**ARKANSAS DEPARTMENT OF TRANSPORTATION** 



# SUBSURFACE INVESTIGATION

STATE JOB NO		CA0801	
FEDERAL AID PROJE	CT NO. <u>A</u>	CNHPP-0071(31)	
	HWY. 110 –	CLINTON (WIDENING) (	6)
STATE HIGHWAY	65		7
IN		VAN BUREN	COUNTY

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

## ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT

### October 28, 2015

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

SUBJECT: CA0801 Hwy. 110 – Clinton (Widening) (S) Route 65 Section 7 Van Buren County

Transmitted herewith are the requested Soil Survey, Strength Data, and Resilient Modulus test results for the above referenced job. The project consists of widening approximately 8.1 miles of Highway 65 to 4 lanes with a painted median. Samples were obtained in the existing travel lanes, shoulder and ditch line.

Based on laboratory results of samples obtained, the subgrade soils consist primarily low to highly plastic sandy clay with varying amounts of sandstone fragments. The subgrade soils are expected to provide a stable working platform with conventional processing if the weather is favorable during construction.

The preliminary cross sections indicate very large cuts and fills. If conventional cut slopes and fill slopes are utilized extreme right-of-way limits will be required and large quantities of excavation and fill will be needed. The attached drawings show alternatives to conventional methods that may be utilized on this project to minimize the right-of-way impacts. The first method is to use Gabion baskets and/or MSE Walls for the construction of cut and embankment slopes. Figure 1 demonstrates this application. The second method is to use internally reinforced embankments with a 1:1 slope configuration. Soil nail reinforced cut slopes could be used for a near vertical slope configuration. Figure 2 demonstrates this application. The Geotechnical Section is available to discuss these at your convenience. A site specific subsurface investigation for any of these alternatives will be required to make the final design recommendations.

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

- 1. The Qualified Products List (QPL) indicates that Aggregate Base Course (Class CL-7) is available from commercial producers located in the vicinity of Bee Branch.
- 2. Asphalt Concrete Hot Mix

Туре	Asphalt Cement %	Mineral Aggregate %
Surface Course	5.5	94.5
Binder Course	4.6	95.4
Base Course	4.3	95.7

nael C. Bensor

Materials Engineer

MCB:pt:bjj Attachment

cc: State Constr. Eng. – Master File Copy District 8 Engineer System Information and Research Div, G. C. File

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT - LITTLE ROCK, ARKANSAS MATERIALS DIVISION MICHAEL BENSON, MATERIALS ENGINEER \*\*\* SOIL SURVEY STRENGTH TEST REPORT \*\*\* SEQUENCE NO. - 1 DATE - 10/06/2015 MATERIAL CODE - SSRVPS JOB NUMBER - CA0801 SPEC. YEAR - 2014 SUPPLIER ID. - 1 COUNTY/STATE - 71 DISTRICT NO. ~ 08 JOB NAME - HWY.110-CLINTON (WIDENING) (S) STATION LIMITS R-VALUE AT 240 psi \* BEGIN JOB = END JOB LESS THAN 5 RESILIENT MODULUS STA.523+00 11954 STA.563+00 6991 STA.651+00 13191 STA.659+00 11090 STA.739+00 4470 REMARKS -STA.828+00 6365 STA.892+00 8774 -AASHTO TESTS : T190

# JOB: CA0801

Arkansas State Highway Transporation Department Materials Division

JOB NAME: HWY.110-CLINTON (WIDENING) (S)

COUN	TY NO.	71	DATE TESTE	ED g	9 <b>/29/</b> :	2015			M	ichael Bo	enson, Materia	ls Engine	eer
STA.#	LOC.	DEPTH	COLOR	#4	#10	# <b>40</b> E	#80 V	#200 E S	L.L.	<i>P.I</i> .	SOIL CLASS	LAB #:	%MOISTURE
523+00	46LT	0-5	BROWN	87	72	68	63	51	29	16	A-4(2)	RV381	
563+00	46RT	0-5	BROWN	90	86	83	81	78	52	30	A-7-6(24)	RV382	
651+00	32LT	0-5	BROWN	92	90	87	73	55	21	08	A-4(1)	RV383	
659+00	37RT	0-5	BROWN	85	81	75	62	52	28	14	A-6(4)	RV384	
739+00	38 RT	0-5	BROWN	94	93	91	87	85	68	42	A-7-6(39)	RV385	
788+00	37RT	0-5	BR/GR	100	100	100	100	94	73	46	A-7-6(50)	RV386	
828+00	26LT	0-5	BROWN	79	74	69	64	62	52	28	A-7-6(15)	RV387	
892+00	26LT	0-5	BROWN	95	92	90	89	88	56	32	A-7-6(31)	RV388	
500+00	16RT	0-5	BROWN	98	95	91	88	81	40	22	A-6(17)	S229	17.9
500+00	28RT	0-5	BROWN	99	94	88	83	77	32	15	A-6(10)	S230	18.3
500+00	36RT	0-5	BROWN	95	92	87	84	80	41	22	A-7-6(17)	S231	17.9
507+00	06LT	0-5	BR/GR	96	89	82	63	39	19	02	A-4(0)	S232	9.3
507+00	20LT	0-3.5Z	BR/GR	97	85	79	65	38	19	03	A-4(0)	S233	7.6
507+00	31LT	0-2.5Z	BROWN	99	97	95	88	49	ND	NP	A-4(0)	S234	6.8
515+00	19RT	0-5	BROWN	84	73	68	62	47	24	08	A-4(1)	S235	11.8
515+00	29RT	0-5	BROWN	97	89	82	75	50	21	06	A-4(0)	S236	13.9
515+00	46RT	0-5	BROWN	98	92	85	72	50	22	08	A-4(1)	S237	17
523+00	06LT	0-5	BR/GR	95	88	84	79	66	29	12	A-6(6)	S238	16.2
523+00	16LT	0-3Z	BR/GR	89	80	74	66	45	19	05	A-4(0)	S239	16.2
523+00	46LT	0-5	BROWN	93	88	83	77	60	31	15	A-6(6)	S240	15.7
531+00	17RT	0-5	RD/BR	98	93	88	77	65	27	12	A-6(5)	S241	31
531+00	30RT	0-5	RD/BR	97	92	87	84	78	49	24	A-7-6(19)	S242	24.4
531+00	47RT	0-5	RD/BR	88	79	76	75	73	48	26	A-7-6(18)	S243	26.6
539+00	06LT	0-5	BR/GR	94	86	77	67	54	28	13	A-6(4)	S244	15.2
539+00	17LT	0-5	BR/GR	96	91	87	81	70	33	17	A-6(10)	S245	20.4
539+00	33LT	0-1.5Z	BR/GR	92	87	78	67	43	22	04	A-4(0)	S246	18.8

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

Thursday, October 08, 2015

STA.#	LOC.	DEPTH	COLOR	#4	#10	#40 E	#80 V	#200 E S	<i>L.L</i> .	<i>P.I</i> .	SOIL CLASS	LAB #:	%MOISTURE
543+00	18RT	0-5	RD/BR	99	96	91	79	66	39	20	A-6(11)	S247	22.2
543+00	30RT	0-5	BROWN	96	90	84	72	57	33	15	A-6(6)	S248	25.2
543+00	55RT	0-3Z	BROWN	97	92	87	80	69	34	16	A-6(9)	S249	20.6
555+00	06LT	0-3.5Z	BR/GR	96	92	86	79	48	18	03	A-4(0)	S250	9.9
555+00	19LT	0-3.5Z	GRAY	86	78	73	58	38	17	02	A-4(0)	S251	12.1
555+00	33LT	0-3Z	BROWN	93	80	64	64	46	23	06	A-4(0)	S252	13,1
563+00	18RT	0-5	BROWN	98	88	76	67	58	30	13	A-6(5)	S253	25.9
563+00	28RT	0-5	BROWN	97	92	88	78	61	38	19	A-6(9)	S254	21.2
563+00	46RT	0-5	BROWN	99	96	93	90	84	47	22	A-7-6(20)	S255	30.1
571+00	08LT	0-5	BROWN	99	97	93	78	67	39	19	A-6(11)	S256	32.1
571+00	28LT	0-5	BR/GR	99	96	90	83	76	37	16	A-6(11)	S257	20
571+00	31LT	0-5	BROWN	96	88	81	66	44	26	11	A-6(1)	S258	21
579+00	16RT	0-5	BR/GR	92	84	75	66	59	26	12	A-6(4)	S259	16.9
579+00	27RT	0-5	BR/GR	95	90	85	69	53	24	11	A-6(3)	S260	18.1
579+00	38RT	0-3Z	BR/GR	94	88	81	70	59	34	16	A-6(7)	S261	13.6
587+00	06LT	0-5	BR/GR	97	92	86	73	58	33	15	A-6(6)	S262	24.6
587+00	18LT	0-5	BR/GR	97	92	88	74	60	34	17	A-6(7)	S263	23.1
587+00	33LT	0-5	BR/GR	97	94	88	82	72	40	22	A-6(14)	S264	22
595+00	18RT	0-5	BR/GR	95	89	85	74	66	32	14	A-6(7)	S265	20.8
595+00	29RT	0-5	BR/GR	99	98	94	63	44	24	10	A-4(1)	S266	25.8
595+00	41RT	0-5	BROWN	98	97	95	86	80	49	28	A-7-6(23)	S267	29.1
603+00	07LT	0-5	BR/GR	98	94	90	74	61	29	14	A-6(6)	S268	20.4
603+00	17LT	0-5	BROWN	95	89	82	63	49	22	08	A-4(1)	S269	33.1
603+00	25LT	0-5	BROWN	100	99	95	83	76	52	29	A-7-6(22)	S270	20.7
611+00	06RT	0-4.5Z	BR/GR	99	90	74	57	41	22	08	A-4(0)	S271	9.2
611+00	20RT	0-5	BR/GR	98	95	87	69	50	25	12	A-6(3)	S272	19.3
611+00	31RT	0-5	BR/GR	98	95	81	57	40	25	11	A-6(1)	S273	17.8
619+00	06LT	0-4.5Z	BR/GR	95	90	82	68	56	30	16	A-6(6)	S274	19.5

STA.#	LOC.	DEPTH	COLOR	#4	#10	# <b>4</b> 0 E	#80 V	#200 E S	L.L.	<i>P.I.</i>	SOIL CLASS	LAB #:	%MOISTURE
619+00	19LT	0-5	BR/GR	95	85	75	.67	61	34	19	A-6(9)	S275	24.6
619+00	26LT	0-5	BROWN	99	96	91	83	77	35	18	A-6(12)	S276	20.9
627+00	19RT	0-2Z	GRAY	94	87	80	48	28	ND	NP	A-2-4(0)	S277	12
627+00	28RT	0-5	BR/GR	96	92	86	72	57	24	10	A-4(3)	S278	19.2
627+00	36RT	0-5	BR/GR	100	100	100	100	.91	51	27	A-7-6(27)	S279	17
635+00	06LT	0-5	BROWN	93	88	81	73	53	21	07	A-4(1)	S280	12,1
635+00	19LT	0-5	BR/GR	95	89	81	71	55	24	10	A-4(2)	S281	17.7
635+00	26LT	0-5	BROWN	90	85	80	65	45	22	09	A-4(1)	S282	13.8
643+00	19RT	0-4Z	BROWN	96	91	86	74	47	20	05	A-4(0)	S283	10
643+00	28RT	0-2.5Z	BR/GR	92	83	76	53	30	ND	NP	A-2-4(0)	S284	6.5
643+00	36RT	0-2.5Z	BROWN	93	85	77	58	33	ND	NP	A-2-4(0)	S285	11.9
651+00	08LT	0-5	GRAY	96	93	89	71	46	17	03	A-4(0)	S286	15.2
651+00	18LT	0-5	GRAY	99	97	94	81	62	22	09	A-4(3)	S287	10.1
651+00	32LT	0-5	BROWN	97	92	85	70	52	ND	NP	A-4(0)	S288	17.2
659+00	18RT	0-5	BROWN	96	91	86	73	58	25	10	A-4(3)	S289	20.3
659+00	27RT	0-5	BR/GR	96	88	80	63	46	20	05	A-4(0)	S290	15.9
659+00	37RT	0-5	BROWN	93	88	81	63	47	22	07	A-4(0)	S291	20.6
667+00	09LT	0-5	BR/GR	97	94	86	58	41	20	06	A-4(0)	S292	15.6
667+00	18LT	0-5	BR/GR	97	92	82	57	38	21	07	A-4(0)	S293	14.1
667+00	26LT	0-5	BROWN	99	97	83	52	44	32	16	A-6(3)	S294	15.9
675+00	18RT	0-5	BROWN	98	92	85	64	51	22	08	A-4(1)	S295	16.4
675+00	30RT	0-3.5Z	BROWN	94	91	86	63	49	22	07	A-4(1)	S296	22.2
675+00	38RT	0-5	BROWN	89	83	76	42	25	ND	NP	A-2-4(0)	S297	12.6
683+00	06LT	0-5	RD/BR	95	90	85	64	52	27	13	A-6(13)	S298	16.7
683+00	17LT	0-5	RD/BR	94	88	82	54	40	21	07	A-4(0)	S299	11.2
683+00	30LT	0-5	RD/BR	99	98	.91	63	55	27	11	A-6(3)	S300	22.3
691+00	19RT	0-5	BROWN	96	81	80	71	58	28	11	A-6(4)	S301	22.9
691+00	30RT	0-4Z	BROWN	96	92	87	68	58	28	13	A-6(5)	S302	20.6

STA.#	LOC.	DEPTH	COLOR	#4	#10	# <b>40</b> E	#80 V	#200 E S	L.L.	<i>P.I.</i>	SOIL CLASS	LAB #:	%MOISTURE
691+00	39RT	0-5	BROWN	90	85	77	67	58	33	16	A-6(6)	S303	18.9
700+00	06LT	0-5	BR/GR	91	84	78	68	51	27	11	A-6(3)	S304	18.2
700+00	17 <b>LT</b>	0-5	BROWN	96	90	84	62	45	23	09	A-4(1)	S305	16.3
700+00	26LT	0-5	BR/GR	95	90	86	83	48	23	10	A-4(1)	S306	14.1
707+00	06RT	0-4Z	BROWN	99	96	91	50	31	ND	NP	A-2-4(0)	S307	7.9
707+00	18RT	0-3.5Z	BROWN	97	94	91	61	32	ND	NP	A-2-4(0)	S308	7.5
715+00	07LT	0-5	BR/GR	99	97	93	73	54	20	07	A-4(1)	S309	13.3
715+00	17LT	0-5	BR/GR	94	88	82	66	51	25	12	A-6(3)	S310	20.1
715+00	29LT	0-5	BR/GR	98	96	94	74	58	24	10	A-4(3)	S311	18.3
723+00	17 RT	0-5	BR/GR	98	94	90	75	57	18	04	A-4(0)	S312	16.4
723+00	27 RT	0-5	BROWN	99	96	93	75	63	27	14	A-6(16)	S313	20.1
723+00	40 RT	0-2,5	BROWN	92	88	84	67	53	22	09	A-4(2)	S314	15.2
731+00	08 LT	0-5	BROWN	98	95	91	56	32	ND	NP	A-2-4(0)	S315	10.5
731+00	18 LT	0-5	BR/GR	98	96	92	63	42	17	03	A-4(0)	S316	23.6
731+00	28 LT	0-5	BROWN	98	98	94	68	58	25	13	A-6(4)	S317	18.8
739+00	17 RT	0-5	BROWN	97	94	90	84	74	35	19	A-6(12)	S318	28.2
739+00	28 RT	0-5	BROWN	99	96	91	88	86	49	29	A-7-6(26)	S319	34.5
739+00	38 RT	0-5	BROWN	95	92	86	77	72	42	24	A-7-6(16)	S320	35.5
748+00	07 LT	0-5	BROWN	99	97	93	79	70	38	19	A-6(12)	S321	21.7
748+00	14 LT	0-5	BROWN	96	90	84	67	53	24	09	A-4(2)	S322	21.4
748+00	28 LT	0-5	BROWN	99	98	95	86	82	54	29	A-7-6(25)	S323	28.2
755+00	07 RT	0-5	BROWN	98	91	83	68	54	22	08	A-4(1)	S324	15.4
755+00	28 RT	0-5	BROWN	99	95	90	73	60	20	07	A-4(1)	S325	18.2
755+00	35 RT	0-5	BROWN	99	97	90	71	59	26	14	A-6(5)	S326	12.2
763+00	08LT	0-5	BR/GR	95	84	72	52	34	23	09	A-2-4(0)	S327	15.8
763+00	18LT	0-4.5Z	BR/GR	98	95	91	58	40	25	12	A-6(1)	S328	14.4
763+00	26LT	0-3Z	BR/GR	96	89	81	66	54	30	15	A-6(5)	S329	20
772+00	07RT	0-5	GRAY	97	86	71	60	52	29	12	A-6(3)	S330	16

STA.#	LOC.	DEPTH	COLOR	#4	#10	#40 E	#80 V	#200 E S	L.L.	<i>P.I.</i>	SO.	IL CLASS	<i>LAB</i> #:	%MOISTURE
772+00	18RT	0-5	BR/GR	94	86	80	55	42	20	07		A-4(0)	S331	23.8
772+00	27RT	0-5	BR/GR	95	85	77	64	58	37	20		A-6(9)	S332	21.9
780+00	06LT	0-4Z	BR/GR	97	92	84	57	45	22	09		A-4(1)	S333	15.3
780+00	17LT	0-3.5Z	BR/GR	93	83	71	54	36	19	04		A-4(0)	S334	20.5
780+00	31LT	0-3Z	BR/GR	98	94	89	57	42	18	04		A-4(0)	S335	12.2
788+00	07RT	0-5	BROWN	99	96	93	91	87	53	27		A-7-6(26)	S336	32.5
788+00	19RT	0-5	BROWN	94	88	83	67	55	41	20		A-7-6(8)	S337	24.7
788+00	37RT	0-5	BR/GR	100	100	100	100	98	66	36		A-7-5(42)	S338	29.1
796+00	06LT	0-5	BR/GR	99	96	92	79	60	29	16		A-6(6)	S339	21.8
796+00	19LT	0-5	BR/GR	96	91	87	67	44	24	11		A-6(1)	S340	19.4
796+00	30LT	0-5	BR/GR	95	92	88	77	67	35	19		A-6(10)	S341	23.2
804+00	16RT	0-5	BROWN	99	91	84	60	49	24	11		A-6(2)	S342	16.7
812+00	05LT	0-5	BR/GR	93	86	77	65	55	35	16		A-6(6)	S343	28.2
812+00	16LT	0-5	BR/GR	98	94	89	82	73	35	15		A-6(10)	S344	25.4
812+00	26LT	0-5	GRAY	100	100	100	100	92	48	22		A-7-6(23)	S345	19.9
820+00	18RT	0-5	BR/GR	99	98	91	64	53	25	12		A-6(3)	S346	23.5
820+00	26RT	0-5	BR/GR	96	93	85	56	45	21	07		A-4(0)	S347	23,3
828+00	06LT	0-5	BR/GR	98	95	89	78	64	28	12		A-6(5)	S348	23.1
828+00	18LT	0-5	BR/GR	91	84	80	70	55	24	07		A-4(1)	S349	24.6
828+00	26LT	0-5	BROWN	100	100	100	100	92	48	22		A-7-6(23)	S350	29.1
836+00	06RT	0-5	BR/GR	100	100	100	100	62	29	13		A-6(5)	S351	20.6
836+00	18RT	0-5	BROWN	98	90	80	63	47	24	08		A-4(1)	S352	21.3
836+00	26RT	0-5	BR/GR	86	84	75	64	59	21	01		A-4(0)	S353	20.5
844+00	06LT	0-5	BROWN	99	97	92	87	80	38	17		A-6(13)	S354	17.2
844+00	16LT	0-5	BROWN	96	93	89	80	69	36	17		A-6(10)	S355	16.4
844+00	25LT	0-5	BROWN	97	96	91	87	85	50	27		A-7-6(24)	S356	19.8
853+00	06RT	0-5	BR/GR	97	91	80	68	57	28	14		A-6(5)	\$357	19.1
853+00	18RT	0-5	BROWN	96	91	83	66	55	27	15		A-6(5)	S358	18.4

STA.#	LOC.	DEPTH	COLOR	#4	#10	# <b>40</b>	#80	#200	<i>L.L</i> .	<i>P.I.</i>	SOIL CLASS	LAB #:	%MOISTURE
853+00	26RT	0-5	BROWN	97	94	85	64	50	27	14	A-6(3)	S359	18.6
860+00	06LT	0-5	BR/GR	97	94	87	85	47	20	08	A-4(1)	S360	19.3
860+00	19LT	0-5	BR/GR	99	96	88	72	53	22	12	A-6(3)	S361	17
860+00	30LT	0-5	BROWN	99	97	90	72	63	32	18	A-6(8)	S362	17.2
868+00	06RT	0-5	GRAY	97	96	92	73	60	24	11	A-6(3)	S363	16.7
868+00	16RT	0-5	BR/GR	100	98	93	78	62	22	09	A-4(3)	S364	17.5
868+00	26RT	0-5	BROWN	100	99	96	86	69	29	15	A-6(8)	S365	20.7
876+00	06LT	0-2.5Z	GRAY	94	89	84	60	42	20	05	A-4(0)	S366	16.1
876+00	18LT	0-5	BR/GR	95	91	84	67	51	23	10	A-4(2)	S367	14.8
876+00	25LT	0-2Z	GRAY	88	81	69	53	41	24	09	A-4(0)	S368	18.8
884+00	07RT	0-4.5Ż	GRAY	97	94	89	70	54	24	09	A-4(2)	S369	19.9
884+00	18RT	0-4.5Z	GRAY	98	97	93	79	71	35	20	A-6(12)	S370	28.2
884+00	29RT	0-4Z	GRAY	92	87	82	69	62	30	16	A-6(7)	S371	18.8
892+00	06LT	0-5	GRAY	97	93	87	68	54	23	10	A-4(2)	S372	22.8
892+00	17LT	0-5	BR/GR	98	98	91	84	80	55	32	A-7-6(27)	S373	26
892+00	26LT	0-5	BR/GR	99	96	90	73	58	22	07	A-4(1)	S374	24.1
900+00	06RT	0-2Z	GRAY	97	92	87	50	27	ND	NP	A-2-4(0)	S375	11.3
900+00	16RT	0-5	BR/GR	96	88	80	74	67	30	14	A-6(7)	S376	28.2
900+00	26RT	0-5	BR/GR	91	86	81	69	63	32	16	A-6(7)	S377	29.3
908+00	09LT	0-4Z	BR/GR	87	75	67	56	48	20	06	A-4(0)	S378	10.2
908+00	20LT	0-5	BR/GR	80	70	60	52	47	27	10	A-4(2)	S379	13.7
908+00	31LT	0-5	BR/GR	93	85	77	58	40	19	05	A-4(0)	S380	11.7

comments:		539+00		539+00		531+00		531+00		531+00		523+00		523+00		523+00		515+00		515+00		515+00		507+00		507+00		507+00		500+00	500+00		500+00	STA.# LOC.	COUNTY NO.	JOB: JOB NA
		17LT		06LT		47RT		30RT		17RT		16LT		06LT		46LT		29RT		19RT		46RT		31LT		20LT		06LT		16RT	36RT		28RT	LOC.		ME: H
=MULTIPLE LAY	6.0	ACHMSC	7.25	ACHMSC	1	ACHMSC	6.0W	ACHMSC	9.5	ACHMSC	6.0W	ACHMSC	8.5	ACHMSC	Ĩ	ACHMSC	6.75	ACHMSC	9.0	ACHMSC	Ē	ACHMSC	ľ	ACHMSC	4.75W	ACHMSC	9.25	ACHMSC	13.0W	ACHMSC	ACHMSC	6.5	ACHMSC		71	CA0801 HWY.110-CLINTON
W=MULTIPLE LAYERS, X=STRIPPED, Z=AUGER REFUSAL	ĩ	ACHMBC	2.0	ACHMBC		ACHMBC	1	ACHMBC	2.25	ACHMBC	I	ACHMBC	3.0	ACHMBC	E	ACHMBC	E	ACHMBC	2.5	ACHMBC	L	ACHMBC	Ľ	ACHMBC	E	ACHMBC	3.0	ACHMBC	6.0	AGG BASE CRS CI -7	AGG.BASE CRS CL-7	12.0	AGG.BASE CRS CL-7			JOB: CA0801 JOB NAME: HWY.110-CLINTON (WIDENING) (S)
AUGER REFUSAL	6.0	AGG.BASE CRS CL-7	7.0	AGG.BASE CRS CL-7	1	AGG.BASE CRS CL-7	4.0	AGG.BASE CRS CL-7	7.0	AGG.BASE CRS CL-7	3.0	AGG.BASE CRS CL-7	5.0	AGG.BASE CRS CL-7		AGG.BASE CRS CL-7	6.0	AGG.BASE CRS CL-7	5.0	AGG.BASE CRS CL-7	E	AGG.BASE CRS CL-7	<b>1</b> ,)	AGG.BASE CRS CL-7	3.0	AGG.BASE CRS CL-7	6.0	AGG.BASE CRS CL-7		-7	-7		<b>7</b> -,			Arkan
Thursday, October 08, 2015																																		PAVEMENT SOUNDINGS	Michael Benson, Materials Engineer	Arkansas State Highway Transporation Department Materials Division
																																				<b>DATE TESTED</b> 9/29/2015

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19LTACHMBCACHMBCAGGEBASE CRS CL-733LTACHMSCACHMBCAGGEBASE CRS CL-733LTACHMSCACHMBCAGGEBASE CRS CL-718RTACHMSCACHMBCAGG.BASE CRS CL-728RTACHMSCACHMBCAGG.BASE CRS CL-708LTACHMSCACHMBCAGG.BASE CRS CL-710.02.0AGG.BASE CRS CL-728LTACHMSCACHMBCAGG.BASE CRS CL-710.1ACHMSCACHMBCAGG.BASE CRS CL-728LTACHMSCACHMBCAGG.BASE CRS CL-75.028LTACHMSCACHMBCAGG.BASE CRS CL-75.028LTACHMSCACHMBCAGG.BASE CRS CL-75.028LTACHMSCACHMBCAGG.BASE CRS CL-75.028LTACHMSCACHMBCAGG.BASE CRS CL-75.027RTACHMSCACHMBCAGG.BASE CRS CL-77.5W7.5W7.6W7.7SW3LTACHMSCACHMBCAGG.BASE CRS CL-76.0W7.5W7.6W7.77.87.97.9
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06LT ACHMSC ACHMBC AGG.BASE CRS CL-7
7.5W = 6.0
30RT ACHMSC ACHMBC AGG.BASE CRS CL-7
55RT ACHMSC ACHMBC AGG.BASE CRS CL-7
9.5 2.5 7.0
18RT ACHMSC ACHMBC AGG.BASE CRS CL-7
1
33LT ACHMSC ACHMBC AGG.BASE CRS CL-7
LOC.

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CTA #	Inc				PAVEMENT SOUNDINGS	lindings
	10DT					
010.00		8.0W	3.0	9.0		
643+00	28RT	ACHMSC	ACHMBC	AGG.BASE CRS CL-7		
		6.0W	Ĩ	11.0		
651+00	32LT	ACHMSC	ACHMSC	ACHMSC	ACHMBC	AGG.BASE CRS CL-7
		Î	I	1	1	1
651+00	18LT	ACHMSC	ACHMSC	ACHMSC	ACHMBC	AGG.BASE CRS CL-7
		7.0W	1	1	1	7.0
651+00	08LT	ACHMSC	ACHMSC	ACHMSC	ACHMBC	AGG.BASE CRS CL-7
		2.0	2.0X	4.5	1.75	7.0
659+00	18RT	ACHMSC	ACHMBC	AGG.BASE CRS CL-7		
		9.5	2.5	4.0		
659+00	27RT	ACHMSC	ACHMBC	AGG.BASE CRS CL-7		
		6.25W	1	6.0		
659+00	37RT	ACHMSC	ACHMBC	AGG.BASE CRS CL-7		
		Ĩ	Ĩ	I		
667+00	09LT	ACHMSC	ACHMBC	AGG.BASE CRS CL-7		
		8.75W	2.0	6.0		
667+00	18LT	ACHMSC	ACHMBC	AGG.BASE CRS CL-7		
		6.5W	ï	6.0		
667+00	26LT	ACHMSC	ACHMBC	AGG.BASE CRS CL-7		
		I		I		
675+00	18RT	ACHMSC	ACHMBC	AGG.BASE CRS CL-7		
		7.75W	3.5	11.0		
675+00	30RT	ACHMSC	ACHMBC	AGG.BASE CRS CL-7		
		6.25W	ī	4.0		
675+00	38RT	ACHMSC	ACHMBC	AGG.BASE CRS CL-7		
		1	I	Ľ		
683+00	06LT	ACHMSC	ACHMBC	AGG.BASE CRS CL-7		
		9.0W	2.0	7.0		
683+00	17LT	ACHMSC	ACHMBC	AGG.BASE CRS CL-7		
		7.0W	I	4.0		
683+00	30LT	ACHMSC	ACHMBC	AGG.BASE CRS CL-7		
		l,	l	r		
691+00	39RT	ACHMSC	ACHMBC	AGG.BASE CRS CL-7		
		ı		ľ		
691+00	19RT	ACHMSC	ACHMBC	AGG.BASE CRS CL-7		
		8.5W	3.0	5.0		
comments:		"=MULTIPLE LAYE	W=MULTIPLE LAYERS, X=STRIPPED, Z=AUGER REFUSAL	AUGER REFUSAL		Thursday, October 08, 2015

Thursday, October 08, 2015

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Thursday, October 08, 2015	W=MULTIPLE LAYERS, X=STRIPPED, Z=AUGER REFUSAL	YERS, X=STRIPPED,	=MULTIPLE LA	- 1	comments:
	Ę	F	ł		
	AGG.BASE CRS CL-7	ACHMBC	ACHMSC	28 LT	748+00
	I	Ē	1		
	AGG.BASE CRS CL-7	ACHMBC	ACHMSC	38 RT	739+00
	6.0	ı	8.0W		
	AGG.BASE CRS CL-7	ACHMBC	ACHMSC	28 RT	739+00
	6.0	2.5	10.5W		
	AGG.BASE CRS CL-7	ACHMBC	ACHMSC	17 RT	739+00
	2.0	t)	6.75W		
	AGG.BASE CRS CL-7	ACHMBC	ACHMSC	18 LT	731+00
	6.0	2.25	9.5W		
	AGG.BASE CRS CL-7	ACHMBC	ACHMSC	08 LT	731+00
	L	ł	ł		
	AGG.BASE CRS CL-7	ACHMBC	ACHMSC	28 LT	731+00
	4.0	ł	6.0W		
	AGG.BASE CRS CL-7	ACHMBC	ACHMSC	27 RT	723+00
	9.0	2.5	8.75W		
	AGG.BASE CRS CL-7	ACHMBC	ACHMSC	17 RT	723+00
	1	ŧ	F		
	AGG.BASE CRS CL-7	ACHMBC	ACHMSC	40 RT	723+00
	1	ŧ	I		
	AGG.BASE CRS CL-7	ACHMBC	ACHMSC	29LT	715+00
	3.0	I	7.0W		
	AGG.BASE CRS CL-7	ACHMBC	ACHMSC	17LT	715+00
	5.0	2.25	9.0W		
	AGG.BASE CRS CL-7	ACHMBC	ACHMSC	07LT	715+00
	5.0	1	6.0W		
	AGG.BASE CRS CL-7	ACHMBC	ACHMSC	18RT	707+00
	5.0	2.0	9.5W		
	AGG.BASE CRS CL-7	ACHMBC	ACHMSC	06RT	707+00
	5.0	1.5	9.5W		
	AGG.BASE CRS CL-7	ACHMBC	ACHMSC	06LT	700+00
	1	t	ſ		
	AGG.BASE CRS CL-7	ACHMBC	ACHMSC	26LT	700+00
	5.0	1	6.5W		
	AGG.BASE CRS CL-7	ACHMBC	ACHMSC	17LT	700+00
	4.0	r	6.0W		
	AGG.BASE CRS CL-7	ACHMBC	ACHMSC	30RT	691+00
PAVEMENT SOUNDINGS				LUC.	STA.#

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A DESCRIPTION OF THE PARTY OF T	The second	THE REPORT OF THE PARTY OF THE	A CONTRACTOR OF THE OWNER OF	a contraction of the local distance of the l
ı	Ĕ	Ĺ		
AGG.BASE CRS CL-7	ACHMBC	ACHMSC	26RT	853+00
11.0	Ĩ	3.5		
AGG.BASE CRS CL-7	ACHMBC	ACHMSC	18RT	853+00
10.0	2.0	6.5		
AGG.BASE CRS CL-7	ACHMBC	ACHMSC	06RT	853+00
7.0	2.5	6.75		
AGG.BASE CRS CL-7	ACHMBC	ACHMSC	06LT	844+00
I	£	ĩ		
AGG.BASE CRS CL-7	ACHMBC	ACHMSC	25LT	844+00
1	I	4.5W		
AGG.BASE CRS CL-7	ACHMBC	ACHMSC	16LT	844+00
6.0	2.0	5.5		
AGG.BASE CRS CL-7	ACHMBC	ACHMSC	06RT	836+00
1	1	1		
AGG.BASE CRS CL-7	ACHMBC	ACHMSC	26RT	836+00
9.0	1	3.5		
AGG.BASE CRS CL-7	ACHMBC	ACHMSC	18RT	836+00
1	1	1		
AGG.BASE CRS CL-7	ACHMBC	ACHMSC	26LT	828+00
6.0	T	2.25		
AGG.BASE CRS CL-7	ACHMBC	ACHMSC	18LT	828+00
5.0	2.5	7.25W		
AGG.BASE CRS CL-7	ACHMBC	ACHMSC	06LT	828+00
1	Ĩ	Î		
AGG.BASE CRS CL-7	ACHMBC	ACHMSC	26RT	820+00
9.0	1	4.0		
AGG.BASE CRS CL-7	ACHMBC	ACHMSC	18RT	820+00
5.0	4.0	5.25		
AGG.BASE CRS CL-7	ACHMBC	ACHMSC	05LT	812+00
7.0	1	2.75		
AGG.BASE CRS CL-7	ACHMBC	ACHMSC	16LT	812+00
1	I	1		
AGG.BASE CRS CL-7	ACHMBC	ACHMSC	26LT	812+00
	9.0	4.0		
	AGG.BASE CRS CL-7	ACHMSC	16RT	804+00
	1	1		
	AGG.BASE CRS CL-7	ACHMSC	30LT	796+00

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Thursday, October 08, 2015	Z=AUGER REFUSAL	W=MULTIPLE LAYERS, X=STRIPPED, Z=AUGER REFUSAL	/=MULTIPLE LAY	1	comments:
		ŧ	ï		
	CL-7	AGG.BASE CRS CL-7	ACHMSC	31LT	908+00
	1	T	ĩ		
	AGG.BASE CRS CL-7	ACHMBC	ACHMSC	26RT	900+00
	10.0	l	3.5		
	AGG.BASE CRS CL-7	ACHMBC	ACHMSC	16RT	900+00
	8.0	1.5	6.0		
	AGG.BASE CRS CL-7	ACHMBC	ACHMSC	06RT	900+00
	I	2.0	6.0		
	AGG.BASE CRS CL-7	ACHMBC	ACHMSC	06LT	892+00
	I	ł	Ĩ		
	AGG.BASE CRS CL-7	ACHMBC	ACHMSC	26LT	892+00
	3.0	ı	3.5		
	AGG.BASE CRS CL-7	ACHMBC	ACHMSC	17LT	892+00
	9.0	2.0	6.0W		
	AGG.BASE CRS CL-7	ACHMBC	ACHMSC	07RT	884+00
	1	,	I		
	AGG.BASE CRS CL-7	ACHMBC	ACHMSC	29RT	884+00
	9.0	I	4.5		
	AGG.BASE CRS CL-7	ACHMBC	ACHMSC	18RT	884+00
	I	•	1		
	AGG.BASE CRS CL-7	ACHMBC	ACHMSC	25LT	876+00
	6.0	r	3.5		
	AGG.BASE CRS CL-7	ACHMBC	ACHMSC	18LT	876+00
	6.0	1.5	5.5		
	AGG.BASE CRS CL-7	ACHMBC	ACHMSC	06LT	876+00
	1	1	1		
	AGG.BASE CRS CL-7	ACHMBC	ACHMSC	26RT	868+00
	7.0	1	3.5		
	AGG.BASE CRS CL-7	ACHMBC	ACHMSC	16RT	868+00
	5.0	1.75	5.25		
	AGG.BASE CRS CL-7	ACHMBC	ACHMSC	06RT	868+00
	6.0	2.0	5.75		
	AGG.BASE CRS CL-7	ACHMBC	ACHMSC	06LT	860+00
	1	1	ı		
	AGG.BASE CRS CL-7	ACHMBC	ACHMSC	30LT	860+00
	1	1	4.0		
	AGG.BASE CRS CL-7	ACHMBC	ACHMSC	19LT	860+00
PAVEMENT SOUNDINGS	PAVEM			LOC.	STA.#
	14 1				

Thursday, October 08, 2015

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Thursday, October 08, 2015	IGER REFUSAL	W=MULTIPLE LAYERS, X=STRIPPED, Z=AUGER REFUSAL	W=MULTIPLE LA		comments:
		6.0	12.0W		
		AGG.BASE CRS CL-7	ACHMSC	20LT	908+00
	10.0	2.25	10.0W		
	AGG.BASE CRS CL-7	ACHMBC	ACHMSC	09LT	908+00
PAVEMENT SOUNDINGS				LOC.	STA.#

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

Job No. Date Sampled: Date Tested: Name of Project:	CA0801 9/24/15 September 24, 2015 HWY.110 - CLINTON (WIDENING)(S)	Material Code Station No.: Location:	SSRVPS 523+00 46'LT
County: Sampled By: Lab No.: Sample ID: LATITUDE:	Code:71Name:VAN BURENFAULKNER20152224RV381	Depth: AASHTO Class: Material Type (1 or 2): LONGITUDE:	0-5 A-4(2) 2
1. Testing Inform	nation:		
	Preconditioning - Permanent Strain > 5% (Y=Ye Testing - Permanent Strain > 5% (Y=Yes or N=N Number of Load Sequences Completed (0-15)		N N 15
2. Specimen Info	ormation:		
3. Soil Specime	Specimen Diameter (in): Top Middle Bottom Average Membrane Thickness (in): Height of Specimen, Cap and Base (in): Height of Cap and Base (in): Initial Length, Lo (in): Initial Area, Ao (sq. in): Initial Volume, AoLo (cu. in):		3.97 3.97 3.97 3.97 0.01 8.01 0.00 8.01 12.29 98.48
5. Son Specifici	Weight of Wet Soil Used (g):		3292.30
4. Soil Propertie			
	Optimum Moisture Content (%): Maximum Dry Density (pcf): 95% of MDD (pcf): In-Situ Moisture Content (%):		15.1 113.5 107.8 N/A
5. Specimen Pro	operties:		
	Wet Weight (g): Compaction Moisture content (%): Compaction Wet Density (pcf): Compaction Dry Density (pcf): Moisture Content After Mr Test (%):		3292.30 15.1 127.38 110.67 14.6
6. Quick Shear 1	Test (Y=Yes, N=No, N/A=Not Applicable):		#VALUE!
7. Resilient Mod	lulus, Mr:	20369(5	Sc)^-0.30425(S3)^0.19890
8. Comments			
9. Tested By:	DEB Dat	te: <u>September 24, 2015</u>	

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

Job No. Date Sampled: Date Tested: Name of Project:	CA0801 9/24/15 September 24, 2015 HWY.110 - CLINTON (WIDENING)(S)	Material Code Station No.: Location:	SSRVPS 523+00 46'LT
County: Sampled By: Lab No.: Sample ID: LATITUDE:	Code: 71 Name: VAN BUKEN FAULKNER 20152224 RV381	Depth: 0-5 AASHTO Class: A-4 Material Type (1 or 2): 2 LONGITUDE:	0-5 A-4(2) ): 2

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	Chamber	Nominal	Actual	Actual	Actual	Actual	Actual	Actual	Average	Resilient	Resilient
	Confining	Maximum	Applied	Applied	Applied	Applied	Applied	Applied	Recov Def.	Strain	Modulus
PARAMETER	Pressure	Axial	Max. Axial	Cyclic Load	Contact	Max.	Cyclic	Contact	LVDT 1		
		Stress	Load		Load	Axial	Stress	Stress	and 2		
						Stress					
DESIGNATION	ŝ	S <sub>cyclic</sub>	P <sub>max</sub>	P <sub>cyclic</sub>	P <sub>contact</sub>	S <sub>max</sub>	S <sub>cyclic</sub>	Scontact	H <sub>avg</sub>	£r	Ā
UNIT	psi	psi	lbs	lbs	lbs	psi	psi	psi	i	in/in	psi
Sequence 1	6.0	2.0	25.3	22.5	2.8	2.1	1.8	0.2	0.00063	0.00008	23,334
Sequence 2	6.0	4.0	47.3	44.5	2.8	3.8	3.6	0.2	0.00139	0.00017	20,791
Sequence 3	6.0	6.0	70.0	66.2	3.7	5.7	5.4	0.3	0.00229	0.00029	18,887
Sequence 4	6.0	8.0	93.4	87.2	6.2	7.6	7.1	0.5	0.00356	0.00044	15,966
Sequence 5	6.0	10.0	115.7	107.0	8.7	9.4	8.7	0.7	0.00504	0.00063	13,826
Sequence 6	4.0	2.0	25.1	22.3	2.8	2.0	1.8	0.2	0.00067	0.00008	21,830
Sequence 7	4.0	4.0	47.1	44.2	2.8	3.8	3.6	0.2	0.00154	0.00019	18,694
Sequence 8	4.0	6.0	68.6	65.8	2.9	5.6	5.3	0.2	0.00258	0.00032	16,610
Sequence 9	4.0	8.0	91.9	86.5	5.4	7.5	7.0	0.4	0.00378	0.00047	14,893
Sequence 10	4.0	10.0	114.6	106.7	7.9	9.3	8.7	0.6	0.00527	0.00066	13,185
Sequence 11	2.0	2.0	25.0	22.2	2.8	2.0	1.8	0.2	0.00077	0.00010	18,742
Sequence 12	2.0	4.0	46.8	43.9	2.9	3.8	3.6	0.2	0.00177	0.00022	16,184
Sequence 13	2.0	6.0	68.1	65.2	2.9	5.5	5.3	0.2	0.00293	0.00037	14,476
Sequence 14	2.0	8.0	90.3	85.8	4.5	7.3	7.0	0.4	0.00425	0.00053	13,146
Sequence 15	2.0	10.0	112.7	105.7	7.0	9.2	8.6	0.6	0.00576	0.00072	11,954

DATE September 24, 2015 DATE DATE

TESTED BY REVIEWED BY

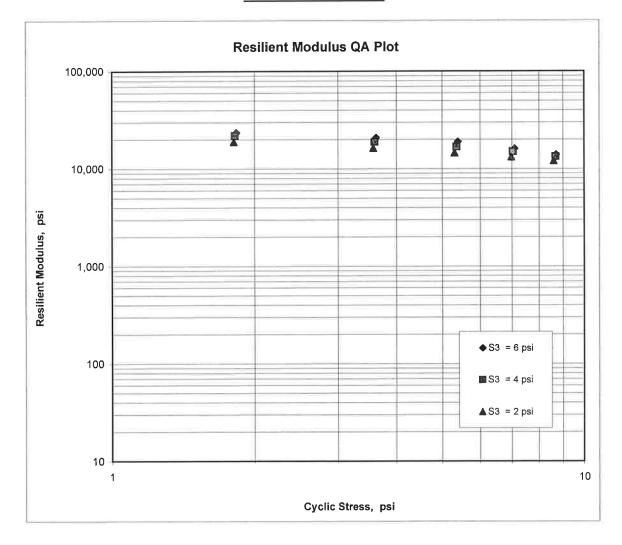
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# AASHTO T 307-99 - RESILIENT MODULUS OF SUBGRADE SOILS RECOMPACTED / THINWALL TUBE SAMPLES

Job No.	CA0801			Material Code SSRVPS
Date Sampled:	9/24/15			<b>Station No.:</b> 523+00
Date Tested:	September 24, 2015			Location: 46'LT
Name of Project:	HWY.110 - CLINTO	ON (WID)	ENING)(S)	
County:	<b>Code:</b> 71	Name:	VAN BUREN	
Sampled By:	FAULKNER			<b>Depth:</b> 0-5
Lab No.:	20152224			AASHTO Class: A-4(2)
Sample ID:	RV381		Mate	rial Type (1 or 2): 2
LATITUDE:				LONGITUDE:

 $M_{R} = K1 (S_{C})^{K2} (S_{3})^{K5}$ 

K1 =	20,369	
K2 =	-0.30425	
K5 =	0.19890	
$R^2 =$	0.95	



1

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

Job No. Date Sampled: Date Tested: Name of Project:	CA0801 9/25/15 September 25, 2015 HWY. 110 - CLINTON (WIDENING)(S)	Material Code Station No.: Location:	SSRVPS 563+00 46'RT
County: Sampled By: Lab No.: Sample ID: LATITUDE:	Code: 71 Name: VAN BUREN FAULKNER 20152225 RV382	Depth: AASHTO Class: Material Type (1 or 2): LONGITUDE:	0-5 A-7-6(24) 2
1. Testing Inform	nation:		y
	Preconditioning - Permanent Strain > 5% (Y=Ye Testing - Permanent Strain > 5% (Y=Yes or N=N Number of Load Sequences Completed (0-15)		N N 15
2. Specimen Info	ormation: Specimen Diameter (in):		
	Top		3.96
	Middle		3.97
	Bottom		3.97
	Average		3.97
	Membrane Thickness (in):		0.01
	Height of Specimen, Cap and Base (in):		8.03
	Height of Cap and Base (in):		0.00
	Initial Length, Lo (in):		8.03
	Initial Area, Ao (sq. in):		12.27
	Initial Volume, AoLo (cu. in):		98.56
2 Soil Specime	a Waight		
3. Soil Specime	Weight of Wet Soil Used (g):		2932.70
			2002.10
4. Soil Propertie	5:		
	Optimum Moisture Content (%):		24.1
	Maximum Dry Density (pcf):		96.9
	95% of MDD (pcf):		92.1
	In-Situ Moisture Content (%):		N/A
5. Specimen Pro	operties:		
	Wet Weight (g):		2932.70
	Compaction Moisture content (%):		24.6
	Compaction Wet Density (pcf):		113.38
	Compaction Dry Density (pcf):		90.99
×	Moisture Content After Mr Test (%):		24.6
6. Quick Shear 1	ſest (Y=Yes, N=No, N/A=Not Applicable):		#VALUE!
7. Resilient Mod	ulus, Mr:	13898(5	Sc)^-0.33706(S3)^0.13102
8. Comments	• company of the comp		
	3		
9. Tested By:	DEB Dat	te: September 25, 2015	

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

Job No. Date Sampled: Date Tested:	CA0801 9/25/15 September 25, 2015			Material Code Station No.: Location:	SSRVPS 563+00 46'RT
Name of Project: County:	HWY. 110 - CLINTON (WIDENING)(S) Code: 71 Name: VAN	N (WIDENIR Name:	(WIDENING)(S) Name: VAN BUREN		
Sampled By: Lab No.:	FAULKNER 2015225			Depth: 0- AASHTO Class: A	0-5 A-7-6(24)
Sample ID: LATITUDE:	RV382			Material Type (1 or ) LONGITUDE:	2): 2

Nominai Actual Maximum Applied
2
Stress Load
S <sub>cyclic</sub> P <sub>max</sub> P <sub>cyclic</sub>
lbs
2.0 25.2 22.5
4.0 47.4 44.6
6.0 69.7 65.9
8.0 90.9 84.6
10.0 110.9 102.1
2.0 25.2 22.4
4.0 47.2 44.2
6.0 68.1 65.2
8.0 89.8 84.4
10.0 110.2 102.4
2.0 25.2 22.3
4.0 46.8 44.0
6.0 67.6 64.7
8.0 88.0 83.5
10.0 108.7 101.8

September 25, 2015

DATE DATE

TESTED BY REVIEWED BY

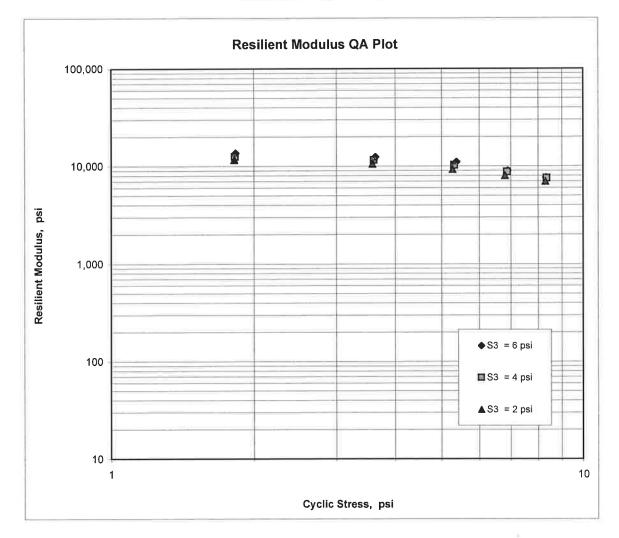
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# AASHTO T 307-99 - RESILIENT MODULUS OF SUBGRADE SOILS RECOMPACTED / THINWALL TUBE SAMPLES

Job No.	CA0801			Material Code SSRVPS
Date Sampled:	9/25/15			Station No.: 563+00
Date Tested:	September 25, 2015			Location: 46'RT
Name of Project:	HWY. 110 - CLINT	ON (WID	ENING)(S)	
County:	<b>Code:</b> 71	Name:	VAN BUREN	
Sampled By:	FAULKNER			<b>Depth:</b> 0-5
Lab No.:	20152225			AASHTO Class: A-7-6(24)
Sample ID:	RV382		Mate	rial Type (1 or 2): 2
LATITUDE:				LONGITUDE:

 $M_{R} = K1 (S_{C})^{K_{2}} (S_{3})^{K_{5}}$ 

K1 =	13,898	
K2 =	-0.33706	
	0.13102	
$R^2 =$	0.88	



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

Job No. Date Sampled: Date Tested: Name of Project:	CA0801 9/24/15 September 24, 2015 HWY.110 - CLINTON (WIDENING)(S)	Material Code Station No.: Location:	SSRVPS 651+00 32'LT
County: Sampled By: Lab No.: Sample ID: LATITUDE:	Code: 71Name: VAN BURENFAULKNER20152226RV383	Depth: AASHTO Class: Material Type (1 or 2): LONGITUDE:	0-5 A-4(1) 2
1. Testing Inform	nation:		
	Preconditioning - Permanent Strain > 5% (Y=Yes Testing - Permanent Strain > 5% (Y=Yes or N=No Number of Load Sequences Completed (0-15)		N N 15
2. Specimen Info	ormation:		
	Specimen Diameter (in): Top Middle Bottom Average Membrane Thickness (in): Height of Specimen, Cap and Base (in): Height of Cap and Base (in): Initial Length, Lo (in): Initial Area, Ao (sq. in): Initial Volume, AoLo (cu. in):		3.97 3.96 3.97 3.97 0.01 8.01 0.00 8.01 12.27 98.31
3. Soil Specimer	Weight: Weight of Wet Soil Used (g):		3209.00
4. Soil Propertie	s:		
	Optimum Moisture Content (%): Maximum Dry Density (pcf): 95% of MDD (pcf): In-Situ Moisture Content (%):		11.7 116 110.2 N/A
5. Specimen Pro	perties:		
	Wet Weight (g): Compaction Moisture content (%): Compaction Wet Density (pcf): Compaction Dry Density (pcf): Moisture Content After Mr Test (%):		3209.00 11.3 124.37 111.74 11.2
6. Quick Shear 1	est (Y=Yes, N=No, N/A=Not Applicable):		#VALUE!
7. Resilient Mod	ulus, Mr:	16579(§	Sc)^-0.17743(S3)^0.22491
8. Comments			
9. Tested By:	DEB Dat	e: September 24, 2015	

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

Job No.	CA0801			Material Code	SSRVPS
Date Sampled:	9/24/15			Station No.:	651+00
Date Tested:	September 24, 2015			Location:	32'LT
Name of Project:	HWY.110 - CLINTON (WIDENING)(S)	I (WIDENIN	(G)(S)		
County:	Code: 71	Name:	Name: VAN BUREN		
Sampled By:	FAULKNER			Depth:	0-5
Lab No.:	20152226			AASHTO Class:	A-4(1)
Sample ID:	RV383			Material Type (1 or 2): 2	<b>2):</b> 2
LATITUDE:				LONGITUDE:	

	_																			٦
Resilient Modulus				Mr	psi	21,951	20,622	19,510	17,537	16,116	19,826	17,747	16,666	15,823	15,004	17,399	15,547	14,547	13,833	13,191
Resilient Strain				£r	in/in	0.00008	0.00018	0.00028	0.00041	0.00055	0.00009	0.00020	0.00032	0.00045	0.00059	0.00010	0.00023	0.00037	0.00051	0.00067
Average Recov Def.	LVDT 1	and 2		H <sub>avg</sub>	ĿĽ	0.00067	0.00142	0.00223	0.00328	0.00443	0.00074	0.00164	0.00260	0.00363	0.00476	0.00084	0.00186	0.00295	0.00411	0.00534
Actual Applied	Contact	Stress		S <sub>contact</sub>	bsi	0.2	0.2	0.3	0.5	0.7	0.2	0.2	0.2	0.4	0.6	0.2	0.2	0.2	0.4	0.6
Actual Applied	Cyclic	Stress		S <sub>cyclic</sub>	psi	1.8	3.6	5.4	7.2	8.9	1.8	3.6	5.4	7.2	8.9	1.8	3.6	5.4	7.1	8.8
Actual Applied	Max.	Axial	Stress	S <sub>max</sub>	psi	2.1	3.9	5.7	7.7	9.6	2.1	3.9	5.6	7.6	9.5	2.0	3.8	5.6	7.5	9.4
Actual Applied	Contact	Load		Pcontact	lbs	2.7	2.8	3.7	6.1	8.6	2.8	2.8	2.9	5.2	7.6	2.8	2.8	2.9	4.4	6.8
Actual Applied	Cyclic Load			P <sub>cyclic</sub>	lbs	22.5	44.8	66.7	88.3	109.4	22.5	44.5	66.4	88.0	109.4	22.3	44.2	65.9	87.2	108.0
Actual Applied	100	Load		P <sub>max</sub>	lbs	25.3	47.6	70.4	94.4	118.1	25.3	47.3	69.3	93.3	117.0	25.1	47.1	68.7	91.6	114.9
Nominal Maximum	Axial	Stress		S <sub>cyclic</sub>	psi	2.0	4.0	6.0	8.0	10.0	2.0	4.0	6.0	8.0	10.0	2.0	4.0	6.0	8.0	10.0
Chamber Confining	Pressure			လိ	psi	6.0	6.0	6.0	6.0	6.0	4.0	4.0	4.0	4.0	4.0	2.0	2.0	2.0	2.0	2.0
	PARAMETER			DESIGNATION	UNIT	Sequence 1	Sequence 2	Sequence 3	Sequence 4	Sequence 5	Sequence 6	Sequence 7	Sequence 8	Sequence 9	Sequence 10	Sequence 11	Sequence 12	Sequence 13	Sequence 14	Sequence 15

September 24, 2015

DATE DATE

TESTED BY REVIEWED BY

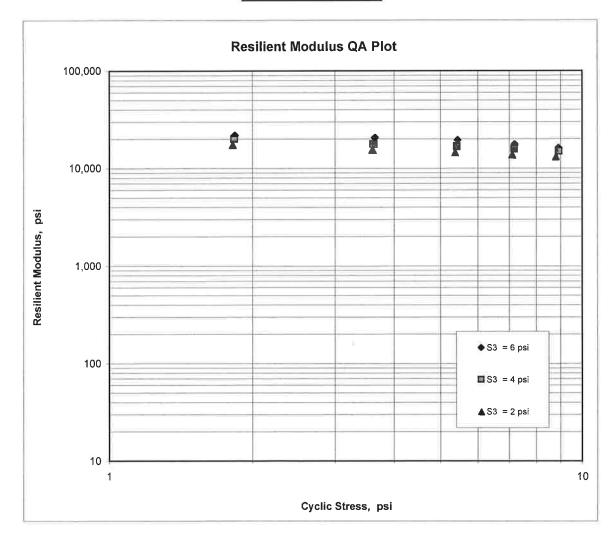
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# AASHTO T 307-99 - RESILIENT MODULUS OF SUBGRADE SOILS RECOMPACTED / THINWALL TUBE SAMPLES

Job No.	CA0801			Material Code SSRVPS
Date Sampled:	9/24/15			Station No.: 651+00
Date Tested:	September 24, 2015			Location: 32'LT
Name of Project:	HWY.110 - CLINTO	ON (WID	ENING)(S)	
County:	<b>Code:</b> 71	Name:	VAN BUREN	
Sampled By:	FAULKNER			<b>Depth:</b> 0-5
Lab No.:	20152226			AASHTO Class: A-4(1)
Sample ID:	RV383		Mate	rial Type (1 or 2): 2
LATITUDE:				LONGITUDE:

 $M_{R} = K1 (S_{C})^{K_{2}} (S_{3})^{K_{5}}$ 

K1 =	16,579	
K2 =	-0.17743	
K5 =	0.22491	
$R^2 =$	0.97	



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

Job No. Date Sampled: Date Tested: Name of Project:	CA0801 9/25/15 September 25, 2015 HWY. 110 - CLINTON (WIDENING)(S)	Material Code Station No.: Location:	SSRVPS 659+00 37'RT
County: Sampled By: Lab No.: Sample ID: LATITUDE:	Code: 71 Name: VAN BUREN FAULKNER 20152227 RV384	Depth: AASHTO Class: Material Type (1 or 2): LONGITUDE:	0-5 A-6(4) 2
1. Testing Inform	nation:		
-	Preconditioning - Permanent Strain > 5% (Y=Yes Testing - Permanent Strain > 5% (Y=Yes or N=Ne Number of Load Sequences Completed (0-15)		N N 15
2. Specimen Info	ormation:		
3. Soil Specimer	Specimen Diameter (in): Top Middle Bottom Average Membrane Thickness (in): Height of Specimen, Cap and Base (in): Height of Cap and Base (in): Initial Length, Lo (in): Initial Area, Ao (sq. in): Initial Area, Ao (sq. in): Initial Volume, AoLo (cu. in): <b>Weight</b> of Wet Soil Used (g):		3.98 3.98 3.97 3.98 0.01 8.02 0.00 8.02 12.34 98.93 3263.40
4. Soll Propertle			13 /
	Optimum Moisture Content (%): Maximum Dry Density (pcf): 95% of MDD (pcf): In-Situ Moisture Content (%):		13.4 116.4 110.6 N/A
5. Specimen Pro	operties:		
	Wet Weight (g): Compaction Moisture content (%): Compaction Wet Density (pcf): Compaction Dry Density (pcf): Moisture Content After Mr Test (%):		3263.40 13.3 125.68 110.93 13.4
6. Quick Shear T	est (Y=Yes, N=No, N/A=Not Applicable):		#VALUE!
7. Resilient Mod	ulus, Mr:	13569(5	Sc)^-0.16824(S3)^0.23594
8. Comments	3 <del></del>		
9. Tested By:	DEB Dat	e: <u>September 25, 2015</u>	

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

Material CodeSSRVPSStation No.:659+00	Location: 37'RT	VAN BUREN	Depth: 0-5	AASHTO Class: A-6(4)	Material Type (1 or 2): 2 LONGITUDE:
	N (WIDENING)(S)	Name: VAN I			
CA0801 9/25/15	September 25, 2015 HWY. 110 - CLINTON (WIDENING)(S)	Code: 71	FAULKNER	20152227	RV384
Job No. Date Sampled:	Date Tested: Name of Proiect:	County:	Sampled By:	Lab No.:	Sample ID: LATITUDE:

	Chamber	Nominal	Actual	Actual	Actual	Actual	Actual	Actual	Average	Resilient	Resilient
	Confining	Maximum	Applied	Applied	Applied	Applied	Applied	Applied	Recov Def.	Strain	Modulus
PARAMETER	Pressure	Axial	Max. Axial	Cyclic Load	Contact	Max.	Cyclic	Contact	LVDT 1		
		Stress	Load		Load	Axial	Stress	Stress	and 2		
						Stress					
DESIGNATION	S3	S <sub>cyclic</sub>	P <sub>max</sub>	P <sub>cyclic</sub>	P <sub>contact</sub>	S <sub>max</sub>	S <sub>cyclic</sub>	S <sub>contact</sub>	H <sub>avg</sub>	εĽ	Ā
UNIT	psi	psi	lbs	lbs	lbs	psi	psi	psi	ŗ	in/in	psi
Sequence 1	6.0	2.0	25.3	22.5	2.8	2.1	1.8	0.2	0.00080	0.00010	18,323
Sequence 2	6.0	4.0	47.6	44.7	2.8	3.9	3.6	0.2	0.00166	0.00021	17,556
Sequence 3	6.0	6.0	70.4	66.6	3.8	5.7	5.4	0.3	0.00258	0.00032	16,808
Sequence 4	6.0	8.0	93.8	87.6	6.2	7.6	7.1	0.5	0.00381	0.00048	14,935
Sequence 5	6.0	10.0	116.3	107.6	8.8	9.4	8.7	0.7	0.00519	0.00065	13,473
Sequence 6	4.0	2.0	25.1	22.3	2.8	2.0	1.8	0.2	0.00088	0.00011	16,537
Sequence 7	4.0	4.0	47.1	44.3	2.8	3.8	3.6	0.2	0.00189	0.00024	15,216
Sequence 8	4.0	6.0	68.7	65.8	2.9	5.6	5.3	0.2	0.00300	0.00037	14,272
Sequence 9	4.0	8.0	92.2	86.8	5.4	7.5	7.0	0.4	0.00420	0.00052	13,433
Sequence 10	4.0	10.0	115.3	107.4	7.9	9.3	8.7	9.0	0.00554	0.00069	12,607
Sequence 11	2.0	2.0	25.0	22.2	2.8	2.0	1.8	0.2	0.00102	0.00013	14,168
Sequence 12	2.0	4.0	46.6	43.7	2.8	3.8	3.5	0.2	0.00216	0.00027	13,170
Sequence 13	2.0	6.0	67.7	64.8	2.9	5.5	5.3	0.2	0.00342	0.00043	12,312
Sequence 14	2.0	8.0	90.1	85.6	4.5	7.3	6.9	0.4	0.00477	0.00059	11,678
Sequence 15	2.0	10.0	112.7	105.7	7.0	9.1	8.6	0.6	0.00619	0.00077	11,090

September 25, 2015

DATE DATE

DEB

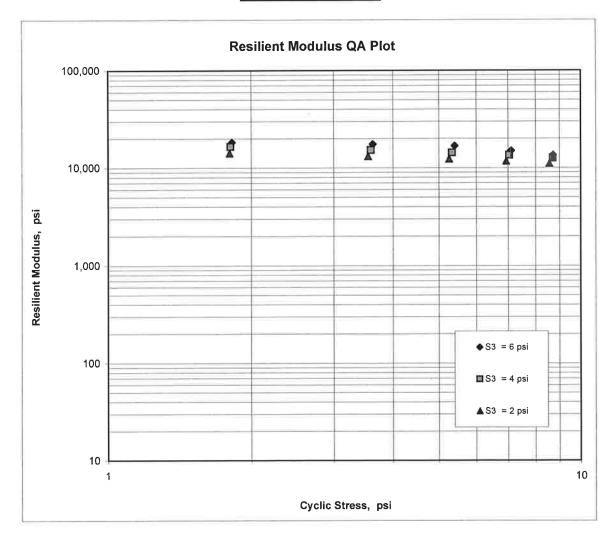
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# AASHTO T 307-99 - RESILIENT MODULUS OF SUBGRADE SOILS RECOMPACTED / THINWALL TUBE SAMPLES

Job No.	CA0801			Material Code SSRVPS
Date Sampled:	9/25/15			Station No.: 659+00
Date Tested:	September 25, 2015			Location: 37'RT
Name of Project:	HWY. 110 - CLINT	ON (WID	ENING)(S)	
County:	<b>Code:</b> 71	Name:	VAN BUREN	
Sampled By:	FAULKNER			Depth: 0-5
Lab No.:	20152227			AASHTO Class: A-6(4)
Sample ID:	RV384		Mate	rial Type (1 or 2): 2
LATITUDE:				LONGITUDE:

 $M_{R} = K1 (S_{C})^{K2} (S_{3})^{K5}$ 

K1 =	13,569	
K2 =	-0.16824	
K5 =	0.23594	
$R^2 =$	0.95	



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

Job No. Date Sampled: Date Tested: Name of Project:	CA0801 9/29/15 September 29, 2015 HWY 110 - CLINTON (WIDENING)(S)	Material Code Station No.: Location:	SSRVPS 739+00 38'RT
County: Sampled By: Lab No.: Sample ID: LATITUDE:	Code: 71Name:VAN BURENFAULKNER20152228RV385	Depth: AASHTO Class: Material Type (1 or 2) LONGITUDE:	0-5 A-7-5(39) : 2
1. Testing Inform	nation:		
·	Preconditioning - Permanent Strain > 5% (Y=Yes Testing - Permanent Strain > 5% (Y=Yes or N=No Number of Load Sequences Completed (0-15)		N N 15
2. Specimen Info	ormation:		
	Specimen Diameter (in): Top Middle Bottom Average Membrane Thickness (in): Height of Specimen, Cap and Base (in): Height of Cap and Base (in): Initial Length, Lo (in): Initial Area, Ao (sq. in): Initial Volume, AoLo (cu. in):		3.95 3.97 3.96 0.01 8 0.00 8 12.26 98.05
3. Soil Specimer	-		
	Weight of Wet Soil Used (g):		2917.80
4. Soil Propertie	5.		
	Optimum Moisture Content (%): Maximum Dry Density (pcf): 95% of MDD (pcf): In-Situ Moisture Content (%):		30.0 89.6 85.1 N/A
5. Specimen Pro	perties:		
	Wet Weight (g): Compaction Moisture content (%): Compaction Wet Density (pcf): Compaction Dry Density (pcf): Moisture Content After Mr Test (%):		2917.80 30.0 113.39 87.22 29.9
6. Quick Shear T	est (Y=Yes, N=No, N/A=Not Applicable):		#VALUE!
7. Resilient Mod	ulus, Mr:	7765(3	Sc)^-0.17784(S3)^0.13084
8. Comments			
9. Tested By:	DEB Date	e: September 29, 2015	

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

Job No.	CA0801			Material Code	SSRVPS
Date Sampled:	9/29/15			<b>Station No.:</b>	739+00
Date Tested:	September 29, 2015			Location:	38'RT
Name of Project:	HWY 110 - CLINTON (WIDENING)(S)	N (WIDENIN	G)(S)		
County:	Code: 71	Name:	VAN BUREN		
Sampled By:	FAULKNER			Depth:	0-5
Lab No.:	20152228			<b>AASHTO Class:</b>	A-7-5(39)
Sample ID:	RV385			Material Type (1 or 2): 2	2): 2
LATITUDE:				LONGITUDE:	

	Chamber	Nominal	Actual	Actual	Actual	Actual	Actual	Actual	Average Decov Def	Resilient	Resilient
PARAMETER	Pressure	Axial	Appreu Max. Axiel	Cyclic Load	Contact	Max.	Cyclic	Contact	LVDT 1	2010	spinnal
		Stress	Load		Load	Axial	Stress	Stress	and 2		
						Stress					
DESIGNATION	S <sub>3</sub>	S <sub>cyclic</sub>	P <sub>max</sub>	P <sub>cyclic</sub>	P <sub>contact</sub>	S <sub>max</sub>	S <sub>cyclic</sub>	Scontact	H <sub>avg</sub>	ŝŗ	Mr
	psi	psi	lbs	lbs	lbs	psi	psi	psi	ų	in/in	psi
	6.0	2.0	25.2	22.3	2.8	2.1	1.8	0.2	0.00130	0.00016	11,190
Sequence 2	6.0	4.0	47.1	44.3	2.8	3.8	3.6	0.2	0.00282	0.00035	10,256
Sequence 3	6.0	6.0	69.0	65.2	3.7	5.6	5.3	0.3	0.00493	0.00062	8,643
Sequence 4	6.0	8.0	87.7	81.5	6.2	7.2	6.6	0.5	0,00878	0,00110	6,056
Sequence 5	6.0	10.0	104.5	95.7	8.8	8.5	7.8	0.7	0.01297	0.00162	4,817
Sequence 6	4.0	2.0	25.1	22.2	2.8	2.0	1.8	0.2	0.00138	0.00017	10,510
Sequence 7	4.0	4.0	46.8	43.9	2.9	3.8	3.6	0.2	0.00310	0.00039	9,243
Sequence 8	4.0	6.0	66.8	63.8	2.9	5.4	5.2	0.2	0.00546	0.00068	7,630
Sequence 9	4.0	8.0	86.5	81.1	5.4	7.1	6.6	0.4	0.00883	0.00110	5,996
Sequence 10	4,0	10.0	104.3	96.4	7.9	8.5	7.9	0.6	0.01325	0.00166	4,747
Sequence 11	2.0	2.0	25.1	22.2	2.9	2.0	1.8	0.2	0.00154	0.00019	9,389
Sequence 12	2.0	4.0	46.5	43.6	2.9	3.8	3.6	0.2	0.00341	0.00043	8,351
Sequence 13	2.0	6.0	66.1	63.1	2.9	5.4	5.2	0.2	0.00599	0.00075	6,877
Sequence 14	2.0	8.0	84.7	80.2	4.5	6.9	6.5	0.4	0.00952	0.00119	5,499
Sequence 15	2.0	10.0	102.7	95.7	7.0	8.4	7.8	0.6	0.01397	0.00175	4,470

September 29, 2015

DATE DATE

TESTED BY REVIEWED BY

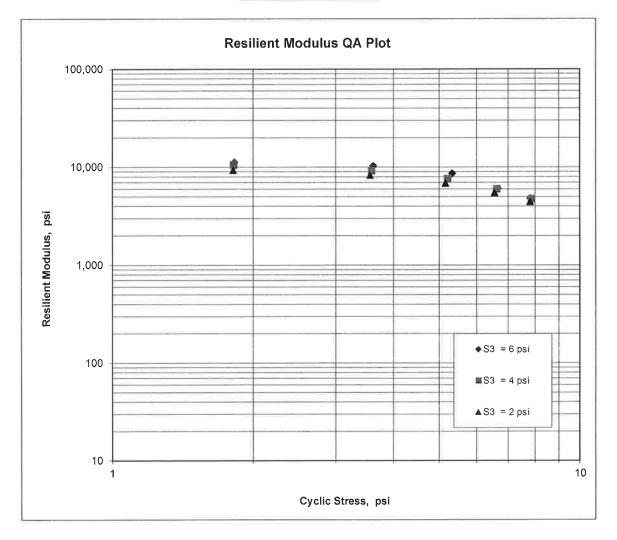
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# AASHTO T 307-99 - RESILIENT MODULUS OF SUBGRADE SOILS RECOMPACTED / THINWALL TUBE SAMPLES

Job No.	CA0801			Material Code SSRVPS
Date Sampled:	9/29/15			Station No.: 739+00
Date Tested:	September 29, 2015			Location: 38'RT
Name of Project:	HWY 110 - CLINTO	ON (WID	ENING)(S)	
County:	<b>Code:</b> 71	Name:	VAN BUREN	
Sampled By:	FAULKNER			<b>Depth:</b> 0-5
Lab No.:	20152228			AASHTO Class: A-7-5(39)
Sample ID:	RV385		Mate	rial Type (1 or 2): 2
LATITUDE:				LONGITUDE:

 $M_{R} = K1 (S_{C})^{K_{2}} (S_{3})^{K_{5}}$ 

K1 =	7,765	
K2 =	-0.17784	
K5 =	0.13084	
$R^2 =$	0.81	



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

Job No. Date Sampled: Date Tested: Name of Project:	CA0801 9/29/15 September 29, 2015 HWY 110 - CLINTON (WIDENING)(S)	Material Code Station No.: Location:	SSRVPS 828+00 26'LT
County: Sampled By: Lab No.: Sample ID: LATITUDE:	Code: 71Name:VAN BURENFAULKNER20152230RV387	Depth: AASHTO Class: Material Type (1 or 2): LONGITUDE:	0-5 A-7-5(15) 2
1. Testing Inform	nation:		
	Preconditioning - Permanent Strain > 5% (Y=Yes Testing - Permanent Strain > 5% (Y=Yes or N=No Number of Load Sequences Completed (0-15)		N N 15
2. Specimen Info	ormation:		
	Specimen Diameter (in): Top Middle Bottom Average Membrane Thickness (in): Height of Specimen, Cap and Base (in): Height of Cap and Base (in): Initial Length, Lo (in): Initial Area, Ao (sq. in): Initial Volume, AoLo (cu. in):		3.94 3.95 3.94 0.01 8.03 0.00 8.03 12.13 97.42
3. Soil Specimer	Weight of Wet Soil Used (g):		3068.90
4. Soil Propertie			00.0
	Optimum Moisture Content (%): Maximum Dry Density (pcf): 95% of MDD (pcf): In-Situ Moisture Content (%):		23.2 99.3 94.3 N/A
5. Specimen Pro	operties:		
	Wet Weight (g): Compaction Moisture content (%): Compaction Wet Density (pcf): Compaction Dry Density (pcf): Moisture Content After Mr Test (%):		3068.90 23.8 120.02 96.95 23.4
6. Quick Shear ]	ſest (Y=Yes, N=No, N/A=Not Applicable):		#VALUE!
7. Resilient Mod	ulus, Mr:	14889(5	Sc)^-0.42355(S3)^0.14286
8. Comments			
9. Tested By:	DEB Dat	e: September 29, 2015	

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

Code .:	Location: 26'LT ()	VAN BUREN Depth: 0-5	AASHTO Class: A-7-5(15)	Material Type (1 or 2): 2 LONGITUDE:
CA0801 9/29/15	September 29, 2015 HWY 110 - CLINTON (WIDENING)(S)	Code: 71 Name: VA FAULKNER	20152230	RV387
Job No. Date Sampled:	Date Tested: Name of Project:	County: Sampled By:	ab No.:	Sample ID: LATITUDE:

Resilient	lef. Strain Modulus	1			ε <sub>r</sub> M <sub>r</sub>	in/in psi		6 0.00013 13,840	0.00013	0.00013 0.00029 0.00050	0.00013 0.00029 0.00050 0.00082	0.00013 0.00029 0.00050 0.00082 0.00116	0.00013 0.00029 0.00050 0.00082 0.00082 0.00116 0.00116	0.00013 0.00029 0.00050 0.00082 0.00082 0.00116 0.00014 0.00032	0.00013 0.00029 0.00050 0.00082 0.00082 0.00014 0.00014 0.00032 0.00055	0.00013 0.00029 0.00050 0.00082 0.00082 0.00014 0.00014 0.00032 0.00055 0.00085	0.00013 0.00029 0.00050 0.00082 0.000116 0.00014 0.00032 0.00032 0.00055 0.00085	0.00013         0.00013           0.00029         0.00050           0.00082         0.00116           0.00014         0.00012           0.00055         0.00032           0.00055         0.00035           0.000121         0.00121	0.00013         0.00029           0.00050         0.00050           0.00082         0.00082           0.00032         0.00032           0.00032         0.00035           0.00035         0.00035           0.00035         0.00035           0.00015         0.00035           0.00034         0.00034	0.00013         0.00029           0.00050         0.00050           0.00082         0.00116           0.00014         0.00012           0.00055         0.00032           0.00055         0.00032           0.000151         0.00034           0.00034         0.00050	0.00013         0.00029           0.00050         0.00050           0.00082         0.00082           0.00032         0.00032           0.00032         0.00032           0.00035         0.00035           0.00036         0.00036           0.00037         0.00032           0.00036         0.00036           0.00037         0.00037           0.00036         0.00036           0.00037         0.00037           0.00036         0.00036           0.00037         0.00037
	u,	ct LVDT1	s and 2		d Havg	ļ	0 00106	· · · · · · · · · · · · · · · · · · ·													
	ed Applied		ss Stress		lic S <sub>contact</sub>		0.2		0.2												
			I Stress	s	s S <sub>cyclic</sub>	psi	1.8		3.6												
_	d Applied		Axial	Stres	t S <sub>max</sub>		2.1		3.8	3.8 5.6	3.8 5.6 7.3	3.8 5.6 7.3 9.0	3.8 5.6 7.3 9.0 2.0	3.8 5.6 7.3 9.0 2.0 3.8	3.8 5.6 7.3 9.0 9.0 2.0 3.8 5.5	3.8 5.6 7.3 9.0 9.0 3.8 3.8 5.5	3.8 5.6 7.3 7.3 8.0 8.9 8.9	3.8 5.6 7.3 7.3 9.0 9.0 9.0 2.0 7.2 8.9 8.9	3.8 5.6 7.3 7.3 8.0 7.2 8.9 8.9 3.8 3.8 3.8 3.8 3.8 3.8 3.8 3.8 3.8 3.8	3.8 5.6 7.3 7.3 9.0 9.0 9.0 2.0 7.3 8.9 8.9 8.9 8.9 5.5 7.5 5.5 7.5 7.2 8.9 8.9 8.9 8.9 8.9 7.2 8.9 7.2 7.3 8.6 7.3 7.3 7.3 7.3 7.3 7.3 7.3 7.3 7.3 7.3	3.8 5.6 7.3 7.3 9.0 9.0 9.0 7.3 7.2 7.2 8.9 8.9 8.9 8.9 8.9 7.2 7.0 7.0
-	_	0	Load		Pcontact	-	2.8		2.9	3.7	2.9 3.7 6.1										
-	Applied	al Cyclic Load			P <sub>cyclic</sub>	lbs	22.1	1	43.7	64.5	43./ 64.5 82.9										
_	1 Applied	Max. Axial	Load		Pmax	lbs	25.0	0.04	40.0	46.6 68.2	40.0 68.2 89.1	40.0 68.2 89.1 108.8	40.0 68.2 89.1 108.8 24.9	46.0 68.2 89.1 108.8 24.9 46.4	46.0       68.2       68.1       89.1       108.8       24.9       24.9       46.4       66.5	46.0       68.2       68.2       89.1       108.8       108.8       24.9       24.9       66.5       66.5	46.6 68.2 89.1 108.8 108.8 24.9 46.4 66.5 87.7 107.7	46.0       68.2       68.1       89.1       108.8       108.8       24.9       46.4       66.5       87.7       107.7       24.8	46.6       68.2       68.1       89.1       108.8       24.9       46.4       87.7       107.7       24.8       87.7       107.7       24.8	46.0         68.2         69.1         89.1         108.8         108.8         24.9         86.5         87.7         107.7         24.8         87.7         107.7         24.8         66.5         87.7         107.7         26.8         65.8	46.6       68.2       68.2       89.1       108.8       108.8       108.8       108.8       87.7       107.7       24.8       87.7       107.7       24.8       65.8       65.8       65.8       85.5
<ul> <li>Nominal</li> </ul>	g Maximum	Axial	Stress		S <sub>cyclic</sub>	psi	2.0		4.0	<b>4</b> .0 6.0	6.0 8.0	4.0 6.0 8.0 10.0	4.0 6.0 10.0 2.0	6.0 6.0 10.0 4.0 4.0	4.0 6.0 8.0 10.0 2.0 4.0 6.0	4.0       6.0       6.0       10.0       10.0       10.0       10.0       10.0       8.0       8.0       8.0       8.0       8.0	4.0 6.0 8.0 10.0 4.0 6.0 8.0 8.0	4.0       6.0       6.0       70.0       70.0       8.0       8.0       8.0       10.0       10.0       10.0	4.0       6.0       6.0       8.0       10.0       8.0       8.0       8.0       10.0       10.0       2.0       2.0       2.0       4.0       2.0       2.0       2.0       2.0       2.0       2.0       2.0       4.0	4.0       6.0       6.0       8.0       10.0       10.0       8.0       8.0       10.0       10.0       10.0       10.0       10.0       10.0       10.0       10.0       10.0       10.0       10.0       10.0       10.0       10.0       6.0       6.0	4.0       6.0       6.0       8.0       10.0       10.0       10.0       10.0       8.0       8.0       8.0       8.0       8.0       8.0       8.0       8.0       8.0       8.0       8.0       8.0
Chamber	Confining	Pressure			လိ	psi	6.0		6.0	6.0	6.0 6.0	6.0 6.0 6.0	6.0 6.0 7 6.0	6.0 4.0 4.0	6.0 6.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7	6.0           6.0	6.0           6.0	6.0           6.0	6.0         6.0           6.0	6.0           6.0	6.0         6.0           6.0
		PARAMETER			DESIGNATION	UNIT	Sequence 1		Sequence 2	Sequence 2 Sequence 3	Sequence 2 Sequence 3 Sequence 4	Sequence 2 Sequence 3 Sequence 4 Sequence 5	Sequence 2 Sequence 3 Sequence 4 Sequence 5 Sequence 6	Sequence 2 Sequence 3 Sequence 4 Sequence 5 Sequence 6 Sequence 7	Sequence 2 Sequence 3 Sequence 4 Sequence 6 Sequence 6 Sequence 7 Sequence 8	Sequence 2 Sequence 3 Sequence 4 Sequence 5 Sequence 6 Sequence 8 Sequence 8 Sequence 9	Sequence 2         Sequence 3         Sequence 4         Sequence 5         Sequence 6         Sequence 8         Sequence 8         Sequence 9         Sequence 9         Sequence 10	Sequence 2 Sequence 3 Sequence 4 Sequence 5 Sequence 6 Sequence 8 Sequence 9 Sequence 10 Sequence 10	Sequence 2 Sequence 3 Sequence 4 Sequence 5 Sequence 6 Sequence 7 Sequence 8 Sequence 9 Sequence 10 Sequence 11 Sequence 11	Sequence 2 Sequence 3 Sequence 4 Sequence 5 Sequence 6 Sequence 8 Sequence 9 Sequence 10 Sequence 11 Sequence 12 Sequence 12 Sequence 13	Sequence 2         Sequence 3         Sequence 4         Sequence 5         Sequence 6         Sequence 7         Sequence 8         Sequence 9         Sequence 10         Sequence 11         Sequence 12         Sequence 13         Sequence 13

TESTED BY REVIEWED BY

DEB

September 29, 2015

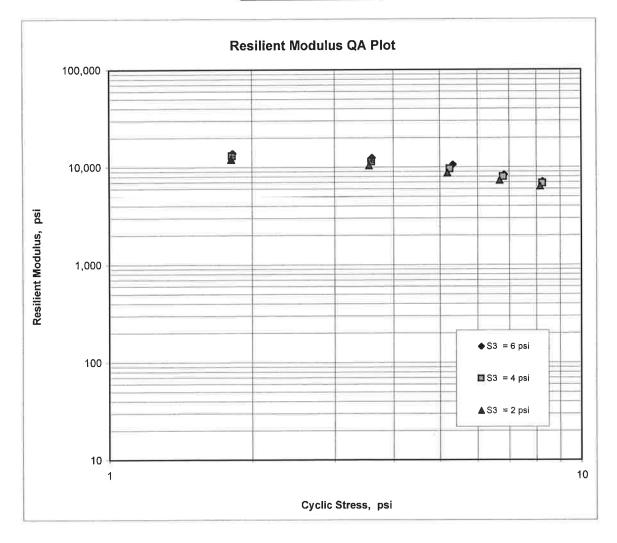
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# AASHTO T 307-99 - RESILIENT MODULUS OF SUBGRADE SOILS RECOMPACTED / THINWALL TUBE SAMPLES

Job No.	CA0801			Material Code	SSRVPS
Date Sampled:	9/29/15			Station No.:	828+00
Date Tested:	September 29, 2015			Location:	26'LT
Name of Project:	HWY 110 - CLINT	ON (WID	ENING)(S)		
County:	<b>Code:</b> 71	Name:	VAN BUREN		
Sampled By:	FAULKNER			Depth:	
Lab No.:	20152230			<b>AASHTO Class:</b>	A-7-5(15)
Sample ID:	RV387		Mate	rial Type (1 or 2):	2
LATITUDE:				LONGITUDE:	

 $M_R = K1 (S_C)^{K_2} (S_3)^{K_5}$ 

K1 =	14,889	
K2 =	-0.42355	
K5 =	0.14286	_
$R^2 =$	0.91	



# ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT MATERIALS DIVISION

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

Job No. Date Sampled: Date Tested: Name of Project:	CA0801 9/29/15 September 29, 2015 HWY 110 - CLINTON (WIDENING)(S)	Material Code Station No.: Location:	SSRVPS 892+00 26'LT
County: Sampled By: Lab No.: Sample ID: LATITUDE:	Code: 71 Name: VAN BUREN FAULKNER 20152231 RV388	Depth: AASHTO Class: Material Type (1 or 2): LONGITUDE:	0-5 A-7-5(31) 2
1. Testing Inform	nation:		
	Preconditioning - Permanent Strain > 5% (Y=Ye Testing - Permanent Strain > 5% (Y=Yes or N=N Number of Load Sequences Completed (0-15)		N N 15
2. Specimen Info	ormation:		
3. Soil Specimer 4. Soil Propertie	Specimen Diameter (in): Top Middle Bottom Average Membrane Thickness (in): Height of Specimen, Cap and Base (in): Height of Cap and Base (in): Initial Length, Lo (in): Initial Area, Ao (sq. in): Initial Volume, AoLo (cu. in): <b>Weight:</b> Weight of Wet Soil Used (g): s:		3.98 3.97 3.98 3.98 0.01 8.03 0.00 8.03 12.34 99.08 2919.40
	Optimum Moisture Content (%):		22.5 97.1
	Maximum Dry Density (pcf): 95% of MDD (pcf): In-Situ Moisture Content (%):		92.2 N/A
5. Specimen Pro			
	Wet Weight (g): Compaction Moisture content (%): Compaction Wet Density (pcf): Compaction Dry Density (pcf): Moisture Content After Mr Test (%):		2919.40 22.5 112.27 91.65 23.0
6. Quick Shear 1	「est (Y=Yes, N=No, N/A=Not Applicable):		#VALUE!
7. Resilient Mod	ulus, Mr:	15002(8	Sc)^-0.28286(S3)^0.15006
8. Comments			
9. Tested By:	DEB Da	te: September 29, 2015	

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT MATERIALS DIVISION

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

Material CodeSSRVPSStation No.:892+00Location:26'LT	Depth: 0-5 AASHTO Class: A-7-5(31) Material Type (1 or 2): 2 LONGITUDE:
2A0801 /29/15 (eptember 29, 2015 HWY 110 - CLINTON (WIDENING)(S) Code: 71 Name: VAN BUREN	
CA0801 9/29/15 September 29, 2015 HWY 110 - CLINTC <b>Code:</b> 71	FAULKNER 20152231 RV388
Job No. Date Sampled: Date Tested: Name of Project: County:	Sampled By: Lab No.: Sample ID: LATITUDE:

-			_			_	_	_	_				_	_				-	-	-	
Resilient	Modulus				Mr	psi	16,006	14,427	13,057	11,099	9,800	14,946	13,480	12,137	10,753	9,567	13,288	11,990	10,827	9,712	8,774
Resilient	Strain			8	εr	in/in	0.00011	0.00025	0.00041	0.00063	0.00087	0.00012	0.00027	0.00044	0.00065	0.00089	0.00014	0.00030	0.00049	0.00071	0.00096
Average	Recov Def.	LVDT 1	and 2		H <sub>avg</sub>	u	0.00092	0.00202	0.00332	0.00509	0.00700	0.00098	0.00215	0.00354	0.00522	0.00716	0.00111	0.00241	0.00394	0.00571	0.00773
Actual	Applied	Contact	Stress		Scontact	psi	0.2	0.2	0.3	0.5	0.7	0.2	0.2	0.2	0.4	0.6	0.2	0.2	0.2	0.4	0.6
Actual	Applied	Cyclic	Stress		S <sub>cyclic</sub>	psi	1.8	3.6	5.4	7.0	8.5	1.8	3.6	5.3	7.0	8.5	1.8	3.6	5.3	6.9	8.4
Actual	Applied	Max.	Axial	Stress	S <sub>max</sub>	psi	2.1	3.9	5.7	7.5	9.2	2.0	3.8	5.6	7.4	9.2	2.0	3.8	5.5	7.3	9.0
Actual	Applied	Contact	Load		Pcontact	lbs	2.7	2.8	3.6	6.2	8.6	2.7	2.7	2.8	5.3	7.8	2.7	2.7	2.8	4.4	6.9
Actual	Applied	Cyclic Load			P <sub>cyclic</sub>	lbs	22.6	44.9	66.7	86.8	105.5	22.6	44.6	66.0	86.2	105.3	22.6	44.4	65.5	85.2	104.2
Actual	Applied	Max. Axial	Load		P <sub>max</sub>	sql	25.4	47.6	70.3	93.0	114.1	25.3	47.3	68.8	91.5	113.1	25.3	47.2	68.3	89.6	111.1
Nominal	Maximum	Axial	Stress		S <sub>cyclic</sub>	psi	2.0	4.0	6.0	8.0	10.0	2.0	4.0	6.0	8.0	10.0	2.0	4.0	6.0	8.0	10.0
Chamber	Confining	Pressure			လိ	psi	6.0	6.0	6.0	6.0	6.0	4.0	4.0	4.0	4.0	4.0	2.0	2.0	2.0	2.0	2.0
		PARAMETER			DESIGNATION	UNIT	Sequence 1	Sequence 2	Sequence 3	Sequence 4	Sequence 5	Sequence 6	Sequence 7	Sequence 8	Sequence 9	Sequence 10	Sequence 11	Sequence 12	Sequence 13	Sequence 14	Sequence 15

September 29, 2015

DATE DATE

TESTED BY REVIEWED BY

DEB

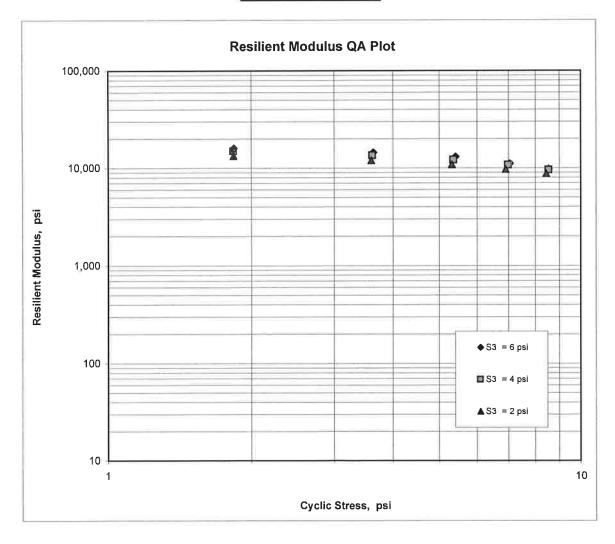
# ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT MATERIALS DIVISION

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

Job No.	CA0801			Material Code SSRVPS
Date Sampled:	9/29/15			Station No.: 892+00
Date Tested:	September 29, 2015			Location: 26'LT
Name of Project:	HWY 110 - CLINTO	ON (WID	ENING)(S)	
County:	<b>Code:</b> 71	Name:	VAN BUREN	
Sampled By:	FAULKNER			<b>Depth:</b> 0-5
Lab No.:	20152231			AASHTO Class: A-7-5(31)
Sample ID:	RV388		Mate	rial Type (1 or 2): 2
LATITUDE:				LONGITUDE:

 $M_{R} = K1 (S_{C})^{K_{2}} (S_{3})^{K_{5}}$ 

K1 =	15,002	_
K2 =	-0.28286	
K5 =	0.15006	
$R^2 =$	0.92	



ARKANSAS STATE HIGHWAY AND TRANSPORTATIO MATERIALS D	DIVISION							
MICHAEL BENSON, MATERI *** SOIL SURVEY / PAVEMENT								
DATE - 10/02/15 JOB NUMBER - CA0801 FEDERAL AID NO TO BE ASSIGNED PURPOSE - SOIL SURVEY SAMPLE SPEC. REMARKS - NO SPECIFICATION CHECK SUPPLIER NAME - STATE NAME OF PROJECT - HWY.110-CLINTON (WIDENING) PROJECT ENGINEER - NOT APPLICABLE DIT/OUNDRY - APPLANSAS	SEQUENCE NO 1 MATERIAL CODE - SSRVPS SPEC. YEAR - 2014 SUPPLIER ID 1 COUNTY/STATE - 71 DISTRICT NO 08 (S)							
PIT/QUARRY       - ARKANSAS         LOCATION       - VAN BUREN COUNTY         SAMPLED BY       - S.FAULKNER         SAMPLE FROM       - TEST HOLE         MATERIAL DESC.       - SOIL SURVEY								
SAMPLE ID - S229 TEST STATUS - INFORMATION ONLY	- 20152073 - 20152074 - S230 - S231 - INFORMATION ONLY - INFORMATION ONLY - 500+00 - 500+00 - 28RT - 36RT 0-5 - 0-5 BROWN - BROWN - 35 36 30.10 - 35 36 30.00 92 27 23.90 92 27 23.80							
<pre>% PASSING 2 IN     1 1/2 IN     3/4 IN     3/8 IN 100     NO. 4 - 98     NO. 10 - 95     NO. 40 - 91     NO. 80 - 88     NO. 200 - 81</pre>								
LIQUID LIMIT - 40 PLASTICITY INDEX - 22 AASHTO SOIL - A-6(17) UNIFIED SOIL - % MOISTURE CONTENT - 17.9	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$							
ACHMSC (IN) - 13.0W AGG.BASE CRS CL-7 (IN) - 6.0 - - - - - - - - - - - - - - - - - - -								

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### ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT - LITTLE ROCK, ARKANSAS MATERIALS DIVISION MICHAEL BENSON, MATERIALS ENGINEER \*\*\* SOIL SURVEY / PAVEMENT SOUNDING TEST REPORT \*\*\* - 09/30/15 SEQUENCE NO. - 2 DATE JOB NUMBER - CA0801 MATERIAL CODE - SSRVPS FEDERAL AID NO.- TO BE ASSIGNED SPEC. YEAR - 2014 PURPOSE - SOIL SURVEY SAMPLE SUPPLIER ID. - 1 SPEC. REMARKS - NO SPECIFICATION CHECK COUNTY/STATE - 71 SUPPLIER NAME - STATE DISTRICT NO. - 08 NAME OF PROJECT - HWY.110-CLINTON (WIDENING) (S) PROJECT ENGINEER - NOT APPLICABLE PIT/OUARRY - ARKANSAS - VAN BUREN COUNTY LOCATION DATE SAMPLED - 07/15/15 SAMPLED BY - S.FAULKNER DATE RECEIVED - 07/16/15 SAMPLE FROM - TEST HOLE DATE TESTED - 09/29/15 MATERIAL DESC. - SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS - 20152075 - 20152076 - 20152077 LAB NUMBER \_ S233 SAMPLE ID - S232 - S234 - INFORMATION ONLY - INFORMATION ONLY - INFORMATION ONLY TEST STATUS - 507+00 - 507+00 - 507+00 STATION - 31LT - 20LT - 06LT LOCATION = 0-2.5Z -3.5Z DEPTH IN FEET - 0-5 BROWN \_ \_ BR/GR - BR/GR MAT'L COLOR MAT'L TYPE --LATITUDE DEG-MIN-SEC - 35 36 36.70 35 36 36.70 - 35 36 36.70 -LONGITUDE DEG-MIN-SEC - 92 27 24.30 92 27 24.50 92 27 24.60 2 IN. -& PASSING $1 \ 1/2 \ IN. -$ --3/4 IN. -100 \_ ---100 3/8 IN. -100 98 \_ 97 NO. 4 - 96 99 12 \_ 85 NO. 10 - 89 97 --NO. 40 - 82 79 95 --88 NO. 80 - 63 65 \_ 1 NO. 200 - 39 38 49 - ND - 19 - 19 LIQUID LIMIT PLASTICITY INDEX 03 $\mathbf{NP}$ - 02 -- A-4(0) A-4(0) A - 4(0)AASHTO SOIL -UNIFIED SOIL -7.6 % MOISTURE CONTENT 6.8 9.3 (IN) -9.25 4.75W ACHMSC -1000 -3.0 -------ACHMBC (IN) -.....

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3.0

6.0

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REMARKS - W=MULTIPLE LAYERS, X=STRIPPED, Z=AUGER REFUSAL

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AASHTO TESTS : T24 T88 T89 T90 T265

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AGG.BASE CRS CL-7 (IN)

ARKANSAS STATE HIGHWAY AND TRANSPORTATION MATERIALS I								
MICHAEL BENSON, MATER *** SOIL SURVEY / PAVEMENT								
DATE - 09/30/15 JOB NUMBER - CA0801 FEDERAL AID NO TO BE ASSIGNED PURPOSE - SOIL SURVEY SAMPLE SPEC. REMARKS - NO SPECIFICATION CHECK SUPPLIER NAME - STATE NAME OF PROJECT - HWY.110-CLINTON (WIDENING) PROJECT ENGINEER - NOT APPLICABLE	DISTRICT NO 08							
PIT/QUARRY- ARKANSASLOCATION- VAN BUREN COUNTYDATE SAMPLEDSAMPLED BY- S.FAULKNERDATE RECEIVEDSAMPLE FROM- TEST HOLEDATE TESTEDMATERIAL DESC SOIL SURVEY- R VALUE- PAVEMENT SOUNDINGS								
SAMPLE ID-S235TEST STATUS-INFORMATION ONLYSTATION-515+00LOCATION-19RTDEPTH IN FEET-0-5MAT'L COLOR-BROWNMAT'L TYPE-	INFORMATION ONLY       INFORMATION ONLY         515+00       515+00         29RT       46RT         0-5       0-5         BROWN       BROWN							
LATITUDE DEG-MIN-SEC - 35 36 43.90 LONGITUDE DEG-MIN-SEC - 92 27 29.10								
<pre>% PASSING 2 IN 1 1/2 IN 3/4 IN 100 3/8 IN 97 NO. 4 - 84 NO. 10 - 73 NO. 40 - 68 NO. 80 - 62 NO. 200 - 47</pre>	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$							
LIQUID LIMIT - 24 PLASTICITY INDEX - 08 AASHTO SOIL - A-4(1) UNIFIED SOIL - % MOISTURE CONTENT - 11.8	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$							
ACHMSC (IN) - 9.0 ACHMBC (IN) - 2.5 AGG.BASE CRS CL-7 (IN) - 5.0 	- 6.75  - 6.0       							
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ARKANSAS STATE HIGHWAY AND TRANSPORTATI MATERIALS I	DIVISION
MICHAEL BENSON, MATER *** SOIL SURVEY / PAVEMENT	
DATE - 09/30/15 JOB NUMBER - CA0801 FEDERAL AID NO TO BE ASSIGNED PURPOSE - SOIL SURVEY SAMPLE SPEC. REMARKS - NO SPECIFICATION CHECK SUPPLIER NAME - STATE NAME OF PROJECT - HWY.110-CLINTON (WIDENING) PROJECT ENGINEER - NOT APPLICABLE PIT/QUARRY - ARKANSAS LOCATION - VAN BUREN COUNTY SAMPLED BY - S.FAULKNER	SEQUENCE NO 4 MATERIAL CODE - SSRVPS SPEC. YEAR - 2014 SUPPLIER ID 1 COUNTY/STATE - 71 DISTRICT NO 08 ) (S) DATE SAMPLED - 07/15/15 DATE RECEIVED - 07/16/15
SAMPLE FROM - TEST HOLE MATERIAL DESC SOIL SURVEY - R VALUE- PAV	DATE TESTED - 09/29/15 EMENT SOUNDINGS
SAMPLE ID - S238 TEST STATUS - INFORMATION ONLY STATION - 523+00 LOCATION - 06LT DEPTH IN FEET - 0-5 MAT'L COLOR - BR/GR MAT'L TYPE - LATITUDE DEG-MIN-SEC - 35 36 50.50 LONGITUDE DEG-MIN-SEC - 92 27 34.00 % PASSING 2 IN 1 1/2 IN 3/4 IN 3/8 IN 100	92 27 34.10 92 27 34.30 
NO. 4 - 95 NO. 10 - 88 NO. 40 - 84 NO. 80 - 79 NO. 200 - 66 LIOUID LIMIT - 29	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
LIQUID LIMIT - 29 PLASTICITY INDEX - 12 AASHTO SOIL - A-6(6) UNIFIED SOIL - % MOISTURE CONTENT - 16.2	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
ACHMSC (IN) - 8.5 ACHMBC (IN) - 3.0 AGG.BASE CRS CL-7 (IN) - 5.0 	- 6.0W 

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### ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT - LITTLE ROCK, ARKANSAS MATERIALS DIVISION MICHAEL BENSON, MATERIALS ENGINEER \*\*\* SOIL SURVEY / PAVEMENT SOUNDING TEST REPORT \*\*\* DATE - 09/30/15 SEQUENCE NO. - 5 JOB NUMBER - CA0801 MATERIAL CODE - SSRVPS FEDERAL AID NO.- TO BE ASSIGNED SPEC. YEAR - 2014 PURPOSE - SOIL SURVEY SAMPLE SUPPLIER ID. = 1 SPEC. REMARKS - NO SPECIFICATION CHECK COUNTY/STATE = 71 SUPPLIER NAME - STATE DISTRICT NO. - 08 NAME OF PROJECT - HWY.110-CLINTON (WIDENING) (S) PROJECT ENGINEER ~ NOT APPLICABLE PIT/QUARRY - ARKANSAS - VAN BUREN COUNTY LOCATION DATE SAMPLED - 07/15/15 SAMPLED BY - S.FAULKNER DATE RECEIVED - 07/16/15 SAMPLE FROM - TEST HOLE DATE TESTED - 09/29/15 MATERIAL DESC. - SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS - 20152085 - 20152086 LAB NUMBER - 20152084 - S242 - S243 SAMPLE ID - 5241 TEST STATUS - INFORMATION ONLY - INFORMATION ONLY - INFORMATION ONLY - 531+00 531+00 531+00 STATION - 30RT -47RT - 17RT LOCATION 0-5 0-5 DEPTH IN FEET - 0-5 \_ RD/BR \_ RD/BR - RD/BR MAT'L COLOR MAT'L TYPE \_ LATITUDE DEG-MIN-SEC - 35 36 58.40 35 36 58.40 🛥 35 36 58.40 $\rightarrow$ 92 27 34.20 LONGITUDE DEG-MIN-SEC - 92 27 34.40 92 27 34.10 2 IN.-% PASSING $1 \ 1/2 \ IN. -$ -100 --3/4 IN. -94 æ 3/8 IN. - 100 100 93 -97 NO. 4 - 98 88 -1 NO. 10 - 93 92 79 144 11 NO. 40 - 88 87 76 1.66 ~ 77 - 84 75 NO. 80 ---NO. 200 - 65 78 73 - 48 - 49 LIQUID LIMIT - 27 PLASTICITY INDEX - 12 ÷. 24 26 - A-6(5) -A-7-6(19) A-7-6(18) AASHTO SOIL ..... UNIFIED SOIL =-24.4 31.0 26.6 % MOISTURE CONTENT -9.5 6.OW .... ACHMSC (IN) ---ACHMBC (IN) -2.25 ÷. ------AGG.BASE CRS CL-7 (IN) --4.0 7.0 ----

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REMARKS - W=MULTIPLE LAYERS, X=STRIPPED, Z=AUGER REFUSAL

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# ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT - LITTLE ROCK, ARKANSAS MATERIALS DIVISION MICHAEL BENSON, MATERIALS ENGINEER

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

DATE - 09/3 JOB NUMBER - CA03 FEDERAL AID NO TO H PURPOSE - SOIN SPEC. REMARKS - NO S SUPPLIER NAME - STAT NAME OF PROJECT - HU PROJECT ENGINEER - NO PIT/QUARRY - ARKANS LOCATION - VAN BU SAMPLED BY - S.FAUL SAMPLE FROM - TEST N MATERIAL DESC SOI	B01 BE ASSI L SURVE SPECIFI FE WY.110- OT APPI SAS UREN CC KNER HOLE	Y SAMPLE CATION CHI CLINTON ( JICABLE OUNTY	ECK WIDENING)			SEQUENC MATERIA SPEC. M SUPPLIE COUNTY, DISTRIC DATE S. DATE R. DATE T. GS	AL ZEA SR ZT CT AMI ECI	CODE - R - ID ATE - NO PLED EIVED -	SS 20 1 71 08 - 07	14
LAB NUMBER		20152087			20152088		ж)	20152	089	
SAMPLE ID	-	S244			S245			S246	000	
TEST STATUS			ION ONLY		INFORMATIC	N ONLY			ITAN	ON ONLY
STATION		539+00		-	539+00			539+0		
LOCATION		06LT		22	17LT			33LT		
DEPTH IN FEET	<u></u>	0-5		с <del>н</del>	0-5		<b>æ</b> 7	0-1.5	Z	
MAT'L COLOR		BR/GR			BR/GR		려! 20	BR/GR		
MAT'L TYPE	(E)			-			20 20			
LATITUDE DEG-MIN-S	SEC -	35 37	5.90	-	35 37	6.00	æ	35	37	6.00
LONGITUDE DEG-MIN-S	SEC -	92 27	32.20		92 27	32.30		92	27	32.50
3/4 3/8		99 94			100 99 96 91 87			100 99 92 87 78		
NO.		67			81		-	67		
	200 -	54		1	70		-	43		
LIQUID LIMIT	÷	28		-	33		*	22		
PLASTICITY INDEX				жн. 	17		-	04	- \	
AASHTO SOIL	-	A-6(4)			A-6(10)		7) 20	A-4 (	0)	
UNIFIED SOIL				(rai)			÷.		_	
% MOISTURE CONTENT	-	15.2			20.4			18	.8	
ACHMSC	(IN) -	7.25		-	6.0		-			
ACHMBC	(IN) -	2.0		-			-			
AGG.BASE CRS CL-7	(IN) -	7.0			6.0		-			
	-			10			_			
				-			_			
				-			-			
	-			5			-			
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REMARKS = W=MULTIPLE LAYERS, X=STRIPPED, Z=AUGER REFUSAL

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ARKANSAS STATE H		AND TRANSPORTATI MATERIALS	DIV	ISION		ROCK, ARK	ANSAS
* * *		IAEL BENSON, MATER SURVEY / PAVEMENT				* *	
DATE - 10/02 JOB NUMBER - CA080 FEDERAL AID NO TO BE PURPOSE - SOIL SPEC. REMARKS - NO SE SUPPLIER NAME - STATE NAME OF PROJECT - HWY PROJECT ENGINEER - NOT PIT/QUARRY - ARKANSZ	)1 SURVE PECIFI S (.110- G APPI	Y SAMPLE CATION CHECK CLINTON (WIDENING			MATERIAL SPEC. YEZ SUPPLIER COUNTY/ST	NO 7 CODE - SS AR - 20 ID 1 IATE - 72 NO 08	SRVPS 014
LOCATION - VAN BUF SAMPLED BY - S.FAULKI SAMPLE FROM - TEST HO	REN CO NER DLE				DATE REC DATE TES	PLED - 07 EIVED - 07 TED - 09	/16/15
MATERIAL DESC SOIL	SURVI	EY - R VALUE- PAV	EME	NT SOUNDING	3S		
LAB NUMBER SAMPLE ID		20152090 S247				20152092 S249	
TEST STATUS							ION ONLY
STATION	(#C	543+00		543+00	<u>~</u>	543+00	
LOCATION		18RT	-	30RT	Ē	55RT	
	-	0-5	_	0-5		0-3Z	
MAT'L COLOR MAT'L TYPE	-	0-5 RD/BR	-	BROWN	-	BROWN	
LATITUDE DEG-MIN-SE LONGITUDE DEG-MIN-SE						35 37 92 27	
% PASSING 2 I	N		-		4		
l 1/2 I	N		-		-		
3/4 I		100	-	100	=		
			150 191			100	
NO .			-	96	<u>ت</u>	97	
NO. 1	0 -	96	-	90	-	92	
NO 4 NO 8			-	84 72	<del></del>	87 80	
NO. 20	-			57	-	69	
LIQUID LIMIT	-	39	_	33	-	34	
PLASTICITY INDEX	-	20	-	15	7	16	
AASHTO SOIL		A-6(11)	-	A-6(6)		A-6(9)	
UNIFIED SOIL			_		-		
% MOISTURE CONTENT	- IN) -	22.2 9.5		25.2		20.6	
	IN) - IN) -	2.5	-	7.5W	-		
	IN)	7.0	5	6.0	(H)		
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### ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT - LITTLE ROCK, ARKANSAS MATERIALS DIVISION MICHAEL BENSON, MATERIALS ENGINEER \*\*\* SOIL SURVEY / PAVEMENT SOUNDING TEST REPORT \*\*\* DATE - 09/30/15 SEQUENCE NO. - 8 JOB NUMBER - CA0801 MATERIAL CODE - SSRVPS FEDERAL AID NO.- TO BE ASSIGNED SPEC. YEAR - 2014 PURPOSE - SOIL SURVEY SAMPLE SUPPLIER ID. - 1 SPEC. REMARKS - NO SPECIFICATION CHECK COUNTY/STATE - 71 SUPPLIER NAME - STATE DISTRICT NO. - 08 NAME OF PROJECT - HWY.110-CLINTON (WIDENING) (S) PROJECT ENGINEER - NOT APPLICABLE PIT/QUARRY - ARKANSAS - VAN BUREN COUNTY LOCATION DATE SAMPLED = 07/15/15 SAMPLED BY - S.FAULKNER DATE RECEIVED = 07/16/15 SAMPLE FROM - TEST HOLE DATE TESTED - 09/29/15 MATERIAL DESC. - SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS LAB NUMBER - 20152094 - 20152095 - 20152093 SAMPLE ID - S250 \_ S251 - S252 TEST STATUS - INFORMATION ONLY - INFORMATION ONLY - INFORMATION ONLY - 555+00 - 555+00 - 555+00 STATION <sup>-</sup> 19LT - 33LT - 06LT LOCATION -0-3Z 0-3.5Z DEPTH IN FEET - 0-3.5Z \_ GRAY BROWN - BR/GR MAT'L COLOR MAT'L TYPE -LATITUDE DEG-MIN-SEC - 35 37 21.30 35 37 21.40 - 35 37 21.40 -LONGITUDE DEG-MIN-SEC - 92 27 26.90 92 27 27.10 92 27 27.20 2 IN. -& PASSING $1 \ 1/2 \ IN. -$ -÷. -3/4 IN. -100 100 ÷. 3/8 IN. -100 94 98 -86 NO. 4 - 96 93 -NO. 10 - 92 78 80 ------NO. 40 - 86 73 64 (**...**) -79 - 58 NO. 80 -- 64 NO. 200 - 48 38 46 - 23 - 17 LIOUID LIMIT - 18 PLASTICITY INDEX - 03 -02 06 -A-4(0) AASHTO SOIL - A-4(0) A-4(0) UNIFIED SOIL \_ -9.9 12.1 % MOISTURE CONTENT -13.1 (IN) -9.0 1.1.1. ACHMSC -7.25 ---(IN) -ACHMBC 1.5 1 H F 122 ------AGG.BASE CRS CL-7 (IN) -3.0 7.0 -----\_ ----1

REMARKS - W=MULTIPLE LAYERS, X=STRIPPED, Z=AUGER REFUSAL

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### ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT - LITTLE ROCK, ARKANSAS MATERIALS DIVISION MICHAEL BENSON, MATERIALS ENGINEER \*\*\* SOIL SURVEY / PAVEMENT SOUNDING TEST REPORT \*\*\* - 09/30/15 DATE SEQUENCE NO. - 9 JOB NUMBER - CA0801 MATERIAL CODE - SSRVPS FEDERAL AID NO.- TO BE ASSIGNED SPEC. YEAR - 2014 PURPOSE - SOIL SURVEY SAMPLE SUPPLIER ID. - 1 SPEC. REMARKS - NO SPECIFICATION CHECK COUNTY/STATE - 71 SUPPLIER NAME - STATE DISTRICT NO. - 08 NAME OF PROJECT - HWY.110-CLINTON (WIDENING) (S) PROJECT ENGINEER - NOT APPLICABLE PIT/QUARRY - ARKANSAS LOCATION - VAN BUREN COUNTY DATE SAMPLED 🖷 07/15/15 SAMPLED BY - S.FAULKNER DATE RECEIVED = 07/16/15 SAMPLE FROM - TEST HOLE DATE TESTED - 09/29/15 MATERIAL DESC. - SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS - 20152096 - 20152097 - 20152098 - 5253 - 5254 - 5255 LAB NUMBER - S254 SAMPLE ID - S253 - S255 TEST STATUS - INFORMATION ONLY - INFORMATION ONLY - INFORMATION ONLY - 563+00 - 563+00 - 563+00 STATION - 28RT - 46RT LOCATION - 18RT - 0-5 - 0-5 DEPTH IN FEET - 0-5 BROWN \_ 0-5 \_ BROWN - BROWN MAT'L COLOR MAT'L TYPE -LATITUDE DEG-MIN-SEC - 35 37 29.50 - 35 37 29.60 - 35 37 29.60 LONGITUDE DEG-MIN-SEC - 92 27 25.90 92 27 25.80 92 27 25.60 % PASSING 2 IN.-1 1/2 IN. --1 --3/4 IN. ---3/8 IN. - 100 100 100 122 NO. 4 - 98 97 99 $2 \approx 1$ NO. 10 - 88 92 96 ---NO. 40 - 76 93 88 NO. 80 - 67 78 90 -61 NO. 200 - 58 84 - 38 - 47 - 30 LIQUID LIMIT PLASTICITY INDEX - 13 22 19 AASHTO SOIL A-6(9) A-7-6(20) - A-6(5) UNIFIED SOIL \_ 21.2 30.1 % MOISTURE CONTENT -25.9 (IN) -ACHMSC 10.0 6.25 \_ ------ACHMBC (IN) -2.5 100 AGG.BASE CRS CL-7 (IN) 8.0 7.0 -

REMARKS - W=MULTIPLE LAYERS, X=STRIPPED, Z=AUGER REFUSAL

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### ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT - LITTLE ROCK, ARKANSAS MATERIALS DIVISION MICHAEL BENSON, MATERIALS ENGINEER \*\*\* SOIL SURVEY / PAVEMENT SOUNDING TEST REPORT \*\*\* DATE - 09/30/15 SEQUENCE NO. - 10 JOB NUMBER - CA0801 MATERIAL CODE - SSRVPS FEDERAL AID NO.- TO BE ASSIGNED SPEC. YEAR - 2014 PURPOSE - SOIL SURVEY SAMPLE SUPPLIER ID. - 1 SPEC. REMARKS - NO SPECIFICATION CHECK COUNTY/STATE - 71 SUPPLIER NAME - STATE DISTRICT NO. - 08 NAME OF PROJECT - HWY.110-CLINTON (WIDENING) (S) PROJECT ENGINEER - NOT APPLICABLE PIT/OUARRY - ARKANSAS LOCATION - VAN BUREN COUNTY DATE SAMPLED - 07/15/15 SAMPLED BY - S.FAULKNER DATE RECEIVED - 07/16/15 SAMPLE FROM - TEST HOLE DATE TESTED - 09/29/15 MATERIAL DESC. - SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS - 20152099 - 20152100 - 20152101 - S256 - S257 - S258 LAB NUMBER SAMPLE ID - S256 - INFORMATION ONLY 🗄 INFORMATION ONLY 📄 INFORMATION ONLY TEST STATUS - 571+00 - 571+00 - 571+00 STATION - 28LT -31LT LOCATION - 08LT - 0-5 - BROWN 0-5 0-5 DEPTH IN FEET 0-5 BR/GR BROWN MAT'L COLOR MAT'L TYPE \_ LATITUDE DEG-MIN-SEC - 35 37 37.00 - 35 37 37.00 - 35 37 37.00 LONGITUDE DEG-MIN-SEC - 92 27 27.00 92 27 27.00 92 27 27.20 2 IN.-% PASSING $1 \ 1/2 \ IN = -$ \_ -\_ 3/4 IN. - $\rightarrow$ -100 3/8 IN. - 100 100 \_ -NO. 4 - 99 99 96 <u>\_\_\_</u>\_\_ \_ 96 NO. 10 - 97 88 \_ -\_ 90 NO. 40 - 93 81 - 83 NO. 80 - 78 -66 NO. 200 - 67 76 44 - 26 - 39 = 37 LIQUID LIMIT PLASTICITY INDEX - 19 16 11 \* AASHTO SOIL = A-6(11) A-6(11) A-6(1) 12 UNIFIED SOIL --20.0 21.0 % MOISTURE CONTENT -32.1 ACHMSC (IN) -10.0 - 5.5 1 1000 ACHMBC (IN) -2.0 ------------AGG.BASE CRS CL-7 (IN) --- -5.0 5.0 $\sim$ $\rightarrow$

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REMARKS 👻 W=MULTIPLE LAYERS, X=STRIPPED, Z=AUGER REFUSAL

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### ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT - LITTLE ROCK, ARKANSAS MATERIALS DIVISION MICHAEL BENSON, MATERIALS ENGINEER \*\*\* SOIL SURVEY / PAVEMENT SOUNDING TEST REPORT \*\*\* - 09/30/15 DATE SEQUENCE NO. - 11 JOB NUMBER - CA0801 MATERIAL CODE - SSRVPS FEDERAL AID NO.- TO BE ASSIGNED SPEC. YEAR - 2014 PURPOSE - SOIL SURVEY SAMPLE SUPPLIER ID. - 1 SPEC. REMARKS - NO SPECIFICATION CHECK COUNTY/STATE = 71 SUPPLIER NAME - STATE DISTRICT NO. - 08 NAME OF PROJECT - HWY.110-CLINTON (WIDENING) (S) PROJECT ENGINEER - NOT APPLICABLE PIT/QUARRY - ARKANSAS LOCATION - VAN BUREN COUNTY DATE SAMPLED - 07/15/15 SAMPLED BY - S.FAULKNER DATE RECEIVED - 07/16/15 SAMPLE FROM - TEST HOLE DATE TESTED - 09/29/15 MATERIAL DESC. - SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS - 20152102 - 20152103 - 20152104 - S259 - S260 - S261 LAB NUMBER SAMPLE ID TEST STATUS - INFORMATION ONLY - INFORMATION ONLY - INFORMATION ONLY - 579+00 - 579+00 579+00 STATION - 27RT - 38RT - 16RT LOCATION 0-5 - 3 Z - 0-5 DEPTH IN FEET - U-5 BR/GR \_ 0-5 \_ BR/GR \_ BR/GR MAT'L COLOR MAT'L TYPE 1 LATITUDE DEG-MIN-SEC - 35 37 45.20 - 35 37 45.20 - 35 37 45.20 LONGITUDE DEG-MIN-SEC = 92 27 26.70 92 27 26.60 92 27 26.50 % PASSING 2 IN. -1 1/2 IN. --\_ -3/4 IN. = 100 100 3/8 IN. - 98 -\_ 100 99 -\_ 95 NO 4 - 92 94 -\_ NO. 10 - 84 90 88 ...... \_ NO. 40 - 75 85 81 -\_ NO. 80 - 66 69 70 --53 NO. 200 - 59 59 - 24 - 34 - 26 LIQUID LIMIT PLASTICITY INDEX - 12 16 11 AASHTO SOIL - A-6(4) A-6(3) A-6(7) UNIFIED SOIL --18.1 % MOISTURE CONTENT -13.6 16.9 (IN) -ACHMSC 9.75W -7.25W \_ ..... ACHMBC (IN) 📼 3.0 - -2 AGG.BASE CRS CL-7 (IN) 6.0 5.0 -----

REMARKS - W=MULTIPLE LAYERS, X=STRIPPED, Z=AUGER REFUSAL

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### ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT - LITTLE ROCK, ARKANSAS MATERIALS DIVISION MICHAEL BENSON, MATERIALS ENGINEER \*\*\* SOIL SURVEY / PAVEMENT SOUNDING TEST REPORT \*\*\* DATE - 09/30/15 SEQUENCE NO. 🖘 12 JOB NUMBER - CA0801 MATERIAL CODE 🖃 SSRVPS FEDERAL AID NO.- TO BE ASSIGNED SPEC. YEAR = 2014 PURPOSE - SOIL SURVEY SAMPLE SUPPLIER ID. = 1 SPEC. REMARKS - NO SPECIFICATION CHECK COUNTY/STATE - 71 SUPPLIER NAME - STATE DISTRICT NO. - 08 NAME OF PROJECT - HWY.110-CLINTON (WIDENING) (S) PROJECT ENGINEER - NOT APPLICABLE PIT/QUARRY - ARKANSAS - VAN BUREN COUNTY LOCATION DATE SAMPLED - 07/15/15 SAMPLED BY - S.FAULKNER DATE RECEIVED = 07/16/15 SAMPLE FROM - TEST HOLE DATE TESTED - 09/29/15 MATERIAL DESC. - SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS - 20152105 - 20152106 - 20152107 LAB NUMBER \_ S263 - S264 SAMPLE ID - S262 - INFORMATION ONLY - INFORMATION ONLY 🗄 INFORMATION ONLY TEST STATUS - 587+00 - 587+00 - 587+00 STATION - 33LT <sup>-</sup> 18LT LOCATION - 06LT - 0-5 DEPTH IN FEET 0-5 0 - 5\_ 0-5 \_ BR/GR BR/GR - BR/GR MAT'L COLOR MAT'L TYPE \_ LATITUDE DEG-MIN-SEC - 35 37 51.40 - 35 37 51.30 - 35 37 51.20 LONGITUDE DEG-MIN-SEC - 92 27 32.00 92 27 32.10 92 27 32.20 % PASSING 2 IN.-1 1/2 IN. ----3/4 IN. - 100 -100 3/8 IN. - 99 \_ ---100 99 2 97 NO. 4 - 97 97 $\simeq$ -92 NO. 10 - 92 94 \_ ----NO. 40 - 86 88 88 -73 74 82 NO. 80 -\_ 60 NO. 200 - 58 72 - 40 - 33 - 34 LIQUID LIMIT PLASTICITY INDEX 22 - 15 17 1 AASHTO SOIL ..... - A-6(6) A-6(7) A-6(14) UNIFIED SOIL \_ =% MOISTURE CONTENT -23.1 22.0 24.6 ACHMSC (IN) -7.75W 6.OW <u>...</u> 1.00 1.00 ACHMBC (IN) -2.0 ------- --(IN) -22 AGG.BASE CRS CL-7 6.0 6.0 -

REMARKS - W=MULTIPLE LAYERS, X=STRIPPED, Z=AUGER REFUSAL

ARKANSAS STATE H	HIGHWAY AND TRANSPORTAT MATERIALS		- LITTLE ROCI	K, ARKANSAS
***	MICHAEL BENSON, MATEN SOIL SURVEY / PAVEMENT			
SPEC. REMARKS - NO S SUPPLIER NAME - STAT	01 E ASSIGNED SURVEY SAMPLE PECIFICATION CHECK E Y.110-CLINTON (WIDENING T APPLICABLE SAS		SEQUENCE NO. MATERIAL COD SPEC. YEAR SUPPLIER ID. COUNTY/STATE DISTRICT NO. DATE SAMPLED	E - SSRVPS - 2014 - 1 - 71 - 08
SAMPLED BY - S.FAULK SAMPLE FROM - TEST H MATERIAL DESC SOII		VEMENT SOUNDING	DATE RECEIVE DATE TESTED GS	
LAB NUMBER SAMPLE ID TEST STATUS STATION LOCATION DEPTH IN FEET MAT'L COLOR MAT'L TYPE LATITUDE DEG-MIN-S LONGITUDE DEG-MIN-S % PASSING 2 1 1/2 3/4 3/8 NO. NO. NO.	- 20152108 - S265 - INFORMATION ONLY - 595+00 - 18RT - 0-5 - BR/GR - EC - 35 37 58.90 EC - 92 27 36.20 IN IN IN IN 100 IN 99 4 - 95 10 - 89 40 - 85 80 - 74	- 20152109 - S266 - INFORMATIO - 595+00 - 29RT - 0-5 - BR/GR - - 35 37 5	- 201 - 226 - 526 - 595 - 41F - 595 - 41F - 0-5 - 8RC - 3 - 6 - 10 - 5 - 5 - 5 - 5 - 5 - 5 - 5 - 5 - 5 - 5	57 FORMATION ONLY 5+00 RT 5 DWN 35 37 59.00 92 27 36.00
ACHMBC	$ \begin{array}{rcrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	- 24 - 10 - A-4(1) - 25.8 - 6.25 	-	

### ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT - LITTLE ROCK, ARKANSAS MATERIALS DIVISION MICHAEL BENSON, MATERIALS ENGINEER \*\*\* SOIL SURVEY / PAVEMENT SOUNDING TEST REPORT \*\*\* - 09/30/15 SEQUENCE NO. - 14 DATE JOB NUMBER - CA0801 MATERIAL CODE - SSRVPS FEDERAL AID NO.- TO BE ASSIGNED SPEC. YEAR - 2014 SUPPLIER ID. = 1 PURPOSE - SOIL SURVEY SAMPLE SPEC. REMARKS - NO SPECIFICATION CHECK COUNTY/STATE = 71 SUPPLIER NAME - STATE DISTRICT NO. - 08 NAME OF PROJECT - HWY.110-CLINTON (WIDENING) (S) PROJECT ENGINEER - NOT APPLICABLE PIT/QUARRY - ARKANSAS - VAN BUREN COUNTY DATE SAMPLED - 07/15/15 LOCATION SAMPLED BY - S.FAULKNER DATE RECEIVED - 07/16/15 SAMPLE FROM - TEST HOLE DATE TESTED - 09/29/15 MATERIAL DESC. - SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS - 20152111 - 20152112 - 20152113 2000 - \$269 - \$270 LAB NUMBER - S269 - S268 - S270 SAMPLE ID TEST STATUS - INFORMATION ONLY - INFORMATION ONLY - INFORMATION ONLY - INFURIALIS. - 603+00 - 603+0 - 25LT 603+00 - 603+00 STATION - 17LT LOCATION - 07LT 0-5 - 0-5 - 0-5 DEPTH IN FEET U-5 BROWN BROWN - BR/GR MAT'L COLOR MAT'L TYPE -LATITUDE DEG-MIN-SEC - 35 38 6.30 = 35 38 6.30 = 35 38 6.30 92 27 37.90 92 27 38.00 LONGITUDE DEG-MIN-SEC - 92 27 37.80 2 IN. -% PASSING $1 \ 1/2 \ IN. -$ 3/4 IN. -100 -3/8 IN. - 100 99 -NO. 4 - 98 95 100 2 NO. 10 - 94 89 99 -82 95 NO. 40 - 90 -- 63 NO. 80 - 74 - 83 NO. 200 - 61 49 76 - 52 - 22 LIOUID LIMIT - 29 PLASTICITY INDEX 08 29 - 14 ..... -— A-6(6) AASHTO SOIL A-4(1) A-7-6(22) UNIFIED SOIL $\approx 2$ -33.1 20.7 % MOISTURE CONTENT -20.4 7.OW ACHMSC (IN) -8.75W \_ - -(IN) --2002 \_ ACHMBC 2.5 ---------\_ 22 AGG.BASE CRS CL-7 (IN) 7.0 10.0 -

REMARKS - W=MULTIPLE LAYERS, X=STRIPPED, Z=AUGER REFUSAL

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ARKANSAS STATE	HIGHWAY	AND TRANSPORTATI MATERIALS 1			LITTLE	ROCK, ARK	NSAS
**		EL BENSON, MATER JRVEY / PAVEMENT			SPORT *	* *	
SPEC. REMARKS - NO SUPPLIER NAME - STA NAME OF PROJECT - H PROJECT ENGINEER - N	801 BE ASSIGI L SURVEY SPECIFICA TE WY.110-C OT APPLIO	SAMPLE ATION CHECK LINTON (WIDENING	) (S)	MA SP SU CO	TERIAL EC. YEA PPLIER UNTY/SI	NO 19 CODE - 59 AR - 20 ID 1 CATE - 71 NO 08	SRVPS )14 L
PIT/QUARRY - ARKAN LOCATION - VAN B SAMPLED BY - S.FAUL SAMPLE FROM - TEST MATERIAL DESC SOI	UREN COU KNER HOLE		ement s	DI DI	ATE RECI	PLED - 07 EIVED - 07 FED - 09	7/16/15
SAMPLE ID TEST STATUS STATION LOCATION DEPTH IN FEET MAT'L COLOR MAT'L TYPE LATITUDE DEG-MIN- LONGITUDE DEG-MIN-	- 2 - 2 - 0 - 0 - 0 - 1 - SEC - SEC - SEC -	INFORMATION ONLY 511+00 06RT 0-4.5Z 3R/GR 35 38 13.80	- S272 - INF( - 611- - 20R2 - 0-5 - BR/( - 39	2 DRMATION ( +00 F 5 3R 5 38 13.	DNLY - - - - - - - - - - - - 80 -	S273 INFORMAT: 611+00 31RT 0-5 BR/GR 35 38	13.90
3/4 3/8 NO. NO. NO.	IN IN IN 4 - 10 - 40 - 80 - 200 -	99 90 74	- - - - 98 - 99 - 99 - 87 - 69 - 50	3 5 7 9		100 98 95 81 57 40	
LIQUID LIMIT PLASTICITY INDEX AASHTO SOIL UNIFIED SOIL % MOISTURE CONTENT	- - - -	22 08 A-4(0) 9.2			2	25 11 A-6(1) 17.8	
ACHMSC ACHMSC ACHMSC AGG.BASE CRS CL-7	(IN) - (IN) - (IN) - (IN) - - - - - - -	2.5 3.0X 6.0 9.0		.75W - .0			

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ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT - LITTLE ROCK, ARKANSAS MATERIALS DIVISION MICHAEL BENSON, MATERIALS ENGINEER						
MICHAEL BENSON, MATERI *** SOIL SURVEY / PAVEMENT						
DATE-09/30/15SEQUENCE NO16JOB NUMBER-CA0801MATERIAL CODE-SSRVPSFEDERAL AID NOTO BE ASSIGNEDSPEC. YEAR-2014PURPOSE-SOIL SURVEY SAMPLESUPPLIER ID1SPEC. REMARKS-NO SPECIFICATION CHECKCOUNTY/STATE-71SUPPLIER NAME-STATEDISTRICT NO08NAME OF PROJECT-HWY.110-CLINTON (WIDENING) (S)-08PROJECT ENGINEER-NOT APPLICABLE						
PIT/QUARRY - ARKANSAS LOCATION - VAN BUREN COUNTY SAMPLED BY - S.FAULKNER SAMPLE FROM - TEST HOLE MATERIAL DESC SOIL SURVEY - R VALUE- PAVE	DATE SAMPLED - 07/15/15 DATE RECEIVED - 07/16/15 DATE TESTED - 09/29/15 EMENT SOUNDINGS					
DAMILL IDDEFTTEST STATUS-STATION-STATION-LOCATION-06LTDEPTH IN FEET-0-4.5ZMAT'L COLOR-BR/GRMAT'L TYPELATITUDE DEG-MIN-SEC-1000000000000000000000000000000000000	<pre>S275 - S276 INFORMATION ONLY - INFORMATION ONLY G19+00 - G19+00 J9LT - 26LT G0-5 - 0-5 BR/GR - BROWN S35 38 20.50 - 35 38 20.50</pre>					
NO. 80 - 68 NO. 200 - 56 LIQUID LIMIT - 30 PLASTICITY INDEX - 16 AASHTO SOIL - A-6(6) UNIFIED SOIL - % MOISTURE CONTENT - 19.5	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$					
ACHMSC (IN) - 9.75W AHCMBC (IN) - 2.25 AGG.BASE CRS CL-7 (IN) - 5.0 - - - - -	- 6.0W - 6.0   					

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- 2
- AASHTO TESTS : T24 T88 T89 T90 T265
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### ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT - LITTLE ROCK, ARKANSAS MATERIALS DIVISION MICHAEL BENSON, MATERIALS ENGINEER \*\*\* SOIL SURVEY / PAVEMENT SOUNDING TEST REPORT \*\*\* SEQUENCE NO. - 17 DATE - 09/30/15 - CA0801 JOB NUMBER MATERIAL CODE - SSRVPS FEDERAL AID NO.- TO BE ASSIGNED SPEC. YEAR - 2014 SUPPLIER ID. - 1 PURPOSE - SOIL SURVEY SAMPLE SPEC. REMARKS - NO SPECIFICATION CHECK COUNTY/STATE - 71 SUPPLIER NAME - STATE DISTRICT NO. - 08 NAME OF PROJECT - HWY.110-CLINTON (WIDENING) (S) PROJECT ENGINEER - NOT APPLICABLE PIT/QUARRY - ARKANSAS DATE SAMPLED - 07/15/15 - VAN BUREN COUNTY LOCATION SAMPLED BY - S.FAULKNER DATE RECEIVED - 07/16/15 DATE TESTED - 09/29/15 SAMPLE FROM - TEST HOLE MATERIAL DESC. - SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS 20152121 LAB NUMBER - 20152120 - 20152122 - S277 S278 - S279 SAMPLE ID - INFORMATION ONLY - INFORMATION ONLY - INFORMATION ONLY TEST STATUS - 627+00 - 627+00 - 627+00 STATION -36RT - 28RT - 19RT LOCATION - 0-5 0-5 DEPTH IN FEET - 0-2Z BR/GR BR/GR - GRAY MAT'L COLOR MAT'L TYPE \_ -LATITUDE DEG-MIN-SEC - 35 38 28.60 = 35 38 28.50 = 35 38 28.50 92 27 40.70 92 27 40.70 LONGITUDE DEG-MIN-SEC - 92 27 40.80 2 % PASSING IN. -1 1/2 IN. -- 100 3/4 IN. - 100 $\rightarrow$ 98 3/8 IN. - 99 ÷. 96 100 NO. 4 -94 -92 NO. 10 - 87 100 80 - 86 NO. 40 -100 NO. 80 - 48 72 100 100 NO. 200 - 28 57 91 51 ND - 24 ----LIOUID LIMIT PLASTICITY INDEX 27 -- NP 10 - -- A-4(3) A-2-4(0) A-7-6(27) AASHTO SOIL \_ UNIFIED SOIL 19.2 17.0 % MOISTURE CONTENT -12.0 6.25W (IN) -8.OW ------ACHMSC (IN) -3.0 ---------ACHMBC AGG.BASE CRS CL-7 (IN) -8.0 4.0 ---

REMARKS - W=MULTIPLE LAYERS, X=STRIPPED, Z=AUGER REFUSAL

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT - LITTLE ROCK, ARKANSAS MATERIALS DIVISION MICHAEL BENSON, MATERIALS ENGINEER \*\*\* SOIL SURVEY / PAVEMENT SOUNDING TEST REPORT \*\*\* SEQUENCE NO. - 18 - 09/30/15 DATE JOB NUMBER - CA0801 MATERIAL CODE - SSRVPS FEDERAL AID NO. - TO BE ASSIGNED SPEC. YEAR - 2014 PURPOSE - SOIL SURVEY SAMPLE SUPPLIER ID. - 1 SPEC. REMARKS - NO SPECIFICATION CHECK COUNTY/STATE - 71 SUPPLIER NAME - STATE DISTRICT NO. - 08 NAME OF PROJECT - HWY.110-CLINTON (WIDENING) (S) PROJECT ENGINEER - NOT APPLICABLE PIT/QUARRY - ARKANSAS - VAN BUREN COUNTY DATE SAMPLED - 07/15/15 LOCATION DATE RECEIVED - 07/16/15 SAMPLED BY - S.FAULKNER DATE TESTED - 09/29/15 SAMPLE FROM - TEST HOLE MATERIAL DESC. - SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS - 20152123 - 20152124 - 20152125 - 5280 - 5281 - 5282 LAB NUMBER - S280 SAMPLE ID \_ S281 - S282 - INFORMATION ONLY - INFORMATION ONLY - INFORMATION ONLY TEST STATUS - 635+00 - 635+00 - 635+0 - 06LT - 19LT - 26LT - 635+00 STATION LOCATION 0-5 BR/GR - 0-5 DEPTH IN FEET - 0-5 -BROWN - BROWN MAT'L COLOR MAT'L TYPE LATITUDE DEG-MIN-SEC - 35 38 37.00 - 35 38 37.00 - 35 38 37.00 92 27 38.50 92 27 38.40 92 27 38,30 LONGITUDE DEG-MIN-SEC -2 % PASSING IN -1 1/2 IN. -- 100 -100 3/4 IN. - 100 ---3/8 IN. - 99 99 96 --90 93 95 NO. 4 ---NO. 10 - 88 89 85 --81 80 NO. 40 - 81 -100 - 65 NO. 80 - 73 71 NO. 200 - 53 55 45 - 22 - 24 LIOUID LIMIT 21 -PLASTICITY INDEX 10 - 07  $\rightarrow$ 09 - A-4(2) - A-4(1) A-4(1) AASHTO SOIL UNIFIED SOIL \_ 12 17.7 13.8 % MOISTURE CONTENT -12.1 (IN) -9.25W \_ 7.OW --ACHMSC (IN) ------2.25 - -ACHMBC AGG.BASE CRS CL-7 (IN) -5.0 7.0

REMARKS - W=MULTIPLE LAYERS, X=STRIPPED, Z=AUGER REFUSAL

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ARKANSAS STATE	HIGHWAY	AND TRANSPORTATI MATERIALS			- LITTLE	ROCK,	ARKANSAS
**		AEL BENSON, MATER SURVEY / PAVEMENT				* * *	
*** SOIL SURVEY / PAVEMENT SOUNDING TEST REPORT ***DATE- 09/30/15SEQUENCE NO 19JOB NUMBER- CA0801MATERIAL CODE - SSRVPSFEDERAL AID NOTO BE ASSIGNEDSPEC. YEAR - 2014PURPOSE- SOIL SURVEY SAMPLESUPPLIER ID 1SPEC. REMARKS- NO SPECIFICATION CHECKCOUNTY/STATE - 71SUPPLIER NAME- STATEDISTRICT NO 08NAME OF PROJECT- HWY.110-CLINTON (WIDENING) (S)PROJECT ENGINEER - NOT APPLICABLEPIT/QUARRY- ARKANSAS- ARKANSAS							SSRVPS 2014 1 71
LOCATION - VAN B SAMPLED BY - S.FAUL		ONTI			DATE RE	CEIVED	- 07/16/15
SAMPLE FROM - TEST MATERIAL DESC SOI		Y - R VALUE- PAV	EME	NT SOUNDING		STED	- 09/29/15
SAMPLE ID TEST STATUS STATION LOCATION DEPTH IN FEET MAT'L COLOR MAT'L TYPE LATITUDE DEG-MIN- LONGITUDE DEG-MIN- % PASSING 2 1 1/2 3/4 3/8 NO. NO. NO.	- - - - - - - - - - - - - - - - - - -	INFORMATION ONLY 643+00 19RT 0-4Z BROWN 35 38 44.30 92 27 36.60 100 99 96 91 86		S284 INFORMATIC 643+00 28RT 0-2.5Z BR/GR 35 38 4	ON ONLY - - - - - - - - - - - - - - - - - - -	S285 INFOR 643+0 36RT 0-2.5 BROWN 35	MATION ONLY 0 Z
LIQUID LIMIT PLASTICITY INDEX AASHTO SOIL UNIFIED SOIL % MOISTURE CONTENT ACHMSC ACHMBC AGG.BASE CRS CL-7	- - (IN) - (IN) - (IN) - - -	20 05 A-4(0) 10.0 8.0W 3.0 9.0		ND NP A-2-4(0) 6.5 6.0W  11.0		ND NP A-2- 11	4(0) .9
	- - 					-	

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT - LITTLE ROCK, ARKANSAS MATERIALS DIVISION MICHAEL BENSON, MATERIALS ENGINEER \*\*\* SOIL SURVEY / PAVEMENT SOUNDING TEST REPORT \*\*\* SEQUENCE NO. - 20 - 09/30/15 DATE JOB NUMBER - CA0801 MATERIAL CODE - SSRVPS FEDERAL AID NO. - TO BE ASSIGNED SPEC. YEAR - 2014 PURPOSE - SOIL SURVEY SAMPLE SUPPLIER ID. - 1 SPEC. REMARKS - NO SPECIFICATION CHECK COUNTY/STATE - 71 SUPPLIER NAME - STATE DISTRICT NO. - 08 NAME OF PROJECT - HWY.110-CLINTON (WIDENING) (S) PROJECT ENGINEER - NOT APPLICABLE PIT/OUARRY - ARKANSAS - VAN BUREN COUNTY DATE SAMPLED - 07/15/15 LOCATION SAMPLED BY - S.FAULKNER DATE RECEIVED - 07/16/15 SAMPLE FROM - TEST HOLE DATE TESTED - 09/29/15 MATERIAL DESC. - SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS LAB NUMBER - 20152129 - 20152130 - 20152131 - S286 - S287 - S288 SAMPLE ID - 5286 - INFORMATION ONLY - INFORMATION ONLY - INFORMATION ONLY TEST STATUS - 651+00 - 651+00 - 651+00 STATION - 32LT - 18LT - 08LT LOCATION - 0-5 0-5 DEPTH IN FEET - 0-5 GRAY - BROWN - GRAY MAT'L COLOR MAT'L TYPE --LATITUDE DEG-MIN-SEC - 35 38 52.40 - 35 38 52.40 - 35 38 52.50 LONGITUDE DEG-MIN-SEC - 92 27 35.70 92 27 35.90 92 27 36.00 2 IN. -% PASSING 1 1/2 IN. --3/4 IN. - 100 5**4**6 100 100 99 3/8 IN. - 99 -\_ NO. 4 - 96 99 97 \_ ÷. 97 NO. 10 - 93 92 \_ -85 NO. 40 - 89 94 \_ -- 81 NO. 80 - 71 70 NO. 200 - 46 62 52 - 22 - ND LIQUID LIMIT - 17 PLASTICITY INDEX - 03 NP - 09 = A-4(3) - A - 4(0)A - 4(0)AASHTO SOIL UNIFIED SOIL \_ \_ -10.1 17.2 % MOISTURE CONTENT -15.2 2.0 - 7.OW (IN) -140 -ACHMSC -------(IN) -2.0X ACHMSC (IN) -4.5 ACHMSC (IN) \_ -- 4 ACHMBC 1.75 -AGG.BASE CRS CL-7 (IN) 7.0 7.0 - - $\sim -1$ -1 2 -

REMARKS - W=MULTIPLE LAYERS, X=STRIPPED, Z=AUGER REFUSAL

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ARKANSAS STATE		AND TRANSPORTATI MATERIALS 1	DIV	ISION		ROCK,	ARKANSAS	
**		IAEL BENSON, MATER SURVEY / PAVEMENT				* * *		
DATE - 09/30/15 JOB NUMBER - CA0801 FEDERAL AID NO TO BE ASSIGNED PURPOSE - SOIL SURVEY SAMPLE SPEC. REMARKS - NO SPECIFICATION CHECK SUPPLIER NAME - STATE NAME OF PROJECT - HWY.110-CLINTON (WIDENING) (S) PROJECT ENGINEER - NOT APPLICABLE						SEQUENCE NO 21 MATERIAL CODE - SSRVPS SPEC. YEAR - 2014 SUPPLIER ID 1 COUNTY/STATE - 71 DISTRICT NO 08		
PIT/QUARRY - ARKAN LOCATION - VAN B SAMPLED BY - S.FAUI SAMPLE FROM - TEST MATERIAL DESC SOJ	UREN CO KNER HOLE		EME	NT SOUNDIN	DATE RE DATE TE	CEIVED	- 07/15/15 - 07/16/15 - 09/29/15	
						00150	1 7 4	
SAMPLE ID TEST STATUS STATION LOCATION	-	INFORMATION ONLY 659+00 18RT 0-5	-	S290	ON ONLY	S291	MATION ONLY	
MAT'L COLOR	-	BROWN	_	BR/GR		BROWN	ſ	
MAT'L TYPE LATITUDE DEG-MIN- LONGITUDE DEG-MIN-	- SEC - SEC -	35 39 .20 92 27 34.30	-	35 39 92 27	.20 34.10		39 .10 27 34.00	
3/4 3/8 NO. NO. NO.	IN IN IN IN 4 - 10 - 40 - 80 - 200 -	99 96 91		100 99 96 88 80 63 46		100 97 93 88 81 63 47		
LIQUID LIMIT PLASTICITY INDEX AASHTO SOIL UNIFIED SOIL	- - -	25 10 A-4(3)		20 05 A-4(0) 15.9	-	- 22 - 07 - A-4	(0)	
% MOISTURE CONTENT		20.3				20		
ACHMSC ACHMBC AGG.BASE CRS CL-7	(IN) - (IN) - (IN) - - - -	9.5 2.5 4.0		6.25W  6.0				
	-		07) (12)			_		
	-					-		
	-		05					

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ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT MATERIALS DIVISION	- LITTLE ROCK, ARKANSAS		
MICHAEL BENSON, MATERIALS ENGINEER *** SOIL SURVEY / PAVEMENT SOUNDING TEST	REPORT ***		
JOB NUMBER - CA0801 FEDERAL AID NO TO BE ASSIGNED PURPOSE - SOIL SURVEY SAMPLE SPEC. REMARKS - NO SPECIFICATION CHECK SUPPLIER NAME - STATE NAME OF PROJECT - HWY.110-CLINTON (WIDENING) (S) PROJECT ENGINEER - NOT APPLICABLE	SEQUENCE NO 22 MATERIAL CODE - SSRVPS SPEC. YEAR - 2014 SUPPLIER ID 1 COUNTY/STATE - 71 DISTRICT NO 08		
SAMPLED BY - S.FAULKNER	DATE SAMPLED - 07/15/15 DATE RECEIVED - 07/16/15 DATE TESTED - 09/29/15 S		
LAB NUMBER- 20152135- 20152136SAMPLE ID- S292- S293TEST STATUS- INFORMATION ONLY- INFORMATIONSTATION- 667+00- 667+00LOCATION- 09LT- 18LTDEPTH IN FEET- 0-5- 0-5MAT'L COLOR- BR/GR- BR/GRMAT'L TYPE	- S294 NONLY - INFORMATION ONLY - 667+00 - 26LT - 0-5 - BROWN -		
LATITUDE DEG-MIN-SEC - 35 39 7.80 - 35 39 LONGITUDE DEG-MIN-SEC - 92 27 34.70 92 27 3			
<pre>% PASSING 2 IN</pre>	- - - 99 - 97 - 83 - 52 44		
LIQUID LIMIT-20-21PLASTICITY INDEX-06-07AASHTO SOILA-4(0)-UNIFIED SOIL% MOISTURE CONTENT-15.614.1	- 32 - 16 - A-6(3) - 15.9		
ACHMSC (IN) - 8.75W - 6.5W ACHMBC (IN) - 2.0 AGG.BASE CRS CL-7 (IN) - 6.0 - 6.0	- (1998) - (1998) - (1998) - (1998) - (1999) - (1999) - (1998) - (		

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ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT - LITTLE ROCK, ARKANSAS MATERIALS DIVISION MICHAEL BENSON, MATERIALS ENGINEER \*\*\* SOIL SURVEY / PAVEMENT SOUNDING TEST REPORT \*\*\* SEQUENCE NO. - 23 - 09/30/15 DATE JOB NUMBER - CA0801 MATERIAL CODE - SSRVPS FEDERAL AID NO.- TO BE ASSIGNED SPEC. YEAR - 2014 PURPOSE - SOIL SURVEY SAMPLE SUPPLIER ID. - 1 SPEC. REMARKS - NO SPECIFICATION CHECK COUNTY/STATE - 71 SUPPLIER NAME - STATE DISTRICT NO. - 08 NAME OF PROJECT - HWY.110-CLINTON (WIDENING) (S) PROJECT ENGINEER - NOT APPLICABLE PIT/OUARRY - ARKANSAS - VAN BUREN COUNTY DATE SAMPLED = 07/15/15 LOCATION SAMPLED BY - S.FAULKNER DATE RECEIVED = 07/16/15 DATE TESTED - 09/29/15 SAMPLE FROM - TEST HOLE MATERIAL DESC. - SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS - 20152138 - 20152139 - 20152140 LAB NUMBER - S296 SAMPLE ID - S295 - S297 - INFORMATION ONLY - INFORMATION ONLY - INFORMATION ONLY TEST STATUS - INFORMATION - 675+0 - 675+00 - 675+0 - 38RT - 675+00 - 675+00 STATION - 30RT - 18RT LOCATION 0-3.5Z \_ DEPTH IN FEET = 0-5 \_ BROWN 0-5 BROWN - BROWN MAT'L COLOR MAT'L TYPE -LATITUDE DEG-MIN-SEC - 35 39 14.70 - 35 39 14.80 - 35 39 14.90 92 27 39.60 92 27 39.60 92 27 39.50 LONGITUDE DEG-MIN-SEC -2 IN. -% PASSING -1 1/2 IN. --- 100 \_ 100 3/4 IN. -100 -93 3/8 IN. - 100 99 -\_ 94 89 NO. 4 - 98 -\_ NO. 10 - 92 91 83 \_ -- 86 76 NO. 40 -85 -- 63 42 NO. 80 - 64 -NO. 200 - 51 49 25 - ND - 22 LIQUID LIMIT - 22 PLASTICITY INDEX 07 NP- 08 -5 \_ - A-4(1) AASHTO SOIL A-2-4(0) - A-4(1) -UNIFIED SOIL -22.2 12.6 % MOISTURE CONTENT -16.4 7.75W -11111 ACHMSC (IN) -\_ 6.25W (IN) -3.5 -\_ -----ACHMBC -AGG.BASE CRS CL-7 (IN) -- -4.0 11.0

REMARKS - W=MULTIPLE LAYERS, X=STRIPPED, Z=AUGER REFUSAL

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ARKANSAS STATE H	HIGHWAY AND T	RANSPORTATION MATERIALS DI		- LITTLE	ROCK, ARKANSAS
***		NSON, MATERIA / PAVEMENT SC		REPORT **	**
DATE - 09/3 JOB NUMBER - CA08 FEDERAL AID NO TO B PURPOSE - SOIL SPEC. REMARKS - NO S SUPPLIER NAME - STAT NAME OF PROJECT - HW PROJECT ENGINEER - NO	(S)	SEQUENCE NO 24 MATERIAL CODE - SSRVPS SPEC. YEAR - 2014 SUPPLIER ID 1 COUNTY/STATE - 71 DISTRICT NO 08			
PIT/QUARRY - ARKANS LOCATION - VAN BU SAMPLED BY - S.FAULK SAMPLE FROM - TEST H MATERIAL DESC SOII	IREN COUNTY KNER IOLE	VALUE - PAVEM	ENT SOUNDING	DATE RECH DATE TEST	PLED - 07/15/15 SIVED - 07/16/15 FED - 09/29/15
SAMPLE ID TEST STATUS STATION LOCATION DEPTH IN FEET MAT'L COLOR MAT'L TYPE LATITUDE DEG-MIN-S LONGITUDE DEG-MIN-S % PASSING 2 1 1/2 3/4 3/8 NO. NO.	- S298 - INFORM - 683+00 - 06LT - 0-5 - RD/BR - - EC - 35 EC - 92 IN IN IN IN 100 IN 99 4 - 95 10 - 90	MATION ONLY	S299 INFORMATIO 683+00 17LT 0-5 RD/BR 35 39 2 92 27 100 99 94 88		S300 INFORMATION ONLY 683+00 30LT 0-5 RD/BR 35 39 20.10 92 27 47.20
	$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$		82 54 40 21 07 A-4(0) 11.2		91 63 55 27 11 A-6(3) 22.3
ACHMSC ACHMBC	(IN) - 9.0 (IN) - 2.0 (IN) - 7.0	w	7.0W 4.0		

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ARKANSAS STATE	HIGHWAY	AND TRANSPORTATI		- LITTLE	ROCK, ARKANSAS		
MICHAEL BENSON, MATERIALS ENGINEER *** SOIL SURVEY / PAVEMENT SOUNDING TEST REPORT ***							
DATE-09/30/15SEQUENCE NO25JOB NUMBER-CA0801MATERIAL CODE -SSRVPSFEDERAL AID NOTO BE ASSIGNEDSPEC. YEAR -2014PURPOSE-SOIL SURVEY SAMPLESUPPLIER ID1SPEC. REMARKS -NO SPECIFICATION CHECKCOUNTY/STATE -71SUPPLIER NAME -STATEDISTRICT NO08NAME OF PROJECT-HWY.110-CLINTON (WIDENING) (S)-PROJECT ENGINEER-NOT APPLICABLE							
PIT/QUARRY - ARKAN LOCATION - VAN E SAMPLED BY - S.FAUI SAMPLE FROM - TEST MATERIAL DESC SO	UREN CO JKNER HOLE		'EMENT SOUNDIN	DATE RECI DATE TEST	PLED - 07/15/15 EIVED - 07/16/15 FED - 09/29/15		
		20152144			20152146		
SAMPLE ID TEST STATUS STATION LOCATION DEPTH IN FEET MAT'L COLOR	- - -	S301 INFORMATION ONLY 691+00 19RT	_ S302	- ON ONLY - -	S303		
MAT'L TYPE LATITUDE DEG-MIN-			- 35 39	- 25.20	35 39 25.30		
LONGITUDE DEG-MIN-	SEC -	92 27 53.40	92 27				
3/4 3/8 NO. NO. NO.	IN IN IN 4 - 10 - 40 - 80 -	96 81 80	- 100 99 96 92 87 - 87 - 68 58		100 90 85 77 67 58		
LIQUID LIMIT	)e)	28	- 28	-	33 16		
PLASTICITY INDEX AASHTO SOIL UNIFIED SOIL	- - 	11 A-6(4)	- 13 - A-6(5) -		A-6(6)		
% MOISTURE CONTENT	-	22.9	- 20.6		18.9		
ACHMSC ACHMBC AGG.BASE CRS CL-7	(IN) - (IN) - (IN) - - -	8.5W 3.0 5.0	- 6.0W  - 4.0 -				
	20 20		2-43 1997	-			
	-			80 80			
REMARKS 👻 W=MULTIP	LE LAYE	RS, X=STRIPPED, Z=	-AUGER REFUSAL	ı			

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ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT - LITTLE ROCK, ARKANSAS MATERIALS DIVISION MICHAEL BENSON, MATERIALS ENGINEER \*\*\* SOIL SURVEY / PAVEMENT SOUNDING TEST REPORT \*\*\* SEQUENCE NO. 😑 26 - 09/30/15 DATE JOB NUMBER - CA0801 MATERIAL CODE 🖃 SSRVPS FEDERAL AID NO.- TO BE ASSIGNED SPEC. YEAR = 2014 PURPOSE - SOIL SURVEY SAMPLE SUPPLIER ID. 📼 1 SPEC. REMARKS - NO SPECIFICATION CHECK COUNTY/STATE - 71 SUPPLIER NAME - STATE DISTRICT NO. - 08 NAME OF PROJECT - HWY.110-CLINTON (WIDENING) (S) PROJECT ENGINEER - NOT APPLICABLE PIT/QUARRY - ARKANSAS DATE SAMPLED 🗧 07/15/15 LOCATION - VAN BUREN COUNTY SAMPLED BY - S.FAULKNER DATE RECEIVED - 07/16/15 DATE TESTED = 09/29/15 SAMPLE FROM - TEST HOLE MATERIAL DESC. - SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS - 20152147 - 20152148 - 20152149 LAB NUMBER - S305 SAMPLE ID - S304 - S306 - INFORMATION ONLY - INFORMATION ONLY - INFORMATION ONLY TEST STATUS - 700+00 700+00 - 700+00 STATION = 17LT -26LT LOCATION - 06LT 0-5 -DEPTH IN FEET - 0-5 0-5 BROWN \_ BR/GR - BR/GR MAT'L COLOR MAT'L TYPE --LATITUDE DEG-MIN-SEC - 35 39 27.90 - 35 39 27.80 - 35 39 27.70 92 28 4.50 92 28 4.50 92 28 4.50 LONGITUDE DEG-MIN-SEC -2 % PASSING IN. --1 1/2 IN. ----100 3/4 IN. - 100 - 100 -99 3/8 IN. - 98 --95 96 NO. 4 -91 -NO. 10 - 84 90 90  $\approx 1$ -NO. 40 - 78 - 84 86 - 62 - 83 NO. 80 - 68 NO. 200 - 51 45 48 - 23 - 23 LIOUID LIMIT \_ 27 PLASTICITY INDEX ÷. 09 - 11 10 -- A-4(1) A-4(1) AASHTO SOIL - A-6(3) --UNIFIED SOIL --16.3 14.1 % MOISTURE CONTENT -18.2 9.5W 6.5W -ACHMSC (IN) --100 (IN) -1.5 \_ -- -ACHMBC -AGG.BASE CRS CL-7 (IN) 5.0 2.2 5.0 -\_ \_ \_

REMARKS 😁 W=MULTIPLE LAYERS, X=STRIPPED, Z=AUGER REFUSAL

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ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT - LITTLE ROCK, ARKANSAS MATERIALS DIVISION MICHAEL BENSON, MATERIALS ENGINEER \*\*\* SOIL SURVEY / PAVEMENT SOUNDING TEST REPORT \*\*\* SEQUENCE NO. - 27 - 09/30/15 DATE JOB NUMBER - CA0801 MATERIAL CODE - SSRVPS FEDERAL AID NO.- TO BE ASSIGNED SPEC. YEAR - 2014 SUPPLIER ID. - 1 PURPOSE - SOIL SURVEY SAMPLE SPEC. REMARKS - NO SPECIFICATION CHECK COUNTY/STATE - 71 SUPPLIER NAME - STATE DISTRICT NO. - 08 NAME OF PROJECT - HWY.110-CLINTON (WIDENING) (S) PROJECT ENGINEER - NOT APPLICABLE PIT/QUARRY - ARKANSAS - VAN BUREN COUNTY DATE SAMPLED - 07/15/15 LOCATION SAMPLED BY - S.FAULKNER DATE RECEIVED - 07/16/15 DATE TESTED - 09/29/15 SAMPLE FROM - TEST HOLE MATERIAL DESC. - SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS - 20152150 - 20152151 - 20152152 - \$307 - \$308 LAB NUMBER - S309 - S307 SAMPLE ID TEST STATUS - INFORMATION ONLY - INFORMATION ONLY - INFORMATION ONLY - 707+00 - 707+00 - 715+00 - 06RT - 18RT - 07LT STATION 07L' 0-5 LOCATION 18RT 0-3.5Z BROWN DEPTH IN FEET - 0-4Z BR/GR \_ BROWN - BROWN MAT'L COLOR MAT'L TYPE LATITUDE DEG-MIN-SEC - 35 39 26.70 - 35 39 28.70 - 35 39 33.00 92 28 12.80 92 28 20.40 LONGITUDE DEG-MIN-SEC - 92 28 12.80 2 % PASSING IN. -1 1/2 IN. -- 100 -3/4 IN. -• -99 100 3/8 IN. - 100 97 99 NO. 4 - 99 -94 96 97 NO. 10 --- 91 91 93 NO. 40 -50 - 61 73 NO. 80 -NO. 200 - 31 32 54 - ND - 20 LIQUID LIMIT \_ ND PLASTICITY INDEX 07 -NP - NP - A-2-4(0) - A-2-4(0) A-4(1) AASHTO SOIL -UNIFIED SOIL  $\sim$ 7.5 13.3 % MOISTURE CONTENT -7.9 (IN) -9.5W - 6.OW \_ 9.0W ACHMSC  $(\Xi)$ -----\_ 2.25 (IN) -2.0 ACHMBC AGG.BASE CRS CL-7 (IN) -1000 5.0 5.0 5.0 -122 -

REMARKS - W=MULTIPLE LAYERS, X=STRIPPED, Z=AUGER REFUSAL

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ARKANSAS STATE HIGHWAY AND TRANSPORTATIO MATERIALS D					
MICHAEL BENSON, MATERI *** SOIL SURVEY / PAVEMENT					
DATE - 09/30/15 SEQUENCE NO 28 JOB NUMBER - CA0801 MATERIAL CODE - SSR FEDERAL AID NO TO BE ASSIGNED SPEC. YEAR - 201 PURPOSE - SOIL SURVEY SAMPLE SUPPLIER ID 1 SPEC. REMARKS - NO SPECIFICATION CHECK COUNTY/STATE - 71 SUPPLIER NAME - STATE DISTRICT NO 08 NAME OF PROJECT - HWY.110-CLINTON (WIDENING) (S) PROJECT ENGINEER - NOT APPLICABLE PIT/QUARRY - ARKANSAS					
LOCATION - VAN BUREN COUNTY SAMPLED BY - S.FAULKNER	DATE SAMPLED - 07/15/15 DATE RECEIVED - 07/16/15				
SAMPLE FROM - TEST HOLE MATERIAL DESC SOIL SURVEY - R VALUE- PAVE	DATE TESTED - 09/29/15 EMENT SOUNDINGS				
SAMPLE ID - S310 TEST STATUS - INFORMATION ONLY	- 20152154 - 20152155 S311 - S312 - INFORMATION ONLY - INFORMATION ONLY - 715+00 - 723+00 - 29LT - 17 RT 0-5 BR/GR - 0-5 BR/GR - 35 39 32.80 - 35 39 38.90 92 28 20.60 92 28 26.10 - 100 - 99 98 - 98 - 96 - 100 - 94 - 94 - 74 - 75 58 - 57				
LIQUID LIMIT - 25 PLASTICITY INDEX - 12 AASHTO SOIL - A-6(3) UNIFIED SOIL - % MOISTURE CONTENT - 20.1 ACHMSC (IN) - 7.0W ACHMBC (IN) AGG.BASE CRS CL-7 (IN) - 3.0	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$				

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ARKANSAS STATE HIGHWAY AND TRANSPORTATIO MATERIALS D	
MICHAEL BENSON, MATERI *** SOIL SURVEY / PAVEMENT	
DATE - 09/30/15 JOB NUMBER - CA0801 FEDERAL AID NO TO BE ASSIGNED PURPOSE - SOIL SURVEY SAMPLE SPEC. REMARKS - NO SPECIFICATION CHECK SUPPLIER NAME - STATE NAME OF PROJECT - HWY.110-CLINTON (WIDENING) PROJECT ENGINEER - NOT APPLICABLE PIT/QUARRY - ARKANSAS	SEQUENCE NO 29 MATERIAL CODE - SSRVPS SPEC. YEAR - 2014 SUPPLIER ID 1 COUNTY/STATE - 71 DISTRICT NO 08 (S)
LOCATION - VAN BUREN COUNTY SAMPLED BY - S.FAULKNER SAMPLE FROM - TEST HOLE MATERIAL DESC SOIL SURVEY - R VALUE- PAVI	DATE SAMPLED - 07/15/15 DATE RECEIVED - 07/16/15 DATE TESTED - 09/29/15 EMENT SOUNDINGS
LIQUID LIMIT - 27 PLASTICITY INDEX - 14 AASHTO SOIL - A-6(16) UNIFIED SOIL - % MOISTURE CONTENT - 20.1 ACHMSC (IN) - 6.0W ACHMBC (IN) AGG.BASE CRS CL-7 (IN) - 4.0 - - -	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$

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ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT - LITTLE ROCK, ARKANSAS MATERIALS DIVISION								
MICHAEL BENSON, MATERIALS ENGINEER *** SOIL SURVEY / PAVEMENT SOUNDING TEST REPORT ***								
DATE - 09/30/15 SEQUENCE NO. = 30 JOB NUMBER - CA0801 MATERIAL CODE - SSRV FEDERAL AID NO TO BE ASSIGNED SPEC. YEAR - 2014 PURPOSE - SOIL SURVEY SAMPLE SUPPLIER ID. = 1 SPEC. REMARKS - NO SPECIFICATION CHECK COUNTY/STATE - 71 SUPPLIER NAME - STATE DISTRICT NO 08 NAME OF PROJECT - HWY.110-CLINTON (WIDENING) (S) PROJECT ENGINEER - NOT APPLICABLE								
PIT/QUARRY-ARKANSASLOCATION-VAN BUREN COUNTYDATE SAMPLED-07/15/15SAMPLED BY-S.FAULKNERDATE RECEIVED-07/16/15SAMPLE FROM-TEST HOLEDATE TESTED-09/29/15MATERIAL DESCSOIL SURVEY-R VALUE- PAVEMENT SOUNDINGS								
LAB NUMBER SAMPLE ID TEST STATUS STATION LOCATION	- - - - - - - - - - - - - -	20152159 S316 INFORMATION ONLY 731+00 18 LT 0-5 BR/GR 35 39 45.60		20152160 S317 INFORMATIC 731+00 28 LT 0-5 BROWN 35 39	ON ONLY	- S318 - INFOR - 739+0 - 17 RT - 0-5 - BROWN - - 35	MATION ONLY 0	
1 1/2 3/4 3/8 NO. NO. NO.	IN IN IN 4 - 10 - 40 - 80 -	98 96 96 92		100 99 98 98 94 68 58		- - - - 97 - 94 - 90 - 84 - 74		
LIQUID LIMIT PLASTICITY INDEX AASHTO SOIL UNIFIED SOIL % MOISTURE CONTENT	2 2 2 1	17 03 A-4(0) 23.6		25 13 A-6(4) 18.8		- 35 - 19 - A-6( - 28	12)	
ACHMSC ACHMBC AGG.BASE CRS CL-7	(IN) - (IN) - (IN) - - - - - -	6.75W  2.0				- 10. - 2.5 - 6.0	5W	
REMARKS - W=MULTIPI	LE LAYE	RS. X=STRIPPED. Z=	=AU(	GER REFUSAL				

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# ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT - LITTLE ROCK, ARKANSAS MATERIALS DIVISION MICHAEL BENSON, MATERIALS ENGINEER

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

DATE - 10/ JOB NUMBER - CAO FEDERAL AID NO TO PURPOSE - SOI SPEC. REMARKS - NO SUPPLIER NAME - STA NAME OF PROJECT - H PROJECT ENGINEER - N PIT/QUARRY - ARKAN	801 BE ASSI L SURVE SPECIFI TE WY.110- IOT APPI	Y SAMPLE CATION CHECK CLINTON (WIDEN	ING) (S)	MATERIAL SPEC. YE SUPPLIER	ID 1 TATE - 71
LOCATION - VAN E SAMPLED BY - S.FAUI		UNTY			PLED - 07/15/15 EIVED - 07/16/15
SAMPLE FROM - TEST				DATE TES	
MATERIAL DESC SOI		Y - R VALUE-	PAVEMENT SOUND		
LAB NUMBER	_	20152162	20152163	-	20152164
SAMPLE ID	_	S319	= \$320		S321
TEST STATUS	-	INFORMATION OF	ILY - INFORMAT	TION ONLY -	INFORMATION ONLY
STATION	-	739+00	739+00	-	748+00
LOCATION	-	28 RT	38 RT	2	07 LT
DEPTH IN FEET	-	0 - 5	0-5	-	0 - 5
MAT'L COLOR	-	BROWN	BROWN	-	BROWN
MAT'L TYPE	-		<u>2</u>	-	
		35 39 52.2		52.20 -	35 40 .10
LONGITUDE DEG-MIN-	SEC -	92 28 37.4	0 92 28	3 37.30	92 28 43.60
& PASSING 2	IN			÷.	
1 1/2	IN		075	5	
	IN		- 100	-	
	IN	100	96		100
NO.	-	99	- 95		99
	10 -	96	92	1	97
	40 -	91	86	(#) (#)	93
NO . NO .		88 86	- 77 72	*	79 70
NO.	200 -	00	12		70
LIQUID LIMIT	-	49	- 42	-	38
PLASTICITY INDEX	-	29	- 24	-	19
AASHTO SOIL	-	A-7-6(26)	- A-7-6(1	16) -	A-6(12)
UNIFIED SOIL	-		-	-	
<pre>% MOISTURE CONTENT</pre>	-	34.5	35.5		21.7
ACHMSC	(IN) -	8.OW		-	9.5W
ACHMBC	(IN) -	(T), (T)	24 8.55	-	2.5
AGG.BASE CRS CL-7	(IN) -	6.0		-	3.0
	_		-	-	
	_			-	
			-	-	
	-			-	
	_		22 22	-	

REMARKS 💌 W=MULTIPLE LAYERS, X=STRIPPED, Z=AUGER REFUSAL

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ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT - LITTLE ROCK, ARKANSAS MATERIALS DIVISION MICHAEL BENSON, MATERIALS ENGINEER \*\*\* SOIL SURVEY / PAVEMENT SOUNDING TEST REPORT \*\*\* SEQUENCE NO. - 32 - 09/30/15 DATE JOB NUMBER - CA0801 MATERIAL CODE - SSRVPS FEDERAL AID NO.- TO BE ASSIGNED SPEC. YEAR - 2014 PURPOSE - SOIL SURVEY SAMPLE SUPPLIER ID. - 1 SPEC. REMARKS - NO SPECIFICATION CHECK COUNTY/STATE - 71 SUPPLIER NAME - STATE DISTRICT NO. - 08 NAME OF PROJECT - HWY.110-CLINTON (WIDENING) (S) PROJECT ENGINEER - NOT APPLICABLE PIT/QUARRY - ARKANSAS - VAN BUREN COUNTY DATE SAMPLED - 07/15/15 LOCATION DATE RECEIVED - 07/16/15 SAMPLED BY - S.FAULKNER SAMPLE FROM - TEST HOLE DATE TESTED - 09/29/15 MATERIAL DESC. - SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS - 20152165 - 20152166 - 20152167 - S322 - S323 - S324 LAB NUMBER - S324 - S322 SAMPLE ID - S323 TEST STATUS - INFORMATION ONLY - INFORMATION ONLY - INFORMATION ONLY - INFURPATES - 748+00 - 748+00 - - - - - - - - - - - - 28 LT - 748+00 755+00 STATION - 07 RT - 28 LI - 0-5 \_ BROWN LOCATION 0-5 DEPTH IN FEET - 0-5 BROWN - BROWN MAT'L COLOR MAT'L TYPE \_ LATITUDE DEG-MIN-SEC - 35 40 .00 - 35 39 59.90 - 35 40 5.90 92 28 43.80 92 28 47.70 92 28 43.70 LONGITUDE DEG-MIN-SEC -2 % PASSING IN. -1 1/2 IN. --1 11 C -3/4 IN. - 100 --100 3/8 IN. - 98 100 -98 96 99 NO. 4 ---98 NO. 10 - 90 91 (iii) -- 95 NO. 40 - 84 83 1 mm - 86 - 68 NO. 80 - 67 NO. 200 - 53 82 54 - 22 - 54 LIOUID LIMIT 24 -PLASTICITY INDEX - 09 29 08 \_ --A-4(2) A-7-6(25) A-4(1) AASHTO SOIL --UNIFIED SOIL -28.2 15.4 % MOISTURE CONTENT -21.4 (IN) -8.5W ------9.25W ACHMSC (IN) ------2.25 ACHMBC AGG.BASE CRS CL-7 (IN) -196 8.0 2.0 ----27 -

REMARKS - W=MULTIPLE LAYERS, X=STRIPPED, Z=AUGER REFUSAL

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# ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT - LITTLE ROCK, ARKANSAS MATERIALS DIVISION MICHAEL BENSON, MATERIALS ENGINEER \*\*\* SOIL SURVEY / PAVEMENT SOUNDING TEST REPORT \*\*\* DATE - 10/08/15 SEQUENCE NO. = 33 JOB NUMBER - CA0801 SEQUENCE SEQUENCE NO. = 33 JOB NUMBER - CA0801 SEQUENCE SEQUENCE NO. = 32 FEDERAL AID NO. - TO BE ASSIGNED SPEC. YEAR - 2014 PURPOSE - SOIL SURVEY SAMPLE SUPPLIER ID. = 1 SPEC. REMARKS - NO SPECIFICATION CHECK COUNTY/STATE = 71

DISTRICT NO. 🧁 08

DATE SAMPLED = 07/15/15

SAMPLED BY - S.FAULKNY SAMPLE FROM - TEST HOI MATERIAL DESC SOIL S	E	EY - R VALUE- PAV	EME		DATE I	ECI	EIVED - 0' FED - 0!	•
TEST STATUS STATION LOCATION DEPTH IN FEET		INFORMATION ONLY 755+00 28 RT	in A	S326	ONLY	त्र हर	S327	ION ONLY
LATITUDE DEG-MIN-SEC	-	35 40 6.00	-	35 40 6	5.10	-	35 40	11.40
LONGITUDE DEG-MIN-SEC	:e	92 28 47.50		92 28 41				
	化 法 法 法 法 法						100 95 84 72 52 34	
LIQUID LIMIT			<u>92</u> 1			ж):	23	
PLASTICITY INDEX		01	1	14 A-6(5)			09 A-2-4 (0	\
AASHTO SOIL UNIFIED SOIL	1	A-4 (1)		A-0(5)		-	A-2-4 (0	)
% MOISTURE CONTENT		18.2	<u>~</u> _5	12.2		-	15.8	
ACHMSC (II	1) -	6.0W	2	-		-	6.25W	
.4.	1) -		=			-	0.011	
AGG.BASE CRS CL-7 (I	1) _	7.0	- 2			2	7.0	
	2		÷			4		
	300 C							
	29. 24		는 전 음			1		
	242		1			-		

REMARKS = W=MULTIPLE LAYERS, X=STRIPPED, Z=AUGER REFUSAL

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SUPPLIER NAME - STATE

PIT/QUARRY - ARKANSAS

PROJECT ENGINEER - NOT APPLICABLE

LOCATION - VAN BUREN COUNTY

NAME OF PROJECT - HWY.110-CLINTON (WIDENING) (S)

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT - LITTLE ROCK, ARKANSAS MATERIALS DIVISION MICHAEL BENSON, MATERIALS ENGINEER \*\*\* SOIL SURVEY / PAVEMENT SOUNDING TEST REPORT \*\*\* SEQUENCE NO. - 34 - 09/30/15 DATE JOB NUMBER - CA0801 MATERIAL CODE - SSRVPS FEDERAL AID NO. - TO BE ASSIGNED SPEC. YEAR - 2014 PURPOSE - SOIL SURVEY SAMPLE SUPPLIER ID. - 1 COUNTY/STATE - 71 SPEC. REMARKS - NO SPECIFICATION CHECK SUPPLIER NAME - STATE DISTRICT NO. - 08 NAME OF PROJECT - HWY.110-CLINTON (WIDENING) (S) PROJECT ENGINEER - NOT APPLICABLE PIT/QUARRY - ARKANSAS DATE SAMPLED - 07/15/15 LOCATION - VAN BUREN COUNTY SAMPLED BY - S.FAULKNER DATE RECEIVED - 07/16/15 DATE TESTED - 09/29/15 SAMPLE FROM - TEST HOLE MATERIAL DESC. - SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS - 20152171 - 20152172 = 20152173 - S328 - S329 - S330 LAB NUMBER - S330 SAMPLE ID - S328 - INFORMATION ONLY - INFORMATION ONLY - INFORMATION ONLY - 763+00 - 763+00 - 772+00 - 18LT - 26LT - 07RT TEST STATUS STATION - 07RT LOCATION - 0-3Z - BR/GR -5 DEPTH IN FEET - 0-4.5Z -GRAY - BR/GR MAT'L COLOR MAT'L TYPE \_ LATITUDE DEG-MIN-SEC - 35 40 11.40 - 35 40 11.30 - 35 40 17.20 LONGITUDE DEG-MIN-SEC - 92 28 54.40 92 28 54.40 92 29 2.20 2 IN.-% PASSING  $1 \ 1/2 \ IN. -$ ----3/4 IN. --100 100 100 3/8 IN. --97 96 NO. 4 - 98 --89 NO. 10 - 95 86 --71 81 NO. 40 - 91 --66 60 NO. 80 - 58 \_ NO. 200 - 40 54 52 - 29 - 30 LIQUID LIMIT - 25 PLASTICITY INDEX 15 12 - 12 - A-6(5) A-6(3) AASHTO SOIL - A-6(1) \_ UNIFIED SOIL ..... -16.0 20.0 % MOISTURE CONTENT -14.4 -6.3W (IN) -8.OW -----ACHMSC -\_ -2.0 (IN) ------ACHMBC (IN) -\_ 2.0X 22.22 ACHMBC (IN) \_ \_ 3.5 22 ACHMBC E. ...... 3.0 \_ -- -9.0 AGG.BASE CRS CL-7 (IN) \_ \_ \_ \_ \_

REMARKS - W=MULTIPLE LAYERS, X=STRIPPED, Z=AUGER REFUSAL

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ARKANSAS STATE		AND TRANSPORTATI MATERIALS	DIV	ISION		ROCK, ARKANS	AS
**		IAEL BENSON, MATER SURVEY / PAVEMENT				* *	
DATE - 09/30/15 SEQUENCE NO 35 JOB NUMBER - CA0801 MATERIAL CODE - SSRVPS FEDERAL AID NO TO BE ASSIGNED SPEC. YEAR - 2014 PURPOSE - SOIL SURVEY SAMPLE SUPPLIER ID 1 SPEC. REMARKS - NO SPECIFICATION CHECK COUNTY/STATE - 71 SUPPLIER NAME - STATE DISTRICT NO 08 NAME OF PROJECT - HWY.110-CLINTON (WIDENING) (S) PROJECT ENGINEER - NOT APPLICABLE PIT/QUARRY - ARKANSAS							
LOCATION-VAN BUREN COUNTYDATE SAMPLED07/SAMPLED BY-S.FAULKNERDATE RECEIVED07/SAMPLE FROM-TEST HOLEDATE TESTED-09/							/15
MATERIAL DESC SOI	L SURVE						
3/4 3/8 NO. NO. NO.	- - - SEC - SEC - IN IN IN IN 10 - 40 -	S331 INFORMATION ONLY 772+00 18RT 0-5 BR/GR 35 40 17.30 92 29 2.20 100 99 94 86 80		772+00 27RT 0-5 BR/GR 35 40 92 29 100 95 85 77	- DN ONLY - - - - - -	S333 INFORMATION 780+00 06LT 0-4Z BR/GR 35 40 23 92 38 15 100 97 92 84	.20
NO. NO.		55 42		64 58	-	57 45	
LIQUID LIMIT PLASTICITY INDEX AASHTO SOIL UNIFIED SOIL % MOISTURE CONTENT	- - -	20 07 A-4(0) 23.8		37 20 A-6(9) 21.9	- - - -	22 09 A-4(1) 15.3	
ACHMSC	(IN) -	4.0	-	-	-	4.75	
ACHMBC AGG.BASE CRS CL-7	(IN) - (IN) - - -	8.0				2.0 3.0	
			3 <b>4</b>		-		

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ARKANSAS STATE	HIGHWAY	AND TRANSPORTATI MATERIALS		- LITTLE	ROCK, ARKANSAS			
**		AEL BENSON, MATER SURVEY / PAVEMENT			* *			
DATE - 09/30/15 SEQUENCE NO 36 JOB NUMBER - CA0801 MATERIAL CODE - SSRVPS FEDERAL AID NO TO BE ASSIGNED SPEC. YEAR - 2014 PURPOSE - SOIL SURVEY SAMPLE SUPPLIER ID 1 SPEC. REMARKS - NO SPECIFICATION CHECK COUNTY/STATE - 71 SUPPLIER NAME - STATE DISTRICT NO 08 NAME OF PROJECT - HWY.110-CLINTON (WIDENING) (S) PROJECT ENGINEER - NOT APPLICABLE								
PIT/QUARRY-ARKANSASLOCATION-VAN BUREN COUNTYDATE SAMPLED-07/15/15SAMPLED BY-S.FAULKNERDATE RECEIVED-07/16/15SAMPLE FROM-TEST HOLEDATE TESTED-09/29/15MATERIAL DESCSOIL SURVEY-R VALUE-PAVEMENT SOUNDINGS								
SAMPLE ID TEST STATUS STATION LOCATION DEPTH IN FEET MAT'L COLOR MAT'L TYPE LATITUDE DEG-MIN- LONGITUDE DEG-MIN- & PASSING 2 1 1/2 3/4 3/8 NO. NO. NO. NO. NO. NO. NO.	- - - - - - - - - - - - - - - - - - -	INFORMATION ONLY 780+00 17LT 0-3.5Z BR/GR 35 40 23.10 92 29 9.40 100 99 93 83 71 54 36 19	- S335 - INFORMATIC - 780+00 - 31LT - 0-3Z - BR/GR - - 35 40 92 29 - - - - - - - - - - - - -		20152179 S336 INFORMATION ONLY 788+00 07RT 0-5 BROWN 35 40 29.60 92 29 14.90 100 99 96 93 91 87 53 27			
PLASTICITY INDEX AASHTO SOIL UNIFIED SOIL % MOISTURE CONTENT	- - -	04 A-4(0) 20.5	- 04 - A-4(0) - 12.2	- - -	27 A-7-6(26) 32.5			
ACHMSC ACHMBC AGG.BASE CRS CL-7	(IN) - (IN) - (IN) - - - - - - - - - - - -	3.5		- - - - - - - -	6.5W 2.5 8.0			

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ARKANSAS STATE HIGHWAY	AND TRANSPORTATION MATERIALS D		- LITTLE ROCK	, ARKANSAS				
	AEL BENSON, MATERIA SURVEY / PAVEMENT S		REPORT ***					
DATE - 09/30/15 SEQUENCE NO 37 JOB NUMBER - CA0801 MATERIAL CODE - SSRVPS FEDERAL AID NO TO BE ASSIGNED SPEC. YEAR - 2014 PURPOSE - SOIL SURVEY SAMPLE SUPPLIER ID 1 SPEC. REMARKS - NO SPECIFICATION CHECK COUNTY/STATE - 71 SUPPLIER NAME - STATE DISTRICT NO 08 NAME OF PROJECT - HWY.110-CLINTON (WIDENING) (S) PROJECT ENGINEER - NOT APPLICABLE								
PIT/QUARRY-ARKANSASLOCATION-VAN BUREN COUNTYDATE SAMPLEDSAMPLED BY-S.FAULKNERDATE RECEIVEDSAMPLE FROM-TEST HOLEDATE TESTEDMATERIAL DESCSOIL SURVEY-R VALUE -PAVEMENT SOUNDINGS-								
LAB NUMBER-SAMPLE ID-TEST STATUS-STATION-LOCATION-DEPTH IN FEET-	20152180 S337 INFORMATION ONLY 788+00 19RT 0-5 BROWN 35 40 29.70 92 29 14.70 100 99 94 88	- 20152181 - S338 - INFORMATION - 788+00 - 37RT - 0-5 - BR/GR - 35 40 2	- 201 - S33 N ONLY - INF - 796 - 06L - 0-5 - BR/ - - - - - - - - - - - - - - - - - - -	9 ORMATION ONLY +00 T GR 5 40 36.70 2 29 21.40 0 9 6 2 9 0				
LIQUID LIMIT - PLASTICITY INDEX - AASHTO SOIL - UNIFIED SOIL - % MOISTURE CONTENT -	41 20 A-7-6(8) 24.7	- 66 - 36 - A-7-5(42) - 29.1	- 29 - 16 - A-					
ACHMSC (IN) - ACHMBC (IN) - AGG.BASE CRS CL-7 (IN) - - - - - - - - - - - - - - - - - - -	4.25  8.0		- :	5.5 2.0 5.0				

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ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT - LITTLE ROCK, ARKANSAS MATERIALS DIVISION MICHAEL BENSON, MATERIALS ENGINEER \*\*\* SOIL SURVEY / PAVEMENT SOUNDING TEST REPORT \*\*\* SEQUENCE NO. - 38 - 09/30/15 DATE JOB NUMBER - CA0801 MATERIAL CODE - SSRVPS SPEC. YEAR - 2014 FEDERAL AID NO. - TO BE ASSIGNED PURPOSE - SOIL SURVEY SAMPLE SUPPLIER ID. - 1 SPEC. REMARKS - NO SPECIFICATION CHECK COUNTY/STATE - 71 SUPPLIER NAME - STATE DISTRICT NO. - 08 NAME OF PROJECT - HWY.110-CLINTON (WIDENING) (S) PROJECT ENGINEER - NOT APPLICABLE PIT/QUARRY - ARKANSAS - VAN BUREN COUNTY DATE SAMPLED - 07/15/15 LOCATION DATE RECEIVED - 07/16/15 SAMPLED BY - S.FAULKNER DATE TESTED - 09/29/15 SAMPLE FROM - TEST HOLE MATERIAL DESC. - SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS - 20152184 = 20152185 - S341 = S342 LAB NUMBER - 20152183 - S342 SAMPLE ID - \$340 \_ S341 - INFORMATION ONLY - INFORMATION ONLY = INFORMATION ONLY TEST STATUS - INFURFERIES - 796+00 - 796+00 - 30LT - 796+00 804+00 STATION -16RT 0-5 BR/GR LOCATION °-- 0 - 5 DEPTH IN FEET - 0-5 BROWN - BR/GR MAT'L COLOR MAT'L TYPE -LATITUDE DEG-MIN-SEC - 35 40 36.60 - 35 40 36.50 - 35 40 41.50 92 29 21.60 92 29 27.40 92 29 21.50 LONGITUDE DEG-MIN-SEC -2 % PASSING IN. -- $1 \ 1/2 \ IN$  -- 100 -3/4 IN. - 100 --100 3/8 IN. - 99 99 --95 99 96 NO. 4 ---92 91 NO. 10 - 91 --NO. 40 - 87 84 88 --- 60 77 NO. 80 - 67 -NO. 200 - 44 67 49 - 24 - 35 LIOUID LIMIT 24 -PLASTICITY INDEX (m)) 19 11 - 11 - A-6(10) A-6(2) AASHTO SOIL - A-6(1) UNIFIED SOIL \_  $i \in I$ 23.2 16.7 % MOISTURE CONTENT -19.4 (IN) -3.5 -- -4.0 ACHMSC AGG.BASE CRS CL-7 (IN) --- -------9.0 4.0 -..... --12 REMARKS - W=MULTIPLE LAYERS, X=STRIPPED, Z=AUGER REFUSAL

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- AASHTO TESTS : T24 T88 T89 T90 T265

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT - LITTLE ROCK, ARKANSAS MATERIALS DIVISION MICHAEL BENSON, MATERIALS ENGINEER \*\*\* SOIL SURVEY / PAVEMENT SOUNDING TEST REPORT \*\*\* SEQUENCE NO. 🖃 39 - 09/30/15 DATE JOB NUMBER - CA0801 MATERIAL CODE - SSRVPS FEDERAL AID NO.- TO BE ASSIGNED SPEC. YEAR - 2014 PURPOSE - SOIL SURVEY SAMPLE SUPPLIER ID. 🖃 1 SPEC. REMARKS - NO SPECIFICATION CHECK COUNTY/STATE = 71 SUPPLIER NAME - STATE DISTRICT NO. 🗢 08 NAME OF PROJECT - HWY.110-CLINTON (WIDENING) (S) PROJECT ENGINEER - NOT APPLICABLE PIT/OUARRY - ARKANSAS - VAN BUREN COUNTY DATE SAMPLED - 07/15/15 LOCATION DATE RECEIVED - 07/16/15 SAMPLED BY - S.FAULKNER DATE TESTED - 09/29/15 SAMPLE FROM - TEST HOLE MATERIAL DESC. - SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS - 20152186 - 20152187 - 20152188 LAB NUMBER \_ S344 SAMPLE ID - S343 - S345 TEST STATUS - INFORMATION ONLY - INFORMATION ONLY - INFORMATION ONLY - 812+00 - 812+00 - 812+00 - 05LT - 16LT - 26LT STATION LOCATION - 0-5 - 0-5 - 0-5 DEPTH IN FEET BR/GR -\_ GRAY - BR/GR MAT'L COLOR MAT'L TYPE LATITUDE DEG-MIN-SEC - 35 40 44.30 - 35 40 44.30 - 35 40 44.20 92 29 36.30 92 29 36.30 LONGITUDE DEG-MIN-SEC = 92 29 36.20 2 % PASSING IN. -\_  $1 \ 1/2 \ IN = -$ --3/4 IN. - 100 -100 3/8 IN. - 99 -100 NO. 4 - 93 98 --94 100 NO. 10 - 86 --\_ 89 NO. 40 - 77 100 -- 82 100 NO. 80 - 65 NO. 200 - 55 73 92 - 35 48 LIQUID LIMIT - 35 (H) PLASTICITY INDEX - 16 -15 22 - A-6(10) A-7-6(23) AASHTO SOIL - A-6(6) UNIFIED SOIL ---25.4 19.9 % MOISTURE CONTENT -28.2 (IN) -5.25 - 2.75 ACHMSC (IN) ----------2.12 4.0 ACHMBC AGG.BASE CRS CL-7 (IN) --7.0 5.0 21 -----120

REMARKS 😁 W=MULTIPLE LAYERS, X=STRIPPED, Z=AUGER REFUSAL

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ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT - LITTLE ROCK, ARKANSAS MATERIALS DIVISION MICHAEL BENSON, MATERIALS ENGINEER \*\*\* SOIL SURVEY / PAVEMENT SOUNDING TEST REPORT \*\*\* SEQUENCE NO. - 40 - 09/30/15 DATE MATERIAL CODE - SSRVPS - CA0801 JOB NUMBER FEDERAL AID NO.- TO BE ASSIGNED SPEC. YEAR - 2014 SUPPLIER ID. - 1 PURPOSE - SOIL SURVEY SAMPLE COUNTY/STATE - 71 SPEC. REMARKS - NO SPECIFICATION CHECK DISTRICT NO. - 08 SUPPLIER NAME - STATE NAME OF PROJECT - HWY.110-CLINTON (WIDENING) (S) PROJECT ENGINEER - NOT APPLICABLE PIT/QUARRY - ARKANSAS - VAN BUREN COUNTY DATE SAMPLED - 07/15/15 LOCATION - S.FAULKNER DATE RECEIVED - 07/16/15 SAMPLED BY DATE TESTED - 09/29/15 SAMPLE FROM - TEST HOLE MATERIAL DESC. - SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS - 20152190 LAB NUMBER - 20152189 - 20152191 \_ S347 - S348 - S346 SAMPLE ID - INFORMATION ONLY - INFORMATION ONLY - INFORMATION ONLY TEST STATUS - 820+00 = 820+00 - 18RT = 26RT - 828+00 STATION - 06LT LOCATION - 0-5 - BR/G - 0-5 DEPTH IN FEET - 0-5 \_\_\_\_BR/GR \_ BR/GR - BR/GR MAT'L COLOR MAT'L TYPE LATITUDE DEG-MIN-SEC - 35 40 47.10 = 35 40 47.20 - 35 40 51.20 92 29 44.30 92 29 53.50 92 29 44.40 LONGITUDE DEG-MIN-SEC -2 % PASSING IN. - $1 \ 1/2 \ IN. -$ 122 - 100 -3/4 IN. ---98 100 3/8 IN. - 100 --96 98 NO. 4 - 99 1.0 98 93 95 NO. 10 -12 -91 NO. 40 -85 89 - E 56 78 NO. 80 - 64 NO. 200 - 53 45 64 - 28 - 21 25 LIOUID LIMIT -12 -07 PLASTICITY INDEX - 12 --A-6(3) A-4(0) A-6(5) AASHTO SOIL \_ UNIFIED SOIL  $\frac{1}{2}$ 23.3 23.1 % MOISTURE CONTENT -23.5 7.25W (IN) --- --4.0 ACHMSC 24 (IN) -1212 -2.5 -----ACHMBC 100 5.0 AGG.BASE CRS CL-7 (IN) -9.0 -----1 -122

REMARKS - W=MULTIPLE LAYERS, X=STRIPPED, Z=AUGER REFUSAL

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ARKANSAS STATE	HIGHWAY		PORTATION		- LITTLE	ROCK, ARKA	ANSAS	
***				LS ENGINEEF OUNDING TES		* *		
DATE - 09/30/15 SEQUENCE NO 41 JOB NUMBER - CA0801 MATERIAL CODE - SSRVPS FEDERAL AID NO TO BE ASSIGNED SPEC. YEAR - 2014 PURPOSE - SOIL SURVEY SAMPLE SUPPLIER ID 1 SPEC. REMARKS - NO SPECIFICATION CHECK COUNTY/STATE - 71 SUPPLIER NAME - STATE DISTRICT NO 08 NAME OF PROJECT - HWY.110-CLINTON (WIDENING) (S) PROJECT ENGINEER - NOT APPLICABLE PIT/QUARRY - ARKANSAS								
PIT/QUARRY       - ARKANSAS         LOCATION       - VAN BUREN COUNTY         SAMPLED BY       - S.FAULKNER         DATE RECEIVED       - 07/16         SAMPLE FROM       - TEST HOLE         MATERIAL DESC.       - SOIL SURVEY         -       R VALUE         PAVEMENT SOUNDINGS						/16/15		
LAB NUMBER SAMPLE ID TEST STATUS STATION LOCATION DEPTH IN FEET MAT'L COLOR MAT'L TYPE LATITUDE DEG-MIN-:	- - - - - - - - - - - - - - - -	20152192 S349 INFORMATIO 828+00 18LT 0-5 BR/GR 35 40 5	N ONLY -	- 20152193 - S350 - INFORMATI - 828+00 - 26LT - 0-5 - BROWN - - 35 40	- ON ONLY - - - 51.10 -	20152194 S351 INFORMATI 836+00 06RT 0-5 BR/GR 35 40 92 30	51.30	
3/4 3/8 NO. NO.	IN IN IN IN 4 - 10 - 40 - 80 -	100 99 91	. 50	92 29 	53.50	100 100 100 100 62	2.00	
LIQUID LIMIT PLASTICITY INDEX AASHTO SOIL UNIFIED SOIL % MOISTURE CONTENT		24 07 A-4(1) 24.6	8 9 9 9 9 9 9 9 9 9 9 9	- 48 - 22 - A-7-6(23 - 29.1	- 3) - -	29 13 A-6(5) 20.6		
ACHMSC ACHMBC AGG.BASE CRS CL-7	(IN) - (IN) - (IN) - - - - -	2.25  6.0				5.5 2.0 6.0		
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## ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT - LITTLE ROCK, ARKANSAS MATERIALS DIVISION MICHAEL BENSON, MATERIALS ENGINEER \*\*\* SOIL SURVEY / PAVEMENT SOUNDING TEST REPORT \*\*\* DATE - 10/08/15 JOB NUMBER - CA0801 SEQUENCE NO. - 42 MATERIAL CODE - SSRVPS FEDERAL AID NO.- TO BE ASSIGNED SPEC. YEAR - 2014 PURPOSE - SOIL SURVEY SAMPLE SUPPLIER ID. -1 SPEC. REMARKS - NO SPECIFICATION CHECK COUNTY/STATE - 71 SUPPLIER NAME - STATE DISTRICT NO. - 08 NAME OF PROJECT - HWY.110-CLINTON (WIDENING) (S) PROJECT ENGINEER - NOT APPLICABLE PIT/QUARRY - ARKANSAS LOCATION - VAN BUREN COUNTY DATE SAMPLED - 07/15/15 SAMPLED BY - S.FAULKNER DATE RECEIVED - 07/16/15 SAMPLE FROM - TEST HOLE DATE TESTED - 09/29/15 MATERIAL DESC. - SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS - 20152195 - 20152196 - 20152197 - S352 - S353 - S354 LAB NUMBER SAMPLE ID 😑 INFORMATION ONLY = INFORMATION ONLY = INFORMATION ONLY TEST STATUS - 836+00 - 836+00 - 844+00 STATION - 26RT - 06LT - 18RT LOCATION 26RT 0-5 BR/GR 0-5 - 0-5 DEPTH IN FEET - BROWN $\approx$ BROWN MAT'L COLOR MAT'L TYPE -LATITUDE DEG-MIN-SEC = 35 40 51.40 = 35 40 51.50 = 35 40 51.60 LONGITUDE DEG-MIN-SEC = 92 30 3.60 92 30 3.60 92 30 12,60 & PASSING 2 IN. 1 1/2 IN. -100 3/4 IN. -100 3/8 IN. - 100 97 99 NO. 4 - 98 86 225 90 NO. 10 -84 97 1 NO. 40 - 80 75 92 (144) NO. 80 - 63 64 87 NO 200 - 47 59 80 - 24 - 21 - 38 LIQUID LIMIT PLASTICITY INDEX - 08 - 01 0.000 17 A-4(0) - A-4(1) A-6(13) AASHTO SOIL UNIFIED SOIL ---20.5 % MOISTURE CONTENT -21.3 17.2 ACHMSC (IN) - 3.5 - -6.75 1 ACHMBC (IN) - $\approx$ 2.5 AGG.BASE CRS CL-7 (IN) -÷ 9.0 ----7.0

REMARKS - W=MULTIPLE LAYERS, X=STRIPPED, Z=AUGER REFUSAL

Interface between y payement sounding test report ***           DATE         - 09/30/15         SEQUENCE NO 43           DATE         - 09/30/15         SEQUENCE NO 43           DATE         - 09/30/15         SEQUENCE NO 43           PUEDNMEER         - CA0801         MATERIAL CODE - SSRVPS           PUEROSE         - SOIL SURVEY SAMPLE         SUPPLIER ID 1           SUPPLER NAME         - NO SPECIFICATION CHECK         COUNTY/STATE - 71           SUPPLER NAME         - STATE         DISTRICT NO 08           PURPOSE         - HW1.10-CLINTON (WIDENING) (S)         PROJECT ENGINEER - NOT APPLICABLE           PTOJECT ENGINEER - NOT APPLICABLE         DATE SAMPLED - 07/15/15           SAMPLED ENT - STATUE         DATE RECEIVED - 07/15/15           SAMPLED ENT - SCH SULVEY - R VALUE- PAVEMENT SOUNDING         09/29/15           SAMPLE ID         - 20152198         2015219         20152200           SAMPLE ID         - S355         - S356         - S357           TEST HOLE         - 100         - 100         - 100           LATION         - 100         - 16LT         284400         - 844400           LATION         - 100         - 35 40 51.50         - 35 40 51.50         - 35 40 51.50           DEROWN         - BROWN	ARKANSAS STATE	HIGHWAY	AND TRANSPORTATI MATERIALS			- LITTLE	ROCK, AR	KANSAS		
JOB NUMBER       -       CA0801       MATERIAL CODE       SSRVPS         FEDERAL AID NO       TO BE ASSIGNED       SUPLICATION       SUPLICE ID       1         SPEC. REMARKS       -       NO SPECIFICATION CHECK       COUNTY/STATE       -       1         SUPLIER NAME       -       STATE       DISTRICT NO       08         NAME OF FROJECT       -       HW.110-CLINTON (WIDENING) (S)       -       -       08         PROJECT ENGINEER -       NOT APPLICABLE       -       DATE SAMPLED       -       07/15/15         SAMPLE BY       -       S.FAULKNER       DATE SAMPLED       -       07/16/15         SAMPLE FROM       -       TEST HOLE       DATE TESTED       09/29/15         MATERIAL DESC.       -       S01L SURVEY       -       RECEIVED       -       07/16/15         SAMPLE ID       -       S355       -       S356       -       S357         TEST STATUS       -       INFORMATION ONLY       -       INFORMATION ONLY       -       INFORMATION ONLY       -       NORTHONICHTON ONLY       -       NORTHON       -       835.0       -       06       -       -       -       -       -       -       -       - <t< td=""><td>**</td><td></td><td>•</td><td></td><td></td><td>REPORT *</td><td>* *</td><td></td></t<>	**		•			REPORT *	* *			
LOCATION       • VAN BUREN COUNTY       DATE SAMPLED       • 07/15/15         SAMPLED BY       • S.FAULKNER       DATE RECEIVED       • 07/16/15         SAMPLE FROM       • TEST HOLE       DATE RECEIVED       • 09/29/15         MATERIAL DESC.       • SOIL SURVEY       • R VALUE- PAVEMENT SOUDLINGS       • 09/29/15         LAB NUMBER       • 20152198       • 20152199       • 20152200         SAMPLE ID       • S355       • S356       • S357         TEST STATUS       • INFORMATION ONLY       • INFORMATION ONLY       • INFORMATION ONLY         STATION       • 844+00       • 844+00       • 853+00         LOCATION       • 16LT       25LT       06RT         DEPTH IN FEET       • 0-5       0-5       0-5         MAT'L COLOR       • BROWN       • BR/GR       • 000         LAITIUDE DEG-MIN-SEC       • 92 30 12.70       92 30 20.60         * PASSING       2       IN       • 100       100         3/4 IN.       • 100       • 100       90       90         3/4 IN.       • 96       97       97       97         NO. 40       98       91       80       97         NO. 40       98       91       80       77 </td <td colspan="10">JOB NUMBER-CA0801MATERIAL CODE -SSRVPSFEDERAL AID NOTO BE ASSIGNEDSPEC. YEAR -2014PURPOSE-SOIL SURVEY SAMPLESUPPLIER ID1SPEC. REMARKS -NO SPECIFICATION CHECKCOUNTY/STATE -71SUPPLIER NAME -STATEDISTRICT NO08NAME OF PROJECT-HWY.110-CLINTON (WIDENING) (S)PROJECT ENGINEER-NOT APPLICABLE</td>	JOB NUMBER-CA0801MATERIAL CODE -SSRVPSFEDERAL AID NOTO BE ASSIGNEDSPEC. YEAR -2014PURPOSE-SOIL SURVEY SAMPLESUPPLIER ID1SPEC. REMARKS -NO SPECIFICATION CHECKCOUNTY/STATE -71SUPPLIER NAME -STATEDISTRICT NO08NAME OF PROJECT-HWY.110-CLINTON (WIDENING) (S)PROJECT ENGINEER-NOT APPLICABLE									
SAMPLE ID       -       S355       -       S356       -       S357         TEST STATUS       -       INFORMATION ONLY       -       INFORMATION ONLY       -       INFORMATION ONLY         STATION       -       844+00       -       844+00       -       853+00         LOCATION       -       16LT       -       25LT       -       06RT         DEPTH IN FEET       -       0-5       -       0-5       -       0-5         MAT'L COLOR       -       BROWN       BROWN       BR/GR       -         LATITUDE DEG-MIN-SEC       -       35 40 51.60       -       35 40 51.50       -       35 40 57.40         LONGITUDE DEG-MIN-SEC       -       92 30 12.70       92 30 12.70       92 30 20.60         % PASSING       2       IN       -       -       -       -         11/2 IN.       -       -       -       -       -       -         3/4 IN.       100       100       100       9       9       -       -       -       -         NO. 40       98       -       97       -       -       -       -       -         NO. 40       89       91	LOCATION-VAN BUREN COUNTYDATE SAMPLED-07/15/15SAMPLED BY-S.FAULKNERDATE RECEIVED-07/16/15SAMPLE FROM-TEST HOLEDATE TESTED-09/29/15									
NO. 4       -       96       97       97         NO. 10       -       93       96       91         NO. 40       -       89       91       80         NO. 80       -       80       -       87       68         NO. 200       -       69       85       57         LIQUID LIMIT       -       36       -       50       -       28         PLASTICITY INDEX       -       17       -       27       -       14         AASHTO SOIL       -       A-6(10)       -       A-7-6(24)       -       A-6(5)	LAB NUMBER SAMPLE ID TEST STATUS STATION LOCATION DEPTH IN FEET MAT'L COLOR MAT'L TYPE LATITUDE DEG-MIN- LONGITUDE DEG-MIN- % PASSING 2 1 1/2 3/4	- - - SEC - SEC - IN IN IN	20152198 S355 INFORMATION ONLY 844+00 16LT 0-5 BROWN 35 40 51.60 92 30 12.70 100		20152199 S356 INFORMATIO 844+00 25LT 0-5 BROWN 35 40 5 92 30 5		S357 INFORMA 853+00 06RT 0-5 BR/GR 35 4 92 3 100	FION ONLY 0 57.40		
UNIFIED SOIL	NO. NO. NO. NO. LIQUID LIMIT PLASTICITY INDEX	4 - 10 - 40 - 80 -	96 93 89 80 69 36 17		97 96 91 87 85 50 27		97 91 80 68 57 28 14			
% MOISTURE CONTENT       -       16.4       19.8       19.1         ACHMSC       (IN) -       4.5W       -       -       6.5         ACHMBC       (IN) -        -       2.0         AGG.BASE CRS CL-7       (IN) -        -       10.0         -       -       -       -       -       10.0         -       -       -       -       -       -         -       -       -       -       -       -         -       -       -       -       -       -         -       -       -       -       -       -         -       -       -       -       -       -         -       -       -       -       -       -         -       -       -       -       -       -         -       -       -       -       -       -       -         -       -       -       -       -       -       -       -         -       -       -       -       -       -       -       -       -         -       -       -       - <td< td=""><td>ACHMSC ACHMBC</td><td>(IN) - (IN) -</td><td></td><td></td><td>19.8  </td><td></td><td>6.5 2.0</td><td></td></td<>	ACHMSC ACHMBC	(IN) - (IN) -			19.8  		6.5 2.0			

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ARKANSAS STATE	MATERIA	LS DIVISION	LITTLE ROCK, ARKANSAS					
* * *	MICHAEL BENSON, MA SOIL SURVEY / PAVEM		REPORT ***					
DATE09/30/15SEQUENCE NO 44JOB NUMBERCA0801MATERIAL CODE - SSRVPSFEDERAL AID NOTO BE ASSIGNEDSPEC. YEAR - 2014PURPOSE- SOIL SURVEY SAMPLESUPPLIER ID 1SPEC. REMARKS- NO SPECIFICATION CHECKCOUNTY/STATE - 71SUPPLIER NAME- STATEDISTRICT NO 08NAME OF PROJECT- HWY.110-CLINTON (WIDENING) (S)PROJECT ENGINEER - NOT APPLICABLEPIT/QUARRY- ARKANSASLOCATION- VAN BUREN COUNTYLOCATION- VAN BUREN COUNTYDATE SAMPLED - 07/15/15SAMPLED BY- S.FAULKNERDATE RECEIVED - 07/16/15SAMPLE FROM- TEST HOLEDATE TESTED - 09/29/15MATERIAL DESC SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS								
LAB NUMBER	- 20152201	- 20152202	- 20152203					
SAMPLE ID	- 5358	_ S359	- \$360					
TEST STATUS	- INFORMATION O	NLY - INFORMATION	ONLY 🗧 INFORMATION ONLY	ζ				
STATION	- 853+00	= 853+00	- 860+00					
LOCATION	- 18RT	- 26RT	- OGLT					
DEPTH IN FEET	0-5	0-5	- 0-5 - DD (CD					
MAT'L COLOR	- BROWN	BROWN	_ BR/GR					
MAT'L TYPE	- SEC - 35 40 57.4	- 10 - 35 40 57	- 35 41 3.40					
LATITOLE DEG-MIN-S	SEC = 92 30 20.5	50 92 30 20	0.40 92 30 25.00					
% PASSING 2	IN	_	-					
	IN	-						
	IN 100	- 100	100					
•	IN 99	- 98	- 99					
NO.	4 - 96	_ 97	97					
NO.	10 - 91	_ 94	- 94					
3	40 - 83	_ 85	- 87					
NO.		- 64	= 85 47					
NO. 2	200 - 55	50	47					
LIQUID LIMIT	- 27	- 27	- 20					
PLASTICITY INDEX	- 15	- 14	- 08					
AASHTO SOIL	- A-6(5)	- A-6(3)	- A-4(1)					
UNIFIED SOIL % MOISTURE CONTENT	- 18.4	- 18.6	19.3					
		2010						
ACHMSC	(IN) - 3.5 (TN)	- 308	≈ 5.75 ≈ 2.0					
ACHMBC AGG.BASE CRS CL-7	(IN) (IN) - 11.0		- 6.0					
AGG. BASE CRS CL-7		-						
	-	-	3 <b>-</b> 01					
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REMARKS - W=MULTIPL	REMARKS - W=MULTIPLE LAYERS, X=STRIPPED, Z=AUGER REFUSAL							
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AASHTO TESTS : T24 T88 T89 T90 T265 :

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ARKANSAS STATE		Y AND TRANSPORTAT MATERIALS	DIVIS	ION		ROCK, ARKANSAS		
**		HAEL BENSON, MATE SURVEY / PAVEMENT				* *		
DATE - 09/30/15 SEQUENCE NO 45 JOB NUMBER - CA0801 MATERIAL CODE - SSRVPS FEDERAL AID NO TO BE ASSIGNED SPEC. YEAR - 2014 PURPOSE - SOIL SURVEY SAMPLE SUPPLIER ID 1 SPEC. REMARKS - NO SPECIFICATION CHECK COUNTY/STATE - 71 SUPPLIER NAME - STATE DISTRICT NO 08 NAME OF PROJECT - HWY.110-CLINTON (WIDENING) (S) PROJECT ENGINEER - NOT APPLICABLE								
PIT/QUARRY- ARKANSASLOCATION- VAN BUREN COUNTYDATE SAMPLED - 07/15/19SAMPLED BY- S.FAULKNERDATE RECEIVED - 07/16/19SAMPLE FROM- TEST HOLEDATE TESTED - 09/29/19								
MATERIAL DESC SOI								
SAMPLE ID TEST STATUS STATION LOCATION	- - -	INFORMATION ONLY 860+00 19LT	- Si - II - 86 - 30 - 0-	362 NFORMATIC	- DN ONLY - -	20152206 S363 INFORMATION ONLY 868+00 06RT 0-5 GRAY		
MAT'L COLOR MAT'L TYPE LATITUDE DEG-MIN- LONGITUDE DEG-MIN-	- SEC -	35 41 3.30		35 41	-	35 41 11.20 92 30 27.60		
3/4 3/8 NO. NO. NO.	IN IN IN IN 4 - 10 - 40 - 80 - 200 -	99 96 88		100 99 97 90 72 63		100 97 96 92 73 60		
LIQUID LIMIT PLASTICITY INDEX AASHTO SOIL UNIFIED SOIL % MOISTURE CONTENT	- - -	22 12 A-6(3) 17.0	1	32 18 A-6(8) 17.2	- - -	24 11 A-6(3) 16.7		
ACHMSC ACHMBC AGG.BASE CRS CL-7	(IN) - (IN) - (IN) - - - - - - - - - - -	4.0				5.25 1.75 5.0		

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## ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT - LITTLE ROCK, ARKANSAS MATERIALS DIVISION MICHAEL BENSON, MATERIALS ENGINEER \*\*\* SOIL SURVEY / PAVEMENT SOUNDING TEST REPORT \*\*\* - 10/08/15 DATE SEOUENCE NO. - 46 JOB NUMBER - CA0801 MATERIAL CODE - SSRVPS FEDERAL AID NO. - TO BE ASSIGNED SPEC. YEAR - 2014 PURPOSE - SOIL SURVEY SAMPLE SUPPLIER ID. - 1 SPEC. REMARKS - NO SPECIFICATION CHECK COUNTY/STATE - 71 SUPPLIER NAME - STATE DISTRICT NO. - 08 NAME OF PROJECT - HWY.110-CLINTON (WIDENING) (S) PROJECT ENGINEER - NOT APPLICABLE PIT/QUARRY - ARKANSAS LOCATION - VAN BUREN COUNTY DATE SAMPLED - 07/15/15 SAMPLED BY - S.FAULKNER DATE RECEIVED - 07/16/15 SAMPLE FROM - TEST HOLE DATE TESTED - 09/29/15 MATERIAL DESC. - SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS - 20152208 - S365 LAB NUMBER 20152207 - 20152209 SAMPLE ID - S364 - S366 TEST STATUS INFORMATION ONLY INFORMATION ONLY INFORMATION ONLY - 868+00 - 868+00 876+00 STATION 26RT 0-5 PC - 26RT - 16RT - 06LT LOCATION -0-2.5Z - 0-5 DEPTH IN FEET (22.0)GRAY BROWN - BR/GR MAT'L COLOR MAT'L TYPE 1 LATITUDE DEG-MIN-SEC = 35 41 11.20 = 35 41 11.20 = 35 41 18.30 LONGITUDE DEG-MIN-SEC = 92 30 27.50 92 30 27.40 92 30 30.80 % PASSING 2 IN. -1 1/2 IN. 😑 - 100 -3/4 IN. -3/8 IN. -98 \_ 100 NO. 4 - 100 94

NO.	10	1	98	-	99	-	89
NO.	40	1	93		96	_	84
NO.	80	1	78	-	86	-	60
NO.	200	2	62		69		42
LIQUID LIMIT		-	22		29	÷:	20
PLASTICITY INDEX		-	09		15	-	05
AASHTO SOIL		12	A-4(3)		A-6(8)	<b>T</b> .,	A-4(0)
UNIFIED SOIL		Ξ÷		755		-	
% MOISTURE CONTENT		-	17.5	1	20.7	-	16.1
ACHMSC	(IN)	-	3.5	2	#:*		5.5
ACHMBC	(IN)	-		÷	÷	3 <del>75</del>	1.5
AGG.BASE CRS CL-7	(IN)	-	7.0	-			6.0
		-		2		-	
				2		-	
				<b>H</b>		-	
		27		5. 		1.50 1.50	
				-			
		0.00		-		-	

REMARKS = W=MULTIPLE LAYERS, X=STRIPPED, Z=AUGER REFUSAL -

## AASHTO TESTS : T24 T88 T89 T90 T265

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ARKANSAS STATE	HIGHWAY	AND TRANSPORTATIO MATERIALS D			- LITTL	'E ]	ROCK, ARKAI	ISAS
***		AEL BENSON, MATERI SURVEY / PAVEMENT				* *	· *	
DATE - 09/30/15 SEQUENCE NO 47 JOB NUMBER - CA0801 MATERIAL CODE - SSRVPS FEDERAL AID NO TO BE ASSIGNED SPEC. YEAR - 2014 PURPOSE - SOIL SURVEY SAMPLE SUPPLIER ID 1 SPEC. REMARKS - NO SPECIFICATION CHECK COUNTY/STATE - 71 SUPPLIER NAME - STATE DISTRICT NO 08 NAME OF PROJECT - HWY.110-CLINTON (WIDENING) (S) PROJECT ENGINEER - NOT APPLICABLE								
PIT/QUARRY- ARKANSASLOCATION- VAN BUREN COUNTYDATE SAMPLED - 07/15/15SAMPLED BY- S.FAULKNERDATE RECEIVED - 07/16/15SAMPLE FROM- TEST HOLEDATE TESTED - 09/29/15MATERIAL DESC SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS								16/15
LAB NUMBER SAMPLE ID TEST STATUS STATION LOCATION DEPTH IN FEET MAT'L COLOR MAT'L TYPE LATITUDE DEG-MIN- % PASSING 2 1 1/2 3/4 3/8 NO. NO. NO.	- - - - - - - - - - - - - - - - - - -	20152210 S367 INFORMATION ONLY 876+00 18LT 0-5 BR/GR 35 41 18.30 92 30 30.90 100 99 95 91 84	- 2019 - S368 - INFC - 8766 - 2517 - 0-22 - GRA - 39	52211 3 DRMATIC +00 F Z Y 5 41 2 30 7 3 L 9 3 L	DN ONLY 18.20		S369 INFORMATIC 884+00 07RT 0-4.5Z GRAY 35 41	26.80
PLASTICITY INDEX AASHTO SOIL UNIFIED SOIL % MOISTURE CONTENT	2 2 2 2	23 10 A-4(2) 14.8	- 09 - A- -			1 E E E	09 A-4(2) 19.9	
ACHMSC ACHMBC AGG.BASE CRS CL-7	(IN) - (IN) - (IN) - - - - - - - - - - - - - - -	3.5  6.0		a de la composición de la comp			6.0W 2.0 9.0	

ARKANSAS STATE		AND TRANSPORTATIC MATERIALS I	DIV	ISION		ROCK, ARKANSAS			
**		IAEL BENSON, MATER SURVEY / PAVEMENT				* *			
DATE - 09/30/15 SEQUENCE NO 48 JOB NUMBER - CA0801 MATERIAL CODE - SSRVPS FEDERAL AID NO TO BE ASSIGNED SPEC. YEAR - 2014 PURPOSE - SOIL SURVEY SAMPLE SUPPLIER ID 1 SPEC. REMARKS - NO SPECIFICATION CHECK COUNTY/STATE - 71 SUPPLIER NAME - STATE DISTRICT NO 08 NAME OF PROJECT - HWY.110-CLINTON (WIDENING) (S) PROJECT ENGINEER - NOT APPLICABLE									
PIT/QUARRY-ARKANSASLOCATION-VAN BUREN COUNTYDATE SAMPLED-07/15/15SAMPLED BY-S.FAULKNERDATE RECEIVED-07/16/15SAMPLE FROM-TEST HOLEDATE TESTED-09/29/15MATERIAL DESCSOIL SURVEY-R VALUE- PAVEMENT SOUNDINGS									
				20152214		20152215			
SAMPLE ID TEST STATUS STATION LOCATION DEPTH IN FEET MAT'L COLOR	-	20152213 S370 INFORMATION ONLY 884+00 18RT 0-4.5Z GRAY	8	S371	- ON ONLY -	S372			
MAT'L TYPE LATITUDE DEG-MIN-	- SEC -	35 41 26 90	<u>~</u>	35 /1	- 26 90 -	35 41 31.80			
LATITODE DEG-MIN- LONGITUDE DEG-MIN-	SEC -	92 30 37.10	~	92 30	37.00				
<pre>% PASSING 2 1 1/2 3/4 3/6 NO. NO. NO. NO. NO.</pre>	IN IN IN IN 4 - 10 - 40 -	100 98	<b>A A K K A A K K</b>	100 97 92 87 82 69 62		100 97 93 87 68 54			
LIQUID LIMIT	-	35	5	30	-	23			
PLASTICITY INDEX AASHTO SOIL UNIFIED SOIL	- -	20 A-6(12)	н н л	16 A-6(7)	-	10 A-4(2)			
% MOISTURE CONTENT	- 1	28.2	-	18.8	-	22.8			
ACHMSC ACHMBC AGG.BASE CRS CL-7	(IN) - (IN) - (IN) -	4.5  9.0			-	6.0 2.0			
	2		-		-				
			_		-				
			_		10				
	<u> </u>		-		-				
	-		-		-				
REMARKS - W=MULTIP	LE LAYE	RS, X=STRIPPED, Z=	AU	GER REFUSAL	ı.				

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ARKANSAS STATE		AND TRANSPORTATIO MATERIALS I	DIV	ISION		E RC	OCK, ARKANSAS	
**		AEL BENSON, MATER URVEY / PAVEMENT				* * *		
DATE - 09/30/15 SEQUENCE NO 49 JOB NUMBER - CA0801 MATERIAL CODE - SSRVPS FEDERAL AID NO TO BE ASSIGNED SPEC. YEAR - 2014 PURPOSE - SOIL SURVEY SAMPLE SUPPLIER ID 1 SPEC. REMARKS - NO SPECIFICATION CHECK COUNTY/STATE - 71 SUPPLIER NAME - STATE DISTRICT NO 08 NAME OF PROJECT - HWY.110-CLINTON (WIDENING) (S) PROJECT ENGINEER - NOT APPLICABLE								
PIT/QUARRY-ARKANSASLOCATION-VAN BUREN COUNTYDATE SAMPLED -07/15/1SAMPLED BY-S.FAULKNERDATE RECEIVED -07/16/1SAMPLE FROM-TEST HOLEDATE TESTED -09/29/1MATERIAL DESCSOIL SURVEY -R VALUE-PAVEMENT SOUNDINGS							VED - 07/16/15	
3/4 3/8 NO. NO. NO.	- - - - SEC - SEC - IN IN IN IN 10 - 40 - 80 -	INFORMATION ONLY 892+00 17LT 0-5 BR/GR 35 41 31.70 92 30 41.50 100 99 98 98 91		S374 INFORMATIC 892+00 26LT 0-5 BR/GR 35 41	ON ONLY	- S - I - 9 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0	INFORMATION ONLY 000+00 06RT 0-2Z GRAY	
LIQUID LIMIT PLASTICITY INDEX AASHTO SOIL UNIFIED SOIL % MOISTURE CONTENT		55 32 A-7-6(27) 26.0		22 07 A-4(1) 24.1			ND NP A-2-4(0) 11.3	
ACHMSC ACHMBC AGG.BASE CRS CL-7	(IN) - (IN) - (IN) - - - - - - - - -	3.5 3.0					6.0 1.5 8.0	

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AASHTO TESTS : T24 T88 T89 T90 T265

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ARKANSAS STATE		Y AND TRANSPORTATI MATERIALS 1	DIV	ISION		ROCK, ARKANSAS		
**		HAEL BENSON, MATER SURVEY / PAVEMENT				* *		
DATE-09/30/15SEQUENCE NO50JOB NUMBER-CA0801MATERIAL CODE-SSRVPSFEDERAL AID NOTO BE ASSIGNEDSPEC. YEAR-2014PURPOSE-SOIL SURVEY SAMPLESUPPLIER ID1SPEC. REMARKS-NO SPECIFICATION CHECKCOUNTY/STATE-71SUPPLIER NAME-STATEDISTRICT NO08NAME OF PROJECT-NOT APPLICABLE								
PIT/QUARRY-ARKANSASLOCATION-VAN BUREN COUNTYDATE SAMPLEDSAMPLED BY-S.FAULKNERDATE RECEIVEDSAMPLE FROM-TEST HOLEDATE TESTEDMATERIAL DESCSOIL SURVEY-R VALUE-PAVEMENT SOUNDINGS-								
LAB NUMBER		20152219	<u> </u>	20152220	-	20152221		
SAMPLE ID TEST STATUS	-	S376 INFORMATION ONLY	н ж	S377 INFORMATIC	- ON ONLY -	S378 INFORMATION ONLY		
STATION LOCATION DEPTH IN FEET	<u>~</u>	900+00 16RT 0-5	5	900+00 26RT 0-5	-	908+00 09LT 0-4Z		
MAT'L COLOR MAT'L TYPE	-	BR/GR	5 5 4	BR/GR	2 2 2	BR/GR		
LATITUDE DEG-MIN- LONGITUDE DEG-MIN-	SEC - SEC -	35 41 37.90 92 30 46.90	-	35 41 92 30	37.90 - 46.80			
	IN IN IN		N 2002 31	100		100		
3/8	IN IN 4 -		ж К 3	95 91	-	96 87		
NO.	10 -	88	프	86	-	75		
	40 -		÷	81 69	( <b>H</b>	67 56		
NO. NO.	80 - 200 -	74 67	~	63	17. I	48		
LIQUID LIMIT	-	30	-	32	-	20		
PLASTICITY INDEX	-	14	- 21	16	-	06		
AASHTO SOIL UNIFIED SOIL	-	A-6(7)	-	A-6(7)		A-4(0)		
% MOISTURE CONTENT	- '	28.2	2	29.3		10.2		
ACHMSC	(IN) -	3.5	-		-	10.0W		
ACHMBC	(IN) -		-		-	2.25 10.0		
AGG.BASE CRS CL-7	(IN) -	10.0	-	-7-77	-	10.0		
	-				-			
	_		-		-			
	_				-			
	-		-		-			
	-		-		-			
REMARKS - W=MULTIP	LE LAYE	RS, X=STRIPPED, Z=	=AUC	GER REFUSAL				

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AASHTO TESTS : T24 T88 T89 T90 T265

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		MATERIALS D	υIV	ISIÓN	- LITTLE ROCK, ARKANSAS	
		IAEL BENSON, MATERI SURVEY / PAVEMENT				
DATE - 09/30/15 SEQUENCE NO 51 JOB NUMBER - CA0801 MATERIAL CODE - SSRVPS FEDERAL AID NO TO BE ASSIGNED SPEC. YEAR - 2014 PURPOSE - SOIL SURVEY SAMPLE SUPPLIER ID 1 SPEC. REMARKS - NO SPECIFICATION CHECK COUNTY/STATE - 71 SUPPLIER NAME - STATE DISTRICT NO 08 NAME OF PROJECT - HWY.110-CLINTON (WIDENING) (S) PROJECT ENGINEER - NOT APPLICABLE PIT/QUARRY - ARKANSAS						
LOCATION - VAN BUREN COUNTY SAMPLED BY - S.FAULKNER SAMPLE FROM - TEST HOLE MATERIAL DESC SOIL SURVEY - R VALUE- PAVEMENT SOUNDI					DATE SAMPLED - 07/15/15 DATE RECEIVED - 07/16/15 DATE TESTED - 09/29/15 GS	
		20152222			-	
SAMPLE ID		S379 INFORMATION ONLY		S380	-	
TEST STATUS	-	INFORMATION ONLY		1NFORMATIC 908+00	ON ONLY -	
	-	908+00 20LT		31LT	-	
LOCATION DEPTH IN FEET		0-5	$\simeq$	0-5	-	
			$\rightarrow$	BR/GR	-	
MAT'L COLOR MAT'L TYPE	_	BR/GR	~	Dit/ dit	-	
LATITUDE DEG-MIN-SEC	_	35 41 44.00	2 20	35 41	43.90 -	
LONGITUDE DEG-MIN-SEC	_	92 30 53.50		92 30	53.60	
• ·	-		-			
1 1/2 IN		100				
3/4 IN 3/8 IN			-	100	-	
NO. 4	_	94	-	93	-	
			-	85	2	
NO. 10 NO. 40	_	60	_	77	-	
NO. 80			_	58	-	
NO. 200		47		40		
LIQUID LIMIT	_	27	-	19	14	
PLASTICITY INDEX	-	10	-	05		
AASHTO SOIL	_	A-4(2)	-	A-4(0)		
UNIFIED SOIL	-		н.			
% MOISTURE CONTENT	-	13.7	-	11.7	-	
ACHMSC (IN	) -	12.0W	-		-	
AGG.BASE CRS CL-7 (IN	) -	6.0	-			
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REMARKS - W=MULTIPLE L	AYE	RS, X=STRIPPED, Z=.	AUG	GER REFUSAL		

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ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT - LITTLE ROCK, ARKANSAS MATERIALS DIVISION MICHAEL BENSON, MATERIALS ENGINEER \*\*\* SOIL SURVEY / PAVEMENT SOUNDING TEST REPORT \*\*\* SEQUENCE NO. - 1 - 09/30/15 DATE JOB NUMBER - CA0801 MATERIAL CODE - RV SPEC. YEAR - 2014 FEDERAL AID NO. - TO BE ASSIGNED PURPOSE - SOIL SURVEY SAMPLE SUPPLIER ID. - 1 COUNTY/STATE - 71 SPEC. REMARKS - NO SPECIFICATION CHECK DISTRICT NO. - 08 SUPPLIER NAME - STATE NAME OF PROJECT - HWY.110-CLINTON (WIDENING) (S) PROJECT ENGINEER - NOT APPLICABLE PIT/QUARRY - ARKANSAS DATE SAMPLED - 07/15/15 LOCATION · - VAN BUREN COUNTY SAMPLED BY - S.FAULKNER DATE RECEIVED = 07/16/15 DATE TESTED = 09/29/15 SAMPLE FROM - TEST HOLE MATERIAL DESC. - SOIL SURVEY - RESISTANCE R-VALUE ACTUAL RESULTS - 20152224 - 20152225 - RV381 \_ RV382 - 20152226 LAB NUMBER - RV383 SAMPLE ID - RV381 TEST STATUS - INFORMATION ONLY - INFORMATION ONLY - INFORMATION ONLY - 651+00 - 563+00 - 523+00 STATION - 46RT 32LT LOCATION 0-5 BROWN - 46LT - 0-5 DEPTH IN FEET - 0-5 \_ BROWN - BROWN MAT'L COLOR MAT'L TYPE LATITUDE DEG-MIN-SEC - 35 36 50.40 - 35 37 29.60 - 35 38 52.50 LONGITUDE DEG-MIN-SEC - 92 27 34.30 92 27 25.60 92 27 36.00 2 IN. -% PASSING - 100 - 100 1 1/2 IN. --94 97 3/4 IN. - 100 --94 92 3/8 IN. - 93 ----90 92 NO. 4 - 87 . e -86 90 NO. 10 - 72 -. ..... - 83 NO. 40 - 68 87 -- 81 73 NO. 80 - 63 -55 NO. 200 - 51 78 - 52 - 21 LIOUID LIMIT - 29 08 PLASTICITY INDEX - 16 30 <u>-</u> A-7-6(24) A - 4(1)AASHTO SOIL - A-4(2) \_ UNIFIED SOIL % MOISTURE CONTENT \_ -REMARKS = W=MULTIPLE LAYERS, X=STRIPPED, Z=AUGER REFUSAL

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ARKANSAS STATE HIGHW.	MATERIALS D	IVISION	- LITTLE P	ROCK, ARKANSAS				
MICHAEL BENSON, MATERIALS ENGINEER *** SOIL SURVEY / PAVEMENT SOUNDING TEST REPORT ***								
DATE - 10/02/15 JOB NUMBER - CA0801 FEDERAL AID NO TO BE ASS PURPOSE - SOIL SURV SPEC. REMARKS - NO SPECIN SUPPLIER NAME - STATE NAME OF PROJECT - HWY.110 PROJECT ENGINEER - NOT APD	SEQUENCE NO 2 MATERIAL CODE - RV SPEC. YEAR - 2014 SUPPLIER ID 1 COUNTY/STATE - 71 DISTRICT NO 08							
PIT/QUARRY - ARKANSAS LOCATION - VAN BUREN ( SAMPLED BY - S.FAULKNER SAMPLE FROM - TEST HOLE MATERIAL DESC SOIL SUR		DATE SAMPLED - 07/15/15 DATE RECEIVED - 07/16/15 DATE TESTED - 09/29/15 RESULTS						
SAMPLE ID TEST STATUS STATION LOCATION DEPTH IN FEET	- INFORMATION ONLY - 659+00 - 37RT - 0-5 - BROWN - 35 39 .10	- RV385 - INFORMATION - 739+00 - 38 RT - 0-5 - BROWN - 35 39 5	- - - - - - - - - - - - - -	20152229 RV386 INFORMATION ONLY 788+00 37RT 0-5 BR/GR 35 40 29.80 92 29 14.60				
<pre>% PASSING 2 IN. 1 1/2 IN. 3/4 IN. 3/8 IN. NO. 4 NO. 10 NO. 40 NO. 80</pre>	- 100 - 89 - 87 - 85 - 81 - 75	- - - - - 97 - 94 - 93 - 91 - 87 85		100 100 100 100 94				
LIQUID LIMIT PLASTICITY INDEX AASHTO SOIL UNIFIED SOIL % MOISTURE CONTENT	- 28 - 14 - A-6(4) -	- 68 - 42 - A-7-6(39) - -		73 46 A-7-6(50)				
PRMARKS - W-MIII.TTDI.R 1.AV	-							

--AASHTO TESTS : T24 T88 T89 T90 T265

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ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT - LITTLE ROCK, ARKANSAS MATERIALS DIVISION MICHAEL BENSON, MATERIALS ENGINEER \*\*\* SOIL SURVEY / PAVEMENT SOUNDING TEST REPORT \*\*\* - 09/30/15 SEQUENCE NO. 🛥 3 DATE JOB NUMBER - CA0801 MATERIAL CODE = RV FEDERAL AID NO.- TO BE ASSIGNED SPEC. YEAR = 2014 PURPOSE - SOIL SURVEY SAMPLE SUPPLIER ID. - 1 SPEC. REMARKS - NO SPECIFICATION CHECK COUNTY/STATE - 71 SUPPLIER NAME - STATE DISTRICT NO. - 08 NAME OF PROJECT - HWY.110-CLINTON (WIDENING) (S) PROJECT ENGINEER - NOT APPLICABLE PIT/OUARRY - ARKANSAS LOCATION DATE SAMPLED = 07/15/15 - VAN BUREN COUNTY DATE RECEIVED = 07/16/15 SAMPLED BY - S.FAULKNER SAMPLE FROM - TEST HOLE DATE TESTED = 09/29/15 MATERIAL DESC. - SOIL SURVEY - RESISTANCE R-VALUE ACTUAL RESULTS - 20152230 - 20152231 - RV387 - RV388 LAB NUMBER SAMPLE ID TEST STATUS - INFORMATION ONLY - INFORMATION ONLY -- 828+00 - 892+00 STATION - 26LT - 26LT LOCATION - 26LT - 0-5 - BROWN - 0-5 DEPTH IN FEET \_ 0-5 \_ BROWN MAT'L COLOR -MAT'L TYPE LATITUDE DEG-MIN-SEC - 35 40 51.10 - 35 41 31.60 92 29 53.50 92 30 41.60 LONGITUDE DEG-MIN-SEC -2 IN.-% PASSING  $1 \ 1/2 \ IN. - 100$ -- 100 3/4 IN. - 88 **T** 3/8 IN. - 85 97 50 95 NO. 4 - 79 -NO. 10 - 74 92 -NO. 40 - 69 90 -NO. 80 - 64 - 1 C 89 NO. 200 - 62 88 - 56 - 52 LIQUID LIMIT PLASTICITY INDEX - 28 32 🐃 A-7-6(31) - A-7-6(15) AASHTO SOIL UNIFIED SOIL -% MOISTURE CONTENT - $\sim 10$ -REMARKS - W=MULTIPLE LAYERS, X=STRIPPED, Z=AUGER REFUSAL

AASHTO TESTS 🗊 T24 T88 T89 T90 T265

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