Released for Construction
Thomas J Powell, PE
10/05/2021

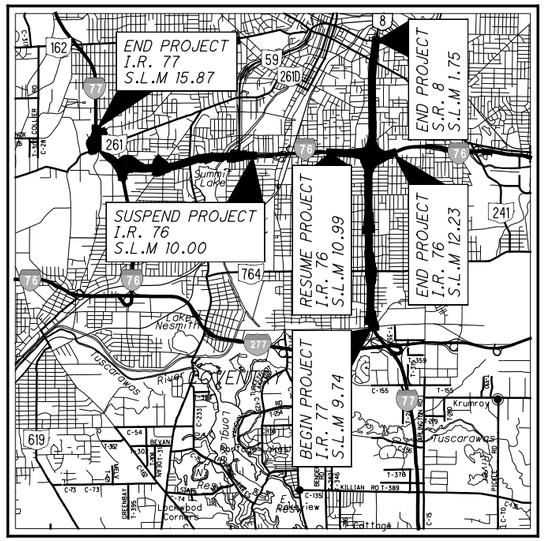
STATE OF OHIO

DEPARTMENT OF TRANSPORTATION

SUM-76-8.24
SUM-77-9.74
SUM-8-0.00

SUMMIT COUNTY

CITY OF AKRON



LOCATION MAP

LATITUDE: N 41° 03′ 43″ LONGITUDE: W 81° 30′ 17″

SCALE IN MILES

0 1 2 3 4

N

PORTION TO BE IMPROVED _____

INTERSTATE HIGHWAY _____

FEDERAL ROUTES _____

STATE ROUTES _____

COUNTY & TOWNSHIP ROADS _____

OTHER ROADS _____

DESIGN DESIGNATION

MAINTENANCE OF TRAFFIC PLANS:
SEE BU-4 & BU-5
ROADWAY PLANS:
SEE BU-33A, BU-33B & BU-34

DESIGN EXCEPTIONS

N/A

PROJECT DESCRIPTION

THE AKRON CENTRAL INTERCHANGE PROJECT (PID 102329) INCLUDES RECONSTRUCTION OF IR-76 EB/WB PAVEMENT FROM SLM 11.05 (IR-76) TO SLM (IR-76) FOR APPROX. 1.16 MILES OF MAINLINE WORK. THIS PROJECT ALSO INCLUDES REPLACEMENT OF TWO FREEWAY STRUCTURES (RAMP N AND RAMP Q) ON NEW ALIGNMENTS, WIDENING OF TWO EXISTING BRIDGES (IR-76 EB OVER BROWN STREET AND IR-76 WB OVER INMAN STREET), CONSTRUCTION OF A NEW PEDESTRIAN/MULTI-USE OVERPASS SPANNING SR-8, AND CONSTRUCTION OF NOISE BARRIERS AT THE PERIMETER OF THE INTERCHANGE. PORTIONS OF SR-8, LANE O AND LANE S ARE TO BE RESURFACED. THE EXISTING IR-76 WB TO INMAN STREET AND IR-77 SB TO LOVERS LANE WILL BE REMOVED PERMANENTLY, AS WELL AS THE EXISTING LAFOLLETTE STREET BRIDGE OVER SR-8 (SUM-77-1184).

BUILDABLE UNIT 15 DESCRIPTION

THIS BUILDABLE UNIT INCLUDES THE REHABILITATION OF SIX STRUCTURES ALONG ROUTE 8 FROM RAMP S TO PERKINS ST., TWO STRUCTURES ALONG I-76 OVER I-77NB & ROUTE 8, EIGHT STRUCTURES ALONG I-76 FROM WATERLOO RD. TO I-77 NB OVER ROUTE 8 AND ONE STRUCTURE ON ROUTE 764 OVER I-77.

LIMITED ACCESS

THIS IMPROVEMENT IS ESPECIALLY DESIGNED FOR THROUGH TRAFFIC AND HAS BEEN DECLARED A LIMITED ACCESS HIGHWAY OR FREEWAY BY ACTION OF THE DIRECTOR IN ACCORDANCE WITH THE PROVISIONS OF SECTION 5511.02 OF THE OHIO REVISED CODE.

2019 SPECIFICATIONS

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PLANS AND CHANGES LISTED IN THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

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UNDERGROUND UTILITIES
Contact Two Working Days Before You Dig
OHIO811.org Before You Dig
OHIO811, 8-1-1, or 1-800-362-2764
(Non-members must be called directly)

PLAN PREPARED BY:
PRIME AE

ENGINEERS SEAL:
FOR STRUCTURES OVER 20′
STATE OF OHIO · KELLY D. CHRISMAN · 68920 · REGISTERED · PROFESSIONAL ENGINEER
SIGNED: Kelly D. Chrisman
DATE: 9-22-2021

STANDARD CONSTRUCTION DRAWINGS		*SUPPLEMENTAL SPECIFICATIONS*
MGS-3.1	*1/19/18*	*800-2019 10/16/20*
MGS-3.2	*1/18/13*	
RM-4.5	*7/21/17*	
TC-41.20	*10/18/13*	
AS-1-15	*7/17/15*	
AS-2-15	*1/18/19*	
BR-1-13	*1/17/14*	
EXJ-4-87	*1/19/18*	
GSD-1-19	*1/15/21*	
SBR-1-20	*7/17/20*	
VPF-1-90	*7/20/18*	
		SPECIAL PROVISIONS

ruhlin · SHELLY & SANDS
AKRON BELTWAY JV

BU-15

STRUCTURES

ROUTE 8, I-76 & I-77
BRIDGE REHABILITATIONS
RELEASED FOR CONSTRUCTION
SEPTEMBER 22, 2021

ISSUE RECORD:		
NO.	DATE	DESCRIPTION

pw:\\VANVA01PWINT01.parsons.com:Ohio State\Documents\DB-Akron Beltway Rehab\10 - Design\102329\Structures\BU-15\Sheets\008_0023S_GT001.dgn Sheet 10/4/2021 2:45:11 PM KChrisman

2021-09-22_BU 15 - RFC PLANS

FEDERAL PROJECT NO. E180(428)
PID NO. 102329
CONSTRUCTION PROJECT NO. 21-3000
RAILROAD INVOLVEMENT NONE
SUM-76/77/8-8.24/9.74/0.00
1/65

ISSUE RECORD:		
NO.	DATE	DESCRIPTION

pw:\\VANVA01PWINT01.parsons.com:Ohio State\Documents\DB-Akron Beltway Rehab\10 - Design\102329\Structures\BU-15\Sheets\008_0023S_MD002.dgn Sheet 10/4/2021 2:45:18 PM KChrisman

LOCATION MAP

LOCATION MAP

Released for Construction
Thomas J Powell, PE
10/05/2021

2021-09-22_BU 15 - RFC PLANS

2 / 65	SUM-76/77/8-8.24/9.74/0.00 PID No. 102329	LOCATION MAP BRIDGE NO. SUM-8-0023S, SUM-8-0038, SUM-8-0117, SUM-8-0125, SUM-8-0160, SUM-59-0341 SUM-76-1151L, SUM-76-1154R, SUM-77-0974R, SUM-77-0975L, SUM-77-1022, SUM-77-1082	DESIGNED KDC CHECKED JAT	DRAWN KDC REVISED	REVIEWED SAN DATE 6/18/21 STRUCTURE FILE NUMBER	DESIGN AGENCY PRIME AE 8415 Pulsar Place Suite 300 Columbus Ohio 43231	

Released for Construction
Thomas J Powell, PE
10/05/2021

STRUCTURE GENERAL NOTES

STANDARD DRAWINGS:

REFER TO THE FOLLOWING STANDARD BRIDGE DRAWINGS:

AS-1-15	REVISED	7/17/15
AS-2-15	REVISED	1/18/15
BR-1-13	REVISED	1/17/14
EXJ-4-87	REVISED	1/19/18
GSD-1-19	REVISED	1/15/21
SBR-1-20	REVISED	7/17/20
VPF-1-90	REVISED	7/20/18

EXISTING STRUCTURE VERIFICATION:

DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURE AND FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURE AND THE PROPOSED WORK BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO CMS SECTIONS 102.05, 105.02 AND 513.04.

EXISTING BRIDGE PLANS:

EXISTING AND REHABILITATION BRIDGE PLANS HAVE BEEN PROVIDED BY ODOT DISTRICT 4.

PROPOSED WORK:

SUM-8-0023S (RAMP S (SR-8 SB TO I-76 EB)):

- SEAL BRIDGE DECK AND APPROACH SLABS WITH GRAVITY FED RESIN.
- REMOVE SPALLS AND DELAMINATIONS OVER SAFETY SENSITIVE AREAS (PAVEMENT, SHOULDERS, SIDEWALKS, ETC.) FROM THE FLOOR AND SEAL WITH EPOXY-URETHANE.
- INSPECT SUBSTRUCTURE AND PERFORM REQUIRED PATCHING.
- REMOVE EXISTING SEALER (IF PRESENT) PER C&MS 512 FROM SUPERSTRUCTURE AND SUBSTRUCTURE AND SEAL WITH EPOXY-URETHANE SEALER.
- REMOVE ALL DIRT AND DEBRIS FROM THE BEAM SEATS, DRAINAGE SYSTEMS (IF PRESENT), AND BRIDGE JOINTS.
- INSPECT BRIDGE DECK, MARK THE AREAS TO BE PATCHED AND PERFORM REQUIRED PATCHING.
- PAINT FASCIA BEAMS (EXTERIOR AND BOTTOM FLANGES ONLY) OF THE EXISTING STRUCTURAL STEEL AS PER C&MS 514.
- REMOVE AND REPLACE THE EXPANSION JOINT STRIP SEALS AT THE FORWARD AND REAR APPROACHES.
- REPAIR THE PARAPET AT THE REAR LEFT OF THE STRUCTURE.
- REPAIR THE EROSION AT THE REAR LEFT OF THE STRUCTURE.
- REMOVE EXISTING STRUCTURE IDENTIFICATION SIGNS (IF PRESENT) AND INSTALL NEW STRUCTURE IDENTIFICATION SIGNS IN THE APPROACH DIRECTION(S).
- PROVIDE VERTICAL CLEARANCE MEASUREMENTS PRIOR TO THE START OF CONSTRUCTION AND AFTER THE COMPLETION OF CONSTRUCTION.

SUM-8-0038 (JOHNSTON ST. OVER SR-8):

- REMOVE SPALLS AND DELAMINATIONS OVER SAFETY SENSITIVE AREAS (PAVEMENT, SHOULDERS, SIDEWALKS, ETC.) FROM THE FLOOR AND SEAL WITH EPOXY-URETHANE.
- INSPECT SUBSTRUCTURE AND PERFORM REQUIRED PATCHING.
- REMOVE EXISTING SEALER (IF PRESENT) PER C&MS 512 FROM SUPERSTRUCTURE AND SUBSTRUCTURE AND SEAL WITH NON-EPOXY SEALER ON THE SIDEWALK AND EPOXY-URETHANE SEALER ON THE REMAINDER.
- REMOVE ALL DIRT AND DEBRIS FROM THE BEAM SEATS, DRAINAGE SYSTEMS (IF PRESENT), AND BRIDGE JOINTS.
- PAINT ALL STRUCTURAL STEEL AS PER C&MS 514.
- REPAIR PAINT THE EXISTING METAL CURB PLATES AND SIDEWALK ARMOR AS PER C&MS 514.22.
- REFURBISH ALL BEARINGS AT THE REAR AND FORWARD APPROACHES.
- REMOVE AND REPLACE THE EXISTING VANDAL PROTECTION FENCE AS PER STD. DWG. VPF-1-90 (STRAIGHT FENCE). THE COLOR OF ALL VISUAL HARDWARE AND FABRIC SHALL BE COATED BLACK (FEDERAL COLOR NO. 27038).
- REMOVE EXISTING STRUCTURE IDENTIFICATION SIGNS (IF PRESENT) AND INSTALL NEW STRUCTURE IDENTIFICATION SIGNS IN THE APPROACH DIRECTION(S).

PROPOSED WORK (CONT'D):

- PROVIDE VERTICAL CLEARANCE MEASUREMENTS PRIOR TO THE START OF CONSTRUCTION AND AFTER THE COMPLETION OF CONSTRUCTION.

SUM-8-0117 (CARROLL ST. OVER SR-8):

- REMOVE SPALLS AND DELAMINATIONS OVER SAFETY SENSITIVE AREAS (PAVEMENT, SHOULDERS, SIDEWALKS, ETC.) FROM THE FLOOR AND SEAL WITH EPOXY-URETHANE.
- INSPECT SUBSTRUCTURE AND PERFORM REQUIRED PATCHING.
- REMOVE EXISTING SEALER (IF PRESENT) PER C&MS 512 FROM SUPERSTRUCTURE AND SUBSTRUCTURE AND SEAL WITH NON-EPOXY SEALER ON THE SIDEWALK AND EPOXY-URETHANE SEALER ON THE REMAINDER.
- REMOVE AND REPLACE THE EXPANSION JOINT STRIP SEALS AT THE REAR AND FORWARDS APPROACHES.
- REMOVE AND REPLACE THE EXISTING VANDAL PROTECTION FENCE AS PER STD. DWG. VPF-1-90 (STRAIGHT FENCE). THE COLOR OF ALL VISUAL HARDWARE AND FABRIC SHALL BE COATED BLACK (FEDERAL COLOR NO. 27038).
- REMOVE EXISTING STRUCTURE IDENTIFICATION SIGNS (IF PRESENT) AND INSTALL NEW STRUCTURE IDENTIFICATION SIGNS IN THE APPROACH DIRECTION(S).
- PROVIDE VERTICAL CLEARANCE MEASUREMENTS PRIOR TO THE START OF CONSTRUCTION AND AFTER THE COMPLETION OF CONSTRUCTION.

SUM-8-0125 (BUCHTEL ST. OVER SR-8):

- REMOVE SPALLS AND DELAMINATIONS OVER SAFETY SENSITIVE AREAS (PAVEMENT, SHOULDERS, SIDEWALKS, ETC.) FROM THE FLOOR AND SEAL WITH EPOXY-URETHANE.
- INSPECT SUBSTRUCTURE AND PERFORM REQUIRED PATCHING.
- REMOVE EXISTING SEALER (IF PRESENT) PER C&MS 512 FROM SUPERSTRUCTURE AND SUBSTRUCTURE AND SEAL WITH NON-EPOXY SEALER ON THE SIDEWALK AND EPOXY-URETHANE SEALER ON THE REMAINDER.
- REMOVE AND REPLACE THE EXISTING VANDAL PROTECTION FENCE AS PER STD. DWG. VPF-1-90 (STRAIGHT FENCE). THE COLOR OF ALL VISUAL HARDWARE AND FABRIC SHALL BE COATED BLACK (FEDERAL COLOR NO. 27038).
- REMOVE EXISTING STRUCTURE IDENTIFICATION SIGNS (IF PRESENT) AND INSTALL NEW STRUCTURE IDENTIFICATION SIGNS IN THE APPROACH DIRECTION(S).
- REMOVE AND REPLACE PORTIONS OF APPROACH SIDEWALK AS DESIGNATED BY THE ENGINEER.

SUM-8-0160 (FORGE ST. OVER SR-8):

- REMOVE SPALLS AND DELAMINATIONS OVER SAFETY SENSITIVE AREAS (PAVEMENT, SHOULDERS, SIDEWALKS, ETC.) FROM THE FLOOR AND SEAL WITH EPOXY-URETHANE.
- INSPECT SUBSTRUCTURE AND PERFORM REQUIRED PATCHING.
- SEAL BRIDGE DECK AND APPROACH SLABS WITH GRAVITY FED RESIN.
- REMOVE EXISTING SEALER (IF PRESENT) PER C&MS 512 FROM SUPERSTRUCTURE AND SUBSTRUCTURE AND SEAL WITH NON-EPOXY SEALER ON THE SIDEWALK AND EPOXY-URETHANE SEALER ON THE REMAINDER.
- INSPECT BRIDGE DECK, MARK THE AREAS TO BE PATCHED AND PERFORM REQUIRED PATCHING.
- REMOVE AND REPLACE THE EXISTING ASPHALT FROM THE PRESSURE RELIEF JOINTS AT EACH END OF THE STRUCTURE.
- REMOVE EXISTING STRUCTURE IDENTIFICATION SIGNS (IF PRESENT) AND INSTALL NEW STRUCTURE IDENTIFICATION SIGNS IN THE APPROACH DIRECTION(S).
- PROVIDE VERTICAL CLEARANCE MEASUREMENTS PRIOR TO THE START OF CONSTRUCTION AND AFTER THE COMPLETION OF CONSTRUCTION.

PROPOSED WORK (CONT'D):

SUM-59-0341 (PERKINS ST. OVER SR-8):

- REMOVE SPALLS AND DELAMINATIONS OVER SAFETY SENSITIVE AREAS (PAVEMENT, SHOULDERS, SIDEWALKS, ETC.) FROM THE FLOOR AND SEAL WITH EPOXY-URETHANE.
- INSPECT SUBSTRUCTURE AND PERFORM REQUIRED PATCHING.
- REMOVE EXISTING SEALER (IF PRESENT) PER C&MS 512 FROM SUPERSTRUCTURE AND SUBSTRUCTURE AND SEAL WITH NON-EPOXY SEALER ON THE SIDEWALK AND EPOXY-URETHANE SEALER ON THE REMAINDER.
- REMOVE AND REPLACE PORTIONS OF THE APPROACH SIDEWALK AS DESIGNATED BY THE ENGINEER.
- REMOVE EXISTING STRUCTURE IDENTIFICATION SIGNS (IF PRESENT) AND INSTALL NEW STRUCTURE IDENTIFICATION SIGNS IN THE APPROACH DIRECTION(S).
- PROVIDE VERTICAL CLEARANCE MEASUREMENTS PRIOR TO THE START OF CONSTRUCTION AND AFTER THE COMPLETION OF CONSTRUCTION.

SUM-76-1151L (I-76 WB OVER I-77 NB & SR-8):

- REMOVE ASPHALT FROM BRIDGE DECK AND APPROACH SLABS AND REPLACE WITH A NEW MICRO-SILICA CONCRETE OVERLAY MATCHING THE ORIGINAL DECK ELEVATION.
- REMOVE SPALLS AND DELAMINATIONS OVER SAFETY SENSITIVE AREAS (PAVEMENT, SHOULDERS, SIDEWALKS, ETC.) FROM THE FLOOR AND SEAL WITH EPOXY-URETHANE.
- INSPECT SUBSTRUCTURE AND PERFORM REQUIRED PATCHING.
- REMOVE EXISTING SEALER (IF PRESENT) PER C&MS 512 FROM SUPERSTRUCTURE AND SUBSTRUCTURE AND SEAL WITH EPOXY-URETHANE SEALER.
- REMOVE ALL DIRT AND DEBRIS FROM THE BEAM SEATS, DRAINAGE SYSTEMS (IF PRESENT), AND BRIDGE JOINTS.
- PAINT ALL STRUCTURAL STEEL AS PER C&MS 514.
- REMOVE AND REPLACE THE EXPANSION JOINT STRIP SEALS AT THE FORWARD AND REAR APPROACHES.
- PERMANENTLY CLOSE THE EXISTING RAMP N CONNECTION BY CONSTRUCTING A NEW CONCRETE PARAPET.
- REFURBISH ALL BEARINGS AT THE REAR AND FORWARD ABUTMENTS.
- REMOVE EXISTING STRUCTURE IDENTIFICATION SIGNS (IF PRESENT) AND INSTALL NEW STRUCTURE IDENTIFICATION SIGNS IN THE APPROACH DIRECTION(S).
- PROVIDE VERTICAL CLEARANCE MEASUREMENTS PRIOR TO THE START OF CONSTRUCTION AND AFTER THE COMPLETION OF CONSTRUCTION.

SUM-76-1154R (I-76 EB OVER I-77 NB & SR-8):

- REMOVE ASPHALT FROM BRIDGE DECK AND APPROACH SLABS AND REPLACE WITH A NEW MICRO-SILICA CONCRETE OVERLAY MATCHING THE ORIGINAL DECK ELEVATION.
- REMOVE SPALLS AND DELAMINATIONS OVER SAFETY SENSITIVE AREAS (PAVEMENT, SHOULDERS, SIDEWALKS, ETC.) FROM THE FLOOR AND SEAL WITH EPOXY-URETHANE.
- INSPECT SUBSTRUCTURE AND PERFORM REQUIRED PATCHING.
- REMOVE EXISTING SEALER (IF PRESENT) PER C&MS 512 FROM SUPERSTRUCTURE AND SUBSTRUCTURE AND SEAL WITH EPOXY-URETHANE SEALER.
- REMOVE ALL DIRT AND DEBRIS FROM THE BEAM SEATS, DRAINAGE SYSTEMS (IF PRESENT), AND BRIDGE JOINTS.
- PAINT ALL STRUCTURAL STEEL AS PER C&MS 514.
- REMOVE AND REPLACE THE EXPANSION JOINT STRIP SEALS AT THE FORWARD AND REAR APPROACHES.
- PERMANENTLY CLOSE THE EXISTING RAMP P CONNECTION BY CONSTRUCTING A NEW CONCRETE PARAPET.
- REFURBISH ALL BEARINGS AT THE REAR AND FORWARD ABUTMENTS.
- REMOVE EXISTING STRUCTURE IDENTIFICATION SIGNS (IF PRESENT) AND INSTALL NEW STRUCTURE IDENTIFICATION SIGNS IN THE APPROACH DIRECTION(S).
- PROVIDE VERTICAL CLEARANCE MEASUREMENTS PRIOR TO THE START OF CONSTRUCTION AND AFTER THE COMPLETION OF CONSTRUCTION.

PROPOSED WORK (CONT'D):

SUM-77-0974R (I-77 NB OVER WATERLOO RD.):

- INSTALL A MICRO-SILICA CONCRETE OVERLAY MATCHING THE CURRENT EXISTING DECK ELEVATION.
- REMOVE SPALLS AND DELAMINATIONS OVER SAFETY SENSITIVE AREAS (PAVEMENT, SHOULDERS, SIDEWALKS, ETC.) FROM THE FLOOR AND SEAL WITH EPOXY-URETHANE.
- INSPECT SUBSTRUCTURE AND PERFORM REQUIRED PATCHING.
- REMOVE EXISTING SEALER (IF PRESENT) PER C&MS 512 FROM SUPERSTRUCTURE AND SUBSTRUCTURE AND SEAL WITH EPOXY-URETHANE SEALER.
- REMOVE ALL DIRT AND DEBRIS FROM THE BEAM SEATS, DRAINAGE SYSTEMS (IF PRESENT), AND BRIDGE JOINTS.
- REMOVE AND REPLACE THE EXPANSION JOINTS AT THE REAR AND FORWARD APPROACHES.
- REFURBISH ALL BEARINGS AT THE REAR AND FORWARD ABUTMENTS.
- REMOVE AND REPLACE ALL END CROSSFRAMES AT THE REAR ABUTMENT.
- REMOVE AND REPLACE THE EXISTING REAR AND FORWARD APPROACH SLABS. THE NEW APPROACH SLABS SHALL BE FULL-WIDTH, PROVIDE THE PARAPET TRANSITIONS AND PROVIDE THE APPROPRIATE APPROACH SLAB INSTALLATION PER STD. DWG. AS-2-15.
- REMOVE EXISTING STRUCTURE IDENTIFICATION SIGNS (IF PRESENT) AND INSTALL NEW STRUCTURE IDENTIFICATION SIGNS IN THE APPROACH DIRECTION(S).
- PROVIDE VERTICAL CLEARANCE MEASUREMENTS PRIOR TO THE START OF CONSTRUCTION.

SUM-77-0975L (I-77 SB OVER WATERLOO RD.):

- INSTALL A MICRO-SILICA CONCRETE OVERLAY MATCHING THE CURRENT EXISTING DECK ELEVATION.
- REMOVE SPALLS AND DELAMINATIONS OVER SAFETY SENSITIVE AREAS (PAVEMENT, SHOULDERS, SIDEWALKS, ETC.) FROM THE FLOOR AND SEAL WITH EPOXY-URETHANE.
- INSPECT SUBSTRUCTURE AND PERFORM REQUIRED PATCHING.
- REMOVE EXISTING SEALER (IF PRESENT) PER C&MS 512 FROM SUPERSTRUCTURE AND SUBSTRUCTURE AND SEAL WITH EPOXY-URETHANE SEALER.
- REMOVE ALL DIRT AND DEBRIS FROM THE BEAM SEATS, DRAINAGE SYSTEMS (IF PRESENT), AND BRIDGE JOINTS.
- REMOVE AND REPLACE THE EXPANSION JOINTS AT THE FORWARD AND REAR APPROACHES.
- REFURBISH ALL BEARINGS AT THE REAR AND FORWARD ABUTMENTS.
- REMOVE AND REPLACE THE EXISTING REAR AND FORWARD APPROACH SLABS. THE NEW APPROACH SLABS SHALL BE FULL-WIDTH, PROVIDE THE PARAPET TRANSITIONS AND PROVIDE THE APPROPRIATE APPROACH SLAB INSTALLATION PER STD. DWG. AS-2-15.
- REMOVE EXISTING STRUCTURE IDENTIFICATION SIGNS (IF PRESENT) AND INSTALL NEW STRUCTURE IDENTIFICATION SIGNS IN THE APPROACH DIRECTION(S).
- PROVIDE VERTICAL CLEARANCE MEASUREMENTS PRIOR TO THE START OF CONSTRUCTION.

ISSUE RECORD:

NO.	DATE	DESCRIPTION

pw:\\VANVA01PWINT01.parsons.com:Ohio State\Documents\DB-Akron Beltway Rehab\10 - Design\102329\Structures\BU-15\Sheets\008_0023S_GN001.dgn Sheet 10/4/2021 2:45:27 PM KChrisman

DESIGN AGENCY
PRIME AE
8415 Pulsar Place Suite 300
Columbus Ohio 43240

DESIGNED	DRAWN	REVIEWED	DATE
KDC	KDC	SAN	6/18/21
CHECKED	REVISED	STRUCTURE FILE NUMBER	
JAT			

GENERAL NOTES (1 OF 5)

SUM-76/77/8-8.24/9.74/0.00
PID No. 102329

2021-09-22_BU 15 - RFC PLANS

Released for Construction
Thomas J Powell, PE
10/05/2021

STRUCTURE GENERAL NOTES

PROPOSED WORK (CONT'D):

SUM-77-1022 (CATAWBA AVE. OVER I-77):

- REMOVE EXISTING SEALER (IF PRESENT) PER C&MS 512 FROM SUPERSTRUCTURE AND SUBSTRUCTURE AND SEAL WITH NON-EPOXY SEALER ON SIDEWALKS AND EPOXY-URETHANE ELSEWHERE AS SHOWN IN THE PLANS.
- REMOVE SPALLS AND DELAMINATIONS OVER SAFETY SENSITIVE AREAS (PAVEMENT, SHOULDERS, SIDEWALKS, ETC.) FROM THE FLOOR AND SEAL WITH EPOXY-URETHANE.
- REMOVE AND REPLACE THE EXISTING VANDAL PROTECTION FENCE AS PER STD. DWG. VPF-1-90 (STRAIGHT FENCE). THE COLOR OF ALL VISUAL HARDWARE AND FABRIC SHALL BE COATED BLACK (FEDERAL COLOR NO. 27038).
- INSPECT SUBSTRUCTURE AND PERFORM REQUIRED PATCHING.
- REMOVE EXISTING STRUCTURE IDENTIFICATION SIGNS (IF PRESENT) AND INSTALL NEW STRUCTURE IDENTIFICATION SIGNS IN THE APPROACH DIRECTION(S).
- PROVIDE VERTICAL CLEARANCE MEASUREMENTS PRIOR TO THE START OF CONSTRUCTION AND AFTER THE COMPLETION OF CONSTRUCTION.

SUM-77-1082 (I-77 OVER FIRESTONE BLVD.):

- REMOVE EXISTING SEALER (IF PRESENT) PER C&MS 512 FROM SUPERSTRUCTURE AND SUBSTRUCTURE AND SEAL WITH AN EPOXY-URETHANE SEALER.
- REMOVE SPALLS AND DELAMINATIONS OVER SAFETY SENSITIVE AREAS (PAVEMENT, SHOULDERS, SIDEWALKS, ETC.) FROM THE FLOOR AND SEAL WITH EPOXY-URETHANE.
- REMOVE EXISTING CONCRETE OVERLAY & EXISTING ASPHALT OVERLAY FROM BRIDGE DECK AND APPROACH SLABS AND REPLACE WITH A NEW MICRO-SILICA CONCRETE OVERLAY MATCHING THE CURRENT ELEVATION OF EXISTING CONCRETE OVERLAY. ADJUST CROWN ON THE SOUTHBOUND BRIDGE ONLY.
- REMOVE AND REPLACE THE EXPANSION JOINT STRIP SEALS AT THE FORWARD AND REAR APPROACH.
- INSPECT SUBSTRUCTURE AND PERFORM REQUIRED PATCHING.
- REMOVE EXISTING STRUCTURE IDENTIFICATION SIGNS (IF PRESENT) AND INSTALL NEW STRUCTURE IDENTIFICATION SIGNS IN THE APPROACH DIRECTION(S).
- PROVIDE VERTICAL CLEARANCE MEASUREMENTS PRIOR TO THE START OF CONSTRUCTION.

SUM-77-1096 (I-77 OVER ARCHWOOD AVE. CR-671):

- REMOVE EXISTING SEALER (IF PRESENT) PER C&MS 512 FROM SUPERSTRUCTURE AND SUBSTRUCTURE AND SEAL WITH AN EPOXY-URETHANE SEALER.
- REMOVE SPALLS AND DELAMINATIONS OVER SAFETY SENSITIVE AREAS (PAVEMENT, SHOULDERS, SIDEWALKS, ETC.) FROM THE FLOOR AND SEAL WITH EPOXY-URETHANE.
- REMOVE EXISTING CONCRETE OVERLAY & EXISTING ASPHALT OVERLAY FROM BRIDGE DECK AND APPROACH SLABS AND REPLACE WITH A NEW MICRO-SILICA CONCRETE OVERLAY MATCHING THE CURRENT ELEVATION OF EXISTING CONCRETE OVERLAY. ADJUST CROWN ON NORTHBOUND AND SOUTHBOUND BRIDGES.
- REMOVE AND REPLACE THE EXPANSION JOINT STRIP SEALS AT THE FORWARD AND REAR APPROACH.
- REFURBISH ALL BEARINGS AT REAR AND FORWARD ABUTMENTS.
- INSPECT SUBSTRUCTURE AND PERFORM REQUIRED PATCHING.
- REMOVE EXISTING STRUCTURE IDENTIFICATION SIGNS (IF PRESENT) AND INSTALL NEW STRUCTURE IDENTIFICATION SIGNS IN THE APPROACH DIRECTION(S).
- PROVIDE VERTICAL CLEARANCE MEASUREMENTS PRIOR TO THE START OF CONSTRUCTION.

SUM-764-0214 (SR 764 OVER I-77):

- REMOVE SPALLS AND DELAMINATIONS OVER SAFETY SENSITIVE AREAS (PAVEMENT, SHOULDERS, SIDEWALKS, ETC.) FROM THE FLOOR AND SEAL WITH EPOXY-URETHANE.
- REMOVE EXISTING STRUCTURE IDENTIFICATION SIGNS (IF PRESENT) AND INSTALL NEW STRUCTURE IDENTIFICATION SIGNS IN THE APPROACH DIRECTION(S).
- PROVIDE VERTICAL CLEARANCE MEASUREMENTS PRIOR TO THE START OF CONSTRUCTION AND AFTER THE COMPLETION OF CONSTRUCTION.

PROPOSED WORK (CONT'D):

SUM-77-1132 (COLE AVENUE OVER I-77):

- REMOVE EXISTING SEALER (IF PRESENT) PER C&MS 512 FROM SUPERSTRUCTURE AND SUBSTRUCTURE AND SEAL WITH NON-EPOXY SEALER ON SIDEWALKS AND EPOXY-URETHANE ELSEWHERE AS SHOWN IN THE PLANS.
- REMOVE SPALLS AND DELAMINATIONS OVER SAFETY SENSITIVE AREAS (PAVEMENT, SHOULDERS, SIDEWALKS, ETC.) FROM THE FLOOR AND SEAL WITH EPOXY-URETHANE.
- REMOVE AND REPLACE THE EXISTING VANDAL PROTECTION FENCE AS PER STD. DWG. VPF-1-90 (STRAIGHT FENCE). THE COLOR OF ALL VISUAL HARDWARE AND FABRIC SHALL BE COATED BLACK (FEDERAL COLOR NO. 27038).
- REMOVE ALL DIRT AND DEBRIS FROM THE BEAM SEATS, DRAINAGE SYSTEMS (IF PRESENT), AND BRIDGE JOINTS.
- REMOVE EXISTING CATHODIC PROTECTION SYSTEM, THIS INCLUDES DISCONNECTING THE POWER SERVICE, REMOVAL OF CABINET, CONDUIT, WIRING, ETC.
- REPAIR AREAS OF THE CURB AS DESIGNATED BY THE ENGINEER.
- INSPECT SUBSTRUCTURE, MARK THE AREAS TO BE PATCHED AND PERFORM THE REQUIRED PATCHING.
- REMOVE EXISTING STRUCTURE IDENTIFICATION SIGNS (IF PRESENT) AND INSTALL NEW STRUCTURE IDENTIFICATION SIGNS IN THE APPROACH DIRECTION(S).
- PROVIDE VERTICAL CLEARANCE MEASUREMENTS PRIOR TO THE START OF CONSTRUCTION AND AFTER THE COMPLETION OF CONSTRUCTION.

SUM-77-1152 (LOVERS LANE OVER I-77):

- REMOVE EXISTING SEALER (IF PRESENT) PER C&MS 512 FROM SUPERSTRUCTURE AND SUBSTRUCTURE AND SEAL WITH NON-EPOXY SEALER ON SIDEWALKS AND EPOXY-URETHANE ELSEWHERE AS SHOWN IN THE PLANS.
- REMOVE SPALLS AND DELAMINATIONS OVER SAFETY SENSITIVE AREAS (PAVEMENT, SHOULDERS, SIDEWALKS, ETC.) FROM THE FLOOR AND SEAL WITH EPOXY-URETHANE.
- REMOVE AND REPLACE THE EXISTING VANDAL PROTECTION FENCE AS PER STD. DWG. VPF-1-90 (STRAIGHT FENCE). THE COLOR OF ALL VISUAL HARDWARE AND FABRIC SHALL BE COATED BLACK (FEDERAL COLOR NO. 27038).
- REMOVE ALL DIRT AND DEBRIS FROM THE BEAM SEATS, DRAINAGE SYSTEMS (IF PRESENT), AND BRIDGE JOINTS.
- REMOVE EXISTING CATHODIC PROTECTION SYSTEM, THIS INCLUDES DISCONNECTING THE POWER SERVICE, REMOVAL OF CABINET, CONDUIT, WIRING, ETC.
- REPAIR AREAS OF THE CURB AS DESIGNATED BY THE ENGINEER.
- INSPECT SUBSTRUCTURE AND PERFORM REQUIRED PATCHING.
- REMOVE EXISTING STRUCTURE IDENTIFICATION SIGNS (IF PRESENT) AND INSTALL NEW STRUCTURE IDENTIFICATION SIGNS IN THE APPROACH DIRECTION(S).
- PROVIDE VERTICAL CLEARANCE MEASUREMENTS PRIOR TO THE START OF CONSTRUCTION AND AFTER THE COMPLETION OF CONSTRUCTION.
- REPLACE THE MISSING TOP RAILING ON THE SOUTH PARAPET.

PROPOSED WORK (CONT'D):

SUM-77-1201 (I-77 NB OVER SR-8):

- REMOVE EXISTING SEALER (IF PRESENT) PER C&MS 512 FROM SUPERSTRUCTURE AND SUBSTRUCTURE AND SEAL WITH AN EPOXY-URETHANE SEALER.
- REMOVE SPALLS AND DELAMINATIONS OVER SAFETY SENSITIVE AREAS (PAVEMENT, SHOULDERS, SIDEWALKS, ETC.) FROM THE FLOOR AND SEAL WITH EPOXY-URETHANE.
- REMOVE ALL DIRT AND DEBRIS FROM THE BEAM SEATS, DRAINAGE SYSTEMS (IF PRESENT), AND BRIDGE JOINTS.
- PAINT FASCIA BEAMS (EXTERIOR AND BOTTOM FLANGES ONLY) OF THE EXISTING STRUCTURAL STEEL AS PER CMS514.
- INSPECT BRIDGE DECK, MARK THE AREAS TO BE PATCHED AND PERFORM REQUIRED PATCHING.
- REMOVE AND REPLACE THE EXPANSION JOINT STRIP SEALS AT THE FORWARD AND REAR APPROACH.
- INSPECT SUBSTRUCTURE AND PERFORM REQUIRED PATCHING.
- REMOVE EXISTING STRUCTURE IDENTIFICATION SIGNS (IF PRESENT) AND INSTALL NEW STRUCTURE IDENTIFICATION SIGNS IN THE APPROACH DIRECTION(S).
- PROVIDE VERTICAL CLEARANCE MEASUREMENTS PRIOR TO THE START OF CONSTRUCTION AND AFTER THE COMPLETION OF CONSTRUCTION.
- SEAL BRIDGE DECK AND APPROACH SLABS WITH GRAVITY FED RESIN.

SPECIAL - STRUCTURES: CONCRETE SPALL REMOVAL:

THIS WORK WILL CONSIST OF REMOVING ALL VISIBLY SPALLED AREAS OF THE BOTTOM DECK FLOOR OF VARIOUS STRUCTURES WITHOUT SOUNDING. AFTER SPALLED CONCRETE AREAS HAVE BEEN REMOVED, REMOVAL AREAS WILL BE SEALED WITH ITEM 512, SEALING OF CONCRETE SURFACES (EPOXY-URETHANE).

CONCRETE SPALL REMOVAL WILL BE PAID FOR AT THE UNIT BID PRICE FOR SPECIAL-STRUCTURE MISC.: CONCRETE SPALL REMOVAL. THIS PRICE WILL INCLUDE THE COST OF LABOR, EQUIPMENT, AND ALL INCIDENTALS REQUIRED TO COMPLETE THIS WORK.

THE FOLLOWING ESTIMATED QUANTITIES WERE PROVIDED BY ODOT AT BID TIME:

ITEM SPECIAL - STRUCTURE MISC.: CONCRETE SPALL REMOVAL

SUM-8-0023S	10 SQ YD	SUM-77-0975L	10 SQ YD
SUM-8-0038	10 SQ YD	SUM-77-1022	10 SQ YD
SUM-8-0117	10 SQ YD	SUM-77-1082	10 SQ YD
SUM-8-0125	10 SQ YD	SUM-77-1096	10 SQ YD
SUM-8-0160	10 SQ YD	SUM-77-1132	10 SQ YD
SUM-59-0341	10 SQ YD	SUM-77-1152	10 SQ YD
SUM-76-1151L	10 SQ YD	SUM-77-1201	10 SQ YD
SUM-76-1154R	10 SQ YD	SUM-764-0214	10 SQ YD
SUM-77-0974R	10 SQ YD		

ITEM 512, SEALING OF CONCRETE SURFACES (EPOXY-URETHANE), FOR CONCRETE SPALL REMOVAL

SUM-8-0023S	10 SQ YD	SUM-77-0975L	10 SQ YD
SUM-8-0038	10 SQ YD	SUM-77-1022	10 SQ YD
SUM-8-0117	10 SQ YD	SUM-77-1082	10 SQ YD
SUM-8-0125	10 SQ YD	SUM-77-1096	10 SQ YD
SUM-8-0160	10 SQ YD	SUM-77-1132	10 SQ YD
SUM-59-0341	10 SQ YD	SUM-77-1152	10 SQ YD
SUM-76-1151L	10 SQ YD	SUM-77-1201	10 SQ YD
SUM-76-1154R	10 SQ YD	SUM-764-0214	10 SQ YD
SUM-77-0974R	10 SQ YD		

THE DEPARTMENT WILL PAY FOR ACCEPTED QUANTITY AS APPROVED BY THE ENGINEER IN CHARGE.

SPECIAL - STRUCTURE, CURB REPAIR:

THIS ITEM WILL BE USED TO REPAIR THE DETERIORATED FACE OF THE CURB ON THE BRIDGE DECK AND/OR APPROACH SLABS. THIS WORK WILL BE PERFORMED IN ACCORDANCE WITH ITEM 519 - PATCHING CONCRETE STRUCTURES AND AS MODIFIED HEREIN.

PRIOR TO THE SURFACE CLEANING SPECIFIED IN 519.04 AND WITHIN 24 HOURS OF PLACING PATCHING MATERIAL, BLAST CLEAN ALL SURFACES TO BE PATCHED INCLUDING THE EXPOSED REINFORCING STEEL.

ACCEPTABLE METHODS INCLUDE HIGH-PRESSURE WATER BLASTING WITH OR WITHOUT ABRASIVES IN THE WATER, ABRASIVE BLASTING WITH CONTAINMENT, OR VACUUM ABRASIVE BLASTING.

PAYMENT FOR ALL OF THE ABOVE DESCRIBED LABOR AND MATERIALS WILL BE MADE AT THE CONTRACT PRICE BID FOR SPECIAL - PATCHING CONCRETE STRUCTURE, MISC.: CURB REPAIR AND WILL BE PAID FOR PER FOOT.

THE FOLLOWING ESTIMATED BID QUANTITIES WERE PROVIDED BY ODOT AT BID TIME:

ITEM SPECIAL - STRUCTURE, MISC.: CURB REPAIR

SUM-77-1132	50 FT
SUM-77-1152	50 FT

THE DEPARTMENT WILL PAY FOR ACCEPTED QUANTITY AS APPROVED BY THE ENGINEER IN CHARGE.

ITEM SPECIAL - REMOVE EXISTING CATHODIC PROTECTION SYSTEM:

THIS ITEM SHALL INCLUDE ALL WORK NECESSARY TO REMOVE THE EXISTING CATHODIC PROTECTION SYSTEM, INCLUDING DISCONNECTING THE POWER SERVICE, REMOVAL OF CABINET, CONDUIT & WIRING. THE REMOVAL OF OVERHEAD POWER LINES & POLES ARE NOT INCLUDED IN THE SCOPE OF WORK. THE FOLLOWING BRIDGES SHALL HAVE THE CATHODIC PROTECTION REMOVED:

SUM-77-1132
SUM-77-1152

ITEM 513 - STRUCTURAL STEEL MEMBERS, LEVEL UF, AS PER PLAN:

ALL REQUIREMENTS OF C&MS 513 APPLY TO SHOP FABRICATED MEMBERS. PERFORM WORK FOR FIELD FABRICATED MEMBERS ACCORDING TO ITEM 513, EXCEPT AS MODIFIED HEREIN. THE DEPARTMENT WILL NOT REQUIRE THE CONTRACTOR PERFORMING FIELD FABRICATION TO BE PRE-QUALIFIED AS SPECIFIED IN S1078. SUBMIT A WRITTEN LETTER OF MATERIAL ACCEPTANCE IN ACCORDANCE WITH C&MS 501.06, TO THE ENGINEER. PROVIDE THE ENGINEER "ASBUILT" DRAWINGS ACCORDING TO C&MS 513.06, EXCEPT C&MS 501.04 DOES NOT APPLY. UPON RECEIPT OF THE ENGINEER'S ACCEPTANCE, SUPPLY A COPY OF THE DRAWINGS, ACCORDING TO S1002, TO THE OFFICE OF MATERIAL MANAGEMENT FOR RECORD PURPOSES.

THE FOLLOWING MEMBERS ARE INCLUDED IN THIS ITEM:

EXPANSION JOINT HARDWARE (SUM-77-0974R & SUM-77-0975L)
END CROSSFRAMES (SUM-77-0974R)

DESCRIPTION

ISSUE RECORD:

NO.	DATE

pw:\\VANVA01PWINT01.parsons.com:Ohio State\Documents\DB-Akron Beltway Rehab\10 - Design\102329\Structures\BU-15\Sheets\008_0023S_GN002.dgn Sheet 10/4/2021 2:45:35 PM KChrisman

DESIGN AGENCY
PRIME AE
8410 Pulsar Place Suite 300
Columbus Ohio 43240

DESIGNED KDC | DRAWN KDC | REVIEWED SAN | DATE 6/18/21
CHECKED JAT | REVISED | STRUCTURE FILE NUMBER

GENERAL NOTES (2 OF 5)

SUM-76/77/8-8.24/9.74/0.00
PID No. 102329

2021-09-22_BU 15 - RFC PLANS

Released for Construction
Thomas J Powell, PE
10/05/2021

ITEM 519 - PATCHING CONCRETE STRUCTURES:

THIS WORK WILL CONSIST OF INSPECTING AND MARKING OF DETERIORATED CONCRETE AREAS AT THE EXISTING BRIDGE DECK, ABUTMENTS AND PIERS, BY THE CONTRACTOR, TO BE CONFIRMED BY THE ENGINEER IN CHARGE. SPALLS FORMING ARE EVIDENCED BY A VISUAL EDGE. DELAMINATIONS THAT DO NOT HAVE A VISIBLE EDGE WILL BE CONFIRMED AND OUTLINED BY THE ENGINEER IN CHARGE. ALL APPROVED DELINEATED AREAS SHALL BE REPAIRED IN ACCORDANCE WITH ITEM 519 - PATCHING CONCRETE SURFACES & ITEM 519 - PATCHING CONCRETE BRIDGE DECK, TYPE C.
REPAIR OF EXISTING CONCRETE WILL BE PAID FOR AT THE UNIT BID PRICE FOR PATCHING CONCRETE STRUCTURES. THIS PRICE WILL INCLUDE THE COST OF LABOR, EQUIPMENT, AND ALL INCIDENTALS REQUIRED TO COMPLETE THIS WORK.

THE FOLLOWING ESTIMATED QUANTITIES WERE PROVIDED BY ODOT AT BID TIME:

ITEM 519, PATCHING CONCRETE STRUCTURES

200 SF - SUM-8-0023S
200 SF - SUM-8-0038
200 SF - SUM-8-0117
200 SF - SUM-8-0125
200 SF - SUM-8-0160
200 SF - SUM-59-0341
200 SF - SUM-76-1151L
200 SF - SUM-76-1154R
200 SF - SUM-77-0974R
200 SF - SUM-77-0975L
200 SF - SUM-77-1022
200 SF - SUM-77-1082
200 SF - SUM-77-1096
200 SF - SUM-77-1132
200 SF - SUM-77-1152
200 SF - SUM-77-1201

ITEM 519, PATCHING CONCRETE BRIDGE DECK, TYPE C

25 SY - SUM-8-0023S
25 SY - SUM-8-0160
25 SY - SUM-77-1201

ITEM SPECIAL - MISC.: VERTICAL CLEARANCE:

BEFORE ANY CONSTRUCTION TAKES PLACE AND AFTER ALL CONSTRUCTION HAS BEEN COMPLETED, A REGISTERED SURVEYOR WILL TAKE VERTICAL CLEARANCE MEASUREMENTS AT LOCATIONS INDICATED ON THE APPROVED ODOT FORM (AVAILABLE IN THE DISTRICT 4 STRUCTURES AND PAVEMENT OFFICE). FOR THE STRUCTURES WHERE THE PROPOSED WORK WILL NEITHER AFFECT THE POSITION OF THE LOWER CHORD NOR THE ROADWAY SURFACE BELOW, THE VERTICAL CLEARANCE DOES NOT NEED TO BE MEASURED AFTER ALL CONSTRUCTION HAS BEEN COMPLETED. THE FINAL MEASUREMENTS SHALL BE RECORDED ON THE FORM AND SUBMITTED TO THE PROJECT ENGINEER AND THE DISTRICT 4 STRUCTURES AND PAVEMENT ENGINEER. THE RECORD SHALL BEAR THE SEAL OF THE LICENSED SURVEYOR WHO HAS TAKEN THE MEASUREMENTS. THIS WORK SHALL BE PERFORMED AT ALL OF THE OVERHEAD STRUCTURES WITHIN THE PROJECT LIMITS.

THE VERTICAL CLEARANCE SHALL BE MEASURED PRIOR TO AND AFTER CONSTRUCTION AT THE FOLLOWING STRUCTURES:

SUM-8-0023S
SUM-8-0038
SUM-8-0117
SUM-8-0125
SUM-8-0160
SUM-59-0341
SUM-76-1151L
SUM-76-1154R
SUM-77-1022
SUM-77-1132
SUM-77-1152
SUM-77-1201
SUM-764-0214

THE VERTICAL CLEARANCE SHALL BE MEASURED ONLY PRIOR TO CONSTRUCTION AT THE FOLLOWING STRUCTURES:

SUM-77-0974R
SUM-77-0975L
SUM-77-1082
SUM-77-1096

ITEM SPECIAL: STRUCTURE, MISC.: EROSION REPAIR:

THE CONTRACTOR SHALL REPAIR ERODED AREAS WITHIN THE LIMITS OF THE RIGHT-OF-WAY. THE FOLLOWING ESTIMATED QUANTITIES WERE PROVIDED AT BID TIME:

SUM-8-0023 - 30 CY

THE DEPARTMENT WILL PAY FOR THE EXTENT OF REPAIR AS APPROVED BY THE ENGINEER IN CHARGE.

ITEM 516 - REFURBISHING BEARING DEVICES, AS PER PLAN:

THIS ITEM SHALL INCLUDE ALL WORK NECESSARY TO PROPERLY ALIGN BRIDGE BEARINGS AS WELL AS THEIR CLEANING AND PAINTING. INCLUDED SHALL BE THE DISASSEMBLY OF BEARINGS, HAND TOOL CLEANING (GRINDING IF NECESSARY), PAINTING ACCORDING TO ITEM 514, REPLACEMENT OF ANY DAMAGED SHEET LEAD WITH PREFORMED BEARING PADS (C&MS 711.21), INSTALLATION OF ANY NECESSARY STEEL SHIMS OF THE SAME SIZE AS THE BEARINGS TO PROVIDE A SNUG FIT, REALIGNMENT OF THE UPPER BEARING PLATE BY REMOVING EXISTING WELDS AND REWELDING SO THAT THE BEARINGS ARE VERTICALLY ALIGNED AT 60°F, LUBRICATING SLIDING SURFACES, AND REASSEMBLY OF THE BEARINGS. ASSURE ALL BEARINGS ARE SHIMMED ADEQUATELY AND THAT NO BEAMS AND/OR BEARING DEVICES ARE "FLOATING". AT NO ADDITIONAL COST TO STATE, THE CONTRACTOR MAY INSTALL NEW BEARINGS OF THE SAME TYPE AS THE EXISTING IN PLACE OF REFURBISHING THE BEARINGS. ALL WORK SHALL BE TO THE SATISFACTION OF THE ENGINEER. THE BEARINGS SHALL BE REFURBISHED AT THE FOLLOWING BRIDGES AT THE ABUTMENT ONLY:

SUM-8-0038
SUM-76-1151L
SUM-76-1154R
SUM-77-0974R
SUM-77-0975L
SUM-77-1096

STRUCTURE/CULVERT IDENTIFICATION SIGNS:

STRUCTURE IDENTIFICATION SIGNS (I-H25b) WILL BE PLACED ON EACH APPROACH OFF THE RIGHT SHOULDER, FACING TRAFFIC, AND BEHIND THE GUARDRAIL IF APPLICABLE. A QUANTITY OF ONE SIGN PER APPROACH WILL BE INSTALLED. THE SIGNS WILL HAVE A NON-REFLECTIVE WHITE SHEETING BACKGROUND.

THE SIGNS WILL BE MOUNTED ON NEW NO. 2 POSTS AND WILL BE INSTALLED AS PER STANDARD CONSTRUCTION DRAWING TC-41.20, MOST CURRENT REVISION. EACH POST WILL BE 7.5' IN LENGTH.

INSTALL SIGNS FOR THE FOLLOWING STRUCTURES:

SUM-8-0023S
SUM-8-0038
SUM-8-0117
SUM-8-0125
SUM-8-0160
SUM-59-0341
SUM-76-1151L
SUM-76-1154R
SUM-77-0974R
SUM-77-0975L
SUM-77-1022
SUM-77-1082
SUM-77-1096
SUM-77-1132
SUM-77-1152
SUM-77-1201
SUM-764-0214

ITEM 514, FIELD PAINTING, MISC: REPAIR PAINTING:

PAINTED CURB PLATES AND SIDEWALK JOINT ARMOR AREAS THAT ARE DAMAGED OR RUSTED WILL BE DESIGNATED BY THE PROJECT ENGINEER. THE C&MS 514.22 PROCESS WILL BE USED TO REPAIR THESE AREAS. THE COLOR SHALL MATCH THE EXISTING PAINT SYSTEM.

THE CONTRACTOR SHALL PROVIDE THE ENGINEER WITH ALL NECESSARY EQUIPMENT TO INSPECT THIS WORK.

THE DEPARTMENT WILL PAY FOR ACCEPTED QUANTITIES AT THE UNIT PRICE BID PER SQUARE FOOT FOR ITEM 514 - FIELD PAINTING, MISC.: REPAIR PAINTING. A CONTINGENCY QUANTITY OF 50 SF HAS BEEN ESTIMATED FOR BRIDGE NO. SUM-8-0038, TO BE USED AS DIRECTED BY THE ENGINEER.

ITEM 514, PAINTING EXISTING STRUCTURAL STEEL, AS PER PLAN:

THIS WORK CONSISTS OF FIELD PAINTING THE EXISTING STRUCTURAL STEEL. THE COATING SHALL BE A THREE-COAT PAINT SYSTEM CONSISTING OF AN ORGANIC ZINC PRIME COAT, AN EPOXY INTERMEDIATE COAT AND A URETHANE FINISH COAT ACCORDING TO C&MS 514.

ITEM 514, PAINTING EXISTING STRUCTURAL STEEL, AS PER PLAN, (CONTINUED):

THE FOLLOWING BRIDGES REQUIRE FIELD PAINTING:

SUM-8-0023S (EXTERIOR & BOTTOM FLANGE OF FASCIA BEAMS ONLY)
SUM-8-0038
SUM-76-1151L
SUM-76-1154R
SUM-77-1201 (EXTERIOR & BOTTOM FLANGE OF FASCIA BEAMS ONLY)

PAINT COLOR WILL BE FEDERAL COLOR NO. 27769.

ITEM 202 - PORTIONS OF STRUCTURES REMOVED, AS PER PLAN:

THIS ITEM SHALL INCLUDE THE ELEMENTS INDICATED IN THE PLANS AND GENERAL NOTES AND THAT ARE NOT SEPARATELY LISTED FOR PAYMENT, EXCEPT FOR WEARING COURSE REMOVAL. ITEMS TO BE REMOVED INCLUDE ALL EXISTING MATERIALS BEING REPLACED BY NEW CONSTRUCTION AND MISCELLANEOUS ITEMS THAT ARE NOT SHOWN TO BE INCORPORATED INTO THE FINAL CONSTRUCTION AND ARE DIRECTED TO BE REMOVED BY THE ENGINEER. THE USE OF EXPLOSIVES, HEADACHE BALLS AND/OR HOE-RAMS WILL NOT BE PERMITTED. THE METHOD OF REMOVAL AND THE WEIGHT OF HAMMER SHALL BE APPROVED BY THE ENGINEER. PERFORM ALL WORK IN A MANNER THAT WILL NOT CUT, ELONGATE OR DAMAGE THE EXISTING REINFORCING STEEL TO BE PRESERVED. CHIPPING HAMMERS SHALL NOT BE HEAVIER THAN THE NOMINAL 90-POUND CLASS. PNEUMATIC HAMMERS SHALL NOT BE PLACED IN DIRECT CONTACT WITH REINFORCING STEEL THAT IS TO BE RETAINED IN THE REBUILT STRUCTURE. SUBMIT CONSTRUCTION PLANS ACCORDING TO C&MS 501.05.

ITEM SPECIAL - SEALING OF CONCRETE:

THE CONTRACTOR SHALL REMOVE EXISTING COATINGS AND PREPARE SURFACES TO BE SEALED ACCORDING TO C&MS 512. ALL SUPERSTRUCTURE AND ALL EXPOSED SUBSTRUCTURE (AS SHOWN IN THE DETAILS ON THIS SHEET) EXCEPT TOPS OF PIER CAPS, SHALL BE SEALED WITH AN EPOXY-URETHANE SEALER. APPLY THE EPOXY-URETHANE SEALER TO THE PARAPETS (DETAIL 'A') AND ALL EXPOSED CONCRETE SURFACES AT THE ABUTMENTS (DETAIL 'B') AND PIERS (DETAIL 'C'). THIS WORK WILL BE DONE IN ACCORDANCE WITH ITEM 512 - TREATING CONCRETE OF THE ODOT C&MS.

EPOXY-URETHANE SEALER WILL BE FEDERAL COLOR NO. 13522 AND SHALL BE APPLIED TO THE FOLLOWING BRIDGES:

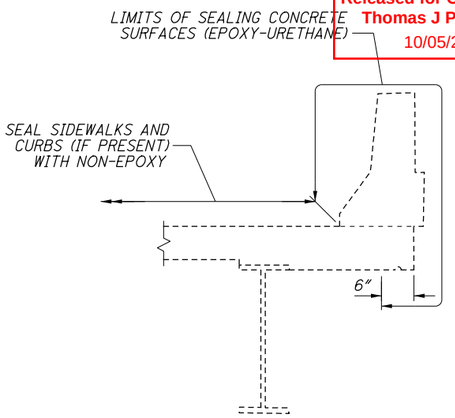
SUM-8-0117
SUM-8-0125
SUM-8-0160
SUM-59-0341
SUM-77-0974R
SUM-77-0975L
SUM-77-1022
SUM-77-1082
SUM-77-1096
SUM-77-1132
SUM-77-1152

EPOXY-URETHANE SEALER WILL BE FEDERAL COLOR NO. 27769 AND SHALL BE APPLIED TO THE FOLLOWING BRIDGES:

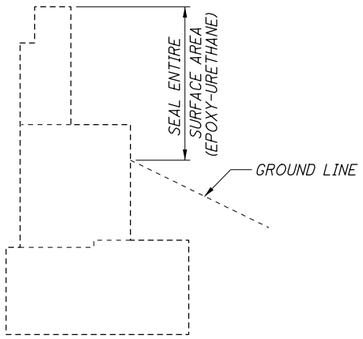
SUM-8-0023S
SUM-8-0038
SUM-76-1151L
SUM-76-1154R
SUM-77-1201

BRIDGE PAINTING EQUIPMENT ON SHOULDERS:

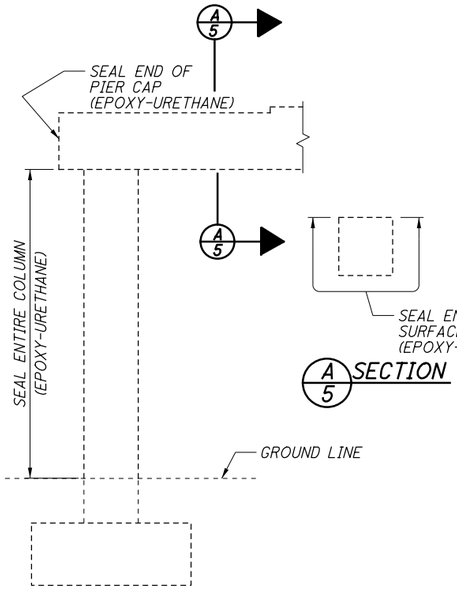
IF BRIDGE PAINTING EQUIPMENT IS TO REMAIN ON THE SHOULDERS WHEN THE CONTRACTOR IS NOT WORKING, IT SHALL BE PLACED BEHIND PORTABLE CONCRETE BARRIER (PCB) AND A WORK ZONE IMPACT ATTENUATOR (WZIA) SHALL PROTECT THE LEADING BLUNT END OF THE PCB (SEE OMUTCD, FIGURE 6H-5 "SHOULDER CLOSURE ON FREEWAY" (TYPICAL APPLICATION 5)). IF THE CONTRACTOR CHOOSES TO PROTECT PAINTING EQUIPMENT WITH PCB AND A WZIA, THE COST SHALL BE CONSIDERED INCIDENTAL TO THE LUMP SUM BID FOR MAINTAINING TRAFFIC.



DETAIL A - SUPERSTRUCTURE SEALING LIMITS



DETAIL B - ABUTMENT SEALING LIMITS



DETAIL C - PIER SEALING LIMITS

DESCRIPTION

ISSUE RECORD:

NO.	DATE

DESIGN AGENCY
PRIME AE
8415 Pulsar Place Suite 300
Columbus Ohio 43240

DESIGNED	DRAWN	REVIEWED	DATE
KDC	KDC	SAN	6/18/21
CHECKED	REVISED	STRUCTURE FILE NUMBER	
JAT			

GENERAL NOTES (3 OF 5)

SUM-76/77/8-
8.24/9.74/0.00
PID No. 102329

2021-09-22_BU 15 - RFC PLANS

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Released for Construction
Thomas J Powell, PE
10/05/2021

BRIDGE CLEANING NOTES:

WATER QUALITY PROTECTION:

THIS PROJECT IS SUBJECT TO THE CONDITIONS OF NPDES PERMIT OHZ000001. THE CONTRACTOR MUST SUBMIT A NOTICE OF INTENT AS A CO- PERMITTEE UNDER THIS PROJECT AND RECEIVE OEPA APPROVAL TO OPERATE UNDER THE PERMIT PRIOR TO UNDERTAKING ITEM 530 SPECIAL STRUCTURES MISC.: CLEANING BRIDGES . CONTRACTOR MUST COMPLETE THE " WORK PLAN FOR BRIDGE CLEANING " FOR EACH BRIDGE IN ACCORDANCE WITH THE NPDES PERMIT.

DEBRIS REMOVAL AND DISPOSAL:

CONTRACTOR SHALL REMOVE AND PROPERLY DISPOSE OF DEBRIS IN ACCORDANCE WITH ALL ENVIRONMENTAL RESTRICTIONS AND PERMITS. DISPOSE ALL THE DEBRIS AS A RESULT OF THE BRIDGE CLEANING OPERATIONS IN ACCORDANCE WITH CMS 105.16. AND OAC 3745-27-05. UNDER NO CIRCUMSTANCES MAY SWEEPINGS BE SWEPT INTO OPEN DECK DRAINS, OVER THE EDGE OF THE BRIDGE. OR THROWN ALONG THE BANKS, OR INTO THE WATER.

ITEM 530 SPECIAL STRUCTURES MISC.: CLEANING BRIDGES

THE WORK SHALL CONSIST OF THE REMOVAL OF DIRT, SAND, SOIL, PAPER, GLASS, CANS, AND OTHER DEBRIS FROM DRAINAGE SYSTEMS, EXPANSION JOINTS, AND ABUTMENT SEATS. EQUIPMENT MAY CONSIST OF HAND TOOLS, MANUAL BROOMS, POWER BROOMS, AIR COMPRESSORS, WATER TANKS, WATER PUMPS WITH ASSOCIATED DELIVERY HARDWARE TO CLEAN, FLUSH, AND REMOVE DIRT AND DEBRIS.

THE CLEANING OF SCUPPERS AND JOINTS SHALL NOT BE PERFORMED PRIOR TO PERFORMING ITEM 530 SPECIAL STRUCTURES MISC.: SWEEPING BRIDGES.

THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER A BRIDGE CLEANING WORK PLAN INDICATING LOCATIONS OF ALL TEMPORARY BMP INSTALLED TO CAPTURE ANY WASH WATER USED IN THE CLEANING PROCESS. THE PLAN SHALL INCLUDE INSPECTION AND DOCUMENTATION OF BMP PERFORMANCE PRIOR TO WORK AND IMMEDIATELY FOLLOWING THE WORK. INTERMEDIATE INSPECTION SHALL BE CONDUCTED EVERY 4 HOUR UNTIL WORK IS COMPLETED.

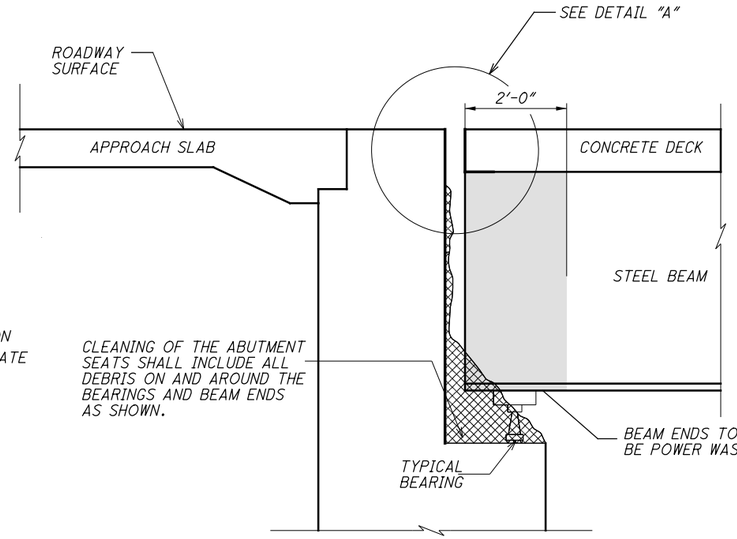
CONTRACTOR SHALL FURNISH ALL MATERIAL, EQUIPMENT, LABOR AND INCIDENTAL ITEMS NECESSARY TO PROPERLY REMOVE AND DISPOSE OF ALL DEBRIS AND OTHER FOREIGN MATERIAL BY POWER SWEEPING, SHOVELING, SCRAPING, ETC. FOLLOWED BY INSTALLING BMPs AS IDENTIFIED IN THE WORK PLAN FOR BRIDGE CLEANING, AND PRESSURE WASHING THE CURB LINES, SHOULDERS, JOINTS, SCUPPERS, DOWNSPOUTS, AND THE BRIDGE SEAT ALONG WITH THE END OF THE BEAMS.

THE FOLLOWING AREAS OF THE BRIDGE ARE TO BE CLEANED:

1. CLEANING JOINTS FOR THE FULL WIDTH OF THE BRIDGE:
   - A) PREVENT ALL DIRT, DEBRIS, AND WASHWATER FROM ENTERING ANY DRAINAGE SYSTEM DURING THE CLEANING OPERATIONS.
   - B) REMOVE AND COLLECT LOOSE DEBRIS FROM THE JOINTS PRIOR TO INTRODUCING WATER. CARE SHOULD BE TAKEN WHEN BREAKING UP DEBRIS IN THE JOINTS IN ORDER NOT TO DAMAGE THE ELASTOMERIC SEAL.
   - C) SWEEP AND COLLECT SAND, DEBRIS AND SEDIMENT BY USE PRESSURE WASHING THE JOINTS OR COMPRESSED AIR.
2. CLEANING SCUPPERS AND DOWNSPOUTS:
   - A) USE SHOVEL, HAND SCRAPERS, AND OTHER HAND TOOLS TO BREAK UP DEBRIS IN SCUPPERS TO THE MAXIMUM EXTENT PRACTICABLE. COLLECT LOOSE AND LARGE DEBRIS FROM THE SCUPPERS PRIOR TO INTRODUCING WATER.
   - B) PRESSURE WASH THE SCUPPERS AND DOWNSPOUTS FOR FINAL CLEANING.
   - C) ALL DIRT OR DEBRIS FROM THE CLEANING OPERATION SHALL BE REMOVED.
3. BRIDGE SEATS:
   - A) REMOVE WITH A SHOVEL, BROOM, HAND SCRAPER OR OTHER MECHANICAL MEANS, ALL GROSS SOLIDS FROM THE ENTIRE BEAM SEATS AND AROUND ALL AREAS SURROUNDING THE BEAM BEARINGS, TO THE MAXIMUM EXTENT PRACTICABLE PRIOR TO INTRODUCING WATERS.
   - B) AFTER REMOVING ALL GROSS SOLIDS PRESSURE WASH THE ABUTMENTS, BACKWALLS, BEAM SEATS AND THE END OF THE BEAMS AS SHOWN ON THE PLANS.

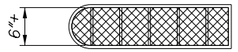
LEGEND:

REMOVE DEBRIS AND OTHER FOREIGN MATERIALS, THEN PRESSURE WASH WITH POTABLE WATER AS DESCRIBED IN THE GENERAL NOTES.

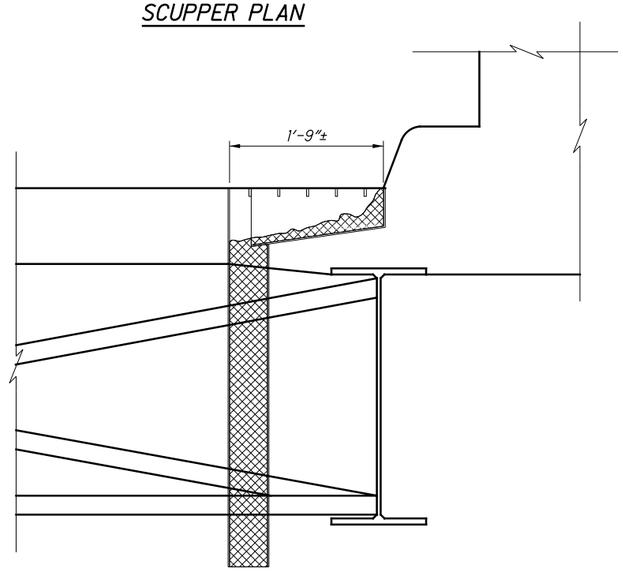


TYPICAL ABUTMENT DETAIL

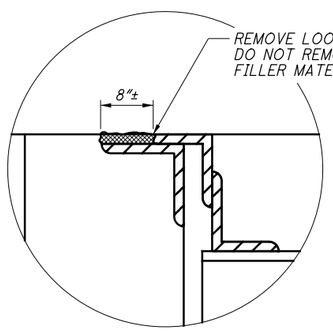
BACKWALL, ABUTMENT SEAT, BEAM ENDS AND EXPANSION JOINT



SCUPPER PLAN

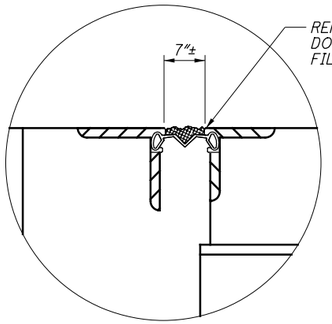


SCUPPER AND DOWNSPOUTS SIDE VIEW



DETAIL "A"

(SLIDING PLATE)



DETAIL "A"

(STRIP SEAL)
AVOID PUNCTURE OR DAMAGE TO SEAL WHILE CLEANING

NOTES:

1. BRIDGE CLEANING TO BE PERFORMED AT THE FOLLOWING BRIDGES:

SUM-8-0023S
SUM-8-0038
SUM-76-1151L
SUM-76-1154R
SUM-77-0974R
SUM-77-0975L
SUM-77-1132
SUM-77-1152
SUM-77-1201

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2021-09-22_BU 15 - RFC PLANS

GENERAL NOTES (4 OF 5)

SUM-76/77/8-
8.24/9.74/0.00
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STRUCTURE GENERAL NOTES

ITEM 848 - MICRO-SILICA MODIFIED CONCRETE OVERLAY USING HYDRODEMOLITION, AS PER PLAN
ITEM 848 - SURFACE PREPARATION USING HYDRODEMOLITION, AS PER PLAN
ITEM 848 - MICRO-SILICA MODIFIED CONCRETE OVERLAY (VARIABLE THICKNESS), MATERIAL ONLY, AS PER PLAN
ITEM 848 - FULL DEPTH REPAIR, AS PER PLAN

THESE ITEMS SHALL BE PERFORMED PER SUPPLEMENTAL SPECIFICATION "BRIDGE DECK REPAIR AND OVERLAY WITH CONCRETE USING HYDRO-DEMOLITION" WITH THE FOLLOWING REVISIONS:
THE THICKNESS OF THE CONCRETE OVERLAY REMOVED, ASPHALT WEARING COURSE REMOVED, PROPOSED OVERLAY, AND THE DEPTH OF HYDRODEMOLITION SHALL BE AS SPECIFIED IN THE PLANS. CONSTRUCTION JOINTS WILL NOT BE PERMITTED IN THE WHEEL LINE.
(SEE 848.12) THE COMPONENTS OF THE MICRO-SILICA MODIFIED CONCRETE SHALL BE PROPORTIONED AS FOLLOWS.

CONCRETE TABLE
QUANTITIES PER CUBIC YARD
AGGREGATES (SSD)

AGG TYPE	FINE AGG (LB)	#8 COARSE AGG (LB) *	AGG TOTAL (LB) *	CEMENT CONTENT (LB)	MICRO SILICA (LB)	WATER TO CEMENT-ITIOUS RATIO	AIR CONTENT +/- 2%	FIBER (1¼" POLYPROPY-LENE) (LB) **
GRAVEL	1410	1430	2840	600	50	0.4	8	1
LIME-STONE	1410	1450	2860	600	50	0.4	8	1
SLAG	1300	1350	2650	600	50	0.4	8	1

* ALL COARSE AGGREGATE SHALL HAVE AN ABSORPTION OF 1.00% OR GREATER AS DEFINED PER ASTM C127
** FIBER MESH SHALL BE 100% VIRGIN POLYPROPYLENE IN A FIBRILLATED-NETWORK FORM AND SHALL BE 1¼" IN LENGTH.

THE WEIGHTS SPECIFIED IN THE CONCRETE TABLE WERE CALCULATED FOR MATERIALS OF THE FOLLOWING BULK SPECIFIC GRAVITIES (SSD): NATURAL SAND AND GRAVEL 2.62, LIMESTONE SAND 2.68, LIMESTONE 2.65, SLAG 2.30, MICRO-SILICA SOLIDS 2.20, AND PORTLAND CEMENT 3.15. FOR AGGREGATES OF SPECIFIC GRAVITIES DIFFERING MORE THAN PLUS OR MINUS 0.02 FROM THESE, THE WEIGHTS IN THE TABLE WILL BE CORRECTED. FIBER MESH WEIGHTS NOT INCLUDED IN MIX DESIGN. ALL COARSE AGGREGATE SHALL HAVE AN ABSORPTION OF 1.00% OR GREATER AS DEFINED BY ASTM C127 ALL OTHER REQUIREMENTS OF THE SUPPLEMENTAL SPECIFICATION SHALL REMAIN IN EFFECT.
(SEE 848.21) THE FINAL DECK SOUNDING MAY TAKE PLACE WITHIN 24 HOURS OF A RAIN, AND THE DECK DOES NOT HAVE TO BE COMPLETELY DRY.
(SEE 848.23) FULL DEPTH REPAIR IS NOT REQUIRED IF LESS THAN ONE HALF OF THE DECK ORIGINAL CONCRETE THICKNESS IS SOUND.
(SEE 848.29) THE WET CURE TIME IS REDUCED FROM 72 HOURS TO 24 HOURS OR UNTIL A BEAM BREAK OF 600 PSI IS ACHIEVED, WHICHEVER IS GREATER. AFTER THE 24 HOUR WET CURE, THE FINISHED OVERLAY SURFACE SHALL BE CURED BY SPRAYING A UNIFORM APPLICATION OF CURING MATERIAL OF 705.07, TYPE 1 OR 1D, AS PER CMS 511.14 METHOD (B) MEMBRANE CURING. IF THE CURING COMPOUND CAN NOT BE PLACED WITHIN THE SAME SHORT TERM CLOSURE PERIOD AS THE OVERLAY, THE CONTRACTOR MAY ALLOW TRAFFIC ONTO THE OVERLAY, AND SHALL, AT THE NEXT AVAILABLE SHORT TERM CLOSURE PERIOD, APPLY THE MEMBRANE CURING COMPOUND.

ITEM 848 - MICRO-SILICA MODIFIED CONCRETE OVERLAY USING HYDRODEMOLITION, AS PER PLAN
ITEM 848 - SURFACE PREPARATION USING HYDRODEMOLITION, AS PER PLAN
ITEM 848 - MICRO-SILICA MODIFIED CONCRETE OVERLAY (VARIABLE THICKNESS), MATERIAL ONLY, AS PER PLAN
ITEM 848 - FULL DEPTH REPAIR, AS PER PLAN (CONT'D)

(SEE 848.29) TRAFFIC WILL NOT BE PERMITTED ON THE FINISHED OVERLAY SURFACE UNTIL AFTER THE COMPLETION OF THE 24 HOUR WET CURE, AND AFTER TWO TEST BEAMS HAVE ATTAINED AN AVERAGE MODULUS OF RUPTURE OF 600 PSI
(4.2 Mpa). (SEE 848.30) THE OVERLAY SURFACE EVAPORATION RATE REQUIREMENTS ARE IN EFFECT FROM 9:30 AM TO 11:00 PM. THEY ARE NOT IN EFFECT FROM 11:00 PM TO 11:00 AM.
(SEE 848.31) FOR EACH PHASE, THE CONTRACTOR SHALL PROVIDE ENOUGH MATERIAL FOR TWO BEAM BREAKS EACH AT 12 HOURS, 24 HOURS, 36 HOURS, AND 48 HOURS. THE DEPARTMENT WILL PERFORM THE BEAM BREAK TESTS AND DOCUMENT THE TIME OF THE POUR, THE TIME OF THE BEAM BREAK TESTS, AND THE MODULUS OF RUPTURE FOR EACH BEAM UNTIL THE MODULUS OF RUPTURE OF THE TWO TESTS IS NOT LESS THAN 650 PSI (4.5 MPa). TRAFFIC IS ALLOWED ON THE OVERLAY AT 600 PSI (4.5 Mpa). ALL OTHER REQUIREMENTS OF THE SUPPLEMENTAL SPECIFICATION SHALL REMAIN IN EFFECT.

THE FOLLOWING ESTIMATED QUANTITIES WERE PROVIDED BY ODOT AT BID TIME:

ITEM 848, HAND CHIPPING

390 SY - SUM-76-1151L
465 SY - SUM-76-1154R
210 SY - SUM-77-0974R
210 SY - SUM-77-0975L
300 SY - SUM-77-1082
300 SY - SUM-77-1096

ITEM 848, FULL DEPTH REPAIR

2 CY - SUM-76-1151L
2 CY - SUM-76-1154R
2 CY - SUM-77-0974R
2 CY - SUM-77-0975L
2 CY - SUM-77-1082
2 CY - SUM-77-1096

ITEM SPECIAL - CONCRETE OVERLAY, VARIABLE THICKNESS, MATERIAL ONLY

20 CY - SUM-76-1151L
20 CY - SUM-76-1154R
10 CY - SUM-77-0974R
10 CY - SUM-77-0975L
20 CY - SUM-77-1085
20 CY - SUM-77-1096

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GENERAL NOTES (5 OF 5)

2021-09-22_BU 15 - RFC PLANS

SUM-76/77/8-8.24/9.74/0.00
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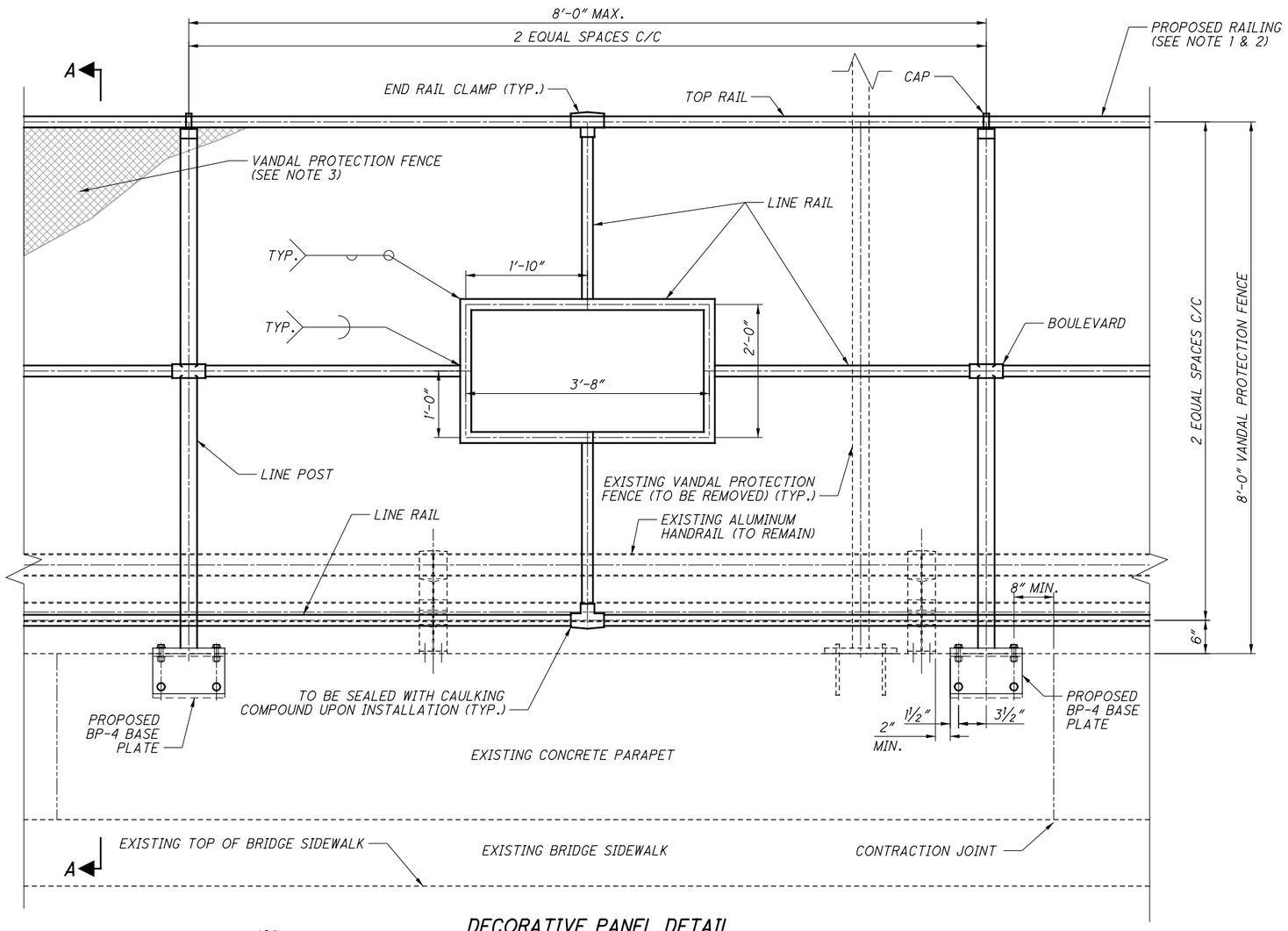
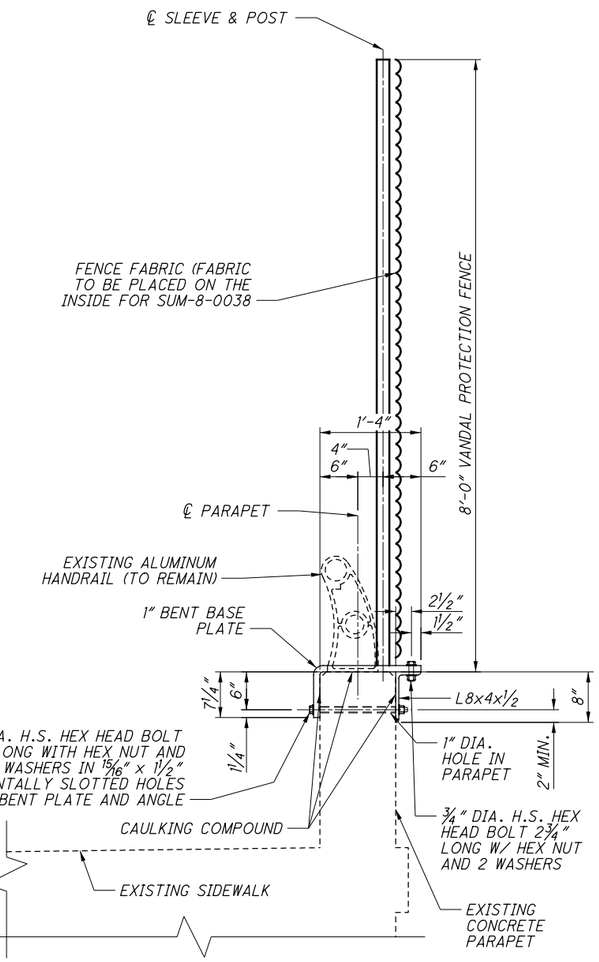
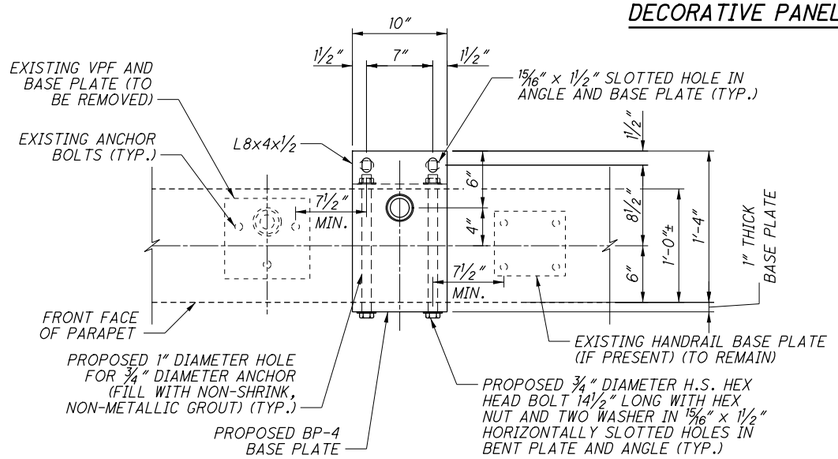


DECORATIVE PANEL DETAIL



SECTION A-A



BP-4 DETAIL

NOTES:

1. ALL POSTS, RAILS, CAPS, AND ANY OTHER VISIBLE HARDWARE SHALL BE GALVANIZED AND POWDER COATED BLACK (FEDERAL COLOR NO. 27038).
2. NEW ORNAMENTAL RAILING TO HAVE GEOMETRIC PATTERN DETAILED ABOVE.
3. EIGHT (8) FEET HIGH ODOT STANDARD PROTECTIVE FENCING (1" MESH) PER ODOT SCD VPF-1-90 IS REQUIRED. 1" VANDAL PROTECTIVE MESH SHALL BE ATTACHED TO THE PROPOSED ORNAMENTAL FENCE.
4. FOR INFORMATION NOT SHOWN, REFER TO SCD VPF-1-90.
5. DECORATIVE PANEL TO BE SPACED EVERY THIRD PANEL.
6. THIS WORK WILL BE PERFORMED AT THE FOLLOWING BRIDGE LOCATIONS:

SUM-8-0038	SUM-77-1022
SUM-8-0117	SUM-77-1132
SUM-8-0125	SUM-77-1152

DESCRIPTION

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VANDAL PROTECTION FENCE COMMON DETAILS

2021-09-22_BU 15 - RFC PLANS

SUM-76/77/8-
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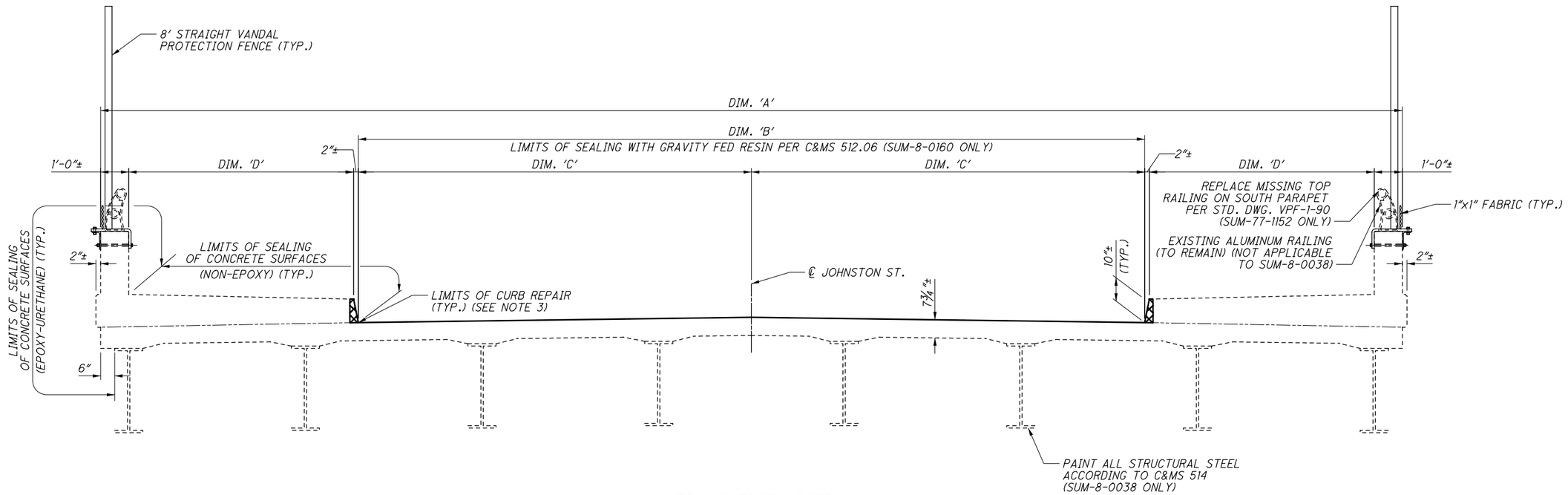

TRANSVERSE SECTION

(SUM-8-0038 SHOWN, OTHERS SIMILAR)

BRIDGE	DIM. 'A'	DIM. 'B'	DIM. 'C'	DIM. 'D'	BRIDGE LIMITS ALONG ℄ CONST.	APPROACH SLAB LENGTH (PER SIDE)
SUM-8-0038	46'-4"±	28'-0"±	14'-0"±	8'-0"±	308'-7⅝"±	23'-7⅜"± (REAR) 26'-0"± (FORWARD)
SUM-8-0117	62'-6½"±	44'-0"±	22'-0"±	7'-11¼"±	119'-7⅞"±	15'-0"±
SUM-8-0125	62'-6½"±	44'-0"±	22'-0"±	7'-11¼"±	119'-8⅛±	15'-0"±
SUM-8-0160	68'-0"±	52'-0"±	26'-0"±	7'-0"±	216'-11⅝"±	20'-0"±
SUM-59-0341	66'-6"±	59'-0"±	31'-0"± (LT.) 28'-0"± (RT.)	5'-0"± (RT. ONLY)	120'-6¼"±	25'-0"±
SUM-77-1022	42'-8"±	30'-0"±	15'-0"±	5'-2"±	162'-10⅜"±	25'-0"±
SUM-77-1132	60'-8"±	48'-0"±	24'-0"±	5'-0"±	158'-0"±	25'-0"±
SUM-77-1152	60'-8"±	48'-0"±	24'-0"±	5'-0"±	152'-0"±	25'-0"±

LEGEND:

▨ - LIMITS OF CURB REPAIR

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3/65 THRU 7/65.
2. FOR VANDAL PROTECTION FENCE DETAILS, SEE SHEETS 8/65 .
3. PERFORM CURB REPAIR AT BRIDGE NO. SUM-77-1132 & SUM-77-1152 AT THE AREAS DESIGNATED BY THE ENGINEER. FOR ADDITIONAL DETAILS, SEE SHEET 4/65.
4. THE FOLLOWING BRIDGES REQUIRE SEALING OF CONCRETE SURFACES:

   SUM-8-0038
   SUM-8-0117
   SUM-8-0125
   SUM-8-0160
   SUM-59-0341
   SUM-77-1022
   SUM-77-1132
   SUM-77-1152

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TRANSVERSE SECTIONS (1 OF 2)
BRIDGE NO. SUM-8-0038, SUM-8-0117, SUM-8-0125, SUM-8-0160, SUM-59-0341, SUM-77-1022, SUM-77-1132, SUM-77-1152

SUM-76/77/8-8.24/9.74/0.00
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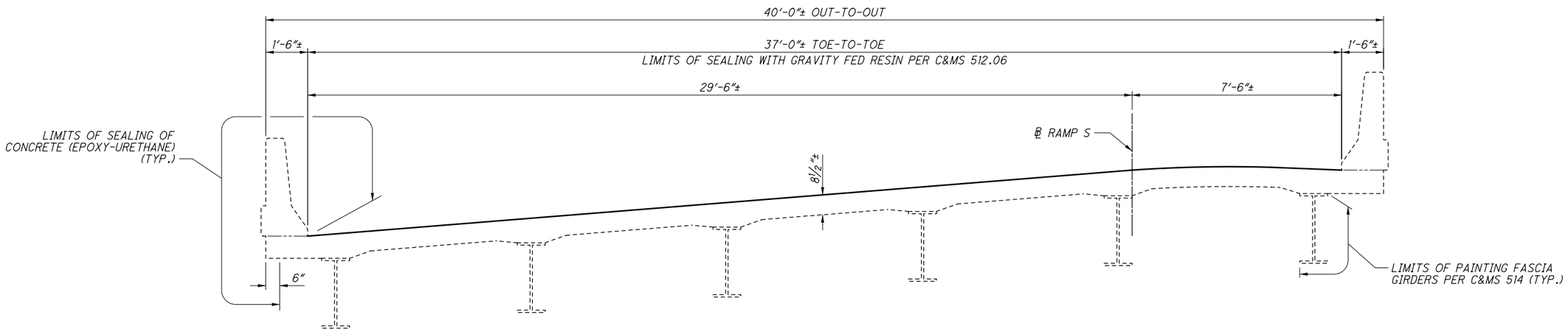
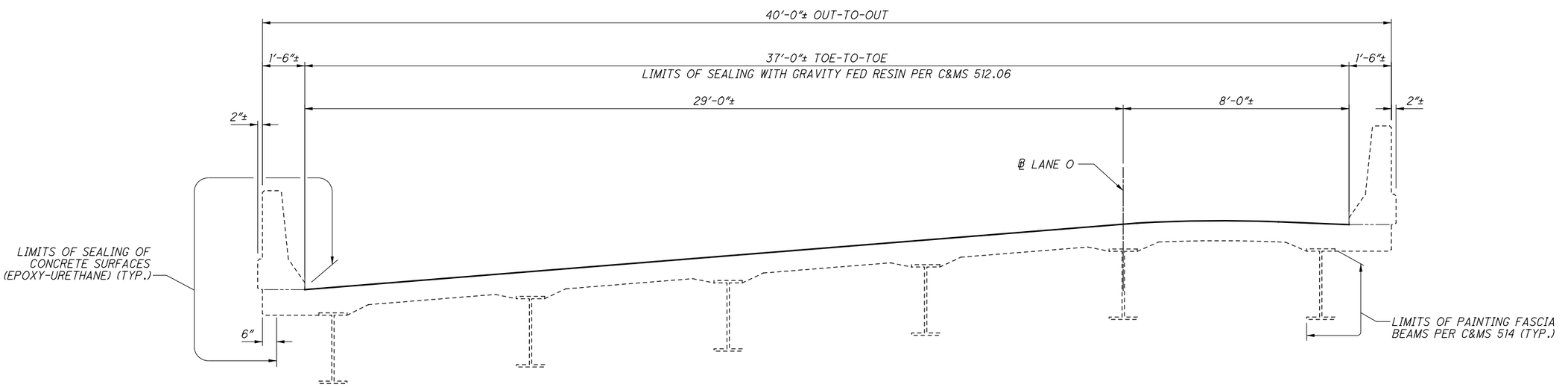


TRANSVERSE SECTION
(SUM-8-0023S)



TRANSVERSE SECTION
(SUM-77-1201)

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3/65 THRU 7/65.

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JAT		7700040/7702973	

TRANSVERSE SECTIONS (2 OF 2)
BRIDGE NO. SUM-8-0023S, SUM-77-1201
RAMP S (SR-8 SB TO EB I-76 EB) & I-77 LANE O OVER SR-8

SUM-76/77/8-8.24/9.74/0.00
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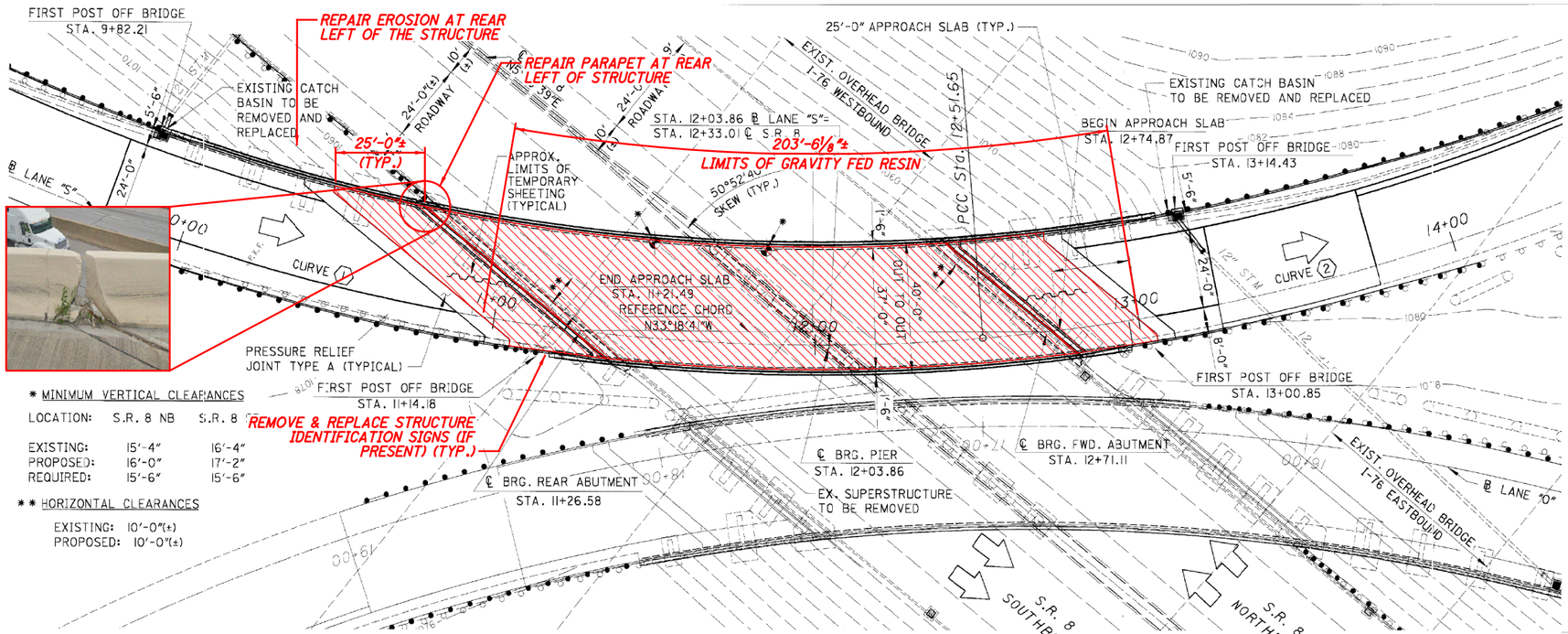


* MINIMUM VERTICAL CLEARANCES

LOCATION:	S.R. 8 NB	S.R. 8 SB
EXISTING:	15'-4"	16'-4"
PROPOSED:	16'-0"	17'-2"
REQUIRED:	15'-6"	15'-6"

** HORIZONTAL CLEARANCES

EXISTING: 10'-0"(±)
PROPOSED: 10'-0"(±)

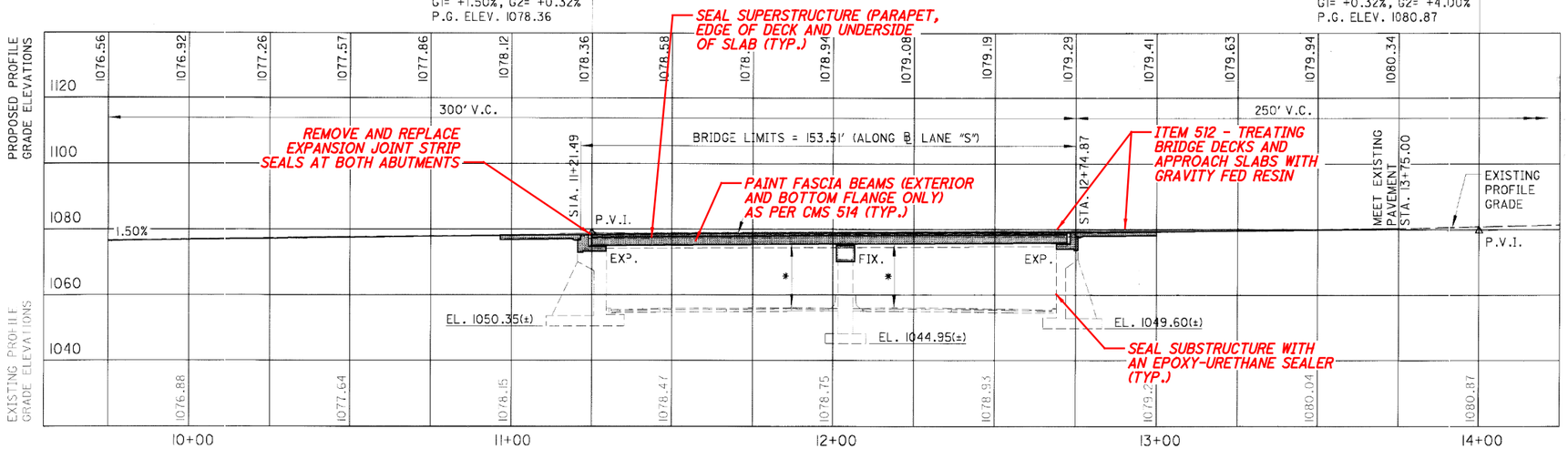
PLAN

CURVE DATA - LANE "S"

CURVE (1)	CURVE (2)
P.I. Sta = 10+37.11	P.I. Sta = 16+54.90
D = 40°22'30" (LT)	D = 64°19'06" (LT)
Dc = 9°00'00"	Dc = 8°56'00"
R = 636.62'	R = 641.37'
T = 234.07'	T = 403.25'
L = 448.61'	L = 719.98'
E = 41.67'	E = 116.24'

NOTES:

1. THE REFERENCE CHORD IS A STRAIGHT LINE CONNECTING THE INTERSECTIONS OF THE ABUTMENT CENTERLINES OF BEARING AND THE SURVEY BASELINE OF LANE "S".
2. ELEVATION DATUM: ALL CURRENT PLAN ELEVATIONS ARE BASED ON NAVD-88 DATUM. EXISTING PLAN ELEVATIONS ARE BASED ON NAVD-29 DATUM. TO CONVERT EXISTING PLAN ELEVATIONS TO CURRENT, SUBTRACT 0.65'



PROFILE ALONG ℄ LANE "S"

BENCHMARK #1

CHISELED Δ IN NORTH CORNER OF NORTH ABUT. OF LANE "O" BRIDGE OVER S.R. 8, 2' SOUTH OF THE SOUTH PIER COLUMN FOR I-76 WESTBOUND

STA. 17+91 ℄ LANE "O", 9' RT ELEV. 1076.27

BENCHMARK #2

"X" CUT IN THE TOP OF NE ANCHOR BOLT OF TOWER LIGHT BETWEEN EAST AND WESTBOUND LANES OF I-76, 150' WEST OF RAMP "O" BRIDGE

STA. 17+88 ℄ LANE "O", 127' LT ELEV. 1077.07

TRAFFIC DATA

LANE "S"

CURRENT ADT (2001) = 7220
DESIGN ADT (2021) = 7970
ADTT (2021) = 7%

ORIGINAL CONSTRUCTION PLANS SHOWN FOR INFORMATION ONLY

NOTES:

1. FOR GENERAL NOTES, SEE SHEET 3/65 THRU 7/65.
2. FOR TRANSVERSE SECTION, SEE SHEET 10/65.

LEGEND:

▨ - LIMITS OF GRAVITY FED RESIN

EXISTING STRUCTURE

TYPE: TWO SPAN CONTINUOUS ROLLED BEAM WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE

SPANS: 72'-1 5/16"±, 72'-1 5/16"±, ALONG REFERENCE CORD

ROADWAY: 37'-0"± TOE TO TOE PARAPET
40'-0"± OUT TO OUT OF DECK

LOADING: HS25 (CASE II) AND THE ALTERNATE MILITARY LOADING

WEARING SURFACE: 1" MONOLITHIC CONCRETE

SKEW: 50°52'40"± RIGHT FORWARD

APPROACH SLABS: 25'-0"± LONG (AS-1-81)

ALIGNMENT: 9°00'00"± & 8°56'00"± CURVE LEFT

SUPERELEVATION: 0.08± FT/FT

COORDINATES: LATITUDE 41°03'43.0"± N
LONGITUDE 81°30'17.2"± W

2021-09-22_BU15 - RFC PLANS

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SUMMIT COUNTY
STA. 11+21.49±
STA. 12+74.87±

GENERAL PLAN
BRIDGE NO. SUM-8-0023S
RAMP S (SR-8 SB TO I-76 EB)

SUM-76/77/8-8.24/9.74/0.00
PID No. 102329

1 / 2

11
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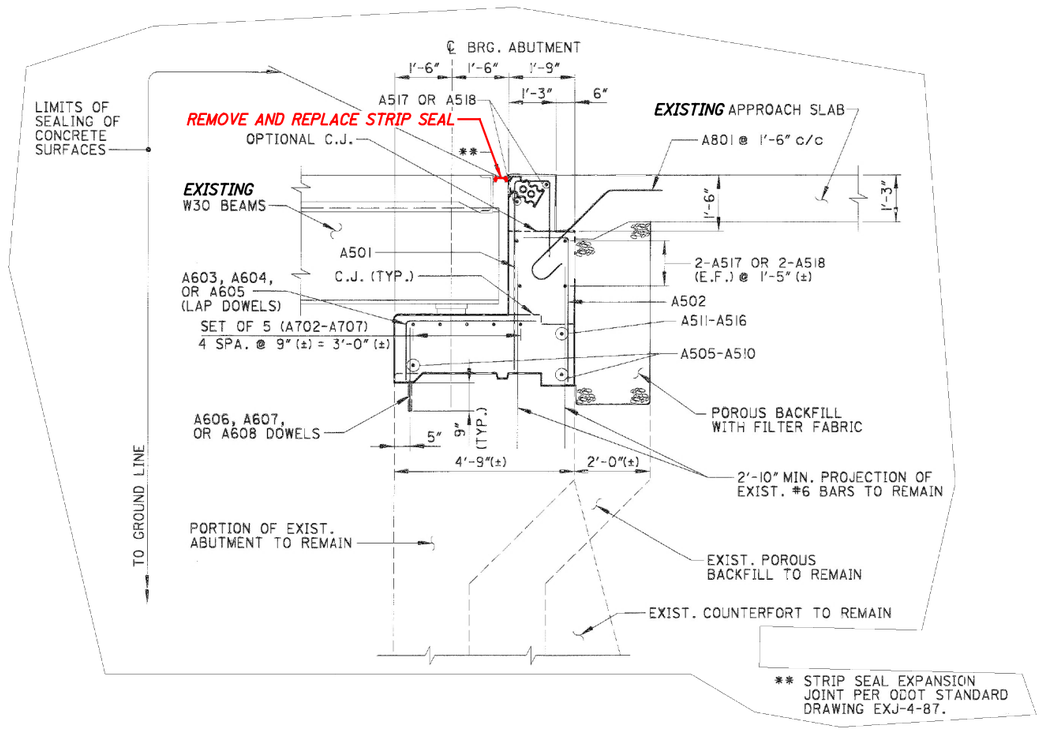

ABUTMENT SECTION

ORIGINAL CONSTRUCTION PLANS SHOWN FOR INFORMATION ONLY. ONLY WORK TO BE PERFORMED AT ABUTMENTS IS THE STRIP SEAL REPLACEMENT

NOTES:

1. REMOVE AND REPLACE THE EXPANSION JOINT STRIP SEALS AT THE REAR AND FORWARD ABUTMENTS.

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CHECKED	REVISED	STRUCTURE FILE NUMBER	
JAT		7700040	

EXPANSION JOINT DETAILS

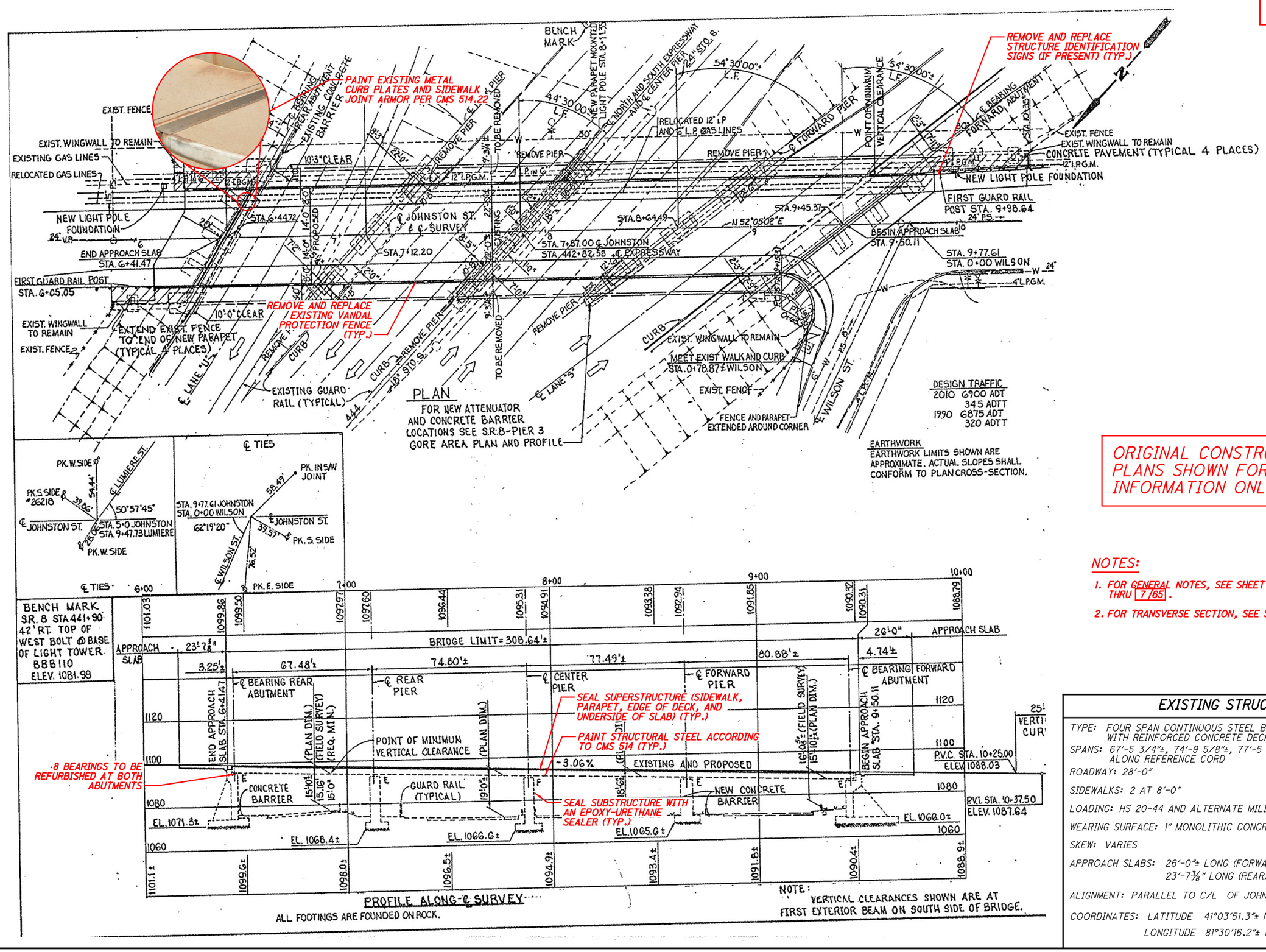
BRIDGE NO. SUM-8-0023S
RAMP S (SR-8 SB TO I-76 EB)

SUM-76/77/8-8.24/9.74/0.00
PID No. 102329

2 / 2

12
65

Released for Construction
Thomas J Powell, PE
10/05/2021



EXISTING STRUCTURE

TYPE: FOUR SPAN CONTINUOUS STEEL BEAM WITH REINFORCED CONCRETE DECK

SPANS: 67'-5 3/4"±, 74'-9 5/8"±, 77'-5 5/8"±, 80'-10 9/16" ALONG REFERENCE CORD

ROADWAY: 28'-0"

SIDEWALKS: 2 AT 8'-0"

LOADING: HS 20-44 AND ALTERNATE MILITARY

WEARING SURFACE: 1" MONOLITHIC CONCRETE

SKEW: VARIES

APPROACH SLABS: 26'-0"± LONG (FORWARD) 23'-7⅜" LONG (REAR) (AS-1-81)

ALIGNMENT: PARALLEL TO C/L OF JOHNSON STREET

COORDINATES: LATITUDE 41°03'51.3"± N
LONGITUDE 81°30'16.2"± W

NOTES:

1. FOR GENERAL NOTES, SEE SHEET 3/65 THRU 7/65.
2. FOR TRANSVERSE SECTION, SEE SHEET 9/65.

2021-09-22_BU 15 - RFC PLANS

DESCRIPTION
ISSUE RECORD
NO. DATE

DESIGN AGENCY
PRIME AE
8415 Pulsar Place Suite 300
Columbus Ohio 43240

DESIGNED KDC | DRAWN KDC | REVIEWED SAN | DATE 6/18/21
CHECKED JAT | REVISED | STRUCTURE FILE NUMBER 7700067

SUMMIT COUNTY
STA. 6+41.47±
STA. 9+50.11±

GENERAL PLAN
BRIDGE NO. SUM-8-0038
JOHNSTON ST. OVER SR-8

SUM-76/77/8-8.24/9.74/0.00
PID No. 102329

1/2
13/65

pw:\\VANVA01PWINT01.parsons.com:Ohio State\Documents\DB-Akron Beltway Rehab\10 - Design\102329\Structures\BU-15\Sheets\008_0038_GP001.dgn Sheet 10/4/2021 2:46:59 PM KChrisman

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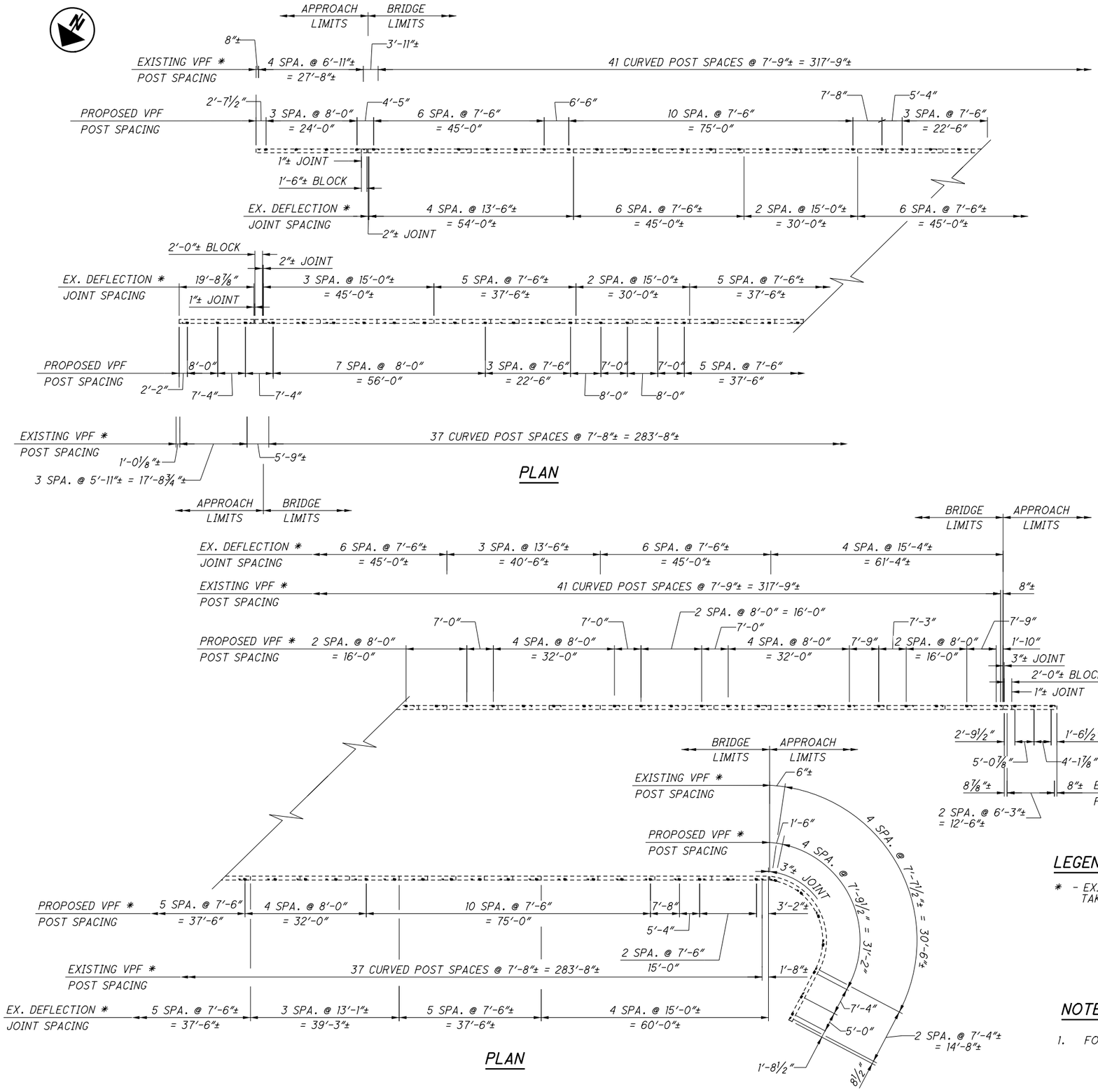
Thomas J Powell, PE
10/05/2021



LEGEND:

* - EXISTING DEFLECTION JOINT AND POST LOCATIONS TAKEN FROM EXISTING PLANS.

NOTE:

1. FOR ADDITIONAL VANDAL PROTECTION FENCE DETAILS, SEE SHEET 8/65.

2021-09-22_BU 15 - RFC PLANS

VANDAL PROTECTION FENCE DETAILS

BRIDGE NO. SUM-8-0038
JOHNSTON ST. OVER SR-8

SUM-76/77/8-8.24/9.74/0.00
PID No. 102329

DESIGN AGENCY
PRIME AE
8415 Pulsar Place Suite 300
Columbus Ohio 43240

DESIGNED	DRAWN	REVIEWED	DATE
HM	HM	SAN	6/18/21
CHECKED	REVISED	STRUCTURE FILE NUMBER	
KDC		7700067	

ISSUE RECORD:

NO.	DATE	DESCRIPTION

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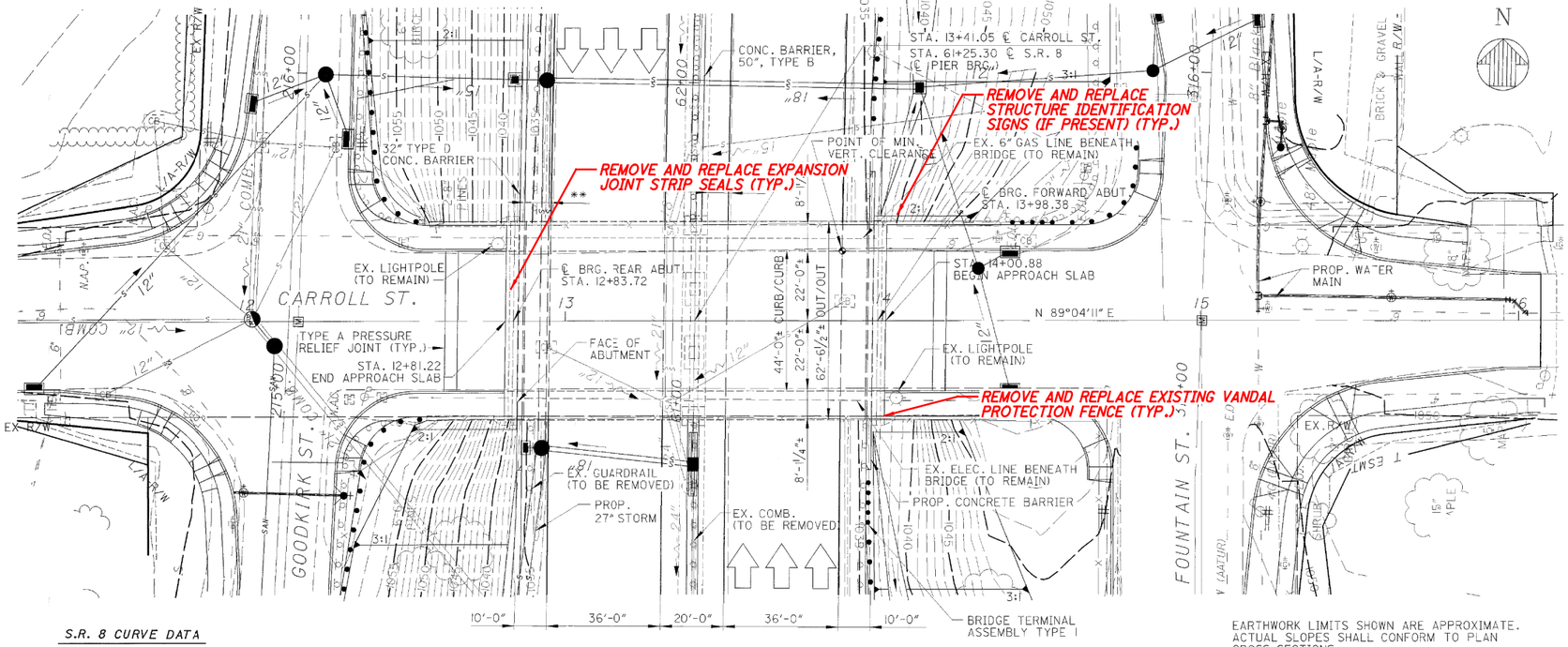
10/05/2021

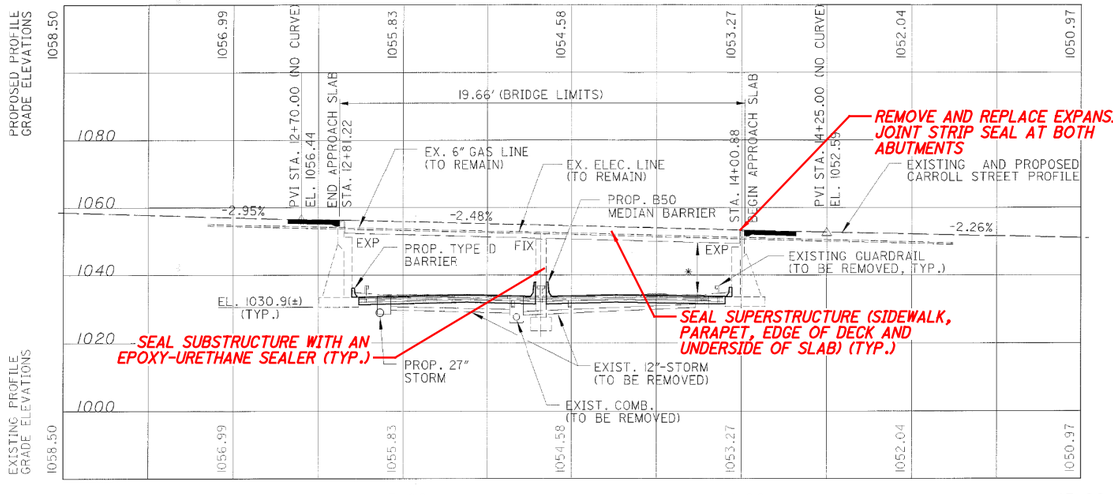


PLAN

EARTHWORK LIMITS SHOWN ARE APPROXIMATE. ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS-SECTIONS

S.R. 8 CURVE DATA

P.I. STA. = 67+45.23
Δ = 7° 46' 07" (RT)
Do = 0° 30' 13"
R = 11,375.75'
T = 772.39'
L = 1,542.41"
E = 26.19'



PROFILE ALONG ℄ CARROLL STREET

ORIGINAL CONSTRUCTION PLANS SHOWN FOR INFORMATION ONLY

NOTES:

1. FOR GENERAL NOTES, SEE SHEET 3/65 THRU 7/65.
2. FOR TRANSVERSE SECTION, SEE SHEET 9/65.

EXISTING STRUCTURE

TYPE: TWO SPAN CONTINUOUS STEEL BEAM WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE

SPANS: 57'-4"±, 57'-4"±, C-C BEARINGS

ROADWAY: 44'-0" (±) FACE TO FACE CURBS
62'-6 1/2" (±) OUT TO OUT OF DECK

LOADING: HS 20-44 (CASE II) AND THE ALT. MILITARY LOADING

WEARING SURFACE: 1 1/4" LATEX MODIFIED CONCRETE

SKEW: 0°42'32"± LEFT FORWARD

APPROACH SLABS: 15'-0"± LONG (AS-1-81)

ALIGNMENT: TANGENT

COORDINATES: LATITUDE 41°04'31.3"± N
LONGITUDE 81°30'16.2"± W

2021-09-22_BU 15 - RFC PLANS

ISSUE RECORD

NO.	DATE	DESCRIPTION

DESIGN AGENCY
PRIME AE
8415 Pulsar Place Suite 300
Columbus Ohio 43240

DESIGNED	DRAWN	REVIEWED	DATE
KDC	KDC	SAN	6/18/21
CHECKED	REVISED	STRUCTURE FILE NUMBER	
JAT		7700180	

SUMMIT COUNTY
STA. 12+81.22± STA. 14+00.88±

GENERAL PLAN
BRIDGE NO. SUM-8-0117
CARROLL ST. OVER SR-8

SUM-76/77/8-8.24/9.74/0.00
PID No. 102329

1 / 3

15 / 65

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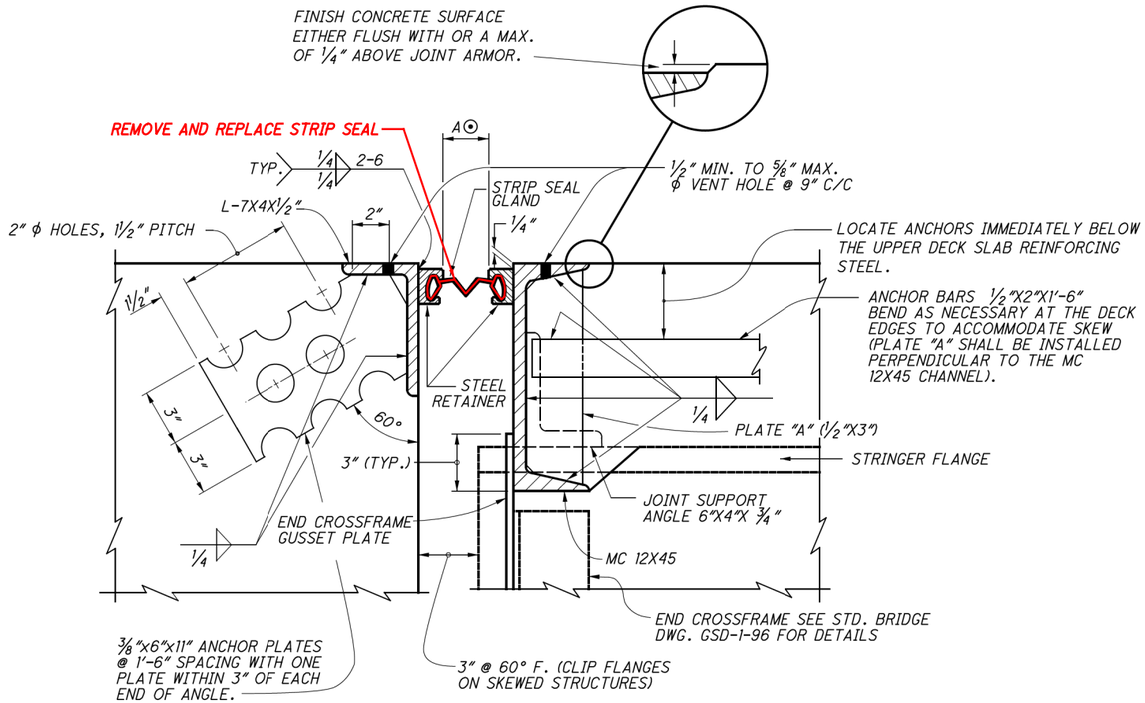
Released for Construction
Thomas J Powell, PE
10/05/2021



SECTION THRU DECK

ITEM 516, ELASTOMERIC STRIP SEAL WITHOUT STEEL EXTRUSIONS, AS PER PLAN:

THIS ITEM SHALL INCLUDE REMOVAL AND REPLACEMENT OF THE EXISTING 3" STRIP SEAL GLANDS FROM FACE-TO-FACE OF CURB. THE CONSTRUCTION PLANS INDICATE THAT THE ELASTOMERIC SEAL WAS INSTALLED WITH AN ADHESIVE. UPON REMOVAL OF THE SEAL, THE CONTRACTOR SHALL ATTEMPT TO MATCH THE REPLACEMENT SEAL AS CLOSELY AS POSSIBLE WITH THE EXISTING SO AS TO PROVIDE A SNUG, WATERTIGHT SEAL. THE STRIP SEAL AND INSTALLATION SHALL MEET THE REQUIREMENTS OF STANDARD DRAWING EXJ-4-87.

THIS WORK WILL BE PAID FOR AT THE CONTRACT PRICE BID, PER LINEAL FOOT, WHICH PRICE AND PAYMENT SHALL BE FULL COMPENSATION FOR ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE WORK IN CONFORMANCE WITH THESE REQUIREMENTS, WITH THE PERTINENT PROVISIONS OF 516, AND TO THE SATISFACTION OF THE ENGINEER.

ORIGINAL CONSTRUCTION PLANS SHOWN FOR INFORMATION ONLY. ONLY WORK TO BE PERFORMED AT ABUTMENTS IS THE STRIP SEAL REPLACEMENT

NOTES:

1. REMOVE AND REPLACE THE 3" EXPANSION JOINT STRIP SEALS AT THE REAR AND FORWARD ABUTMENTS.
2. NO EXISTING PLANS ON STRIP SEAL WERE AVAILABLE. DETAILS SHOWN ARE FROM ODOT STD. DWG. EXJ-4-87.

2021-09-22_BU 15 - RFC PLANS

DESIGN AGENCY
PRIME AE
8415 Pulsar Place Suite 300
Columbus Ohio 43240

DESIGNED	DRAWN	REVIEWED	DATE
KDC	KDC	SAN	6/18/21
CHECKED	REVISED	STRUCTURE FILE NUMBER	
JAT		7700180	

EXPANSION JOINT DETAILS
BRIDGE NO. SUM-8-0117
CARROLL ST. OVER SR-8

SUM-76/77/8-8.24/9.74/0.00
PID No. 102329

2 / 3

16
65

ISSUE RECORD:

NO.	DATE	DESCRIPTION

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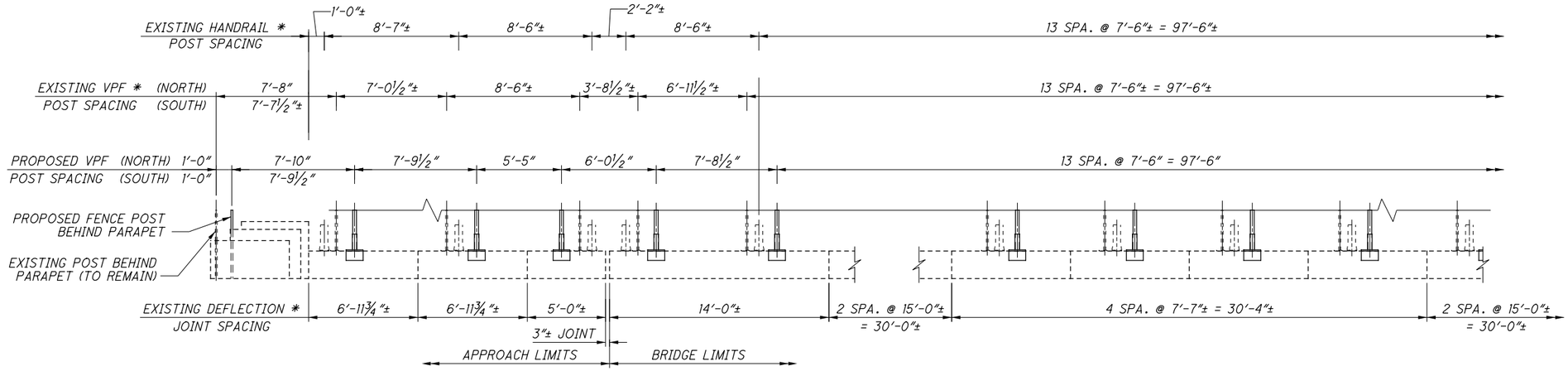
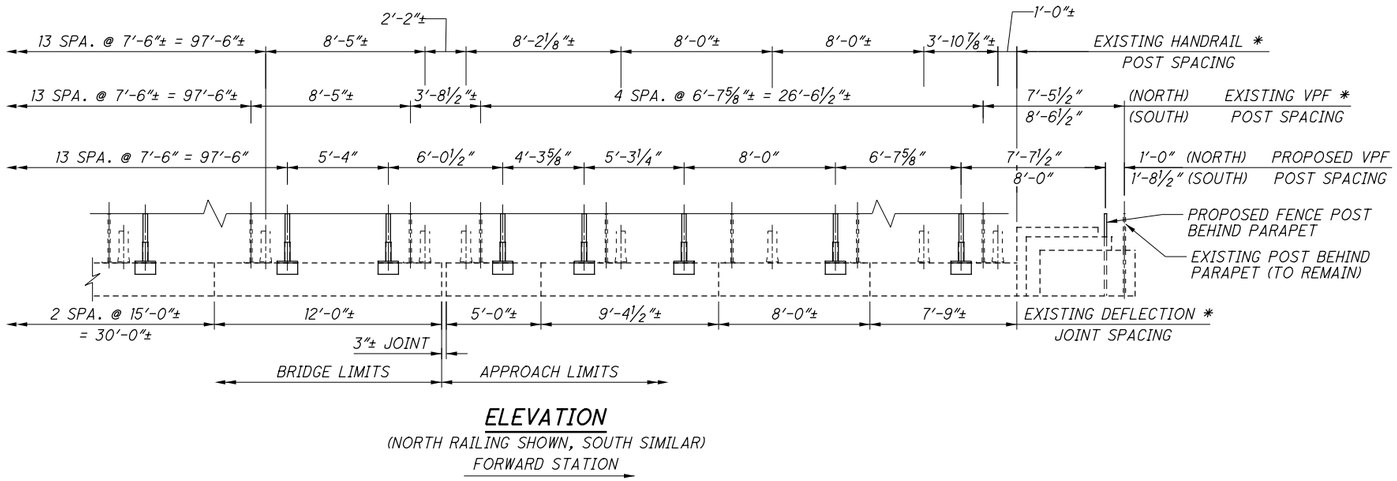


ELEVATION

(NORTH RAILING SHOWN, SOUTH SIMILAR)
FORWARD STATION



ELEVATION

(NORTH RAILING SHOWN, SOUTH SIMILAR)
FORWARD STATION

LEGEND:

* - EXISTING DEFLECTION JOINT AND POST LOCATIONS TAKEN FROM ORIGINAL PLANS.

NOTE:

1. FOR ADDITIONAL VANDAL PROTECTION FENCE DETAILS, SEE SHEET 8/65.

2021-09-22_BU 15 - RFC PLANS

VANDAL PROTECTION FENCE DETAILS

BRIDGE NO. SUM-8-0117
CARROLL ST OVER SR-8

SUM-76/77/8-8.24/9.74/0.00
PID No. 102329

3 / 3

17
65

DESIGN AGENCY
PRIME AE
8415 Pulsar Place Suite 300
Columbus Ohio 43240

DESIGNED	DRAWN	REVIEWED	DATE
JAT	JAT	SAN	6/18/21
CHECKED	REVISED	STRUCTURE FILE NUMBER	
KDC		7700180	

ISSUE RECORD:

NO.	DATE	DESCRIPTION

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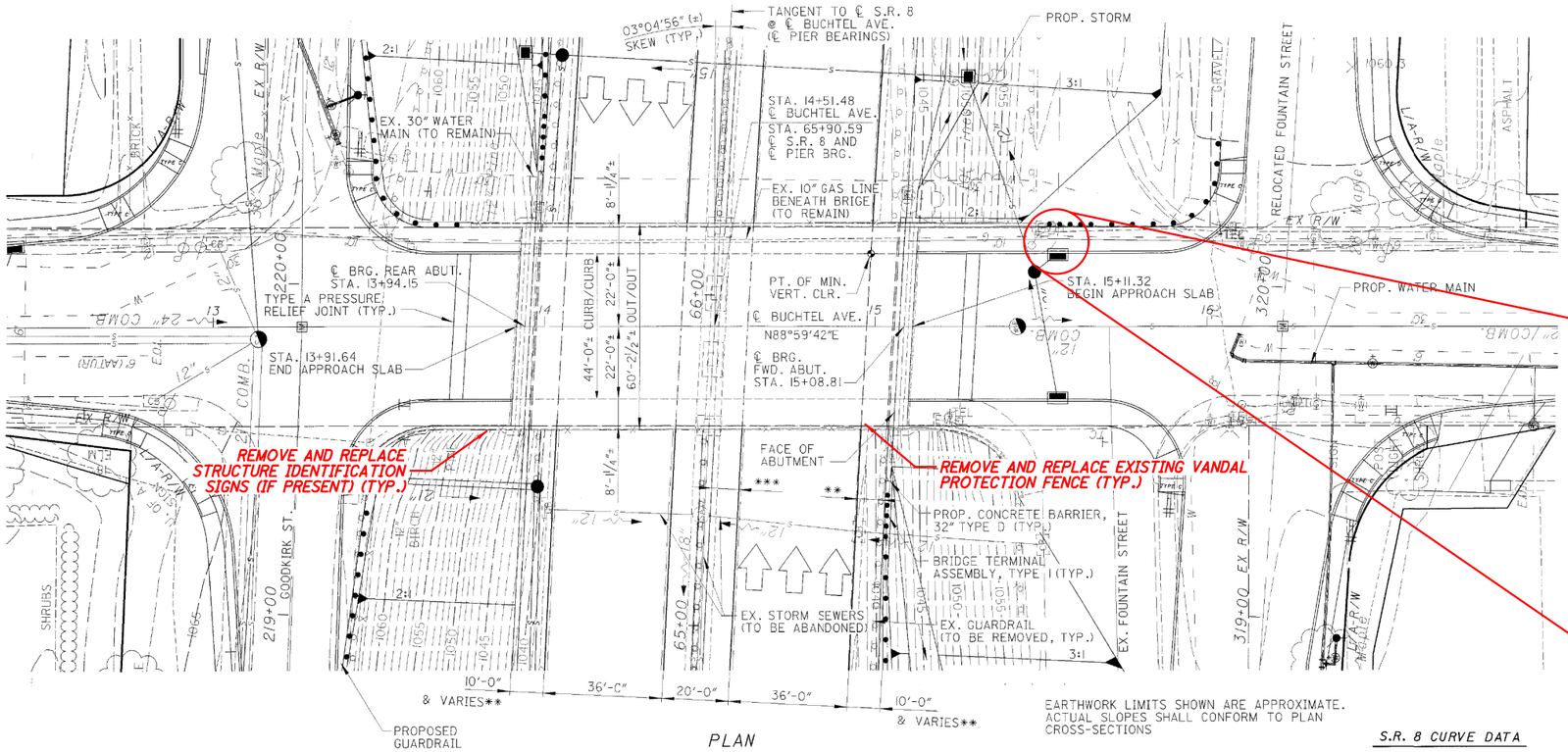
Thomas J Powell, PE
10/05/2021



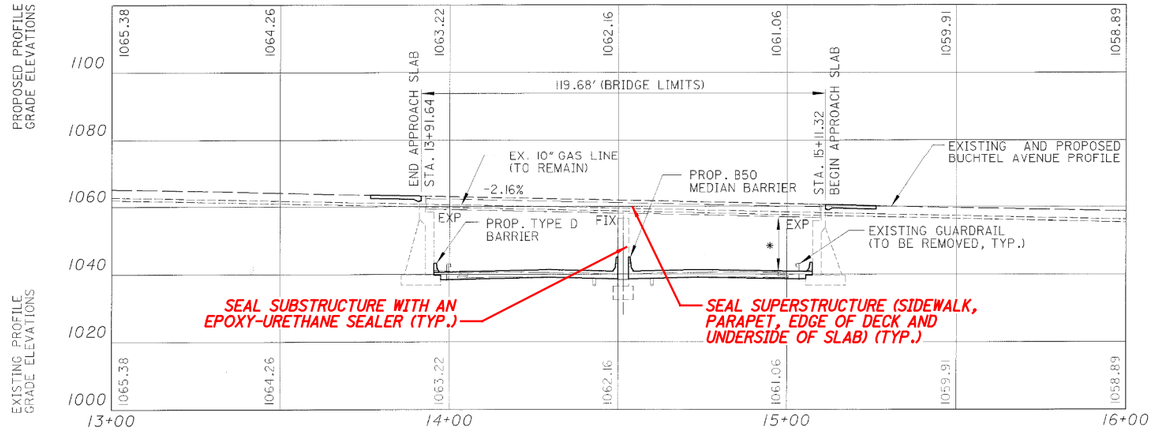
PLAN

EARTHWORK LIMITS SHOWN ARE APPROXIMATE.
ACTUAL SLOPES SHALL CONFORM TO PLAN
CROSS-SECTIONS

REMOVE AND REPLACE PORTIONS OF SIDEWALK ON
APPROACHES AS DESIGNATED BY THE ENGINEER

S.R. 8 CURVE DATA

P.I. STA. = 67+45.23
Δ = 7° 46' 07" (RT)
Dc = 0° 30' 13"
R = 11,375.75'
T = 772.39'
L = 1,542.41"
E = 26.19'



PROFILE ALONG ℄ BUCHTEL STREET

ORIGINAL CONSTRUCTION
PLANS SHOWN FOR
INFORMATION ONLY

NOTES:

1. FOR GENERAL NOTES, SEE SHEET 3/65 THRU 7/65.
2. FOR TRANSVERSE SECTION, SEE SHEET 9/65.

EXISTING STRUCTURE

TYPE: TWO SPAN CONTINUOUS STEEL BEAM WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE

SPANS: 57'-4"±, 57'-4"±, CENTER TO CENTER OF BEARINGS

ROADWAY: 44'-0" FACE TO FACE OF CURBS
62'-6½" OUT TO OUT OF DECK

LOADING: HS 20-44 (CASE II) AND THE ALT. MILITARY LOADING

WEARING SURFACE: 1" MONOLITHIC CONCRETE

SKEW: 3°04'56"± LEFT FORWARD

APPROACH SLABS: 15'-0"± LONG (AS-1-81)

ALIGNMENT: TANGENT

COORDINATES: LATITUDE 41°04'36.0"± N
LONGITUDE 81°30'16.2"± W

2021-09-22_BU 15 - RFC PLANS

DESIGN AGENCY
PRIME AE
8415 Pulsar Place Suite 300
Columbus Ohio 43240

DESIGNED	DRAWN	REVIEWED	DATE
KDC	KDC	SAN	6/18/21
CHECKED	REVISED	STRUCTURE FILE NUMBER	
JAT		7700210	

SUMMIT COUNTY
STA. 13+91.64±
STA. 15+11.32±

GENERAL PLAN
BRIDGE NO. SUM-8-0125
BUCHTEL ST. OVER SR-8

SUM-76/77/8-8.24/9.74/0.00
PID No. 102329

1 / 2

18
65

ISSUE RECORD:

NO.	DATE	DESCRIPTION

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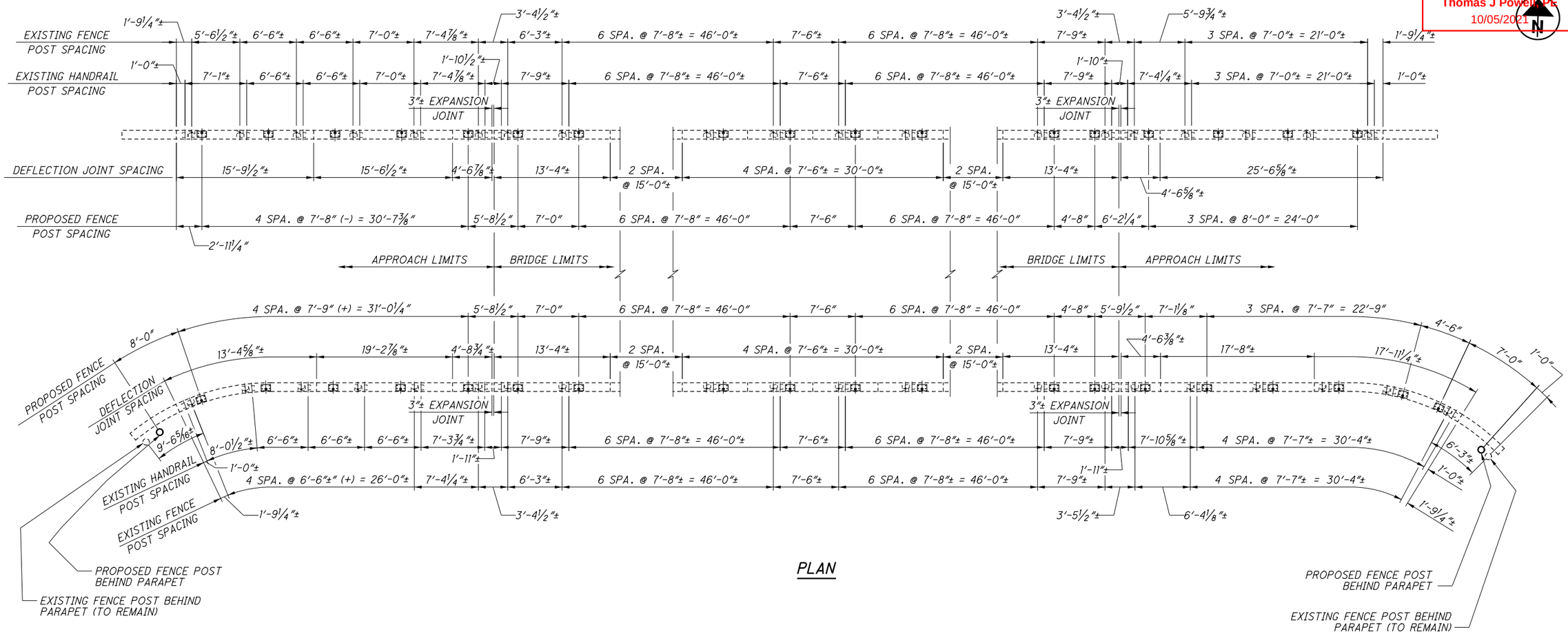
Released for Construction
Thomas J Powell, PE
10/05/2021



PLAN

LEGEND:

* - EXISTING DEFLECTION JOINT AND POST LOCATIONS TAKEN FROM EXISTING PLANS.

NOTES:

1. FOR INFORMATION NOT SHOWN REFER TO SCD VPF-1-90.
2. FOR ADDITIONAL VANDAL PROTECTION FENCE DETAILS, SEE SHEET 8/65.

2021-09-22_BU 15 - RFC PLANS

DESIGN AGENCY
PRIME AE
8415 Pulsar Place Suite 300
Columbus Ohio 43240

DESIGNED	DRAWN	REVIEWED	DATE
JAT	JAT	SAN	6/18/21
CHECKED	REVISED	STRUCTURE FILE NUMBER	
KDC		7700210	

VANDAL PROTECTION FENCE DETAILS

BRIDGE NO. SUM-8-0125
BUCHTEL ST. OVER SR-8

SUM-76/77/8-8.24/9.74/0.00
PID No. 102329

2 / 2

19 / 65

ISSUE RECORD:

NO.	DATE	DESCRIPTION

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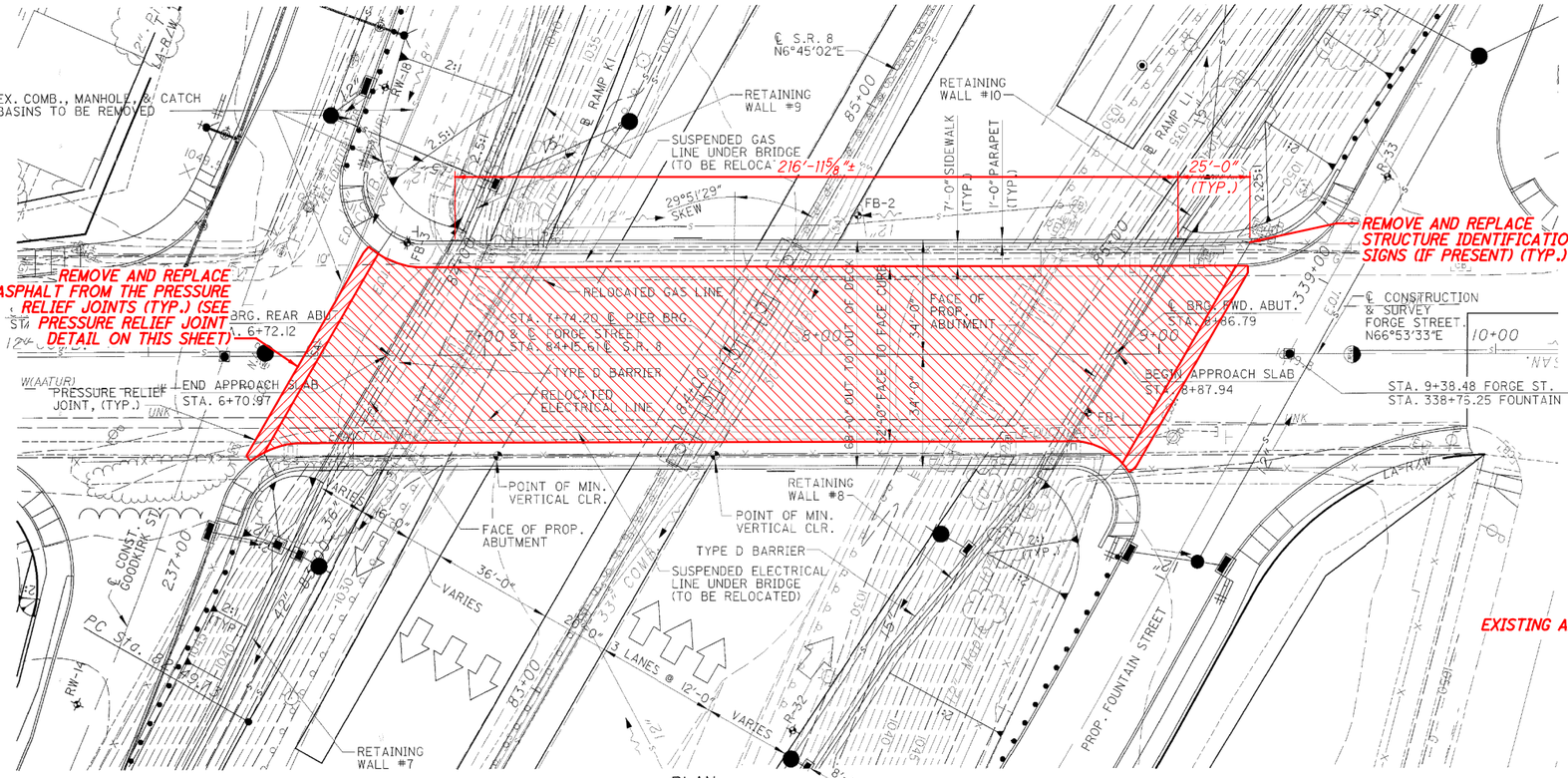
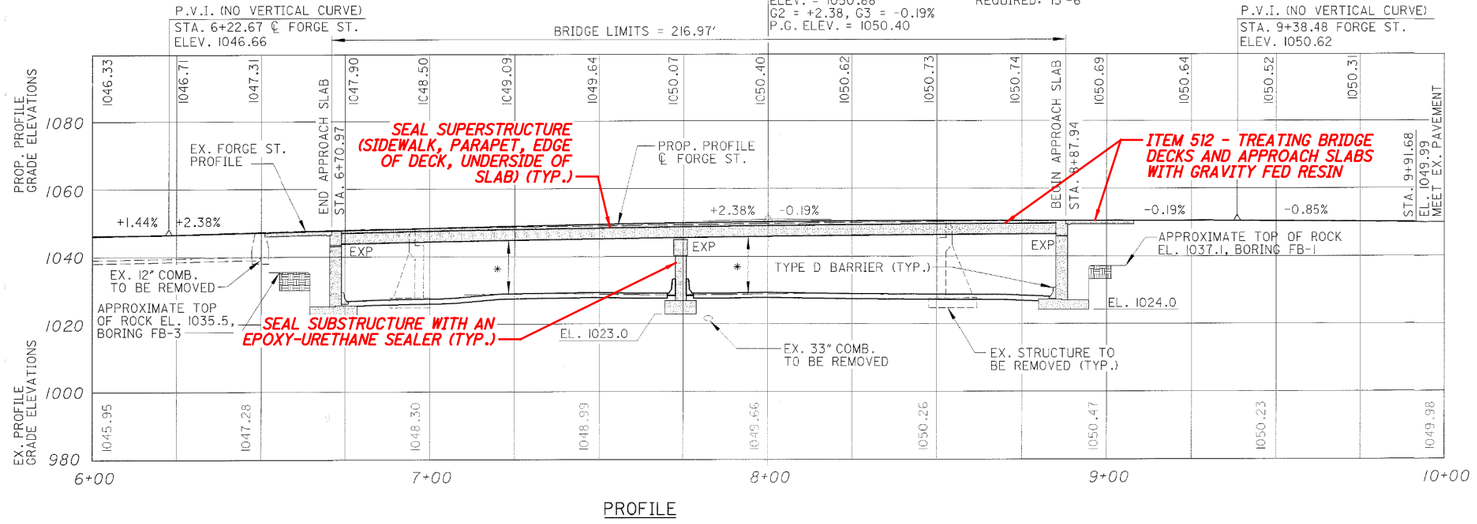
Thomas J Powell, PE
10/05/2021



PLAN

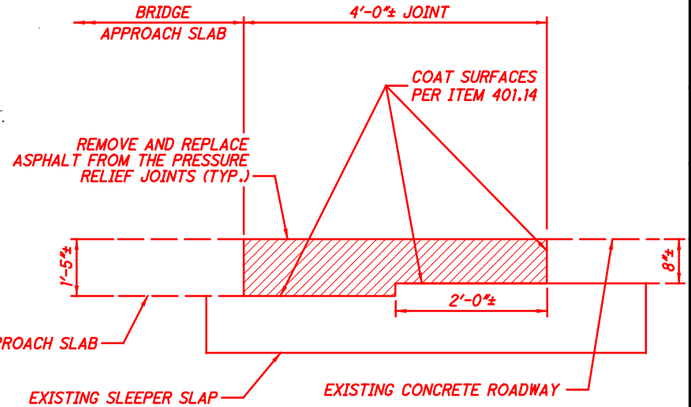
* VERTICAL CLEARANCE
EXISTING: 15'-4" (±)
PROPOSED: 15'-6" (SB LANES)
16'-5" (NB LANES)
REQUIRED: 15'-6"

EARTHWORK NOTE:
EARTHWORK LIMITS ARE APPROXIMATE. ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS-SECTIONS.



PROFILE

ORIGINAL CONSTRUCTION PLANS SHOWN FOR INFORMATION ONLY



PRESSURE RELIEF JOINT DETAIL

NOTES:

1. FOR GENERAL NOTES, SEE SHEET 3/65 THRU 7/65.
2. FOR TRANSVERSE SECTION, SEE SHEET 9/65.

LEGEND:

- ▨ - LIMITS OF GRAVITY FED RESIN
- ▨ - REMOVE AND REPLACE ASPHALT FROM PRESSURE RELIEF JOINT

EXISTING STRUCTURE

TYPE: TWO SPAN CONTINUOUS STEEL BEAM BRIDGE WITH COMPOSITE CONCRETE DECK AND SEMI-INTEGRAL ABUTMENTS

SPANS: 102'-1"±, 112'-7"± C/C BEARINGS

ROADWAY: 52'-0" FACE TO FACE CURBS WITH 7'-0" SIDEWALKS
68'-0" OUT TO OUT OF DECK

LOADING: HS25 (CASE II) AND THE ALTERNATE MILITARY LOADING

WEARING SURFACE: MONOLITHIC CONCRETE

SKEW: 29°51'29"± LEFT FORWARD

APPROACH SLABS: 20'-0"± LONG

ALIGNMENT: TANGENT

COORDINATES: LATITUDE 41°04'53.7"± N
LONGITUDE 81°30'12.6"± W

2021-09-22_BU15 - RIC PLANS

DESIGN AGENCY
PRIME AE
8415 Pulsar Place Suite 300
Columbus Ohio 43240

REVIEWED	DATE
SAN	6/18/21
STRUCTURE FILE NUMBER	
7700245	
DRAWN	REVISED
KDC	
DESIGNED	CHECKED
KDC	JAT

SUMMIT COUNTY
STA. 6+70.97±
STA. 8+87.94±

GENERAL PLAN
BRIDGE NO. SUM-8-0160
FORGE ST. OVER SR-8

SUM-76/77/8-8.24/9.74/0.00
PID No. 102329

1 / 1

20
65

ISSUE RECORD

NO.	DATE	DESCRIPTION

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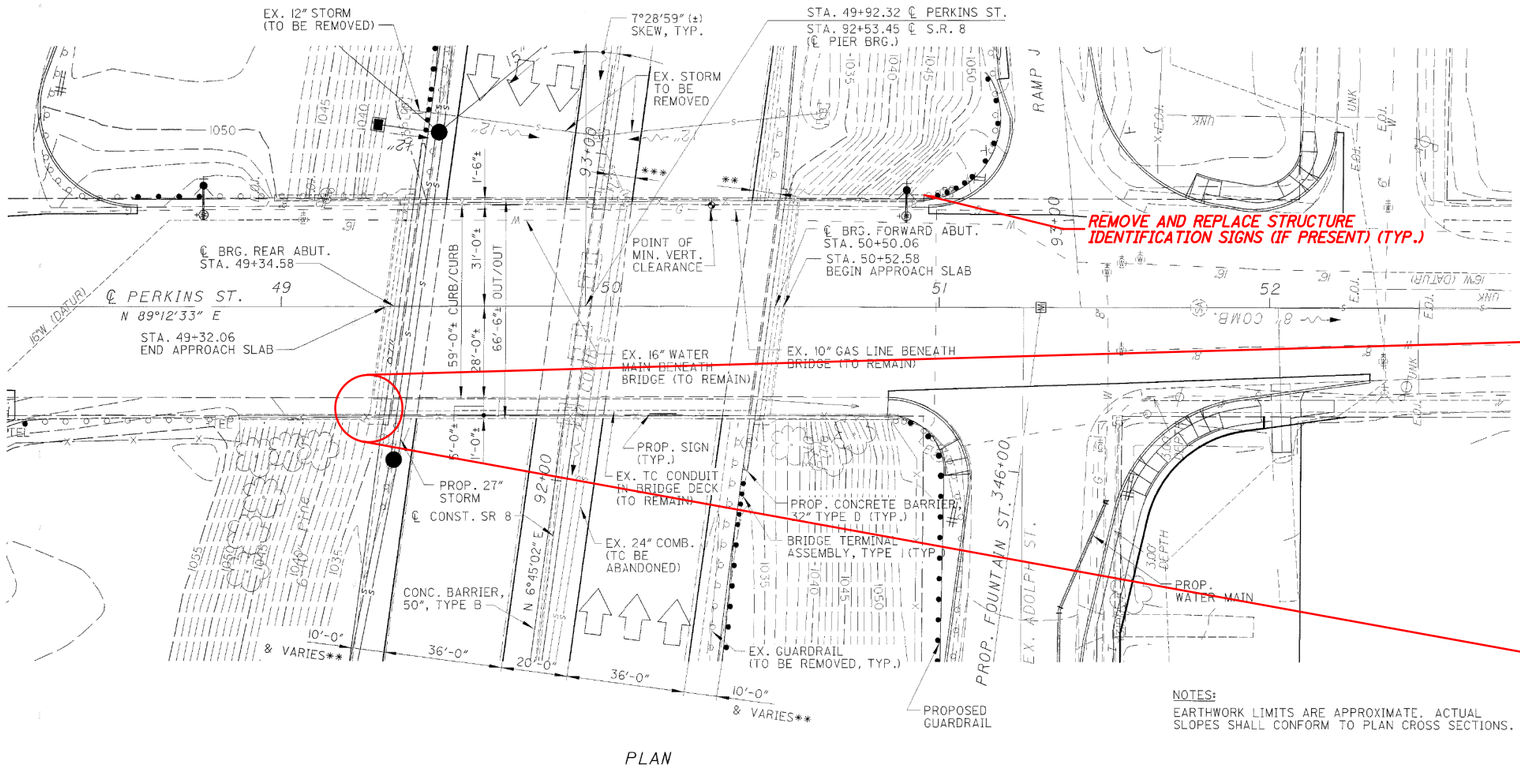
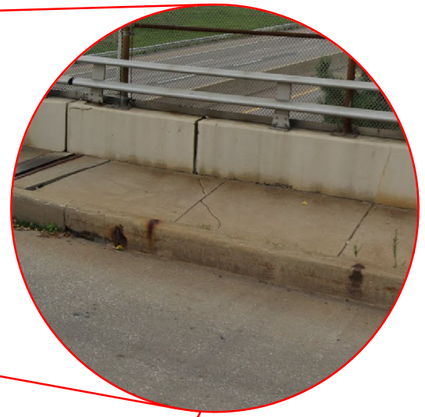
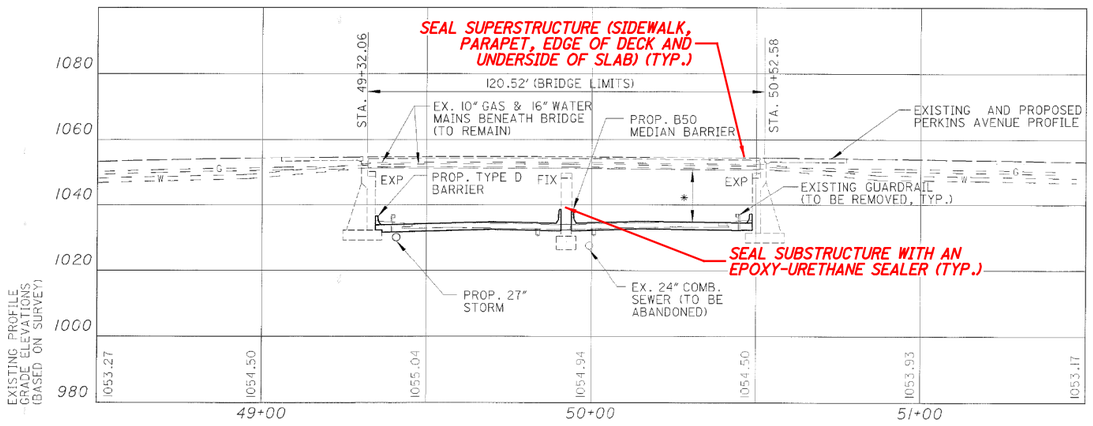


PLAN



REMOVE AND REPLACE PORTIONS OF SIDEWALK ON APPROACHES AS DESIGNATED BY THE ENGINEER



PROFILE ALONG ℄ PERKINS STREET

ORIGINAL CONSTRUCTION PLANS SHOWN FOR INFORMATION ONLY

NOTES:

1. FOR GENERAL NOTES, SEE SHEET 3/65 THRU 7/65.
2. FOR TRANSVERSE SECTION, SEE SHEET 9/65.

EXISTING STRUCTURE

TYPE: TWO SPAN CONTINUOUS STEEL BEAM WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE

SPANS: 57'-8 7/8"±, 57'-8 7/8"±, C/C BEARINGS

ROADWAY: 59'-0"± F/F OF CURB TO TOE OF PARAPET WITH A 5'-0"± SIDEWALK
66'-6"± O/O OF DECK.

LOADING: HS20-44 (CASE II) AND ALTERNATE MILITARY LOADING

WEARING SURFACE: 1 1/4"± LATEX MODIFIED CONCRETE

SKEW: 7°28'59"± LEFT FORWARD

APPROACH SLABS: 25'-0"± LONG (AS-1-54)

ALIGNMENT: TANGENT

COORDINATES: LATITUDE 41°05'02"± N
LONGITUDE 81°30'12"± W

Released for Construction
Thomas J Powell, PE
10/05/2021

DESIGN AGENCY
PRIME AE
8415 Pulsar Place Suite 300
Columbus Ohio 43240

DESIGNED	DRAWN	REVIEWED	DATE
KDC	KDC	SAN	6/18/21
CHECKED	REVISED	STRUCTURE FILE NUMBER	
JAT		7700334	

SUMMIT COUNTY
STA. 49+32.06±
STA. 50+52.58±

GENERAL PLAN
BRIDGE NO. SUM-59-0341
PERKINS ST. OVER SR-8

SUM-76/77/8-8.24/9.74/0.00
PID No. 102329

1 / 1

21
65

2021-09-22_BU 15 - RFC PLANS

ISSUE RECORD:

NO.	DATE	DESCRIPTION

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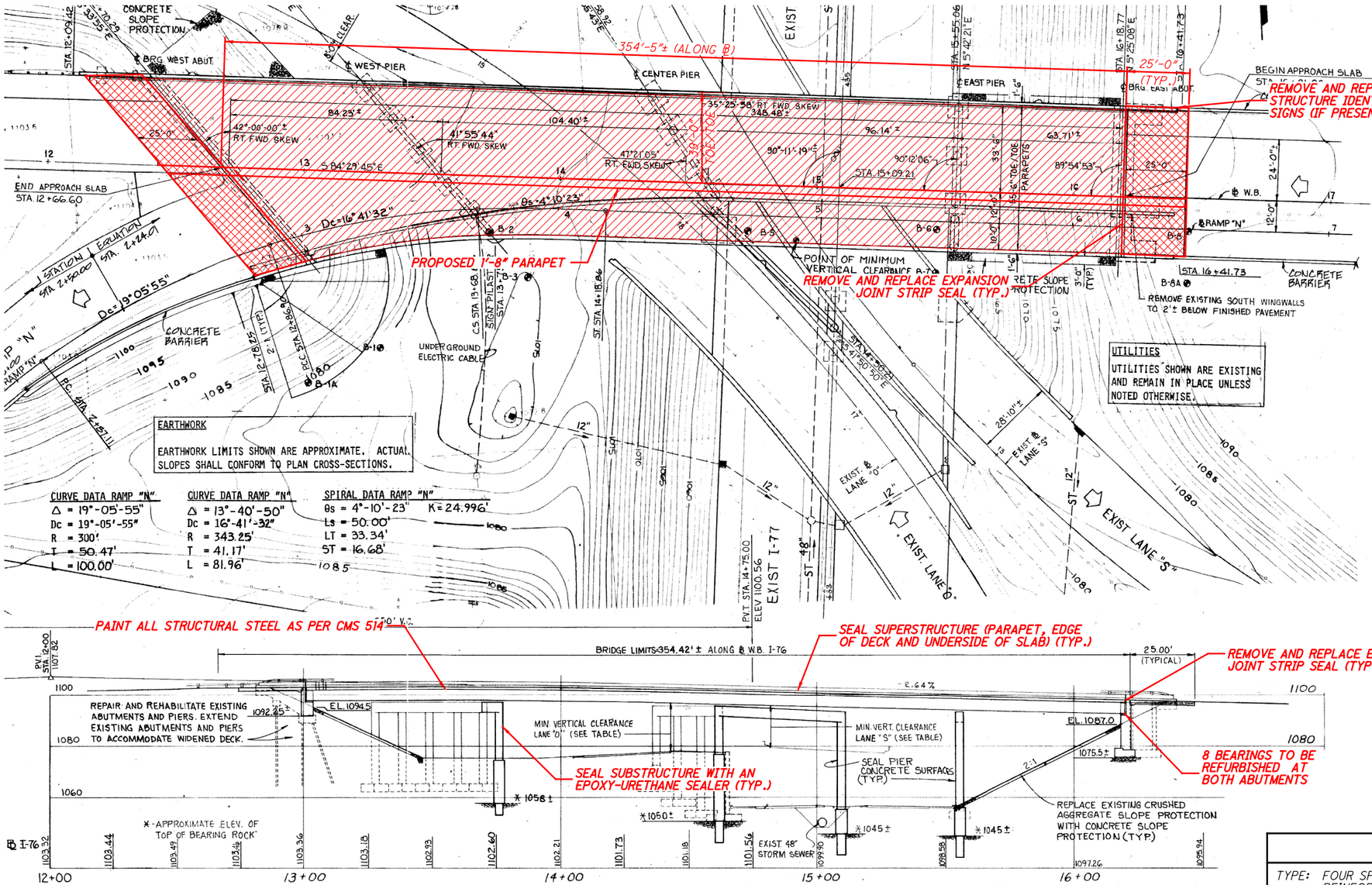
Released for Construction
Thomas J Powell, PE
10/05/2021



EARTHWORK

EARTHWORK LIMITS SHOWN ARE APPROXIMATE. ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS-SECTIONS.

UTILITIES

UTILITIES SHOWN ARE EXISTING AND REMAIN IN PLACE UNLESS NOTED OTHERWISE.

CURVE DATA RAMP "N"	CURVE DATA RAMP "N"	SPIRAL DATA RAMP "N"
Δ = 19°-05'-55"	Δ = 13°-40'-50"	θs = 4°-10'-23" K = 24.996'
Dc = 19°-05'-55"	Dc = 16°-41'-32"	Ls = 50.00'
R = 300'	R = 343.25'	LT = 33.34'
T = 50.47'	T = 41.17'	ST = 16.68'
L = 100.00'	L = 81.96'	

ORIGINAL CONSTRUCTION PLANS SHOWN FOR INFORMATION ONLY

LEGEND:

- ▨ - LIMITS OF MILLING & MICRO-SILICA CONCRETE OVERLAY ON BRIDGE DECK
- ▩ - LIMITS OF MILLING & MICRO-SILICA CONCRETE OVERLAY ON APPROACH SLAB

NOTES:

1. FOR GENERAL NOTES, SEE SHEET 3/65 THRU 7/65.
2. FOR TRANSVERSE SECTION, SEE SHEET 2/5.
3. FOR EXPANSION JOINT DETAILS, SEE SHEET 3/5.
4. FOR PARAPET DETAILS, SEE SHEET 4/5.

EXISTING STRUCTURE

TYPE: FOUR SPAN CONTINUOUS STEEL GIRDERS WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE

SPANS: 84'-2¾"±, 104'-4 13/16"±, 96'-1 11/16"±, 63'-8½"± C/C BEARINGS

ROADWAY: VARIES

LOADING: HS20-44 CASE 1 AND THE ALTERNATE MILITARY LOADING

WEARING SURFACE: 1"± MONOLITHIC CONCRETE

SKEW: VARIES

APPROACH SLABS: 25'-0"± LONG (AS-1-81)

ALIGNMENT: VARIES

SUPERELEVATION: VARIES

COORDINATES: LATITUDE 41°03'43.2"± N
LONGITUDE 81°30'16.0"± W

ISSUE RECORD:

NO.	DATE	DESCRIPTION

DESIGN AGENCY
PRIME AE
8415 Pulsar Place Suite 300
Columbus Ohio 43240

DESIGNED	DRAWN	REVIEWED	DATE
KDC	KDC	SAN	6/18/21
CHECKED	REVISED	STRUCTURE FILE NUMBER	
JAT		7706006	

SUMMIT COUNTY
STA. 12+66.60±
STA. 16+21.02±

GENERAL PLAN
BRIDGE NO. SUM-76-1151L
I-76 WB OVER SR-8

SUM-76/77/8-8.24/9.74/0.00
PID No. 102329

1 / 5

22 / 65

2021-09-22_BU 15 - RFC PLANS

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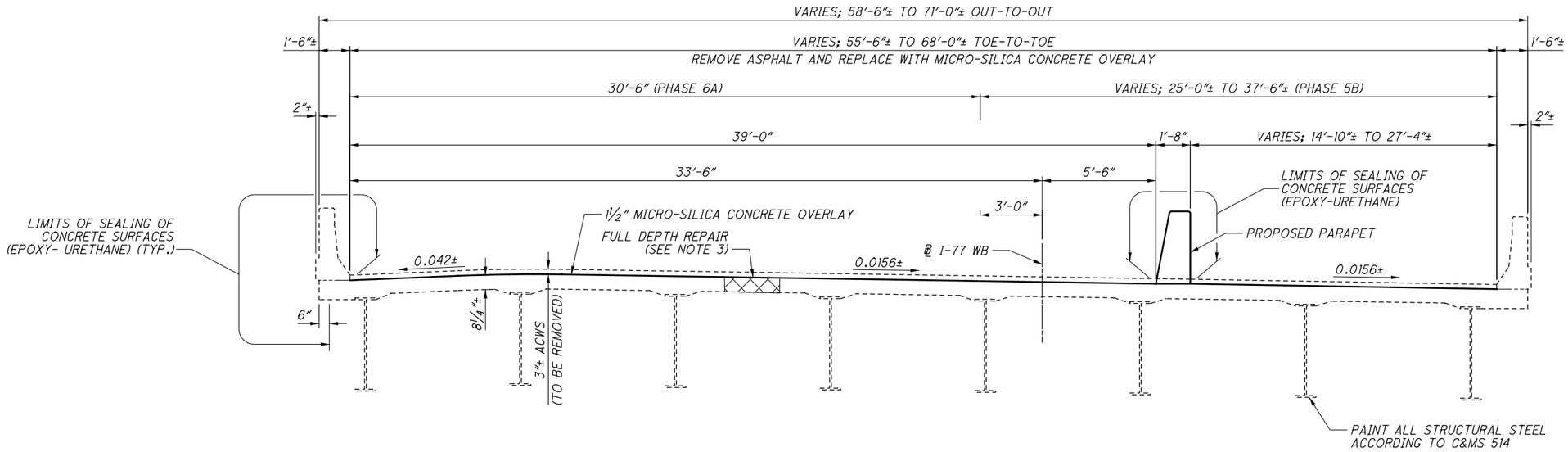

TRANSVERSE SECTION

LEGEND:

- LIMITS OF FULL DEPTH REPAIR

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3/65 THRU 7/65.
2. FOR PROPOSED PARAPET DETAILS, SEE SHEET 4/5.
3. PERFORM FULL DEPTH REPAIR OF THE DECK AT THE AREAS DESIGNATED BY THE ENGINEER. FOR ADDITIONAL NOTES, SEE SHEET 7/65.
4. REMOVE EXISTING ASPHALT CONCRETE WEARING SURFACE (ACWS) & PROVIDE NEW MICRO-SILICA CONCRETE OVERLAY MATCHING THE ORIGINAL DECK ELEVATION.

2021-09-22_BU 15 - RFC PLANS

ISSUE RECORD:

NO.	DATE	DESCRIPTION

DESIGN AGENCY
PRIME AE
8415 Pulsar Place Suite 300
Columbus Ohio 43240

DESIGNED	DRAWN	REVIEWED	DATE
KDC	KDC	SAN	6/18/21
CHECKED	REVISED	STRUCTURE FILE NUMBER	
JAT		7706006	

TRANSVERSE SECTION
BRIDGE NO. SUM-76-1151L
I-76 WB OVER SR-8

SUM-76/77/8-8.24/9.74/0.00
PID No. 102329

2 / 5

23
65

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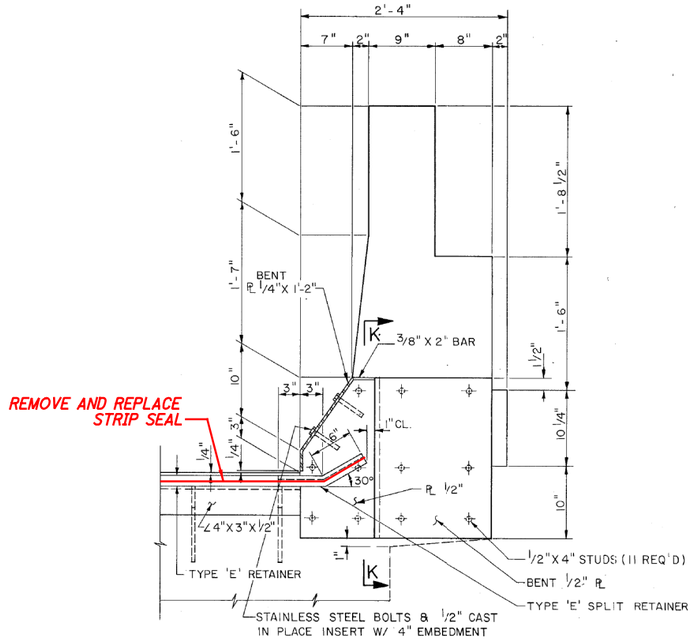
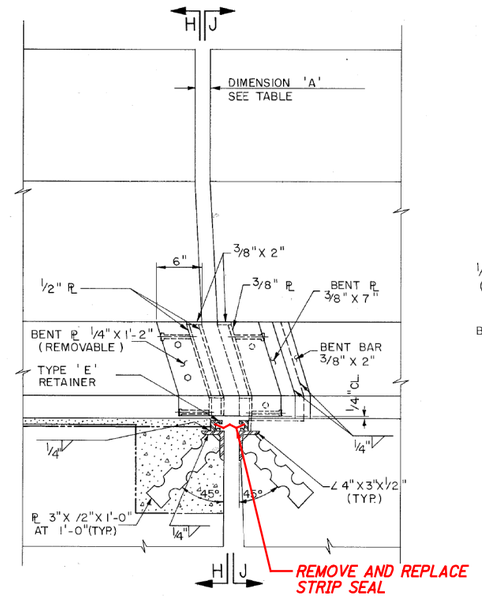
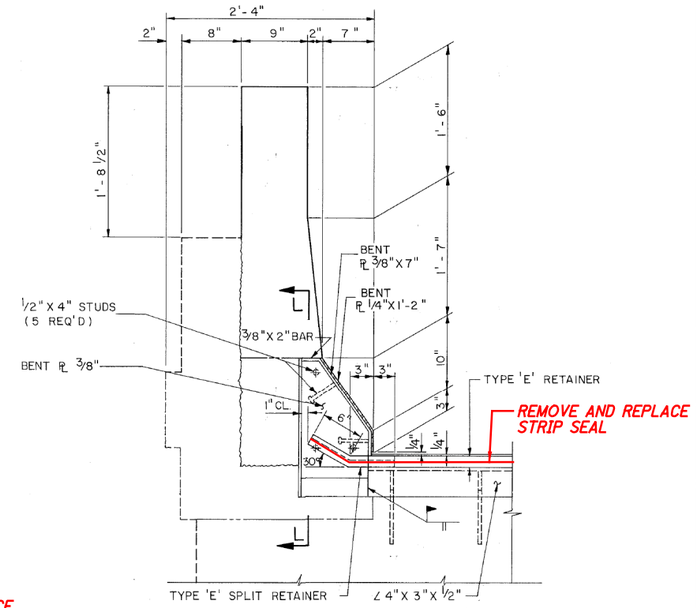


SECTION H - H

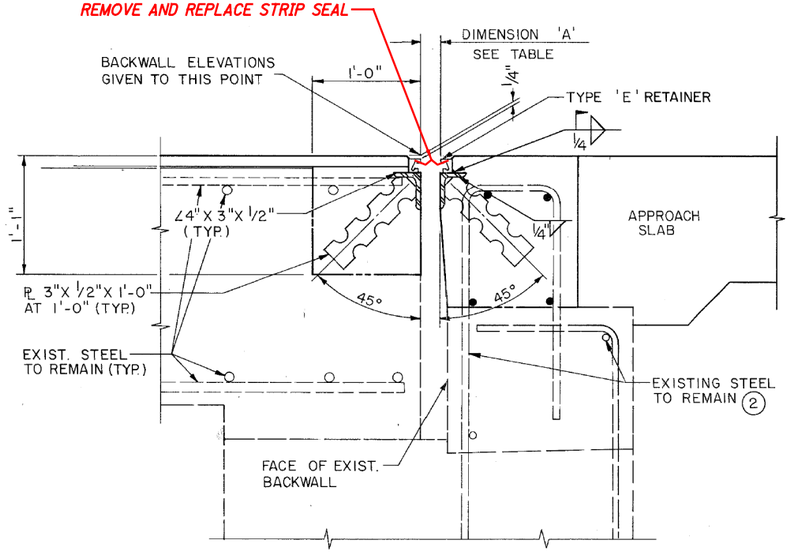


PARAPET EXPANSION JOINT ELEVATION



SECTION J - J

REMOVE AND REPLACE STRIP SEAL



EXPANSION JOINT DETAIL

DIMENSION 'A'						
TEMPERATURE °F	40	50	60	70	80	90
	2 1/16"	2 1/32"	2"	1 31/32"	1 15/16"	1 7/8"

ORIGINAL CONSTRUCTION PLANS SHOWN FOR INFORMATION ONLY. ONLY WORK TO BE PERFORMED AT ABUTMENTS IS THE STRIP SEAL REPLACEMENT

NOTES:

1. REMOVE AND REPLACE THE EXPANSION JOINT STRIP SEALS AT THE REAR AND FORWARD ABUTMENTS.

ISSUE RECORD

NO.	DATE	DESCRIPTION

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PRIME AE
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Columbus Ohio 43240

DESIGNED	DRAWN	REVIEWED	DATE
KDC	KDC	SAN	6/18/21
CHECKED	REVISED	STRUCTURE FILE NUMBER	
JAT		7706006	

EXPANSION JOINT DETAILS

BRIDGE NO. SUM-76-1151L
I-76 WB OVER SR-8

SUM-76/77/8-8.24/9.74/0.00
PID No. 102329

3 / 5

24
65

2021-09-22_BU 15 - RFC PLANS

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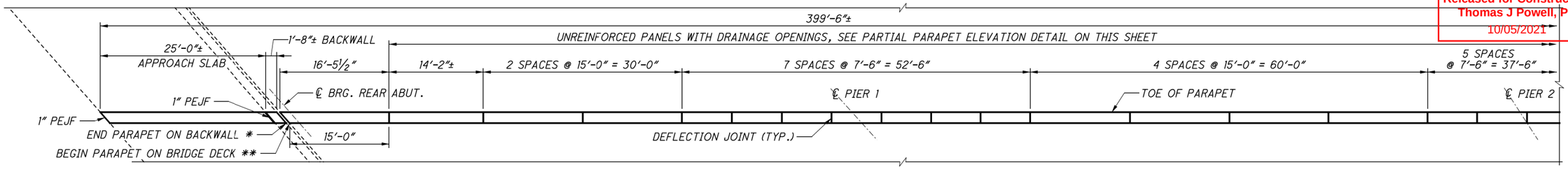
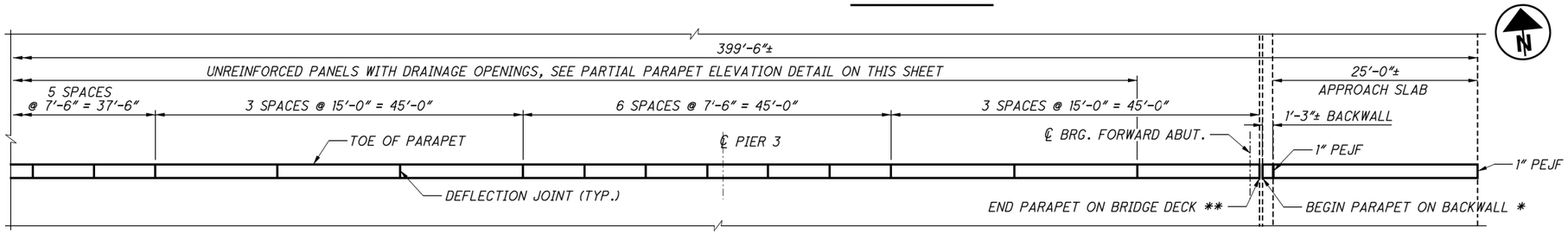


PARAPET PLAN



LEGEND:

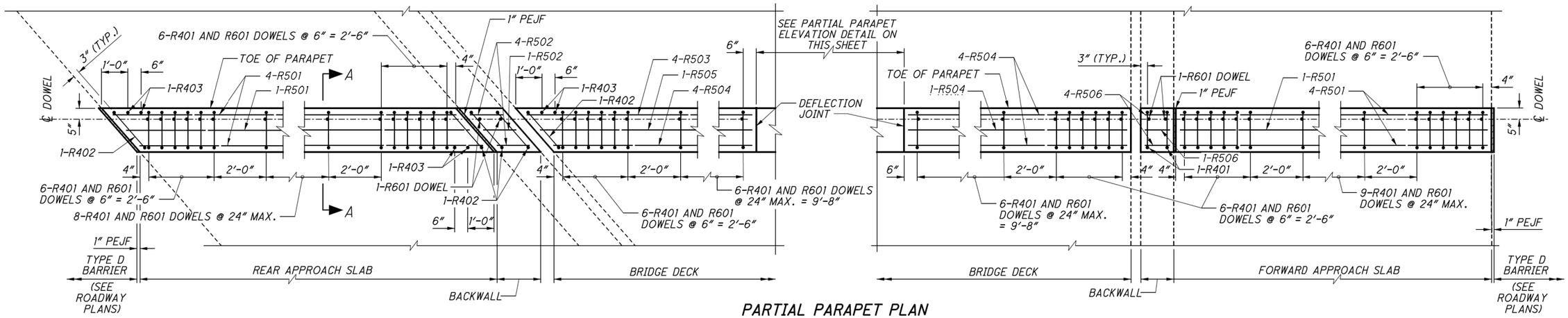
* = ALIGN WITH THE EDGE OF EXISTING 7"x4"x½" ANGLE

** = ALIGN WITH THE EDGE OF EXISTING 6"x4"x½" ANGLE

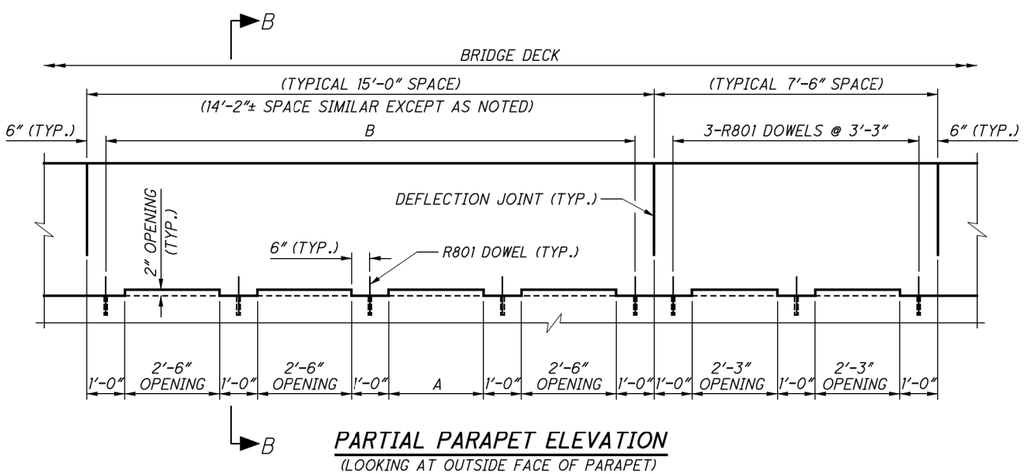
A = 2'-6" IF 15'-0" SPACE OR 1'-8"± IF 14'-2"± SPACE

B = DOWEL SPACING IF 15'-0" SPACE: 4 SPACES @ 3'-6" DOWEL SPACING IF 14'-2"± SPACE: 2 SPACES @ 3'-6", 1 SPACE @ 2'-8"± AND 1 SPACE @ 3'-6"

PARAPET PLAN (CONTINUED)

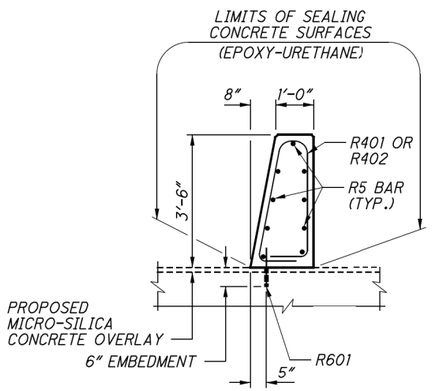


PARTIAL PARAPET PLAN

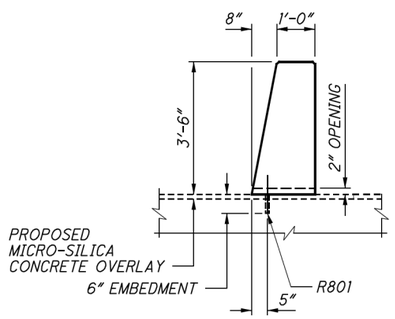


PARTIAL PARAPET ELEVATION

(LOOKING AT OUTSIDE FACE OF PARAPET)



SECTION A-A



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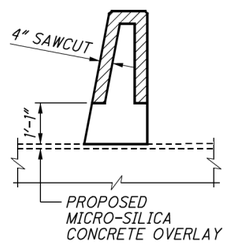

DEFLECTION JOINT DETAIL

NOTES:

1. FOR REINFORCING LIST, SEE SHEET 5/5.

2021-09-22_BU 15 - RFC PLANS

ISSUE RECORD:

NO.	DATE	DESCRIPTION

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PRIME AE
8415 Pulsar Place Suite 300
Columbus Ohio 43240

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CHECKED	REVISED	STRUCTURE FILE NUMBER	
JAT		7706006	

PARAPET DETAILS
BRIDGE NO. SUM-76-115L
I-76 WB OVER SR-8

SUM-76/77/8-8.24/9.74/0.00
PID No. 102329

4 / 5

25 / 65

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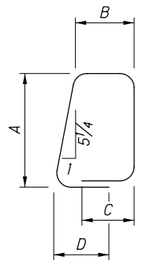
MARK	NUMBER TOTAL	LENGTH	WEIGHT	TYPE	DIMENSIONS A	B	C	D	E	R	INC
PARAPET											
R401	67	8'-2"	366	37	3'-2"	6"	1'-0"	1'-0"			
R402	5	9'-2"	31	37	3'-2"	10"	1'-4"	1'-4"			
R403	6	3'-0"	12	STR							
R501	18	24'-6"	460	STR							
R502	9	1'-2"	11	STR							
R503	4	15'-11"	66	STR							
R504	13	14'-6"	197	STR							
R505	1	15'-3"	16	STR							
R506	9	0'-9"	7	STR							
*R601	69	1'-0"	104	STR							
*R801	119	1'-0"	318	STR							
SUB-TOTAL			1588								

* - INDICATES DOWEL BAR



TYPE-37

NOTES:

1. ALL REINFORCING STEEL SHALL BE EPOXY COATED.
2. BAR SIZE: THE BAR SIZE IS INDICATED IN THE BAR MARK. THE MARK BEGINS WITH TWO OR THREE LETTERS OR NUMBERS THAT IDENTIFY THE BAR LOCATION. THE NEXT ONE OR TWO DIGITS INDICATE THE BAR SIZE, AND THE REMAINING TWO DIGITS ARE THE SEQUENCE NUMBER.

   EXAMPLE: SA1001
   SA = SUPERSTRUCTURE BAR
   10 = #10 BAR
   01 = BAR SEQUENCE NUMBER 1
3. BAR DIMENSIONS SHOWN ARE OUT-TO-OUT UNLESS OTHERWISE INDICATED.
4. STR. IN THE BAR TYPE COLUMN INDICATES A STRAIGHT BAR.
5. RAD INDICATES INSIDE RADIUS, UNLESS OTHERWISE NOTED.
6. INCR. INDICATES THE LENGTH INCREMENT FOR SERIES BARS.
7. STD. WRITTEN IN PLACE OF A DIMENSION INDICATES A STANDARD BEND AT THE END OF A BAR.
8. FIELD BEND BARS AS NECESSARY TO MATCH CURVATURE OF ROADWAY.

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Thomas J Powell, PE
10/05/2021

2021-09-22_BU 15 - RFC PLANS

DESIGN AGENCY
PRIME AE
8415 Pulsar Place Suite 300
Columbus Ohio 43240

DESIGNED	DRAWN	REVIEWED	DATE
KDC	KDC	SAN	6/18/21
CHECKED	REVISED	STRUCTURE FILE NUMBER	
JAT		7706006	

REINFORCING STEEL LIST

BRIDGE NO. SUM-76-1151L
I-76 WB OVER SR-8

SUM-76/77/8-
8.24/9.74/0.00
PID No. 102329

5 / 5

26
65

ISSUE RECORD:

NO.	DATE	DESCRIPTION

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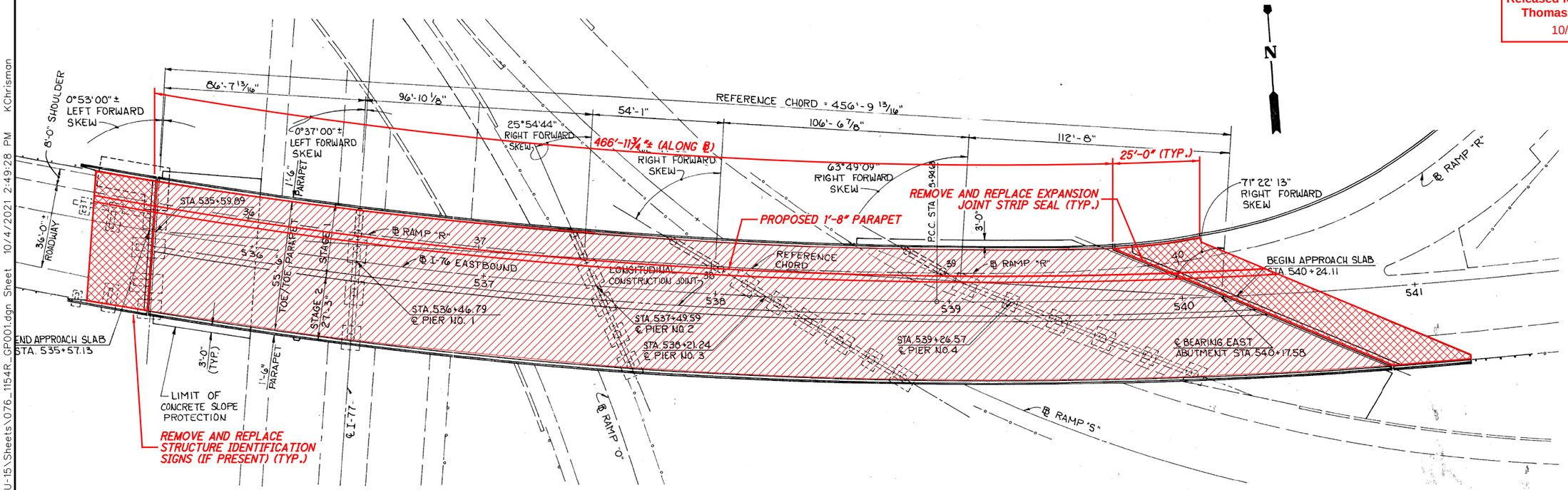
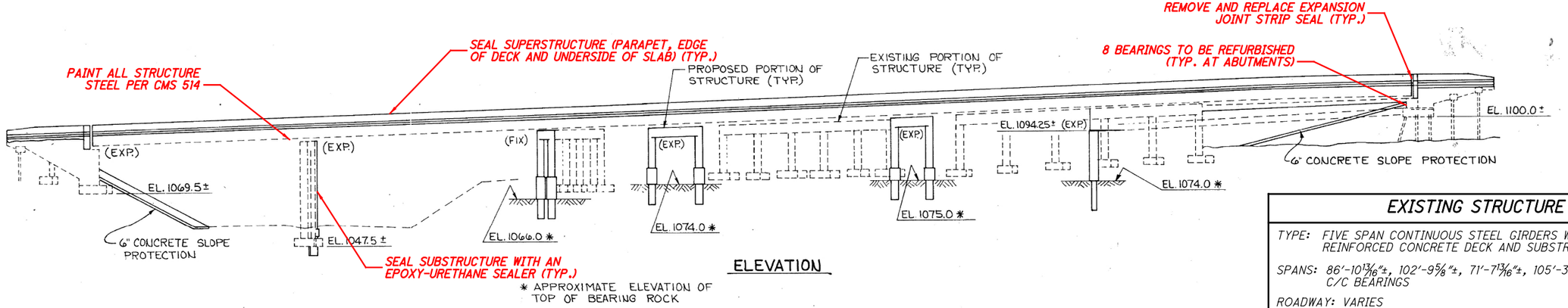
10/05/2021



PLAN



ELEVATION

ORIGINAL CONSTRUCTION PLANS SHOWN FOR INFORMATION ONLY

NOTES:

1. FOR GENERAL NOTES, SEE SHEET 3/65 THRU 7/65.
2. FOR TRANSVERSE SECTION, SEE SHEET 2/6.

LEGEND:

- LIMITS OF MILLING & MICRO-SILICA CONCRETE OVERLAY ON BRIDGE DECK
- LIMITS OF MILLING & MICRO-SILICA CONCRETE OVERLAY ON APPROACH SLAB

EXISTING STRUCTURE

TYPE: FIVE SPAN CONTINUOUS STEEL GIRDERS WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE

SPANS: 86'-10 13/16"±, 102'-9 5/8"±, 71'-7 13/16"±, 105'-3 15/16"±, 91'-0 1/8"± C/C BEARINGS

ROADWAY: VARIES

LOADING: HS20-44 CASE 1 AND THE ALTERNATE MILITARY LOADING

WEARING SURFACE: 1"± MONOLITHIC CONCRETE

SKEW: VARIES

APPROACH SLABS: 25'-0"± LONG (AS-1-81)

ALIGNMENT: SPIRAL AND COMPOUND CURVE LEFT

SUPERELEVATION: 0.045 FT/FT

COORDINATES: LATITUDE 41°03'41.5"± N
LONGITUDE 81°30'18.0"± W

DESCRIPTION

ISSUE RECORD:

NO.	DATE

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DESIGN AGENCY
PRIME AE
8415 Pulsar Place Suite 300
Columbus Ohio 43240

DESIGNED	DRAWN	REVIEWED	DATE
KDC	KDC	SAN	6/18/21
CHECKED	REVISED	STRUCTURE FILE NUMBER	
JAT		7706030	

SUMMIT COUNTY
STA. 535+57.13±
STA. 540+24.11±

GENERAL PLAN
BRIDGE NO. SUM-76-1154R
I-76 EB OVER SR-8

2021-09-22_BU15 - RFC PLANS

SUM-76/77/8-
8.24/9.74/0.00
PID No. 102329

1 / 6

27
65

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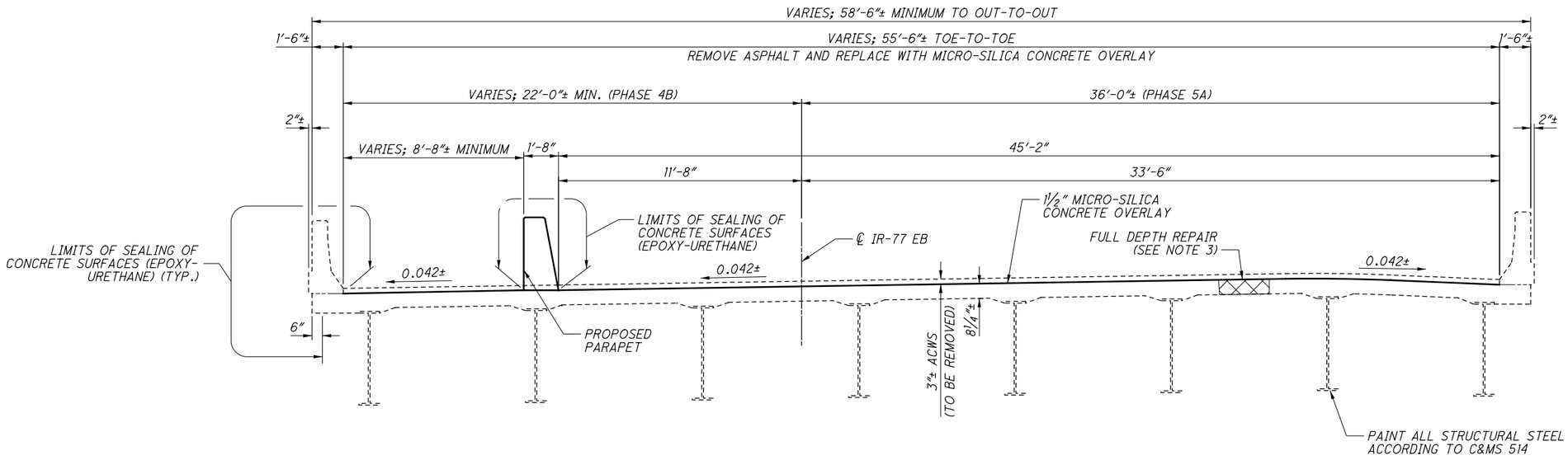

TRANSVERSE SECTION

LEGEND:

- LIMITS OF FULL DEPTH REPAIR

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3/65 THRU 7/65.
2. FOR PROPOSED BARRIER DETAILS, SEE SHEET 4/6 THRU 5/6.
3. PERFORM FULL DEPTH REPAIR OF THE DECK AT THE AREAS DESIGNATED BY THE ENGINEER. FOR ADDITIONAL NOTES, SEE SHEET 7/65.
4. REMOVE EXISTING ASPHALT CONCRETE WEARING SURFACE (ACWS) & PROVIDE NEW MICRO-SILICA CONCRETE OVERLAY MATCHING THE ORIGINAL DECK ELEVATION.

2021-09-22_BU 15 - RFC PLANS

ISSUE RECORD:

NO.	DATE	DESCRIPTION

DESIGN AGENCY
PRIME AE
8415 Pulsar Place Suite 300
Columbus Ohio 43240

DESIGNED	DRAWN	REVIEWED	DATE
KDC	KDC	SAN	6/18/21
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JAT		7706030	

TRANSVERSE SECTION
BRIDGE NO. SUM-76-1154R
I-76 EB OVER SR-8

SUM-76/77/8-8.24/9.74/0.00
PID No. 102329

2 / 6

28
65

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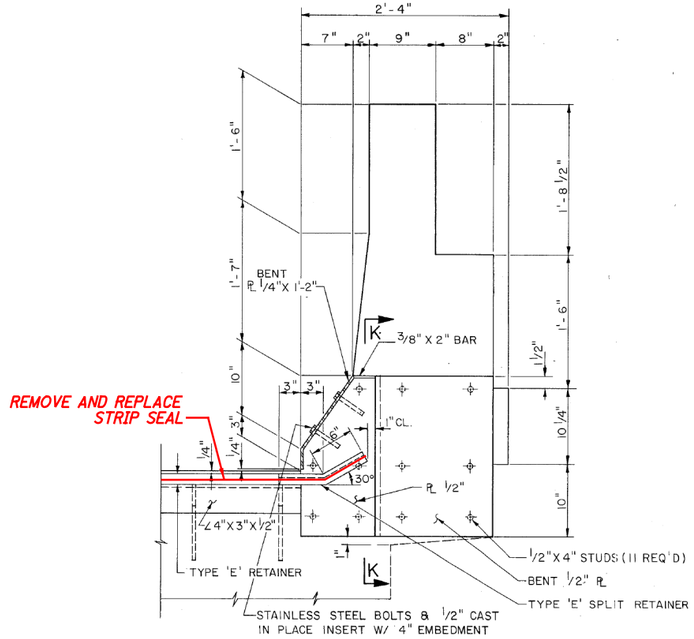
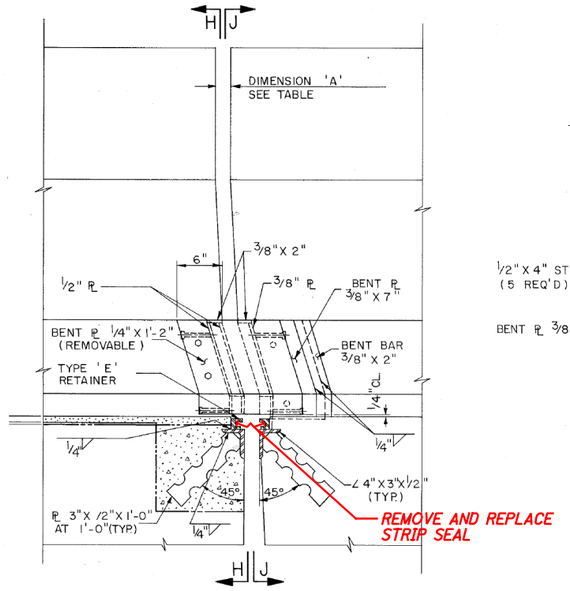
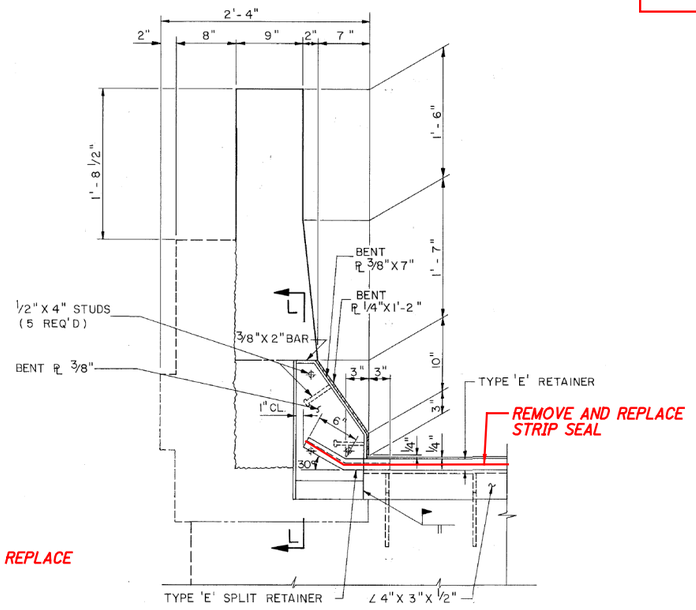
10/05/2021



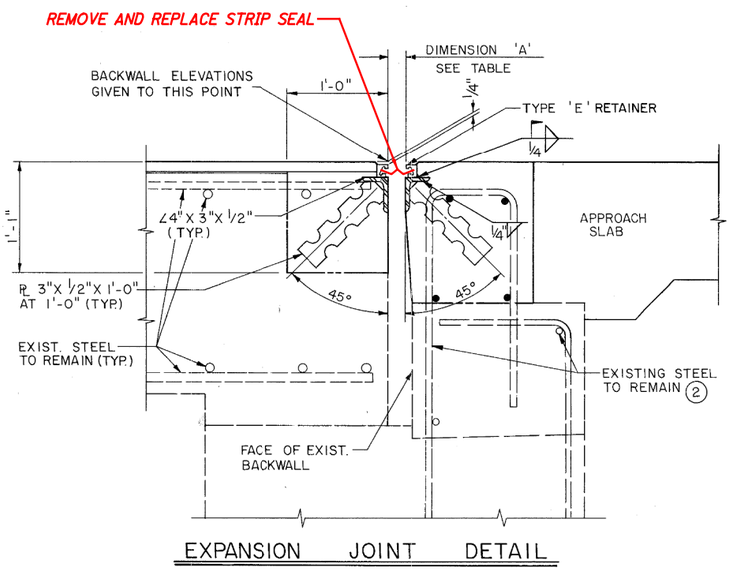
SECTION H - H



PARAPET EXPANSION JOINT ELEVATION



SECTION J - J



EXPANSION JOINT DETAIL

DIMENSION 'A'						
TEMPERATURE °F	40	50	60	70	80	90
	2 1/16"	2 1/32"	2"	1 31/32"	1 15/16"	1 7/8"

ORIGINAL CONSTRUCTION PLANS SHOWN FOR INFORMATION ONLY. ONLY WORK TO BE PERFORMED AT ABUTMENTS IS THE STRIP SEAL REPLACEMENT

NOTES:

1. REMOVE AND REPLACE THE EXPANSION JOINT STRIP SEALS AT THE REAR AND FORWARD ABUTMENTS.

ISSUE RECORD

NO.	DATE	DESCRIPTION

DESIGN AGENCY
PRIME AE
8415 Pulsar Place Suite 300
Columbus Ohio 43240

DESIGNED	DRAWN	REVIEWED	DATE
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JAT		7706030	

EXPANSION JOINT DETAILS
BRIDGE NO. SUM-76-1154R
I-76 EB OVER SR-8

SUM-76/77/8-8.24/9.74/0.00
PID No. 102329

3 / 6

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2021-09-22_BU 15 - RFC PLANS

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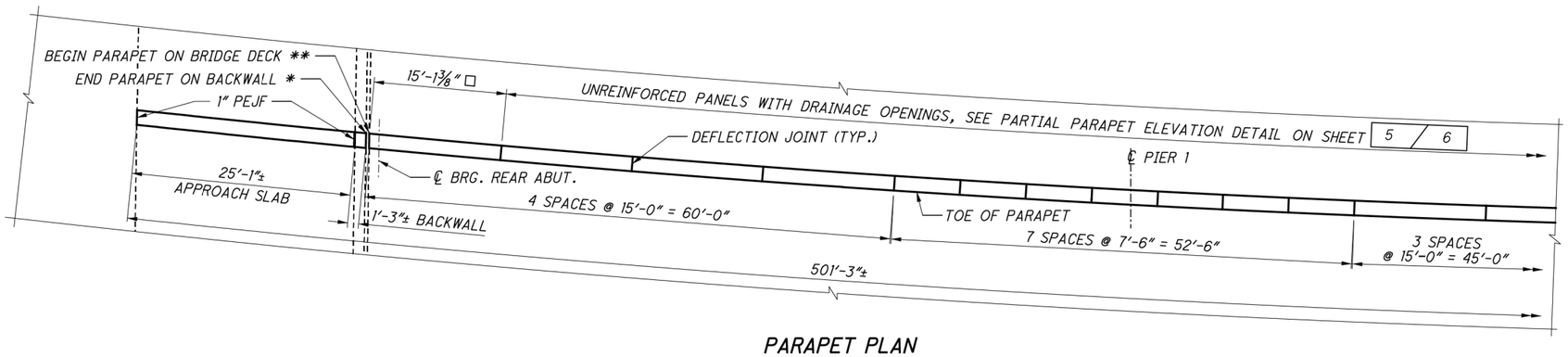
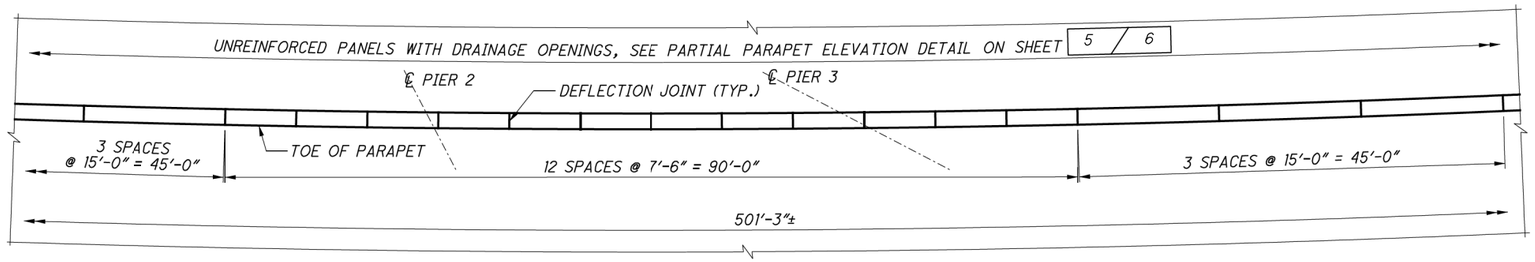
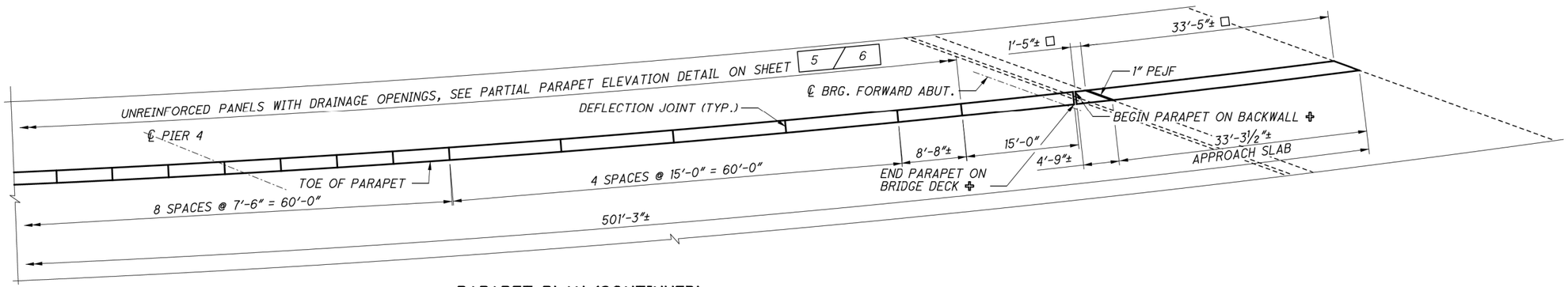


PARAPET PLAN



PARAPET PLAN (CONTINUED)



PARAPET PLAN (CONTINUED)

NOTES:

1. FOR REINFORCING LIST, SEE SHEET 6 / 6.

NOTE:

ALL LONGITUDINAL DIMENSIONS ARE MEASURED ALONG TOE OF PARAPET, UNLESS NOTED OTHERWISE.

LEGEND:

* = ALIGN WITH THE EDGE OF EXISTING 7"x4"x½" ANGLE

** = ALIGN WITH THE EDGE OF EXISTING 6"x4"x½" ANGLE

✣ = SEE SHEET 5 / 6 FOR DETAILS

□ = MEASURED ALONG BACK FACE OF PARAPET

2021-09-22_BU 15 - RFC PLANS

DESIGN AGENCY
PRIME AE
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DESIGNED	DRAWN	REVIEWED	DATE
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CHECKED	REVISED	STRUCTURE FILE NUMBER	
JAT		7706030	

PARAPET DETAILS (1 OF 2)
BRIDGE NO. SUM-76-1154R
I-76 EB OVER SR-8

SUM-76/77/8-
8.24/9.74/0.00
PID No. 102329

4 / 6

30
65

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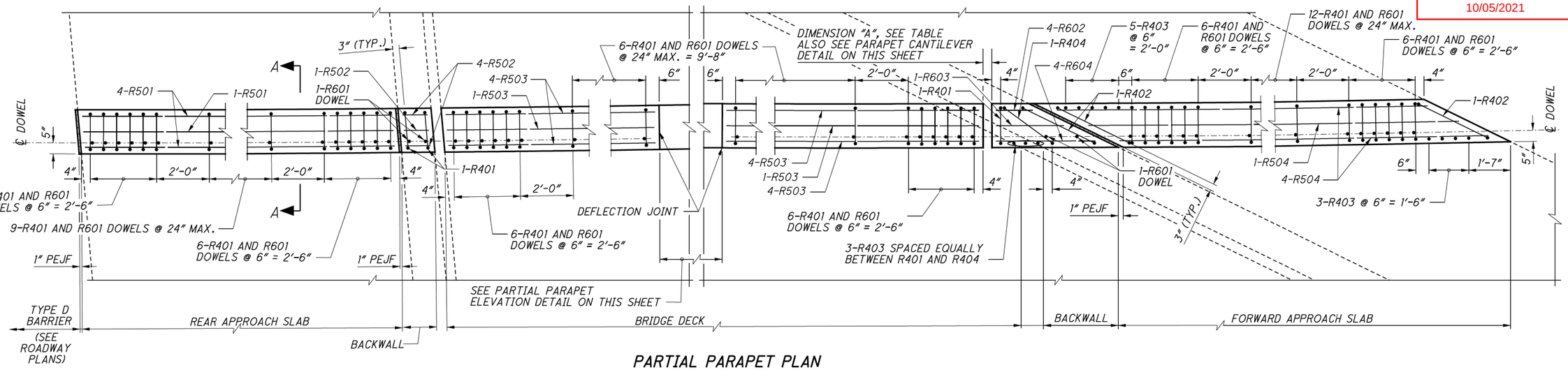
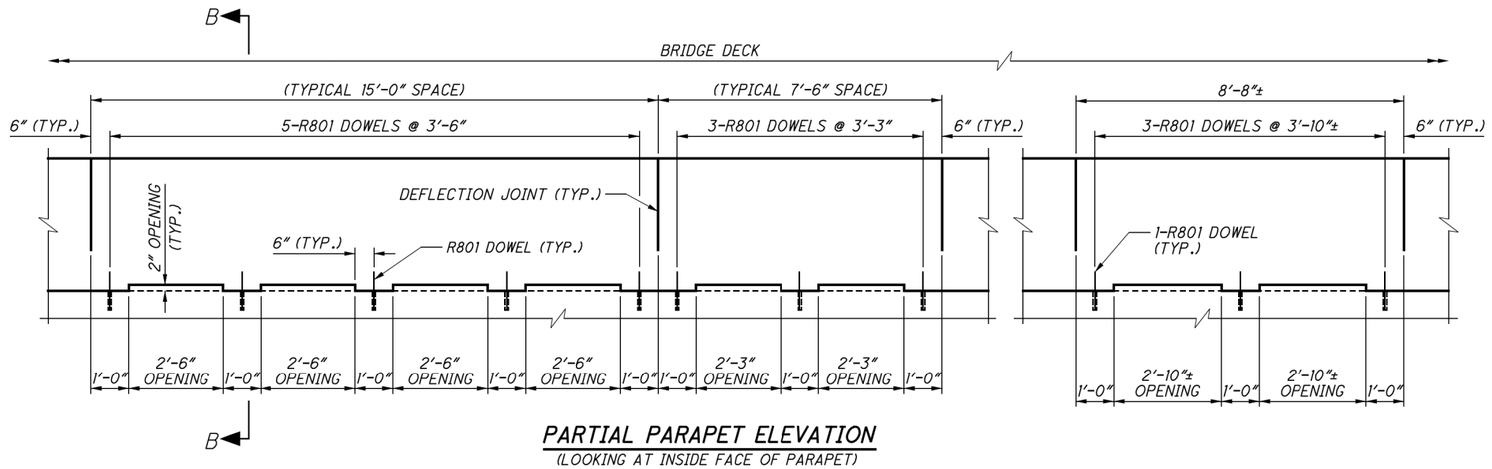
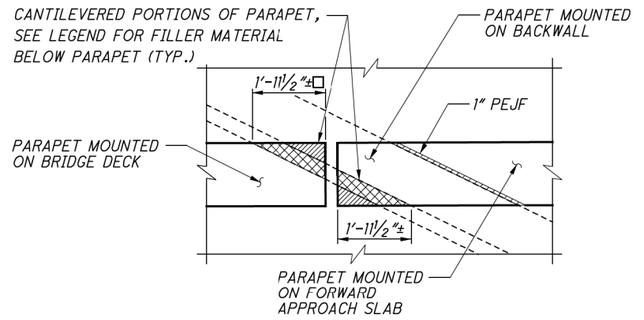


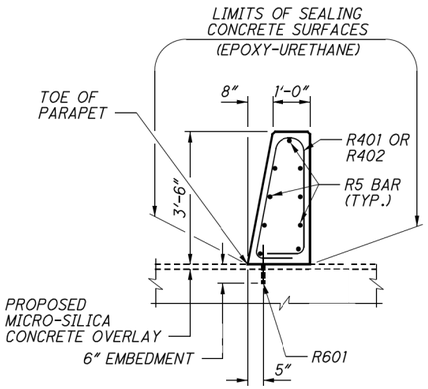
PARTIAL PARAPET PLAN



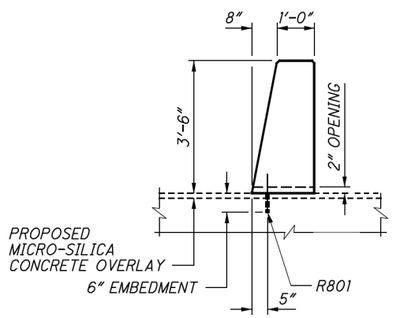
PARTIAL PARAPET ELEVATION
(LOOKING AT INSIDE FACE OF PARAPET)



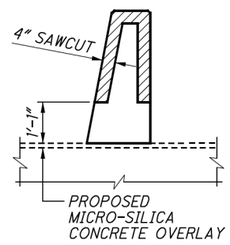
PARAPET CANTILEVER DETAIL AT FORWARD ABUTMENT



SECTION A-A



SECTION B-B



DEFLECTION JOINT DETAIL

NOTES:

1. FOR REINFORCING LIST, SEE SHEET 6/6.

AMBIENT TEMP. F°	JOINT OPENING BETWEEN PARAPETS AT FORWARD ABUTMENT, DIMENSION "A"
30	4¾"
40	4½"
50	4¼"
60	4"
70	3¾"
80	3½"
90	3¼"

NOTE:

ALL LONGITUDINAL DIMENSIONS ARE MEASURED ALONG TOE OF PARAPET, UNLESS NOTED OTHERWISE.

LEGEND:

= 1" PEJF

= REMOVABLE FORMING MATERIAL

□ = MEASURED ALONG BACK FACE OF PARAPET

2021-09-22_BU 15 - RFC PLANS

DESIGN AGENCY
PRIME AE
8415 Pulsar Place Suite 300
Columbus Ohio 43240

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KDC	KDC	SAN	6/18/21
CHECKED	REVISED	STRUCTURE FILE NUMBER	
JAT		7706030	

PARAPET DETAILS (2 OF 2)
BRIDGE NO. SUM-76-1154R
I-76 EB OVER SR-8

SUM-76/77/8-
8.24/9.74/0.00
PID No. 102329

5 / 6

31
65

ISSUE RECORD:

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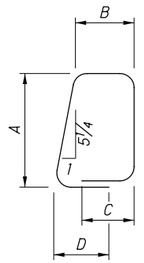
MARK	NUMBER TOTAL	LENGTH	WEIGHT	TYPE	DIMENSIONS A	B	C	D	E	R	INC
PARAPET											
R401	72	8'-2"	393	37	3'-2"	6"	1'-0"	1'-0"			
R402	3	15'-8"	31	37	3'-2"	2'-9"	3'-3"	3'-3"			
R403	8	3'-0"	16	STR							
R404	1	12'-5"	8	37	3'-2"	1'-8"	2'-2"	2'-2"			
R501	9	24'-7"	231	STR							
R502	9	9"	7	STR							
R503	18	14'-6"	272	STR							
R504	9	32'-9"	307	STR							
*R601	73	1'-0"	110	STR							
R602	4	11"	6	STR							
R603	1	2'-7"	4	STR							
R604	4	4'-3"	26	STR							
*R801	149	1'-0"	398	STR							
SUB-TOTAL			1809								

* - INDICATES DOWEL BAR



TYPE-37

NOTES:

1. ALL REINFORCING STEEL SHALL BE EPOXY COATED.
2. BAR SIZE: THE BAR SIZE IS INDICATED IN THE BAR MARK. THE MARK BEGINS WITH TWO OR THREE LETTERS OR NUMBERS THAT IDENTIFY THE BAR LOCATION. THE NEXT ONE OR TWO DIGITS INDICATE THE BAR SIZE, AND THE REMAINING TWO DIGITS ARE THE SEQUENCE NUMBER.

   EXAMPLE: SA1001
   SA = SUPERSTRUCTURE BAR
   10 = #10 BAR
   01 = BAR SEQUENCE NUMBER 1
3. BAR DIMENSIONS SHOWN ARE OUT-TO-OUT UNLESS OTHERWISE INDICATED.
4. STR. IN THE BAR TYPE COLUMN INDICATES A STRAIGHT BAR.
5. RAD INDICATES INSIDE RADIUS, UNLESS OTHERWISE NOTED.
6. INCR. INDICATES THE LENGTH INCREMENT FOR SERIES BARS.
7. STD. WRITTEN IN PLACE OF A DIMENSION INDICATES A STANDARD BEND AT THE END OF A BAR.
8. FIELD BEND BARS AS NECESSARY TO MATCH CURVATURE OF ROADWAY.

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DESIGN AGENCY
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Columbus Ohio 43240

DESIGNED	DRAWN	REVIEWED	DATE
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REINFORCING STEEL LIST

BRIDGE NO. SUM-76-1154R
I-76 EB OVER SR-8

SUM-76/77/8-8.24/9.74/0.00
PID No. 102329

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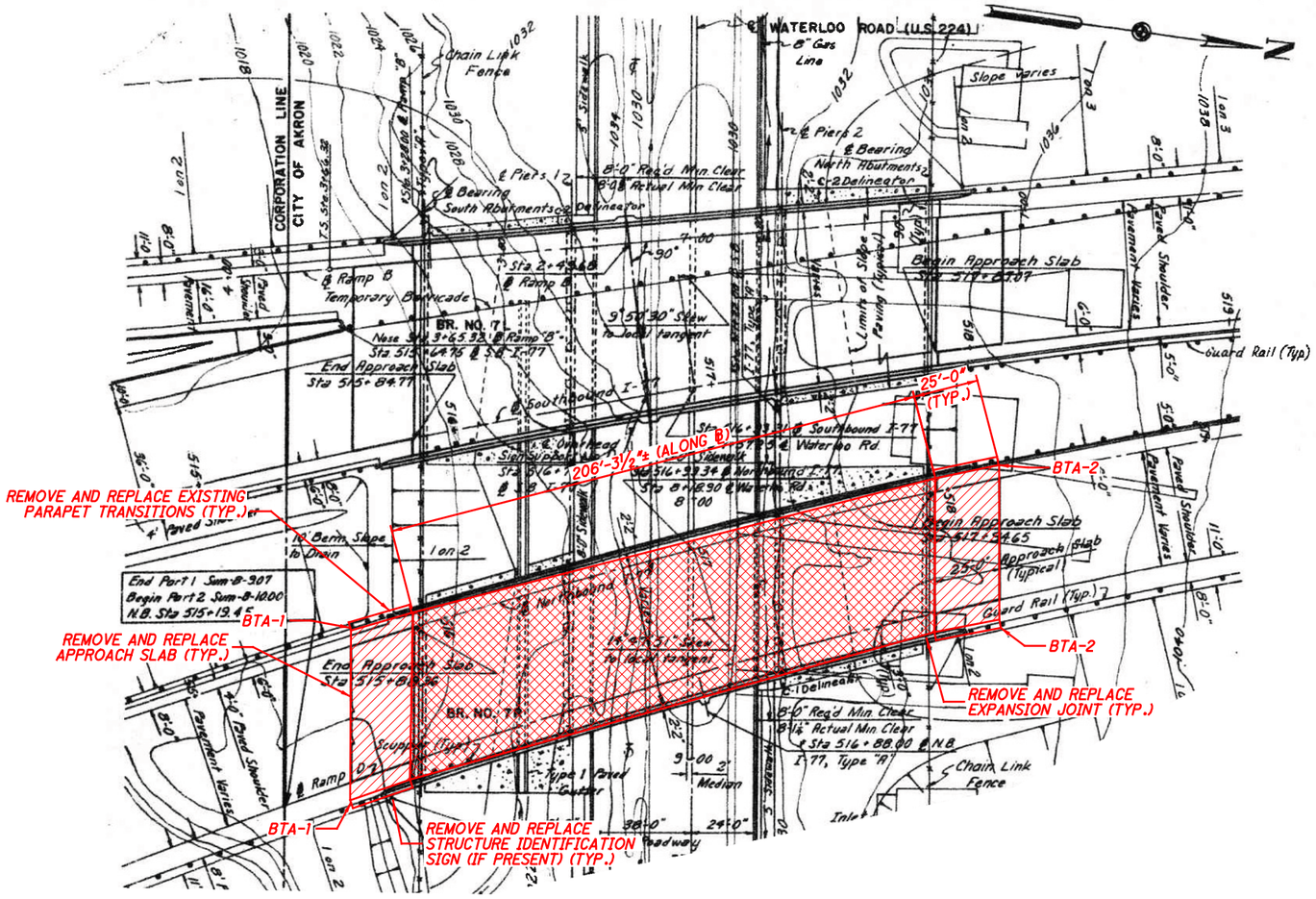

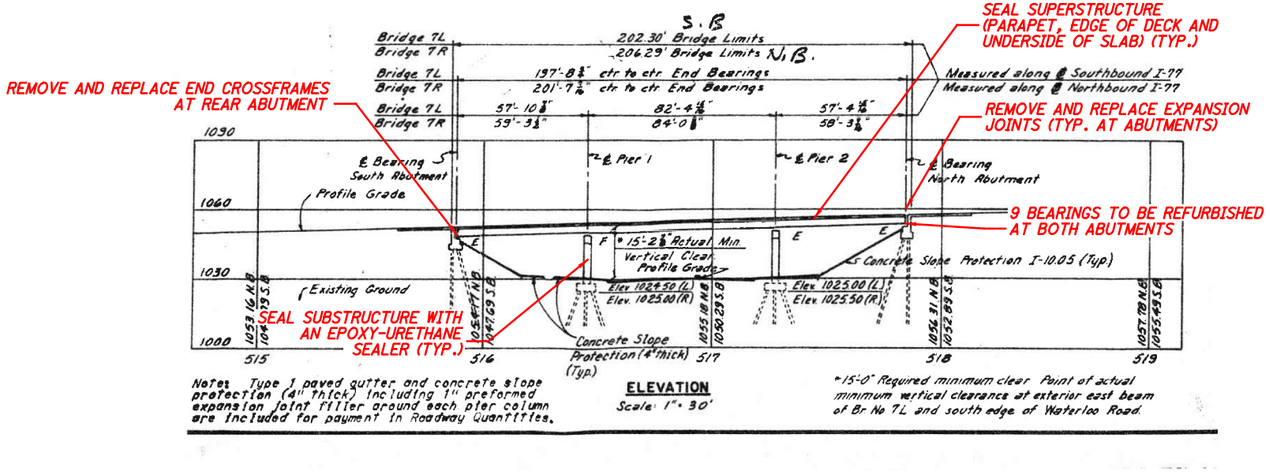

ORIGINAL CONSTRUCTION PLANS SHOWN FOR INFORMATION ONLY

LEGEND:

- LIMITS OF APPROACH SLAB REMOVAL AND REPLACEMENT
- LIMITS OF MICRO-SILICA CONCRETE OVERLAY ON BRIDGE DECK

NOTES:

1. FOR GENERAL NOTES, SEE SHEET 3/65 THRU 7/65.
2. FOR TRANSVERSE SECTION AND END CROSSFRAME DETAILS, SEE SHEET 3/8.
3. FOR REMOVAL DETAILS, SEE SHEET 2/8.
4. FOR EXPANSION JOINT DETAILS, SEE SHEET 4/8.
5. FOR APPROACH SLAB DETAILS, SEE SHEETS 5/8 THRU 7/8.

EXISTING STRUCTURE

TYPE: THREE SPAN CONTINUOUS STEEL BEAMS WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE

SPANS: 59'-3 1/2"±, 84'-0 3/8"±, 58'-3 3/8"± C/C BEARINGS

ROADWAY: VARIES

LOADING: HS 20-44 (CASE I) AND ALTERNATE MILITARY LOADING

WEARING SURFACE: 1.2"± MONOLITHIC

SKEW: VARIES

APPROACH SLABS: 25'-0"± LONG (AS-1-54)

ALIGNMENT: 2°30'00"± RIGHT

SUPERELEVATION: 0.081 FT/FT

COORDINATES: LATITUDE 41°01'45"± N
LONGITUDE 81°30'16"± W

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CHECKED	REVISED	STRUCTURE FILE NUMBER	
JAT		7702736	

SUMMIT COUNTY
STA. 515+88.36±
STA. 517+94.65±

GENERAL PLAN
BRIDGE NO. SUM-77-0974R
I-77 NB OVER WATERLOO ROAD

SUM-76/77/8-8.24/9.74/0.00
PID No. 102329

1 / 8

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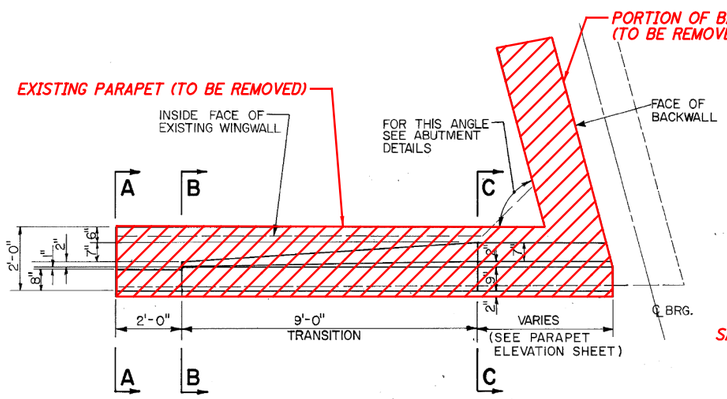
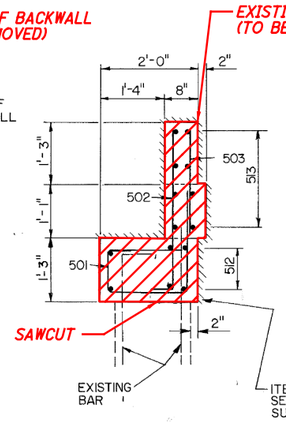
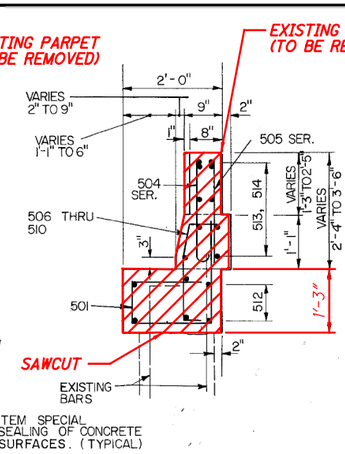


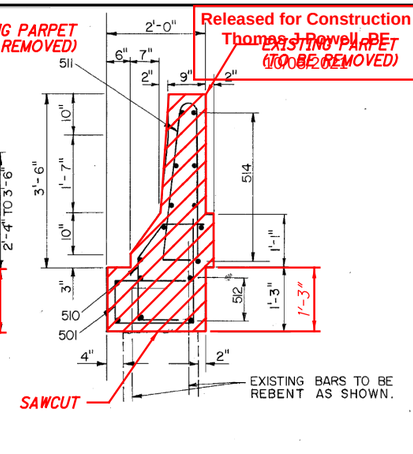
PLAN PARAPET TRANSITION DETAIL



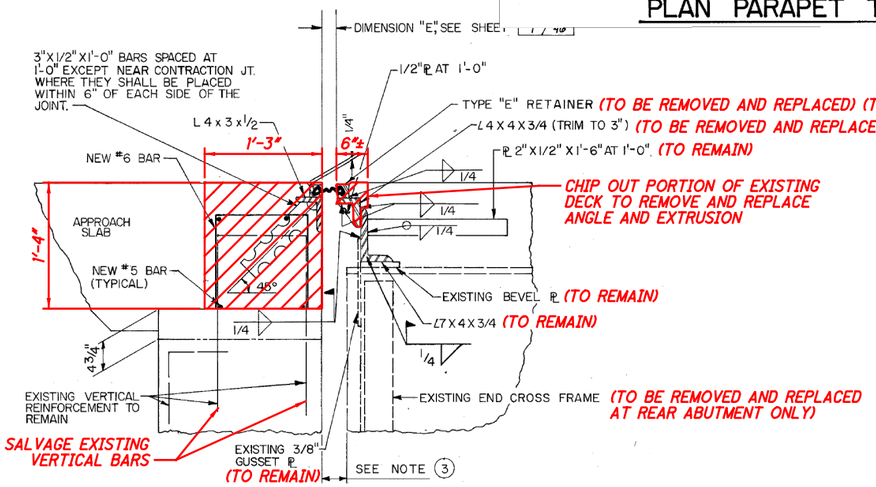
SECTION A-A



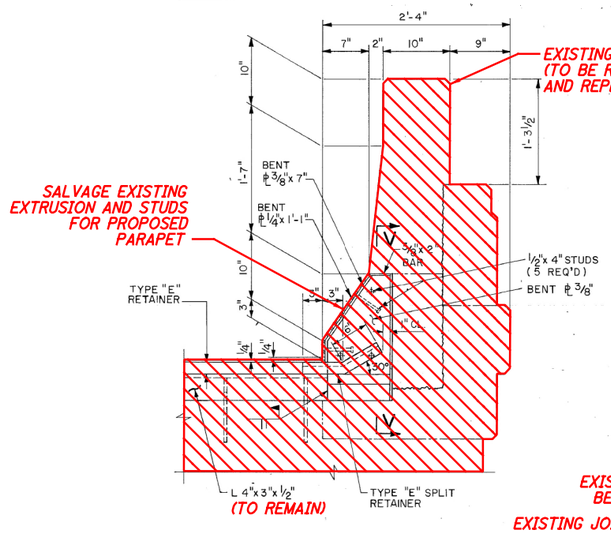
SECTION B-B



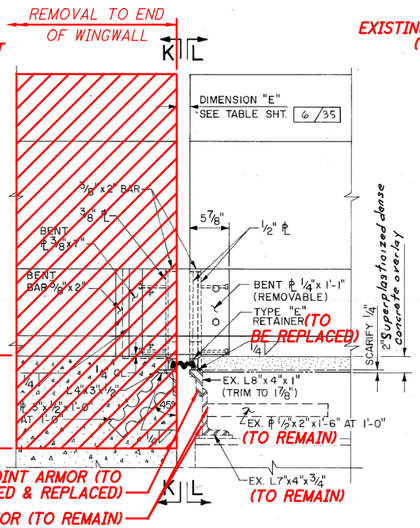
SECTION C-C



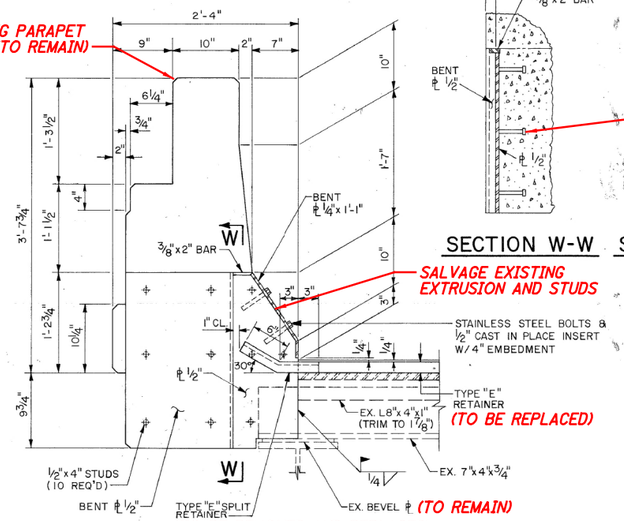
EXPANSION JOINT DETAIL



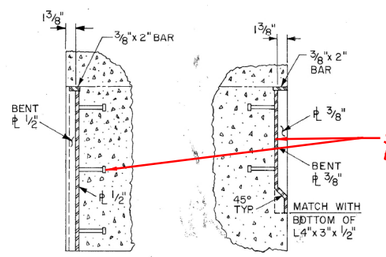
SECTION K - K



PARAPET EXPANSION JOINT ELEVATION



SECTION L - L



SECTION W-W SECTION V-V

ORIGINAL CONSTRUCTION PLANS SHOWN FOR INFORMATION ONLY

LEGEND:

- LIMITS OF REMOVAL

2021-09-22_BU 15 - RFC PLANS

WINGWALL AND BRIDGE DECK REMOVAL DETAILS

BRIDGE NO. SUM-77-0974R
I-77 NB OVER WATERLOO ROAD

SUM-76/77/8-8.24/9.74/0.00
PID No. 102329

2 / 8

34 / 65

DESIGN AGENCY
PRIME AE
8415 Pulsar Place Suite 300
Columbus Ohio 43240

DESIGNED	DRAWN	REVIEWED	DATE
JAT	JAT	SAN	6/18/21
CHECKED	REVISED	STRUCTURE FILE NUMBER	
JAT		7702736	

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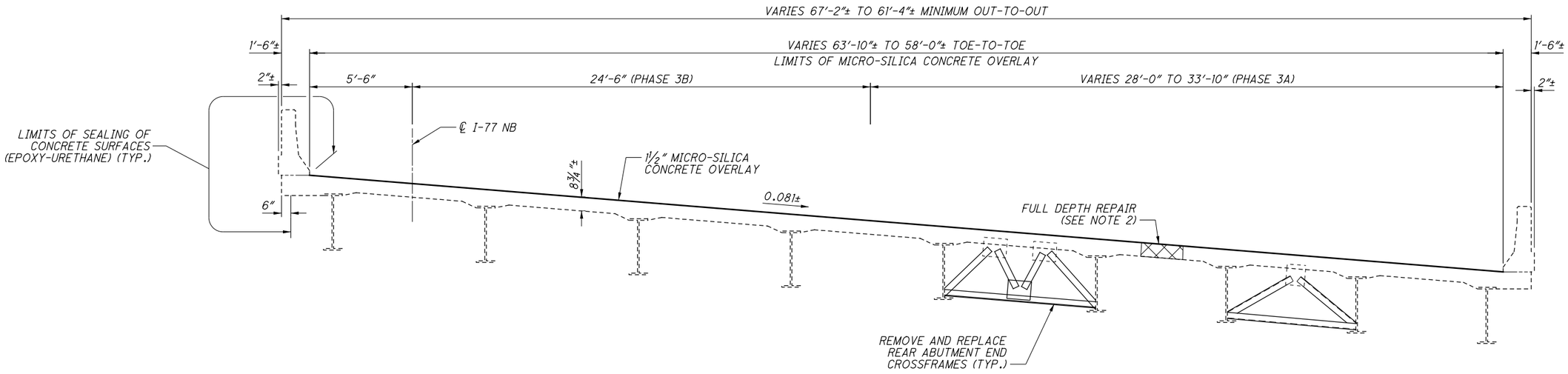
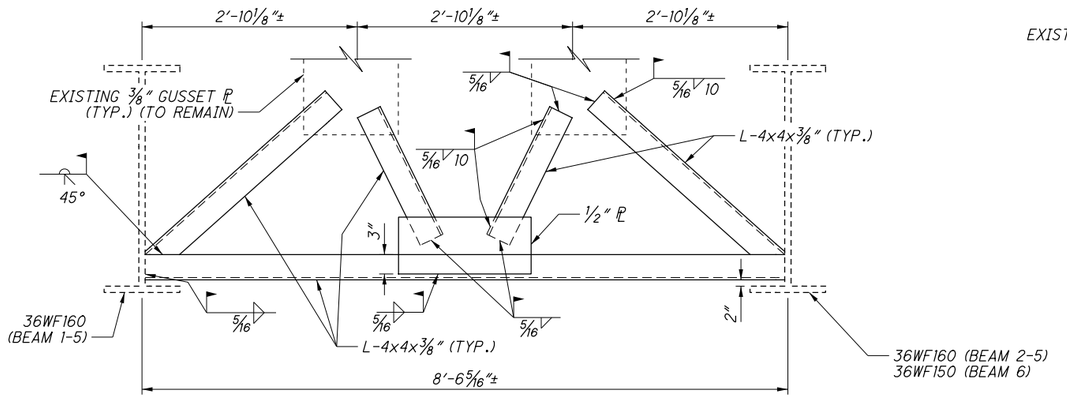
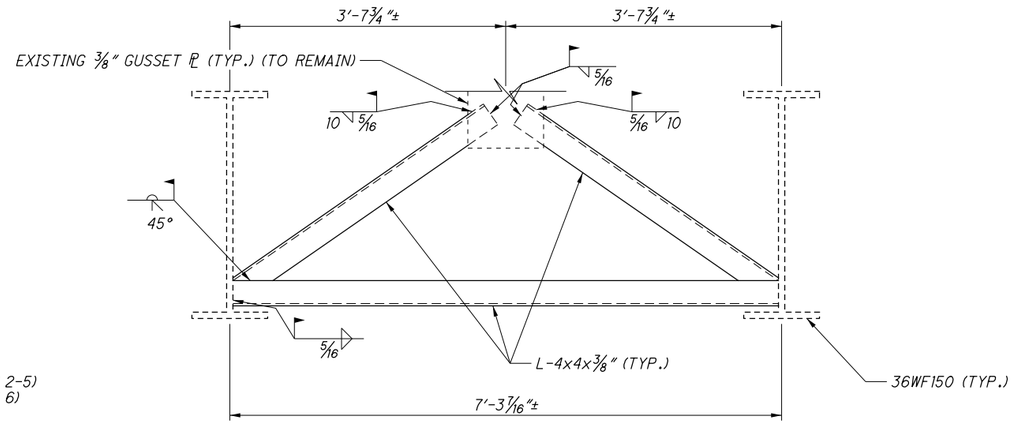


TRANSVERSE SECTION



END CROSSFRAME DETAIL
(FOR BAYS 1-5)



END CROSSFRAME DETAIL
(FOR BAYS 6-8)

LEGEND:

- LIMITS OF FULL DEPTH REPAIR

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3/65 THRU 7/65.
2. PERFORM FULL DEPTH REPAIR OF THE DECK AT THE AREAS DESIGNATED BY THE ENGINEER. FOR ADDITIONAL NOTES, SEE SHEET 7/65.
3. FOR ADDITIONAL END CROSSFRAME NOTES AND DETAILS, SEE STD. DWG. GSD-1-19.
4. PROVIDE NEW MICRO-SILICA CONCRETE OVERLAY MATCHING THE CURRENT EXISTING DECK ELEVATION.

2021-09-22_BU 15 - RFC PLANS

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TRANSVERSE SECTION
BRIDGE NO. SUM-77-0974R
I-77 NB OVER WATERLOO ROAD

SUM-76/77/8-8.24/9.74/0.00
PID No. 102329

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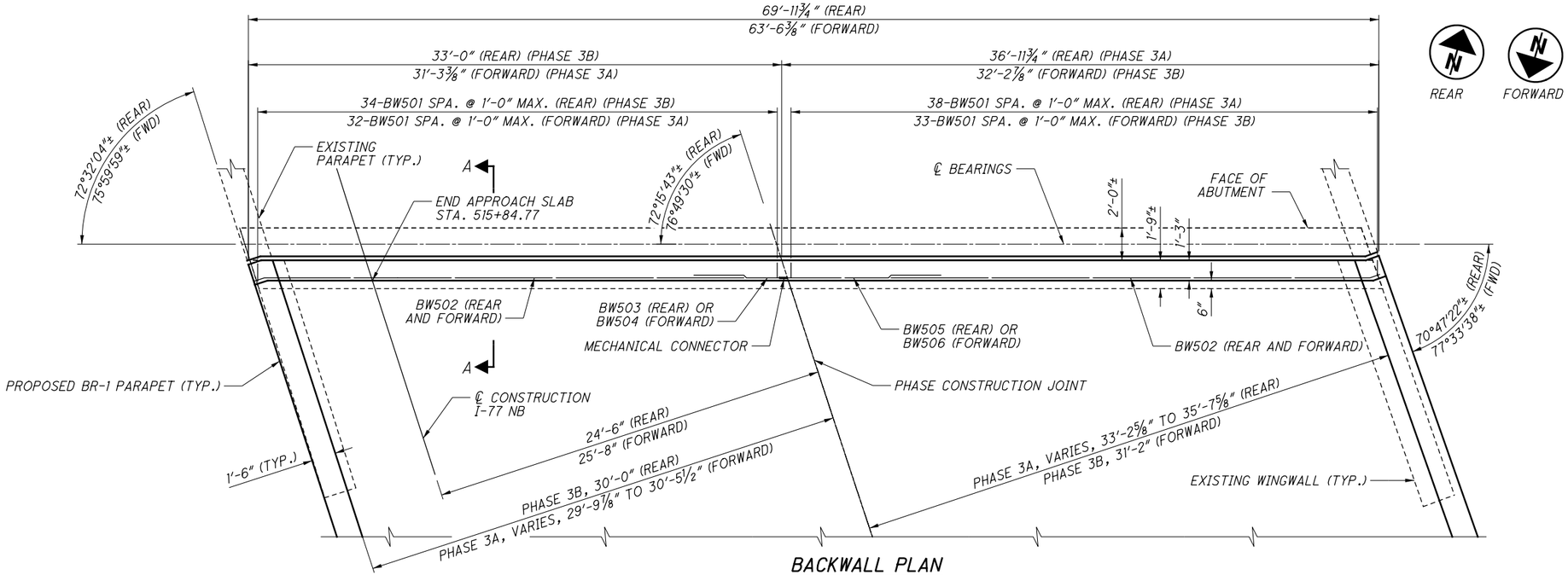
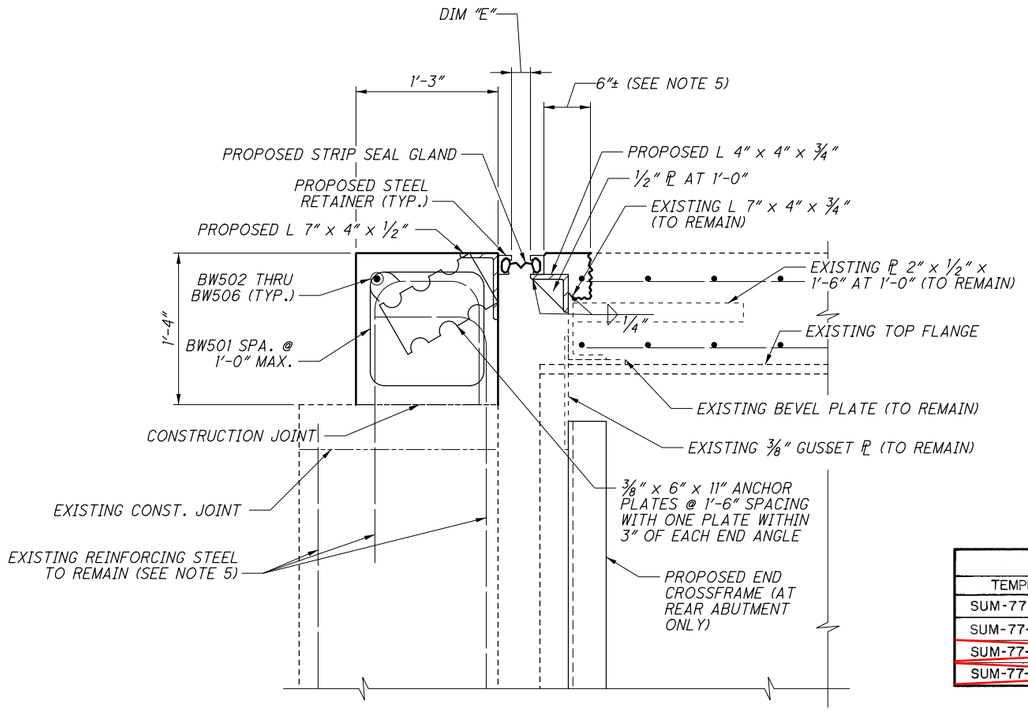
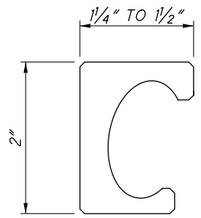


BACKWALL PLAN

(REAR ABUTMENT SHOWN, FORWARD ABUTMENT SIMILAR)

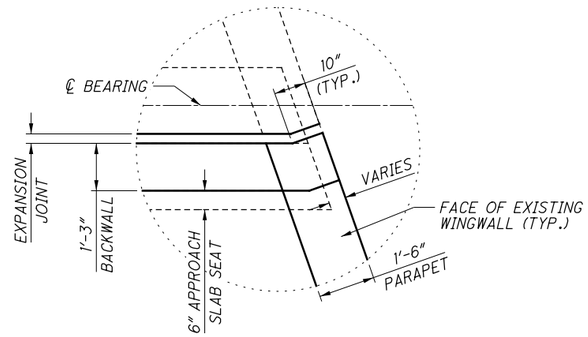


SECTION A-A THRU ABUTMENT



RETAINER DETAIL

DIMENSION E					
TEMPERATURE, °F	50°	60°	70°	80°	90°
SUM-77-9.75R S.ABUT.	2 1/16"	2"	1 15/16"	1 15/16"	1 7/8"
SUM-77-9.75R N.ABUT.	2 1/8"	2"	1 7/8"	1 3/4"	1 11/16"
SUM-77-9.75L S.ABUT.	2 1/16"	2"	1 15/16"	1 15/16"	1 7/8"
SUM-77-9.75L N.ABUT.	2 1/8"	2"	1 7/8"	1 15/16"	1 11/16"



CORNER DETAIL

(RIGHT CORNER OF REAR ABUTMENT SHOWN, OTHER SIMILAR)

NOTES:

1. FOR ADDITIONAL NOTES AND DETAILS, SEE STD. DWG. EXJ-4-87.
2. FOR REAR ABUTMENT END CROSSFRAME DETAILS, SEE SHEET 3/8.
3. FOR PARAPET DETAILS, SEE SHEET 7/8.
4. FOR REINFORCING LIST, SEE SHEET 8/8.
5. CHIP AWAY PORTION OF EXISTING BRIDGE DECK TO REMOVE AND REPLACE JOINT ANGLE AND EXTRUSION.

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2021-09-22_BU 15 - RFC PLANS

DESIGN AGENCY
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8415 Pulsar Place Suite 300
Columbus Ohio 43240

DESIGNED	DRAWN	REVIEWED	DATE
JAT	JAT	SAN	6/18/21
CHECKED	REVISED	STRUCTURE FILE NUMBER	
KDC		7702736	

EXPANSION JOINT AND BACKWALL DETAILS

BRIDGE NO. SUM-77-0974R
I-77 NB OVER WATERLOO ROAD

SUM-76/77/8-
8.24/9.74/0.00
PID No. 102329

4 / 8

36
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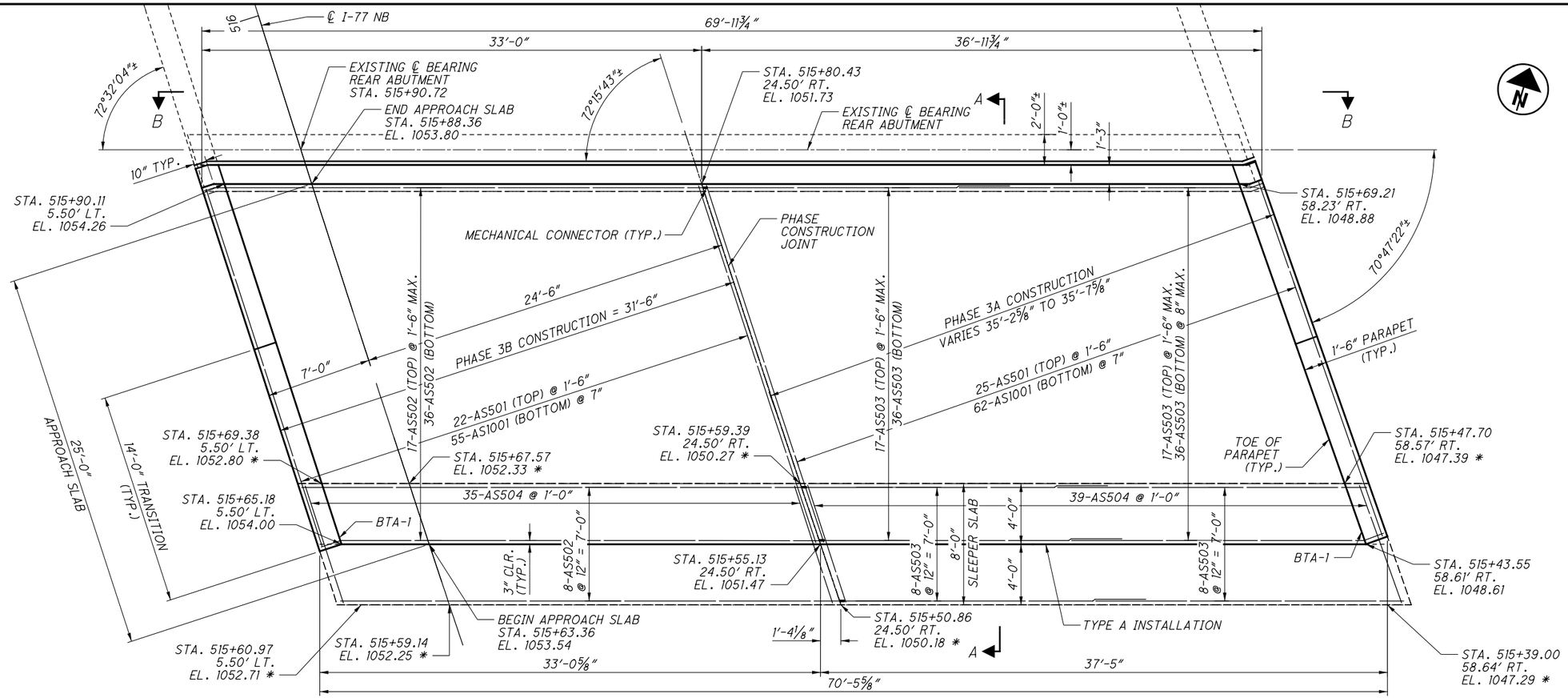
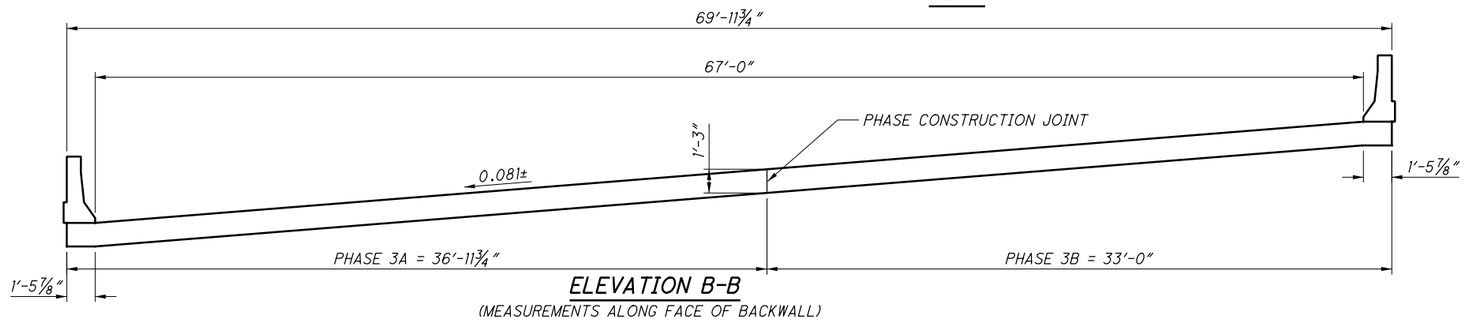
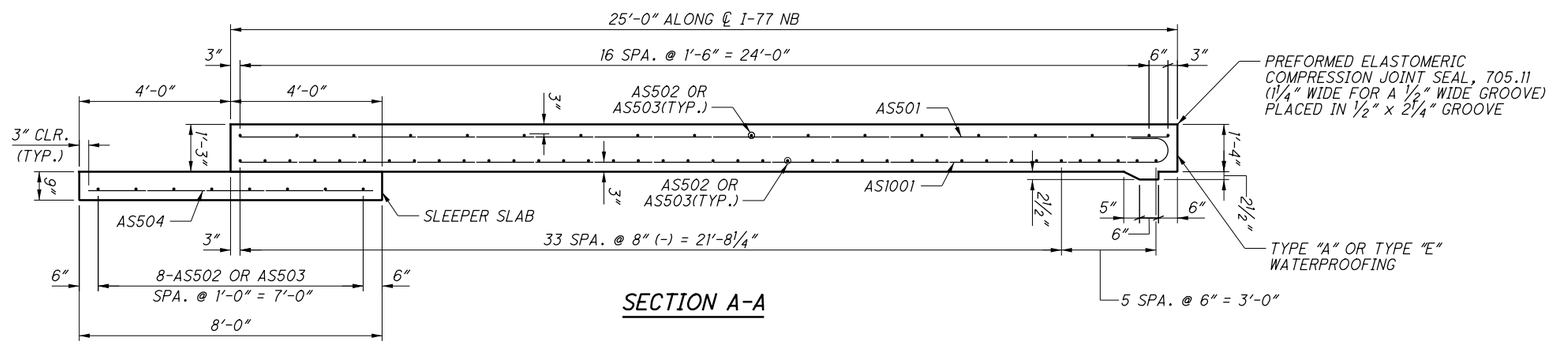


PLAN



ELEVATION B-B

(MEASUREMENTS ALONG FACE OF BACKWALL)



SECTION A-A

LEGEND:

* - ELEVATION SHOWN IS TO TOP OF SLEEPER SLAB

MINIMUM LAP LENGTHS:

#5 BAR = 3′-1″

NOTES:

1. FOR ADDITIONAL NOTES AND DETAILS, SEE STD. DWGS. AS-1-15 AND AS-2-15.
2. FOR PARAPET DETAILS, SEE SHEET 7/8.
3. FOR REINFORCING LIST, SEE SHEET 8/8.

2021-09-22_BU 15 - RFC PLANS

DESIGN AGENCY
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Columbus Ohio 43240

DESIGNED	DRAWN	REVIEWED	DATE
BTJ	BTJ	SAN	6/18/21
CHECKED	REVISED	STRUCTURE FILE NUMBER	
JAT		7702736	

REAR APPROACH SLAB DETAILS

BRIDGE NO. SUM-77-0974R
I-77 NB OVER WATERLOO RD

SUM-76/77/8-8.24/9.74/0.00
PID No. 102329

5 / 8

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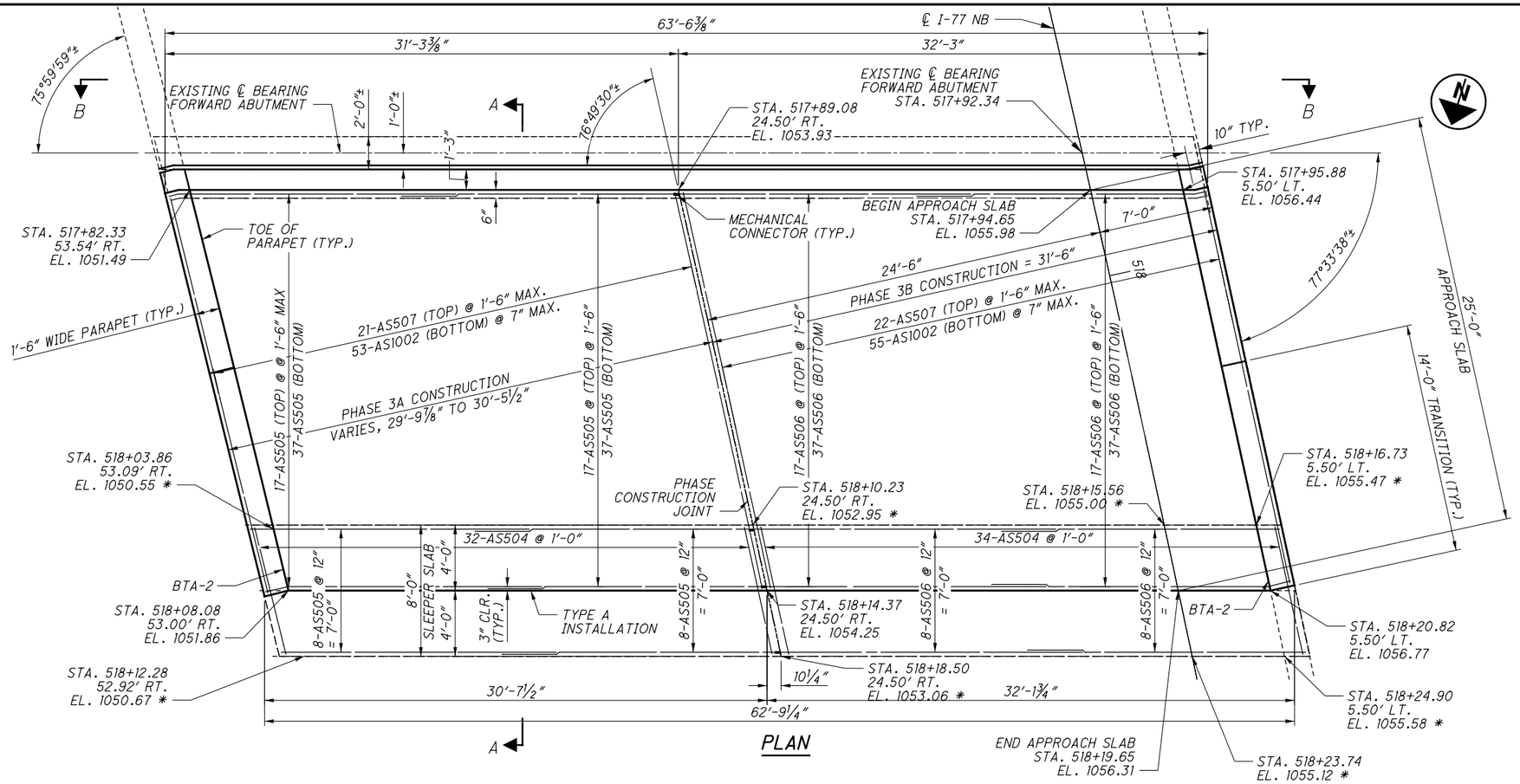
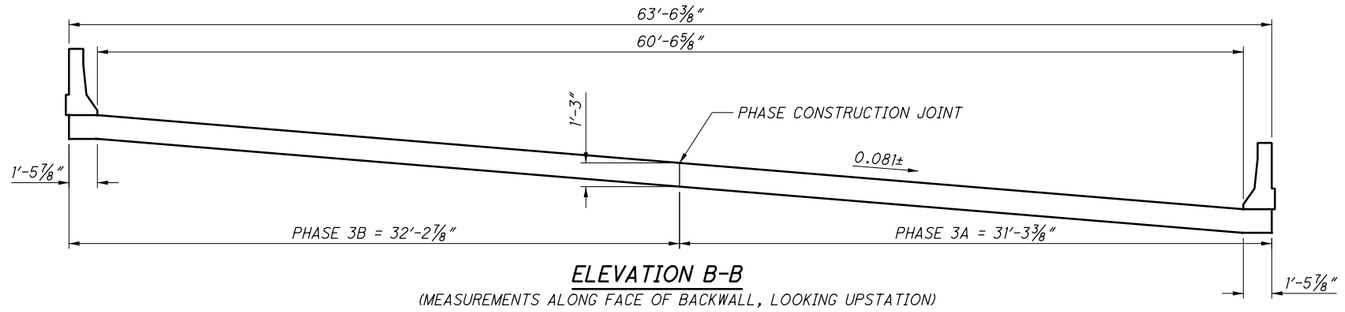
Thomas J Powell, PE
10/05/2021

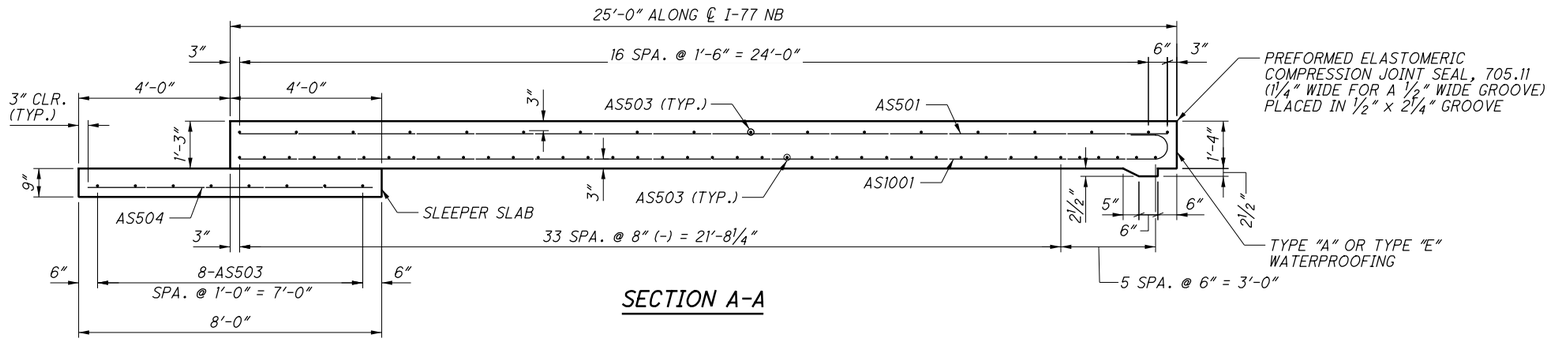


PLAN



ELEVATION B-B

(MEASUREMENTS ALONG FACE OF BACKWALL, LOOKING UPSTATION)



SECTION A-A

LEGEND:

* - ELEVATION SHOWN IS TO TOP OF SLEEPER SLAB

MINIMUM LAP LENGTHS:

#5 BAR = 3′-1″

NOTES:

1. FOR ADDITIONAL NOTES AND DETAILS, SEE STD. DWGS. AS-1-15 AND AS-2-15.
2. FOR PARAPET DETAILS, SEE SHEET 7/8.
3. FOR REINFORCING LIST, SEE SHEET 8/8.

DESCRIPTION

ISSUE RECORD:

NO.	DATE

pw:\\VANVA01PWINT01.parsons.com:Ohio State\Documents\DB-Akron Beltway Rehab\10 - Design\102329\Structures\BU-15\Sheets\077_0974R_AS002.dgn Sheet 10/4/2021 2:52:22 PM KChrisman

DESIGN AGENCY
PRIME AE
8415 Pulsar Place Suite 300
Columbus Ohio 43240

DESIGNED	DRAWN	REVIEWED	DATE
BTJ	BTJ	SAN	6/18/21
CHECKED	REVISED	STRUCTURE FILE NUMBER	
JAT		7702736	

FORWARD APPROACH SLAB DETAILS

BRIDGE NO. SUM-77-0974R
I-77 NB OVER WATERLOO RD

SUM-76/77/8-8.24/9.74/0.00
PID No. 102329

2021-09-22_BU 15 - RFC PLANS

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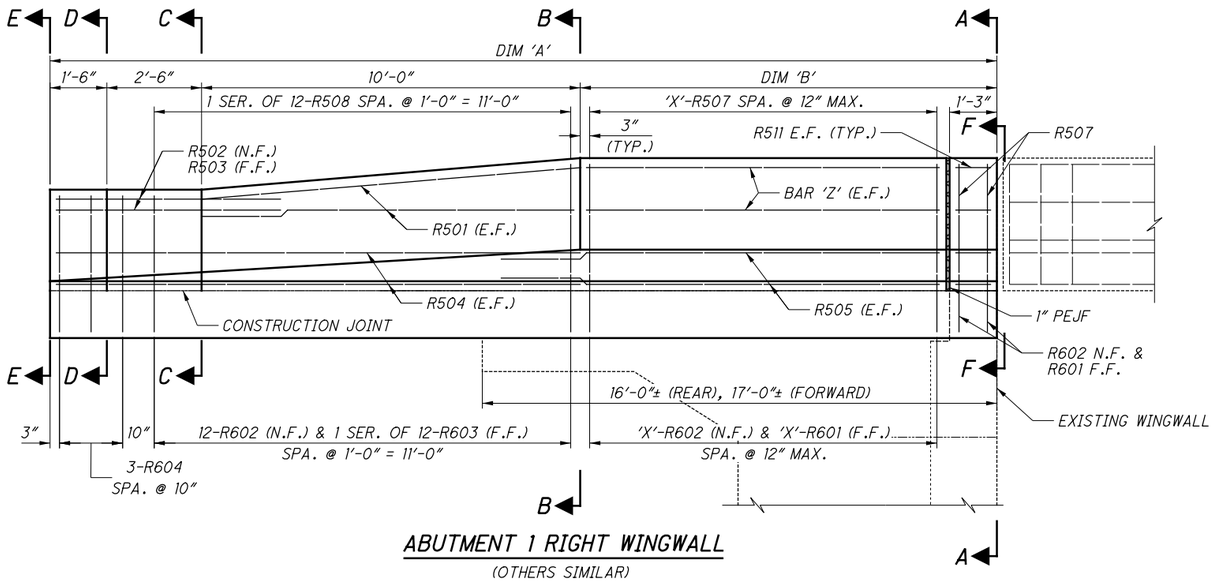
10/05/2021

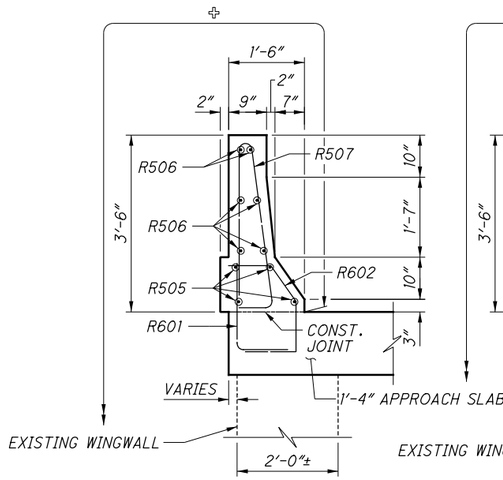
LOCATION	DIM 'A'	DIM 'B'	'X' SETS	BAR 'Z'
LEFT REAR	25'-2 5/8"	11'-2 5/8"	10	R506
RIGHT REAR	25'-2 3/8"	11'-2 3/8"	10	R506
LEFT FWD.	25'-3 3/4"	11'-3 3/4"	10	R510
RIGHT FWD.	25'-0"	11'-0"	10	R509



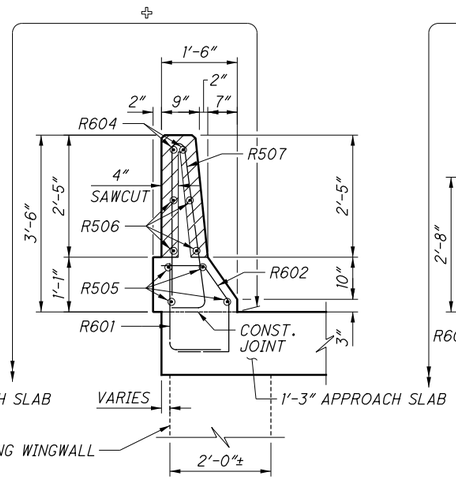
ABUTMENT 1 RIGHT WINGWALL

(OTHERS SIMILAR)

MARK	NUMBER TOTAL	LENGTH	WEIGHT	TYPE	DIMENSIONS A	B	C	D	E	R	INC
APPROACH SLAB PARAPET											
R501	16	10'-0"	167	STR							
R502	8	5'-8"	47	25	1'-10"	2'-5"	1'-4"	1 1/2"	5"		
R503	8	5'-8"	47	STR							
R504	16	13'-10"	231	STR							
R505	16	12'-0"	200	STR							
R506	8	9'-6"	79	STR							
R507	48	6'-11"	346	22	0'-8"	3'-0"	3'-3"			0'-2"	
	4 SR	3'-0"			2'-4 1/2"						
R508	OF	TO	171	16	TO						3/4"
	12	3'-10"			3'-3"						
R509	4	9'-4"	39	STR							
R510	4	9'-7"	40	STR							
R511	32	11"	31	STR							
R601	48	2'-7"	186	1	1'-0"	1'-9"					
R602	96	3'-3"	469	14	0'-7"	0'-6"	0'-8 1/2"	1'-0"	1'-2"		
	4 SR	4'-1"				3'-3"					
R603	OF	TO	327	1	1'-0"	TO					3/4"
	12	5'-0"				4'-1 1/2"					
R604	12	4'-1"	74	1	1'-0"	3'-3"					
SUB-TOTAL		2454									



SECTION A-A



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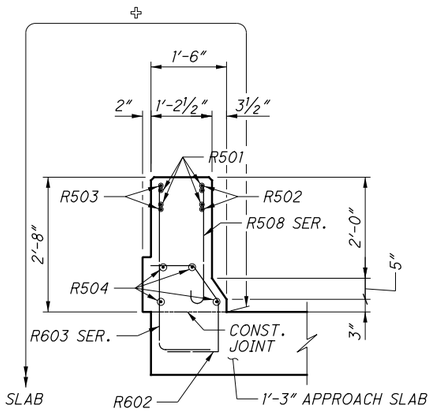

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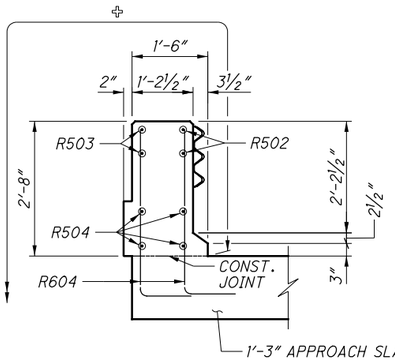

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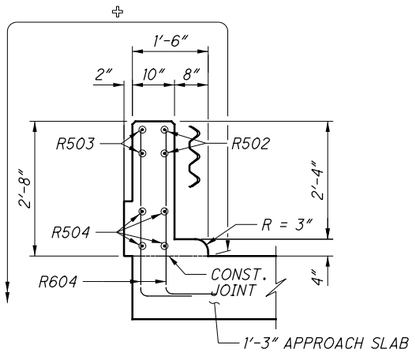

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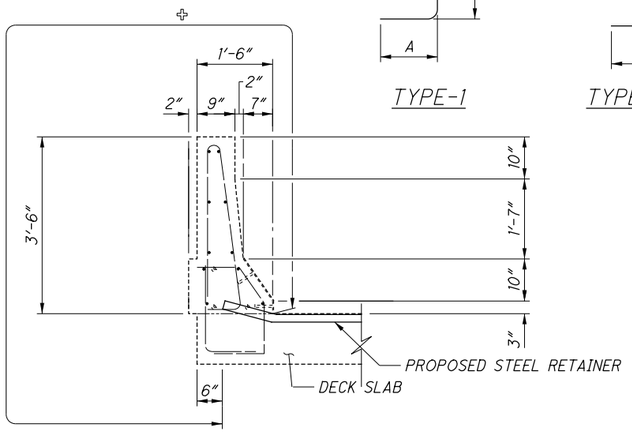
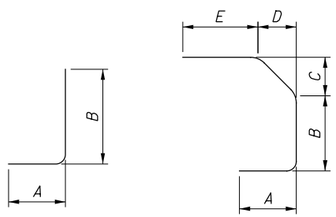
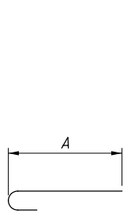


SECTION F-F



TYPE-1 TYPE-14



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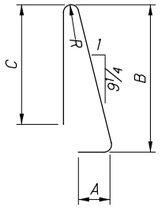

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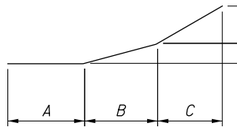

TYPE-25

LEGEND:

⌖ - LIMITS OF SEALING (EPOXY-URETHANE). SEAL ENTIRE SURFACE DOWN TO THE PROPOSED GROUND LINE

NOTES:

1. FOR ADDITIONAL NOTES AND DETAILS, SEE STD. DWG. BR-1-13.
2. CLEAR DISTANCE FROM THE EDGE OF CONCRETE TO THE FACE OF REINFORCING STEEL SHALL BE 2" UNLESS NOTED OTHERWISE.
3. FOR REINFORCING STEEL NOTES, SEE SHEET 8/8.

ISSUE RECORD:

NO.	DATE	DESCRIPTION

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DESIGN AGENCY
PRIME AE
8415 Pulsar Place Suite 300
Columbus Ohio 43240

DESIGNED BTJ | DRAWN BTJ | CHECKED JAT | REVIEWED SAN | DATE 6/18/21 | STRUCTURE FILE NUMBER 7702736 | REVISED

APPROACH PARAPET DETAILS

BRIDGE NO. SUM-77-0974R
I-77 NB OVER WATERLOO RD

2021-09-22_BU 15 - RFC PLANS

SUM-76/77/8-8.24/9.74/0.00
PID No. 102329

7 / 8

39 / 65

Released for Construction
Thomas J Powell, PE
10/05/2021

MARK	NUMBER PHASE 3A	NUMBER PHASE 3B	NUMBER TOTAL	LENGTH	WEIGHT	TYPE	DIMENSIONS A	B	C	D	E	R	INC
REAR APPROACH SLAB													
AS501	25	22	47	24'-6"	1201	STR							
AS502		61	61	32'-9"	2084	STR							
AS503	122		122	20'-1"	2558	STR							
AS504	39	35	74	7'-11"	611	STR							
AS1001	62	55	117	25'-11"	13048	16	24'-6"						
				SUB-TOTAL	19502								

* - INDICATES MECHANICAL CONNECTOR SHALL BE ATTACHED

MARK	NUMBER PHASE 3A	NUMBER PHASE 3B	NUMBER TOTAL	LENGTH	WEIGHT	TYPE	DIMENSIONS A	B	C	D	E	R	INC
FORWARD APPROACH SLAB													
AS504	32	34	66	7'-11"	545	STR							
AS505	124		124	17'-1"	2209	STR							
AS506		124	124	17'-7"	2274	STR							
AS507	21	22	43	24'-6"	1099	STR							
AS1002	53	55	108	25'-11"	12044	16	24'-6"						
				SUB-TOTAL	18171								

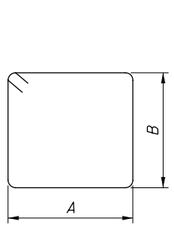
* - INDICATES MECHANICAL CONNECTOR SHALL BE ATTACHED

MARK	NUMBER PHASE 5A	NUMBER PHASE 5B	NUMBER TOTAL	LENGTH	WEIGHT	TYPE	DIMENSIONS A	B	C	D	E	R	INC
REAR ABUTMENT BACKWALL													
BW501	38	34	72	4'-6"	338	3	11"	1'-0"					
BW502	1	1	2	30'-0"	63	STR							
BW503	1		1	5'-11"	6	STR							
BW504	NOT USED												
*BW505		1	1	9'-11"	10	STR							
BW506	NOT USED												
				SUB-TOTAL	417								

* - INDICATES MECHANICAL CONNECTOR SHALL BE ATTACHED

MARK	NUMBER PHASE 5A	NUMBER PHASE 5B	NUMBER TOTAL	LENGTH	WEIGHT	TYPE	DIMENSIONS A	B	C	D	E	R	INC
FORWARD ABUTMENT BACKWALL													
BW501	32	33	65	4'-6"	305	3	11"	1'-0"					
BW502	1	1	2	30'-0"	63	STR							
BW503	NOT USED												
*BW504	1		1	4'-4"	5	STR							
BW505	NOT USED												
BW506		1	1	5'-2"	5	STR							
				SUB-TOTAL	378								

* - INDICATES MECHANICAL CONNECTOR SHALL BE ATTACHED



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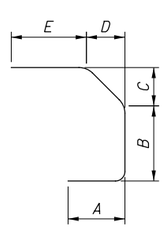

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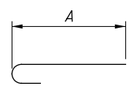

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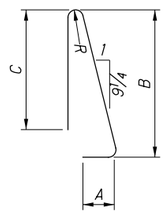

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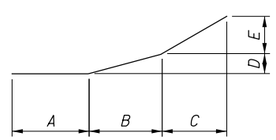

TYPE-25

NOTES:

1. ALL REINFORCING STEEL SHALL BE EPOXY COATED.
2. BAR SIZE: THE BAR SIZE IS INDICATED IN THE BAR MARK. THE MARK BEGINS WITH TWO OR THREE LETTERS OR NUMBERS THAT IDENTIFY THE BAR LOCATION. THE NEXT ONE OR TWO DIGITS INDICATE THE BAR SIZE, AND THE REMAINING TWO DIGITS ARE THE SEQUENCE NUMBER.

   EXAMPLE: SA1001
   SA = SUPERSTRUCTURE BAR
   10 = #10 BAR
   01 = BAR SEQUENCE NUMBER 1
3. BAR DIMENSIONS SHOWN ARE OUT-TO-OUT UNLESS OTHERWISE INDICATED.
4. STR. IN THE BAR TYPE COLUMN INDICATES A STRAIGHT BAR.
5. RAD INDICATES INSIDE RADIUS, UNLESS OTHERWISE NOTED.
6. INCR. INDICATES THE LENGTH INCREMENT FOR SERIES BARS.
7. STD. WRITTEN IN PLACE OF A DIMENSION INDICATES A STANDARD BEND AT THE END OF A BAR.
8. FIELD BEND BARS AS NECESSARY TO MATCH CURVATURE OF ROADWAY.

2021-09-22_BU 15 - RFC PLANS

ISSUE RECORD:

NO.	DESCRIPTION	DATE

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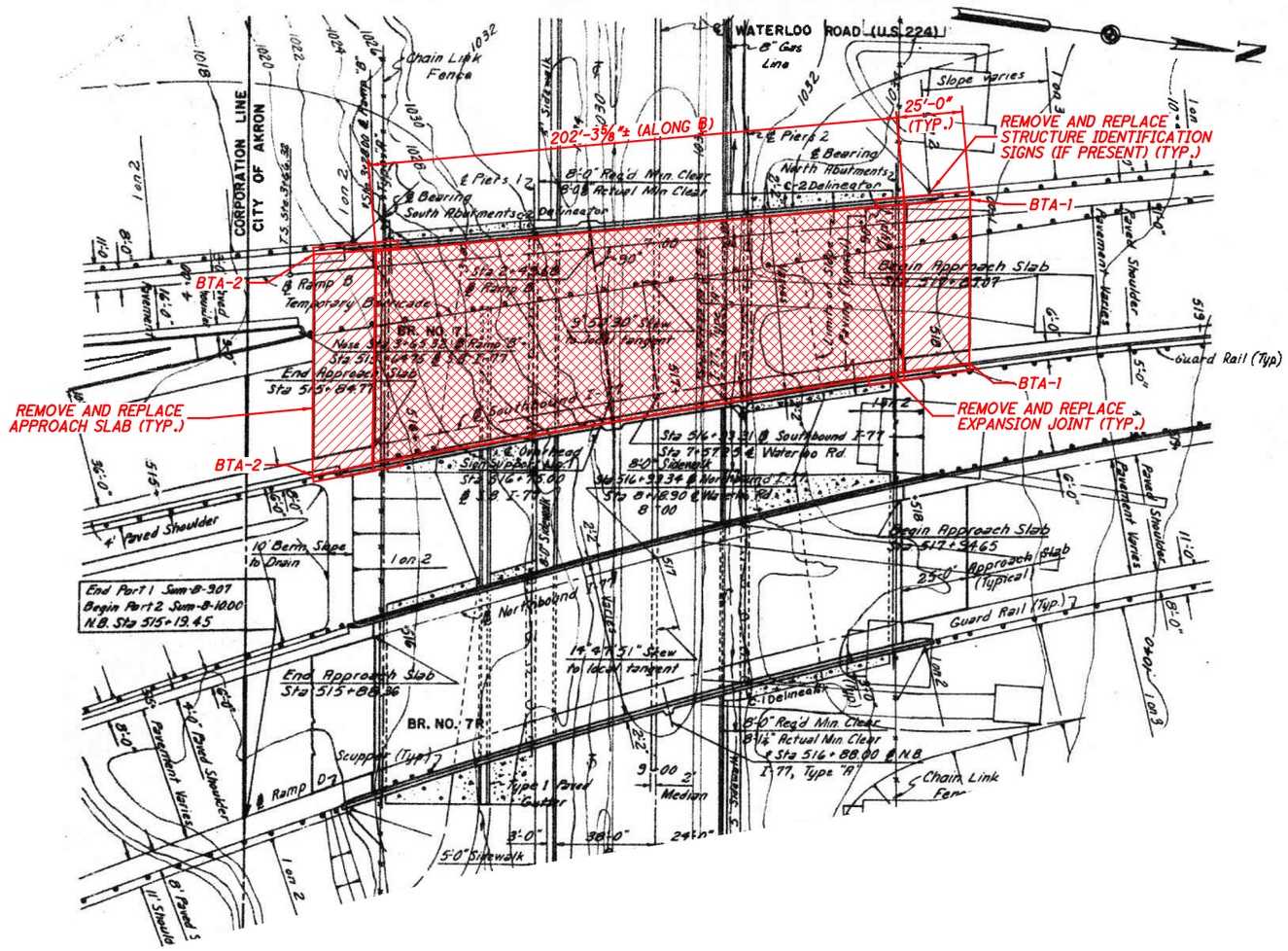
DESIGN AGENCY
PRIME AE
8415 Pulsar Place Suite 300
Columbus Ohio 43240

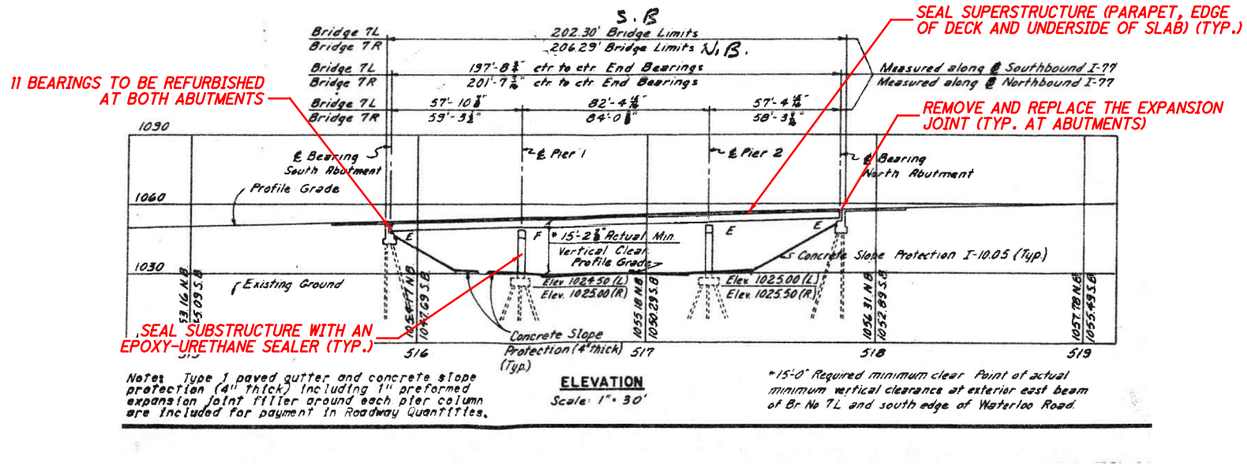
DESIGNED	DRAWN	REVIEWED	DATE
BTJ	BTJ	SAN	6/18/21
CHECKED	REVISED	STRUCTURE FILE NUMBER	
JAT		7702736	

REINFORCING STEEL LIST
BRIDGE NO. SUM-77-0974R
I-77 NB OVER WATERLOO RD

SUM-76/77/8-8.24/9.74/0.00
PID No. 102329

Released for Construction
Thomas J Powell, PE
10/05/2021





Notes: Type 1 paved gutter and concrete slope protection (4" thick) including 1" preformed expansion joint filler around each pier column are included for payment in Roadway Quantities.

ELEVATION
Scale: 1" = 30'

*15'-0" Required minimum clear. Point of actual minimum vertical clearance at exterior east beam of Br No 7L and south edge of Waterloo Road.

LEGEND:

- ▨ - LIMITS OF APPROACH SLAB REMOVAL AND REPLACEMENT
- ▩ - LIMITS OF MICRO-SILICA CONCRETE OVERLAY ON BRIDGE DECK

NOTES:

1. FOR GENERAL NOTES, SEE SHEET 3/65 THRU 7/65.
2. FOR TRANSVERSE SECTION, SEE SHEET 3/8.
3. FOR REMOVAL DETAILS, SEE SHEET 2/8.
4. FOR EXPANSION JOINT DETAILS, SEE SHEET 4/8.
5. FOR APPROACH SLAB DETAILS, SEE SHEETS 5/8 THRU 7/8.

EXISTING STRUCTURE

TYPE: THREE SPAN CONTINUOUS STEEL BEAMS WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE

SPANS: 57'-10⅞"±, 82'-4¹⁵⁄₁₆"±, 57'-4¹⁵⁄₁₆"± C/C BEARINGS

ROADWAY: VARIES

LOADING: HS 20-44 (CASE 1) AND ALTERNATE MILITARY LOADING

WEARING SURFACE: 1.2"± MONOLITHIC

SKEW: VARIES

APPROACH SLABS: 25'-0"± LONG (AS-1-54)

ALIGNMENT: 2°00'00"± RIGHT

SUPERELEVATION: NONE

COORDINATES: LATITUDE 41°01'45"± N
LONGITUDE 81°30'18"± W

2021-09-22_BU 15 - RFC PLANS

DESIGN AGENCY
PRIME AE
8415 Pulsar Place Suite 300
Columbus Ohio 43240

DESIGNED	DRAWN	REVIEWED	DATE
KDC	KDC	SAN	6/18/21
CHECKED	REVISED	STRUCTURE FILE NUMBER	
JAT		7702701	

SUMMIT COUNTY
STA. 515+84.77±
STA. 517+87.07±

GENERAL PLAN
BRIDGE NO. SUM-77-0975L
I-77 SB OVER WATERLOO ROAD

SUM-76/77/8-8.24/9.74/0.00
PID No. 102329

1 / 8

41 / 65

ISSUE RECORD:

NO.	DATE	DESCRIPTION

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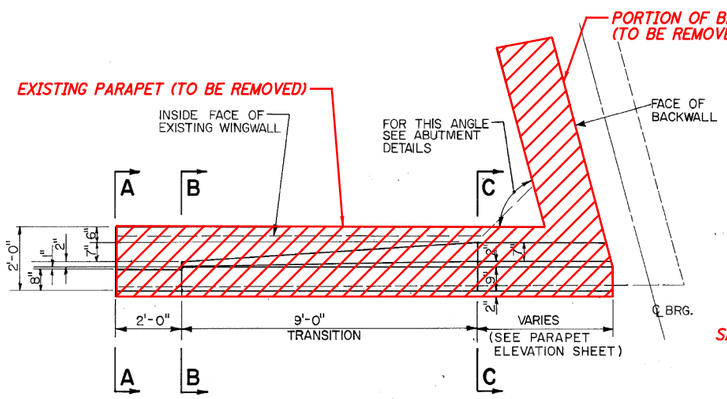
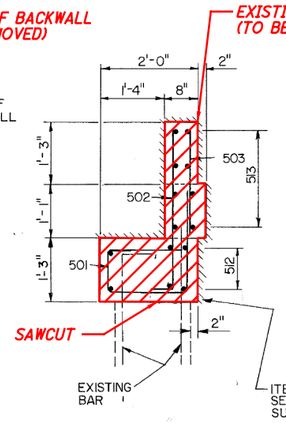
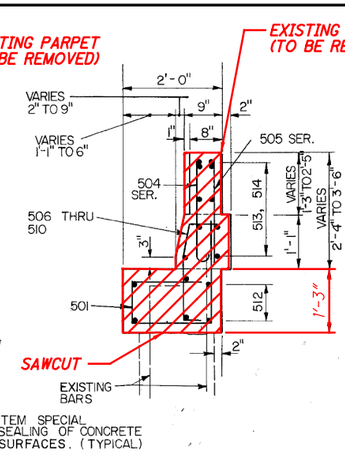
Released for Construction
Thomas J Bovell, PE
10/04/2021



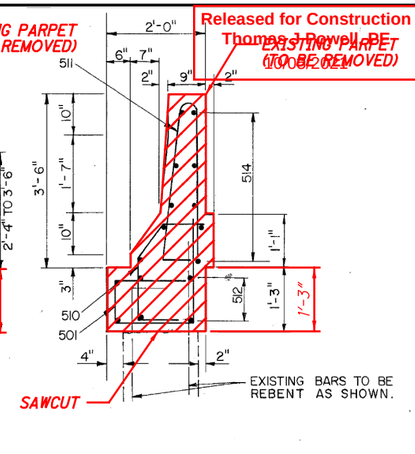
PLAN PARAPET TRANSITION DETAIL



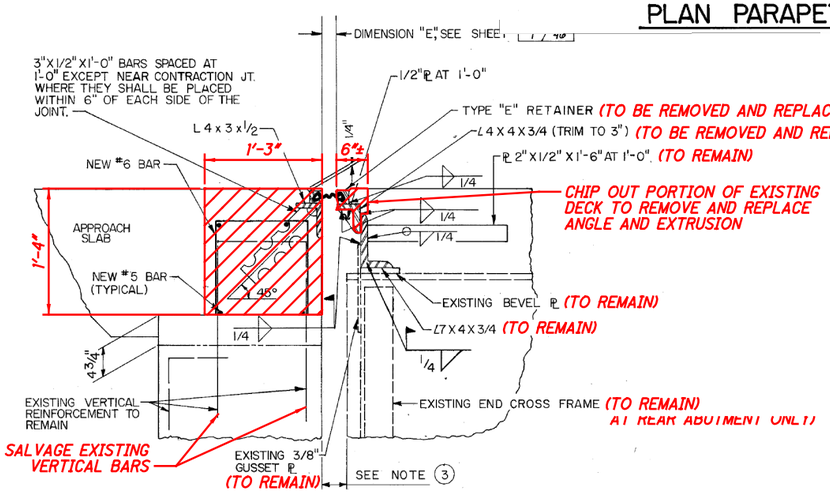
SECTION A-A



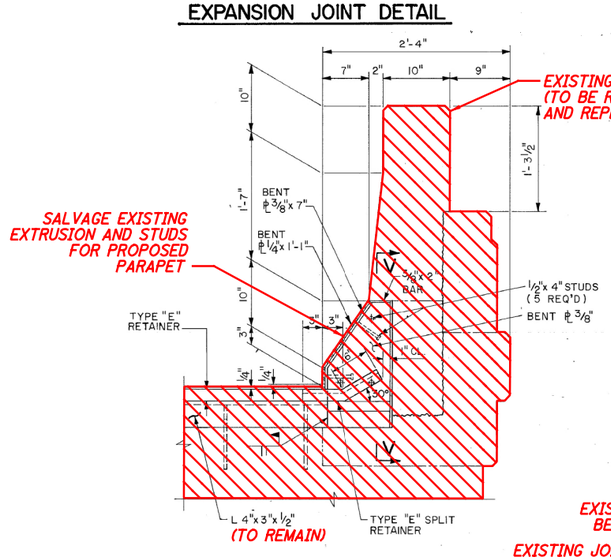
SECTION B-B



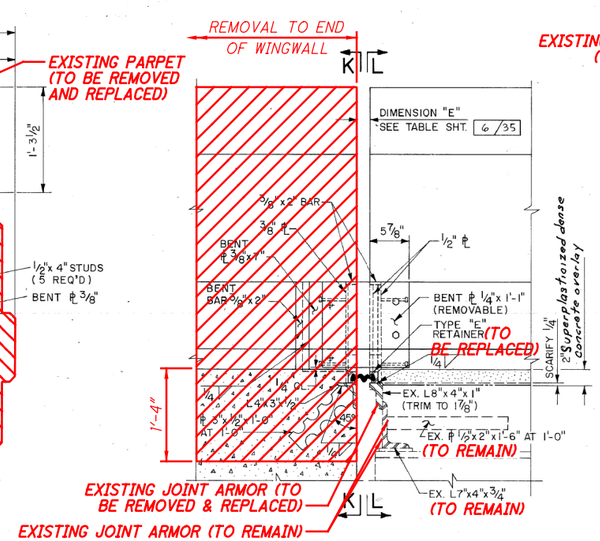
SECTION C-C



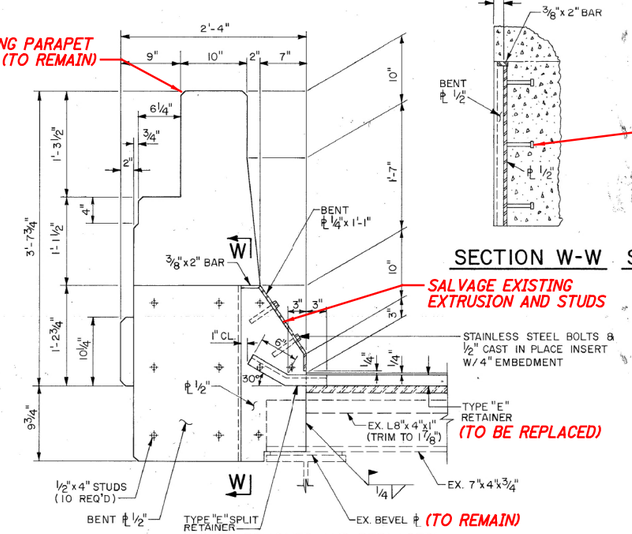
EXPANSION JOINT DETAIL



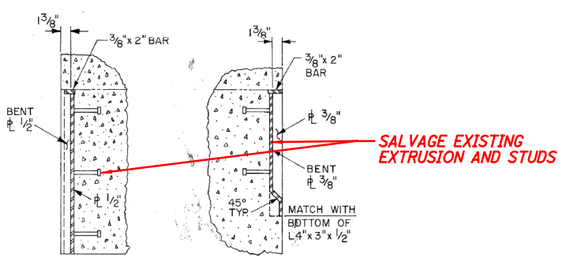
SECTION K-K



PARAPET EXPANSION JOINT ELEVATION



SECTION L-L



SECTION W-W SECTION V-V

ORIGINAL CONSTRUCTION PLANS SHOWN FOR INFORMATION ONLY

LEGEND:

- LIMITS OF REMOVAL

DESCRIPTION

ISSUE RECORD:

NO.	DATE

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2021-09-22_BU 15 - RFC PLANS

WINGWALL AND BRIDGE DECK REMOVAL DETAILS

BRIDGE NO. SUM-77-0975L
I-77 SB OVER WATERLOO ROAD

DESIGN AGENCY
PRIME AE
8415 Pulsar Place Suite 300
Columbus Ohio 43240

DESIGNED	DRAWN	REVIEWED	DATE
KDC	KDC	SAN	6/18/21
CHECKED	REVISED	STRUCTURE FILE NUMBER	
JAT		7702701	

SUM-76/77/8-8.24/9.74/0.00
PID No. 102329

2 / 8

42 / 65

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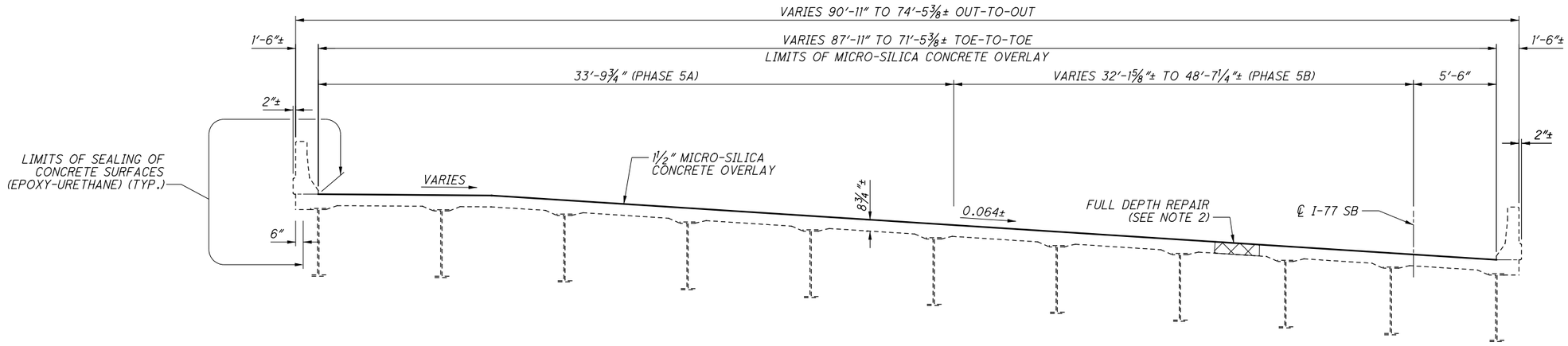
Thomas J Powell, PE
10/05/2021



TRANSVERSE SECTION

LEGEND:

- LIMITS OF FULL DEPTH REPAIR

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3/65 THRU 7/65.
2. PERFORM FULL DEPTH REPAIR OF THE DECK AT THE AREAS DESIGNATED BY THE ENGINEER. FOR ADDITIONAL NOTES, SEE SHEET 7/65.
3. PROVIDE NEW MICRO-SILICA CONCRETE OVERLAY MATCHING THE CURRENT EXISTING DECK ELEVATION.

2021-09-22_BU 15 - RFC PLANS

DESIGN AGENCY
PRIME AE
8415 Pulsar Place Suite 300
Columbus Ohio 43240

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CHECKED	REVISED	STRUCTURE FILE NUMBER	
JAT		7702701	

TRANSVERSE SECTION
BRIDGE NO. SUM-77-0975L
I-77 SB OVER WATERLOO ROAD

SUM-76/77/8-8.24/9.74/0.00
PID No. 102329

3 / 8

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65

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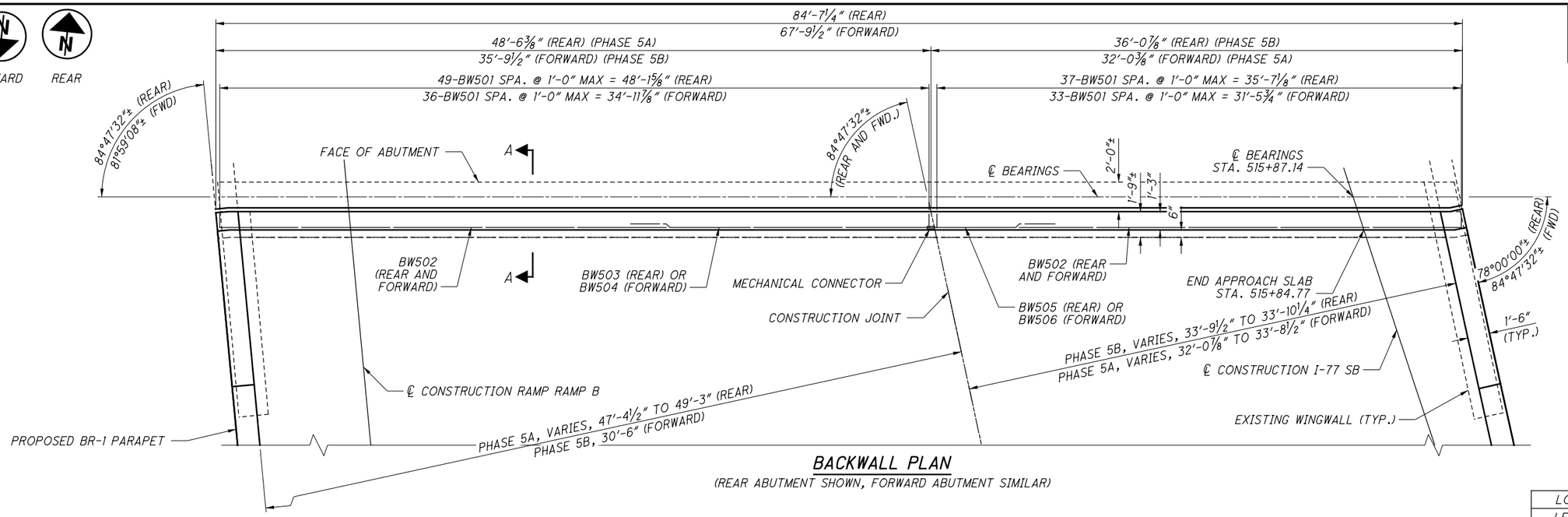
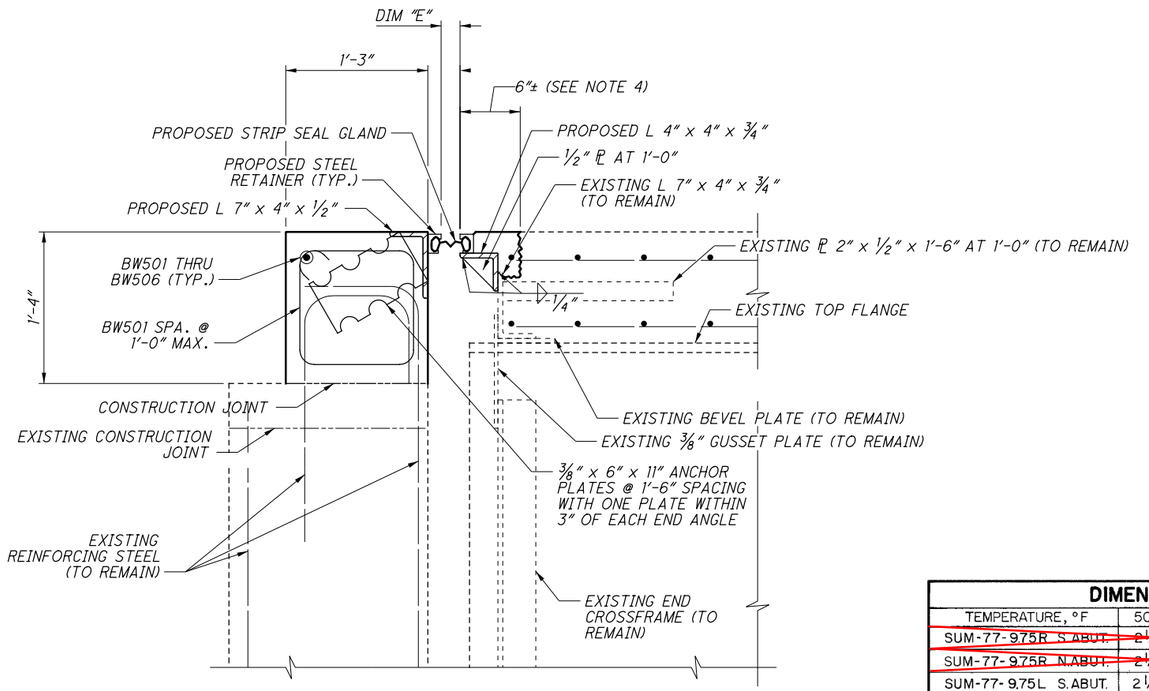


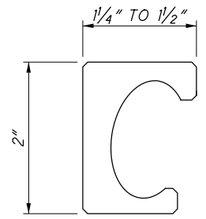
BACKWALL PLAN

(REAR ABUTMENT SHOWN, FORWARD ABUTMENT SIMILAR)

LOCATION	DIM "A"
LEFT REAR	2'-0 1/8"
RIGHT REAR	2'-0 1/2"
LEFT FORWARD	2'-0 1/4"
RIGHT FORWARD	2'-0 3/8"

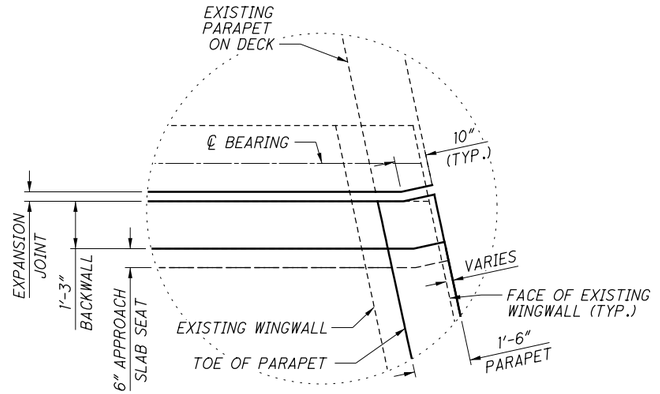


SECTION A-A THRU ABUTMENT



RETAINER DETAIL

DIMENSION E					
TEMPERATURE, °F	50°	60°	70°	80°	90°
SUM-77-9.75R S.ABUT.	2 1/16"	2"	1 15/16"	1 15/16"	1 7/8"
SUM-77-9.75R N.ABUT.	2 1/8"	2"	1 7/8"	1 3/4"	1 11/16"
SUM-77-9.75L S.ABUT.	2 1/16"	2"	1 15/16"	1 15/16"	1 7/8"
SUM-77-9.75L N.ABUT.	2 1/8"	2"	1 7/8"	1 13/16"	1 1/16"



CORNER DETAIL

(RIGHT CORNER OF REAR ABUTMENT SHOWN, OTHER SIMILAR)

NOTES:

1. FOR ADDITIONAL NOTES AND DETAILS, SEE STD. DWG. EXJ-4-87.
2. FOR PARAPET DETAILS, SEE SHEET 7/8.
3. FOR REINFORCING LIST, SEE SHEET 8/8.
4. CHIP AWAY PORTION OF EXISTING BRIDGE DECK TO REMOVE AND REPLACE JOINT ANGLE AND EXTRUSION.

2021-09-22_BU 15 - RFC PLANS

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CHECKED	REVISED	STRUCTURE FILE NUMBER	
JAT		7702701	

EXPANSION JOINT AND BACKWALL DETAILS
BRIDGE NO. SUM-77-0975L
I-77 SB OVER WATERLOO ROAD

SUM-76/77/8-8.24/9.74/0.00
PID No. 102329

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65

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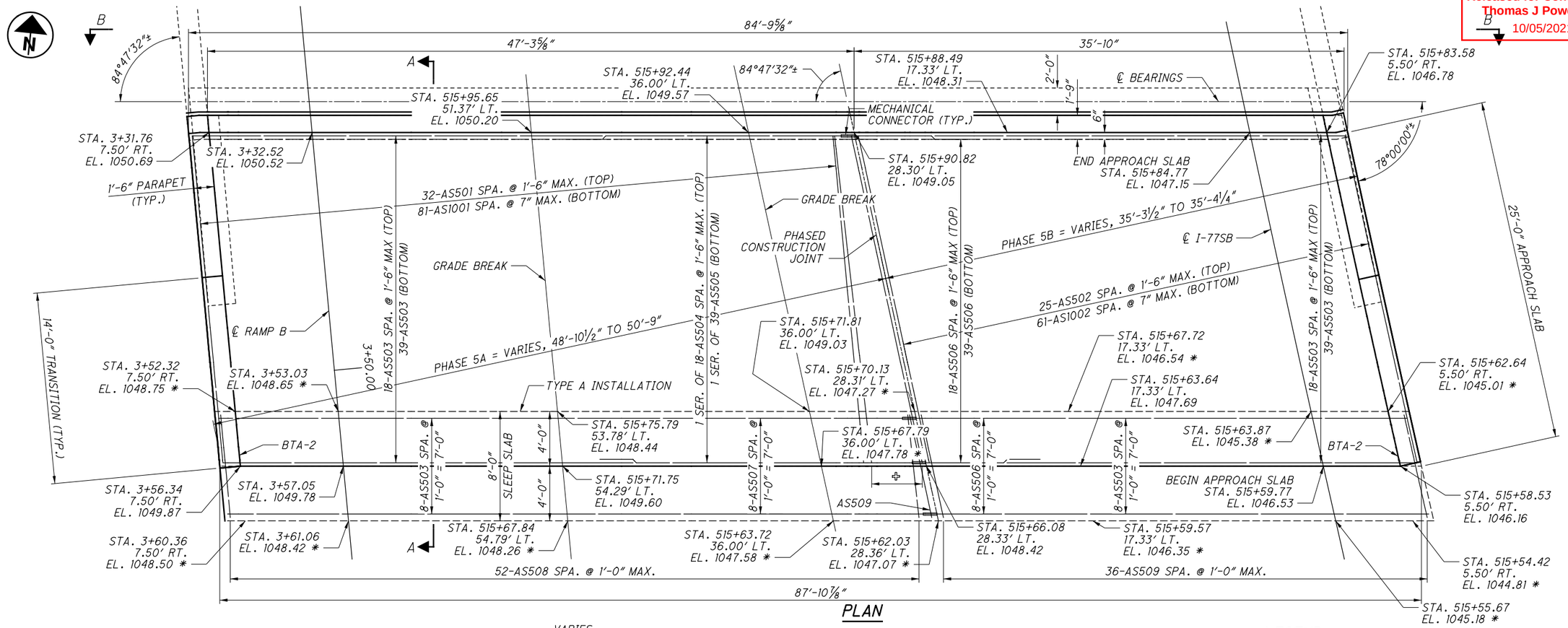
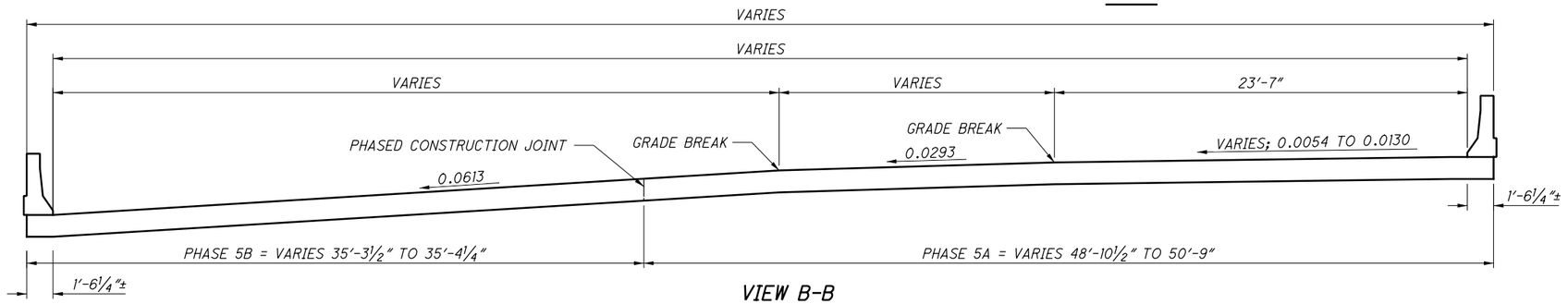
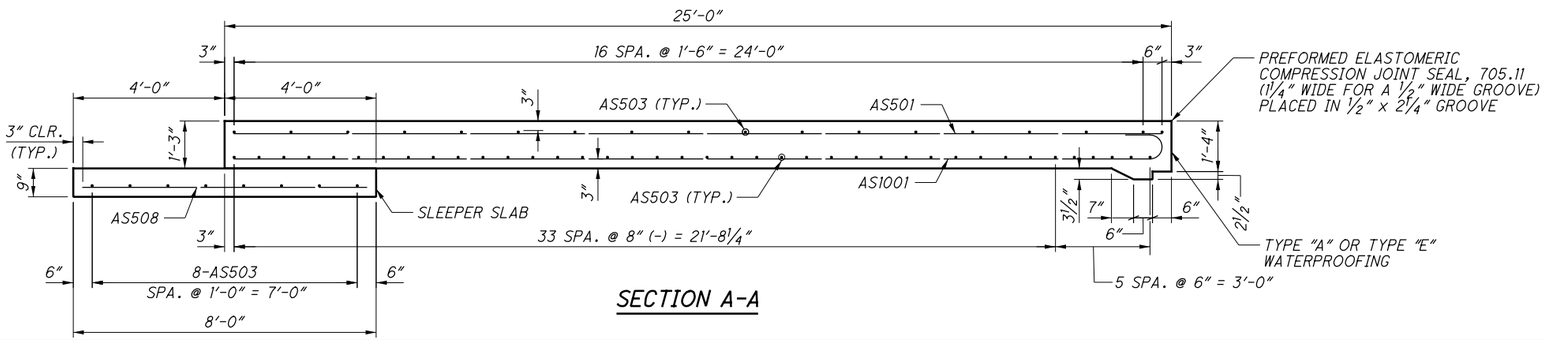


PLAN



VIEW B-B

(ALONG FACE OF BACKWALL)



SECTION A-A

LEGEND:

✣ - 3-AS502 SPA. @ 1'-6" MAX. (TOP) (FAN TO FIT)
8-AS1002 SPA. @ 7" MAX (BOTTOM) (FAN TO FIT)

* - ELEVATION SHOWN IS TO TOP OF SLEEPER SLAB

MINIMUM LAP LENGTHS:

#5 BAR = 3'-1"

NOTES:

1. FOR ADDITIONAL NOTES AND DETAILS, SEE STD. DWGS. AS-1-15 AND AS-2-15.
2. FOR PARAPET DETAILS, SEE SHEET 7/8.
3. FOR REINFORCING LIST, SEE SHEET 8/8.

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REAR APPROACH SLAB DETAILS
BRIDGE NO. SUM-77-0975L
I-77 SB OVER WATERLOO RD

SUM-76/77/8-8.24/9.74/0.00
PID No. 102329

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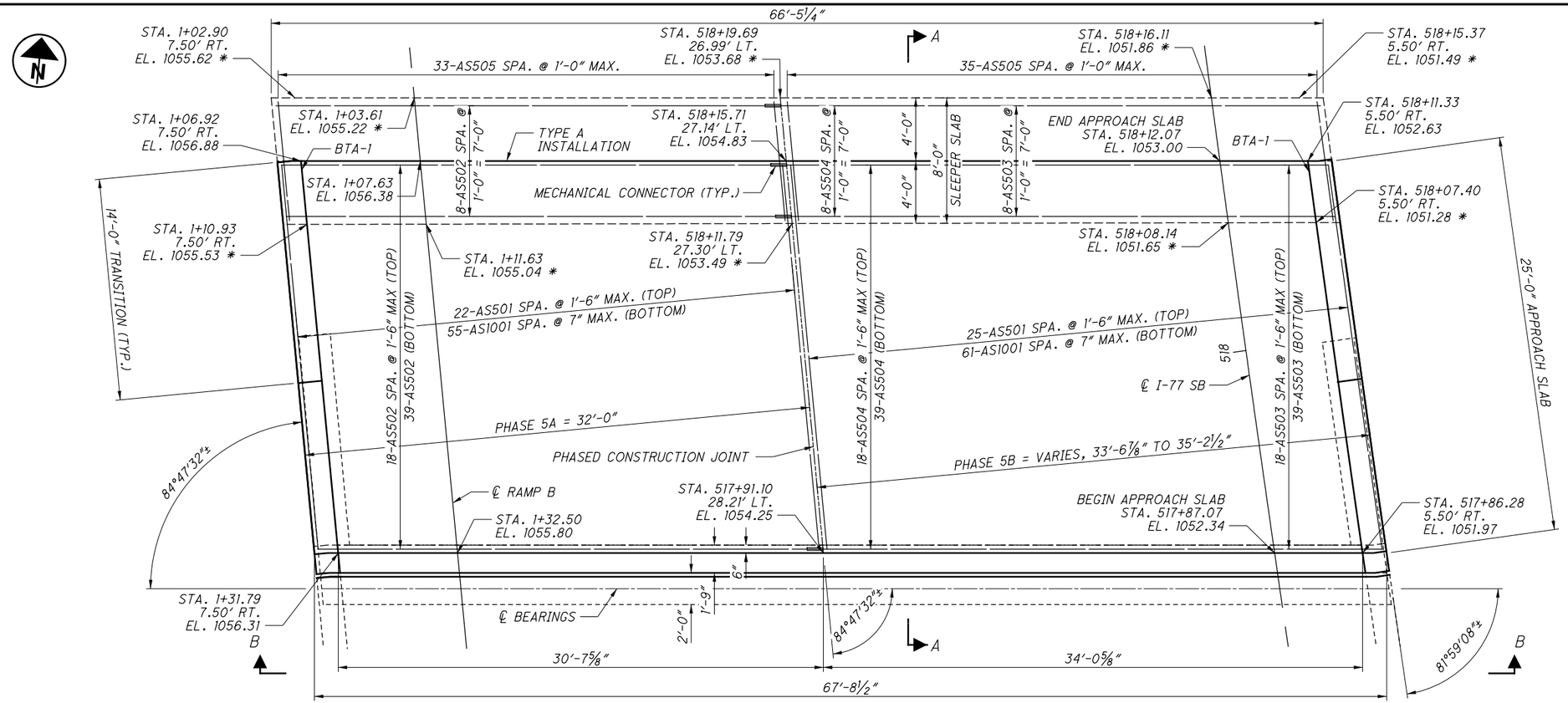
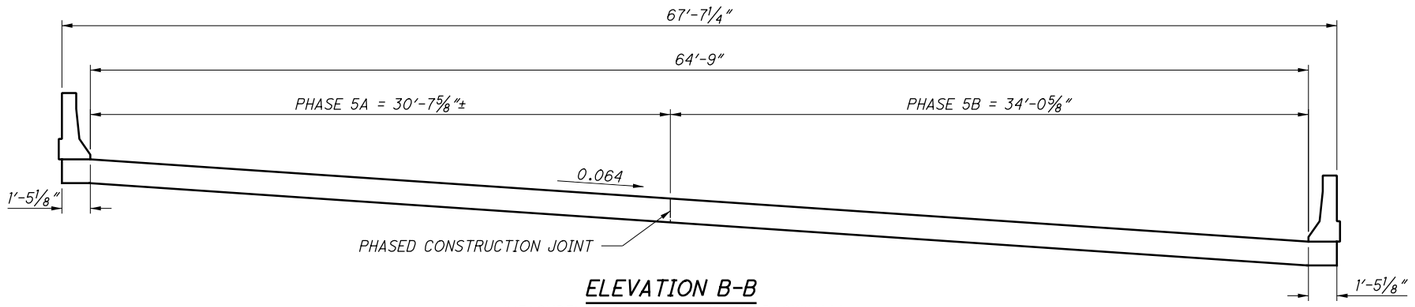
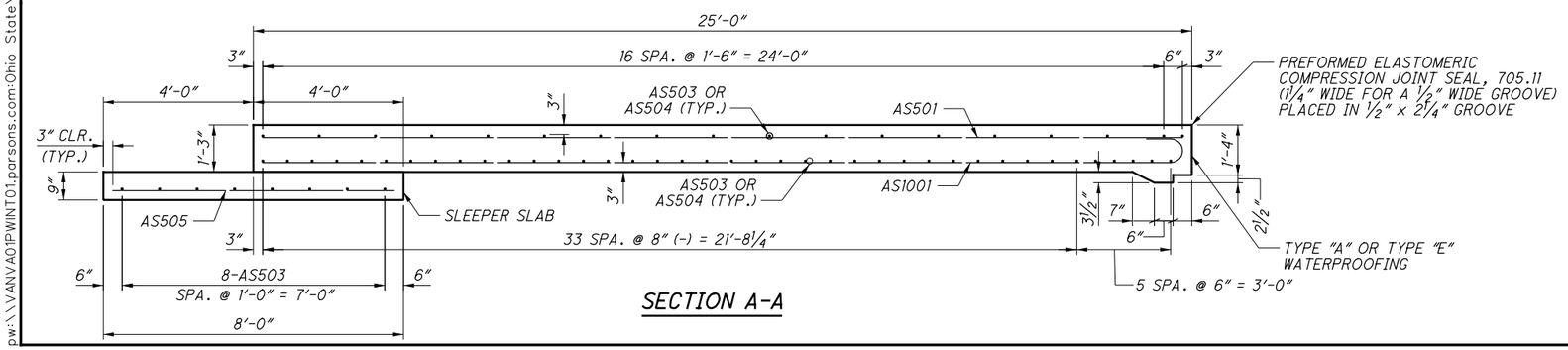


PLAN



ELEVATION B-B

(MEASUREMENTS ALONG FACE OF BACKWALL)



SECTION A-A

LEGEND:

* - ELEVATION SHOWN IS TO TOP OF SLEEPER SLAB

MINIMUM LAP LENGTHS:

#5 BAR = 3′-1″

NOTES:

1. FOR ADDITIONAL NOTES AND DETAILS, SEE STD. DWGS. AS-1-15 AND AS-2-15.
2. FOR PARAPET DETAILS, SEE SHEET 7/8.
3. FOR REINFORCING LIST, SEE SHEET 8/8.

2021-09-22_BU 15 - RFC PLANS

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DESIGNED	DRAWN	REVIEWED	DATE
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FORWARD APPROACH SLAB DETAILS
BRIDGE NO. SUM-77-0975L
I-77 SB OVER WATERLOO RD

SUM-76/77/8-8.24/9.74/0.00
PID No. 102329

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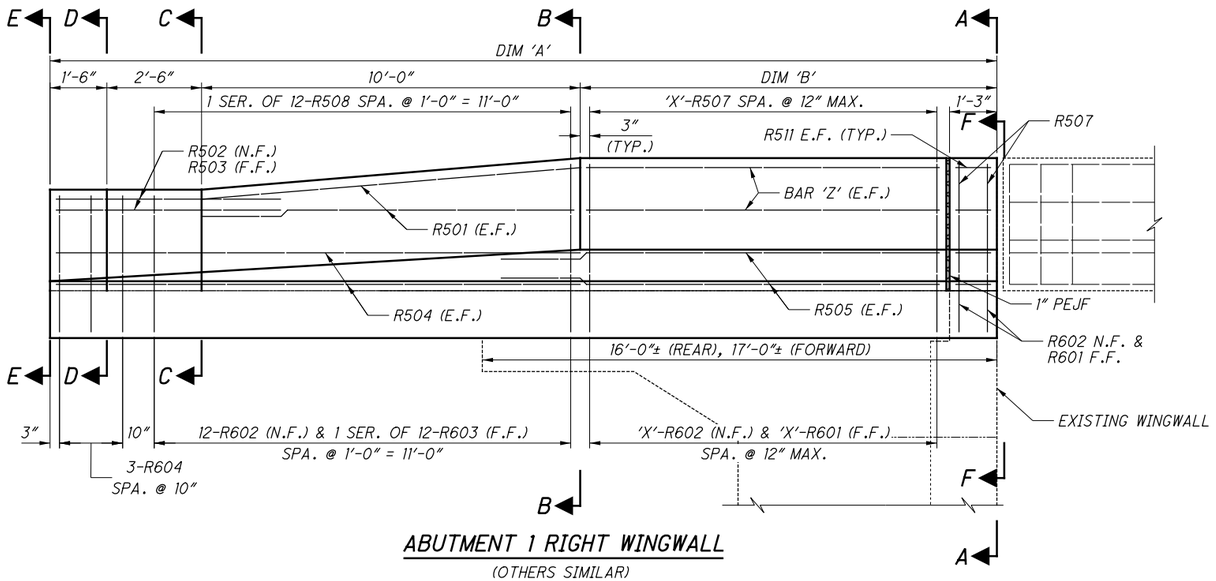
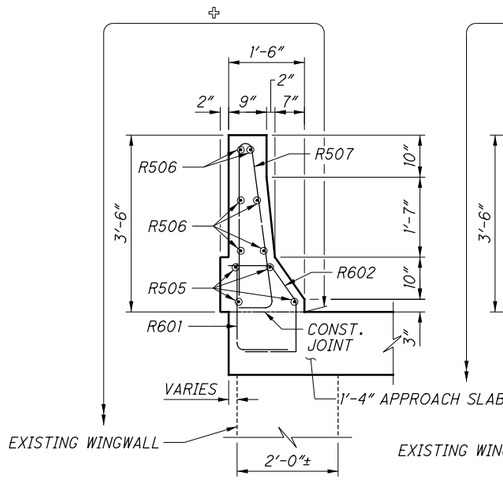
LOCATION	DIM 'A'	DIM 'B'	'X' SETS	BAR 'Z'
LEFT REAR	24'-6¼"	10'-6¼"	10	R506
RIGHT REAR	25'-0"	11'-0"	10	R509
LEFT FWD.	24'-10½"	10'-10½"	10	R510
RIGHT FWD.	25'-0"	11'-0"	10	R509

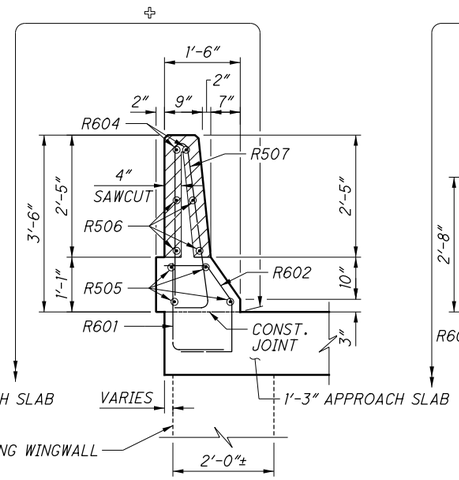


ABUTMENT 1 RIGHT WINGWALL

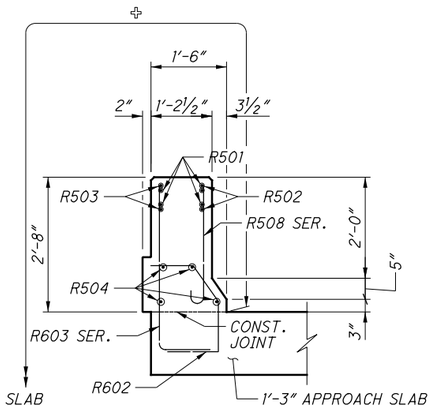
(OTHERS SIMILAR)



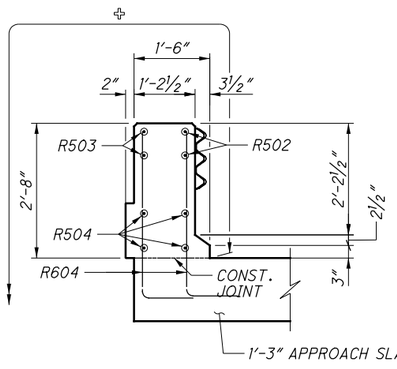
SECTION A-A



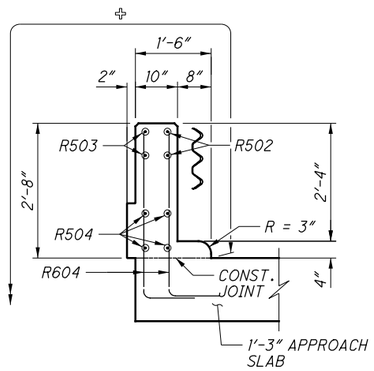
SECTION B-B



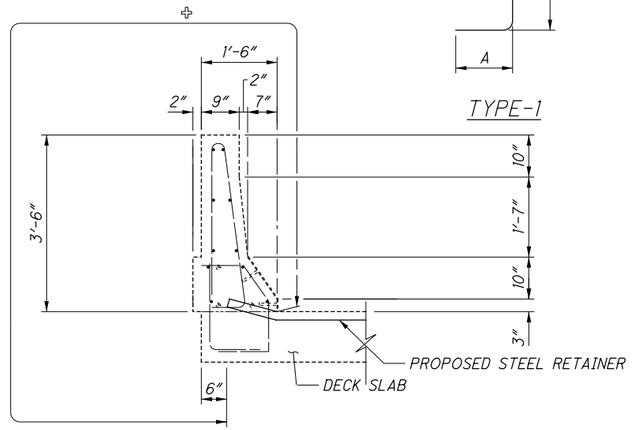
SECTION C-C



SECTION D-D

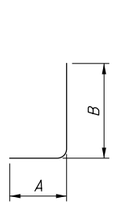


SECTION E-E

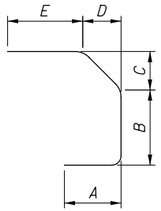


SECTION F-F

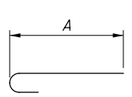
MARK	NUMBER TOTAL	LENGTH	WEIGHT	TYPE	DIMENSIONS A	B	C	D	E	R	INC
APPROACH SLAB PARAPET											
R501	16	10'-0"	167	STR							
R502	8	5'-8"	47	25	1'-10"	2'-5"	1'-4"	1½"	5"		
R503	8	5'-8"	47	STR							
R504	16	13'-10"	231	STR							
R505	16	11'-6"	192	STR							
R506	4	8'-10"	37	STR							
R507	48	6'-11"	346	22	8"	3'-0"	3'-3"			2"	
	4 SR	3'-0"			2'-4 ½"						
R508	OF	TO	171	16	TO						¾"
	12	3'-10"			3'-3"						
R509	8	9'-4"	78	STR							
R510	4	9'-2"	38	STR							
R511	32	11"	31	STR							
R601	48	2'-7"	186	1	1'-0"	1'-9"					
R602	96	3'-3"	469	14	7"	6"	8 ½"	1'-0"	1'-2"		
	4 SR	4'-1"				3'-3"					
R603	OF	TO	327	1	1'-0"	TO					¾"
	12	5'-0"				4'-1 ½"					
R604	12	4'-1"	74	1	1'-0"	3'-3"					
SUB-TOTAL			2,441								



TYPE-1



TYPE-14



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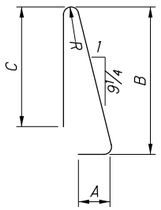
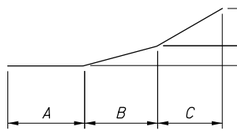


TYPE-22



TYPE-25

LEGEND:

⌖ - LIMITS OF SEALING (EPOXY-URETHANE). SEAL ENTIRE SURFACE DOWN TO THE PROPOSED GROUND LINE

NOTES:

1. FOR ADDITIONAL NOTES AND DETAILS, SEE STD. DWG. BR-1-13.
2. CLEAR DISTANCE FROM THE EDGE OF CONCRETE TO THE FACE OF REINFORCING STEEL SHALL BE 2" UNLESS NOTED OTHERWISE.
3. FOR REINFORCING STEEL NOTES, SEE SHEET 8/8.

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JAT		7702701	

APPROACH PARAPET DETAILS

BRIDGE NO. SUM-77-0975L
I-77 SB OVER WATERLOO RD

SUM-76/77/8-8.24/9.74/0.00
PID No. 102329

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10/05/2021

MARK	NUMBER PHASE 5A	NUMBER PHASE 5B	NUMBER TOTAL	LENGTH	WEIGHT	TYPE	DIMENSIONS A	B	C	D	E	R	INC
REAR APPROACH SLAB													
AS501	32		32	24'-0"	801	STR							
AS502	3	25	28	24'-5"	713	STR							
AS503	65	65	130	30'-0"	4068	STR							
	1 SR		1 SR	21'-7"									
*AS504	OF		OF	TO	433	STR							2"
	18		18	24'-7"									
	1 SR		1 SR	21'-7"									
*AS505	OF		OF	TO	942	STR							1"
	39		39	24'-9"									
AS506		65	65	8'-10"	599	STR							
AS507	8		8	24'-2"	202	STR							
AS508	52		52	7'-6"	407	STR							
AS509	1	36	37	7'-8"	296	STR							
AS1001	81		81	25'-5"	8859	16	24'-0"						
AS1002	8	61	69	25'-10"	7670	16	24'-5"						
				SUB-TOTAL	24,990								

* - INDICATES MECHANICAL CONNECTOR SHALL BE ATTACHED

MARK	NUMBER PHASE 5A	NUMBER PHASE 5B	NUMBER TOTAL	LENGTH	WEIGHT	TYPE	DIMENSIONS A	B	C	D	E	R	INC
FORWARD APPROACH SLAB													
AS501	22	25	47	24'-5"	1197	STR							
*AS502	65		65	31'-11"	2164	STR							
AS503		65	65	30'-0"	2034	STR							
AS504		65	65	8'-5"	571	STR							
AS505	33	35	68	7'-6"	532	STR							
AS1001	55	61	116	25'-9"	12853	16	24'-4"						
				SUB-TOTAL	19,351								

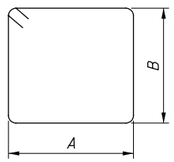
* - INDICATES MECHANICAL CONNECTOR SHALL BE ATTACHED

MARK	NUMBER PHASE 5A	NUMBER PHASE 5B	NUMBER TOTAL	LENGTH	WEIGHT	TYPE	DIMENSIONS A	B	C	D	E	R	INC
REAR ABUTMENT BACKWALL													
BW501	49	37	86	4'-6"	404	3	11"	1'-0"					
BW502	1	1	2	30'-0"	63	STR							
*BW503	1		1	20'-6"	21	STR							
BW504	NOT USED												
BW505		1	1	8'-3"	9	STR							
BW506	NOT USED												
				SUB-TOTAL	497								

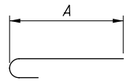
* - INDICATES MECHANICAL CONNECTOR SHALL BE ATTACHED

MARK	NUMBER PHASE 5A	NUMBER PHASE 5B	NUMBER TOTAL	LENGTH	WEIGHT	TYPE	DIMENSIONS A	B	C	D	E	R	INC
FORWARD ABUTMENT BACKWALL													
BW501	33	36	69	4'-6"	324	3	11"	1'-0"					
BW502	1	1	2	30'-0"	63	STR							
BW503	NOT USED												
*BW504	1		1	4'-2"	4	STR							
BW505	NOT USED												
BW506		1	1	7'-9"	8	STR							
				SUB-TOTAL	399								

* - INDICATES MECHANICAL CONNECTOR SHALL BE ATTACHED



TYPE-3



TYPE-16

NOTES:

1. ALL REINFORCING STEEL SHALL BE EPOXY COATED.
2. BAR SIZE: THE BAR SIZE IS INDICATED IN THE BAR MARK. THE MARK BEGINS WITH TWO OR THREE LETTERS OR NUMBERS THAT IDENTIFY THE BAR LOCATION. THE NEXT ONE OR TWO DIGITS INDICATE THE BAR SIZE, AND THE REMAINING TWO DIGITS ARE THE SEQUENCE NUMBER.

   EXAMPLE: SA1001
   SA = SUPERSTRUCTURE BAR
   10 = #10 BAR
   01 = BAR SEQUENCE NUMBER 1
3. BAR DIMENSIONS SHOWN ARE OUT-TO-OUT UNLESS OTHERWISE INDICATED.
4. STR. IN THE BAR TYPE COLUMN INDICATES A STRAIGHT BAR.
5. RAD INDICATES INSIDE RADIUS, UNLESS OTHERWISE NOTED.
6. INCR. INDICATES THE LENGTH INCREMENT FOR SERIES BARS.
7. STD. WRITTEN IN PLACE OF A DIMENSION INDICATES A STANDARD BEND AT THE END OF A BAR.
8. FIELD BEND BARS AS NECESSARY TO MATCH CURVATURE OF ROADWAY.

2021-09-22_BU 15 - RFC PLANS

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8415 Pulsar Place Suite 300
Columbus Ohio 43240

DESIGNED	DRAWN	REVIEWED	DATE
JAT	JAT	SAN	6/18/21
CHECKED	REVISED	STRUCTURE FILE NUMBER	
KDC		7702701	

REINFORCING STEEL LIST

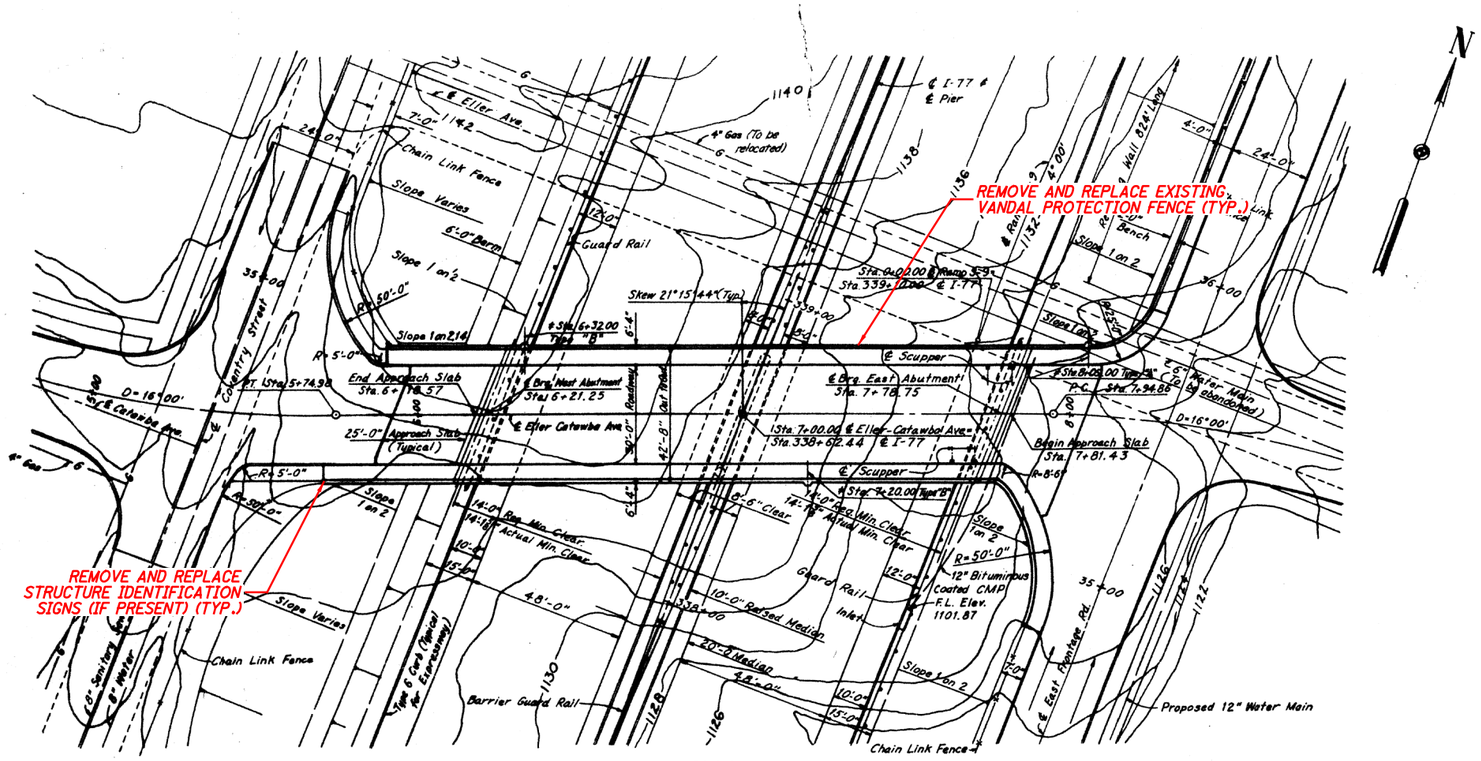
BRIDGE NO. SUM-77-0975L
I-77 SB OVER WATERLOO RD

SUM-76/77/8-8.24/9.74/0.00
PID No. 102329

8 / 8

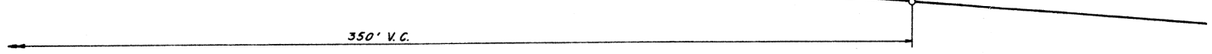
48
65

Released for Construction
Thomas J Powell, PE
10/05/2021

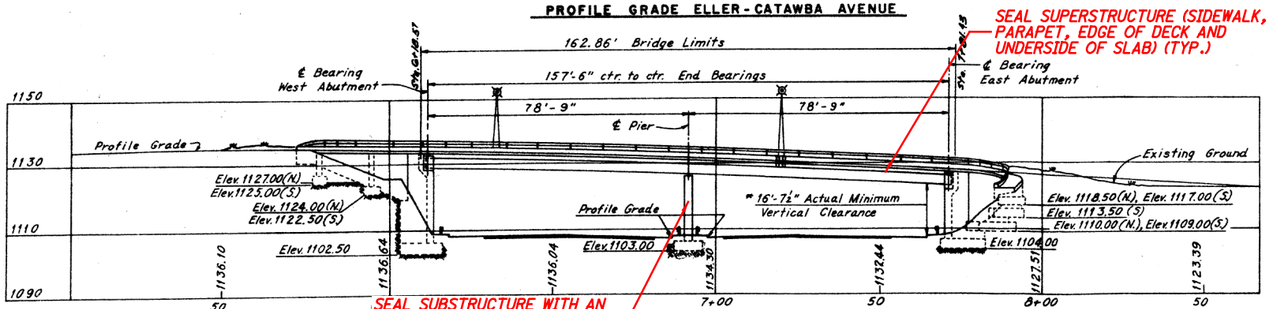


PLAN
Scale: 1" = 20'

℄ Denotes Light Standard Support



PROFILE GRADE ELLER-CATAWBA AVENUE



Note:
Rock lines shown are determined by interpolation of boring information and are approximate only.

ELEVATION
Scale: 1" = 20'

"16'-4" required minimum vertical clearance. Point of actual minimum vertical clearance occurs at north exterior beam and east edge of Northbound I-77 paved shoulder.

ORIGINAL CONSTRUCTION PLANS SHOWN FOR INFORMATION ONLY

NOTES:

1. FOR GENERAL NOTES, SEE SHEET 3/65 THRU 7/65.
2. FOR TRANSVERSE SECTION, SEE SHEET 9/65.

EXISTING STRUCTURE

TYPE: TWO SPAN CONTINUOUS STEEL BEAMS WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE

SPANS: 78'-9"±, 78'-9"± C/C BEARINGS

ROADWAY: 30'-0"± F/F OF CURBS WITH TWO 5'-2"± SIDEWALKS

LOADING: HS 20-44 (CASE II) AND ALTERNATE MILITARY LOADING

WEARING SURFACE: 1"± MONOLITHIC

SKEW: 21°15'44"± LEFT FORWARD

APPROACH SLABS: 25'-0"± LONG (AS-1-54)

ALIGNMENT: TANGENT

SUPERELEVATION: NONE

COORDINATES: LATITUDE 41°02'09"± N
LONGITUDE 81°30'18"± W

2021-09-22_BU 15 - RFC PLANS

DESCRIPTION

ISSUE RECORD:

NO.	DATE

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DESIGN AGENCY
PRIME AE
8415 Pulsar Place Suite 300
Columbus Ohio 43240

DESIGNED	DRAWN	REVIEWED	DATE
KDC	KDC	SAN	6/18/21
CHECKED	REVISED	STRUCTURE FILE NUMBER	
JAT		7702760	

SUMMIT COUNTY
STA. 6+18.57±
STA. 7+81.43±

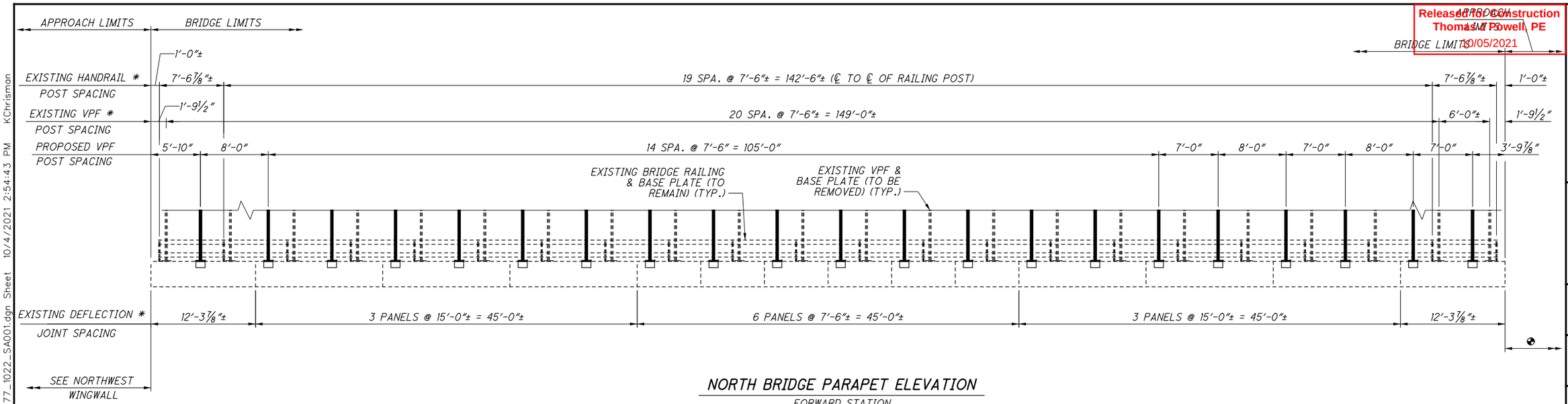
GENERAL PLAN
BRIDGE NO. SUM-77-1022
CATAWBA AVE OVER I-77

SUM-76/77/8-8.24/9.74/0.00
PID No. 102329

1 / 3

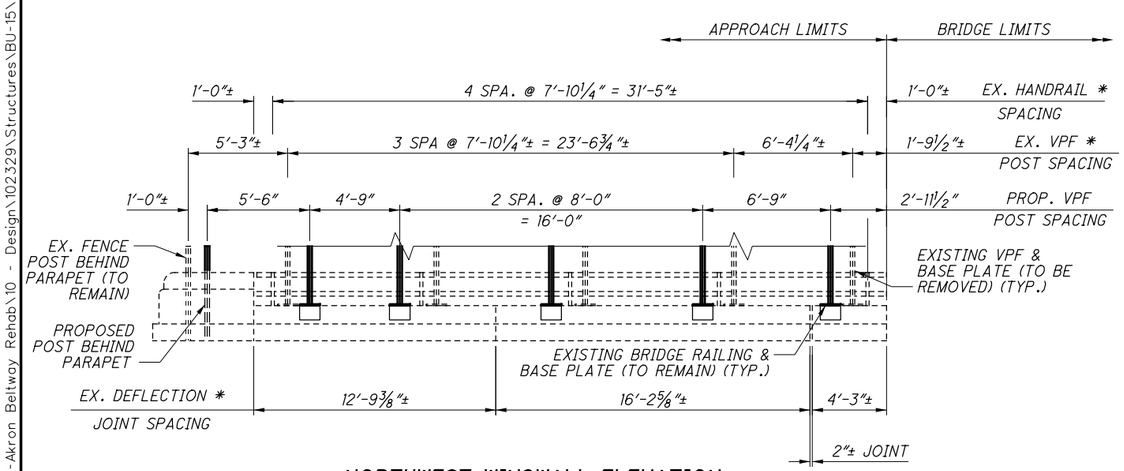
49
65

Released for Construction
Thomas M. Powell, PE
10/05/2021

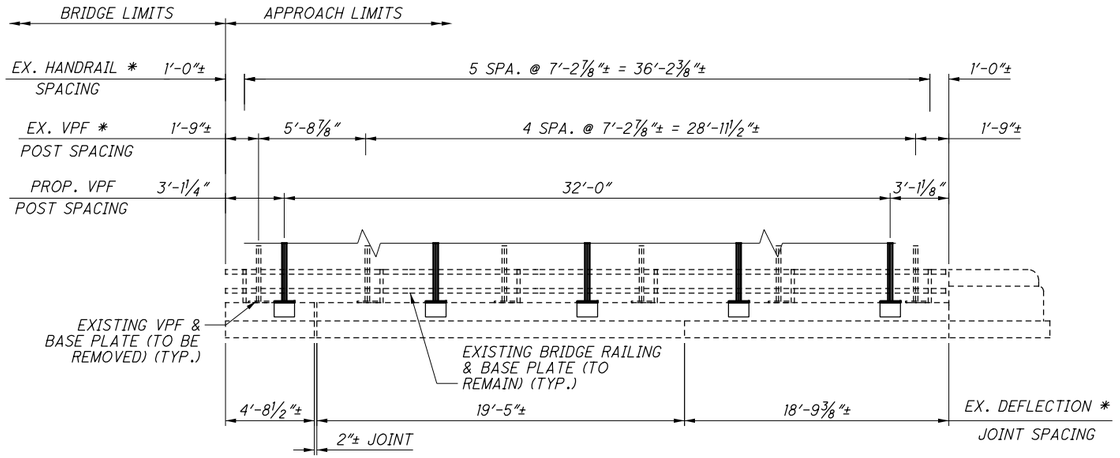


NORTH BRIDGE PARAPET ELEVATION

FORWARD STATION



NORTHWEST WINGWALL ELEVATION



DEVELOPED NORTHEAST WINGWALL ELEVATION

(MEASUREMENTS ALONG ℄ PARAPET)

LEGEND:

* - EXISTING DEFLECTION JOINT AND POST LOCATIONS TAKEN FROM ORIGINAL PLANS.

◓ - SEE NORTHEAST WINGWALL

NOTES:

1. FOR INFORMATION NOT SHOWN REFER TO SCD VPF-1-90.
2. FOR ADDITIONAL VANDAL PROTECTION FENCE DETAILS, SEE SHEET 8/65.

ISSUE RECORD

NO.	DATE	DESCRIPTION

DESIGN AGENCY
PRIME AE
8415 Pulsar Place Suite 300
Columbus Ohio 43240

DESIGNED	DRAWN	REVIEWED	DATE
HM	HM	SAN	6/18/21
CHECKED	REVISED		STRUCTURE FILE NUMBER
KDC			7702760

VANDAL PROTECTION FENCE DETAILS (1 OF 2)

BRIDGE NO. SUM-77-1022
CATAWBA AVE OVER I-77

SUM-76/77/8-8.24/9.74/0.00
PID No. 102329

2 / 3

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2021-09-22_BU 15 - RFC PLANS

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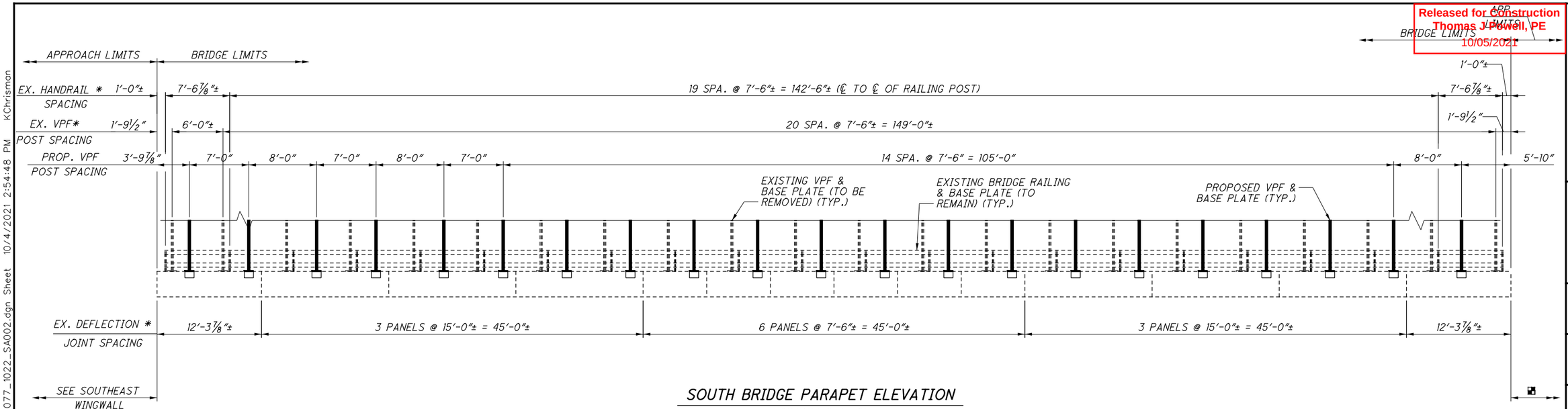
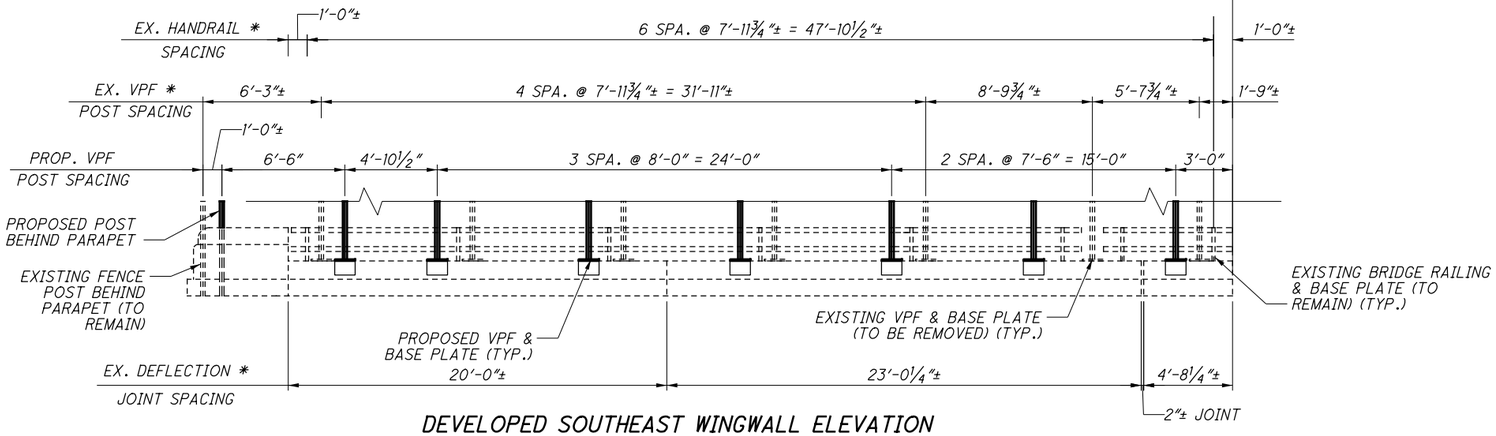
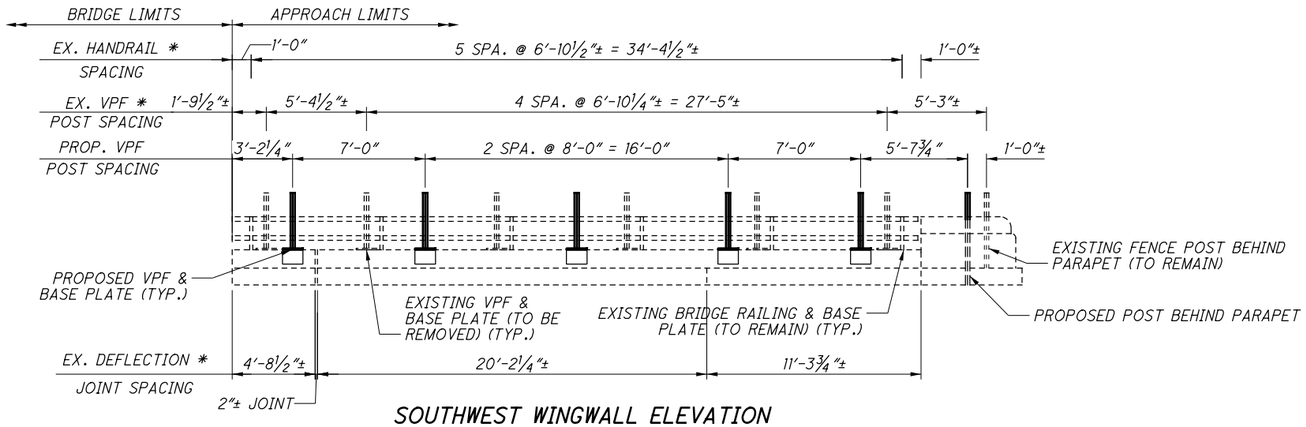


SOUTH BRIDGE PARAPET ELEVATION



DEVELOPED SOUTHEAST WINGWALL ELEVATION

(MEASUREMENTS ALONG ℄ PARAPET)



SOUTHWEST WINGWALL ELEVATION

LEGEND:

* - EXISTING DEFLECTION JOINT AND POST LOCATIONS TAKEN FROM ORIGINAL PLANS.

■ - SEE SOUTHWEST WINGWALL

NOTES:

1. FOR INFORMATION NOT SHOWN REFER TO SCD VPF-1-90.
2. FOR ADDITIONAL VANDAL PROTECTION FENCE DETAILS, SEE SHEET 8/65.

2021-09-22_BU 15 - RFC PLANS

DESIGN AGENCY
PRIME AE
8415 Pulsar Place Suite 300
Columbus Ohio 43240

DESIGNED	DRAWN	REVIEWED	DATE
HM	HM	SAN	6/18/21
CHECKED	REVISED	STRUCTURE FILE NUMBER	
KDC		7702760	

VANDAL PROTECTION FENCE DETAILS (2 OF 2)

BRIDGE NO. SUM-77-1022
CATAWBA AVE OVER I-77

SUM-76/77/8-8.24/9.74/0.00
PID No. 102329

3 / 3

51 / 65

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NO.	DATE	DESCRIPTION

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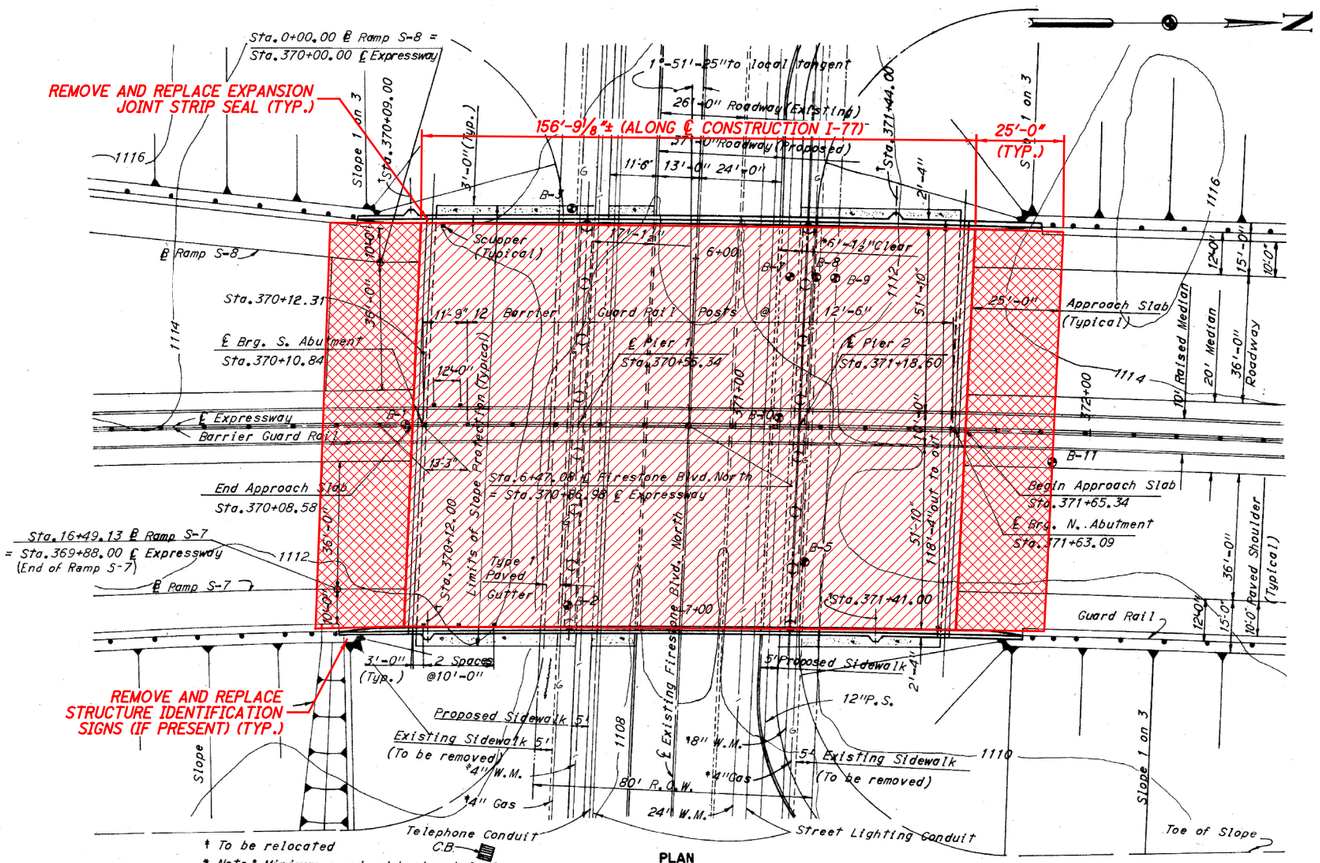

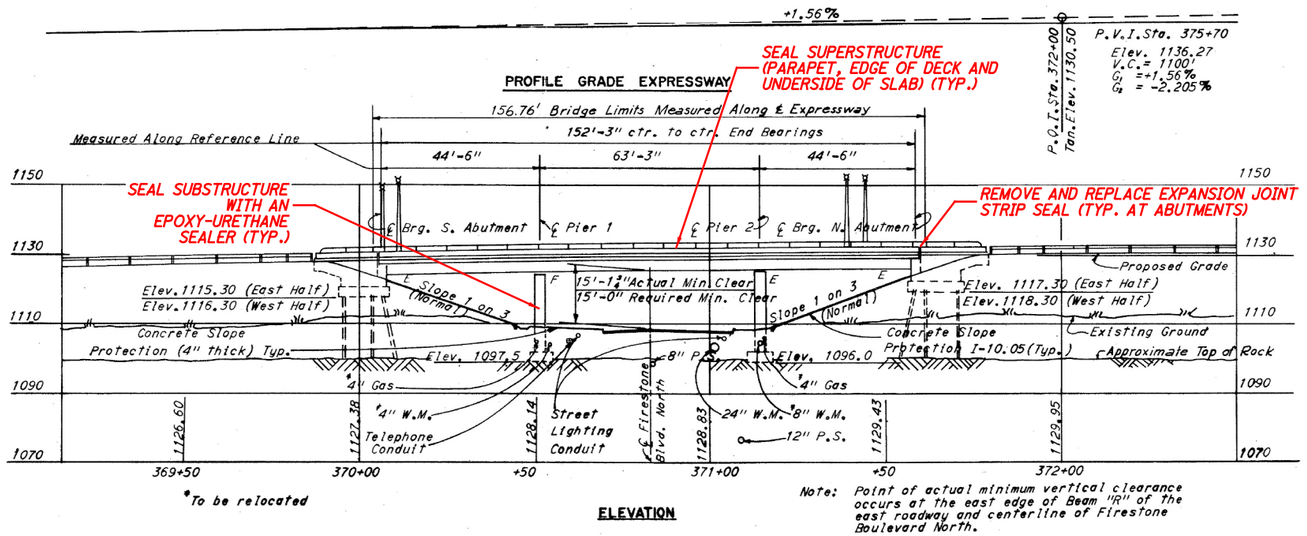

LEGEND:

- ▨ - LIMITS OF MICRO-SILICA CONCRETE OVERLAY ON BRIDGE DECK
- ▨ - LIMITS OF MICRO-SILICA CONCRETE OVERLAY ON APPROACH SLAB

ORIGINAL CONSTRUCTION PLANS SHOWN FOR INFORMATION ONLY

NOTES:

1. FOR GENERAL NOTES, SEE SHEET 3/65 THRU 7/65.
2. FOR TRANSVERSE SECTION, SEE SHEET 2/3.

EXISTING STRUCTURE

TYPE: THREE SPAN CONTINUOUS STEEL BEAMS WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE

SPANS: 44'-6"±, 63'-3"±, 44'-6"± C/C BEARINGS

ROADWAY: 55'-6"± F/F OF PARAPETS (NB)
55'-6"± F/F OF PARAPETS (SB)

LOADING: HS 20-44 (CASE I) AND ALTERNATE MILITARY LOADING

WEARING SURFACE: 3"± BITUMINOUS

SKEW: 1°51'25"± TO LOCAL TANGENT

APPROACH SLABS: 25'-0"± LONG (AS-1-54)

ALIGNMENT: 1°00'00"±

SUPERELEVATION: NONE

COORDINATES: LATITUDE 41°02'40"± N
LONGITUDE 81°30'20"± W

DESCRIPTION

ISSUE RECORD:

NO.	DATE

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DESIGN AGENCY
PRIME AE
8415 Pulsar Place Suite 300
Columbus Ohio 43240

DESIGNED	DRAWN	REVIEWED	DATE
KDC	KDC	SAN	6/18/21
CHECKED	REVISED	STRUCTURE FILE NUMBER	
JAT		7702795	

SUMMIT COUNTY
STA. 370+08.58±
STA. 371+65.34±

GENERAL PLAN
BRIDGE NO. SUM-77-1082
I-77 OVER FIRESTONE BLVD.

SUM-76/77/8-8.24/9.74/0.00
PID No. 102329

1 / 3

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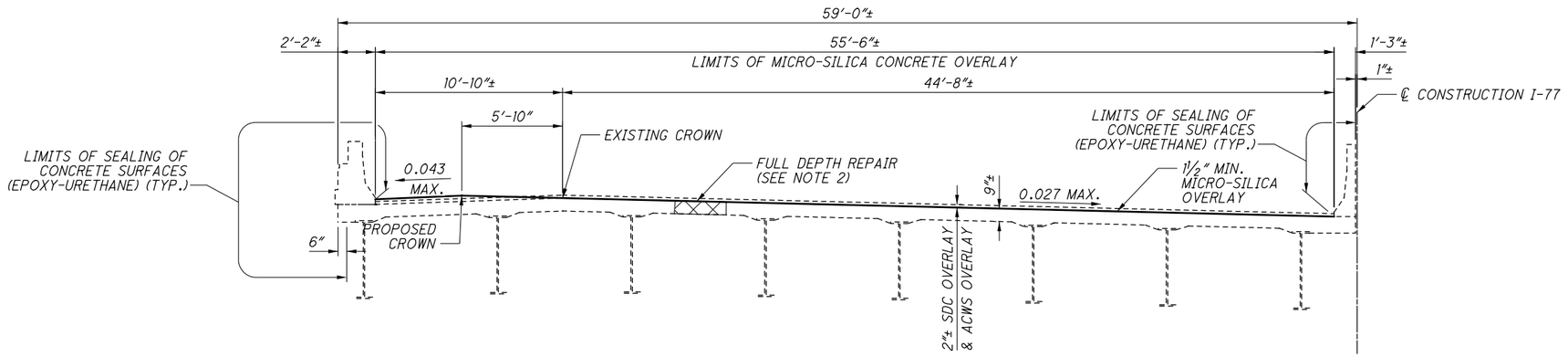
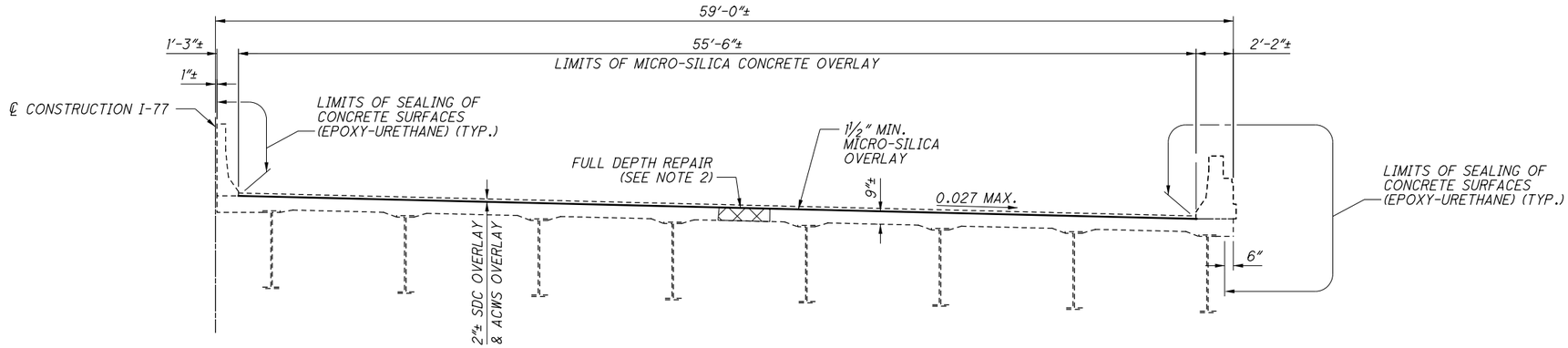
2021-09-22_BU15 - RFC PLANS

Released for Construction
Thomas J Powell, PE
10/05/2021



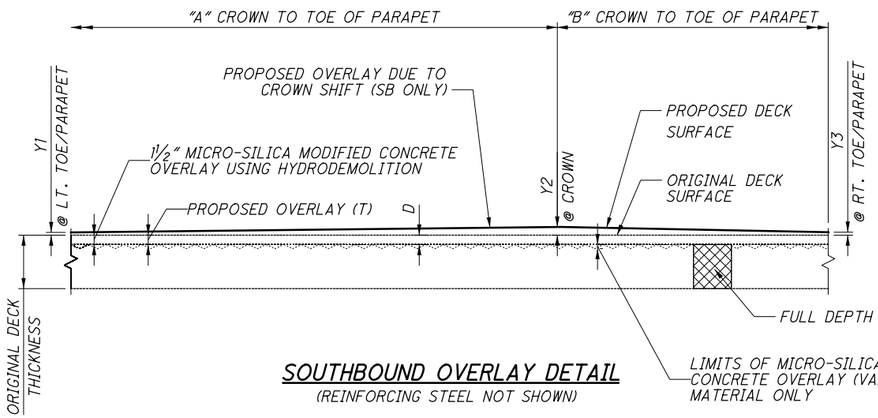
SOUTHBOUND TRANSVERSE SECTION

LIMITS OF MICRO-SILICA CONCRETE OVERLAY FROM 370+08.58± TO 371+65.34±



NORTHBOUND TRANSVERSE SECTION

LIMITS OF MICRO-SILICA CONCRETE OVERLAY FROM 370+08.58± TO 371+65.34±



SOUTHBOUND OVERLAY DETAIL

(REINFORCING STEEL NOT SHOWN)

DECK OVERLAY TABLE						
LOCATION	OVERLAY THICKNESS			WIDTH		REMOVAL DEPTH
	Y1	Y2	Y3	A	B	D
SUM-77-1082 (NB)	0"±	0"±	0"±	-	-	1½"
SUM-77-1082 (SB)	3½"±	4"±	0"±	5'-0"±	50'-6"±	1½"

DIMENSIONS Y1, Y2 & Y3 ARE MEASURED FROM THE TOP OF THE UNIFORM OVERLAY FROM HYDRODEMOLITION TO THE PROPOSED DECK SURFACE REQUIRED TO SHIFT CROWN.

LEGEND:

- LIMITS OF FULL DEPTH REPAIR

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3/65 THRU 7/65.
2. PERFORM FULL DEPTH REPAIR OF THE DECK AT THE AREAS DESIGNATED BY THE ENGINEER. FOR ADDITIONAL NOTES, SEE SHEET 7/65.
3. REMOVE EXISTING ASPHALT CONCRETE WEARING SURFACE (ACWS) & EXISTING CONCRETE OVERLAY. NEW OVERLAY TO MATCH EXISTING DECK CONCRETE OVERLAY ELEVATION, EXCEPT IN THE AREA OF CROWN ADJUSTMENT ON THE SOUTHBOUND DECK.

2021-09-22_BU 15 - RFC PLANS

DESIGN AGENCY
PRIME AE
8415 Pulsar Place Suite 300
Columbus Ohio 43240

DESIGNED	DRAWN	REVIEWED	DATE
KDC	KDC	SAN	6/18/21
CHECKED	REVISED	STRUCTURE FILE NUMBER	
JAT		7702795/7702884	

TRANSVERSE SECTION
BRIDGE NO. SUM-77-1082
I-77 OVER FIRESTONE BLVD.

SUM-76/77/8-
8.24/9.74/0.00
PID No. 102329

2 / 3

53
65

ISSUE RECORD

NO.	DATE	DESCRIPTION

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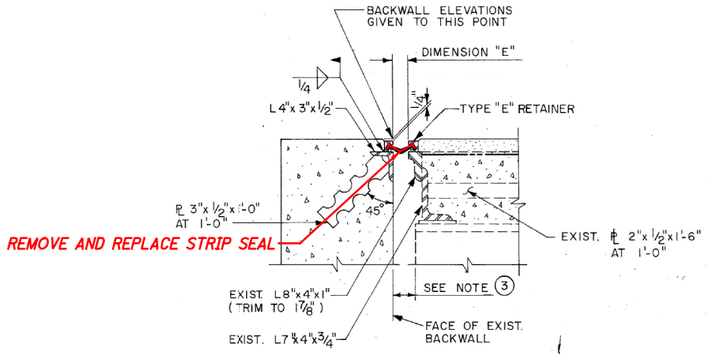
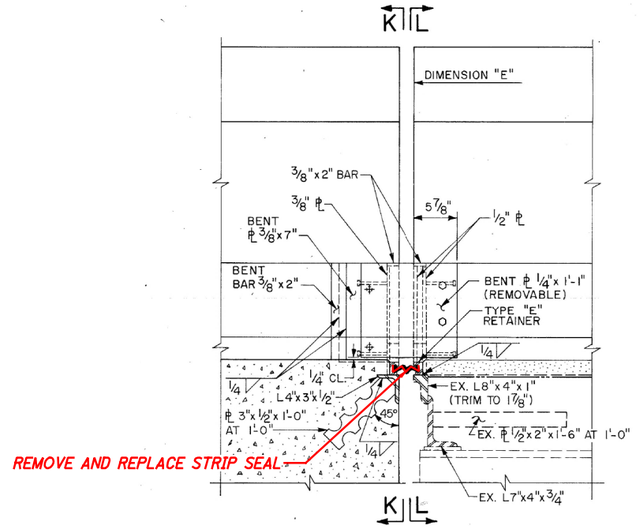


TYPICAL EXPANSION JOINT DETAIL



PARAPET EXPANSION JOINT ELEVATION

DIMENSION "E" SUM-77-10.82 over FIRESTONE BLVD.					
TEMPERATURE °F	50	60	70	80	90
NORTH ABUT.	2 1/16"	2"	1 15/16"	1 27/32"	1 3/4"
SOUTH ABUT.	2 1/32"	2"	1 31/32"	1 15/16"	1 29/32"

ORIGINAL CONSTRUCTION PLANS SHOWN FOR INFORMATION ONLY. ONLY WORK TO BE PERFORMED AT ABUTMENTS IS THE STRIP SEAL REPLACEMENT

NOTES:

1. REMOVE AND REPLACE THE EXPANSION JOINT STRIP SEALS AT THE REAR AND FORWARD ABUTMENTS.

2021-09-22_BU 15 - RFC PLANS

DESIGN AGENCY
PRIME AE
8415 Pulsar Place Suite 300
Columbus Ohio 43240

DESIGNED	DRAWN	REVIEWED	DATE
KDC	KDC	SAN	6/18/21
CHECKED	REVISED	STRUCTURE FILE NUMBER	
JAT		7702795	

EXPANSION JOINT DETAILS
BRIDGE NO. SUM-77-1082
I-77 OVER FIRESTONE BLVD.

SUM-76/77/8-
8.24/9.74/0.00
PID No. 102329

3 / 3

54
65

ISSUE RECORD:		
NO.	DATE	DESCRIPTION

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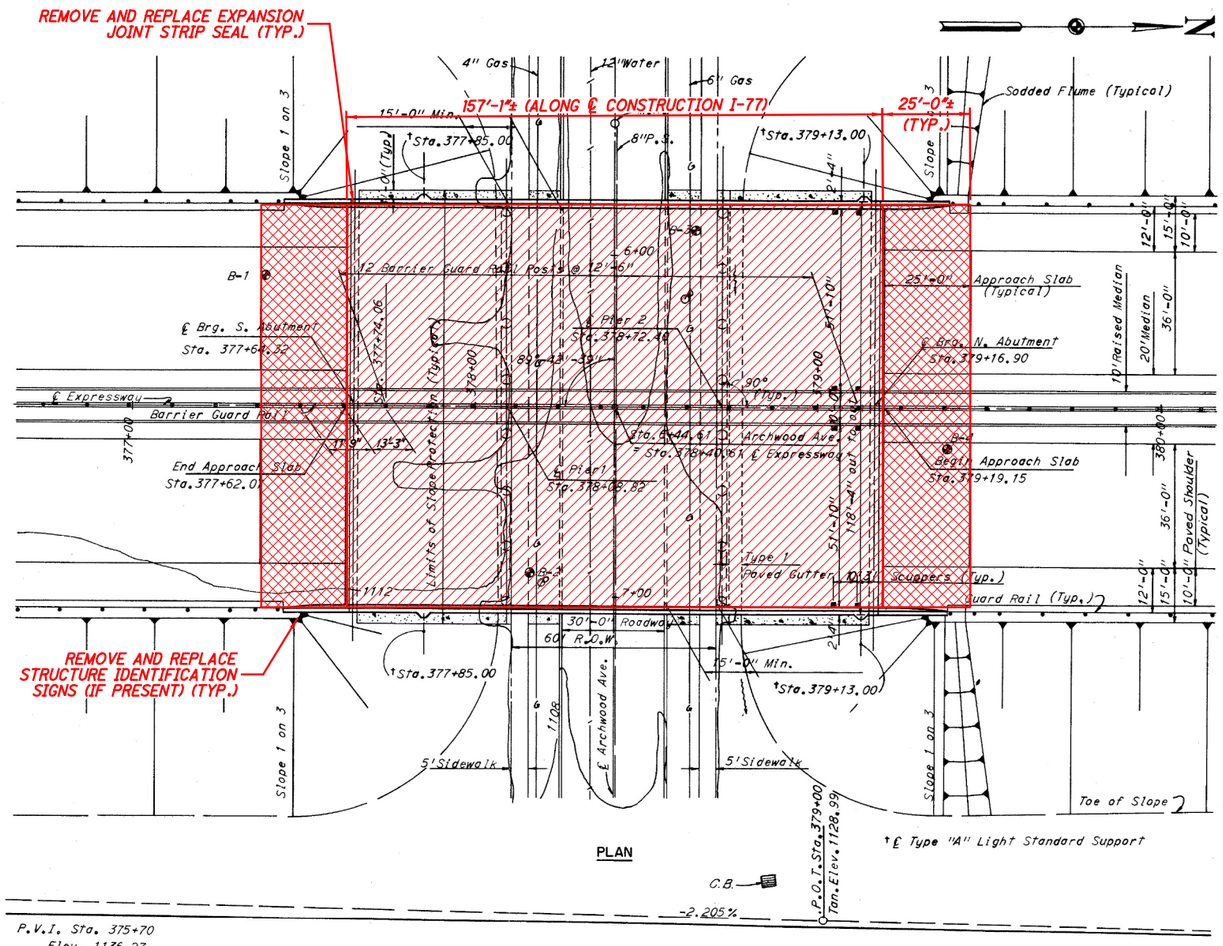
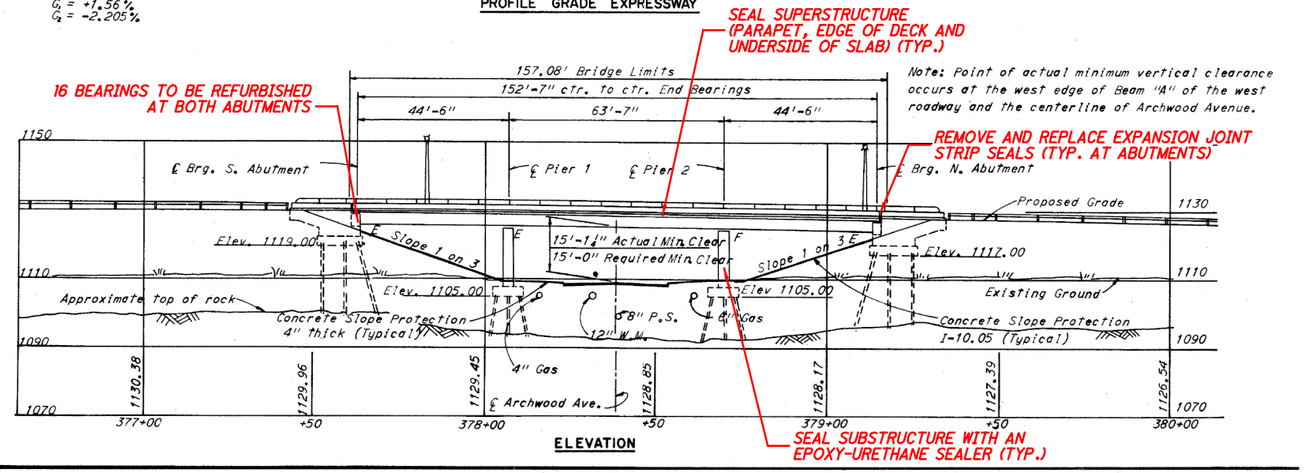


PLAN

*℄ Type "A" Light Standard Support

P.V.I. Sta. 375+70
Elev. 1136.27
V.C.=1100'
G_1 = +1.56%
G_2 = -2.205%

PROFILE GRADE EXPRESSWAY



ELEVATION

LEGEND:

- ▨ - LIMITS OF MICRO-SILICA CONCRETE OVERLAY ON BRIDGE DECK
- ▩ - LIMITS OF MICRO-SILICA CONCRETE OVERLAY ON APPROACH SLAB

ORIGINAL CONSTRUCTION PLANS SHOWN FOR INFORMATION ONLY

NOTES:

1. FOR GENERAL NOTES, SEE SHEET 3/65 THRU 7/65.
2. FOR TRANSVERSE SECTION, SEE SHEET 2/3.

EXISTING STRUCTURE

TYPE: THREE SPAN CONTINUOUS STEEL BEAMS WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE

SPANS: 44'-6"±, 63'-7"±, 44'-6"± C/C BEARINGS

ROADWAY: 55'-0"± F/F OF PARAPETS (NB)
55'-0"± F/F OF PARAPETS (SB)

LOADING: HS 20-44 (CASE I) AND ALTERNATE MILITARY LOADING

WEARING SURFACE: 3"± BITUMINOUS

SKEW: NONE

APPROACH SLABS: 25'-0"± LONG (AS-1-54)

ALIGNMENT: TANGENT

SUPERELEVATION: NONE

COORDINATES: LATITUDE 41°02'48"± N
LONGITUDE 81°30'20"± W

2021-09-22_BU 15 - RFC PLANS

DESIGN AGENCY
PRIME AE
8415 Pulsar Place Suite 300
Columbus Ohio 43240

DESIGNED	DRAWN	REVIEWED	DATE
KDC	KDC	SAN	6/18/21
CHECKED	REVISED	STRUCTURE FILE NUMBER	
JAT		7702884	

SUMMIT COUNTY
STA. 377+62.07±
STA. 379+19.15±

GENERAL PLAN
BRIDGE NO. SUM-77-1096
I-77 OVER ARCHWOOD AVE.

SUM-76/77/8-8.24/9.74/0.00
PID No. 102329

1 / 3

55 / 65

ISSUE RECORD:

NO.	DATE	DESCRIPTION

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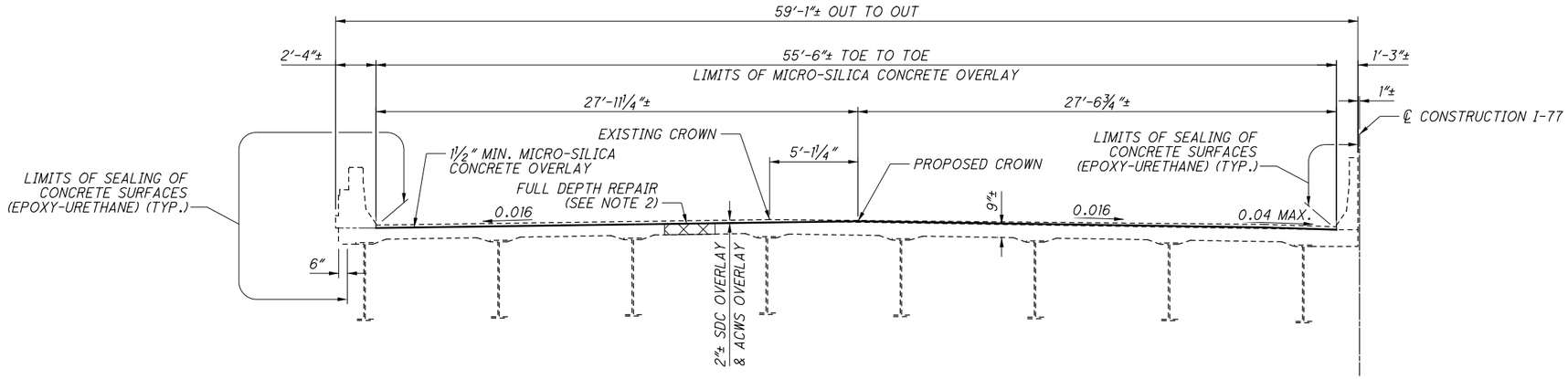
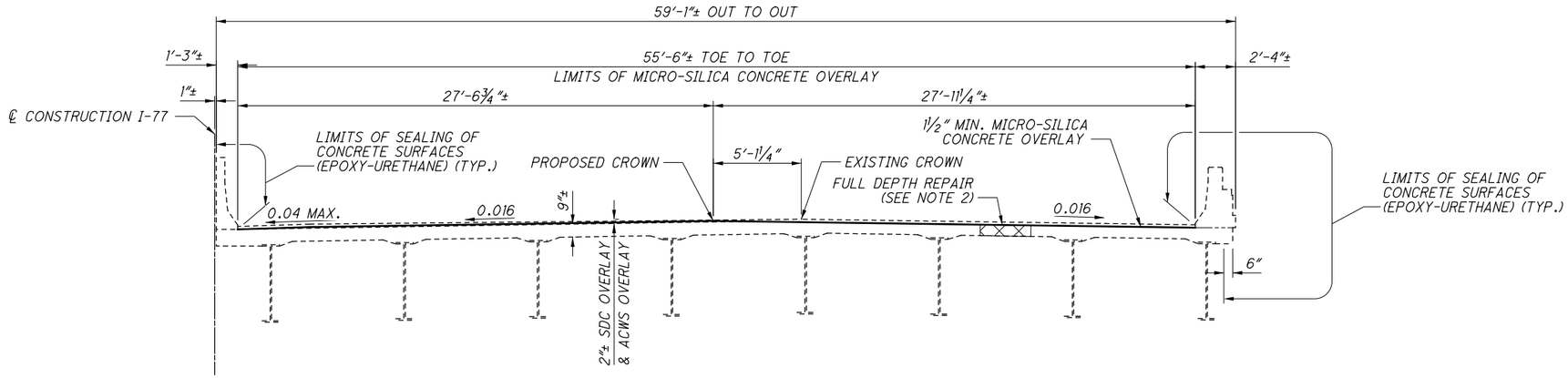
10/05/2021



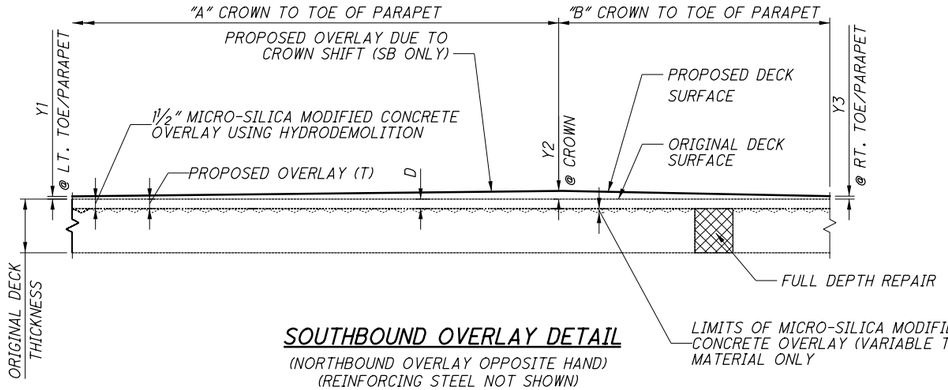
SOUTHBOUND TRANSVERSE SECTION

LIMITS OF MICRO-SILICA CONCRETE OVERLAY FROM 377+62.07± TO 379+19.15±



NORTHBOUND TRANSVERSE SECTION

LIMITS OF MICRO-SILICA CONCRETE OVERLAY FROM 377+62.07± TO 379+19.15±



SOUTHBOUND OVERLAY DETAIL

(NORTHBOUND OVERLAY OPPOSITE HAND)
(REINFORCING STEEL NOT SHOWN)

DECK OVERLAY TABLE						
LOCATION	OVERLAY THICKNESS			WIDTH		REMOVAL DEPTH
	Y1	Y2	Y3	A	B	D
SUM-77-1096 (NB)	0"±	⅞"±	0"±	27'-11¼"±	27'-6¾"±	1½"
SUM-77-1096 (SB)	0"±	⅞"±	0"±	27'-6¾"±	27'-11¼"±	1½"

DIMENSIONS Y1, Y2 & Y3 ARE MEASURED FROM THE TOP OF THE UNIFORM OVERLAY FROM HYDRODEMOLITION TO THE PROPOSED DECK SURFACE REQUIRED TO SHIFT CROWN.

LEGEND:

- LIMITS OF FULL DEPTH REPAIR

NOTES:

1. FOR GENERAL NOTES, SEE SHEETS 3/65 THRU 7/65.
2. PERFORM FULL DEPTH REPAIR OF THE DECK AT THE AREAS DESIGNATED BY THE ENGINEER. FOR ADDITIONAL NOTES, SEE SHEET 7/65.
3. REMOVE EXISTING ASPHALT CONCRETE WEARING SURFACE (ACWS) & EXISTING CONCRETE OVERLAY. NEW OVERLAY TO MATCH EXISTING DECK CONCRETE OVERLAY ELEVATION, EXCEPT IN THE AREA OF THE CROWN ADJUSTMENT.

ISSUE RECORD:

NO.	DATE	DESCRIPTION

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DESIGN AGENCY
PRIME AE
8415 Pulsar Place Suite 300
Columbus Ohio 43240

DESIGNED	DRAWN	REVIEWED	DATE
KDC	KDC	SAN	6/18/21
CHECKED	REVISED	STRUCTURE FILE NUMBER	
JAT		7702884	

TRANSVERSE SECTION
BRIDGE NO. SUM-77-1096
I-77 OVER ARCHWOOD AVE.

SUM-76/77/8-
8.24/9.74/0.00
PID No. 102329

2 / 3

56
65

2021-09-22_BU 15 - RFC PLANS

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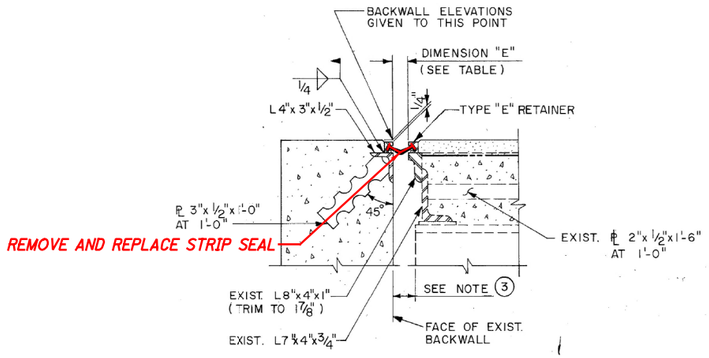
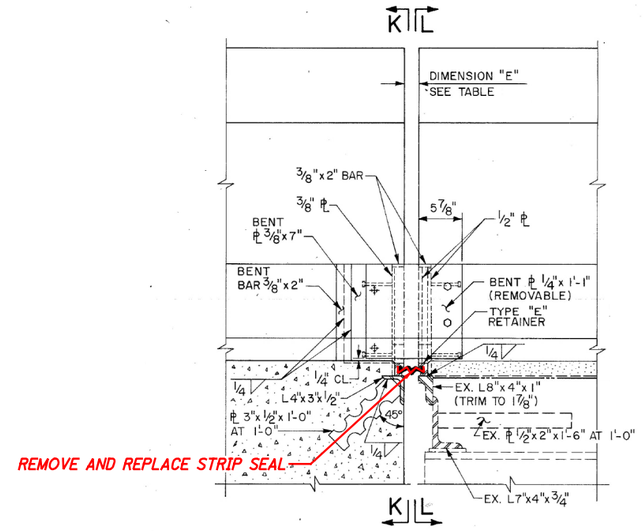
Thomas J Powell, PE
10/05/2021



TYPICAL EXPANSION JOINT DETAIL



PARAPET EXPANSION JOINT ELEVATION

DIMENSION "E" SUM-77-10.96 over ARCHWOOD AVE.					
TEMPERATURE °F	50	60	70	80	90
NORTH ABUT.	2 1/16"	2"	1 15/16"	1 27/32"	1 3/4"
SOUTH ABUT.	2 1/32"	2"	1 31/32"	1 15/16"	1 29/32"

ORIGINAL CONSTRUCTION PLANS SHOWN FOR INFORMATION ONLY. ONLY WORK TO BE PERFORMED AT ABUTMENTS IS THE STRIP SEAL REPLACEMENT

NOTES:

1. REMOVE AND REPLACE THE EXPANSION JOINT STRIP SEALS AT THE REAR AND FORWARD ABUTMENTS.

2021-09-22_BU 15 - RFC PLANS

DESIGN AGENCY
PRIME AE
8415 Pulsar Place Suite 300
Columbus Ohio 43240

DESIGNED	DRAWN	REVIEWED	DATE
KDC	KDC	SAN	6/18/21
CHECKED	REVISED	STRUCTURE FILE NUMBER	
JAT		7702884	

EXPANSION JOINT DETAILS
BRIDGE NO. SUM-77-1096
I-77 OVER ARCHWOOD AVE

SUM-76/77/8-8.24/9.74/0.00
PID No. 102329

3 / 3

57
65

ISSUE RECORD:

NO.	DATE	DESCRIPTION

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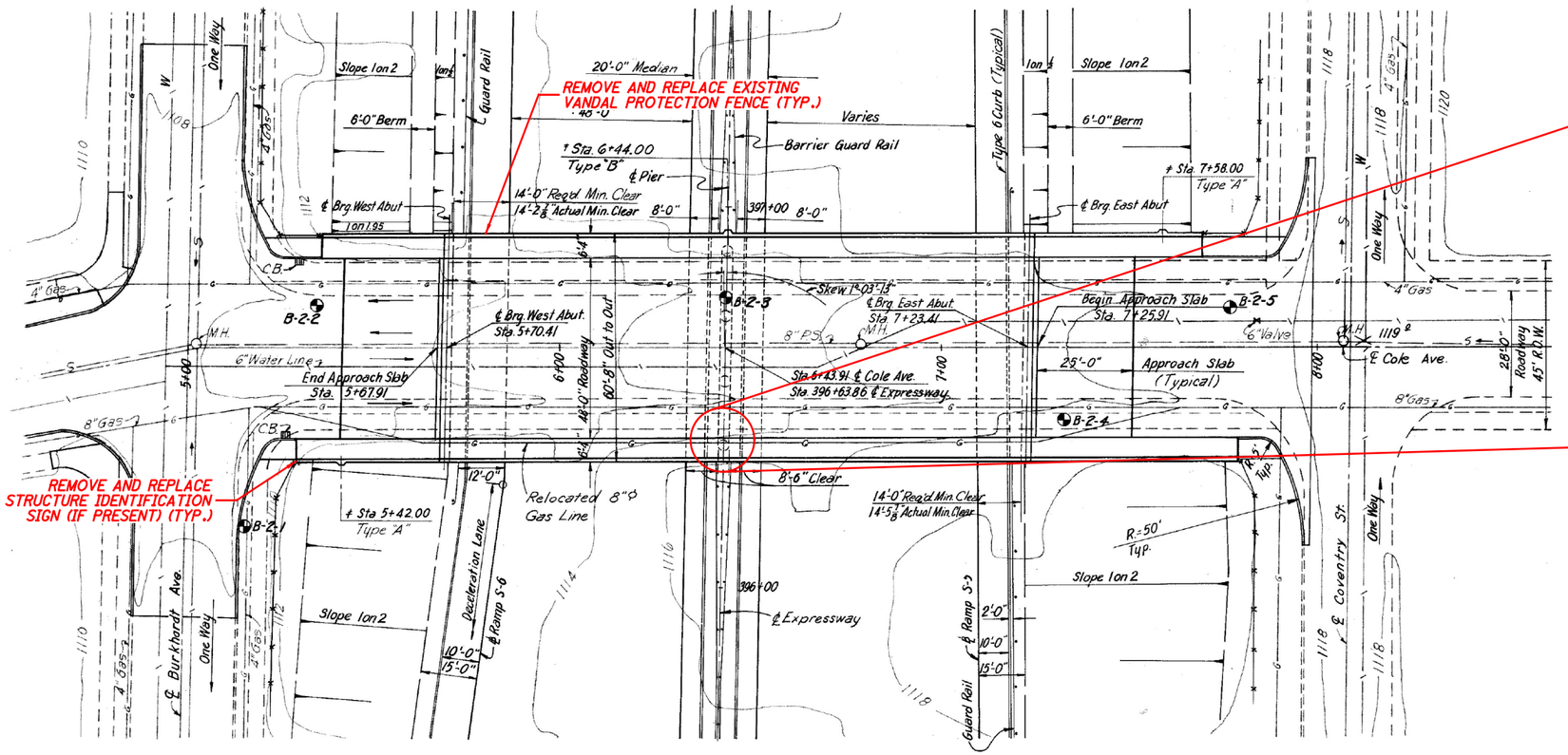
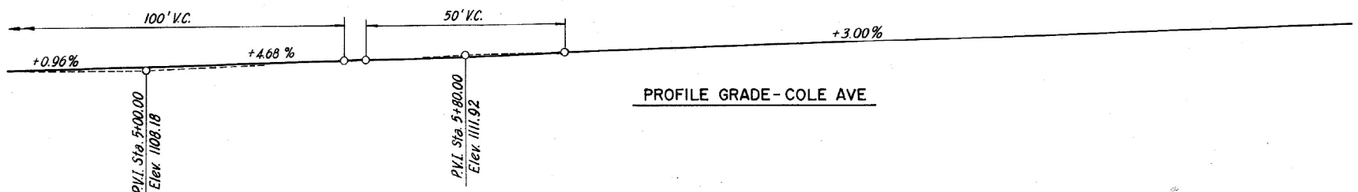
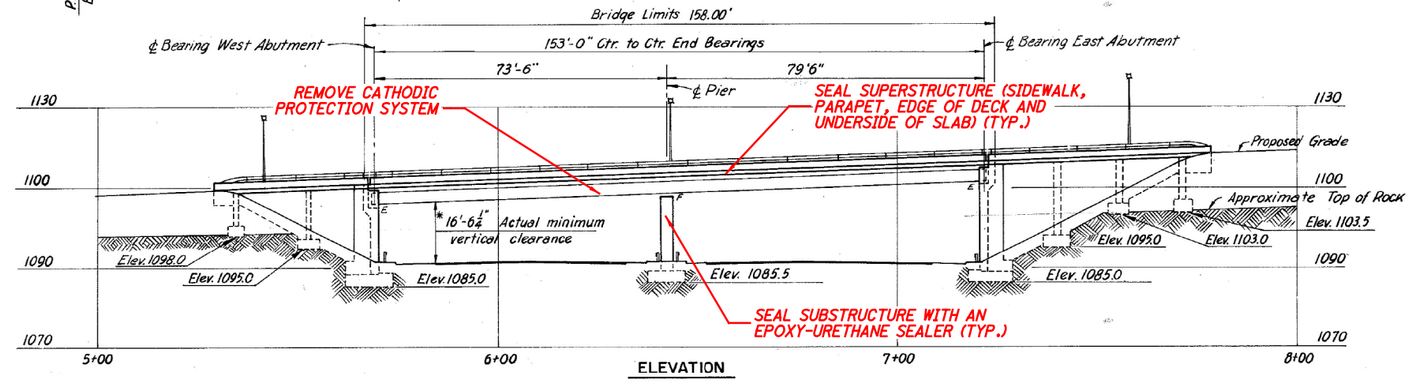


PLAN

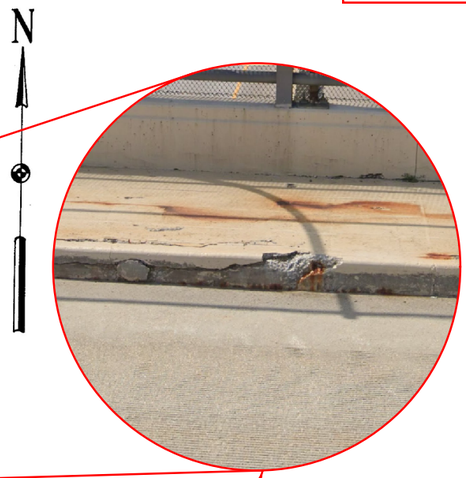
† Denotes Light Standard Support



PROFILE GRADE - COLE AVE



ELEVATION



REPAIR AREAS OF THE CURB AS DESIGNATED BY THE ENGINEER (TYP.)

ORIGINAL CONSTRUCTION PLANS SHOWN FOR INFORMATION ONLY

NOTES:

1. FOR GENERAL NOTES, SEE SHEET 3/65 THRU 7/65.
2. FOR TRANSVERSE SECTION, SEE SHEET 9/65.

EXISTING STRUCTURE

TYPE: TWO SPAN CONTINUOUS STEEL BEAMS WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE

SPANS: 73'-6"±, 79'-6"± C/C BEARINGS

ROADWAY: 48'-0"± F/F OF CURBS WITH TWO 5'-2"± SIDEWALKS

LOADING: CF400(57)

WEARING SURFACE: 1.5"± INTEGRAL

SKEW: 1°03'13"± RIGHT

APPROACH SLABS: 25'-0"± LONG (AS-1-54)

ALIGNMENT: TANGENT

SUPERELEVATION: NONE

COORDINATES: LATITUDE 41°03'06"± N
LONGITUDE 81°30'19"± W

2021-09-22_BU 15 - RFC PLANS

DESCRIPTION

ISSUE RECORD:

NO.	DATE

DESIGN AGENCY
PRIME AE
8415 Pulsar Place Suite 300
Columbus Ohio 43240

DESIGNED	DRAWN	REVIEWED	DATE
KDC	KDC	SAN	6/18/21
CHECKED	REVISED	STRUCTURE FILE NUMBER	
JAT		7702825	

SUMMIT COUNTY
STA. 5+67.91±
STA. 7+25.91±

GENERAL PLAN
BRIDGE NO. SUM-77-1132
COLE AVE. OVER I-77

SUM-76/77/8-8.24/9.74/0.00
PID No. 102329

1 / 3

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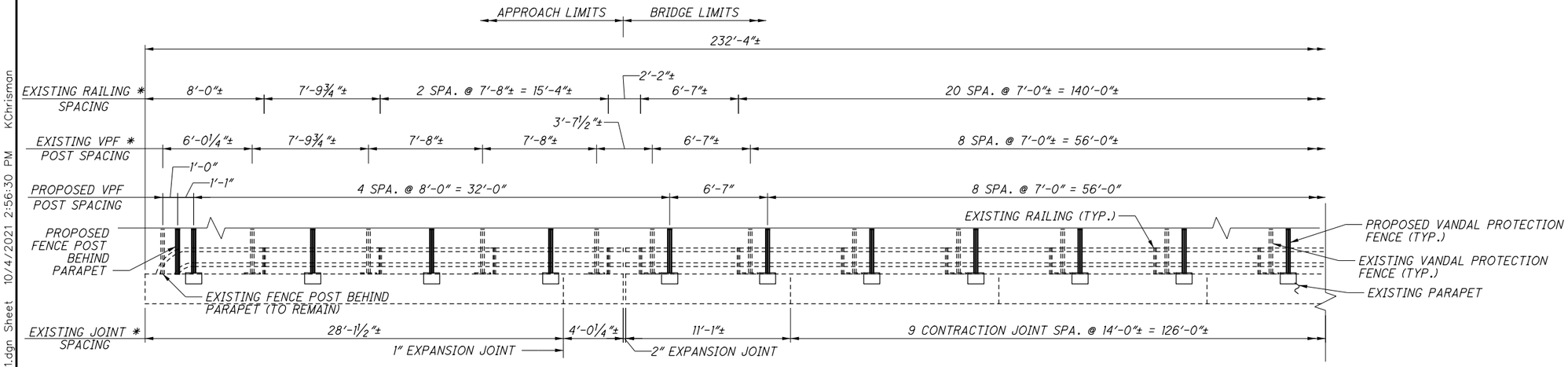
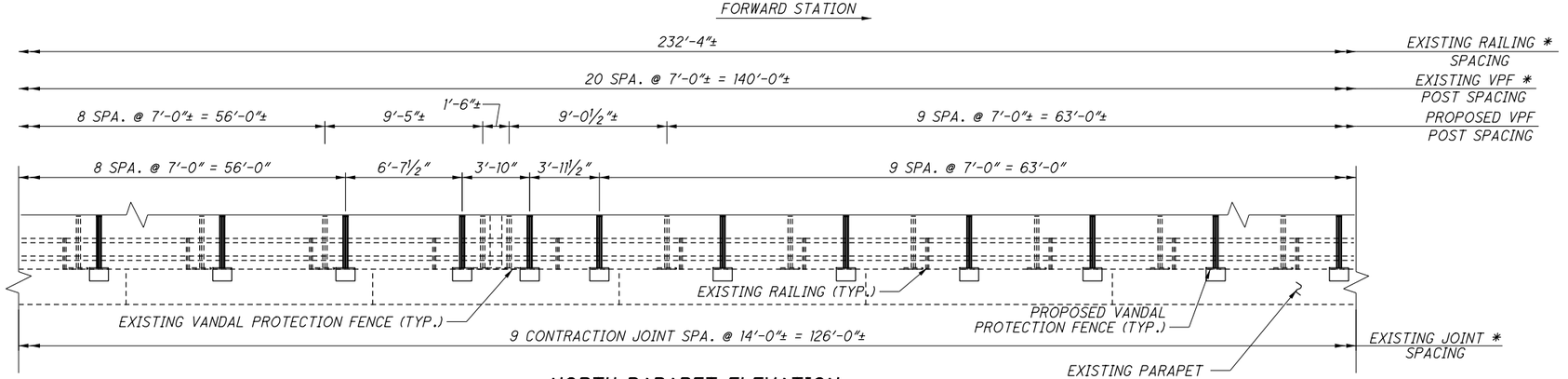
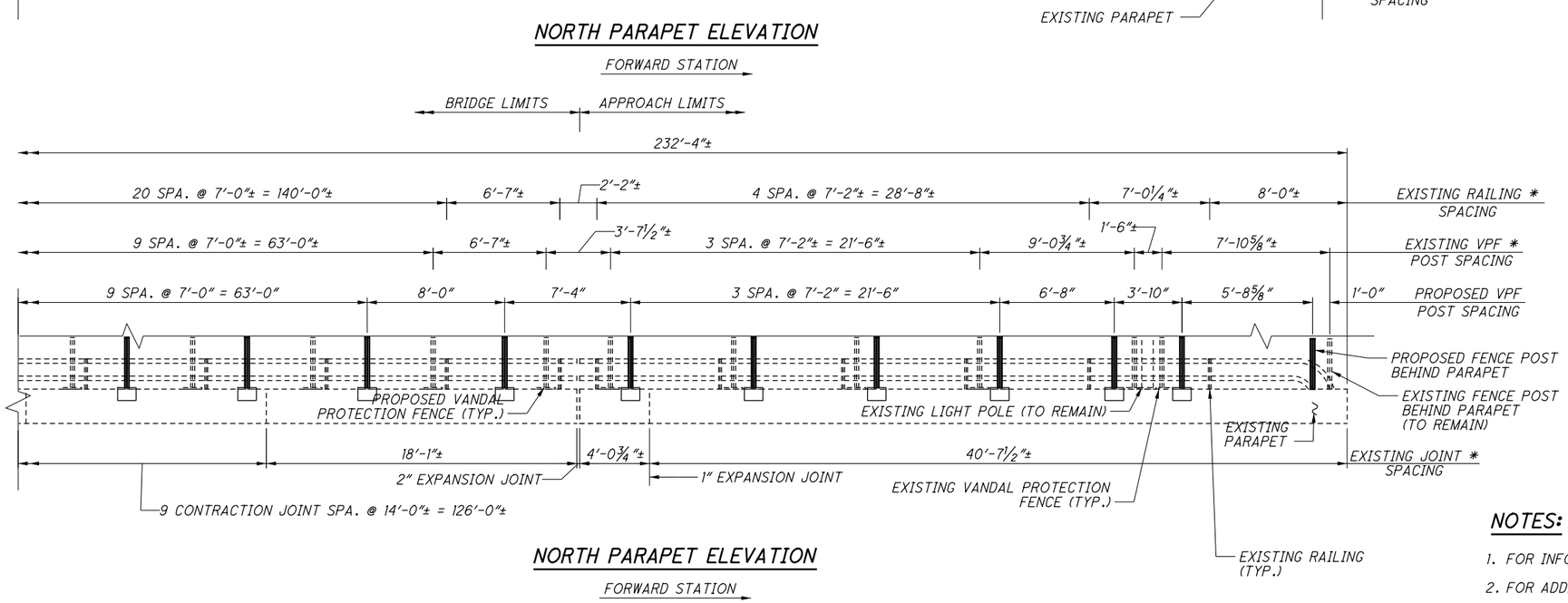


NORTH PARAPET ELEVATION



NORTH PARAPET ELEVATION



NORTH PARAPET ELEVATION

FORWARD STATION

LEGEND:

* - EXISTING DEFLECTION JOINT AND POST LOCATIONS TAKEN FROM ORIGINAL PLANS.

NOTES:

1. FOR INFORMATION NOT SHOWN REFER TO SCD VPF-1-90.
2. FOR ADDITIONAL VANDAL PROTECTION FENCE DETAILS, SEE SHEET 8/65.

2021-09-22_BU 15 - RFC PLANS

ISSUE RECORD:

NO.	DATE	DESCRIPTION

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DESIGN AGENCY
PRIME AE
8415 Pulsar Place Suite 300
Columbus Ohio 43240

DESIGNED	DRAWN	REVIEWED	DATE
HM	HM	SAN	6/18/21
CHECKED	REVISED	STRUCTURE FILE NUMBER	
KDC		7702825	

VANDAL PROTECTION FENCE DETAILS (1 OF 2)

BRIDGE NO. SUM-77-1132
COLE AVE. OVER I-77

SUM-76/77/ 8-8.24/ 9.74/ 0.00
PID No. 102329

2 / 3

59 / 65

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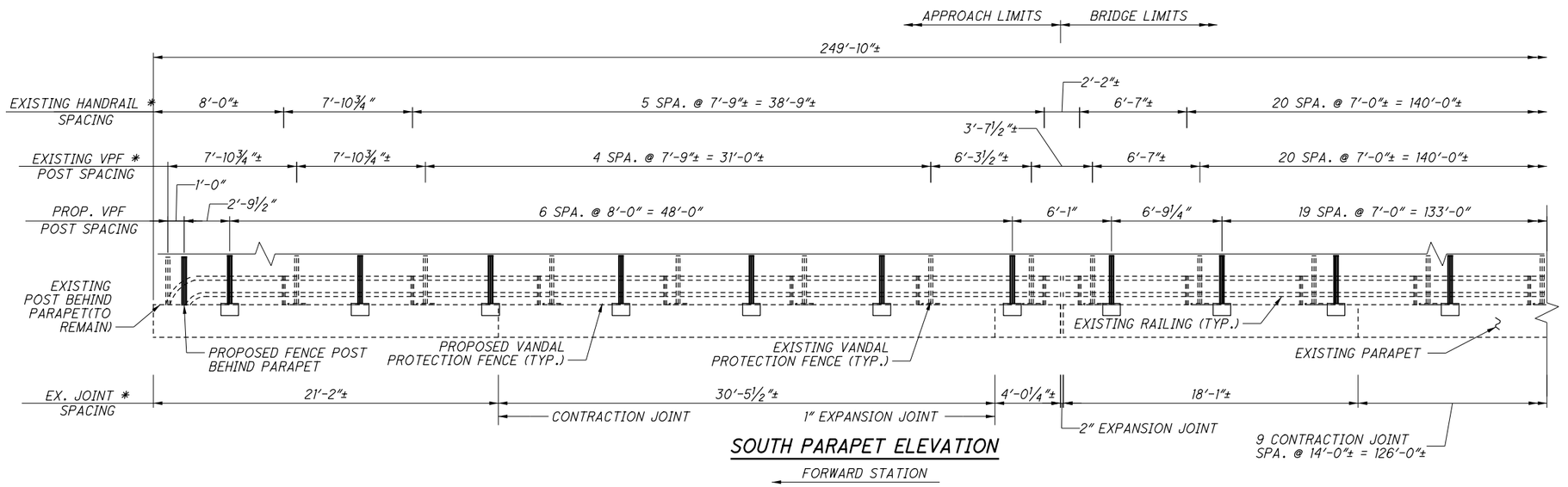
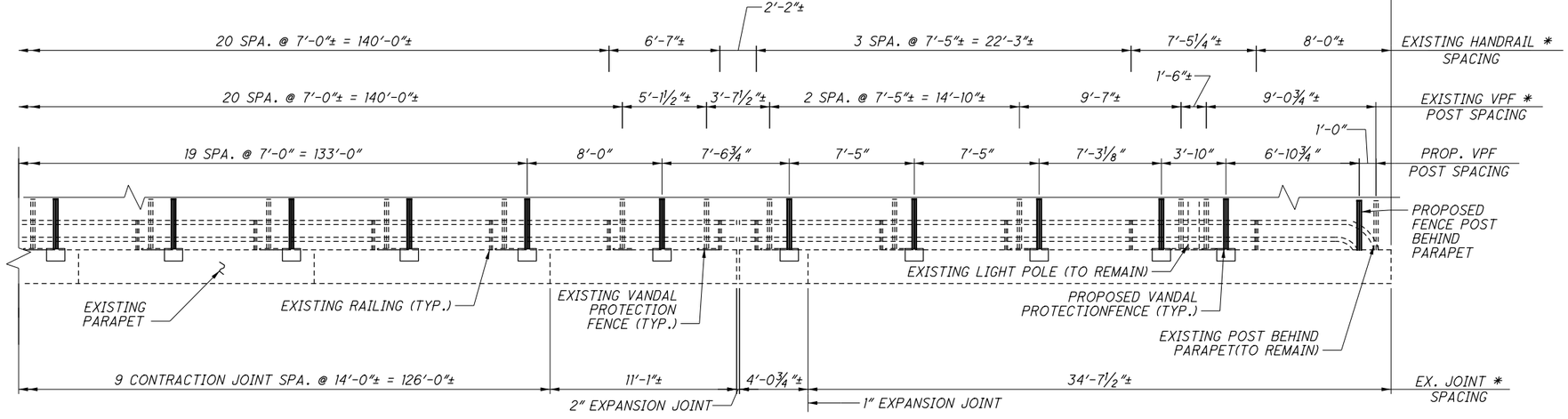


SOUTH PARAPET ELEVATION

FORWARD STATION



SOUTH PARAPET ELEVATION

FORWARD STATION

LEGEND:

* - EXISTING DEFLECTION JOINT AND POST LOCATIONS TAKEN FROM EXISTING PLANS.

NOTES:

1. FOR INFORMATION NOT SHOWN REFER TO SCD VPF-1-96.
2. FOR ADDITIONAL VANDAL PROTECTION FENCE DETAILS SEE SHEET 8/65.

2021-09-22 BU 15 - RFC PLANS

DESIGN AGENCY
PRIME AE
8415 Pulsar Place Suite 300
Columbus Ohio 43240

DESIGNED	DRAWN	REVIEWED	DATE
HM	HM	SAN	6/18/21
CHECKED	REVISED	STRUCTURE FILE NUMBER	
KDC		7702825	

VANDAL PROTECTION FENCE DETAILS (2 OF 2)

BRIDGE NO. SUM-77-1132
COLE AVE. OVER I-77

SUM-76/77/ 8-
8.24/ 9.74/ 0.00
PID No. 102329

3 / 3

60
65

ISSUE RECORD:

NO.	DATE	DESCRIPTION

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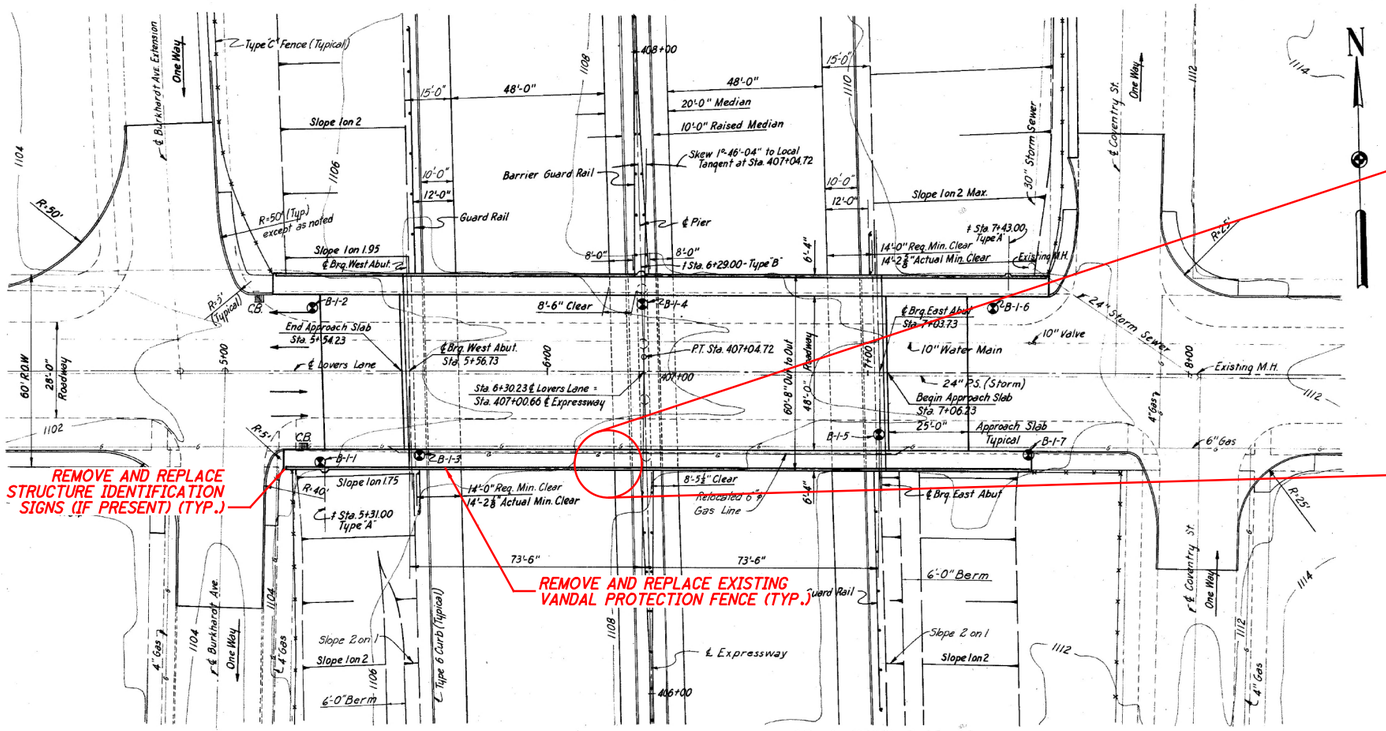
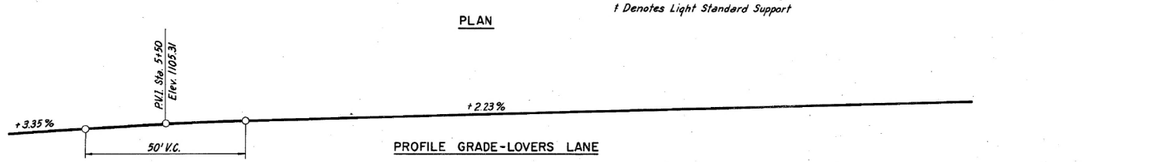
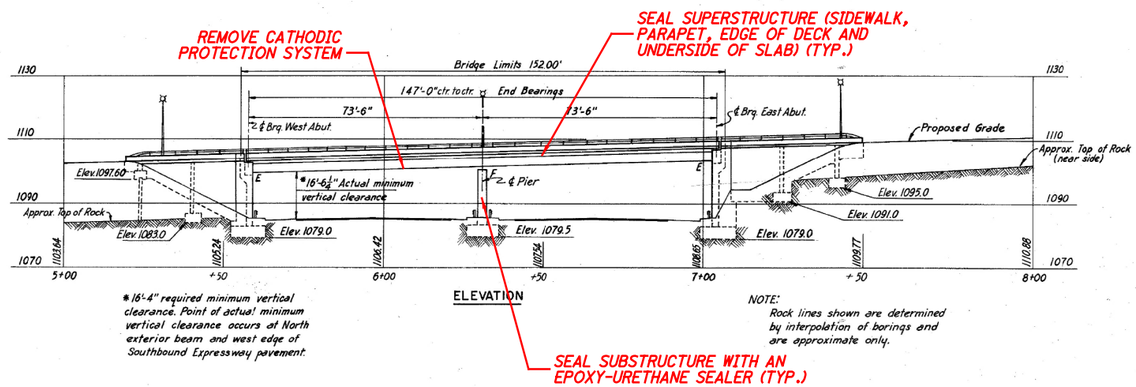


PLAN

℄ Denotes Light Standard Support



PROFILE GRADE-LOVERS LANE



*16'-4" required minimum vertical clearance. Point of actual minimum vertical clearance occurs at North exterior beam and west edge of Southbound Expressway pavement.

ELEVATION

NOTE:
Rock lines shown are determined by interpolation of borings and are approximate only.

REPLACE MISSING TOP RAILING ON THE SOUTHERN PARAPET PER STD. DWG. VPF-1-90 AND REPAIR AREAS OF THE CURB AS DESIGNATED BY THE ENGINEER

ORIGINAL CONSTRUCTION PLANS SHOWN FOR INFORMATION ONLY

NOTES:

1. FOR GENERAL NOTES, SEE SHEET 3/65 THRU 7/65.
2. FOR TRANSVERSE SECTION, SEE SHEET 9/65.

EXISTING STRUCTURE

TYPE: TWO SPAN CONTINUOUS STEEL BEAMS WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE

SPANS: 73'-6"±, 73'-6"± C/C BEARINGS

ROADWAY: 48'-0"± F/F OF CURB WITH TWO 5'-2"± SIDEWALKS

LOADING: CF400(57)

WEARING SURFACE: 3.1" INTEGRAL

SKEW: 1°46'04"± LEFT FORWARD TO LOCAL TANGENT

APPROACH SLABS: 25'-0"± LONG (AS-1-54)

ALIGNMENT: TANGENT

SUPERELEVATION: NONE

COORDINATES: LATITUDE 41°03'16"± N
LONGITUDE 81°30'19"± W

DESCRIPTION

ISSUE RECORD:

NO.	DATE

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PRIME AE
8415 Pulsar Place Suite 300
Columbus Ohio 43240

DESIGNED	DRAWN	REVIEWED	DATE
KDC	KDC	SAN	6/18/21
CHECKED	REVISED	STRUCTURE FILE NUMBER	
JAT		7702914	

SUMMIT COUNTY
STA. 5+54.23±
STA. 7+06.23±

2021-09-22_BU 15 - RFC PLANS

GENERAL PLAN
BRIDGE NO. SUM-77-1152
LOVERS LANE OVER I-77

SUM-76/77/8-8.24/9.74/0.00
PID No. 102329

1 / 3

61
65

Released for Construction
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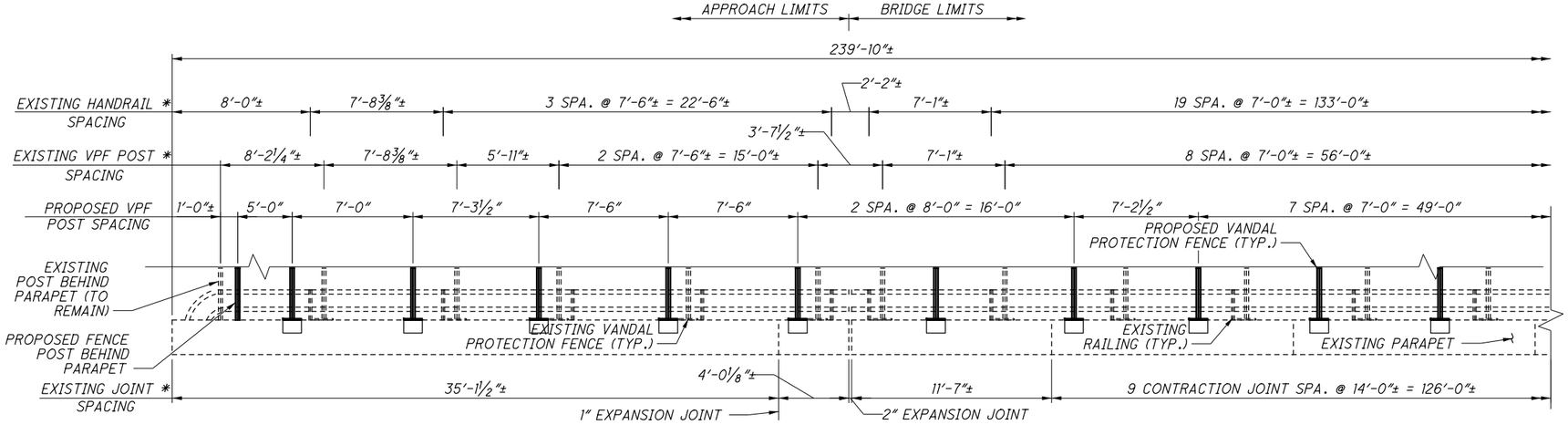
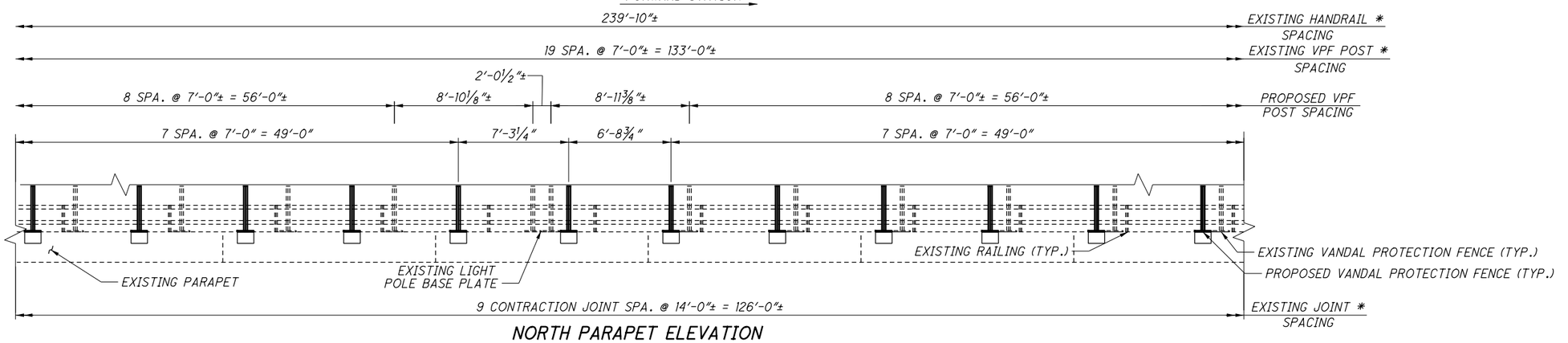
10/05/2021



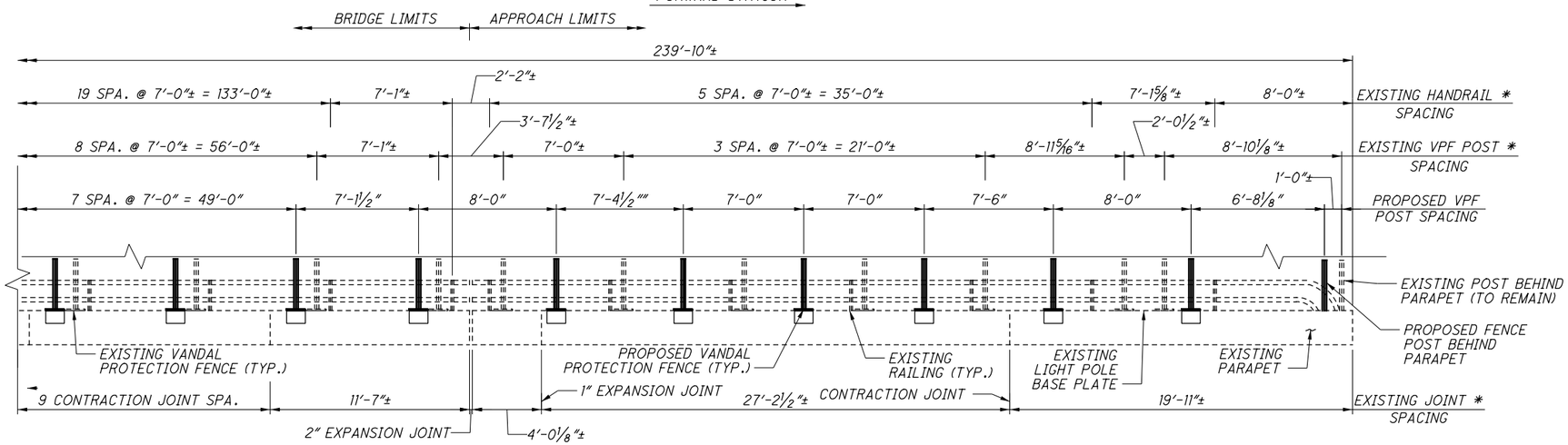
NORTH PARAPET ELEVATION

FORWARD STATION



NORTH PARAPET ELEVATION

FORWARD STATION



NORTH PARAPET ELEVATION

FORWARD STATION

LEGEND:

* - EXISTING DEFLECTION JOINT AND POST LOCATIONS TAKEN FROM EXISTING PLANS.

NOTES:

1. FOR INFORMATION NOT SHOWN REFER TO SCD VPF-1-90.
2. FOR ADDITIONAL VANDAL PROTECTION FENCE DETAILS, SEE SHEET 8/65

2021-09-22_BU 15 - RFC PLANS

ISSUE RECORD:

NO.	DATE	DESCRIPTION

DESIGN AGENCY
PRIME AE
8415 Pulsar Place Suite 300
Columbus Ohio 43240

DESIGNED	DRAWN	REVIEWED	DATE
HM	HM	SAN	6/18/21
CHECKED	REVISED	STRUCTURE FILE NUMBER	
KDC		7702914	

VANDAL PROTECTION FENCE DETAILS (1 OF 2)

BRIDGE NO. SUM-77-1152
LOVERS LANE OVER I-77

SUM-76/77/ 8-8.24/ 9.74/ 0.00
PID No. 102329

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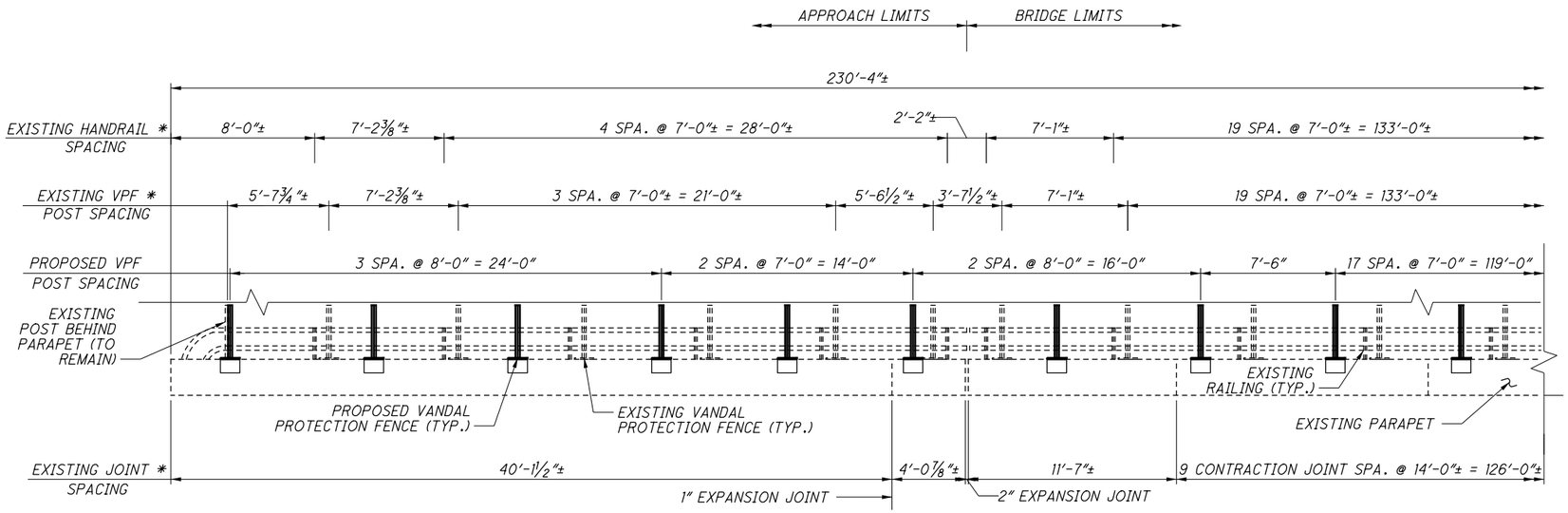
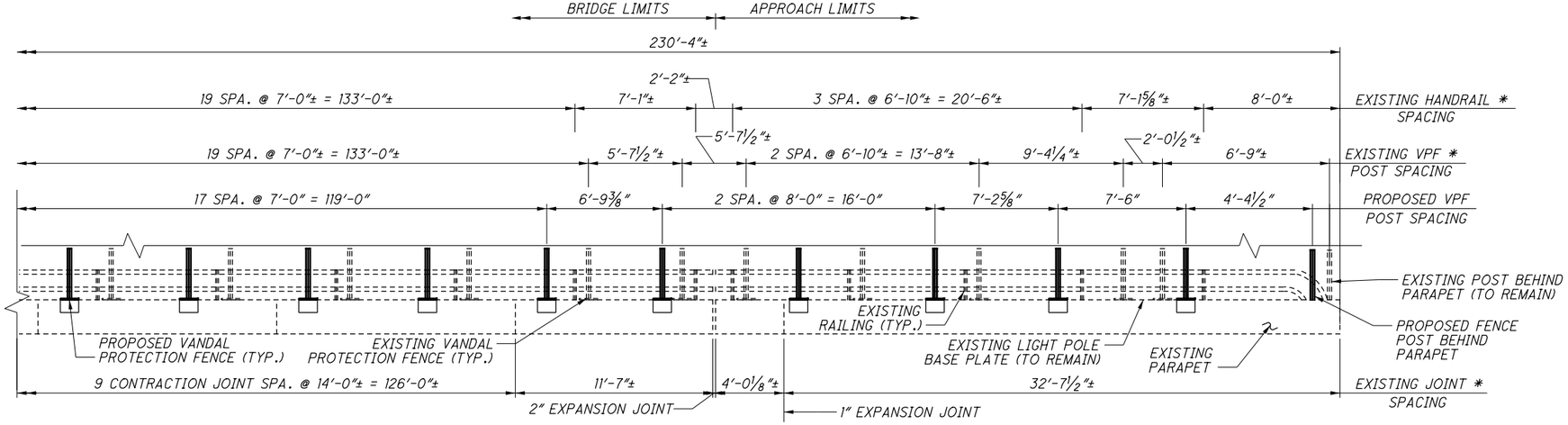


SOUTH PARAPET ELEVATION

FORWARD STATION



SOUTH PARAPET ELEVATION

FORWARD STATION

LEGEND:

* - EXISTING DEFLECTION JOINT AND POST LOCATIONS TAKEN FROM EXISTING PLANS.

NOTES:

1. FOR INFORMATION NOT SHOWN REFER TO SCD VPF-1-90.
2. FOR ADDITIONAL VANDAL PROTECTION FENCE DETAILS, SEE SHEET 8/65.

2021-09-22_BU 15 - RFC PLANS

ISSUE RECORD

NO.	DESCRIPTION	DATE

DESIGN AGENCY
PRIME AE
8415 Pulsar Place Suite 300
Columbus Ohio 43240

DESIGNED	DRAWN	REVIEWED	DATE
HM	HM	SAN	6/18/21
CHECKED	REVISED		STRUCTURE FILE NUMBER
KDC			7702914

VANDAL PROTECTION FENCE DETAILS (2 OF 2)
BRIDGE NO. SUM-77-1152
LOVERS LANE OVER I-77

SUM-76/77/ 8-8.24/ 9.74/ 0.00
PID No. 102329

3 / 3

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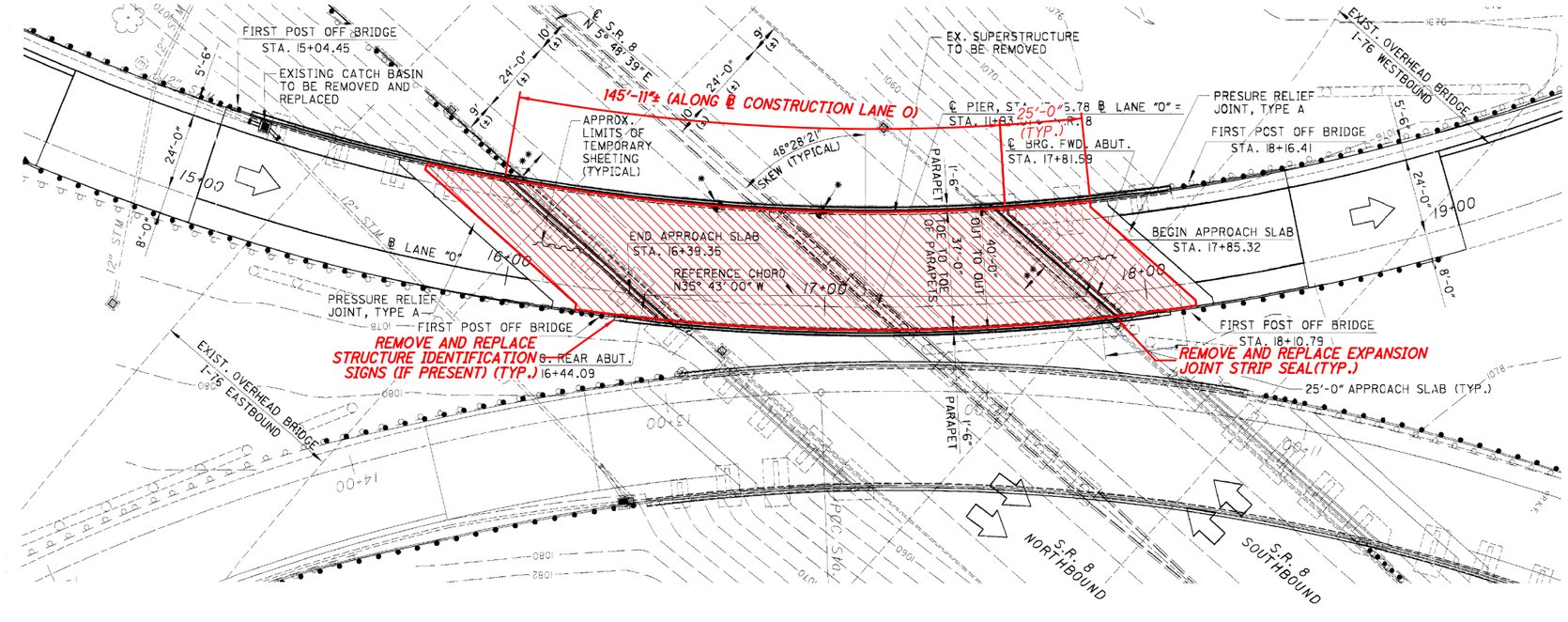


PLAN

CURVE DATA - LANE "O"

P.I. Sta = 18+75.52
D = 83°48'29" (LT)
Dc = 8°30'00"
R = 674.07'
T = 604.89'
L = 985.98'
E = 231.62'

* MINIMUM VERTICAL CLEARANCES

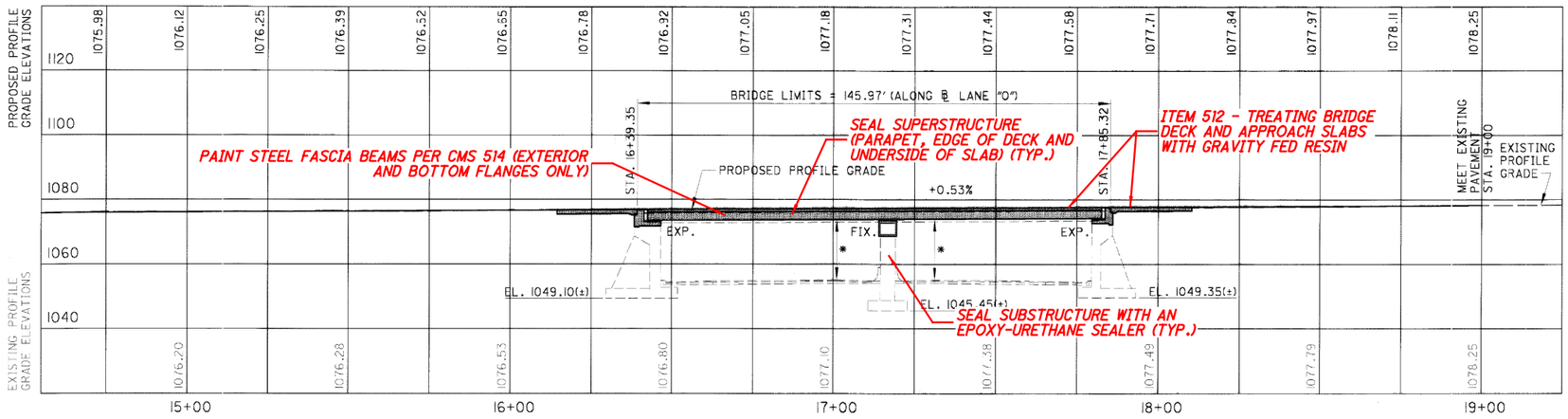
LOCATION:	S.R. 8 NB	S.R. 8 SB
EXISTING:	15'-2"	15'-5"
PROPOSED:	15'-10"	16'-1"
REQUIRED:	15'-6"	15'-6"

** HORIZONTAL CLEARANCE

EXISTING: 10'-0"(±)
PROPOSED: 10'-0"(±)

NOTES

1. THE REFERENCE CHORD IS A STRAIGHT LINE CONNECTING THE INTERSECTIONS OF THE ABUTMENT CENTERLINES OF BEARING AND THE SURVEY BASELINE OF LANE "O".
2. ELEVATION DATUM: ALL CURRENT PLAN ELEVATIONS ARE BASED ON NAVD-88 DATUM. EXISTING PLAN ELEVATIONS ARE BASED ON NAVD-29 DATUM. TO CONVERT EXISTING PLAN ELEVATIONS TO CURRENT, SUBTRACT 0.65'



PROFILE ALONG ℄ LANE "O"

ORIGINAL CONSTRUCTION PLANS SHOWN FOR INFORMATION ONLY

NOTES:

1. FOR GENERAL NOTES, SEE SHEET 3/65 THRU 7/65.
2. FOR TRANSVERSE SECTION, SEE SHEET 10/65.

LEGEND:

▨ - LIMITS OF GRAVITY FED RESIN

EXISTING STRUCTURE

TYPE: CONTINUOUS CURVED STEEL BEAMS COMPOSITE WITH DECK REINFORCED CONCRETE DECK AND SUBSTRUCTURE

SPANS: 68'-7 9/16"±, 68'-7 9/16"±, ALONG REFERENCE CORD

ROADWAY: 37'-0" TOE TO TOE OF PARAPET
40'-0" OUT TO OUT OF DECK

LOADING: HS25 (CASE II) AND THE ALTERNATE MILITARY LOADING

WEARING SURFACE: 1" MONOLITHIC CONCRETE

SKEW: 48°28'21"± RIGHT FORWARD WITH RESPECT TO THE REFERENCE LINE

APPROACH SLABS: 25'-0"± LONG (AS-1-81)

ALIGNMENT: 8°30'00" CURVE LEFT

SUPERELEVATION: 0.08 FT/FT

COORDINATES: LATITUDE: 41°03'43"± N
LONGITUDE: 81°30'17"± W

2021-09-22_BU15 - RFC PLANS

ISSUE RECORD:

NO.	DATE	DESCRIPTION

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DESIGN AGENCY
PRIME AE
8415 Pulsar Place Suite 300
Columbus Ohio 43240

DRAWN	REVIEWED	DATE
KDC	SAN	6/18/21
DESIGNED	CHECKED	REVISED
KDC	JAT	STRUCTURE FILE NUMBER 7702973

SUMMIT COUNTY
STA. 16+39.35±
STA. 17+85.32±

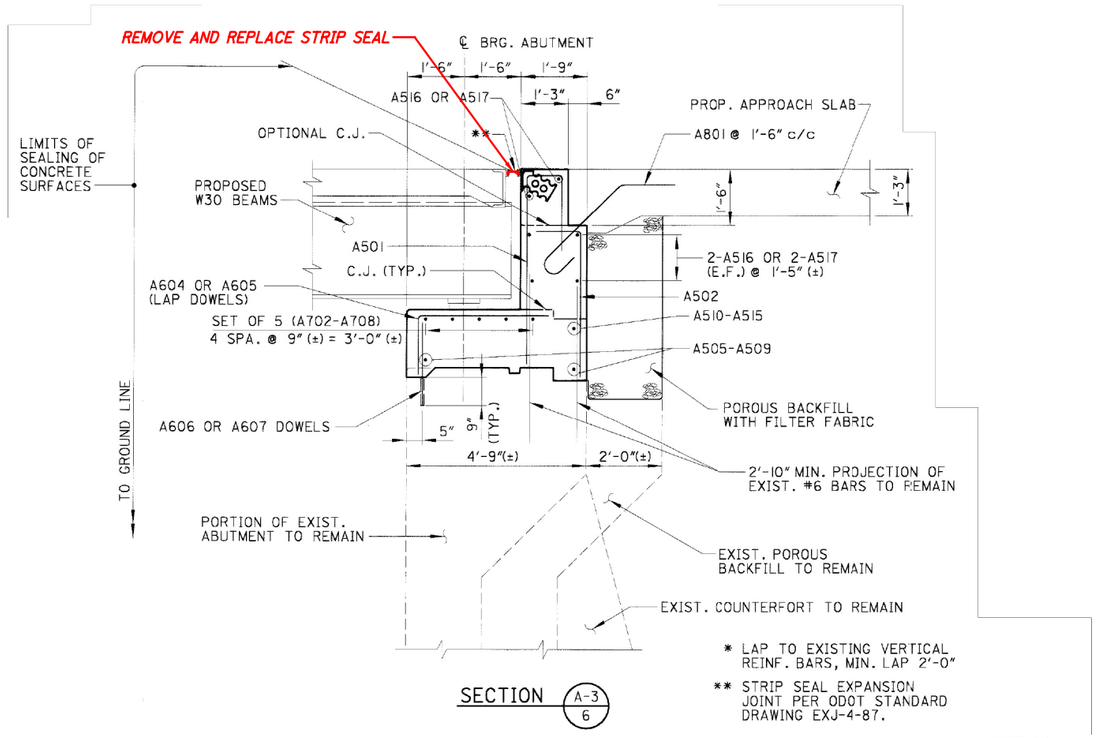
GENERAL PLAN
BRIDGE NO. SUM-77-1201
I-77 LANE O OVER SR-8

SUM-76/77/8-8.24/9.74/0.00
PID No. 102329

1 / 2

64
65

Released for Construction
Thomas J Powell, PE
10/05/2021



SECTION A-3 / 6

ORIGINAL CONSTRUCTION PLANS SHOWN FOR INFORMATION ONLY. ONLY WORK TO BE PERFORMED AT ABUTMENTS IS THE STRIP SEAL REPLACEMENT

NOTES:

1. *REMOVE AND REPLACE THE EXPANSION JOINT STRIP SEALS AT THE REAR AND FORWARD ABUTMENTS.*

2021-09-22_BU 15 - RFC PLANS

EXPANSION JOINT DETAILS

BRIDGE NO. SUM-77-1201
I-77 "LANE 0" OVER SR-8

SUM-76/77/8-8.24/9.74/0.00
PID No. 102329

2 / 2

65 / 65

DESIGN AGENCY
PRIME AE
8415 Pulsar Place Suite 300
Columbus Ohio 43240

DESIGNED	DRAWN	REVIEWED	DATE
JAT	JAT	SAN	6/18/21
CHECKED	REVISED	STRUCTURE FILE NUMBER	
KDC		7702973	

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