STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOG

Geo Services, Inc.
Geotechnical, Environmental & Civil Engineering
805 Analport Court, Suite 100
Naperville, Illinois 60563
(630) 305-3618

PAGE 1 of 2
DATE 11/13/2008
LOGGED BY MR
JOB NUMBER P-91-186-08
GSI JOB No. 08015

ROUTE I-294 & I-57
DESCRIPTION I-57 & I-294 Interchange Improvements (PTB 146, Item 1)
SECTION –
LOCATION I-57 Over I-294
COUNTY Cook
DRILLING METHOD Straight Flight Auger/Rotary
HAMMER TYPE CME Automatic

STRUCT. NO. 016-1096 & 016-1097
Station –
BORING NO. I57-I294 B-5
Station: 258+82
Offset: 80.5' Left
Ground Surface Elev. 614.9

Surface Water Elev. n/a
Stream Bed Elev. n/a
Groundwater Elevation:
First Encounter n/a
Upon Completion n/a
After ___ Hrs. ___

Description	Elev.	DEPTH (ft)	BLOWS (6")	UCS Qu (tsf)	MOIST (%)
12.0" ASPHALT, 24.0" CRUSHED STONE-dense	611.9		17, 19, 20	NP	15
CLAY LOAM-brown & gray-hard (A-6) Fill	604.4	–5, –10	4, 8, 11, 7, 10, 14	4.5+P, 4.2B	14, 17
SILTY LOAM-dark brown & gray-medium dense (A-4)	601.9		3, 5, 7	NP	17
SILTY CLAY LOAM-brown & gray-medium stiff (A-4/A-6) Wet	599.4	–15	2, 2, 2	0.5P	31
SAND-gray-loose (A-3)	596.9		3, 4, 5	NP	20
SILTY LOAM-brown & gray-medium dense (A-4)		–20	4, 5, 5	NP	21
SILTY LOAM-medium dense (A-4)	594.4				
SILTY LOAM-gray-very dense (A-4)	586.9	–25	17, 28, 41, 29, 50/4", 21, 32, 44	NP	20, 17, 8
FRACTURED ROCK-gray-very dense (A-1)	582.9	–30	50/4"	NP	14
SANDY LOAM with Fractured Rock-gray-very dense (A-2)	578.9	–35	22, 34, 47	NP	12
Drillers Observation: Cobbles & Boulders.		–40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer) ST-Shelby Tube Sample VS=Vane Shear Test
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) The Unit Dry Weight (pcf) is noted in italics above moist (%)
NR-No Recovery

SOIL BORING LOG

Geo Services, Inc.
Geotechnical, Environmental & Civil Engineering
805 Analport Court, Suite 100
Naperville, Illinois 60563
(630) 305-3618

PAGE 2 of 2
DATE 11/13/2008
LOGGED BY MR
JOB NUMBER P-91-186-08
GSI JOB No. 08015

ROUTE I-294 & I-57
DESCRIPTION I-57 & I-294 Interchange Improvements (PTB 146, Item 1)
SECTION –
LOCATION I-57 Over I-294
COUNTY Cook
DRILLING METHOD Straight Flight Auger/Rotary
HAMMER TYPE CME Automatic

STRUCT. NO. 016-1096 & 016-1097
Station –
BORING NO. I57-I294 B-5
Station: 258+82
Offset: 80.5' Left
Ground Surface Elev. 614.9

Surface Water Elev. n/a
Stream Bed Elev. n/a
Groundwater Elevation:
First Encounter n/a
Upon Completion n/a
After ___ Hrs. ___

Description	Elev.	DEPTH (ft)	BLOWS (6")	UCS Qu (tsf)	MOIST (%)
Drillers Observation: Cobbles & Boulders.	573.9				
Run 1 (–41.0' to –47.0') Silurian System Niagaran Series Dolomite Light gray to gray with horizontal bedding. Fine grained with some pyrite inclusions. Highly fractured & weathered to –43.0' with 2.0" clay parting @ –41.6' & 0.25" clay parting @ –43.4'. Horizontal fractures @ –43.6', –43.8' & –43.9'. Weathered fracture zone from –44.2' to –44.4'. Horizontal fractures @ –44.6', –45.6', –45.7' & –46.1'. Recovery = 98.3% R.Q.D. = 45.8% 100.0% Water Loss	567.9	–45, –50, –55, –60, –65, –70, –75, –80	RUN 1		
End Of Boring @ –47.0' Straight Flight Augers To –10.0' Rotary Drilling To Completion CME Automatic Hammer 10.0' 4.0"* Casing Used 3.0"* Casing Used					

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer) ST-Shelby Tube Sample VS=Vane Shear Test
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) The Unit Dry Weight (pcf) is noted in italics above moist (%)
NR-No Recovery

ROCK CORE LOG

Geo Services, Inc.
Geotechnical, Environmental & Civil Engineering
805 Analport Court, Suite 100
Naperville, Illinois 60563
(630) 305-3618

PAGE 1 of 1
DATE 11/13/2008
LOGGED BY MR
JOB NUMBER P-91-186-08
GSI JOB No. 08015

ROUTE I-294 & I-57
DESCRIPTION I-57 & I-294 Interchange Improvements (PTB 146, Item 1)
SECTION –
LOCATION I-57 Over I-294
COUNTY Cook
CORING METHOD Rotary Wash

STRUCT. NO. 016-1096 & 016-1097
Station –
BORING NO. I57-I294 B-5
Station: 258+82
Offset: 80.5' Left
Ground Surface Elev. 614.9

CORING BARREL TYPE & SIZE NX Double Swivel-10 ft
Core Diameter 2.0 in
Top of Rock Elev. 573.9
Begin Core Elev. 573.9

Description	Elev.	DEPTH (ft)	CORE RUN (#)	RECOVERY (%)	R.Q.D. (%)	CORE TIME (min/ft)	STRENGTH (tsf)
Run 1 (–41.0' to –47.0') Silurian System Niagaran Series Dolomite Light gray to gray with horizontal bedding. Fine grained with some pyrite inclusions. Highly fractured & weathered to –43.0' with 2.0" clay parting @ –41.6' & 0.25" clay parting @ –43.4'. Horizontal fractures @ –43.6', –43.8' & –43.9'. Weathered fracture zone from –44.2' to –44.4'. Horizontal fractures @ –44.6', –45.6', –45.7' & –46.1'. 100.0% Water Loss	573.9	–46, –51	1	98.3	48.5	n/a	563@ –43.0'

Color pictures of the cores Yes Cores will be stored for examination for –
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)

P:\60J2540(57-294)\STRUCTURAL\I-57 OVER I294\016I251-60J27-BORINGS.dgn

BORING LOGS 5
STRUCTURE NO. 016-1251

TYLIN INTERNATIONAL

DESIGNED - JMA	REVISIONS		
CHECKED - SP.	NAME	DATE	
DRAWN - JMA			
CHECKED - SP.PDF			
DATE - 03/18/10			

SHEET NO. 61
68 SHEETS

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	1414.2B	COOK	516	306
		CONTRACT NO. 60J27		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

3/17/2010