ROADWAY GEOTECHNICAL REPORT
INTERSTATE 80 IMPROVEMENTS
HOUBOLT ROAD TO WEST OF CENTER STREET
STATION 518+00 TO STATION 634+50
CONTRACT 62R89 - EAST MAINLINE
WILL COUNTY, ILLINOIS

For

TranSystems Corporation

1475 East Woodfield Road, Suite 600

Schaumburg, IL 60173

Submitted by

Wang Engineering, Inc.

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Original Report: July 22, 2022
Revised Report: September 16, 2022,
October 13, 2022

Illinois Department of Transportation

Memorandum

To:	Fawad Aqueel	Attn:	Suleyman Tulgar Kenneth Park
From:	Stephen Jones	By:	Giancarlo Gierbolini
Subject:	Roadway Geotechnical Report*		
Date:	April 5, 2023		

*Route: FAI 80 (Interstate Route 80)
Location: from Joliet Junction Trail to Wheeler Avenue
Section: FAI 80 22 BR
County: Will
Contract: 62R89

The IDOT District One Geotechnical Unit has reviewed the Roadway Geotechnical Report (RGR) prepared by Wang Engineering, Inc., dated October 13, 2022 for the above-referenced project. The report provides geotechnical recommendations for the proposed improvements to Interstate Route 80 (I-80) between Joliet Junction Trail and Wheeler Avenue, in Will County.

The project will include reconstruction and widening of I-80 beginning at Station 518+00 on the west side and ends on the east side at Station 634+50.

Based on our review of the RGR, the report is approved with the following comments. The comments can be addressed by the design team through the contract documents and design plans. A revised geotechnical report is not required.

1. The 12 inch improved subgrade layer should meet the requirements of the IDOT Bureau of Design and Environment (BDE) Aggregate Subgrade Improvement Special Provision (April 1, 2022). The District One Special Provision is no longer used.

2. The report provides recommendations for undercutting unsuitable soils at the subgrade elevation in Table 10 on page 14. In addition to the undercuts provided in the table, we recommend that a plan quantity of Aggregate Subgrade Improvement (CU YD) equal to 25% of the planned full depth pavement area assuming a thickness of 12 inches should be added for estimating purposes. This material should be used to replace

any unsuitable soils below the bottom of the improved subgrade layer that are encountered in the field during construction. The actual need for removal and replacement with Aggregate Subgrade Improvement should be determined in the field at the time of construction by the Geotechnical Engineer or soils inspector. All potentially unstable soils should be tested with a cone penetrometer and treated in accordance with Article 301.04 of the SSRBC and the undercut guidelines in the IDOT Subgrade Stability Manual. Any material not needed for undercut replacement at the time of construction should be deleted from the contract with no extra compensation to the contractor.

Based on the above recommendation, there will be a need for two separate Aggregate Subgrade Improvement line items in the Schedule of Quantities (SOQ) included in the design plans:

- **AGGREGATE SUBGRADE IMPROVEMENT 12" (SQ YD)** – This will be used for the 12 inch aggregate subgrade improvement below new pavement sections and widening pavement sections.

- **AGGREGATE SUBGRADE IMPROVEMENT (CU YD)** – This will be used in locations where there are undercuts (below the 12 inch improved subgrade layer) where poor soils were removed.

IDOT Bureau of Design and Environment (BDE) Aggregate Subgrade Improvement Special Provision (April 1, 2022).

We also recommend including a plan quantity of **GEOTECHNICAL FABRIC FOR GROUND STABILIZATION (SQ YD)** equal to at least 25% of the planned pavement area, in addition to the areas listed in the undercut table. We recommend placing geotextile fabric at the base of undercut areas where low strength subgrade soils are encountered. The 12 inches of improved subgrade is not considered an undercut, and we do not recommend placing the fabric at the base of the proposed 12 inch improved subgrade layer unless it is determined to be necessary to achieve stability by the Geotechnical Engineer or soils inspector at the time of construction. Fabric should meet the requirements of Article 210, Fabric for Ground Stabilization, of the SSRBC. Any material not needed at time of construction should be deleted from the contract with no extra compensation to the contractor.

If you have any questions regarding this review, please contact Robert Claussen, P.E. at (847)705-4735 or Giancarlo Gierbolini, P.E. at (847) 705-4003.

Cc: IDOT Soil Inspector

Technical Report Documentation Page

1. Title and Subtitle Roadway Geotechnical Report Interstate 80 Improvements East Mainline - Contract 62R89 Station 518+00 to Station 634+50		**2. Original Date:** July 22, 2022 **Revised Date:** September 16, 2022, October 13, 2022 **3. Report Type** ☐ SGR ☒ RGR ☒ Draft ☐ Final ☐ Revised
4. Route / Section / County/ District/ Region F.A.I 80 / NA / Will /1 / 1		**5. IDOT Project No. /Contract No.** D-91-207-19/ 62R89
6. PTB / Item No. 194/011	**7. Existing Structure Number(s)** NA	**8. Proposed Structure Number(s)** NA
9. Prepared by Wang Engineering, Inc. 1145 N Main Street Lombard, IL 60148	**Contributor(s)** Author: Andri Kurnia, PE Jessica Bensen, PG QC/QA: Corina T. Farez, PE, PG PM: Andri Kurnia, PE	**Contact** (630) 480-5545 akurnia@wangeng.com
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11. Abstract

The proposed improvements include roadway reconstruction and widening along I-80 from Station 518+00 to Station 634+50. A major widening is proposed over the existing interstate median, which is currently a ditch, along both directions. Embankment cuts up to 7 feet are proposed between Station 522+00 and 547+00.

At the surface, the borings encountered 1 to 22 inches of silty clay to sandy loam topsoil. The recommended topsoil thickness to be stripped is 8 inches. The existing shoulder pavements are made of either asphalt or concrete with average thickness of 12 inches over aggregate base. The mainline pavements are made of asphalt over concrete with average thickness of 13 inches over aggregate base. The existing subgrade consists of mainly very stiff to hard silty clay to silty clay loam natural ground or fill. With only 18% of the borings encountered groundwater, perched groundwater was observed between 4 and 14.5 feet below ground surface. The groundwater is mainly deep seated.

The subgrade soilswill generally provide a stable working platform for the placement of fill and pavement construction. We recommend subgrade treatment of 12 inches undercut for several sections. We recommend placing geofabric at the base of undercut areas.

For a mechanistic pavement design, the pavement sections should be designed using an SSR of POOR. For an AASHTO pavement design, the pavement sections should be designed using an IBR of 2.

We estimate the embankment will have adequate factors of safety against slope instability and foundation soil settlement will be 1 inch or less. A shrinkage factor of 15% should be used to measure borrowed and furnished excavation quantities.

12. Path to archived file

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TABLE OF CONTENTS

1.0 INTRODUCTION 1

2.0 GEOLOGICAL SETTING 1

2.1 PHYSIOGRAPHY 2

2.2 PEDOLOGICAL FEATURES 2

2.3 SURFICIAL COVER 2

2.4 BEDROCK 3

2.5 CLIMATOLOGICAL DATA 3

3.0 METHODS OF INVESTIGATION 6

3.1 FIELD INVESTIGATION 6

3.2 LABORATORY TESTING 7

4.0 INVESTIGATION RESULTS 8

4.1 SURFACE CHARACTERIZATION 8

4.2 SUBGRADE CONDITIONS 9

4.3 GROUNDWATER CONDITIONS 12

5.0 ANALYSIS AND RECOMMENDATIONS 13

5.1 SITE PREPARATION 13

5.2 SUBGRADE TREATMENT RECOMMENDATIONS 13

5.3 PAVEMENT DESIGN RECOMMENDATIONS 15

5.4 EMBANKMENT AND CUT SECTIONS 15

5.4.1 Settlement 15

5.4.2 Global Stability 16

5.5 ROADWAY DRAINAGE 16

6.0 CONSTRUCTION CONSIDERATIONS 17

6.1 EXCAVATION, DEWATERING, AND UTILITIES 17

6.2 FILLING AND BACKFILLING 17

6.3 REUSE OF MATERIALS 17

6.4 EARTHWORK OPERATIONS 17

7.0 QUALIFICATIONS 18

REFERENCES 19

EXHIBITS

1. SITE LOCATION MAP

2-1. SITE PEDOLOGICAL MAP

2-2.and 2-3 SITE PEDOLOGICAL TABLE

3. SITE AND REGIONAL GEOLOGY MAP

4. SUBGRADE SUPORT RATING CHART

APPENDIX A

BORING LOGS

APPENDIX B

LABORATORY TEST RESULTS

APPENDIX C

IDOT BMPR 507A AND 508A FORMS

APPENDIX D

PAVEMENT COMPOSITION

APPENDIX E

PAVEMENT CORES

APPENDIX F

SLOPE STABILITY

APPENDIX G

SOIL BORING LOCATION PLAN AND SOIL PROFILES

APPENDIX H

IDOT BENCHING DETAIL

LIST OF TABLES

Table 1: Soil Boring Summary 6

Table 2: Summary of Topsoil Thickness..... 8

Table 3: Summary of Shoulder Pavement Thickness and Composition..... 9

Table 4: Summary of Roadway Lane Pavement Thickness and Composition..... 9

Table 5: Summary of Unit 1 Properties.....10

Table 6: Summary of Unit 2 Properties.....11

Table 7: Summary of Unit 3 Properties.....11

Table 8: Summary of Unit 4 Properties.....12

Table 9: Summary of Groundwater Measurements 12

Table 10: Summary of Subgrade Treatment Recommendations.....14

Table 11: Summary of Estimated Consolidation Settlements....16

LIST OF FIGURES

Figure 1: Monthly Precipitation Data for 2020 to 2021 4
Figure 2: Monthly Temperature Data for 2020 to 2021 4
Figure 3: Monthly Precipitation Data for 2022.... 5
Figure 4: Monthly Temperature Data for 2022.... 5

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TRANSYSTEMS

1.0 INTRODUCTION

This report presents the results of our subsurface investigation, laboratory testing, and geotechnical evaluations and recommendations in support of the roadway improvements proposed along Interstate 80 (I-80) from Houbolt Road to west of Center Street in Will County, Illinois. A *Site Location Map* is presented as Exhibit 1.

Wang Engineering, Inc. (Wang) understands the proposed improvements include I-80 roadway widening over the median and the outer shoulders between Station 518+00 and Station 634+50. This section of the I-80 is included in Contract 62R89, as east mainline.

The purpose of our investigation was to characterize the pavement, subgrade, and groundwater conditions; perform geotechnical engineering analyses; and provide geotechnical recommendations for the design and construction of the proposed roadway mainline widening. The results of geotechnical investigation, laboratory testing, and geotechnical evaluations and recommendations for west mainline (contract 62R27), Larkin Interchange (contract 62R25), and Wheeler Road (contract 62R30) are addressed in separate Roadway Geotechnical Reports (RGRs).

2.0 GEOLOGICAL SETTING

The project area extends through western Will County, Illinois. On the USGS *Plainfield and Joliet 7.5 Minute Series Quadrangle* maps, the project runs from west to east along the limit between NE ¼ of Section 24 and SE ¼ of Section 13, Tier 35N, Range 9E of the Troy Township and S ½ of Section 17 and 18, Tier 35N, Range 10E of the Joliet Township of the Third Principal Meridian.

The following review of published geologic data, with emphasis on factors that might influence the design and construction of the proposed engineering works, is meant to place the project area within a geological framework and confirm the dependability and consistency of the subsurface investigation results. For the study of the regional geologic framework, Wang considered northeastern Illinois in general and Will County in particular.

2.1 Physiography

The project area is located within the western part of the Wheaton Morainal Country physiographic subsection of the Great Lake Section (Leighton et al. 1948). The project area is dominated by the Rockdale Moraine, it is characterized by morainic topography with series of broad parallel morainic ridges, elongated hills, mounds, basins, sags and valleys. The surface along the project alignment undulates from west to east, along the southern portion of the Rockdale Moraine into intermorainal area between Rockdale and Manhattan Moraines. In the project's eastern half (600 to 610 feet), the roadway crosses over an unnamed tributary of DuPage River. The surface elevation along the project alignment ranges from 600 feet at the west and east ends of the project and peaks near Joliet Junction Trail to a high at 640 feet and near Midland Avenue at 645 feet.

2.2 Pedological Features

After the Wisconsin glaciation, several types of soils developed through weathering of glacigenic sediments. In Will County, the soil types were surveyed by the USDA (2021). A summary of the USDA soil types present within the project area, including their relevant geotechnical index properties and suitability as subgrade and road fill are shown in Exhibits 2-1 to 2-3. The soil information provided by USDA is meant to be used as a general reference in the absence of a site-specific investigation. In this instance, our findings regarding soil features affecting suitability for highway and street construction are not necessarily in agreement with the information presented in the exhibits.

2.3 Surficial Cover

The surficial cover is the result of Wisconsinan-age glacial activity. The glacigenic deposits were emplaced during pulsating advances and retreats of an ice-sheet lobe responsible for the formation of end moraines and associated low-relief till and lake plains (Hansel and Johnson 1996). Along the project area, the drift thickness varies from about 20 feet to 80 feet. Predominantly the drift is dominated by silty clay diamicton of the Yorkville Member of the Lemont Formation resting over sand and gravel outwash of the Henry Formation unconformably resting over bedrock. Exhibit 3 illustrates the *Site and Regional Geology*.

The Yorkville Member of the Lemont Formation, up to 35-foot thick, consists of yellowish brown to gray silty clay to silty clay loam diamicton that contains lenses of gravel, sand, silt, and clay (Hansel and Johnson 1996, Caron 2017). The Henry Formation consists of stratified sand and gravel outwash with thicknesses of about 5 to 40 feet (Caron 2017).

From a geotechnical viewpoint, the Yorkville Member is characterized by low to moderate plasticity, high strength, and low to moderate moisture content (Bauer et al. 1991).

2.4 Bedrock

Within the project limits, the surficial cover rests unconformably on top of Silurian-age bedrock that dips eastward. The top of the bedrock lies at 20 to 95 feet below the ground surface (bgs). The bedrock is Silurian-age dolostone (Kolata 2005), slightly to highly weathered.

Structurally, the site is located on the eastern flank of the Wisconsin Arch. The northwest to southeast trending inactive Sandwich Fault Zone is about 4.5 miles southwest of the project.

2.5 Climatological Data

The subsurface investigation was performed from March to April of 2021 and from April to May of 2022. To assess the possible effects of temperature and precipitation on water table data and soil moisture, the climatic conditions for the investigation period and three months prior to the start of the investigation are summarized graphically in Figures 1 through 4. The precipitation and temperature data for the investigation period are compared against thirty-year monthly data (1991 to 2020) in box-and-whiskers format to show deviations from “normal” climate conditions during the current investigation. Local climate data were obtained from the O’Hare Station (NCDC 2022).

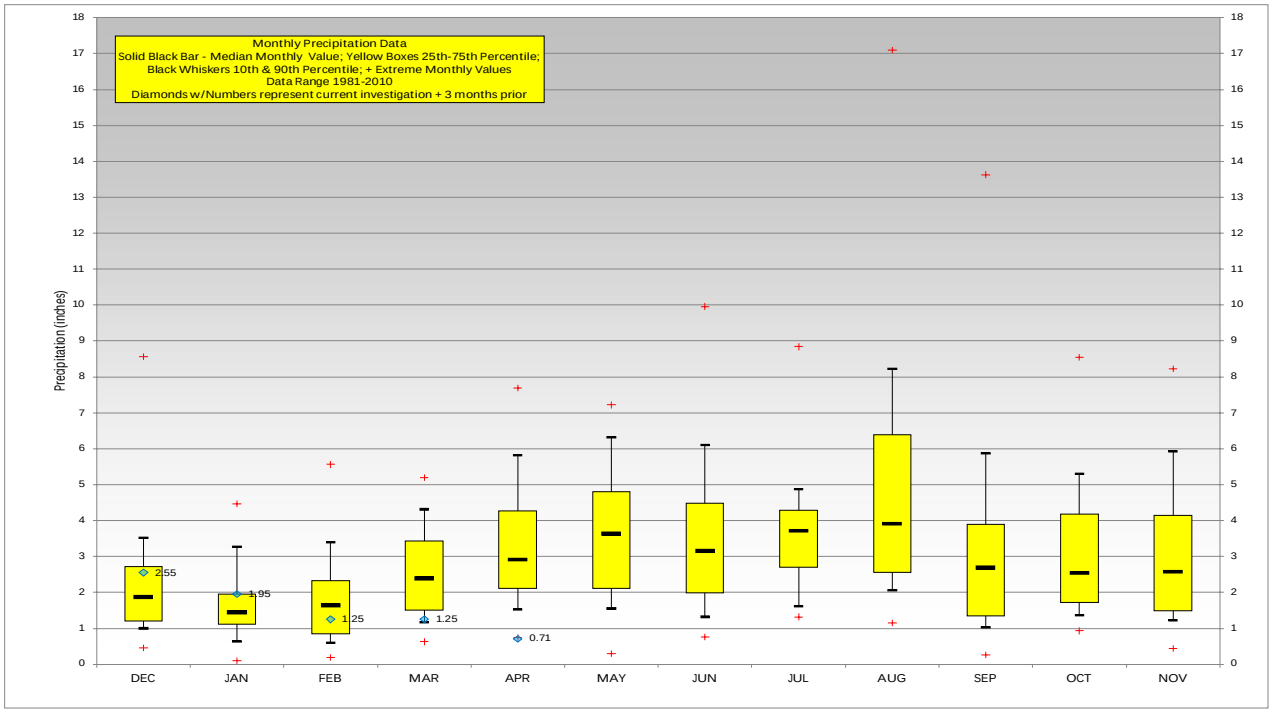

Figure 1: Monthly Precipitation Data for 2020 to 2021

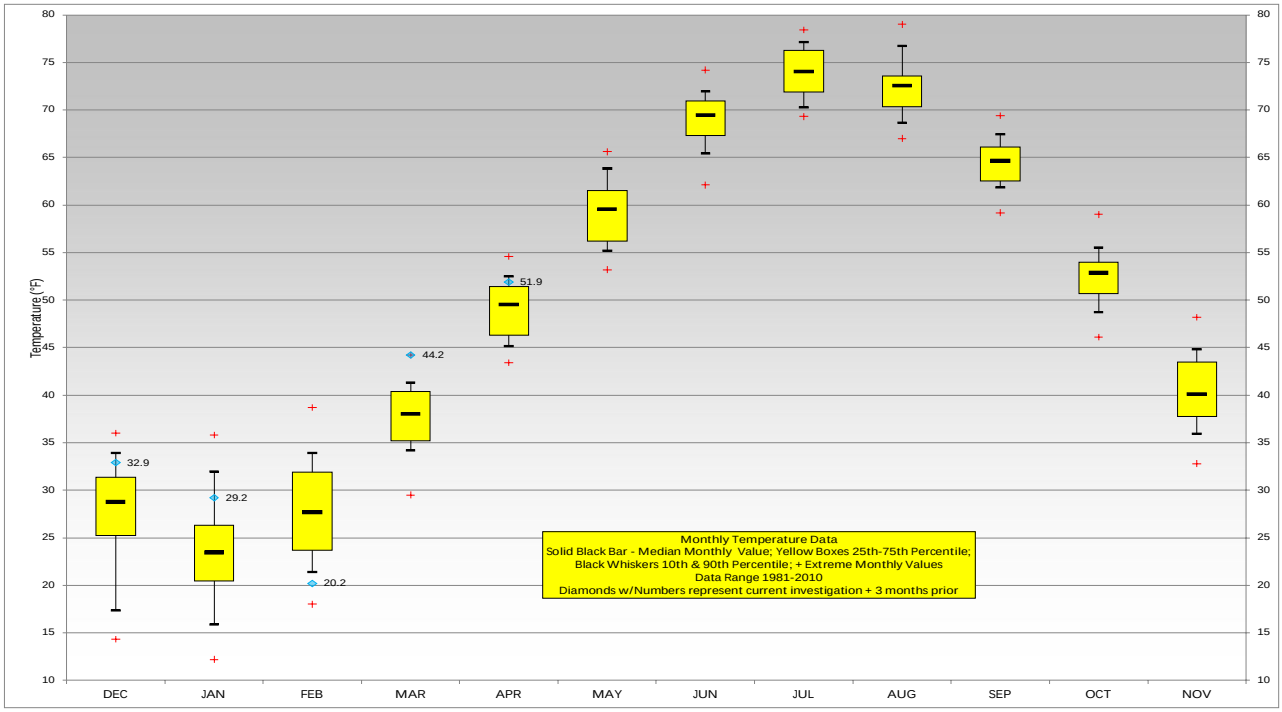

Figure 2: Monthly Temperature Data for 2020 to 2021

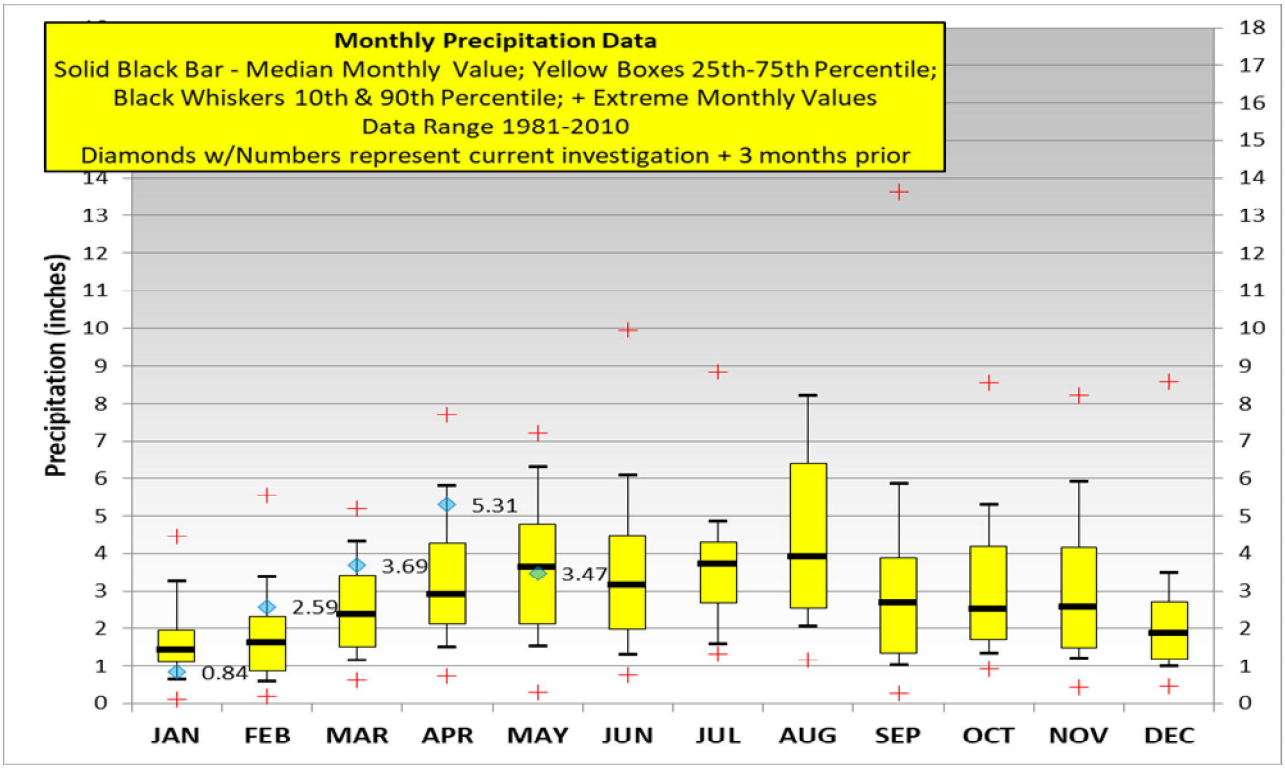

Figure 3: Monthly Precipitation Data for 2022

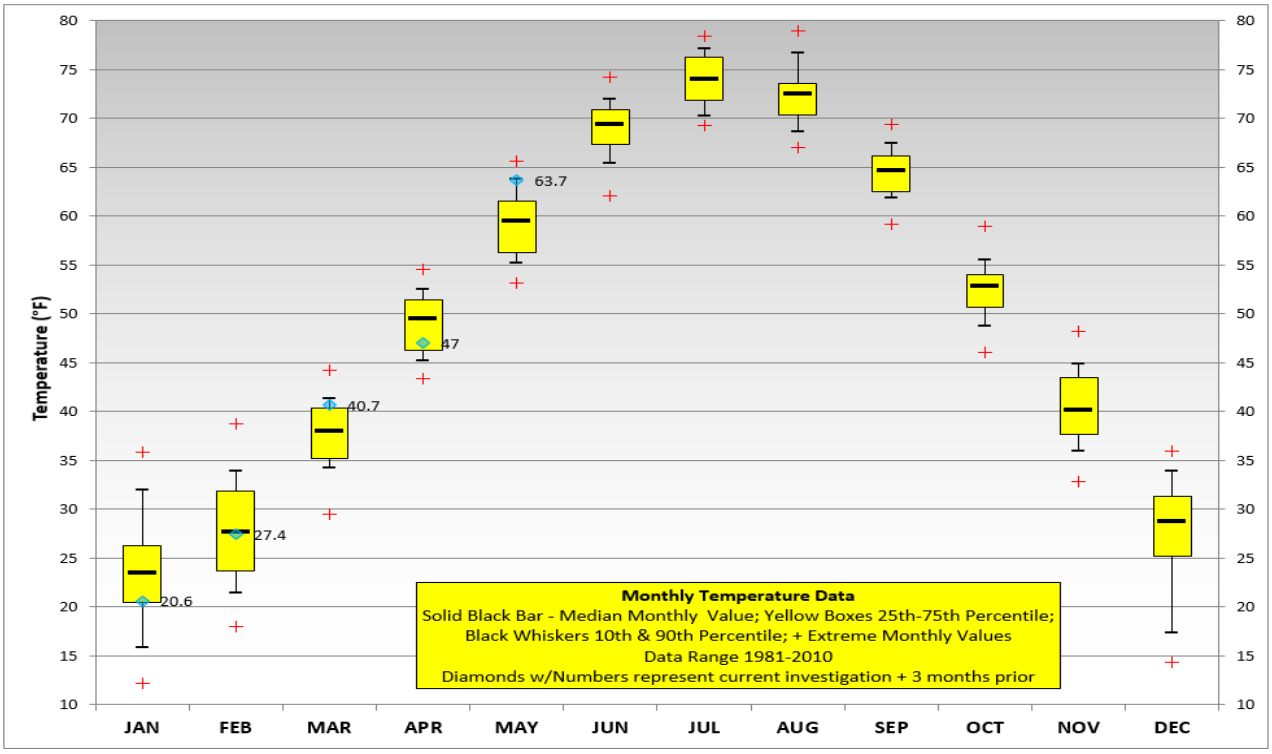

Figure 4: Monthly Temperature Data for 2022

The deviations from the historical 30-year climate data show the investigation period was characterized in general by average precipitations and average to high temperatures with the exception of record high temperatures and average to low precipitation in March 2021 and May 2022 and record low temperatures with average precipitation in February 2021. A record low precipitation with high temperature was recorded in April 2021. Observations of perched water within the granular fill may have been influenced by these climate factors.

3.0 METHODS OF INVESTIGATION

The following sections outline the subsurface and laboratory investigations performed by Wang.

3.1 Field Investigation

The subsurface investigation along the I-80 mainline east section, between Stations 518+00 and 634+50, consisted of subgrade borings (SGB) drilled along the I-80 eastbound (EB), westbound (WB) and centerline/median (CL). To supplement the subsurface data, we considered for our analysis soil borings performed for nearby bridge structures (BSB) borings. The roadway borings were drilled by Wang in April and May of 2022. The bridge borings were drilled between March and April 2021. The borings were drilled from surface elevations of 603.6 to 645.4 feet and were advanced to depths of 10.0 to 90.0 feet bgs. A summary of soil borings, ground surface elevations, and termination depths is provided in Table 1.

Table 1: Soil Boring Summary

Roadway Alignment	Alignment Limits (Station to Station)	Location	Reference Borings IDs	Ground Surface Elevations (feet)	Termination Depths (feet)
I-80	518+00 to 634+50	Eastbound	EB-SGB-18 through EB-SGB-38, JJT-BSB-01, JJT-BSB-03, MLA-BSB-03, MLA-BSB-06	609.4 to 645.4	10 to 90
		Center line	CL-SGB-17 through CL-SGB-37, MLA-BSB-02, MLA-BSB-05, WA-BSB-03	603.6 to 641.5	10 to 90
		Westbound	WB-SGB-19 through WB-SGB-39, JJT-BSB-02, JJT-BSB-04,	607.1 to 642.5	10 to 90

The as-drilled northing and easting coordinates were surveyed by Wang with a mapping-grade GPS unit, whereas the stations, offsets, and elevations were provided by TranSystems. Boring location data are presented in the *Boring Logs* (Appendix A) and the as-drilled locations are shown in the *Boring Location Plans and Profiles* (Appendix G).

Geoprobe, ATV-, and truck-mounted drilling rigs equipped with hollow stem augers were used to advance and maintain open boreholes. Soil sampling was performed according to AASHTO T206, *"Penetration Test and Split Barrel Sampling of Soils."* The soil was sampled continuously in SGB borings. The BSB borings were sampled at 2.5-foot intervals to 30 feet, and at 5-foot intervals thereafter. Soil samples collected from each sampling interval were placed in sealed jars and transported to the laboratory for further examination and laboratory testing.

Field boring logs, prepared and maintained by a Wang field engineer, included lithological descriptions, visual-manual soil classifications, results of Rimac and/or pocket penetrometer unconfined compressive strength tests, and results of Standard Penetration Tests (SPT) recorded as blows per 6 inches of penetration. The N-values shown in the *Boring Location Plans and Soil Profiles* (Appendix G) are the sum of the second and third set of blows per 6 inches of penetration.

Groundwater levels were measured while drilling and at the completion of each boring. For safety considerations each borehole was backfilled upon completion with soil cuttings and bentonite chips and the pavement surface was restored as close as possible to the original condition.

3.2 Laboratory Testing

The soil samples were tested in the laboratory for moisture content (T265). Atterberg limits (T89 and T90), particle size analysis (T88), and organic content by loss on ignition (T267) tests were performed on select samples. Field visual descriptions of the soil samples were verified in the laboratory and the soils were classified according to the IDH and AASHTO Soil Classification Systems. The laboratory test results are shown in the *Boring Logs* (Appendix A), in the *Laboratory Test Results* (Appendix B), in the *IDOT Forms* (Appendix C), and in the *Boring Location Plans and Soil Profile* (Appendix G).

4.0 INVESTIGATION RESULTS

Detailed descriptions of the soil conditions encountered during the subsurface investigation are presented in the attached *Boring Logs* (Appendix A) and in the *Boring Location Plans and Soil Profile* (Appendix G). Please note that the strata contact lines shown on the logs and profiles represent approximate boundaries between soil types. The actual transition between soil types in the field may be gradual in horizontal and vertical directions.

4.1 Surface Characterization

The proposed improvement will include widening within the median and outer shoulders. Most of eastbound and westbound borings were drilled through pavement, and all centerline borings were drilled through grassy area in the existing ditch. Topsoil measurements were performed off the paved areas, within the improvement right-of-way (ROW) to supplement the topsoil data obtained from borings. Topsoil thicknesses are summarized in Table 2.

Table 2: Summary of Topsoil Thickness

Alignment	Number of Measurements	Topsoil Thickness Range (inches)	Average Thickness (inches)
EB	19	4 to 10	6
CL	21	1 to 22	8
WB	20	3 to 9	6

NA = not available

The borings were mostly drilled through paved shoulders. The borings drilled on the shoulders show the pavement structure consists of asphalt. The pavement thickness ranges from 3 to 16 inches with an average of 12 inches. The aggregate base consists of gravel, sandy gravel, or reclaimed asphalt pavement (RAP) and its thickness ranges from 1 to 21 inches. Shoulder pavement thicknesses are summarized in Table 3.

Table 3: Summary of Shoulder Pavement Thickness and Composition

Alignment		Total Number of Measurements (No)	Pavement Structure Thickness (inches)			Pavement Average Thickness (inches)
			Asphalt No[1]/Range	Concrete No[1]/Range	Total Pavement No[1]/Range	
I-80	EB	19	18/3-16	1/11	19/3-16	11
	WB	19	19/9-16	-	19/9-16	13

[1]No = number of measurements along the alignment

Additional pavement cores were obtained from I-80 roadway pavements. The cores obtained from the travel lanes show the pavement structure consists asphalt over concrete. The travel lanes pavement thickness ranges from 11 to 17.25 inches with an average of 13 inches. The aggregate base consists of either gravel or RAP. Roadway pavement structure thicknesses are summarized in Table 4. The breakdown of pavement composition for both shoulder and mainline are included in Appendix D.

Table 4: Summary of Roadway Lane Pavement Thickness and Composition

Alignment		Total Number of Measurements (No)	Pavement Structure Thickness (inches)			Average Pavement Thickness (inches)
			Asphalt No[1]/Range	Concrete No[1]/Range	Total Pavement No[1]/Range	
I-80	EB	4	4/3.75-4.25	4/7.5-8.5	4/11.5-12.5	12
	WB	5	5/4-7	5/7-13.25	5/11-17.25	14

4.2 Subgrade Conditions

Beneath the surface, in descending order, the lithologic succession encountered includes: 1) man-made ground (fill); 2) soft to very stiff clay to silty clay; 3) medium stiff to hard silty clay, silty clay loam to silty loam; 4) loose to very dense sand to sandy gravel; 5) medium dense to very dense silty loam; 6) very dense weathered bedrock; and 7) dolostone bedrock. The following section presents the subgrade conditions encountered within top 20 feet along the roadway alignment by our subsurface investigation. Thus, the top four units geotechnical properties are presented below.

1) Man-made ground (fill)

Beneath the surface, the borings encountered mainly cohesive fill along I-80. Granular fill was encountered along the shoulders or just below the pavement structure consists of very loose to medium dense sandy gravel aggregate base, reclaimed asphalt grinds, sandy loam, and sand, with N values of 3 to 28 blows per foot, and moisture content values of 1 to 21% with an average of 7%. The cohesive fill generally consists of medium stiff to hard silty clay, clay loam to silty clay loam with unconfined compressive strength (Q_u) values of 0.3 to 10.1 tsf with an average of 3.3 tsf, and moisture content values of 7 to 37% with an average of 19%. Laboratory index testing shows liquid limit (L_L) values of 36 to 53% and plastic limit (P_L) values of 14 to 19%. The soil belongs primarily to the A-6 and A-7-6 group in accordance with AASHTO.

Table 5: Summary of Unit 1 Properties

Alignment	Q_u Min-Max/Avg. (tsf)	SPT N-values Min-Max/Avg. (blows per foot)	Moisture Content Min-Max/Avg (%)	Liquid Limit Min-Max (%)	Plastic Limit Min-Max (%)
EB	0.6-10.1/3.2	3-24/14	1-37/18	37-41	14-17
CL	1.0-9.2/3.7	NA	12-27/19	39-44	16-19
WB	0.3-7.3/3.2	7-28/16	1-37/18	36-53	15-17

Buried topsoil was encountered below the fill in 12 borings along I-80. Buried topsoil thickness varies from 8 to 32 inches; it is a black silty clay, silty clay loam to sandy loam characterized by Q_u values of 0.4 top 4.4 tsf, moisture content of 17 to 36%, L_L value of 37%, and plasticity index (PI) value of 17%.

2) Soft to very stiff clay to silty clay lacustrine deposits

Beneath the fill, topsoil, or buried topsoil, at elevations of 597 to 633 feet (1.1 to 16.9 feet bgs), the borings encountered 1.8- to 3.8-foot thick, soft to very stiff clay to silty clay lacustrine deposits, discontinuously present along the alignments. The unit is characterized by Q_u values of 0.4 to 3.4 tsf, averaging 1.4 tsf, SPT N-values of 5 to 40 blows per foot, averaging 13 blows per foot, moisture content of 14 to 37% and an average of 25%, L_L values of 36 to 42%, and P_L of 14 to 15%. The AASHTO soil classification show the soil belongs to A-6 and A-7-6 groups. Within this unit, lenses

of sand and silt are discontinuously encountered. Lenses are more than 4-foot thick, moist to saturated, with an N-value of 3 to 25 blows per foot, and moisture content values of 5 to 24%.

Table 6: Summary of Unit 2 Properties

Alignment	Q_u Min-Max/Avg. (tsf)	SPT N-values Min-Max/Avg. (blows per foot)	Moisture Content Min-Max/Avg (%)	Liquid Limit Min-Max (%)	Plasticity Index Min-Max (%)
EB	0.8-2.1/1.5	14-23/19	14-22/18	42	28
CL	0.4-3.4/1.4	5-40/12	24-37/28	36-39	21-24
WB	NA	NA	NA	NA	NA

3) Medium stiff to hard silty clay, silty clay loam to silty loam diamicton

Below the surface, fill, buried topsoil or Unit 2, at elevations of 596 to 637 feet (0.1 to 20.5 feet bgs), the borings advanced through medium stiff to hard silty clay, silty clay loam to silty loam diamicton. This unit makes up most of the of subgrade. Throughout this unit, occasional silt and sand lenses are encountered. The unit is characterized by Q_u values of 0.8 to 9.0 tsf averaging 4.6 tsf, SPT N-values of 4 to 52 blows per foot averaging 17 blows per foot, moisture content values of 11 to 37% averaging 18%, L_L values of 26 to 44%, and P_L of 13 to 16%. The AASHTO soil classification show the soil belongs mainly to A-6 group.

Table 7: Summary of Unit 3 Properties

Alignment	Q_u Min-Max/Avg. (tsf)	SPT N-values Min-Max/Avg. (blows per foot)	Moisture Content Min-Max/Avg (%)	Liquid Limit Min-Max (%)	Plasticity Index Min-Max (%)
EB	0.8-8.0/4.3	4-52/19	11-27/18	26	13
CL	1.1-9.0/5.0	5-35/15	13-37/19	33-35	18-19
WB	1.0-8.8/4.2	6-48/18	12-29/18	40-44	24-31

4) Loose to very dense sand and sandy gravel outwash

Below the fill, Unit 2 or Unit 3, at elevations of 594 to 633 feet (1.6 to 15.5 feet bgs), borings encountered 0.6 to 3 feet of loose to very dense sand, gravelly sand and sandy gravel outwash. The unit is characterized by SPT N-values of 6 blows per foot to spoon refusal averaging 31 blows per foot, and moisture content values of 3 to 7% averaging 6%.

Table 8: Summary of Unit 4 Properties

Alignment	SPT N-values Min-Max/Avg. (blows per foot)	Moisture Content Min-Max/Avg (%)
EB	6-27/14	2-13/6
CL	>80/10"/>80/10"	4-19/11
WB	NA	NA

4.3 Groundwater Conditions

Groundwater was recorded during and upon completion of drilling. The groundwater was encountered in 18% of the roadway borings, perched within granular lenses, along I-80 between Station 533+50 and Station 537+00 and between Station 600+00 and 634+50. However, it should be noted that groundwater levels might change with seasonal rainfall patterns or may be influenced by local site conditions. A groundwater data summary is presented in Table 9.

Table 9: Summary of Groundwater Measurements

Roadway Alignment	Groundwater measurements No[1]./out of [2]	Groundwater while drilling (feet)		Groundwater after drilling (feet)	
		Depth min-max	Elevation min-max	Depth min-max	Elevation min-max
EB	5/25	4.0-52.0	586.7-634.0	NA	NA
CL	5/24	6.3-58.5	581.6-614.1	14.5	610.6
WB	3/23	8.0-50.0	590.2-606.6	NA	NA

[1]No = number of borings that encountered groundwater; [2] total number of borings drilled along the alignment

5.0 ANALYSIS AND RECOMMENDATIONS

Cross-section drawings indicate the proposed grade will require up to seven feet of fill or cuts. Up to seven feet cuts are proposed between Stations 522+00 and 547+00. Up to 6 feet raise in grade is proposed along the existing median ditch. The side slope will be graded mainly at 1:4 to 1:6 (V:H)

5.1 Site Preparation

For the proposed pavement widening and reconstruction, it is recommended that any topsoil and existing pavement be stripped within the limits of the improvements. For estimating purposes, the topsoil thickness to be stripped is 8 inches. As per IDOT District One, a shrinkage factor of 15% should be used to measure borrowed and furnished excavation quantities.

After stripping, the stability of the exposed subgrade should be observed for the presence of any unsuitable and/or unstable soils to determine if remedial treatment is necessary. The prepared subgrade should be proofrolled to check for rutting and subgrade deformation. Using a static or dynamic cone penetrometer, any unstable and/or unsuitable soils revealed during proofrolling should be tested and evaluated according to the IDOT *Subgrade Stability Manual* (IDOT 2005). The side slopes along the right and left offsets should be benched to accommodate the new embankment fill. We recommend including the IDOT District One benching detail (Appendix H) in the contract plans.

5.2 Subgrade Treatment Recommendations

Based on the results of our investigation, the subgrade will consist of very stiff to hard silty clay to silty clay loam natural ground or fill. In some areas, the subgrade will consist of loose to medium dense sand to coarse sand or medium dense to dense RAP aggregate base. The proposed pavement structure will be supported on existing fill, natural ground, or new fill.

The soil borings indicate the proposed subgrade generally consists of soils with Q_u values greater than 1.0 tsf, moisture contents of less than 25%, and L_L values below 50%. Overall, the subgrade soils will provide a stable working platform for the construction of the new pavement structure and the aggregate base. However, a few borings revealed soil with L_L value above 50%, or Q_u values less than 1.0 tsf. In addition, a few borings encountered buried topsoil at or just below the proposed subgrade. At these boring locations we are recommending subgrade treatment as summarized in Table 10. The proposed treatment undercuts are below the 12 inches of aggregate subgrade improvement that is included in as part of the proposed pavement section.

The improved subgrade should be in accordance with the IDOT District One special provision, *Aggregate Subgrade Improvement.* We recommend placing geotextile fabric at the base of undercut areas. Fabric should meet the requirements of Article 210, Fabric for Ground Stabilization of IDOT *Standard Specifications* (IDOT 2022).

Table 10: Summary of Subgrade Treatment Recommendations

Limits Station to Station	Treatment Width	Treatment Type	Treatment Depth[(1)] (inch)	Reference Boring, Subgrade Concerns
I-80 EB 639+80 to 641+80	EB pavement [(2)]	Aggregate Subgrade Improvement	12	EB-SGB-38 Buried topsoil (MC=21%)
I-80 CL 524+20 to 532+40	Within Existing Median	Aggregate Subgrade Improvement	12	CL-SGB-18 and CL-SGB-19 Buried Topsoil (MC=26%)
I-80 CL 596+30 to 598+80	Within Existing Median	Aggregate Subgrade Improvement and Geogrid	12	CL-SGB-30 (MC=25-28%; Qu= 0.66 to 0.98 tsf)
I-80 WB 600+50 to 602+40	WB pavement [(2)]	Aggregate Subgrade Improvement	12	WB-SGB-32 (LL=53%; MC=23%)

[(1)] The treatment depths are below 12 inches of aggregate improvement that is included in proposed pavement section.
[(2)] The proposed treatment limits under EB or WB proposed pavement and shoulders should be from the outside edge of the outside shoulder to the inside median barrier.

The proposed treatment limits under EB or WB pavement should be from the outside edge of the shoulder to the inside median. Other than topsoil removal for site preparation, the existing median will not need to follow treatment recommendation under EB or WB pavement. Especially in areas where the proposed roadway is much higher than the existing median.

Any highly moist soils, if not otherwise unsuitable or unstable, encountered within the exposed roadway subgrade should be disked or tilled, dried, and compacted before placing the new pavement structure.

The actual need for removal and replacement of unstable and/or unsuitable soils should be determined in the field at the time of construction. The subgrade should be proofrolled and tested as outlined in Section 5.1. If low strength and/or high moisture soils are encountered during construction other

locations not shown in Table 10, they should be removed to a minimum depth of 6 inches and replaced with compacted granular fill.

The frost depth for pavement design in northern Illinois could be expected to range from 45 to 60 inches (IDOT 2020). Within the frost susceptible depths, most of the samples tested in the laboratory had plasticity indices (PI) of 13 to 38. In our opinion, the soils will exhibit low to moderate frost susceptibility. Adequate drainage will suffice to alleviate frost heave.

5.3 Pavement Design Recommendations

For a Mechanistic Pavement Design (MPD), IDOT rates the subgrade using the Subgrade Support Rating (SSR). Laboratory testing on representative samples of the subgrade soil shows SSR ratings of POOR to FAIR (Exhibit 4). Considering the worst subgrade conditions and unknown new fill type, we recommend an SSR of POOR be used for the purpose of pavement design. Pavement structure conforming to IDOT's MPD requires a minimum of 12 inches of improved subgrade below the design pavement structure to ensure stability during construction and long-term pavement performance (IDOT 2020).

For an AASHTO pavement design, the subgrade soil support is characterized using the Illinois Bearing Ratio (IBR). Based on soil tests and classifications of A-6 and A-7-6, we recommend that the pavement be designed based on an IBR value of 2 (IDOT 2020).

5.4 Embankment and cut sections

Based on the cross-sections drawings, the proposed I-80 embankment widenings will have embankment cuts or fill placed on the existing embankment slope and centerline. The slope will be graded mainly at 1:4 to 1:6 (V: H). We have evaluated the potential long-term settlement and global slope stability at critical sections along the proposed improvements.

5.4.1 Settlement

In general, we do not anticipate excessive settlement. We performed settlement analysis at selected sections with the highest fill and lower soil strength. Settlement estimates have been made based on correlations to measured index properties obtained from the laboratory tests (Appendix B). Settlement evaluations are summarized and presented in Table 11. Unless specify in Table 10, removal and replacement is not required at locations shown in table 11.

Table 11: Summary of Estimated Consolidation Settlements

Alignment	Approximate Station	New Fill Height (feet)	Reference Boring(s)	Estimated Settlement (inches)
I-80 CL	561+00	4.0	CL-SGB-24	0.22
I-80 CL	573+00	3.5	CL-SGB-26	0.22
I-80 CL	597+00	3.0	CL-SGB-30	0.50
I-80 CL	613+00	6.0	EB-SGB-33	0.34

5.4.2 Global Stability

The proposed embankment and cut side slopes will be graded mainly at 1:4 to 1:6 (V: H). The global stability at a critical section was analyzed at Station 537+00 based on the soil information from the nearest borings. In this area, a major cut is anticipated to lower the roadway grade elevation. The analysis shows the factors of safety (FOS) of 2.8 and 1.8, higher than IDOT's minimum requirement of 1.7 for cuts. Slope stability analyses results are included in Appendix F.

5.5 Roadway Drainage

The proposed subgrade and pavement should have proper surface grading to prevent the pooling of water. The soils encountered beneath the proposed subgrade will exhibit poor to fair drainage characteristics. The fill material to be placed in support of the widening will likely be cohesive and will also exhibit poor drainage characteristics. We recommend installing longitudinal pipe underdrains under the edge of new pavement in widening areas, and transverse pipe underdrains at the low points in the profile, spaced 300 feet on either side of the low point, and at the base of any undercuts. For transverse underdrains at the low points where the distance to the previous or the following high point is greater than 600 feet, we recommend two transverse underdrains to be placed at 300 feet interval on either side. The pipe underdrains should be 4 inches in diameter and should be installed per Article 601 in the IDOT *Standard Specifications* (IDOT 2022) and consist of Type 2 underdrains (Adopted 1, 2022).

6.0 CONSTRUCTION CONSIDERATIONS

6.1 Excavation, Dewatering, and Utilities

Excavations should be performed in accordance with local, state, and federal regulations. The potential effect of ground movements upon nearby utilities should be considered during construction. Excavations should be sloped at no steeper than 1:2 (V: H) for cohesive soils and 1:2.5(V:H) for granular soils.

We do not anticipate the need for special dewatering systems. However, during and immediately following periods of heavy precipitation, the excavations may encounter perched groundwater within any granular layers interbedded within the cohesive layers. Therefore, the Contractor should ensure proper surface grading to prevent pooling of water and run-off into open excavations. Any water allowed to enter excavations should immediately be removed via sump-pump.

6.2 Filling and Backfilling

Fill material used for replacement of any unstable and/or unsuitable soils encountered during construction should be pre-approved by the Engineer. The fill material should be free of organic matter and debris and should be placed in lifts compacted in accordance with Section 205, *Embankment* (IDOT 2022). For new fill to be placed on existing slopes, we recommend benching the slopes according to IDOT embankment construction details.

6.3 Reuse of Materials

Site soils may be reused as embankment fill if testing shows it conforms to the following criteria: a) L_L less than 50%; b) PI value of more than 12%; c) maximum dry density greater than 90 pcf according to AASHTO T99; and d) organic content less than 10%. The soils should be removed, brought to within ±2% of the optimum moisture content and recompacted according to Section 205, *Embankment* (IDOT 2022).

6.4 Earthwork Operations

The required earthwork can be accomplished with conventional construction equipment. Moisture and traffic will cause deterioration of the exposed subgrade soils. Precautions should be taken by the Contractor to prevent water erosion of the exposed subgrade. A compacted subgrade will minimize water runoff erosion.

Earth moving operations should be scheduled to avoid excessive cold or wet weather (early spring, late fall or winter). Any soil allowed to freeze or soften due to the standing water should be removed. Wet weather can cause problems with subgrade compaction.

It is recommended that an experienced geotechnical engineer be retained to inspect the exposed subgrade, monitor earthwork operations, and provide material inspection services during the construction phase of this project.

7.0 QUALIFICATIONS

The analyses and recommendations in this report are based upon data obtained from the borings drilled at the locations shown on the *Boring Logs* (Appendix A) and in the *Boring Location Plans and Soil Profiles* (Appendix G). This report does not reflect any variations that may occur between the borings or elsewhere on the site, variations whose nature and extent may not become evident until the course of construction. In the event that any changes in the design and/or location of the proposed improvements are planned, we should be timely informed so that our recommendations can be adjusted accordingly.

It has been a pleasure to assist TranSystems and the Illinois Department of Transportation on this project. Please call if there are any questions, or if we can be of further service.

Respectfully Submitted,

WANG ENGINEERING, INC.

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Senior Engineer

Jessica Bensen, P.G.
Senior Staff Geologist

Corina T Farez, P.E., P.G.
QA/QC Reviewer

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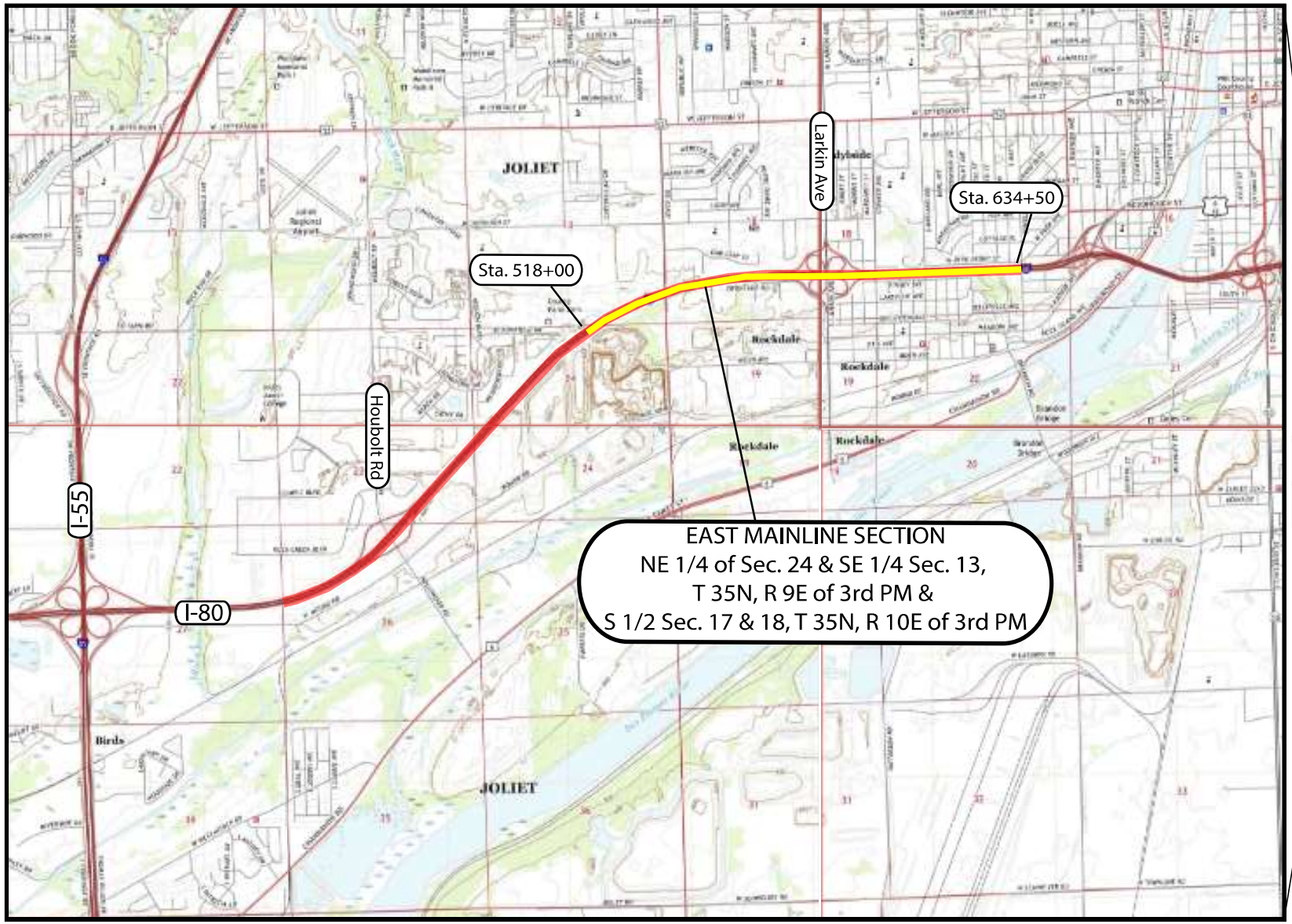
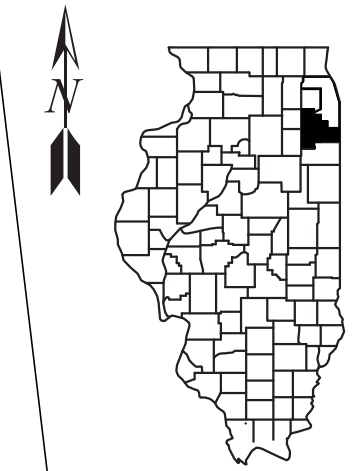
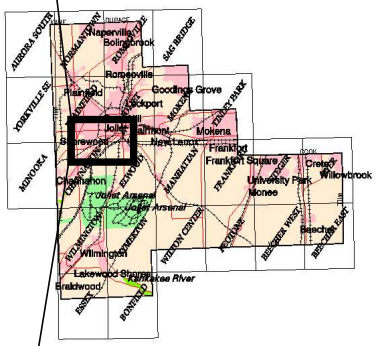
EXHIBITS







Will County

0 1.0 2.0 Miles

SITE LOCATION MAP: I-80 RECONSTRUCTION; EAST MAINLINE FORM STATION 518+00 TO STATION 634+50, WILL COUNTY, ILLINOIS

SCALE: GRAPHICAL	EXHIBIT 1	DRAWN BY: J. Bensen CHECKED BY: A. Kurnia

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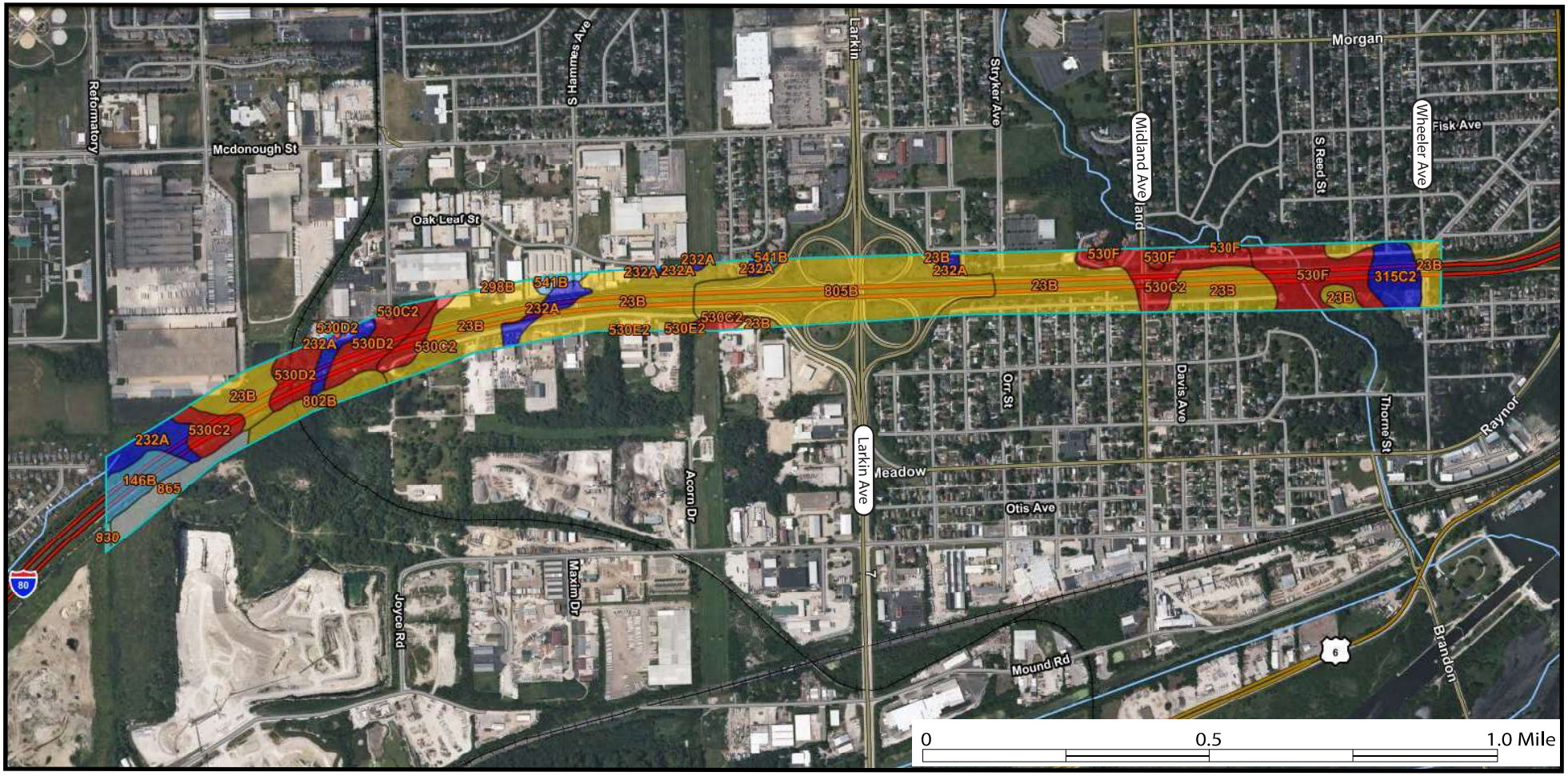

Organic Matter Soil Rating

- <= 0.82
- > 0.82 and <= 1.27
- > 1.27 and <= 1.50
- > 1.50 and <= 2.10
- > 2.10 and <= 3.82
- Not rated or not available

SITE PEDOLOGY MAP: I-80 RECONSTRUCTION; EAST MAINLINE FROM STATION 518+00 TO 634+50, WILL COUNTY, ILLINOIS

SCALE: GRAPHICAL	EXHIBIT 2-1	DRAWN BY: J. Bensen CHECKED BY: C. Marin

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Map unit symbol and soil name	Depth	USDA texture	Classification	Pct Fragments		Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Organic matter	Liquid limit	Plasticity index	Erosion factors			Potential as a source of roadfill	Local Roads and Streets	Shallow Excavations
			AASHTO	>10 inches	3-10 inches									Kw	Kf	T	Rating class; and Limiting features	Rating class; and Limiting features	Rating class; and Limiting features
	In			*L-R-H*	*L-R-H*	*Pct*	*Pct*	*Pct*	*g/cc*	*micro m/sec*	*Pct*	*L-R-H*	*L-R-H*						
23B—Blount silt loam, Lake Michigan Lobe, 2 to 4 percent slopes																			
Blount, lake michigan lobe	0-6	Silt loam	A-6, A-7-6	0-0-0	0-1-3	5-12-20	53-66-77	18-22-27	1.25-1.35-1.45	4.23-9.17-14.11	2.0-2.5-3.0	31-37-43	11-14-18	0.37	0.37	3	Poor, Low strength, Wetness, Dusty, Shrink-swell	Very limited; Frost action, Low strength, Depth to saturated zone, Ponding, Shrink-swell	Very limited; Depth to saturated zone, Dusty, Unstable excavation walls, Ponding, Too clayey
	6-10	Silt loam	A-4, A-6	0-0-0	0-1-3	5-12-20	53-67-80	15-21-27	1.30-1.40-1.55	4.23-9.17-14.11	0.2-0.6-1.0	25-32-39	9-14-19	0.55	0.55				
	10-28	silty clay loam, silty clay, clay loam	A-7-6	0-1-1	0-1-3	5-15-25	27-43-60	35-42-48	1.40-1.50-1.55	0.42-2.33-4.23	0.2-0.6-1.0	44-51-58	25-30-35	0.32	0.32				
	28-34	silty clay loam, clay loam, silty clay	A-6, A-7-6	0-1-1	0-3-4	5-15-25	30-49-68	27-36-45	1.50-1.55-1.70	0.42-0.92-1.41	0.0-0.3-0.5	37-46-55	19-26-32	0.37	0.37				
	34-60	silty clay loam	A-6, A-7-6	0-1-1	0-2-4	5-15-20	40-55-68	27-30-40	1.60-1.75-1.90	0.42-0.92-1.41	0.0-0.3-0.5	35-39-49	18-21-28	0.43	0.43				
146B—Elliott silt loam, 2 to 4 percent slopes																			
Elliott	0-9	Silt loam	A-6, A-7-6	0-0-0	0-0-0	2-10-15	58-65-76	22-25-27	1.30-1.40-1.45	4.23-9.17-14.11	3.0-4.3-5.0	38-44-47	15-17-18	0.32	0.32	3	Poor, Low strength, Wetness, Dusty	Very limited; Frost action, Low strength, Depth to saturated zone, Ponding, Shrink-swell	Very limited; Depth to saturated zone, Dusty, Unstable excavation walls, Ponding, Too clayey
	9-13	Silty clay loam	A-7-6	0-0-0	0-0-0	2-8-15	50-62-71	27-30-35	1.25-1.35-1.45	4.23-9.17-14.11	2.5-3.3-4.0	41-46-53	18-21-24	0.28	0.28				
	13-17	silty clay loam, silty clay	A-7-6	0-0-0	0-0-0	2-7-15	40-51-61	37-42-49	1.35-1.45-1.55	1.41-2.82-4.23	0.5-1.0-1.6	46-52-60	26-30-35	0.32	0.32				
	17-35	silty clay, silty clay loam	A-6, A-7-6	0-0-0	0-0-1	2-10-20	40-55-65	27-35-45	1.45-1.55-1.75	0.42-1.41-4.23	0.1-0.4-0.8	34-43-55	17-24-32	0.43	0.43				
	35-60	silty clay loam	A-6, A-7-6	0-0-0	0-0-2	3-10-20	42-60-70	27-30-38	1.65-1.75-1.85	0.42-0.92-1.41	0.0-0.2-0.5	34-38-46	16-19-26	0.49	0.49				
232A—Ashkum silty clay loam, 0 to 2 percent slopes																			
Ashkum, drained	0-12	Silty clay loam	A-7-5, A-7-6	0-0-0	0-0-0	1-8-15	45-55-64	35-37-40	1.20-1.35-1.45	1.41-2.82-4.23	3.0-5.0-8.0	51-58-67	25-26-28	0.20	0.20	5	Poor, Wetness, Low strength, Shrink-swell, Dusty	Very limited; Ponding, Depth to saturated zone, Shrink-swell, Frost action, Low strength	Very limited; Dusty, Unstable excavation walls, Ponding, Depth to saturated zone, Too clayey
	12-29	Silty clay loam, silty clay	A-7-6	0-0-0	0-0-0	2-8-15	43-51-63	35-41-42	1.30-1.40-1.50	1.41-2.82-4.23	0.5-1.3-2.5	46-54-58	25-30-30	0.32	0.32				
	29-54	Silty clay loam, silty clay	A-6, A-7-6	0-0-0	0-0-1	5-9-20	40-58-65	30-33-42	1.50-1.60-1.70	1.41-2.82-4.23	0.1-0.3-1.0	39-43-53	21-23-30	0.43	0.43				
	54-60	Silty clay loam	A-6, A-7-6	0-0-0	0-0-1	5-9-20	45-61-68	27-30-35	1.55-1.65-1.75	1.41-2.82-4.23	0.0-0.3-1.0	37-41-47	19-21-25	0.43	0.43				
298B—Beecher silt loam, 2 to 4 percent slopes																			
Beecher	0-13	Silt loam	A-6, A-7-6	0-0-0	0-0-0	2-8-15	58-68-78	20-24-27	1.25-1.35-1.45	4.23-9.17-14.11	2.0-3.0-4.0	34-40-46	13-16-19	0.37	0.37	3	Poor, Low strength, Wetness, Dusty, Shrink-swell	Very limited; Frost action, Low strength, Shrink-swell, Depth to saturated zone, Ponding	Very limited; Depth to saturated zone, Dense layer, Ponding, Dusty, Unstable excavation walls, Too clayey
	13-21	silty clay, silty clay loam	A-7-6	0-0-0	0-0-0	2-8-15	40-53-63	35-39-50	1.40-1.50-1.60	0.42-2.33-4.23	0.2-0.6-1.0	43-49-61	25-29-36	0.37	0.37				
	21-37	silty clay loam	A-6, A-7-6	0-0-0	0-0-1	5-10-20	40-54-68	27-36-40	1.50-1.60-1.70	0.42-0.92-4.23	0.1-0.3-0.5	35-44-49	17-24-28	0.37	0.37				
	37-60	silty clay loam	A-6, A-7-6	0-0-0	0-0-2	5-10-20	45-61-68	27-29-35	1.70-1.80-1.90	0.42-0.92-1.41	0.0-0.2-0.5	34-38-44	17-20-25	0.49	0.49				
315C2—Channahon silt loam, 4 to 6 percent slopes, eroded																			
Channahon	0-6	Silt loam	A-4, A-6	0-0-1	0-1-4	10-20-30	50-58-72	18-22-27	1.20-1.30-1.40	4.23-9.17-14.11	2.0-2.5-3.0	20-30-40	7-14-20	0.43	0.43	1	Poor; Depth to bedrock, Low Strength, Dusty, Shrink-swell	Very limited; Depth to hard bedrock, Frost action, Low strength, Shrink-swell	Very limited; Depth to hard bedrock, Dusty, Unstable excavation walls
	6-13	Clay loam, silty clay loam, silt loam, loam	A-6, A-7-6	0-1-1	0-3-10	15-35-50	15-39-60	25-26-35	1.35-1.47-1.60	4.23-9.17-14.11	0.0-0.7-1.5	30-38-45	15-20-25	0.37	0.37				
	13-60	Bedrock	-	-	-	-	-	-	-	0.42-2.33-4.23	-	-	-						
530C2—Ozaukee silt loam, 4 to 6 percent slopes, eroded																			
Ozaukee, eroded	0-7	Silt loam	A-6, A-7-6	0-0-0	0-0-1	5-12-22	53-66-75	18-22-27	1.30-1.43-1.55	4.23-9.17-14.11	1.0-1.7-2.5	30-35-42	12-14-18	0.43	0.43	3	Fair, Low strength, Dusty, Wetness	Somewhat limited; Frost action, Low strength	Somewhat limited; Depth to saturated zone, Dusty, Unstable excavation walls, Too clayey
	7-26	silty clay loam, clay, silty clay	A-6, A-7-6	0-0-1	0-1-4	5-11-18	34-48-58	35-41-50	1.45-1.55-1.65	0.42-2.33-4.23	0.2-0.5-0.9	31-38-48	15-19-25	0.32	0.32				
	26-37	silty clay loam, silty clay	A-6	0-1-2	0-1-5	5-12-20	40-52-64	29-36-42	1.55-1.65-1.70	0.42-0.92-1.41	0.1-0.3-0.6	24-31-37	11-15-19	0.37	0.37				
	37-60	silty clay loam, clay loam	A-4, A-6	0-1-2	0-2-7	7-14-23	50-55-64	27-31-35	1.60-1.70-1.85	0.42-0.75-1.41	0.0-0.2-0.5	21-26-30	9-12-14	0.43	0.43				

Source: USDA, Natural Resources Conservation Service; Web Soil Survey
Soil Survey Area: Will County, Illinois
Survey Area Data: Version 16, Aug 31, 2021

SITE PEDOLOGICAL MAP: I-80 RECONSTRUCTION; EAST MAINLINE FORM STATION 518+00 TO STATION 634+50, WILL COUNTY, ILLINOIS

SCALE: GRAPHICAL | EXHIBIT 2-2 | DRAWN BY: J. Bensen, CHECKED BY: C. Marin

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Map unit symbol and soil name	Depth	USDA texture	Classification	Pct Fragments		Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Organic matter	Liquid limit	Plasticity index	Erosion factors			Potential as a source of roadfill	Local Roads and Streets	Shallow Excavations
			AASHTO	>10 inches	3-10 inches									Kw	Kf	T	Rating class; and Limiting features	Rating class; and Limiting features	Rating class; and Limiting features
	In			*L-R-H*	*L-R-H*	*Pct*	*Pct*	*Pct*	*g/cc*	*micro m/sec*	*Pct*	*L-R-H*	*L-R-H*						
530D2—Ozaukee silt loam, 6 to 12 percent slopes, eroded																			
Ozaukee, eroded	0-7	Silt loam	A-6, A-7-6	0-0-0	0-0-1	7-14-23	52-65-73	18-21-27	1.30-1.45-1.55	4.23-9.17-14.11	1.0-1.7-2.5	30-35-42	12-15-19	0.43	0.43		Fair, Low strength, Wetness, Dusty	Somewhat limited; Frost action, Low strength, Slope, Depth to saturated zone	Somewhat limited; Depth to saturated zone, Dusty, Unstable excavation walls, Slope, Too clayey
	7-11	Silty clay loam, silt loam	A-6, A-7-6	0-0-0	0-0-1	5-10-18	50-59-69	24-31-34	1.40-1.50-1.60	4.23-9.17-14.11	0.3-0.6-1.0	34-41-45	16-21-24	0.43	0.43				
	11-27	Silty clay, silty clay loam, clay	A-6, A-7-6	0-0-1	0-1-4	5-11-18	34-48-58	35-41-50	1.45-1.55-1.65	0.42-2.33-4.23	0.2-0.5-0.9	30-38-52	15-19-26	0.32	0.32	3			
	27-32	silty clay loam, silty clay	A-6	0-1-2	0-1-5	5-12-20	40-52-64	29-36-42	1.55-1.65-1.70	0.42-0.92-1.41	0.1-0.3-0.6	24-31-37	11-15-19	0.37	0.37				
	32-60	Clay loam, silty clay loam	A-4, A-6	0-1-2	0-2-7	7-14-23	50-55-64	27-31-35	1.65-1.75-1.85	0.42-0.75-1.41	0.0-0.2-0.5	21-26-31	9-12-15	0.43	0.43				
530E2—Ozaukee silt loam, 12 to 20 percent slopes, eroded																			
Ozaukee, eroded	0-6	Silt loam	A-6, A-7-6	0-0-0	0-0-1	7-14-23	52-65-73	18-21-27	1.30-1.45-1.55	4.23-9.17-14.11	1.0-1.7-2.5	30-35-42	12-15-19	0.43	0.43		Fair; Low Strength, Wetness, Dusty, Slope	Very limited; Slope, Low strength, Depth to saturated zone, Frost action	Very limited; Depth to saturated zone, Slope, Dusty, Unstable excavation walls, Too clayey
	6-11	Silty clay loam, silt loam	A-6, A-7-6	0-0-0	0-0-1	5-10-18	50-59-69	24-31-34	1.40-1.50-1.60	4.23-9.17-14.11	0.3-0.6-1.0	34-41-45	16-21-24	0.43	0.43				
	11-27	Silty clay, silty clay loam, clay	A-6, A-7-6	0-0-1	0-1-4	5-11-18	34-48-58	35-41-50	1.45-1.55-1.65	0.42-2.33-4.23	0.2-0.5-0.9	30-38-52	15-19-26	0.32	0.32	3			
	27-32	Silty clay loam, silty clay	A-6	0-1-2	0-1-5	5-12-20	40-52-64	29-36-42	1.55-1.65-1.70	0.42-0.92-1.41	0.1-0.3-0.6	24-31-37	11-15-19	0.37	0.37				
	32-60	Silty clay loam, clay loam	A-4, A-6	0-1-2	0-2-7	7-14-23	50-55-64	27-31-35	1.65-1.75-1.85	0.42-0.75-1.41	0.0-0.2-0.5	21-26-31	9-12-15	0.43	0.43				
530F—Ozaukee silt loam, 20 to 30 percent slopes																			
Ozaukee	0-5	Silt loam	A-4, A-6, A-7-6	0-0-0	0-0-1	7-14-23	52-67-76	15-19-27	1.30-1.40-1.50	4.23-9.17-14.11	1.2-2.0-3.0	28-33-43	9-12-18	0.43	0.43		Poor; Slope, Low Strength, Dusty, Wetness	Very limited; Slope, Ponding, Depth to saturated zone, Frost action, Low strength	Very limited; Slope, Depth to saturated zone, Dusty, Unstable excavation walls
	5-9	Silt loam	A-4, A-6	0-0-0	0-0-1	5-10-18	57-69-77	16-21-27	1.35-1.45-1.55	4.23-9.17-14.11	0.3-0.8-1.2	27-32-39	10-14-19	0.55	0.55				
	9-14	Silty clay loam, silt loam	A-6, A-7-6	0-0-0	0-0-1	5-10-18	50-59-69	24-31-34	1.40-1.50-1.60	4.23-9.17-14.11	0.3-0.6-1.0	34-41-45	16-21-24	0.43	0.43	3			
	14-29	silty clay loam, clay, silty clay	A-6, A-7-6	0-0-1	0-1-4	5-11-18	34-50-58	35-39-50	1.45-1.55-1.65	0.42-2.33-4.23	0.2-0.5-0.9	30-36-52	15-18-26	0.37	0.37				
	29-36	Silty clay loam, silty clay	A-6	0-1-2	0-1-5	5-12-20	40-52-64	29-36-42	1.55-1.65-1.70	0.42-0.92-1.41	0.1-0.3-0.6	24-31-37	11-15-19	0.37	0.37				
	36-60	Silty clay loam, clay loam	A-4, A-6	0-1-2	0-2-7	7-14-23	50-55-64	27-31-35	1.65-1.75-1.85	0.42-0.75-1.41	0.0-0.2-0.5	21-26-31	9-12-15	0.43	0.43				
541B—Graymont silt loam, 2 to 5 percent slopes																			
Graymont	0-12	Silt loam	A-6, A-7-6	0-0-0	0-0-0	1-5-10	63-70-77	22-25-27	1.24-1.35-1.45	4.23-9.17-14.11	3.0-4.0-5.0	39-44-48	15-17-18	0.28	0.28		Poor, Low strength, Dusty, Shrink-swell, Wetness	Very limited; Frost action, Low strength, Shrink-swell, Ponding, Depth to saturated zone	Somewhat limited; Dusty, Unstable excavation walls, Depth to saturated zone
	12-33	Silt loam, silty clay loam	A-6, A-7-6	0-0-0	0-0-0	1-5-10	55-64-74	25-31-35	1.25-1.30-1.45	4.23-9.17-14.11	0.2-1.1-2.0	35-43-49	17-22-25	0.43	0.43	5			
	33-38	Silt loam, silty clay loam	A-6, A-7-6	0-0-0	0-0-3	10-15-20	40-54-68	22-31-40	1.50-1.60-1.78	0.42-2.33-4.23	0.1-0.3-0.5	32-41-51	15-22-29	0.43	0.43				
	38-60	Silty clay loam, silt loam	A-6, A-7-6	0-0-0	0-1-4	10-15-20	46-56-66	24-29-34	1.55-1.65-1.82	0.42-0.92-1.41	0.0-0.3-0.5	33-39-45	15-20-24	0.49	0.49				
802B—Orthents, loamy, undulating																			
Orthents, loamy, undulating	0-7	Loam	A-6, A-7-6	0-0-0	0-2-4	23-40-50	28-40-50	22-25-27	1.70-1.73-1.75	1.41-2.82-4.23	0.5-1.3-2.0	32-37-41	15-17-19	0.37	0.37	5	Poor; Low strength, Shrink-swell, Dusty	Somewhat limited; Frost action, Low strength, Shrink-swell	Somewhat limited; Depth to saturated zone, Dusty, Unstable excavation walls, Too
	7-60	Loam, silt loam, clay loam	A-6, A-7-6	0-1-1	0-2-4	20-38-50	25-35-58	22-28-30	1.70-1.75-1.80	1.41-2.82-4.23	0.2-0.6-1.0	33-39-43	15-19-21	0.32	0.32				
805B—Orthents, clayey, undulating																			
Orthents, clayey, undulating	0-7	Silty clay	A-7-6	0-0-0	0-1-3	2-8-20	40-48-58	40-44-55	1.50-1.58-1.65	0.42-0.92-1.41	0.5-1.3-2.0	50-56-68	29-32-40	0.32	0.32	2	Poor; Low strength, Shrink-swell, Dusty, Wetness	Very limited; Frost action, Low strength, Ponding, Shrink-swell, Depth to saturated zone	Somewhat limited; Depth to saturated zone, Dusty, Unstable excavation walls, Too clayey
	7-60	Silty clay, silty clay loam	A-7-6	0-0-0	0-1-2	2-11-30	10-41-60	35-48-60	1.60-1.75-1.90	0.14-0.28-0.42	0.2-0.6-1.0	46-58-70	25-35-44	0.32	0.32				

Source: USDA, Natural Resources Conservation Service; Web Soil Survey
Soil Survey Area: Will County, Illinois
Survey Area Data: Version 16, Aug 31, 2021

SITE PEDOLOGICAL MAP: I-80 RECONSTRUCTION; EAST MAINLINE FORM STATION 518+00 TO STATION 634+50, WILL COUNTY, ILLINOIS

SCALE: GRAPHICAL | EXHIBIT 2-3 | DRAWN BY: J. Benson CHECKED BY: C. Marin

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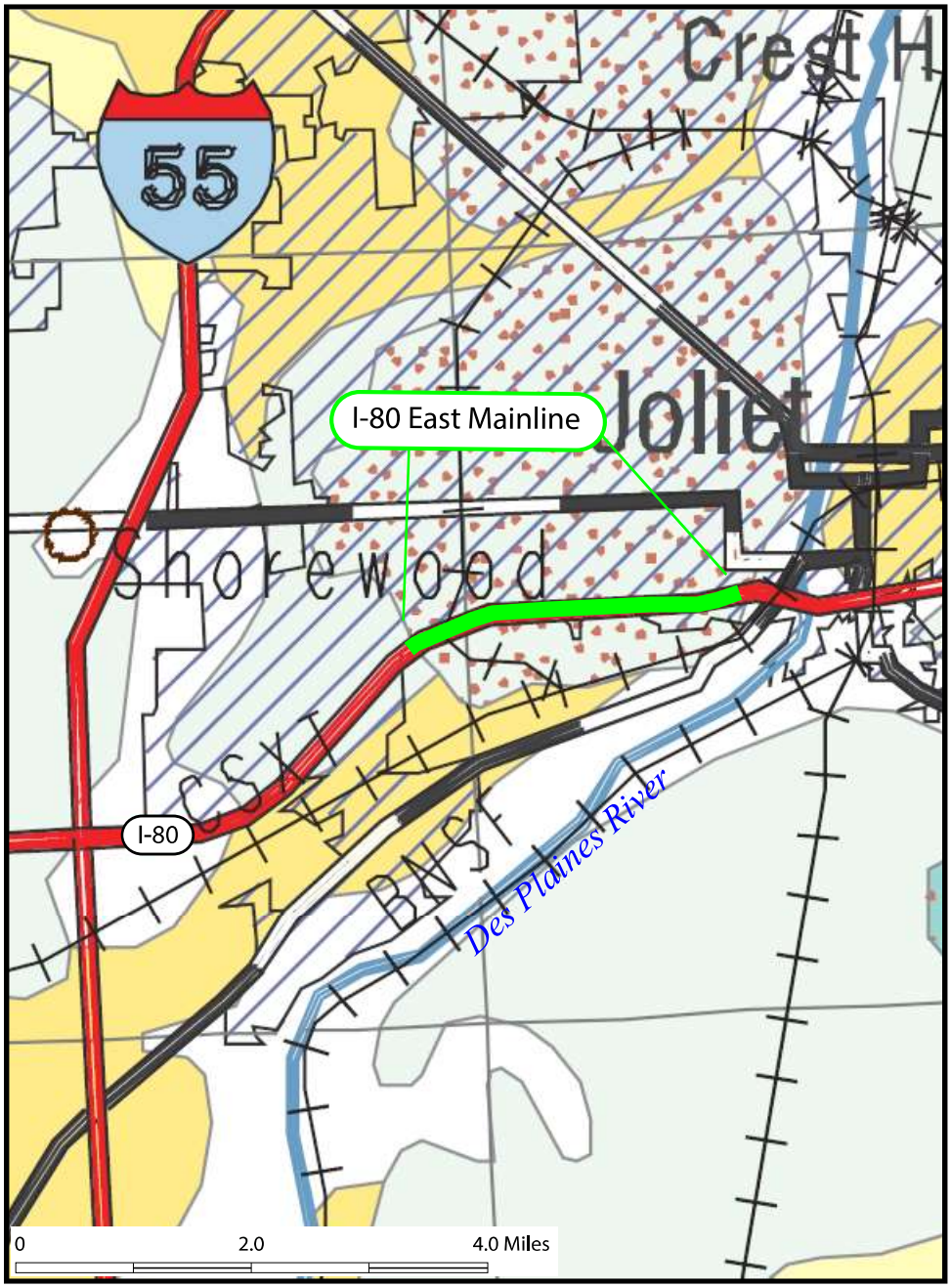
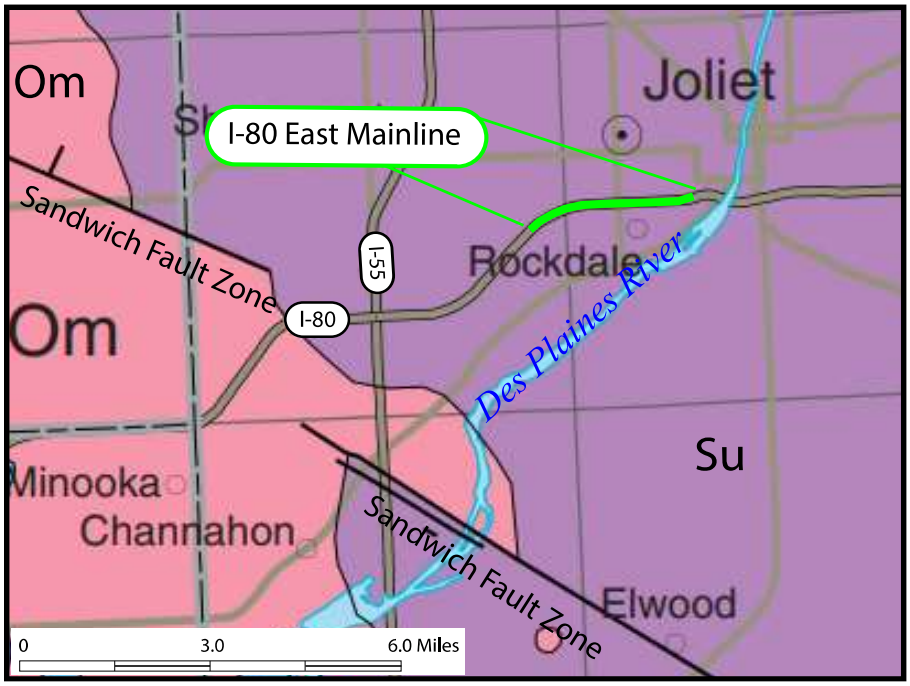
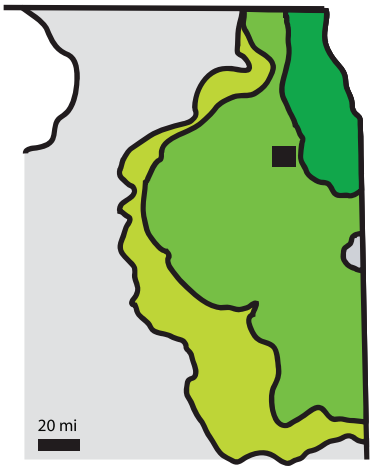




Modified after Dennis R. Kolata (2005)

Modified after William W. Shilts (2000)

REGIONAL GEOLOGY



Wedron Group

- Wadsworth Formation
- Lemont Formation
- Tiskilwa Formation

Modified after Hansel and Johnson (1996)

Legend

- **Cahokia Formation** — Bedded silts, clays and sand and gravel deposited in floodplains and channels of modern rivers and streams
- **Equality Formation** — Laminated silt, clay, or fine sand deposited in slackwater, glacial, and postglacial lakes; massive to bedded, calcareous
- **Henry Formation** — Predominantly stratified sand and gravel; locally occurring silt, clay, organic debris, wood, shell lenses; outwash on floodplains
- **Lemont Formation** — Diamicton; silty clay loam to silty clay; fine grained matrix; unsorted, unstratified mixture of gravel, sand, silt, and clay; containing lenses of sand, gravel and/or silt.
- Bedrock near or at the surface
- Major metropolitan area

Modified after William W. Shilts (2000)

Legend

- Pt — Pennsylvanian Shale, Tadewater Formation
- Su — Silurian Dolomitic Limestone
- Om — Ordovician Formation, Maquoketa Group
- Og — Ordovician Formation, Galena Group

SITE AND REGIONAL GEOLOGY: I-80 RECONSTRUCTION, EAST MAINLINE FROM STATION 518+00 TO STATION 634+50, WILL COUNTY, ILLINOIS

SCALE: GRAPHICAL	EXHIBIT 3	DRAWN BY: J. Bensen CHECKED BY: A. Kurnia

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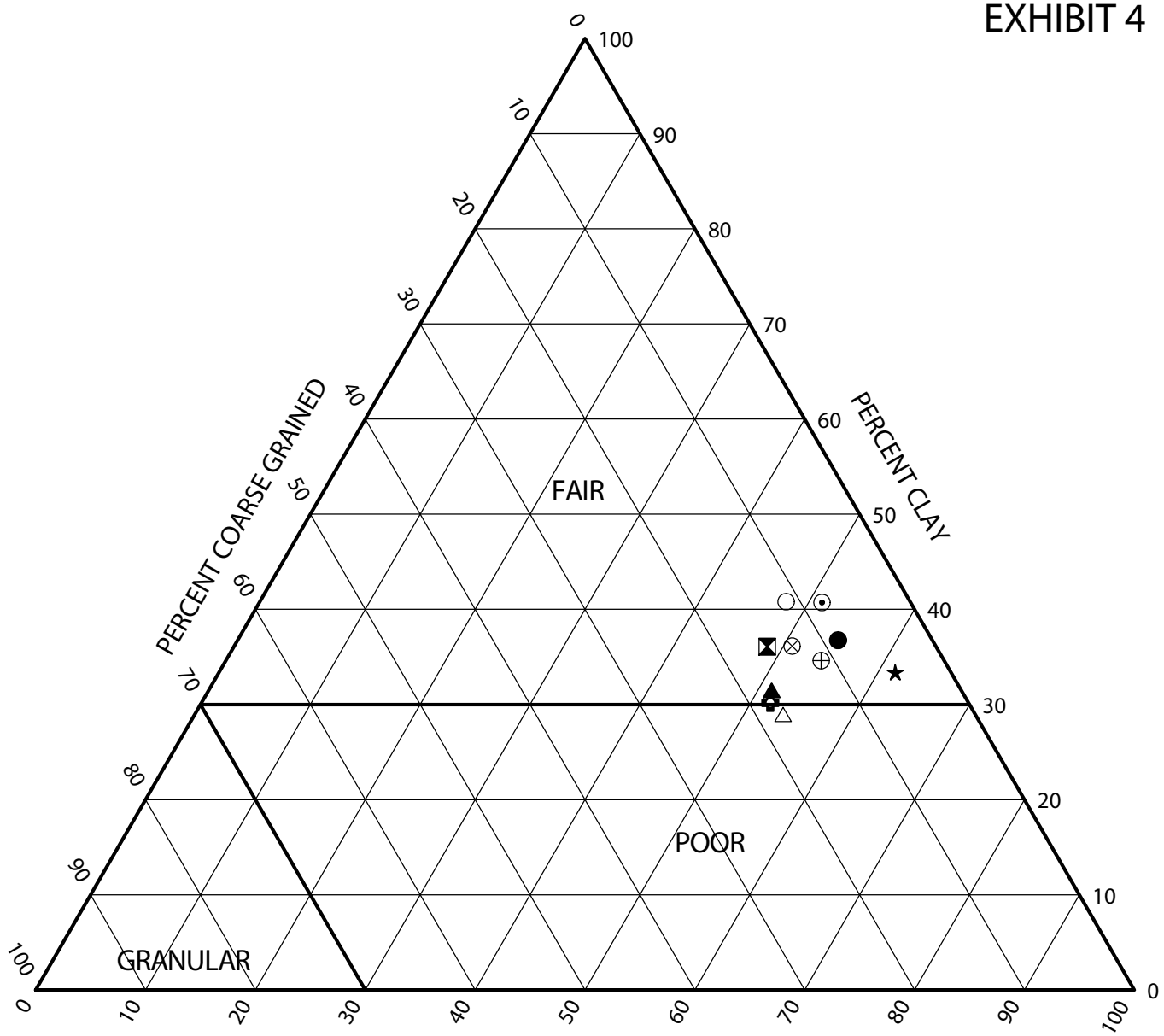
FOR TRANSYSTEMS CORPORATION | 7901-15-01

EXHIBIT 4



	Sample	Depth (ft)	Coarse (%)	Silt (%)	Clay (%)	Classification		
						IL DOT	AASHTO	RATING
●	CL-SGB-19#2	2.0	8.6	54.7	36.8	Silty Clay	A-6 (22)	FAIR
⧓	CL-SGB-24#3	4.0	15.4	48.5	36.1	Clay	A-6 (17)	FAIR
▲	CL-SGB-26#2	2.0	17.3	51.3	31.5	Silty Clay	A-6 (16)	FAIR
★	CL-SGB-30#3	4.0	5.1	61.6	33.4	Silty Clay	A-6 (23)	FAIR
⊙	CL-SGB-33#2	2.0	8.1	51.2	40.7	Silty Clay	A-6 (17)	FAIR
✿	CL-SGB-36#2	2.0	18.0	51.8	30.2	Silty Clay	A-7-6 (22)	FAIR
○	EB-SGB-21#5	9.0	11.3	47.9	40.8	Clay	A-7-6 (25)	FAIR
△	EB-SGB-29#3	5.0	17.5	53.6	29.0	Silty Clay Loam	A-6 (8)	POOR
⊗	EB-SGB-38#1	0.0	13.1	50.8	36.1	Silty Clay	A-7-6 (23)	FAIR
⊕	JJT-BSB-02#3	6.0	11.2	54.2	34.6	Silty Clay	A-6 (17)	FAIR

WEI SINCE 1982

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Subgrade Support Rating Chart

Project: I-80 Reconstruction (Houbolt Rd to Center St)

Location: Will County, Illinois

Number: 7901-15-01

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A Terracon Company

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APPENDIX A

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BORING LOG CL-SGB-17

WEI Job No.: 7901-15-01

Client **TranSystems Corporation**
Project **I-80 Reconstruction (Houbolt Rd to Center St)**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 603.61 ft
North: 1762901.31 ft
East: 1034886.50 ft
Station: 519+63.71
Offset: 5.52 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	603.1	6-inch thick, black SILTY CLAY --TOPSOIL--						
		Very stiff, brown and black SILTY CLAY LOAM to CLAY LOAM, trace gravel; moist --FILL-- --RDR 2--			1	2 3 4 5	3.28 B	21
					2	2 2 5 4	2.05 B	17
	599.6	Very stiff, brown SILTY CLAY, trace gravel; moist --RDR 2--	5		3	2 2 3 5	2.05 B	26
	597.8	Soft, brown SILTY LOAM to SILTY CLAY LOAM, trace gravel; moist --RDR 2--			4	2 1 2 4	0.49 B	24
	595.9	Very stiff, brown SILTY CLAY, trace gravel; moist --RDR 2--			5	2 4 5 6	2.38 B	20
	593.6	Boring terminated at 10.00 ft	10					
			15					
			20					

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)

GENERAL NOTES

Begin Drilling **05-22-2022** Complete Drilling **05-22-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **21GeoA[96%]**
Driller **KG&TC** Logger **A. Scifers** Checked by **J. Bensen**
Drilling Method **2.25" IDA HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **DRY**
At Completion of Drilling ▼ **DRY**
Time After Drilling **NA**
Depth to Water ▼ **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

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BORING LOG CL-SGB-18

WEI Job No.: 7901-15-01

Client **TranSystems Corporation**
Project **I-80 Reconstruction (Houbolt Rd to Center St)**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 618.17 ft
North: 1763206.41 ft
East: 1035340.78 ft
Station: 525+11.33
Offset: 3.72 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	617.2	12-inch thick, black SILTY CLAY						
		--TOPSOIL--			1	3 5 6 7	9.18 B	15
		Hard, brown and black SILTY CLAY, trace gravel; moist						
		--FILL--						
		--RDR 2--			2	4 5 5 7	4.10 B	15
	614.3	Very stiff, dark gray SILTY CLAY, trace gravel; moist						
		--BURIED TOPSOIL--	5		3	2 4 5 7	2.95 B	26
	611.8	Hard, brown SILTY CLAY, trace gravel; moist						
		--RDR 2--			4	4 4 5 8	3.94 B	16
	608.2		10		5	4 5 7 10	5.90 B	16
		Boring terminated at 10.00 ft						
			15					
			20					

GENERAL NOTES

Begin Drilling **05-22-2022** Complete Drilling **05-22-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **21GeoA[96%]**
Driller **KG&TC** Logger **A. Scifers** Checked by **J. Bensen**
Drilling Method **2.25" IDA HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **DRY**
At Completion of Drilling ▼ **DRY**
Time After Drilling **NA**
Depth to Water ▼ **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

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BORING LOG CL-SGB-19

WEI Job No.: 7901-15-01

Client **TranSystems Corporation**
Project **I-80 Reconstruction (Houbolt Rd to Center St)**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 632.37 ft
North: 1763527.47 ft
East: 1035900.29 ft
Station: 531+56.79
Offset: 2.31 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	630.4	Very stiff, black SILTY CLAY, trace gravel; moist --TOPSOIL--			1	2 3 4 5	3.85 B	24
		Very stiff, brown, black and gray SILTY CLAY, trace gravel; moist --FILL-- --RDR 2-- --L_L(%)=40, P_L(%)=16-- --%Gravel=1.4-- --%Sand=7.1-- --%Silt=54.7-- --%Clay=36.8-- --A-6 (22)--			2	2 2 4 4	3.03 B	24
	626.6		5		3	2 4 5 5	3.69 B	17
	624.6	Very stiff, black SILTY CLAY, trace gravel; moist --BURIED TOPSOIL--			4	2 3 4 6	2.79 B	26
	622.4	Stiff, brown SILTY CLAY, trace gravel; moist --RDR 2--	10		5	3 4 4 6	1.89 B	18
		Boring terminated at 10.00 ft	15					
			20					

GENERAL NOTES

Begin Drilling **05-22-2022** Complete Drilling **05-22-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **21GeoA[96%]**
Driller **KG&TC** Logger **A. Scifers** Checked by **J. Bensen**
Drilling Method **2.25" IDA HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **DRY**
At Completion of Drilling ▼ **DRY**
Time After Drilling **NA**
Depth to Water ▼ **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

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BORING LOG CL-SGB-20

WEI Job No.: 7901-15-01

Client **TranSystems Corporation**
Project **I-80 Reconstruction (Houbolt Rd to Center St)**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 638.62 ft
North: 1763788.81 ft
East: 1036455.94 ft
Station: 537+71.23
Offset: 5.92 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	637.7	11-inch thick, black SILTY CLAY						
		--TOPSOIL--			1	2 1 2 1	0.98 B	21
		Medium stiff to hard, black, brown, and gray SILTY CLAY to SILTY CLAY LOAM, trace gravel; moist			2	3 4 5 6	2.62 B	19
		--FILL--						
		--RDR 2--	5		3	2 1 3 4	2.79 B	20
					4	3 5 5 7	5.58 B	19
					5	3 4 6 8	> 4.50 P	17
	628.6		10					
		Very stiff to hard, black to gray SILTY CLAY, trace to some gravel; damp to moist						
		--RDR 2--			6	5 6 6	2.54 B	17
					7	3 5 8	4.92 B	23
			15					
					8	7 7 12	NA	16
		--few sand seams--			9	18 6 7	4.50 P	13
	618.6		20					
		Boring terminated at 20.00 ft						

GENERAL NOTES

Begin Drilling **05-23-2022** Complete Drilling **05-23-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **21GeoA[96%]**
Driller **KG&TC** Logger **A. Scifers** Checked by **J. Bensen**
Drilling Method **2.25" IDA HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **DRY**
At Completion of Drilling ▼ **DRY**
Time After Drilling **NA**
Depth to Water ▼ **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

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BORING LOG CL-SGB-21

WEI Job No.: 7901-15-01

Client **TranSystems Corporation**
Project **I-80 Reconstruction (Houbolt Rd to Center St)**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 629.02 ft
North: 1764008.88 ft
East: 1037001.83 ft
Station: 543+60.16
Offset: 1.40 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	628.4	8-inch thick, black SILTY CLAY --TOPSOIL--						
		Very stiff to hard, black, brown and gray SILTY CLAY, trace gravel; moist --FILL-- --RDR 2--			1	2 3 4 5	4.02 B	16
					2	2 3 5 5	2.87 B	19
			5		3	3 3 5 7	4.43 B	18
					4	3 3 4 6	2.79 B	17
	619.0		10		5	4 5 12 8	5.99 B	19
		Boring terminated at 10.00 ft						
			15					
			20					

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)

GENERAL NOTES

Begin Drilling **05-23-2022** Complete Drilling **05-23-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **21GeoA[96%]**
Driller **KG&TC** Logger **A. Scifers** Checked by **J. Bensen**
Drilling Method **2.25" IDA HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **DRY**
At Completion of Drilling ▼ **DRY**
Time After Drilling **NA**
Depth to Water ▼ **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

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BORING LOG CL-SGB-22

WEI Job No.: 7901-15-01

Client **TranSystems Corporation**
Project **I-80 Reconstruction (Houbolt Rd to Center St)**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 620.23 ft
North: 1764189.86 ft
East: 1037581.18 ft
Station: 549+67.42
Offset: 3.36 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	619.7	6-inch thick, black SILTY CLAY --TOPSOIL--						
		Very stiff to hard, brown to gray SILTY CLAY, trace gravel; moist --RDR 2--			1	2 3 5 6	3.20 B	18
					2	3 5 6 10	6.97 B	15
			5		3	3 8 21 16	5.41 B	19
					4	4 6 8 11	5.33 B	16
					5	3 6 8 11	3.28 B	19
	610.2		10					
		Boring terminated at 10.00 ft						
			15					
			20					

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)

GENERAL NOTES

Begin Drilling **05-23-2022** Complete Drilling **05-23-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **21GeoA[96%]**
Driller **KG&TC** Logger **A. Scifers** Checked by **J. Bensen**
Drilling Method **2.25" IDA HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **DRY**
At Completion of Drilling ▼ **DRY**
Time After Drilling **NA**
Depth to Water ▼ **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

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BORING LOG CL-SGB-23

WEI Job No.: 7901-15-01

Client **TranSystems Corporation**
Project **I-80 Reconstruction (Houbolt Rd to Center St)**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 623.40 ft
North: 1764331.85 ft
East: 1038153.73 ft
Station: 555+57.51
Offset: 0.60 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	623.2	3-inch thick, black SILTY CLAY --TOPSOIL--						
		Very stiff to hard, brown SILTY CLAY, trace gravel; moist --RDR 2--			1	2 4 5 11	5.08 B	16
					2	13 8 16 13	5.33 B	19
			5		3	9 10 10 14	5.25 B	18
					4	12 13 18 15	2.38 B	18
					5	8 10 12 13	2.50 P	15
	613.7							
	613.4	Brown SILT; moist	10					
		Boring terminated at 10.00 ft						
			15					
			20					

GENERAL NOTES

Begin Drilling **05-17-2022** Complete Drilling **05-17-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **D25 ATV [93%]**
Driller **KG&TC** Logger **A. Scifers** Checked by **J. Bensen**
Drilling Method **2.25" IDA HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **DRY**
At Completion of Drilling ▼ **DRY**
Time After Drilling **NA**
Depth to Water ▼ **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

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BORING LOG CL-SGB-24

WEI Job No.: 7901-15-01

Client **TranSystems Corporation**
Project **I-80 Reconstruction (Houbolt Rd to Center St)**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 627.42 ft
North: 1764432.97 ft
East: 1038742.39 ft
Station: 561+54.81
Offset: 2.25 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	626.9	6-inch thick, black SILTY CLAY --TOPSOIL--						
		Very stiff to hard, brown SILTY CLAY, trace gravel; moist --FILL-- --RDR 2--			1	2 3 4 7	4.02 B	20
					2	7 6 9 10	3.03 B	21
	623.4	Very stiff, gray SILTY CLAY to CLAY, trace gravel; moist --RDR 2-- --L_L(%)=36, P_L(%)=15-- --%Gravel=2.4-- --%Sand=13.0-- --%Silt=48.5-- --%Clay=36.1-- --A-6 (17)--	5		3	3 4 3 8	3.36 B	37
	621.7	Very stiff, gray SILTY CLAY, trace gravel; moist --RDR 2--			4	6 7 12 14	3.61 B	16
					5	4 6 10 17	3.61 B	19
	617.4	Boring terminated at 10.00 ft	10					
			15					
			20					

GENERAL NOTES

Begin Drilling **05-17-2022** Complete Drilling **05-17-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **D25 ATV [93%]**
Driller **KG&TC** Logger **A. Scifers** Checked by **J. Bensen**
Drilling Method **2.25" IDA HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **DRY**
At Completion of Drilling ▼ **DRY**
Time After Drilling **NA**
Depth to Water ▼ **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

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BORING LOG CL-SGB-25

WEI Job No.: 7901-15-01

Client **TranSystems Corporation**
Project **I-80 Reconstruction (Houbolt Rd to Center St)**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 626.20 ft
North: 1764491.96 ft
East: 1039341.59 ft
Station: 567+56.86
Offset: 2.55 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	625.9	3-inch thick, black SILTY CLAY LOAM						
		<<R>--TOPSOIL--						
		Hard, brown and gray SILTY CLAY, trace gravel; moist			1	2 4 4 6	6.56 B	16
		--RDR 2--			2	3 5 6 10	7.79 B	16
			5		3	4 7 9 12	7.13 B	17
					4	3 5 8 11	7.79 B	17
					5	3 7 8 11	5.90 B	19
	616.2		10					
		Boring terminated at 10.00 ft						
			15					
			20					

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)

GENERAL NOTES

Begin Drilling **05-22-2022** Complete Drilling **05-22-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **21GeoA[96%]**
Driller **KG&TC** Logger **A. Scifers** Checked by **J. Bensen**
Drilling Method **2.25" IDA HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **DRY**
At Completion of Drilling ▼ **DRY**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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BORING LOG CL-SGB-26

WEI Job No.: 7901-15-01

Client **TranSystems Corporation**
Project **I-80 Reconstruction (Houbolt Rd to Center St)**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 623.07 ft
North: 1764513.23 ft
East: 1039859.05 ft
Station: 572+74.72
Offset: 0.96 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	623.0	1-inch thick, black SANDY LOAM						
		--TOPSOIL--			1	2 3 5 6	5.74 B	10
	621.2	Hard, brown SILTY CLAY, trace gravel; moist						
		--FILL--			2	2 5 6 8	0.87 B	36
	619.9	Black SILTY CLAY						
		--BURIED TOPSOIL--						
		--L_L(%)=37, P_L(%)=17--						
		--%Gravel=4.5--						
		--%Sand=12.8--						
		--%Silt=51.3--	5		3	4 5 6 9	4.92 B	16
		--%Clay=31.5--						
		--A-6 (16)--						
		Hard, brown to gray SILTY CLAY, trace gravel; moist						
		--RDR 2--			4	5 7 11 11	7.71 B	19
	613.1		10		5	3 5 9 12	7.71 B	16
		Boring terminated at 10.00 ft						
			15					
			20					

GENERAL NOTES

Begin Drilling **05-24-2022** Complete Drilling **05-24-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **21GeoA[96%]**
Driller **KG&TC** Logger **A. Scifers** Checked by **J. Bensen**
Drilling Method **2.25" IDA HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **DRY**
At Completion of Drilling ▼ **DRY**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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BORING LOG CL-SGB-27

WEI Job No.: 7901-15-01

Client **TranSystems Corporation**
Project **I-80 Reconstruction (Houbolt Rd to Center St)**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 623.71 ft
North: 1764535.00 ft
East: 1040538.55 ft
Station: 579+54.54
Offset: 4.37 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	623.5	2-inch thick, black SILTY CLAY --TOPSOIL--						
		Very stiff, brown and gray SILTY CLAY, trace gravel; moist			1	2 2 4 5	3.85 B	25
	621.9	--FILL--						
	621.2	Black SILTY CLAY --BURIED TOPSOIL--						
		Very stiff to hard, brown to gray SILTY CLAY, trace gravel; moist --RDR 2--			2	3 5 7 11	6.31 B	25
			5		3	2 4 6 8	7.54 B	17
					4	3 4 8 8	3.44 B	18
					5	2 4 5 8	4.67 B	20
	613.7		10					
		Boring terminated at 10.00 ft						
			15					
			20					

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)

GENERAL NOTES

Begin Drilling **05-24-2022** Complete Drilling **05-24-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **21GeoA[96%]**
Driller **KG&TC** Logger **A. Scifers** Checked by **J. Bensen**
Drilling Method **2.25" IDA HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **DRY**
At Completion of Drilling ▼ **DRY**
Time After Drilling **NA**
Depth to Water ▼ **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

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BORING LOG CL-SGB-28

WEI Job No.: 7901-15-01

Client **TranSystems Corporation**
Project **I-80 Reconstruction (Houbolt Rd to Center St)**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 627.32 ft
North: 1764565.57 ft
East: 1041139.27 ft
Station: 585+56.01
Offset: 2.24 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	626.9	5-inch thick, black SILTY CLAY LOAM --TOPSOIL--						
		Very stiff to hard, brown SILTY CLAY LOAM, trace gravel; moist --FILL--			1	2 2 4 4	2.38 B	12
					2	2 3 5 7	> 4.50 P	16
	623.6							
	623.2	Black SILTY CLAY --BURIED TOPSOIL--						
		Stiff to hard, gray SILTY CLAY, trace gravel; moist --RDR 2--	5		3	2 5 4 6	4.92 B	17
					4	2 3 3 5	2.46 B	17
	618.6							
		Medium dense, gray SILT, trace gravel; moist			5	2 3 8 11	NP	18
	617.7							
	617.3	Brown, coarse SAND; moist	10					
		Boring terminated at 10.00 ft						
			15					
			20					

GENERAL NOTES

Begin Drilling **05-24-2022** Complete Drilling **05-24-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **21GeoA[96%]**
Driller **KG&TC** Logger **A. Scifers** Checked by **J. Bensen**
Drilling Method **2.25" IDA HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **DRY**
At Completion of Drilling ▼ **DRY**
Time After Drilling **NA**
Depth to Water ▼ **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

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BORING LOG CL-SGB-29

WEI Job No.: 7901-15-01

Client **TranSystems Corporation**
Project **I-80 Reconstruction (Houbolt Rd to Center St)**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 631.07 ft
North: 1764586.38 ft
East: 1041749.20 ft
Station: 591+66.28
Offset: 1.28 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	631.0	1-inch thick, black SILTY CLAY --TOPSOIL--						
		Very stiff to hard, brown to gray SILTY CLAY, trace gravel; moist --RDR 2--			1	3 4 4 5	3.20 B	16
					2	7 6 8 9	3.12 B	18
			5		3	5 6 8 11	5.90 B	20
					4	6 7 8 9	6.72 B	21
	621.1		10		5	4 7 12 11	5.49 B	21
		Boring terminated at 10.00 ft						
			15					
			20					

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)

GENERAL NOTES

Begin Drilling **05-16-2022** Complete Drilling **05-16-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **20D25A [83%]**
Driller **KG&TC** Logger **A. Scifers** Checked by **J. Bensen**
Drilling Method **2.25" IDA HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **DRY**
At Completion of Drilling ▼ **DRY**
Time After Drilling **NA**
Depth to Water ▼ **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

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BORING LOG CL-SGB-30

WEI Job No.: 7901-15-01

Client **TranSystems Corporation**
Project **I-80 Reconstruction (Houbolt Rd to Center St)**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 634.28 ft
North: 1764613.91 ft
East: 1042344.54 ft
Station: 597+62.24
Offset: 2.51 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	633.2	13-inch thick, black SILTY CLAY --TOPSOIL--			1	2 2 3 4	1.72 B	25
		Soft to stiff, gray and brown SILTY CLAY LOAM, trace gravel; moist --RDR 2--			2	3 4 4 6	0.98 B	25
		--L_L(%)=39, P_L(%)=15-- --%Gravel=0.2-- --%Sand=4.9-- --%Silt=61.6-- --%Clay=33.4-- --A-6 (23)--	5		3	2 2 3 3	0.66 B	28
	626.4				4	30 20 20 10	0.41 B	24
		Very stiff, gray SILTY CLAY, trace gravel; moist --RDR 2--			5	8 9 13 14	3.69 B	18
	624.3		10					
		Boring terminated at 10.00 ft						
			15					
			20					

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)

GENERAL NOTES

Begin Drilling **05-16-2022** Complete Drilling **05-16-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **20D25A [83%]**
Driller **KG&TC** Logger **A. Scifers** Checked by **J. Bensen**
Drilling Method **2.25" IDA HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **DRY**
At Completion of Drilling ▼ **DRY**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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BORING LOG CL-SGB-31

WEI Job No.: 7901-15-01

Client **TranSystems Corporation**
Project **I-80 Reconstruction (Houbolt Rd to Center St)**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 637.05 ft
North: 1764639.72 ft
East: 1042944.23 ft
Station: 603+63.72
Offset: 6.71 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	636.4	8-inch thick, black SILTY CLAY --TOPSOIL--						
		Very stiff to hard, gray and brown SILTY CLAY, trace gravel; moist			1	2 2 6 9	2.87 B	17
		--RDR 2--			2	5 4 8 10	3.03 B	21
			5		3	6 9 8 11	5.74 B	15
					4	6 9 11 11	6.40 B	16
	627.0		10		5	20 18 17 18	7.13 B	18
		Boring terminated at 10.00 ft						
			15					
			20					

GENERAL NOTES

Begin Drilling **05-16-2022** Complete Drilling **05-16-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **20D25A [83%]**
Driller **KG&TC** Logger **A. Scifers** Checked by **J. Bensen**
Drilling Method **2.25" IDA HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **DRY**
At Completion of Drilling ▼ **DRY**
Time After Drilling **NA**
Depth to Water ▼ **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

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BORING LOG CL-SGB-32

WEI Job No.: 7901-15-01

Client **TranSystems Corporation**
Project **I-80 Reconstruction (Houbolt Rd to Center St)**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 639.38 ft
North: 1764660.53 ft
East: 1043539.94 ft
Station: 609+58.55
Offset: 1.46 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	638.9	6-inch thick, black SILTY CLAY --TOPSOIL--						
		Very stiff to hard, gray and brown SILTY CLAY, trace gravel; moist --FILL-- --RDR 2--			1	2 3 3 4	3.00 P	24
					2	5 8 10 13	2.87 B	21
			5		3	4 4 8 9	3.28 B	18
					4	8 12 13 12	4.84 B	16
					5	6 9 16 9	5.41 B	15
	629.4		10					
		Boring terminated at 10.00 ft						
			15					
			20					

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)

GENERAL NOTES

Begin Drilling **05-16-2022** Complete Drilling **05-16-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **20D25A [83%]**
Driller **KG&TC** Logger **A. Scifers** Checked by **J. Bensen**
Drilling Method **2.25" IDA HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **DRY**
At Completion of Drilling ▼ **DRY**
Time After Drilling **NA**
Depth to Water ▼ **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

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BORING LOG CL-SGB-33

WEI Job No.: 7901-15-01

Client **TranSystems Corporation**
Project **I-80 Reconstruction (Houbolt Rd to Center St)**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 625.06 ft
North: 1764709.85 ft
East: 1044741.09 ft
Station: 621+60.71
Offset: 2.87 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	624.4	8-inch thick, black SILTY CLAY --TOPSOIL--						
		Very stiff to hard, brown to gray SILTY CLAY, trace gravel; moist			1	1 2 5 7	8.61 B	20
		--RDR 2--						
		--L_L(%)=35, P_L(%)=16--			2	6 9 7 8	7.95 B	19
		--%Gravel=1.5--						
		--%Sand=6.5--						
		--%Silt=51.2--						
		--%Clay=40.7--						
		--A-6 (17)--	5		3	6 11 7 15	7.38 B	19
					4	7 11 18 5	6.31 B	20
		--sand seam--			5	6 10 8 11	3.61 B	17
			10					
		--wet spoon recovery; possible sand lens--			6	3 6 9	2.21 B	16
					7	5 5 6	1.07 B	21
			15					
					8	4 6 8	2.13 B	21
					9	4 10 14	4.84 B	16
	605.1		20					
		Boring terminated at 20.00 ft						

GENERAL NOTES

Begin Drilling **05-16-2022** Complete Drilling **05-16-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **20D25A [83%]**
Driller **KG&TC** Logger **A. Scifers** Checked by **J. Bensen**
Drilling Method **2.25" IDA HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **11.00 ft**
At Completion of Drilling ▼ **14.50 ft**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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BORING LOG CL-SGB-34

WEI Job No.: 7901-15-01

Client **TranSystems Corporation**
Project **I-80 Reconstruction (Houbolt Rd to Center St)**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 608.59 ft
North: 1764728.18 ft
East: 1045340.87 ft
Station: 627+60.74
Offset: 2.72 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	608.0	7-inch thick, black SILTY CLAY --TOPSOIL--						
		Hard, brown to gray SILTY CLAY, trace gravel; moist --RDR 2--			1	2 2 4 7	5.90 B	18
					2	7 9 13 8	7.79 B	18
			5		3	10 11 14 9	7.63 B	19
					4	12 8 12 11	6.64 B	19
	598.6		10		5	7 8 10 12	5.99 B	19
		Boring terminated at 10.00 ft						
			15					
			20					

GENERAL NOTES

Begin Drilling **05-16-2022** Complete Drilling **05-16-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **20D25A [83%]**
Driller **KG&TC** Logger **A. Scifers** Checked by **J. Bensen**
Drilling Method **2.25" IDA HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **DRY**
At Completion of Drilling ▼ **DRY**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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BORING LOG CL-SGB-35

WEI Job No.: 7901-15-01

Client: **TranSystems Corporation**
Project: **I-80 Reconstruction (Houbolt Rd to Center St)**
Location: **Will County, Illinois**

Datum: NAVD 88
Elevation: 603.89 ft
North: 1764744.39 ft
East: 1045937.95 ft
Station: 633+55.71
Offset: 14.52 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	603.5	5-inch thick, dark brown to black SILTY CLAY --TOPSOIL--			1	2 5 7 12	5.33 S	19
	602.1	Hard, gray SILTY CLAY, trace gravel; moist --FILL--						
	601.1	--RDR 2--			2	3 7 15 11	9.02 B	21
		Black SILTY CLAY --Buried TOPSOIL--						
		Hard, brown SILTY CLAY, trace gravel; damp to moist --RDR 2--	5		3	4 11 15 22	4.84 B	23
	597.6	Medium dense, brown SILT, trace gravel; moist to saturated --RDR 2--			4	5 6 7 8	NP	24
	595.4	Dense, brown, coarse SAND, trace gravel; damp --RDR 2--			5	9 12 13 18	NP	5
	593.9	Boring terminated at 10.00 ft	10					
			15					
			20					

GENERAL NOTES

Begin Drilling: **05-12-2022** Complete Drilling: **05-13-2022**
Drilling Contractor: **Wang Testing Services** Drill Rig: **D25 ATV [93%]**
Driller: **JS&AG** Logger: **A. Scifers** Checked by: **J. Bensen**
Drilling Method: **2.25" IDA HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling: **6.50 ft**
At Completion of Drilling: **DRY**
Time After Drilling: **NA**
Depth to Water: **NA**

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BORING LOG CL-SGB-36

WEI Job No.: 7901-15-01

Client **TranSystems Corporation**
Project **I-80 Reconstruction (Houbolt Rd to Center St)**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 610.22 ft
North: 1764783.12 ft
East: 1046534.60 ft
Station: 639+55.72
Offset: 4.60 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	609.4	10-inch thick, black SILTY CLAY						
		--TOPSOIL--			1	4 4 7 9	4.10 B	19
	608.2	Hard, black and gray SILTY CLAY, trace gravel; moist						
		--FILL--						
	607.4	--RDR 2--			2	3 5 9 8	1.07 B	34
		Stiff, black SILTY CLAY, trace gravel; moist						
		--Buried TOPSOIL--						
		Stiff to very stiff, gray SILTY CLAY, trace gravel; moist	5		3	2 7 12 10	1.56 B	18
		--RDR 2--			4	3 4 6 7	2.87 B	22
	600.2		10		5	3 3 5 8	2.79 B	20
		Boring terminated at 10.00 ft						
			15					
			20					

GENERAL NOTES

Begin Drilling **05-12-2022** Complete Drilling **05-13-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **D25 ATV [93%]**
Driller **JS&AG** Logger **A. Scifers** Checked by **C. Marin**
Drilling Method **2.25" IDA HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **DRY**
At Completion of Drilling ▼ **DRY**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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BORING LOG CL-SGB-37

WEI Job No.: 7901-15-01

Client **TranSystems Corporation**
Project **I-80 Reconstruction (Houbolt Rd to Center St)**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 614.86 ft
North: 1764785.94 ft
East: 1046962.83 ft
Station: 643+83.72
Offset: 9.65 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	614.4	6-inch thick, black SILTY CLAY --TOPSOIL--						
		Stiff to very stiff, gray SILTY CLAY, trace gravel; moist --RDR 2--			1	2 2 3 5	2.38 B	19
					2	3 2 3 4	1.64 B	24
			5		3	2 3 3 8	2.05 B	22
					4	3 5 7 10	2.87 B	21
					5	3 5 7 9	1.64 B	21
	604.9		10					
		Boring terminated at 10.00 ft						
			15					
			20					

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)

GENERAL NOTES

Begin Drilling **05-13-2022** Complete Drilling **05-13-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **D25 ATV [93%]**
Driller **JS&AG** Logger **A. Scifers** Checked by **C. Marin**
Drilling Method **2.25" IDA HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **DRY**
At Completion of Drilling ▼ **DRY**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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BORING LOG EB-SGB-18

WEI Job No.: 7901-15-01

Client **TranSystems Corporation**
Project **I-80 Reconstruction (Houbolt Rd to Center St)**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 612.65 ft
North: 1762968.02 ft
East: 1035076.74 ft
Station: 521+58.67
Offset: 59.56 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	611.5	14-inch thick ASPHALT --PAVEMENT--						
		Stiff to hard, brown SILTY CLAY LOAM to CLAY LOAM, trace gravel; damp to moist --FILL-- --RDR 2--			1	8 9 11 7	> 4.50 P	13
					2	10 9 12 14	7.79 B	13
			5		3	11 14 17 19	3.03 B	17
					4	9 6 8 10	4.43 B	15
			10		5	6 8 9 10	4.50 P	14
					6	11 9 10	5.00 B	17
					7	4 3 2	1.00 P	16
	597.6		15					
		Medium stiff, black SILTY CLAY; moist --Buried TOPSOIL--			8	7 6 8	0.82 B	29
	595.7							
		Medium stiff to stiff, black and brown SILTY CLAY, trace gravel; moist --RDR 2--						
	593.6							
		Medium dense, tan Gravelly SAND; damp			9	9 15 12	NP	7
	592.6		20					

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		--RDR 2-- Boring terminated at 20.00 ft	25					
			30					
			35					
			40					

GENERAL NOTES

Begin Drilling **05-01-2022** Complete Drilling **05-01-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **20CME55T[81%]**
Driller **JS&AE** Logger **A. Scifers** Checked by **J. Bensen**
Drilling Method **2.25" IDA HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **DRY**
At Completion of Drilling ▼ **DRY**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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BORING LOG EB-SGB-19

WEI Job No.: 7901-15-01

Client **TranSystems Corporation**
Project **I-80 Reconstruction (Houbolt Rd to Center St)**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 629.46 ft
North: 1763286.32 ft
East: 1035590.17 ft
Station: 527+67.24
Offset: 63.77 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	628.3	14-inch thick ASPHALT --PAVEMENT--						
	627.6	8-inch thick, black ASPHALT grinds; reclaimed pavement; dry --FILL--			1	9 6 8 9	5.90 B	11
		Stiff to hard, brown SILTY CLAY to SILTY CLAY LOAM, trace gravel; moist --FILL-- --RDR 2--	5		2	3 3 4 8	4.00 P	19
					3	11 13 16 15	3.85 B	19
					4	6 4 6 8	1.97 B	15
	618.5		10		5	15 16 17 14	2.30 B	19
		Boring terminated at 11.00 ft	15					
			20					

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)

GENERAL NOTES

Begin Drilling **05-01-2022** Complete Drilling **05-01-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **20CME55T[81%]**
Driller **JS&AE** Logger **A. Scifers** Checked by **J. Bensen**
Drilling Method **2.25" IDA HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **DRY**
At Completion of Drilling ▼ **DRY**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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BORING LOG EB-SGB-20

WEI Job No.: 7901-15-01

Client **TranSystems Corporation**
Project **I-80 Reconstruction (Houbolt Rd to Center St)**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 638.10 ft
North: 1763535.00 ft
East: 1036049.65 ft
Station: 532+93.68
Offset: 63.68 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	637.2	11-inch thick ASPHALT --PAVEMENT--						
	636.4	10-inch thick, black ASPHALT grinds; reclaimed pavement; dry --FILL--			1	14 8 5 4	NP	2
	635.6	Hard (4.50P), brown SILTY CLAY, trace gravel; moist --FILL--			2	7 4 5 6	NP	3
	633.6	Loose, black, coarse SAND, little gravel; damp --FILL-- --RDR 2--	5		3	10 13 14 15	1.50 P	22
	631.6	Stiff, brown SILTY CLAY, trace gravel; moist --FILL-- --RDR 2--			4	8 8 11 12	NP	18
	629.6	Medium dense, brown SANDY LOAM, little gravel; damp --FILL-- --RDR 2--	10		5	16 20 17 14	1.48 B	19
	627.1	Stiff, brown SILTY CLAY, trace gravel; moist --FILL-- --RDR 2--						
		Boring terminated at 11.00 ft	15					
			20					

GENERAL NOTES

Begin Drilling **05-01-2022** Complete Drilling **05-01-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **20CME55T[81%]**
Driller **JS&AE** Logger **A. Scifers** Checked by **J. Bensen**
Drilling Method **2.25" IDA HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **DRY**
At Completion of Drilling ▼ **DRY**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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BORING LOG EB-SGB-21

WEI Job No.: 7901-15-01

Client: **TranSystems Corporation**
Project: **I-80 Reconstruction (Houbolt Rd to Center St)**
Location: **Will County, Illinois**

Datum: NAVD 88
Elevation: 638.69 ft
North: 1763815.13 ft
East: 1036669.20 ft
Station: 539+83.89
Offset: 67.29 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		14-inch thick ASPHALT --PAVEMENT--						
	637.5	Very stiff, brown SILTY CLAY, trace gravel; moist --FILL-- --RDR 2--			1	5 3 4 4	NA	16
	635.1	Brown, fine SAND				4		
	634.4	--FILL--			2	4 5 6	2.00 P	7
		Stiff, brown SILTY CLAY, trace gravel; moist	5					
		--FILL-- --RDR 2--			3	8 9 9 10	1.80 B	19
	630.4	Very stiff, brown CLAY, trace gravel; moist --L_L(%)=42, P_L(%)=14-- --%Gravel=2.3--			4	5 5 7 9	1.07 B	19
		--%Sand=9.0-- --%Silt=47.9--	10		5	10 10 13 11	2.13 B	22
	627.7	--%Clay=40.8-- --A-7-6 (25)--						
		Boring terminated at 11.00 ft						
			15					
			20					

GENERAL NOTES

Begin Drilling: **05-01-2022** Complete Drilling: **05-01-2022**
Drilling Contractor: **Wang Testing Services** Drill Rig: **20CME55T[81%]**
Driller: **JS&AE** Logger: **A. Scifers** Checked by: **J. Bensen**
Drilling Method: **2.25" IDA HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling: **DRY**
At Completion of Drilling: **DRY**
Time After Drilling: **NA**
Depth to Water: **NA**

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BORING LOG EB-SGB-22

WEI Job No.: 7901-15-01

Client **TranSystems Corporation**
Project **I-80 Reconstruction (Houbolt Rd to Center St)**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 630.04 ft
North: 1764024.28 ft
East: 1037238.39 ft
Station: 545+89.94
Offset: 63.03 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	628.8	15-inch thick ASPHALT --PAVEMENT--						
		Very stiff to hard, brown SILTY CLAY LOAM to CLAY LOAM, trace gravel; moist --FILL-- --RDR 2--			1	5 4 5 8	2.00 P	14
					2	5 6 8 11	3.03 B	12
			5		3	14 15 16 13	> 4.50 P	19
					4	5 5 7 12	2.38 B	19
			10		5	13 13 14 14	> 4.50 P	17
	619.0	Boring terminated at 11.00 ft						
			15					
			20					

GENERAL NOTES

Begin Drilling **05-01-2022** Complete Drilling **05-01-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **20CME55T[81%]**
Driller **JS&AE** Logger **A. Scifers** Checked by **J. Bensen**
Drilling Method **2.25" IDA HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **DRY**
At Completion of Drilling ▼ **DRY**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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BORING LOG EB-SGB-23

WEI Job No.: 7901-15-01

Client **TranSystems Corporation**
Project **I-80 Reconstruction (Houbolt Rd to Center St)**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 624.20 ft
North: 1764188.78 ft
East: 1037816.21 ft
Station: 551+97.67
Offset: 73.85 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	623.2	12-inch thick ASPHALT --PAVEMENT--						
		Very stiff to hard, brown SILTY CLAY, trace gravel; damp to moist --RDR 2--			1	6 8 7 6	NA	15
			5		2	8 9 14 11	> 4.50 P	15
					3	14 15 16 18	2.79 B	15
					4	8 6 10 16	4.59 B	17
			10		5	15 18 22 22	2.79 B	18
	613.2	Boring terminated at 11.00 ft						
			15					
			20					

GENERAL NOTES

Begin Drilling **05-01-2022** Complete Drilling **05-01-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **20CME55T[81%]**
Driller **JS&AE** Logger **A. Scifers** Checked by **J. Bensen**
Drilling Method **2.25" IDA HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **DRY**
At Completion of Drilling ▼ **DRY**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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BORING LOG EB-SGB-24

WEI Job No.: 7901-15-01

Client **TranSystems Corporation**
Project **I-80 Reconstruction (Houbolt Rd to Center St)**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 628.79 ft
North: 1764314.06 ft
East: 1038400.94 ft
Station: 557+97.91
Offset: 63.11 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	627.6	14-inch thick ASPHALT --PAVEMENT--						
	627.2	Medium dense, black ASPHALT grinds; reclaimed pavement; damp --FILL--			1	3 4 7 8	2.50 P	19
		Stiff to very stiff, brown and gray SILTY CLAY, trace gravel; moist --FILL-- --RDR 2--			2	3 4 6 7	1.48 B	24
	624.0	Very stiff to hard, brown SILTY CLAY, trace gravel; moist --RDR 2--	5		3	7 8 9 8	2.13 B	21
					4	8 10 4 4	4.92 B	24
			10		5	12 13 14 13	4.18 B	16
	617.8	Boring terminated at 11.00 ft	15					
			20					

GENERAL NOTES

Begin Drilling **05-01-2022** Complete Drilling **05-01-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **20CME55T[81%]**
Driller **JS&AE** Logger **A. Scifers** Checked by **J. Bensen**
Drilling Method **2.25" IDA HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **DRY**
At Completion of Drilling ▼ **DRY**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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BORING LOG EB-SGB-25

WEI Job No.: 7901-15-01

Client **TranSystems Corporation**
Project **I-80 Reconstruction (Houbolt Rd to Center St)**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 631.33 ft
North: 1764397.30 ft
East: 1039001.50 ft
Station: 564+04.91
Offset: 59.94 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	630.0	16-inch thick ASPHALT --PAVEMENT--						
		Black and brown, gravelly SILTY CLAY; damp to moist			1	5 6 6 7	NA	15
	628.8	--FILL--						
		Medium dense, brown Gravelly SAND; damp			2	5 5 10 14	6.31 B	11
	627.6	--RDR 2--						
		Very stiff to hard, brown SILTY CLAY, trace gravel; moist	5		3	13 18 22 21	4.67 B	16
		--RDR 2--			4	12 9 12 13	3.69 B	16
			10		5	20 22 30 50/1"	6.81 B	16
	620.7	Boring terminated at 10.60 ft						
			15					
			20					

GENERAL NOTES

Begin Drilling **05-01-2022** Complete Drilling **05-01-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **20CME55T[81%]**
Driller **JS&AE** Logger **A. Scifers** Checked by **J. Bensen**
Drilling Method **2.25" IDA HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **DRY**
At Completion of Drilling ▼ **DRY**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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BORING LOG EB-SGB-26

WEI Job No.: 7901-15-01

Client **TranSystems Corporation**
Project **I-80 Reconstruction (Houbolt Rd to Center St)**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 628.31 ft
North: 1764438.98 ft
East: 1039597.35 ft
Station: 570+10.27
Offset: 62.80 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	627.6	9-inch thick ASPHALT --PAVEMENT--						
		Medium dense, black ASPHALT grinds; reclaimed pavement; damp			1	9 6 5 10	NP	1
	626.1	--FILL--						
		Medium dense, brown, fine SAND, some gravel; dry --RDR 2--			2	6 4 4 8	NP	3
	623.8		5					
		Very stiff to hard, brown SILTY CLAY, trace gravel; damp to moist --RDR 2--			3	9 11 12 15	2.71 B	19
					4	6 7 9 10	5.33 B	16
			10		5	7 8 10 11	6.40 B	16
	617.3	Boring terminated at 11.00 ft						
			15					
			20					

GENERAL NOTES

Begin Drilling **05-01-2022** Complete Drilling **05-01-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **20CME55T[81%]**
Driller **JS&AE** Logger **A. Scifers** Checked by **J. Bensen**
Drilling Method **2.25" IDA HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **DRY**
At Completion of Drilling ▼ **DRY**
Time After Drilling **NA**
Depth to Water ▼ **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

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BORING LOG EB-SGB-27

WEI Job No.: 7901-15-01

Client **TranSystems Corporation**
Project **I-80 Reconstruction (Houbolt Rd to Center St)**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 625.20 ft
North: 1764435.03 ft
East: 1040191.28 ft
Station: 576+03.56
Offset: 90.41 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	624.3	11-inch thick CONCRETE --PAVEMENT--						
	624.0	3-inch thick GRAVEL --AGGREGATE BASE--						
		Loose to medium dense, gray, coarse SAND, some gravel; damp			1	4 6 3 4	NR	
		--FILL--						
	621.5	--RDR 2--						
		Stiff to hard, brown and gray SILTY CLAY, trace gravel; moist			2	3 5 6 7	1.50 P	27
		--RDR 2--	5		3	11 12 13 15	5.17 B	17
					4	6 5 9 13	3.03 B	23
			10		5	6 10 15 17	6.23 B	16
	614.2	Boring terminated at 11.00 ft						
			15					
			20					

GENERAL NOTES

Begin Drilling **05-02-2022** Complete Drilling **05-02-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **20CME55T[81%]**
Driller **JS&AG** Logger **A. Scifers** Checked by **J. Bensen**
Drilling Method **2.25" IDA HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **DRY**
At Completion of Drilling ▼ **DRY**
Time After Drilling **NA**
Depth to Water ▼ **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

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BORING LOG EB-SGB-28

WEI Job No.: 7901-15-01

Client **TranSystems Corporation**
Project **I-80 Reconstruction (Houbolt Rd to Center St)**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 628.48 ft
North: 1764484.38 ft
East: 1040796.87 ft
Station: 582+10.64
Offset: 65.24 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		14-inch thick ASPHALT --PAVEMENT--						
	627.3							
		23-inch thick, medium dense, black ASPHALT grinds; reclaimed pavement; dry --FILL--			1	8 10 11 10	NP	1
	625.4	--RDR 2--						
		Hard, brown SILTY CLAY, trace gravel; moist --RDR 2--			2	6 7 11 10	5.24 B	15
			5		3	11 18 20 17	4.26 B	16
					4	7 9 13 15	5.99 B	17
			10		5	8 7 12 12	7.95 B	17
	617.5							
		Boring terminated at 11.00 ft						
			15					
			20					

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)

GENERAL NOTES

Begin Drilling **05-02-2022** Complete Drilling **05-02-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **20CME55T[81%]**
Driller **JS&AG** Logger **A. Scifers** Checked by **J. Bensen**
Drilling Method **2.25" IDA HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **DRY**
At Completion of Drilling ▼ **DRY**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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BORING LOG EB-SGB-29

WEI Job No.: 7901-15-01

Client **TranSystems Corporation**
Project **I-80 Reconstruction (Houbolt Rd to Center St)**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 631.86 ft
North: 1764492.74 ft
East: 1041398.33 ft
Station: 588+11.96
Offset: 80.86 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	631.0	10-inch thick ASPHALT --PAVEMENT--						
	630.2	10-inch thick, black ASPHALT grinds; reclaimed pavement; damp --FILL--			1	9 13 9 5	NP	7
	628.1	Medium dense, brown and gray SANDY LOAM, little to some gravel; damp to moist --FILL-- --RDR 2-3--	5		2	17 9 10 11	4.26 B	12
		Very stiff to hard, brown SILTY CLAY LOAM, trace gravel; moist --RDR 2-3-- --L_L(%)=26, P_L(%)=13-- --%Gravel=2.2-- --%Sand=15.2-- --%Silt=53.6-- --%Clay=29.0-- --A-6 (8)--			3	13 16 19 16	3.69 B	13
					4	8 7 8 11	4.18 B	13
			10		5	6 7 9 9	3.12 B	13
	620.9	Boring terminated at 11.00 ft						
			15					
			20					

GENERAL NOTES

Begin Drilling **05-02-2022** Complete Drilling **05-02-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **20CME55T[81%]**
Driller **JS&AG** Logger **A. Scifers** Checked by **J. Bensen**
Drilling Method **2.25" IDA HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **DRY**
At Completion of Drilling ▼ **DRY**
Time After Drilling **NA**
Depth to Water ▼ **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

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BORING LOG EB-SGB-30

WEI Job No.: 7901-15-01

Client **TranSystems Corporation**
Project **I-80 Reconstruction (Houbolt Rd to Center St)**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 635.66 ft
North: 1764528.82 ft
East: 1041993.88 ft
Station: 594+08.33
Offset: 67.86 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	634.8	10-inch thick ASPHALT --PAVEMENT--						
	634.5	4-inch thick GRAVEL --AGGREGATE BASE--						
	633.4	Very stiff, brown SILTY CLAY, trace gravel; moist --RDR 2--			1	5 5 7 8	3.00 P	16
	632.0	Loose, brown SANDY GRAVEL; damp --RDR 2--			2	5 2 4 4	1.50 P	21
		Medium stiff to very stiff, brown SILTY CLAY, trace gravel; moist --RDR 2--	5		3	7 6 7 7	0.82 B	21
					4	3 3 4 6	3.44 B	18
			10		5	8 15 7 11	2.21 B	17
	624.7	Boring terminated at 11.00 ft						
			15					
			20					

GENERAL NOTES

Begin Drilling **05-02-2022** Complete Drilling **05-02-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **20CME55T[81%]**
Driller **JS&AG** Logger **A. Scifers** Checked by **J. Bensen**
Drilling Method **2.25" IDA HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **DRY**
At Completion of Drilling ▼ **DRY**
Time After Drilling **NA**
Depth to Water ⧩ **NA**

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BORING LOG EB-SGB-31

WEI Job No.: 7901-15-01

Client **TranSystems Corporation**
Project **I-80 Reconstruction (Houbolt Rd to Center St)**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 638.01 ft
North: 1764528.86 ft
East: 1042587.72 ft
Station: 600+01.84
Offset: 92.17 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	637.4	7-inch thick, stiff (1.50P), black SILTY CLAY LOAM, trace gravel; damp to moist			1	2 2 1 1	NP	10
	636.5	--TOPSOIL--	0					
		Very loose, tan SANDY GRAVEL; damp to moist --FILL--			2	7 2 2 2	1.15 B	25
	634.3	Stiff, black and dark brown SILTY CLAY, trace gravel; moist --RDR 2--						
		Hard, brown SILTY CLAY LOAM to SILTY LOAM, little gravel; damp to wet --RDR 2--	5		3	1 2 4 5	5.00 B	16
	632.5	Hard, brown SILTY CLAY LOAM, trace gravel; damp --RDR 2--			4	3 5 6 7	6.72 B	16
					5	2 6 7 11	7.30 B	16
	628.0	Boring terminated at 10.00 ft	10					
			15					
			20					

GENERAL NOTES

Begin Drilling **05-23-2022** Complete Drilling **05-23-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **21GeoA[96%]**
Driller **RR&AP** Logger **D. You** Checked by **J. Bensen**
Drilling Method **2.25" IDA HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **4.00 ft**
At Completion of Drilling ▼ **DRY**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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BORING LOG EB-SGB-32

WEI Job No.: 7901-15-01

Client **TranSystems Corporation**
Project **I-80 Reconstruction (Houbolt Rd to Center St)**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 642.88 ft
North: 1764570.33 ft
East: 1043195.67 ft
Station: 606+10.96
Offset: 74.96 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	642.0	10-inch thick ASPHALT --PAVEMENT--						
	640.9	Medium dense, black ASPHALT grinds; reclaimed pavement; damp --FILL--			1	23 8 11 7	NP	1
		Medium stiff to very stiff, brown and gray SILTY CLAY to SILTY CLAY LOAM, trace to little gravel; moist --FILL-- --RDR 2--	5		2	5 5 7 7	2.30 B	22
					3	10 14 14 20	1.23 B	20
					4	10 5 4 8	2.30 B	24
			10		5	9 8 8 8	0.57 B	34
	632.0	Hard, black SILTY CLAY --Buried TOPSOIL--						
	631.1	Hard, brown and black SILTY CLAY, trace gravel; moist --RDR 2--			6	5 8 10 12	4.35 B	15
	629.9	Boring terminated at 13.00 ft						
			15					
			20					

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)

GENERAL NOTES

Begin Drilling **05-02-2022** Complete Drilling **05-02-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **20CME55T[81%]**
Driller **JS&AG** Logger **A. Scifers** Checked by **J. Bensen**
Drilling Method **2.25" IDA HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **DRY**
At Completion of Drilling ▼ **DRY**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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BORING LOG EB-SGB-33

WEI Job No.: 7901-15-01

Client **TranSystems Corporation**
Project **I-80 Reconstruction (Houbolt Rd to Center St)**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 645.42 ft
North: 1764610.49 ft
East: 1043801.10 ft
Station: 612+15.60
Offset: 55.86 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	644.6	10-inch thick ASPHALT --PAVEMENT--						
	643.9	8-inch thick, black ASPHALT grinds; reclaimed pavement; dry --FILL--						
		Very stiff to hard, brown SILTY CLAY LOAM to CLAY LOAM, trace gravel; moist --FILL-- --RDR 2--			1	6 5 6 9	4.50 P	14
			5		2	7 6 8 8	NA	14
					3	8 9 8 8	3.03 B	16
	636.9				4	5 4 15 20	3.36 B	17
		Very stiff, brown and black SILTY CLAY, trace gravel; damp --RDR 2--	10		5	5 5 5 5	2.05 B	22
	634.4	Boring terminated at 11.00 ft						
			15					
			20					

GENERAL NOTES

Begin Drilling **05-02-2022** Complete Drilling **05-02-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **20CME55T[81%]**
Driller **JS&AG** Logger **A. Scifers** Checked by **J. Bensen**
Drilling Method **2.25" IDA HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **DRY**
At Completion of Drilling ▼ **DRY**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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BORING LOG EB-SGB-34

WEI Job No.: 7901-15-01

Client **TranSystems Corporation**
Project **I-80 Reconstruction (Houbolt Rd to Center St)**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 638.72 ft
North: 1764629.80 ft
East: 1044392.49 ft
Station: 618+09.20
Offset: 63.23 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	637.9	10-inch thick ASPHALT --PAVEMENT--						
	637.1	10-inch thick, medium dense, black ASPHALT grinds; reclaimed pavement; damp --FILL--			1	4 6 5 7	NP	19
		Stiff to very stiff, brown CLAY LOAM to SILTY CLAY LOAM, trace gravel; moist --FILL-- --RDR 2--	5		2	4 4 6 8	3.44 B	15
	632.2				3	7 9 9 8	1.07 B	20
		Stiff to very stiff, brown SILTY CLAY, trace gravel; moist --RDR 2--			4	3 4 6 6	2.46 B	26
	627.7		10		5	9 10 9 9	1.64 B	21
		Boring terminated at 11.00 ft	15					
			20					

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)

GENERAL NOTES

Begin Drilling **05-02-2022** Complete Drilling **05-02-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **20CME55T[81%]**
Driller **JS&AG** Logger **A. Scifers** Checked by **J. Bensen**
Drilling Method **2.25" IDA HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **DRY**
At Completion of Drilling ▼ **DRY**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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BORING LOG EB-SGB-35

WEI Job No.: 7901-15-01

Client **TranSystems Corporation**
Project **I-80 Reconstruction (Houbolt Rd to Center St)**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 622.85 ft
North: 1764651.85 ft
East: 1044997.98 ft
Station: 624+15.09
Offset: 65.33 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	622.0	10-inch thick ASPHALT --PAVEMENT--						
		Medium dense, black ASPHALT grinds; reclaimed pavement; dry --FILL--			1	12 6 7 10	NP	10
	620.6	Stiff to hard, brown SILTY CLAY, trace to little gravel; moist --RDR 2--			2	12 18 13 10	5.56 B	19
			5		3	18 20 23 21	5.49 B	21
					4	13 14 16 17	NA	23
			10		5	6 9 13 16	1.80 B	21
	611.9	Boring terminated at 11.00 ft						
			15					
			20					

GENERAL NOTES

Begin Drilling **05-02-2022** Complete Drilling **05-02-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **20CME55T[81%]**
Driller **JS&AG** Logger **A. Scifers** Checked by **J. Bensen**
Drilling Method **2.25" IDA HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **DRY**
At Completion of Drilling ▼ **DRY**
Time After Drilling **NA**
Depth to Water ▼ **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

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BORING LOG EB-SGB-36

WEI Job No.: 7901-15-01

Client **TranSystems Corporation**
Project **I-80 Reconstruction (Houbolt Rd to Center St)**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 609.42 ft
North: 1764671.83 ft
East: 1045497.57 ft
Station: 629+15.07
Offset: 65.27 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	609.2	3-inch thick ASPHALT --PAVEMENT--						
	608.4	9-inch thick SANDY GRAVEL --AGGREGATE--						
		Hard, brown SILTY CLAY to SILTY CLAY LOAM, trace gravel; damp --RDR 2--			1	8 2 2 3	4.00 P	17
					2	3 3 2 2	NA	17
			5		3	2 5 6 9	7.30 B	21
					4	3 4 6 8	7.71 B	20
			10		5	3 4 6 8	6.23 B	23
	598.4	Boring terminated at 11.00 ft						
			15					
			20					

GENERAL NOTES

Begin Drilling **05-23-2022** Complete Drilling **05-23-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **21GeoA[96%]**
Driller **RR&AP** Logger **D. You** Checked by **J. Bensen**
Drilling Method **2.25" IDA HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **DRY**
At Completion of Drilling ▼ **DRY**
Time After Drilling **NA**
Depth to Water ▼ **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

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BORING LOG EB-SGB-37

WEI Job No.: 7901-15-01

Client **TranSystems Corporation**
Project **I-80 Reconstruction (Houbolt Rd to Center St)**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 609.80 ft
North: 1764699.25 ft
East: 1046194.44 ft
Station: 636+12.49
Offset: 65.64 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	609.5	4-inch thick ASPHALT --PAVEMENT--						
	608.8	8-inch thick SANDY GRAVEL --AGGREGATE--						
		Hard, brown and gray SILTY CLAY LOAM, trace gravel; damp			1	6 3 4 4	5.00 B	20
		--FILL-- --RDR 2--			2	2 5 5 6	10.09 B	17
			5		3	2 4 5 7	5.99 B	16
	603.1	--2-inch thick gravel lens; damp--						
		Hard, brown SILTY CLAY, trace gravel; damp --RDR 2--			4	4 5 9 32	4.76 B	16
	601.6							
	601.1	Brown SANDY GRAVEL; damp --RDR 2--						
		Hard, brown SILTY CLAY, trace gravel; damp --RDR 2--	10		5	12 7 6 13	5.74 B	23
	598.8	Boring terminated at 11.00 ft						
			15					
			20					

GENERAL NOTES

Begin Drilling **05-23-2022** Complete Drilling **05-23-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **21GeoA[96%]**
Driller **RR&AP** Logger **D. You** Checked by **J. Bensen**
Drilling Method **2.25" IDA HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **DRY**
At Completion of Drilling ▼ **DRY**
Time After Drilling **NA**
Depth to Water ▼ **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

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BORING LOG EB-SGB-38

WEI Job No.: 7901-15-01

Client: **TranSystems Corporation**
Project: **I-80 Reconstruction (Houbolt Rd to Center St)**
Location: **Will County, Illinois**

Datum: NAVD 88
Elevation: 612.55 ft
North: 1764770.79 ft
East: 1046617.37 ft
Station: 640+37.93
Offset: 11.01 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	612.1	5-inch thick, black SILTY CLAY --TOPSOIL--						
		Very stiff, black and gray SILTY CLAY, trace gravel; moist			1	3 4 4 5	3.61 B	30
	610.8	--FILL--						
		--RDR 2--			2	3 4 6 8	2.62 B	21
	609.6	--L_L(%)=41, P_L(%)=14--						
		--%Gravel=3.1--						
		--%Sand=10.0--						
		--%Silt=50.8--						
		--%Clay=36.1--						
		--A-7-6 (23)--	5		3	3 5 5 7	2.13 B	21
		Medium stiff (0.5P), black SILTY CLAY, trace gravel; moist						
		--Buried TOPSOIL--						
		Stiff to very stiff, gray SILTY CLAY, trace gravel; moist			4	6 5 5 6	1.97 B	21
		--RDR 2--						
					5	4 6 6 8	2.62 B	21
	602.5		10					
		Boring terminated at 10.00 ft						
			15					
			20					

GENERAL NOTES

Begin Drilling: **05-12-2022** Complete Drilling: **05-13-2022**
Drilling Contractor: **Wang Testing Services** Drill Rig: **D25 ATV [93%]**
Driller: **JS&AG** Logger: **A. Scifers** Checked by: **C. Marin**
Drilling Method: **2.25" IDA HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling: **DRY**
At Completion of Drilling: **DRY**
Time After Drilling: **NA**
Depth to Water: **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

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BORING LOG JJT-BSB-01

WEI Job No.: 7901-15-01

Client **TranSystems Corporation**
Project **I-80 Reconstruction (Houbolt Rd to Center St)**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 638.68 ft
North: 1763574.41 ft
East: 1036121.43 ft
Station: 533+76.10
Offset: 60.29 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		16-inch thick ASPHALT --PAVEMENT--						
	637.4							
	636.9	5-inch thick, brown and gray SANDY GRAVEL; damp --AGGREGATE BASE--						
		Very stiff to hard, brown and gray SILTY CLAY to SILTY CLAY LOAM, trace gravel; damp --FILL-- --RDR 2--	5		1	3 4 6	2.50 P	19
					2	3 4 5	2.30 B	21
					3	3 4 4	2.05 B	20
			10		4	5 10 10	8.61 B	18
					5	4 7 7	3.20 B	20
			15		6	3 5 6	2.54 B	20
					7	8 6 10	5.49 B	16
			20		8	7 5 5	6.23 B	21
			25		9	4 5 8	4.43 B	19
					10	6 8 10	3.77 B	17
					11	5 7 10	4.10 B	20
		--trace organic matter-- --L_L(%)=37, P_L(%)=17-- --%Gravel=2.4-- --%Sand=5.3-- --%Silt=66.6-- --%Clay=25.7-- --A-6 (18)--	30		12	3 3 4	2.25 P	26
	606.9							
		Very stiff to hard, brown to gray SILTY CLAY LOAM to SILTY CLAY, trace gravel; damp --RDR 2--						
			35		13	7 12 15	6.64 B	17
			40		14	6 11 13	5.74 B	19

GENERAL NOTES

Begin Drilling **03-14-2021** Complete Drilling **03-14-2021**
Drilling Contractor **Wang Testing Services** Drill Rig **20D50T [80%]**
Driller **J&M** Logger **M. Sadowski** Checked by **C. Marin**
Drilling Method **2.25" IDA HSA to 10 ft; mud rotary thereafter; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **52.00 ft**
At Completion of Drilling ▼ **NA**
Time After Drilling **24 hours**
Depth to Water **22 (Cave in at 62 ft) ft**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

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BORING LOG JJT-BSB-01

WEI Job No.: 7901-15-01

Client **TranSystems Corporation**
Project **I-80 Reconstruction (Houbolt Rd to Center St)**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 638.68 ft
North: 1763574.41 ft
East: 1036121.43 ft
Station: 533+76.10
Offset: 60.29 RT

Elevation (ft)	Depth (ft)	SOIL AND ROCK DESCRIPTION	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	45			15	6 11 13	3.36 B	20
588.9	50	Gray SILTY LOAM; damp --RDR 2--		16	6 8 12	4.59 B	16
586.9		Medium dense, gray and brown, coarse SAND; wet to saturated --RDR 2--					
584.2	55	Hard (4.00P), gray SILTY CLAY; damp --RDR 2--		17	9 8 7	NP	22
581.9		Very dense, gray Gravelly SILTY LOAM; damp --RDR 2-3-- --hard drilling at 58 feet-- --possible cobbles--					
	60			18	34 45 43	NP	8
	65	--RDR 3-4--		19	38 50/2"	NP	10
571.7		--slow hard drilling from 67 feet-- --possible cobbles-- WEATHERED BEDROCK --RDR 4--					
	70			20	50/1"	NR	
567.2		Very strong, light yellowish gray, fair quality DOLOSTONE; closely spaced, moderately weathered, horizontal and oblique joints, with <0.05 inch opening, slightly rough walls, and <0.2 inch thick sand infill, few chert nodules.			CORE		
	75	--RUN 1: 71.5 to 79.0 feet-- --Recovery= 98%-- --RQD= 66%--		21			
	80	--RUN 2: 79.0 to 87.0 feet-- --Recovery=100%--			CO		

GENERAL NOTES

Begin Drilling **03-14-2021** Complete Drilling **03-14-2021**
Drilling Contractor **Wang Testing Services** Drill Rig **20D50T [80%]**
Driller **J&M** Logger **M. Sadowski** Checked by **C. Marin**
Drilling Method **2.25" IDA HSA to 10 ft; mud rotary thereafter; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **52.00 ft**
At Completion of Drilling ▼ **NA**
Time After Drilling **24 hours**
Depth to Water **22 (Cave in at 62 ft) ft**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

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BORING LOG JJT-BSB-01

WEI Job No.: 7901-15-01

Client **TranSystems Corporation**
Project **I-80 Reconstruction (Houbolt Rd to Center St)**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 638.68 ft
North: 1763574.41 ft
East: 1036121.43 ft
Station: 533+76.10
Offset: 60.29 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		--RQD= 56%--				R E		
					22			
			85					
	551.7							
		Boring terminated at 87.00 ft						
			90					
			95					
			100					

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)

GENERAL NOTES

Begin Drilling **03-14-2021** Complete Drilling **03-14-2021**
Drilling Contractor **Wang Testing Services** Drill Rig **20D50T [80%]**
Driller **J&M** Logger **M. Sadowski** Checked by **C. Marin**
Drilling Method **2.25" IDA HSA to 10 ft; mud rotary thereafter; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **52.00 ft**
At Completion of Drilling ▼ **NA**
Time After Drilling **24 hours**
Depth to Water **22 (Cave in at 62 ft) ft**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

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BORING LOG JJT-BSB-02

WEI Job No.: 7901-15-01

Client: **TranSystems Corporation**
Project: **I-80 Reconstruction (Houbolt Rd to Center St)**
Location: **Will County, Illinois**

Datum: NAVD 88
Elevation: 639.61 ft
North: 1763702.19 ft
East: 1036132.01 ft
Station: 534+41.45
Offset: 50.05 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		18-inch thick ASPHALT --PAVEMENT--						
	638.1							
		Medium dense, brown and gray SANDY GRAVEL; damp			1	20 22 6	NP	4
	636.9	--AGGREGATE BASE--						
		Medium stiff to hard, brown and gray SILTY CLAY, trace gravel; damp --FILL-- --RDR 2--	5		2	2 3 3	1.80 B	21
		--L_L(%)=36, P_L(%)=16-- --%Gravel=2.0-- --%Sand=9.1-- --%Silt=54.2-- --%Clay=34.6-- --A-6 (17)--			3	2 3 2	1.15 B	23
			10		4	2 3 3	0.82 B	22
					5	4 5 7	4.51 B	21
			15		6	4 5 5	4.10 B	19
					7	4 5 5	1.39 B	18
			20		8	3 4 7	4.59 B	21
			25		9	4 6 7	2.95 B	23
					10	6 6 6	5.33 B	17
					11	5 6 50/3"	2.79 B	21
	612.4							
		--very hard and slow drilling at 27 feet, concrete fragments--						
	611.4	--FILL-- --RDR 4-5--						
		Hard, brown and gray SILTY CLAY; damp			12	5 5 6	1.56 B	22
		--RDR 2--	30					
			35		13	4 7 7	4.51 B	19
			40		14	8 10 10	4.59 B	18

GENERAL NOTES

Begin Drilling: **03-11-2021** Complete Drilling: **03-11-2021**
Drilling Contractor: **Wang Testing Services** Drill Rig: **20D50T [80%]**
Driller: **NC&EG** Logger: **M. Sadowski** Checked by: **C. Marin**
Drilling Method: **2.25" IDA HSA to 10 ft; mud rotary thereafter; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling: **46.75 ft**
At Completion of Drilling: **mud in borehole**
Time After Drilling: **NA**
Depth to Water: **NA**

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BORING LOG JJT-BSB-02

WEI Job No.: 7901-15-01

Client: **TranSystems Corporation**
Project: **I-80 Reconstruction (Houbolt Rd to Center St)**
Location: **Will County, Illinois**

Datum: NAVD 88
Elevation: 639.61 ft
North: 1763702.19 ft
East: 1036132.01 ft
Station: 534+41.45
Offset: 50.05 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
			45		15	8 18 20	10.09 B	17
	592.9	Medium dense, gray SILT; wet --RDR 2--						
			50		16	8 9 12	NP	18
	587.9	Brown and gray Gravelly SAND; saturated --RDR 2-3--						
	585.4	Very stiff to hard (>4.5P), gray SILTY CLAY LOAM, trace gravel; damp --RDR 3-- --rig chatter and slow drilling at 55.5 feet, possible cobbles--	55		17	10 30 11	NP	13
		--silt seams--	60		18	10 11 12	2.95 B	25
	577.9	Very dense, gray Gravelly SILTY LOAM; damp --RDR 2-3--						
			65		19	18 27 27	NP	10
		--rig chatter at 65 feet; possible cobbles--						
	571.6	Very dense, gray GRAVEL; damp --WEATHERED BEDROCK-- --RDR 3-4-- --slow drilling, rock fragments--	70		20	50/1"	NP	
	568.6	Very strong, light yellowish gray, poor quality DOLOSTONE; closely spaced, moderately weathered, horizontal joints, with <0.05 inch opening, slightly rough walls, and <0.2 inch thick sand infill. --RUN 1: 71.0 to 81.0 feet-- --Recovery = 98%-- --RQD= 33%-- --Q_u= 6,408 psi--	75		21	CORE		
		--no water return from 78 to 79 feet--	80					

GENERAL NOTES

Begin Drilling: **03-11-2021** Complete Drilling: **03-11-2021**
Drilling Contractor: **Wang Testing Services** Drill Rig: **20D50T [80%]**
Driller: **NC&EG** Logger: **M. Sadowski** Checked by: **C. Marin**
Drilling Method: **2.25" IDA HSA to 10 ft; mud rotary thereafter; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling: **46.75 ft**
At Completion of Drilling: **mud in borehole**
Time After Drilling: **NA**
Depth to Water: **NA**

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BORING LOG JJT-BSB-02

WEI Job No.: 7901-15-01

Client **TranSystems Corporation**
Project **I-80 Reconstruction (Houbolt Rd to Center St)**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 639.61 ft
North: 1763702.19 ft
East: 1036132.01 ft
Station: 534+41.45
Offset: 50.05 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	558.6	Boring terminated at 81.00 ft	85 90 95 100					

GENERAL NOTES

Begin Drilling **03-11-2021** Complete Drilling **03-11-2021**
Drilling Contractor **Wang Testing Services** Drill Rig **20D50T [80%]**
Driller **NC&EG** Logger **M. Sadowski** Checked by **C. Marin**
Drilling Method **2.25" IDA HSA to 10 ft; mud rotary thereafter; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **46.75 ft**
At Completion of Drilling ▼ **mud in borehole**
Time After Drilling **NA**
Depth to Water ▼ **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

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BORING LOG JJT-BSB-03

WEI Job No.: 7901-15-01

Client **TranSystems Corporation**
Project **I-80 Reconstruction (Houbolt Rd to Center St)**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 639.13 ft
North: 1763665.90 ft
East: 1036323.57 ft
Station: 535+99.56
Offset: 64.22 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		15-inch thick ASPHALT --PAVEMENT--						
	637.9							
		Medium dense, brown and gray SANDY GRAVEL; damp						
	636.6	--AGGREGATE BASE--			1	28 18 3	NP	6
		Stiff to very stiff, brown and gray SILTY CLAY, trace gravel; damp						
		--FILL-- --RDR 2--	5		2	2 3 3	2.54 B	20
					3	2 2 3	1.64 B	22
			10		4	4 4 4	2.62 B	19
					5	3 3 4	1.17 N/6	22
			15		6	3 4 4	2.54 B	19
					7	3 3 5	2.05 B	21
			20		8	4 4 6	3.36 B	19
			25		9	3 3 4	2.13 B	23
					10	3 3 4	2.05 B	23
			30		11	4 4 6	1.80 B	20
					12	5 6 6	3.28 B	21
	607.4	Stiff to very stiff, brown and gray SILTY CLAY; damp --RDR 2--	35		13	4 5 5	1.72 B	21
			40		14	7 9 12	2.95 B	20

GENERAL NOTES

Begin Drilling **03-15-2021** Complete Drilling **03-15-2021**
Drilling Contractor **Wang Testing Services** Drill Rig **20D50T [80%]**
Driller **J&M** Logger **M. Sadowski** Checked by **C. Marin**
Drilling Method **2.25" IDA HSA to 10 ft; mud rotary thereafter; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **49.00 ft**
At Completion of Drilling ▼ **mud in borehole**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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BORING LOG JJT-BSB-03

WEI Job No.: 7901-15-01

Client: **TranSystems Corporation**
Project: **I-80 Reconstruction (Houbolt Rd to Center St)**
Location: **Will County, Illinois**

Datum: NAVD 88
Elevation: 639.13 ft
North: 1763665.90 ft
East: 1036323.57 ft
Station: 535+99.56
Offset: 64.22 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	597.4	Medium dense, brown SILT; damp to moist --RDR 2-- --L_L(%)=NP, P_L(%)=NP-- --%Gravel=0.6-- --%Sand=3.1-- --%Silt=91.2-- --%Clay=5.0-- --A-4 (0)--			15	12 13 13	NP	23
	592.4	Medium dense, brown and gray, medium to coarse SAND; moist to saturated --RDR 2--	45					
			50		16	12 14 12	NP	22
			55		17	8 12 17	NP	27
	582.4	Dense to very dense, gray SILTY LOAM, little to some gravel; damp --RDR 2-3--						
			60		18	27 27 21	NP	9
		--slow hard drilling and rig chatter at 61.5 feet-- --possible cobbles--	65		19	54/6"	NP	11
	572.6	--hard drilling from 66.5 feet-- --WEATHERED BEDROCK--						
	570.6	Very strong, light brownish gray, fair quality, DOLOSTONE; closely spaced, moderately weathered, horizontal joints, with 0.05 - 0.2 inch opening, slightly rough walls, and <0.2 inch thick sand infill. --RUN 1: 68.5 to 70.5 feet-- --Recovery = 96%-- --RQD= 58%-- --Q_u= 7,495 psi-- --no water return at 69.5 feet-- Boring terminated at 70.50 ft	70		20	CORE		
	568.6		75					
			80					

GENERAL NOTES

Begin Drilling: **03-15-2021** Complete Drilling: **03-15-2021**
Drilling Contractor: **Wang Testing Services** Drill Rig: **20D50T [80%]**
Driller: **J&M** Logger: **M. Sadowski** Checked by: **C. Marin**
Drilling Method: **2.25" IDA HSA to 10 ft; mud rotary thereafter; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling: **49.00 ft**
At Completion of Drilling: **mud in borehole**
Time After Drilling: **NA**
Depth to Water: **NA**

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BORING LOG JJT-BSB-04

WEI Job No.: 7901-15-01

Client **TranSystems Corporation**
Project **I-80 Reconstruction (Houbolt Rd to Center St)**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 640.22 ft
North: 1763805.61 ft
East: 1036332.58 ft
Station: 536+65.51
Offset: 59.29 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		18-inch thick ASPHALT --PAVEMENT--						
	638.7							
		Loose, brown and gray SANDY GRAVEL; damp --AGGREGATE BASE--			1	8 4 3	NP	4
	636.5							
		Medium stiff to very stiff, brown and gray SILTY CLAY, trace to little gravel; damp --FILL-- --RDR 2--	5		2	9 5 3	3.50 P	20
					3	2 2 3	2.25 P	21
			10		4	2 2 2	1.07 B	19
					5	2 3 3	3.03 B	22
		--L_L(%)=39, P_L(%)=17-- --%Gravel=0.5-- --%Sand=11.3-- --%Silt=54.7-- --%Clay=33.5-- --A-6 (19)--	15		6	3 3 4	0.98 B	23
					7	3 4 5	0.98 B	24
			20		8	5 5 6	2.54 B	20
	619.7							
		Very stiff to hard, brown and gray SILTY CLAY, trace gravel; damp --RDR 2-3--	25		9	3 6 8	2.79 B	22
					10	6 6 6	2.79 B	21
					11	5 7 11	2.21 B	22
			30		12	5 7 21	3.77 B	20
			35		13	3 9 12	6.81 B	17
			40		14	8 8 11	5.99 B	19

GENERAL NOTES

Begin Drilling **03-10-2021** Complete Drilling **03-10-2021**
Drilling Contractor **Wang Testing Services** Drill Rig **20D50T [80%]**
Driller **NC&EG** Logger **M. Sadowski** Checked by **C. Marin**
Drilling Method **2.25" IDA HSA to 10 ft; mud rotary thereafter; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **50.00 ft**
At Completion of Drilling ▼ **NA**
Time After Drilling **24 hours**
Depth to Water **6 (Cave in at 12 ft) ft**

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BORING LOG JJT-BSB-04

WEI Job No.: 7901-15-01

Client **TranSystems Corporation**
Project **I-80 Reconstruction (Houbolt Rd to Center St)**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 640.22 ft
North: 1763805.61 ft
East: 1036332.58 ft
Station: 536+65.51
Offset: 59.29 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		--slow drilling at 47.0 feet--	45		15	8 13 18	6.48 B	19
		--possible cobbles--						
	590.5	Medium dense, brown and gray, medium to coarse SAND; wet	50		16	7 8 13	4.18 B	19
		--RDR 2 to 3--						
	583.5	Dense to very dense, gray Gravelly SILTY LOAM; damp	55		17	8 8 8	NP	21
		--RDR 2-3--						
		--L_L(%)=17, P_L(%)=12--						
		--%Gravel=17.6--						
		--%Sand=29.7--						
		--%Silt=44.6--	60		18	19 21 24	NP	10

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		--%Clay=8.1--						
		--A-4 (0)--						
		--rig chatter--						
		--possible cobbles--						
		--very hard drilling at 65 feet; possible boulder--			19	31 50/3"	NP	10
	575.2	--RDR 4--	65					
		Very strong, light grayish gray, highly weathered DOLOSTONE						
	573.7	BOULDER,			20	CORE		
		--RUN 1: 66.0 to 66.5 feet--						
		--Recovery = 67%--						
		--RQD= 0%--						
		--loss of drilling mud--						
		Very dense, gray, fine to coarse GRAVEL; saturated			21	50/5"	NP	
		--RDR 4--						
		--gravel cave-in at 70 feet--	70					
	569.2	Boring terminated at 71.00 ft	75					
			80					

GENERAL NOTES

Begin Drilling **03-10-2021** Complete Drilling **03-10-2021**
Drilling Contractor **Wang Testing Services** Drill Rig **20D50T [80%]**
Driller **NC&EG** Logger **M. Sadowski** Checked by **C. Marin**
Drilling Method **2.25" IDA HSA to 10 ft; mud rotary thereafter; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **50.00 ft**
At Completion of Drilling ▼ **NA**
Time After Drilling **24 hours**
Depth to Water **6 (cave in at 12 ft) ft**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

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BORING LOG MLA-BSB-02

WEI Job No.: 7901-15-01

Client: **TranSystems Corporation**
Project: **I-80 Reconstruction (Houbolt Rd to Center St)**
Location: **Will County, Illinois**

Datum: NAVD 88
Elevation: 641.53 ft
North: 1764685.15 ft
East: 1044037.36 ft
Station: 614+56.55
Offset: 6.23 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	641.0	6-inch thick, black SILTY CLAY LOAM --TOPSOIL-- Very stiff to hard, brown SILTY CLAY, trace gravel; damp --FILL-- --RDR 2--			1	5 5 5	4.00 P	17
			5		2	5 6 7	5.33 B	21
		--L_L(%)=44, P_L(%)=19-- --%Gravel=1.1-- --%Sand=10.4-- --%Silt=53.3-- --%Clay=35.2-- --A-7-6 (23)--			3	3 4 6	2.46 B	27
			10		4	6 7 11	3.69 B	17
	631.0	Very stiff to hard, brown to gray SILTY CLAY, trace gravel; damp --RDR 2--			5	6 11 12	8.61 B	18
			15		6	6 12 11	6.21 B	21
					7	7 10 15	3.69 B	22
			20		8	6 10 14	6.56 B	21
			25		9	5 8 10	> 4.50 P	21
					10	6 7 12	5.33 B	22
					11	7 8 12	3.33 N/6	24
			30		12	5 6 9	2.54 B	23
	609.8	Loose, gray SILTY LOAM; wet --RDR 2--						
			35		13	2 2 3	0.08 B	22
	604.8	Very stiff, gray SILTY CLAY, trace gravel; damp --RDR 2--						
			40		14	5 6 10	3.03 B	19

GENERAL NOTES

Begin Drilling: **04-20-2021** Complete Drilling: **04-20-2021**
Drilling Contractor: **Wang Testing Services** Drill Rig: **20CME55T[81%]**
Driller: **R&J** Logger: **I. Nenn** Checked by: **C. Marin**
Drilling Method: **2.25" IDA HSA to 10 ft; mud rotary thereafter; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling: **58.50 ft**
At Completion of Drilling: **mud in borehole**
Time After Drilling: **NA**
Depth to Water: **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

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BORING LOG MLA-BSB-02

WEI Job No.: 7901-15-01

Client: **TranSystems Corporation**
Project: **I-80 Reconstruction (Houbolt Rd to Center St)**
Location: **Will County, Illinois**

Datum: NAVD 88
Elevation: 641.53 ft
North: 1764685.15 ft
East: 1044037.36 ft
Station: 614+56.55
Offset: 6.23 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	597.7							
		Medium dense, gray SILT; wet --RDR 2--	45		15	9 8 14	NP	22
	594.8							
		Very dense, gray, coarse SAND; damp --RDR 2--	50		16	28 43 32	NP	11
	589.8							
		Dense, brown SANDY LOAM; wet --RDR 2--	55		17	11 16 16	NP	22
	584.8							
		Dense, gray coarse SAND; saturated --RDR 2--	60		18	12 17 21	NP	16
	569.8							
		Stiff, gray SILTY CLAY LOAM, trace gravel; moist --RDR 2--	65		19	18 15 18	NP	11
			70		20	13 23 13	NP	13
	564.8							
		Medium dense, gray SILT; wet to saturated --RDR 2--	75		21	9 8 11	1.23 B	17
			80		22	6 6 8	NP	26

GENERAL NOTES

Begin Drilling: **04-20-2021** Complete Drilling: **04-20-2021**
Drilling Contractor: **Wang Testing Services** Drill Rig: **20CME55T[81%]**
Driller: **R&J** Logger: **I. Nenn** Checked by: **C. Marin**
Drilling Method: **2.25" IDA HSA to 10 ft; mud rotary thereafter; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling: **58.50 ft**
At Completion of Drilling: **mud in borehole**
Time After Drilling: **NA**
Depth to Water: **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

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BORING LOG MLA-BSB-02

WEI Job No.: 7901-15-01

Client **TranSystems Corporation**
Project **I-80 Reconstruction (Houbolt Rd to Center St)**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 641.53 ft
North: 1764685.15 ft
East: 1044037.36 ft
Station: 614+56.55
Offset: 6.23 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	559.8							
		Stiff to hard, gray SILTY CLAY LOAM to SILTY LOAM, trace gravel; damp --RDR 2--			23	9 15 18	6.15 B	16
			85					
					24	11 19 39	1.72 B	15
	551.5		90					
		Boring terminated at 90.00 ft						
			95					
			100					

GENERAL NOTES

Begin Drilling **04-20-2021** Complete Drilling **04-20-2021**
Drilling Contractor **Wang Testing Services** Drill Rig **20CME55T[81%]**
Driller **R&J** Logger **I. Nenn** Checked by **C. Marin**
Drilling Method **2.25" IDA HSA to 10 ft; mud rotary thereafter; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **58.50 ft**
At Completion of Drilling ▼ **mud in borehole**
Time After Drilling **NA**
Depth to Water ▼ **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

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BORING LOG MLA-BSB-03

WEI Job No.: 7901-15-01

Client: **TranSystems Corporation**
Project: **I-80 Reconstruction (Houbolt Rd to Center St)**
Location: **Will County, Illinois**

Datum: NAVD 88
Elevation: 643.51 ft
North: 1764616.64 ft
East: 1044033.20 ft
Station: 614+50.47
Offset: 62.88 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	642.0	18-inch thick ASPHALT --PAVEMENT--						
	641.8	Brown and gray SANDY GRAVEL; damp --FILL--			1	7 5 5	1.56 B	23
		Stiff to very stiff, gray, black and brown SILTY CLAY, trace gravel; damp --trace wood fragments-- --FILL-- --RDR 2--	5		2	8 5 7	2.71 B	22
					3	5 4 4	1.25 P	19
			10		4	14 12 6	2.25 P	23
					5	4 5 5	1.48 B	27
	630.5	Very stiff to hard, gray and brown SILTY CLAY, trace gravel; damp --RDR 2--	15		6	5 8 16	6.64 B	19
					7	9 15 23	NR	
			20		8	5 10 12	5.00 B	21
					9	9 10 16	3.77 B	22
		--L_L(%)=42, P_L(%)=19-- --%Gravel=0.2-- --%Sand=1.6-- --%Silt=56.9-- --%Clay=41.3-- --A-7-6 (24)--	25		10	8 9 12	4.35 B	24
					11	5 10 15	5.33 B	24
		--sand seams; wet--			12	9 14 17	> 4.50 P	25
	614.0	Brown, fine SAND; saturated --RDR 2--	30					
	611.8	--slow hard drilling-- --possible cobbles-- Stiff to hard, brown to gray SILTY CLAY, trace gravel; damp to moist --RDR 2-3--						
			35		13	5 6 11	1.80 B	20
			40		14	5 9 12	4.76 B	18

GENERAL NOTES

Begin Drilling: **03-16-2021** Complete Drilling: **03-16-2021**
Drilling Contractor: **Wang Testing Services** Drill Rig: **20D50T [80%]**
Driller: **J&M** Logger: **M. Sadowski** Checked by: **C. Marin**
Drilling Method: **2.25" IDA HSA to 10 ft; mud rotary thereafter; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling: **29.50 ft**
At Completion of Drilling: **mud in borehole**
Time After Drilling: **48 hours**
Depth to Water: **22.00 ft**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

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BORING LOG MLA-BSB-03

WEI Job No.: 7901-15-01

Client: **TranSystems Corporation**
Project: **I-80 Reconstruction (Houbolt Rd to Center St)**
Location: **Will County, Illinois**

Datum: NAVD 88
Elevation: 643.51 ft
North: 1764616.64 ft
East: 1044033.20 ft
Station: 614+50.47
Offset: 62.88 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
			45		15	3 6 9	2.05 B	22
	596.8	Dense, gray SILT; wet --RDR 2--						
			50		16	17 25 18	NP	16
	591.8	--rig chatter-- Dense to very dense, brown and gray, medium to coarse SAND, trace to little gravel; saturated --RDR 2-3--						
			55		17	26 28 25	NP	16
			60		18	5 20 23	NP	12
		--sand caving in--						
			65		19	9 12 13	NP	15
		--sand caving in--						
			70		20	7 9 13	NP	21
		--sand caving in--						
			75		21	7 10 10	NP	17
	566.8	Dense, gray SILT; wet to saturated --RDR 2--						
			80		22	11 12 18	NP	19

GENERAL NOTES

Begin Drilling: **03-16-2021** Complete Drilling: **03-16-2021**
Drilling Contractor: **Wang Testing Services** Drill Rig: **20D50T [80%]**
Driller: **J&M** Logger: **M. Sadowski** Checked by: **C. Marin**
Drilling Method: **2.25" IDA HSA to 10 ft; mud rotary thereafter; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling: ▽ **29.50 ft**
At Completion of Drilling: ▼ **mud in borehole**
Time After Drilling: **48 hours**
Depth to Water: ▼ **22.00 ft**

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BORING LOG MLA-BSB-03

WEI Job No.: 7901-15-01

Client **TranSystems Corporation**
Project **I-80 Reconstruction (Houbolt Rd to Center St)**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 643.51 ft
North: 1764616.64 ft
East: 1044033.20 ft
Station: 614+50.47
Offset: 62.88 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	562.0							
		--hard drilling-- Very stiff, gray SILTY CLAY LOAM to SILTY LOAM, little gravel; damp --RDR 3--			23	13 13 14	3.50 P	17
			85					
	557.5							
		--hard slow drilling; boulder-- Black GRANITE --RUN 1: 87.5 to 88.0 feet-- --Recovery = 100%-- --RQD= 100%--			24	CORE		
	555.5							
		Hard, gray SILTY CLAY LOAM to SILTY LOAM, some gravel; damp --RDR 3-5--			25	50/5"	> 4.50 P	14
	553.5		90					
		Boring terminated at 90.00 ft						
			95					
			100					

GENERAL NOTES

Begin Drilling **03-16-2021** Complete Drilling **03-16-2021**
Drilling Contractor **Wang Testing Services** Drill Rig **20D50T [80%]**
Driller **J&M** Logger **M. Sadowski** Checked by **C. Marin**
Drilling Method **2.25" IDA HSA to 10 ft; mud rotary thereafter; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **29.50 ft**
At Completion of Drilling ▼ **mud in borehole**
Time After Drilling **48 hours**
Depth to Water ▼ **22.00 ft**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

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BORING LOG MLA-BSB-05

WEI Job No.: 7901-15-01

Client: **TranSystems Corporation**
Project: **I-80 Reconstruction (Houbolt Rd to Center St)**
Location: **Will County, Illinois**

Datum: NAVD 88
Elevation: 638.63 ft
North: 1764696.23 ft
East: 1044214.48 ft
Station: 616+33.98
Offset: 10.25 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		Very stiff (2.50P), black and brown SILTY CLAY LOAM, trace gravel; damp						
	637.1	--TOPSOIL--						
		Stiff to very stiff, brown, gray and black SILTY CLAY, trace gravel; damp						
		--FILL--						
		--RDR 2--						
			5		1	4 4 4	3.25 P	20
					2	3 5 6	3.69 B	18
					3	6 8 9	1.50 P	20
		--L_L(%)=39, P_L(%)=17--						
		--%Gravel=2.0--						
		--%Sand=6.5--						
		--%Silt=54.4--	10		4	3 4 6	2.21 B	17
		--%Clay=37.1--						
		--A-6 (20)--			5	4 5 5	2.54 B	17
					6	9 50/5"	2.05 B	21
			15					
	623.4	Soft, black and gray SILTY CLAY LOAM; damp						
		--Buried TOPSOIL--						
		--RDR 2--			7	3 3 4	0.41 B	31
	620.6							
		Stiff to hard, brown to gray SILTY CLAY, trace to little gravel; damp						
		--RDR 2-3--			8	9 7 6	4.35 B	23
			20					
					9	9 12 22	8.04 B	19
		--hard drilling--						
		--possible cobbles--						
			25		10	10 16 23	7.22 B	19
					11	9 9 16	7.38 B	20
		--rig chatter; possible cobbles--						
			30		12	12 11 15	1.00 P	26
					13	6 7 12	3.94 B	19
			35					
					14	5 7 10	2.71 B	23
			40					

GENERAL NOTES

Begin Drilling: **04-20-2021** Complete Drilling: **04-20-2021**
Drilling Contractor: **Wang Testing Services** Drill Rig: **20D50T [80%]**
Driller: **R&J** Logger: **M. Sadowski** Checked by: **C. Marin**
Drilling Method: **2.25" IDA HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling: **57.00 ft**
At Completion of Drilling: **mud in borehole**
Time After Drilling: **NA**
Depth to Water: **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

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BORING LOG MLA-BSB-05

WEI Job No.: 7901-15-01

Client **TranSystems Corporation**
Project **I-80 Reconstruction (Houbolt Rd to Center St)**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 638.63 ft
North: 1764696.23 ft
East: 1044214.48 ft
Station: 616+33.98
Offset: 10.25 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	596.9	Very stiff, gray CLAY; damp --RDR 2--						
	594.1	Gray SILTY LOAM; moist --RDR 2--	45		15	5 9 10	3.28 B	27
	591.9	Medium dense to dense, brown and gray, medium to coarse SAND, trace gravel; moist to saturated --RDR 2--	50		16	22 24 14	NP	15
			55		17	14 23 20	NP	11
			60		18	14 12 13	NP	16
			65		19	14 12 11	NP	17
			70		20	10 12 11	NP	17
			75		21	11 12 11	NP	21
	561.9	Dense, gray fine SAND; saturated --RDR 2--	80		22	19 20 21	NP	20

GENERAL NOTES

Begin Drilling **04-20-2021** Complete Drilling **04-20-2021**
Drilling Contractor **Wang Testing Services** Drill Rig **20D50T [80%]**
Driller **R&J** Logger **M. Sadowski** Checked by **C. Marin**
Drilling Method **2.25" IDA HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **57.00 ft**
At Completion of Drilling ▼ **mud in borehole**
Time After Drilling **NA**
Depth to Water ▼ **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

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BORING LOG MLA-BSB-05

WEI Job No.: 7901-15-01

Client **TranSystems Corporation**
Project **I-80 Reconstruction (Houbolt Rd to Center St)**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 638.63 ft
North: 1764696.23 ft
East: 1044214.48 ft
Station: 616+33.98
Offset: 10.25 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	556.9	--rig chatter at 81.5 feet-- --possible cobbles-- Hard, gray SILTY CLAY LOAM, trace gravel; damp --RDR 2-3--			23	7 10 23	5.25 B	14
			85					
	551.9	Very dense, gray, Gravelly SILTY LOAM; damp --RDR 3-4--			24	50/3"	NP	11
	548.6		90					
		Boring terminated at 90.00 ft						
			95					
			100					

GENERAL NOTES

Begin Drilling **04-20-2021** Complete Drilling **04-20-2021**
Drilling Contractor **Wang Testing Services** Drill Rig **20D50T [80%]**
Driller **R&J** Logger **M. Sadowski** Checked by **C. Marin**
Drilling Method **2.25" IDA HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **57.00 ft**
At Completion of Drilling ▼ **mud in borehole**
Time After Drilling **NA**
Depth to Water ▼ **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

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BORING LOG MLA-BSB-06

WEI Job No.: 7901-15-01

Client: **TranSystems Corporation**
Project: **I-80 Reconstruction (Houbolt Rd to Center St)**
Location: **Will County, Illinois**

Datum: NAVD 88
Elevation: 641.38 ft
North: 1764622.45 ft
East: 1044220.46 ft
Station: 616+37.02
Offset: 63.71 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		22-inch thick ASPHALT --PAVEMENT--						
	639.6							
		Stiff to hard, brown and gray SILTY CLAY, trace to little gravel; damp --FILL-- --RDR 2--			1	4 5 8	3.53 B	17
			5		2	5 5 8	3.03 B	20
					3	6 4 6	1.64 B	21
			10		4	4 5 5	NR	
		--brown, gray and black from 11 feet and below--			5	4 5 5	3.77 B	21
			15		6	4 4 4	4.51 B	26
					7	4 5 13	3.61 B	26
	623.4							
		Stiff to hard, brown to gray SILTY CLAY to SILTY CLAY LOAM, trace gravel; damp to moist			8	10 15 22	6.56 B	22
			20					

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		--RDR 2--						
		--trace organic matter--			9	8 18 31	7.71 B	19
		--L_L(%)=38, P_L(%)=17-- --%Gravel=0.5-- --%Sand=3.8-- --%Silt=53.2-- --%Clay=42.5-- --A-6 (21)--	25		10	10 24 34	6.89 B	18
					11	6 15 17	5.58 B	20
			30		12	8 8 9	NR	
			35		13	5 7 10	1.25 P	23
			40		14	4 7 12	2.05 B	14

GENERAL NOTES

Begin Drilling: **03-18-2021** Complete Drilling: **03-18-2021**
Drilling Contractor: **Wang Testing Services** Drill Rig: **20D50T [80%]**
Driller: **J&M** Logger: **M. Ciapas** Checked by: **C. Marin**
Drilling Method: **2.25" IDA HSA to 10 ft; mud rotary thereafter; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling: **49.00 ft**
At Completion of Drilling: **mud in borehole**
Time After Drilling: **NA**
Depth to Water: **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

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BORING LOG MLA-BSB-06

WEI Job No.: 7901-15-01

Client **TranSystems Corporation**
Project **I-80 Reconstruction (Houbolt Rd to Center St)**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 641.38 ft
North: 1764622.45 ft
East: 1044220.46 ft
Station: 616+37.02
Offset: 63.71 RT

Elevation (ft)	Depth (ft)	SOIL AND ROCK DESCRIPTION	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
594.6		Brown SILT; moist --RDR 3--					
592.2		Medium dense to dense, brown SAND; wet to saturated --RDR 2-3--					
	45		X	15	5 6 10	2.38 B	21
	50		X	16	10 17 29	NP	24
	55		X	17	13 15 15	NP	14
584.6		Medium dense, gray SILT; moist to wet --RDR 2--					
	60		X	18	7 8 9	NP	22
579.6		Dense, gray Gravelly SAND; saturated --RDR 2--					
	65		X	19	12 15 16	NP	17
574.6		Medium dense, gray, fine to coarse SAND; saturated --RDR 2--					
	70		X	20	8 8 11	NP	21
	75	--%Gravel=1.6-- --%Sand=88.5-- --%Silt=8.6-- --%Clay=1.3-- --A-3 (0)--	X	21	8 11 11	NP	24
564.6		Medium dense, gray Gravelly SAND; saturated --RDR 2--					
	80		X	22	7 14 15	NP	11

GENERAL NOTES

Begin Drilling **03-18-2021** Complete Drilling **03-18-2021**
Drilling Contractor **Wang Testing Services** Drill Rig **20D50T [80%]**
Driller **J&M** Logger **M. Ciapas** Checked by **C. Marin**
Drilling Method **2.25" IDA HSA to 10 ft; mud rotary thereafter; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **49.00 ft**
At Completion of Drilling ▼ **mud in borehole**
Time After Drilling **NA**
Depth to Water ▼ **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

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BORING LOG MLA-BSB-06

WEI Job No.: 7901-15-01

Client **TranSystems Corporation**
Project **I-80 Reconstruction (Houbolt Rd to Center St)**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 641.38 ft
North: 1764622.45 ft
East: 1044220.46 ft
Station: 616+37.02
Offset: 63.71 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	559.6	--cave-in while sampling--						
		Dense, gray SILT; wet --RDR 2--						
					23	18 17 18	NP	18
			85					
	554.6							
		Hard, gray SILTY CLAY LOAM to SILTY LOAM, trace gravel; damp --RDR 2--						
					24	11 24 49	7.63 S	11
	551.4		90					
		Boring terminated at 90.00 ft						
			95					
			100					

GENERAL NOTES

Begin Drilling **03-18-2021** Complete Drilling **03-18-2021**
Drilling Contractor **Wang Testing Services** Drill Rig **20D50T [80%]**
Driller **J&M** Logger **M. Ciapas** Checked by **C. Marin**
Drilling Method **2.25" IDA HSA to 10 ft; mud rotary thereafter; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **49.00 ft**
At Completion of Drilling ▼ **mud in borehole**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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BORING LOG WA-BSB-03

WEI Job No.: 7901-15-01

Client: **TranSystems Corporation**
Project: **I-80 Reconstruction (Houbolt Rd to Center St)**
Location: **Will County, Illinois**

Datum: NAVD 88
Elevation: 613.28 ft
North: 1764790.60 ft
East: 1046801.06 ft
Station: 642+22.27
Offset: 1.46 LT

Elevation (ft)	Depth (ft)	SOIL AND ROCK DESCRIPTION	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
613.0		4-inch thick, black SILTY CLAY LOAM					
612.0		--TOPSOIL--					
		Gray SILTY LOAM; damp		1	3 4 6	2.13 B	22
		Medium stiff (0.75P) to very stiff, gray SILTY CLAY, trace gravel; damp to moist					
		--RDR 2--		2	5 5 7	1.64 B	21
	5						
607.0		Loose, brown and gray SILT, few sand lenses; saturated		3	4 3 4	NP	17
		--RDR 2--					
605.3		Very stiff, gray SILTY CLAY, trace gravel; damp					
		--RDR 2--		4	2 6 9	3.53 B	20
		--L_L(%)=33, P_L(%)=15--					
	10	--%Gravel=2.3--					
		--%Sand=6.3--					
		--%Silt=53.6--					
		--%Clay=37.8--					
		--A-6 (16)--		5	8 10 10	NR	
				6	4 6 13	2.95 B	21
598.6		Gray SILT to SILTY LOAM; saturated					
597.8	15	Very dense, brown, medium to coarse SAND, trace gravel; damp					
		--RDR 2-3--		7	23 30 50/4"	NP	7
594.8		--frequent rig chatter at 18.5 feet--		8	50/1"	NP	
593.3	20	--possible cobbles--					

Elevation (ft)	Depth (ft)	SOIL AND ROCK DESCRIPTION	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		--WEATHERED BEDROCK--					
		Strong, light gray, very poor to poor quality, DOLOSTONE; very closely to closely spaced, slightly weathered, horizontal, oblique, and vertical joints, with 0 inch opening, slightly rough walls, and no infill.					
		--RUN 1: 20.0 to 30.0 feet--					
		--Recovery = 90%--					
		--RQD= 0%--					
	25	--no water return from 21.5 to 37.0 feet bgs--		9	CORE		
	30						
		--RUN 2: 30.0 to 37.0 feet--					
		--Recovery = 96%--					
		--RQD= 26%--					
		--Q_u=8,617 psi		10	CORE		
576.3	35	Boring terminated at 37.00 ft					
	40						

GENERAL NOTES

Begin Drilling: **04-30-2021** Complete Drilling: **04-30-2021**
Drilling Contractor: **Wang Testing Services** Drill Rig: **20D25A [83%]**
Driller: **NC&KG** Logger: **E. Yim** Checked by: **C. Marin**
Drilling Method: **2.25" IDA HSA to 10 ft; mud rotary thereafter; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling: **6.25 ft**
At Completion of Drilling: **mud in borehole**
Time After Drilling: **NA**
Depth to Water: **NA**

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BORING LOG WB-SGB-19

WEI Job No.: 7901-15-01

Client **TranSystems Corporation**
Project **I-80 Reconstruction (Houbolt Rd to Center St)**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 618.40 ft
North: 1763164.40 ft
East: 1035160.42 ft
Station: 523+37.13
Offset: 57.62 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	617.4	12-inch thick ASPHALT --PAVEMENT--						
	616.4	Medium dense, brown and gray SANDY GRAVEL; damp --FILL--			1	23 8 10 9	NP	2
		Very stiff to hard, brown SILTY CLAY, trace gravel; moist --FILL-- --RDR 2--	5		2	8 6 8 10	5.82 B	15
					3	6 6 7 9	3.85 B	18
					4	6 6 8 10	3.77 B	17
			10		5	4 6 8 9	4.18 B	14
	607.4	Boring terminated at 11.00 ft						
			15					
			20					

GENERAL NOTES

Begin Drilling **05-10-2022** Complete Drilling **05-10-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **20D50T [80%]**
Driller **JS&AE** Logger **A. Scifers** Checked by **J. Bensen**
Drilling Method **2.25" IDA HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **DRY**
At Completion of Drilling ▼ **DRY**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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BORING LOG WB-SGB-20

WEI Job No.: 7901-15-01

Client **TranSystems Corporation**
Project **I-80 Reconstruction (Houbolt Rd to Center St)**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 633.79 ft
North: 1763481.03 ft
East: 1035687.25 ft
Station: 529+47.83
Offset: 57.69 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		16-inch thick ASPHALT --PAVEMENT--						
	632.5							
	632.2	3-inch thick, black ASPHALT grinds; reclaimed pavement; dry --FILL--			1	5 7 10 11	> 4.50 P	15
		Very stiff to hard, gray SILTY CLAY, trace gravel; moist --FILL-- --RDR 2--			2	6 8 8 8	5.00 B	21
			5		3	4 5 10 12	3.94 B	16
		--L_L(%)=40, P_L(%)=15-- --%Gravel=2.5-- --%Sand=10.3-- --%Silt=49.0-- --%Clay=38.3-- --A-6 (21)--			4	6 7 8 8	2.54 B	17
			10		5	4 7 10 10	5.08 B	17
	622.8	Boring terminated at 11.00 ft						
			15					
			20					

GENERAL NOTES

Begin Drilling **05-09-2022** Complete Drilling **05-09-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **20D50T [80%]**
Driller **JS&AE** Logger **A. Scifers** Checked by **J. Bensen**
Drilling Method **2.25" IDA HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **DRY**
At Completion of Drilling ▼ **DRY**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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BORING LOG WB-SGB-21

WEI Job No.: 7901-15-01

Client **TranSystems Corporation**
Project **I-80 Reconstruction (Houbolt Rd to Center St)**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 640.23 ft
North: 1763808.80 ft
East: 1036344.43 ft
Station: 536+77.55
Offset: 57.35 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		15-inch thick ASPHALT --PAVEMENT--						
	639.0							
	638.6	5-inch thick, black ASPHALT grinds; reclaimed pavement; dry --FILL--			1	11 4 3 5	NP	
		Stiff, gray SILTY CLAY, trace gravel; moist --FILL-- --RDR 2--			2	4 3 4 5	1.56 B	19
			5		3	6 7 6 6	1.39 B	22
					4	3 3 4 4	1.50 P	19
			10		5	2 3 3 4	1.23 B	17
	629.2	Boring terminated at 11.00 ft						
			15					
			20					

GENERAL NOTES

Begin Drilling **05-09-2022** Complete Drilling **05-09-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **20D50T [80%]**
Driller **JS&AE** Logger **A. Scifers** Checked by **J. Bensen**
Drilling Method **2.25" IDA HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **DRY**
At Completion of Drilling ▼ **DRY**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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BORING LOG WB-SGB-22

WEI Job No.: 7901-15-01

Client **TranSystems Corporation**
Project **I-80 Reconstruction (Houbolt Rd to Center St)**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 637.93 ft
North: 1763985.65 ft
East: 1036765.68 ft
Station: 541+31.40
Offset: 58.81 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	636.9	12-inch thick ASPHALT --PAVEMENT--						
	636.4	2-inch thick, black ASPHALT grinds; reclaimed pavement; dry --FILL--						
		Very stiff to hard, gray SILTY CLAY LOAM to CLAY LOAM, trace gravel; moist --FILL-- --RDR 2--			1	6 6 8 10	4.92 B	16
			5		2	6 7 7 6	3.53 B	13
					3	8 12 12 13	4.43 B	17
					4	4 4 7 8	3.85 B	20
			10		5	3 5 8 8	3.44 B	18
	626.9	Boring terminated at 11.00 ft						
			15					
			20					

GENERAL NOTES

Begin Drilling **05-09-2022** Complete Drilling **05-09-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **20D50T [80%]**
Driller **JS&AE** Logger **A. Scifers** Checked by **J. Bensen**
Drilling Method **2.25" IDA HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **DRY**
At Completion of Drilling ▼ **DRY**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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BORING LOG WB-SGB-23

WEI Job No.: 7901-15-01

Client **TranSystems Corporation**
Project **I-80 Reconstruction (Houbolt Rd to Center St)**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 628.07 ft
North: 1764180.45 ft
East: 1037327.77 ft
Station: 547+19.51
Offset: 56.54 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		14-inch thick ASPHALT --PAVEMENT--						
	626.8							
		Very stiff to hard, gray SILTY CLAY LOAM to CLAY LOAM, trace gravel; moist --FILL-- --RDR 2--			1	6 5 8 11	4.67 B	17
					2	4 6 7 9	4.76 B	17
			5		3	15 17 17 17	4.92 B	14
					4	6 9 13 14	7.30 B	16
			10		5	5 7 10 13	3.69 B	16
	617.1							
		Boring terminated at 11.00 ft						
			15					
			20					

GENERAL NOTES

Begin Drilling **05-09-2022** Complete Drilling **05-09-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **20D50T [80%]**
Driller **JS&AE** Logger **A. Scifers** Checked by **J. Bensen**
Drilling Method **2.25" IDA HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **DRY**
At Completion of Drilling ▼ **DRY**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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BORING LOG WB-SGB-24

WEI Job No.: 7901-15-01

Client **TranSystems Corporation**
Project **I-80 Reconstruction (Houbolt Rd to Center St)**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 625.74 ft
North: 1764339.05 ft
East: 1037907.26 ft
Station: 553+19.14
Offset: 60.44 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	624.6	14-inch thick ASPHALT --PAVEMENT--						
	624.2	3-inch thick, black ASPHALT grinds; reclaimed pavement; dry -- FILL--			1	6 6 5 7	1.23 B	16
		Stiff to hard, brown to gray SILTY CLAY to SILTY CLAY LOAM, trace gravel; moist --RDR 2--	5		2	4 5 7 9	5.66 B	14
					3	12 17 18 15	4.10 B	16
					4	5 6 9 12	4.51 B	15
	614.7		10		5	11 9 13 17	8.77 B	16
		Boring terminated at 11.00 ft	15					
			20					

GENERAL NOTES

Begin Drilling **05-09-2022** Complete Drilling **05-09-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **20D50T [80%]**
Driller **JS&AE** Logger **A. Scifers** Checked by **J. Bensen**
Drilling Method **2.25" IDA HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **DRY**
At Completion of Drilling ▼ **DRY**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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BORING LOG WB-SGB-25

WEI Job No.: 7901-15-01

Client **TranSystems Corporation**
Project **I-80 Reconstruction (Houbolt Rd to Center St)**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 630.46 ft
North: 1764455.19 ft
East: 1038497.59 ft
Station: 559+16.73
Offset: 59.97 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	629.3	14-inch thick ASPHALT --PAVEMENT--						
	628.5	Medium dense, black ASPHALT grinds; reclaimed pavement; dry --FILL--			1	9 4 8 10	NP	0
		Hard, brown SILTY CLAY LOAM, trace gravel; moist --RDR 2--			2	7 6 8 10	5.74 B	16
			5		3	14 17 19 19	5.58 B	16
					4	8 7 10 10	5.58 B	15
			10		5	5 8 12 16	6.23 B	15
	619.5	Boring terminated at 11.00 ft						
			15					
			20					

GENERAL NOTES

Begin Drilling **05-09-2022** Complete Drilling **05-09-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **20D50T [80%]**
Driller **JS&AE** Logger **A. Scifers** Checked by **J. Bensen**
Drilling Method **2.25" IDA HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **DRY**
At Completion of Drilling ▼ **DRY**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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BORING LOG WB-SGB-26

WEI Job No.: 7901-15-01

Client **TranSystems Corporation**
Project **I-80 Reconstruction (Houbolt Rd to Center St)**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 631.46 ft
North: 1764530.80 ft
East: 1039090.79 ft
Station: 565+10.68
Offset: 60.57 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	630.7	9-inch thick ASPHALT --PAVEMENT--						
	630.5	3-inch thick GRAVEL --AGGREGATE BASE--						
		Hard, brown and gray SILTY CLAY, trace gravel; moist --FILL-- --RDR 2--			1	6 6 7 10	5.33 B	18
						12 9 10 12		
	627.5	Very stiff to hard, brown to gray SILTY CLAY, trace to little gravel; moist --RDR 2--			2		NR	
			5		3	13 17 16 17	6.64 B	17
					4	12 9 13 16	2.00 P	15
			10		5	10 18 15 18	8.36 B	15
	620.5	Boring terminated at 11.00 ft						
			15					
			20					

GENERAL NOTES

Begin Drilling **05-09-2022** Complete Drilling **05-09-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **20D50T [80%]**
Driller **JS&AE** Logger **A. Scifers** Checked by **J. Bensen**
Drilling Method **2.25" IDA HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **DRY**
At Completion of Drilling ▼ **DRY**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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BORING LOG WB-SGB-27

WEI Job No.: 7901-15-01

Client **TranSystems Corporation**
Project **I-80 Reconstruction (Houbolt Rd to Center St)**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 627.50 ft
North: 1764577.72 ft
East: 1039687.72 ft
Station: 571+06.09
Offset: 72.23 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	626.7	10-inch thick ASPHALT --PAVEMENT--						
		Medium dense, black ASPHALT grinds; reclaimed pavement; dry --FILL--			1	15 11 7 6	NP	21
	625.0	Stiff to hard, brown SILTY CLAY, trace gravel; moist --RDR 2-- --L_L(%)=44, P_L(%)=13-- --%Gravel=3.7-- --%Sand=15.2-- --%Silt=50.5-- --%Clay=30.7-- --A-7-6 (24)--	5		2	6 3 3 5	1.48 B	20
					3	7 9 11 12	3.69 B	22
					4	4 5 9 10	5.41 B	20
			10		5	3 5 11 15	6.15 B	16
	616.5	Boring terminated at 11.00 ft						
			15					
			20					

GENERAL NOTES

Begin Drilling **05-08-2022** Complete Drilling **05-08-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **20D50T [80%]**
Driller **JS&AE** Logger **A. Scifers** Checked by **J. Bensen**
Drilling Method **2.25" IDA HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **DRY**
At Completion of Drilling ▼ **DRY**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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BORING LOG WB-SGB-28

WEI Job No.: 7901-15-01

Client **TranSystems Corporation**
Project **I-80 Reconstruction (Houbolt Rd to Center St)**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 625.36 ft
North: 1764618.22 ft
East: 1040278.78 ft
Station: 577+02.28
Offset: 84.27 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	624.9	6-inch thick, stiff (1.00P), black SILTY CLAY LOAM; moist						
	624.4	--TOPSOIL--						
	623.6	6-inch thick, tan SANDY GRAVEL; moist						
		--AGGREGATE--						
		Soft, brown SILTY CLAY, trace gravel; moist			1	2 2 1 1	0.25 P	29
		--FILL--			2	2 5 4 4	3.94 B	16
		Very stiff to hard, brown SILTY CLAY, trace gravel; damp	5		3	2 3 6 6	5.72 B	17
		--RDR 2--			4	3 6 7 10	7.13 B	18
	615.4		10		5	2 4 6 7	7.95 B	17
		Boring terminated at 10.00 ft						
			15					
			20					

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)

GENERAL NOTES

Begin Drilling **05-23-2022** Complete Drilling **05-23-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **21GeoA[96%]**
Driller **RR&AP** Logger **D. You** Checked by **J. Bensen**
Drilling Method **2.25" IDA HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **DRY**
At Completion of Drilling ▼ **DRY**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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BORING LOG WB-SGB-29

WEI Job No.: 7901-15-01

Client **TranSystems Corporation**
Project **I-80 Reconstruction (Houbolt Rd to Center St)**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 629.30 ft
North: 1764614.58 ft
East: 1040884.87 ft
Station: 583+03.76
Offset: 61.35 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	628.2	13-inch thick ASPHALT --PAVEMENT--						
	628.0	3-inch thick GRAVEL --AGGREGATE BASE--						
		Stiff to hard, brown SILTY CLAY, trace gravel; moist --RDR 2--			1	17 8 6 8	5.49 B	15
					2	4 7 6 9	1.50 P	15
			5		3	11 11 14 13	4.35 B	16
					4	5 5 7 8	2.13 B	17
			10		5	4 5 8 9	4.51 B	18
	618.3	Boring terminated at 11.00 ft						
			15					
			20					

GENERAL NOTES

Begin Drilling **05-08-2022** Complete Drilling **05-08-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **20D50T [80%]**
Driller **JS&AE** Logger **A. Scifers** Checked by **J. Bensen**
Drilling Method **2.25" IDA HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **DRY**
At Completion of Drilling ▼ **DRY**
Time After Drilling **NA**
Depth to Water ▼ **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

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BORING LOG WB-SGB-30

WEI Job No.: 7901-15-01

Client **TranSystems Corporation**
Project **I-80 Reconstruction (Houbolt Rd to Center St)**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 633.11 ft
North: 1764654.23 ft
East: 1041556.87 ft
Station: 589+76.81
Offset: 74.19 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	632.1	12-inch thick ASPHALT --PAVEMENT--						
		Medium dense, black ASPHALT grinds; reclaimed pavement; dry --FILL--			1	16 11 8 10	NP	1
	629.6	Stiff to hard, brown SILTY CLAY to SILTY CLAY LOAM, trace gravel; moist --RDR 2--	5		2	6 8 13 13	8.20 B	15
					3	17 19 27 24	5.74 B	17
					4	8 10 14 18	1.72 B	14
	622.1		10		5	7 10 11 15	4.84 B	16
		Boring terminated at 11.00 ft	15					
			20					

GENERAL NOTES

Begin Drilling **05-08-2022** Complete Drilling **05-08-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **20D50T [80%]**
Driller **JS&AE** Logger **A. Scifers** Checked by **J. Bensen**
Drilling Method **2.25" IDA HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **DRY**
At Completion of Drilling ▼ **DRY**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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BORING LOG WB-SGB-31

WEI Job No.: 7901-15-01

Client **TranSystems Corporation**
Project **I-80 Reconstruction (Houbolt Rd to Center St)**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 636.51 ft
North: 1764660.91 ft
East: 1042087.97 ft
Station: 595+09.22
Offset: 59.85 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	635.5	12-inch thick ASPHALT --PAVEMENT--						
	635.4	2-inch thick, black ASPHALT grinds; reclaimed pavement; dry --FILL--			1	7 6 7 9	1.07 B	17
	633.8	Stiff, brown SILTY CLAY, trace gravel; moist --FILL-- --RDR 2--			2	4 4 7 7	1.97 B	17
	631.8	Stiff, black SILTY CLAY, trace gravel; moist --BURIED TOPSOIL--	5		3	8 9 8 6	1.23 B	29
		Stiff to very stiff, gray to brown SILTY CLAY, trace gravel; moist --RDR 2--			4	3 4 5 6	3.36 B	18
			10		5	3 3 6 8	3.77 B	15
	625.5	Boring terminated at 11.00 ft						
			15					
			20					

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)

GENERAL NOTES

Begin Drilling **05-08-2022** Complete Drilling **05-08-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **20D50T [80%]**
Driller **JS&AE** Logger **A. Scifers** Checked by **J. Bensen**
Drilling Method **2.25" IDA HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **DRY**
At Completion of Drilling ▼ **DRY**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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BORING LOG WB-SGB-32

WEI Job No.: 7901-15-01

Client **TranSystems Corporation**
Project **I-80 Reconstruction (Houbolt Rd to Center St)**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 639.34 ft
North: 1764684.03 ft
East: 1042693.77 ft
Station: 601+11.31
Offset: 55.46 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	638.3	12-inch thick ASPHALT --PAVEMENT--						
	637.8	7-inch thick, black ASPHALT grinds; reclaimed pavement; dry --FILL--			1	9 5 8 9	4.67 B	11
		Stiff to hard, gray SILTY CLAY, trace gravel; moist --FILL-- --L_L(%)=53, P_L(%)=15-- --%Gravel=0.9-- --%Sand=5.7-- --%Silt=53.9-- --%Clay=39.5-- --A-7-6 (37)--			2	5 3 7 8	1.72 B	23
	634.8		5		3	11 13 12 11	2.54 B	15
		Very stiff to hard, brown SILTY CLAY LOAM, trace gravel; moist --RDR 2--			4	4 6 9 11	4.92 B	16
	628.3		10		5	4 6 9 10	4.26 B	16
		Boring terminated at 11.00 ft	15					
			20					

GENERAL NOTES

Begin Drilling **05-08-2022** Complete Drilling **05-08-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **20D50T [80%]**
Driller **JS&AE** Logger **A. Scifers** Checked by **J. Bensen**
Drilling Method **2.25" IDA HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **DRY**
At Completion of Drilling ▼ **DRY**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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BORING LOG WB-SGB-33

WEI Job No.: 7901-15-01

Client **TranSystems Corporation**
Project **I-80 Reconstruction (Houbolt Rd to Center St)**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 641.72 ft
North: 1764708.09 ft
East: 1043286.49 ft
Station: 607+07.20
Offset: 59.08 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	640.9	10-inch thick ASPHALT --PAVEMENT--						
	640.6	3-inch thick GRAVEL --AGGREGATE BASE--						
		Medium stiff to very stiff, brown, black and gray SILTY CLAY, trace gravel; moist --FILL-- --RDR 2--			1	8 6 7 6	3.53 B	17
					2	4 4 6 8	1.97 B	23
			5		3	16 12 12 12	3.20 B	28
					4	3 4 5 7	1.97 B	29
		--Qu: 0.50P--	10		5	7 7 5 6	0.33 B	37
	631.5	Soft, brown SILTY LOAM, trace gravel; wet						
	630.8	Hard, brown SILTY CLAY, trace gravel; moist --RDR 2--			6	4 8 13 14	4.10 B	23
	628.7	Boring terminated at 13.00 ft						
			15					
			20					

GENERAL NOTES

Begin Drilling **05-08-2022** Complete Drilling **05-08-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **20D50T [80%]**
Driller **JS&AE** Logger **A. Scifers** Checked by **J. Bensen**
Drilling Method **2.25" IDA HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **DRY**
At Completion of Drilling ▼ **DRY**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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BORING LOG WB-SGB-34

WEI Job No.: 7901-15-01

Client **TranSystems Corporation**
Project **I-80 Reconstruction (Houbolt Rd to Center St)**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 642.47 ft
North: 1764728.77 ft
East: 1043807.86 ft
Station: 612+28.98
Offset: 58.97 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	641.4	13-inch thick ASPHALT --PAVEMENT--						
	641.3	1-inch thick, black ASPHALT grinds; reclaimed pavement; dry						
		Stiff to hard, brown SILTY CLAY, trace gravel; moist --FILL-- --RDR 2--			1	6 5 6 6	2.30 B	19
					2	3 5 6 8	2.30 B	25
			5		3	10 12 13 13	4.26 B	22
					4	5 5 10 12	2.38 B	21
			10		5	11 12 12 12	1.89 B	21
	631.5	Boring terminated at 11.00 ft						
			15					
			20					

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)

GENERAL NOTES

Begin Drilling **05-08-2022** Complete Drilling **05-08-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **20D50T [80%]**
Driller **JS&AE** Logger **A. Scifers** Checked by **J. Bensen**
Drilling Method **2.25" IDA HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **DRY**
At Completion of Drilling ▼ **DRY**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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BORING LOG WB-SGB-35

WEI Job No.: 7901-15-01

Client **TranSystems Corporation**
Project **I-80 Reconstruction (Houbolt Rd to Center St)**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 634.40 ft
North: 1764754.92 ft
East: 1044482.63 ft
Station: 619+04.25
Offset: 58.20 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	633.2	14-inch thick ASPHALT --PAVEMENT--						
	633.0	3-inch thick, black ASPHALT grinds; reclaimed pavement; dry --FILL--			1	7 5 5 5	2.21 B	1
		Very stiff, brown and gray CLAY LOAM to SILTY CLAY LOAM, trace gravel; moist --FILL-- --RDR 2--			2	4 4 5 7	2.71 B	22
			5		3	8 13 11 8	3.85 B	23
	627.6							
		Stiff to hard, dark gray to brown SILTY CLAY, trace gravel; moist --RDR 2--			4	3 4 5 6	1.56 B	20
			10		5	9 10 11 10	4.10 B	23
	623.4							
		Boring terminated at 11.00 ft						
			15					
			20					

GENERAL NOTES

Begin Drilling **05-08-2022** Complete Drilling **05-08-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **20D50T [80%]**
Driller **JS&AE** Logger **A. Scifers** Checked by **J. Bensen**
Drilling Method **2.25" IDA HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **DRY**
At Completion of Drilling ▼ **DRY**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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BORING LOG WB-SGB-36

WEI Job No.: 7901-15-01

Client **TranSystems Corporation**
Project **I-80 Reconstruction (Houbolt Rd to Center St)**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 619.15 ft
North: 1764779.51 ft
East: 1045090.61 ft
Station: 625+12.73
Offset: 58.55 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	618.0	14-inch thick ASPHALT --PAVEMENT--						
	617.9	1-inch thick, black ASPHALT grinds; reclaimed pavement; dry --FILL--			1	8 7 8 10	4.50 P	20
		Stiff to hard, brown SILTY CLAY, trace gravel; moist --RDR 2--			2	9 11 14 19	6.89 B	18
			5		3	7 9 14 13	2.38 B	17
					4	6 5 5 6	1.31 B	20
			10		5	5 7 11 8	3.28 B	22
	608.2	Boring terminated at 11.00 ft						
			15					
			20					

GENERAL NOTES

Begin Drilling **05-04-2022** Complete Drilling **05-04-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **20CME55T[81%]**
Driller **JS&AG** Logger **A. Scifers** Checked by **J. Bensen**
Drilling Method **2.25" IDA HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **DRY**
At Completion of Drilling ▼ **DRY**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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BORING LOG WB-SGB-37

WEI Job No.: 7901-15-01

Client **TranSystems Corporation**
Project **I-80 Reconstruction (Houbolt Rd to Center St)**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 607.13 ft
North: 1764802.91 ft
East: 1045693.80 ft
Station: 631+16.37
Offset: 57.88 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	606.0	14-inch thick ASPHALT --PAVEMENT--						
		Stiff to hard, brown to gray SILTY CLAY to SILTY CLAY LOAM, trace gravel; moist --FILL-- --RDR 2--			1	7 6 5 7	2.00 P	20
			5		2	3 3 5 6	1.80 B	13
					3	9 12 13 13	6.72 B	20
					4	4 5 10 10	6.31 B	14
	596.1		10		5	5 7 10 11	3.36 B	17
		Boring terminated at 11.00 ft						
			15					
			20					

GENERAL NOTES

Begin Drilling **05-04-2022** Complete Drilling **05-04-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **20CME55T[81%]**
Driller **JS&AG** Logger **A. Scifers** Checked by **J. Bensen**
Drilling Method **2.25" IDA HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **DRY**
At Completion of Drilling ▼ **DRY**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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BORING LOG WB-SGB-38

WEI Job No.: 7901-15-01

Client **TranSystems Corporation**
Project **I-80 Reconstruction (Houbolt Rd to Center St)**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 611.09 ft
North: 1764830.66 ft
East: 1046292.44 ft
Station: 637+15.65
Offset: 61.76 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	609.9	14-inch thick ASPHALT --PAVEMENT--						
	609.6	4-inch thick, black ASPHALT grinds; reclaimed pavement; dry --FILL--			1	5 6 8 11	5.25 B	19
		Very stiff to hard, brown to gray SILTY CLAY, trace gravel; moist --RDR 2--			2	10 7 13 20	7.71 B	17
			5		3	20 23 25 24	5.74 B	21
					4	5 8 10 13	2.30 B	21
			10		5	5 5 8 9	2.62 B	22
	600.1	Boring terminated at 11.00 ft						
			15					
			20					

GENERAL NOTES

Begin Drilling **05-04-2022** Complete Drilling **05-04-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **20CME55T[81%]**
Driller **JS&AG** Logger **A. Scifers** Checked by **J. Bensen**
Drilling Method **2.25" IDA HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **DRY**
At Completion of Drilling ▼ **DRY**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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BORING LOG WB-SGB-39

WEI Job No.: 7901-15-01

Client: **TranSystems Corporation**
Project: **I-80 Reconstruction (Houbolt Rd to Center St)**
Location: **Will County, Illinois**

Datum: NAVD 88
Elevation: 614.55 ft
North: 1764803.44 ft
East: 1046895.35 ft
Station: 643+16.99
Offset: 10.53 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	614.3	3-inch thick, black SILTY CLAY --TOPSOIL--						
		Stiff, black and gray SILTY CLAY, trace gravel; moist --RDR 2--			1	2 4 3 5	1.31 B	17
		--L_L(%)=40, P_L(%)=16-- --%Gravel=0.1-- --%Sand=5.5-- --%Silt=50.7-- --%Clay=43.7-- --A-6 (23)--			2	4 3 5 8	2.21 B	17
			5		3	2 4 4 6	1.72 B	22
					4	4 4 6 7	2.05 B	21
	606.9							
	606.6	Gray SILTY LOAM; wet						
		Medium stiff, gray SILTY CLAY, trace gravel; moist --RDR 2--			5	2 4 5 5	0.98 B	18
			10					
	604.1							
		Very stiff, gray SILTY CLAY LOAM to SILTY LOAM, trace gravel; moist --RDR 2--			6	8 12 12 7	3.20 B	12
	601.6							
		Boring terminated at 13.00 ft						
			15					
			20					

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)

GENERAL NOTES

Begin Drilling: **05-13-2022** Complete Drilling: **05-13-2022**
Drilling Contractor: **Wang Testing Services** Drill Rig: **D25 ATV [93%]**
Driller: **JS&AG** Logger: **A. Scifers** Checked by: **C. Marin**
Drilling Method: **2.25" IDA HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling: **8.00 ft**
At Completion of Drilling: **DRY**
Time After Drilling: **NA**
Depth to Water: **NA**

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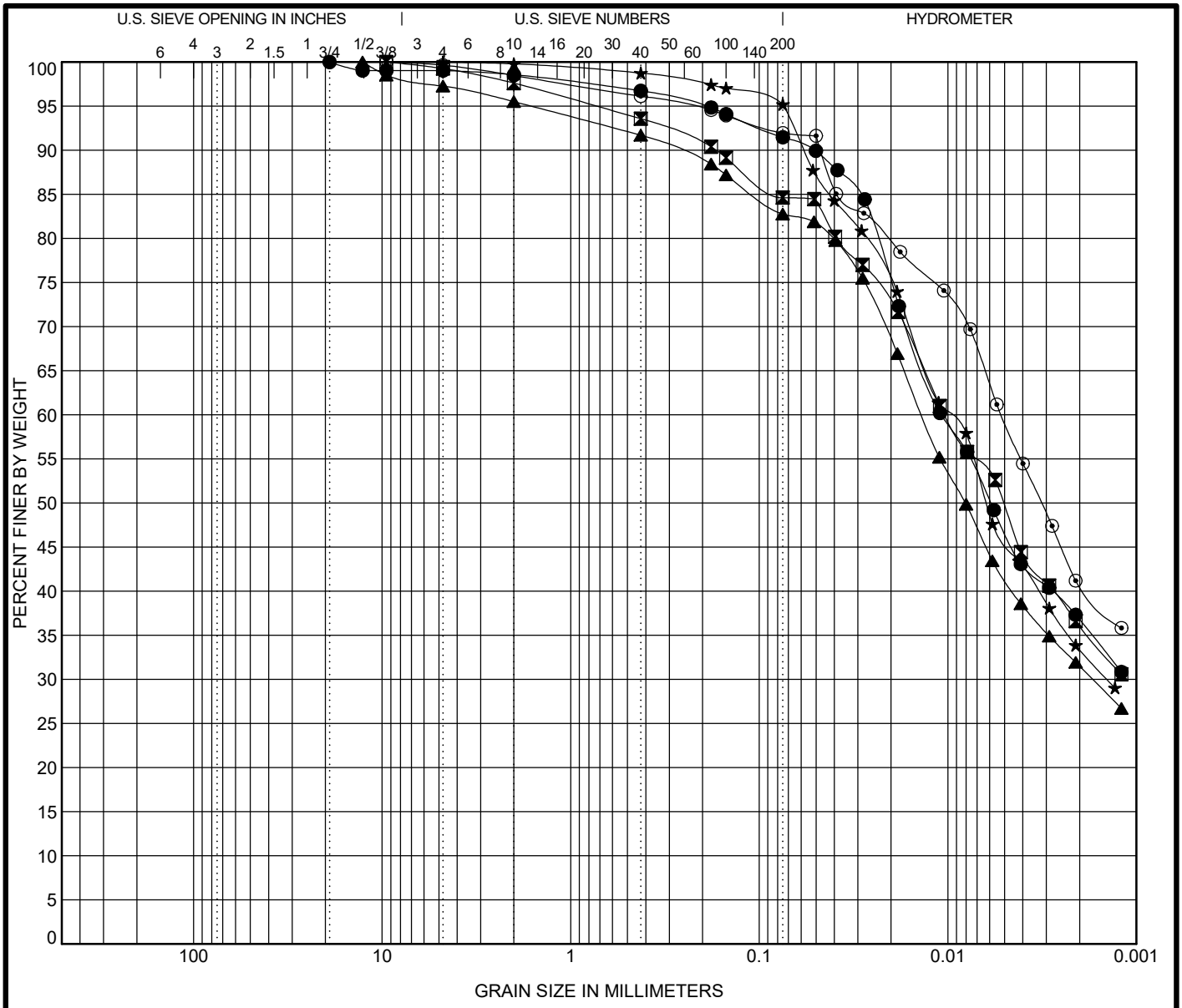
APPENDIX B



COBBLES	GRAVEL	SAND		SILT AND CLAY
		coarse	fine	

Specimen Identification			IDH Classification	LL	PL	PI	Cc	Cu
●	CL-SGB-19#2	2.0 ft	**Silty Clay**	**40**	**16**	**24**		
⊠	CL-SGB-24#3	4.0 ft	**Clay**	**36**	**15**	**21**		
▲	CL-SGB-26#2	2.0 ft	**Silty Clay**	**37**	**17**	**20**		
★	CL-SGB-30#3	4.0 ft	**Silty Clay**	**39**	**15**	**24**		
⊙	CL-SGB-33#2	2.0 ft	**Silty Clay**	**35**	**16**	**19**		

Specimen Identification			D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	CL-SGB-19#2	2.0 ft	**19**	**0.011**			**1.4**	**7.1**	**54.7**	**36.8**
⊠	CL-SGB-24#3	4.0 ft	**9.5**	**0.01**			**2.4**	**13.0**	**48.5**	**36.1**
▲	CL-SGB-26#2	2.0 ft	**12.7**	**0.014**	**0.002**		**4.5**	**12.8**	**51.3**	**31.5**
★	CL-SGB-30#3	4.0 ft	**4.75**	**0.01**	**0.001**		**0.2**	**4.9**	**61.6**	**33.4**
⊙	CL-SGB-33#2	2.0 ft	**9.5**	**0.005**			**1.5**	**6.5**	**51.2**	**40.7**

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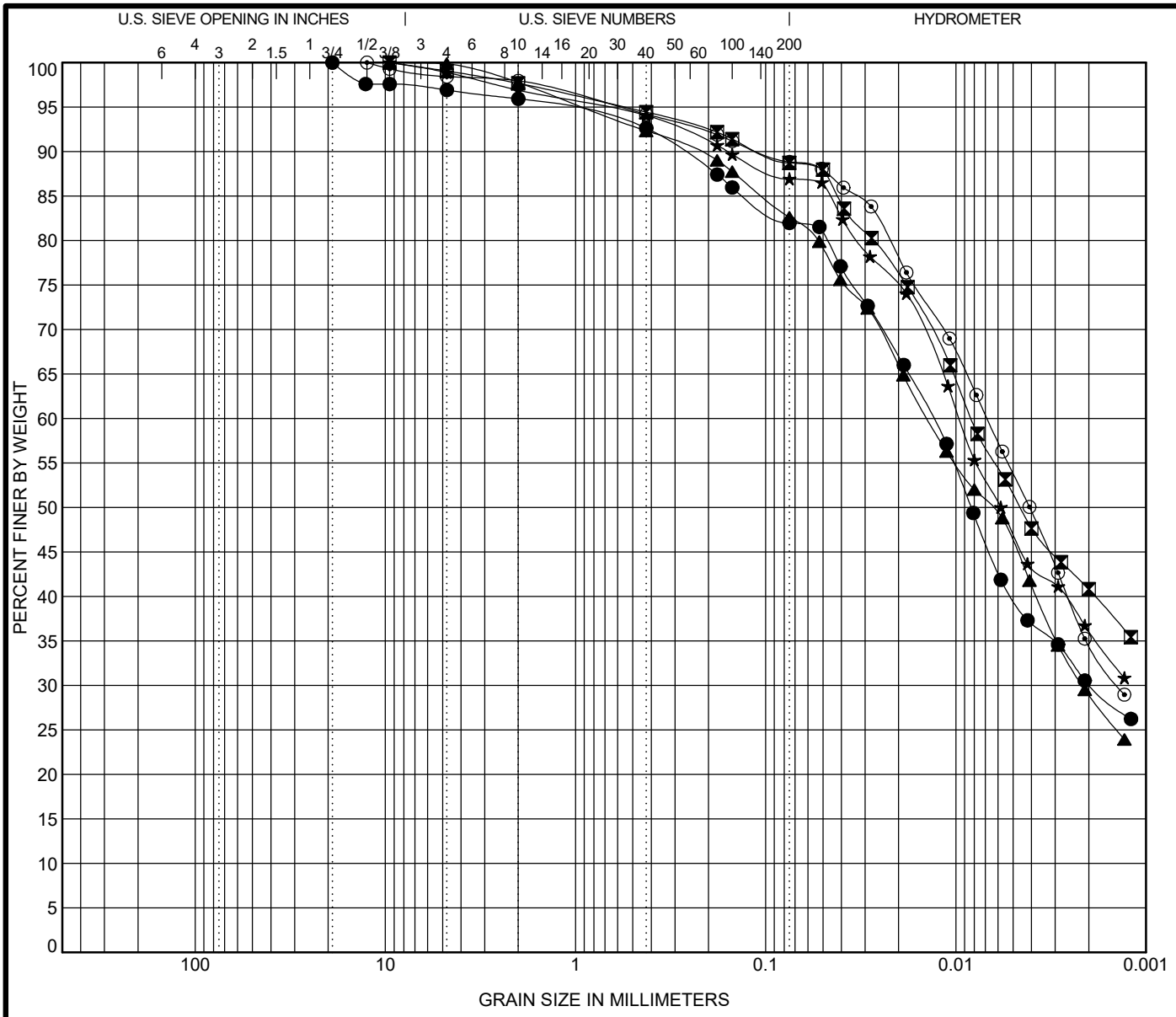
GRAIN SIZE DISTRIBUTION

Project: I-80 Reconstruction (Houbolt Rd to Center St)

Location: Will County, Illinois

Number: 7901-15-01



COBBLES	GRAVEL	SAND		SILT AND CLAY
		coarse	fine	

	Specimen Identification		IDH Classification	LL	PL	PI	Cc	Cu
●	CL-SGB-36#2	2.0 ft	**Silty Clay**	**46**	**19**	**27**		
⊠	EB-SGB-21#5	9.0 ft	**Clay**	**42**	**14**	**28**		
▲	EB-SGB-29#3	5.0 ft	**Silty Clay Loam**	**26**	**13**	**13**		
★	EB-SGB-38#1	0.0 ft	**Silty Clay**	**41**	**14**	**27**		
⊙	JJT-BSB-02#3	6.0 ft	**Silty Clay**	**36**	**16**	**20**		

	Specimen Identification		D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	CL-SGB-36#2	2.0 ft	**19**	**0.013**	**0.002**		**4.1**	**14.0**	**51.8**	**30.2**
⊠	EB-SGB-21#5	9.0 ft	**9.5**	**0.008**			**2.3**	**9.0**	**47.9**	**40.8**
▲	EB-SGB-29#3	5.0 ft	**9.5**	**0.014**	**0.002**		**2.2**	**15.2**	**53.6**	**29.0**
★	EB-SGB-38#1	0.0 ft	**9.5**	**0.01**			**3.1**	**10.0**	**50.8**	**36.1**
⊙	JJT-BSB-02#3	6.0 ft	**12.5**	**0.007**	**0.001**		**2.0**	**9.1**	**54.2**	**34.6**

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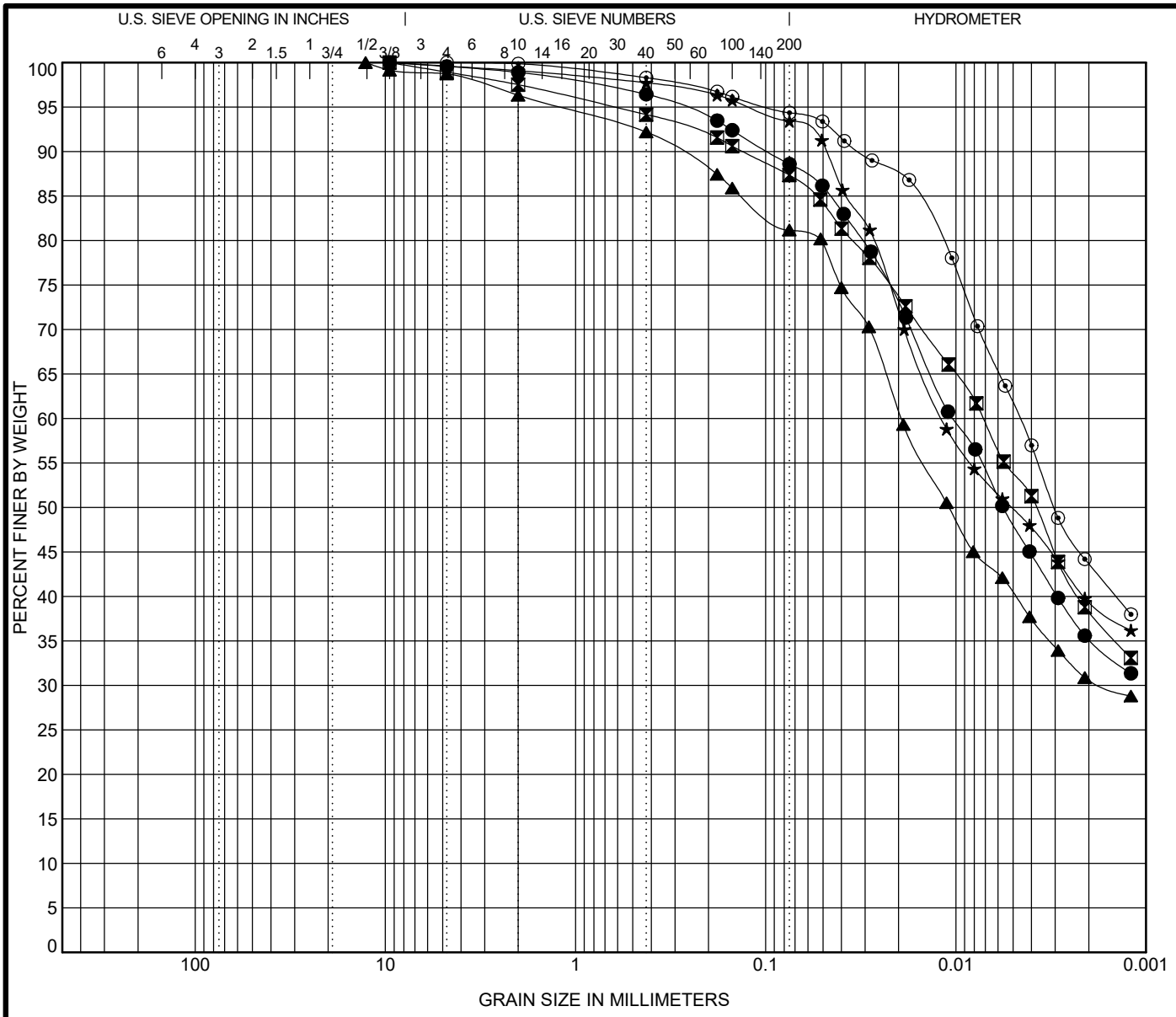
Fax: 630 953-9938

GRAIN SIZE DISTRIBUTION

Project: I-80 Reconstruction (Houbolt Rd to Center St)

Location: Will County, Illinois

Number: 7901-15-01



COBBLES	GRAVEL	SAND		SILT AND CLAY
		coarse	fine	

Specimen Identification			IDH Classification	LL	PL	PI	Cc	Cu
●	MLA-BSB-02#3	6.0 ft	Silty Clay	44	19	25		
⊠	WB-SGB-20#4	7.0 ft	Silty Clay	40	15	25		
▲	WB-SGB-27#2	3.0 ft	Silty Clay	44	13	31		
★	WB-SGB-32#2	3.0 ft	Silty Clay	53	15	38		
⊙	WB-SGB-39#	3.0 ft	Silty Clay	40	16	24		

Specimen Identification			D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	MLA-BSB-02#3	6.0 ft	9.5	0.01			1.1	10.4	53.3	35.2
⊠	WB-SGB-20#4	7.0 ft	9.5	0.007			2.5	10.3	49.0	38.3
▲	WB-SGB-27#2	3.0 ft	12.7	0.019	0.002		3.7	15.2	50.5	30.7
★	WB-SGB-32#2	3.0 ft	9.5	0.012			0.9	5.7	53.9	39.5
⊙	WB-SGB-39#	3.0 ft	4.75	0.005			0.1	5.5	50.7	43.7

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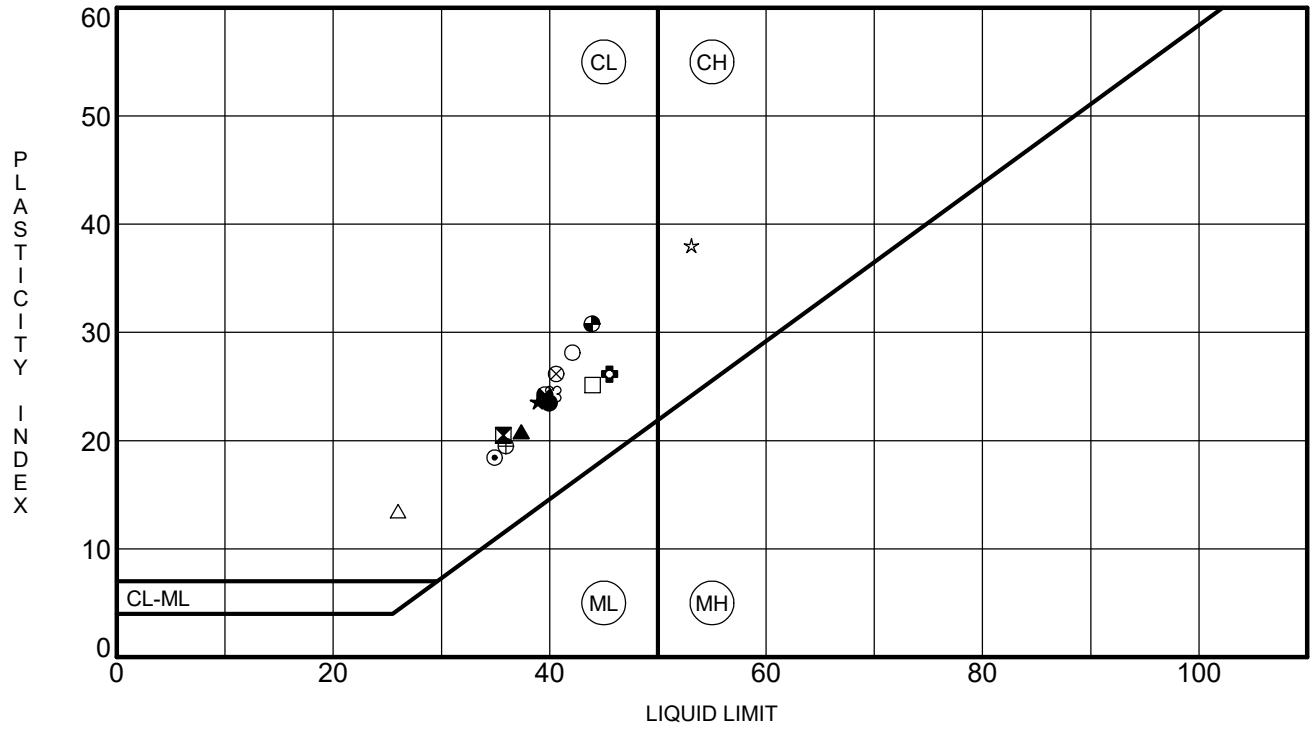
GRAIN SIZE DISTRIBUTION

Project: I-80 Reconstruction (Houbolt Rd to Center St)

Location: Will County, Illinois

Number: 7901-15-01



	Specimen Identification		LL	PL	PI	Fines	IDH Classification
●	CL-SGB-19#2	2.0 ft	40	16	24	91	Silty Clay
⊠	CL-SGB-24#3	4.0 ft	36	15	21	85	Clay
▲	CL-SGB-26#2	2.0 ft	37	17	20	83	Silty Clay
★	CL-SGB-30#3	4.0 ft	39	15	24	95	Silty Clay
⊙	CL-SGB-33#2	2.0 ft	35	16	19	92	Silty Clay
✿	CL-SGB-36#2	2.0 ft	46	19	27	82	Silty Clay
○	EB-SGB-21#5	9.0 ft	42	14	28	89	Clay
△	EB-SGB-29#3	5.0 ft	26	13	13	83	Silty Clay Loam
⊗	EB-SGB-38#1	0.0 ft	41	14	27	87	Silty Clay
⊕	JJT-BSB-02#3	6.0 ft	36	16	20	89	Silty Clay
□	MLA-BSB-02#3	6.0 ft	44	19	25	89	Silty Clay
⊛	WB-SGB-20#4	7.0 ft	40	15	25	87	Silty Clay
◕	WB-SGB-27#2	3.0 ft	44	13	31	81	Silty Clay
☆	WB-SGB-32#2	3.0 ft	53	15	38	93	Silty Clay
⊠	WB-SGB-39#	3.0 ft	40	16	24	94	Silty Clay

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ATTERBERG LIMITS' RESULTS

Project: I-80 Reconstruction (Houbolt Rd to Center St)

Location: Will County, Illinois

Number: 7901-15-01

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ORGANIC CONTENT in SOILS by LOSS on IGNITION

ASTM D 2974, Method C

Client: Transystems
Project: I-80
WEI Job: 7901-15-01
Type/Condition: SS
Testing Furnace Temp °C.: 440

Analyst Name: M. Ciapas
Date Received: Various
Date Tested: 7/7/2022

Sample No./ Depth	CL-SGB-04 SS#2 (2-4ft.)	CL-SGB-11 SS#2 (2-4ft.)	CL-SGB-19 SS#4 (6-8ft.)	CL-SGB-19 SS#1 (0-2ft.)	
Wet Soil + Tare	70.3	83.3	76.77	86.82	
Dry Soil + Tare	64.02	75.16	69.96	78.18	
Tare Mass	42.55	43.73	42.61	43.71	
w (%)	29	26	25	25	
Dry Soil + Tare	64.02	75.16	69.96	78.18	
Ash+ Tare	61.87	73.26	68.47	76.35	
Tare Mass	42.55	43.73	42.61	43.71	
Ash Content (%)	90	94	95	95	
Organic Content (%)	10.0	6.0	5.4	5.3	

Prepared By:_____

Reviewed By:_____

AASHTO ACCREDITATION PROGRAM

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APPENDIX C

Illinois Department of Transportation

Summary Report on Pavement, Base and Subbase Design

State Job Number: 7901-15-01 Project: I-80 Reconstruction Route: I-80

Section: _____ City or County: Will Date: 07/18/2022

ADT: _____ Year: _____ Design Period: _____ Class Highway: _____

Passenger Cars Per Day: _____ Trucks S.U. Per Day: _____ Trucks M.U. Per Day: _____

Pavement Structure: _____

Type Surface Course: _____ Thickness: _____

Type Base Course: _____ Thickness: _____

Type Subbase Material: _____ Thickness: _____

Sta. to Sta.	518+00 to 642+00	+ to +	+ to +	+ to +
*Sta. of Test	597+62.24			
*Drainage Class	Poor			
*Ave. Frost Penetration	45 to 60 in.			
Illinois Textural Classification	Silty Clay			
Classification and Group Index (AASHTO M 145)	A-6 (23)			
*Percent Silt (AASHTO T 88)	61.6			
*Illinois Bearing Ratio (%)				
Std. Dry Density (IL Mod. AASHTO T 99)				
Optimum Moisture (IL Mod AASHTO T 99)				

* Indicates worst condition within the above station limits.

Remarks: _____

SOIL TEST DATA

ROUTE
I-80 Reconstruction

PROJECT
7901-15-01/ KE225089 I 80

SECTION
I-80 (Sta. 518+00 to Sta. 642+00)

COUNTY
Will

Lab. No.	CL-SGB-19 No.2	CL-SGB-24 No.3	CL-SGB-26 No.2	CL-SGB-30 No.3	CL-SGB-33 No.2	CL-SGB-36 No.2
Station ft)	531+56.79	561+54.81	572+74.72	597+62.24	621+60.71	639+55.72
Offset (ft)	2.31 RT	2.25 LT	0.96 LT	2.51 LT	2.87 LT	4.60 LT
Depth (ft)	2.0	4.0	2.0	4.0	2.0	2.0
AASHTO M 145 Classification and Group Index	A-6 (22)	A-6 (17)	A-6 (16)	A-6 (23)	A-6 (17)	A-7-6 (22)
Illinois Textural Classification (Illinois Method)	Silty Clay	Clay	Silty Clay	Silty Clay	Silty Clay	Silty Clay
Gradation--Passing 1" Sieve %						
--"-- 3/4" Sieve %	100.0					100
--"-- 1/2" Sieve %	99.0		100.0			97.6
--"-- No.4 Sieve %	99.0	99.3	97.3	100.0	99.6	96.9
--"-- No.10 Sieve %	98.6	97.6	95.5	99.8	98.5	95.9
--"-- No.4 0 Sieve %	96.7	93.6	91.7	98.8	96.1	92.6
--"-- No.100 Sieve %	94.1	89.1	87.2	97.0	93.9	86.0
--"-- No.200 Sieve %	91.4	84.6	82.7	94.9	91.9	82.0
Sand % (AASHTO T 88)	7.1	13.0	12.8	4.9	6.5	14.0
Silt % (AASHTO T 88)	54.7	48.5	51.3	61.6	51.2	51.8
Clay % (AASHTO T 88)	36.8	36.1	31.5	33.4	40.7	30.2
Liquid limit % (AASHTO T 89)	40	36	37	39	35	46
Plasticity index % (AASHTO T 90)	23	20	21	24	18	26
IBR % (Illinois Method)						
Standard Dry Density % (AASHTO T 99)						
Optimum Moisture % (AASHTO T 99)						
Subgrade Support Rating	FAIR	FAIR	FAIR	FAIR	FAIR	FAIR
Insitu Moisture % (AASHTO T 99)	24	37	36	28	19	34

SOIL TEST DATA

SECTION
I-80 (Sta. 518+00 to Sta. 642+00)

Lab. No.	EB-SGB-21 No.5	EB-SGB-29 No.3	EB-SGB-38 No.1	JJT-BSB-02 No.3	MLA-BSB-02 No.3	WB-SGB-20 No.4
Station ft)	539+83.89	588+11.96	640+37.93	534+41.45	614+56.55	529+47.83
Offset (ft)	67.29 RT	80.86 RT	11.01 RT	50.05 LT	6.23 LT	57.69 LT
Depth (ft)	9	5.0	0.0	6.0	6.0	7.0
AASHTO M 145 Classification and Group Index	A-7-6 (25)	A-6 (8)	A-7-6 (23)	A-6 (17)	A-7-6 (23)	A-6 (21)
Illinois Textural Classification (Illinois Method)	Clay	Silty Clay Loam	Silty Clay	Silty Clay	Silty Clay	Silty Clay
Gradation--Passing 1" Sieve %						
--"-- 3/4" Sieve %						
--"-- 1/2" Sieve %						
--"-- No.4 Sieve %	99	99.9	98.9	98.4	99.6	98.9
--"-- No.10 Sieve %	97.7	97.8	96.9	98.0	98.9	97.5
--"-- No.4 0 Sieve %	94.4	92.3	94.1	94.2	96.4	94.2
--"-- No.100 Sieve %	91.4	87.7	89.7	91.2	92.4	90.6
--"-- No.200 Sieve %	88.7	82.5	86.9	88.8	88.5	87.3
Sand % (AASHTO T 88)	9	15.2	10.0	9.1	10.4	10.3
Silt % (AASHTO T 88)	47.9	53.6	50.8	54.2	53.3	49.0
Clay % (AASHTO T 88)	40.8	29.0	36.1	34.6	35.2	38.3
Liquid limit % (AASHTO T 89)	42	26	41	36	44	40
Plasticity index % (AASHTO T 90)	28	13	26	19	25	24
IBR % (Illinois Method)						
Standard Dry Density % (AASHTO T 99)						
Optimum Moisture % (AASHTO T 99)						
Subgrade Support Rating	FAIR	POOR	FAIR	FAIR	FAIR	FAIR
Insitu Moisture % (AASHTO T 99)	22	13	30	23	27	17

SOIL TEST DATA

SECTION
I-80 (Sta. 518+00 to Sta. 642+00)

Lab. No.	WB-SGB-27 No.2	WB-SGB-32 No.2	WB-SGB-39 No.
Station ft)	571+06.09	601+11.31	643+16.99
Offset (ft)	72.23 LT	55.46 LT	10.53 LT
Depth (ft)	3.0	3.0	
AASHTO M 145 Classification and Group Index	A-7-6 (24)	A-7-6 (37)	A-6 (23)
Illinois Textural Classification (Illinois Method)	Silty Clay	Silty Clay	Silty Clay
Gradation--Passing 1" Sieve %			
--"-- 3/4" Sieve %			
--"-- 1/2" Sieve %	100.0		
--"-- No.4 Sieve %	98.7	99.6	100.0
--"-- No.10 Sieve %	96.3	99.1	99.9
--"-- No.4 0 Sieve %	92.2	97.7	98.3
--"-- No.100 Sieve %	85.9	95.8	96.2
--"-- No.200 Sieve %	81.2	93.3	94.3
Sand % (AASHTO T 88)	15.2	5.7	5.5
Silt % (AASHTO T 88)	50.5	53.9	50.7
Clay % (AASHTO T 88)	30.7	39.5	43.7
Liquid limit % (AASHTO T 89)	44	53	40
Plasticity index % (AASHTO T 90)	31	38	24
IBR % (Illinois Method)			
Standard Dry Density % (AASHTO T 99)			
Optimum Moisture % (AASHTO T 99)			
Subgrade Support Rating	FAIR	FAIR	FAIR
Insitu Moisture % (AASHTO T 99)	20	23	

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APPENDIX D

APPENDIX D-1

Wang Engineering

Pavement Composition - Shoulder
I-80 East Mainline
Station 518+00 to Station 642+00

	Station	Offset	Asphalt (in)	Concrete (in)	Basecourse Type / Thickness (in)	Topsoil Type	Topsoil Thickness (in)	Distance from Edge of Pavement (ft)
EB-SGB-18	521+58.67	59.6	14	-	-	Black Sandy Loam	7	10'
EB-SGB-19	527+67.24	63.8	14	-	Gravel / 8	Black Sandy Loam	8	10'
EB-SGB-20	532+93.68	63.7	11	-	Gravel / 10	Black Sandy Loam	8	10'
EB-SGB-21	539+83.89	67.3	14	-	-	Black Sandy Loam	10	10'
EB-SGB-22	545+89.94	63.0	15	-	-	Black Sandy Loam	8	10'
EB-SGB-23	551+97.67	73.9	12	-	-	Black Sandy Loam	5	10'
EB-SGB-24	557+97.91	63.1	14	-	Sandy gravel / 5	Black Sandy Loam	4	10'
EB-SGB-25	564+04.91	59.9	16	-	-	Black Sandy Loam	5	10'
EB-SGB-26	570+10.27	62.8	9	-	Sandy gravel	Black Sandy Loam	4	10'
EB-SGB-27	576+03.56	90.4	-	11	Gravel / 3	Black Sandy Loam	6	10'
EB-SGB-28	582+10.64	65.2	14	-	Sandy gravel or RAP/ 2	Black Sandy Loam	6	10'
EB-SGB-29	588+11.96	80.9	10	-	Sandy gravel or RAP/ 1	Black Sandy Loam	4	10'
EB-SGB-30	594+08.33	67.9	10	-	Gravel / 4	Black Sandy Loam	4	10'
EB-SGB-31	600+01.84	92.2	-	-	-	Black Silty Clay Loam	7	1'
EB-SGB-32	606+10.96	75.0	10	-	Gravel or RAP/ 4	Black Sandy Loam	6	10'
EB-SGB-33	612+15.6	55.9	10	-	RAP / 8	Black Sandy Loam	5	10'
EB-SGB-34	618+09.2	63.2	10	-	RAP / 10	Black Sandy Loam	6	10'
EB-SGB-35	624+15.09	65.3	10	-	RAP / 6	Black Sandy Loam	5	10'
EB-SGB-36	629+15.07	65.3	3	-	Sandy gravel / 9	Not Measured	-	-
EB-SGB-37	636+12.49	65.6	4	-	Sandy gravel / 8	Not Measured	-	-
EB-SGB-38	640+37.93	11.0	-	-	-	Black Silty Clay	6	10'
CL-SGB-17	519+63.71	5.5				Black Silty Clay	6	
CL-SGB-18	525+11.33	3.7				Black Silty Clay	12	
CL-SGB-19	531+56.79	2.3				Black Silty Clay	22	
CL-SGB-20	537+71.23	5.9				Black Silty Clay	11	
CL-SGB-21	543+60.16	1.4				Black Silty Clay	8	
CL-SGB-22	549+67.42	3.4				Black Silty Clay	6	
CL-SGB-23	555+57.51	-0.6				Black Silty Clay	3	
CL-SGB-24	561+54.81	-2.3				Black Silty Clay	6	
CL-SGB-25	567+56.86	-2.6				Black Silty Clay Loam	3	
CL-SGB-26	572+74.72	-1.0				Black Sandy Loam	1	
CL-SGB-27	579+54.54	4.4				Black Silty Clay	2	
CL-SGB-28	585+56.01	-2.2				Black Silty Clay Loam	5	
CL-SGB-29	591+66.28	1.3				Black Silty Clay	1	
CL-SGB-30	597+62.24	-2.5				Black Silty Clay	13	
CL-SGB-31	603+63.72	-6.7				Black Silty Clay	8	
CL-SGB-32	609+58.55	-1.5				Black Silty Clay	6	
CL-SGB-33	621+60.71	-2.9				Black Silty Clay	8	
CL-SGB-34	627+60.74	2.7				Black Silty Clay	7	
CL-SGB-35	633+55.71	14.5				Black Silty Clay	6	
CL-SGB-36	639+55.72	-4.6				Black Silty Clay	10	
CL-SGB-37	643+83.72	9.6				Black Silty Clay	6	
WB-SGB-19	523+37.13	-57.6	12	-	-	Black Sandy Loam	6	10'
WB-SGB-20	529+47.83	-57.7	16	-	RAP / 3	Black Sandy Loam	8	10'
WB-SGB-21	536+77.55	-57.4	15	-	RAP / 5	Black Sandy Loam	6	10'
WB-SGB-22	541+31.4	-58.8	12	-	RAP / 2	Black Sandy Loam	5	10'
WB-SGB-23	547+19.51	-56.5	15	-	-	Black Sandy Loam	6	10'
WB-SGB-24	553+19.14	-60.4	14	-	RAP / 2	Black Sandy Loam	6	10'
WB-SGB-25	559+16.73	-60.0	14	-	RAP	Black Sandy Loam	6	10'
WB-SGB-26	565+10.68	-60.6	9	-	Gravel / 3	Black Sandy Loam	5	10'
WB-SGB-27	571+06.09	-72.2	10	-	Gravel / 3	Black Sandy Loam	4	10'
WB-SGB-28	577+02.28	-84.3	-	-	-	Black Silty Clay Loam	6	11'
WB-SGB-29	583+03.76	-61.4	13	-	Gravel / 3	Black Sandy Loam	9	10'

APPENDIX D-1

Pavement Composition - Shoulder
I-80 East Mainline
Station 518+00 to Station 642+00

	Station	Offset	Asphalt (in)	Concrete (in)	Basecourse Type / Thickness (in)	Topsoil Type	Topsoil Thickness (in)	Distance from Edge of Pavement (ft)
WB-SGB-30	589+76.81	-74.2	12	-	RAP / 2	Black Sandy Loam	4	10'
WB-SGB-31	595+09.22	-59.9	12	-	RAP / 2	Black Sandy Loam	5	10'
WB-SGB-32	601+11.31	-55.5	12	-	Gravel / 7	Not Measured	-	-
WB-SGB-33	607+07.2	-59.1	10	-	Gravel / 3	Black Sandy Loam	5	10'
WB-SGB-34	612+28.98	-59.0	13	-	RAP / 1	Black Sandy Loam	5	10'
WB-SGB-35	619+04.25	-58.2	14	-	RAP / 3	Black Sandy Loam	9	10'
WB-SGB-36	625+12.73	-58.5	14	-	-	Black Sandy Loam	5	10'
WB-SGB-37	631+16.37	-57.9	14	-	-	Black Sandy Loam	9	10'
WB-SGB-38	637+15.65	-61.8	14	-	Gravel / 1	Black Sandy Loam	8	10'
WB-SGB-39	643+16.99	-10.5	-	-	-	Black Silty Clay	3	10'

EXHIBIT D-2

Pavement Composition - Mainline
I-80 East Mainline
Station 518+00 to Station 642+00

	Station	Offset	Asphalt (in)	Concrete (in)	Total Thickness (in)	Basecourse Type / Thickness (in)
PC-EB-05	541+94.81	57.14	4	7.5	11.5	Gravel
PC-EB-06	567+95.11	38.78	3.75	7.75	11.5	RAP (4.5")
PC-EB-07	594+83.68	59.45	4	8.5	12.5	RAP
PC-EB-08	621+36.25	36.68	4.25	8	12.25	Gravel
PC-WB-05	528+73.43	-31.40	4	13.25	17.25	RAP
PC-WB-06	555+24.4	-53.16	4	10.5	14.5	Gravel
PC-WB-07	583+09.72	-32.18	7	8	15	RAP
PC-WB-08	608+02.27	-51.73	4	7	11	Gravel
PC-WB-09	634+44.93	-52.08	4.25	8.5	12.75	Gravel

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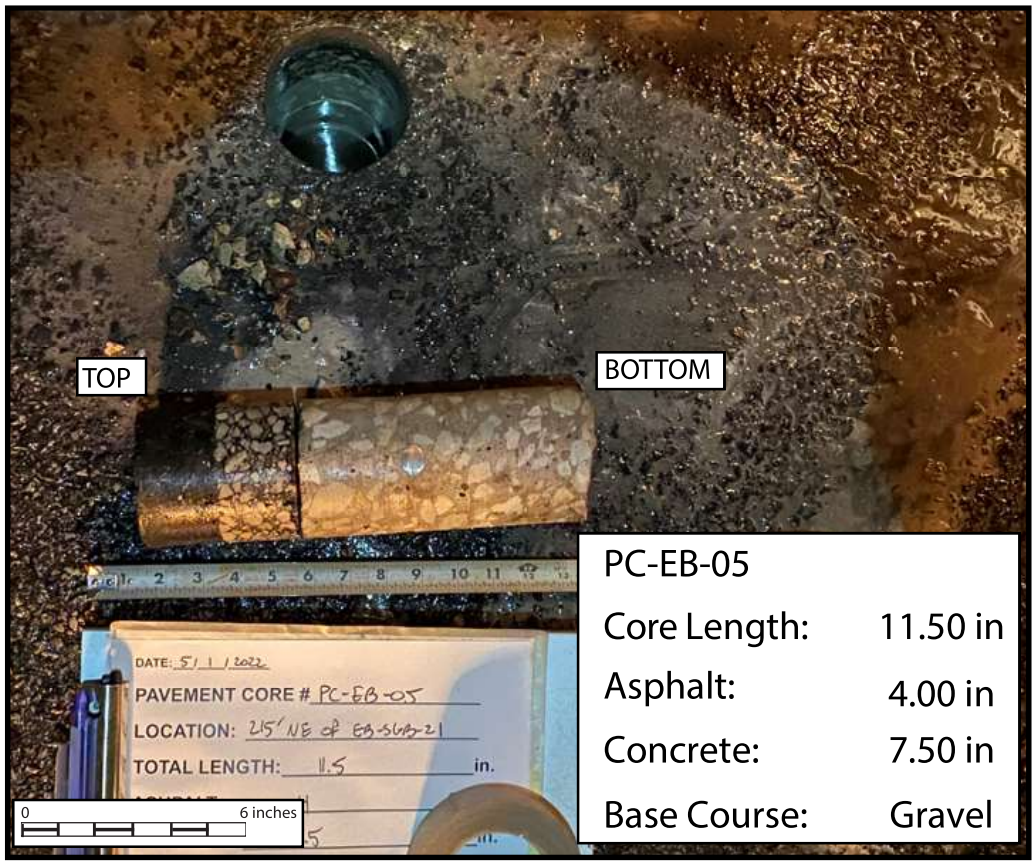
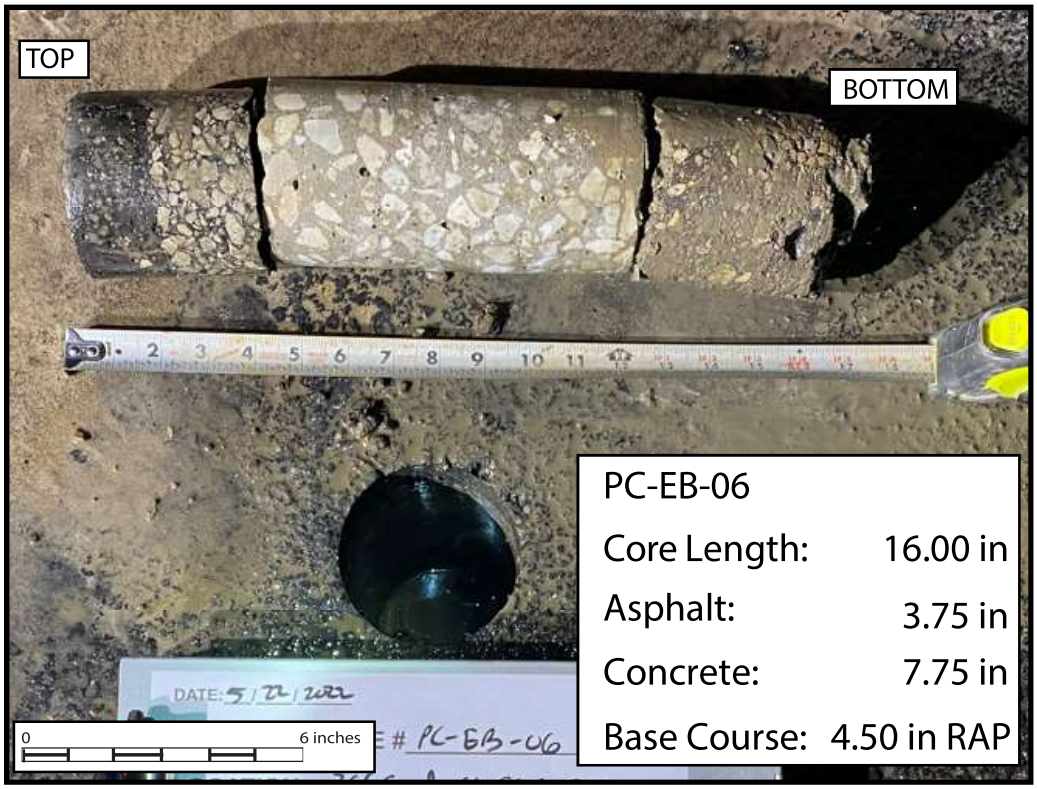
APPENDIX E



PC-EB-05

Core Length:	11.50 in
Asphalt:	4.00 in
Concrete:	7.50 in
Base Course:	Gravel



PC-EB-06

Core Length:	16.00 in
Asphalt:	3.75 in
Concrete:	7.75 in
Base Course:	4.50 in RAP

PAVEMENT CORES: I-80 RECONSTRUCTION; EAST MAINLINE FORM STATION 518+00 TO STATION 634+50, WILL COUNTY, ILLINOIS

SCALE: GRAPHICAL | APPENDIX E-1 | DRAWN BY: J. Bensen, CHECKED BY: A. Kurnia

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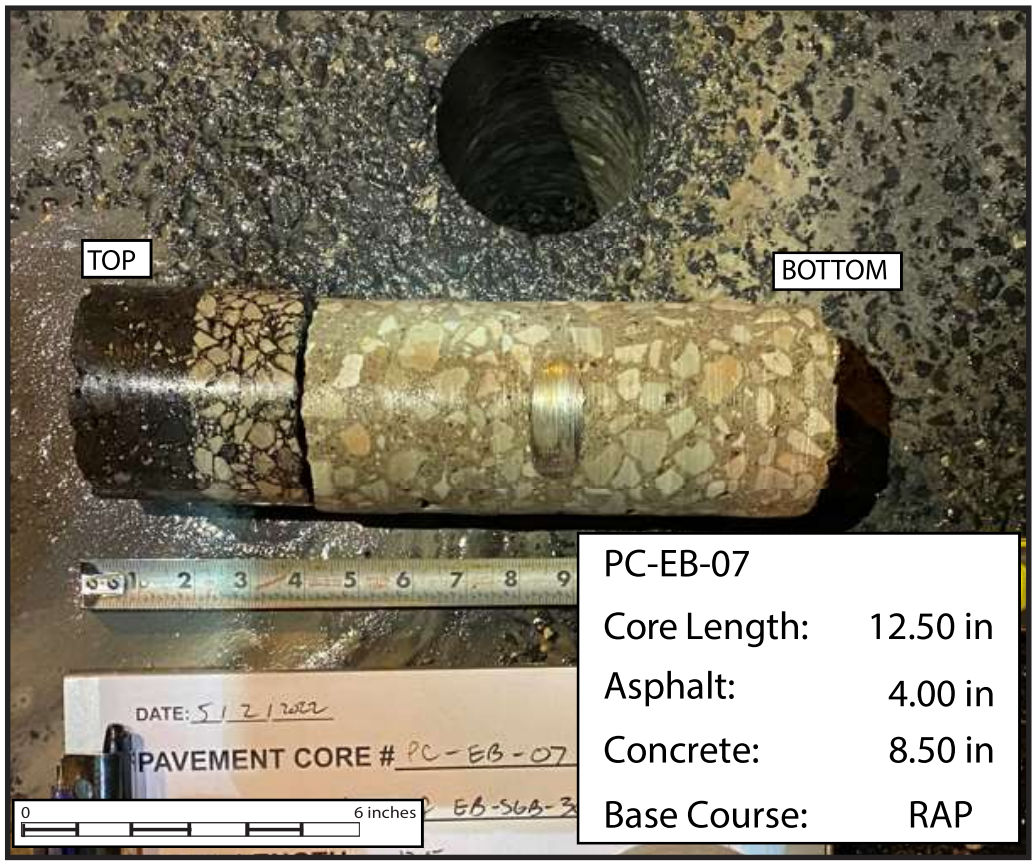
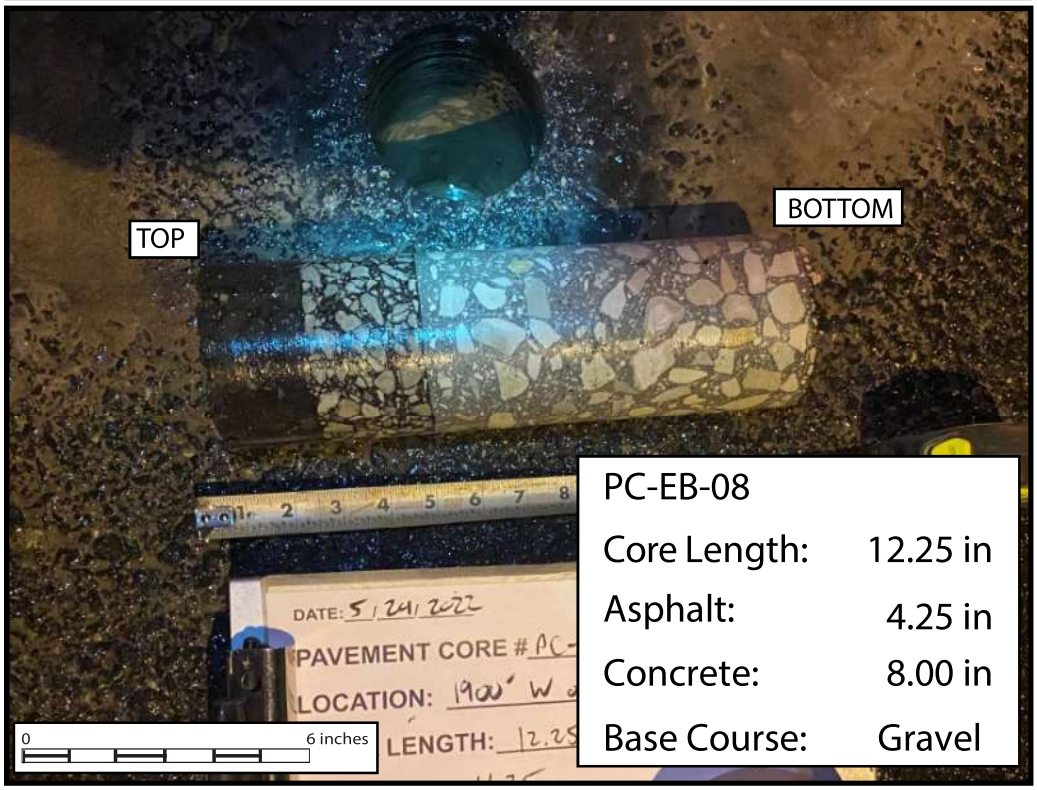
FOR TRANSYSTEMS | 7901-15-01



PC-EB-07	
Core Length:	12.50 in
Asphalt:	4.00 in
Concrete:	8.50 in
Base Course:	RAP



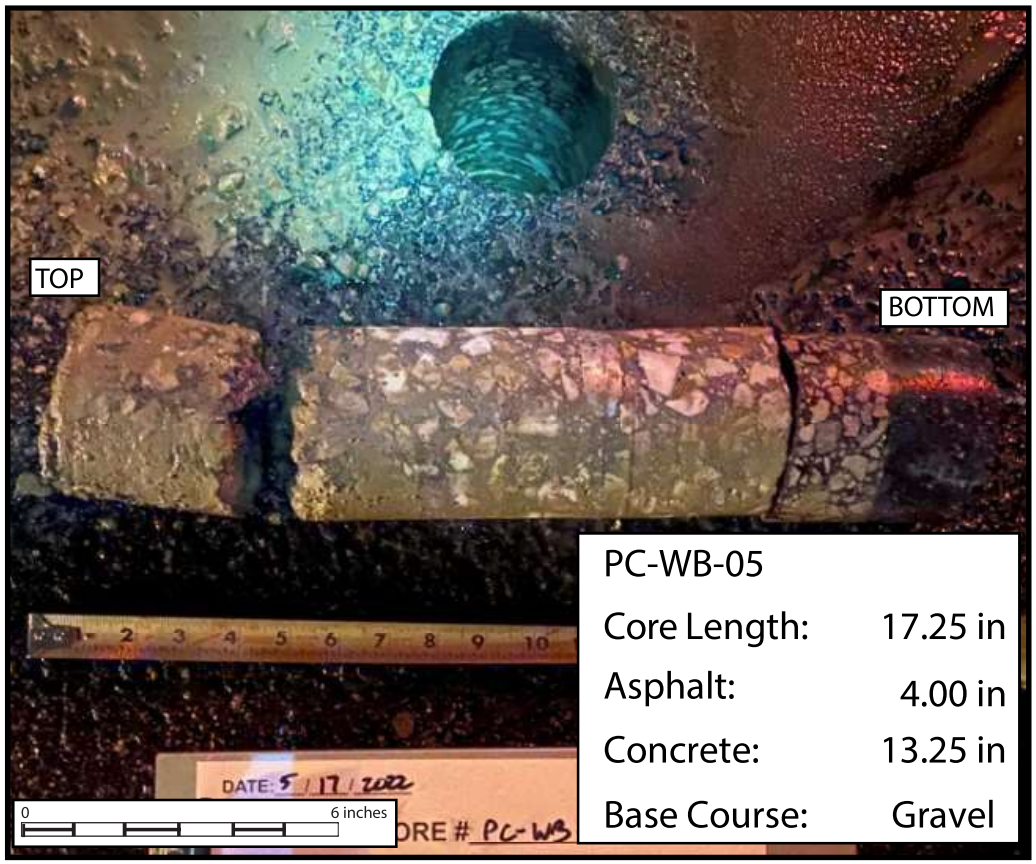
PC-EB-08	
Core Length:	12.25 in
Asphalt:	4.25 in
Concrete:	8.00 in
Base Course:	Gravel

PAVEMENT CORES: I-80 RECONSTRUCTION; EAST MAINLINE FORM STATION 518+00 TO STATION 634+50, WILL COUNTY, ILLINOIS

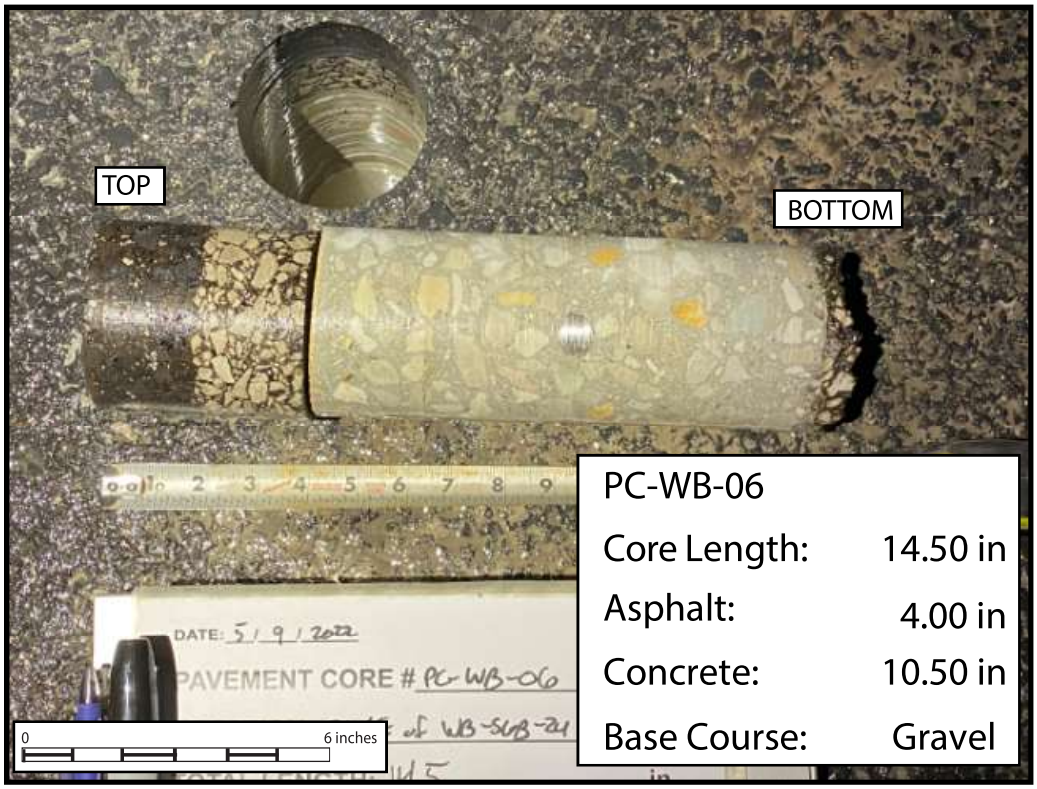
SCALE: GRAPHICAL | APPENDIX E-2 | DRAWN BY: J. Bensen, CHECKED BY: A. Kurnia

Wang Engineering
1145 N. Main Street
Lombard, IL 60148
www.wangeng.com

FOR TRANSYSTEMS | 7901-15-01



PC-WB-05	
Core Length:	17.25 in
Asphalt:	4.00 in
Concrete:	13.25 in
Base Course:	Gravel



PC-WB-06	
Core Length:	14.50 in
Asphalt:	4.00 in
Concrete:	10.50 in
Base Course:	Gravel

PAVEMENT CORES: I-80 RECONSTRUCTION; EAST MAINLINE FORM STATION 518+00 TO STATION 634+50, WILL COUNTY, ILLINOIS

SCALE: GRAPHICAL	APPENDIX E-3	DRAWN BY: J. Bensen CHECKED BY: A. Kurnia

Wang Engineering
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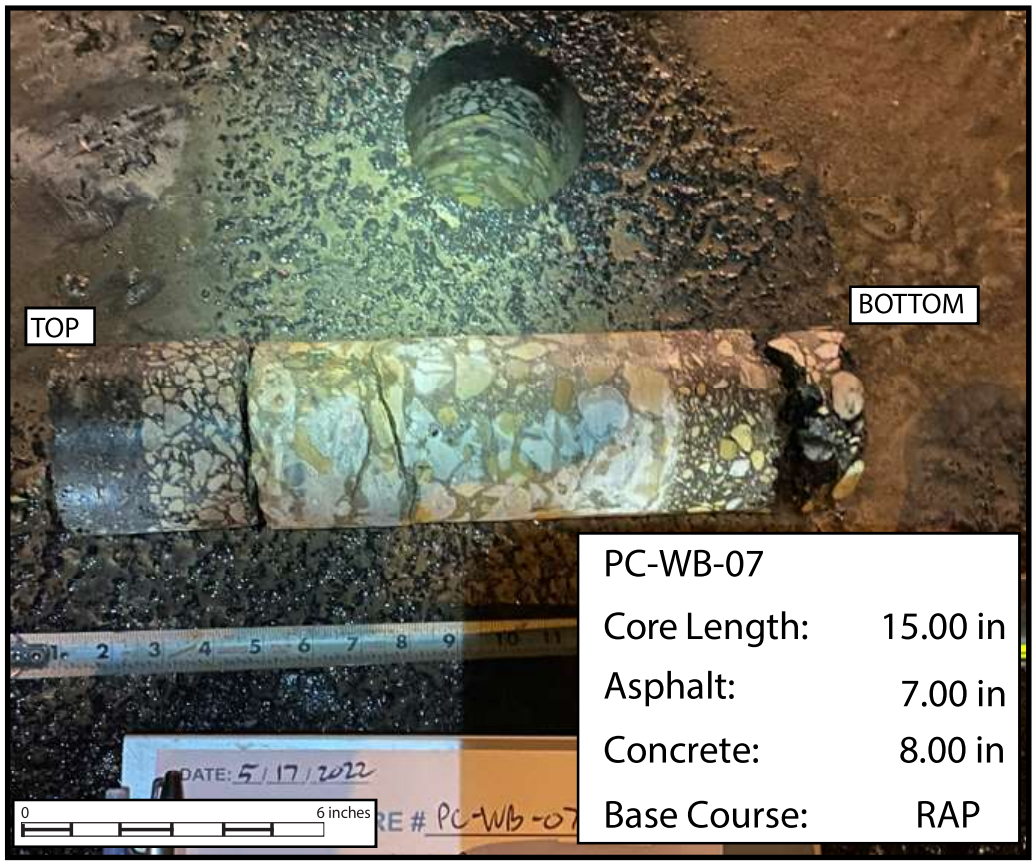
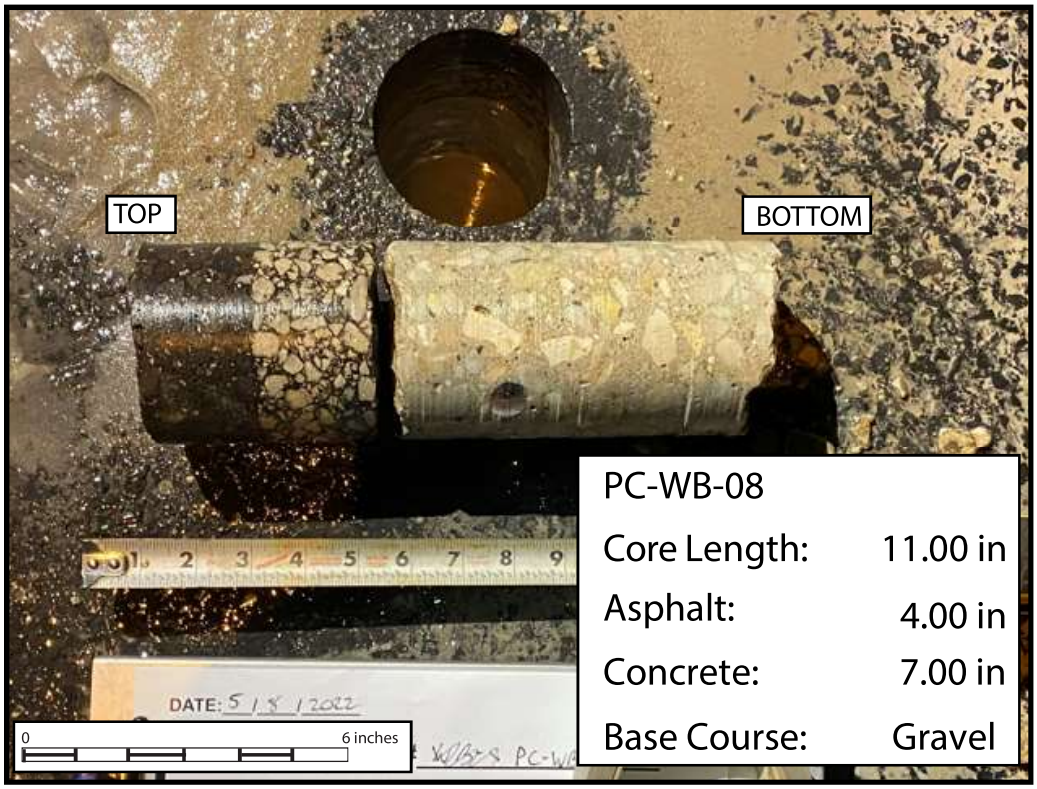
FOR TRANSYSTEMS	7901-15-01



PC-WB-07	
Core Length:	15.00 in
Asphalt:	7.00 in
Concrete:	8.00 in
Base Course:	RAP



PC-WB-08	
Core Length:	11.00 in
Asphalt:	4.00 in
Concrete:	7.00 in
Base Course:	Gravel

PAVEMENT CORES: I-80 RECONSTRUCTION; EAST MAINLINE FORM STATION 518+00 TO STATION 634+50, WILL COUNTY, ILLINOIS

SCALE: GRAPHICAL	APPENDIX E-4	DRAWN BY: J. Bensen CHECKED BY: A. Kurnia

Wang Engineering
1145 N. Main Street
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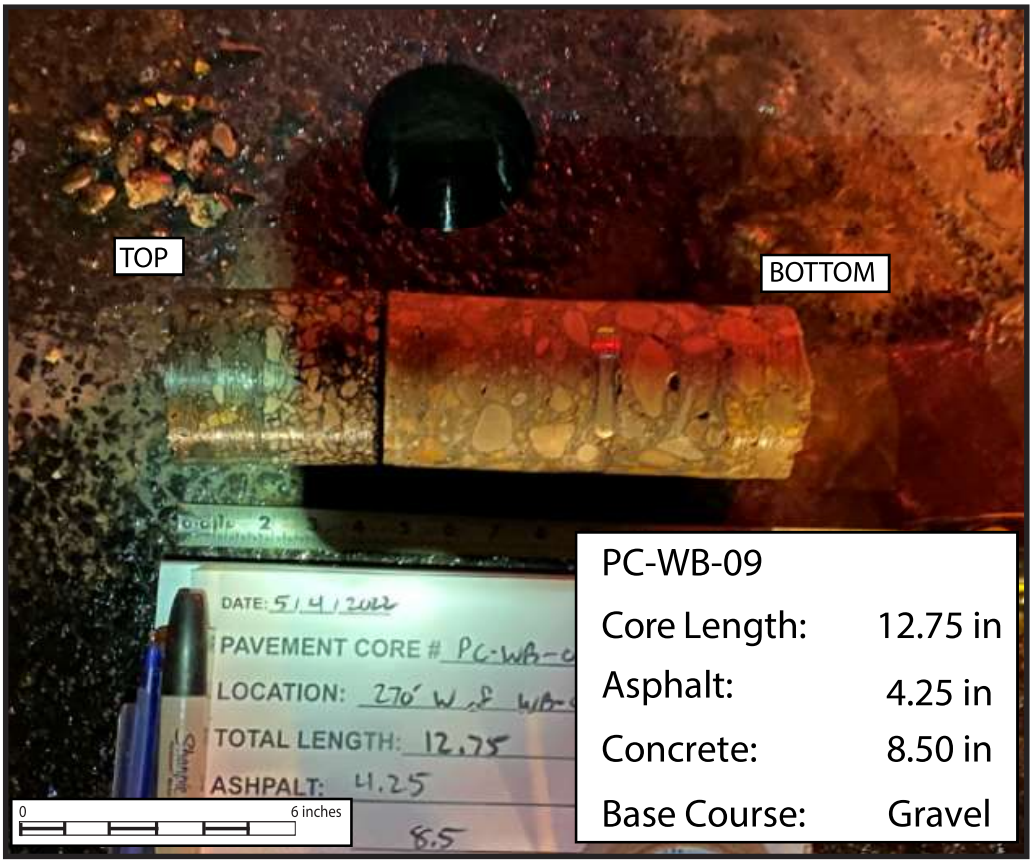
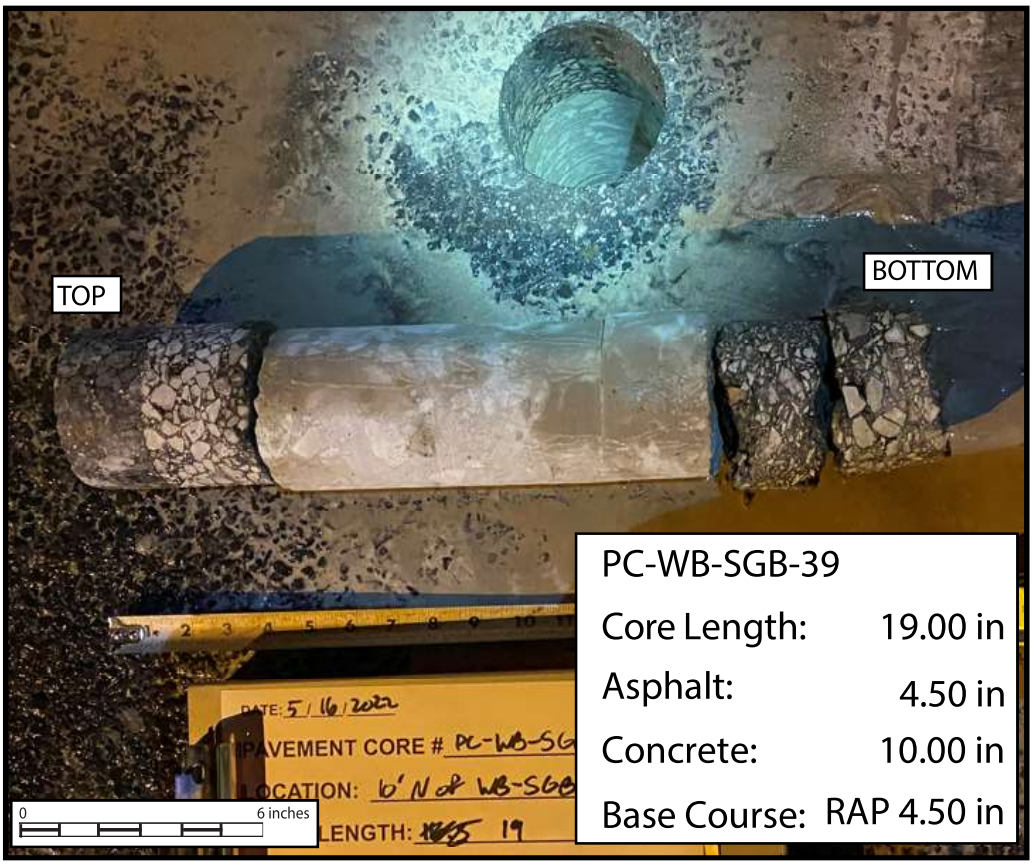
FOR TRANSYSTEMS	7901-15-01





PAVEMENT CORES: I-80 RECONSTRUCTION; EAST MAINLINE FORM STATION 518+00 TO STATION 634+50, WILL COUNTY, ILLINOIS

SCALE: GRAPHICAL	APPENDIX E-5	DRAWN BY: J. Bensen CHECKED BY: A. Kurnia

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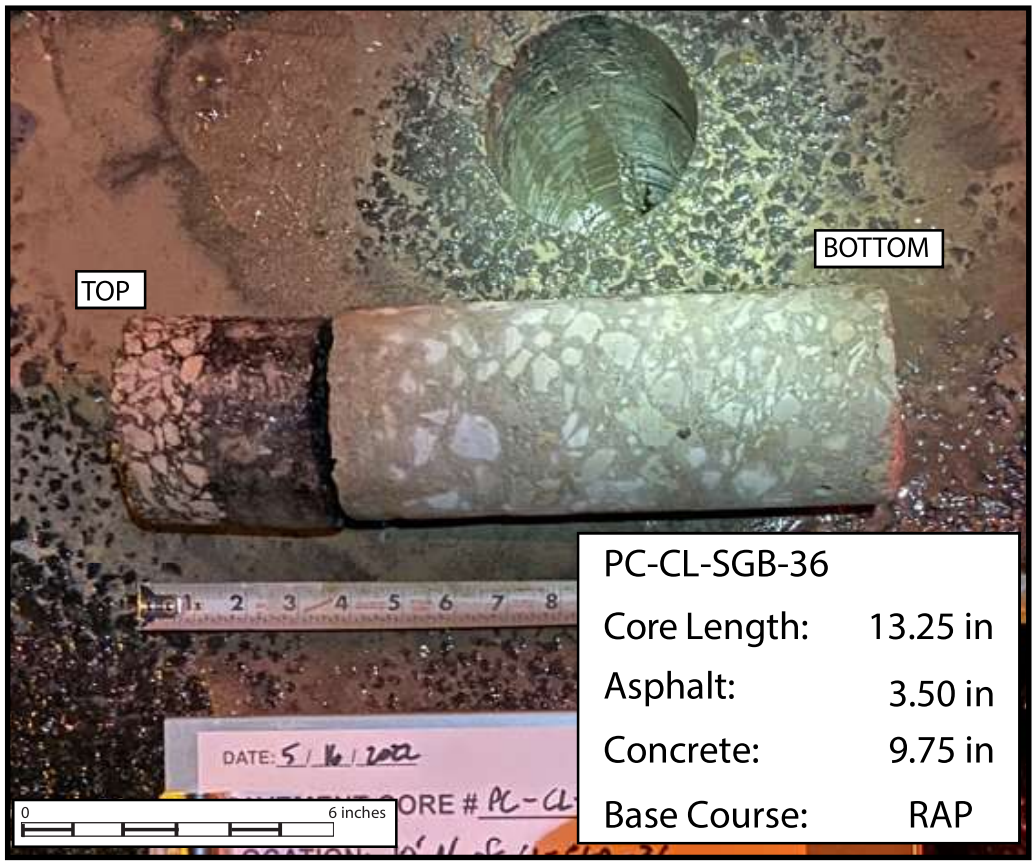
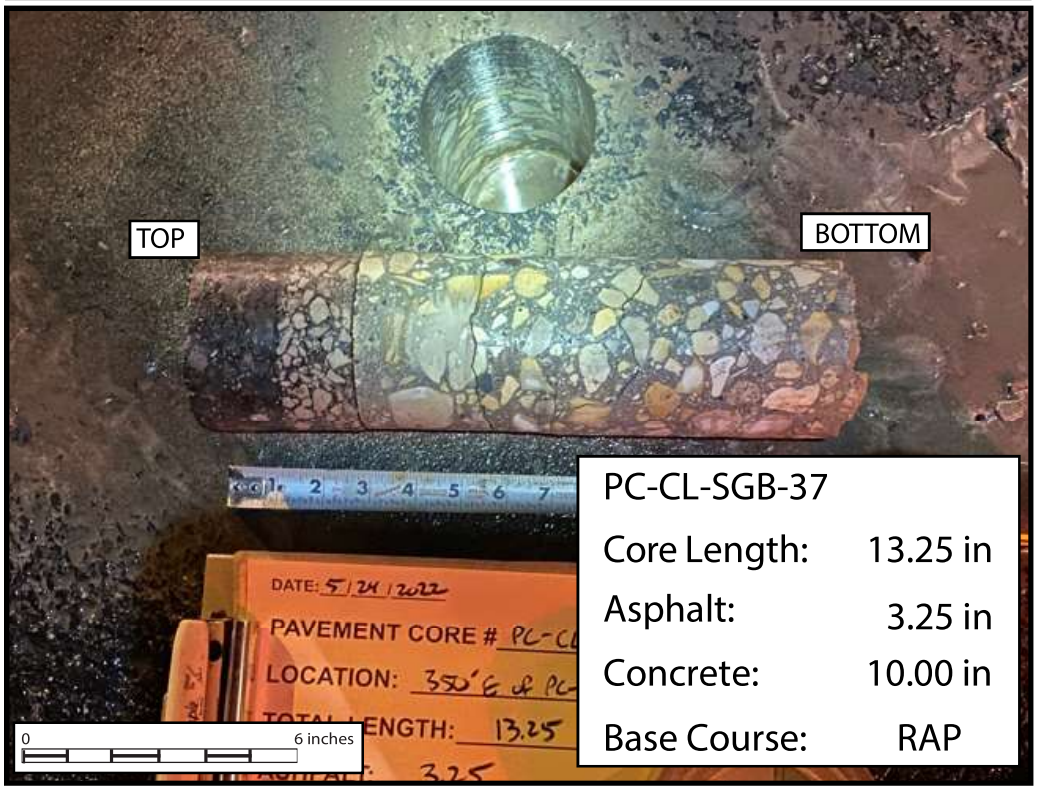
FOR TRANSYSTEMS	7901-15-01



PC-CL-SGB-36	
Core Length:	13.25 in
Asphalt:	3.50 in
Concrete:	9.75 in
Base Course:	RAP



PC-CL-SGB-37	
Core Length:	13.25 in
Asphalt:	3.25 in
Concrete:	10.00 in
Base Course:	RAP

PAVEMENT CORES: I-80 RECONSTRUCTION; EAST MAINLINE FORM STATION 518+00 TO STATION 634+50, WILL COUNTY, ILLINOIS

SCALE: GRAPHICAL | APPENDIX E-6 | DRAWN BY: J. Bensen, CHECKED BY: A. Kurnia

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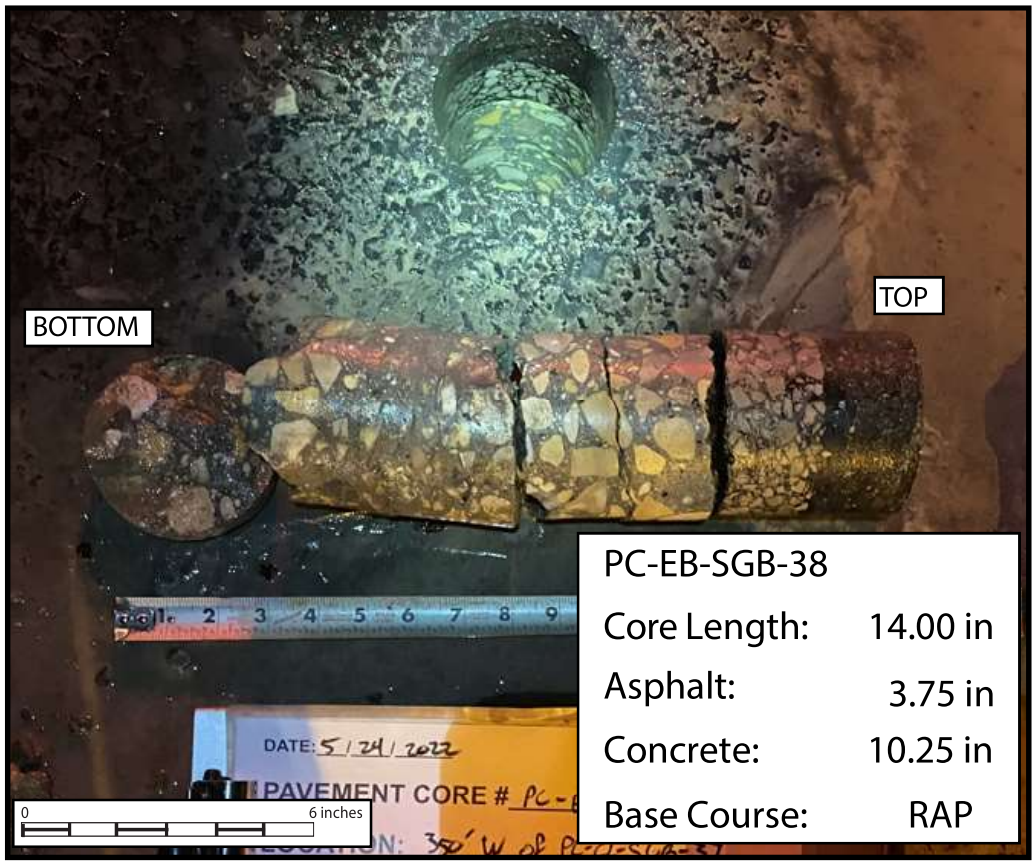
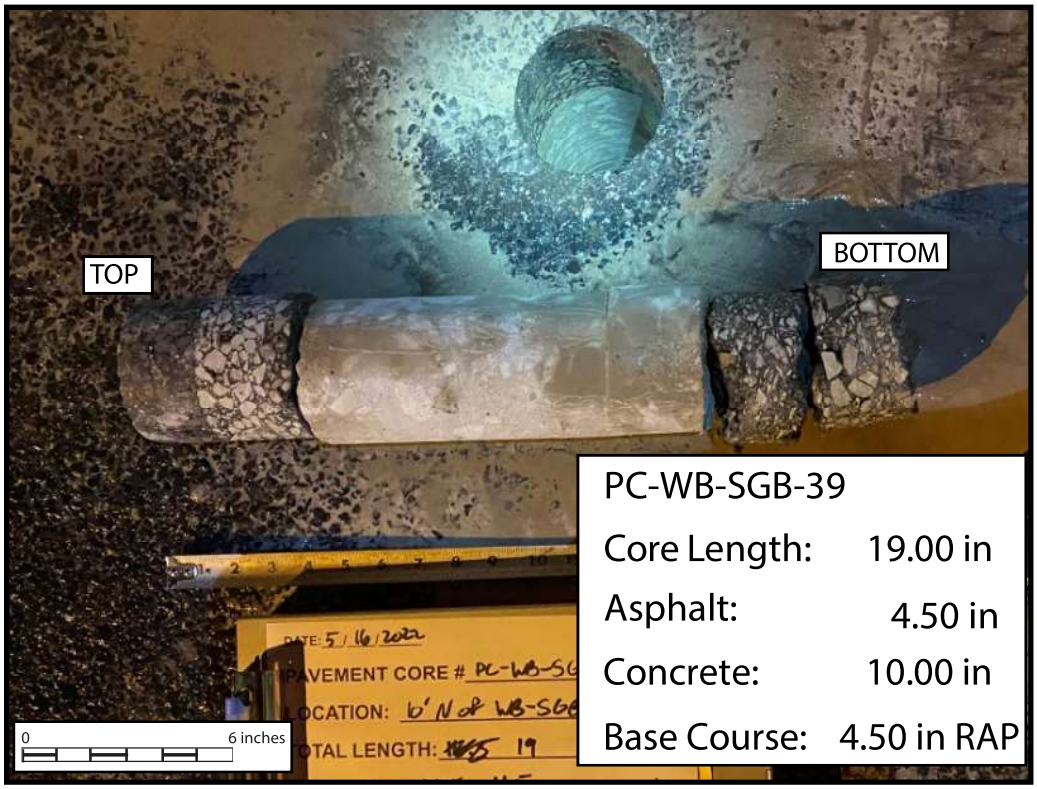
FOR TRANSYSTEMS | 7901-15-01



PC-EB-SGB-38	
Core Length:	14.00 in
Asphalt:	3.75 in
Concrete:	10.25 in
Base Course:	RAP



PC-WB-SGB-39	
Core Length:	19.00 in
Asphalt:	4.50 in
Concrete:	10.00 in
Base Course:	4.50 in RAP

PAVEMENT CORES: I-80 RECONSTRUCTION; EAST MAINLINE FORM STATION 518+00 TO STATION 634+50, WILL COUNTY, ILLINOIS

SCALE: GRAPHICAL	APPENDIX E-7	DRAWN BY: J. Bensen CHECKED BY: A. Kurnia

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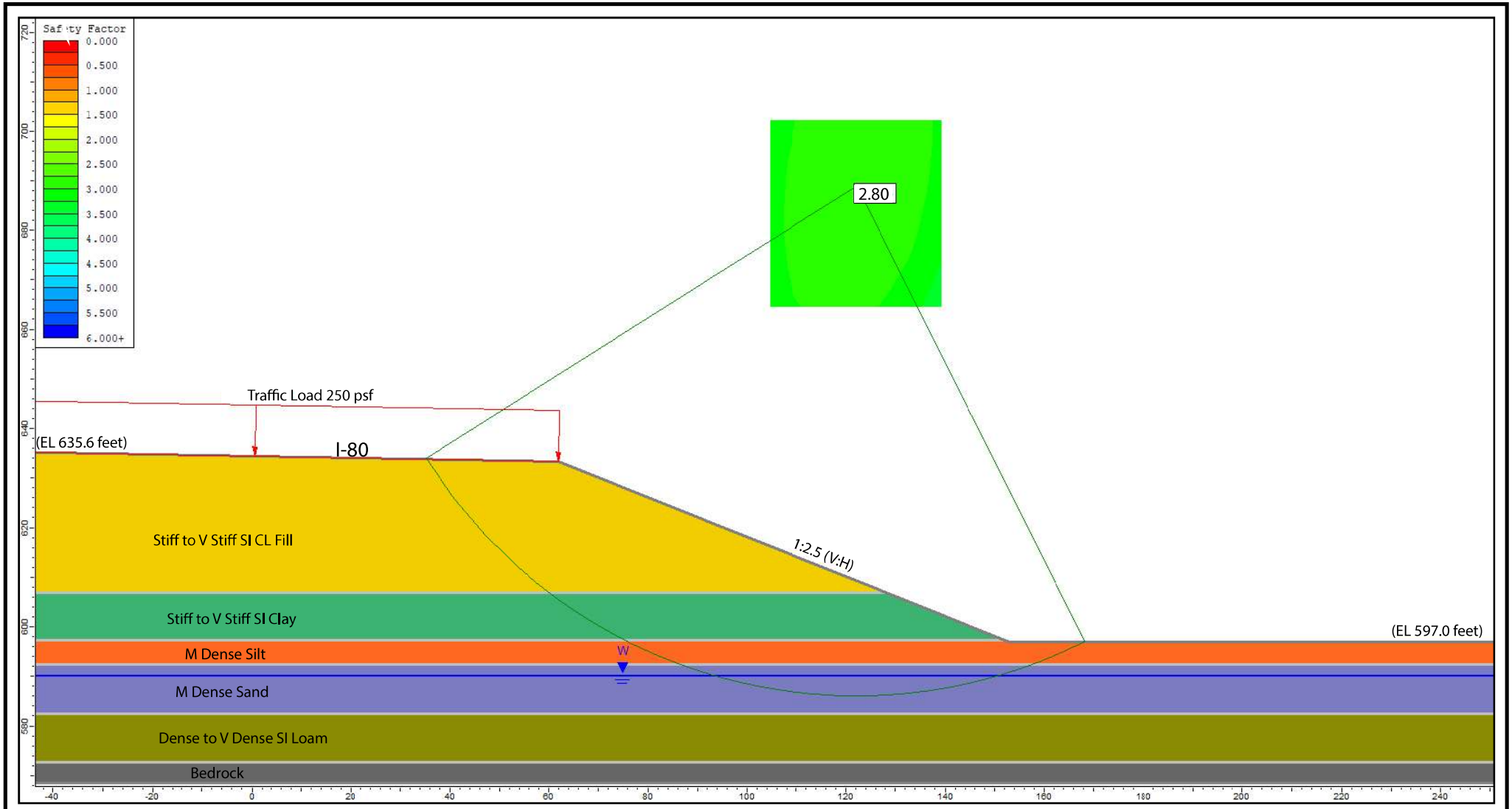
FOR TRANSYSTEMS	7901-15-01

Wang Engineering
1145 North Main Street
Lombard, Illinois 60148
Phone (630) 953-9928
www.wangeng.com

APPENDIX F



Undrained Analysis, Mainline-East 62R89, Station 537+00, Ref Boring: JJT-BSB-03

Layer ID	Description	Total Unit Weight (pcf)	Undrained Cohesion (psf)	Undrained Friction Angle (degrees)
1	Stiff to V Stiff SI CL Fill	120	2300	0
2	Stiff to V Stiff SI Clay	120	2350	0
3	M Dense Silt	115	0	30
4	M Dense Sand	115	0	31
5	Dense to V Dense SI Loam	125	0	32
6	Bedrock	150	--	--

GLOBAL STABILITY: I-80 RECONSTRUCTION; EAST MAINLINE FORM STATION 518+00 TO STATION 634+50, WILL COUNTY, ILLINOIS

SCALE: GRAPHICAL | APPENDIX F-1 | DRAWN BY: RKC CHECKED BY: A. Kurnia

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Lombard, IL 60148
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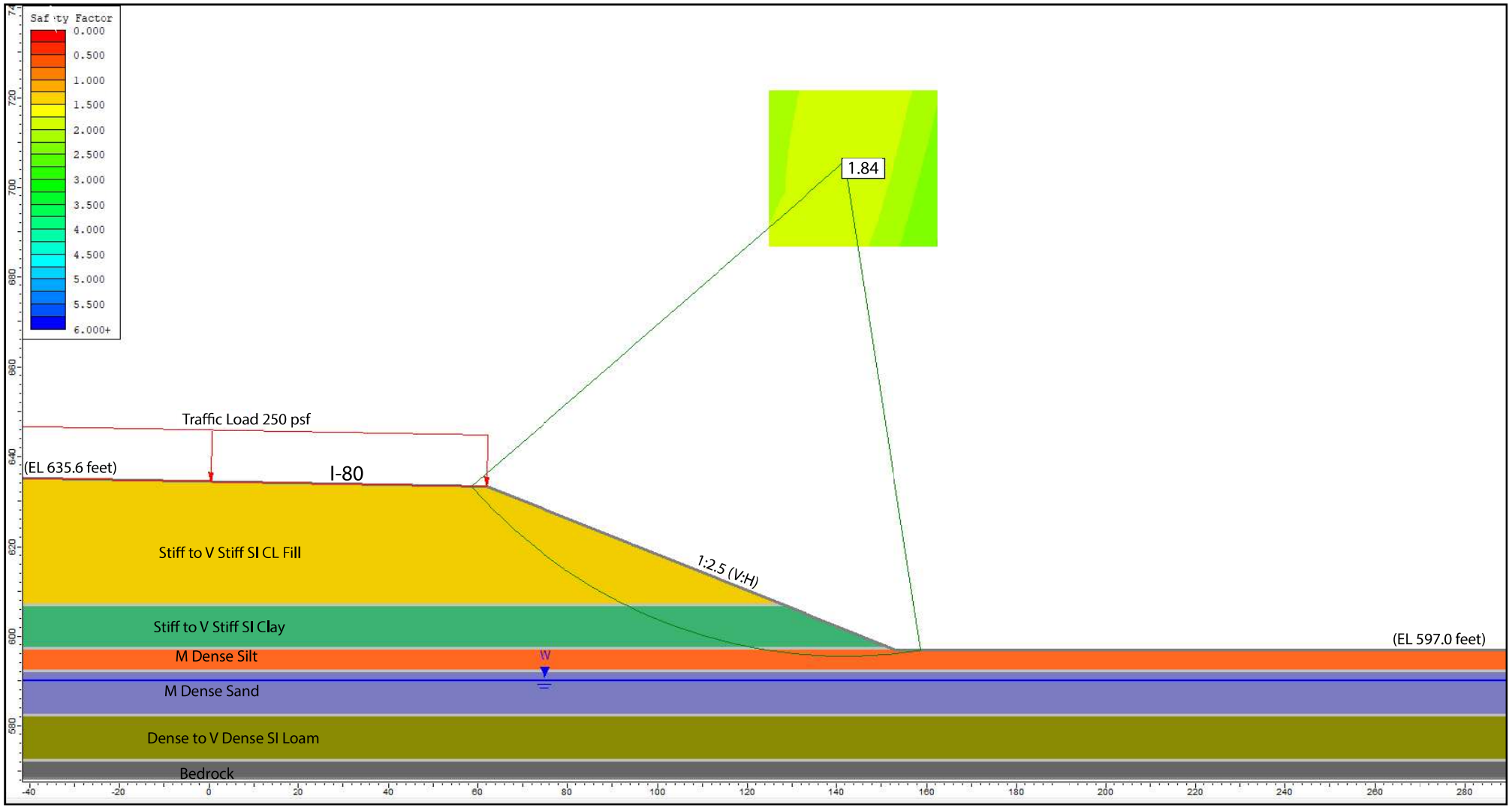
FOR TRANSYSTEMS CORPORATION | 7901-15-01



Drained Analysis, Mainline-East 62R89, Station 537+00, Ref Boring: JJT-BSB-03

Layer ID	Description	Total Unit Weight (pcf)	Drained Cohesion (psf)	Drained Friction Angle (degrees)
1	Stiff to V Stiff SI CL Fill	120	100	31
2	Stiff to V Stiff SI Clay	120	100	31
3	M Dense Silt	115	0	30
4	M Dense Sand	115	0	31
5	Dense to V Dense SI Loam	125	0	32
6	Bedrock	150	--	--

GLOBAL STABILITY: I-80 RECONSTRUCTION; EAST MAINLINE FORM STATION 518+00 TO STATION 634+50, WILL COUNTY, ILLINOIS

SCALE: GRAPHICAL | APPENDIX F-2 | DRAWN BY: RKC CHECKED BY: A. Kurnia

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Wang Engineering
1145 North Main Street
Lombard, Illinois 60148
Phone (630) 953-9928
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APPENDIX G

APPENDIX G
BORING AND PAVEMENT CORE LOCATION PLANS AND SOIL PROFILES

ROADWAY GEOTECHNICAL REPORT

I-80 IMPROVEMENTS
EAST MAINLINE
CONTRACT 62R89
STATION 518+00 AND STATION 634+50
WILL COUNTY, ILLINOIS

FOR

FOR TRANSYSTEMS CORPORATION
1475 EAST WOODFIELD ROAD, SUITE 600
SCHAUMBURG, IL 60173

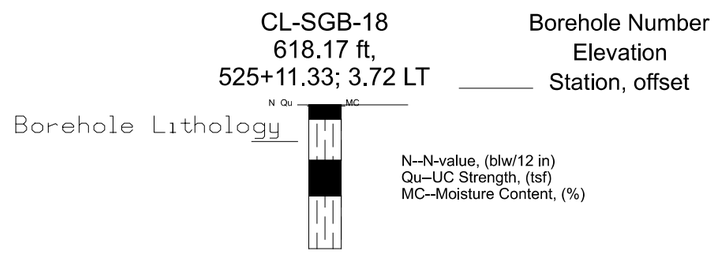
PREPARED BY
WANG ENGINEERING
1145 NORTH MAIN STREET
LOMBARD, IL 60148

September 16, 2022
WANG PROJECT 7901-15-01

LEGEND:

Soil Boring

Pavement Core

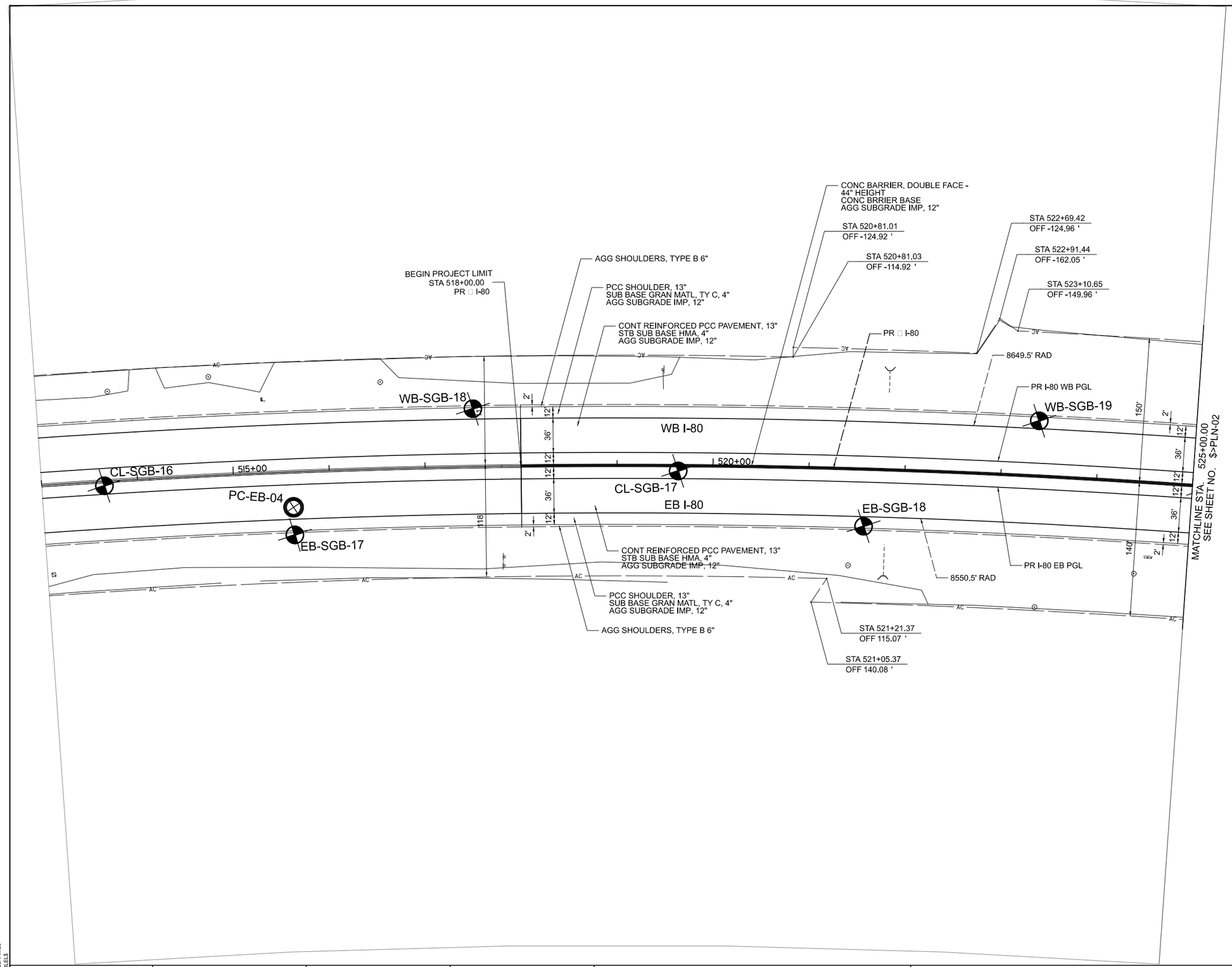


Water Level Reading at time of drilling.

Water Level Reading 24-hr after drilling or at end of drilling

Lithology Graphics

- Topsoil
- Concrete
- IDH Sand, Sandy Loam
- IDH Clay
- Gravelly sand, sandy gravel
- IDH Loam
- IDH Clay Loam
- IDH Silt, Silty Loam
- Pavement
- IDH Silty Clay, Silty Clay Loam
- Crushed stone
- Coarse sand



N

0 50 100 150

SCALE IN FEET

NOTES:

1. SEE ALIGNMENT AND TIES SHEETS FOR CURVE DATA.
2. ALL STATION AND OFFSET MEASUREDD FROM PR CL I-80 UNLESS OTHERWISE NOTES.

MODEL: $MODELNAME$
FILE NAME: $FILE$

TranSystems

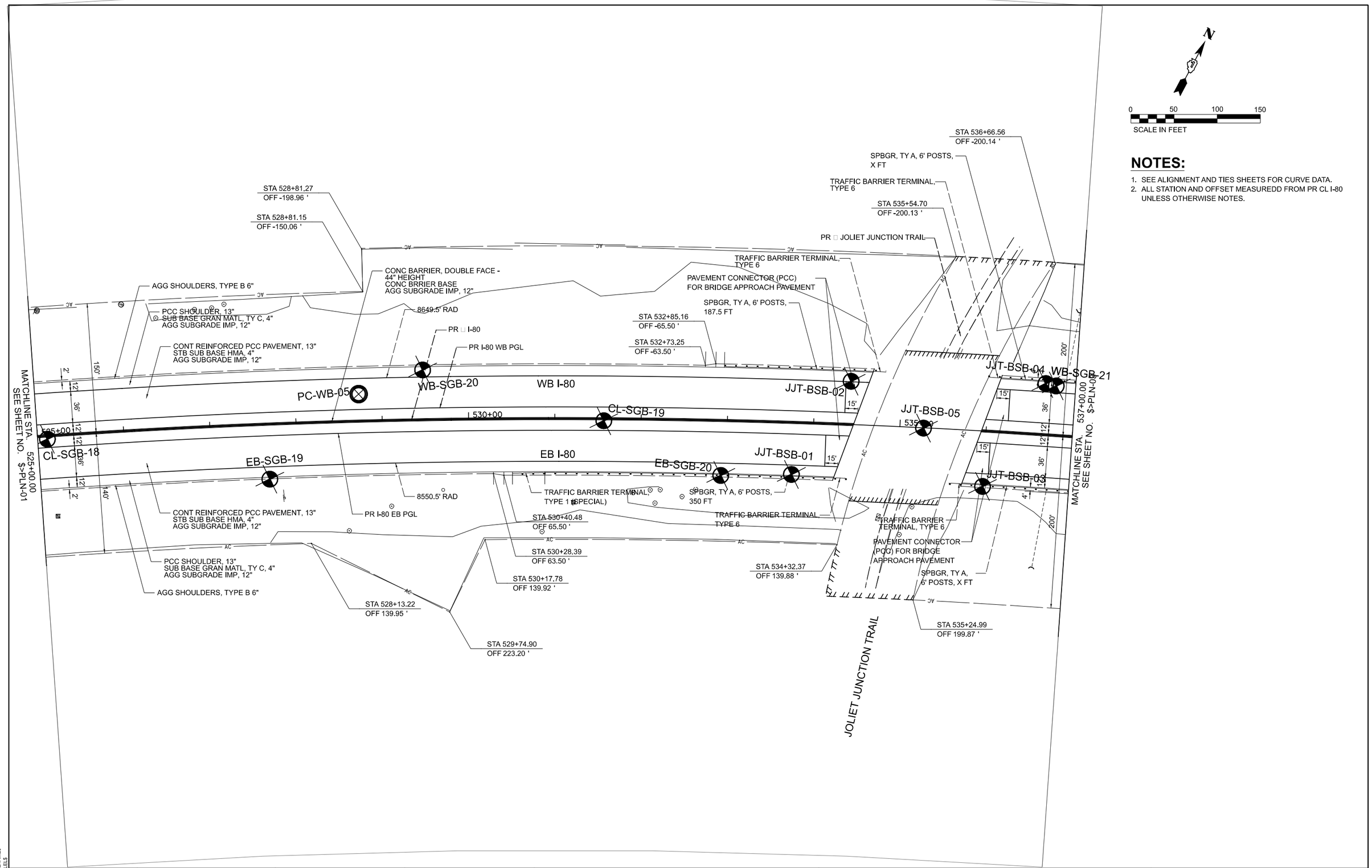
USER NAME = $USER$	DESIGNED - $>PLN-01-DE	REVISED -
	DRAWN - $>PLN-01-DR	REVISED -
PLOT SCALE = $SCALE$	CHECKED - $>PLN-01-CH	REVISED -
PLOT DATE = $DATE$	DATE - ####$DATE	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

$>PLN-01-L1
$>PLN-02-L2

SCALE: 1"=50' | SHEET $$>PLN-01F $>PLN-01SHEETS | STA. 518+00.00 | TO STA. 525+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	$>SNUM	$>COUNTY	$>TOT	$>PLN-01
		CONTRACT NO. $>CNUM		
	ILLINOIS	FED. AID PROJECT		



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	DRAWN -	$>PLN-02-DR	REVISED -	
PLOT SCALE = $SCALE$	CHECKED -	$>PLN-02-CH	REVISED -	
PLOT DATE = $DATE$	DATE -	####$DATE	REVISED -	

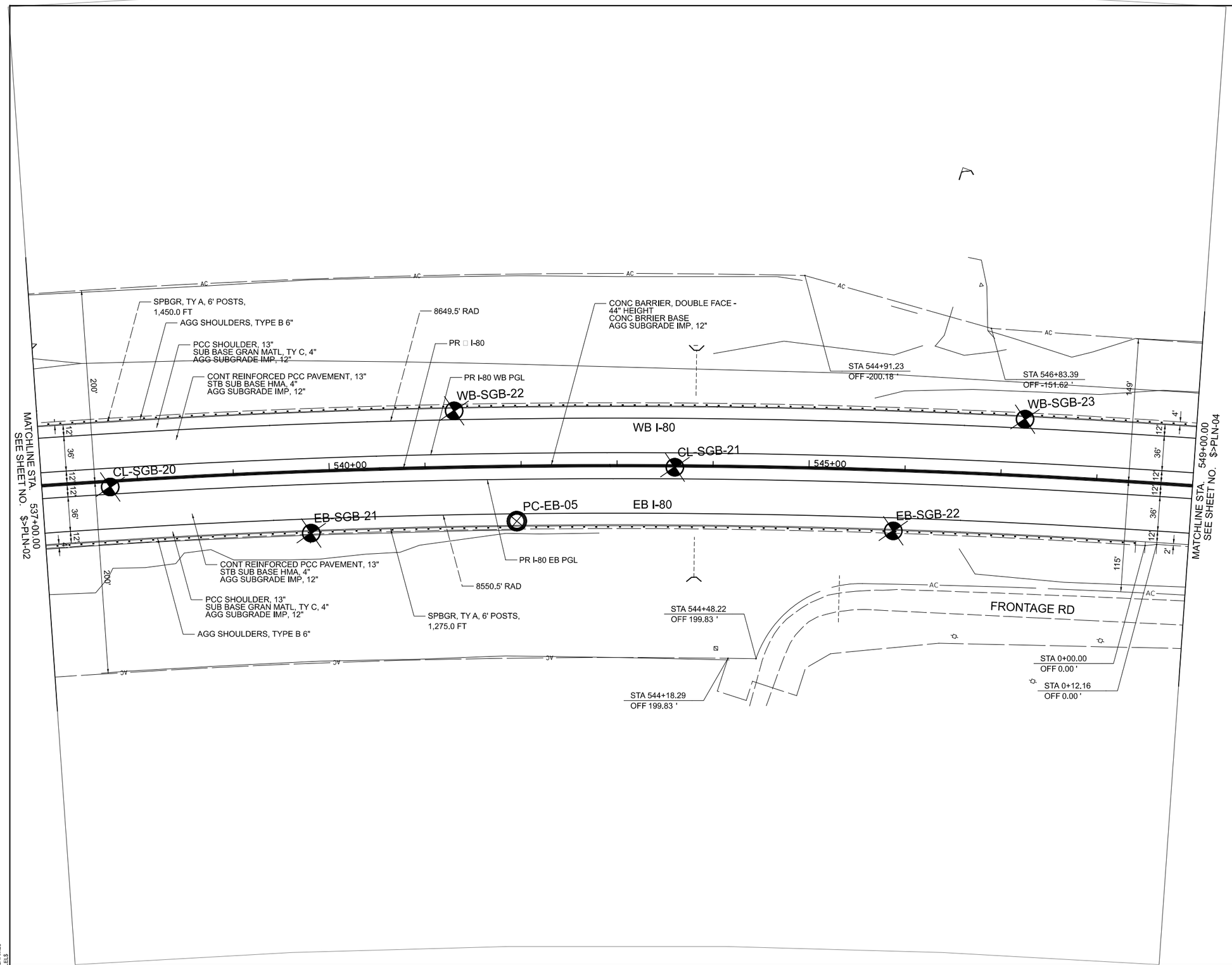
TranSystems

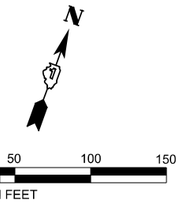
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

$>PLN-02-L1
$>PLN-02-L2

SCALE: 1"=50' | SHEET $$>PLN-02F $>PLN-03ETS | STA. 525+00.00 | TO STA. 537+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	$>SNUM	$>COUNTY	$>TOT	$>PLN-02
		CONTRACT NO. $>CNUM		
	ILLINOIS	FED. AID PROJECT		





NOTES:

1. SEE ALIGNMENT AND TIES SHEETS FOR CURVE DATA.
2. ALL STATION AND OFFSET MEASUREDD FROM PR CL I-80 UNLESS OTHERWISE NOTES.

MODEL: $MODELNAME$
FILE NAME: $FILE$

TranSystems

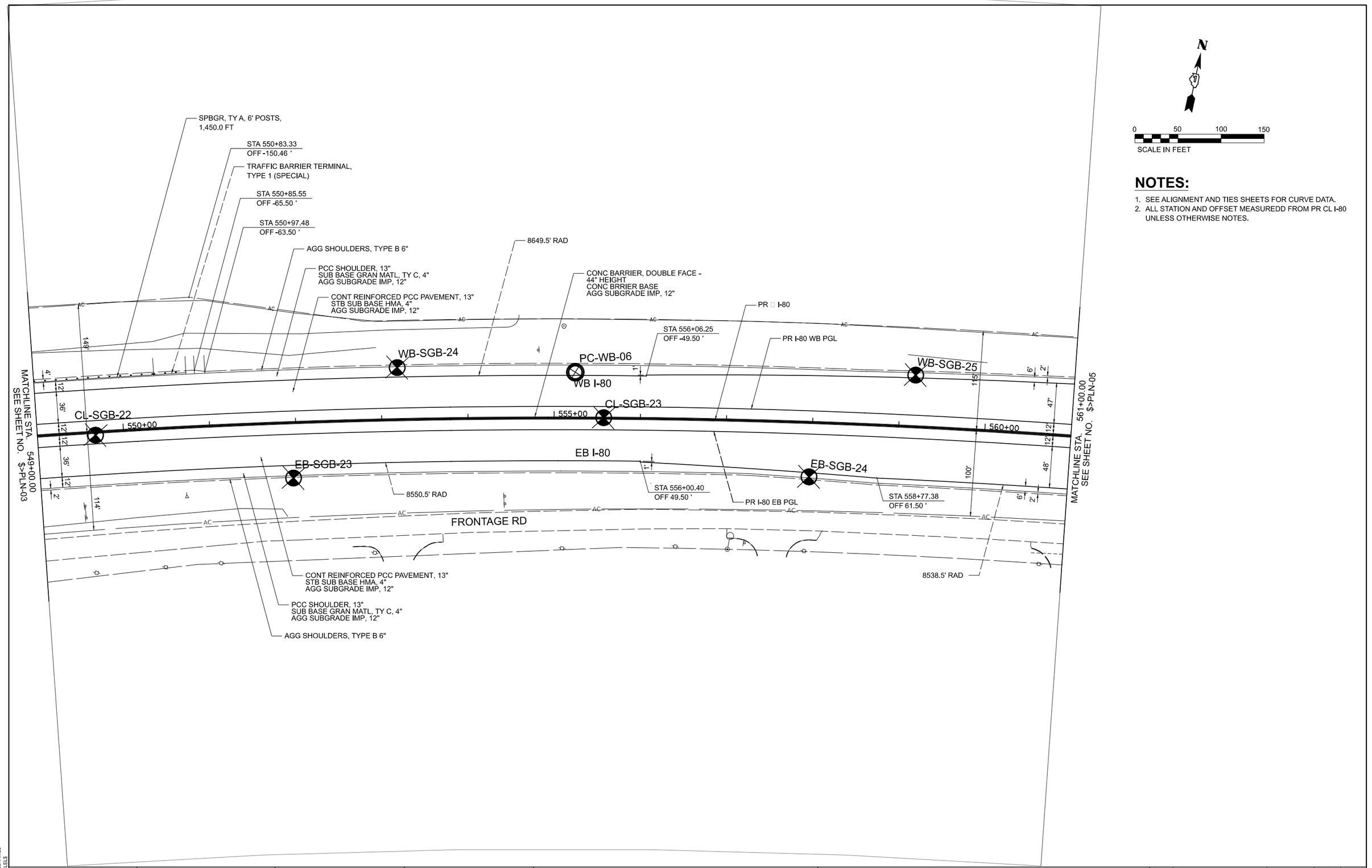
USER NAME = $USER$	DESIGNED - $>PLN-03-DE	REVISED -	
	DRAWN - $>PLN-03-DR	REVISED -	
PLOT SCALE = $SCALE$	CHECKED - $>PLN-03-CH	REVISED -	
PLOT DATE = $DATE$	DATE - ####$DATE	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

$>PLN-Ø3-L1
$>PLN-Ø3-L2

SCALE: 1"=50' | SHEET $$>PLN-03 OF $>PLN-03TS | STA. $>STAFROM | TO STA. $>STATO

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	$>SNUM	$>COUNTY	$>TOT	$>PLN-03
		CONTRACT NO. $>CNUM		
	ILLINOIS	FED. AID PROJECT		



N

0 50 100 150

SCALE IN FEET

NOTES:

1. SEE ALIGNMENT AND TIES SHEETS FOR CURVE DATA.
2. ALL STATION AND OFFSET MEASUREDD FROM PR CL I-80 UNLESS OTHERWISE NOTES.

MODEL: $MODELNAME$
FILE NAME: $FILE$

TranSystems

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	DRAWN - $>PLN-04-DR	REVISED -	
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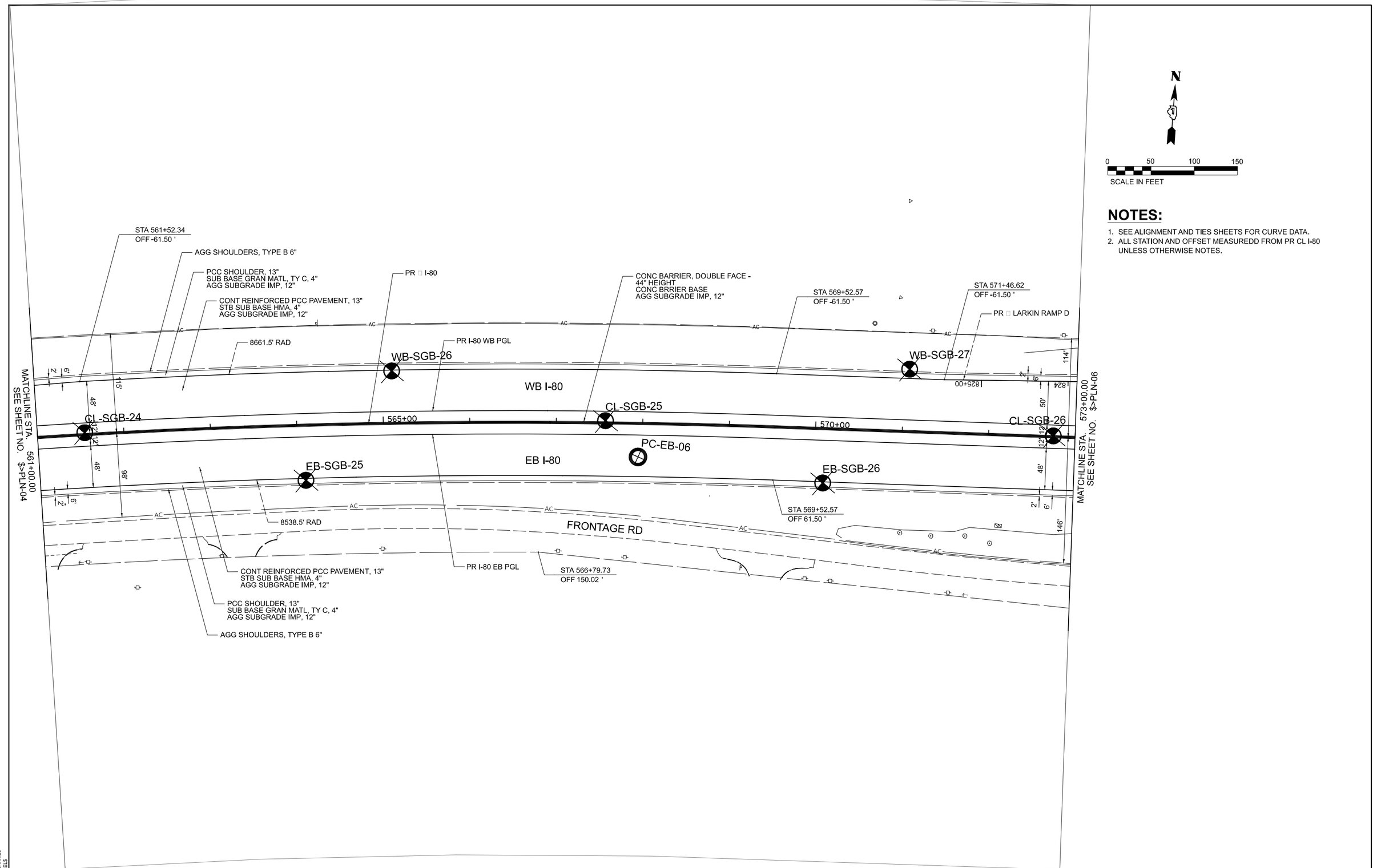
PLOT DATE = $DATE$	DATE - ####$DATE	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

$>PLN-Ø4-L1
$>PLN-Ø4-L2

SCALE: 1"=50' | SHEET $$>PLN-03F ##$#PLN-03## SHEETS | STA. 549+00.00 | TO STA. 561+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	$>SNUM	$>COUNTY	$>TOT	$>PLN-04
		CONTRACT NO. $>CNUM		
	ILLINOIS	FED. AID PROJECT		



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	DRAWN - $>PLN-05-DR	REVISED -	
PLOT SCALE = $SCALE$	CHECKED - $>PLN-05-CH	REVISED -	
PLOT DATE = $DATE$	DATE - ####$DATE	REVISED -	

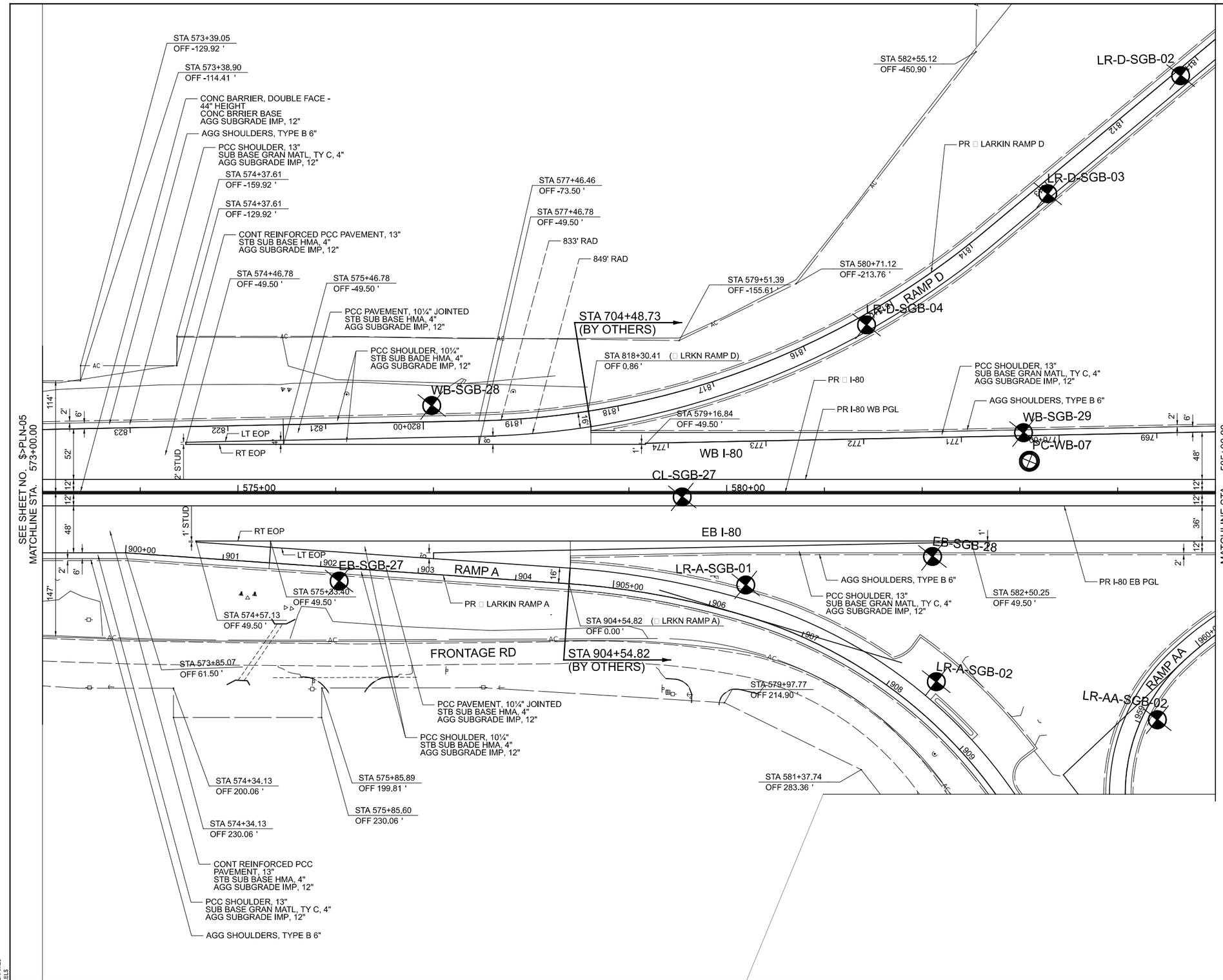
TranSystems

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

$>PLN-05-L1
$>PLN-05-L2

SCALE: 1"=50' | SHEET $$>PLN-05F ####PLN-05EETS | STA. 561+00.00 | TO STA. 573+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	$>SNUM	$>COUNTY	$>TOT	$>PLN-05
		CONTRACT NO. $>CNUM		
	ILLINOIS	FED. AID PROJECT		



N

0 50 100 150

SCALE IN FEET

NOTES:

1. SEE ALIGNMENT AND TIES SHEETS FOR CURVE DATA.
2. ALL STATION AND OFFSET MEASUREDD FROM PR CL I-80 UNLESS OTHERWISE NOTES.

MODEL: $MODELNAME$
FILE NAME: $FILE$

TranSystems

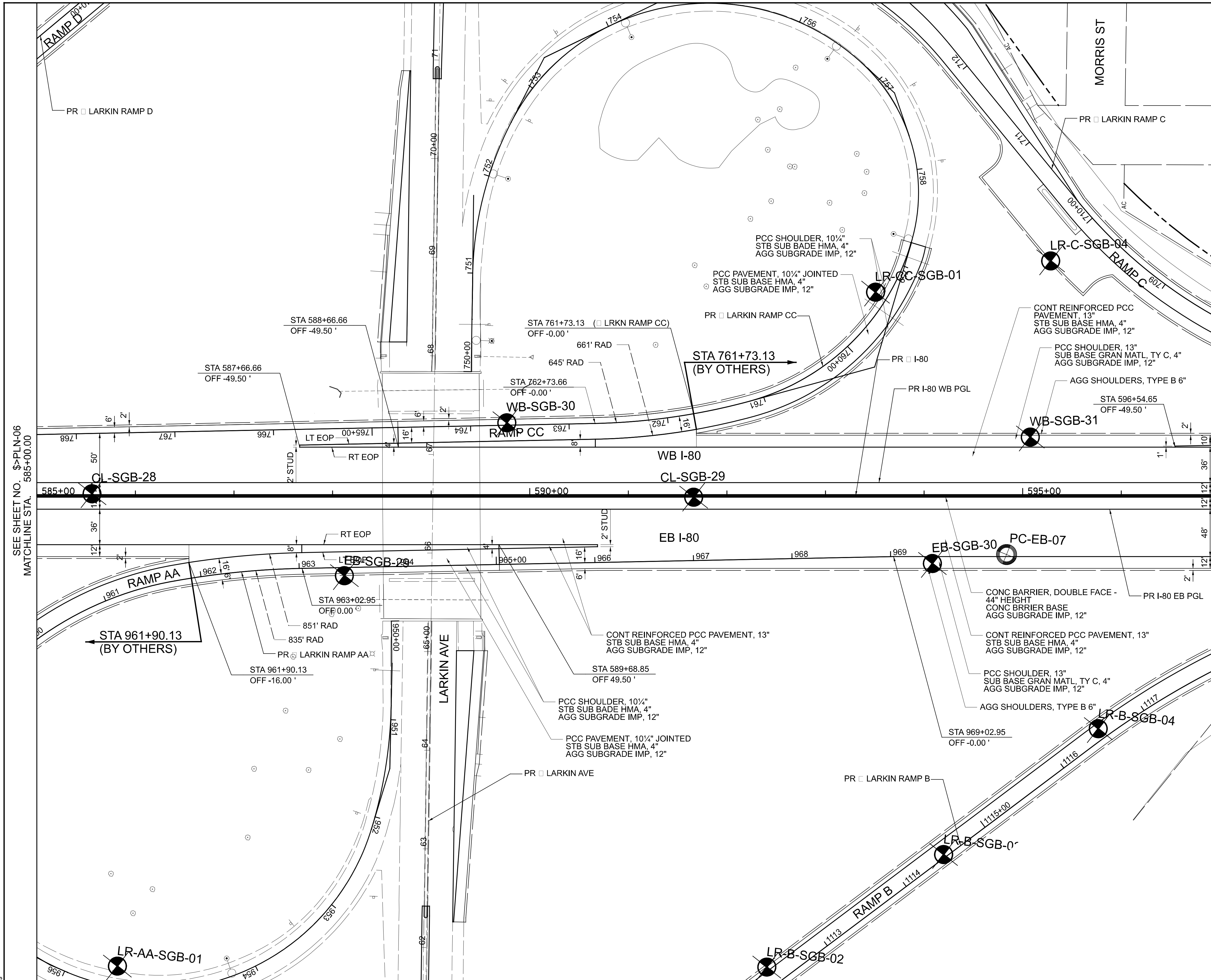
USER NAME = $USER$	DESIGNED - $>PLN-06-DE	REVISED -	
	DRAWN - $>PLN-06-DR	REVISED -	
PLOT SCALE = $SCALE$	CHECKED - $>PLN-06-CH	REVISED -	
PLOT DATE = $DATE$	DATE - ####$DATE	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

$>PLN-Ø6-L1
$>PLN-Ø6-L2

SCALE: 1"=50' | SHEET $$>PLN-06-SHEETS | STA. 573+00.00 | TO STA. 585+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	$>SNUM	$>COUNTY	$>PLN-06-TOT	$>PLN-06
		CONTRACT NO. $>CNUM		
	ILLINOIS	FED. AID PROJECT		



N

0 50 100 150
SCALE IN FEET

NOTES:

1. SEE ALIGNMENT AND TIES SHEETS FOR CURVE DATA.
2. ALL STATION AND OFFSET MEASUREDD FROM PR CL I-80 UNLESS OTHERWISE NOTES.

MODEL: $MODELNAME$ FILE NAME: $FILEL$

TranSystems

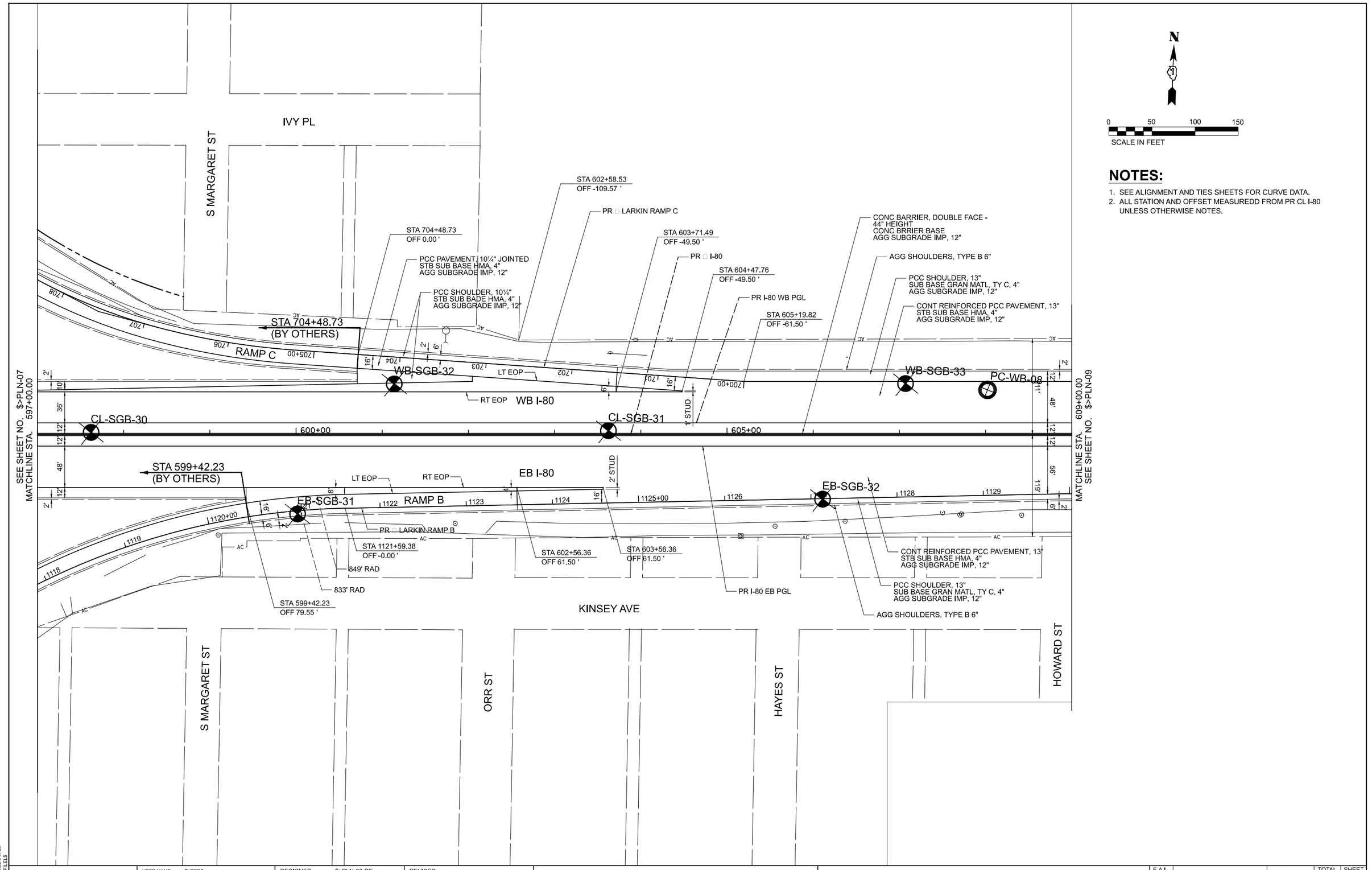
USER NAME = $USER$	DESIGNED - $>PLN-07-DE	REVISED -
	DRAWN - $>PLN-07-DR	REVISED -
PLOT SCALE = $SCALE$	CHECKED - $>PLN-07-CH	REVISED -
PLOT DATE = $DATE$	DATE - ####$DATE	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

$>PLN-07-L1
$>PLN-07-L2

SCALE: 1"=50' SHEET $$>PLN-07 OF ####PLN SHEETS STA. 585+00.00 TO STA. 597+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	$>SNUM	$>COUNTY	$>TOT	$>PLN-07
CONTRACT NO. $>CNUM				
ILLINOIS	FED. AID PROJECT			



NOTES:

1. SEE ALIGNMENT AND TIES SHEETS FOR CURVE DATA.
2. ALL STATION AND OFFSET MEASUREDD FROM PR CL I-80 UNLESS OTHERWISE NOTES.

MODEL: $MODELNAME$
FILE NAME: $FILE$

TranSystems

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	DRAWN - $>PLN-08-DR	REVISED -
PLOT SCALE = $SCALE$	CHECKED - $>PLN-08-CH	REVISED -
PLOT DATE = $DATE$	DATE - ####$DATE	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

$>PLN-Ø8-L1
$>PLN-Ø8-L2

SCALE: 1"=50' | SHEET $$>PLN-08-SF #@#PLN-SHEETS | STA. 597+00.00 | TO STA. 609+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	$>SNUM	$>COUNTY	$>TOT	$>PLN-08
		CONTRACT NO. $>CNUM		
	ILLINOIS	FED. AID PROJECT		

N

0 50 100 150

SCALE IN FEET

NOTES:

1. SEE ALIGNMENT AND TIES SHEETS FOR CURVE DATA.
2. ALL STATION AND OFFSET MEASUREDD FROM PR CL I-80 UNLESS OTHERWISE NOTES.

CONC BARRIER, DOUBLE FACE - 44" HEIGHT
CONC BRRIER BASE
AGG SUBGRADE IMP, 12"

AGG SHOULDERS, TYPE B 6"

PCC SHOULDER, 13"
SUB BASE GRAN MATL, TY C, 4"
AGG SUBGRADE IMP, 12"

CONT REINFORCED PCC PAVEMENT, 13"
STB SUB BASE HMA, 4"
AGG SUBGRADE IMP, 12"

PR □ I-80

PR I-80 WB PGL

PR I-80 EB PGL

PR □ MIDLAND AVE

W PARK FRONT ST

KINSEY AVE

WARREN AVE

DAVIS AVE

MIDLAND AVE

WB I-80

SEE SHEET NO. $>PLN-08
MATCHLINE STA. 609+00.00

MATCHLINE STA. 621+00.00
SEE SHEET NO. $>PLN-10

STA 615+16.88	OFF -163.34 '
STA 614+77.78	OFF -163.27 '
STA 614+76.72	OFF -112.76 '
STA 613+36.16	OFF -77.50 '
STA 613+24.16	OFF -75.50 '
STA 612+06.58	OFF 62.50 '
STA 610+96.26	OFF 77.50 '
STA 610+84.26	OFF 75.50 '
STA 614+53.19	OFF 117.64 '
STA 615+75.59	OFF 165.90 '
STA 618+98.58	OFF -77.50 '
STA 619+10.58	OFF -75.50 '
STA 617+45.68	OFF 75.50 '
STA 617+33.68	OFF 77.50 '

TRAFFIC BARRIER TERMINAL, TYPE 6

TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL)

PAVEMENT CONNECTOR (PCC) FOR BRIDGE APPROACH PAVEMENT

SPBGR, TY A, 6' POSTS, 150.0 FT

SPBGR, TY A, 6' POSTS, 350.0 FT

SPBGR, TY A, 6' POSTS, 250.0 FT

SPBGR, TY A, 6' POSTS, 125.0 FT

MLA-BSB-01
MLA-BSB-02
MLA-BSB-03
MLA-BSB-04
MLA-BSB-05
MLA-BSB-06
MLA-BSB-07
MLA-BSB-08
MLA-BSB-09
MLA-BSB-09B
MLA-BSB-10
MLA-PZ-001

CL-SGB-32
EB-SGB-33
EB-SGB-34
WB-SGB-34
WB-SGB-35

610+00 615+00 620+00
1130+00 1131 1132

MODEL: $MODELNAME$
FILE NAME: $FILE$

USER NAME = $USER$	DESIGNED - $>PLN-09-DE	REVISED -	
	DRAWN - $>PLN-09-DR	REVISED -	
PLOT SCALE = $SCALE$	CHECKED - $>PLN-09-CH	REVISED -	
PLOT DATE = $DATE$	DATE - ####DATE	REVISED -	

TranSystems

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

$>PLN-09-L1
$>PLN-09-L2

SCALE: 1"=50' SHEET $$>PLN-09 OF ###PLN-SHEETS STA. 609+00.00 TO STA. 621+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	$>SNUM	$>COUNTY	$>TOT	$>PLN-09
		CONTRACT NO. $>CNUM		
	ILLINOIS	FED. AID PROJECT		

N

0 50 100 150

SCALE IN FEET

NOTES:

1. SEE ALIGNMENT AND TIES SHEETS FOR CURVE DATA.
2. ALL STATION AND OFFSET MEASUREDD FROM PR CL I-80 UNLESS OTHERWISE NOTES.

CONC BARRIER, DOUBLE FACE - 44" HEIGHT
CONC BRRIER BASE
AGG SUBGRADE IMP, 12"

AGG SHOULDERS, TYPE B 6"

PCC SHOULDER, 13"
SUB BASE GRAN MATL, TY C, 4"
AGG SUBGRADE IMP, 12"

CONT REINFORCED PCC PAVEMENT, 13"
STB SUB BASE HMA, 4"
AGG SUBGRADE IMP, 12"

W PARK FRONT ST

PR □ I-80

STA 627+78.06
OFF -75.50 '

TEMPORARY CONCRETE BARRIER
(TO REMAIN PERMANENTLY)
PINNING TEMPORARY CONCRETE BARRIER

STA 631+87.50
OFF -3.00 '

S REED ST

STA 627+90.06
OFF -77.50 '

STA 628+61.71
OFF -61.50 '

SPBGR, TY A, 6' POSTS,
1,327.5 FT

PR I-80 WB PGL

WB-SGB-36

WB-SGB-37

WB I-80

CL-SGB-33

CL-SGB-34

625+00

630+00

SEE SHEET NO. $>PLN-09
MATCHLINE STA. 621+00.00

MATCHLINE STA. 633+00.00
SEE SHEET NO. $>PLN-11

PC EB-08

EB-SGB-35

EB I-80

EB-SGB-36

CONT REINFORCED PCC PAVEMENT, 13"
STB SUB BASE HMA, 4"
AGG SUBGRADE IMP, 12"

PR I-80 EB PGL

SPBGR, TY A, 6' POSTS,
375.0 FT

PCC SHOULDER, 13"
SUB BASE GRAN MATL, TY C, 4"
AGG SUBGRADE IMP, 12"

AGG SHOULDERS, TYPE B 6"

STA 624+38.29
OFF 166.78 '

STA 628+53.15
OFF 150.05 '

STA 629+90.00
OFF 77.50 '

STA 629+75.34
OFF 75.50 '

KINSEY AVE

STA 624+38.62
OFF 246.78 '

STA 628+52.01
OFF 243.02 '

CENTRAL AVE

BETULA ST

MODEL: $MODELNAME$
FILE NAME: $FILE$

TranSystems

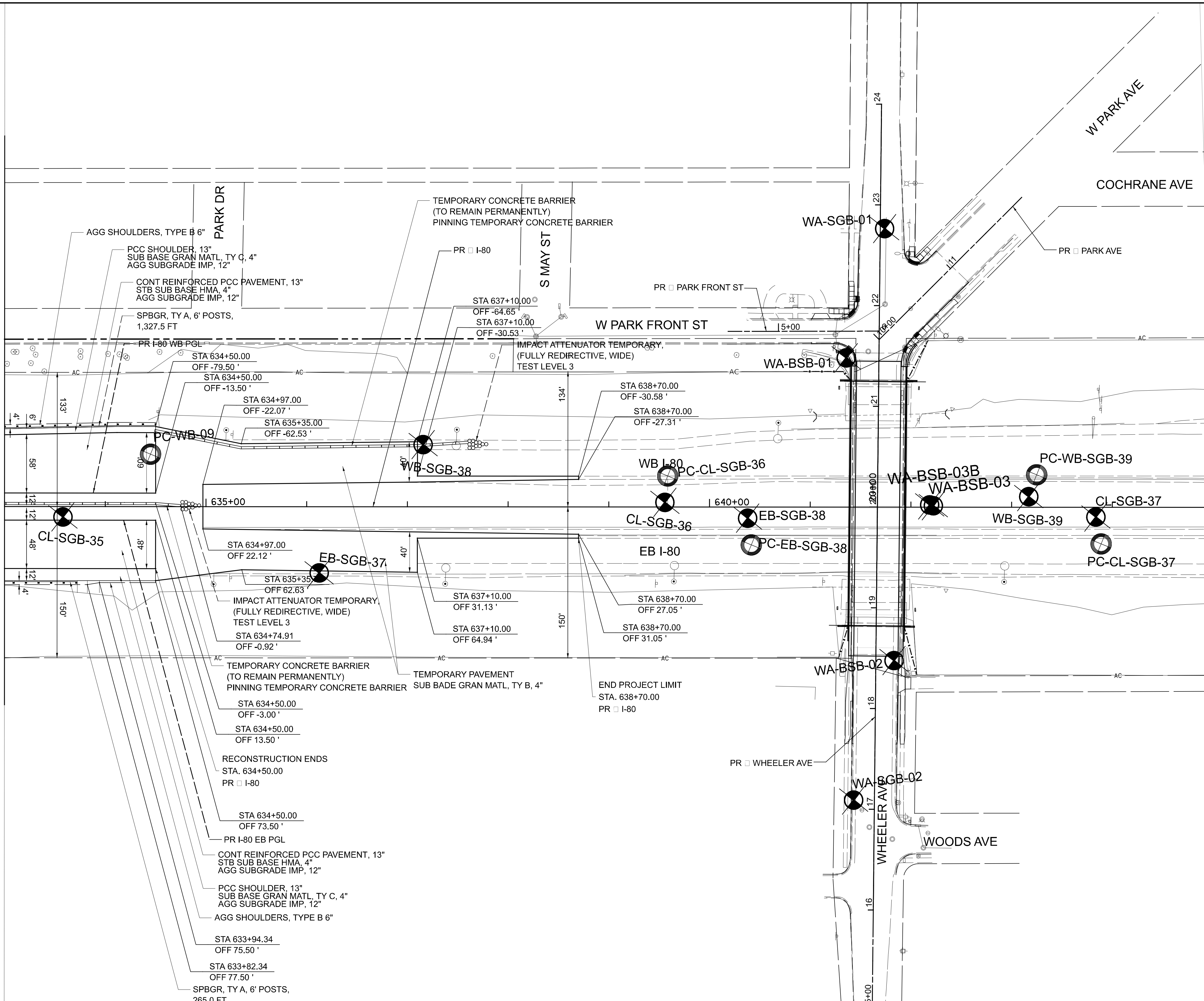
USER NAME = $USER$	DESIGNED - $>PLN-10-DE	REVISED -	
	DRAWN - $>PLN-10-DR	REVISED -	
PLOT SCALE = $SCALE$	CHECKED - $>PLN-10-CH	REVISED -	
PLOT DATE = $DATE$	DATE - ####$DATE	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

$>PLN-10-L1
$>PLN-10-L2

SCALE: 1"=50' | SHEET $$>PLN-10 OF ###$#PLN-SHEETS | STA. 621+00.00 | TO STA. 633+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	$>SNUM	$>COUNTY	$>TOT	$>PLN-10
		CONTRACT NO. $>CNUM		
	ILLINOIS	FED. AID PROJECT		



W PARK AVE
COCHRANE AVE
PARK DR
S MAY ST
W PARK FRONT ST
WHEELER AVE
WOODS AVE
TEMPORARY CONCRETE BARRIER
(TO REMAIN PERMANENTLY)
PINNING TEMPORARY CONCRETE BARRIER
AGG SHOULDERS, TYPE B 6"
PCC SHOULDER, 13"
SUB BASE GRAN MATL, TY C, 4"
AGG SUBGRADE IMP, 12"
CONT REINFORCED PCC PAVEMENT, 13"
STB SUB BASE HMA, 4"
AGG SUBGRADE IMP, 12"
SPBGR, TY A, 6' POSTS,
1,327.5 FT
PR I-80 WB PGL
PR I-80
PR PARK AVE
PR PARK FRONT ST
STA 637+10.00
OFF -64.65 '
STA 637+10.00
OFF -30.53 '
IMPACT ATTENUATOR TEMPORARY,
(FULLY REDIRECTIVE, WIDE)
TEST LEVEL 3
STA 634+50.00
OFF -79.50 '
STA 634+50.00
OFF -13.50 '
STA 634+97.00
OFF -22.07 '
STA 635+35.00
OFF -62.53 '
STA 638+70.00
OFF -30.58 '
STA 638+70.00
OFF -27.31 '
WA-SGB-01
WA-BSB-01
PC-WB-09
WB-SGB-38
WB I-80
PC-CL-SGB-36
CL-SGB-36
635+00
640+00
EB-SGB-38
PC-EB-SGB-38
WA-BSB-03B
WA-BSB-03
PC-WB-SGB-39
WB-SGB-39
CL-SGB-37
PC-CL-SGB-37
I-80
CL-SGB-35
EB-SGB-37
EB I-80
SEE SHEET NO. $>PLN-10
MATCHLINE STA. 633+00.00
STA 634+97.00
OFF 22.12 '
STA 635+35
OFF 62.63
STA 637+10.00
OFF 31.13 '
STA 637+10.00
OFF 64.94 '
STA 638+70.00
OFF 27.05 '
STA 638+70.00
OFF 31.05 '
IMPACT ATTENUATOR TEMPORARY,
(FULLY REDIRECTIVE, WIDE)
TEST LEVEL 3
STA 634+74.91
OFF -0.92 '
TEMPORARY CONCRETE BARRIER
(TO REMAIN PERMANENTLY)
PINNING TEMPORARY CONCRETE BARRIER
TEMPORARY PAVEMENT
SUB BADE GRAN MATL, TY B, 4"
END PROJECT LIMIT
STA. 638+70.00
PR I-80
WA-BSB-02
STA 634+50.00
OFF -3.00 '
STA 634+50.00
OFF 13.50 '
RECONSTRUCTION ENDS
STA. 634+50.00
PR I-80
PR WHEELER AVE
WA-SGB-02
STA 634+50.00
OFF 73.50 '
PR I-80 EB PGL
CONT REINFORCED PCC PAVEMENT, 13"
STB SUB BASE HMA, 4"
AGG SUBGRADE IMP, 12"
PCC SHOULDER, 13"
SUB BASE GRAN MATL, TY C, 4"
AGG SUBGRADE IMP, 12"
AGG SHOULDERS, TYPE B 6"
STA 633+94.34
OFF 75.50 '
STA 633+82.34
OFF 77.50 '
SPBGR, TY A, 6' POSTS,
265.0 FT
133'
134'
150'
58'
48'
40'
12'
4'
6'
AC
15+00
16
17
18
19
20+00
21
22
23
24
5+00
10+00
11
N
0 50 100 150
SCALE IN FEET

NOTES:

1. SEE ALIGNMENT AND TIES SHEETS FOR CURVE DATA.
2. ALL STATION AND OFFSET MEASUREDD FROM PR CL I-80 UNLESS OTHERWISE NOTES.

MODEL: $MODELNAME$
FILE NAME: $FILEL$

TranSystems

USER NAME = $USER$	DESIGNED - $>PLN-11-DE	REVISED -
	DRAWN - $>PLN-11-DR	REVISED -
PLOT SCALE = $SCALE$	CHECKED - $>PLN-11-CH	REVISED -
PLOT DATE = $DATE$	DATE - ####DATE	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

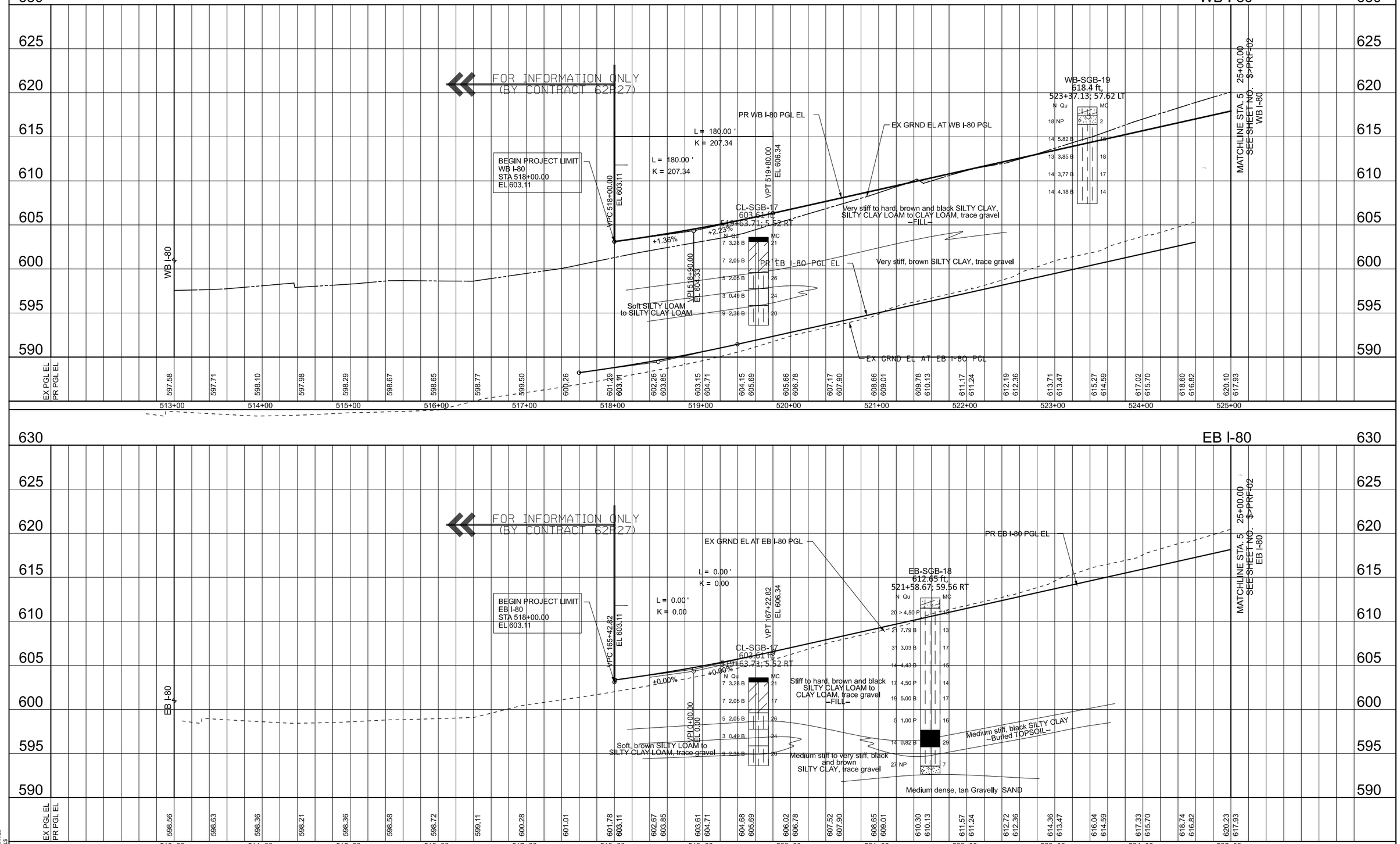
$>PLN-11-L1
$>PLN-11-L2

SCALE: 1"=50' | SHEET $$>PLN-11 OF ####PLN SHEETS | STA. 633+00.00 | TO STA. 642+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	$>SNUM	$>COUNTY	$>TOT	$>PLN-11

CONTRACT NO. $>CNUM

ILLINOIS | FED. AID PROJECT



MODEL: $MODELNAME$
FILE NAME: $FILE$

TranSystems

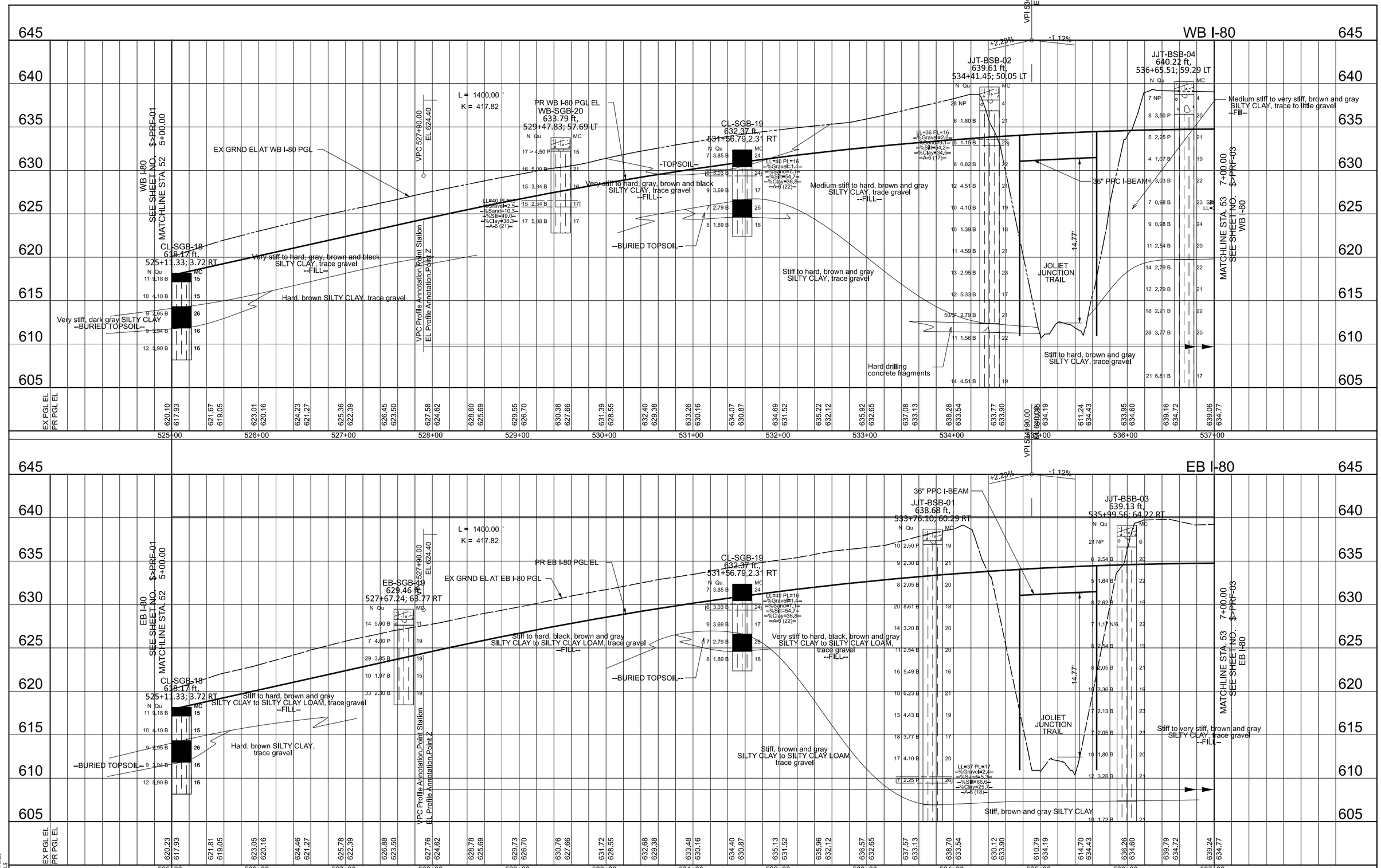
USER NAME = $USER$	DESIGNED -	$>PRF-01-DE	REVISED -	$>REV1	
	DRAWN -	$>PRF-01-DR	REVISED -	$>REV2	
PLOT SCALE = $SCALE$	CHECKED -	$>PRF-01-CH	REVISED -	$>REV3	
PLOT DATE = $DATE$	DATE -	$>DATE	REVISED -	$>REV4	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

$>PRF-01-L1
$>PRF-01-L2

SCALE: HORIZ: 1"=50'
VERT: 1"=5'
SHEET $$>PRF-01 OF $>PRF-01 SHEETS
STA. 518+00.00 TO STA. 525+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	$>SNUM	$>COUNTY	$>TOT	$>PRF-01
		CONTRACT NO. $>CNUM		
	ILLINOIS FED. AID PROJECT			



USER NAME	= $USER$	DESIGNED -	$>PRF-02-DE	REVISED -	$>REV1		
		DRAWN -	$>PRF-02-DR	REVISED -	$>REV2		
PLOT SCALE	= $SCALE$	CHECKED -	$>PRF-02-CH	REVISED -	$>REV3		
PLOT DATE	= $DATE$	DATE -	$>DATE	REVISED -	$>REV4		

MODEL: $MODELNAME$
FILE NAME: $FILE$

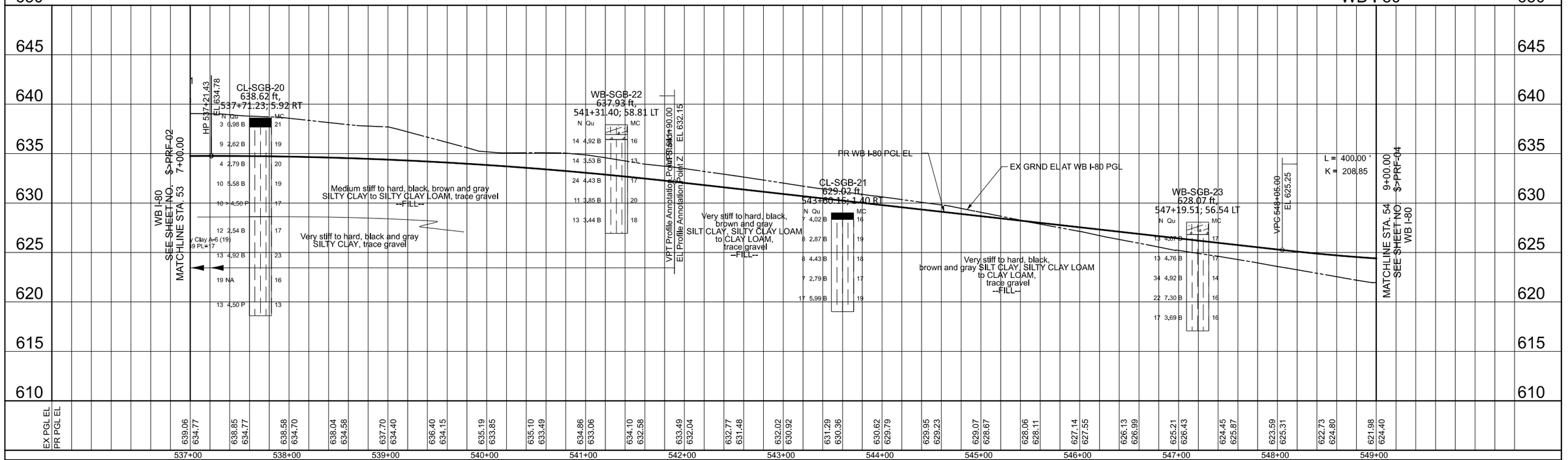
TranSystems

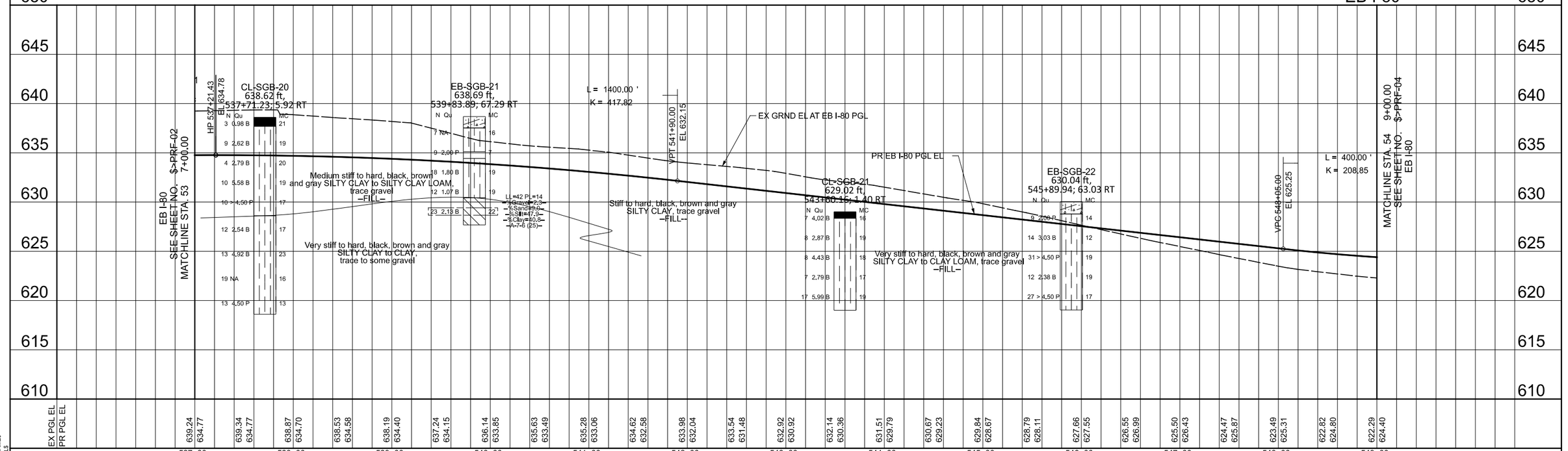
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

$>PRF-02-L1
$>PRF-02-L2

SCALE: HORIZ: 1"=50'
VERT: 1"=5'
SHEET $$>PRF-02$ OF $>PRF-02-SHEETS$ STA. 525+00.00 TO STA. 537+00.00

F.A.I. RTE.		SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80		$>SNUM	$>COUNTY	$>TOT	$>PRF-02
			CONTRACT NO. $>CNUM		
		ILLINOIS	FED. AID PROJECT		

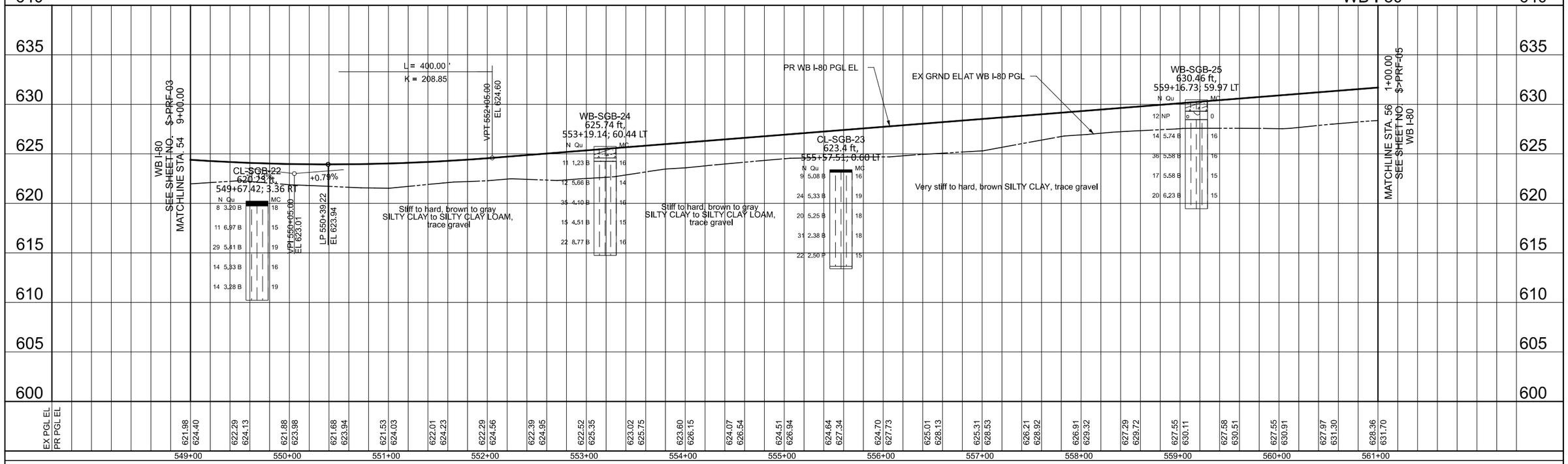




MODEL: $MODELNAME$
FILE NAME: $FILE$

Tran Systems

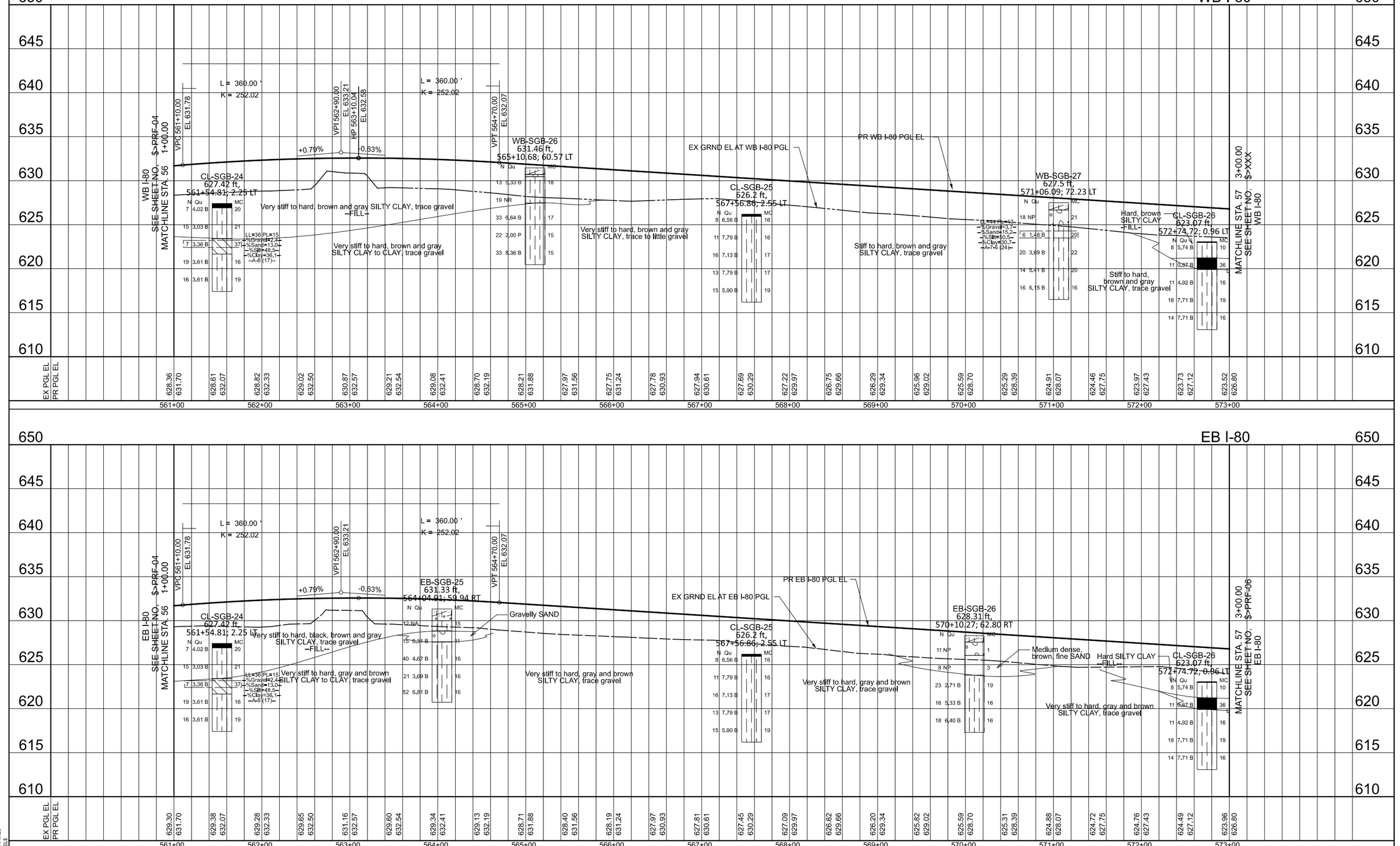
USER NAME = $USER$	DESIGNED - $>PRF-03-DE	REVISED - $>REV1	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	$>PRF-Ø3-L1 $>PRF-Ø3-L2	F.A.I. RTE. / SECTION / COUNTY / TOTAL SHEETS / SHEET NO.
	DRAWN - $>PRF-03-DR	REVISED - $>REV2			I-80 / $>SNUM / $>COUNTY / $>TOT$ / $>PRF-03
PLOT SCALE = $$SCALE$	CHECKED - $>PRF-03-CH	REVISED - $>REV3		SCALE: HORIZ: 1"=50' VERT: 1"=5' SHEET $$>PRF-03 OF $>PRFSHEETS STA. 537+00.00 TO STA. 549+00.00	CONTRACT NO. $>CNUM
PLOT DATE = $DATE$	DATE - $>DATE	REVISED - $>REV4			ILLINOIS / FED. AID PROJECT



MODEL: $MODELNAME$
FILE NAME: $FILE$

USER NAME = $USER$	DESIGNED - $>PRF-04-DE	REVISED - $>REV1	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	$>PRF-04-L1 $>PRF-04-L2	
	DRAWN - $>PRF-04-DR	REVISED - $>REV2			
PLOT SCALE = $SCALE$	CHECKED - $>PRF-04-CH	REVISED - $>REV3			
PLOT DATE = $DATE$	DATE - $>DATE	REVISED - $>REV4		SCALE: HORIZ: 1"=50' VERT: 1"=5' SHEET $$>PRF-04-F $>PRF-04-L SHEETS STA. 549+00.00 TO STA. 561+00.00	

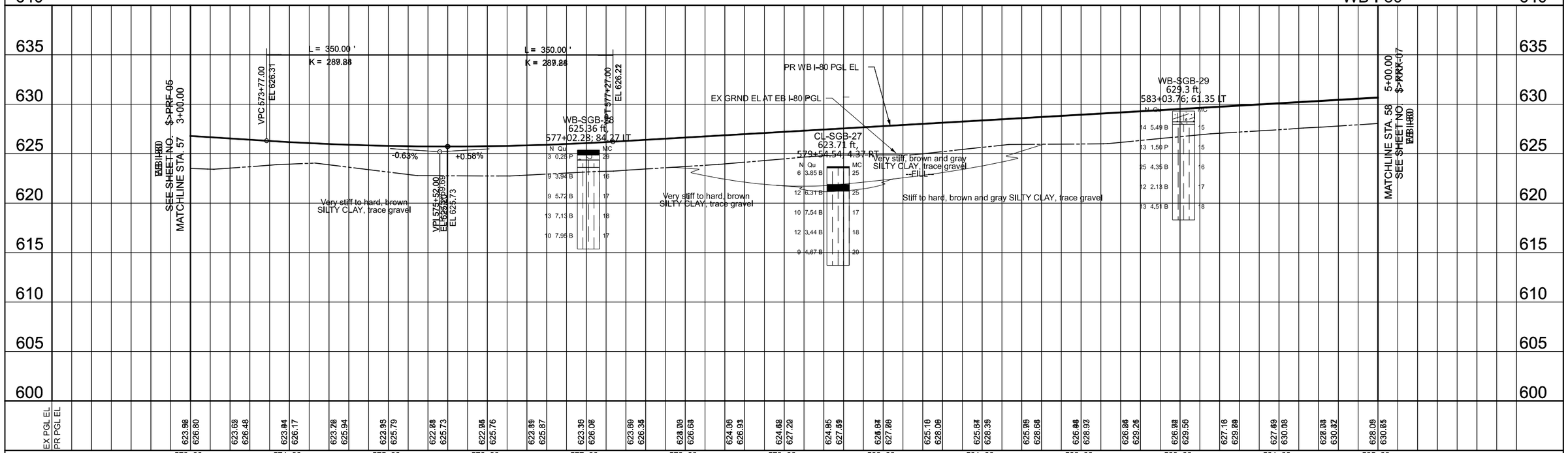
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	$>SNUM	$>COUNTY	$>TOT	$>PRF-04
		CONTRACT NO. $>CNUM		
	ILLINOIS FED. AID PROJECT			



USER NAME = $USER$	DESIGNED - $>PRF-05-DE	REVISED - $>REV1	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	$>PRF-05-L1 $>PRF-05-L2	
	DRAWN - $>PRF-05-DR	REVISED - $>REV2			
PLOT SCALE = $SCALE$	CHECKED - $>PRF-05-CH	REVISED - $>REV3		SCALE: HORIZ: 1"=50' VERT: 1"=5'	SHEET $$>PRF-05F $>PRF-05G SHEETS STA. 561+00.00 TO STA. 573+00.00
PLOT DATE = $DATE$	DATE - $>DATE	REVISED - $>REV4			

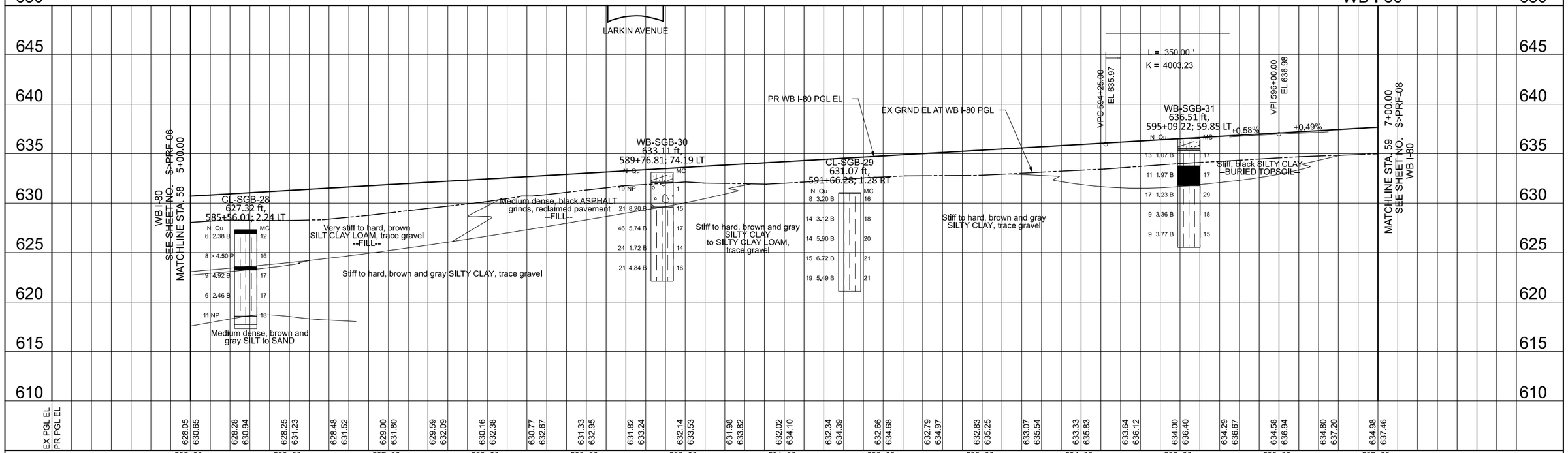
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	$>SNUM	$>COUNTY	$>TOT	$>PRF-05
		CONTRACT NO. $>CNUM		
	ILLINOIS FED. AID PROJECT			

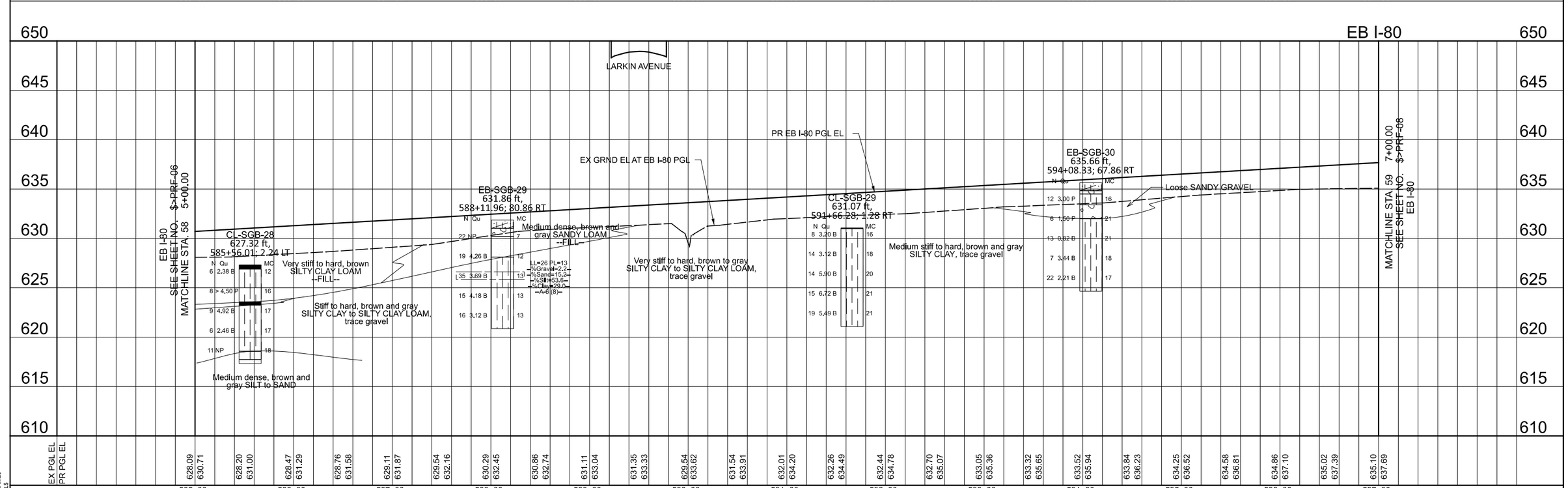
MODEL: $MODELNAME$
FILE NAME: $FILE$



MODEL: $MODELNAME$
FILE NAME: $FILE$

TranSystems	USER NAME = $USER$	DESIGNED - $>PRF-06-DE	REVISED - $>REV1	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	$>PRF-06-L1 $>PRF-06-L2	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - $>PRF-06-DR	REVISED - $>REV2			I-80	$>SNUM	$>COUNTY	$>TOT	$>PRF-06
	PLOT SCALE = $SCALE$	CHECKED - $>PRF-06-CH	REVISED - $>REV3						CONTRACT NO. $>CNUM	
	PLOT DATE = $DATE$	DATE - $>DATE	REVISED - $>REV4		SCALE: HORIZ: 1"=50' VERT: 1"=5'	SHEET $$>PRF-06 OF $>PRF-06 SHEETS	STA. 573+00.00	TO STA. 585+00.00	ILLINOIS	FED. AID PROJECT

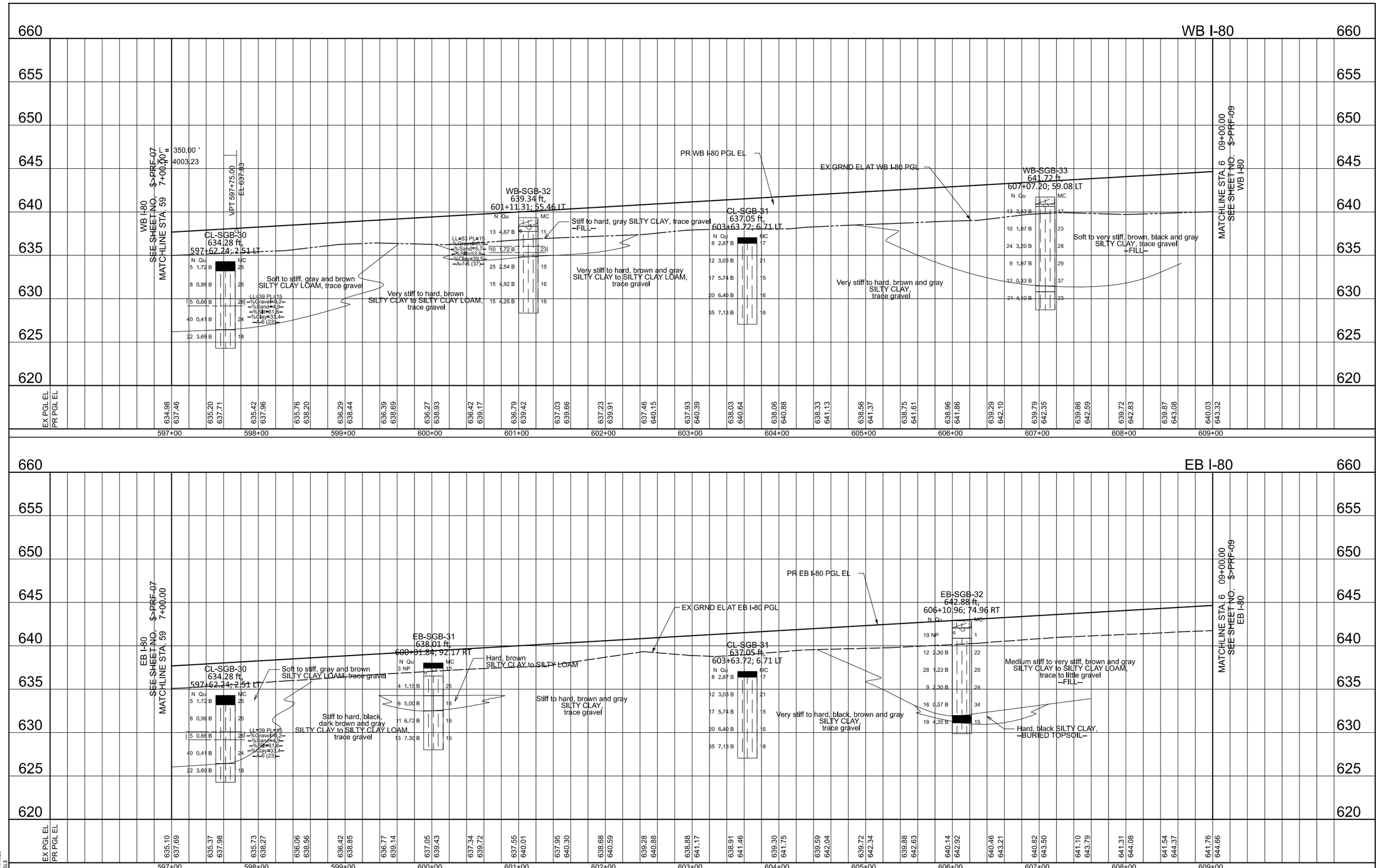




MODEL: $MODELNAME$
FILE NAME: $FILE$

TranSystems

USER NAME = $USER$	DESIGNED - $>PRF-07-DE	REVISED - $>REV1	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	$>PRF-07-L1 $>PRF-07-L2	F.A.I. RTE. / SECTION / COUNTY / TOTAL SHEETS / SHEET NO.
	DRAWN - $>PRF-07-DR	REVISED - $>REV2			I-80 / $>SNUM / $>COUNTY / $>TOT / $>PRF-07
PLOT SCALE = $SCALE$	CHECKED - $>PRF-07-CH	REVISED - $>REV3		SCALE: HORIZ: 1"=50' VERT: 1"=5' SHEET $$>PRF-07-DF $>PRF-07-SHEETS STA. 585+00.00 TO STA. 597+00.00	CONTRACT NO. $>CNUM
PLOT DATE = $DATE$	DATE - $>DATE	REVISED - $>REV4			ILLINOIS / FED. AID PROJECT

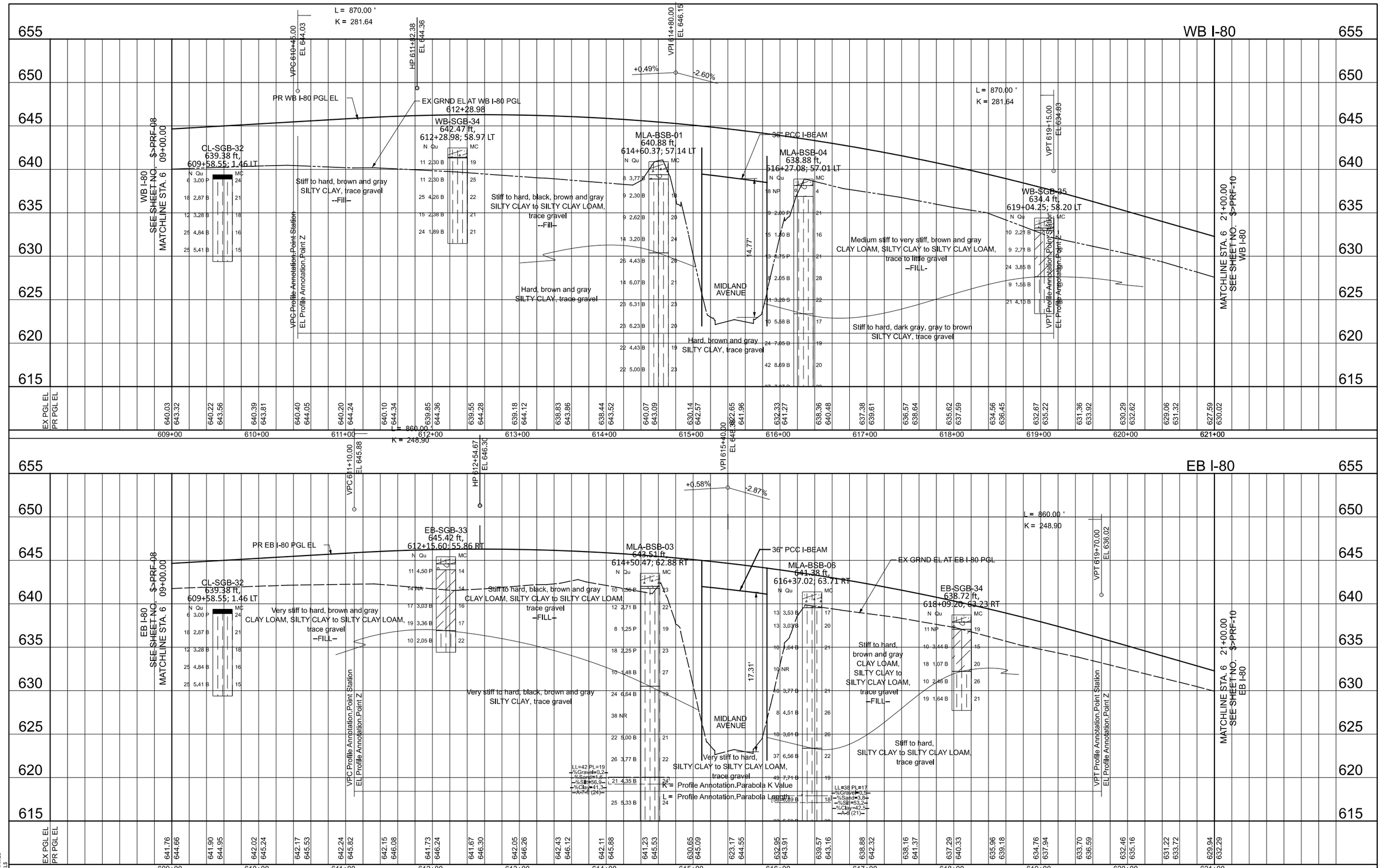


MODEL: $MODELNAME$
FILE NAME: $FILE$

TranSystems

USER NAME = $USER$	DESIGNED - $>PRF-08-DE	REVISED - $>REV1	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	$>PRF-08-L1 $>PRF-08-L2	
	DRAWN - $>PRF-08-DR	REVISED - $>REV2			
PLOT SCALE = $SCALE$	CHECKED - $>PRF-08-CH	REVISED - $>REV3		SCALE: HORIZ: 1"=50' VERT: 1"=5'	SHEET $$>PRF-08 OF $>PRF-08 SHEETS STA. 597+00.00 TO STA. 609+00.00
PLOT DATE = $DATE$	DATE - $>DATE	REVISED - $>REV4			

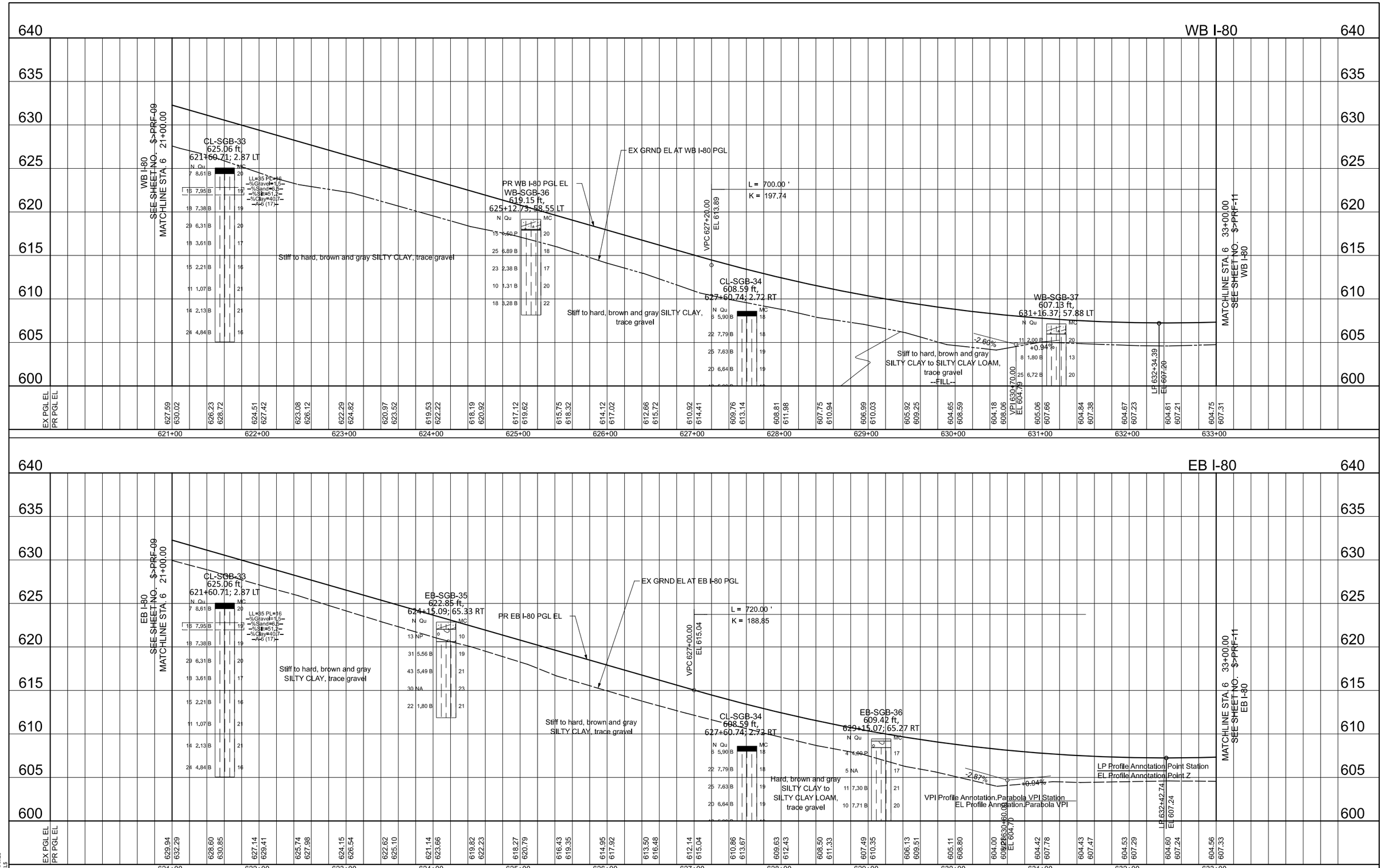
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	$>SNUM	$>COUNTY	$>TOT	$>PRF-08
		CONTRACT NO. $>CNUM		
	ILLINOIS FED. AID PROJECT			



USER NAME = $USER$	DESIGNED - $>PRF-09-DE	REVISED - $>REV1	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	$>PRF-09-L1 $>PRF-09-L2	
	DRAWN - $>PRF-09-DR	REVISED - $>REV2			
PLOT SCALE = $SCALE$	CHECKED - $>PRF-09-CH	REVISED - $>REV3		SCALE: HORIZ: 1"=50' VERT: 1"=5'	SHEET $$>PRF-09-SF $>PRF-09-SHEETS STA. 609+00.00 TO STA. 621+00.00
PLOT DATE = $DATE$	DATE - $>DATE	REVISED - $>REV4			

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	$>SNUM	$>COUNTY	$>TOT	$>PRF-09
		CONTRACT NO. $>CNUM		
	ILLINOIS FED. AID PROJECT			

MODEL: $MODELNAME$
FILE NAME: $FILE$



MODEL: $MODELNAME$
FILE NAME: $FILE$

TranSystems

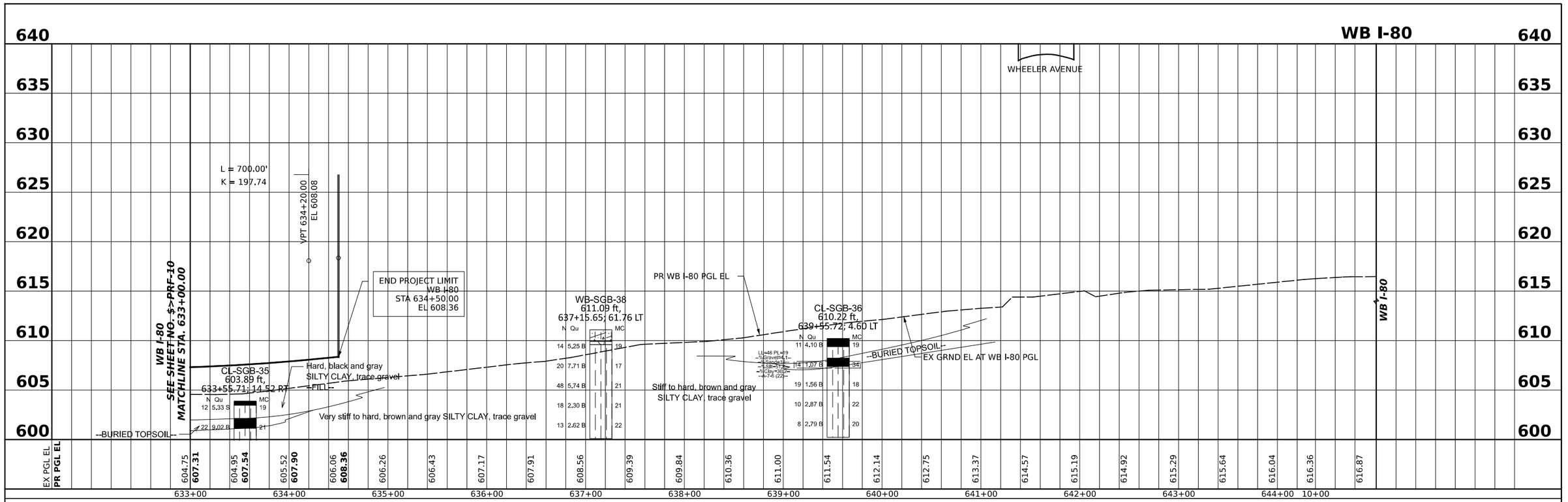
USER NAME = $USER$	DESIGNED - $>PRF-10-DE	REVISED -	$>REV1
	DRAWN - $>PRF-10-DR	REVISED -	$>REV2
PLOT SCALE = $SCALE$	CHECKED - $>PRF-10-CH	REVISED -	$>REV3
PLOT DATE = $DATE$	DATE - $>DATE	REVISED -	$>REV4

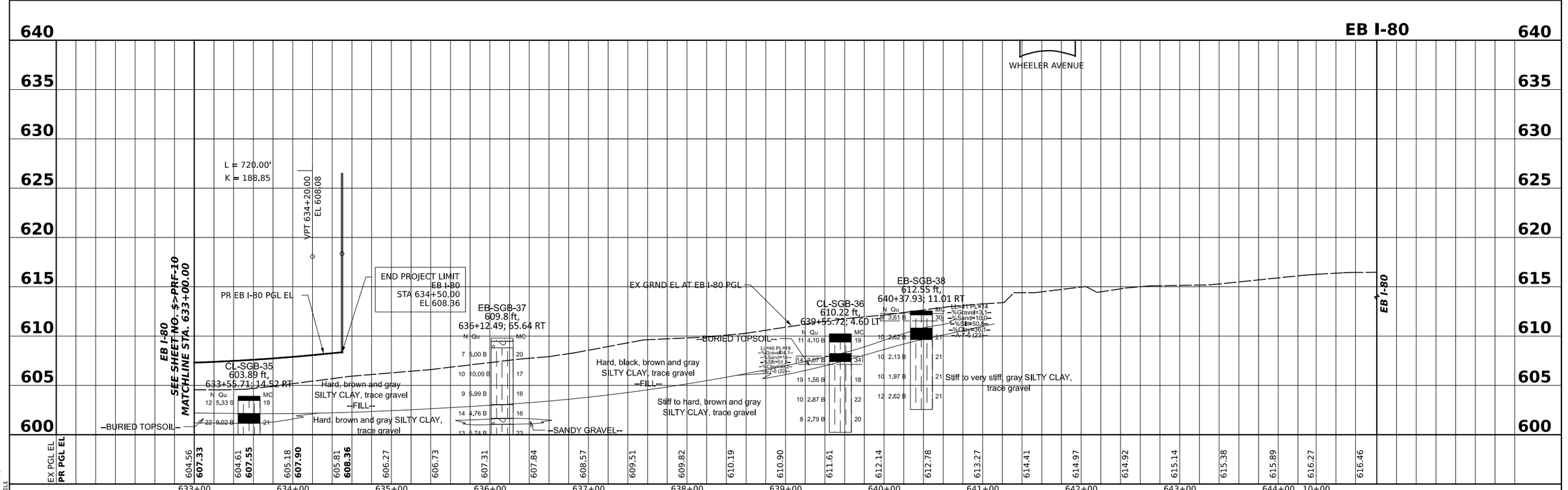
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

$>PRF-10-L1
$>PRF-10-L2

SCALE: HORIZ: 1"=50' VERT: 1"=5' | SHEET $$>PRF-10 OF $>PRF-10 SHEETS | STA. 621+00.00 | TO STA. 633+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	$>SNUM	$>COUNTY	$>TOT	$>PRF-10
		CONTRACT NO. $>CNUM		
	ILLINOIS	FED. AID PROJECT		





MODEL: $MODELNAME$
FILE NAME: $FILE1$

TranSystems

USER NAME = $USER$	DESIGNED - $>PRF-11-DE	REVISED - $>REV1			
	DRAWN - $>PRF-11-DR	REVISED - $>REV2			
PLOT SCALE = $SCALE$	CHECKED - $>PRF-11-CH	REVISED - $>REV3			
PLOT DATE = $DATE$	DATE - $>DATE	REVISED - $>REV4			

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

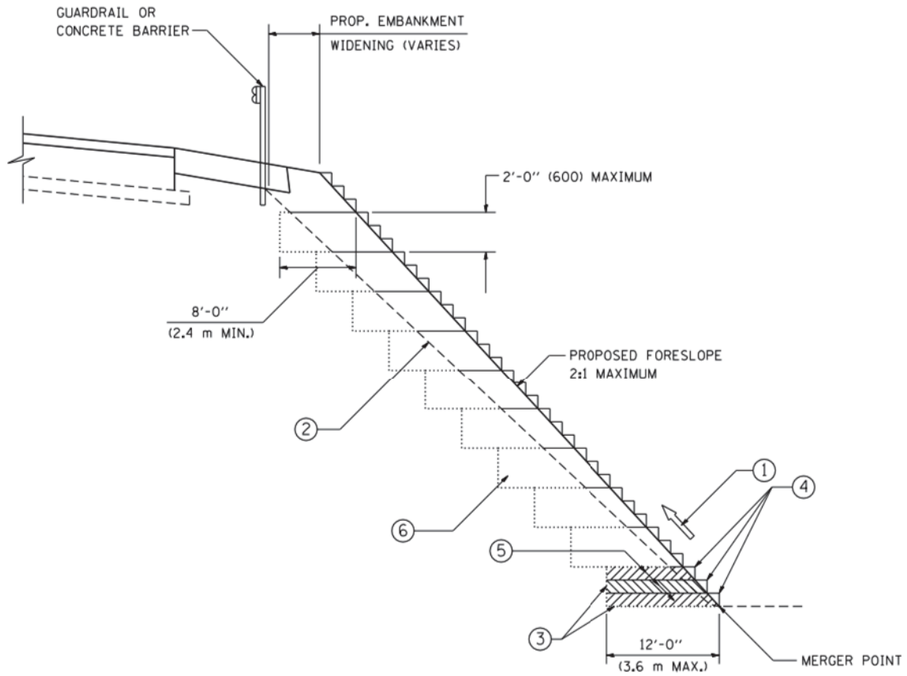
$>PRF-11-L1
$>PRF-11-L2

SCALE: HORIZ: 1"=50' VERT: 1"=5' | SHEET $$>PRF-DE $>PRF-SHEETS | STA. 633+00.00 | TO STA. 642+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	$>SNUM	$>COUNTY	$>TOTS	$>PRF-11
		CONTRACT NO. $>CNUM		
	ILLINOIS	FED. AID PROJECT		

Wang Engineering
1145 North Main Street
Lombard, Illinois 60148
Phone (630) 953-9928
www.wangeng.com

APPENDIX H



TYPICAL BENCHING DETAIL FOR EMBANKMENT

NOTES:

1. CONSTRUCT SUCCEEDING BENCH CUTS AND EMBANKMENT PLACEMENT AND COMPACTION FROM BOTTOM TO TOP IN STAIRSTEP FASHION.
2. EXISTING FORESLOPE PREPARED IN ACCORDANCE WITH ARTICLE 205.03 OF THE STANDARD SPECIFICATIONS.
3. BENCH CUT EXISTING SLOPE TYPICAL FOR EACH STEP.
4. TRIM TO FINAL SLOPE.
5. EQUAL 8-INCH (200) LIFTS OF EMBANKMENT COMPACTED IN ACCORDANCE WITH ARTICLE 205.05 OF THE STANDARD SPECIFICATIONS.
6. EXCAVATION OF BENCH CUTS WITHIN EXISTING EMBANKMENT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER CUBIC METER OR CUBIC YARD FOR "EARTH EXCAVATION". THIS PRICE WILL INCLUDE ALL LABOR AND MATERIAL, NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
7. SLOPES SHALL BE BENCHED ACCORDING TO THIS DETAIL WHEN THE SLOPE IS STEEPER THAN 4:1 AND THE HEIGHT IS GREATER THAN 5' (1.5 m).

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

FILE NAME = W:\diststd\22x34\bd51.dgn	USER NAME = gaglianobt	DESIGNED -	REVISED -
		DRAWN - CADD	REVISED -
	PLOT SCALE = 50.0000 ' / IN.	CHECKED - S.E.B.	REVISED -
	PLOT DATE = 1/4/2008	DATE - 06-16-04	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BENCHING DETAIL
FOR EMBANKMENT WIDENING

SCALE: NONE | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
326	105-N-2(15)	MCHENRY	473	380
	BD-51	**CONTRACT NO.** 62B43		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		