# SOIL BORING LOG

O'BRIEN & ASSOCIATES, INC.
CONSULTING ENGINEERS
1235 E. DAWS ST./ARLINGTON HTS., IL 60005
(847)398-1441 • FAX(847) 398-2376

PAGE 1 of 1
DATE August 24, 2011
LOGGED BY TOB
OBA JOB No. 11585

ROUTE F.A.P. RTE. 330 DESCRIPTION I-190 Collector-Distribution Roadway Improvements
SECTION 0105-WRS LOCATION Mannheim Road Reconstruction, I-190 to North of Higgins, Chicago, IL
COUNTY Cook DRILLING METHOD Straight Flight Auger HAMMER TYPE CME Automatic

STRUCT. NO. –
Station –
BORING NO. NMR-28
Station 157+05
Offset 57.0 ft Left
Ground Surface Elev. 640.5 ft

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

| Description | Elev. | DEPTH (ft) | BLOWS (/6") | UCS Qu (tsf) | MOIST (%) |
|---|---|---|---|---|---|
| Black SAND & GRAVEL FILL | 639.0 | | 2 | | 105 |
| CLAY-brown and black-very stiff (A-6) Fill | 637.0 | | 4 4 | 2.0B | 20 |
| CLAY-brown & gray-very stiff to hard (A-6) | | | 3 | | 101 |
| | | –5 | 5 7 | 2.4B | 24 |
| | | | 5 | | 105 |
| | | | 8 10 | 5.0B | 20 |
| | | | 7 | | |
| | 630.5 | –10 | 11 14 | 4.0P | 18 |
| End of Boring @ –10.0' CME Automatic Hammer | | | | | |
| | | –15 | | | |
| | | –20 | | | |
| | | –25 | | | |
| | | –30 | | | |
| | | –35 | | | |
| | | –40 | | | |

# SOIL BORING LOG

O'BRIEN & ASSOCIATES, INC.
CONSULTING ENGINEERS
1235 E. DAWS ST./ARLINGTON HTS., IL 60005
(847)398-1441 • FAX(847) 398-2376

PAGE 1 of 1
DATE September 7, 2011
LOGGED BY JW
OBA JOB No. 11585

ROUTE F.A.P. RTE. 330 DESCRIPTION I-190 Collector-Distribution Roadway Improvements
SECTION 0105-WRS LOCATION Mannheim Road Reconstruction, I-190 to North of Higgins, Chicago, IL
COUNTY Cook DRILLING METHOD Straight Flight Auger HAMMER TYPE CME Automatic

STRUCT. NO. –
Station –
BORING NO. NMR-29
Station 147+17
Offset 85.0 ft Left
Ground Surface Elev. 635.1 ft

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

| Description | Elev. | DEPTH (ft) | BLOWS (/6") | UCS Qu (tsf) | MOIST (%) |
|---|---|---|---|---|---|
| Black ORGANIC TOPSOIL/PEAT | 634.1 | | | | 95 |
| CLAY-brown & gray-hard (A-6) | | | 5 | | 114 |
| | | | 6 8 | 5.0B | 18 |
| | | | 5 | | 117 |
| | | –5 | 10 12 | 7.6B | 16 |
| CLAY-gray-stiff to very stiff (A-6) | 629.1 | | 6 | | 112 |
| | | | 6 9 | 2.2B | 18 |
| | | | 4 | | |
| | 625.1 | –10 | 5 7 | 1.0P | 18 |
| End of Boring @ –10.0' CME Automatic Hammer | | | | | |
| | | –15 | | | |
| | | –20 | | | |
| | | –25 | | | |
| | | –30 | | | |
| | | –35 | | | |
| | | –40 | | | |

# SOIL BORING LOG

O'BRIEN & ASSOCIATES, INC.
CONSULTING ENGINEERS
1235 E. DAWS ST./ARLINGTON HTS., IL 60005
(847)398-1441 • FAX(847) 398-2376

PAGE 1 of 1
DATE September 7, 2011
LOGGED BY TOB
OBA JOB No. 11585

ROUTE F.A.P. RTE. 330 DESCRIPTION I-190 Collector-Distribution Roadway Improvements
SECTION 0105-WRS LOCATION Mannheim Road Reconstruction, I-190 to North of Higgins, Chicago, IL
COUNTY Cook DRILLING METHOD Straight Flight Auger HAMMER TYPE CME Automatic

STRUCT. NO. –
Station –
BORING NO. NMR-30
Station 148+17
Offset 85.0 ft Left
Ground Surface Elev. 634.8 ft

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

| Description | Elev. | DEPTH (ft) | BLOWS (/6") | UCS Qu (tsf) | MOIST (%) |
|---|---|---|---|---|---|
| Black ORGANIC TOPSOIL/PEAT | 633.8 | | | | 60 |
| CLAY-brown & gray-hard (A-6) | | | 1 | | 114 |
| | | | 3 5 | 4.2B | 17 |
| | | | 3 | | 111 |
| | | –5 | 5 9 | 5.7B | 19 |
| CLAY-gray-very stiff (A-6) | 628.8 | | 3 | | 111 |
| | | | 6 8 | 2.7B | 18 |
| | | | 3 | | 105 |
| | 624.8 | –10 | 5 6 | 2.4B | 22 |
| End of Boring @ –10.0' CME Automatic Hammer | | | | | |
| | | –15 | | | |
| | | –20 | | | |
| | | –25 | | | |
| | | –30 | | | |
| | | –35 | | | |
| | | –40 | | | |

BOR-10

DELTA ENGINEERING GROUP, LLC

| | | |
|---|---|---|
| USER NAME = kkhan | DESIGNED | REVISED - |
| | DRAWN | REVISED - |
| PLOT SCALE = $SCALE$ | CHECKED | REVISED - |
| PLOT DATE = 10/10/2012 | DATE 10/19/12 | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOG
MANNHEIM ROAD

SCALE: 1" = 50' | SHEET NO. OF SHEETS | STA. TO STA.

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 330 | 0105-WRS | COOK | 537 | 341 |

CONTRACT NO. 60P35
ILLINOIS FED. AID PROJECT

FILE NAME = c:\caddlib\pw\kkhan\pwgreat_lakes\dms47849\D160P35-sht-bor-10.dgn