



**US Army Corps
of Engineers®**

PUBLIC NOTICE

Applicant:
Marwa Said, P.E.
Pennsylvania Department of
Transportation
PN-25-15

Published: March 24, 2025
Expires: April 23, 2025

Baltimore District
Permit Application No. NAB-2020-00388-P02 (PA DOT I-83
South Bridge Replacement Project)

The Baltimore District of the U.S. Army Corps of Engineers (Corps) has received an application for a Department of the Army permit pursuant to Section 404 of the Clean Water Act (33 U.S.C. §1344). The purpose of this public notice is to solicit comments from the public regarding the work described below:

APPLICANT: Marwa Said, P.E.
Pennsylvania Department of Transportation
Engineering District 8-0
2140 Herr Street
Harrisburg, Pennsylvania 17103

AGENT: Eric Gogola, Project Manager
HNTB Corporation
4507 North Front Street
Harrisburg, Pennsylvania 17110

LEAD FEDERAL AGENCY: The Federal Highway Administration (FHWA), as the lead federal agency, is responsible for all coordination pursuant to applicable federal authorities.

WATERWAY AND LOCATION: The project would affect waters of the United States and navigable waters of the United States associated with the Susquehanna River and wetlands. The project is located in Lemoyne Borough, Cumberland County, and the City of Harrisburg, Dauphin County, Pennsylvania; at Latitude 40°14'54.9" N; and Longitude -76°52'37.7" W.

EXISTING CONDITIONS: The project area includes approximately 42.6 acres of the Susquehanna River with a channel width of 3,200-linear feet; approximately 0.07 acre of Paxton Creek with a channel width of 20-linear feet; and three wetlands totaling approximately 3.21 acres situated on a mid-river island.

PROJECT PURPOSE:

Basic: To reconstruct a bridge to provide a vehicular crossing over the Susquehanna River.

Overall: To discharge dredged or fill materials associated with the reconstruction on partial new alignment and widening of the existing Interstate 83 South John Harris Memorial Bridge, to improve traffic flow and safety.

PROPOSED WORK: The applicant requests authorization to discharge dredged or fill materials into the Susquehanna River and wetlands associated with the reconstruction of a new bridge and temporary stone access road/causeway as follows:

Structural Discharge for Bridge Piers: To permanently adversely impact 1.69 acres below the ordinary high-water mark (OHWM) of the Susquehanna River and 0.03 acre of forested wetlands (PFO) in Wetland 2 for construction of a total of 16 lines of new bridge piers (continuous across northbound and southbound direction bridges, with a break in between) and an additional 4 piers for the northbound 2nd Street off ramp.

Discharge of Fill Material for Pier Scour Protection: To permanently impact 0.91 acre below the OHWM of the Susquehanna River for R-7 rock, choked with natural streambed material, scour protection of the new piers.

Discharge of Fill Material for Temporary Access Road/Causeway: To temporarily impact 3.57 acre below the OHWM of the Susquehanna River for the construction of a temporary access road/causeway, including 942-linear feet of temporary impact along the west bank of the river, with a maximum channelward encroachment into the river of 285-linear feet as measured from the OHWM. The temporary access road/causeway will be in place within the Susquehanna River for an estimated 7 years.

Sandbag Cofferdams for Construction Access and Dewatering: To temporarily impact (direct and indirect impacts from the sandbag placement and dewatered area) 0.13 acre below the OHWM for the construction of the East Shore permanent outfall structure; 0.20 acre below the OHWM for the East Shore slope restoration; and 0.07 acre below the OHWM for construction of a temporary emergency boat ramp.

Structural Discharges for Temporary Trestle Bridge Piers: To discharge concrete into sealed casings for the construction of 1,808 caissons each measuring 2-feet in diameter, for the structural support of a temporary trestle bridge. The trestle bridge would be constructed in four phases, with no phase exceeding one half of the river width, permanently impacting 0.26 acre below the OHWM of the Susquehanna River. After construction, the caissons will be cut off below the riverbed and the riverbed will be restored to pre-construction condition with channel substrates and sediment.

Discharge of Fill Material for Outfall Structure Rip-Rap Aprons: To permanently impact 0.01 acre below the OHWM for the West Shore outfall structure apron constructed of R-8 rip-rap with a maximum channelward encroachment of 32-linear feet; and to permanently impact 0.02 acre below the OHWM for the East Shore outfall structure apron constructed of R-8 rip-rap with a maximum extent channelward encroachment of 32-linear feet.

Discharge of Fill Materials for Vegetated Rip-Rap Bank Protection: To permanently impact 452-linear feet of river bank and 0.18 acre below the OHWM for construction of the West Shore vegetated rip-rap bank protection; and to permanently impact 232-linear feet of river bank and 0.09 acre below the OHWM for construction of the East Shore vegetated rip-rap bank protection; both consisting of R-8 boulders, and R-5 rip-rap choked with topsoil and planted with a native herbaceous seed mix and live willow stakes.

Discharge of Fill Materials for East Shore Temporary Boat Ramp: To temporarily impact 0.03 acre below the OHWM for the construction of a 92-foot-long by 20-foot-wide temporary boat ramp for providing emergency response units access to the Susquehanna River in the immediate vicinity of the South Bridge and the Dock Street Dam.

EFFECTS ON AQUATIC RESOURCES:

Activity (i.e. culvert)	Stream Impact (l.f. and/or acres) total in Susquehanna River	Wetland Impact (acres) total	Authority (Section 10/404/408)
Bridge piers, 16 new lines	1.69 acres permanent adverse	0.03 acres PFO permanent adverse	404
Pier scour protection with R-7 rip-rap	0.91 acre permanent	None	404
Temporary access road/causeway	3.57 acres temporary 942 l.f. temporary	None	404
Sandbag cofferdams for construction access and dewatering	0.40 acre temporary	None	404
Structural Discharges for Temporary Trestle Bridge Piers	0.26 acre permanent	None	404
Outfall Structure R-8 Rip-Rap Aprons	0.03 acre permanent 64 l.f. permanent	None	404
Vegetated R-8 and R-5 Rip-Rap Bank Protection	0.27 acre permanent 684 l.f. permanent	None	404
Temporary Boat Ramp	0.03 acre temporary 92 l.f. temporary	None	404

AVOIDANCE AND MINIMIZATION: The applicant has provided the following information in support of efforts to avoid and/or minimize impacts to the aquatic environment: The applicant has proposed a phased trestle bridge (4 phases) for construction access in-lieu of a full width stone causeway alternative and a phased hybrid earthen-trestle alternative. The phased trestle bridge alternative will avoid temporary impacts to approximately 12.79 acres of river bottom below the OHWM, and approximately 0.80 acres of submerged aquatic vegetation beds. Use of the trestle

bridge will also result in the avoidance of approximately 0.70 acre of PFO wetland impacts (Wetland 2) on the mid-river unnamed island.

COMPENSATORY MITIGATION: The applicant offered the following compensatory mitigation plan to offset unavoidable functional loss to the aquatic environment:

Mitigation Statement

Due to the need to replace the bridge, impacts to wetlands and waterways are unavoidable. Mitigation methods include avoidance, minimization, repair or restoration, reduction of impacts over time, or compensation.

The following measures have been incorporated into the design to offset effects:

- Monitor the shoreline and islands during construction to determine if erosion is taking place as a result of the temporary causeway and construction bridges; remediate if issues are noted.
- Replant the island and re-establish the shoreline once the temporary construction bridge/causeway is removed.
- No tree cutting shall occur between May 15 and August 15. This restriction avoids the Northern Long Ear Bat pup season, when females are giving birth and have non-volant pups (pups unable to fly).
- Clear trees from the river island but do not grub to maintain root structure and stability of the island.
- Prepare an erosion and sedimentation control plan during final design that addresses the procedures and BMPs, including Antidegradation Best Available Combination of Technologies, for the construction of the new bridges to limit impacts to surface waters.
- Utilize an in-lieu fee program to off-set the wetland impact area.
- Design the construction causeway to include temporary construction bridge sections (trestles) to ensure fish and eel passage is maintained during construction.
- Restrict in-stream work (construction/removal of causeways) from May 1 to June 15 due to smallmouth bass spawning.
- Install dam warning signs and buoys up and downstream of the Dock Street Dam in accordance with the approved ATON plan.

- Follow Pennsylvania Department of Transportation PennDOTs invasive species guidance and BMPs (PennDOT Publication 756 [2014]) during construction to minimize the potential for invasive species to take root or spread during construction.
- Develop a monitoring plan to monitor the submerged aquatic vegetation beds before and after construction to ensure they re-establish naturally.
- Remove existing bridge piers to 24 inches or more below the river bottom.

CULTURAL RESOURCES: The National Register of Historic Places was consulted, and coordination with the Pennsylvania State Historic Preservation Office (PA SHPO) was completed by PennDOT under the provisions of the Programmatic agreement among the FHWA, the Corps, the advisory council on historic preservation, the PA SHPO and the PennDOT regarding implementation of the National Historic Preservation Act for federal aid highway projects and/or highway projects requiring a Corps permit in Pennsylvania. The PA SHPO determined that there will be no adverse effect to properties currently listed, or eligible for listing, on the register which would be directly affected by the proposed work. For further information regarding project compliance with Section 106 of the National Historic Preservation Act, reference Section 3.8.2, Historic Properties, in the SR0083 Section 094, Interstate 83 South Bridge Replacement Project, Dauphin County, Environmental Assessment, dated October 2023, prepared by PennDOT Engineering District 8-0 and the FHWA at: <https://www.pa.gov/agencies/penndot/projects-near-you/district-8-projects/i-83-south-bridge-project.html>.

ENDANGERED SPECIES: Pursuant to Section 7 of the Endangered Species Act, any required consultation with the United States Fish and Wildlife Service will be conducted in accordance with 50 CFR part 402. The FHWA is the lead federal agency for Endangered Species Act consultation for the proposed action. A Pennsylvania Natural Diversity Inventory project receipt was provided with the permit application, to determine if any threatened, endangered, proposed, or candidate species, as well as the proposed and final designated critical habitat may occur in the vicinity of the proposed project. Based upon the results of the Pennsylvania Natural Diversity Inventory project search, a determination was made that the proposed project is not likely to adversely affect any listed species or critical habitat, provided that avoidance measures are implemented to ensure that take is not reasonably certain to occur. The applicant has agreed to the avoidance measures in writing.

NAVIGATION: The proposed structure or activity is not located in the vicinity of a federal navigation channel.

SECTION 408: The applicant will not require permission under Section 14 of the Rivers and Harbors Act of 1899 (33 USC 408) because the activity, in whole or in part, would not alter, occupy, or use a Corps Civil Works project.

WATER QUALITY CERTIFICATION: The applicant is required to obtain a water quality certification in accordance with Section 401 of the Clean Water Act from the Pennsylvania Department of Environmental Protection.

NOTE: This public notice is being issued based on information furnished by the applicant. This information has not been verified or evaluated to ensure compliance with laws and regulation governing the regulatory program. The geographic extent of aquatic resources within the proposed project area that either are, or are presumed to be, within the Corps jurisdiction has not been verified by Corps personnel.

EVALUATION: The decision whether to issue a permit will be based on an evaluation of the probable impact including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefits, which reasonably may be expected to accrue from the proposal, must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including cumulative impacts thereof; among these are conservation, economics, esthetics, general environmental concerns, wetlands, historical properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food, and fiber production, mineral needs, considerations of property ownership, and in general, the needs and welfare of the people. Evaluation of the impact of the activity on the public interest will also include application of the guidelines promulgated by the Administrator, EPA, under authority of Section 404(b) of the Clean Water Act or the criteria established under authority of Section 102(a) of the Marine Protection Research and Sanctuaries Act of 1972. A permit will be granted unless its issuance is found to be contrary to the public interest.

COMMENTS: The Corps is soliciting comments from the public; federal, state, and local agencies and officials; Indian Tribes; and other Interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps to determine whether to issue, modify, condition, or deny a permit for this proposal. To make this determination, comments are used to assess impacts to endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

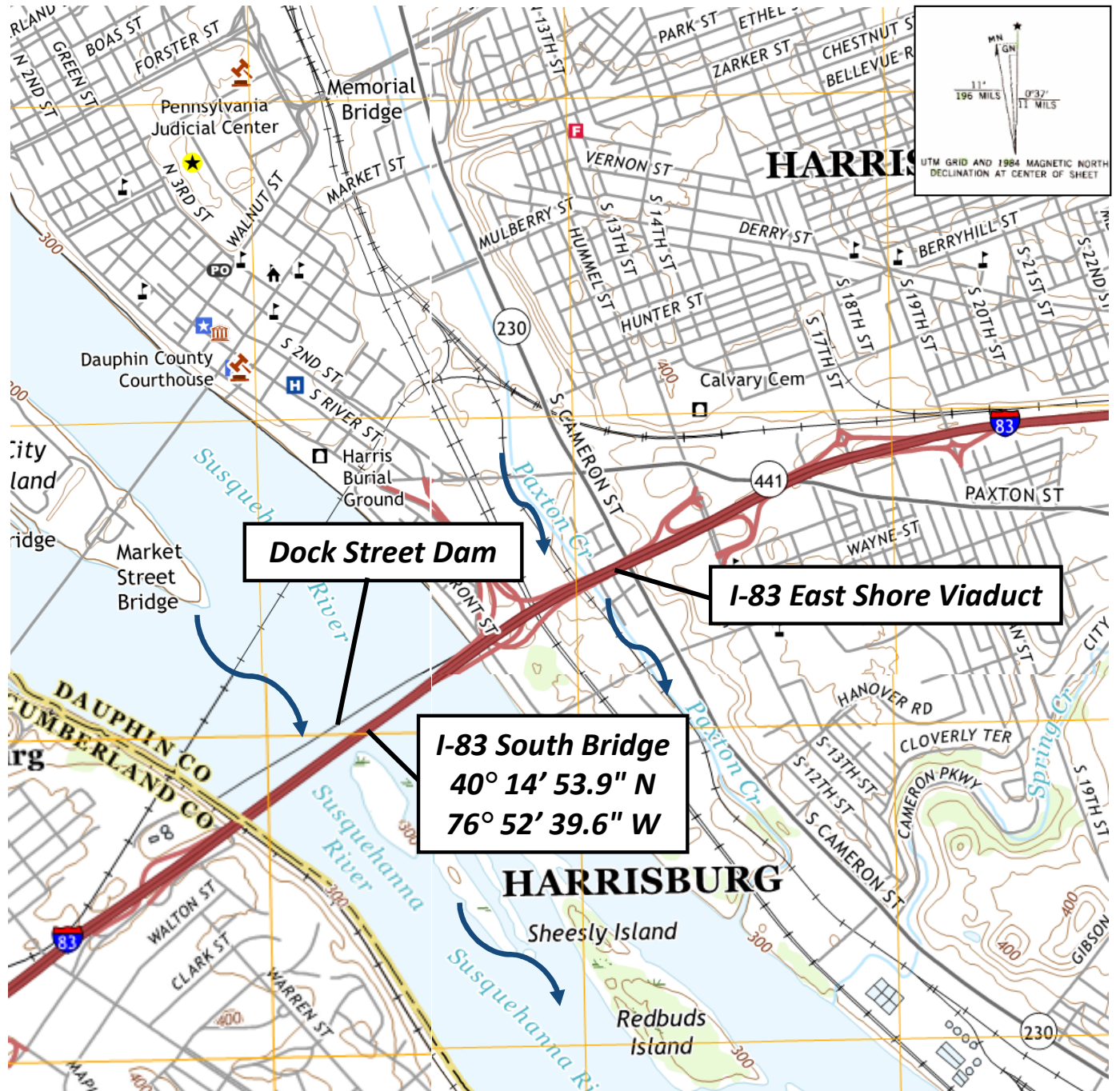
The Baltimore District will receive written comments on the proposed work, as outlined above, until April 23, 2025. Comments should be submitted electronically via the Regulatory Request System (RRS) at <https://rrs.usace.army.mil/rrs> or to Mr. Michael Danko, Transportation Program Manager, at mike.danko@usace.army.mil. Alternatively, you may submit comments in writing to the Commander, U.S. Army Corps of Engineers, Baltimore District, Attention: Mr. Michael Danko, Carlisle Field Office,

401 East Louther Street, Suite 205, Carlisle, Pennsylvania, 17013. Please refer to the permit application number in your comments.

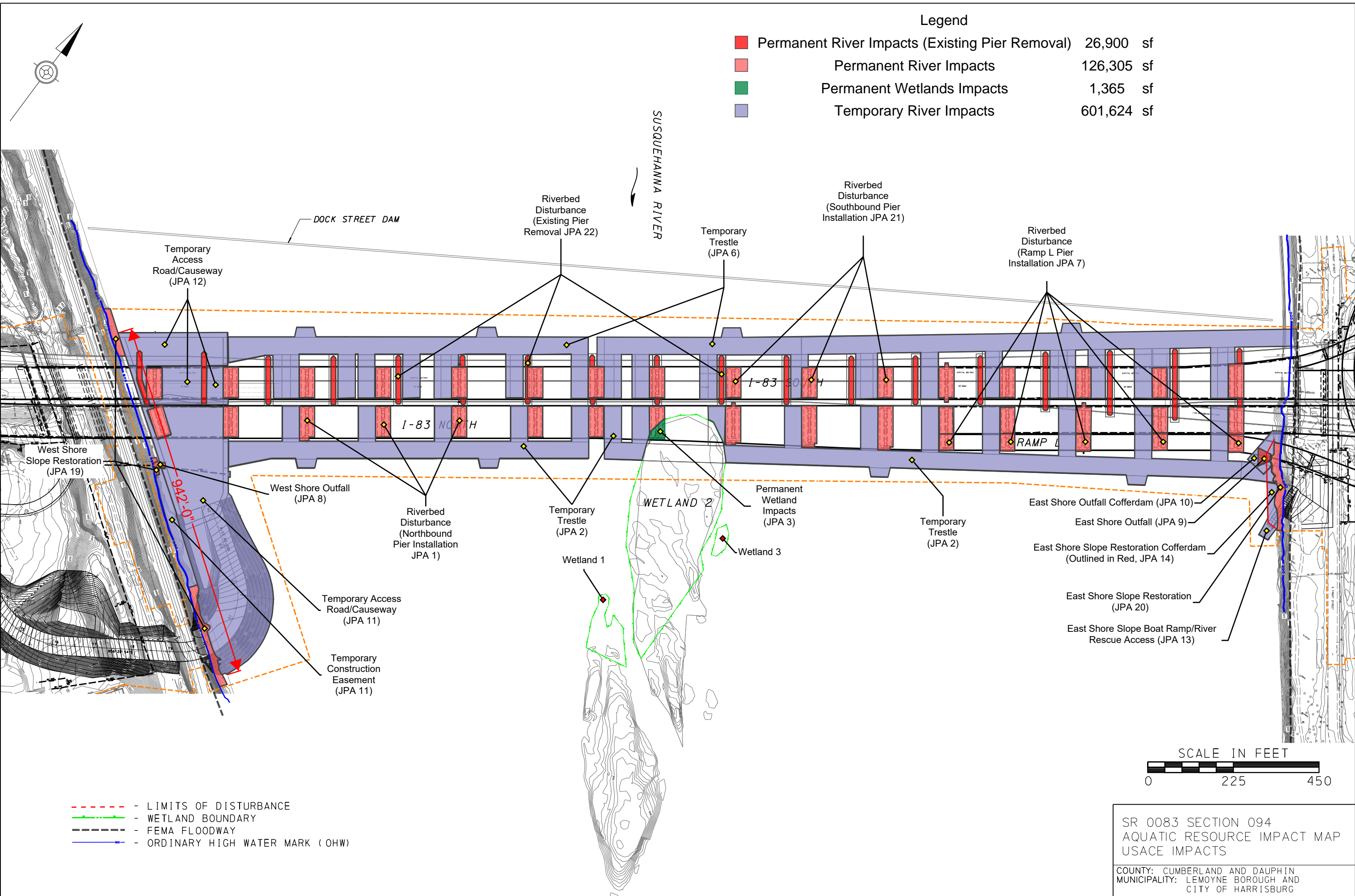
Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider the application. Requests for public hearings shall state, with particularity, the reasons for holding a public hearing. Requests for a public hearing will be granted, unless the District Engineer determines that the issues raised are insubstantial or there is otherwise no valid interest to be served by a hearing.

General information regarding the Corps' permitting process can be found on our website at <https://www.nab.usace.army.mil/Missions/Regulatory.aspx>. This public notice has been prepared in accordance with Corps implementing regulations at 33 CFR 325.3.

Harrisburg, PA USGS Topographic Map

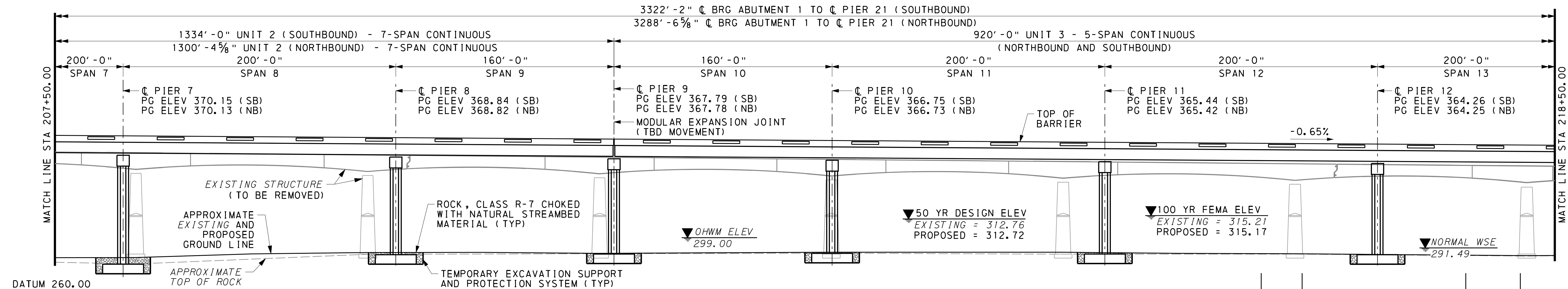
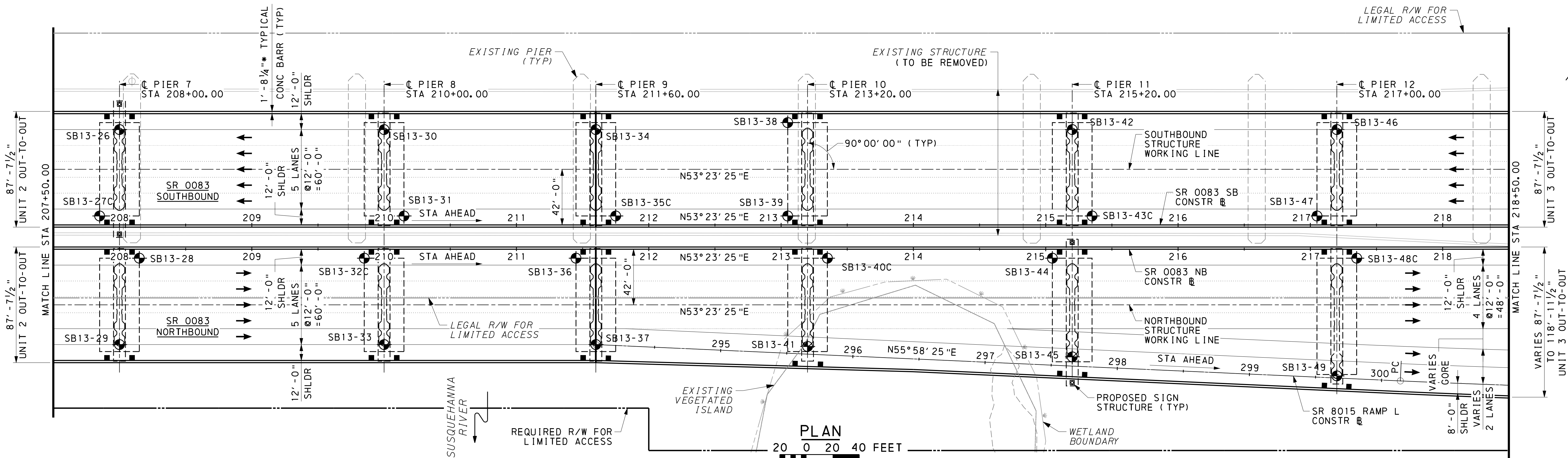


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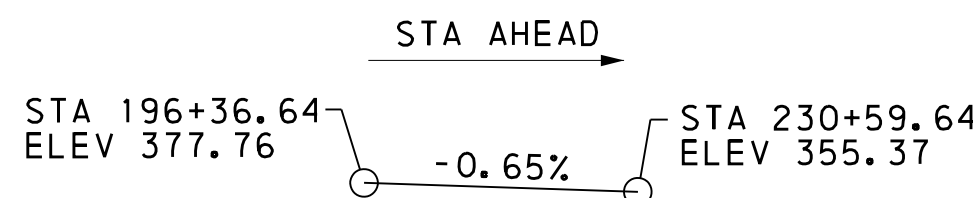
SR 0083 SECTION 094
AQUATIC RESOURCE IMPACT MAP
USACE IMPACTS

COUNTY: CUMBERLAND AND DAUPHIN
MUNICIPALITY: LEMOYNE BOROUGH AND
CITY OF HARRISBURG

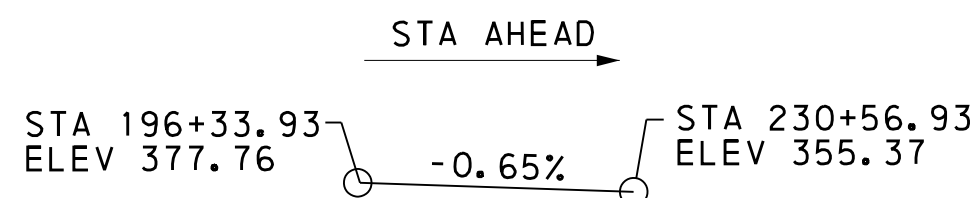


VERTICAL ALIGNMENT DATA

SR 0083 SOUTHBOUND

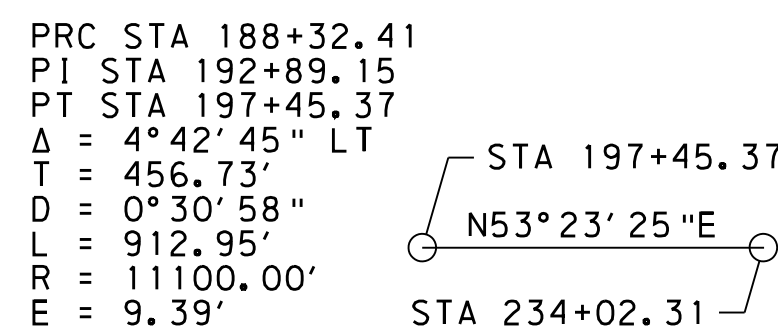


SR 0083 NORTHBOUND

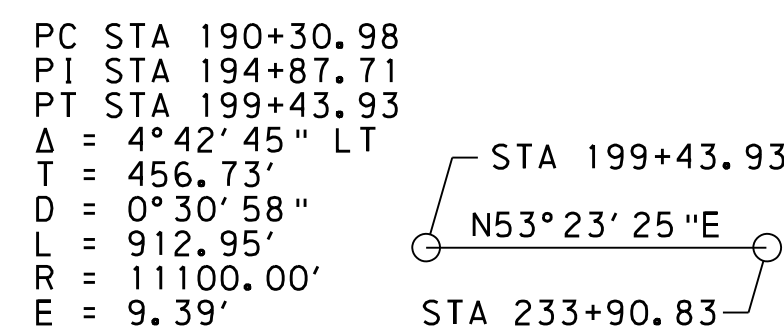


HORIZONTAL ALIGNMENT AND CURVE DATA

SR 0083 SOUTHBOUND



SR 0083 NORTHBOUND



HYDRAULIC DATA - SUSQUEHANNA RIVER

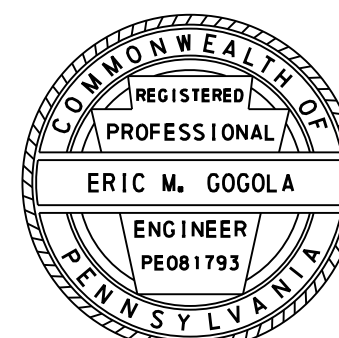
DRAINAGE AREA: 24,100 SQUARE MILES				
FREQUENCY		MAGNITUDE	ELEVATION	VELOCITY
50 YEAR FLOOD-DESIGN	PROPOSED	615,700 CFS	312.72	7.7 F/S
	EXISTING	615,700 CFS	312.76	7.6 F/S
100 YEAR FLOOD-FEMA	PROPOSED	700,000 CFS	315.17	7.9 F/S
	EXISTING	700,000 CFS	315.21	7.9 F/S

FLOOD OF RECORD: 1,020,000 CFS (1972)

NOTES:

1. SEE NOTES ON SHEET 1.

HNTB



PREPARED BY:
HNTB CORPORATION
4507 NORTH FRONT STREET
SUITE 300
HARRISBURG, PA 17110

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 0083 PREVIOUSLY KNOWN AS LR 767
BMS STR ID# 22-0083-0414-2378 (NB)
22-0083-0415-2340 (SB)

MPMS/ECMS PROJ:113754
BRKEY: 69031 (NB)
69085 (SB)

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

CUMBERLAND AND DAUPHIN COUNTIES
SR 0083 SECTION 094
SR 0083 NB SEG 0414 OFFSET 2378
SR 0083 SB SEG 0415 OFFSET 2340
SR 0083 NB STA 197+11.81 SR 0083 SB STA 196+77.25
OVER LOWTHER ST, NSRC & SUSQUEHANNA RIVER
19-SPAN CONTINUOUS STEEL MULTI-GIRDER BRIDGE

GENERAL PLAN AND ELEVATION - 2

RECOMMENDED _____

SHEET 2 OF _____

S-40918 (NB)
S-40966 (SB)

TEST BORING LOCATIONS		
BORING NUMBER	STATION	OFFSET
SB13-01	196+46.00	80.00' LT
SB13-02	196+79.00	10.00' RT
SB13-03	197+02.00	94.00' RT
SB13-04	197+34.00	86.00' LT
SB13-05	197+71.00	13.00' RT
SB13-06	197+95.00	102.00' RT
SB13-07	198+04.00	86.00' LT
SB13-08	198+40.00	0.00' RT
SB13-09	198+66.00	102.00' RT
SB13-10	199+89.00	11.00' LT
SB13-11C	200+00.00	118.00' LT
SB13-12	200+16.00	25.00' RT
SB13-13	200+23.00	91.00' RT
SB13-14	202+00.06	76.00' LT
SB13-15	202+14.00	9.00' LT
SB13-16C	201+85.00	25.00' RT
SB13-17	202+00.00	97.00' RT
SB13-18	204+00.00	75.00' LT
SB13-19C	203+85.00	7.00' LT
SB13-20	204+00.00	25.00' RT
SB13-21	204+15.00	93.00' RT
SB13-22	206+00.00	76.00' LT
SB13-23	206+15.00	7.00' LT
SB13-24C	205+85.00	25.00' RT
SB13-25	206+00.00	93.00' RT

PROPOSED BORING LOCATION STATIONS
MEASURED ALONG CONSTR 8 SB SR 0083

TEST BORING LOCATIONS		
BORING NUMBER	STATION	OFFSET
SB13-26	208+00.00	72.00' LT
SB13-27C	207+85.00	7.00' LT
SB13-28	208+15.00	25.00' RT
SB13-29	208+00.00	90.00' RT
SB13-30	210+00.00	72.00' LT
SB13-31	210+15.00	7.00' LT
SB13-32C	209+85.00	25.00' RT
SB13-33	210+00.00	90.00' RT
SB13-34	211+60.00	72.00' LT
SB13-35C	211+75.00	7.00' LT
SB13-36	211+45.00	25.00' RT
SB13-37	211+60.00	90.00' RT
SB13-38	213+05.00	77.00' LT
SB13-39	213+05.00	7.00' LT
SB13-40C	213+35.00	25.00' RT
SB13-41	213+20.00	92.00' RT
SB13-42	215+20.00	72.00' LT
SB13-43C	215+35.00	7.00' LT
SB13-44	215+05.00	25.00' RT
SB13-45	215+20.00	100.00' RT
SB13-46	217+20.00	72.00' LT
SB13-47	217+05.00	7.00' LT
SB13-48C	217+35.00	25.00' RT
SB13-49	217+20.00	114.00' RT

PROPOSED BORING LOCATION STATIONS
MEASURED ALONG CONSTR 8 SB SR 0083

TEST BORING LOCATIONS		
BORING NUMBER	STATION	OFFSET
SB13-50	219+20.00	72.00' LT
SB13-51C	219+35.00	7.00' LT
SB13-52	219+05.00	25.00' RT
SB13-53	219+20.00	123.00' RT
SB13-54	220+80.00	72.00' LT
SB13-55	220+65.00	7.00' LT
SB13-56C	220+95.00	25.00' RT
SB13-57	220+80.00	127.00' RT
SB13-58	222+40.00	72.00' LT
SB13-59C	222+55.00	7.00' LT
SB13-60	222+25.00	25.00' RT
SB13-61	224+40.00	72.00' LT
SB13-62	224+25.00	7.00' LT
SB13-63C	224+55.00	25.00' RT
SB13-64	226+40.00	72.00' LT
SB13-65C	226+55.00	7.00' LT
SB13-66	226+25.00	25.00' RT
SB13-67	228+40.00	83.00' LT
SB13-68	228+25.00	7.00' LT
SB13-69C	228+55.00	25.00' RT
SB13-70	229+91.00	112.00' LT
SB13-71	230+09.00	9.00' RT
SB13-72	230+00.00	90.00' RT

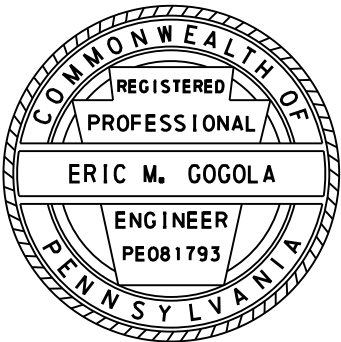
PROPOSED BORING LOCATION STATIONS
MEASURED ALONG CONSTR 8 SB SR 0083

Mark	Description	By	Chk' d	Recm' d	Date
REVISIONS					

SR 0083 PREVIOUSLY KNOWN AS LR 767
BMS STR ID: 22-0083-0414-2378 (NB)
22-0083-0415-2340 (SB)

MPMS/ECMS PROJ: 113754
BRKEY: 69031 (NB)
69085 (SB)

HNTB



PREPARED BY:
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SUITE 300
HARRISBURG, PA 17110

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

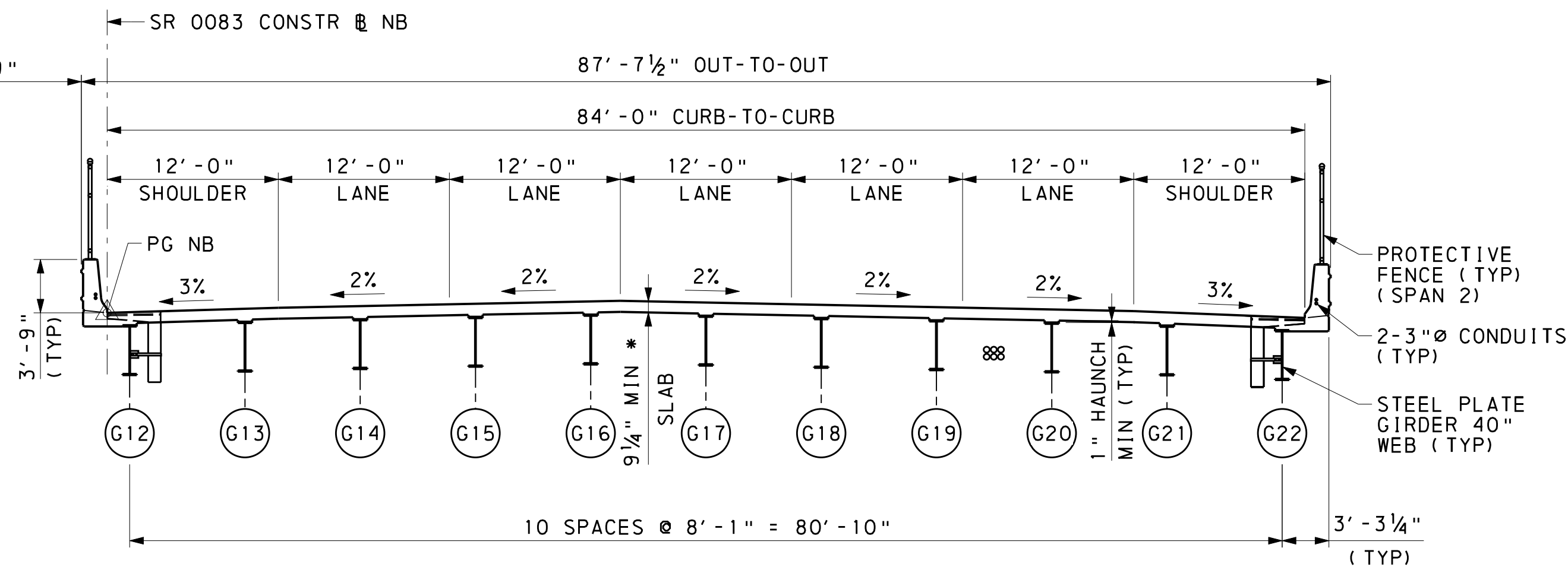
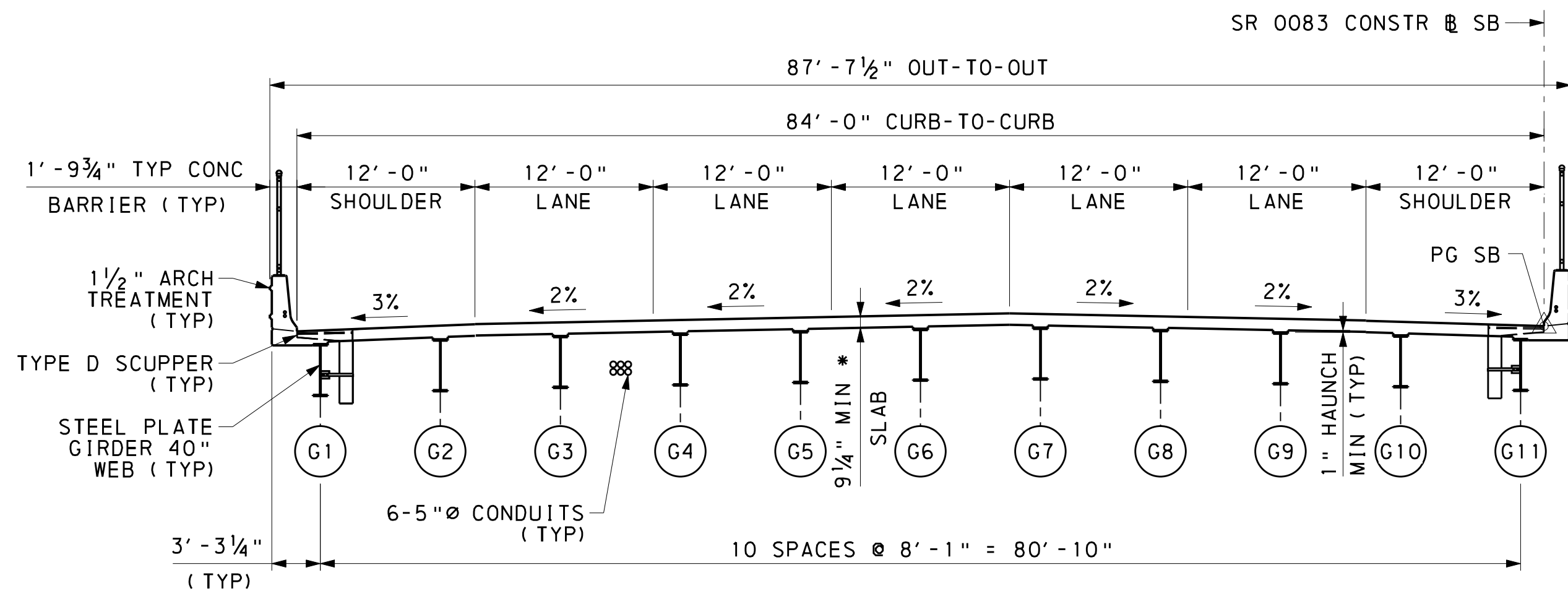
CUMBERLAND AND DAUPHIN COUNTIES
SR 0083 SECTION 094
SR 0083 NB SEG 0414 OFFSET 2378
SR 0083 SB SEG 0415 OFFSET 2340
SR 0083 NB STA 197+11.81 SR 0083 SB STA 196+77.25
OVER LOWTHER ST, NSRC & SUSQUEHANNA RIVER
19-SPAN CONTINUOUS STEEL MULTI-GIRDER BRIDGE

GENERAL NOTES

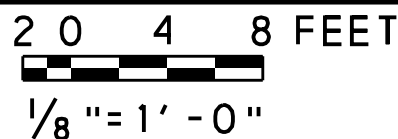
RECOMMENDED _____

SHEET X OF

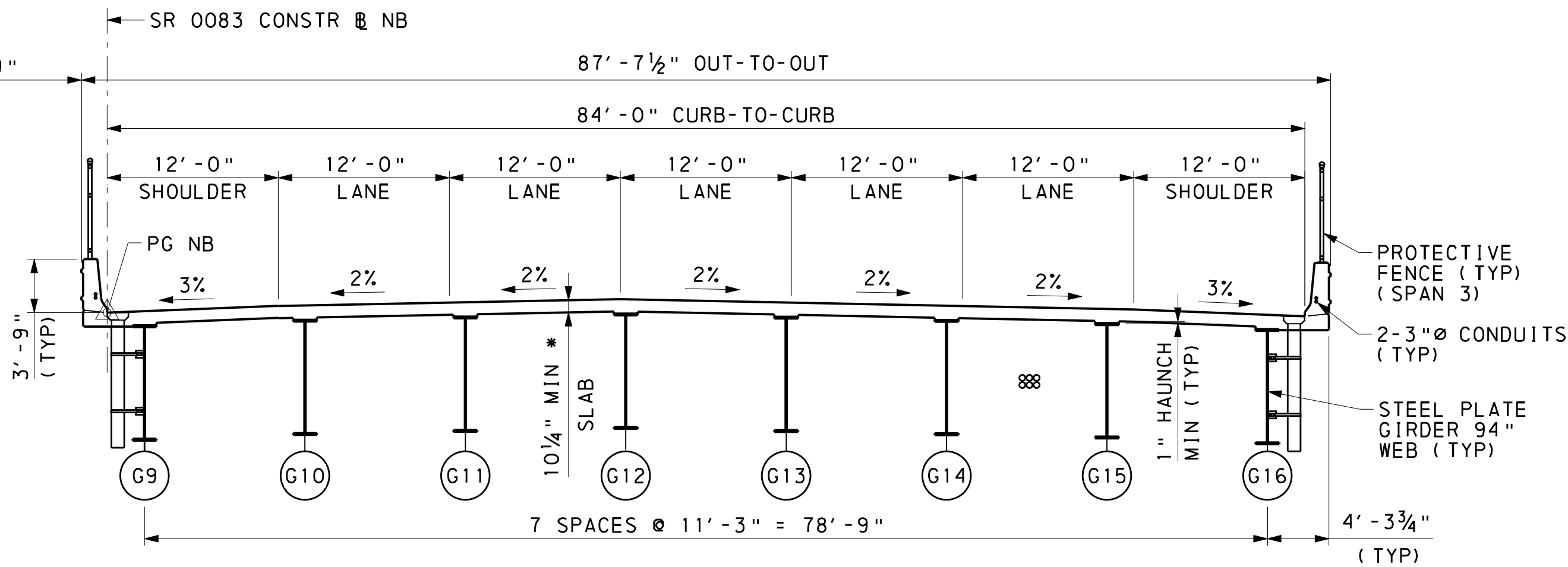
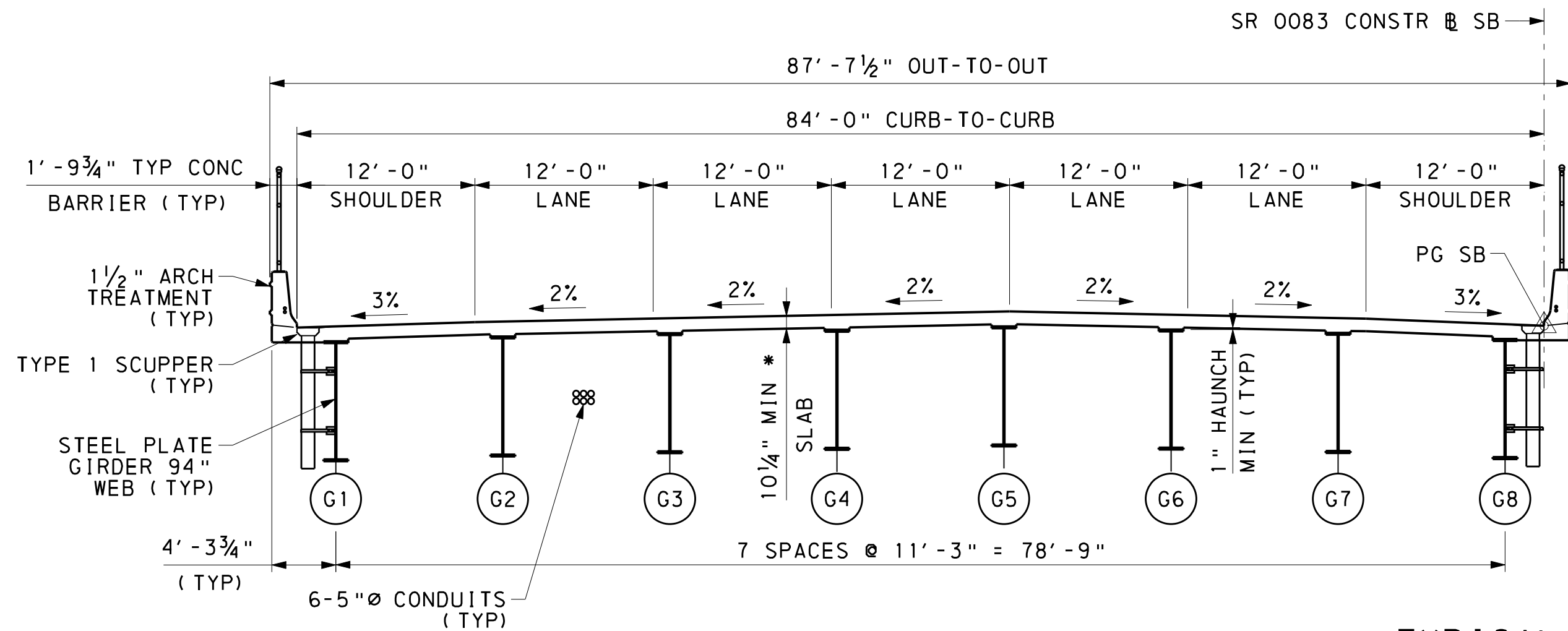
S-40918 (NB)
S-40966 (SB)



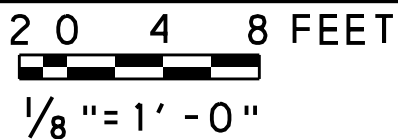
TYPICAL SECTION - UNIT 1



* INCLUDES 1 1/4" LMC OVERLAY



TYPICAL SECTION - UNIT 2



* INCLUDES 1 1/4" LMC OVERLAY

DESIGN SPECIFICATIONS

- AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 8TH EDITION, 2017, AND AS SUPPLEMENTED BY DESIGN MANUAL, PART 4 (DM-4) DECEMBER 2019 EDITION.
- LIVE LOAD DISTRIBUTION TO GIRDERS IS TO BE BASED UPON DM-4 DISTRIBUTION FACTORS.
- DESIGN IS IN ACCORDANCE WITH THE LRFD METHOD.
- PROVIDE GRADE 60 REINFORCING STEEL BARS THAT MEET THE REQUIREMENTS OF ASTM A615, A996, OR A706. PROVIDE STAINLESS STEEL REINFORCING BARS IN THE BRIDGE DECK.

EXISTING STRUCTURE DATA

STRUCTURE TYPE:

21-SPAN STEEL DECK GIRDER BRIDGE

SUBSTRUCTURE TYPE:

REINFORCED CONCRETE ABUTMENTS ON MULTIPLE FOUNDATION TYPES

REINFORCED CONCRETE MULTI-COLUMN BENTS ON MULTIPLE FOUNDATION TYPES

BRIDGE LENGTH: 3324'-1 1/4"

SKEW: VARIES

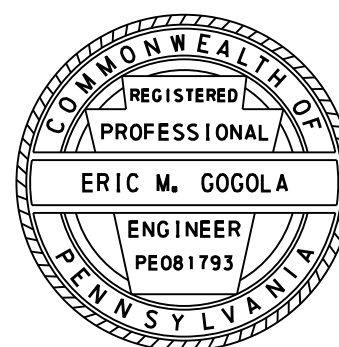
CLEAR ROADWAY: VARIES

Mark	Description	By	Chk'd	Recm'd	Date
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COMMONWEALTH OF PENNSYLVANIA
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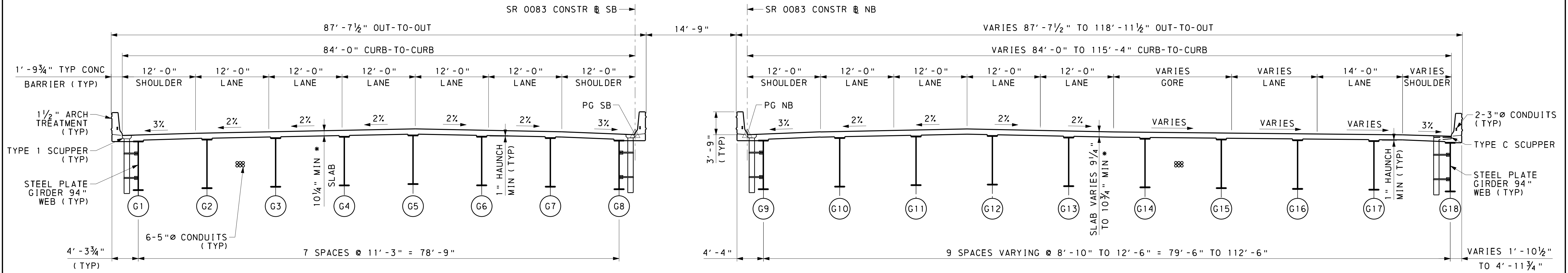
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SR 0083 SB SEG 0415 OFFSET 2340
SR 0083 NB STA 197+11.81 SR 0083 SB STA 196+77.25
OVER LOWTHER ST, NSRC & SUSQUEHANNA RIVER
19-SPAN CONTINUOUS STEEL MULTI-GIRDER BRIDGE

TYPICAL SECTION - 1

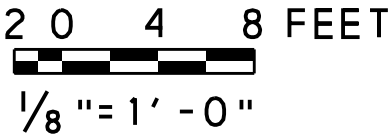
RECOMMENDED _____

SHEET 4 OF _____

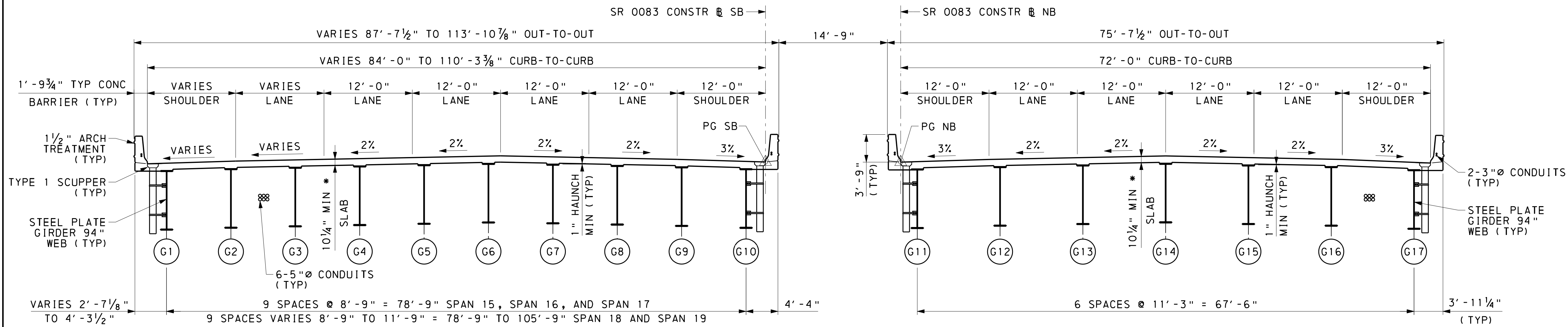
S-40918 (NB)
S-40966 (SB)



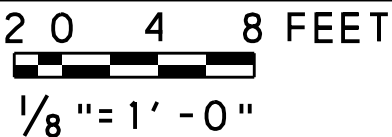
TYPICAL SECTION - UNIT 3



* INCLUDES 1 1/4" LMC OVERLAY



TYPICAL SECTION - UNIT 4



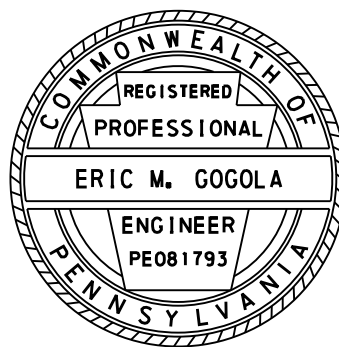
* INCLUDES 1 1/4" LMC OVERLAY

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 0083 PREVIOUSLY KNOWN AS LR 767
BMS STR ID# 22-0083-0414-2378 (NB)
22-0083-0415-2340 (SB)

MPMS/ECMS PROJ# 113754
BRKEY# 69031 (NB)
69085 (SB)

HNTB



PREPARED BY:
HNTB CORPORATION
4507 NORTH FRONT STREET
SUITE 300
HARRISBURG, PA 17110

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

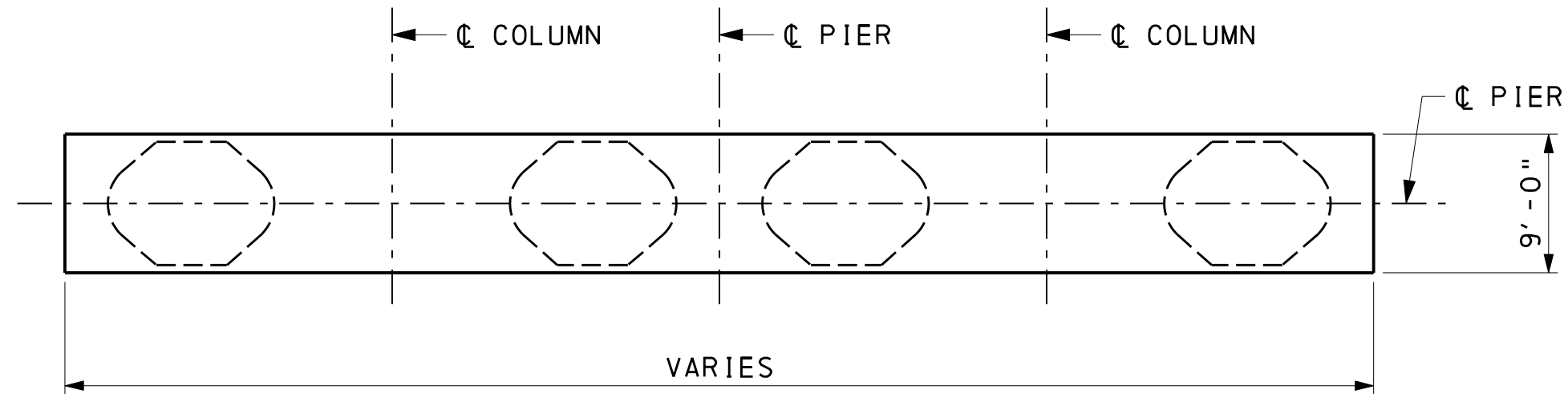
CUMBERLAND AND DAUPHIN COUNTIES
SR 0083 SECTION 094
SR 0083 NB SEG 0414 OFFSET 2378
SR 0083 SB SEG 0415 OFFSET 2340
SR 0083 NB STA 197+11.81 SR 0083 SB STA 196+77.25
OVER LOWTHER ST, NSRC & SUSQUEHANNA RIVER
19-SPAN CONTINUOUS STEEL MULTI-GIRDER BRIDGE

TYPICAL SECTION - 2

RECOMMENDED _____

SHEET 5 OF _____

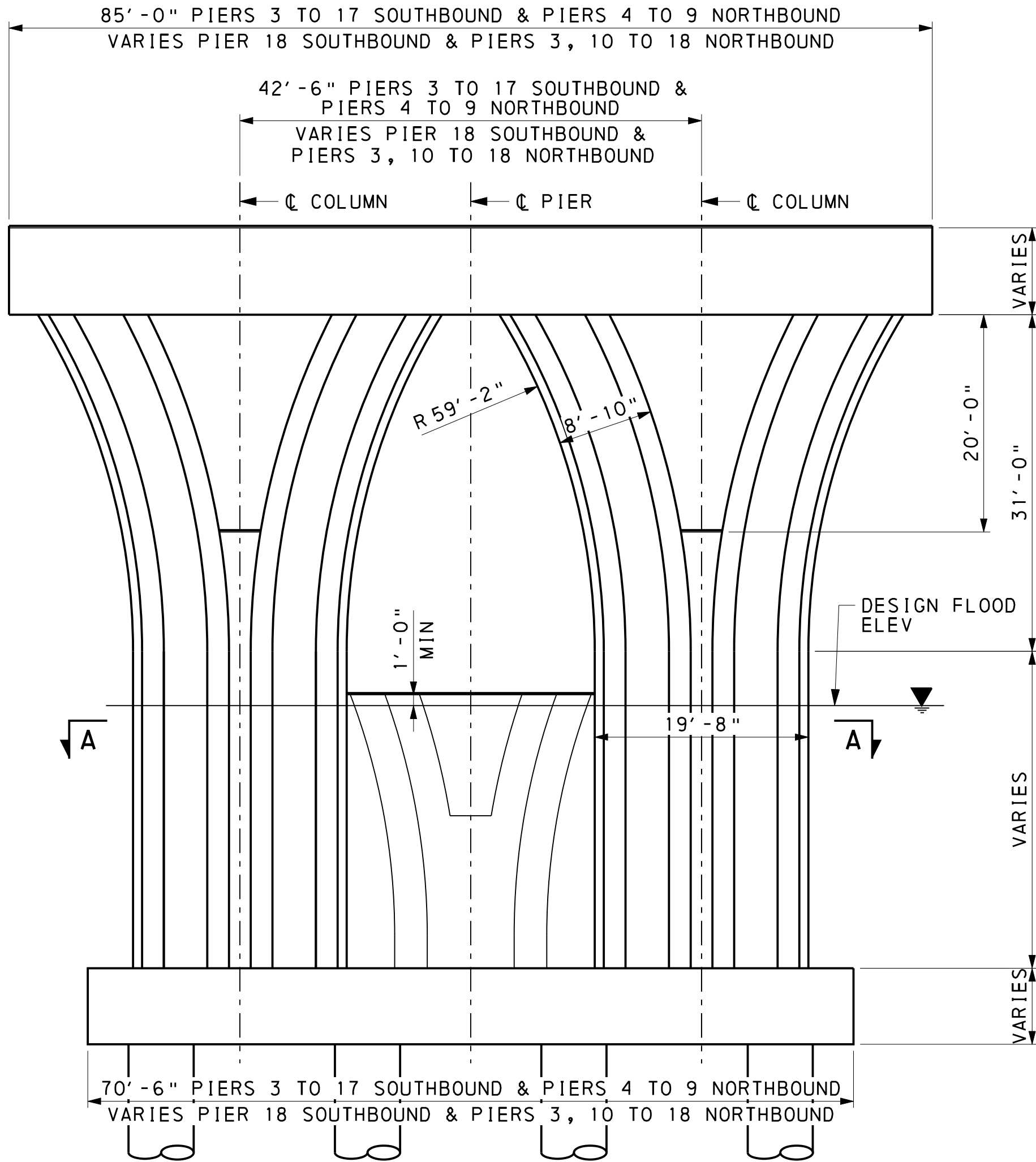
S-40918 (NB)
S-40966 (SB)



CAP PLAN TYPICAL Y-PIER

5 0 5 10 FEET

1"=10'

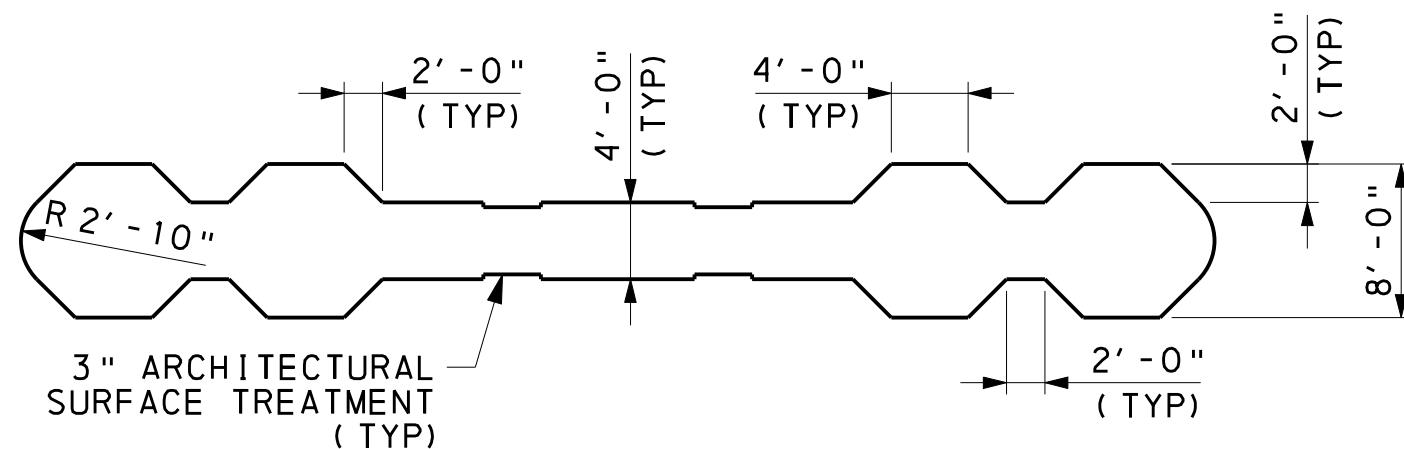


ELEVATION TYPICAL Y-PIER

5 0 5 10 FEET

1"=10'

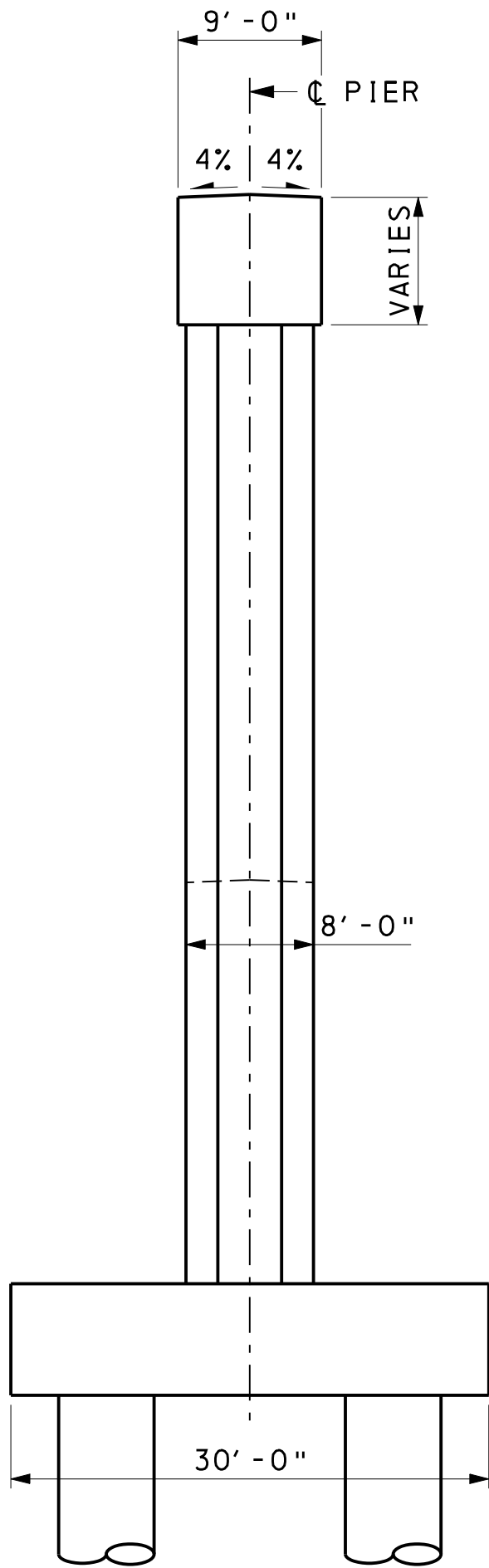
(PIERS 3 TO 18)



SECTION A-A

5 0 5 10 FEET

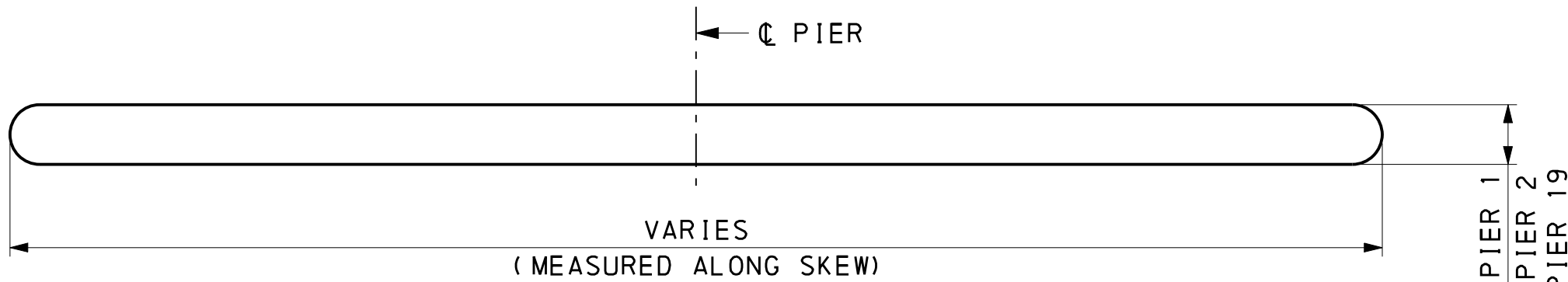
1"=10'



END VIEW TYPICAL Y-PIER

5 0 5 10 FEET

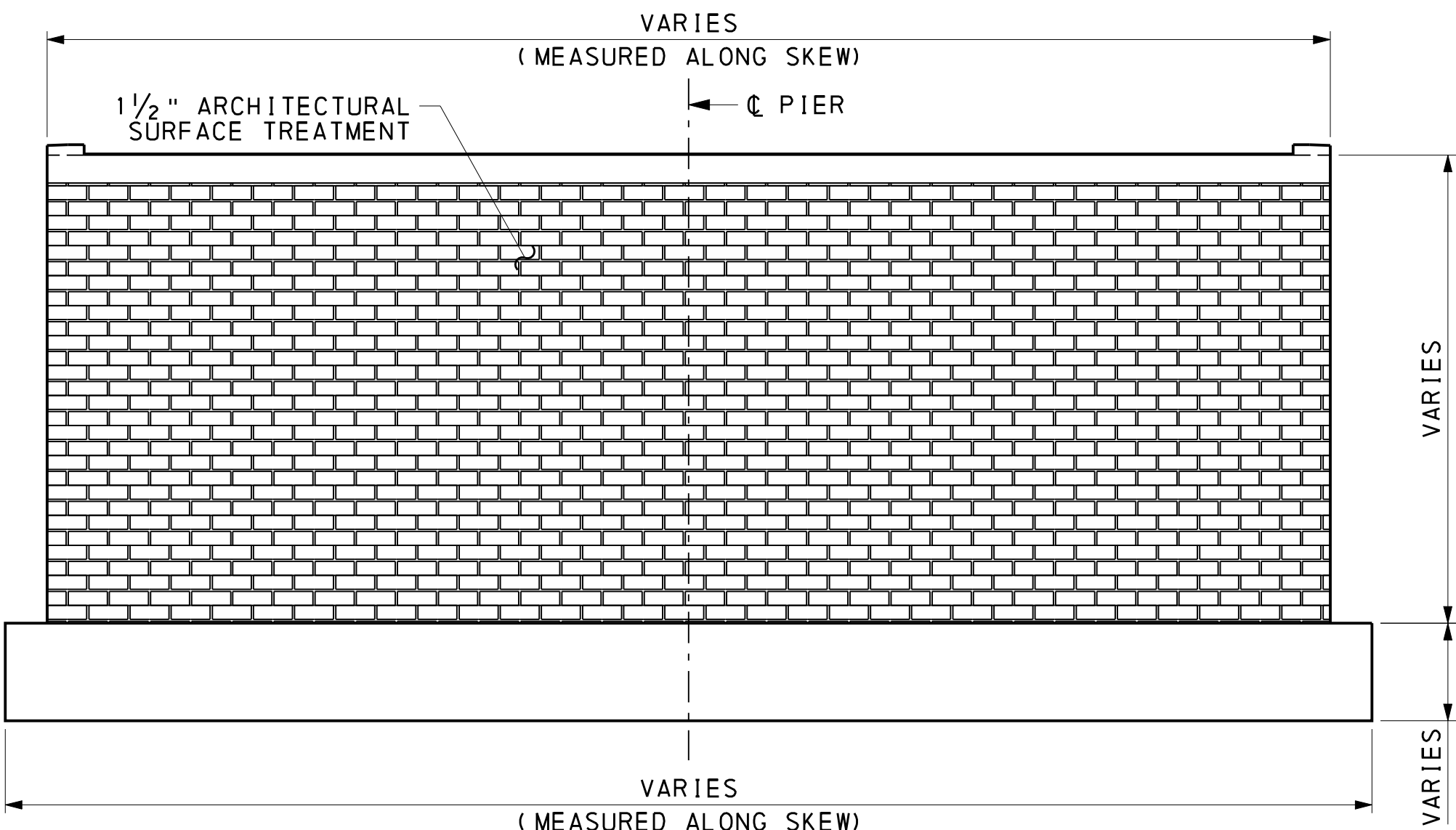
1"=10'



CAP PLAN TYPICAL WALL PIER

5 0 5 10 FEET

1"=10'

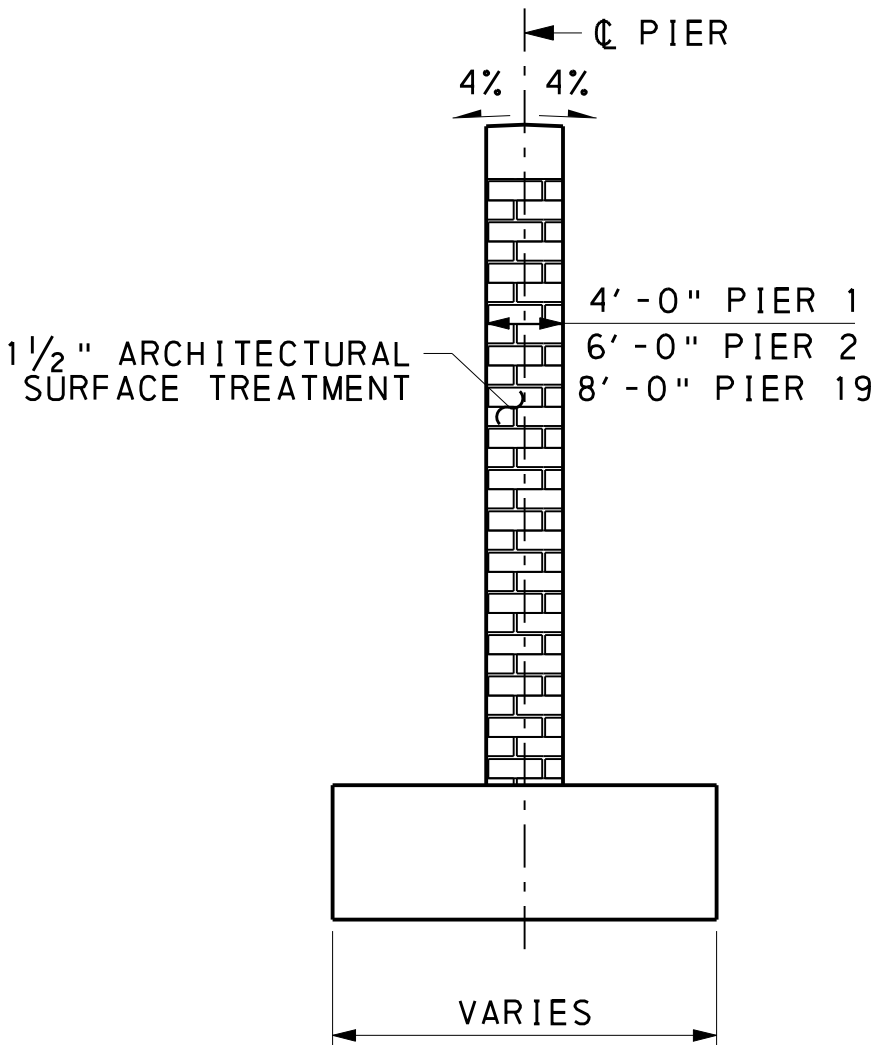


ELEVATION TYPICAL WALL PIER

5 0 5 10 FEET

1"=10'

(PIERS 1, 2 AND 19)



END VIEW TYPICAL WALL PIER

5 0 5 10 FEET

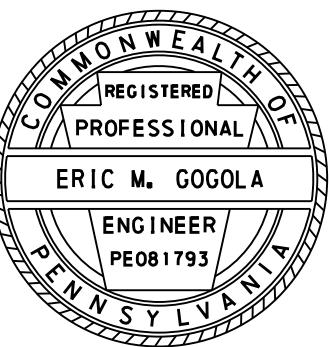
1"=10'

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 0083 PREVIOUSLY KNOWN AS LR 767
BMS STR ID# 22-0083-0414-2378 (NB)
22-0083-0415-2340 (SB)

MPMS/ECMS PROJ# 113754
BRKEY# 69031 (NB)
69085 (SB)

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SUITE 300
HARRISBURG, PA 17110

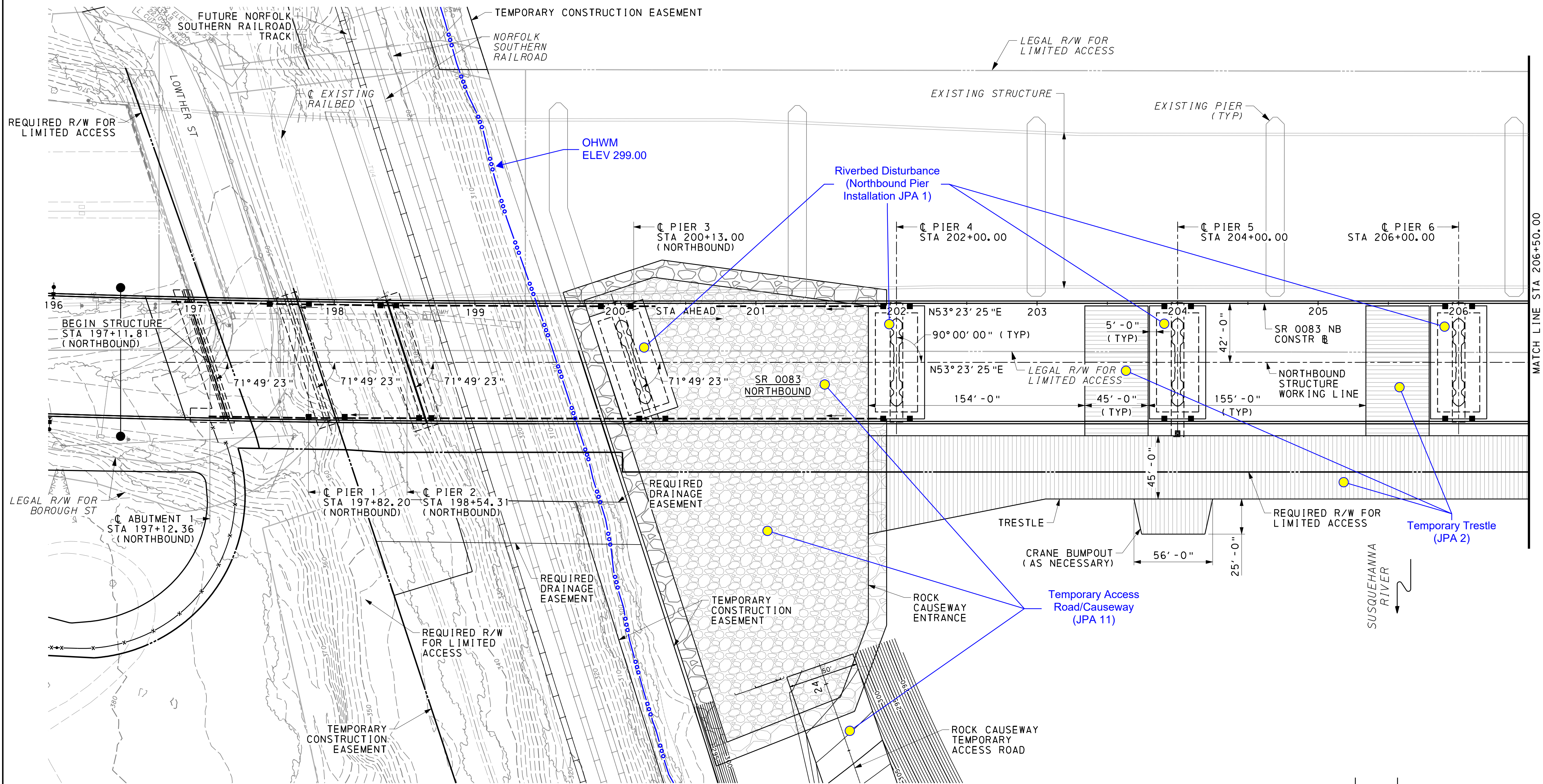
COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF TRANSPORTATION					
CUMBERLAND AND DAUPHIN COUNTIES SR 0083 SECTION 094 SR 0083 NB SEG 0414 OFFSET 2378 SR 0083 SB SEG 0415 OFFSET 2340 SR 0083 NB STA 197+11.81 SR 0083 SB STA 196+77.25 OVER LOWTHER ST, NSRC & SUSQUEHANNA RIVER 19-SPAN CONTINUOUS STEEL MULTI-GIRDER BRIDGE					
TYPICAL PIER PLAN & ELEVATION					
RECOMMENDED _____				SHEET <u>6</u> OF _____	
				S-40918 (NB) S-40966 (SB)	

NOTES:

- PIER DESIGN TO BE FINALIZED DURING FINAL DESIGN.
- FOUNDATION TYPE(S) ARE TO BE DETERMINED DURING FINAL DESIGN. FOUNDATION TYPES INDICATED ARE NOT TO BE USED FOR BIDDING PURPOSES.

2/12/2025
FILENAME: 43377-s-dr-tp03.dgn

DES: JAC DES CKD: AMV DWG: MKB DWG CKD: EMG



STAGING PLAN - STAGE 1C
20 0 20 40 FEET
1"=40'

CONSTRUCTION SEQUENCE NOTES:

COMPLETE STAGES 1A & 1B

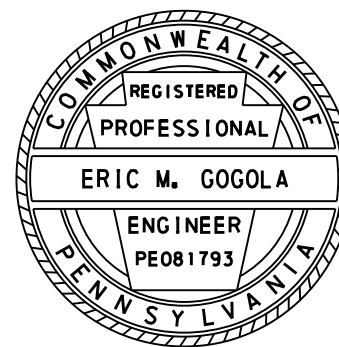
STAGE 1C

1. CONSTRUCT ACCESS ROADS, ROCK CAUSEWAY ENTRANCE, AND TRESTLE TO WESTERN PORTION OF THE NORTHBOUND STRUCTURE.
2. INSTALL TRAFFIC CONTROL TO MAINTAIN THREE (3) NORTHBOUND LANES OF TRAFFIC.
3. DEMO PORTION OF EXISTING NORTHBOUND STRUCTURE AS NECESSARY TO FACILITATE PLACEMENT OF PROPOSED NORTHBOUND STRUCTURE.
4. PLACE TEMPORARY EXCAVATION SUPPORT AND PROTECTION SYSTEM AND COFFERDAMS. EXCAVATE AS NECESSARY FOR FOUNDATION PLACEMENT.
5. PLACE WESTERN PORTION OF NORTHBOUND SUBSTRUCTURE.
6. PLACE WESTERN PORTION OF NORTHBOUND SUPERSTRUCTURE.

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 0083 PREVIOUSLY KNOWN AS LR 767
BMS STR ID# 22-0083-0414-2378 (NB)
22-0083-0415-2340 (SB)
MPMS/ECMS PROJ# 113754
BRKEY# 69031 (NB)
69085 (SB)

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SUITE 300
HARRISBURG, PA 17110

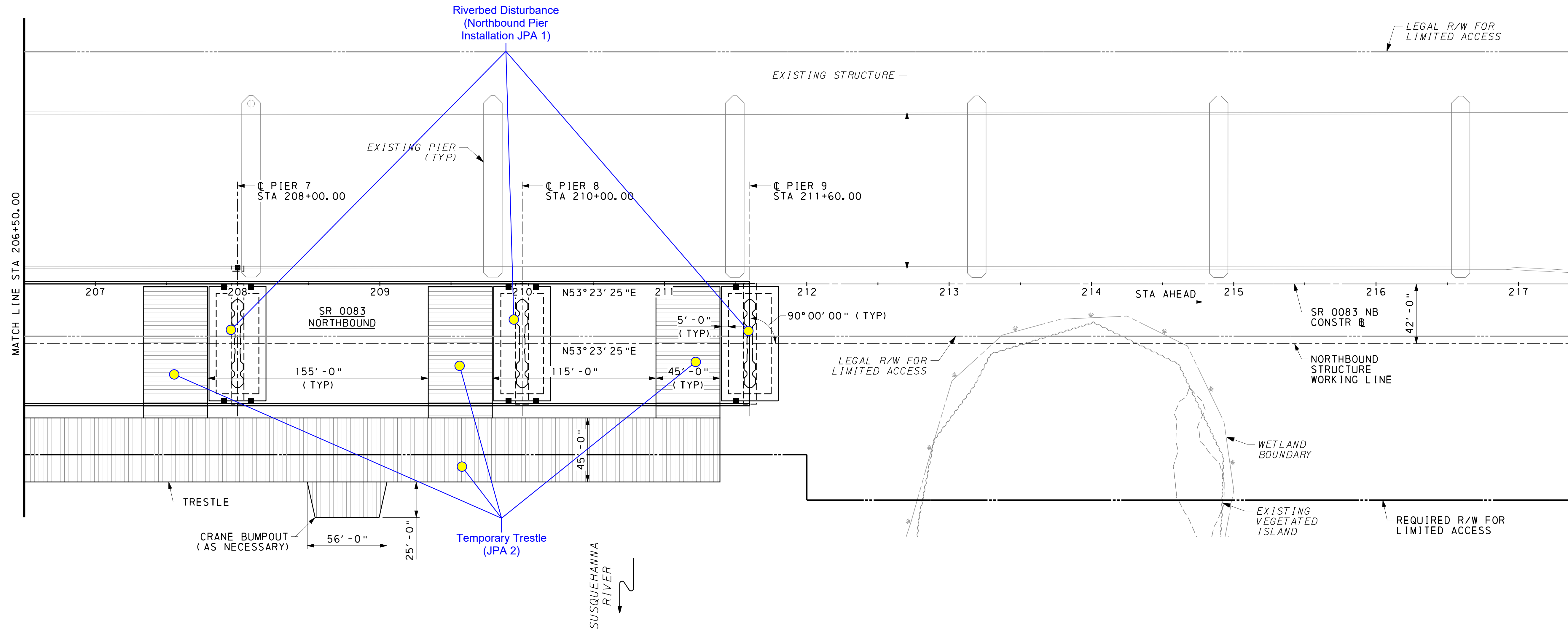
COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

CUMBERLAND AND DAUPHIN COUNTIES
SR 0083 SECTION 094
SR 0083 NB SEG 0414 OFFSET 2378
SR 0083 SB SEG 0415 OFFSET 2340
SR 0083 NB STA 197+11.81 SR 0083 SB STA 196+77.25
OVER LOWTHER ST, NSRC & SUSQUEHANNA RIVER
19-SPAN CONTINUOUS STEEL MULTI-GIRDER BRIDGE

STAGING PLAN - 1

RECOMMENDED _____ SHEET 7 OF _____

S-40918 (NB)
S-40966 (SB)



STAGING PLAN - STAGE 1C

20 0 20 40 FEET

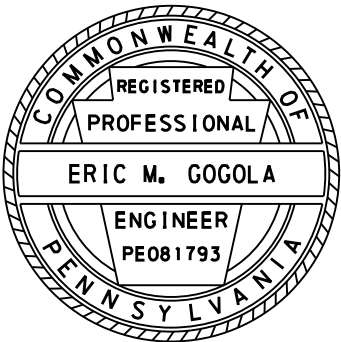
1"=40'

Mark	Description	By	Chk'd	Rec'd	Date
REVISIONS					

SR 0083 PREVIOUSLY KNOWN AS LR 767
BMS STR ID# 22-0083-0414-2378 (NB)
22-0083-0415-2340 (SB)

MPMS/ECMS PROJ# 113754
BRKEY# 69031 (NB)
69085 (SB)

HNTB

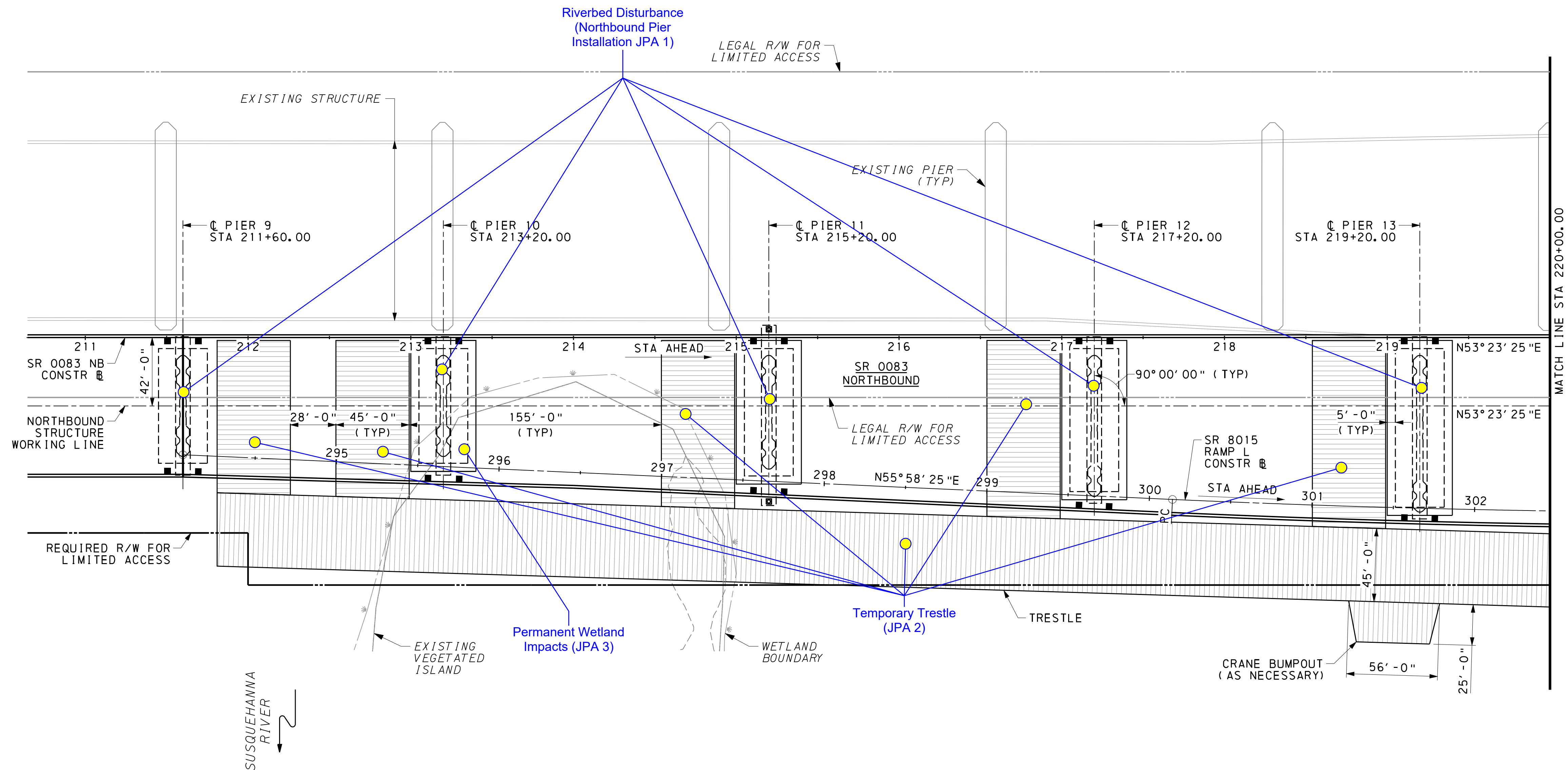
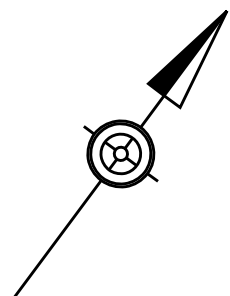


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SUITE 300
HARRISBURG, PA 17110

COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF TRANSPORTATION	
CUMBERLAND AND DAUPHIN COUNTIES SR 0083 SECTION 094 SR 0083 NB SEG 0414 OFFSET 2378 SR 0083 SB SEG 0415 OFFSET 2340 SR 0083 NB STA 197+11.81 SR 0083 SB STA 196+77.25 OVER LOWTHER ST, NSRC & SUSQUEHANNA RIVER 19-SPAN CONTINUOUS STEEL MULTI-GIRDER BRIDGE	
STAGING PLAN - 2	
RECOMMENDED _____	SHEET 8 OF _____
	S-40918 (NB) S-40966 (SB)

REFERENCES:
STAGE 1 NOTES

SHEETS:
07



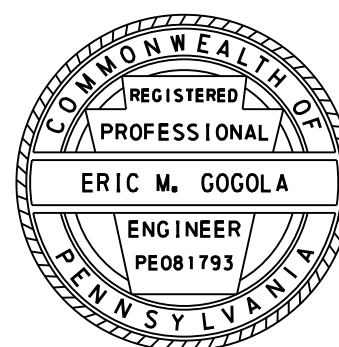
STAGING PLAN - STAGE 1C-2
20 0 20 40 FEET
1"=40'

Mark	Description	By	Chk'd	Rec'd	Date
REVISIONS					

SR 0083 PREVIOUSLY KNOWN AS LR 767
BMS STR ID: 22-0083-0414-2378 (NB)
22-0083-0415-2340 (SB)

MPMS/ECMS PROJ: 113754
BRKEY: 69031 (NB)
69085 (SB)

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COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

CUMBERLAND AND DAUPHIN COUNTIES
SR 0083 SECTION 094
SR 0083 NB SEG 0414 OFFSET 2378
SR 0083 SB SEG 0415 OFFSET 2340
SR 0083 NB STA 197+11.81 SR 0083 SB STA 196+77.25
OVER LOWTHER ST, NSRC & SUSQUEHANNA RIVER
19-SPAN CONTINUOUS STEEL MULTI-GIRDER BRIDGE

STAGING PLAN - 3

RECOMMENDED _____

SHEET 9 OF _____

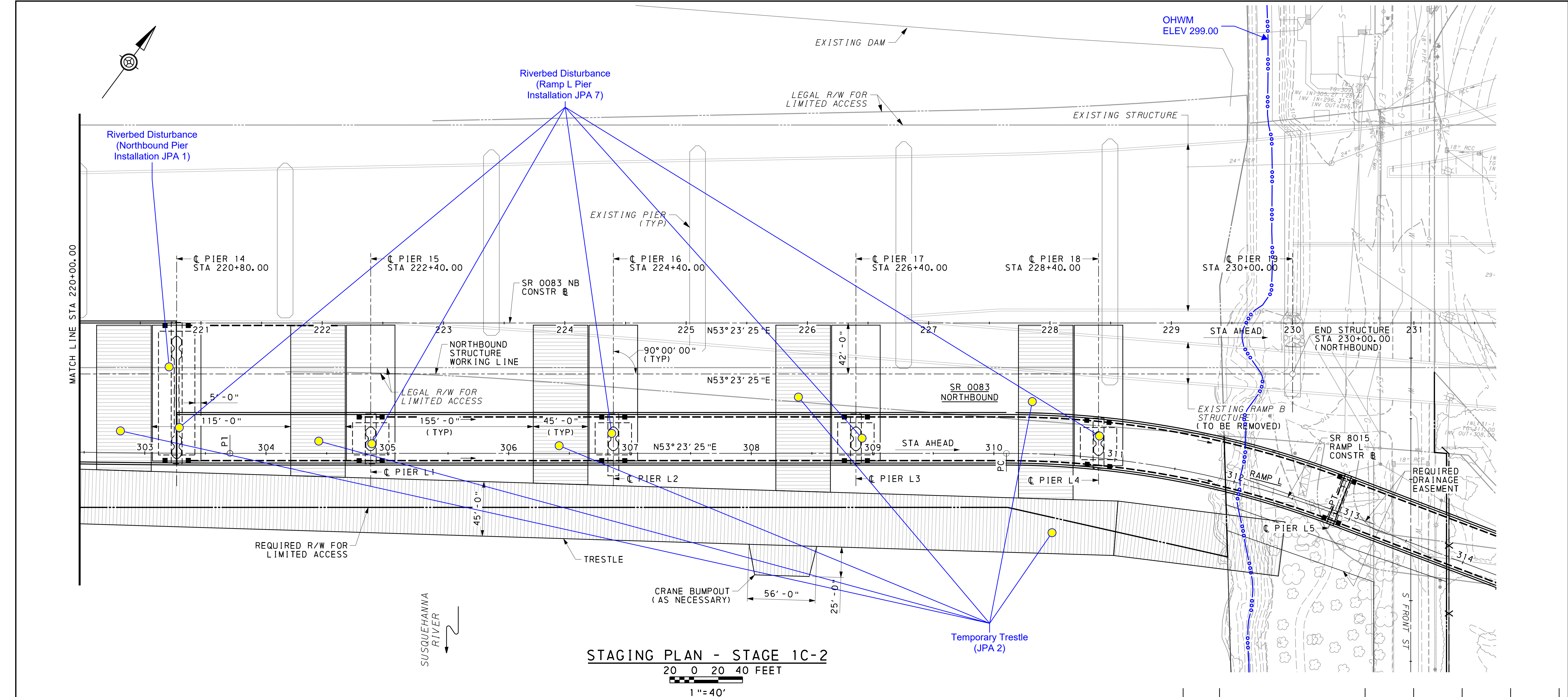
S-40918 (NB)
S-40966 (SB)

REFERENCES:
STAGE 1C-2 NOTES

SHEETS:
10

2/12/2025 4:33:17 PM s-br-sig03.dgn

DES: MKB DES CKD: EMG DWG: MKB DWG CKD: EMG



CONSTRUCTION SEQUENCE NOTES:

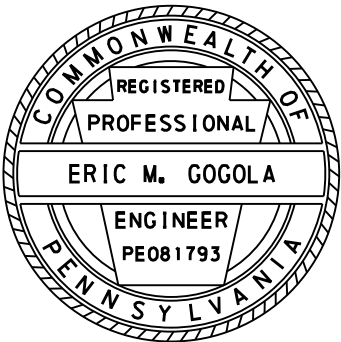
- STAGE 1C-2
1. REMOVE WESTERN PORTION OF THE TRESTLE, TEMPORARY EXCAVATION SUPPORT AND PROTECTION SYSTEM AND COFFERDAMS. ROCK CAUSEWAY AT WESTERN SHORE TO REMAIN.
 2. CONSTRUCT ACCESS RAMPS AND TRESTLE TO EASTERN PORTION OF THE NORTHBOUND STRUCTURE.
 3. REMOVE, AS NECESSARY, PORTIONS OF THE EXISTING NORTHBOUND MAINLINE SUBSTRUCTURE AND SUPERSTRUCTURE TO FACILITATE CONSTRUCTION.
 4. PLACE TEMPORARY EXCAVATION SUPPORT AND PROTECTION SYSTEM AND COFFERDAMS FROM PIER 10 TO PIER 14 AND FOR ALL RAMP L SUBSTRUCTURE UNITS. EXCAVATE AS NECESSARY FOR FOUNDATION PLACEMENT.
 5. PLACE EASTERN PORTION OF NORTHBOUND SUBSTRUCTURE, PIER 10 TO PIER 14 AND ALL RAMP L SUBSTRUCTURE UNITS.
 6. PLACE EASTERN PORTION OF NORTHBOUND SUPERSTRUCTURE, FROM PIER 10 TO PIER 14 AND RAMP L IN ITS ENTIRETY.

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 0083 PREVIOUSLY KNOWN AS LR 767
BMS STR ID# 22-0083-0414-2378 (NB)
22-0083-0415-2340 (SB)

MPMS/ECMS PROJ# 113754
BRKEY# 69031 (NB)
69085 (SB)

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COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

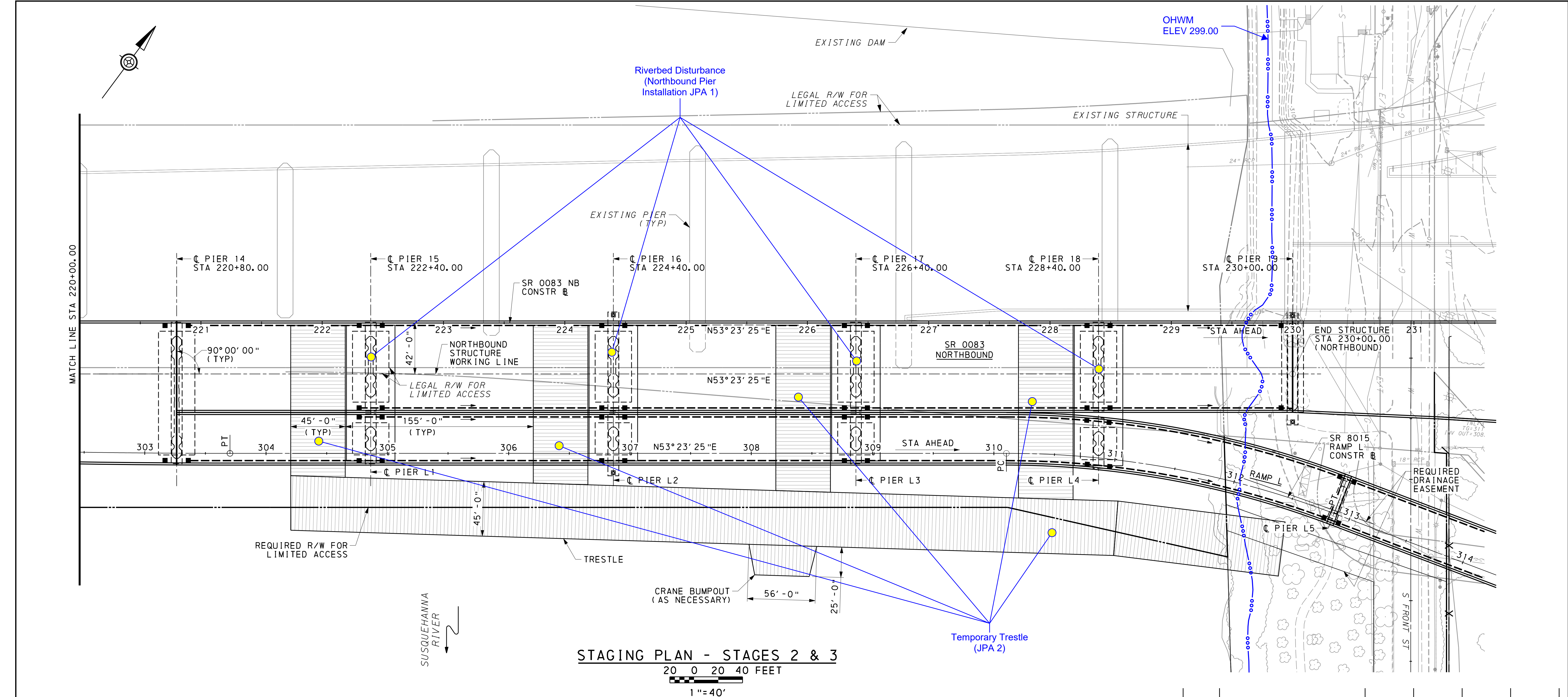
CUMBERLAND AND DAUPHIN COUNTIES
SR 0083 SECTION 094
SR 0083 NB SEG 0414 OFFSET 2378
SR 0083 SB SEG 0415 OFFSET 2340
SR 0083 NB STA 197+11.81 SR 0083 SB STA 196+77.25
OVER LOWTHER ST, NSRC & SUSQUEHANNA RIVER
19-SPAN CONTINUOUS STEEL MULTI-GIRDER BRIDGE

STAGING PLAN - 4

RECOMMENDED _____

SHEET 10 OF _____

S-40918 (NB)
S-40966 (SB)



STAGING PLAN - STAGES 2 & 3

20 0 20 40 FEET
1"=40'

CONSTRUCTION SEQUENCE NOTES:

STAGE 2

1. SHIFT EXISTING RAMP B TRAFFIC ONTO NEWLY CONSTRUCTED RAMP L.
2. REMOVE, AS NECESSARY, PORTIONS OF THE EXISTING NORTHBOUND MAINLINE AND RAMP B SUBSTRUCTURE AND SUPERSTRUCTURE TO FACILITATE CONSTRUCTION.

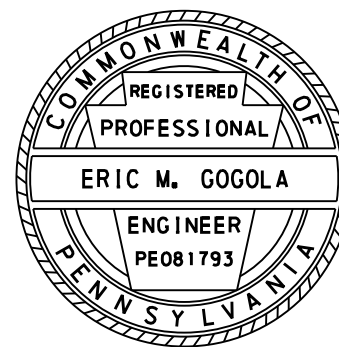
STAGE 3

3. PLACE TEMPORARY EXCAVATION SUPPORT AND PROTECTION SYSTEM AND COFFERDAMS FOR REMAINING EASTERN PORTIONS OF THE NORTHBOUND STRUCTURE. EXCAVATE AS NECESSARY FOR FOUNDATION PLACEMENT.
4. PLACE THE REMAINING EASTERN PORTION OF NORTHBOUND SUBSTRUCTURE.
5. PLACE THE REMAINING EASTERN PORTION OF NORTHBOUND SUPERSTRUCTURE.

EXISTING STRUCTURE DEMOLITION NOTES:

1. DEMOLISH EXISTING PIERS TO TOP OF ROCK OR TWO (2) FEET BELOW STREAMBED ELEVATION.
2. THE CONTRACTOR IS TO PREVENT DEBRIS FROM ENTERING THE WATERWAY. IMMEDIATELY REMOVE ANY DEBRIS THAT FALLS INTO THE RIVER DURING DEMOLITION OPERATIONS.
3. EXCAVATIONS TO REMOVE THE EXISTING FOUNDATIONS THAT EXTEND BELOW THE STREAMBED TO BE BACKFILLED WITH NATURAL STREAMBED MATERIAL.

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Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 0083 PREVIOUSLY KNOWN AS LR 767
BMS STR ID: 22-0083-0414-2378 (NB)
22-0083-0415-2340 (SB)

MPMS/ECMS PROJ: 113754
BRKEY: 69031 (NB)
69085 (SB)

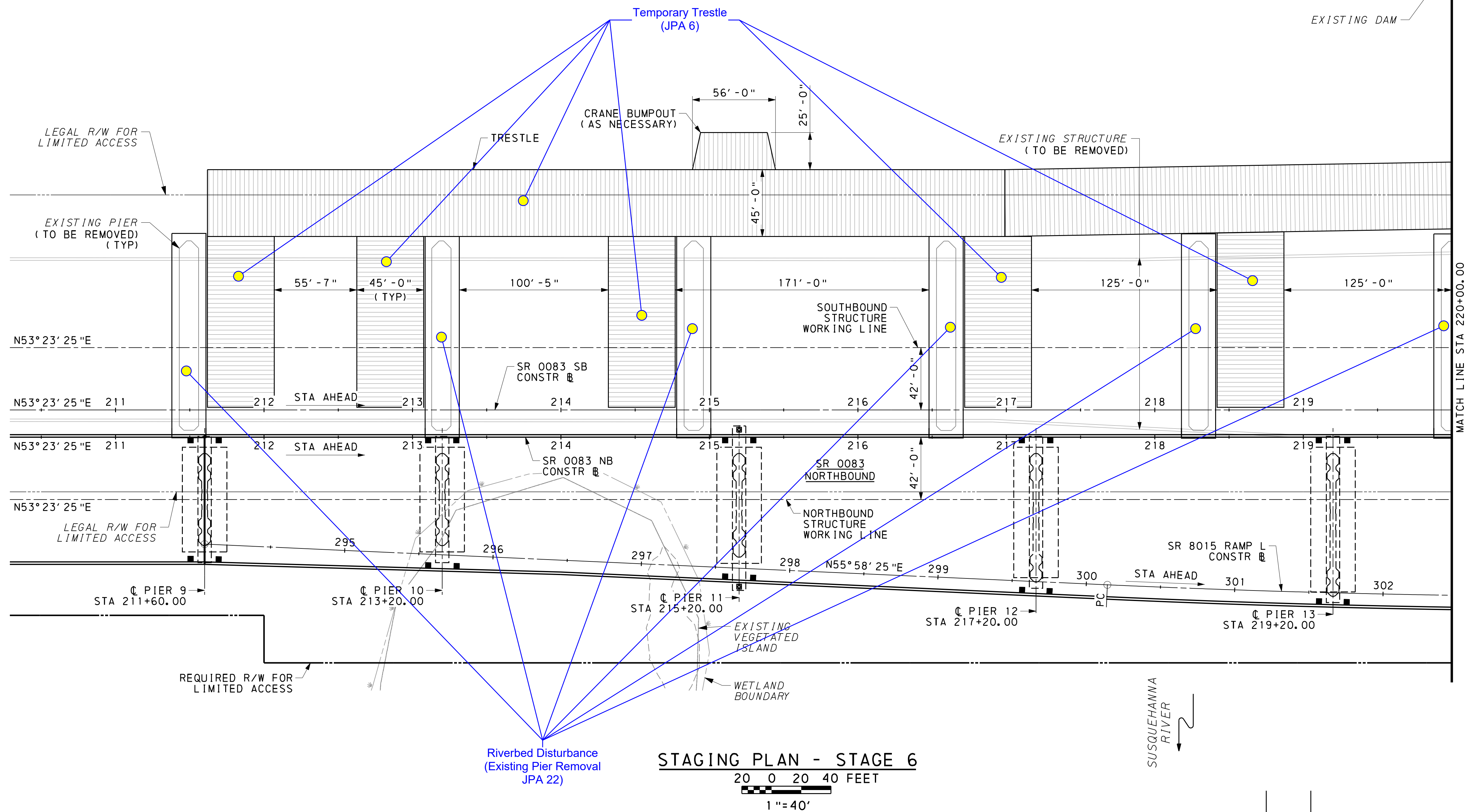
COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

CUMBERLAND AND DAUPHIN COUNTIES
SR 0083 SECTION 094
SR 0083 NB SEG 0414 OFFSET 2378
SR 0083 SB SEG 0415 OFFSET 2340
SR 0083 NB STA 197+11.81 SR 0083 SB STA 196+77.25
OVER LOWTHER ST, NSRC & SUSQUEHANNA RIVER
19-SPAN CONTINUOUS STEEL MULTI-GIRDER BRIDGE

STAGING PLAN - 5

RECOMMENDED _____ SHEET 11 OF _____

S-40918 (NB)
S-40966 (SB)



STAGING PLAN - STAGE 6
20 0 20 40 FEET
1" = 40'

CONSTRUCTION SEQUENCE NOTES:

COMPLETE STAGES 4 & 5.

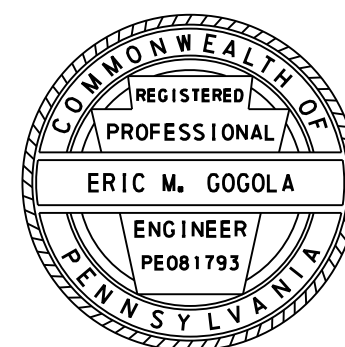
STAGE 6

1. REMOVE EASTERN PORTION OF THE NORTHBOUND TRESTLE, TEMPORARY EXCAVATION SUPPORT AND PROTECTION SYSTEM AND COFFERDAMS.
2. CONSTRUCT ACCESS RAMPS AND TRESTLE TO EASTERN PORTION OF THE SOUTHBOUND STRUCTURE.
3. SHIFT NORTHBOUND AND SOUTHBOUND TRAFFIC FROM EXISTING STRUCTURE TO NEWLY CONSTRUCTED NORTHBOUND STRUCTURE.
4. DEMO REMAINING EASTERN PORTIONS OF THE EXISTING NORTHBOUND AND SOUTHBOUND STRUCTURE.

EXISTING STRUCTURE DEMOLITION NOTES:

1. DEMOLISH EXISTING PIERS TO TOP OF ROCK OR TWO (2) FEET BELOW STREAMBED ELEVATION.
2. THE CONTRACTOR IS TO PREVENT DEBRIS FROM ENTERING THE WATERWAY. IMMEDIATELY REMOVE ANY DEBRIS THAT FALLS INTO THE RIVER DURING DEMOLITION OPERATIONS.
3. EXCAVATIONS TO REMOVE THE EXISTING FOUNDATIONS THAT EXTEND BELOW THE STREAMBED TO BE BACKFILLED WITH NATURAL STREAMBED MATERIAL.

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4507 NORTH FRONT STREET
SUITE 300
HARRISBURG, PA 17110

Mark	Description	By	Chk'd	Rec'd	Date
REVISIONS					

SR 0083 PREVIOUSLY KNOWN AS LR 767
BMS STR ID# 22-0083-0414-2378 (NB)
22-0083-0415-2340 (SB)

MPMS/ECMS PROJ# 113754
BRKEY# 69031 (NB)
69085 (SB)

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

CUMBERLAND AND DAUPHIN COUNTIES
SR 0083 SECTION 094
SR 0083 NB SEG 0414 OFFSET 2378
SR 0083 SB SEG 0415 OFFSET 2340
SR 0083 NB STA 197+11.81 SR 0083 SB STA 196+77.25
OVER LOWTHER ST, NSRC & SUSQUEHANNA RIVER
19-SPAN CONTINUOUS STEEL MULTI-GIRDER BRIDGE

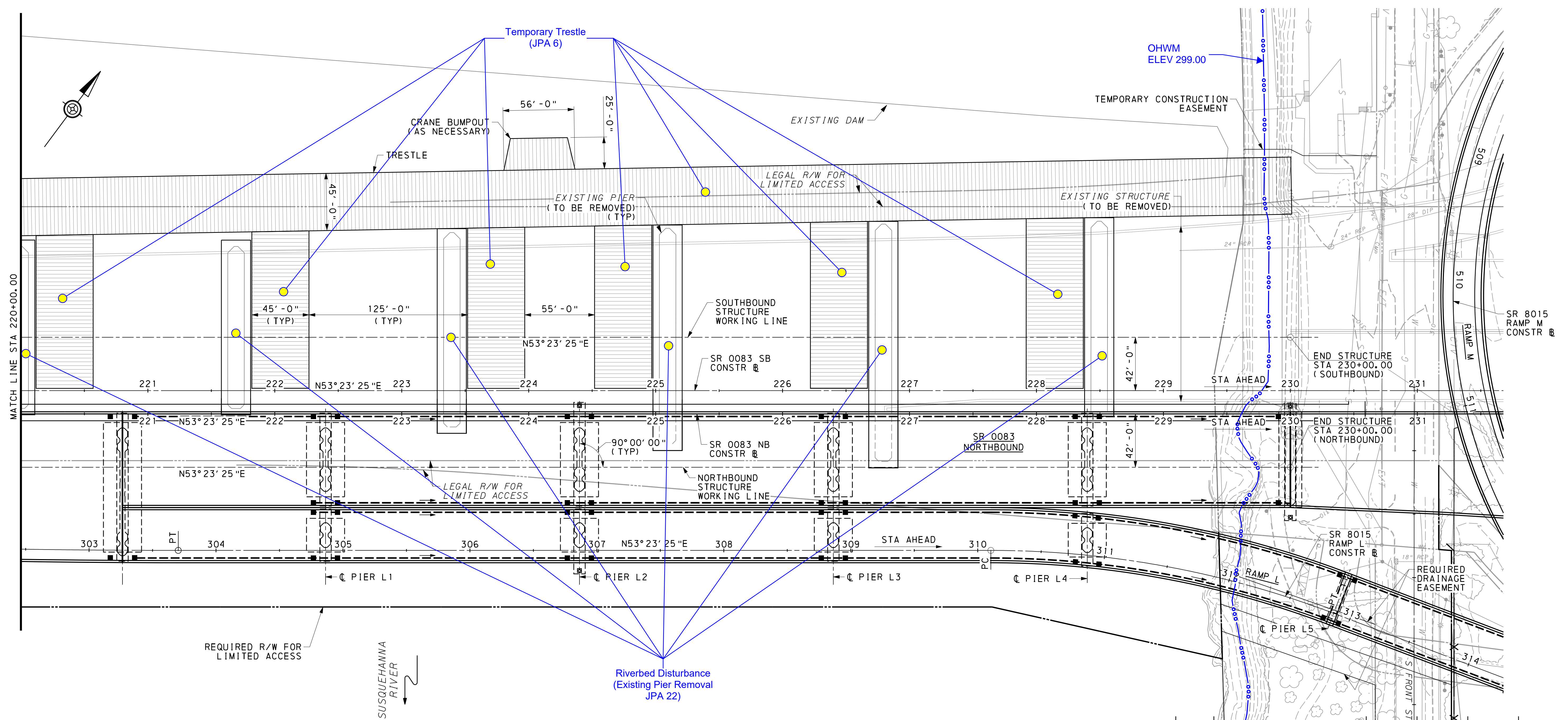
STAGING PLAN - 6

RECOMMENDED _____

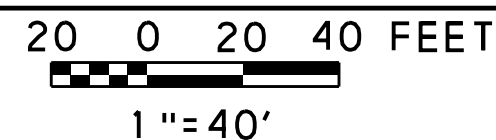
SHEET 12 OF ____

S-40918 (NB)
S-40966 (SB)

2/12/2025 4:33:77 s-br-sig07a.dgn



STAGING PLAN - STAGE 6

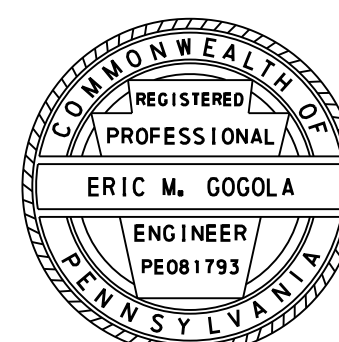


Mark	Description	By	Chk' d	Recm' d	Date
REVISIONS					

SR 0083 PREVIOUSLY KNOWN AS LR 767
BMS STR ID: 22-0083-0414-2378 (NB)
22-0083-0415-2340 (SB)

MPMS/ECMS PROJ: 113754
BRKEY: 69031 (NB)
69085 (SB)

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SUITE 300
HARRISBURG, PA 17110

REFERENCES:
STAGE 6 NOTES

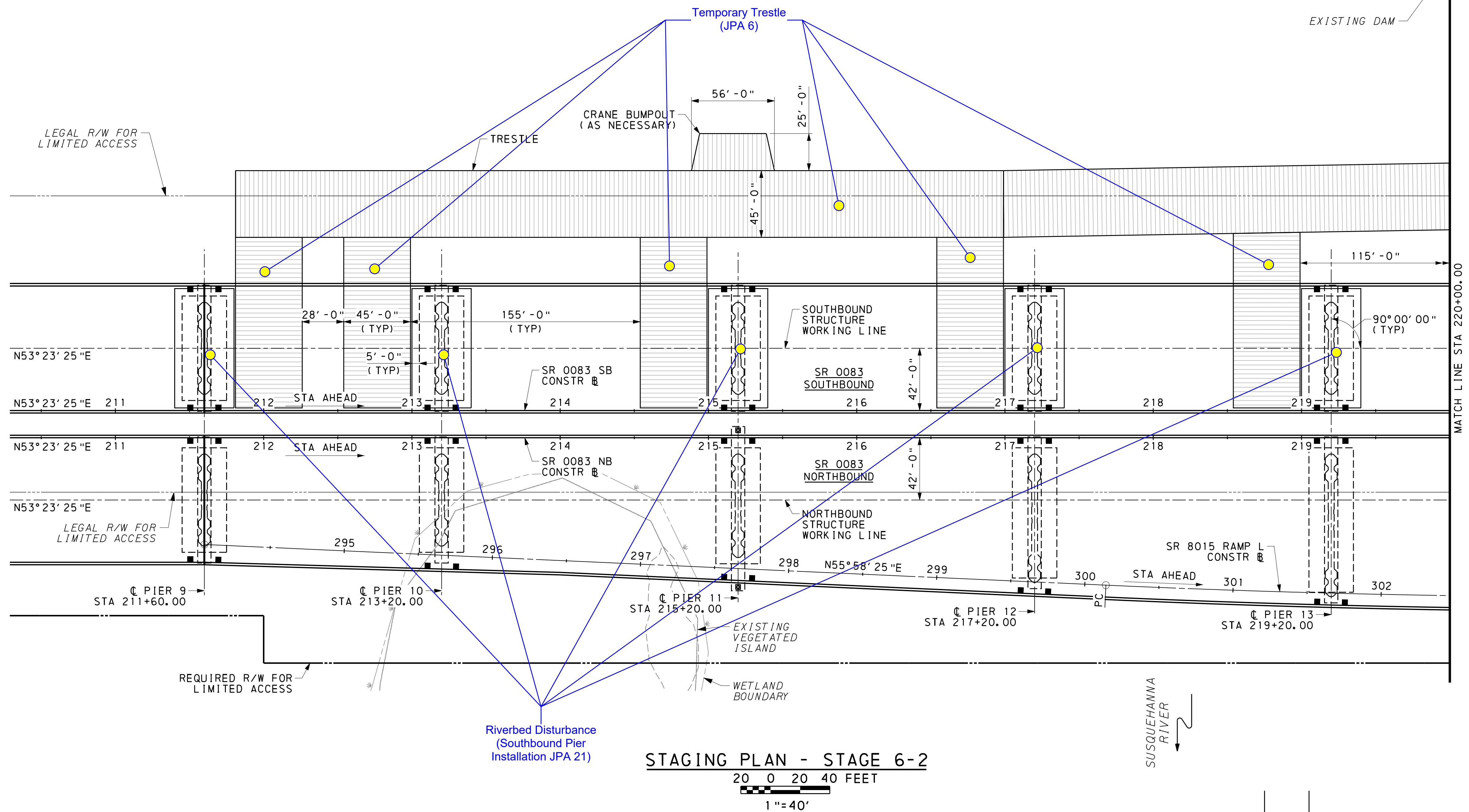
SHEETS:
12

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

CUMBERLAND AND DAUPHIN COUNTIES
SR 0083 SECTION 094
SR 0083 NB SEG 0414 OFFSET 2378
SR 0083 SB SEG 0415 OFFSET 2340
SR 0083 NB STA 197+11.81 SR 0083 SB STA 196+77.25
OVER LOWTHER ST, NSRC & SUSQUEHANNA RIVER
19-SPAN CONTINUOUS STEEL MULTI-GIRDER BRIDGE

STAGING PLAN - 7

RECOMMENDED _____
SHEET 13 OF _____
S-40918 (NB)
S-40966 (SB)



STAGING PLAN - STAGE 6-2
20 0 20 40 FEET
1"=40'

CONSTRUCTION SEQUENCE NOTES:

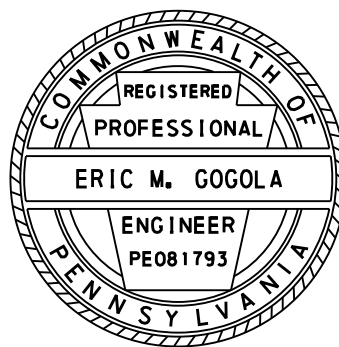
STAGE 6-2

1. PLACE TEMPORARY EXCAVATION SUPPORT AND PROTECTION SYSTEM AND COFFERDAMS. EXCAVATE AS NECESSARY FOR FOUNDATION PLACEMENT.
2. PLACE EASTERN PORTION OF SOUTHBOUND SUBSTRUCTURE.
3. PLACE EASTERN PORTION OF SOUTHBOUND SUPERSTRUCTURE.

EXISTING STRUCTURE DEMOLITION NOTES:

1. DEMOLISH EXISTING PIERS TO TOP OF ROCK OR TWO (2) FEET BELOW STREAMBED ELEVATION.
2. THE CONTRACTOR IS TO PREVENT DEBRIS FROM ENTERING THE WATERWAY. IMMEDIATELY REMOVE ANY DEBRIS THAT FALLS INTO THE RIVER DURING DEMOLITION OPERATIONS.
3. EXCAVATIONS TO REMOVE THE EXISTING FOUNDATIONS THAT EXTEND BELOW THE STREAMBED TO BE BACKFILLED WITH NATURAL STREAMBED MATERIAL.

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HNTB CORPORATION
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SUITE 300
HARRISBURG, PA 17110

Mark	Description	By	Chk'd	Rec'd	Date
REVISIONS					

SR 0083 PREVIOUSLY KNOWN AS LR 767
BMS STR ID# 22-0083-0414-2378 (NB)
22-0083-0415-2340 (SB)

MPMS/ECMS PROJ# 113754
BRKEY# 69031 (NB)
69085 (SB)

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

CUMBERLAND AND DAUPHIN COUNTIES
SR 0083 SECTION 094
SR 0083 NB SEG 0414 OFFSET 2378
SR 0083 SB SEG 0415 OFFSET 2340
SR 0083 NB STA 197+11.81 SR 0083 SB STA 196+77.25
OVER LOWTHER ST, NSRC & SUSQUEHANNA RIVER
19-SPAN CONTINUOUS STEEL MULTI-GIRDER BRIDGE

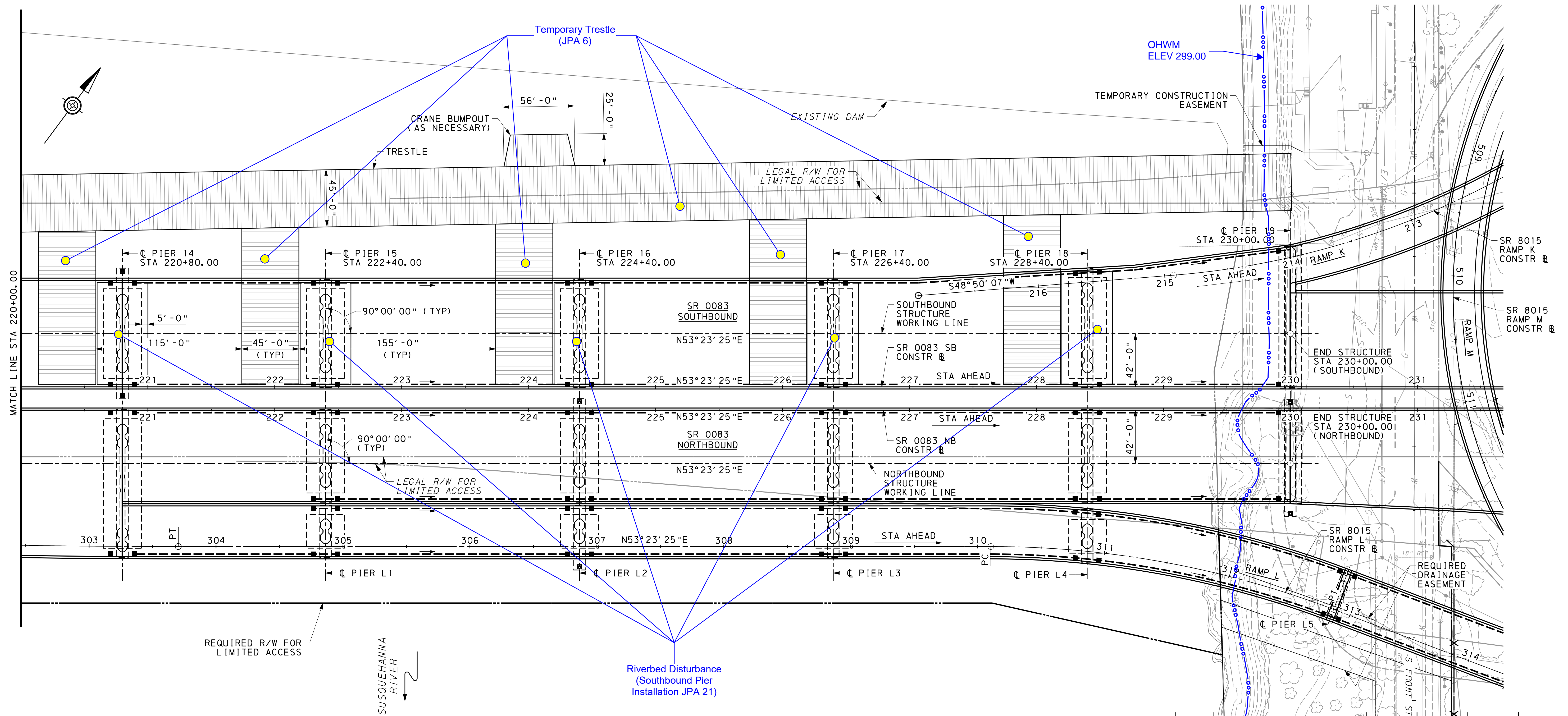
STAGING PLAN - 8

RECOMMENDED _____

SHEET 14 OF _____

S-40918 (NB)
S-40966 (SB)

2/12/2025 4:33:77 s-br-s-g07b.dgn

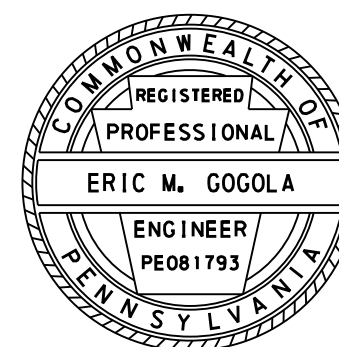


STAGING PLAN - STAGE 6-2
20 0 20 40 FEET
1"=40'

Mark	Description	By	Chk' d	Recm' d	Date
REVISIONS					

SR 0083 PREVIOUSLY KNOWN AS LR 767
BMS STR ID: 22-0083-0414-2378 (NB)
22-0083-0415-2340 (SB)
MPMS/ECMS PROJ: 113754
BRKEY: 69031 (NB)
69085 (SB)

HNTB



PREPARED BY:
HNTB CORPORATION
4507 NORTH FRONT STREET
SUITE 300
HARRISBURG, PA 17110

REFERENCES:
STAGE 6-2 NOTES

SHEETS:
14

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

CUMBERLAND AND DAUPHIN COUNTIES
SR 0083 SECTION 094
SR 0083 NB SEG 0414 OFFSET 2378
SR 0083 SB SEG 0415 OFFSET 2340
SR 0083 NB STA 197+11.81 SR 0083 SB STA 196+77.25
OVER LOWTHER ST, NSRC & SUSQUEHANNA RIVER
19-SPAN CONTINUOUS STEEL MULTI-GIRDER BRIDGE

STAGING PLAN - 9

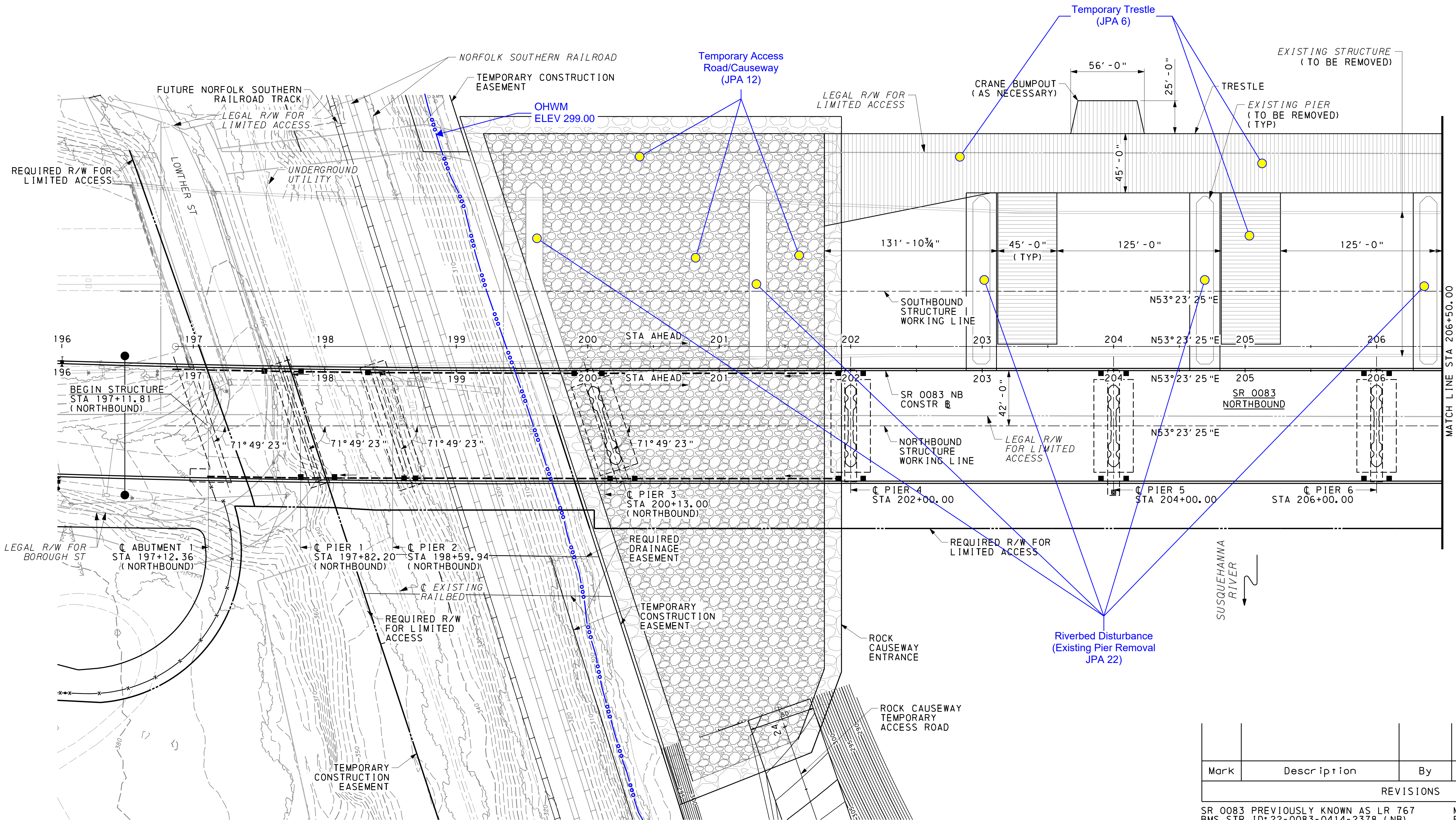
RECOMMENDED _____

SHEET 15 OF _____

S-40918 (NB)
S-40966 (SB)

DES: MKB DES CKD: EMG DWG: MKB DWG CKD: EMG

2/12/2025
FILENAME: 43377-S-BR-S1008a.dgn



STAGING PLAN - STAGE 7

20 0 20 40 FEET

1" = 40'

CONSTRUCTION SEQUENCE NOTES:

STAGE 7

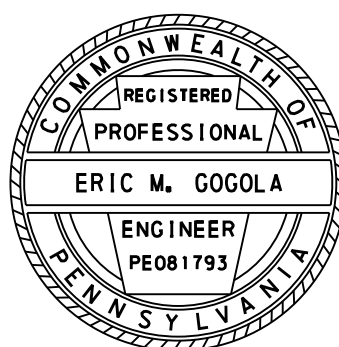
1. REMOVE THE EASTERN PORTION OF THE SOUTHBOUND TRESTLE, TEMPORARY EXCAVATION SUPPORT AND PROTECTION SYSTEM AND COFFERDAMS.
2. CONSTRUCT TRESTLE TO WESTERN PORTION OF THE SOUTHBOUND STRUCTURE.
3. DEMO REMAINING WESTERN PORTION OF EXISTING NORTHBOUND AND SOUTHBOUND STRUCTURE.

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 0083 PREVIOUSLY KNOWN AS LR 767
BMS STR ID: 22-0083-0414-2378 (NB)
22-0083-0415-2340 (SB)

MPMS/ECMS PROJ: 113754
BRKEY: 69031 (NB)
69085 (SB)

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HNTB CORPORATION
4507 NORTH FRONT STREET
SUITE 300
HARRISBURG, PA 17110

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

CUMBERLAND AND DAUPHIN COUNTIES
SR 0083 SECTION 094
SR 0083 NB SEG 0414 OFFSET 2378
SR 0083 SB SEG 0415 OFFSET 2340
SR 0083 NB STA 197+11.81 SR 0083 SB STA 196+77.25
OVER LOWTHER ST, NSRC & SUSQUEHANNA RIVER
19-SPAN CONTINUOUS STEEL MULTI-GIRDER BRIDGE

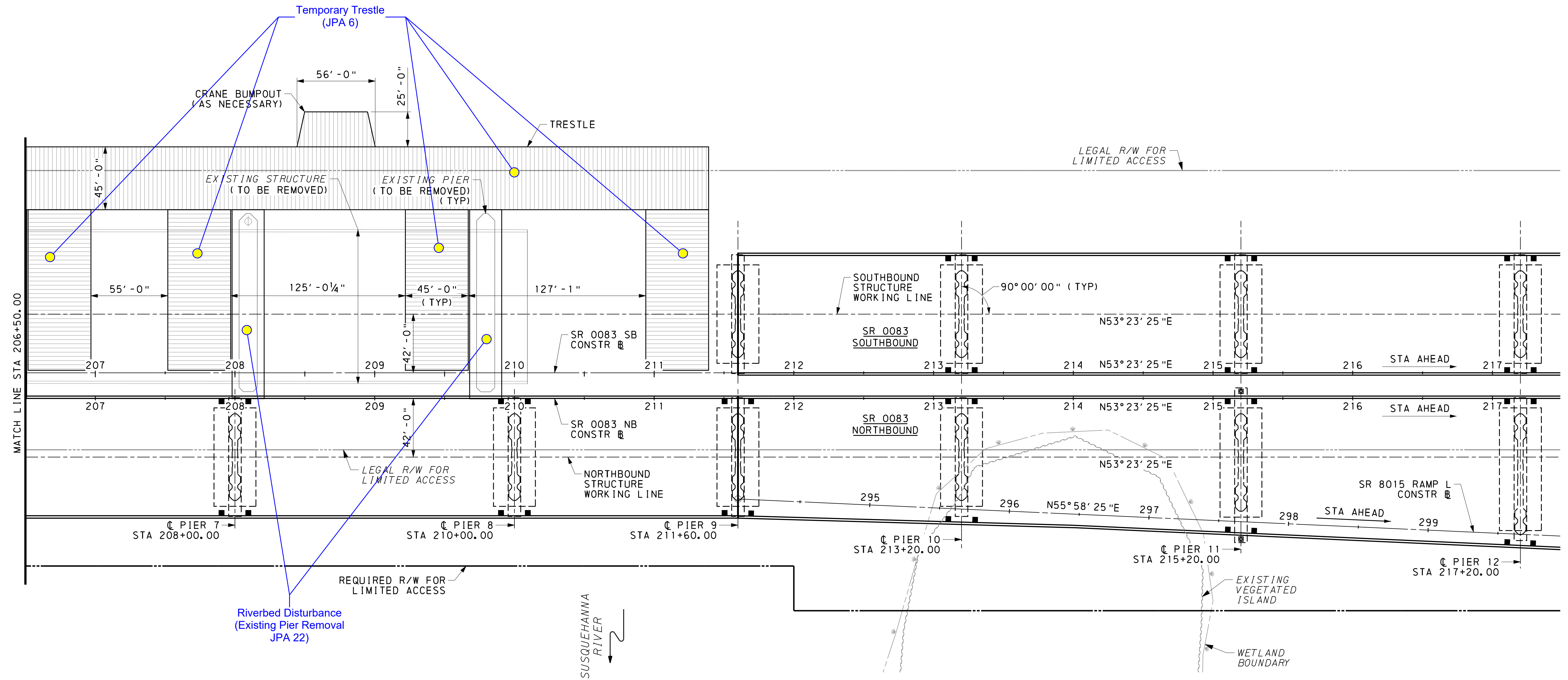
STAGING PLAN - 10

RECOMMENDED _____

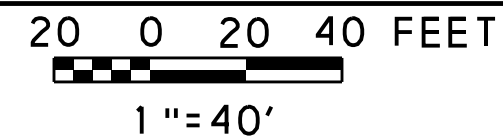
SHEET 16 OF _____

S-40918 (NB)
S-40966 (SB)

DES: MKB DES CKD: EMG DWG: MKB DWG CKD: EMG



STAGING PLAN - STAGE 7

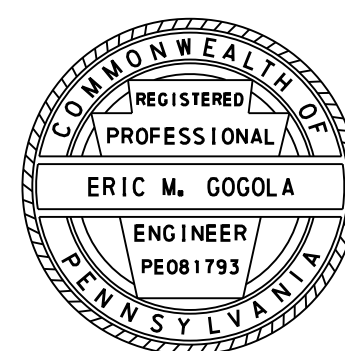


Mark	Description	By	Chk' d	Recm' d	Date
REVISIONS					

SR 0083 PREVIOUSLY KNOWN AS LR 767
BMS STR ID# 22-0083-0414-2378 (NB)
22-0083-0415-2340 (SB)

MPMS/ECMS PROJ# 113754
BRKEY# 69031 (NB)
69085 (SB)

HNTB



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HNTB CORPORATION
4507 NORTH FRONT STREET
SUITE 300
HARRISBURG, PA 17110

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

CUMBERLAND AND DAUPHIN COUNTIES
SR 0083 SECTION 094
SR 0083 NB SEG 0414 OFFSET 2378
SR 0083 SB SEG 0415 OFFSET 2340
SR 0083 NB STA 197+11.81 SR 0083 SB STA 196+77.25
OVER LOWTHER ST, NSRC & SUSQUEHANNA RIVER
19-SPAN CONTINUOUS STEEL MULTI-GIRDER BRIDGE

STAGING PLAN - 11

RECOMMENDED _____

SHEET 17 OF ____

S-40918 (NB)
S-40966 (SB)

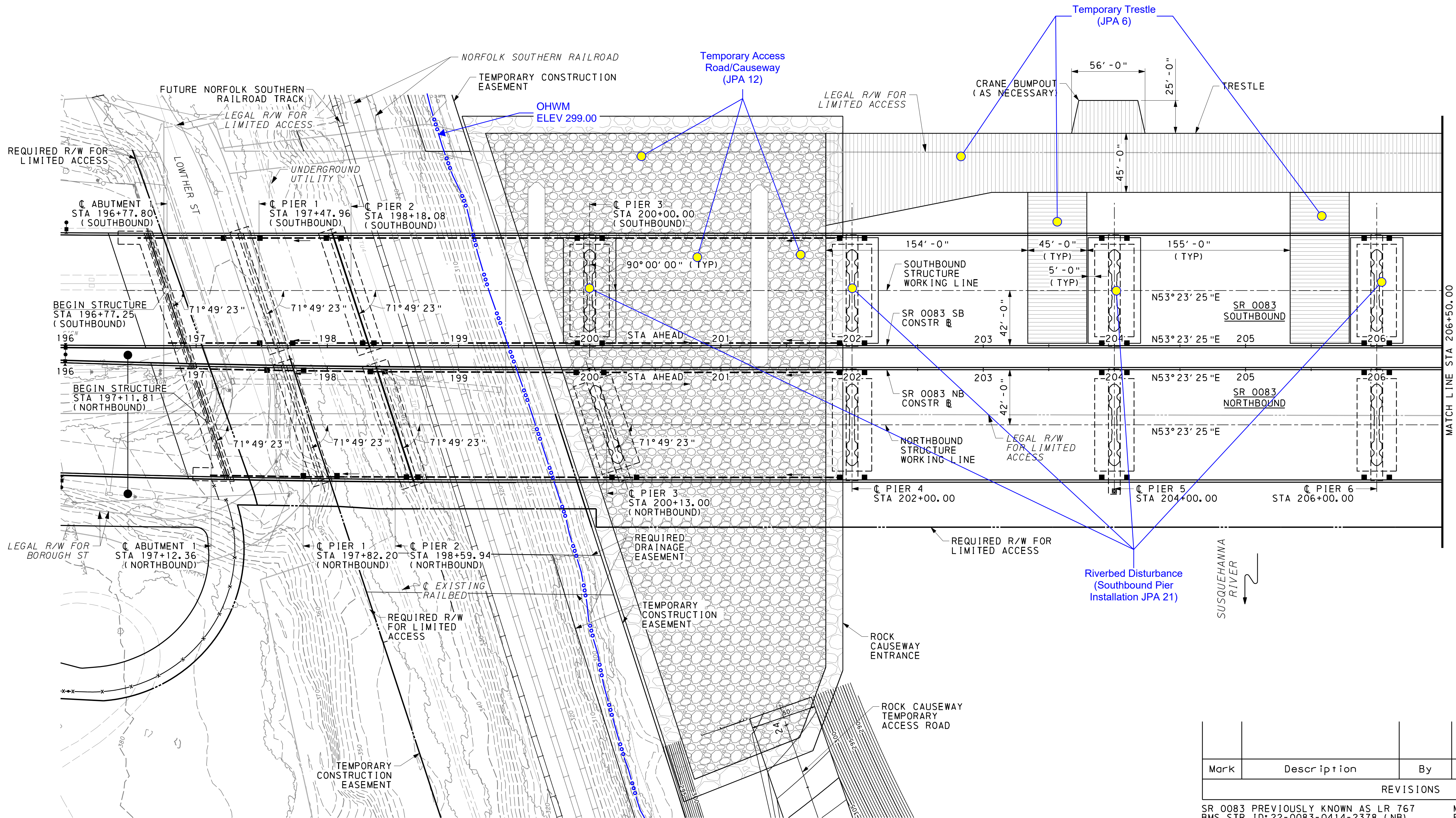
REFERENCES:
STAGE 7 NOTES

SHEETS:
16

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DES: MKB DES CKD: EMG DWG: MKB DWG CKD: EMG

2/12/2025
FILENAME: 43377-S-DR-SIG08b.dgn



CONSTRUCTION SEQUENCE NOTES:

STAGE 7-2

1. PLACE TEMPORARY EXCAVATION SUPPORT AND PROTECTION SYSTEM AND COFFERDAMS. EXCAVATE AS NECESSARY FOR FOUNDATION PLACEMENT.
2. PLACE WESTERN PORTION OF SOUTHBOUND SUBSTRUCTURE.
3. PLACE WESTERN PORTION OF SOUTHBOUND SUPERSTRUCTURE.
4. SHIFT SOUTHBOUND TRAFFIC FROM NORTHBOUND STRUCTURE TO SOUTHBOUND STRUCTURE.
5. REMOVE TEMPORARY EXCAVATION SUPPORT AND PROTECTION SYSTEM, COFFERDAMS, ROCK CAUSEWAY ENTRANCE, AND ACCESS ROADS.

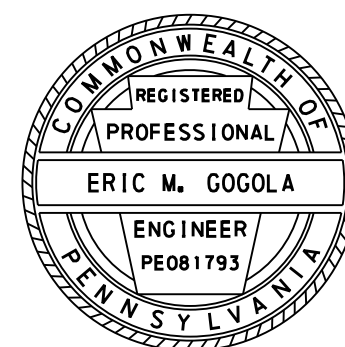
DES: MKB | DES CKD: EMG | DWG: MKB | DWG CKD: EMG

STAGING PLAN - STAGE 7-2

20 0 20 40 FEET

1" = 40'

HNTB



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HNTB CORPORATION
4507 NORTH FRONT STREET
SUITE 300
HARRISBURG, PA 17110

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 0083 PREVIOUSLY KNOWN AS LR 767
BMS STR ID# 22-0083-0414-2378 (NB)
22-0083-0415-2340 (SB)

MPMS/ECMS PROJ# 113754
BRKEY# 69031 (NB)
69085 (SB)

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

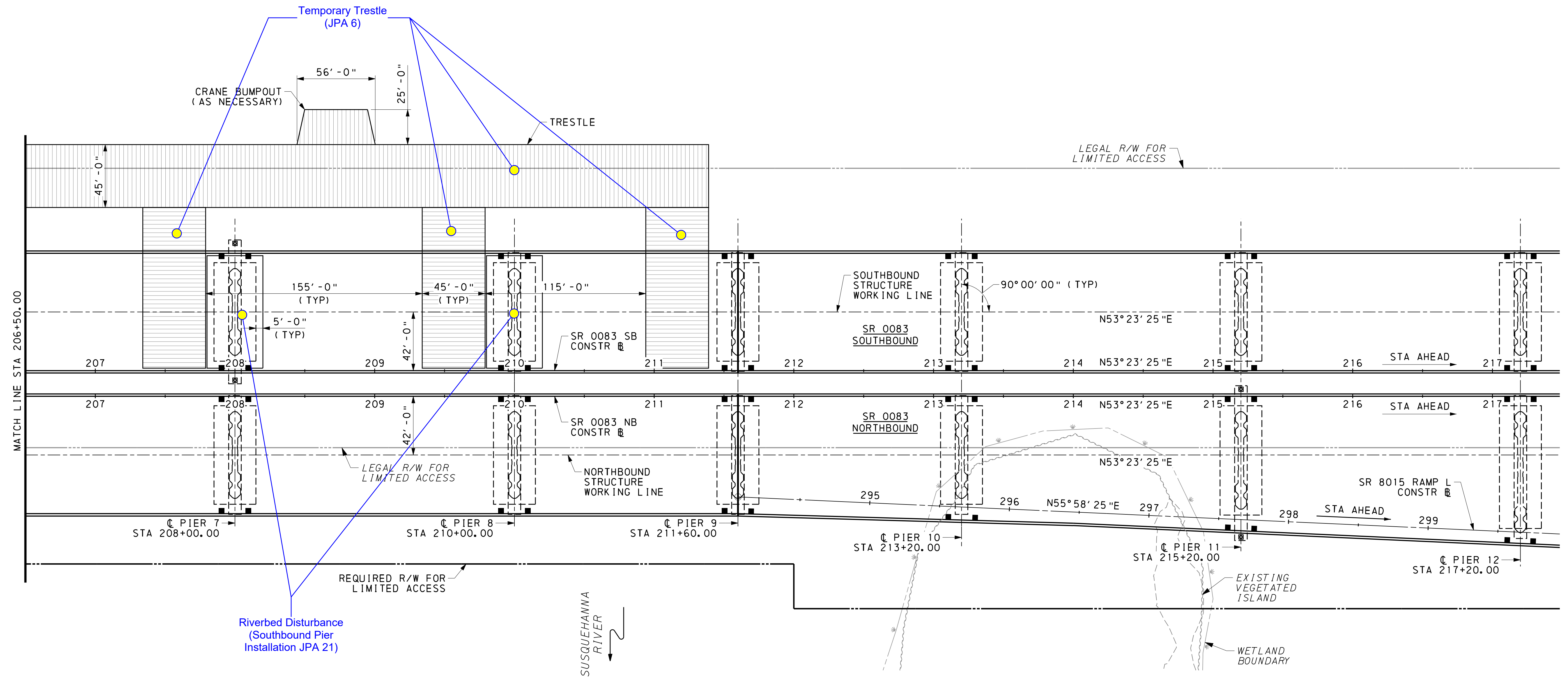
CUMBERLAND AND DAUPHIN COUNTIES
SR 0083 SECTION 094
SR 0083 NB SEG 0414 OFFSET 2378
SR 0083 SB SEG 0415 OFFSET 2340
SR 0083 NB STA 197+11.81 SR 0083 SB STA 196+77.25
OVER LOWTHER ST, NSRC & SUSQUEHANNA RIVER
19-SPAN CONTINUOUS STEEL MULTI-GIRDER BRIDGE

STAGING PLAN - 12

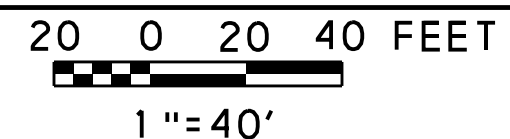
RECOMMENDED _____

SHEET 18 OF _____

S-40918 (NB)
S-40966 (SB)



STAGING PLAN - STAGE 7-2

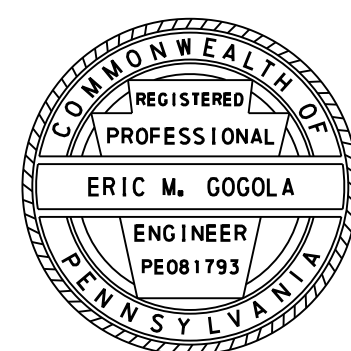


Mark	Description	By	Chk' d	Recm' d	Date
REVISIONS					

SR 0083 PREVIOUSLY KNOWN AS LR 767
BMS STR ID# 22-0083-0414-2378 (NB)
22-0083-0415-2340 (SB)

MPMS/ECMS PROJ# 113754
BRKEY# 69031 (NB)
69085 (SB)

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HNTB CORPORATION
4507 NORTH FRONT STREET
SUITE 300
HARRISBURG, PA 17110

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

CUMBERLAND AND DAUPHIN COUNTIES
SR 0083 SECTION 094
SR 0083 NB SEG 0414 OFFSET 2378
SR 0083 SB SEG 0415 OFFSET 2340
SR 0083 NB STA 197+11.81 SR 0083 SB STA 196+77.25
OVER LOWTHER ST, NSRC & SUSQUEHANNA RIVER
19-SPAN CONTINUOUS STEEL MULTI-GIRDER BRIDGE

STAGING PLAN - 13

RECOMMENDED _____

SHEET 19 OF ____

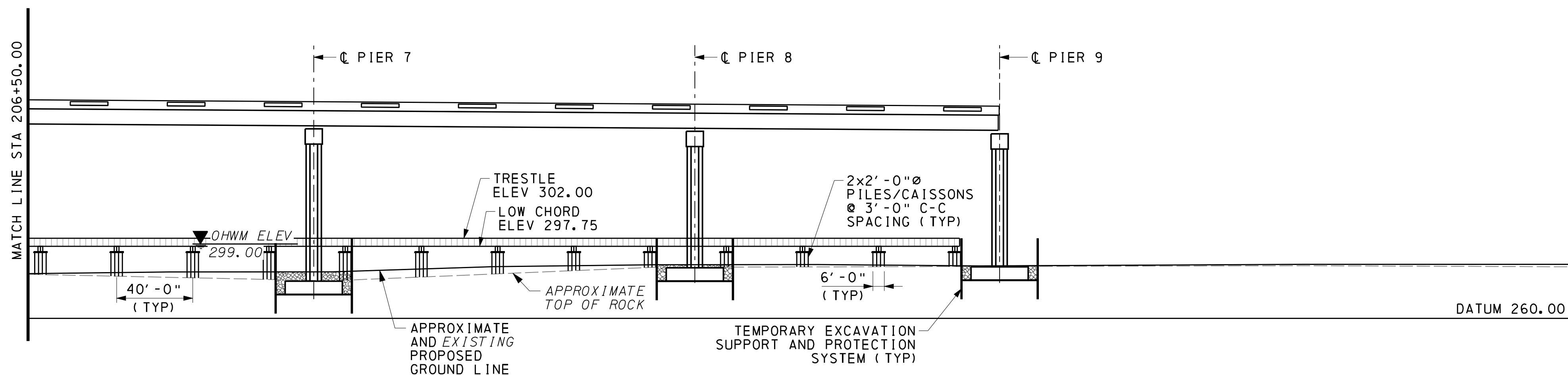
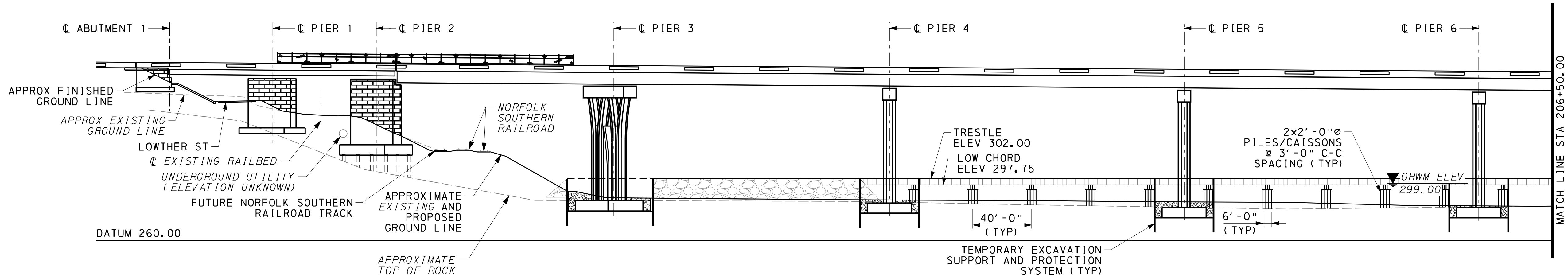
S-40918 (NB)
S-40966 (SB)

REFERENCES:
STAGE 7-2 NOTES

SHEETS:
18

2/12/2025 4:33:17 PM s-br-s-g09b.dgn

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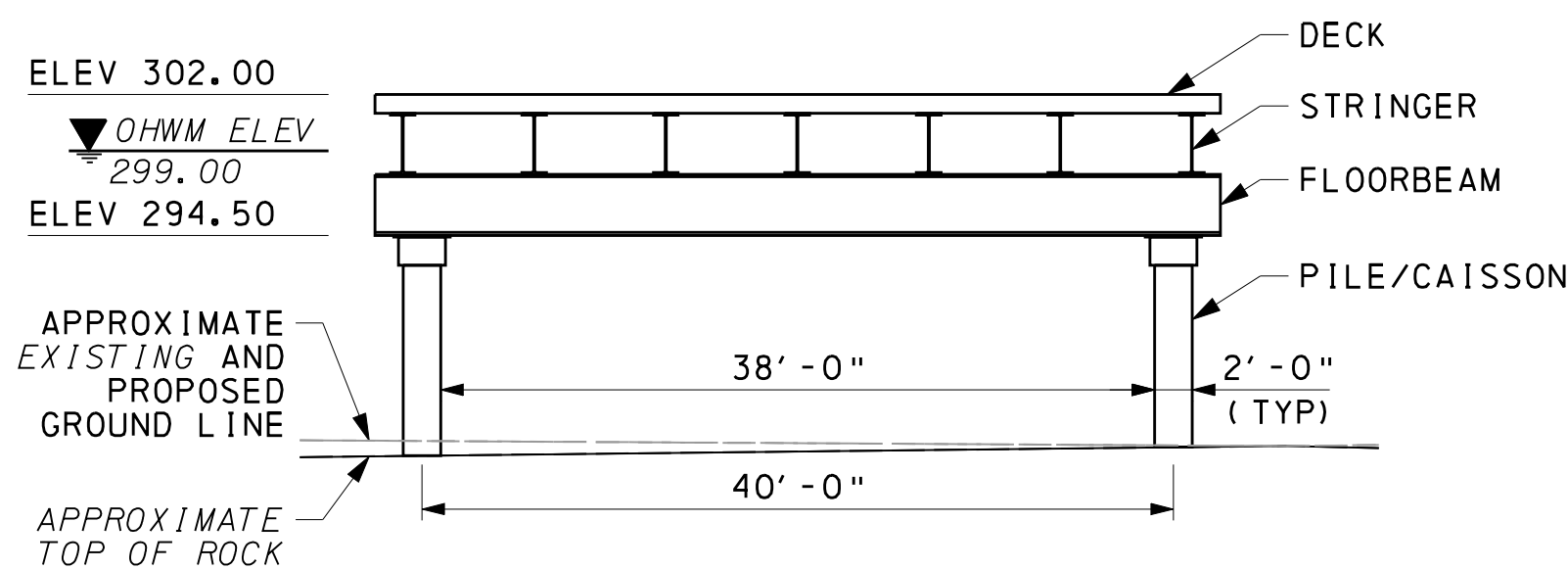


STAGING ELEVATION - STAGE 1C

20 0 20 40 FEET

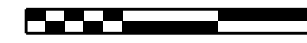


1"=40'



TRESTLE FINGER TYPICAL SECTION

5 0 5 10 FEET



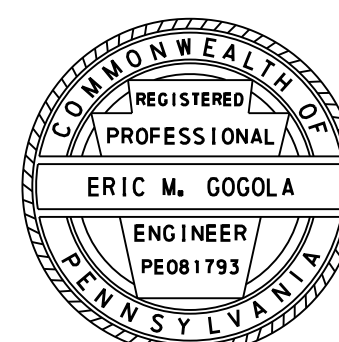
1"=10'

Mark	Description	By	Chk'd	Rec'd	Date
REVISIONS					

SR 0083 PREVIOUSLY KNOWN AS LR 767
BMS STR ID# 22-0083-0414-2378 (NB)
22-0083-0415-2340 (SB)

MPMS/ECMS PROJ# 113754
BRKEY# 69031 (NB)
69085 (SB)

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4507 NORTH FRONT STREET
SUITE 300
HARRISBURG, PA 17110

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

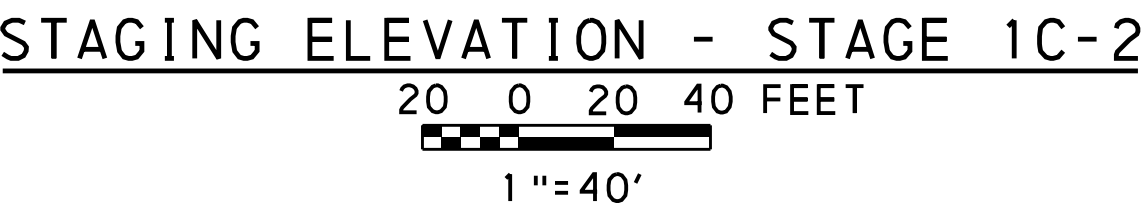
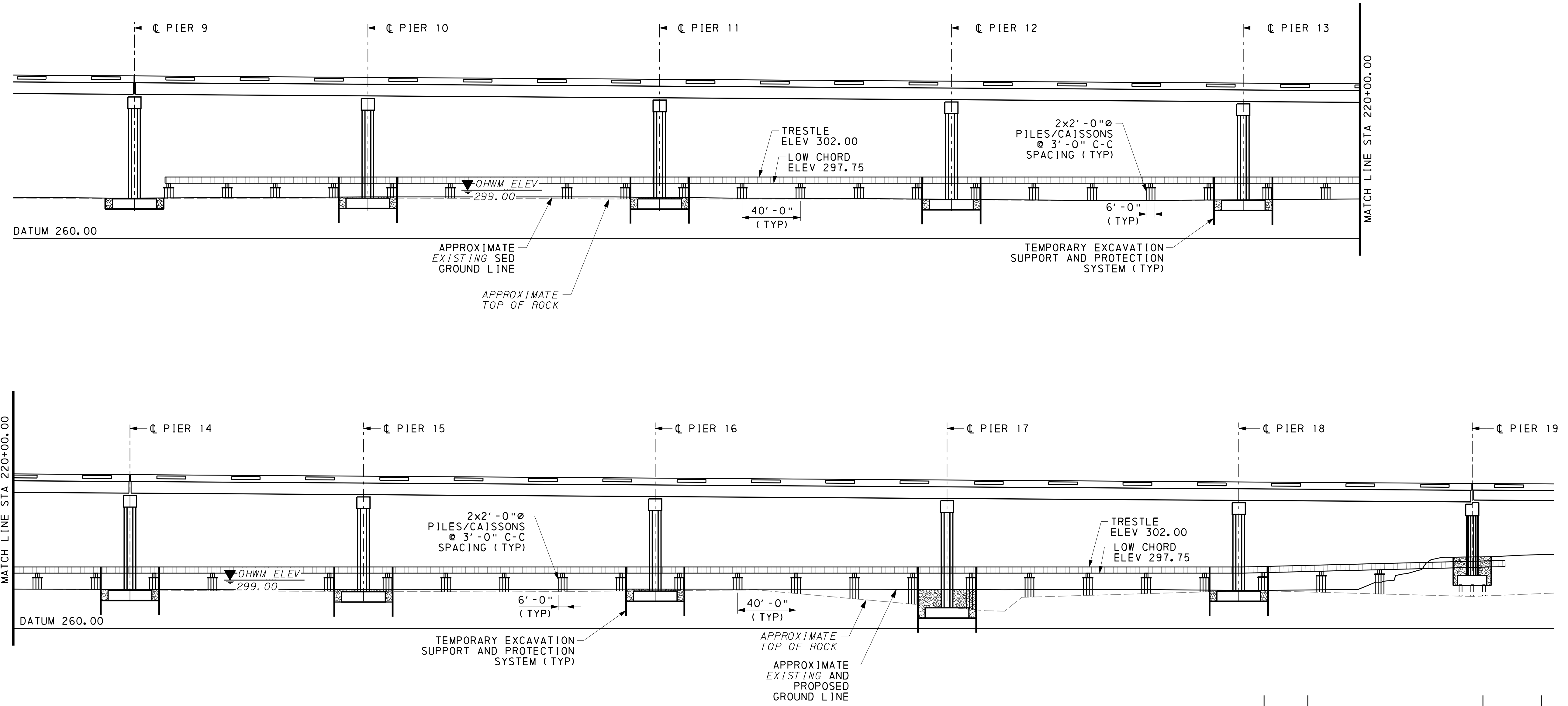
CUMBERLAND AND DAUPHIN COUNTIES
SR 0083 SECTION 094
SR 0083 NB SEG 0414 OFFSET 2378
SR 0083 SB SEG 0415 OFFSET 2340
SR 0083 NB STA 197+11.81 SR 0083 SB STA 196+77.25
OVER LOWTHER ST, NSRC & SUSQUEHANNA RIVER
19-SPAN CONTINUOUS STEEL MULTI-GIRDER BRIDGE

STAGING ELEVATION - 1

RECOMMENDED _____

SHEET 20 OF ____

S-40918 (NB)
S-40966 (SB)

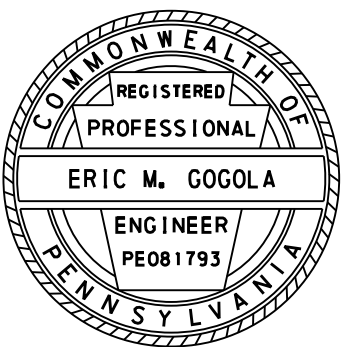


Mark	Description	By	Chk' d	Recm' d	Date
REVISIONS					

SR 0083 PREVIOUSLY KNOWN AS LR 767
BMS STR ID# 22-0083-0414-2378 (NB)
22-0083-0415-2340 (SB)

MPMS/ECMS PROJ# 113754
BRKEY# 69031 (NB)
69085 (SB)

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4507 NORTH FRONT STREET
SUITE 300
HARRISBURG, PA 17110

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

CUMBERLAND AND DAUPHIN COUNTIES
SR 0083 SECTION 094
SR 0083 NB SEG 0414 OFFSET 2378
SR 0083 SB SEG 0415 OFFSET 2340
SR 0083 NB STA 197+11.81 SR 0083 SB STA 196+77.25
OVER LOWTHER ST, NSRC & SUSQUEHANNA RIVER
19-SPAN CONTINUOUS STEEL MULTI-GIRDER BRIDGE

STAGING ELEVATION - 2

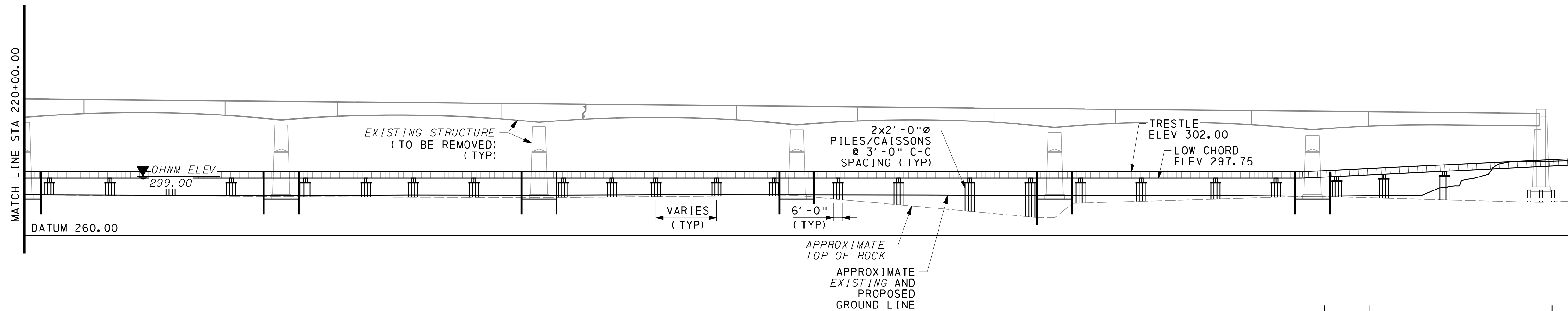
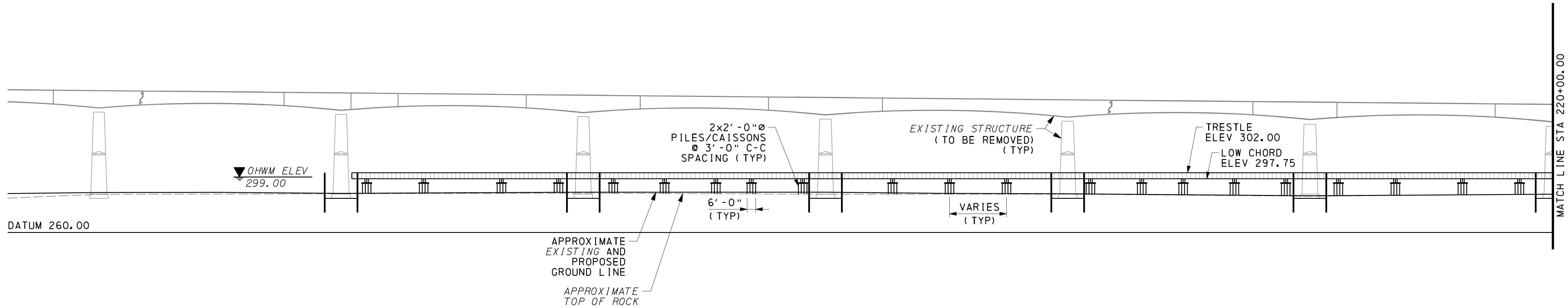
RECOMMENDED _____

SHEET 21 OF _____

S-40918 (NB)
S-40966 (SB)

NOTES:
1. STAGE 2 AND STAGE 3 SIMILAR.

2/12/2025
FILENAME: 43377-s-br-sgl2a.dgn



STAGING ELEVATION - STAGE 6

20 0 20 40 FEET



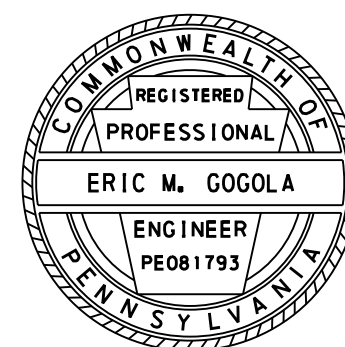
1" = 40'

Mark	Description	By	Chk' d	Recm' d	Date
REVISIONS					

SR 0083 PREVIOUSLY KNOWN AS LR 767
BMS STR ID: 22-0083-0414-2378 (NB)
22-0083-0415-2340 (SB)

MPMS/ECMS PROJ: 113754
BRKEY: 69031 (NB)
69085 (SB)

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HNTB CORPORATION
4507 NORTH FRONT STREET
SUITE 300
HARRISBURG, PA 17110

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

CUMBERLAND AND DAUPHIN COUNTIES
SR 0083 SECTION 094
SR 0083 NB SEG 0414 OFFSET 2378
SR 0083 SB SEG 0415 OFFSET 2340
SR 0083 NB STA 197+11.81 SR 0083 SB STA 196+77.25
OVER LOWTHER ST, NSRC & SUSQUEHANNA RIVER
19-SPAN CONTINUOUS STEEL MULTI-GIRDER BRIDGE

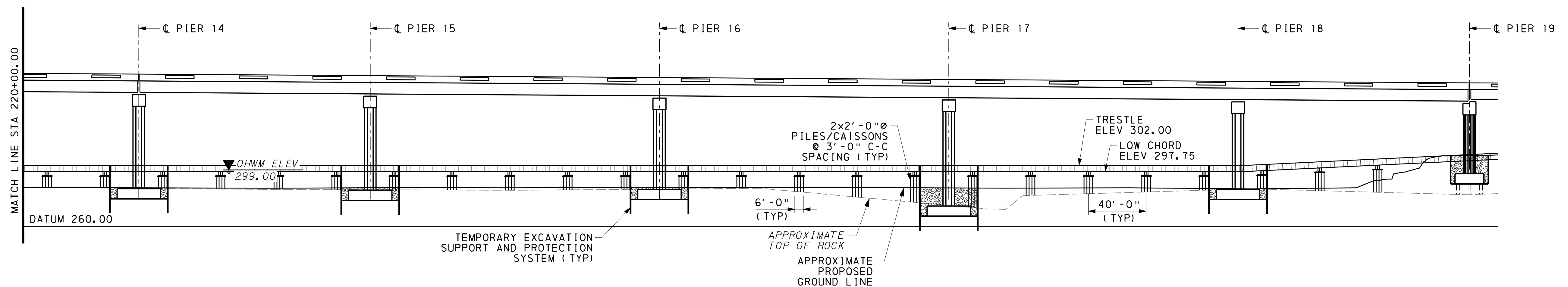
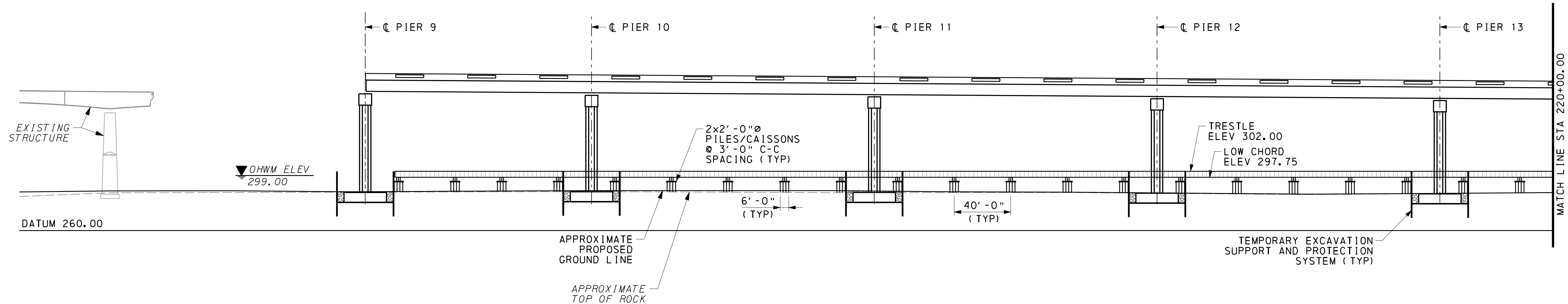
STAGING ELEVATION - 3

RECOMMENDED _____

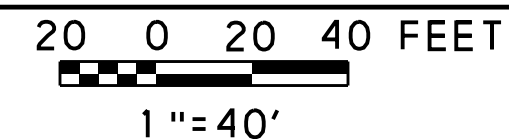
SHEET 22 OF ____

S-40918 (NB)
S-40966 (SB)

DES: MKB DES CKD: EMG DWG: MKB DWG CKD: EMG



STAGING ELEVATION - STAGE 6-2

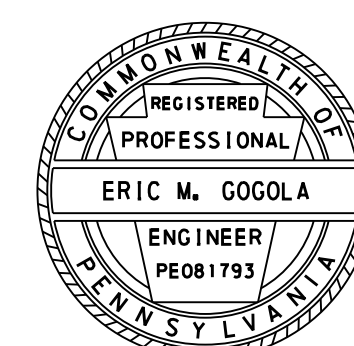


Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 0083 PREVIOUSLY KNOWN AS LR 767
BMS STR ID# 22-0083-0414-2378 (NB)
22-0083-0415-2340 (SB)

MPMS/ECMS PROJ# 113754
BRKEY# 69031 (NB)
69085 (SB)

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HNTB CORPORATION
4507 NORTH FRONT STREET
SUITE 300
HARRISBURG, PA 17110

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

CUMBERLAND AND DAUPHIN COUNTIES
SR 0083 SECTION 094
SR 0083 NB SEG 0414 OFFSET 2378
SR 0083 SB SEG 0415 OFFSET 2340
SR 0083 NB STA 197+11.81 SR 0083 SB STA 196+77.25
OVER LOWTHER ST, NSRC & SUSQUEHANNA RIVER
19-SPAN CONTINUOUS STEEL MULTI-GIRDER BRIDGE

STAGING ELEVATION - 4

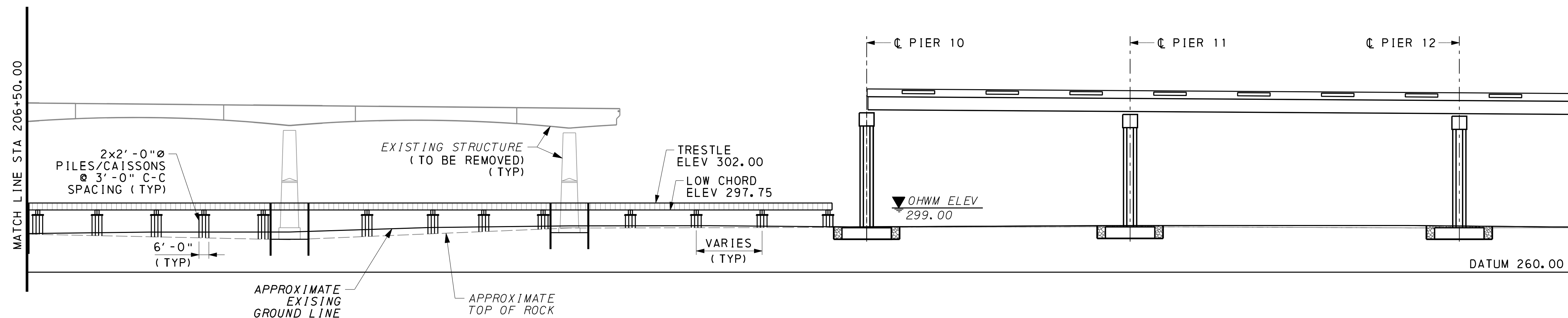
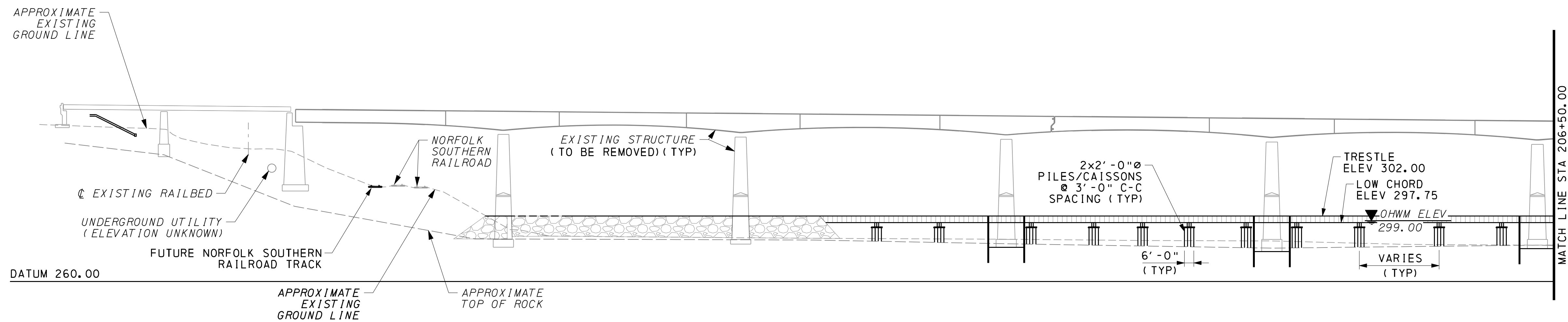
RECOMMENDED _____

SHEET 23 OF

S-40918 (NB)
S-40966 (SB)

2/12/2025
FILENAME: 43377-s-br-sgl2b.dgn

DES: MKB DES CKD: EMG DWG: MKB DWG CKD: EMG



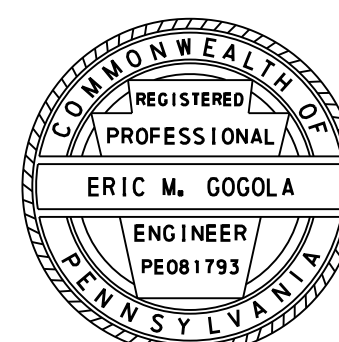
STAGING ELEVATION - STAGE 7

20 0 20 40 FEET
1" = 40'

Mark	Description	By	Chk' d	Recm' d	Date
REVISIONS					

SR 0083 PREVIOUSLY KNOWN AS LR 767 MPMS/ECMS PROJ: 113754
BMS STR ID: 22-0083-0414-2378 (NB) BRKEY: 69031 (NB)
22-0083-0415-2340 (SB) 69085 (SB)

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4507 NORTH FRONT STREET
SUITE 300
HARRISBURG, PA 17110

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

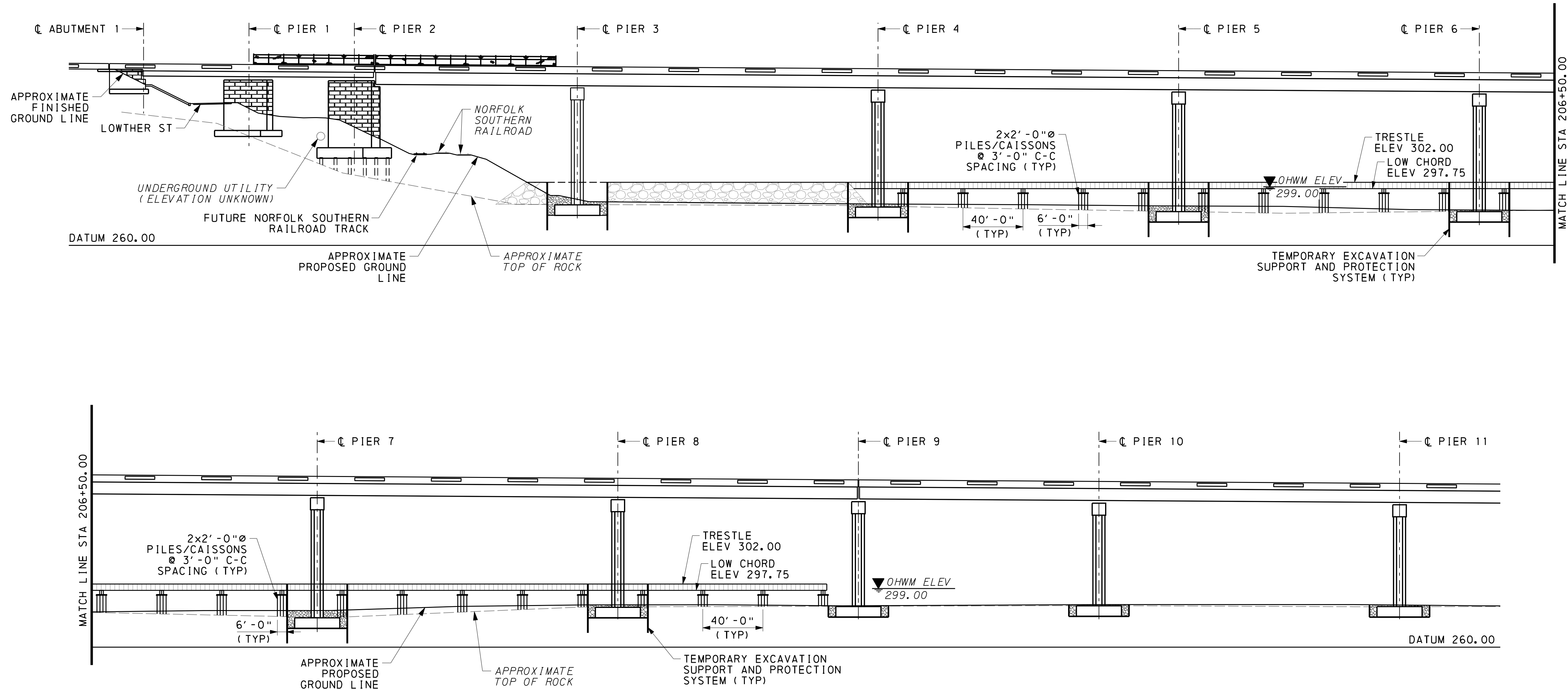
CUMBERLAND AND DAUPHIN COUNTIES
SR 0083 SECTION 094
SR 0083 NB SEG 0414 OFFSET 2378
SR 0083 SB SEG 0415 OFFSET 2340
SR 0083 NB STA 197+11.81 SR 0083 SB STA 196+77.25
OVER LOWTHER ST, NSRC & SUSQUEHANNA RIVER
19-SPAN CONTINUOUS STEEL MULTI-GIRDER BRIDGE

STAGING ELEVATION - 5

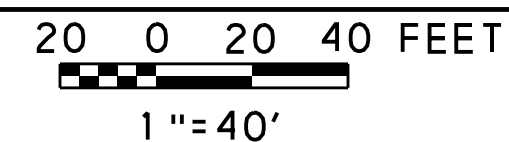
RECOMMENDED _____

SHEET 24 OF ____

S-40918 (NB)
S-40966 (SB)



STAGING ELEVATION - STAGE 7-2

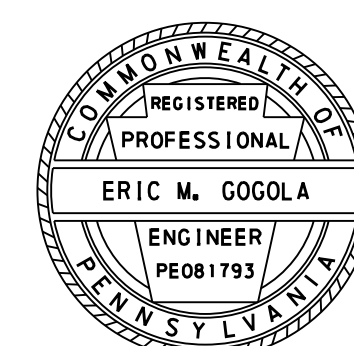


Mark	Description	By	Chk' d	Recm' d	Date
REVISIONS					

SR 0083 PREVIOUSLY KNOWN AS LR 767
BMS STR ID# 22-0083-0414-2378 (NB)
22-0083-0415-2340 (SB)

MPMS/ECMS PROJ# 113754
BRKEY# 69031 (NB)
69085 (SB)

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PREPARED BY:
HNTB CORPORATION
4507 NORTH FRONT STREET
SUITE 300
HARRISBURG, PA 17110

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

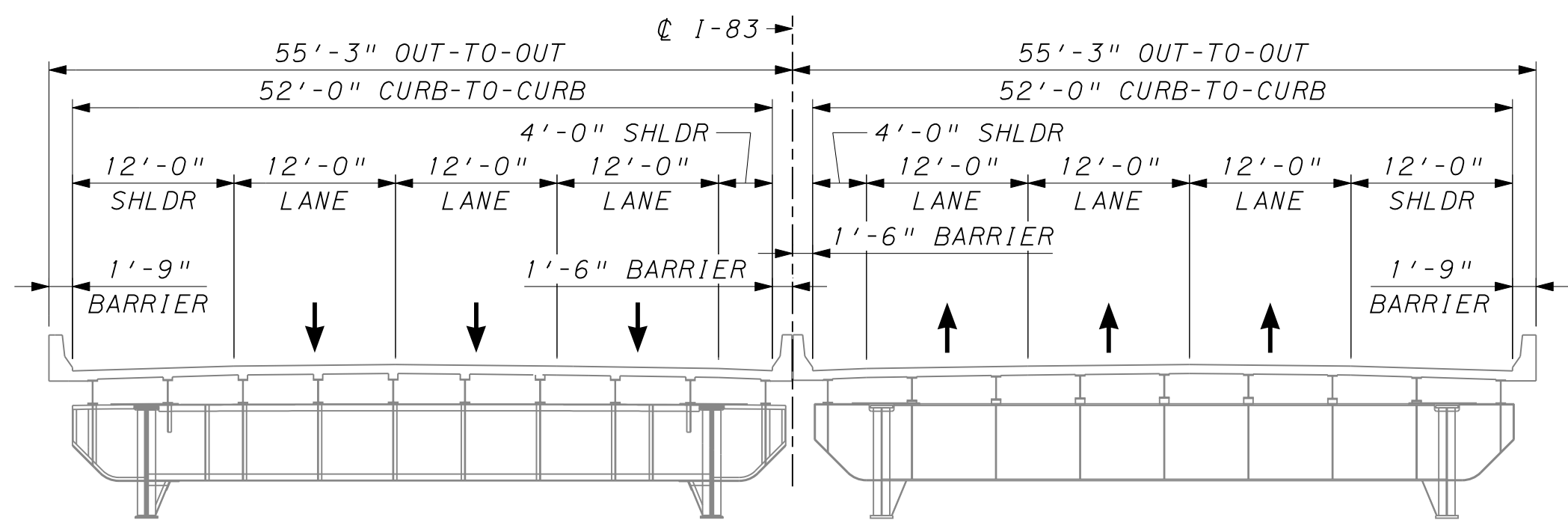
CUMBERLAND AND DAUPHIN COUNTIES
SR 0083 SECTION 094
SR 0083 NB SEG 0414 OFFSET 2378
SR 0083 SB SEG 0415 OFFSET 2340
SR 0083 NB STA 197+11.81 SR 0083 SB STA 196+77.25
OVER LOWTHER ST, NSRC & SUSQUEHANNA RIVER
19-SPAN CONTINUOUS STEEL MULTI-GIRDER BRIDGE

STAGING ELEVATION - 6

RECOMMENDED _____

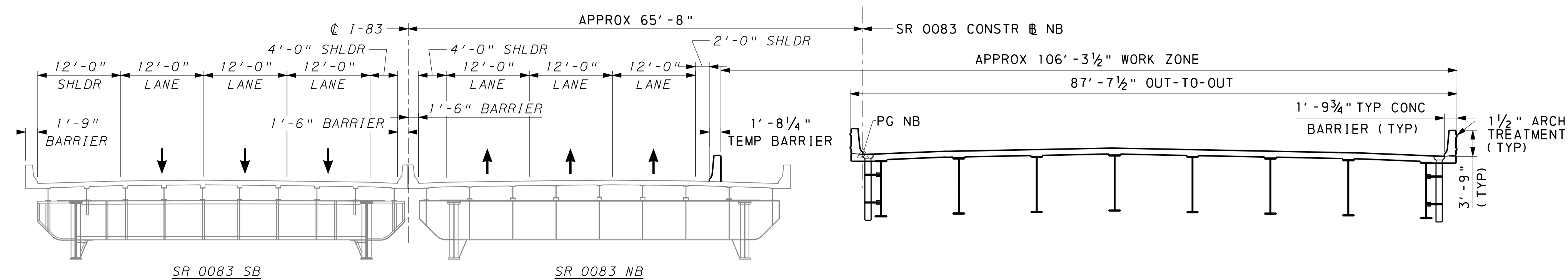
SHEET 25 OF ____

S-40918 (NB)
S-40966 (SB)



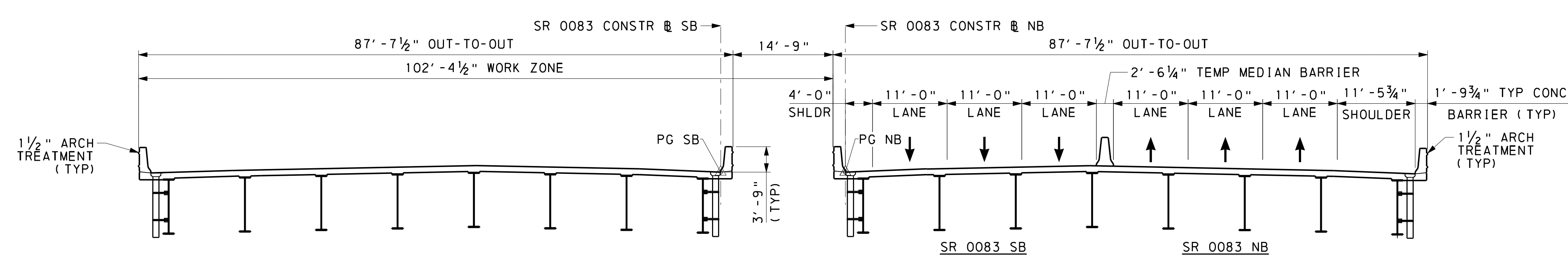
EXISTING TYPICAL SECTION

2 0 4 8 12 FEET
3/32" = 1' - 0"
(SPAN 10 SHOWN)



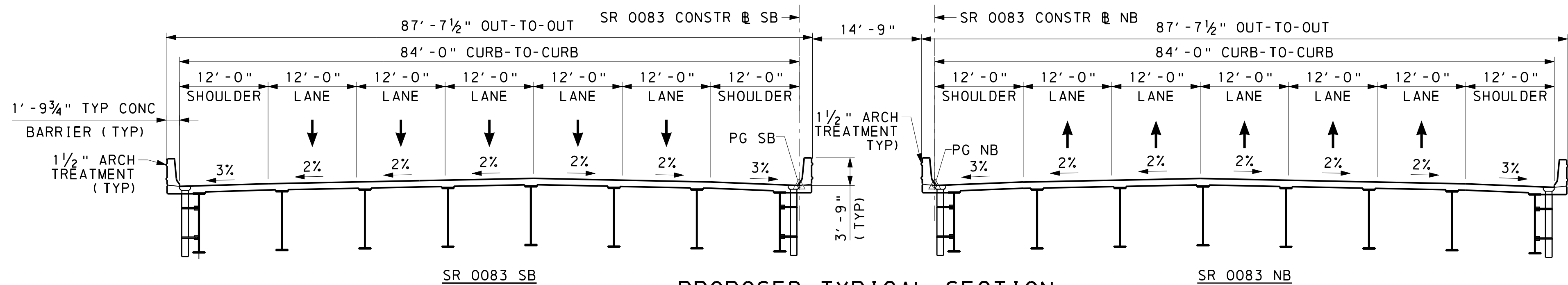
TYPICAL SECTION - STAGES 1 & 2

2 0 4 8 12 FEET
3/32" = 1' - 0"
(SPAN 8 SHOWN, SPANS 3-12 SIMILAR)



TYPICAL SECTION - STAGES 3 & 4

2 0 4 8 12 FEET
3/32" = 1' - 0"
(SPAN 8 SHOWN, SPANS 3-12 SIMILAR)



PROPOSED TYPICAL SECTION

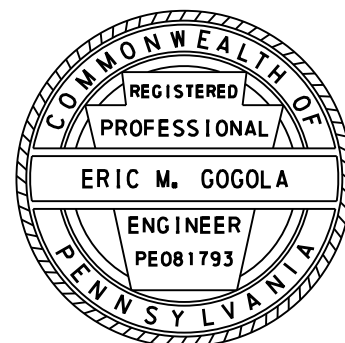
2 0 4 8 12 FEET
3/32" = 1' - 0"
(SPAN 8 SHOWN, SPANS 3-12 SIMILAR)

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 0083 PREVIOUSLY KNOWN AS LR 767
BMS STR ID: 22-0083-0414-2378 (NB)
22-0083-0415-2340 (SB)

MPMS/ECMS PROJ: 113754
BRKEY: 69031 (NB)
69085 (SB)

HNTB

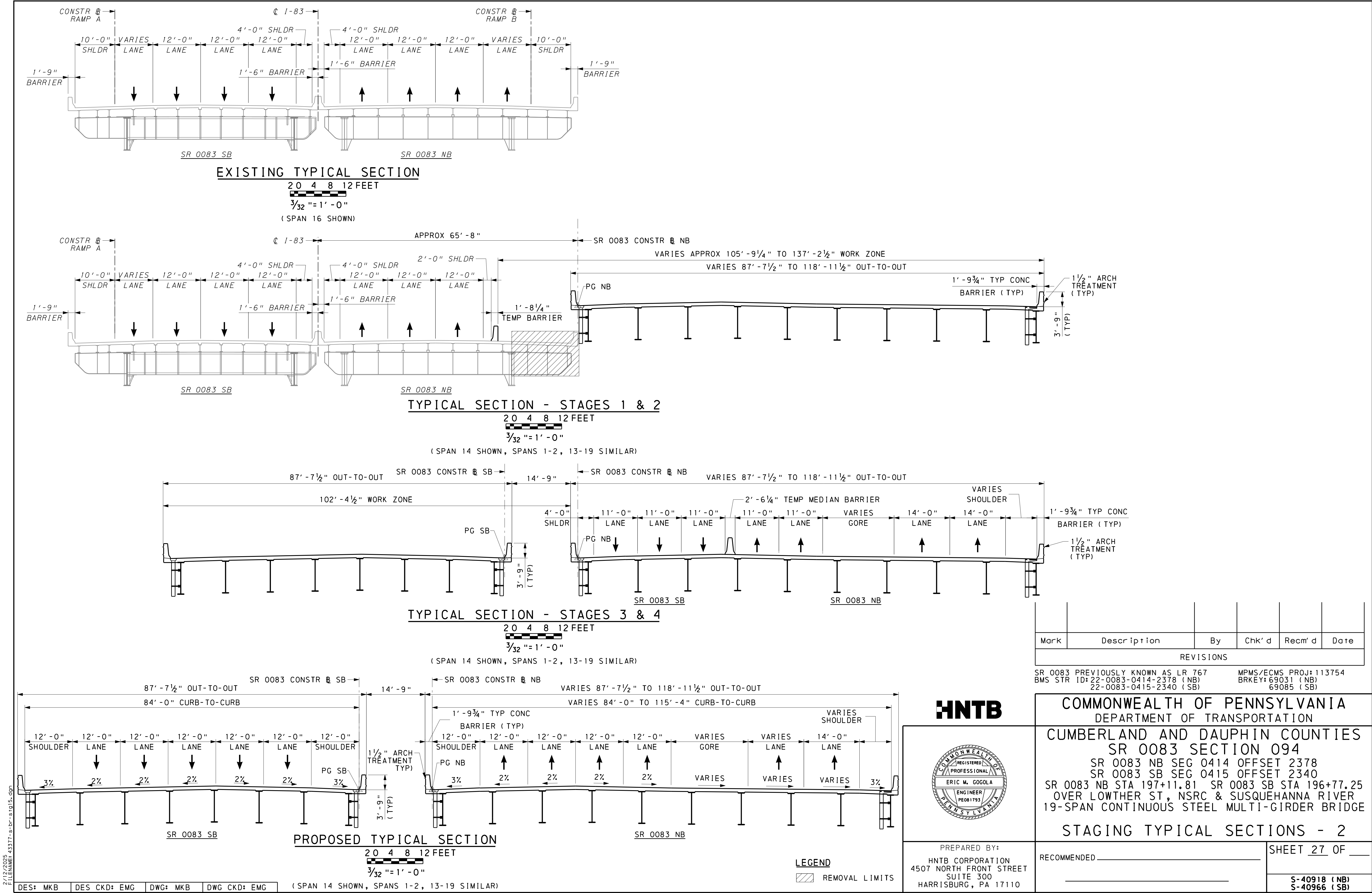


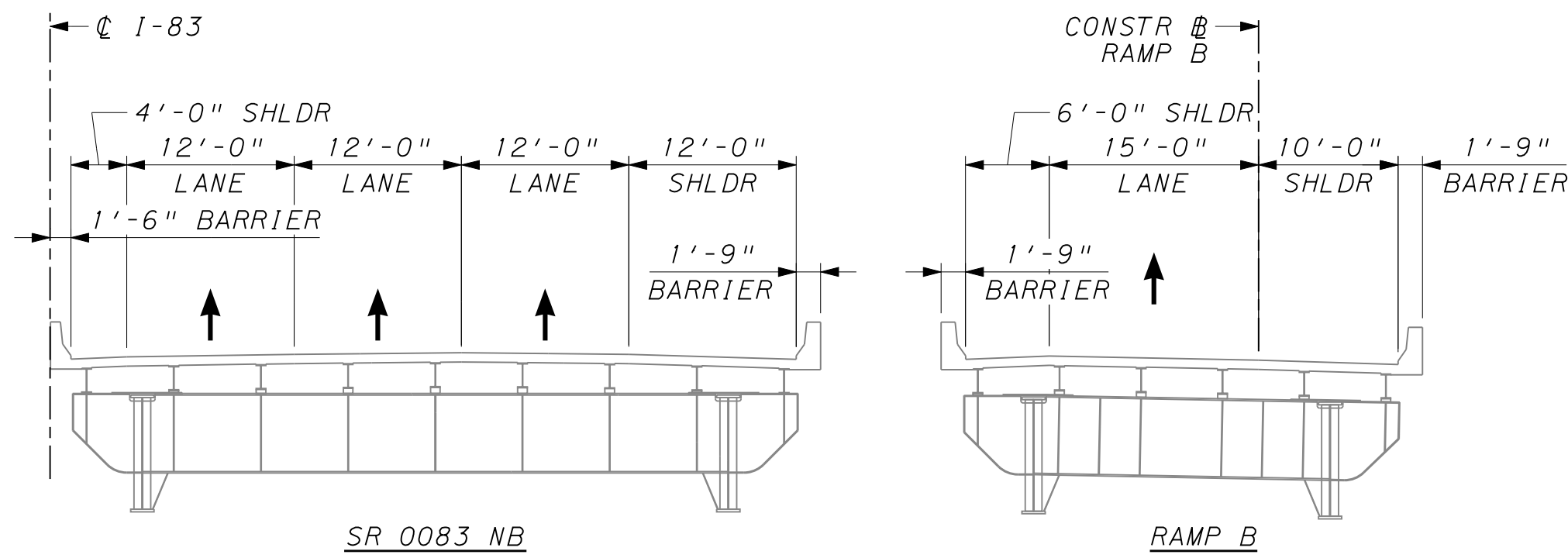
PREPARED BY:
HNTB CORPORATION
4507 NORTH FRONT STREET
SUITE 300
HARRISBURG, PA 17110

COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF TRANSPORTATION	
CUMBERLAND AND DAUPHIN COUNTIES SR 0083 SECTION 094 SR 0083 NB SEG 0414 OFFSET 2378 SR 0083 SB SEG 0415 OFFSET 2340 SR 0083 NB STA 197+11.81 SR 0083 SB STA 196+77.25 OVER LOWTHER ST, NSRC & SUSQUEHANNA RIVER 19-SPAN CONTINUOUS STEEL MULTI-GIRDER BRIDGE	
STAGING TYPICAL SECTIONS - 1	
RECOMMENDED _____	SHEET 26 OF _____
S-40918 (NB) S-40966 (SB)	

2/12/2025
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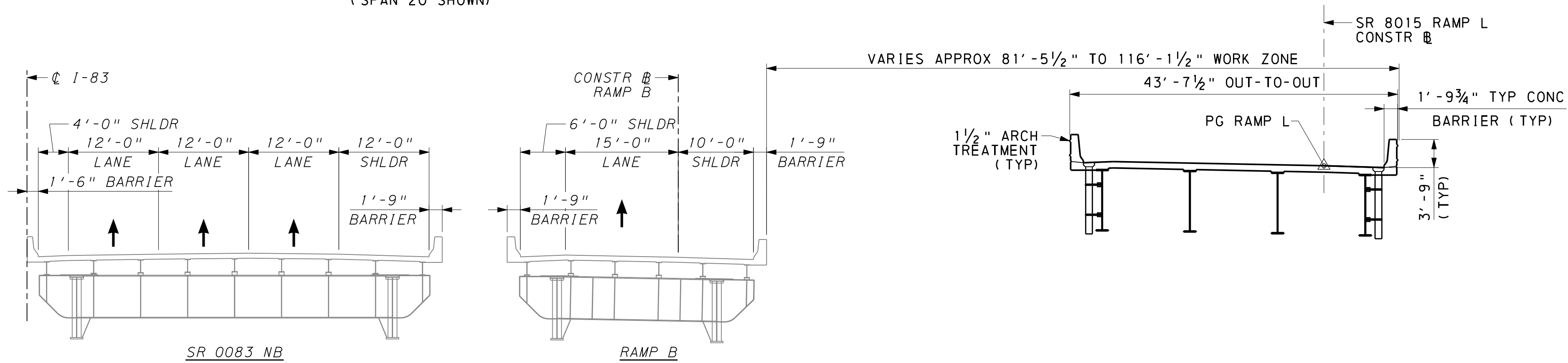




EXISTING TYPICAL SECTION

20 4 8 12 FEET

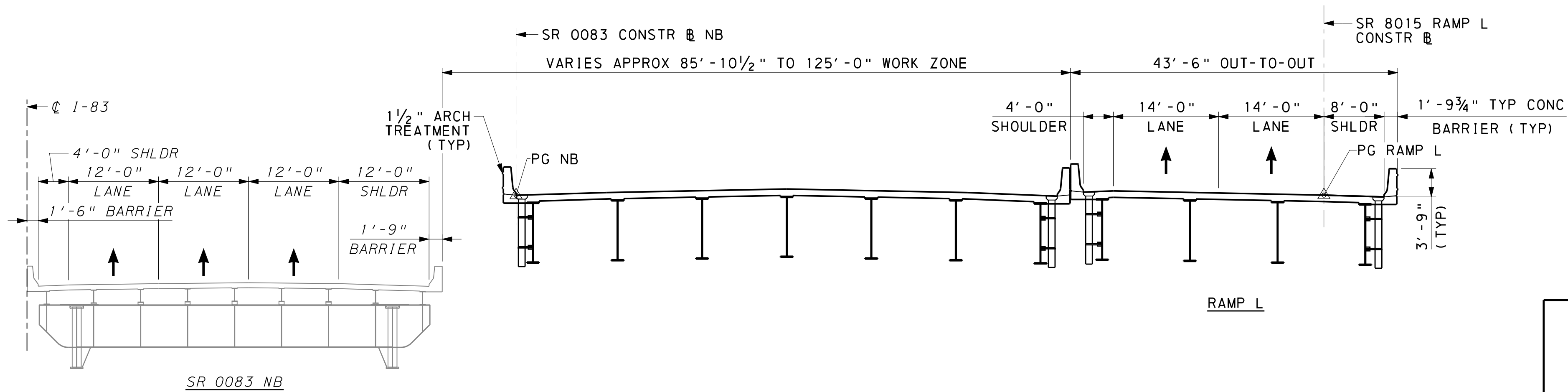
 3/32" = 1' - 0"
 (SPAN 20 SHOWN)



TYPICAL SECTION - STAGE 2A

20 4 8 12 FEET

 3/32" = 1' - 0"



TYPICAL SECTION - STAGE 2B

20 4 8 12 FEET

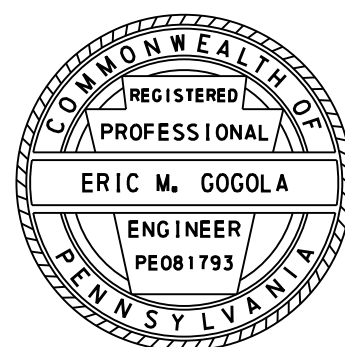
 3/32" = 1' - 0"

Mark	Description	By	Chk' d	Recm' d	Date
REVISIONS					

SR 0083 PREVIOUSLY KNOWN AS LR 767
 BMS STR ID: 22-0083-0414-2378 (NB)
 22-0083-0415-2340 (SB)

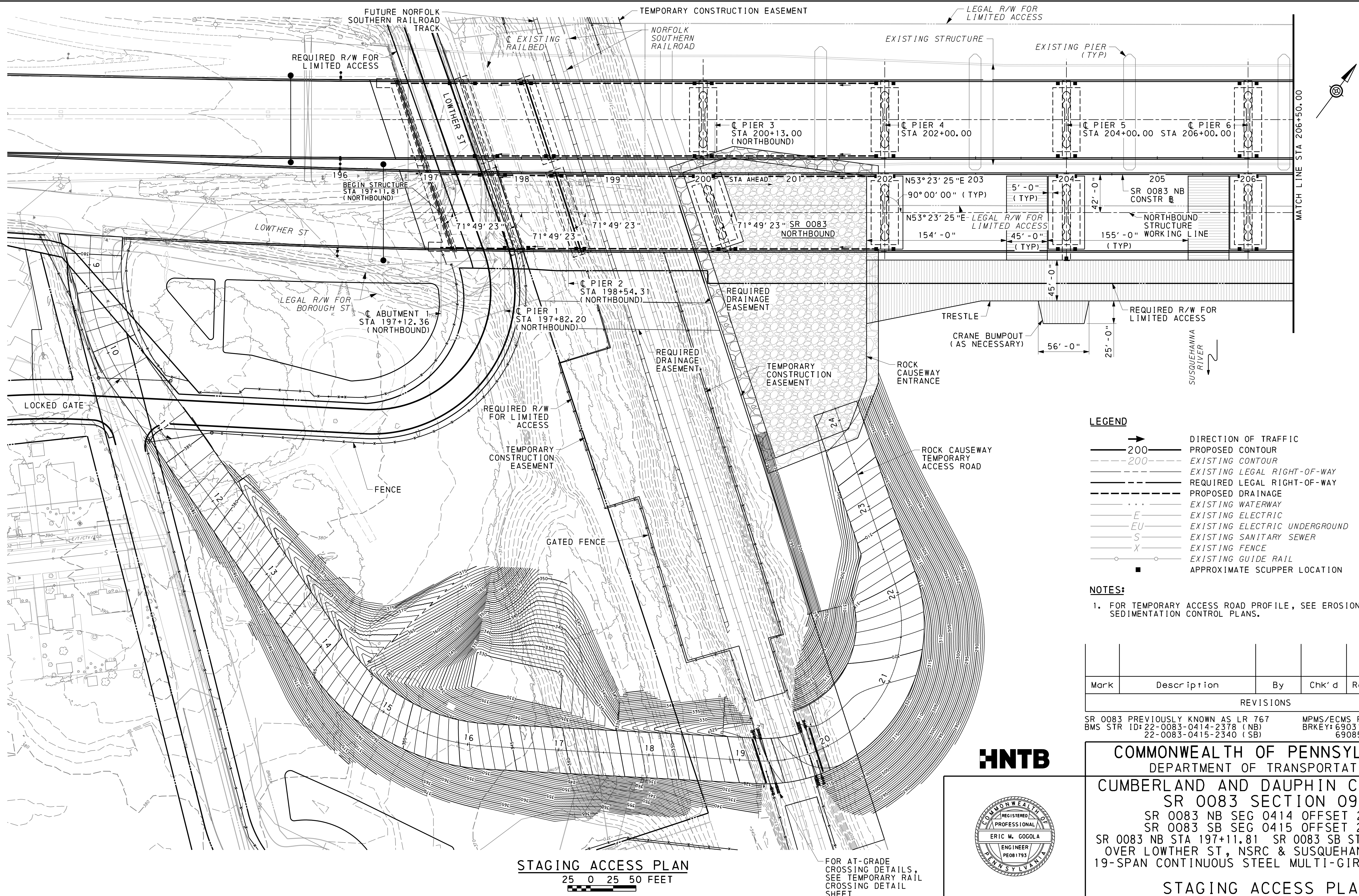
MPMS/ECMS PROJ: 113754
 BRKEY: 69031 (NB)
 69085 (SB)














HNTB



PREPARED BY:
 HNTB CORPORATION
 4507 NORTH FRONT STREET
 SUITE 300
 HARRISBURG, PA 17110

COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF TRANSPORTATION					
CUMBERLAND AND DAUPHIN COUNTIES SR 0083 SECTION 094 SR 0083 NB SEG 0414 OFFSET 2378 SR 0083 SB SEG 0415 OFFSET 2340 SR 0083 NB STA 197+11.81 SR 0083 SB STA 196+77.25 OVER LOWTHER ST, NSRC & SUSQUEHANNA RIVER 19-SPAN CONTINUOUS STEEL MULTI-GIRDER BRIDGE					
STAGING TYPICAL SECTIONS - 3					
RECOMMENDED _____				SHEET 28 OF _____	
_____				S-40918 (NB) S-40966 (SB)	



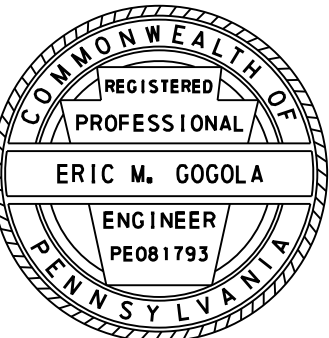
<u>LEGEND</u>	
	DIRECTION OF TRAFFIC
	PROPOSED CONTOUR
	EXISTING CONTOUR
	EXISTING LEGAL RIGHT-OF-WAY
	REQUIRED LEGAL RIGHT-OF-WAY
	PROPOSED DRAINAGE
	EXISTING WATERWAY
	EXISTING ELECTRIC
	EXISTING ELECTRIC UNDERGROUND
	EXISTING SANITARY SEWER
	EXISTING FENCE
	EXISTING GUIDE RAIL
	APPROXIMATE SCUPPER LOCATION

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

R 0083 PREVIOUSLY KNOWN AS LR 767 MPMS/ECMS PROJ: 113754
MS STR ID: 22-0083-0414-2378 (NB) BRKEY: 69031 (NB)
 22-0083-0415-2340 (SB) 69085 (SB)

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION
CUMBERLAND AND DAUPHIN COUNTIES
SR 0083 SECTION 094
SR 0083 NB SEG 0414 OFFSET 2378
SR 0083 SB SEG 0415 OFFSET 2340
SR 0083 NB STA 197+11.81 SR 0083 SB STA 196+77.25
OVER LOWTHER ST, NSRC & SUSQUEHANNA RIVER
19-SPAN CONTINUOUS STEEL MULTI-GIRDER BRIDGE

STAGING ACCESS PLAN	
RECOMMENDED _____ _____	SHEET <u>29</u> OF _____ <div style="text-align: right;">S-40918 (NB) S-40966 (SB)</div>

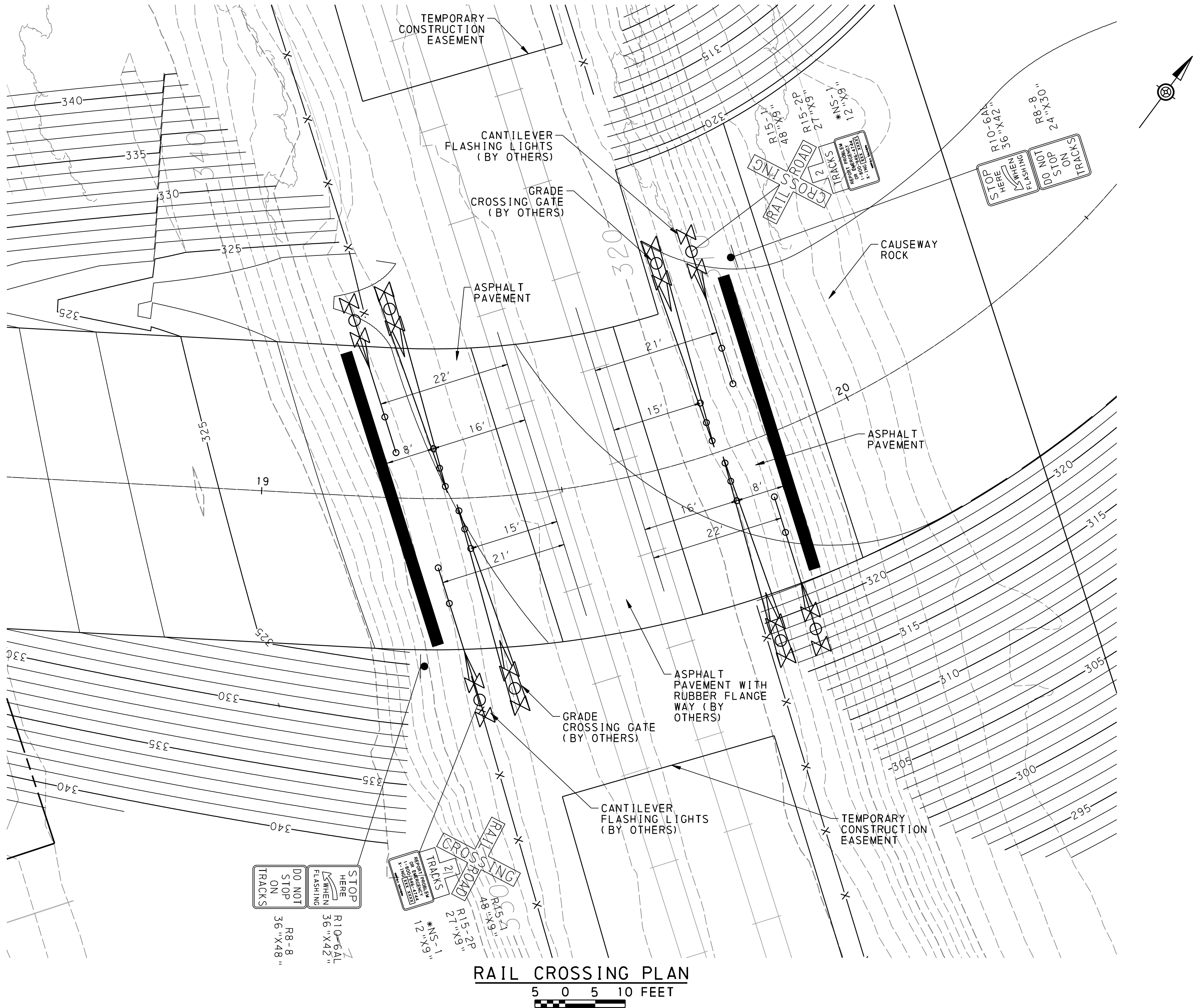
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SUITE 300
HARRISBURG, PA 17110

FOR AT-GRADE
CROSSING DETAILS,
SEE TEMPORARY RAIL
CROSSING DETAIL
SHEET

2/12/2025
FILENAME: 43377-s-dr-sig01b.dgn

DES: MKB DES CKD: EMG DWG: CTD DWG CKD: EMG



LEGEND					
	DIRECTION OF TRAFFIC				
	PROPOSED CONTOUR				
	EXISTING CONTOUR				
	EXISTING LEGAL RIGHT-OF-WAY				
	REQUIRED LEGAL RIGHT-OF-WAY				
	PROPOSED DRAINAGE				
	EXISTING WATERWAY				
	EXISTING ELECTRIC				
	EXISTING ELECTRIC UNDERGROUND				
	EXISTING SANITARY SEWER				
	EXISTING FENCE				
	EXISTING GUIDE RAIL				

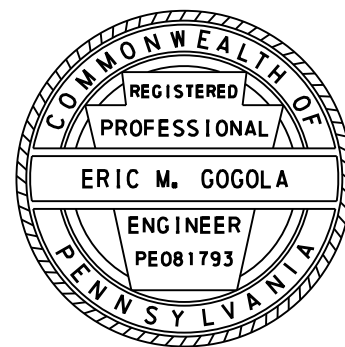
NOTES:

1.

Mark	Description	By	Chk' d	Recm' d	Date
REVISIONS					

SR 0083 PREVIOUSLY KNOWN AS LR 767 MPMS/ECMS PROJ: 113754
BMS STR ID: 22-0083-0414-2378 (NB) BRKEY: 69031 (NB)
22-0083-0415-2340 (SB) 69085 (SB)

HNTB



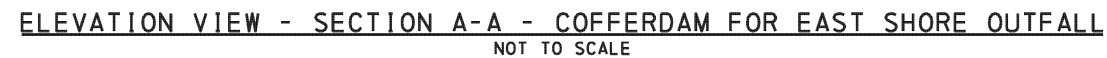
PREPARED BY:
HNTB CORPORATION
4507 NORTH FRONT STREET
SUITE 300
HARRISBURG, PA 17110

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

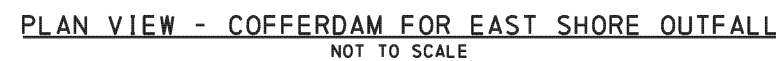
CUMBERLAND AND DAUPHIN COUNTIES
SR 0083 SECTION 094
SR 0083 NB SEG 0414 OFFSET 2378
SR 0083 SB SEG 0415 OFFSET 2340
SR 0083 NB STA 197+11.81 SR 0083 SB STA 196+77.25
OVER LOWTHER ST, NSRC & SUSQUEHANNA RIVER
19-SPAN CONTINUOUS STEEL MULTI-GIRDER BRIDGE

RAIL CROSSING PLAN

RECOMMENDED _____
SHEET 30 OF _____
S-40918 (NB)
S-40966 (SB)


• CUMBERLAND & DAUPHIN

1. COFFERDAM ALTERNATIVES INCLUDE THE FOLLOWING CLEAN MATERIALS:
 - SAND BAGS
 - CONCRETE CLARE SCREEN (54" HEIGHT)
2. AN IMPERVIOUS LINING IS REQUIRED TO PREVENT WATER FROM PENETRATING THE WORK AREA. THE IMPERVIOUS LINING SHOULD BE ANCHORED AT THE TOP AND AT THE STREAMBED WITH A SAND BAG OR ANOTHER FORM OF WEIGHT TO KEEP THE LINING IN PLACE.
3. WORK AREAS BEHIND THE COFFERDAM SHOULD BE KEPT AS DRY AS POSSIBLE. ANY WATER THAT PENETRATES THE COFFERDAM SHOULD BE DISCHARGED THROUGH A PUMPED WATER FILTER BAG.
4. SHOULD THE CONTRACTOR WISH TO USE MATERIALS OTHER THAN THOSE LISTED IN NOTE 1, WRITTEN APPROVAL FROM THE PA DEP SOUTH CENTRAL REGION WILL BE REQUIRED.
5. PLACE COFFERDAM IN THE LOCATIONS SHOWN ON THE DRAWINGS. SEE PLAN VIEW ABOVE FOR THE COFFERDAM DIMENSIONS.
6. PLACE THE OPEN END OF THE SANDBAG UNDER THE FILLED PORTION. PLACE SUCCEEDING SANDBAGS WITH THE BOTTOM OF THE BAG TIGHTLY AND PARTIALLY OVERLAPPING THE PREVIOUS BAG. OFFSET ADJACENT ROWS OR LAYERS BY ONE-HALF THE SANDBAG LENGTH TO AVOID CONTINUOUS JOINTS.
7. USE PYRAMID PLACEMENT TO INCREASE THE HEIGHT OF THE COFFERDAM. TO ELIMINATE VOIDS AND FORM A TIGHT SEAL, COMPACT AND SHAPE EACH SANDBAG BY WALKING ON IT. CONTINUE THIS PROCESS AS EACH LAYER IS PLACED. THIS WILL FLATTEN THE TOPS OF THE SANDBAGS AND PREVENT SLIPPING BETWEEN SUCCEEDING LAYERS.
8. THE TOP ROW OF THE SANDBAG SHOULD BE AT LEAST TWICE THE WIDTH OF THE COFFERDAM BARRIER.



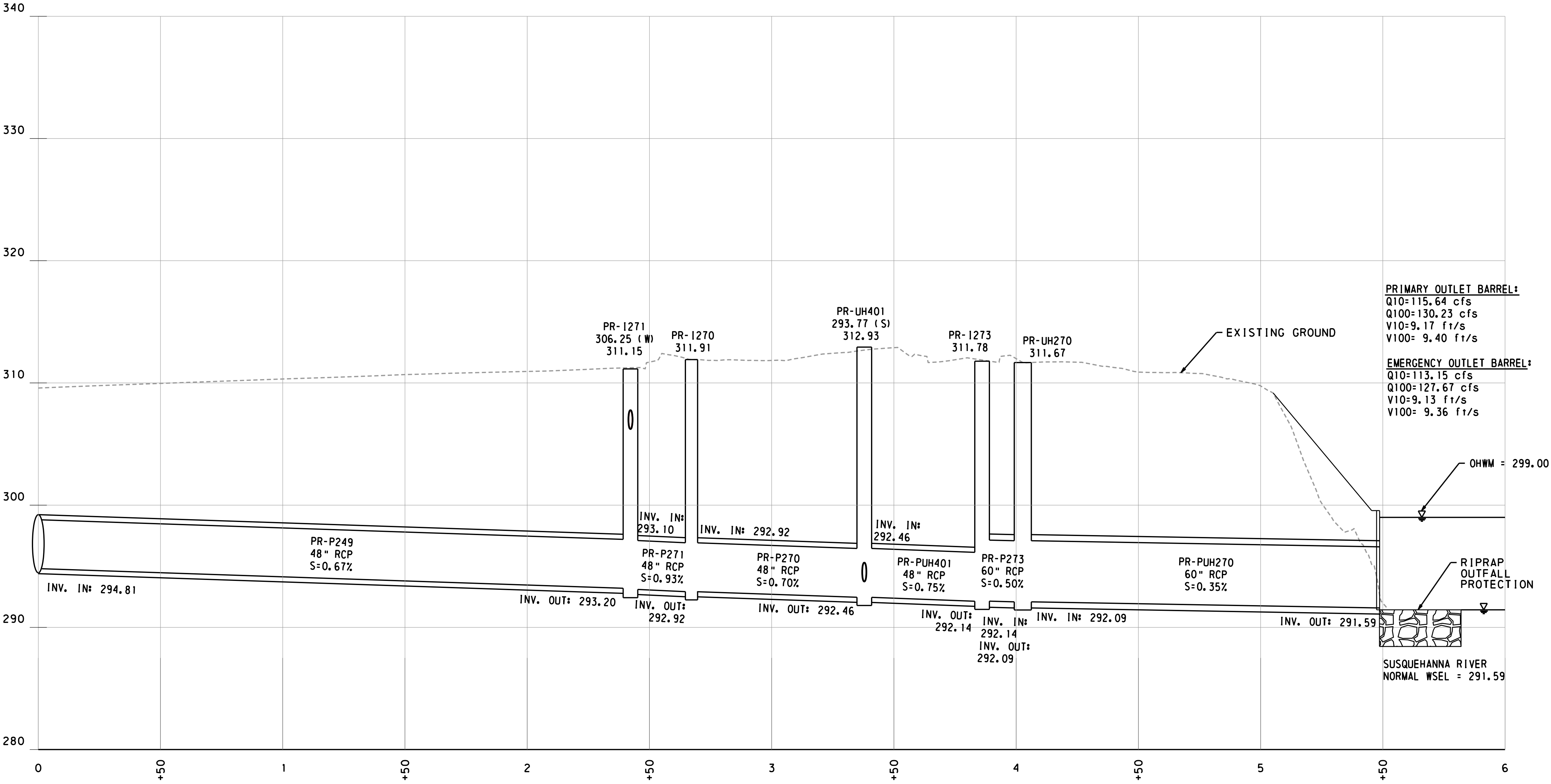
COFFERDAM
NOT TO SCALE

PREPARED BY:
TM ENGINEERING, INC.
MILLSBURG, PA 17019



COMMONWEALTH OF
REGISTERED
PROFESSIONAL
KEVIN RICHARD KOZAIN
ENGINEER
PE075052
PENNSYLVANIA

DISTRICT	COUNTY	ROUTE	SECTION	SHEET	
8-0	DAUPHIN	0083		OF	
CITY OF HARRISBURG AND SWATARA TOWNSHIP					
REVISION NUMBER	REVISIONS			DATE	BY

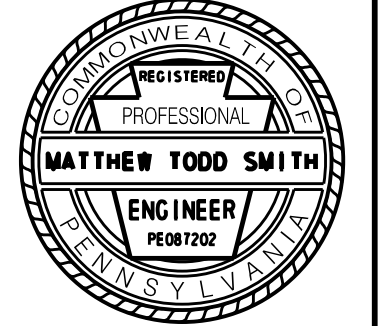


SUSQUEHANNA RIVER OUTFALL

SCALE: 1" = 25' HORIZONTAL
1" = 5' VERTICAL

SECTION 094 STORM DRAIN OUTFALL PROFILES

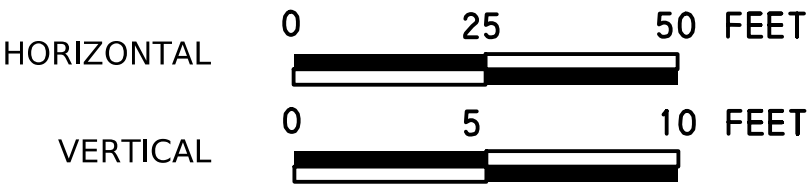
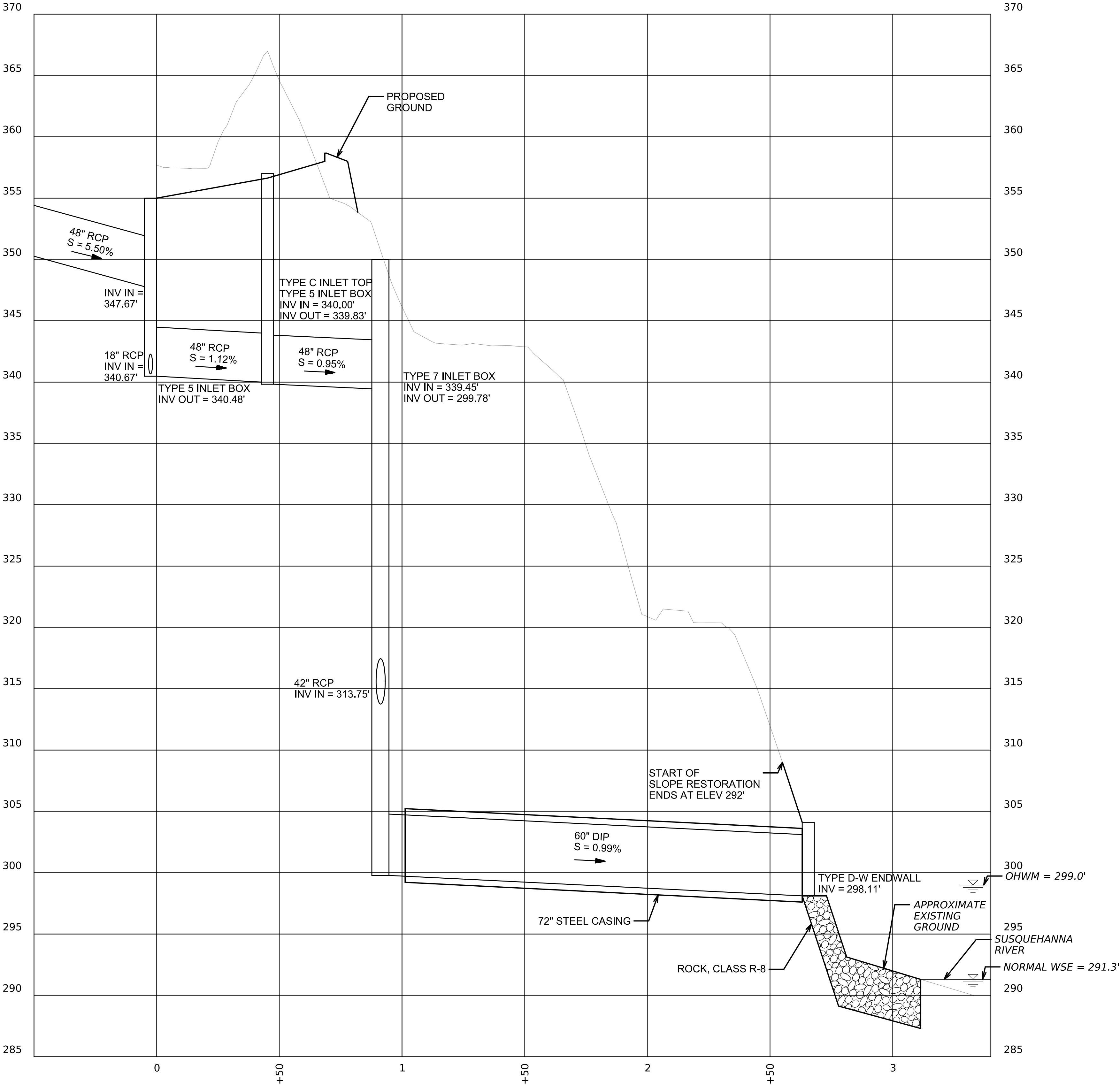
PREPARED BY:
JOHNSON,
MIRMIRAN &
THOMPSON, INC.
220 ST. CHARLES
WAY SUITE 200
YORK, PA 17402



PLOTTED: 30-JAN-2025 14:17

OUTFALL
LOWTHER STREET STA 323+13, RT

DISTRICT	COUNTY	ROUTE	SECTION	SHEET		
8-0	CUMBERLAND	0083	094	OF		
LEMOYNE BOROUGH AND CITY OF HARRISBURG						
REV NO	REVISIONS			DATE	BY	APPD



DISTRICT	COUNTY	ROUTE	SECTION	SHEET	
8-0	*	0083	094	1 OF 6	
LEMOYNE BOROUGH & CITY OF HARRISBURG					
REVISION NUMBER	REVISIONS			DATE	BY

* CUMBERLAND AND DAUPHIN

SEEDING TABLE

FORMULA AND SPECIES	PERCENT BY MASS	MINIMUM %		MAX % WEED SEED	SEEDING LBS PER ACRE	SOIL SUPPLEMENTS		STRAW OR HAY MULCHING LBS PER 1000 SQ. YARDS	SEEDING USE
		PURITY	GERMINATION			LIMESTONE LBS PER 1000 SQ. YARDS	10-20-20 FERTILIZER LBS PER 1000 SQ. YARDS		
NATIVE STEEP SLOPE SEED MIX - PERMANENT									
-INDIANGRASS, (SORGHASTRUM NUTANS)	30	95.5	75	0.15	6				
-VIRGINIA WILDRYE	24	95.5	85	0.15	4.8				
-DEERTONGUE, "TIOGA" (PANICUM CLANDESTINUM)	15	95.5	75	0.15	3				
-WILD SENSITIVE PEA, (CHAMAECRISTA FASICULATA)	10	95.5	60	0.15	2				
-BIG BLUESTEM, 'NIAGARA' (ANDROPOGON GERARDII)	7	95.5	75	0.15	1.4				
-SWITCHGRASS, (PANICUM VIRGATUM)	3	95.5	75	0.15	0.6				
-PURPLETOP, (TRIDENS FLAVUS)	3	95.5	85	0.15	0.6	800	140	1200	PERMANENT STABILIZATION
-FOX SEDGE, (CAREX VULPINOIDEA)	2	95.5	85	0.15	0.4				
-OXEYE SUNFLOWER, (HELIOPSIS HELIANTHOIDES)	1	95.5	85	0.15	0.2				
-CUTLEAF CONEFLOWER, (RUDBECKIA LACINIATA)	1	95.5	85	0.15	0.2				
-SHOWY TICKTREFOIL, (DESMODIUM CANADENSE)	1	95.5	60	0.15	0.2				
-BUTTERFLY MILKWEED, (ASCLEPIAS TUBEROSA)	1	95.5	85	0.15	0.2				
-NARROWLEAF MOUNTAINMINT, (PYCNANTHEMUM TENUIFOLIUM)	1	95.5	85	0.15	0.2				
-EARLY GOLDENROD, (SOLIDAGO JUNCEA)	1	95.5	85	0.15	0.2				

INCLUDING HARD SEED AND NORMAL SEEDLINGS

STABILIZATION NOTES

1. PLACE ALL SEEDING, SOIL SUPPLEMENTS AND MULCHING ITEMS IN ACCORDANCE WITH THE REQUIREMENTS OF THE MOST RECENT VERSION OF PENNDOT PUBLICATION 408, SECTIONS 804 AND 805.
2. SPREAD SEED AT THE RATES SPECIFIED AND ONLY WITHIN THE FOLLOWING DATES:

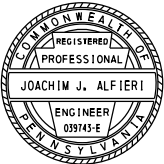
NATIVE STEEP SLOPE SEED MIX (PERMANENT SEEDING)- APRIL 1 TO JUNE 15 AND AUGUST 16 TO SEPTEMBER 15
3. AN AREA SHALL BE CONSIDERED TO HAVE ACHIEVED FINAL STABILIZATION WHEN IT HAS A MINIMUM UNIFORM 70% PERENNIAL VEGETATIVE COVER OR OTHER PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED SURFACE EROSION AND SUBSURFACE CHARACTERISTICS SUFFICIENT TO RESIST SLIDING AND OTHER MOVEMENTS.

NOTES

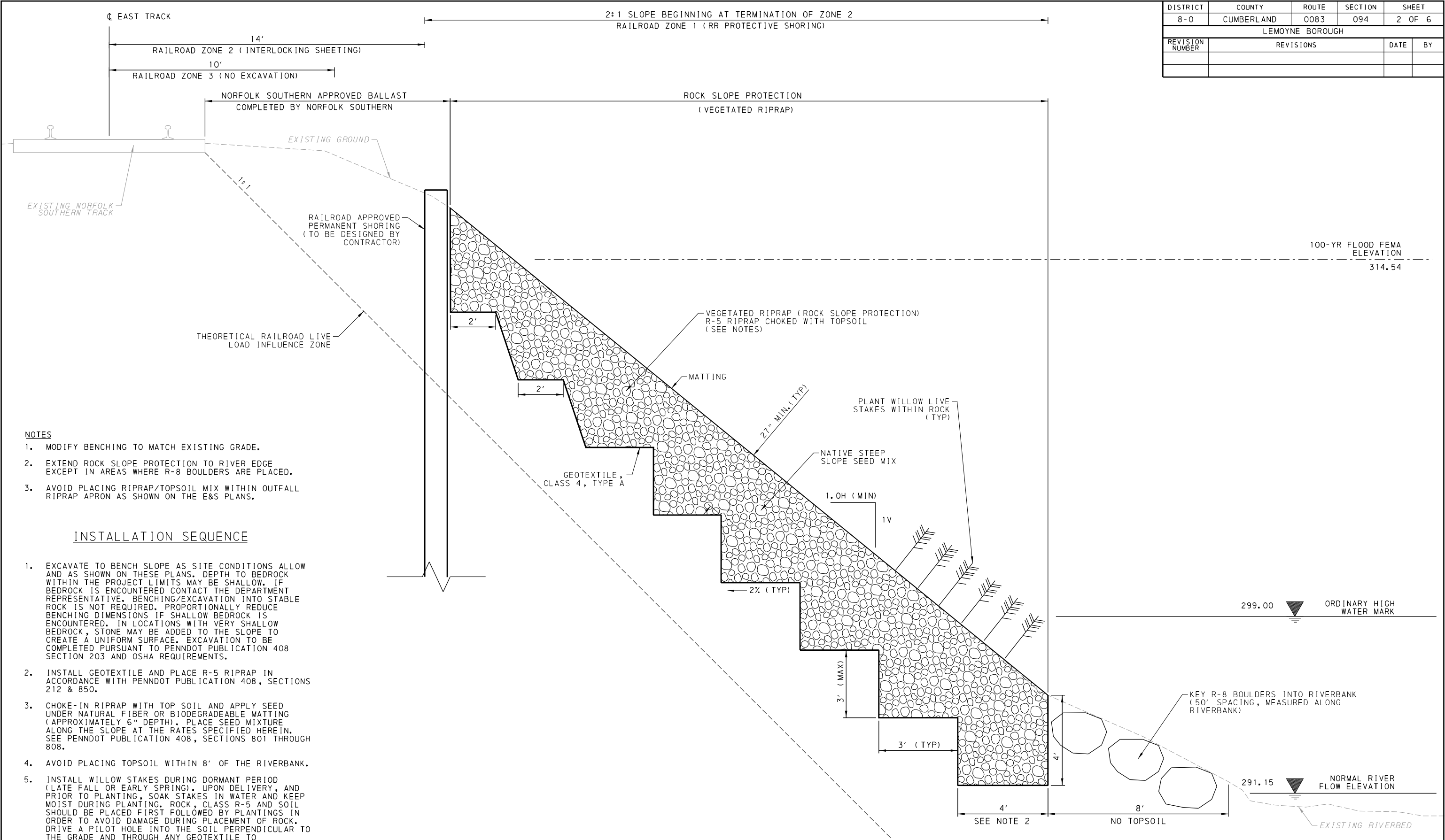
1. REFER TO E&S PLANS AND PCSM PLANS FOR ADDITIONAL PROJECT INFORMATION, REQUIREMENTS, PERIMETER CONTROLS ETC.

ENVR MITIGATION (SLOPE RESTORATION)

PREPARED BY:
HNTB CORPORATION
4507 N FRONT STREET
SUITE 300
HARRISBURG,
PA 17110


Joachim J. Alfieri

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
8-0	CUMBERLAND	0083	094	2 OF 6
LEMOYNE BOROUGH				
REVISION NUMBER	REVISIONS		DATE	BY



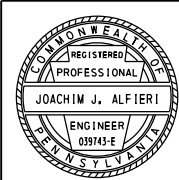
- NOTES**
1. MODIFY BENCHING TO MATCH EXISTING GRADE.
 2. EXTEND ROCK SLOPE PROTECTION TO RIVER EDGE EXCEPT IN AREAS WHERE R-8 BOULDERS ARE PLACED.
 3. AVOID PLACING RIPRAP/TOPSOIL MIX WITHIN OUTFALL RIPRAP APRON AS SHOWN ON THE E&S PLANS.

INSTALLATION SEQUENCE

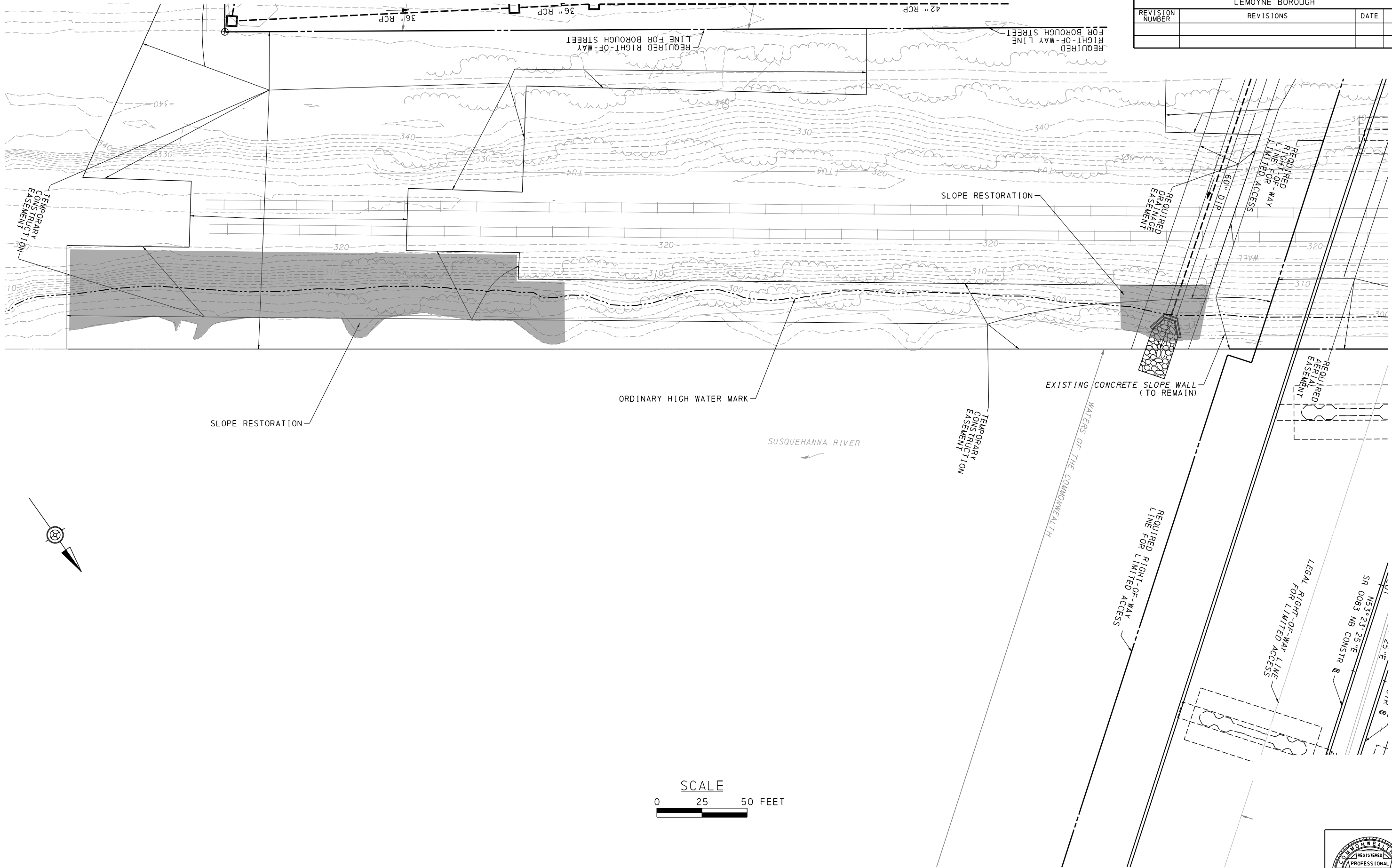
1. EXCAVATE TO BENCH SLOPE AS SITE CONDITIONS ALLOW AND AS SHOWN ON THESE PLANS. DEPTH TO BEDROCK WITHIN THE PROJECT LIMITS MAY BE SHALLOW. IF BEDROCK IS ENCOUNTERED CONTACT THE DEPARTMENT REPRESENTATIVE. BENCHING/EXCAVATION INTO STABLE ROCK IS NOT REQUIRED. PROPORTIONALLY REDUCE BENCHING DIMENSIONS IF SHALLOW BEDROCK IS ENCOUNTERED. IN LOCATIONS WITH VERY SHALLOW BEDROCK, STONE MAY BE ADDED TO THE SLOPE TO CREATE A UNIFORM SURFACE. EXCAVATION TO BE COMPLETED PURSUANT TO PENNDOT PUBLICATION 408 SECTION 203 AND OSHA REQUIREMENTS.
2. INSTALL GEOTEXTILE AND PLACE R-5 RIPRAP IN ACCORDANCE WITH PENNDOT PUBLICATION 408, SECTIONS 212 & 850.
3. CHOKE-IN RIPRAP WITH TOP SOIL AND APPLY SEED UNDER NATURAL FIBER OR BIODEGRADABLE MATTING (APPROXIMATELY 6" DEPTH). PLACE SEED MIXTURE ALONG THE SLOPE AT THE RATES SPECIFIED HEREIN. SEE PENNDOT PUBLICATION 408, SECTIONS 801 THROUGH 808.
4. AVOID PLACING TOPSOIL WITHIN 8' OF THE RIVERBANK.
5. INSTALL WILLOW STAKES DURING DORMANT PERIOD (LATE FALL OR EARLY SPRING). UPON DELIVERY, AND PRIOR TO PLANTING, SOAK STAKES IN WATER AND KEEP MOIST DURING PLANTING. ROCK, CLASS R-5 AND SOIL SHOULD BE PLACED FIRST FOLLOWED BY PLANTINGS IN ORDER TO AVOID DAMAGE DURING PLACEMENT OF ROCK. DRIVE A PILOT HOLE INTO THE SOIL PERPENDICULAR TO THE GRADE AND THROUGH ANY GEOTEXTILE TO FACILITATE INSERTION OF WILLOW STAKES. INSERT WILLOW STAKES INTO PILOT HOLES WITH BUDS POINTED UP AND AT LEAST TWO-THIRDS OF THE STAKE LENGTH UNDERGROUND. PLANT STAKES IN STAGGERED ROWS IN TRIANGULAR SPACING, APPROXIMATELY 3 FEET ON CENTER. TAMP THE SOIL DOWN AROUND THE CUTTINGS AND WATER THOROUGHLY. IF A LONG DRY SPELL OR HOT WEATHER IS ANTICIPATED AFTER PLANTING, IRRIGATION MAY BE REQUIRED.

TYPICAL SECTION - WEST SHORE RESTORATION MEASURES

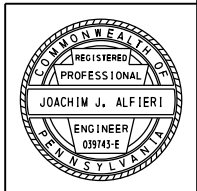
ENVR MITIGATION (SLOPE RESTORATION)



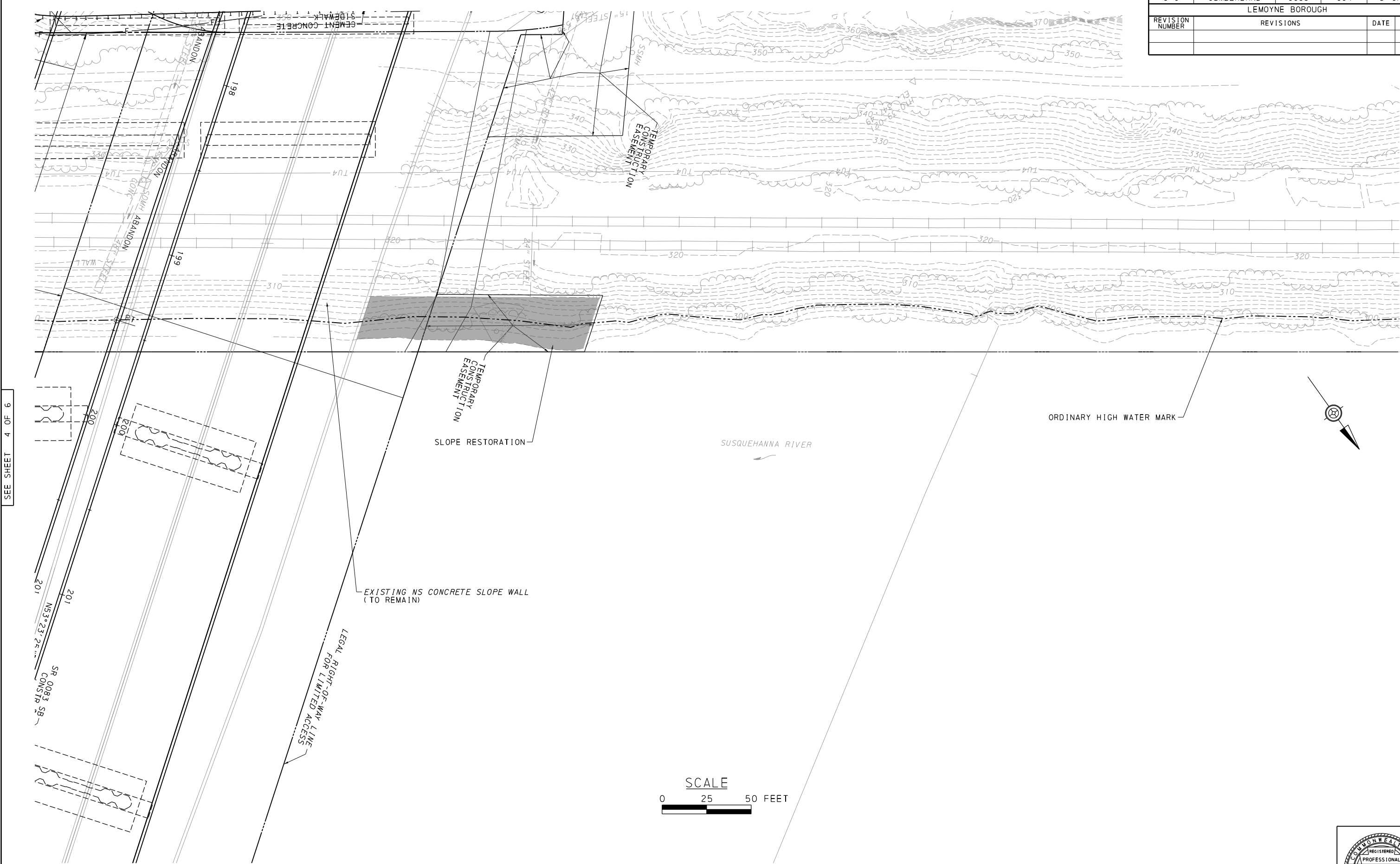
DISTRICT	COUNTY	ROUTE	SECTION	SHEET
8-0	CUMBERLAND	0083	094	4 OF 6
LEMOYNE BOROUGH				
REVISION NUMBER	REVISIONS	DATE	BY	



ENVR MITIGATION (SLOPE RESTORATION) - WEST SHORE



DISTRICT	COUNTY	ROUTE	SECTION	SHEET
8-0	CUMBERLAND	0083	094	5 OF 6
LEMOYNE BOROUGH				
REVISION NUMBER	REVISIONS		DATE	BY



ENVR MITIGATION (SLOPE RESTORATION) - WEST SHORE

