STRUCTURE GEOTECHNICAL REPORT
I-80 RECONSTRUCTION FROM RIDGE ROAD TO HOUBOLT ROAD
I-55 RAMP AA RETAINING WALL
SN 099-W1003
WILL COUNTY, ILLINOIS

For

Stantec

350 North Orleans Street, Suite 1301

Chicago, IL 60654

Submitted by

Wang Engineering, Inc. (A Terracon Company)

1145 North Main Street

Lombard, IL 60148

Original Report: November 22, 2023

Revised Report: April 4, 2024

Technical Report Documentation Page

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11. Abstract

A new retaining wall is proposed along I-55 Ramp AA in Will County, Illinois. The wall will be about 421.1-foot long, extending from Station 27+31.53 to Station 31+54.68 (or 1019+16.89; measured along Ramp B Station). The face of the wall will be constructed about 5.1 to 16.8 feet north of the Ramp AA centerline. The wall will have a maximum total height of 14.9 feet. This report provides geotechnical recommendations for the design and construction of the proposed retaining wall.

A topsoil thickness of 4 to 16 inches was noted along or near the proposed wall alignment. Along the proposed wall alignment, the foundation soils consist primarily of up to 5 feet of very stiff to hard silty clay to silty clay loam and silty clay loam to silty loam followed by up to 5 feet of very silty clay loam, silty loam to loam overlying very dense gravelly silty loam to loam weathered bedrock. Dolostone bedrock was encountered at 572 to 574 feet elevation. The groundwater level was measured at elevations ranging from 572 to 577 feet.

The proposed retaining wall will be in a fill section. Fill wall types such as Mechanically Stabilized Earth (MSE) and Reinforced Concrete Cantilever (RCC) would be more suitable at this location.

The designer envisions a MSE wall at the site. The proposed MSE wall will be supported on new embankment fill and native foundation soils. The wall sections supported on the existing native soils and new embankment will have maximum factored bearing resistances of 7,000 and 3,500 psf, respectively, based on a geotechnical resistance factor of 0.65 (AASHTO 2020). The wall will have adequate FOS of 1.5 for global stability. The long-term settlement estimated to be up to 1-inch with differential settlement of up to 0.5 inch between the two sections

The groundwater will be at or near the leveling pad elevation near Station 29+00 and dewatering efforts will be required.

12. Path to archived file

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TABLE OF CONTENTS

LIST OF TABLES

Wang Engineering
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STRUCTURE GEOTECHNICAL REPORT
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FOR
STANTEC

1.0 INTRODUCTION

This report presents the results of our subsurface investigation, laboratory testing, geotechnical evaluations, and recommendations in support of the design and construction of a new retaining wall proposed along the new Ramp AA at Interstate 55 (I-55) south of Interstate 80 (I-80) in Will County, Illinois. The project area is located in west central Will County, extending along the proposed Ramp AA alignment, within Troy Township. On the USGS *Channahon Quadrangle 7.5 Minute Series* map, the project is located in the SW ¼ of Section 27, Tier 35 N, Range 9 E of the Third Principal Meridian. A *Site Location Map* is presented as Exhibit 1.

The purpose of this investigation was to characterize the site soil and groundwater conditions, perform geotechnical analyses, and provide recommendations for the design and construction of the proposed retaining wall. This retaining wall will be constructed as part of Construction Contract INT-2.

1.1 Existing Structure and Ground Conditions

There is no existing structure at the proposed retaining wall site. The site surface elevation is generally flat gently sloping westward toward DuPage River and steeper eastward toward Rock Run Creek. The proposed retaining wall is about halfway between the two valleys. DuPage River runs south about 0.8 miles west of the new retaining wall and Rock Run Creek runs south about 0.5 miles east of the retaining wall. The ground surface is about 579.0 to 583.0 feet along the proposed retaining wall.

In the project area (see Exhibit 2), about 5 to 10 feet of overburden made up of low to moderate plasticity, medium to high strength, and low to moderate moisture content silty clayey diamicton resting over granular, very dense, low compressibility silty loam diamicton unconformably covers the bedrock (Bauer et al. 1991, Hansel and Johnson 1996, Leighton et al. 1948, Willman et al. 1971). The bedrock is made up of dolostone. Top of bedrock is mapped at about 573.0 feet elevation. The site is located just north of the inactive Sandwich Fault Zone (Kolata 2005). The shallow bedrock is highly to

moderately weathered and may show the presence of cavities more likely filled with fine sediment. There are no records of mining activity within the retaining wall site. Neither the overburden nor the upper bedrock is known to include significant sources of water supply (Woller and Sanderson 1983).

1.2 Proposed Structure

Based on the *GPE* drawing prepared by Stantec and dated April 2, 2024, Wang understands the proposed retaining wall will measure about 421 feet in length, extending along Ramp AA from Station 27+31.53 to Station 31+54.68 (or Station 1019+16.89 measured along Ramp B). The front face of the wall will be constructed at a distance ranging from 5.1 to 16.8 feet north of the proposed Ramp AA centerline. The wall will support the new Ramp AA to be constructed southeast of the I-80/I-55 interchange. A Mechanically Stabilized Earth (MSE) wall type is currently shown on the *GPE* sheets. Based on the drawings, we estimate the wall will have a maximum total height of approximately 14.9 feet near Station 29+65.83 as measured from the toe of the barrier/top of slab to the top of leveling pad. The *GPE* drawing is included as Appendix E, whereas the *Cross-Sections*, dated April 1, 2024, are included as Appendix F.

2.0 METHODS OF INVESTIGATION

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

2.1 Field Investigation

The subsurface investigation consisted of five retaining wall borings, designated as AA-RWB-11 to AA-RWB-13, AA-RWB-15, and AA-RWB-16 and one subgrade/stability boring, designated as 55AA-SGB-05, drilled by Wang between December of 2022 and February of 2024. Boring 55AA-SGB-05 was included to supplement our analysis. The borings were drilled from elevations of 578.8 to 583.0 feet and were advanced to depths of 5.2 to 20.0 feet bgs. The as-drilled northings and eastings were acquired with a mapping-grade GPS unit. Stations, offsets, and elevations were provided by Stantec. Boring location data are presented in the *Boring Logs* (Appendix A) and the as-drilled boring locations are shown in the *Boring Location Plan* (Exhibit 3).

An ATV-mounted drilling rig, equipped with hollow stem augers, was 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 in the retaining wall borings was sampled at 2.5-foot intervals to the boring's termination depth or top of bedrock whereas the soil in the subgrade/stability boring was sampled continuously to spoon refusal at 5.2 feet at apparent top of bedrock. Bedrock cores were

obtained from Borings AA-RWB-11, AA-RWB-13, and AA-RWB-16 in 10-foot runs with an NWD4-sized core barrel. Soil samples collected from each sampling interval were placed in sealed jars, and rock cores were placed into boxes, and transported to the laboratory for further examination and testing.

Field boring logs, prepared and maintained by a Wang field engineer, included lithological descriptions, visual-manual soil (IDH Textural) classifications, results of Rimac and pocket penetrometer unconfined compressive strength tests, and results of Standard Penetration Tests (SPT) recorded as blows per 6 inches of penetration. Bedrock cores were measured for recovery and rock quality designation (RQD), described, and photographed.

Groundwater levels were measured while drilling and at completion of each of the borings. Prior to being backfilled, Borings 55AA-SGB-05 and AA-RWB-12 were left open to record 24-hour water level readings. Each borehole location was backfilled upon completion.

2.2 Laboratory Testing

Soil samples were tested in the laboratory for moisture content (AASHTO T265). Atterberg limits (AASHTO T89 and T90) and particle size (AASHTO T88) analyses were performed on selected samples. Unconfined compressive strength tests were performed on selected bedrock cores. Field visual descriptions of the soil samples were verified in the laboratory and index tested soils were classified according to the IDH Soil Classification System. The laboratory test results are shown in the *Boring Logs* (Appendix A) and in the *Laboratory Test Results* (Appendix B).

3.0 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 *Soil Profile* (Exhibit 4). Please note that strata contact lines represent approximate boundaries between soil types. The actual transition between soil types in the field may be gradual in horizontal and vertical directions.

Our subsurface investigation results fit into the local geologic context. The borings drilled in the project area revealed the native sediments consists of silty clay to silty clay loam diamicton (Unit 1), over silty loam to silty clay loam diamicton (Unit 2), resting over weathered bedrock (Unit 3). Top of dolostone bedrock was encountered at elevations of 572 to 574 feet (7 to 10 feet bgs) as predicted based on geologic data.

3.1 Lithological Profile

The borings were drilled along the proposed Ramp AA alignment and sampled 4 to 16 inches of silty clay to silty clay loam topsoil at the surface. In descending order, the general lithologic succession encountered beneath the topsoil includes: 1) very stiff to hard silty clay to silty clay loam and silty clay loam to silty loam; 2) very dense gravelly silty loam to loam weathered bedrock; 3) very dense gravelly silty loam to loam weathered bedrock; and 4) strong, very poor quality dolostone.

1) Very stiff to hard silty clay to silty clay loam and silty clay loam to silty loam

Beneath the topsoil, at elevations of 577 to 582 feet, the borings advanced through up to 5 feet of very stiff to hard, brown, gray, and orange silty clay to silty clay loam and silty clay loam to silty loam. This layer is characterized Q_u values of 2.3 to 8.5 tsf and moisture content values of 16 to 28%. Laboratory index testing on a sample from this layer showed liquid limit (L_L) values of 34 to 37% and plastic limit (P_L) values of 15 to 22%. Cobble blockage was noted in Boring AA-RWB-12 based on the hard drilling conditions.

2) Very stiff silty clay loam, silty loam to loam

At elevations of 577 to 579 feet, depths of 5.5 feet bgs, the borings augured through 2.5 to 3.8 feet of very stiff, gray, brown, and orange, damp to wet silty clay loam, silty loam to loam. This soil unit has Q_u values of 1.0 to 3.0 tsf, N values of 12 to 29 blows per foot, and moisture content values of 12 to 14%. Laboratory index testing on a sample from this layer showed LL value of 19 and 30% and PL value of 15 and 18%.

3) Very dense gravelly silty loam to loam weathered bedrock

At elevations of 573 to 577 feet, the borings advanced through up to 3.0 feet of very dense, orangish brown to brown and gray, damp to saturated gravelly silty loam to loam weathered bedrock. This soil unit has N values of greater than 50 blows per 4 to 5 inches and moisture content values of 2 to 20%. Auger refusal indicating the apparent top of bedrock was noted within this layer at a depth of 10.5 feet bgs (elevation of 573 feet) in Boring AA-RWB-12, at a depth of 5.5 feet (elevation 575 feet) in Boring AA-RWB-15, and at a depth of 5.2 feet bgs (elevation of 574 feet) in Boring 55AA-SGB-05.

4) Strong, very poor quality dolostone

At elevations of 572 to 574 feet (7 to 10 feet bgs), Borings AA-RWB-11, AA-RWB-13, and AA-RWB-16 cored strong, very poor quality, highly weathered dolostone bedrock. The rock quality designation (RQD) ranges from 0 to 11% and uniaxial compressive strength testing revealed a Q_u

value of 8,138 psi. The bedrock core data and pictures are shown in the *Bedrock Core Photographs* (Appendix C).

3.2 Groundwater Conditions

Groundwater was encountered while drilling at elevations of 576 to 577 feet (4.5 to 6 feet bgs). At the completion of drilling, the groundwater level was observed at elevations of 572 to 577 feet (5 to 7.5 feet bgs). At the end of drilling, Borings 55AA-SGB-05 and AA-RWB-12 were left open to measure 24-hour groundwater levels within the granular silty loam and weathered bedrock. The 24-hour groundwater level was recorded as either dry due to borehole cave-in or at an elevation of 576 feet (6 feet bgs). It should be noted that groundwater levels might change with seasonal rainfall patterns and long-term climate fluctuations or may be influenced by local site conditions.

4.0 FOUNDATION ANALYSIS AND RECOMMENDATIONS

The retaining wall will support the new Ramp AA proposed southeast of the I-80 and I-55 interchange. Based on the *GPE* and *Cross-Sections* (Appendixes E and F), the wall will have a total length of 421 feet and a maximum total height of 14.9 feet near Station 29+65.83. The proposed wall is a fill wall which will support the new Ramp AA roadway embankments. Additionally, based on the information provided by Stantec, the GPE, and cross-sections, we understand the proposed wall will be supported on new embankment fill between the beginning of the wall at Station 27+31.53 and Station 29+00, then the wall will be supported on the native foundation soils between Station 29+00 and the end of the wall at Station 31+54.68.

Fill wall types, such as Mechanically Stabilized Earth (MSE) and Reinforced Concrete Cantilever (RCC) walls would be more appropriate for this location. The construction of these wall types would likely also require longer construction time. Non-gravity wall types such as a sheet pile or soldier pile type wall would also be feasible. However, a driven sheet pile wall type will not be feasible due to potential difficulty of driving the sheet piles in cohesive soils with unconfined compressive strength values of greater than 4.5 tsf and weathered bedrock with SPT N values of more than 45 blows per foot. Considering the presence of shallow bedrock, we anticipate a soldier pile socketed into bedrock will likely be required. We understand that MSE wall is the most suitable wall type at this location as proposed by the designer and shown on the GPE. However, the final wall type should be selected based on a wall-type study including cost and construction considerations. Recommendations for the design and construction of the proposed wall type are discussed in the following sections.

4.1 Seismic Design Considerations

Seismic design is not required for retaining wall structures located in Seismic Performance Zone (SPZ) 1 in accordance with the IDOT *Bridge Manual* (2012).

4.2 Mechanically Stabilized Earth (MSE) Wall

The plans and information provided by Stantec indicate a section of the proposed MSE wall will be supported on the new embankment fill and the remaining section of the wall will be supported on the native foundation soils. These section limits, maximum wall heights, and top of leveling pad elevations are summarized in Table 1.

Table 1: Proposed MSE Wall

Station Limits	Maximum Total Height (feet)	Proposed Top of Leveling Pad Elevation Range (feet)	Foundation Soils
27+31.53, 16.76′ LT (Begin Wall) to 29+00, 5.08′ LT	13.0	580.0 to 594.3	New Embankment Fill
29+00, 5.08′ LT to 31+54.68, 5.08′ LT (End Wall)	14.9	577.0 to 583.8	Native Soil

The following sections provide our bearing resistance, settlement, sliding, and global stability evaluation for the proposed MSE wall sections.

4.2.1 Bearing Resistance

The top of the MSE leveling pad should be established at a depth of at least 3.5 feet below the finished grade at the front face of the wall (IDOT 2023). The reinforcement width should be taken as 0.7 times the total height or a minimum of 8.0 feet. For our geotechnical evaluation, we estimate maximum equivalent factored bearing pressures of 3,800 psf for the wall section from Station 27+31.53 (begin wall) to approximate Station 29+00 and 4,300 psf for the wall section from approximate Station 29+00 to Station 31+54.68 (end wall). The final equivalent factored bearing pressure should be provided and/or reevaluated by the designer.

For the wall section from Station 29+00 to 31+54.68, the subsurface investigation indicates that following topsoil stripping, the soil below the top of pad elevations of 576.9 to 581.1feet is expected to be very stiff to hard silty clay to silty clay loam and/or very dense weathered bedrock. We estimate these foundation soils will provide a maximum factored bearing resistance of 7,000 psf based on a geotechnical resistance factor of 0.65 (AASHTO 2020).

For the wall section from Station 27+31.53 to Station 29+00, the soil below the top of pad elevations of 580.0 to 594.3 feet will be new embankment fill. We estimate the wall within this section will apply a maximum equivalent factored bearing pressures of 3,800 psf and a project special provision should be included to verify the compacted embankment fill properties achieved will provide the required bearing resistance.

The actual need for removal and replacement of soils, including the required width and depth of improvement, should be determined in the field at the time of construction.

4.2.2 Settlement

For the section of the wall from Station 27+31.53 to Station 29+00, we recommend constructing the Ramp AA embankment as early as possible. This will reduce any embankment fill settlement due to the self-weight. We estimate the wall foundation soils will undergo up to 1-inch long-term settlement. The Ramp AA embankment settlement analysis is discussed in the INT-2 RGR.

For the section of the wall from Station 29+00 to 31+54.68, we estimate the wall foundation soils will undergo the foundation soils undergo up to 0.5-inch long-term settlement. A differential settlement of up to 0.5 inches should be expected between these two sections of the wall.

4.2.3 Global Stability

The global stability of the MSE walls was analyzed at the critical sections near Stations 29+60 and 28+10 based on the soil profile described in Section 3.1 and the information provided in the *General Plan and Elevation* and *Cross-sections* (Appendixes E and F). The minimum required FOS for both short (undrained) and long-term (drained) conditions is 1.5 (IDOT 2020). Our analysis indicates that the MSE walls have adequate FOS. *Slide2* exhibits employing the Bishop Simplified method of analysis are shown in Appendix D.

5.0 CONSTRUCTION CONSIDERATIONS

5.1 Site Preparation

Vegetation, surface topsoil, and debris should be cleared and stripped where the structure will be placed. If unstable or unsuitable materials are exposed during excavation, they should be removed and replaced with compacted structural fill as described in Section 5.3.

5.2 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 for the construction of the wall should be sloped at no steeper than 1:2 (V: H). Any slope that cannot be graded at 1:2 (V:H) should be properly shored.

Groundwater was encountered while drilling and at the completion of drilling at elevations of 576 to 577 feet (4.5 to 6.0 feet bgs). The groundwater will be encountered where the pad elevation is below 577 feet elevation near Boring AA-RWB-11. Therefore, the dewatering efforts will be required. Water that does accumulate in open excavations by seepage or runoff should be immediately removed by sump pump. Any soils allowed to soften under standing water should be removed and replaced with compacted fill as described in Section 5.3.

5.3 Filling and Backfilling

Fill material used to attain final design elevations should be pre-approved, compacted, cohesive or granular soil conforming to Section 204, *Borrow and Furnished Excavation* (IDOT 2022). The fill material should be free of organic matter and debris and should be placed in lifts and compacted according to Section 205, *Embankment* (IDOT 2022). Backfill materials must be pre-approved by the Resident Engineer.

5.4 Earthwork Operations

The required earthwork can be accomplished with conventional construction equipment. Moisture and traffic will cause deterioration of 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 not coincide with 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.

6.0 QUALIFICATIONS

The analysis and recommendations submitted in this report are based upon the data obtained from the borings drilled at the locations shown on the boring logs and in Exhibit 3. 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 structure are planned, we should be timely informed so that our recommendations can be adjusted accordingly.

It has been a pleasure to assist Stantec 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.

Azza Hamad, P.E.
Senior Geotechnical Engineer

Nesam Balakumaran, P.E.
Geotechnical Project Engineer

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

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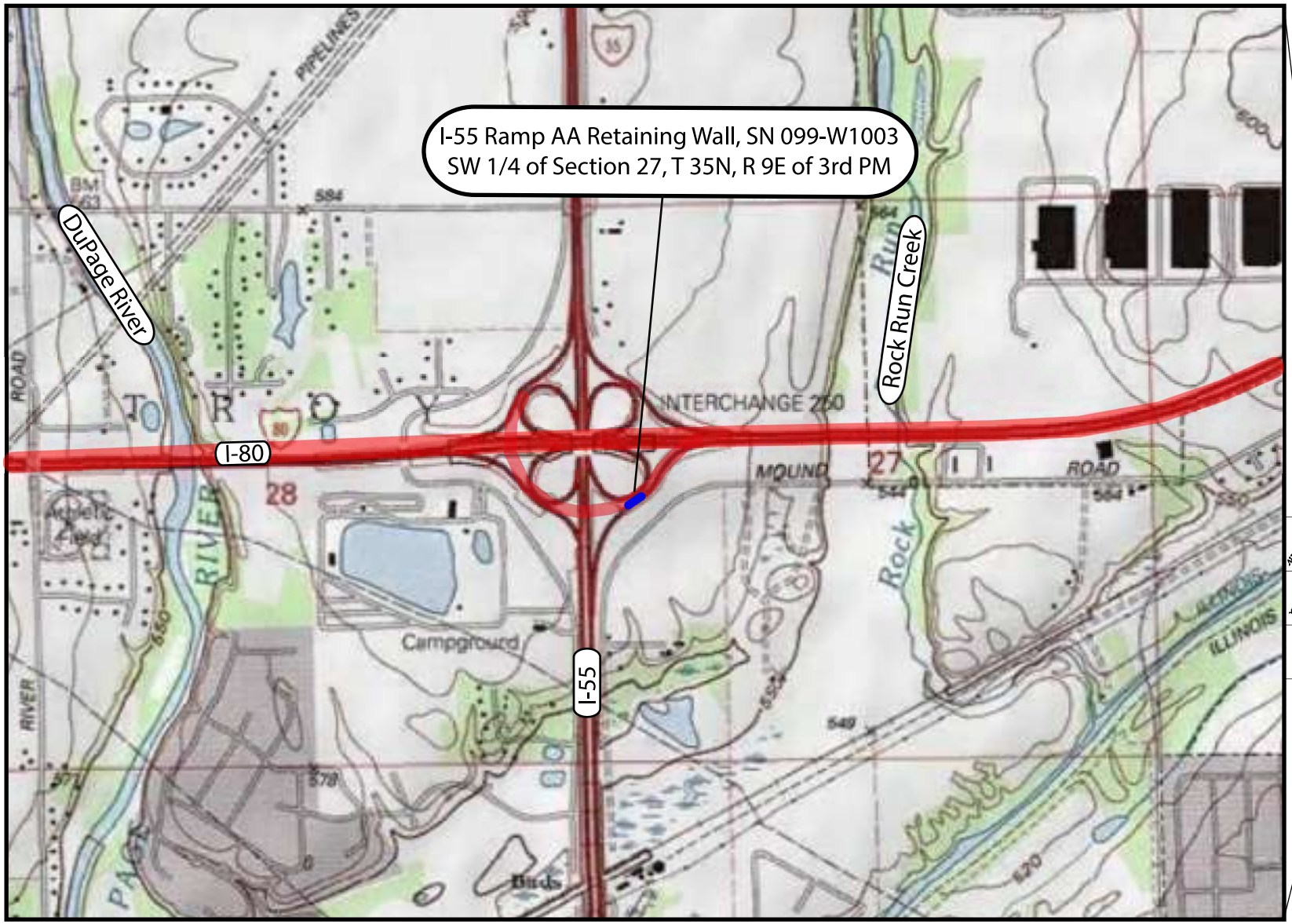
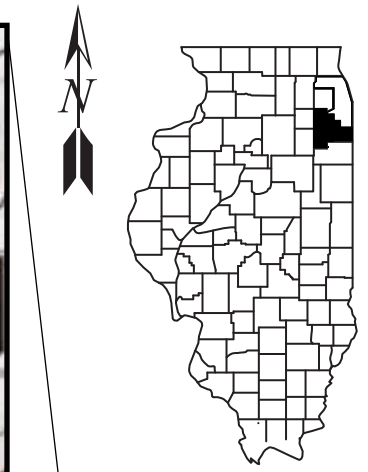
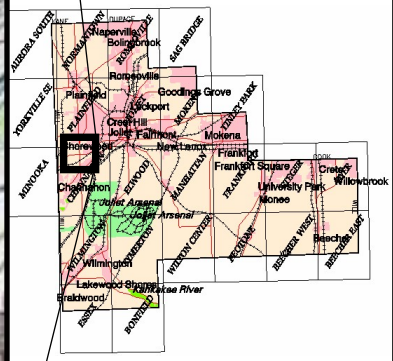
EXHIBITS







Will County

SITE LOCATION MAP: I-55 RAMP AA RETAINING WALL, SN 099-W1003; I-80 RECONSTRUCTION FROM EAST OF RIDGE RD TO HOUBOLT RD; WILL COUNTY, ILLINOIS

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

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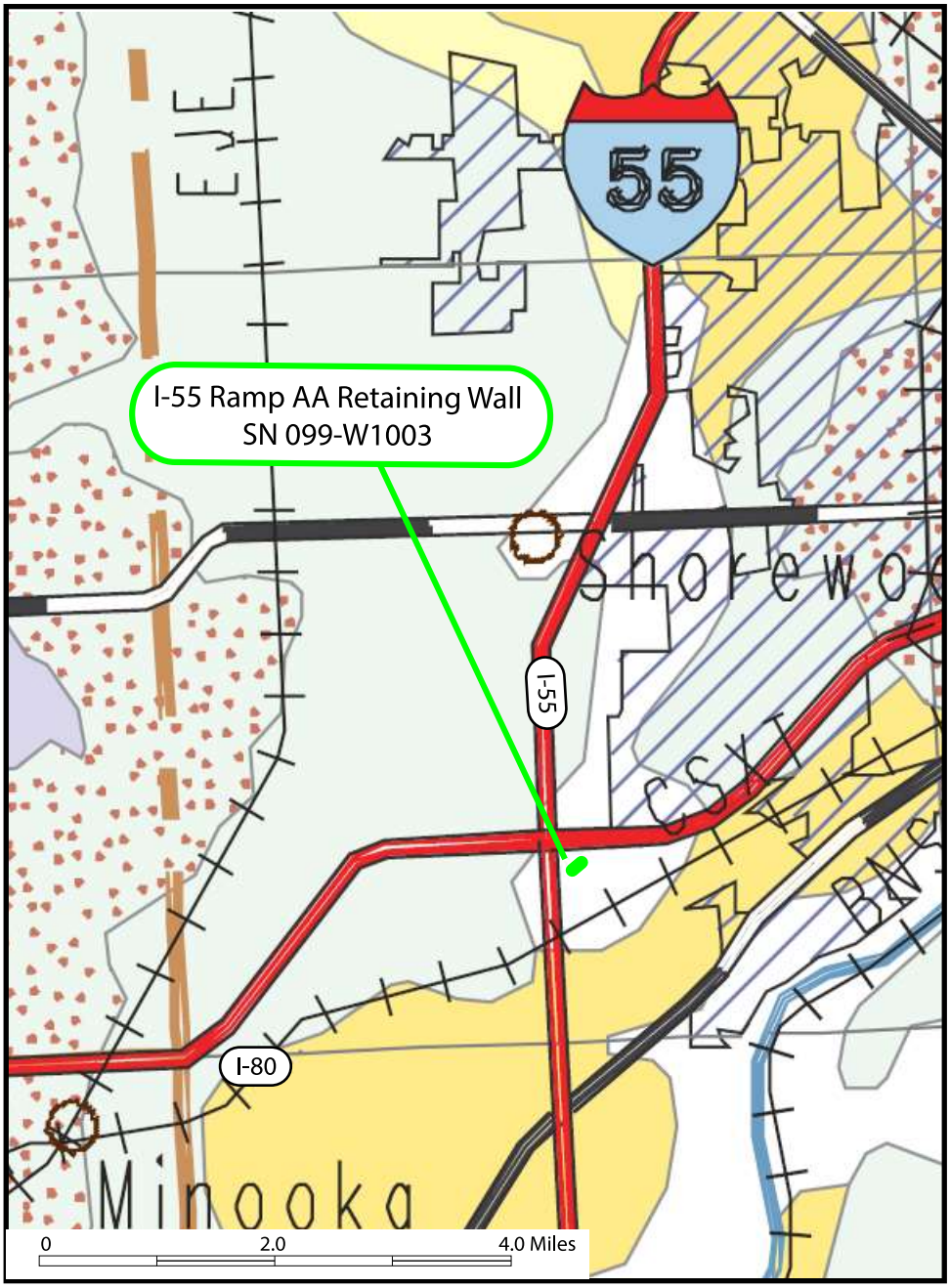
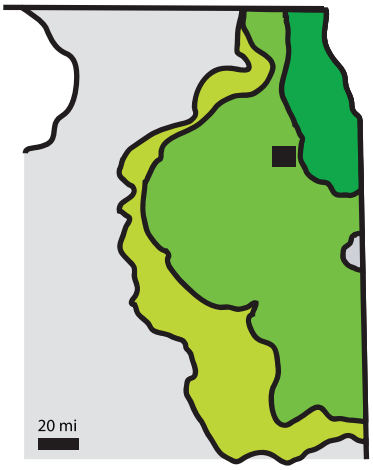
255-39-01



Modified after William W. Shilts (2000)

REGIONAL GEOLOGY



Wedron Group

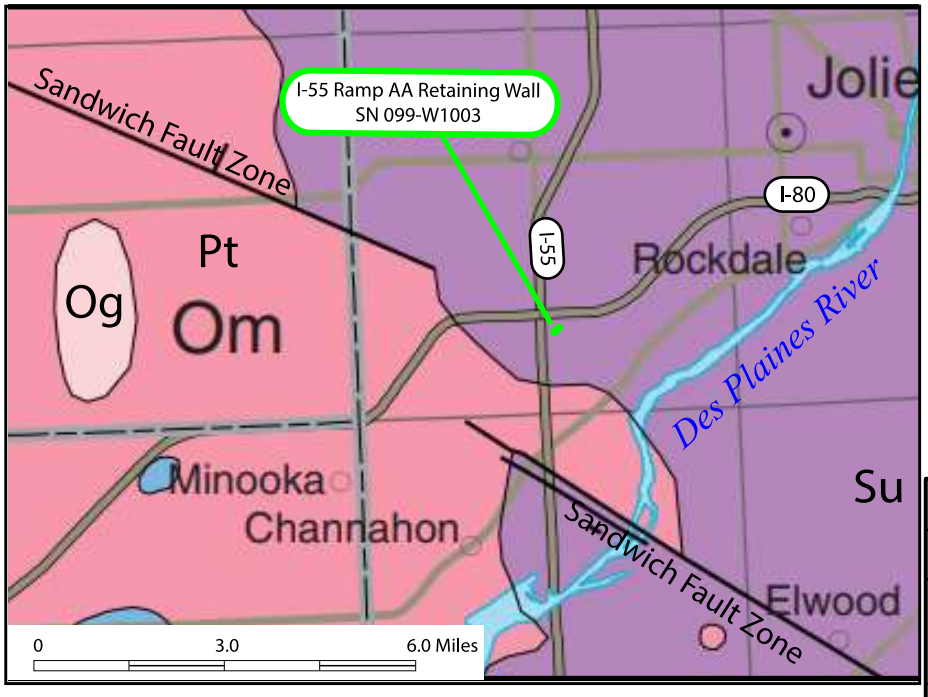
- Wadsworth Formation
- Lemont Formation
- Tiskilwa Formation

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)



Modified after Dennis R. Kolata (2005)

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-55 RAMP AA RETAINING WALL, SN 099-W1003; I-80 RECONSTRUCTION FROM EAST OF RIDGE RD TO HOUBOLT RD; WILL COUNTY, ILLINOIS

SCALE: GRAPHICAL	EXHIBIT 2	DRAWN BY: J. Bensen CHECKED BY: L. Iordache

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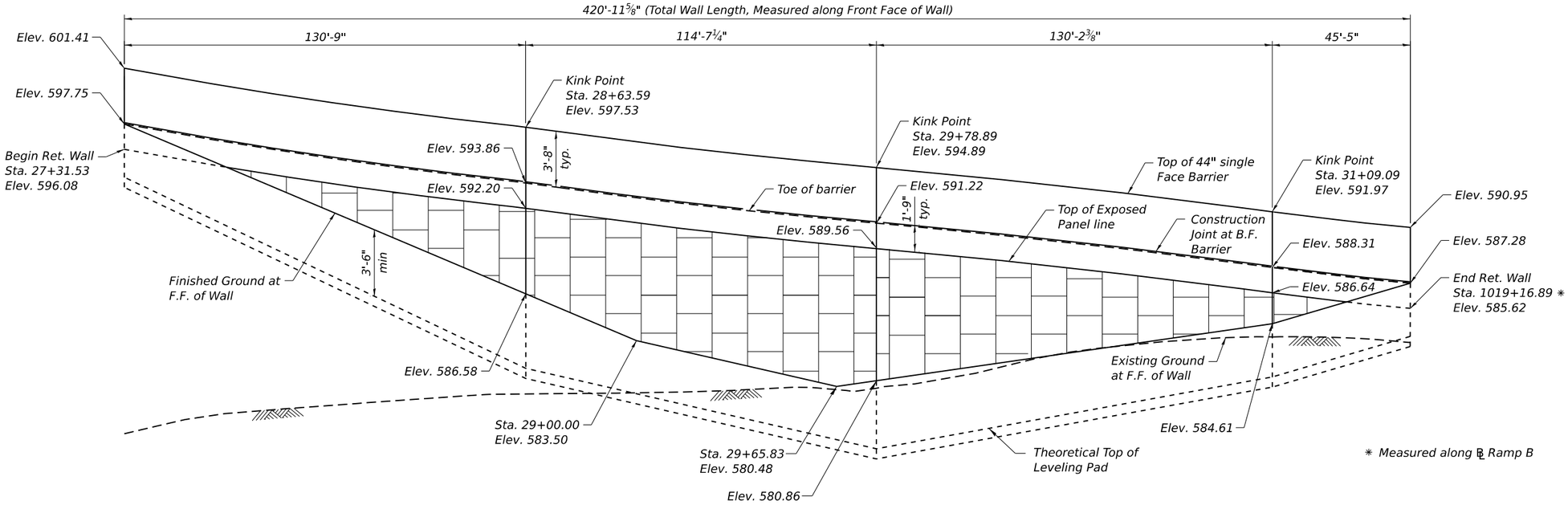
FOR STANTEC | 255-39-01

Benchmark: Set 2" CWA aluminum disc in concrete base of light pole on north side of westbound I-80, approximately 250'± east of mile marker 126 & 950'± west of I-55 centerline. Elev. 609.80

Existing Structure: None

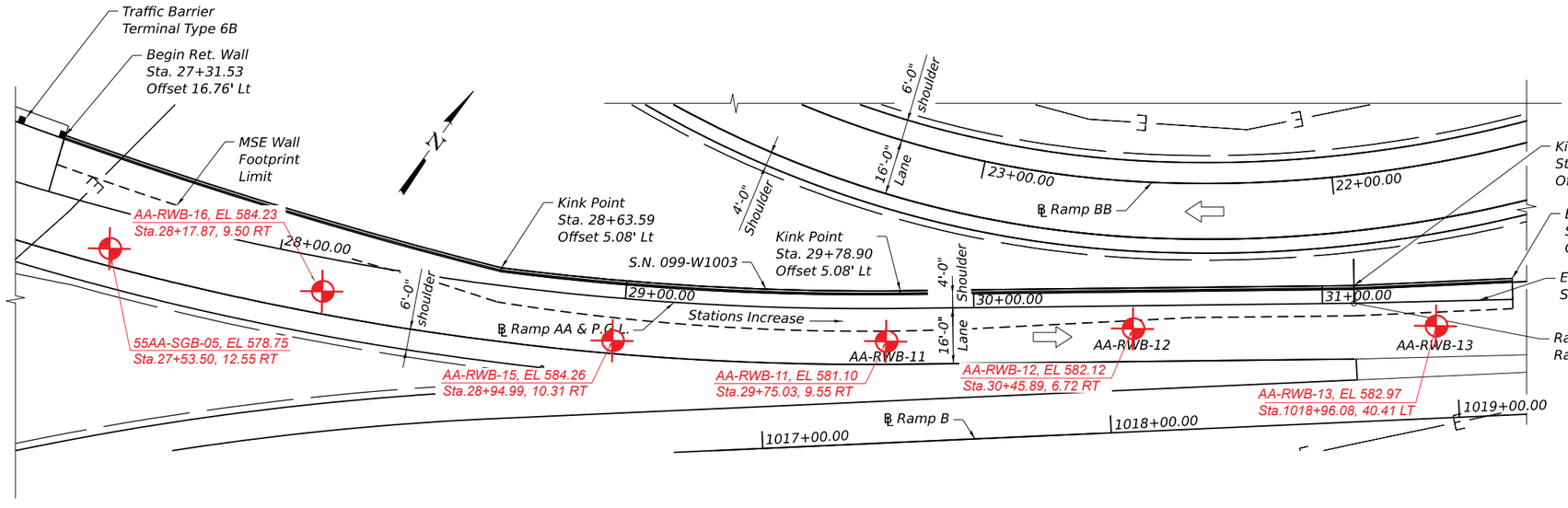
Traffic Control: None

No Salvage.



ELEVATION

Looking at F.F. of Wall



PLAN

NOTE:

Offsets and stations are measured along F.F. of wall from ℄ Ramp AA.

DESIGN SPECIFICATIONS

2020 AASHTO LRFD Bridge Design Specifications, 9th Edition

DESIGN STRESSES

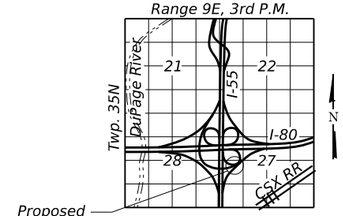
FIELD UNITS

f'_c = 3,500 psi

f_y = 60,000 psi (Reinforcement)

HIGHWAY CLASSIFICATION

FAI Rte. 55 - I-55 Ramp AA
Functional Class: Interstate
ADT: 7,600 (2021); 15,800 (2040)
ADTT: 1,930 (2021); 5,060 (2040)
DHV: 2,270 (2040)
Design Speed: 50 m.p.h.
Posted Speed: 50 m.p.h.
One-Way Traffic
Directional Distribution: 100:0



LOCATION SKETCH

LEGEND

Existing Electrical Line

Soil Boring

GENERAL PLAN AND ELEVATION
I-55 RAMP AA RETAINING WALL
F.A.I. ROUTE 55
SECTION FAI 80 21 STRUCTURE 5
WILL COUNTY
STA. 27+31.53 TO 1019+16.89
STRUCTURE NO. 099-W1003

BORING LOCATION PLAN: I-55 RAMP AA RETAINING WALL, SN 099-W1003; I-80 RECONSTRUCTION FROM EAST OF RIDGE RD TO HOUBOLT RD; WILL COUNTY, ILLINOIS

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

Wang Engineering
1145 N. Main Street
Lombard, IL 60148
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FOR STANTEC | 255-39-01 KE225039

Stantec

USER NAME = eoskoui	DESIGNED - EAO	REVISED -	
	CHECKED - JZ	REVISED -	
PLOT SCALE = 40.0000 ' / in.	DRAWN - EAO	REVISED -	
PLOT DATE = 3/27/2024	CHECKED - JZ	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHEET 1 OF 2 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	FAI 80 21 STRUCTURE 5	WILL	1059	S509
		CONTRACT NO. 62R26		
		ILLINOIS	FED. AID PROJECT	

MODEL: Default
FILE NAME: pw://transystems-pw.bentley.com:transystcorp-pw1-hosted/Documents/Projects_2018/CH401/401180022/01-Stantec/CAD/INT-02_62R26/04-Sheet/04-Structures/099W1003 Ramp AA Retaining Wall/TSL/099W1003 62R26-Retaining Wall-TSL-001.dgn
3/27/2024 1:39:44 PM

Toe of Barrier
Top of Exposed Panel Line
Top of Levelling Pad

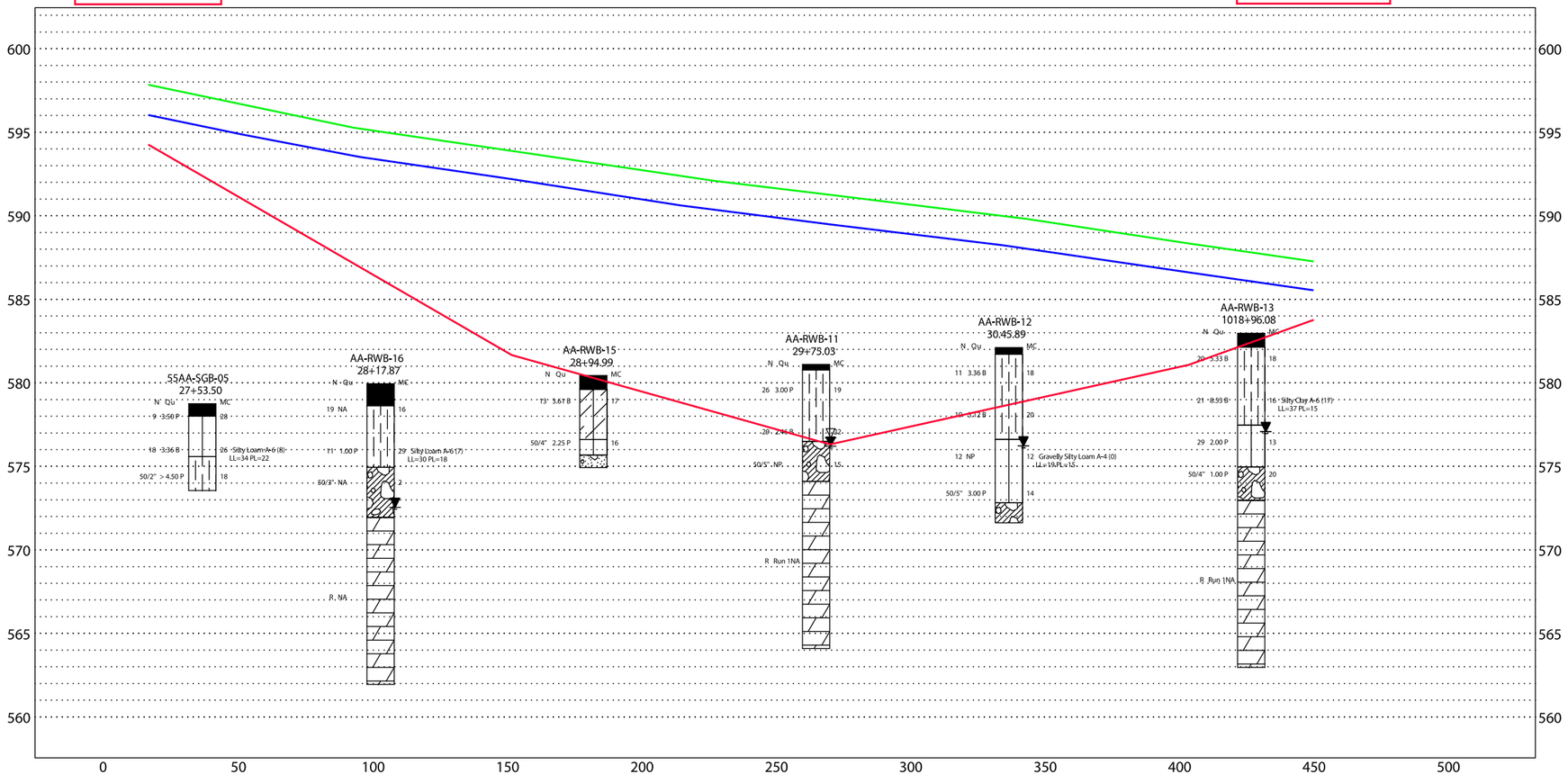
W

Begin Ret. Wall
Sta. 27+31.53

E

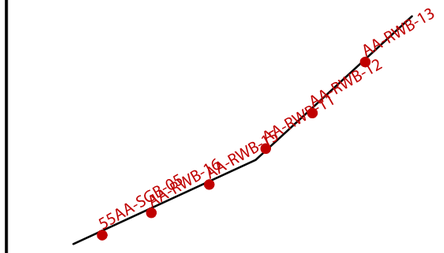
End Ret. Wall
Sta. 1019+16.89

N



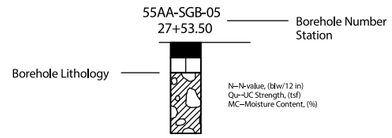
Lithology Graphics

- Topsoil
- Dolomite or Dolomitic Limestone
- IDH Silt, Silty Loam
- IDH Clay Loam
- IDH Silty Clay, Silty Clay Loam
- Gravelly sand, sandy gravel
- Weathered bedrock



Site Map Scale 1 inch equals 185 feet

Explanation:



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

0 50

Horizontal Scale (feet)

Vertical Exaggeration: 6x

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Soil Profile
I-55 Ramp AA Retaining Wall
SN 099-W1003

WEI SINCE 1982

I-80 Reconstruction, Ridge Road to Houbolt Road
Will County, Illinois

JOB NUMBER	PLATE NUMBER
255-39-01	EXHIBIT 4

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APPENDIX A

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BORING LOG 55AA-SGB-05

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 578.75 ft
North: 1754627.70 ft
East: 1021835.52 ft
Station: 27+53.50
Offset: 12.55 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT (blw/6 in) RQD (%)	Qu (tsf)	Moisture Content (%)
	578.0	9-inch thick, very stiff, brown SILTY CLAY, trace gravel; damp			1	5 4 5 11	3.50 P	28
		--TOPSOIL--						
		Very stiff, brown SILTY LOAM to SILTY CLAY LOAM, trace gravel; damp			2	6 7 11 12	3.36 B	26
	575.6	--RDR 2-- --L_L(%)=34, P_L(%)=22-- --%Gravel=3.6-- --%Sand=21.8-- --%Silt=59.4-- --%Clay=15.2-- --A-6 (8)--						
	573.6	Hard, orange, brown and gray SILTY CLAY LOAM, trace to some gravel; damp	5		3	6 18 50/2"	> 4.50 P	18
		--RDR 2-3-- --AUGER REFUSAL-- Boring terminated at 5.20 ft						
			10					
			15					
			20					

GENERAL NOTES

Begin Drilling **12-29-2022** Complete Drilling **12-29-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **21D120A[78%]**
Driller **NC&DZ** Logger **B. Miller** Checked by **C. Marin**
Drilling Method **3.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **DRY**
At Completion of Drilling ▼ **NA**
Time After Drilling **24 hours**
Depth to Water **Dry (cave in 4 ft) ft**

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

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BORING LOG AA-RWB-11

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 581.10 ft
North: 1754732.37 ft
East: 1022033.36 ft
Station: 29+75.03
Offset: 9.55 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT (blw/6 in) RQD (%)	Qu (tsf)	Moisture Content (%)
	580.8	4-inch thick, brown SILTY CLAY, trace gravel; damp --TOPSOIL--						
		Very stiff, brown and gray SILTY CLAY to SILTY CLAY LOAM, little gravel; damp --RDR 2-- --cobble blockage--			1	13 14 12	3.00 P	19
					2	5 8 21	2.46 B	22
	576.5	Very dense, orange and light gray GRAVEL, few silt lenses; wet to saturated --RDR 2-3-- --Weathered BEDROCK--	5		3	50/5"	NP	15
	574.1	Strong, light gray, very poor rock quality, DOLOSTONE; very closely spaced, highly weathered, horizontal, oblique and vertical joints, with <0.05 inch opening, slightly rough walls, and <0.2 inch thick clay infill. -- Run 1: 7.0 to 17.0 feet-- --Recovery = 98%-- --RQD = 11%-- --Qu=8,138 psi	10		4	11%	Run 1	
	564.1	Boring terminated at 17.00 ft	15 20					

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

GENERAL NOTES

Begin Drilling **12-29-2022** Complete Drilling **12-29-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **21D120A[78%]**
Driller **NC&DZ** Logger **B. Miller** Checked by **C. Marin**
Drilling Method **3.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **4.50 ft**
At Completion of Drilling ▼ **5.00 ft**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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BORING LOG AA-RWB-12

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 582.12 ft
North: 1754775.33 ft
East: 1022089.83 ft
Station: 30+45.89
Offset: 6.72 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT (blw/6 in) RQD (%)	Qu (tsf)	Moisture Content (%)
	581.7	5-inch thick, brown SILTY CLAY, trace gravel; damp --TOPSOIL--						
		Very stiff, brown, orange and gray SILTY CLAY, trace to little gravel; damp --RDR 2--			1	4 5 6	3.36 B	18
			5		2	6 7 12	3.12 B	20
	576.6	Medium dense, gray and orange SILTY LOAM to LOAM, little gravel; moist to wet --RDR 2-3-- --L_L(%)=19, P_L(%)=15-- --%Gravel=16.2-- --%Sand=31.0-- --%Silt=45.5-- --%Clay=7.2--			3	5 7 5	NP	12
	572.8				4	21 50/5"	3.00 P	14
		Very dense, orangish brown Gravelly SILTY LOAM; wet--RDR 4--	10					
	571.6	--AUGER REFUSAL-- Boring terminated at 10.50 ft						
			15					
			20					

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

GENERAL NOTES

Begin Drilling **12-29-2022** Complete Drilling **12-29-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **21D120A[78%]**
Driller **NC&DZ** Logger **B. Miller** Checked by **C. Marin**
Drilling Method **3.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **6.00 ft**
At Completion of Drilling ▼ **NA**
Time After Drilling **24 hours**
Depth to Water ▼ **6.00 ft**

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

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BORING LOG AA-RWB-13

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 582.97 ft
North: 1754837.07 ft
East: 1022153.73 ft
Station: 1018+96.08
Offset: 40.41 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT (blw/6 in) RQD (%)	Qu (tsf)	Moisture Content (%)
	582.1	10-inch thick, brown SILTY CLAY, trace gravel; damp						
		--TOPSOIL--						
		Hard, brown and gray SILTY CLAY to SILTY CLAY LOAM, trace gravel; damp			1	5 10 10	5.33 B	18
		--RDR 2--						
		--L_L(%)=37, P_L(%)=15--						
		--%Gravel=3.8--						
		--%Sand=12.0--			2	8 9 12	8.53 B	16
		--%Silt=53.7--	5					
	577.5	--%Clay=30.5--						
		Very stiff, brown and tan SILTY LOAM to SILTY CLAY LOAM, trace gravel; damp to wet			3	5 7 22	2.00 P	13
		--RDR 2-3--						
	575.0							
		Very dense, brown Gravelly SILTY LOAM to LOAM; wet to saturated			4	50/4"	1.00 P	20
		--RDR 4--						
	573.0		10					
		Strong, light gray, very poor rock quality, DOLOSTONE; very closely spaced, highly weathered, horizontal, oblique and vertical joints, with <0.05 inch opening, slightly rough walls, and <0.2 inch thick clay infill.						
		-- Run 1: 10.0 to 20.0 feet--						
		--Recovery = 98%--						
		--RQD = 8%--						
			15		5	8%	Run 1	
	563.0		20					
		Boring terminated at 20.00 ft						

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

GENERAL NOTES

Begin Drilling **12-30-2022** Complete Drilling **12-30-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **21D120A[78%]**
Driller **NC&DZ** Logger **B. Miller** Checked by **C. Marin**
Drilling Method **3.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **6.00 ft**
At Completion of Drilling ▼ **6.00 ft**
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 AA-RWB-15

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 580.43 ft
North: 1754688.85 ft
East: 1021965.09 ft
Station: 28+94.99
Offset: 10.31 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT (blw/6 in) RQD (%)	Qu (tsf)	Moisture Content (%)
	579.6	10-inch thick, dark brown SILTY CLAY LOAM, trace organic matter						
		--TOPSOIL--						
		Very stiff, black, brown, and gray SILTY CLAY LOAM to CLAY LOAM, trace gravel; damp			1	5 7 6	3.61 B	17
	576.6	--RDR 2--						
		Very stiff, brown SILTY LOAM, trace gravel; damp			2	3 7 50/4"	2.25 P	16
	575.7	--RDR 2--	5					
	574.9	Very dense, brown DOLOSTONE fragments; damp						
		--RDR 3--						
		--AUGER REFUSAL--						
		Boring terminated at 5.50 ft						
			10					
			15					
			20					

GENERAL NOTES

Begin Drilling **02-12-2024** Complete Drilling **02-12-2024**
Drilling Contractor **Wang Testing Services** Drill Rig **21GeoA[96%]**
Driller **WG&TC** Logger **F. Bozga** Checked by **C. Marin**
Drilling Method **3.25" ID 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 AA-RWB-16

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 579.94 ft
North: 1754654.67 ft
East: 1021894.96 ft
Station: 28+17.87
Offset: 9.50 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT (blw/6 in) RQD (%)	Qu (tsf)	Moisture Content (%)
		16-inch thick black SILTY CLAY LOAM, trace organic matter --TOPSOIL--						
	578.6	Stiff, brown, black and gray SILTY CLAY LOAM, trace gravel; damp			1	6 8 11	NA	16
		--L_L(%)=30, P_L(%)=18-- --%Gravel=6.5-- --%Sand=17.7-- --%Silt=60.5-- --%Clay=15.3-- --A-6 (7)--			2	3 4 7	1.00 P	29
	574.9	--hard drilling, 5 to 6 feet--	5		3	50/3"	NP	2
		Very dense, brown DOLOSTONE fragments; damp --RDR 4 to 5--						
	571.9	Strong, light gray, very poor rock mass quality, DOLOSTONE; very closely spaced, highly weathered, horizontal, oblique and vertical joints, with <0.05 inch opening, slightly rough walls, and <0.2 inch thick clay infill.	10					
		-- Run 1: 8.0 to 18.0 feet-- --Recovery = 97%-- --RQD = 0%--			4	0%		
			15					
	561.9	Boring terminated at 18.00 ft						
			20					

GENERAL NOTES

Begin Drilling **02-12-2024** Complete Drilling **02-12-2024**
Drilling Contractor **Wang Testing Services** Drill Rig **21GeoA[96%]**
Driller **WG&TC** Logger **F. Bozga** Checked by **C. Marin**
Drilling Method **3.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **DRY**
At Completion of Drilling ▼ **7.50 ft**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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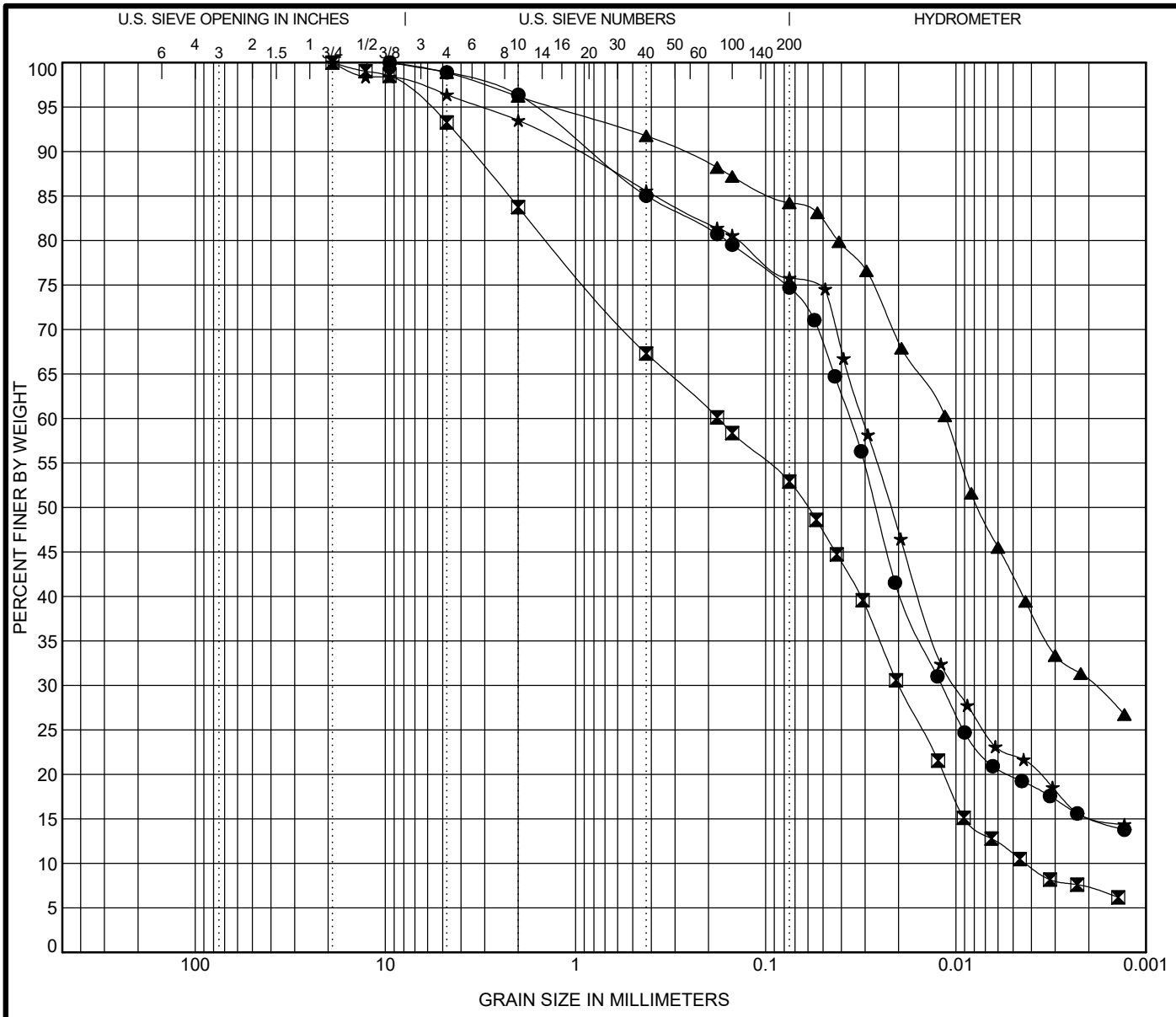
APPENDIX B



COBBLES	GRAVEL	SAND		SILT AND CLAY
		coarse	fine	

	Specimen Identification		IDH Classification	LL	PL	PI	Cc	Cu
●	55AA-SGB-05#2	2.0 ft	**Silty Loam**	**34**	**22**	**12**		
⊠	AA-RWB-12#3	6.0 ft	**Gravelly Silty Loam**	**19**	**15**	**4**	**0.53**	**41.62**
▲	AA-RWB-13#2	3.5 ft	**Silty Clay**	**37**	**15**	**22**		
★	AA-RWB-16#2	3.5 ft	**Silty Loam**	**30**	**18**	**12**		

	Specimen Identification		D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	55AA-SGB-05#2	2.0 ft	**9.5**	**0.036**	**0.012**		**3.6**	**21.8**	**59.4**	**15.2**
⊠	AA-RWB-12#3	6.0 ft	**19**	**0.178**	**0.02**	**0.004**	**16.2**	**31.0**	**45.5**	**7.2**
▲	AA-RWB-13#2	3.5 ft	**9.5**	**0.011**	**0.002**		**3.8**	**12.0**	**53.7**	**30.5**
★	AA-RWB-16#2	3.5 ft	**19**	**0.031**	**0.01**		**6.5**	**17.7**	**60.5**	**15.3**

WEI SINCE 1982
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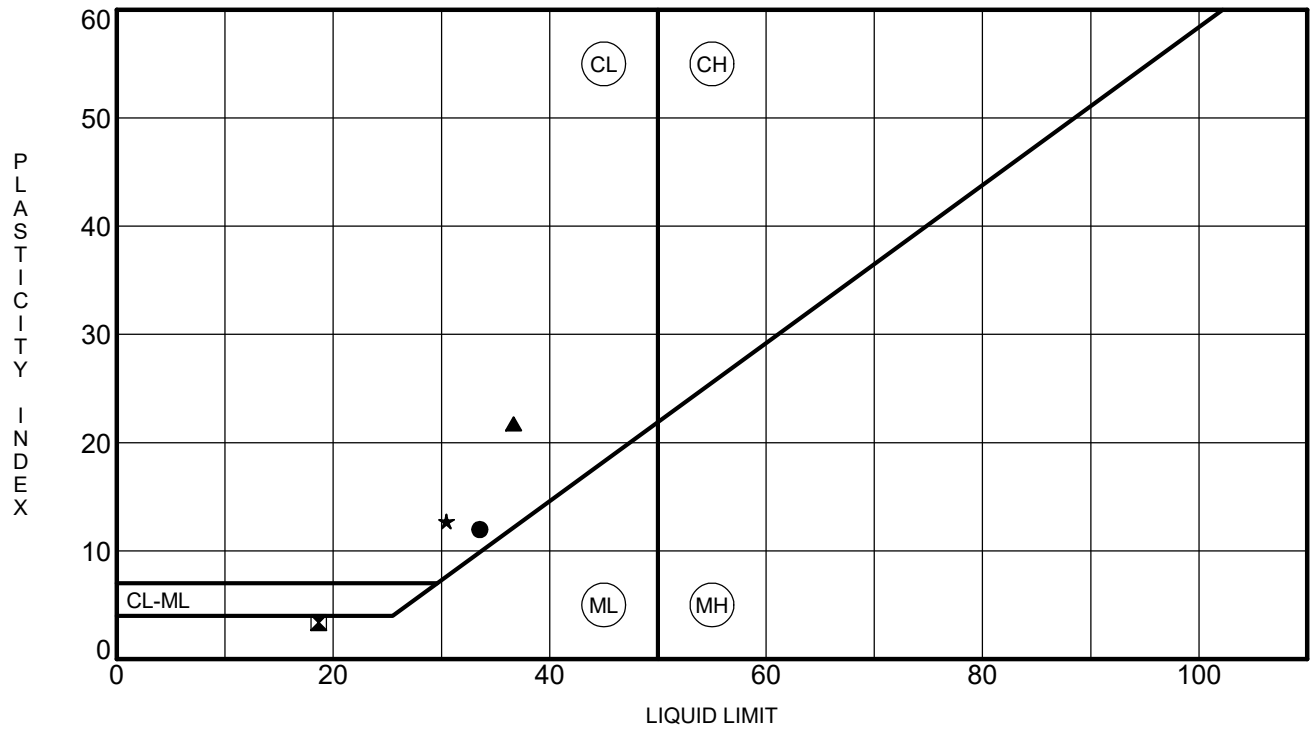
GRAIN SIZE DISTRIBUTION

Project: I-80 Reconstruction, Ridge Road to Houbolt Road

Location: Will County, Illinois

Number: 255-39-01



	Specimen Identification		LL	PL	PI	Fines	IDH Classification
●	55AA-SGB-05#2	2.0 ft	34	22	12	75	Silty Loam
⊠	AA-RWB-12#3	6.0 ft	19	15	4	53	Gravelly Silty Loam
▲	AA-RWB-13#2	3.5 ft	37	15	22	84	Silty Clay
★	AA-RWB-16#2	3.5 ft	30	18	12	76	Silty Loam

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ATTERBERG LIMITS' RESULTS

Project: I-80 Reconstruction, Ridge Road to Houbolt Road

Location: Will County, Illinois

Number: 255-39-01

Unconfined Compressive Strength of Intact Rock Core Specimens

Project: I-80

Client: Stantec

WEI Job No.: KE225039

Field Sample ID	Run #	Depth (ft)	Location	Sample Description	Length (in)		Diameter (in)	Total Load (lbs)	Total Pressure (psi)	Fracture Type*	Break Date	Tested By	Area (in^2)
					Before Capping	After Capping							
AA-RWB-11	1	8.0	Ramp AA Retaining Wall	Dolostone	4.00		2.04	26600	8138	3	1/24/23	KJ	3.27

*** Fracture Types:**

Type 1 - Reasonably well-formed cones on both ends, less than 1 in. [25 mm] of cracking through caps;
Type 2 - Well-formed cone on one end, vertical cracks running through caps, no well defined cone on other end;
Type 3 - Columnar vertical cracking through both ends, no well-formed cones;
Type 4 - Diagonal fracture with no cracking through ends; tap with hammer to distinguish from Type 1;
Type 5 - Side fractures at top or bottom (occur commonly with unbonded caps);
Type 6 - Similar to Type 5 but end of cylinder is pointed.

Prepared by:_____

Checked by: _____

WANG ENGINEERING, INC.
1145 N. Main Street, Lombard. IL 60148

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APPENDIX C

Run #1

0 6 inches

Boring AA-RWB-10:
Run #1, 7.5 to 17.5 feet, RECOVERY=100%, RQD=8%

BEDROCK CORE: I-55 RAMP AA RETAINING WALL, SN 099-W1003; I-80 RECONSTRUCTION FROM EAST OF RIDGE RD TO HOUBOLT RD; WILL COUNTY, ILLINOIS

SCALE: GRAPHICAL	APPENDIX C-1	DRAWN BY: D. You CHECKED BY: A. Hamad

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FOR STANTEC | 255-39-01

Run #1

Boring AA-RWB-11:
Run #1, 7.0 to 17.0 feet, RECOVERY=98%, RQD=11%

BEDROCK CORE: I-55 RAMP AA RETAINING WALL, SN 099-W1003; I-80 RECONSTRUCTION FROM EAST OF RIDGE RD TO HOUBOLT RD; WILL COUNTY, ILLINOIS

SCALE: GRAPHICAL	APPENDIX C-2	DRAWN BY: D. You CHECKED BY: A. Hamad

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1145 N. Main Street
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FOR STANTEC	255-39-01

Run #1

Boring AA-RWB-13:
Run #1, 10.0 to 20.0 feet, RECOVERY=98%, RQD=8%

BEDROCK CORE: I-55 RAMP AA RETAINING WALL, SN 099-W1003; I-80 RECONSTRUCTION FROM EAST OF RIDGE RD TO HOUBOLT RD; WILL COUNTY, ILLINOIS

SCALE: GRAPHICAL	APPENDIX C-3	DRAWN BY: D. You CHECKED BY: A. Hamad

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Run #1

0 6 inches

BOTTOM

Boring AA-RWB-16:
Run #1, 8.0 to 18.0 feet, RECOVERY=98%, RQD=0%

BEDROCK CORE: I-55 RAMP AA RETAINING WALL, SN 099-W1003; I-80
RECONSTRUCTION FROM EAST OF RIDGE RD TO HOUBOLT RD; WILL COUNTY, ILLINOIS

SCALE: GRAPHICAL	APPENDIX C-4	DRAWN BY: J. Bensen CHECKED BY: A. Hamad

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Lombard, Illinois 60148
Phone (630) 953-9928
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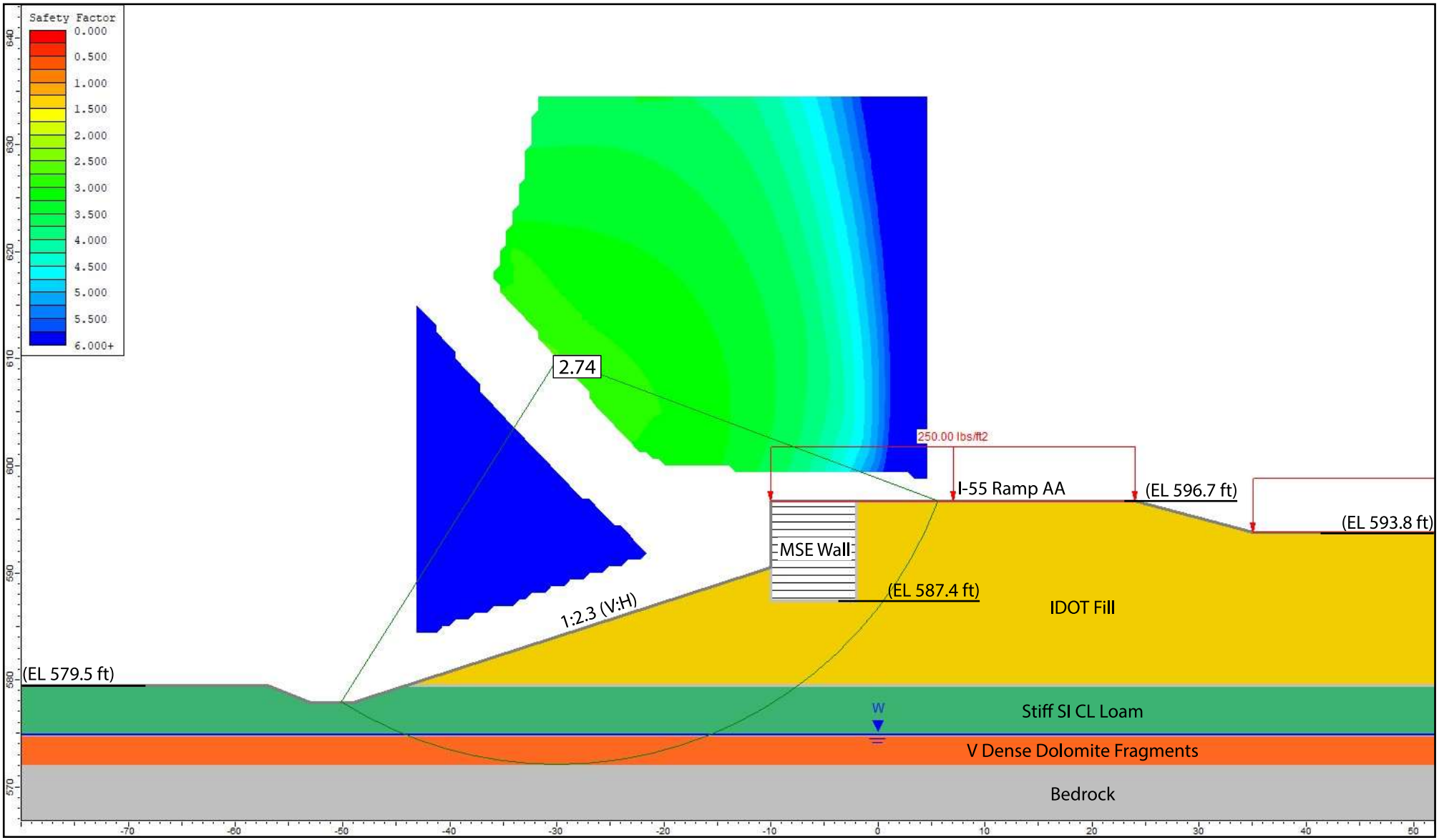
APPENDIX D



Undrained Analysis, Retaining Wall, SN 099-W1003, Sta.28+10, Ref Boring: AA-RWB-16

Layer ID	Description	Total Unit Weight (pcf)	Undrained Cohesion (psf)	Undrained Friction Angle (degrees)
1	IDOT Fill	120	1000	0
2	Stiff SI CL Loam	120	1000	0
3	V Dense Dolomite Fragments	130	0	36

GLOBAL STABILITY: I-55 RAMP AA RETAINING WALL, SN099-W1003; I-80 RECONSTRUCTION FROM EAST OF RIDGE RD TO HOUBOLT RD; WILL COUNTY, ILLINOIS

SCALE: GRAPHICAL | APPENDIX D-1 | DRAWN BY: D. You, CHECKED BY: A. Hamad

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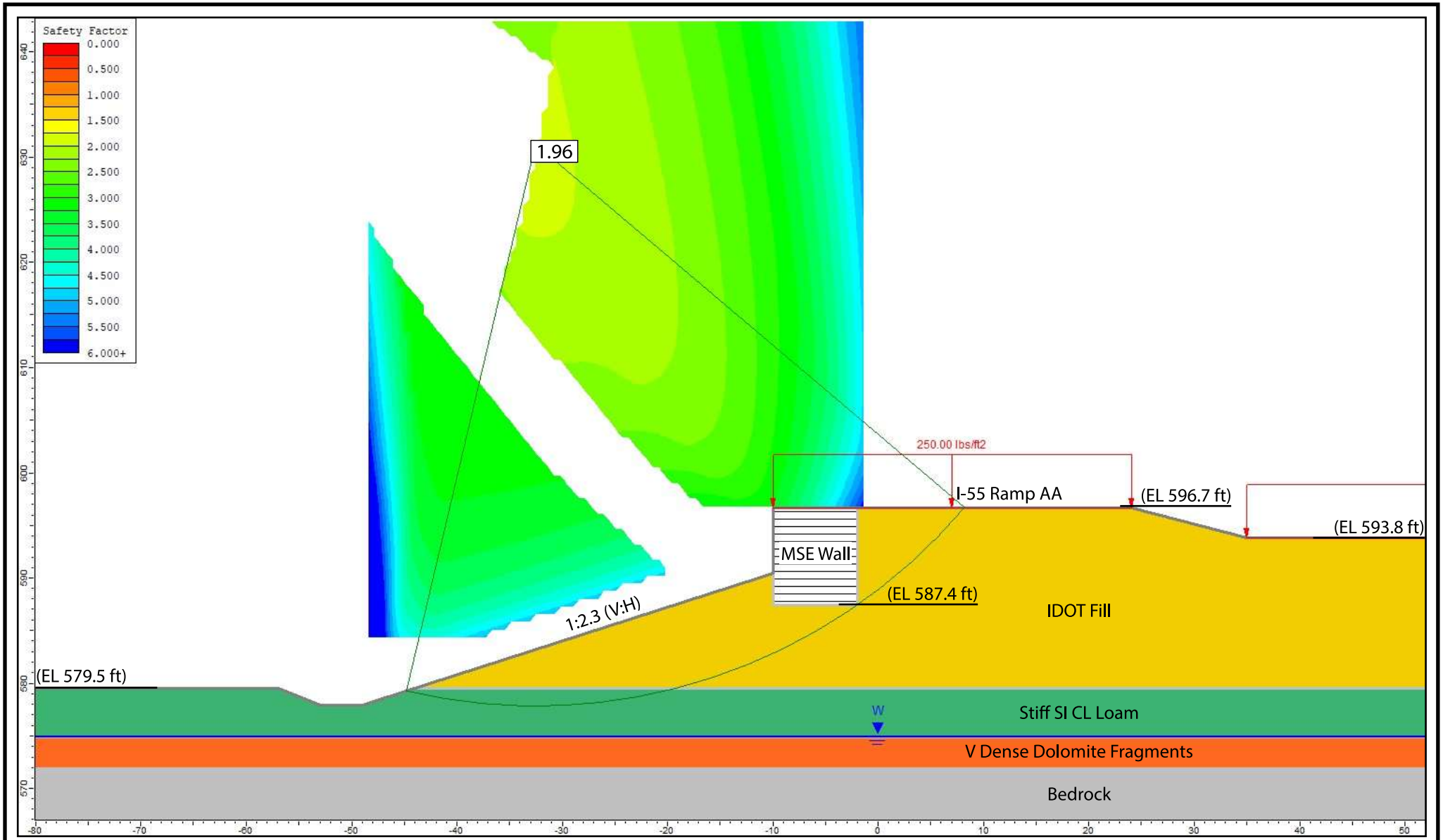

Drained Analysis, Retaining Wall, SN 099-W1003, Sta.28+10, Ref Boring: AA-RWB-16

Layer ID	Description	Total Unit Weight (pcf)	Drained Cohesion (psf)	Drained Friction Angle (degrees)
1	IDOT Fill	120	100	30
2	Stiff SI CL Loam	120	100	30
3	V Dense Dolomite Fragments	130	0	36

GLOBAL STABILITY: I-55 RAMP AA RETAINING WALL, SN099-W1003; I-80 RECONSTRUCTION FROM EAST OF RIDGE RD TO HOUBOLT RD; WILL COUNTY, ILLINOIS

SCALE: GRAPHICAL | APPENDIX D-2 | DRAWN BY: D. You, CHECKED BY: A. Hamad

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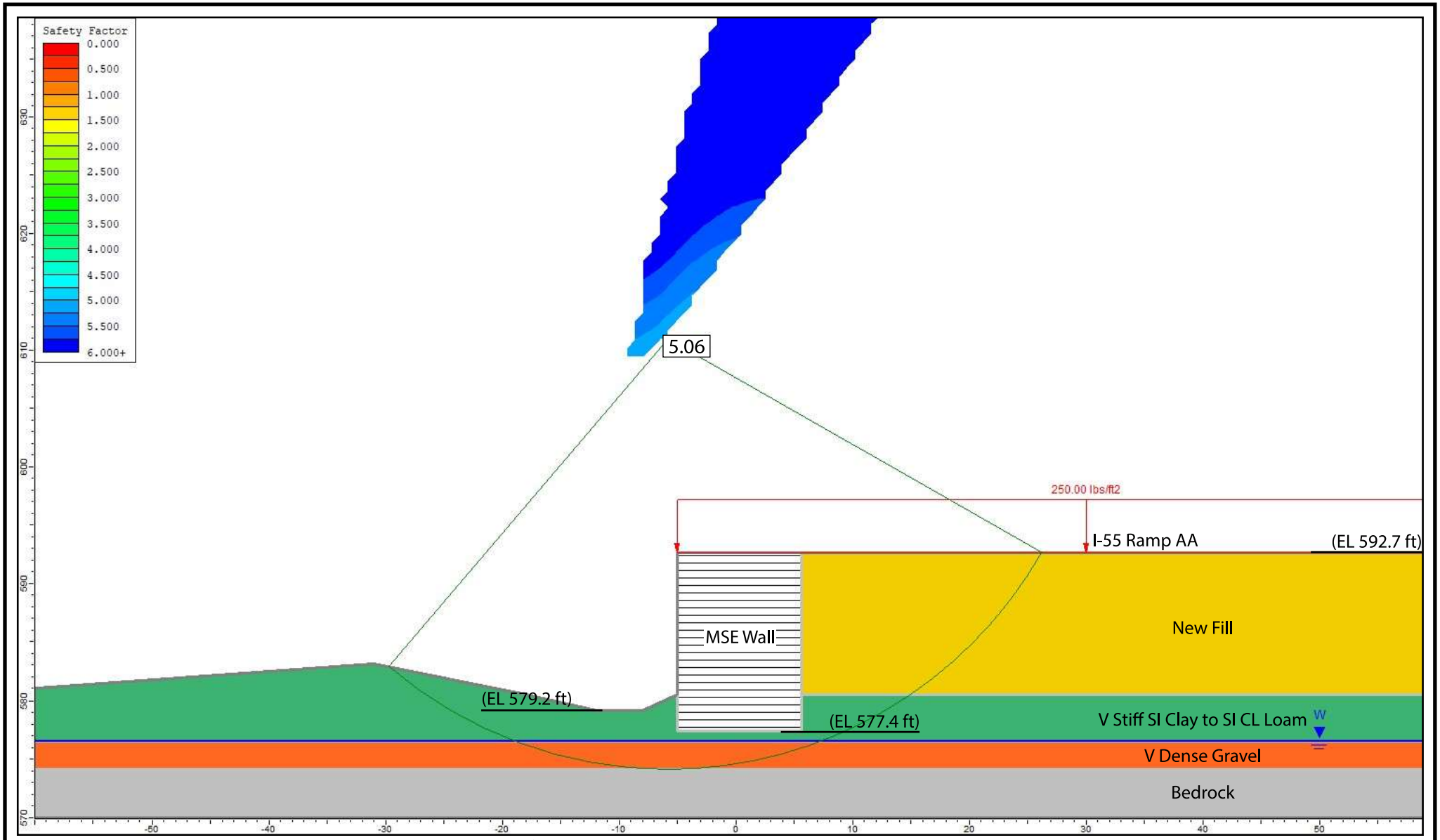

Undrained Analysis, Retaining Wall, SN 099-W1003, Sta.29+60, Ref Boring: AA-RWB-11

Layer ID	Description	Total Unit Weight (pcf)	Undrained Cohesion (psf)	Undrained Friction Angle (degrees)
1	New Fill	125	1000	0
2	V Stiff SI Clay to SI CL Loam	125	2500	0
3	V Dense Gravel	125	0	33

GLOBAL STABILITY: I-55 RAMP AA RETAINING WALL, SN099-W1003; I-80 RECONSTRUCTION FROM EAST OF RIDGE RD TO HOUBOLT RD; WILL COUNTY, ILLINOIS

SCALE: GRAPHICAL | APPENDIX D-3 | DRAWN BY: D. You, CHECKED BY: A. Hamad

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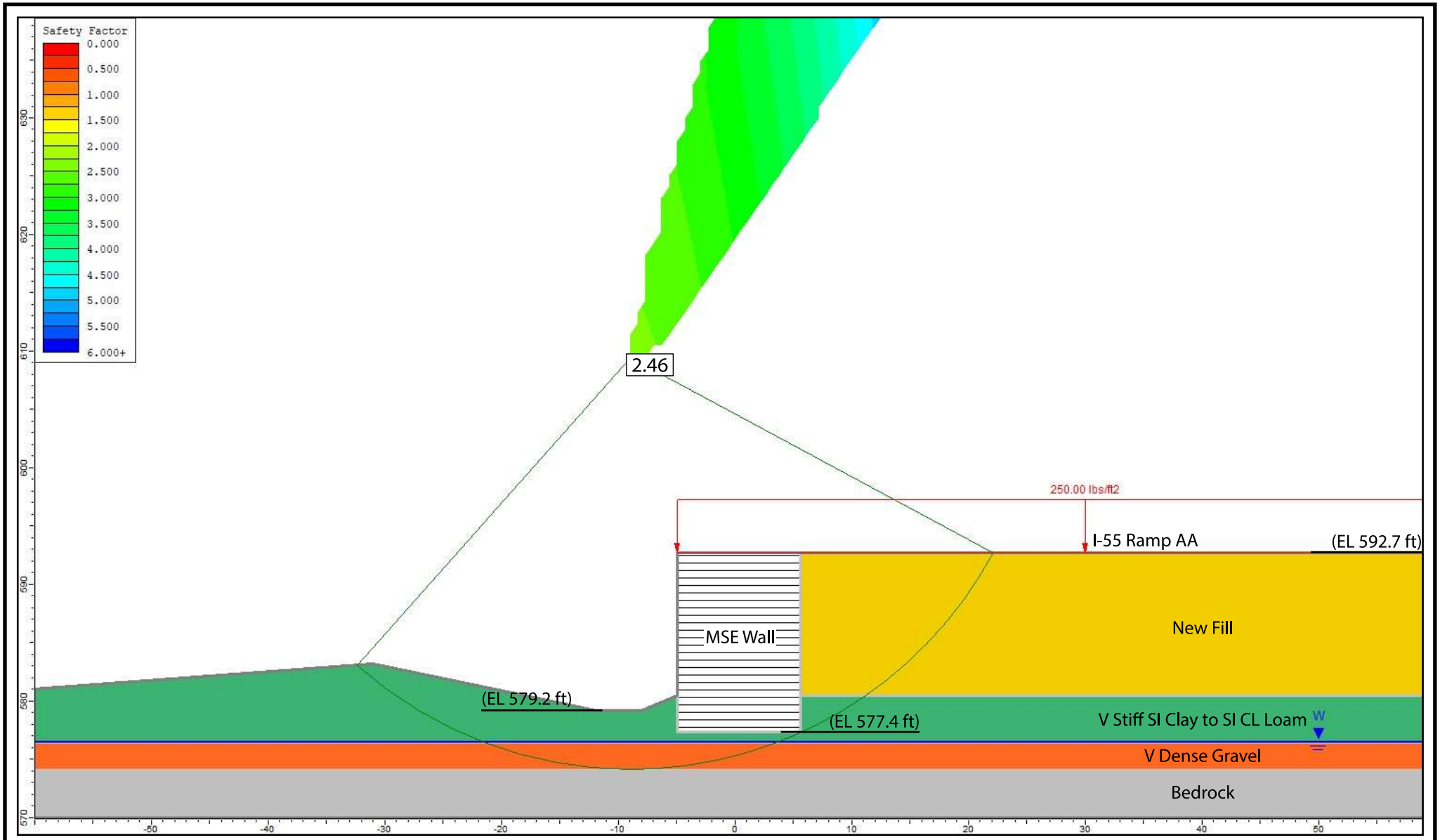

Drained Analysis, Retaining Wall, SN 099-W1003, Sta.29+60, Ref Boring: AA-RWB-11

Layer ID	Description	Total Unit Weight (pcf)	Drained Cohesion (psf)	Drained Friction Angle (degrees)
1	New Fill	125	100	30
2	V Stiff SI Clay to SI CL Loam	125	100	30
3	V Dense Gravel	125	0	33

GLOBAL STABILITY: I-55 RAMP AA RETAINING WALL, SN099-W1003; I-80 RECONSTRUCTION FROM EAST OF RIDGE RD TO HOUBOLT RD; WILL COUNTY, ILLINOIS

SCALE: GRAPHICAL | APPENDIX D-4 | DRAWN BY: D. You CHECKED BY: A. Hamad

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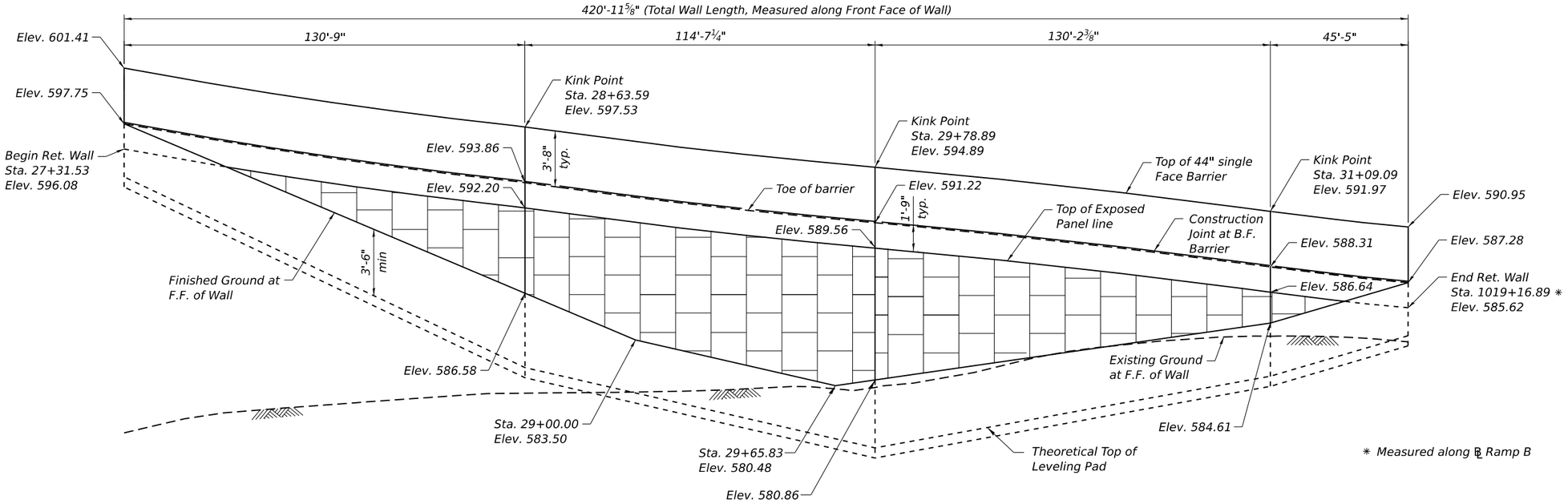
APPENDIX E

Benchmark: Set 2" CWA aluminum disc in concrete base of light pole on north side of westbound I-80, approximately 250'± east of mile marker 126 & 950'± west of I-55 centerline. Elev. 609.80

Existing Structure: None

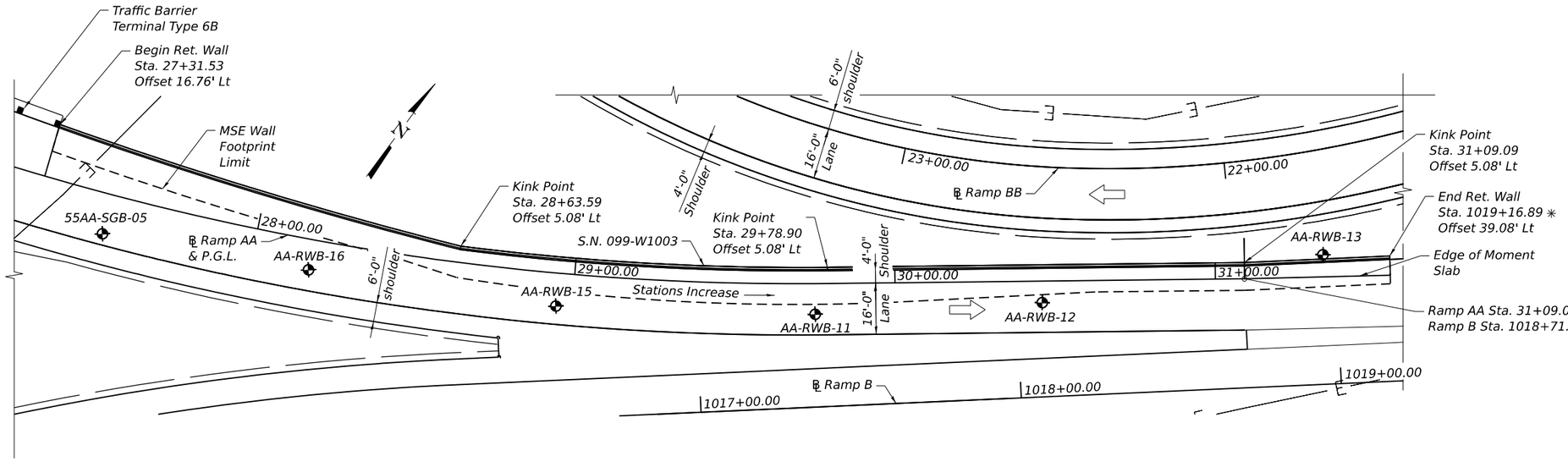
Traffic Control: None

No Salvage.



ELEVATION

Looking at F.F. of Wall



PLAN

DESIGN SPECIFICATIONS

2020 AASHTO LRFD Bridge Design Specifications, 9th Edition

DESIGN STRESSES

FIELD UNITS

f'_c = 3,500 psi

fy = 60,000 psi (Reinforcement)

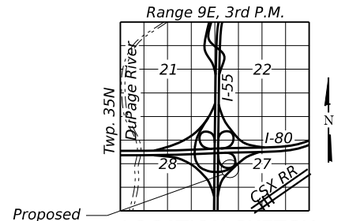
HIGHWAY CLASSIFICATION

FAI Rte. 55 - I-55 Ramp AA
Functional Class: Interstate
ADT: 7,600 (2021); 15,800 (2040)
ADTT: 1,930 (2021); 5,060 (2040)
DHV: 2,270 (2040)
Design Speed: 50 m.p.h.
Posted Speed: 50 m.p.h.
One-Way Traffic
Directional Distribution: 100:0

LEGEND

Existing Electrical Line

Soil Boring



LOCATION SKETCH

NOTE:

Offsets and stations are measured along F.F. of wall from ℄ Ramp AA.

GENERAL PLAN AND ELEVATION
I-55 RAMP AA RETAINING WALL
F.A.I. ROUTE 55
SECTION FAI 80 21 STRUCTURE 5
WILL COUNTY
STA. 27+31.53 TO 1019+16.89
STRUCTURE NO. 099-W1003

Stantec

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	CHECKED - JZ	REVISED -	
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PLOT DATE = 4/3/2024	CHECKED - JZ	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHEET 1 OF 2 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	FAI 80 21 STRUCTURE 5	WILL	1059	SS09
		CONTRACT NO. 62R26		
		ILLINOIS	FED. AID PROJECT	

MODEL: Default
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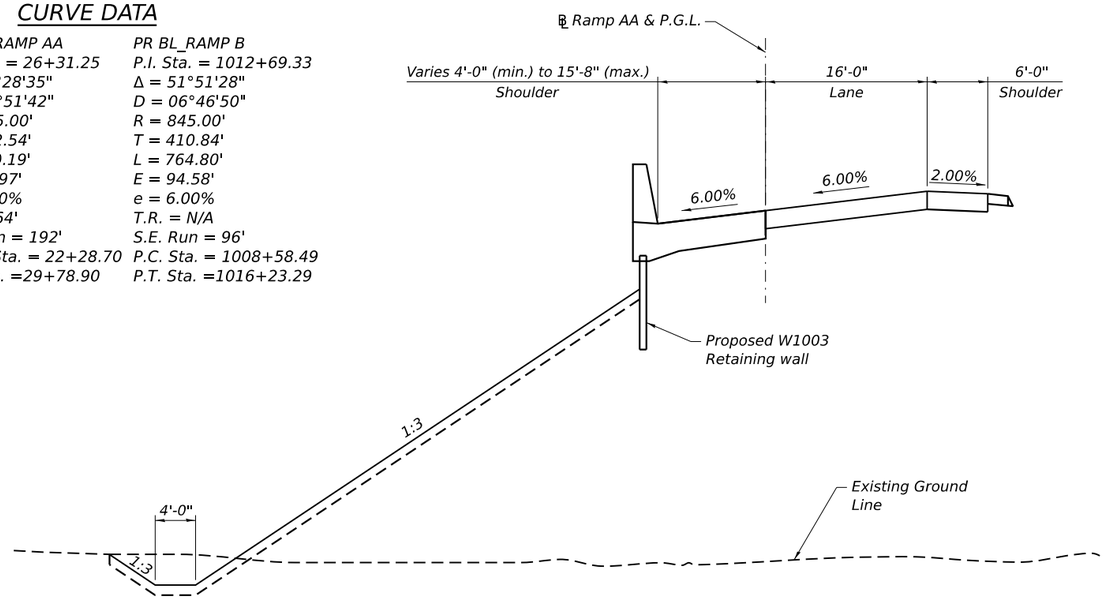
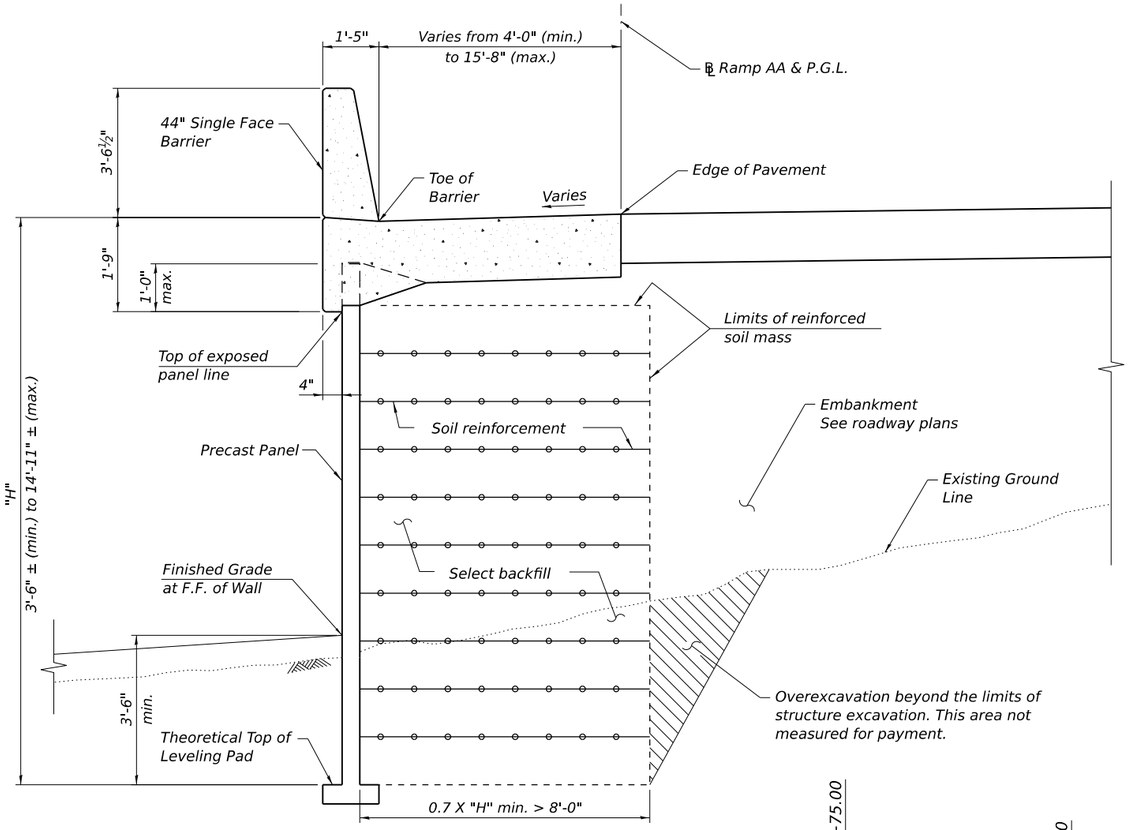
CURVE DATA

PR BL_RAMP AA	PR BL_RAMP B
P.I. Sta. = 26+31.25	P.I. Sta. = 1012+69.33
Δ = 51°28'35"	Δ = 51°51'28"
D = 06°51'42"	D = 06°46'50"
R = 835.00'	R = 845.00'
T = 402.54'	T = 410.84'
L = 750.19'	L = 764.80'
E = 91.97'	E = 94.58'
e = 6.00%	e = 6.00%
T.R. = 64'	T.R. = N/A
S.E. Run = 192'	S.E. Run = 96'
P.C.C. Sta. = 22+28.70	P.C. Sta. = 1008+58.49
P.T. Sta. =29+78.90	P.T. Sta. =1016+23.29



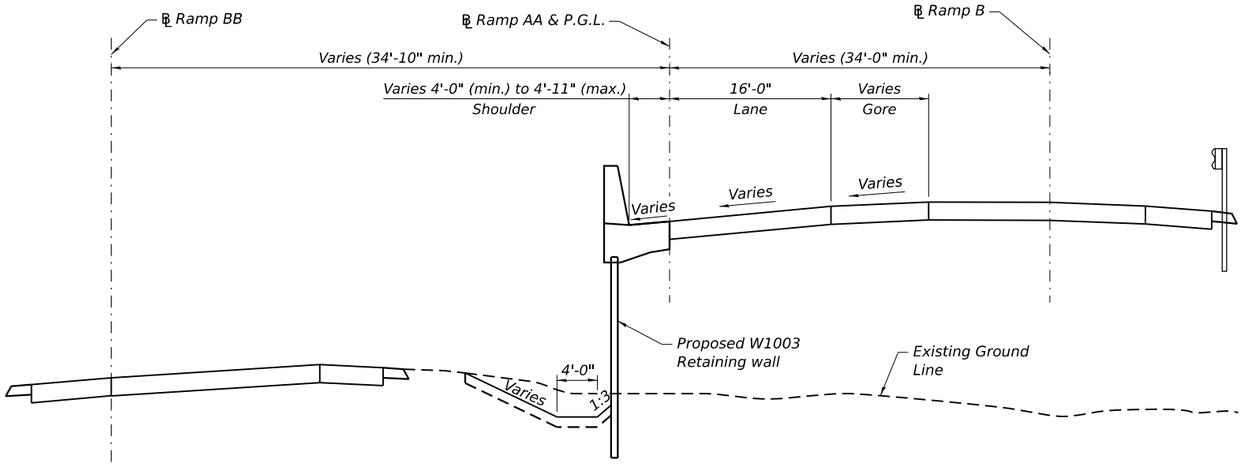
TYPICAL WALL SECTION

(Looking North-East)
Ramp AA Sta. 27+31.53 to Sta. 28+78.35



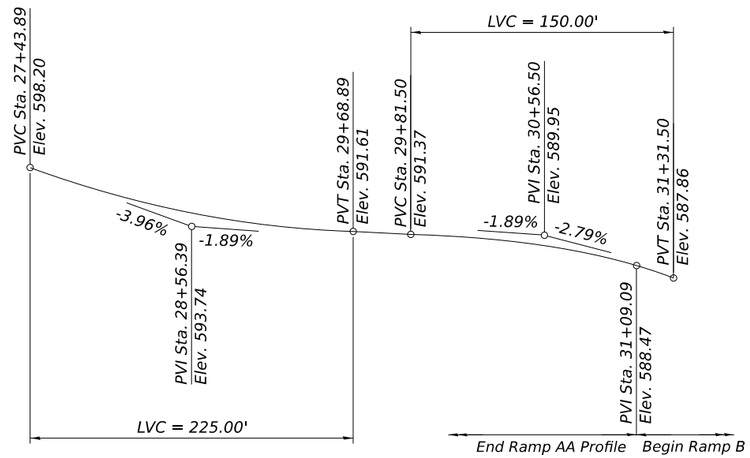
TYPICAL WALL SECTION

(Looking North-East)
Ramp AA Sta. 28+78.35 to Sta. 31+09.09
Ramp B Sta. 1018+71.30 to Sta. 1019+16.89



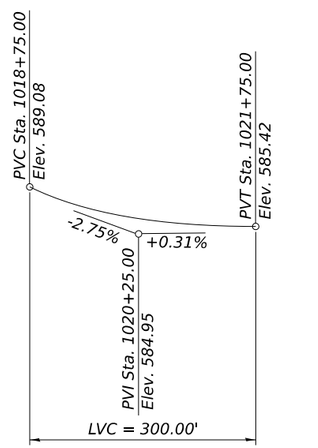
PROFILE GRADE

Along ℄ Ramp AA



PROFILE GRADE

Ramp B



NOTE:

The MSE wall supplier's internal stability design shall account for the anchorage slab's bearing pressure surcharge of 1.0 ksf and horizontal sliding force of 0.5 kips/ft. of wall.

I-55 RAMP AA RETAINING WALL
F.A.I. ROUTE 55
SECTION FAI 80 21 STRUCTURE 5
WILL COUNTY
STA. 27+31.53 TO 1019+16.89
STRUCTURE NO. 099-W1003

Stantec

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	CHECKED - JZ	REVISED -	
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PLOT DATE = 4/3/2024	CHECKED - JZ	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHEET 2 OF 2 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	FAOI 80 21 STRUCTURE 5	WILL	1059	$S10
		CONTRACT NO. 62R26		
		ILLINOIS	FED. AID PROJECT	

MODEL: Default
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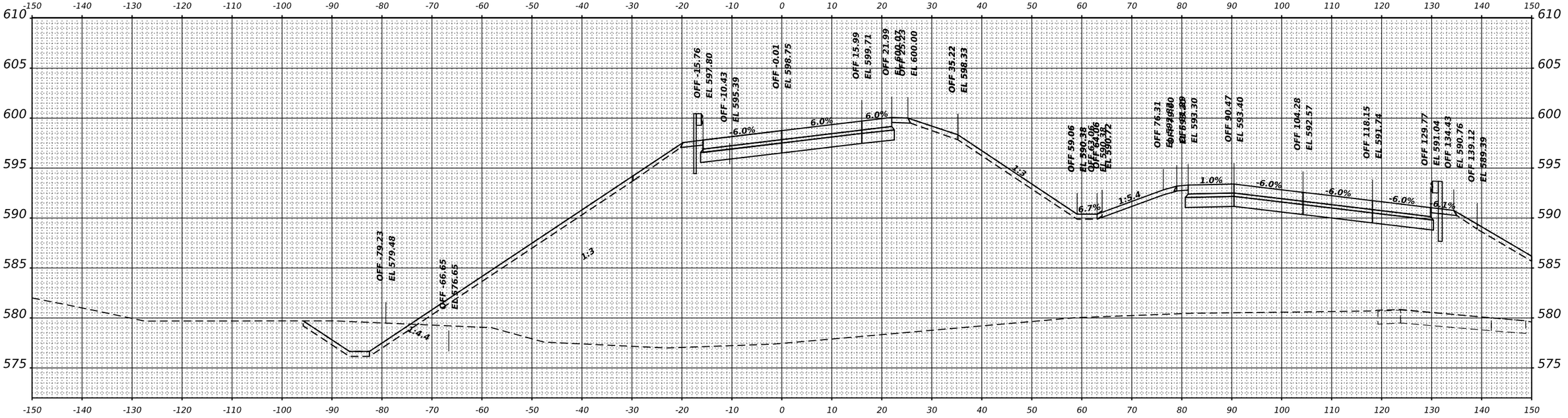
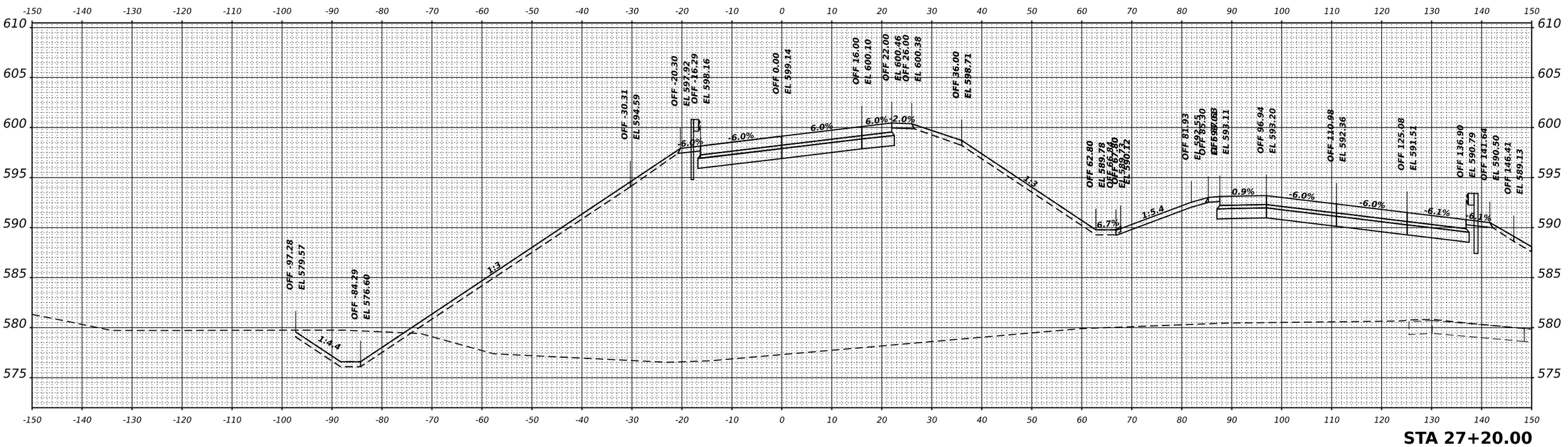
APPENDIX F





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I-80	FAI 80 21 STRUCTURE 5	WILL	378	
		CONTRACT NO. 62R26		
	ILLINOIS	FED. AID PROJECT		

ORIGINAL SURVEY | NOTE BOOK | NO. | SURVEYED | PLOTTED | TEMPLATE | AREAS | AREAS CHECKED | BY | DATE

FINAL SURVEY | NOTE BOOK | NO. | SURVEYED | PLOTTED | TEMPLATE | AREAS | AREAS CHECKED | BY | DATE

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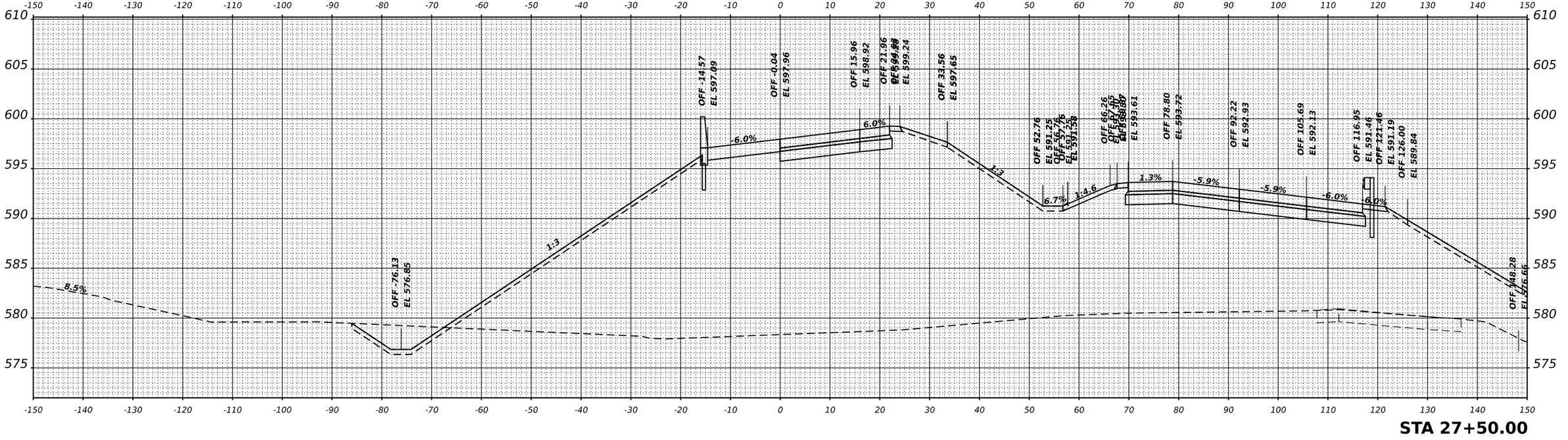

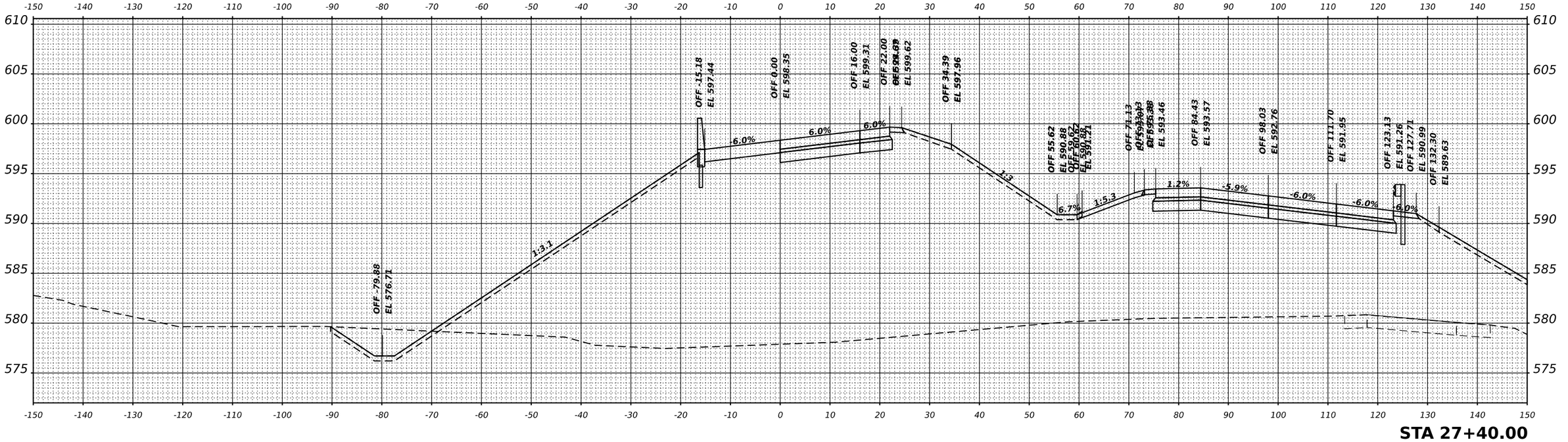

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
RAMP AA

SCALE: | SHEET OF SHEETS | STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 21 STRUCTURE 5	WILL	378	
		CONTRACT NO. 62R26		
		ILLINOIS	FED. AID PROJECT	

FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

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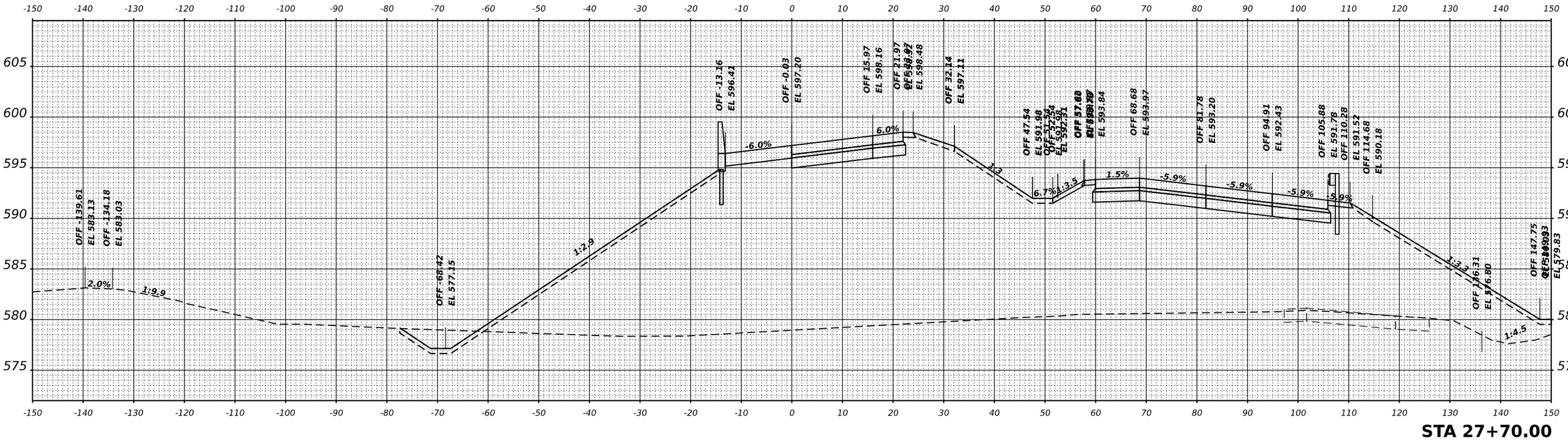

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BY — DATE

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SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED

BY — DATE

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
RAMP AA

SCALE: | SHEET OF SHEETS | STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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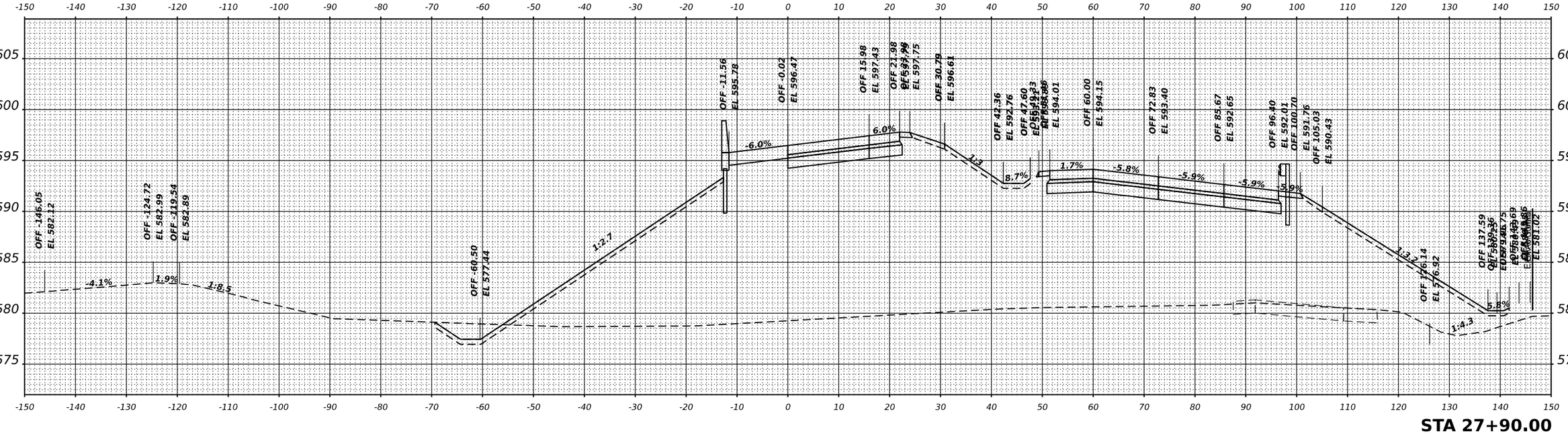
		CONTRACT NO. 62R26		
	ILLINOIS FED. AID PROJECT			



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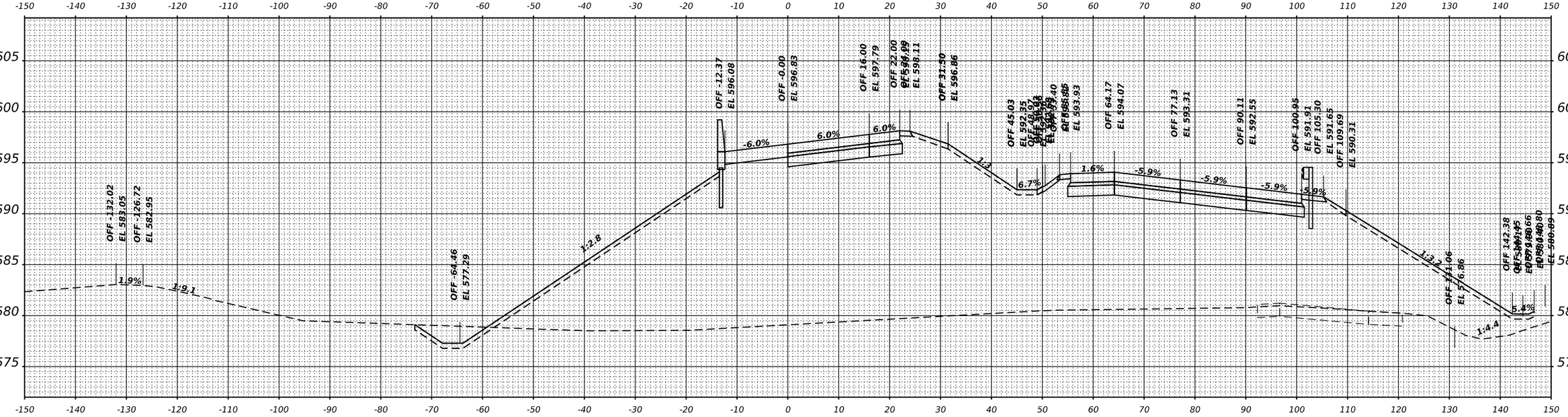

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FINAL SURVEY	NOTE BOOK	NO.
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

BY | DATE

ORIGINAL SURVEY	NOTE BOOK	NO.
SURVEYED		
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BY | DATE

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
RAMP AA

SCALE: | SHEET OF SHEETS | STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 21 STRUCTURE 5	WILL	378	
		CONTRACT NO. 62R26		
	ILLINOIS	FED. AID PROJECT		

FINAL SURVEY		BY	DATE
NOTE BOOK	SURVEYED		
NO.	PLOTTED		
	TEMPLATE		
	AREAS		
	AREAS CHECKED		

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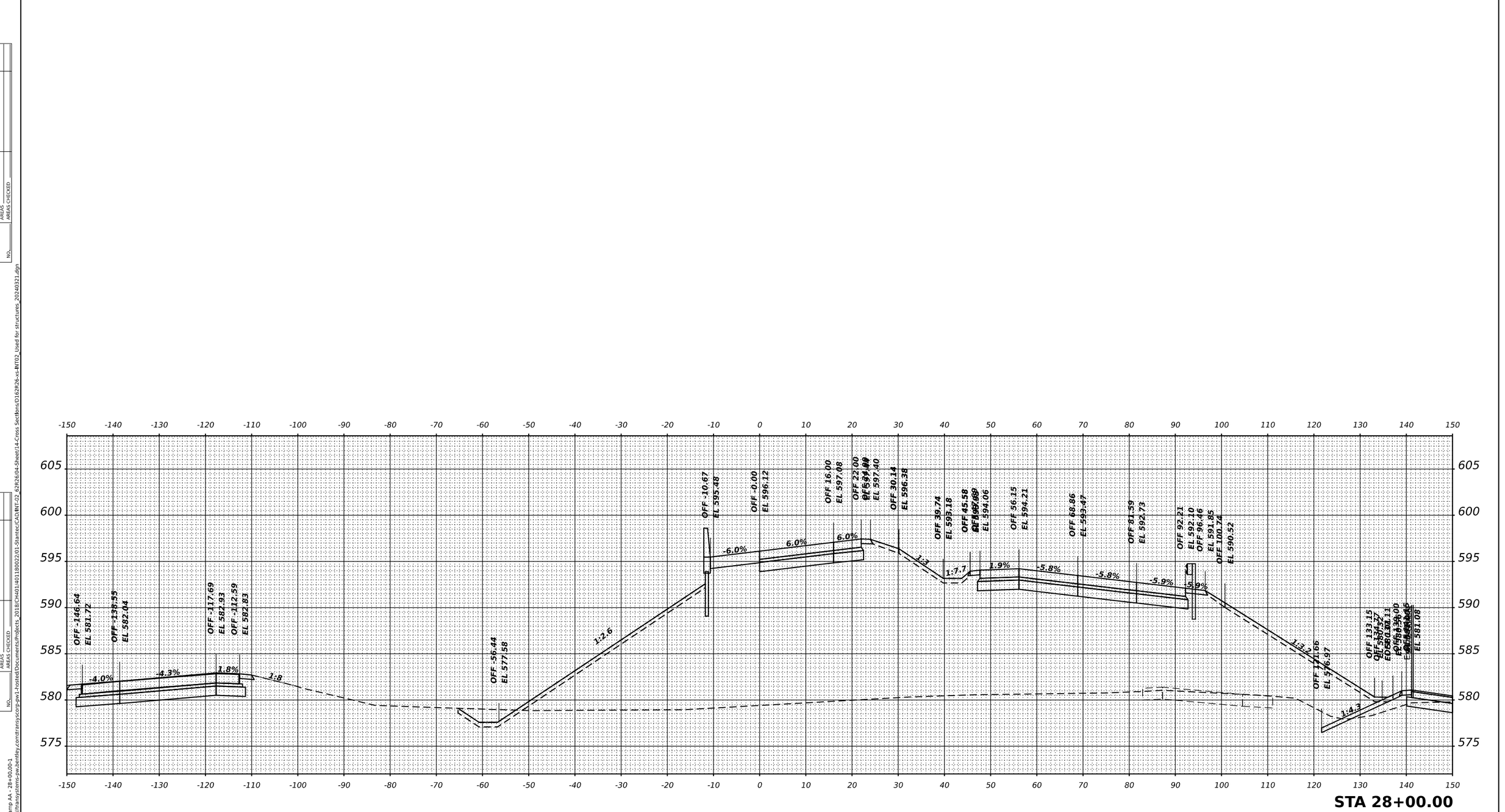

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
RAMP AA

SCALE: | SHEET OF SHEETS | STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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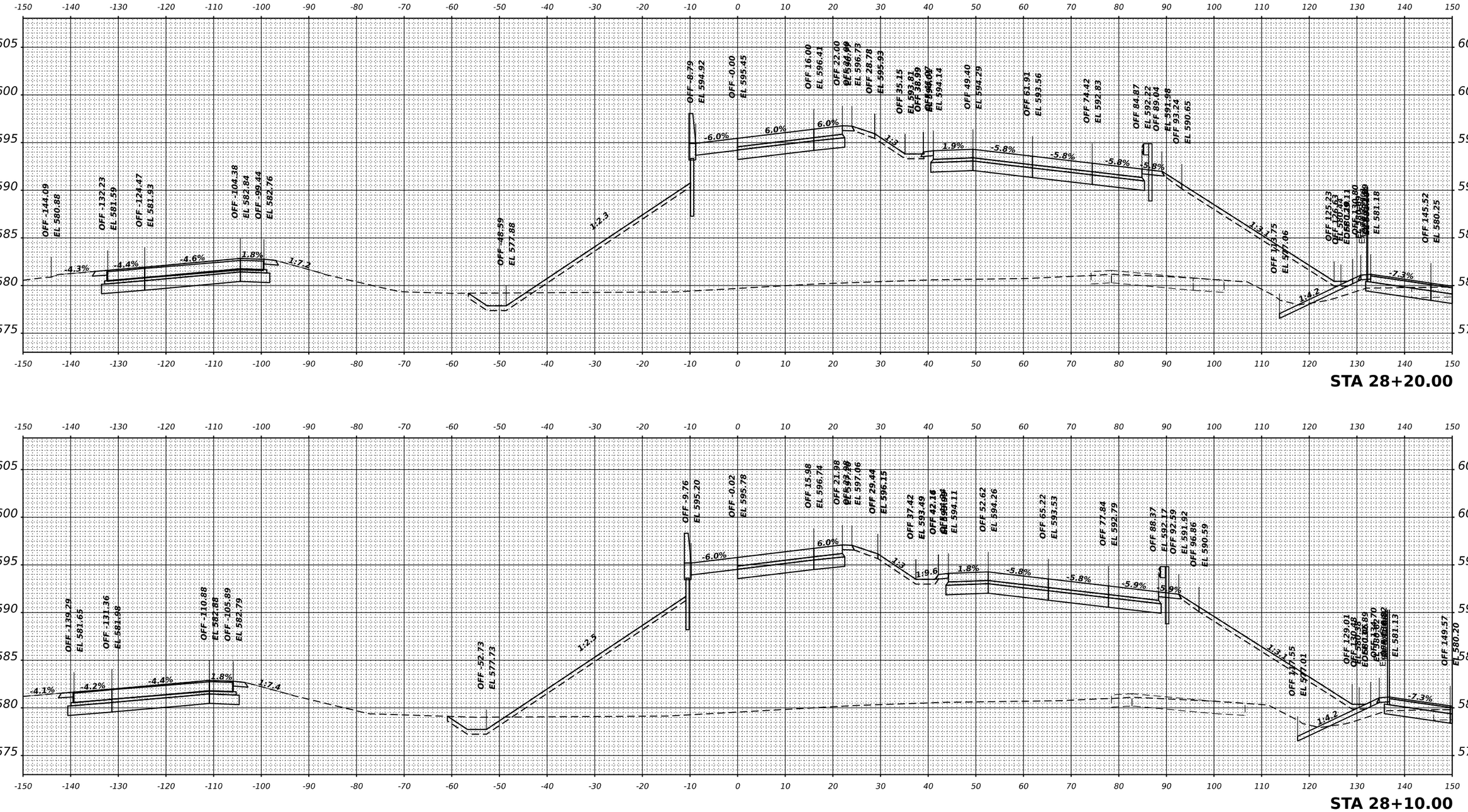
	ILLINOIS	FED. AID PROJECT		



STA 28+20.00

STA 28+10.00

FINAL SURVEY	NOTE BOOK	NO.
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

BY	DATE

ORIGINAL SURVEY	NOTE BOOK	NO.
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

BY	DATE

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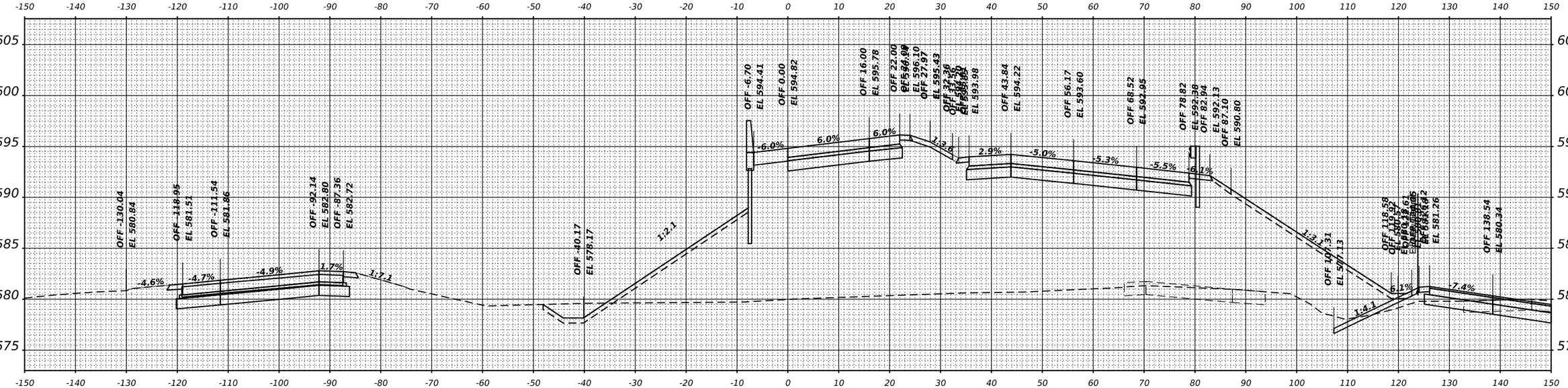
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
RAMP AA

SCALE: | SHEET OF SHEETS | STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 21 STRUCTURE 5	WILL	378	
		CONTRACT NO. 62R26		
	ILLINOIS	FED. AID PROJECT		



USER NAME = lbusansky	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
	DRAWN -	REVISED -	
PLOT SCALE = 0.16666667 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 4/1/2024	DATE -	REVISED -	

CROSS SECTIONS
RAMP AA

SCALE: | SHEET OF SHEETS | STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 21 STRUCTURE 5	WILL	378	
		CONTRACT NO. 62R26		
	ILLINOIS	FED. AID PROJECT		

ORIGINAL SURVEY / FINAL SURVEY
NOTE BOOK
NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
BY
DATE

MODEL: PRL_Ramp AA - 28+30.00-1
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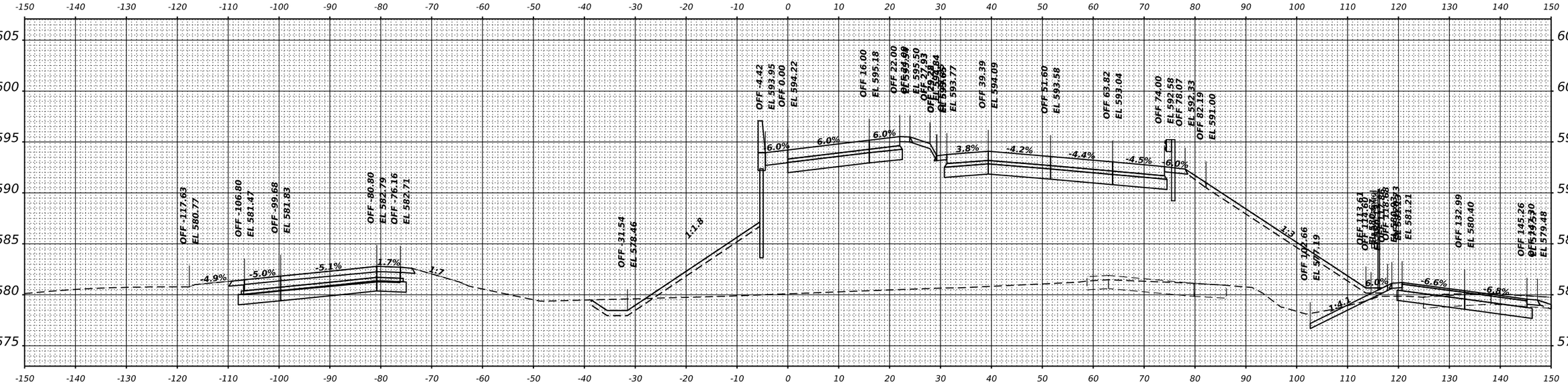
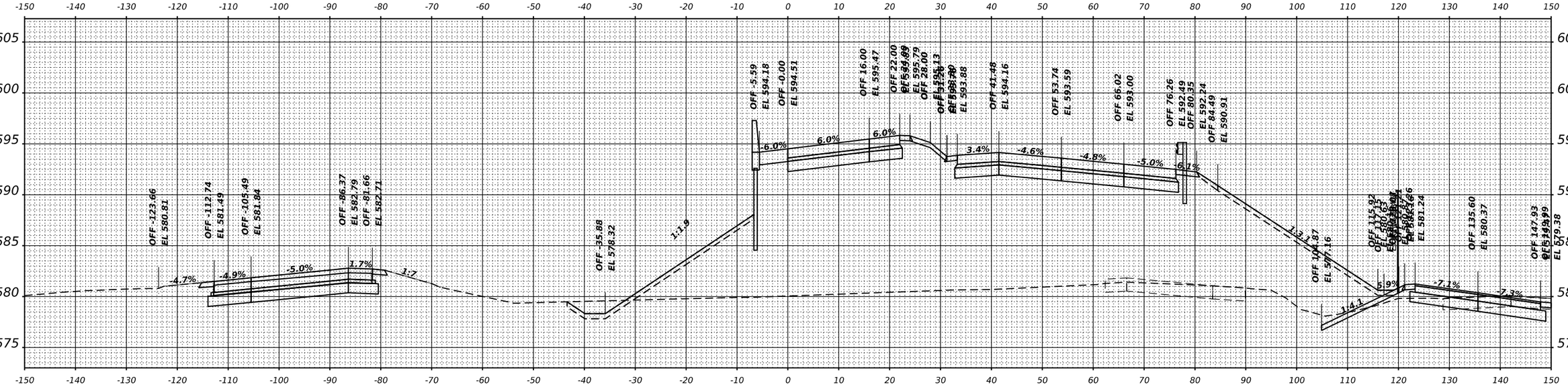


STA 28+60.00



STA 28+50.00

Stantec	USER NAME = lbusansky	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 0.16666667 ' / in.	CHECKED -	REVISED -
	PLOT DATE = 4/1/2024	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
RAMP AA

SCALE: | SHEET OF SHEETS | STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 21 STRUCTURE 5	WILL	378	
		CONTRACT NO. 62R26		
	ILLINOIS	FED. AID PROJECT		

FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

MODEL: PBL_Ramp AA - 28+50.00-1
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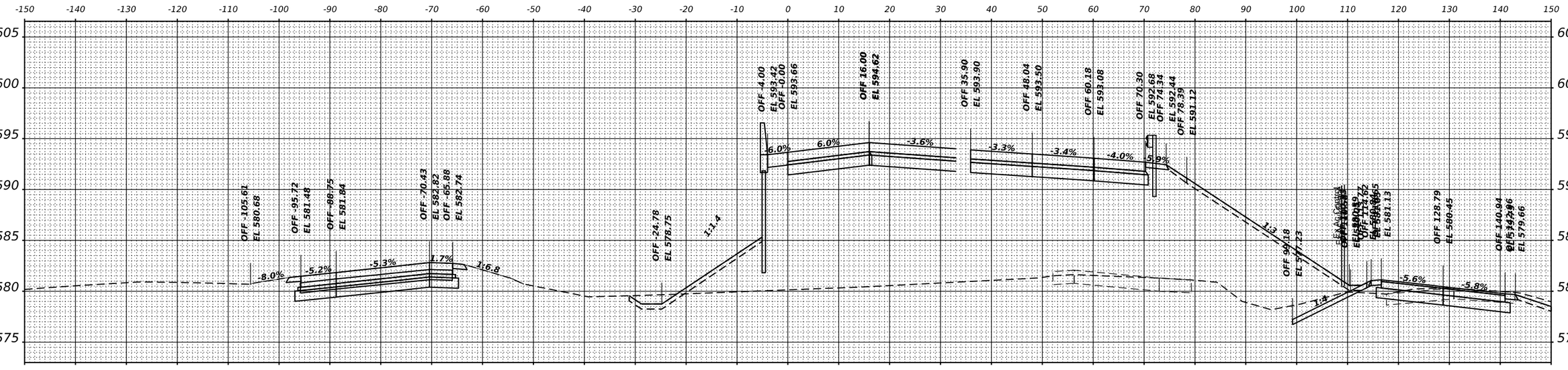
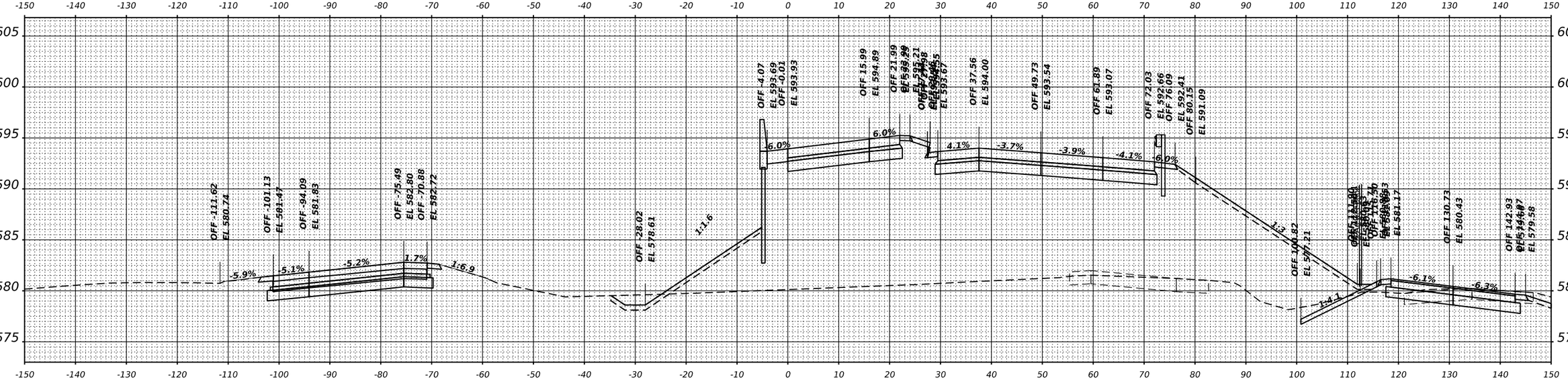


STA 28+80.00



STA 28+70.00

Stantec	USER NAME = lbusansky	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 0.16666667 ' / in.	CHECKED -	REVISED -
	PLOT DATE = 4/1/2024	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

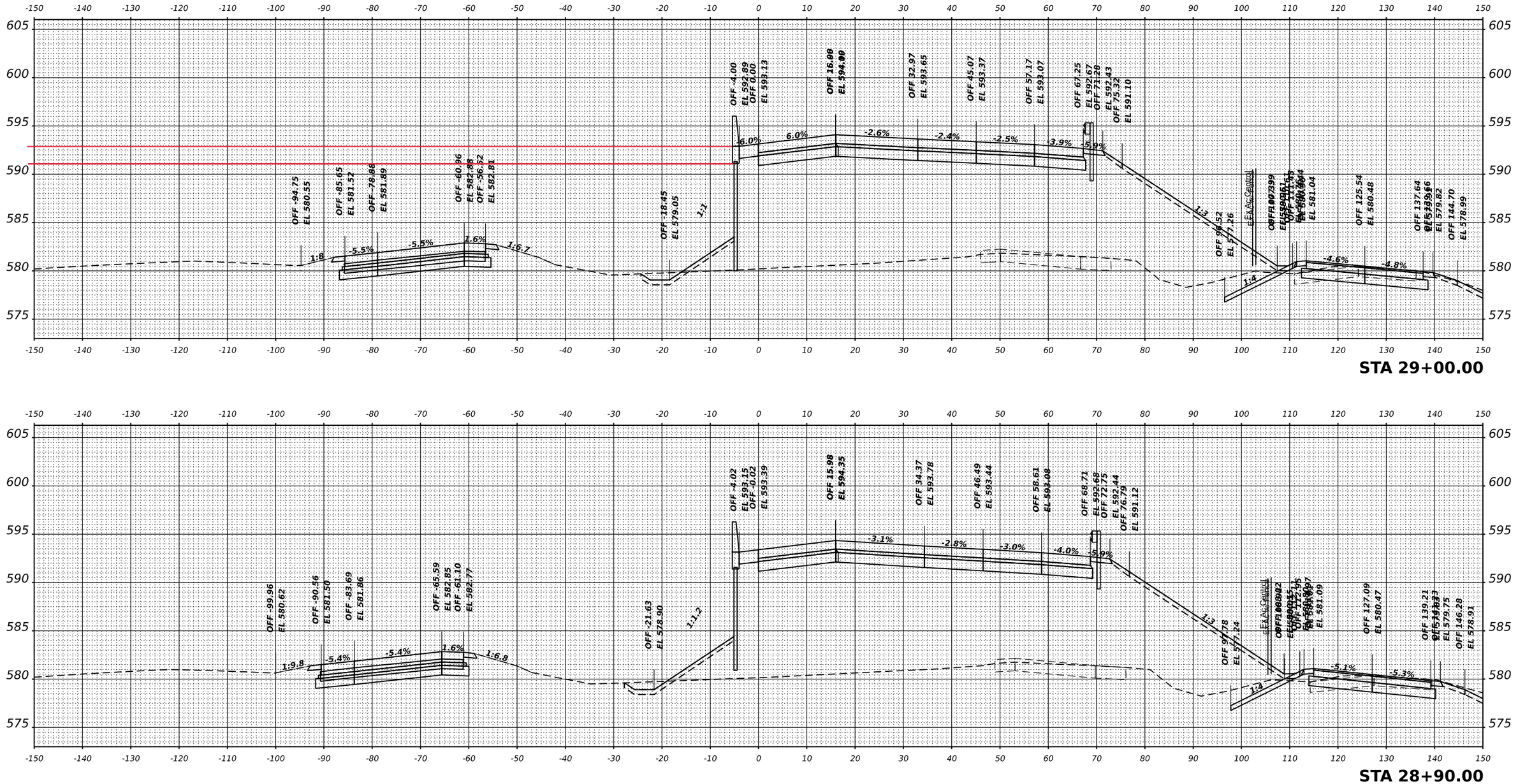
CROSS SECTIONS
RAMP AA

SCALE: | SHEET OF SHEETS | STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 21 STRUCTURE 5	WILL	378	
		CONTRACT NO. 62R26		
	ILLINOIS FED. AID PROJECT			

ORIGINAL SURVEY | FINAL SURVEY
NOTE BOOK
NO.
SURVEYED | PLOTTED | TEMPLATE | AREAS | AREAS CHECKED
BY
DATE

MODEL: PBL_Ramp AA - 28+70.00-1
FILE NAME: pw:///transystems-pw.bentley.com:transysCorp-pw1-Hosted/Documents/Projects_2018/CH401401180022/01-Stantec/CADINT-02_62R26/04-Sheet/14-Cross Sections/D162R26-xs-INT02_Used for structures_20240321.dgn



Stantec	USER NAME = lbusansky	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 0.16666667 ' / in.	CHECKED -	REVISED -
	PLOT DATE = 4/1/2024	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
RAMP AA

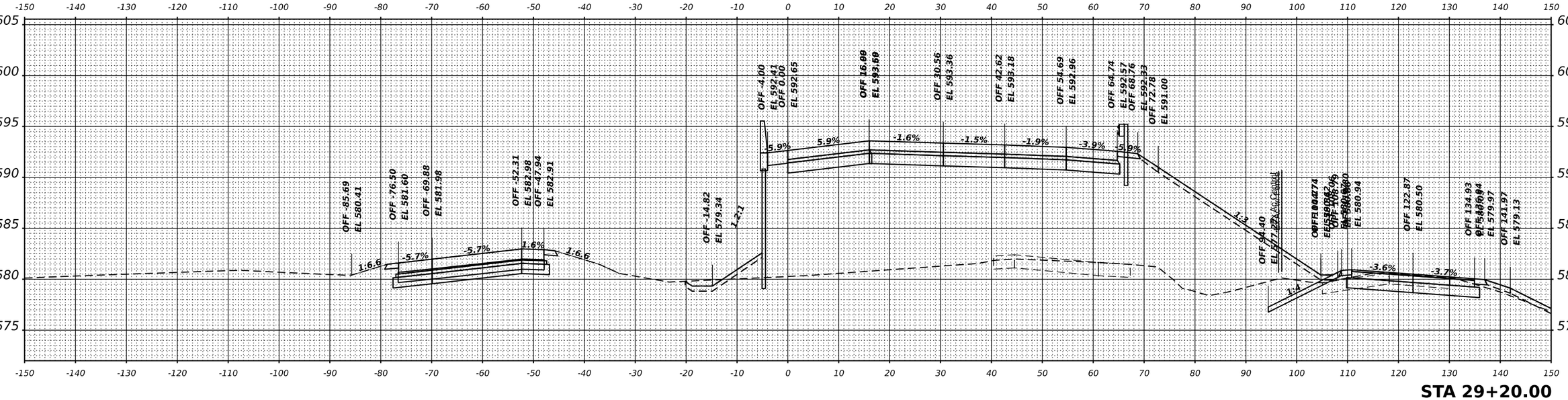
SCALE: | SHEET OF SHEETS | STA.

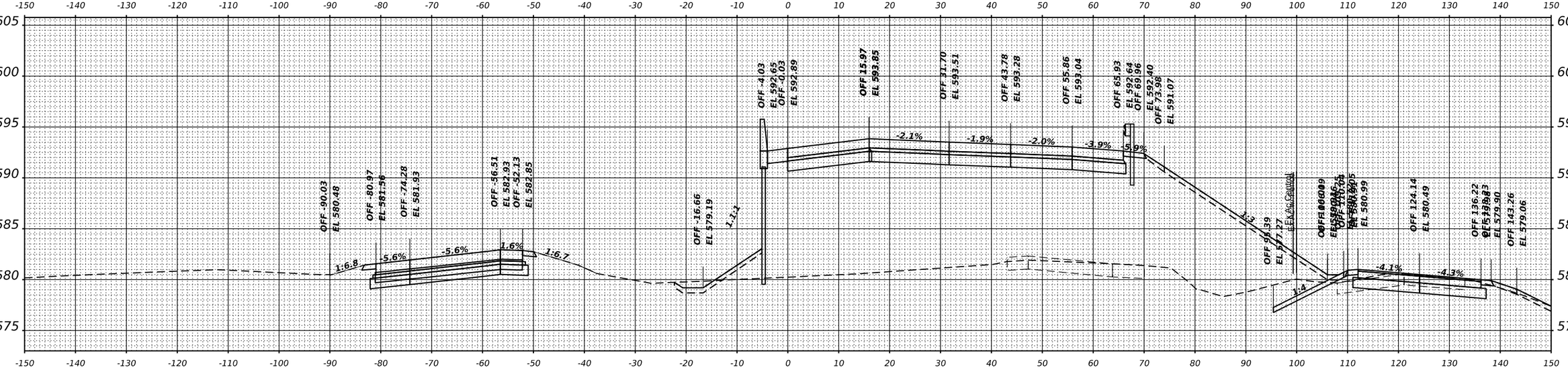
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 21 STRUCTURE 5	WILL	378	
		CONTRACT NO. 62R26		
	ILLINOIS FED. AID PROJECT			

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

MODEL: PrBL_Ramp AA - 28+90.00-1
FILE NAME: pw://transystems-pw.bentley.com:transyscorp-pw1-hosted/Documents/Projects_2018/CH401/401180022/01-Stantec/CAD\INT-02_62R26/04-Sheet/14-Cross Sections\D162R26-xs-INT02_Used for structures_20240321.dgn





Stantec	USER NAME = lbusansky	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 0.16666667 ' / in.	CHECKED -	REVISED -
	PLOT DATE = 4/1/2024	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
RAMP AA

SCALE: | SHEET OF SHEETS | STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 21 STRUCTURE 5	WILL	378	
		CONTRACT NO. 62R26		
	ILLINOIS	FED. AID PROJECT		

FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

MODEL: PBL_Ramp AA - 29+10.00-1
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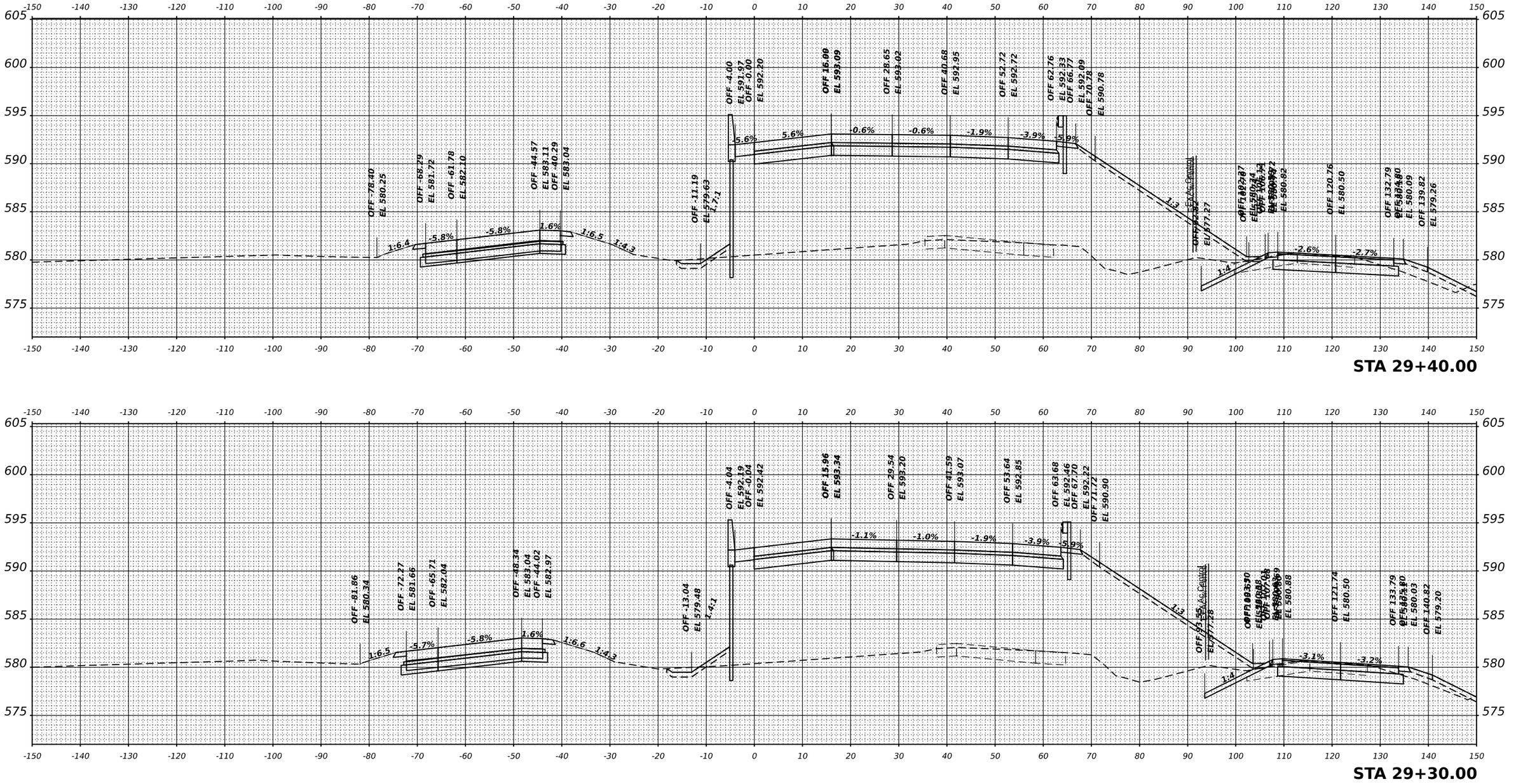
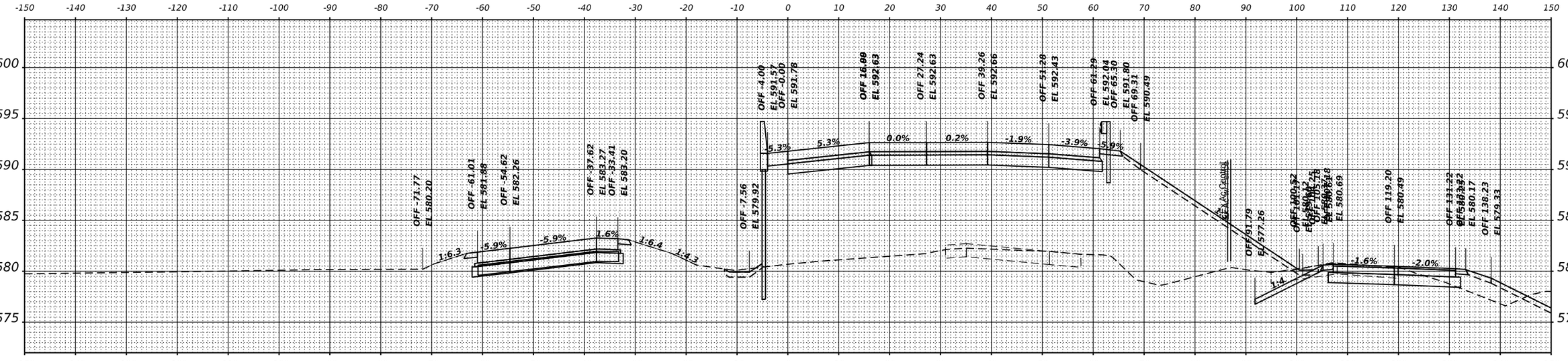


Stantec	USER NAME = lbusansky	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CROSS SECTIONS RAMP AA
		DRAWN -	REVISED -		
	PLOT SCALE = 0.16666667 ' / in.	CHECKED -	REVISED -		SCALE: SHEET OF SHEETS STA.
	PLOT DATE = 4/1/2024	DATE -	REVISED -		

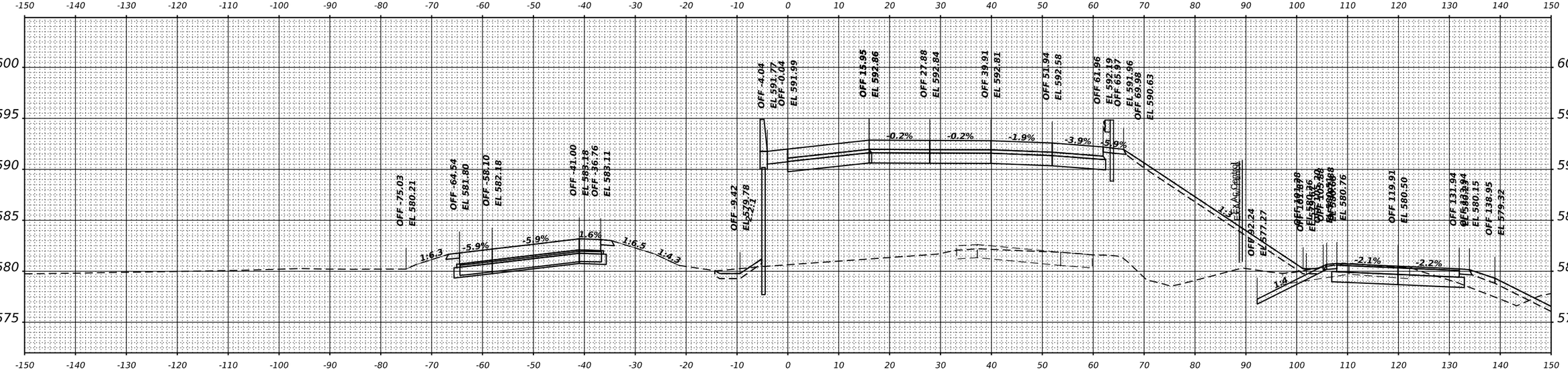
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 21 STRUCTURE 5	WILL	378	
		CONTRACT NO. 62R26		
	ILLINOIS FED. AID PROJECT			

FINAL SURVEY / ORIGINAL SURVEY
NOTE BOOK
NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
BY
DATE

MODEL: PrBL_Ramp AA - 29+30.00-1
FILE NAME: pw://transystems-pw.bentley.com:transyscorp-pw1-hosted/Documents/Projects_2018/CH401/401180022/01-Stantec/CADINT-02_62R26/04-Sheet/14-Cross Sections/D162R26-xs-INT02_Used for structures_20240321.dgn



STA 29+60.00



STA 29+50.00

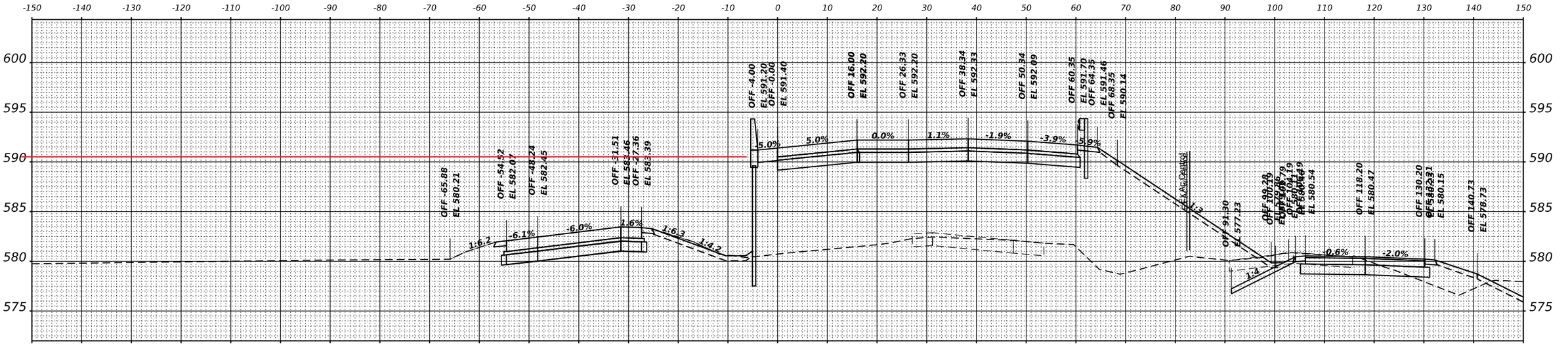
Stantec	USER NAME = lbusansky	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CROSS SECTIONS RAMP AA
		DRAWN -	REVISED -		
	PLOT SCALE = 0.16666667 ' / in.	CHECKED -	REVISED -		SCALE: SHEET OF SHEETS STA.
	PLOT DATE = 4/1/2024	DATE -	REVISED -		

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 21 STRUCTURE 5	WILL	378	
		CONTRACT NO. 62R26		
	ILLINOIS	FED. AID PROJECT		

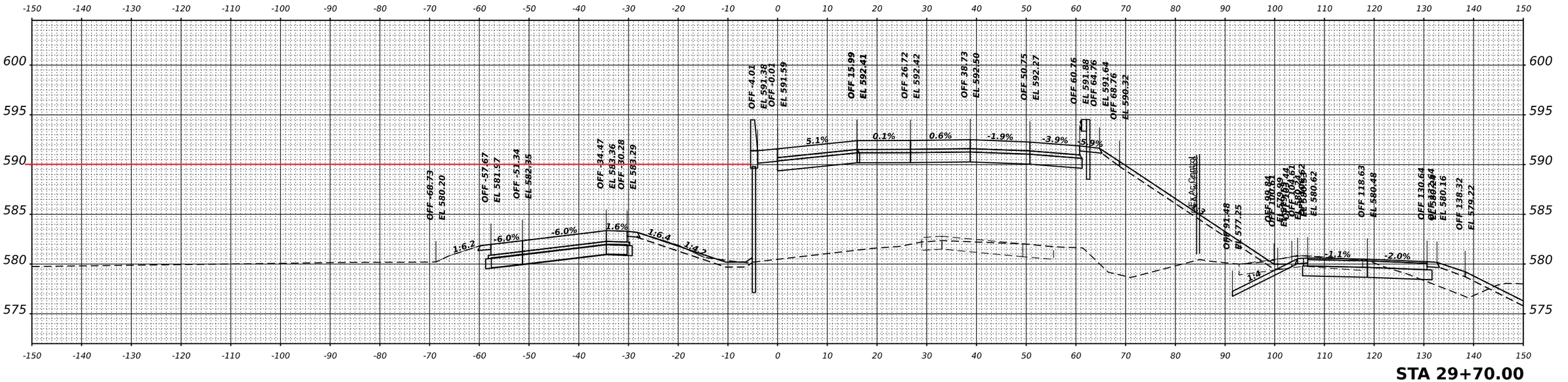
FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

MODEL: PrBL_Ramp AA - 29+50.00-1
FILE NAME: pw://transystems-pw.bentley.com:transystcorp-pw1-hosted/Documents/Projects_2018/CH401401180022/01-Stantec/CAD/INT-02_62R26/04-Sheet/14-Cross Sections/D162R26-xs-INT02_Used for structures_20240321.dgn



STA 29+80.00



STA 29+70.00

Stantec	USER NAME = fbusansky	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CROSS SECTIONS RAMP AA
		DRAWN -	REVISED -		
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	PLOT DATE = 4/1/2024	DATE -	REVISED -		

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 21 STRUCTURE 5	WILL	378	
		CONTRACT NO. 62R26		
	ILLINOIS	FED. AID PROJECT		

FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

MODEL: PBL Ramp AA - 29+70.00-1
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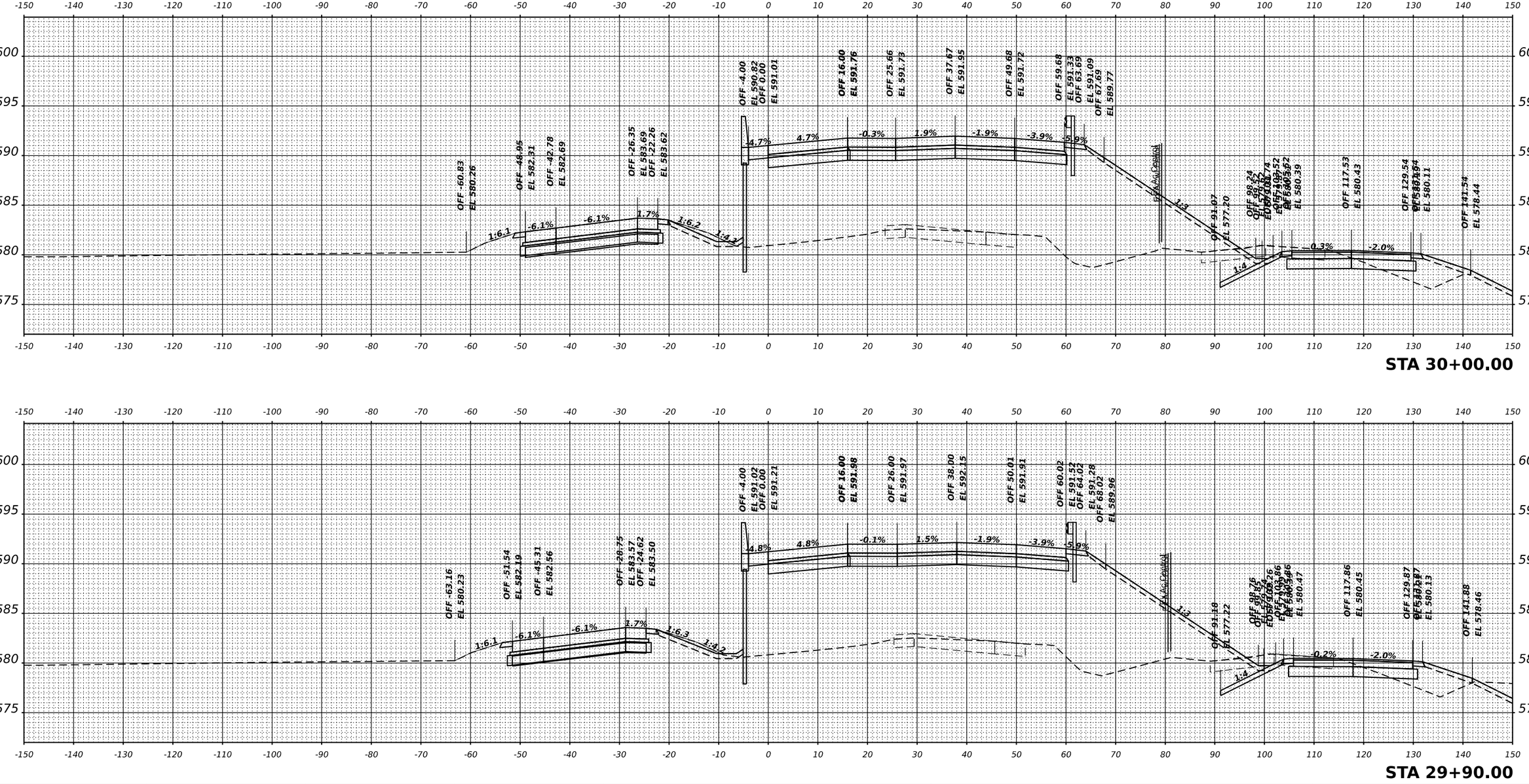

Stantec	USER NAME = lbusansky	DESIGNED -	REVISED -
		DRAWN -	REVISED -
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	PLOT DATE = 4/1/2024	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
RAMP AA

SCALE: | SHEET OF SHEETS | STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 21 STRUCTURE 5	WILL	378	
		CONTRACT NO. 62R26		
	ILLINOIS FED. AID PROJECT			

FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

MODEL: PrBL_Ramp AA - 29+90.00-1
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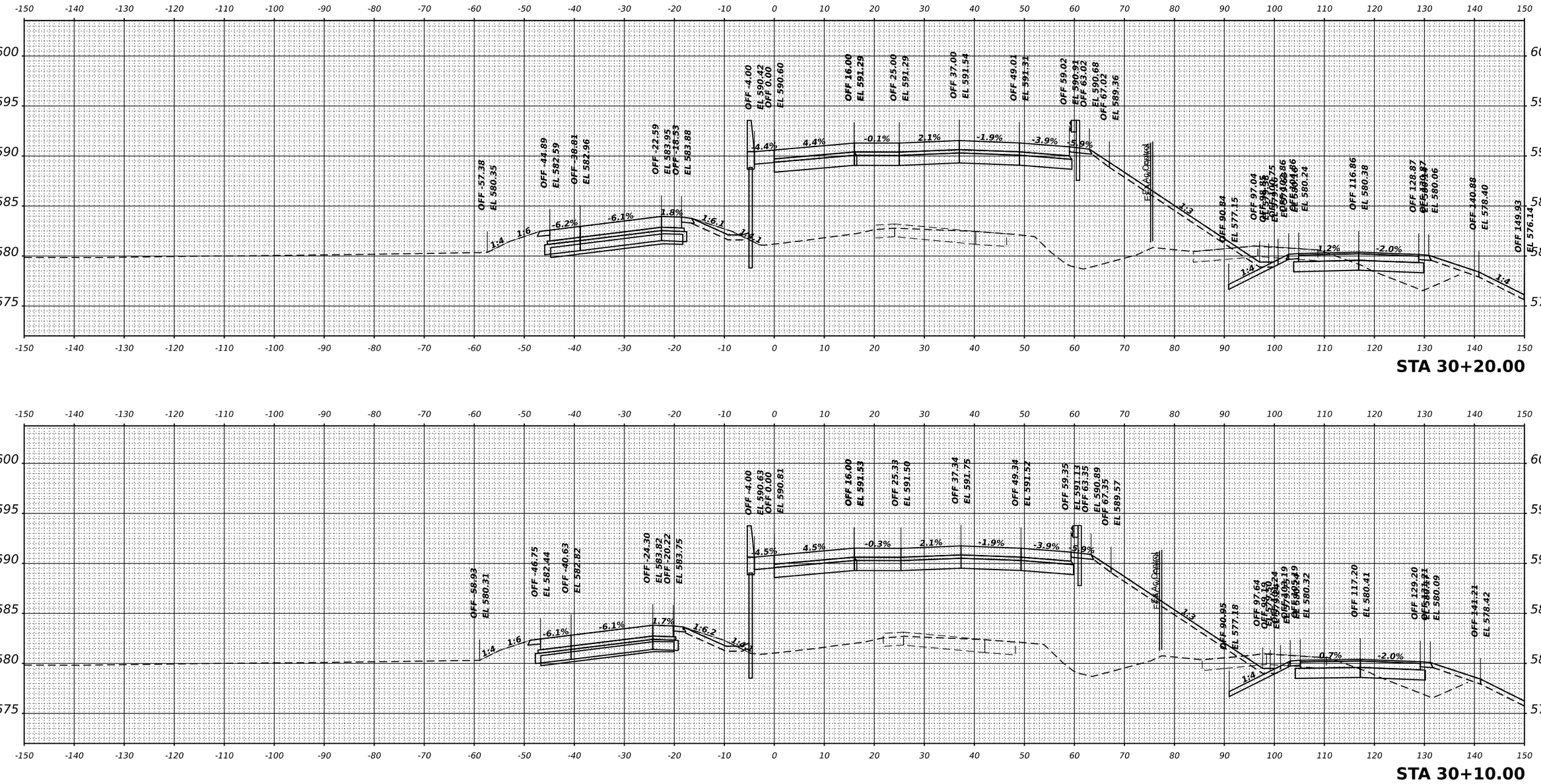

STA 30+20.00

STA 30+10.00

FINAL SURVEY
NOTE BOOK
NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
BY
DATE

ORIGINAL SURVEY
NOTE BOOK
NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
BY
DATE

MODEL: PBL_Ramp AA - 30+10.00-1
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	DRAWN -	REVISED -	
PLOT SCALE = 0.16666667 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 4/1/2024	DATE -	REVISED -	

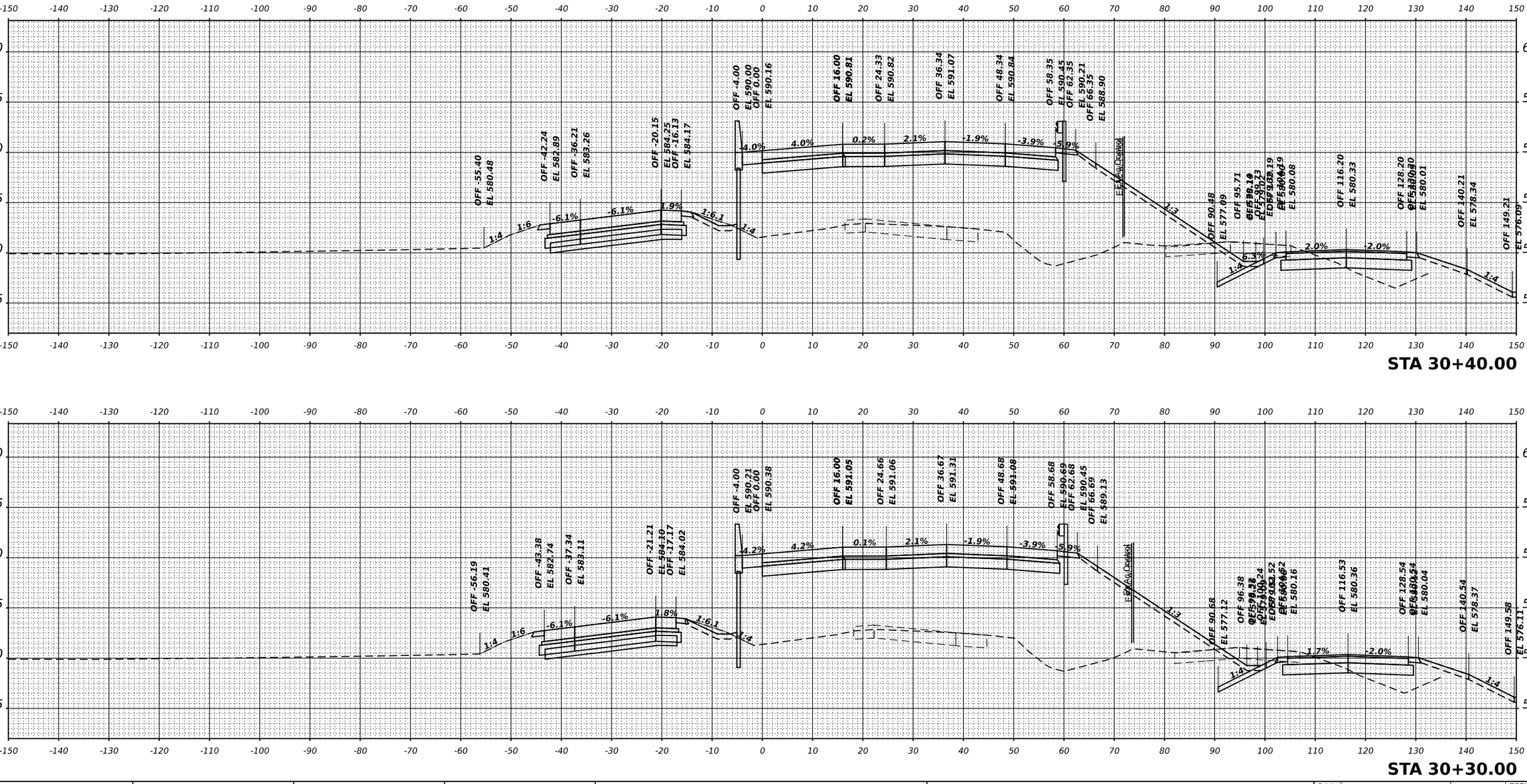
Stantec

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
RAMP AA

SCALE: | SHEET OF SHEETS | STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 21 STRUCTURE 5	WILL	378	
		CONTRACT NO. 62R26		
		ILLINOIS	FED. AID PROJECT	



STA 30+40.00

STA 30+30.00

Stantec	USER NAME = lbusansky	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CROSS SECTIONS RAMP AA
		DRAWN -	REVISED -		
	PLOT SCALE = 0.16666667 ' / in.	CHECKED -	REVISED -		SCALE: SHEET OF SHEETS STA.
	PLOT DATE = 4/1/2024	DATE -	REVISED -		

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 21 STRUCTURE 5	WILL	378	
		CONTRACT NO. 62R26		
	ILLINOIS FED. AID PROJECT			

FINAL SURVEY — NOTE BOOK NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

MODEL: PrBL_Ramp AA - 30+30.00-1
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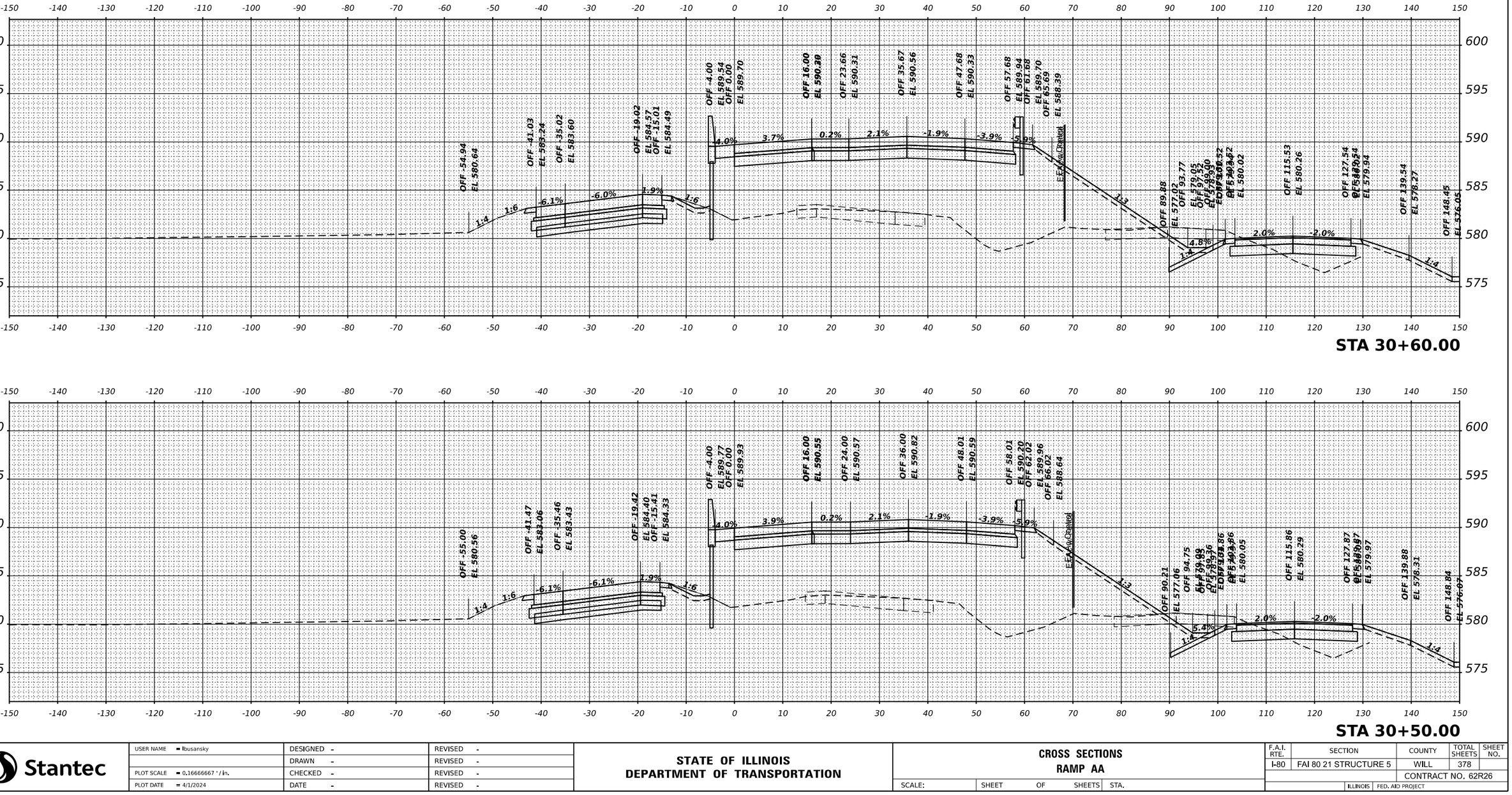


STA 30+60.00

STA 30+50.00

FINAL SURVEY		BY	DATE
NOTE BOOK	SURVEYED		
NO.	PLOTTED		
	TEMPLATE		
	AREAS		
	AREAS CHECKED		

ORIGINAL SURVEY		BY	DATE
NOTE BOOK	SURVEYED		
NO.	PLOTTED		
	TEMPLATE		
	AREAS		
	AREAS CHECKED		

MODEL: PrBL_Ramp AA - 30+50.00-1
FILE NAME: pw://transystems-pw.bentley.com:transystcorp-pw1-hosted/Documents/Projects_2018/CH401/401180022/01-Stantec/CAD/RNT-02_62R26/04-Sheet/14-Cross Sections/D162R26-xs-RNT02_Used for structures_20240321.dgn

Stantec

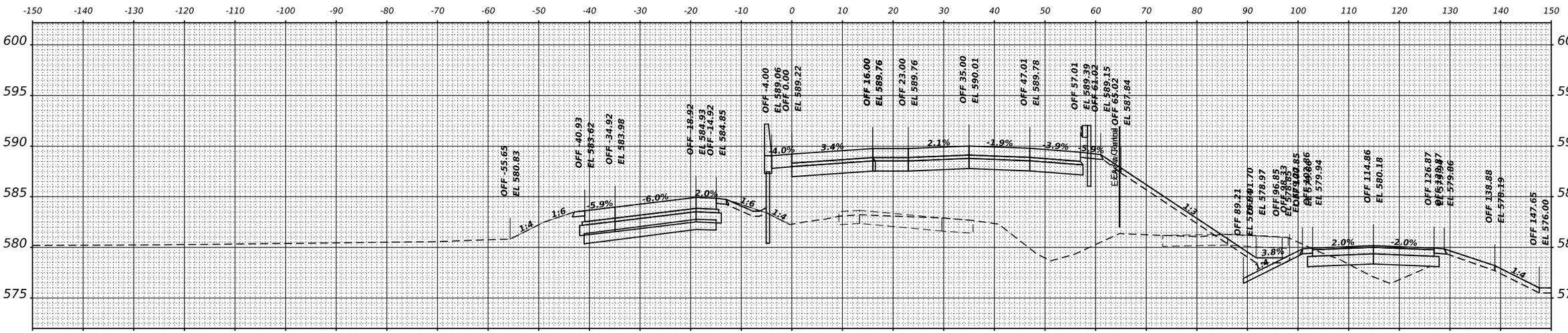
USER NAME = lbusansky	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 0.16666667 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 4/1/2024	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

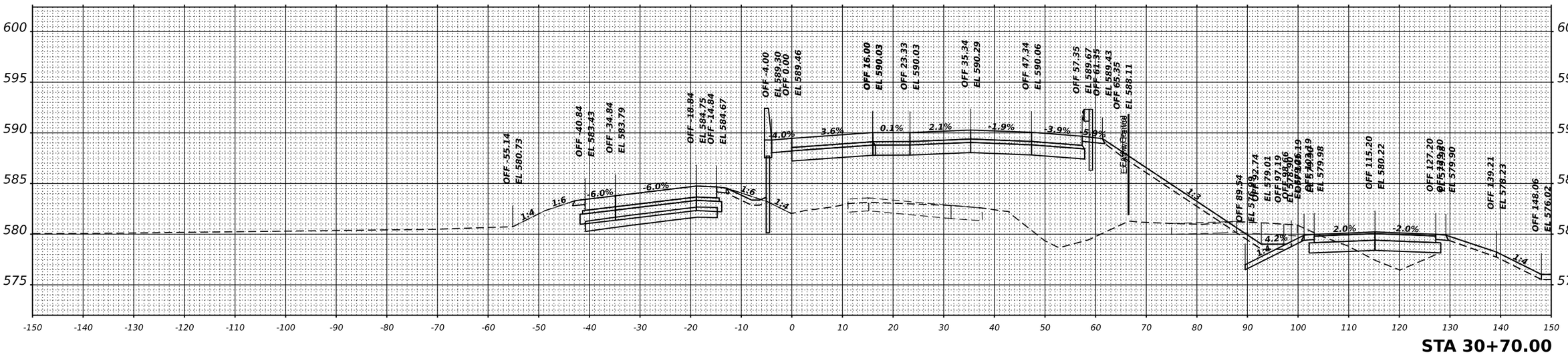
CROSS SECTIONS
RAMP AA

SCALE: | SHEET OF SHEETS | STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 21 STRUCTURE 5	WILL	378	
		CONTRACT NO. 62R26		
		ILLINOIS	FED. AID PROJECT	



STA 30+80.00



STA 30+70.00

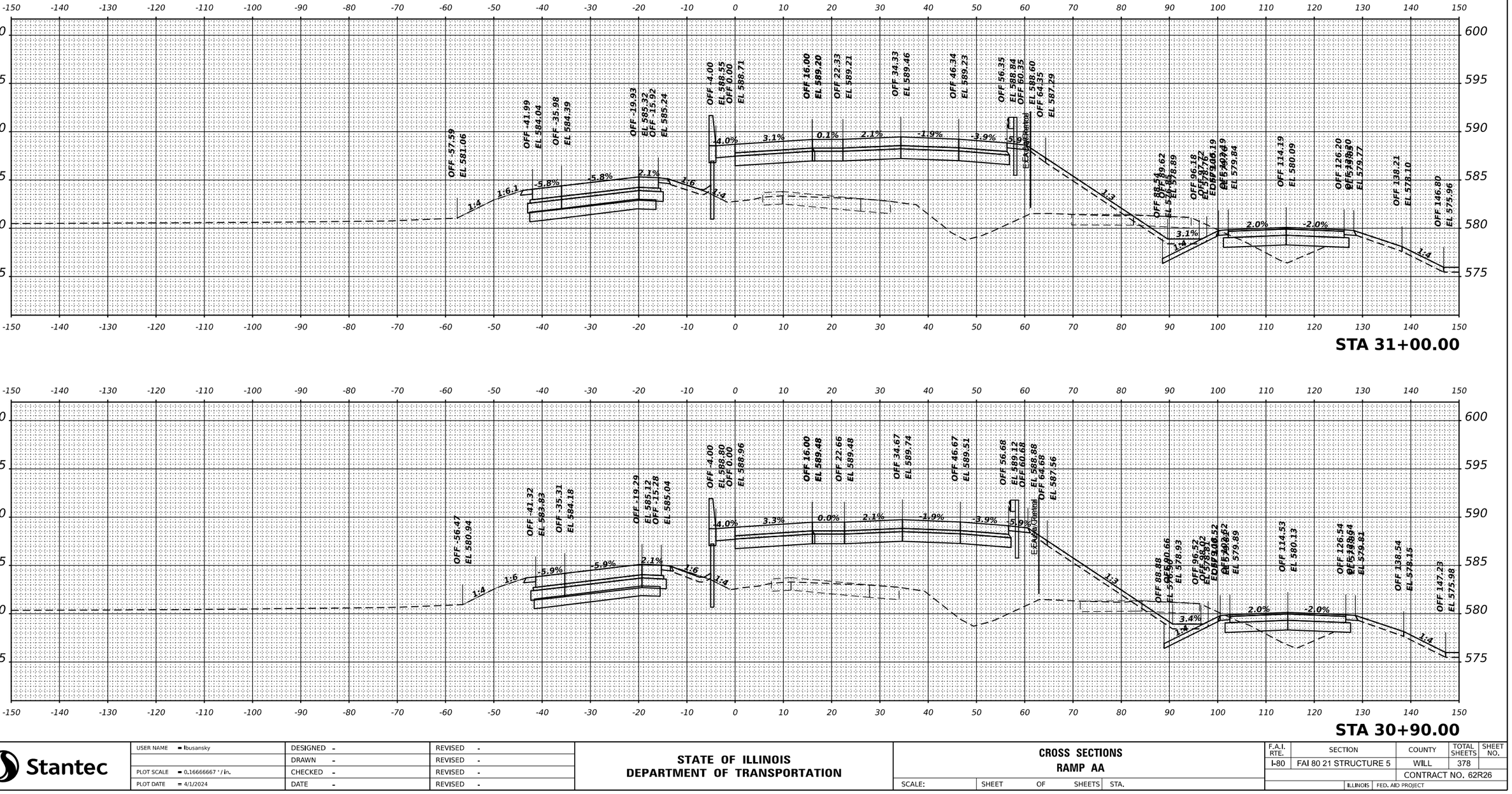
Stantec	USER NAME = lbusansky	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CROSS SECTIONS RAMP AA
		DRAWN -	REVISED -		
	PLOT SCALE = 0.16666667 ' / in.	CHECKED -	REVISED -		SCALE: SHEET OF SHEETS STA.
	PLOT DATE = 4/1/2024	DATE -	REVISED -		

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 21 STRUCTURE 5	WILL	378	
		CONTRACT NO. 62R26		
	ILLINOIS FED. AID PROJECT			

FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

MODEL: PrBL_Ramp AA - 30+70.00-1
FILE NAME: pw://transystems-pw.bentley.com:transyscorp-pw1-hosted/Documents/Projects_2018/CH401/401180022/01-Stantec/CAD\INT-02_62R26/04-Sheet/14-Cross Sections/D162826-xs-INT02_Used for structures_20240321.dgn



USER NAME = lbusansky	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
	DRAWN -	REVISED -	
PLOT SCALE = 0.16666667 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 4/1/2024	DATE -	REVISED -	

Stantec

CROSS SECTIONS
RAMP AA

SCALE: | SHEET OF SHEETS | STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 21 STRUCTURE 5	WILL	378	
		CONTRACT NO. 62R26		
	ILLINOIS	FED. AID PROJECT		

ORIGINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
TEMPLATE		
NOTE BOOK		
NO.	AREAS CHECKED	

FINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
TEMPLATE		
NOTE BOOK		
NO.	AREAS CHECKED	

MODEL: PrBL_Ramp AA - 30+90.00-1
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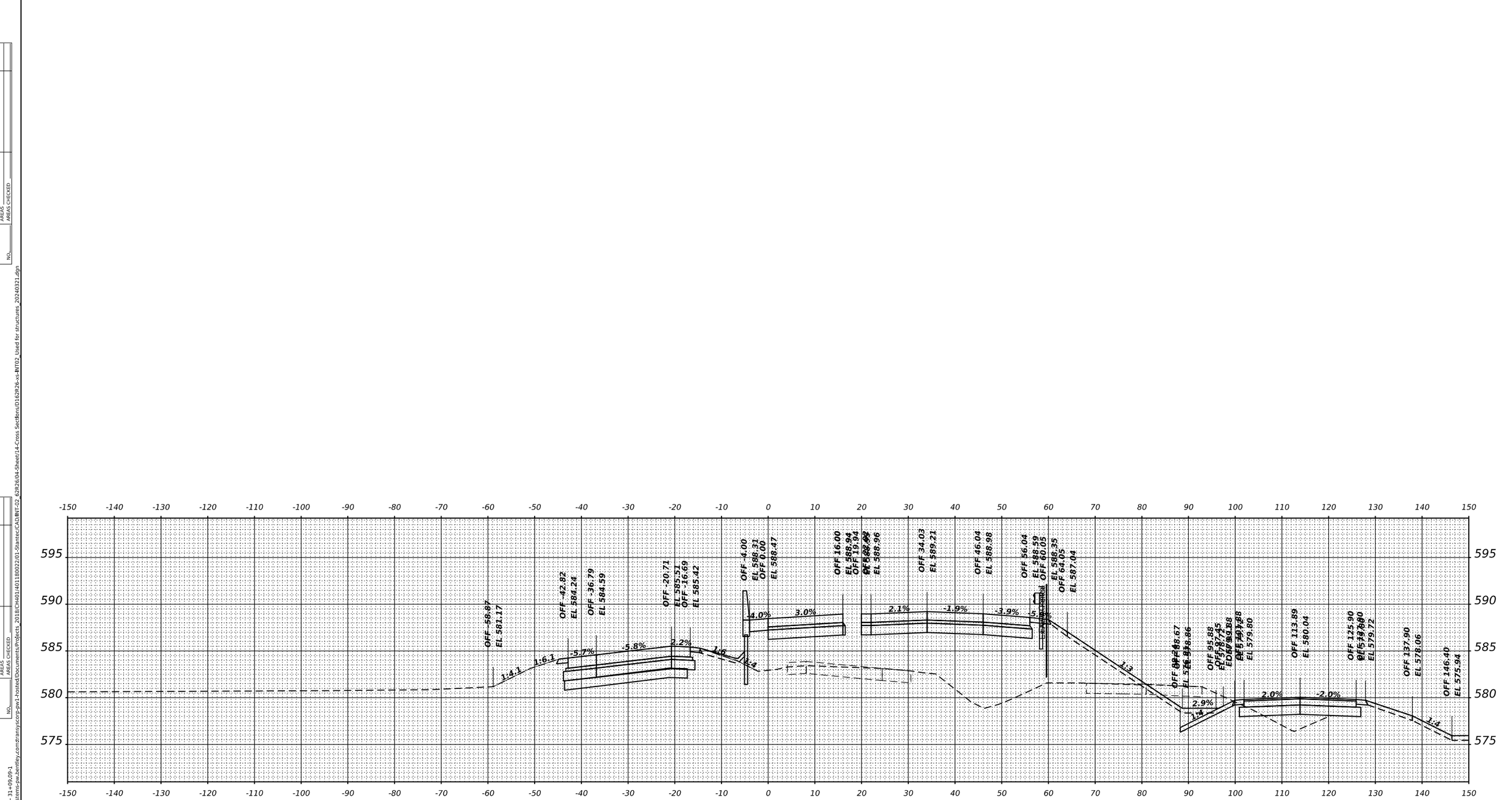
FINAL SURVEY		BY	DATE
	SURVEYED		
	PLOTTED		
NOTE BOOK	TEMPLATE		
	AREAS		
NO.	AREAS CHECKED		

ORIGINAL SURVEY		BY	DATE
	SURVEYED		
	PLOTTED		
NOTE BOOK	TEMPLATE		
	AREAS		
NO.	AREAS CHECKED		



STA 31+09.09

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Stantec

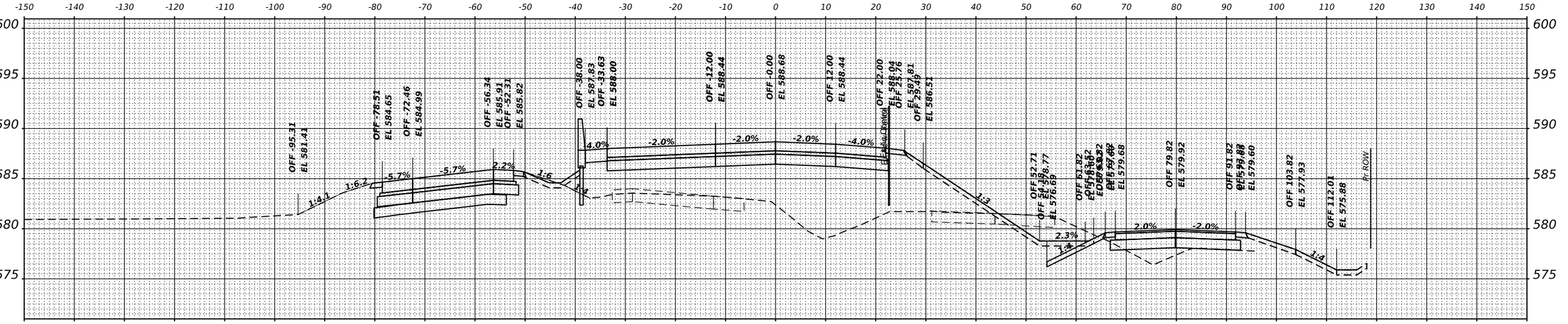
USER NAME = lbusansky	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 0.16666667 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 4/1/2024	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

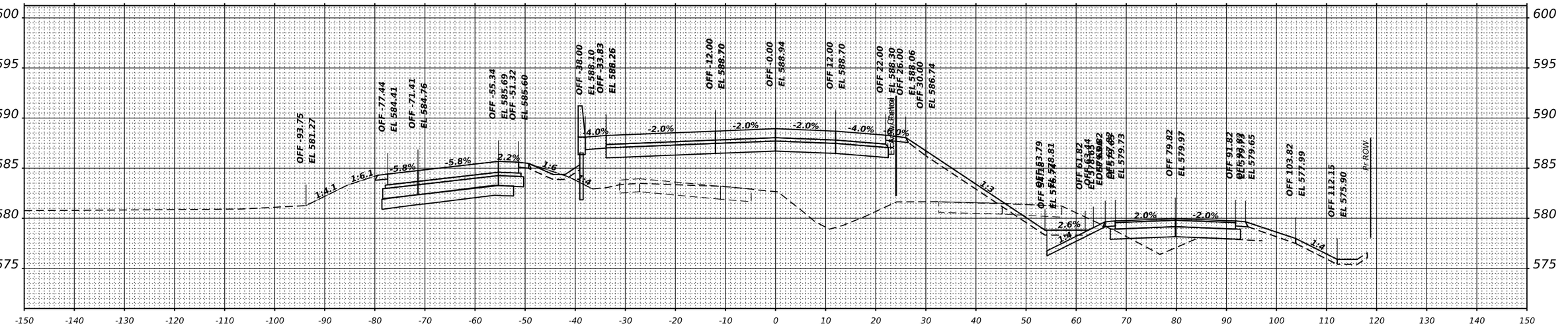
CROSS SECTIONS
RAMP AA

SCALE: | SHEET OF SHEETS | STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 21 STRUCTURE 5	WILL	378	
		CONTRACT NO. 62R26		
	ILLINOIS	FED. AID PROJECT		



STA 1018+90.00



STA 1018+80.00

Stantec	USER NAME = lbusansky	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 0.16666667 ' / in.	CHECKED -	REVISED -
	PLOT DATE = 4/1/2024	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
RAMP B

SCALE: | SHEET OF SHEETS | STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 21 STRUCTURE 5	WILL	378	
		CONTRACT NO. 62R26		
	ILLINOIS FED. AID PROJECT			

FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

MODEL: PrBi_Ramp B - 1018+80.00
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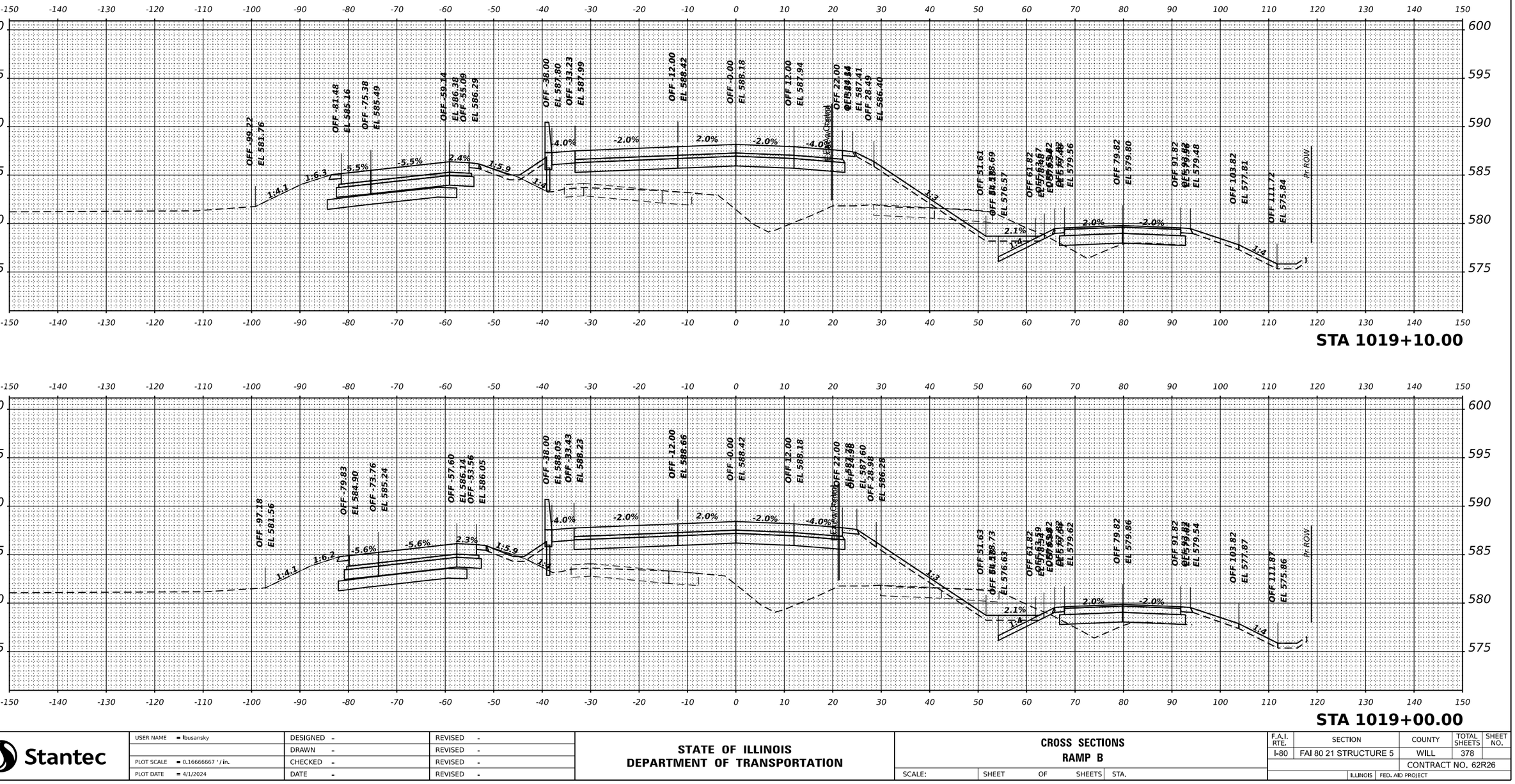

Stantec	USER NAME = lbusansky	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
		DRAWN -	REVISED -	
	PLOT SCALE = 0.16666667 ' / in.	CHECKED -	REVISED -	
	PLOT DATE = 4/1/2024	DATE -	REVISED -	

CROSS SECTIONS
RAMP B

SCALE: | SHEET OF SHEETS | STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 21 STRUCTURE 5	WILL	378	
		CONTRACT NO. 62R26		
	ILLINOIS	FED. AID PROJECT		

FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

MODEL: PrBL_Ramp B - 1019+00.00-1
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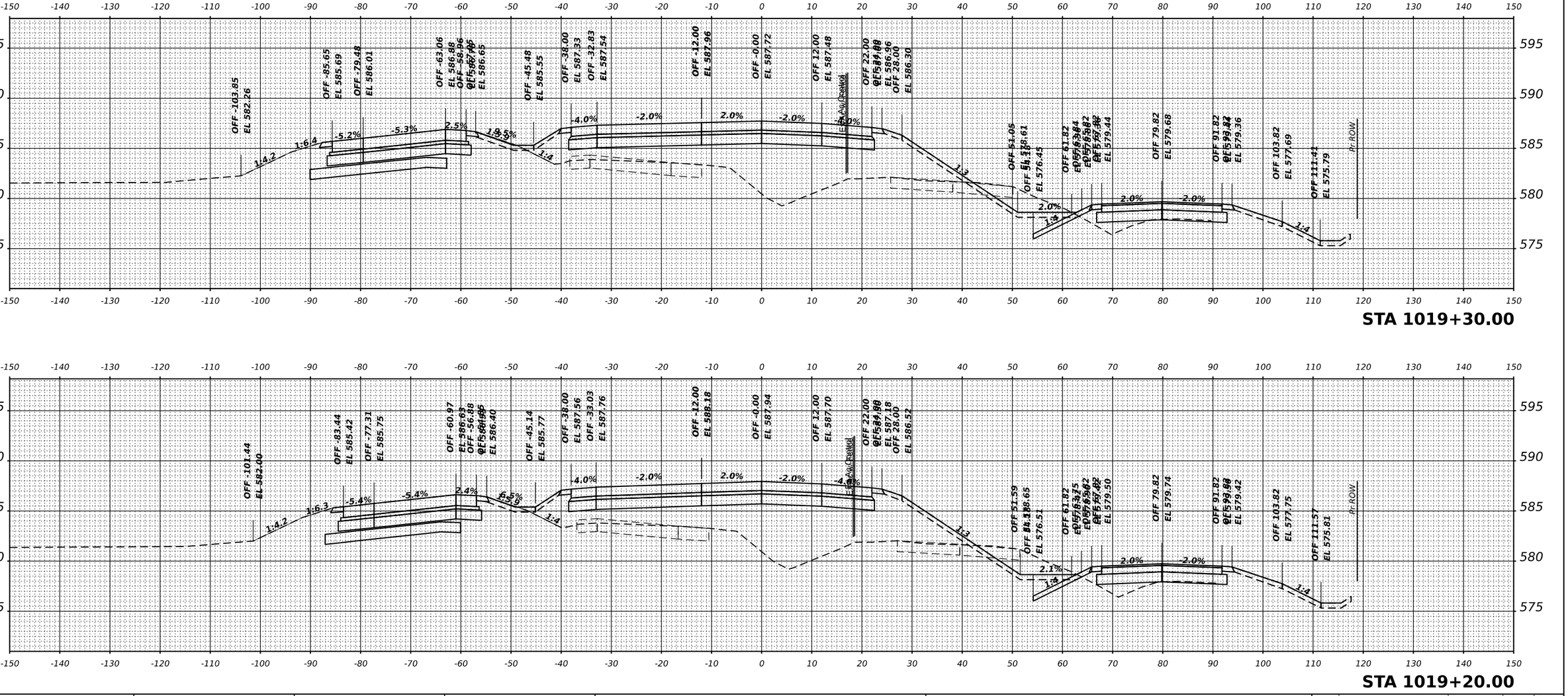

Stantec	USER NAME = lbusansky	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CROSS SECTIONS RAMP B
		DRAWN -	REVISED -		
	PLOT SCALE = 0.16666667 ' / in.	CHECKED -	REVISED -		SCALE: SHEET OF SHEETS STA.
	PLOT DATE = 4/1/2024	DATE -	REVISED -		

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 21 STRUCTURE 5	WILL	378	
		CONTRACT NO. 62R26		
	ILLINOIS FED. AID PROJECT			

ORIGINAL SURVEY		BY	DATE
NOTE BOOK	SURVEYED		
NO.	PLOTTED		
	TEMPLATE		
	AREAS		
	AREAS CHECKED		

FINAL SURVEY		BY	DATE
NOTE BOOK	SURVEYED		
NO.	PLOTTED		
	TEMPLATE		
	AREAS		
	AREAS CHECKED		

MODEL: PrBL_Ramp B - 1019+20.00-1
FILE NAME: pw://transystems-pw.bentley.com:transystcorp-pw1-hosted/Documents/Projects_2018/CH401/401180022/01-Stantec/CADD/NT-02_62R26/04-Sheet/14-Cross Sections/D162R26-xs-INT02_Used for structures_20240321.dgn