

TIER 3 CATEGORICAL EXCLUSION

AHTD JOB NUMBER 100872
FAP NUMBER FSTPC-9227(55)
Hwy. 18/Main St./Highland Dr. Inters. Impvts. (Jonesboro)
Craighead County, Arkansas

Submitted Pursuant to Title 42 U.S. Code §4332(2)
By the
U.S. Department of Transportation
Federal Highway Administration
and the
Arkansas State Highway and Transportation Department

Prepared by
Fisher Arnold, Inc.
9180 Crestwyn Hills Drive
Memphis, TN 38125

April 26, 2017

4/27/2017

Date of Approval



Randal Looney
Environmental Specialist
Federal Highway Administration

The Arkansas State Highway and Transportation Department (AHTD) Environmental Division has reviewed the referenced project and determined that the project falls within the definition of a 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 the proposed improvements at the Highway 18/Main St./Highland Dr. intersection is to improve capacity, improve the current level of service, and to accommodate future traffic growth. The Highway 18 corridor in Jonesboro, Arkansas is a heavily traveled primary roadway within the City (Figure 1). Adjoining land uses along Highway 18 include a variety of commercial, industrial, and residential developments. The Highway 18/Main St./Highland Dr. intersection currently operates at a Level of Service “E” with an average overall intersection delay of 67 seconds. The proposed improvements will result in an overall intersection Level of Service “C” with an average overall intersection delay of 31 seconds.

Existing Highway 18 south of the intersection consists of five lanes (two southbound, one northbound left turn, one northbound, and one northbound right turn). The proposed improvement for Highway 18 south of the intersection is to widen the roadway to the east side to allow for six 11-foot wide travel lanes (two southbound, one northbound left turn, two northbound, and one northbound right turn), with curb and gutter, and a new 6-foot wide sidewalk (east side only). Some additional widening will be required to properly align the northbound through lanes on the north and south sides of the intersection.

Existing Main Street north of the intersection consists of five lanes (two southbound, one southbound left turn, one northbound, and a dedicated northbound lane for the Highway 18 westbound to Main St. northbound free flow lane movement). Proposed improvements will include modification of the free flow movement from westbound Highway 18 into a deflected westbound right turn controlled by a signal. Additionally, the existing roadway will be restriped to allow for six 11-foot wide travel lanes (two southbound, two southbound left turn, and two northbound). The typical cross sections are enclosed (Figures 3-6).

Approximately 0.056 acre of permanent right of way will be required for the project, along with approximately 0.067 acre of temporary construction easements.

TRAFFIC DATA FOR HIGHWAY 18 AND HIGHLAND DRIVE

ROADWAY	YEAR	ADT	PERCENT TRUCKS	DESIGN SPEED
Main Street (North of Intersection)	Existing	20,000	1	35 mph
	2036 Build	27,400	2	35 mph
Southwest Drive (South of Intersection)	Existing	20,000	1	35 mph
	2036 Build	27,400	2	35 mph
East Highland Drive (East of Intersection)	Existing	2,900	1	35 mph
	2036 Build	3,980	2	35 mph
West Highland Drive (West of Intersection)	Existing	22,000	1	35 mph
	2036 Build	30,140	2	35 mph

There are no relocations, wetlands, environmental justice issues, prime farmland, floodplains or endangered species associated with this project. No impacts to cultural resources are anticipated; concurrence from the State Historic Preservation Officer is provided in Appendix A.. Field inspections found no evidence of existing underground storage tanks or hazardous waste deposits. A Section 404 permit will not be required. All agency correspondence is provided in Appendix A.

No noise impacts are anticipated as a result of this project. Screening level noise analysis findings are provided in Appendix B.

The AHTD Environmental Assessments Form is enclosed (Appendix C). A Public Involvement Meeting will not be offered for this project.



Figure 3 – Typical Cross Sections

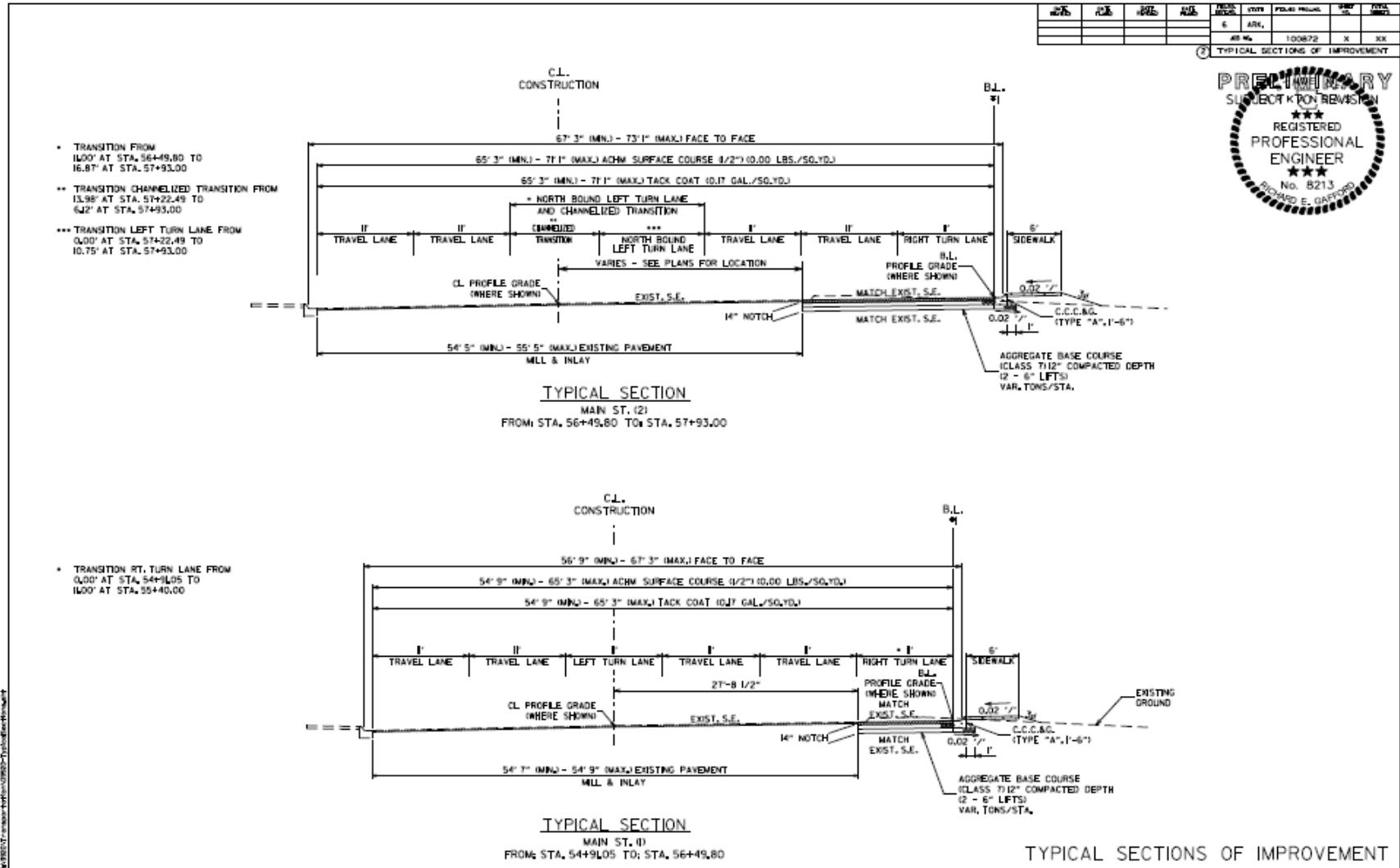


Figure 4 – Typical Cross Sections

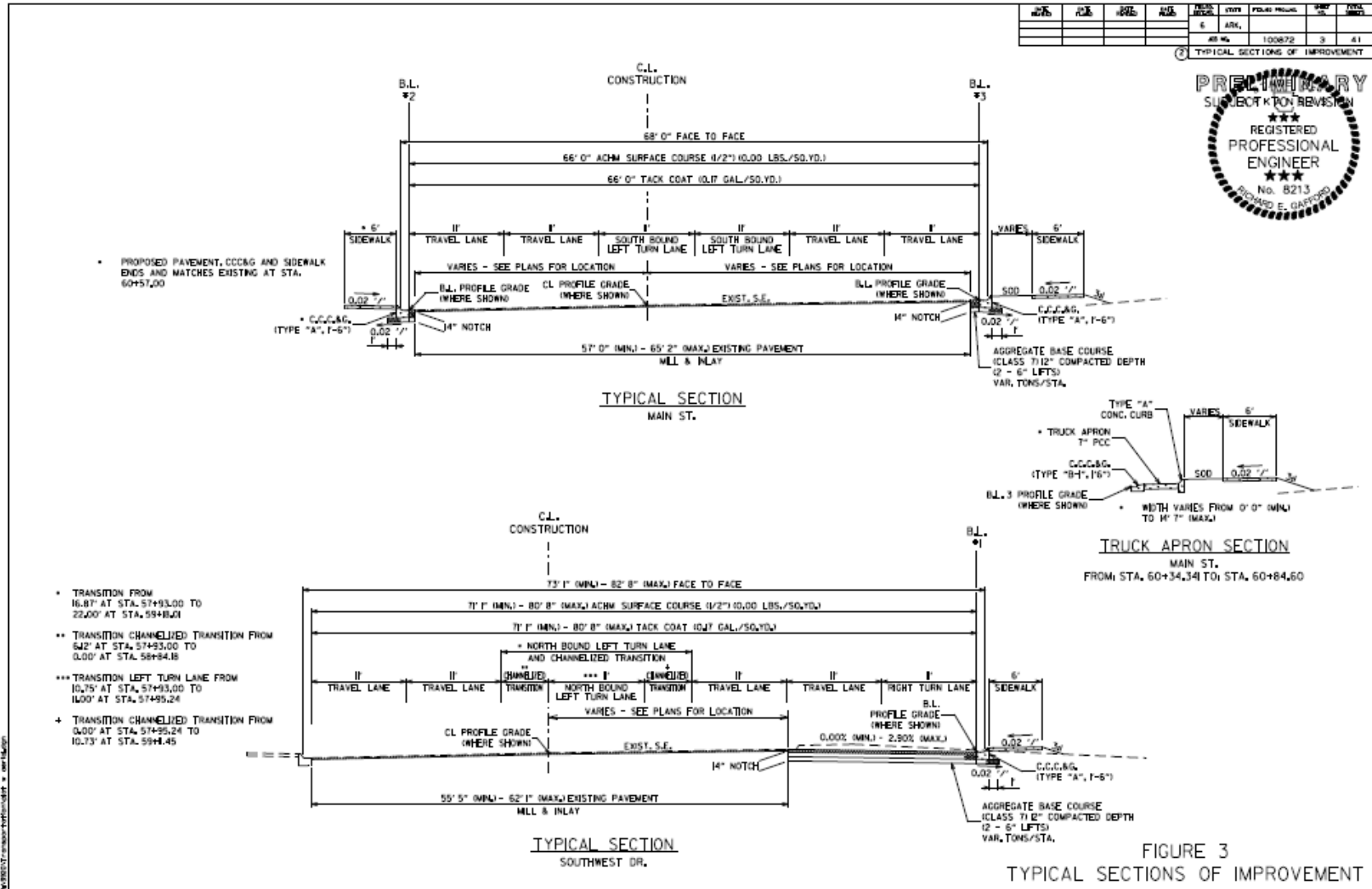


Figure 5 – Typical Cross Sections

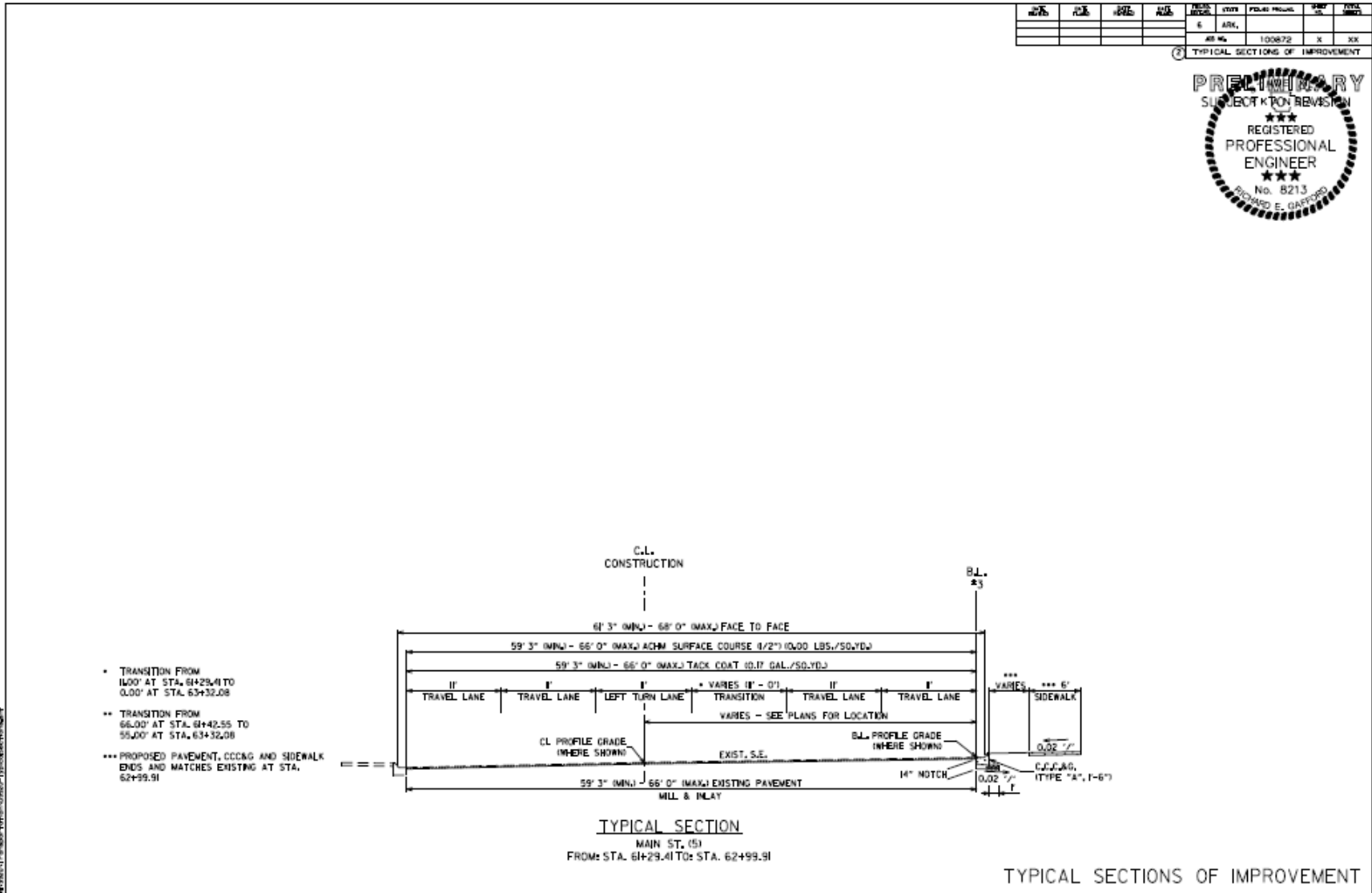
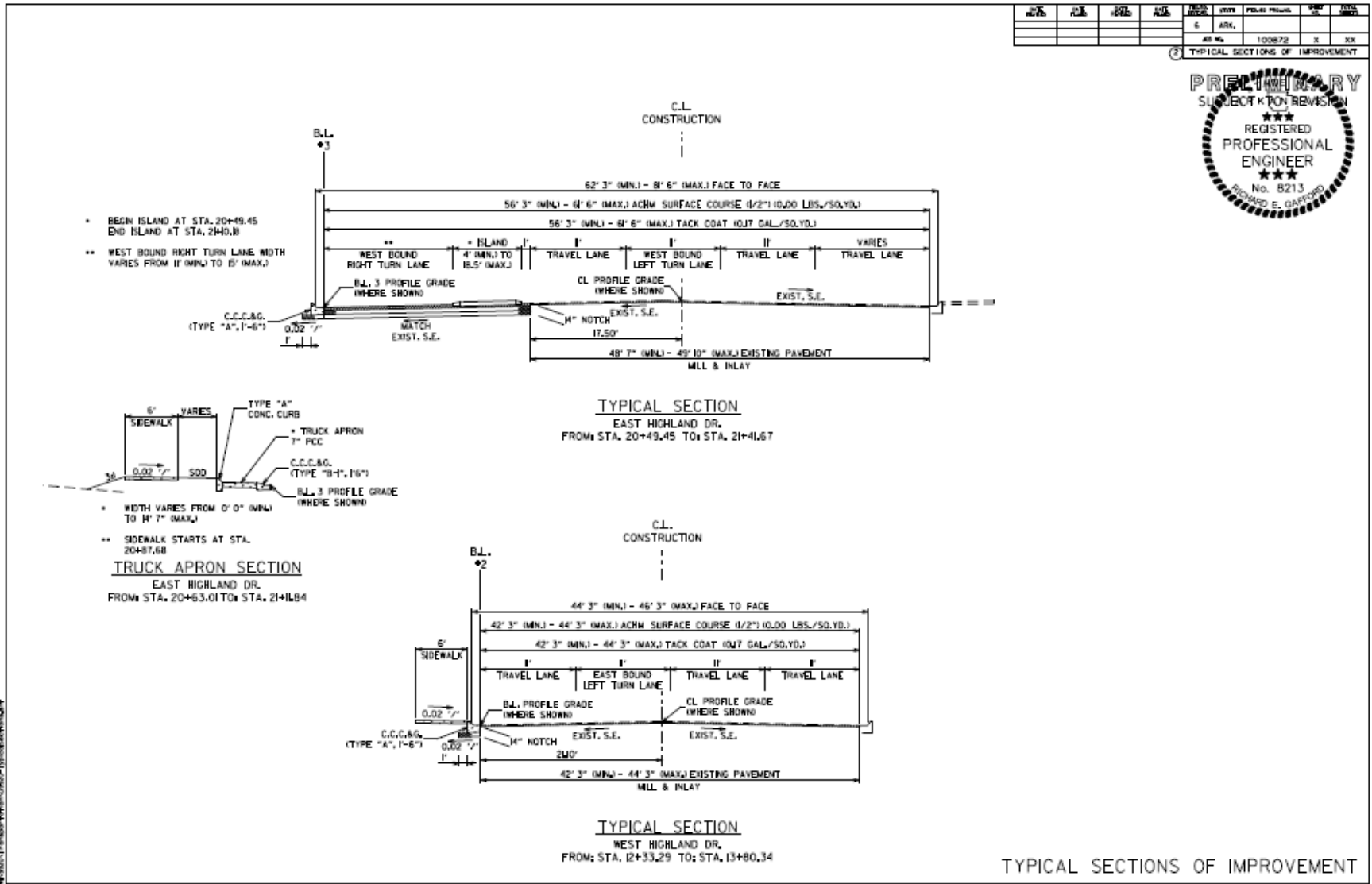


Figure 6 – Typical Cross Sections



APPENDIX A

Agency Correspondence



FISHER ARNOLD
ENGINEERING CONSULTANTS

96248
FHWA

July 18, 2016

Robert Scoggin
Arkansas Historic Preservation Program
1500 Tower Building
323 Center Street
Little Rock, AR 72201

RE: Information on Historic Properties

AHPP

Dear Mr. Scoggin,

JUL 22 2016

A roadway improvement project has been proposed for Highway 18 (also called Southwest Drive and Main Street) in Jonesboro, Arkansas. The improvements primarily consist of widening the roadway for approximately 500 feet north and 500 feet south along Highway 18 at Highland Drive. Because the proposed project will be partially funded by Federal funds, the requirements of NEPA must be addressed.

The project occurs within a developed commercial area and is not expected to result in significant environmental impacts. In addition, this project falls within the definition of a Tier 3 Categorical Exclusion as defined by Title 40 Code of Federal Regulations (CFR) Part 771, §117. The attached aerial photograph shows the project site and the planned improvements (highlighted in yellow) to Highway 18 at Highland Drive.

Please review the project site and provide information regarding potential impacts to any historical properties in the area, if applicable. If you have questions or need additional information, please contact me at your earliest convenience.

Regards,

Tim Alexander
Project Manager
tal Alexander@fisherarnold.com
901-359-7818

Date AUG 08 2016

No known historic properties will be affected by this undertaking. This affect determination could change should new information come to light

Francis M. Swain
Historic Preservation Officer

9180 Crislowyn Hills Drive
Memphis, TN 38125
901.748.1811
Fax: 901.748.3115
Toll Free: 1.888.593.9724
www.fisherarnold.com

July 18, 2016

RECEIVED JUL 26 2016



FISHER ARNOLD
ENGINEERS ARCHITECTS

Chris Davidson
US Department of the Interior
Fish and Wildlife Service
110 South Amity, Suite 300
Conway, AR 72032

RE: Request for Information Regarding Endangered Species

Dear Mr. Davidson,

A roadway improvement project has been proposed for Highway 18 (also called Southwest Drive and Main Street) in Jonesboro, Arkansas. The improvements primarily consist of widening the roadway for approximately 500 feet north and 500 feet south along Highway 18 at Highland Drive. Because the proposed project will be partially funded by Federal funds, the requirements of NEPA must be addressed.

The project occurs within a developed commercial area and is not expected to result in significant environmental impacts. In addition, this project falls within the definition of a Tier 3 Categorical Exclusion as defined by Title 40 Code of Federal Regulations (CFR) Part 771, §117. The attached aerial photograph shows the project site and the planned improvements (highlighted in yellow) to Highway 18 at Highland Drive.

Please provide information regarding potential impacts to endangered species within the project area, if applicable. If you have questions or need additional information, please contact me at your earliest convenience.

Regards,

Tim Alexander
Project Manager
Fisher Arnold, Inc.
901-359-7818 (mobile)

This project has been reviewed for effects to Federal trust resources currently protected by the Endangered Species Act of 1973 (16 U.S.C. 1531 et seq.; Act) and under our jurisdiction. The project as proposed:
 Will have no effect on those trust resources; or
 There are no trust resources protected by the Act present. This finding fulfills the requirements under section 7(a)(2) of the Act

Arming Field Supervisor Date 8-17-16
Arkansas Ecological Services Field Office
U.S. Fish and Wildlife Service

5100 Crawley Hills Drive
Memphis, TN 38120
901.748.1811
Fax: 901.748.3115
Toll Free: 1.855.585.5724
www.fisherarnold.com

04ER100-2016-TA-0794



DEPARTMENT OF THE ARMY
MEMPHIS DISTRICT CORPS OF ENGINEERS
167 NORTH MAIN STREET B-202
MEMPHIS, TENNESSEE 38103-1894

August 22, 2016

Mr. Tim Alexander
Fisher Arnold
9180 Crestwyn Hills Drive
Memphis, Tennessee 38125

Dear Mr. Alexander:

This is in reference to your request for an improvement project for Highway 18 in Jonesboro, Arkansas. The improvements primarily consist of widening the roadway for approximately 500 feet north and south along Highway 18 at Highland Drive as shown on the attached maps. Based on the information you provided, a site visit and other information available to us, it is our approved jurisdictional determination (AJD) that the area does not contain any wetlands or other waters of the United States. Therefore, permit authorization from the Corps of Engineers is not required under Section 404 of the Clean Water Act.

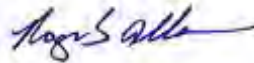
The basis for our AJD is available on our website at the following address: <http://www.mvm.usace.army.mil/About/Offices/Regulatory/JurisdictionalDeterminations.aspx>. This AJD is valid for five years from the date of this letter, unless new information warrants a revision of the determination before the expiration date or the District Engineer has identified, after public notice and comment, that specific geographic areas with rapidly changing environmental conditions merit re-verification on a more frequent basis.

If you object to this AJD, you may request an administrative appeal under Corps of Engineers regulations at 33 CFR Part 331 as described in Section D of the attached request for appeal (RFA) form. The completed RFA form must be submitted to the Mississippi Valley Division, Administrative Appeals Review Officer, P.O. Box 80, Vicksburg, Mississippi 39181-0080 within 60 days from the date of this letter. In order for an RFA to be accepted by the Corps of Engineers, the Corps of Engineers must determine that it is complete, that it meets the criteria for appeal under 33 CFR Part 331.5 and that it has been received by the division office at the above address by October 21, 2016. Please review and carefully consider this information. It is not necessary to submit an RFA form to the division office if you do not object to the decision in this letter.

The Memphis District, Regulatory Branch is committed to providing quality and timely service to our customers. In an effort to improve customer service, we invite you to complete a Customer Service Survey found at http://corpsmapu.usace.army.mil/cm_apex/f?p=regulatory_survey. Your comments, positive or negative, will not affect any current or future dealings with the Corps of Engineers.

If you have questions, please contact Josh Bright at (901) 544-0926 and refer to File No. MVM-2016-275.

Sincerely,

A handwritten signature in blue ink, appearing to read "Roger S. Allan".

Roger S. Allan
Chief, Western Section
Regulatory Branch

Enclosures

Tim Alexander

From: Hairston, Lazendra <HAIRSTONL@adeq.state.ar.us>
Sent: Tuesday, August 30, 2016 3:14 PM
To: Tim Alexander
Subject: RE: 401 Permit City of Jonesboro Highway 18 and Highland Drive Expansion Project

Mr. Alexander:

The Water Division has completed its review the City of Jonesboro Highway 18 and Highland Drive Expansion Project and has the following comments:

Based on the maps that were provided, it appears that no Water of the State will be impacted during the course of this project. If the final plans are changed and later incorporate possible impacts to Waters of the State, your office should contact ADEQ for information regarding how to apply for a Short Term Activity Authorization (STAA) from the Office of Water Quality. The STAA allows a one-time exceedance of the water quality standards for activity that is "essential to the protection or promotion of the public interest and where no permanent or long-term impairment of beneficial uses is likely to result (Reg. 2.305, Regulation No. 2, ADEQ)."

In addition, you must also apply for and comply with all provisions of the NPDES General Stormwater Construction Permit and submit a Pollution Prevention Plan to the Office of Water Quality of ADEQ. This information can be obtained by contacting ADEQ at 501 682-0621.

Sincerely,

Lazendra Hairston
Ecologist
Office of Water Quality
501-682-0946

From: Tim Alexander [mailto:talexander@fisheramold.com]
Sent: Tuesday, August 30, 2016 12:19 PM
To: Hairston, Lazendra
Subject: 401 Permit

Lazendra,

Thank you for your direction regarding the Section 401 permit. As I mentioned in our conversation, we are addressing NEPA requirements for a roadway widening project in Jonesboro, AR. To accommodate increased traffic at the intersection of Highway 18 and Highland Drive in Jonesboro, improvements to this intersection have been proposed, which primarily consist of widening the roadway 500 feet north and 500 feet south along Highway 18 at Highland Drive. This project occurs within a developed commercial area and is not expected to result in significant environmental

impacts. There are no identified water bodies or wetlands within the project area. The attached aerial photo shows the proposed roadway improvements (highlighted in yellow).

As we discussed, assuming that your review does not result in environmental concerns, you would provide a response letter, which confirms that no Section 401 permit or short-term activity authorization is required. Also, please provide the reference you mentioned that addresses the SWPPP and General Stormwater Permit guidance needed for this project.

Please feel free to contact me, if you have additional questions. Thank you for your assistance in this matter.

Regards,

Tim Alexander
Project Manager
Fisher Arnold, Inc.
9180 Crestwyn Hills Drive
Memphis, TN 38125
901-748-1811

APPENDIX B

Screening Level Noise Analysis

Bowlby & Associates, Inc.

504 Autumn Springs Court, #11
Franklin, Tennessee 37067-8278
(615) 771-3006, Fax (615) 771-3406
cpatton@bowlbyassociates.com

August 9, 2016

Mr. Tim Alexander, Project Manger
Fisher Arnold
9180 Crestwyn Hills Drive
Memphis, TN 38125

Dear Mr. Alexander:

**Subject: Screening Level Noise Analysis
Highway 18 and Highland Avenue Intersection Improvement
Jonesboro Arkansas
AHTD Job # 100872**

As directed by Arkansas Highway and Transportation Department Environmental Division staff we have conducted a screening level noise analysis on the Highway 18 and Highland Avenue Intersection Improvement project. This letter serves as our reporting on that analysis.

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 dB(A). Because the dB(A) is based on a logarithmic scale, a 10 dB(A) increase in sound level is generally perceived as twice as loud while a 3 dB(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 dB(A) (decibels on the A-scale). The noise abatement standard of 67 dB(A) is used for sensitive noise receptors such as residences, and exterior frequent human use areas near schools, churches, and parks. The noise abatement standard of 72 dB(A) is used for sensitive commercial noise receptors, such as outdoor seating areas of restaurants or office buildings. The term "approach" is considered to be one dB(A) less than the noise abatement standard.

This project involves improvements at the intersection of Highway 18 (also called Southwest Drive and Main Street) and Highland Drive. This Type I project primarily involves the widening of Highway 18 approximately 500 feet north and 500 feet south of Highland Drive. There are no noise-sensitive receptors within the project limits. This report contains a "Screening Level" traffic noise analysis utilizing the Federal Highway Administration's Traffic Noise Model 2.5 (TNM), 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 TNM with latest guidance for modelling signalized intersections from National Cooperative Highway Research Program (NCHRP) Report 791, "Supplemental Guidance on the Application of FHWA's Traffic Noise Model (TNM)." The approaching legs of each roadway were modeled at a constant-speed of 35mph, and the departing legs were modelled using a flow-controlled acceleration roadway. An array of receivers were placed north of Highland Avenue – and on each side of Highway 18 - to determine the approximate distance from the proposed edge of roadway pavement (EOP) to the 66 dB(A) traffic noise level. The model assumed an at-grade condition, no intervening buildings, and a "pavement" default ground type.

Effects of Project

The traffic noise estimates for the project resulted in levels below 71 dB(A). There exists the potential for traffic noise levels to exceed the 66dB(A) Category B Noise Abatement Criterion within 75 to 125 feet from the EOP of Highway 18 or Highland Drive. However, there are no noise-sensitive receptors within the project limits, so no impacts are predicted to occur.

Mr. Tim Alexander
August 9, 2016
Page 3

Traffic Noise Abatement

Since noise impacts are not predicted, noise abatement was not 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.

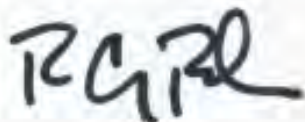
To avoid noise levels in excess of design levels, any future receptors should be located a minimum of 10 feet beyond the distance that the noise abatement standard is projected to occur. This distance should be used as a general guide and not a specific rule since the noise will vary depending upon the 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 East Arkansas Planning and Development District for possible use in present and future land use planning.

If you have any questions or need further information, please give me a call.

Sincerely yours,

A handwritten signature in black ink, appearing to read "CPATTON". The signature is stylized and cursive.

Clay Patton
Senior Project Manager

APPENDIX C

AHTD Environmental Impacts Assessment Form

AHTD ENVIRONMENTAL IMPACTS ASSESSMENT FORM

AHTD Job Number 100872 FAP Number FSTPC-9227(55)
 Job Title Hwy 18 at Highland Drive Intersection Improvements, Jonesboro, AR

Environmental Impacts	None	Minor	Significant	Comments
Air Quality	X			
Construction Impacts		X		
Cultural Resources	X			SHPO Clearance 08/08/2016
Economic	X			
Endangered Species	X			USFWS Clearance 08/17/2016
Energy Resources	X			
Environmental Justice/Title VI	X			
Fish and Wildlife	X			USFWS Clearance 08/17/2016
Floodplains	X			
Forest Service Property	X			
Hazardous Materials/Landfills	X			
Land Use Impacts	X			
Migratory Birds	X			
Navigation/Coast Guard	X			
Noise Levels	X			
Prime Farmland	X			
Protected Waters	X			
Public Recreation Lands	X			
Public Water Supply/WHPA	X			
Relocatees	X			
Section 4(f)/6(f)	X			
Social	X			
Underground Storage Tanks	X			
Visual Impacts	X			
Stream Impacts	X			
Water Quality	X			ADEQ Clearance 08/30/2016
Wetlands	X			COE Clearance 08/22/2016
Wildlife Refuges	X			

Section 401 Water Quality Certification Required? NO
 Short-term Activity Authorization Required? NO
 Section 404 Permit Required? NO Type _____

Remarks: _____

Signature of Evaluator Jim Alexander Date 3/10/17