FEDERAL HIGHWAY ADMINISTRATION FINDING OF NO SIGNIFICANT IMPACT FOR

US 61

From Memorial Park Road in Burlington north to 1 mile north of IA 78.

Des Moines and Louisa County, Iowa

NHS-061-2(50)--19-29

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

9/22/2016

ichael La Pietra

Date

For FHWA

Description of the Proposed Action

The Federal Highway Administration (FHWA) and the Iowa Department of Transportation (Iowa DOT) is proposing to improve U.S. 61 from Memorial Park Road in Burlington north to 1 mile north of IA 78 in Louisa County. The proposed project consists of improving approximately 18 miles of roadway from 2-lanes to 4-lanes and evaluating a potential bypass around Mediapolis.

Environmental Assessment Availability

The Environmental Assessment (EA) was signed on November 24, 2015 and distributed to selected federal, state, and local resource agencies on January 11, 2016 for review and comment. A notice of the public availability of the EA and notification of a public hearing on February 16, 2016, was published in the Hawkeye (Burlington) on January 28, 2016, The Mediapolis News on January 28, 2016, The Des Moines County News (West Burlington) on January 28, 2016, and the Morning Sun News Herald on January 28, 2016. A Spanish version was also placed in El Heraldo Hispano on January 20, 2016. Notice of the public hearing was also included on the Iowa DOT website at www.iowadot.gov/pim.

Review and Comment Period

Following publication and distribution of the EA, a review and comment period was established for receipt of comments on the EA. The review and comment period closed on March 1, 2016 (Appendix A – Agency Coordination Letters and Comments). A public hearing for the project was held at the Mediapolis Elementary School located at 725 N. Northfield Street in Mediapolis, Iowa on February 16, 2016. The public hearing used an open forum format with a formal presentation. A written record of this meeting has been prepared and is available upon request.

Agency Comments

Comment letters on the EA were received from three (3) agencies and are included in Appendix A. The comments are summarized as follows with DOT responses presented in italics.

<u>U.S. Department of the Interior, Fish and Wildlife Service (USFWS)</u> – The USFWS noted that coordination regarding this project is ongoing. USFWS will continue to coordinate with IA DOT regarding appropriate wetland mitigation. USFWS understands that trees in upland areas will be replaced in accordance with Iowa Code 314.23 in order to minimize adverse impacts to threatened and endangered species including bats and migratory birds.

The Service has removed bald eagles from protection under the Endangered Species Act on August 8, 2007. However, they remain protected under the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act of 1940. The National Bald Eagle Management Guidelines (Guidelines) offer guidance on how to minimize disturbance to bald eagles and increase the likelihood that actions near bald eagle nests are consistent with the Eagle Act and the Migratory Bird Treaty Act. USFWS encourages adherence to these Guidelines.

<u>State of Iowa, Department of Natural Resources (IDNR)</u> – The IDNR provided comments on the EA on December 2, 2011 and have no additional concerns or comments at this time.

<u>U.S. Department of Environmental Protection Agency (EPA)</u> – The EPA had the following comments that focused on two areas: NEPA and 404.

NEPA comments:

EPA noted that Figure 11 in the EA shows the Worm Snake habitat (low and moderate potential) would be affected. The EA further states that although no specimens were found during windshield and walking surveys, plenty of moderate habitat was observed and is on record as being suitable habitat. The EPA inquired if there would be compensation or mitigation for lost habitat. Additionally, the EPA inquired if there was a plan for what would happen if an endangered species were discovered. *Compensation or mitigation for western worm snake was not requested by the IDNR. Woodland is Worm Snake habitat and is essentially being mitigated with the planned woodland and bat habitat mitigation for this project.*

EPA also inquired as to whether or not IA DOT has considered Indiana bat specific tree plantings to compensate for potential loss of bat habitat. EPA recommended continued consultation with U.S. Fish and Wildlife Services to bolster habitat for endangered species. *Impacted woodland will be mitigated at the Hickory Bend Mitigation site by restoring and creating 43 acres of trees suitable for bat habitat. Mitigation was discussed with the agencies during the concurrence point process.*

Regarding noise impacts, EPA noted that there is proof that noise barriers, whether engineered or vegetative, have the potential to not only reduce noise, but also lessen air pollution in and around homes located near highways. EPA recommended working with land owners near the right-of-ways to provide vegetative noise barriers that could provide either bat habitat or pollinator habitat. *Noise mitigation in the form of a noise barrier or noise berm was found to not be feasible and reasonable. Planting vegetation for noise mitigation is not feasible and reasonable due to the fact that it takes several hundred feet of dense trees to result in an appreciable noise reduction. Although vegetation screening is a good idea, it may be cost prohibitive.*

404 comments:

EPA inquired as to why the alignment in the northern section is shifted to the east where it crosses more streams and water resources. *The shift in alignment is necessary to avoid a large cultural site with potential for human remains. A shift to the west would also result in impacts to local businesses.*

The alignment also runs along a waterway at Stoney Hollow Road. Can the route be moved west to avoid it? *There are two residences to the west that would require total acquisitions. Shifting the alignment west would also result in greater farmland impacts.*

Public Hearing Date and Summary

A public hearing was held on February 16, 2016 from 4:30 p.m. to 6:30 p.m. at the Mediapolis Elementary School located at 725 N. Northfield Street in Mediapolis, Iowa. The purpose of the meeting was to present the Proposed Alternative and to gather feedback from the public on Proposed Alternative and the EA. The hearing was conducted using a combined open forum and formal presentation format. The hearing began with an open session during which attendees could express their views and ask questions in an informal setting. A formal presentation, followed by a question and answer session, was held after the open forum session. Approximately 228 people attended the public hearing. Overall, there was general support for the project, however, there were several comments related to access locations, property impacts, and the ROW/acquisition process. Other comments received related to safety concerns and emergency response time. A transcript of this hearing is included by reference as a separate document to the FONSI and is available upon request.

New Information

Several changes and new information has occurred since the publication of the EA and public hearing. This updates are described below.

Subsequent to publication of the EA, design modifications have occurred as a result of comments received at the public hearing regarding property impacts and access locations. The Study Area and Impact Area were adjusted in some areas where access locations were modified. The modifications have resulted in changes to the overall project impacts shown in Table 1 of the EA. The table below shows the revised impacts on resources based on the changes made since the EA was published.

	No Build	Proposed Alternative (Revised)
Cultural Resources (Historical Sites)	0	5 Structures/ 3 Historic Districts
Cultural Resources (Archaeological)	0	11 Sites-14 acres
Floodplains (acres)	0	65
Recreational Areas	0	0
Wildlife Management Areas (acres)	0	0
Sovereign Lands (acres)	0	0
Regulated Materials	0	5
Special Rivers (feet)	0	738
Streams (feet)	0	25,164
T & E Wildlife, Plant (species)	0	4
Wetlands (acres)	0	18.8
Woodlands (acres)	0	123
Bat Habitat (acres)	0	123
Businesses	0	5
Churches/Cemeteries	0	1
Farmland (acres)	0	1021
Homes	0	20

Schools (acres)	0	0.6
Utilities	0	Pipeline

These revisions were incorporated into the Proposed Alternative and reviewed by the resource agencies (USACE, USFWS, EPA, Iowa DNR) as part of the Iowa DOT's NEPA/404 Merge Process (Concurrence Point 4). All agencies concurred with the revised Proposed Alternative. The agencies also concurred on the proposed mitigation plans for the Proposed Alternative (Concurrence Point 5).

Iowa DOT Cultural Resources staff made a determination of Adverse Effect dated May 26, 2015 regarding archaeological sites 13DM1432, 13LA904 and 13LA921. On June 29, 2016, FHWA, SHPO, Iowa DOT, and OSA executed a Memorandum of Agreement (MOA) that governs the Section 106 process for this project. Iowa DOT has determined that all three sites are exempt from Section 4(f) approval. The Federal Highway Administration (FHWA) concurred on July 14, 2016. (Appendix B - Memorandum of Agreement)

Habitat assessments performed for the study area determined that habitat for state-listed species potentially occurred. Project habitat assessments and surveys were sent to the USFWS and Iowa DNR on July 12, 2016. On July 29, 2016 the Iowa DNR responded by commenting that the DNR agrees that (state) listed animal and prairie/wetland plant species are unlikely to be impacted and need no further attention. The DNR recommended plant surveys to be performed in forest along riparian corridors and in woodland ravines in the southern part of the project area. Additional plant surveys will be completed prior to construction. Iowa DOT will continue to coordinate with DNR concerning state listed species.

The proposed project falls within a county designated by the Iowa DNR and USFWS as summer range of the Indiana bat (*Myotis sodalist*) and northern long-eared bat (*Myotis septentrionalis*) in Iowa. Iowa DOT has determined, under the delegated authority provided by the Federal Highway Administration, that the proposed project may affect but is not likely to adversely affect Indiana bat or Northern long-eared bat or result in the adverse modification of federally designated critical habitat. USFWS concurred with this determination on August 8, 2016. USFWS concurrence is based on the implementation of the action items listed below.

- Tree removal will occur after October 1st and before March 31 per Iowa DOT specification 2101.01A
- Mitigate woodland per Iowa Code 314.23 including bat friendly tree plantings.

Basis for Finding of No Significant Impact

The EA evaluated resources present in the project area for effects as they may occur related to the proposed improvements to U.S 61 in Des Moines and Louisa Counties. The EA documents the absence of significant impacts associated with construction of the proposed project. The following resources were evaluated in detail: Land Use, Churches and Schools, Economic, Parkland and Recreational Areas, Bicycle and Pedestrian Facilities, Right-of-Way, Relocation Potential, Construction and Emergency Routes, Historical Sites or Districts, Archaeological Sites,

Wetlands, Surface Waters and Water Quality, Floodplains, Farmlands, Wildlife and Habitat, Threatened and Endangered Species, Woodlands, Noise and Air, Contaminated and Regulated Materials, Visual, and Utilities.

This FONSI documents compliance with the National Environmental Policy Act (NEPA) and all other applicable environmental laws, Executive Orders, and related requirements.

Special Conditions for Location Approval

The following conditions were identified for approval and will be implemented during the design process prior to construction:

Iowa DOT will allow Des Moines County Conservation (DMCC) to construct portions of the Flint River Trail in the Iowa DOT right-of-way from Flint Bottom Road south to the bridge over Flint River.

Right-of-way requirements will be minimized to the extent possible during final design. Relocations will be conducted in accordance with the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 and Iowa Code 316, the "Relocation Assistance Law". Relocations will be made available to all affected persons without discrimination.

For historic structures, 23 resources will be clearly identified within the project plans as historic property to be avoided by all project activities. Project plans will include a 100 foot buffer around the Hazel Grove Cemetery identifying it as "Restricted Area". Iowa DOT will require a Special Provision for Vibration Monitoring within the project contract.

For archaeological sites 13DM1432, 13LA904, and 13LA921, a data recovery agreement will be followed as per The MOA executed by FHWA, SHPO, Iowa DOT, and OSA.

A Section 401 Water Quality Certification from the Iowa DNR will be required for any unavoidable stream impacts.

A Section 404 permit from USACE will be required for stream and wetland impacts. A permit application and a wetland mitigation plan will be submitted to USACE for approval.

An Iowa DNR Floodplain Development Permit will be required and applied for during final design.

A National Pollutant Discharge Elimination System (NPDES) general stormwater discharge permit for construction will be required from the DNR. Iowa DOT will require the contractor to comply with measures outlined in the Stormwater Pollution Prevention Plan (SWPPP).

Trees will be cut after October 1 and before March 31 per Iowa DOT Specifications. Impacted woodland will be mitigated at the Hickory Bend Mitigation site by restoring and creating 43 acres of trees suitable for bat habitat.

Plant surveys for state-listed species will be completed prior to construction and coordinated with IDNR.

Construction activities will be coordinated with public utilities to avoid potential conflicts and to minimize planned interruptions of service.

APPENDIX A

Agency Coordination Letters and Comments



IN REPLY REFER TO:

FWS/RIFO

United States Department of the Interior

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



February 29, 2016

Mr. Mitch Dillavou Bureau Director, Highway Division Iowa Department of Transportation 800 Lincoln Way Ames, Iowa 50010

Dear Mr. Dillavou:

We have received the Environmental Assessment dated November 24, 2015, for the improvement of U.S. 61 from Memorial Park Road in Burlington to one mile north of IA 78 in Louisa County, Iowa. We have reviewed the document and have the following comments.

Coordination regarding this project has been ongoing with the Iowa Department of Transportation Office of Location and Environment (IADOT). As project design, including proposed right of way requirements, becomes more detailed, we will continue to work with IADOT regarding appropriate wetland mitigation locations and ratios in order to address unavoidable impacts to wetlands. We understand that trees cleared in upland areas will be replaced in accordance with Iowa Code 314.23 and, additionally, in order to minimize adverse impacts to threatened and endangered species, including bats, and migratory birds. To insure impacts to threatened and endangered species and migratory birds, from all instances of tree clearing, are addressed we will coordinate with IADOT regarding tree replacement composition and location.

The Service removed bald eagles from protection under the Endangered Species Act on August 8, 2007. However, they remain protected under the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act of 1940 (Eagle Act). The Eagle Act prohibits take which is defined as, "pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, destroy, molest, or disturb" (50 CFR 22.3). Disturb is defined in regulations as, "to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, 1) injury to an eagle, 2) decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or 3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior."

Mr. Mitch Dillavou

The National Bald Eagle Management Guidelines (Guidelines) offer guidance on how to minimize disturbance to bald eagles and increase the likelihood that actions near bald eagle nests are consistent with the Eagle Act and the Migratory Bird Treaty Act. We encourage adherence to these Guidelines.

It is unlawful to take or disturb eagles without first obtaining a permit for non-purposeful take of eagles. However, no permit would be available unless an applicant has first taken all practicable steps to avoid take of eagles. Information about eagle permits can be found online at the following link: http://www.fws.gov/midwest/MidwestBird/eaglepermits/

This letter provides comments under the authority of and in accordance with provisions of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.); and the Endangered Species Act of 1973, as amended. Please contact me if you have questions.

Heidi Woeber U.S. Fish and Wildlife Service 1511 47th Avenue Moline, Illinois 61265 309/757-5800 Ext. 209

cc: IADNR (Moore, Schwake) USEPA (Summerlin)



STATE OF IOWA

TERRY E. BRANSTAD, GOVERNOR KIM REYNOLDS, LT. GOVERNOR DEPARTMENT OF NATURAL RESOURCES CHUCK GIPP, DIRECTOR

February 12, 2016

MR MITCH DILLAVOU BUREAU DIRECTOR HIGHWAY DIVISION IOWA DEPARTMENT OF TRANSPORTATION 800 LINCOLN WAY AMES IA 50010

 RE: U.S. 61 from Memorial Park Rd. (in Burlington) to 1 mile north of IA 78 – Environmental Assessment Des Moines and Louisa Counties NHS-061-2(50)—19-58 PIN: 97-29-061-010 IDNR Sovereign Lands Tracking Number 6775 Sections 26, 27, 34, 35, Township 73N, Range 3W Section 2, 3, 11, 14, 23, 26, 35, Township 72N, Range 3W Section 2, 11, 14, 23, 26, 35, Township 71N, Range 3W Section 2, 11, 14, 23, 26, 35, Township 70N, Range 3W

Dear Mr. Dillavou:

Thank you for the opportunity to comment on the Environmental Assessment (EA) dated November 24, 2015 for U.S. 61 in Des Moines and Louisa Counties. We provided comments on the draft EA on December 2, 2011 and have no additional concerns or comments to make at this time.

If you have any questions, please call me at (515) 725-8399.

Sincerely,

Christine M. Schurche

Christine Schwake Environmental Specialist

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 7

11201 Renner Boulevard Lenexa, Kansas 66219

0 1 MAR 2016

RECEIVED

Mr. Mitch Dillavou, Bureau Director Highway Division, Iowa Department of Transportation 800 Lincoln Way Ames, Iowa 50010

MAR 4 2016

Office of Location & Environment

Dear Mr. Dillavou:

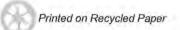
Thank you for contacting the U.S. Environmental Protection Agency for comments on the Draft Environmental Assessment on U.S. 61 from Memorial Park Road in Burlington North to 1 Mile North of IA 78 in Louisa County (NHS-061-2(50)-19-58).

During our evaluation we consulted EPA's 404 Program to help consolidate comments that will help ensure compliance with Section 404 of the Clean Water Act. When reading the comments in the attachment please note the two sections: NEPA Compliance and 404 Compliance.

Also, our personal emails have been consolidated into a NEPA Program mailbox. This will allow any of our reviewers and managers to access your documents. We would appreciate it if you would ensure that your organizational records and data bases reflect this change of address. Again, thank you for contacting EPA. If you have any questions, please contact Joe Summerlin at 913-551-7029 or at R7_NEPA@epa.gov. If you have any 404 questions, please contact Jeannette Schafer at 913-551-7297 or schafer.jeannette@epa.gov.

Sincerely

Joshua Tapp Deputy Director Environmental Sciences and Technology Division



NEPA COMMENTS

Section 5.3.6 Endangered Species, p.32: Under the proposed alternative the document concludes that the "project may affect but not adversely affect listed species and their habitats." However, by looking at the map (Figure 11), it shows that Worm Snake habitat (low and moderate potential) would be affected. On page 31 the document shows that "windshield and walking surveys were conducted to assess habitat for the western worm snake and Blanding's turtle on August 12-14 2013 and again on July 22, 2014 and that no animals were found. The document also states that intensive searches were not conducted. Although no specimens were found during the windshield and walking surveys, plenty of moderate habitat was observed and is on record as being suitable habitat. Will the lead agency compensate or mitigate for lost habitat, and has the lead agency planned for what would happen if an endangered species were discovered?

Furthermore, a discussion about the Indiana Bat was included in the document which states that there would be a prohibition of the taking of trees during roosting phase of the bat. Has the agency considered Indiana bat specific tree plantings to compensate for the loss of bat habitat? EPA recommends continued consultation with the U.S. Fish and Wildlife Service to bolster habitat for endangered species this project might affect.

Section 5.4.1 Noise, p.35: Under the proposed alternative the document states that the criteria for building a noise barrier along the highway is not warranted. In many EPA studies, there is proof that noise barriers, whether engineered (e.g. walls, berms) or vegetative (e.g. trees, bushes), have the potential to not only reduce noise, but also lessen air pollution in and around homes located near highways. EPA recommends working with land owners near the right-of-ways to provide vegetative noise barriers that could provide either bat habitat or pollinator habitat. EPA understands that Iowa DOT may not have funds to maintain the vegetation in their ROW, but IADOT could work with those land owners that might want to not only have the barrier, but also would maintain it.

https://www.researchgate.net/profile/Andrey_Khlystov/publication/221780896_Field_investigation_of_r oadside_vegetative_and_structural_barrier_impact_on_nearroad_ultrafine_particle_concentrations_under_a_variety_of_wind_conditions/links/0912f50883fc276c4 0000000.pdf

http://www3.epa.gov/otaq/nearroadway.htm

404 COMMENTS

For the purposes of 404 permitting and public disclosure (since the public is not involved in the concurrence point process), EPA recommends explaining why:

- a. In the northern section of this alignment, the road is shifted US 61 to the east which crosses more streams and water resources. Can the alignment be shifted to the west, and would this result in fewer water resource impacts?
- b. Also at Stony Hollow Road, the planned route runs right along a waterway. Can it be moved to the west to avoid this?

APPENDIX B

Memorandum of Agreement

WHEREAS, the Federal Highway Administration (FHWA) plans to fund the southern segment of the U.S. 61 Reconstruction Project in Des Moines and Louisa County (undertaking) pursuant to Section 106 of the National Historic Preservation Act, 54 U.S.C. § 306108 (the Act), and its implementing regulations (36 CFR§ 800); and

WHEREAS, this undertaking consists of the development of a four lane highway facility between the city of Burlington in Des Moines County, to one mile north of Iowa 78 in Louisa County; and

WHEREAS, the FHWA has defined the undertaking's area of potential effects (APE) as described in Appendix A; and

WHEREAS, the FHWA has determined that this undertaking may have an adverse effect on archaeological sites 13DM1432, 13LA904, and 13LA921 which are eligible for listing on the National Register of Historic Places, and has consulted with the Iowa State Historic Preservation Office (SHPO) pursuant to 36 CFR § 800, the regulations implementing Section 106 of the National Historic Preservation Act (54 U.S.C. § 306108); and

WHEREAS, the FHWA has determined that this undertaking should not have an adverse effect on the twenty-three built historic properties, including one historic cemetery, all identified in Appendix B, which are listed on or eligible for listing on the National Register of Historic Places, and has consulted with the Iowa State Historic Preservation Office (SHPO) pursuant to 36 CFR § 800, the regulations implementing Section 106 of the National Historic Preservation Act (54 U.S.C. § 306108); and

WHEREAS, the FHWA has consulted with the Flandreau Santee Sioux; Ho-Chunk Nation; Iowa Tribe of Kansas and Nebraska; Iowa Tribe of Oklahoma; Mandan, Hidatsa, Arikara; Miami Nation of Oklahoma; Omaha Tribe of Nebraska; Otoe-Missouria Tribe; Pawnee Nation of Oklahoma; Peoria Tribe of Indians of Oklahoma; Ponca Tribe of Nebraska; Prairie Band Potawatomi Nation; Sac and Fox Tribe of the Mississippi in Iowa; Sac and Fox Tribe of Oklahoma; Sisseton-Wapheton Oyate; Spirit Lake Tribe; Winnebago Tribe of Nebraska; and Yankton Sioux Tribe, for which no specific historic properties within the APE have been expressed has having religious and cultural significance; and

WHEREAS, the interested tribes and nations from the list above have been provided information regarding the effects of the undertaking on historic properties and have been invited to sign this Memorandum of Agreement (MOA) as concurring parties; and

WHEREAS, the FHWA has consulted with the Iowa Department of Transportation (Iowa DOT) and the University of Iowa's Office of the State Archaeologist Bioarchaeology Program (OSA), regarding the effects of the undertaking on historic properties and has invited them to sign this MOA as invited signatories; and

WHEREAS, the FHWA has consulted with the Des Moines County Historical Society, Louisa County Historic Preservation Commission, Louisa County Historical Society, and Preservation Iowa regarding the effects of the undertaking on historic properties and has invited them to sign this MOA as concurring parties; and

WHEREAS, this undertaking has continued to be developed with appropriate public involvement pursuant to 36 CFR 800.2(d) and 800.6(a), having been coordinated with the scoping, public review and comment, and public hearings conducted to also comply with National Environmental Policy Act and its implementing regulations; and

WHEREAS, in accordance with 36 CFR § 800.6(a)(1), the FHWA has notified the Advisory Council on Historic Preservation (ACHP) of its adverse effect determination with specified documentation, and the ACHP has chosen *not to* participate in the consultation pursuant to 36 CFR § 800.6(a)(1)(iii); and

NOW, THEREFORE, the FHWA and the SHPO agree that the undertaking shall be implemented in accordance with the following stipulations in order to take into account the effect of the undertaking on historic properties.

STIPULATIONS

The FHWA shall ensure that the following measures are carried out:

- I. MITIGATION OF ADVERSE EFFECTS
 - A. The Iowa DOT shall implement the planned phase III data recovery in Appendix C, prior to and in coordination with construction activities.
 - B. The Iowa DOT shall ensure that all historic preservation work pursuant to this agreement is carried out by or under the direct supervision of an archeologist meeting the Secretary of the Interior's Professional Qualifications Standards for prehistoric archeologist (48 FR 44738-9).
 - C. The SHPO will be provided an opportunity to make a site visit to review the data recovery field work for thoroughness and compliance with the planned phase III data recovery, so that at its completion, the letting of the construction project may be allowed to proceed and will not be delayed while the laboratory analysis and writing of the report are being finished.
 - D. Tribes choosing to act as consulting parties to this agreement will be provided an opportunity to make a site visit to review the data recovery field work for thoroughness and compliance with the planned phase III data recovery.
 - E. Archeological investigations and data recovery activities may be terminated at sites 13DM1432, 13LA904, and 13LA921 if the FHWA, SHPO, and Iowa DOT and agree that significant information is not being recovered.

- F. The Iowa Code protects all human burials in the state of Iowa. Ancient remains are also protected under Chapter 263B, 523I.316(6) and 716.5 of the Iowa Code and the provisions of the Native American Graves Protection and Repatriation Act (25 U.S.C. 3001 through 3005).
 - i. In the event that human remains or burials are encountered during additional archaeological investigations or construction activities, the Iowa DOT shall cease work in the area, take appropriate steps to secure the site, and notify the signatories to this agreement within 24 hours.
 - ii. If the remains appear to be ancient (i.e., older than 150 years), the Bioarchaeology Program at the OSA shall have jurisdiction to ensure Iowa law, NAGPRA and the implementing regulations (43CFR10) are observed. In keeping with the policy and procedures of Bioarchaeology Program, the disposition of the remains will be arranged in consultation with the culturally affiliated tribe(s) or the Indian Advisory Council, following the procedures in the OSA/tribal NAGPRA agreement for culturally unidentifiable human remains, if the affiliation is not known.
 - iii. If the remains appear to be less than 150 years old, the burial may be legally protected under Chapters 113.34, 144.34, 523I.316, 56 and 716.5 of the Iowa Code and the Iowa Department of Health will be notified.
- G. The FHWA and Iowa DOT shall ensure that all final archeological reports resulting from actions pursuant to this agreement are responsive to contemporary professional standards and to the Department of the Interior's Format Standards for Final Reports of Data Recovery Program (42 FR 5377-79). Precise locational data may be provided only in a separate appendix if it appears that release of such data could jeopardize archeological deposits. The FHWA and Iowa DOT shall also ensure that the final written report of the testing and data recovery shall be distributed to the signatories and consulting parties.
- H. The FHWA and Iowa DOT shall ensure that all materials and records resulting from the testing and data recovery conducted at archeological sites 13DM1432, 13LA904, and 13LA921 are curated in accordance with 36 CFR Part 79 at a facility within the State of Iowa.
- I. If the FHWA, SHPO, and Iowa DOT can agree that sufficient data has been collected, the FHWA and Iowa DOT shall ensure the development of a for public media (i.e. blogpost, booklet, video) that may be printed and/or hosted on the Iowa DOT website or other publically accessible location.

II. AVOIDANCE OF ADVERSE EFFECTS

A. VIBRATION: Monitoring

i. FHWA and Iowa DOT shall ensure a pre-construction survey of the six
(6) individual historic properties identified in Appendix B Part I is completed to document their present condition. The preconstruction

survey will also establish a peak particle velocity (PPV) threshold for vibration.

- ii. FHWA and Iowa DOT shall ensure sensors (crack and/or seismic) are installed and tested daily. If eighty (80) percent of the PPV threshold is reached sensors will alert the contractor and in turn the construction engineer.
- iii. If the PPV is reached, a meeting with the contractor and the construction engineer will identify alternative demolition/ construction methods and/or equipment to be used to minimize project vibration.
- iv. If damage to these properties occurs during construction or demolition, all activities will cease until approval from the construction engineer occurs. The SHPO will be immediately notified by the Iowa DOT if this occurs.
- v. FHWA and Iowa DOT shall ensure a post-construction survey is performed and distributed to the SHPO sixty (60) days after construction completion.
- vi. Items under Stipulation II.C will be captured in a Special Provision of the construction documents.
- B. VIBRATION: Plans
 - i. FHWA and Iowa DOT shall ensure the construction plans contain a plan note identifying the sixteen (16) properties listed in Appendix B Part II are listed or considered eligible for listing on the National Register of Historic Places.
 - ii. FHWA and Iowa DOT shall ensure the construction plans contain a plan note identifying that all demolition and construction methods and equipment used shall achieve low project vibration levels when working near these properties.
 - iii. If damage to these properties occurs during construction or demolition, all activities will cease until approval from the construction engineer occurs. The SHPO will be immediately notified if this occurs.
 - iv. FHWA and Iowa DOT shall provide check plans to the SHPO for their review and comment.
 - v. FHWA and Iowa DOT shall provide final plans to the SHPO for their information.

III. DURATION

This MOA will expire if its terms are not carried out within five (5) years from the date of its execution. Prior to such time, the FHWA may consult with the other signatories to reconsider the terms of the MOA and amend it in accordance with Stipulation VII below.

IV. POST-REVIEW DISCOVERIES

If properties are discovered that may be historically significant or unanticipated effects on historic properties found, the FHWA shall implement the discovery plan of this stipulation.

A. DISCOVERY PLAN: Archaeology

If construction work should uncover previously undetected archaeological materials, the Iowa DOT will cease construction activities involving subsurface disturbances in the area of the resource and notify the SHPO of the discovery and proceed with the following stipulation. If the discovery includes human remains, Stipulation IV.B will be followed.

- i. The SHPO, or an archaeologist retained by the Iowa DOT that meets or exceeds the Secretary of the Interior's Standards for archeology, will immediately inspect the work site and determine the extent of the affected archaeological resource. Construction work may then continue in the area outside the archaeological resource as it is defined by the DOT's retained archaeologist in consultation with the SHPO.
- ii. Within fourteen (14) days of the original notification of discovery, the Iowa DOT, in consultation with the SHPO, will determine the National Register eligibility of the resource. The Iowa DOT may extend this 14day calendar period one time by an additional seven (7) days by providing written notice to the SHPO prior to the expiration date of said 14-day calendar period.
- iii. If the resource is determined eligible for the National Register, the Iowa DOT shall submit a plan for its avoidance, protection, recovery of information, or destruction without data recovery to the SHPO for review and comment. The Iowa DOT will notify all consulting parties of the unanticipated discovery and provide the proposed treatment plan for their consideration. The SHPO and consulting parties will have seven (7) days to provide comments on the proposed treatment plan to the FHWA and Iowa DOT upon receipt of the information.
- iv. Work in the affected area shall resume upon either:
 - 1. the development and implementation of an appropriate data recovery plan or other recommended mitigation procedures; or
 - 2. agreement by the SHPO that the newly located archaeological materials are not eligible for inclusion on the National Register.

B. DISCOVERY PLAN: Human Graves

The Iowa Code protects all human burials in the state of Iowa. Ancient remains are protected under Chapter 263B, 523I.316(6), and 716.5 of the Iowa Code and the provisions of the Native American Graves Protection and Repatriation Act (25 U.S.C. 3001 through 3005).

In the event that human remains or burials are encountered during additional archaeological investigations or construction activities, the Iowa DOT shall proceed with the following process:

- i. Cease work in the area and take appropriate steps to secure the site.
- ii. Notify the Office of the State Archaeologist (OSA) and the SHPO.
- iii. If the remains appear to be ancient (i.e., older than 150 years), the Bioarchaeology Program at the OSA shall have jurisdiction to ensure Iowa law, NAGPRA and the implementing regulations (43CFR10) are observed. In keeping with the policy and procedures of Bioarchaeology Program, the disposition of the remains will be arranged in consultation with the culturally affiliated tribe(s) or the Indian Advisory Council, following the procedures in the OSA/tribal NAGPRA agreement for culturally unidentifiable human remains, if the affiliation is not known.
- iv. If the remains appear to be less than 150 years old, the remains may be legally protected under Chapters 113.34, 144.34, 523I.316, and 716.5 of the Iowa Code and the Iowa Department of Health will be notified.

V. MONITORING AND REPORTING

Each year following the execution of the MOA until it expires or is terminated, the Iowa DOT shall provide all parties to this MOA a summary report detailing work undertaken pursuant to its terms. Such report shall include any scheduling changes proposed, any problems encountered, and any disputes and objections received in the FHWA's efforts to carry out the terms of this MOA.

VI. DISPUTE RESOLUTION

Should any signatory or concurring party to this MOA object at any time to any actions proposed or the manner in which the terms of this MOA are implemented, FHWA shall consult with such party to resolve the objection. If FHWA determines that such objection cannot be resolved, FHWA will:

A. Forward all documentation relevant to the dispute, including the FHWA's proposed resolution, to the ACHP. The ACHP shall provide the FHWA with its advice on the resolution of the objection within thirty (30) days of receiving adequate documentation. Prior to reaching a final decision on the dispute, the FHWA shall prepare a written response that takes into account any timely advice or comments regarding the dispute from the ACHP, signatories, and concurring

parties, and provide them with a copy of this written response. The FHWA will then proceed according to its final decision.

- B. If the ACHP does not provide its advice regarding the dispute within the thirty (30) day time period, the FHWA may make a final decision on the dispute and proceed accordingly. Prior to reaching such a final decision, the FHWA shall prepare a written response that takes into account any timely comments regarding the dispute from the signatories and concurring parties to the MOA, and provide them and the ACHP with a copy of such written response.
- C. The FHWA's responsibilities to carry out all other actions subject to the terms of this MOA that are not the subject of the dispute remain unchanged.

VII. AMENDMENTS

This MOA may be amended when such an amendment is agreed to in writing by all signatories. The amendment will be effective on the date a copy signed by all of the signatories is filed with the ACHP.

VIII. TERMINATION

If any signatory to this MOA determines that its terms will not or cannot be carried out, that party shall immediately consult with the other parties to attempt to develop an amendment per Stipulation VII above. If within thirty (30) days (or another time period agreed to by all signatories) an amendment cannot be reached, any signatory may terminate the MOA upon written notification to the other signatories. Once the MOA is terminated, and prior to work continuing on the undertaking, the FHWA must either (a) execute a MOA pursuant to 36 CFR § 800.6 or (b) request, take into account, and respond to the comments of the ACHP under 36 CFR § 800.7. The FHWA shall notify the signatories as to the course of action it will pursue.

Execution of this MOA by the FHWA and the SHPO, and implementation of its terms is evidence that the FHWA has taken into account the effects of this undertaking on historic properties and afforded the ACHP an opportunity to comment.

This agreement is binding upon the signatories hereto not as individuals, but solely in their capacity as officials of their respective organizations, and acknowledges proper action of each organization to enter into the same.

SIGNATORY:

FEDERAL HIGHWAY ADMINSTRATION - IOWA DIVISION

Date 6/29/16

Michael LaPietra Environment and Realty Manager

SIGNATORY:

IOWA STATE HISTORIC PRESERVATION OFFICER

1=2016 Date

Steve King Deputy State Historic Preservation Officer

INVITED SIGNATORIES:

IOWA DEPARTMENT OF TRANSPORTATION

Date 6/28/2016

Tamara Nicholson, PE Director Office of Location and Environment

Memorandum of Agreement U.S. Highway 61 Des Moines and Louisa County, Iowa

INVITED SIGNATORIES:

THE OFFICE OF THE STATE ARCHAEOLOGIST

Date 4

John Doershuk State Archaeologist