$PINTBIS$
$PLTDRIVS$

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2843	3249B-R	COOK	64	45
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT-	

Sheet 21 of 22 Contract No. 62539

SOIL BORING LOG

Illinois Department of Transportation
Bureau of Highways
Applied Geotechnics Unit

Page 1 of 2

Date 12/29/03

ROUTE FAU 2843/Dixie Highway over Butterfield Creek DESCRIPTION LOGGED BY

SECTION 3249 B-R LOCATION SEC TWP RNG

COUNTY Cook DRILLING METHOD Hollow Stem Auger HAMMER TYPE

STRUCT. NO. Station

BORING NO. B-1 Station 79+38.6 Offset 17.50ft LT Ground Surface Elev. 637.10 ft

Surface Water Elev. ft
Stream Bed Elev. ft
Groundwater Elev.: First Encounter 631.1 ft ▼ Upon Completion ft After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
5" Asphalt over 9" concrete							
637.10							
FILL: silty clay with sand & organic, brown-gray, very stiff to soft	6			SILTY LOAM, tr. gravel, grey, med. dense to loose, moist to wet (continued)	3		17.0
	5	3.3	21.0		4		
	6	B			2		
	3				3		14.0
	4	1.6	24.0		5		
	5	B			2		
630.10	1			611.10			
SILTY LOAM, tr. gravel, grey, med. dense to loose, moist to wet	2			FINE SAND, some rock, gray, dense, very wet	25		17.0
	5	0.3	24.0		50		
	6	B			33		
	8				30		
	6		17.0		30		
	8				15		
	10				13		
	6		13.0		19		
	11				11		
	4				7		
	3		12.0		19		
	2				16		
	1			592.10	22		
592.10	2			SILT, with sand & gravel, gray, wet, dense to extremely dense	18		

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer).
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206).

BBS, from 137 (Rev. 6-99)

SOIL BORING LOG

Illinois Department of Transportation
Bureau of Highways
Applied Geotechnics Unit

Page 1 of 2

Date 11/04

ROUTE FAU 2843/Dixie Highway over Butterfield Creek DESCRIPTION LOGGED BY

SECTION 3249 B-R LOCATION SEC TWP RNG

COUNTY Cook DRILLING METHOD Hollow Stem Auger HAMMER TYPE

STRUCT. NO. Station

BORING NO. B-2 Station 78+55.5 Offset 24.30ft RT Ground Surface Elev. 636.64 ft

Surface Water Elev. ft
Stream Bed Elev. ft
Groundwater Elev.: First Encounter ft Upon Completion ft After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
5" Asphalt over 9" Concrete							
635.33							
SILTY CLAY, tr. brown, stiff	3			SAND & GRAVEL, tr. clay, gray, med. dense to loose (continued)	2		
	4	1.2			3		
	4	B			2		
631.84	3				3		
SANDY LOAM, gray, loose, moist	4	1.3			4		
	5	B			3		
	2				3		
628.66	3			609.64			
SAND & GRAVEL, tr. clay, gray, med. dense to loose	4			SILTY LOAM, some gravel, gray, loose to med. dense	3		
	5				3		
	3				4		
	2				5		
	3				6		
	4				5		
	5				6		
	6				7		
	5				8		
	4				9		
	3				8		
	2				7		
	3				8		
	4				9		
	5				10		
	6				11		
	7				12		
	8			592.64	12		
	9			LOAM, with gravel, gray, med. dense	7		
	10				8		
	11				9		
	12				10		
	13				11		
	14				12		
	15				13		
	16				14		
	17				15		
	18				16		
	19				17		
	20				18		
	21				19		
	22				20		
	23				21		
	24				22		
	25				23		
	26				24		
	27				25		
	28				26		
	29				27		
	30				28		
	31				29		
	32				30		

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer).
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206).

BBS, from 137 (Rev. 6-99)

SOIL BORING LOG

Illinois Department of Transportation
Bureau of Highways
Applied Geotechnics Unit

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Date 12/24/03

ROUTE FAU 2843/Dixie Highway over Butterfield Creek DESCRIPTION LOGGED BY

SECTION 3249 B-R LOCATION SEC TWP RNG

COUNTY Cook DRILLING METHOD Hollow Stem Auger HAMMER TYPE

STRUCT. NO. Station

BORING NO. B-3 Station 77+90.8 Offset 15.80ft LT Ground Surface Elev. 636.66 ft

Surface Water Elev. ft
Stream Bed Elev. ft
Groundwater Elev.: First Encounter 621.0 ft ▼ Upon Completion ft After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
4" Topsoil, sandy loam, black				SANDY LOAM, tr. limestone gravel, gray, loose (continued)	3		
FILL: sand & gravel, brown & black, loose	3				5		12.0
	4		18.0		6		
	5				4		
633.06	3			SILTY LOAM, gray, very wet, loose	3		
LOAM, brown, very loose	2				4		19.0
631.66	1				5		
SANDY LOAM, tr. gravel, dk. brown, very wet, loose to med. dense	3				6		
	4		17.0	606.66			
	5			SILTY CLAY, gray, med. stiff	3		
	6				4		21.0
SANDY LOAM, dk. brown, extremely dense	100				5		
627.56	50/4"			604.66			
FINE SAND, tr. silt, gray, med. dense	7			FINE SAND, tr. silt, gray, loose to med. dense	5		
	8				6		
	9				7		
	10				8		
	11				9		
	12				10		
	13				11		
	14				12		
	15				13		
	16				14		
	17				15		
	18				16		
	19				17		
	20				18		
	21				19		
	22				20		
	23				21		
	24				22		
	25				23		
	26				24		
	27				25		
	28				26		
	29				27		
	30				28		
	31				29		
	32				30		

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer).
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206).

BBS, from 137 (Rev. 6-99)

SOIL BORING LOG

Illinois Department of Transportation
Bureau of Highways
Applied Geotechnics Unit

Page 1 of 2

Date 12/04/03

ROUTE FAU 2843/Dixie Highway over Butterfield Creek DESCRIPTION LOGGED BY

SECTION 3249 B-R LOCATION SEC TWP RNG

COUNTY Cook DRILLING METHOD Hollow Stem Auger HAMMER TYPE

STRUCT. NO. Station

BORING NO. B-4 Station 77+38.5 Offset 16.90ft LT Ground Surface Elev. 639.04 ft

Surface Water Elev. ft
Stream Bed Elev. ft
Groundwater Elev.: First Encounter 61.0 ft ▼ Upon Completion ft After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
7" Asphalt over 8" Concrete							
638.58							
SANDY CLAY, dk. brown, med. stiff	3			SILTY LOAM, tr. limestone gravel, gray, very wet, loose (continued)	3		
	3	0.6	14.0		4		
	5	B			5		
632.74	3				3		
CLAY LOAM, tr. gravel, brown, med. stiff	4	0.9	18.0		4		
	5	B			5		
	3				6		
627.94	5			607.04			
SAND & GRAVEL, tr. clay, very wet, loose to med. dense	6			SANDY LOAM, gray, med. dense, very wet	5		
	10				6		
	6				7		
	9				8		
	10				9		
	11				10		
	12				11		
	13				12		
	14				13		
	15				14		
	16				15		
	17				16		
	18				17		
	19				18		
	20				19		
	21				20		
	22				21		
	23				22		
	24				23		
	25				24		
	26				25		
	27				26		
	28				27		
	29				28		
	30				29		
	31				30		
	32				31		
621.54	33				32		
SILTY CLAY, some rock fragments, gray, very stiff	50/4"						

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer).
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206).

BBS, from 137 (Rev. 6-99)

SOIL BORING LOG

Illinois Department of Transportation
Bureau of Highways
Applied Geotechnics Unit

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Date 12/08/03

ROUTE FAU 2843/Dixie Highway over Butterfield Creek DESCRIPTION LOGGED BY

SECTION 3249 B-R LOCATION SEC TWP RNG

COUNTY Cook DRILLING METHOD Hollow Stem Auger HAMMER TYPE

STRUCT. NO. Station

BORING NO. B-5 Station 77+97.2 Offset 18.42ft RT Ground Surface Elev. 637.00 ft

Surface Water Elev. ft
Stream Bed Elev. ft
Groundwater Elev.: First Encounter 60.1 ft ▼ Upon Completion ft After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
6.5" Asphalt over 8.5" Concrete							
635.83							
SILTY CLAY, tr. sand & gravel, brown & blk. brown, soft	2			SANDY LOAM, some gravel, gray, very wet, loose (continued)	2		
	3	0.9	19.0		3		
	4	B			4		
	2				2		
	3				3		
630.38	4				4		
SANDY CLAY, brown, & blk. brown, soft	2	0.3	16.0		5		
	3	B			6		
	4				7		
627.00	5			606.00			
SAND & GRAVEL, tr. clay, loam, gray, med. dense	7			SILTY CLAY LOAM, some gravel, gray, med. stiff, wet	3		
	8				3		24.0
	9				3		
	10			604.50			
	12			SILTY LOAM, tr. gravel, gray, very wet, med. dense	5		
	13				7		
	14				10		
	15				13		
	16				15		
	17				18		
	18				20		
	19				22		
	20				24		
	21				26		
	22				28		
	23				30		
	24				32		
	25				34		
	26				36		
	27				38		
	28				40		
	29				42		
	30				44		
	31				46		
	32				48		
	33				50		
	34				52		
	35				54		
	36				56		
	37				58		
	38				60		
	39				62		
	40				64		

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer).
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206).

BBS, from 137 (Rev. 6-99)

SOIL BORING LOG

Illinois Department of Transportation
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Applied Geotechnics Unit

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Date 12/29/03

ROUTE FAU 2843/Dixie Highway over Butterfield Creek DESCRIPTION LOGGED BY

SECTION 3249 B-R LOCATION SEC TWP RNG

COUNTY Cook DRILLING METHOD Hollow Stem Auger HAMMER TYPE

STRUCT. NO. Station

BORING NO. B-1 Station 79+38.6 Offset 17.50ft LT Ground Surface Elev. 637.10 ft

Surface Water Elev. ft
Stream Bed Elev. ft
Groundwater Elev.: First Encounter 631.1 ft ▼ Upon Completion ft After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
SILT, with sand & gravel, grey, wet, dense to extremely dense (continued)	28		
	21		
	20		
	30		
	50		
	50/4"		
600.10			
End of Boring			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer).
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206).

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SOIL BORING LOG

Illinois Department of Transportation
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Applied Geotechnics Unit

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Date 11/04

ROUTE FAU 2843/Dixie Highway over Butterfield Creek DESCRIPTION LOGGED BY

SECTION 3249 B-R LOCATION SEC TWP RNG

COUNTY Cook DRILLING METHOD Hollow Stem Auger HAMMER TYPE

STRUCT. NO. Station

BORING NO. B-2 Station 78+55.5 Offset 24.30ft RT Ground Surface Elev. 636.64 ft

Surface Water Elev. ft
Stream Bed Elev. ft
Groundwater Elev.: First Encounter 621.6 ft ▼ Upon Completion ft After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
LOAM, with gravel, gray, med. dense (continued)	12		
	15		
	13		
598.14			
SILTY LOAM TO SILT, with limestone, gray, dense to extremely dense	50		
	60		
	50/4"		
593.64			
DOLOMITIC LIMESTONE, solid, very hard, fresh, horizontal bedded, shallow bands closely spaced, bluish-gray	50		
Recovery = 92% RQD = 61%			
583.64			
End of Boring			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer).
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206).

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SOIL BORING LOG

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Date 12/04/03

ROUTE FAU 2843/Dixie Highway over Butterfield Creek DESCRIPTION LOGGED BY

SECTION 3249 B-R LOCATION SEC TWP RNG

COUNTY Cook DRILLING METHOD Hollow Stem Auger HAMMER TYPE

STRUCT. NO. Station

BORING NO. B-3 Station 77+90.8 Offset 15.80ft LT Ground Surface Elev. 636.66 ft

Surface Water Elev. ft
Stream Bed Elev. ft
Groundwater Elev.: First Encounter 62.1 ft ▼ Upon Completion ft After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
FINE SAND, tr. silt, gray, loose to med. dense (continued)	6		
	10		
	10		
601.66			
End of Boring			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer).
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206).

BBS, from 137 (Rev. 6-99)

SOIL BORING LOG

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Applied Geotechnics Unit

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Date 11/04

ROUTE FAU 2843/Dixie Highway over Butterfield Creek DESCRIPTION LOGGED BY

SECTION 3249 B-R LOCATION SEC TWP RNG

COUNTY Cook DRILLING METHOD Hollow Stem Auger HAMMER TYPE

STRUCT. NO. Station

BORING NO. B-4 Station 77+38.5 Offset 16.90ft LT Ground Surface Elev. 639.04 ft

Surface Water Elev. ft
Stream Bed Elev. ft
Groundwater Elev.: First Encounter 61.0 ft ▼ Upon Completion ft After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
GRAVEL, some silt & fine sand, grey, very wet, med. dense to dense (continued)	10		
	14		
	22		
	19		
	20		
593.54	50/3"		
DOLOMITIC LIMESTONE, solid, very hard, fresh, horizontal bedded, shallow bands closely spaced, bluish-gray			
Recovery = 85% RQD = 30%			
588.54			
End of Boring			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer).
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206).

BBS, from 137 (Rev. 6-99)

SOIL BORING LOG

Illinois Department of Transportation
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Date 12/08/03

ROUTE FAU 2843/Dixie Highway over Butterfield Creek DESCRIPTION LOGGED BY

SECTION 3249 B-R LOCATION SEC TWP RNG

COUNTY Cook DRILLING METHOD Hollow Stem Auger HAMMER TYPE

STRUCT. NO. Station

BORING NO. B-5 Station 77+97.2 Offset 18.42ft RT Ground Surface Elev. 637.00 ft

Surface Water Elev. ft
Stream Bed Elev. ft
Groundwater Elev.: First Encounter 60.1 ft ▼ Upon Completion ft After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
SAND, with gravel, tr. silt, grey, very wet, med. dense (continued)	11		
	17		
	28		
606.50	50/4"		
SILTY LOAM, with limestone, grey, dense to extremely dense	14		
	17		
	17		
593.00	50/4"		
DOLOMITIC LIMESTONE, solid, very hard, fresh, horizontal bedded, shallow bands closely spaced, bluish-gray			
Recovery = 77% RQD = 48%			
588.00			
End of Boring			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer).
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206).

BBS, from 137 (Rev. 6-99)

REVISIONS	
NAME	DATE

RME Rubinos & Mesia Engineers, Inc.

SOIL BORINGS

DIXIE HIGHWAY OVER
BUTTERFIELD CREEK
F.A.U. ROUTE 2843 SECTION 3249B-R
STA. 78+55.00
COOK COUNTY
STRUCTURE NUMBER 016-7946

SCALE: NOT-TO-SCALE
DATE 6-25-09

DRAWN BY BV
DESIGNED BY BS
CHECKED BY PK

$FILES$
$DATE$
$TIME$