

K-10
SOUTH LAWRENCE TRAFFICWAY
Project 10-23 K-8392-01

Record of Decision



Baker Wetlands

RECORD OF DECISION

Kansas Highway 10 Relocation (South Lawrence Trafficway)

May 2008

I. Decision

The proposed action is the construction of a four-lane, fully access-controlled freeway between the K-10 Highway/US-59 Highway interchange and the existing K-10 Highway Alignment near E 1750 Road on the eastern edge of the City of Lawrence, Kansas. The Selected Alternative was identified as the 32nd Street Alignment B Alternative in the Final Environmental Impact Statement (FEIS).

The U.S. Army Corps of Engineers, Kansas City District (Corps) prepared the Draft and Final EIS for the South Lawrence Trafficway (SLT) as a part of the Section 404 Permit Application and on January 7, 2003, published the Notice of Availability for the FEIS in the *Federal Register*. The Corps completed their Record of Decision (ROD) and Section 404(b)(1) Evaluation on December 15, 2003 and December 12, 2003, respectively. In April 2006, the FHWA published in the Federal Register a Notice of Intent to adopt the Corps' FEIS. As part of the early coordination process, the FHWA sent to all the recipients of the FEIS a letter informing them that the FHWA, in cooperation with the Kansas Department of Transportation, intended to adopt the Corps' FEIS in accordance with the Council on Environmental Quality's Regulations. The letter, which was dated April 6, 2006, also informed the recipients that the FHWA intended to prepare and process an individual Section 4(f) Evaluation and then conclude the decision-making process with the preparation and approval of its own ROD. The FHWA approved the Final Section 4(f) Evaluation on November 1, 2007, and adopted the Corps' FEIS on November 9, 2007.

This document constitutes FHWA's ROD for the proposed South Lawrence Trafficway (K-10 Highway), and complies with the requirements of the National Environmental Policy Act (NEPA) of 1969.

A. Selected Alternative Description

The proposed action is the construction of a four-lane, fully access-controlled freeway between the K-10/US-59 Highway interchange in South Lawrence to a point east of the intersection of K-10 and E 1750 Road. The selected alignment was identified as the 32nd Street Alignment B Alternative in the Final EIS and Final Section 4(f) Evaluation.

1. ALIGNMENT

Beginning at the western terminus at US-59 Highway, the 32nd Street Alignment B Alternative extends northeast to a point just south of the Louisiana and 31st Street intersection. At Louisiana Street the alignment turns in a more easterly direction generally paralleling 31st Street. The alignment extends between Louisiana Street and Haskell Avenue approximately 600 to 800 feet south of 31st Street. East of Haskell Avenue the alignment passes along the south side of an industrial park southeast of the Haskell Avenue and 31st Street intersection. At

E 1700 Road, the alignment turns northward following a northeasterly projection to an interchange with K-10 Highway east of E 1750 Road. The alignment is located just south of Haskell Indian Nation University's (HINU) southern boundary between Louisiana Street and Haskell Avenue. This location impacts the National Register of Historic Places eligible Haskell Agricultural Farm Property (HAFF), but confines impacts to the northern edge of the National Natural Landmark Baker University Wetlands. The alignment's location between Haskell Avenue and E 1700 Road is routed south of a creek to minimize impacts to the stream and any adjacent wetlands. (See **Exhibit 1**)

2. ACCESS POINTS

The 32nd Street Alignment B Alternative has access points at the western and eastern termini of the project. These interchanges are system interchanges providing access to the state highway system. The interchange on the western terminus is the completion of a diamond interchange at US-59 Highway. The interchange at the eastern terminus is a fully directional interchange providing all the movements between the SLT and the existing K-10 Highway/23rd Street. There is one local access point between the two termini interchanges. It is a folded diamond interchange providing access to a relocated Haskell Avenue.

3. LOCAL ROADWAYS

With this alignment, local roadway modifications are planned for E 1750 Road, Haskell Avenue, Louisiana Street, and 31st Street. As a result of the directional interchange on the eastern terminus of the SLT, access to E 1750 Road from K-10 Highway must be modified. The at-grade intersection must be eliminated and access from K-10 Highway to E 1750 Road will be provided by a new frontage road. The new frontage road will intersect with E 1750 Road at the existing County Route 442 intersection. The frontage road will parallel K-10 Highway/23rd Street to the west connecting with East Hills Drive at a location with appropriate spacing between the K-10 Highway/23rd Street and Greenway Drive intersections. This alignment alternative relocates Haskell Avenue approximately 1,000 feet east of its existing alignment between 31st and 35th Streets. This alternative also relocates Louisiana Street to the west between the proposed 32nd Street route and the Wakarusa River, and relocates 31st Street to the south from Louisiana Street to Haskell Avenue. The existing 31st Street roadbed will be obliterated and the right-of-way will revert back to HINU.

4. COST ESTIMATE

Planning level cost estimates were developed for the 32nd Street Alignment B Alternative using KDOT typical unit costs. The project costs for the fully built-out four-lane freeway were estimated to be \$147.9 million in 2007 dollars.

II. Alternatives Considered

The No-Action Alternative and five roadway corridors with a total of twelve reasonable build alternative alignments were evaluated and are discussed in the Draft and Final EIS. See **Exhibit 2** for a plan view of the five conceptual roadway corridors evaluated for this project.

A. Alternative Descriptions and Evaluation

1. NO-ACTION ALTERNATIVE

The No-Action Alternative assumes that K-10 Highway will not be relocated and that the connecting link through the city of Lawrence will remain essentially unchanged for the near future. This alternative will result in worsening traffic conditions on K-10 Highway and will continue to degrade the human environment due to increasing traffic congestion, lack of access control, high accident rates, noise, lost time, and other traffic-related impacts. The No-Action Alternative does not satisfy Lawrence and Douglas County's local planning objectives, which include improvements to both local and regional transportation service and relief for congestion on 23rd Street. The No-Action Alternative will encourage Lawrence and Douglas County to widen 31st Street between Haskell Avenue and Louisiana Street to accommodate an increasing volume of through and local traffic on 31st Street due to congestion and delays on the K-10 Highway connecting link (Iowa Street and 23rd Street). Increased traffic volumes on 31st Street will increase noise and visual disturbances on the HINU property and will increase noise in Baker Wetlands.

2. 31ST STREET ALTERNATIVE

A single alternative alignment was developed for a 31st Street corridor. The alignment overlays a section of existing 31st Street routed through the HINU property. The 31st Street alignment was determined to meet the purpose and need and to be a reasonable alternative, and was presented in the Draft EIS for further evaluation. Significant political and social obstacles exist that make construction of the SLT on Douglas County's easement through HINU property an unacceptable alternative. Accordingly, the 31st Street Alternative was eliminated from further consideration since other operationally comparable alternatives are available that meet the project's purpose and need and do not directly impact HINU property. The decision to eliminate the 31st Street Alternative from further consideration was based on input received from the HINU Administration, its Board of Regents, Native American interest groups, the Bureau of Indian Affairs (BIA), and consultation with Native American tribes.

3. 35TH STREET ALTERNATIVE

Two alternative alignments (A and B) were developed for the 35th Street corridor. The two alignments follow slightly different routes, which are offset by approximately 700 feet. The two 35th Street alignments were determined to be reasonable alternatives and were presented in the Draft EIS for further evaluation. The 35th Street corridor is located on an alignment near an existing 35th Street roadway. The existing 35th Street roadway is an unimproved access road through the Baker University property (Baker Wetlands). The 35th Street corridor bisects Baker Wetlands between Haskell Avenue and Louisiana Street.

Although alignments within the 35th Street corridor could clearly achieve the purpose and need for the project, it was determined that the environmental impacts associated with alignments that bifurcate Baker Wetlands would have excessive adverse effects on the areas ecology and were, therefore, unacceptable given the availability of less damaging alternatives. In addition to

dividing the wetland complex in half, alignments in the 35th Street corridor would create significant visual impacts that could be avoided, minimized or more readily mitigated in other corridors. Highway construction within the 35th Street corridor would also have the high potential to impact the Wakarusa River floodway.

In summary, the alignments evaluated within the 35th Street corridor were eliminated because the significant environmental impacts resulting from those alternatives could be avoided, minimized or more readily mitigated through election of other less environmentally damaging alternatives with similar operational characteristics.

4. 38TH STREET ALTERNATIVE

Two alternative alignments (A and B) were developed for the 38th Street corridor. The two alignments follow the same basic route but differ in the number of access points and modifications to the local road network. The two 38th Street alignments were determined to be reasonable alternatives and were presented in the Draft EIS for further evaluation. The 38th Street corridor is located south of the 35th Street corridor along most of its length. No current 38th Street roadway exists. The 38th Street corridor crosses Baker University property (Baker Wetlands) immediately north of the Wakarusa River between Haskell Avenue and Louisiana Street.

The 38th Street corridor was eliminated from further consideration since construction within the corridor would create a barrier between the Wakarusa River and the majority of the Baker Wetlands complex. Creating a physical barrier between the Wakarusa River and the Baker Wetlands would have a high potential to significantly impact the area's ecology and is expected to substantially impact terrestrial wildlife species that travel between the Wakarusa River's riparian corridor and the Baker Wetlands complex. An additional concern related to selection of an alignment within the 38th Street corridor was the potential to disturb unmarked Native American burials that may be present in the vicinity of the Wakarusa River. The alignments evaluated within the 38th Street corridor were not considered further since less environmentally damaging alternatives with similar operational characteristics were available for selection.

5. 42ND STREET ALTERNATIVE

Two alternative alignments (A and B) were developed for the 42nd Street corridor. The 42nd Street corridor is located south of the Wakarusa River along part of its length. The two alignments follow the same route east of Haskell Avenue but different routes between Haskell Avenue and US-59 Highway. Both of the 42nd Street alignments cross the Wakarusa River east of Haskell Avenue and west of Louisiana Street and do not cross Baker Wetlands. No 42nd Street roadway currently exists. The two 42nd Street alignments were determined to be reasonable alternatives and were presented in the Draft EIS for further evaluation. Although the two 42nd Street alignments (A and B) were similar in many ways, the following differences were identified and considered:

- Alignment B resulted in approximately four times the number of residential displacements as Alignment A.
- Alignment A resulted in fewer infringements on wetlands, floodways and floodplains.
- Alignment B would cost more to construct and operate.
- Alignment B would lack system continuity and would not meet driver expectations.

For these reasons, the 42nd Street Alignment A Alternative was selected as the more desirable 42nd Street alternative, and was identified as one of the two preferred alternatives in the Draft EIS. (See **Exhibit 3**)

While the 42nd Street Alignment A Alternative does not directly impact the Baker Wetlands/HAFP, this alternative is not identified as the environmentally preferred alternative because of the following reasons:

- The 42nd Street Alignment A Alternative does not meet the purpose and need for the project as well as the selected alternative in the areas of safety and efficiency.
- The 42nd Street Alignment A Alternative is not consistent with current local planning objectives described in the *Horizon 2020 Plan*, and the *Transportation 2030 Plan*.
- The 42nd Street Alignment A Alternative has greater impacts on the Wakarusa River floodplain and floodway than the selected alternative.
- The 42nd Street Alignment A Alternative has greater indirect and cumulative impacts than the selected alternative on the Baker Wetlands/HAFP and to the area south of the Wakarusa River.
- The 42nd Street Alignment A Alternative would impact other historic areas that include the Oregon and California National Historic Trail, and Blanton's Crossing (identified by the National Park Service in their "Comprehensive Management and Use Plan EIS" as a "High Potential Site"), and the Meair's Farmstead (no adverse affect).
- The 42nd Street Alignment A Alternative would have greater impacts than the selected alternative on woodland riparian areas.
- In a separate Section 4(f) Evaluation completed by the FHWA it was determined that the 42nd Street Alignment A Alternative was not a feasible and prudent alternative.

6. 32ND STREET ALTERNATIVE

Five alternative alignments (A through E) were developed for the 32nd Street corridor. The five alignments follow the same basic route but differ in the number of access points and modifications to the local road network. The five 32nd Street alignments were determined to be reasonable alternatives and were presented in the Draft EIS for further evaluation. The 32nd Street corridor is located south of the 31st Street corridor along most of its length. No 32nd Street roadway currently exists. The 32nd Street Alignment B Alternative is one of the two Preferred Alternatives identified in the Draft EIS and is the Selected Alternative presented in the Final EIS.

The 32nd Street Alignment B Alternative was identified by the Corps as the Selected Alternative for this project based on the Corps' findings that it is the least environmentally damaging practicable alternative (after consideration of avoidance, minimization and mitigation) available to the Corps that meets the project's purpose and need, and that best serves the overall public interest in this matter. The 32nd Street Alignment B Alternative does not cross HINU property but does cross Baker Wetlands/HAFP from Haskell Avenue to Louisiana Street. The 32nd Street Alignment B Alternative is highly desirable based on an evaluation of foreseeable cumulative future impacts, cost, efficiency, and other factors discussed in the Final EIS. The alignment satisfies the project's purpose and need, and is consistent with Lawrence and Douglas County's local planning objectives.

The FHWA completed a Section 4(f) Evaluation in which it was determined that there were no feasible and prudent alternatives to using land from the HAFP. In addition, because the 32nd Street Alignment B Alternative best meets the purpose and need for this project and because

the mitigation plan for this project will result in net benefits to the HAFP, the FHWA concludes that this alternative results in the least overall harm in light of Section 4(f)'s preservation purpose. The FHWA also agrees with the Corps' determination that the 32nd Street Alignment B Alternative is the least environmentally damaging and the environmentally preferred alternative. These determinations were based on consideration of all of the information collected by the Corps during development of the EIS for this project, comments received after publication that FHWA intended to adopt the EIS, and information analyzed during the FHWA's Section 4(f) Evaluation.

III. Section 4(f)

The HAFP includes the lands historically associated with Haskell Institute's outlying agricultural training areas. The HAFP (804 acres) consists of a portion of the current HINU property (upper fields and wetland north of the Baker Wetlands northern levee), as well as the Wakarusa River flood plain area south of the HINU property, now known as the Baker Wetlands. Most of the Baker Wetlands area is owned by Baker University, but there are two parcels in the northeast corner, one owned by the University of Kansas, and the other owned by the Kansas Department of Wildlife and Parks.

The Selected Alternative (32nd Street Alignment B Alternative) in the Final EIS will permanently convert land to transportation use from the HAFP, which has been determined to be eligible for the National Register of Historic Places. Consequently, FHWA prepared and processed an individual Section 4(f) Evaluation to determine whether a feasible and prudent alternative existed that avoided using the Section 4(f) property. The 32nd Street Alignment B Alternative is highly desirable based on an evaluation of foreseeable cumulative future impacts, cost, efficiency, and other factors discussed in the Final EIS. The alignment satisfies the project's purpose and need, and does not conflict with Lawrence and Douglas County's local planning objectives. It was determined in the final evaluation that there were no feasible and prudent alternatives to the use of the Section 4(f) property.

A. Impacts to the Section 4(f) Property

The Selected Alternative (32nd Street Alignment B Alternative) will directly impact and have an adverse effect on the HAFP, and will also result in indirect and cumulative impacts to the HAFP.

1. DIRECT IMPACTS

Direct impacts associated with the Selected Alternative would involve construction of approximately one mile of 300 to 400-foot-wide roadway corridor across the HAFP and would include an area of approximately 53 acres of land east-west across the property. This includes all construction, the South Lawrence Trafficway, relocation of 31st Street, mitigation walls and vegetation, and construction of a parallel hike and bike trail.

Construction of the Selected Alternative will alter small portions of the surface of the Farm Property by placing fill material in W-ditches, fields, the Mink Creek drainage canal, the north-south access road, and the low eastern and western remnant dikes. A structure will be constructed at the north end of Mink Creek (at relocated 31st Street) to avoid impacts to remnant screw valves and steel/wood doors that will be left in place. The borrow area (ponded water) that will be impacted, located immediately east of the north-south access road, is a recent feature created by Baker University when borrow material was excavated to raise the access road. The dike that will be crossed, located along the western edge of the property, has already been modified over its entire length when it was relocated approximately 25 to 30 feet east of its historic location in 1969 in an effort to reduce flooding north of 31st Street.

2. INDIRECT AND CUMULATIVE IMPACTS

The elevation of the roadway corridor and its associated structures within the segment of the SLT passing through the HAFP, have been designed to avoid significant impacts to views within the property. However, changes to the current views will be most dramatic close to the roadway, with diminishing viewshed impacts as one moves farther north or south of the road. In

addition, audible and visual disturbances associated with high-speed traffic on the SLT will adversely affect the HAFP.

B. Avoidance Alternatives

The avoidance alternatives include the No-Action Alternative and the 42nd Street Alignment A Alternative (see **Exhibit 3**), both of which would avoid direct impacts to historic properties within the Area of Potential Effect. However, the No-Action Alternative may have an indirect impact because it does not address the future growth of the area. The 42nd Street Alignment A Alternative could have an indirect impact by increasing traffic on roads adjacent to the HAFP, and by failing to prevent urban development from occurring adjacent to the HAFP.

1. NO-ACTION ALTERNATIVE

The No-Action Alternative will have no direct impacts to the Section 4(f) historic properties identified within the project's Area of Potential Effect. However, the No-Action Alternative with a comprehensive regional public transit system has been considered and disregarded as not meeting the purpose and need for the project, as it would not reduce traffic demand enough to significantly reduce traffic congestion on US-59 Highway and 23rd Street. This alternative will result in worsening traffic conditions on K-10 Highway and will continue to degrade the human environment due to increasing traffic congestion, high accident rates, noise, lost time, and other traffic-related deficiencies

The No-Action Alternative will encourage Lawrence and Douglas County to widen 31st Street from Haskell Avenue to Louisiana Street to accommodate an increasing volume of through and local traffic on 31st Street due to congestion and delays on the K-10 Highway connecting link. Increased traffic volumes on 31st Street will increase noise and visual disturbances on the HINU property and in the Baker Wetlands. In addition, the No-Action Alternative may have an indirect impact on the HAFP due to the fact that growth will occur west of Louisiana Street and east of Haskell Avenue adjacent to the HAFP.

The No-Action Alternative does not meet the Purpose and Need for the project, and would therefore not be considered a feasible and prudent alternative.

2. 42ND STREET ALIGNMENT A ALTERNATIVE

The 42nd Street Alignment A Alternative avoids a direct impact to the HAFP, but does require right of way from the William Meairs Farmstead Property, a property eligible for the National Register of Historic Places (NRHP). However, it has been determined that this alternative would have no adverse effect on the Meairs Farmstead Property if mitigation is incorporated. It was also determined that a *de minimis* finding would apply to the Section 4(f) impacts associated with this alternative.

The Section 4(f) Evaluation made the determination that the 42nd Street Alignment A Alternative was not feasible and prudent based on an accumulation of factors that collectively, rather than individually, have adverse impacts that present unique problems. Those factors are as follows:

- The 42nd Street Alignment A Alternative does not meet the purpose and need for the project as well as the Selected Alternative in the areas of safety and efficiency.
- The 42nd Street Alignment A Alternative is not consistent with current local planning objectives described in the *Horizon 2020 Plan*, and the *Transportation 2030 Plan*.

- The 42nd Street Alignment A Alternative costs approximately \$19 million more than the Selected Alternative.
- The 42nd Street Alignment A Alternative has greater impacts than the Selected Alternative to the Wakarusa floodplain and floodway.
- The 42nd Street Alignment A Alternative would accelerate planned and unplanned development south of the Wakarusa River.
- The 42nd Street Alignment A Alternative has greater indirect and cumulative impacts than the Selected Alternative on the HAFP and to the area south of the Wakarusa River.
- The 42nd Street Alignment A Alternative would have greater impacts than the Selected Alternative on woodland riparian areas.
- The 42nd Street Alignment A Alternative would impact other historic areas that include the Oregon and California National Historic Trail, and Blanton's Crossing (identified by the National Park Service in their "Comprehensive Management and Use Plan EIS" as a "High Potential Site"), and the Meair's Farmstead (no adverse affect).
- The Selected Alternative provides a net benefit to the HAFP by creating a buffer to growth and traffic and providing better educational opportunities.

C. Measures to Minimize Harm to Section 4(f) Property

An extensive coordination and consultation process was conducted to obtain comments regarding the project. The insight gained through the public interest review for this project was used to identify avoidance, minimization and mitigation measures that address Native American concerns, where practicable.

Several minimization and mitigation measures have been incorporated into the planning of the Selected Alternative, including bridging historic engineering structures in the HAFP; removal of 31st Street from HINU property and the possible conversion of that area to wetlands; and acquisition, conservation, and preservation of adjacent lands to reduce foreseeable cumulative future development-related impacts.

Memorandum of Agreement

At the time of issuance of the Final EIS, the Corps consulted with agencies and other interested parties regarding its Determination of Effect and proposed resolution of adverse effects to the HAFP associated with the Selected Alternative. The Corps' Determination of Effect letter contained context-sensitive, comprehensive mitigation proposals to minimize and mitigate adverse effects. Based on comments from agencies, organizations, and tribes, these mitigation proposals were revised and developed into a Draft Memorandum of Agreement (MOA), which was provided to the Advisory Council on Historic Preservation (ACHP), State Historic Preservation Officer (SHPO), Kansas Department of Transportation (KDOT), Douglas County Commission, Baker University, Bureau of Indian Affairs (BIA), and the HINU. Copies of the Draft MOA and an invitation to submit comments were also provided to the twenty-nine Kansas homeland and reservation tribes and all other Federally-recognized tribes and other parties that had expressed an interest in Section 106 issues. The BIA and HINU were identified as "Concurring Parties" due to their association with the historic property, however, both declined to participate as concurring parties to the MOA.

The Corps considered the comments received in response to the Draft MOA and finalized the document in May 2003. The Final MOA was routed for concurrence and signature to all of the

Kansas based Signatories and Invited Signatories. It was signed by the Corps, the Kansas State Historic Preservation Officer, the Douglas County Commission, Baker University, and the Kansas Department of Transportation. After those signatures were executed, the Final MOA was mailed to the ACHP for concurrence and signature. The ACHP executed the final signature on June 20, 2003.

On October 10, 2007, the original consulting parties (the Corps, Kansas State Historical Society, the Advisory Councils on Historic Preservation, Douglas County, Baker University, and the Kansas Department of Transportation) executed an amendment adding the Federal Highway Administration as a signatory to the Memorandum of Agreement regarding the South Lawrence Trafficway (see Appendix A).

The minimization and mitigation measures that were outlined in the MOA to resolve adverse effects to the HAFP are quoted below (References to Attachments and Exhibits correspond to **Exhibits 1** and **4** of this document):

- The Kansas Department of Transportation shall relocate the existing section of 31st Street (located on the HINU property) to an alignment immediately north of the Kansas Highway 10 (32nd Street Alignment B) on Baker University property in Baker Wetlands (See Attachment A). The Kansas Department of Transportation shall remove the abandoned section of 31st Street, including bedding material, located on the HINU property and shall grade the vacated right-of-way to approximate the contours/elevations of existing adjacent ground. The Kansas Department of Transportation shall confer with HINU/BIA representatives to develop and implement a vegetative planting scheme for the vacated 31st Street right-of-way.
- Douglas County, Kansas shall vacate the section of 31st Street located on the HINU property and shall relinquish its easement for the right-of-way to the United States of America.
- The Kansas Department of Transportation shall relocate Haskell Avenue approximately 1,000 feet east of its present location and Louisiana Street approximately 2,500 feet west of its present location for those sections of the roads located adjacent to that portion of the Haskell Agricultural Farm Property located in Baker Wetlands (See Attachment A). The Kansas Department of Transportation shall remove the abandoned sections of Haskell Avenue and Louisiana Street and grade the right-of-ways to approximate the contours/elevations of the existing adjacent ground. The Kansas Department of Transportation shall ensure that approximately 304 acres of mitigation wetlands will be developed in the areas created between the relocated and vacated roads (See Attachment A). The Kansas Department of Transportation shall convey a conservation easement in accordance with K.S.A. 58-3810, et. seq., on the approximately 304 acre wetland mitigation area, to limit its future use to that consistent with this agreement, prior to a transfer of the property to a second party.
- The Kansas Department of Transportation shall ensure that the width of the roadway corridor within the Haskell Agricultural Farm Property is the minimum necessary to accommodate the eventual construction of a four-lane Kansas Highway 10 bypass and relocation of 31st Street with four lanes. The Kansas Department of Transportation shall ensure that the roadways, medians between opposing lanes, and the roadway shoulders are the minimum width necessary to satisfy highway transportation safety standards in order to minimize the adverse impact of the roadway corridor on the Haskell Agricultural Farm Property (see Exhibit 4f-12).

- The Kansas Department of Transportation shall construct a 12-foot-high wall (as measured from the roadway surface) along the north side of the highway bypass and a 6-foot-high wall located on a 6-foot-high berm (the top of the wall will be located 12 feet above the roadway surface) on the south side of the bypass along that portion of the bypass located within the Haskell Agricultural Farm Property to minimize traffic noise and visual disturbance in areas outside the bypass corridor (See Attachment B). The walls shall be painted or tinted to blend with the background and shall be screened with vegetation plantings to obscure their presence from areas outside the roadway corridor.
- The Kansas Department of Transportation shall develop and implement a plan to minimize construction-related impacts to the Haskell Agricultural Farm Property. The plan must be approved by Corps and shall be incorporated into the special conditions of Corps' Section 404 authorization for the undertaking. All construction equipment shall be either low ground pressure types or be required to operate on log mats. No grubbing will be allowed within the Haskell Agricultural Farm Property (cutting woody vegetation will be allowed.) No staging areas or lay down yards will be located in the Haskell Agricultural Farm Property. Construction of the roadway embankment within the Haskell Agricultural Farm Property will be limited to 300-meter-long sections at any one time.
- The Kansas Department of Transportation shall ensure that the final roadway design will minimize adverse impacts to the Haskell Agricultural Farm Property, to the maximum extent practicable. The Kansas Department of Transportation shall also ensure that the final roadway design will avoid the historic east-west dike and drainage canal located immediately south of the existing 31st Street between Haskell Avenue and Louisiana Street, all historic water control gate structures, and all historic bridges within the Haskell Agricultural Farm Property.
- The Kansas Department of Transportation shall document the Haskell Agricultural Farm Property features impacted by the undertaking by preparing a permanent record of the features through use of photographs, detailed drawings, and a narrative, as appropriate. The Kansas Department of Transportation shall consult with and take direction from the SHPO to ensure preparation of a complete record.
- If the Kansas Department of Transportation determines that lighting is required for traveler safety within that portion of the undertaking located within the Haskell Agricultural Farm Property, it shall limit such lighting to the minimum necessary to ensure traveler safety and shall install such lighting in a manner that will minimize impacts to areas outside the roadway corridor.
- The Kansas Department of Transportation shall monitor construction activities and shall inform all contractors to be alert to the potential for the discovery of cultural resources. If artifacts or previously unidentified archaeological sites are encountered, or if the undertaking will result in unanticipated effects to an existing historic property, KDOT shall stop construction activities that have a potential to impact such properties and shall immediately notify the Corps and the SHPO that such action has taken place. In the event of such notification, the Corps will consult with the SHPO and other interested parties, as necessary, to determine an appropriate course of action.
- If human remains are discovered, all work within the area of discovery shall stop immediately, the area shall be protected from further disturbance, and local law enforcement and the State Archaeologist shall be contacted immediately, in accordance with the Kansas Unmarked Burial Sites Preservation Act (K.S.A. 75-2741 through 75-2754). In the event of a discovery of human remains KDOT shall comply with all provisions of the Unmarked Burial Sites Preservation Act.

- The Kansas Department of Transportation shall invite all Kansas reservation tribes to provide a representative to monitor all project-related excavation activities within the Haskell Agricultural Farm Property for the inadvertent discovery of unmarked burials. The Kansas Department of Transportation shall also accommodate any federally recognized tribe that wishes to monitor excavation activities within the Haskell Agricultural Farm Property. The Kansas Department of Transportation shall have the right to limit the number of tribal monitors on the construction site to a total of five, at any given time, and to impose such additional safety restrictions on monitors as it deems appropriate. Nothing in this stipulation shall require construction activities to be delayed due to the inability of monitors to be present on site during excavation activities.

IV. Measures to Minimize Harm and Mitigation Measures

All practical measures to minimize harm and mitigate impacts have been incorporated into the identification of the Selected Alternative.

A. Clarification on Wetland Mitigation

A variety of measures to mitigate documented social, economic, and environmental impacts associated with the Selected Alternative have been identified. For wetlands, total wetland mitigation/compensation is identified in Table 4-11 of the FEIS, Exhibit IV-2 of the FEIS, Exhibit 4f-10 of the Section 4(f) Evaluation and **Exhibit 1** of this document. The Table and Exhibits indicate the mitigation plan for this project includes 234 acres of created wetlands, 17 acres of previously created wetlands at the Santa Fe site, 37 acres for tallgrass prairie restoration, cultural/wetland education center construction, and 16 acres for riparian area conservation. Under this mitigation plan a total of 304 acres of land would be added to the Baker Wetland complex. The mitigation plan mirrors the diversity of the existing Baker Wetlands area. However, commitments identified in the Section 106 Memorandum of Agreement (MOA), the Section 404 permit issued by the Corps (Section 404 permit), and FHWA's Section 4(f) Evaluation could be interpreted to indicate that "wetland mitigation" includes creation of 304 acres of wetlands. To eliminate any confusion, KDOT will purchase an additional 53 acres of land and convert that land to wetlands to match the commitments identified in the MOA, the Section 404 permit, and the Section 4(f) Evaluation. This additional land will be included in the mitigation package for this project so that the mitigation package will include a total of 304 acres of created wetlands, 37 acres for tallgrass prairie restoration and the cultural/wetland education center construction, and 16 acres for riparian area conservation. The revised wetland mitigation area will add 357 acres of land to the Baker Wetland complex. An additional 13 acres of wetlands may be created in the area that is vacated by the relocated 31st Street. This vacated area will revert back to HINU and restoration will be subject to their approval.

B. Minimization Measures

Minimization efforts relating to impacts associated with the historic HAFP were discussed in more detail in Section III.C of this document, and are summarized as follows:

- Minimize the width of the corridor;
- Avoid historic engineering structures within the HAFP;
- Re-route roadway run-off to prevent potentially contaminated run-off from entering the wetlands;
- Construction sequencing and methodology to minimize impacts; and
- Monitor construction activities for possible discovery of cultural resources or unmarked burials

Other efforts to minimize impacts related to the overall project include the following:

- The Kansas Department of Health and Environment certified on December 10, 2003, in accordance with Section 401 of the Clean Water Act (33 USC 1341), that the project will not violate applicable water quality standards. The state's certification contains conditions, which address water quality concerns. The conditions presented in the

certification will be incorporated into the special conditions of the Department of the Army Section 404 Permit that will be issued for this project. Standard measures to minimize harm to water quality will include employment of KDOT's Storm Water Pollution Prevention Plan (SWPPP). This plan utilizes best management practices (BMPs) such as installing ditch checks and silt fences at the outset of construction, minimizing disturbances to stream banks and riparian zones, applying all necessary precautions to prevent petroleum products from entering water bodies, and seeding disturbed areas as soon as possible. In addition, structural BMPs such as silt fences and grassed ditches will be utilized where practical to avoid or reduce contamination of water bodies. Other non-structural BMPs such as debris and litter removal during construction, and control of fertilizers will reduce the potential for contamination.

- Air quality emissions analyses were not required as part of this project, as the project area is classified as an attainment area by EPA. The project will reduce the amount of congestion and idling/acceleration through improved traffic flow, which will lower average vehicle air emissions relative to the existing connector link.

C. Mitigation Measures

Mitigation requirements for the Selected Alternative consist of a broad range of stipulations intended to compensate for project-related impacts to the human environment. Most of the mitigation measures for this project include several specific conditions that were developed to address physical, cultural and aesthetic impacts, and were incorporated into a Memorandum of Agreement (MOA) that is narrowly focused on conditions to resolve adverse effects to the HAFP. Those mitigation measures are discussed in more detail in Section III.C. of this document and are summarized below. In addition, several other mitigation measures were also developed to address wetland impacts resulting from the project. Those wetland mitigation measures are also discussed in more detail in Section III.C of this document and are included in the summary below (See **Exhibits 1** and **4** for plan view and cross section of mitigation features). The measures developed to mitigate project related impacts are as follows:

- Vacate and relocate 31st Street, and develop a plan for restoration of the vacated right-of-way
- Relocate Haskell Avenue and Louisiana Street
- Develop extensive wetland areas between and adjacent to the relocated and vacated roads
- Extend the existing north-south road in the center of the HINU property (HINU approval required)
- Construct walls to minimize traffic noise and visual disturbances
- Stain noise walls a color that blends with environment and utilize vegetative screening
- Prohibit grubbing and staging areas within the HAFP
- Document and photograph historic features impacted within the HAFP
- Incorporate lighting, if appropriate, that minimizes impacts to outside areas
- Develop a cultural/wetland education center
- Provide funds for an annuity for management of the wetlands
- Construct hike and bike trails for access to Baker Wetlands
- Provide for pedestrian access to Baker Wetlands at its northeast and northwest corners
- Develop campsites and parking areas for access to the Baker Wetlands

D. Compliance with Other Laws and Executive Orders

All applicable Federal, state and local laws, and Executive Orders were considered prior to the selection of a roadway alignment for this project.

- **Farmland Protection Policy Act of 1981 (FPPA)** – Pursuant to the FPPA, a request for an evaluation was submitted to the NRCS on the *Farmland Conversion Impact Rating for Corridor Type Projects* form (SCS-CPA-106). The total point score for conversion impact ratings for the Selected Alternative did not exceed the 160-point threshold established for consideration of farmland protection measures, and therefore no further farmland evaluation is required.
- **The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended (42 U.S.C. 4601)** ensures adequate consideration and compensation for the persons whose property is required for a roadway project. The Kansas Department of Transportation's policy on residential relocations, which satisfies the requirements of Title VI of the Civil Rights Act of 1964, stipulates that individuals will not be requested to move from their dwellings until at least one comparable replacement dwelling has been made available. Replacement dwellings must also be open to persons regardless of race, color, religion or national origin. A representative of KDOT will assist displaced persons in securing comparable replacement housing and will be sensitive to the particular needs of any special group of residents. The occupants of residences are entitled to receive reasonable and necessary moving costs and related expenses associated with relocation of their personal property.
- **Section 106 of the National Historic Preservation Act.** The Selected Alternative complies with the provisions of Section 106.
- **Section 7 of the Endangered Species Act.** The Selected Alternative will not impact any Federally-listed Threatened or Endangered Species or the critical habitat of such species.
- **Executive Order 11988 – Floodplain Management** – The Selected Alternative complies with the intent of Executive Order 11988 on Floodplain Management, and complies with applicable State of Kansas Federal Emergency Management Agency and local floodplain protection standards. The Selected Alternative is not expected to increase flood heights or flood risk. Improvements associated with the Selected Alternative including modifications to the Naismith Creek drainage channel and a reduction in the dike height along Louisiana Street are expected to improve area drainage. The Selected Alternative is a mix of detrimental and beneficial impacts to floodplain values. The footprint of the alignment will result in the loss of approximately 58 acres of wetlands along the northern edge of the floodplain. Mitigation will result in the creation of approximately 304 acres of floodplain wetlands. Mitigation also includes lowering the elevation of the dike located along Louisiana Street to allow a more natural sheet flow of floodwaters across the Baker Wetlands area. The Selected Alternative, with mitigation, will have a minimal impact on beneficial floodplain values. Based upon the above considerations, and for the reasons stated in the Final Environmental Impact Statement, it is determined that the Selected Alternative, the 32nd Street Alignment B Alternative with mitigation, is the only practicable alternative that meets the project's purpose and need.
- **Executive Order 11990 – Protection of Wetlands** – The Selected Alternative complies with the intent of Executive Order 11990 on Protection of Wetlands. The Selected Alternative will have the least overall impact on wetland resources based on

consideration of construction-related wetland losses, foreseeable cumulative future development-related wetland impacts, and total net increase in wetland acreage through mitigation. The Selected Alternative will result in the creation of 304 acres of wetlands along with an additional 53 acres for tallgrass prairie, wetland/cultural education center, and riparian area. This area will provide a buffer from future development-related impacts to Baker Wetlands. Based upon the above considerations, it is determined that there is no practicable alternative to the proposed construction in wetlands and that the proposed action includes all practicable measures to minimize harm to wetlands that may result from such use.

- **Executive Order 11898 – Environmental Justice** – The public involvement program did not exclude any populations based on income, race, color, religion, national origin, sex, age, or handicap. In addition, all Federally-recognized Native American tribes were contacted by the Corps and were requested to submit comments relating to the project. Twenty-nine Kansas homeland and reservation tribes were invited to engage in government-to-government consultation. Comments were also requested from individuals of all races; organizations; representatives from the HINU administration, faculty, alumni and student body; the Bureau of Indian Affairs (BIA); and city and county governments.

The only potential minority or low-income population identified within the study area is the HINU, a Native American university, which is almost entirely a minority population of approximately 900 students that represent many different tribes. Native American concerns regarding the Selected Alternative's potential to impact HINU are based on a belief that noise and other highway-related impacts will adversely affect ceremonies held on the southern portion of the HINU property. Some Native Americans have expressed concern that any alignment located in or near Baker Wetlands will affect ceremonies conducted on that property. In addition, some Native Americans have stated that Baker Wetlands contains numerous unmarked burials of former Haskell Institute students and that construction of a road on the property will affect those burials.

The following mitigation has been developed to avoid and/or minimize, to the extent practicable, impacts associated with the Selected Alternative that may affect the unquantifiable spiritual issues identified by Native Americans regarding use of the southern HINU property and Baker Wetlands for ceremonies and other spiritual activities:

- Noise studies completed for the project demonstrate that noise levels related to the Selected Alternative, with the addition of noise walls, will not significantly increase on the HINU property or in the Baker Wetlands.
- The Selected Alternative's noise walls, existing vegetation, and additional vegetative plantings will screen views of the SLT from individuals using the Medicine Wheel, sweat lodges and other areas on the southern HINU property.
- Removal of 31st Street from HINU property will eliminate the segmentation of the HINU property and reduce the impact of traffic-related noise, light and visual disturbances to the HINU property.
- Minimal excavation will be performed in association with construction of the SLT and relocation of 31st Street to Baker Wetlands in order to minimize any potential to disturb unmarked burials. (The possibility that unmarked burials may be located in the Baker Wetlands has been thoroughly investigated and no evidence to support the existence of such burials was discovered.)

The populations in the study area that are not identified as minority or low income were examined for locations and potential impacts. The evaluation concluded that these populations are present and that they will be exposed to the same noise and other typical highway-related impacts that are likely to occur to the HINU resident population.

The Selected Alternative will not have a disproportionate adverse impact on the minority student and employee population at HINU. The Selected Alternative will not adversely impact the physical integrity of any area within the HINU property, including its sacred sites. In addition, the project is not expected to significantly increase noise, light or other traffic-related disturbances to the HINU property. Therefore, the project is not expected to significantly impact the unquantifiable spiritual connection, use and/or value expressed by Native Americans regarding the Medicine Wheel, sweat lodges or other areas on the southern HINU property. After considering all available information, it has been concluded that the Selected Alternative will not have a disproportionately high and adverse human health or environmental effect on any minority or low-income population.

- **Hazardous Waste Sites** – The Selected Alternative will impact low-risk sites and one moderate-risk site, however, these will have little impact. The greatest projected impacts from these sites will be from leaking underground storage tanks and possible associated contaminated soil. Contamination of this type will not subject the project to undue cost or time delays. Any remediation will require the coordination and approval of the Kansas Department of Health and Environment (KDHE). The KDHE requires that all structures acquired for demolition be inspected for asbestos containing material (ACM) by an accredited inspector. If ACM is found, it will be removed by a Kansas licensed asbestos abatement contractor prior to demolition in accordance with state and Federal regulations.

V. Monitoring/Enforcement Program

All of the minimization and mitigation features described above, including the MOA, will be incorporated into all appropriate construction specifications and contracts, including the special conditions of the Section 404 permit that the Corps issued. The Corps and FHWA will work together to monitor completion of all programs required by the MOA.

The approximately 304 acres of mitigation wetlands and the additional 53 acres of land for tallgrass prairie, wetland/cultural education center, and riparian area that will be created will be protected from disturbance in perpetuity. This property will be owned and managed by Baker University. The creation of an addition 13 acres of wetlands in the area of the vacated 31st Street will be subject to the approval of the restoration plan by the HINU.

VI. Comments on the FHWA Adopted Final EIS

In April 2006, the FHWA submitted to the *Federal Register* a Notice of Intent to adopt the 2002 Final EIS that was prepared by the Corps, as part of a Section 404 Permit application.

As part of the early coordination process, the FHWA sent to all recipients of the Corps' Final EIS an additional copy of the Final EIS and a letter informing them that the FHWA in cooperation with the Kansas Department of Transportation intended to adopt the Final EIS in accordance with the Council on Environmental Quality's Regulations. The letter, dated April 6, 2006, also informed the recipients that the FHWA intended to prepare and process an individual Section 4(f) Evaluation and then conclude the decision-making process with the preparation and approval of its own Record of Decision. A 45-day comment period was provided for comments concerning FHWA's intent to adopt the Final EIS and the comment period ended May 31, 2006. In addition to comments received on the adoption of the Final EIS, the FHWA conducted a public hearing and received comments on the Draft Section 4(f) Evaluation.

During the 45-day comment period on FHWA's intent to adopt the Final EIS, a total of 551 comments were received. All the comments that were received were considered in the decision process. Many of the comments received were a repeat of the concerns expressed and are satisfactorily answered in the Corps' Final EIS, the Corps' ROD or the FHWA's Section 4(f) Evaluation. The following comments and responses are representative of new substantive comments that have not previously been addressed.

- 1. The FEIS fails to adequately address the changed conditions in the area south of the Wakarusa River. The Corps partly based their decision on the fact that the 42nd St. route south of the Wakarusa River would promote too much development in this area. The fact that a new wastewater treatment is planned and the Urban Growth Boundary has been moved changes the argument that they used.**

Response – The 32nd Street Alignment B Alternative analysis in the FHWA's Final Section 4(f) Evaluation acknowledges that changes have occurred south of the river since the Corps' analysis and decision. As documented in FHWA's Final Section 4(f) Evaluation, Douglas County, in a letter dated October 10, 2007, indicated that it believes that the Wakarusa River and its wide floodplain provide a significant natural barrier to the expansion of urban development south of the river. The major type of land use is low density residential development. Douglas County also believes the 42nd Street Alignment A Alternative south of the river would create a major intersection at Douglas County 1055 (Haskell Avenue). This intersection of a principal arterial with a freeway would provide a new or alternative location for a regional commercial node. The development south of the river would be more rapid and would include more commercial development than shown in current planning documents. Also, increased traffic (and widening) on Haskell and Louisiana and potential future development near the Baker Wetlands are reasonably foreseeable impacts associated with the 42nd Street Alignment A Alternative, and are likely to be substantial.

Concerning the Wakarusa Treatment Plant, the initial phase of the plant will be to relieve pressure on not only the existing treatment plant but also on the Four Seasons holding basin, the Haskell pump station and force mains just north of the Wakarusa River. This first phase will serve western sections of Lawrence and will need to be expanded in later years to treat sewage due to population growth south of the river.

- 2. The FEIS fails to include the recent development proposals moving forward on the former 9,000-acre Sunflower facility in far western Johnson County.**

Response – There is a conceptual land use plan for the Sunflower Army Ammunition Plant. It is a planned community concept called “Community in a Park.” It includes: greenspace and park land, residential, light industrial, a town center area, a business center, and a network of pedestrian and bicycle paths. The existing hazardous sites are targeted to be cleaned-up by 2012, and the full build-out of the community concept by the year 2050. At this time funding is uncertain. Also, transportation plans show a location of a future 4-lane parkway corridor connecting K-10 and I-35 through the Sunflower property. The development plan is a ‘concept only’ at this time and would have little impact on the selection of the preferred alternative for the South Lawrence Trafficway.

- 3. The Construction of the South Lawrence Trafficway through the Baker Wetlands would reduce the outdoor education opportunities in the wetlands.**

Response – There will be greater education opportunities as part of the project’s mitigation and enhancement plan. In addition to the expanded natural area of the Baker Wetlands that is envisioned in the mitigation plan, an approximately 10,000 square foot Wetland and Cultural Education Center and an extensive trail network will be constructed, and a trust fund will be set up to continue operation of the facility. Baker University will own and manage the center and the surrounding expanded Baker Wetlands.

- 4. The FEIS fails to consider the recently proposed new I-70 interchange near Tonganoxie. This new interchange will alter traffic patterns in east and south Lawrence dramatically. A Kansas Turnpike Authority study is projecting that 2/3 of the traffic onto this new I-70 interchange will come from the south. The majority of this traffic will come from K-10 through Eudora, thus altering the traffic data used in the FEIS.**

Response – In reviewing the results of the traffic study prepared for the proposed interchange, it can be concluded that the new Turnpike interchange proposed at mile post 212 will not significantly impact the traffic forecasts used in the traffic analysis for the SLT. The study estimated that only 2% (425 vpd) of the traffic using K-10 between Lawrence and Kansas City (26,000 vpd) would use the new interchange to/from the east. The approximately 2/3 (1,575 vpd) of the interchange traffic to/from the south has local destinations in the area south of the interchange. A minimal amount of cut-through K-10 traffic is forecast to pass through Eudora to make a K-10 to/from Turnpike connection.

- 5. The FEIS fails to consider the recently approved improvement to U.S. Highway 59 south of Lawrence.**

Response – The U.S. Highway 59 improvements were considered in the Corps’ decision under “Cumulative Impacts”. The traffic analysis considered the improvements and there were no significant adverse cumulative impacts identified. FHWA acknowledges that the proposed improvements to US-59 Highway have been approved and that this approval does not result in changes that were not evaluated in the EIS.

- 6. The FEIS fails to consider the disproportionate impacts to Native Americans in violation of Executive Order 12898 on Environmental Justice.**

Response – In consideration of the extensive coordination and the formal Section 106 consultation process, it was determined that there is no disproportionate impact to HINU. There are no direct impacts to the HINU property. There will be no direct or indirect impact to the Medicine Wheel or the sweat lodges. The foreseeable cumulative future impacts will be less with the Selected Alternative than with the 42nd Street alignment due to the relocation of 31st, Louisiana, and Haskell Streets. The removal of existing 31st Street should provide for an overall benefit to the HINU property by moving future traffic related impacts further away from HINU’s sensitive areas.

7. The FEIS fails to consider lack of access provided by the 32nd Street Alternative between HINU and Baker Wetlands. This lack of access will reduce the learning opportunities for the HINU students.

Response – Existing pedestrian access from the north is only available through the gated HINU campus road. This road intersects 31st Street approximately half way between Louisiana Street and Haskell Avenue. Currently, pedestrians have only seasonal access, because of standing water over the roadway, with no formal street intersection. Given current and future traffic at this location, a mid-block pedestrian/bicycle crossing, such as this, is not desired because of safety concerns.

The 32nd Street Alignment B Alternative will improve overall access to the wetlands. Specifically, the construction of grade separated trail crossings at the existing Louisiana/31st Street location and the proposed Haskell Avenue/31st Street location will provide safe pedestrian and bicycle access to the wetlands and wetland/cultural center from the north. This alternative also includes a trail system from the wetland center to Louisiana Street along the full length of the wetlands to Haskell Avenue. The 32nd Street Alignment B Alternative will also provide better parking access with four new parking areas including the parking area to be built at the new Wetland Center just east of the relocated Louisiana Street. For additional information on learning opportunities see the response to comment #3.

On November 9, 2007, the FHWA adopted the Final EIS that was prepared by the Corps. Since FHWA was not a Cooperating Agency on the Final EIS, a thirty-day waiting period was required. It ended on December 10, 2007. During this waiting period, a letter from the City of Lawrence and a letter from the Osage Nation were received. A copy of these letters and other comments previously received from local, state and federal agencies can be found in Appendix B.

VII. Conclusion

Based on the analysis and evaluation contained in this project's Final Environmental Impact Statement; Section 4(f) Evaluation; careful consideration of all the social, economic, and environmental factors; and input from the public involvement process, it is my decision to adopt the 32nd Street Alignment B Alternative as the Selected Alternative for this project.

Date: 5/2/2008



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