## ARKANSAS STATE HIGHWAY

AND<br>TRANSPORTATION DEPARTMENT


P.O. Box 2261

Little Rock, Arkansas 72203-2261
Telefax (501) 569-2400
www.arkansashighways.com

January 22, 2015

Ms. Sandra L. Otto
Division Administrator
Federal Highway Administration
700 West Capitol, Room 3130
Little Rock, Arkansas 72201-3298

## Re: Job Number 061335

FAP Number EBS-9061(6)
Bridge Number 02715
Alcoa Rd. - Hwy. 183
Saline County
Tier 3 Categorical Exclusion

Dear Ms. Otto:

The Environmental Division has reviewed the referenced project and it falls within the definition of the Tier 3 Categorical Exclusion as defined by the AHTD/FHWA Memorandum of Agreement on the processing of Categorical Exclusions. The following information is included for your review and, if acceptable, approval as the environmental documentation for this project.

The purpose of this project is to widen Highway 5 from Alcoa Road to Highway 183 and replace the bridge over Hurricane Creek. Total length of the project is 2.3 miles. The enclosed figure illustrates the project location.

The existing roadway consists of two 11-foot wide paved travel lanes with 8 -foot wide shoulders. Existing right of way width is 60 feet. The existing Bridge No. 02715 is 124 ' x 31.5' and has a concrete deck on steel beams. This bridge has a sufficiency rating of 46.8 and is structurally deficient.

The new roadway will have a curb and gutter design with four 11 -foot wide paved travel lanes, a 12 -foot wide turn lane, 4 -foot wide bike lanes and 5 -foot wide sidewalks. The new bridge over Hurricane Creek includes a 190’ x 82’ continuous composite W-Beam unit on steel shell H-Pile end bents and multi column interior bents on spread footings. The new right of way width will be 110 feet. A temporary left turn lane will be provided at Dearborn Circle at the eastern end of the project. The turning lane will accommodate traffic after construction until a permanent one can be constructed as part of a different project. Approximately 16 acres of additional right of way will be required for this project.

Design data for this project is as follows:

| Design Year | Average Daily Traffic | Percent Trucks | Design Speed |
| :---: | :---: | :---: | :---: |
| 2016 | 18,500 | 2 | 45 mph |
| 2036 | 26,000 | 2 | 45 mph |

There are no environmental justice issues, prime farmland or endangered species associated with this project. Three residential owners and one business will be relocated as a result of this project. Public Law 91-646, Uniform Relocation Assistance Act of 1970, as amended, will apply. Field inspections found no evidence of existing underground storage tanks or hazardous waste deposits. No impacts to cultural resources are anticipated; concurrence from the State Historic Preservation Officer is enclosed. Noise predictions have been made for this project utilizing the Federal Highway Administration’s Traffic Noise Model 2.5 procedures. A noise assessment is enclosed.

The widening of Highway 5 will impact approximately 1.43 acres of wetlands and relocate 371 linear feet of ephemeral stream. A temporary work road will be constructed across Hurricane Creek for bridge construction. Construction of the Hurricane Creek Bridge and associated work road will impact an additional 0.2 acre of waters of the United States. A detailed description of wetland and stream impacts is included in the enclosed stream and wetland assessment. Compensatory mitigation, 12.9 wetland credits and $1,467.15$ stream credits, will be provided at the Department's Upper Saline River Mitigation Area, once approved. Construction of the proposed project should be allowed under the terms of a Nationwide 23 Permit for Categorical Exclusions.

AHTD Job Number 061335
Tier 3 Categorical Exclusion
Page 3 of 3
Saline County and the Cities of Benton and Bryant participate in the National Flood Insurance Program. All of the floodplain encroachments within this highway construction project will be designed to comply with the local flood damage prevention ordinance. The project lies within the Zone AE, Special Flood Hazard Area. The final project design will be reviewed to confirm that the design is adequate and that the potential risk to life and property are minimized. The project will not support incompatible use and development of the floodplain. Adjacent properties should not be impacted nor have a greater flood risk than existed before construction of the project. None of the encroachments will constitute a significant floodplain encroachment or a significant risk to property or life.

A public involvement meeting for this project was held on September 18, 2013 in Bryant. A public involvement synopsis is enclosed.

If you have any questions, please contact the Environmental Division at 569-2281.


Sincerely,
goon laming
John Fleming
Division Head
Environmental Division
Enclosures
JF:JB:fc
c: Program Management
Right of Way
Roadway Design
District 6
Master File


The Department of Arkansas Heritage

Mike Beebe Governor

Martha Miller Director

Arkansas Arts Council

Arkansas Natural Heritage Commission

Delta Cultural Center

Historic Arkansas Museum

Mosaic Templars Cultural Center

Old State House Museum


Arkansas Historic
Preservation Program
323 Center Street, Suite 1500
Little Rock, AR 72201
(501) 324-9880
fax: (501) 324-9184
tdd: (501) 324-9811
e-mail:
infogarkansaspreservation.org website:
"www.arkansaspreservation.org

November 12, 2014
Mr. John Fleming
Division Head
Environmental Division
Arkansas State Highway and Transportation Department
P.O. Box 2261

Little Rock, Arkansas 72203-2261
Re: Saline County - Bryant
Section 106 Review - FHWA
Report Titled A Cultural Resources Survey of AHTD Job Number 061335 Alcoa Rd.-Hwy. 183 (Bryant) (S) Saline County, Arkansas AHPP Tracking Number 91626

Dear Mr. Fleming:
The staff of the Arkansas Historic Preservation Program has reviewed the above-referenced cultural resources survey report. This report documents fieldwork done for a highway expansion and is acceptable. Based on the information in this report, we concur that the New Hope Cemetery (3SA378) is eligible for listing in the National Register of Historic Places (NRHP), and that archeological sites 3SA382 and 3SA383 are ineligible for listing in the NRHP. As New Hope Cemetery is being avoided, we concur that the proposed undertaking will have no effect on historic properties.

Thank you for the opportunity to review this undertaking. Please refer to the AHPP Tracking Number listed above in all correspondence. If you have any questions, please call Eric Gilliland of my staff at 501-324-9270.

Sincerely,

## Frances maswain

Frances McSwain
Deputy State Historic Preservation Officer
cc: Ms. Lisa C. Baker, United Keetoowah Band of Cherokee Indians
Mr. Everett Bandy, Quapaw Tribe of Oklahoma
Mr. Robert Cast, Caddo Nation
Dr. Ann Early, Arkansas Archeological Survey
Ms. Amber Hood, Chickasaw Nation
Dr. Andrea Hunter, Osage Nation

## Fundamentals of Sound and Noise

"Noise" is defined as an unwanted sound. Sounds are described as noise if they interfere with an activity or disturb the person hearing them. Sound is measured in a logarithmic unit called a decibel (dB). The human ear is more sensitive to middle and high frequency sounds than it is to low frequency sounds, so sound levels are weighted to more closely reflect human perceptions. These "A-weighted" sounds are measured using the decibel unit $\mathrm{dB}(\mathrm{A})$. Because the $\mathrm{dB}(\mathrm{A})$ is based on a logarithmic scale, a $10 \mathrm{~dB}(\mathrm{~A})$ increase in sound level is generally perceived as twice as loud while a $3 \mathrm{~dB}(\mathrm{~A})$ increase is just barely perceptible to the human ear.

Sound levels fluctuate with time depending on the sources of the sound audible at a specific location. In addition, the degree of annoyance associated with certain sounds varies by time of day, depending on other ambient sounds affecting the listener and the activities of the listener. The time-varying fluctuations in sound levels at a fixed location can be quite complex, so they are typically reported using statistical or mathematical descriptors that are a function of sound intensity and time. A commonly used descriptor of the equivalent sound level is Leq, which represents the equivalent of a steady, unvarying level over a defined period of time containing the same level of sound energy as the time varying noise environment. Leq(h) is a sound level averaged over one hour. For highway projects, the Leq(h) is commonly used to describe traffic-generated sound levels at locations of outdoor human use and activity (such as residences).

## Noise Impact Criteria

Traffic noise impacts take place when the predicted traffic noise levels approach or exceed the noise abatement standard, or when the predicted traffic noise levels exceed the existing noise level by ten $\mathrm{dB}(\mathrm{A})$ (decibels on the A -scale). The noise abatement standard of $67 \mathrm{~dB}(\mathrm{~A})$ is used for sensitive noise receptors such as residences, schools, churches, and parks. The term "approach" is considered to be one $\mathrm{dB}(\mathrm{A})$ less than the noise abatement standard.

The number of noise receptors was estimated for this project utilizing the Federal Highway Administration’s Traffic Noise Model 2.5, existing and proposed roadway information, existing traffic information, and projected traffic levels for 2036.

## Traffic noise analyses

Traffic noise analyses were performed for the project utilizing a roadway cross-section for Highway 5 consisting of four 11-foot paved travel lanes, a 12-foot painted median and 4 -foot wide paved bike lanes with curb and gutter.

AHTD Job 061335
Noise Analysis
Page 2 of 2

## Effects of Project

The traffic noise estimates for the project resulted in a noise abatement distance of 130 feet from the centerline of Highway 5 in the project area. Approximately 20 receptors could be affected by future noise levels greater than $66 \mathrm{~dB}(\mathrm{~A})$. Of those 20 receptors, 18 are currently being affected by noise levels from Highway 5 and would experience a 3 $\mathrm{dB}(\mathrm{A})$ noise increase from the proposed project. This increase would be barely discernible to the impacted receptors.

## Traffic Noise Abatement

Since noise impacts are predicted within 500 feet of the proposed project, the feasibility and reasonableness of potential noise abatement measures must be evaluated. Based upon AHTD's "Policy on Highway Traffic Noise Abatement", any noise abatement effort using barrier walls or berms is not warranted for this project. In order to provide direct access to the highway from adjacent properties, breaks in the barrier walls or berms would be required. These necessary breaks for highway access would render any noise barrier ineffective.

To avoid noise levels in excess of design levels, any future receptors should be located a minimum of 10 feet beyond the distance that the noise abatement standard is projected to occur. This distance should be used as a general guide and not a specific rule since the noise will vary depending upon the roadway grades and other noise contributions.

Any excessive project noise, due to construction operations, should be of short duration and have a minimum adverse effect on land uses or activities associated with this project area.

In compliance with Federal guidelines, a copy of this analysis will be transmitted to the Central Arkansas Planning and Development District for possible use in present and future land use planning.

# Wetlands And Stream Assessment 

Pursuant To Section 404
Ahtd Job Number 061335
Alcoa RD. - HWY. 183 (S)
SALINE COUNTY


## CLINT HUTCHESON

## Environmental Division

Arkansas State Highway and Transportation Department

DECEMBER 16, 2014

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## Overview

This analysis finds that there is no practicable alternative to construction in the wetlands and waters of the United States adjacent to Highway 5 in Saline County, Arkansas. This finding is in accordance with Executive Orders 11990 on Protection of Wetlands and 11988 on Floodplain Management.

## Project Description

The proposed project is located in Sections 20, 21, \& 29; Township 1S; Range 14W in Saline County (refer to the attached Categorical Exclusion). The proposed project will widen the existing Highway 5 and construct a new bridge over Hurricane Creek upstream of the existing Highway 5 Bridge (Figure 1A).

## Project Area

The project is located in the Tertiary Uplands of South Central Plains Ecoregions of Arkansas (Woods, et. al., 2004). Land use for the surround area is a mixture of residential and commercial development. The remaining forested areas within the Hurricane Creek floodplains are dominated with bottomland hardwoods with scattered loblolly pines.
(1)


## Description of Wetlands and Stream

The wetlands affected by the construction of the proposed project are classified as scrubshrub and bottomland hardwood. The scrub-shrub wetlands (Figure 2) are dominated with black willow (Salix nigra), green ash (Fraxinus pennsylvanica), soft rush (Juncus effusus), and button bush (Cephalanthus occedentalis). The bottomland hardwood wetlands (Figure 3) are dominated with willow oak (Quercus phellos), American elm (Ulmus americana), water oak (Quercus nigra), green ash (Fraxinus pennsyvanica), chinese privet (Ligustrum sinense), and sweet gum (liquidambar styraciflua).

Soils in both the scrub-shrub and the bottomland hardwood wetlands are listed as Amy silt loam, which is considered hydric (Hoelsher, 1987). Chroma of the soils in the wetlands range from $10 \mathrm{YR} 5 / 2$ to $10 \mathrm{YR} 6 / 2$, with mottles ranging from $10 \mathrm{Y} 5 / 8$ to 10 YR 5/6. Amy soils are on level flood plains in the Coastal Plain and are saturated with a high water table in late winter and early spring. During a normal growing season the soil in the project area is saturated in the upper 12 inches. Hydrology was determined by using water marks and soil saturation.

An unnamed tributary to Hurricane Creek is labeled as an intermittent stream on the USGS 7.5 minute series topographic map, Benton quadrangle; however, a field inspection conducted on December 11, 2014, determined that the stream should be classified as ephemeral (Figure 4). This classification is primarily based on the fact that the source of water is precipitation driven for short periods after rain events and not ground water driven. The substrate of this section of unnamed tributary comprised mostly of silt/clay. The Rosgen classification for this segment of unnamed tributary is an E6 stream type. This stream is relatively stable, showing few signs of impairment in this segment. However, upstream of this segment there are numerous impairments that can be found. There are five road crossings and three impoundments that can be found within a 0.5 mile upstream of this segment. Due to the number of impacts within 0.5 mile of the project area and limited potential for restoration or recovery, the stream is characterized as moderately function utilizing the COE Little Rock District Stream Method (2011).

## Alternatives Considered

The No-Action Alternative would not alleviate the unsafe conditions created by the volume of traffic on Highway 5. Widening the existing roadway toward the south would have introduced a reverse curve making for more unsafe travel conditions and requiring the relocation of approximately 415 feet of intermittent stream. Widening Highway 5 toward the north will improve travel conditions by reducing the existing curve west of Hurricane Creek. Impacts to the wetlands were minimized as much as practicable during the design of this project.


Figure 2. Scrub-Shrub Wetlands North of Hwy. 5, West of Hurricane Creek


Figure 3. Bottomland Hardwood Wetlands North of Hwy. 5, West of Hurricane Creek


Figure 4. Ephemeral Stream North of Hwy. 5, West of Hurricane Lake Estates Entrance

## Impacts to Wetlands and Waters of the United States

Widening the existing Highway 5 toward the north will impact approximately 1.43 acres of wetlands and relocate approximately 371 linear feet of ephemeral stream. The impacted wetlands and stream are illustrated on Figure 4A. Wetland impacts include 0.4 acre of bottomland hardwood wetlands that will be permanently filled for the construction of the new roadway embankment and 0.13 acre of bottomland hardwoods that will be permanently cleared for the new proposed right-of-way. There will also be 0.7 acres of scrub-shrub wetlands that will be permanently filled for the construction of the new roadway embankment and 0.2 acres of scrub-shrub wetlands that will be permanently cleared for the new proposed right-of-way.

Shifting the alignment toward the north will require the relocation of 371 linear feet of unnamed tributary of Hurricane Creek (ephemeral stream) impacting less than 0.1 acre of waters of the United States. This unnamed tributary will be incorporated into the new roadside ditch during construction. This project will also replace the existing 124 foot two lane bridge over Hurricane Creek with a new 190 foot four lane bridge 50 foot upstream of the existing bridge. For purposes of construction of the new bridge and demolition of the existing bridge, a work road will be constructed across Hurricane Creek. Construction of the work road will require the placement of fill material below the plane of ordinary high water (elevation 364 ft . msl.), impacting approximately 0.1 acre of waters of the United States. Detailed work road drawings will be attached to the Section 404 permit application.

Water quality will be temporarily impacted by construction due to increased turbidity and sedimentation. Best management practices will be used to control water pollution and minimize negative impacts to wetlands due to construction runoff. Water quality will not be permanently impacted by construction of this project.



## Mitigation

Unavoidable wetland and stream impacts resulting from this project will be mitigated at an offsite mitigation area or approved mitigation bank, as determined during the Section 404 permitting process. The AHTD proposes the use of 12.9 wetland credits to mitigate the 1.43 acres of wetland impacts and the use of $1,467.15$ stream credits to mitigate the 371 feet of stream impacts.

## Conclusion

There are no practical alternative to permanently impacting 1.43 acres of wetlands and 0.2 acre of the waters of the United States during construction of this project. All practical measures to minimize harm have been included. Construction of the proposed project should be allowed under the terms of a Nationwide 23 Permit for Categorical Exclusions.

## Literature Cited

Hoelsher, James E.
1987 Soil Survey of Saline County, Arkansas. Soil Conservation Service and Arkansas Experiment Station. Published by U.S. Government Printing Office, Washington, D.C.

Woods, A.J., et al.
2004 Ecoregions of Arkansas (color poster with map, descriptive text, summary tables and photographs). Reston, Virginia. U.S. Geological Survey.

## Required Wetland Mitigation Credits Worksheet

| Factor | Filled <br> Forested <br> Wetland | Cleared <br> Forested <br> Wetland | Filled <br> Scrub- <br> Shrub <br> Wetland | Cleared <br> Scrub- <br> Shrub <br> Wetland |
| :---: | :---: | :---: | :---: | :---: |
| Lost Type | $\mathbf{3}$ | $\mathbf{3}$ | $\mathbf{2}$ | $\mathbf{2}$ |
| Priority <br> Category | $\mathbf{0 . 5}$ | $\mathbf{0 . 5}$ | $\mathbf{0 . 5}$ | $\mathbf{0 . 5}$ |
| Existing <br> Condition | $\mathbf{2 . 5}$ | $\mathbf{2 . 5}$ | $\mathbf{1}$ | $\mathbf{1}$ |
| Duration | $\mathbf{2}$ | $\mathbf{2}$ | $\mathbf{2}$ | $\mathbf{2}$ |
| Dominant <br> Impact | $\mathbf{3}$ | $\mathbf{1}$ | $\mathbf{3}$ | $\mathbf{1}$ |
| Cumulative <br> Impact | $\mathbf{0 . 1}$ | $\mathbf{0 . 1}$ | $\mathbf{0 . 1}$ | $\mathbf{0 . 1}$ |
| Sum of r <br> Factors | $\mathrm{R}_{1}=11.1$ | $\mathrm{R}_{2}=9.1$ | $\mathrm{R}_{3}=8.6$ | $\mathrm{R}_{3}=6.6$ |
| Impacted Area | $\mathrm{AA}_{1}=0.4$ | $\mathrm{AA}_{2}=0.13$ | $\mathrm{AA}_{3}=0.7$ | $\mathrm{AA}_{3}=0.2$ |
| R x AA= | 4.4 | 1.2 | 6.0 | 1.3 |

$$
\text { TOTAL REQUIRED CREDITS }=\sum(\mathrm{R} \mathrm{X} \mathrm{AA})=12.9
$$

## Required Stream Mitigation Credits Worksheet

## ADVERSE IMPACT

FACTORS FOR RIVERINE SYSTEMS WORKSHEET

\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|}
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\hline Existing Condition \& \multicolumn{3}{|c|}{Functionally Impaired 0.1} \& \multicolumn{3}{|l|}{Moderately Functional 0.8} \& \multicolumn{3}{|l|}{Fully Functional 1.6} \\
\hline Duration \& \multicolumn{3}{|c|}{Temporary
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0.05
\]} \& \multicolumn{3}{|c|}{Recurrent
\[
0.1
\]} \& \multicolumn{3}{|c|}{Permanent 0.3} \\
\hline Activity \& Clearing
\[
0.05
\] \& Utility Crossing/Bridge Footing 0.15 \& \begin{tabular}{l}
Below \\
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| Factor | Dominant <br> Impact <br> Type 1 | Dominant <br> Impact <br> Type 2 | Dominant <br> Impact <br> Type 3 | Dominant <br> Impact <br> Type 4 | Dominant Impact <br> Type 5 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Stream <br> Type <br> Impacted | Ephermeral | blank | blank | blank | blank |
| Priority <br> Area | Tertiary | blank | blank | blank | blank |
| Existing <br> Condition | Moderately Funct | blank | blank | blank | blank |
| Duration | Permanent | blank | blank | blank | blank |
| Activity <br> Fill | blank | blank | blank | blank |  |
| Cumulative <br> Linear <br> Impact | $201-500$ | blank | 0 | blank | blank |
| Sum of <br> Factors | $\mathrm{M}=3.9$ | 0 | 0 | 0 |  |
| Linear Feet <br> of Stream <br> Impacted in <br> Reach | LF=371 | $1,446.90$ | 0 | 0 | 0 |
| M X LF |  | blank |  |  |  |

Total Mitigation Credits Required $=(\mathbf{M X ~ L F})=\quad 1446.9$

# PUBLIC INVOLVEMENT SYNOPSIS 

Job Number 061335<br>Alcoa Road - Highway 183 (Hwy. 5)<br>Saline County<br>Thursday, September 18, 2014

An open forum Public Involvement meeting for the proposed project was held at the Grace Church from 4:00-7:00 p.m. on Thursday, September 18, 2014. Special efforts to involve minorities and the public in the meeting included the following:

- Display advertisement placed in the Arkansas Democrat Gazette on Sunday, September 7, 2014 and Sunday, September 14, 2014.
- Display advertisement placed in the Benton Courier on Thursday, September 4, 2014 and Thursday, September 11, 2014.
- Public Service Announcements to La Pantera 1440 AM which aired on Monday, September 15, 2014 through Thursday, September 18, 2014.
- Public Service Announcements to Heartbeat 106.7 FM which aired on Monday, September 15, 2014 through Thursday, September 18, 2014.
- Distribution of flyers in the project area.

The following information was available for inspection and comment:

- Displays including an aerial photograph at a scale of 1 inch equals 300 feet.
- Preliminary plans at a scale of 1 inch equals 100 feet.

Handouts for the public included a comment sheet and a small-scale map illustrating the project location, which was identical to the aerial photograph display. Copies of the handouts are attached.

Table 1 describes the results of the public participation at the meeting.

| TABLE 1 |  |
| :--- | :---: |
| Public Participation | Totals |
| Attendance at meeting (including AHTD staff) | 220 |
| Total comment forms received | 89 |
| Letters received | 1 |

AHTD staff reviewed all comments received and evaluated their contents. The summary of comments listed below reflects the personal perception or opinion of the person or organization making the statement. The sequencing of the comments is random and is not intended to reflect importance or numerical values. Some of the comments were combined and/or paraphrased to simplify the synopsis process.

An analysis of the responses received as a result of the public survey is shown in Table 2.

| TABLE 2 |  |
| :--- | :---: |
| Survey Results | Totals |
| Supports improvements to Highway 5 | 83 |
| Does not support improvements to Highway 5 | 4 |
| No response to the support of project question | 2 |
| Knowledge of historical, archeological or cemetery sites | 19 |
| Knowledge of area environmental constraints | 2 |
| Beneficial impacts due to the proposed project | 29 |
| Adverse impacts due to the proposed project | 25 |
| Home or property offers limitations to the project | 4 |

The following is a listing of comments concerning issues associated with this project.

- One individual commented it would be better with four lanes and a median.
- One individual commented it would take too many trees.
- Two individuals commented it would provide safer route with economic benefits.
- Thirty nine individuals wanted no impacts to the fountain at Hurricane Lake Estates.
- Three individuals wanted it moved to the south in the area of the Mt Carmel Church.
- Fourteen individuals wanted a traffic signal at Hurricane Lake Estates.
- One individual wanted a traffic signal at North Prickett Road.
- Three individuals wanted a traffic signal at Forest Cove and Sunset Meadows Subdivisions.
- Four individuals wanted more traffic signals on the project.
- One individual wanted two left turn lanes at Springhill Road in all four directions.
- One individual wanted an exit ramp at Springhill Road on Interstate 30.
- One individual wanted a turn lane on Highway 183.
- One individual wanted roundabouts.
- Twelve individuals that commented on the (knowledge of historical sites, family cemeteries, or archeological) question stated that the New Hope and Kirkpatrick Cemeteries are located on or near the project.
- Two individuals wanted more lighting at the Highway 5/Highway 183 intersection.
- One individual wanted green and white crosswalks at school crossings.
- One individual commented there should be a grassy area between travel lanes and bike lanes.

Job Number 061335 Public Involvement Synopsis
September 18, 2014
Page 3 of 3

- One individual commented bike lanes and sidewalks are not needed.
- Two individuals commented it would create poor access to their business.

Attachments:
Public handouts, including blank comment form
Small-scale display copies

JB:ym
RJRJ
DNDN

## Cottizen Comment Form

AHTD Job Number 061335<br>Alcoa Rd. - Highway 183 (HwY 5)<br>SALINE COUNTY<br>LOCATION:<br>Grace Church<br>4200 Highway 5 North<br>Bryant, AR<br>4:00-7:00 P.M.<br>Thursday, September 18, 2014

Make your comments on this form and leave it with AHTD personnel at the meeting or mail it within 15 days to: Arkansas State Highway and Transportation Department, Environmental Division, Post Office Box 2261, Little Rock, Arkansas 72203-2261. Email: environmentalpimeetings@ahtd.ar.gov.

Do you feel there is a need for the proposed widening of Highway 5 from Alcoa Road extending east to Highway 183 in Bryant? (Comment optional)
$\qquad$
$\qquad$
$\qquad$
$\square \quad \square$ Do you know of any historical sites, family cemeteries, or archaeological sites in the project area? Please note and discuss with staff.
$\qquad$
$\qquad$
$\square \square$ Do you know of any environmental constraints, such as UST's, asbestos, endangered species, hazardous waste sites, existing or former landfills, or parks and public lands in the vicinity of the project? Please note and discuss with AHTD staff. $\qquad$
$\qquad$
$\qquad$
$\square \square$ Do you feel that the proposed widening project will have any impacts ( $\square$ Beneficial or $\square$ Adverse) on your property and/or communizy (economic, environmental, social, etc.)? Please explain. $\qquad$
$\qquad$
$\qquad$

## Yes No

$\square \quad \square$ Does your home or property offer any limitations to the project, such as septic systems, springs or wells that the Department needs to consider in its design? $\qquad$
$\qquad$
$\qquad$
$\square \quad \square \quad$ Do you have a suggestion that would make this proposed project better serve the needs of the community? $\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

It is often necessary for the AHTD to contact property owners along potential routes. If you are a property owner along or adjacent to the route under consideration, please provide information below. Thank you.
Name : $\qquad$ (Please Print)
Address: $\qquad$ Phone: ( $\quad$ ) $\qquad$ -- $\qquad$

E-mail: $\qquad$

Please make additional comments here. $\qquad$
$\qquad$
$\qquad$
$\qquad$
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## AHTD ENVIRONMENTAL IMPACTS ASSESSMENT FORM

AHTD Job Number
061335
FAP Number
EBS-9061(6)

Job Title Alcoa Rd. - Hwy. 183 (S)

| Environmental Impacts | None | Minor | Significant |  |
| :--- | :---: | :--- | :--- | :--- |
| Air Quality | X |  |  | Comments |
| Construction Impacts | X |  |  | Temporary |
| Cultural Resources | X |  |  |  |
| Economic | X |  |  |  |
| Endangered Species | X |  |  |  |
| Energy Resources | X |  |  |  |
| Environmental Justice/Title VI | X |  |  |  |
| Fish and Wildlife | X |  |  |  |
| Floodplains |  | X |  | Zone AE |
| Forest Service Property | X |  |  |  |
| Hazardous Materials/Landfills | X |  |  |  |
| Land Use Impacts | X |  |  |  |
| Migratory Birds |  | X |  | Bird SP in contract |
| Navigation/Coast Guard | X |  |  |  |
| Noise Levels |  | X |  |  |
| Prime Farmland | X |  |  |  |
| Protected Waters | X |  |  |  |
| Public Recreation Lands | X |  |  |  |
| Public Water Supply/WHPA | X |  |  |  |
| Relocatees |  | X |  | Three residential one business |
| Section 4(f)/6(f) | X |  |  |  |
| Social | X |  |  |  |
| Underground Storage Tanks | X |  |  |  |
| Visual Impacts | X |  |  |  |
| Stream Impacts |  | X |  | 371 linear feet of channel relocation |
| Water Quality |  | X |  | Temporary during construction |
| Wetlands | X |  | 1.43 acres |  |
| Wildlife Refuges |  |  |  |  |

Section 401 Water Quality Certification Required?
No
Short-term Activity Authorization Required?
Section 404 Permit Required?
Remarks: Compensatory wetland/stream mitigation offered at Upper Saline Mitigation Area


Date $1 / 23 / 15$

## ROADWAY DESIGN REQUEST

Job Number 061335 FAP Number: EBS-9061(6) County: Saline Job Name: Alcoa Rd. - Hwy. 183 (S)
Design Engineer: Primary Environmental Staff:
A. Existing Conditions:

1. Roadway Width: 22’
2. Shoulder Width: 8’
3. Number of Lanes and Width: 2-11’
4. Existing Right-of-Way: 60’
B. Proposed Conditions:
5. Roadway Width:

66' Face to Face Curb \& Gutter
2. Shoulder Width:
3. Number of Lanes and Width: 2 @ 4’ Bike Lane, 4-11', 1-12’
4. Average Right-of-Way: 110’
C. Construction Information:

If detour: Where:
Length:
D. Design Data:

2016 ADT: 18,500 2036 ADT: 26,000 Trucks 2\%
Design Speed: 45 MPH
E. Approximate total length of project: 2.311 miles
F. Justification for proposed improvements: Widen from 2 lanes to 5 lanes.
G. Total Relocatees: 6 Residences: 5 Businesses: 1 Personal Property: 0
H. Have you coordinated with any of the following: (Provide name and date)

City and or County Officials: Public Involvement 9-18-14
State Agency: No
Federal Agency: No

## BRIDGE INFORMATION - PRELIMINARY

Job Number: $\mathbf{0 6 1 3 3 5}$ FAP Number: _ 9990 County: Saline
Job Name: Alcoa Rd. - Hwy. 183 West (S)
Design Engineer: Kyle Yeary Environmental Staff: John Baber
A. Description of Existing Bridge:

1. Bridge Number_ 02715 over
2. Location: Rte.: _SH 5 Section: 8 Log Mile: 2.12
3. Length: 124.00 ft Br. Rdwy. Width: $\quad 28.00 \mathrm{ft}$ Deck Width (Out-to-Out): 31.00 ft . ft
4. Type Construction: Concrete deck on steel beams
5. Deficiencies: Inadequate Load Capacity
6. HBRRP Eligibility: Qualif. Code: SD Sufficiency Rating: 46.8
B. Proposed Improvements:
7. Length: $\underline{190.34 \mathrm{ft}} \mathrm{Br}$. Rdwy. Width: $\underline{66.00 \mathrm{ft}}$ Deck Width (Out-to-Out): 82.167 ft
8. Travel Lanes: Four 11' lanes, 12' Painted Median, and two 5' Bike Lanes
9. Shoulder Width: None
10. Sidewalks? Yes Location: _ Both Sides Width: $\quad 6.5 \mathrm{ft}$
C. Construction Information:
11. Location in relation to existing bridge: CL new bridge 50 ft . upstream of existing CL
12. Superstructure Type: Cont. Comp. W Beam
13. Span Lengths: Three spans, 60'-68'-60’
14. Substructure Type: Steel H-Pile End Bents, Multi Column Int. Bents on Spread Footings
15. Ordinary High Water Elev. (OHW): 364.0 No. of Bents inside OHW Contours: 2
16. Concrete Volume below OHW: TBD yd $^{3}$ Vol. Bent Excavation: TBD yd $^{3}$ Is backfill req'd? TBD
17. Is Channel Excavation Required? No Surface Area: _ $0 \quad \mathrm{ft}^{2}$ Volume: 0 _ $\mathrm{yd}^{3}$
18. Is Fill below OHW Req'd.? No Surface Area: $\quad 0 \quad \mathrm{ft}^{2}$ Volume: $\quad 0 \quad \mathrm{yd}^{3}$
19. Is Riprap required? No Volume: $\quad 0 \quad \mathrm{yd}^{3}$

## D. Work Road Information:

1. Is Work Road(s) required? TBD Location: $\qquad$ Top Width: $\qquad$ ft
2. Is Fill below OHW required? TBD Surface Area: ___ $\mathrm{ft}^{2}$ Volume ___ $\mathrm{yd}^{3}$
3. Are Pipes required to meet Backwater Criteria? TBD

Waterway Opening: $\qquad$ $\mathrm{ft}^{2}$
E. Detour Information:

1. Is a detour bridge required? No Location in relation to Existing Br .:
2. Length: $\qquad$ ft Br. Rdwy. Width: $\qquad$ ft Deck Elevation:
3. Volume of Fill below OHW: $\qquad$ $\mathrm{yd}^{3} \quad$ Surface Area: $\qquad$ $\mathrm{ft}^{2}$
F. Coordination with Outside Agencies (e.g., FHWA, City, County, C of E, USCG):

Has Bridge Division coordinated with any outside agencies? $\qquad$ No -

| Agency | Person Contacted | Date |
| :---: | :---: | :---: |
|  |  |  |
|  |  |  |
|  |  |  |

REPLY TO
ATTENTION OF

Regulatory Division

DEPARTMENT OF THE ARMY<br>LITTLE ROCK DISTRICT, CORPS OF ENGINEERS<br>POST OFFICE BOX 867<br>LITTLE ROCK, ARKANSAS 72203-0867<br>ROCK, ARKANSAS 72203 www.swl.usace.army.mil/

JNN 272097

## NATIONWIDE PERMIT NO. MVK 2017-00412

Mr. John Fleming
Division Head, Environmental Division
Arkansas Highway and Transportation Department
PO Box 2261
Little Rock, Arkansas 72203-2261
Dear Mr. Fleming:
Please refer to your recent request concerning Department of the Army permit requirements pursuant to Section 404 of the Clean Water Act. You requested authorization for the placement of dredged and fill material in waters of the United States associated with widening 2.3 miles of roadway at Benton and Bryant. The project will widen 2.3 miles of State Highway 5 and replace the bridge over Hurricane Creek. The new roadway will consist of four 11-foot-wide travel lanes, a 12 -foot-wide turn lane, 4 -foot-wide bicycle lanes and 5 -foot-wide sidewalks. The project will relocate approximately 371 linear feet of an ephemeral stream and adversely impact approximately 1.43 acres of wetlands. The new bridge will completely span Hurricane Creek and only temporary fill will be placed in the stream for construction of a work road. Approximately 16 acres of additional right-of-way will be required for the project. Three residences and one business will be relocated. There are no endangered species or cultural resources impacts. The project was approved as a Tier 3 Categorical Exclusion by the Federal Highway Administration on January 30, 2015. The project begins at Alcoa Road in Benton and ends at the junction of State Highway 183 (Reynolds Road) in Bryant, in sections 20, 21, and 29, T. 1 S., R. 14 W., Saline County, Arkansas. A vicinity map, project location maps, and stream and wetland impact sheets are enclosed.

The proposed activities are authorized by Department of the Army Nationwide Permit (NWP) No. 23 (copy enclosed), provided that the following Special Conditions and General Conditions therein are met. For your convenience, we have highlighted the General Conditions of the NWP that are the most pertinent to your project. You should become familiar with the conditions and maintain a copy of the permit at the worksite for ready reference. If changes are proposed in the design or location of the project, you should submit revised plans to this office for approval before construction of the change begins.

## Special Conditions:

1. The AHTD agrees to mitigate for the adverse impacts to 1.43 acres of wetlands with 12.9 wetland credits at their AHTD Upper Saline River Mitigation Bank.

## 2. The AHTD agrees to mitigate for the adverse impacts to $\mathbf{3 7 1}$ linear feet of stream

 with 1446.9 stream credits at their AHTD Upper Saline River Mitigation Bank.Please pay particular attention to General Condition No. 12 which stipulates that appropriate erosion and siltation controls be used during construction and all exposed soil be permanently stabilized. Erosion control measures must be implemented before, during and after construction.

Also, in order to fully comply with the conditions of the NWP, you must submit the enclosed compliance certification within 30 days of completion of the project. This is required pursuant to General Condition No. 30 of the permit.

For your information, we have enclosed a copy of the Section 401 Water Quality Certification conditions, which are conditions of your permit. If you have any questions concerning compliance with the conditions of the 401 certification, you should contact Ms. Lazendra Hairston at the Arkansas Department of Environmental Quality, Water Division, 5301 Northshore Drive, North Little Rock, Arkansas 72118, telephone (501) 682-0645.

The NWP determination will be valid until March 18, 2022. If NWP No. 23 is modified, suspended, or revoked during this period, your project may not be authorized unless you have begun or are under contract to begin the project. If work has started or the work is under contract, you would then have twelve (12) months to complete the work.

Your cooperation in the Regulatory Program is appreciated. If you have any additional questions about this permit or any of its provisions, please contact Mr. Johnny McLean at (501) 324-5295 and refer to Permit No. MVK 2017-00412, State Highway 5 widening at Benton and Bryant (AHTD Project No. 061335).

> Sincerely,


Enclosures

Copy Furnished:
Vicksburg District Regulatory, w/cy dwgs
Ms. Lazendra Hairston, Arkansas Department of Environmental Quality, w/cy dwgs Mr. Lindsey Lewis, U.S. Fish \& Wildlife Service, w/cy dwgs




## Required Wetland Mitigation Credits Worksheet

| Factor | Filled <br> Forested <br> Wetland | Cleared <br> Forested <br> Wetland | Filled <br> Scrub- <br> Shrub <br> Wetland | Cleared <br> Scrub- <br> Shrub <br> Wetland |
| :---: | :---: | :---: | :---: | :---: |
| Lost Type | $\mathbf{3}$ | $\mathbf{3}$ | $\mathbf{2}$ | $\mathbf{2}$ |
| Priority <br> Category | $\mathbf{0 . 5}$ | $\mathbf{0 . 5}$ | $\mathbf{0 . 5}$ | $\mathbf{0 . 5}$ |
| Existing <br> Condition | $\mathbf{2 . 5}$ | $\mathbf{2 . 5}$ | $\mathbf{1}$ | $\mathbf{1}$ |
| Duration | $\mathbf{2}$ | $\mathbf{2}$ | $\mathbf{2}$ | $\mathbf{2}$ |
| Dominant <br> Impact | $\mathbf{3}$ | $\mathbf{1}$ | $\mathbf{3}$ | $\mathbf{1}$ |
| Cumulative <br> Impact | $\mathbf{0 . 1}$ | $\mathbf{0 . 1}$ | $\mathbf{0 . 1}$ | $\mathbf{0 . 1}$ |
| Sum of r <br> Factors | $\mathrm{R}_{1}=11.1$ | $\mathrm{R}_{2}=9.1$ | $\mathrm{R}_{3}=8.6$ | $\mathrm{R}_{3}=6.6$ |
| Impacted Area | $\mathrm{AA}_{1}=0.4$ | $\mathrm{AA}_{2}=0.13$ | $\mathrm{AA}_{3}=0.7$ | $\mathrm{AA}_{3}=0.2$ |
| R x AA= | 4.4 | 1.2 | 6.0 | 1.3 |

TOTAL REQUIRED CREDITS $=\Sigma($ R XAA $)=12.9$

## Required Stream Mitigation Credits Worksheet

## ADVERSE IMPACT

FACTORS FOR RIVERINE SYSTEMS WORKSHEET

| Stream <br> Type <br> Impacted | Ephemeral 0.1 |  |  | $\begin{gathered} \text { Intermittent } \\ 0.4 \end{gathered}$ |  |  | Perennial-OHWM width |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | $\begin{array}{l\|} \hline<15^{\prime} \\ 0.4 \end{array}$ | $15^{\prime}-30^{\prime}$ <br> 0.6 | $>30^{\prime}$ 0.8 |
| Priority Area | Tertiary$0.1$ |  |  |  |  |  | $\begin{gathered} \text { Secondary } \\ 0.4 \end{gathered}$ |  |  | Primary$0.8$ |  |  |
| Existing Condition | Functionally Impaired$\qquad$ |  |  | Moderately Functional 0.8 |  |  | Fully Functional1.6 |  |  |
| Duration | $\begin{gathered} \text { Temporary } \\ 0.05 \\ \hline \end{gathered}$ |  |  | $\begin{gathered} \text { Recurrent } \\ 0.1 \end{gathered}$ |  |  | Permanent 0.3 |  |  |
| Activity | Clearing <br> 0.05 | Utility <br> Crossing/Bridge <br> Footing <br> 0.15 | Below <br> Grade <br> Culvert $0.3$ | Armor $0.5$ | Detention $0.75$ | Morphologic Change 1.5 | $\begin{array}{\|c} \hline \text { Impound- } \\ \text { ment } \\ \text { (dam) } \\ 2.0 \\ \hline \end{array}$ | Pipe $>100^{\prime}$ 2.2 | Fill $2.5$ |
| Cumulative Linear Impact | $<100^{\prime}$ <br> 0 | $\begin{gathered} 100^{\prime}-200^{\prime} \\ 0.05 \end{gathered}$ | $201-$ 500 0.1 | $\begin{gathered} 501- \\ 1000 \\ 0.2 \\ \hline \end{gathered}$ | 0.1 reac fact | $\begin{aligned} & >1000 \mathrm{lin} \\ & 500 \mathrm{LF} \text { of } \\ & \text { for } 5,280 \end{aligned}$ | ear feet (L mpact (exa F of impa | F) <br> ample: sc cts - 1.1 | aling |


| Factor | Dominant Impact Type 1 | Dominant Impact Type 2 | Dominant Impact Type 3 | Dominant Impact Type 4 | Dominant Impact Type 5 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Stream <br> Type <br> Impacted | Ephermeral | blank | blank | blank | blank |
| Priority Area | Tertiary | blank | blank | blank | blank |
| Existing Condition | Moderately Funct | blank | blank | blank | blank |
| Duration | Permanent | blank | blank | blank | blank |
| Activity | Fill | blank | blank | blank | blank |
| Cumulative Linear Impact | 201-500' | blank | blank | blank | blank |
| Sum of Factors | $\mathrm{M}=3.9$ | 0 | 0 | 0 | 0 |
| Linear Feet of Stream Impacted in Reach | $\mathrm{LF}=371$ |  |  |  | 0 |
| M X IF | 1,446.90 | 0 | 0 | 0 | 0 |

Total Mitigation Credits Required $=(\mathbf{M} \times \mathrm{LF})=$ $\qquad$

# ADEQ <br> $\begin{array}{llllllll}\text { A } & R & K & A & N & S & A & S\end{array}$ <br> Department of Environmental Quality 

MAR 162017

Colonel Robert G. Dixon<br>District Commander<br>U.S. Army Corps of Engineers<br>P.O. Box 867<br>Little Rock, Arkansas 72203-0867

RE: Public Notice: Re-issuance of Nationwide Permits

Dear Colonel Dixon:
The Arkansas Department of Environmental Quality (ADEQ) has completed its review of the above referenced public notice for re-issuance of the U.S. Army Corps of Engineers Nationwide Permits (NWPs) for the State of Arkansas.

ADEQ has determined that there is a reasonable assurance that the activities covered under most these NWPs will be conducted in a manner which, according to the Arkansas Pollution Control and Ecology Commission's Regulation No.2, will not physically alter a significant segment of the waterbody and will not violate the water quality criteria.

Therefore, pursuant to $\S 401(\mathrm{a})(1)$ of the Clean Water Act, the ADEQ hereby issues water quality certification for all NWPs with the exception of NWPs 14, 29, and 43, contingent upon the following conditions:

1) An individual water quality certification request must be submitted to $A D E Q$ for Activities which may impact Extraordinary Resource Waters, Ecologically Sensitive Waterbodies, and Natural Scenic Waterways and their tributaries (within 1 mile) as defined in Regulation No. 2, Water Quality Standards.
2) The applicant shall contact ADEQ to determine if a Short Term Activity Authorization (STAA) is needed when performing work in the wetted area of any waterbody. More information can be obtained by contacting the Water Division Planning Section of ADEQ at 501-682-0946.
3) The applicant shall implement all practicable best management practices (BMPs) to avoid excessive impacts of sedimentation and turbidity to the surface waters.
4) The applicant will take all reasonable measures to prevent the spillage or leakage of any chemicals, oil, grease, gasoline, diesel, or other fuels. In the unlikely event such spillage or leakage occurs, the applicant must contact ADEQ immediately.
5) The applicant shall limit construction to low flow periods as much as possible to minimize adverse effects on water quality and aquatic life.
6) If a construction site will disturb equal to or greater than one (1) acre and less than five (5) acres, the applicant shall comply with the requirements in Reg. 6.203 for Stormwater discharge associated with a small construction site, as defined in APC\&EC Regulation No. 6. If the construction site will disturb five (5) acres or more, the applicant shall comply with the terms of the Stormwater Construction General Permit Number ARR 150000 prior to the start of construction. BMPs must be implemented regardless of the size. More information can be obtained by contacting the NPDES Stormwater Section of ADEQ at (501) 682-0621.

For NWPs 14, 29, and 43, where a Pre-Construction Notification (PCN) is required, in addition to conditions 1-6 listed above, an individual water quality certification request must be submitted to ADEQ in cases and the activity occurs in:
a. Waterbodies on the most currently approved 303(d) list for turbidity/siltation, including tributaries of the listed stream (within 1 mile) and waters upstream of the listed segment (within 1 mile).
b. Waterbodies with an approved Total Maximum Daily Load (TMDL) for turbidity/siltation, including their tributaries (within 1 mile) and waters upstream of the listed segment (within 1 mile).

If you have additional questions regarding this certification, please contact Ms. Lazendra Hairston at (501) 682-0946.

Sincerely,


Caleb Osborne
Associate Director, Office of Water Quality
cc: Elaine Edwards, Chief Regulatory Division USACE Jim Ellis, Project Manager USACE
Wanda Boyd, U.S. EPA,

