessment US-69 Corridor

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#### Considerations:

- The design will seek to avoid adverse impacts to streams, wetlands and aquatic environments to the extent practical, but some impacts will be unavoidable.
- KDOT will obtain required permits from the Kansas Division of Water Resources prior to constructing the proposed project.

#### Mitigation:

- Stream impacts will be mitigated according to the U.S. Army Corps of Engineers' *Kansas Stream Mitigation Guidance*.
- Wetland impacts will be fully identified during the final design stages prior to permitting. Unavoidable impacts will be mitigated consistent with current regulatory practices.

### Prime Farmland Impacts

#### Potential Impacts:

- The project's environmental study area contains approximately 1,638 acres of which 89% (1,460 acres) are designated as Prime Farmlands.

#### Considerations:

- The potential project impacts account for only 0.45% of the Prime Farmland acreage within Crawford County.

#### Mitigation:

- There are no practical mitigation measures. Impacts to Prime Farmlands are unavoidable due to the preponderance of high-quality agricultural soils in Crawford County.

### Threatened and Endangered Species Impacts

#### Potential Impacts:

- There is one federally designated and four state designated endangered species are found in Crawford County.
- There is one federally designated and nine state designated threatened species are found in Crawford County.

#### Considerations:

- The Kansas Department of Wildlife, Parks, and Tourism (KDWPT) has established Designated Critical Habitat (DCH) in Crawford County for the Broadhead Skink, Gray Bat, Redbelly Snake, and Spring Peeper.
- There is a broad range of DCH that exists within Crawford County giving a reasonable probability that DCH exists within the environmental limits of the proposed project.

#### Mitigation:

- Final design of the project will include delineating DCH. One objective of final design is to avoid DCH and still stay within the designated corridor. If avoidance does not work, KDOT will initiate coordination with KDWPT and the US Fish and Wildlife Service (USFWS) regarding action permits, consultation, and appropriate mitigation measures.
- Mitigation for unavoidable impacts may include:
  - Gray Bat – taller than standard light poles near stream crossings; tree plantings along stream corridors.
  - Broadhead Skink – tree plantings.
  - Redbelly Snake – tree plantings and construction of underground wintering dens.
  - Spring Peeper – construction of small pools adjacent to streams or woodland and implementing date restrictions that prohibit work in suitable water bodies from February 15 to June 1.

### Agency Coordination

Invitation letters to participate in the environmental review of the project were submitted to the Environmental Protection Agency, U.S. Army Corps of Engineers, and the U.S. Fish and Wildlife Service. Each agency was provided the

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opportunity to comment on a draft EA prior to the public review and comment period. The aforementioned agencies all provided comments to the Kansas Department of Transportation (KDOT), which were addressed prior to the draft EA being available for public review and comment. The written comments are summarized below and included in full as **Appendix A**. These comments were considered and addressed as indicated in the final EA.

## EPA:

- Comment to include effects on minority and low-income communities based on exact property parcels rather than census block groups and to identify where the mobile homes are located.
  - Specified the number of manufacture homes impacted.
  - Wording revised to clarify the impacts to minority and low income populations.
  - Section added to clarify impacts on EJ populations.

## USACE:

- Comment that numerous waters of the U.S. exist in the plan area. An alternatives analysis and mitigation plan will be required during the permit process.
  - This will be addressed during the permitting process.

## USFWS:

- Comment to include discussion about the impacts to wildlife from habitat loss, habitat conversion, habitat infringement. Also include discussion of wildlife corridors and wildlife crossings.
  - Added section to describe wildlife impacts for commonly found species.
- Comment to classify the type of stream.
  - Changed language to clarify stream impacts and provide more detail for impacted segments.
- Comment to discuss indirect and cumulative impacts to natural resources.
  - Language added to clarify indirect and cumulative impacts.

## Public Review

### **Public Availability of the EA**

In accordance with the public involvement provision of the Council on Environmental Quality (CEQ regulations, 40 CFR, 1506.6), an EA was prepared and made available for public review. The EA was available for review beginning on August 1, 2012 and ending on August 31, 2012. The public announcement of availability of the EA for review was made in the Pittsburg Morning Sun (local newspaper of general circulation). The public announcement was also sent to the following news media: Joplin Globe; Fort Scott Tribune; Columbus News-Report; KOAM-7 and Fox 14-Pittsburg/Joplin; KODE/KSN-Joplin TV stations; KKOW Radio-Pittsburg; and KOMB Radio-Fort Scott.

Hard copies were made available to the public, as well as online. Copies of the EA were made available for public inspection at the following locations:

- KDOT District Four Office, 411 W. 14<sup>th</sup>, Chanute, KS
- KDOT Pittsburg Area Office, 1813 W. 4<sup>th</sup>, Pittsburg, KS
- Federal Highway Administration, 6111 SW 29<sup>th</sup> St., Suite 100, Topeka, KS
- Pittsburg City Offices, 201 W. 4<sup>th</sup>, Pittsburg, KS
- Pittsburg Public Library, 308 N. Walnut, Pittsburg, KS
- Frontenac City Hall, 315 E. McKay, Frontenac, KS
- Arma City Hall, 701 E. Washington, Arma, KS
- Crawford County Courthouse, 111 E. Forest St., Girard, KS

### Attachment to Environmental Assessment US-69 Corridor

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advertisement and the public announcement of availability of the EA for review are available in **Appendix B**. These announcements also served as the advertisement and public announcement for the public information open house.

#### **Public Officials Open House**

A public officials open house was held on August 16, 2012 at the Pittsburg Memorial Auditorium, Lower Level, 503 North Pine, Pittsburg, Kansas, from 4:00 pm to 5:00 pm.

There were four persons that signed in to the public officials open house. Handouts were available to persons who attended the meeting and for those persons who could not attend, but contacted KDOT. Exhibit boards were on display for viewing with members of the project team available to answer questions.

#### **Public Information Open House**

A public Information open house was held on August 16, 2012 at the Pittsburg Memorial Auditorium, Lower Level, 503 North Pine, Pittsburg, Kansas, from 5:00 pm to 7:00 pm.

There were 22 persons that signed in to the public information open house. Handouts were available to persons who attended the meeting and for those persons who could not attend, but contacted KDOT. Exhibit boards were on display for viewing with members of the project team available to answer questions. A court reporter was available but no comments were provided. There was general discussion between the project team and members of the public. There were comment forms available. One comment form was completed.

The guest registers and comments received are available in **Appendix C**.

#### **Summary of Final Changes to EA**

No changes were made to the EA after it was presented to the public for review and comment.

#### **Summary**

There were no new alternatives identified during the public information open house or by any other means during the Document review and comment period. Based on comments received, the proposed action as described in the EA is considered the alternative that best satisfies the project's purpose while taking into account the environmental impacts resulting from the project. Mitigation efforts will minimize the identified environmental impacts.

**APPENDIX A**

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**Environmental Protection Agency Comments**

**The U.S. Army Corps of Engineers Comments**

**U.S. Fish and Wildlife Service Comments**



## US-69 CORRIDOR: FINDING OF NO SIGNIFICANT IMPACT

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**From:** [Summerlin.Joe@epamail.epa.gov](mailto:Summerlin.Joe@epamail.epa.gov) [mailto:[Summerlin.Joe@epamail.epa.gov](mailto:Summerlin.Joe@epamail.epa.gov)]  
**Sent:** Wednesday, December 14, 2011 8:11 AM  
**To:** Knowles, John (FHWA)  
**Subject:** 69-106 K-7290-03 Pittsburg Bypass

Subject: 69-106 K-7290-03  
Cherokee and Crawford Counties  
Pittsburg Bypass  
Cooperating Agency Review  
Environmental Assessment

Dear Mr. Bowen:

This is a response to your correspondence dated November 8, 2011 concerning the Pittsburg Bypass just north of Arma, KS and south of Pittsburg, KS. Thank you for involving the Environmental Protection Agency (EPA) during the consideration of environmental effects from this project.

In evaluating this action, I referred to the EPA Region 7's NEPAAssist database for spatial relationships of environmentally regulated facilities and remediation sites. No environmental issues were found that should interfere with the proposed project; however it may be beneficial to include effects on minority and low-income communities based on the total number of property directly affected rather than in blocks in accordance with Executive Order 12898. For example on p.22 under the heading, "Residential Acquisition Impacts," you state that you will be acquiring approximately 131 acres from a total of 67 property parcels containing residential land uses. Of these, 44 homes have been identified for acquisition. A more beneficial statistic for the lead agency might include the number of these homes owned by low-income or minorities, rather than blocking off sections of the proposed highway to see if it falls within an EJ area.

The following comments are provided by the Environmental Justice Division within EPA Region 7:

Demographic analysis of the census block groups impacted by the project indicate that census block group #200379566001 has a higher percentage of persons living below poverty than the state average.

In the residential acquisition impacts section of the report there is a discussion of 67 property parcels which will be acquired in order to implement the preferred alternative. This section also identifies that among the potentially impacted properties are several mobile homes.

While it is unclear whether the residential properties which will be purchased (among them, several mobile homes) is also located in census block group #200379566001 in Crawford County. It is recommended that steps be taken to ensure that residents being displaced by the project are compensated for their loss of property to a level at which they may relocate with minimal additional financial burden.

It is also recommended that the NEPA EJ guidance be followed in its' entirety in the conducting environmental justice analysis.

It is also recommended that the potentially impacted area be reviewed for the identification of potential disproportionate impacts on sensitive populations (children, elderly, and those with compromised immune systems due to illness) and to take steps to mitigate any potential impacts on these populations. Children are more vulnerable to the exposure of environmental hazards as their immune systems are more susceptible to illness resulting from exposure as their systems are developing and their bodies are proportionally smaller than adults. Census block group number 200379566002 has a population which is 20.6% older than 65 yrs which is greater than the 15.5% county average. Census block group #200379572001 has a population which is 8.1% under age 5 which is greater than the 6.4% county average. Census block group #200379573001 has a population which is 7.2% under age 5 which is greater than the 6.4% county average. Census block group #200379572001 also has a poverty rate of 14.6% which is near county average of 16.0 %.

If you have any other questions, you can contact me at (913) 551-7029, or via email at [summerlin.joe@epa.gov](mailto:summerlin.joe@epa.gov). For Environmental Justice questions, email or call Althea M. Moses at (913) 551-7649 or [moses.althea@epa.gov](mailto:moses.althea@epa.gov).

**US-69 CORRIDOR: FINDING OF NO SIGNIFICANT IMPACT**

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REPLY TO  
ATTENTION OF:

DEPARTMENT OF THE ARMY  
KANSAS CITY DISTRICT, CORPS OF ENGINEERS  
STATE REGULATORY PROGRAM OFFICE- KANSAS  
2710 N.E. SHADY CREEK ACCESS ROAD  
EL DORADO, KANSAS 67042

December 21, 2011

Kansas State Regulatory Office  
(NWK-2011-01538)

USDOT-FHA  
ATTN: John Knowles  
6111 SW 29<sup>th</sup>, Suite 100  
Topeka, Kansas 66614

Dear Mr. Knowles:

This letter is in reference to your request for comments under our regulatory responsibility under NEPA for the advance copy of the Environmental Assessment (EA) for the Pittsburg Bypass project # 69-106 K-7290-03 received in our office on November 10, 2011.

A cursory review of the EA revealed that numerous waters of the United States (wetlands and stream channels) exist within the 5 proposed alternative routes. An alternatives analysis and mitigation plan will be required during the Department of the Army (DA) permit process and public interest review to justify the route that is the least damaging practicable alternative.

A complete DA permit application form should be submitted to our office prior to the anticipated letting and/or construction date. If you have any questions concerning this matter, please feel free to write me or call @ (316) 322-8247.

Sincerely,

A handwritten signature in cursive script that reads "Thomas A. McCabe".

Thomas A. McCabe  
Project Manager / Team Leader  
Kansas State Regulatory Office



United States Department of the Interior

FISH AND WILDLIFE SERVICE  
Kansas Ecological Services Field Office  
2609 Anderson Avenue  
Manhattan, Kansas 66502



December 14, 2011

J. Michael Bowen, P.E.  
Federal Highway Administration  
Kansas Division  
6111 SW 29<sup>th</sup>, Suite 100  
Topeka, KS 66614

RE: HAD-KS; 69-106 K-7290-03; Cherokee & Crawford Counties; Pittsburg Bypass,  
Cooperating Agency Review; Environmental Assessment

FWS Tracking # 2012-CPA-0077

Dear Mr. Bowen:

This letter is in response to your letter dated November 8, 2011 requesting our review and comment, as a Cooperating Agency and for NEPA responsibilities, on an advanced copy of the Environmental Assessment (EA) for a proposed US 69 Highway bypass from just north of Arma to just south of Pittsburg, Kansas.

We offer the following comments.

**Chapter 3. Affected Environment**

We recommend that you include a discussion in the EA about the impacts to wildlife from habitat loss, habitat conversion, and habitat fragmentation. There should also be a discussion of how wildlife corridors will be maintained through the project area including the development of wildlife crossings. Wildlife crossings should be considered early in the planning stages so that wildlife surveys and other necessary planning can be performed to develop crossings in locations that will encourage wildlife use of them and to design the correct crossing structures for wildlife present specific locations.

**Section G. Floodplain and Stream Impacts**

2. *Streams:* The EA should classify the type of stream (e.g. Rosgen classification method) for the reaches of the streams that are expected to be impacted. An alternative, or in addition to stream classification, would be to include the stream information that is used for the Kansas Stream Mitigation Guidance (KSMG), Version 2, Adverse Impact Factors Table, i.e. stream type, stream status, and existing condition. This information would provide a point of reference for current

stream conditions, provide a comparison to future conditions, and to analyze what changes might occur due to anticipated changes in the environment from this project. The EA provides a classification for the wetland types and streams should have the same minimal information.

I. Wetland Impacts

From the description in the EA, it appears that a field survey of the preferred alternative route was not conducted to find wetlands that may not appear on the National Wetland Inventory maps or that might have been missed during analysis of the geographic information systems data. We recommend that a field survey of the entire route be undertaken to locate any missed wetlands.

P. Threatened and Endangered Species

*I. Federal:* The classification of federally threatened and endangered species may change in the intervening years until the project is built. FHWA and KDOT should periodically check with our office as planning progresses and construction dates are more established.

S. Indirect and Cumulative Impacts

Indirect and cumulative impacts to natural resources should be discussed. Indirect impacts from new economic development and growth opportunities, especially at interchange locations, will impact land use and habitat types, streams, and wetlands. Runoff from the roadway will likely carry pollutants into the streams and wetlands especially if runoff from the bridges and culverts discharge directly into the streams or wetlands.

Cumulative impacts to streams and wetlands will also occur due to the project. The EA states that 6,326 feet of existing stream length would be impacted from the project. Much of this impact will likely be from channelization. Channelization usually results in increased water velocity in the stream channel which can set up a chain of adverse effects to the aquatic environment including, but not limited to downcutting, headcuts, and bank erosion. New economic development will likely include new roads which may also cross streams and promote more channelization. In addition, urbanization is widely known to alter the physical and chemical characteristics of streams and to cause significant degradation of aquatic ecosystems including the flora and fauna components. Urbanization is accompanied by an increase in amount of impervious surfaces in the watershed which has many affects on the aquatic environment such as increased surface water runoff into the streams, increased pollutant levels in the streams, and elevated water temperatures.

Appendix B. KDOT Environmental Review

A discussion about a consultation with the USFWS on July 21, 2010 for Mead's milkweed is included on page 63, fifth paragraph. Finding no record of this consultation in our files, Susan Blackford, of my staff, contacted Jim Peterson of KDOT to inquire about the consultation. Jim related that it was a phone conversation between himself and Dan Mulhern, also of my staff. As such, this was not actually a consultation but more accurately constituted technical assistance. When project designs are finalized and the final route has been determined, the FHWA should

make a determination about the impacts to Mead's milkweed.

Thank you for the opportunity to review the advance copy of the EA and provide comments on this project. If you have any questions, please contact me or Susan Blackford of my staff at (785) 539-3474.

Sincerely,



Mike LeValley  
Field Supervisor

cc: KDWP, Pratt, KS (Environmental Services)  
KDOT, Topeka, KS (Environmental Section)  
John Knowles, Program Development Team Leader, FHWA KS Division

MJL/shb



APPENDIX B

Advertisement of Availability of the EA for Public Review  
Public Announcement of Availability of the EA for Public Review



Kansas Department of Transportation  
**U.S. 69 Crawford County Corridor  
Environmental Assessment Document  
Available for Public Comment**

The U.S. Department of Transportation, Federal Highway Administration and the Kansas Department of Transportation (KDOT) in cooperation with the U.S. Army Corps of Engineers, U.S. Department of the Interior Fish and Wildlife Service, and U.S. Environmental Protection Agency announce the availability of the Environmental Assessment (EA) for U.S. 69 in Crawford County. The proposed project would expand an 18-mile corridor of U.S. 69 to a four-lane freeway, starting at the Cherokee-Crawford county line and continuing north to end three miles north of the north city limits of Arma. Currently this project is not programmed for right-of-way acquisition or construction.

The EA has been prepared in accordance with the National Environmental Policy Act (NEPA), the National Historic Preservation Act, the Clean Water Act, the Clean Air Act, and regulations of the Council on Environmental Quality, to provide guidance in determining the appropriate actions needed to perform the improvements. The EA will be available for public review starting **Wednesday, Aug. 1, 2012** during regular business hours at the following locations:

- KDOT District Four Office, 411 W. 14th, Chanute, KS
- KDOT Pittsburg Area Office, 1813 W. 4th, Pittsburg, KS
- Federal Highway Administration, 6111 SW. 29th St., Suite 100, Topeka, KS
- Pittsburg City Offices, 201 W. 4th, Pittsburg, KS
- Pittsburg Public Library, 308 N. Walnut, Pittsburg, KS
- Frontenac City Hall, 315 E. McKay, Frontenac, KS
- Arma City Hall, 701 E. Washington, Arma, KS
- Crawford County Courthouse, 111 E. Forest St., Girard, KS

Or you may view on-line at: <http://tinyurl.com/d5nxrv>

The EA will be available at these locations for 30 days. Written comments for the EA will be accepted through **Friday, Aug. 31, 2012**. The EA will also be available for review at a public open house KDOT is hosting for the U.S. 69 Crawford County Corridor on **Thursday, Aug. 16, 2012**, at Pittsburg Memorial Auditorium, Lower Level, 503 N. Pine, Pittsburg, KS. The public may attend the open house at any time between the hours of 5:00 p.m. and 7:00 p.m. No formal presentation is planned.

Questions and comments concerning the EA should be directed to Sue Stringer, KDOT Public Involvement Liaison, 2nd Floor, Dwight D. Eisenhower State Office Building, 700 SW Harrison St., Topeka, KS 66603-3745, phone (785) 296-8669, email [stringer@ksdot.org](mailto:stringer@ksdot.org).

Southeast District Office  
411 W. Fourteenth  
Chanute, KS 66720-2894



phone: 620-431-1000  
fax: 620-431-4406  
[www.ksdot.org](http://www.ksdot.org)

Mike King, Secretary

Sam Brownback, Governor

**FOR IMMEDIATE RELEASE**

August 1, 2012

News contact: Priscilla Petersen, (620) 431-1000, [Priscilla@ksdot.org](mailto:Priscilla@ksdot.org)

## **Environmental Assessment document for U.S. 69 Crawford County Corridor available for public viewing**

The U.S. Department of Transportation, Federal Highway Administration and the Kansas Department of Transportation (KDOT), in cooperation with the U.S. Army Corps of Engineers, U.S. Department of the Interior Fish and Wildlife Service, and U.S. Environmental Protection Agency, announce the availability of the Environmental Assessment (EA) for U.S. 69 in Crawford County.

The proposed Crawford County Corridor project would expand an 18-mile corridor of U.S. 69 to a four-lane freeway, starting at the Cherokee-Crawford county line and continuing north to end three miles north of the north city limits of Arma. Currently this project is not programmed for right-of-way acquisition or construction.

The EA will be available for review during a public open house KDOT is hosting from 5:00 p.m. until 7:00 p.m. Thursday, Aug. 16, at Pittsburg Memorial Auditorium, Lower Level, 503 N. Pine, Pittsburg, KS. The public may attend the open house at any time between the hours of 5:00 and 7:00 p.m. to give input and leave comments. No formal presentation is planned.

At 4:00 p.m. on Aug. 16 at the same location, KDOT staff will brief local public officials on the EA and U.S. 69 project.

The EA has been prepared in accordance with the National Environmental Policy Act (NEPA), the National Historic Preservation Act, the Clean Water Act, the Clean Air

Act. and regulations of the Council on Environmental Quality, to provide guidance in determining the highway improvements.

The EA is also available for public viewing starting Wednesday, Aug. 1, 2012 during regular business hours at the following locations:

- KDOT District Four Office, 411 W. 14<sup>th</sup>, Chanute KS
- KDOT Pittsburg Area Office, 1813 W. 4<sup>th</sup>, Pittsburg, KS
- Federal Highway Administration, 6111 SW 29<sup>th</sup> St., Suite 100, Topeka, KS
- Pittsburg City Offices, 201 W. 4<sup>th</sup>, Pittsburg, KS
- Pittsburg Public Library, 308 N. Walnut, Pittsburg, KS
- Frontenac City Hall, 315 E. McKay, Frontenac, KS
- Arma City Hall, 701 E. Washington, Arma, KS
- Crawford County Courthouse, 111 E. Forest St., Girard, KS

The EA may also be viewed online at <http://tinyurl.com/d5nxrvv>

The EA can be viewed at these locations for 30 days. Written comments will be accepted through Friday, Aug. 31, 2012. Questions and comments concerning the EA should be directed to Sue Stringer, KDOT Public Involvement Liaison, 2<sup>nd</sup> Floor, Dwight D. Eisenhower State Office Building, 700 SW Harrison St., Topeka, KS 66603-3745, phone (785) 296-8669, email [stringer@ksdot.org](mailto:stringer@ksdot.org).

The open house location is ADA accessible. Persons in need of a sign language interpreter, an assistive listening device, large print or Braille material, or other accommodation to attend this meeting should notify Southeast District Public Affairs Manager Priscilla Petersen at [Priscilla@ksdot.org](mailto:Priscilla@ksdot.org), phone (620) 431-1000 (Voice), or phone (785) 296-3585 (Voice)/Hearing Impaired – 711. It would be appreciated if the accommodation request is made at least 10 days in advance of the open house.

#####

This information can be made available in alternative accessible formats upon request. For information about obtaining an alternative format, contact the Bureau of Transportation Information, 700 SW Harrison St., 2<sup>nd</sup> Fl West, Topeka, KS 66603-3754 or phone 785-296-3585 (Voice)/Hearing Impaired – 711.

Click below to connect to KDOT's Social Networks:



**APPENDIX C**

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**Public Official Guest Register**  
**Public Information Guest Register**  
**Public Comments Received**



PUBLIC OFFICIALS REGISTRATION

Purpose: Crawford County Corridor EA Briefing
Project # K-7290-03, K-8320-01, K-8320-02, K-8320-03, K-8320-04

Date: Thursday, August 16, 2012 Time: 4:00 p.m. Place: Pittsburg Memorial Auditorium, Lower Level, 503 N. Pine, Pittsburg, KS

Name: John Kethemari City of Pittsburg
Organization you are representing (if applicable): [Redacted]

Mailing Address: [Redacted] City: [Redacted] State: [Redacted] Zip: [Redacted] Phone: [Redacted]

E-Mail Address: [Redacted] How did you hear about today's meeting? City EMAIL

Name: [Redacted] Organization you are representing (if applicable): [Redacted]

Mailing Address: [Redacted] City: [Redacted] State: [Redacted] Zip: [Redacted] Phone: [Redacted]

E-Mail Address: [Redacted] How did you hear about today's meeting? [Redacted]

Name: [Redacted] Organization you are representing (if applicable): [Redacted]

Mailing Address: [Redacted] City: [Redacted] State: [Redacted] Zip: [Redacted] Phone: [Redacted]

E-Mail Address: [Redacted] How did you hear about today's meeting? [Redacted]

Name: [Redacted] Organization you are representing (if applicable): [Redacted]

Mailing Address: [Redacted] City: [Redacted] State: [Redacted] Zip: [Redacted] Phone: [Redacted]

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Department of Transportation

# PUBLIC OFFICIALS REGISTRATION

Purpose: Crawford County Corridor EA Briefing

Project # K-7290-03, K-8320-01, K-8320-02, K-8320-03, K-8320-04

Date: Thursday, August 16, 2012 Time: 4:00 p.m. Place: Pittsburg Memorial Auditorium, Lower Level, 503 N. Pine, Pittsburg, KS

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# PUBLIC OFFICIALS REGISTRATION

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Project # K-7290-03, K-8320-01, K-8320-02, K-8320-03, K-8320-04

Date: Thursday, August 16, 2012 Time: 4:00 p.m. Place: Pittsburg Memorial Auditorium, Lower Level, 503 N. Pine, Pittsburg, KS

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### GUEST REGISTRATION

Purpose: Crawford County Corridor EA Open House  
Project # K-7290-03, K-8320-01, K-8320-02, K-8320-03, K-8320-04

Date: Thursday, August 16, 2012 Time: 5:00 - 7:00 p.m. Place: Pittsburg Memorial Auditorium, Lower Level, 503 N. Pine, Pittsburg, KS

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### GUEST REGISTRATION

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Date: Thursday, August 16, 2012 Time: 5:00 - 7:00 p.m. Place: Pittsburg Memorial Auditorium, Lower Level, 503 N. Pine, Pittsburg, KS

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Date: Thursday, August 16, 2012 Time: 5:00 - 7:00 p.m. Place: Pittsburg Memorial Auditorium, Lower Level, 503 N. Pine, Pittsburg, KS

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# GUEST REGISTRATION

Purpose: Crawford County Corridor EA Open House  
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KDOT  
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Purpose: Crawford County Corridor EA Open House  
Project # K-7290-03, K-8320-01, K-8320-02, K-8320-03, K-8320-04

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Date: Thursday, August 16, 2012 Time: 5:00 - 7:00 p.m. Place: Pittsburg Memorial Auditorium, Lower Level, 503 N. Pine, Pittsburg, KS

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**KDOT**  
**GUEST REGISTRATION**

Purpose: Crawford County Corridor EA Open House  
Project # K-7290-03, K-8320-01, K-8320-02, K-8320-03, K-8320-04

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Comment Form

K-7290-03, K-8320-01, K-8320-02, K-8320-03, K-8320-04
Crawford County Corridor Environmental Assessment Open House
Pittsburg Memorial Auditorium, 503 North Pine, Pittsburg, KS
Thursday, August 16, 2012

Your input is very important to the Kansas Department of Transportation. In the space below, please share your thoughts regarding the US 69 Environmental Assessment or the projects overall. Place this form in the comment box, email: stringer@ksdot.org or mail to the address on the back by August 31, 2012. Thank you!

Please print clearly:

THIS long-awaited project is on a corridor that has had general consensus for over 10 years. The diligent work of KDOT AND PEC is evident and we should move to ROW purchase as soon as possible. Getting this project ready for construction should be a priority. To be sure, this project will have a significant positive impact on SE Kansas. All ahead!!

Name: Jim AUBURTON, Hwy 69 Assoc of Kansas, Inc



This information is available in alternative accessible formats. To obtain an alternative format, contact KDOT Transportation Information, Eisenhower Building, 700 SW Harrison, 2nd Fl. West, Topeka, Kansas, 66603-3754 or 785-296-3585 (Voice)/Hearing Impaired - 711.

**US-69 CORRIDOR: US-400 TO E. 680 AVENUE  
(CRAWFORD COUNTY, KANSAS)**

KDOT PROJECT NO.

69-19 K-7290-03  
69-19 K-8320-01  
69-19 K-8320-02  
160-19 K-8320-03  
69-19 K-8320-04

FEDERAL PROJECT NO.

HPD-K729(003)  
STP-K832(011)  
HPD-K832(002)  
HPD-K832(003)  
HPD-K832(004)

**ENVIRONMENTAL ASSESSMENT**

SUBMITTED PURSUANT TO 42 U.S.C. 4332(2)(C) AND 49 U.S.C. 303 BY THE

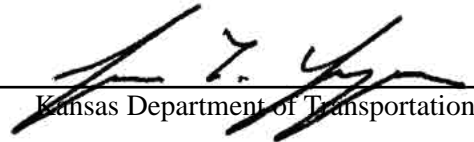
U.S. DEPARTMENT OF TRANSPORTATION  
FEDERAL HIGHWAY ADMINISTRATION  
AND  
KANSAS DEPARTMENT OF TRANSPORTATION

COOPERATING AGENCIES:

U.S. ENVIRONMENTAL PROTECTION AGENCY  
U.S. ARMY CORPS OF ENGINEERS  
U.S. FISH AND WILDLIFE SERVICE


7/25/12

Date of Approval

  
Kansas Department of Transportation

7/25/2012

Date of Approval

  
Federal Highway Administration

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The Kansas Department of Transportation (KDOT) and the Federal Highway Administration (FHWA) are proposing to provide an access controlled route around the cities of Pittsburg, Frontenac, and Arma in Crawford County, Kansas. Comments on this Environmental Assessment should be received by August 31, 2012 and should be sent to the persons listed above.

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**LIST OF ABBREVIATIONS**

Above-ground Storage Tank .....	AST	National:	
Advanced Preliminary Engineering Study .....	APES	Ambient Air Quality Standards .....	NAAQS
Area of Potential Effects.....	APE	Environmental Protection Act.....	NEPA
Average Annual Daily Traffic.....	AADT	Flood Hazard Layer.....	NFHL
Best Management Practice.....	BMP	Historic Preservation Act.....	NHPA
Conditionally Exempt Small Quantity Generator .	CESQG	Pollutant Discharge Elimination System .....	NPDES
Digital Flood Insurance Rate Map .....	DFIRM	Priority List.....	NPL
Draft Environmental Assessment.....	DEA	Register of Historic Places.....	NRHP
Environmental Justice .....	EJ	Wetlands Inventory .....	NWI
Environmental Protection Agency.....	EPA	Natural Resources Conservation Service .....	NRCS
KDOT Environmental Services Section.....	ESS	Noise Abatement Criteria.....	NAC
Federal Emergency Management Agency.....	FEMA	Notice of Intent .....	NOI
Federal Highway Administration .....	FHWA	Particulate Matter.....	PM
8-digit Hydrologic Unit Code.....	HUC8	Passenger-car vehicles per hour.....	pc/h
Kansas Department of:		Register of Historic Kansas Places .....	RHKP
Agriculture.....	KDA	Remedial Investigation/Feasibility Study.....	RI/FS
Health and Environment .....	KDHE	Right-of-Way .....	ROW
Transportation .....	KDOT	State Historic Preservation Officer.....	SHPO
Wildlife, Parks and Tourism .....	KDWP	Stormwater Pollution Prevention Plan.....	SWP2
Kansas:		Underground Storage Tank.....	UST
Historic Resources Inventory .....	KHRI	United States:	
Historical Society.....	KHS	Army Corps of Engineers.....	USACE
Historical Society-Archeologist.....	KHSA	Department of the Interior .....	DOI
Natural Heritage Inventory (KNHI)		Fish and Wildlife Service .....	USFWS
Level of Service .....	LOS	Geological Survey.....	USGS
Long Range Transportation Plan .....	LRTP	Waters of the United States .....	WUS
Miles per hour.....	mph		

## **CHAPTER 1. PURPOSE AND NEED FOR PROJECT**

### **A. PROJECT DESCRIPTION**

The Kansas Department of Transportation (KDOT) and the Federal Highway Administration (FHWA) are proposing to improve US-69 Highway in Crawford County. US-69 is the easternmost north-south route in the state of Kansas. US-69 carries the US-400 and the US-160 designation through portions of the project area, but for this report it will be referred to only as US-69. See **Figure 1: Project Location Map**.

Existing US-69 in Crawford County passes through or is adjacent to the cities of Pittsburg (population 19,536), Frontenac (population 3,194) and Arma (population 1,521). US-69 is also the Frontier Military Historic Byway of Kansas.

The US-69 corridor segment under study begins at the intersection of US-69 and US-400. The existing alignment extends north into the town of Pittsburg, crossing Centennial Drive and then curving northwesterly around the town. At the intersection with Highway K-126 the roadway curves back in a northeasterly direction until it joins up with US-69 Business Route, where it then proceeds north, into Frontenac, past intersections with Highway US-160 and Highway K-47. The roadway proceeds north towards unincorporated Franklin, shifting slightly to the west, continuing north and shifting back east as it circumvents the existing Arma bypass to the north terminus, approximately 3 miles north of Arma. The portion north of milepost 39.6 near Frontenac is designated as the Frontier Military Historic Byway. The length of the study corridor is approximately 20 miles.

The proposed action is to construct a new four-lane access-controlled route around the cities of Pittsburg and Arma in Crawford County, Kansas. Per 23 CFR 771.115 (a)(1) & (2), this type of action would normally require an Environmental Impact Statement (EIS). The extent of impacts is unknown at this time. This document will determine if the proposed action will result in significant impacts. If it is determined that significant impacts will occur, an EIS will be prepared. If it is determined that significant impacts will not occur, a Finding of No Significant Impacts (FONSI) document will be issued.

### **B. PROJECT PURPOSE**

The purpose of the project is to accommodate both the local and regional needs with a safe and efficient highway system that effectively serves the traveling public now and up to the future design horizon.

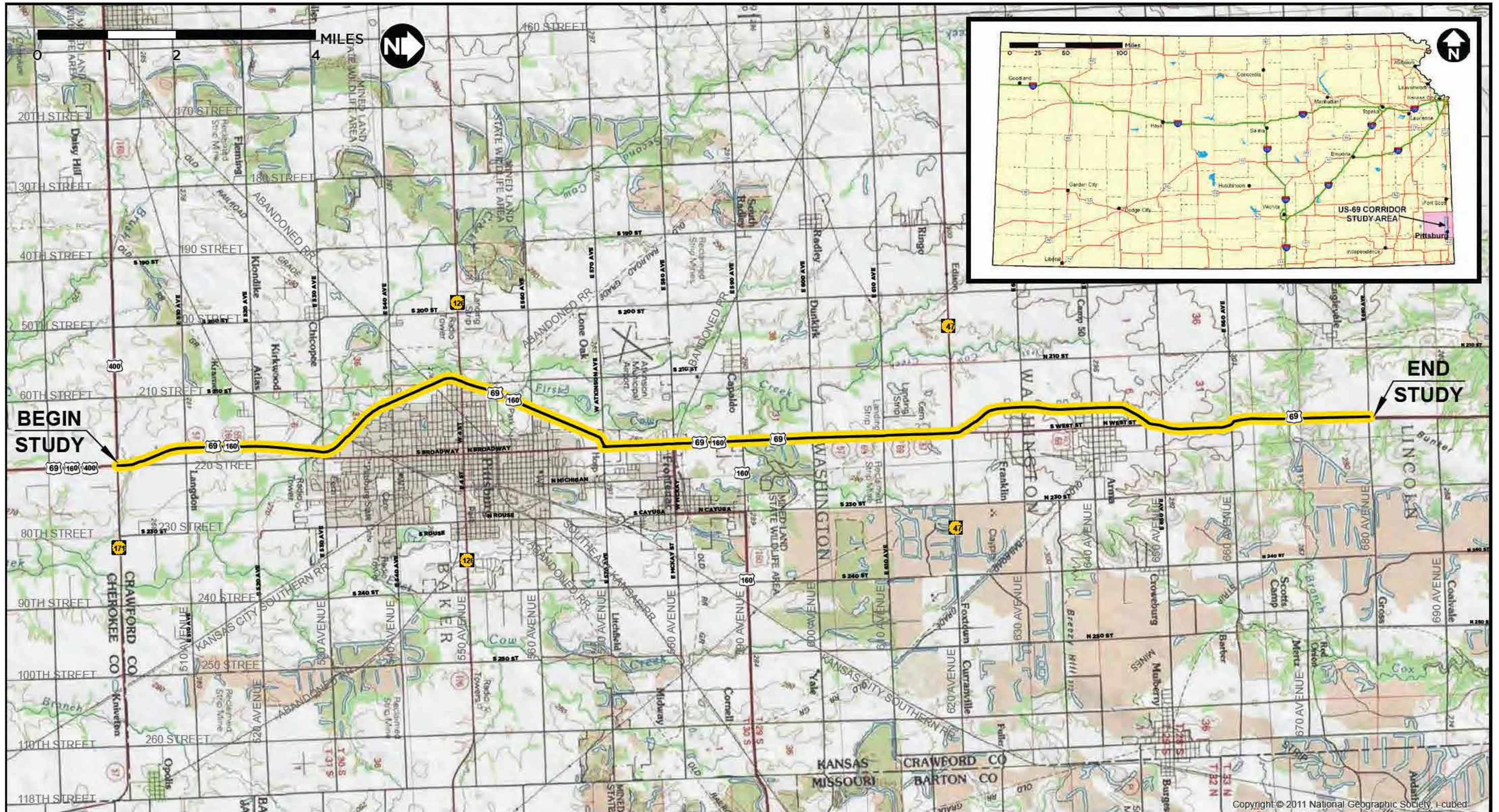
Regionally, US-69 serves as an interstate connection between the Kansas City, Tulsa and Dallas metropolitan areas. It fulfills a role as a conduit of commerce and is the major arterial connecting Pittsburg with surrounding communities to the north and south. Improvements to this roadway would provide a segment consistent with the overall route design intended for US-69.

Specifically, the purposes of the project are to:

- Provide an access controlled route around the cities of Pittsburg and Arma.
- Provide capacity that will serve existing and future traffic demands.
- Provide route continuity with uniform operational characteristics.
- Provide a route that is consistent with current design criteria.
- Improve the overall safety of the highway corridor.



FIGURE 1. PROJECT LOCATION MAP





In addition, the following items need to be considered when evaluating any improvements in this corridor.

- Minimize business disruptions and the other impacts from land acquisition.
- Comply with the State of Kansas' *Long Range Transportation Plan* (LRTP).

## **C. PROJECT NEED**

While the needs for individual highway improvements are often similar in nature, they are specific in the detail of each improvement.

Locally, the demands placed upon the existing facility have become overwhelming. The existing two-lane facility has multiple signalized intersections, all impeding the movement of through traffic. Development adjacent to the facility has made the expansion of the existing alignment difficult without significant business relocations.

### **1. TRAFFIC DEMANDS**

The need to serve the current and future traffic demands is best illustrated by examining the capacity of the existing two-lane facility.

According to the 2009 *Traffic Flow Map for the Kansas State Highway System*, the current Annual Average Daily Traffic (AADT) for US-69, near the intersection with K-126, is 11,300 vehicles per day. This translates to an equivalent two-way peak-hour flow rate of 1,289 passenger-car vehicles per hour (pc/h).

A level-of-service (LOS) of C or better is commonly used as a criterion for design-traffic flow for new highway facilities. According to the most current edition of the *Highway Capacity Manual*, a two-way service flow rate of up to 1,190 pc/h can be accommodated at LOS C. The range of flow rates for LOS D falls between 1,191 pc/h and 1,830 pc/h. With an estimated 1,289 pc/h peak-hour two-way flow rate, the current facility is operating at LOS D.

According to the *Highway Capacity Manual*:

*“LOS D describes unstable traffic flow. The two opposing traffic streams begin to operate separately at higher volume levels, as passing becomes extremely difficult. Passing demand is high, but passing capacity approaches zero... Turning vehicles and roadside distractions cause major shock waves in the traffic stream. Motorists are delayed in platoons for nearly 80 percent of their travel time.”*

Based on traffic projections for the year 2031, the daily traffic would increase to 12,800 vehicles per day. For this AADT, a peak-hour flow rate of 1,460 pc/h results. At this flow rate, the facility would again be expected to operate at LOS D. Traffic operations could be characterized by the conditions given above, and unstable traffic flow would be expected. With the increase in traffic from current levels to the year 2031, the facility will operate even further from the desirable LOS C threshold thus overall traffic conditions and delays would only worsen in the future for this facility.

## **2. ROADWAY GEOMETRICS**

The ability of a facility to safely accommodate traffic is related to the standard of design used to define the facility's geometric features. Both horizontal and vertical alignments can restrict the function of a roadway and are just two of the many important aspects of design. Exploring the deficiencies of the existing facility based upon desirable design criteria establishes the need for improvement when those existing characteristics fall below the level of design required to satisfy the project safety goals.

Of the 17 horizontal curves comprising the existing alignment, only two adhere to current design criteria for the desired design speed of 70 miles per hour (mph). Eight of the 17 provide for a design speed of 45 mph or less.

Similarly, the vertical alignment consists of 68 vertical curves, nine of which fall below minimum criteria of stopping sight distance for the desired design speed.

Five miles of the existing facility are four-lane divided roadway allowing opportunities for passing. Fifteen (15) miles of the existing facility are two-lane roadway with minimal passing opportunities due to multiple intersections, access points and the curvilinear alignment.

## **3. OPERATIONAL CHARACTERISTIC UNIFORMITY AND ROUTE CONTINUITY**

Highway US-69 is classified by KDOT as a Class B route whose function is stated as:

*"...along with Class A Routes, serve the most important corridors of statewide and interstate travel. Nearly all cities with a population over 10,000 are within ten miles of one of these routes. Since these routes serve a larger percentage of travelers from outside the local area including out-of-state vehicles, there are a higher proportion of drivers that are unfamiliar with the particular features of the route, making continuity of design over major sections of the route very important."*

Class B routes that are a part of the National Highway System, as stated in the *Intermodal Surface Transportation Efficiency Act (1991)*, are intended to:

*"...provide an interconnected system of principal arterial routes which will serve major population centers, international border crossings, ports, airports, public transportation facilities and other major travel destinations; meet national defense requirements; and serve interstate and interregional travel."*

In 2006, KDOT reviewed the condition of the state's highway system and found that only a small percentage of the Class B network was in need of modernization. A larger percentage was in need of capacity upgrades. This segment of US-69 was included in both categories.

US-69 has already been upgraded to a 4-lane freeway between Kansas City and Ft. Scott. Immediately north of this project between Arma and Ft. Scott, US-69 is a two-lane facility constructed on four lane right-of-way and is currently under study for upgrading to a 4-lane facility. Immediately south of this project there is a current study on-going in Cherokee County to upgrade US-69 to a four-lane facility from the intersection with US-400 south to I-44.

**4. SAFETY**

The existing alignment is shown in **Figure 1: Project Location Map**. The existing route intersects with the county roadway grid system at nearly every mile line; there are numerous intersections with city streets, private points of access, and at all state and U.S. routes. There is one four-way stop-controlled intersection and eight signalized intersections along the route, which when mixed with highway speed traffic, increases the likelihood of rear-end collisions and red-light running. Each of these intersections exposes the traveling public to points of conflict. **Table 1.1: Summary of Intersections** below summarizes the number and nature of the existing intersections.

<b>TABLE 1.1: SUMMARY OF INTERSECTIONS</b>				
<b>CONDITION</b>	<b>PUBLIC, LOCAL STREETS</b>	<b>PRIVATE DRIVES</b>	<b>ARTERIALS OR HIGHWAYS</b>	<b>RAILROAD CROSSINGS</b>
Existing	21	152	17	1

Comparison of statewide average accident rates for similar types of facilities demonstrates that a reduction or elimination of access points can reduce the number and severity of roadway crashes. One of the project goals is to implement access control and thereby eliminate at-grade roadway intersections and private drive access points.

Five year (2006 – 2010) accident statistics for existing US-69 from US-400 to three miles north of Arma are summarized below in **Table 1.2: Accident Summary**. The segment is approximately 20 miles in length and the roadway configuration corresponds with the description found in the Roadway Geometrics discussion on the previous page. Traffic volume on the segment is 9,554 AADT for the analysis period and there were approximately 330 million vehicle miles traveled.

<b>TABLE 1.2: ACCIDENT SUMMARY</b>						
<b>YEAR</b>	<b>ACCIDENTS</b>				<b>PEOPLE</b>	
	<b>FATAL</b>	<b>INJURY</b>	<b>PDO*</b>	<b>TOTAL</b>	<b>DEATHS</b>	<b>INJURIES</b>
2006	1	35	68	104	2	52
2007	2	36	95	133	2	59
2008	0	32	80	112	0	53
2009	0	10	63	73	0	15
2010	1	21	69	91	1	31
<b>TOTAL</b>	<b>4</b>	<b>134</b>	<b>375</b>	<b>513</b>	<b>5</b>	<b>210</b>

\* Property damage only

Of the 513 total accidents, 116 (23%) occurred at an intersection, with an additional 13 occurring at driveways. There were 273 accidents involving multiple vehicles accounting for 53% of the total accidents. Rear end accidents were most common with 48% of multiple vehicle accidents, followed by angle (side impact) accidents with 26%, sideswipes with 11% and head on accidents with 3.6%.

**Table 1.3: Accident Rate Analysis** below summarizes the state average accident rates over the five year period between 2004 – 2008 for similar facilities and for freeway-type facilities.

<b>TABLE 1.3: ACCIDENT RATE ANALYSIS</b>		
<b>FACILITY</b>	<b>FATALITY RATE (PER MILLION VEHICLE-MILES)</b>	<b>ACCIDENT RATE (PER MILLION VEHICLE-MILES)</b>
US-69 (2004-2008)	1.56	121
STATE AVERAGE FOR SIMILAR ROADWAY TYPE	1.80	102
STATE AVERAGE FOR FREEWAY-TYPE FACILITY	.58	67

The accident rate for the five study years exceeds state averages for similar facilities, primarily due to the exposure at intersections and other points of access. By removing the conflicts at intersections and other access points, the number of crashes should be reduced, thus the accident rate per million vehicle-miles traveled should be lowered, reflecting the experience of similar freeway segments.

## **CHAPTER 2. PROJECT ALTERNATIVES**

### **A. ALTERNATIVES CONSIDERED**

This chapter describes the project alternatives, including the No-Build and the Build Alternatives. The National Environmental Protection Act (NEPA) requires that the No-Build Alternative be considered to provide a baseline against which the positive and negative effects of the Build Alternatives are compared. Alternatives are assessed to determine if they meet the project purpose and need identified in the previous chapter.

#### **1. DEVELOPMENT OF ALTERNATIVES**

For this Environmental Assessment (EA), the No-Build Alternative (Alternative #1) is the baseline used to compare against the build alternatives. Alternatives #2, #3, and #4, the East, West and Middle Alternatives respectively, were first established in the US-69 Advanced Preliminary Engineering Study (APES) dated May 2008. These alternatives were developed using input, among other sources, from a public involvement meeting on August 17, 1999. The APES has significant relevance to this EA. Alternative #5 was proposed after the adoption of the APES and was designated as the Preferred Alternative at the July 18, 2010 Frontenac Public Officials Meeting. **Figure 2: Project Alternatives** shows the locations of all five alternatives.

The APES identified the southern end of Alternatives #2, #3, and #4 at the intersection of US-69 and K-103, which is about 2 miles south of the Cherokee/Crawford County Line. However, since the adoption of the APES in 2008, that terminus location has been reevaluated. The national economic downturn has affected transportation revenue, which impacted potential funding availability and statewide improvement priorities. These realities, coupled with potential environmental concerns identified in the following narrative, have dictated modifications to the APES terminus point. Therefore, this EA considers US-400 as the southern terminus for project alternatives and includes appropriate connections to the existing US-69/US-400 intersection.

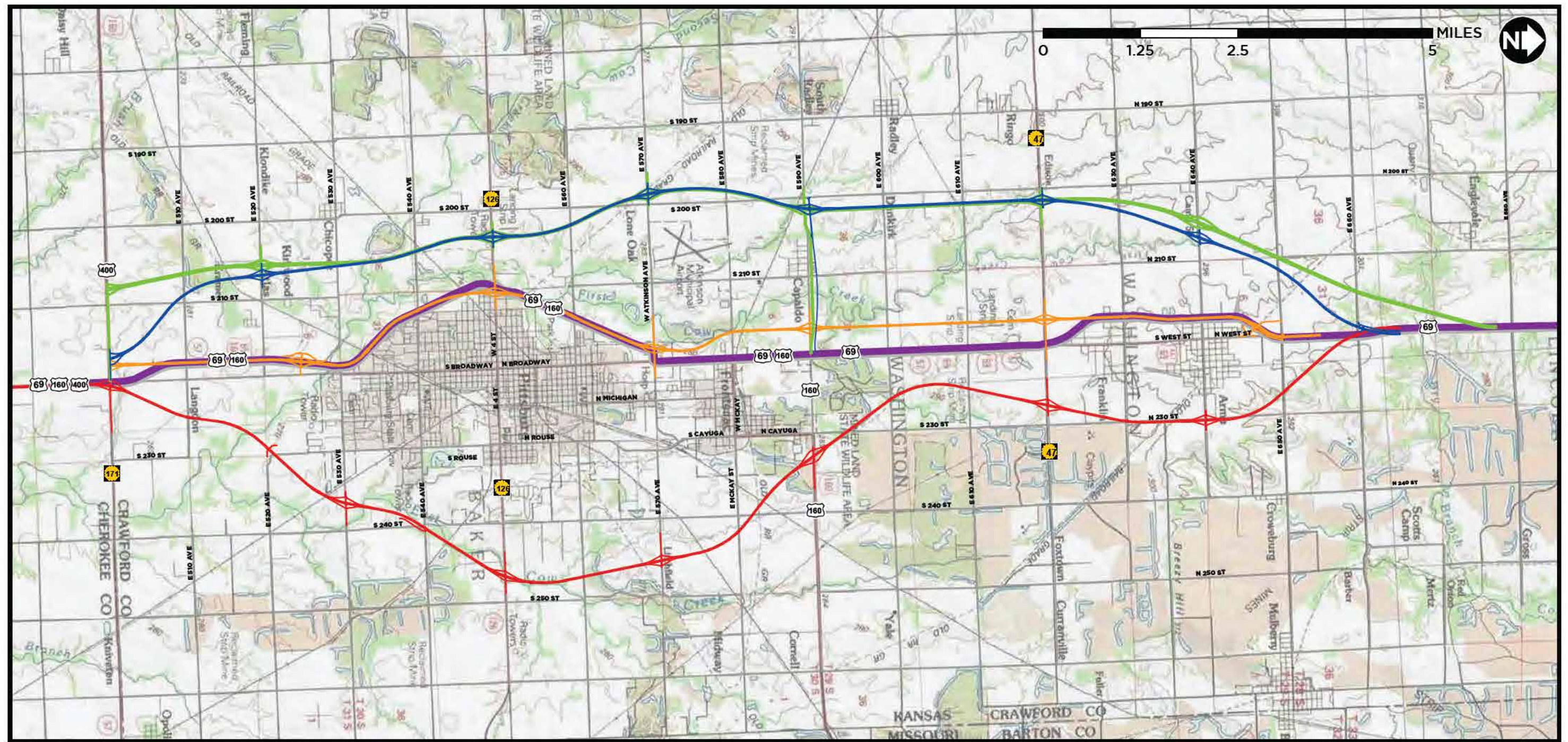
The five alternatives were evaluated in greater detail from a preliminary engineering, environmental, and cost perspective. Vertical and horizontal profiles, cost estimates, and other data for the East, West, and Middle Alternatives are addressed in the APES. These design alternatives were modified to limit and/or avoid impacts to existing land uses, including residences, businesses, prime farmland, oil wells, wetlands, cemeteries, open space, and other natural and manmade features. The five alternatives were further examined for impacts on any cultural resources (historic and archaeological) designated critical habitat, Section 4(f) and 6(f) lands, prime farmland, wetlands, floodplains, and private property.

Evaluation factors for the alternatives included:

- Environmental impacts.
- Safety.
- Engineering factors.
- Useful functional life.
- Feasibility for the concepts to be built in useable sections over time.
- Number of miles of existing highway that would be turned over to local governments for the maintenance.
- Overall costs.



FIGURE 2. PROJECT ALTERNATIVES



Base Map Credit: © 2009 National Geographic Society, i-cubed; Seamless, scanned images of USGS paper topographic maps.

LEGEND

-  EXISTING US-69 ALIGNMENT ALTERNATIVE #1 (NO-BUILD)
-  ALTERNATIVE #2 (EAST)
-  ALTERNATIVE #3 (WEST)
-  ALTERNATIVE #4 (MIDDLE)
-  ALTERNATIVE #5 (PREFERRED)



**a. ALTERNATIVE #1 (NO-BUILD ALTERNATIVE)**

The No-Build Alternative includes routine maintenance and repair of the existing alignment. Kansas Department of Transportation (KDOT) would not make improvements to intersections, improve the vertical profile, or create new interchanges. This alternative would not directly impact other wetlands, floodplains, cultural resources, land uses, human displacements, or critical habitats. As noted previously in Chapter 1, the daily traffic flow with no improvement would operate at level-of-service (LOS) D, which is an unstable traffic flow. Therefore, Alternative #1 does not meet the project purpose of providing road capacity that will serve existing and future traffic demands. For these reasons, the No-Build Alternative does not satisfy the purpose and need for this project. It will not meet prevailing design criteria or the traffic demands for the design.

**b. ALTERNATIVE #2 (EAST ALTERNATIVE)**

The East Alternative would begin at the existing US-69/US-400 intersection and travel approximately 0.2 miles east along the existing K-171 alignment. From there the route would proceed northeasterly to a point about 3.0 miles east of downtown Pittsburg in the vicinity of K-126. Then, the East Alternative would head back northwesterly passing northeast of the Crawford County State Park, then would turn northerly to pass just east of Arma High School. Past Arma, it would curve back northwesterly to tie into the existing alignment, ending near the existing US-69/660 Avenue intersection just north of Arma. The East Alternative measures approximately 20.6 miles in length.

**c. ALTERNATIVE #3 (WEST ALTERNATIVE)**

The West Alternative would begin at the existing US-69/US-400 intersection and travel approximately 0.3 miles west along the existing US-400 alignment. From there the route would proceed north-northwesterly toward the unincorporated community of Chicopee, before crossing a mined lands area and the Southeast Kansas Railway. It would meander northerly, generally following Lone Star Road, passing east of Chicopee and west of the Atkinson Municipal Airport. Past the north junction with K-47, the West Alternative would curve back northeasterly to tie into the existing alignment just north of Arma, in the same general location as the East Alternative. The West Alternative measures approximately 17.7 miles in length.

**d. ALTERNATIVE #4 (MIDDLE ALTERNATIVE)**

The Middle Alternative would begin at the existing US-69/US-400 intersection and travel approximately 0.2 miles west along the existing US-400 alignment. From there the Middle Alternative generally would follow the existing US-69 configuration with realignments proposed at two different locations. The first alignment between Quincy Avenue and 12<sup>th</sup> Street would be made to accommodate current design standards for a new interchange at 4<sup>th</sup> Street. Second, the segment between Atkinson Road and the Arma bypass would be realigned to about 1,800 feet west of the existing roadway. This approximately 5.0 mile realignment would preserve existing development along US-69 in Frontenac including Crawford State Fishing Lake No. 1 and the cemeteries between US-160 and K-47. This separation distance would also provide for standard diamond interchanges with US-160 and K-47. The Middle Alternative measures approximately 18.2 miles.

**e. ALTERNATIVE #5 (PREFERRED ALTERNATIVE)**

The Preferred Alternative would begin at the existing US-69/US-400 intersection and travel approximately 1.2 miles west along the existing US-400 alignment. From there this alternative would continue north, curving slightly northwesterly until it crosses 520 Avenue, approximately 1.2 miles west of the existing US-69/520 Avenue intersection. The route would then proceed north, curving slightly northwesterly and cross 530 Avenue continuing to a point approximately 0.3 miles to the north and 2.2 miles to the west of the existing US-69/570 Avenue intersection. The route would then gradually shift east where it would end approximately 0.2 miles south of the existing US-69/680 Avenue intersection. The Preferred Alternative measures approximately 18.5 miles in length.

**f. ALTERNATIVES REMOVED FROM FURTHER STUDY**

The No-Build Alternative does not meet the corridor purpose and need. However, it will be carried forward through this document as a baseline comparison. Alternative #2 (East) never gained significant public support and was not considered viable for further refinement. The Alternative #4 (Middle) was preferred early in the process, but lost public support due to funding issues in fiscal year 2000. This led to a 2001 intergovernmental resolution between Crawford County and the cities of Pittsburg, Arma, Frontenac, and Girard supporting the Alternative #3 (West).

The early concept alignment for the West Alternative was modified due to drainage concerns near the northern terminus. Public sentiment also expressed concern with the proximity of this alignment to the unincorporated town of Chicopee. Additionally, the City of Pittsburg preferred an alignment closer to town. Based on this input, the alignment was revised in 2006 to the final Alternative #3 shown in **Figure 2**. As investigation continued on Alternative #3, further concerns were identified. The alignment would impact existing residential development along US-400 and a portion of the south end would impact stream alignments and area drainage. Furthermore, drainage issues were identified along the alignment west of Arma, near the northern terminus. These items factored into the decision to pass over the West Alternative and designate Alternative #5 as the Preferred Alternative. Detailed information on Alternatives #1 - #4 can be found in the APES.

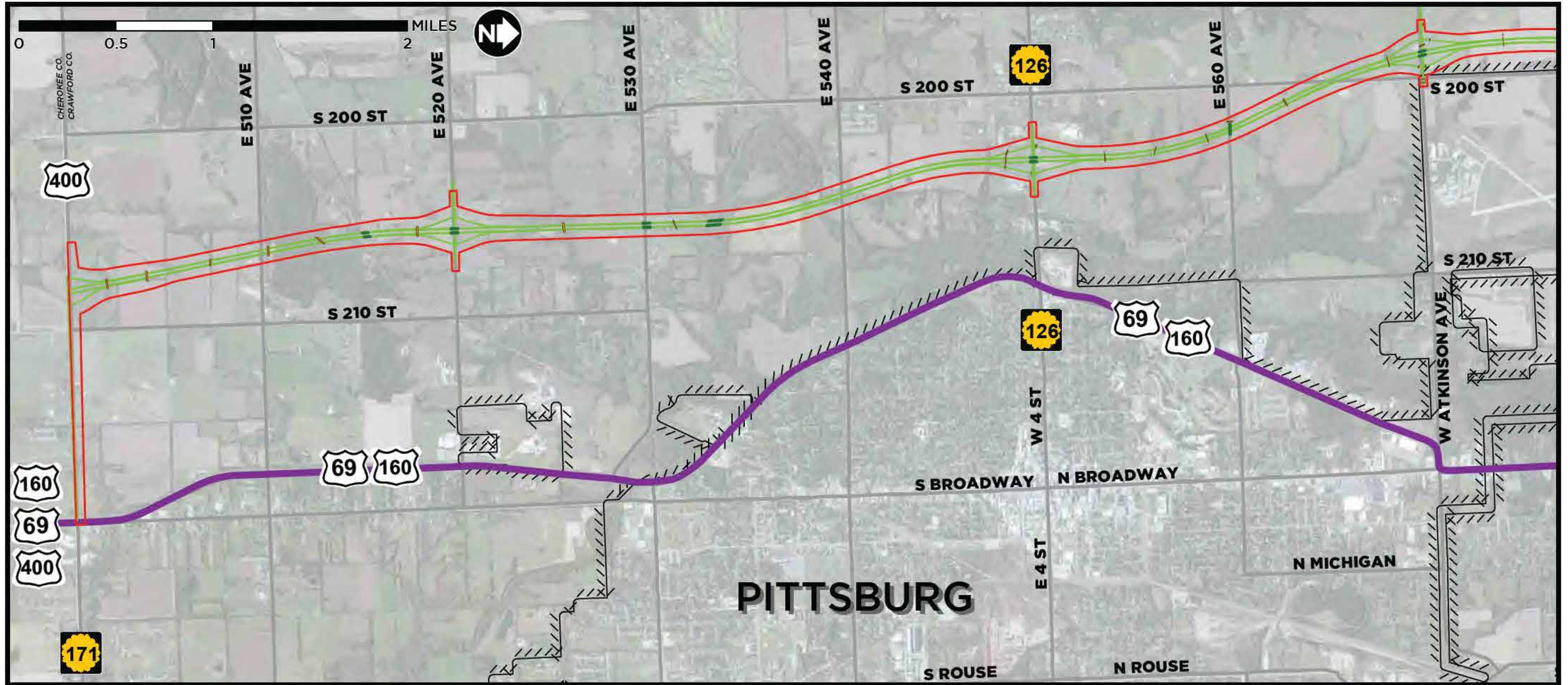
**B. PREFERRED ALTERNATIVE**

The Preferred Alternative (Alternative #5) detailed in **Figures 3A – 3C**, would replace 18.2 miles of existing two- and four-lane US-69 with approximately 18.5 miles of full access-controlled four-lane divided freeway. The Alternative #5 alignment is essentially a revised version of Alternative #3 (West) approved in the APES. The alignment modifications evolved to minimize encroachment on floodplains, wetlands, and existing structures. Other potential environmental impacts were also carefully considered. Subsequently, Alternative #5 was designated and endorsed as the Preferred Alternative at the July 18, 2010 Frontenac Public Officials Meeting.

**C. RECOMMENDED FACILITY TYPE**

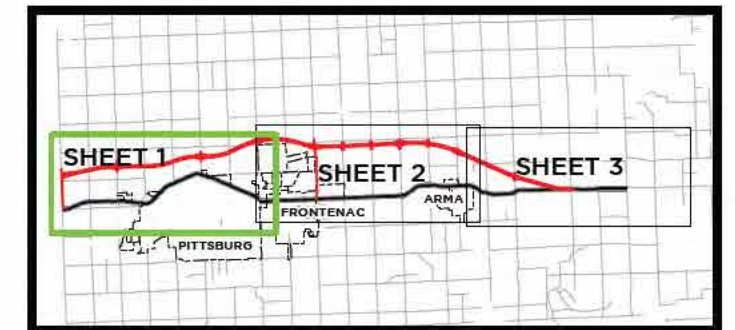
The recommended facility type is a full access-controlled freeway. Following KDOT/AASHTO design criteria, the typical cross section will consist of two 12-foot lanes in each direction with paved shoulders. The inside shoulder width is six feet and the outside shoulder width is 10 feet. Travel lanes will be separated by an 84-foot median with a grass recovery area for errant vehicles, which preserves the potential for additional lanes should future traffic volumes justify them. See **Figure 4: Project Typical Road Section**



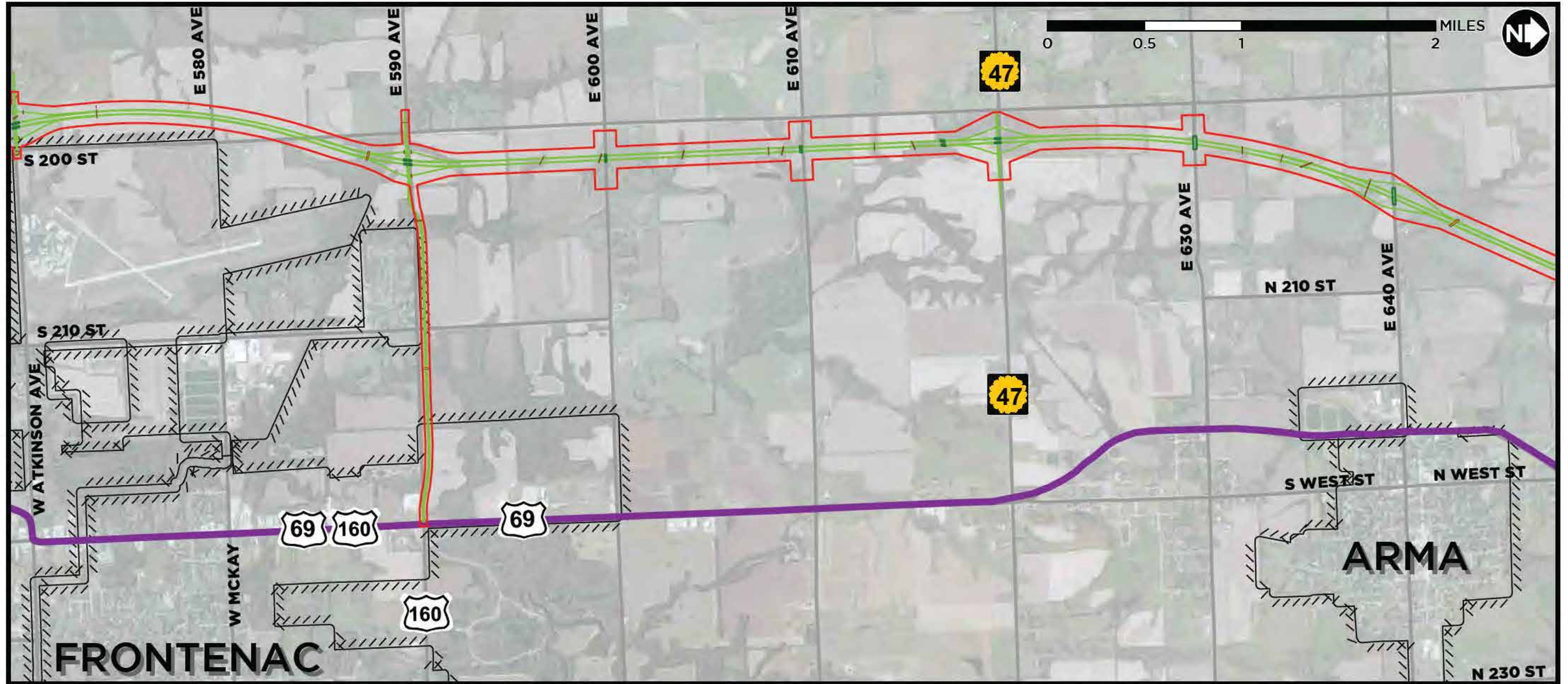


**LEGEND**

- ENVIRONMENTAL LIMITS
- PREFERRED ALTERNATIVE
- ▭ PROPOSED BRIDGES
- CORPORATE LIMITS
- EXISTING US-69 ALIGNMENT
- ▭ PROPOSED CULVERTS

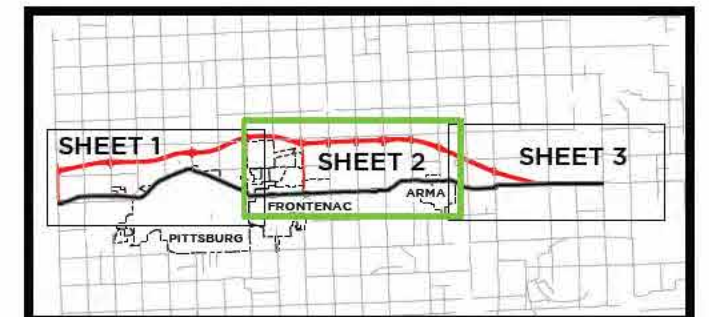




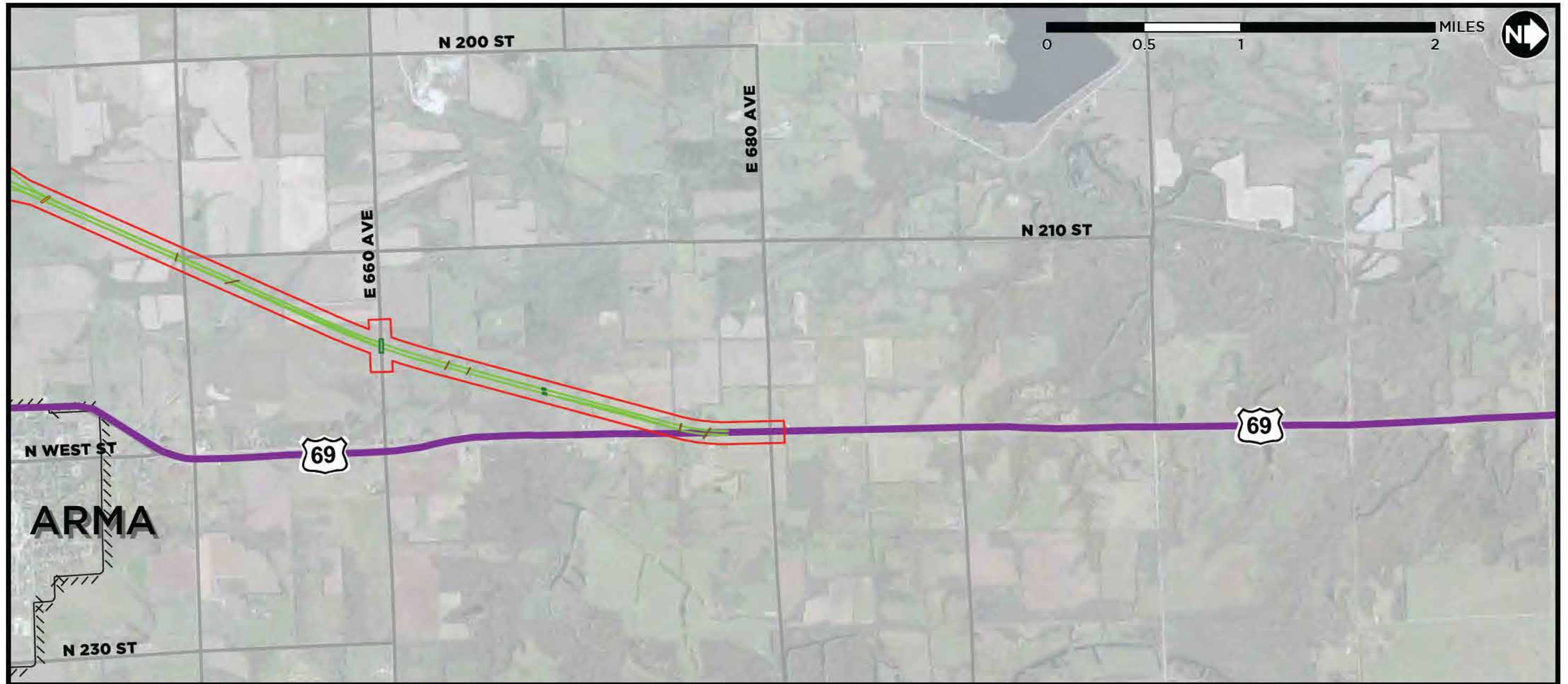


**LEGEND**







- ENVIRONMENTAL LIMITS
- PREFERRED ALTERNATIVE
- PROPOSED BRIDGES
- CORPORATE LIMITS
- EXISTING US-69 ALIGNMENT
- PROPOSED CULVERTS

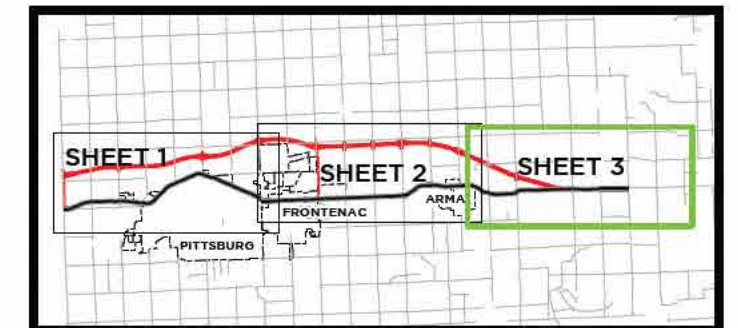






**LEGEND**

- |   |                      |   |                          |   |                   |
|---|----------------------|---|--------------------------|---|-------------------|
|  | ENVIRONMENTAL LIMITS |  | PREFERRED ALTERNATIVE    |  | PROPOSED BRIDGES  |
|  | CORPORATE LIMITS     |  | EXISTING US-69 ALIGNMENT |  | PROPOSED CULVERTS |



for reference. Intersections with other roadways are located throughout the project length, with nine points of access provided at two- to three-mile intervals. **Table 2.1** below summarizes proposed intersection/interchange locations and configurations.

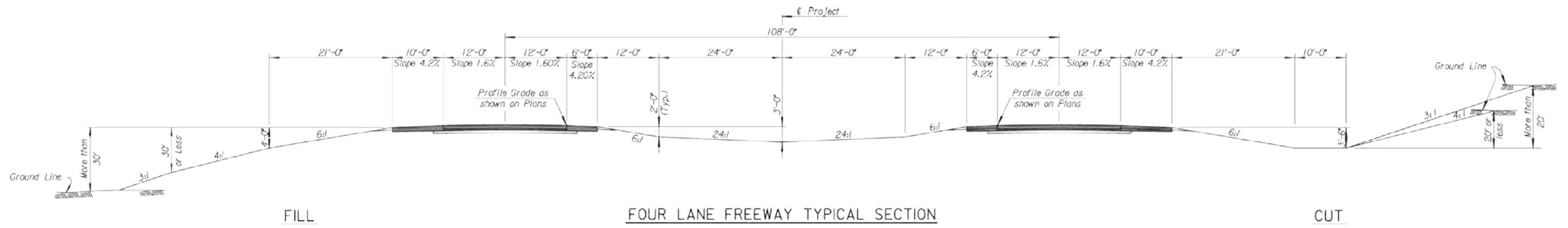
<b>TABLE 2.1: PROPOSED INTERSECTIONS AND INTERCHANGES</b>		
<b>LOCATION</b>	<b>TYPE</b>	<b>CONFIGURATION</b>
US-69/US-400/US-160 (SOUTH TERMINUS)	INTERSECTION	AT-GRADE, 4-WAY, STOP-CONTROLLED
US-400	INTERCHANGE	UNDER STUDY
520 AVE.	INTERCHANGE	GRADE-SEPARATED, DIAMOND, MAINLINE OVER
K-126	INTERCHANGE	GRADE-SEPARATED, DIAMOND, MAINLINE OVER
570 AVE./ATKINSON AVE.	INTERCHANGE	GRADE-SEPARATED, DIAMOND, MAINLINE OVER
590 AVE./US-160	INTERCHANGE	GRADE-SEPARATED, DIAMOND, MAINLINE OVER
K-47/620 AVE.	INTERCHANGE	GRADE-SEPARATED, DIAMOND, MAINLINE OVER
640 AVE.	INTERCHANGE	GRADE-SEPARATED, DIAMOND, SIDE ROAD OVER
US-69 (NORTH TERMINUS)	TBD	UNDER STUDY

As indicated in the table above, two interchange configurations are still under study. The final design for the north terminus will be coordinated with the design for a future project extending from that point, proceeding north to Fort Scott. That project has been programmed and the design process will begin in the near future. The connecting point is anticipated to provide a seamless transition of the roadway to allow for continuous travel, rather than an interchange between the two segments.

Traffic analysis was conducted to forecast operating conditions assuming a 20-year horizon (year 2031) and determine necessary interim improvements. Two interchange configurations were examined for the future US-69/US-400 junction. The half-diamond shown in **Figure 3A** is projected to operate at LOS C, assuming stop control. Alternatively, adding a loop ramp for the southbound to eastbound movement would improve traffic flow to LOS A.

The existing segment between these two points is currently a two-lane section that operates at LOS C with 2010 ADT of approximately 9,300. However, the segment is currently programmed for widening to four lanes. This cross-section will be in place at the anticipated time of construction of the Preferred Alternative and was assumed in the analysis. Under future conditions, it is projected this segment will carry 13,800 ADT operating at LOS A.

The existing US-69/US-400 intersection operates at LOS B. The eastbound and westbound legs have dedicated right turn lanes. The northbound and southbound legs have dedicated left turn lanes. A no-build scenario with future volumes would operate at LOS B overall. However, the northbound to westbound movement degrades to LOS F. Adding traffic signals and an additional left turn lane would only improve operations to LOS D. Study of this intersection will continue during the design process to identify interim improvements that will operate at an acceptable level of service.



## **CHAPTER 3. AFFECTED ENVIRONMENT**

This chapter identifies the factors that may be impacted by the proposed improvements. This includes the physical aspects of the natural and human environment that could be altered by any phase of work or future roadway use. The current and projected state of the environment is the standard by which environmental impacts are analyzed. The analysis considers effects of both the No-Build Alternative and the Preferred Alternative. The figures referenced in this chapter are found in Appendix A: Maps and Figures. See Appendix B: KDOT Preliminary Environmental Review for details of the studies conducted by KDOT's Environmental Services Section (ESS) in preparation of this EA.

The main focus area for environmental impact analysis of the Preferred Alternative is referred to throughout this document as the "environmental limits" and depicted as such on the accompanying figures. Generally, the environmental limits are 600 feet in width where they encompass the traffic lanes. Proposed interchange locations flare to about 1,250 feet in width and impacted side road locations are approximately 200 feet wide. It should be noted that the analysis considers potential impacts of the Preferred Alternative rather than actual impacts. The design process is in the early stages. Design dimensions, details and alignment cannot be calculated to final engineering precision at this point. Therefore, the environmental limits encompass the area preliminarily anticipated for right-of-way acquisition plus additional width to account for minor alignment adjustments during the design process. For example, the 600-foot environmental limits width accounts for 200 feet of right-of-way from center line of the typical section plus 100 feet of buffer. Ultimately, actual impacts of the constructed Preferred Alternative would likely be confined to an area 30% - 40% smaller than the environmental limits.

### **A. SOCIAL IMPACTS**

Social environment refers to the community setting in which persons live and reflects the quality of life within the project area. The No-Build Alternative would consist of the existing US-69 roadway. Impacts to the social environment beyond current conditions would be those primarily associated with future increases in traffic volume. Social impacts of the No-Build Alternative include frustration, anxiety and harm caused by diminished safety and operational efficiency.

#### **1. CHANGES IN TRAVEL PATTERNS**

The proposed action is to replace existing US-69 through the study area with a full access-controlled freeway. While the current alignment will not be closed, future traffic would be directed away from the existing road network. KDOT modeling indicates that north of US-160 (590 Ave.) the Preferred Alternative would carry about 85% of the projected traffic volume, with the remaining 15% being directed to the existing alignment. South of US-160, this mix would change to 70% through traffic and 30% local traffic. Access to roads and properties along the existing alignment would change and could require a slightly longer trip to access the new US-69 mainline. Many area residents, though, would be closer to the new facility.

#### **2. IMPACT ON HIGHWAY AND TRAFFIC SAFETY**

Freeway construction around the communities of Pittsburg, Frontenac and Arma will reduce traffic volumes on existing US-69 through those cities. Such a reduction in traffic volume will increase safety and improve traffic operations. Additionally, travel times for local trips will decrease as congestion decreases.

Traffic safety will improve as a result of the proposed action. The facility will carry through-traffic on an access-controlled freeway. Compared to the existing road cross sections, freeways with full access controls typically have much lower accident and fatal accident rates. This will result in an ancillary reduction of accident rates along the existing facility as traffic volumes decrease.

### **3. NEIGHBORHOOD EFFECTS**

There are four primary residential areas within the preliminary right-of-way of the Preferred Alternative that may be affected. Potential impacts as a result of the proposed action removing homes or parcels from a cluster of residential development may include dispersing families/individuals with existing social relationships, placing a barrier between homes within an established neighborhood or removing developable residential lots. These four residential areas can be loosely considered as neighborhoods. They are listed and described below by the nearest street or intersection from south to north.

- W. Quincy St./E. 540 Ave. – A cluster of homes will be impacted by right-of-way acquisition.
- W. 4<sup>th</sup> St. (K-126) – A cluster of homes will be impacted by right-of-way acquisition.
- E. 570 Ave. – A platted residential subdivision with homes and unimproved parcels will be impacted by right-of-way acquisition.
- E. 600 Ave. – A platted residential subdivision with homes and unimproved parcels will be impacted by right-of-way acquisition.

Properties in these neighborhoods may potentially be impacted by full property acquisition, partial property acquisition and elimination or relocation of access to US-69. The full listing of properties impacted by anticipated acquisition is included in **Appendix C**.

## **B. ECONOMIC IMPACTS**

A 2004 report funded by the Kansas Department of Transportation (KDOT) entitled *Case Studies of the Economic Impact of Highway Bypasses in Kansas* studied nine KDOT bypass projects. This report provides excellent comparative information for analysis of economic impacts. The study indicated that travel-related businesses suffered negative economic effects after bypass completion. Specifically, the report investigated the impacts on four types of travel related businesses, which are restaurants, gas stations/convenience stores, auto/truck repair shops and hotels/motels.

Two windshield surveys conducted in June and July 2010 identified travel-related businesses along the existing US-69 alignment as indicated below.

- Restaurants – 4
- Gas Stations/Convenience Stores – 6
- Hotels/Motels – 6
- Auto/Truck Repair Shops – 6

The No-Build Alternative would result in no direct impacts to existing businesses along the existing US-69 alignment. These travel-related businesses would continue to benefit from through traffic along the route. In fact, there is the potential of income growth as traffic volumes increase over time.

The location of the Preferred Alternative in some segments is more than a mile away from the commercial corridor along the existing US-69. The new alignment would direct through traffic around existing

development, which may lead to negative economic impacts for the travel-related businesses during construction and after the new facility opens. However, the Preferred Alternative would provide new economic development and growth opportunities, especially at interchange locations. These locations often become prime targets for commercial growth.

### **C. LAND USE IMPACTS**

The study area for land use impacts was extended beyond the Preferred Alternative's environmental limits. This is because the area located between the current alignment and the Preferred Alternative would be affected by the proposed action. Traffic patterns, development patterns and infrastructure needs could all change over time, resulting in land use impacts.

The land use study area encompasses the land located within 1,000 feet west of the environmental limits of the Preferred Alternative to 1,000 feet east of the existing US-69 alignment. The southern boundary extends slightly into Cherokee County to a point 1,000 feet south of US-400. The northern boundary is 1,000 north of the intersection of 680 Ave. and existing US-69, just north of Arma.

The Crawford County Appraiser provided parcel data for most properties within the study area. This information included Kansas Class Codes, which specify the types of land uses occurring on each parcel. The Class Codes were verified parcel-by-parcel against field observations and revised as necessary to create the baseline land use data. Cherokee County did not have parcel data readily available for the strip of land within the study area abutting the south edge of US-400. Baseline land use data for this area was created entirely from field observations. **Figures 5A-5C: Land Use Impacts** depict the study area land uses.

The bulk of the study area is rural in nature. Agriculture, which includes farming and grazing, is the predominant land use. Other more intense land uses are scattered throughout the rural section of the study area. The eastern fringe of study area has an urban character and contains portions of the cities of Pittsburg, Frontenac and Arma. The urban land uses are largely a mix of residential, commercial, industrial and public land uses. Additionally, almost two percent of the study area is classified as vacant land use.

Land use planning is most commonly practiced through a jurisdiction's implementation of Comprehensive Plans, Zoning Regulations and/or Subdivision Regulations. Within the study area, Crawford County, Pittsburg, Frontenac, and Arma have adopted zoning and subdivision regulations. Crawford County adopted their current *Comprehensive Plan* in 1998, and the *Pittsburg Comprehensive Plan* was adopted in 2000.

The No-Build Alternative would have no negative impacts on existing land uses along the current corridor alignment. Land use impacts would be limited to those related to the future development or redevelopment potential of properties within the study area.

The Preferred Alternative will convert directly impacted land within the corridor from existing land uses to a transportation use. It will also require the altering of the physical landscape to accommodate the transportation use. Some parcels may be split by the alignment, which could lead to negative impacts and inconveniences, especially to agricultural land uses. The conditions created by the Preferred Alternative will be incompatible with some existing land uses. However, it may also create opportunities for other land uses, which are enabled by enhanced transportation.



## **D. RIGHT-OF-WAY IMPACTS**

Right-of-way impacts were determined through GIS analysis techniques using the parcel data provided by the Crawford County Appraiser. Some of the right-of-way acquisition will only impact land. However, there are also many structures within the environmental limits that will need to be acquired to accommodate the new alignment. The analysis identified both property parcels and structures located either wholly within the environmental limits or intersected by the boundary line.

Several identified structures are located on or just outside the environmental limits. The acquisition status of those structures was estimated based on their location relative to the alignment of the Preferred Alternative. As the project moves into the right-of-way acquisition phase, the precise status of those structures will become more evident. Subsequently, this preliminary acquisition count may change by several structures.

The discussion in this section related to structure acquisition is focused on primary structures, such as homes and businesses. It should also be noted that numerous barns, sheds and other ancillary structures are located within the environmental limits. Acquisition of accessory structures results in negligible impacts. As such, they have been omitted from this discussion.

The anticipated property parcel and primary structure acquisition needs of the Preferred Alternative are shown in **Figure 6: Right-of-Way Impacts**. Additional details are included in **Appendix C: Right-of-Way Impacts**.

The No-Build Alternative includes no alignment or intersection modifications. Therefore, it will require no right-of-way acquisition and will result in no right-of-way impacts.

### **1. AGRICULTURAL ACQUISITION IMPACTS**

Agricultural land uses consisting of non-irrigated row crops and unimproved pastures make up the vast majority of the corridor. Approximately 1,359 acres of agricultural land will be needed for right-of-way from 117 property parcels. It should be noted that impacts to prime farmland are analyzed in **Section J: Prime Farmland Impacts**. Prime farmland is treated separately from agricultural land uses because prime farmland status is mainly determined by soil composition rather than the land use that occurs on the property.

Acquisition of agricultural tracts as a result of the Preferred Alternative will result in impacts to farming or livestock operations. These effects will include loss of field access and the bisection of properties. Additionally, the freeway project will construct a physical barrier restricting the movement of farm implements. Height and width limitations of mainline overpasses will impede some machinery from accessing crop locations.

KDOT frequently purchases right-of-way in advance of construction projects. In such cases, KDOT may enter into an agreement to lease the property back to the owner or tenant until it is needed for construction. Such agreements could allow for continued agricultural production in the interim while minimizing KDOT property maintenance costs.

### **2. RESIDENTIAL ACQUISITION IMPACTS**

Many residential properties are dispersed throughout the environmental limits. The Preferred Alternative will require the acquisition of about 131 acres from a total of 67 property parcels containing

residential land uses. However, not every residential structure on the impacted parcels is located within the environmental limits. Some of this acquisition will be land only.

Preliminary analysis has identified 44 residences for acquisition. Most of the homes are stick-built frame homes, but three have been positively identified as mobile or manufactured home units. No multi-family residences have been identified within the preliminary right-of-way boundaries. All of the needed residences are single-family. Although no rental units have been positively identified, the potential for at least two tenant-occupied residences is indicated by the duplicate ownership of multiple parcels.

The primary impact of the Preferred Alternative is the relocation of the 44 individuals and families from the identified residences. While the relocation policies cited certainly lessen displacement impacts to the extent practicable, it is impossible to completely mitigate all negative effects of such a major disruption to one's life and social behaviors. Relocated persons face a range of impacts related to potential changes in communities, neighborhoods, schools, and social interactions.

### **3. HOUSING AVAILABILITY**

The 2008 U.S. Census estimate for median home value in Crawford County is \$81,100. A search of the National Association of Realtors website (<http://www.realtor.com>) conducted on October 28, 2010 listed 311 single-family homes available for sale within the communities of Pittsburg, Frontenac and Arma. The asking price for the listed homes ranges from \$9,500 to \$633,500. Based upon this information, displaced residents should be easily absorbed into the local housing supply.

### **4. COMMERCIAL/INDUSTRIAL ACQUISITION IMPACTS**

Approximately 15 acres from eight property parcels containing commercial/industrial land uses have been identified for acquisition. The analysis identified two commercial/industrial relocations due to structure acquisition and one potential displacement/relocation based on elimination of access. Each of the eight parcels is described below with the business name and owner followed by a brief property description.

AJL Machine Shop and Welding; Tommy Joe and Kathryn L. Sells

This is a partial acquisition of 13.64 acres from the 32.36 acre parcel. The primary structure is located within the preliminary acquisition area and the business will need to be relocated. The remaining portion will have no public road access, unless access is otherwise included in final design.

Allure Salon and Spa; Allure Shop LLC

This is a partial acquisition of 0.01 acres of the 1.73 acre parcel. No structures are located within the preliminary acquisition area. If this property is needed, the impact appears limited to existing road frontage suggesting minimal impact to the business and no relocation.

Country Lane RV Park; Sandra E. and Delbert C. Greier

This is a partial acquisition of 0.30 acres of the 0.87 acre parcel. The primary structure is not located on this portion. Business activities occur primarily on an adjacent parcel that is not impacted by the right-of-way, suggesting minimal impact to the business and no relocation.

UPS Customer Center; S & H Management LLC

This is a partial acquisition of 0.58 acres of the 29.33 acre parcel. No structures are located within the preliminary acquisition area. The impact appears limited to existing road frontage, suggesting minimal impact to the business and no relocation.

Kevin's Custom Cabinets; Kevin R. Hall

This is a partial acquisition of 0.13 acres of the 1.00 acre parcel. No structures are located within the preliminary acquisition area. The impact appears limited to existing road frontage, suggesting minimal impact to the business and no relocation.

Downing Motor Services; Jerrod S. Lowrie

This business is a secondary use on the parcel. The primary use is residential. The business structure is not located within the preliminary acquisition area. However, the remnant parcel will have no public road access, suggesting the potential of displacement and relocation of the impacted business if alternate access cannot be provided.

Steve Gepford Trucking; Shirley Jaynes

This is a displacement and relocation of the impacted business. However, the business is a secondary use. The primary land use on this parcel is residential.

Lonestar Automotive; M. Curtis and Janis E. Saket

This is a partial acquisition of 0.75 acres of the 2.03 acre parcel. No structures are located within the preliminary acquisition area. The primary structure is located on the remaining portion, which has public road access, suggesting minimal impact to the business and no relocation.

## **5. COMMERCIAL/INDUSTRIAL PROPERTY AVAILABILITY**

Overall right-of-way impacts to commercial/industrial properties are negligible. The Preferred Alternative will result in the relocation of only two businesses; with the potential of one additional if access cannot be provided. Ad hoc internet searches suggest ample availability of commercial/industrial buildings and developable properties throughout Crawford County.

## **6. GOVERNMENT/INSTITUTIONAL ACQUISITION IMPACTS**

The analysis has identified 1.44 acres for acquisition on two property parcels containing government/institutional land uses. This includes one structure. Each of these parcels is described below with the occupant name and owner, followed by a brief property description.

Kansas Department of Transportation; State of Kansas

This is a partial acquisition of 0.003 acres of the 6.64 acre parcel. The parcel is adjacent to the next tract discussed below and the two tracts appear to be jointly managed as a single property. No structures are located within the preliminary acquisition area. The remaining portion will have public road access. Right-of-way impacts appear negligible at this site and no relocation is needed.

Kansas Department of Transportation; State of Kansas

This is a partial acquisition of 1.44 acres of the 4.98 acre parcel. The primary structure (office building) is located within the preliminary acquisition area. Parking and access will also be affected. The parcel is adjacent to the previously discussed tract. The remaining portion combined with the adjacent tract appears to be developable and will have public road access. This may be a relocation of the administrative government activities that occur within the primary structure. However, it appears as if the secondary activities could continue with minimal impact.

It should also be noted that two parcels totaling 0.30 acres owned by the City of Pittsburg are within the environmental limits. These two tracts are part of Atkinson Municipal Airport's property holdings. However, their acquisition is not anticipated due to their location relative to the alignment of the Preferred Alternative.

## **7. VACANT PARCEL ACQUISITION IMPACTS**

The remaining impacted parcels have been determined to be vacant, which is defined as currently undeveloped with no signs of active land use. Approximately 15 acres on 15 property parcels have been identified for acquisition. These parcels are scattered throughout the project corridor. Since these parcels have no development and no active land uses there will be no immediate impacts as a result of the proposed action. Generally, impacts to these parcels will be limited to their future development potential.

## **8. RELOCATION POLICIES**

KDOT's relocation policies conform to the *Uniform Relocation Assistance and Real Property Acquisition Policies Act* of 1970 as amended, which lists the Federal requirements all property acquisitions must follow. A summary brochure entitled "Relocation: Your Rights and Benefits as a Displaced Person under the Federal Relocation Assistance Program" is available to the public through KDOT. The policies address relocation policies and procedures for all types of residential and nonresidential properties.

## **E. VISUAL AND AESTHETIC IMPACTS**

Proposed road improvements would alter both the view of the roadway and the view from the roadway. In almost every location, except for the northern terminus along existing US-69, there will be a highway that did not previously exist. The Preferred Alternative includes grade-separated crossings and interchanges which will alter the vertical visual element.

The No-Build Alternative would not change from the existing alignment of US-69. Neither the views from the roadway nor the views of the roadway will be impacted by this alternative.

### **1. VIEW OF THE ROADWAY**

The entire Preferred Alternative is located on relatively flat terrain with little to no changes in elevation. Most of the existing land cover is agricultural with a few woodland areas and some dense vegetation. There are very few structures near or within the construction limits to screen the proposed roadway. With the exception of the wooded areas near 510 Avenue and K-47, there would be an unencumbered view of the proposed roadway from the adjacent parcels and the existing road network.

Proposed overpasses and interchanges would be higher in elevation than the existing ground and would be visible for some distance away. The view of the roadway will also be greater on 650 and 660 Avenues, since the Preferred Alternative will cut off existing east-west access along these two roads.

### **2. VIEW FROM THE ROADWAY**

The Preferred Alternative is located predominantly in a terrain that is markedly different from the existing alignment. The existing alignment traverses through a variety of land uses, including agricultural, strip commercial, wooded, and light industrial. These different land uses, existing structures, signage, and lighting provide a variety of line, color, form, and texture. There is also a variety in architecture, scale, materials, line and form in the structures located along the existing alignment.

As mentioned previously, the Preferred Alternative is located on relatively flat land in mostly agricultural areas. Absent the structures acquired for right-of-way, the few remaining structures near the future roadway alignment would be mostly farmsteads. This would afford motorists unencumbered views of the surrounding landscape. Gradual changes in roadway elevation will produce clear lines of sight for motorists traveling along the proposed roadway.

## **F. ENVIRONMENTAL JUSTICE AND TITLE VI**

Title VI of the 1964 Civil Rights Act prohibits intentional discrimination on the basis of race, color, or national origin in any program or activity receiving federal financial assistance. In addition, under Title VI and related statutes, federal agencies are directed to enact rules, regulations and orders to achieve the statute's objective.

Executive Order 12898 *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, DOT Order 5610.2 and FHWA Order 6640.23 broaden the scope of Title VI. These orders require federally-funded activities to identify and mitigate "disproportionately high and adverse impacts" to minority and low income populations in regard to health and environment. As such, this analysis has examined available U.S. Census data and incorporated field observations to identify potential impacts to the specified environmental justice (EJ) populations.

### **1. DEMOGRAPHIC ANALYSIS**

The baseline demographic data used for analysis were obtained from the 2000 U.S. Census. Income data were analyzed for the Census Block Groups intersected by the construction limits of the proposed action. Countywide racial data were analyzed for the Census Block Groups and Census Blocks levels intersected by the construction limits of the proposed action. The selected data were then compared against the 2000 Census countywide information to identify impacts to EJ populations.

Finally, the data were compared to the most recent (2008 – 2009) Census estimates at the county level to identify the likelihood of significant demographic changes since the 2000 Census. **Table 3.1: Selected Demographics for Environmental Justice Analysis** on the next page, is a synopsis of relevant data for comparison. **Figure 6: Title VI – Environmental Justice** is a reference map that illustrates the demographic information presented in this section.

The No-Build Alternative includes no expansion of the existing US-69 right-of-way and no further encroachment on adjacent property. Hence, the impacts to EJ populations would be limited to their current extent.

#### **a. MINORITY POPULATIONS**

A review of the 2000 Census data indicates no concentrations of minority populations within the Block Groups or Blocks bisected by the Preferred Alternative. None of these Block Groups have a minority percentage higher than the Crawford County minority percentage of 6.7%. Combined, the affected Census Blocks have a total population of 1,047 persons, of which only 29 were minorities. This minority percentage of 2.8% is substantially lower than the county minority percentage.

The 2009 Census estimated minority percentage for Crawford County is 7.1%, an increase of 0.4%. Even assuming the same increase across the impacted Block Groups and Blocks, there is no substantial growth in minority percentages since 2000. Additionally, field observations indicate

## US-69 CORRIDOR: ENVIRONMENTAL ASSESSMENT

TABLE 3.1: SELECTED DEMOGRAPHICS FOR ENVIRONMENTAL JUSTICE ANALYSIS							
DEMOGRAPHIC CATEGORY	CRAWFORD COUNTY TOTALS		TOTALS FOR IMPACTED CENSUS BLOCK GROUPS				
	TOTAL	2009 EST.	#200379566001	#200379566002	#200379569001	#200379572001	#200379573001
<b>Population</b>	38,242	38,869	1,240	904	1,127	828	1,751
<b>Population Trend</b>							
2009 Estimate	38,869	-	-	-	-	-	-
2000 Total	38,242	-	1,240	904	1,127	828	1,751
1990 Total	35,582	-	-	-	-	-	-
1980 Total	37,916	-	-	-	-	-	-
1970 Total	37,850	-	-	-	-	-	-
1960 Total	37,032	-	-	-	-	-	-
<b>Race/Ethnicity</b>							
% White	93.3%	92.9%	96.5%	98.3%	96.7%	94.2%	94.4%
% Black	1.8%	2.2%	0.6%	0.0%	0.1%	0.7%	1.5%
% Native American	0.9%	1.1%	1.0%	0.2%	1.2%	1.0%	0.5%
% Asian	1.1%	1.9%	0.1%	0.1%	0.2%	0.2%	0.6%
% Other	1.2%	97.8%	0.8%	0.0%	1.0%	1.8%	0.1%
% Two or More Races	1.6%	1.8%	1.0%	1.3%	0.9%	2.1%	2.9%
Total Minority %	6.7%	7.1%	3.5%	1.7%	3.3%	5.8%	5.6%
% Hispanic	2.4%	3.6%	0.8%	1.1%	1.6%	3.6%	1.3%
<b>Sex</b>							
Male	18,634	19,085	621	425	566	403	879
% of Total	48.7%	49.1%	50.1%	47.0%	50.2%	48.7%	50.2%
Female	19,608	19,474	619	479	561	425	872
% of Total	51.3%	50.9%	49.9%	53.0%	49.8%	51.3%	49.8%
<b>Households</b>							
Avg. Size	15,504	-	485	415	434	339	698
	2.47	-	2.55	2.18	2.60	2.44	2.51
<b>Families</b>							
Avg. Size	9,436	-	338	234	306	229	497
	4.05	-	3.12	2.98	3.12	2.96	2.95
<b>Age Characteristics</b>							
Median Age	33.8	-	37.7	41.6	37.4	34.3	35.2
Male	31.1	-	37	38.8	35.5	32.8	33.1
Female	36.4	-	38.6	42.8	39.4	36.1	37.7
Under 5 yrs.	2,446	-	75	55	65	67	126
% of Total	6.40%	6.6%	6.0%	6.1%	5.8%	8.1%	7.2%
5 - 17 yrs.	6,329	-	253	138	255	159	331
% of Total	16.50%	15.30%	20.4%	15.3%	22.6%	19.2%	18.9%
18 - 64 yrs.	23,557	-	725	525	659	504	1,082
% of Total	61.6%	63.5%	58.5%	58.1%	58.5%	60.9%	61.8%
Older than 65 yrs.	5,910	-	187	186	148	98	212
% of Total	15.5%	14.6%	15.1%	20.6%	13.1%	11.8%	12.1%
<b>Median Family Income</b>	\$40,582	\$47,853	\$42,031	\$40,227	\$47,900	\$43,958	\$48,542
<b>Below Poverty Level</b>	5,823	7,113	216	91	57	116	113
% of Total	16.0%	18.3%	17.4%	10.1%	5.2%	14.6%	6.5%

no evidence of minority population concentrations in impacted residential areas. This analysis and investigation concludes the Preferred Alternative will not cause any disproportionately high or adverse effects on minority populations.

### **b. LOW INCOME POPULATIONS**

Census income and poverty information is available at the Block Group level. There are five Block Groups impacted by the proposed action for which data were analyzed. Block Group #200379566001 has a 17.4% poverty level, which is slightly higher than Crawford County's 16% poverty rate. It is the only impacted Block Group with a poverty rate over that of the county as a whole. The geographic scale and poverty data available for Block Groups does not allow a greater level of specificity regarding impacts to low income population concentrations. According to 2008 Census estimates for Crawford County, the percent of population below poverty level grew by 2.3% to 18.3% of the total population. Adjusting the data for the impacted Block Groups by the same percentage of growth yields the same results as the 2000 data, with only Block Group #200379566001 exceeding the county poverty level. Given the available data and the number of

affected properties, there appears to be no concentrations of low income populations within the area of analysis and no disproportionate high and adverse impacts to low income populations as a result of the Preferred Alternative.

## **2. EJ PROPERTY ACQUISITION IMPACTS**

The general character of the corridor is rural or exurban with low residential density. Farm homes are scattered along the corridor, with relatively few residences located in a neighborhood setting. This dispersed development pattern reveals no concentrated settlements of minority, elderly, young, disabled or low income individuals. Therefore, there is no evidence of disproportionately high or adverse impacts to EJ populations as a result of property acquisition. No further EJ analysis is required. All displaced persons will be relocated in compliance with the *Uniform Relocation Assistance and Real Property Acquisition Policies Act*, which will help mitigate any individual relocation impacts that might occur.

## **3. PUBLIC INFORMATION**

**Chapter 4: Comments and Coordination** provides an overview of the Public Involvement (PI) process implemented by KDOT for this project. There have been numerous and ongoing opportunities to comment on the various alignments. Other opportunities will yet become available. No feedback to date has indicated any disproportionate impacts to EJ populations. KDOT will continue to monitor all input of this nature and provide assistance to affected individuals and those with special needs.

## **G. FLOODPLAIN IMPACTS**

A GIS analysis was conducted to determine impacts to floodplains. Spatial floodplain data were provided on disc by the FEMA National Flood Hazard Layer (NFHL). This data includes digital Flood Insurance Rate Maps (DFIRMs). Areas of impacted floodplains and streams are shown in **Figures 8A-8C: Floodplain and Water Quality Impacts**. The floodplains illustrated on these maps include the areas designated by FEMA as Zone A and Zone AE in the DFIRM data. Additional information is found in **Appendix B**.

Floodplains serve many purposes, including cropland soil, nutrient retention and removal, flora and fauna habitats, and erosion control. *Executive Order 11988, Floodplain Management* requires federal agencies to avoid actions, to the extent possible, which results in the locations of improvements in floodplains and/or impact floodplain values.

The Federal Emergency Management Agency (FEMA) imposes requirements for construction in the floodplain and floodway. For cases involving construction in the floodplain where a regulatory floodway is defined, no hydrologic or hydraulic analysis is required for construction and placement of fill in the floodway fringe. However, construction proposed within the floodway requires a detailed analysis demonstrating the impacts of proposed construction.

The No-Build Alternative contains no new construction or roadway expansion. Subsequently, this alternative will have no impacts on floodplains beyond what exists on the current US-69 alignment.

One factor in determining potential alignments is the minimization of floodplain impacts. Yet, given the numerous streams throughout Crawford County, floodplain impacts are unavoidable. The final design will minimize the area of impacted floodplain with perpendicular crossings to the extent practicable. The analysis has identified approximately 188 acres of 100-year floodplains that would be impacted by the Preferred Alternative.



The Kansas Division of Water Resources (DWR) considers it an unreasonable effect to increase the elevation of the design and base flood profiles within a floodway, or increase the elevation of the design and base flood profiles more than one foot at any location outside a floodway. Floodplain fill, bridge structures and other appurtenances will be calculated and sized accordingly. Thus, the Preferred Alternative presents no expectation of exceeding the one foot rise.

## **H. WATER QUALITY IMPACTS**

Protecting water quality is important in minimizing harm to aquatic life and preserving adequate water supplies for drinking, industry, irrigation, and agriculture. **Figures 8A-8C: Floodplain and Water Quality and Impacts** illustrate the data related to water quality within the study area. The data used in the analysis were accumulated from a variety of sources as indicated within the narrative.

The No-Build Alternative includes no construction or activities that could affect a stream, aquifer or other body of water. As such, the No-Build Alternative will result in no additional impacts to surface or ground water quality.

### **1. SURFACE WATER QUALITY**

The Preferred Alternatives is located within two subbasins as shown on **Figures 8A-8C**. These subbasins have the following names and 8-digit Hydrologic Unit Codes (HUC 8):

- Spring Subbasin, Neosho River Basin (HUC 8:11070207)
- Marmaton Subbasin, Upper Marais Des Cygnes Basin (HUC 8: 10290104)

Named streams in Crawford County crossed by the corridor include Dry Branch Cox Creek, First Cow Creek and Second Cow Creek. Dry Branch Cox Creek, located in the Marais des Cygnes River Basin, is not classified in the Kansas Department of Health and Environment (KDHE) *Kansas Surface Water Register*.

First Cow Creek and Second Cow Creek are in the Neosho River Basin, Spring Subbasin. Segment 27 of First Cow Creek and segment 16 of Second Cow Creek are classified as Special Aquatic Life Use Waters (SALU). The Kansas Surface Water Register defines Special Aquatic Life Use Waters as,

*“Waters that contain combinations of habitat types and indigenous biota not found commonly in the state, or contain representative populations of threatened or endangered species that are listed in rules and regulations promulgated by the Kansas Department of Wildlife & Parks or the USFWS.”*

KDHE indicated that First Cow Creek and Second Cow Creek are classified as SALUs due to being important foraging habitat for the state endangered Gray Myotis. The construction of highway crossings over streams classified as SALUs will require Action Permits from the Kansas Department of Wildlife, Parks and Tourism (KDWPT).

In accordance with Section 303(d) of the *Clean Water Act*, KDHE’s Bureau of Water has listed Cow Creek, near Lawton, with impairments for meeting water quality standards for both S04-Sulfate and Chl-Chlordane.

Bradley Acres, located at 6564 NE HWY 400 on the southern end of the study area, is a non-point source pollutant. The property owner holds a National Pollutant Discharge Elimination (NPDES) certificate issued by KDHE that is valid through June 30, 2013.

During the design process, efforts will be taken to minimize surface water impacts. Most impacts of the Preferred Alternative are expected to be minimal and temporary, such as sedimentation and siltation during construction. Longer-term impacts can include petroleum products and pollutants from the operation of the facility.

Implementation of *KDOT Standards and Specifications for Erosion Control* will limit water quality impacts to the adjacent water bodies. Also, the DWR requires 50-foot vegetated buffers on both sides of new stream channels. Thus, there is no expectation of substantial long-term impacts to surface water quality as a result of the Preferred Alternative.

## **2. GROUNDWATER QUALITY**

The project is located entirely within the Ozark aquifer. No groundwater management districts are located in Crawford County. There are no sole source aquifers noted in Environmental Protection Agency (EPA) Region 7, which includes the state of Kansas. The United States Geological Survey (USGS) Scientific Investigations Report #2009-5148 *Groundwater-Flow Model of the Ozark Plateaus Aquifer System* notes that the Ozark aquifer is recharged from runoff and infiltration in outcrop areas where permeable parts of the aquifer outcrop, generally from the east in Missouri. Due to the absence of aquifer rechargers and sole source aquifers within the area, there are no expected impacts to groundwater quality with the Preferred Alternative.

## **I. STREAM AND WETLAND IMPACTS**

**Figures 9A-9C** illustrate the stream and wetland impacts within the preliminary right-of-way for the Preferred Alternative. The preliminary right-of-way is 300 feet in width based on the four lane typical section.

The No-Build Alternative will include no expansion of the existing US-69 alignment. It can be assumed that construction and design of this facility complied with all regulatory requirements regarding streams and wetlands in effect at that time. No additional impacts to streams or wetlands would be anticipated.

### **1. STREAMS**

This analysis looks specifically at the “blue line streams” identified on U.S. Geological Survey (USGS) maps, which depict perennial streams with a solid blue line and intermittent streams with a dotted blue line. Preliminary design of the Preferred Alternative anticipates realignment of stream segments in the 12 locations illustrated in **Figures 9A-9C**.

In total, about 4,587 feet of existing stream length would be impacted by realignment or channelization. Approximately 4,352 feet of proposed channel improvements would replace of the impacted stream lengths. These stream realignment locations and lengths are based on preliminary project designs. Most of the impacted stream portions are transverse to the roadway and will be realigned with bridges or culverts. **Table 3.2** on the next page is a summary of preliminary impacts to stream segments with the number of locations broken down by stream type (intermittent or perennial) and Strahler’s stream order for the impacted reaches.

<b>TABLE 3.2: PRELIMINARY STREAM IMPACTS SUMMARY TABLE*</b>									
STRAHLER'S STREAM ORDER	PERENNIAL			INTERMITTENT			TOTALS		
	#	Length in Feet		#	Length in Feet		#	Length in Feet	
		Impacted	Channel		Impacted	Channel		Impacted	Channel
1	0	0	0	10	3,798.4	3,697.2	10	3,798.4	3,697.2
2	1	318.0	308.9	0	0	0	1	318.0	308.9
3	1	471.0	345.8	0	0	0	1	471.0	345.8
<b>TOTALS</b>	<b>2</b>	<b>789.0</b>	<b>653.7</b>	<b>10</b>	<b>3,798.4</b>	<b>3,697.2</b>	<b>12</b>	<b>4,587.4</b>	<b>4,351.9</b>

\*Data Sources: USGS National Hydrography Dataset (NHD); Kansas Biological Survey NHD Waterways GIS Data

The Preferred Alternative crosses several streams including Dry Branch Cox Creek, First Cow Creek, Second Cow Creek, Dry Branch Cox Creek and several unnamed streams. Stream crossings associated with the Preferred Alternative will result in unavoidable channelization, which may increase a stream’s water velocity. This may result in adverse impacts to the aquatic environment such as downcutting, headcuts and bank erosion.

DWR has jurisdiction over streams having drainage areas in excess of 240 acres, which requires Stream Obstruction or Channel Change permits for the construction of culverts or bridges and changing stream channel cross-sections. KDOT will obtain the required DWR permits prior to constructing the project. Final stream realignment locations and specific impacts will be identified and impacted stream reach lengths will be more precisely calculated during the preparation of the stream mitigation plan, which is required in conjunction with permitting. Mitigation measures will be determined using the United States Army Corps of Engineers (USACE) *Kansas Stream Mitigation Guidance (Version 2)*. This guidance includes the process for quantifying unavoidable adverse impacts and the acceptable compensatory mitigation measures. The process will also determine the stream type, status and existing condition for each impacted segment. This information will provide a baseline for analyzing future stream conditions and determining the environmental changes caused by the project.

## **2. WETLAND IMPACTS**

NWI maps were developed by the U.S. Fish and Wildlife Service (USFWS) using high altitude aerial photography. The NWI maps use the Cowardin classification system, which includes wetlands as well as deepwater habitats such as ponds and strip pits. NWI mapped wetlands may or may not qualify as USACE jurisdictional wetlands when wetland determinations are performed according to the methods described in the September 2010 *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region (Version 2)*.

**Table 3.3** on the next page lists the Cowardin classification wetlands and deepwater habitats within the preliminary right-of-way of the Preferred Alternative. The total wetland area of 23.43 acres is approximate and based upon GIS analysis rather than formal wetland delineation.

<b>TABLE 3.3: ESTIMATED NWI WETLAND IMPACTS</b>					
COWARDIN CLASSIFICATION				AREA (ACRES)	
SYSTEM/SUBSYSTEM	CLASS	MODIFIER(S)	CODE		
Riverine/4 (intermittent)	streambed	seasonally flooded	R4SBC	4.88	
	unconsolidated shore	semi permanently flooded	R4USF	1.07	
<b>SUBTOTAL</b>				<b>5.95</b>	
Palustrine	unconsolidated bottom	semi permanently flooded; diked/impounded	PUBFh	2.52	
	aquatic bed	semi permanently flooded; diked/impounded	PABFh	4.91	
	emergent	temporarily flooded		PEMA	6.46
		temporarily flooded; diked/impounded		PEMAh	0.32
		seasonally flooded		PEMC	1.71
		seasonally flooded; diked/impounded		PEMCh	0.35
		semi permanently flooded; diked/impounded		PEMFh	0.03
	forested	scrub-shrub		PSSA	0.03
		temporarily flooded		PFOA	0.31
<b>SUBTOTAL</b>				<b>16.64</b>	
Lacustrine/1 (limnetic)	unconsolidated bottom	permanently flooded; excavated	L1UBHx	0.84	
<b>TOTAL ESTIMATED WETLAND AREA IMPACTED</b>				<b>23.43</b>	

On August 3, 2010 a field survey was conducted by the ESS, which compared the NWI maps to actual corridor conditions. The field survey confirmed the presence of many NWI mapped wetlands. However, due to many of the NWI mapped wetlands being located away from existing roads and trees blocking views, several NWI mapped wetlands could not be observed. It was concluded the NWI maps are generally accurate in identifying the locations of wetlands and other waters.

It will be possible to identify wetland impacts more precisely and investigate practicable alternatives to avoid wetlands through the latter stages of the design process. As final wetland impacts are determined, appropriate mitigation measures will developed that are consistent with current regulatory practices.

**J. PRIME FARMLAND IMPACTS**

The *Farmland Protection Policy Act* (FPPA) (7 USC 4201 et seq.) provides for the evaluation of project impacts to prime farmlands and farmlands of statewide importance. These classifications are based upon the composition of the soils, which indicates the quality and suitability for agricultural production. Prime farmlands have the best characteristics for efficient agricultural productivity. Farmlands of statewide importance, which are designated by the states, are slightly less suited to agricultural production than prime farmlands. However, they may still produce high yields using acceptable farming practices.

**Figure 10: Prime Farmland Impacts and Area Soils** illustrates the prime farmlands and farmlands of statewide importance within the study area. National Resources Conservation Service (NRCS) data from the USDA were obtained to prepare the maps and conduct the GIS analysis.

The No-Build Alternative includes no facility expansion beyond the current US-69 alignment. Soils and farmlands would not be impacted by the No-Build Alternative.

Ten types of prime farmland soils are found within the environmental limits of the Preferred Alternative. These are mostly loams and silt loams. Additionally, two soil types designated as farmlands of statewide importance are included in the corridor. A summary table of the specific soil types is included in **Figure 10**.

The environmental limits of the Preferred Alternative encompass about 1,638 total acres. Approximately 1,460 acres are designated as prime farmlands and another 54 acres as farmlands of statewide importance. Prime farmlands make up 89% of the corridor, while farmlands of statewide importance comprise slightly more than 3%. While these high-quality agricultural soils make up a substantial portion of the corridor, the impacts are not as dramatic when viewed relative to the entire county. Crawford County covers 380,759 acres of which 324,227 acres (85%) are prime farmlands and 8,614 acres (2.3%) are farmlands of statewide importance. The Preferred Alternative will affect only a slightly higher proportion of prime farmlands and farmlands of statewide importance than the general make up Crawford County. Furthermore, the environmental limits contain only 0.45% of the prime farmlands and 0.63% of the farmlands of statewide importance in the entire county.

Given the preponderance of high-quality agricultural soils in Crawford County, impacts to prime farmlands and farmlands of statewide importance are unavoidable. Attempts to avoid prime farmlands would likely result in greater impacts to other environmental resources, such as wetlands, streams and floodplains. Therefore, the Preferred Alternative would result in negligible impacts to prime farmlands and farmlands of statewide importance.

## **K. VEGETATION IMPACTS**

According to the EPA's *Ecoregions of Nebraska and Kansas* map prepared by the USGS, the study corridor is located entirely within the Cherokee Plains subdivision of the Central Irregular Plains ecoregion. The area is characterized by a grassland/forest mosaic with forested strips along the streams. The preponderance of natural vegetation within the Environmental Limits of the Preferred Alternative can be described as prairie. There is very little forested land found in the study corridor. However, woodland and shrubland vegetation are found in limited quantities, mostly in floodplain areas. Small amounts of riparian areas are found around strip mine pits and stream corridors. Additionally, croplands containing mostly corn, soybean, sorghum and alfalfa hay are found in the vicinity.

Some examples of common grasses in the prairie areas are Big Bluestem (*Andropogon gerardii*), Little Bluestem (*Schizachyrium scoparium*), Indian Grass (*Sorghastrum nutans*) and Switch Grass (*Panicum virgatum*). Forests and floodplains contain many species of deciduous trees. Among the most prominent are various Oaks (*Quercus spp.*), Eastern Cottonwood (*Populus deltoids*), Elms (*Ulmus spp.*), Hackberry (*Celtis occidentalis*), Osage Orange (*Maclura pomifera*), Honeylocust (*Gleditsia triacanthos*), Black Walnut (*Juglans nigra*) and Pecan (*Carya illinoensis*). Understory vegetation in the corridor are Missouri Gooseberry (*Ribes missouriense*), High-bush Blackberry (*Rubus ostryifolius*), Smooth Sumac (*Rhus glabra*), and Eastern Redbud (*Cercis Canadensis*). Dominant species of wetland plants in the corridor are Bulrushes (*Scirpus spp.*), Cattail (*Typha latifolia*), Prairie Cordgrass (*Spartina pectinata*), Common Ragweed (*Ambrosia artemisiifolia*), Sorrel (*Rumex spp.*), Rushes (*Eleocharis spp.*) and Sedges (*Carex spp.*).

The No-Build Alternative would be confined to the existing roadway configuration. Therefore, implementation of the No-Build Alternative would not impact vegetation within the project area.

Impacts of the Preferred Alternative on vegetation within the Environmental Limits would mostly be associated with the clearing of existing plant materials within the construction limits as required for the travel lanes, embankments, ramps and bridges. Each type of vegetation described in this section extends beyond the proposed right-of-way. Only small areas of each vegetation type will be removed for construction of the proposed project, relative to the total amount of vegetation occurring in the general vicinity. Based on this analysis, impacts to vegetation as a result of the Preferred Alternative will be minimal.

No mitigation is proposed for upland vegetation affected by the project beyond that described for protected species in **Section M** of this chapter. In accordance with KDOT best management practices, disturbed upland areas will be restored to their natural state to the extent practical and replanted with native grasses. Mitigation of wetland vegetation will proceed as previously described in this chapter (**Section I. Wetland Impacts**).

**L. WILDLIFE IMPACTS**

Resources from several state and federal agencies including the KDWPT, KBS and USFWS were used to identify the types of wildlife found in the vicinity of the study corridor. According to the *Kansas Comprehensive Wildlife Conservation Plan* of 2005 maintained by KBS, the primary wildlife habitats in the project vicinity are Tallgrass Prairie, Cropland, Deciduous Forest/Floodplain, Herbaceous Wetland and Aquatic.

**1. WILDLIFE SPECIES**

The following is a list of common wildlife species found in the vicinity of the Environmental Limits along with the primary habitats in which they are found.

Mammals

American Beaver, <i>Castor canadensis</i> .....	Aquatic
Bobcat, <i>Lynx rufus</i> .....	Forest/Floodplain
Common Muskrat, <i>Ondatra zibethicus</i> .....	Wetland
Coyote, <i>Canis latrans</i> .....	Prairie, Forest/Floodplain
Eastern Cottontail Rabbit, <i>Sylvilagus floridanus</i> .....	Cropland, Forest/Floodplain
Eastern Fox Squirrel, <i>Sciurus niger</i> .....	Forest/Floodplain
Eastern Gray Squirrel, <i>Sciurus carolinensis</i> .....	Forest/Floodplain
Nine-banded Armadillo, <i>Dasypus novemcinctus</i> .....	Forest/Floodplain
Northern Raccoon, <i>Procyon lotor</i> .....	Forest/Floodplain
Red Fox, <i>Vulpes vulpes</i> .....	Forest/Floodplain
Striped Skunk, <i>Mephitis mephitis</i> .....	Prairie, Cropland, Forest/Floodplain
Virginia Opossum (marsupial), <i>Didelphis virginiana</i> .....	Cropland, Forest/Floodplain
White-tailed Deer, <i>Odocoileus virginianus</i> .....	Cropland, Forest/Floodplain

Birds

Canada Goose, <i>Branta canadensis</i> .....	Wetland, Aquatic
Great Blue Heron, <i>Ardea herodias</i> .....	Wetland, Aquatic
Indigo Bunting, <i>Passerina cyanea</i> .....	Forest/Floodplain
Mallard, <i>Anas platyrhynchos</i> .....	Wetland, Aquatic
Northern Cardinal, <i>Cardinalis cardinalis</i> .....	Forest/Floodplain

Birds (continued from previous page)

Northern Flicker, <i>Colaptes auratus</i> .....	Forest/Floodplain
Northern Harrier, <i>Circus cyaneus</i> .....	Prairie, Cropland
Red-tailed Hawk, <i>Buteo jamaicensis</i> .....	Prairie, Cropland
Screech Owl, <i>Megascops kennicotti</i> .....	Forest/Floodplain
Turkey Vulture, <i>Cathartes aura</i> .....	Prairie, Cropland
Wild Turkey, <i>Meleagris gallopavo</i> .....	Forest/Floodplain
Wood Duck, <i>Aix sponsa</i> .....	Wetland, Aquatic

Reptiles and Amphibians

American Toad, <i>Anaxyrus americanus</i> .....	Prairie, Forest/Floodplain, Wetland
Bullfrog, <i>Lithobates catesbeianus</i> .....	Wetland, Aquatic
Common Garter Snake, <i>Thamnophis sirtalis</i> .....	Prairie, Cropland, Forest/Floodplain, Wetland
Common Kingsnake, <i>Lampropeltis getula</i> .....	Prairie, Forest/Floodplain
Common Snapping Turtle, <i>Chelydra serpentina</i> .....	Wetland, Aquatic
Copperhead, <i>Agkistrodon contortrix</i> .....	Forest/Floodplain
Eastern Box Turtle, <i>Terrapene Carolina</i> .....	Prairie
Great Plains Skink, <i>Eumeces obsoletus</i> .....	Prairie, Forest/Floodplain
Northern Water Snake, <i>Nerodia sipedon</i> .....	Wetland, Aquatic
Prairie Lizard, <i>Sceloporus consobrinus</i> .....	Prairie, Forest/Floodplain

**2. IMPACTS**

Implementation of the No-Build Alternative would have no effect on wildlife or wildlife habitats beyond the existent disruptions to wildlife travel patterns.

Potential impacts to wildlife resulting from the Preferred Alternative will be related mostly to the loss, conversion and fragmentation of habitat. Tallgrass Prairie is the predominant habitat in the Environmental Limits accounting for about 761 acres or 46% of the project area. About 636 acres (39% of the project area) are Cropland. Deciduous Forest/Floodplain covers about 152 acres making up of 9% of the project area. While these habitat types make up the majority of the project area, they are insignificant proportions of the total amount of each habitat in the vicinity. Crawford County has about 180,000 acres of Prairie habitat, 132,000 acres of Cropland and 49,000 acres of Forested habitat. The Preferred Alternative will impact less than 0.5% of each of these three habitat types in Crawford County.

The Preferred Alternative will affect only localized habitat extents and localized populations of wildlife. Therefore, habitat loss and conversion within the Environmental Limits will be minimal. Wildlife accustomed to human-altered environments, such as opossums, raccoons, white-tailed deer and migratory birds should continue to thrive. Most unprotected wildlife populations should be impacted minimally and no mitigation measures are anticipated beyond those for threatened or endangered species as recommended in **Section M**.

Habitat fragmentation and the resulting disruption to local wildlife communities and their travel patterns will be permanent impacts that extend the length of the Preferred Alternative. Once again, impacts will be mostly localized as there are no major migratory corridors. Final design will consider the potential to incorporate best practices for wildlife crossings and/or motorist warnings to minimize conflicts.



Less than 3% (55 ac.) of the Environmental Limits is comprised of wetland or aquatic habitat areas. Impacts to these habitats and the wildlife species found therein will be minimal and of limited extent. Resident wildlife populations may be temporarily displaced from occupied habitats in close proximity to construction activities. These impacts would be short-term and once construction is completed wildlife would be expected to return. Mitigation of these minor impacts will be consistent with the measures previously described in **Section G**, **Section H** and **Section I** of this chapter.

There are no anticipated impacts to migratory bird populations related to the Preferred Alternative. However, *KDOT Standard Specifications Edition 2007* outlines contractor responsibilities consistent with the *Migratory Bird Treaty Act* (15 USC 703-711) and federal regulation under 50 CFR Parts 10 and 21. Construction activities should be planned to minimize clearing of vegetation where active nests are present between April 1 and July 15. The contractor should remove inactive nests from structures. Contact with migratory birds, active nests and eggs should be avoided and if evidence of active nests is discovered, work should immediately stop and KDOT notified.

## **M. THREATENED AND ENDANGERED SPECIES**

The USFWS and KDWPT have both compiled lists of threatened and endangered species. Several species of wildlife and vegetation found in Crawford County are designated on one or both of these lists. An analysis of potential impacts to these species is included in this section. Details regarding threatened species, endangered species and Designated Critical Habitat (DCH) are included in **Appendix B** (Table 1).

The No-Build Alternative would not require the acquisition of any habitat areas beyond the extent of the existing US-69 corridor. Therefore, the No-Build Alternative will result in no impacts to threatened or endangered species.

### **1. FEDERAL**

In Crawford County, the USFWS lists the endangered Gray Bat, *Myotis grisescens*, and threatened Mead's Milkweed, *Asclepias meadii*. The USFWS has not established DCH for either species in Crawford County. Information from the KDWPT indicates that Gray Bats inhabit storm sewers in Pittsburg in the daylight hours and forage around water at night. Mead's Milkweed may occur in high quality native prairie.

The Kansas Biological Survey (KBS) surveyed the corridor for the presence of Mead's Milkweed. Six potentially suitable grasslands were observed in the APE and no Mead's Milkweed was found. At that time, the KBS indicated most of these grasslands are of the Hardpan Prairie type. The KBS has not previously found Mead's Milkweed on Hardpan Prairie in Crawford County.

The north and south ends of the corridor were modified in July 2010 to the locations included in the Preferred Alternative. Subsequently, KBS botanists conducted an additional field survey in the realigned portions in June 2011 and found no evidence of Mead's Milkweed. The observations from both surveys indicate no presence of Mead's Milkweed. Hence, there is no anticipated effect on Mead's Milkweed as a result of the Preferred Alternative.

Initial discussions regarding Gray Bat habitat were conducted between KDOT and the USFWS, in which a habitat survey was requested. However, the construction timing of this project is unknown and could be a number of years in the future. Consequently, it was agreed that it would be best to schedule a full survey of Gray Bat habitat when construction is programmed. At that time, any potential impacts

to Gray Bat habitat will be assessed. If potential impacts to Gray Bat habitat would occur, possible mitigation includes installing taller light poles where stream corridors and the highway intersect to reduce the possibility of bat/vehicle collisions, or tree plantings along stream corridors.

## **2. STATE**

In Crawford County, the KDWPT lists the following threatened and endangered species as indicated below.

### Endangered

1. American Burying Beetle, *Nicrophorus americanus*
2. Eskimo Curlew, *Numenius borealis*
3. Gray Bat, *Myotis grisescens*
4. Least Tern, *Sterna antillarum*

### Threatened

1. Broadhead Skink, *Eumeces laticeps*
2. Common Map Turtle, *Graptemys geographica*
3. Eastern Newt, *Notophthalmus viridescens louisianensis*
4. Eastern Spotted Skunk, *Spilogale putorius*
5. Green Frog, *Rana clamitans melanota*
6. Piping Plover, *Charadrius melodus*
7. Redbelly Snake, *Storeria occipitomaculata*
8. Snowy Plover, *Charadrius alexandrinus*
9. Spring Peeper, *Pseudacris crucifer*

The KDWPT has established the following DCH in Crawford County, all of which potentially exist within the project corridor.

1. Broadhead Skink – Any mature oak woodlands or suitable timber.
2. Gray Myotis – The only known populations are dependent on storm sewers. Nearby streams with adjacent woodlands provide critical foraging habitat.
3. Redbelly Snake – Any areas of deeply wooded regions near rivers and lakes, sandstone woods, wooded hillsides, hillsides near streams, steep slopes of forested hills, moist areas, moist woodlands, woodlands with dense leaf liner, lowlands, forest edge, open fields, the vicinity of old dilapidated farm buildings and woodlands that remain damp throughout the year.
4. Spring Peeper – Any small ponds and wetlands having abundant emergent aquatic vegetation and located within or very near woodlands.

Given the relatively broad range of DCH, there is a reasonable probability of these conditions being found within the corridor. Hence, the Preferred Alternative will likely result in some impacts to critical habitats. The DCH of state-listed species will be delineated during the final design process. One objective of final design will be to avoid DCH and still stay within the designated corridor. If avoidance cannot be practically achieved, then KDOT will initiate coordination with KDWPT regarding action permits and appropriate mitigation measures.

In the past, mitigation for unavoidable impacts to Broadhead Skink DCH has consisted of tree plantings. Mitigation for impacts to Redbelly Snake DCH has included tree plantings and the construction of hibernacula (underground wintering dens). Spring Peeper mitigation has included date restrictions that prohibit work in suitable water bodies from February 15 to June 1 and the construction of small pools adjacent to streams and woodlands.

## **N. ARCHAEOLOGICAL AND HISTORIC RESOURCE IMPACTS**

The No-Build Alternative is confined to the current US-69 alignment. Since there would be no potential of encroachment upon archaeological or historic sites, this alternative would result in no impacts to these resources.

### **1. ARCHAEOLOGICAL RESOURCES**

Archeological Phase I background research was conducted to determine the presence of archaeological sites in the project vicinity. Initial research discovered 22 archaeological sites that could potentially be impacted. Following several modifications to the alignment during the preliminary design phases, a total of 18 archeological sites remain within the final corridor. The archaeological survey work administered by KDOT included Phase III investigations on five of these sites.

The final determination has deemed one of the investigated sites eligible for listing on the National Register of Historic Places (NRHP). It has also been determined that the Preferred Alternative would adversely affect the site. However, it is not recommended that the site be preserved in place. Rather, mitigation has been deemed appropriate. Mitigation measures will include a detailed history of the Cambria Site and an exhibit for the Crawford County Historic Society. A Memorandum of Agreement will be developed and implemented to finalize Section 106 requirements.

### **2. HISTORIC RESOURCES**

The project is considered cleared of all historic (standing structures) concerns. Through the course of investigations four properties potentially eligible for the NRHP were identified within the Area of Potential Effect (see [Appendix B: Figure 9](#)). Based on the location of the study corridor in relation to the properties, the State Historic Preservation Officer determined that the project would not adversely affect any of the properties. It was determined that even if the alignment were to be constructed at the extreme edge of the study corridor it would not result in an adverse effect. Also, the Preferred Alternative will require no right-of-way acquisition from any of these locations and will result in no 4(f) historic property impacts.

Section 106 of the *National Historic Preservation Act* (NHPA) has been completed. If there are any changes in the study corridor, eligibility determinations would be required and, if eligible, determinations of effect for each property would be evaluated. The findings are further discussed in [Appendix B](#).

## **O. SECTION 4(F) IMPACTS**

Section 4(f) of the *Department of Transportation Act* of 1996 (49 USC 303; 23 USC 138) provides for preserving the natural beauty of countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites. Section 4(f) further requires consultation with the Department of the Interior (DOI) and, as appropriate, the involved offices of the Departments of Agriculture (USDA) and Housing and Urban Development (HUD) in developing transportation projects and programs that use lands protected by Section 4(f).

The proposed actions of the Preferred Alternative will not encroach upon or acquire right-of-way from any public lands covered by Section 4(f). Additionally, the only Section 4(f) public land area in the immediate vicinity of the proposed alignment is a Mined Lands State Wildlife Area. The corridor passes within one-half mile of this location at its nearest point west of 200 Street between 560 and 570 Avenues. The lack of public parklands, recreation lands, wildlife refuges and waterfowl refuges in or near the environmental limits of the Preferred Alternative indicates no Section 4(f) impacts to these lands. Several such areas are located along the existing alignment, but the No-Build Alternative proposes no expansion or encroachment into those areas.

As indicated in the previous section of this document, there was one archaeological site of concern. However, mitigation was determined the appropriate course of action, rather than preservation in place. No important historic sites were otherwise indicated. The Preferred Alternative has been cleared of Section 4(f) historic property and NHPA Section 106 concerns. Absent further corridor modifications, there are no Section 4(f) impacts and investigations are complete.

## **P. HAZARDOUS MATERIALS**

The No-Build Alternative would require no realignment or construction. It would result in no additional impacts to hazardous material storage or hazardous waste sites.

Hazardous materials storage sites were identified using EPA and KDHE databases. **Appendix D: Hazardous Materials** notes the various researched databases. There are no National Priority Listing (NPL) sites, Kansas Identified sites, superfund sites, landfills, or above-ground storage tanks (ASTs) within the environmental limits. **Appendix D** includes EPA Facility Detail Reports for three sites with potential concerns for encountering hazardous materials were located near the environmental limits of the Preferred Alternative. None of these sites have been field tested and the level of hazardous materials is still unknown at this time. However, given their locations, it is unlikely further investigation will be necessary.

A visual field survey of the corridor was conducted by ESS on June 18, 2009. No obvious hazardous waste sites were observed. Following the relocation of portions of the corridor, a follow up field survey of the revised corridor was conducted on November 16, 2010. No new hazardous waste concerns were identified.

The research and survey indicate no apparent concerns regarding hazardous materials sites. The Preferred Alternative will result in no potential impacts to these locations.

## **Q. AIR QUALITY IMPACTS**

The *Federal Clean Air Act Amendments* of 1990 require that states adopt National Ambient Air Quality Standards (NAAQS). Designated maintenance or non-attainment areas are determined by the EPA. Each county in Kansas that has sufficient data for a rating is classified as meeting the NAAQS or is designated a nonattainment/maintenance area. Crawford County is classified as meeting NAAQS. Therefore, this project is not within a designated maintenance/non-attainment area for any of the air pollutants for which EPA has established standards. No further analysis is necessary.

## **R. NOISE IMPACTS**

Vehicle noise is a combination of noise produced by the engine, exhaust, and tires. Heavier traffic volumes, higher speeds, and greater numbers of trucks all increase the loudness of traffic noise. The FHWA and KDOT have both established criteria that specify the acceptable highway traffic noise levels. Projected

noise levels exceeding these guidelines would generally require the incorporation of abatement features. *Procedures for Highway Noise and Construction Noise* (23 CFR 772) contains the noise abatement criteria (NAC) utilized by the FHWA. KDOT's *Policy Statement on Highway Noise Abatement* dictates their noise standards. Details regarding these documents and the preliminary noise analysis conducted by the ESS are contained in **Appendix B**.

Increased traffic volumes are projected over time on the existing US-69 alignment. This will result in a correlated increase traffic noise level. The No-Build Alternative would be located on this alignment. Subsequently, residential receptors adjacent to the No-Build Alternative would be assumed to be impacted.

The ESS analyzed traffic noise of the Preferred Alternative consistent with KDOT's criteria for this type of project. The projected distance of the 66 dBA noise level from the centerline of the nearest proposed traffic lane was determined using a noise prediction model. The modeling estimated this distance to be approximately 125 feet within the area between the south terminus of the Preferred Alternative and K-47, just south of Arma. The distance for the remaining northern portion of the Preferred Alternative is 150 feet. Any residence within the modeled 66 dBA noise line would be considered impacted by traffic noise.

The predicted distances place this line very near, but entirely within the environmental limits of the Preferred Alternative by several feet. Conservatively, all residential receptors located within the environmental limits would be impacted by traffic noise. The analysis of right-of-way impacts identified a total of 44 residences within the environmental limits. Given most of these homes are expected to be acquired and the residents relocated, there are no anticipated noise impacts related to the Preferred Alternative.

KDOT does not recommend any noise abatement features with this project at this time. However, final design details are not available and the project is not funded for construction. If the alignment changes such that the 66 dBA noise line shifts to a point outside of the current corridor, additional residential receptors may be impacted. Therefore, when the project is funded for construction, KDOT will utilize final design details and current land use along the alignment to conduct additional analysis.

## **S. CONSTRUCTION IMPACTS AND MITIGATIVE MEASURES**

The physical construction of proposed improvements to the US-69 corridor will have some short-term adverse impacts to residents, businesses, and users of the highway. Construction activities related to the Preferred Alternative will result in nuisance, noise, dust and particulates, traffic congestion, and utility relocations. Best Management Practices (BMPs) to minimize construction impacts will be incorporated into construction contract specifications.

The No-Build Alternative is located on an existing alignment with no associated construction activities. There will be no resultant construction impacts or mitigation requirements.

### **1. WASTE DISPOSAL**

All suitable materials removed from the excavation shall be used as practicable in the formation of the embankment, sub grade, shoulders, and at such other places as directed. No excavation material shall be wasted without permission, and when such material is to be wasted, it should have a neat appearance and not be injurious to the abutting property. Construction documents may designate certain materials to be excavated and stockpiled for a specific purpose or for future use.

## **2. WATER QUALITY**

BMPs for pollution and runoff control will be implemented, as will the planting of vegetation before, during, and after construction. Surface water impacts are anticipated to be minimal during BMP implementation.

## **3. AIR**

During construction, there will be a local increase in particulate matter (PM) concentration because of earthmoving and pavement removal operations. Short-term air quality impacts could occur on lands within and adjacent to the environmental limits. Fugitive PM emissions will also be generated from the movement of trucks and heavy construction equipment. Engine exhaust from the heavy equipment will generate a small amount of sulfur dioxide (SO<sub>2</sub>), nitrogen oxides (NO<sub>x</sub>), and carbon monoxide (CO) emissions. To minimize emissions, all construction contractors will be required to comply with all applicable state and federal air pollution regulations.

## **4. NOISE**

Earth removal, paving, hauling, grading, and bridge construction will be the major construction activities that produce noise during the construction of the Preferred Alternative. These activities would temporarily increase noise levels in portions of the project area. During construction, the character and level of noise would vary depending on the type and number of sources operating at any one time. Sources of construction noise would include trucks, earthmoving equipment, generators, and other equipment required to undertake the various phases of road construction.

## **5. VIBRATION**

During project construction, the contractor shall follow KDOT's *Standard Specifications for State Road and Bridge Construction* and all interim special provisions to address vibration generated by the operation.

## **6. UTILITIES**

Existing utilities are located near and within the Preferred Alternative corridor. These utilities include telephone, electrical, fiber optic cable, natural gas, and water lines. In addition, there are several major high-voltage electrical transmission lines and natural gas pipelines. These may require relocation and/or protection during construction.

## **7. TRAFFIC**

During construction, the contractor shall furnish, erect, and maintain all traffic control devices required by the contract documents according to the details shown on KDOT standard plan sheets and project plans.



The minimum criteria for the project traffic sequencing are:

1. Maintain one lane of traffic in each direction along US-69 during the full construction period.
2. Maintain reasonable access to US-69 during periods of local road closures, intersection and overpass construction.
3. Maintain access to all residences and businesses during the full construction period.

## **T. PERMITS**

### **1. SECTION 401 WATER QUALITY CERTIFICATION**

KDHE, Bureau of Water requires a Section 401 Water Quality Certification to acknowledge that proposed improvements are not likely to violate Kansas Water Quality Standards. This must be done prior to a Section 404 Permit, which is discussed next. Additional information on Section 401 is found on the internet at: <http://www.kdheks.gov/nps/section401.html>.

### **2. SECTION 404 PERMIT FOR DREDGED OR FILL MATERIAL**

Fill placed in USACE jurisdictional wetlands requires Section 404 permits and mitigation. KDOT will obtain the necessary Section 404 permits to construct the project. Additional information on the Section 404 permit is available through the USACE Kansas City District Office website at: <http://www.nwk.usace.army.mil/regulatory/regulatory.htm>.

### **3. CONSTRUCTION STORMWATER PERMIT**

The KDHE requires a construction stormwater permit for owners or operators of construction activities that discharge stormwater runoff, which may disturb an area equal to or greater one acre. This requires completing and submitting a construction stormwater “Notice of Intent” (NOI), preparing a Stormwater Pollution Prevention (SWP2) plan and all required documentation. Additional information on the Construction Stormwater Permit is found on the internet at: <http://www.kdheks.gov/stormwater/download/ExecutiveSummary.pdf>.

### **4. PERMIT FOR DAMS, STREAM OBSTRUCTIONS, AND CHANNEL CHANGES**

A stream obstruction permit may be required by the Kansas Department of Agriculture (KDA) to place bridges on new alignment. Additional online information on permits for dams, stream obstructions and channel changes is located at: <http://www.ksda.gov/structures/content/197>.

### **5. FLOODPLAIN PERMIT**

In Crawford County the Kansas Division of Water Resources (DWR) has jurisdiction over floodplain fills averaging over one foot in height that are placed in the 100-year floodplains of streams having drainage areas in excess of 240 acres. Fills averaging over one foot in height placed within jurisdictional floodplains require Floodplain Fills permits from the DWR. Local floodplain permits may also be required for work performed within city jurisdictions. Additional information on floodplain permits can be found on City of Pittsburg website at <http://www.pittks.org/index.php?pageid=20>.

## **U. INDIRECT AND CUMULATIVE IMPACTS**

Indirect impacts are those that may occur when removed in distance or time from the actual project, but are still reasonably foreseeable. Cumulative impacts occur when actions or improvements, though not having any significant impact individually, may contribute to an adverse impact when combined with other similar projects or actions.

The No-Build Alternative would have indirect and cumulative impacts. The projected increase in traffic volume discussed **Chapter 1: Purpose and Need** would occur in the absence of future improvements, such as those included in the Preferred Alternative. This would result in travel delays, congestion and traffic accidents. Such conditions would lead to additional frustration and stress among drivers. These concerns, compounded over time, would be cumulative impacts to the community and motorists on the route.

### **1. INDIRECT IMPACTS**

The Preferred Alternative includes road realignment with bridges, intersections, interchanges, and pavement, all located in a predominantly rural setting. Over time, this may lead to an increase in economic and social opportunities for the communities of Pittsburg, Frontenac, and Arma. Existing businesses that rely on US-69 traffic for business, whether within the environmental limits of the Preferred Alternative or along existing US-69, may benefit from additional traffic along the new realignment in the long run. Advance acquisition of the right-of-way will help the communities better establish long-range land use planning and transportation goals.

Additionally, a project of this magnitude provides transportation infrastructure that can facilitate future community growth. The Preferred Alternative will improve access to properties within the vicinity of the corridor, which will change the corridor's land use development pattern. There will be opportunities for new residential subdivisions in locations that are currently unviable for such development. Interchange locations along U.S. highways are often thought of as good commercial sites. The Preferred Alternative includes eight new interchanges that could promote new business development. While KDOT will mitigate unavoidable impacts of the Preferred Alternative as required, the agency will have little control over the adverse effects caused by future development. As such, those effects may also be considered indirect impacts of the Preferred Alternative.

Wildlife habitats, streams and wetlands might be affected as the project is constructed and new development occurs. Pollutants carried by runoff from roadways, rooftops and parking lots will eventually discharge into streams and wetlands. The precise extent of the effects caused by future pollutants is indeterminable. However, they can be mitigated as part of future development and regulatory requirements at that time. It is understood and accepted that development, growth and changes to existing conditions may also occur under the No-Build Alternative.

### **2. CUMULATIVE IMPACTS**

There are no other transportation improvements of similar scope currently being constructed within the immediate vicinity of the Preferred Alternative. However, the two segments of US-69 immediately adjacent to the north and south of this corridor are currently being planned and are in the initial design phases. Therefore, there will eventually be cumulative transportation impacts to consider. The benefits derived from the future corridor improvements along successive segments of US-69 would be positive cumulative impacts. These benefits include reduced travel time, reduced congestion and enhanced

safety. However, the construction delays and detours that go hand-in-hand with road improvements and would hamper traffic movement in the interim.

The Preferred Alternative will increase travel mobility and traffic capacity while improving National Highway System access. There are no known major developments currently underway or approved in the corridor's immediate vicinity. However, transportation benefits of the Preferred Alternative may influence potential development at two main locations. First, the properties adjacent to Atkinson Municipal Airport are planned for future industrial development. This location is immediately east of the environmental limits. Second, Pittsburg State University is a growing institution that attracts students from throughout the state and region. The campus expansion of recent years will likely continue as the student body grows.

Future development at either location will likely precipitate ancillary commercial and residential growth, which will lead to a variety of cumulative impacts over time. There will be increased demand for community services and infrastructure that require added capacity. Water and sanitary sewer utilities will require improvements and system expansions. Additional traffic volumes may impact the safety and operational efficiency of the roadway network, including the Preferred Alternative.

Growth and increased development density may also affect the local environment. New roads may cross streams and require bridges, culverts and channelization. These improvements can cause adverse impacts such as erosion. Damage to aquatic ecosystems might occur as a result of runoff pollutants or elevated water temperatures associated with urbanization. Considered together over time, each of these things might be regarded as cumulative impacts related to the Preferred Alternative.

Cumulative impacts of the Preferred Alternative are not anticipated to be significant and many may actually be considered beneficial. Any additional negative impacts can be mitigated if and when future development occurs.

## **V. LOCAL SHORT-TERM USES VERSUS LONG-TERM PRODUCTIVITY**

The proposed improvements to the US-69 corridor are consistent with KDOT's *Long Range Transportation Plan* (LRTP). The county and local municipal governments want to expand US-69 to a four-lane freeway, which is also identified in the LRTP. Therefore, local and short-term impacts resulting from the Preferred Alternative are consistent with the long-term productivity, economic development, safety, and general welfare of the area. Conversely, the lack of improvements associated with the No-Build Alternative does not provide those same benefits.

## **W. IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES**

Fossil fuels, labor, and construction materials that include cement, aggregate, and bituminous materials will be required for development of the Preferred Alternative. These materials are generally not retrievable. However, the use of these materials will not have a long-term adverse effect on the continued availability of these resources. Construction will also require an expenditure of state and federal lands that will not be retrievable.

The commitment of these resources will benefit the residents and economy of the area by providing improving accessibility, safety and economic development potential. These benefits, which would not be realized with the No-Build Alternative, are anticipated to outweigh the commitment of the resources used for the project.

## **CHAPTER 4. COMMENTS AND COORDINATION**

### **A. PUBLIC INVOLVEMENT**

The Public Involvement (PI) approach for the US-69 Corridor Improvement Project included a series of activities linked to the development and selection of the Preferred Alternative. Throughout the PI process information was provided to public officials, stakeholders and the general public which allowed them an opportunity to have input, comment and participate in decisions affecting the development of the various alternatives. The process helped educate public officials, stakeholders and the public about the needs for the US-69 improvements, provided information about advantages and disadvantages of the various alternatives. It also gathered input and allowed the team to learn about issues and concerns of the public and communities involved. This information was utilized by the team to address concerns during the technical process of evaluating concepts and developing the Preferred Alternative.

Several methods have been utilized throughout the PI process to disseminate and gather information, including:

- Media Releases
- Project Website
- Presentations and briefings to Public Officials
- Public Meetings

**Table 4.1: Public Involvement** notes the date and purpose of public meetings held for the project. Advance notices including media releases were sent to public officials and the general public to attend these meetings. All of the meetings were held in the immediate project area either in or near Pittsburg, Kansas. Supporting material such as handouts, meeting minutes and comments are contained separately in the project records.

<b>TABLE 4.1: PUBLIC INVOLVEMENT</b>	
<b>DATE</b>	<b>PURPOSE OF MEETING</b>
8-17-1999	Public Officials Meeting and Public Information Meeting - Presented Concepts of four Alternatives, Do Nothing, East, Middle, and West Corridors.
3-6-2001	Public Officials Meeting and Public Information Meeting – Summary of APE Study activities.
11-10-2005	Public Officials Meeting – Update of project status, public officials expressed support for West Corridor as Preferred Alternative.
3-6-2006	Public Information Meeting – Presented West Corridor as Preferred Alternative. Modifications requested to shift corridor closer to Pittsburg.
10-18-2006	Public officials meeting to present Modified West Corridor addressing 3-6-2006 comments.
11-13-2006	Public Information Meeting to present Modified West Corridor.
4-17-2008	Public Officials meeting to provide update on status of project development.
11-20-2009	Public Officials meeting to provide update on status of project development.
3-18-2010	Public Officials meeting to present project corridor modifications north of Arma, progress on entire project, outcome and impacts of the US-400 study in Cherokee County.
7-19-2010	Public officials meeting to discuss changes to the Preferred Alternative resulting from completion of US-400 study in Cherokee County.

The Public Information meeting on November 13, 2006 held in Pittsburg, Kansas was attended by approximately 200 people. One hundred and forty three people signed the guest register, but many signees were accompanied by spouses and other family members and a few chose not to sign the guest register. The Public Information meeting had a short presentation by the Project Team followed by an open house where the public observed detailed displays of the project corridor, ask questions and comment. Members of the Project Team were available to discuss the project, answer questions and take comments.

Comments were collected throughout the project via the website, through email, in writing via mail and at the public meetings, both in writing and through a certified shorthand transcriptionist. Comments that required a response received one from a member of the Project Team. Comments received for the project included both support and opposition for the Preferred Alternative. Local residents showed concern for potential encroachment onto or near their properties. There was a desire to look at possible design improvements within the corridor to minimize impacts to adjacent properties. Comments expressing concern about safety and congestion on the existing highway and the need for the improvements were also received.

It is anticipated that another public meeting (formal Public Hearing per EA guidelines) will be held in August 2012 to present the final alignment and the Environmental Assessment document. One meeting will be held at a central location in Pittsburg, Kansas.

## **B. AGENCY COORDINATION**

Cooperating Agencies are those governmental agencies specifically requested by the Lead Agency (FHWA) to participate during the environmental evaluation process for the project. FHWA's regulations (23 CFR 771.111(d)) require that those federal agencies with jurisdiction by law (with permitting or land transfer authority) be invited to be Cooperating Agencies for an EA. The USACE Kansas State Regulatory Office, the USFWS and the EPA have agreed to be Cooperating Agencies in the development of this EA.

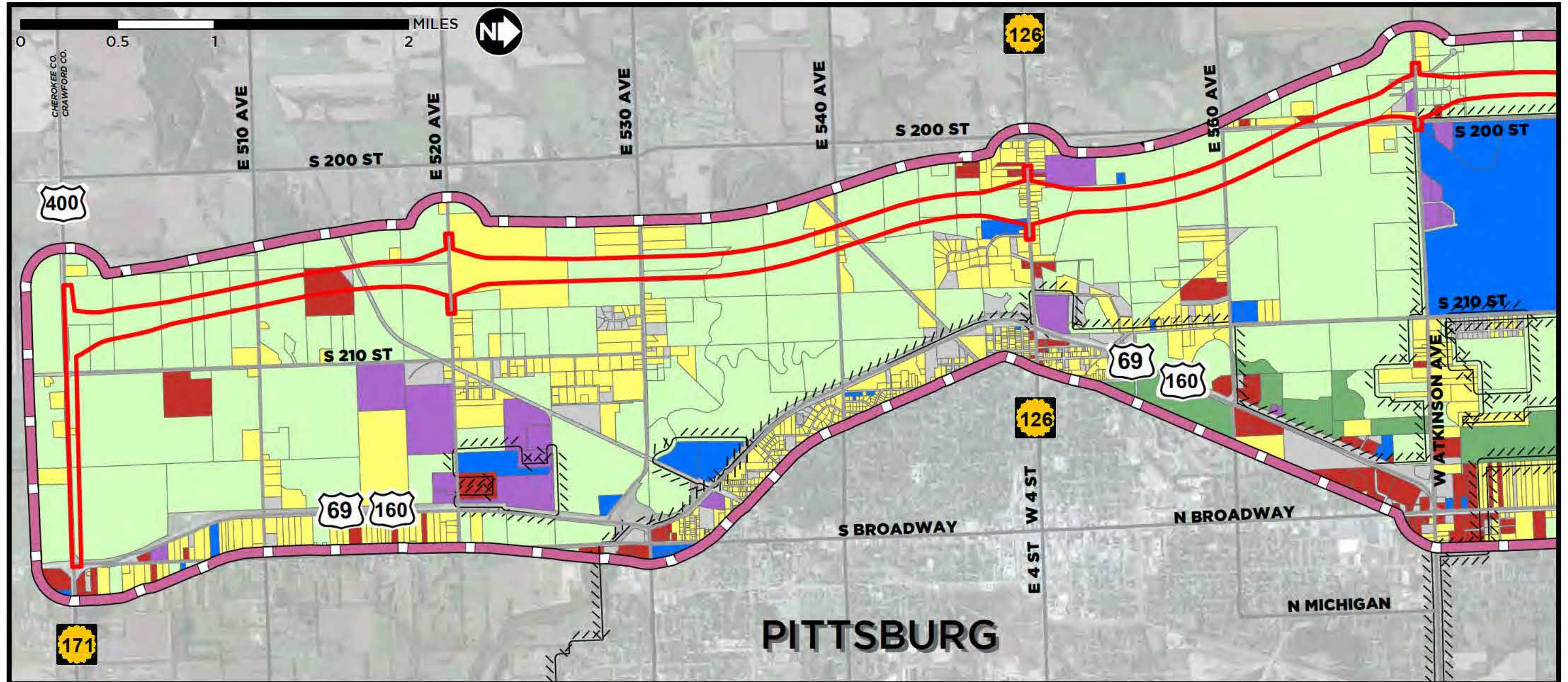
US Army Corps of Engineers, Kansas State Regulatory Office  
2710 NE Shady Creek Access Road  
El Dorado, KS 67042  
Contact: Tom Shoeman, State Program Manager

US Fish and Wildlife Service, Kansas State Office  
2069 Anderson Avenue  
Manhattan, KS 66502-2801  
Contact: Michael J. LeValley, Field Supervisor

US Environmental Protection Agency, Region 7  
901 N. 5<sup>th</sup> Street  
Kansas City, KS 66101  
Contact: Joe Cothorn, NEPA Program Manager

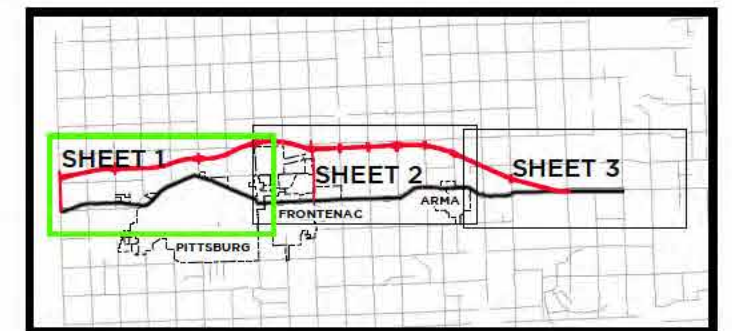


APPENDIX A. MAPS AND FIGURES

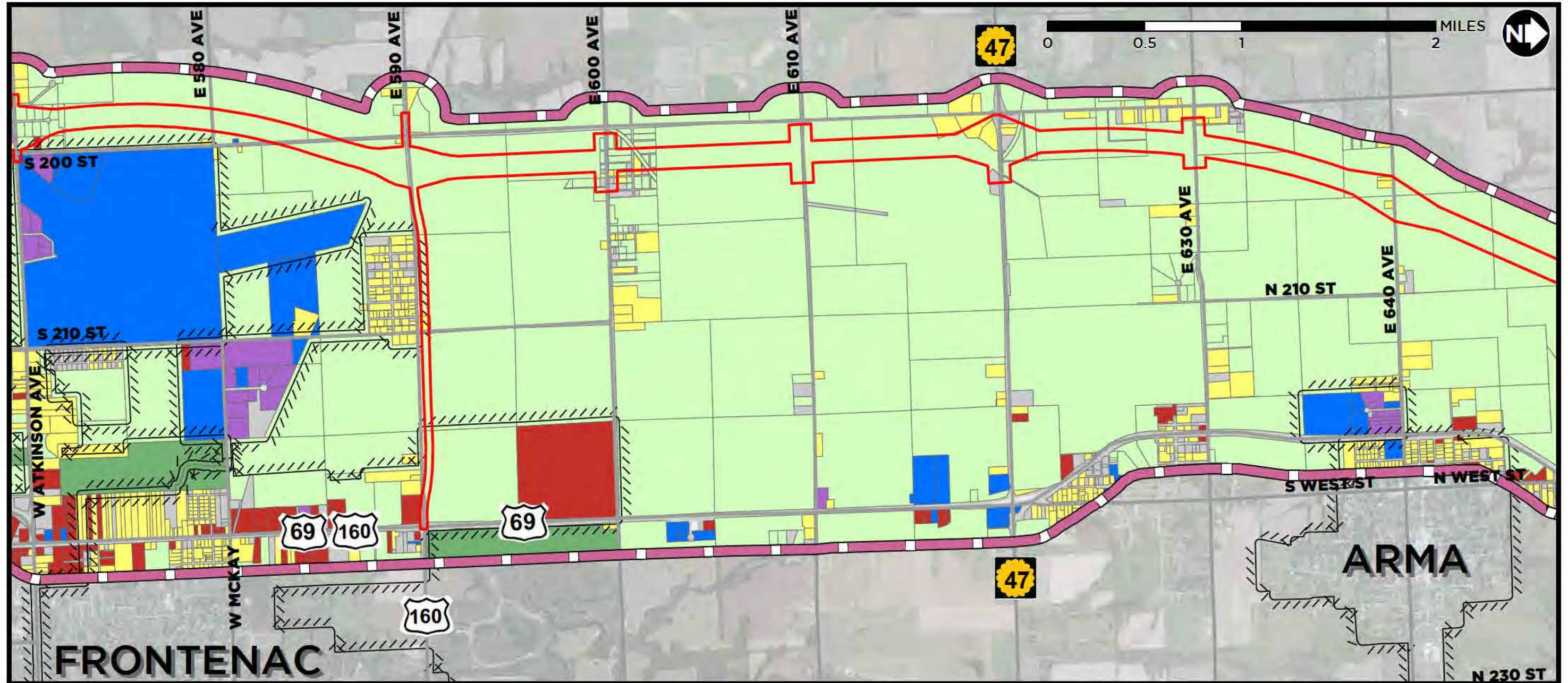


LEGEND

- |  |                      |  |                          |  |                            |
|--|----------------------|--|--------------------------|--|----------------------------|
|  | ENVIRONMENTAL LIMITS |  | AGRICULTURAL/FARMSTEAD   |  | INDUSTRIAL/MANUFACTURING   |
|  | LAND USE STUDY AREA  |  | RESIDENTIAL              |  | GOVERNMENT/INSTITUTION     |
|  | CORPORATE LIMITS     |  | OFFICE/RETAIL            |  | PARK/RECREATION/OPEN SPACE |
|  |                      |  | UTILITIES/COMMUNICATIONS |  | VACANT                     |

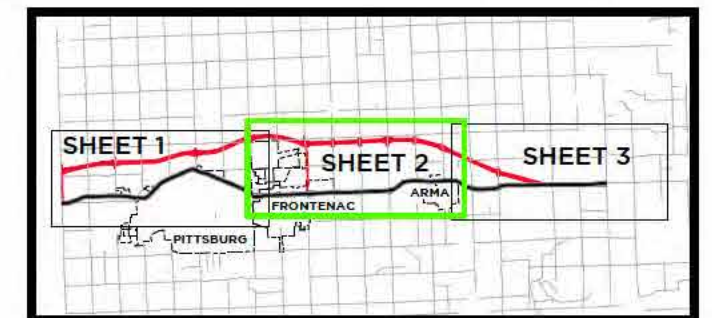




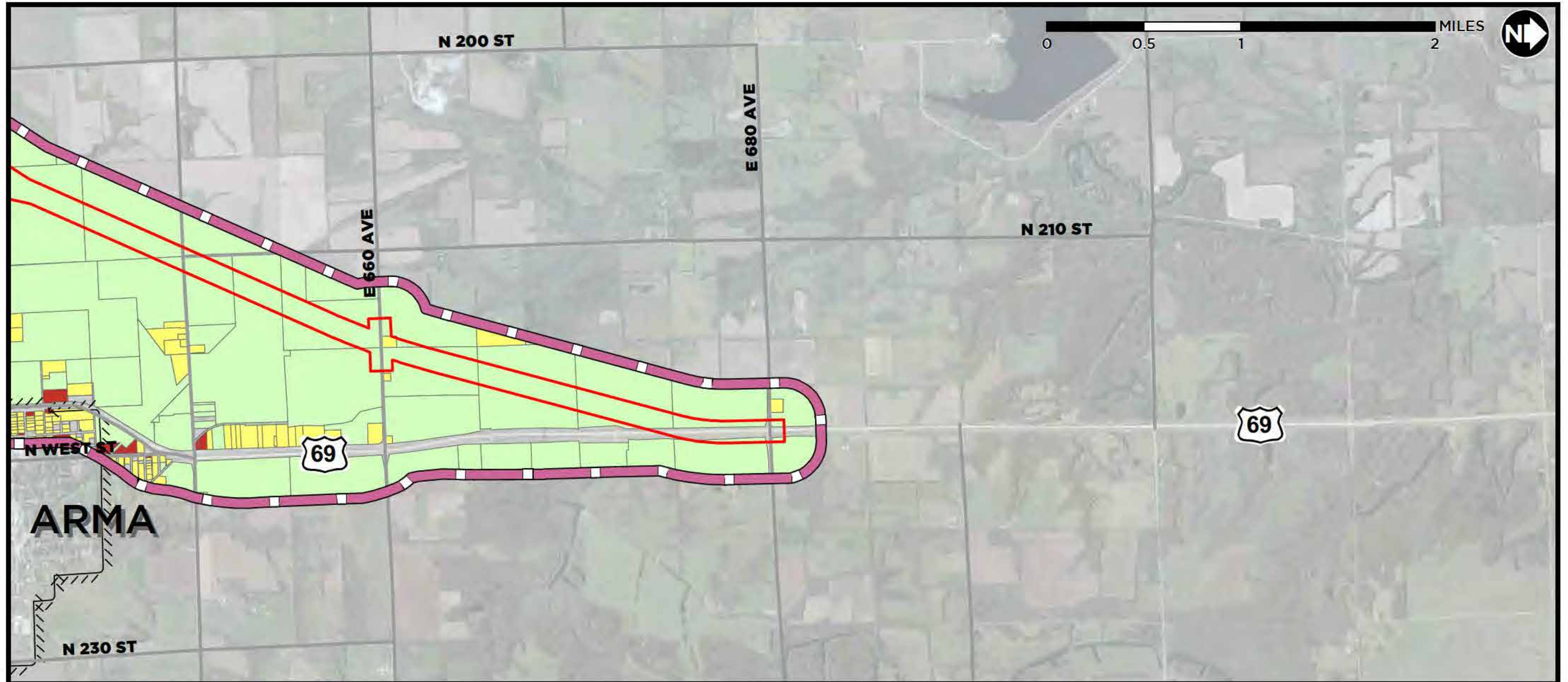


**LEGEND**

- |                      |                          |                            |
|----------------------|--------------------------|----------------------------|
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| LAND USE STUDY AREA  | RESIDENTIAL              | GOVERNMENT/INSTITUTION     |
| CORPORATE LIMITS     | OFFICE/RETAIL            | PARK/RECREATION/OPEN SPACE |
|                      | UTILITIES/COMMUNICATIONS | VACANT                     |







**LEGEND**

- |  |  |  |
|--|--|--|
|  ENVIRONMENTAL LIMITS |  AGRICULTURAL/FARMSTEAD   |  INDUSTRIAL/MANUFACTURING   |
|  LAND USE STUDY AREA  |  RESIDENTIAL              |  GOVERNMENT/INSTITUTION     |
|  CORPORATE LIMITS     |  OFFICE/RETAIL            |  PARK/RECREATION/OPEN SPACE |
|  |  UTILITIES/COMMUNICATIONS |  VACANT                     |

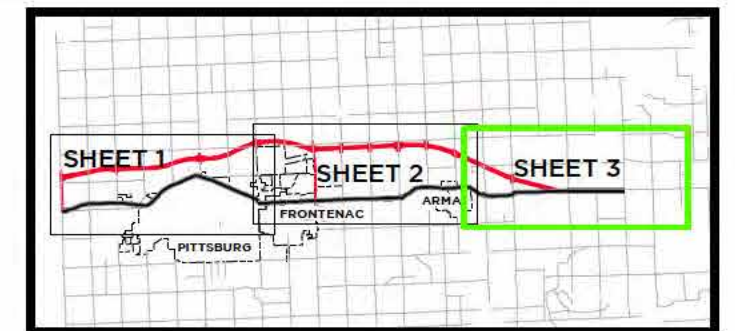




FIGURE 6. RIGHT-OF-WAY IMPACTS



**LEGEND**

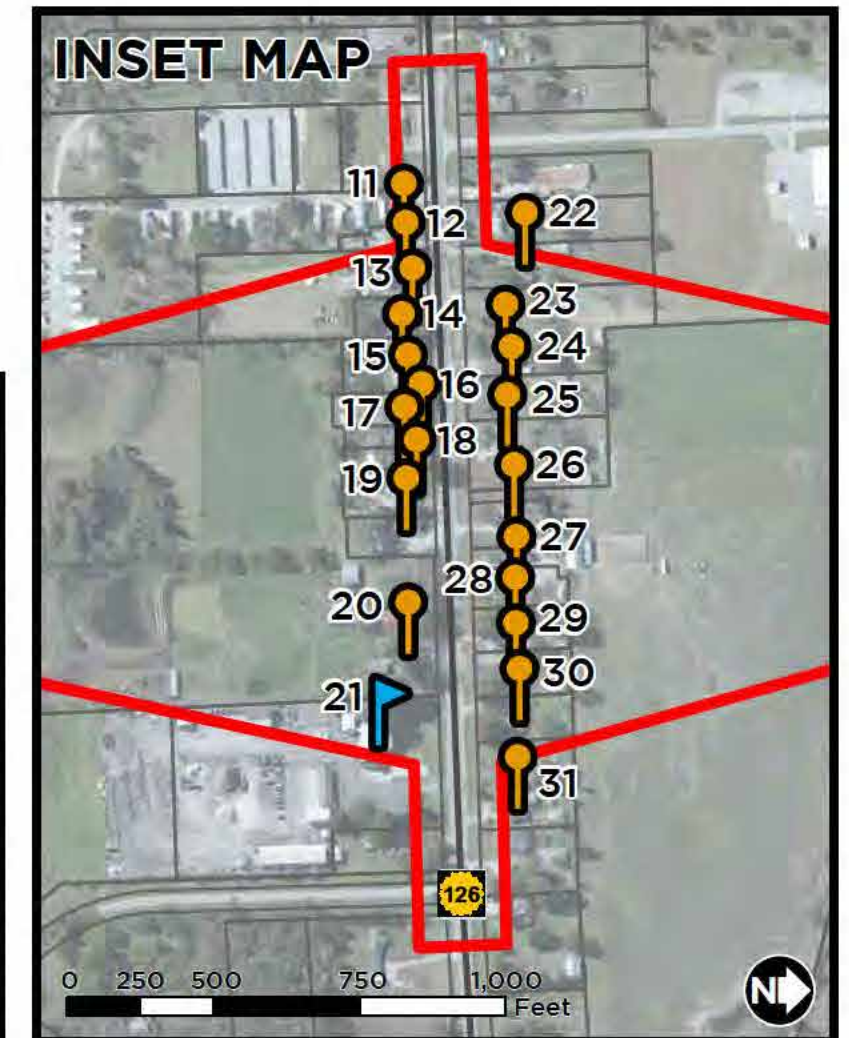
- ENVIRONMENTAL LIMITS
- CORPORATE LIMITS
- PARCELS POTENTIALLY IMPACTED BY RIGHT-OF-WAY ACQUISITION\*

\* THESE PARCELS ARE INTERSECTED BY THE ENVIRONMENTAL LIMITS, WHICH INDICATES RIGHT-OF-WAY MAY BE ACQUIRED FROM THEM.

**POTENTIAL STRUCTURE ACQUISITION\*\*  
(MAP NUMBERS CORRESPOND WITH TABLE BELOW)**

- 📍 RESIDENTIAL
- 🏢 COMMERCIAL/INDUSTRIAL
- 🏛️ GOVERNMENT

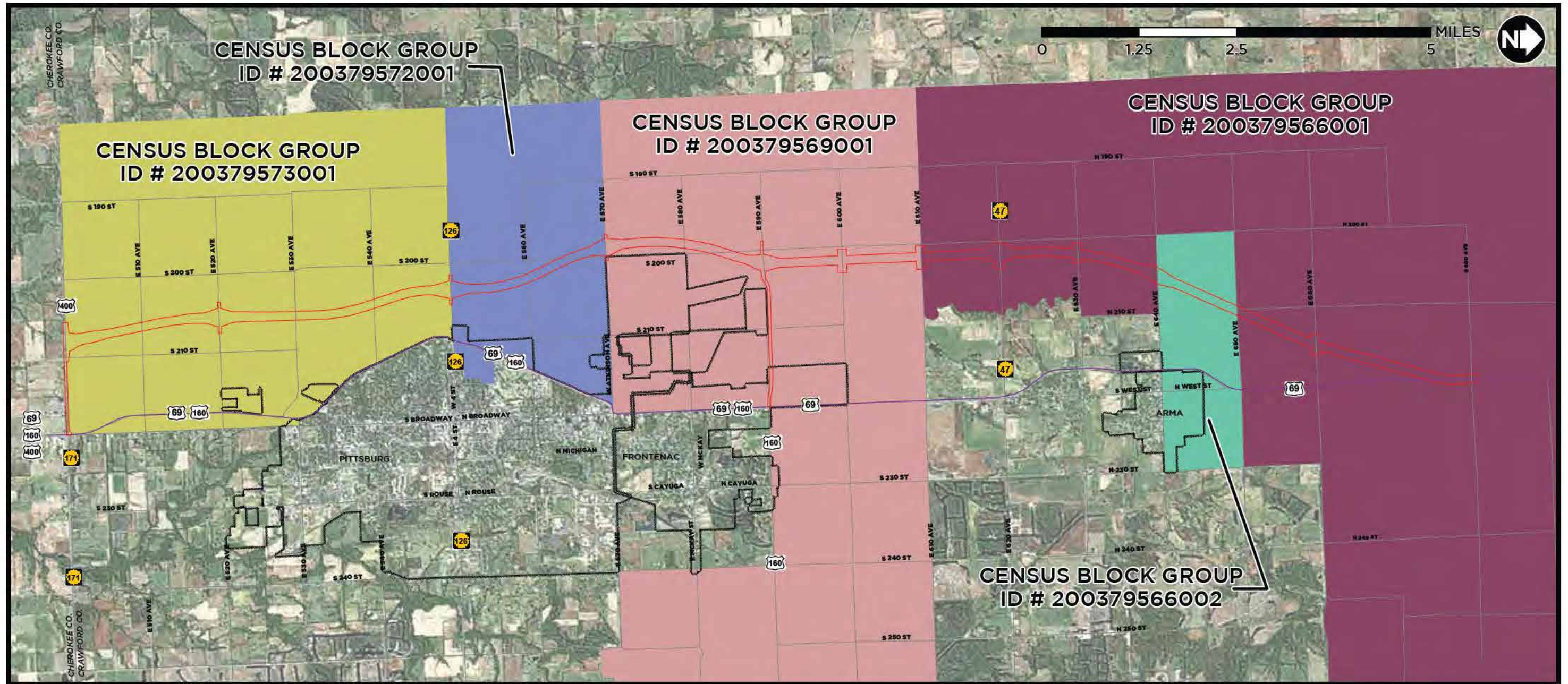
\*\* THESE ARE PRIMARY STRUCTURES THAT MAY BE ACQUIRED FOR RIGHT-OF-WAY. ACCESSORY STRUCTURES, SUCH AS SHEDS AND BARN, ARE NOT SHOWN.



**POTENTIAL STRUCTURE ACQUISITION**

MAP ID #	OWNER	STRUCTURE TYPE	MAP ID #	OWNER	STRUCTURE TYPE
1	MUSICK, ROBERT W. & PAMELA ANN	RESIDENTIAL	25	HICKMAN, HERBERT H. & SHIRLEY	RESIDENTIAL
2	SELLS, TOMMY JOE & KATHRYN L.	RESIDENTIAL	26	GILMORE, THOMAS R. & CATHERINE A.	RESIDENTIAL
3	SELLS, TOMMY JOE & KATHRYN L. (AJL Machine Shop and Welding)	COMMERCIAL/INDUSTRIAL	27	CUDNEY, CHARLES A. & PATRICIA	RESIDENTIAL
4	BROWN, CLAYTON MARK & MELISSA LOUISE	RESIDENTIAL	28	GUDDE, ERIC L. & ANNA B.	RESIDENTIAL
5	JAMESON, BRUCE D. & TERESA G.	RESIDENTIAL	29	GILMORE, THOMAS J. & REAGAN, MELISSA K.	RESIDENTIAL
6	SPIERS, JONATHAN & SANDS, MARLA K.	RESIDENTIAL	30	SMITH, RICHARD D. & MARY C.	RESIDENTIAL
7	WILLIAMS, KARLA	RESIDENTIAL	31	HILDEBRANDT, GWENDOLA	RESIDENTIAL
8	CUMMINS, PERRY E. & LAUGHLIN, LINDA	RESIDENTIAL	32	KUBLER, KERRY	RESIDENTIAL
9	MORANDO, JOSEPH W. & BETH M.	RESIDENTIAL	33	LOWRIE, JERROD S.	RESIDENTIAL
10	STOCKER, EMILY LU	RESIDENTIAL	34	JAYNES, SHIRLEY	RESIDENTIAL
11	MERRILL, HANNAH N.	RESIDENTIAL	35	JAYNES, SHIRLEY (Steve Gepford Trucking)	COMMERCIAL/INDUSTRIAL
12	SEIFERT, TIFFANY A.	RESIDENTIAL	36	ELNICKI, BRICE E.	RESIDENTIAL
13	RION, AARON K.	RESIDENTIAL	37	SAKET, M. CURTIS & JANIS E.	RESIDENTIAL
14	BLESSANT, ELIZABETH A. & NICHOLSON, WILLIAM	RESIDENTIAL	38	STARKEY, DORA L.	RESIDENTIAL
15	JONES, GREGORY	RESIDENTIAL	39	BLYTHE, SCOTT A. & CHRISTINE L.	RESIDENTIAL
16	GILMORE, DANIEL A.	RESIDENTIAL	40	PINGREE, JAMES E.	RESIDENTIAL
17	LEGRAND, JACK H. & MARY A.	RESIDENTIAL	41	RAKESTRAW, KENNETH ROBERT & KAREN S.	RESIDENTIAL
18	ROBINSON, DAVID E. & REBECCA P.	RESIDENTIAL	42	THOMASON, BRIAN L. & KRISTA D.	RESIDENTIAL
19	VANBECELAERE, ERIC A. & REBECCA A.	RESIDENTIAL	43	SMITH, KENNETH L. & LEROY, CYNTHIA J.	RESIDENTIAL
20	FANKHAUSER, KEITH RONALD & KAREN LYNN	RESIDENTIAL	44	MARSHALL, BRIAN KEITH & BRENDA KAY	RESIDENTIAL
21	STATE OF KANSAS (Department of Transportation)	GOVERNMENT	45	KUHEL, TIMMY JOE & JILL M.	RESIDENTIAL
22	WACHTER, PAUL E. JR. & TERESA A.	RESIDENTIAL	46	DEGRUSON, WALT & RITA	RESIDENTIAL
23	GILMORE, THOMAS R. & CATHERINE A.	RESIDENTIAL	47	KING, CHRISTOPHER L. & JOSIE A.	RESIDENTIAL
24	PENTOLA, CATHERINE F.	RESIDENTIAL	-	-	-

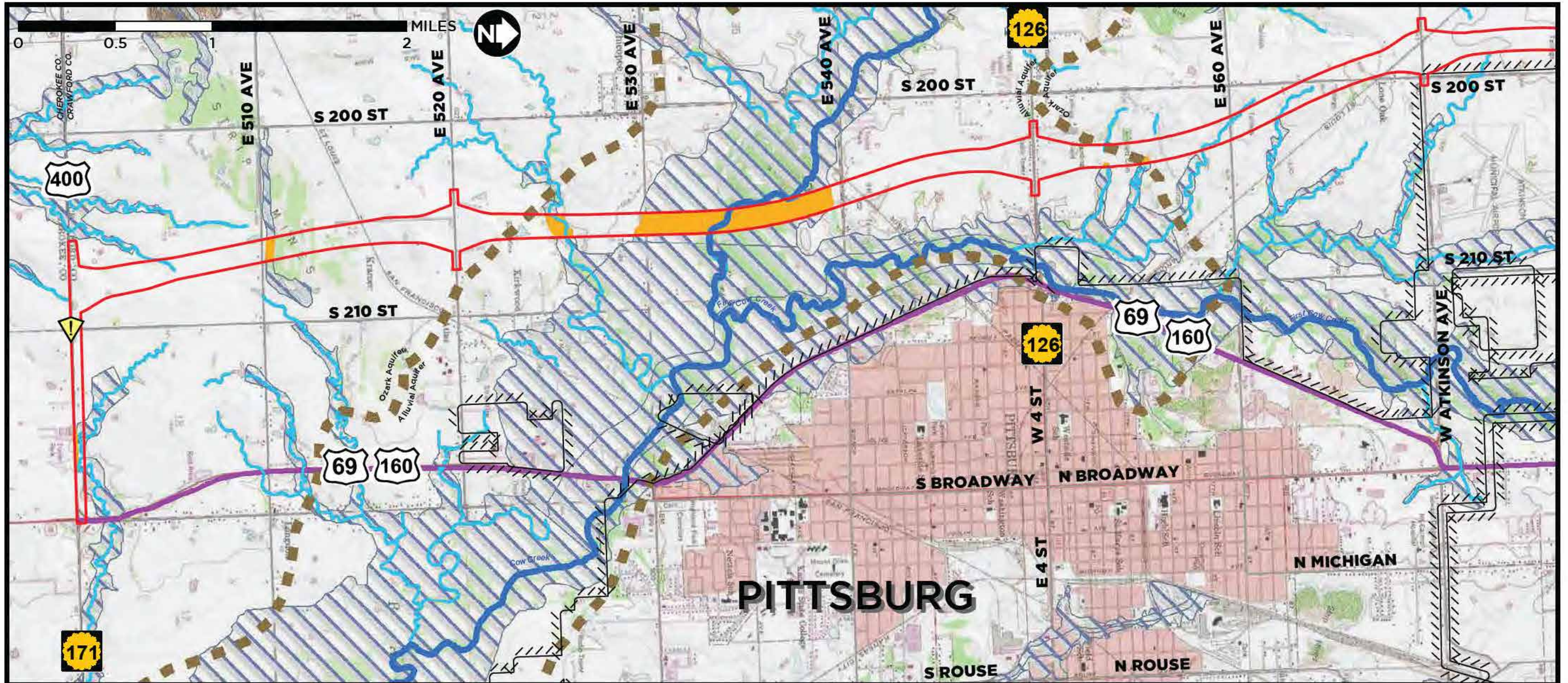




**LEGEND**

-  ENVIRONMENTAL LIMITS (PREFERRED ALTERNATIVE)
-  EXISTING US-69 ALIGNMENT
-  CORPORATE LIMITS
-  POVERTY 6.53%; MINORITY 5.60%
-  POVERTY 14.61%; MINORITY 5.80%
-  POVERTY 5.22%; MINORITY 3.28%
-  POVERTY 10.07%; MINORITY 1.66%
-  POVERTY 17.42%; MINORITY 3.47% (POVERTY RATE GREATER THAN COUNTY TOTAL OF 15.95%)

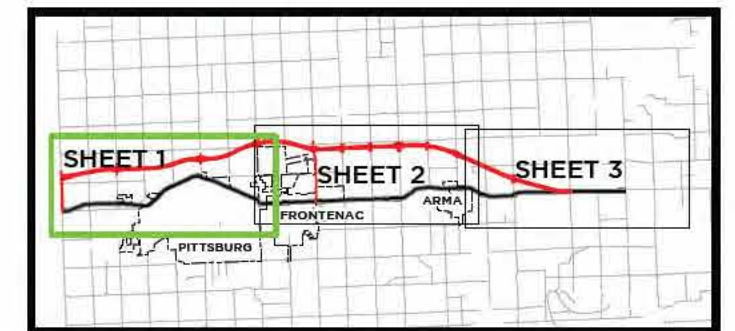




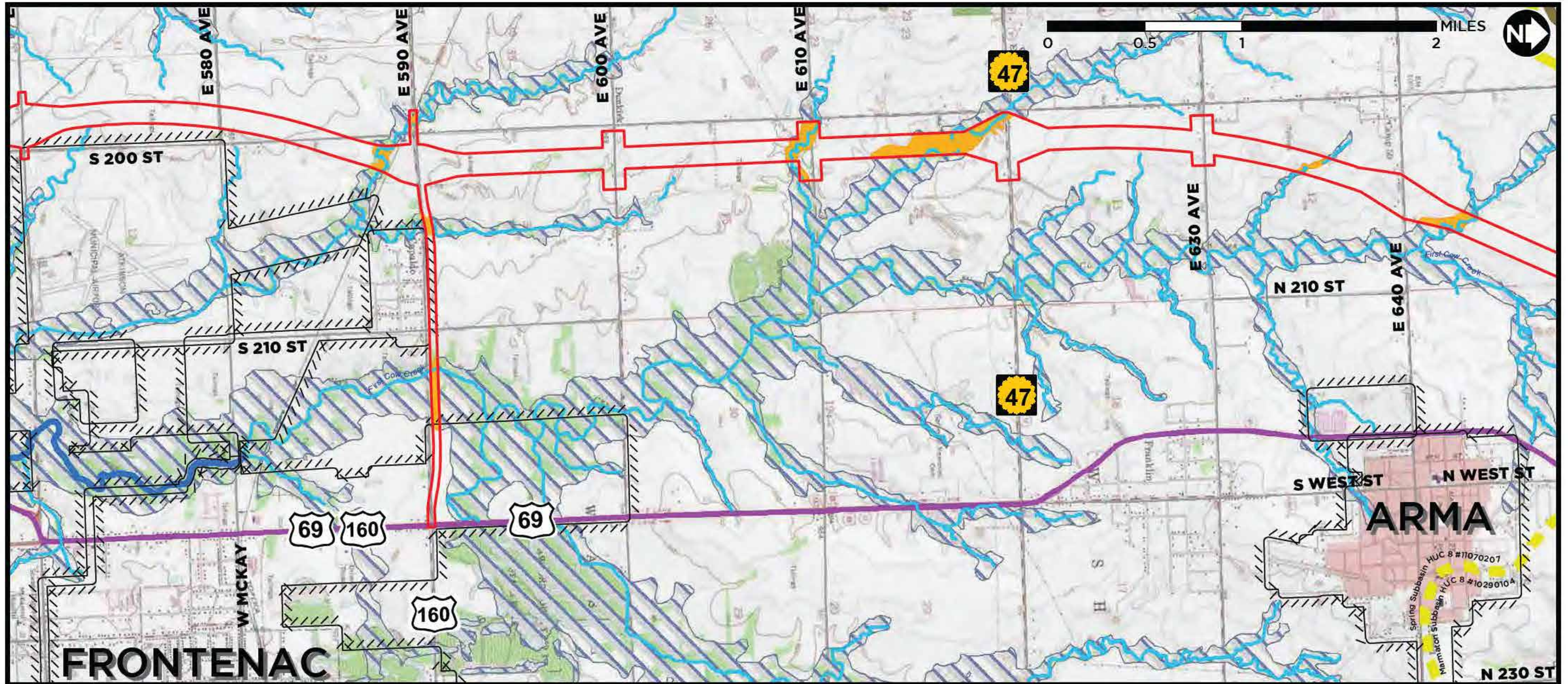
Base Map Credit: © 2009 National Geographic Society, i-cubed; Seamless, scanned images of USGS paper topographic maps.

**LEGEND**

- ENVIRONMENTAL LIMITS
- CORPORATE LIMITS
- EXISTING US-69 ALIGNMENT
- ~ RIVERS/STREAMS
- DRAINAGE BASIN BOUNDARY (HUC 8)
- AQUIFER BOUNDARY
- 100 YEAR FLOODPLAIN (DFIRM ZONES A & AE)
- IMPACTED FLOODPLAIN
- ▲ POINT SOURCE OF POLLUTION (BRADFORD ACRES)
- ~ TMDL IMPAIRED WATERS



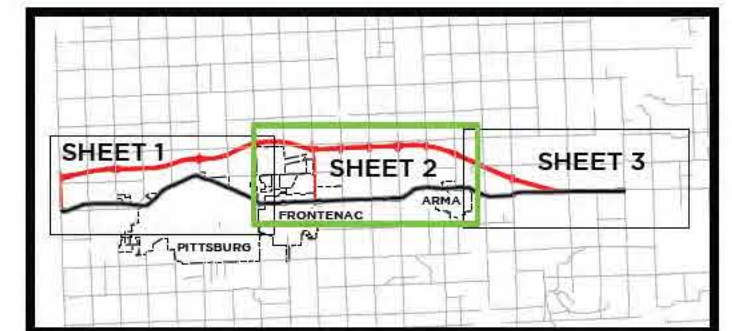




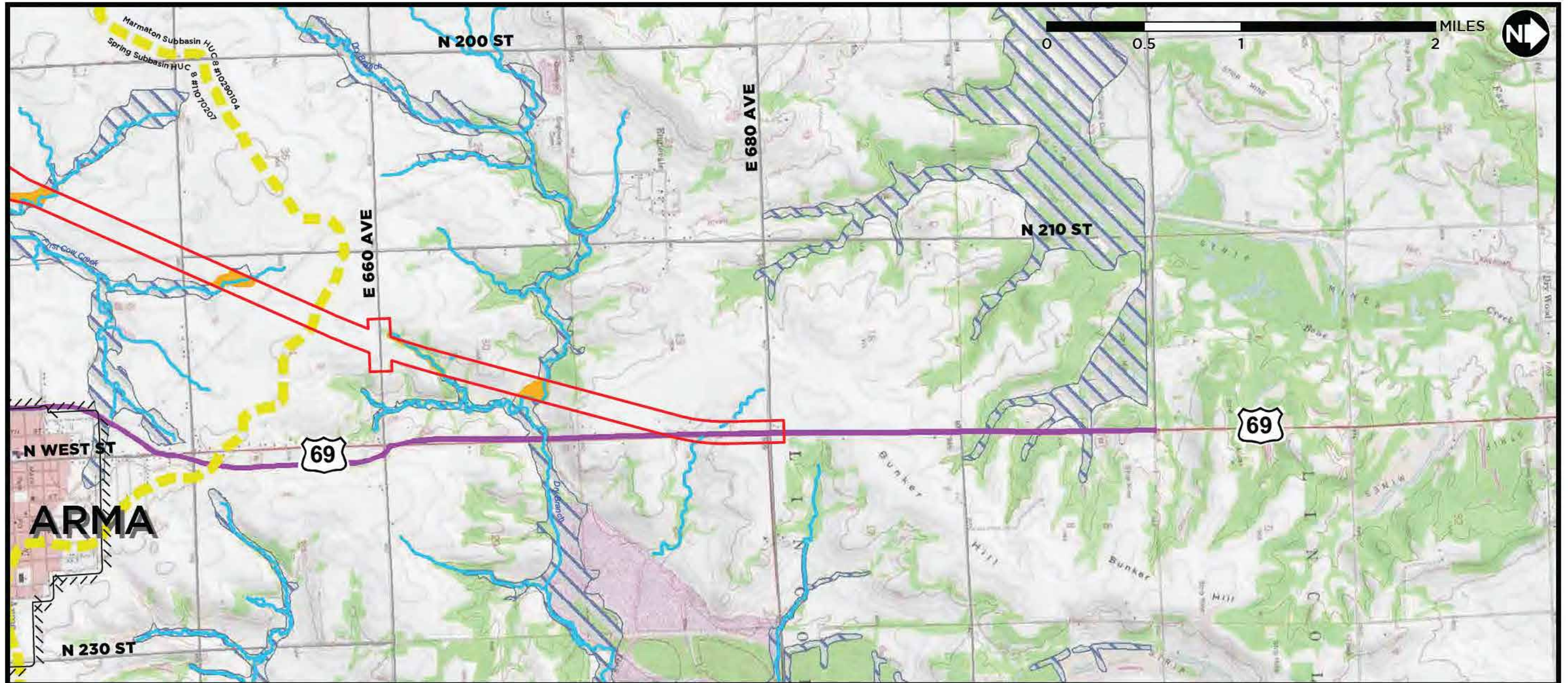
Base Map Credit: © 2009 National Geographic Society, i-cubed; Seamless, scanned images of USGS paper topographic maps.

**LEGEND**

- ENVIRONMENTAL LIMITS
- CORPORATE LIMITS
- EXISTING US-69 ALIGNMENT
- RIVERS/STREAMS
- DRAINAGE BASIN BOUNDARY (HUC 8)
- AQUIFER BOUNDARY
- 100 YEAR FLOODPLAIN (DFIRM ZONES A & AE)
- IMPACTED FLOODPLAIN
- ! POINT SOURCE OF POLLUTION (BRADFORD ACRES)
- TMDL IMPAIRED WATERS



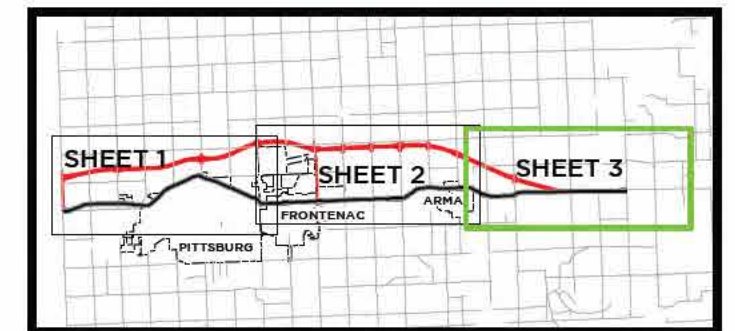




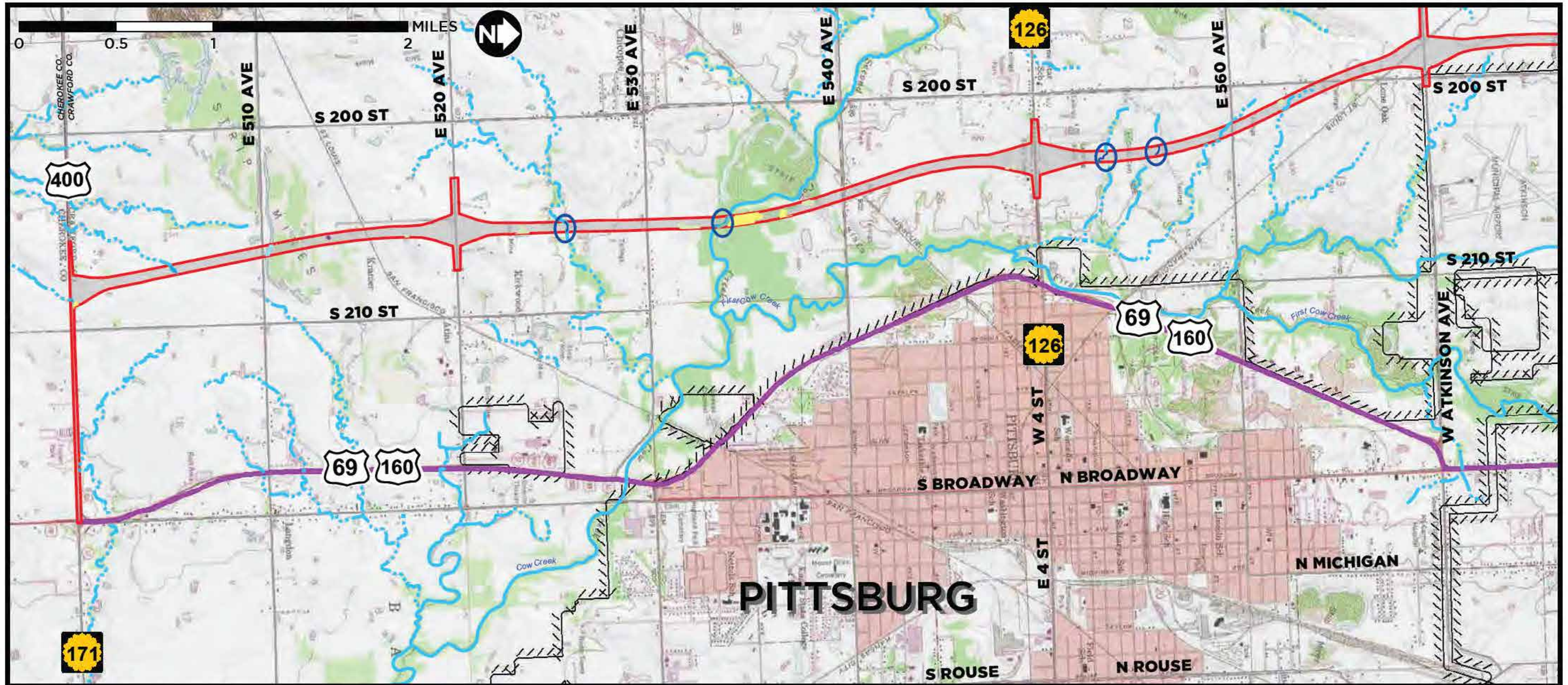
Base Map Credit: © 2009 National Geographic Society, i-cubed; Seamless, scanned images of USGS paper topographic maps.

**LEGEND**

- ENVIRONMENTAL LIMITS
- CORPORATE LIMITS
- EXISTING US-69 ALIGNMENT
- RIVERS/STREAMS
- DRAINAGE BASIN BOUNDARY (HUC 8)
- AQUIFER BOUNDARY
- 100 YEAR FLOODPLAIN (DFIRM ZONES A & AE)
- IMPACTED FLOODPLAIN
- POINT SOURCE OF POLLUTION (BRADFORD ACRES)
- TMDL IMPAIRED WATERS







Base Map Credit: © 2009 National Geographic Society, i-cubed; Seamless, scanned images of USGS paper topographic maps.

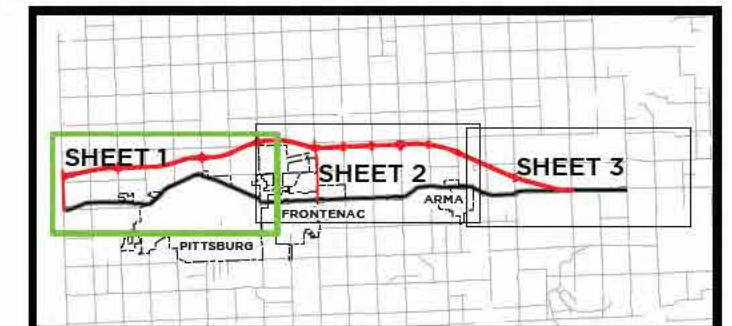
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- CORPORATE LIMITS
- EXISTING US-69 ALIGNMENT

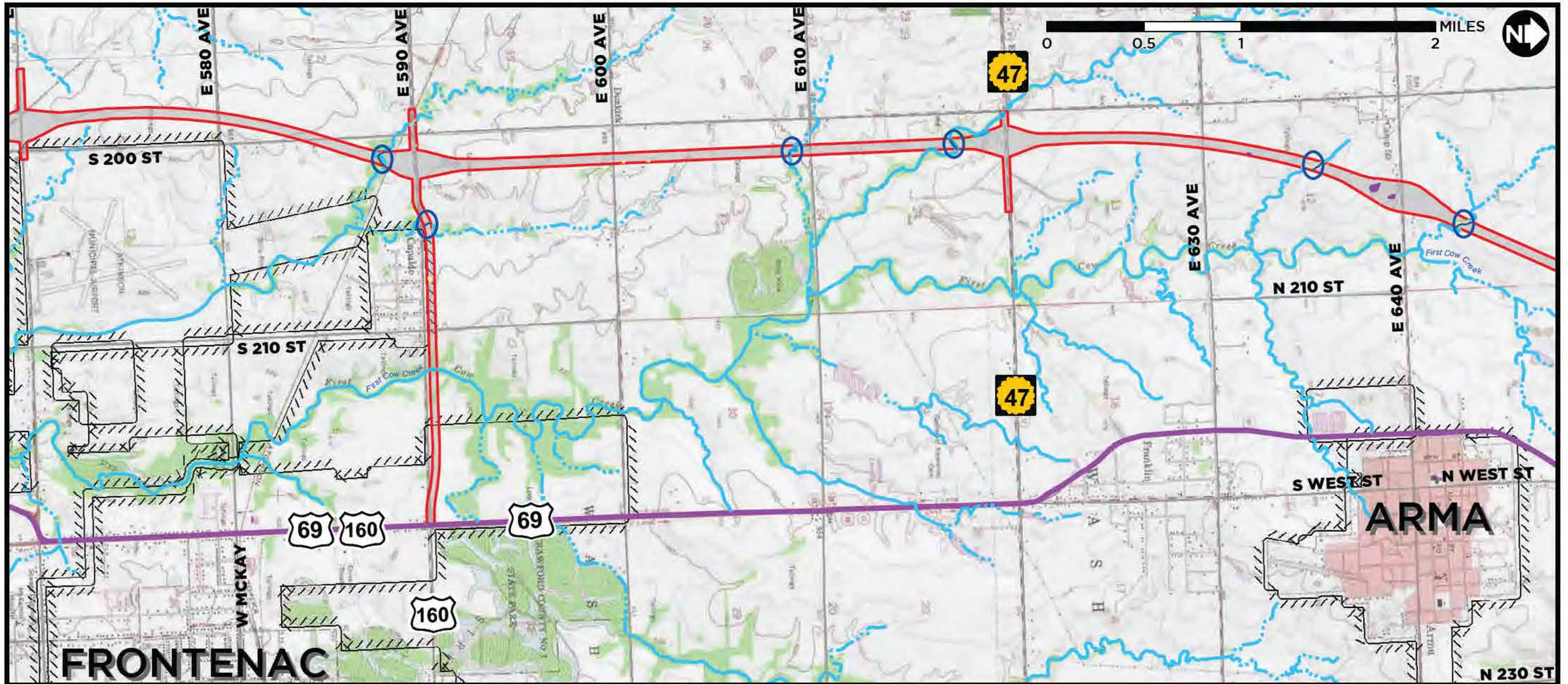
- PERENNIAL STREAMS
- INTERMITTENT STREAMS
- IMPACTED STREAM SEGMENTS
- PROPOSED STREAM IMPACT LOCATION

**Impacted NWI Wetlands**

- |                        |                                  |
|------------------------|----------------------------------|
| RIVERINE               | PALUSTRINE FORESTED              |
| LACUSTRINE             | PALUSTRINE SCRUB-SHRUB           |
| PALUSTRINE AQUATIC BED | PALUSTRINE UNCONSOLIDATED BOTTOM |
| PALUSTRINE EMERGENT    |                                  |







Base Map Credit: © 2009 National Geographic Society, i-cubed; Seamless, scanned images of USGS paper topographic maps.

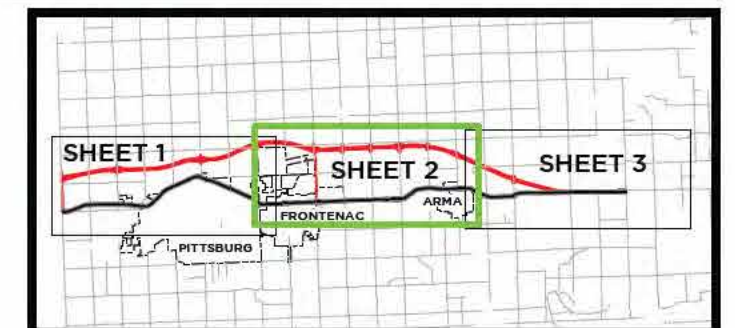
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- CORPORATE LIMITS
- EXISTING US-69 ALIGNMENT

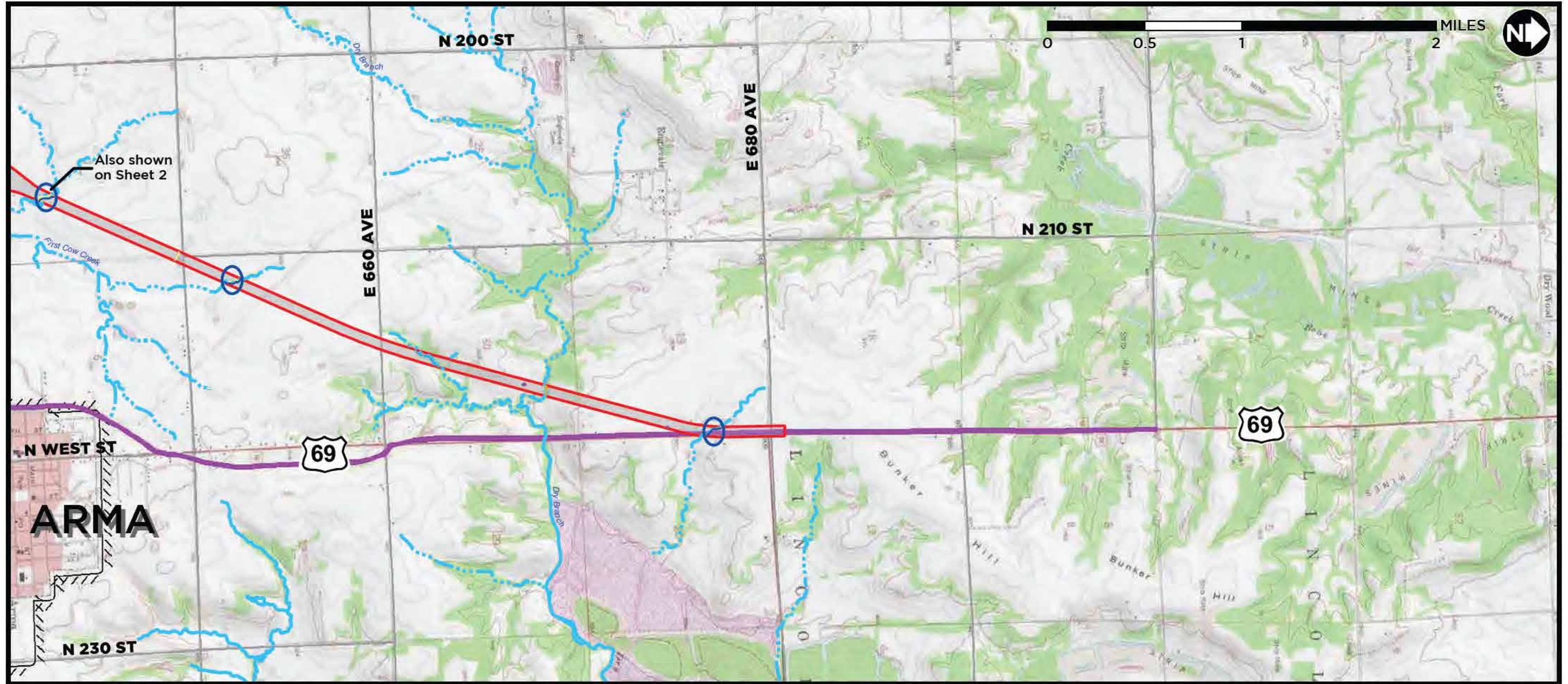
- PERENNIAL STREAMS
- INTERMITTENT STREAMS
- IMPACTED STREAM SEGMENTS
- PROPOSED STREAM IMPACT LOCATION

**Impacted NWI Wetlands**

- RIVERINE
- LACUSTRINE
- PALUSTRINE AQUATIC BED
- PALUSTRINE EMERGENT
- PALUSTRINE FORESTED
- PALUSTRINE SCRUB-SHRUB
- PALUSTRINE UNCONSOLIDATED BOTTOM







Base Map Credit: © 2009 National Geographic Society, i-cubed; Seamless, scanned images of USGS paper topographic maps.

**LEGEND**

- PRELIMINARY RIGHT-OF-WAY
- CORPORATE LIMITS
- EXISTING US-69 ALIGNMENT

- PERENNIAL STREAMS
- INTERMITTENT STREAMS
- IMPACTED STREAM SEGMENTS
- PROPOSED STREAM IMPACT LOCATION

**Impacted NWI Wetlands**

- |                        |                                  |
|------------------------|----------------------------------|
| RIVERINE               | PALUSTRINE FORESTED              |
| LACUSTRINE             | PALUSTRINE SCRUB-SHRUB           |
| PALUSTRINE AQUATIC BED | PALUSTRINE UNCONSOLIDATED BOTTOM |
| PALUSTRINE EMERGENT    |                                  |

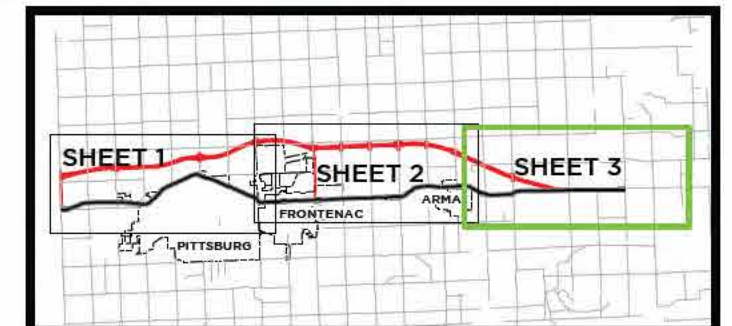
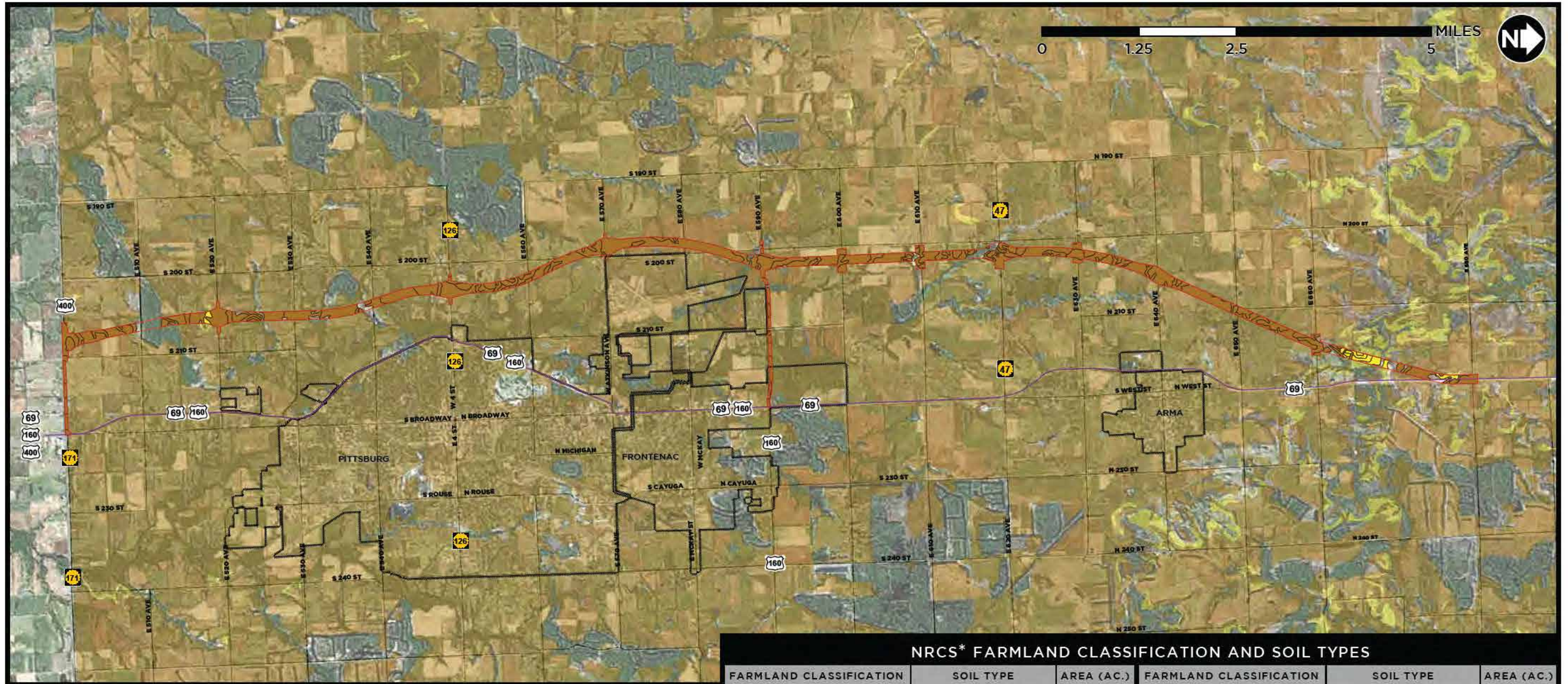




FIGURE 10. PRIME FARMLAND IMPACTS AND AREA SOILS



**LEGEND**

- ENVIRONMENTAL LIMITS (PREFERRED ALTERNATIVE)
- EXISTING US-69 ALIGNMENT
- CORPORATE LIMITS
- PRIME FARMLAND
- FARMLAND OF STATEWIDE IMPORTANCE
- NO FARMLAND CLASSIFICATION PER NRCS

NRCS* FARMLAND CLASSIFICATION AND SOIL TYPES					
FARMLAND CLASSIFICATION	SOIL TYPE	AREA (AC.)	FARMLAND CLASSIFICATION	SOIL TYPE	AREA (AC.)
PRIME	Bates loam	34.671	STATEWIDE IMPORTANCE	Bates loam, eroded	22.408
	Brazilton silty clay loam	24.596		Ringo silty clay	31.665
	Cherokee silt loam	133.561		<b>SUBTOTAL</b>	<b>54.073</b>
	Dennis silt loam	151.256	NONE	Bolivar-Hector complex	6.316
	Parsons silt loam	831.305		Borrow pits	0.361
	Wagstaff silty clay loam	57.446		Clareson stony silty clay loam	22.634
	Wagstaff-Clareson complex	6.930		Kanima silty clay loam	52.842
	Zaar silty clay	20.941		Radley-Hepler silt loam	40.867
	McCune silt loam	36.317		Water/Unclassified	0.763
	Hepler silt loam	162.861		<b>SUBTOTAL</b>	<b>123.784</b>
<b>SUBTOTAL</b>		<b>1,459.883</b>	<b>TOTAL AREA (AC.)</b>		<b>1,637.991</b>

\* U.S. DEPARTMENT OF AGRICULTURE'S NATIONAL RESOURCES CONSERVATION SERVICE



**APPENDIX B. KDOT ENVIRONMENTAL REVIEW**

Kansas Department of Transportation

MEMO TO: Steve Rockers, P.E., Road Design Leader  
State Road Office

FROM: Scott P. Vogel, Chief *SV*  
Environmental Services Section

DATE: January 5, 2011

SUBJECT: 69-19 K-7290-03  
Preliminary Environmental Review  
Crawford County

The Kansas Department of Transportation (KDOT) Environmental Services Section (ESS) initiated preliminary environmental review of the referenced project based on the Preferred Concept map received December 5, 2008. The Preferred Concept is a western bypass of the cities of Arma, Franklin, and Pittsburgh.

This area was the subject of an Advanced Preliminary Engineering report submitted by ESS in January 1999. The 1999 study evaluated a western and eastern bypass, as well as existing US-69. This study utilized existing published information in addition to a field survey of potential hazardous waste sites and all potentially historic properties within the study area. The 1999 western bypass (Figure 1) is similar, but not identical, to the current Preferred Concept.

In October, 2006 the ESS was requested to evaluate the environmental impacts related to the relocation of a proposed interchange at 520 Avenue to 530 Avenue under project number K-7290-02. This proposed interchange relocation was located on a segment of the bypass that had been shifted eastward and was not included in the 1999 study (Figure 2). The November 2006 environmental evaluation was based on existing published data only. It was noted that field surveys would be needed for archeological and historical resources if this alternative was selected.

In December 2008 ESS received the US-69 Corridor Preferred Concept and initiated field investigations and agency coordination for the study corridor (Figure 3).

On June 16, 2010 ESS was provided with a map showing a new alternative for the southern end of the project (Figure 4). This single alternative split into two alternatives at the Crawford/Cherokee County Line. ESS was requested to evaluate the Crawford County segment only. The Cherokee County portion of the project would be evaluated under a separate project. In a June 29, 2010 meeting with the State Archeologist a new map was presented which split the two alternatives further northward into Crawford County (Figure 5). It was decided to also evaluate the Cherokee County portion of the southern realignment to ensure there were no "show stoppers" in this area. Field investigations were initiated for both alternatives.

On July 20, 2010 a design file was provided to ESS from the project consultant. This file consisted of roadway centerlines and pavement edges. No study area was defined but comparing this design file with the 2008 US-69 Corridor Preferred Concept revealed several areas of proposed work outside of the original study corridor (Figure 6).

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January 5, 2011  
Page 2

On July 20, 2010 ESS met with the design squad to discuss these differences. At this time ESS was also informed that the project study corridor had been modified again, this time at the northern end of the project (Figure 7). Field investigations were initiated for the new modification.

In an email from the project consultant, ESS was requested to incorporate the Cherokee County portion of the US-400 Interchange. The consultant indicated that at this time they were unsure how the US-69/US-400 connection would be made and work may be included in Cherokee County. The project consultant also indicated that the side road work extending outside the 2008 study corridor was generalized information and did not need to be evaluated unless further modifications to the alignment were made.

The following tasks have been evaluated using data from the previous historic resources survey, recent archeology and historic resources surveys, and current field investigations for wildlife and wetland resources.

**NOISE:** The project concept meets the criteria of a Type I project, which would require traffic noise analysis. Design details are not available and the project is not funded for construction. At this time KDOT does not recommend any noise abatement features with this project. However, when the project is funded for construction, design details and current land use along the alignment will be utilized to conduct the project traffic noise analysis. The traffic noise analysis will be conducted in accordance with 23 CFR 772, "Procedures for Highway Noise and Construction Noise" and the KDOT "Policy Statement on Highway Noise Abatement".

Appendix A discusses KDOT's traffic noise policy and includes a preliminary evaluation of traffic noise. The distance of the 66 dB noise level from the centerline of the nearest proposed traffic lane is reported. Any residential receptors falling within this distance may be impacted by traffic noise.

**ARCHAEOLOGY:** Through the course of investigations five archeology sites underwent Phase III investigations (Figure 8). One archeological site (historical) was determined eligible for the National Register of Historic Places (NRHP). A Memorandum of Agreement will be developed and implemented to finalize section 106 requirements. Appendix B discusses the findings.

**HISTORIC:** The project is considered cleared of all historic (standing structures) concerns. Through the course of investigations four properties potentially eligible for the NRHP were identified within the Area of Potential Effect (Figure 9). Based on the location of the study corridor in relation to the properties, the State Historic Preservation Officer determined that the project would not adversely affect any of the properties. It was determined that even if the alignment were to be constructed at the extreme edge of the study corridor it would not result in an adverse effect. Section 106 of the National Historic Preservation Act has been completed.

If there are any changes in the study corridor, eligibility determinations would be required and, if eligible, determinations of effect for each property would be evaluated. Appendix C discusses the findings.

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January 5, 2011  
Page 3

**WETLANDS:** Figure 10 illustrates the locations of NWI mapped wetlands within the project corridor. National Wetlands Inventory maps were developed by the US Fish & Wildlife Service (USFWS) using high altitude aerial photography. The NWI maps use the Cowardin classification system which includes wetlands as well as deepwater habitats such as ponds and strip pits. National Wetlands Inventory mapped wetlands may or may not qualify as US Army Corps of Engineers (COE) jurisdictional wetlands when wetland determinations are performed according to the methods described in the September 2010 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region (Version 2).

The following types of Cowardin classification wetlands and deepwater habitats are shown to occur within the project corridor: PEMA - Palustrine emergent temporarily flooded, PEMC - Palustrine emergent seasonally flooded, PEMAH - Palustrine emergent temporarily flooded diked/impounded, PEMCh - Palustrine emergent seasonally flooded diked/impounded, PEMFh - Palustrine emergent semi permanently flooded diked/impounded, PUBFh - Palustrine unconsolidated bottom semi permanently flooded diked/impounded, PABF - Palustrine aquatic bed semi permanently flooded, PABFh - Palustrine aquatic bed semi permanently flooded diked/impounded, PFOA - Palustrine forested temporarily flooded, R4SBC -Riverine intermittent streambed seasonally flooded, LIUBHx - Lacustrine limnetic unconsolidated bottom permanently flooded excavated.

On August 3, 2010 a field survey was conducted by Environmental Services staff to compare the NWI maps to actual conditions. The field survey confirmed the presence of many NWI mapped wetlands, however, due to many of the NWI mapped wetlands being located away from existing roads, and trees blocking views, several NWI mapped wetlands could not be observed. It was concluded the NWI maps are generally accurate in identifying the locations of wetlands and other waters.

The project corridor is 600 feet in width and the final four lane right-of-way will be 300 feet in width. Not all wetlands within the corridor will be impacted. It will be possible to identify wetland impacts when plans are developed and practicable alternatives to avoid wetlands are further examined.

Fill placed in COE jurisdictional wetlands requires Section 404 permits and mitigation. The Kansas Department of Transportation (KDOT) will obtain the necessary Section 404 permits to construct the project.

**STREAMS:** Named streams in Crawford County crossed by the corridor include Dry Branch Cox Creek, First Cow Creek, and Second Cow Creek. Dry Branch Cox Creek is crossed in the NE ¼ Sec.30-T28S-R25E. Dry Branch Cox Creek is in the Marais des Cygnes River Basin, Marmaton sub-basin, HUC 10290104. Dry Branch Cox Creek is not classified in the Kansas Department of Health & Environment (KDHE), February 12, 2009, Kansas Surface Water Register. Segment 27 of First Cow Creek is crossed in the SW ¼ Sec.31-T28S-R25E and, and in the SE ¼ Sec. 31-T29S-R25E at Capaldo Road. Segment 16 of Second Cow Creek is crossed in the SE ¼ Sec.36-T30S-R24E. First Cow Creek and Second Cow Creek are in the Neosho River Basin, Spring sub-basin, HUC 11070207. Segment 27 of First Cow Creek and segment 16 of Second Cow Creek are classified as Special Aquatic Life Use Waters (SALU). The Kansas Surface Water Register defines Special Aquatic Life Use Waters as, "Waters that contain combinations of habitat types and indigenous biota not found commonly in the state, or contain representative populations of threatened or endangered species that are listed in rules and



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regulations promulgated by the Kansas Department of Wildlife & Parks (KDWP) or the USFWS.” The KDHE indicated that First Cow Creek and Second Cow Creek are classified as SALUs due to being important foraging habitat for the state endangered Gray Myotis. The construction of highway crossings over streams classified as SALUs will require Action Permits from the Kansas Department of Wildlife & Parks (KDWP).

In Cherokee County the corridor crosses Brush Creek in the SW ¼ Sec. 30-T31S-R25E. Brush Creek is in the Neosho River Basin, Spring subbasin (HUC 11070207). Segment 26 of Brush Creek is classified as a SALU. The KDHE, who maintains the Kansas Surface Water Register, indicated that although segment 26 of Brush Creek is currently listed as a SALU the stream is not DCH for any threatened or endangered species and KDHE intends to propose to the Environmental Protection Agency a change in the classification to Expected Aquatic Life Use Water (E). Corps of Engineers Nationwide Permit Regional Conditions requires box culverts with three or more cells on E waters to have the opening of the center culvert slightly lower than the adjacent culverts to concentrate low flows for the passage of aquatic organisms.

Fill placed below the ordinary high water mark of COE jurisdictional streams requires Section 404 permits and mitigation of impacts.

In Crawford and Cherokee Counties the Kansas Department of Agriculture, Division of Water Resources (DWR), has jurisdiction over streams having drainage areas in excess of 240 acres. Construction or modification of culverts or bridges, or changes made to the cross sections of DWR jurisdictional stream channels requires Stream Obstructions or Channel Changes permits from the DWR. The DWR requires 50 ft. vegetated buffers on both sides of new stream channels. The KDOT will obtain the required DWR permits to construct the project.

#### **WILDLIFE:**

##### **Federal:**

In Crawford County the USFWS lists the endangered Gray Bat, *Myotis grisescens*, and threatened Mead’s Milkweed, *Asclepias meadii*. The USFWS has not established DCH for either species in Crawford County. Information from the KDWP indicates that Gray Bats inhabit storm sewers in Pittsburg in the daylight hours, and forage around water at night. Mead’s Milkweed may occur in high quality native prairie.

In Cherokee County the USFWS lists the threatened Neosho Madtom, *Noturus placidus*. The USFWS has not established DCH for the Neosho Madtom in Cherokee County. Information from the KDWP indicates the Neosho Madtom is found only in the Cottonwood, Neosho, and Spring Rivers which are not within the project corridor. There will be no impacts to Neosho Madtom habitat.

On November 18, 2009 the KDOT sent project information and a corridor map to USFWS and requested a preliminary review regarding impacts to federally listed species. The KDOT stated that in efforts to assess potential impacts to Mead’s Milkweed, the KDOT is working with the Kansas Biological Survey (KBS) to identify possible Mead’s Milkweed habitat within the corridor. If native grasslands are identified a field survey will be conducted in mid-May to mid-June when the vegetative portion of the plant is most visible. If Mead’s Milkweed is found within the corridor the information would be used in the avoidance and minimization of impacts to Mead’s Milkweed.

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The KDOT received a response from USFWS dated Dec. 16, 2009. The USFWS indicated the project has the potential to impact the Gray Bat and Mead's Milkweed. The USFWS requested to be notified of the results of any surveys for Mead's Milkweed. The USFWS recommended that bat surveys be conducted in any potential Gray Bat habitat including travel corridors and feeding areas. The USFWS requested to be notified of the results of any surveys done for the Gray Bat.

In a telephone conversation on Apr. 8, 2010 the KDOT and USFWS agreed to resume Gray Bat Section 7 discussions when plans become available. At that time any potential impacts to Gray Bat habitat can be assessed. If impacts to Gray Bat habitat occur potential mitigation discussed by USFWS included installing taller light poles where stream corridors and the highway intersect to reduce the possibility of bat/vehicle collisions, or tree plantings along stream corridors.

In May 2010 the KBS surveyed the corridor for the presence of Mead's Milkweed. Six potentially suitable grasslands were observed and no Mead's Milkweed was found. The KBS indicated most of these grasslands are of the Hardpan Prairie type. The KBS has not previously found Mead's Milkweed on Hardpan Prairie in Crawford or Cherokee County.

In July 2010 the north and south ends of the corridor were re-located. The KBS Mead's Milkweed survey occurred prior to these changes so these new areas were not included in the May 2010 survey. The KBS plans to survey the new areas in the spring of 2011 and 2012.

Following consultation with USFWS on July 21, 2010, KDOT will contract with KBS to survey the grassland habitats for another two years to verify the results of the initial survey. If Mead's Milkweed is not found by the end of the survey period, USFWS indicated that is sufficient evidence the federally threatened plant is not present.

**State:**

In Crawford County the KDWP lists the endangered American Burying Beetle, *Nicrophorus americanus*, threatened Broadhead Skink, *Eumeces laticeps*, threatened Common Map Turtle, *Graptemys geographica*, threatened Eastern Newt, *Notophthalmus viridescens louisianensis*, threatened Eastern Spotted Skunk, *Spilogale putorius*, endangered Eskimo Curlew, *Numenius borealis*, endangered Gray Myotis, *Myotis grisescens*, threatened Green Frog, *Rana clamitans melanota*, endangered Least Tern, *Sterna antillarum*, threatened Piping Plover, *Charadrius melodus*, threatened Redbelly Snake, *Storeria occipitomauculata*, threatened Snowy Plover, *Charadrius alexandrinus*, and threatened Spring Peeper, *Pseudacris crucifer*.

In Crawford County the KDWP has established DCH for the Broadhead Skink, Gray Myotis, Redbelly Snake, and Spring Peeper. Species with potential DCH within the project corridor include the Broadhead Skink, Gray Myotis, Redbelly Snake, and Spring Peeper.

The KDWP describes Broadhead Skink DCH as: "All stands of mature oak in Bourbon, Crawford, Linn, and Miami Counties, and stands of suitable timber anywhere within the skink's probable range may, upon field investigation, also be found to be essential for conservation of the species." Any mature oak woodlands or suitable timber in Crawford County is DCH for the Broadhead Skink.

Kansas Department of Wildlife & Parks information indicates the Gray Myotis is almost totally cave dwelling. In Kansas the only known populations are dependent on storm sewers in the southeast corner of the state. Nearby streams with adjacent woodlands provide critical foraging

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habitat. The KDWP defines Gray Myotis DCH in Crawford County as, 1) "All portions of the storm sewer system under the City of Pittsburg in Crawford County that were in place as of May 1, 1981. 2) "All suitable woodlands and water bodies within that portion of Crawford County encircled by a line beginning at the Kansas-Missouri border in the NE ¼ Sec. 24-T29S-R25E, then extending due west to the NW corner Sec.19-T29S-R24E, then due south to the SW corner Sec. 18-T31S-R24E, then due east to the Kansas-Missouri border, then due north to the point of origin." The K-7290-03 corridor is within the area of Gray Myotis DCH from the east-west K-47 in Crawford County south to the Cherokee County line.

Redbelly Snake DCH is described by KDWP as, "All suitable habitat occurring within the section of Cherokee and Crawford counties east of US-69 at the Kansas-Oklahoma border (Sec. 18-T35S-R24E), extending north to K-7 (Sec. 7-T33S-R24E), then continuing north to the northern border of Crawford County (Sec. 30-T27S-R24E)". Information from the KDWP indicates the Redbelly Snake seems to prefer deeply wooded regions near rivers and lakes, sandstone woods, wooded hillsides, hillsides near streams, steep slopes of forested hills, moist areas, moist woodlands, woodlands with dense leaf litter, lowlands, forest edge, open fields, the vicinity of old dilapidated farm buildings, and woodlands which remain damp throughout the year. The entire corridor is located within an area that may contain DCH for the Redbelly Snake.

Spring Peeper DCH includes all temporary and permanent wetlands within that portion of Cherokee, Crawford and Bourbon counties lying east and south of a line beginning at the Kansas-Oklahoma border extending north on US-69 to K-7, continue north on K-7 to the junction of K-7 and K-39 in Bourbon County, continue west on K-39 to the junction of K-39 and K-3 in Bourbon County, continue north on K-3 until the junction of K-3 and US-54, continue on US-54 to the Kansas Missouri border. The Spring Peeper requires small ponds and wetlands having abundant emergent aquatic vegetation and located within or very near woodlands. The entire corridor is within an area where all temporary and permanent wetlands may be Spring Peeper DCH.

In Cherokee County the KDWP lists the endangered American Burying Beetle, *Nicrophorus americanus*, threatened Arkansas Darter, *Etheostoma cragini*, threatened Broadhead Skink, *Eumeces laticeps*, threatened Butterfly Mussel, *Ellipsaria lineolata*, endangered Cave Salamander, *Eurycea lucifuga*, threatened Common Map Turtle, *Graptemys geographica*, threatened Eastern Narrowmouth Toad, *Gastrophryne carolinensis*, threatened Eastern Newt, *Notophthalmus viridescens*, threatened Eastern Spotted Skunk, *Spilogale putorius*, endangered Elktoe Mussel, *Alasmidonta marginata*, endangered Ellipse Mussel, *Venustaconcha ellipsiformis*, endangered Eskimo Curlew, *Numenius borealis*, endangered Flat Floater, *Anodonta suborbiculata*, threatened Flutedshell Mussel, *Lasmigona castata*, endangered Gray Myotis, *Myotis grisescens*, threatened Green Frog, *Rana clamitans*, endangered Grotto Salamander, *Typhlotriton spelaeus*, endangered Least Tern, *Sterna antillarum*, threatened Longtail Salamander, *Eurycea longicauda melanopleura*, endangered Many-ribbed Salamander, *Eurycea multiplicato*, threatened Neosho Madtom, *Noturus placidus*, endangered Neosho Mucket Mussel, *Lampsilis rafinesqueana*, threatened Ouachita Kidneyshell Mussel, *Ptychobranchus occidentalis*, threatened Piping Plover, *Charadrius melodus*, endangered Rabbitsfoot Mussel, *Quadrula cylindrical*, threatened Redbelly Snake, *Storeria occipitomaculata*, threatened Redspot Chub, *Nocomis asper*, threatened Snowy Plover, *Charadrius alexandrinus*, threatened Spring Peeper, *Pseudacris crucifer*, endangered Western Fanshell Mussel, *Cyprogenia aberti*.

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In Cherokee County the KDWP has established DCH for the Arkansas Darter, Butterfly Mussel, Cave Salamander, Eastern Narrowmouth Toad, Eastern Newt, Elktoe Mussel, Ellipse Mussel, Flutedshell Mussel, Gray Myotis, Green Frog, Grotto Salamander, Longtail Salamander, Many-ribbed Salamander, Neosho Madtom, Neosho Mucket Mussel, Ouachita Kidneyshell Mussel, Rabbitsfoot Mussel, Redbelly Snake, Redspot Chub, Spring Peeper, and Western Fanshell Mussel.

In Cherokee County species with potential DCH within the project corridor include the Redbelly Snake, and Spring Peeper.

On Nov. 23, 2009 the KDOT sent project information and a corridor map to KDWP and requested a preliminary review regarding impacts to state listed species. State threatened or endangered species with potential DCH within the corridor were identified as the Broadhead Skink, Gray Myotis, Redbelly Snake, and Spring Peeper. The KDOT stated that in the future when plans become available potential impacts to wetlands and DCH can be assessed. If areas of DCH cannot be avoided KDOT will apply for the required KDWP Action Permits and will work with KDWP to mitigate unavoidable impacts.

The KDOT received a response from KDWP dated Dec. 8, 2009 which stated the project was reviewed for potential impacts to crucial wildlife habitats, current state listed threatened and endangered species, species in need of conservation, and public recreation areas. The KDWP indicated threatened and endangered species that will be affected by the corridor include the Broadhead Skink, Gray Myotis, Redbelly Snake, and Spring Peeper. The KDWP recommended avoidance of all DCH for those species. For those areas of DCH that cannot be avoided Action Permits, further consultation, and a review of project plans will be required.

In the past mitigation for unavoidable impacts to Broadhead Skink DCH has consisted of tree plantings. Mitigation for impacts to Redbelly Snake DCH has included tree plantings and the construction of hibernacula (underground wintering dens). Spring Peeper mitigation has included date restrictions from Feb. 15 to June 1 prohibiting work in suitable water bodies, and the construction of small pools adjacent to streams and woodlands.

Table I lists the state threatened and/or endangered species in Crawford and Cherokee Counties with DCH, a description of the DCH, and indicates if the project corridor includes potential DCH.

**US-69 CORRIDOR: ENVIRONMENTAL ASSESSMENT**

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**Table 1. State threatened or endangered species in Crawford and Cherokee Counties with designated critical habitat, designated critical habitat description, and potential DCH within the project corridor.**

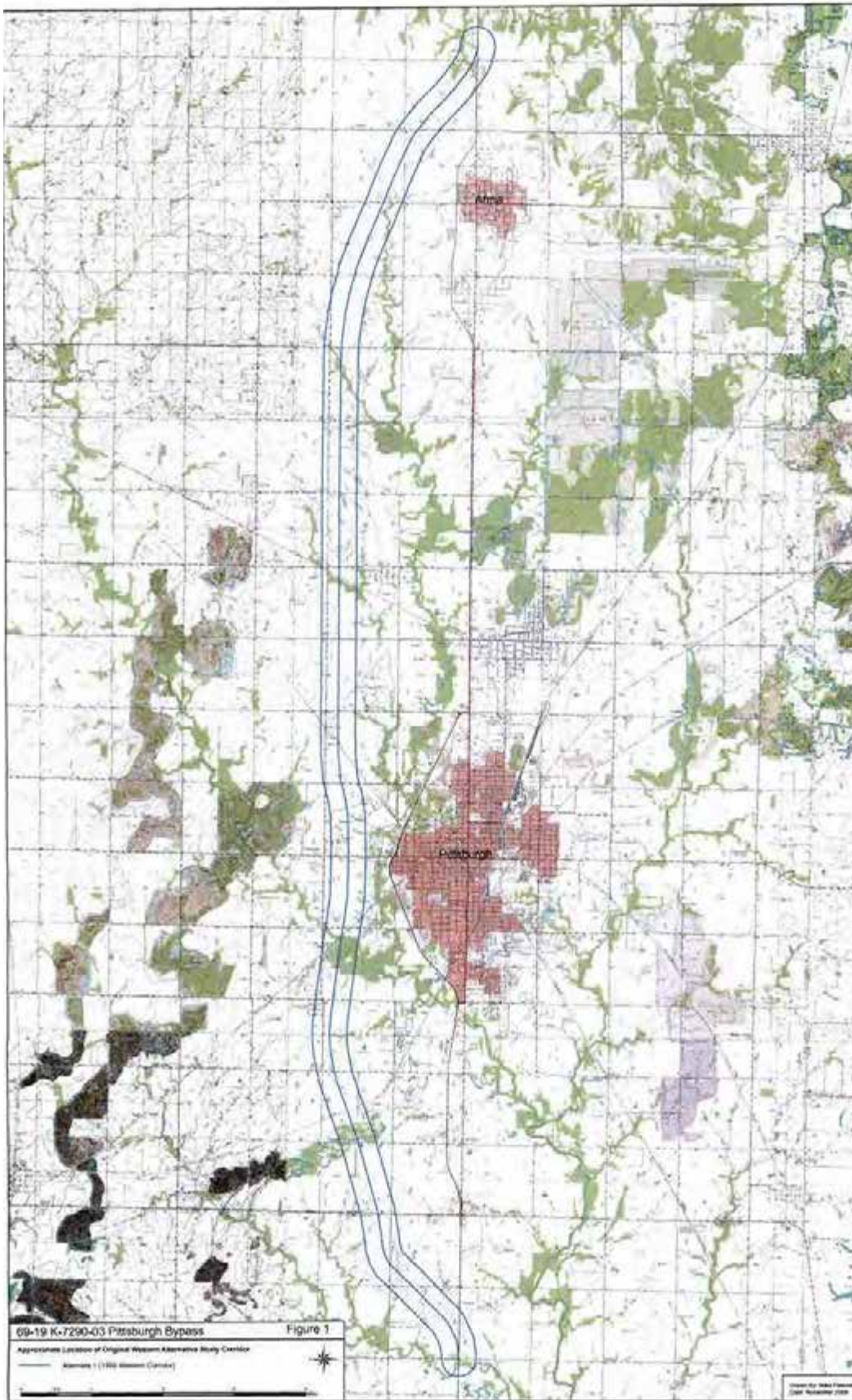
Common name	Designated critical habitat description	County	Potential designated critical habitat within project corridor
Arkansas Darter	Spring River	CK	No
Broadhead Skink	Stands of mature oak or suitable timber	CR	Potential DCH in Crawford Co.
Butterfly Mussel	Neosho River	CK	No
Cave Salamander Grotto Salamander Many-ribbed Salamander	Caves and associated spring flows S and E of US-66	CK	No
Eastern Narrowmouth Toad	Suitable habitats S and E of a line beginning at the MO border at the NE corner Sec.36-T32S-R25E extending W to US-69 extending S to US-66 and S to OK border	CK	No
Eastern Newt	Suitable wetlands, waters, and moist bottomlands extending S of K-96 and E of K-26 and US-66 to OK	CK	No
Elktoe Mussel Ellipse Mussel	Spring River to US-66	CK	No
Flutedshell Mussel	Spring River to US-66, Shoal Ck to US-66	CK	No
Gray Myotis	Suitable woodlands and water bodies in the area from ½ mile E of the K-7/K-57 junction at Girard extending due E to MO. and due S to Cherokee Co.	CR	Potential DCH in Crawford Co. from K-57 south to the Cherokee Co. line
Green Frog	All waters and wetlands in Spring River and Shoal Ck and their floodplains	CK	No
Longtail Salamander	All suitable wetlands, waters, and moist wooded bottomlands S and E of K-96 to K-26 S to US-66 S to OK	CK	No
Neosho Madtom	Neosho River and Spring River to W boundary of Sec.36-T33S-R25E	CK	No
Neosho Mucket	Neosho River, Spring River to US-66, Shoal Ck to Lowell	CK	No
Quachita Kidneyshell Mussel	Spring River to US-66, Shoal Ck to K-26	CK	No
Rabbitsfoot Mussel	Neosho River and Spring River to US-66	CK	No
Redbelly Snake	Suitable woodland habitat E of US-69 and K-7	CR, CK	Potential DCH over the length of the corridor
Redspot Chub	Spring River to confluence of Shoal Ck and Shoal Ck to Empire Lake	CK	No
Spring Peeper	Temporary and permanent wetlands E of US-69 and K-7	CR, CK	Potential DCH over the length of the corridor
Western Fanshell Mussel	Spring River to US-66 and Shoal Ck to K-26	CK	No

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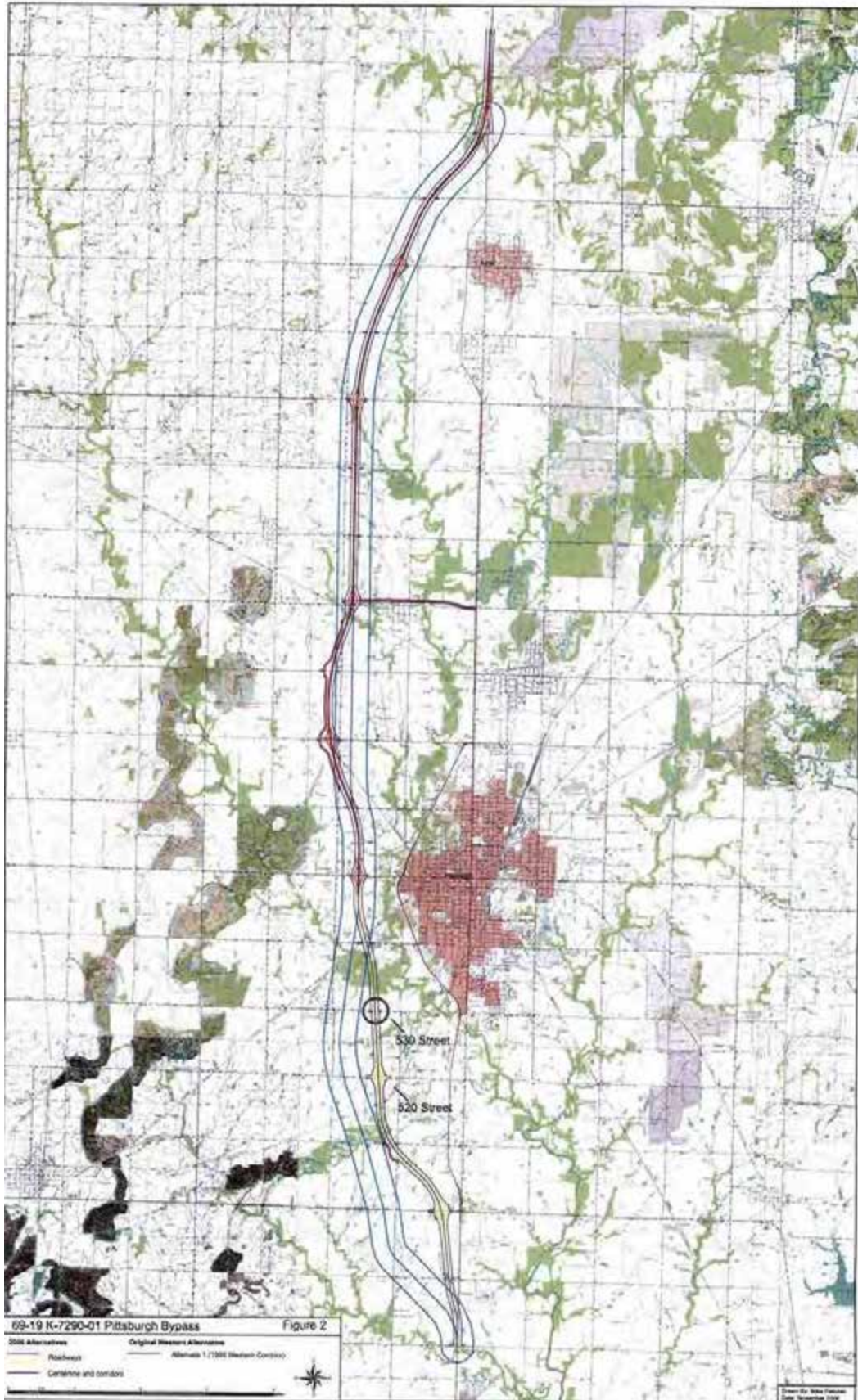
**FLOODPLAINS:** In Crawford and Cherokee Counties the DWR has jurisdiction over floodplain fills averaging over 1 ft. in height that are placed in the 100-year floodplains of streams having drainage areas in excess of 240 acres. Fills averaging over 1 ft. in height placed within jurisdictional floodplains require Floodplain Fills permits from the DWR. The DWR considers it an unreasonable effect to increase the elevation of the design and base flood profiles within a floodway, or increase the elevation of the design and base flood profiles more than one foot at any location outside a floodway. The KDOT will obtain the necessary DWR Floodplain Fills permits to construct the project.

One hundred year floodplains can be viewed at the Federal Emergency Management Agency Map Service Center website:  
<http://msc.fema.gov/webapp/wcs/stores/servlet/QuickOrderResultView>.

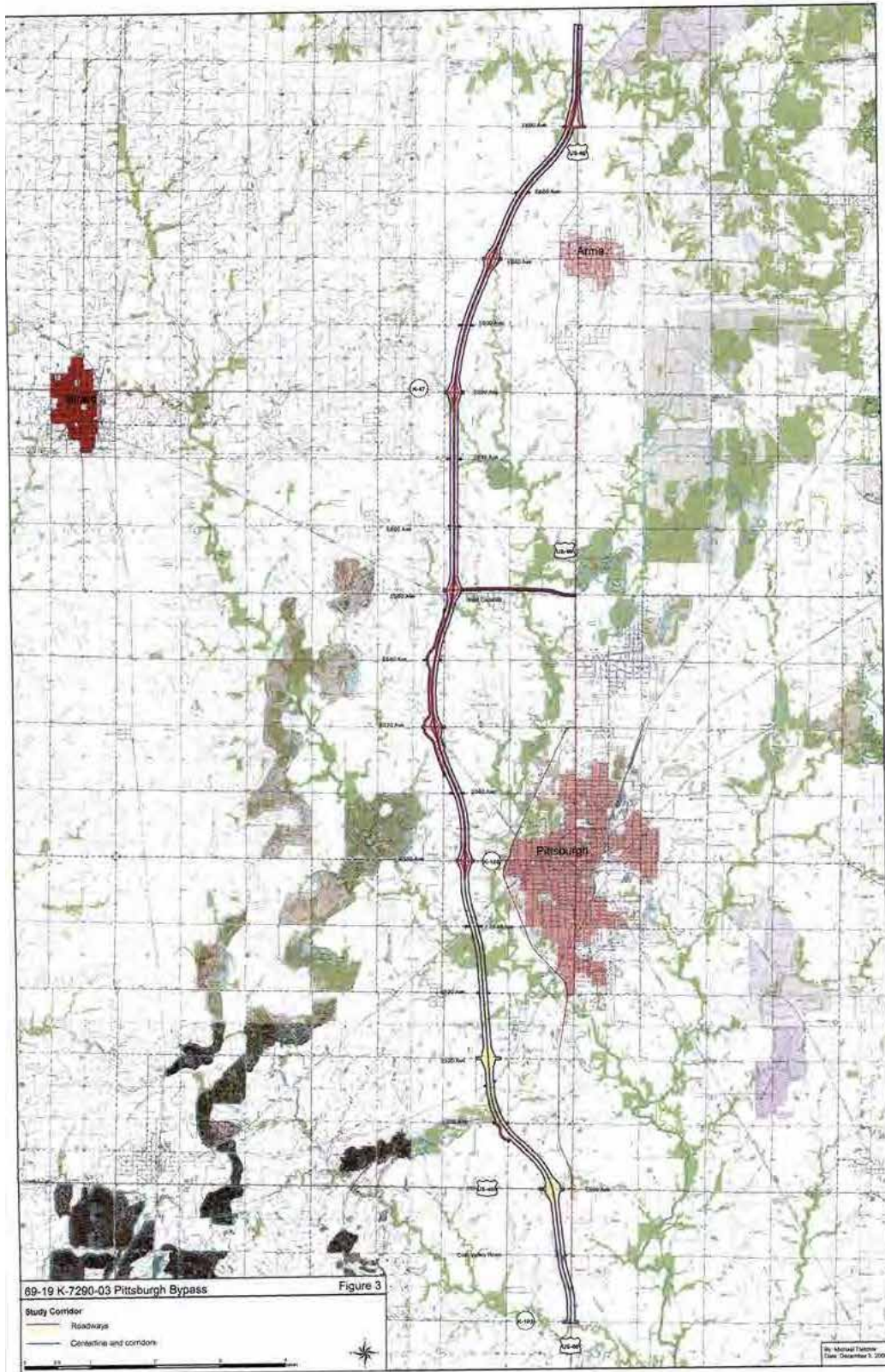
**HAZARDOUS WASTE:** A visual field survey of the corridor was conducted by Environmental Services staff on June 18, 2009. No obvious hazardous waste sites were observed. Following the relocation of portions of the corridor, a follow up field survey of the revised corridor was conducted on November 16, 2010. No new hazardous waste concerns were identified.



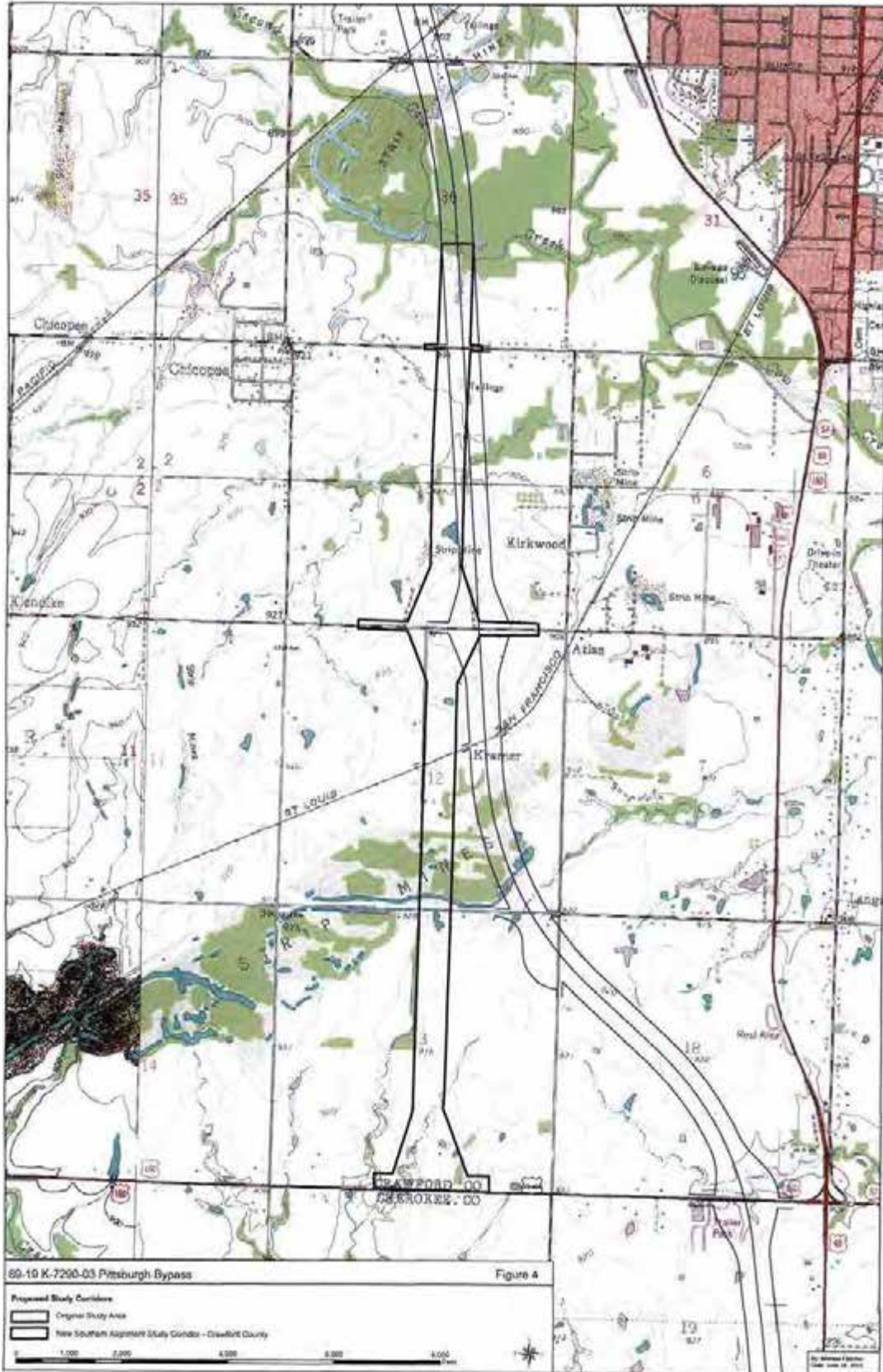




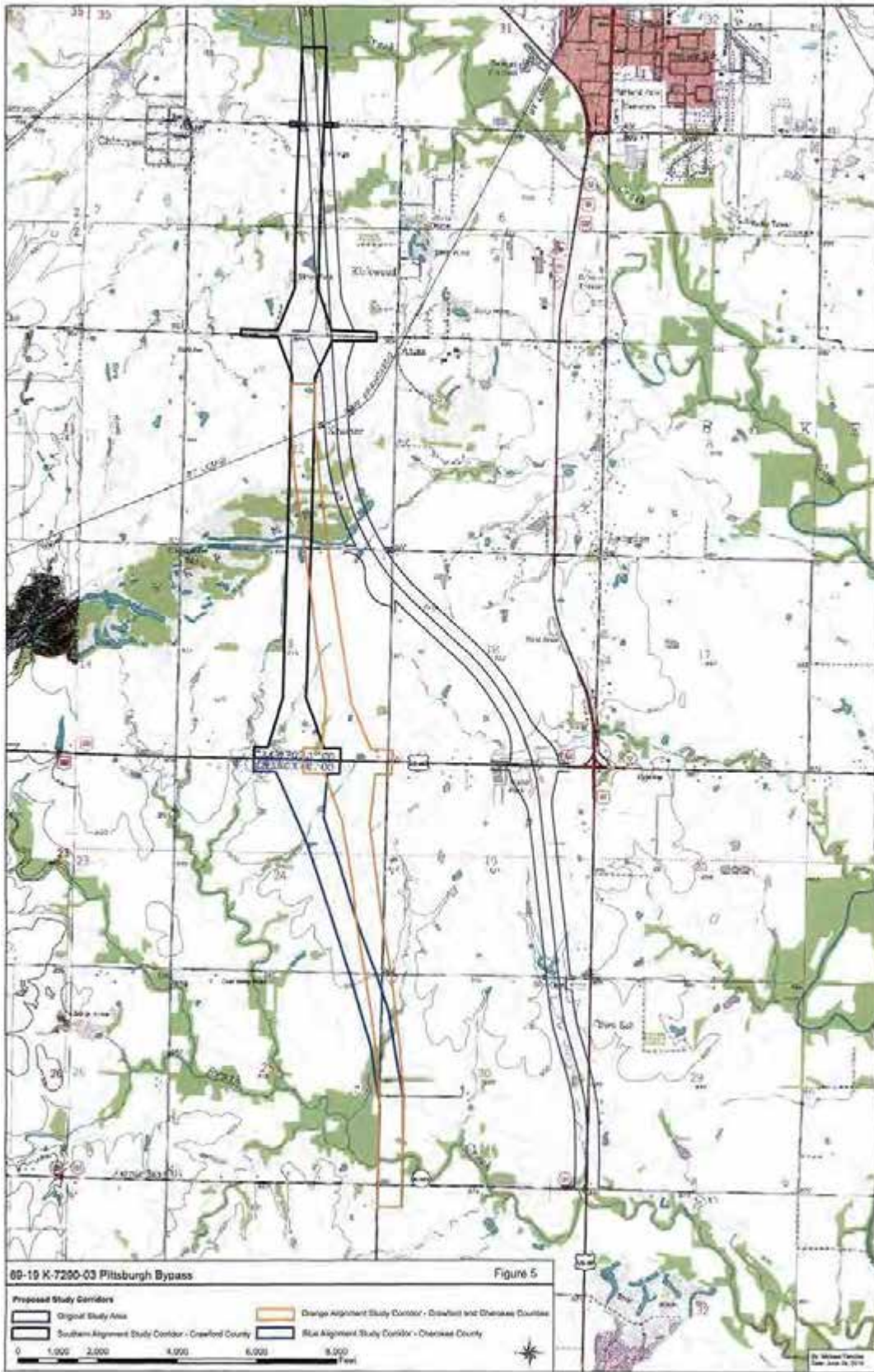


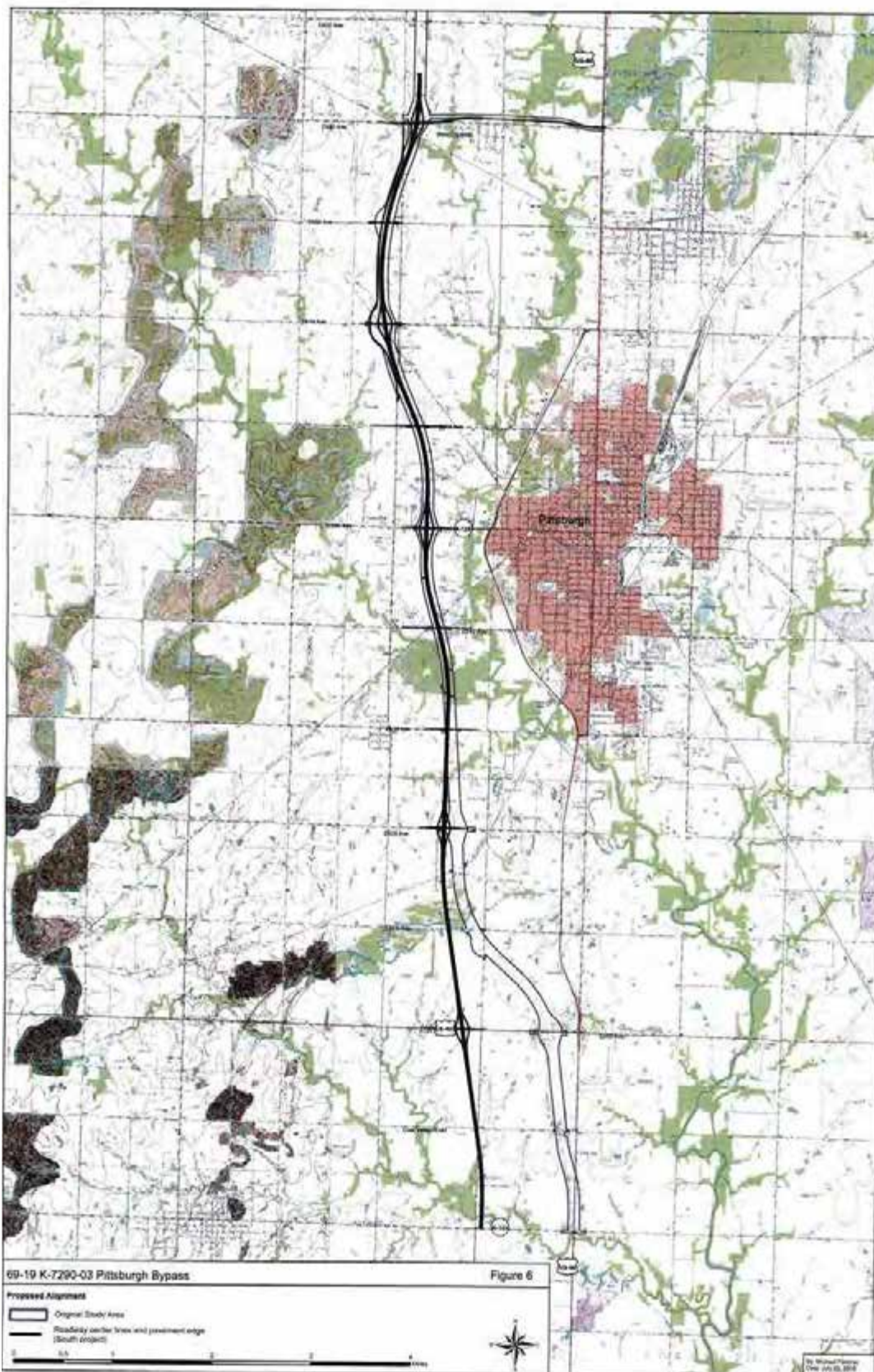


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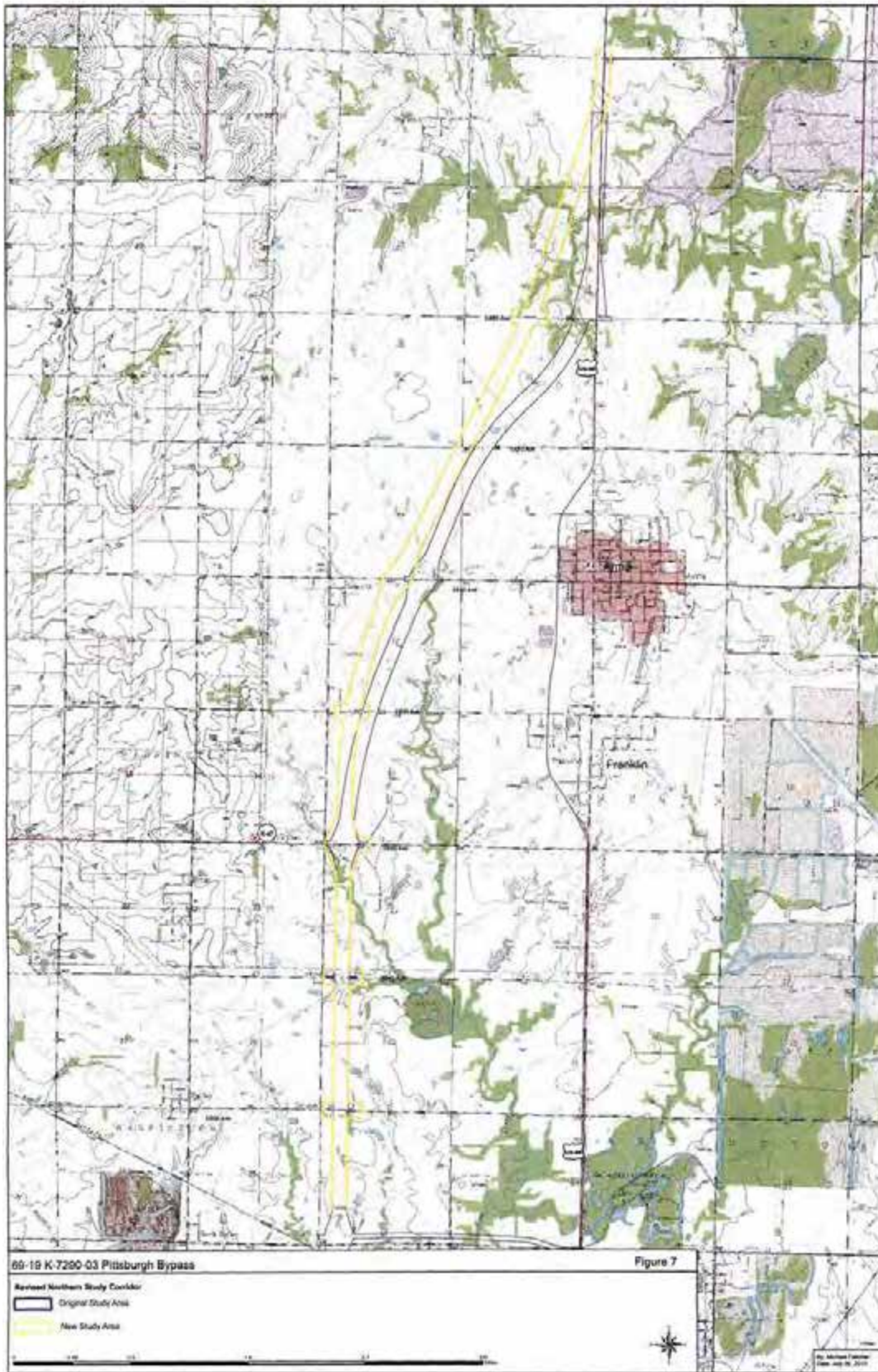




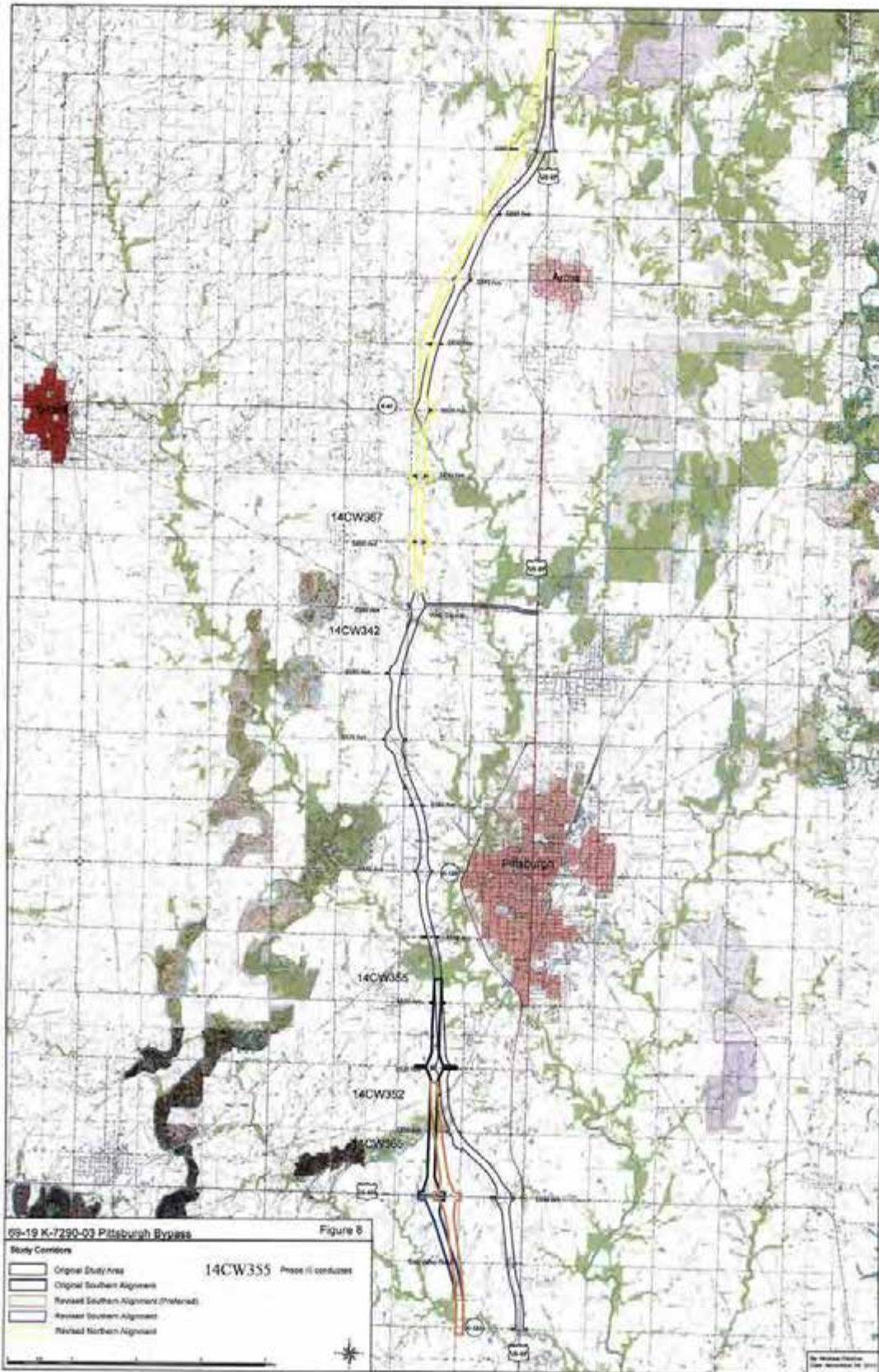




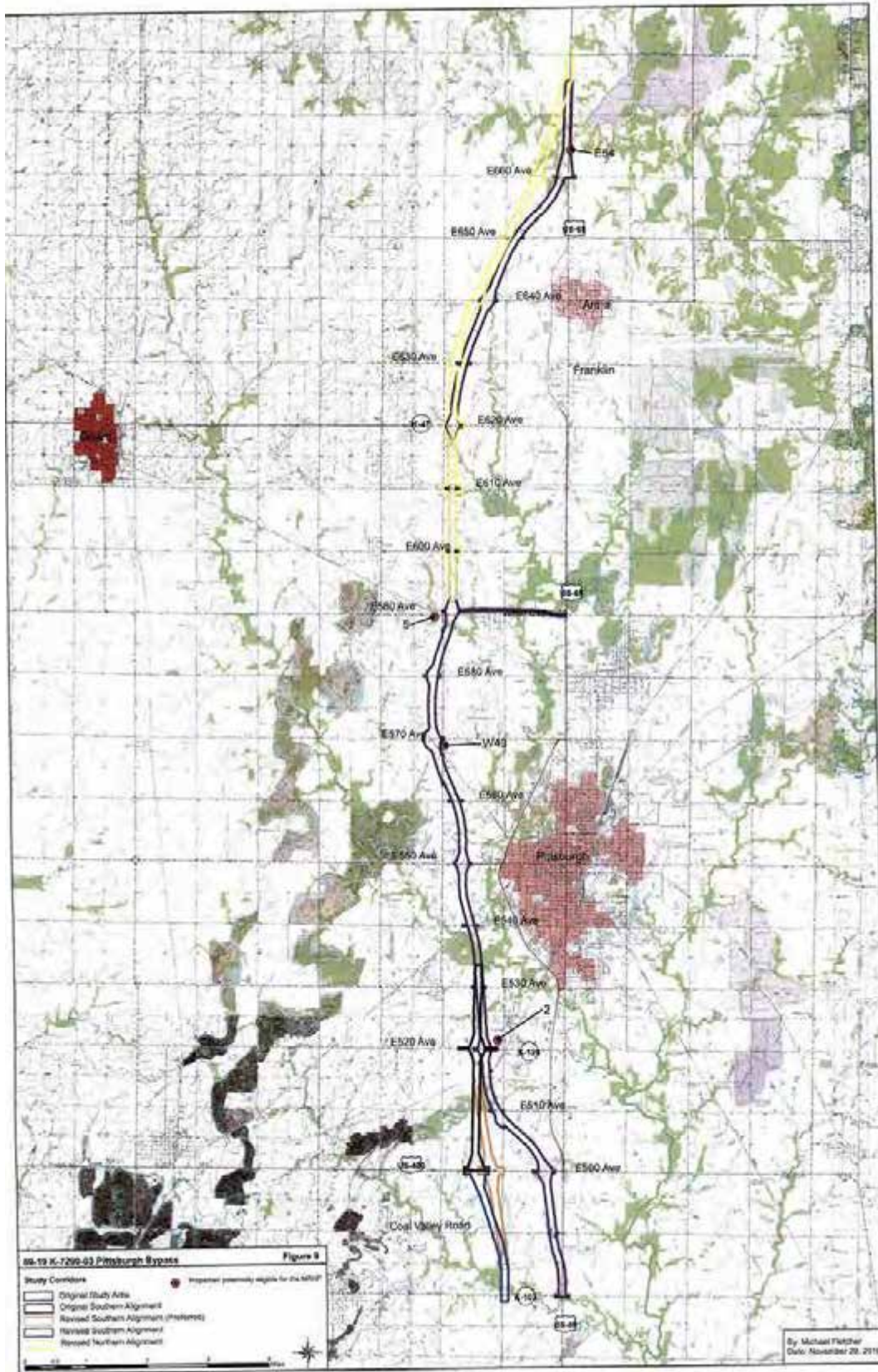






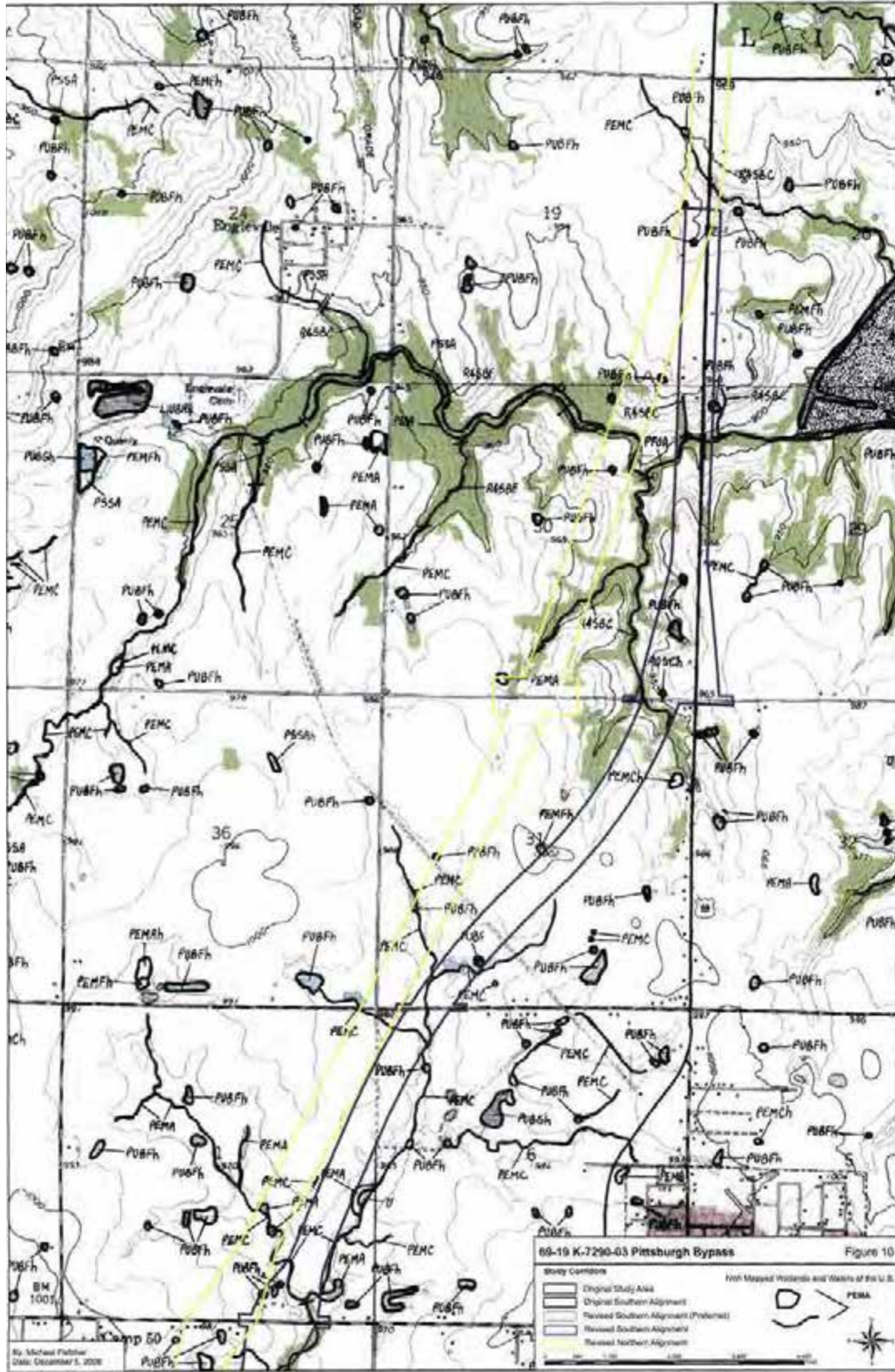






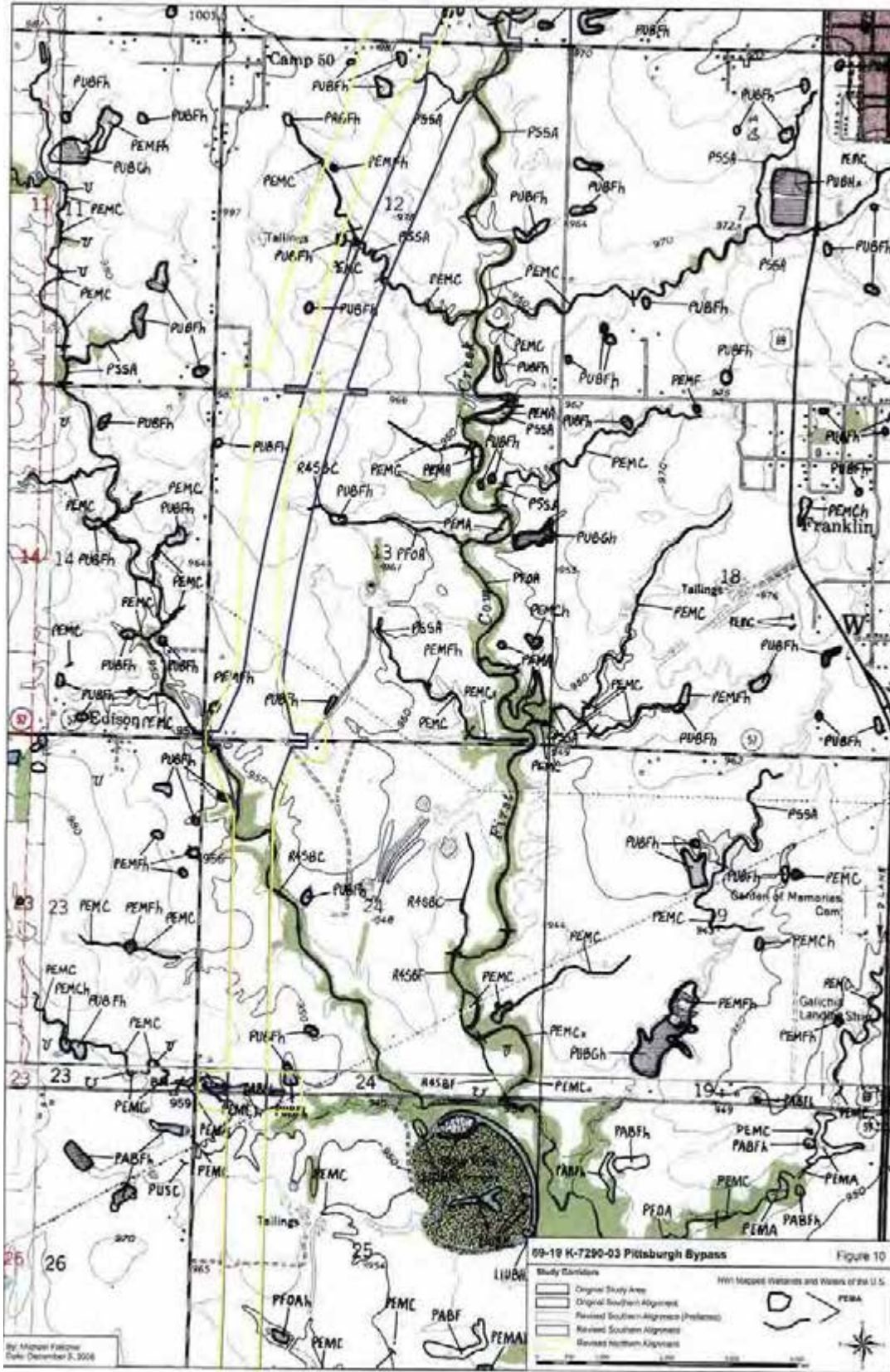


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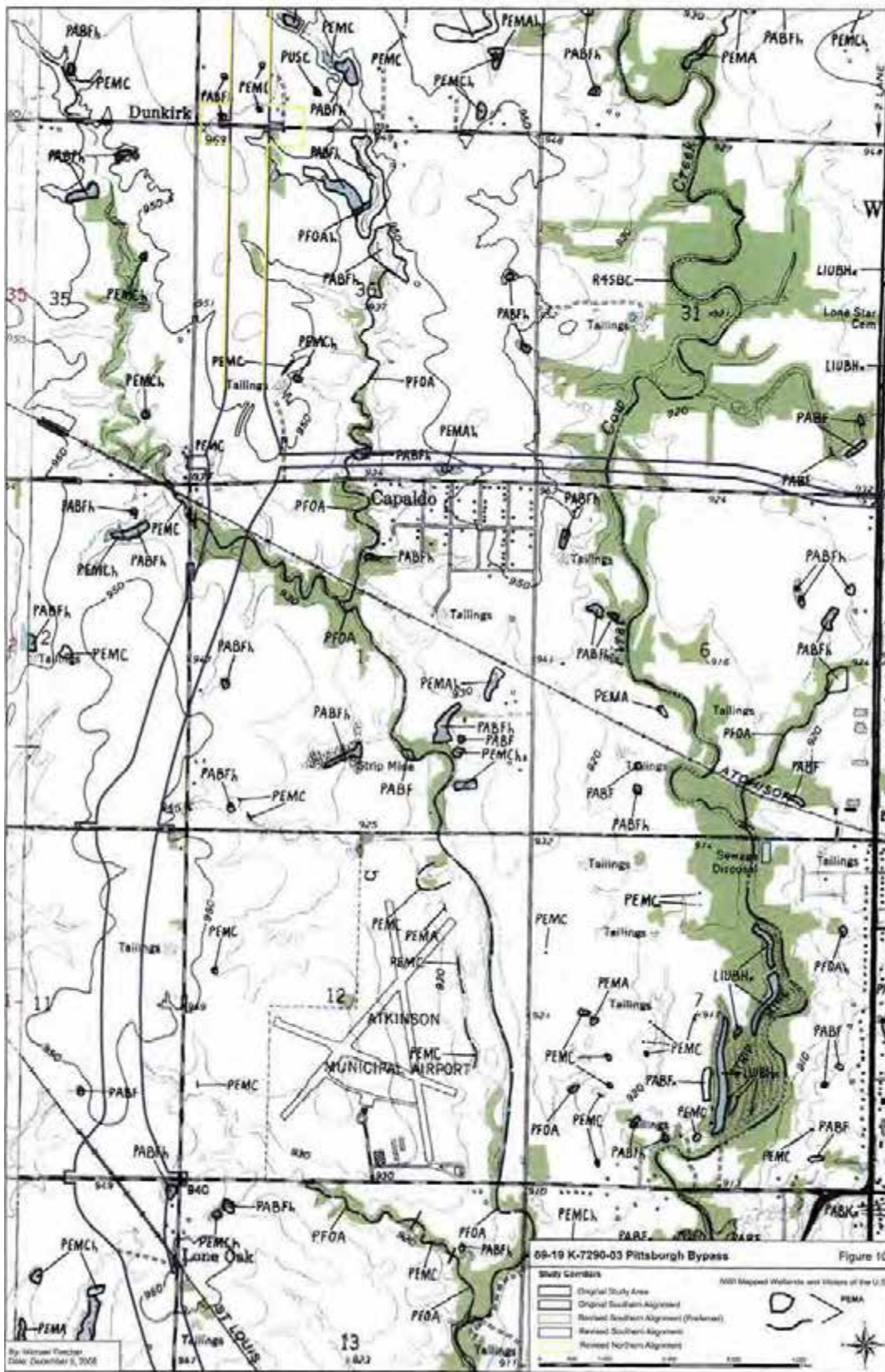


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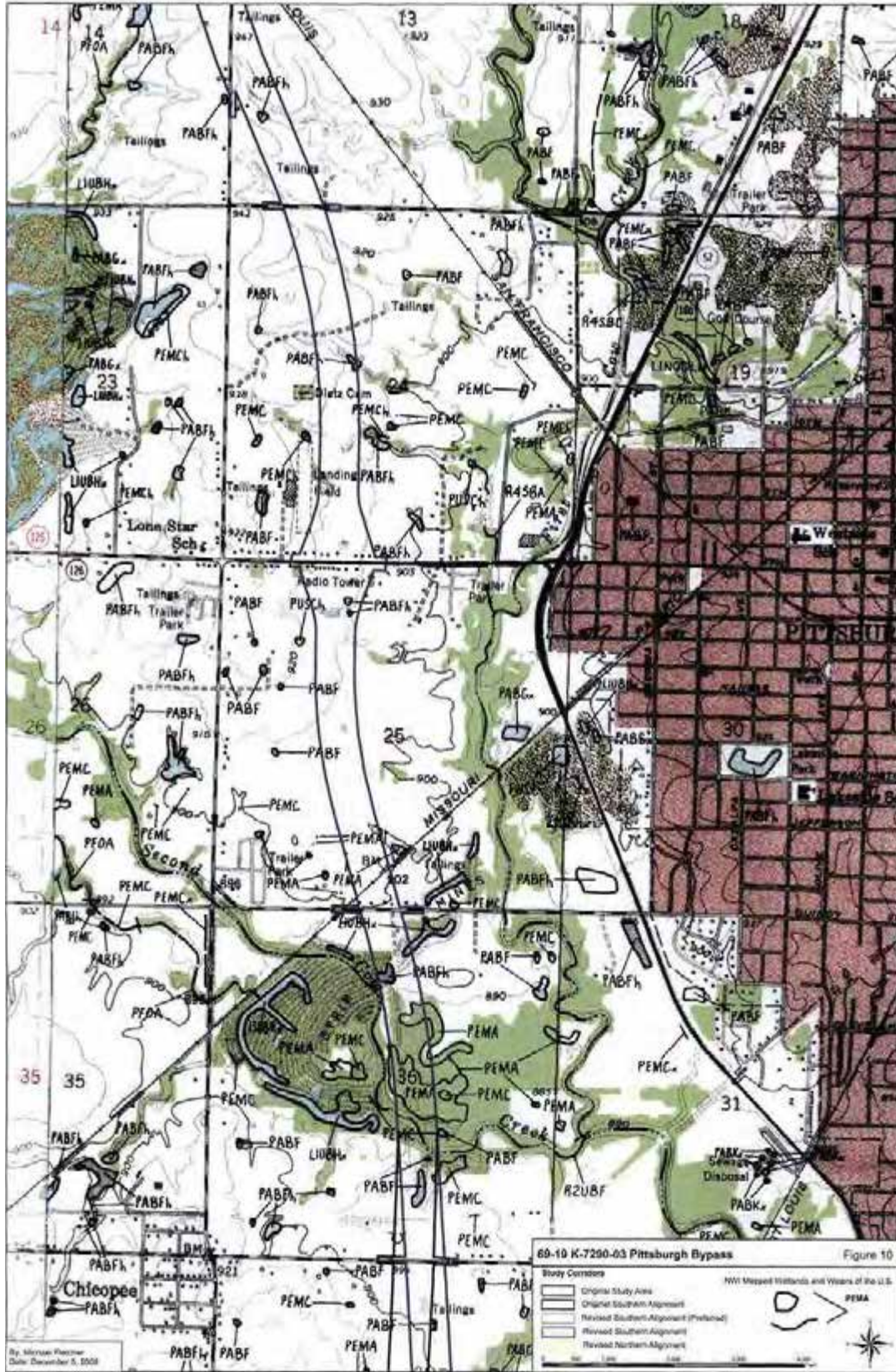




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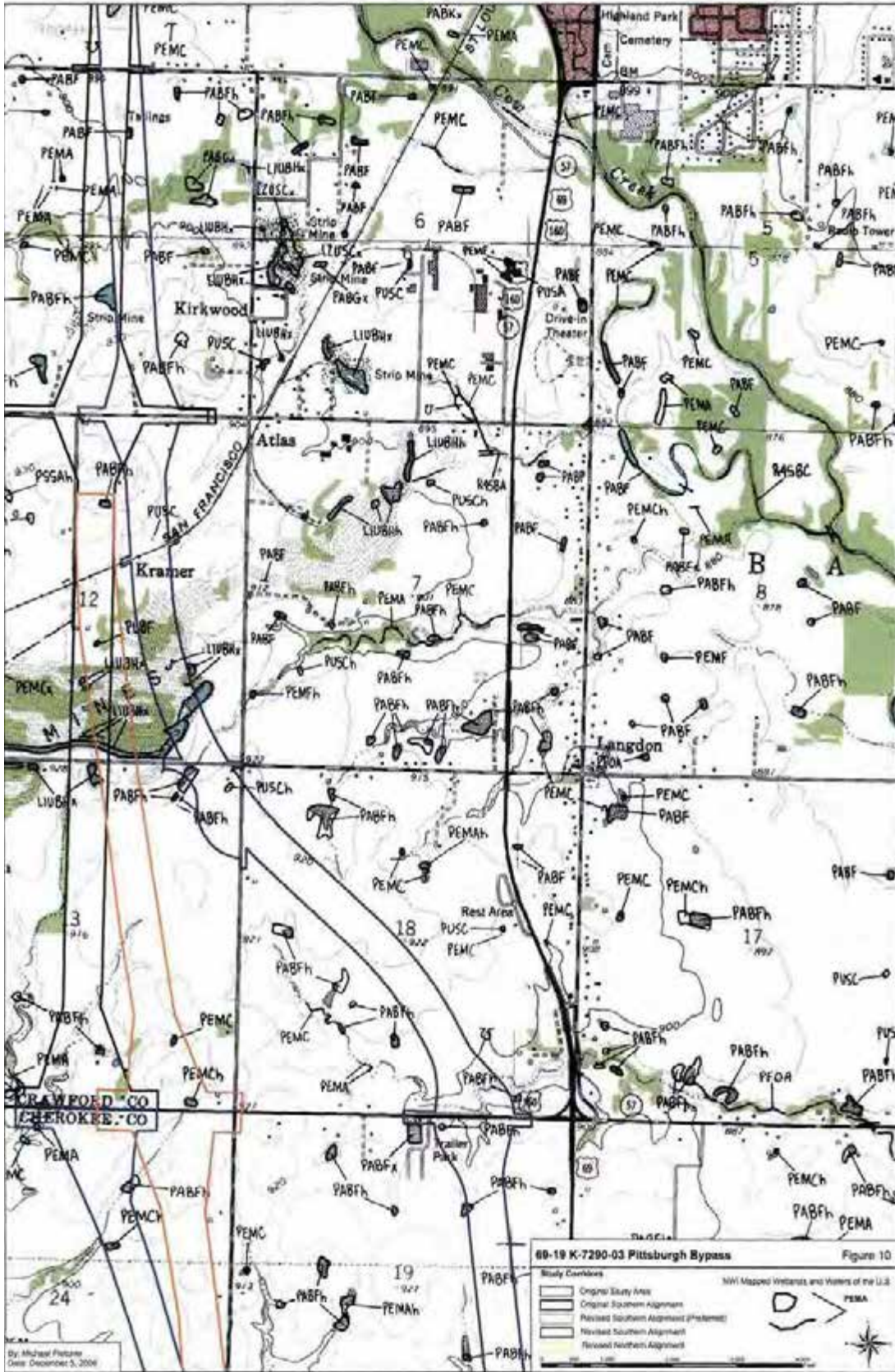




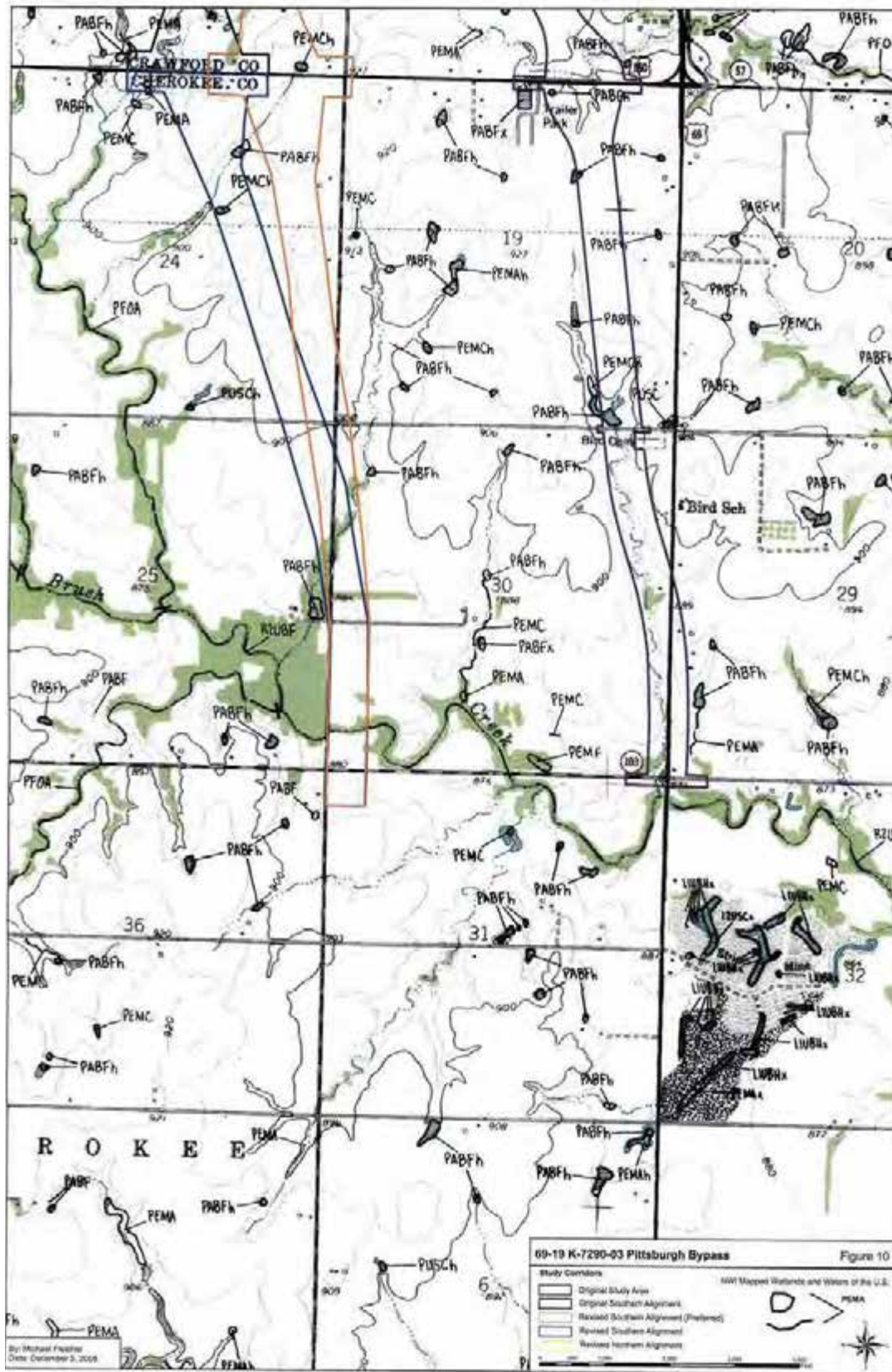




US-69 CORRIDOR: ENVIRONMENTAL ASSESSMENT



US-69 CORRIDOR: ENVIRONMENTAL ASSESSMENT





**Appendix A  
Noise Analysis**

Vehicle noise is a combination of noise produced by the engine, exhaust, and tires. Heavier traffic volumes, higher speeds, and greater numbers of trucks all increase the loudness of traffic noise. Sound pressure levels are used to measure the intensity of sound and are described in terms of decibels (dB). However, the human ear does not respond to all frequencies that compose sound. A-weighted sound levels (dBA) are used to measure sound pressure levels with a frequency-weighting network which best approximates sound as heard by the normal human ear and filters out frequencies the human ear cannot detect.

In addition to noise varying in frequency, noise intensity fluctuates with time. The equivalent sound level (Leq) is the equivalent steady-state sound level for a period of time and is measured in decibels on an A-weighted scale. If the time period is one hour, the descriptor is the hourly equivalent sound level dBA-Leq(h).

The FHWA has determined a NAC for different land uses as shown in the Table below. For the purpose of traffic noise analysis, land usage of a property located adjacent to the transportation improvements is classified according to human activities that occur or are expected to occur within the property boundaries. KDOT's "Policy Statement on Highway Noise Abatement" defines the "approached" value as 1 dBA less than the NAC.

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

Traffic noise impacts occur when the predicted noise levels approach or exceed the NAC or when predicted traffic noise levels substantially (greater than a 10 dBA increase) exceed the existing noise level.

The land usage along the Preferred Concept is classified as Category B, C and D. The noise sensitive receptors are scattered along the alignment.



**Noise Results**

The FHWA highway traffic noise prediction model known as TNM was used to predict worst case scenario, peak hour traffic noise levels in the year 2031 for the Preferred Concept from the existing US 69 south of Pittsburgh in Cherokee County to existing US-69 north of Arma in Crawford County. The preliminary noise analysis utilized planning level estimates for traffic acquired from the Bureau of Transportation Planning.

The model approximated the distance to the 66 dBA traffic noise level from the centerline of the nearest driving lane along both sides of the highway. Receptors falling within this line would be considered impacted according to KDOT's NAC approached value. The project is located on new alignment therefore, with the exception of the proposed interchanges; nearly all receptors adjacent to the proposed project are experiencing ambient noise levels without the influence of highway traffic.

The model predicts the 66 dBA noise level will be located approximately 125' from the centerline of the nearest travel lane from existing US-69 south of Pittsburgh in Cherokee County to K-47 (620 Avenue) south of Arma. Between K-47 and existing US-69 north of Arma, the 66 dBA noise level will be located approximately 150' from the centerline of the nearest travel lane.

Any Category B receivers within these distances would be considered impacted by traffic noise and abatement analysis would be required when design details are available.

## **Appendix B Archeological Resources**

During the 1999 Advanced Preliminary Engineering Study, three study corridors were evaluated to determine areas with moderate and high potential for encountering archeological resources. No field surveys were conducted. The 2006 proposed interchange relocation was evaluated for recorded archeological resources only. The Preferred Concept map, which overlaps much of the 1999 western bypass, was submitted to the Kansas State Historical Society (KSHS) Highway Archeologist for Phase I review on December 10, 2008.

The State Archeologist submitted a Discovery Phase review on January 22, 2009. Additional areas with moderate and high potential for archeological resources were identified. Phase II fieldwork began February 9, 2009. The Phase II Management Summary identified fourteen archeological sites that were determined not eligible for the National Register of Historic Places (NRHP). In addition three previously unknown archeological sites were recommended for Phase III testing. The SHPO concurred with this recommendation on March 19, 2009.

Under the Statewide Archeological Contract for Phase III and Phase IV Investigations the State Archeologist subcontracted with the Center for Archeological Research (CARS) at Missouri State University to conduct Phase IIIa archival research, and potentially, Phase IIIb excavations for historic archeological sites 14CW342 and 14CW352 and Phase IIIb excavation for prehistoric site 14CW355 (Figure 8). A Phase III technical proposal was submitted May 21, 2009 and the Notice to Proceed was issued on June 9, 2009.

In an email dated September 17, 2009 the CARS summarized their findings. Site 14CW342 was deemed not eligible for further investigations based on Phase IIIa findings. Phase IIIb field investigations at prehistoric site 14CW355 resulted in a recommendation that further investigations are not necessary. Phase IIIa archival research and Phase IIIb testing resulted in a recommendation that site 14CW352 be considered eligible for the NRHP.

Site 14CW352 (Cambria site) is a former coal mine camp (1889-1908) that encompassed about 70 acres. The site is centered along the Preferred Concept corridor at a proposed interchange on East 520 Avenue (Figure 8). A draft version of the Phase III report for the Cambria site was provided to ESS on October 27, 2010. Based on the draft report it was determined that a geophysical survey would be the most efficient method of evaluating the site. Archaeo-Physics was approved to conduct the geophysical survey with field support by KSHS. A supplement to the engineering contract was approved and Notice to Proceed was issued on November 16, 2009.

The geophysical survey was conducted from December 15 through December 21, 2009. A two-stage geophysical investigation was completed. Stage 1 consisted of a broad-area low sample

density geophysical reconnaissance. Stage 2 included high-resolution survey over selected portions of the site based on Stage 1 results.

Stage 1 reconnaissance was conducted using a Geonics Instruments single-sensor total field magnetometer on 2.0 meter transects. Stage 2 included magnetic field gradient and electrical resistance survey of two areas of the site. Magnetic field gradient survey data were collected on 50 cm transects using a Geoscan Instruments FM256 fluxgate gradiometer. Resistance data were collected on 1.0 meter transects using a Geoscan Instruments RM15 electrical resistance meter.

In a letter dated December 22, 2009 the SHPO indicated the document entitled *Archeological Survey Report: Phase II Archeological Survey of KDOT Project 69-106 K-7290-03, Crawford and Cherokee Counties, Kansas*, was acceptable and the recommendations were the same as those contained in the management summary previously approved.

On January 20, 2010 the State Highway Archeologist at the Kansas State Historical Society (KSHS) provided an update on the project. The results of the geophysical survey have confirmed that the site is eligible for the NRHP. Mitigation will be recommended but will consist of minimal field work. The main focus of the mitigation will most likely be a detailed history of the Cambria Site resulting in an exhibit for the Crawford County Historic Society. An MOA will be developed once sufficient design details are known.

In a letter dated April 30, 2010 the SHPO indicated they had reviewed the Phase III report entitled *Phase III Assessment of Sites 14CW342, Cambria (14CW352), and Second Cow Creek (14CW355)* and concurred that sites 14CW342 and 14CW355 were not eligible for listing in the NRHP. In addition the SHPO concurred that the Cambria Site (14CW352) is eligible for National Register listing under Criterion D.

In a letter dated May 3, 2010 the State Highway Archeologist state that the deposits at 14CW352 are important chiefly because of what can be learned by data recovery and will have minimal value for preservation in place. As such section 4(f) does not apply.

On June 21, 2010 ESS requested Phase III investigations for the modified southern end of the project for the Crawford County portion of the new alignment.

On June 29, 2010 ESS, Road Design and the State Archeologist met to discuss the impact of the proposed realignment on the Cambria Site. At this meeting KDOT's Road Design Leader provided the State Archeologist a revised map with a revision to the previously modified southern end of the project. It was determined at this meeting the Phase III investigation should include the Cherokee County portion of the project. The State Archeologist advised that the modified alignment impacted an area of the Cambria Site that had not been investigated. It was recommended that an additional geophysical survey be performed for this area with the remaining areas within the proposed alternatives undergoing Phase III surveys.



In a letter dated July 19, 2010 the SHPO indicated they had reviewed the final report entitled *Phase III Assessment of Sites 14CW342, Cambria (14CW352) and Second Cow Creek (14CW355), Crawford County, Kansas* and found the report to be acceptable with the recommendation to be the same as the draft report.

In response to the July 20, 2010 modification to the northern end of the project, ESS submitted a request for Phase I/II investigation to KSHS on July 26, 2010. The KSHS was requested to evaluate the modified north end of the project, the side roads and frontage roads that fell outside the original study corridor, and the previously hand delivered dual corridors at the southern end of the project.

On July 27 ESS received a cost estimate from Archaeo-Physics and a request from KSHS to include the equipment rental under the subcontract. Archaeo-Physics was approved to begin the surveys on August 19, 2010.

On September 16, 2010 ESS received an update on the additional Phase II work conducted by the KSHS. Three new sites had been discovered, however, KSHS was waiting on the results of the geophysical survey to determine if Phase III testing was needed at the town of Dunkirk (14CW367 and 14CW366). KSHS was also planning on conducting additional historical background research for site 14CW365 before further recommendations would be made.

In an email update from Tricia Waggoner (KSHS) on October 22, 2010 it was stated that site 14CW366 would be recommended for clearance. It was also stated that sites 14CW365 and 14CW367 would be recommended for Phase III testing and a cost estimate was being prepared (Figure 8). The Notice to Proceed for the Phase III testing was issued on November 16, 2010.

In an email update from Tricia Waggoner on November 29, 2010 it was stated that site 14CW365 would be recommended for clearance and that Phase III testing for site 14CW367 (Dunkirk) would be conducted between November 29 and December 10, 2010.

In a Management Summary Report dated December 7, 2010, Tricia Waggoner reported that nine test units were placed on anomalies located during the geophysical survey. Eight of the nine units produced very little cultural material while one unit produced a fair amount of material believed to be from a burn pile. Since the material in the unit was not intact it was determined that the site within the project boundaries was unlikely to yield further information and was not eligible for listing on the NRHP. The SHPO concurred in a letter dated December 16, 2010.

Site 14CW352 (Cambria site) is eligible for the NRHP. The proposed project will adversely affect the site. However, since the deposits at 14CW352 are important chiefly because of what can be learned by data recovery and will have minimal value for preservation in place section 4(f) does not apply. Mitigation will consist of minimal field work. The main focus of the mitigation will be a detailed history of the Cambria Site resulting in an exhibit for the Crawford County Historic Society. An MOA will be developed once sufficient design details are known.

# KANSAS

Kansas Historical Society  
Jennie Chinn, Executive Director

MARK PARKINSON, GOVERNOR

December 16, 2010

Jim L. Kowach  
Chief, Bureau of Design  
Kansas Department of Transportation  
Eisenhower State Office Building  
700 S.W. Harrison Street  
Topeka, KS 66603-3754

Attn: Scott Vogel, Chief, Environmental Services

Re: 69-106 K-7290-03  
NHS-HPD-K729(003)  
Crawford and Cherokee Counties

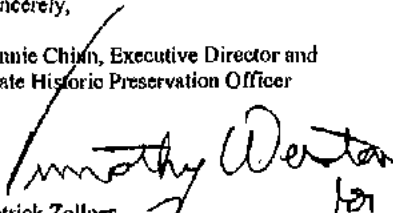
Dear Mr. Kowach:

In accordance with 36 CFR 800, the Kansas State Historic Preservation Office has reviewed a summary of Phase III archeological investigations conducted at the historic town site of Dunkirk (14CW367) situated within the above-referenced project. We find the summary, prepared by Tricia Waggoner, to be acceptable. Our office concurs with its recommendation that the portion of 14CW367 within the project boundaries is not eligible for listing in the National Register of Historic Places. It is our understanding that a full report of investigations will be submitted at a later time.

This information is provided at your request to assist you in identifying historic properties, as specified in 36 CFR 800 for Section 106 consultation procedures. If you have questions or need additional information regarding these comments, please contact Tim Weston at 785-272-8681 (ext. 214) or KJim Gant at 785-272-8681 (ext. 225).

Sincerely,

Jennie Chinn, Executive Director and  
State Historic Preservation Officer

  
Patrick Zollner  
Deputy SHPO

6425 SW 6th Avenue • Topeka KS 66615-1099  
Phone 785-272-8681, ext. 205 • Fax 785-272-8682 • jchinn@kshs.org • TTY 785-272-8683  
kshs.org

**Michael Fletcher**

---

**From:** Tricia Waggoner [twaggoner@kshs.org]  
**Sent:** Monday, November 29, 2010 11:08 AM  
**To:** Michael Fletcher  
**Cc:** Bob Hoard  
**Subject:** Re: K-7290-03, Dunkirk and Kramer Junction

Mike,

On 14CW365 we will be recommending that no further work be done based on additional background research. On 14CW367 (Dunkirk) we started on the Phase III testing today. We will be excavating for the next two weeks. I can most likely have a management summary by Christmas.

If you have any further questions please email Bob as I will be in the field, Tricia

Tricia Waggoner  
Archeologist II (Highway Archeologist)  
Kansas State Historical Society  
1425 SW 6th Avenue  
Topeka, KS 66615-1099  
785-272-8681 x267  
785-272-8682 fax  
[twaggoner@kshs.org](mailto:twaggoner@kshs.org)

Michael Fletcher wrote:

>  
> Bob and Tricia,  
>  
>  
>  
> Steve Rockers stopped by and was wondering how the Phase III survey  
> was progressing. Can you tell me approximately where we are on this one?  
>  
>  
> Thanks  
>  
> Mike  
>



**Michael Fletcher**

---

**From:** Tricia Waggoner [twaggoner@kshs.org]  
**Sent:** Friday, October 22, 2010 10:40 AM  
**To:** Michael Fletcher  
**Cc:** Robert Hoard; Tim Weston  
**Subject:** Re: K-7290-03 Pittsburgh Bypass  
**Attachments:** CostEstimateWorksheet2010FY2011.xls; 7290\_p.5.png; 7290\_p.10.png

Mike,

In Crawford,

1. 14CW352 will need Phase IV and the we will be rewriting the Cost estimate and MOA for that work shortly.
  2. 14CW366 we are going to recommend to SHPO that no further work is needed.
  3. 14CW367 (Dunkirk Town) will need Phase III testing, I have a cost estimate for this work ready and attached.
  4. 14CW365 (Kramer Junction) the Phase IIIa turned up no new information, so we will be recommending this site for testing. I will develop a cost estimate for this shortly.
- I have attached maps of the sites for your records.

Let me know if you have any further questions.

Tricia

Tricia Waggoner  
Archeologist II (Highway Archeologist)  
Kansas State Historical Society  
6425 SW 6th Avenue  
Topeka, KS 66615-1099  
785-272-8681 x267  
785-272-8682 fax  
[twaggoner@kshs.org](mailto:twaggoner@kshs.org)

Michael Fletcher wrote:

Tricia,

The project manager and consultant are getting anxious to complete the EA for this project. I was wondering if you could provide a brief update.

I know we will be conducting Phase IV for the portion of the Cambria Mining Camp that had undergone a Phase III and the geophysical survey by Archaeo-Physics before the alignment was shifted west. Also, based on your 9/16/10 update, we will need to mitigate for the area impacted by the new alignment at the mining camp.

Have you received any results from Archaeo-Physics for the two sites at the town of Dunkirk (14CW367 and 14CW366)? If so have you determined whether Phase III testing is needed?

You had also referenced site 14CW365 as potentially needing Phase III testing pending further work on the history of this site. Have you had a chance to determine whether Phase III testing will be needed for this site?

Thanks for your help.

Mike

**Michael Fletcher**

---

**From:** Tricia Waggoner [twaggoner@kshs.org]  
**Sent:** Thursday, September 16, 2010 2:24 PM  
**To:** Michael Fletcher  
**Cc:** Robert Hoard; Wes Gibson  
**Subject:** Crawford 69 project

Mike,

This email is just a rough run down of where we are in the Crawford County 69 project.

1. All phase II field work is complete, but we are waiting on geophysical results, I will need these before the Phase II report can be completed.
2. I am currently working on the report for the new Phase II survey from with the information I have and am about 25% done with that report.
3. The report will recommend mitigation on Cambria (14CW352) based on this and past investigations at that site.
4. Once I have results from geophysical survey I will know if Phase III testing will be needed at the town of Dunkirk (14CW367 and 14CW366).
5. Lastly there is a group of features in Section: NW, NW, SE of 12 Township: 31 S Range: 24 E (site 14CW365). These features include a cellar, foundation and well. Some work on the history of this site will be needed in order to decide if Phase III testing will be in order. If this site does go to testing it will be difficult due to the instability of the cellar feature.

If I get any additional information (like the geophysics) I will forward it to you.

Thank you,  
Tricia

--

Tricia Waggoner  
Archeologist II (Highway Archeologist)  
Kansas State Historical Society  
6425 SW 6th Avenue  
Topeka, KS 66615-1099  
785-272-8681 x267  
785-272-8682 fax  
[twaggoner@kshs.org](mailto:twaggoner@kshs.org)

# KANSAS

Kansas State Historical Society  
Jennie Chinn, Executive Director

KATHLEEN SEBELIUS, GOVERNOR

July 19, 2010

Jim L. Kowach  
Chief, Bureau of Design  
Kansas Department of Transportation  
Eisenhower State Office Building  
700 S.W. Harrison Street  
Topeka, KS 66603-3754

Attn: Scott Vogel, Chief, Environmental Services

Re: 69-106 K-7290-03  
NHS-HPD-K729(003)  
Crawford and Cherokee Counties

Dear Mr. Kowach:

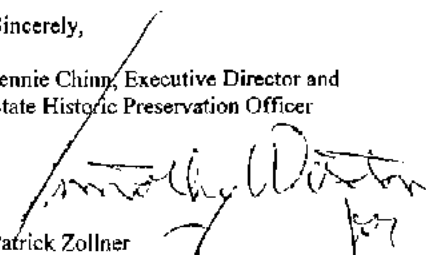
In accordance with 36 CFR 800, the Kansas State Historic Preservation Office has reviewed a final report entitled *Phase III Assessment of Sites 14CW342, Cambria (14CW352) and Second Cow Creek (14CW355), Crawford County, Kansas*, by Neal H. Lopinot, Jack H. Ray, and Dustin A. Thompson. As was the case with the draft version, we find the final report to be acceptable. Our office continues to concur with the recommendation that archeological sites 14CW342 and 14CW355 are not eligible for listing in the National Register of Historic Places. We also continue to concur that the Cambria site (14CW352) is eligible for National Register listing under Criterion D.

This information is provided at your request to assist you in identifying historic properties, as specified in 36 CFR 800 for Section 106 consultation procedures. If you have questions or need additional information regarding these comments, please contact Tim Weston at 785-272-8681 (ext. 214) or Kim Gant at 785-272-8681 (ext. 225).

Sincerely,

Jennie Chinn, Executive Director and  
State Historic Preservation Officer

Patrick Zollner  
Deputy SHPO



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www.ksks.org



# KANSAS

Kansas Historical Society  
Cultural Resources Division

MARK PARKINSON, GOVERNOR

May 3, 2010

Scott Vogel, Chief  
Environmental Services Section  
Kansas Department of Transportation  
Eisenhower State Office Building  
Topeka KS 66612

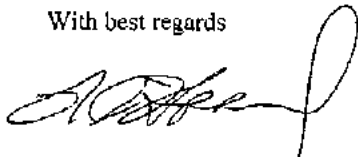
Re: 69-106 K-7290-03  
Crawford and Cherokee counties  
Archeological site 14CW352  
Section 4(f) of the Department of Transportation Act of 1966

Dear Sir:

In a draft report by Neal H. Lopinot, Jack H. Ray, and Dustin Thompson entitled *PHASE III ASSESSMENT OF SITES 14CW342, CAMBRIA (14CW352), AND SECOND COW CREEK (14CW355), CRAWFORD COUNTY, KANSAS*, submitted March, 2010, it is recommended that site 14CW352, the Cambria site, be considered eligible for listing on the National Register of Historic Places. It is my understanding that the Kansas State Historic Preservation Officer agrees with this assessment and will be sending a letter of concurrence in the near future.

If portions of 14CW352 have significant deposits that will be impacted by the proposed project, the deposits will be important chiefly because of what can be learned by data recovery and will have minimal value for preservation in place. As per 23 CFR 771.135(g)(2), section 4(f) of the Department of Transportation Act of 1966 (49 U.S.C. 303) does not apply in these circumstances.

With best regards



Robert J. Hoard, Kansas State Archeologist  
Copy, via email: Dr. Timothy Weston, State Historic Preservation Office  
Tricia Waggoner, Contract Archeology Program, Kansas Historical Society

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MAY 06 2010

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Des. Eng. Road	Des. Eng. Highway
Const.	Const.

# KANSAS

Kansas State Historical Society  
Jennie Chinn, Executive Director

KATHLEEN SEBELIUS, GOVERNOR

April 30, 2010

Jim L. Kowach  
Chief, Bureau of Design  
Kansas Department of Transportation  
Eisenhower State Office Building  
700 S.W. Harrison Street  
Topeka, KS 66603-3754

Attn: Scott Vogel, Chief, Environmental Services

Re: 69-106 K-7290-03  
NHS-HPD-K729(003)  
Crawford and Cherokee Counties

Dear Mr. Kowach:

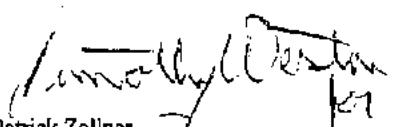
In accordance with 36 CFR 800, the Kansas State Historic Preservation Office has reviewed a document entitled *Phase III Assessment of Sites 14CW342, Cambria (14CW352) and Second Cow Creek (14CW355), Crawford County, Kansas*, by Neal H. Lopinot, Jack H. Ray, and Dustin A. Thompson. We find the report to be acceptable. Our office concurs with the recommendation that archeological sites 14CW342 and 14CW355 are not eligible for listing in the National Register of Historic Places. We further concur that the Cambria site (14CW352) is eligible for National Register listing under Criterion D.

This information is provided at your request to assist you in identifying historic properties, as specified in 36 CFR 800 for Section 106 consultation procedures. If you have questions or need additional information regarding these comments, please contact Tim Weston at 785-272-8681 (ext. 214) or Kim Gant at 785-272-8681 (ext. 225).

Sincerely,

Jennie Chinn, Executive Director and  
State Historic Preservation Officer

Patrick Zollner  
Deputy SHPO



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MAY 06 2010

BUREAU OF DESIGN ADMINISTRATION	
SET DATE TIME ROOM CONTACT	PROJ. NO. CONTRACT SHEET NO.

**Michael Fletcher**

---

**From:** Tricia Waggoner [twaggoner@ksks.org]  
**Sent:** Wednesday, January 20, 2010 10:20 AM  
**To:** Scott Vogel; Marsha King; Michael Fletcher  
**Cc:** Robert Hoard; Tim Weston  
**Subject:** 69-106 K-7290-03

Scott,  
I wanted to update you on what is going on with this project in Crawford County. We are waiting for the Phase III report from CAR. That report will include the findings of the geophysical survey. The results from the geophysical survey were both surprising and good. The site is eligible for listing on the National Register of Historic Places and will need some mitigation. For mitigation of this site we are proposing a smaller amount of field work than is usual. The main focus of the mitigation will be a history of the Cambria Site and an exhibit for the Crawford county historic society accompanied by a brochure. This will all promote the KDOT sponsored archeological work. I am currently working on a MOA for this site and a cost proposal for the work. We would like it better if the land was purchase prior to fieldwork. When would this take place? How soon would you like this work completed? Let me know if you have any questions regarding this project.

Thank you,  
Tricia

--  
Tricia Waggoner  
Archeologist II (Highway Archeologist)  
Kansas State Historical Society  
6425 SW 6th Avenue  
Topeka, KS 66615-1099  
785-272-8681 x267  
785-272-8682 fax  
[twaggoner@ksks.org](mailto:twaggoner@ksks.org)



# KANSAS

Kansas State Historical Society  
Jennie Chinn, Executive Director

KATHLEEN SEBELIUS, GOVERNOR

December 22, 2009

Jim L. Kowach  
Chief, Bureau of Design  
Kansas Department of Transportation  
Eisenhower State Office Building  
700 S.W. Harrison Street  
Topeka, KS 66603-3754

Attn: Scott Vogel, Chief, Environmental Services

Re: 69-106 K-7290-03  
NHS-HPD-K729(003)  
Crawford and Cherokee Counties

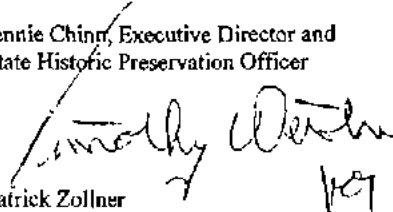
Dear Mr. Kowach:

In accordance with 36 CFR 800, the Kansas State Historic Preservation Office has reviewed a document entitled *Archeological Survey Report: Phase II Archeological Survey of KDOT Project 69-106 K-7290-03, Crawford and Cherokee Counties, Kansas*, by Tricia Waggoner. We find the report to be acceptable. Its recommendations mirror those contained in a management summary reviewed by our office in May of 2009. We continue to concur with the recommendation that archeological sites 14CW342, 14CW352, and 14CW355 should be tested at the Phase III level in order to determine if they are eligible for listing in the National Register of Historic Places. We further concur that the remaining fourteen archeological sites discovered during survey (14CW341, 14CW343, 14CW344, 14CW345, 14CW346, 14CW347, 14CW348, 14CW349, 14CW350, 14CW351, 14CW353, 14CW354, 14CW356, and 14CW357) are not eligible for National Register listing and will not require further investigations.

This information is provided at your request to assist you in identifying historic properties, as specified in 36 CFR 800 for Section 106 consultation procedures. If you have questions or need additional information regarding these comments, please contact Tim Weston at 785-272-8681 (ext. 214) or Kim Gant at 785-272-8681 (ext. 225).

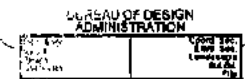
Sincerely,

Jennie Chinn, Executive Director and  
State Historic Preservation Officer

  
Patrick Zollner  
Deputy SHPO

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JAN 27 2010



6425 SW Sixth Avenue • Topeka, KS 66615-1099  
Phone 785-272-8681 Ext. 205 • Fax 785-272-8682 • Email jchinn@kshs.org • TTY 785-272-6683  
www.kshs.org

Re: K-7290-03 Pittsburgh Bypass- Enterprise Vault Archived Item

Page 1 of 2

**From** Neal Lopinot **Date** Thursday, September 17, 2009 4:49:32 PM  
**To** Michael Fletcher  
**Cc** Marsha King; Robert Hoard  
**Subject** Re: K-7290-03 Pittsburgh Bypass

Mike,

I apologize. I checked the file and realized that we needed to get a summary management report to KDOT a while back. Although the project began in June and we have a year to complete everything, we are actually within about a month or so of finishing an entire first draft. This may be a little optimistic, but we will get it done well ahead of our contractual obligation. Two others are working on the report as I write this email. I will try to whip up a longer overview of everything for you tomorrow if you need more details. However, I will briefly summarize here our Phase III investigations for the three sites.

Phase IIIA records research was undertaken for site 14CR342, a historic site, but it has since been deemed not eligible for further investigations.

As a result of Phase III records research and test excavations at 14CR352, now designated the Cambria site, it will be recommended as eligible and therefore require mitigation if it cannot be avoided. This former coal mine camp (1889-1908) site encompasses 28.3 hectares or about 70 acres (substantially larger than was identified as a result of the Phase II investigations), nearly all of which occurs within the proposed alignment. Although about 7 per cent of the north part of the camp has been destroyed by the construction of a lake, the remainder has good integrity, both established and potential. I will provide you with a map tomorrow that depicts the location of the coal mine camp (based on a very detailed 1906 atlas map) orthorectified relative to the currently proposed alignment. This could be very expensive to mitigate if it cannot be avoided.

Phase III investigations of 14CR355, a prehistoric site, also was undertaken. Although this site has proved interesting at the Phase III level, further investigations will not be recommended for a variety of reasons.

More tomorrow if you deem such necessary. Please let me know.

Sincerely,  
Neal

Neal H. Lopinot, Ph.D.  
Director & Research Professor  
Center for Archaeological Research  
Missouri State University  
622 South Kimbrough  
Springfield, Missouri 65897

Phone: 417-836-5363  
Fax: 417-836-4772

Mike, I'm copying Dr. Lopinot on this so he can respond. If the EA is moving forward, that suggests that the project will be built--I had heard otherwise. Please let me know any information you have regarding the project's schedule.  
Thanks  
Bob

<http://evserver/EnterpriseVault/ViewMessage.asp?VaultId=1A7248DE421F3354AA3D9...> 12/17/2010

Re: K-7290-03 Pittsburgh Bypass- Enterprise Vault Archived Item

Page 2 of 2

Robert J. Hoard, PhD  
State Archeologist, Kansas Historical Society  
6425 SW 6th Avenue, Topeka, KS 66615-1099, USA  
v: 785.272.8681 x269 f: 785.272.8682 rhoard@kshs.org  
Kansas Archaeology, edited by R. J. Hoard & W. E. Banks  
is available at <http://www.kshs.org/store/home.php>

Michael Fletcher wrote:

Bob,

The project design leader is wanting to put together a schedule for the EA. I haven't been able to get with Marsha but was hoping you might be able to give me an update on the status (and possible completion date) of the Phase III's.

Let me know if you have anything.

Thanks

Mike

<http://evserver/EnterpriseVault/ViewMessage.asp?VaultId=1A7248DE421F3354AA3D9...> 12/17/2010



# KANSAS

Kansas State Historical Society  
Jennie Chinn, Executive Director

KATHLEEN SEBELIUS, GOVERNOR

March 19, 2009

Jim L. Kowach  
Chief, Bureau of Design  
Kansas Department of Transportation  
Eisenhower State Office Building  
700 S.W. Harrison Street  
Topeka, KS 66603-3754

Attn: Scott Vogel, Chief, Environmental Services

Re: 69-106 K-7290-03  
NHS-HPD-K729(003)  
Crawford and Cherokee Counties

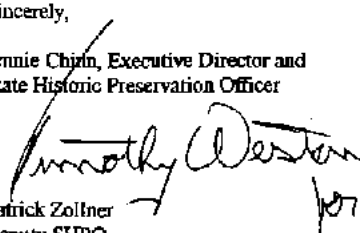
Dear Mr. Kowach:

In accordance with 36 CFR 800, the Kansas State Historic Preservation Office has reviewed a document entitled *Management Summary: Phase II Archeological Survey of KDOT Project 69-106 K-7290-03, Crawford and Cherokee Counties, Kansas*, by Tricia Waggoner. We find the management summary to be acceptable. It is our understanding that a full Phase II report will be submitted for review at a later date. Our office concurs with the recommendation that archeological sites 14CW342, 14CW352, and 14CW355 should be tested at the Phase III level in order to determine if they are eligible for listing in the National Register of Historic Places. We further concur that the remaining fourteen archeological sites discovered during survey (14CW341, 14CW343, 14CW344, 14CW345, 14CW346, 14CW347, 14CW348, 14CW349, 14CW350, 14CW351, 14CW353, 14CW354, 14CW356, and 14CW357) are not eligible for National Register listing and will not require further investigations. Finally, we note that landowner permission could not be obtained for four small portions of the corridor where survey had been recommended. It is our expectation that examination of those areas will be completed once KDOT has been able to obtain access.

This information is provided at your request to assist you in identifying historic properties, as specified in 36 CFR 800 for Section 106 consultation procedures. If you have questions or need additional information regarding these comments, please contact Tim Weston at 785-272-8681 (ext. 214) or Kim Norton at 785-272-8681 (ext. 225).

Sincerely,

Jennie Chinn, Executive Director and  
State Historic Preservation Officer

  
Patrick Zollner  
Deputy SHPO

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DATE	TIME	BY

6425 SW Sixth Avenue • Topeka, KS 66615-1099  
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www.kshs.org

# KANSAS

Kansas State Historical Society  
Cultural Resources Division

KATHLEEN SEBELIUS, GOVERNOR

Scott Vogel, Chief  
Environmental Services Section  
Kansas Department of Transportation  
Eisenhower State Office Building  
Topeka KS 66612

January 22, 2009

RE: 69-106 K-7290-03  
Discovery Phase  
Crawford County

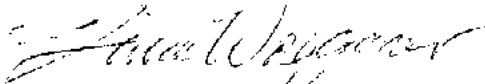
Subject: Discovery Phase completed

Dear Mr. Vogel:

In accordance with the goals and procedures of the Memorandum of Agreement between the Kansas State Historical Society and the Kansas Department of Transportation effective July 1, 2006, the KSHS Contract Archeology Program (CAP) has completed a Discovery Phase investigation of the above referenced road project. CAP's staff archeologist Tricia Waggoner completed the Discovery Phase. Enclosed, you will find a report of that investigation.

Thank you for your cooperation in helping to preserve the State's archeological resources.

Sincerely,  
For the State Archeologist:



Tricia Waggoner, Archeologist

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FILED	YES TO LAW
7/23/09	1/26/09

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### **Appendix C Historic (Standing Structures) Resources**

As part of the 1999 Advance Preliminary Engineering Study, ESS staff conducted a field survey and photographed all potentially eligible properties within the area of potential effect of three study corridors. The photographs were submitted to the State Historic Preservation Officer (SHPO) for review. The SHPO recommended that a number of properties undergo an Activity II (historic resource inventory) investigation, including several along the western bypass. A field survey was not conducted for the 2006 proposed interchange relocation.

The Preferred Concept overlaps much of the 1999 western bypass. However, the southern segment of the Preferred Concept was moved eastward and required an additional Activity I investigation by ESS staff. In addition, the added side road work, interchanges, and the West Capaldo Road relocation were not evaluated during the 1999 Activity I review.

Photographs of all potentially eligible structures that fell outside the 1999 area of potential effect were photographed and submitted to the SHPO on December 29, 2008. Based on these photographs the SHPO recommended Activity II investigations for three structures. Activity II investigations were initiated with a Notice to Proceed to City Search Preservation on January 14, 2009 for the three structures, as well as for five structures that were previously recommended for further review during the 1999 study.

Activity II investigations were completed by the KDOT consultant and submitted to the SHPO February 26, 2009. On March 9, 2009 the SHPO rendered an opinion that four properties were potentially eligible for inclusion in the National Register of Historic Places (NRHP) and recommended submission of Activity III reports for property #2 Albery House and Wash House, #5 Merando Barn, # E54 Ehmke Barn, and #W43 Motto Barn (Figure 9).

Following meetings with the Road Designer and SHPO it was determined that although the properties were within the APE of the Study Area they will not be adversely affected by the proposed project. On April 2, 2009, the SHPO determined Activity III investigations were not necessary unless the project alignment would change beyond the present study corridor.

The change in alignments for the northern and southern segments of the project in June and July of 2010 necessitated a re-evaluation of the effect of the project on the four potentially eligible properties. As shown the proposed changes to the alignment will move the alignment further away from properties #2 and #E54 and should not change the distance to properties #5 and #W43. The modified alignments also required an additional Activity I field survey.

Activity I photographs were taken of all potentially eligible standing structures with the area of potential effect of the realigned southern corridor on November 16, 2010 and December 13, 2010 and submitted to the SHPO on December 16, 2010. In a letter dated December 27, 2010 the



SHPO determined that the project will not adversely affect any buildings or structures listed or eligible for listing in the National Register of Historic Places.

The section 106 process has been completed for the proposed corridor and the SHPO has no objections to the proposed project. This determination will be re-evaluated in the event of any additional changes in the proposed corridor.



KSR&C No. 08-12-159

Kansas Historical Society  
Jennie Chinn, Executive Director

MARK PARKINSON, GOVERNOR

December 27, 2010

Scott Vogel  
Environmental Services Section, Bureau of Design  
Kansas Department of Transportation  
Eisenhower Office Building, 700 SW Harrison  
Topeka, KS 66603

Re: KDOT Project No. 69-106 K-7290-03  
New Corridor Alignment  
Crawford and Cherokee Counties

Dear Mr. Vogel:

We have reviewed the materials received December 17, 2010, regarding the above-referenced project in accordance with 36 CFR Part 800. The SHPO has determined the proposed project will not adversely affect any buildings or structures listed or eligible for listing in the National Register of Historic Places. As far as this office is concerned, the project may proceed. Please refer to the Kansas State Review & Compliance number (KSR&C#) listed above on any future correspondence.

Thank you for giving us the opportunity to comment on this proposal. Please submit any comments or questions regarding this review to Kim Norton Gant at 785-272-8681, ext. 225.

Sincerely,  
Jennie Chinn  
State Historic Preservation Officer

Patrick Zollner  
Director, Cultural Resources Division  
Deputy State Historic Preservation Officer

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Comm. Aff.	Rec. Mgmt.
Contract	Spec. Inv.

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# KANSAS

KSR&C No. 08-12-159

Kansas State Historical Society  
Jennie Chinn, *Executive Director*

KATHLEEN SEBELIUS, GOVERNOR

April 2, 2009

Marsha King  
KDOT  
Bureau of Design  
700 SW Harrison Street  
Topeka, KS 66603

Re: Activity III Investigations  
US 69 Corridor Project – Crawford and Cherokee Counties  
69-106 K-7290-03

Dear Ms. King:

Our staff has reviewed the revised corridor maps received via email March 31, 2009 for the above-referenced project in accordance with 36 CFR Part 800. The SHPO has determined that the historic properties located within the APE will not be adversely affected by the proposed project. Therefore, Activity III investigations are not necessary at this time. Should the project alignment change we would need to reassess the determination of effect.

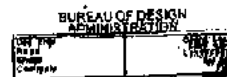
Sincerely,  
Jennie Chinn  
State Historic Preservation Officer



Patrick Zollner  
Director, Cultural Resources Division  
Deputy State Historic Preservation Officer

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[www.ksbs.org](http://www.ksbs.org)



# KANSAS

KSR&C No. 08-12-159

Kansas State Historical Society  
Jennie Chinn, *Executive Director*

KATHLEEN SEBELIUS, GOVERNOR

March 9, 2009

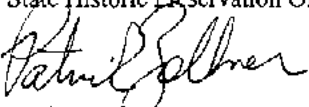
Marsha King  
KDOT  
Bureau of Design  
700 SW Harrison Street  
Topeka, KS 66603

re: Activity II for Eight Properties  
US 69 Corridor Project – Crawford and Cherokee Counties  
69-106 K-7290-03

Dear Ms. King:

Our staff has reviewed the Activity II submissions received February 27, 2009 for the above-referenced properties in accordance with the federal regulations for the protection of historic properties, 36 CFR Part 800.

The role of the State Historic Preservation Officer (SHPO) in reviews of this nature is to comment on whether or not an undertaking involving use of federal funds will have an adverse effect on a historic property or a property eligible for listing in the National Register of Historic Places. Our staff has determined that the following properties are potentially eligible for inclusion in the National Register of Historic Places and recommends the submission of Activity III reports: #2 Alberty House and Wash House; #5 Merando Barn; E54 Ehmke Barn; #W43 Motto Barn.

Sincerely,  
Jennie Chinn  
State Historic Preservation Officer  
  
Patrick Zollner  
Director, Cultural Resources Division  
Deputy State Historic Preservation Officer

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KANSAS

KSR&C No. 08-12-15A

Kansas State Historical Society  
Jennie Chinn, Executive Director

KATHLEEN SEBELIUS, GOVERNOR

December 29, 2008

Marsha King  
KDOT  
Bureau of Design  
700 SW Harrison Street  
Topeka, KS 66603

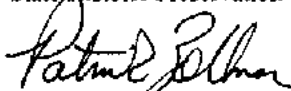
Re: US-69 Study Corridor  
69-106K-7290-03 - Crawford and Cherokee Counties

Dear Ms. King:

We have reviewed the materials received December 29, 2008 regarding the above-referenced project in accordance with 36 CFR Part 800. In reviews of this nature, the State Historic Preservation Officer (SHPO) determines whether a federally funded, licensed, or permitted project will have an adverse effect to properties that are listed or determined eligible for listing in the National Register of Historic Places. Should the project progress, we will require Activity II review on three properties: #2 (house and barn), #5 (barn), and #8 (barn) as these properties may be potentially eligible for listing in the National Register.

Thank you for giving us the opportunity to comment on this proposal. Please refer to the Kansas State Review & Compliance number (KSR&C#) listed above on any future correspondence. Please submit any comments or questions regarding this review to Kim Norton at 785-272-8681, ext. 225.

Sincerely,  
Jennie Chinn  
State Historic Preservation Officer



Patrick Zollner  
Director, Cultural Resources Division  
Deputy State Historic Preservation Officer

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**APPENDIX C. RIGHT-OF-WAY IMPACTS**

**Table B.1** lists the parcel information for those properties anticipated to be acquired for right-of-way. Indicated for each parcel are the Crawford County Parcel ID#, owner’s name(s), land use, area to be acquired, and the total area.

**Table B.2** is a summary table of anticipated acquisition needs.

**Table B.3** lists the parcel information for those properties that could potentially lose access to a public road as a result of right-of-way acquisition. No property is expected to be acquired from these parcels. Indicated for each parcel are the Crawford County Parcel ID#, owner’s name(s) and land use. Please note this is a preliminary assessment and alternative access may be provided through the final design phases.

**Table B.1 Land Use Codes**

AG = Agricultural  
 RES = Residential  
 COM/IND = Commercial/industrial  
 GOV = Governmental  
 VAC = Vacant

**Table B.1 Anticipated Structure Acquisition**

White fill = None  
 Yellow fill = Residence  
 Red fill = Business  
 Blue fill = Government Building

TABLE B.1: ANTICIPATED RIGHT-OF-WAY ACQUISITION				
Crawford County Parcel ID # (PIN)	Owner	Parcel Land Use	Acquisition Area (in Acres)	Total Parcel Area (in Acres)
019-097-36-0-00-00-00600-0-01	GRANO, FRANK JAMES & MARY	AG	1.09	161.41
019-104-17-0-00-00-00600-0-01	RUTHERFORD, JOANN & KAYE	AG	0.98	230.76
019-104-18-0-00-00-00800-0-01	YARTZ, HENRY JR. & MADELINE M.	AG	1.62	66.84
019-104-19-0-00-01-00100-0-01	RUTHERFORD, KAYE & JOANN	AG	12.66	144.14
019-104-19-0-00-01-00800-0-01	GOBL, JOSEPH F. III	AG	35.32	221.36
019-104-20-0-00-00-00200-0-01	RUTHERFORD, JOANN KAREN	AG	4.41	148.36
019-109-30-0-00-00-00100-0-01	GOBL, JOSEPH F. III	AG	38.41	139.22
019-109-30-0-00-00-00400-0-01	BRUNK, RANDALL L. & KIMBRA J.	AG	5.23	156.30
019-109-30-0-00-00-00401-0-01	KING, CHRISTOPHER L. & JOSIE A.	RES	2.77	2.87
019-109-30-0-00-00-00701-0-01	BRUNK, KIRBY LEE & KERRI DEANN	AG	34.27	77.61
019-109-31-0-00-01-00200-0-01	BRUNK, HARRY L. & BETTY L.	AG	4.52	115.77
019-109-31-0-00-01-00300-0-01	HECKERT, RONNIE G. & DOROTHY L.	AG	40.46	100.41
019-109-31-0-00-01-00401-0-01	YOUVAN, MARIE G.	AG	18.38	55.38
019-109-31-0-00-01-02600-0-01	HECKERT, RONNIE	AG	20.00	190.39
019-113-06-0-00-01-00900-0-01	BORDEN, BENJAMIN A.	AG	3.85	79.82
019-119-31-0-00-00-00100-0-01	TERLIP, ROBERT & MORRIS, WALDO	AG	8.02	147.97
019-119-31-0-00-00-00200-0-01	KUPLIN, HERMAN A. & BARBARA A.	AG	11.99	158.90
019-121-01-0-00-00-00100-0-01	LITTLE, KIMBERLY F. & RICK	AG	43.28	155.14
019-121-01-0-00-00-00101-0-01	HOTZ FARM TRUST	AG	36.81	161.55
019-121-01-0-00-00-00400-0-01	BOGINA, GREGORY P.	AG	3.72	111.52
019-121-12-0-00-01-00100-0-01	CLELAND, RICHARD A.	AG	16.42	37.20
019-121-12-0-00-01-00102-0-01	DEGRUSON, WALT & RITA	RES	1.08	1.08
019-121-12-0-00-01-00103-0-01	DEGRUSON, WALT & RITA	AG	6.53	159.67
019-121-12-0-00-01-00300-0-01	KUHEL, TIMMY JOE & JILL M.	RES	1.89	1.89
019-121-12-0-00-01-00400-0-01	KUHEL, TIMMY JOE & JILL M.	RES	0.94	0.94
019-121-12-0-00-01-00500-0-01	KLINKON, JOSEPH A. III	AG	33.86	116.57
019-121-12-0-00-01-01500-0-01	JOHN STERLE REVOCABLE LIVING TRUST	AG	4.44	40.69
019-121-12-0-00-01-02300-0-01	ECKELBERRY, DANIEL D. & SUSAN	RES	0.10	4.09

*Table continued on next page*

**US-69 CORRIDOR: ENVIRONMENTAL ASSESSMENT**

TABLE B.1: ANTICIPATED RIGHT-OF-WAY ACQUISITION (CONT.)				
Crawford County Parcel ID # (PIN)	Owner	Parcel Land Use	Acquisition Area (in Acres)	Total Parcel Area (in Acres)
019-121-12-0-00-01-02500-0-01	VINARDI, JOHN L. & BRUNETTI, KATHI L.	RES	0.80	1.21
019-121-12-0-00-01-03000-0-01	PERNOT, HERBERT W. & LOIS M.	AG	15.05	23.54
019-121-12-0-00-01-03100-0-01	KORACH, PAULINE	AG	6.42	39.98
019-126-13-0-00-00-00300-0-01	MARSHALL, BRIAN KEITH & BRENDA KAY	AG	23.12	106.37
019-126-13-0-00-00-00500-0-01	PUCKETT, KEVIN K.	RES	0.49	2.62
019-126-13-0-00-00-00600-0-01	ANNIS, CLAUDE JR.	RES	0.03	3.49
019-126-13-0-00-00-01500-0-01	RUSSIAN, HAYLEY	AG	6.77	11.82
019-126-13-0-00-00-01600-0-01	RUSSIAN, HAYLEY	AG	10.80	19.35
019-126-13-0-00-00-01800-0-01	PERNOT, HERBERT W. & LOIS M.	AG	22.82	45.40
019-126-13-0-00-00-02100-0-01	PERNOT, HERBERT W. & LOIS M.	AG	5.49	8.85
019-126-13-0-00-00-02200-0-01	PERNOT, HERBERT W. & LOIS M.	AG	5.78	5.83
019-126-13-0-00-00-02300-0-01	PERNOT, HERBERT W. & LOIS M.	AG	2.44	3.00
019-126-13-0-00-00-02400-0-01	RYAN, ROSEMARY & SIMONCIC, FRANK JAMES	VAC	1.34	2.80
019-126-13-0-00-00-02500-0-01	SMITH, KENNETH L. & LEROY, CYNTHIA J.	RES	1.14	1.15
019-126-13-0-00-00-02600-0-01	KRANTZ, JOHN & MARY P.	RES	1.92	1.92
019-126-13-0-00-00-02700-0-01	FARRUGGIA, APRIL M. RICHARDSON	VAC	2.42	2.42
019-126-13-0-00-00-02800-0-01	RUSSIAN, HAYLEY	VAC	0.13	0.13
019-126-13-0-00-00-02900-0-01	WOOD, RICHARD W. & BETTY M.	AG	2.10	51.77
019-126-13-0-00-00-02901-0-01	BIANCARELLI, KENNETH L. & CAROL S.	AG	0.13	101.47
019-126-13-0-00-00-02902-0-01	SMITH, DANIEL CHARLES & JENNIFER ELAINE	AG	0.56	45.90
019-126-24-0-00-00-00100-0-01	WOOD, RICHARD W. & BETTY M.	AG	55.25	412.10
019-126-24-0-00-00-00103-0-01	DORIO, JOHN C. & MARGARET A.	RES	0.37	7.66
019-126-24-0-00-00-00104-0-01	HEAD, JOSEPH GUY HEAD, KELSEY L.	RES	4.46	9.89
019-126-24-0-00-00-00106-0-01	THOMASON, BRIAN L. & KRISTA D.	RES	5.96	5.96
019-126-24-0-00-00-00300-0-01	CUKJATI, FRANK L. & JEANETTE	VAC	2.00	3.99
019-126-24-0-00-00-00400-0-01	CAROLYN L. BARTO REVOCABLE TRUST	AG	23.73	71.16
019-127-25-0-00-01-00200-0-01	NORRIS, CHRISTOPHER C. & MARY BETH	AG	61.66	242.61
019-127-25-0-00-03-00100-0-01	ALLEN, BILL D. & MARY K.	AG	1.65	1.82
019-127-25-0-00-04-00100-0-01	ALLEN, BILL D. & MARY K.	AG	0.76	0.76
019-127-25-0-00-05-00100-0-01	ALLEN, BILL D. & MARY K.	AG	1.29	1.29
019-127-25-0-00-06-00100-0-01	ALLEN, BILL D. & MARY K.	AG	0.08	0.36
019-127-25-0-00-07-00100-0-01	FOUR SIGHT LP	AG	1.66	4.34
019-127-25-0-00-08-00100-0-01	SHEPHERD, STEVEN B. & KAREN LEE	VAC	0.27	0.75
019-127-25-0-00-08-00200-0-01	SHEPHERD, STEVEN B. & KAREN LEE	RES	1.59	2.16
019-127-25-0-00-22-00200-0-01	MURNANE, ROBERT J. & SHIRLEY JOANN	VAC	0.00	2.37
019-127-25-0-00-23-00300-0-01	MURNANE, ROBERT J. & SHIRLEY JOANN	RES	0.34	1.32
019-127-25-0-00-23-00500-0-01	WENDEL, DALENA M. & GRAHAM, VICTOR F.	VAC	0.53	0.53
019-127-25-0-00-23-00600-0-01	MURNANE, ROBERT J. & SHIRLEY JOANN	VAC	0.87	1.85
019-127-25-0-00-24-00100-0-01	WENDEL, DALENA M. & GRAHAM, VICTOR F.	RES	0.57	1.32
019-127-25-0-00-24-00101-0-01	WENDEL, DALENA M. & GRAHAM, VICTOR F.	VAC	0.13	0.53
019-127-25-0-00-24-00200-0-01	WENDEL, DALENA M. & GRAHAM, VICTOR F.	AG	1.85	1.85
019-127-25-0-00-24-00201-0-01	WENDEL, DALENA M. & GRAHAM, VICTOR F.	VAC	0.53	0.53
019-127-25-0-00-24-00300-0-01	RAKESTRAW, KENNETH ROBERT & KAREN S.	RES	0.53	0.53
019-127-25-0-00-25-00100-0-01	WENDEL, DALENA M. & GRAHAM, VICTOR F.	AG	2.37	2.37
019-127-25-0-00-25-00200-0-01	ALLEN, BILL D. & MARY K.	AG	2.37	2.37
019-127-25-0-00-28-00100-0-01	ALLEN, BILL D. & MARY K.	AG	0.50	1.31
019-127-25-0-00-28-00200-0-01	ALLEN, BILL D. & MARY K.	AG	1.50	1.64
019-127-35-0-00-02-01400-0-01	MT RENTALS LLC	RES	0.14	3.88
019-127-35-0-00-02-01500-0-01	JONES, JON R. & DEANA J.	AG	0.39	0.47
019-127-35-0-00-02-01702-0-01	JONES, JON R. & DEANA J.	AG	0.72	10.69
019-127-36-0-00-00-00300-0-01	O'NELIO, PAUL	AG	0.82	3.00

*Table continued on next page*



**US-69 CORRIDOR: ENVIRONMENTAL ASSESSMENT**

TABLE B.1: ANTICIPATED RIGHT-OF-WAY ACQUISITION (CONT.)				
Crawford County Parcel ID # (PIN)	Owner	Parcel Land Use	Acquisition Area (in Acres)	Total Parcel Area (in Acres)
019-127-36-0-00-00-00400-0-01	WENDEL, DALENA M. & GRAHAM, VICTOR F.	VAC	0.96	0.96
019-127-36-0-00-00-00500-0-01	PINGREE, JAMES E.	RES	0.45	0.45
019-127-36-0-00-00-00600-0-01	PINGREE, JAMES E.	VAC	0.45	0.45
019-127-36-0-00-00-00700-0-01	PATTON, HELEN M. & NICOLETTI, PATTI S.	AG	0.45	0.45
019-127-36-0-00-00-00800-0-01	PATTON, HELEN M. & NICOLETTI, PATTI S.	AG	1.22	1.22
019-127-36-0-00-00-00900-0-01	PATTON, HELEN M. & NICOLETTI, PATTI S.	AG	1.22	1.22
019-127-36-0-00-00-01000-0-01	PATTON, HELEN M. & NICOLETTI, PATTI S.	AG	37.52	76.11
019-127-36-0-00-00-01100-0-01	O'NELIO, MARGUERITE & KNOLL, LINDA J.	AG	0.68	3.99
019-127-36-0-00-00-01300-0-01	FOUR SIGHT LP	AG	48.87	159.78
019-127-36-0-00-00-01400-0-01	BLYTHE, SCOTT A. & CHRISTINE L.	RES	1.92	3.12
019-127-36-0-00-00-01500-0-01	BARTO FAMILY INVESTMENTS LLC	AG	10.04	152.07
019-191-01-0-00-00-00100-0-01	FOUR SIGHT LP	AG	45.72	176.52
019-191-01-0-00-00-00200-0-01	STARKEY, DORA L.	RES	0.19	0.73
019-191-02-0-00-00-00100-0-01	MERANDO, TODD A. & JON D.	AG	3.60	75.31
019-191-02-0-00-00-00103-0-01	MERANDO, TODD A. & BRENDA K.	AG	0.07	1.80
019-191-02-0-00-00-00200-0-01	FOUR SIGHT LP	AG	33.07	273.36
019-191-11-0-00-00-00200-0-01	FOUR SIGHT LP	AG	55.07	199.25
019-191-11-0-00-00-00700-0-01	SAKET, M. CURTIS & JANIS E.	AG	3.21	4.49
019-191-11-0-00-00-00900-0-01	SAKET, M. CURTIS & JANIS E. (Lonestar Automotive)	COM/IND	0.75	2.03
019-191-11-0-00-00-01000-0-01	SAKET, M. CURTIS & JANIS E.	AG	0.00	4.07
019-191-11-0-00-00-01100-0-01	SAKET, M. CURTIS & JANIS E.	AG	0.30	2.16
019-191-11-0-00-00-01101-0-01	PATTON, SHERWIN E. & GLENDA K.	AG	2.00	3.11
019-191-11-0-00-00-01601-0-01	ELNICKI, BRICE E.	RES	0.48	3.60
019-191-11-0-00-00-01700-0-01	SAKET, M. CURTIS & JANIS E.	AG	2.55	2.70
019-191-11-0-00-00-01800-0-01	SAKET, M. CURTIS & JANIS E.	AG	1.70	1.99
019-191-11-0-00-00-01900-0-01	SAKET, M. CURTIS & JANIS E.	AG	1.55	1.99
019-191-11-0-00-00-02000-0-01	SAKET, M. CURTIS & JANIS E.	AG	1.26	2.01
019-191-11-0-00-00-02100-0-01	SAKET, M. CURTIS & JANIS E.	AG	1.54	2.01
019-191-11-0-00-00-02200-0-01	SAKET, M. CURTIS & JANIS E.	AG	2.57	3.17
019-191-11-0-00-00-02300-0-01	SAKET, M. CURTIS & JANIS E.	AG	2.05	2.05
019-191-11-0-00-00-02400-0-01	SAKET, M. CURTIS & JANIS E.	AG	2.00	2.00
019-191-11-0-00-00-02500-0-01	SAKET, M. CURTIS & JANIS E.	AG	2.00	2.00
019-191-11-0-00-00-02600-0-01	SAKET, M. CURTIS & JANIS E.	AG	2.00	2.00
019-196-13-0-00-01-00303-0-01	MOTTO, SHANE	AG	0.21	4.59
019-196-13-0-00-01-00600-0-01	BRYAN, FINIS R.	AG	16.05	38.12
019-196-13-0-00-01-01300-0-01	FARABI, C.L. & PAULA	AG	23.31	402.05
019-196-14-0-00-00-00100-0-01	SPEARS, DEAN E. & JUDITH D.	RES	2.41	4.16
019-196-14-0-00-00-00200-0-01	JAYNES, SHIRLEY	RES	3.47	3.47
019-196-14-0-00-00-00200-0-01	JAYNES, SHIRLEY (Steve Gepford Trucking)	COM/IND	same as previous	
019-196-14-0-00-00-00201-0-01	KELLER, RICHARD J. & JANET R.	VAC	2.97	2.97
019-196-14-0-00-00-00300-0-01	PAGE, JOSEPH H. & KAY F.	AG	13.53	22.23
019-196-14-0-00-00-00400-0-01	PAGE, JOSEPH H. & KAY F.	AG	15.82	440.48
019-196-14-0-00-00-00902-0-01	LOWRIE, JERROD S.	RES	0.90	2.18
019-196-14-0-00-00-00902-0-01	LOWRIE, JERROD S. (Downing Motor Services)	COM/IND	same as previous	
019-196-14-0-00-00-00903-0-01	BORN, TOM E. & LOUISA J.	AG	0.45	51.64
019-196-14-0-00-00-01200-0-01	KUBLER, KERRY	RES	0.28	0.95
019-196-14-0-00-00-01300-0-01	KELLER, RICHARD J. & JANET R.	RES	1.15	2.48
019-196-24-0-00-01-01000-0-01	HOUGH, GLENN L. & DONELDA J. REVOCABLE TRUST	AG	19.09	77.00
019-196-24-0-00-01-01200-0-01	HOUGH, GLENN L. & DONELDA J. REVOCABLE TRUST	AG	18.77	142.66
019-196-24-0-00-02-00100-0-01	BLESSANT, MATTHEW N.	AG	21.46	94.23
019-196-24-0-00-02-00200-0-01	S&H MANAGEMENT LLC (UPS Customer Center)	COM/IND	0.58	29.33

*Table continued on next page*

**US-69 CORRIDOR: ENVIRONMENTAL ASSESSMENT**

TABLE B.1: ANTICIPATED RIGHT-OF-WAY ACQUISITION (CONT.)				
Crawford County Parcel ID # (PIN)	Owner	Parcel Land Use	Acquisition Area (in Acres)	Total Parcel Area (in Acres)
019-196-24-0-00-02-01100-0-01	MARANSANI, CHARLEY J. & CAROL J.	RES	0.03	1.00
019-196-24-0-00-02-01200-0-01	WATT, MICHAEL RAY & CHRISTY ANN	RES	0.13	1.00
019-196-24-0-00-02-01300-0-01	HALL, KEVIN R. (Kevin's Custom Cabinets)	COM/IND	0.13	1.00
019-196-24-0-00-02-01400-0-01	KRASOVEC, ALTA & NEPOTE, JOHN L.	RES	0.13	1.00
019-196-24-0-00-02-01500-0-01	GILMORE, THOMAS R. & CATHERINE A.	RES	1.73	1.73
019-196-24-0-00-02-01501-0-01	WACHTER, PAUL E. JR. & TERESA A.	RES	0.59	1.00
019-196-24-0-00-02-01600-0-01	PENTOLA, CATHERINE F.	RES	0.73	0.73
019-196-24-0-00-02-01700-0-01	HICKMAN, HERBERT H. & SHIRLEY	RES	1.18	1.18
019-196-24-0-00-02-01800-0-01	GUDE, ERIC L. & ANNA B.	RES	0.51	0.51
019-196-24-0-00-02-01900-0-01	GILMORE, THOMAS J. & REAGAN, MELISSA K.	RES	0.52	0.52
019-196-24-0-00-02-02000-0-01	SMITH, RICHARD D. & MARY C.	RES	0.52	0.52
019-196-24-0-00-02-02100-0-01	HILDEBRANDT, GWENDOLA	RES	0.35	1.01
019-196-24-0-00-02-02200-0-01	MCCORMICK, JON S. & KAREN B.	RES	0.18	0.76
019-196-24-0-00-02-02300-0-01	WILSON, RICHARD D. & DIANA L.	RES	0.13	1.12
019-196-24-0-00-02-02400-0-01	GILMORE, THOMAS R. & CATHERINE A.	AG	16.03	29.22
019-196-24-0-00-02-02402-0-01	CUDNEY, CHARLES A. & PATRICIA	RES	0.44	0.44
019-196-24-0-00-02-02403-0-01	GILMORE, THOMAS R. & CATHERINE A.	RES	0.44	0.44
019-197-25-0-00-02-00701-0-01	PURDY, LARRY B. & CHARLOTTE A.	RES	0.11	3.01
019-197-25-0-00-02-01000-0-01	FOWLER, J.W. & SUZANNE	VAC	0.04	0.74
019-197-25-0-00-02-03500-0-01	FOWLER, J.W. & SUZANNE	RES	0.04	4.98
019-197-25-0-00-04-00100-0-01	CUSSIMANIO, GREG J. & AMY D.	RES	0.14	0.58
019-197-25-0-00-04-00200-0-01	STATE OF KANSAS (Department of Transportation)	GOV	1.44	4.98
019-197-25-0-00-04-00300-0-01	FANKHAUSER, KEITH RONALD & KAREN LYNN	AG	20.30	21.81
019-197-25-0-00-04-00301-0-01	STATE OF KANSAS (Department of Transportation)	GOV	0.00	6.64
019-197-25-0-00-04-00400-0-01	VANBECELAERE, ERIC A. & REBECCA A.	RES	0.43	0.43
019-197-25-0-00-04-00500-0-01	ROBINSON, DAVID E. & REBECCA P.	RES	0.52	0.52
019-197-25-0-00-04-00600-0-01	LEGRAND, JACK H. & MARY A.	RES	0.23	0.23
019-197-25-0-00-04-00700-0-01	GILMORE, DANIEL A.	RES	0.23	0.23
019-197-25-0-00-04-00800-0-01	JONES, GREGORY	RES	0.39	0.39
019-197-25-0-00-04-00900-0-01	BLESSANT, ELIZABETH A. & NICHOLSON, WILLIAM	RES	0.58	0.58
019-197-25-0-00-04-01000-0-01	RION, AARON K.	RES	0.36	0.36
019-197-25-0-00-04-01100-0-01	SEIFERT, TIFFANY A.	RES	1.51	2.05
019-197-25-0-00-04-01200-0-01	MERRILL, HANNAH N.	RES	0.08	0.22
019-197-25-0-00-04-01300-0-01	WILLIAMS, MYLAN L. & PAULA A.	RES	0.49	4.72
019-197-25-0-00-04-01400-0-01	GEIER, SANDRA E. & DELBERT C. (Country Lane RV Park)	COM/IND	0.30	0.87
019-197-25-0-00-04-01500-0-01	WILSON, VASELA G.	RES	0.13	1.77
019-197-25-0-00-04-01600-0-01	ALLURE SHOP LLC (Allure Salon and Spa)	COM/IND	0.01	1.73
019-197-25-0-00-04-02600-0-01	HALL, ALLEN E. & BETTY J.	AG	12.74	33.16
019-197-25-0-00-04-02602-0-01	BLESSENT, DAVID R. & TERRI D.	AG	8.93	15.31
019-197-25-0-00-04-02604-0-01	HALL, KEVIN R. & AMY L.	AG	13.64	53.69
019-197-25-0-00-04-02605-0-01	JONES, JOHN P. & DANA L.	AG	1.24	9.88
019-197-25-0-00-04-04100-0-01	CLARK, ANNA M. & JIM R.	AG	12.73	47.55
019-197-25-0-00-04-04400-0-01	HORN, RICHARD R. & DIANE S.	AG	0.18	8.25
019-197-25-0-00-05-00300-0-01	SHOEMAKER, DANNY R.	RES	0.28	0.35
019-197-25-0-00-05-00400-0-01	CUMMINS, PERRY E. & LAUGHLIN, LINDA	RES	1.22	1.22
019-197-25-0-00-05-00500-0-01	MORANDO, JOSEPH W. & BETH M.	RES	1.45	1.45
019-197-25-0-00-05-00600-0-01	STOCKER, EMILY LU	RES	0.11	0.37
019-197-25-0-00-05-01000-0-01	MARY E. POGSON REVOCABLE TRUST	AG	1.12	28.54
019-197-36-0-00-00-00200-0-01	COLEMAN, TODD R. & HEATHER MAREE	AG	21.90	119.60
019-197-36-0-00-00-00300-0-01	ELMER, DONALD E. & DITTMAN, CYNTHIA A.	RES	0.41	11.32
019-197-36-0-00-00-00303-0-01	SPIERS, JONATHAN & SANDS, MARLA K.	RES	2.81	3.00

*Table continued on next page*

**US-69 CORRIDOR: ENVIRONMENTAL ASSESSMENT**

TABLE B.1: ANTICIPATED RIGHT-OF-WAY ACQUISITION (CONT.)				
Crawford County Parcel ID # (PIN)	Owner	Parcel Land Use	Acquisition Area (in Acres)	Total Parcel Area (in Acres)
019-197-36-0-00-00-00304-0-01	WILLIAMS, KARLA	RES	2.60	2.60
019-197-36-0-00-00-01700-0-01	COLEMAN, TODD R. & HEATHER MAREE	AG	18.32	108.70
019-197-36-0-00-00-01800-0-01	BROWN, CLAYTON MARK & MELISSA LOUISE	AG	6.70	6.70
019-197-36-0-00-00-01802-0-01	JAMESON, BRUCE D. & TERESA G.	AG	18.45	28.53
019-197-36-0-00-00-01803-0-01	THOMAS, TIMOTHY E. & PATTI C.	AG	2.21	4.58
019-214-18-0-00-01-00800-0-01	AGNES L. PRICE REVOCABLE TRUST	AG	0.54	183.96
019-221-01-0-00-02-00100-0-01	SULLINGER, MURVYL M. & DOROTHY E.	AG	27.49	163.27
019-221-01-0-00-02-01500-0-01	SCHOUNTZ, BARBARA A.	AG	0.69	14.35
019-221-01-0-00-02-01600-0-01	RYAN, RAYMOND M. & ZOE ANN	RES	55.92	161.00
019-221-01-0-00-03-00600-0-01	HIX, CLIFFORD A. & JUDITH A.	RES	0.14	2.74
019-221-12-0-00-00-00100-0-01	GENEVIEVE E. RISTAU REVOCABLE LIVING TRUST	AG	21.41	70.95
019-221-12-0-00-00-00201-0-01	WOOD, CARL RICHARD & JUDY KAY	AG	6.04	72.81
019-221-12-0-00-00-00300-0-01	RUSSIAN, JAMES P. & JOHNNA L.	AG	0.85	35.95
019-221-12-0-00-00-00301-0-01	RUSSIAN, ROBERT P. & SUSAN F.	RES	0.48	3.01
019-221-12-0-00-00-01302-A-01	FRAZIER, JERALD L. & MARY L.	AG	17.53	66.04
019-221-12-0-00-00-01100-0-01	KEMP, JESS C & JOSEPHINE M.	VAC	2.39	2.50
019-221-12-0-00-00-01200-0-01	SELLS, TOMMY JOE & KATHRYN L.	RES	16.02	36.72
019-221-12-0-00-00-01200-0-02	SELLS, TOMMY JOE & KATHRYN L. (AJL Machine Shop)	COM/IND	13.64	32.36
019-221-12-0-00-00-01400-0-01	GENEVIEVE E. RISTAU REVOCABLE LIVING TRUST	AG	2.29	39.90
019-226-13-0-00-00-00200-0-01	WILKERSON, KENNETH K. & KAREN E.	AG	0.48	17.98
019-226-13-0-00-00-00300-0-01	MUSICK, ROBERT W. & PAMELA ANN	AG	9.70	17.12
019-226-13-0-00-00-00700-0-01	SCHMIDT, JOHN H. & MILDRED L.	AG	13.64	39.18
019-226-13-0-00-00-00800-0-01	HURST, ALONZO T. JR. & PATSY R.	AG	12.36	17.57
019-226-13-0-00-00-00900-0-01	DRENIK, SUSAN E.	AG	7.56	19.60
019-226-13-0-00-00-01000-0-01	COBB, WESLEY E., ELLEN M. & ROBERT R.	AG	22.24	79.12
019-226-13-0-00-00-01100-0-01	JOHNSON, JAMEY & RACHEL	AG	4.60	19.91
019-226-13-0-00-00-01101-0-01	ROSS, STANLEY D.	AG	11.89	51.00
019-226-13-0-00-00-01200-0-01	O'MALLEY, MARY ELIZABETH, TRUSTEE UNDER MARY ETC.	AG	10.21	44.06

TABLE B.2: SUMMARY TABLE OF ACQUISITION NEEDS		
Property Acquisition Land Use	Number of Parcels	Acquisition Area (in Acres)
Agricultural	117	1,359.36
Residential	67	130.64
Commercial/Industrial	8	15.41
Governmental	2	1.44
Vacant	15	15.02
<b>TOTALS</b>	<b>209</b>	<b>1,521.87</b>
Structure Acquisition Type	Number of Structures	Crawford Co. Appraised Value
Residence	44	\$2,244,910
Business	2	\$11,760
Government Building	1	\$520,190
<b>TOTALS</b>	<b>47</b>	<b>\$2,765,100</b>

## US-69 CORRIDOR: ENVIRONMENTAL ASSESSMENT

TABLE B.3: POTENTIAL ACCESS ELIMINATION		
Crawford County Parcel ID # (PIN)	Owner	Parcel Land Use
019-127-36-0-00-00-01200-0-01	O'NELIO, JOHN	AG
019-191-11-0-00-00-00800-0-01	PATTON, SHERWIN E. & GLENDA K.	AG
019-191-11-0-00-00-01300-0-01	HAMMERBACHER, CAROL A.	AG
019-191-11-0-00-00-01400-0-01	HAMMERBACHER, CAROL A.	AG
019-191-11-0-00-00-01600-0-01	HAMMERBACHER, CAROL A.	AG
019-197-25-0-00-04-04300-0-01	REDD, DONALD WAYNE & JACQUELINE L.	VAC
019-197-25-0-00-04-04301-0-01	RE FUND I LLC	VAC
019-197-25-0-00-04-04302-0-01	BRAZIL, WILLIAM T. & MENDI C.	VAC



**APPENDIX D. HAZARDOUS MATERIAL STORAGE**

The following websites were researched to determine the presence of hazardous wastes within the construction zones of the preferred alternative.

TABLE C1 : HAZARDOUS MATERIALS DATABASES	
DATABASE	URL
Federal National Priority List (NPL)	<a href="http://www.epa.gov/superfund/sites/npl/index.htm">http://www.epa.gov/superfund/sites/npl/index.htm</a>
Resource Conservation and Recovery Act (RCRA) query	<a href="http://www.epa.gov/enviro/html/rcris/rcris_query_java.html">http://www.epa.gov/enviro/html/rcris/rcris_query_java.html</a>
Envirofacts Facility Registry System	<a href="http://www.epa.gov/enviro/html/fii/fii_query_forms.html">http://www.epa.gov/enviro/html/fii/fii_query_forms.html</a>
Kansas Identified Sites List	<a href="http://kansas.kdhe.state.ks.us/certop/ISL_results?Selr=%28psnam=;pcnty=CRAWFORD;pdist=;pcity=;pbasn=;pleql=TS%20R%20S;%29">http://kansas.kdhe.state.ks.us/certop/ISL_results?Selr=%28psnam=;pcnty=CRAWFORD;pdist=;pcity=;pbasn=;pleql=TS%20R%20S;%29</a>
	<a href="http://kansas.kdhe.state.ks.us/certop/ISL_results?Selr=%28psnam=;pcnty=CHEROKEE;pdist=;pcity=;pbasn=;pleql=TS%20R%20S;%29">http://kansas.kdhe.state.ks.us/certop/ISL_results?Selr=%28psnam=;pcnty=CHEROKEE;pdist=;pcity=;pbasn=;pleql=TS%20R%20S;%29</a>
Kansas Underground Storage Tank/ Above Ground Storage Tank Assessment Database	<a href="http://www.kdheks.gov/tanks/index.html">http://www.kdheks.gov/tanks/index.html</a>
Kansas Solid Waste Facilities Database	<a href="http://public1.kdhe.state.ks.us/Landfills/Landfills.nsf?Opendatabase">http://public1.kdhe.state.ks.us/Landfills/Landfills.nsf?Opendatabase</a>
US EPA Brownfields And Land Revitalization	<a href="http://www.epa.gov/swerosps/bf/">http://www.epa.gov/swerosps/bf/</a>
US EPA Superfund Record Of Decision System (RODS)	<a href="http://www.epa.gov/superfund/sites/rods/">http://www.epa.gov/superfund/sites/rods/</a>
US EPA Geospatial Access Data Access Project	<a href="http://www.epa.gov/enviro/geo_data.html">http://www.epa.gov/enviro/geo_data.html</a>

The following pages include Facility Detail Reports for identified hazardous waste sites.

US-69 CORRIDOR: ENVIRONMENTAL ASSESSMENT



Facility Registry System (FRS)

http://enviro.epa.gov/efw/fii\_query\_detail\_disp\_program\_facility?p\_registry\_id=110017550791  
last updated on Thursday, August 26, 2010

View and filter: [EPA Home](#) [Envirofacts](#) [FRS](#) [Help](#)



Facility Detail Report



KANSAS DEPT OF TRANSPORTATION

PITTSBURG, KS 66762  
EPA Registry ID: 110017550791



Legend

- Selected Facility
- EPA Facility of Interest
- State/Tribal Facility of Interest

The facility locations displayed come from the FRS Spatial Coordinates tables. They are the best representative locations for the displayed facilities based on the accuracy of the collection method and quality assurance checks performed against each location. The North American Datum of 1983 is used to display all coordinates.

Environmental Interests

Information System	Information System ID	Environmental Interest Type	Data Source	Last Updated Date	Supplemental Environmental Interests
NAASAC - FACILITY PROFILE	1414133	STATE FACILITY	KS-FF		TANKS-24708 UNDERGROUND STORAGE TANK PROGRAM

Standard Industrial Classification Codes (SIC)

No SIC Codes returned.

National Industry Classification System Codes (NAICS)

No NAICS Codes returned.

Facility Codes and Flags

EPA Region	07
DUNS Number	
Congressional District Number	
Legislative District Number	
HUC Code/Watershed	101070107 / GRAND
US Mexico Border Indicator	001
Federal Facility	
Tribal Land	000

Alternative Names

No Alternative Names returned.

Facility Mailing Addresses

Affiliation Type	Delivery Point	City Name	State	Postal Code	Information System
KCOC STORAGE TANK FACILITY CONTACT	1013 W. 4TH ST., BOX 104	PITTSBURG		66762	KS-FF
MAILING ADDRESS	700 SW HARRISON ST., 6TH FLOOR	TOROKA		66603	KS-FF
OWNER/OPERATOR	700 SW HARRISON ST., 6TH FLOOR	TOROKA		66603	KS-FF
STORAGE TANK FACILITY CONTACT	1013 W. 4TH ST., BOX 104	PITTSBURG		66762	KS-FF

Contracts

Affiliation Type	Name	DUNS Number	Information System	Mailing Address
OWNER/OPERATOR	KCOF-CONTRACT		KS-FF	Site
OWNER/OPERATOR	AUGT-CURRY/MAINT		KS-FF	Site

Affiliation Type	Full Name	Office Phone	Information System	Mailing Address
KCOC STORAGE TANK FACILITY CONTACT	JOE MINELLI	316-231-7560	KS-FF	Site
STORAGE TANK FACILITY CONTACT	BILL MORGANIS	620-231-7560	K2-FF	Site
STORAGE TANK FACILITY CONTACT	JOE MINELLI	316-231-7560	KS-FF	Site

Query executed on: AUG-26-2010

http://iaspub.epa.gov/enviro/fii\_query\_detail\_disp\_program\_facility?p\_registry\_id=110017... 8/26/2010

# US-69 CORRIDOR: ENVIRONMENTAL ASSESSMENT



## Facility Registry System (FRS)

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 [Support](#)



### Facility Detail Report



#### LONE STAR MACHINE

2610 W 4TH  
 PTTTSBURG, KS 66752  
 EPA Facility ID: 110003207404



- Legend**
- Selected Facility
  - EPA Facility of Interest
  - State/Tribe Facility of Interest

The facility locations displayed come from the FRS Spatial Coordinates tables. They are the best representative locations for the displayed facilities based on the accuracy of the collection method and quality assurance checks performed against each location. The North American Datum of 1983 is used to display all coordinates.

#### Environmental Interests

Information System	Information System ID	Environmental Interest Type	Data Source	Last Updated Date	Supplemental Environmental Interests
RESOURCE CONSERVATION AND RECOVERY ACT (RCRA) TSD LISTED	KSR00005822	CE200 (ACTIVE)	RCRAINFO	11/17/2003	

Additional EPA Reports: [Air](#) [Environment](#) [Enforcement and Compliance](#) [Site Demographics](#) [Watershed Report](#)

#### Standard Industrial Classification Codes (SIC)

#### National Industry Classification System Codes (NAICS)

Data Source	SIC Code	Description	Primary	Data Source	NAICS Code	Description	Primary
RCRAINFO	2536	GENERAL AUTOMOTIVE REPAIR SHOPS		RCRAINFO	81111	GENERAL AUTOMOTIVE REPAIR	

#### Facility Codes and Flags

EPA Region	07
Buns Number	048107427
Congressional District Number	07
Legislative District Number	01
HUC Code/Watershed	11070207 / SPRING
US Mexico Border Indicator	NO
Federal Facility	NO
Tribal Land	NO

#### Facility Mailing Addresses

Affiliation Type	Delivery Point	City Name	State	Postal Code	Information System
Operator	2610 W 4TH	PTTTSBURG	KS	66752	RCRAINFO
REGULATORY CONTACT	2610 W 4TH	PTTTSBURG	KS	66752	RCRAINFO
FACILITY MAILING ADDRESS	2610 W 4TH	PTTTSBURG	KS	66752	RCRAINFO

#### Contacts

Affiliation Type	Full Name	Office Phone	Information System	Mailing Address
REGULATORY CONTACT	BOBBI PATTON	8204325655	RCRAINFO	1100

#### Alternative Names

No Alternative Names returned.

#### Organizations

Affiliation Type	Name	DUNS Number	Information System	Mailing Address
OPERATOR	LONE STAR MACHINE		RCRAINFO	
OWNER	LONE STAR MACHINE		RCRAINFO	5000

Query executed on: AUG-30-2010

[http://iaspub.epa.gov/enviro/fii\\_query\\_dtl\\_disp\\_program\\_facility?pgm\\_sys\\_id\\_in=KSR000...](http://iaspub.epa.gov/enviro/fii_query_dtl_disp_program_facility?pgm_sys_id_in=KSR000...) 8/30/2010

# US-69 CORRIDOR: ENVIRONMENTAL ASSESSMENT



## Facility Registry System (FRS)

http://iaspub.epa.gov/enviro/fii\_query\_detail\_disp\_program\_facility?p\_registry\_id=110017542998  
Last updated on Thursday, August 26, 2010

You are here: [EPA Home](#) | [Envirofacts](#) | [FRS](#) | [Home](#)



### Facility Detail Report



**JCB FARMS**  
2022 IIC HIGHWAY 57  
PITTSBURG, KS 66752  
EPA Facility ID: 110017542998



#### Legend

- \* Selected Facility
- EPA Facility of Interest
- State/Tribe Facility of Interest

The facility locations displayed come from the FRS Spatial Coordinates tables. They are the best representative locations for the displayed facilities based on the accuracy of the collection method and quality assurance checks performed against each location. The North American Datum of 1983 is used to display all coordinates.

#### Environmental Interests

Information System	Information System ID	Environmental Interest Type	Data Source	Last Updated Date	Supplemental Environmental Interests
KANSAS - FACILITY PROFILE	17050081	STATE MASTER	KS-FF		TANKS-41822 UNDEGROUND STORAGE TANK PROGRAM
KANSAS - FACILITY PROFILE	31581617	STATE MASTER	KS-FF		CAFQ 1048 LIVE STOCK WASTE CONTROL

#### Standard Industrial Classification Codes (SIC)

No SIC Codes returned

#### National Industry Classification System Codes (NAICS)

No NAICS Codes returned

#### Facility Codes and Flags

EPA Region	07
DUNS Number	
Congressional District Number	
Legislative District Number	
HUC Code/Watershed	11070207 / SPRING
US Mexico Border Indicator	00
Federal Facility	00
Tribal Land	00

#### Alternative Names

No Alternative Names returned

#### Organizations

Affiliation Type	Name	DUNS Number	Information System	Mailing Address
OWNER/OPERATOR	DOUR OIL CO		KS-FF	3020
OWNER/OPERATOR	JCB FARMS		KS-FF	3020
OWNER/OPERATOR	DOUR OIL CO		KS-FF	3020
OWNER/OPERATOR	TRD W&I		KS-FF	3020

#### Facility Mailing Addresses

Affiliation Type	Address	City Name	State	Postal Code	Information System
MAILING ADDRESS	2022 IIC HWY	PITTSBURG		66752	KS-FF
STORAGE TANK FACILITY CONTACT	2022 IIC HWY	PITTSBURG		66752	KS-FF
KOBE STORAGE TANK FACILITY CONTACT	2022 IIC HWY	PITTSBURG		66752	KS-FF
MAILING ADDRESS	2022 IIC HWY	PITTSBURG		66752	KS-FF
OWNER/OPERATOR	RD 001 104	BUTLER		64730	KS-FF
OWNER/OPERATOR	HECTOR BOX 480	ARMA		66713	KS-FF
OWNER/OPERATOR	2022 IIC HWY	PITTSBURG		66752	KS-FF

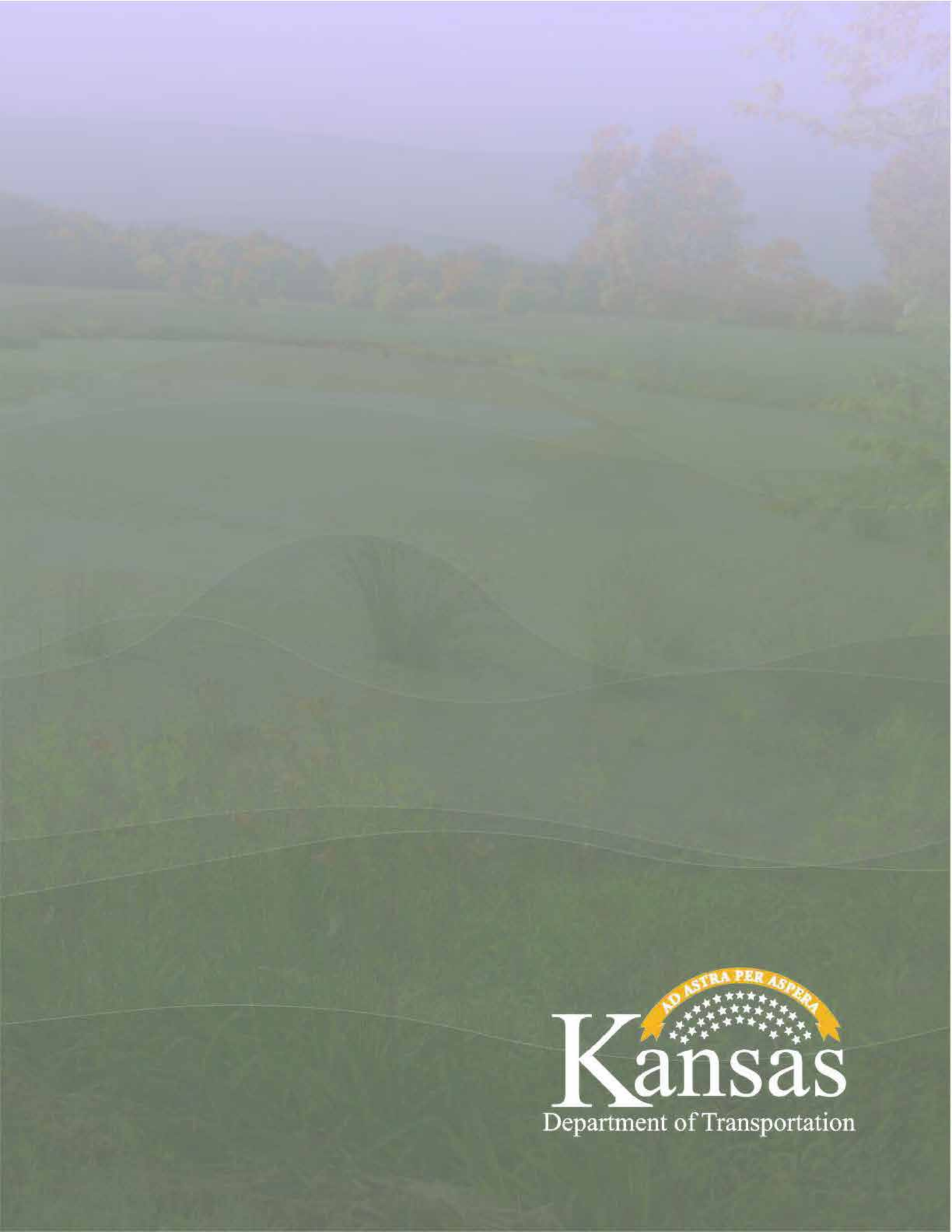
#### Contacts

Affiliation Type	Full Name	Office Phone	Information System	Mailing Address
STORAGE TANK FACILITY CONTACT	ROGER E DOUR	316-347-8208	KS-FF	3020
CONTACT	JCB FARMS		KS-FF	
KOBE STORAGE TANK FACILITY CONTACT	ROGER E DOUR	316-347-8208	KS-FF	3020

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**Kansas**  
Department of Transportation