

ARKANSAS DEPARTMENT OF TRANSPORTATION



SUBSURFACE INVESTIGATION

STATE JOB NO. 020614

FEDERAL AID PROJECT NO. NHPP-0040(34)

MILLS BAYOU STR. & APPRS. (S)

STATE HIGHWAY 54 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 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

August 24, 2017

TO: Mr. Trinity Smith, Engineer of Roadway Design

SUBJECT: Job No. 020614
Mills Bayou Str. & Apprs. (S)
Route 54 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 Mills Bayou on Highway 54. 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 with some sand. 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" 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 at the river port near Dumas.
2. Asphalt Concrete Hot Mix

Table with 3 columns: Type, Asphalt Cement %, Mineral Aggregate %. Rows: Surface Course, Binder Course, Base Course. Title: PG 64-22

Table with 3 columns: Type, Asphalt Cement %, Mineral Aggregate %. Rows: Surface Course, Binder Course, Base Course. Title: PG 70-22



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| PG 76-22 | | |
|----------------|------------------|---------------------|
| Type | Asphalt Cement % | Mineral Aggregate % |
| Surface Course | 5.2 | 94.8 |
| Binder Course | 4.3 | 95.7 |
| Base Course | 3.6 | 96.4 |



Michael C. Benson
Materials Engineer

MCB:pt:bjj
Attachment

cc: 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 - 08/16/2017
JOB NUMBER - 020614

SEQUENCE NO. - 2
MATERIAL CODE - SSRV
SPEC. YEAR - 2014
SUPPLIER ID. - 1
COUNTY/STATE - 40
DISTRICT NO. - 02

JOB NAME - MILLS BAYOU STR. & APPRS.(S)

* STATION LIMITS R-VALUE AT 240 psi *

BEGIN JOB - END JOB 9
RESILIENT MODULUS
STA. 108+00 9258

REMARKS -

AASHTO TESTS : T190

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

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

| | | | |
|-------------------------|-------------------------------|--------------------------------|--------|
| Job No. | 020614 | Material Code | SSRVPS |
| Date Sampled: | 7/19/17 | Station No.: | 108+00 |
| Date Tested: | August 11, 2017 | Location: | 21'LT |
| Name of Project: | MILLS BAYOU STR. & APPRS. (S) | | |
| County: | Code: 40 | Name: LINCOLN | |
| Sampled By: | THORNTON/BATES | | |
| Lab No.: | 20172437 | Depth: | 0-5 |
| Sample ID: | RV494 | AASHTO Class: | A-4(0) |
| LATITUDE: | | Material Type (1 or 2): | 2 |
| | | LONGITUDE: | |

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:

| | |
|--|-------|
| Specimen Diameter (in): | |
| Top | 3.94 |
| Middle | 3.95 |
| Bottom | 3.95 |
| Average | 3.95 |
| Membrane Thickness (in): | 0.01 |
| Height of Specimen, Cap and Base (in): | 8.02 |
| Height of Cap and Base (in): | 0.00 |
| Initial Length, Lo (in): | 8.02 |
| Initial Area, Ao (sq. in): | 12.16 |
| Initial Volume, AoLo (cu. in): | 97.52 |

3. Soil Specimen Weight:

| | |
|------------------------------|---------|
| Weight of Wet Soil Used (g): | 3199.10 |
|------------------------------|---------|

4. Soil Properties:

| | |
|-------------------------------|-------|
| Optimum Moisture Content (%): | 14.5 |
| Maximum Dry Density (pcf): | 111.9 |
| 95% of MDD (pcf): | 106.3 |
| In-Situ Moisture Content (%): | N/A |

5. Specimen Properties:

| | |
|-------------------------------------|---------|
| Wet Weight (g): | 3199.10 |
| Compaction Moisture content (%): | 14.7 |
| Compaction Wet Density (pcf): | 125.00 |
| Compaction Dry Density (pcf): | 108.98 |
| Moisture Content After Mr Test (%): | 14.3 |

6. Quick Shear Test (Y=Yes, N=No, N/A=Not Applicable):

#VALUE!

7. Resilient Modulus, Mr:

13064(Sc)^{-0.21959(S3)^{0.22284}}

8. Comments

9. Tested By:

GW

Date: August 11, 2017

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

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

Job No. 020614 **Material Code** SSRVPS
Date Sampled: 7/19/17 **Station No.:** 108+00
Date Tested: August 11, 2017 **Location:** 21'LT
Name of Project: MILLS BAYOU STR. & APPRS. (S)
County: Code: 40 **Name:** LINCOLN
Sampled By: THORNTON/BATES **Depth:** 0-5
Lab No.: 20172437 **AASHTO Class:** A-4(0)
Sample ID: RV494 **Material Type (1 or 2):** 2
LATITUDE: LONGITUDE:

| PARAMETER | Chamber Confining Pressure | Nominal Maximum Axial Stress | Actual Applied Max. Axial Load | Actual Applied Cyclic Load | Actual Applied Contact Load | Actual Applied Max. Axial Stress | Actual Applied Cyclic Stress | Actual Applied Contact Stress | Average Recov Def. LVDT 1 and 2 | Resilient Strain | Resilient Modulus |
|-------------|----------------------------|------------------------------|--------------------------------|----------------------------|-----------------------------|----------------------------------|------------------------------|-------------------------------|---------------------------------|-------------------------|-----------------------|
| | S ₃ psi | S _{cyclic} psi | P _{max} lbs | P _{cyclic} lbs | P _{contact} lbs | S _{max} psi | S _{cyclic} psi | S _{contact} psi | H _{avg} in | ε _r in/in | M _r psi |
| Sequence 1 | 6.0 | 2.0 | 25.3 | 22.6 | 2.7 | 2.1 | 1.9 | 0.2 | 0.00088 | 0.00011 | 16,890 |
| Sequence 2 | 6.0 | 4.0 | 47.4 | 44.6 | 2.8 | 3.9 | 3.7 | 0.2 | 0.00187 | 0.00023 | 15,733 |
| Sequence 3 | 6.0 | 6.0 | 70.1 | 66.5 | 3.6 | 5.8 | 5.5 | 0.3 | 0.00308 | 0.00038 | 14,227 |
| Sequence 4 | 6.0 | 8.0 | 93.4 | 87.4 | 6.0 | 7.7 | 7.2 | 0.5 | 0.00464 | 0.00058 | 12,417 |
| Sequence 5 | 6.0 | 10.0 | 115.8 | 107.3 | 8.5 | 9.5 | 8.8 | 0.7 | 0.00632 | 0.00079 | 11,199 |
| Sequence 6 | 4.0 | 2.0 | 25.2 | 22.5 | 2.8 | 2.1 | 1.8 | 0.2 | 0.00102 | 0.00013 | 14,592 |
| Sequence 7 | 4.0 | 4.0 | 47.3 | 44.5 | 2.7 | 3.9 | 3.7 | 0.2 | 0.00213 | 0.00027 | 13,757 |
| Sequence 8 | 4.0 | 6.0 | 68.9 | 66.1 | 2.8 | 5.7 | 5.4 | 0.2 | 0.00345 | 0.00043 | 12,625 |
| Sequence 9 | 4.0 | 8.0 | 92.2 | 87.1 | 5.1 | 7.6 | 7.2 | 0.4 | 0.00495 | 0.00062 | 11,598 |
| Sequence 10 | 4.0 | 10.0 | 114.6 | 107.0 | 7.5 | 9.4 | 8.8 | 0.6 | 0.00672 | 0.00084 | 10,505 |
| Sequence 11 | 2.0 | 2.0 | 25.1 | 22.3 | 2.8 | 2.1 | 1.8 | 0.2 | 0.00115 | 0.00014 | 12,775 |
| Sequence 12 | 2.0 | 4.0 | 46.8 | 44.0 | 2.8 | 3.8 | 3.6 | 0.2 | 0.00245 | 0.00030 | 11,873 |
| Sequence 13 | 2.0 | 6.0 | 68.1 | 65.3 | 2.8 | 5.6 | 5.4 | 0.2 | 0.00395 | 0.00049 | 10,906 |
| Sequence 14 | 2.0 | 8.0 | 90.4 | 86.1 | 4.3 | 7.4 | 7.1 | 0.3 | 0.00561 | 0.00070 | 10,118 |
| Sequence 15 | 2.0 | 10.0 | 112.5 | 105.8 | 6.7 | 9.2 | 8.7 | 0.5 | 0.00754 | 0.00094 | 9,258 |

TESTED BY _____ DATE August 11, 2017
 REVIEWED BY _____ DATE _____

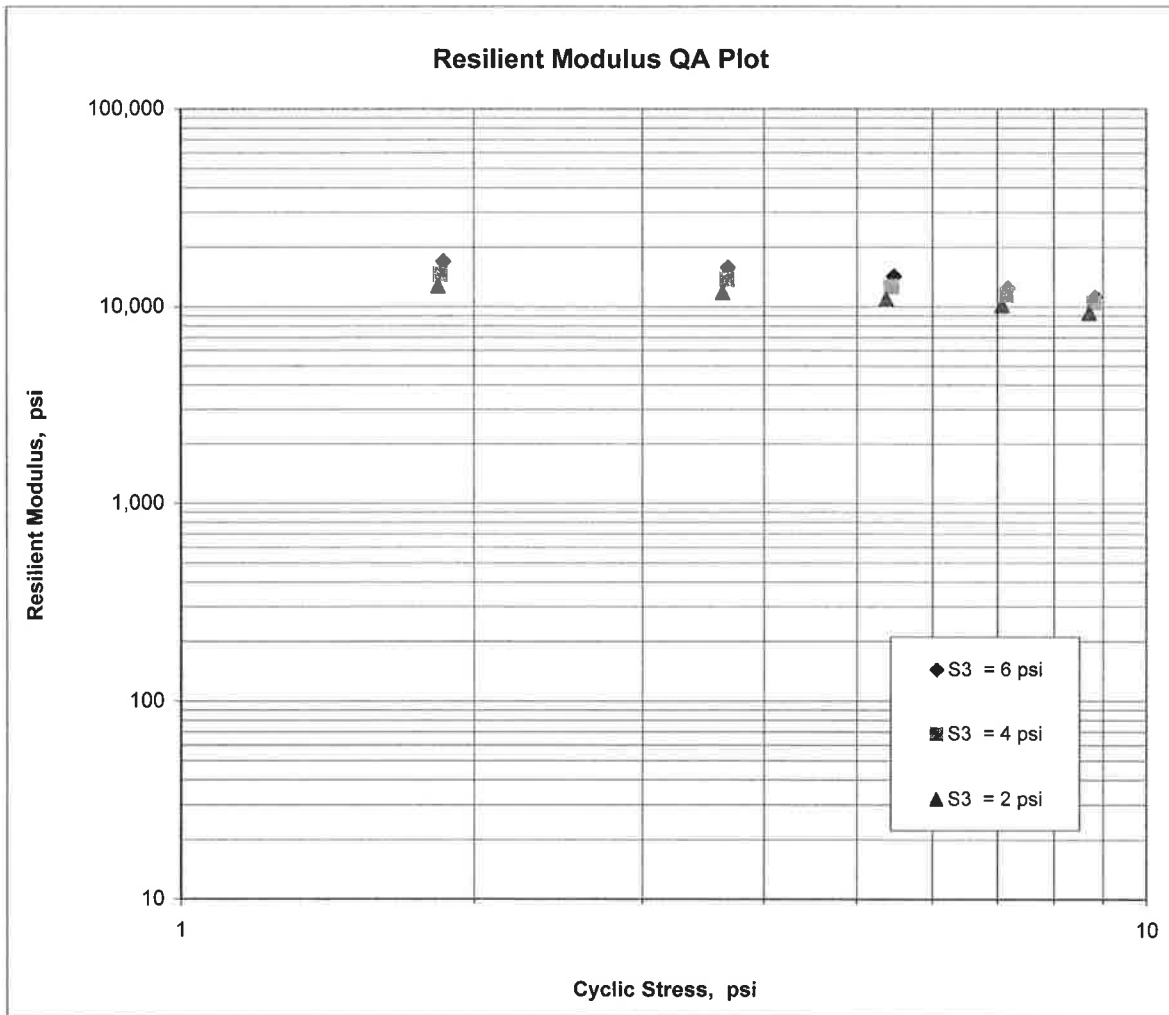
**ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT
MATERIALS DIVISION**

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

| | | | |
|-------------------------|-------------------------------|--------------------------------|---------|
| Job No. | 020614 | Material Code | SSRVPS |
| Date Sampled: | 7/19/17 | Station No.: | 108+00 |
| Date Tested: | August 11, 2017 | Location: | 21'LT |
| Name of Project: | MILLS BAYOU STR. & APPRS. (S) | | |
| County: | Code: 40 | Name: | LINCOLN |
| Sampled By: | THORNTON/BATES | | |
| Lab No.: | 20172437 | Depth: | 0-5 |
| Sample ID: | RV494 | AASHTO Class: | A-4(0) |
| LATITUDE: | | Material Type (1 or 2): | 2 |
| | | LONGITUDE: | |

$$M_R = K_1 (S_C)^{K_2} (S_3)^{K_5}$$

$K_1 = \frac{13,064}{\underline{\hspace{2cm}}}$
 $K_2 = \frac{-0.21959}{\underline{\hspace{2cm}}}$
 $K_5 = \frac{0.22284}{\underline{\hspace{2cm}}}$
 $R^2 = \frac{0.93}{\underline{\hspace{2cm}}}$



JOB: 020614

Arkansas State Highway Transportation Department

JOB NAME: MILLS BAYOU STR. & APPRS.(S)

Materials Division

COUNTY NO. 40 DATE TESTED 8/1/2017

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 | | | | |
| 108+10 | 21 LT | 0-5 | BROWN | 91 | 90 | 88 | 87 | 86 | ND | NP | A-4(0) | RV494 | |
| 102+00 | 06 RT | 0-5 | BROWN | 92 | 88 | 84 | 82 | 80 | 44 | 29 | A-7-6(22) | S487 | 20.8 |
| 102+00 | 21 RT | 0-5 | BROWN | | | | | 95 | 24 | 06 | A-4(4) | S488 | 25.2 |
| 108+00 | 06 LT | 0-5 | BROWN | 95 | 93 | 91 | 90 | 89 | 38 | 22 | A-6(19) | S489 | 20.1 |
| 108+00 | 21 LT | 0-5 | BROWN | 100 | 98 | 94 | 91 | 88 | 35 | 20 | A-6(17) | S490 | 16.7 |
| 112+00 | 21 RT | 0-5 | BROWN | 100 | | | | 93 | 37 | 32 | A-6(28) | S491 | 19.6 |
| 119+00 | 06 LT | 0-5 | BROWN | 97 | 95 | 91 | 89 | 80 | 33 | 18 | A-6(13) | S492 | 20.7 |
| 119+00 | 21 LT | 0-5 | BROWN | 100 | | | | 97 | ND | NP | A-4(0) | S493 | 20.8 |

JOB: 020614

Arkansas State Highway Transportation Department

DATE TESTED

JOB NAME: MILLS BAYOU STR. & APPRS.(S)

Materials Division

8/1/2017

COUNTY NO. 40

Michael Benson, Materials Engineer

STA# LOC.

PAVEMENT SOUNDINGS

| | | | | |
|--------|-------|------|-------------------|-------------------|
| 102+00 | 06 RT | BST | ACHMSC | AGG.BASE CRS CL-7 |
| | | 2.0W | -- | 9.0 |
| 102+00 | 21 RT | BST | ACHMSC | AGG.BASE CRS CL-7 |
| | | -- | -- | -- |
| 108+00 | 06 LT | BST | ACHMSC | AGG.BASE CRS CL-7 |
| | | 2.0W | 2.0 | 6.0 |
| 108+00 | 21 LT | BST | AGG.BASE CRS CL-7 | |
| | | -- | -- | -- |
| 112+00 | 21 RT | BST | AGG.BASE CRS CL-7 | |
| | | -- | -- | -- |
| 119+00 | 06 LT | BST | AGG.BASE CRS CL-7 | |
| | | 1.5 | 9.0 | |

Comments: W=MULTIPLE LAYERS

Monday, August 21, 2017

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

MICHAEL BENSON, MATERIALS ENGINEER

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

| | | | |
|------------------|---|---------------|------------|
| DATE | - 08/21/17 | SEQUENCE NO. | - 1 |
| JOB NUMBER | - 020614 | MATERIAL CODE | - RV |
| FEDERAL AID NO. | - TO BE ASSIGNED | SPEC. YEAR | - 2014 |
| PURPOSE | - SOIL SURVEY SAMPLE | SUPPLIER ID. | - 1 |
| SPEC. REMARKS | - NO SPECIFICATION CHECK | COUNTY/STATE | - 40 |
| SUPPLIER NAME | - STATE | DISTRICT NO. | - 02 |
| NAME OF PROJECT | - MILLS BAYOU STR. & APPRS. (S) | | |
| PROJECT ENGINEER | - NOT APPLICABLE | | |
| PIT/QUARRY | - ARKANSAS | | |
| LOCATION | - LINCOLN COUNTY | DATE SAMPLED | - 07/19/17 |
| SAMPLED BY | - THORNTON/BATES | DATE RECEIVED | - 07/25/17 |
| SAMPLE FROM | - TEST HOLE | DATE TESTED | - 08/01/17 |
| MATERIAL DESC. | - SOIL SURVEY - RESISTANCE R-VALUE ACTUAL RESULTS | | |

| | | | | |
|-----------------------|---------|------------------|-------|---|
| LAB NUMBER | - | 20172437 | - | - |
| SAMPLE ID | - | RV494 | - | - |
| TEST STATUS | - | INFORMATION ONLY | - | - |
| STATION | - | 108+10 | - | - |
| LOCATION | - | 21 LT | - | - |
| DEPTH IN FEET | - | 0-5 | - | - |
| MAT'L COLOR | - | BROWN | - | - |
| MAT'L TYPE | - | | - | - |
| LATITUDE DEG-MIN-SEC | - | 33 52 43.50 | - | - |
| LONGITUDE DEG-MIN-SEC | - | 91 36 13.70 | - | - |
| % PASSING | 2 | IN. | - | - |
| | 1 1/2 | IN. | - 100 | - |
| | 3/4 | IN. | - 93 | - |
| | 3/8 | IN. | - 92 | - |
| | NO. 4 | | - 91 | - |
| | NO. 10 | | - 90 | - |
| | NO. 40 | | - 88 | - |
| | NO. 80 | | - 87 | - |
| | NO. 200 | | - 86 | - |
| LIQUID LIMIT | - | ND | - | - |
| PLASTICITY INDEX | - | NP | - | - |
| AASHTO SOIL | - | A-4 (0) | - | - |
| UNIFIED SOIL | - | | - | - |
| % MOISTURE CONTENT | - | | - | - |
| | - | | - | - |
| | - | | - | - |
| | - | | - | - |
| | - | | - | - |
| | - | | - | - |
| | - | | - | - |
| | - | | - | - |
| | - | | - | - |
| | - | | - | - |
| | - | | - | - |
| | - | | - | - |
| | - | | - | - |

REMARKS - W=MULTIPLE LAYERS

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

MICHAEL BENSON, MATERIALS ENGINEER

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

| | | | |
|------------------|---|---------------|------------|
| DATE | - 08/21/17 | SEQUENCE NO. | - 1 |
| JOB NUMBER | - 020614 | MATERIAL CODE | - SSRVPS |
| FEDERAL AID NO. | - TO BE ASSIGNED | SPEC. YEAR | - 2014 |
| PURPOSE | - SOIL SURVEY SAMPLE | SUPPLIER ID. | - 1 |
| SPEC. REMARKS | - NO SPECIFICATION CHECK | COUNTY/STATE | - 40 |
| SUPPLIER NAME | - STATE | DISTRICT NO. | - 02 |
| NAME OF PROJECT | - MILLS BAYOU STR. & APPRS.(S) | | |
| PROJECT ENGINEER | - NOT APPLICABLE | | |
| PIT/QUARRY | - ARKANSAS | | |
| LOCATION | - LINCOLN COUNTY | DATE SAMPLED | - 07/19/17 |
| SAMPLED BY | - THORNTON/BATES | DATE RECEIVED | - 07/25/17 |
| SAMPLE FROM | - TEST HOLE | DATE TESTED | - 08/01/17 |
| MATERIAL DESC. | - SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS | | |

| | | | |
|------------------------|--------------------|--------------------|--------------------|
| LAB NUMBER | - 20172430 | - 20172431 | - 20172432 |
| SAMPLE ID | - S487 | - S488 | - S489 |
| TEST STATUS | - INFORMATION ONLY | - INFORMATION ONLY | - INFORMATION ONLY |
| STATION | - 102+00 | - 102+00 | - 108+00 |
| LOCATION | - 06 RT | - 21 RT | - 06 LT |
| DEPTH IN FEET | - 0-5 | - 0-5 | - 0-5 |
| MAT'L COLOR | - BROWN | - BROWN | - BROWN |
| MAT'L TYPE | - | - | - |
| LATITUDE DEG-MIN-SEC | - 33 52 39.90 | - 33 52 39.80 | - 33 52 43.40 |
| LONGITUDE DEG-MIN-SEC | - 91 36 19.50 | - 91 36 19.40 | - 91 36 13.70 |
| % PASSING | | | |
| 2 IN. | - | - | - |
| 1 1/2 IN. | - | - | - |
| 3/4 IN. | - 100 | - 100 | - 100 |
| 3/8 IN. | - 97 | - | - 97 |
| NO. 4 | - 92 | - | - 95 |
| NO. 10 | - 88 | - | - 93 |
| NO. 40 | - 84 | - | - 91 |
| NO. 80 | - 82 | - | - 90 |
| NO. 200 | - 80 | - 95 | - 89 |
| LIQUID LIMIT | - 44 | - 24 | - 38 |
| PLASTICITY INDEX | - 29 | - 06 | - 22 |
| AASHTO SOIL | - A-7-6(22) | - A-4(4) | - A-6(19) |
| UNIFIED SOIL | - | - | - |
| % MOISTURE CONTENT | - 20.8 | - 25.2 | - 20.1 |
| BST (IN) | - 2.0W | - -- | - 2.0W |
| ACHMSC (IN) | - -- | - -- | - 2.0 |
| AGG.BASE CRS CL-7 (IN) | - 9.0 | - -- | - 6.0 |
| | - | - | - |
| | - | - | - |
| | - | - | - |
| | - | - | - |
| | - | - | - |
| | - | - | - |
| | - | - | - |
| | - | - | - |

REMARKS - W=MULTIPLE LAYERS

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 - 08/21/17 SEQUENCE NO. - 2
JOB NUMBER - 020614 MATERIAL CODE - SSRVPS
FEDERAL AID NO.- TO BE ASSIGNED SPEC. YEAR - 2014
PURPOSE - SOIL SURVEY SAMPLE SUPPLIER ID. - 1
SPEC. REMARKS - NO SPECIFICATION CHECK COUNTY/STATE - 40
SUPPLIER NAME - STATE DISTRICT NO. - 02
NAME OF PROJECT - MILLS BAYOU STR. & APPRS.(S)
PROJECT ENGINEER - NOT APPLICABLE
PIT/QUARRY - ARKANSAS
LOCATION - LINCOLN COUNTY DATE SAMPLED - 07/19/17
SAMPLED BY - THORNTON/BATES DATE RECEIVED - 07/25/17
SAMPLE FROM - TEST HOLE DATE TESTED - 08/01/17
MATERIAL DESC. - SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS

| LAB NUMBER | 20172433 | 20172434 | 20172435 |
|------------------------|------------------|------------------|------------------|
| SAMPLE ID | S490 | S491 | S492 |
| TEST STATUS | INFORMATION ONLY | INFORMATION ONLY | INFORMATION ONLY |
| STATION | 108+00 | 112+00 | 119+00 |
| LOCATION | 21 LT | 21 RT | 06 LT |
| DEPTH IN FEET | 0-5 | 0-5 | 0-5 |
| MAT'L COLOR | BROWN | BROWN | BROWN |
| MAT'L TYPE | | | |
| LATITUDE DEG-MIN-SEC | 33 52 43.40 | 33 52 46.20 | 33 52 52.90 |
| LONGITUDE DEG-MIN-SEC | 91 36 13.80 | 91 36 10.40 | 91 36 8.60 |
| % PASSING | | | |
| 2 IN. | | | |
| 1 1/2 IN. | | | |
| 3/4 IN. | | | 100 |
| 3/8 IN. | | | 99 |
| NO. 4 | 100 | 100 | 97 |
| NO. 10 | 98 | | 95 |
| NO. 40 | 94 | | 91 |
| NO. 80 | 91 | | 89 |
| NO. 200 | 88 | 93 | 80 |
| LIQUID LIMIT | 35 | 37 | 33 |
| PLASTICITY INDEX | 20 | 32 | 18 |
| AASHTO SOIL | A-6(17) | A-6(28) | A-6(13) |
| UNIFIED SOIL | | | |
| % MOISTURE CONTENT | 16.7 | 19.6 | 20.7 |
| BST (IN) | -- | -- | 1.5 |
| AGG.BASE CRS CL-7 (IN) | -- | -- | 9.0 |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

REMARKS - W=MULTIPLE LAYERS
-
-
-
-

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

MICHAEL BENSON, MATERIALS ENGINEER

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

| | | | |
|------------------|---|---------------|------------|
| DATE | - 08/21/17 | SEQUENCE NO. | - 3 |
| JOB NUMBER | - 020614 | MATERIAL CODE | - SSRVPS |
| FEDERAL AID NO. | - TO BE ASSIGNED | SPEC. YEAR | - 2014 |
| PURPOSE | - SOIL SURVEY SAMPLE | SUPPLIER ID. | - 1 |
| SPEC. REMARKS | - NO SPECIFICATION CHECK | COUNTY/STATE | - 40 |
| SUPPLIER NAME | - STATE | DISTRICT NO. | - 02 |
| NAME OF PROJECT | - MILLS BAYOU STR. & APPRS. (S) | | |
| PROJECT ENGINEER | - NOT APPLICABLE | | |
| PIT/QUARRY | - ARKANSAS | | |
| LOCATION | - LINCOLN COUNTY | DATE SAMPLED | - 07/19/17 |
| SAMPLED BY | - THORNTON/BATES | DATE RECEIVED | - 07/25/17 |
| SAMPLE FROM | - TEST HOLE | DATE TESTED | - 08/01/17 |
| MATERIAL DESC. | - SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS | | |

| | | | |
|-----------------------|--------------------|-------|---|
| LAB NUMBER | - 20172436 | - | - |
| SAMPLE ID | - S493 | - | - |
| TEST STATUS | - INFORMATION ONLY | - | - |
| STATION | - 119+00 | - | - |
| LOCATION | - 21 LT | - | - |
| DEPTH IN FEET | - 0-5 | - | - |
| MAT'L COLOR | - BROWN | - | - |
| MAT'L TYPE | - | - | - |
| LATITUDE DEG-MIN-SEC | - 33 52 53.00 | - | - |
| LONGITUDE DEG-MIN-SEC | - 91 36 8.80 | - | - |
| % PASSING | 2 IN. | - | - |
| | 1 1/2 IN. | - | - |
| | 3/4 IN. | - | - |
| | 3/8 IN. | - | - |
| | NO. 4 | - 100 | - |
| | NO. 10 | - | - |
| | NO. 40 | - | - |
| | NO. 80 | - | - |
| | NO. 200 | - 97 | - |
| LIQUID LIMIT | - ND | - | - |
| PLASTICITY INDEX | - NP | - | - |
| AASHTO SOIL | - A-4 (0) | - | - |
| UNIFIED SOIL | - | - | - |
| % MOISTURE CONTENT | - 20.8 | - | - |
| | - | - | - |
| | - | - | - |
| | - | - | - |
| | - | - | - |
| | - | - | - |
| | - | - | - |
| | - | - | - |
| | - | - | - |
| | - | - | - |
| | - | - | - |

REMARKS - W=MULTIPLE LAYERS

AASHTO TESTS : T24 T88 T89 T90 T265