

4 COMMITMENTS

Each Affected Environment and Environmental Consequences Subsection contains commitments specific to the impact area being assessed. This section contains a summary of the commitments that have been made in this document to minimize potential impacts associated with construction of this project.

The AHTD's standard commitments associated with relocation procedures, hazardous waste abatement, and control of water quality impacts have been made in association with this project.

4.1 LAND USE AND LAND COVER

Impacts to developed property will be avoided and minimized to the extent practicable. Excess right of way outside of safety zone will be allowed to revegetate naturally. A post-construction survey for invasive plant species will be conducted in order to identify possible problem areas and species.

4.2 VISUAL ENVIRONMENT

Excess right of way outside of safety zones will be allowed to revegetate naturally. AHTD's Standard Specifications include native wildflowers in the permanent seeding mix. Automobile salvage yards visible from the proposed facility will be purchased or screened.

4.3 AIR QUALITY

Air quality impacts will be minimized by the project contractor during the construction of the proposed facility through a combination of fugitive dust control, equipment maintenance and compliance with state and local regulations.

4.4 NOISE QUALITY

Based upon the preliminary data related to noise contour information, the Crystal Hill area and the Kellogg Acres, Oakdale, and Northlake subdivisions warrant additional and detailed studies for noise barrier analysis if the Preferred Alternative is chosen as the Selected Alternative. This detailed noise mitigation analysis will be conducted as part of the design

phase of the Selected Alternative. The focus of this analysis will be in the areas that currently have existing and/or expanding residential development. The current residential development within the study area is increasing the number of sensitive receptors on a continuing basis. These changes will be evaluated and considered during the noise barrier feasibility evaluation. The AHTD's Policy of Reasonableness and Feasibility will be applied to the residential areas near the Selected Alternative that are identified as having the potential to be impacted by noise. Where opportunities occur to incorporate earth berms as part of the highway construction and placement of excavated waste materials, they will be evaluated as part of the design phase of the Selected Alternative.

4.5 SOCIOECONOMIC

See relocation procedures located in Appendix E.

4.6 HYDROGEOLOGY AND GROUNDWATER

Special provisions and actions will be required during the design and construction phase to protect groundwater in the vicinity of the Kellogg Mines. These commitments will include ditch paving through highly vulnerable areas, including areas where conduits directly leading to the groundwater are discovered during construction. Coordination with state and federal agencies involved with groundwater quality protection will be conducted as needed if concerns are identified.

4.7 SURFACE WATER QUALITY AND QUANTITY

4.7.1 Water Quality

The AHTD will comply with all requirements of the Clean Water Act, as Amended, for the construction of this project. This includes Section 401, Water Quality Certification; Section 402, NPDES; and Section 404, Permits for Dredged or Fill Material.

Impacts to streams within the project area will be minimized by constructing the project to the minimum width necessary to meet design safety standards. The project will be constructed on new alignment, thus minimizing temporary impacts associated with detours.

The AHTD will prepare and implement a Stormwater Pollution Prevention Plan (SWPPP) in accordance with the requirements of the permit. Before construction begins, AHTD will file the requisite Notice of Intent with ADEQ. The SWPPP will include all specifications and best management practices (BMPs) needed for control of erosion and sedimentation. This will be prepared when the roadway design work has been completed in order to best integrate the BMPs with the project design.

General measures to be used to manage stormwater runoff include litter control, proper usage of deicing chemicals and herbicides, establishment and maintenance of vegetation, and reducing direct discharges to receiving waters when practicable.

Specific measures to be considered and used for management of potential stormwater pollution problems include grassed channels, overland flow through vegetation, wet detention basins, and wetlands.

If a material spill should occur during construction, clean-up procedures would be followed as outlined in the AHTD's *Standard Specifications for Highway Construction*. Measures taken to ensure accidental spill and runoff control while the facility is operating would be coordinated by the Arkansas State Police, the Arkansas Highway Police, AHTD, and a contracted hazardous spill containment team. The State Emergency Operations Center's HAZMAT Hot Line is notified for official notification and response.

4.7.2 Floodways and Floodplains

All of the floodplain and floodway encroachments will be designed to comply with the respective community's local flood damage prevention ordinance. During project design, hydraulic data and construction plans will be submitted to the communities for review, approval and/or permitting as specified by their ordinance.

4.8 WETLANDS AND WATERS OF THE UNITED STATES

Commitments to minimize harm to wetlands and streams are as follows:

- Dredged or fill material used for construction will be non pollutional material in accordance with EPA Guidelines for the Discharge of Dredged or Fill Material found in 40 CFR 230.
- All construction activity will be performed in a manner that would minimize increased turbidity of the water in the work area and otherwise avoid adverse effects on water quality and aquatic life.
- All dredged material not used as backfill will be placed on land and no runoff water from the disposal site will be allowed to enter the waterway.
- The discharge will not be located in the proximity of a public water supply intake.
- Erosion, both during and after construction, will be controlled as outlined in the latest edition of the AHTD's *Standard Specifications for Highway Construction*.
- The project will not significantly disrupt the movement of those species of aquatic life indigenous to the water body.
- Temporary work ramps or haul roads, when needed, will provide sufficient waterway openings to allow the passage of expected high flows.
- The contractor will take precautions in the handling and storage of hazardous materials including lubricants and fuels to prevent discharges or spillages that would result in degradation of water quality.

Although it is clear that numerous streams will be impacted by this project, the extent of those impacts has yet to be determined. Following the design phase, a Stream Mitigation Program to determine stream impacts and restoration requirements will be developed in cooperation with the US Army Corps of Engineers.

Commitments to protect wetlands will include:

- Wetland areas will be avoided to the maximum extent practicable.
- Wetlands outside the construction limits will not be used for construction support activities (borrow sites, waste sites, storage, parking access, etc.) unless permitted by the US Army Corps of Engineers.
- Heavy equipment working in wetlands will be placed on mats.
- Clearing of wetlands will be limited to the minimum amount necessary for the completion of the job.
- The contractor will be responsible for the protection of adjacent wetlands.

The AHTD proposes to mitigate the unavoidable wetland impacts associated with this project at the Rixey Bayou Wetland Mitigation Area. The Vicksburg District Corps of Engineers permitted the Selected Alignment in the FEIS on December 19, 1994, under Individual Permit Number CELMK-OD-FE14-PBH-G13-1. This permit expired on June 21, 2000. This permit required 50 acres (20 hectares) of mitigation from the Rixey Bayou Wetland Mitigation Area. If additional wetland mitigation is required for the Preferred Alternative, additional mitigation acres are available at the Rixey Bayou Wetland Mitigation Area. The Rixey Bayou Wetland Mitigation plan is located in Appendix N of the 1994 FEIS.

4.9 DRINKING WATER SUPPLIES

If any permanent impacts to private drinking water sources occur as a result of this project, the AHTD will mitigate these impacts by providing an alternative water source, either by drilling a new well or connecting the residents to a community water system.

4.10 TERRESTRIAL AND AQUATIC COMMUNITIES

Impacts to terrestrial and aquatic communities will be minimized by limiting construction to the minimum width necessary to meet design safety. Erosion control methods will also be used to decrease the amount of sediments and pollutants entering the stream during

construction. Further consideration will be given to wildlife corridors and passages during the design process.

4.11 CULTURAL RESOURCES

An architectural survey of the Preferred Alternative has been completed and all standing structures 50 years old or older and any potential resources that might qualify as Section 4(f) properties have been identified. The five structural elements (Structural Elements A and C – F) and Structure XXX (Camp Robinson Bridge #2) have been determined as Section 4(f) properties and are eligible to the National Register of Historic Places as contributing elements to the previously recorded Camp Joseph T. Robinson Native Stone Architecture Historic District. An individual Section 4(f) Evaluation revealed no feasible and prudent avoidance alternative, and mitigation measures were developed and carried out by FHWA in consultation with the SHPO. The SHPO concurred that the mitigation is sufficient to resolve the anticipated adverse effect that the undertaking may have on these properties. None of the other structures identified within the Preferred Alternative buffer zone or APE were determined to be eligible for nomination to the National Register and no further work is anticipated regarding standing structures in the study area.

Because much of the land along the Preferred Alternative is privately owned, an intensive archeological survey of the Preferred Alternative has not been yet been completed. About 65% of the route has been examined during previous surveys and this accounts for the 18 previously recorded sites identified within the study area. Furthermore, until final project design is fully developed, project impacts to archeological resources can not be fully addressed. In order to ensure that all outstanding fieldwork, site assessment, and mitigation are carried out in compliance with pertinent state and federal laws and regulations, a PA was signed by the FHWA, SHPO and the AHTD. A copy of the PA is included in Appendix M. It will ensure that:

- An intensive cultural resources survey will be conducted of the entire project area once the final project design has been developed.
- All sites identified will be evaluated to determine if Phase II testing is necessary.

- All National Register eligibility determinations will be made by FHWA in consultation with the SHPO and other appropriate interested parties.
- Any sites determined eligible for the National Register will be avoided if possible. If avoidance is not possible, site specific treatment plans to mitigate or minimize impacts will be prepared and submitted to the SHPO, appropriate Indian tribes or other appropriate interested parties for review. Once approved, the treatment plans will be carried out at the earliest practicable time.
- Should any sites be found to qualify as Section 4(f) properties, there should be enough flexibility within the study corridor to modify final roadway designs to consider avoidance of all but the very largest sites (except where the route has been designated by Camp Robinson officials). If avoidance is not possible an Individual Section 4(f) statement will be prepared for the qualifying property as per 49 USC Section 303 and Title 23 USC Section 138.
- Standard documentation regarding all phases of the project will be provided to the SHPO for review and comment.
- All fieldwork, resource evaluation, treatment and reporting will conform to the Secretary of the Interior's "Standards and Guidelines for Archeology and Historic Preservation" (48 CFR 44716), "A State Plan for the Conservation of Archeological Resources in Arkansas" (Davis, 1982), the "2007 Integrated Cultural Resources Management Plan for Installations of the Arkansas Army National Guard" (ARNG, 2007) and all other pertinent state and federal laws and regulations.
- Consultation will continue with appropriate federally recognized Indian tribes throughout project duration.

4.12 FARMLAND

Farm severance can be mitigated through the construction of frontage roads and overpasses, or severance damages can be paid to affected owners if damages are established through the appraisal process. The construction of any frontage roads must be economically feasible. Any severance payments, as determined by the appraisal process, will compensate farm owners for their lack of access to the severed portion of the farm.

The harvesting of timber on the right of way through Camp Robinson will be administered by the Camp prior to construction of the proposed facility.

4.13 HAZARDOUS MATERIALS

If the project requires acquisition and demolition of standing structures, an asbestos survey will be conducted on each building prior to the development of demolition plans. If the survey detects the presence of any asbestos-containing materials, plans will be developed to accomplish the safe removal of these materials prior to demolition. All asbestos abatement work will be conducted in conformance with ADEQ, EPA and OSHA asbestos abatement regulations.

If a hazardous waste site is identified, observed, or discovered during construction within the right of way area, it will be AHTD's responsibility to determine the type and extent of the contamination. The AHTD will determine the remediation and disposal methods to be employed for that particular type of contamination. Any required remediation work will be conducted in conformance with ADEQ, EPA and OSHA regulations.

The AHTD's *Standard Specifications for Highway Construction* that will be utilized during the construction of the project requires the contractor to: 1) employ best management practices to prevent pollution by spills; 2) utilize proper storage and disposal techniques; and 3) limit the amount of hazardous materials stored on-site.

4.14 POLLUTION PREVENTION

The Community Right-to-Know Act of 1986 was signed into law as part of the Superfund Amendments and Reauthorization Act. This act establishes reporting and emergency notification requirements for companies that use, manufacture, or process any of approximately 1,500 chemicals. Companies using 10,000 pounds or more of certain chemicals or manufacturing or processing 25,000 pounds or more of highly toxic chemicals must follow additional notification requirements. The act also requires that companies maintain a current file of Material Safety Data Sheets (MSDS) for each hazardous chemical in their facility and that companies provide information about these chemicals in reports submitted to the local fire department, the local emergency planning committee and the state

emergency response agency. The AHTD follows these regulations and keeps a copy of all MSDS sheets for all materials that would be used in the construction process.

In Appendix K, there are Standard Construction Specifications addressing responsibilities of the AHTD's contractors as they relate to pollution prevention; such as how to lessen impacts to temporary rights of way; applicable environmental permits, licenses and taxes; Section 404 permits; and ways to reduce or eliminate point and non-point sources of pollution.

The AHTD will allow the usage of recyclable materials in road construction where they yield economic, engineering and environmental benefits. If the contractor wishes to use recyclable materials, a written statement of the type, quantity and location the material is to be used is submitted to the AHTD for approval.

The AHTD allows the addition of fly ash in cement mixes. Fly ash is a waste product of coal-fired electric generation plants. Certain classes of concrete can accept 15% by weight of fly ash added to the concrete mix. Granulated blast furnace slag (25%), a waste product of steel production, is also accepted in certain types of cement mixes. The addition of rubber to asphalt in hot-mix asphalt pavement containing crumb rubber modifiers is sometimes used.

The AHTD allows up to 15% recycled asphalt pavement and even up to 30% recycled asphalt to be added to virgin asphalt.

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