

ARKANSAS DEPARTMENT OF TRANSPORTATION



**SUBSURFACE INVESTIGATION**

STATE JOB NO. 061506

FEDERAL AID PROJECT NO. NHPP-9315(50)

SHILCOTTS BAYOU STR. & APPRS. (NORTH LITTLE ROCK) (S)

STATE HIGHWAY 176 SECTION 1

IN PULASKI COUNTY

The information contained herein was obtained by the Department for design and estimating purposes only. It is being furnished with the express understanding that said information does not constitute a part of the Proposal or Contract and represents only the best knowledge of the Department as to the location, character and depth of the materials encountered. The information is only included and made available so that bidders may have access to subsurface information obtained by the Department and is not intended to be a substitute for personal investigation, interpretation and judgment of the bidder. The bidder should be cognizant of the possibility that conditions affecting the cost and/or quantities of work to be performed may differ from those indicated herein.



ARKANSAS DEPARTMENT OF TRANSPORTATION

ARDOT.gov | IDriveArkansas.com | Scott E. Bennett, P.E., Director

MATERIALS DIVISION

11301 West Baseline Road | P.O. Box 2261 | Little Rock, AR 72203-2261 | Phone: 501.569.2185 | Fax: 501.569.2368

April 9, 2018

**TO:** Mr. Trinity Smith, Engineer of Roadway Design

**SUBJECT:** Job No. 061506  
Shilcotts Bayou Str. & Apprs. (S)  
Route 176 Section 1  
Pulaski County

Transmitted herewith is the requested Soil Survey test results for the above referenced job. The project consists of replacing the existing structure at Shilcotts Bayou on Highway 176 with a box culvert. Samples were taken in the existing travel lanes. Due to utility conflicts samples were not obtained in the ditch line. An estimated R-Value of 6 should be sufficient for the subgrade soils.

Based on laboratory results of samples obtained, the subgrade soils consist primarily of low plasticity clayey sands with varying amounts of sandstone fragments. Cross-sections are not currently available, but it is assumed the construction grade line will closely match that of the existing roadway. The subgrade soils are expected to provide a stable working platform with conventional processing if the weather is favorable during construction. Rock was encountered at station 107+00 at 6 feet right of centerline at a depth of 1.3 feet.

Earthwork recommendations will be made upon request when plans are further developed and cross-sections are available.

Listed below is the additional information requested for use in developing the plans:

1. The Qualified Products List (QPL) indicates that Aggregate Base Course (Class CL-7) is available from commercial producers located in the vicinity of Maumelle.

2. Asphalt Concrete Hot Mix

<u>Type</u>	<u>Asphalt Cement %</u>	<u>Mineral Aggregate %</u>
Surface Course	4.9	95.1
Binder Course	4.0	96.0
Base Course	3.6	96.4



Michael C. Benson  
Materials Engineer

MCB:pt:bjj  
Attachment

cc: State Constr. Eng. – Master File Copy  
District 6 Engineer  
System Information and Research Div.  
G. C. File

**JOB: 061506**

**Arkansas State Highway Transportation Department**

**JOB NAME: SHILCOTTS BAYOU STR. & APPRS. (S)**

**Materials Division**

**COUNTY NO. 60 DATE TESTED 2/20/2018**

**Michael Benson, Materials Engineer**

STA.#	LOC.	DEPTH	COLOR						L.L.	P.I.	SOIL CLASS	LAB #:	%MOISTURE
				#4	#10	#40	#80	#200					
				S	I	E	V	E	S				
107+00	06 RT	0-1.3Z	BROWN	83	70	57	52	46	29	14	A-6(3)	S54	10.2
110+00	06 LT	0-5	BROWN	88	85	79	72	57	ND	NP	A-4(0)	S55	11.2

**comments:** W=MULTIPLE LAYERS, Z=AUGER REFUSAL

**Monday, April 02, 2018**

**JOB:** 061506 **DATE TESTED** 2/20/2018  
**JOB NAME:** SHILCOTTS BAYOU STR. & APPRS. (S)

**COUNTY NO.** 60 **Arkansas State Highway Transportation Department**  
**Materials Division**  
**Michael Benson, Materials Engineer**

**STA.# LOC.** **PAVEMENT SOUNDINGS**

107+00	06 RT	ACHMSC 9.0W	ACHMBC ---	AGG.BASE CRS CL-7 2.0
110+00	06 LT	ACHMSC 6.5W	ACHMBC 1.0	AGG.BASE CRS CL-7 5.0

**comments:** W=MULTIPLE LAYERS, Z=AUGER REFUSAL

