STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING #1

LOG 1 OF 2

Geotechnical Investigation
SIU-Carbondale Research
Park Roadway
Carbondale, Jackson Co., Illinois
Project # 365-4048

ATLAS SOILS, INC.
HILLSBORO, ILLINOIS
PHONE 217/532-3959

DATE: Feb. 3, 2009
BORING TECH: J. Maness
DRILLING TECH: M. Hough

FOUNDATION BORING LOG

BORING NO.: 1
APPROX. STATION: 60+55, 5' LT
APP. SURFACE ELEV.: 410 ft.

	N Value	P (tsf)	W (%)	REC (%)
SILTY CLAY (CL), Reddish Brown, Moist, Medium Stiff	7	–	21.0	10
SILTY CLAY LOAM (CL), Reddish Brown, Moist, Medium Stiff	6	P 0.7	18.9	50
Stiff	10	P 0.8	23.5	55
SILTY CLAY (CL), Reddish Brown, Moist, Medium Stiff, Trace of Gravel	6	–	24.9	35
SILTY LOAM (ML), Gray, Brown, Mottled, Moist to Wet, Medium Stiff	6	P 1.25	21.3	90
SILTY CLAY LOAM (CL), Gray, Brown, Mottled, Wet, Medium Stiff	4	–	26.1	90
	4	–	24.6	95
SILTY CLAY (CL), Brown, Black & Reddish Brown, Mottled, Moist, Medium Stiff, Trace of Sand	6	P 1.75	27.2	90

GROUNDWATER ELEV.
COMP.: -44.3 ft.
AFTER 24 HRS.: -26.7 ft.;
Bridge @ -36.0 ft.

	N Value	P (tsf)	W (%)	REC (%)
SILTY CLAY LOAM (CL), Brown, Moist, Medium Stiff	7	P 1.5	24.5	100
SILTY CLAY (CL), Gray, Moist, Stiff	10	P 1.0	23.3	100
Medium Stiff	6	P 0.6	20.4	100
Reddish-Brown, Mottled	6	P 0.75	24.6	100
Trace of Sand & Wood	4	P 0.75	22.8	100
SILTY LOAM (ML), Gray Moist, Medium Stiff, Trace of Sand	4	P 1.25	21.2	100

N:Blows per ft. to Drive 2" O.D. Split Spoon Sampler 12" with 140 lb. Hammer falling 30" (Standard Penetration Test)

Qu: Unconfined Compression Strength
NP: Non-Plastic
ST: Shelby Tube
W: Water Content

Type Failure:
B: Bulge Failure
S: Shear Failure
NS: No Sample
P: Penetrometer

RQD: Rock Quality Determination

LOG 2 OF 2

Geotechnical Investigation
SIU-Carbondale Research
Park Roadway
Carbondale, Jackson Co., Illinois
Project # 365-4048

ATLAS SOILS, INC.
HILLSBORO, ILLINOIS
PHONE 217/532-3959

DATE: Feb. 3, 2009
BORING TECH: J. Maness
DRILLING TECH: M. Hough

FOUNDATION BORING LOG

BORING NO.: 1 (Continued)
APPROX. STATION: 60+55, 5' LT
APP. SURFACE ELEV.: 410 ft.

	N Value	P (tsf)	W (%)	REC (%)
SILTY LOAM (ML), Gray, Moist, Medium Stiff, Trace of Sand				
SILT (ML), Gray, Moist, Stiff	11	NP	22	100
SILTSTONE, Gray, Dry to Moist, Hard	100/5"	NP	–	100
End of Exploration at 48.9 ft.				

GROUNDWATER ELEV.
COMP.: -44.3 ft.
AFTER 24 HRS.: -26.7 ft.;
Bridge @ -36.0 ft.

Notes:
1) Borehole backfilled with soil cuttings upon final groundwater measurement.

N:Blows per ft. to Drive 2" O.D. Split Spoon Sampler 12" with 140 lb. Hammer falling 30" (Standard Penetration Test)

Qu: Unconfined Compression Strength
NP: Non-Plastic
ST: Shelby Tube
W: Water Content

Type Failure:
B: Bulge Failure
S: Shear Failure
NS: No Sample
P: Penetrometer

RQD: Rock Quality Determination

SOIL BORING #2

LOG 1 OF 2

Geotechnical Investigation
SIU-Carbondale Research
Park Roadway
Carbondale, Jackson Co., Illinois
Project # 365-4048

ATLAS SOILS, INC.
HILLSBORO, ILLINOIS
PHONE 217/532-3959

DATE: Feb. 2, 2009
BORING TECH: J. Maness
DRILLING TECH: M. Hough

FOUNDATION BORING LOG

BORING NO.: 2
APPROX. STATION: 60+15, 5' LT
APP. SURFACE ELEV.: 410 ft.

	N Value	P (tsf)	W (%)	REC (%)
SILTY LOAM (ML), Brown, Dry to Moist	22	NP	17.9	90
Brown, Medium Stiff	7	P 1.75	31.5	20
Gray, Brown, Mottled, Stiff	9	P 225	18.8	65
Trace of Sand, Medium Stiff	7	P 1.5	20.7	90
SILTY CLAY LOAM (CL), Gray, Reddish-Brown, Mottled, Moist, Medium Stiff	4	P 0.6	21.2	100
	5	P 1.5	16.0	100
SILTY CLAY (CL), Gray, Reddish Brown, Mottled, Moist, Stiff, Few Sand	8	P 2.0	25.8	100
Medium Stiff, No Sand	6	P 1.8	25.2	100

GROUNDWATER ELEV.
COMP.: Dry
AFTER 24 HRS. -14.7 ft.;
Bridge @ -33.6 ft.

	N Value	P (tsf)	W (%)	REC (%)
Brown	6	P 1.5	17.3	100
Gray, Stiff	8	P 2.3	21.1	100
	7	P 1.0	21.1	100
	7	P 1.5	20.9	40
	9	P 2.25	18.8	100
SILTY LOAM (ML), Gray, Moist, Stiff	12	P 4.0	19.8	100

N:Blows per ft. to Drive 2" O.D. Split Spoon Sampler 12" with 140 lb. Hammer falling 30" (Standard Penetration Test)

Qu: Unconfined Compression Strength
NP: Non-Plastic
ST: Shelby Tube
W: Water Content

Type Failure:
B: Bulge Failure
S: Shear Failure
NS: No Sample
P: Penetrometer

RQD: Rock Quality Determination

LOG 2 OF 2

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DATE: Feb. 2, 2009
BORING TECH: J. Maness
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FOUNDATION BORING LOG

BORING NO.: 2 (Continued)
APPROX. STATION: 60+15, 5' LT
APP. SURFACE ELEV.: 410 ft.

	N Value	P (tsf)	W (%)	REC (%)
SILTY LOAM (ML), Gray, Moist, Stiff				
SILTSTONE, Gray, Hard	100/11"	NP	–	95
	100/2"	NP	–	100
	100/3"	NP	–	100
	100/2"	NP	–	100
End of Exploration at 57.7 ft.				

GROUNDWATER ELEV.
COMP.: Dry
AFTER 24 HRS. -14.7 ft.;
Bridge @ -33.6 ft.

Notes:
1) Borehole backfilled with soil cuttings upon final groundwater measurements.

N:Blows per ft. to Drive 2" O.D. Split Spoon Sampler 12" with 140 lb. Hammer falling 30" (Standard Penetration Test)

Qu: Unconfined Compression Strength
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Type Failure:
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DESIGNED	MEB
CHECKED	JSP
DRAWN	MLK
CHECKED	JSP

HR
HURST-ROSCHE ENGINEERS, INC.
PROFESSIONAL DESIGN NUMBER 184-002298

HRE # 365-4048

BORING LOGS
STRUCTURE NO. 039-3268

SHEET NO. 6	S.B.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6 SHEETS	2	05-00002-00-RP	JACKSON	35	22
			CONTRACT NO. 99425		
	FED. ROAD DIST. NO. 9 ILLINOIS FED. AID PROJECT				

D-95-013-97

...\BORING LOGS.dgn 7/13/2010 2:07:12 PM