ARKANSAS DEPARTMENT OF TRANSPORTATION

SUBSURFACE INVESTIGATION

STATE JOB NO. CA0202

FEDERAL AID PROJECT NO. 9991

HWY. 425 – HAMBURG (WIDENING) (S)

STATE HIGHWAY 82 SECTION 8

IN ASHLEY 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.

Grubbs, Hoskyn, Barton & Wyatt, INC.
CONSULTING ENGINEERS

P.O. Box 30970
Little Rock, Arkansas 72260-0970
#1 Trigon Place 72209
(501) 455-2536
FAX (501) 455-4137

May 20, 2015
Job No. 14-197

Crafton Tull & Associates, Inc.
901 North 47th Street, Suite 200
Rogers, Arkansas 72756

Attn: Mr. Mike Burns, P.E.

RESULTS of
GEOTECHNICAL INVESTIGATION and PAVEMENT STUDY
TASK ORDER C068: JOB NO. CA0202 HWY. 425-HAMBURG (WIDENING)(S)
ASHLEY COUNTY, ARKANSAS

INTRODUCTION

Submitted herewith are the results of the geotechnical investigation and pavement coring performed for Job CA0202: Hwy 425 (Widening)(S). These services have been performed as a part of Task Order C068. The project alignment begins near the intersection of Hwy 425 and Hwy 82 W, at log mile 17.54 (Sta 546+95) and extends north approximately 5.3 miles to log mile 22.87 (Sta 828+40), just north of the Hwy 425/Lion Drive intersection in Hamburg, Arkansas. These services were authorized by the Subconsultant Agreement executed December 11, 2014. This study has been performed in general accordance with the scope of services described in the subconsultant agreement and as discussed with Mr. Mike Burns of Crafton Tull & Associates as the scope of work was refined. The scope of this study phase, as defined by the Department, included obtaining roadway cores at an approximate frequency of one (1) core every 1000 ft in alternating northbound and southbound lanes. The scope also included obtaining cores in special groups located at approximately 0.5-mile intervals in alternating northbound and southbound lanes. Subgrade conditions in the project alignment have been evaluated by drilling borings, obtaining representative soil samples, and performing laboratory tests.

The field and laboratory studies are discussed in the following report sections. Recommendations for subgrade support are provided in a subsequent report section.

FIELD EXPLORATION

The scope of work for this study included coring the existing asphalt concrete to the bottom of the pavement at selected locations, performing sample borings to explore subsurface conditions and obtain samples for laboratory testing, and obtaining bulk samples from test pits excavated along the alignment. The following report sections discuss the field exploration phases of this study. A Site Vicinity Map is provided on Plate 1 of Attachment 1. The approximate core and boring locations are shown on the Plans of Borings, Test Pits and Pavement Cores provided as Plates 2 through 22 of Attachment 1. A Core Sampling Layout is provided in Attachment 2. This includes the "typical" layout with cores at 1000-ft intervals and the "special" layout obtained at 0.5-mile intervals. A summary of the subsurface exploration program is also provided in Attachment 2.

Pavement Cores

The existing asphalt concrete (ACHM) pavements were evaluated by obtaining 4-in.-diameter cores along the existing roadway on a frequency of approximately one (1) core every 1000 feet. A total of 29 cores of the ACHM were obtained in the outer wheel path of the existing roadway. The cores were obtained in alternating northbound and southbound lanes.

The full-depth pavement section was measured at the "special" locations by obtaining 6-in.-diameter location specific cores at approximately every 0.5 mile, alternating between the northbound and southbound lanes. The cores began approximately 10 ft from the existing centerline and continued in 1 ft increments to find where the full depth pavement ends. A total of 63 cores were collected in order to determine full-depth pavement thicknesses.

As noted, the approximate core locations are shown on the plan drawings included in Attachment 1. A summary of the core results is provided in Attachment 3. The summary provides the measured thicknesses of the ACHM cores, including the individual layers where discernible. The summary also includes a subgrade description, where the subgrade was sampled, and comments regarding the cores. Detailed core reports, including core location, photographs, and measurements for each core are also provided in Attachment 3.

The cores were advanced through the asphalt concrete to the underlying soil cement or aggregate base (indicated on core logs). All cores were extracted from the core barrel in the field and measured. Coreholes were patched with cold mix asphalt concrete patch after the cores had been obtained. All cores were returned to our laboratory. In the laboratory, the measurements

obtained in the field were verified, photographs were obtained, and a detailed visual description of each core was made. All cores are presently stored in our Little Rock facility.

Sample Borings

Subsurface conditions in the 5.3-mile project alignment of the existing roadway were explored by drilling 29 sample borings to approximately 5 ft beneath the existing pavement subgrade at each typical roadway core location. In addition, 56 sample borings were drilled to 10-ft depth at offset locations in the proposed roadway alignment. The approximate boring locations are shown in Attachment 1.

The pavement borings were advanced through the 4-in.-diameter core hole in the outer wheel path, to at least 5 ft beneath the existing pavement subgrade. Boring logs for the pavement borings and roadway borings, presenting descriptions of the subsurface strata encountered and results of field and laboratory tests, are provided in Attachments 4 and 5, respectively. The approximate boring station location, offset and surface elevation are also noted on the logs. A key to the terms and symbols used on the logs is also provided with each set of logs.

The pavement borings were drilled with a truck-mounted SIMCO 2400 rotary-drilling rig using dry auger drilling techniques. The roadway borings were typically drilled with an all-terrain buggy-mounted Mobile B-53 rotary-drilling rig. Samples were obtained using a 2-in.-diameter split-barrel sampler driven into the strata by blows of a 140-lb safety hammer with 30-in. drop in accordance with Standard Penetration Test (SPT) procedures. The number of blows required to drive the standard split-barrel sampler the final 12 in. of an 18-in. total drive, or a portion thereof, is defined as the Standard Penetration Number (N). Recorded N-values are shown on the boring logs in the "Blows Per Ft" column.

All samples were removed from sampling tools in the field, examined and visually classified. Samples were then placed in appropriate containers to prevent moisture loss and/or change in condition during transfer to our laboratory for further examination and testing. A summary of classification test results is provided in Attachment 6.

The borings were advanced using dry-auger drilling procedures to the extent possible to facilitate groundwater observations. Observations regarding groundwater are noted in the lower right portion of each log. All boreholes were backfilled after obtaining final groundwater readings. Where drilled through the existing roadway pavement, the pavement was patched with asphalt concrete cold patch.

Test Pits and Bulk Sampling

To obtain bulk samples utilized for evaluation of subgrade support properties in the approximately 5.3-mile project alignment, three (3) test pits were excavated at representative, accessible locations. The approximate test pit locations are shown on the plan drawings included in Attachment 1. The test pit logs are provided in Attachment 5.

LABORATORY TESTING

To evaluate pertinent physical and engineering characteristics of the subgrade soils, laboratory tests consisting of natural water content determinations and classification tests were performed on selected representative soil and rock samples. A total of 49 natural water content determinations were performed to develop a water content data for each boring. The results of these tests are plotted on the boring logs in Attachment 5 as solid circles, in accordance with the scale and symbols shown in the legend located in the upper-right corner.

To verify field classification and to evaluate soil plasticity, 15 liquid and plastic (Atterberg) limit determinations and 15 sieve analyses were performed on selected representative samples. The Atterberg limits are plotted on the logs as small pluses inter-connected with a dashed line using the water content scale. The percent of soil passing the No. 200 Sieve is noted in the "Minus No. 200" column on the log forms. Classification test results, as well as soil classification by the Unified Soil Classification System and AASHTO Classification System, are summarized in Attachment 6.

Additionally, classification tests were performed on the bulk samples obtained from the test pits to develop information on the range of subgrade classification and support properties. Classification test results from the bulk samples are provided on the summary in Attachment 4. Proctor (i.e., moisture-density relationship) tests were performed on three (3) representative samples obtained from the test pits in accordance with the AASHTO T-99 method.

Pavement subgrade support properties were evaluated by performing three (3) CBR tests (AASHTO T-193). For the CBR tests, the specimens were molded at approximately the optimum water content and 95 percent of the maximum dry density as determined by the appropriate laboratory Proctor test. The Proctor and CBR test results are summarized in Attachment 7. The graphical results of the Proctor and CBR tests are also presented in Attachment 7.

To evaluate potential subgrade improvement with stabilization additives, CBR tests were also performed on representative cement- and lime-treated soils. Samples obtained from Test Pit 2 were mixed with either 4 percent Portland cement or 4 percent quicklime (by dry soil weight) and

remolded at approximately 95 percent of the AASHTO T-99 maximum dry density. These test results are provided in Attachment 7 as well.

GENERAL SITE AND SUBSURFACE CONDITIONS

Site Conditions

The Hamburg, Ashley County, Arkansas project alignment extends from near the intersection of Hwy 425 and Hwy 82 W, log mile 17.54 (Sta 546+95) north approximately 5.3 miles to log mile 22.87 (Sta 828+40), just north of the Hwy 425/Lion Drive intersection (Sta 828+40). The project locale is primarily rural with agricultural and timber development along the alignment. The existing highway is a two-lane roadway with an asphalt concrete pavement section and a typical width on the order of 22 to 24 feet.

The existing roadway pavements exhibit moderate to severe rutting and some raveling. Longitudinal and transverse cracks are common. Alligator cracking is frequently apparent, particularly along the shoulders. There are some apparent full-depth pavement repair patches. Localized full-depth failures are evident along the shoulders in some areas. The pavement surface in general is weathered.

The terrain in the project alignment is undulating with surface grades ranging from about El 142 to El 180. The existing roadway is locally on an existing embankment. Drainage ditches are located on both sides of the highway. Surface drainage in the roadway is good, with some "birdbathing" of surface water in pavement ruts. Surface drainage along the roadsides is very poor to fair and standing water is not uncommon.

Subsurface Conditions

The roadway alignment is located in the Gulf Coastal Plain Geologic Province. This area is shown on the Geologic Map of Arkansas[1] to be in an area of Quaternary Terrace deposits. The Terrace deposits are flood-plain deposits comprising terraces of gravel, sand, silt and clay. The depth to bedrock (Paleozoic rocks) is reported to be in excess of 4000 ft in the Hamburg area.

The results of the borings indicate that much of the existing roadway is on existing embankment fill comprised of loose to dense clayey fine to coarse gravel to clayey fine to coarse sand with variable amounts of fine to coarse gravel and soft to stiff silty clay and clayey silt. The

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[1] Geologic Map of Arkansas, Arkansas Geologic Commission and U.S. Geologic Survey; 1993

clayey sand and clayey gravel typically provide good subgrade support. The silty clay and clayey silt provide poor to fair subgrade support.

The natural subgrade and near-surface soils are a variable mixture of soft to very stiff silty clay, clayey silt and clay. These soils exhibit variable low to high plasticity, low to moderate shear strength, and variable compressibility. Subgrade support is considered to vary from poor to fair.

Groundwater was encountered at 1- to 7.7-ft depth in March and April 2015. Groundwater levels will vary with seasonal precipitation, surface infiltration, and stream levels in nearby waterways. In addition, perched water could be present at shallow depths in the more pervious on-site fill or in the saturated soils of the existing drainage ditches.

ANALYSES and RECOMMENDATIONS

Pavement Design Subgrade Support Parameters

In light of the results of the borings and the laboratory test results, the subgrade soils in the project alignment are expected to predominately be silty/sandy clay (AASHTO A-6, A-4, and A-7-6), clayey silt (AASHTO A-4) and sandy clay/clayey sand and gravel fill (AASHTO A-2-4, A-2-6, A-1-b, A-4 and A-6). Locally available borrow for use as unclassified embankment fill is expected to be comprised of similar soils. We recommend that soils classifying as A-7-5 and A-7-6 with a plasticity index (PI) in excess of 18 be excluded from use as subgrade within 18 in. of the plan subgrade elevation. The top 18 in. of subgrade soils should have a maximum plasticity index (PI) of 18. The as-built pavement subgrade should be approved by the Engineer or Department based on site observations.

Areas of unsuitable subgrade should be improved by undercut and replacement. Alternatively, improvement by addition of lime, Portland cement or an approved alternative additive may be considered. Laboratory testing has been performed to confirm the suitability of lime or cement to improve weak and unstable subgrade areas and improve subgrade support. Laboratory CBR tests indicate an increase in CBR from 3 to 56 for silty clay (AASHTO A-6) treated with 4 percent quicklime (by dry weight). For silty clay (AASHTO A-6) treated with 4 percent Type I Portland cement (by dry weight) the laboratory CBR value increased from 3 to 91. We recommend a minimum treatment depth of 8 in. where lime- or cement-modified subgrade is utilized. The addition of lime, cement, or other alternative modification additives must be approved by the Engineer or Department.

Based on the results of the borings and laboratory tests, the following parameters are recommended for use in pavement design.

- Resilient Modulus (M_R): 3000 lbs per sq in.
- R value: 4.6

The parameters above have been developed for a prepared subgrade of the on-site soils which have not been modified by additives.

Site Grading and Subgrade Preparation

Site grading in the alignment of the existing roadway is expected to be relatively minor with embankment fill utilized in the widened roadway sections. Site preparation in the widened section of the roadway alignment should include any necessary clearing and grubbing of trees and underbrush and stripping of the organic-containing surface soils in work areas. Part of the widened section is in roadside drainage ditch areas.

Where fill depths in excess of 3 ft are planned, stumps may be left after close cutting trees to grade, as per AHTD criteria. Otherwise, tree stumps must be completely excavated and properly backfilled. The depth of stripping will be variable, with deeper stripping depths in the low-lying, poorly drained, and/or wooded areas. In general, the stripping depth is estimated to be about 6 to 12 in. in cleared areas, but may be 18 to 24 in. or more in localized wooded areas. All wet and/or organic soils in the existing drainage ditches must be completely mucked out. The zone of organic-containing surface soils should be completely stripped in the embankment footprints.

Where the existing shoulder and roadway pavements are within 3 ft of the plan subgrade elevation, the existing pavement surface should be scarified to a minimum depth of 6 inches. The scarified material should be recompacted to a stable condition. Where pavements are to be demolished, consideration may be given to utilizing the processed asphalt concrete, aggregate base and/or soil cement for embankment fill. In this case, the demolished materials should be thoroughly blended and processed to a reasonably well-graded mixture with a maximum particle size of 2 inches.

Following demolition of existing pavements, stripping, and prior to fill placement or otherwise continuing with subgrade preparation, the extent of weak and unsuitable soils should be determined. Proof-rolling is recommended to evaluate subgrade stability. Proof-rolling should be performed with a loaded tandem-wheel dump truck or similar equipment. Unstable soils exhibiting a tendency to rut and/or pump should be undercut and replaced with suitable fill. Care should be

taken that undercuts, stump holes, and other excavations or low areas resulting from subgrade preparation are properly backfilled with compacted fill.

Based on the results of the project borings and layouts of the project alignment, undercuts to stabilize subgrades are expected. Consequently, some undercut will likely be required in the widened roadway alignment. Estimated undercut depths are summarized in the table below.

Estimated Undercut Depths for Widened Roadway Section

Approximate Station	Directional lane	Estimated undercut depth, ft	Comments
546+95 to 720+00	Right	2	Localized soft or wet areas will require undercut up to 6-ft depth. See Borings 18, 22, 23, 27, and 29.
720+00 to 810+00	Right	2-4	Undercut depth varies from 2 to 4 ft through this section and will depend on seasonal site conditions.
810+00 to 828+40	Right	Minimal	Some minor undercut may be required, depending on seasonal site conditions.
546+95 to 645+00 675+00 to 765+00 805+00 to 828+40	Left	2	Localized soft or wet areas will require undercut up to 5-ft depth. See Boring 36.
645+00 to 675+00	Left	4	---
765+00 to 805+00	Left	6	---

It should be noted that estimated undercut depths are below existing grade and are based on the results of the borings. Required as-built depth of undercut will vary with seasonal site conditions and final grading plans. As-built undercut requirements must be field verified by the Engineer or Department.

Areas of unsuitable subgrade should be improved by undercut and replacement. Alternatively, improvement by addition of Portland cement or lime may be considered. Laboratory testing has confirmed the suitability of cement or lime addition to stabilize weak subgrade areas and improve subgrade support. Laboratory tests evaluated soil mixtures with a cement or lime addition quantity of 4 percent by soil dry weight. For estimation purposes, this would equate to an application rate of approximately 3.5 lbs per sq yd per in. of treatment depth. The specific appropriate cement or lime application rate must be confirmed by appropriate laboratory testing

based on specific subgrade conditions. In light of the laboratory test results it is anticipated that an application rate of 4 percent by soil dry weight could yield significant improvement in subgrade support. We recommend a minimum treatment depth of 8 in. where additive-modified subgrade is utilized.

CONSTRUCTION CONSIDERATIONS

Positive surface drainage should be established at the start of the work, be maintained during construction and following completion of the project to prevent surface water ponding and subsequent saturation of subgrade soils. Density and water content of all earthwork should be maintained until all work is completed. Subgrade soils that become saturated by ponding water or runoff should be excavated to undisturbed soils. The embankment subgrade should be evaluated by the Engineer during subgrade preparation.

Groundwater was encountered at 1- to 7.7-ft depth in the borings drilled in March and April 2015. Shallow groundwater is not generally expected to impact the work. However, localized perched water, seeps or springs may be present or could be encountered during site grading. Where shallow water is encountered, seepage should be directed to positive discharge at daylight or into storm drainage lines via French drains or blanket drains.

CLOSING

The Engineer, the Department, or a designated representative thereof should monitor site grading, subgrade preparation, and pavement and overlay construction. Subsurface conditions significantly at variance with those encountered in the borings or test pits should be brought to the attention of the Geotechnical Engineer. The conclusions and recommendations of this report should then be reviewed in light of the new information.

The following attachments are included and complete this report.

Attachment 1	Site Vicinity Map and Plan of Borings, Test Pits and Pavement Cores
Attachment 2	Core Sampling Layout and Summary of Subsurface Exploration
Attachment 3	Core Reports
Attachment 4	Pavement Boring Logs
Attachment 5	Roadway Boring and Test Pit Logs
Attachment 6	Classification Test Results
Attachment 7	Subgrade Support Test Results

* * * *

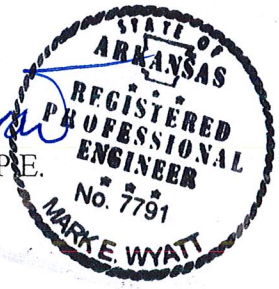
We appreciate the opportunity to be of service to you during this phase of the project. Should you have any questions regarding this report, or if we may be of additional assistance, please call on us.

Sincerely,

GRUBBS, HOSKYN,
BARTON & WYATT, INC.

Jay R. McKiever, E.I.
Staff Engineer

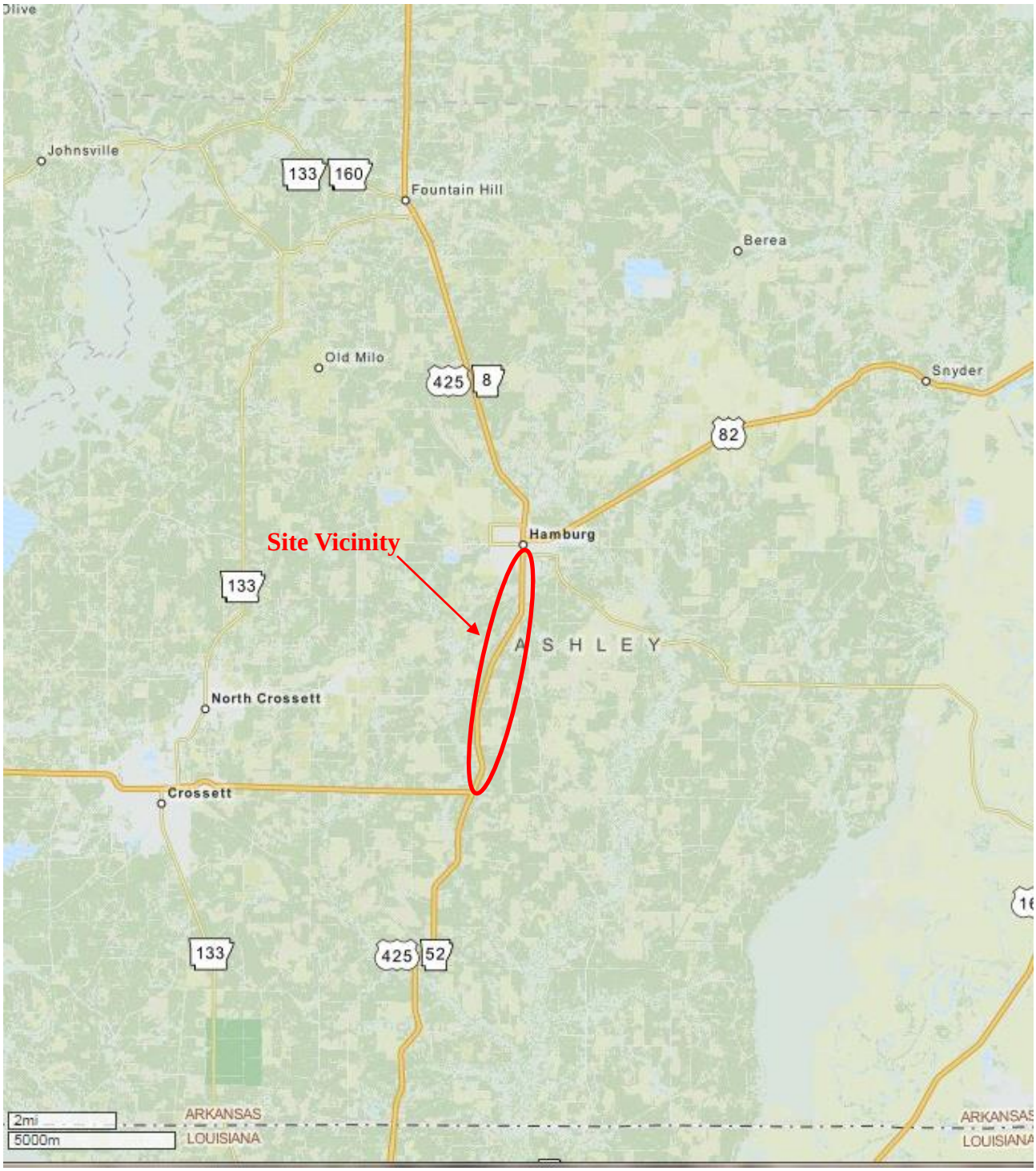
Mark E. Wyatt, P.E.
President



JRM/MEW:jw

Copies Submitted: Crafton Tull & Associates, Inc.
Attn: Mr. Mike Burns, P.E. (3+electronic)

ATTACHMENT 1



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SITE VICINITY MAP
CA0202 – Hwy 425 – Hamburg (Widening)(S)
Ashley County, Arkansas

Job No. 14-197

Plate 1

Cratton, Tull & Associates Inc.

REVISED	FILED	REVISED	FILED	DIST.NO.	STATE	FEDERAL PROJECT
				6	ARK.	
				JOB NO.	CA0202	
				PLAN & PROFILE - 2		

Boring
Typical Roadway Core
Location Specific Core
Test Pit

STA. 546+95
BEGIN JOB CA0202
(LOG MILE XX.XX)

540 545 550

N 23°15'50.0" E

P.I. 550+02.27

℄ CONST.

EX. ROW

B-30

B-29 C-15 CS-11

50 ft 0 50 ft 100 ft

PRELIM
SUBJ
TO
REVI
HW

165 160 155 150 145 140

PVI 546+97.24
ELEV. 141.93

PVI 547+15.89
ELEV. 141.87

20%

89.00
142.01

PVI 549+39.00
ELEV. 142.30

300' V. C.

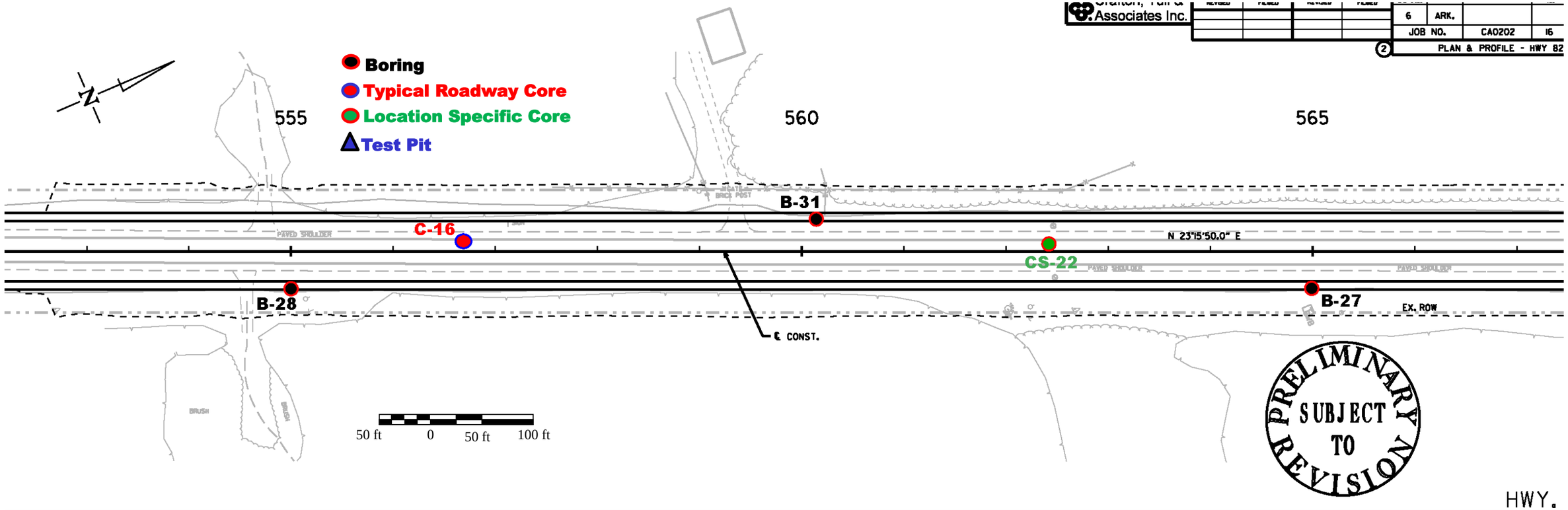
89.00
12.96

Grubbs, Hoskyn, Barton & Wyatt, INC. CONSULTING ENGINEERS	**PLAN OF BORINGS, TEST PITS AND PAVEMENT CORES** **Job No. CA0202 – Hwy 425 – Hamburg (Widening)(S)** **Ashley County, Arkansas**	**Scale: As Shown**	**Job No. 14-197**	**PLATE 2**

Grubbs, Hoskyn & Associates Inc.

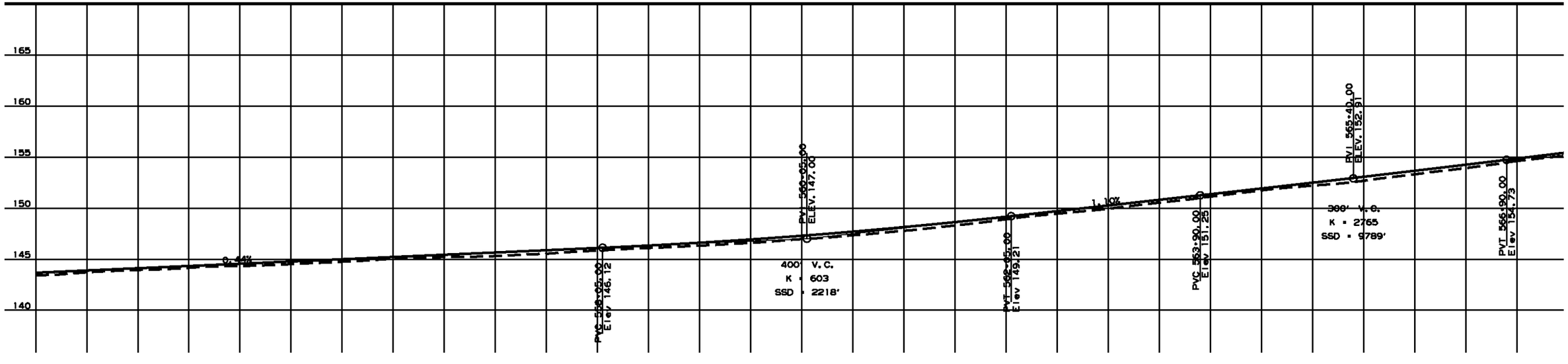
6	ARK.		
JOB NO.	CA0202		16
2	PLAN & PROFILE - HWY 82		

Boring
Typical Roadway Core
Location Specific Core
Test Pit

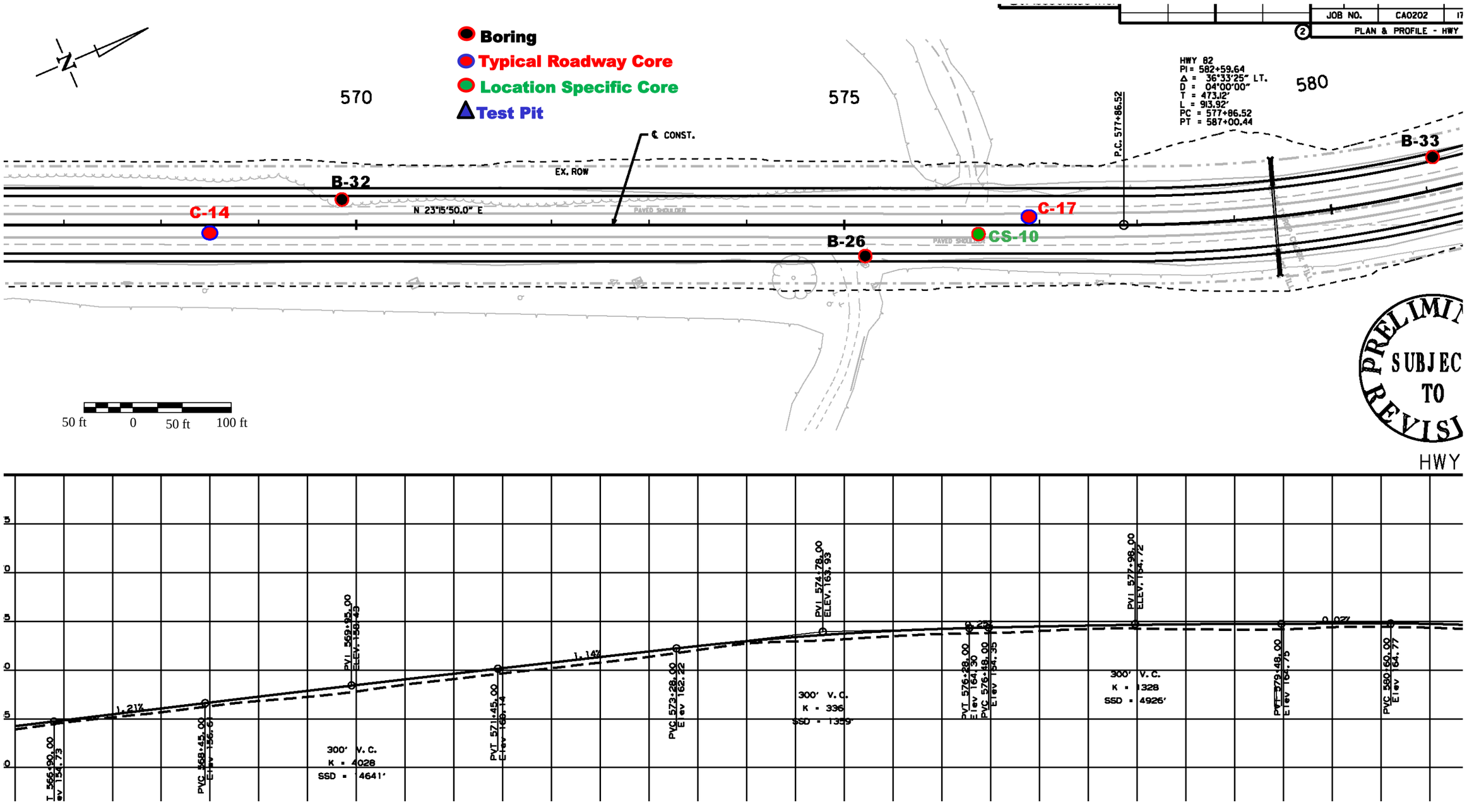


PRELIMINARY SUBJECT TO REVISION

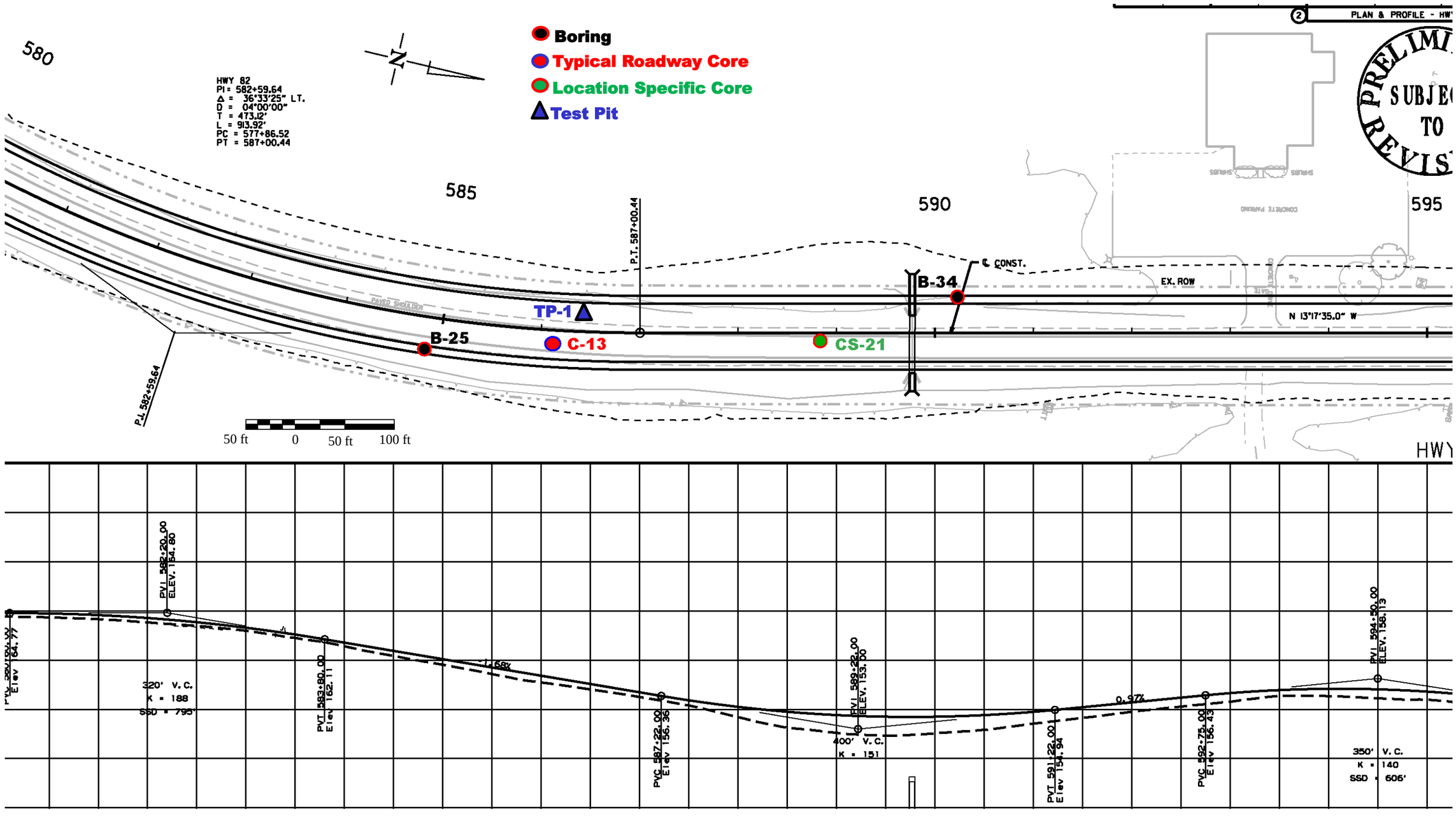
HWY.



Grubbs, Hoskyn, Barton & Wyatt, INC. CONSULTING ENGINEERS	**PLAN OF BORINGS, TEST PITS AND PAVEMENT CORES** **Job No. CA0202 – Hwy 425 – Hamburg (Widening)(S)** **Ashley County, Arkansas**	**Scale: As Shown**	**Job No. 14-197**	**PLATE 3**



Grubbs, Hoskyn, Barton & Wyatt, INC. CONSULTING ENGINEERS	**PLAN OF BORINGS, TEST PITS AND PAVEMENT CORES** **Job No. CA0202 – Hwy 425 – Hamburg (Widening)(S)** **Ashley County, Arkansas**	**Scale: As Shown**	**Job No. 14-197**	**PLATE 4**



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				6	ARK.	
				JOB NO.		
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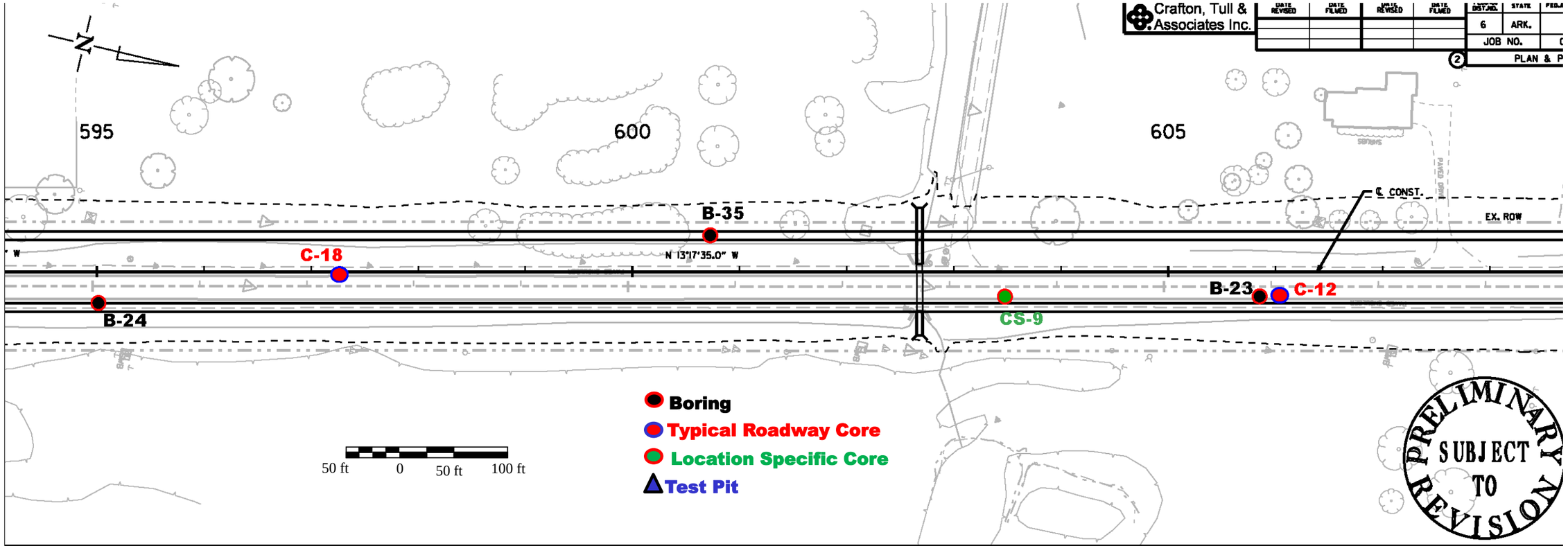

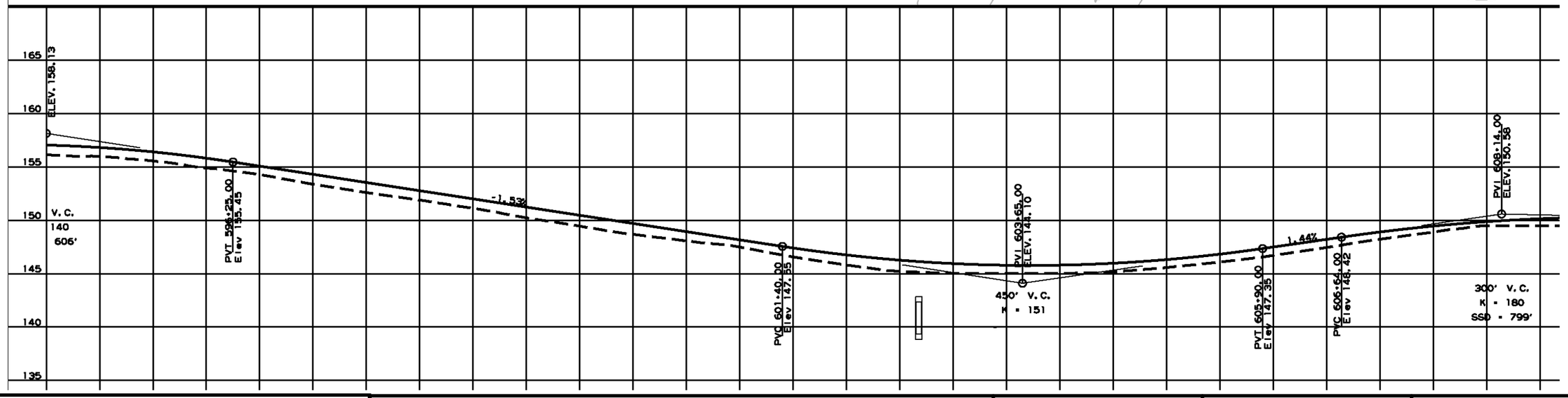

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PLAN OF BORINGS, TEST PITS AND PAVEMENT CORES
Job No. CA0202 – Hwy 425 – Hamburg (Widening)(S)
Ashley County, Arkansas

Scale: As Shown

Job No. 14-197

PLATE 6

Crafton, Tull & Associates Inc.

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	HIGHWAY DIST.NO.	STATE	FED.AID PROJ.NO.
				6	ARK.	
				JOB NO.	CA0202	
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Boring
Typical Roadway Core
Location Specific Core
Test Pit

HWY 82
PI = 616+97.15
Δ = 12°04'55" RT.
D = 01°45'00"
T = 346.48'
L = 690.40'
PC = 613+50.67
PT = 620+41.06

PRELIM
SUBJE
TO
REVIS

610 615 620

EX. ROW
N 13°17'35.0" W
B-36
P.C. 613+50.67
P.I. 616+97.15
B-22
CS-20
C-19
℄ CONST.
P.T. 620+41.06
B-37
PAVED SHOULDER
PAVED SHOULDER
N 0°12'40.0" W

50 ft 0 50 ft 100 ft

HW

175
170
165
160
155
150

54.00
.25
18.00
49.91
-0.22%
PVI 612+88.00
ELEV. 149.54
340' V.C.
K = 151
614+58.00
153.00
2.03%
PVC 615+87.00
Elev 155.62
PVI 618+27.00
ELEV. 160.50
480' V.C.
K = 141
SSD = 557'
PVT 620+67.00
Elev 157.20
-1.37%

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CONSULTING ENGINEERS

PLAN OF BORINGS, TEST PITS AND PAVEMENT CORES
Job No. CA0202 – Hwy 425 – Hamburg (Widening)(S)
Ashley County, Arkansas

Scale: As Shown

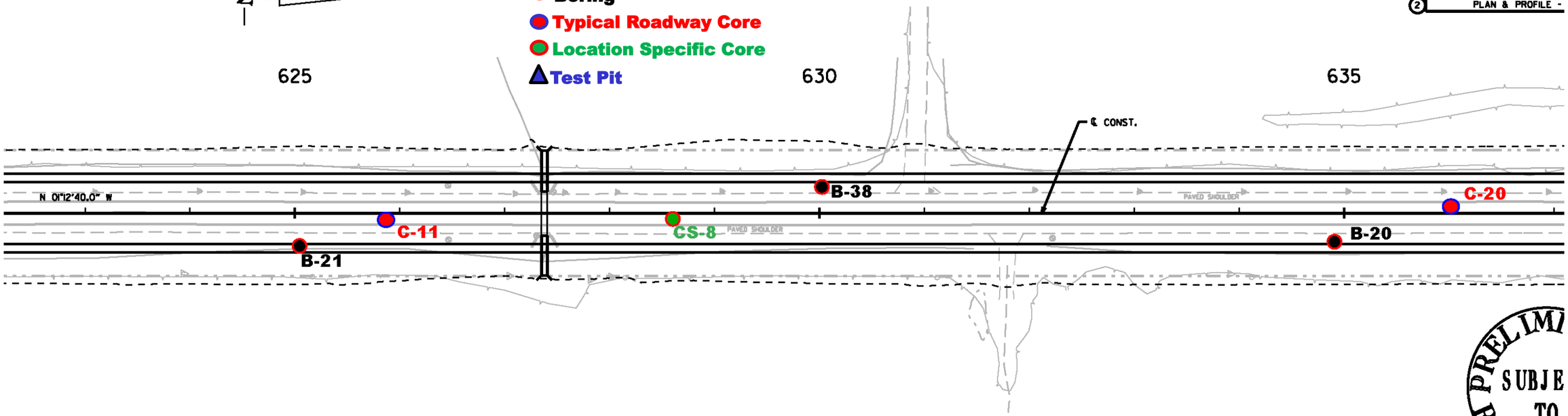
Job No. 14-197

PLATE 7

Associates Inc.

6	ARK.		
JOB NO.	CA0202		
2	PLAN & PROFILE -		

Boring
Typical Roadway Core
Location Specific Core
Test Pit



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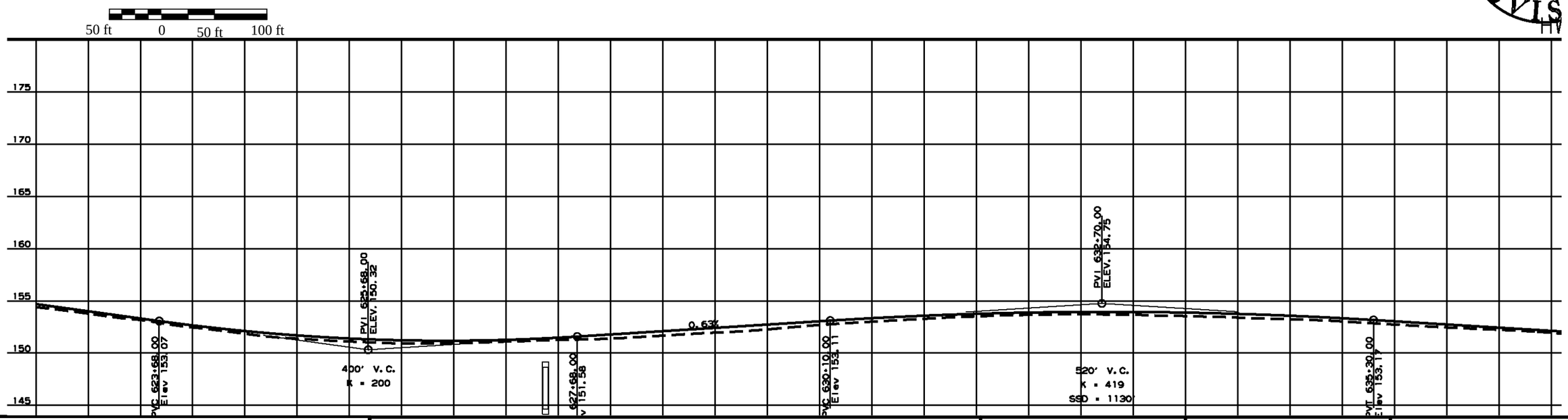

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CONSULTING ENGINEERS

PLAN OF BORINGS, TEST PITS AND PAVEMENT CORES
Job No. CA0202 – Hwy 425 – Hamburg (Widening)(S)
Ashley County, Arkansas

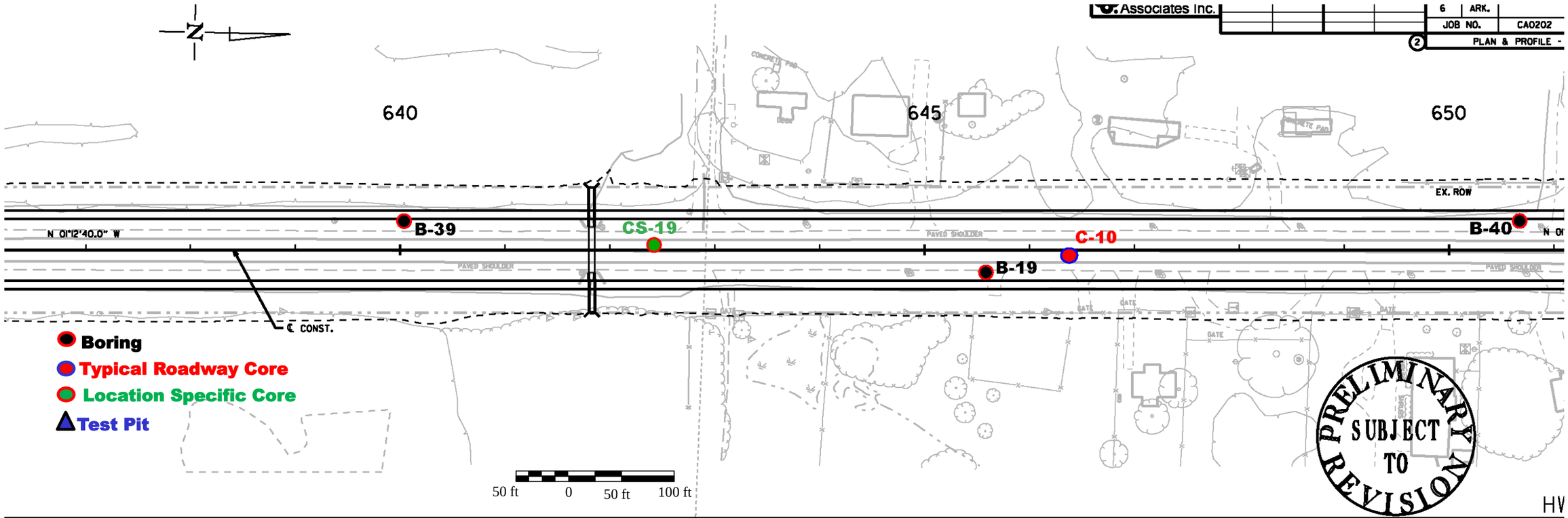
Scale: As Shown

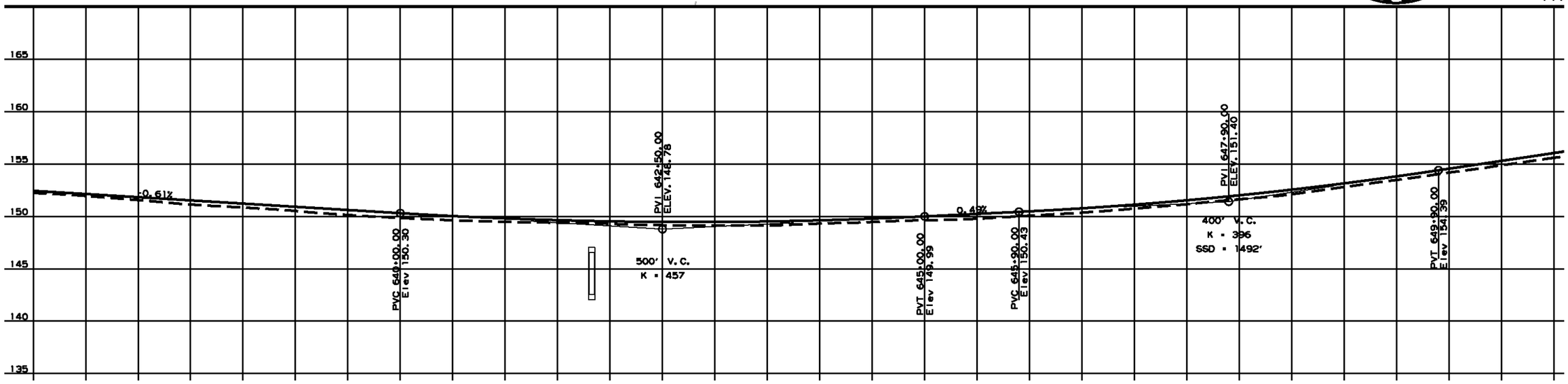
Job No. 14-197

PLATE 8

Associates Inc.

6 | ARK.
JOB NO. CA0202
2 PLAN & PROFILE -





Grubbs, Hoskyn, Barton & Wyatt, INC.
CONSULTING ENGINEERS

PLAN OF BORINGS, TEST PITS AND PAVEMENT CORES
Job No. CA0202 – Hwy 425 – Hamburg (Widening)(S)
Ashley County, Arkansas

Scale: As Shown

Job No. 14-197

PLATE 9

Crafton, Tull & Associates Inc.

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	DIST. NO.	STATE	FED.
				6	ARK.	
				JOB NO.		
				2	PLAN &	

Boring
Typical Roadway Core
Location Specific Core
Test Pit

655
660
P.C. 651+76.27
P.I. 661+10.27
N 01°12'40.0" W
PAVED SHOULDER
PAVED PARKING
PARKING
BRUSH
TREE FARM
EX. ROW
℄ CONST.
B-18
CS-7
C-21
B-41

HWY 82
PI = 661+10.27
Δ = 18°31'02" RT.
D = 01°00'00"
T = 934.01'
L = 1851.72'
PC = 651+76.27
PT = 670+27.99

50 ft 0 50 ft 100 ft

185
180
175
170
165
160
155

PVI 656+00.00 ELEV. 163.51
PVI 660+39.00 ELEV. 154.75
PVT 654+50.00 Elev 161.27
PVT 657+50.00 Elev 163.93
PVC 658+89.00 Elev 164.33
PVT 661+89.00 Elev 166.14
1.50%
0.28%
0.93%
300' V.C. K = 247
300' V.C. K = 464 SSD = 1730'

Grubbs, Hoskyn, Barton & Wyatt, INC. CONSULTING ENGINEERS

PLAN OF BORINGS, TEST PITS AND PAVEMENT CORES
Job No. CA0202 – Hwy 425 – Hamburg (Widening)(S)
Ashley County, Arkansas

Scale: As Shown

Job No. 14-197

PLATE 10

Associates Inc.

		6	ARK.
		JOB NO.	CA0202
		2	PLAN & PROFILE

PRELIMINARY SUBJECT TO REVISION

665 670 675

P.T. 670+27.99

275 YEAR MORRIS PINE

EX. ROW

℄ CONST.

N 17°18'22.0" E

CS-18 B-42 C-22 C-9 B-17 B-16

PAVED SHOULDER

TREE FARM

HWY 82
PI = 661+10.27
Δ = 18°31'02" RT.
D = 01°00'00"
T = 934.01'
L = 1851.72'
PC = 651+76.27
PT = 670+27.99

- Boring
- Typical Roadway Core
- Location Specific Core
- Test Pit

50 ft 0 50 ft 100 ft

H

185 180 175 170 165 160

PVC 665+29.00 Elev 169.31

PVI 666+79.00 ELEV. 170.70

300' V.C. K = 282 SSD = 1164'

PVT 668+29.00 Elev 170.50

PVC 669+95.00 Elev 170.40

-0.13%

PVI 671+25.00 ELEV. 170.10

440' V.C.

PVC 675+25.00 Elev 153.38

Grubbs, Hoskyn, Barton & Wyatt, INC.
CONSULTING ENGINEERS

PLAN OF BORINGS, TEST PITS AND PAVEMENT CORES
Job No. CA0202 – Hwy 425 – Hamburg (Widening)(S)
Ashley County, Arkansas

Scale: As Shown

Job No. 14-197

PLATE 11

JOB NO. CA0202

2 PLAN & PROFILE

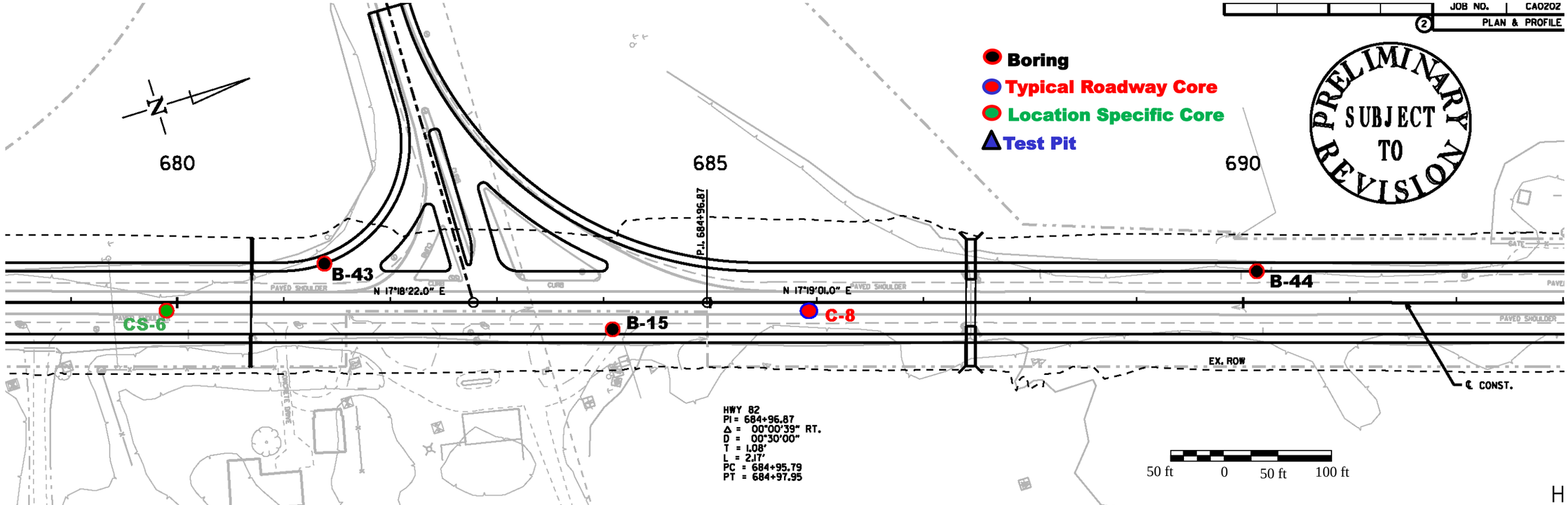
PRELIMINARY SUBJECT TO REVISION

Boring

Typical Roadway Core

Location Specific Core

Test Pit



Grubbs, Hoskyn, Barton & Wyatt, INC.
CONSULTING ENGINEERS

PLAN OF BORINGS, TEST PITS AND PAVEMENT CORES
Job No. CA0202 – Hwy 425 – Hamburg (Widening)(S)
Ashley County, Arkansas

Scale: As Shown

Job No. 14-197

PLATE 12

JOB NO. CA0202 26
2 PLAN & PROFILE - HWY

695 700 705

CONCRETE PAD
CONCRETE PAD
GATE GATE
PAVED SHOULDER
PAVED SHOULDER
PAVED SHOULDER
PAVED SHOULDER
N 17°19'01.0" E
℄ CONST.
EX. ROW

CS-17
B-14
C-23
TP-2
B-45
B-13
C-7

Boring
Typical Roadway Core
Location Specific Core
Test Pit

PRELIMI
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50 ft 0 50 ft 100 ft

HWY

PVI 694+00.00
ELEV. 160.02
420' V.C.
K = 314
SSD = 1018'
PVT 696+10.00
Elev 158.64
-0.66%
PVC 696+22.00
Elev 158.08
PVI 698+49.00
ELEV. 157.07
300' V.C.
K = 417
PVT 699+99.00
Elev 157.17
-0.06%
PVC 704+13.00
Elev 157.43
PVI 705+63.00
ELEV. 157.52
300' V.C.
K = 1269
SSD = 4714'
PVT 707+13.00
Elev 157.26

Grubbs, Hoskyn, Barton & Wyatt, INC.
CONSULTING ENGINEERS

PLAN OF BORINGS, TEST PITS AND PAVEMENT CORES
Job No. CA0202 – Hwy 425 – Hamburg (Widening)(S)
Ashley County, Arkansas

Scale: As Shown

Job No. 14-197

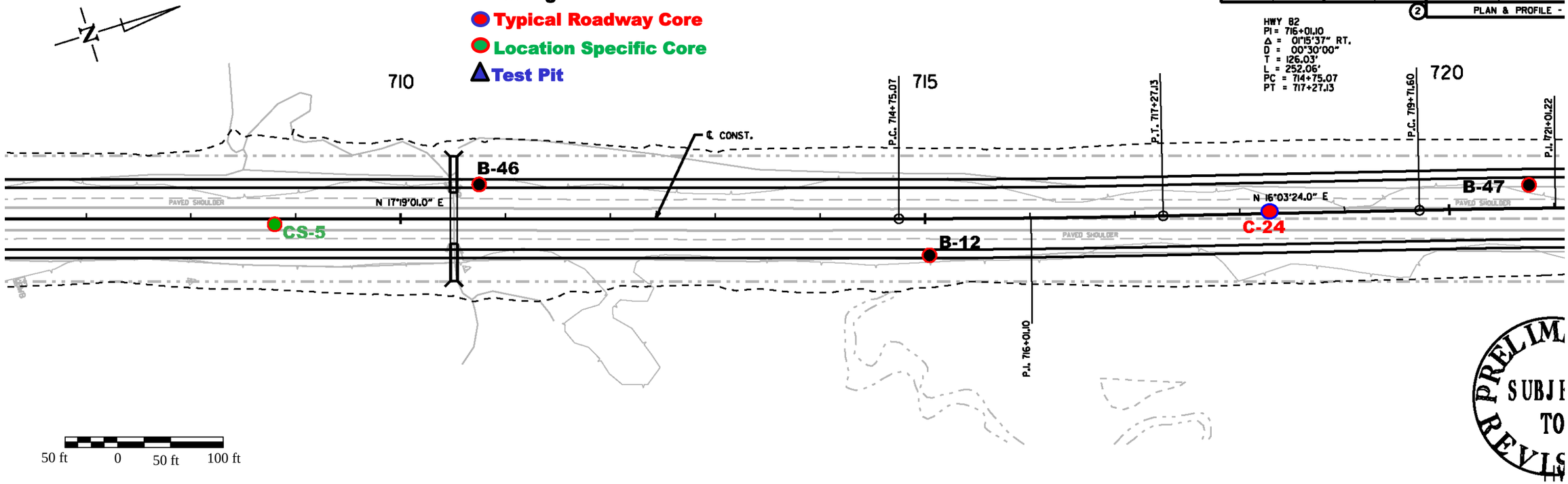
PLATE 13

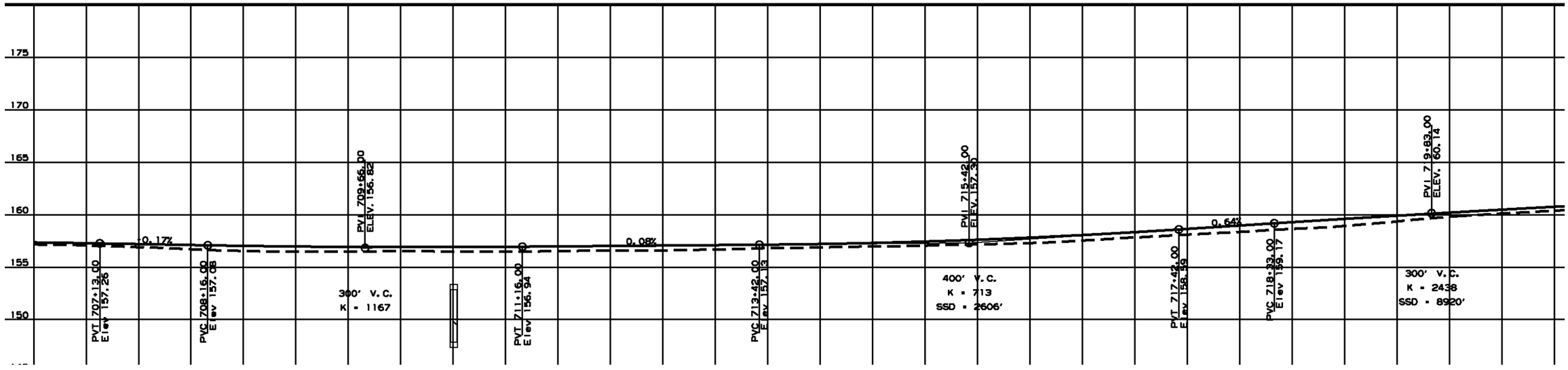
Associates Inc.

6 | ARK.
JOB NO. | CA0202
2 | PLAN & PROFILE -

HWY 82
PI = 716+01.10
Δ = 01°15'37" RT.
D = 00°30'00"
T = 126.03'
L = 252.06'
PC = 714+75.07
PT = 717+27.13

Boring
Typical Roadway Core
Location Specific Core
Test Pit





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Grubbs, Hoskyn, Barton & Wyatt, INC.
CONSULTING ENGINEERS

PLAN OF BORINGS, TEST PITS AND PAVEMENT CORES
Job No. CA0202 – Hwy 425 – Hamburg (Widening)(S)
Ashley County, Arkansas

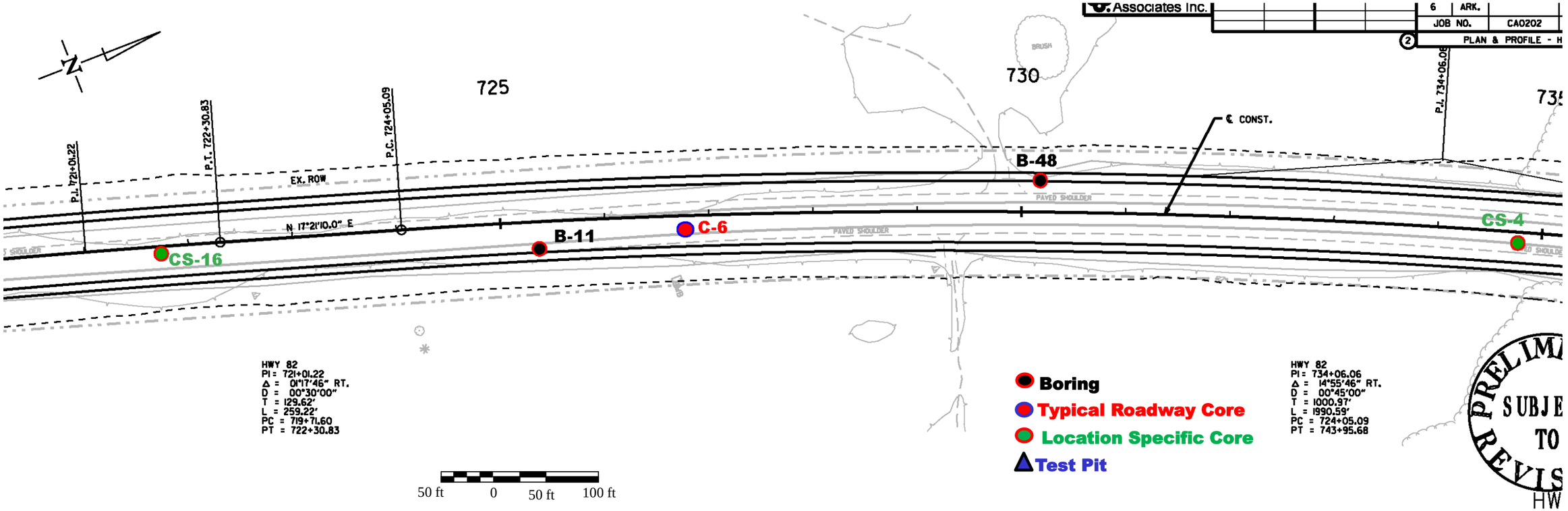
Scale: As Shown

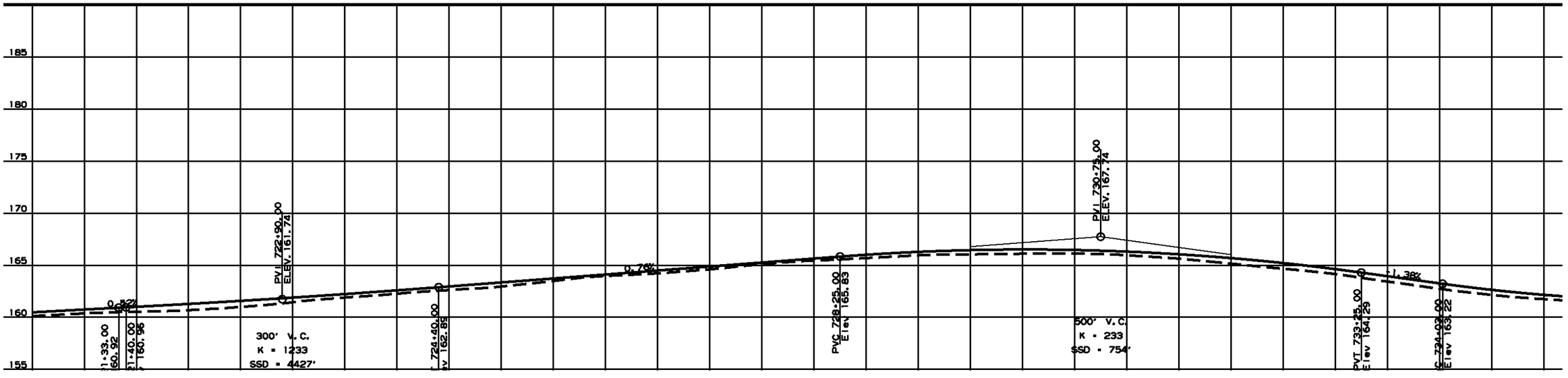
Job No. 14-197

PLATE 14

Associates Inc.

6 | ARK.
JOB NO. | CA0202
2 | PLAN & PROFILE - H

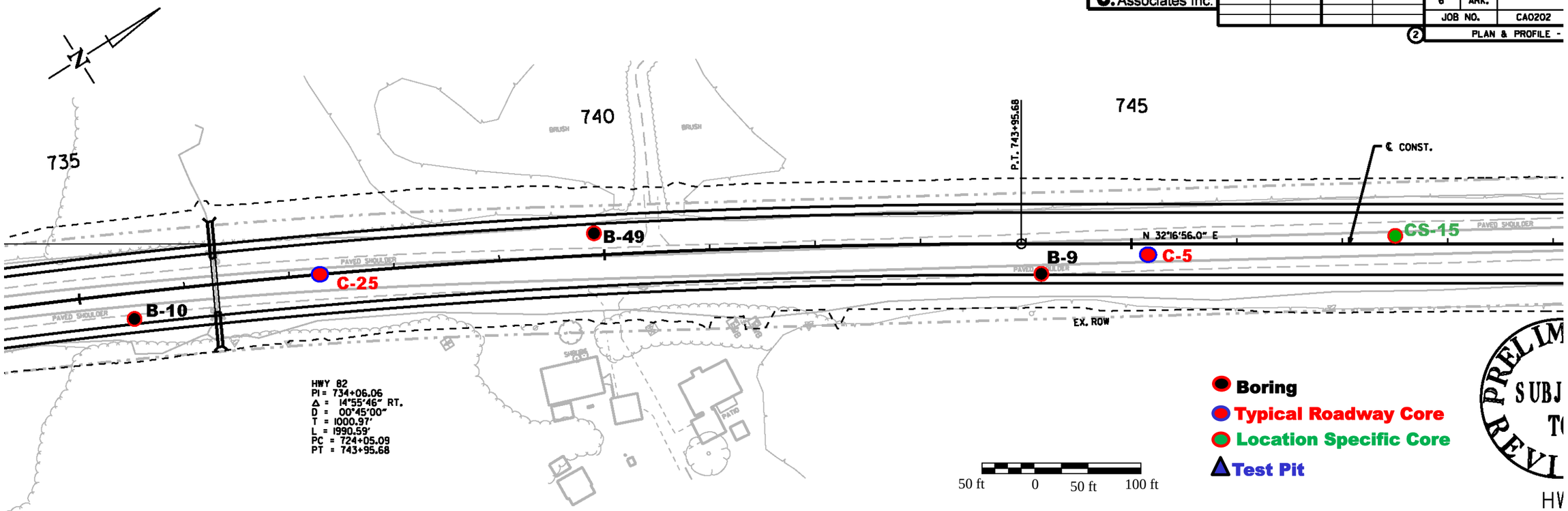




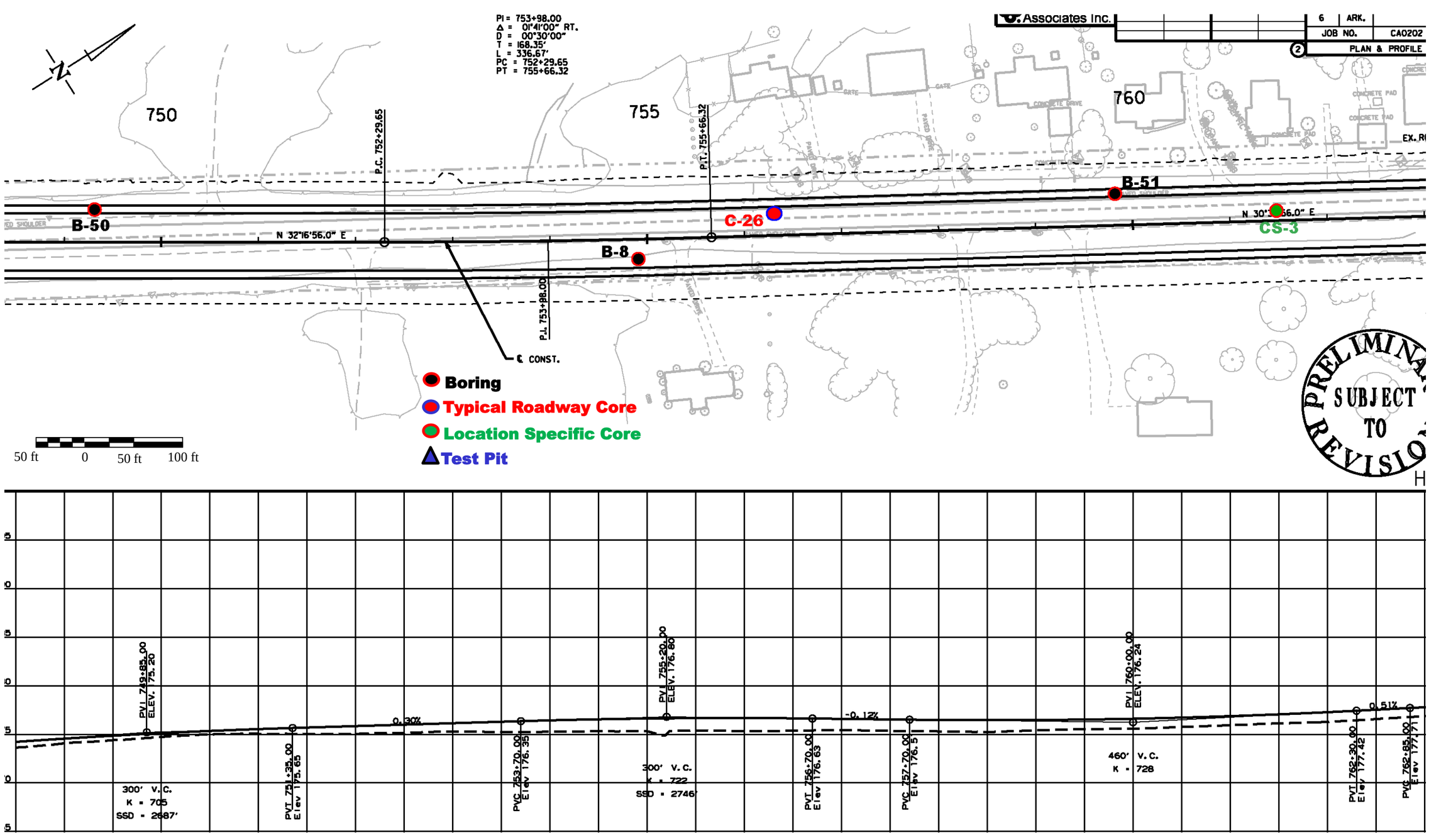
Grubbs, Hoskyn, Barton & Wyatt, INC. CONSULTING ENGINEERS	**PLAN OF BORINGS, TEST PITS AND PAVEMENT CORES** **Job No. CA0202 – Hwy 425 – Hamburg (Widening)(S)** **Ashley County, Arkansas**	**Scale: As Shown**	**Job No. 14-197**	**PLATE 15**

Associates Inc.

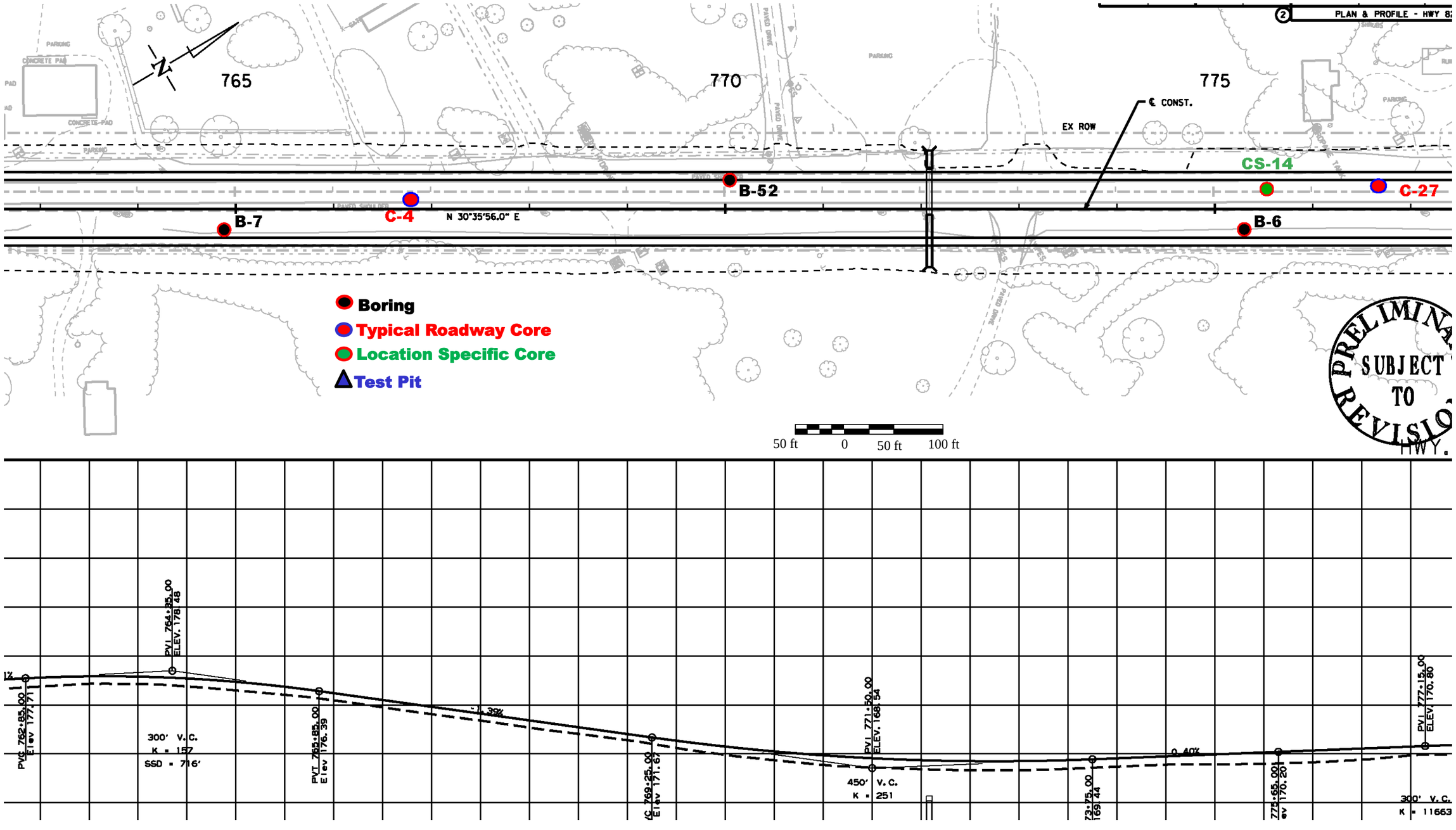
		6	ARK.
		JOB NO.	CA0202
		2	PLAN & PROFILE -



Grubbs, Hoskyn, Barton & Wyatt, INC. CONSULTING ENGINEERS	**PLAN OF BORINGS, TEST PITS AND PAVEMENT CORES** **Job No. CA0202 – Hwy 425 – Hamburg (Widening)(S)** **Ashley County, Arkansas**	**Scale: As Shown**	**Job No. 14-197**	**PLATE 16**



Grubbs, Hoskyn, Barton & Wyatt, INC. CONSULTING ENGINEERS	**PLAN OF BORINGS, TEST PITS AND PAVEMENT CORES** **Job No. CA0202 – Hwy 425 – Hamburg (Widening)(S)** **Ashley County, Arkansas**	**Scale: As Shown**	**Job No. 14-197**	**PLATE 17**



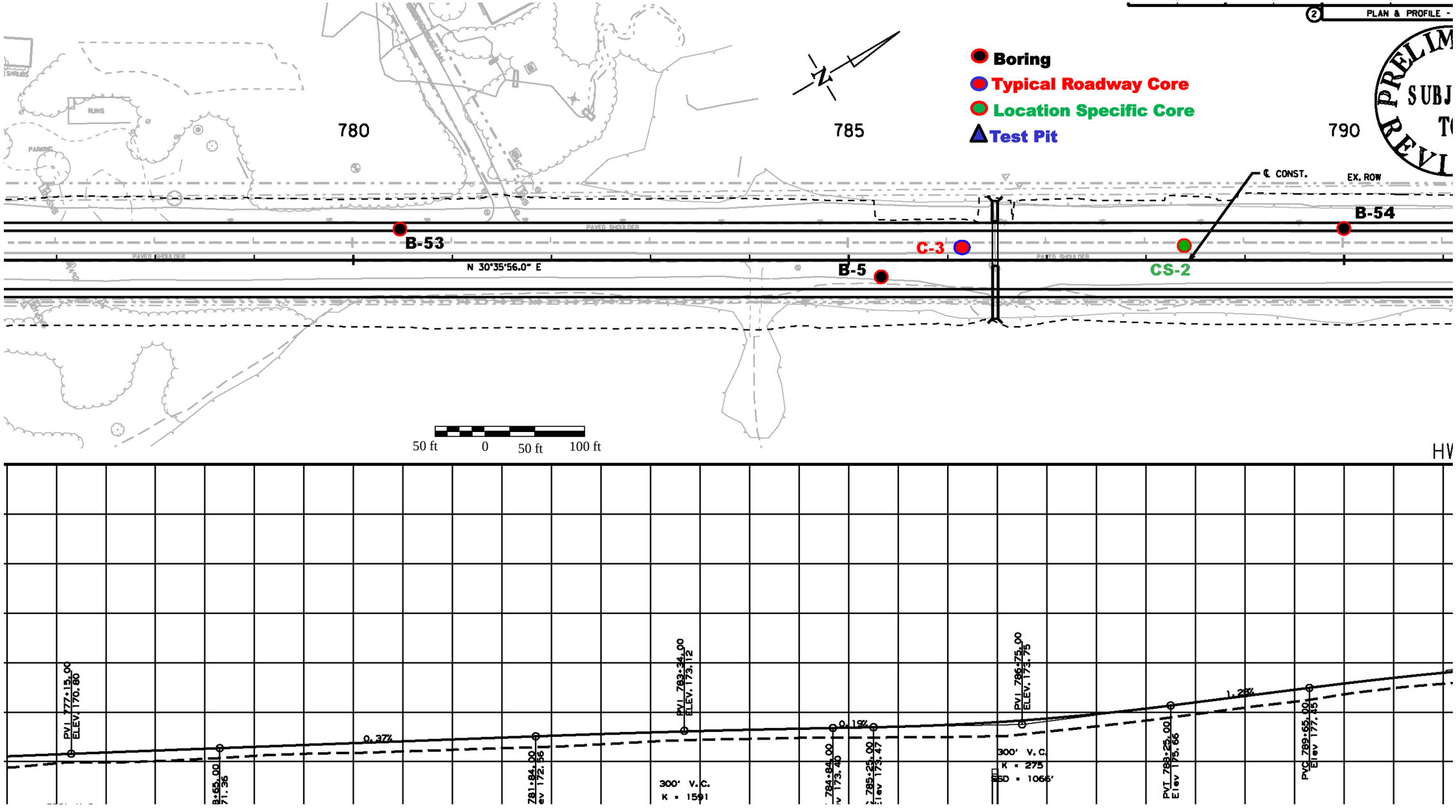
Grubbs, Hoskyn, Barton & Wyatt, INC.
CONSULTING ENGINEERS

PLAN OF BORINGS, TEST PITS AND PAVEMENT CORES
Job No. CA0202 – Hwy 425 – Hamburg (Widening)(S)
Ashley County, Arkansas

Scale: As Shown

Job No. 14-197

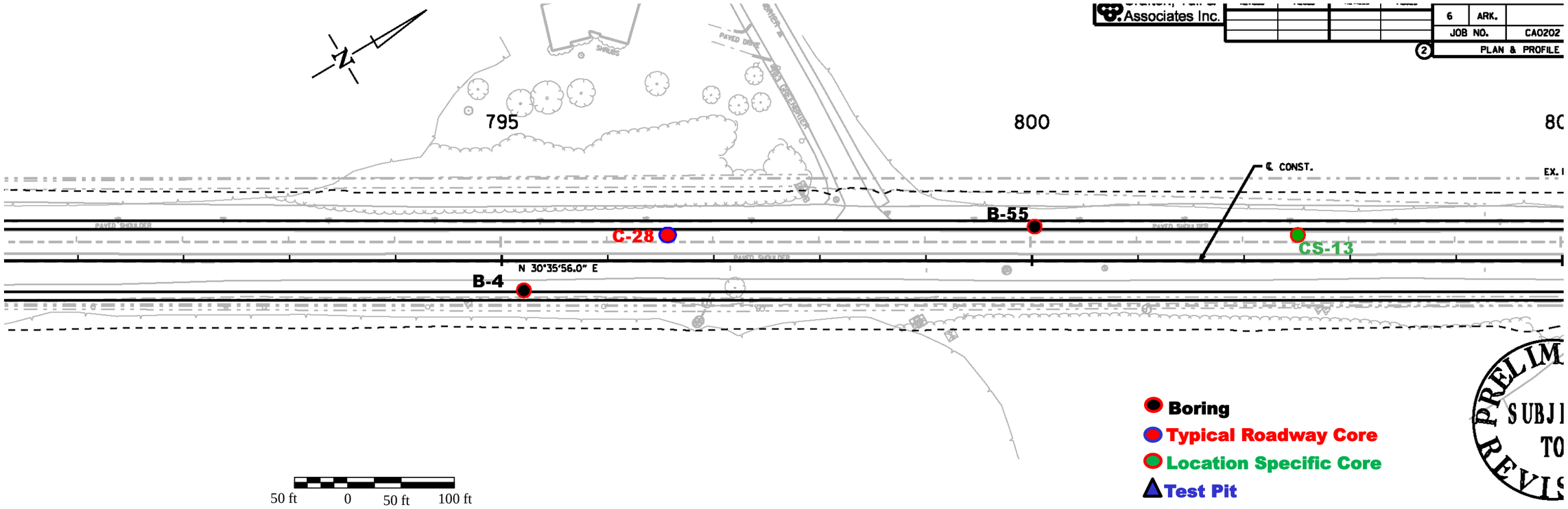
PLATE 18

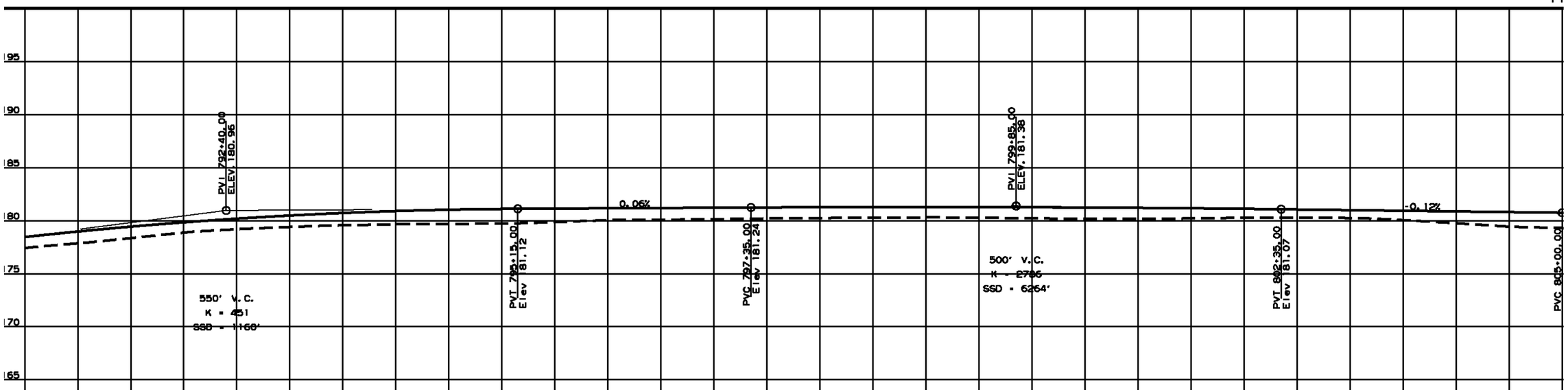


Grubbs, Hoskyn, Barton & Wyatt, INC. CONSULTING ENGINEERS	**PLAN OF BORINGS, TEST PITS AND PAVEMENT CORES** **Job No. CA0202 – Hwy 425 – Hamburg (Widening)(S)** **Ashley County, Arkansas**	**Scale: As Shown**	**Job No. 14-197**	**PLATE 19**

Associates Inc.

6	ARK.	
JOB NO.		CA0202
2	PLAN & PROFILE	





Grubbs, Hoskyn, Barton & Wyatt, INC.
CONSULTING ENGINEERS

PLAN OF BORINGS, TEST PITS AND PAVEMENT CORES
Job No. CA0202 – Hwy 425 – Hamburg (Widening)(S)
Ashley County, Arkansas

Scale: As Shown

Job No. 14-197

PLATE 20

JOB NO. | CA0202

2 PLAN & PROFILE

Boring

Typical Roadway Core

Location Specific Core

Test Pit

805 810 815

HWY 82
PI = 812+54.14
Δ = 30°01'17" LT.
D = 02°48'00"
T = 558.68'
L = 1091.69'
PC = 806+95.45
PT = 817+87.14

P.C. 806+95.45

P.T. 817+87.14

N 30°35'56.0" E

N 00°34'39.0" E

C-2

B-3

B-56

CS-1

B-2

C-29

TP-1

CONCRETE DRIVE

PAVED SHOULDER

PAVED SHOULDER

PAVED SHOULDER

50 ft 0 50 ft 100 ft

54.14

PVC 805+00.00
Elev 180.72

PVI 807+00.00
ELEV. 180.50

400' V. C.
K = 365
SSD = 1185'

PVT 809+00.00
Elev 178.06

PVC 810+25.00
Elev 178.54

-1.22%

PVI 812+25.00
ELEV. 174.10

400' V. C.
K = 304

PVT 814+25.00
Elev 174.29

0.96%

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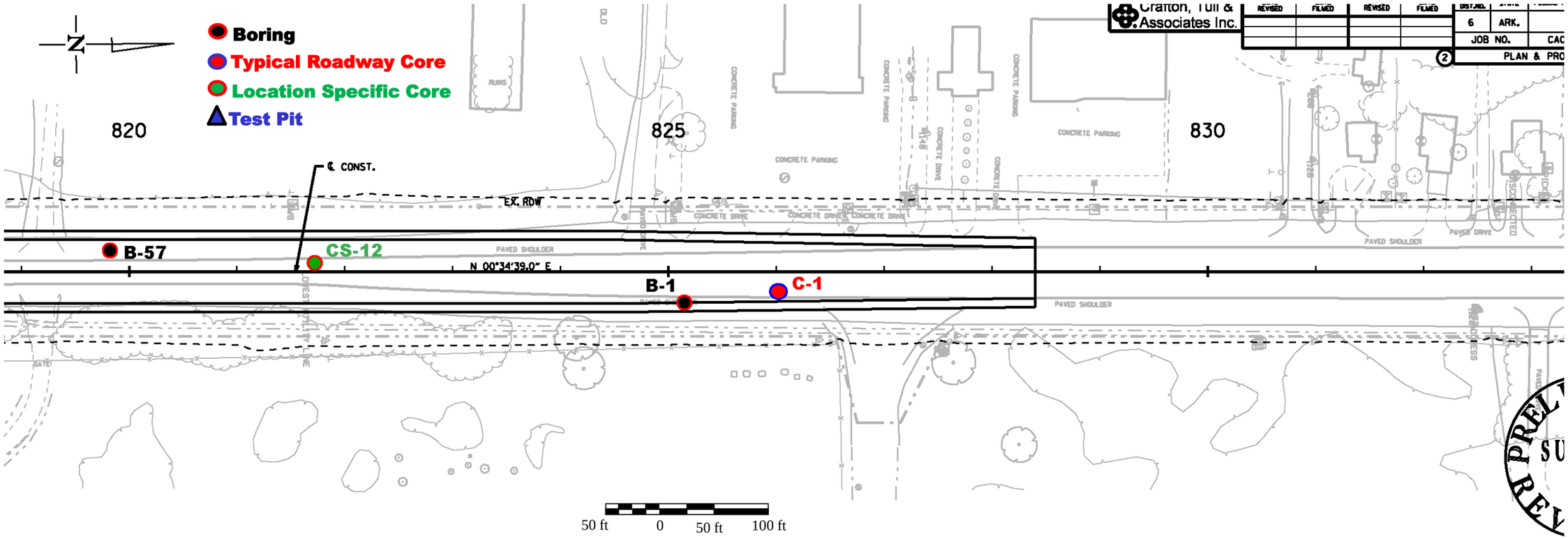
Grubbs, Hoskyn, Barton & Wyatt, INC. CONSULTING ENGINEERS	**PLAN OF BORINGS, TEST PITS AND PAVEMENT CORES** **Job No. CA0202 – Hwy 425 – Hamburg (Widening)(S)** **Ashley County, Arkansas**	**Scale: As Shown**	**Job No. 14-197**	**PLATE 21**

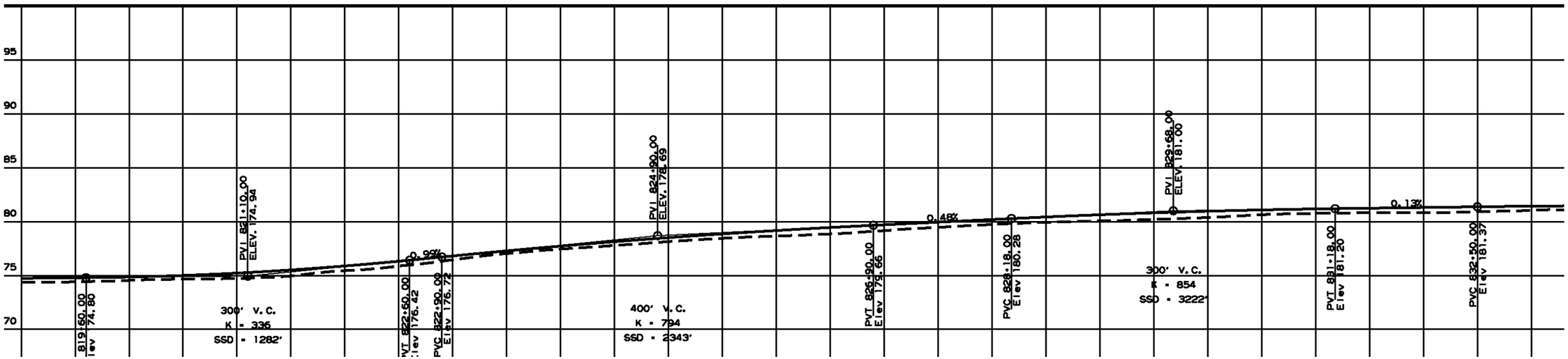
Cratton, Tull & Associates Inc.

REVISED	FILED	REVISED	FILED

DIST.NO. 6 ARK.
JOB NO. CAC
2 PLAN & PRO

Boring
Typical Roadway Core
Location Specific Core
Test Pit





PRELIMINARY
SUBJECT TO REVISION

Grubbs, Hoskyn, Barton & Wyatt, INC.
CONSULTING ENGINEERS

PLAN OF BORINGS, TEST PITS AND PAVEMENT CORES
Job No. CA0202 – Hwy 425 – Hamburg (Widening)(S)
Ashley County, Arkansas

Scale: As Shown

Job No. 14-197

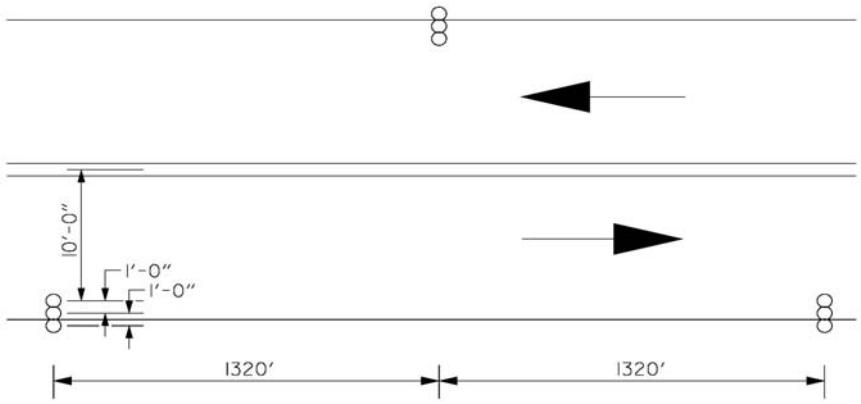
PLATE 22

ATTACHMENT 2

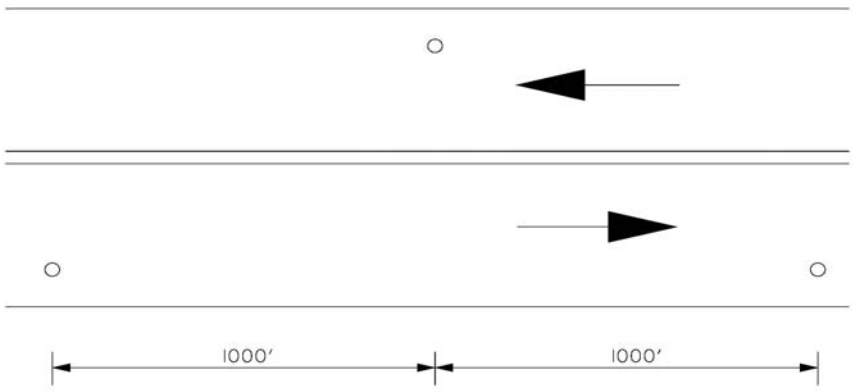
JOB CA0202 - Core Sampling Layout

Location Specific Cores	
Location	1/2 mile intervals alternating between lanes on the outside lane edge
Depth of Corings	To bottom of Pavement
Coring Size	6"
Coring Size tolerance	± 0"
Core Spacing	See Diagram below

Begin cores at 10' from centerline and continue in 1' increments to find where full depth pavement ends.



Typical Cores	
Location	1000' Intervals alternating between lanes on the outside wheel path
Depth of Corings	To Bottom of Pavement
Coring Size	4" or 6"
Coring Size tolerance	± 0"
Core Spacing	See Diagram below



SUMMARY OF SUBSURFACE EXPLORATION

PROJECT: Job No. CA0202 - Hwy 425-Hamburg (Widening)(S)
LOCATION: Little Rock, AR
GHBW JOB No.: 14-197

Boring No.	Station	Construction CL Offsett, ft		Completion Depth, ft	Approximate Surface EL, ft	Groundwater Depth, ft
1	825+16	30	RT	10	177.5	6
2	813+92	26	RT	10	175.3	6
3	805+22	26	RT	10	177.3	Dry
4	795+30	29	RT	10	178.0	Dry
5	785+35	19	RT	10	168.1	1
6	775+38	31	RT	10	166.4	Dry
7	764+89	21	RT	10	172.1	Dry
8	754+80	19	RT	10	171.8	Dry
9	744+14	31	RT	10	169.6	Dry
10	735+57	19	RT	10	160.4	6
11	725+37	27	RT	10	162.8	6
12	715+03	40	RT	10	151.7	1
13	704+77	37	RT	10	152.2	1
14	695+14	35	RT	10	154.9	4
15	684+02	22	RT	10	154.7	7
16	674+79	41	RT	10	154.8	3
17	665+19	37	RT	10	165.5	Dry
18	654+78	34	RT	10	160.5	6.2
19	645+68	31	RT	10	149.0	Dry
20	634+87	32	RT	10	150.8	Dry
21	625+03	38	RT	10	148.7	Dry
22	614+96	25	RT	10	152.0	Dry
23	605+89	21	RT	10	146.0	Dry
24	595+02	23	RT	10	155.0	Dry
25	584+82	39	RT	10	156.4	Dry
26	575+37	30	RT	10	162.1	Dry
27	564+98	39	RT	10	148.9	Dry
28	555+01	38	RT	10	140.1	Dry
29	547+90	29	RT	10	140.4	5
30	550+37	37	LT	10	137.2	Dry
31	560+15	33	LT	10	143.0	2
32	569+87	33	LT	10	154.1	Dry
33	581+06	36	LT	10	158.6	Dry
34	590+26	40	LT	10	146.4	1
35	600+80	38	LT	10	143.7	1
36	611+15	35	LT	10	145.7	Dry

SUMMARY OF SUBSURFACE EXPLORATION

PROJECT: Job No. CA0202 - Hwy 425-Hamburg (Widening)(S)
LOCATION: Little Rock, AR
GHBW JOB No.: 14-197

Boring No.	Station	Construction CL Offsett, ft		Completion Depth, ft	Approximate Surface EL, ft	Groundwater Depth, ft
37	620+62	42	LT	10	151.6	1
38	630+38	35	LT	10	149.3	2
39	640+06	35	LT	10	146.0	2
40	650+74	31	LT	10	152.5	2
41	659+69	35	LT	10	161.4	2
42	669+67	28	LT	10	167.5	Dry
43	681+43	41	LT	10	149.3	2
44	690+16	38	LT	10	150.9	Dry
45	701+91	40	LT	10	150.7	3
46	710+75	32	LT	10	152	Dry
47	720+73	20	LT	10	157.0	Dry
48	730+19	29	LT	10	164.9	Dry
49	739+86	29	LT	10	158.9	2
50	749+28	42	LT	10	168.4	Dry
51	759+81	37	LT	10	175.3	Dry
52	770+06	37	LT	10	169.5	7.7
53	780+48	39	LT	10	169.5	Dry
54	790+00	40	LT	10	177	Dry
55	800+08	39	LT	10	179.9	Dry
56	810+71	28	LT	10	172.1	2
57	819+80	40	LT	10	172.7	3
C1	825+62	22	RT	6.5	177.5	Dry
C2	805+78	8	LT	6	175.3	Dry
C3	786+44	10	LT	8	177.3	6.5
C4	765+82	9	LT	6	178.0	Dry
C5	745+11	14	RT	6	168.1	Dry
C6	726+87	15	RT	6	166.4	Dry
C7	706+53	8	RT	6	172.1	Dry
C8	684+93	9	RT	8.5	171.8	Dry
C9	665+14	10	RT	6.5	169.6	Dry
C10	646+42	10	RT	6.5	160.4	Dry
C11	625+82	9	RT	6.5	162.8	Dry
C12	606+00	22	RT	6.5	151.7	Dry
C13	586+11	7	RT	6.5	152.2	Dry
C14	568+47	11	RT	6.5	154.9	Dry

SUMMARY OF SUBSURFACE EXPLORATION

PROJECT: Job No. CA0202 - Hwy 425-Hamburg (Widening)(S)
LOCATION: Little Rock, AR
GHBW JOB No.: 14-197

Boring No.	Station	Construction CL Offsett, ft		Completion Depth, ft	Approximate Surface EL, ft	Groundwater Depth, ft
C15	548+30	11	RT	9.5	154.7	7.3
C16	556+74	10	LT	8	154.8	Dry
C17	576+96	9	LT	6.5	165.5	Dry
C18	597+31	7	LT	6.5	160.5	Dry
C19	618+62	11	LT	6.5	149.0	Dry
C20	636+77	9	LT	6.5	150.8	Dry
C21	656+16	7	LT	6	148.7	Dry
C22	676+00	6	LT	6.5	152.0	Dry
C23	698+71	8	LT	6	146.0	Dry
C24	718+20	CL	---	6	155.0	Dry
C25	737+24	4	LT	6	156.4	Dry
C26	756+33	25	LT	6.5	162.1	Dry
C27	776+75	26	LT	6	148.9	Dry
C28	796+56	26	LT	6.5	140.1	Dry
C29	816+00	2	LT	6.5	140.4	Dry
TP-1	817+49	27	RT	4	171.9	Dry
TP-2	698+58	26	RT	4	154.8	Dry
TP-3	586+50	15	LT	10	151.0	Dry

ATTACHMENT 3

SUMMARY of PAVEMENT CORE RESULTS

PROJECT: Job No. CA0202 - Hwy 425-Hamburg (Widening)(S)
LOCATION: Highway 82 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Core No.	Approx Sta	Approx Offset From Construction CL, ft	Approx Offset From Existing CL, ft	Approx Surface EL, ft	Directional lane	Total ACHM, in.	Base/Subbase	Comments
CS1A	812+05	20 RT	10 RT	175.5	Northbound	6.5	Soil cement	Full Depth Pavement extends approx 11ft from existing CL
CS1B	812+05	21 RT	11 RT	175.5	Northbound	4	Soil cement	Full Depth Pavement extends approx 11ft from existing CL
CS2A	788+40	8 LT	10 RT	174.8	Northbound	7.5	Soil cement	Full Depth Pavement extends approx 12ft from existing CL
CS2B	788+40	7 LT	11 RT	174.8	Northbound	7.5	Soil cement	Full Depth Pavement extends approx 12ft from existing CL
CS2C	788+40	6 LT	12 RT	174.8	Northbound	5	Clayey fine to coarse sand with some fine gravel	Full Depth Pavement extends approx 12ft from existing CL
CS3A	761+53	6 LT	10 RT	176.1	Northbound	8	Soil cement	Full Depth Pavement extends approx 11ft from existing CL
CS3B	761+53	5 LT	11 RT	176.1	Northbound	4.5	Sandy fine to coarse gravel	Full Depth Pavement extends approx 11ft from existing CL
CS4A	734+80	10 RT	10 RT	163	Northbound	8.5	Soil cement	Full Depth Pavement extends approx 13ft from existing CL
CS4B	734+80	11 RT	11 RT	163	Northbound	11.5	Sandy fine to coarse gravel	Full Depth Pavement extends approx 13ft from existing CL
CS4C	734+80	12 RT	12 RT	163	Northbound	9.5	Sandy fine to coarse gravel	Full Depth Pavement extends approx 13ft from existing CL
CS4D	734+80	13 RT	13 RT	163	Northbound	4.75	Sandy fine to coarse gravel	Full Depth Pavement extends approx 13ft from existing CL
CS5A	708+82	10 RT	10 RT	156.2	Northbound	8.5	Clayey fine to coarse sand with some fine gravel	Full Depth Pavement extends approx 11ft from existing CL
CS5B	708+82	11 RT	11 RT	156.2	Northbound	3.25	Clayey fine to coarse sand with some fine gravel	Full Depth Pavement extends approx 11ft from existing CL
CS6A	679+91	11 RT	10 RT	153.6	Northbound	9.5	Soil cement	Full Depth Pavement extends approx 12ft from existing CL
CS6B	679+91	12 RT	11 RT	153.6	Northbound	9	Soil cement	Full Depth Pavement extends approx 12ft from existing CL
CS6C	679+91	13 RT	12 RT	153.6	Northbound	2.25	Clayey fine to coarse sand with some fine gravel	Full Depth Pavement extends approx 12ft from existing CL

Grubbs, Hoskyn,
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SUMMARY of PAVEMENT CORE RESULTS

PROJECT: Job No. CA0202 - Hwy 425-Hamburg (Widening)(S)
LOCATION: Highway 82 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Core No.	Approx Sta	Approx Offset From Construction CL, ft	Approx Offset From Existing CL, ft	Approx Surface EL, ft	Directional lane	Total ACHM, in.	Base/Subbase	Comments
CS7A	655+92	12 RT	10 RT	162.3	Northbound	7	Soil cement	Full Depth Pavement extends approx 11ft from existing CL
CS7B	655+92	13 RT	11 RT	162.3	Northbound	2	Soil cement	Full Depth Pavement extends approx 11ft from existing CL
CS8A	628+66	12 RT	10 RT	151.8	Northbound	9	Soil cement	Full Depth Pavement extends approx 12ft from existing CL
CS8B	628+66	13 RT	11 RT	151.8	Northbound	8.5	Soil cement	Full Depth Pavement extends approx 12ft from existing CL
CS8C	628+66	14 RT	12 RT	151.8	Northbound	3.5	Clayey fine to coarse sand with some fine gravel	Full Depth Pavement extends approx 12ft from existing CL
CS9A	603+53	10 RT	10 RT	145±	Northbound	14	Soil cement	Full Depth Pavement extends approx 12ft from existing CL
CS9B	603+53	11 RT	11 RT	145±	Northbound	6.5	Soil cement	Full Depth Pavement extends approx 12ft from existing CL
CS9C	603+53	12 RT	12 RT	145±	Northbound	3	Clayey fine to coarse sand with some fine gravel	Full Depth Pavement extends approx 12ft from existing CL
CS10A	576+41	12 RT	10 RT	149.2	Northbound	11	Sandy fine to coarse gravel	Full Depth Pavement extends approx 11ft from existing CL
CS10B	576+41	13 RT	11 RT	149.2	Northbound	9	Clayey fine to coarse sand with some fine gravel	Full Depth Pavement extends approx 11ft from existing CL
CS11A	550+39	9 RT	10 RT	150.9	Northbound	12	Soil cement	Full Depth Pavement extends approx 14ft from existing CL
CS11B	550+39	10 RT	11 RT	150.9	Northbound	10.5	Soil cement	Full Depth Pavement extends approx 14ft from existing CL
CS11C	550+39	11 RT	12 RT	150.9	Northbound	10.75	Soil cement	Full Depth Pavement extends approx 14ft from existing CL
CS11D	550+39	12 RT	13 RT	150.9	Northbound	12	Soil cement	Full Depth Pavement extends approx 14ft from existing CL
CS11E	550+39	13 RT	14 RT	150.9	Northbound	7.5	Clayey fine to coarse sand with some fine gravel	Full Depth Pavement extends approx 14ft from existing CL
CS12A	821+66	11 LT	10 LT	175.1	Southbound	11.5	Soil cement	Full Depth Pavement extends approx 11ft from existing CL

Grubbs, Hoskyn,
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SUMMARY of PAVEMENT CORE RESULTS

PROJECT: Job No. CA0202 - Hwy 425-Hamburg (Widening)(S)
LOCATION: Highway 82 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Core No.	Approx Sta	Approx Offset From Construction CL, ft	Approx Offset From Existing CL, ft	Approx Surface EL, ft	Directional lane	Total ACHM, in.	Base/Subbase	Comments
CS12B	821+66	12 LT	11 LT	175.1	Southbound	5	Soil cement	Full Depth Pavement extends approx 11ft from existing CL
CS13A	802+50	28 LT	10 LT	175.1	Southbound	11	Soil cement	Full Depth Pavement extends approx 12ft from existing CL
CS13B	802+50	29 LT	11 LT	175.1	Southbound	11	Soil cement	Full Depth Pavement extends approx 12ft from existing CL
CS13C	802+50	30 LT	12 LT	175.1	Southbound	5.5	Sandy fine to coarse gravel	Full Depth Pavement extends approx 12ft from existing CL
CS14A	775+55	28 LT	10 LT	169.3	Southbound	5.5	Soil cement	Full Depth Pavement extends approx 11ft from existing CL
CS14B	775+55	29 LT	11 LT	169.3	Southbound	4.5	Clayey fine to coarse sand with some fine gravel	Full Depth Pavement extends approx 11ft from existing CL
CS15A	747+47	10 LT	10 LT	172.8	Southbound	8.5	Soil cement	Full Depth Pavement extends approx 13ft from existing CL
CS15B	747+47	11 LT	11 LT	172.8	Southbound	5.75	Soil cement	Full Depth Pavement extends approx 13ft from existing CL
CS15C	747+47	12 LT	12 LT	172.8	Southbound	6.5	Soil cement	Full Depth Pavement extends approx 13ft from existing CL
CS15D	747+47	13 LT	13 LT	172.8	Southbound	4.75	Sandy fine to coarse gravel	Full Depth Pavement extends approx 13ft from existing CL
CS16A	721+76	1 RT	10 LT	160.6	Southbound	8.5	Soil cement	Full Depth Pavement extends approx 13ft from existing CL
CS16B	721+76	CL	11 LT	160.6	Southbound	6	Soil cement	Full Depth Pavement extends approx 13ft from existing CL
CS16C	721+76	1 LT	12 LT	160.6	Southbound	6.5	Soil cement	Full Depth Pavement extends approx 13ft from existing CL
CS16D	721+76	2 LT	13 LT	160.6	Southbound	5	Clayey fine to coarse sand with some fine gravel	Full Depth Pavement extends approx 13ft from existing CL
CS17A	695+62	12 LT	10 LT	158.5	Southbound	7	Soil cement	Full Depth Pavement extends approx 11ft from existing CL

Grubbs, Hoskyn,
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SUMMARY of PAVEMENT CORE RESULTS

PROJECT: Job No. CA0202 - Hwy 425-Hamburg (Widening)(S)
LOCATION: Highway 82 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Core No.	Approx Sta	Approx Offset From Construction CL, ft	Approx Offset From Existing CL, ft	Approx Surface EL, ft	Directional lane	Total ACHM, in.	Base/Subbase	Comments
CS17B	695+62	13 LT	11 LT	158.5	Southbound	3	Clayey fine to coarse sand with some fine gravel	Full Depth Pavement extends approx 11ft from existing CL
CS18A	668+82	9 LT	10 LT	170.2	Southbound	6.5	Soil cement	Full Depth Pavement extends approx 12ft from existing CL
CS18B	668+82	10 LT	11 LT	170.2	Southbound	7.5	Soil cement	Full Depth Pavement extends approx 12ft from existing CL
CS18C	668+82	11 LT	12 LT	170.2	Southbound	3	Clayey fine to coarse sand with some fine gravel	Full Depth Pavement extends approx 12ft from existing CL
CS19A	642+43	8 LT	10 LT	149.1	Southbound	7.5	Soil cement	Full Depth Pavement extends approx 11ft from existing CL
CS19B	642+43	9 LT	11 LT	149.1	Southbound	8.75	Soil cement	Full Depth Pavement extends approx 13ft from existing CL
CS19C	642+43	10 LT	12 LT	149.1	Southbound	9	Soil cement	Full Depth Pavement extends approx 13ft from existing CL
CS19D	642+43	11 LT	13 LT	149.1	Southbound	5	Clayey fine to coarse sand with some fine gravel	Full Depth Pavement extends approx 13ft from existing CL
CS20A	619+21	10 LT	10 LT	158.2	Southbound	9	Soil cement	Full Depth Pavement extends approx 13ft from existing CL
CS20B	619+21	11 LT	11 LT	158.2	Southbound	3.5	Sandy fine to coarse gravel	Full Depth Pavement extends approx 11ft from existing CL
CS21A	588+86	10 LT	10 LT	152.9	Southbound	8	Sandy fine to coarse gravel	Full Depth Pavement extends approx 11ft from existing CL
CS21B	588+86	11 LT	11 LT	152.9	Southbound	3.5	Sandy fine to coarse gravel	Full Depth Pavement extends approx 11ft from existing CL
CS22A	562+38	9 LT	10 LT	149.1	Southbound	12	Soil cement	Full Depth Pavement extends approx 13ft from existing CL
CS22B	562+38	10 LT	11 LT	149.1	Southbound	13	Soil cement	Full Depth Pavement extends approx 13ft from existing CL
CS22C	562+38	11 LT	12 LT	149.1	Southbound	13	Soil cement	Full Depth Pavement extends approx 13ft from existing CL

Grubbs, Hoskyn,
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SUMMARY of PAVEMENT CORE RESULTS

PROJECT: Job No. CA0202 - Hwy 425-Hamburg (Widening)(S)
LOCATION: Highway 82 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Core No.	Approx Sta	Approx Offset From Construction CL, ft	Approx Offset From Existing CL, ft	Approx Surface EL, ft	Directional lane	Total ACHM, in.	Base/Subbase	Comments
CS22D	562+38	12 LT	13 LT	149.1	Southbound	6	Sandy fine to coarse gravel	Full Depth Pavement extends approx 13ft from existing CL

Grubbs, Hoskyn,
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SUMMARY of PAVEMENT CORE RESULTS

PROJECT: Job No. CA0202 - Hwy 425-Hamburg (Widening)(S)
LOCATION: Highway 82 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Core No.	Approx Sta	Approx Offset From Construction CL, ft	Approx Offset From Existing CL, ft	Approx Surface EL, ft	Directional lane	Total ACHM, in.	Base/Subbase, in.	Subgrade
C1	825+62	22 RT	19 RT	178.0	Northbound - Outer wheel path	12.5	3 in. soil cement	Loose clayey fine sand with some medium to coarse sand and trace fine gravel
C2	805+78	8 LT	8 RT	179.5	Northbound - Outer wheel path	7.75	6 in. soil cement	Dense clayey fine to coarse sand with a little fine to coarse gravel
C3	786+44	10 LT	8 RT	173.0	Northbound - Outer wheel path	9	NA	Dense clayey fine to coarse sand with a little fine to coarse gravel
C4	765+82	9 LT	8 RT	175.9	Northbound - Outer wheel path	7	NA	Dense clayey fine sand with some fine gravel and asphalt concrete debris
C5	745+11	14 RT	8 RT	171.3	Northbound - Outer wheel path	6	3.5 in. soil cement	Medium dense clayey fine sand with some fine gravel
C6	726+87	15 RT	8 RT	164.4	Northbound - Outer wheel path	9	NA	Dense clayey fine sand with some fine gravel
C7	706+53	8 RT	8 RT	157.0	Northbound - Outer wheel path	7	NA	Dense reddish brown clayey fine gravel
C8	684+93	9 RT	9 RT	155.1	Northbound - Outer wheel path	7.5	8 in. soil cement	Stiff reddish brown fine sandy clay with some fine to coarse gravel
C9	665+14	10 RT	8 RT	168.4	Northbound - Outer wheel path	6	3 in. soil cement	Stiff silty clay
C10	646+42	10 RT	8 RT	150.1	Northbound - Outer wheel path	8.75	4 in. soil cement	Stiff silty clay with some silt seams
C11	625+82	9 RT	8 RT	150.9	Northbound - Outer wheel path	8	3 in. soil cement	Stiff silty clay with some silt pockets and seams
C12	606+00	22 RT	8 RT	147±	Northbound - Outer wheel path	7.25	6 in. soil cement	Stiff silty clay with occasional silt pockets and clay partings and seams
C13	586+11	7 RT	9 RT	158.3	Northbound - Outer wheel path	14	4 in. soil cement	Firm silty clay with some silt pockets and trace clay partings and seams
C14	568+47	11 RT	9 RT	156.0	Northbound - Outer wheel path	13	3 in. clayey fine to coarse gravel	Stiff clayey silt with occasional silty clay pockets

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SUMMARY of PAVEMENT CORE RESULTS

PROJECT: Job No. CA0202 - Hwy 425-Hamburg (Widening)(S)
LOCATION: Highway 82 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Core No.	Approx Sta	Approx Offset From Construction CL, ft	Approx Offset From Existing CL, ft	Approx Surface EL, ft	Directional lane	Total ACHM, in.	Base/Subbase, in.	Subgrade
C15	548+30	11 RT	11 RT	141.8	Northbound - Outer wheel path	9	4 in. soil cement	Stiff clayey silt with occasional silt partings and seams
C16	556+74	10 LT	9 LT	145.1	Southbound - Outer wheel path	13	7 in. soil cement	Stiff silty clay with some silt pockets and seams and clay seams
C17	576+96	9 LT	8 LT	163.5	Southbound - Outer wheel path	12	4 in. soil cement	Stiff fine sandy clay with occasional fine sand pockets
C18	597+31	7 LT	8 LT	152.9	Southbound - Outer wheel path	8.5	8 in. soil cement	Firm fine sandy clay with occasional fine sand pockets and trace fine gravel
C19	618+62	11 LT	8 LT	158.2	Southbound - Outer wheel path	9	6 in. soil cement	Firm silty clay with trace fine gravel
C20	636+77	9 LT	9 LT	151.8	Southbound - Outer wheel path	9.5	4 in. soil cement	Stiff silty clay with occasional silt pockets
C21	656+16	7 LT	9 LT	163.1	Southbound - Outer wheel path	8.5	6 in. soil cement	Stiff fine sandy clay with trace fine gravel
C22	676+00	6 LT	8 LT	156±	Southbound - Outer wheel path	9.5	6 in. soil cement	Dense brown clayey fine to coarse sand with trace fine gravel
C23	698+71	8 LT	8 LT	156.9	Southbound - Outer wheel path	5	3 in. soil cement	Medium dense brown clayey fine to coarse sand with some fine to coarse gravel
C24	718+20	CL	8 LT	158.2	Southbound - Outer wheel path	7	3 in. sandy fine to coarse gravel	Medium dense silt, slightly clayey
C25	737+24	4 LT	8 LT	161.6	Southbound - Outer wheel path	8.5	NA	Dense clayey fine to coarse sand with some fine gravel
C26	756+33	25 LT	8 LT	175.9	Southbound - Outer wheel path	9.5	2.5 in. sandy fine to coarse gravel, slightly clayey	Very stiff silty clay with some silt pockets and fine to coarse gravel
C27	776+75	26 LT	8 LT	169.7	Southbound - Outer wheel path	8.5	6 in. soil cement	Dense clayey fine gravel, sandy
C28	796+56	26 LT	8 LT	180.4	Southbound - Outer wheel path	5.5	10.5 in. soil cement	Stiff clayey silt with some wood debris

Grubbs, Hoskyn,
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SUMMARY of PAVEMENT CORE RESULTS

PROJECT: Job No. CA0202 - Hwy 425-Hamburg (Widening)(S)
LOCATION: Highway 82 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Core No.	Approx Sta	Approx Offset From Construction CL, ft	Approx Offset From Existing CL, ft	Approx Surface EL, ft	Directional lane	Total ACHM, in.	Base/Subbase, in.	Subgrade
C29	816+00	2 LT	8 LT	174±	Southbound - Outer wheel path	8	4 in. soil cement	Very stiff clayey silt with some silt pockets and a little fine to coarse gravel

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AHTD PROJECT: Task Order No. C068
Job No. CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Hwy 425 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Approximate Station	812+05	**Construction CL Offset**	20 RT
Directional lane	Northbound - 10 ft from existing CL		
Date cored:	4/1/2015		
Total core length, in.	6.5	**Core Diameter, in.**	6
Comments:	2.5 in. surface course, 2 in. surface course, 2 in. ACHM base. Aggregate is fine to coarse, subrounded to angular sandstone gravel and crushed syenite with some crushed sandstone. Surface course is mainly fine grained. The upper surface course has an apparent high bitumen content. The ACHM base contains mainly coarse grained, moderately to well-distributed, sandstone gravel and is underlain by soil cement.		

Core No. CS-1A

Top of Pavement Core

Notes: 1) Top of pavement to the left.

2) Unless otherwise noted fractured pavement cores resulted from the coring process.

Grubbs, Hoskyn, Barton & Wyatt, INC.
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AHTD PROJECT: Task Order No. C068
Job No. CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Hwy 425 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Approximate Station	812+05	**Construction CL Offset**	21 RT
Directional lane	Northbound - 11 ft from existing CL		
Date cored:	4/1/2015		
Total core length, in.	4	**Core Diameter, in.**	6
Comments:	2.5 in. surface course, 1.5 in. binder. Aggregate is fine to coarse, subrounded to angular, well distributed sandstone gravel and crushed syenite with some crushed sandstone. Surface course is mainly fine grained with an apparent high bitumen content. The binder consists of fine to coarse grained aggregate and is underlain by soil cement.		

Core No. CS-1B

Top of Pavement Core

Notes: 1) Top of pavement to the left.

2) Unless otherwise noted fractured pavement cores resulted from the coring process.

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AHTD PROJECT: Task Order No. C068
Job No. CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Hwy 425 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Approximate Station	788+40	**Construction CL Offset**	8 LT
Directional lane	Northbound - 10 ft from existing CL		
Date cored:	4/1/2015		
Total core length, in.	7.5	**Core Diameter, in.**	6
Comments:	1.5 in. surface course, 3 in. binder, 3 in. ACHM base. Aggregate is fine to coarse, subrounded to angular, well distributed sandstone gravel and crushed syenite with some crushed sandstone. Surface course is mainly fine grained with an apparent high bitumen content. The binder is degraded with an apparent high bitumen content and consists of fine to coarse grained aggregate. The ACHM base also has an apparent high bitumen content and consists of mainly coarse grained sandstone gravel. The base is underlain by soil cement.		

Core No. CS-2A

Top of Pavement Core

Notes: 1) Top of pavement to the left.

2) Unless otherwise noted fractured pavement cores resulted from the coring process.

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AHTD PROJECT: Task Order No. C068
Job No. CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Hwy 425 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Approximate Station	788+40	**Construction CL Offset**	7 LT
Directional lane	Northbound - 11 ft from existing CL		
Date cored:	4/1/2015		
Total core length, in.	7.5	**Core Diameter, in.**	6
Comments:	2 in. surface course, 1 in. binder, 2 in. surface course, 2.5 in. ACHM base. Aggregate is fine to coarse, subrounded to angular, well distributed sandstone gravel and crushed syenite with some crushed sandstone. Surface course is mainly fine grained with an apparent high bitumen content. The binder consists of fine to coarse grained aggregate. The ACHM base also has an apparent high bitumen content and consists of mainly coarse grained, moderate to well-distributed sandstone gravel. The base is underlain by soil cement.		

Core No. CS-2B

Top of Pavement Core

Notes: 1) Top of pavement to the left.

2) Unless otherwise noted fractured pavement cores resulted from the coring process.

Grubbs, Hoskyn, Barton & Wyatt, INC.
CONSULTING ENGINEERS

AHTD PROJECT: Task Order No. C068
Job No. CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Hwy 425 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Approximate Station	788+40	**Construction CL Offset**	6 LT
Directional lane	Northbound - 12 ft from existing CL		
Date cored:	4/1/2015		
Total core length, in.	5	**Core Diameter, in.**	6
Comments:	2 in. surface course, 2 in. binder, 1 in. surface course. Aggregate is fine to coarse, subrounded to angular, well distributed sandstone gravel and crushed syenite with some crushed sandstone. Surface course is mainly fine grained with an apparent high bitumen content. The binder consists of fine to coarse grained aggregate with an apparent high bitumen contenet. The asphalt concrete is underlain by cement treated fine sandy clay with some fine to coarse gravel.		

Core No. CS-2C

Top of Pavement Core

Notes: 1) Top of pavement to the left.

2) Unless otherwise noted fractured pavement cores resulted from the coring process.

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AHTD PROJECT: Task Order No. C068
Job No. CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Hwy 425 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Approximate Station	761+53	**Construction CL Offset**	6 LT
Directional lane	Northbound - 10 ft from existing CL		
Date cored:	4/1/2015		
Total core length, in.	8	**Core Diameter, in.**	6
Comments:	2 in. surface course, 2 in. binder, 2 in. surface course, 2 in. ACHM base. Aggregate is fine to coarse, subrounded to angular, well distributed sandstone gravel and crushed syenite with some crushed sandstone. Surface course is mainly fine grained with an apparent high bitumen content. The binder consists of fine to coarse grained aggregate. The ACHM base has an apparent high bitumen content and consists of mainly coarse grained, well-distributed sandstone gravel. The base is underlain by soil cement.		

Core No. CS-3A

Top of Pavement Core

Notes: 1) Top of pavement to the left.

2) Unless otherwise noted fractured pavement cores resulted from the coring process.

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AHTD PROJECT: Task Order No. C068
Job No. CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Hwy 425 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Approximate Station	761+53	**Construction CL Offset**	5 LT
Directional lane	Northbound - 11 ft from existing CL		
Date cored:	4/1/2015		
Total core length, in.	4.5	**Core Diameter, in.**	6
Comments:	2.5 in. surface course, 2 in. surface course. Aggregate is mainly fine grained, subrounded and subangular, well distributed sandstone gravel and crushed syenite with some crushed sandstone. The upper surface course has an apparent high bitumen content. The asphalt concrete is underlain by sandy fine to coarse gravel.		

Core No. CS-3B

Top of Pavement Core

Notes: 1) Top of pavement to the left.

2) Unless otherwise noted fractured pavement cores resulted from the coring process.

Grubbs, Hoskyn, Barton & Wyatt, INC.
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AHTD PROJECT: Task Order No. C068
Job No. CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Hwy 425 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Approximate Station	734+80	**Construction CL Offset**	10 RT
Directional lane	Northbound - 10 ft from existing CL		
Date cored:	3/31/2015		
Total core length, in.	8.5	**Core Diameter, in.**	6
Comments:	2 in. surface course, 3.5 in. binder, 3 in. ACHM base. Aggregate is fine to coarse, subrounded to angular, well distributed sandstone gravel and crushed syenite with some crushed sandstone. Surface course is mainly fine grained with an apparent high bitumen content. The binder consists of fine to coarse grained aggregate. The ACHM base has an apparent high bitumen content and consists of mainly coarse grained, moderate to well-distributed sandstone gravel. The base is underlain by soil cement.		

Core No. CS-4A

Top of Pavement Core

Notes: 1) Top of pavement to the left.

2) Unless otherwise noted fractured pavement cores resulted from the coring process.

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CONSULTING ENGINEERS

AHTD PROJECT: Task Order No. C068
Job No. CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Hwy 425 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Approximate Station	734+80	**Construction CL Offset**	11 RT
Directional lane	Northbound - 11 ft from existing CL		
Date cored:	3/31/2015		
Total core length, in.	11.5	**Core Diameter, in.**	6
Comments:	2 in. surface course, 1.5 in. binder, 2 in. surface course, 3 in. binder, 3 in. ACHM base. Aggregate is fine to coarse, subrounded to angular, well distributed sandstone gravel and crushed syenite with some crushed sandstone. The surface course is mainly fine grained. The upper surface course has an apparent high bitumen content. The upper binder is degraded with an apparent high bitumen content. The binder consists of fine to coarse grained aggregate. The ACHM base has an apparent high bitumen content and consists of mainly coarse grained, moderate to well-distributed sandstone gravel. The base is underlain by sandy fine to coarse gravel.		

Core No. CS-4B

Top of Pavement Core

Notes: 1) Top of pavement to the left.

2) Unless otherwise noted fractured pavement cores resulted from the coring process.

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AHTD PROJECT: Task Order No. C068
Job No. CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Hwy 425 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Approximate Station	734+80	**Construction CL Offset**	12 RT
Directional lane	Northbound - 12 ft from existing CL		
Date cored:	3/31/2015		
Total core length, in.	9.5	**Core Diameter, in.**	6
Comments:	2 in. surface course, 2 in. surface course, 1.5 in. binder, 4 in. ACHM base. Aggregate is fine to coarse, subrounded to angular, well distributed sandstone gravel and crushed syenite with some crushed sandstone. The surface course is mainly fine grained. The upper surface course has an apparent high bitumen content. The binder is degraded with an apparent high bitumen content. The binder consists of fine to coarse grained aggregate. The ACHM base has an apparent high bitumen content and consists of mainly coarse grained, moderate to well-distributed sandstone gravel. The base is underlain by sandy fine to coarse gravel.		

Core No. CS-4C

Top of Pavement Core

Notes: 1) Top of pavement to the left.

2) Unless otherwise noted fractured pavement cores resulted from the coring process.

Grubbs, Hoskyn, Barton & Wyatt, INC.
CONSULTING ENGINEERS

AHTD PROJECT: Task Order No. C068
Job No. CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Hwy 425 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Approximate Station	734+80	**Construction CL Offset**	13 RT
Directional lane	Northbound - 13 ft from existing CL		
Date cored:	3/31/2015		
Total core length, in.	4.75	**Core Diameter, in.**	6
Comments:	1.75 in. surface course, 2 in. binder, 0.5 in.surface course. Aggregate is fine to coarse, subrounded to angular, well distributed sandstone gravel and crushed syenite with some crushed sandstone. The surface course is mainly fine grained and has an apparent high bitumen content. The binder consists of fine to coarse grained aggregate and has an apparent high bitumen content. The asphalt concrete is underlain by sandy fine to coarse gravel.		

Core No. CS-4D

Top of Pavement Core

Notes: 1) Top of pavement to the left.

2) Unless otherwise noted fractured pavement cores resulted from the coring process.

Grubbs, Hoskyn, Barton & Wyatt, INC.
CONSULTING ENGINEERS

AHTD PROJECT: Task Order No. C068
Job No. CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Hwy 425 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Approximate Station	708+82	**Construction CL Offset**	10 RT
Directional lane	Northbound - 10 ft from existing CL		
Date cored:	3/31/2015		
Total core length, in.	8.5	**Core Diameter, in.**	6
Comments:	2 in. surface course, 1 in. surface course, 2.5 in. binder, 3 in. ACHM base. Aggregate is fine to coarse, subrounded to angular, well distributed sandstone gravel and crushed syenite with some crushed sandstone. The surface course is mainly fine grained and has an apparent high bitumen content. The binder consists of fine to coarse grained aggregate. The ACHM base has an apparent high bitumen content and consists of mainly coarse grained, moderate to well-distributed sandstone gravel. The base is underlain by fine sandy clay with some fine to coarse gravel.		

Core No. CS-5A

Top of Pavement Core

Notes: 1) Top of pavement to the left.

2) Unless otherwise noted fractured pavement cores resulted from the coring process.

Grubbs, Hoskyn, Barton & Wyatt, INC.
CONSULTING ENGINEERS

AHTD PROJECT: Task Order No. C068
Job No. CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Hwy 425 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Approximate Station	708+82	**Construction CL Offset**	11 RT
Directional lane	Northbound - 11 ft from existing CL		
Date cored:	3/31/2015		
Total core length, in.	3.25	**Core Diameter, in.**	6
Comments:	1.5 in. surface course, 1.25 in. binder, 0.5 in. surface course. Aggregate is fine to coarse, subrounded to angular, well distributed sandstone gravel and crushed syenite with some crushed sandstone. The surface course is mainly fine grained and has an apparent high bitumen content. The binder consists of fine to coarse grained aggregate. The asphalt concrete is underlain by fine sandy clay with some fine to coarse gravel.		

Core No. CS-5B

Top of Pavement Core

Notes: 1) Top of pavement to the left.

2) Unless otherwise noted fractured pavement cores resulted from the coring process.

Grubbs, Hoskyn, Barton & Wyatt, INC.
CONSULTING ENGINEERS

AHTD PROJECT: Task Order No. C068
Job No. CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Hwy 425 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Approximate Station	679+91	**Construction CL Offset**	11 RT
Directional lane	Northbound - 10 ft from existing CL		
Date cored:	3/31/2015		
Total core length, in.	9.5	**Core Diameter, in.**	6
Comments:	2 in. surface course, 3 in. binder, 3.5 in. surface course, 1 in. surface course. Aggregate is fine to coarse, subrounded to angular, well distributed sandstone gravel and crushed syenite with some crushed sandstone. The upper surface course has an apparent high bitumen content. The binder consists of fine to coarse grained aggregate. The asphalt concrete is underlain by soil cement.		

Core No. CS-6A

Top of Pavement Core

Notes: 1) Top of pavement to the left.

2) Unless otherwise noted fractured pavement cores resulted from the coring process.

Grubbs, Hoskyn, Barton & Wyatt, INC.
CONSULTING ENGINEERS

AHTD PROJECT: Task Order No. C068
Job No. CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Hwy 425 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Approximate Station	679+91	**Construction CL Offset**	12 RT
Directional lane	Northbound - 11 ft from existing CL		
Date cored:	3/31/2015		
Total core length, in.	9	**Core Diameter, in.**	6
Comments:	2 in. surface course, 3 in. binder, 2.5 in. binder, 3.5 in. surface course, 1 in. surface course. Aggregate is fine to coarse, subrounded to angular, well distributed sandstone gravel and crushed syenite with some crushed sandstone. The surface course has an apparent high bitumen content. The binder consists of fine to coarse grained aggregate. The asphalt concrete is underlain by soil cement.		

Core No. CS-6B

Top of Pavement Core

Notes: 1) Top of pavement to the left.

2) Unless otherwise noted fractured pavement cores resulted from the coring process.

Grubbs, Hoskyn, Barton & Wyatt, INC.
CONSULTING ENGINEERS

AHTD PROJECT: Task Order No. C068
Job No. CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Hwy 425 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Approximate Station	679+91	**Construction CL Offset**	13 RT
Directional lane	Northbound - 12 ft from existing CL		
Date cored:	3/31/2015		
Total core length, in.	2.25	**Core Diameter, in.**	6
Comments:	2.25 in. surface course. Aggregate is mainly fine grained, subrounded to subangular, well distributed sandstone gravel and crushed syenite with some crushed sandstone. The surface course has an apparent high bitumen content. The asphalt concrete is underlain by fine sandy clay with some fine to coarse gravel.		

Core No. CS-6C

Top of Pavement Core

Notes: 1) Top of pavement to the left.

2) Unless otherwise noted fractured pavement cores resulted from the coring process.

Grubbs, Hoskyn, Barton & Wyatt, INC.
CONSULTING ENGINEERS

AHTD PROJECT: Task Order No. C068
Job No. CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Hwy 425 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Approximate Station	655+92	**Construction CL Offset**	12 RT
Directional lane	Northbound - 10 ft from existing CL		
Date cored:	3/31/2015		
Total core length, in.	7	**Core Diameter, in.**	6
Comments:	1.5 in. surface course, 2.5 in. binder, 2.5 in. surface course, 0.5 in. surface course. Aggregate is fine to coarse, subrounded to angular, well distributed sandstone gravel and crushed syenite with some crushed sandstone. The surface course is mainly fine grained. The upper surface course has an apparent high bitumen content. The binder consists of fine to coarse grained aggregate. The asphalt concrete is underlain by soil cement.		

Core No. CS-7A

Top of Pavement Core

Notes: 1) Top of pavement to the left.

2) Unless otherwise noted fractured pavement cores resulted from the coring process.

Grubbs, Hoskyn, Barton & Wyatt, INC.
CONSULTING ENGINEERS

AHTD PROJECT: Task Order No. C068
Job No. CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Hwy 425 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Approximate Station	655+92	**Construction CL Offset**	13 RT
Directional lane	Northbound - 11 ft from existing CL		
Date cored:	3/31/2015		
Total core length, in.	2	**Core Diameter, in.**	6
Comments:	2 in. surface course. Aggregate is mainly fine grained, subrounded to subangular, well distributed sandstone gravel and crushed syenite with some crushed sandstone. The asphalt concrete is underlain by soil cement.		

Core No. CS-7B

Top of Pavement Core

Notes: 1) Top of pavement to the left.

2) Unless otherwise noted fractured pavement cores resulted from the coring process.

Grubbs, Hoskyn, Barton & Wyatt, INC.
CONSULTING ENGINEERS

AHTD PROJECT: Task Order No. C068
Job No. CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Hwy 425 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Approximate Station	628+66	**Construction CL Offset**	12 RT
Directional lane	Northbound - 10 ft from existing CL		
Date cored:	3/27/2015		
Total core length, in.	9	**Core Diameter, in.**	6
Comments:	1.5 in. surface course, 3.5 in. binder, 3 in. surface course, 1 in. surface course. Aggregate is fine to coarse, subrounded to angular, well distributed sandstone gravel and crushed syenite with some crushed sandstone. The surface course is mainly fine grained. The upper surface course has an apparent high bitumen content. The binder is degraded with a high apparent bitumen content and consists of fine to coarse grained aggregate. The asphalt concrete is underlain by soil cement.		

Core No. CS-8A

Top of Pavement Core

Notes: 1) Top of pavement to the left.

2) Unless otherwise noted fractured pavement cores resulted from the coring process.

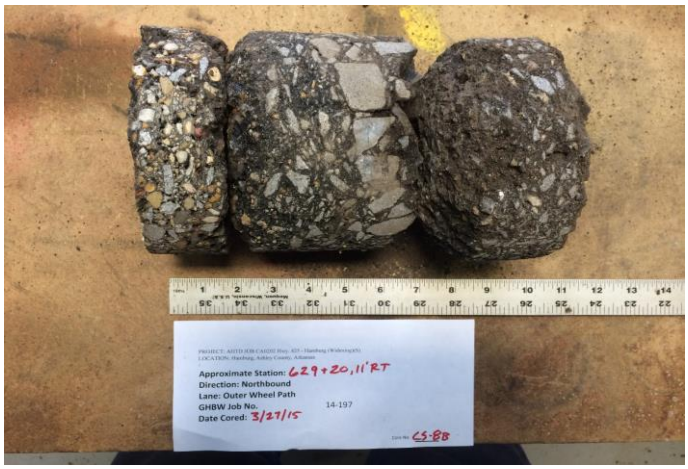
Grubbs, Hoskyn, Barton & Wyatt, INC.
CONSULTING ENGINEERS

AHTD PROJECT: Task Order No. C068
Job No. CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Hwy 425 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Approximate Station	628+66	**Construction CL Offset**	13 RT
Directional lane	Northbound - 11 ft from existing CL		
Date cored:	3/27/2015		
Total core length, in.	8.5	**Core Diameter, in.**	6
Comments:	2 in. surface course, 2 in. surface course, 2 in. binder, 2.5 in. surface course. Aggregate is fine to coarse, subrounded to angular, well distributed sandstone gravel and crushed syenite with some crushed sandstone. The surface course is mainly fine grained. The upper surface course has an apparent high bitumen content. The binder consists mainly coarse grained aggregate. The lower surface coarse is degraded with an apparent high bitumen content. The asphalt concrete is underlain by soil cement.		

Core No. CS-8B

Top of Pavement Core



Notes: 1) Top of pavement to the left.

2) Unless otherwise noted fractured pavement cores resulted from the coring process.

Grubbs, Hoskyn, Barton & Wyatt, INC.
CONSULTING ENGINEERS

AHTD PROJECT: Task Order No. C068
Job No. CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Hwy 425 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Approximate Station	628+66	**Construction CL Offset**	14 RT
Directional lane	Northbound - 12 ft from existing CL		
Date cored:	3/27/2015		
Total core length, in.	3.5	**Core Diameter, in.**	6
Comments:	2 in. surface course, 1.5 in. surface course. Aggregate is mainly fine grained, subrounded to subangular, well-distributed sandstone gravel, crushed syenite and crushed sandstone. The surface course has an apparent high bitumen content. The asphalt concrete is underlain by fine sandy clay with fine to coarse gravel.		

Core No. CS-8C

Top of Pavement Core

Notes: 1) Top of pavement to the left.

2) Unless otherwise noted fractured pavement cores resulted from the coring process.

Grubbs, Hoskyn, Barton & Wyatt, INC.
CONSULTING ENGINEERS

AHTD PROJECT: Task Order No. C068
Job No. CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Hwy 425 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Approximate Station	603+53	**Construction CL Offset**	10 RT
Directional lane	Northbound - 10 ft from existing CL		
Date cored:	3/27/2015		
Total core length, in.	14	**Core Diameter, in.**	6
Comments:	2 in. surface course, 2.5 in. binder, 1.5 in. surface course, 1 in. surface course. Aggregate is fine to coarse, subrounded to angular, well-distributed sandstone gravel and crushed syenite with some crushed sandstone. The surface course is mainly fine grained and has an apparent high bitumen content. The binder aggregate is mainl coarse grained. The asphalt concrete is underlain by ±7 in. of soil cement.		

Core No. CS-9A

Top of Pavement Core

Notes: 1) Top of pavement to the left.

2) Unless otherwise noted fractured pavement cores resulted from the coring process.

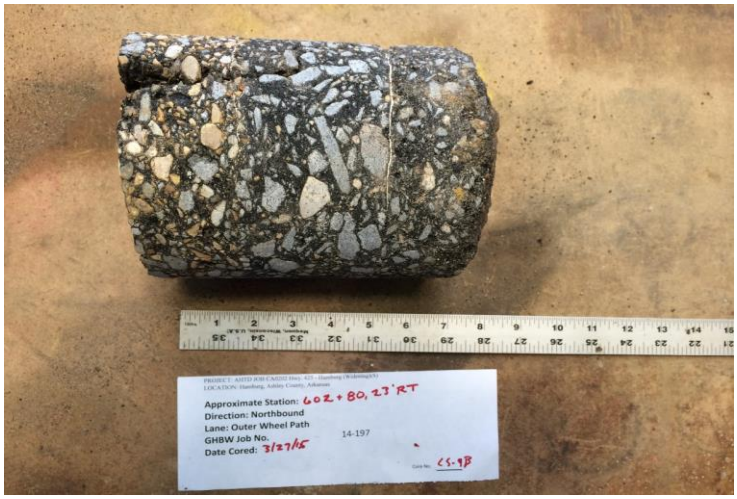
Grubbs, Hoskyn, Barton & Wyatt, INC.
CONSULTING ENGINEERS

AHTD PROJECT: Task Order No. C068
Job No. CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Hwy 425 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Approximate Station	603+53	**Construction CL Offset**	11 RT
Directional lane	Northbound - 11 ft from existing CL		
Date cored:	3/27/2015		
Total core length, in.	6.5	**Core Diameter, in.**	6
Comments:	2 in. surface course, 2.5 in. binder, 2 in. surface course. Aggregate is fine to coarse, subrounded to angular, well-distributed sandstone gravel and crushed syenite with some crushed sandstone. The surface course is mainly fine grained. The upper surface course has an apparent high bitumen content. The binder aggregate is fine to coarse grained. The lower surface course is degraded with an apparent high bitumen content. The asphalt concrete is underlain by soil cement.		

Core No. CS-9B

Top of Pavement Core



Notes: 1) Top of pavement to the left.

2) Unless otherwise noted fractured pavement cores resulted from the coring process.

Grubbs, Hoskyn, Barton & Wyatt, INC.
CONSULTING ENGINEERS

AHTD PROJECT: Task Order No. C068
Job No. CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Hwy 425 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Approximate Station	603+53	**Construction CL Offset**	12 RT
Directional lane	Northbound - 12 ft from existing CL		
Date cored:	3/27/2015		
Total core length, in.	3	**Core Diameter, in.**	6
Comments:	3 in. surface course. Aggregate is fine to coarse, subrounded to subangular, well-distributed sandstone gravel and crushed sandstone with some crushed syenite. The surface course is mainly fine grained and has an apparent high bitumen content. The asphalt concrete is underlain by fine sandy clay with some fine to coarse gravel.		

Core No. CS-9C

Top of Pavement Core

Notes: 1) Top of pavement to the left.

2) Unless otherwise noted fractured pavement cores resulted from the coring process.

Grubbs, Hoskyn, Barton & Wyatt, INC.
CONSULTING ENGINEERS

AHTD PROJECT: Task Order No. C068
Job No. CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Hwy 425 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Approximate Station	576+41	**Construction CL Offset**	12 RT
Directional lane	Northbound - 10 ft from existing CL		
Date cored:	3/23/2015		
Total core length, in.	11	**Core Diameter, in.**	6
Comments:	2 in. surface course, 2 in.surface course, 5 in. binder, 2 in. ACHM base. Aggregate is fine to coarse, subrounded to angular, well-distributed sandstone gravel and crushed syenite with some crushed sandstone. The surface course is mainly fine grained. The upper surface course has an apparent high bitumen content. The binder is degraded with an apparent high bitumen content and fine to coarse aggregate. The ACHM base is mainly coarse grained sandstone gravel and has an apparent high bitumen content. The base is underlain by sandy fine to coarse gravel.		

Core No. CS-10A

Top of Pavement Core

Notes: 1) Top of pavement to the left.

2) Unless otherwise noted fractured pavement cores resulted from the coring process.

Grubbs, Hoskyn, Barton & Wyatt, INC.
CONSULTING ENGINEERS

AHTD PROJECT: Task Order No. C068
Job No. CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Hwy 425 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Approximate Station	576+41	**Construction CL Offset**	13 RT
Directional lane	Northbound - 11 ft from existing CL		
Date Cored:	3/23/2015		
Total core length, in.	9	**Core Diameter, in.**	6
Comments:	3.5 in. surface course, 1.5 in.binder, 2 in.surface coarse, 2 in. binder. Aggregate is fine to coarse, subrounded to angular, well-distributed sandstone gravel and crushed syenite with some crushed sandstone. The surface course is mainly fine grained. The binder is fine to coarse aggregrate. The base is underlain by fine sandy clay with some fine to coarse gravel.		

Core No. CS-10B

Top of Pavement Core

Notes: 1) Top of pavement to the left.

2) Unless otherwise noted fractured pavement cores resulted from the coring process.

Grubbs, Hoskyn, Barton & Wyatt, INC.
CONSULTING ENGINEERS

AHTD PROJECT: Task Order No. C068
Job No. CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Hwy 425 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Approximate Station	550+39	**Construction CL Offset**	9 RT
Directional lane	Northbound - 10 ft from existing CL		
Date cored:	3/23/2015		
Total core length, in.	12	**Core Diameter, in.**	6
Comments:	1.5 in. surface course, 2 in.surface course, 1.5 in. surface course, 2 in. binder. Aggregate is fine to coarse, subrounded to angular, well-distributed sandstone gravel and crushed syenite with some crushed sandstone. The surface course is mainly fine grained. The binder is fine to coarse aggregate. The asphalt concrete is underlain by 5 in. of soil cement.		

Core No. CS-11A

Top of Pavement Core

Notes: 1) Top of pavement to the left.

2) Unless otherwise noted fractured pavement cores resulted from the coring process.

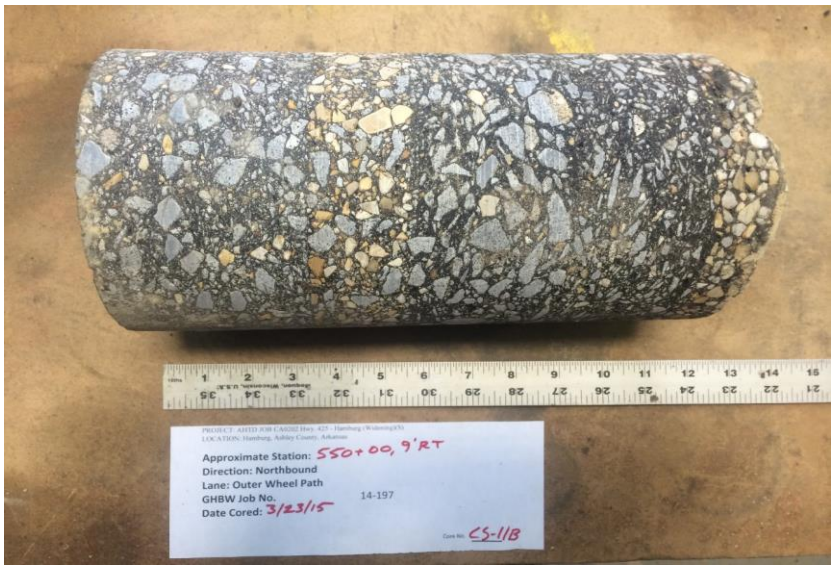
Grubbs, Hoskyn, Barton & Wyatt, INC.
CONSULTING ENGINEERS

AHTD PROJECT: Task Order No. C068
Job No. CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Hwy 425 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Approximate Station	550+39	**Construction CL Offset**	10 RT
Directional lane	Northbound - 11 ft from existing CL		
Date cored:	3/23/2015		
Total core length, in.	10.5	**Core Diameter, in.**	6
Comments:	1.5 in. surface course, 2 in.surface course, 1.5 in. surface course, 2.5 in. binder, 2 in. surface course, 1 in. surface course. Aggregate is fine to coarse, subrounded to angular, well-distributed sandstone gravel and crushed syenite with some crushed sandstone. The surface course is mainly fine grained. The binder is fine to coarse aggregate. The asphalt concrete is underlain by soil cement.		

Core No. CS-11B

Top of Pavement Core



Notes: 1) Top of pavement to the left.

2) Unless otherwise noted fractured pavement cores resulted from the coring process.

Grubbs, Hoskyn, Barton & Wyatt, INC.
CONSULTING ENGINEERS

AHTD PROJECT: Task Order No. C068
Job No. CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Hwy 425 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Approximate Station	550+39	**Construction CL Offset**	11 RT
Directional lane	Northbound - 12 ft from existing CL		
Date cored:	3/23/2015		
Total core length, in.	10.75	**Core Diameter, in.**	6
Comments:	1.5 in. surface course, 2 in.surface course, 1.25 in. surface course, 3 in. binder, 2 in. surface course, 1 in. surface course. Aggregate is fine to coarse, subrounded to angular, well-distributed sandstone gravel and crushed syenite with some crushed sandstone. The surface course is mainly fine grained. The binder is fine to coarse aggregate. The lower binder and surface course is degraded and has an apparent high bitumen content. The asphalt concrete is underlain by soil cement.		

Core No. CS-11C

Top of Pavement Core

Notes: 1) Top of pavement to the left.

2) Unless otherwise noted fractured pavement cores resulted from the coring process.

Grubbs, Hoskyn, Barton & Wyatt, INC.
CONSULTING ENGINEERS

AHTD PROJECT: Task Order No. C068
Job No. CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Hwy 425 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Approximate Station	550+39	**Construction CL Offset**	12 RT
Directional lane	Northbound - 13 ft from existing CL		
Date cored:	3/23/2015		
Total core length, in.	12	**Core Diameter, in.**	6
Comments:	2.75 in. surface course, 1 in.surface course, 2.75 in. binder, 3 in. surface course, 2.5 in. surface course. Aggregate is fine to coarse, subrounded to angular, well-distributed sandstone gravel and crushed syenite with some crushed sandstone. The surface course is mainly fine grained. The binder is fine to coarse aggregate. The lower surface course is degraded and has an apparent high bitumen content. The asphalt concrete is underlain by soil cement.		

Core No. CS-11D

Top of Pavement Core

Notes: 1) Top of pavement to the left.

2) Unless otherwise noted fractured pavement cores resulted from the coring process.

Grubbs, Hoskyn, Barton & Wyatt, INC.
CONSULTING ENGINEERS

AHTD PROJECT: Task Order No. C068
Job No. CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Hwy 425 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Approximate Station	550+39	**Construction CL Offset**	13 RT
Directional lane	Northbound - 14 ft from existing CL		
Date cored:	3/23/2015		
Total core length, in.	7.5	**Core Diameter, in.**	6
Comments:	1.75 in. surface course, 1.75 in.surface course, 2 in. surface course, 2 in. surface course. Aggregate is fine to coarse, subrounded to angular, well-distributed sandstone gravel and crushed syenite with some crushed sandstone. The surface course is mainly fine grained. The binder is fine to coarse aggregate. The lower surface course has an apparent high bitumen content. The asphalt concrete is underlain by fine sandy clay with some fine to coarse gravel.		

Core No. CS-11E

Top of Pavement Core

Notes: 1) Top of pavement to the left.

2) Unless otherwise noted fractured pavement cores resulted from the coring process.

Grubbs, Hoskyn, Barton & Wyatt, INC.
CONSULTING ENGINEERS

AHTD PROJECT: Task Order No. C068
Job No. CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Hwy 425 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Approximate Station	821+66	**Construction CL Offset**	11 LT
Directional lane	Southbound - 10 ft from existing CL		
Date cored:	4/1/2015		
Total core length, in.	11.5	**Core Diameter, in.**	6
Comments:	2.5 in. surface course, 1.5 in.binder, 2.5 in. surface course, 5 in. ACHW base. Aggregate is fine to coarse, subrounded to angular, well-distributed sandstone gravel and crushed syenite with some crushed sandstone. The surface course is mainly fine aggregate. The binder is slightly degraded and contains fine to coarse aggregate. The upper surface course and binder have an apparent high bitumen content. The ACHW base consists of mainly fine to course sandstone gravel and has an apparent high bitumen content. The base is underlain by soil cement.		

Core No. CS-12A

Top of Pavement Core

Notes: 1) Top of pavement to the left.

2) Unless otherwise noted fractured pavement cores resulted from the coring process.

Grubbs, Hoskyn, Barton & Wyatt, INC.
CONSULTING ENGINEERS

AHTD PROJECT: Task Order No. C068
Job No. CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Hwy 425 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Approximate Station	821+66	**Construction CL Offset**	10 LT
Directional lane	Southbound - 11 ft from existing CL		
Date cored:	4/1/2015		
Total core length, in.	5	**Core Diameter, in.**	6
Comments:	2 in. surface course, 3 in. surface course. Aggregate is mainly fine grained, subrounded to angular, well-distributed sandstone gravel and crushed syenite with some crushed sandstone. The upper surface course has an apparent high bitumen content. The asphalt concrete is underlain by soil cement.		

Core No. CS-12B

Top of Pavement Core

Notes: 1) Top of pavement to the left.

2) Unless otherwise noted fractured pavement cores resulted from the coring process.

Grubbs, Hoskyn, Barton & Wyatt, INC.
CONSULTING ENGINEERS

AHTD PROJECT: Task Order No. C068
Job No. CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Hwy 425 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Approximate Station	802+50	**Construction CL Offset**	28 LT
Directional lane	Southbound - 10 ft from existing CL		
Date cored:	4/1/2015		
Total core length, in.	11	**Core Diameter, in.**	6
Comments:	2.5 in. surface course, 6 in. surface course, 2.5 in. ACHM base. Aggregate is mainly fine grained, subrounded to angular, well-distributed sandstone gravel and crushed syenite with some crushed sandstone. The upper surface course has an apparent high bitumen content. The ACHM base consists of fine to coarse, well-distributed sandstone gravel and has an apparent high bitumen content. The base is underlain by soil cement.		

Core No. CS-13A

Top of Pavement Core

Notes: 1) Top of pavement to the left.

2) Unless otherwise noted fractured pavement cores resulted from the coring process.

Grubbs, Hoskyn, Barton & Wyatt, INC.
CONSULTING ENGINEERS

AHTD PROJECT: Task Order No. C068
Job No. CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Hwy 425 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Approximate Station	802+50	**Construction CL Offset**	29 LT
Directional lane	Southbound - 11 ft from existing CL		
Date cored:	4/1/2015		
Total core length, in.	11	**Core Diameter, in.**	6
Comments:	2 in. surface course, 2 in. binder, 5 in. surface course, 3 in. ACHM base. Aggregate is fine to coarse, subrounded to angular, well-distributed sandstone gravel and crushed syenite with some crushed sandstone. Surface course is mainly fine aggregate. The upper surface course has an apparent high bitumen content. The binder consists of fine to coarse aggregate. The ACHM base consists of fine to coarse, well-distributed sandstone gravel and has an apparent high bitumen content. The base is underlain by soil cement.		

Core No. CS-13B

Top of Pavement Core

Notes: 1) Top of pavement to the left.

2) Unless otherwise noted fractured pavement cores resulted from the coring process.

Grubbs, Hoskyn, Barton & Wyatt, INC.
CONSULTING ENGINEERS

AHTD PROJECT: Task Order No. C068
Job No. CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Hwy 425 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Approximate Station	802+50	**Construction CL Offset**	30 LT
Directional lane	Southbound - 12 ft from existing CL		
Date cored:	4/1/2015		
Total core length, in.	5.5	**Core Diameter, in.**	6
Comments:	1.5 in. surface course, 3.5 in. binder, 0.5 in. surface course. Aggregate is fine to coarse, subrounded to angular, well-distributed sandstone gravel and crushed syenite with some crushed sandstone. Surface course is mainly fine aggregate and has an apparent high bitumen content. The binder consists of fine to coarse aggregate. The asphalt concrete is underlain by sandy fine to coarse gravel.		

Core No. CS-13C

Top of Pavement Core

Notes: 1) Top of pavement to the left.

2) Unless otherwise noted fractured pavement cores resulted from the coring process.

Grubbs, Hoskyn, Barton & Wyatt, INC.
CONSULTING ENGINEERS

AHTD PROJECT: Task Order No. C068
Job No. CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Hwy 425 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Approximate Station	775+55	**Construction CL Offset**	28 LT
Directional lane	Southbound - 10 ft from existing CL		
Date cored:	4/1/2015		
Total core length, in.	5.5	**Core Diameter, in.**	6
Comments:	3 in. surface course, 3 in. surface course. Aggregate is mainly fine grained, subrounded to angular, well-distributed sandstone gravel and crushed syenite with some crushed sandstone. The upper surface course has an apparent high bitumen content. The asphalt concrete is underlain by soil cement.		

Core No. CS-14A

Top of Pavement Core

Notes: 1) Top of pavement to the left.

2) Unless otherwise noted fractured pavement cores resulted from the coring process.

Grubbs, Hoskyn, Barton & Wyatt, INC.
CONSULTING ENGINEERS

AHTD PROJECT: Task Order No. C068
Job No. CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Hwy 425 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Approximate Station	775+55	**Construction CL Offset**	29 LT
Directional lane	Southbound - 11 ft from existing CL		
Date cored:	4/1/2015		
Total core length, in.	4.5	**Core Diameter, in.**	6
Comments:	2 in. surface course, 1.25 in. surface course, 1.25 in. surface course. Aggregate is mainly fine grained, subrounded to angular, well-distributed sandstone gravel and crushed syenite with some crushed sandstone. Upper surface course has an apparent high bitumen content. The asphalt concrete is underlain by fine sandy clay with some fine to coarse gravel.		

Core No. CS-14B

Top of Pavement Core

Notes: 1) Top of pavement to the left.

2) Unless otherwise noted fractured pavement cores resulted from the coring process.

Grubbs, Hoskyn, Barton & Wyatt, INC.
CONSULTING ENGINEERS

AHTD PROJECT: Task Order No. C068
Job No. CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Hwy 425 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Approximate Station	747+47	**Construction CL Offset**	10 LT
Directional lane	Southbound - 10 ft from existing CL		
Date cored:	4/1/2015		
Total core length, in.	8.5	**Core Diameter, in.**	6
Comments:	2 in. surface course, 2.5 in. surface course, 1.5 in. binder, 2.5 in. surface course. Aggregate is fine to coarse, subrounded to angular, well-distributed sandstone gravel and crushed syenite with some crushed sandstone. Surface course is mainly fine aggregate. The surface course has an apparent high bitumen content. The binder consists of fine to coarse aggregate. The asphalt concrete is underlain by soil cement.		

Core No. CS-15A

Top of Pavement Core

Notes: 1) Top of pavement to the left.

2) Unless otherwise noted fractured pavement cores resulted from the coring process.

Grubbs, Hoskyn, Barton & Wyatt, INC.
CONSULTING ENGINEERS

AHTD PROJECT: Task Order No. C068
Job No. CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Hwy 425 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Approximate Station	747+47	**Construction CL Offset**	11 LT
Directional lane	Southbound - 11 ft from existing CL		
Date cored:	4/1/2015		
Total core length, in.	5.75	**Core Diameter, in.**	6
Comments:	2 in. surface course, 1.25 in. binder, 2.5 in. binder. Aggregate is fine to coarse, subrounded to angular, well-distributed sandstone gravel and crushed syenite with some crushed sandstone. Surface course is mainly fine aggregate. The surface course has an apparent high bitumen content. The binder consists of fine to coarse aggregate and is degraded with an apparent high bitumen content. The asphalt concrete is underlain by soil cement.		

Core No. CS-15B

Top of Pavement Core

Notes: 1) Top of pavement to the left.

2) Unless otherwise noted fractured pavement cores resulted from the coring process.

Grubbs, Hoskyn, Barton & Wyatt, INC.
CONSULTING ENGINEERS

AHTD PROJECT: Task Order No. C068
Job No. CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Hwy 425 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Approximate Station	747+47	**Construction CL Offset**	12 LT
Directional lane	Southbound - 12 ft from existing CL		
Date cored:	4/1/2015		
Total core length, in.	6.5	**Core Diameter, in.**	6
Comments:	1.5 in. surface course, 3 in. surface course, 1.5 in. surface course, 0.5 in. surface course. Aggregate is fine to coarse, subrounded to angular, well-distributed sandstone gravel and crushed syenite with some crushed sandstone. Surface course is mainly fine aggregate and has an apparent high bitumen content. The binder consists of fine to coarse aggregate and has an apparent high bitumen content. The asphalt concrete is underlain by soil cement.		

Core No. CS-15C

Top of Pavement Core

Notes: 1) Top of pavement to the left.

2) Unless otherwise noted fractured pavement cores resulted from the coring process.

Grubbs, Hoskyn, Barton & Wyatt, INC.
CONSULTING ENGINEERS

AHTD PROJECT: Task Order No. C068
Job No. CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Hwy 425 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Approximate Station	747+47	**Construction CL Offset**	13 LT
Directional lane	Southbound - 13 ft from existing CL		
Date cored:	4/1/2015		
Total core length, in.	4.75	**Core Diameter, in.**	6
Comments:	3 in. surface course, 1.75 in. surface course. Aggregate is mainly fine grained, subrounded to angular, well-distributed sandstone gravel and crushed syenite with some crushed sandstone. The asphalt concrete is underlain by sandy fine to course gravel.		

Core No. CS-15D

Top of Pavement Core

Notes: 1) Top of pavement to the left.

2) Unless otherwise noted fractured pavement cores resulted from the coring process.

Grubbs, Hoskyn, Barton & Wyatt, INC.
CONSULTING ENGINEERS

AHTD PROJECT: Task Order No. C068
Job No. CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Hwy 425 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Approximate Station	721+76	**Construction CL Offset**	1 RT
Directional lane	Southbound - 10 ft from existing CL		
Date cored:	3/31/2015		
Total core length, in.	8.5	**Core Diameter, in.**	6
Comments:	2 in. surface course, 2 in. binder, 1.5 in. surface course, 3 in. ACHM base. Aggregate is fine to coarse, subrounded to angular, well-distributed sandstone gravel and crushed syenite with some crushed sandstone. Surface course is mainly fine aggregate and has an apparent high bitumen content. The binder is degraded with an apparent high bitumen content and consists of fine to coarse aggregate. The ACHM base consists of fine to coarse, moderately to well-distributed sandstone gravel and has an apparent high bitumen content. The base is underlain by soil cement.		

Core No. CS-16A

Top of Pavement Core

Notes: 1) Top of pavement to the left.

2) Unless otherwise noted fractured pavement cores resulted from the coring process.

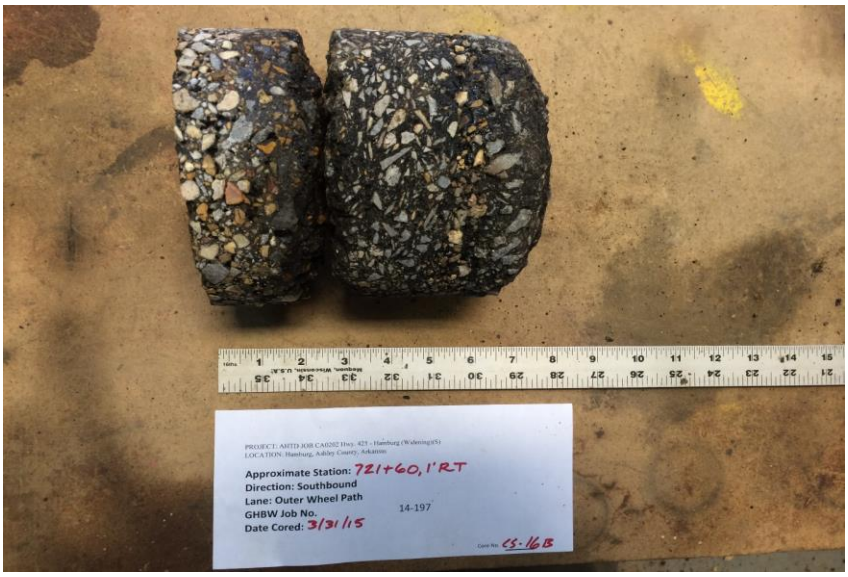
Grubbs, Hoskyn, Barton & Wyatt, INC.
CONSULTING ENGINEERS

AHTD PROJECT: Task Order No. C068
Job No. CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Hwy 425 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Approximate Station	721+76	**Construction CL Offset**	CL
Directional lane	Southbound - 11 ft from existing CL		
Date cored:	3/31/2015		
Total core length, in.	6	**Core Diameter, in.**	6
Comments:	2 in. surface course, 2 in. surface course, 0.5 in. surface course, 1.5 in. binder. Aggregate is fine to coarse, subrounded to angular, well-distributed sandstone gravel and crushed syenite with some crushed sandstone. Surface course is mainly fine aggregate. The upper surface course has an apparent high bitumen content. The binder consists of fine to coarse aggregate and is slightly degraded with an apparent high bitumen content. The asphalt concrete is underlain by soil cement.		

Core No. CS-16B

Top of Pavement Core



Notes: 1) Top of pavement to the left.

2) Unless otherwise noted fractured pavement cores resulted from the coring process.

Grubbs, Hoskyn, Barton & Wyatt, INC.
CONSULTING ENGINEERS

AHTD PROJECT: Task Order No. C068
Job No. CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Hwy 425 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Approximate Station	721+76	**Construction CL Offset**	1 LT
Directional lane	Southbound - 12 ft from existing CL		
Date cored:	3/31/2015		
Total core length, in.	6	**Core Diameter, in.**	6
Comments:	2 in. surface course, 2 in. binder, 2 in. ACHM base. Aggregate is fine to coarse, subrounded to angular, well-distributed sandstone gravel and crushed syenite with some crushed sandstone. Surface course is mainly fine aggregate. The upper surface course has an apparent high bitumen content. The binder consists of fine to coarse aggregate and is slightly degraded with an apparent high bitumen content. The asphalt concrete is underlain by soil cement.		

Core No. CS-16C

Top of Pavement Core

Notes: 1) Top of pavement to the left.

2) Unless otherwise noted fractured pavement cores resulted from the coring process.

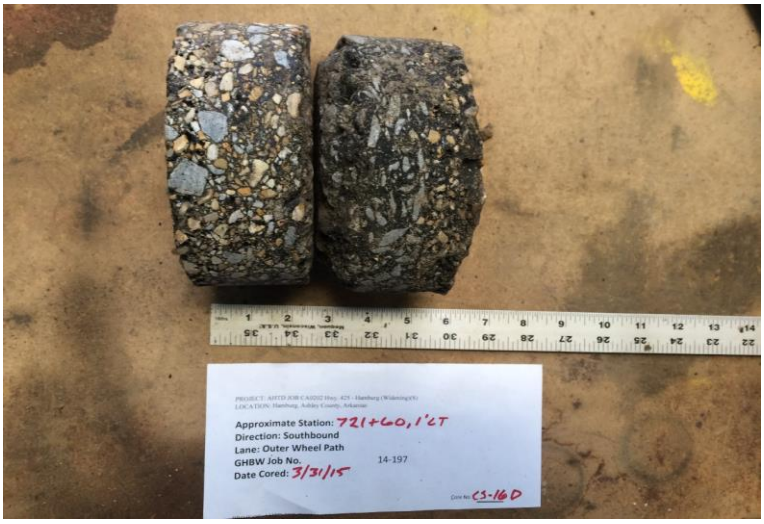
Grubbs, Hoskyn, Barton & Wyatt, INC.
CONSULTING ENGINEERS

AHTD PROJECT: Task Order No. C068
Job No. CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Hwy 425 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Approximate Station	721+76	**Construction CL Offset**	2 LT
Directional lane	Southbound - 13 ft from existing CL		
Date cored:	3/31/2015		
Total core length, in.	5	**Core Diameter, in.**	6
Comments:	2 in. surface course, 2 in. surface course, 1 in. surface course. Aggregate is mainly fine grained, subrounded to angular, well-distributed sandstone gravel and crushed syenite with some crushed sandstone. The upper surface course has an apparent high bitumen content. The lower surface course is slightly degraded with an apparent high bitumen content. The asphalt concrete is underlain by fine sandy clay with some fine to coarse gravel.		

Core No. CS-16D

Top of Pavement Core



Notes: 1) Top of pavement to the left.

2) Unless otherwise noted fractured pavement cores resulted from the coring process.

Grubbs, Hoskyn, Barton & Wyatt, INC.
CONSULTING ENGINEERS

AHTD PROJECT: Task Order No. C068
Job No. CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Hwy 425 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Approximate Station	695+62	**Construction CL Offset**	12 LT
Directional lane	Southbound - 10 ft from existing CL		
Date cored:	3/31/2015		
Total core length, in.	7	**Core Diameter, in.**	6
Comments:	3 in. surface course, 1.5 in. surface course, 2.5 in. ACHM base. Aggregate is fine to coarse, subrounded to angular, well-distributed sandstone gravel and crushed syenite with some crushed sandstone. Surface course is mainly fine aggregate. The surface course has an apparent high bitumen content. The upper surface course is degraded. The AMHC base is fine to course, moderately to well-distributed sandstone gravel and is degrated with an apparent highbitumen content. The base is underlain by soil cement.		

Core No. CS-17A

Top of Pavement Core

Notes: 1) Top of pavement to the left.

2) Unless otherwise noted fractured pavement cores resulted from the coring process.

Grubbs, Hoskyn, Barton & Wyatt, INC.
CONSULTING ENGINEERS

AHTD PROJECT: Task Order No. C068
Job No. CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Hwy 425 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Approximate Station	695+62	**Construction CL Offset**	13 LT
Directional lane	Southbound - 11 ft from existing CL		
Date cored:	3/31/2015		
Total core length, in.	3	**Core Diameter, in.**	6
Comments:	3 in. surface course. Aggregate is mainly fine grained, subrounded to angular, well-distributed sandstone gravel and crushed syenite with some crushed sandstone. The asphalt concrete is underlain by sandy fine to coarse gravel.		

Core No. CS-17B

Top of Pavement Core

Notes: 1) Top of pavement to the left.

2) Unless otherwise noted fractured pavement cores resulted from the coring process.

Grubbs, Hoskyn, Barton & Wyatt, INC.
CONSULTING ENGINEERS

AHTD PROJECT: Task Order No. C068
Job No. CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Hwy 425 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Approximate Station	668+82	**Construction CL Offset**	9 LT
Directional lane	Southbound - 10 ft from existing CL		
Date cored:	3/31/2015		
Total core length, in.	6.5	**Core Diameter, in.**	6
Comments:	1.25 in. surface course, 1 in. surface course, 2 in. binder, 1.25 in surface course, 1 in. surface course. Aggregate is fine to coarse, subrounded to angular, well-distributed sandstone gravel and crushed syenite with some crushed sandstone. The upper surface course has an apparent high bitumen content. The binder is fine to coarse grained and is slightly degraded with an apparent high bitumen content. The asphalt concrete is underlain by soil cement.		

Core No. CS-18A

Top of Pavement Core

Notes: 1) Top of pavement to the left.

2) Unless otherwise noted fractured pavement cores resulted from the coring process.

Grubbs, Hoskyn, Barton & Wyatt, INC.
CONSULTING ENGINEERS

AHTD PROJECT: Task Order No. C068
Job No. CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Hwy 425 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Approximate Station	668+82	**Construction CL Offset**	10 LT
Directional lane	Southbound - 11 ft from existing CL		
Date cored:	3/31/2015		
Total core length, in.	7.5	**Core Diameter, in.**	6
Comments:	1.5 in. surface course, 1 in. surface course, 2.5 in. binder, 1.5 in surface course, 1 in. surface course. Aggregate is fine to coarse, subrounded to angular, well-distributed sandstone gravel and crushed syenite with some crushed sandstone. The upper surface course has an apparent high bitumen content. The binder contains fine to coarse aggregate. The asphalt concrete is underlain by soil cement.		

Core No. CS-18B

Top of Pavement Core

Notes: 1) Top of pavement to the left.

2) Unless otherwise noted fractured pavement cores resulted from the coring process.

Grubbs, Hoskyn, Barton & Wyatt, INC.
CONSULTING ENGINEERS

AHTD PROJECT: Task Order No. C068
Job No. CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Hwy 425 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Approximate Station	668+82	**Construction CL Offset**	11 LT
Directional lane	Southbound - 12 ft from existing CL		
Date cored:	3/31/2015		
Total core length, in.	3	**Core Diameter, in.**	6
Comments:	3 in. surface course. Aggregate is mainly fine grained, subrounded to angular, well-distributed sandstone gravel and crushed syenite with some crushed sandstone. The surface course has an apparent high bitumen content and is underlain by fine sandy clay with some fine to coarse gravel.		

Core No. CS-18C

Top of Pavement Core

Notes: 1) Top of pavement to the left.

2) Unless otherwise noted fractured pavement cores resulted from the coring process.

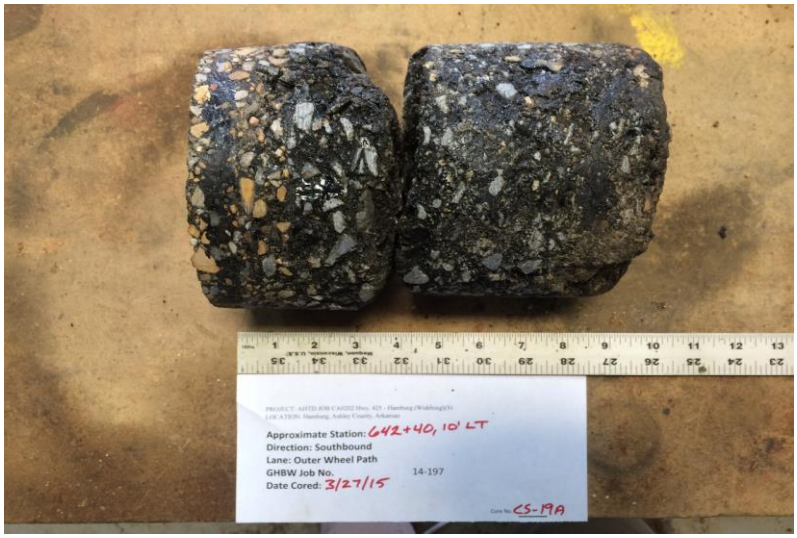
Grubbs, Hoskyn, Barton & Wyatt, INC.
CONSULTING ENGINEERS

AHTD PROJECT: Task Order No. C068
Job No. CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Hwy 425 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Approximate Station	642+43	**Construction CL Offset**	8 LT
Directional lane	Southbound - 10 ft from existing CL		
Date cored:	3/27/2015		
Total core length, in.	7.5	**Core Diameter, in.**	6
Comments:	1.5 in. surface course, 2 in. binder, 3.5 in. surface course, 0.5 in surface course. Aggregate is fine to coarse, subrounded to angular, well-distributed sandstone gravel and crushed syenite with some crushed sandstone. The upper surface course has an apparent high bitumen content. The binder contains fine to coarse aggregate. The binder and lower surface course are degraded with an apparent high bitumen content. The asphalt concrete is underlain by soil cement.		

Core No. CS-19A

Top of Pavement Core



Notes: 1) Top of pavement to the left.

2) Unless otherwise noted fractured pavement cores resulted from the coring process.

Grubbs, Hoskyn, Barton & Wyatt, INC.
CONSULTING ENGINEERS

AHTD PROJECT: Task Order No. C068
Job No. CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Hwy 425 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Approximate Station	642+43	**Construction CL Offset**	9 LT
Directional lane	Southbound - 11 ft from existing CL		
Date cored:	3/27/2015		
Total core length, in.	8.75	**Core Diameter, in.**	6
Comments:	1.5 in. surface course, 2 in. binder, 3.5 in. surface course, 1.75 in surface course. Aggregate is fine to coarse, subrounded to angular, well-distributed sandstone gravel and crushed syenite with some crushed sandstone. The upper surface course has an apparent high bitumen content. The binder contains fine to coarse aggregate. The asphalt concrete is underlain by soil cement.		

Core No. CS-19B

Top of Pavement Core

Notes: 1) Top of pavement to the left.

2) Unless otherwise noted fractured pavement cores resulted from the coring process.

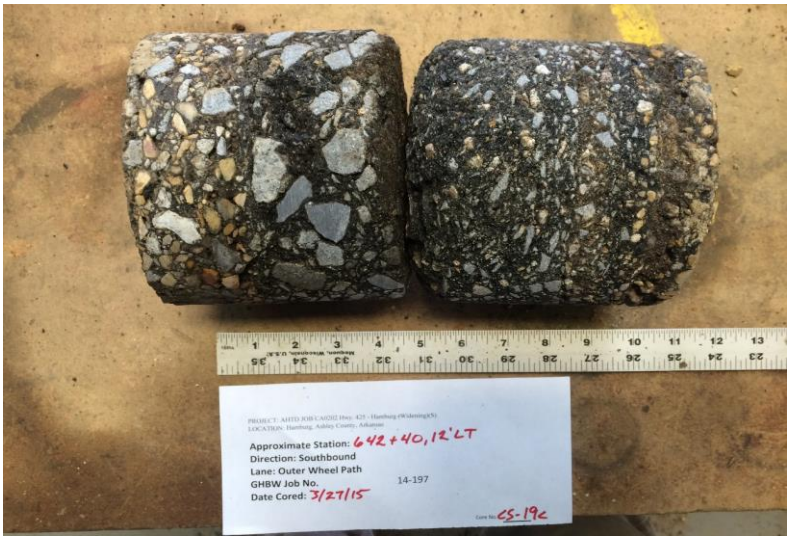
Grubbs, Hoskyn, Barton & Wyatt, INC.
CONSULTING ENGINEERS

AHTD PROJECT: Task Order No. C068
Job No. CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Hwy 425 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Approximate Station	642+43	**Construction CL Offset**	10 LT
Directional lane	Southbound - 12 ft from existing CL		
Date cored:	3/27/2015		
Total core length, in.	9	**Core Diameter, in.**	6
Comments:	1.75 in. surface course, 2.75 in. binder, 3 in. surface course, 1.5 in surface course. Aggregate is fine to coarse, subrounded to angular, well-distributed sandstone gravel and crushed syenite with some crushed sandstone. The upper surface course has an apparent high bitumen content. The binder is slightly degraded with an apparent high bitumen content and contains fine to coarse aggregate. The asphalt concrete is underlain by soil cement.		

Core No. CS-19C

Top of Pavement Core



Notes: 1) Top of pavement to the left.

2) Unless otherwise noted fractured pavement cores resulted from the coring process.

Grubbs, Hoskyn, Barton & Wyatt, INC.
CONSULTING ENGINEERS

AHTD PROJECT: Task Order No. C068
Job No. CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Hwy 425 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Approximate Station	642+43	**Construction CL Offset**	11 LT
Directional lane	Southbound - 13 ft from existing CL		
Date cored:	3/27/2015		
Total core length, in.	5	**Core Diameter, in.**	6
Comments:	3 in. surface course, 2 in. ACHM base. Aggregate is fine to coarse, subrounded to angular, well-distributed sandstone gravel and crushed syenite with some crushed sandstone. The surface course is mainly fine grained and has an apparent high bitumen content. The ACHM base contains fine to coarse, moderately to well-distributed sandstone gravel and has an apparent high bitumen content. The base is underlain by fine sandy clay with some fine to coarse gravel.		

Core No. CS-19D

Top of Pavement Core

Notes: 1) Top of pavement to the left.

2) Unless otherwise noted fractured pavement cores resulted from the coring process.

Grubbs, Hoskyn, Barton & Wyatt, INC.
CONSULTING ENGINEERS

AHTD PROJECT: Task Order No. C068
Job No. CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Hwy 425 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Approximate Station	619+21	**Construction CL Offset**	10 LT
Directional lane	Southbound - 10 ft from existing CL		
Date cored:	3/27/2015		
Total core length, in.	9	**Core Diameter, in.**	6
Comments:	0.5 in. surface course, 2 in. surface course, 1 in. surface course, 2.5 in. binder, 2 in. surface course, 1 in.surface course. Aggregate is fine to coarse, subrounded to angular, well-distributed sandstone gravel and crushed syenite with some crushed sandstone. Surface course is mainly fine aggregate. The binder is fine to course aggregate. The asphalt concrete is underlain by soil cement.		

Core No. CS-20A

Top of Pavement Core

Notes: 1) Top of pavement to the left.

2) Unless otherwise noted fractured pavement cores resulted from the coring process.

Grubbs, Hoskyn, Barton & Wyatt, INC.
CONSULTING ENGINEERS

AHTD PROJECT: Task Order No. C068
Job No. CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Hwy 425 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Approximate Station	619+21	**Construction CL Offset**	11 LT
Directional lane	Southbound - 11 ft from existing CL		
Date cored:	3/27/2015		
Total core length, in.	3.5	**Core Diameter, in.**	6
Comments:	0.5 in. surface course, 3 in. surface course. Aggregate is mainly fine grained, subrounded to subangular, well-distributed sandstone gravel and crushed syenite with some crushed sandstone. The surface course has an apparent high bitumen content. The asphalt concrete is underlain by sandy fine to coarse gravel.		

Core No. CS-20B

Top of Pavement Core

Notes: 1) Top of pavement to the left.

2) Unless otherwise noted fractured pavement cores resulted from the coring process.

Grubbs, Hoskyn, Barton & Wyatt, INC.
CONSULTING ENGINEERS

AHTD PROJECT: Task Order No. C068
Job No. CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Hwy 425 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Approximate Station	588+86	**Construction CL Offset**	10 LT
Directional lane	Southbound - 10 ft from existing CL		
Date cored:	3/27/2015		
Total core length, in.	8	**Core Diameter, in.**	6
Comments:	1.5 in. surface course, 2 in. surface course, 0.5 in. surface course, 2 in. binder, 2 in. ACHM base. Aggregate is fine to coarse, subrounded to subangular, well-distributed sandstone gravel and crushed syenite with some crushed sandstone. The surface course is mainly fine aggregate. The binder is fine to coarse aggregate. The ACHM base contains fine to coarse, moderately to well-distributed sandstone gravel and is sightly degraded with an apparent high bitumen content. The base is underlain by sandy fine to coarse gravel.		

Core No. CS-21A

Top of Pavement Core

Notes: 1) Top of pavement to the left.

2) Unless otherwise noted fractured pavement cores resulted from the coring process.

Grubbs, Hoskyn, Barton & Wyatt, INC.
CONSULTING ENGINEERS

AHTD PROJECT: Task Order No. C068
Job No. CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Hwy 425 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Approximate Station	588+86	**Construction CL Offset**	11 LT
Directional lane	Southbound - 11 ft from existing CL		
Date cored:	3/27/2015		
Total core length, in.	3.5	**Core Diameter, in.**	6
Comments:	1.5 in. surface course, 2 in. surface course. Aggregate is mainly fine grained, subrounded to subangular, well-distributed sandstone gravel and crushed syenite with some crushed sandstone. The lower surface course has an apparent high bitumen content. The asphalt concrete is underlain by sandy fine to coarse gravel.		

Core No. CS-21B

Top of Pavement Core

Notes: 1) Top of pavement to the left.

2) Unless otherwise noted fractured pavement cores resulted from the coring process.

Grubbs, Hoskyn, Barton & Wyatt, INC.
CONSULTING ENGINEERS

AHTD PROJECT: Task Order No. C068
Job No. CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Hwy 425 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Approximate Station	562+38	**Construction CL Offset**	9 LT
Directional lane	Southbound - 10 ft from existing CL		
Date cored:	3/26/2015		
Total core length, in.	12	**Core Diameter, in.**	6
Comments:	4 in. surface course, 2.5 in. surface course, 2.5 in. binder, 3 in. surface course. Aggregate is fine to coarse, subrounded to angular, well-distributed sandstone gravel and crushed syenite with some crushed sandstone. The surface course has mainly fine aggregrate. The binder is degraded and has an high apparent bitumen content. The asphalt concrete is underlain by soil cement.		

Core No. CS-22A

Top of Pavement Core

Notes: 1) Top of pavement to the left.

2) Unless otherwise noted fractured pavement cores resulted from the coring process.

Grubbs, Hoskyn, Barton & Wyatt, INC.
CONSULTING ENGINEERS

AHTD PROJECT: Task Order No. C068
Job No. CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Hwy 425 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Approximate Station	562+38	**Construction CL Offset**	10 LT
Directional lane	Southbound - 11 ft from existing CL		
Date cored:	3/26/2015		
Total core length, in.	13	**Core Diameter, in.**	6
Comments:	4 in. surface course, 2.5 in. surface course, 3.5 in. binder, 3 in. surface course. Aggregate is fine to coarse, subrounded to angular, well-distributed sandstone gravel and crushed syenite with some crushed sandstone. The surface course has mainly fine aggregrate. The binder contains fine to coarse aggregate and has an high apparent bitumen content. The asphalt concrete is underlain by soil cement.		

Core No. CS-22B

Top of Pavement Core

Notes: 1) Top of pavement to the left.

2) Unless otherwise noted fractured pavement cores resulted from the coring process.

Grubbs, Hoskyn, Barton & Wyatt, INC.
CONSULTING ENGINEERS

AHTD PROJECT: Task Order No. C068
Job No. CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Hwy 425 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Approximate Station	562+38	**Construction CL Offset**	11 LT
Directional lane	Southbound - 12 ft from existing CL		
Date cored:	3/26/2015		
Total core length, in.	13	**Core Diameter, in.**	6
Comments:	3.75 in. surface course, 2 in. surface course, 1.75 in. surface course, 2.5 in. binder, 3 in. surface course. Aggregate is fine to coarse, subrounded to angular, well-distributed sandstone gravel and crushed syenite with some crushed sandstone. The surface course has mainly fine aggregrate. The binder contains fine to coarse aggregate and has an high apparent bitumen content. The asphalt concrete is underlain by soil cement.		

Core No. CS-22C

Top of Pavement Core

Notes: 1) Top of pavement to the left.

2) Unless otherwise noted fractured pavement cores resulted from the coring process.

Grubbs, Hoskyn, Barton & Wyatt, INC.
CONSULTING ENGINEERS

AHTD PROJECT: Task Order No. C068
Job No. CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Hwy 425 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Approximate Station	562+38	**Construction CL Offset**	12 LT
Directional lane	Southbound - 13 ft from existing CL		
Date cored:	3/26/2015		
Total core length, in.	6	**Core Diameter, in.**	6
Comments:	4 in. surface course, 2 in. surface course. Aggregate is mainly fine grained, subrounded to angular, well-distributed sandstone gravel and crushed syenite with some crushed sandstone. The lower surface course has an high apparent bitumen content. The asphalt concrete is underlain by sandy fine to coarse gravel.		

Core No. CS-22D

Top of Pavement Core

Notes: 1) Top of pavement to the left.

2) Unless otherwise noted fractured pavement cores resulted from the coring process.

Grubbs, Hoskyn, Barton & Wyatt, INC.
CONSULTING ENGINEERS

AHTD PROJECT: Task Order No. C068
Job No. CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Hwy 425 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Approximate Station	825+62	**Construction CL Offset**	22 RT
Directional lane	Northbound - Outer Wheel Path		
Date cored:	3/25/2015		
Total core length, in.	12.5	**Core Diameter, in.**	4
Comments:	1.5 in. surface course, 8 in. binder, 3 in surface course. Aggregate is fine to coarse, subrounded to angular, well-distributed sandstone gravel and crushed syenite with some crushed sandstone. The upper surface course has an high apparent bitumen content. The asphalt concrete is underlain by soil cement.		

Core No. 1

Top of Pavement Core

Notes: 1) Top of pavement to the left.

2) Unless otherwise noted fractured pavement cores resulted from the coring process.

Grubbs, Hoskyn, Barton & Wyatt, INC.
CONSULTING ENGINEERS

AHTD PROJECT: Task Order No. C068
Job No. CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Hwy 425 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Approximate Station	805+78	**Construction CL Offset**	8 LT
Directional lane	Northbound - Outer Wheel Path		
Date cored:	3/24/2015		
Total core length, in.	7.75	**Core Diameter, in.**	4
Comments:	2.25 in. surface course, 1.5 in. binder, 2 in surface course, 2 in. ACHM base. Aggregate is fine to coarse, subrounded to angular, well-distributed sandstone gravel and crushed syenite with some crushed sandstone. The upper surface course and binder have an high apparent bitumen content. The binder appears to be slighly degraded. The ACHM base is mainly coarse grained, well-distributed sandstone gravel with an apparent high bitumen content. The base is underlain by soil cement.		

Core No. 2

Top of Pavement Core

Notes: 1) Top of pavement to the left.

2) Unless otherwise noted fractured pavement cores resulted from the coring process.

Grubbs, Hoskyn, Barton & Wyatt, INC.
CONSULTING ENGINEERS

AHTD PROJECT: Task Order No. C068
Job No. CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Hwy 425 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Approximate Station	786+44	**Construction CL Offset**	10 LT
Directional lane	Northbound - Outer Wheel Path		
Date cored:	3/24/2015		
Total core length, in.	9	**Core Diameter, in.**	4
Comments:	2 in. surface course, 3 in. binder, 4 in surface course, 2 in. ACHM base. Aggregate is fine to coarse, subrounded to angular, well-distributed sandstone gravel and crushed syenite with some crushed sandstone. The upper surface course has an high apparent bitumen content. The binder is fine to coarse grained and appears to be degraded with an apparent high bitumen content. The ACHM base is mainly coarse grained, well-distributed sandstone gravel with an apparent high bitumen content. The base is underlain by fine sandy clay with some medium to coarse sand and fine to coarse gravel.		

Core No. 3

Top of Pavement Core

Notes: 1) Top of pavement to the left.

2) Unless otherwise noted fractured pavement cores resulted from the coring process.

Grubbs, Hoskyn, Barton & Wyatt, INC.
CONSULTING ENGINEERS

AHTD PROJECT: Task Order No. C068
Job No. CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Hwy 425 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Approximate Station	765+82	**Construction CL Offset**	9 LT
Directional lane	Northbound - Outer Wheel Path		
Date cored:	3/24/2015		
Total core length, in.	7	**Core Diameter, in.**	4
Comments:	2 in. surface course, 3 in. binder, 2 in. ACHM base. Aggregate is fine to coarse, subrounded to angular, well-distributed sandstone gravel and crushed syenite with some crushed sandstone. The surface course is mainly fine grained and has an apparent high bitumen content. The binder is fine to coarse grained and is degraded with an apparent high bitumen content. The ACHM base is mainly coarse grained, well-distributed sandstone gravel with an apparent high bitumen content. The base is underlain by clayey fie sand with fine to coarse gravel.		

Core No. 4

Top of Pavement Core

Notes: 1) Top of pavement to the left.

2) Unless otherwise noted fractured pavement cores resulted from the coring process.

Grubbs, Hoskyn, Barton & Wyatt, INC.
CONSULTING ENGINEERS

AHTD PROJECT: Task Order No. C068
Job No. CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Hwy 425 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Approximate Station	745+11	**Construction CL Offset**	14 RT
Directional lane	Northbound - Outer Wheel Path		
Date cored:	3/24/2015		
Total core length, in.	6	**Core Diameter, in.**	4
Comments:	2 in. surface course, 2 in. binder, 2 in. ACHM base. Aggregate is fine to coarse, subrounded to angular, well-distributed sandstone gravel and crushed syenite with some crushed sandstone. The surface course is mainly fine grained and has an apparent high bitumen content. The binder is fine to coarse grained and is degraded with an apparent high bitumen content. The ACHM base is mainly coarse grained, well-distributed sandstone gravel with an apparent high bitumen content. The base is underlain by clayey fine sand with some medium to coarse sand and fine to coarse gravel.		

Core No. 5

Top of Pavement Core

Notes: 1) Top of pavement to the left.

2) Unless otherwise noted fractured pavement cores resulted from the coring process.

Grubbs, Hoskyn, Barton & Wyatt, INC.
CONSULTING ENGINEERS

AHTD PROJECT: Task Order No. C068
Job No. CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Hwy 425 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Approximate Station	726+87	**Construction CL Offset**	8 RT
Directional lane	Northbound - Outer Wheel Path		
Date cored:	3/24/2015		
Total core length, in.	9	**Core Diameter, in.**	4
Comments:	2 in. surface course, 1.5 in. binder, 2 in. surface course, 3.5 in. ACHM base. Aggregate is fine to coarse, subrounded to angular, well-distributed sandstone gravel and crushed syenite with some crushed sandstone. The surface course is mainly fine grained. The upper surface course has an apparent high bitumen content. The binder is fine to coarse grained and is degraded with an apparent high bitumen content. The ACHM base is mainly coarse grained, well-distributed sandstone gravel with an apparent high bitumen content. The base is underlain by fine sandy clay with fine to coarse sand and fine to coarse gravel.		

Core No. 6

Top of Pavement Core

Notes: 1) Top of pavement to the left.

2) Unless otherwise noted fractured pavement cores resulted from the coring process.

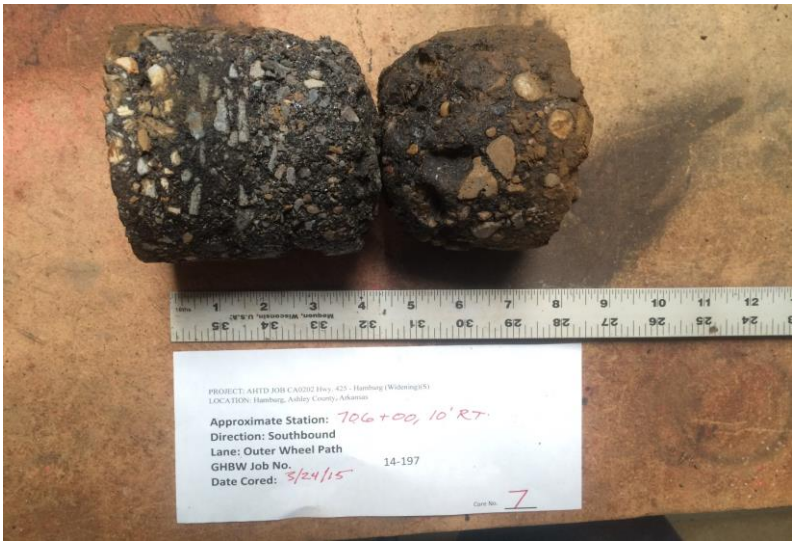
Grubbs, Hoskyn, Barton & Wyatt, INC.
CONSULTING ENGINEERS

AHTD PROJECT: Task Order No. C068
Job No. CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Hwy 425 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Approximate Station	706+53	**Construction CL Offset**	8 RT
Directional lane	Northbound - Outer Wheel Path		
Date cored:	3/24/2015		
Total core length, in.	7	**Core Diameter, in.**	4
Comments:	1 in. surface course, 1.25 in. binder, 1.25 in. surface course, 3.5 in. ACHM base. Aggregate is fine to coarse, subrounded to angular, well-distributed sandstone gravel and crushed syenite with some crushed sandstone. The surface course is mainly fine grained. The surface course has an apparent high bitumen content.The lower surface course is slightly degraded. The binder is fine to coarse grained with an apparent high bitumen content. The ACHM base is mainly coarse grained, well-distributed sandstone gravel with an apparent high bitumen content. The base is underlain by fine sandy clay with some medium to coarse sand and fine to coarse gravel.		

Core No. 7

Top of Pavement Core



Notes: 1) Top of pavement to the left.

2) Unless otherwise noted fractured pavement cores resulted from the coring process.

Grubbs, Hoskyn, Barton & Wyatt, INC.
CONSULTING ENGINEERS

AHTD PROJECT: Task Order No. C068
Job No. CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Hwy 425 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Approximate Station	686+00	**Construction CL Offset**	8 RT
Directional lane	Northbound - Outer Wheel Path		
Date cored:	3/24/2015		
Total core length, in.	7.5	**Core Diameter, in.**	4
Comments:	1.5 in. surface course, 2 in. binder, 2.5 in. surface course, 1.5 in. binder. Aggregate is fine to coarse, subrounded to angular, well-distributed sandstone gravel and crushed syenite with some crushed sandstone. The surface course is mainly fine grained. The upper surface course and binder have an apparent high bitumen content.The binder is mainly coarse grained. The asphalt concrete is underlain by fine sandy clay with some medium to coarse sand and fine to coarse gravel.		

Core No. 8

Top of Pavement Core

Notes: 1) Top of pavement to the left.

2) Unless otherwise noted fractured pavement cores resulted from the coring process.

Grubbs, Hoskyn, Barton & Wyatt, INC.
CONSULTING ENGINEERS

AHTD PROJECT: Task Order No. C068
Job No. CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Hwy 425 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Approximate Station	665+14	**Construction CL Offset**	10 RT
Directional lane	Northbound - Outer Wheel Path		
Date cored:	3/24/2015		
Total core length, in.	6	**Core Diameter, in.**	4
Comments:	1 in. surface course, 2 in. binder, 3 in. ACHM base. Aggregate is fine to coarse, subrounded to angular, well-distributed sandstone gravel and crushed syenite with some crushed sandstone. The surface course is mainly fine grained and has an apparent high bitumen content.The binder is fine to coarse grained and is degraded with an apparent high bitumen content. The ACHM base contains mainly coarse sandstone gravel and is moderate to well-distributed with an apparent high bitumen content. The base is underlain by soil cement.		

Core No. 9

Top of Pavement Core

Notes: 1) Top of pavement to the left.

2) Unless otherwise noted fractured pavement cores resulted from the coring process.

Grubbs, Hoskyn, Barton & Wyatt, INC.
CONSULTING ENGINEERS

AHTD PROJECT: Task Order No. C068
Job No. CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Hwy 425 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Approximate Station	646+42	**Construction CL Offset**	10 RT
Directional lane	Northbound - Outer Wheel Path		
Date cored:	3/24/2015		
Total core length, in.	8.75	**Core Diameter, in.**	4
Comments:	1.5 in. surface course, 2.5 in. binder, 2 in. surface course, 0.75 in. surface course, 2 in. ACHM base. Aggregate is fine to coarse, subrounded to angular, well-distributed sandstone gravel and crushed syenite with some crushed sandstone. The surface course is mainly fine grained and has an apparent high bitumen content.The binder is fine to coarse grained. The ACHM base contains mainly coarse sandstone gravel and is moderate to well-distributed with an apparent high bitumen content. The base is underlain by soil cement.		

Core No. 10

Top of Pavement Core

Notes: 1) Top of pavement is to the left.

2) Unless otherwise noted fractured pavement cores resulted from the coring process.

Grubbs, Hoskyn, Barton & Wyatt, INC.
CONSULTING ENGINEERS

AHTD PROJECT: Task Order No. C068
Job No. CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Hwy 425 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Approximate Station	625+82	**Construction CL Offset**	9 RT
Directional lane	Northbound - Outer Wheel Path		
Date cored:	3/24/2015		
Total core length, in.	8	**Core Diameter, in.**	4
Comments:	2 in. surface course, 2.5 in. binder, 1.25 in. surface course, 2 in. surface course, 0.75 in.surface course. Aggregate is fine to coarse, subrounded to angular, well-distributed sandstone gravel and crushed syenite with some crushed sandstone. The surface course is mainly fine grained. The upper surface course has an apparent high bitumen content.The binder is fine to coarse grained. The asphalt concrete is underlain by soil cement.		

Core No. 11

Top of Pavement Core

Notes: 1) Top of pavement to the left.

2) Unless otherwise noted fractured pavement cores resulted from the coring process.

Grubbs, Hoskyn, Barton & Wyatt, INC.
CONSULTING ENGINEERS

AHTD PROJECT: Task Order No. C068
Job No. CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Hwy 425 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Approximate Station	606+00	**Construction CL Offset**	22 RT
Directional lane	Northbound - Outer Wheel Path		
Date cored:	3/24/2015		
Total core length, in.	7.25	**Core Diameter, in.**	4
Comments:	1.75 in. surface course, 2 in. binder, 2 in. surface course, 1.5 in. surface course. Aggregate is fine to coarse, subrounded to angular, well-distributed sandstone gravel and crushed syenite with some crushed sandstone. The surface course is mainly fine grained. The upper surface course has an apparent high bitumen content.The binder is fine to coarse grained. The asphalt concrete is underlain by soil cement.		

Core No. 12

Top of Pavement Core

Notes: 1) Top of pavement to the left.

2) Unless otherwise noted fractured pavement cores resulted from the coring process.

Grubbs, Hoskyn, Barton & Wyatt, INC.
CONSULTING ENGINEERS

AHTD PROJECT: Task Order No. C068
Job No. CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Hwy 425 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Approximate Station	586+11	**Construction CL Offset**	7 RT
Directional lane	Northbound - Outer Wheel Path		
Date cored:	3/24/2015		
Total core length, in.	14	**Core Diameter, in.**	4
Comments:	1.5 in. surface course, 1 in. binder, 1.5 in. surface course, 0.75 in. surface course, 1.75 in. surface course, 5 in. binder, 1 in. surface course, 1.5 in. surface course. Aggregate is fine to coarse, subrounded to angular, well-distributed sandstone gravel and crushed syenite with some crushed sandstone. The surface course is mainly fine grained and has an apparent high bitumen content.The binder is fine to coarse grained. The lower binder is degraded and has an apparent high bitumen content. The asphalt concrete is underlain by soil cement.		

Core No. 13

Top of Pavement Core

Notes: 1) Top of pavement to the left.

2) Unless otherwise noted fractured pavement cores resulted from the coring process.

Grubbs, Hoskyn, Barton & Wyatt, INC.
CONSULTING ENGINEERS

AHTD PROJECT: Task Order No. C068
Job No. CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Hwy 425 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Approximate Station	568+11	**Construction CL Offset**	7 RT
Directional lane	Northbound - Outer Wheel Path		
Date cored:	3/23/2015		
Total core length, in.	13	**Core Diameter, in.**	4
Comments:	2 in. surface course, 1.5 in. binder, 1.5 in. surface course, 2 in. surface course, 1 in. surface course, 1 in. surface course, 2 in. binder, 2 in. surface course. Aggregate is fine to coarse, subrounded to angular, well-distributed sandstone gravel and crushed syenite with some crushed sandstone. The surface course is mainly fine grained and has an apparent high bitumen content.The binder is fine to coarse grained. The lower binder is slightly degraded and has an apparent high bitumen content. The asphalt concrete is underlain by clayey fine to coarse gravel.		

Core No. 14

Top of Pavement Core

Notes: 1) Top of pavement to the left.

2) Unless otherwise noted fractured pavement cores resulted from the coring process.

Grubbs, Hoskyn, Barton & Wyatt, INC.
CONSULTING ENGINEERS

AHTD PROJECT: Task Order No. C068
Job No. CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Hwy 425 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Approximate Station	548+30	**Construction CL Offset**	11 RT
Directional lane	Northbound - Outer Wheel Path		
Date cored:	3/23/2015		
Total core length, in.	9	**Core Diameter, in.**	4
Comments:	1 in. surface course, 1.75 in. surface course, 1.25 in. surface course, 2 in. binder, 3 in. surface course. Aggregate is fine to coarse, subrounded to angular, well-distributed sandstone gravel and crushed syenite with some crushed sandstone. The surface course is mainly fine grained and has an apparent high bitumen content.The binder is fine to coarse grained and is degraded with an apparent high bitumen content. The asphalt concrete is underlain by soil cement.		

Core No. 15

Top of Pavement Core

Notes: 1) Top of pavement to the left.

2) Unless otherwise noted fractured pavement cores resulted from the coring process.

Grubbs, Hoskyn, Barton & Wyatt, INC.
CONSULTING ENGINEERS

AHTD PROJECT: Task Order No. C068
Job No. CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Hwy 425 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Approximate Station	556+74	**Construction CL Offset**	10 LT
Directional lane	Southbound - Outer Wheel Path		
Date cored:	3/25/2015		
Total core length, in.	13	**Core Diameter, in.**	4
Comments:	3.5 in. surface course, 1.5 in. surface course, 1 in. surface course, 3 in. binder, 2.5 in. surface course, 1.5 in. surface course. Aggregate is fine to coarse, subrounded to angular, well-distributed sandstone gravel and crushed syenite with some crushed sandstone. The surface course is mainly fine grained and has an apparent high bitumen content.The binder is fine to coarse grained and has an apparent high bitumen content. The asphalt concrete is underlain by soil cement.		

Core No. 16

Top of Pavement Core

Notes: 1) Top of pavement to the left.

2) Unless otherwise noted fractured pavement cores resulted from the coring process.

Grubbs, Hoskyn, Barton & Wyatt, INC.
CONSULTING ENGINEERS

AHTD PROJECT: Task Order No. C068
Job No. CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Hwy 425 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Approximate Station	576+96	**Construction CL Offset**	9 LT
Directional lane	Southbound - Outer Wheel Path		
Date cored:	3/25/2015		
Total core length, in.	12	**Core Diameter, in.**	4
Comments:	3.5 in. surface course, 2 in. surface course, 2.5 in. binder, 2 in. surface course, 2 in. ACHM base. Aggregate is fine to coarse, subrounded to angular, well-distributed sandstone gravel and crushed syenite with some crushed sandstone. The surface course is mainly fine grained and has an apparent high bitumen content.The binder is fine to coarse grained and has an apparent high bitumen content. The ACHM base is mainly coarse grained sandsone gravel with an apparent high bitumen content. The base is underlain by soil cement.		

Core No. 17

Top of Pavement Core

Notes: 1) Top of pavement to the left.

2) Unless otherwise noted fractured pavement cores resulted from the coring process.

Grubbs, Hoskyn, Barton & Wyatt, INC.
CONSULTING ENGINEERS

AHTD PROJECT: Task Order No. C068
Job No. CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Hwy 425 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Approximate Station	597+31	**Construction CL Offset**	7 LT
Directional lane	Southbound - Outer Wheel Path		
Date cored:	3/25/2015		
Total core length, in.	8.5	**Core Diameter, in.**	4
Comments:	4 in. surface course, 2.5 in. surface course, 2 in. binder. Aggregate is fine to coarse, subrounded to angular, well-distributed sandstone gravel and crushed syenite with some crushed sandstone. The surface course is mainly fine grained and is degraded with an apparent high bitumen content. The binder is fine to coarse grained and is slightly degraded with an apparent high bitumen content. The asphalt concrete is underlain by soil cement.		

Core No. 18

Top of Pavement Core

Notes: 1) Top of pavement to the left.

2) Unless otherwise noted fractured pavement cores resulted from the coring process.

Grubbs, Hoskyn, Barton & Wyatt, INC.
CONSULTING ENGINEERS

AHTD PROJECT: Task Order No. C068
Job No. CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Hwy 425 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Approximate Station	618+62	**Construction CL Offset**	11 LT
Directional lane	Southbound - Outer Wheel Path		
Date cored:	3/25/2015		
Total core length, in.	9	**Core Diameter, in.**	4
Comments:	1 in. surface course, 1.5 in. surface course, 2 in binder, 4.5 in. ACHM base. Aggregate is fine to coarse, subrounded to angular, well-distributed sandstone gravel and crushed syenite with some crushed sandstone. The surface course is mainly fine grained and has an apparent high bitumen content. The binder is fine to coarse grained and is degraded with an apparent high bitumen content. The ACHM base contains mainly coarse sandstone gravel and is moderate to well-distributed and degraded with an apparent high bitumen content. The base is underlain by soil cement.		

Core No. 19

Top of Pavement Core

Notes: 1) Top of pavement to the left.

2) Unless otherwise noted fractured pavement cores resulted from the coring process.

Grubbs, Hoskyn, Barton & Wyatt, INC.
CONSULTING ENGINEERS

AHTD PROJECT: Task Order No. C068
Job No. CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Hwy 425 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Approximate Station	636+77	**Construction CL Offset**	9 LT
Directional lane	Southbound - Outer Wheel Path		
Date cored:	3/25/2015		
Total core length, in.	9.5	**Core Diameter, in.**	4
Comments:	1.5 in. surface course, 2 in. binder, 2 in surface course, 1 in.surface course, 3 in. binder. Aggregate is fine to coarse, subrounded to angular, well-distributed sandstone gravel and crushed syenite with some crushed sandstone. The surface course is mainly fine grained and has an apparent high bitumen content. The lower surface course appears to be slightly degraded. The binder is fine to coarse grained. The lower binder is degraded with an apparent high bitumen content. The asphalt concrete is underlain by soil cement.		

Core No. 20

Top of Pavement Core

Notes: 1) Top of pavement to the left.

2) Unless otherwise noted fractured pavement cores resulted from the coring process.

Grubbs, Hoskyn, Barton & Wyatt, INC.
CONSULTING ENGINEERS

AHTD PROJECT: Task Order No. C068
Job No. CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Hwy 425 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Approximate Station	656+16	**Construction CL Offset**	7 LT
Directional lane	Southbound - Outer Wheel Path		
Date cored:	3/25/2015		
Total core length, in.	8.5	**Core Diameter, in.**	4
Comments:	1.5 in. surface course, 4 in. binder, 3 in surface course. Aggregate is fine to coarse, subrounded to angular, well-distributed sandstone gravel and crushed syenite with some crushed sandstone. The surface course is mainly fine grained and has an apparent high bitumen content. The lower surface course appears to be slightly degraded. The binder is fine to coarse grained. The lower binder is degraded with an apparent high bitumen content. The asphalt concrete is underlain by soil cement.		

Core No. 21

Top of Pavement Core

Notes: 1) Top of pavement to the left.

2) Unless otherwise noted fractured pavement cores resulted from the coring process.

Grubbs, Hoskyn, Barton & Wyatt, INC.
CONSULTING ENGINEERS

AHTD PROJECT: Task Order No. C068
Job No. CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Hwy 425 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Approximate Station	676+00	**Construction CL Offset**	6 LT
Directional lane	Southbound - Outer Wheel Path		
Date cored:	3/25/2015		
Total core length, in.	9.5	**Core Diameter, in.**	4
Comments:	1.5 in. surface course, 2 in. surface course, 2 in binder, 4 in. surface course. Aggregate is fine to coarse, subrounded to angular, well-distributed sandstone gravel and crushed syenite with some crushed sandstone. The surface course is mainly fine grained and has an apparent high bitumen content. The lower surface course is degraded. The binder is fine to coarse grained with an apparent high bitumen content. The asphalt concrete is underlain by soil cement.		

Core No. 22

Top of Pavement Core

Notes: 1) Top of pavement to the left.

2) Unless otherwise noted fractured pavement cores resulted from the coring process.

Grubbs, Hoskyn, Barton & Wyatt, INC.
CONSULTING ENGINEERS

AHTD PROJECT: Task Order No. C068
Job No. CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Hwy 425 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Approximate Station	698+71	**Construction CL Offset**	8 LT
Directional lane	Southbound - Outer Wheel Path		
Date cored:	3/25/2015		
Total core length, in.	5	**Core Diameter, in.**	4
Comments:	1.5 in. surface course, 3.5 in binder. Aggregate is fine to coarse, subrounded to angular, well-distributed sandstone gravel and crushed syenite with some crushed sandstone. The surface course is mainly fine grained and has an apparent high bitumen content. The binder is fine to coarse grained and is degraded with an apparent high bitumen content. The asphalt concrete is underlain by soil cement.		

Core No. 23

Top of Pavement Core

Notes: 1) Top of pavement to the left.

2) Unless otherwise noted fractured pavement cores resulted from the coring process.

Grubbs, Hoskyn, Barton & Wyatt, INC.
CONSULTING ENGINEERS

AHTD PROJECT: Task Order No. C068
Job No. CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Hwy 425 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Approximate Station	718+20	**Construction CL Offset**	CL
Directional lane	Southbound - Outer Wheel Path		
Date cored:	3/25/2015		
Total core length, in.	7	**Core Diameter, in.**	4
Comments:	2 in. surface course, 3 in binder, 2 in ACHM base. Aggregate is fine to coarse, subrounded to angular, well-distributed sandstone gravel and crushed syenite with some crushed sandstone. The surface course is mainly fine grained and has an apparent high bitumen content. The binder is fine to coarse grained and is degraded with an apparent high bitumen content. The ACHM base contains mainly coarse sandstone gravel and has an apparent high bitumen content. The base is underlain by sandy fine to coarse gravel.		

Core No. 24

Top of Pavement Core

Notes: 1) Top of pavement to the left.

2) Unless otherwise noted fractured pavement cores resulted from the coring process.

Grubbs, Hoskyn, Barton & Wyatt, INC.
CONSULTING ENGINEERS

AHTD PROJECT: Task Order No. C068
Job No. CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Hwy 425 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Approximate Station	737+24	**Construction CL Offset**	4 LT
Directional lane	Southbound - Outer Wheel Path		
Date cored:	3/25/2015		
Total core length, in.	8.5	**Core Diameter, in.**	4
Comments:	2.25 in. surface course, 1.25 in binder, 2 in. surface course, 3 in. ACHM base. Aggregate is fine to coarse, subrounded to angular, well-distributed sandstone gravel and crushed syenite with some crushed sandstone. The surface course is mainly fine grained. The upper surface course has an apparent high bitumen content. The binder is fine to coarse grained. The ACHM base contains mainly coarse sandstone gravel and has an apparent high bitumen content. The base is underlain by slightly clayey, sandy fine to coarse gravel.		

Core No. 25

Top of Pavement Core

Notes: 1) Top of pavement to the left.

2) Unless otherwise noted fractured pavement cores resulted from the coring process.

Grubbs, Hoskyn, Barton & Wyatt, INC.
CONSULTING ENGINEERS

AHTD PROJECT: Task Order No. C068
Job No. CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Hwy 425 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Approximate Station	756+33	**Construction CL Offset**	25 LT
Directional lane	Southbound - Outer Wheel Path		
Date cored:	3/25/2015		
Total core length, in.	9.5	**Core Diameter, in.**	4
Comments:	3 in. surface course, 2 in. surface course, 1.5 in. surface course, 3 in. ACHM base. Aggregate is fine to coarse, subrounded to angular, well-distributed sandstone gravel and crushed syenite with some crushed sandstone. The surface course is mainly fine grained. The middle surface course has an apparent high bitumen content. The ACHM base contains mainly coarse sandstone gravel and has an apparent high bitumen content. The base is underlain by slightly clayey, sandy fine to coarse gravel.		

Core No. 26

Top of Pavement Core

Notes: 1) Top of pavement to the left.

2) Unless otherwise noted fractured pavement cores resulted from the coring process.

Grubbs, Hoskyn, Barton & Wyatt, INC.
CONSULTING ENGINEERS

AHTD PROJECT: Task Order No. C068
Job No. CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Hwy 425 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Approximate Station	776+75	**Construction CL Offset**	26 LT
Directional lane	Southbound - Outer Wheel Path		
Date cored:	3/24/2015		
Total core length, in.	8.5	**Core Diameter, in.**	4
Comments:	1.5 in. surface course, 2 in. binder, 2 in. surface course, 3 in. ACHM base. Aggregate is fine to coarse, subrounded to angular, well-distributed sandstone gravel and crushed syenite with some crushed sandstone. The surface course is mainly fine grained. The middle surface course has an apparent high bitumen content. The ACHM base contains mainly coarse sandstone gravel and has an apparent high bitumen content. The base is underlain by soil cement.		

Core No. 27

Top of Pavement Core

Notes: 1) Top of pavement to the left.

2) Unless otherwise noted fractured pavement cores resulted from the coring process.

Grubbs, Hoskyn, Barton & Wyatt, INC.
CONSULTING ENGINEERS

AHTD PROJECT: Task Order No. C068
Job No. CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Hwy 425 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Approximate Station	796+56	**Construction CL Offset**	26 LT
Directional lane	Southbound - Outer Wheel Path		
Date cored:	3/24/2015		
Total core length, in.	5.5	**Core Diameter, in.**	4
Comments:	1.5 in. surface course, 2 in. binder, 2 in. surface course. Aggregate is fine to coarse, subrounded to angular, well-distributed sandstone gravel and crushed syenite with some crushed sandstone. The surface course is mainly fine grained. The lower surface course has an apparent high bitumen content. The asphalt concrete is underlain by soil cement.		

Core No. 28

Top of Pavement Core

Notes: 1) Top of pavement to the left.

2) Unless otherwise noted fractured pavement cores resulted from the coring process.

Grubbs, Hoskyn, Barton & Wyatt, INC.
CONSULTING ENGINEERS

AHTD PROJECT: Task Order No. C068
Job No. CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Hwy 425 - Ashley County, Arkansas
GHBW JOB No.: 14-197

Approximate Station	816+00	**Construction CL Offset**	2 LT
Directional lane	Southbound - Outer Wheel Path		
Date cored:	3/24/2015		
Total core length, in.	8	**Core Diameter, in.**	4
Comments:	2 in. surface course, 1.5 in. binder, 1.5 in. surface course, 3 in. ACHM base. Aggregate is fine to coarse, subrounded to angular, well-distributed sandstone gravel and crushed syenite with some crushed sandstone. The surface course is mainly fine grained. The upper surface course has an apparent high bitumen content. The binder contains fine to coarse aggregrate. The ACHM base contains mainly coarse sandstone gravel and has an apparent high bitumen content. The base is underlain by soil cement.		

Core No. 29

Top of Pavement Core

Notes: 1) Top of pavement to the left.

2) Unless otherwise noted fractured pavement cores resulted from the coring process.

Grubbs, Hoskyn, Barton & Wyatt, INC.
CONSULTING ENGINEERS

ATTACHMENT 4

Grubbs, Hoskyn, Barton & Wyatt, Inc.
Consulting Engineers

LOG OF BORING NO. C1

CA0202- Hwy 425 - Hamburg (Widening)(S)
Ashley County, Arkansas

TYPE: Auger LOCATION: Approx Sta 825+62, 22 ft Rt

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) / PLASTIC LIMIT / WATER CONTENT / LIQUID LIMIT (10 20 30 40 50 60 70)	- No. 200 %
			SURF. EL: 178.0				
			12.5 inches: Asphalt Concrete				
			3 inches: Soil Cement				
			Loose reddish brown clayey fine sand w/some medium to coarse sand and trace fine gravel	4		+ ● - - +	35
				6		●	
5			Stiff gray and tan silty clay w/some silt pockets and seams and some ferrous stains	15		●	
10							
15							

COMPLETION DEPTH: 6.5 ft
DATE: 3-25-15

DEPTH TO WATER IN BORING: Dry

DATE: 3/25/2015

LGBNEW 14-197_C LOGS.GPJ 5-21-15

Grubbs, Hoskyn, Barton & Wyatt, Inc.
Consulting Engineers

LOG OF BORING NO. C2

CA0202- Hwy 425 - Hamburg (Widening)(S)
Ashley County, Arkansas

TYPE: Auger LOCATION: Approx Sta 805+78, 8 ft Lt

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) / PLASTIC LIMIT / WATER CONTENT / LIQUID LIMIT (10 20 30 40 50 60 70)	- No. 200 %
			SURF. EL: 179.5				
			7.75 inches: Asphalt Concrete				
			6 inches: Soil Cement				
			Dense reddish brown clayey fine to coarse sand w/a little fine gravel (fill)	36			15
			Firm tan and gray clayey silt w/some ferrous stains and nodules and occasional organic inclusions	8			90
5			Stiff tan and gray silty clay w/some silt pockets and seams, ferrous stains and nodules	13			
10							
15							

COMPLETION DEPTH: 6.0 ft
DATE: 3-24-15

DEPTH TO WATER IN BORING: Dry

DATE: 3/24/2015

LGBNEW 14-197_C LOGS.GPJ 5-21-15

Grubbs, Hoskyn, Barton & Wyatt, Inc.
Consulting Engineers

LOG OF BORING NO. C3

CA0202- Hwy 425 - Hamburg (Widening)(S)
Ashley County, Arkansas

TYPE: Auger

LOCATION: Approx Sta 786+44, 10 ft Lt

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) / PLASTIC LIMIT / WATER CONTENT / LIQUID LIMIT (10 20 30 40 50 60 70)	- No. 200 %
			SURF. EL: 173.0				
			9 inches: Asphalt Concrete				
			Dense reddish brown clayey fine to coarse sand w/a little fine to coarse gravel (fill)	33			
			Stiff reddish tan, gray and tan silty clay, slightly sandy w/trace fine gravel (fill)	22			
5			Very soft tan and gray silty clay w/occasional silt pockets and ferrous stains and nodules, moist	3			77
			- water at 6.5 ft Stiff tan and gray clay, slightly silty w/some ferrous stains and nodules and trace organics	21			
			NOTE: Water at 5.8 ft after 10 minutes.				
10							
15							

COMPLETION DEPTH: 8.0 ft
DATE: 3-24-15

DEPTH TO WATER IN BORING: 6.5 ft

DATE: 3/24/2015

LGBNEW 14-197_C LOGS.GPJ 5-21-15

Grubbs, Hoskyn, Barton & Wyatt, Inc.
Consulting Engineers

LOG OF BORING NO. C4

CA0202- Hwy 425 - Hamburg (Widening)(S)
Ashley County, Arkansas

TYPE: Auger LOCATION: Approx Sta 765+82, 9 ft Lt

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) / PLASTIC LIMIT / WATER CONTENT / LIQUID LIMIT (10 20 30 40 50 60 70)	- No. 200 %
			SURF. EL: 175.9				
			7 inches: Asphalt Concrete				
			Dense reddish brown clayey fine sand w/some fine gravel and asphalt concrete debris (fill)	35		● + – – – +	17
			Stiff reddish tan silty clay w/silt seams and layers	20		● + – +	92
			- slight sandy below 4 ft				
5				21		●	
10							
15							

COMPLETION DEPTH: 6.0 ft
DATE: 3-24-15

DEPTH TO WATER IN BORING: Dry

DATE: 3/24/2015

LGBNEW 14-197_C LOGS.GPJ 5-21-15

Grubbs, Hoskyn, Barton & Wyatt, Inc.
Consulting Engineers

LOG OF BORING NO. C5

CA0202- Hwy 425 - Hamburg (Widening)(S)
Ashley County, Arkansas

TYPE: Auger LOCATION: Approx Sta 745+11, 14 ft Rt

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) / PLASTIC LIMIT — WATER CONTENT — LIQUID LIMIT (10 20 30 40 50 60 70)	- No. 200 %
			SURF. EL: 171.3				
			6 inches: Asphalt Concrete				
			3.5 inches: Soil Cement				
			Medium dense brown clayey fine sand w/some fine gravel (fill)	25		● + +	25
			Firm tan silty clay w/some ferrous stains and nodules and organic stains, moist	7		●	
5			Firm to stiff gray and reddish tan clay, slightly silty w/some silt pockets and some ferrous stains and nodules	10		●	
10							
15							

COMPLETION DEPTH: 6.0 ft
DATE: 3-24-15

DEPTH TO WATER IN BORING: Dry

DATE: 3/24/2015

LGBNEW 14-197_C LOGS.GPJ 5-21-15

Grubbs, Hoskyn, Barton & Wyatt, Inc.
Consulting Engineers

LOG OF BORING NO. C6

CA0202- Hwy 425 - Hamburg (Widening)(S)
Ashley County, Arkansas

TYPE: Auger LOCATION: Approx Sta 726+87, 15 ft Rt

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) / PLASTIC LIMIT / WATER CONTENT / LIQUID LIMIT (10 20 30 40 50 60 70)	- No. 200 %
			SURF. EL: 164.4				
			9 inches: Asphalt Concrete				
			Dense reddish brown clayey fine sand w/some fine gravel (fill)	39			36
			Firm tan and reddish tan silty clay w/some silt pockets	8			94
5			Stiff gray and reddish tan silty clay w/some silt seams and layers and ferrous stains and nodules	12			
10							
15							

COMPLETION DEPTH: 6.0 ft
DATE: 3-24-15

DEPTH TO WATER IN BORING: Dry

DATE: 3/24/2015

LGBNEW 14-197_C LOGS.GPJ 5-21-15

Grubbs, Hoskyn, Barton & Wyatt, Inc.
Consulting Engineers

LOG OF BORING NO. C7

CA0202- Hwy 425 - Hamburg (Widening)(S)
Ashley County, Arkansas

TYPE: Auger LOCATION: Approx Sta 706+53, 8 ft Rt

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) / PLASTIC LIMIT — WATER CONTENT — LIQUID LIMIT (10 20 30 40 50 60 70)	- No. 200 %
			SURF. EL: 157.0				
			7 inches: Asphalt Concrete				
			Dense reddish brown clayey fine gravel (fill)	46		● + +	28
			Loose to medium dense tan and gray silt, slightly clayey w/occasional silty clay seams, some ferrous stains and nodules, and some organic inclusions	10		●	
5			Stiff gray and reddish tan silty clay w/some silt pockets and some ferrous stains and nodules	12		+ ● +	92
10							
15							

COMPLETION DEPTH: 6.0 ft
DATE: 3-24-15

DEPTH TO WATER IN BORING: Dry

DATE: 3/24/2015

LGBNEW 14-197_C LOGS.GPJ 5-21-15

Grubbs, Hoskyn, Barton & Wyatt, Inc.
Consulting Engineers

LOG OF BORING NO. C8

CA0202- Hwy 425 - Hamburg (Widening)(S)
Ashley County, Arkansas

TYPE: Auger LOCATION: Approx Sta 684+93, 9 ft Rt

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) / PLASTIC LIMIT — WATER CONTENT — LIQUID LIMIT (10 20 30 40 50 60 70)	- No. 200 %
			SURF. EL: 155.1				
			7.5 inches: Asphalt Concrete				
			8 inches: Soil Cement				
			Stiff reddish brown fine sandy clay w/some fine to coarse gravel (fill)	22			60
			Soft tan and gray silty clay w/some ferrous stains and nodules and silt seams and layers	5			90
5			- very soft, wet	3			
			Stiff tan, reddish tan and gray silty clay w/some silt pockets and seams and numerous ferrous stains and nodules	22			
10							
15							

COMPLETION DEPTH: 8.5 ft
DATE: 3-24-15

DEPTH TO WATER IN BORING: Dry

DATE: 3/24/2015

LGBNEW 14-197_C LOGS.GPJ 5-21-15

Grubbs, Hoskyn, Barton & Wyatt, Inc.
Consulting Engineers

LOG OF BORING NO. C9

CA0202- Hwy 425 - Hamburg (Widening)(S)
Ashley County, Arkansas

TYPE: Auger LOCATION: Approx Sta 665+14 10 ft Rt

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) / PLASTIC LIMIT / WATER CONTENT / LIQUID LIMIT (10 20 30 40 50 60 70)	- No. 200 %
			SURF. EL: 168.4				
			6 inches: Asphalt Concrete				
			3 inches: Soil Cement				
			Stiff reddish tan silty clay w/occasional ferrous stains and nodules (fill)	13			95
			Medium dense tan and gray silt w/some ferrous stains	14			
5			Stiff gray, tan and reddish tan silty clay w/occasional silt pockets and seams and ferrous stains	20			
10							
15							

COMPLETION DEPTH: 6.5 ft
DATE: 3-24-15

DEPTH TO WATER IN BORING: Dry

DATE: 3/24/2015

LGBNEW 14-197_C LOGS.GPJ 5-21-15

Grubbs, Hoskyn, Barton & Wyatt, Inc.
Consulting Engineers

LOG OF BORING NO. C10

CA0202- Hwy 425 - Hamburg (Widening)(S)
Ashley County, Arkansas

TYPE: Auger LOCATION: Approx Sta 646+42, 10 ft Rt

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) / PLASTIC LIMIT / WATER CONTENT / LIQUID LIMIT (10 20 30 40 50 60 70)	- No. 200 %
			SURF. EL: 150.1				
			8.75 inches: Asphalt Concrete				
			4 inches: Soil Cement				
			Stiff tan and reddish tan silty clay w/some silt seams and occasional ferrous stains and occasional organic inclusions	22			91
			- firm, moist below 3 ft				
			- with more silt pockets and seams and occasional clay pockets below 4 ft	9			
5			- stiff below 5 ft				
				22			
10							
15							

COMPLETION DEPTH: 6.5 ft
DATE: 3-24-15

DEPTH TO WATER
IN BORING: Dry
DATE: 3/24/2015

LGBNEW 14-197_C LOGS.GPJ 5-21-15

PLATE 10

Grubbs, Hoskyn, Barton & Wyatt, Inc.
Consulting Engineers

LOG OF BORING NO. C11

CA0202- Hwy 425 - Hamburg (Widening)(S)
Ashley County, Arkansas

TYPE: Auger LOCATION: Approx Sta 625+82, 9 ft Rt

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) / PLASTIC LIMIT / WATER CONTENT / LIQUID LIMIT (10 20 30 40 50 60 70)	- No. 200 %
			SURF. EL: 150.9				
			8 inches: Asphalt Concrete				
			3 inches: Soil Cement				
			Stiff brownish gray and reddish brown silty clay w/some silt pockets and seams and ferrous stains and nodules and occasional organic stains and inclusions	13			90
5			Firm to stiff reddish tan and gray silty clay w/some clayey silt seams and layers and occasional ferrous stains and nodules	10			
			- stiff below 5 ft with occasional clay pockets and seams	21			
10							
15							

COMPLETION DEPTH: 6.5 ft
DATE: 3-24-15

DEPTH TO WATER IN BORING: Dry

DATE: 3/24/2015

LGBNEW 14-197_C LOGS.GPJ 5-21-15

Grubbs, Hoskyn, Barton & Wyatt, Inc.
Consulting Engineers

LOG OF BORING NO. C12

CA0202- Hwy 425 - Hamburg (Widening)(S)
Ashley County, Arkansas

TYPE: Auger LOCATION: Approx Sta 606+00, 22 ft Rt

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) / PLASTIC LIMIT / WATER CONTENT / LIQUID LIMIT (10 20 30 40 50 60 70)	- No. 200 %
			SURF. EL: 147±				
			7.25 inches: Asphalt Concrete				
			6 inches: Soil Cement				
			Stiff gray, reddish tan and tan silty clay w/occasional silt pockets and clay partings and seams and ferrous stains and nodules and organic stains and inclusions	16			92
			Stiff reddish brown clay, slightly blocky and slickensided w/some ferrous stains and organic stains	17			100
5			- blocky below 5 ft	13			
10							
15							

COMPLETION DEPTH: 6.5 ft
DATE: 3-24-15

DEPTH TO WATER IN BORING: Dry

DATE: 3/24/2015

LGBNEW 14-197_C LOGS.GPJ 5-21-15

Grubbs, Hoskyn, Barton & Wyatt, Inc.
Consulting Engineers

LOG OF BORING NO. C13

CA0202- Hwy 425 - Hamburg (Widening)(S)
Ashley County, Arkansas

TYPE: Auger LOCATION: Approx Sta 586+11, 7 ft Rt

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) / PLASTIC LIMIT / WATER CONTENT / LIQUID LIMIT (10 20 30 40 50 60 70)	- No. 200 %
			SURF. EL: 158.3				
			14 inches: Asphalt				
			4 inches: Soil Cement				
			Firm gray, tan and reddish tan silty clay w/some silt pockets and ferrous stains and nodules and trace clay partings and seams	8			92
			- stiff with occasional silt pockets and seams below 3 ft	12			
5			Stiff gray, tan and reddish tan clay, slightly silty, w/some silty clay seams and occasional ferrous stains	14			
10							
15							

COMPLETION DEPTH: 6.5 ft
DATE: 3-24-15

DEPTH TO WATER IN BORING: Dry

DATE: 3/24/2015

LGBNEW 14-197_C LOGS.GPJ 5-21-15

Grubbs, Hoskyn, Barton & Wyatt, Inc.
Consulting Engineers

LOG OF BORING NO. C14

CA0202- Hwy 425 - Hamburg (Widening)(S)
Ashley County, Arkansas

TYPE: Auger LOCATION: Approx Sta 568+47, 11 ft Rt

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) / PLASTIC LIMIT / WATER CONTENT / LIQUID LIMIT (10 20 30 40 50 60 70)	- No. 200 %
			SURF. EL: 156.0				
			13 inches: Asphalt Concrete				
			3 inches: Brown clayey fine to coarse gravel, sandy				
			Stiff tan and gray clayey silt w/ferrous nodules and occasional silty clay pockets	13			89
			Firm tan and reddish tan silty clay w/occasional silt pockets and ferrous stains and nodules	8			
5			Stiff gray, tan and reddish tan clay, slightly silty w/occasional silty clay pockets	23			
10							
15							

COMPLETION DEPTH: 6.5 ft
DATE: 3-23-15

DEPTH TO WATER IN BORING: Dry

DATE: 3/23/2015

LGBNEW 14-197_C LOGS.GPJ 5-21-15

Grubbs, Hoskyn, Barton & Wyatt, Inc.
Consulting Engineers

LOG OF BORING NO. C15

CA0202- Hwy 425 - Hamburg (Widening)(S)
Ashley County, Arkansas

TYPE: Auger LOCATION: Approx Sta 548+30, 11 ft Rt

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) / PLASTIC LIMIT / WATER CONTENT / LIQUID LIMIT (10 20 30 40 50 60 70)	- No. 200 %
			SURF. EL: 141.8				
			9 inches: Asphalt Concrete				
			4 inches: Soil Cement				
			Stiff tan and gray clayey silt w/occasional silty clay partings and seams and ferrous stains	15			88
			Soft tan and gray silty clay w/occasional silt partings and seams and trace organic inclusions	5			88
5			Very soft reddish tan and gray silty clay w/clayey silt pockets and ferrous stains and nodules and occasional organic inclusions, moist	3			
			- water at 7.3 ft				
			- soft, with occasional clay partings and seams below 8 ft	5			
10							
15							

COMPLETION DEPTH: 9.5 ft
DATE: 3-23-15

DEPTH TO WATER IN BORING: 7.3 ft

DATE: 3/23/2015

LGBNEW 14-197_C LOGS.GPJ 5-21-15

Grubbs, Hoskyn, Barton & Wyatt, Inc.
Consulting Engineers

LOG OF BORING NO. C16

CA0202- Hwy 425 - Hamburg (Widening)(S)
Ashley County, Arkansas

TYPE: Auger LOCATION: Approx Sta 556+74, 10 ft Lt

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) / PLASTIC LIMIT / WATER CONTENT / LIQUID LIMIT (10 20 30 40 50 60 70)	- No. 200 %
			SURF. EL: 145.1				
			13 inches: Asphalt Concrete				
			7 inches: Soil Cement				
			Stiff gray silty clay w/some silt pockets and seams, some clay seams and occasional organic inclusions - soft with less silt seams below 2 ft	22			
				4			90
5			- stiff below 5 ft	15			
			Stiff reddish tan and gray clay w/some silt pockets and ferrous stains and nodules and organic stains and inclusions	16			
10							
15							

COMPLETION DEPTH: 8.0 ft
DATE: 3-26-15

DEPTH TO WATER IN BORING: Dry

DATE: 3/26/2015

LGBNEW 14-197_C LOGS.GPJ 5-21-15

Grubbs, Hoskyn, Barton & Wyatt, Inc.
Consulting Engineers

LOG OF BORING NO. C17

CA0202- Hwy 425 - Hamburg (Widening)(S)
Ashley County, Arkansas

TYPE: Auger LOCATION: Approx Sta 576+96, 9 ft Lt

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) / PLASTIC LIMIT / WATER CONTENT / LIQUID LIMIT (10 20 30 40 50 60 70)	- No. 200 %
			SURF. EL: 163.5				
			12 inches: Asphalt Concrete				
			4 inches: Soil Cement				
			Stiff reddish tan fine sandy clay w/some ferrous stains and nodules and occasional fine sand pockets (fill)	11			
			Stiff gray and reddish tan silty clay w/some silt pockets and seams	11			
5			- tan and reddish tan below 5 ft	14			
10							
15							

COMPLETION DEPTH: 6.5 ft
DATE: 3-26-15

DEPTH TO WATER IN BORING: Dry

DATE: 3/26/2015

LGBNEW 14-197_C LOGS.GPJ 5-21-15

Grubbs, Hoskyn, Barton & Wyatt, Inc.
Consulting Engineers

LOG OF BORING NO. C18

CA0202- Hwy 425 - Hamburg (Widening)(S)
Ashley County, Arkansas

TYPE: Auger LOCATION: Approx Sta 597+31, 7 ft Rt

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) / PLASTIC LIMIT / WATER CONTENT / LIQUID LIMIT (10 20 30 40 50 60 70)	- No. 200 %
			SURF. EL: 152.9				
			8.5 inches: Asphalt Concrete				
			8 inches: Soil Cement				
			Firm reddish brown fine sandy clay w/occasional fine sand pockets and trace fine gravel (fill)	7			75
			Stiff gray and reddish tan clay, slightly silty w/some ferrous stains and nodules	11			94
5			- gray tan and reddish tan, less silty w/occasional organic inclusions below 5 ft	14			
10							
15							

COMPLETION DEPTH: 6.5 ft
DATE: 3-26-15

DEPTH TO WATER IN BORING: Dry

DATE: 3/26/2015

LGBNEW 14-197_C LOGS.GPJ 5-21-15

Grubbs, Hoskyn, Barton & Wyatt, Inc.
Consulting Engineers

LOG OF BORING NO. C19

CA0202- Hwy 425 - Hamburg (Widening)(S)
Ashley County, Arkansas

TYPE: Auger LOCATION: Approx Sta 618+62, 11 ft Rt

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) / PLASTIC LIMIT / WATER CONTENT / LIQUID LIMIT (10 20 30 40 50 60 70)	- No. 200 %
			SURF. EL: 158.2				
			9 inches: Asphalt Concrete				
			6 inches: Soil Cement				
			Firm reddish brown silty clay w/trace fine gravel (fill)	8			88
			Stiff tan and gray silty clay w/some silt pockets and clay partings and seams and some ferrous stains and nodules	10			92
5			Stiff reddish tan and tan clay slightly silty w/ferrous stains and nodules and some silt pockets and seams	15			
10							
15							

COMPLETION DEPTH: 6.5 ft
DATE: 3-25-15

DEPTH TO WATER IN BORING: Dry

DATE: 3/25/2015

LGBNEW 14-197_C LOGS.GPJ 5-21-15

Grubbs, Hoskyn, Barton & Wyatt, Inc.
Consulting Engineers

LOG OF BORING NO. C20

CA0202- Hwy 425 - Hamburg (Widening)(S)
Ashley County, Arkansas

TYPE: Auger LOCATION: Approx Sta 636+77, 9 ft Lt

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) / PLASTIC LIMIT — WATER CONTENT — LIQUID LIMIT (10 20 30 40 50 60 70)	- No. 200 %
			SURF. EL: 151.8				
			9.5 inches: Asphalt Concrete				
			4 inches: Soil Cement				
			Stiff brownish gray and tan silty clay w/occasional silt pockets and organic inclusions	22			93
			Soft tan and gray silty clay w/occasional silt pockets and clay partings and ferrous stains and nodules, moist	5			91
5			Stiff gray, tan and reddish tan clay, slightly silty w/occasional silt pockets and ferrous stains and nodules	15			
10							
15							

COMPLETION DEPTH: 6.5 ft
DATE: 3-25-15

DEPTH TO WATER IN BORING: Dry

DATE: 3/25/2015

LGBNEW 14-197_C LOGS.GPJ 5-21-15

Grubbs, Hoskyn, Barton & Wyatt, Inc.
Consulting Engineers

LOG OF BORING NO. C21

CA0202- Hwy 425 - Hamburg (Widening)(S)
Ashley County, Arkansas

TYPE: Auger LOCATION: Approx Sta 656+16

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) / PLASTIC LIMIT / WATER CONTENT / LIQUID LIMIT (10 20 30 40 50 60 70)	- No. 200 %
			SURF. EL: 163.1				
			8.5 inches: Asphalt Concrete				
			6 inches: Soil Cement				
			Stiff reddish brown fine sandy clay w/trace fine gravel (fill)	24		●	
			Firm to stiff tan and reddish tan clayey silt w/some silty clay seams and ferrous stains and nodules	10		● + – – +	88
5			Stiff tan and reddish tan silty clay w/silt seams and layers and some ferrous stains and nodules	20		●	
10							
15							

COMPLETION DEPTH: 6.0 ft
DATE: 3-25-15

DEPTH TO WATER IN BORING: Dry

DATE: 3/25/2015

LGBNEW 14-197_C LOGS.GPJ 5-21-15

Grubbs, Hoskyn, Barton & Wyatt, Inc.
Consulting Engineers

LOG OF BORING NO. C22

CA0202- Hwy 425 - Hamburg (Widening)(S)
Ashley County, Arkansas

TYPE: Auger LOCATION: Approx Sta 676+00, 6 ft Lt

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) / PLASTIC LIMIT — WATER CONTENT — LIQUID LIMIT (10 20 30 40 50 60 70)	- No. 200 %
			SURF. EL: 156±				
			9.5 inches: Asphalt Concrete				
			6 inches: Soil Cement				
			Dense brown clayey fine to coarse sand w/trace fine gravel (fill)	38			19
			Medium dense gray and reddish tan silt, slightly clayey w/occasional silty clay partings and some organic inclusions	15			
5			Stiff reddish tan and gray clay, slightly silty w/ferrous stains and nodules	14			
10							
15							

COMPLETION DEPTH: 6.5 ft
DATE: 3-26-15

DEPTH TO WATER IN BORING: Dry
DATE: 3/26/2015

LGBNEW 14-197_C LOGS.GPJ 5-21-15

Grubbs, Hoskyn, Barton & Wyatt, Inc.
Consulting Engineers

LOG OF BORING NO. C23

CA0202- Hwy 425 - Hamburg (Widening)(S)
Ashley County, Arkansas

TYPE: Auger LOCATION: Approx Sta 698+71, 8 ft Lt

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) / PLASTIC LIMIT / WATER CONTENT / LIQUID LIMIT (10 20 30 40 50 60 70)	- No. 200 %
			SURF. EL: 156.9				
			5 inches: Asphalt Concrete				
			3 inches: Soil Cement				
			Medium dense brown clayey fine to coarse sand w/some fine to coarse gravel (fill)	27			17
			Stiff tan and brown gray clayey silt w/occasional organic inclusions and seams	11			87
5			Firm reddish tan and gray silty clay w/occasional silt seams and layers and some organic stains and inclusions	8			
10							
15							

COMPLETION DEPTH: 6.0 ft
DATE: 3-25-15

DEPTH TO WATER IN BORING: Dry

DATE: 3/25/2015

LGBNEW 14-197_C LOGS.GPJ 5-21-15

Grubbs, Hoskyn, Barton & Wyatt, Inc.
Consulting Engineers

LOG OF BORING NO. C24

CA0202- Hwy 425 - Hamburg (Widening)(S)
Ashley County, Arkansas

TYPE: Auger LOCATION: Approx Sta 718+20

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) / PLASTIC LIMIT / WATER CONTENT / LIQUID LIMIT (10 20 30 40 50 60 70)	- No. 200 %
			SURF. EL: 158.2				
			7inches: Asphalt Concrete				
			3 inches: Sandy fine to coarse gravel (fill)				
			Medium dense tan and reddish tan silt, slightly clayey w/occasional organic inclusions (fill)	25			62
			Stiff gray, tan and reddish tan silty clay w/silt seams and layers and occasional organic stains	18			
5			- slightly sandy below 4 ft	16			
10							
15							

COMPLETION DEPTH: 6.0 ft
DATE: 3-25-15

DEPTH TO WATER IN BORING: Dry

DATE: 3/25/2015

LGBNEW 14-197_C LOGS.GPJ 5-21-15

PLATE 24

Grubbs, Hoskyn, Barton & Wyatt, Inc.
Consulting Engineers

LOG OF BORING NO. C25

CA0202- Hwy 425 - Hamburg (Widening)(S)
Ashley County, Arkansas

TYPE: Auger LOCATION: Approx Sta 737+24, 4 ft Lt

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) / PLASTIC LIMIT / WATER CONTENT / LIQUID LIMIT (10 20 30 40 50 60 70)	- No. 200 %
			SURF. EL: 161.6				
			8.5 inches: Asphalt Concrete				
			Dense reddish brown clayey fine to coarse sand w/some fine gravel (fill)	41		●	15
			Stiff gray and tan and brown silty clay w/some silt pockets and seams, some ferrous stains and nodules and trace organic inclusions	14		●	
5			Stiff tan and reddish tan silt, slightly clayey w/occasional fine sand pockets and organic inclusions	12		●+	80
10							
15							

COMPLETION DEPTH: 6.0 ft
DATE: 3-25-15

DEPTH TO WATER IN BORING: Dry

DATE: 3/25/2015

LGBNEW 14-197_C LOGS.GPJ 5-21-15

Grubbs, Hoskyn, Barton & Wyatt, Inc.
Consulting Engineers

LOG OF BORING NO. C26

CA0202- Hwy 425 - Hamburg (Widening)(S)
Ashley County, Arkansas

TYPE: Auger

LOCATION: Approx Sta 756+33, 25 ft Lt

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) / PLASTIC LIMIT / WATER CONTENT / LIQUID LIMIT (10 20 30 40 50 60 70)	- No. 200 %
			SURF. EL: 175.9				
			9.5 inches: Asphalt Concrete				
			Reddish brown sandy fine to coarse gravel, slightly clayey (fill)				
			Very stiff reddish brown and gray fine sandy clay w/some silt pockets and fine to coarse gravel (fill)	50			55
			Medium dense brownish gray silt, slightly clayey w/some organic stains and inclusions	17			
5				15			
10							
15							

COMPLETION DEPTH: 6.5 ft
DATE: 3-25-15

DEPTH TO WATER IN BORING: Dry

DATE: 3/25/2015

LGBNEW 14-197_C LOGS.GPJ 5-21-15

Grubbs, Hoskyn, Barton & Wyatt, Inc.
Consulting Engineers

LOG OF BORING NO. C27

CA0202- Hwy 425 - Hamburg (Widening)(S)
Ashley County, Arkansas

TYPE: Auger LOCATION: Approx Sta 776+75, 26 ft Lt

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) / PLASTIC LIMIT — WATER CONTENT — LIQUID LIMIT (10 20 30 40 50 60 70)	- No. 200 %
			SURF. EL: 169.7				
			8.5 inches: Asphalt Concrete				
			6 inches: Soil Cement				
			Dense tan and brown clayey fine gravel, sandy	30			13
			Soft tan and gray clayey silt w/some silty clay pockets and occasional organic stains	6			85
5			Stiff tan and reddish tan silty clay w/some seams and layers and some ferrous stains and nodules	12			
10							
15							

COMPLETION DEPTH: 6.0 ft
DATE: 3-25-15

DEPTH TO WATER IN BORING: Dry

DATE: 3/25/2015

LGBNEW 14-197_C LOGS.GPJ 5-21-15

Grubbs, Hoskyn, Barton & Wyatt, Inc.
Consulting Engineers

LOG OF BORING NO. C28

CA0202- Hwy 425 - Hamburg (Widening)(S)
Ashley County, Arkansas

TYPE: Auger LOCATION: Approx Sta 796+56, 26 ft Lt

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) / PLASTIC LIMIT — WATER CONTENT — LIQUID LIMIT (10 20 30 40 50 60 70)	- No. 200 %
			SURF. EL: 180.4				
			5.5 inches: Asphalt Concrete				
			10.5: Soil Cement				
			Stiff tan and gray clayey silt w/occasional organic inclusions and some wood debris (fill)	17			91
			Firm tan and gray silty clay w/some silt pockets and seams and occasional ferrous stains and nodules	8			
5			- stiff below 5 ft	13			
10							
15							

COMPLETION DEPTH: 6.5 ft
DATE: 3-25-15

DEPTH TO WATER IN BORING: Dry

DATE: 3/25/2015

LGBNEW 14-197_C LOGS.GPJ 5-21-15

Grubbs, Hoskyn, Barton & Wyatt, Inc.
Consulting Engineers

LOG OF BORING NO. C29

CA0202- Hwy 425 - Hamburg (Widening)(S)
Ashley County, Arkansas

TYPE: Auger LOCATION: Approx Sta 816+00, 2 ft Lt

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) / PLASTIC LIMIT — WATER CONTENT — LIQUID LIMIT (10 20 30 40 50 60 70)	- No. 200 %
			SURF. EL: 174±				
			8 inches: Asphalt Concrete				
			4 inches: Soil Cement				
			Very stiff brown and gray clayey silt w/some silt pockets and seams and a little fine to coarse gravel (fill)	39		+ +	63
			Medium dense tan and gray silt w/occasional organic stains and inclusions	16		● -NON-PLASTIC-	95
5			Stiff gray and tan silty clay w/some silt pockets and some ferrous stains and nodules	14		●	
10							
15							

COMPLETION DEPTH: 6.5 ft
DATE: 3-25-15

DEPTH TO WATER IN BORING: Dry

DATE: 3/25/2015

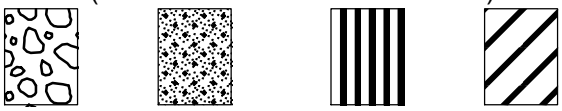
LGBNEW 14-197_C LOGS.GPJ 5-21-15

Grubbs, Hoskyn, Barton & Wyatt, Inc.
Consulting Engineers

SYMBOLS AND TERMS USED ON BORING LOGS

SOIL TYPES

(SHOWN IN SYMBOLS COLUMN)

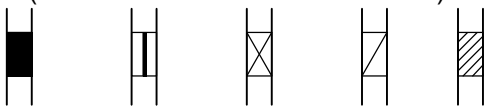


Gravel Sand Silt Clay

Predominant type shown heavy

SAMPLER TYPES

(SHOWN ON SAMPLES COLUMN)



Shelby Tube | Rock Core | Split Spoon | No Recovery | Cutting

TERMS DESCRIBING CONSISTENCY OR CONDITION

COARSE GRAINED SOILS (major portion retained on No. 200 sieve): Includes (I) Clean gravels and sands, and (2) silty or clayey gravels and sands. Condition is rated according to relative density, as determined by laboratory tests.

DESCRIPTIVE TERM	N-VALUE	RELATIVE DENSITY
VERY LOOSE	0-4	0-15%
LOOSE	4-10	15-35%
MEDIUM DENSE	10-30	35-65%
DENSE	30-50	65-85%
VERY DENSE	50 and above	85-100%

FINE GRAINED SOILS (major portion passing No. 200 sieve): Includes (1) Inorganic and organic silts and clays, (2) gravelly, sandy, or silty clays, and (3) clayey silts. Consistency is rated according to shearing strength, as indicated by penetrometer readings or by unconfined compression tests.

DESCRIPTIVE TERM	UNCONFINED COMPRESSIVE STRENGTH TON/SQ. FT.
VERY SOFT	Less than 0.25
SOFT	0.25-0.50
FIRM	0.50-1.00
STIFF	1.00-2.00
VERY STIFF	2.00-4.00
HARD	4.00 and higher

NOTE: Slickensided and fissured clays may have lower unconfined compressive strengths than shown above, because of planes of weakness or cracks in the soil. The consistency ratings of such soils are based on penetrometer readings.

TERMS CHARACTERIZING SOIL STRUCTURE

SLICKENSIDED - having inclined planes of weakness that are slick and glossy in appearance.
FISSURED - containing shrinkage cracks, frequently filled with fine sand or silt; usually more or less vertical.
LAMINATED - composed of thin layers of varying color and texture.
INTERBEDDED - composed of alternate layers of different soil types.
CALCAREOUS - containing appreciable quantities of calcium carbonate.
WELL GRADED - having a wide range in grain sizes and substantial amounts of all intermediate particle sizes.
POORLY GRADED - predominantly of one grain size, or having a range of sizes with some intermediate sizes missing.

Terms used on this report for describing soils according to their texture or grain size distribution are in accordance with the UNIFIED SOIL CLASSIFICATION SYSTEM, as described in Technical Memorandum No.3-357, Waterways Experiment Station, March 1953

KEY 3-14-12

ATTACHMENT 5

Grubbs, Hoskyn, Barton & Wyatt, Inc.
Consulting Engineers

LOG OF BORING NO. 1

CA0202- Hwy 425 - Hamburg-(Widening)(S)
Ashley County, Arkansas

TYPE: Auger LOCATION: Approx Sta 825+16,30 ft Rt

SURF. EL: 177.5

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) / PLASTIC LIMIT / WATER CONTENT / LIQUID LIMIT (10 20 30 40 50 60 70)	- No. 200 %
			3 inches: Asphalt Concrete				
			4 inches: Sandy fine to coarse gravel (fill)				
			Stiff reddish brown clayey fine sand w/some crushed stone fragments and trace fine gravel (fill)	11			36
				18			
			- with some fine sandy clay seams and layers below 4 ft				
5				10			40
			Stiff light gray and tan silty clay w/ferrous stains and nodules and occasional silt seams and layers - water at 6 ft	14			
				25			
10							
15							

COMPLETION DEPTH: 10.0 ft
DATE: 4-1-15

DEPTH TO WATER IN BORING: 6 ft

DATE: 4/1/2015

LGBNEW 14-197_BORINGS.GPJ 5-19-15

Grubbs, Hoskyn, Barton & Wyatt, Inc.
Consulting Engineers

LOG OF BORING NO. 2

CA0202- Hwy 425 - Hamburg-(Widening)(S)
Ashley County, Arkansas

TYPE: Auger LOCATION: Approx Sta 813+92,26ft Rt

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) / PLASTIC LIMIT / WATER CONTENT / LIQUID LIMIT (10 20 30 40 50 60 70)	- No. 200 %
			SURF. EL: 175.3				
			3 inches: Asphalt Concrete				
			4 inches: Tan sandy fine to coarse gravel (fill)				
			Very stiff tan reddish tan and gray clayey silt, sandy w/some fine sand pockets and a little fine gravel (fill)	29			67
				39			
5			Loose gray and tan silt w/occasional ferrous stains and nodules, moist	7		- NON-PLASTIC-	95
			- medium dense below 6 ft - water at 6 ft	13			
			Stiff reddish tan and gray silty clay w/some ferrous stains and nodules and occasional silt pockets	14			
10							
15							

COMPLETION DEPTH: 10.0 ft
DATE: 4-1-15

DEPTH TO WATER IN BORING: 6 ft

DATE: 4/1/2015

LGBNEW 14-197_BORINGS.GPJ 5-19-15

Grubbs, Hoskyn, Barton & Wyatt, Inc.
Consulting Engineers

LOG OF BORING NO. 3

CA0202- Hwy 425 - Hamburg-(Widening)(S)
Ashley County, Arkansas

TYPE: Auger

LOCATION: Approx Sta 805+22, 26 ft Rt

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) / PLASTIC LIMIT — WATER CONTENT — LIQUID LIMIT (10 20 30 40 50 60 70)	- No. 200 %
			SURF. EL: 177.3				
			Soft tan and gray silty clay w/silt pockets and seams and some ferrous stains, moist	6			
			- stiff below 2 ft	17			92
5				20			
				22			
			- with decreasing silt pockets and seams below 8 ft	19			
10							
15							

COMPLETION DEPTH: 10.0 ft
DATE: 3-17-15

DEPTH TO WATER IN BORING: Dry

DATE: 3/17/2015

LGBNEW 14-197_BORINGS.GPJ 5-19-15

Grubbs, Hoskyn, Barton & Wyatt, Inc.
Consulting Engineers

LOG OF BORING NO. 4

CA0202- Hwy 425 - Hamburg-(Widening)(S)
Ashley County, Arkansas

TYPE: Auger LOCATION: Approx Sta 795+30, 29 ft Rt

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) / PLASTIC LIMIT — WATER CONTENT — LIQUID LIMIT (10 20 30 40 50 60 70)	- No. 200 %
			SURF. EL: 178.0				
			Soft tan and gray silty clay w/silt pockets and seams and some ferrous stains	6			87
			- firm, more silt below 2 ft	9			
			- stiff below 4 ft				
5				18			
			- moist below 6 ft	23			
			Stiff reddish tan, gray and tan silty clay w/occasional silt pockets and clay partings and seams	21			
10							
15							

COMPLETION DEPTH: 10.0 ft
DATE: 3-17-15

DEPTH TO WATER IN BORING: Dry

DATE: 3/17/2015

LGBNEW 14-197_BORINGS.GPJ 5-19-15

Grubbs, Hoskyn, Barton & Wyatt, Inc.
Consulting Engineers

LOG OF BORING NO. 5

CA0202- Hwy 425 - Hamburg-(Widening)(S)
Ashley County, Arkansas

TYPE: Auger LOCATION: Approx Sta 785+35, 19 ft Rt

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) / PLASTIC LIMIT — WATER CONTENT — LIQUID LIMIT (10 20 30 40 50 60 70)	- No. 200 %
			SURF. EL: 168.1				
			Firm gray, tan and brown silty clay, slightly sandy w/silt pockets and trace fine gravel (fill)				
			- water at 1 ft	7			80
			Stiff gray, tan and reddish brown clay, slightly silty w/some silty clay pockets and silt partings and ferrous stains and nodules	14			94
5			Stiff tan and reddish brown silty clay, slightly sandy w/occasional fine sand pockets	21			
			- very stiff from 6 to 8 ft	26			
10				14			
15							

COMPLETION DEPTH: 10.0 ft
DATE: 3-17-15

DEPTH TO WATER IN BORING: 1 ft

DATE: 3/17/2015

LGBNEW 14-197_BORINGS.GPJ 5-19-15

Grubbs, Hoskyn, Barton & Wyatt, Inc.
Consulting Engineers

LOG OF BORING NO. 6

CA0202- Hwy 425 - Hamburg-(Widening)(S)
Ashley County, Arkansas

TYPE: Auger LOCATION: Approx Sta 775+38, 31 ft Rt

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) / PLASTIC LIMIT — WATER CONTENT — LIQUID LIMIT (10 20 30 40 50 60 70)	- No. 200 %
			SURF. EL: 166.4				
			Very soft to soft tan and gray silty clay w/silt pockets and trace fine sand partings and ferrous stains	4			86
			- firm below 2 ft	9			
			- stiff with clay seams below 4 ft	14			
5				14			
			Stiff reddish brown and tan silty clay w/fine sand pockets	19			98
10							
15							

COMPLETION DEPTH: 10.0 ft
DATE: 3-17-15

DEPTH TO WATER IN BORING: Dry
DATE: 3/17/2015

LGBNEW 14-197_BORINGS.GPJ 5-19-15

Grubbs, Hoskyn, Barton & Wyatt, Inc.
Consulting Engineers

LOG OF BORING NO. 7

CA0202- Hwy 425 - Hamburg-(Widening)(S)
Ashley County, Arkansas

TYPE: Auger

LOCATION: Approx Sta 764+89, 21 ft Rt

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) / PLASTIC LIMIT — WATER CONTENT — LIQUID LIMIT (10 20 30 40 50 60 70)	- No. 200 %
			SURF. EL: 172.1				
			Very soft to soft gray, tan and brown silty clay w/silt pockets and ferrous stains	4			90
			- stiff at 2 to 4 ft	11			93
5			- very stiff below 4 ft	38			
			Stiff reddish brown clay, slightly silty w/occasional silt pockets	15			97
			Stiff reddish brown silty clay w/silt pockets	20			
10							
15							

COMPLETION DEPTH: 10.0 ft
DATE: 3-17-15

DEPTH TO WATER IN BORING: Dry

DATE: 3/17/2015

LGBNEW 14-197_BORINGS.GPJ 5-19-15

Grubbs, Hoskyn, Barton & Wyatt, Inc.
Consulting Engineers

LOG OF BORING NO. 8

CA0202- Hwy 425 - Hamburg-(Widening)(S)
Ashley County, Arkansas

TYPE: Auger LOCATION: Approx Sta 754+80, 19 ft Rt

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) / PLASTIC LIMIT — WATER CONTENT — LIQUID LIMIT (10 20 30 40 50 60 70)	- No. 200 %
			SURF. EL: 171.8				
			Very soft tan, brown and gray silty clay w/silt pockets and a little fine gravel (fill)	4			83
			Stiff gray, tan and brown silty clay w/silt pockets and occasional clay seams and ferrous stains	12			
			- very stiff below 4 ft				
5				26			92
				24			
			Stiff reddish brown silty clay, slightly sandy	20			
10							
15							

COMPLETION DEPTH: 10.0 ft
DATE: 3-17-15

DEPTH TO WATER IN BORING: Dry

DATE: 3/17/2015

LGBNEW 14-197_BORINGS.GPJ 5-19-15

Grubbs, Hoskyn, Barton & Wyatt, Inc.
Consulting Engineers

LOG OF BORING NO. 9

CA0202- Hwy 425 - Hamburg-(Widening)(S)
Ashley County, Arkansas

TYPE: Auger LOCATION: Approx Sta 744+14, 31 ft Rt

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) / PLASTIC LIMIT — WATER CONTENT — LIQUID LIMIT (10 20 30 40 50 60 70)	- No. 200 %
			SURF. EL: 169.6				
			Medium dense brown clayey fine to coarse gravel, sandy (fill)	14			14
			Firm reddish tan and tan silty clay, slightly sandy w/occasional silt pockets and occasional ferrous stains and nodules	9			93
			- soft at 4 to 6 ft				
5				6			
			Stiff tan, gray and reddish tan silty clay w/occasional silt pockets	21			
				17			
10							
15							

COMPLETION DEPTH: 10.0 ft
DATE: 3-27-15

DEPTH TO WATER IN BORING: Dry

DATE: 3/27/2015

LGBNEW 14-197_BORINGS.GPJ 5-19-15

Grubbs, Hoskyn, Barton & Wyatt, Inc.
Consulting Engineers

LOG OF BORING NO. 10

CA0202- Hwy 425 - Hamburg-(Widening)(S)
Ashley County, Arkansas

TYPE: Auger

LOCATION: Approx Sta 735+57, 19 ft Rt

SURF. EL: 160.4

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) / PLASTIC LIMIT / WATER CONTENT / LIQUID LIMIT (10 20 30 40 50 60 70)	- No. 200 %
			3 inches: Asphalt Concrete				
			12 inches: Sandy fine to coarse gravel (fill)				
			Stiff tan and gray silty clay w/some fine to coarse gravel (fill)	23			
			- less gravel below 2 ft				
			Stiff gray, reddish tan and tan silty clay w/some ferrous stains and nodules	26			92
5				14			
			Soft tan and gray clayey silt w/occasional organic inclusions				
			- water at 6 ft	6			96
			- stiff with some ferrous stains and nodules below 8 ft				
				26			
10							
15							

COMPLETION DEPTH: 10.0 ft
DATE: 4-1-15

DEPTH TO WATER IN BORING: 6 ft

DATE: 4/1/2015

LGBNEW 14-197_BORINGS.GPJ 5-19-15

Grubbs, Hoskyn, Barton & Wyatt, Inc.
Consulting Engineers

LOG OF BORING NO. 11

CA0202- Hwy 425 - Hamburg-(Widening)(S)
Ashley County, Arkansas

TYPE: Auger LOCATION: Approx Sta 725+37, 27 ft Rt

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) / PLASTIC LIMIT — WATER CONTENT — LIQUID LIMIT (10 20 30 40 50 60 70)	- No. 200 %
			SURF. EL: 162.8				
			4 inches: Asphalt Concrete				
			8 inches: Sandy fine to coarse gravel (fill)				
			Medium dense reddish brown clayey fine sand w/some fine gravel (fill)	23			28
			Loose tan and gray clayey silt w/some ferrous stains and nodules and trace organic inclusions	6			
5				11			90
			Stiff reddish tan, gray and tan silty clay w/some ferrous stains and nodules and some silt pockets and seams - water at 6 ft	20			
10				21			
15							

COMPLETION DEPTH: 10.0 ft
DATE: 4-1-15

DEPTH TO WATER IN BORING: 6 ft

DATE: 4/1/2015

LGBNEW 14-197_BORINGS.GPJ 5-19-15

Grubbs, Hoskyn, Barton & Wyatt, Inc.
Consulting Engineers

LOG OF BORING NO. 12

CA0202- Hwy 425 - Hamburg-(Widening)(S)
Ashley County, Arkansas

TYPE: Auger LOCATION: Approx Sta 715+03, 40 ft Rt

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) / PLASTIC LIMIT / WATER CONTENT / LIQUID LIMIT (10 20 30 40 50 60 70)	- No. 200 %
			SURF. EL: 151.7				
			Soft gray and tan fine sand w/some ferrous stains and trace organics, very moist (fill)	4			61
			- water at 1 ft				
			Stiff tan and gray silty clay w/some silt pockets and ferrous stains and nodules	20			
5			Stiff to very stiff reddish brown clay, slightly silty w/occasional silt pockets and seams	30			
				20			
			Medium dense reddish brown silty fine sand	28			
10							
15							

COMPLETION DEPTH: 10.0 ft
DATE: 3-30-15

DEPTH TO WATER IN BORING: 1 ft

DATE: 3/30/2015

LGBNEW 14-197_BORINGS.GPJ 5-19-15

Grubbs, Hoskyn, Barton & Wyatt, Inc.
Consulting Engineers

LOG OF BORING NO. 13

CA0202- Hwy 425 - Hamburg-(Widening)(S)
Ashley County, Arkansas

TYPE: Auger LOCATION: Approx Sta 704+77, 37 ft Rt

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) / PLASTIC LIMIT / WATER CONTENT / LIQUID LIMIT (10 20 30 40 50 60 70)	- No. 200 %
			SURF. EL: 152.2				
			Very soft tan and gray silty clay w/some ferrous stains and nodules and some silt pockets and seams and trace organics - water at 1 ft	4			
			Stiff gray and tan silty clay w/some silt pockets and seams and ferrous stains and nodules	18			91
5			- reddish brown, gray and tan with some clay pockets and seams below 4 ft	19			
			Stiff reddish brown clay w/some ferrous stains and nodules and occasional silt pockets	23			
10				22			
15							

COMPLETION DEPTH: 10.0 ft
DATE: 3-1-15

DEPTH TO WATER IN BORING: 1 ft

DATE: 3/1/2015

LGBNEW 14-197_BORINGS.GPJ 5-19-15

Grubbs, Hoskyn, Barton & Wyatt, Inc.
Consulting Engineers

LOG OF BORING NO. 14

CA0202- Hwy 425 - Hamburg-(Widening)(S)
Ashley County, Arkansas

TYPE: Auger LOCATION: Approx Sta 695+14, 35 ft Rt

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) / PLASTIC LIMIT / WATER CONTENT / LIQUID LIMIT (10 20 30 40 50 60 70)	- No. 200 %
			SURF. EL: 154.9				
			Very soft gray and tan silty clay w/some ferrous stains and nodules and some silt pockets and seams	4			92
			- stiff below 2 ft	18			
			- water at 4 ft				
5			Tan and gray clayey silt w/occasional ferrous stains and nodules and organic inclusions, moist	8			87
				12			
			- with some clay pockets below 8 ft	16			
10							
15							

COMPLETION DEPTH: 10.0 ft
DATE: 3-30-15

DEPTH TO WATER IN BORING: 4 ft

DATE: 3/30/2015

LGBNEW 14-197_BORINGS.GPJ 5-19-15

Grubbs, Hoskyn, Barton & Wyatt, Inc.
Consulting Engineers

LOG OF BORING NO. 15

CA0202- Hwy 425 - Hamburg-(Widening)(S)
Ashley County, Arkansas

TYPE: Auger

LOCATION: Approx Sta 684+02, 22 ft Rt

SURF. EL: 154.7

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) / PLASTIC LIMIT / WATER CONTENT / LIQUID LIMIT (10 20 30 40 50 60 70)	- No. 200 %
			Medium dense clayey fine sand w/some medium to coarse sand and some fine to coarse gravel (fill)	17			26
			Stiff gray clayey silt w/occasional organic inclusions	15			87
5			Stiff tan and gray silty clay w/some silt seams and trace organic inclusions	11			
			- with some ferrous stains and nodules below 6ft	10			
			- water at 7 ft				
10				14			
15							

COMPLETION DEPTH: 10.0 ft
DATE: 3-30-15

DEPTH TO WATER IN BORING: 7 ft
DATE: 3/30/2015

LGBNEW 14-197_BORINGS.GPJ 5-19-15

Grubbs, Hoskyn, Barton & Wyatt, Inc.
Consulting Engineers

LOG OF BORING NO. 16

CA0202- Hwy 425 - Hamburg-(Widening)(S)
Ashley County, Arkansas

TYPE: Auger

LOCATION: Approx Sta 674+79, 41 ft Rt

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) / PLASTIC LIMIT — WATER CONTENT — LIQUID LIMIT (10 20 30 40 50 60 70)	- No. 200 %
			SURF. EL: 154.8				
			Firm brown and light gray silty clay				
			- trace organics to 1.5 ft	7			93
			- very stiff below 2 ft				
			- water at 3 ft	28			
5			Stiff gray and reddish tan silty clay w/some silt seams and layers and occasional organic stains	22			99
				24			
			Stiff reddish brown clay, slightly silty w/occasional organic stains and inclusions	13			
10							
15							

COMPLETION DEPTH: 10.0 ft
DATE: 3-31-15

DEPTH TO WATER IN BORING: 3 ft

DATE: 3/31/2015

LGBNEW 14-197_BORINGS.GPJ 5-19-15

Grubbs, Hoskyn, Barton & Wyatt, Inc.
Consulting Engineers

LOG OF BORING NO. 17

CA0202- Hwy 425 - Hamburg-(Widening)(S)
Ashley County, Arkansas

TYPE: Auger

LOCATION: Approx Sta 665+19, 37 ft Rt

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) / PLASTIC LIMIT / WATER CONTENT / LIQUID LIMIT (10 20 30 40 50 60 70)	- No. 200 %
			SURF. EL: 165.5				
			Sift tan and gray silty clay w/silt pockets and seams, moist - with trace organics to 1.5	5			93
			- stiff below 2 ft	19			
5				21			
			- with some organic stains below 6 ft Stiff gray, tan, and reddish tan silty clay w/occasional silt pockets and clay partings and seams	31			
			Stiff reddish brown clay, slightly silty w/occasional silty clay pockets and organic stains	23			
10							
15							

COMPLETION DEPTH: 10.0 ft
DATE: 3-31-15

DEPTH TO WATER IN BORING: Dry

DATE: 3/31/2015

LGBNEW 14-197_BORINGS.GPJ 5-19-15

Grubbs, Hoskyn, Barton & Wyatt, Inc.
Consulting Engineers

LOG OF BORING NO. 18

CA0202- Hwy 425 - Hamburg-(Widening)(S)
Ashley County, Arkansas

TYPE: Auger LOCATION: Approx Sta 654+78, 34 ft Rt

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) / PLASTIC LIMIT / WATER CONTENT / LIQUID LIMIT (10 20 30 40 50 60 70)	- No. 200 %
			SURF. EL: 160.5				
			Stiff brown, tan and reddish tan fine sandy clay, slightly silty w/some silt pockets and occasional clay seams and trace organics (fill)	14			94
			- soft below 2 ft	6			
5			Firm gray, tan and reddish tan silty clay, slightly sandy w/some silt pockets and seams and some ferrous stains and nodules - stiff below 4 ft	8			89
			- water at 6.2 ft	12			
10			Stiff gray, reddish tan and red clay, w/some silty clay seams and occasional ferrous stains	18			
15							

COMPLETION DEPTH: 10.0 ft
DATE: 3-27-15

DEPTH TO WATER IN BORING: 6.2 ft

DATE: 3/27/2015

LGBNEW 14-197_BORINGS.GPJ 5-19-15

PLATE 18

Grubbs, Hoskyn, Barton & Wyatt, Inc.
Consulting Engineers

LOG OF BORING NO. 19

CA0202- Hwy 425 - Hamburg-(Widening)(S)
Ashley County, Arkansas

TYPE: Auger LOCATION: Approx Sta 645+68, 31 ft Rt

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) / PLASTIC LIMIT / WATER CONTENT / LIQUID LIMIT (10 20 30 40 50 60 70)	- No. 200 %
			SURF. EL: 149.0				
			Medium dense reddish brown clayey fine to coarse sand w/a little fine gravel	18			20
			Medium dense gray and tan silty clay w/some silt seams and layers	10			82
5			Stiff gray and tan clayey silt	14			
			- very stiff from 6 to 8 ft	26			
10				16			
15							

COMPLETION DEPTH: 10.0 ft
DATE: 3-27-15

DEPTH TO WATER IN BORING: Dry

DATE: 3/27/2015

LGBNEW 14-197_BORINGS.GPJ 5-19-15

Grubbs, Hoskyn, Barton & Wyatt, Inc.
Consulting Engineers

LOG OF BORING NO. 20

CA0202- Hwy 425 - Hamburg-(Widening)(S)
Ashley County, Arkansas

TYPE: Auger LOCATION: Approx Sta 634+87, 32 ft Rt

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) / PLASTIC LIMIT / WATER CONTENT / LIQUID LIMIT (10 20 30 40 50 60 70)	- No. 200 %
			SURF. EL: 150.8				
			Soft tan and brown silty clay w/some silt seams and ferrous stains and nodules and organics	6			
			- stiff and less silty below 2 ft	10			94
			- gray and reddish tan below 4 ft	22			
5							
			Stiff tan and reddish tan silty clay w/occasional silt partings and clay seams and layers	24			
			Stiff tan and reddish brown clay, slightly silty and slightly blocky w/occasional organic stains	22			
10							
15							

COMPLETION DEPTH: 10.0 ft
DATE: 3-31-15

DEPTH TO WATER IN BORING: Dry

DATE: 3/31/2015

LGBNEW 14-197_BORINGS.GPJ 5-19-15

Grubbs, Hoskyn, Barton & Wyatt, Inc.
Consulting Engineers

LOG OF BORING NO. 21

CA0202- Hwy 425 - Hamburg-(Widening)(S)
Ashley County, Arkansas

TYPE: Auger LOCATION: Approx Sta 625+03, 38 ft Rt

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) / PLASTIC LIMIT — WATER CONTENT — LIQUID LIMIT (10 20 30 40 50 60 70)	- No. 200 %
			SURF. EL: 148.7				
			Very soft tan and reddish tan silty clay w/occasional silt pockets and organics, moist	4			92
			Stiff gray and reddish tan silty clay w/some silt pockets and ferrous stains	21			94
5				25			
			Stiff gray, tan and reddish brown clay, slightly silty w/ occasional silty clay pockets, slightly blocky	24			
			- slightly slickensided with less silt below 8 ft	24			
10							
15							

COMPLETION DEPTH: 10.0 ft
DATE: 3-31-15

DEPTH TO WATER IN BORING: Dry

DATE: 3/31/2015

LGBNEW 14-197_BORINGS.GPJ 5-19-15

Grubbs, Hoskyn, Barton & Wyatt, Inc.
Consulting Engineers

LOG OF BORING NO. 22

CA0202- Hwy 425 - Hamburg-(Widening)(S)
Ashley County, Arkansas

TYPE: Auger LOCATION: Approx Sta 614+96, 25 ft Rt

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) / PLASTIC LIMIT / WATER CONTENT / LIQUID LIMIT (10 20 30 40 50 60 70)	- No. 200 %
			SURF. EL: 152.0				
			Stiff reddish brown, gray and tan fine sandy clay w/a little fine to coarse gravel (fill)	11			88
			Soft gray, reddish tan and tan silty clay, slightly sandy w/some silt pockets and occasional ferrous stains and nodules	6			
5				8			92
			- stiff below 6 ft	27			
				17			
10							
15							

COMPLETION DEPTH: 10.0 ft
DATE: 3-27-15

DEPTH TO WATER IN BORING: Dry

DATE: 3/27/2015

LGBNEW 14-197_BORINGS.GPJ 5-19-15

Grubbs, Hoskyn, Barton & Wyatt, Inc.
Consulting Engineers

LOG OF BORING NO. 23

CA0202- Hwy 425 - Hamburg-(Widening)(S)
Ashley County, Arkansas

TYPE: Auger LOCATION: Approx Sta 605+89, 21 ft Rt

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) / PLASTIC LIMIT — WATER CONTENT — LIQUID LIMIT (10 20 30 40 50 60 70)	- No. 200 %
			SURF. EL: 146.0				
			Very soft to soft reddish brown silty clay w/trace fine gravel and occasional organic inclusions (fill)	4			96
			Soft gray silty clay, slightly sandy	6			88
5			Soft gray, reddish tan and red clay, slightly silty w/occasional ferrous stains and silty clay seams	7			
			Stiff reddish brown clay w/some ferrous stains, slightly blocky	12			
10				15			
15							

COMPLETION DEPTH: 10.0 ft
DATE: 3-27-15

DEPTH TO WATER IN BORING: Dry

DATE: 3/27/2015

LGBNEW 14-197_BORINGS.GPJ 5-19-15

Grubbs, Hoskyn, Barton & Wyatt, Inc.
Consulting Engineers

LOG OF BORING NO. 24

CA0202- Hwy 425 - Hamburg-(Widening)(S)
Ashley County, Arkansas

TYPE: Auger LOCATION: Approx Sta 595+02, 23 ft Rt

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) / PLASTIC LIMIT — WATER CONTENT — LIQUID LIMIT (10 20 30 40 50 60 70)	- No. 200 %
			SURF. EL: 155.0				
			Very soft reddish brown fine sandy clay w/fine to coarse gravel and trace organics (fill)	3			23
			Stiff gray, reddish tan and tan silty clay w/some ferrous stains and nodules	11			93
5				13			
			Stiff red clay w/some ferrous stains, blocky	15		86	100
				13			
10							
15							

COMPLETION DEPTH: 10.0 ft
DATE: 3-27-15

DEPTH TO WATER IN BORING: Dry
DATE: 3/27/2015

LGBNEW 14-197_BORINGS.GPJ 5-22-15

Grubbs, Hoskyn, Barton & Wyatt, Inc.
Consulting Engineers

LOG OF BORING NO. 25

CA0202- Hwy 425 - Hamburg-(Widening)(S)
Ashley County, Arkansas

TYPE: Auger LOCATION: Approx Sta 584+82, 39 ft Rt

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) / PLASTIC LIMIT — WATER CONTENT — LIQUID LIMIT (10 20 30 40 50 60 70)	- No. 200 %
			SURF. EL: 156.4				
			Firm reddish tan clayey silt, slightly silty w/occasional orgainc stains	8			86
			Stiff gray, tan and reddish brown silty clay w/occasional silt pockets and some clay partings and seams	20			97
5				20			
			- more clay seams below 6 ft	20			
			Stiff gray and reddish brown clay, slightly silty and slightly blocky w/some ferrous stains and nodules and organic stains	22			
10							
15							

COMPLETION DEPTH: 10.0 ft
DATE: 3-31-15

DEPTH TO WATER IN BORING: Dry
DATE: 3/31/2015

LGBNEW 14-197_BORINGS.GPJ 5-19-15

Grubbs, Hoskyn, Barton & Wyatt, Inc.
Consulting Engineers

LOG OF BORING NO. 26

CA0202- Hwy 425 - Hamburg-(Widening)(S)
Ashley County, Arkansas

TYPE: Auger LOCATION: Approx Sta 575+37, 30 ft Rt

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) / PLASTIC LIMIT — WATER CONTENT — LIQUID LIMIT (10 20 30 40 50 60 70)	- No. 200 %
			SURF. EL: 162.1				
			Soft reddish brown clayey fine sand w/some fine to coarse gravel (fill)	6			
			Stiff gray, reddish tan and tan silty clay, slightly sandy w/some silt pockets and seams and some ferrous stains	13			93
5				20			
			Stiff reddish tan and red clay, slightly silty w/some ferrous stains and occasional silt pockets	21			
				13			
10							
15							

COMPLETION DEPTH: 10.0 ft
DATE: 3-26-15

DEPTH TO WATER IN BORING: Dry
DATE: 3/26/2015

LGBNEW 14-197_BORINGS.GPJ 5-19-15

Grubbs, Hoskyn, Barton & Wyatt, Inc.
Consulting Engineers

LOG OF BORING NO. 27

CA0202- Hwy 425 - Hamburg-(Widening)(S)
Ashley County, Arkansas

TYPE: Auger LOCATION: Approx Sta 564+98, 39 ft Rt

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) / PLASTIC LIMIT / WATER CONTENT / LIQUID LIMIT (10 20 30 40 50 60 70)	- No. 200 %
			SURF. EL: 148.9				
			Soft gray, tan and reddish tan silty clay w/some silt partings and seams and occasional clay partings	5			
			- stiff with some silt seams and ferrous stains and nodules below 2 ft	11			90
5			Stiff gray and tan silty clay w/some silt seams and ferrous stains and nodules	26			
			- with some clay partings and organic stains and inclusions below 6 ft	22			
			Very stiff gray and reddish brown clay, slightly blocky w/organic stains and inclusions	26			
10							
15							

COMPLETION DEPTH: 10.0 ft
DATE: 3-31-15

DEPTH TO WATER IN BORING: Dry

DATE: 3/31/2015

LGBNEW 14-197_BORINGS.GPJ 5-19-15

Grubbs, Hoskyn, Barton & Wyatt, Inc.
Consulting Engineers

LOG OF BORING NO. 28

CA0202- Hwy 425 - Hamburg-(Widening)(S)
Ashley County, Arkansas

TYPE: Auger LOCATION: Approx Sta 555+01, 38 ft Rt

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) / PLASTIC LIMIT / WATER CONTENT / LIQUID LIMIT (10 20 30 40 50 60 70)	- No. 200 %
			SURF. EL: 140.1				
			Soft gray, tan and reddish tan silty clay w/occasional silt partings and clay seams w/ferrous stains and nodules, moist	5			90
			- stiff with some silt pockets below 2 ft	20			
5			Stiff gray, tan and reddish tan clay, slightly silty w/silty clay pockets and seams and ferrous stains and nodules	25			
			Stiff gray and reddish brown clay, slightly blocky w/occasional silt partings and organic stains and inclusions	21			99
			- very stiff below 8 ft	26			
10							
15							

COMPLETION DEPTH: 10.0 ft
DATE: 3-31-15

DEPTH TO WATER IN BORING: Dry

DATE: 3/31/2015

LGBNEW 14-197_BORINGS.GPJ 5-19-15

Grubbs, Hoskyn, Barton & Wyatt, Inc.
Consulting Engineers

LOG OF BORING NO. 29

CA0202- Hwy 425 - Hamburg-(Widening)(S)
Ashley County, Arkansas

TYPE: Auger

LOCATION: Approx Sta 547+90, 29 ft Rt

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) / PLASTIC LIMIT / WATER CONTENT / LIQUID LIMIT (10 20 30 40 50 60 70)	- No. 200 %
			SURF. EL: 140.4				
			Soft reddish tan and tan silty clay, slightly sandy w/some silt pockets trace fine gravel and ferrous stains and nodules (fill)	5			89
			- with organic inclusions below 2 ft	6			
5			Soft tan and gray silty clay w/some silt pockets, some ferrous stains and nodules and some organics - water at 5 ft	5			89
			Medium dense gray silt w/ ferrous stains and nodules and occasional silty clay pockets	25			
			- very dense, slightly clayey with some silty clay seams below 8.5	49			
10			NOTE 1: Water at 5.4 ft after 10 minutes. NOTE 2: Water at 4.3 ft after 2 hours.				
15							

COMPLETION DEPTH: 10.0 ft
DATE: 3-26-15

DEPTH TO WATER IN BORING: 5 ft

DATE: 3/26/2015

LGBNEW 14-197_BORINGS.GPJ 5-19-15

Grubbs, Hoskyn, Barton & Wyatt, Inc.
Consulting Engineers

LOG OF BORING NO. 30

CA0202- Hwy 425 - Hamburg-(Widening)(S)
Ashley County, Arkansas

TYPE: Auger LOCATION: Appox Sta 550+37, 37 ft Lt

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) / PLASTIC LIMIT / WATER CONTENT / LIQUID LIMIT (10 20 30 40 50 60 70)	- No. 200 %
			SURF. EL: 137.2				
			Soft gray, tan and reddish tan silty clay w/occasional silt pockets and seams and clay partings and ferrous stains and nodules	4			85
			Firm tan and reddish tan silty clay w/some silty clay seams and layers and ferrous stains and nodules, moist	9			84
			- stiff below 4 ft				
5				20			
			Very dense reddish tan silt w/occasional organic inclusions	50/6"			
			Very stiff tan and reddish tan silty clay w/some silt seams and layers and occasional organic stains and inclusions	50/5"			
10							
15							

COMPLETION DEPTH: 10.0 ft
DATE: 3-31-15

DEPTH TO WATER IN BORING: Dry

DATE: 3/31/2015

LGBNEW 14-197_BORINGS.GPJ 5-19-15

Grubbs, Hoskyn, Barton & Wyatt, Inc.
Consulting Engineers

LOG OF BORING NO. 31

CA0202- Hwy 425 - Hamburg-(Widening)(S)
Ashley County, Arkansas

TYPE: Auger LOCATION: Approx Sta 560+15, 33 ft Lt

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) / PLASTIC LIMIT — WATER CONTENT — LIQUID LIMIT (10 20 30 40 50 60 70)	- No. 200 %
			SURF. EL: 143.0				
			Soft tan, brown and gray silty clay w/some clayey silt seams and layers and trace organics	6			93
			Stiff gray and reddish tan silty clay w/some ferrous stains and nodules - water at 2 ft	17			
5			- very stiff, more silty below 4 ft	32			
			Very stiff gray, tan and reddish brown clay, slightly silty w/ some silty clay pockets and ferrous stains and nodules and organic stains and inclusions	52			94
10				50/8"			
15							

COMPLETION DEPTH: 10.0 ft
DATE: 4-1-15

DEPTH TO WATER IN BORING: 2 ft

DATE: 4/1/2015

LGBNEW 14-197_BORINGS.GPJ 5-19-15

Grubbs, Hoskyn, Barton & Wyatt, Inc.
Consulting Engineers

LOG OF BORING NO. 32

CA0202- Hwy 425 - Hamburg-(Widening)(S)
Ashley County, Arkansas

TYPE: Auger LOCATION: Approx Sta 569+87, 33 ft Lt

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) / PLASTIC LIMIT — WATER CONTENT — LIQUID LIMIT (10 20 30 40 50 60 70)	- No. 200 %
			SURF. EL: 154.1				
			Soft tan and gray silty clay w/some ferrous stains and nodules and trace organics	7			90
			- stiff with some silt and layers below 2 ft	14			
5			Stiff gray and reddish tan silty clay w/some silt pockets and seams and ferrous stains and nodules	18			93
			- with occasional clay partings and seams below 6 ft	23			
10			- very stiff, slightly sandy below 8 ft	25			
15							

COMPLETION DEPTH: 10.0 ft
DATE: 4-2-15

DEPTH TO WATER IN BORING: Dry

DATE: 4/2/2015

LGBNEW 14-197_BORINGS.GPJ 5-19-15

Grubbs, Hoskyn, Barton & Wyatt, Inc.
Consulting Engineers

LOG OF BORING NO. 33

CA0202- Hwy 425 - Hamburg-(Widening)(S)
Ashley County, Arkansas

TYPE: Auger LOCATION: Approx Sta 581+06, 36 ft Lt

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) / PLASTIC LIMIT — WATER CONTENT — LIQUID LIMIT (10 20 30 40 50 60 70)	- No. 200 %
			SURF. EL: 158.6				
			Firm reddish brown, tan and reddish tan silty clay w/occasional silt seams and fine to medium sand pockets (fill)	9			78
			Very stiff gray, reddish tan and reddish brown silty clay w/occasional silt pockets and seams	27			
5				37			
				32			92
				34			
10							
15							

COMPLETION DEPTH: 10.0 ft
DATE: 4-2-15

DEPTH TO WATER IN BORING: Dry

DATE: 4/2/2015

LGBNEW 14-197_BORINGS.GPJ 5-19-15

Grubbs, Hoskyn, Barton & Wyatt, Inc.
Consulting Engineers

LOG OF BORING NO. 34

CA0202- Hwy 425 - Hamburg-(Widening)(S)
Ashley County, Arkansas

TYPE: Auger LOCATION: Approx Sta 590+26, 40 ft Lt

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) / PLASTIC LIMIT — WATER CONTENT — LIQUID LIMIT (10 20 30 40 50 60 70)	- No. 200 %
			SURF. EL: 146.4				
			Firm tan and reddish tan silty clay w/some organic inclusions				
			- water at 1 ft	8			
			- moist with occasional silt pockets and clay partings below 2 ft	13			88
			Stiff reddish brown clay w/occasional organic inclusions				
5				16			
			- less silty and slightly blocky below 6 ft	19			96
				20			
10							
15							

COMPLETION DEPTH: 10.0 ft
DATE: 4-2-15

DEPTH TO WATER IN BORING: 1 ft

DATE: 4/2/2015

LGBNEW 14-197_BORINGS.GPJ 5-19-15

Grubbs, Hoskyn, Barton & Wyatt, Inc.
Consulting Engineers

LOG OF BORING NO. 35

CA0202- Hwy 425 - Hamburg-(Widening)(S)
Ashley County, Arkansas

TYPE: Auger LOCATION: Approx Sta 600+80, 38 ft Lt

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) / PLASTIC LIMIT / WATER CONTENT / LIQUID LIMIT (10 20 30 40 50 60 70)	- No. 200 %
			SURF. EL: 143.7				
			Soft brown silty clay w/occasional silt pockets and ferrous stains and nodules				
			- water at 1 ft	5			82
			Stiff gray, tan and reddish tan silty clay w/some silt seams and layers and ferrous stains and nodules	14			
5			Very stiff reddish brown clay w/occasional organic stains and inclusions	38		90	99
			- stiff below 6 ft	22			
			- slightly blocky and slickensided below 8 ft	25			
10							
15							

COMPLETION DEPTH: 10.0 ft
DATE: 4-2-15

DEPTH TO WATER IN BORING: 1 ft

DATE: 4/2/2015

LGBNEW 14-197_BORINGS.GPJ 5-19-15

Grubbs, Hoskyn, Barton & Wyatt, Inc.
Consulting Engineers

LOG OF BORING NO. 36

CA0202- Hwy 425 - Hamburg-(Widening)(S)
Ashley County, Arkansas

TYPE: Auger

LOCATION: Approx Sta 611+15, 35 ft Lt

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) / PLASTIC LIMIT — WATER CONTENT — LIQUID LIMIT (10 20 30 40 50 60 70)	- No. 200 %
			SURF. EL: 145.7				
			Very soft brown silty clay w/some organics	3			
			Soft reddish tan and reddish brown clay w/trace wood debris, moist	6			95
5			Very stiff reddish brown clay, slightly blocky and slickensided w/trace organics	29		84	
			- with occasional organic stains and inclusions below 6 ft	27			
			- stiff below 8 ft	24			
10							
15							

COMPLETION DEPTH: 10.0 ft
DATE: 4-2-15

DEPTH TO WATER IN BORING: Dry

DATE: 4/2/2015

LGBNEW 14-197_BORINGS.GPJ 5-19-15

Grubbs, Hoskyn, Barton & Wyatt, Inc.
Consulting Engineers

LOG OF BORING NO. 37

CA0202- Hwy 425 - Hamburg-(Widening)(S)
Ashley County, Arkansas

TYPE: Auger LOCATION: Approx Sta 620+62, 42 ft Lt

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) / PLASTIC LIMIT — WATER CONTENT — LIQUID LIMIT (10 20 30 40 50 60 70)	- No. 200 %
			SURF. EL: 151.6				
			Very soft tan, light gray and reddish tan silty clay w/silt pockets and ferrous stains and nodules, moist - water at 1 ft	2			93
			Stiff gray, tan and reddish tan clay, slightly silty w/occasional ferrous stains and nodules and organic stains	19			95
			- very stiff with occasional silt partings below 4 ft				
5				37			
			Very stiff reddish brown clay, slightly blocky and slickensided w/occasional organic stains and inclusions	40			
				44			
10							
15							

COMPLETION DEPTH: 10.0 ft
DATE: 4-2-15

DEPTH TO WATER IN BORING: 1 ft

DATE: 4/2/2015

LGBNEW 14-197_BORINGS.GPJ 5-19-15

PLATE 37

Grubbs, Hoskyn, Barton & Wyatt, Inc.
Consulting Engineers

LOG OF BORING NO. 38

CA0202- Hwy 425 - Hamburg-(Widening)(S)
Ashley County, Arkansas

TYPE: Auger LOCATION: Approx Sta 630+38, 35 ft Lt

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) / PLASTIC LIMIT — WATER CONTENT — LIQUID LIMIT (10 20 30 40 50 60 70)	- No. 200 %
			SURF. EL: 149.3				
			Very soft tan and brown silty clay w/occasional silt pockets and trace organics and ferrous stains and nodules	4			
			Stiff gray, tan and reddish tan silty clay w/occasional silt pockets and clay partings - water at 2 ft	14			92
5			- very stiff, more silty below 4 ft	38			
			Very stiff reddish brown clay w/occasional organics	26			
			- slighlty blocky and slickensided below 8 ft	30			
10							
15							

COMPLETION DEPTH: 10.0 ft
DATE: 4-2-15

DEPTH TO WATER IN BORING: 2 ft

DATE: 4/2/2015

LGBNEW 14-197_BORINGS.GPJ 5-19-15

Grubbs, Hoskyn, Barton & Wyatt, Inc.
Consulting Engineers

LOG OF BORING NO. 39

CA0202- Hwy 425 - Hamburg-(Widening)(S)
Ashley County, Arkansas

TYPE: Auger

LOCATION: Approx Sta 640+06, 35 ft Lt

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) / PLASTIC LIMIT — WATER CONTENT — LIQUID LIMIT (10 20 30 40 50 60 70)	- No. 200 %
			SURF. EL: 146.0				
			Very soft reddish tan, gray and brown silty clay w/clayey silt seams and layers and some ferrous stains and nodules and organics	4			86
			Stiff tan and gray silty clay w/occasional silt pockets and clay seams - water at 2 ft	15			
5			- very stiff with more silt below 4 ft	29			
				40			89
			Very stiff gray and reddish brown clay, slightly silty w/occasional silt pockets	37			
10							
15							

COMPLETION DEPTH: 10.0 ft
DATE: 4-2-15

DEPTH TO WATER IN BORING: 2 ft

DATE: 4/2/2015

LGBNEW 14-197_BORINGS.GPJ 5-19-15

Grubbs, Hoskyn, Barton & Wyatt, Inc.
Consulting Engineers

LOG OF BORING NO. 40

CA0202- Hwy 425 - Hamburg-(Widening)(S)
Ashley County, Arkansas

TYPE: Auger LOCATION: Approx Sta 650+74, 31 ft Lt

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) / PLASTIC LIMIT — WATER CONTENT — LIQUID LIMIT (10 20 30 40 50 60 70)	- No. 200 %
			SURF. EL: 152.5				
			Soft gray and brown silty clay w/some organics and silt pockets, moist	5			92
			- water at 2 ft				
			Soft reddish tan and gray silty clay w/occasional silt pockets and seams and ferrous stains and nodules	7			
			- stiff below 4 ft				
5				20			
			Very stiff reddish brown clay, slightly blocky and slickensided w/some organic stains and inclusions	27			98
			- slightly silty below 8 ft				
				28			
10							
15							

COMPLETION DEPTH: 10.0 ft
DATE: 4-2-15

DEPTH TO WATER IN BORING: 2 ft

DATE: 4/2/2015

LGBNEW 14-197_BORINGS.GPJ 5-19-15

Grubbs, Hoskyn, Barton & Wyatt, Inc.
Consulting Engineers

LOG OF BORING NO. 41

CA0202- Hwy 425 - Hamburg-(Widening)(S)
Ashley County, Arkansas

TYPE: Auger LOCATION: Approx Sta 659+69, 35 ft Lt

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) / PLASTIC LIMIT — WATER CONTENT — LIQUID LIMIT (10 20 30 40 50 60 70)	- No. 200 %
			SURF. EL: 161.4				
			Soft brown, gray and tan clayey silt w/ferrous stains and nodules and trace organics, moist	6			
			- water at 2 ft				
			Firm gray, tan and reddish tan silty clay w/some silt seams and layers and ferrous stains and nodules	8			90
			- stiff below 4 ft				
5				10			
				16			
			- more silt below 8 ft				
			Stiff reddish brown clay, slightly blocky and slickensided w/some organic stains and inclusions	20			
10							
15							

COMPLETION DEPTH: 10.0 ft
DATE: 4-2-15

DEPTH TO WATER IN BORING: 2 ft

DATE: 4/2/2015

LGBNEW 14-197_BORINGS.GPJ 5-19-15

Grubbs, Hoskyn, Barton & Wyatt, Inc.
Consulting Engineers

LOG OF BORING NO. 42

CA0202- Hwy 425 - Hamburg-(Widening)(S)
Ashley County, Arkansas

TYPE: Auger LOCATION: Approx Sta 669+67, 28 ft Lt

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) / PLASTIC LIMIT / WATER CONTENT / LIQUID LIMIT (10 20 30 40 50 60 70)	- No. 200 %
			SURF. EL: 167.5				
			Firm brown, gray and tan clayey silt w/some ferrous stains and trace organics	8			87
			Stiff gray and reddish tan silty clay w/occasional silt seams and layers	9			
			- with ferrous stains and nodules below 4 ft	14			
5			- very stiff with occasional clay partings below 6 ft	26			94
			Very stiff reddish brown clay, slightly blocky and slickensided w/occasional organic stains	50/7"			
10							
15							

COMPLETION DEPTH: 10.0 ft
DATE: 4-2-15

DEPTH TO WATER IN BORING: Dry

DATE: 4/2/2015

LGBNEW 14-197_BORINGS.GPJ 5-19-15

Grubbs, Hoskyn, Barton & Wyatt, Inc.
Consulting Engineers

LOG OF BORING NO. 43

CA0202- Hwy 425 - Hamburg-(Widening)(S)
Ashley County, Arkansas

TYPE: Auger LOCATION: Approx Sta 681+43,41 ft Lt

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) / PLASTIC LIMIT — WATER CONTENT — LIQUID LIMIT (10 20 30 40 50 60 70)	- No. 200 %
			SURF. EL: 149.3				
			Very soft gray and reddish tan clay slightly silty w/occasional silt pockets and seams and trace organics	4			
			- water at 2 ft - stiff, less silt below 2 ft	14			92
5			Very stiff reddish tan and gray silty clay	26			91
			- with occasional silt pockets below 6 ft	50			
			Stiff reddish brown clay, slightly blocky and slickensided w/occasional organic stains	20			
10							
15							

COMPLETION DEPTH: 10.0 ft
DATE: 4-2-15

DEPTH TO WATER IN BORING: 2 ft

DATE: 4/2/2015

LGBNEW 14-197_BORINGS.GPJ 5-19-15

Grubbs, Hoskyn, Barton & Wyatt, Inc.
Consulting Engineers

LOG OF BORING NO. 44

CA0202- Hwy 425 - Hamburg-(Widening)(S)
Ashley County, Arkansas

TYPE: Auger LOCATION: Approx Sta 690+16, 38 ft Lt

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) / PLASTIC LIMIT — WATER CONTENT — LIQUID LIMIT (10 20 30 40 50 60 70)	- No. 200 %
			SURF. EL: 150.9				
			Stiff reddish tan and tan silty clay w/some silt pockets and ferrous stains and nodules	11			92
			- very stiff w/some silt seams and layers below 2 ft	39			
5				50/7"			94
			Very stiff reddish brown clay, slightly silty w/occasional silt partings	50/10"			
			- less silt with some organic stains below 8 ft	34			98
10							
15							

COMPLETION DEPTH: 10.0 ft
DATE: 4-2-15

DEPTH TO WATER IN BORING: Dry

DATE: 4/2/2015

LGBNEW 14-197_BORINGS.GPJ 5-19-15

Grubbs, Hoskyn, Barton & Wyatt, Inc.
Consulting Engineers

LOG OF BORING NO. 45

CA0202- Hwy 425 - Hamburg-(Widening)(S)
Ashley County, Arkansas

TYPE: Auger LOCATION: Approx Sta 701+91, 40 ft Lt

SURF. EL: 150.7

DEPTH, FT	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	- No. 200 %
	Stiff tan, gray and reddish tan silty clay w/some silt seams and ferrous stains and nodules	21		
	- water at 3 ft	18		85
5	Very stiff reddish tan and gray silty clay w/occasional clay partings and seams and ferrous stains and nodules	31		84
	- stiff below 6 ft	18		
10	Stiff reddish brown clay, slightly silty w/occasional silty clay seams	22		
15				

COHESION, TON/SQ FT
0.2 0.4 0.6 0.8 1.0 1.2 1.4

PLASTIC LIMIT — WATER CONTENT — LIQUID LIMIT
10 20 30 40 50 60 70

COMPLETION DEPTH: 10.0 ft
DATE: 4-1-15

DEPTH TO WATER IN BORING: 3 ft

DATE: 4/1/2015

LGBNEW 14-197_BORINGS.GPJ 5-19-15

Grubbs, Hoskyn, Barton & Wyatt, Inc.
Consulting Engineers

LOG OF BORING NO. 46

CA0202- Hwy 425 - Hamburg-(Widening)(S)
Ashley County, Arkansas

TYPE: Auger LOCATION: Approx Sta 710+75, 32 ft Lt

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) / PLASTIC LIMIT — WATER CONTENT — LIQUID LIMIT (10 20 30 40 50 60 70)	- No. 200 %
			SURF. EL: 152±				
			Soft brown, gray and reddish tan clayey silt w/some ferrous stains and nodules	6			82
			Stiff tan and gray silty clay w/occasional silt pockets and ferrous stains and nodules	24			
5				21			91
			Stiff tan and reddish brown clay, slightly sandy w/occasional silty clay pockets and seams				
			- less silt with occasional organic inclusions below 6 ft	19			
			- slightly blocky with occasional silty clay pockets below 8 ft	20			
10							
15							

COMPLETION DEPTH: 10.0 ft
DATE: 4-1-15

DEPTH TO WATER IN BORING: Dry

DATE: 4/1/2015

LGBNEW 14-197_BORINGS.GPJ 5-19-15

Grubbs, Hoskyn, Barton & Wyatt, Inc.
Consulting Engineers

LOG OF BORING NO. 47

CA0202- Hwy 425 - Hamburg-(Widening)(S)
Ashley County, Arkansas

TYPE: Auger LOCATION: Approx Sta 720+73, 20 ft Lt

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) / PLASTIC LIMIT — WATER CONTENT — LIQUID LIMIT (10 20 30 40 50 60 70)	- No. 200 %
			SURF. EL: 157.0				
			Very soft brown, gray and reddish tan fine sandy clay w/ferrous stains and nodules and some organics and trace fine gravel (fill)	3			69
			Very stiff gray, reddish tan and tan silty clay w/some silt seams and layers	28			
5			Very dense gray and tan silt	50/6"		-NON-PLASTIC-	94
			Very stiff tan and gray silty clay w/some clay partings and seams	36			
10			Very stiff gray, tan and reddish brown clay w/occasional silt partings and some organic stains	50/7"			
15							

COMPLETION DEPTH: 10.0 ft
DATE: 4-2-15

DEPTH TO WATER IN BORING: Dry

DATE: 4/2/2015

LGBNEW 14-197_BORINGS.GPJ 5-19-15

Grubbs, Hoskyn, Barton & Wyatt, Inc.
Consulting Engineers

LOG OF BORING NO. 48

CA0202- Hwy 425 - Hamburg-(Widening)(S)
Ashley County, Arkansas

TYPE: Auger LOCATION: Approx Sta 730+19, 29 ft Lt

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) / PLASTIC LIMIT / WATER CONTENT / LIQUID LIMIT (10 20 30 40 50 60 70)	- No. 200 %
			SURF. EL: 164.9				
			Medium dense brown and reddish brown clayey fine to coarse sand w/some fine gravel and asphalt concrete debris (fill)	20			14
			Stiff reddish brown silty clay	19			93
5			Very stiff gray and tan silty clay w/some silt seams and layers and ferrous stains and nodules	26			
			- with some clay partings and seams below 6 ft	32			
			- less silt below 8 ft	30			
10							
15							

COMPLETION DEPTH: 10.0 ft
DATE: 4-1-15

DEPTH TO WATER IN BORING: Dry

DATE: 4/1/2015

LGBNEW 14-197_BORINGS.GPJ 5-19-15

Grubbs, Hoskyn, Barton & Wyatt, Inc.
Consulting Engineers

LOG OF BORING NO. 49

CA0202- Hwy 425 - Hamburg-(Widening)(S)
Ashley County, Arkansas

TYPE: Auger LOCATION: Approx Sta 739+86, 29 ft Lt

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) / PLASTIC LIMIT / WATER CONTENT / LIQUID LIMIT (10 20 30 40 50 60 70)	- No. 200 %
			SURF. EL: 158.9				
			Soft tan and reddish tan silty clay, slightly sandy w/occasional silt partings and trace fine gravel and some organic inclusions	5			76
			- water at 2 ft				
			Very stiff gray, tan and reddish tan silty clay w/some silt pockets and ferrous stains and nodules	26			
			- stiff below 4 ft				
5				23			90
				28			
			Very stiff gray and reddish brown clay, slightly blocky and slickensided w/trace silt pockets and occasional organic stains				
				27			
10							
15							

COMPLETION DEPTH: 10.0 ft
DATE: 4-1-15

DEPTH TO WATER IN BORING: 2 ft

DATE: 4/1/2015

LGBNEW 14-197_BORINGS.GPJ 5-19-15

Grubbs, Hoskyn, Barton & Wyatt, Inc.
Consulting Engineers

LOG OF BORING NO. 50

CA0202- Hwy 425 - Hamburg-(Widening)(S)
Ashley County, Arkansas

TYPE: Auger

LOCATION: Approx Sta 749+29,42 ft Lt

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) / PLASTIC LIMIT / WATER CONTENT / LIQUID LIMIT (10 20 30 40 50 60 70)	- No. 200 %
			SURF. EL: 168.4				
			Soft gray and reddish tan silty clay w/some silt pockets and occasional clay partings and ferrous stains and nodules	5			86
			- firm to stiff below 2 ft	10			
5			Very stiff gray, tan and reddish brown silty clay w/occasional clay pockets and ferrous stains and nodules	36			
				28			94
				41			
10							
15							

COMPLETION DEPTH: 10.0 ft
DATE: 4-1-15

DEPTH TO WATER IN BORING: Dry

DATE: 4/1/2015

LGBNEW 14-197_BORINGS.GPJ 5-19-15

Grubbs, Hoskyn, Barton & Wyatt, Inc.
Consulting Engineers

LOG OF BORING NO. 51

CA0202- Hwy 425 - Hamburg-(Widening)(S)
Ashley County, Arkansas

TYPE: Auger LOCATION: Approx Sta 759+81, 37 ft Lt

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) / PLASTIC LIMIT / WATER CONTENT / LIQUID LIMIT (10 20 30 40 50 60 70)	- No. 200 %
			SURF. EL: 175.3				
			Medium dense reddish brown and brown silty fine sand w/fine to coarse gravel and some organic inclusions (fill)	11		-NON-PLASTIC-	15
				14			
			Stiff tan and gray silty clay w/some silt seams and layers and ferrous stains - very soft below 4 ft				
5				4			93
			Medium dense gray, tan and reddish tan silt, slightly clayey w/some silty clay pockets and seams and occasional ferrous stains and nodules	29			
			Stiff gray, reddish tan and tan silty clay w/some silt pockets and seams and occasional ferrous stains	12			
10							
15							

COMPLETION DEPTH: 10.0 ft
DATE: 3-27-15

DEPTH TO WATER IN BORING: Dry

DATE: 3/27/2015

LGBNEW 14-197_BORINGS.GPJ 5-19-15

Grubbs, Hoskyn, Barton & Wyatt, Inc.
Consulting Engineers

LOG OF BORING NO. 52

CA0202- Hwy 425 - Hamburg-(Widening)(S)
Ashley County, Arkansas

TYPE: Auger LOCATION: Approx Sta 770+06,37 ft Lt

SURF. EL: 169.5

DEPTH, FT	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT
	Loose to medium dense reddish brown clayey fine sand w/fine to coarse gravel (fill)	10	
	Firm gray and tan silty clay, slightly sandy, w/some ferrous stains (fill)		
	- very soft below 2 ft	5	
	-very soft below 4 ft	2	
5			
	Stiff gray, reddish tan and tan silty clay, slightly sandy w/some silt pockets and seams and some ferrous stains and nodules	17	
	- water at 7.7 ft - more clayey below 8 ft	13	
10			
	NOTE: Water at 5.3 ft after 10 minutes.		
15			

COHESION, TON/SQ FT
0.2 0.4 0.6 0.8 1.0 1.2 1.4

PLASTIC LIMIT + WATER CONTENT ● LIQUID LIMIT +
10 20 30 40 50 60 70

- No. 200 %

COMPLETION DEPTH: 10.0 ft
DATE: 3-27-15

DEPTH TO WATER IN BORING: 7.7 ft

DATE: 3/27/2015

LGBNEW 14-197_BORINGS.GPJ 5-19-15

Grubbs, Hoskyn, Barton & Wyatt, Inc.
Consulting Engineers

LOG OF BORING NO. 54

CA0202- Hwy 425 - Hamburg-(Widening)(S)
Ashley County, Arkansas

TYPE: Auger LOCATION: Approx Sta 790+00, 40 ft Lt

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) / PLASTIC LIMIT / WATER CONTENT / LIQUID LIMIT (10 20 30 40 50 60 70)	- No. 200 %
			SURF. EL: 177±				
			Loose brown clayey fine to coarse sand w/a little fine gravel (fill)	9			17
			Soft gray and tan silty clay, slightly sandy w/some silt pockets, some ferrous stains and nodules and trace organic inclusions	5			90
5				5			
			- firm to stiff with some silt seams and layers below 6 ft	10			
			- stiff below 8 ft	15			
10							
15							

COMPLETION DEPTH: 10.0 ft
DATE: 3-27-15

DEPTH TO WATER IN BORING: Dry
DATE: 3/27/2015

LGBNEW 14-197_BORINGS.GPJ 5-19-15

Grubbs, Hoskyn, Barton & Wyatt, Inc.
Consulting Engineers

LOG OF BORING NO. 55

CA0202- Hwy 425 - Hamburg-(Widening)(S)
Ashley County, Arkansas

TYPE: Auger LOCATION: Approx Sta 800+08, 39 ft Rt

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) / PLASTIC LIMIT — WATER CONTENT — LIQUID LIMIT (10 20 30 40 50 60 70)	- No. 200 %
			SURF. EL: 179.9				
			Loose brown and dark gray fine to coarse sand, slightly clayey w/a little fine gravel and trace of asphalt concrete debris (fill)	5			16
			Soft gray and tan silty clay w/some ferrous stains and occasional organic inclusions	6			91
			- firm, more silty below 4 ft				
5				9			93
			- stiff below 6 ft				
				19			
				18			
10							
15							

COMPLETION DEPTH: 10.0 ft
DATE: 3-27-15

DEPTH TO WATER IN BORING: Dry

DATE: 3/27/2015

LGBNEW 14-197_BORINGS.GPJ 5-19-15

Grubbs, Hoskyn, Barton & Wyatt, Inc.
Consulting Engineers

LOG OF BORING NO. 56

CA0202- Hwy 425 - Hamburg-(Widening)(S)
Ashley County, Arkansas

TYPE: Auger LOCATION: Approx Sta 810+71, 28 ft Lt

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) / PLASTIC LIMIT / WATER CONTENT / LIQUID LIMIT (10 20 30 40 50 60 70)	- No. 200 %
			SURF. EL: 172.1				
			Very soft brown, gray and tan silty clay w/some silt pockets and seams and ferrous stains and nodules, moist	4			88
			- water at 2 ft - stiff, less silt below 2 ft	18			
			- with some clay pockets below 4 ft	15			95
5			- with occasional silt pockets below 6 ft	18			
			Very stiff gray and reddish brown clay w/occasional organic stains and inclusions	30			
10							
15							

COMPLETION DEPTH: 10.0 ft
DATE: 4-1-15

DEPTH TO WATER IN BORING: 2 ft

DATE: 4/1/2015

LGBNEW 14-197_BORINGS.GPJ 5-19-15

Grubbs, Hoskyn, Barton & Wyatt, Inc.
Consulting Engineers

LOG OF BORING NO. 57

CA0202- Hwy 425 - Hamburg-(Widening)(S)
Ashley County, Arkansas

TYPE: Auger LOCATION: Approx Sta 819+80,40 ft Lt

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) / PLASTIC LIMIT / WATER CONTENT / LIQUID LIMIT (10 20 30 40 50 60 70)	- No. 200 %
			SURF. EL: 172.7				
			Soft brown, tan and reddish brown silty clay, slightly sandy w/some silt pockets and ferrous stains and nodules	6			85
			Stiff gray, reddish tan and tan silty clay w/some silt pockets and seams	12			
			- water at 3 ft				
5				23			94
			- with some clay seams and layers below 6 ft				
				17			
			Very stiff gray and tan clay, slightly silty w/ferrous stains and nodules	31			
10							
15							

COMPLETION DEPTH: 10.0 ft
DATE: 4-1-15

DEPTH TO WATER IN BORING: 3 ft

DATE: 4/1/2015

LGBNEW 14-197_BORINGS.GPJ 5-19-15

Grubbs, Hoskyn, Barton & Wyatt, Inc.
Consulting Engineers

LOG OF TEST PIT NO. 1

CA0202 - Hwy 425 Hamburg (Widening)(S)
Hamburg, Ashley County, Arkansas

TYPE: Trackhoe

LOCATION: Approx Sta 817+49, 27 ft Rt

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) / PLASTIC LIMIT / WATER CONTENT / LIQUID LIMIT (10 20 30 40 50 60 70)	- No. 200 %
			SURF. EL: 171.9				
0			Stiff gray, tan and reddish tan silty clay w/occasional silt pockets and seams (fill) - organics to 1 ft				
1							93
2							
3							
4							
5							
6							
7							
8							
9							

COMPLETION DEPTH: 4.0 ft
DATE: 2-19-15

DEPTH TO WATER IN TEST PIT: Dry

DATE: 2/19/2015

LTPNEW 14-197_TEST PITS.GPJ 5-18-15

Grubbs, Hoskyn, Barton & Wyatt, Inc.
Consulting Engineers

LOG OF TEST PIT NO. 2

CA0202 - Hwy 425 Hamburg (Widening)(S)
Hamburg, Ashley County, Arkansas

TYPE: Trackhoe

LOCATION: Approx Sta 698+58,26 ft Rt

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) / PLASTIC LIMIT / WATER CONTENT / LIQUID LIMIT (10 20 30 40 50 60 70)	- No. 200 %
			SURF. EL: 154.8				
0			Stiff gray, tan and reddish tan silty clay (fill) - with organics to 0.5 ft - with trace fine to coarse gravel to 1 ft				
1							90
2							
3							
4							
5							
6							
7							
8							
9							

COMPLETION DEPTH: 4.0 ft
DATE: 2-19-15

DEPTH TO WATER
IN TEST PIT: Dry

DATE: 2/19/2015

LTPNEW 14-197_TEST PITS.GPJ 5-18-15

Grubbs, Hoskyn, Barton & Wyatt, Inc.
Consulting Engineers

LOG OF TEST PIT NO. 3

CA0202 - Hwy 425 Hamburg (Widening)(S)
Hamburg, Ashley County, Arkansas

TYPE: Trackhoe

LOCATION: Approx Sta 587+23,33 ft Lt

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	COHESION, TON/SQ FT (0.2 0.4 0.6 0.8 1.0 1.2 1.4) / PLASTIC LIMIT — WATER CONTENT — LIQUID LIMIT (10 20 30 40 50 60 70)	- No. 200 %
			SURF. EL: 151.0				
			Stiff tan and reddish tan silty clay (fill) - with organics to 0.7 ft				90
			- with trace fine to coarse gravel below 3 ft				
			Stiff red clay w/ferrous partings - seepage at 4 ft				97
5							
			- very stiff, slightly blocky below 8 ft				
10							
15							

COMPLETION DEPTH: 10.0 ft
DATE: 2-19-15

DEPTH TO WATER IN TEST PIT: Dry

DATE: 2/19/2015

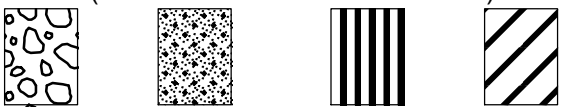
LTPNEW 14-197_TEST PITS.GPJ 5-18-15

Grubbs, Hoskyn, Barton & Wyatt, Inc.
Consulting Engineers

SYMBOLS AND TERMS USED ON BORING LOGS

SOIL TYPES

(SHOWN IN SYMBOLS COLUMN)

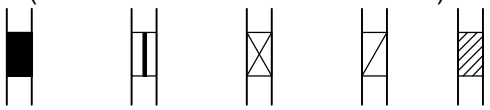


Gravel Sand Silt Clay

Predominant type shown heavy

SAMPLER TYPES

(SHOWN ON SAMPLES COLUMN)



Shelby Tube | Rock Core | Split Spoon | No Recovery | Cutting

TERMS DESCRIBING CONSISTENCY OR CONDITION

COARSE GRAINED SOILS (major portion retained on No. 200 sieve): Includes (I) Clean gravels and sands, and (2) silty or clayey gravels and sands. Condition is rated according to relative density, as determined by laboratory tests.

DESCRIPTIVE TERM	N-VALUE	RELATIVE DENSITY
VERY LOOSE	0-4	0-15%
LOOSE	4-10	15-35%
MEDIUM DENSE	10-30	35-65%
DENSE	30-50	65-85%
VERY DENSE	50 and above	85-100%

FINE GRAINED SOILS (major portion passing No. 200 sieve): Includes (1) Inorganic and organic silts and clays, (2) gravelly, sandy, or silty clays, and (3) clayey silts. Consistency is rated according to shearing strength, as indicated by penetrometer readings or by unconfined compression tests.

DESCRIPTIVE TERM	UNCONFINED COMPRESSIVE STRENGTH TON/SQ. FT.
VERY SOFT	Less than 0.25
SOFT	0.25-0.50
FIRM	0.50-1.00
STIFF	1.00-2.00
VERY STIFF	2.00-4.00
HARD	4.00 and higher

NOTE: Slickensided and fissured clays may have lower unconfined compressive strengths than shown above, because of planes of weakness or cracks in the soil. The consistency ratings of such soils are based on penetrometer readings.

TERMS CHARACTERIZING SOIL STRUCTURE

SLICKENSIDED - having inclined planes of weakness that are slick and glossy in appearance.
FISSURED - containing shrinkage cracks, frequently filled with fine sand or silt; usually more or less vertical.
LAMINATED - composed of thin layers of varying color and texture.
INTERBEDDED - composed of alternate layers of different soil types.
CALCAREOUS - containing appreciable quantities of calcium carbonate.
WELL GRADED - having a wide range in grain sizes and substantial amounts of all intermediate particle sizes.
POORLY GRADED - predominantly of one grain size, or having a range of sizes with some intermediate sizes missing.

Terms used on this report for describing soils according to their texture or grain size distribution are in accordance with the UNIFIED SOIL CLASSIFICATION SYSTEM, as described in Technical Memorandum No.3-357, Waterways Experiment Station, March 1953

KEY 3-14-12

ATTACHMENT 6

SUMMARY OF CLASSIFICATION TEST RESULTS

PROJECT: CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Ashley County, AR
JOB NUMBER: 14-197

BORING NO.	SAMPLE DEPTH (ft)	WATER CONTENT (%)	ATTERBERG LIMITS			SIEVE ANALYSIS PERCENT PASSING							UNIFIED CLASS.	AASHTO CLASS.
			LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX	1 in.	3/4 in.	3/8 in.	#4	#10	#40	#200		
1	0.5-1.5	12	25	12	13	---	---	---	---	---	---	36	GC	A-6
1	4.5-5.5	17	29	12	17	---	---	---	---	---	---	40	GC	A-6
2	0.5-1.5	12	24	19	5	100	100	94	86	83	76	67	CL-ML	A-4
2	4.5-5.5	21	---Non Plastic---			---	---	---	---	---	---	95	ML	A-4
3	2.5-3.5	22	38	20	18	---	---	---	---	---	---	92	CL	A-6
4	0.5-1.5	24	29	22	7	---	---	---	---	---	---	87	CL-ML	A-4
5	0.5-1.5	24	31	20	11	100	100	100	99	97	93	80	CL	A-6
5	2.5-3.5	23	28	20	8	---	---	---	---	---	---	94	CL	A-6
6	0.5-1.5	23	32	21	11	---	---	---	---	---	---	65	CL	A-6
6	9-10	21	28	20	8	---	---	---	---	---	---	98	CL	A-6
7	0.5-1.5	22	31	20	11	---	---	---	---	---	---	90	CL	A-6
7	2.5-3.5	22	36	16	20	---	---	---	---	---	---	93	CL	A-6
7	6.5-7.5	22	42	16	26	---	---	---	---	---	---	97	CL	A-7-6
8	0.5-1.5	43	34	25	9	---	---	---	---	---	---	83	ML	A-4

SUMMARY OF CLASSIFICATION TEST RESULTS

PROJECT: CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Ashley County, AR
JOB NUMBER: 14-197

BORING NO.	SAMPLE DEPTH (ft)	WATER CONTENT (%)	ATTERBERG LIMITS			SIEVE ANALYSIS PERCENT PASSING							UNIFIED CLASS.	AASHTO CLASS.
			LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX	1 in.	3/4 in.	3/8 in.	#4	#10	#40	#200		
8	4.5-5.5	22	32	19	13	---	---	---	---	---	---	92	CL	A-6
9	0.5-1.5	7	23	17	6	---	---	---	---	---	---	14	GC-GM	A-1-b
9	2.5-3.5	25	36	22	14	---	---	---	---	---	---	93	CL	A-6
10	2.5-3.5	16	33	20	13	---	---	---	---	---	---	92	CL	A-6
10	6.5-7.5	25	24	21	3	---	---	---	---	---	---	96	ML	A-4
11	1-2	9	30	14	16	---	---	---	---	---	---	28	GC	A-2-6
11	4.5-5.5	23	28	21	7	---	---	---	---	---	---	90	CL-ML	A-4
12	0.5-1.2	27	24	18	6	---	---	---	---	---	---	61	CL-ML	A-4
13	2.5-3.5	20	33	16	17	---	---	---	---	---	---	91	CL	A-6
14	0.5-1.5	24	38	17	21	---	---	---	---	---	---	92	CL	A-6
14	4.5-5.5	23	24	18	6	---	---	---	---	---	---	87	CL-ML	A-4
15	0.5-1.5	17	21	15	6	---	---	---	---	---	---	26	GC-GM	A-2-4
15	2.5-3.5	19	24	18	6	---	---	---	---	---	---	87	CL-ML	A-4
16	0.5-1.5	22	39	16	23	---	---	---	---	---	---	93	CL	A-6

SUMMARY OF CLASSIFICATION TEST RESULTS

PROJECT: CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Ashley County, AR
JOB NUMBER: 14-197

BORING NO.	SAMPLE DEPTH (ft)	WATER CONTENT (%)	ATTERBERG LIMITS			SIEVE ANALYSIS PERCENT PASSING							UNIFIED CLASS.	AASHTO CLASS.
			LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX	1 in.	3/4 in.	3/8 in.	#4	#10	#40	#200		
16	4.5-5.5	27	40	19	21	---	---	---	---	---	---	99	CL	A-6
17	0.5-1.5	28	31	21	10	---	---	---	---	---	---	93	CL	A-6
18	0.5-1.5	13	35	16	19	---	---	---	---	---	---	94	CL	A-6
18	4.5-5.5	20	32	19	13	---	---	---	---	---	---	89	CL	A-6
19	0.5-1.5	7	18	15	3	100	100	92	78	65	45	20	SM	A-1-b
19	2.5-3.5	21	30	20	10	---	---	---	---	---	---	82	CL	A-6
20	2.5-3.5	26	45	18	27	---	---	---	---	---	---	94	CL	A-7-6
21	0.5-1.5	24	31	18	13	---	---	---	---	---	---	92	CL	A-6
21	2.5-3.5	22	48	18	30	---	---	---	---	---	---	93	CL	A-7-6
22	1-1.5	17	28	20	8	---	---	---	---	---	---	88	CL	A-4
22	4.5-5.5	21	36	20	16	---	---	---	---	---	---	92	CL	A-6
23	0.5-1.5	22	43	16	27	---	---	---	---	---	---	96	CL	A-7-6
23	2.5-3.5	21	47	19	28	---	---	---	---	---	---	88	CL	A-7-6

SUMMARY OF CLASSIFICATION TEST RESULTS

PROJECT: CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Ashley County, AR
JOB NUMBER: 14-197

BORING NO.	SAMPLE DEPTH (ft)	WATER CONTENT (%)	ATTERBERG LIMITS			SIEVE ANALYSIS PERCENT PASSING							UNIFIED CLASS.	AASHTO CLASS.
			LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX	1 in.	3/4 in.	3/8 in.	#4	#10	#40	#200		
24	0.5-1.5	12	23	16	7	---	---	---	---	---	---	23	SC-SM	A-2-4
24	2.5-3.5	19	41	15	26	---	---	---	---	---	---	93	CL	A-7-6
24	6.5-7.5	36	86	24	62	---	---	---	---	---	---	100	CH	A-7-6
25	0.5-1.5	19	29	17	12	---	---	---	---	---	---	86	CL	A-6
25	2.5-3.5	20	39	18	21	---	---	---	---	---	---	97	CL	A-6
26	2.5-3.5	19	30	18	12	---	---	---	---	---	---	93	CL	A-6
27	2.5-3.5	25	36	19	17	---	---	---	---	---	---	90	CL	A-6
28	0.5-1.5	24	44	17	27	---	---	---	---	---	---	90	CL	A-7-6
28	6.5-7.5	24	59	17	42	---	---	---	---	---	---	99	CH	A-7-6
29	0.5-1.5	18	32	16	16	---	---	---	---	---	---	89	CL	A-6
29	4.5-5.5	20	32	20	12	---	---	---	---	---	---	89	CL	A-6
30	0.5-1.5	24	27	20	7	---	---	---	---	---	---	85	CL-ML	A-4
30	2.5-3.5	25	30	17	13	---	---	---	---	---	---	84	CL	A-6
31	0.5-1.5	28	31	20	11	---	---	---	---	---	---	93	CL	A-6

SUMMARY OF CLASSIFICATION TEST RESULTS

PROJECT: CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Ashley County, AR
JOB NUMBER: 14-197

BORING NO.	SAMPLE DEPTH (ft)	WATER CONTENT (%)	ATTERBERG LIMITS			SIEVE ANALYSIS PERCENT PASSING							UNIFIED CLASS.	AASHTO CLASS.
			LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX	1 in.	3/4 in.	3/8 in.	#4	#10	#40	#200		
31	6.5-7.5	19	49	15	34	---	---	---	---	---	---	94	CL	A-7-6
32	0.5-1.5	24	37	19	18	---	---	---	---	---	---	90	CL	A-6
32	4.5-5.5	20	41	15	26	---	---	---	---	---	---	93	CL	A-7-6
33	0.5-1.5	19	31	17	14	100	100	100	100	98	90	78	CL	A-6
33	6.5-7.5	12	36	16	20	---	---	---	---	---	---	92	CL	A-6
34	2.5-3.5	31	40	19	21	---	---	---	---	---	---	88	CL	A-6
34	6.5-7.5	32	77	20	52	---	---	---	---	---	---	96	CH	A-7-6
35	0.5-1.5	28	35	19	16	---	---	---	---	---	---	81	CL	A-6
35	4.5-5.5	34	90	26	64	---	---	---	---	---	---	99	CH	A-7-6
36	2.5-3.5	29	67	20	47	---	---	---	---	---	---	95	CH	A-7-6
36	4.5-5.5	26	84	23	61	---	---	---	---	---	---	98	CH	A-7-6
37	0.5-1.5	26	39	20	19	---	---	---	---	---	---	93	CL	A-6
37	2.5-3.5	23	56	17	39	---	---	---	---	---	---	95	CH	A-7-6
38	2.5-3.5	19	37	17	20	---	---	---	---	---	---	92	CL	A-6

SUMMARY OF CLASSIFICATION TEST RESULTS

PROJECT: CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Ashley County, AR
JOB NUMBER: 14-197

BORING NO.	SAMPLE DEPTH (ft)	WATER CONTENT (%)	ATTERBERG LIMITS			SIEVE ANALYSIS PERCENT PASSING							UNIFIED CLASS.	AASHTO CLASS.
			LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX	1 in.	3/4 in.	3/8 in.	#4	#10	#40	#200		
39	0.5-1.5	22	30	19	11	---	---	---	---	---	---	86	CL	A-6
39	6.5-7.5	18	38	15	23	---	---	---	---	---	---	89	CL	A-6
40	0.5-1.5	30	33	21	12	---	---	---	---	---	---	92	CL	A-6
40	6.5-7.5	29	61	23	38	---	---	---	---	---	---	98	CH	A-7-6
41	2.5-3.5	24	31	21	10	---	---	---	---	---	---	90	CL	A-6
42	0.5-1.5	22	28	21	7	---	---	---	---	---	---	87	CL-ML	A-4
42	6.5-7.5	20	46	16	30	---	---	---	---	---	---	94	CL	A-7-6
43	2.5-3.5	23	53	16	37	---	---	---	---	---	---	92	CH	A-7-6
43	4.5-5.5	18	44	15	29	---	---	---	---	---	---	91	CL	A-7-6
44	0.5-1.5	22	36	17	19	---	---	---	---	---	---	92	CL	A-6
44	4.5-5.5	17	32	16	16	---	---	---	---	---	---	94	CL	A-6
44	9-10	22	50	18	32	---	---	---	---	---	---	98	CH	A-7-6
45	2.5-3.5	20	37	17	20	---	---	---	---	---	---	85	CL	A-6
45	4.5-5.5	19	37	15	22	---	---	---	---	---	---	84	CL	A-6

SUMMARY OF CLASSIFICATION TEST RESULTS

PROJECT: CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Ashley County, AR
JOB NUMBER: 14-197

BORING NO.	SAMPLE DEPTH (ft)	WATER CONTENT (%)	ATTERBERG LIMITS			SIEVE ANALYSIS PERCENT PASSING							UNIFIED CLASS.	AASHTO CLASS.
			LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX	1 in.	3/4 in.	3/8 in.	#4	#10	#40	#200		
46	0.5-1.5	20	24	20	4	---	---	---	---	---	---	82	CL-ML	A-4
46	4.5-5.5	22	36	15	21	---	---	---	---	---	---	91	CL	A-6
46	6.5-7.5	29	56	20	36	---	---	---	---	---	---	---	CH	A-7-6
47	0.5-1.5	23	30	19	11	---	---	---	---	---	---	69	CL	A-6
47	4.5-5.5	10	---Non Plastic---			---	---	---	---	---	---	94	ML	A-4
48	0.5-1.5	6	28	19	9	100	100	86	62	46	27	14	SC	A-2-4
48	2.5-3.5	18	35	20	15	---	---	---	---	---	---	93	CL	A-6
49	0.5-1.5	27	30	21	9	---	---	---	---	---	---	76	CL	A-4
49	4.5-5.5	19	33	18	15	---	---	---	---	---	---	90	CL	A-6
50	0.5-1.5	21	43	16	27	---	---	---	---	---	---	86	CL	A-7-6
50	6.5-7.5	18	43	16	27	---	---	---	---	---	---	94	CL	A-7-6
51	0.5-1.5	9	---Non Plastic---			---	---	---	---	---	---	15	SM	A-1-b
51	4.5-5.5	26	30	21	9	---	---	---	---	---	---	93	CL	A-6
52	2.5-3.5	23	27	20	7	---	---	---	---	---	---	84	CL-ML	A-4

SUMMARY OF CLASSIFICATION TEST RESULTS

PROJECT: CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Ashley County, AR
JOB NUMBER: 14-197

BORING NO.	SAMPLE DEPTH (ft)	WATER CONTENT (%)	ATTERBERG LIMITS			SIEVE ANALYSIS PERCENT PASSING							UNIFIED CLASS.	AASHTO CLASS.
			LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX	1 in.	3/4 in.	3/8 in.	#4	#10	#40	#200		
54	0.5-1.5	6	---	---	---	100	100	90	74	61	35	17	SC	A-2-4
54	2.5-3.5	26	32	22	10	---	---	---	---	---	---	90	CL	A-4
55	0.5-1.5	8	---	---	---	100	100	88	68	56	40	16	SC	A-2-4
55	2.5-3.5	25	30	21	9	---	---	---	---	---	---	91	CL	A-4
55	4.5-5.5	19	33	22	11	---	---	---	---	---	---	93	CL	A-6
56	0.5-1.5	21	34	18	16	---	---	---	---	---	---	88	CL	A-6
56	4.5-5.5	21	40	18	22	---	---	---	---	---	---	95	CL	A-6
57	0.5-1.5	25	30	21	9	---	---	---	---	---	---	85	CL	A-4
57	4.5-5.5	20	29	20	9	---	---	---	---	---	---	94	CL	A-4
C1	1.5-2.5	16	28	12	16	---	---	---	---	---	---	36	GC	A-6
C2	1.2-2.2	9	28	12	16	100	100	88	74	57	32	15	SC	A-2-6
C2	3-4	24	25	20	5	---	---	---	---	---	---	90	ML	A-4
C3	5-6	27	26	19	7	---	---	---	---	---	---	77	CL-ML	A-4
C4	1.1-2.1	7	28	12	16	---	---	---	---	---	---	58	CL	A-6

SUMMARY OF CLASSIFICATION TEST RESULTS

PROJECT: CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Ashley County, AR
JOB NUMBER: 14-197

BORING NO.	SAMPLE DEPTH (ft)	WATER CONTENT (%)	ATTERBERG LIMITS			SIEVE ANALYSIS PERCENT PASSING							UNIFIED CLASS.	AASHTO CLASS.
			LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX	1 in.	3/4 in.	3/8 in.	#4	#10	#40	#200		
C4	3-4	19	32	23	9	---	---	---	---	---	---	92	CL	A-4
C5	1.2-2.2	8	26	14	12	---	---	---	---	---	---	25	GC	A-2-6
C6	1.2-2.2	10	23	16	7	---	---	---	---	---	---	36	GC-GM	A-4
C6	3-4	26	37	23	14	---	---	---	---	---	---	93	CL	A-6
C7	1.1-2.1	2	24	15	9	100	100	66	55	49	38	28	GC	A-2-4
C7	5-6	24	37	21	16	---	---	---	---	---	---	92	CL	A-6
C8	1.4-2.4	21	29	17	12	---	---	---	---	---	---	60	CL	A-6
C8	3.5-4.5	20	29	19	10	---	---	---	---	---	---	90	CL	A-4
C9	1.3-2.3	24	43	22	21	---	---	---	---	---	---	95	CL	A-7-6
C10	1.2-2.2	18	28	19	9	---	---	---	---	---	---	91	CL	A-4
C11	1.4-2.4	19	26	18	8	---	---	---	---	---	---	90	CL	A-4
C12	1.6-2.6	19	46	16	30	---	---	---	---	---	---	92	CL	A-7-6
C12	3.5-4.5	33	79	24	55	---	---	---	---	---	---	100	CH	A-7-6
C13	1.6-2.6	21	36	17	19	---	---	---	---	---	---	92	CL	A-6
C14	1.5-2.5	19	25	20	5	---	---	---	---	---	---	89	CL-ML	A-4
C15	1.5-2.5	16	26	19	7	---	---	---	---	---	---	88	CL-ML	A-4

SUMMARY OF CLASSIFICATION TEST RESULTS

PROJECT: CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Ashley County, AR
JOB NUMBER: 14-197

BORING NO.	SAMPLE DEPTH (ft)	WATER CONTENT (%)	ATTERBERG LIMITS			SIEVE ANALYSIS PERCENT PASSING							UNIFIED CLASS.	AASHTO CLASS.
			LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX	1 in.	3/4 in.	3/8 in.	#4	#10	#40	#200		
C15	3.5-4.5	24	27	19	8	---	---	---	---	---	---	88	CL	A-4
C16	1.7-2.1	17	29	20	9	---	---	---	---	---	---	---	CL	A-4
C16	3-4	25	35	19	16	---	---	---	---	---	---	90	CL	A-6
C18	1.8-2.8	16	27	17	10	---	---	---	---	---	---	75	CL	A-4
C18	3.5-4.5	24	49	20	29	---	---	---	---	---	---	94	CL	A-7-6
C19	1.5-2.5	23	33	19	14	100	100	98	98	96	93	88	CL	A-6
C19	3.5-4.5	22	35	20	15	---	---	---	---	---	---	92	CL	A-6
C20	1.4-2.4	19	29	20	9	---	---	---	---	---	---	93	CL	A-4
C20	3.5-4.5	26	44	20	24	---	---	---	---	---	---	91	CL	A-7-6
C21	3-4	18	31	22	9	---	---	---	---	---	---	88	CL	A-6
C22	1.8-2.3	21	---	---	---	100	100	94	81	64	39	19	SC	A-2-4
C23	1.2-2.2	9	---	---	---	100	94	82	65	53	32	17	SC	A-2-4
C23	3-4	21	24	21	3	---	---	---	---	---	---	87	ML	A-4
C24	1.1-2.1	14	21	19	2	---	---	---	---	---	---	62	ML	A-4
C25	1.1-2.1	8	---	---	---	100	100	89	73	58	33	15	SC	A-2-4
C25	5-6	18	22	20	2	---	---	---	---	---	---	80	ML	A-4
C-26	1.5-2.5	11	26	17	9	---	---	---	---	---	---	55	CL	A-4

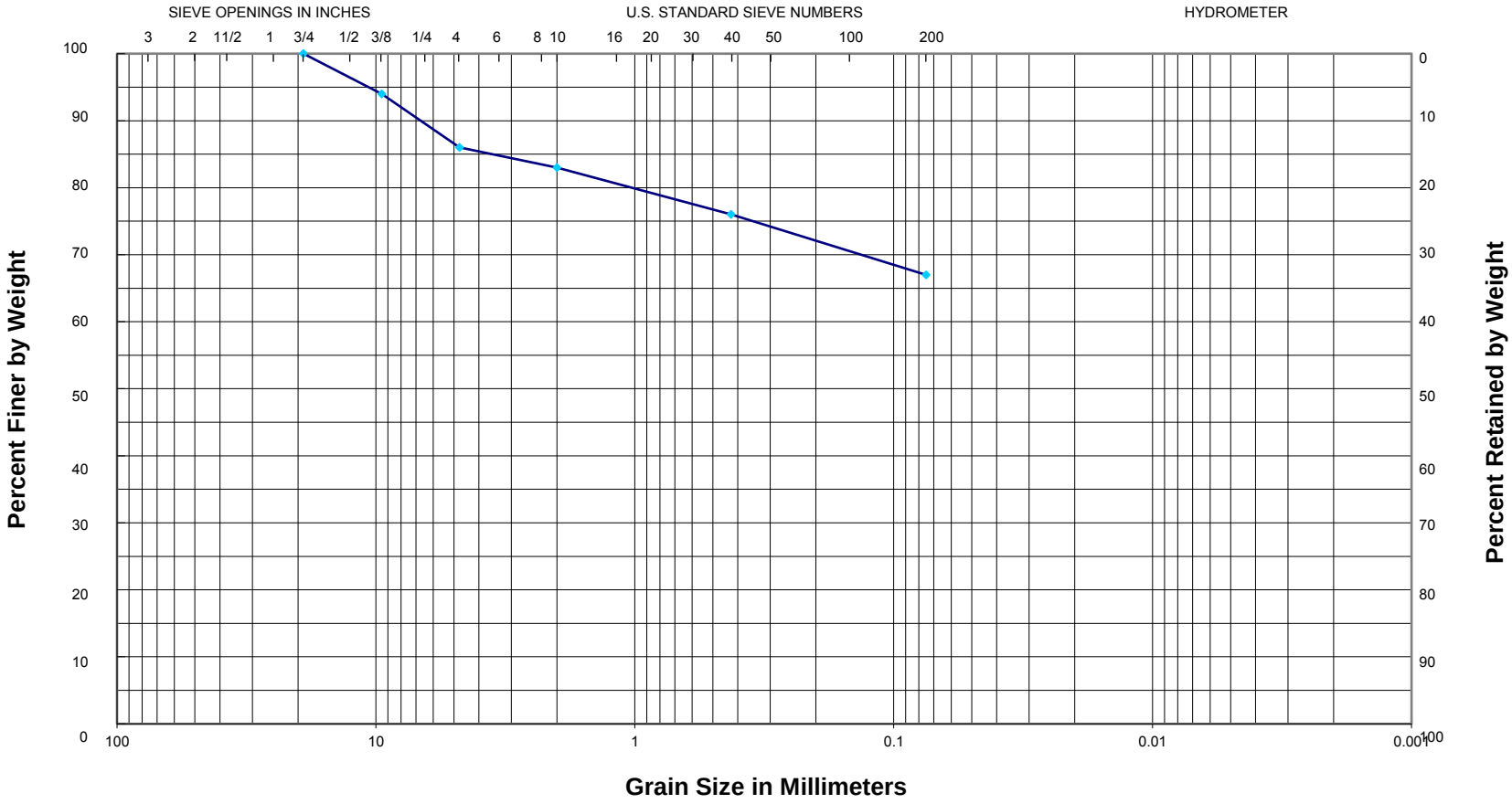
SUMMARY OF CLASSIFICATION TEST RESULTS

PROJECT: CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Ashley County, AR
JOB NUMBER: 14-197

BORING NO.	SAMPLE DEPTH (ft)	WATER CONTENT (%)	ATTERBERG LIMITS			SIEVE ANALYSIS PERCENT PASSING							UNIFIED CLASS.	AASHTO CLASS.
			LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX	1 in.	3/4 in.	3/8 in.	#4	#10	#40	#200		
C27	1.2-2.2	8	23	14	9	100	100	69	47	38	24	13	GC	A-2-4
C27	3-4	23	28	20	8	---	---	---	---	---	---	85	CL	A-4
C28	1.5-2.5	21	27	21	6	---	---	---	---	---	---	91	CL-ML	A-4
C29	1.3-2.3	14	23	18	5	---	---	---	---	---	---	63	CL-ML	A-4
C29	3.5-4.5	22	---Non Plastic---			---	---	---	---	---	---	95	ML	A-4

14-197

GRAIN SIZE CURVE



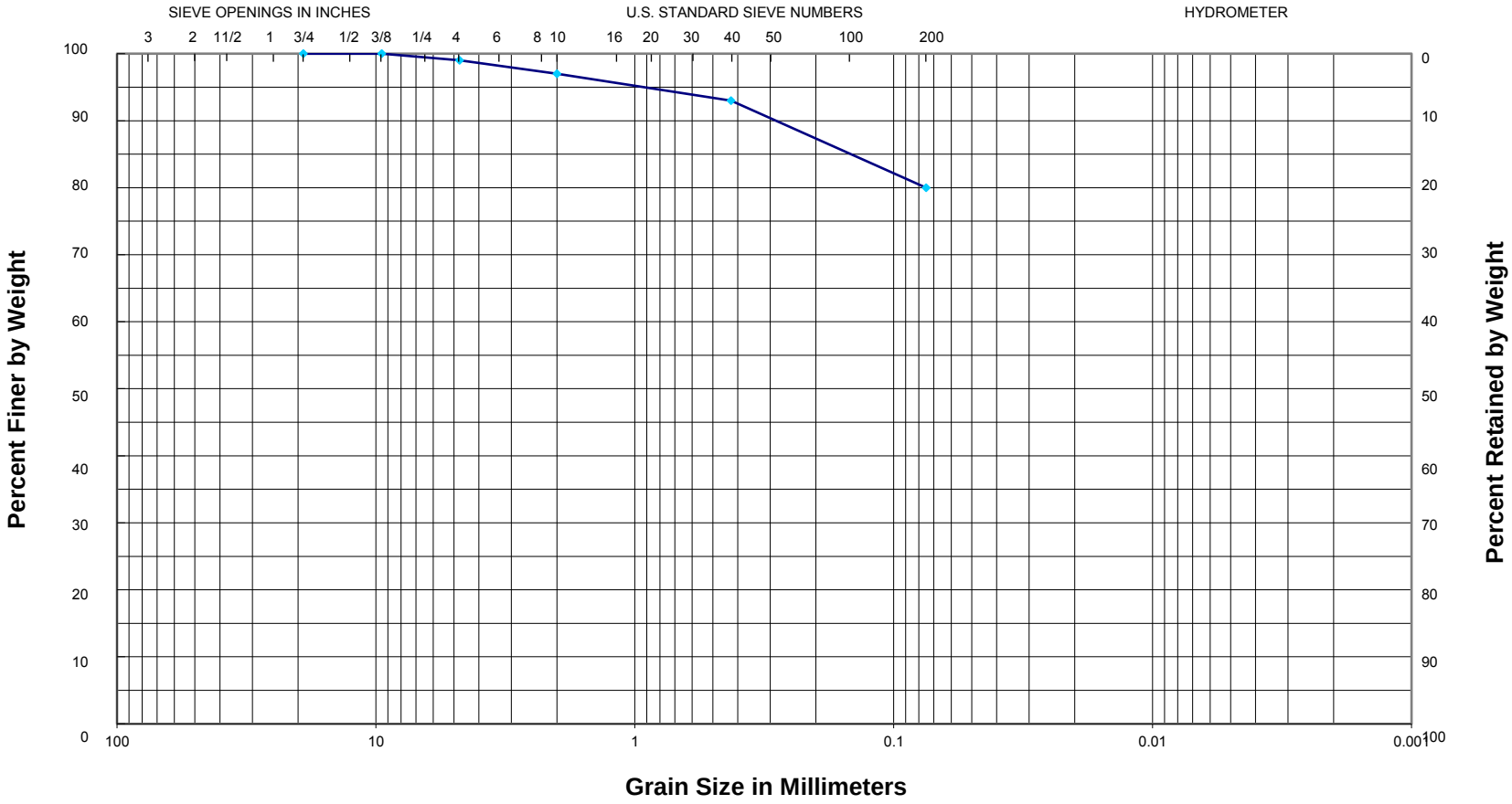
GRAVEL		SAND			SILT OR CLAY
COARSE	FINE	COARSE	MEDIUM	FINE	

Sample: B-2, 0.5-1.5 ft; LL = 24, PL = 19, PI = 5;
Description: Tan, reddish tan and gray clayey silt with some fine sand pockets and a little fine gravel (fill)

USCS = CL-ML AASHTO = A-4

14-197

GRAIN SIZE CURVE

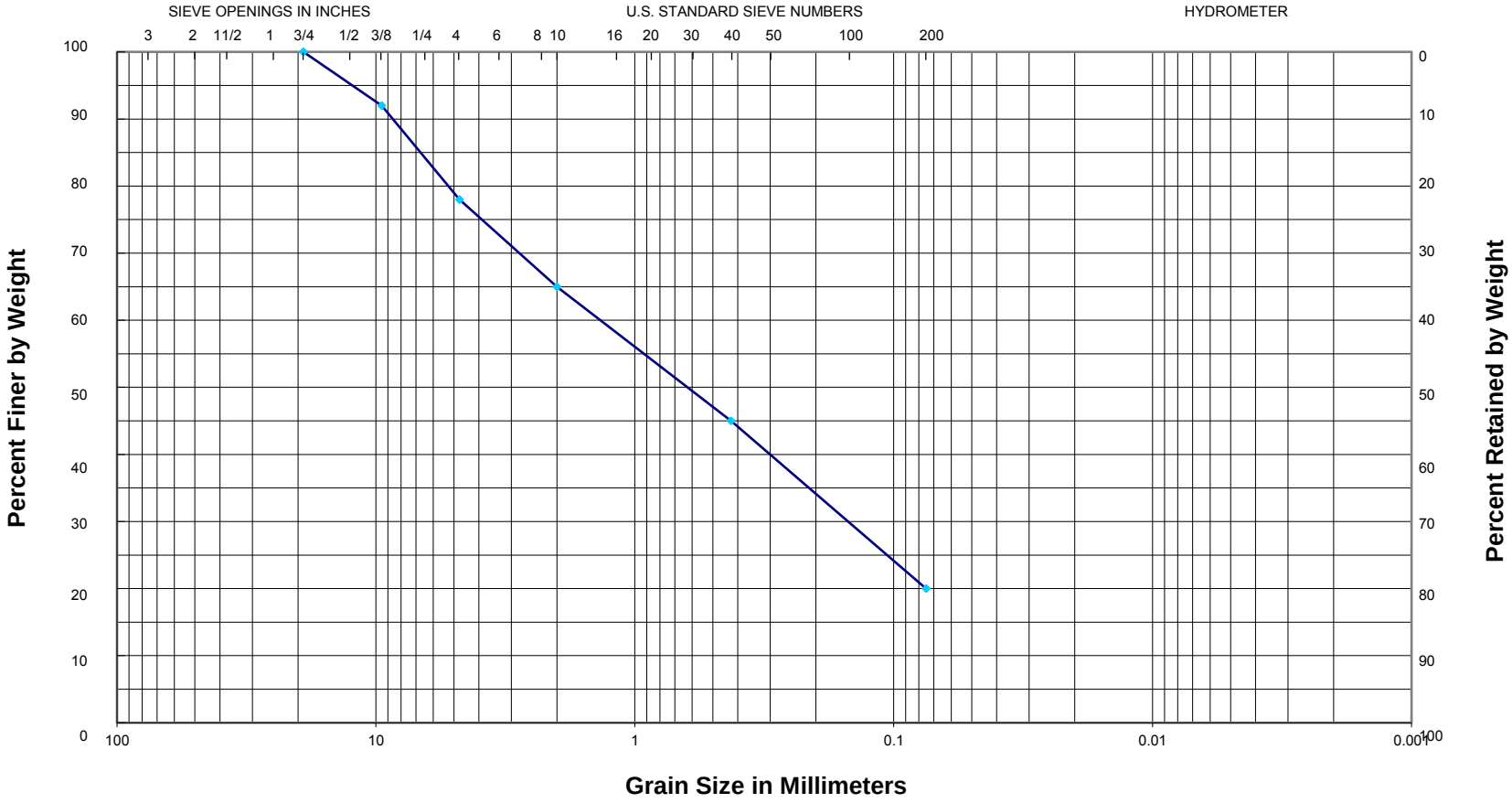


GRAVEL		SAND			SILT OR CLAY
COARSE	FINE	COARSE	MEDIUM	FINE	

Sample: B-5, 0.5-1.5 ft; LL = 31, PL = 20, PI = 11
Description: Gray, tan and brown silty clay, slightly sandy w/ silt pockets and trace fine gravel (fill)
USCS = CL AASHTO = A-6

14-197

GRAIN SIZE CURVE

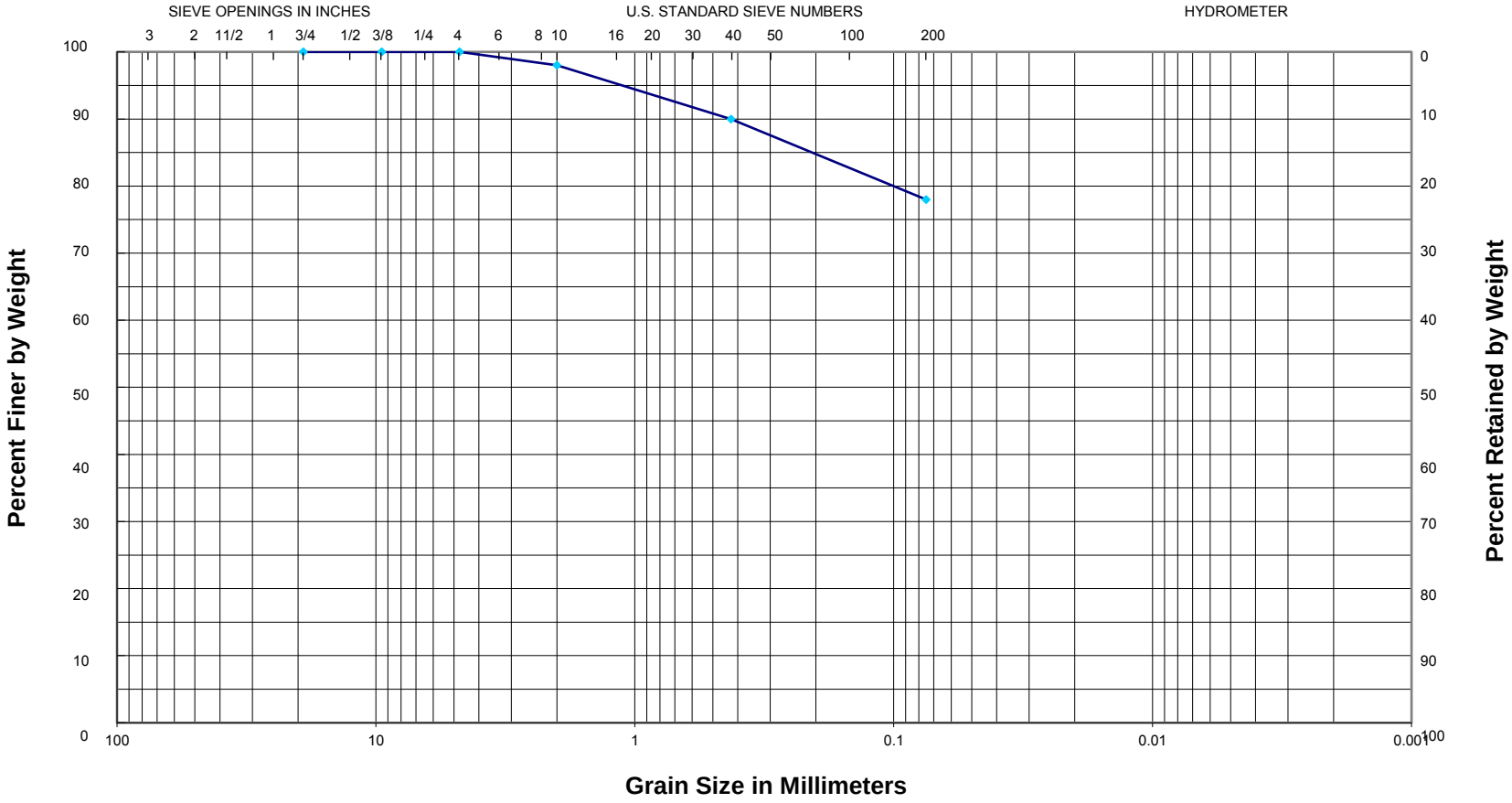


GRAVEL		SAND			SILT OR CLAY
COARSE	FINE	COARSE	MEDIUM	FINE	

Sample: B-19, 0.5-1.5 ft; LL = 18, PL = 15, PI = 3
Description: Redddish brown clayey fine to coarse sand with a little fine gravel (fill)
USCS = SM AASHTO = A-1-b

14-197

GRAIN SIZE CURVE

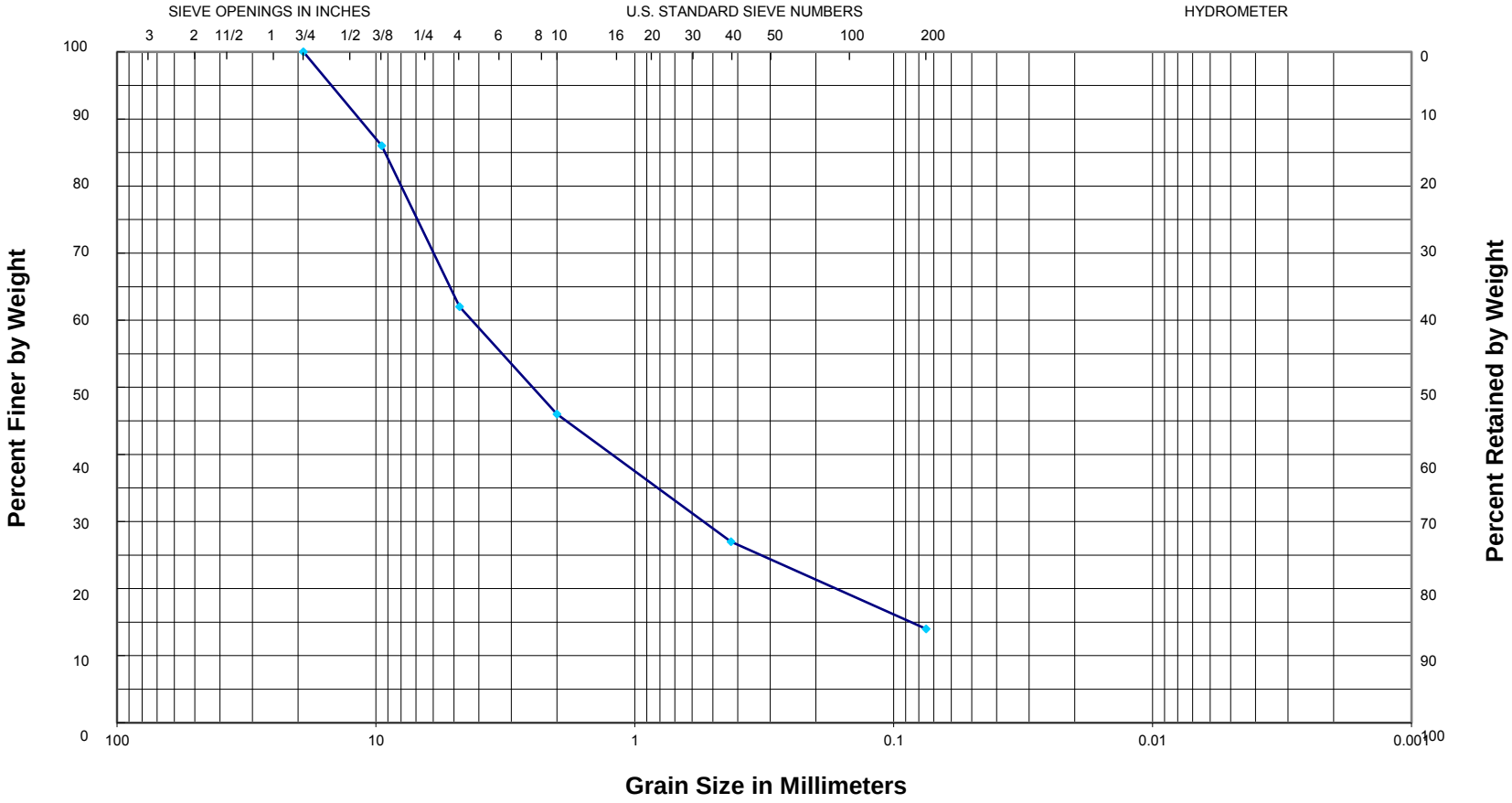


GRAVEL		SAND			SILT OR CLAY
COARSE	FINE	COARSE	MEDIUM	FINE	

Sample: B-33, 0.5-1.5 ft; LL = 31, PL = 17, PI = 14
Description: Reddish brown, tan and reddish tan silty clay w/ occasional silt seams and fine to medium sand pockets
USCS = CL AASHTO = A-6

14-197

GRAIN SIZE CURVE

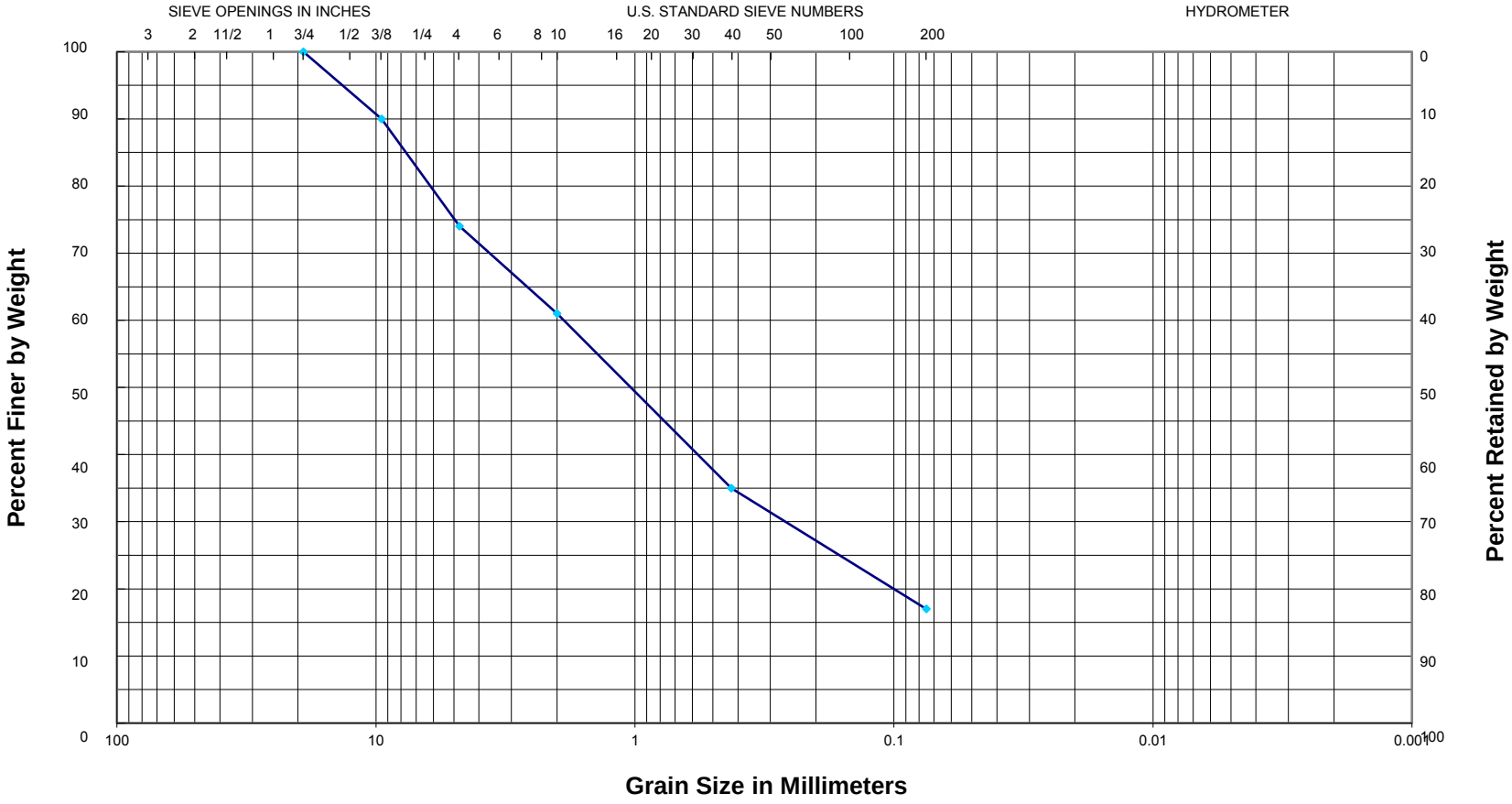


GRAVEL		SAND			SILT OR CLAY
COARSE	FINE	COARSE	MEDIUM	FINE	

Sample: B-48, 0.5-1.5 ft; LL =28, PL =19, PI =9;
Description: Brown and reddish brown clayey fine to coarse sand w/ some fine gravel and AC debris
USCS = SC AASHTO = A-2-4

14-197

GRAIN SIZE CURVE

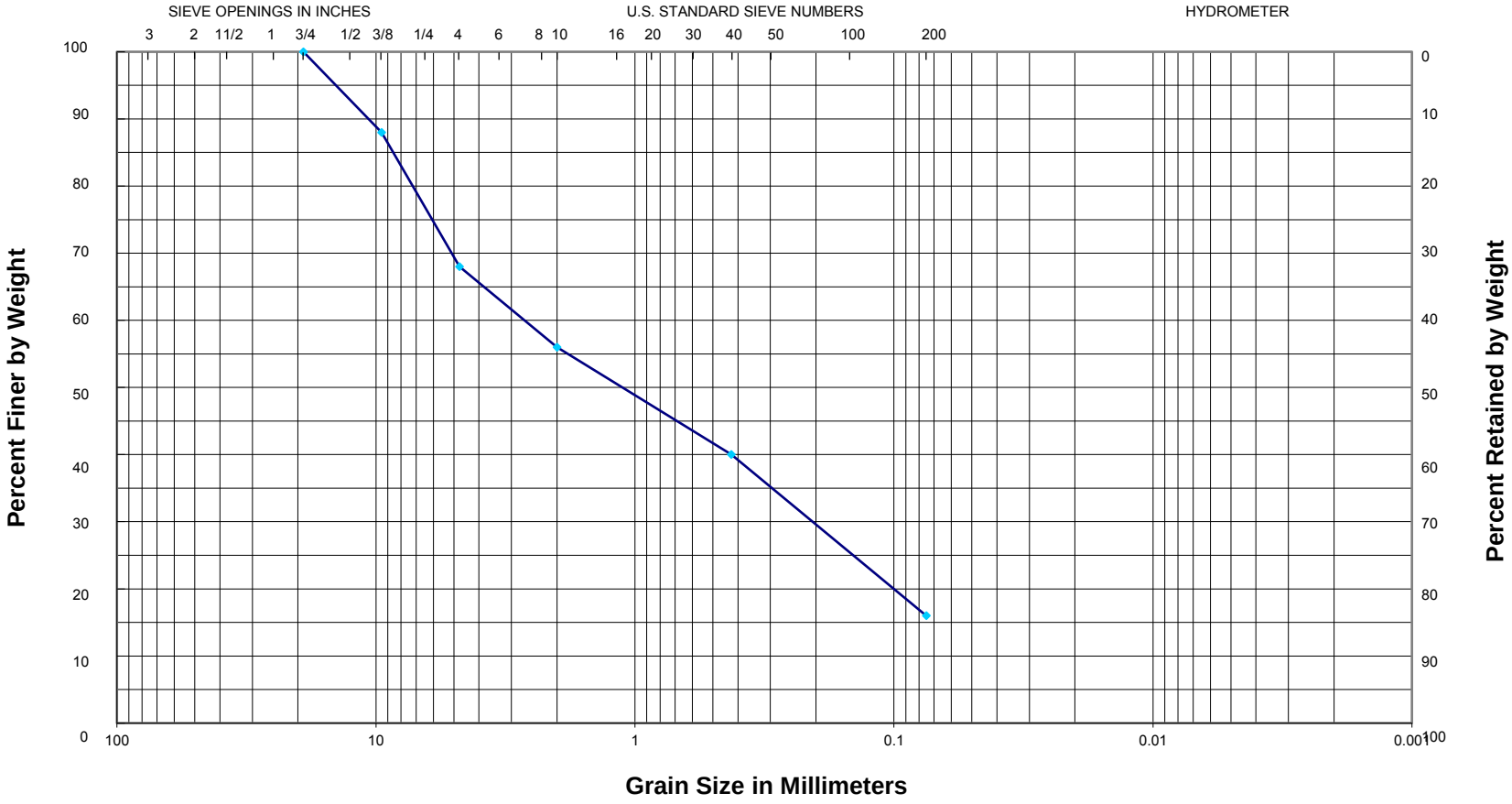


GRAVEL		SAND			SILT OR CLAY
COARSE	FINE	COARSE	MEDIUM	FINE	

Sample: B-54, 0.5-1.5 ft
Description: Brown clayey fine to coarse sand with a little fine gravel
USCS = SC AASHTO = A-1-b

14-197

GRAIN SIZE CURVE

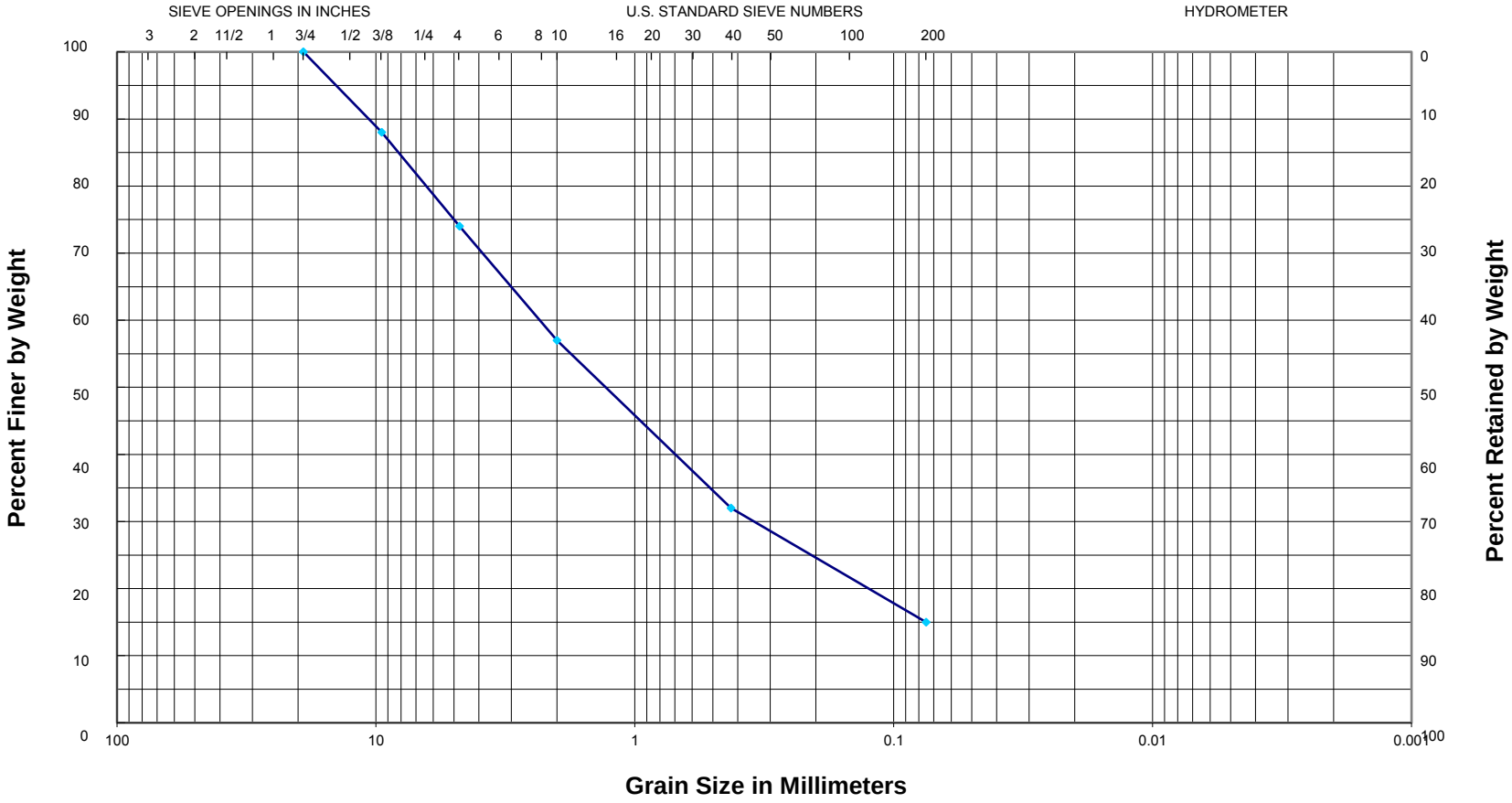


GRAVEL		SAND			SILT OR CLAY
COARSE	FINE	COARSE	MEDIUM	FINE	

Sample: B-55, 0.5-1.5 ft;
Description: Brown and dark gray fine to coarse sand, slightly clayey with a little fine gravel and trace AC debris
USCS = SC AASHTO = A-1-b

14-197

GRAIN SIZE CURVE

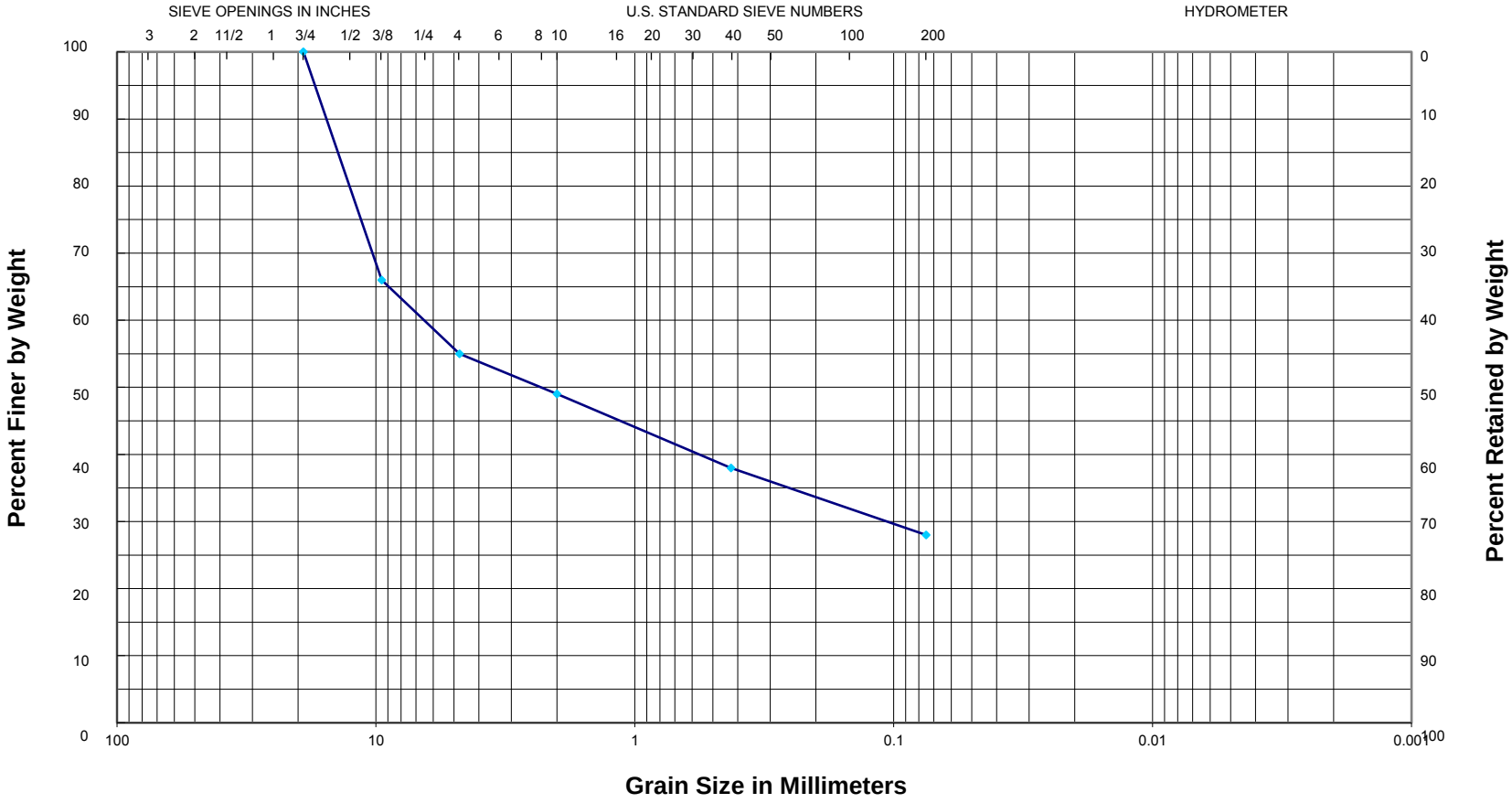


GRAVEL		SAND			SILT OR CLAY
COARSE	FINE	COARSE	MEDIUM	FINE	

Sample: B-C2, 1.2-2.2 ft; LL = 28, PL = 12, PI = 16
Description: Reddish brown clayey fine to coarse sand with a little fine gravel
USCS = SC AASHTO = A-2-6

14-197

GRAIN SIZE CURVE

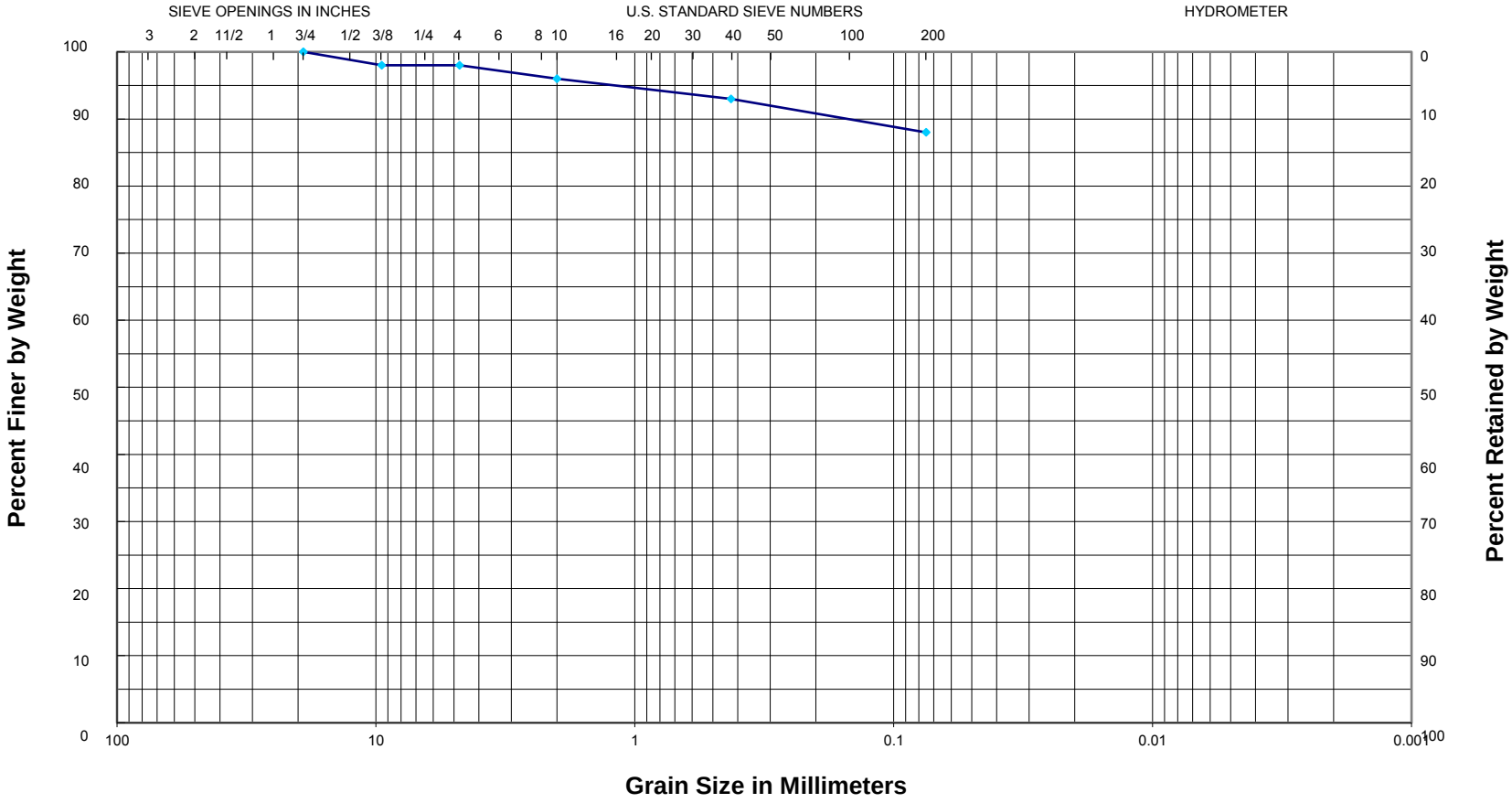


GRAVEL		SAND			SILT OR CLAY
COARSE	FINE	COARSE	MEDIUM	FINE	

Sample: B-C7, 1.1-2.1 ft; LL = 24, PL = 15, PI = 9
Description: Reddish brown clayey fine gravel
USCS = GC AASHTO = A-2-4

14-197

GRAIN SIZE CURVE

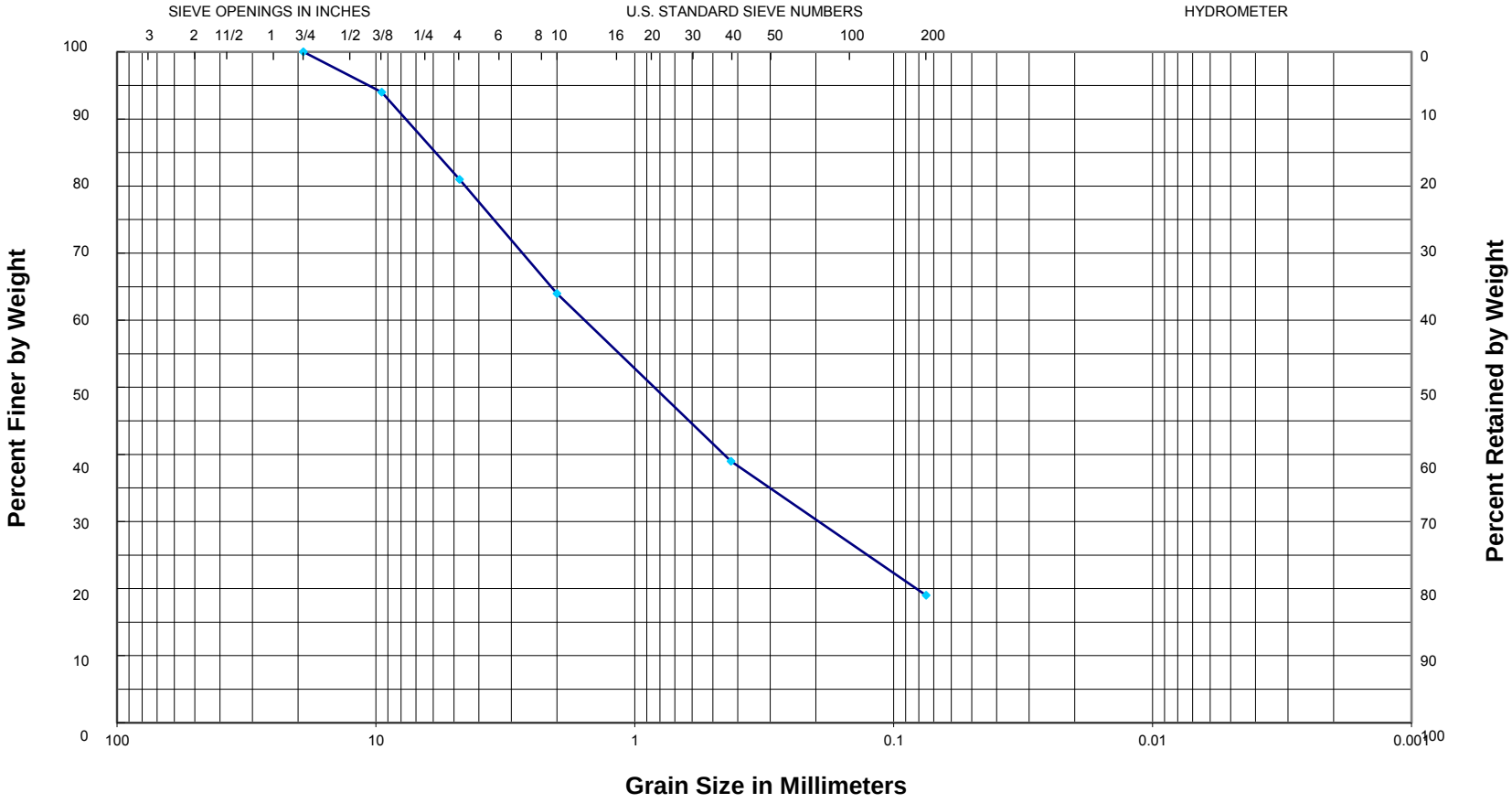


GRAVEL		SAND			SILT OR CLAY
COARSE	FINE	COARSE	MEDIUM	FINE	

Sample: B-C19, 1.5-2.5 ft; LL = 33, PL = 19, PI = 14
Description: Reddish brown silty clay w/ trace fine gravel
USCS = CL AASHTO = A-6

14-197

GRAIN SIZE CURVE

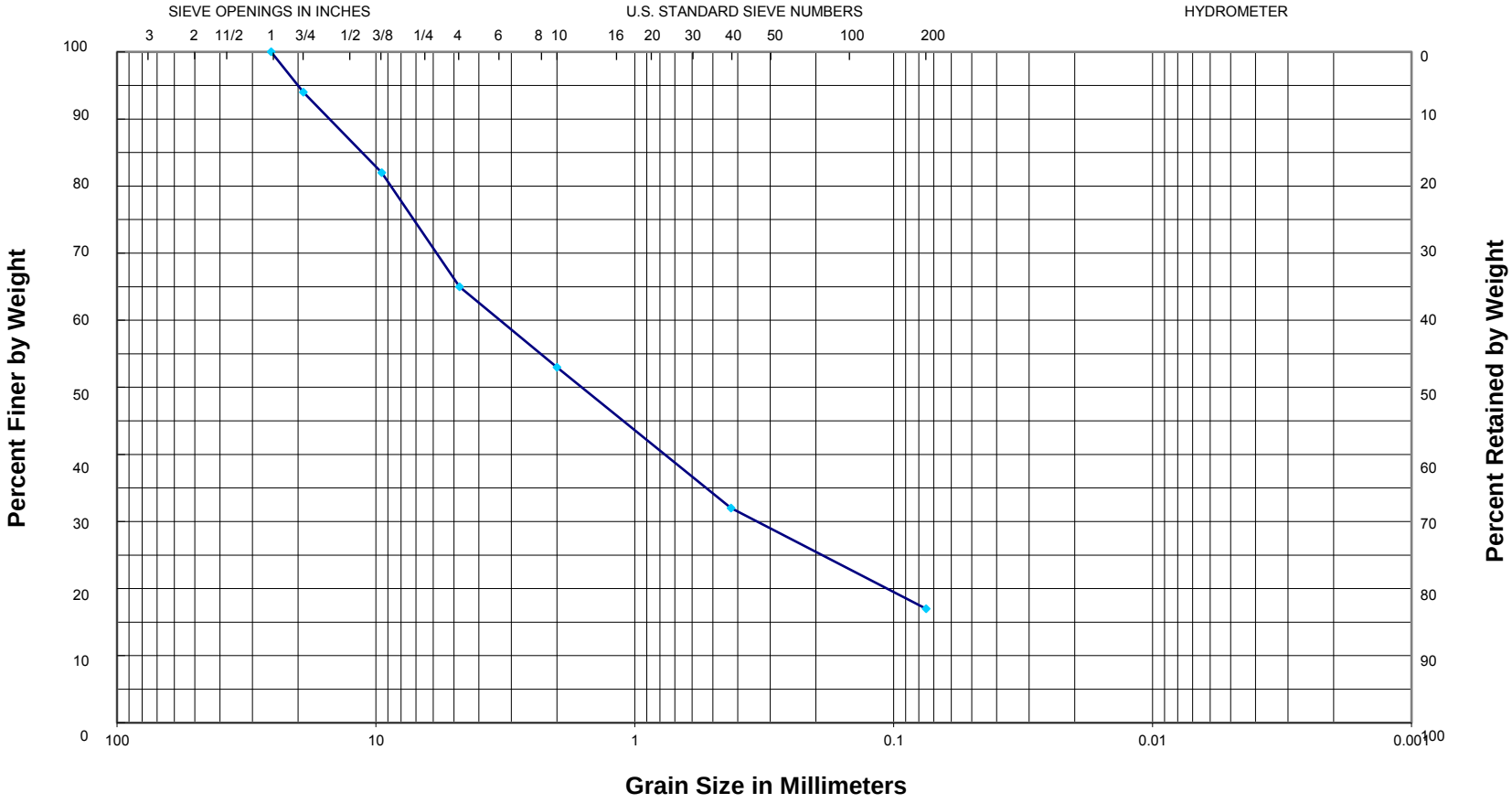


GRAVEL		SAND			SILT OR CLAY
COARSE	FINE	COARSE	MEDIUM	FINE	

Sample: B-C22, 1.8-2.3 ft;
Description: Brown clayey fine to coarse sand with trace fine gravel
USCS = SC AASHTO = A-2-4

14-197

GRAIN SIZE CURVE

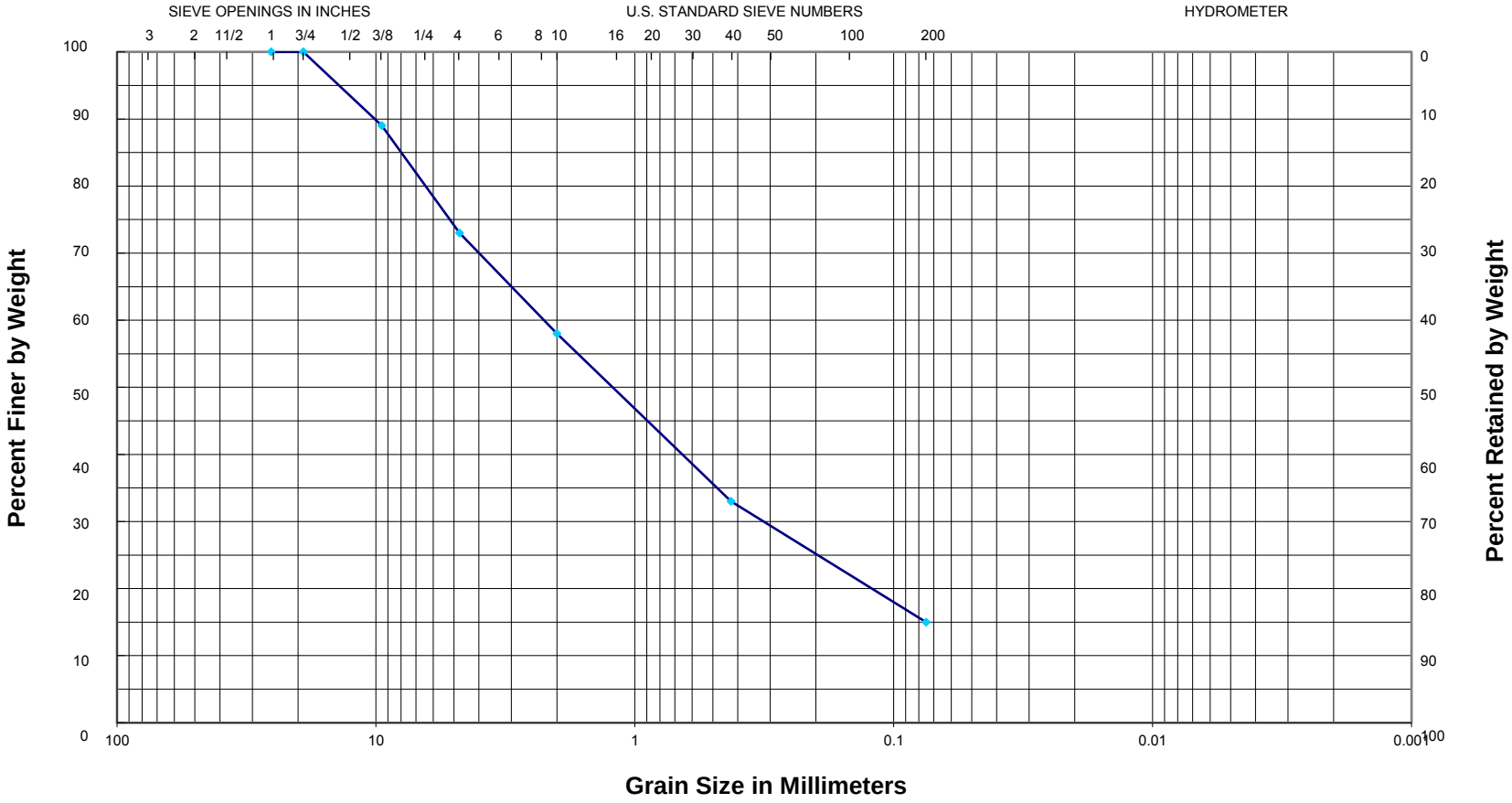


GRAVEL		SAND			SILT OR CLAY
COARSE	FINE	COARSE	MEDIUM	FINE	

Sample: B-C23, 1.2-2.2 ft;
Description: Brown clayey fine to coarse sand with some fine to coarse gravel
USCS = SC AASHTO = A-2-4

14-197

GRAIN SIZE CURVE

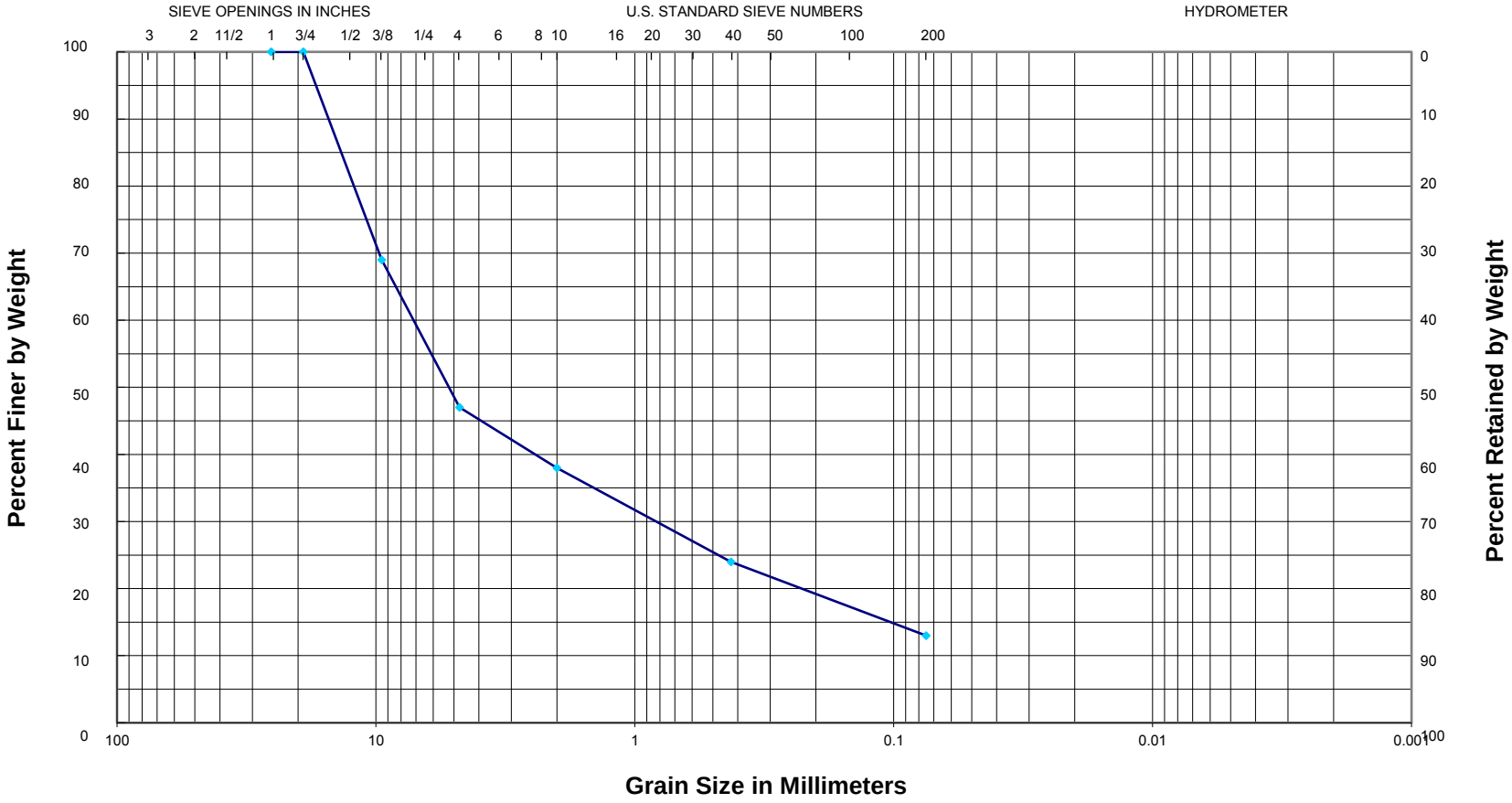


GRAVEL		SAND			SILT OR CLAY
COARSE	FINE	COARSE	MEDIUM	FINE	

Sample: B-C25, 1.1-2.1 ft;
Description: Reddish brown clayey fine to coarse sand with some fine gravel
USCS = SC AASHTO = A-2-4

14-197

GRAIN SIZE CURVE



GRAVEL		SAND			SILT OR CLAY
COARSE	FINE	COARSE	MEDIUM	FINE	

Sample: B-C27, 1.2-2.2 ft; LL = 23, PL = 14, PI = 9;
Description: Reddish brown clayey fine gravel, sandy
USCS = GC AASHTO = A-2-4

ATTACHMENT 7

SUMMARY of SUBGRADE SUPPORT TEST RESULTS

PROJECT: CA0202 - Hwy 425 - Hamburg (Widening)(S)
LOCATION: Ashley County, Arkansas
GHBW Job Number: 14-197

TEST PIT NO.	DEPTH, FT	WATER CONT, %	ATTERBERG LIMITS			SIEVE ANALYSIS PERCENT			Soil Description	UNIFIED CLASS.	AASHTO CLASS.	AASHTO COMPACTION CRITERIA	PROCTOR TEST RESULTS		CBR TEST RESULTS (AASHTO T-193)			
			LIQUID LIMIT	PLASTIC LIMIT	PI	+ #4	#4 - #200	- #200					MAX DRY UNIT WT, pcf	OPTIMUM MOISTURE, %	MOLDED DRY UNIT WT, pcf	MOLDED WATER CONTENT, %	CBR VALUE	
																	TOP	BOT
1	1-3	16	35	19	16	0	7	93	Gray, tan and reddish tan silty clay with occasional silt pockets and seams	CL	A-6	T-99	108.0	16.7	102.7	16.6	4.6	8.8
2	1-3	18	38	17	21	1	9	90	Gray, tan and reddish tan silty clay	CL	A-6	T-99	106.1	18.4	101.1	18.4	3.0	5.2
3	1-3	17	34	17	17	1	9	90	Tan and reddish tan silty clay	CL	A-6	T-99	1088.1	17.8	102.8	17.9	4.4	7.1

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CONSULTING ENGINEERS

P.O. Box 30970
Little Rock, Arkansas 72260-0970
#1 Trigon Place 72209
(501) 455-2536
FAX (501) 455-4137

REPORT OF STANDARD PROCTOR TEST
(AASHTO T-99)

Project: AHTD CA0202 - HWY 425 - Hamburg (Widening)(S) Job No: 14-197
Material Description: Gray, tan and reddish tan silty clay w/ occasional silt pockets and seams (fill)
Location Sampled/Source: Test Pit 1
Sample Depth, ft: 1-3
Date Sampled: 2/19/2015
Date Tested: 3/4/2015
Tested By: RSL
Report Date: 4/9/2015

LAB COMPACTION PROCEDURE: AASHTO T-99 Method: A	
Maximum Unit Dry Wt. (pcf):	108.0
Optimum Water Content (%):	16.7

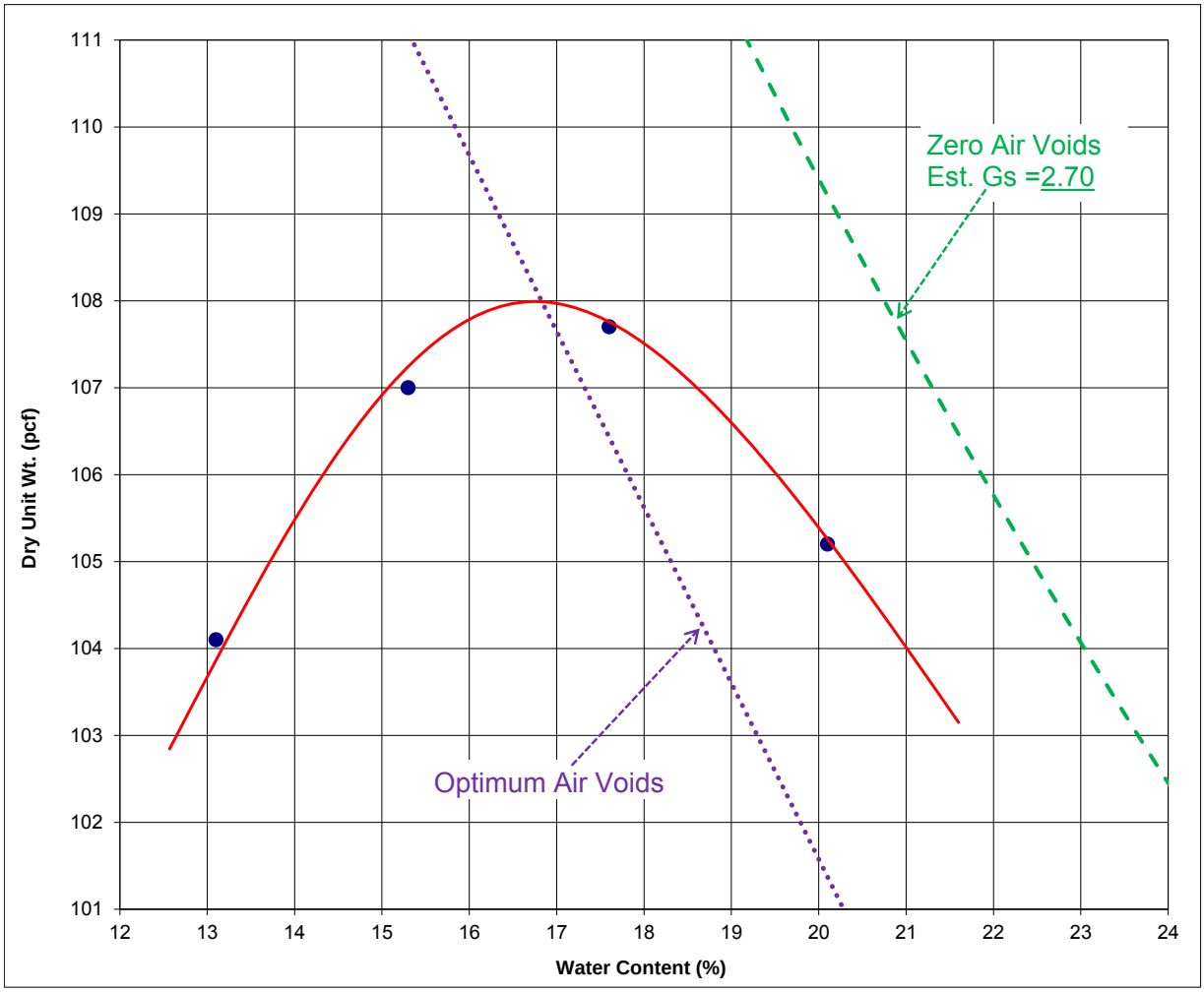
As Processed Water Content: 20.7 %

ATTERBERG LIMITS AASHTO T-89 & T-90
Liquid Limit: 35
Plastic Limit: 19
Plasticity Index: 16

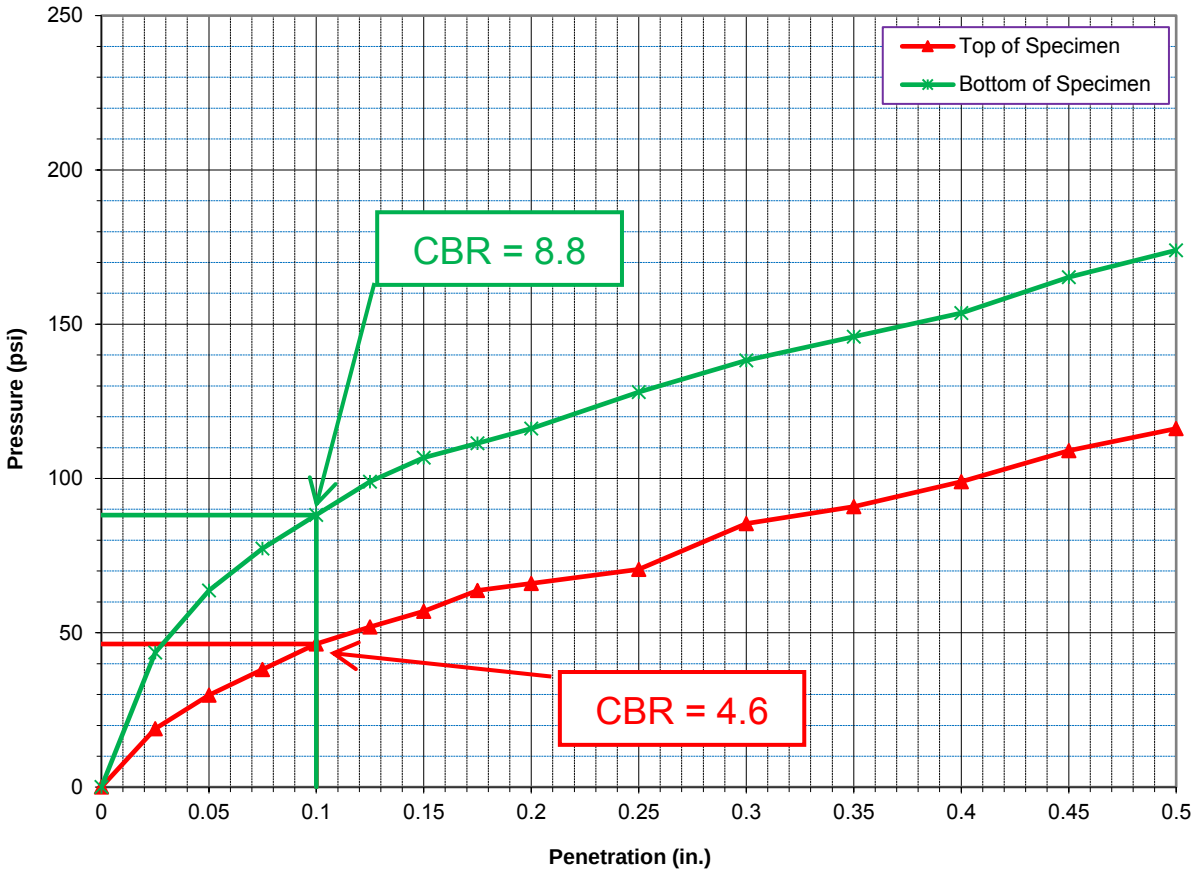
AASHTO Classification:
A-6

USCS Classification:
CL

GRADATION AASHTO T-88	
Sieve Number	Percent Passing
3 in.	100
2 in.	100
3/4 in.	100
3/8 in.	100
#4	100
#10	98
#40	96
#200	93



Laboratory CBR Test Report
(AASHTO T-193)



Test Pit/Depth, ft	Classification		Natural Moisture Content, %	Assumed Specific Gravity	Liquid Limit, %	Plastic Limit, %	% Passing No.4	% Passing No.200
	USCS	AASHTO						
TP-1/1-3	CL	A-6	16	2.70	35	19	100	93

PROCTOR TEST RESULTS (AASHTO T-99)	MATERIAL DESCRIPTION
Optimum Moisture Content = 16.7% Maximum Dry Density = 108.0 pcf	Gray, tan and reddish tan silty clay w/ occasional silt pockets and seams (fill)

Remarks:

As molded: Dry Unit Weight, γ_d = 102.7 pcf; Moisture Content, w = 16.6%

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Project: CA0202 - Hwy 425 - Hamburg (Widening)
GHBW Project No.: 14-197
Location: Ashley County, Arkansas
Sample Date: 2/19/2015
Test Date: 3/12/2015

Grubbs, Hoskyn, Barton & Wyatt, INC.
CONSULTING ENGINEERS

P.O. Box 30970
Little Rock, Arkansas 72260-0970
#1 Trigon Place 72209
(501) 455-2536
FAX (501) 455-4137

REPORT OF STANDARD PROCTOR TEST
(AASHTO T-99)

Project: AHTD CA0202 - HWY 425 - Hamburg (Widening)(S) Job No: 14-197
Material Description: Gray, tan and reddish tan silty clay (fill)
Location Sampled/Source: Test Pit 2
Sample Depth, ft: 1-3
Date Sampled: 2/19/2015
Date Tested: 3/4/2015
Tested By: RSL
Report Date: 4/10/2015

LAB COMPACTION PROCEDURE: AASHTO T-99 Method: A	
Maximum Unit Dry Wt. (pcf):	106.1
Optimum Water Content (%):	18.4

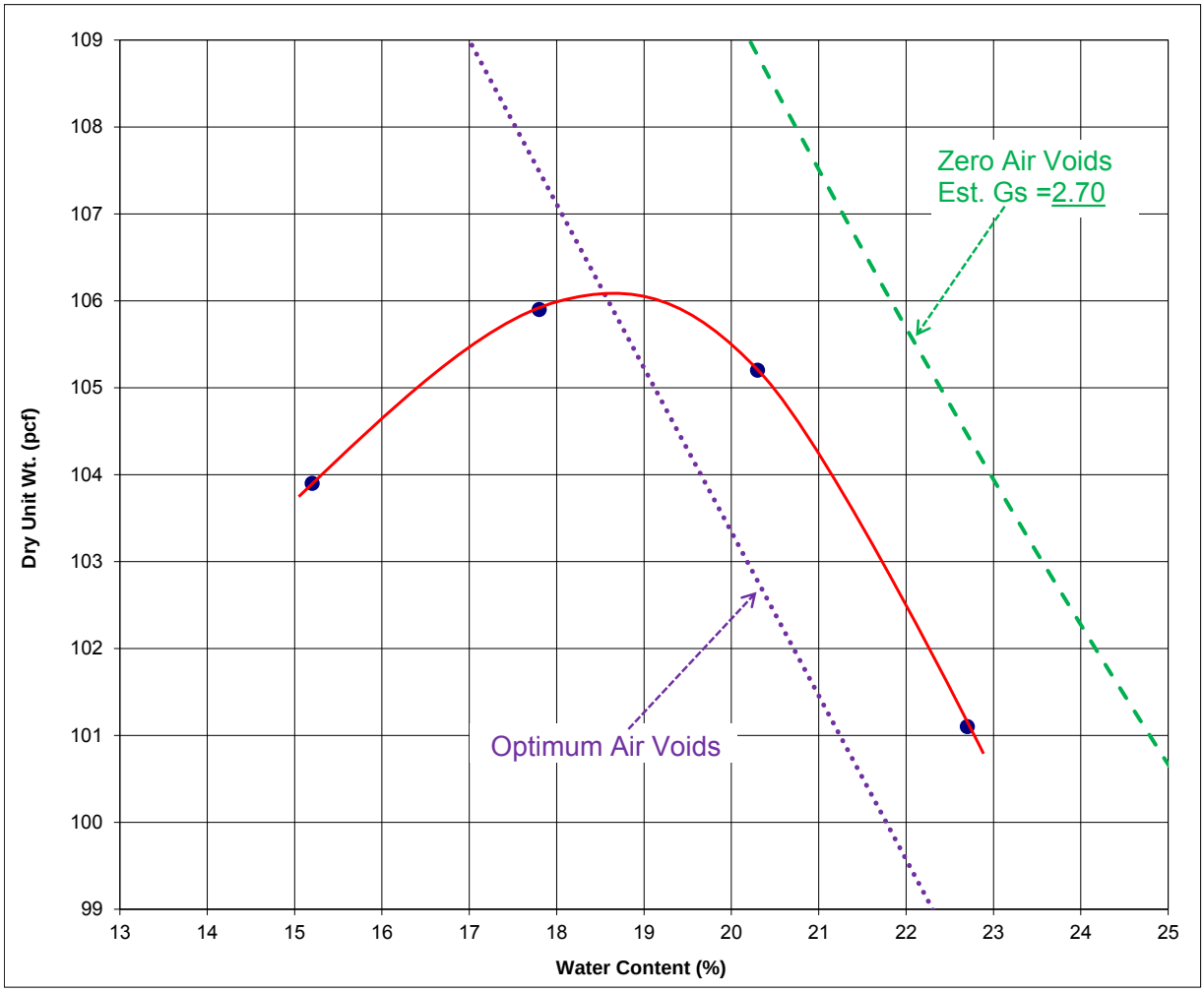
As Processed Water Content: 22.0 %

ATTERBERG LIMITS AASHTO T-89 & T-90
Liquid Limit: 38
Plastic Limit: 17
Plasticity Index: 21

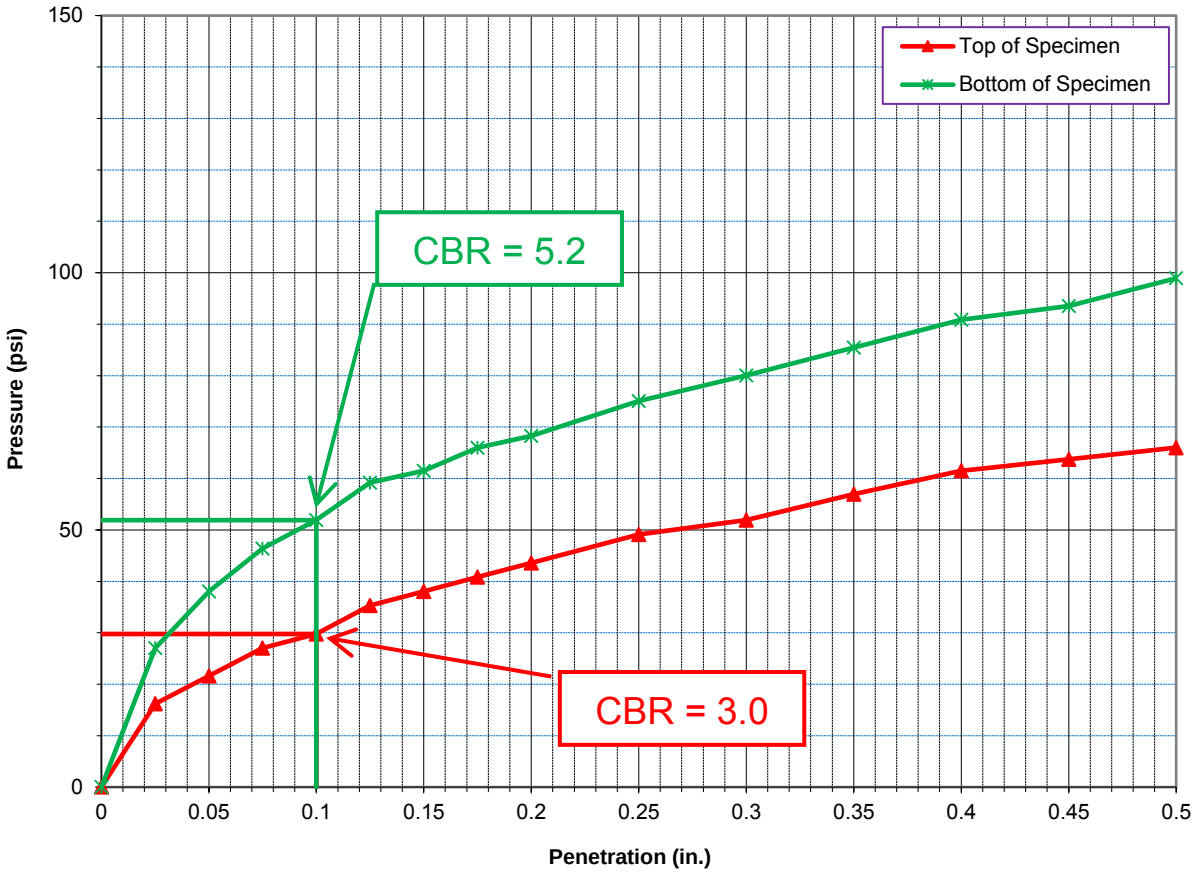
AASHTO Classification:
A-6

USCS Classification:
CL

GRADATION AASHTO T-88	
Sieve Number	Percent Passing
3 in.	100
2 in.	100
3/4 in.	100
3/8 in.	100
#4	99
#10	96
#40	93
#200	90



Laboratory CBR Test Report
(AASHTO T-193)



Test Pit/Depth, ft	Classification		Natural Moisture Content, %	Assumed Specific Gravity	Liquid Limit, %	Plastic Limit, %	% Retained No.4	% Passing No.200
	USCS	AASHTO						
TP-2/1-3	CL	A-6	18	2.70	38	17	1	90
PROCTOR TEST RESULTS (AASHTO T-99)				**MATERIAL DESCRIPTION**				
Optimum Moisture Content = 18.4% Maximum Dry Density = 106.1 pcf				Gray, tan and reddish tan silty clay (fill)				

Remarks:

As molded: Dry Unit Weight, γ_d = 101.1 pcf; Moisture Content, w = 18.4%

Grubbs, Hoskyn, Barton & Wyatt, INC.
CONSULTING ENGINEERS

Project: CA0202 - Hwy 425 - Hamburg (Widening)
GHBW Project No.: 14-197
Location: Ashley County, Arkansas
Sample Date: 2/19/2015
Test Date: 3/12/2015

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CONSULTING ENGINEERS

P.O. Box 30970
Little Rock, Arkansas 72260-0970
#1 Trigon Place 72209
(501) 455-2536
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REPORT OF STANDARD PROCTOR TEST
(AASHTO T-99)

Project: AHTD CA0202 - HWY 425 - Hamburg (Widening)(S) Job No: 14-197
Material Description: Tan and reddish tan silty clay
Location Sampled/Source: Test Pit 3
Sample Depth, ft: 1-3
Date Sampled: 2/19/2015
Date Tested: 3/4/2015
Tested By: RSL
Report Date: 4/10/2015

LAB COMPACTION PROCEDURE: AASHTO T-99 Method: A	
Maximum Unit Dry Wt. (pcf):	108.1
Optimum Water Content (%):	17.8

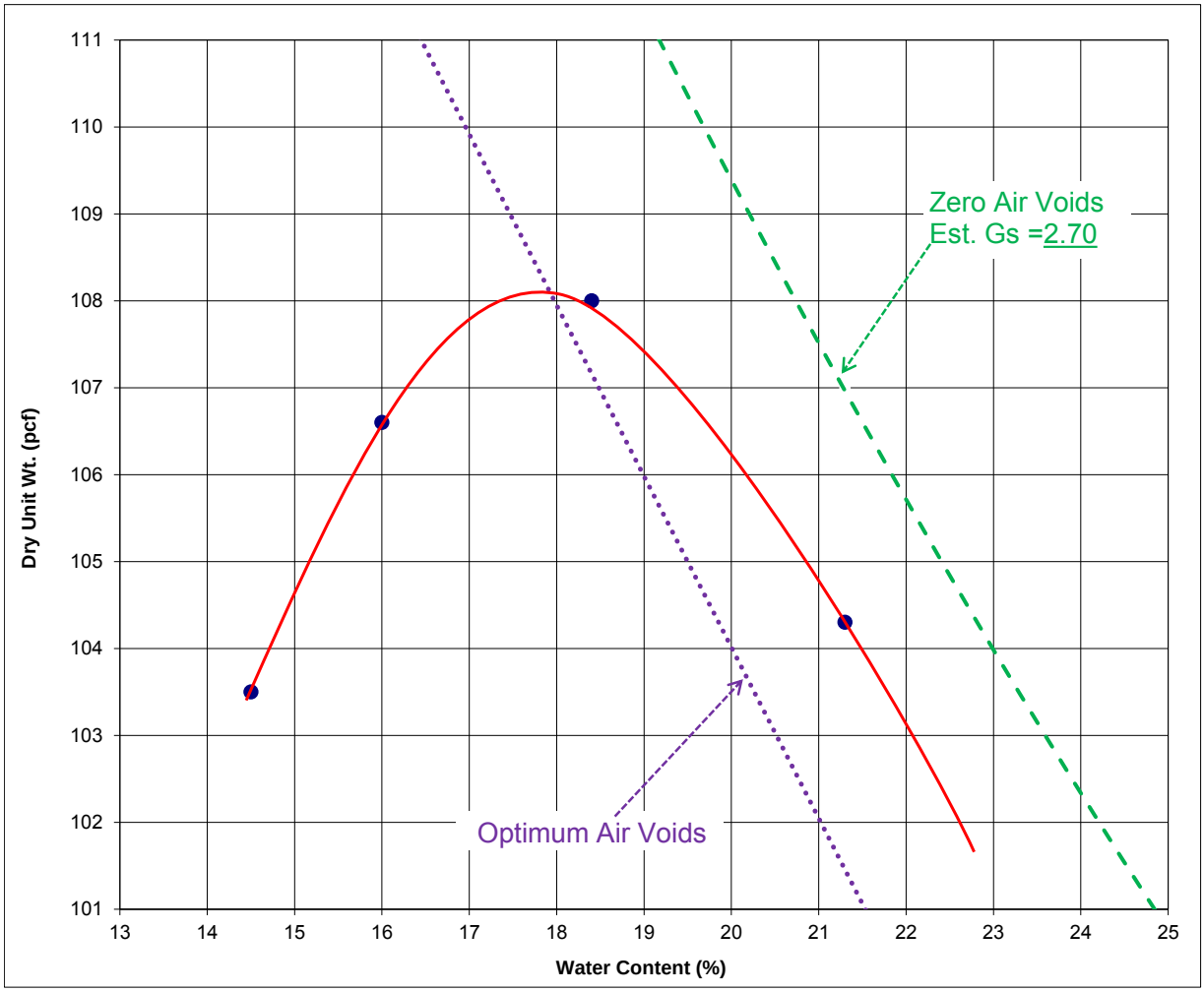
As Received Water Content: 22.1 %

ATTERBERG LIMITS AASHTO T-89 & T-90
Liquid Limit: 34
Plastic Limit: 17
Plasticity Index: 17

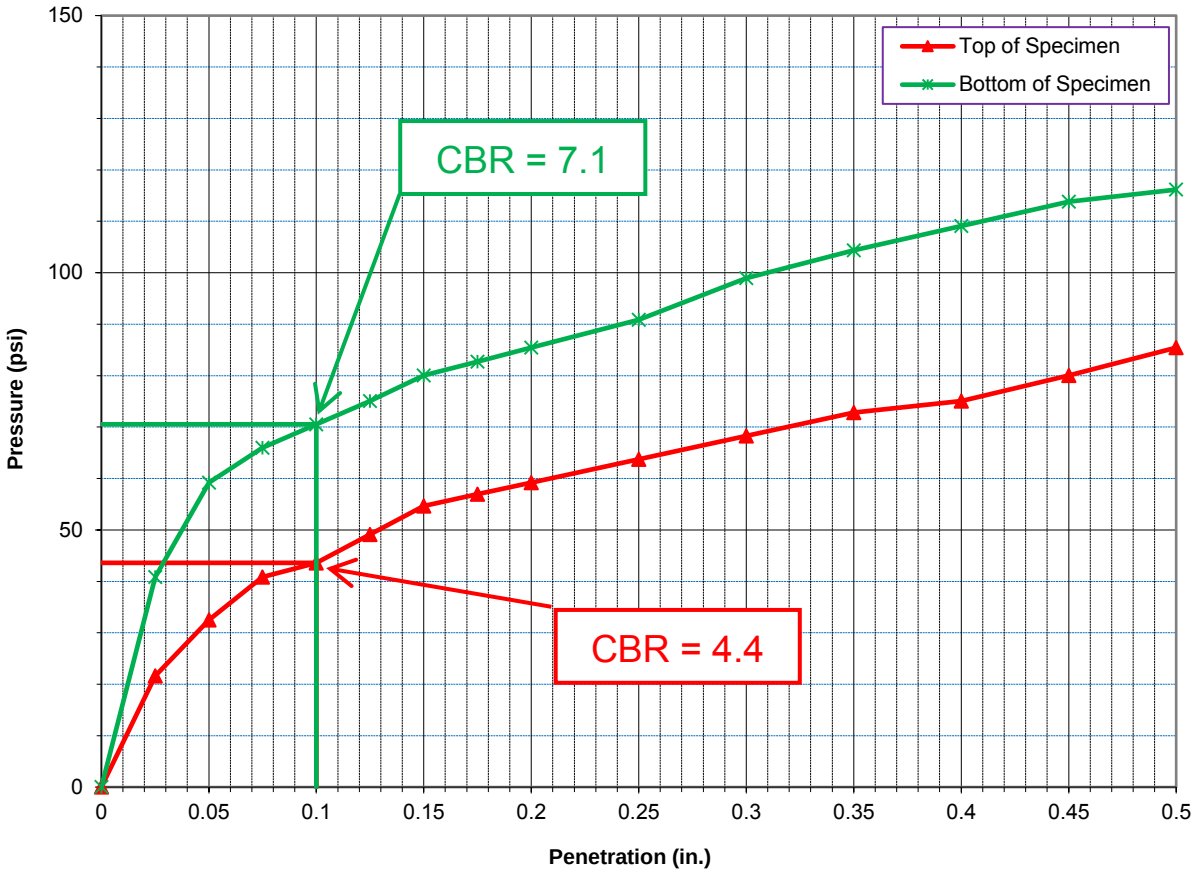
AASHTO Classification:
A-6

USCS Classification:
CL

GRADATION AASHTO T-88	
Sieve Number	Percent Passing
3 in.	100
2 in.	100
3/4 in.	100
3/8 in.	100
#4	99
#10	99
#40	97
#200	90



Laboratory CBR Test Report
(AASHTO T-193)



Test Pit/Depth, ft	Classification		Natural Moisture Content, %	Assumed Specific Gravity	Liquid Limit, %	Plastic Limit, %	% Retained No.4	% Passing No.200
	USCS	AASHTO						
TP-3/1-3	CL	A-6	17	2.70	34	17	1	90
PROCTOR TEST RESULTS (AASHTO T-99)				**MATERIAL DESCRIPTION**				
Optimum Moisture Content = 17.8% Maximum Dry Density = 108.1 pcf				Tan and reddish tan silty clay				

Remarks:

As molded: Dry Unit Weight, γ_d = 102.8 pcf; Moisture Content, w = 17.9%

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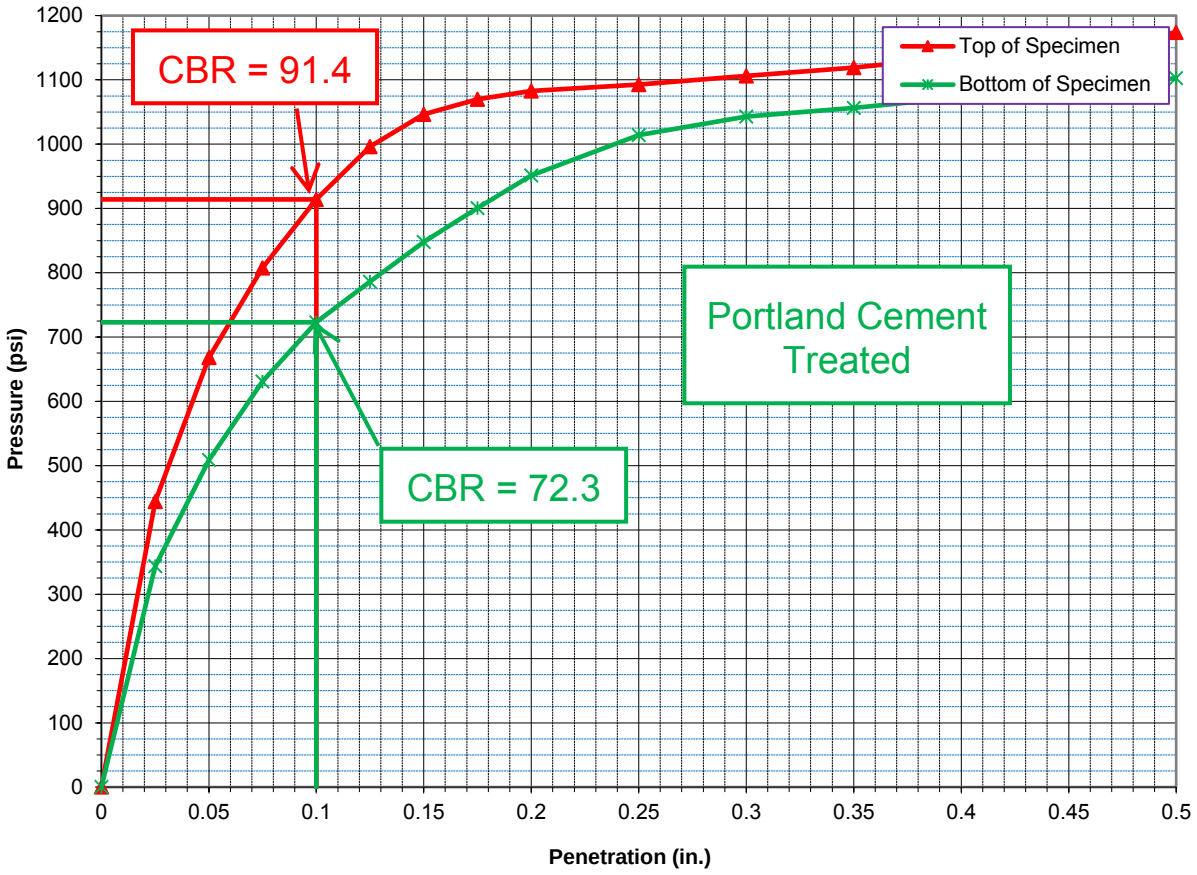
Project: CA0202 - Hwy 425 - Hamburg (Widening)
GHBW Project No.: 14-197
Location: Ashley County, Arkansas
Sample Date: 2/19/2015
Test Date: 3/12/2015

Laboratory CBR Test Report
(AASHTO T-193)



Test Pit/Depth, ft	Classification		Natural Moisture Content, %	Assumed Specific Gravity	Liquid Limit, %	Plastic Limit, %	% Retained No.4	% Passing No.200
	USCS	AASHTO						
TP-2/1-3	CL	A-6	17	2.70	39	22	NA	NA

PROCTOR TEST RESULTS (AASHTO T-99)	MATERIAL DESCRIPTION
Optimum Moisture Content = 18.4% Maximum Dry Density = 106.1 pcf	Gray, tan and reddish tan silty clay with trace fine gravel mixed with 4% Portland cement by dry weight

Remarks:

1) Proctor Values on un-treated soil
2) As molded: Dry Unit Weight, γ_d = 101.3 pcf; Moisture Content, w = 18.2%

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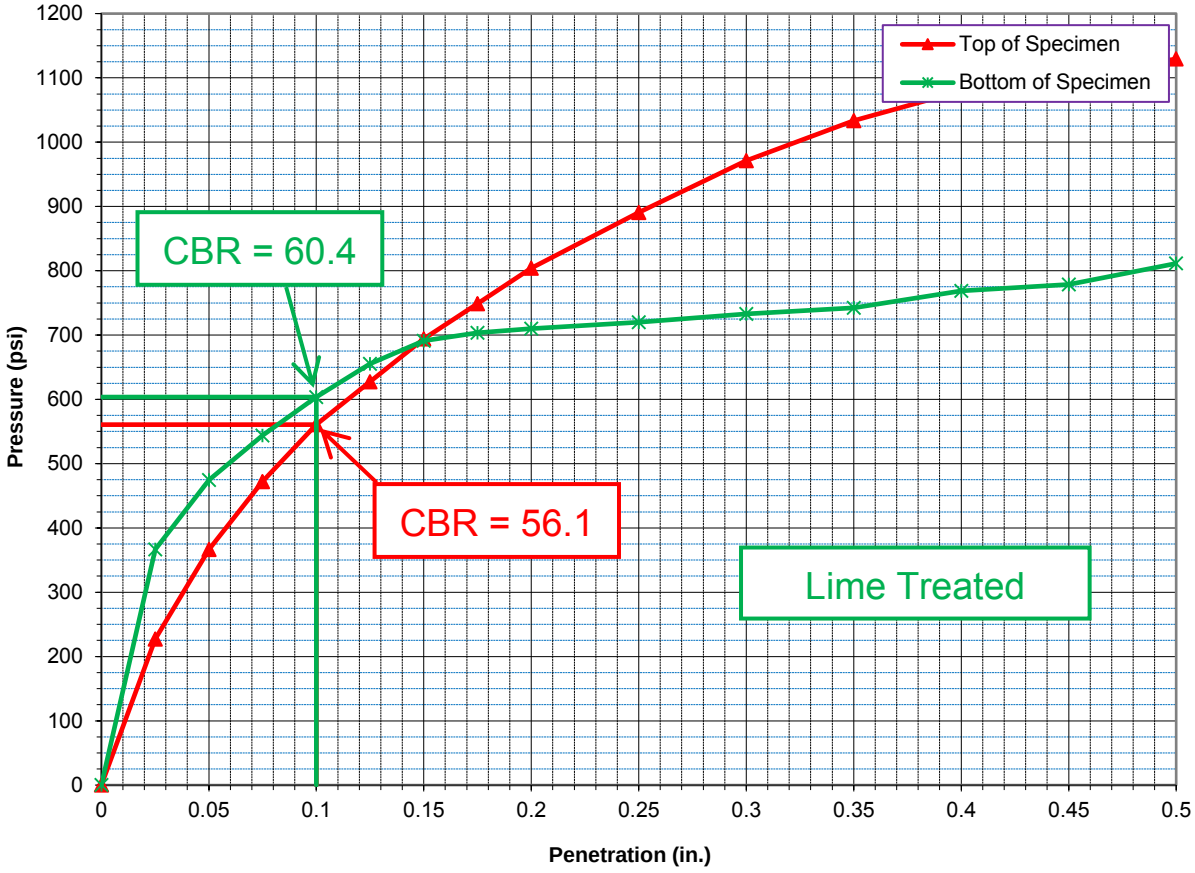
Project: CA0202 - Hwy 425 - Hamburg (Widening)
GHBW Project No.: 14-197
Location: Ashley County, Arkansas
Sample Date: 2/19/2015
Test Date: 5/12/2015

Laboratory CBR Test Report
(AASHTO T-193)



Test Pit/Depth, ft	Classification		Natural Moisture Content, %	Assumed Specific Gravity	Liquid Limit, %	Plastic Limit, %	% Retained No.4	% Passing No.200
	USCS	AASHTO						
TP-2/1-3	CL	A-6	17	2.70	39	26	NA	NA

PROCTOR TEST RESULTS (AASHTO T-99)	MATERIAL DESCRIPTION
Optimum Moisture Content = 18.4% Maximum Dry Density = 106.1 pcf	Gray, tan and reddish tan silty clay with trace fine gravel mixed with 4% quicklime by dry weight

Remarks:

1) Proctor Values on un-treated soil
2) As molded: Dry Unit Weight, γ_d = 102.1 pcf; Moisture Content, w = 16.9%

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CONSULTING ENGINEERS

Project: CA0202 - Hwy 425 - Hamburg (Widening)
GHBW Project No.: 14-197
Location: Ashley County, Arkansas
Sample Date: 2/19/2015
Test Date: 5/12/2015