ARKANSAS DEPARTMENT OF TRANSPORTATION



SUBSURFACE INVESTIGATION

STATE JOB NO.		061506						
FEDERAL AID PROJ		NHPP-9315(50)						
SHILCOTTS BAYOU STR. & APPRS. (NORTH LITTLE ROCK) (S)								
STATE HIGHWAY	176	SECTION	1					
IN		PULASKI						

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 Shilcots 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

Туре	Asphalt Cement %	Mineral Aggregate %			
Surface Course	4.9	95.1			
Binder Course	4.0	96.0			
Base Course	3.6	96.4			

Aichael 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

<i>JOB:</i> 061506	Arkansas Sta	te Highway	Transporati	on Depa	rtment			
JOB NAME: SHILCOTTS BAYOU STR. & AP	PRS. (S)							
COUNTY NO. 60 DATE TESTED 2/2	20/2018	Michael Benson, Materials Engineer						
STA.# LOC. DEPTH COLOR #4 #	10 #40 #80 #200	L.L. P.I.	SOIL CLASS	LAB #: %	MOISTURE			
107+00 06 RT 0-1.3Z BROWN 83 7	70 57 52 46	29 14	A-6(3)	S54	10.2			
110+00 06 LT 0-5 BROWN 88 8	85 79 72 57	ND NP	A-4(0)	S55	11.2			

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DATE TESTED 2/20/2018											
Arkansas State Highway Transporation Department Materials Division	Michael Benson, Materials Engineer	PAVEMENT SOUNDINGS									
Arkansa			AGG.BASE CRS CL-7 2.0	AGG.BASE CRS CL-7 5.0							
JOB: 061506 JOB NAME: SHILCOTTS BAYOU STR. & APPRS. (S)			ACHMBC -	ACHMBC 1.0							
061506 SHILCOTTS BAYC	80		ACHMSC 9.0W	ACHMSC 6.5W							
06 1 <i>ME</i> : SH	COUNTY NO. 60	LOC.	06 RT	06 LT							
JOB: JOB NA	COUNT	STA.# LOC.	107+00	110+00							

Monday, April 02, 2018

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comments: W=MULTIPLE LAYERS, Z=AUGER REFUSAL

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ARKANSAS STATE H		MATE	RIALS D	IVI	ISION		, ARKANSAS
* * *		IAEL BENSON, SURVEY / PAV					
DATE - 04/02 JOB NUMBER - 0615 FEDERAL AID NO TO B PURPOSE - SOIL SPEC. REMARKS - NO S SUPPLIER NAME - STAT NAME OF PROJECT - SH PROJECT ENGINEER - NO PIT/QUARRY - ARKANS	06 E ASSI SURVE PECIFI E ILCOTT T APPL AS	Y SAMPLE CATION CHEC S BAYOU STR ICABLE	K			SEQUENCE NO. MATERIAL CODE SPEC. YEAR SUPPLIER ID. COUNTY/STATE DISTRICT NO.	E - SSPS - 2014 - 1 - 60
LOCATION - PULASK SAMPLED BY - THORNTO						DATE SAMPLED DATE RECEIVE	
SAMPLE FROM - TEST H MATERIAL DESC SOIL		Y PAVEMENT	SOUNDIN	GS		DATE TESTED	
LAB NUMBER SAMPLE ID TEST STATUS STATION LOCATION DEPTH IN FEET MAT'L COLOR MAT'L TYPE LATITUDE DEG-MIN-SI LONGITUDE DEG-MIN-SI % PASSING 2 1 1/2 3 3/4 1	- - - - - - - - - - - - - - - - - - -	20180249 S54 INFORMATION 107+00 06 RT 0-1.3Z BROWN 34 48 1 92 15 5 100 94 83 70 57	N ONLY 6.20 7.10		20180250 S55 INFORMATIC 110+00 06 LT 0-5 BROWN 34 48 92 15 100 99 88 85 79	- - - 18.90 -	
LIQUID LIMIT PLASTICITY INDEX AASHTO SOIL UNIFIED SOIL % MOISTURE CONTENT	- - -	29 14 A-6(3) 10.2			ND NP A-4(0) 11.2		
ACHMSC (IN) -	9.OW		-	6.5W	-	
	IN) - IN) -	2.0		2	1.0 5.0		
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	-					-	
	-					1996 1997	

REMARKS - W=MULTIPLE LAYERS, Z=AUGER REFUSAL