Structural Geotechnical Report

Noise Abatement Walls
SN 099-N1023 thru N1027
I-80 Des Plaines River Bridge
Center Street Interchange
Contract 62R22
Joliet, Illinois

Prepared for

Illinois Department of Transportation
PTB: 198-003

Project Design Engineer
WSP USA Inc.

Prepared by

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June 6, 2025

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David Skaleski, P.E.
Project Manager
WSP USA
30 North LaSalle Street, Suite 4200
Chicago, Illinois 60602

Geotechnical Structural Report
Noise Abatement Walls at I-80 Des Plaines River Bridge
Joliet, IL
PTB 198-003

Dear Mr. Skaleski:

Attached is a copy of the Structural Geotechnical Report for the above referenced project. This report provides a brief description of the site investigation, site conditions, and lab test results. The site investigation included advancing a total of fourteen (14) soil borings to depths of 15 feet or until auger refusal at depths between 3 and 11.5 feet for the three proposed noise walls (B22, B23 and B24N).

Should you have any questions or require additional information, please call us at 630-994-2600.

Sincerely,

Brook Geletu, E.I.T.
Project Engineer

Dawn Edgell, P.E.
Sr. Project Engineer

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1.0 INTRODUCTION

GSG Consultants, Inc. (GSG) completed a geotechnical investigation for the installation of three new noise abatement walls located along eastbound and westbound Interstate 80 mainline and westbound Interstate 80 at Center Street exit ramp in Joliet, IL. The purpose of this site investigation was to explore the subsurface conditions along the proposed structure locations, to determine engineering properties of the subsurface soil, and to develop construction recommendations for the noise abatement walls.

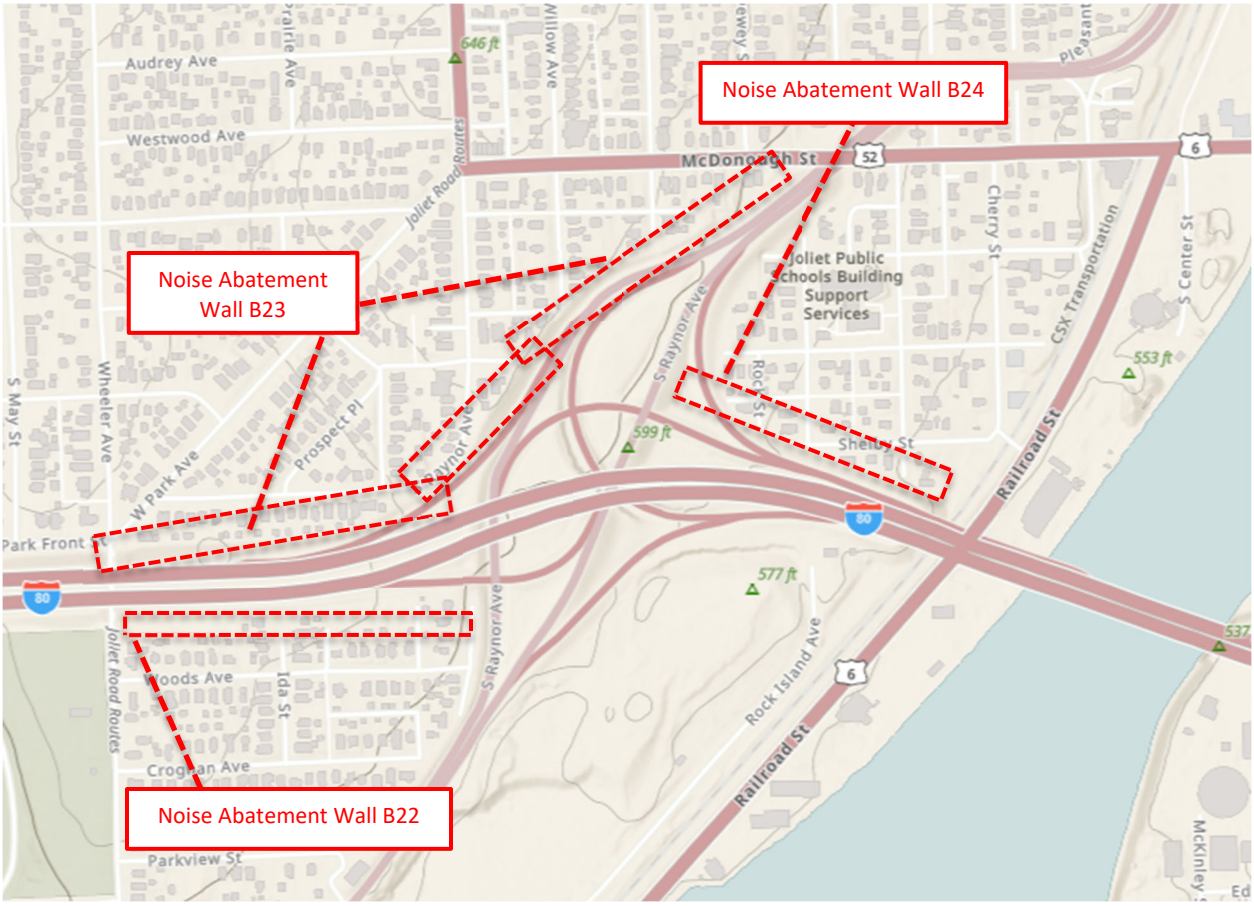


Exhibit 1 – Project Location Map
(Source: USGS Topographic Maps, usgs.gov)

1.1 Existing Site Conditions

The area where the proposed noise walls are to be built will be located on the right-of-way (ROW) along Interstate 80. **Exhibits 2a, 2b, and 2c** generally show the existing site conditions where the three proposed noise walls will be constructed. The existing route consists of a four-lane roadway with shoulders.

Exhibit 2a – Existing Site Conditions for Wall B22, looking East along I-80

Exhibit 2b – Existing Site Conditions for Wall B23, looking West along I-80

Exhibit 2c – Existing Site Conditions for Wall B24, looking West along I-80

1.2 Proposed Noise Wall Information

The proposed project is to construct 3 noise walls along the Interstate 80 corridor, between Wheeler Avenue and the Des Plaines River. Based on the preliminary Plan and Profile Drawings provided by WSP, dated 10/21/2022, three noise walls will be constructed, with Wall B22 being constructed along eastbound I-80 and Walls B23 and B24 being constructed along westbound I-80. **Table 1** presents a summary of the proposed noise walls.

Table 1 – Noise Wall Summary

Wall Name	Wall Stations	Proposed Wall Type	Approximate Length (ft)	Maximum Anticipated Wall Height (ft)
Wall B22	[1]Sta. 0+75 to Sta. 15+42 (RT)	Ground Mounted	1,600	20.0
Wall B23	[2]Sta. 642+15 to Sta. 18+89 (LT)	Ground Mounted	2,900	25.0
Wall B24	[3]Sta. 7+69 to Sta. 14+15 (RT)	Ground Mounted	2,345	20.0

1. Based on US Route 41 stationing.
2. Based on Center Ramp C stationing.
3. Based on I-80 stationing.

1.3 Regional Geology

GSG reviewed several published documents to determine the regional geological setting in the area. The site is located in Joliet, Will County. The surficial geologic deposits in this area are typically glacial drift deposited during the Wisconsin Glacial Age. The subsurface profile in the area consists of deposits of silty clay, and gravel extending to approximately 2 to 66 feet below ground surface, at which point bedrock is generally encountered, which is consistent with the soil borings. Underlying the surficial deposits, the bedrock consists of the Joliet formation of Niagaran Series, which consists of dolomite that varies from extremely argillaceous, silty, shaly and cherty to exceptionally pure.

2.0 SITE SUBSURFACE EXPLORATION PROGRAM

This section describes the subsurface exploration program and laboratory testing program completed as part of this project. The subsurface exploration program was performed in accordance with applicable IDOT geotechnical manuals and procedures.

2.1 Subsurface Exploration Program

Soil borings were completed between March 20 to May 21, 2025. The exploration program included advancing fourteen (14) standard penetration test (SPT) borings along the lengths of the three proposed walls; four (4) borings were drilled for wall B22; five (5) soil borings for wall B23; and five (5) soils borings for wall B24. The as-drilled locations of the soil borings are shown on the Soil Boring Location Plan and Subsurface Profiles (**Appendix A**). **Table 2** presents a summary list of the borings for each wall.

Table 2 – Summary of Subsurface Exploration Borings

	Boring ID	Station	Offset (ft)/ Direction	Depth (ft)	Surface Elevation (ft)
Noise Wall B22	NAW-11A	9+41.04	01.67' Rt.	15.0	617.34
	NAW-12	N/A	N/A	15.0	611.48
	NAW-13*	13+45.49	30.40' Rt.	9.5	606.74
	NAW-14A*	14+37.22	75.50' Rt.	5.0	602.39
Noise Wall B23	NAW-20A	10+21.36	52.82' Rt.	14.5	612.61
	NAW-21*	8+10.23	43.12' Rt.	11.5	612.43
	NAW-22	6+03.71	84.40’ Rt.	15.0	598.26
	NAW-23A	4+35.97	182.46' Rt.	15.0	624.36
	NAW-24A	4+31.76	306.00' Rt.	15.0	623.14
	NAW-26	36+49.00	139.26’ Lt.	15.0	605.14
	NAW-29	41+01.01	140.78’ Lt.	15.0	596.42
Noise Wall B24	NAW-30	N/A	N/A	15.0	599.18
	NAW-31*	N/A	N/A	3.0	589.66
	NAW-33*	10+50.74	11.70' Rt.	3.0	573.95
	NAW-34*	8+50.94	8.38' Rt.	3.0	571.15
	NAW-36*	N/A	N/A	3.0	551.92

*terminated upon encountering auger refusal on bedrock

The soil borings were drilled using four drill rigs, including a Geoprobe (hammer efficiency 99%), Diedrich D-50 (hammer efficiency 97.7%), Mobile B-57 (hammer efficiency 89%), and CME-75 (hammer efficiency 78.8%), all using 3¼-inch I.D. hollow stem augers and an automatic hammer. Soil sampling was performed according to AASHTO T 206, "Penetration Test and Split Barrel Sampling of Soils." Soil samples were obtained at 2.5-foot intervals to the boring termination depths or encountering auger refusal on bedrock. Water level measurements were made in each boring when evidence of free groundwater was detected on the drill rods or in the samples. The boreholes were also checked for free water immediately after auger removal, and before filling the open boreholes with soil cuttings and surface patching with asphalt when necessary.

GSG's field representative inspected, visually classified and logged the soil samples during the subsurface exploration activities and performed unconfined compressive strength tests on cohesive soil samples using a calibrated Rimac compression tester and a calibrated hand penetrometer in accordance with IDOT procedures and requirements. Representative soil samples collected from each sample interval were placed in jars and were returned to the laboratory for further testing and evaluation.

2.2 Laboratory Testing Program

All samples were inspected in the laboratory to verify the field classifications. A laboratory testing program was undertaken to characterize and determine engineering properties of the subsurface soils encountered in the area of the proposed walls. Moisture content tests (ASTM D2216) were performed on representative soil samples.

The laboratory tests were performed in accordance with test procedures outlined in the IDOT Geotechnical Manual (2020), and per ASTM and AASHTO requirements. Based on the laboratory test results, the soils encountered were classified according to the Illinois Division of Highways (IDH) classification systems. The results of the laboratory testing program are shown along with the field test results on the Soil Boring Logs **(Appendix B)**.

2.3 Subsurface Soil Conditions

This section provides a brief description of the soils encountered in the borings performed in the vicinity of the proposed noise walls. Variations in the general subsurface soil profile were noted during the drilling activities. Detailed descriptions of the subsurface soils are provided in the Soil

Boring Logs (**Appendix B**). The soil boring logs provide specific conditions encountered at each boring location, including soil descriptions, stratifications, penetration resistance, elevations, location of the samples, water levels (when encountered), and laboratory test data. Variations in the general subsurface soil profile were noted during the drilling activities. The stratifications shown on the boring logs represent the conditions only at the actual boring locations and represent the approximate boundary between subsurface materials; however, the actual transition may be gradual.

Noise Wall B22

NAW-11A through NAW-14A

Boring NAW-11A was drilled in the asphalt shoulder along Interstate 80 eastbound. NAW-12 (in grass) and NAW-13 (in asphalt driveway) were both drilled in the neighborhood between Interstate 80 and Raynor Avenue. NAW-14A was drilled in the asphalt shoulder of Raynor Avenue southbound. NAW-11A encountered 11 inches of asphalt for Interstate 80 and NAW-14A encountered 6 inches of asphalt for Raynor Avenue. NAW-12 encountered 1 inch of topsoil.

Underlying the surficial layers, the borings encountered brown and gray silty clay fill soils to depths of 3 to 6 feet below the ground surface. The fill materials consist of silty soils with trace sand and gravel. Beneath the existing fill soils, boring NAW-11A, NAW-12 and NAW-13, and NAW-14A encountered stiff to hard brown and gray silty clay soils to termination depths between 5.0 and 15.0 feet due to auger refusal on bedrock.

Noise Wall B23

NAW-20A through NAW-26, NAW-29

Borings NAW-20A through NAW-29 were drilled along the westbound on-ramp from Raynor Avenue to Interstate 80 and adjacent residential streets. The surface elevations of the borings ranged between 605.14 and 624.36 feet and initially encountered 4.0 to 6.0 inches of asphalt. Borings 23A and 24A were drilled in the grass right of way and encountered 1.0 inch of topsoil.

Underlying the surficial layers, borings NAW-20A, NAW-24, and NAW-26 encountered brown and gray silty clay fill soils to depths of 3.5 feet below the ground surface. Beneath the existing fill soils, the borings encountered stiff to hard brown and gray silty clay soils to the termination depths between 11.0 and 15.0 feet where auger refusal was encountered on bedrock.

Noise Wall B24N

NAW-30 through NAW-36

Borings NAW-30 through NAW-36 were drilled in the grass space along the Interstate 80 off-ramp to northbound Raynor Avenue, and within the right of way along several residential streets in the neighborhood to the north of I-80. The borings initially encountered 3 to 6 inches of topsoil.

Underlying the surficial layers, borings NAW-30 and NAW-31 encountered brown silty clay fill soils to depths of 2.5 to 8.5 feet below the ground surface. NAW-30 encountered 3 inches of concrete at a depth of 6.0 feet. Borings NAW-33 and NAW-36 encountered brown and gray gravel fill to depths of 1.0 to 2.5 feet below the ground surface.

Beneath the existing fill soils, boring NAW-30 encountered stiff dark brown silty clay soils to a depth of 11.0 feet. Borings NAW-34 and NAW-36 encountered soft black silty clay to depths of 1.5 to 2.0 feet. Borings NAW-31, NAW-33, NAW-34, and NAW-36 encountered auger refusal on bedrock at a depth of 3.0 feet.

2.4 Groundwater Conditions

Water levels were checked in each boring to determine the general groundwater conditions present at the site and were measured while drilling and after each boring was completed. Groundwater was not encountered during drilling or after drilling was completed in any of the borings.

Due to safety reasons, the borings were not left open after completion, and no 24-hour readings were collected. The borings were immediately backfilled with soil cuttings and bentonite, and surface patched with asphalt where necessary.

Based on the color change from brown to gray, it is anticipated that the long-term groundwater level could range between 2.5 to 14.0 feet (elevations of 571.5 to 606.6 feet) and will vary based on the bedrock surface. Perched water may be encountered within the existing fill materials or any confined granular layers. Water level readings were made in the boreholes at times and under conditions shown on the boring logs and stated in the text of this report. Long-term observations in cased borings or piezometers would be necessary to more accurately evaluate

the long-term groundwater conditions at the site. However, it should be noted that fluctuations in groundwater level may occur due to variations in rainfall, other climatic conditions, or other factors not evident at the time measurements were made and reported herein.

3.0 GEOTECHNICAL ANALYSES

This section provides GSG's geotechnical analysis for the design of the proposed noise walls based on the results of the field exploration, laboratory testing, and geotechnical analysis. Subsurface conditions in unexplored locations may vary from those encountered at the boring locations. If structure locations, loadings, or elevations are changed, we request that GSG be contacted so that we may re-evaluate our recommendations.

3.1 Derivation of Soil Parameters for Design

GSG determined the geotechnical parameters to be used for the project design based on the results of field and laboratory test data on individual boring logs as well as our experience. Unit weights, friction angles and shear strength parameters were estimated using corrected standard penetration test (SPT) using published correlations for N values results for the fill and cohesionless soils and in-situ and laboratory test results for cohesive soils. The SPT values were corrected for hammer efficiency. The hammer efficiency correction factor considers the use of a safety hammer/rope/cat-head system, generally estimated to be 60% efficient. Thus, correlations should be based upon what is currently termed as N_{60} data. The efficiencies of the automatic hammers used for this exploration were estimated to be approximately 98% for the Diedrich D-50, 89% for the Mobile B-57, 78.8% for the CME-75 and 99% for the 7822DT Geoprobe based on previous efficiency testing of the drill rigs. The correction for hammer efficiency is a direct ratio of relative efficiencies as follows:

$N_{60} = N * (98/60)$: Diedrich D-50
$N_{60} = N * (89/60)$: Mobile B-57
$N_{60} = N * (78.8/60)$: CME-75
$N_{60} = N * (99/60)$: 7822DT Geoprobe

*Where the N value is the field recorded blow counts.

Based on the field investigation data collected, generalized soil parameters were developed for each of the noise walls. For the soils encountered in the project, the recommended soil parameters for use in design are presented in **Tables 3a, 3b and 3c**.

Table 3a – Summary of Soil Parameters – Wall B22

Depth Range (feet)	Soil Description	In situ Unit Weight γ (pcf)	Undrained		Drained	
			Cohesion c (psf)	Friction Angle ϕ (°)	Cohesion c (psf)	Friction Angle ϕ (°)
	New Engineered Clay Fill	120	1,000	0	100	25
	New Engineered Granular Fill	125	0	30	0	30
1.0 to 6.0*	Brown and Gray Silty Clay Fill	138	3,600	0	300	25
6.0 to 15.0	Brown and Gray Very Stiff to Hard Silty Clay	138	5,200	0	520	28

Table 3b – Summary of Soil Parameters – Wall B23

Depth Range (feet)	Soil Description	In situ Unit Weight γ (pcf)	Undrained		Drained	
			Cohesion c (psf)	Friction Angle ϕ (°)	Cohesion c (psf)	Friction Angle ϕ (°)
	New Engineered Clay Fill	120	1,000	0	100	25
	New Engineered Granular Fill	125	0	30	0	30
1.0 to 3.5* **Only boring B-20A**	Brown and Dark Gray Silty Clay Fill	138	4,500	0	450	25
3.5 to 15.0	Brown and Gray Stiff to Hard Silty Clay	138	4,100	0	410	28

Table 3c – Summary of Soil Parameters – Wall B24

Depth Range (feet)	Soil Description	In situ Unit Weight γ (pcf)	Undrained		Drained	
			Cohesion c (psf)	Friction Angle ϕ (°)	Cohesion c (psf)	Friction Angle ϕ (°)
	New Engineered Clay Fill	120	1,000	0	100	25
	New Engineered Granular Fill	125	0	30	0	30
1.0 to 8.5* **Only boring NAW-30**	Brown and Dark Gray Silty Clay Fill	128	900	0	90	25
1.0 to 11.0 **Only boring NAW-30 and NAW-31**	Brown and Gray Stiff to Hard Silty Clay	133	1,300	0	130	28

3.2 Seismic Parameters

The seismic hazard for the site was analyzed per the IDOT Geotechnical Manual, IDOT Bridge Design Manual, and AASHTO LRFD Bridge Design Specifications.

The Seismic Soil Site Class was determined per the requirements of "All Geotechnical Manual Users" (AGMU) Memo 9.1, Design Guide for Seismic Site Class Determination, and the "Seismic Site Class Determination" Excel spreadsheet provided by IDOT. A global Site Class Definition was determined for this project, and was found to be **Soil Site Class D**. The Seismic Performance Zone (SPZ) was determined using Figure 2.3.10-3 in the IDOT Bridge Manual and was found to be **Seismic Performance Zone 1**.

The AASHTO Seismic Design Parameters program was used to determine the peak ground acceleration coefficient (PGA), and the short (S_{DS}) and long (S_{D1}) period design spectral acceleration coefficients for each of the proposed structures. For this section of the project, the S_{DS} and the S_{D1} were determined using 2020 AASHTO Guide Specifications as shown in **Table 4**. Given the site location and materials encountered, the potential for liquefaction is minimal.

Table 4 – Seismic Parameters

Code Reference	PGA	S_{DS}	S_{D1}
2020 AASHTO Guide for LRFD Seismic Bridge Design	0.049g	0.0167g	0.095g

4.0 CONSTRUCTION CONSIDERATIONS

All work performed for the proposed project should conform to the requirements in the IDOT Standard Specifications for Road and Bridge Construction (2022). Any deviation from the requirements in the manuals above should be approved by the design engineer.

4.1 Existing Utilities

Where there are existing utilities that will remain in place, the final locations of the foundations should be determined relative to the location of the utilities to determine any impact of influence the new structure may have on the utilities. There may also be existing utilities that may be relocated or abandoned prior to wall construction. Before proceeding with construction, any existing utility lines that are to be abandoned and will interfere with construction should be completely relocated from beneath the proposed construction areas. Where possible, existing utility lines that are to be abandoned in place should be removed and/or plugged with cement grout. All excavations resulting from underground utility removal activities should be cleaned of loose and disturbed materials, including all previously placed backfill, and backfilled with suitable fill materials in accordance with the requirements of this section. During the clearing and stripping operations, positive surface drainage should be maintained to prevent the accumulation of water.

4.2 Site Excavation

Site excavations are expected to encounter various types of soils as described in the Subsurface Exploration section of this report. The contractor will be responsible for providing a safe excavation during the construction activities of the project. All excavations should be conducted in accordance with applicable federal, state, and local safety regulations, including, but not limited to the Occupational Safety and Health Administration (OSHA) excavation safety standards. Excavation stability and soil pressures on temporary shoring are dependent on soil conditions, depth of excavations, installation procedures, and the magnitude of any surcharge loads on the ground surface adjacent to the excavation. Excavation near existing structures and underground utilities should be performed with extreme care to avoid undermining existing structures. It is the responsibility of the contractor for field determinations of applicable conditions and providing adequate shoring (if needed) for all excavation activities.

4.3 Borrow Material and Compaction Requirements

If borrow material is to be used for onsite construction, it should conform to Section 204 "Borrow and Furnish Excavations" of the IDOT Construction Manual (2021). Earth-moving operations should be avoided during excessively cold or wet weather to avoid freezing of softening subgrade soils.

Suitable structural fill materials shall be of a nature that will compact and develop stability satisfactory to the geotechnical engineer. Structural fill shall consist of crushed limestone or recycled concrete consistent with IDOT CA-6 gradation or medium plasticity silty clays in accordance with the IDOT standards specifications.

Structural fill should be placed in lifts not to exceed 8 inches in loose thickness and compacted to a minimum of 95% of the material's standard proctor maximum dry density obtained according to the ASTM D698/AASHTO T 99 method. Should fill be placed during cool, wet seasons, the use of granular fill may be necessary since weather conditions will make compaction of cohesive soils more difficult. If water seepage while excavating and backfilling procedures, or where wet conditions are encountered such that the water cannot be removed with conventional sump and pump procedures, GSG recommends placing open-grade stone similar to IDOT CA-7 to stabilize the bottom of the excavation. The CA-7 stone should be placed 12 inches above the water level, in 12-inch lifts, and should be compacted with the use of a heavy smooth drum roller or heavy vibratory plate compactor until stable. The remaining portion of the excavation should be backfilled using approved engineered fill.

GSG recommends that foundation excavations, subgrade preparation, and structural fill placement and compaction be inspected by a GSG geotechnical engineer to verify the type and strength of soil materials present at the site and their conformance with the geotechnical recommendations in this report.

4.4 Groundwater Management

Based on the color change from brown to gray, it is anticipated that the long-term groundwater level could range between elevations 2.5 to 14.0 feet (Elev. 571.5 to 606.6) throughout the corridor and likely fluctuate with the bedrock topography. GSG does not anticipate groundwater

related issues during construction activity; however, water may become perched in the near-surface fill material. If rainwater run-off or perched water is accumulated at the base of excavation, the contractor should remove accumulated water using conventional sump pit and pump procedures and maintain a dry and stable excavation. The location of the sump should be determined by the contractor based on field conditions. During earthmoving activities at the site, grading should be performed to ensure that drainage is maintained throughout the construction period. Water should not be allowed to accumulate in the foundation area either during or after construction. Undercut and excavated areas should be sloped toward one corner to facilitate removal of any collected rainwater or surface run-off. Grades should be sloped away from the excavations to minimize runoff from entering.

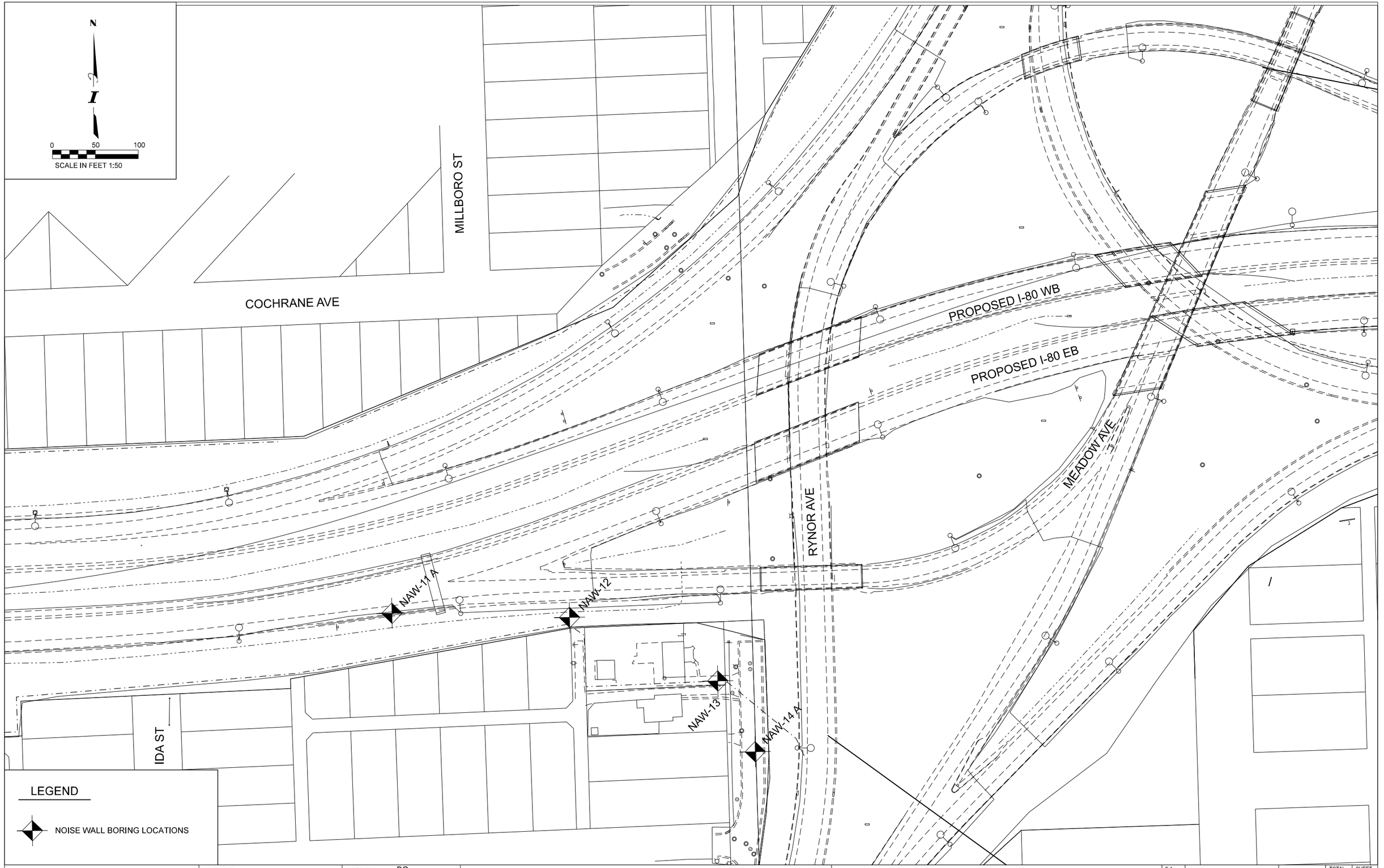
If water seepage occurs during excavations or where wet conditions are encountered such that the water cannot be removed with conventional sumping, we recommend placing open grade stone similar to IDOT CA-7 to stabilize the bottom of the excavation below the water table. The CA-7 stone should be placed 12 inches above the water table, in 12-inch lifts, and should be compacted with the use of a heavy smooth drum roller or heavy vibratory plate compactor until stable.

5.0 LILIMITATIONS

This report has been prepared for the exclusive use of the Illinois Department of Transportation (IDOT) and its Design Section Engineer consultant. The results provided in the report are specific to the project described herein and are based on the information obtained at the soil boring locations within the proposed noise wall area. The analysis has been performed and the results provided in this report are based on subsurface conditions determined at the location of the borings. This report may not reflect all variations that may occur between boring locations or at some other time, the nature and extent of which may not become evident until the time of construction. If variations in subsurface conditions become evident after the submission of this report, it will be necessary to evaluate their nature and review the recommendations presented herein.

APPENDIX A

SOIL BORING LOCATION PLAN



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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

NOISE WALLS
SOIL BORING LOCATION PLAN FOR B-22
JOLIET, ILLINOIS

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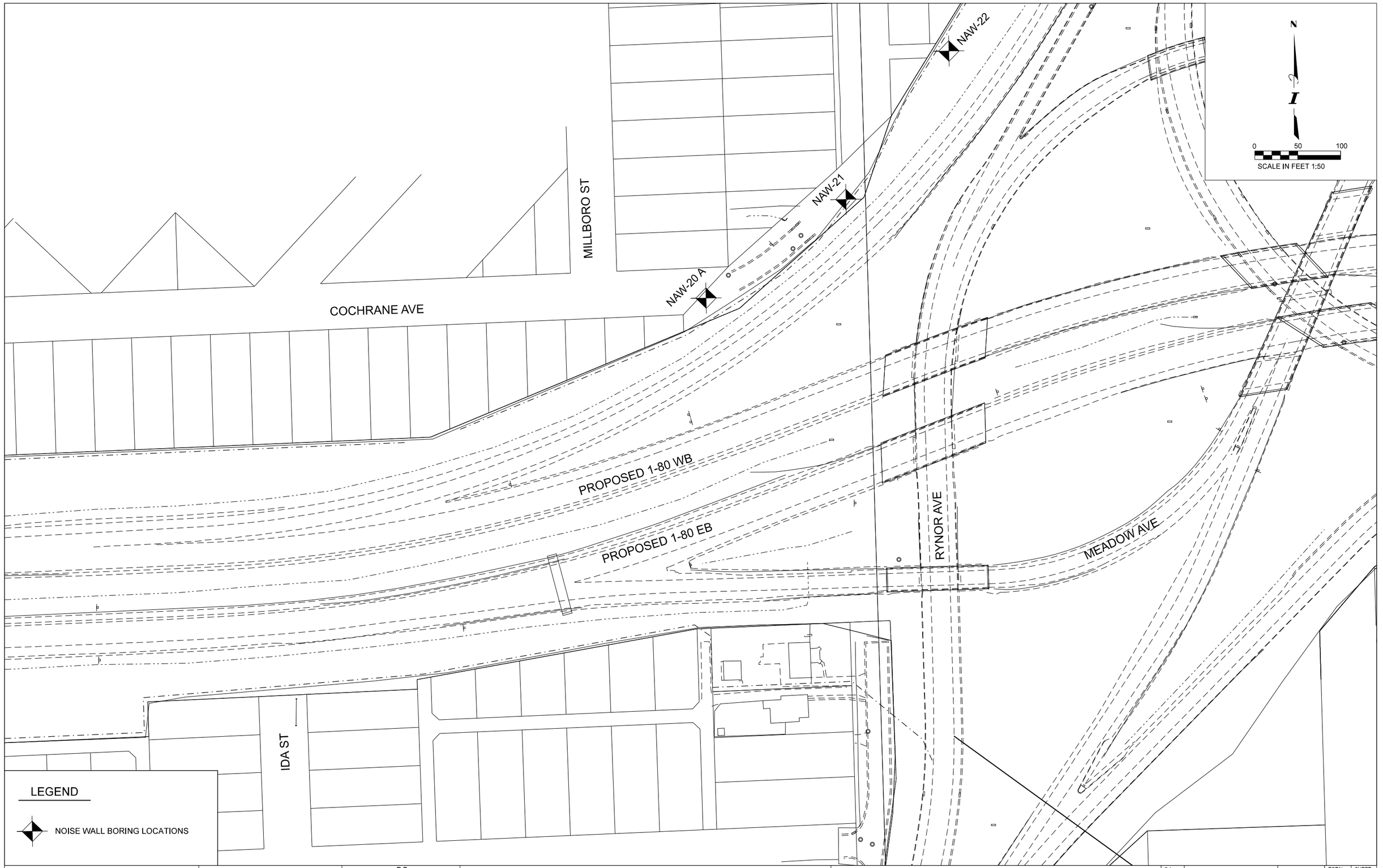

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

NOISE WALLS
SOIL BORING LOCATION PLAN FOR B-23B
JOLIET, ILLINOIS

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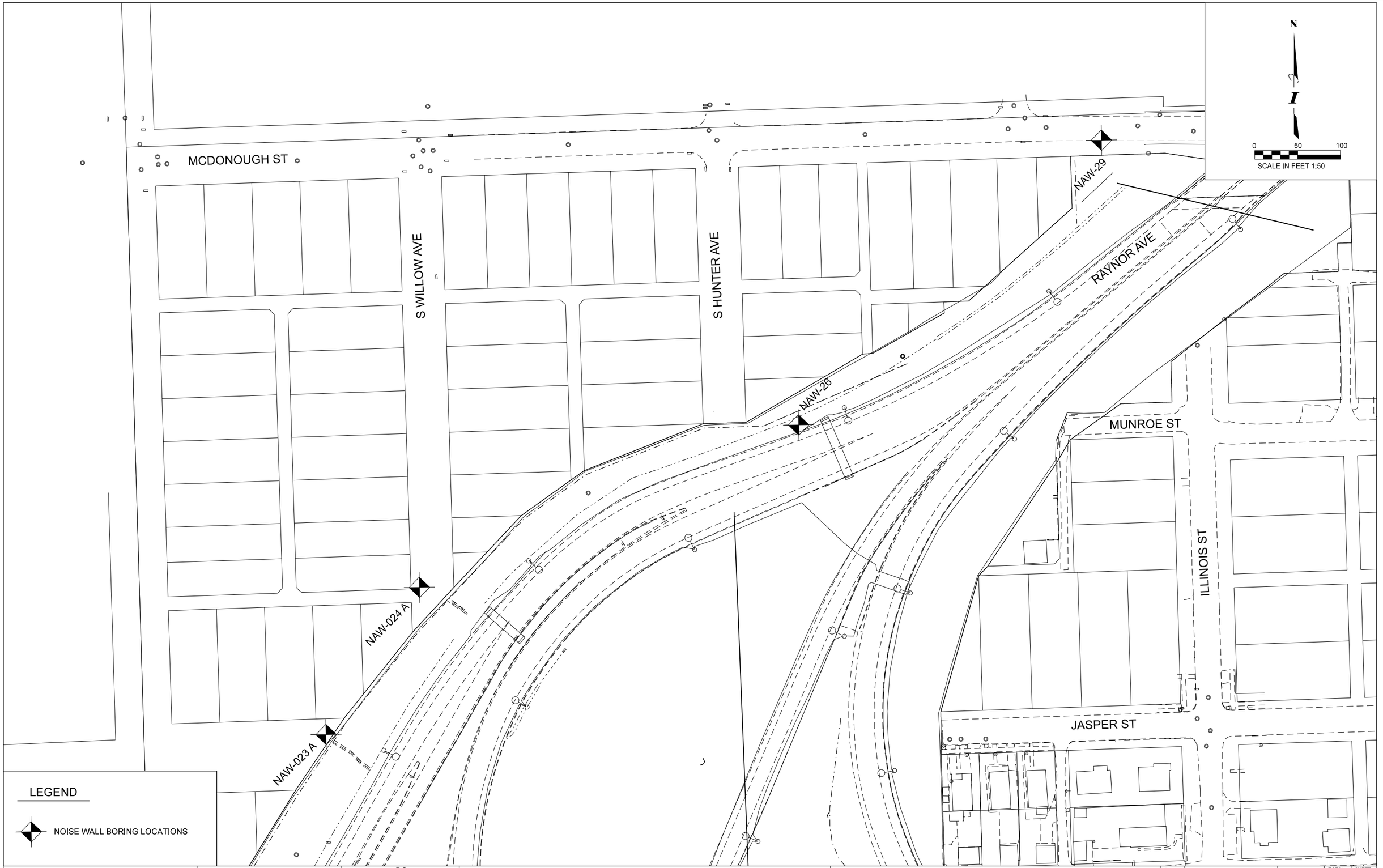

LEGEND

NOISE WALL BORING LOCATIONS

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

NOISE WALLS

SOIL BORING LOCATION PLAN FOR B-23B
JOLIET, ILLINOIS

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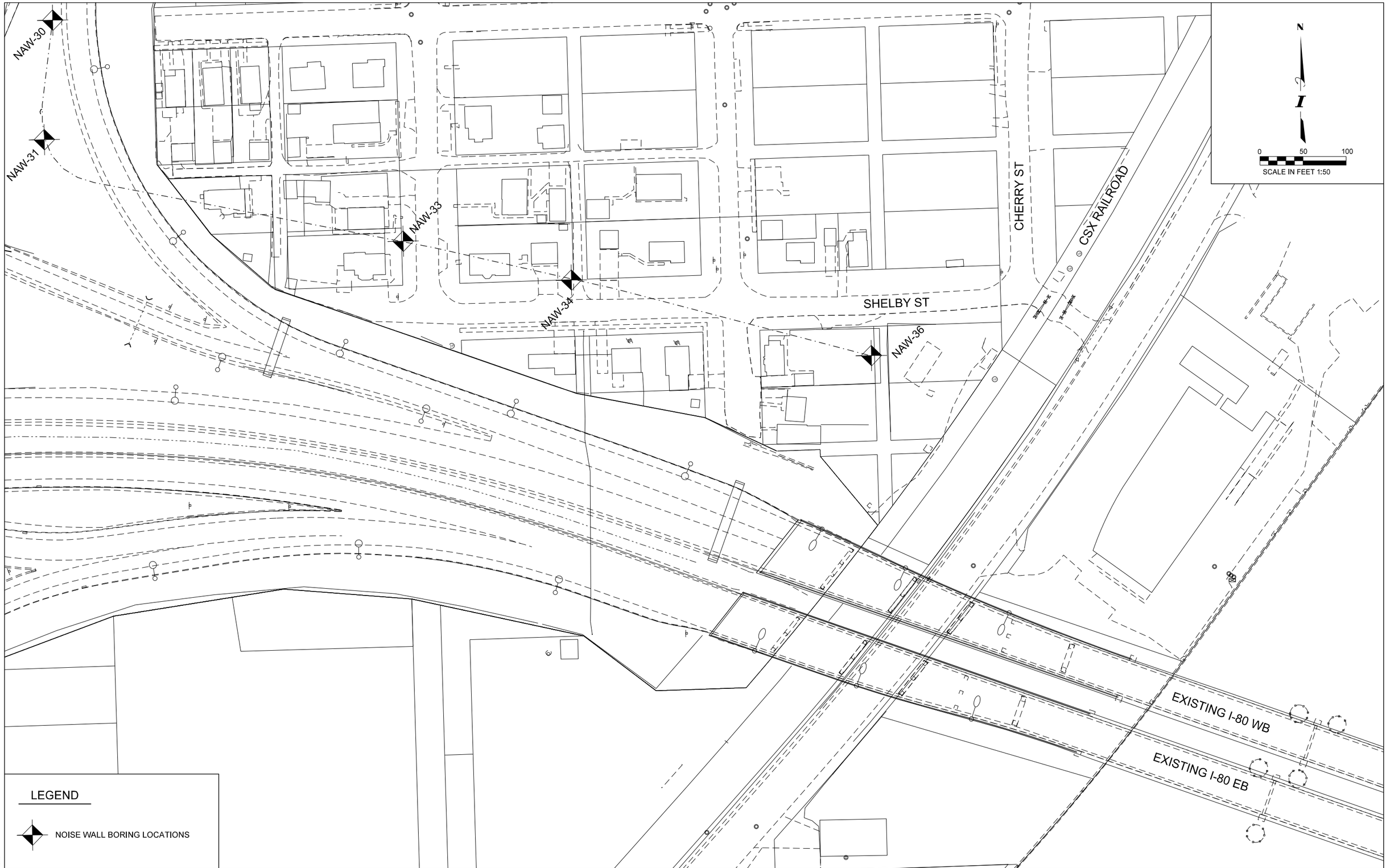

FILE NAME = Z:\Projects\Illinois DOT\WSP-198-003\Geotechnical\Noise Walls\DGNs\WALL B-23 AND B-24\DGNs\Noise Wall No.1-80 Retaining - PL-01.dgn
PEN TABLE = $PENTABLE$
PLOT DATE = $PLOTDATE$
TIME = 10:38:03 AM
SHEET SIZE = $SHEETSIZE$
PLOT SCALE = $SCALE$
USER NAME = nnano

GSG CONSULTANTS, INC.
735 E. REMINGTON RD, SCHAUMBURG, IL 60173
TEL: +1630.994.2600 | WWW.GSG-CONSULTANTS.COM

USER NAME = nnano		DESIGNED - BG	
SHEET SIZE = $SHEETSIZE$		DRAWN - NN	
PLOT SCALE = $SCALE$		CHECKED - DE	
PLOT DATE = 6/6/2025		DATE - 06/05/2025	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

NOISE WALLS
SOIL BORING LOCATION PLAN FOR B-24
JOLIET, ILLINOIS

SCALE: 1:50 | SHEET 1 OF 1 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		WILL	1	1
		CONTRACT NO. PTB-198-003		
	ILLINOIS	FED. AID PROJECT		

APPENDIX B

SOIL BORING LOGS

Illinois Department of Transportation
Division of Highways
GSG Consultants

SOIL BORING LOG

Date 4/30/25

ROUTE I-80 **DESCRIPTION** Noise Wall B22 **LOGGED BY** SB

SECTION C-91-109-22 **LOCATION** , **SEC.** , **TWP.** , **RNG.** ,
Latitude , **Longitude**

COUNTY Will **DRILLING RIG** Geoprobe **HAMMER TYPE** Auto
DRILLING METHOD HSA **HAMMER EFF (%)** 99

STRUCT. NO. N/A
Station

BORING NO. NAW-11A
Station 9+41.04
Offset 1.67ft RT
Ground Surface Elev. 617.34 ft

Surface Water Elev. N/A ft
Stream Bed Elev. N/A ft

Groundwater Elev.:
First Encounter ft
Upon Completion N/A ft
After Hrs. N/A ft

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
11 inches of Asphalt				
616.42				
Brown and Gray, Moist FILL: SILTY CLAY, trace gravel		5		
		7 9	4.5	18
		6		
613.34				
Hard Brown and Gray, Moist SILTY CLAY, trace gravel (CL/ML)		10 13	4.5	
	-5	8		
		8 11	4.5	21
		5		
		6 12	4.5	18
	-10	4		
		7 8	4.5	18
		7		
603.34				
Hard Gray, Moist		7 8	4.5	24
602.34	-15			
SILTY CLAY, some gravel, some sand (CL/ML)				
End of Boring				
	-20			

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

Illinois Department of Transportation
Division of Highways
GSG Consultants

SOIL BORING LOG

Date 4/8/25

ROUTE I-80 **DESCRIPTION** Noise Wall B22 **LOGGED BY** DV

SECTION C-91-109-22 **LOCATION** , **SEC.** , **TWP.** , **RNG.** ,

COUNTY Will **DRILLING RIG** Diedrich D-50 **HAMMER TYPE** Auto
DRILLING METHOD HSA **HAMMER EFF (%)** 97.7
Latitude , **Longitude**

STRUCT. NO. N/A
Station

BORING NO. NAW-12
Station N/A
Offset
Ground Surface Elev. 611.48 ft

Surface Water Elev. N/A ft
Stream Bed Elev. N/A ft

Groundwater Elev.:
First Encounter Dry ft
Upon Completion N/A ft
After ____ **Hrs.** N/A ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
1 inch of Topsoil 611.40			
Brown, Moist FILL: SILTY CLAY, with gravel	4		
	9 9	3.5 P	18
	5		
	8 10		
-5			
605.48			
Hard Brown, Moist SILTY CLAY, trace gravel (CL/ML)	4		
	7 9	5.2 B	21
	5		
	7 11	6.0 B	18
-10			
	7		
	10 13	7.3 B	18
	5		
	9 11	7.1 B	24
596.48 -15			
End of Boring			
-20			

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

Illinois Department of Transportation
Division of Highways
GSG Consultants

SOIL BORING LOG

Date 4/8/25

ROUTE I-80 **DESCRIPTION** Noise Wall B22 **LOGGED BY** DV

SECTION C-91-109-22 **LOCATION** , **SEC.** , **TWP.** , **RNG.** ,

COUNTY Will **DRILLING RIG** Diedrich D-50 **HAMMER TYPE** Auto
DRILLING METHOD HSA **HAMMER EFF (%)** 97.7

Latitude , **Longitude**

STRUCT. NO. N/A
Station N/A

BORING NO. NAW-13
Station 13+45.49
Offset 30.40ft RT
Ground Surface Elev. 606.74 ft

Surface Water Elev. N/A ft
Stream Bed Elev. N/A ft

Groundwater Elev.:
First Encounter Dry ft
Upon Completion N/A ft
After ____ **Hrs.** N/A ft

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
2 inches of Asphalt 606.57				
10 inches of Gravel Aggregate Subbase 605.74		4		
Brown, Moist FILL: SILTY CLAY, trace asphalt, trace gravel		3 4	4.5 P	24
603.24		7		
Hard Brown, Moist SILTY CLAY, trace gravel (CL/ML)	-5	6 11	5.0 B	20
		6		
		10 13	7.3 B	5
598.24		25		
Very Dense Brown, Moist GRAVEL, with sand (GP) 597.24	-10	50/3"		15
Auger refusal at 9.5 feet				
End of Boring	-15			
	-20			

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

Illinois Department of Transportation
Division of Highways
GSG Consultants

SOIL BORING LOG

Date 4/8/25

ROUTE I-80 **DESCRIPTION** Noise Wall B22 **LOGGED BY** DV

SECTION C-91-109-22 **LOCATION** , **SEC.** , **TWP.** , **RNG.** ,

COUNTY Will **DRILLING RIG** Diedrich D-50 **HAMMER TYPE** Auto
DRILLING METHOD HSA **HAMMER EFF (%)** 97.7

STRUCT. NO. N/A
Station N/A

BORING NO. NAW-14A
Station 14+37.22
Offset 75.50ft RT
Ground Surface Elev. 602.39 ft

Latitude , Longitude

Surface Water Elev. N/A ft
Stream Bed Elev. N/A ft

Groundwater Elev.:
First Encounter Dry ft
Upon Completion N/A ft
After ____ **Hrs.** N/A ft

		DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
6 inches of Asphalt	601.89				
Dark Brown, Moist FILL: SILTY CLAY, with sand, trace asphalt, trace gravel			5		
			3 3	2.0 P	15
	598.89				
Very Stiff Brown, Moist SILTY CLAY, trace gravel (CL/ML)			4		
			5 9	2.3 B	23
Auger refusal at 5 feet	597.39	-5			
End of Boring					
		-10			
		-15			
		-20			

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

Illinois Department of Transportation
Division of Highways
GSG Consultants

SOIL BORING LOG

Date 4/8/25

ROUTE I-80 **DESCRIPTION** Noise Wall B23 **LOGGED BY** SB

SECTION C-91-109-22 **LOCATION** , **SEC.** , **TWP.** , **RNG.** ,
Latitude , **Longitude**

COUNTY Will **DRILLING RIG** Mobile B-57 **HAMMER TYPE** Auto
DRILLING METHOD HSA **HAMMER EFF (%)** 89

STRUCT. NO. N/A
Station N/A

BORING NO. NAW-20A
Station 10+21.36
Offset 52.82ft RT
Ground Surface Elev. 612.61 ft

Surface Water Elev. N/A ft
Stream Bed Elev. N/A ft

Groundwater Elev.:
First Encounter Dry ft
Upon Completion N/A ft
After ____ **Hrs.** N/A ft

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
4 inches of Asphalt 612.28				
Gray, Moist FILL: SILTY CLAY, with gravel, some sand		10		
		7 5	4.5 P	
609.11		7		
Very Stiff Brown and Black, Moist SILTY CLAY, trace gravel, trace sand (CL/ML)	-5	8 8	2.0 P	
606.61		6		
Very Stiff to Hard Brown and Gray, Moist SILTY CLAY, trace gravel (CL/ML)		8 8	4.5 P	
		9		
Cobbles at 9 feet	-10	8 10	4.5 P	
		5		
		8 11	4.5 P	
598.61		7		
WEATHERED LIMESTONE 598.11		50/3"	3.0	
Auger refusal at 14.5 feet	-15		P	
End of Boring				
	-20			

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

Illinois Department of Transportation
Division of Highways
GSG Consultants

SOIL BORING LOG

Date 4/8/25

ROUTE I-80 **DESCRIPTION** Noise Wall B23 **LOGGED BY** SB

SECTION C-91-109-22 **LOCATION** , **SEC.** , **TWP.** , **RNG.** ,
Latitude , **Longitude**

COUNTY Will **DRILLING RIG** Mobile B-57 **HAMMER TYPE** Auto
DRILLING METHOD HSA **HAMMER EFF (%)** 89

STRUCT. NO. N/A
Station N/A

BORING NO. NAW-21
Station 8+10.23
Offset 43.12ft RT
Ground Surface Elev. 612.43 ft

Surface Water Elev. N/A ft
Stream Bed Elev. N/A ft

Groundwater Elev.:
First Encounter Dry ft
Upon Completion N/A ft
After ____ **Hrs.** N/A ft

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
4 inches of Asphalt 612.10				
Light Brown and Black, Moist FILL: GRAVEL, with sand, little slag 610.68		6		
		4 2		
Stiff Brown, Moist SILTY CLAY, trace gravel, trace sand (CL/ML)		4		
	-5	3 4	1.5 P	
606.43		4		
Hard Brown, Moist SILTY CLAY, trace gravel, trace sand (CL/ML)		6 10	4.3 P	
		6		
	-10	11 18	4.5 P	
601.43				
WEATHERED LIMESTONE 600.93		50/3"		
Auger refusal at 11.5 feet			4.5 P	
End of Boring				
	-15			
	-20			

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

Illinois Department of Transportation
Division of Highways
GSG Consultants

SOIL BORING LOG

Date 5/21/25

ROUTE I-80 **DESCRIPTION** Noise Wall B23 **LOGGED BY** SB

SECTION C-91-109-22 **LOCATION** , **SEC.** , **TWP.** , **RNG.** ,
Latitude , **Longitude**

COUNTY Will **DRILLING RIG** CME-75 **HAMMER TYPE** Auto
DRILLING METHOD HSA **HAMMER EFF (%)** 78.8

STRUCT. NO. N/A
Station N/A

BORING NO. NAW-22
Station 6+03.71
Offset 84.40ft RT
Ground Surface Elev. 598.26 **ft**

Surface Water Elev. N/A **ft**
Stream Bed Elev. N/A **ft**

Groundwater Elev.:
First Encounter Dry **ft**
Upon Completion N/A **ft**
After ____ **Hrs.** N/A **ft**

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
2 inches of Asphalt 598.09 10 inches of Gravel 597.26				
Hard Brown and Gray, Moist SILTY CLAY, trace gravel (CL/ML)		7		
		10 13	4.5 P	
		6		
	-5	9 9	4.5 P	
		8		
		13 17	4.5 P	
		7		
	-10	10 14	4.5 P	
		7		
		11 13	4.5 P	
		8		
583.26	-15	9 14	4.5 P	
End of Boring				
	-20			

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

Illinois Department of Transportation
Division of Highways
GSG Consultants

SOIL BORING LOG

Date 3/27/25

ROUTE I-80 **DESCRIPTION** Noise Wall B23 **LOGGED BY** DV

SECTION C-91-109-22 **LOCATION** , **SEC.** , **TWP.** , **RNG.** ,
Latitude , **Longitude**

COUNTY Will **DRILLING RIG** CME-75 **HAMMER TYPE** Auto
DRILLING METHOD HSA **HAMMER EFF (%)** 78.8

STRUCT. NO. N/A
Station N/A

BORING NO. NAW-23A
Station 4+35.97
Offset 182.46ft RT
Ground Surface Elev. 624.36 **ft**

Surface Water Elev. N/A **ft**
Stream Bed Elev. N/A **ft**

Groundwater Elev.:
First Encounter Dry **ft**
Upon Completion N/A **ft**
After ____ **Hrs.** N/A **ft**

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
1 inch of Topsoil 624.28				
Hard Brown, Moist SILTY CLAY LOAM, trace gravel (ML/CL)		5		
		9 11	5.0 B	23
		7		
		13 13	4.6 B	17
	-5			
618.36				
Very Stiff to Hard Brown, Moist SILTY CLAY, trace gravel (CL/ML)		7		
		10 12	4.4 B	18
		6		
		13 9	4.1 B	13
	-10			
		5		
		8 11	3.5 B	17
Some Gravel at 12 feet				
		5		
		7 11	3.1 B	16
609.36	-15			
End of Boring				
	-20			

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

Illinois Department of Transportation
Division of Highways
GSG Consultants

SOIL BORING LOG

Date 3/27/25

ROUTE I-80 **DESCRIPTION** Noise Wall B23 **LOGGED BY** DV

SECTION C-91-109-22 **LOCATION** , **SEC.** , **TWP.** , **RNG.** ,
Latitude , **Longitude**

COUNTY Will **DRILLING RIG** CME-75 **HAMMER TYPE** Auto
DRILLING METHOD HSA **HAMMER EFF (%)** 78.8

STRUCT. NO. N/A
Station N/A

BORING NO. NAW-24A
Station 4+31.76
Offset 306.00ft RT
Ground Surface Elev. 623.14 **ft**

Surface Water Elev. N/A **ft**
Stream Bed Elev. N/A **ft**

Groundwater Elev.:
First Encounter Dry **ft**
Upon Completion N/A **ft**
After ____ **Hrs.** N/A **ft**

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
1 inch of Topsoil / 623.05				
Stiff Brown, Moist SILTY CLAY, with sand, little gravel (CL/ML)		2 3 4	1.9 B	22
619.64		8		
Hard Brown, Moist SILTY CLAY, with sand, little gravel (CL/ML)	-5	10 12	6.0 B	11
617.14		7		
Very Stiff to Hard Brown, Moist SILTY CLAY, trace gravel (CL/ML)		12 15	7.7 B	19
		6		
	-10	9 10	7.1 B	19
		6		
		7 9	3.3 B	13
		7		
		12 15	4.8 B	15
608.14	-15			
End of Boring				
	-20			

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

Illinois Department of Transportation
Division of Highways
GSG Consultants

SOIL BORING LOG

Date 4/22/25

ROUTE I-80 **DESCRIPTION** Noise Wall B23 **LOGGED BY** SB

SECTION C-91-109-22 **LOCATION** , **SEC.** , **TWP.** , **RNG.** ,
Latitude , **Longitude**

COUNTY Will **DRILLING RIG** CME-75 **HAMMER TYPE** Auto
DRILLING METHOD HSA **HAMMER EFF (%)** 78.8

STRUCT. NO. N/A
Station N/A

BORING NO. NAW-26
Station 36+49.00
Offset 139.26ft LT
Ground Surface Elev. 605.14 ft

Surface Water Elev. N/A ft
Stream Bed Elev. N/A ft

Groundwater Elev.:
First Encounter Dry ft
Upon Completion N/A ft
After ____ **Hrs.** N/A ft

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
6 inches of Asphalt 604.64				
2 inches of Aggregate Base ~~604.47~~				
Stiff		22		
Brown, Moist		5	1.8	
SILTY CLAY, little sand, little gravel		4	P	
(CL/ML)				
601.64		3		
Very Stiff to Hard		5	3.5	
Brown and Gray, Moist	-5	5	P	
SILTY CLAY, with gravel, little sand		5		
(CL/ML)		6	4.5	
		11	P	
		7		
		8	4.5	
	-10	11	P	
		5		
		8	4.5	
		11	P	
		5		
		8	4.5	
590.14	-15	6	P	
End of Boring				
	-20			

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

Illinois Department of Transportation
Division of Highways
GSG Consultants

SOIL BORING LOG

Date 5/21/25

ROUTE I-80 **DESCRIPTION** Noise Wall B23 **LOGGED BY** SB

SECTION C-91-109-22 **LOCATION** , **SEC.** , **TWP.** , **RNG.** ,
Latitude , **Longitude**

COUNTY Will **DRILLING RIG** CME-75 **HAMMER TYPE** Auto
DRILLING METHOD HSA **HAMMER EFF (%)** 78.8

STRUCT. NO. N/A
Station N/A

BORING NO. NAW-29
Station 41+01.01
Offset 140.78ft LT
Ground Surface Elev. 596.42 ft

Surface Water Elev. N/A ft
Stream Bed Elev. N/A ft

Groundwater Elev.:
First Encounter Dry ft
Upon Completion N/A ft
After ____ **Hrs.** N/A ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
4 inches of Topsoil 596.09			
Stiff Brown, Moist SILTY CLAY, trace gravel (CL/ML)	3		
	3 4	1.0 P	
	5		
	6 7	1.3 P	
-5			
	4		
	4 4	1.5 P	
	3		
	4 4	1.3 P	
-10			
Low recovery at 11 feet	1		
	1 1		
582.92			
Medium Dense Light Brown, Moist GRAVEL, with sand (GP)	6		
581.42 -15	2 13		
End of Boring			
-20			

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

Illinois Department of Transportation
Division of Highways
GSG Consultants

SOIL BORING LOG

Date 4/30/25

ROUTE I-80 **DESCRIPTION** Noise Wall B24 **LOGGED BY** SB

SECTION C-91-109-22 **LOCATION** , **SEC.** , **TWP.** , **RNG.** ,
Latitude , **Longitude**

COUNTY Will **DRILLING RIG** Geoprobe **HAMMER TYPE** Auto
DRILLING METHOD HSA **HAMMER EFF (%)** 99

STRUCT. NO. N/A
Station N/A

BORING NO. NAW-30
Station N/A
Offset
Ground Surface Elev. 599.18 **ft**

Surface Water Elev. N/A **ft**
Stream Bed Elev. N/A **ft**

Groundwater Elev.:
First Encounter Dry **ft**
Upon Completion N/A **ft**
After ____ **Hrs.** N/A **ft**

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
3 inches of Topsoil 598.93				
Brown, Moist FILL: SILTY CLAY, little sand, trace roots, trace gravel		3		
		2 3	0.8 P	
		2		
	-5	1 1	0.5 P	
593.18				
3 inches of Concrete 592.93		35		
Brown, Moist FILL: SILTY CLAY, little gravel, little roots		9 9	2.0 P	
590.68				
Stiff Dark Brown, Moist SILTY CLAY, trace gravel (CL/ML)		3		
		4 4	1.3 P	
	-10			
588.18				
Gray, Moist WEATHERED LIMESTONE		50/5"		
		50/3"		
584.18	-15			
End of Boring				
	-20			

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

Illinois Department of Transportation
Division of Highways
GSG Consultants

SOIL BORING LOG

Date 4/30/25

ROUTE I-80 **DESCRIPTION** Noise Wall B24 **LOGGED BY** SB

SECTION C-91-109-22 **LOCATION** , **SEC.** , **TWP.** , **RNG.** ,

Latitude , **Longitude**

COUNTY Will **DRILLING RIG** Geoprobe **HAMMER TYPE** Auto

DRILLING METHOD HSA **HAMMER EFF (%)** 99

STRUCT. NO. N/A
Station N/A

BORING NO. NAW-31
Station N/A
Offset
Ground Surface Elev. 589.66 ft

Surface Water Elev. N/A ft
Stream Bed Elev. N/A ft

Groundwater Elev.:
First Encounter Dry ft
Upon Completion N/A ft
After ____ **Hrs.** N/A ft

		DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
4 inches of Topsoil	589.32				
Stiff Brown, Moist SILTY CLAY, trace gravel, trace roots (CL/ML)	588.16		50/3"		
				1.3 P	
Gray, Moist WEATHERED LIMESTONE	586.66				
Auger refusal at 3 feet End of Boring		-5			
		-10			
		-15			
		-20			

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

Illinois Department of Transportation
Division of Highways
GSG Consultants

SOIL BORING LOG

Date 3/20/25

ROUTE I-80 **DESCRIPTION** Noise Wall B24 **LOGGED BY** SB

SECTION C-91-109-22 **LOCATION** , **SEC.** , **TWP.** , **RNG.** ,
Latitude , **Longitude**

COUNTY Will **DRILLING RIG** Mobile B-57 **HAMMER TYPE** Auto
DRILLING METHOD HSA **HAMMER EFF (%)** 92.1

STRUCT. NO. N/A
Station N/A

BORING NO. NAW-33
Station 10+50.74
Offset 11.70ft RT
Ground Surface Elev. 573.95 ft

Surface Water Elev. N/A ft
Stream Bed Elev. N/A ft

Groundwater Elev.:
First Encounter Dry ft
Upon Completion N/A ft
After ____ **Hrs.** N/A ft

		DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
4 inches of Topsoil	573.61				
Very Dense Brown, Moist GRAVEL, with sand, trace clay (GP)			50/4"		28
	571.45				
Gray, Moist WEATHERED LIMESTONE Auger refusal at 3 feet	570.95				
End of Boring					
		-5			
		-10			
		-15			
		-20			

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

Illinois Department of Transportation
Division of Highways
GSG Consultants

SOIL BORING LOG

Date 3/20/25

ROUTE I-80 **DESCRIPTION** Noise Wall B24 **LOGGED BY** SB

SECTION C-91-109-22 **LOCATION** , **SEC.** , **TWP.** , **RNG.** ,
Latitude , **Longitude**

COUNTY Will **DRILLING RIG** Mobile B-57 **HAMMER TYPE** Auto
DRILLING METHOD HSA **HAMMER EFF (%)** 92.1

STRUCT. NO. N/A
Station N/A

BORING NO. NAW-34
Station 8+50.94
Offset 8.38ft RT
Ground Surface Elev. 571.15 ft

Surface Water Elev. N/A ft
Stream Bed Elev. N/A ft

Groundwater Elev.:
First Encounter Dry ft
Upon Completion N/A ft
After ____ **Hrs.** N/A ft

		DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
6 inches of Topsoil	570.65				
Soft Black, Moist			4		
SILTY CLAY, little gravel, trace roots (CL/ML)	569.15		7 50/2"	0.3 P	52
WEATHERED LIMESTONE					
Auger refusal at 3 feet	568.15				
End of Boring					
		-5			
		-10			
		-15			
		-20			

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

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SOIL BORING LOG

Date 4/29/25

ROUTE I-80 **DESCRIPTION** Noise Wall B24 **LOGGED BY** EH

SECTION C-91-109-22 **LOCATION** , **SEC.** , **TWP.** , **RNG.** ,
Latitude , **Longitude**

COUNTY Will **DRILLING RIG** CME-75 **HAMMER TYPE** Auto
DRILLING METHOD HSA **HAMMER EFF (%)** 78.8

STRUCT. NO. N/A
Station N/A

BORING NO. NAW-36
Station N/A
Offset
Ground Surface Elev. 551.92 **ft**

Surface Water Elev. N/A **ft**
Stream Bed Elev. N/A **ft**

Groundwater Elev.:
First Encounter Dry **ft**
Upon Completion N/A **ft**
After ____ **Hrs.** N/A **ft**

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Gray, Moist FILL: GRAVEL, with sand 550.92				
Black, Moist SILTY CLAY, with gravel (CL/ML) 550.42		6		
		10		7
Very Dense Brown, Moist SAND, with gravel (SP) 548.92		50/1"		
Auger refusal at 3 feet End of Boring				
	-5			
	-10			
	-15			
	-20			

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