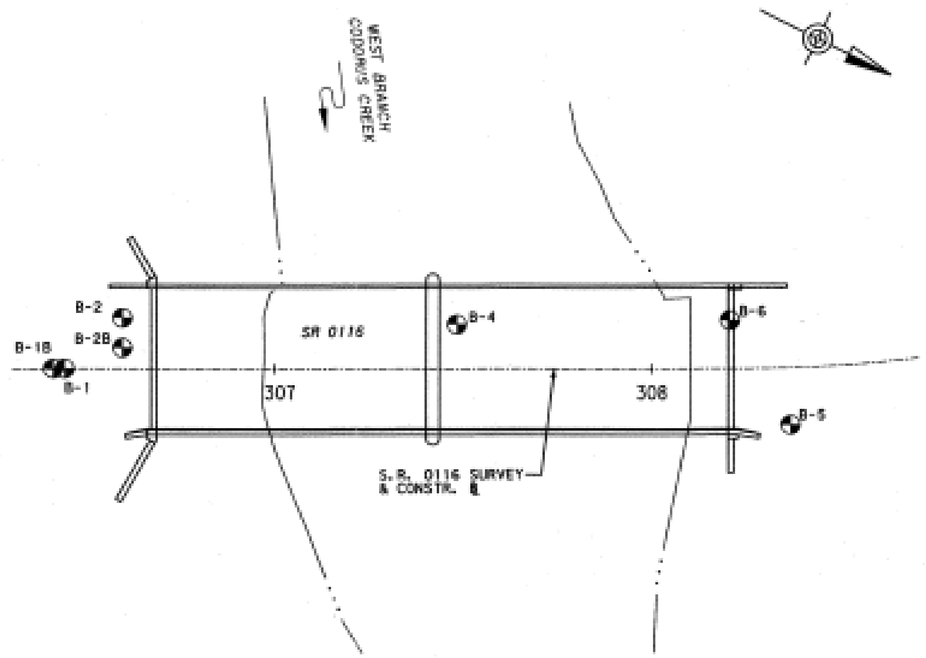


BORING LOCATION PLAN
N.T.S.

GENERAL NOTES

THIS SHEET IS INCLUDED FOR THE CONVENIENCE OF THE DEPARTMENT. REFER TO PUBLICATION 408 SECTION 102.05 FOR FURTHER INFORMATION.

FOR ADDITIONAL SOIL AND ROCK DESCRIPTIONS SEE PUBLICATION 222.

THE BORING LOGS AND RELATED INFORMATION DEPICT SUBSURFACE CONDITIONS ONLY AT THE SPECIFIC LOCATIONS AND DATES INDICATED. SUBSURFACE CONDITIONS MAY DIFFER FROM THE CONDITIONS REPORTED AT THE SPECIFIC LOCATIONS. ALSO, THE PASSAGE OF TIME MAY RESULT IN A CHANGE OF CONDITIONS AT THE BORING LOCATIONS.

LEGEND

PP	POCKET PENETROMETER
T	TORVANE
BFE	BOTTOM OF FOOTING ELEVATION
BPCE	BOTTOM OF PILE CAP ELEVATION
EPTE	ESTIMATED PILE TIP ELEVATION
TOR	ESTIMATED TOP OF ROCK ELEVATION

THE DESCRIPTIONS OF THE MATERIALS HAVE BEEN VERIFIED.

_____

THE SUBSURFACE EXPLORATION DATA THAT ARE PRESENTED ON THESE DRAWINGS (INCLUDING BORING LOGS, EARTH SAMPLES, ROCK CORES, CLASSIFICATION OF MATERIALS AND DEPTH OF BORINGS) ACCURATELY REPRESENT THE CONDITIONS ENCOUNTERED BY THE TEST BORING PROGRAM AT EACH BORING LOCATION.

_____ _____
GEOTECHNICAL ENGINEER/ENGINEERING GEOLOGIST DATE:

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

YORK COUNTY
SR 0116 SECTION 019

SEGMENT 2030 OFFSET 1658
SR 0116 STA. 307+44.00
OVER WEST CODORUS CREEK

TWO SPAN P/S CONCRETE BULB TEE BRIDGE

STRUCTURE BORINGS

SHEET 1 OF 7

_____ _____
DISTRICT GEOTECHNICAL ENGINEER DATE

S - 30141

SUBSTRUCTURE UNIT:

ABUTMENT 1

LOG 1 OF 1

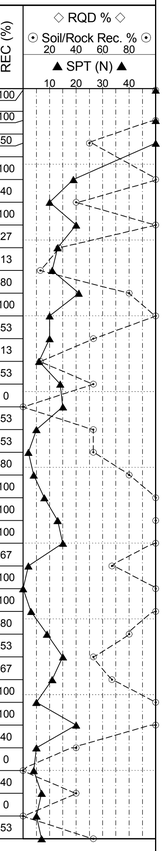
BORING NUMBER:	BORING LOCATION	START: 09/13/2010 10:00 AM	HAMMER: AUTOMATIC
S1-01	STATION: 306+44.0 OFFSET: 0.3 ft. LT.	FINISH: 09/15/2010 11:50 AM	EFFICIENCY: 0.8 ERa

DRILLING METHOD AND EQUIPMENT:	SIZE OF CORE:	VERTICAL SCALE:	TOP OF BORING ELEVATION:
DBLE TUBE SPLIT INNER BRL-NX, AUTOMATIC, TRACK RIG W/SAFETY HAMMER	1.874"	0 FT. 5 FT.	451.7 FT.

DRILLING INSPECTOR: KYLE GIBNEY
DRILLER & DRILLING COMPANY: B. JONES EICHELBERGERS, INC.

▽ 0 HR. READING - ELAPSED TIME: El. 434.9 - 43.7 hr.
▼ 24 HR. READING - ELAPSED TIME: El. 433.0 - 70.7 hr.

ELEV.	GRAPHIC	MATERIAL DESCRIPTION	AASHTO/ USCS	SAMPLE DEPTH	SAMPLE NO.	BLOW COUNT ------ PP/T TSF	N 60 / %RQD	REC (ft.)	REC (%)
		BITUMINOUS CONCRETE, black, *0.1' spoon refusal.* 0.4'/El. 451.3		0.1	S-1	50/.1'	>67	0.1	100
				1.5	A-1				
		Coarse **SAND** and **GRAVEL**, some Silt, contains bituminous concrete fragments, very loose to very dense, dry to wet, homogeneous, poorly graded, orange brown to gray, fill. *2.1' spoon refusal. S-3 has a creosote odor. 3.6' spoon refusal.*		2.1	S-2	23-50/.1'	>67	0.6	100
				3.0	S-3	20-50/.1'	>67	0.3	50
		0.0' - 13' fill.		4.5	S-4	7-9-10	25	1.5	100
450				6.0	S-5	1-2-8	13	0.6	40
				7.5	S-6	8-9-11	27	1.5	100
445				9.0	S-7	7-8-5	17	0.4	27
				10.5	S-8	6-5-6	15	0.2	13
440			A-4 / CL	12.0	S-9	6-6-15	28	1.2	80
		13.5'-49.5' alluvial.		13.5	S-10	9-5-5	13	1.5	100
				15.0	S-11	6-3-7	13	0.8	53
435 ▽				16.5	S-12	7-3-3	8	0.2	13
▼				18.0	S-13	7-7-7	19	0.8	53
				19.5	S-14	8-8-7	20	0.0	0
430	**BPCE 430.00**	*S-14 no recovery; reason unknown.*		21.0	S-15	4-3-2	7	0.8	53
		24.0'/El. 427.7		22.5	S-16	2-0-2	3	0.8	53
		SILT and **SAND**, very loose to medium dense, wet, orange brown, *becoming more brown in color.*		24.0	S-17	1-1-3 **1.25/---**	5	1.2	80
				25.5	S-18	1-3-5 **1.50/---**	11	1.5	100
425			a-4 / ml	27.0	S-19	7-7-6	17	1.5	100
		30.0'/El. 421.7		28.5	S-20	8-8-7	20	1.5	100
		SILT, some Sand, medium dense to dense, wet to moist, homogeneous, well graded, angular to sub-angular, light orange brown to dark brown.		30.0	S-21	1-1-1	3	1.0	67
				31.5	S-22	0-0-0 **1.00/---**	0	1.5	100
420				33.0	S-23	1-1-2 **0.00/---**	4	1.5	100
				34.5	S-24	5-5-4 **1.75/---**	12	1.2	80
415				36.0	S-25	8-8-7	20	0.8	53
			a-4 / ml	37.5	S-26	5-5-6 **1.50/---**	15	1.0	67
				39.0	S-27	3-2-3 **1.50/---**	7	1.5	100
410				40.5	S-28	3-11-9 **1.00/---**	27	1.5	100
				42.0	S-29	7-3-2	7	0.6	40
		45.0'/El. 406.7		43.5	S-30	1-2-2	5	0.0	0
		SILT and **SAND**, dark brown and orange brown. *S-30 no recovery, reason unknown. 49.5' end of boring sheared off bottom 10' of augers, had to abandon hole; moved 3' back station.*		45.0	S-31	2-3-4	9	0.6	40
405			a-4 / ml	46.5	S-32	1-2-3	7	0.0	0
		49.5'/El. 402.2		48.0	S-33	2-4-3 **0.50/---**	9	0.8	53



GENERAL NOTES

THIS SHEET IS INCLUDED FOR THE CONVENIENCE OF THE DEPARTMENT. REFER TO PUBLICATION 408 SECTION 102.05 FOR FURTHER INFORMATION.

FOR ADDITIONAL SOIL AND ROCK DESCRIPTIONS SEE PUBLICATION 222.

THE BORING LOGS AND RELATED INFORMATION DEPICT SUBSURFACE CONDITIONS ONLY AT THE SPECIFIC LOCATIONS AND DATES INDICATED. SUBSURFACE CONDITIONS MAY DIFFER FROM THE CONDITIONS REPORTED AT THE SPECIFIC LOCATIONS. ALSO, THE PASSAGE OF TIME MAY RESULT IN A CHANGE OF CONDITIONS AT THE BORING LOCATIONS.

LEGEND

PP	POCKET PENETROMETER
T	TORVANE
BFE	BOTTOM OF FOOTING ELEVATION
BPCE	BOTTOM OF PILE CAP ELEVATION
EPTE	ESTIMATED PILE TIP ELEVATION
TOR	ESTIMATED TOP OF ROCK ELEVATION

THE DESCRIPTIONS OF THE MATERIALS HAVE BEEN VERIFIED.

_____

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

YORK COUNTY
SR 0116 SECTION 019

SEGMENT 2030 OFFSET 1658
SR 0116 STA. 307+44.00
OVER WEST CODORUS CREEK

TWO SPAN P/S CONCRETE BULB TEE BRIDGE

STRUCTURE BORINGS

SHEET 2 OF 7

DATE

S - 30141

SUBSTRUCTURE UNIT:

ABUTMENT 1

LOG 1 OF 1

BORING NUMBER:	BORING LOCATION	START: 09/18/2010 8:00 AM	HAMMER: AUTOMATIC
S1-02	STATION: 306+60.0 OFFSET: 13.6 ft. LT.	FINISH: 09/18/2010 4:30 PM	EFFICIENCY: 0.8 ERa

DRILLING METHOD AND EQUIPMENT:	SIZE OF CORE:	VERTICAL SCALE:	TOP OF BORING ELEVATION:
DBLE. TUBE WIRE LN-NQ, AUTOMATIC, TRACK RIG W/SAFETY HAMMER	1.874"	0 FT. 5 FT.	451.2 FT.

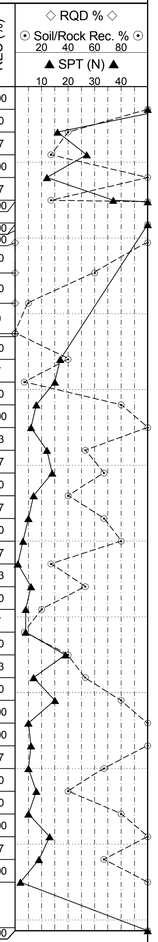
DRILLING INSPECTOR: KYLE GIBNEY
DRILLER & DRILLING COMPANY: B. JONES
EICHELBERGERS, INC.

▽ 0 HR. READING - ELAPSED TIME: El. 437.9 - 24.5 hr.
▼ 24 HR. READING - ELAPSED TIME: El. 437.2 - 62.7 hr.

MATERIAL DESCRIPTION	AASHTO/ USCS
BITUMINOUS CONCRETE, *asphalt.* 0.5'/El. 450.7	a-1-b / sw
SAND and **GRAVEL**, medium dense to very dense, moist to dry, dark gray. 2.5'/El. 448.7	A-4 / CL
SILT, some Sand, some coarse and fine Gravel. *spoon refusal @ 7'; S-6 no recovery due to cobbles.* *0'-16.3' fill.* 9.5'/El. 441.7	
Spoon refusal.	
COBBLES, *cobbles and boulders.* *R-4 no recovery; reason unknown.* 16.5'/El. 434.7	
SAND, some Silt, medium dense, wet, well graded, gray brown. 19.5'/El. 431.7	a-1-b / sw-sm
SAND, some Silt, trace Gravel, loose to medium dense, wet, orange brown. *16.3'-28.5' alluvial.* 28.5'/El. 422.7	A-4 / CL-ML
SILT and **SAND**, some Gravel, very loose to loose, moist to wet, brown. *28.5'-55.7' residual.* 36.0'/El. 415.2	a-4 / ml
SAND, some Silt, some Gravel, loose to medium dense, wet, orange brown. 40.5'/El. 410.7	a-1-b / sm
SAND, some Silt, loose to medium dense, wet, well graded. 52.5'/El. 398.7	a-1-b / sw-sm
UNSAMPLED. 55.5'/El. 395.7	
SAND and **SILT**, medium dense to dense, wet to moist, well graded, orange brown. 55.7'/El. 395.5	a-1-b / sw-sm

BPCE 430.00

SAMPLE DEPTH	SAMPLE NO.	BLOW COUNT	PP/T TSF	N 60 / %RQD	REC (ft.)	REC (%)
1.5	S-1	50-34-24		77	1.5	100
3.0	S-2	11-9-7		21	0.6	40
4.5	S-3	7-12-15		36	0.4	27
6.0	S-4	7-9-3		16	1.5	100
7.5	S-5	7-18-19		49	0.4	27
7.6	S-6	50/.1'		>67	0.1	100
9.0	A-1					
9.1	S-7	50/.1'		>67	0.1	100
9.5	A-2			0%	0.8	100
10.3	R-1					
12.3	R-2			0%	1.2	60
14.3	R-3			0%	0.2	10
16.3	R-4			0%	0.0	0
16.5	S-8	6-8-9		23	0.6	40
18.0	S-9	6-8-7		20	0.1	7
19.5	S-10	3-1-7		11	1.2	80
21.0	S-11	4-4-2		8	1.5	100
22.5	S-12	5-5-7		16	0.8	53
24.0	S-13	9-6-8		19	1.0	67
25.5	S-14	6-4-3		9	0.6	40
27.0	S-15	2-2-3		7	1.0	67
28.5	S-16	2-2-1		4	1.2	80
30.0	S-17	1-1-0		1	0.4	27
31.5	S-18	2-2-4		8	0.8	53
33.0	S-19	3-2-2		5	0.3	20
34.5	S-20	1-2-2		5	0.1	7
36.0	S-21	3-7-12		25	0.6	40
37.5	S-22	5-4-3		9	0.8	53
39.0	S-23	2-5-10		20	1.2	80
40.5	S-24	5-3-2		7	1.5	100
42.0	S-25	3-3-3		8	1.5	100
43.5	S-26	2-2-3		7	1.0	67
45.0	S-27	2-3-5		11	0.6	40
46.5	S-28	2-3-2		7	1.2	80
48.0	S-29	12-9-4		17	1.5	100
49.5	S-30	3-3-6		12	1.0	67
51.0	S-31	1-1-1		3	1.5	100
52.5	A-3					
55.5	S-32	50/.2'		>67	0.2	100



NOTE: DRILL TO 56.3'; STARTED TO CORE AT 55.7'; DRILLER ATTEMPTED TO PULL INNER BARREL ; SHEARED

GENERAL NOTES

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LEGEND

PP	POCKET PENETROMETER
T	TORVANE
BFE	BOTTOM OF FOOTING ELEVATION
BPCE	BOTTOM OF PILE CAP ELEVATION
EPTE	ESTIMATED PILE TIP ELEVATION
TOR	ESTIMATED TOP OF ROCK ELEVATION

THE DESCRIPTIONS OF THE MATERIALS HAVE BEEN VERIFIED.

_____

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

YORK COUNTY
SR 0116 SECTION 019

SEGMENT 2030 OFFSET 1658
SR 0116 STA. 307+44.00
OVER WEST CODORUS CREEK

STRUCTURE BORINGS

SHEET 3 OF 7

DATE

S - 30141

SUBSTRUCTURE UNIT:
PIER

LOG 1 OF 2

BORING NUMBER:	BORING LOCATION	START: 09/23/2010 7:15 AM	HAMMER: AUTOMATIC
S1-04	STATION: 307+48.0 OFFSET: 11.9 ft. LT.	FINISH: 10/08/2010 3:10 PM	EFFICIENCY: 0.8 ERa

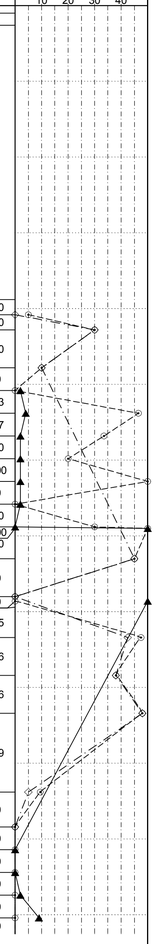
DRILLING METHOD AND EQUIPMENT:	SIZE OF CORE:	VERTICAL SCALE:	TOP OF BORING ELEVATION:
DBLE. TUBE WIRE LN-NQ, AUTOMATIC, TRACK RIG W/SAFETY HAMMER	1.874"	0 FT. [redacted] 5 FT.	451.9 FT.

DRILLING INSPECTOR: KYLE GIBNEY
DRILLER & DRILLING COMPANY: B. JONES
EICHELBERGERS, INC.

▽ 0 HR. READING - ELAPSED TIME: NR - NR
▼ 24 HR. READING - ELAPSED TIME: NR - NR

ELEV.		MATERIAL DESCRIPTION	AASHTO/ USCS	SAMPLE DEPTH	SAMPLE NO.	BLOW COUNT	PP/T TSF	N 60 / %RQD	REC (ft.)	REC (%)
		BITUMINOUS CONCRETE. 0.5'/El. 451.4		0.5	A-1					
				1.3	A-2					
		CEMENT CONCRETE. 1.3'/El. 450.6								
		UNSAMPLED.								
					A-3					
		19.4'/El. 432.5								
		CEMENT CONCRETE, *concrete footing.*		19.4	R-1			0%	0.1	10
				20.4	R-2			60%	0.6	60
				21.4	R-3			20%	0.5	20
		23.9'/El. 428.0								
	BPCE 428.00	**SAND** and **CLAY**, some Silt, very loose, wet, well graded, orange brown. *23.9'-34.5' alluvial after S-6 casing advanced to deck level and left open; spoon refusal at 34.5'. S-1 no recovery due to loose material, sediment trap installed casing device every two spoons too soft for penetrometer.*	a-1-b / sc-sm	23.9	S-1	1-1-1		3	0.0	0
				25.4	S-2	1-1-3		5	1.4	93
				26.9	S-3	1-1-1		3	1.0	67
				28.4	S-4	1-1-1		3	0.6	40
				29.9	S-5	1-1-1		3	1.5	100
				31.4	S-6	1-1-1		3	0.0	0
				32.9	S-7	1-0-0		0	0.9	60
		34.5'/El. 417.4		34.4	S-8	50/.1'		>67	0.1	100
		LIMESTONE, *limestone pinnacle.* 36.5'/El. 415.4		34.5	R-4			90%	1.8	90
		SAND and **CLAY**, *soil seam, vertical fracture, or weathered rock.*		36.5	R-5			0%	0.0	0
		39.7'/El. 412.2		39.0	S-9	50/.3'		>67	0.0	0
		LIMESTONE, gray, hard to very hard, fresh to moderately weathered, laminated to thin bedding with sheer dip, fracture zone, closely spaced discontinuity spacing, sheer dip.		39.3	R-6			85%	1.9	95
				41.7	R-7			76%	1.9	76
				44.2	R-8			96%	2.4	96
		47.7'/El. 404.2		46.7	R-9			10%	1.0	19
		SILT and **CLAY**, *soil seam, vertical fracture or weathered rock.*								
				51.9	R-10			0%	0.0	0
				54.2	S-10	0-0-0		0	0.0	0
				55.7	S-11	0-0-0		0	0.0	0
				57.2	S-12	1-0-2		3	0.0	0
				58.7	S-13	4-5-4		12	0.0	0
				60.2	R-11			0%	0.0	0

◇ RQD % ◇
⊙ Soil/Rock Rec. % ⊙ (20 40 60 80)
▲ SPT (N) ▲ (10 20 30 40)



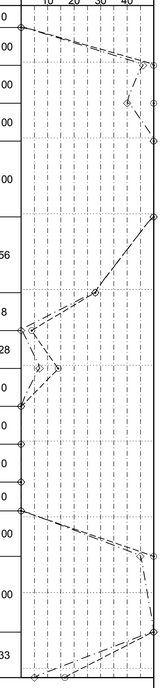
SUBSTRUCTURE UNIT:
PIER

LOG 2 OF 2

BORING NUMBER:	BORING LOCATION	VERTICAL SCALE:	
S1-04	STATION: 307+48.0 OFFSET: 11.9 ft. LT.	0 FT. [redacted] 5 FT.	▽ 0 HR. READING: NR ▼ 24 HR. READING: NR

ELEV.		MATERIAL DESCRIPTION	AASHTO/ USCS	SAMPLE DEPTH	SAMPLE NO.	BLOW COUNT	PP/T TSF	N 60 / %RQD	REC (ft.)	REC (%)
	EPTE 389.20	**SILT** and **CLAY**, *soil seam, vertical fracture or weathered rock.(Layer continued from the previous log page)* 62.7'/El. 389.2		62.7	R-11			0%	0.0	0
		LIMESTONE, gray, hard to very hard, fresh to moderately weathered, indistinct to thin bedding with sheer dip, jointed, closely spaced discontinuity spacing, sheer dip.		65.2	R-12			92%	2.5	100
				67.7	R-13			80%	2.5	100
				70.2	R-14			100%	2.5	100
				75.2	R-15			100%	5.0	100
				80.2	R-16			56%	2.8	56
		80.4'/El. 371.5 *79.4'-80.2' void due to sand filled void; drillers tools got sanded in and it took 1.5 days to get fixed.*								
		SILT and **CLAY**, *soil seam, vertical fracture or weathered rock.*		82.7	R-17			0%	0.2	8
				85.2	R-18			14%	0.7	28
				87.7	R-19			0%	0.0	0
				90.2	R-20			0%	0.0	0
				92.7	R-21			0%	0.0	0
		94.6'/El. 357.3		94.6	R-22			0%	0.0	0
		LIMESTONE, light gray, hard to very hard, fresh to moderately weathered, indistinct to thin bedding with very steep dip, fracture zone, closely spaced discontinuity spacing, sheer dip, *siliceous. 94.6' -95.4' solution activity.*		97.6	R-23			90%	3.0	100
				102.6	R-24			100%	5.0	100
		R-24 solid 5' core. *R-25 2' of rock core slipped, unable to recover.* 105.6'/El. 346.3			R-25			10%	1.0	33

◇ RQD % ◇
⊙ Soil/Rock Rec. % ⊙ (20 40 60 80)
▲ SPT (N) ▲ (10 20 30 40)



GENERAL NOTES

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LEGEND

PP	POCKET PENETROMETER
T	TORVANE
BFE	BOTTOM OF FOOTING ELEVATION
BPCE	BOTTOM OF PILE CAP ELEVATION
EPTE	ESTIMATED PILE TIP ELEVATION
TOR	ESTIMATED TOP OF ROCK ELEVATION

THE DESCRIPTIONS OF THE MATERIALS HAVE BEEN VERIFIED.

_____

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

YORK COUNTY
SR 0116 SECTION 019

SEGMENT 2030 OFFSET 1658
SR 0116 STA. 307+44.00
OVER WEST CODORUS CREEK

TWO SPAN P/S CONCRETE BULB TEE BRIDGE
STRUCTURE BORINGS

DATE

SHEET 4 OF 7

S - 30141

SUBSTRUCTURE UNIT:

ABUTMENT 2

LOG 1 OF 1

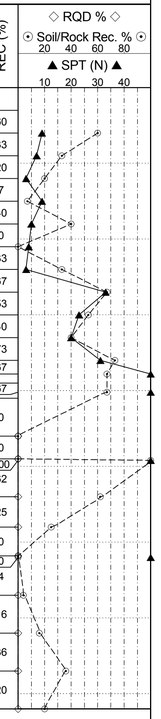
BORING NUMBER:	BORING LOCATION	START: 10/12/2010 8:05 AM	HAMMER: AUTOMATIC
S1-05	STATION: 308+36.0 OFFSET: 15.2 ft. RT.	FINISH: 10/12/2010 4:30 PM	EFFICIENCY: 0.8 ERa

DRILLING METHOD AND EQUIPMENT:	SIZE OF CORE:	VERTICAL SCALE:	TOP OF BORING ELEVATION:
DBLE. TUBE WIRE LN-NQ, AUTOMATIC, TRACK RIG W/SAFETY HAMMER	1.874"	0 FT. 5 FT.	451.0 FT.

DRILLING INSPECTOR: KYLE GIBNEY
DRILLER & DRILLING COMPANY: B. JONES
EICHELBERGERS, INC.

▽ 0 HR. READING - ELAPSED TIME: El. 437.7 - 24.3 hr.
▼ 24 HR. READING - ELAPSED TIME: El. 439.0 - 48.6 hr.

ELEV.	GRAPHIC	MATERIAL DESCRIPTION	AASHTO/ USCS	SAMPLE DEPTH	SAMPLE NO.	BLOW COUNT ------ PP/T TSF	N 60 / %RQD	REC (ft.)	REC (%)
450		**BITUMINOUS CONCRETE.** 0.4'/El. 450.6	a-1-b / sw-sm	1.5	A-1				
		SAND and **GRAVEL**, *subbase.* 1.5'/El. 449.5	a-1-b / sw-sm	3.0	S-1	4-5-4	12	0.9	60
				4.5	S-2	2-4-3	9	0.5	33
445		**SAND**, some Silt, some Gravel, very loose to loose, wet to dry, dark gray, *quartztitic gravel.*		6.0	S-3	3-2-1	4	0.3	20
		0'-12' fill. 7.5'/El. 443.5		7.5	S-4	3-4-5	12	0.1	7
		SAND and **SILT**, some Gravel, very loose to loose, brown.	a-1-b / sm	9.0	S-5	5-3-2	7	0.6	40
440		*No recovery; reason unknown S-6.* 12.0'/El. 439.0		10.5	S-6	3-2-2	5	0.0	0
				12.0	S-7	3-2-1	4	0.5	33
		SAND and **GRAVEL**, some Silt, medium dense, moist, dark brown to gray. *12'-16.5' alluvial.*	a-1-a / sw	13.5	S-8	5-16-17	44	1.0	67
				15.0	S-9	9-12-11	31	0.8	53
435		*16.5' -20.5' saprolitic soil.*		16.5	S-10	13-10-10	27	0.6	40
				18.0	S-11	9-13-18	41	1.1	73
				18.9	S-12	15-50/.4'	>67	0.6	67
		20.5'/El. 430.5		19.5	A-2				
430		*20.1' spoon refusal.*		20.1	S-13	11-50/.1'	>67	0.4	67
		PHYLLITE interbedded with SHALE, dark gray, fissile, hard, fresh to slight weathering, laminated bedding with steep dip, foliation joints, laminated spacing, sheer dip, *closely fissile.* *R-1 no recovery, reason unknown, several attempts were made to get recovery in R-1 and R-2, but all failed..* *R-2 no recovery reason unknown.* *spoon refusal.*		20.5	A-3				
BFE 428.00				23.0	R-1		0%	0.0	0
				24.5	R-2		0%	0.0	0
				24.6	S-14	50/.1'	>67	0.1	100
425				27.0	R-3		0%	1.5	62
				29.0	R-4		0%	0.5	25
				30.9	R-5		0%	0.0	0
420		*R-5 no recovery reason unknown.* *spoon refusal.*		31.0	S-15	50/.1'	>67	0.0	0
				33.5	R-6		0%	0.1	4
				36.0	R-7		0%	0.4	16
415				38.5	R-8		0%	0.9	36
410		41.0'/El. 410.0			R-9		0%	0.5	20



GENERAL NOTES

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LEGEND

PP	POCKET PENETROMETER
T	TORVANE
BFE	BOTTOM OF FOOTING ELEVATION
BPCE	BOTTOM OF PILE CAP ELEVATION
EPTE	ESTIMATED PILE TIP ELEVATION
TOR	ESTIMATED TOP OF ROCK ELEVATION

THE DESCRIPTIONS OF THE MATERIALS HAVE BEEN VERIFIED.

_____

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

YORK COUNTY
SR 0116 SECTION 019

SEGMENT 2030 OFFSET 1658
SR 0116 STA. 307+44.00
OVER WEST CODORUS CREEK

TWO SPAN P/S CONCRETE BULB TEE BRIDGE

STRUCTURE BORINGS

DATE

SHEET 5 OF 7

S - 30141

SUBSTRUCTURE UNIT:

ABUTMENT 2

LOG 1 OF 1

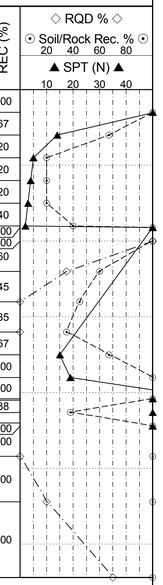
BORING NUMBER:	BORING LOCATION	START: 08/30/2010 8:00 AM	HAMMER: AUTOMATIC
S1-06	STATION: 308+21.0 OFFSET: 12.9 ft. LT.	FINISH: 08/31/2010 4:00 PM	EFFICIENCY: 0.8 ERa

DRILLING METHOD AND EQUIPMENT:	SIZE OF CORE:	VERTICAL SCALE:	TOP OF BORING ELEVATION:
DBLE. TUBE WIRE LN-NQ, AUTOMATIC, TRACK RIG W/SAFETY HAMMER	1.874"	0 FT. 5 FT.	451.3 FT.

DRILLING INSPECTOR: LAWRENCE GRYBOSKY
DRILLER & DRILLING COMPANY: B. JONES
EICHELBERGERS, INC.

▽ 0 HR. READING - ELAPSED TIME: El. 442.1 - 22.2 hr.
▼ 24 HR. READING - ELAPSED TIME: NR - NR

ELEV.	GRAPHIC	MATERIAL DESCRIPTION	AASHTO/ USCS	SAMPLE DEPTH	SAMPLE NO.	BLOW COUNT ------ PP/T TSF	N 60 / %RQD	REC (ft.)	REC (%)
450		**BITUMINOUS CONCRETE**. 0.5'/El. 450.8	a-1-b / sm	1.5	S-1	50-33-18	68	1.5	100
		GRAVEL and **SAND**. 3.0'/El. 448.3		3.0	S-2	6-7-7	19	1.0	67
		SAND, some Silt, some Gravel, very loose to very dense, moist to dry, dark gray.	a-1-b / sm	4.5	S-3	1-3-2	7	0.3	20
				6.0	S-4	2-2-2	5	0.3	20
				7.5	S-5	2-1-2	4	0.3	20
		9.1'/El. 442.2		9.0	S-6	2-1-1	3	0.6	40
440		*3'-16' fill.*		9.1	S-7	50/.1'	>67	0.1	100
		COBBLES, *evidence of boulders.* *Spoon refusal.*		10.0	R-1		100%	0.9	100
					R-2		35%	1.2	60
				12.0	R-3		0%	0.9	45
				14.0	R-4		0%	0.7	35
		16.0'/El. 435.3							
435		Coarse **SAND** and **GRAVEL**, medium dense to very dense, wet to moist, well graded, mottled green brown and light green gray, glacial till. *16'-22.2' residual saprolitic soil.*	a-1-b / sw-sm	16.0	S-8	5-7-8	20	1.0	67
				17.5	S-9	6-9-10	25	1.5	100
				19.0	S-10	6-22-50/.4'	96	1.4	100
				20.4	A-1	20-50/.3'	>67	0.3	38
				20.5	S-11				
				21.3	A-2	50/.2'	>67	0.2	100
		22.2'/El. 429.1		22.0	S-12		0%	2.0	100
430		**PHYLLITE interbedded with SHALE**, dark gray olive to dark olive gray, fissile, medium hard, fresh to slight weathering, laminated to thin bedding with sheer dip, bedding joints, close spacing, sheer dip. *auger refusal.* *top of rock at 22.2'.*		22.2	R-5				
TOR 419.10				24.2	R-6		20%	3.0	100
BFE 428.00				27.2	R-7		70%	5.0	100
425									
420		32.2'/El. 419.1							



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DATE

SHEET 6 OF 7

S - 30141

LABORATORY TEST SUMMARY - SOILS

					% GRAIN SIZE DISTRIBUTION (AASHTO)							CLASSIFICATION			PLASTICITY PARAMETERS			SHEAR STRENGTH				
BORING NUMBER	STATION & OFFSET	SAMPLE #	TEST DEPTH (FT.)	NATURAL MOISTURE %	GRAVEL %	SAND %	COARSE SAND %	FINE SAND %	FINES %	SILT %	CLAY %	AASHTO	USCS	S.G.	LIQUID LIMIT	PLASTIC LIMIT	P. I.	C (TSF)	ϕ (DEG.)	C' (TSF)	ϕ' (TSF)	TEST METHOD
S1-01	306+44.0 0.31 ft. LT.	S-3 to 10	3.0 to 15.0	15.7		25.0			75.0	35.0	40.0	A-4	CL	2.68	34	17	17	0.011	29.0	0.012	28.0	TRIAXIAL-CD
S1-01	306+44.0 0.31 ft. LT.	S-13	18.5 to 19.5	15.0											3	5	NP					
S1-02	306+60.0 13.55 ft. LT.	S-1 to 6	6.0 to 9.0	4.9	11.0	36.6	18.3	18.3	52.2	24.0	28.2	A-4	CL	2.65	26	16	10	0.198	25.0			DIR. SHR.
S1-02	306+60.0 13.55 ft. LT.	S-11 to 13	21.0 to 26.0	3.8	6.1	42.2			51.7	30.4	21.3	A-4	CL-ML	2.63	24	14	10	0.020	27.0			DIR. SHR.

LABORATORY TEST SUMMARY - ROCK CORE

BORING NUMBER	STATION & OFFSET	SAMPLE #	TEST DEPTH (FT.)	TEST	STRENGTH	JAR SLAKE TEST PERFORMED?	SLAKE DURABILITY INDEX & TYPE	ROCK RECOVERY %	RQD %	BEDROCK LITHOLOGY	STRATIGRAPHIC UNIT
S1-01B	306+44.0 0.31 ft. LT.	R-1	29.5 to 34.0	POINT LOAD TEST	1200.0 PSI / 86 TSF	SLAKE LEVEL 6	10% / TYPE I	80	60	LIMESTONE	OLD PORT FORMATION: SHRIVER, MANDATA, CORRIGANVILLE AND NEW CREEK MEMBERS
S1-02B	306+60.0 5.66 ft. LT.	R-1	50.0 to 55.0	UNCONFINED COMPRESSIVE TEST	850.0 PSI / 61 TSF	SLAKE LEVEL 6	10% / TYPE I	88	50	LIMESTONE	JUNIATA AND BALD EAGLE FORMATIONS

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