RECORD OF DECISION
FEDERAL HIGHWAY ADMINISTRATION - REGION 6

U.S. 71 RELOCATION - DEQUEEN TO INTERSTATE 40
SEVIER, POLK, SCOTT, SEBASTIAN AND CRAWFORD COUNTIES, ARKANSAS

FHWA-AR-EIS-96-01-F
STATE PROJECT 001747
FEDERAL PROJECT DPS-A015(7)

1. DECISION

This Record of Decision (ROD) approves the selection of the Selected Alignment for the U.S. 71 Relocation between DeQueen and Interstate 40, as described in the Final Environmental Impact Statement (FEIS) issued in July 1997. The FEIS studied the proposed construction of a four-lane interstate-type highway on new location, approximately 196 kilometers (122 miles) in length from DeQueen, Arkansas in Sevier County, passing through Polk, Scott, and Sebastian counties to Interstate 40 near Alma, Arkansas in Crawford County. The selection of the Selected Alignment is conditioned upon compliance with the agreements reached in the Programmatic Section 106 Agreement (Appendix J of the FEIS), several agreements reached with the U.S. Forest Service and other agreements reached as itemized below and described in the FEIS (Page S-15). This decision is based on analyses contained in the Draft Environmental Impact Statement (DEIS) issued in October 1996, the FEIS, the comments of state and federal agencies and members of the public and elected officials, and other information in the record in this matter.

1.1. SELECTION OF THE ALIGNMENT FOR CONSTRUCTION

The Selected Alignment approved in this ROD consists of parts of each of three unique alignments developed for the entire length of the project. Each alignment was divided into fourteen segments, defined by points at which a different selection could be made in each segment, as shown in the FEIS, Exhibit S-3. The particular line selected in each segment was based on engineering and environmental factors, and is described in Table 1.

In most segments, the decision represents a balance of impacts, in which certain factors were weighed against others in reaching a decision.

Table 1
IDENTIFICATION OF THE SELECTED ALIGNMENT

SEGMENT	SELECTED ALIGNMENT	BASIS FOR SELECTED ALIGNMENT
A-B	Line 3	Line 3 takes the fewest houses and is publicly preferred.
B-C	Line 3	Line 3 takes the fewest houses and is publicly preferred.
C-D	Line 3 / Line 2 combination	Line 3 (modified to connect to Line 2 south of point D) takes the fewest homes; impacts the fewest streams, floodplains, farmlands, and wetlands; has the fewest noise impacts, the shortest length and lowest construction costs. This line does not provide direct access to Cove but best serves the general public due to its shorter length and corresponding shorter travel time.
D-E	Line 2	Line 2 provides the best access for a moderate cost, has slightly more displacements than the other lines but the fewest floodplain impacts. Line 2 is the only line that can provide access to south Mena in this reach and therefore the only line that can serve to alleviate traffic congestion in Mena by diverting existing U.S. 71 traffic to the proposed highway.
E-F	Line 1	Line 1 provides the greatest potential of the three lines around Mena to reduce traffic congestion, provide access to the city and to promote development in accordance with Mena's Future Land Use plan. In spite of its increased residential relocations (2 additional homes and two additional mobile homes over Line 2), this line has been maintained as the Selected Alignment in order to best serve its intended purpose.
F-G	Line 1	Based on segment E-F preference, Line 1 is preferred in this segment.
G-H	Line 3	Line 3 replaces the existing route through the gap, is publicly preferred, is preferred by the Forest Service, is preferred by the City of Mena and has the least potential to affect the Irons Fork watershed, minimizes impact to the Ouachita National Recreation Trail, and has the lowest estimated construction cost.
H-I	Line 1	Of the two lines that avoid all red-cockaded woodpecker active and recruitment areas (Lines 1 and 2), Line 1 takes fewer houses and has a similar cost to Line 2.
I-J	Line 2	Line 2 is preferred overall in Waldron by the public and local officials, has the best potential to integrate new businesses and commercial operations into the existing economic structure of the city.
J-K	Line 3	Line 3 impacts the fewest wetlands, takes the fewest houses and impacts no producing gas wells.
K-L	Line 3	Line 3 has the least impact on residential areas in this densely populated reach of the project. Line 3 is the furthest from the Devil's Backbone Ridge Civil War site which is impacted by Line 2. It also avoids the Excelsior Community Center which is impacted by Line 2.
L-M	Line 1	Line 1 takes the fewest houses in this reach which was voiced repeatedly by the public during early alignment development.
M-N	Line 2	Line 2 across the Arkansas River and Springhill Park minimizes impacts overall to park facilities and the military water obstacle training area east of the park.
N-O	Line 3	Line 3 takes the fewest houses, is publicly preferred in Kibler, is the location established in the June 3, 1996 City Council resolution and impacts the least wetland areas.

For example, in Segments D-E, E-F, and F-G in the Mena area, the Selected Alignment impacts more homes and involves more noise impacts than Line 3, though not as many noise impacts as Line 2. However, the Selected Alignment provides the best opportunity to relieve traffic and improve safety in Mena by providing an alternate route. Line 2 or Line 3 in this area would not provide such opportunity due to their greater distance from town. In Segment B-C, the Selected Alignment crosses more streams than the other lines in the segment, but takes one third of the homes that would be taken by Line 1. As shown in Table S-1 of the FEIS, the Selected Alignment involves neither the greatest nor the least impact in most impact categories evaluated, but represents a balance of impacts compared to the anticipated benefits of the project. The Selected Alignment best meets the project purpose and need, represents a balance of environmental impacts through minimization, and is considered the environmentally preferred alternative.

Some unavoidable adverse environmental effects will be associated with the Selected Alignment. There will be 81 houses, 12 mobile homes and 6 businesses displaced; approximately 21.0 hectares (51.9 acres) of wetlands and 105 hectares (252 acres) of floodplain encroached upon; approximately 86 streams will be either bridged or culverted; and 211 receptors throughout the project will experience noise impacts.

However, the Selected Alignment will generate significant benefits including the improvement in level of service in over 91% of the existing route, provide traffic relief in some communities, decrease travel time by 50 minutes for a through trip, decrease response times for emergency service providers, improve access to medical and other social services, enhance potential for economic growth and development, improve traffic safety and complete an important link in the interstate system to serve commercial and recreational travel needs between the Gulf of Mexico and points north of Kansas City, Missouri.

1.2. SELECTION OF A CONSTRUCTION ALTERNATIVE OVER THE NO-ACTION ALTERNATIVE

Construction of the selected highway alignment will cause some unavoidable, adverse impacts, however, it is the alternative that best satisfies the identified transportation needs of the project area. The No-Action alternative provides a benchmark for environmental analysis but does not meet the project purpose and need and at the Final EIS, has been dropped from further

consideration as a viable alternative. Therefore, the Selected Alignment, is the "environmentally preferred alternative" for purposes of 40 CFR 1502.2(b) because it best meets the project purpose and need and balances impacts overall.

2. CONSIDERATION OF PROPOSED ACTION AND ALTERNATIVES

The study of alternatives for this project followed a multi-step approach in which broad corridors were first compared against readily available environmental information. This corridor study was then followed by a detailed alignment study within a corridor agreed upon by the public and state and federal agencies. Additionally, a Major Investment Study was completed for the Fort Smith / Van Buren urbanized area.

2.1. CORRIDOR STUDY

The Corridor Study evaluated three continuous corridors on new location (3 kilometers or 2 miles in width), two partial corridors on new location, and an existing location corridor (300 meters or 1,000 feet in width) to evaluate reconstruction of the existing route to interstate standards. The existing location corridor was eliminated from further consideration due to potentially relocating hundreds of homes, loss of access to property, inability to meet the interstate design criteria, impacts to community facilities, and potentially high cost of utility relocation. The corridor advanced to the detailed alignment study is a combination of the three continuous new location corridors and is documented in section 2.4.4 of the FEIS. The preferred corridor provides the best opportunity to minimize impacts during the alignment study and is consistent with local transportation plans and development objectives.

2.2. ALIGNMENT STUDY

The alignment study considered three continuous alignments within the preferred corridor. These alignments were developed using industry standard highway design software and computer mapping prepared for the study area. As a result, the width of the alignments vary with the limits of the cut and fill slopes as each alignment crosses ridges and valleys. Once constructed, the alignments will range from a minimum width of 60 meters to an anticipated maximum width of 550 meters. Prior to alignment development, environmentally sensitive areas where mapped in a geographic information system (GIS) so that environmental issues could be considered

concurrently with engineering design issues. As described above, impacts were evaluated in fourteen segments, so that the three alignments could be compared along the route, and a different alignment selected in each segment.

2.3. MAJOR INVESTMENT STUDY

Early in the study, a Working Group was established to consider strategies for project development in the Fort Smith / Van Buren urbanized area. The Major Investment Study (MIS) is described the FEIS at page 2-10. Several construction and non-construction strategies were considered for the project. Construction strategies considered include widening I-540, construction of an elevated through lane along the I-540 alignment, a transit alternative, and construction of an interstate-type highway on new location. Non-construction alternatives included instituting flexible work hours, using shoulders during peak hours, and establishment of high-occupancy vehicle lanes.

A traffic analysis and a recent origin-destination study of the urbanized area provided the basis for elimination of all non-construction strategies, the elevated through lane strategy and the transit alternative because these would not improve the level of service of the existing U.S. 71 / I-540. The remaining construction strategies, widening I-540 and construction of a highway on new location, were compared based on several measurements of effectiveness including: purpose, need, ease of implementation, environmental impacts and public acceptance, and relative cost. The Working Group concluded that the construction of an interstate-type highway best met the project purpose and need as well as numerous local planning and development objectives, was the easiest to implement in terms of disruption to the surrounding communities and public awareness, and had the lowest relative cost.

3. MEASURES TO MINIMIZE HARM

The development of alternatives, both corridors and alignments, considered environmental factors. After showing that a resource could not be avoided, minimization of impacts was considered throughout the project. Specifically, the number of residential relocations was minimized by avoiding densely populated areas evident in project mapping and during field studies. Based on the FEIS, there is no practicable alternative. Wetland impacts were minimized by avoiding individual wetlands entirely and by project design modifications. This was made possible by incorporation of existing wetland mapping into the project GIS,

consideration of soil type and performing wetland delineations. The identification of the Selected Alignment considered wetland impact minimization as presented in the alternatives analysis found in Table 4-12 of the FEIS.

Impacts to the Ouachita National Recreation Trail and the forest landscape of the Ouachita National Forest were minimized by selecting the alignment that reconstructs the existing route in this reach and substantially reducing the depth of cut. This location also minimized impacts to the watershed of Irons Fork Lake, Mena's water supply, by crossing the watershed at the narrowest part.

Impacts to Springhill Park were minimized by crossing the park at its narrowest width, by crossing in a densely vegetated area and by crossing in an area with no existing or planned public use facilities.

4. AGREEMENTS REACHED

4.1. SECTION 106 PROCESS

A Programmatic Agreement to guide the completion of the cultural resources efforts for this project has been signed by the Arkansas Highway and Transportation Department (AHTD), the State Historic Preservation Officer, the Federal Highway Administration and the Advisory Council on Historic Preservation. During the EIS preparation, a Phase I survey was conducted to identify potentially eligible archeology sites. The Programmatic Agreement covers the completion of the Phase I cultural resources survey in areas inaccessible to project personnel at the time of the survey, the testing of potentially eligible archeological sites, and treatment plans for sites determined to be eligible for the National Register of Historic Places. The agreement also provides for consultation with the Caddo Tribe and other interested parties when appropriate. The Programmatic Agreement is contained in Appendix J of the FEIS. When possible, avoidance will be the preferred treatment of adversely effected sites. All archeological sites that warrant preservation in place will be avoided, provided that a prudent and feasible alternative for highway construction can be identified. The need for preparation of a section 4(f) evaluation on Section 106 sites is not anticipated.

4.2. U.S. FOREST SERVICE TOPICS

An agreement has been reached with the U.S. Forest Service (USFS) for a number of issues. All referenced correspondence is contained in Appendix C of the FEIS.

4.2.1. The June 18, 1997 USFS letter to Michael Baker Jr., Inc. documents the agreement to prepare a Biological Evaluation required by the 1976 National Forest Management Act prior to granting a right-of-entry for construction and a permanent easement for the project. It also includes stipulations for design phase consideration of fish passages for migratory fish species and minimization of runoff flow velocities. Further, AHTD has agreed to compensate the USFS for any land remnants that directly result from construction of the project.

4.2.2. The July 17, 1996 Michael Baker Jr., Inc. letter to USFS documents the agreement to coordinate with the USFS during final design regarding access to forest roads and replacement of wildlife ponds.

4.2.3. An agreement has been reached for compensation for the conversion of roughly 437 acres of national forest lands included in habitat management area 22 managed for shortleaf pine/bluestem grass ecosystem. The details of this compensation are described in AHTD letter to the U.S. Forest Service dated May 16, 1997.

4.3. SECTION 7 CONSULTATION WITH U.S. FISH AND WILDLIFE SERVICE FOR AMERICAN BURYING BEETLE

Due to the long term nature of project design and construction, it has been agreed that potential impacts to the American Burying Beetle cannot be determined until just prior to construction. Existing protocols for determining impacts and relocation of individuals of this species will be followed. The Arkansas Highway and Transportation Department will coordinate and consult with the U.S. Fish and Wildlife Service as the project proceeds. Reference is made to U.S. Department of the Interior comment letter on the DEIS dated December 23, 1996 noting their concurrence with this approach.

5. SUMMARY OF MITIGATION MEASURES

5.1. WETLAND ENCROACHMENT

Wetland encroachments resulting from the project will be mitigated for within each river basin. Approximately 12.4 hectares (30.6 acres) of wetlands are impacted in the Arkansas River basin and are planned to be mitigated for in one of two sites identified on Fort Chaffee for a replacement area of 17.6 hectares (43.6 acres). Approximately 8.6 hectares (21.3 acres) of wetlands are impacted in the Ouachita and Red River basins and are planned to be mitigated for in one or more sites along the project in these basins for a replacement area of 10.4 hectares (25.8 acres). These sites will be identified during the project final design and right-of-way acquisition process. The mitigation ratios are based on a wetland functions and values assessment and have been agreed upon by the U.S. Army Corps of Engineers (September 10, 1996 meeting with AHTD and the U.S. Fish and Wildlife Service December 23, 1996 letter). A ratio of 1:1 will apply to herbaceous wetlands and a ratio of 2:1 for scrub-shrub and forested wetlands.

5.2. SPRINGHILL PARK SECTION 4(f) IMPACT

Mitigation measures have been agreed to with the Corps of Engineers and involve fourteen (14) items that are detailed in the Final Section 4(f) Evaluation contained in the FEIS. These measures consider: relocation of currently abandoned campsites to an area of the park that is currently in use; bridging the entire park; signing on the new highway directing the public to the park; access to the park and protection of the public during construction; protection of the public while passing under the completed bridge; access to currently remote areas of the park for any future development (no current plans exist); minimization of areas to be cleared of vegetation; and restoration of construction areas and disposal of unsuitable materials following construction.

5.3. OUACHITA NATIONAL RECREATION TRAIL SECTION 4(f) IMPACT

Mitigation of impacts to the Ouachita National Recreation Trail include: providing a pedestrian bridge to carry the trail over the new highway; consideration of the use of colored concrete for construction of the pedestrian bridge; consideration of screening or other enclosure to protect trail users and highway traffic following construction; and pavement design considerations for the

pedestrian bridge to reduce hazardous footing during the winter months. These measures are provided in the September 3, 1996 letter from USFS to Michael Baker Jr., Inc.

5.4. NOISE IMPACTS

Over the 196 kilometer (122 mile) length of the project, the Selected Alignment results in 211 receptor impacts which are primarily single family residences. A noise abatement analysis was conducted to determine which noise impact areas met the current AHTD criteria for noise abatement. This analysis determined that 6 sites comprised primarily of grouped single family residences and involving 135 receptors may benefit from noise abatement. Final locations and designs for noise abatement will be made during the project final design stage and will be based on additional noise analysis and the involvement of those directly impacted as specified in the current AHTD noise policy.

6. SECTION 4(f) APPROVAL

6.1. SPRINGHILL PARK

The Selected Alignment crosses Springhill Park at its narrowest point and would entirely span the park with a bridge. The land use involved would be limited to that required for the substructure of the bridge, most likely concrete piers. The Selected Alignment would not affect currently active park facilities. The Section 4(f) analysis for Springhill Park considered avoidance alternatives at each phase of the multi-step alternatives development process adopted for this project. The MIS strategies considered utilization of I-540 through widening which would have avoided the park. The MIS determined that this alternative would not meet the project purpose and need and that residential and commercial relocation impacts resulting from such a strategy would cause community disruption of an extraordinary magnitude. The corridor study considered numerous constraints in the study area, including parks. Adoption of another corridor would have involved either impact to another Section 4(f) resource (Vache Grasse Park), would have involved severe residential relocations in Barling or Lavaca, or would have impacted areas of Fort Chaffee that have been determined to be critical to military operations during the assessment of surplus property as part of BRAC 95. The selection of another alignment within the preferred corridor would have impacted the nationally significant U.S. Army water obstacle training area just east of the park, the only such training area in the United States.

Based on the foregoing, the FEIS has determined that there are not prudent and feasible alternatives to the use of Springhill Park by this project. The proposed action includes all possible planning to minimize harm to Springhill Park resulting from such use.

6.2. OUACHITA NATIONAL RECREATION TRAIL

The Selected Alignment crosses the trail at nearly the same location as existing U.S. 71, which would remain in service from the north to the existing trail access point. The trail would remain in its existing location and would be carried over the proposed highway on a pedestrian bridge. Because the Ouachita National Recreation Trail runs east-west across the study area for a distance of 310 kilometers (192 miles), alternative locations for a north-south highway that avoid the trail do not exist. Based upon the above considerations, there is no feasible and prudent alternative to the use of land from the Ouachita National Recreation Trail and the proposed action includes all possible planning to minimize harm to the trail resulting from such use.

7. COMMENTS ON THE FEIS

Following circulation of the FEIS, sixteen letters were received by AHTD and Michael Baker Jr., Inc. that are related to this project. Fourteen letters focused on specific issues discussed in the FEIS, while one letter requested an FEIS document and one requested assistance in locating their property with respect to the Selected Alignment. Of the fourteen letters, seven requested additional consideration of the location of the Selected Alignment in the Grannis - Wickes area. Responses to all comments are provided below. Comments have been grouped by subject and addressed together wherever possible to avoid duplication of responses.

12/17/97
Date

Federal Highway Administration

SUMMARY OF COMMENTS RECEIVED ON FINAL EIS		
WRITTEN COMMENTS		
NAME	**COMMENT**	**RESPONSE**
Mrs. E. Bowles Mena, AR	Could not locate property on FEIS mapping.	Comment noted. Attempted to contact by phone
Jim and Linda Burns Fort Smith, AR	Request alignment shift east to avoid residential displacements in the Rye Hill area.	The Selected Alignment in the Rye Hill area north of U.S. 71 has been shifted as far east as possible working with the environmental and engineering constraints in this area. The main constraint north of U.S. 71 is the need to remain west of Donahoe Ridge just inside Fort Chaffee. This directly affects how far east the alignment can be moved in the Rye Hill area and maintain interstate design standards. During the final design process, existing residential structures will be considered with respect to the final location of right-of -way limits. A design public hearing will be held in your community at this time to discuss these issues.
Gregg Butts, Director Arkansas State Parks	Concerned with potential impacts to Cossatot River and leopard darter.	The FEIS Appendix contains a complete section on stormwater runoff minimization measures. During the design phase of this project, the Arkansas Department of Pollution Control and Ecology will be reviewing the erosion and sedimentation control plans for each segment of the project and will be issuing a NPDES permit

SUMMARY OF COMMENTS RECEIVED ON FINAL EIS		
WRITTEN COMMENTS		
NAME	**COMMENT**	**RESPONSE**
Gregg Butts, Director Arkansas State Parks (cont.)		based on their assurance of a sound erosion and sedimentation control plan. With respect to the Leopard darter, the Selected Alignment crosses Cow Creek greater than 8 kilometers (5 miles actual stream length) from its confluence with the Cossatot River. Where upper tributaries of the Leopard darter drainage are crossed, site specific erosion and sedimentation control plans will be prepared and reviewed by Arkansas Pollution Control and Ecology and an NPDES permit will be issued based on their assurance of a sound plan.
Grannis - Wickes Area Lavene Briggs Mrs. Dexter Turner Larry McCarley Connie L. Grace Sharon Wilcher Mrs. Terry Alexander Freddie Loyd	Proposed alignment shift between Hatton and Grannis	AHTD has again considered the shift described in your comment letter. This shift was previously proposed during the DEIS comment period and was evaluated and addressed in the FEIS. While potential residential impacts have been considered throughout this project, community access to the new highway facility is also of importance. The shift described in your comment letters may reduce residential displacements in the Port Arthur Avenue area, but would result in an undesirable interchange location due to

SUMMARY OF COMMENTS RECEIVED ON FINAL EIS		
WRITTEN COMMENTS		
NAME	**COMMENT**	**RESPONSE**
Grannis - Wickes Area (cont.)		a combination of topography and local road conditions. Furthermore, while the residential impacts may decrease in your area, a new set of property owners would be affected by the proposed route shift. As discussed in Section 8 of the FEIS, further review of the Port Arthur Avenue area will take place during the AHTD final design phase of this project and will include a public hearing in your area. During this phase, residential impacts will be re-evaluated to fully consider the residential development that exists at this time.
Robert Hedge Wickes, AR	Concerned with Cossatot River Watershed.	Potential impacts to water quality are discussed in Section 4 of the FEIS.
Tim Klinger Fayetteville, AR	Request for FEIS.	Sent copy of FEIS.
Robert Manis Mena, AR	Concerned with potential impact to water oak listed as famous and historic tree by the Arkansas Famous and Historic Tree Program.	Comment noted. The avoidance of individual trees would be addressed during the final design process, which will include a design public hearing in your community.
Patti K. Oates Mena, AR	1. Concerned with water pollution 2. Concerned with impacts to forest land and wildlife. 3. Concerned with impacts to archeological artifacts.	1. Potential impacts to water quality are discussed in Section 4 of the FEIS. 2. Potential impacts to forest habitat and wildlife species is discussed in Section 4 of the FEIS.

SUMMARY OF COMMENTS RECEIVED ON FINAL EIS		
WRITTEN COMMENTS		
NAME	**COMMENT**	**RESPONSE**
Patti K. Oates Mena, AR (cont.)		3. Cultural resources are discussed in detail in Sections 3 and 4 of the FEIS and have been assessed by an archeologist meeting the state requirements in this field.
Personal Property Impacts Jerry Jackson Booneville, AR W. T. Hedge Wickes, AR	Concerned with impacts to personal property.	Comment noted. Mitigation for personal property impacts will continue into the final design process, which will include a design public hearing in your community.
William T. & Charlene Riales Mena, AR	1. Concerned with impacts to personal property. 2. Concerned with impacts to Indian landmarks. 3. Concerned with wetland impacts. 4. Concerned with impacts to red headed woodpecker habitat. 5. Concerned with noise impacts.	1. Comment noted. Mitigation for personal property impacts will continue into the final design process, which will include a design public hearing in your community. 2. Cultural resources, including Indian landmarks, are discussed in detail in Sections 3 and 4 of the FEIS and have been assessed by an archeologist meeting the state requirements in this field. Coordination with the Arkansas State Historic Preservation Officer will continue during the completion of more comprehensive archeological surveys on the Selected Alignment. 3. Wetland impacts are discussed in detail in Section 4 of the FEIS and have been given full consideration in the alignment development process.

SUMMARY OF COMMENTS RECEIVED ON FINAL EIS		
WRITTEN COMMENTS		
NAME	**COMMENT**	**RESPONSE**
William T. & Charlene Riales Mena, AR (cont.)		4. Wildlife and wildlife habitat are discussed in Sections 3 and 4 of the FEIS. 5. Noise impacts are discussed in detail in Section 4 of the FEIS and have been fully evaluated. Mitigation for noise will be considered in accordance with AHTD noise policy.