ARKANSAS DEPARTMENT OF TRANSPORTATION



SUBSURFACE INVESTIGATION

STATE JOB NO.									
FEDERAL AID PROJECT NO.	NHPP-0040(33)								
CANAL AT L.M. 20.98 STR. & APPRS. (S)									
STATE HIGHWAY	11	SECTION	3						
IN		LINCOLN		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 STATE HIGHWAY AND TRANSPORTATION DEPARTMENT

June 22, 2017

TO:

Mr. Trinity Smith, Engineer of Roadway Design

SUBJECT:

Job No. 020581

Canal at L.M. 20.98 Str. & Apprs. (S)

Route 11 Section 3 Lincoln County

Transmitted herewith is the requested Soil Survey, strength data and Resilient Modulus test results for the above referenced job. The project consists of replacing the bridge crossing a canal at log mile 20.98 on Highway 11. Samples were obtained in the existing travel lanes, and ditch line. There were no paved shoulders within the project limits.

Based on laboratory results of samples obtained, the subgrade soils consist primarily of highly plastic clay. 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. If soil remediation is needed to allow construction to proceed during adverse weather conditions or if a stable working platform cannot be obtained with normal drying and compactive effort, stabilization with lime is the most appropriate remediation technique. It is recommended that the addition of 4% lime (by dry weight) mixed to a depth of 16 inches be used for soil stabilization quantity estimation purposes; however, if the Engineer determines that stabilization is necessary, field trials or local experience may dictate that a stable working platform can be achieved at a lower lime content.

Additional 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 Avoca.

2. Asphalt Concrete Hot Mix

TypeAsphalt Cement %Mineral Aggregate %Surface Course5.294.8Binder Course4.295.8Base Course3.596.5

Michael C. Benson Materials Engineer

MCB:pt:bjj Attachment

cc: St

State Constr. Eng. – Master File Copy

District 2 Engineer

System Information and Research Div.

G. C. File

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT - LITTLE ROCK, ARKANSAS MATERIALS DIVISION

MICHAEL BENSON, MATERIALS ENGINEER *** SOIL SURVEY STRENGTH TEST REPORT ***

DATE - 06/16/2017

SEQUENCE NO. = 1

JOB NUMBER - 020581

MATERIAL CODE - SSRV

SPEC. YEAR - 2014

SUPPLIER ID. - 1

COUNTY/STATE = 40

DISTRICT NO. - 02

JOB NAME - CANAL @ L.M. 20.98 STR. & APPRS.(S)

STATION LIMITS R-VALUE AT 240 psi *****************

BEGIN JOB - END JOB LESS THAN 5

RESILIENT MODULUS

STA. 117+90 6515

REMARKS -

AASHTO TESTS : T190

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT MATERIALS DIVISION

AASHTO T 307-99 - RESILIENT MODULUS OF SUBGRADE SOILS RECOMPACTED SAMPLES

Date Project Sume 15, 2017 Coation: 18*L" Name of Project CANAL AT L.M. 20.98 STR. & APPRS. (S) County: Code: 40 Name: LINCOLN Sampled By: THORNTONTAYLOR Depth: 0.5 AASHTO Class: A-6(13) Sample ID: RV406 Material Type (1 or 2): 2 LONGITUDE: CONGITUDE: CONGITUDE: CONGITUDE: CONGITUDE: CONGITUDE: CONGITUDE	Job No.	020581 5/30/17	Material Code Station No.:	SSRVPS	
Name of Project: CANAL AT L.M. 20.98 STR. & APPRS. (S) County: Code: 40 Name: LINCOLN Sampled By: THORNTON/TAYLOR AASHTO Class: A-6(13) AASHTO Class: A	Date Sampled:			117+90 187 T	
County: Code: 40 Name: LINCOLN Sampled By: THORNTON/TAYLOR AASHTO Class: A-6(13)			Location.	1011	
Sampled By:	•				
Lab No.: 20171801 AASHTO Class: Material Type (I or 2): LONGITUDE: A-6(13) LATTTUDD: RV406 Material Type (I or 2): LONGITUDE: 2 1. Testing Information: Preconditioning - Permanent Strain > 5% (Y=Yes or N=No) N Testing - Permanent Strain > 5% (Y=Yes or N=No) N Number of Load Sequences Completed (0-15) 15 2. Specimen Information: Top Middle 3.93 Average 3.93 Membrane Thickness (in): 0.0 Height of Specimen, Cap and Base (in): 0.0 Height of Specimen, Cap and Base (in): 0.0 Height of Cap and Base (in): 0.0 Initial Length, Lo (in): 8.0 Initial Volume, AoLo (cu. in): 96.6 3. Soil Specimen Weight: 2961.90 4. Soil Properties: Optimum Moisture Content (%): 18.6 Maximum Dry Density (pcf): 97. In-Situ Moisture Content (%): 18.7 Moisture Content (%):	•		Denth:		0-5
Sample ID: RV406					
1. Testing Information: Preconditioning - Permanent Strain > 5% (Y=Yes or N= No)					
Preconditioning - Permanent Strain > 5% (Y=Yes or N=No)	-			,	
Testing - Permanent Strain > 5% (Y=Yes or N=No) Number of Load Sequences Completed (0-15) 15 15 15 15 15 15 15 15 15 15 15 15 15	1. Testing Inform				
Number of Load Sequences Completed (0-15) 15			•		N
2. Specimen Information: Specimen Diameter (in): Top		Testing - Permanent Strain > 5% (Y=Yes or	N=No)		N
Specimen Diameter (in):		Number of Load Sequences Completed (0-1	5)		15
Top 3.95 Middle 3.95 Bottom 3.95 Average 3.95 Membrane Thickness (in):	2. Specimen Info	rmation:			
Middle 3.93 Bottom 3.95 Average 3.95 Membrane Thickness (in): 0.00 Height of Specimen, Cap and Base (in): 8.00 Height of Cap and Base (in): 0.00 Initial Length, Lo (in): 8.00 Initial Area, Ao (sq. in): 12.00 Initial Volume, AoLo (cu. in): 96.66 3. Soil Specimen Weight: 2961.90 4. Soil Properties: 18.00 Maximum Dry Density (pcf): 102-2-95% of MDD (pcf): 97.3 In-Situ Moisture Content (%): 97.3 In-Situ Moisture Content (%): 18.00 Compaction Moisture content (%): 18.00 Compaction Moisture content (%): 18.00 Compaction Wet Density (pcf): 10.70 Compaction Dry Density (pcf): 116.70 Compaction Dry Density (pcf): 98.55 Moisture Content After Mr Test (%): 18.10 6. Quick Shear Test (Y=Yes, N=No, N/A=Not Applicable): #VALUE		Specimen Diameter (in):			
Bottom 3.99		Тор			3.93
Average Membrane Thickness (in): Height of Specimen, Cap and Base (in): Height of Cap and Base (in): Height of Cap and Base (in): Initial Length, Lo (in): Initial Area, Ao (sq. in): Initial Volume, AoLo (cu. in): 3. Soil Specimen Weight: Weight of Wet Soil Used (g): 4. Soil Properties: Optimum Moisture Content (%): Maximum Dry Density (pcf): In-Situ Moisture Content (%): In-Situ Moisture Content (%): Wet Weight (g): Compaction Moisture content (%): Compaction Wet Density (pcf): Compaction Wet Density (pcf): Moisture Content (%): 18. Compaction Wet Density (pcf): Compaction Wet Density (pcf): Moisture Content After Mr Test (%): 4. Soil Properties: Wet Weight (g): Compaction Try Density (pcf): Moisture Content (%): 18. Specimen Properties: Wet Weight (g): Specimen Properties: Wet Weight (g): Compaction Moisture Content (%): Moisture Content After Mr Test (%): 18. Specimen Properties: Wet Weight (pcf): Moisture Content After Mr Test (%): 18. Specimen Properties: #VALUE		Middle			3.93
Membrane Thickness (in): 0.0 Height of Specimen, Cap and Base (in): 8.0 Height of Cap and Base (in): 0.0 Initial Length, Lo (in): 8.0 Initial Area, Ao (sq. in): 12.0 Initial Volume, AoLo (cu. in): 96.6 3. Soil Specimen Weight: Weight of Wet Soil Used (g): 2961.9 4. Soil Properties: Optimum Moisture Content (%): 18.6 Maximum Dry Density (pcf): 102.4 95% of MDD (pcf): 97.3 In-Situ Moisture Content (%): N// 5. Specimen Properties: 2961.90 Compaction Moisture content (%): 18.6 Compaction Wet Density (pcf): 16.7 Compaction Wet Density (pcf): 98.50 Moisture Content After Mr Test (%): 18.6 6. Quick Shear Test (Y=Yes, N=No, N/A=Not Applicable): #VALUE		Bottom			3.93
Height of Specimen, Cap and Base (in):		•			3.93
Height of Cap and Base (in):		Membrane Thickness (in):			0.01
Initial Length, Lo (in):		Height of Specimen, Cap and Base (in);			8.02
Initial Area, Ao (sq. in):					0.00
Initial Volume, AoLo (cu. in): 3. Soil Specimen Weight: Weight of Wet Soil Used (g): 2961.90 4. Soil Properties: Optimum Moisture Content (%): Maximum Dry Density (pcf): 95% of MDD (pcf): In-Situ Moisture Content (%): In-Situ Moisture Content (%): Vet Weight (g): Compaction Moisture content (%): Compaction Wet Density (pcf): Compaction Wet Density (pcf): Moisture Content After Mr Test (%): 6. Quick Shear Test (Y=Yes, N=No, N/A=Not Applicable): #VALUE		Initial Length, Lo (in):			8.02
3. Soil Specimen Weight: Weight of Wet Soil Used (g): 2961.90 4. Soil Properties: Optimum Moisture Content (%): Maximum Dry Density (pcf): 95% of MDD (pcf): In-Situ Moisture Content (%): N// 5. Specimen Properties: Wet Weight (g): Compaction Moisture content (%): Compaction Wet Density (pcf): Compaction Dry Density (pcf): Moisture Content After Mr Test (%): 6. Quick Shear Test (Y=Yes, N=No, N/A=Not Applicable): #VALUE		Initial Area, Ao (sq. in):			12.06
Weight of Wet Soil Used (g): 4. Soil Properties: Optimum Moisture Content (%): Maximum Dry Density (pcf): 95% of MDD (pcf): 102.4 95% of MDD (pcf): 107.3 10-Situ Moisture Content (%): Wet Weight (g): Compaction Moisture content (%): Compaction Wet Density (pcf): Compaction Dry Density (pcf): Moisture Content After Mr Test (%): 6. Quick Shear Test (Y=Yes, N=No, N/A=Not Applicable): #VALUE		Initial Volume, AoLo (cu. in):			96.69
4. Soil Properties: Optimum Moisture Content (%): Maximum Dry Density (pcf): 95% of MDD (pcf): In-Situ Moisture Content (%): Wet Weight (g): Compaction Moisture content (%): Compaction Wet Density (pcf): Compaction Dry Density (pcf): Moisture Content After Mr Test (%): 4. Soil Properties: 18. 6. Quick Shear Test (Y=Yes, N=No, N/A=Not Applicable): #VALUE	3. Soil Specimen	Weight:			
Optimum Moisture Content (%): Maximum Dry Density (pcf): 95% of MDD (pcf): In-Situ Moisture Content (%): Wet Weight (g): Compaction Moisture content (%): Compaction Wet Density (pcf): Compaction Dry Density (pcf): Moisture Content After Mr Test (%): 6. Quick Shear Test (Y=Yes, N=No, N/A=Not Applicable): #VALUE		Weight of Wet Soil Used (g):			2961.90
Maximum Dry Density (pcf): 95% of MDD (pcf): 97.3 In-Situ Moisture Content (%): Wet Weight (g): Compaction Moisture content (%): Compaction Wet Density (pcf): Compaction Dry Density (pcf): Moisture Content After Mr Test (%): 6. Quick Shear Test (Y=Yes, N=No, N/A=Not Applicable): #VALUE	4. Soil Properties	s:			
95% of MDD (pcf): In-Situ Moisture Content (%): 5. Specimen Properties: Wet Weight (g): Compaction Moisture content (%): Compaction Wet Density (pcf): Compaction Dry Density (pcf): Moisture Content After Mr Test (%): 6. Quick Shear Test (Y=Yes, N=No, N/A=Not Applicable): #VALUE		Optimum Moisture Content (%):			18.6
In-Situ Moisture Content (%): N/A 5. Specimen Properties: Wet Weight (g): Compaction Moisture content (%): Compaction Wet Density (pcf): Compaction Dry Density (pcf): Moisture Content After Mr Test (%): 6. Quick Shear Test (Y=Yes, N=No, N/A=Not Applicable): **WALUE*		* " '	*		102.4
5. Specimen Properties: Wet Weight (g): Compaction Moisture content (%): Compaction Wet Density (pcf): Compaction Dry Density (pcf): Moisture Content After Mr Test (%): 6. Quick Shear Test (Y=Yes, N=No, N/A=Not Applicable): #VALUE		, ,			97.3
Wet Weight (g): Compaction Moisture content (%): Compaction Wet Density (pcf): Compaction Dry Density (pcf): Moisture Content After Mr Test (%): 6. Quick Shear Test (Y=Yes, N=No, N/A=Not Applicable): 2961.90 18.4 18.5 18.5 4*VALUE		In-Situ Moisture Content (%):			N/A
Compaction Moisture content (%): Compaction Wet Density (pcf): Compaction Dry Density (pcf): Moisture Content After Mr Test (%): 6. Quick Shear Test (Y=Yes, N=No, N/A=Not Applicable): #VALUE	5. Specimen Pro	perties:			
Compaction Wet Density (pcf): Compaction Dry Density (pcf): Moisture Content After Mr Test (%): 6. Quick Shear Test (Y=Yes, N=No, N/A=Not Applicable): #VALUE		- 1-			2961.90
Compaction Dry Density (pcf): Moisture Content After Mr Test (%): 6. Quick Shear Test (Y=Yes, N=No, N/A=Not Applicable): #VALUE					18.4
Moisture Content After Mr Test (%): 6. Quick Shear Test (Y=Yes, N=No, N/A=Not Applicable): #VALUE					116.72
6. Quick Shear Test (Y=Yes, N=No, N/A=Not Applicable): #VALUE					98.58
		Moisture Content After Mr Test (%):			18.8
7. Resilient Modulus, Mr: 9706(Sc)^-0.23952(S3)^0.1827	6. Quick Shear T	est (Y=Yes, N=No, N/A=Not Applicable):			#VALUE!
	7. Resilient Mode	ulus, Mr:	9706(Sc)^-0.23952((S3)^0.18273
8. Comments	8. Comments				
					X
9. Tested By: B.H. Date: June 15, 2017	9. Tested By:	В.Н.	Date: June 15, 2017		

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT **MATERIALS DIVISION**

AASHTO T 307-99 - RESILIENT MODULUS OF SUBGRADE SOILS RECOMPACTED SAMPLES

SSRVPS

117+9018'LT

Material Code Station No.: Location: CANAL AT L.M. 20.98 STR. & APPRS. (S) June 15, 2017 5/30/17 020581 Name of Project: Date Sampled: Date Tested: Job No.

LINCOLN Name: THORNTON/TAYLOR Code: 40 Sampled By: County:

20171801 **RV406** Sample ID: Lab No.:

A-6(13)

AASHTO Class:

Depth:

0-5

Material Type (1 or 2): 2 LONGITUDE: LATITUDE:

		_	_		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Resilient Modulus				M	psi	11,437	10,674	9,608	8,334	7,402	10,369	9,378	8,506	7,772	7,120	9,141	8,271	7,654	7,023	6,515
Resilient Strain				ຜ້	in/in	0.00016	0.00034	0.00056	0.00085	0.00118	0.00018	0.00039	0.00063	0.00091	0.00122	0.00020	0.00044	0.00070	0.00100	0.00132
Average Recov Def.	LVDT 1	and 2		H _{avg}	Ľ	0.00129	0.00274	0.00452	0.00683	0.00944	0.00141	0.00310	0.00506	0.00727	0.00982	0.00160	0.00349	0.00559	0.00801	0.01062
Actual Applied	Contact	Stress		Scontact	psi	0.2	0.2	0.3	0.5	0.7	0.2	0.2	0.2	0.4	9.0	0.2	0.2	0.2	0.4	9.0
Actual Applied	Cyclic	Stress		Scyclic	isd	1.8	3.6	5.4	7.1	8.7	1.8	3.6	5.4	7.0	8.7	1.8	3.6	5.3	7.0	8.6
Actual Applied	Мах.	Axial	Stress	Smax	psi	2.1	3.9	5.7	7.6	9.4	2.1	3.9	5.6	7.5	9.3	2.1	3.8	5.6	7.4	9.2
Actual Applied	Contact	Load		Pcontact	sql	2.8	2.8	3.6	0.9	8.4	2.8	2.9	2.8	5.1	7.5	2.8	2.8	2.8	4.2	6.7
Actual Applied	Cyclic Load			P _{cyclic}	sql	22.1	43.9	65.3	85.5	105.0	22.0	43.6	64.7	85.0	105.1	22.0	43.4	64.3	84.5	104.0
Actual Applied	ial.	Load		P _{max}	sql	24.9	46.8	68.9	91.5	113.4	24.9	46.5	9.79	90.1	112.6	24.8	46.2	67.1	88.8	110.7
Nominal Maximum	Axial	Stress		Scyclic	psi	2.0	4.0	6.0	8.0	10.0	2.0	4.0	6.0	8.0	10.0	2.0	4.0	0.9	8.0	10.0
Chamber Confining	Pressure			Š	psi	0.9	0.9	0.9	0.9	0.9	4.0	4.0	4.0	4.0	4.0	2.0	2.0	2.0	2.0	2.0
	PARAMETER			DESIGNATION	UNIT	Sequence 1	Sequence 2	Sequence 3	Sequence 4	Sequence 5	Sequence 6	Sequence 7	Sequence 8	Sequence 9	Sequence 10	Sequence 11	Sequence 12	Sequence 13	Sequence 14	Sequence 15

June 15, 2017

DATE DATE

B.H.

REVIEWED BY

TESTED BY

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT **MATERIALS DIVISION**

AASHTO T 307-99 - RESILIENT MODULUS OF SUBGRADE SOILS RECOMPACTED / THINWALL TUBE SAMPLES

Job No.

020581

Material Code SSRVPS

Date Sampled:

5/30/17

Station No.: 117+90

Date Tested:

June 15, 2017

Location: 18'LT

Name of Project: CANAL AT L.M. 20.98 STR. & APPRS. (S)

County:

Code: 40

Name: LINCOLN

Sampled By:

THORNTON/TAYLOR

Depth: 0-5

Lab No.:

20171801

AASHTO Class: A-6(13)

Sample ID:

RV406

Material Type (1 or 2): 2

LATITUDE:

LONGITUDE:

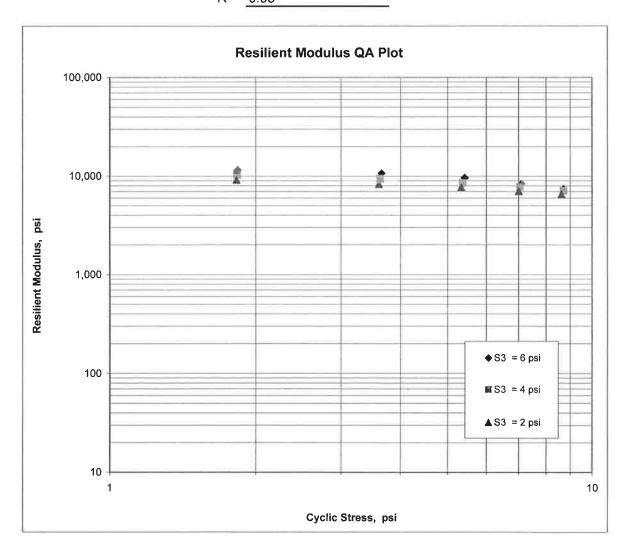
$$M_R = K1 (S_C)^{K2} (S_3)^{K5}$$

K1 = 9,706

K2 = -0.23952

K5 = 0.18273

 $R^2 = 0.93$



JOB: 020581

Arkansas State Highway Transporation Department

JOB NAME: CANAL @ L.M. 20.98 STR. & APPRS.(S)

Materials Division

COUNTY NO. 40 **DATE TESTED** 6/12/2017

Michael Benson, Materials Engineer

STA.#	LOC.	DEPTH	COLOR	#4	#10	#40	#80	#200	<i>L.L</i> .	<i>P.I</i> .	SOIL CLASS	<i>LAB</i> #:	%MOISTURE
117+90	18 LT	0-5	BROWN	92	90	88	87	E S 84	32	17	A-6(13)	RV 406	
111+00	05 RT	0-5	BROWN	100		i di	(Marie)	92	37	22	A-6(20)	S402	28.2
111+00	18 RT	0-5	BROWN	100	W W	M. Febr		97	41	25	A-7-6(25)	S403	22.7
118+00	05 LT	0-5	BROWN	98	96	94	93	89	33	18	A-6(15)	S404	28.6
118+00	18 LT	0-5	BROWN	98	96	94	93	88	35	21	A-6(17)	S405	20.2

DATE TESTED 6/12/2017

Arkansas State Highway Transporation Department

JOB: 020581 JOB NAME: CANAL @ L.M. 20.98 STR. & APPRS.(S)

Materials Division

Michael Benson, Materials Engineer

PAVEMENT SOUNDINGS AGG BASE CRS CL-5 AGG BASE CRS CL-5 CHIP SEAL CHIP SEAL ACHMSC 3.5W ACHIMSC COUNTY NO. 40 05 RT 18 RT STA.# LOC.

111+00

111+00

AGG BASE CRS CL-5 7.0

CHIP SEAL

ACHIMSC

05 LT

118+00

1.25W

Monday, June 19, 2017

W=MULTIPLE LAYERS comments:

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT - LITTLE ROCK, ARKANSAS MATERIALS DIVISION

MICHAEL BENSON, MATERIALS ENGINEER

*** SOIL SURVEY / PAVEMENT SOUNDING TEST REPORT ***

DATE - 06/ JOB NUMBER - 020 FEDERAL AID NO TO: PURPOSE - SOI SPEC. REMARKS - NO SUPPLIER NAME - STA NAME OF PROJECT - C	581 BE ASSIC L SURVEY SPECIFIC TE ANAL @ 1	/ SAMPLE CATION CHECK L.M. 20.98 STR. &	SEQUENCE NO 1 MATERIAL CODE - SSRVPS SPEC. YEAR - 2014 SUPPLIER ID 1 COUNTY/STATE - 40 DISTRICT NO 02 APPRS.(S)									
PROJECT ENGINEER - NOT APPLICABLE PIT/QUARRY - ARKANSAS LOCATION - LINCOLN COUNTY DATE SAMPLED - 05/30/3 SAMPLED BY - THORNTON/TAYLOR DATE RECEIVED - 06/02/3 SAMPLE FROM - TEST HOLE DATE TESTED - 06/12/3 MATERIAL DESC SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS												
LAB NUMBER SAMPLE ID TEST STATUS STATION LOCATION DEPTH IN FEET MAT'L COLOR MAT'L TYPE LATITUDE DEG-MIN-LONGITUDE DEG-MIN-	- - - SEC -	S402 INFORMATION ONLY 111+00 05 RT 0-5 BROWN	- 111+00 - 18 RT - 0-5 - BROWN - 34 07	ON ONLY - - - - - -	20171799 S404 INFORMATION ONLY 118+00 05 LT 0-5 BROWN 34 8 3.90 91 41 14.40							
% PASSING 2 1 1/2 3/4 3/8	IN IN IN IN 10 - 40 - 80 -	100	- - - - 100 - - - 97	- - - - - - - -	100 98 96 94 93							
LIQUID LIMIT PLASTICITY INDEX AASHTO SOIL UNIFIED SOIL % MOISTURE CONTENT ACHMSC CHIP SEAL AGG BASE CRS CL-5	- - -	92 37 22 A-6(20) 28.2 3.5W 7.0	97 - 41 - 25 - A-7-6(25) - 22.7		33 18							
	-		-									

REMARKS - W=MULTIPLE LAYERS

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AASHTO TESTS : T24 T88 T89 T90 T265

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT - LITTLE ROCK, ARKANSAS MATERIALS DIVISION

MICHAEL BENSON, MATERIALS ENGINEER

*** SOIL SURVEY / PAVEMENT SOUNDING TEST REPORT ***

JOB NUMBER FEDERAL AID NO. PURPOSE SPEC. REMARKS SUPPLIER NAME NAME OF PROJECT PROJECT ENGINEE PIT/QUARRY - LOCATION -	- SOIL SUF - NO SPECT - STATE - CANAL R - NOT AN ARKANSAS LINCOLN CO	SSICVET	Y SAMP: CATION L.M. 2 ICABLE TY	CHE		APPRS	. (S)	MATER SPEC. SUPPL COUNT DISTR DATE DATE	ENCE NO. EIAL CODE YEAR IER ID. EY/STATE EICT NO. SAMPLED RECEIVED TESTED	- - -	2014
MATERIAL DESC.	- SOIL SU	RVE	Y - R	. VA	LUE- PAV	EMENT	SOUNDING	S			
LAB NUMBER SAMPLE ID TEST STATUS STATION LOCATION DEPTH IN FEET MAT'L COLOR MAT'L TYPE LATITUDE DEC	r G-MIN-SEC	- -	118+00 18 LT 0-5 BROWN	MATI O	3.90				-		
LONGITUDE DEC	G-MIN-SEC	-	91	41	14.50						
% PASSING	2 IN. 1 1/2 IN. 3/4 IN. 3/8 IN. NO. 4 NO. 10 NO. 40 NO. 80 NO. 200	- - - - -	100 98 96 94 93 88						- - - - - -		
LIQUID LIMIT		-	35			1,000					
PLASTICITY IN AASHTO SOIL UNIFIED SOIL % MOISTURE CO		- - -				 					
		_				1470			-		
		-				-			-		
		_				:			-		
		_				. 			-		
		-				38			-		
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REMARKS - W=MULTIPLE LAYERS

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AASHTO TESTS : T24 T88 T89 T90 T265

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT - LITTLE ROCK, ARKANSAS MATERIALS DIVISION

MICHAEL BENSON, MATERIALS ENGINEER

*** SOIL SURVEY / PAVEMENT SOUNDING TEST REPORT ***

DATE - 06/12/1 JOB NUMBER - 020581 FEDERAL AID NO TO BE A PURPOSE - SOIL SU SPEC. REMARKS - NO SPEC SUPPLIER NAME - STATE NAME OF PROJECT - CANAL PROJECT ENGINEER - NOT A PIT/QUARRY - ARKANSAS LOCATION - LINCOLN O	ASSI JRVE CIFI . @ APPI	Y SAMPLE CATION CHECK L.M. 20.98 STR ICABLE	. & APPRS	. (S)	MATERIAL CODE - SPEC. YEAR - SUPPLIER ID COUNTY/STATE -	40 02
SAMPLED BY - THORNTON/	rayı				DATE RECEIVED -	06/02/17
SAMPLE FROM - TEST HOLE MATERIAL DESC SOIL ST		V - RESISTANCE	R-WALTE	ברייונבו.		06/12/17
	217.01		K- AMIOR	ACTOAL	KEBOHIB	
LAB NUMBER	-	20171801	_			
SAMPLE ID	-	RV 406	×=		# 8	
TEST STATUS	-		1LA ==		=	
STATION		117+90	2		55 27	
LOCATION		18 LT	2 =		======================================	
DEPTH IN FEET		0-5	:			
MAT'L COLOR MAT'L TYPE	-	BROWN	15 5		5 82	
	_	34 8 3.9	0			
LATITUDE DEG-MIN-SEC		91 41 14.5				
LONGITUDE DEG-MIN-SEC	-	91 41 14.5	O			
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NO. 10		90	72		-	
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NO. 200	-	84				
LIQUID LIMIT	-	32	0.50		27	
PLASTICITY INDEX	-	17	-		-	
AASHTO SOIL	-	A-6(13)	1024		#1	
UNIFIED SOIL	-		: -			
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REMARKS - W=MULTIPLE LAYERS

AASHTO TESTS : T24 T88 T89 T90 T265