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**BORING LOG RW-5A**  
WEI Job No.: 722-23-01

Datum: NAV88  
Elevation: 706.64 ft  
North: 2054762.30 ft  
East: 1084957.50 ft  
Station: 268+05.521  
Offset: 53.3 RT

Client: MACTEC Engineering and Consulting, Inc.  
Project: FAP 330, IL 21 (Milwaukee Avenue)  
Location: Section 128 R-3, Lake County, Illinois

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**BORING LOG RW-5B**  
WEI Job No.: 722-23-01

Datum: NAV88  
Elevation: 708.22 ft  
North: 2054681.22 ft  
East: 1085007.20 ft  
Station: 269+00.618  
Offset: 61.89 RT

Client: MACTEC Engineering and Consulting, Inc.  
Project: FAP 330, IL 21 (Milwaukee Avenue)  
Location: Section 128 R-3, Lake County, Illinois

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| Profile Elevation (ft) | SOIL AND ROCK DESCRIPTION            | Depth (ft) | Sample No. | Sample No. recovery | SPT Values (blows/6 in) | Qu (tsf) | Moisture Content (%) | Profile Elevation (ft) | SOIL AND ROCK DESCRIPTION | Depth (ft) | Sample No. | Sample No. recovery | SPT Values (blows/6 in) | Qu (tsf) | Moisture Content (%) |
|------------------------|--------------------------------------|------------|------------|---------------------|-------------------------|----------|----------------------|------------------------|---------------------------|------------|------------|---------------------|-------------------------|----------|----------------------|
| 705.2                  | Stiff to very stiff, brown CLAY LOAM | 1          | 2          | 3                   | 3                       | 1.39     | 21                   |                        |                           |            |            |                     |                         |          |                      |
|                        |                                      | 2          | 3          | 4                   | 5                       | 2.54     | 15                   |                        |                           |            |            |                     |                         |          |                      |
| 698.6                  | Loose, brown SANDY LOAM              | 3          | 2          | 3                   | 4                       | 1.89     | 17                   |                        |                           |            |            |                     |                         |          |                      |
| 696.6                  | Boring terminated at 10.00 ft        | 4          | 2          | 4                   | 5                       | NP       | 19                   |                        |                           |            |            |                     |                         |          |                      |

| Profile Elevation (ft) | SOIL AND ROCK DESCRIPTION            | Depth (ft) | Sample No. | Sample No. recovery | SPT Values (blows/6 in) | Qu (tsf) | Moisture Content (%) | Profile Elevation (ft) | SOIL AND ROCK DESCRIPTION | Depth (ft) | Sample No. | Sample No. recovery | SPT Values (blows/6 in) | Qu (tsf) | Moisture Content (%) |
|------------------------|--------------------------------------|------------|------------|---------------------|-------------------------|----------|----------------------|------------------------|---------------------------|------------|------------|---------------------|-------------------------|----------|----------------------|
| 705.2                  | Stiff, brown CLAY LOAM --FILL--      | 1          | 5          | 3                   | 3                       | 1.89     | 22                   |                        |                           |            |            |                     |                         |          |                      |
|                        |                                      | 2          | 3          | 3                   | 5                       | 2.05     | 18                   |                        |                           |            |            |                     |                         |          |                      |
| 705.2                  | Stiff to very stiff, brown CLAY LOAM | 3          | 2          | 3                   | 4                       | 1.97     | 17                   |                        |                           |            |            |                     |                         |          |                      |
| 698.2                  | Boring terminated at 10.00 ft        | 4          | 3          | 4                   | 6                       | 1.72     | 16                   |                        |                           |            |            |                     |                         |          |                      |

|   |  |                   |            |                           |         |                     |          |
|---|--|-------------------|------------|---------------------------|---------|---------------------|----------|
| <b>GENERAL NOTES</b>  |  |                   |            | <b>WATER LEVEL DATA</b>   |         |                     |          |
| Begin Drilling  | 04-30-2001                                   | Complete Drilling | 04-30-2001 | While Drilling            | ▽       | 8.00 ft             |          |
| Drilling Contractor   | Windy City Drilling                          | Drill Rig         | CME 45     | At Completion of Drilling | ▽       | 7.00 ft             |          |
| Driller   | Gabriel                                      | Logger            | T. Chen    | Checked by                | P. Wang | Time After Drilling | 24 hours |
| Drilling Method   | 3.25" ID HSA; backfilled with benotine chip. |                   |            | Depth to Water            | ▽       | NA                  |          |
| The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual. |  |                   |            |                           |         |                     |          |

|   |   |                   |            |                           |         |                     |          |
|---|---|-------------------|------------|---------------------------|---------|---------------------|----------|
| <b>GENERAL NOTES</b>  |   |                   |            | <b>WATER LEVEL DATA</b>   |         |                     |          |
| Begin Drilling  | 04-30-2001  | Complete Drilling | 04-30-2001 | While Drilling            | ▽       | DRY                 |          |
| Drilling Contractor   | Windy City Drilling                                       | Drill Rig         | CME 45     | At Completion of Drilling | ▽       | DRY                 |          |
| Driller   | Gabriel   | Logger            | T. Chen    | Checked by                | P. Wang | Time After Drilling | 24 hours |
| Drilling Method   | 3.25" ID HSA; backfilled with benotine chip and blacktop. |                   |            | Depth to Water            | ▽       | NA                  |          |
| The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual. |   |                   |            |                           |         |                     |          |

**SOIL BORING LOGS**  
**STRUCTURE NO. 049-W023**



|   |                         |                          |                               |   |  |                 |                |             |                  |               |
|---|-------------------------|--------------------------|-------------------------------|---|--|-----------------|----------------|-------------|------------------|---------------|
| FILE NAME =<br>D168953-06-boring_logs.dgn | USER NAME =             | DESIGNED - J.C.N./B.N.S. | REVISED -                     | <b>STATE OF ILLINOIS</b><br><b>DEPARTMENT OF TRANSPORTATION</b> | <b>SOIL BORING LOGS</b><br><b>STRUCTURE NO. 049-W023</b> | F.A.P. RTE. 330 | SECTION 128R-3 | COUNTY LAKE | TOTAL SHEETS 518 | SHEET NO. 335 |
| PLOT SCALE =                              | DESIGNED - B.N.S.       | REVISED -                | CONTRACT NO. 60953            |   |  |                 |                |             |                  |               |
| PLOT DATE =                               | DRAWN - F.M.            | REVISED -                | SHEET NO. S7-6 OF S7-6 SHEETS |   |  |                 |                |             |                  |               |
|   | CHECKED - B.N.S./J.C.N. | REVISED -                | ILLINOIS FED. AID PROJECT     |   |  |                 |                |             |                  |               |