pennsylvania
DEPARTMENT OF TRANSPORTATION
www.dot.state.pa.us

2140 Herr Street
Harrisburg, PA 17103-5493

Final Construction Plan Submission to PUC
SR 83 Section 079

March 30, 2023

Dauphin County
Swatara Township
SR 3007 (19 Street Bridge)
DOT # 592187 F
PUC No. 2020-3021193
ECMS # 97828

Rosemary Chiavetta, Secretary
Pennsylvania Public Utility Commission
PO Box 3265
Harrisburg, PA 17105-3265

Dear Secretary Chiavetta,

In accordance with ordering paragraph number 12 of PUC Docket No. A-2020-3021193 entered on 2/23/2021, please find attached for your approval a copy of the final signed Drawings for the Construction of State Route 83, Section 079 in Dauphin County . All of which includes: Construction Plan consisting of sheets 1, 18, 32, 33, 347, 386, 387, 432, a total of 8 sheets; Bridge 2 Plan S-39452 consisting of sheets 1 through 70, a total of 70 sheets; Bridge 3 Plan S-39453 consisting of sheets 1 through 78, a total of 78 sheets; Retaining Wall 1 Plan S-40312 consisting of sheets 1 through 13, a total of 13 sheets; Gas Utility Relocation Plan consisting of sheets 1 through 3 of 3, a total of 3 sheets; Signing and Pavement Marking Plan consisting of sheets 1 and 109 of 125, a total of 2 sheets; Traffic Control Plan consisting of sheets 1, 43, 54, 68, a total of 4 sheets. Water Utility Relocation Plan consisting of sheets 1 and 21 through 27, a total of 28 sheets. Erosion and Sediment Pollution Control Plan consisting of sheets 35, 59, 64, 81, a total of 4 sheets; Cross Sections consisting of sheets 1, 239 through 246, a total of 8 sheets.

The Department of Transportation hereby avers that a complete set of the aforesaid final Drawings for Construction plans are being sent to the following parties of record for examination simultaneously with this submission to the Public Utility Commission:

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Mr. Douglas Starling, P.E.
Senior Engineer Public Improvement
Norfolk Southern Railroad Company
650 West Peachtree Street, NW- BOX 45
Atlanta, GA 30308
douglas.starling@nscorp.com

Ms. Julianne Freeman, Esq.
General Attorney
Norfolk Southern Railroad Company
650 West Peachtree Street-Box 45
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Julianne.Freeman@nscorp.com

Mr. Mike Pries, Chairman
Dauphin County Commissioners
Dauphin County Administrative
Building 2 South Second Street, 4th
Floor Harrisburg, PA 17108
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Mr. Jim Fosselman, Manager
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Harrisburg, PA 17111
jfosselman@swatara.com

Mr. Gerry Miller, Manager
Swatara Township Authority
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PO Box 4920
Harrisburg, PA 17111
gmiller@sta4920.com

Mr. Keldeen Stambaugh, Manager
Paxtang Borough
3423 Derry Street
Harrisburg, PA 17111
Paxtangchief-manager@comcast.net

Mr. Rob Zimmel
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Strawberry Square
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Harrisburg, PA 17101
Robert.zimmel@verizon.com

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Mr. Rob Januszko
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93 Old Berwick Road
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RobertJanuszko@frontiercorp.com

Mr. Mike Sweigard, Construction Specialist
Comcast Cable Communications, Inc.
4601 Smith Street
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Ms. Charlotte Krupa
PPL Electric Utilities Corporation
Two North Ninth Street, GENN3
Allentown, PA 18101-1179
cakrupa@pplweb.com

Mr. David Hayward
Sunseys, LLC
11 Grandview Circle
Suite 220
Canonsburg, PA 15317
DHayward@sunseys.com

Mr. Scott Dreiling
XO/Verizon
630 Clark Avenue
King of Prussia 19406
Scott.dreiling@one.verizon.com

Mr. Chris Ricciuti
Zayo Group
170 Robbins Road
Downington, PA 19335
Chris.Ricciuti@zayo.com

We respectfully request the approval of these plans and the subsequent issuance of a PUC Order. Should you have any questions or concerns, please feel free to contact me at (717) 787 – 4732

Sincerely,

Ahmed Lasloudji
Engineering District 8-0
Department of Transportation

pennsylvania
DEPARTMENT OF TRANSPORTATION
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Attachments

cc: Parties of Record
Mark J. Chappell, P.E, Chief, Utilities and Right-of-Way Section, 7th Floor Karen L. Cummings, Senior Assistant Counsel, 9th Floor,
William Sinick, P.E Manager, Rail Safety Division, PUC, 3rd Floor

DISTRICT	COUNTY	TOWNSHIP	CITY	ROUTE	SECTION	TOTAL SHEETS
8-0	DAUPHIN	SWATARA	HARRISBURG	0083	079	435
		PAXTANG BOROUGH		0230	045	
				3007	020	
				3013	009	

ECMS NO. 97828

COMMONWEALTH OF PENNSYLVANIA

DEPARTMENT OF TRANSPORTATION

DRAWINGS
FOR
CONSTRUCTION
OF

STATE ROUTE 0083 SECTION 079

IN DAUPHIN COUNTY

FROM STA. 39+50.00 TO STA. 140+00.00 LENGTH 9,950.00 FT. 1.884 MI.
NB FROM SEG. 0424 OFFSET 0974 TO SEG. 0444 OFFSET 1432
SB FROM SEG. 0425 OFFSET 0974 TO SEG. 0445 OFFSET 1406

AND

STATE ROUTE 0230 SECTION 045

FROM STA. 7+02.06 TO STA. 46+24.39 LENGTH 3,831.97 FT. 0.726 MI.
FROM SEG. 0080 OFFSET 0000 TO SEG. 0050 OFFSET 1103
FROM SEG. 0081 OFFSET 0000 TO SEG. 0051 OFFSET 1115

STATE ROUTE 3007 SECTION 020

FROM STA. 90+62.41 TO STA. 112+58.40 LENGTH 2095.99 FT. 0.397 MI.
FROM SEG. 0040 OFFSET 1794 TO SEG. 0070 OFFSET 0978

STATE ROUTE 3013 SECTION 009

FROM STA. 29+91.55 TO STA. 44+88.28 LENGTH 1,444.60 FT. 0.274 MI.
FROM SEG. 0010 OFFSET 0000 TO SEG. 0030 OFFSET 0169

ALSO

STATE ROUTE 3009

FROM STA. 15+43.84 TO STA. 21+49.44

STATE ROUTE 3010

FROM STA. 21+49.44 TO STA. 107+79.54

STATE ROUTE 8017
STATE ROUTE 8021
STATE ROUTE 9402
STATE ROUTE 9403

LIMITS OF SIGNING

STATE ROUTE 0083 SECTION 079

FROM STA. 23+00.00 TO STA 131+63.70

SCALE

HORIZONTAL 0 25 50 FEET

VERTICAL 0 5 10 FEET

DESIGN DESIGNATION

HIGHWAY CLASSIFICATION	- URBAN INTERSTATE	CURRENT A.D.T.	- 135,569 (2022)
DESIGN SPEED	- 60 MPH	DESIGN YEAR A.D.T.	- 168,210 (2050)
PAVEMENT WIDTH	- 3 TO 4 - 12' LANES	D.H.V.	- 13,677 (2050)
SHOULDER WIDTH	- VARIES 10' TO 14'	D	- 55%
		T	- 16%

TRAFFIC DATA

ALSO INCLUDED

TRAFFIC CONTROL PLAN	85 SHEETS
SIGNING AND PAVEMENT MARKING PLAN	125 SHEETS
WATER UTILITY RELOCATION PLAN	27 SHEETS
SEWER UTILITY RELOCATION PLAN	17 SHEETS
UTILITY PLAN - RETIRED IN PLACE STEAM DEMOLITION	7 SHEETS
NATURAL GAS UTILITY RELOCATION PLAN	3 SHEETS
EROSION AND SEDIMENT POLLUTION CONTROL PLAN	95 SHEETS
HIGHWAY LIGHTING PLAN	20 SHEETS
ITS PLAN	41 SHEETS
BORING LOCATION PLAN	3 SHEETS
TRAFFIC SIGNAL PLAN	46 SHEETS
POST-CONSTRUCTION STORM WATER MANAGEMENT PLAN	56 SHEETS
STRUCTURE PLANS	
S-39451	93 SHEETS
S-39452	70 SHEETS
S-39453	78 SHEETS
S-40308	3 SHEETS
S-40312	13 SHEETS
S-40313	13 SHEETS
S-40314	39 SHEETS
S-40315	16 SHEETS
S-40316	23 SHEETS
S-40317	12 SHEETS
S-40318	31 SHEETS
S-40319	40 SHEETS
CROSS SECTIONS	340 SHEETS
EXISTING STRUCTURE PLANS	
S-2384	6 SHEETS
S-2386	9 SHEETS
S-2387	6 SHEETS
S-7173	19 SHEETS
S-9870	10 SHEETS
S-12141	6 SHEETS
S-18035	3 SHEETS

SR 0083 RE-ESTABLISHED AS A LIMITED ACCESS HIGHWAY FROM
STATION 29+38.41 TO STATION 83+24.00
LEGISLATIVE ROUTE 767 SECTION A14 R/W(B)
APPROVED MARCH 4, 1994.

SR 0083 RE-ESTABLISHED AS A LIMITED ACCESS HIGHWAY FROM
STATION 47+87.56 TO STATION 122+24.83
STATE ROUTE 0083 SECTION 079 GR/W
APPROVED OCTOBER 4, 2022.

SR 0083 RE-ESTABLISHED AS A LIMITED ACCESS HIGHWAY FROM
STATION 48+10.62 TO STATION 131+30.00
STATE ROUTE 0083 SECTION A79 R/W
APPROVED JULY 12, 2022.

SR 0083 ESTABLISHED AS A LIMITED ACCESS HIGHWAY FROM
STATION 83+64.88 TO STATION 197+67.89
LEGISLATIVE ROUTE 767 PARALLEL, SECTION 3
APPROVED JULY 24, 1952.

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

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
JOACHIM J. ALFIERI
ENGINEER
039743-E

Joachim J. Alfieri
PROFESSIONAL ENGINEER

DATE: March 28, 2023

RECOMMENDED DATE: _____
PROJECT MANAGER

RECOMMENDED DATE: _____
DISTRICT EXECUTIVE

RECOMMENDED DATE: _____
DEPUTY SECRETARY

RECOMMENDED DATE: _____
ACTING SECRETARY OF TRANSPORTATION
(ON BEHALF OF THE GOVERNOR
AS WELL AS THE SECRETARY)

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
8-0	DAUPHIN	0083	079	18 OF 435
		0230	045	
		3007	020	
		3013	009	
CITY OF HARRISBURG, SWATARA TWP, PAXTANG BOROUGH				

REVISION NUMBER	REVISIONS	DATE	BY

TABULATION OF STRUCTURE DATA

EXISTING

EXISTING STRUCTURE DATA

SR 0083 OVER ABANDONED RAILROAD SIDING
STATION: 121+10.50
TYPE OF STRUCTURE: 3-SPAN ROLLED STEEL I-BEAM
SPAN LENGTHS:
SPAN 1 = 60'-0"
SPAN 2 = 60'-0"
SPAN 3 = 60'-0"
VERTICAL CLEAR: N/A
SKEW: 50°57'00"
CLEAR ROADWAY WIDTH:
NORTHBOUND = 33'-0"
SOUTHBOUND = 33'-0"
STRUCTURE NO: S-2386 & S-18035 (REHAB)

EXISTING STRUCTURE DATA

SR 3007 (19TH STREET) OVER SR 0083
STATION: 101+31.64
TYPE OF STRUCTURE: REINFORCED CONCRETE RIGID FRAME
SPAN LENGTH: 69'-0 ½"
VERTICAL CLEAR: 14'-3"
SKEW: 81°48'15"
CLEAR ROADWAY WIDTH: 46'-0"
STRUCTURE NO: S-2384

EXISTING STRUCTURE DATA

SR 3013 (29TH STREET) OVER SR 0083
STATION: 8+25.96
TYPE OF STRUCTURE: REINFORCED CONCRETE RIGID FRAME
SPAN LENGTH: 68'-7"
VERTICAL CLEAR: 14'-0"
SKEW: 87°10'00"
CLEAR ROADWAY WIDTH: 40'-0"
STRUCTURE NO: S-2387

EXISTING STRUCTURE DATA

SR 3013 (29TH STREET) OVER NORFOLK SOUTHERN RAILWAY COMPANY
STATION: 9+52.41
TYPE OF STRUCTURE: 2-SPAN P/S CONCRETE ADJACENT BOX BEAM
SPAN LENGTHS:
SPAN 1: 59'-3"
SPAN 2: 37'-0"
VERTICAL CLEAR: 21'-11"
SKEW: 84°55'00"
CLEAR ROADWAY WIDTH: 40'-0"
STRUCTURE NO: S-9870

EXISTING STRUCTURE DATA

SR 3007 (19TH STREET) OVER NORFOLK SOUTHERN RAILWAY COMPANY
STATION: 103+34.04
TYPE OF STRUCTURE: 2-SPAN P/S CONCRETE I-BEAM
SPAN LENGTHS:
SPAN 1: 65'-0"
SPAN 2: 33'-9"
VERTICAL CLEAR:
NS INDUSTRY TRACK = 19'-2"
NS MAINLINE TRACK = 27'-4"
SKEW: 74°53'22"
CLEAR ROADWAY WIDTH: 46'-0"
STRUCTURE NO: S-7173

PROPOSED

PROPOSED STRUCTURE DATA

SR 3013 (29TH STREET) OVER SR 0083 AND NORFOLK SOUTHERN RAILWAY COMPANY
STATION: 37+78.24
TYPE OF STRUCTURE: 3-SPAN P/S CONCRETE PA BULB-TEE BEAM
SPAN LENGTHS:
SPAN 1 = 95'-0"
SPAN 2 = 100'-0"
SPAN 3 - 97'-0"
VERTICAL CLEAR:
SR 0083 = 20'-7"
NS MAINLINE TRACK = 23'-3"
SKEW: 87°25'29"
CLEAR ROADWAY WIDTH: 32'-0"
STRUCTURE NO: S-39451

PROPOSED STRUCTURE DATA

SR 3007 (19TH STREET) OVER NORFOLK SOUTHERN RAILWAY COMPANY
STATION: 103+30.88
TYPE OF STRUCTURE: 1-SPAN P/S CONCRETE PA BULB-TEE BEAM
SPAN LENGTH: 115'-0"
VERTICAL CLEAR:
NS INDUSTRY TRACK = 19'-4"
NS MAINLINE TRACK = 30'-6"
SKEW: 75°00'00"
CLEAR ROADWAY WIDTH: 56'-0"
STRUCTURE NO: S-39452

PROPOSED STRUCTURE DATA

SR 3007 (19TH STREET) OVER SR 0083 AND SR 8019 (RAMP T)
STATION: 100+84.74
TYPE OF STRUCTURE: 2-SPAN P/S CONCRETE PA BULB-TEE BEAM
SPAN LENGTHS:
SPAN 1 = 105'-0"
SPAN 2 = 108'-0"
VERTICAL CLEAR:
SR 0083 = 16'-9"
SR 8019 (RAMP T) = 21'-1"
SKEW: 80°59'10"
CLEAR ROADWAY WIDTH: 56'-0"
STRUCTURE NO: S-39453

STATION 104+18.94 TO 104+90.69 SR 3007
TYPE OF STRUCTURE: REINFORCED CONCRETE RETAINING WALL
STRUCTURE NO: S-40312

STATION 83+72.04 TO 85+41.03 SR 0083
TYPE OF STRUCTURE: SOLDIER PILE RETAINING WALL
STRUCTURE NO: S-40313

STATION 950+35.07 TO 955+86.86 SR 8021 RAMP V
TYPE OF STRUCTURE: REINFORCED CONCRETE AND SOLDIER PILE RETAINING WALL
STRUCTURE NO: S-40314

STATION 90+98.30 TO 97+00.00 SR 0083
TYPE OF STRUCTURE: GROUND MOUNTED SOUND BARRIER
STRUCTURE NO: S-40315

STATION 953+71.11 TO 957+15.32 SR 8021 RAMP V
TYPE OF STRUCTURE: SOLDIER PILE RETAINING WALL WITH SOUND BARRIER
STRUCTURE NO: S-40316

STATION 950+80.88 TO 953+71.11 SR 8021 RAMP V
TYPE OF STRUCTURE: GROUND MOUNTED SOUND BARRIER
STRUCTURE NO: S-40317

STATION 904+53.86 TO 909+03.26 SR 8021 RAMP U
TYPE OF STRUCTURE: REINFORCED CONCRETE RETAINING WALL
STRUCTURE NO: S-40318

STATION 73+72.65 SR 0083 TO 908+62.54 SR 8021 RAMP U
TYPE OF STRUCTURE: REINFORCED CONCRETE RETAINING WALL
STRUCTURE NO: S-40319

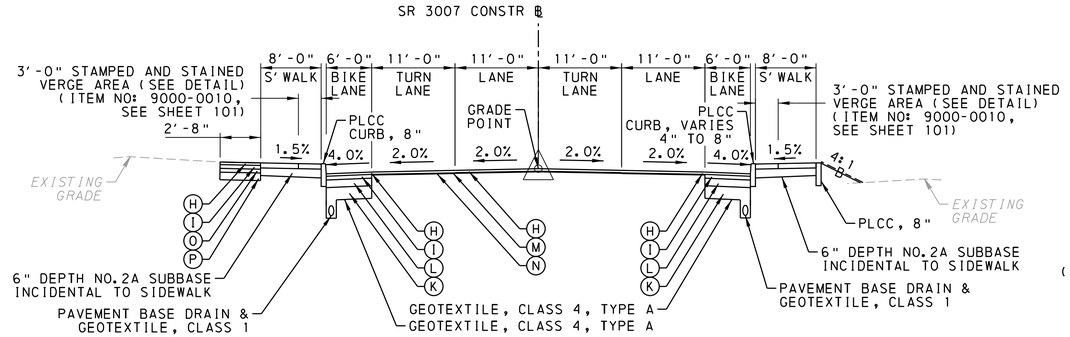
COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
CHRISTOPHER M. DEATS
ENGINEER
PE079050

3/29/2023
FILENAME: 63016_079-s-cv-str01.dgn

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
8-0	DAUPHIN	0083	079	32 OF 435
		0230	045	
		3007	020	
		3013	009	

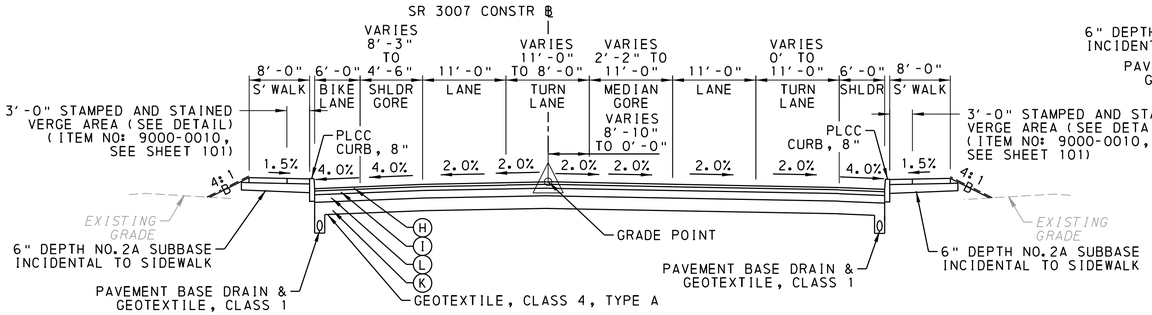
CITY OF HARRISBURG, SWATARA TWP, PAXTANG BOROUGH

REVISION NUMBER	REVISIONS	DATE	BY



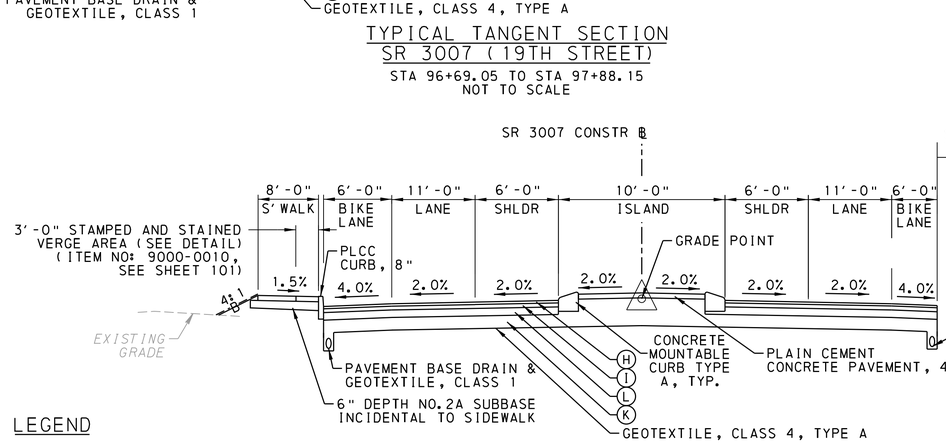
TYPICAL TANGENT SECTION
SR 3007 (19TH STREET)

STA 93+44.57 TO STA 95+57.06
NOT TO SCALE



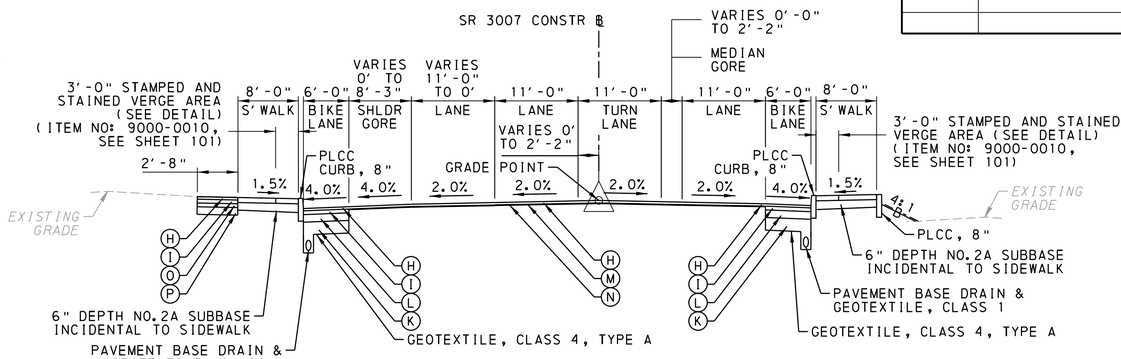
TYPICAL TANGENT SECTION
SR 3007 (19TH STREET)

STA 96+69.05 TO STA 97+88.15
NOT TO SCALE



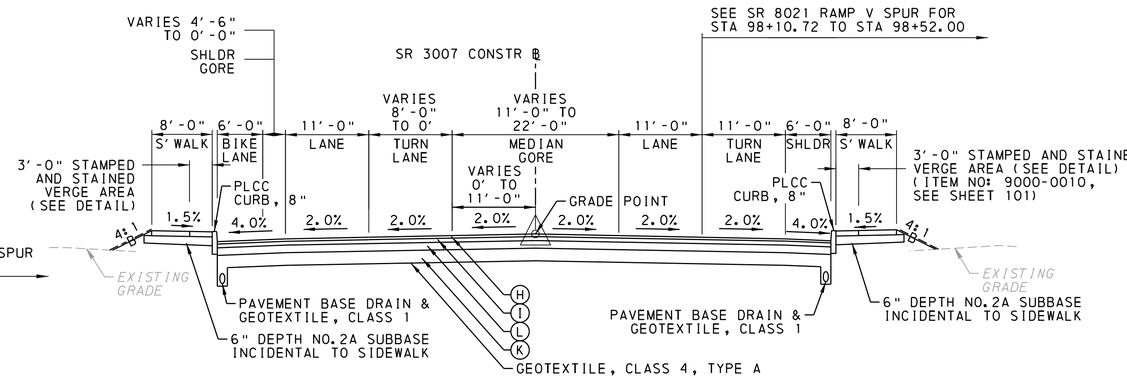
TYPICAL TANGENT SECTION
SR 3007 (19TH STREET) OVER SR 0083

STA 99+54.00 TO STA 102+35.09
NOT TO SCALE



TYPICAL TANGENT SECTION
SR 3007 (19TH STREET)

STA 95+57.06 TO STA 96+69.05
NOT TO SCALE



TYPICAL TANGENT SECTION
SR 3007 (19TH STREET)

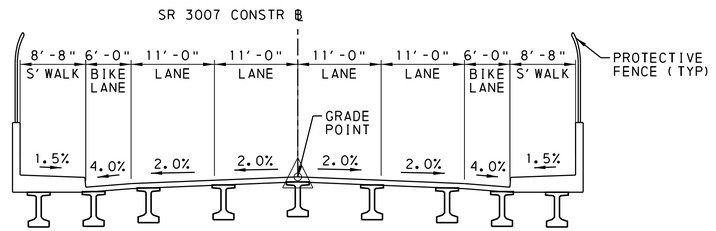
STA 97+88.15 TO STA 98+52.00
NOT TO SCALE

LEGEND

- (H) SUPERPAVE ASPHALT MIXTURE DESIGN, WEARING COURSE, RPS, PG 64E-22, 3 TO <10 MILLION ESALS, 12.5 MM MIX, 2" DEPTH, SRL-E
- (I) SUPERPAVE ASPHALT MIXTURE DESIGN, BINDER COURSE, RPS, PG 64E-22, 3 TO <10 MILLION ESALS, 19.0 MM MIX, 2 1/2" DEPTH
- (L) SUPERPAVE ASPHALT MIXTURE DESIGN, BASE COURSE, PG 64S-22, 3 TO <10 MILLION ESALS, 25.0 MM MIX, 6" DEPTH
- (K) SUBBASE 10" DEPTH (NO. 2A)
- (M) SUPERPAVE ASPHALT MIXTURE DESIGN, WEARING COURSE (SCRATCH), PG 64S-22, 3 TO < 10 MILLION ESALS, 9.5 MM MIX, SRL-L (0.5" MIN DEPTH)
- (N) MILLING OF ASPHALT PAVEMENT SURFACE, 2 1/2" DEPTH, MILLED MATERIAL RETAINED BY CONTRACTOR
- (O) SUPERPAVE ASPHALT MIXTURE DESIGN, BASE COURSE, PG 64S-22, 3 TO <10 MILLION ESALS, 25.0 MM MIX, 3" DEPTH
- (P) SUBBASE 6" DEPTH (NO. 2A)

---B--- SEEDING AND SOIL SUPPLEMENT - FORMULA D

——L—— SEEDING AND SOIL SUPPLEMENT - FORMULA L



TYPICAL TANGENT SECTION
SR 3007 (19TH STREET) OVER NS RR

STA 102+35.09 TO STA 104+19.05
NOT TO SCALE

NOTE: 1. APPLY ASPHALT TACK COAT BETWEEN ALL PAVEMENT LAYERS
2. FOR LANE CONFIGURATIONS SEE SIGNING AND PAVEMENT MARKING PLAN

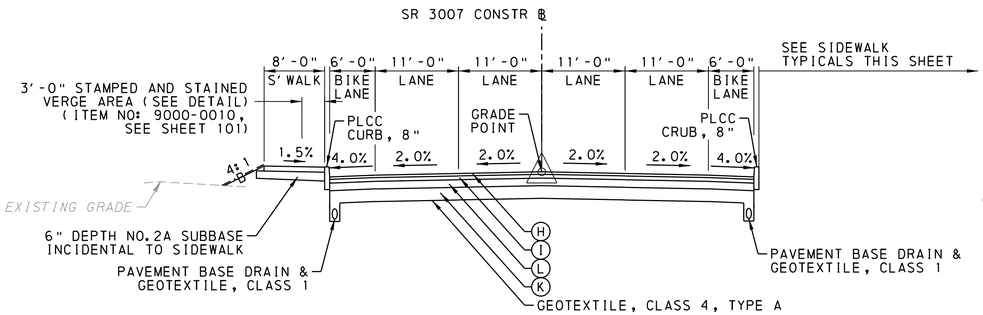
COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
CHRISTOPHER M. DEATS
ENGINEER PE079050

3/29/2023
FILENAME: 63016_079-s-cv-typ13.dgn

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
8-0	DAUPHIN	0083	079	33 OF 435
		0230	045	
		3007	020	
		3013	009	

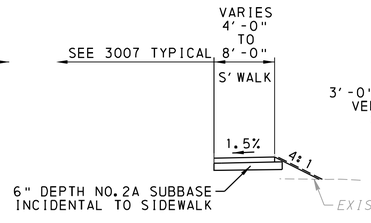
CITY OF HARRISBURG, SWATARA TWP, PAXTANG BOROUGH

REVISION NUMBER	REVISIONS	DATE	BY



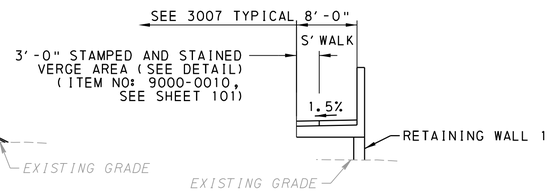
TYPICAL TANGENT SECTION
SR 3007 (19TH STREET)

STA 104+19.05 TO STA 104+64.01
NOT TO SCALE



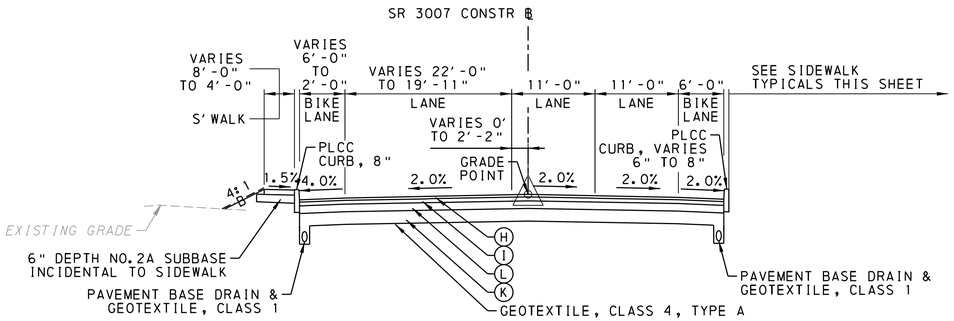
TYPICAL SIDEWALK OPTION

STA 104+90.67 TO STA 106+00.00
NOT TO SCALE



TYPICAL SIDEWALK OPTION

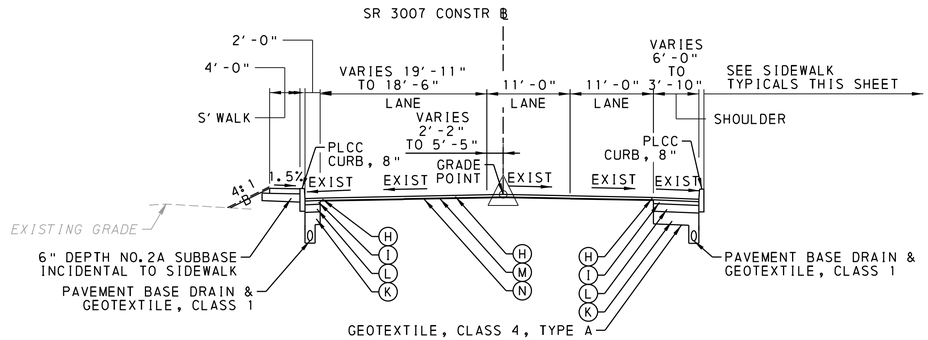
STA 104+18.91 TO STA 104+90.67
NOT TO SCALE



TYPICAL TANGENT SECTION
SR 3007 (19TH STREET)

STA 104+64.01 TO STA 105+17.32
NOT TO SCALE

* STA 104+66 TO STA 104+91 RT - 6" HEIGHT



TYPICAL TANGENT SECTION
SR 3007 (19TH STREET)

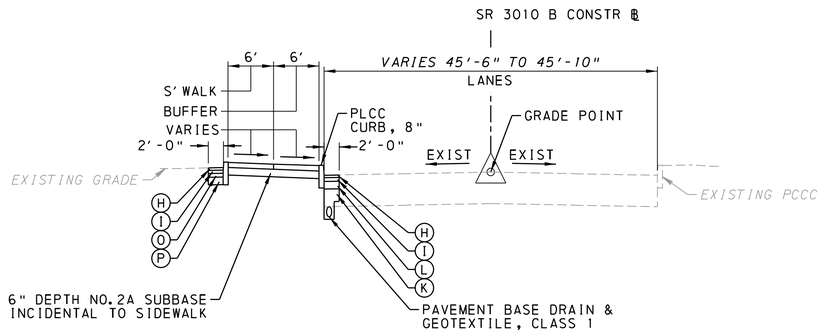
STA 105+17.32 TO STA 106+00.00
NOT TO SCALE

LEGEND

- (H) SUPERPAVE ASPHALT MIXTURE DESIGN, WEARING COURSE, RPS, PG 64E-22, 3 TO <10 MILLION ESALS, 12.5 MM MIX, 2" DEPTH, SRL-E
- (I) SUPERPAVE ASPHALT MIXTURE DESIGN, BINDER COURSE, RPS, PG 64E-22, 3 TO <10 MILLION ESALS, 19.0 MM MIX, 2 1/2" DEPTH
- (L) SUPERPAVE ASPHALT MIXTURE DESIGN, BASE COURSE, PG 64S-22, 3 TO <10 MILLION ESALS, 25.0 MM MIX, 6" DEPTH
- (K) SUBBASE 10" DEPTH (NO. 2A)
- (M) SUPERPAVE ASPHALT MIXTURE DESIGN, WEARING COURSE (SCRATCH), PG 64S-22, 3 TO < 10 MILLION ESALS, 9.5 MM MIX, SRL-L (0.5" MIN DEPTH)
- (N) MILLING OF ASPHALT PAVEMENT SURFACE, 2 1/2" DEPTH, MILLED MATERIAL RETAINED BY CONTRACTOR
- (O) SUPERPAVE ASPHALT MIXTURE DESIGN, BASE COURSE, PG 64S-22, 3 TO <10 MILLION ESALS, 25.0 MM MIX, 3" DEPTH
- (P) SUBBASE 6" DEPTH (NO. 2A)

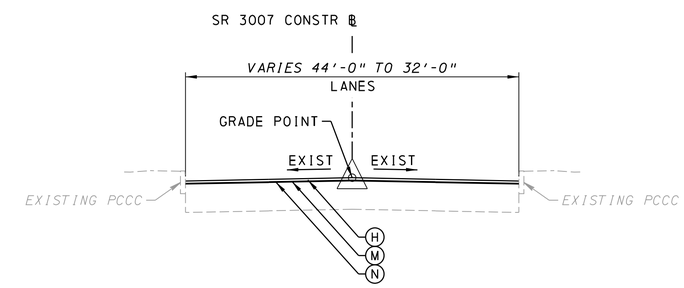
---B--- SEEDING AND SOIL SUPPLEMENT - FORMULA D

——L—— SEEDING AND SOIL SUPPLEMENT - FORMULA L



TYPICAL TANGENT SECTION
SR 3010 (PAXTON STREET)

STA 61+75.35 TO STA 62+42.28
NOT TO SCALE



TYPICAL TANGENT SECTION
SR 3007 (19TH STREET)

STA 106+00.00 TO STA 111+47.49
NOT TO SCALE

NOTE: 1. APPLY ASPHALT TACK COAT BETWEEN ALL PAVEMENT LAYERS
2. FOR LANE CONFIGURATIONS SEE SIGNING AND PAVEMENT MARKING PLAN

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
CHRISTOPHER M. DEATS
ENGINEER PE079050

3/29/2023
FILENAME: 63016_079-s-cv-typ14.dgn

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
8-0	DAUPHIN	0083	079	347 OF 435
		0230	045	
		3007	020	
		3013	009	

CITY OF HARRISBURG

REVISION NUMBER	REVISIONS	DATE	BY

BM-5 ELEV 389.802
SR 3007 STA 102+46.22, 27.75' RT
SQ CUT ON SE CORNER OF PARAPET

SEE SHEET 329 OF 435

SEE SHEET 348 OF 435

LEGAL RIGHT-OF-WAY LINE FOR LIMITED ACCESS

DENSE WOODS

LIMIT OF AERIAL EASEMENT, STA. 102+16

TO REMAIN AND BE PROTECTED

TEMPORARY CONSTRUCTION EASEMENT

LIMIT OF AERIAL EASEMENT, STA. 104+06

LEGAL AERIAL EASEMENT

LEGAL RIGHT-OF-WAY LINE

THRIE-BEAM GUIDE RAIL TO CONCRETE BRIDGE BARRIER TRANSITION WITHOUT CURB

DRIVEWAY TO BE RELOCATED

TERMINAL SECTION, SINGLE

TEMPORARY CONSTRUCTION EASEMENT

15' WIDE VEHICULAR GATE

START WORK STA 10+00.00 GREENWOOD STREET

GASLINE (BY OTHERS)

SIDEWALK

TYPE 31-SC

SR 3007 CONSTR

SOUTH 19TH STREET

VERGE (TYP)

DRIVEWAY TO BE CLOSED

+00.00, 23.89' LT

+00.00, 20.43' RT

R=15'

END FULL DEPTH
BEGIN MILL AND OVERLAY
STA 105+17.32

END BRIDGE
BEGIN FULL DEPTH
STA 104+20.98

RW-1

4' PEDESTRIAN GATE

REMOVE, MODIFY AND REINSTALL STAIRS

LEGAL AERIAL EASEMENT

TEMPORARY CONSTRUCTION EASEMENT

LEGAL RIGHT-OF-WAY LINE

LEGAL RIGHT-OF-WAY LINE FOR LIMITED ACCESS

LEGAL SLOPE EASEMENT

19TH STREET TEMP ACCESS CONSTR

N 20° 34' 09" W

N 78° 37' 30" W

N 69° 29' 17" E

89° 56' 34"

R=5820'

STOP WORK
STA 10+48.16
GREENWOOD STREET

GREENWOOD STREET CONSTR

LEGAL RIGHT-OF-WAY LINE FOR CITY STREET

GREENWOOD STREET

EDWIN L. HEIM CO.
MOTOR DIVISION
SALES & SERVICE
HARRISBURG, PENNSYLVANIA

MULTI-STORY BRICK

TOWER

FLAGPOLE

PARKING

GATE

C.O.P.

SYNDICATE STREET

HETRICK STREET

PLATFORM

LEGAL RIGHT-OF-WAY LINE

PARKING LTG

LEGAL RIGHT-OF-WAY LINE

LEGEND

MILL & OVERLAY

PAVEMENT REMOVAL

BASIN ACCESS ROAD

SCALE

0 25 50 FEET

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
CHRISTOPHER M. DEATS
ENGINEER
PE079050

FOR STRUCTURE DATA SEE SHEET 18	
FOR PROPERTY OWNER INFO SEE SHEET 5	
FOR CURVE DATA SEE SHEETS 14-17	FOR SR 3007 PROFILE, SEE SHEETS 386 & 387

SURVEY BOOK NOS. 7127, 7128, 7152, 7153

3/29/2023
FILENAME= 63016_079-s-cv-pln25.dgn

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
8-0	DAUPHIN	0083	079	386 OF 435
		0230	045	
		3007	020	
		3013	009	

CITY OF HARRISBURG

REVISION NUMBER	REVISIONS	DATE	BY

SEE SHEET 385 OF 435

SEE SHEET 387 OF 435

PVI STA 97+32.41
ELEV 374.76
VC 125.00'
MO 0.59'
HLSD 214'

PVI STA 102+45.29
ELEV 398.55
VC 260.00'
MO -3.26'
SSD 237'

HI 102+35.65
ELEV 395.31

PROFILE GRADE

4.64%

-5.38%

PVT

PVC

PVT

EXISTING GROUND

EXISTING GROUND

2" WATER

2" WATER

2" WATER

12" WATER

4" GAS

16'-6" REQUIRED
16'-9" PROVIDED

18"

42"

18"

23'-0" REQUIRED
30'-6" PROVIDED

19'-2" EXISTING
19'-4" PROVIDED

ELEV. 365.38'

ELEV. 350.07'

ELEV. 356.05'

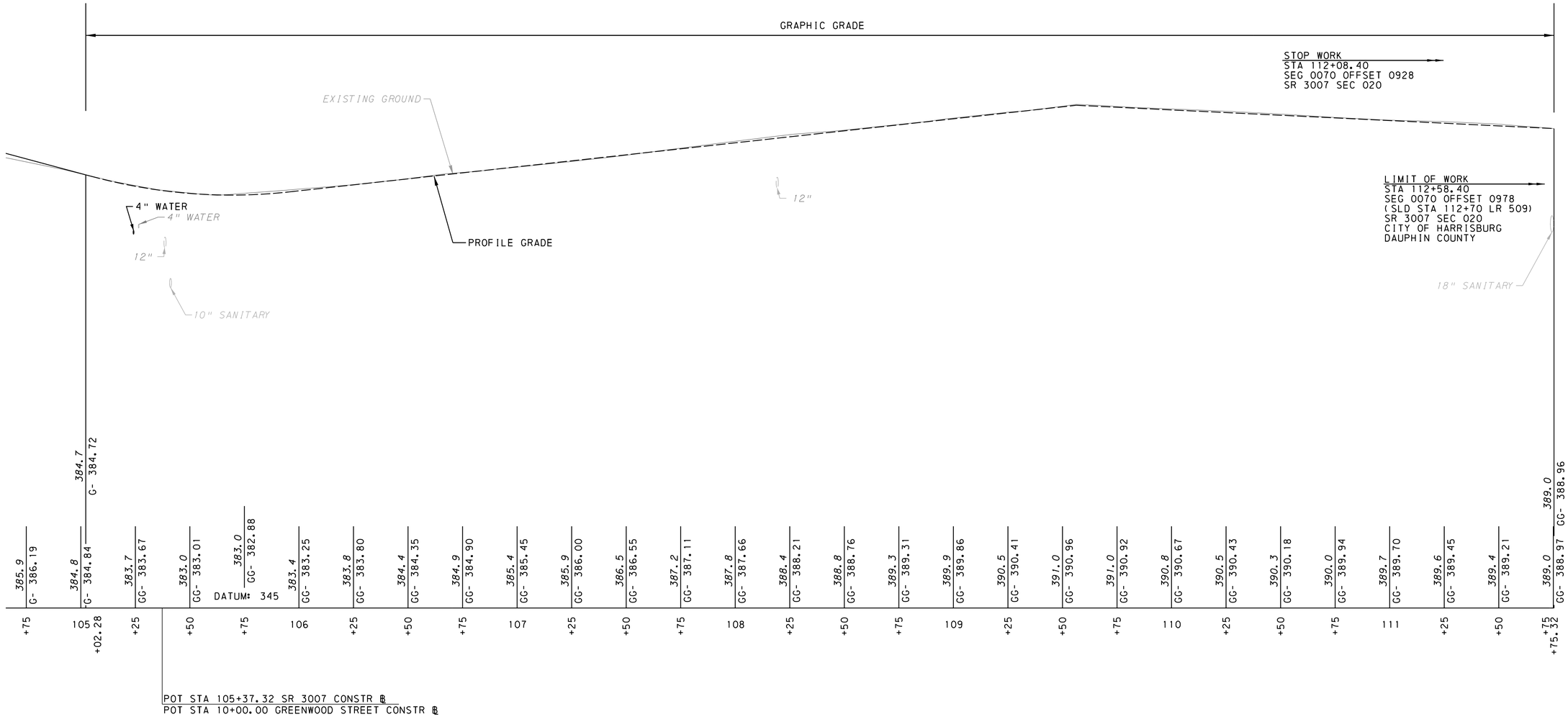
| | | |

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
8-0	DAUPHIN	0083	079	387 OF 435
		0230	045	
		3007	020	
		3013	009	

CITY OF HARRISBURG

REVISION NUMBER	REVISIONS	DATE	BY

SEE SHEET 386 OF 435



SR 3007

SCALE

HORIZONTAL: 0 25 50 FEET

VERTICAL: 0 5 10 FEET

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
CHRISTOPHER M. DEATS
ENGINEER
PE079050

FOR PLAN, SEE SHEETS 347 & 348

3/29/2023
FILENAME: 63016_079-s-cv-pr136.dgn

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
8-0	DAUPHIN	0083	079	432 OF 435
		0230	045	
		3007	020	
		3013	009	

CITY OF HARRISBURG

REVISION NUMBER	REVISIONS	DATE	BY

SEE SHEET 415 OF 435

SEE SHEET 433 OF 435

START WORK
STA 10+00.00
GREENWOOD STREET

STOP WORK
STA 10+48.16
GREENWOOD STREET

SR 3007 HP
STA 102+35.65
ELEV 395.31

SR 3007 CONSTR ℄

GREENWOOD STREET CONSTR ℄

19TH STREET TEMP ACCESS CONSTR ℄

PR-12000

PR-12001

PR-12003

PR-13028

RW-1

TO REMAIN AND BE PROTECTED

SR 3007 STA 102+46.22 27.75' RT SQ CUT ON SE CORNER OF PARAPET BM-5 ELEV 389.802

N 20° 34' 09" W

N 69° 29' 17" E

S 89° 56' 34" E

EDWIN L. HEIM CO.
MOTOR DIVISION
SALES & SERVICE
HARRISBURG, PENNSYLVANIA

SYNDICATE STREET

GREENWOOD STREET

LEGEND

- PROP PIPE
- EX PIPE
- PROP CONTOURS
- EX CONTOURS
- EX INLET
- ---C--- CUT LINE
- —F— FILL LINE
- PROP INLET
- PROP MANHOLE

SCALE

0 25 50 FEET

CONTOUR GRADING AND DRAINAGE PLAN

FOR PROPERTY OWNER INFO SEE SHEET 5

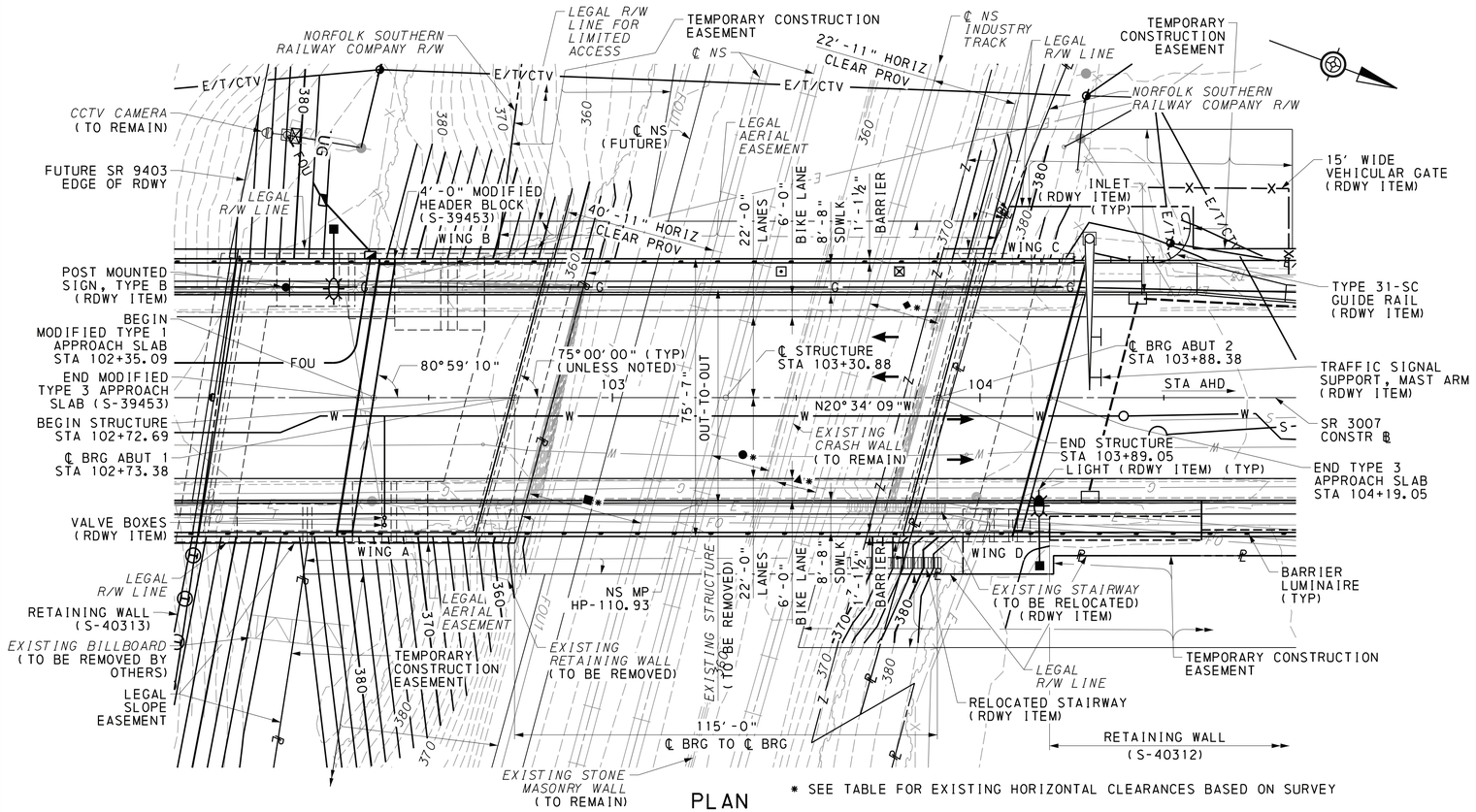
FOR CURVE DATA SEE SHEETS 14-17

SURVEY BOOK NOS. 7127, 7128, 7152, 7153

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
CHRISTOPHER M. DEATS
ENGINEER
PE079050

3/29/2023
FILENAME= 63016_079-s-cv-gr-d22.dgn

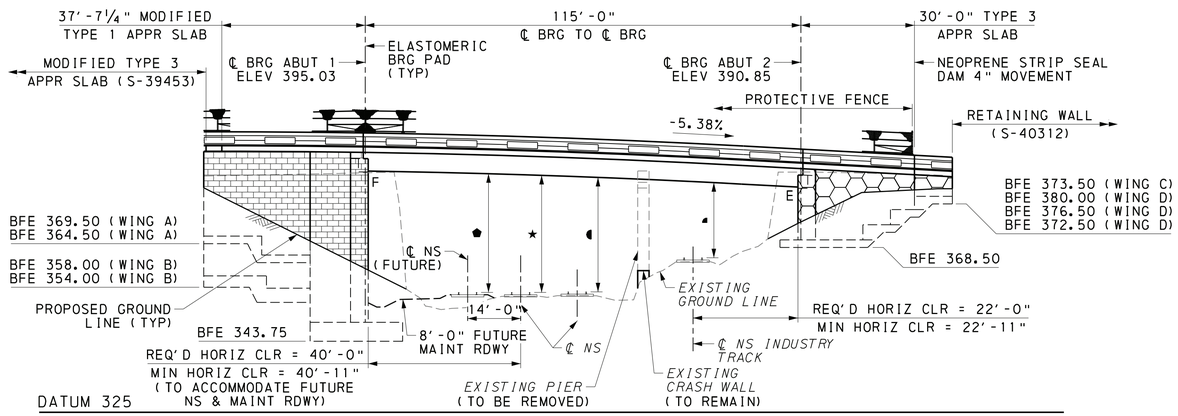
BRIDGE 2



PLAN

10 0 10 20 FEET

* SEE TABLE FOR EXISTING HORIZONTAL CLEARANCES BASED ON SURVEY



ELEVATION

10 0 10 20 FEET

EXISTING HORIZONTAL CLEARANCES		
SYMBOL	CLEARANCE	LOCATION
■	31'-0"	SOUTH ABUTMENT
●	16'-0"	PIER SOUTH FACE
▲	10'-10"	PIER NORTH FACE
◆	19'-2"	NORTH ABUTMENT

CLEARANCE NOTE:
TEMPORARY CLEARANCES OF 22'-0" VERTICAL ABOVE TOP OF HIGHEST RAIL AND 13'-0" HORIZONTAL FROM CENTERLINE OF TRACK ARE TO BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION. EXISTING SUBSTANDARD CLEARANCES ARE NOT TO BE FURTHER REDUCED FOR THE TEMPORARY CONSTRUCTION CONDITION WITHOUT WRITTEN PERMISSION FROM NORFOLK SOUTHERN.

VERTICAL CLEARANCES			
SYMBOL	EXISTING	PROPOSED	REQUIRED
◂	19'-2"	19'-4"	19'-2"
◖	27'-4"	30'-6"	23'-0"
★	27'-4"	31'-1"	23'-0"
⬟	- - -	31'-8"**	23'-0"

** VERTICAL CLEARANCE ASSUMES THE FUTURE TRACK ELEVATIONS ARE CONSISTENT WITH THE EXISTING ADJACENT TRACK TOP OF RAIL ELEVATIONS.

LEGEND

→	DIRECTION OF TRAFFIC
370	PROPOSED CONTOUR
FOU	PROPOSED FIBER OPTIC UNDERGROUND
E/T/CTV	PROPOSED ELECTRIC, TELEPHONE, CABLE/TELEVISION
W	PROPOSED WATER
G	PROPOSED GAS
S	PROPOSED SEWER
X	PROPOSED FENCE
370	EXISTING CONTOUR
	LEGAL RIGHT-OF-WAY
FO	EXISTING FIBER OPTIC
FOU	EXISTING FIBER OPTIC UNDERGROUND
E	EXISTING ELECTRIC
EU	EXISTING ELECTRIC UNDERGROUND
W	EXISTING WATER
T	EXISTING TELEPHONE
TU	EXISTING TELEPHONE UNDERGROUND
G	EXISTING GAS
S	EXISTING SEWER
CTV	EXISTING CABLE/TELEVISION
X	EXISTING FENCE
⊡	PT OF MIN VERT CLR OVER NS TRACK
⊠	PT OF MIN VERT CLR OVER NS INDUSTRY TRACK

HORIZONTAL ALIGNMENT DATA

SR 3007 (19TH STREET)

STA 90+00.00
N20°34'09"W
STA 113+00.00

VERTICAL ALIGNMENT AND CURVE DATA

SR 3007 (19TH STREET)

PVI STA 102+45.29
ELEV 398.55
VC 260.00'
MO -3.26'

+4.64% -5.38%

SR 3007 (19TH STREET)

STA 103+75.29
ELEV 391.55
-5.38%
STA 105+02.28
ELEV 384.72

REFERENCES:	SHEETS:
TYPICAL SECTION & LOAD RATINGS	2
GENERAL NOTES	3 - 4
QUANTITIES	5
STAKE-OUT PLAN	10
STRUCTURE BORINGS	64 - 70

NOTES:

1. FOR INDEX OF DRAWINGS, SEE SHEET 2.
2. FOR SUPPLEMENTAL DRAWINGS, SEE SHEET 3.
3. FOR DEMOLITION CONCEPT DETAILS, SHEETS 6 AND 7.

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0417 MPMS/ECMS PROJ: 97828 BRKEY: 67417

HNTB

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0417 SEG 0051 OFFSET 0417
SR 3007 (19TH STREET) STA 103+30.88
OVER NORFOLK SOUTHERN RAILWAY COMPANY
1-SPAN COMPOSITE PS CONCRETE
PA BULB-TEE BEAM BRIDGE
GENERAL PLAN & ELEVATION

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL
JUSTIN ROBERT MCCARTHY
ENGINEER
PE076998

Justin R. McCarthy
REG PROF ENGINEER
DATE 7/27/2022

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

RECOMMENDED 12-6-2022
Derek Mitch
DISTRICT 8-0 BRIDGE ENGINEER

SHEET 1 OF 70
+ SUPPLEMENTAL DRAWINGS
S-39452

DES: MCA | DES CKD: JRM | DWG: SMZ | DWG CKD: JRM

7/26/2022
FILENAME: 63016-s-brB2-gpe01.dgn

BRIDGE LOAD RATINGS WITHOUT FUTURE WEARING SURFACE

ADT: 4,985 (2050); ADTT: 265 (2050) (ONE-DIRECTIONAL)

SPAN 1		PA BULB-TEE BEAM, 33/55						
		H 20	HS 20	ML-80	TK527	PHL-93	P-82	P2016-13
INVENTORY RATING (IR)	DISTRIBUTION FACTOR	0.680	0.680	0.680	0.680	0.923	-	-
	LOCATION	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	-	-
	LIMIT STATE	SERV-IIIP	SERV-IIIP	SERV-IIIP	SERV-IIIP	SERV-III	-	-
	RATING FACTOR	1.81M	1.60M	1.43M	1.40M	1.15M	-	-
	RESISTANCE	0.300 KSI	0.300 KSI	0.300 KSI	0.300 KSI	0.300 KSI	-	-
	SPAN # / BEAM #	1/8	1/8	1/8	1/8	1/6	-	-
OPERATING RATING (OR)	DISTRIBUTION FACTOR	0.946	0.946	0.946	0.946	0.946	0.946	0.946
	LOCATION	0.20 L	0.44 L	0.44 L	0.44 L	0.44 L	0.20 L	0.20 L
	LIMIT STATE	STR-II	STR-II	STR-II	STR-II	STR-IA	STR-II	STR-II
	RATING FACTOR	3.26V	2.75V	2.49V	2.42V	2.04V	1.31V	1.15V
	RESISTANCE	336.1K	232.1K	232.1K	232.1K	232.1K	366.1K	366.1K
	SPAN # / BEAM #	1/6	1/6	1/6	1/6	1/6	1/6	1/6

CRITICAL MEMBER MAXIMUM FACTORED FLEXURAL RESISTANCE: 14,744.8 K-FT LOCATION: BEAM 6 (SPAN 1), 57'-6"

CRITICAL MEMBER MAXIMUM FACTORED SHEAR RESISTANCE: 589.09 K LOCATION: BEAM 6 (SPAN 1), 23'-0"

BRIDGE LOAD RATINGS WITH FUTURE WEARING SURFACE

ADT: 4,985 (2050); ADTT: 265 (2050) (ONE-DIRECTIONAL)

SPAN 1		PA BULB-TEE BEAM, 33/55						
		H 20	HS 20	ML-80	TK527	PHL-93	P-82	P2016-13
INVENTORY RATING (IR)	DISTRIBUTION FACTOR	0.680	0.680	0.680	0.680	0.923	-	-
	LOCATION	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	-	-
	LIMIT STATE	SERV-IIIP	SERV-IIIP	SERV-IIIP	SERV-IIIP	SERV-III	-	-
	RATING FACTOR	1.53M	1.34M	1.21M	1.18M	1.02M	-	-
	RESISTANCE	0.300 KSI	0.300 KSI	0.300 KSI	0.300 KSI	0.300 KSI	-	-
	SPAN # / BEAM #	1/8	1/8	1/8	1/8	1/6	-	-
OPERATING RATING (OR)	DISTRIBUTION FACTOR	0.946	0.946	0.946	0.946	0.946	0.946	0.946
	LOCATION	0.20 L	0.44 L	0.44 L	0.44 L	0.20 L	0.20 L	0.20 L
	LIMIT STATE	STR-II	STR-II	STR-II	STR-II	STR-IA	STR-II	STR-II
	RATING FACTOR	3.09V	2.63V	2.38V	2.31V	1.95V	1.24V	1.09V
	RESISTANCE	354.3K	207.4K	207.4K	207.4K	354.3K	354.3K	354.3K
	SPAN # / BEAM #	1/6	1/6	1/6	1/6	1/6	1/6	1/6

CRITICAL MEMBER MAXIMUM FACTORED FLEXURAL RESISTANCE: 14,744.8 K-FT LOCATION: BEAM 6 (SPAN 1), 57'-6"

CRITICAL MEMBER MAXIMUM FACTORED SHEAR RESISTANCE: 582.76 K LOCATION: BEAM 6 (SPAN 1), 23'-0"

RATING NOTES:

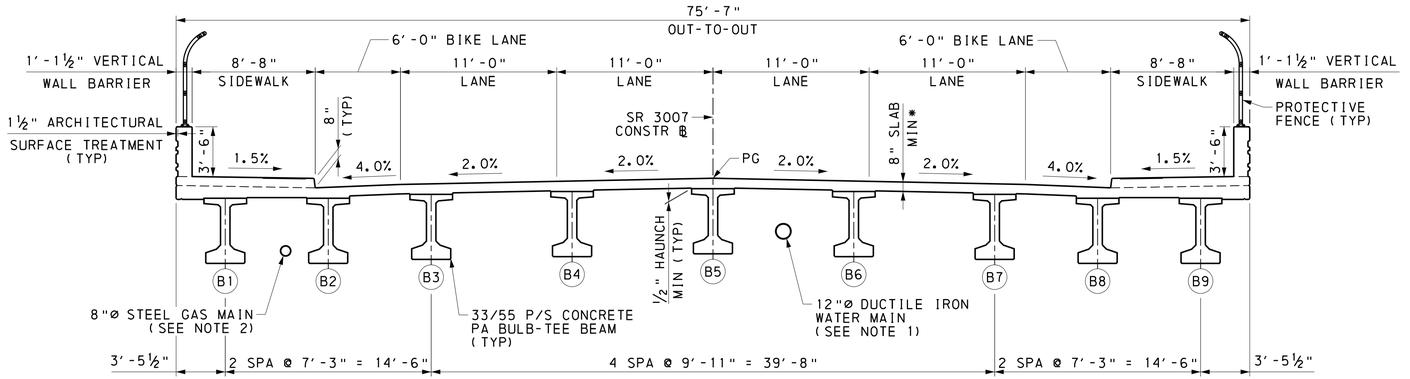
1. RATINGS BASED ON LOAD AND RESISTANCE FACTOR DESIGN (LRFD) METHOD.
2. DISTRIBUTION FACTORS ARE CORRESPONDING TO THE CONTROLLING LIMIT STATES.
3. DATA TAKEN FROM PENNDOT'S P/S CONCRETE GIRDER DESIGN AND RATING (PSLRFD) PROGRAM (v2.14.0.0)
4. FACTORED RESISTANCE TAKEN AT THE LOCATION OF THE CRITICAL MEMBER INDICATED.
5. M - MOMENT RATING FACTOR CONTROLS
   V - SHEAR RATING FACTOR CONTROLS
6. RATINGS WITH FUTURE WEARING SURFACE INCLUDES SURFACE AREA DENSITY OF 30 LB/SF FOR FUTURE WEARING SURFACE.
7. PHL-93 = PENNSYLVANIA DESIGN VEHICULAR LIVE LOAD
   ML-80 = PENNSYLVANIA MAXIMUM LEGAL LOAD
   TK527 = PENNSYLVANIA LEGAL LOAD CONFIGURATION
   P-82 = PENNSYLVANIA PERMIT LOAD
   P2016-13 = PENNSYLVANIA PERMIT LOAD
8. FOR THE STR-IP LIMIT STATE, THE VEHICULAR LOAD DISTRIBUTION FACTOR ACCOUNTS FOR THE PRESENCE OF PEDESTRIAN LOADS.
9. FOR BEAM PROPERTIES USED FOR RATINGS, SEE SHEET 37.

INDEX OF DRAWINGS

SHEET NO.	TITLE
1	GENERAL PLAN & ELEVATION
2	TYPICAL SECTION & LOAD RATINGS
3	GENERAL NOTES 1
4	GENERAL NOTES 2
5	QUANTITIES
6	DEMOLITION CONCEPT DETAILS 1
7	DEMOLITION CONCEPT DETAILS 2
8	CONCEPTUAL ERECTION PLAN 1
9	CONCEPTUAL ERECTION PLAN 2
10	STAKE-OUT PLAN
11	ABUTMENT 1 FOOTING PLAN
12	ABUTMENT 1 PLAN
13	ABUTMENT 1 ELEVATION
14	ABUTMENT 1 SECTION & DETAILS
15	WINGWALL A PLAN
16	WINGWALL A ELEVATION
17	WINGWALL A SECTIONS
18	WINGWALL B PLAN
19	WINGWALL B ELEVATION
20	WINGWALL B SECTIONS
21	ABUTMENT 1 REBAR SCHEDULE
22	ABUTMENT 2 FOOTING PLAN
23	ABUTMENT 2 PLAN
24	ABUTMENT 2 ELEVATION
25	ABUTMENT 2 SECTION & DETAILS
26	WINGWALL C PLAN & ELEVATION
27	WINGWALL C SECTIONS
28	WINGWALL D PLAN & ELEVATION
29	WINGWALL D SECTIONS 1
30	WINGWALL D SECTIONS 2
31	ABUTMENT 2 REBAR SCHEDULE 1
32	ABUTMENT 2 REBAR SCHEDULE 2
33	MISCELLANEOUS ABUTMENT DETAILS
34	ABUTMENT ARCHITECTURAL DETAILS
35	FRAMING PLAN

INDEX OF DRAWINGS (CONT'D)

SHEET NO.	TITLE
36	BEAM DETAILS 1
37	BEAM DETAILS 2
38	BEARING DETAILS
39	SLAB PLAN
40	SLAB TYPICAL SECTION
41	BARRIER & SIDEWALK DETAILS
42	DIAPHRAGM DETAILS 1
43	DIAPHRAGM DETAILS 2
44	DIAPHRAGM DETAILS 3
45	DIAPHRAGM DETAILS 4
46	DIAPHRAGM DETAILS 5
47	DIAPHRAGM DETAILS 6
48	DIAPHRAGM DETAILS 7
49	SUPERSTRUCTURE REBAR SCHEDULE
50	DECK ELEVATIONS
51	FAR SLEEPER SLAB PLAN
52	NEAR APPROACH SLAB PLAN
53	FAR APPROACH SLAB PLAN
54	NEAR APPROACH SLAB SECTIONS
55	FAR APPROACH SLAB SECTIONS
56	APPROACH SLAB DETAILS 1
57	APPROACH SLAB DETAILS 2
58	APPROACH SLAB DETAILS 3
59	APPROACH SLAB DETAILS 4
60	APPROACH SLAB REBAR SCHEDULE
61	BARRIER ARCHITECTURAL DETAILS
62	PROTECTIVE FENCE DETAILS
63	FUTURE REDECKING PLAN
64-70	STRUCTURE BORINGS



TYPICAL SECTION

2 0 2 4 6 FEET

* INCLUDES ½" INTEGRAL WEARING SURFACE

NOTES:

1. COORDINATE WITH CAPITAL REGION WATER. SEE WATER UTILITY RELOCATION ALSO PLAN.
2. COORDINATE WITH UGI UTILITIES, INC. AND THEIR CONTRACTOR FOR THE GAS UTILITY RELOCATION. SEE GAS UTILITY RELOCATION ALSO PLAN.

REFERENCES:

	SHEETS:
GENERAL PLAN	1
GENERAL NOTES	3 - 4

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509

BMS STR ID: 22-3007-0050-0417 MPMS/ECMS PROJ: 97828 BRKEY: 67417

HNTB

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
JUSTIN ROBERT MCCARTHY
ENGINEER
PE076998

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0417 SEG 0051 OFFSET 0417
SR 3007 (19TH STREET) STA 103+30.88
OVER NORFOLK SOUTHERN RAILWAY COMPANY

1-SPAN COMPOSITE PS CONCRETE
PA BULB-TEE BEAM BRIDGE

TYPICAL SECTION & LOAD RATINGS

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

RECOMMENDED 12-6-2022

SHEET 2 OF 70

S-39452

7/22/2022
FILENAME= 63016-s-br-B2-typ01.dgn

DES: MCA	DES CKD: JMA	DWG: SMZ	DWG CKD: JRM

GENERAL NOTES

DESIGN SPECIFICATIONS:

1. AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 8TH EDITION, 2017, AND AS SUPPLEMENTED BY DESIGN MANUAL, PART 4, DECEMBER 2019.
2. LIVE LOAD DISTRIBUTION TO GIRDERS IS BASED UPON DM-4 DISTRIBUTION FACTORS.
3. DESIGN IS IN ACCORDANCE WITH THE LRFD METHOD.

DESIGN LIVE LOADS:

1. PHL-93, P-82 AND P2016-13
2. FATIGUE DESIGN IS BASED ON THE FOLLOWING:

   PRESTRESSED CONCRETE: ADTT 265 (2050)(ONE-DIRECTIONAL)
3. MAXIMUM ALLOWABLE TENSILE STRESS IN PRECOMPRESSED TENSILE ZONE: 0.0948 $\sqrt{(f'c)}$

DEAD LOADS:

1. INCLUDES SURFACE AREA DENSITY OF 0.030 KSF FOR FUTURE WEARING SURFACE ON THE DECK SLAB.
2. INCLUDES A SURFACE AREA DENSITY OF 0.015 KSF FOR PERMANENT METAL DECK FORMS THAT TAKES INTO ACCOUNT THE WEIGHT OF THE FORM, PLUS THE WEIGHT OF THE CONCRETE IN THE VALLEYS OF THE FORMS.
3. BEAMS 5 AND 6 INCLUDE 0.083 KIP/FT EACH FOR UTILITY AND SUPPORT.
4. BEAMS 1-4 AND 7-9 INCLUDE 0.020 KIP/FT EACH FOR UTILITY AND SUPPORT.

GENERAL:

1. PROVIDE MATERIALS AND PERFORM WORK IN ACCORDANCE WITH SPECIFICATIONS, PUBLICATION 408/2020, AASHTO/AWS D1.5M/D1.5: 2015 BRIDGE WELDING CODE, AND CONTRACT SPECIAL PROVISIONS.
2. PROVIDE 2" CONCRETE COVER ON REINFORCEMENT BARS, EXCEPT AS NOTED.
3. USE CLASS AAAP CEMENT CONCRETE IN DECK SLAB AND TYPE 3 APPROACH SLAB.

   USE CLASS AA CEMENT CONCRETE IN ALTERNATE SIDEWALK, CURBS, BARRIERS, TYPE 1 APPROACH SLAB, CONCRETE DIAPHRAGMS, ABUTMENT 2 BACKWALL, CHEEK WALLS, SHEAR BLOCKS, U-WINGS ABOVE BRIDGE SEAT CONSTRUCTION JOINT, AND SLEEPER SLAB.

   USE CLASS A CEMENT CONCRETE IN ABUTMENTS BELOW BRIDGE SEAT, WINGWALLS, AND FOOTINGS.

   USE CLASS C CEMENT CONCRETE BELOW THE BOTTOM OF FOOTINGS WHEN SPECIFIED.
4. A HIGHER CLASS CONCRETE MAY BE SUBSTITUTED FOR A LOWER CLASS CONCRETE AT NO ADDITIONAL COST TO THE DEPARTMENT, IF APPROVED BY THE DISTRICT BRIDGE ENGINEER.
5. PROVIDE GRADE 60 REINFORCING STEEL BARS THAT MEET THE REQUIREMENTS OF ASTM A 615/A 615M, A 996/A 996M OR A 706/A 706M. DO NOT WELD GRADE 60 REINFORCING STEEL BARS UNLESS SPECIFIED. GRADE 40 REINFORCING STEEL BARS MAY BE SUBSTITUTED WITH A PROPORTIONAL INCREASE IN CROSS-SECTIONAL AREA, IF APPROVED BY THE CHIEF BRIDGE ENGINEER. DO NOT USE RAIL STEEL A 996/A 996M REINFORCEMENT BARS IN ABUTMENTS, SHEAR BLOCKS, BEAMS, FOOTINGS, BARRIERS OR WHERE BENDING OF THE REINFORCEMENT BARS IS INDICATED.
6. USE EPOXY-COATED REINFORCEMENT BARS EVERYWHERE.
7. GALVANIZED REINFORCING STEEL BARS MAY BE SUBSTITUTED FOR EPOXY-COATED REINFORCING STEEL BARS AT NO ADDITIONAL COST TO THE DEPARTMENT.
8. RAKE-FINISH ALL HORIZONTAL CONSTRUCTION JOINTS, EXCEPT AS INDICATED.
9. CONSTRUCT DECK SLAB TRANSVERSE CONSTRUCTION JOINTS PARALLEL TO BRIDGE CENTERLINE OF BEARINGS.
10. PLACE CHEEKWALL, CONCRETE SHEAR BLOCKS, AND BACKWALL CONCRETE AFTER BEAMS ARE SET IN POSITION.
11. CHAMFER EXPOSED CONCRETE EDGES ¾" BY ¾", EXCEPT AS NOTED.
12. ALL DIMENSIONS SHOWN ARE HORIZONTAL, EXCEPT AS NOTED.
13. USE PERMANENT METAL FORMS TO CONSTRUCT THE DECK SLAB.
14. DECK SLAB THICKNESS INCLUDES A ½" INTEGRAL WEARING SURFACE.
15. SUPERSTRUCTURE DIMENSIONS SHOWN ARE FOR A NORMAL TEMPERATURE OF 68°F.
16. PROVIDE MINIMUM EMBEDMENT AND SPLICE LENGTHS IN ACCORDANCE WITH STANDARD DRAWING BC-736M, UNLESS OTHERWISE INDICATED.
17. PREPARE BEARING AREAS AS SPECIFIED IN PUBLICATION 408, SECTION 1001.3(K)9.
18. BRIDGE IS NOT WEIGHT RESTRICTED. SEE PUBLICATION 408 SECTION 105.17 FOR CONSTRUCTION LOADING LIMITS.
19. PROVIDE A MINIMUM WIDTH OF 2½" AT 68°F FOR STRIP SEAL INSTALLATIONS UNLESS OTHERWISE INDICATED.
20. DO NOT USE ADHESIVE ANCHORS IN A TENSION APPLICATION FOR PERMANENT INSTALLATIONS.
21. DO NOT USE ADHESIVE ANCHORS IN A SUSTAINED TENSION APPLICATION FOR TEMPORARY INSTALLATIONS, INCLUDING DURING CONSTRUCTION.
22. LABORATORY ANALYSIS OF SAMPLES FROM CAULKING MATERIAL OBSERVED AT THE BASE PLATE OF EACH RAILING POST ATTACHED TO THE BRIDGE PARAPETS OF THE EXISTING STRUCTURE (S-7173) WAS CONFIRMED TO BE ASBESTOS CONTAINING MATERIAL. REFER TO THE ASBESTOS CONTAINING MATERIAL AND LEAD-BASED PAINT INSPECTION REPORT AND SPECIAL PROVISION.

EXISTING STRUCTURE PLANS:

1. DO NOT CONSIDER ANY OF THE DATA ON THE EXISTING STRUCTURE SUPPLIED IN THE ORIGINAL DESIGN DRAWINGS OR MADE AVAILABLE TO YOU BY THE DEPARTMENT OR ITS AUTHORIZED AGENTS AS POSITIVE REPRESENTATIONS OF ANY OF THE CONDITIONS THAT YOU WILL ENCOUNTER IN THE FIELD.
2. THE INFORMATION SHOWN ON THE PLANS FOR THE EXISTING BRIDGE IS NOT PART OF THE PLANS, PROPOSAL OR CONTRACT AND IS NOT TO BE CONSIDERED A BASIS FOR COMPUTATION OF THE UNIT PRICES USED FOR BIDDING PURPOSES. THERE IS NO EXPRESSED OR IMPLIED AGREEMENT THAT INFORMATION IS CORRECTLY SHOWN. THE BIDDER IS NOT TO RELY ON THIS INFORMATION, BUT IS TO ASSUME THE POSSIBILITY THAT CONDITIONS AFFECTING THE COST AND/OR QUANTITIES OF WORK TO BE PERFORMED MAY DIFFER FROM THOSE INDICATED. SEE S-7173 (MAY 1964) PLAN SHEETS FOR EXISTING STRUCTURE INFORMATION.
3. REMOVE EXISTING BRIDGE IN ACCORDANCE WITH THE TRAFFIC CONTROL PLANS AND SPECIAL PROVISIONS.

FOUNDATION NOTES:

1. FOUNDATIONS MAY BE ORDERED BY THE REPRESENTATIVE AND DISTRICT GEOTECHNICAL SPECIALIST TO BE AT ANY ELEVATION OR OF ANY DIMENSIONS NECESSARY TO PROVIDE A PROPER FOUNDATION.
2. THE CONTRACTOR IS RESPONSIBLE FOR THE CONTROL OF DRAINAGE DURING CONSTRUCTION. DIRECT RUNOFF AWAY FROM THE PROPOSED FOUNDATION FOOTPRINT.
3. AT ABUTMENT 1 AND ASSOCIATED WINGWALLS, IF BEDROCK IS NOT ENCOUNTERED AT THE BOTTOM OF FOOTING ELEVATION, OVER-EXCAVATE TO TOP OF ROCK AND BACKFILL WITH CLASS C CEMENT CONCRETE TO THE BOTTOM OF FOOTING ELEVATION IN ACCORDANCE WITH OVEREXCAVATION AND BACKFILL WITH CLASS C CEMENT CONCRETE SPECIAL PROVISION.
4. PRIOR TO FOOTING CONSTRUCTION, ALLOW THE DISTRICT GEOTECHNICAL SPECIALIST TO INSPECT THE BOTTOM OF FOOTING EXCAVATION. AS DIRECTED, EXCAVATE SOFT OR UNSUITABLE MATERIAL BELOW THE BOTTOM OF FOOTING ELEVATION AND REPLACE WITH STRUCTURAL FILL.
5. AT ABUTMENT 2, OVER-EXCAVATE TO TOP OF EXISTING PEDESTALS AND BACKFILL TO THE BOTTOM OF FOOTING ELEVATION WITH STRUCTURAL FILL IN ACCORDANCE WITH OVEREXCAVATION AND BACKFILL WITH STRUCTURAL FILL SPECIAL PROVISION.
6. AT WINGWALLS C AND D, OVER-EXCAVATE TWO (2) FEET AND PERFORM SPECIAL ROLLING WITHIN THE FOUNDATION FOOTPRINT PER PUBLICATION 408, SECTION 208. WHERE UNSUITABLE AND/OR UNSTABLE MATERIALS ARE IDENTIFIED, PERFORM ADDITIONAL OVER-EXCAVATION TO COMPETENT MATERIAL AND BACKFILL TO THE BOTTOM OF FOOTING ELEVATION WITH STRUCTURAL FILL IN ACCORDANCE WITH OVEREXCAVATION AND BACKFILL WITH STRUCTURAL FILL SPECIAL PROVISION.
7. EXCAVATE ACCORDING TO CURRENT OSHA OR OTHER APPLICABLE LOCAL, STATE, AND FEDERAL REGULATIONS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE STABILITY OF THE EXCAVATIONS.
8. NOTIFY THE DISTRICT GEOTECHNICAL SPECIALIST IF ANY DEVIATIONS FROM THE NOTED SUBSURFACE CONDITIONS ARE ENCOUNTERED DURING CONSTRUCTION.
9. CONSIDER THE SOIL ENVIRONMENT AS POTENTIALLY CORROSIVE, EPOXY COAT ALL REINFORCEMENT BARS.
10. SITE CLASS IS NOT CLASS E OR F.
11. ROCK EXCAVATION IS ANTICIPATED FOR THE CONSTRUCTION OF ABUTMENT 1, WINGWALL A AND WINGWALL B.

ARCHITECTURAL DETAIL NOTES:

1. PROVIDE FORMWORK TO CREATE THE RELIEF DETAILS ON THE OUTSIDE FACES OF BARRIERS AS INDICATED ON SHEET 61. THIS FORMWORK IS INCIDENTAL TO THE BARRIER CONCRETE.
2. APPLY AN ARCHITECTURAL SURFACE TREATMENT (FORMLINER) TO THE FRONT FACE OF WINGWALLS A AND B AS INDICATED ON SHEET 34 AND IN ACCORDANCE WITH SPECIAL PROVISION - ARCHITECTURAL SURFACE TREATMENT, ½" RELIEF, SPLIT BLOCK, 14"x22".
3. APPLY AN ARCHITECTURAL SURFACE TREATMENT (FORMLINER) TO THE FRONT FACE OF WINGWALLS C AND D AS INDICATED ON SHEET 34 AND IN ACCORDANCE WITH SPECIAL PROVISION - ARCHITECTURAL SURFACE TREATMENT, 3/4" RELIEF, HEXAGON.
4. APPLY STAIN TO CONCRETE SURFACES TO THE LIMITS INDICATED AND IN ACCORDANCE WITH SPECIAL PROVISION - STAINING OF REINFORCED CONCRETE SURFACES. USE THE FOLLOWING COLORS:

   AREAS OF ARCHITECTURAL SURFACE TREATMENT, SPLIT BLOCK, 14"x22"

   BASE COLOR OF ENTIRE SURFACE AREA:
   FEDERAL COLOR #30372, BEIGE-SAND

   ACCENT BLOCK COLORS (THE NUMBER OF BLOCKS TO HAVE THE TWO ACCENT COLORS SHOULD EACH BE 4% OF THE TOTAL BLOCK SURFACE AREA, EACH ACCENT BLOCK SHOULD BE COMPLETELY COLORED):
   FEDERAL COLOR #30219, COCOA-TAN
   FEDERAL COLOR #30166, REDDISH-BROWN

   GROUT LINES:
   FEDERAL COLOR #26492, OFF-WHITE

   OTHER CONCRETE SURFACES

   BARRIER RECTANGULAR BLOCKS:
   FEDERAL COLOR #15450, BLUE
5. BRIDGE BARRIER, SIDEWALK, BEAMS, ABUTMENT 1 FRONT FACE, ABUTMENT 2 FRONT FACE, WINGWALL C, AND WINGWALL D TO BE NATURAL COLOR, EXCEPT FOR AREAS INDICATED ABOVE.
6. PROVIDE A MODIFIED PROTECTIVE FENCE AS INDICATED ON SHEET 62 AND IN ACCORDANCE WITH SPECIAL PROVISION - RAILROAD PROTECTIVE FENCE, CURVED TOP, VINYL-COATED STEEL, BLACK.
   FEDERAL COLOR #37031, BLACK

UTILITY NOTES:

1. COORDINATE, LOCATE, AND CONDUCT ALL WORK RELATED TO PUBLIC AND PRIVATE UTILITIES IN ACCORDANCE WITH PUBLICATION 408, SECTIONS 105.06 AND 107.12.
2. COORDINATE WITH CAPITAL REGION WATER. SEE WATER UTILITY RELOCATION ALSO PLAN.
3. COORDINATE WITH UGI UTILITIES, INC. AND THEIR CONTRACTOR FOR THE GAS UTILITY RELOCATION. SEE GAS UTILITY RELOCATION ALSO PLAN.
4. COORDINATE WITH CAPITAL REGION WATER AND UGI UTILITIES, INC. PRIOR TO DEMOLITION OF THE EXISTING STRUCTURE (S-7173). THE EXISTING UTILITIES SHALL BE DISCONNECTED/ABANDONED AND TEMPORARY SERVICE PROVIDED BEFORE EXISTING BRIDGE REMOVAL.
5. PROTECT EXISTING CCTV CAMERA AND SERVICE POLE THAT ARE TO REMAIN IN OPERATION DURING CONSTRUCTION.

* AS SUPPLEMENTED BY ATTACHMENT BC-788 MODIFIED "SPRAY-ON WATERPROOFING DETAILS"

SUPPLEMENTAL DRAWINGS

DESCRIPTION	DWG. NO.	REC. DATE
CLASSIFICATION OF EARTHWORK FOR STRUCTURES	RC-11M	06/01/10
BACKFILL AT STRUCTURES	RC-12M	02/08/19
CONCRETE PAVEMENT JOINTS	RC-20M	11/30/21
GUIDE RAIL TO BRIDGE BARRIER TRANSITIONS	RC-50M	02/19/21
PROTECTIVE FENCE	BC-701M	02/19/21
ELECTRICAL DETAILS	BC-721M	02/19/21
PERMANENT METAL DECK FORMS	BC-732M	01/31/19
ANCHOR SYSTEMS	BC-734M	02/19/21
WALL CONSTRUCTION AND EXPANSION JOINT DETAILS	BC-735M	09/30/16
REINFORCEMENT BAR FABRICATION DETAILS	BC-736M	01/31/19
BRIDGE DRAINAGE	BC-751M	01/31/19
CONCRETE DECK SLAB DETAILS	BC-752M	02/19/21
BEARINGS	BC-755M	01/31/19
PREFORMED NEOPRENE COMPRESSION SEAL JOINT FOR APPROACH SLABS	BC-766M	01/31/19
NEOPRENE STRIP SEAL DAM FOR PRESTRESSED CONCRETE & STEEL I-BEAM BRIDGES	BC-767M	02/19/21
PRESTRESSED CONCRETE BEAM BRACING	BC-772M	09/30/16
MISCELLANEOUS PRESTRESS DETAILS	BC-775M	09/30/16
REINFORCED CONCRETE REPAIR	BC-783M	01/31/19
TYPICAL WATERPROOFING AND EXPANSION DETAILS *	BC-788M	01/31/19
UTILITY ATTACHMENT & SUPPORT DETAILS, PRESTRESSED BRIDGES	BC-794M	01/31/19

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0417 MPMS/ECMS PROJ: 97828 BRKEY: 67417

HNTB

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
JUSTIN ROBERT MCCARTHY
ENGINEER PE076998

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

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0417 SEG 0051 OFFSET 0417
SR 3007 (19TH STREET) STA 103+30.88
OVER NORFOLK SOUTHERN RAILWAY COMPANY

1-SPAN COMPOSITE PS CONCRETE
PA BULB-TEE BEAM BRIDGE
GENERAL NOTES 1

RECOMMENDED 12-6-2022

SHEET 3 OF 70

S-39452

12/2/2022
FILENAME 63016-s-brB2-gen01.dgn

DES: MCA	DES CKD: JRM	DWG: SMZ	DWG CKD: JRM

GENERAL NOTES

RAILROAD NOTES:

1. ALL WORK TO BE PERFORMED ON, OVER, UNDER, OR ADJACENT TO THE RAILROAD RIGHT-OF-WAY SHALL COMPLY WITH THE NORFOLK SOUTHERN RAILWAY COMPANY ("RAILROAD", "NSR" OR "NS") PUBLIC PROJECTS MANUAL (APPENDIX E, SPECIAL PROVISIONS FOR PROTECTION OF RAILWAY INTERESTS, AND APPENDIX H1, OVERHEAD GRADE SEPARATION DESIGN CRITERIA). WHEN IN CONFLICT WITH OTHER PROJECT SPECIFICATIONS, THE MOST STRINGENT ONE SHALL APPLY.

2. "ONE CALL" SERVICES DO NOT LOCATE BURIED RAILROAD SIGNAL AND COMMUNICATIONS LINES. THE CONTRACTOR SHALL CONTACT THE RAILROAD'S REPRESENTATIVE 2 DAYS IN ADVANCE OF WORK AT THOSE PLACES WHERE EXCAVATION, PILE DRIVING, OR HEAVY LOADS MAY DAMAGE THE RAILROAD'S UNDERGROUND FACILITIES. UPON REQUEST FROM THE CONTRACTOR OR SPONSOR, RAILROAD FORCES WILL LOCATE AND PAINT MARK OR FLAG THE RAILROAD'S UNDERGROUND FACILITIES. THE CONTRACTOR SHALL AVOID EXCAVATION OR OTHER DISTURBANCE OF THESE FACILITIES. IF DISTURBANCE OR EXCAVATION IS REQUIRED NEAR A BURIED RAILROAD FACILITY, THE CONTRACTOR SHALL COORDINATE WITH THE RAILROAD TO HAVE THE FACILITY POTHOLED MANUALLY WITH CAREFUL HAND EXCAVATION. THE FACILITY SHALL BE PROTECTED BY THE CONTRACTOR DURING THE COURSE OF THE DISTURBANCE UNDER THE SUPERVISION AND DIRECTION OF THE RAILROAD'S REPRESENTATIVE. (SEE NS PUBLIC PROJECTS MANUAL, APPENDIX E, SECTION 3.D).

3. ALL UTILITY INSTALLATIONS OR RELOCATIONS THAT ARE REQUIRED IN CONJUNCTION WITH THIS PROJECT CAN BE INSTALLED OR RELOCATED AS PART OF THE PROJECT PROVIDED THE CONSTRUCTION IS PERFORMED BY THE PROJECT CONTRACTOR OR PROJECT CONTRACTOR'S SUB-CONTRACTOR. HOWEVER, THE UTILITY MUST SUBMIT AN APPLICATION FOR THE INSTALLATION OR RELOCATION TO AECOM FOR APPROPRIATE HANDLING FOR LICENSE AGREEMENT AND APPLICABLE FEES. FOR UTILITY APPLICATIONS GO TO: WWW.NSCORP.COM > REAL ESTATE > NS SERVICES > WIRE, PIPELINE, & FIBER OPTIC PROJECTS > AECOM. NOTE: LICENSE AGREEMENT MUST BE EXECUTED PRIOR TO UTILITY BEING INSTALLED OR RELOCATED.

4. THE CONTRACTOR SHALL NOT COMMENCE ANY WORK ON RAILROAD RIGHTS-OF-WAY UNTIL THEY HAVE COMPLIED WITH THE CONDITIONS PRESENTED IN NS PUBLIC PROJECTS MANUAL (SEE APPENDIX E, NORFOLK SOUTHERN - SPECIAL PROVISIONS FOR PROTECTION OF RAILWAY INTERESTS).

5. THE CONTRACTOR SHALL SO ARRANGE AND CONDUCT THEIR WORK SUCH THAT THERE WILL BE NO INTERFERENCE WITH THE RAILROAD'S OPERATIONS. WHENEVER WORK IS LIABLE TO AFFECT THE OPERATIONS OR SAFETY OF TRAINS, THE METHODS OF DOING SUCH WORK SHALL FIRST BE SUBMITTED TO THE RAILROAD ENGINEER FOR APPROVAL, BUT SUCH APPROVAL SHALL NOT RELIEVE THE CONTRACTOR FROM ANY LIABILITY.

6. MATERIALS AND EQUIPMENT SHALL NOT BE STORED WHERE THEY WILL INTERFERE WITH RAILROAD OPERATIONS, NOR ON THE RIGHTS-OF-WAY OF THE RAILROAD WITHOUT FIRST HAVING OBTAINED PERMISSION FROM THE RAILROAD ENGINEER, AND SUCH PERMISSION WILL BE WITH THE UNDERSTANDING THAT THE RAILROAD WILL NOT BE LIABLE FOR DAMAGE TO SUCH MATERIAL AND EQUIPMENT FROM ANY CAUSE AND THAT THE RAILROAD ENGINEER MAY MOVE OR REQUIRE THE CONTRACTOR TO MOVE, AT THE CONTRACTOR'S EXPENSE, SUCH MATERIAL AND EQUIPMENT. (SEE NS PUBLIC PROJECTS MANUAL, APPENDIX E, SECTION 5K).

7. SUPPORT OF EXCAVATION AND EXISTING SUBSTRUCTURE TO REMAIN ARE TO BE CUT OFF AT LEAST 2 FEET BELOW PROPOSED GRADE. (SEE NS PUBLIC PROJECTS MANUAL, APPENDIX E5, SECTION D7, AND APPENDIX H1, SECTION 5H).

8. PROVIDE NO. 3 COARSE AGGREGATE FOR THE TOP 2 FEET OF ANY BACKFILL WITHIN 20 FEET OF CENTERLINE OF EXISTING TRACK.

9. THE RAILROAD WILL BE PROVIDED AS-BUILT DRAWINGS SHOWING THE ACTUAL CLEARANCES AS CONSTRUCTED. DEPTH, SIZE, AND LOCATION OF ALL FOUNDATION COMPONENTS SHALL BE SHOWN ON THE DRAWINGS. (SEE NS PUBLIC PROJECTS MANUAL, APPENDIX H1, SECTION 8A).

10. FOR PROJECTS REQUIRING MORE THAN 30 CONSECUTIVE DAYS OF FLAGGING, THE CONTRACTOR SHALL PROVIDE THE FLAGMAN A SMALL WORK AREA WITH A DESK/COUNTER AND CHAIR WITHIN THE FIELD/SITE TRAILER, INCLUDING THE USE OF BATHROOM FACILITIES, WHERE THE FLAGMAN CAN CHECK IN/OUT WITH THE PROJECT, AS WELL AS TO THE FLAGMAN'S HOME TERMINAL. THE WORK AREA SHOULD PROVIDE ACCESS TO TWO (2) ELECTRICAL OUTLETS FOR RECHARGING RADIO(S), AND A LAPTOP COMPUTER; AND HAVE THE ABILITY TO PRINT OFF NEEDED DOCUMENTATION AND ORDERS AS NEEDED AT THE FIELD/SITE TRAILER. THIS SHOULD AID IN MAXIMIZING THE FLAGMAN'S TIME AND EFFICIENCY ON THE PROJECT.

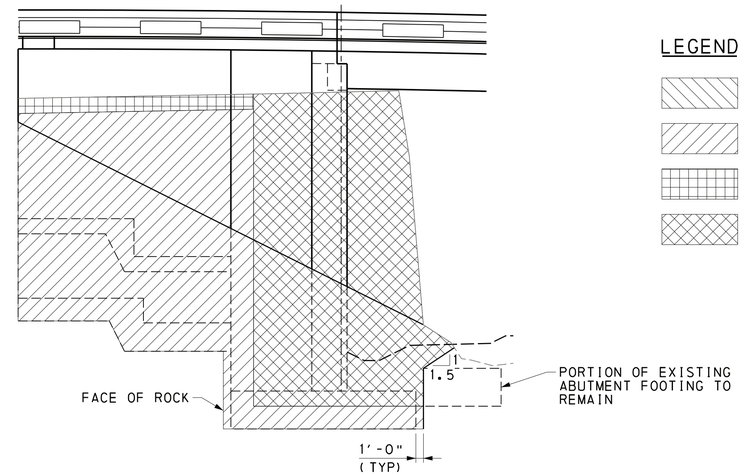
11. THE PROPOSED PROJECT WILL NOT CHANGE THE QUANTITY AND/OR CHARACTER OF FLOW IN THE RAILWAY'S DITCHES AND/OR DRAINAGE STRUCTURES.

12. NORFOLK SOUTHERN HAS 54 TRAINS PER DAY AT 40 MPH.

13. CONTACT INFORMATION FOR THE RAILROAD IS AS FOLLOWS:
    MR. D. SHAWN STARLING, PE
    SENIOR ENGINEER PUBLIC IMPROVEMENTS
    ENGINEERING - DESIGN & CONSTRUCTION
    NORFOLK SOUTHERN RAILWAY COMPANY
    650 WEST PEACHTREE STREET NW - BOX 45
    ATLANTA, GA 30308
    TELEPHONE: (470) 463-6721
    EMAIL: DOUGLAS.STARLING@NSCORP.COM

LEGEND OF ABBREVIATIONS:

ABUT	=	ABUTMENT
ADT	=	AVERAGE DAILY TRAFFIC
ADTT	=	AVERAGE DAILY TRUCK TRAFFIC
ALT	=	ALTERNATE
APPR	=	APPROACH
APPROX	=	APPROXIMATE
AHD	=	AHEAD
AUX	=	AUXILIARY
℄	=	BASELINE
BRG	=	BEARING
BOT	=	BOTTOM
BFE	=	BOTTOM OF FOOTING ELEVATION
℄	=	CENTERLINE
CG	=	CENTER OF GRAVITY
CHK'D/CKD	=	CHECKED
CLR	=	CLEAR/CLEARANCE
CONSTR	=	CONSTRUCTION
DES	=	DESIGN
ø/DIA	=	DIAMETER
DWG	=	DRAWING
EA	=	EACH
EF	=	EACH FACE
ELEV	=	ELEVATION
EQ	=	EQUAL
EXIST	=	EXISTING
E/EXP	=	EXPANSION
FF	=	FRONT FACE
F	=	FIXED
GALV	=	GALVANIZED
H/HORIZ	=	HORIZONTAL
INV	=	INVERT
JT	=	JOINT
LT	=	LEFT
MAINT	=	MAINTENANCE
MAX	=	MAXIMUM
MP	=	MILEPOST
MIN	=	MINIMUM
NB	=	NORTHBOUND
NE	=	NORTHEAST
NW	=	NORTHWEST
NS	=	NORFOLK SOUTHERN RAILWAY
NO.	=	NUMBER
OD	=	OUTSIDE DIAMETER
PED	=	PEDESTAL
ℙ	=	PLATE
POB	=	POINT OF BEGINNING
POE	=	POINT OF ENDING
POT	=	POINT OF TANGENCY
PCP	=	PREFORMED CELLULAR POLYSTYRENE
P/S	=	PRESTRESSED
PG/PGL	=	PROFILE GRADE LINE
PROV	=	PROVIDED
PUB	=	PUBLICATION
R	=	RADIUS
R/W	=	RIGHT-OF-WAY
RDWY	=	ROADWAY
RECM'D	=	RECOMMENDED
REINF	=	REINFORCEMENT
REQ'D	=	REQUIRED
RF	=	REAR FACE
RT	=	RIGHT
SCHED	=	SCHEDULE
SHLDR	=	SHOULDER
SB	=	SOUTHBOUND
SE	=	SOUTHEAST
SW	=	SOUTHWEST
SPA	=	SPACE
STD	=	STANDARD
SR	=	STATE ROUTE
STA	=	STATION
ST	=	STREET
TEMP	=	TEMPORARY
TESPS	=	TEMPORARY EXCAVATION SUPPORT & PROTECTION SYSTEM
TOR	=	TOP OF ROCK
TYP	=	TYPICAL
UNO	=	UNLESS NOTED OTHERWISE
V/VERT	=	VERTICAL
WING	=	WINGWALL
WP	=	WORK POINT

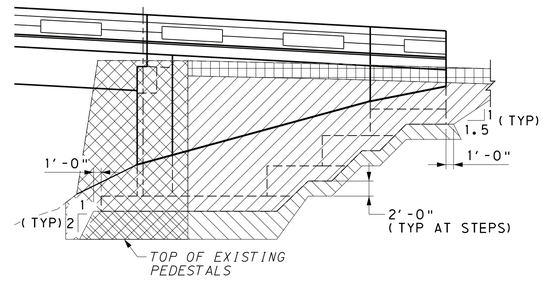


(SEE SHEETS 15 & 18 FOR DETAILS OF CLASS C CEMENT CONCRETE BACKFILL AT WINGS A & B)

LIMITS OF EXCAVATION AT
ABUTMENT 1 AND WINGS A & B
NOT TO SCALE

LEGEND

- OVEREXCAVATION AND BACKFILL WITH STRUCTURAL FILL
- CLASS 3 EXCAVATION
- CLASS 1 EXCAVATION
- REMOVAL OF EXISTING STRUCTURE



LIMITS OF EXCAVATION AT
ABUTMENT 2 AND WINGS C & D
NOT TO SCALE

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0417 MPMS/ECMS PROJ: 97828 BRKEY: 67417

HNTB

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0417 SEG 0051 OFFSET 0417
SR 3007 (19TH STREET) STA 103+30.88
OVER NORFOLK SOUTHERN RAILWAY COMPANY

1-SPAN COMPOSITE PS CONCRETE
PA BULB-TEE BEAM BRIDGE
GENERAL NOTES 2

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — JUSTIN ROBERT MCCARTHY — ENGINEER — PE076998

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

RECOMMENDED 12-6-2022

SHEET 4 OF 70

S-39452

7/26/2022
FILENAME: 63016-s-br82-gen02.dgn

DES: MCA	DES CKD: JRM	DWG: JTM	DWG CKD: JRM

APPROXIMATE QUANTITIES - BRIDGE STRUCTURE, AS DESIGNED

ITEM NUMBER	DESCRIPTION	UNIT	NEAR APPR SLAB	ABUT 1	ABUT 2	FAR APPR SLAB	SUPER STRUCTURE	TOTAL
8030-0002	BRIDGE STRUCTURE, AS DESIGNED, S-39452 (2)	LS	- - -	- - -	- - -	- - -	- - -	LS
(1)	CLASS 3 EXCAVATION (11)	CY	- - -	3122	2387	- - -	- - -	5509
(1)	STRUCTURE BACKFILL (10)	CY	- - -	2780	1455	- - -	- - -	4235
(1)	ELASTOMER WATERPROOFING MEMBRANE ON OTHER SURFACES (2)(12)	SY	- - -	156	96	- - -	- - -	252
(1)	NO. 57 COARSE AGGREGATE (3)	CY	- - -	35	22	- - -	- - -	57
(1)	NO. 3 COARSE AGGREGATE	CY	- - -	- - -	64	- - -	- - -	64
(1)	JUNCTION BOXES J.B.-25	EA	- - -	- - -	- - -	1	- - -	1
(1)	1/2" CONDUIT IN STRUCTURE (2)	LF	76	- - -	10	43	233	362
(1)	2" CONDUIT IN STRUCTURE	LF	76	- - -	14	60	233	383
(1)	6" STRUCTURE FOUNDATION DRAIN	LF	- - -	275	153	- - -	- - -	428
(1)	MECHANICAL TEXTURING WITH LONGITUDINAL SAWED GROOVES	SY	223	- - -	- - -	176	696	1095
(1)	CLASS AAAP CEMENT CONCRETE (7)	CY	- - -	- - -	- - -	136	282	418
(1)	CLASS AA CEMENT CONCRETE	CY	216	4	19	38	141	418
(1)	CLASS A CEMENT CONCRETE	CY	- - -	1341	383	- - -	- - -	1724
(1)	PROTECTIVE COATING FOR REINFORCED CONCRETE SURFACES (PENETRATING SEALERS, REINFORCED CONCRETE SUBSTRUCTURE SURFACES)	SY	- - -	464	245	- - -	- - -	709
(1)	PROTECTIVE COATING FOR REINFORCED CONCRETE SURFACES (PENETRATING SEALERS, BRIDGE SUPERSTRUCTURE)	SY	351	- - -	- - -	294	1087	1732
(1)	NEOPRENE STRIP SEAL DAM (4" MOVEMENT)	LF	- - -	- - -	- - -	83	- - -	83
(1)	PRESTRESSED CONCRETE PA BULB-TEE BEAMS, 33/55 (5)	LF	- - -	- - -	- - -	- - -	1049	1049
(1)	RAILROAD PROTECTIVE FENCE, CURVED TOP, VINYL-COATED STEEL, BLACK (2)	LF	76	- - -	- - -	47	233	356
(1)	BARRIER LUMINAIRE (2)	EA	7	- - -	1	5	24	37
(1)	STAINING OF REINFORCED CONCRETE SURFACES (2)	SF	24	2149	638	14	70	2895
(1)	STAMPED AND STAINED CEMENT CONCRETE SIDEWALK (2)	SF	226	- - -	- - -	192	699	1117
(1)	ARCHITECTURAL SURFACE TREATMENT, 3/4" RELIEF, HEXAGON (2)	SF	- - -	- - -	638	- - -	- - -	638
(1)	ARCHITECTURAL SURFACE TREATMENT, 1/2" RELIEF, SPLIT BLOCK, 14"x22" (2)	SF	- - -	2149	- - -	- - -	- - -	2149
AND								
1002-0199	REINFORCEMENT BARS, EPOXY COATED (4)(6)	LB	46550	115586	38083	38139	77599	315957
1018-0002	REMOVAL OF EXISTING BRIDGE, S-39452 (2)	LS	- - -	- - -	- - -	- - -	- - -	LS
9000-0502	OVEREXCAVATION AND BACKFILL WITH STRUCTURAL FILL, S-39452 (2)	CY	- - -	- - -	345	- - -	- - -	345
9000-0505	OVEREXCAVATION AND BACKFILL WITH CLASS C CEMENT CONCRETE, S-39452 (2)	CY	- - -	113	- - -	- - -	- - -	113
9000-0512	REPAIR DETERIORATED CONCRETE (2)(8)	SF	- - -	- - -	- - -	- - -	- - -	180
9000-0519	CONTROL OF HEAT OF HYDRATION FOR STRUCTURAL MASS CONCRETE (2)(9)	LS	- - -	- - -	- - -	- - -	- - -	LS

(1) ITEMS IN BRIDGE STRUCTURE LUMP SUM ITEM 8030-0002 - GIVEN FOR INFORMATION ONLY.

(2) SEE SPECIAL PROVISIONS.

(3) GEOTEXTILE, CLASS 1 IS INCIDENTAL TO NO. 57 COARSE AGGREGATE.

(4) FOR AS DESIGNED STRUCTURE. FOR ALTERNATE DESIGNS INCLUDE IN BRIDGE STRUCTURE LUMP SUM BID ITEM.

(5) INCLUDES P/S CONCRETE PA BULB-TEE BEAMS DELIVERED AND SET IN PLACE WITH NEOPRENE BEARING PADS, DOWEL HOLES, GROUT, PREFORMED CELLULAR POLYSTYRENE, NEOPRENE PADS, THE WATERPROOFING SYSTEM AS PER BC-788M, AND ALL OTHER MATERIAL AND WORK FOR A COMPLETE INSTALLATION.

(6) INCLUDES 255 LBS OF STAINLESS STEEL DOWEL BARS.

(7) INCLUDES 16 CY OF CLASS AAAP CONCRETE IN THE VALLEYS OF SIP FORMS.

(8) EXISTING CRASHWALL REPAIR ITEM.

(9) THE FOLLOWING APPROXIMATE QUANTITIES OF MASS CONCRETE ARE GIVEN FOR INFORMATION ONLY:

ABUTMENT 1 STEM: 395 CY
WINGWALL A STEM: 16 CY
WINGWALL B STEM: 18 CY

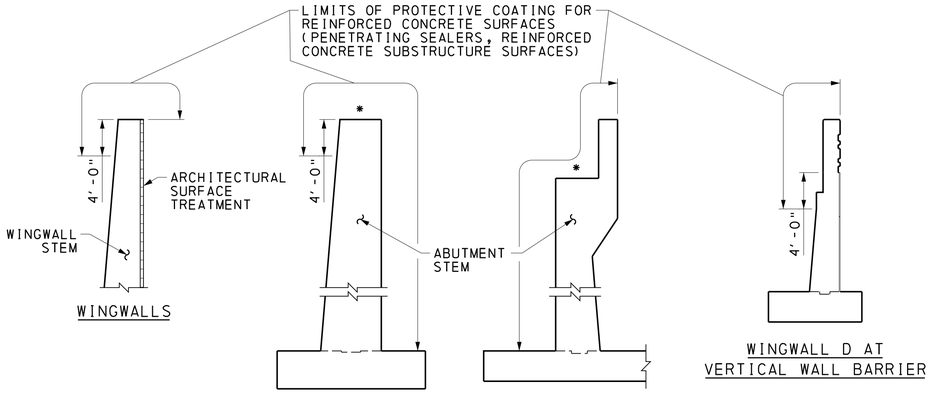
(10) ALL BACKFILL BELOW APPROACH SLAB SUBBASE AT ABUTMENT 1 IS CONSIDERED STRUCTURE BACKFILL.

(11) FOR EXCAVATION PAY LIMITS, SEE SHEET 4.

(12) SEE ATTACHMENT BC-788 MODIFIED "SPRAY-ON WATERPROOFING DETAILS".

ALTERNATE STRUCTURE ITEMS

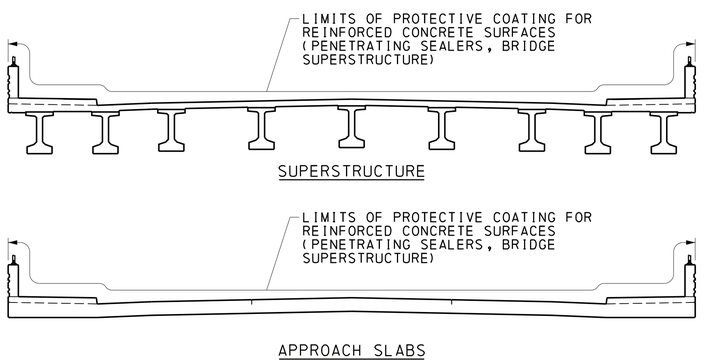
ITEM NUMBER	DESCRIPTION	UNIT	TOTAL
8030-0002	BRIDGE STRUCTURE, AS DESIGNED, S-39452 (2)	LS	LUMP SUM
8000-0002	PRESTRESSED CONCRETE BRIDGE STRUCTURE (2)	LS	LUMP SUM
8100-0002	STEEL BRIDGE STRUCTURE (2)	LS	LUMP SUM



* DO NOT APPLY PROTECTIVE COATING WITHIN 2" OF BEARING PADS

SUBSTRUCTURE PROTECTIVE COATING LIMITS

NOT TO SCALE



SUPERSTRUCTURE PROTECTIVE COATING LIMITS

NOT TO SCALE

Mark	Description	By	Chk'd	Recm'd	Date
	REVISIONS				

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0417 MPMS/ECMS PROJ: 97828 BRKEY: 67417

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COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL JUSTIN ROBERT MCCARTHY ENGINEER PE076998

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0417 SEG 0051 OFFSET 0417
SR 3007 (19TH STREET) STA 103+30.88
OVER NORFOLK SOUTHERN RAILWAY COMPANY
1-SPAN COMPOSITE PS CONCRETE
PA BULB-TEE BEAM BRIDGE
QUANTITIES

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

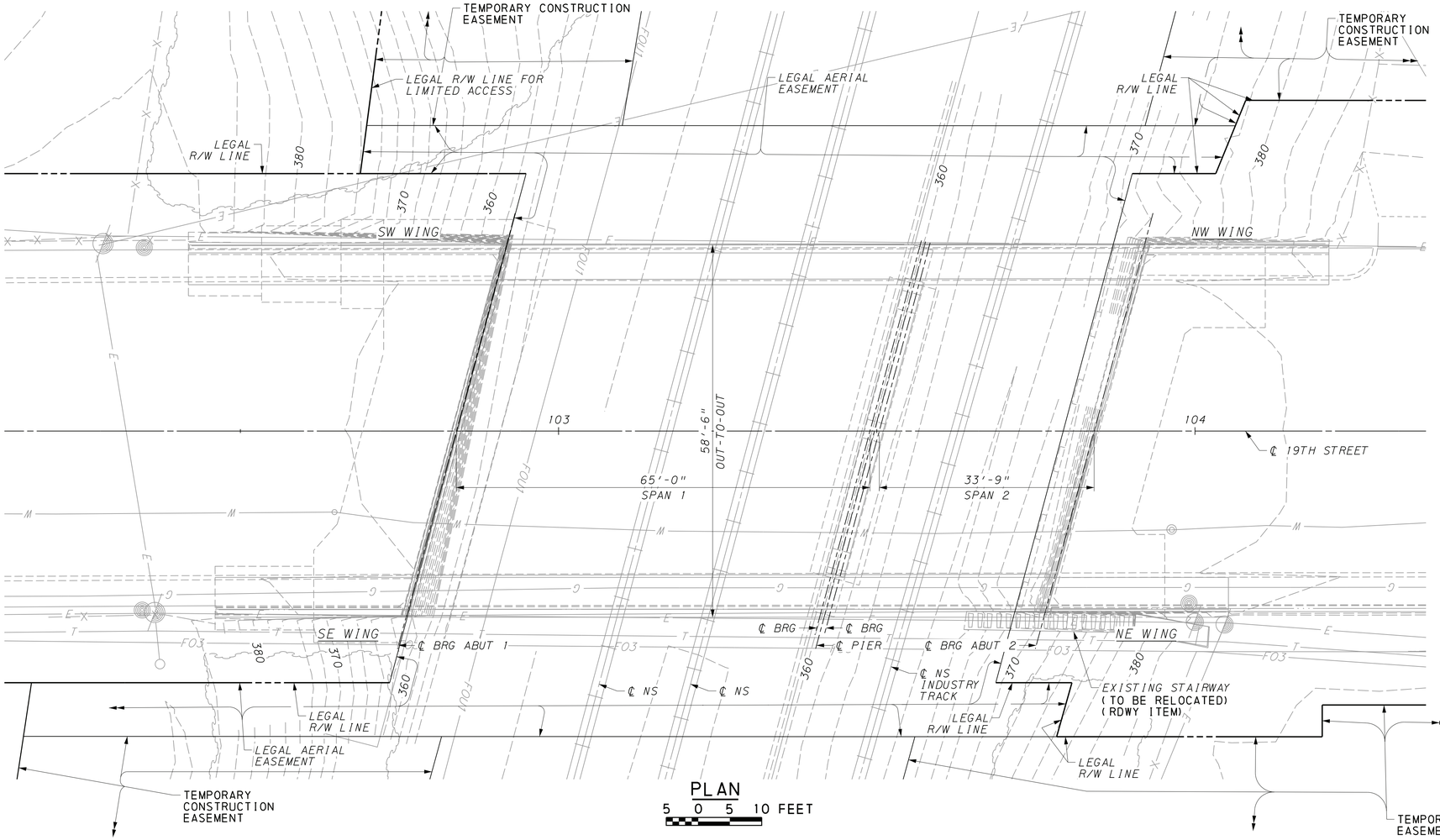
RECOMMENDED 12-6-2022

SHEET 5 OF 70

S-39452

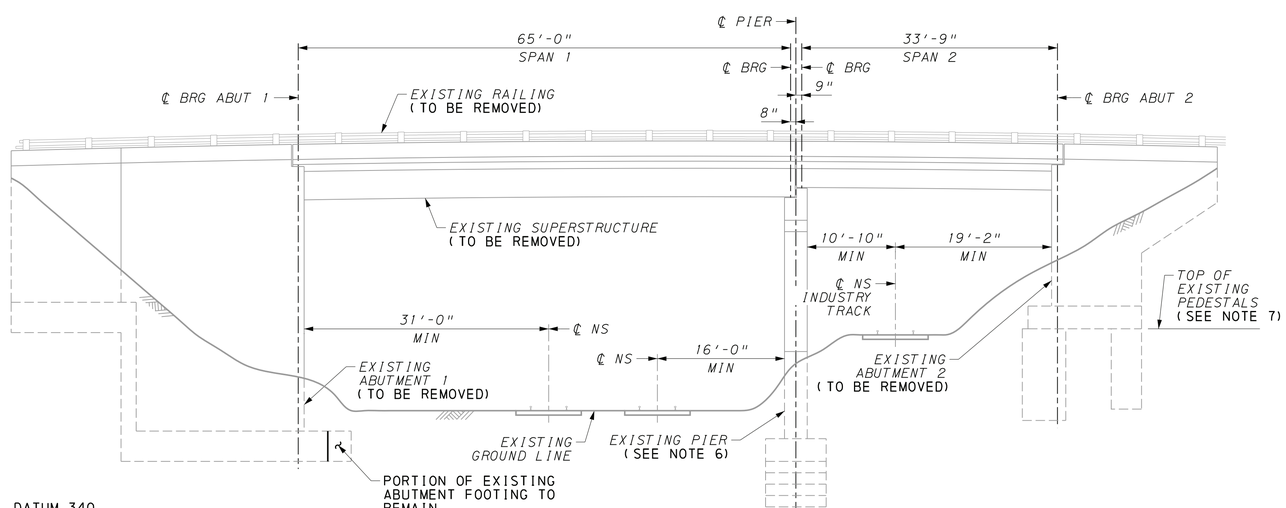
12/2/2022
FILENAME: 63016-s-brB2-sum01.dgn

DES: MCA	DES CKD: CEK	DWG: SMZ	DWG CKD: CEK



PLAN

5 0 5 10 FEET



ELEVATION

5 0 5 10 FEET

NOTES:

1. REMOVAL OF THE EXISTING STRUCTURE CONSISTS OF:
   - SUPERSTRUCTURE IN ITS ENTIRETY
   - ABUTMENT 1, WINGWALLS AND ASSOCIATED ELEMENTS AS INDICATED
   - PIER CAP AND COLUMNS ONLY
   - ABUTMENT 2, WINGWALLS AND ASSOCIATED ELEMENTS AS INDICATED
2. SUGGESTED DEMOLITION SEQUENCE IS PROVIDED "FOR INFORMATION ONLY". SEE DESCRIPTION OF SUGGESTED SEQUENCE.
3. NORFOLK SOUTHERN REQUIRES CRANES AND LIFTING EQUIPMENT TO HAVE A CAPACITY OF 150% OF THE EXPECTED LOAD (INCLUDING RIGGING) FOR ALL LIFTS OVER RAILROAD PROPERTY.
4. ALL DEMOLITION RELATED ACTIVITIES TAKING PLACE ON NORFOLK SOUTHERN PROPERTY NEED TO BE COORDINATED WITH AND APPROVED BY NORFOLK SOUTHERN.
5. SHORING FOR EXCAVATION SHALL BE IN ACCORDANCE WITH NORFOLK SOUTHERN REQUIREMENTS. NO EXCAVATIONS WILL BE ALLOWED WITHIN 10 FEET OF CENTERLINE OF EXISTING TRACK.
6. FOR EXISTING PIER REMOVAL DETAILS, SEE SHEET 7.
7. EXISTING PEDESTALS ARE TO REMAIN. SEE SHEET 22 FOR ADDITIONAL INFORMATION.

SUGGESTED DEMOLITION SEQUENCE:

STEP 1: REMOVE THE EXISTING SPAN 1 SUPERSTRUCTURE.

STEP 2: REMOVE THE EXISTING SPAN 2 SUPERSTRUCTURE.

STEP 3: REMOVE THE EXISTING ABUTMENT 1, WINGWALLS AND ASSOCIATED ELEMENTS AS INDICATED.

STEP 4: REMOVE THE EXISTING PIER TO THE TOP OF THE CRASH WALL. SEE PIER REMOVAL DETAILS ON SHEET 7 FOR ADDITIONAL INFORMATION.

STEP 5: REMOVE THE EXISTING ABUTMENT 2, WINGWALLS AND ASSOCIATED ELEMENTS AS INDICATED.

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0417 MPMS/ECMS PROJ: 97828 BRKEY: 67417

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COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — JUSTIN ROBERT MCCARTHY — ENGINEER PE076998

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0417 SEG 0051 OFFSET 0417
SR 3007 (19TH STREET) STA 103+30.88
OVER NORFOLK SOUTHERN RAILWAY COMPANY
1-SPAN COMPOSITE PS CONCRETE
PA BULB-TEE BEAM BRIDGE
DEMOLITION CONCEPT DETAILS 1

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

RECOMMENDED 12-6-2022

SHEET 6 OF 70

S-39452

DES: JMA	DES CKD: JRM	DWG: SMZ	DWG CKD: JMA

7/22/2022
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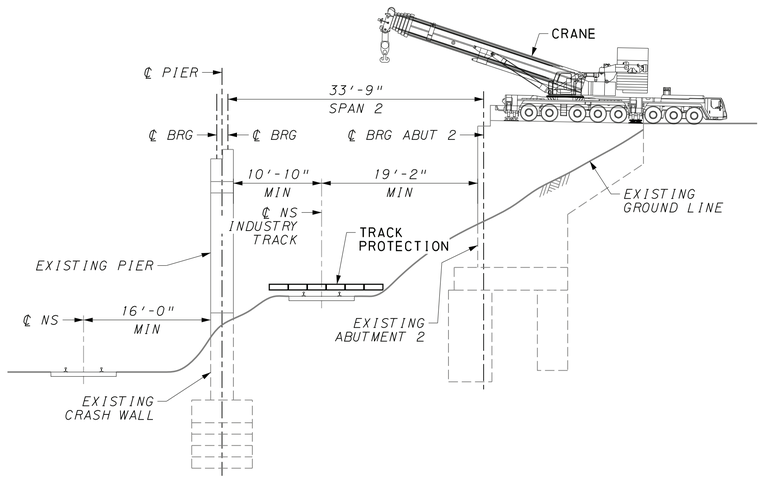
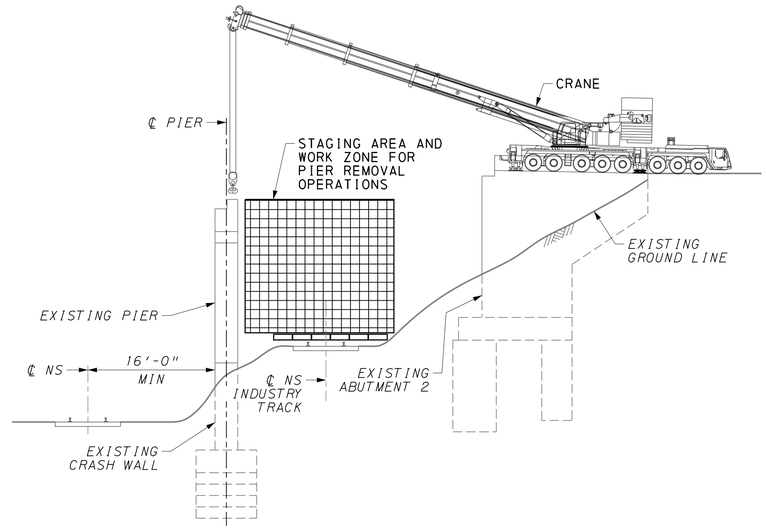


EXISTING PIER REMOVAL STEPS 1 & 2

5 0 5 10 FEET

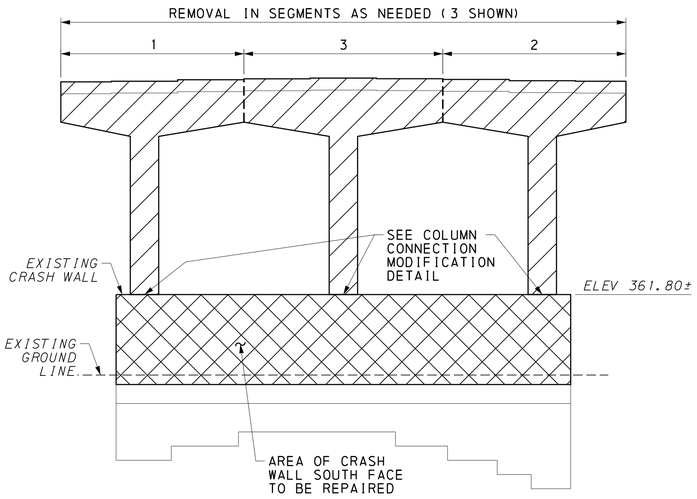


EXISTING PIER REMOVAL STEPS 3 - 8

5 0 5 10 FEET

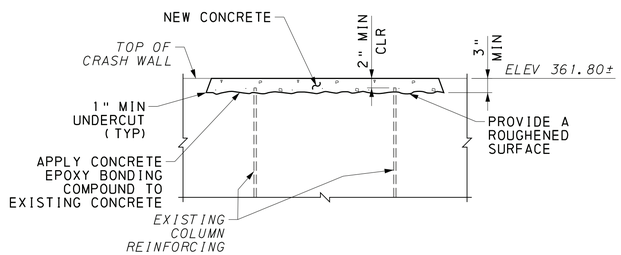
LEGEND:

- REMOVAL
- REPAIR
- PIER REMOVAL STAGING AREA



EXISTING PIER ELEVATION

2 0 4 8 FEET



COLUMN CONNECTION MODIFICATION DETAIL

NOT TO SCALE

NOTES:

1. SUGGESTED METHOD OF PIER REMOVAL IS PROVIDED "FOR INFORMATION ONLY".
2. LIMIT OF PIER REMOVAL IS TO THE TOP OF THE CRASH WALL.
3. SUGGESTED PIER REMOVAL METHOD MAY REQUIRE MORE THAN ONE OPERATION PERIOD.
4. CONTRACTOR SHALL ENSURE THAT DEBRIS WILL NOT FOUL THE NORFOLK SOUTHERN MAIN LINE TRACKS. REMOVED SECTIONS OF PIER ARE NOT PERMITTED TO BE PLACED OR DROPPED ON NORFOLK SOUTHERN PROPERTY.
5. PRIOR TO MAKING SAW CUTS TO THE EXISTING PIER, ELEMENTS TO BE REMOVED SHALL BE PROPERLY SECURED.
6. REMOVAL OF THE PIER SHALL NOT BE PERFORMED WITH IMPACT TOOLS.
7. FOR THE EXISTING CRASH WALL TO REMAIN, REPAIR EXISTING SPALLS, DELAMINATIONS, AND COMPLETE THE COLUMN CONNECTION MODIFICATION.
8. REPAIR THE CRASH WALL TO A DEPTH OF ONE FOOT BELOW THE EXISTING GROUND LINE.
9. REPAIR THE CRASH WALL USING TYPE 2 CONCRETE REPAIRS IN ACCORDANCE WITH PENNDOT STANDARD BC-783M.
10. CONCRETE REPAIRS TO BE PAID UNDER ITEM "REPAIR DETERIORATED CONCRETE".
11. LIMITS OF REPAIR ARE APPROXIMATIONS AND THE DEPARTMENT REPRESENTATIVE RESERVES THE RIGHT TO REVISE THE LIMITS AS NECESSARY.
12. AFTER EXISTING COLUMNS HAVE BEEN REMOVED, COMPLETE COLUMN CONNECTION MODIFICATION. REMOVE CONCRETE FROM AROUND EXISTING EXPOSED REINFORCING AS INDICATED. BLAST CLEAN RUST AND CORROSION FROM THE REINFORCING. EPOXY COATING OF REINFORCING IS NOT REQUIRED. APPLY A RAPID HARDENING CONCRETE PATCHING MATERIAL FROM A MANUFACTURER LISTED IN BULLETIN 15 UNDER MISCELLANEOUS POLYMER MODIFIED AND SPECIAL CEMENTS, MORTARS AND CONCRETES, IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. COST OF COLUMN CONNECTION MODIFICATION IS INCIDENTAL TO CONCRETE REPAIRS.
13. THE STAGING AREA AND WORK ZONE FOR PIER REMOVAL OPERATIONS IS FOR THE CONTRACTOR TO LOCATE PERSONNEL AND EQUIPMENT NEEDED TO BRACE, SUPPORT, RIG, SAW CUT, AND REMOVE SEGMENTS OF THE EXISTING PIER.

SUGGESTED METHOD FOR PIER REMOVAL:

STEP 1: IN ACCORDANCE WITH ITEM "REMOVAL OF EXISTING BRIDGE" AND NS SPECIAL PROVISIONS FOR PROTECTION OF RAILWAY INTERESTS, COORDINATE WITH NORFOLK SOUTHERN TO OBTAIN ACCESS TO THE INDUSTRY TRACK.

STEP 2: WITH PERMISSION FROM NORFOLK SOUTHERN, PLACE TRACK PROTECTION OVER THE INDUSTRY TRACK.

STEP 3: INSTALL RIGGING ON A PIER SEGMENT THAT IS TO BE REMOVED. ATTACH THE RIGGING TO THE CRANE AND TENSION THE RIGGING SO THAT THE PIER SEGMENT MAY BE CUT WITHOUT THE ELEMENT FALLING ONTO NORFOLK SOUTHERN PROPERTY.

STEP 4: SAW CUT PIER SEGMENT FOR REMOVAL.

STEP 5: REMOVE THE PIER SEGMENT WITH CRANE.

STEP 6: REPEAT STEPS 3 THROUGH 5 UNTIL THE PIER HAS BEEN REMOVED.

STEP 7: REMOVE ALL EQUIPMENT USED FOR PIER REMOVAL OPERATIONS.

STEP 8: UPON COMPLETION OF PIER REMOVAL AND REPAIRS, REMOVE ALL DEBRIS FROM NORFOLK SOUTHERN PROPERTY AND RETURN TO ORIGINAL CONDITION.

Mark	Description	By	Chk'd	Recm'd	Date
	REVISIONS				

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0417 MPMS/ECMS PROJ: 97828 BRKEY: 67417

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COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL JUSTIN ROBERT MCCARTHY ENGINEER PE076998

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0417 SEG 0051 OFFSET 0417
SR 3007 (19TH STREET) STA 103+30.88
OVER NORFOLK SOUTHERN RAILWAY COMPANY
1-SPAN COMPOSITE PS CONCRETE
PA BULB-TEE BEAM BRIDGE
DEMOLITION CONCEPT DETAILS 2

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

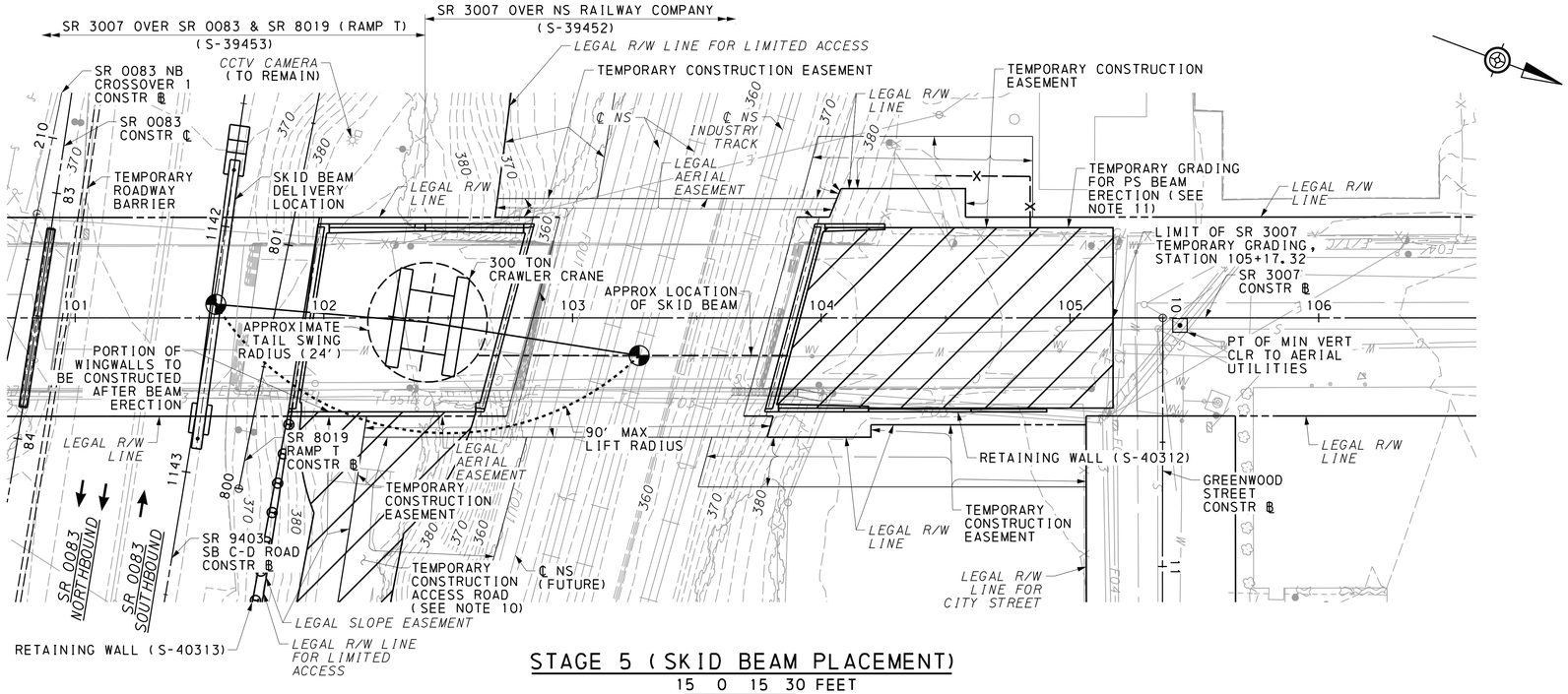
RECOMMENDED 12-6-2022

SHEET 7 OF 70

S-39452

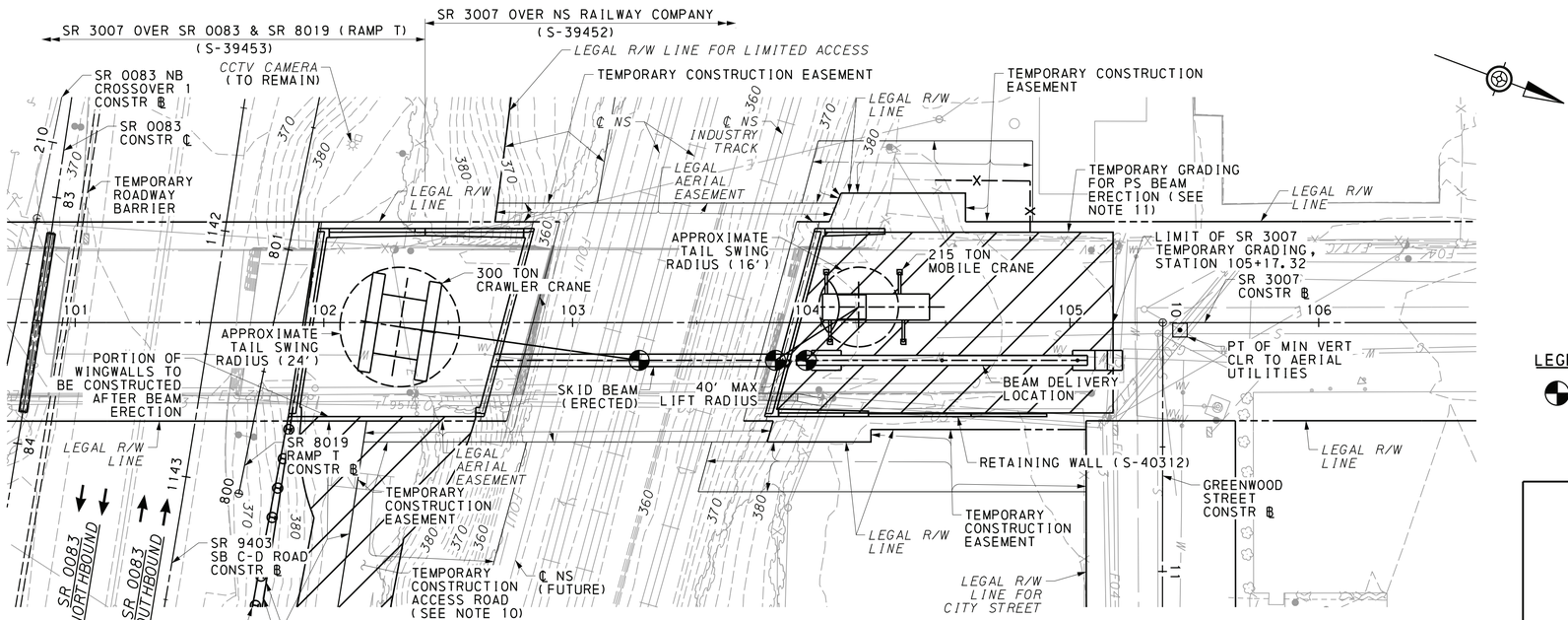
7/22/2022
FILENAME: 63016-s-brB2-dem02.dgn

DES: JMA | DES CKD: JRM | DWG: JTM | DWG CKD: JMA



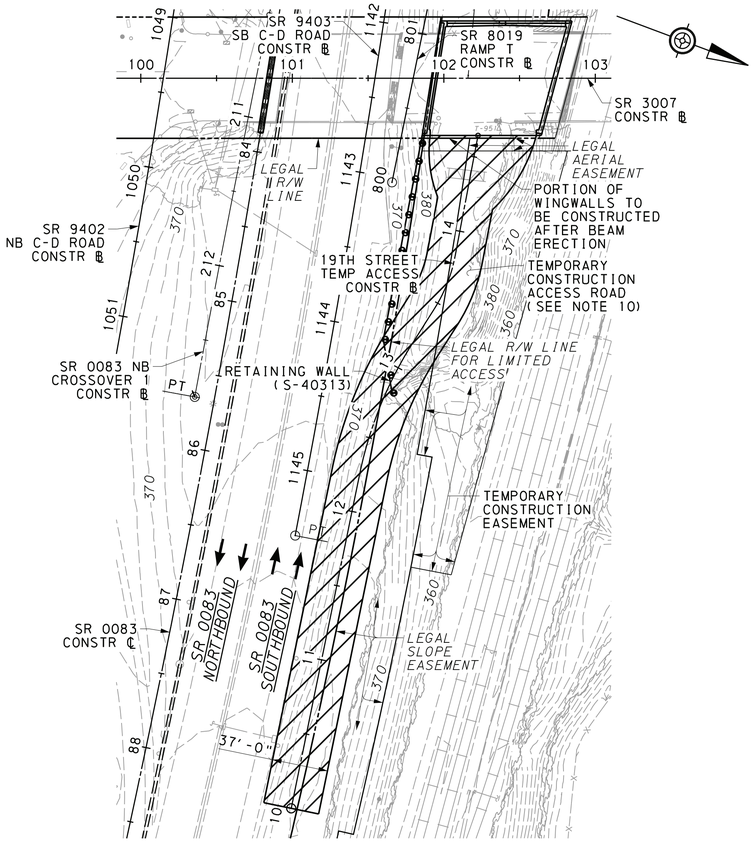
STAGE 5 (SKID BEAM PLACEMENT)

15 0 15 30 FEET



STAGE 6 (P/S BEAM PLACEMENT ONTO SKID BEAM)

15 0 15 30 FEET



TEMPORARY CONSTRUCTION ACCESS ROAD

25 0 25 50 FEET

NOTES:

1. CONCEPTUAL ERECTION PLAN IS PROVIDED "FOR INFORMATION ONLY".
2. REFER TO CONCEPTUAL ERECTION PLAN 2 FOR SUGGESTED CONSTRUCTION SEQUENCE AND ADDITIONAL NOTES.

Mark	Description	By	Chk'd	Recm'd	Date
	REVISIONS				

LEGEND:

PICK POINT

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0417 MPMS/ECMS PROJ: 97828 BRKEY: 67417

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COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0417 SEG 0051 OFFSET 0417
SR 3007 (19TH STREET) STA 103+30.88
OVER NORFOLK SOUTHERN RAILWAY COMPANY
1-SPAN COMPOSITE PS CONCRETE
PA BULB-TEE BEAM BRIDGE
CONCEPTUAL ERECTION PLAN 1

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — JUSTIN ROBERT MCCARTHY — ENGINEER PE076998

REFERENCES:

GENERAL PLAN	1
GENERAL NOTES	3 - 4
CONCEPTUAL ERECTION PLAN 2	9

SHEETS:

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

RECOMMENDED 12-6-2022

SHEET 8 OF 70

S-39452

7/22/2022
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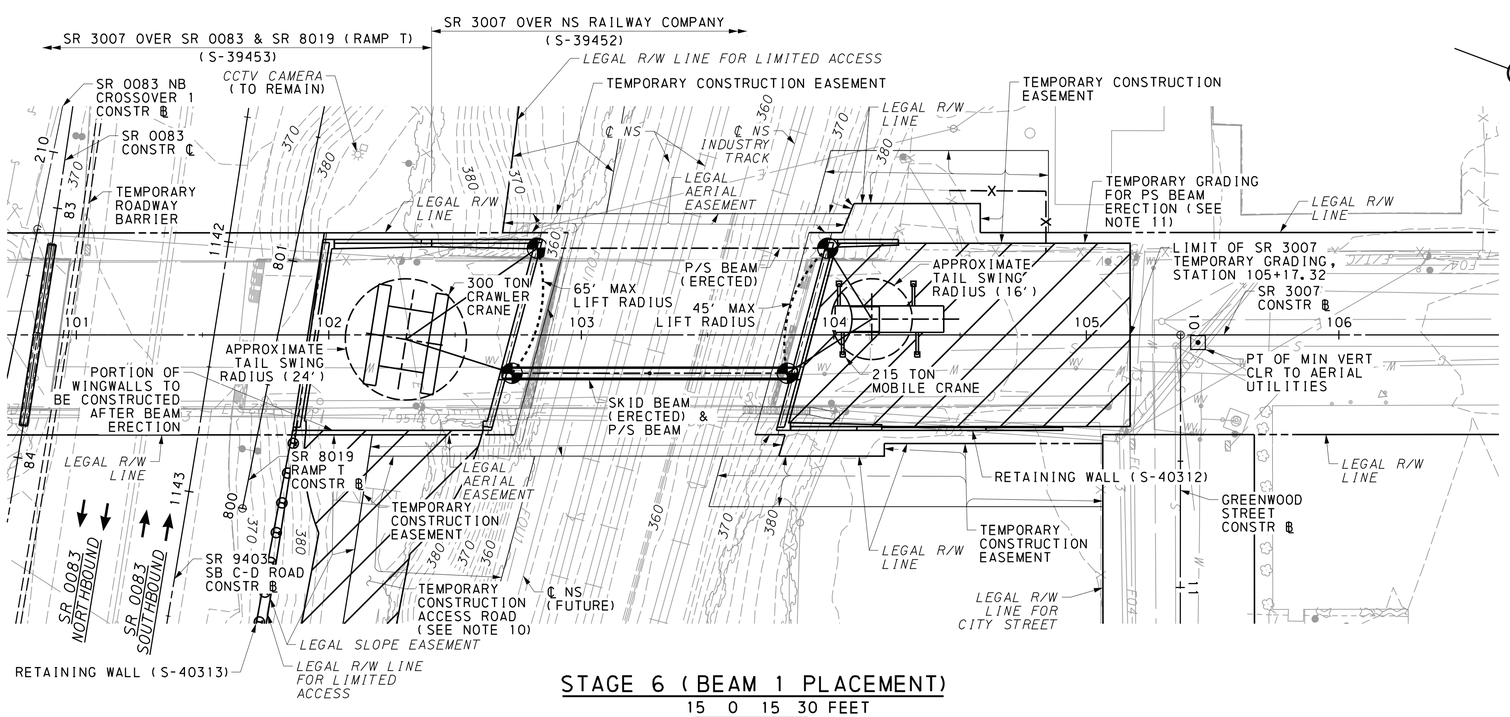
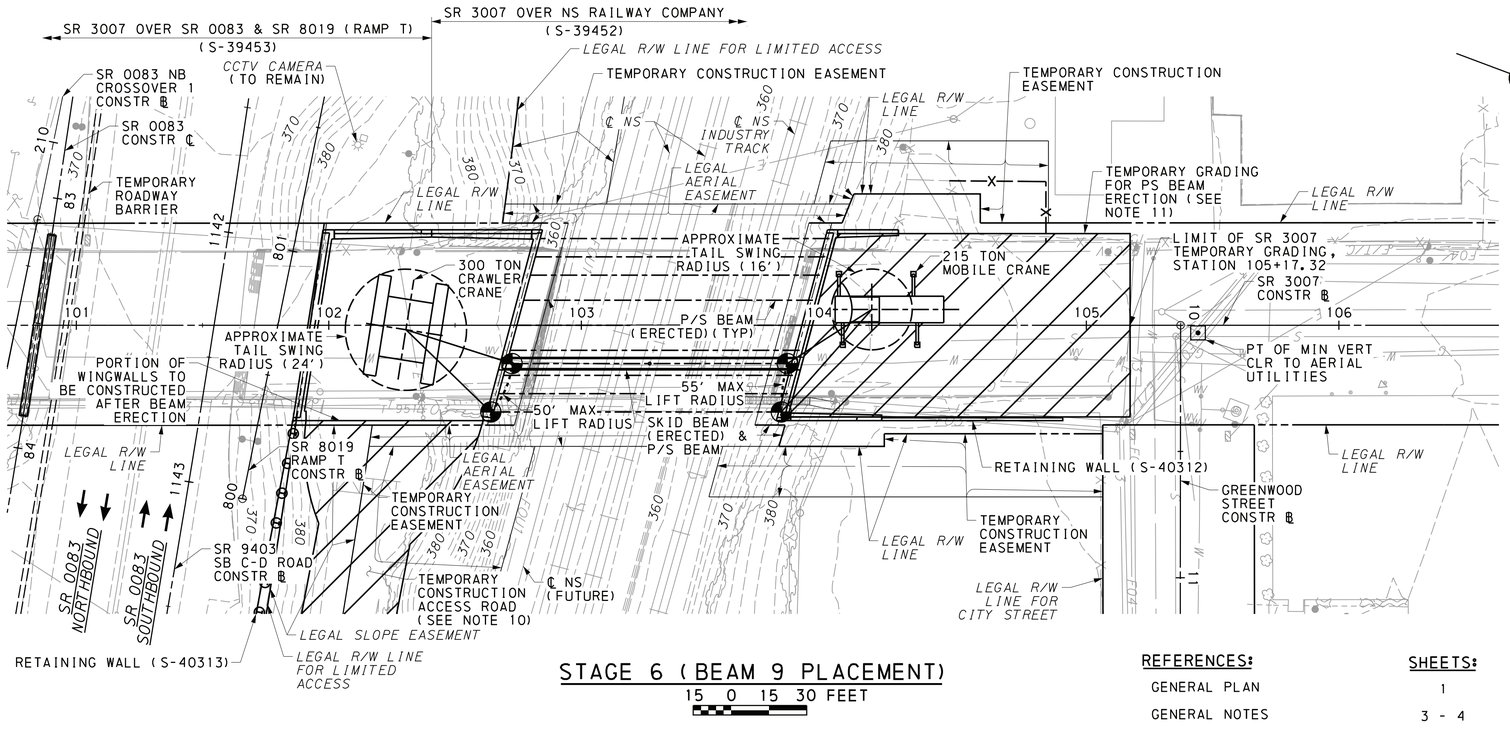
DES: JMA	DES CKD: MCA	DWG: MCA	DWG CKD: JMA



STAGE 6 (BEAM 1 PLACEMENT)

15 0 15 30 FEET



STAGE 6 (BEAM 9 PLACEMENT)

15 0 15 30 FEET

LEGEND:

PICK POINT

SUGGESTED CONSTRUCTION SEQUENCE:

STAGE 1: REMOVE EXISTING STRUCTURE.

STAGE 2: CONSTRUCT PROPOSED SUBSTRUCTURE. S-39452 WINGWALL A AND S-39453 WINGWALL B TO BE CONSTRUCTED AFTER S-39452 AND S-39453 BEAM ERECTION TO FACILITATE TEMPORARY CONSTRUCTION ACCESS ROAD.

STAGE 3: PERFORM CLEARING AND GRUBBING.

STAGE 4: CONSTRUCT TEMPORARY CONSTRUCTION ACCESS ROAD AND GRADE SR 3007 (19TH STREET) FOR BEAM DELIVERY.

STAGE 5: INSTALL SKID BEAM.

STAGE 6: ERECT S-39452 BEAMS.

STAGE 7: REMOVE SKID BEAM.

STAGE 8: ERECT S-39453 BEAMS.

STAGE 9: CONSTRUCT S-39452 WINGWALL A AND S-39453 WINGWALL B.

STAGE 10: CONSTRUCT S-40312 AND S-40313 RETAINING WALLS.

NOTES:

1. CONCEPTUAL ERECTION PLAN IS PROVIDED "FOR INFORMATION ONLY".
2. NORFOLK SOUTHERN REQUIRES CRANES TO HAVE A CAPACITY OF 150% OF THE EXPECTED LOAD (INCLUDING BEAM AND RIGGING) AT THE REQUIRED REACH FOR ALL LIFTS OVER RAILROAD PROPERTY.
3. ALL LIFTS OVER NORFOLK SOUTHERN PROPERTY NEED TO BE COORDINATED AND APPROVED BY NORFOLK SOUTHERN.
4. PROPOSED MINIMUM VERTICAL CLEARANCE TO AERIAL UTILITIES = 16'-11". PROVIDED CLEARANCE DOES NOT CONSIDER REDUCTION DUE TO TEMPORARY GRADING.
5. ESTIMATED WEIGHTS (DOES NOT INCLUDE 1.5 RAILROAD FACTOR):
   SKID BEAM: 50.0 KIPS
   PA BULB-TEE BEAM: 110.0 KIPS
6. CRANE SIZES SHOWN ARE THE ESTIMATED CRANE SIZES REQUIRED TO PERFORM THE CONCEPTUAL ERECTION PLAN. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE ACTUAL CRANE SIZES.
7. COORDINATE CONSTRUCTION OF S-39452 WITH CONSTRUCTION OF S-39453.
8. THE CONCEPTUAL ERECTION PLAN DEPICTED WITHIN THESE DRAWINGS REQUIRES THE S-39452 WINGWALL A AND S-39453 WINGWALL B FOOTINGS AND STEMS TO BE CONSTRUCTED AFTER PLACEMENT OF THE S-39453 SPAN 2 BEAMS AND S-39452 BEAMS.
9. NIGHT LANE CLOSURE REQUIRED FOR SKID BEAM DELIVERY AND REMOVAL.
10. SEE ROADWAY CONSTRUCTION PLANS FOR ADDITIONAL INFORMATION ON TEMPORARY CONSTRUCTION ACCESS ROAD.
11. CONTRACTOR IS RESPONSIBLE FOR DETERMINING ELEVATIONS AND SLOPES OF TEMPORARY GRADING FOR BEAM DELIVERY AND ERECTION AT S-39452 ABUTMENT 2.
12. THE CONCEPTUAL ERECTION PLAN IS BASED ON THE FOLLOWING CONDITIONS AT S-39452 ABUTMENT 1. CONTRACTOR MUST SUBMIT CALCULATIONS CHECKING ABUTMENT STRENGTH AND STABILITY FOR ERECTION PLANS WHICH DEVIATE FROM THESE CONDITIONS:
    - S-39452 ABUTMENT 1 BACKFILL ELEVATION = 378.0 MAX
    - MAXIMUM TOTAL WEIGHT OF CRANE PLUS PICK = 750 KIPS
    - MAXIMUM LOAD ON THE CRANE TRACK NEAREST THE ABUTMENT = 675 KIPS

REFERENCES:

	SHEETS:
GENERAL PLAN	1
GENERAL NOTES	3 - 4
CONCEPTUAL ERECTION PLAN 1	8

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0417 MPMS/ECMS PROJ: 97828 BRKEY: 67417

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COMMONWEALTH OF PENNSYLVANIA
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DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0417 SEG 0051 OFFSET 0417
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OVER NORFOLK SOUTHERN RAILWAY COMPANY
1-SPAN COMPOSITE PS CONCRETE
PA BULB-TEE BEAM BRIDGE
CONCEPTUAL ERECTION PLAN 2

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

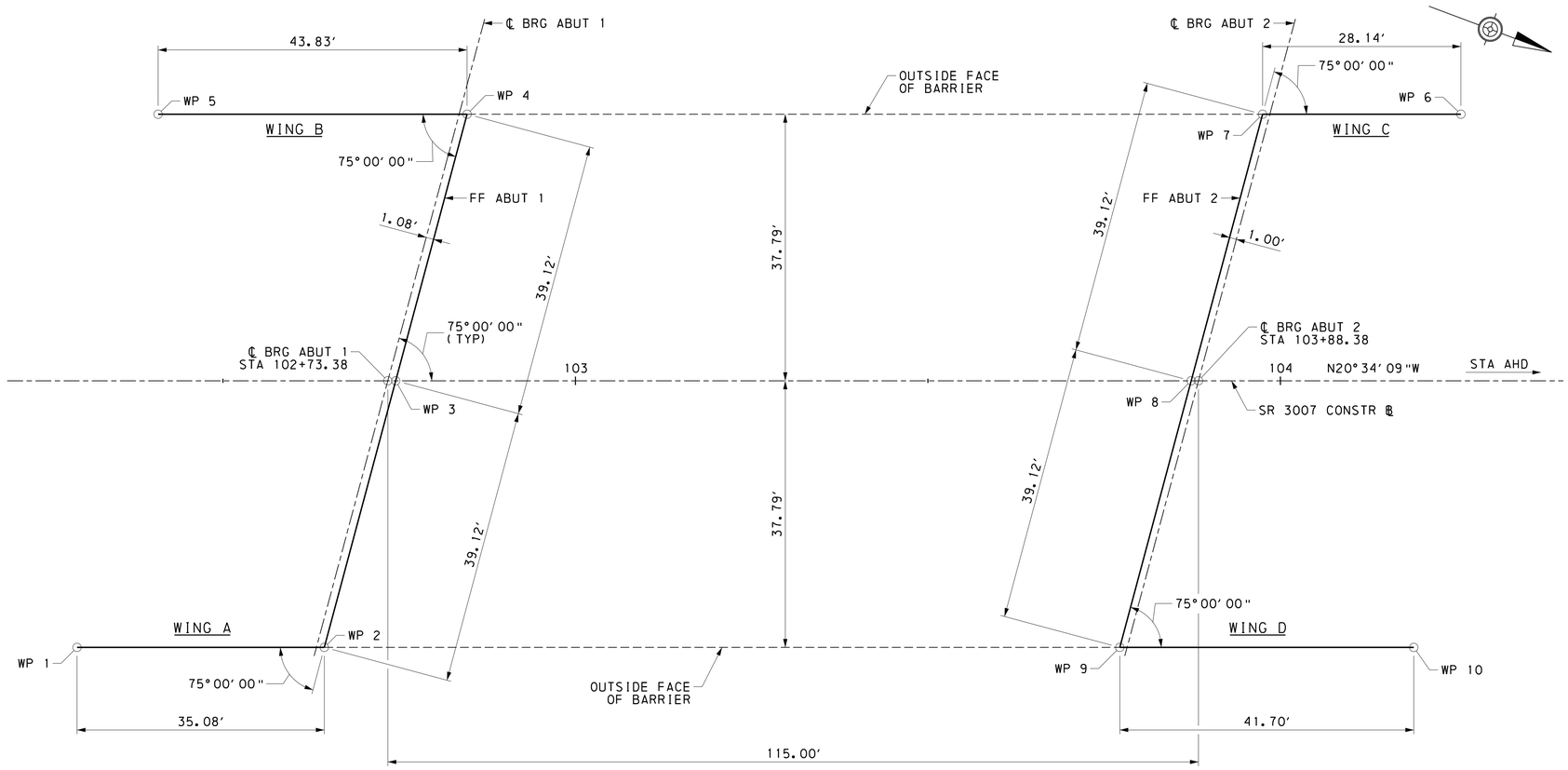
RECOMMENDED 12-6-2022

SHEET 9 OF 70

S-39452

DES: JMA | DES CKD: MCA | DWG: MCA | DWG CKD: JMA

7/22/2022
FILENAME: 63016-s-br82-crd02.dgn



STAKE-OUT PLAN

5 0 5 10 FEET

NOTES:

1. WINGWALL FREE END WORK POINTS ARE LOCATED AT THE FRONT FACE OF THE ARCHITECTURAL SURFACE TREATMENT.

WORKING POINT COORDINATES				
WP	STATION	OFFSET	NORTHING	EASTING
1	102+29.29	37.79' RT	337805.5601	2218069.9548
2	102+64.38	37.79' RT	337838.4055	2218057.6292
3	102+74.50	0.00'	337834.6086	2218018.6891
4	102+84.63	37.79' LT	337830.8117	2217979.7490
5	102+40.79	37.79' LT	337789.7725	2217995.1493
6	104+25.61	37.79' LT	337962.8051	2217930.2173
7	103+97.47	37.79' LT	337936.4611	2217940.1031
8	103+87.34	0.00'	337940.2580	2217979.0432
9	103+77.22	37.79' RT	337944.0549	2218017.9834
10	104+18.92	37.79' RT	337983.1001	2218003.3313

FOUR PLACE COORDINATES ARE FOR COMPUTATIONAL PURPOSES ONLY AND DO NOT IMPLY A PRECISION BEYOND TWO DECIMAL POINTS.

WORKING POINT CLOSURE DISTANCES	
WP TO WP	DISTANCE
2 TO 7	153.06'
4 TO 9	119.52'

SR 3007 CONSTR ℄ COORDINATES				
POINT	STATION	NORTHING	EASTING	BEARING
POB	90+00.00	336641.3572	2218466.4673	N20°34'09"W
POE	113+00.00	338794.7310	2217658.3947	

REFERENCES:

GENERAL PLAN	1
GENERAL NOTES	3 - 4
ABUTMENT 1 PLAN	12
ABUTMENT 2 PLAN	23

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0417 MPMS/ECMS PROJ: 97828 BRKEY: 67417

HNTB

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
JUSTIN ROBERT MCCARTHY
ENGINEER PE076998

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0417 SEG 0051 OFFSET 0417
SR 3007 (19TH STREET) STA 103+30.88
OVER NORFOLK SOUTHERN RAILWAY COMPANY
1-SPAN COMPOSITE PS CONCRETE
PA BULB-TEE BEAM BRIDGE
STAKE-OUT PLAN

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

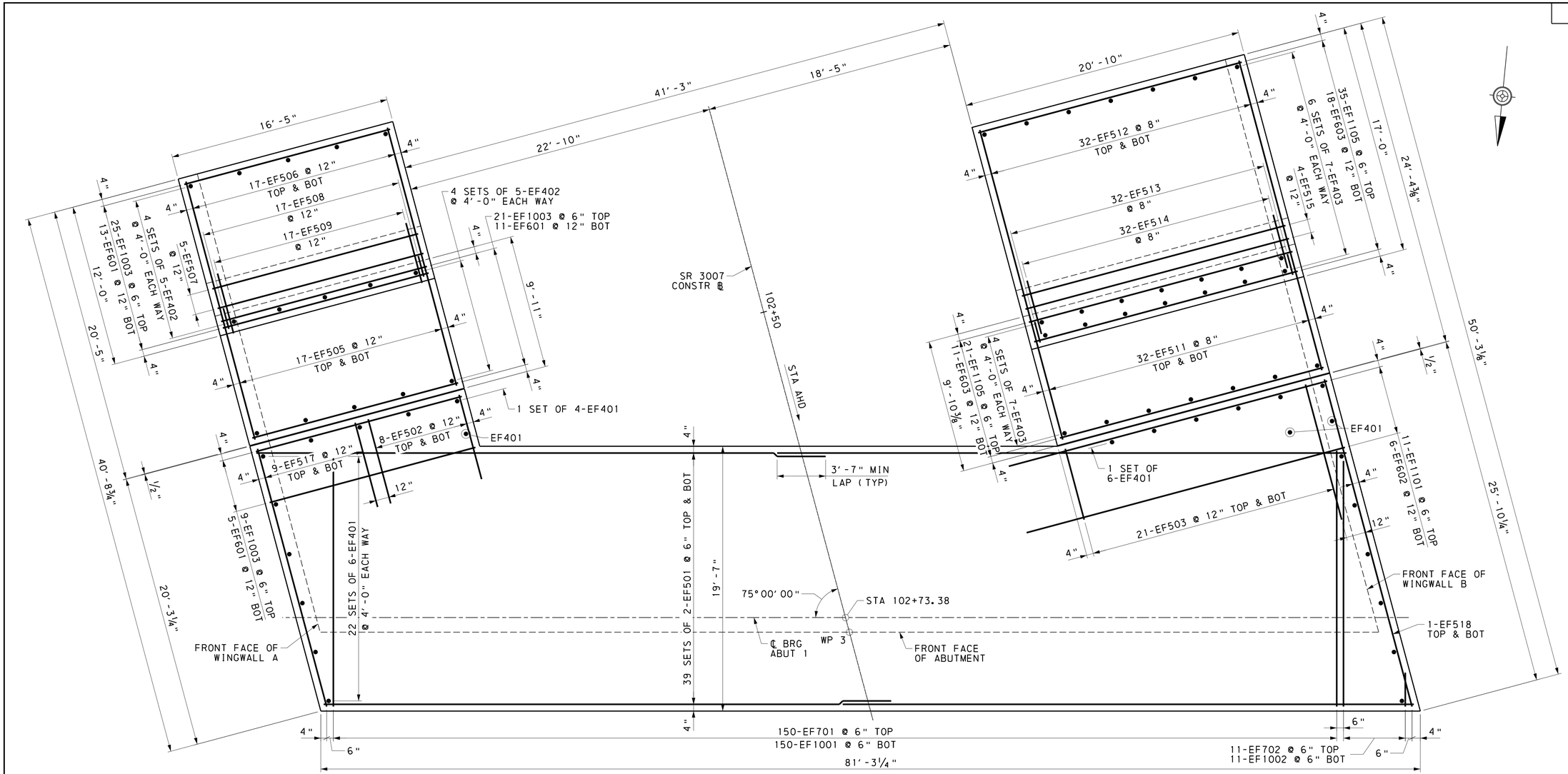
RECOMMENDED 12-6-2022

SHEET 10 OF 70

S-39452

7/22/2022
FILENAME: 63016-s-br82-sop01.dgn

DES: MCA	DES CKD: CEK	DWG: SMZ	DWG CKD: JRM



FOOTING PLAN

2 0 2 4 FEET

NOTES:

1. SHIFT EF501, EF511, EF512, AND EF513 BARS AS REQUIRED TO FACILITATE VIBRATION OF CONCRETE.

FOUNDATION PARAMETERS AT ABUTMENT 1			
BEARING CAPACITY	ABUTMENT 1	WING A (BFE 364.50)	WING B (BFE 354.00)
SECTION	TYPICAL	TYPICAL	TYPICAL
BEARING RESISTANCE	100.00 KSF	100.00 KSF	100.00 KSF
MAX BEARING PRESSURE	46.32 KSF	11.44 KSF	16.07 KSF
PERFORMANCE RATIO	2.159	8.744	6.224
LIMIT STATE	STR-I	STR-I	STR-I
LOAD CASE	MIN	MAX	MAX
STAGE	FINAL	FINAL	FINAL
SLIDING RESISTANCE	ABUTMENT 1	WING A (BFE 364.50)	WING B (BFE 354.00)
SECTION	TYPICAL	TYPICAL	TYPICAL
SLIDING RESISTANCE	81.82 K	53.12 K	90.12 K
MAX HORIZONTAL FORCE	70.13 K	33.38 K	57.38 K
PERFORMANCE RATIO	1.167	1.592	1.571
LIMIT STATE	STR-I	STR-I	STR-I
LOAD CASE	MIN	MIN	MIN
CONDITION	TEMPORARY	TEMPORARY	TEMPORARY

SPREAD FOOTING ROCK PARAMETERS	
EMPIRICAL BEARING CAPACITY	200.0 KSF
ALLOWABLE SETTLEMENT	1.0 IN
BEARING CAPACITY PHI FACTOR	0.50
SLIDING PHI FACTOR	1.00
CONCRETE/ROCK FRICTION	35°
INTACT ELASTIC MODULUS	5700 KSI
POISSON'S RATIO	0.23
ROCK MASS MODULUS	1934 KSI

REFERENCES: / **SHEETS:**

GENERAL NOTES	3 - 4
STAKE-OUT PLAN	10
ABUTMENT 1 DRAWINGS	11 - 21

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0417 MPMS/ECMS PROJ: 97828 BRKEY: 67417

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COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
JUSTIN ROBERT MCCARTHY
ENGINEER PE076998

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0417 SEG 0051 OFFSET 0417
SR 3007 (19TH STREET) STA 103+30.88
OVER NORFOLK SOUTHERN RAILWAY COMPANY
1-SPAN COMPOSITE PS CONCRETE
PA BULB-TEE BEAM BRIDGE
ABUTMENT 1 FOOTING PLAN

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

RECOMMENDED 12-6-2022

SHEET 11 OF 70

S-39452

7/22/2022
FILENAME: 63016-s-br-B2-ab11.dgn

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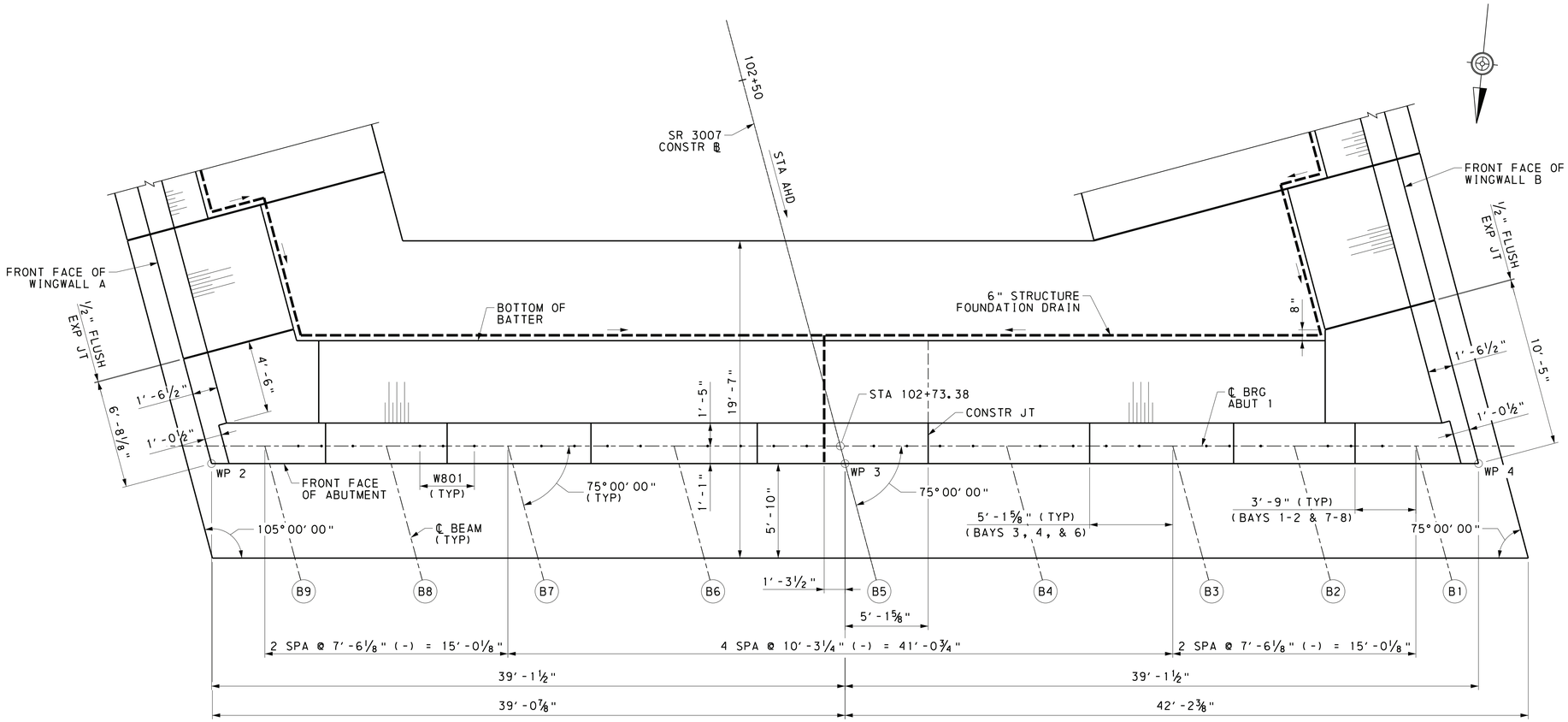

PLAN

2 0 2 4 FEET

NOTES:

1. WORK POINTS ARE LOCATED AT THE FRONT FACE OF THE ARCHITECTURAL SURFACE TREATMENT, WHERE PRESENT.

REFERENCES:	SHEETS:
GENERAL NOTES	3 - 4
STAKE-OUT PLAN	10
ABUTMENT 1 DRAWINGS	11 - 21

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0417 MPMS/ECMS PROJ: 97828 BRKEY: 67417

HNTB

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — JUSTIN ROBERT MCCARTHY — ENGINEER — PE076998

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0417 SEG 0051 OFFSET 0417
SR 3007 (19TH STREET) STA 103+30.88
OVER NORFOLK SOUTHERN RAILWAY COMPANY
1-SPAN COMPOSITE PS CONCRETE
PA BULB-TEE BEAM BRIDGE
ABUTMENT 1 PLAN

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

RECOMMENDED 12-6-2022

SHEET 12 OF 70

S-39452

7/22/2022
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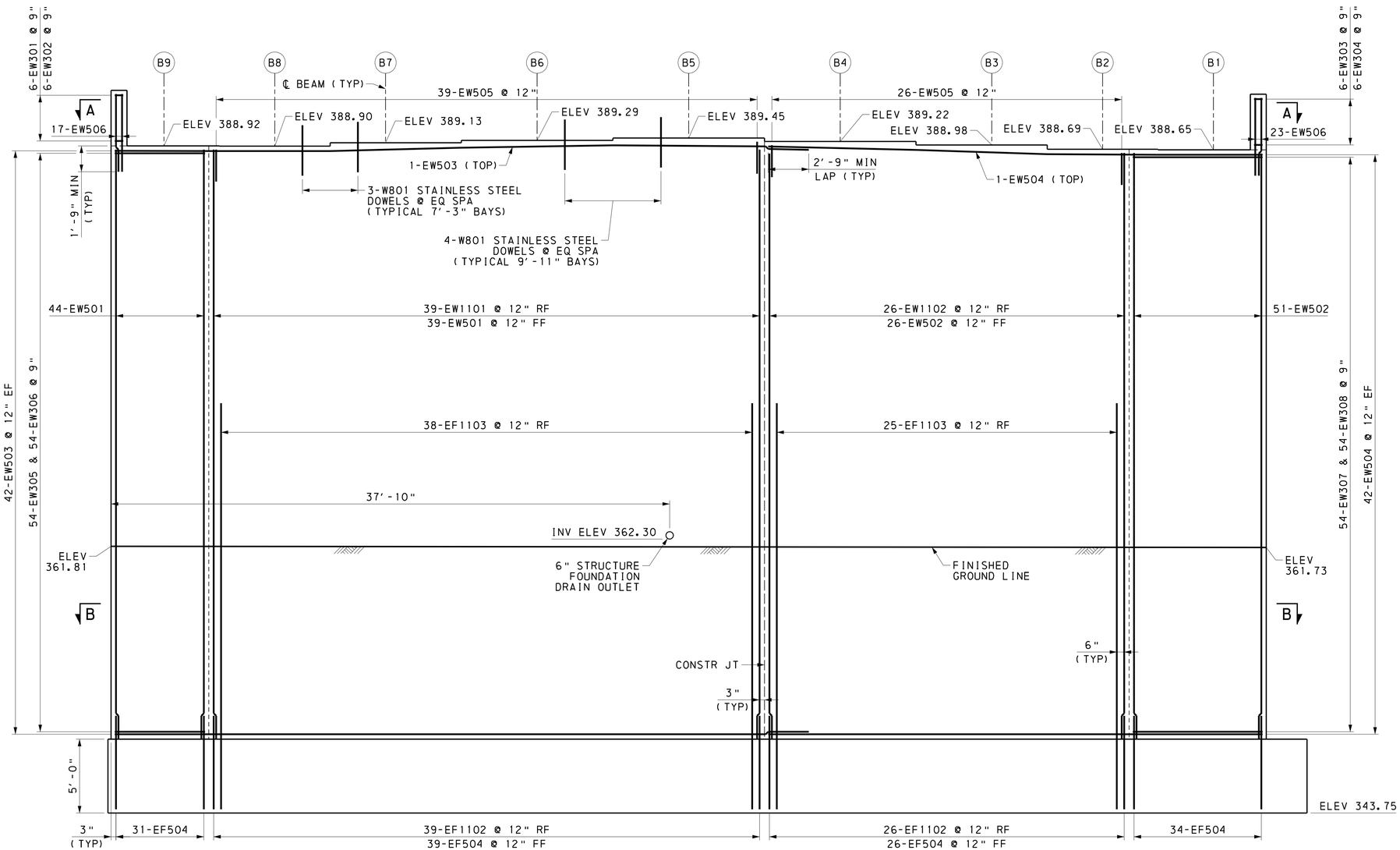

ELEVATION

2 0 2 4 FEET

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0417 MPMS/ECMS PROJ: 97828 BRKEY: 67417

REFERENCES:	SHEETS:
GENERAL NOTES	3 - 4
ABUTMENT 1 DRAWINGS	11 - 21
MISCELLANEOUS ABUTMENT DETAILS	33

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COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
JUSTIN ROBERT MCCARTHY
ENGINEER
PE076998

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

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0417 SEG 0051 OFFSET 0417
SR 3007 (19TH STREET) STA 103+30.88
OVER NORFOLK SOUTHERN RAILWAY COMPANY
1-SPAN COMPOSITE PS CONCRETE
PA BULB-TEE BEAM BRIDGE
ABUTMENT 1 ELEVATION

RECOMMENDED 12-6-2022

SHEET 13 OF 70

S-39452

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7/22/2022
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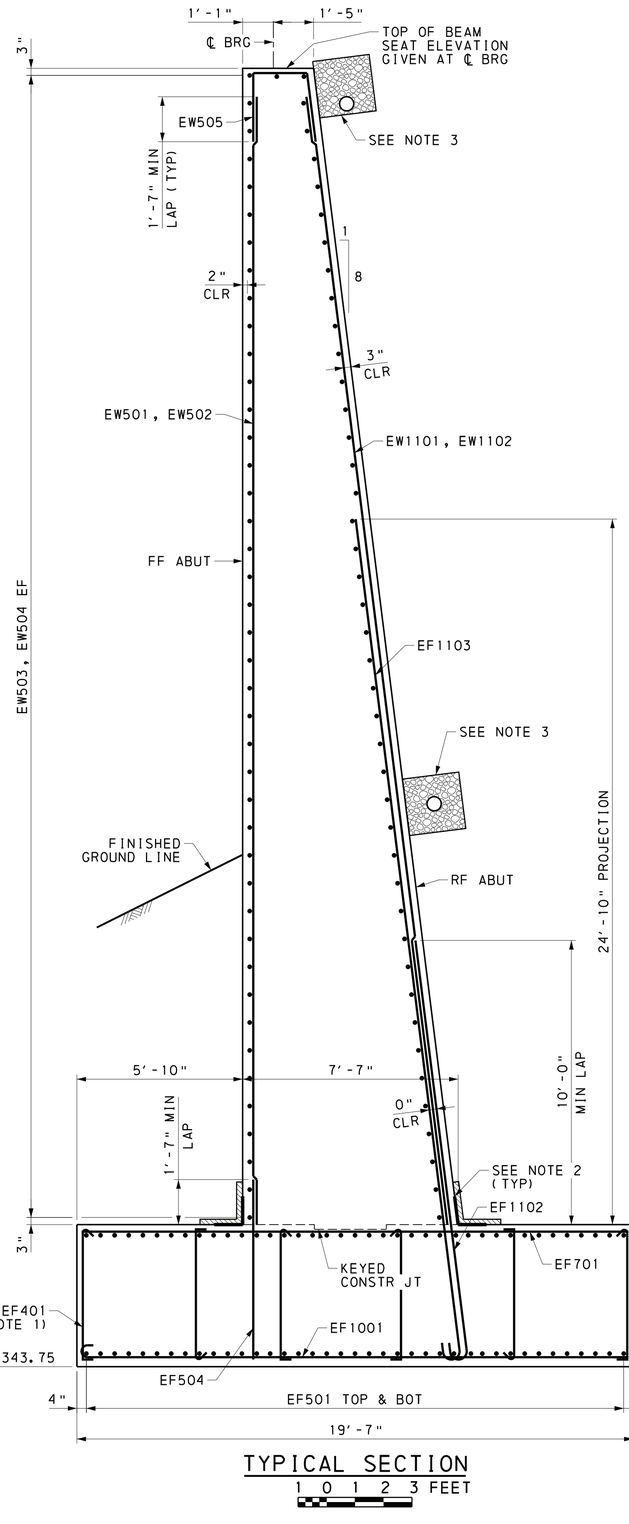
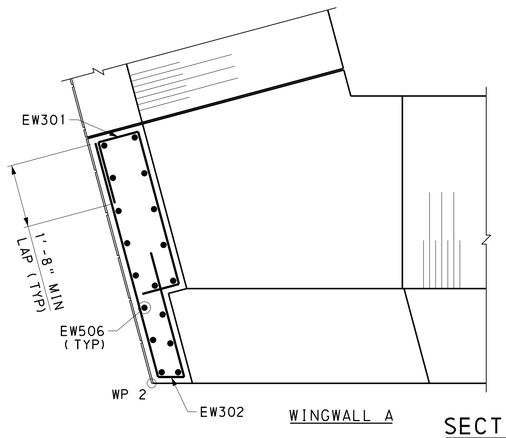
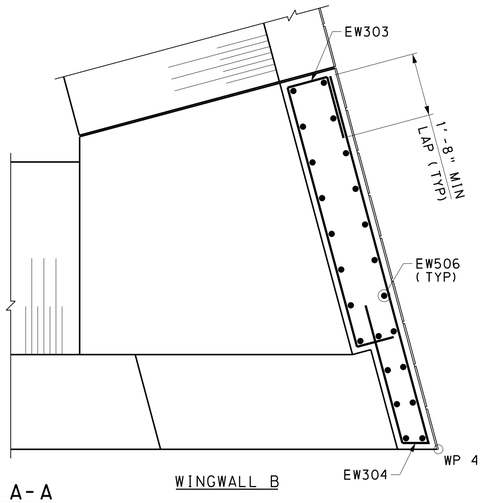


TYPICAL SECTION

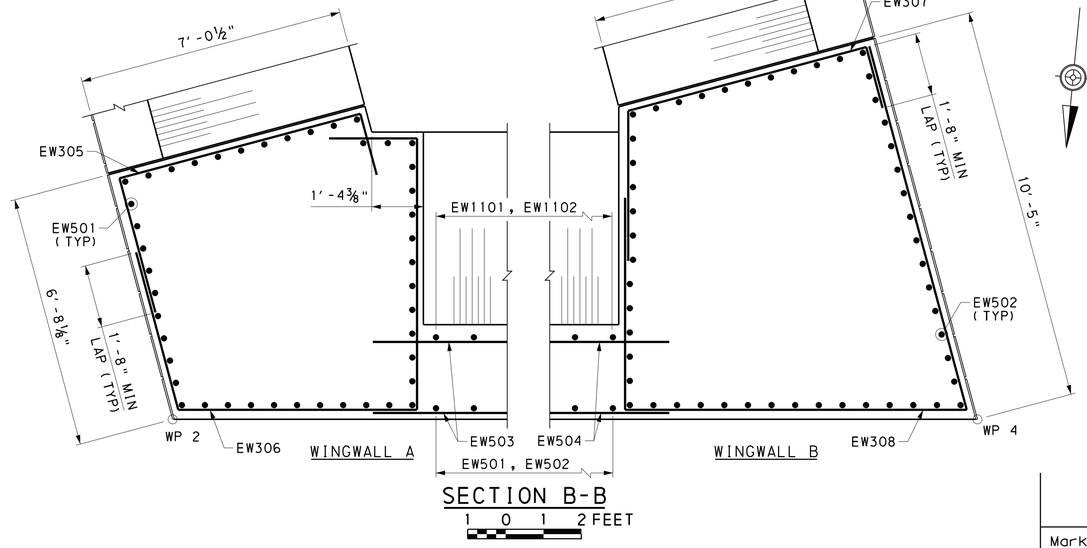
1 0 1 2 3 FEET





SECTION A-A

1 0 1 2 FEET



SECTION B-B

1 0 1 2 FEET

NOTES:

1. TIE TOP & BOTTOM MATS OF REINFORCING STEEL WITH #4 TIE BARS AT A MAXIMUM SPACING OF 4'-0" IN BOTH DIRECTIONS. PROVIDE TIE BARS WITH 90° HOOK AT ONE END AND 135° HOOK AT THE OTHER END. ALTERNATE 90° AND 135° HOOKS AT TOP IN ALTERNATE TIES.
2. FOR WATERPROOFING DETAILS, SEE ATTACHMENT BC-788 MODIFIED "SPRAY-ON WATERPROOFING DETAILS".
3. 6" STRUCTURE FOUNDATION DRAIN WITHIN CONTINUOUS 2' x 2' OF NO. 57 COARSE AGGREGATE ENCASED IN GEOTEXTILE, CLASS 1. SEE PUB 408 SECTION 1001.3(d) AND BC-751M.

REFERENCES:	SHEETS:
GENERAL NOTES	3 - 4
ABUTMENT 1 DRAWINGS	11 - 21
MISCELLANEOUS ABUTMENT DETAILS	33

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0417 MPMS/ECMS PROJ: 97828 BRKEY: 67417

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COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL JUSTIN ROBERT MCCARTHY ENGINEER PE076998

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0417 SEG 0051 OFFSET 0417
SR 3007 (19TH STREET) STA 103+30.88
OVER NORFOLK SOUTHERN RAILWAY COMPANY
1-SPAN COMPOSITE PS CONCRETE
PA BULB-TEE BEAM BRIDGE
ABUTMENT 1 SECTION & DETAILS

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

RECOMMENDED 12-6-2022

SHEET 14 OF 70

S-39452

12/2/2022
FILENAME: 63016-s-brB2-ab114.dgn

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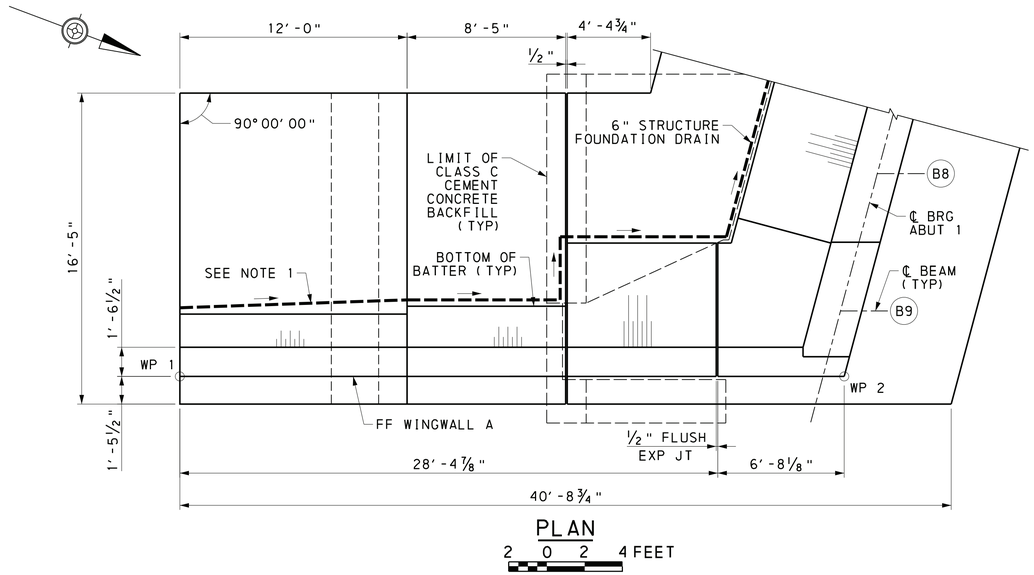
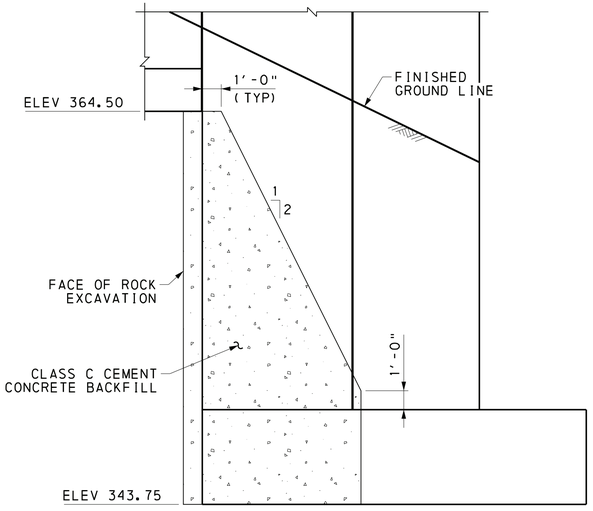


PLAN

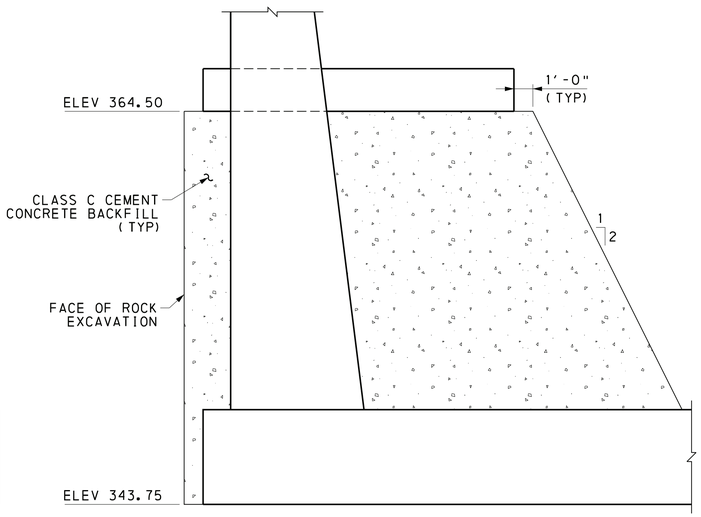
2 0 2 4 FEET

NOTES:

1. CONNECT TO BRIDGE 3 (S-39453) 6" STRUCTURE FOUNDATION DRAIN.



WING A ELEVATION



WING A SECTION

(WING A SHOWN, WING B SIMILAR)

CLASS C CEMENT CONCRETE BACKFILL DETAILS

2 0 2 4 FEET

REFERENCES:	SHEETS:
GENERAL NOTES	3 - 4
ABUTMENT 1 DRAWINGS	11 - 21
ABUTMENT ARCHITECTURAL DETAILS	34

Mark	Description	By	Chk'd	Recm'd	Date

REVISIONS

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0417 MPMS/ECMS PROJ: 97828 BRKEY: 67417

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COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL JUSTIN ROBERT MCCARTHY ENGINEER PE076998

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0417 SEG 0051 OFFSET 0417
SR 3007 (19TH STREET) STA 103+30.88
OVER NORFOLK SOUTHERN RAILWAY COMPANY
1-SPAN COMPOSITE PS CONCRETE
PA BULB-TEE BEAM BRIDGE
WINGWALL A PLAN

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

RECOMMENDED 12-6-2022

SHEET 15 OF 70

S-39452

7/22/2022
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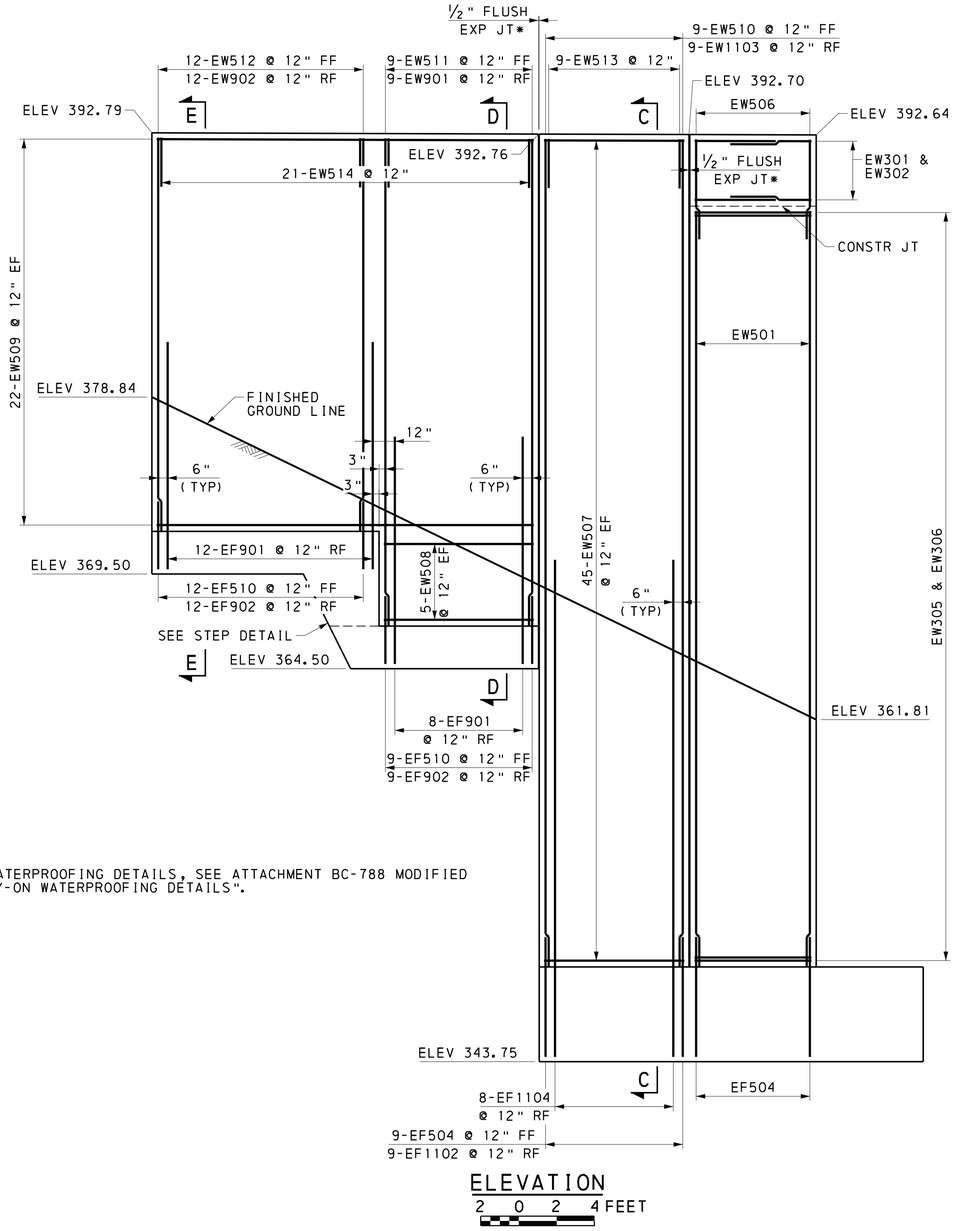
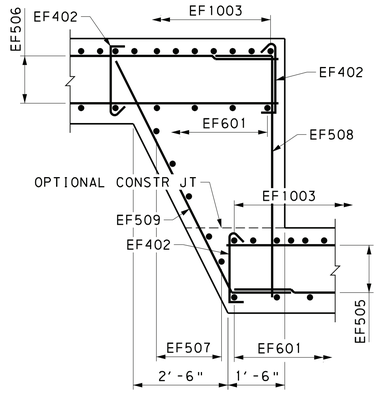


ELEVATION
2 0 2 4 FEET



STEP DETAIL
1 0 1 2 FEET

* FOR WATERPROOFING DETAILS, SEE ATTACHMENT BC-788 MODIFIED "SPRAY-ON WATERPROOFING DETAILS".

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0417 MPMS/ECMS PROJ: 97828 BRKEY: 67417

HNTB

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL JUSTIN ROBERT MCCARTHY ENGINEER PE076998

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0417 SEG 0051 OFFSET 0417
SR 3007 (19TH STREET) STA 103+30.88
OVER NORFOLK SOUTHERN RAILWAY COMPANY

1-SPAN COMPOSITE PS CONCRETE PA BULB-TEE BEAM BRIDGE
WINGWALL A ELEVATION

REFERENCES:	SHEETS:
GENERAL NOTES	3 - 4
ABUTMENT 1 DRAWINGS	11 - 21
ABUTMENT ARCHITECTURAL DETAILS	34

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

RECOMMENDED 12-6-2022

SHEET 16 OF 70

S-39452

DES: SMZ	DES CKD: CEK	DWG: SMZ	DWG CKD: CEK

12/2/2022
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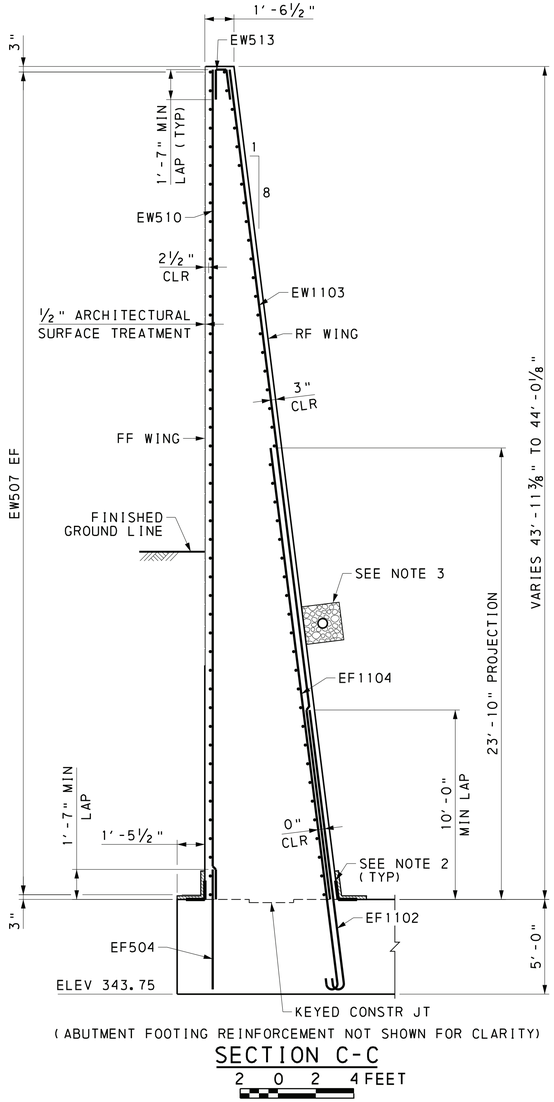
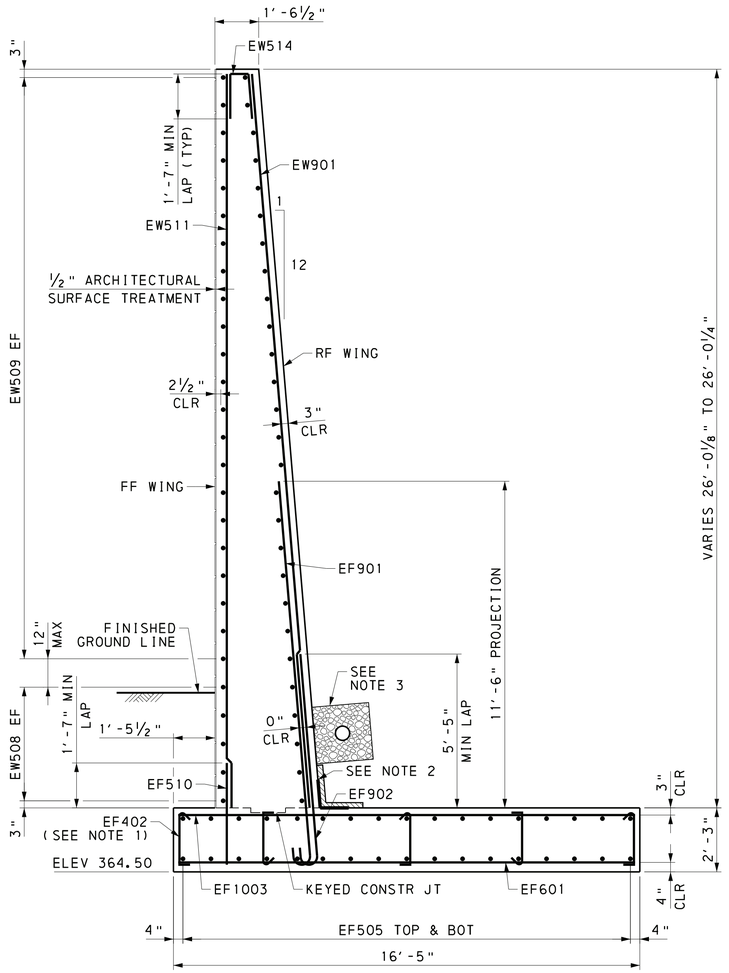


(ABUTMENT FOOTING REINFORCEMENT NOT SHOWN FOR CLARITY)

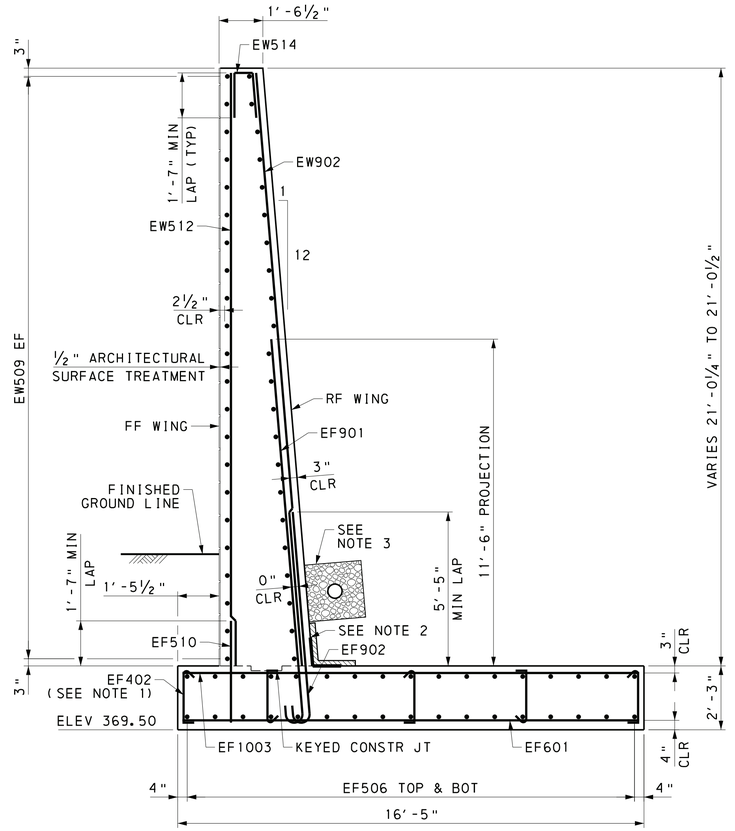
SECTION C-C

2 0 2 4 FEET



SECTION D-D

1 0 1 2 3 FEET



SECTION E-E

1 0 1 2 3 FEET

NOTES:

1. TIE TOP & BOTTOM MATS OF REINFORCING STEEL WITH #4 TIE BARS AT A MAXIMUM SPACING OF 4'-0" IN BOTH DIRECTIONS. PROVIDE TIE BARS WITH 90° HOOK AT ONE END AND 135° HOOK AT THE OTHER END. ALTERNATE 90° AND 135° HOOKS AT TOP IN ALTERNATE TIES.
2. FOR WATERPROOFING DETAILS, SEE ATTACHMENT BC-788 MODIFIED "SPRAY-ON WATERPROOFING DETAILS".
3. 6" STRUCTURE FOUNDATION DRAIN WITHIN CONTINUOUS 2' x 2' OF NO. 57 COARSE AGGREGATE ENCASED IN GEOTEXTILE, CLASS 1. SEE PUB 408 SECTION 1001.3(d) AND BC-751M.

REFERENCES:	SHEETS:
GENERAL NOTES	3 - 4
ABUTMENT 1 DRAWINGS	11 - 21
ABUTMENT ARCHITECTURAL DETAILS	34

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0417 MPMS/ECMS PROJ: 97828 BRKEY: 67417

HNTB

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0417 SEG 0051 OFFSET 0417
SR 3007 (19TH STREET) STA 103+30.88
OVER NORFOLK SOUTHERN RAILWAY COMPANY
1-SPAN COMPOSITE PS CONCRETE
PA BULB-TEE BEAM BRIDGE
WINGWALL A SECTIONS

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL JUSTIN ROBERT MCCARTHY ENGINEER PE076998

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

RECOMMENDED 12-6-2022

SHEET 17 OF 70

S-39452

12/2/2022
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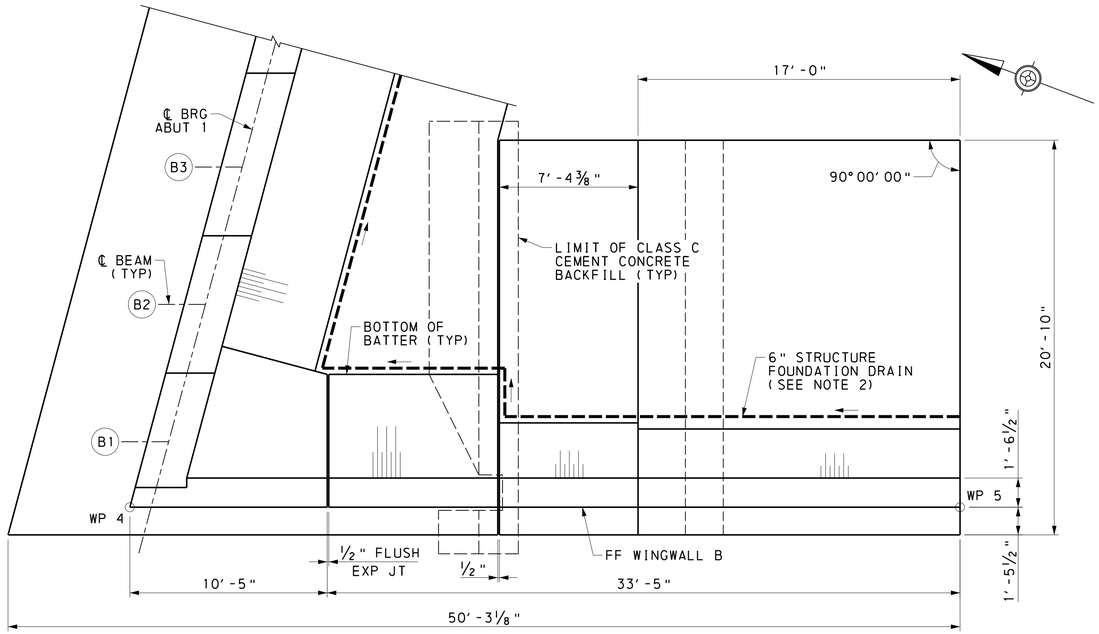

PLAN

2 0 2 4 FEET

NOTES:

1. SEE SHEET 15 FOR CLASS C CEMENT CONCRETE BACKFILL DETAILS.
2. CONNECT TO BRIDGE 3 (S-39453) 6" STRUCTURE FOUNDATION DRAIN.

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0417 MPMS/ECMS PROJ: 97828 BRKEY: 67417

HNTB

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
JUSTIN ROBERT MCCARTHY
ENGINEER
PE076998

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0417 SEG 0051 OFFSET 0417
SR 3007 (19TH STREET) STA 103+30.88
OVER NORFOLK SOUTHERN RAILWAY COMPANY

1-SPAN COMPOSITE PS CONCRETE
PA BULB-TEE BEAM BRIDGE
WINGWALL B PLAN

REFERENCES:

	SHEETS:
GENERAL NOTES	3 - 4
ABUTMENT 1 DRAWINGS	11 - 21
ABUTMENT ARCHITECTURAL DETAILS	34

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

RECOMMENDED 12-6-2022

SHEET 18 OF 70

S-39452

7/22/2022
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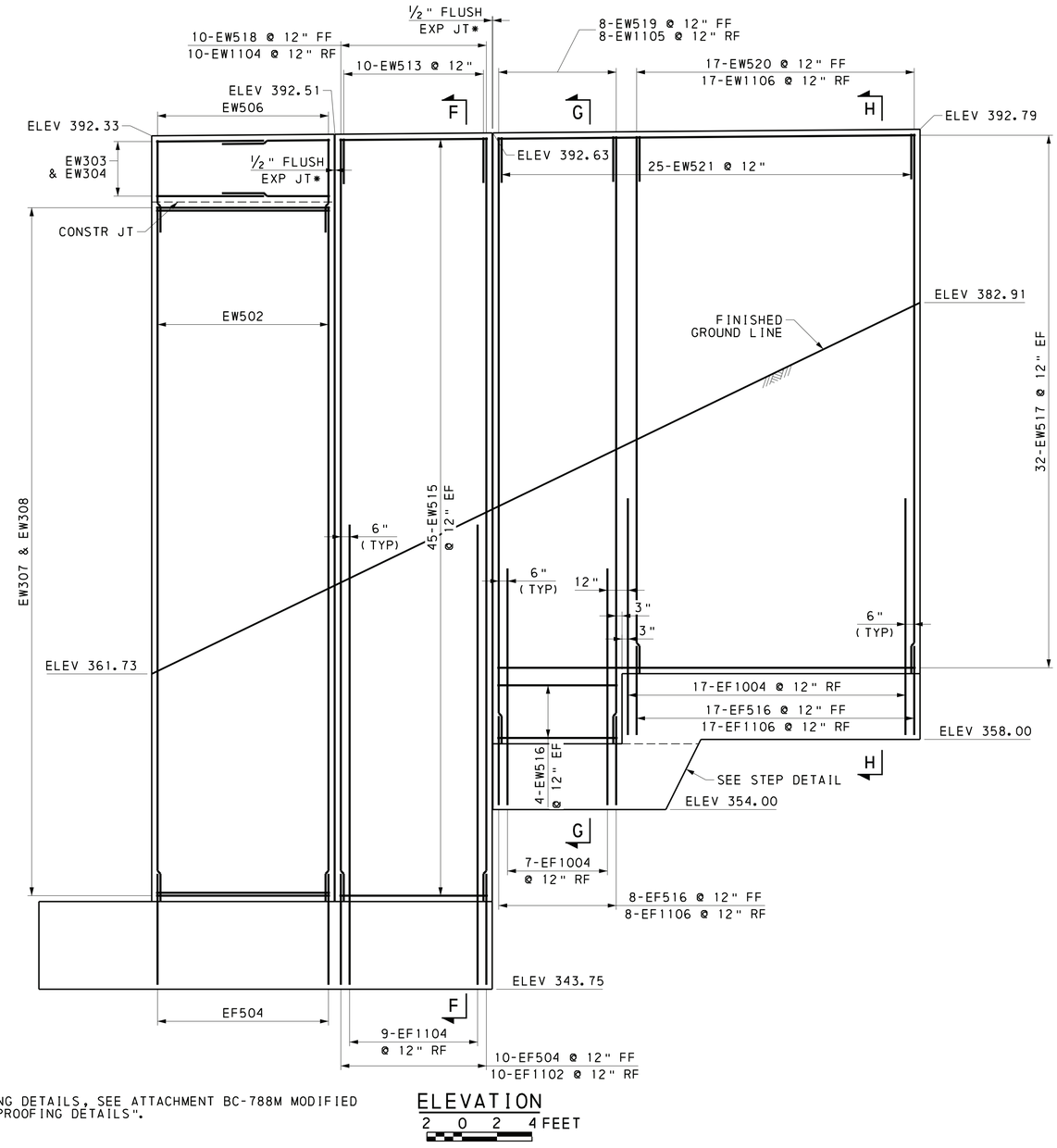
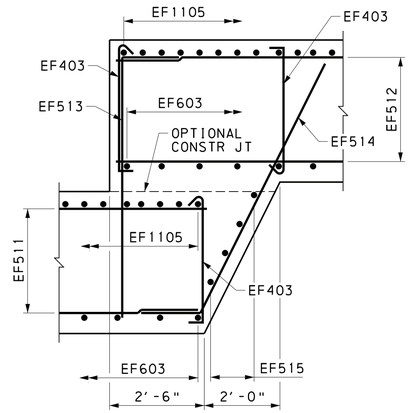


ELEVATION
2 0 2 4 FEET



STEP DETAIL
1 0 1 2 FEET

* FOR WATERPROOFING DETAILS, SEE ATTACHMENT BC-788M MODIFIED "SPRAY-ON WATERPROOFING DETAILS".

REFERENCES:	SHEETS:
GENERAL NOTES	3 - 4
ABUTMENT 1 DRAWINGS	11 - 21
ABUTMENT ARCHITECTURAL DETAILS	34

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0417 MPMS/ECMS PROJ: 97828 BRKEY: 67417

HNTB

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL JUSTIN ROBERT MCCARTHY ENGINEER PE076998

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0417 SEG 0051 OFFSET 0417
SR 3007 (19TH STREET) STA 103+30.88
OVER NORFOLK SOUTHERN RAILWAY COMPANY
1-SPAN COMPOSITE PS CONCRETE
PA BULB-TEE BEAM BRIDGE
WINGWALL B ELEVATION

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

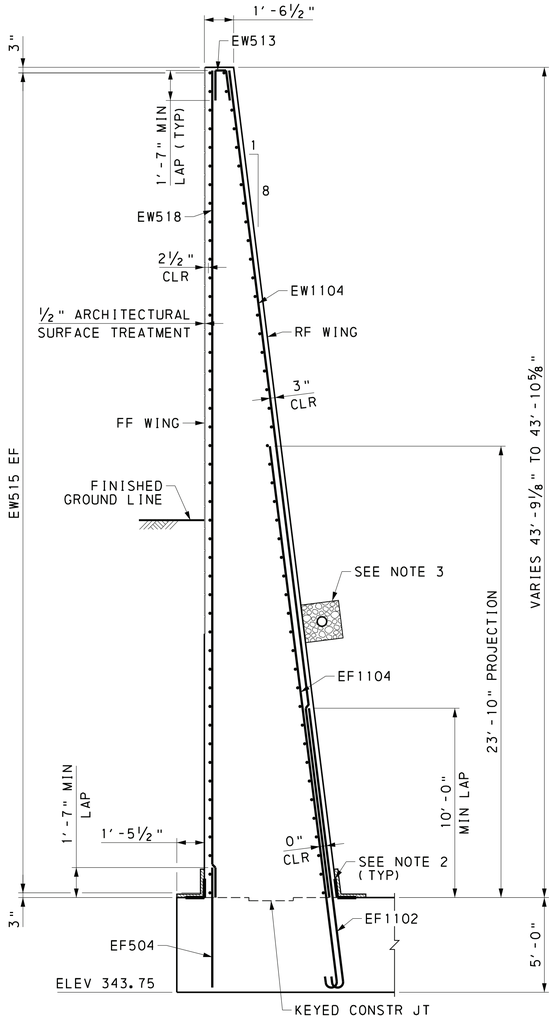
RECOMMENDED 12-6-2022

SHEET 19 OF 70

S-39452

12/2/2022
FILENAME: 63016-s-br82-ab119.dgn

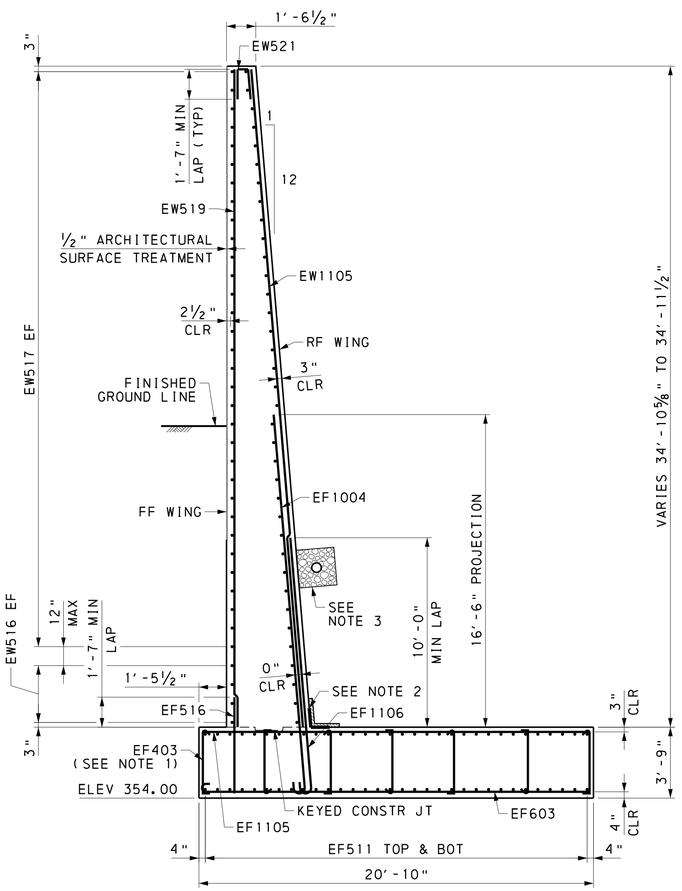
DES: SMZ	DES CKD: CEK	DWG: SMZ	DWG CKD: CEK



(ABUTMENT FOOTING REINFORCEMENT NOT SHOWN FOR CLARITY)

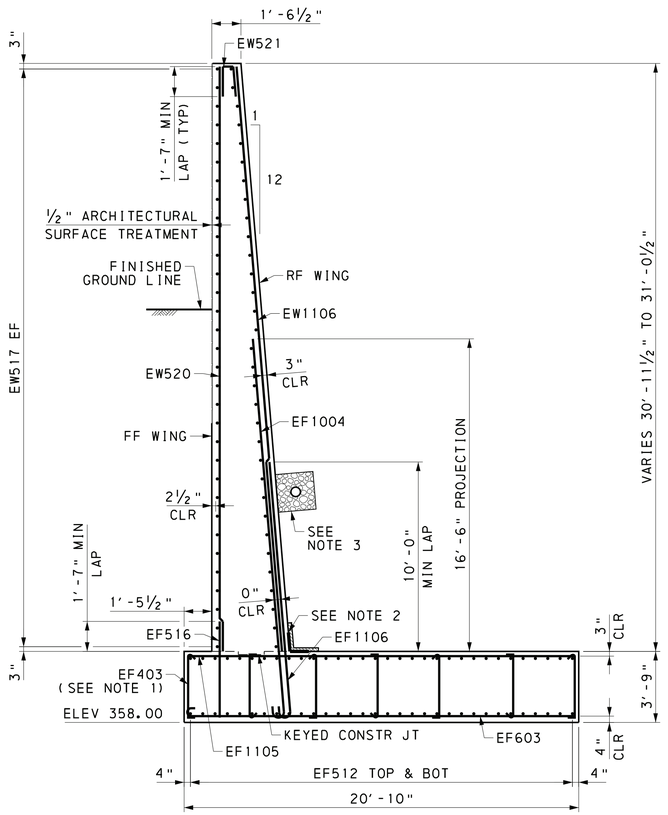
SECTION F-F

2 0 2 4 FEET



SECTION G-G

2 0 2 4 FEET



SECTION H-H

2 0 2 4 FEET

NOTES:

1. TIE TOP & BOTTOM MATS OF REINFORCING STEEL WITH #4 TIE BARS AT A MAXIMUM SPACING OF 4'-0" IN BOTH DIRECTIONS. PROVIDE TIE BARS WITH 90° HOOK AT ONE END AND 135° HOOK AT THE OTHER END. ALTERNATE 90° AND 135° HOOKS AT TOP IN ALTERNATE TIES.
2. FOR WATERPROOFING DETAILS, SEE ATTACHMENT BC-788 MODIFIED "SPRAY-ON WATERPROOFING DETAILS".
3. 6" STRUCTURE FOUNDATION DRAIN WITHIN CONTINUOUS 2' x 2' OF NO. 57 COARSE AGGREGATE ENCASED IN GEOTEXTILE, CLASS 1. SEE PUB 408 SECTION 1001.3(d) AND BC-751M.

REFERENCES:

	SHEETS:
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ABUTMENT 1 DRAWINGS	11 - 21
ABUTMENT ARCHITECTURAL DETAILS	34

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0417 MPMS/ECMS PROJ: 97828 BRKEY: 67417

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COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL JUSTIN ROBERT MCCARTHY ENGINEER PE076998

DAUPHIN COUNTY
SR 0083 SECTION 079
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OVER NORFOLK SOUTHERN RAILWAY COMPANY
1-SPAN COMPOSITE PS CONCRETE
PA BULB-TEE BEAM BRIDGE
WINGWALL B SECTIONS

PREPARED BY:
HNTB CORPORATION
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SUITE 300
HARRISBURG, PA 17110

RECOMMENDED 12-6-2022

SHEET 20 OF 70

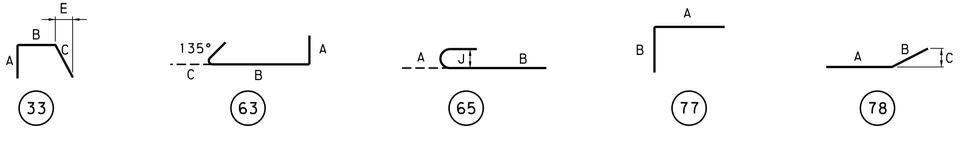
S-39452

12/2/2022
FILENAME: 63016-s-brB2-ab120.dgn

DES: SMZ	DES CKD: CEK	DWG: SMZ	DWG CKD: CEK

MARK	SIZE	NO REQ'D	LENGTH	TYPE	A	B	C	D	E	REMARKS
					ABUTMENT 1					
EF401	4	35	5'-2"	63	4 1/2"	4'-5"	4 1/2"			
EF501	5	156	42'-4"	STR						
EF502	5	16	6'-6"	STR						
EF503	5	42	5'-6" TO							VARY 2 EACH BY 3"
			10'-6"							
EF504	5	130	6'-5"	STR						
EF517	5	18	6'-6" TO	STR						VARY 2 EACH BY 1'-8 1/8"
			19'-11"							
EF518	5	2	25'-6"	STR						
EF601	6	5	16'-1"	STR						
EF602	6	6	22'-8"	65	8"	22'-0"				J = 6"
EF701	7	150	19'-3"	STR						
EF702	7	11	2'-3" TO	STR						VARY EACH BY 1'-8 3/8"
			19'-3"							
EF1001	10	150	20'-8"	65	1'-5"	19'-3"				J = 1'-1 1/4"
EF1002	10	11	3'-8" TO	65	1'-5"	2'-3" TO				J = 1'-1 1/4"
			20'-8"			19'-3"				VARY B EACH BY 1'-8 3/8"
EF1003	10	9	16'-1"	STR						
EF1101	11	11	26'-9"	STR						
EF1102	11	65	16'-7"	65	1'-7"	15'-0"				J = 1'-2 3/4"
EF1103	11	63	31'-4"	65	1'-7"	29'-9"				J = 1'-2 3/4"
EW301	3	6	8'-6"	STR						BEND IN FIELD
EW302	3	6	10'-3"	STR						BEND IN FIELD
EW303	3	6	11'-3"	STR						BEND IN FIELD
EW304	3	6	15'-0"	STR						BEND IN FIELD
EW305	3	54	12'-9"	STR						BEND IN FIELD
EW306	3	54	19'-9"	STR						BEND IN FIELD
EW307	3	54	13'-6"	STR						BEND IN FIELD
EW308	3	54	23'-9"	STR						BEND IN FIELD
EW401	4	8	3'-6"	STR						
EW501	5	83	39'-10"	STR						
EW502	5	77	39'-6"	STR						
EW503	5	43	42'-0"	STR						
EW504	5	43	25'-10"	STR						
EW505	5	65	6'-6"	33	2'-2"	2'-1"	2'-3"		3 3/8"	
EW506	5	40	5'-7"	STR						
EW1101	11	39	40'-2"	STR						
EW1102	11	26	39'-10"	STR						
W801	8	28	3'-5"	STR						STAINLESS STEEL DOWEL
					WINGWALL A					
EF402	4	40	2'-5"	63	4 1/2"	1'-8"	4 1/2"			
EF504	5	9	6'-5"	STR						
EF505	5	34	9'-7"	STR						
EF506	5	34	11'-8"	STR						
EF507	5	5	16'-1"	STR						
EF508	5	17	8'-1"	77	6'-6"	1'-7"				
EF509	5	17	9'-0"	78	7'-5"	1'-7"	1'-5"			
EF510	5	21	3'-8"	STR						
EF601	6	24	16'-1"	STR						
EF901	9	20	14'-9"	65	1'-3"	13'-6"				J = 11 3/4"
EF902	9	21	8'-10"	65	1'-3"	7'-7"				J = 11 3/4"
EF1003	10	46	16'-1"	STR						
EF1102	11	9	16'-7"	65	1'-7"	15'-0"				J = 1'-2 3/4"
EF1104	11	8	30'-4"	65	1'-7"	28'-9"				J = 1'-2 3/4"

MARK	SIZE	NO REQ'D	LENGTH	TYPE	A	B	C	D	E	REMARKS
					WINGWALL A (CONT'D)					
EW507	5	90	7'-6"	STR						
EW508	5	10	8'-1"	STR						
EW509	5	44	20'-1"	STR						
EW510	5	9	43'-7"	STR						
EW511	5	9	25'-7"	STR						
EW512	5	12	20'-8"	STR						
EW513	5	9	4'-7"	33	1'-9"	1'-1"	1'-9"		2 1/2"	
EW514	5	21	4'-7"	33	1'-9"	1'-1"	1'-9"		1 3/4"	
EW901	9	9	25'-9"	STR						
EW902	9	12	20'-9"	STR						
EW1103	11	9	43'-11"	STR						
					WINGWALL B					
EF403	4	70	3'-11"	63	4 1/2"	3'-2"	4 1/2"			
EF504	5	10	6'-5"	STR						
EF511	5	64	9'-6"	STR						
EF512	5	64	16'-8"	STR						
EF513	5	32	8'-7"	77	7'-0"	1'-7"				
EF514	5	32	9'-4"	78	7'-9"	1'-7"	1'-5"			
EF515	5	4	20'-6"	STR						
EF516	5	25	5'-2"	STR						
EF603	6	29	21'-2"	65	8"	20'-6"				J = 6"
EF1004	10	24	21'-5"	65	1'-5"	20'-0"				J = 1'-1 1/4"
EF1102	11	10	16'-7"	65	1'-7"	15'-0"				J = 1'-2 3/4"
EF1104	11	9	30'-4"	65	1'-7"	28'-9"				J = 1'-2 3/4"
EF1105	11	56	20'-6"	STR						
EF1106	11	25	15'-3"	65	1'-7"	13'-8"				J = 1'-2 3/4"
EW513	5	10	4'-7"	33	1'-9"	1'-1"	1'-9"		2 1/2"	
EW515	5	90	8'-7"	STR						
EW516	5	8	7'-0"	STR						
EW517	5	64	24'-0"	STR						
EW518	5	10	43'-5"	STR						
EW519	5	8	34'-6"	STR						
EW520	5	17	30'-6"	STR						
EW521	5	25	4'-7"	33	1'-9"	1'-1"	1'-9"		1 3/4"	
EW1104	11	10	43'-9"	STR						
EW1105	11	8	34'-8"	STR						
EW1106	11	17	30'-8"	STR						



NOTES:

1. "E" PREFIX IN BAR MARK DENOTES EPOXY COATED BARS.
2. ALL DIMENSIONS ARE OUT TO OUT OF BAR EXCEPT "A" & "C" ON STANDARD 135° AND 180° HOOKS, UNLESS NOTED.
3. FOR REINFORCEMENT BAR FABRICATION DETAILS, REFER TO STANDARD DRAWING BC-736M.
4. FIGURES IN CIRCLE REPRESENT BAR TYPES.
5. "J" DIMENSIONS ON 180° HOOKS ARE SHOWN ONLY WHERE NECESSARY TO RESTRICT HOOK SIZE, OTHERWISE STANDARD HOOKS ARE TO BE USED.
6. RADIUS, "R" IS TO THE INSIDE OF THE BAR.
7. REINFORCEMENT BAR SCHEDULE IS FOR INFORMATION ONLY. VERIFY INFORMATION BEFORE FABRICATION.

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0417 MPMS/ECMS PROJ: 97828 BRKEY: 67417

REFERENCES:

GENERAL NOTES	3 - 4
ABUTMENT 1 DRAWINGS	11 - 21

SHEETS:

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COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — JUSTIN ROBERT MCCARTHY — ENGINEER — PE076998

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0417 SEG 0051 OFFSET 0417
SR 3007 (19TH STREET) STA 103+30.88
OVER NORFOLK SOUTHERN RAILWAY COMPANY
1-SPAN COMPOSITE PS CONCRETE
PA BULB-TEE BEAM BRIDGE
ABUTMENT 1 REBAR SCHEDULE

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

RECOMMENDED 12-6-2022

SHEET 21 OF 70

S-39452

7/22/2022
FILENAME: 63016-s-brB2-bar01.dgn

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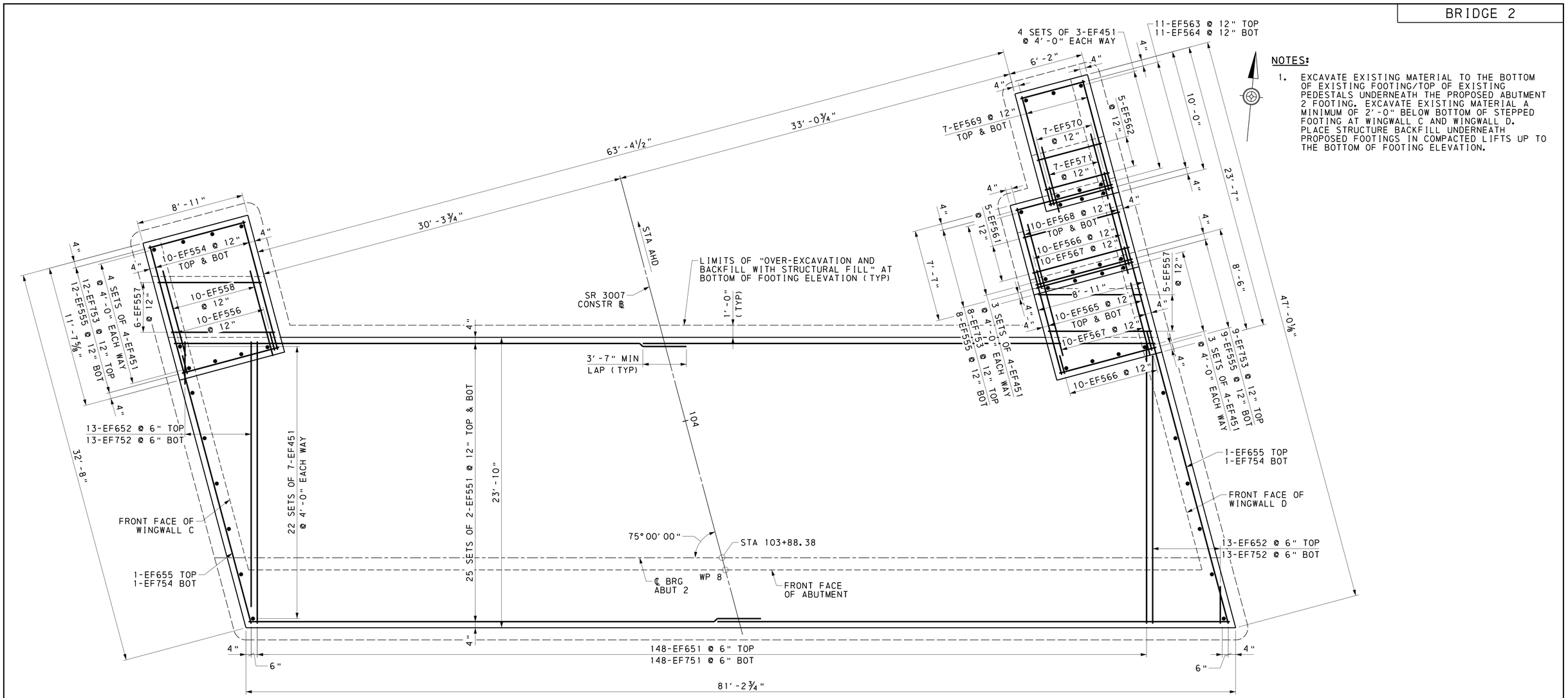

FOOTING PLAN

2 0 2 4 FEET

NOTES:

1. EXCAVATE EXISTING MATERIAL TO THE BOTTOM OF EXISTING FOOTING/TOP OF EXISTING PEDESTALS UNDERNEATH THE PROPOSED ABUTMENT 2 FOOTING. EXCAVATE EXISTING MATERIAL A MINIMUM OF 2'-0" BELOW BOTTOM OF STEPPED FOOTING AT WINGWALL C AND WINGWALL D. PLACE STRUCTURE BACKFILL UNDERNEATH PROPOSED FOOTINGS IN COMPACTED LIFTS UP TO THE BOTTOM OF FOOTING ELEVATION.

FOUNDATION PARAMETERS AT ABUTMENT 2			
BEARING CAPACITY	ABUTMENT 2	WING C (BFE 373.50) WING D (BFE 372.50) WING D (BFE 376.50)	WING D (BFE 380.00)
SECTION	TYPICAL	TYPICAL	TYPICAL
BEARING RESISTANCE	5.05 KSF	14.77 KSF	7.74 KSF
MAX BEARING PRESSURE	5.12 KSF	6.62 KSF	3.62 KSF
PERFORMANCE RATIO	0.986*	2.231	2.136
LIMIT STATE	STR-I	STR-I	EXT-II
LOAD CASE	MAX	MIN	MIN
STAGE	FINAL	FINAL	FINAL
SLIDING RESISTANCE	ABUTMENT 2	WING C (BFE 373.50) WING D (BFE 372.50) WING D (BFE 376.50)	WING D (BFE 380.00)
SECTION	TYPICAL	TYPICAL	TYPICAL
SLIDING RESISTANCE	34.05 K	13.50 K	4.90 K
MAX HORIZONTAL FORCE	17.18 K	13.43 K	4.48 K
PERFORMANCE RATIO	1.982	1.005	1.094
LIMIT STATE	STR-I	STR-I	STR-I
LOAD CASE	MIN	MIN	MIN
CONDITION	FINAL	TEMPORARY	TEMPORARY

*BEARING CAPACITY PERFORMANCE RATIO IS WITHIN TOLERANCE

SPREAD FOOTING SOIL PARAMETERS		
SUBSTRUCTURE UNIT	ABUTMENT 2	WINGS C & D
ALLOWABLE SETTLEMENT	1.0 IN	1.0 IN
BEARING CAPACITY PHI FACTOR	0.50	0.50
SLIDING PHI FACTOR	0.80	0.80
SOIL LAYER 1 THICKNESS	9.5 FT	2.0 FT
LAYER 1 MASS UNIT WEIGHT	123 PCF	120 PCF
LAYER 1 SATURATED UNIT WEIGHT	128 PCF	125 PCF
LAYER 1 ELASTIC MODULUS	1238 KSF	1584 KSF
LAYER 1 EFFECTIVE FRICTION ANGLE	30 DEG	34 DEG
LAYER 1 Ncq	0.0	- - -
LAYER 1 Ngq	9.0	- - -
SOIL LAYER 2 THICKNESS	- - -	*
LAYER 2 MASS UNIT WEIGHT	- - -	125
LAYER 2 SATURATED UNIT WEIGHT	- - -	130
LAYER 2 ELASTIC MODULUS	- - -	1008
LAYER 2 EFFECTIVE FRICTION ANGLE	- - -	27

*11.5 FT AT WING C BFE 373.50 & WING D BFE 372.50 & WING D BFE 376.50 (ONE TYPICAL DESIGN FOR THESE SECTIONS)
19.0 FT AT WING D BFE 380.00

REFERENCES:

	SHEETS:
GENERAL NOTES	3 - 4
STAKE-OUT PLAN	10
ABUTMENT 2 DRAWINGS	22 - 32

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0417 MPMS/ECMS PROJ: 97828 BRKEY: 67417

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DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0417 SEG 0051 OFFSET 0417
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OVER NORFOLK SOUTHERN RAILWAY COMPANY
1-SPAN COMPOSITE PS CONCRETE
PA BULB-TEE BEAM BRIDGE
ABUTMENT 2 FOOTING PLAN

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

RECOMMENDED 12-6-2022

SHEET 22 OF 70

S-39452

7/22/2022
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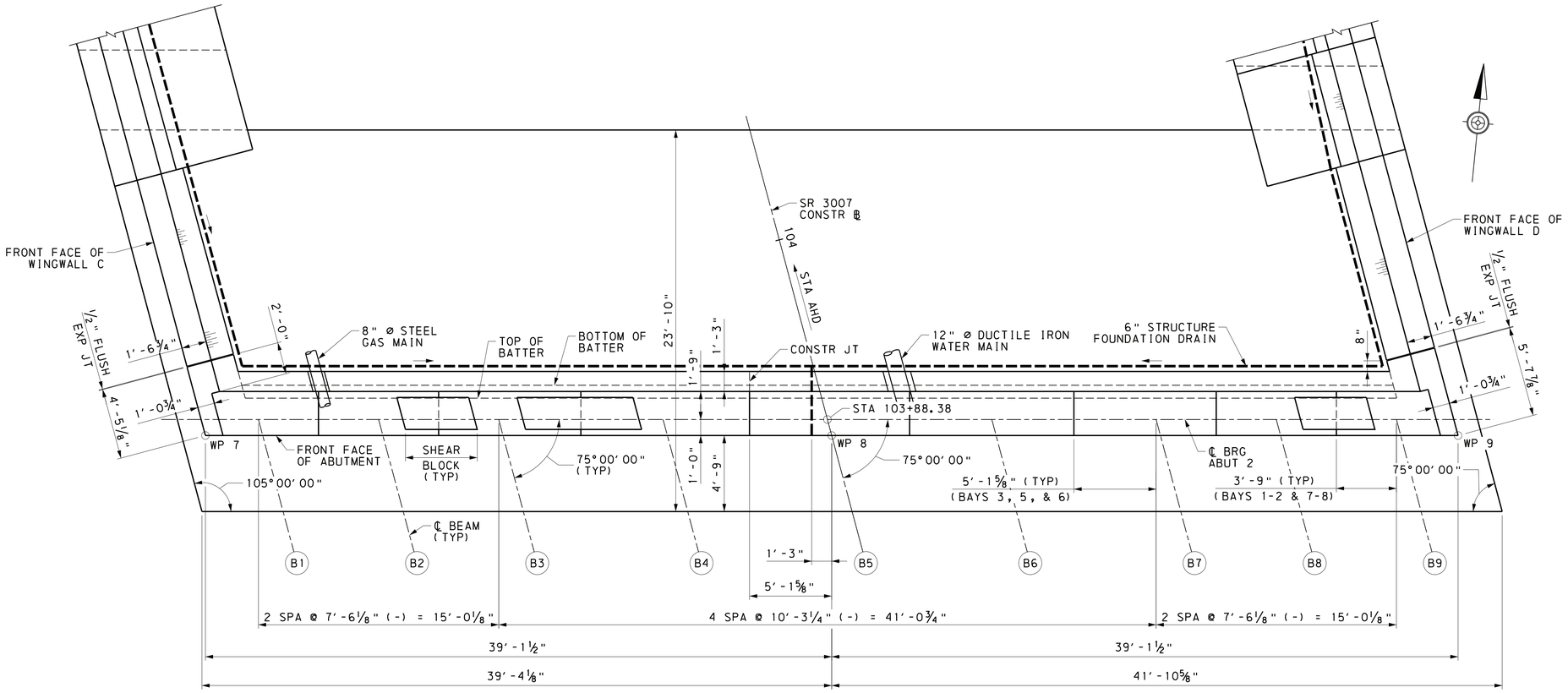

PLAN

2 0 2 4 FEET

NOTES:

1. WORK POINTS ARE LOCATED AT THE FRONT FACE OF THE ARCHITECTURAL SURFACE TREATMENT, WHERE PRESENT.

REFERENCES:	SHEETS:
GENERAL NOTES	3 - 4
STAKE-OUT PLAN	10
ABUTMENT 2 DRAWINGS	22 - 32

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0417 MPMS/ECMS PROJ: 97828 BRKEY: 67417

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PA BULB-TEE BEAM BRIDGE
ABUTMENT 2 PLAN

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL JUSTIN ROBERT MCCARTHY ENGINEER PE076998

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

RECOMMENDED 12-6-2022

SHEET 23 OF 70

S-39452

7/22/2022
FILENAME 63016-s-br82-ab122.dgn

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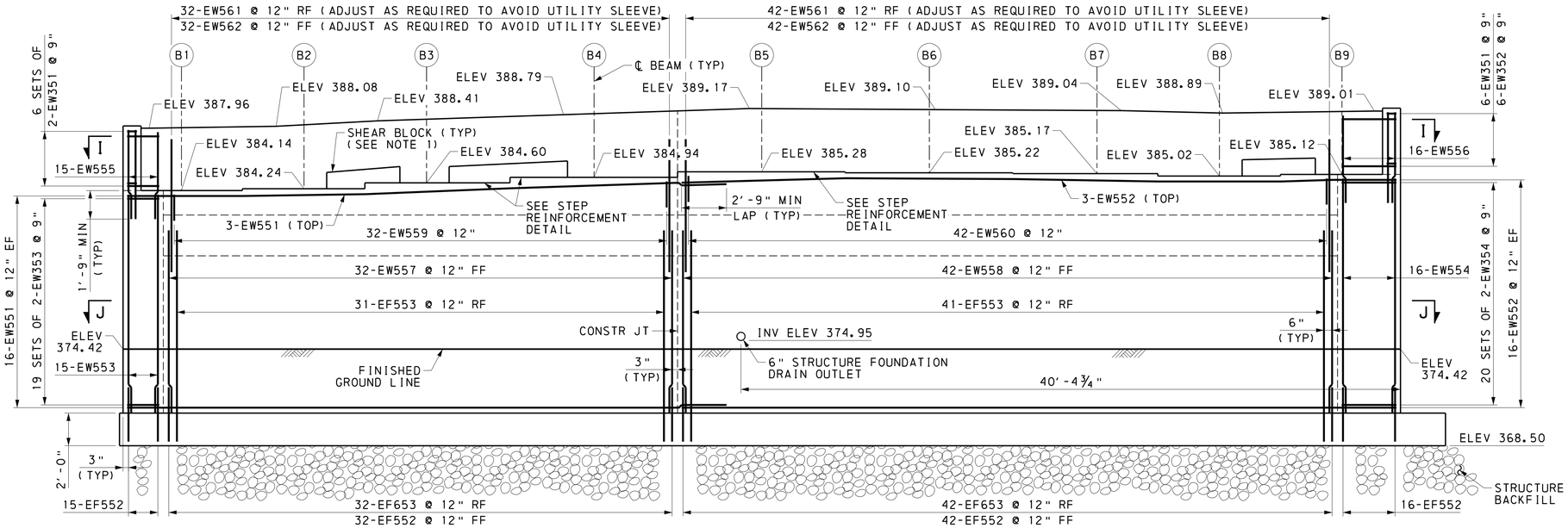
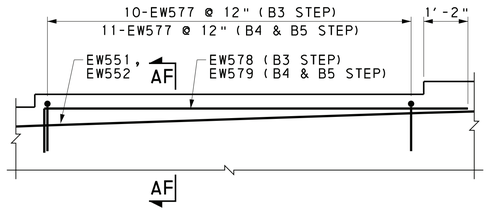


(BACKWALL REINFORCEMENT NOT SHOWN FOR CLARITY, SEE BACKWALL ELEVATION)

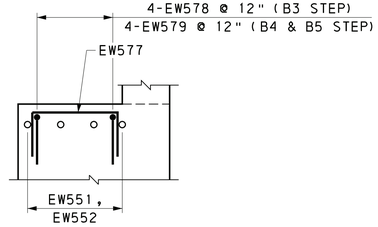
ELEVATION

2 0 2 4 FEET



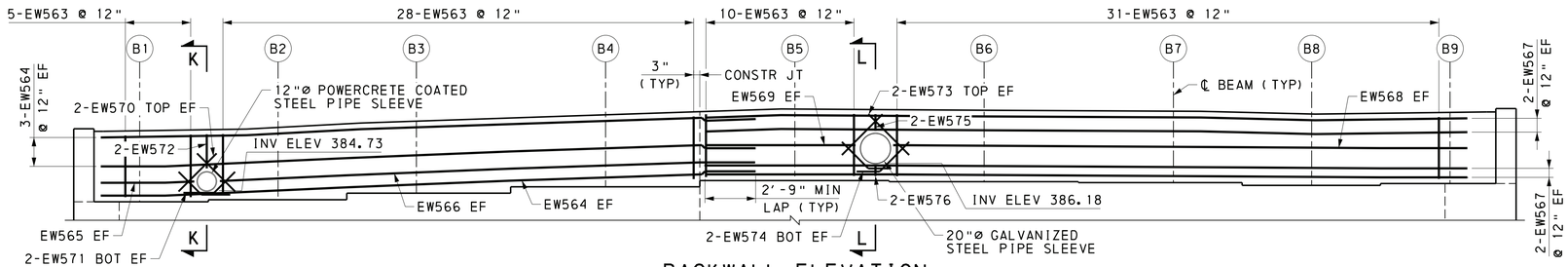
STEP REINFORCEMENT DETAIL

1 0 1 2 FEET



SECTION AF-AF

1 0 1 2 FEET



BACKWALL ELEVATION

2 0 2 4 FEET

NOTES:

1. SHEAR BLOCK REINFORCEMENT NOT SHOWN FOR CLARITY.
2. BACKWALL ELEVATIONS GIVEN AT LOCATIONS OF SUPERSTRUCTURE BREAK POINTS.

REFERENCES:	SHEETS:
GENERAL NOTES	3 - 4
ABUTMENT 2 DRAWINGS	22 - 32
MISCELLANEOUS ABUTMENT DETAILS	33

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
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PREPARED BY:
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SUITE 300
HARRISBURG, PA 17110

RECOMMENDED 12-6-2022

SHEET 24 OF 70

S-39452

7/22/2022
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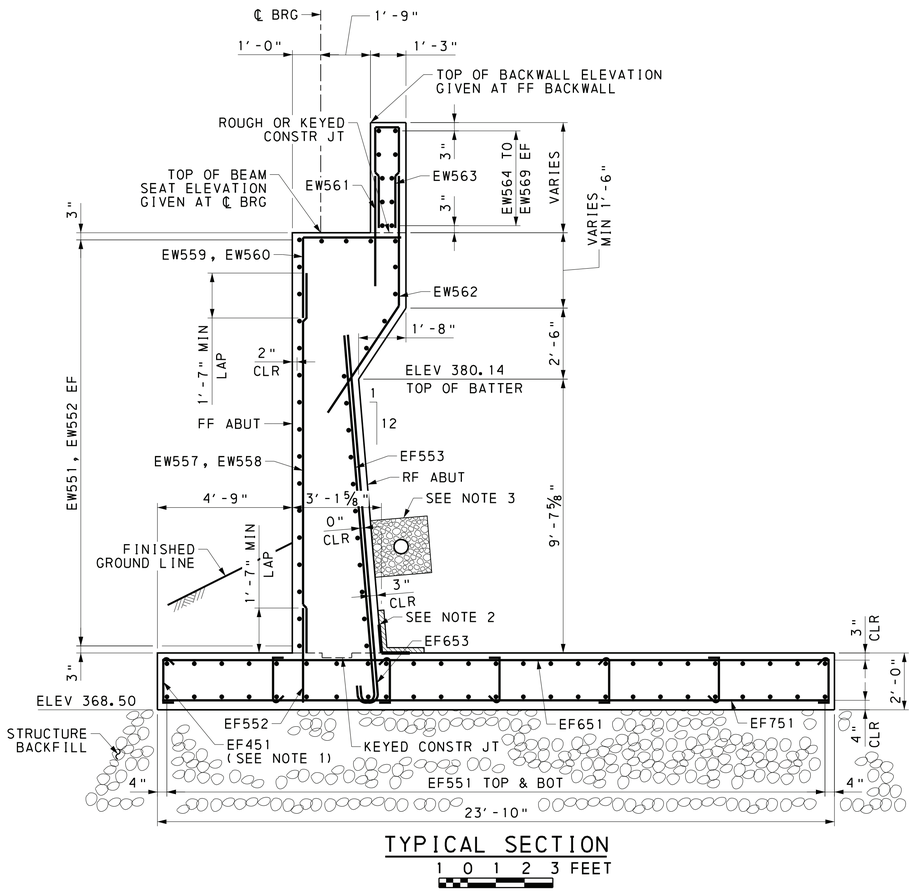
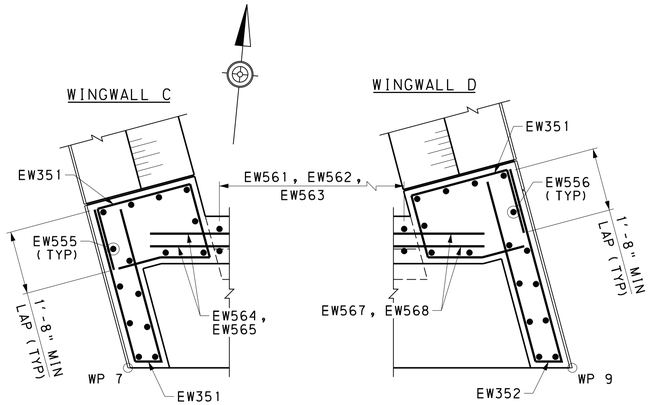


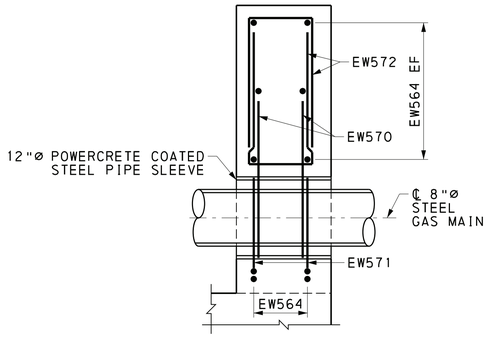
TYPICAL SECTION

1 0 1 2 3 FEET



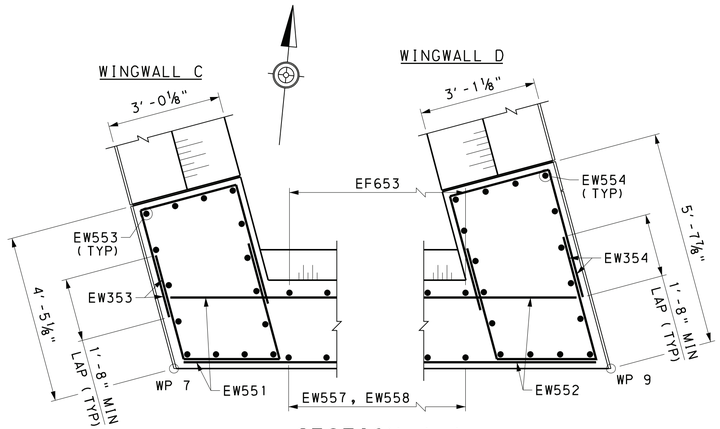
SECTION I-I

1 0 1 2 FEET



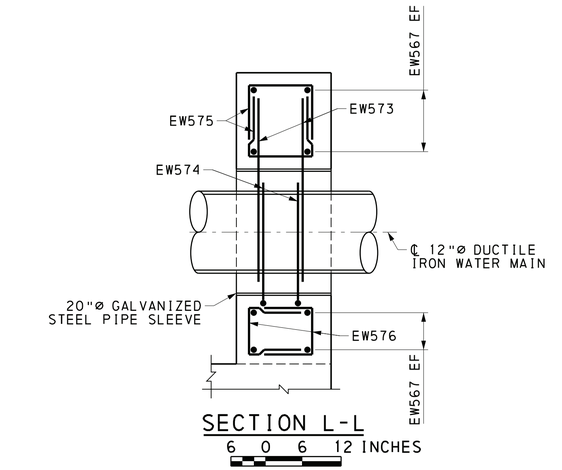
SECTION K-K

6 0 6 12 INCHES



SECTION J-J

1 0 1 2 FEET



SECTION L-L

6 0 6 12 INCHES

NOTES:

1. TIE TOP & BOTTOM MATS OF REINFORCING STEEL WITH #4 TIE BARS AT A MAXIMUM SPACING OF 4'-0" IN BOTH DIRECTIONS. PROVIDE TIE BARS WITH 90° HOOK AT ONE END AND 135° HOOK AT THE OTHER END. ALTERNATE 90° AND 135° HOOKS AT TOP IN ALTERNATE TIES.
2. FOR WATERPROOFING DETAILS, SEE ATTACHMENT BC-788 MODIFIED "SPRAY-ON WATERPROOFING DETAILS".
3. 6" STRUCTURE FOUNDATION DRAIN WITHIN CONTINUOUS 2' x 2' OF NO. 57 COARSE AGGREGATE ENCASED IN GEOTEXTILE, CLASS 1. SEE PUB 408 SECTION 1001.3(d) AND BC-751M.

REFERENCES:

	SHEETS:
GENERAL NOTES	3 - 4
ABUTMENT 2 DRAWINGS	22 - 32
MISCELLANEOUS ABUTMENT DETAILS	33

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0417 MPMS/ECMS PROJ: 97828 BRKEY: 67417

HNTB

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
JUSTIN ROBERT MCCARTHY
ENGINEER
PE076998

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

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0417 SEG 0051 OFFSET 0417
SR 3007 (19TH STREET) STA 103+30.88
OVER NORFOLK SOUTHERN RAILWAY COMPANY

1-SPAN COMPOSITE PS CONCRETE
PA BULB-TEE BEAM BRIDGE

ABUTMENT 2 SECTION & DETAILS

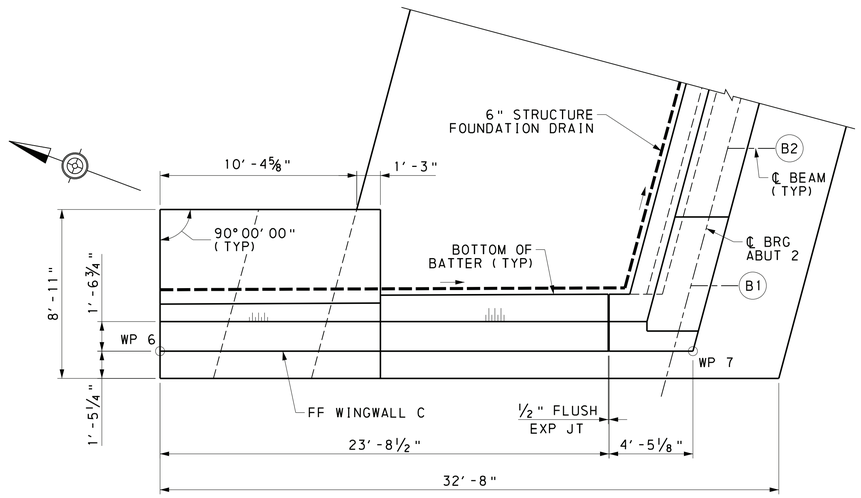
RECOMMENDED 12-6-2022

SHEET 25 OF 70

S-39452

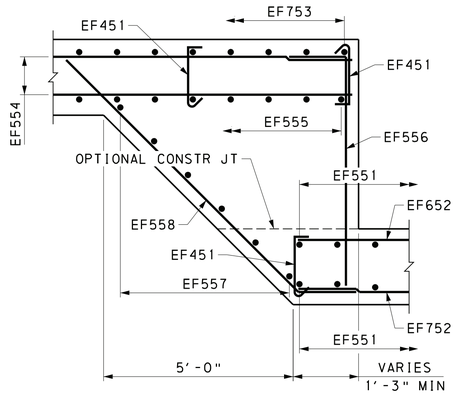
12/2/2022
FILENAME: 63016-s-brB2-ab124.dgn

DES: SMZ	DES CKD: CEK	DWG: SMZ	DWG CKD: CEK



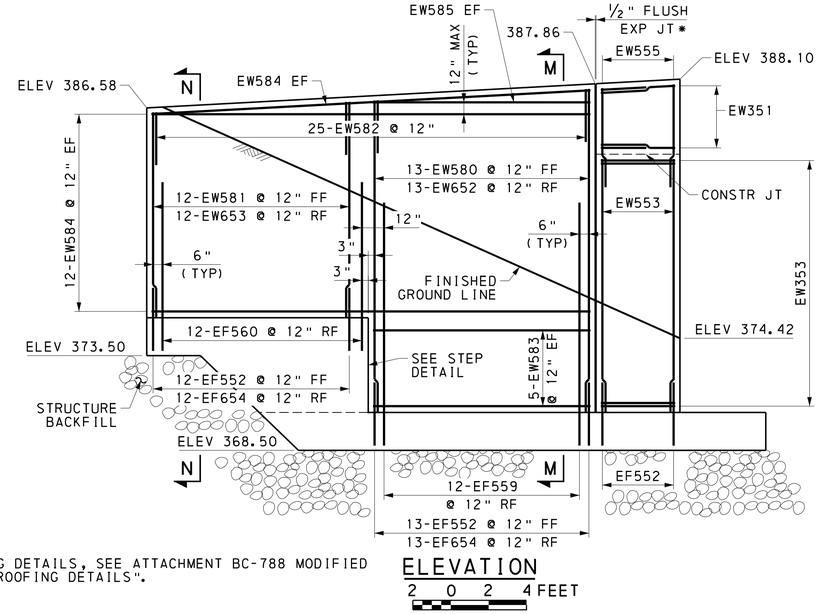
PLAN

2 0 2 4 FEET



STEP DETAIL

1 0 1 2 FEET



ELEVATION

2 0 2 4 FEET

* FOR WATERPROOFING DETAILS, SEE ATTACHMENT BC-788 MODIFIED "SPRAY-ON WATERPROOFING DETAILS".

REFERENCES:	SHEETS:
GENERAL NOTES	3 - 4
ABUTMENT 2 DRAWINGS	22 - 32
ABUTMENT ARCHITECTURAL DETAILS	34

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0417 MPMS/ECMS PROJ: 97828 BRKEY: 67417

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COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0417 SEG 0051 OFFSET 0417
SR 3007 (19TH STREET) STA 103+30.88
OVER NORFOLK SOUTHERN RAILWAY COMPANY
1-SPAN COMPOSITE PS CONCRETE
PA BULB-TEE BEAM BRIDGE
WINGWALL C PLAN & ELEVATION

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — JUSTIN ROBERT MCCARTHY — ENGINEER PE076998

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

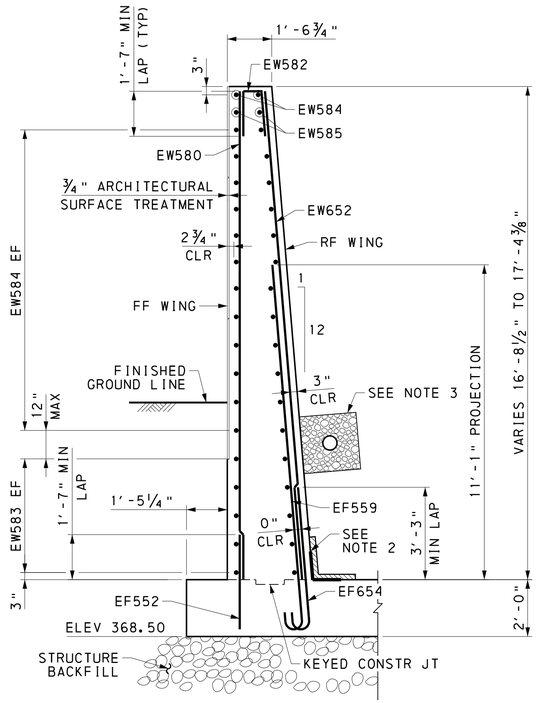
RECOMMENDED 12-6-2022

SHEET 26 OF 70

S-39452

DES: SMZ	DES CKD: CEK	DWG: SMZ	DWG CKD: CEK

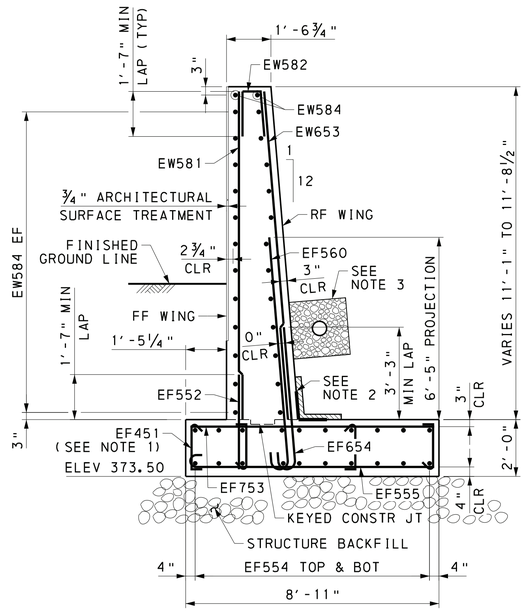
12/2/2022
FILENAME: 63016-s-br-B2-ab125.dgn



(ABUTMENT FOOTING REINFORCEMENT NOT SHOWN FOR CLARITY)

SECTION M-M

1 0 1 2 3 FEET



SECTION N-N

1 0 1 2 3 FEET

NOTES:

1. TIE TOP & BOTTOM MATS OF REINFORCING STEEL WITH #4 TIE BARS AT A MAXIMUM SPACING OF 4'-0" IN BOTH DIRECTIONS. PROVIDE TIE BARS WITH 90° HOOK AT ONE END AND 135° HOOK AT THE OTHER END. ALTERNATE 90° AND 135° HOOKS AT TOP IN ALTERNATE TIES.
2. FOR WATERPROOFING DETAILS, SEE ATTACHMENT BC-788 MODIFIED "SPRAY-ON WATERPROOFING DETAILS".
3. 6" STRUCTURE FOUNDATION DRAIN WITHIN CONTINUOUS 2' x 2' OF NO. 57 COARSE AGGREGATE ENCASED IN GEOTEXTILE, CLASS 1. SEE PUB 408 SECTION 1001.3(d) AND BC-751M.

REFERENCES:

	SHEETS:
GENERAL NOTES	3 - 4
ABUTMENT 2 DRAWINGS	22 - 32
ABUTMENT ARCHITECTURAL DETAILS	34

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0417 MPMS/ECMS PROJ: 97828 BRKEY: 67417

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COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
JUSTIN ROBERT MCCARTHY
ENGINEER
PE076998

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0417 SEG 0051 OFFSET 0417
SR 3007 (19TH STREET) STA 103+30.88
OVER NORFOLK SOUTHERN RAILWAY COMPANY

1-SPAN COMPOSITE PS CONCRETE
PA BULB-TEE BEAM BRIDGE
WINGWALL C SECTIONS

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

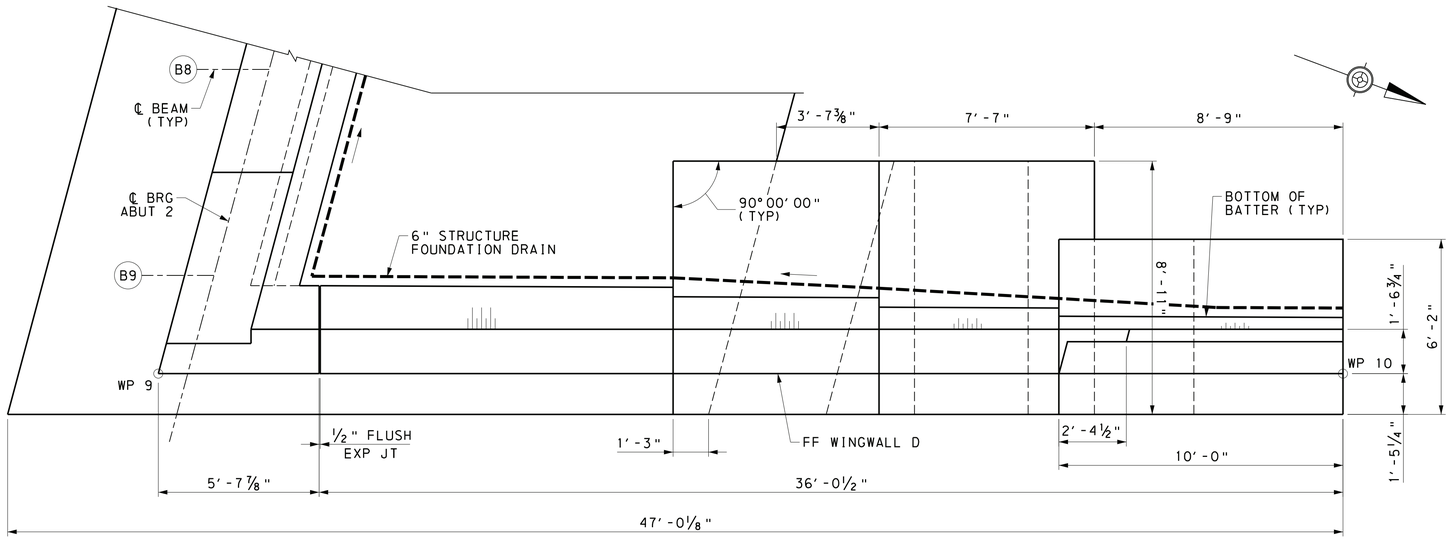
RECOMMENDED 12-6-2022

SHEET 27 OF 70

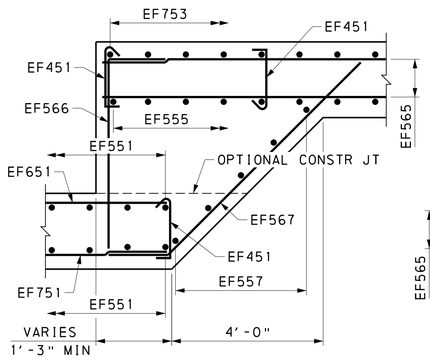
S-39452

12/2/2022
FILENAME: 63016-s-brB2-ab126.dgn

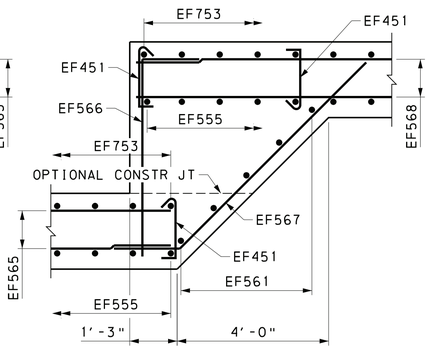
DES: SMZ	DES CKD: CEK	DWG: SMZ	DWG CKD: CEK



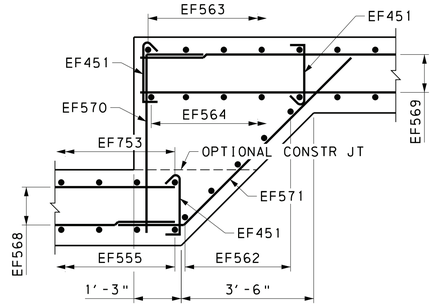
PLAN
1 0 1 2 3 FEET



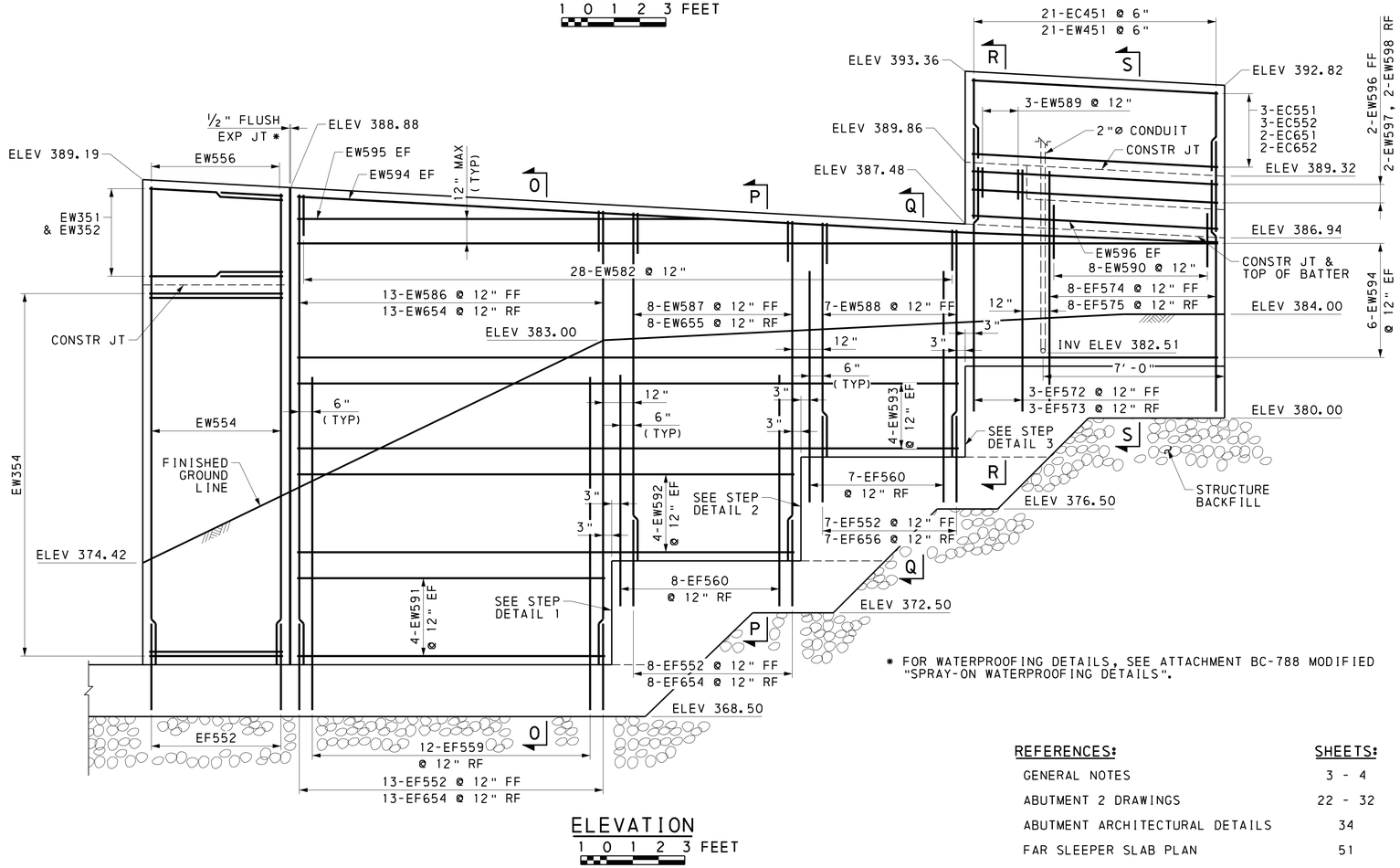
STEP DETAIL 1
1 0 1 2 FEET



STEP DETAIL 2
1 0 1 2 FEET



STEP DETAIL 3
1 0 1 2 FEET



ELEVATION
1 0 1 2 3 FEET

* FOR WATERPROOFING DETAILS, SEE ATTACHMENT BC-788 MODIFIED "SPRAY-ON WATERPROOFING DETAILS".

REFERENCES:	SHEETS:
GENERAL NOTES	3 - 4
ABUTMENT 2 DRAWINGS	22 - 32
ABUTMENT ARCHITECTURAL DETAILS	34
FAR SLEEPER SLAB PLAN	51
FAR APPROACH SLAB PLAN	53

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0417 MPMS/ECMS PROJ: 97828 BRKEY: 67417

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COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0417 SEG 0051 OFFSET 0417
SR 3007 (19TH STREET) STA 103+30.88
OVER NORFOLK SOUTHERN RAILWAY COMPANY
1-SPAN COMPOSITE PS CONCRETE
PA BULB-TEE BEAM BRIDGE
WINGWALL D PLAN & ELEVATION

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL JUSTIN ROBERT MCCARTHY ENGINEER PE076998

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

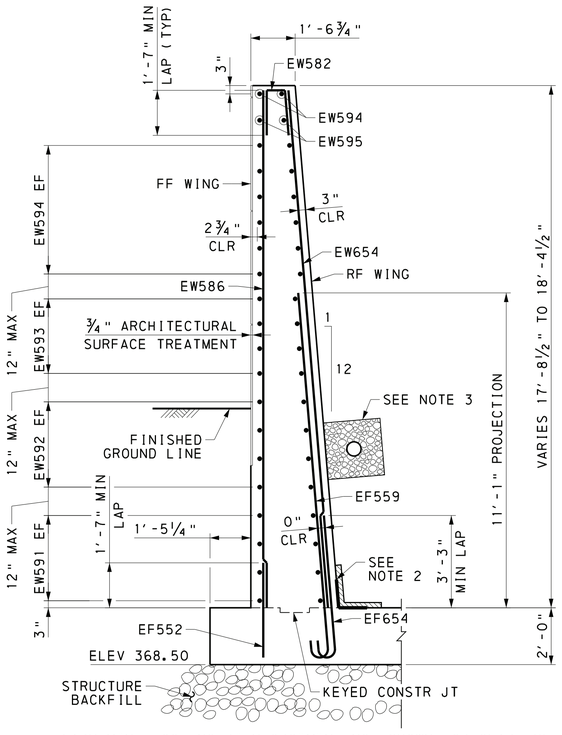
RECOMMENDED 12-6-2022

SHEET 28 OF 70

S-39452

12/2/2022
FILENAME: 63016-s-br82-ab127.dgn

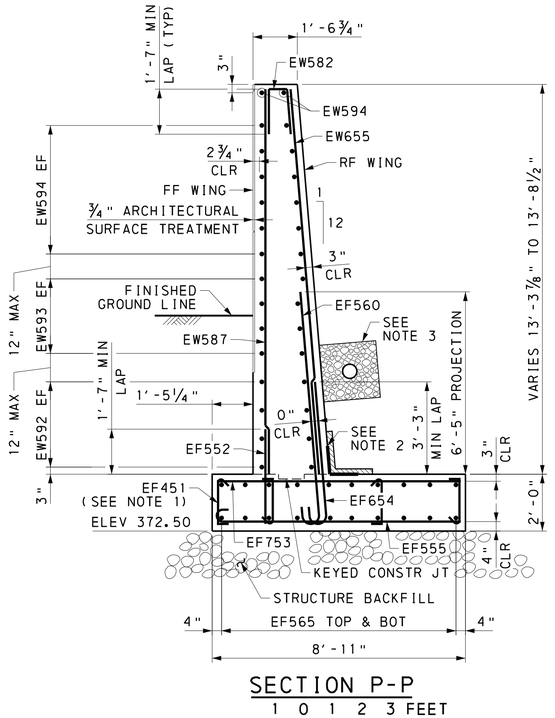
DES: SMZ	DES CKD: CEK	DWG: SMZ	DWG CKD: CEK



(ABUTMENT FOOTING REINFORCEMENT NOT SHOWN FOR CLARITY)

SECTION O-O

1 0 1 2 3 FEET



SECTION P-P

1 0 1 2 3 FEET

NOTES:

1. TIE TOP & BOTTOM MATS OF REINFORCING STEEL WITH #4 TIE BARS AT A MAXIMUM SPACING OF 4'-0" IN BOTH DIRECTIONS. PROVIDE TIE BARS WITH 90° HOOK AT ONE END AND 135° HOOK AT THE OTHER END. ALTERNATE 90° AND 135° HOOKS AT TOP IN ALTERNATE TIES.
2. FOR WATERPROOFING DETAILS, SEE ATTACHMENT BC-788 MODIFIED "SPRAY-ON WATERPROOFING DETAILS".
3. 6" STRUCTURE FOUNDATION DRAIN WITHIN CONTINUOUS 2' x 2' OF NO. 57 COARSE AGGREGATE ENCASED IN GEOTEXTILE, CLASS 1. SEE PUB 408 SECTION 1001.3(d) AND BC-751M.

REFERENCES:	SHEETS:
GENERAL NOTES	3 - 4
ABUTMENT 2 DRAWINGS	22 - 32
ABUTMENT ARCHITECTURAL DETAILS	34

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0417 MPMS/ECMS PROJ: 97828 BRKEY: 67417

HNTB

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
JUSTIN ROBERT MCCARTHY
ENGINEER
PE076998

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0417 SEG 0051 OFFSET 0417
SR 3007 (19TH STREET) STA 103+30.88
OVER NORFOLK SOUTHERN RAILWAY COMPANY
1-SPAN COMPOSITE PS CONCRETE
PA BULB-TEE BEAM BRIDGE
WINGWALL D SECTIONS 1

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

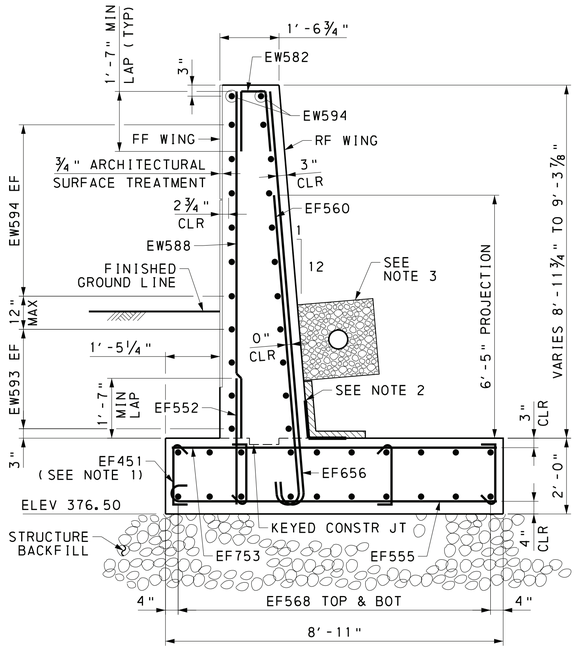
RECOMMENDED 12-6-2022

SHEET 29 OF 70

S-39452

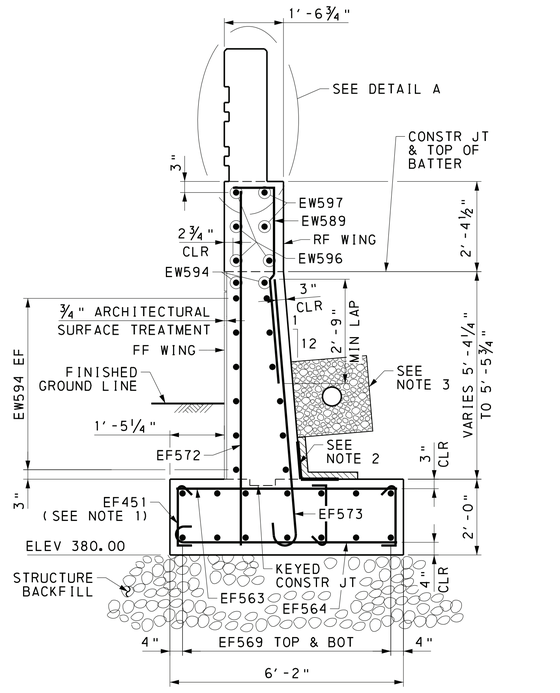
12/2/2022
FILENAME 63016-s-br82-ab128.dgn

DES: SMZ	DES CKD: CEK	DWG: SMZ	DWG CKD: CEK



SECTION Q-Q

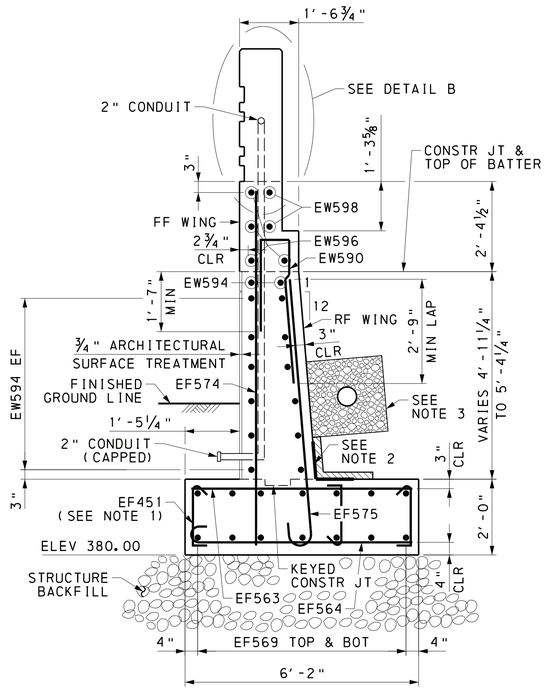
1 0 1 2 FEET



(VERTICAL WALL BARRIER REINFORCEMENT NOT SHOWN FOR CLARITY)

SECTION R-R

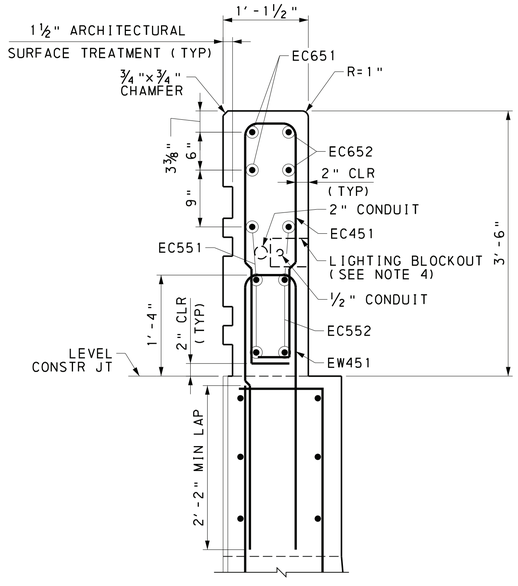
1 0 1 2 FEET



(VERTICAL WALL BARRIER REINFORCEMENT NOT SHOWN FOR CLARITY)

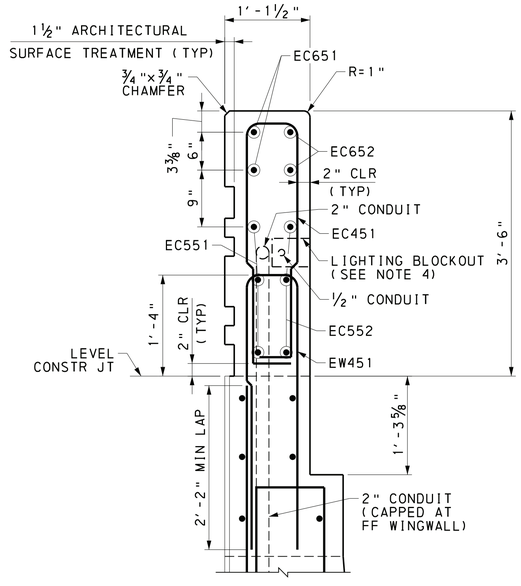
SECTION S-S

1 0 1 2 FEET



DETAIL A

6 0 6 12 INCHES



DETAIL B

6 0 6 12 INCHES

NOTES:

1. TIE TOP & BOTTOM MATS OF REINFORCING STEEL WITH #4 TIE BARS AT A MAXIMUM SPACING OF 4'-0" IN BOTH DIRECTIONS. PROVIDE TIE BARS WITH 90° HOOK AT ONE END AND 135° HOOK AT THE OTHER END. ALTERNATE 90° AND 135° HOOKS AT TOP IN ALTERNATE TIES.
2. FOR WATERPROOFING DETAILS, SEE ATTACHMENT BC-788 MODIFIED "SPRAY-ON WATERPROOFING DETAILS".
3. 6" STRUCTURE FOUNDATION DRAIN WITHIN CONTINUOUS 2' x 2' OF NO. 57 COARSE AGGREGATE ENCASED IN GEOTEXTILE, CLASS 1. SEE PUB 408 SECTION 1001.3(d) AND BC-751M.
4. PROVIDE ONE ADDITIONAL EC451 BAR ON EACH SIDE OF BARRIER LIGHTING BLOCKOUT (LAP WITH EW451). ADJUST REINFORCEMENT AS REQUIRED TO ACCOMMODATE PLACEMENT OF LIGHTING BLOCKOUTS. SEE HIGHWAY LIGHTING ALSO PLAN FOR PLACEMENT OF JUNCTION BOXES AND LUMINAIRES.

REFERENCES:

	SHEETS:
GENERAL NOTES	3 - 4
ABUTMENT 2 DRAWINGS	22 - 32
ABUTMENT ARCHITECTURAL DETAILS	34

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0417 MPMS/ECMS PROJ: 97828 BRKEY: 67417

HNTB

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0417 SEG 0051 OFFSET 0417
SR 3007 (19TH STREET) STA 103+30.88
OVER NORFOLK SOUTHERN RAILWAY COMPANY
1-SPAN COMPOSITE PS CONCRETE
PA BULB-TEE BEAM BRIDGE
WINGWALL D SECTIONS 2

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL
JUSTIN ROBERT MCCARTHY
ENGINEER
PE076998

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

RECOMMENDED 12-6-2022

SHEET 30 OF 70

S-39452

12/2/2022
FILENAME: 63016-s-brB2-ob129.dgn

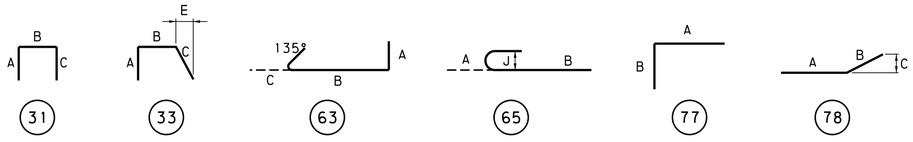
DES: SMZ	DES CKD: CEK	DWG: SMZ	DWG CKD: CEK

MARK	SIZE	NO REQ'D	LENGTH	TYPE	A	B	C	D	E	REMARKS
ABUTMENT 2										
EF451	4	154	2'-2"	63	4 1/2"	1'-5"	4 1/2"			
EF551	5	100	42'-3"	STR						
EF552	5	105	3'-5"	STR						
EF553	5	72	13'-5"	65	7"	12'-10"				J = 5"
EF651	6	148	23'-6"	STR						
EF652	6	26	2'-6 TO	STR						VARY 2 EACH BY 1'-7 1/2"
			22'-0"							
EF653	6	74	13'-6"	65	8"	12'-10"				J = 6"
EF655	6	2	24'-4"	STR						
EF751	7	148	23'-6"	STR						
EF752	7	26	2'-6 TO	STR						VARY 2 EACH BY 1'-7 1/2"
			22'-0"							
EF754	7	2	24'-4"	STR						
EW351	3	18	8'-9"	STR						BEND IN FIELD
EW352	3	6	11'-2"	STR						BEND IN FIELD
EW353	3	38	9'-0"	STR						BEND IN FIELD
EW354	3	40	9'-6"	STR						BEND IN FIELD
EW452	4	8	3'-6"	STR						
EW551	5	35	37'-11"	STR						
EW552	5	35	42'-9"	STR						
EW553	5	15	13'-4"	STR						
EW554	5	16	14'-3"	STR						
EW555	5	15	5'-7"	STR						
EW556	5	16	5'-8"	STR						
EW557	5	32	13'-4"	STR						
EW558	5	42	14'-3"	STR						
EW559	5	32	6'-3"	77	3'-7"	2'-8"				
EW560	5	42	5'-7"	77	3'-7"	2'-0"				
EW561	5	74	4'-0"	STR						
EW562	5	74	9'-7"	78	5'-0"	4'-7"	2'-6 1/2"			
EW563	5	74	7'-6"	31	3'-4"	10"	3'-4"			
EW564	5	8	35'-7"	STR						
EW565	5	2	5'-3"	STR						
EW566	5	2	29'-0"	STR						
EW567	5	8	41'-6"	STR						
EW568	5	2	31'-1"	STR						
EW569	5	2	8'-1"	STR						
EW570	5	4	3'-0"	STR						
EW571	5	4	3'-4"	78	1'-10"	1'-6"	1'-0 3/4"			
EW572	5	2	4'-6"	31	1'-10"	10"	1'-10"			
EW573	5	4	3'-8"	STR						
EW574	5	4	4'-3"	78	2'-6"	1'-9"	1'-2 3/4"			
EW575	5	2	2'-7 1/2"	31	10 3/4"	10"	10 3/4"			
EW576	5	2	2'-2 1/4"	31	10"	6 1/4"	10"			
EW577	5	32	4'-9"	31	1'-2"	2'-5"	1'-2"			
EW578	5	4	11'-1"	77	9'-11"	1'-2"				
EW579	5	8	12'-6"	77	11'-4"	1'-2"				

MARK	SIZE	NO REQ'D	LENGTH	TYPE	A	B	C	D	E	REMARKS
WINGWALL C										
EF451	4	16	2'-2"	63	4 1/2"	1'-5"	4 1/2"			
EF552	5	25	3'-5"	STR						
EF554	5	20	11'-3 1/2"	STR						
EF555	5	12	9'-2"	65	7"	8'-7"				J = 5"
EF556	5	10	8'-0"	77	6'-5"	1'-7"				
EF557	5	6	8'-10"	STR						
EF558	5	10	10'-7"	78	9'-0"	1'-7"	1'-1 1/2"			
EF559	5	12	13'-5"	65	7"	12'-10"				J = 5"
EF560	5	12	8'-9"	65	7"	8'-2"				J = 5"
EF654	6	25	5'-10"	65	8"	5'-2"				J = 6"
EF753	7	12	8'-7"	STR						
EW580	5	13	16'-5"	STR						
EW581	5	12	10'-9"	STR						
EW582	5	25	6'-1"	33	2'-6"	1'-1"	2'-6"		2 1/2"	
EW583	5	10	11'-8"	STR						
EW584	5	26	23'-4"	STR						
EW585	5	2	13'-0"	STR						
EW652	6	13	16'-5"	STR						
EW653	6	12	10'-9 1/2"	STR						

NOTES:

1. "E" PREFIX IN BAR MARK DENOTES EPOXY COATED BARS.
2. ALL DIMENSIONS ARE OUT TO OUT OF BAR EXCEPT "A" & "C" ON STANDARD 135° AND 180° HOOKS, UNLESS NOTED.
3. FOR REINFORCEMENT BAR FABRICATION DETAILS, REFER TO STANDARD DRAWING BC-736M.
4. FIGURES IN CIRCLE REPRESENT BAR TYPES.
5. "J" DIMENSIONS ON 180° HOOKS ARE SHOWN ONLY WHERE NECESSARY TO RESTRICT HOOK SIZE, OTHERWISE STANDARD HOOKS ARE TO BE USED.
6. RADIUS, "R" IS TO THE INSIDE OF THE BAR.
7. REINFORCEMENT BAR SCHEDULE IS FOR INFORMATION ONLY. VERIFY INFORMATION BEFORE FABRICATION.



REFERENCES:

	SHEETS:
GENERAL NOTES	3 - 4
ABUTMENT 2 DRAWINGS	22 - 32

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0417 MPMS/ECMS PROJ: 97828 BRKEY: 67417

HNTB

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL JUSTIN ROBERT MCCARTHY ENGINEER PE076998

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0417 SEG 0051 OFFSET 0417
SR 3007 (19TH STREET) STA 103+30.88
OVER NORFOLK SOUTHERN RAILWAY COMPANY
1-SPAN COMPOSITE PS CONCRETE
PA BULB-TEE BEAM BRIDGE
ABUTMENT 2 REBAR SCHEDULE 1

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

RECOMMENDED 12-6-2022

SHEET 31 OF 70

S-39452

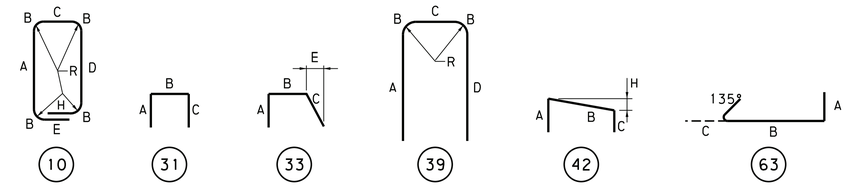
7/22/2022
FILENAME: 63016-s-br82-bar02.dgn

DES: SMZ	DES CKD: CEK	DWG: SMZ	DWG CKD: CEK

MARK	SIZE	NO REQ'D	LENGTH	TYPE	A	B	C	D	E	REMARKS
						WINGWALL D				
EF451	4	36	2'-2"	63	4 1/2"	1'-5"	4 1/2"			
EF552	5	28	3'-5"	STR						
EF555	5	17	9'-2"	65	7"	8'-7"				J = 5"
EF557	5	5	8'-10"	STR						
EF559	5	12	13'-5"	65	7"	12'-10"				J = 5"
EF560	5	15	8'-9"	65	7"	8'-2"				J = 5"
EF561	5	5	8'-7"	STR						
EF562	5	5	5'-10"	STR						
EF563	5	11	5'-10"	STR						
EF564	5	11	6'-5"	65	7"	5'-10"				J = 5"
EF565	5	20	8'-2"	STR						
EF566	5	20	7'-0"	77	5'-5"	1'-7"				
EF567	5	20	9'-2"	78	7'-7"	1'-7"	1'-1 1/2"			
EF568	5	20	7'-3"	STR						
EF569	5	14	9'-8"	STR						
EF570	5	7	6'-6"	77	4'-11"	1'-7"				
EF571	5	7	8'-5"	78	6'-10"	1'-7"	1'-1 1/2"			
EF572	5	3	9'-2 3/4" TO	STR						VARY EACH BY 3/4"
			9'-4 1/4"							
EF573	5	3	7'-5 1/2" TO	65	7"	6'-10 1/2" TO				J = 5", VARY B EACH BY 3/4"
			7'-7"			7'-0"				
EF574	5	8	8'-9 3/4" TO	STR						VARY EACH BY 3/4"
			9'-2 3/4"							
EF575	5	8	7'-0 1/2" TO	65	7"	6'-5 1/2" TO				J = 5", VARY B EACH BY 3/4"
			7'-5 1/2"			6'-10 1/2"				
EF654	6	21	5'-10"	65	8"	5'-2"				J = 6"
EF656	6	7	11'-1 3/4"	65	8"	10'-5 3/4"				J = 6"
EF753	7	17	8'-7"	STR						
EW451	4	21	7'-11"	39	3'-6"	4"	3"	3'-6"		
EW582	5	28	6'-1"	33	2'-6"	1'-1"	2'-6"		2 1/2"	
EW586	5	13	17'-4 1/2"	STR						
EW587	5	8	13'-0"	STR						
EW588	5	7	8'-7 3/4"	STR						
EW589	5	3	6'-3 1/2"	81	1'-1"	2'-2 1/2"	3'-0"	3"		
EW590	5	8	7'-8"	114	2'-8"	1'-1"	11"	3'-0"	3"	
EW591	5	8	12'-1"	STR						
EW592	5	8	19'-4"	STR						
EW593	5	8	25'-8"	STR						
EW594	5	14	35'-8"	STR						
EW595	5	2	20'-4"	STR						
EW596	5	4	9'-8"	STR						
EW597	5	2	2'-0 1/2"	STR						
EW598	5	2	7'-2 1/2"	STR						
EW654	6	13	17'-5"	STR						
EW655	6	8	13'-0 1/2"	STR						
EC451	4	21	7'-10"	10	2'-9"	4"	3"	2'-9"	5 1/2"	H = 3", R = 2"
EC551	5	3	9'-8"	STR						
EC552	5	3	9'-4"	STR						
EC651	6	2	9'-8"	STR						
EC652	6	2	9'-4"	STR						
							SHEAR BLOCKS			
EW541	5	3	9'-3 1/2"	42	2'-7"	4'-1 1/2"	2'-7"			H = 4 1/4"
EW542	5	20	7'-0 3/4"	31	2'-8"	1'-8 3/4"	2'-8"			
EW543	5	3	12'-0 3/4"	42	2'-7"	6'-10 3/4"	2'-7"			H = 4 1/8"
EW544	5	3	9'-3 1/2"	42	2'-7"	4'-1 1/2"	2'-7"			H = 1 1/4"

NOTES:

1. "E" PREFIX IN BAR MARK DENOTES EPOXY COATED BARS.
2. ALL DIMENSIONS ARE OUT TO OUT OF BAR EXCEPT "A" & "C" ON STANDARD 135° AND 180° HOOKS, UNLESS NOTED.
3. FOR REINFORCEMENT BAR FABRICATION DETAILS, REFER TO STANDARD DRAWING BC-736M.
4. FIGURES IN CIRCLE REPRESENT BAR TYPES.
5. "J" DIMENSIONS ON 180° HOOKS ARE SHOWN ONLY WHERE NECESSARY TO RESTRICT HOOK SIZE, OTHERWISE STANDARD HOOKS ARE TO BE USED.
6. RADIUS, "R" IS TO THE INSIDE OF THE BAR.
7. REINFORCEMENT BAR SCHEDULE IS FOR INFORMATION ONLY. VERIFY INFORMATION BEFORE FABRICATION.



Mark	Description	By	Chk'd	Recm'd	Date
	REVISIONS				

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0417 MPMS/ECMS PROJ: 97828 BRKEY: 67417

REFERENCES:

	SHEETS:
GENERAL NOTES	3 - 4
ABUTMENT 2 DRAWINGS	22 - 32

HNTB

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL JUSTIN ROBERT MCCARTHY ENGINEER PE076998

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0417 SEG 0051 OFFSET 0417
SR 3007 (19TH STREET) STA 103+30.88
OVER NORFOLK SOUTHERN RAILWAY COMPANY
1-SPAN COMPOSITE PS CONCRETE
PA BULB-TEE BEAM BRIDGE
ABUTMENT 2 REBAR SCHEDULE 2

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

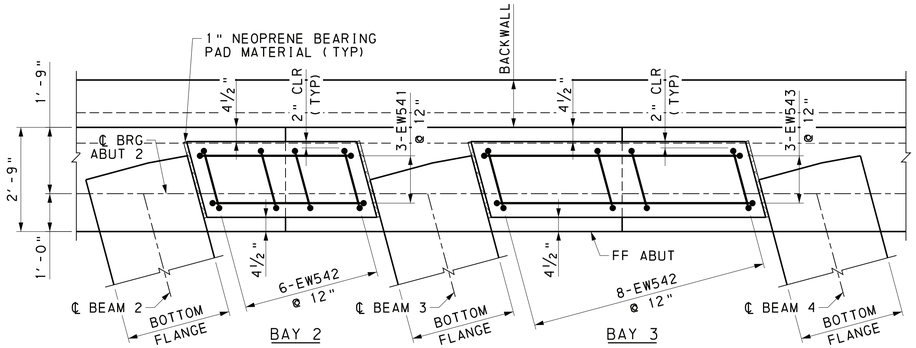
RECOMMENDED 12-6-2022

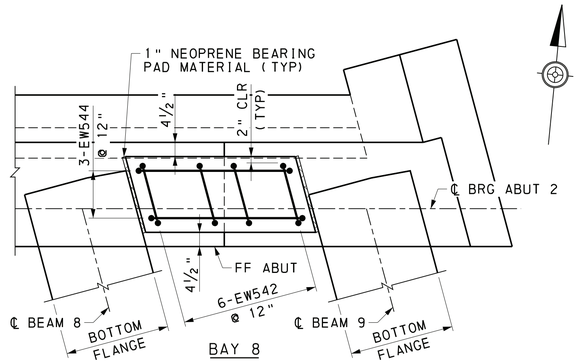
SHEET 32 OF 70

S-39452

DES: SMZ | DES CKD: CEK | DWG: SMZ | DWG CKD: CEK

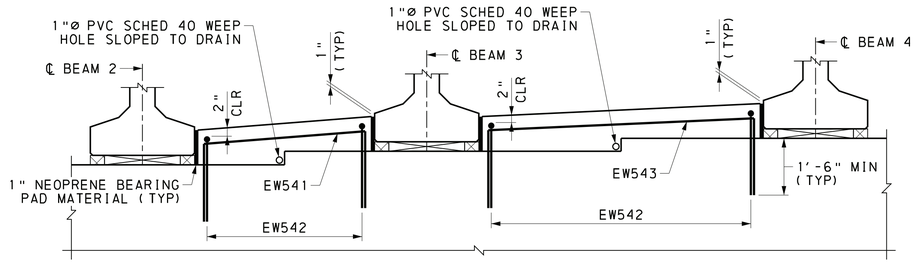
7/22/2022
FILENAME: 63016-s-br82-bar03.dgn

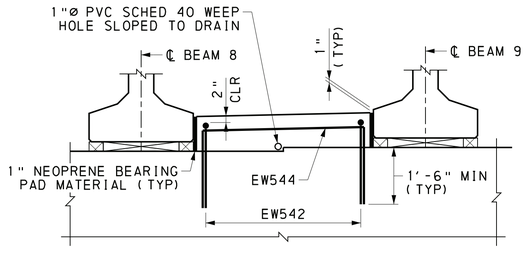




SHEAR BLOCK PLAN

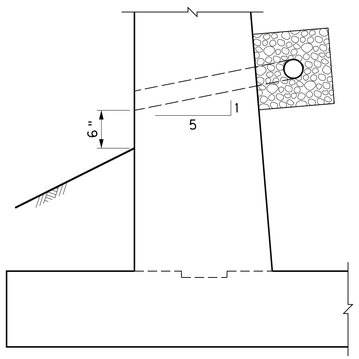
1 0 1 2 FEET





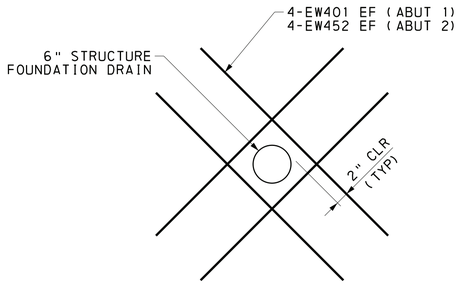
SHEAR BLOCK ELEVATION

1 0 1 2 FEET



STRUCTURE FOUNDATION DRAIN OUTLET DETAIL

NOT TO SCALE



STRUCTURE FOUNDATION DRAIN REINFORCEMENT DETAIL

NOT TO SCALE

REFERENCES:	SHEETS:
GENERAL NOTES	3 - 4
ABUTMENT 1 & 2 DRAWINGS	11 - 32

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0417 MPMS/ECMS PROJ: 97828 BRKEY: 67417

HNTB

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
JUSTIN ROBERT MCCARTHY
ENGINEER
PE076998

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

DAUPHIN COUNTY
SR 0083 SECTION 079

SEG 0050 OFFSET 0417 SEG 0051 OFFSET 0417
SR 3007 (19TH STREET) STA 103+30.88
OVER NORFOLK SOUTHERN RAILWAY COMPANY

1-SPAN COMPOSITE PS CONCRETE
PA BULB-TEE BEAM BRIDGE

MISCELLANEOUS ABUTMENT DETAILS

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

RECOMMENDED 12-6-2022

SHEET 33 OF 70

S-39452

7/22/2022
FILENAME 63016-s-brB2-ob131.dgn

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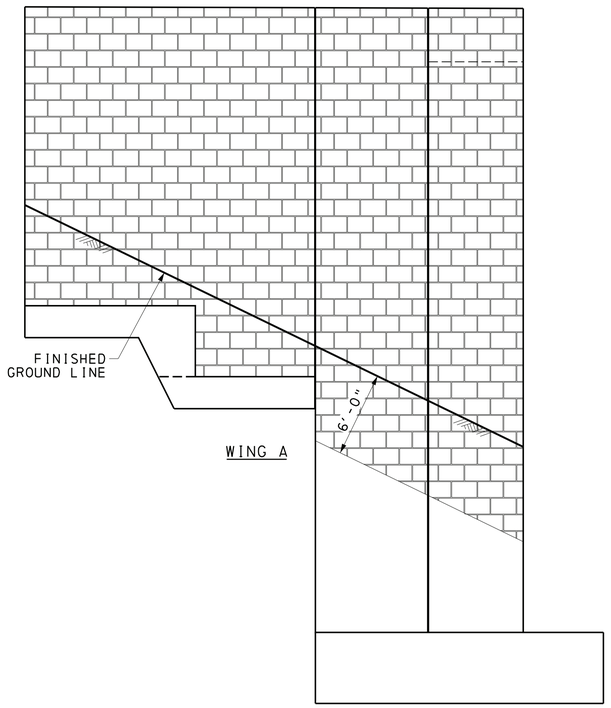
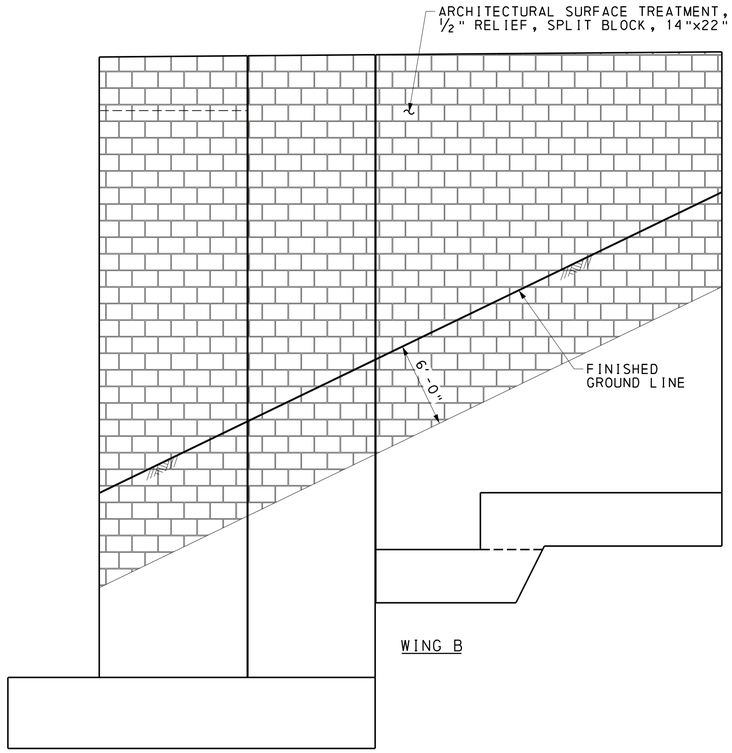




LEGEND:

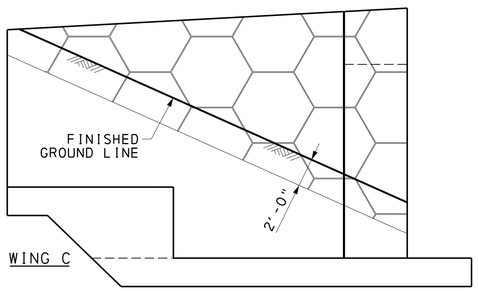
LIMITS OF ARCHITECTURAL SURFACE TREATMENT

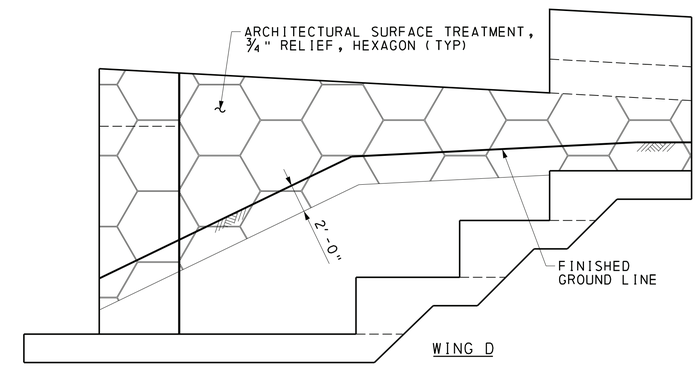
LIMITS OF ARCHITECTURAL SURFACE TREATMENT

(NO ARCHITECTURAL SURFACE TREATMENT IS APPLIED TO THE FRONT FACE OF THE ABUTMENT)

WINGWALL ELEVATIONS AT ABUTMENT 1

2 0 2 4 6 FEET





(NO ARCHITECTURAL SURFACE TREATMENT IS APPLIED TO THE FRONT FACE OF THE ABUTMENT)

WINGWALL ELEVATIONS AT ABUTMENT 2

2 0 2 4 6 FEET

REFERENCES:	SHEETS:
GENERAL NOTES	3 - 4
ABUTMENT 1 & 2 DRAWINGS	11 - 32

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0417 MPMS/ECMS PROJ: 97828 BRKEY: 67417

HNTB

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL
JUSTIN ROBERT MCCARTHY
ENGINEER PE076998

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0417 SEG 0051 OFFSET 0417
SR 3007 (19TH STREET) STA 103+30.88
OVER NORFOLK SOUTHERN RAILWAY COMPANY
1-SPAN COMPOSITE PS CONCRETE
PA BULB-TEE BEAM BRIDGE

ABUTMENT ARCHITECTURAL DETAILS

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

RECOMMENDED 12-6-2022

SHEET 34 OF 70

S-39452

7/22/2022
FILENAME: 63016-s-brB2-ab132.dgn

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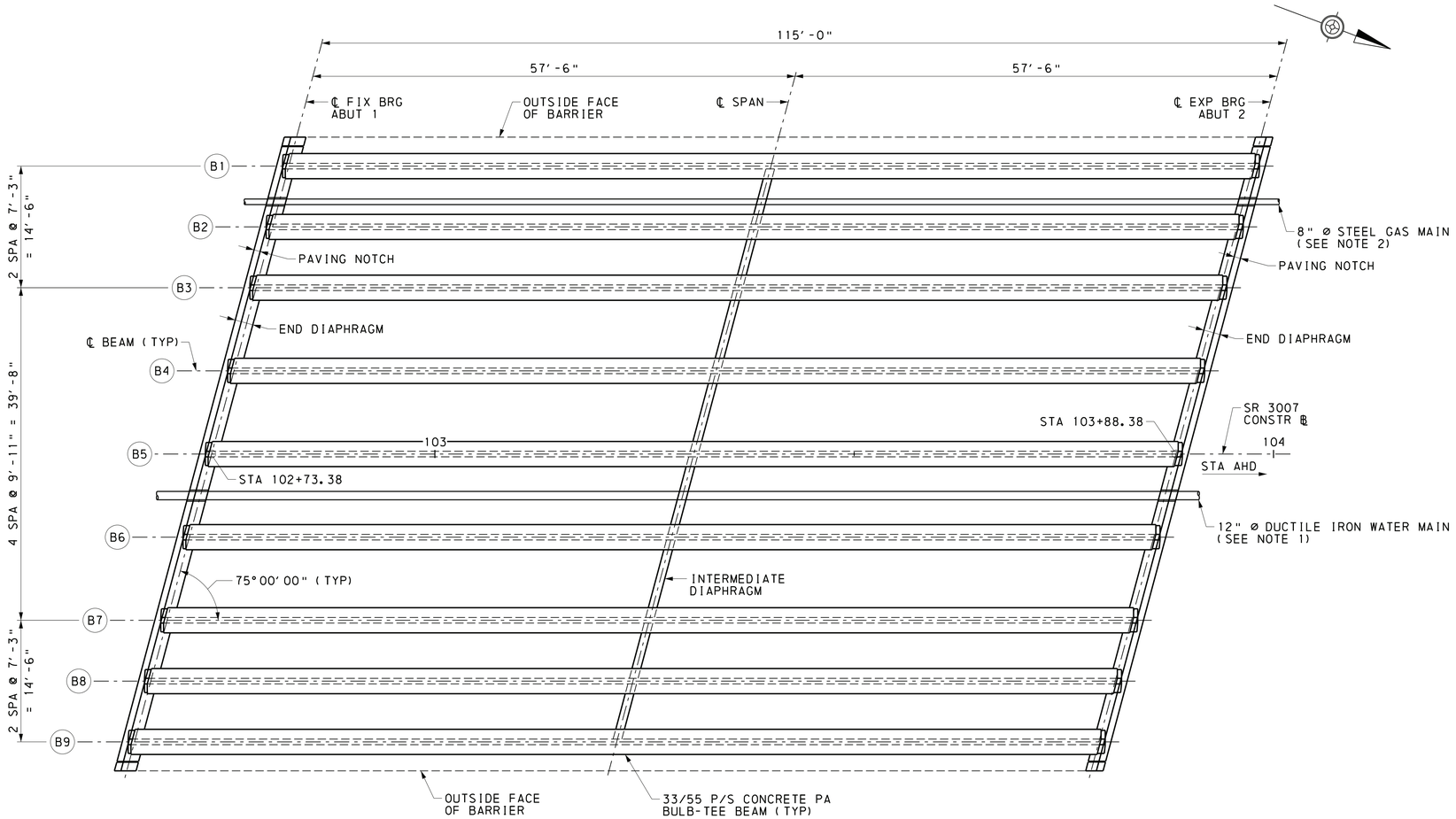
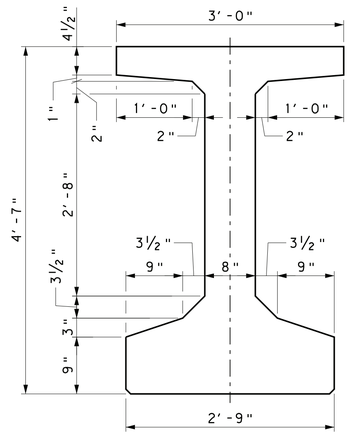


FRAMING PLAN
20 4 8 FEET



PA BULB-TEE BEAM, 33/55
6 0 6 12 INCHES

NOTES:

1. COORDINATE WITH CAPITAL REGION WATER. SEE WATER UTILITY RELOCATION ALSO PLAN.
2. COORDINATE WITH UGI UTILITIES, INC. AND THEIR CONTRACTOR FOR THE GAS UTILITY RELOCATION. SEE GAS UTILITY RELOCATION ALSO PLAN.

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0417 MPMS/ECMS PROJ: 97828 BRKEY: 67417

REFERENCES:	SHEETS:
GENERAL PLAN	1
GENERAL NOTES	3 - 4
BEAM DETAILS	36 - 37
SLAB PLAN	39
SLAB TYPICAL SECTION	40
DIAPHRAGM DETAILS	42 - 48

HNTB

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL JUSTIN ROBERT MCCARTHY ENGINEER PE076998

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0417 SEG 0051 OFFSET 0417
SR 3007 (19TH STREET) STA 103+30.88
OVER NORFOLK SOUTHERN RAILWAY COMPANY
1-SPAN COMPOSITE PS CONCRETE
PA BULB-TEE BEAM BRIDGE
FRAMING PLAN

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

RECOMMENDED 12-6-2022

SHEET 35 OF 70

S-39452

DES: MCA	DES CKD: JMA	DWG: SMZ	DWG CKD: JRM

7/22/2022
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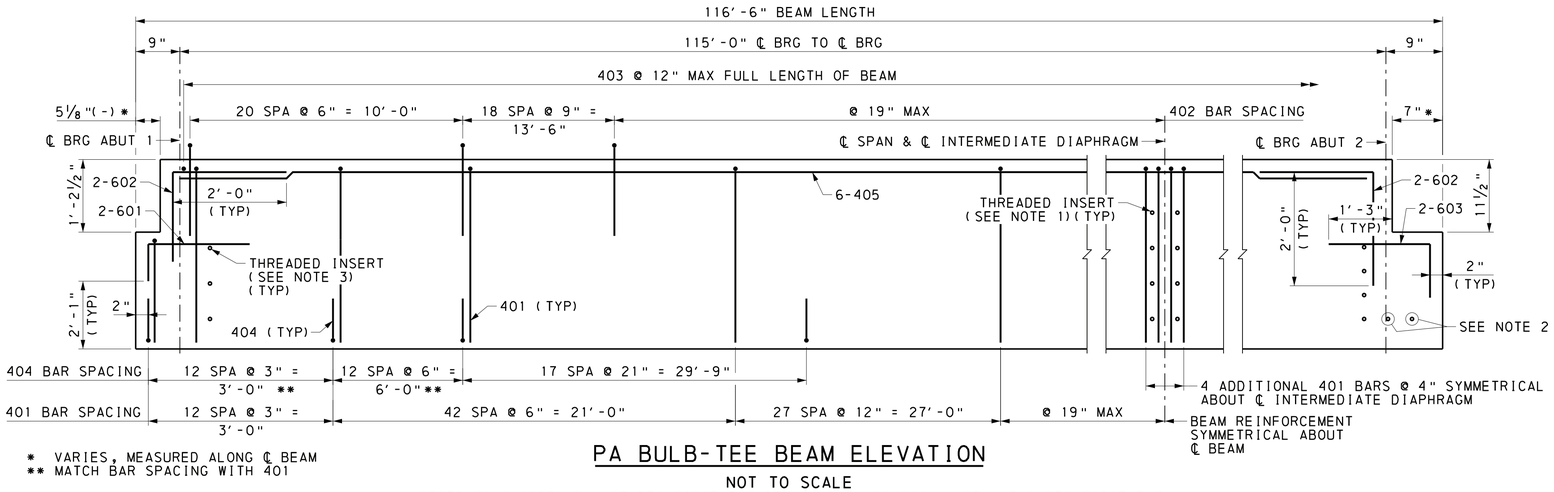


* VARIES, MEASURED ALONG ℄ BEAM
** MATCH BAR SPACING WITH 401

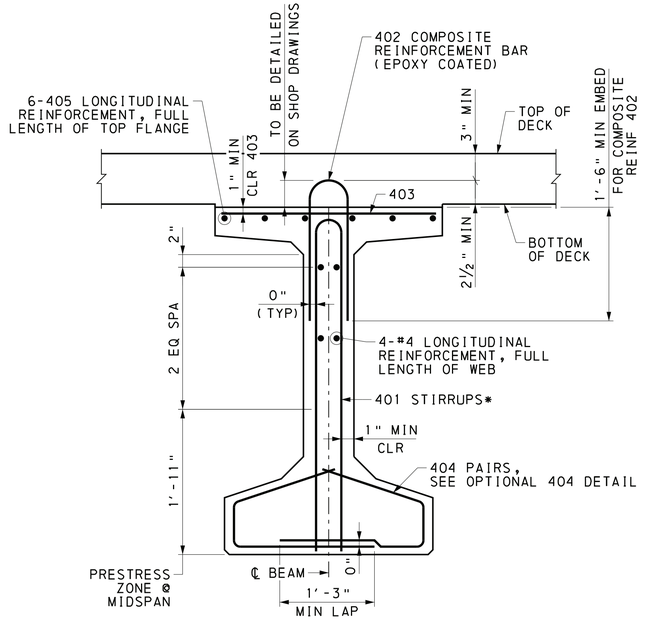
PA BULB-TEE BEAM ELEVATION

NOT TO SCALE

(REFER TO CLIPPED FLANGE REINFORCEMENT DETAIL FOR ADDITIONAL BEAM END REINFORCEMENT)

BEAM NOTES:

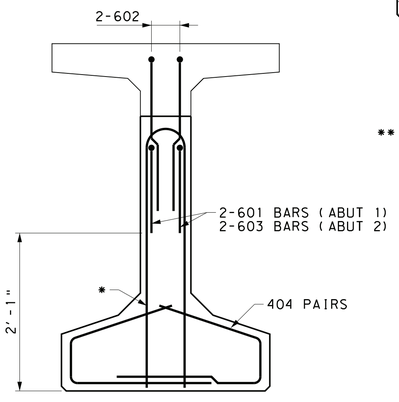
1. PROVIDE MATERIAL AND WORK QUALITY IN ACCORDANCE WITH THE APPROPRIATE SPECIFICATIONS AS OUTLINED IN THE PENNSYLVANIA DEPARTMENT OF TRANSPORTATION PUBLICATION 408.
2. EPOXY COAT ALL REINFORCEMENT WHICH PROTRUDES INTO BRIDGE DECK FROM TOP OF BEAMS.
3. SHOW DESIGN LENGTH AND CASTING LENGTH ON SHOP DRAWINGS.
4. SHOW PLAN, ELEVATION, SECTIONS AND ALL REINFORCEMENT DETAILS ON SHOP DRAWINGS.
5. SHOW ANY MODIFICATIONS TO REINFORCEMENT SPLICE AND BENDING DETAILS ON SHOP DRAWINGS.
6. SHOW THE FOLLOWING DATA ON THE SHOP DRAWINGS:
   1) THE SIZE AND LOCATION OF THE TEMPORARY STORAGE SUPPORTS.
   2) THE TYPE AND LOCATION OF THE BRACING AND TEMPORARY SUPPORTS USED FOR THE TRANSPORTATION AND ERECTION OF THE BEAMS.
7. END ZONE REINFORCEMENT MAY BE INCREASED BY FABRICATOR TO REFLECT FABRICATOR'S EXPERIENCE AND/OR TO CONTROL CRACKING.
8. FABRICATOR TO CHECK STABILITY FOR HANDLING AND TRANSPORTING OF THE MEMBERS.
9. MIN COVER: STIRRUPS - 1" MIN
   ALL OTHERS - 1½" MIN



* 401 MAY BE UTILIZED BY FABRICATOR TO REPLACE 402 COMPOSITE REINFORCEMENT. ALL 401 REINFORCEMENT BARS PROJECTING INTO THE DECK SLAB MUST BE EPOXY COATED FOR ENTIRE LENGTH.

PA BULB-TEE TYPICAL SECTION

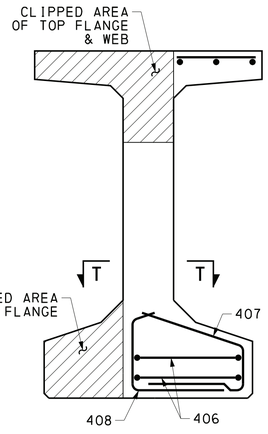
6 0 6 12 INCHES



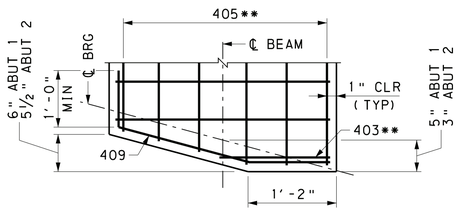
* MODIFY 401 BAR, AS REQUIRED, TO ACCOMMODATE BEAM NOTCH

PA BULB-TEE NOTCH REINF END VIEW

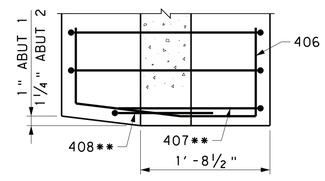
6 0 6 12 INCHES



BEAM END VIEW



TOP FLANGE PLAN



SECTION T-T

** MODIFY REINFORCEMENT BARS AS REQUIRED TO ACCOMMODATE CLIPPED FLANGE

CLIPPED FLANGE REINFORCEMENT DETAIL

NOT TO SCALE

NOTES:

1. OMIT INTERMEDIATE DIAPHRAGM THREADED INSERTS ALONG BEAMS 1 & 9 FASCIA WEB.
2. OMIT SPECIFIED THREADED INSERTS ALONG BEAMS 1 & 9 FASCIA WEB.
3. PROVIDE FOUR THREADED INSERTS WITHIN UTILITY BAYS.

REFERENCES:	SHEETS:
GENERAL PLAN	1
GENERAL NOTES	3 - 4
FRAMING PLAN	35
BEAM DETAILS	36 - 37
SLAB PLAN	39
SLAB TYPICAL SECTION	40
DIAPHRAGM DETAILS	42 - 48

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0417 MPMS/ECMS PROJ: 97828 BRKEY: 67417

HNTB

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
JUSTIN ROBERT MCCARTHY
ENGINEER
PE076998

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

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

DAUPHIN COUNTY
SR 0083 SECTION 079

SEG 0050 OFFSET 0417 SEG 0051 OFFSET 0417
SR 3007 (19TH STREET) STA 103+30.88
OVER NORFOLK SOUTHERN RAILWAY COMPANY

1-SPAN COMPOSITE PS CONCRETE PA BULB-TEE BEAM BRIDGE

BEAM DETAILS 1

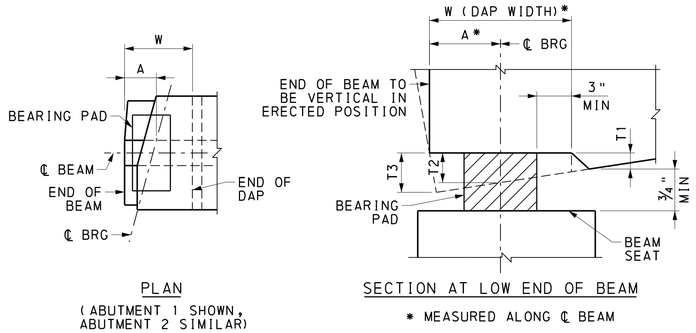
RECOMMENDED 12-6-2022

SHEET 36 OF 70

S-39452

DES: MCA	DES CKD: JMA	DWG: SMZ	DWG CKD: JRM

7/22/2022
FILENAME: 63016-s-br-B2-bem01.dgn



PLAN

(ABUTMENT 1 SHOWN, ABUTMENT 2 SIMILAR)

SECTION AT LOW END OF BEAM

* MEASURED ALONG ℄ BEAM

SECTION AT HIGH END OF BEAM

* MEASURED ALONG ℄ BEAM

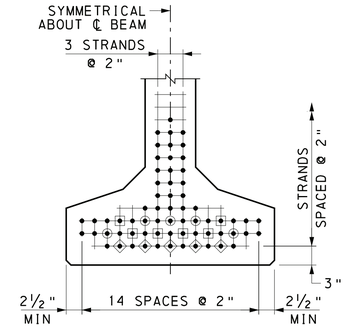
BEAM DAP DETAILS

NOT TO SCALE

DAP DIMENSIONS			
LOCATION/DIMENSION		BEAMS 1-5	BEAMS 6-9
ABUT 1 (HIGH END)	W	18"	18"
	A	9"	9"
	T1	¼"	¼"
	T2	½"	½"
	T3	13/16"	¾"
ABUT 2 (LOW END)	W	17¾"	17¾"
	A	9"	9"
	T1	¼"	¼"
	T2	11/16"	⅝"
	T3	1 1/16"	1"

BEAM DAP NOTES:

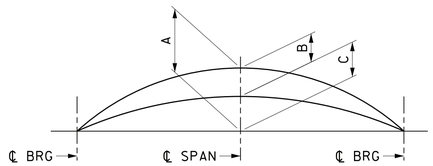
1. T1 IS DAP THICKNESS AT END OF BEAM FOR HIGHER END OF BEAM AND DAP THICKNESS AT BEGINNING OF DAP FOR LOWER END OF BEAM. T1 MINIMUM IS ¼".
2. T2 IS DAP THICKNESS AT CENTERLINE OF BEARING.
3. T3 IS DEFINED AS THE DAP THICKNESS BASED ON THE SLOPE OF THE BEAM DUE TO THE GRADE AND CAMBER.
4. BEAM SEAT AND BOTTOM OF BEAM BEARING AREA REQUIREMENTS AS PER DESIGN MANUAL PART 4, SECTION 14.7.6.3.9dP.
5. MAXIMUM GRADE FOR USE OF DAPPING IS BASED ON LIMITING THE MAXIMUM DAP THICKNESS TO 1½" AND MAINTAINING 1" MINIMUM CONCRETE COVER ON CONFINEMENT REINFORCEMENT IN THE PROPOSED BEAM DAPPING AREA.
6. FOR BEAM DAPPING, A MINIMUM CLEARANCE OF ¾" MUST BE PROVIDED BETWEEN THE BOTTOM OF THE BEAM (WITHOUT CONSIDERATION OF THE DAP) AND THE TOP OF BEAM SEAT TO ENSURE INSPECTABILITY OF BEARING PAD.
7. PARTIAL-WIDTH BEAM DAPS ARE NOT PERMITTED.
8. THE MAXIMUM DAP THICKNESS IS 1½".
9. ENSURE THAT ALL CONCRETE COVER REQUIREMENTS ON STEEL CONFINEMENT REINFORCEMENT AND PRESTRESSING STRANDS ARE SATISFIED WHEN USING BEAM DAPS TO MODIFY THE BOTTOM OF BEAM AREA.



- BONDED STRAND
- DEBONDED STRAND FROM ℄ BRG TO 3'-0"
- DEBONDED STRAND FROM ℄ BRG TO 6'-0"
- DEBONDED STRAND FROM ℄ BRG TO 19'-0"

TYPICAL STRAND PATTERN

6 0 6 12 INCHES



BEAM CAMBER DIAGRAM

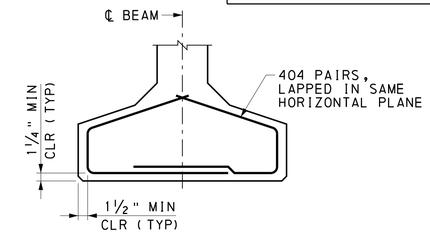
A = ESTIMATED PRESTRESS CAMBER LESS DEFLECTION DUE TO DEAD LOAD OF BEAM TIMES CREEP FACTOR. (CHECK IN FIELD)

B = DEFLECTION DUE TO ALL DEAD LOAD EXCEPT BEAM WEIGHT AND FUTURE WEARING SURFACE.

C = A-B = NET FINAL CAMBER.

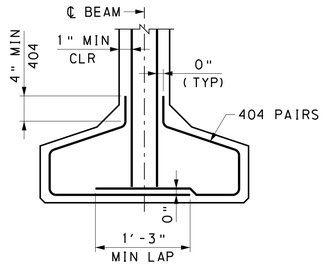
1. VARY THE THICKNESS OF THE CONCRETE HAUNCH TO COMPENSATE FOR ANY DEVIATIONS OF THE ACTUAL CAMBER FROM THE DESIGN CAMBER.
2. NEGATIVE HAUNCHES ARE NOT ALLOWED.
3. A, B AND C ARE THEORETICAL VALUES AND MAY VARY WITH ACTUAL CONCRETE STRENGTH (AGE), VARIOUS PRESTRESSING CONDITIONS, CREEP FACTOR AND PRESTRESS LOSSES.
4. A CREEP FACTOR EQUAL TO 1.6 AND P/S LOSS EQUAL TO 10% WAS USED.

CAMBER TABLE (INCHES)				
SPAN/BEAM		A	B	C
SPAN 1	BEAMS 1 & 9	5.36	3.20	2.16
	BEAMS 2 & 8	5.36	2.87	2.49
	BEAMS 3 & 7	5.36	2.34	3.02
	BEAMS 4 - 6	5.36	2.82	2.54



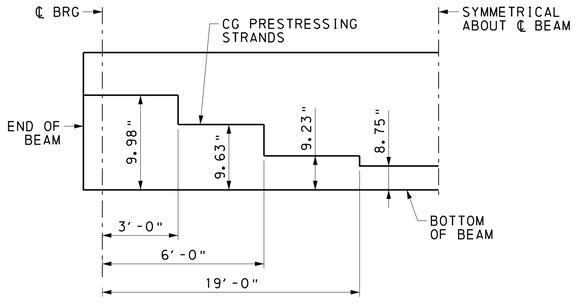
TYPICAL STRAND CONFINEMENT

6 0 6 12 INCHES



OPTIONAL 404 DETAIL

6 0 6 12 INCHES



DEBONDING DIAGRAM

NOT TO SCALE

PRESTRESSING DATA:

PRESTRESSED BEAM SIZE = 33/55 PA BULB-TEE.

CONCRETE STRENGTH AT STRAND RELEASE = 8500 PSI.

CONCRETE STRENGTH AT 28 DAYS (F'C) = 10000 PSI.

USE ONLY 0.6" DIA OVERSIZED GRADE 270, LOW RELAXATION STRANDS FOR AS-DESIGNED BEAMS.

TOTAL NUMBER OF STRANDS = 65

JACKING PRESTRESS STRESS = 202500 PSI.

JACKING PRESTRESS FORCE PER BEAM = 2856.3 KIPS

BEAM SECTION PROPERTIES					
SECTION PROPERTY	BASIC BEAM	COMPOSITE BEAM, TRANSFORMED PROPERTIES*			
		BEAMS 1 & 9	BEAMS 2 & 8	BEAMS 3 & 7	BEAMS 4 - 6
AREA - IN²	871.25	-	-	-	-
EFF. WIDTH - IN	-	85.00	87.00	103.00	119.00
I - IN⁴	331,440	680,922	686,499	728,518	766,463
Y TOP SLAB - IN	-	28.63	28.46	27.18	26.03
Y TOP BEAM - IN	30.43	21.13	20.96	19.68	18.53
Y BOT BEAM - IN	24.57	33.87	34.04	35.32	36.47
S TOP SLAB - IN³	-	23,782	24,120	26,801	29,446
S TOP BEAM - IN³	10,893	32,223	32,751	37,013	41,365
S BOT BEAM - IN³	13,489	20,105	20,168	20,628	21,016

* PROPERTIES DO NOT INCLUDE THE HAUNCH HEIGHT. PROPERTIES TAKEN AT ℄ SPAN.

REFERENCES:

GENERAL PLAN	1
GENERAL NOTES	3 - 4
FRAMING PLAN	35
BEAM DETAILS	36 - 37
SLAB PLAN	39
SLAB TYPICAL SECTION	40
DIAPHRAGM DETAILS	42 - 48

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0417 MPMS/ECMS PROJ: 97828 BRKEY: 67417

HNTB

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0417 SEG 0051 OFFSET 0417
SR 3007 (19TH STREET) STA 103+30.88
OVER NORFOLK SOUTHERN RAILWAY COMPANY
1-SPAN COMPOSITE PS CONCRETE
PA BULB-TEE BEAM BRIDGE
BEAM DETAILS 2

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — JUSTIN ROBERT MCCARTHY — ENGINEER — PE076998

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

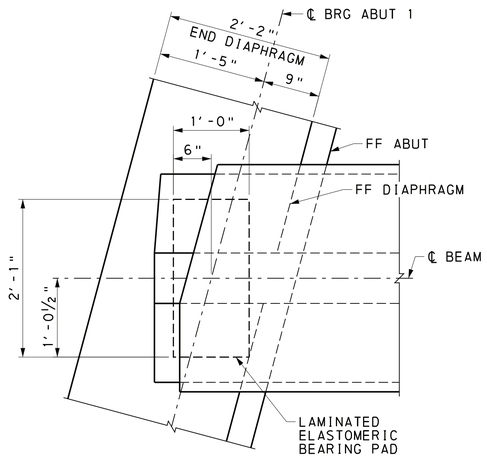
RECOMMENDED 12-6-2022

SHEET 37 OF 70

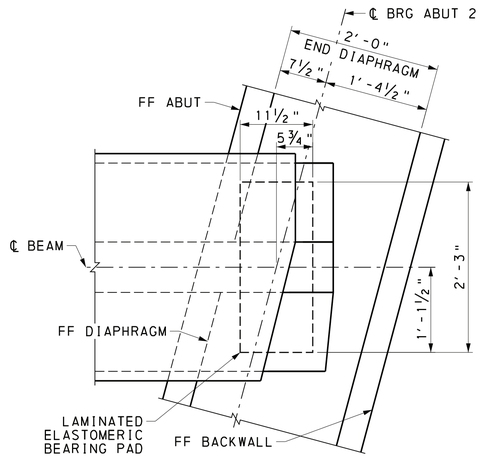
S-39452

7/22/2022
FILENAME: 63016-s-brB2-bem02.dgn

DES: MCA	DES CKD: JMA	DWG: SMZ	DWG CKD: JRM



ABUTMENT 1



ABUTMENT 2

ELASTOMERIC BEARING PAD PLAN

6 0 6 12 INCHES

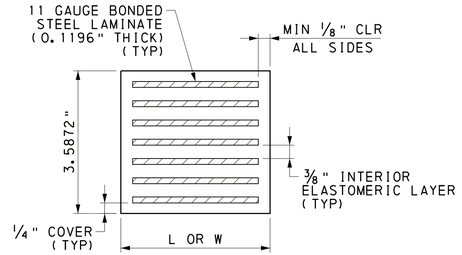
ELASTOMERIC BEARING PADS				
LOCATION	BEARING TYPE	ITEM DESCRIPTION	SIZE (T x L x W)	NUMBER REQUIRED
ABUT 1	FIXED	LAMINATED PADS	3.5872" x 1'-0" x 2'-1"	9
ABUT 2	EXPANSION	LAMINATED PADS	3.5872" x 11½" x 2'-3"	9

NOTES:

1. SMOOTH CUT AND DEBURR METAL SHIMS.
2. GRIT BLAST AND DEGREASE METAL SHIMS.
3. MANUFACTURE ALL BEARINGS IN ACCORDANCE WITH THE COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF TRANSPORTATION PLANS AND SPECIFICATIONS (PUB. 408) SECTION 1113.
4. ALL BEARING PADS ARE TO BE MOLDED TO DESIGN DIMENSIONS. CUTTING TO SIZE AFTER FABRICATION IS PROHIBITED.
5. PROVIDE NEOPRENE 50 +/-5 DUROMETER.
6. PROVIDE MINIMUM LOW-TEMPERATURE NEOPRENE GRADE 3.
7. PROVIDE INTERNAL SHIMS AS PER ASTM A36 GRADE 36.
8. VULCANIZE PATCH PIN GROOVES.
9. FABRICATOR MAY USE CONTRACT DRAWINGS TO FABRICATE BEARING PADS.
10. FOR ADDITIONAL BEARING PAD DETAILS AND STANDARD BEARING DETAILS AND NOTES, SEE BC-755M.
11. PAYMENT FOR BEARING PADS IS CONSIDERED INCIDENTAL TO THE PRESTRESSED CONCRETE PA BULB-TEE BEAMS.

DESIGN CRITERIA:

1. CONSTRUCTION TOLERANCE ABOUT TRANSVERSE AXIS OF PAD = 0.003 RADIANS
2. CONSTRUCTION TOLERANCE ABOUT LONGITUDINAL AXIS OF PAD = 0.003 RADIANS



ABUTMENT 1 & 2

ELASTOMERIC BEARING PAD TYPICAL SECTION

NOT TO SCALE

REFERENCES:	SHEETS:
GENERAL NOTES	3 - 4
FRAMING PLAN	35
BEAM DETAILS	36 - 37
DIAPHRAGM DETAILS	42 - 48

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0417 MPMS/ECMS PROJ: 97828 BRKEY: 67417

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REGISTERED PROFESSIONAL
JUSTIN ROBERT MCCARTHY
ENGINEER PE076998

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0417 SEG 0051 OFFSET 0417
SR 3007 (19TH STREET) STA 103+30.88
OVER NORFOLK SOUTHERN RAILWAY COMPANY
1-SPAN COMPOSITE PS CONCRETE
PA BULB-TEE BEAM BRIDGE
BEARING DETAILS

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

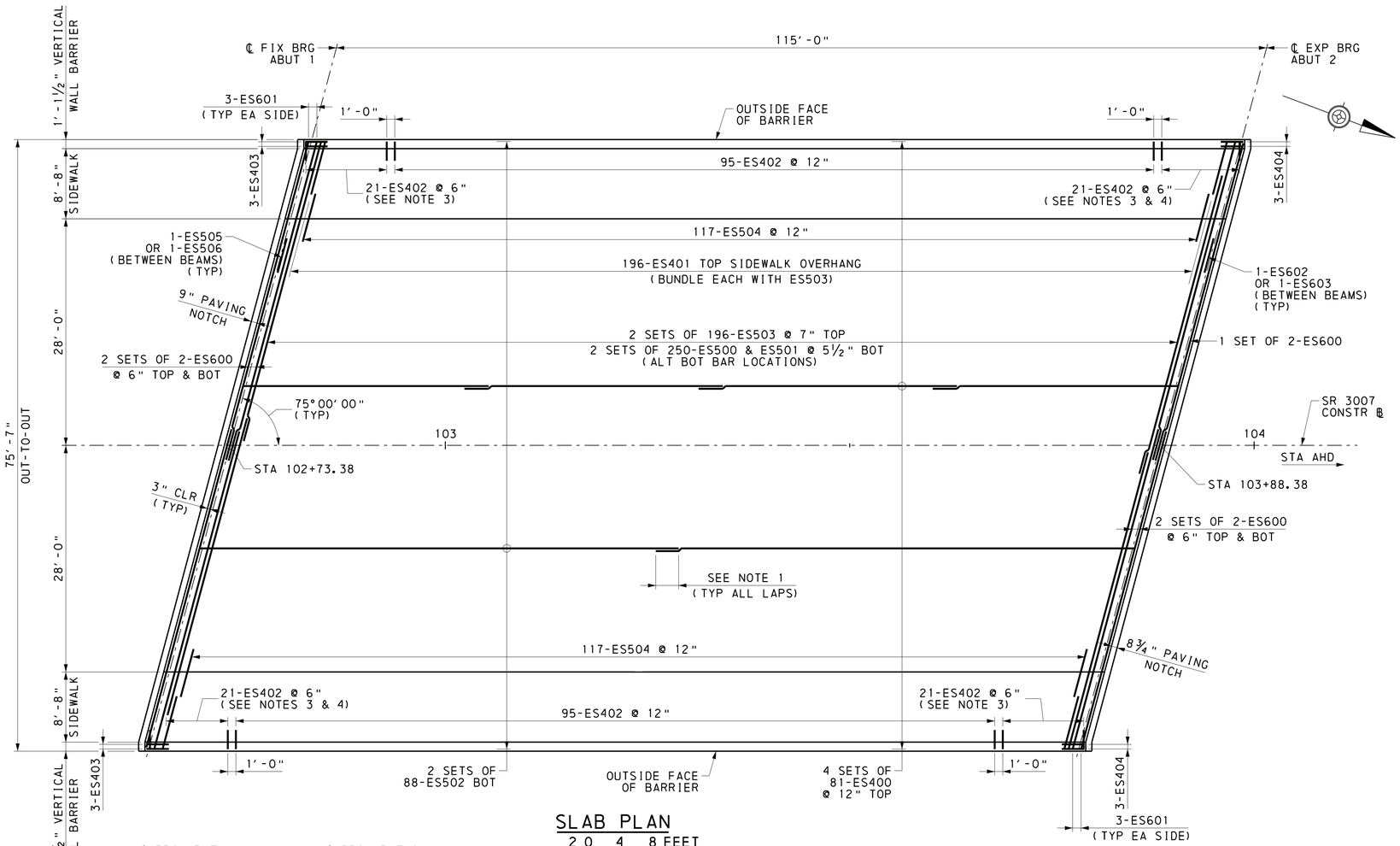
RECOMMENDED 12-6-2022

SHEET 38 OF 70

S-39452

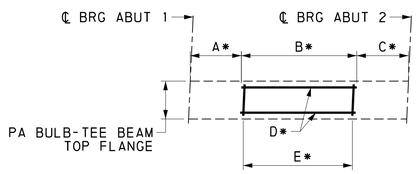
7/22/2022
FILENAME: 63016-s-br82-br001.dgn

DES: MCA	DES CKD: JMA	DWG: SMZ	DWG CKD: JRM



SLAB PLAN

2 0 4 8 FEET



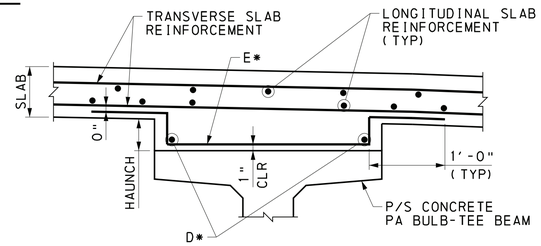
* SEE HAUNCH REINFORCEMENT TABLE

HAUNCH REINFORCEMENT PLAN

NOT TO SCALE

HAUNCH REINFORCEMENT TABLE					
BEAM	A	B	C	D	E
BEAM 1	38'-5"	33'-0"	43'-7"	ES405	37-ES300 @ 11"
BEAM 2	25'-4"	59'-0"*	30'-8"	ES408	66-ES300 @ 11"
BEAM 3	36'-4"	37'-0"	41'-8"	ES405	42-ES300 @ 11"
BEAM 4	29'-0"	53'-0"*	33'-0"	ES407	59-ES300 @ 11"
BEAM 5	33'-8"	46'-0"*	35'-4"	ES406	52-ES300 @ 11"
BEAM 6	28'-3"	57'-0"*	29'-9"	ES408	64-ES300 @ 11"
BEAM 7	32'-11"	48'-0"*	34'-1"	ES406	54-ES300 @ 11"
BEAM 8	22'-10"	69'-0"*	23'-2"	ES409	77-ES300 @ 11"
BEAM 9	32'-10"	49'-0"*	33'-2"	ES406	55-ES300 @ 11"

* DOES NOT INCLUDE 1'-11" MINIMUM LAP.



* SEE HAUNCH REINFORCEMENT TABLE

HAUNCH REINFORCEMENT DETAIL

6 0 6 12 INCHES

NOTES:

1. DECK SLAB LAP SPLICE LENGTH:
   #4 BARS - 2'-5"
   #5 BARS - 3'-0"
   #6 BARS - 3'-7"
2. THE HAUNCH REINFORCEMENT QUANTITY SHOWN ON THE REINFORCEMENT BAR SCHEDULE PROVIDES THE AMOUNT NECESSARY TO COVER THE LIMITS SHOWN ON THE HAUNCH REINFORCEMENT PLAN. PROVIDE ADDITIONAL HAUNCH REINFORCEMENT IN OTHER REGIONS ALONG THE LENGTH OF THE BEAM WHERE ACTUAL HAUNCHES EXCEED THE THICKNESSES SPECIFIED IN BC-752M.
3. PROVIDE ONE ADDITIONAL ES402 BAR ON EACH SIDE OF BARRIER LIGHTING BLOCKOUT. ADJUST REINFORCEMENT AS REQUIRED TO ACCOMMODATE PLACEMENT OF JUNCTION BOXES AND LIGHTING BLOCKOUTS.
4. SPLAY THE LAST FOUR ES402 BARS ADJACENT TO END OF BRIDGE DECK AS REQUIRED TO ACCOMMODATE PLACEMENT.

REFERENCES:	SHEETS:
GENERAL PLAN	1
GENERAL NOTES	3 - 4
SLAB TYPICAL SECTION	40
BARRIER & SIDEWALK DETAILS	41
DIAPHRAGM DETAILS	42 - 48

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0417 MPMS/ECMS PROJ: 97828 BRKEY: 67417

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COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — JUSTIN ROBERT MCCARTHY — ENGINEER — PE076998

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0417 SEG 0051 OFFSET 0417
SR 3007 (19TH STREET) STA 103+30.88
OVER NORFOLK SOUTHERN RAILWAY COMPANY

1-SPAN COMPOSITE PS CONCRETE
PA BULB-TEE BEAM BRIDGE
SLAB PLAN

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

RECOMMENDED 12-6-2022

SHEET 39 OF 70

S-39452

7/22/2022
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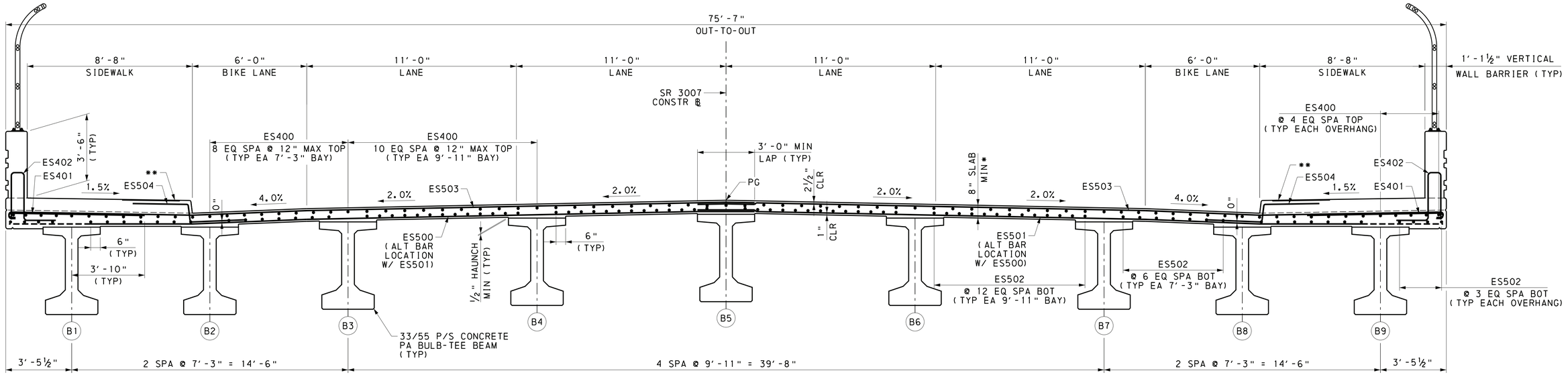
DES: MCA | DES CKD: JMA | DWG: SMZ | DWG CKD: JRM



SLAB TYPICAL SECTION

1 0 1 2 3 FEET

* INCLUDES ½" INTEGRAL WEARING SURFACE

** 3'-0" STAMPED AND STAINED CONCRETE BRICK PATTERN (SEE SHEET 41)

NOTES:

1. BARRIER AND SIDEWALK REINFORCEMENT NOT SHOWN FOR CLARITY.
2. EXTEND ONE HALF OF ES500 AND ES501 BARS ACROSS THE FULL WIDTH OF THE OVERHANG. THE ALTERNATE BARS WHICH DO NOT EXTEND INTO THE OVERHANG SHALL EXTEND 6" MINIMUM BEYOND THE INTERIOR EDGE OF THE FLANGE OF THE FASCIA BEAM.
3. UTILITIES NOT SHOWN FOR CLARITY.

TOTAL DECK SLAB THICKNESS TABLE

BEAM	℄ BRG ABUT 1	℄ BRG ABUT 2
BEAM 1	8½"	8½"
BEAM 2	9"	9"
BEAM 3	8⅞"	8⅞"
BEAM 4	8⅞"	8⅞"
BEAM 5	8⅞"	8⅞"
BEAM 6	8⅞"	8⅞"
BEAM 7	8⅞"	8⅞"
BEAM 8	9"	9"
BEAM 9	8½"	8½"

MEASURED AT ℄ BEAM. VALUES INCLUDE DECK THICKNESS, HAUNCH THICKNESS, AND EFFECT OF DECK CROSS SLOPE.

REFERENCES:

	SHEETS:
GENERAL PLAN	1
GENERAL NOTES	3 - 4
BEAM DETAILS	36 - 37
SLAB PLAN	39
BARRIER & SIDEWALK DETAILS	41
BARRIER ARCHITECTURAL DETAILS	61

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0417 MPMS/ECMS PROJ: 97828 BRKEY: 67417

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DEPARTMENT OF TRANSPORTATION

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DAUPHIN COUNTY
SR 0083 SECTION 079
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SR 3007 (19TH STREET) STA 103+30.88
OVER NORFOLK SOUTHERN RAILWAY COMPANY
1-SPAN COMPOSITE PS CONCRETE PA BULB-TEE BEAM BRIDGE
SLAB TYPICAL SECTION

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

RECOMMENDED 12-6-2022

SHEET 40 OF 70

S-39452

7/22/2022
FILENAME: 63016-s-brB2-typ02.dgn

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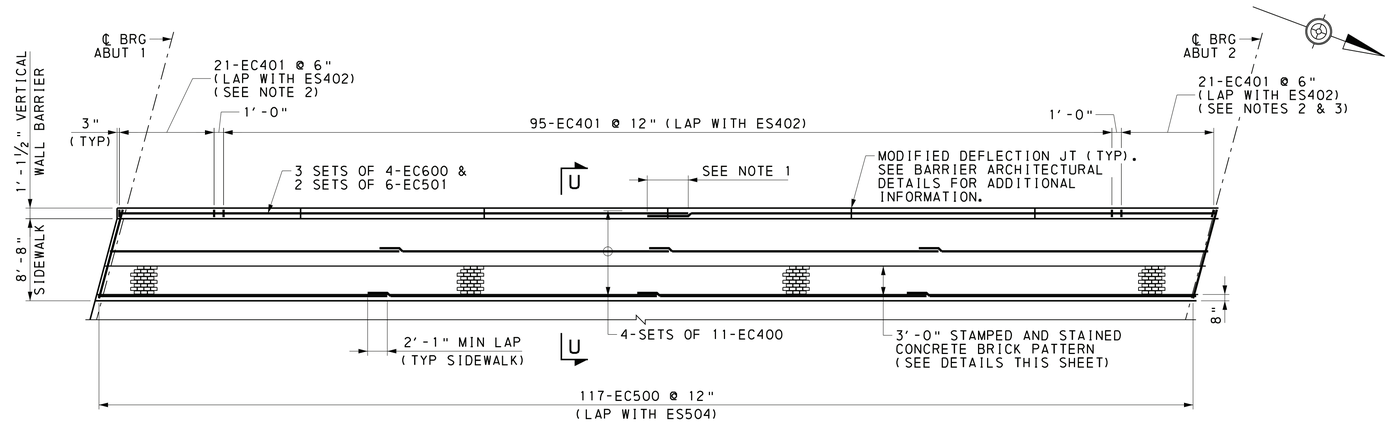
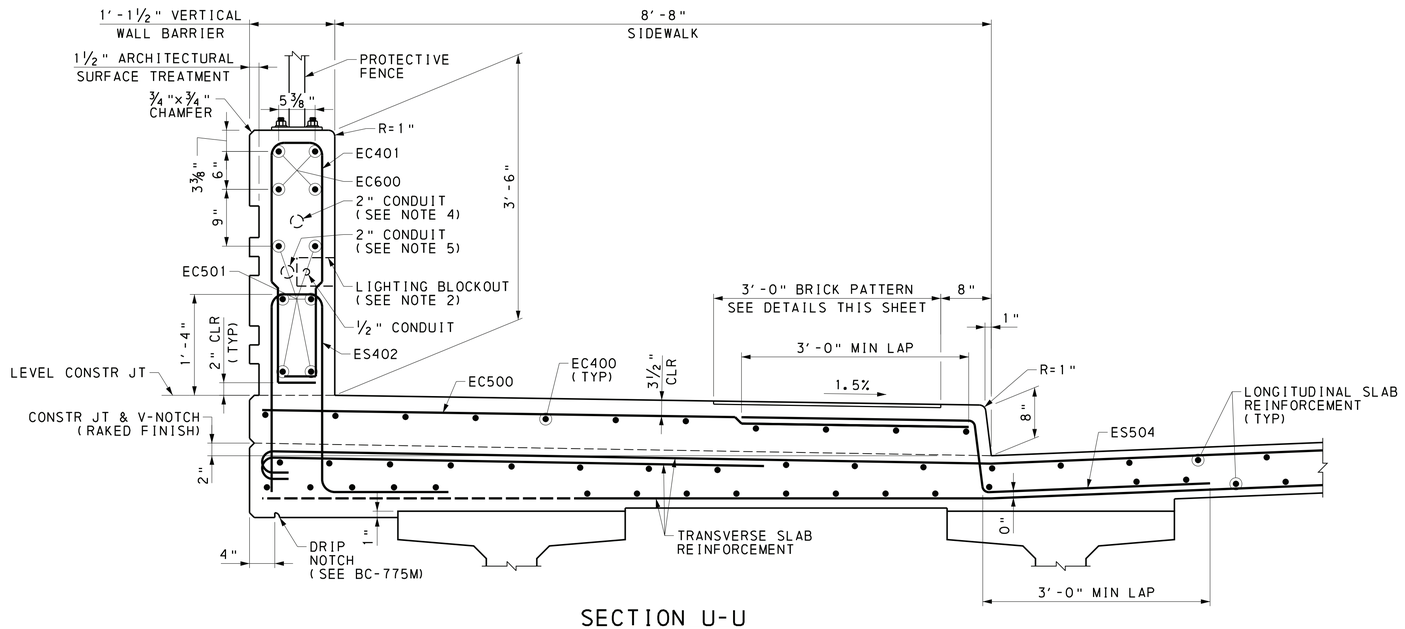


PLAN

2 0 4 8 FEET

(LEFT BARRIER/SIDEWALK SHOWN, RIGHT BARRIER/SIDEWALK SIMILAR BY OPPOSITE HAND)

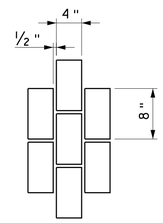


SECTION U-U

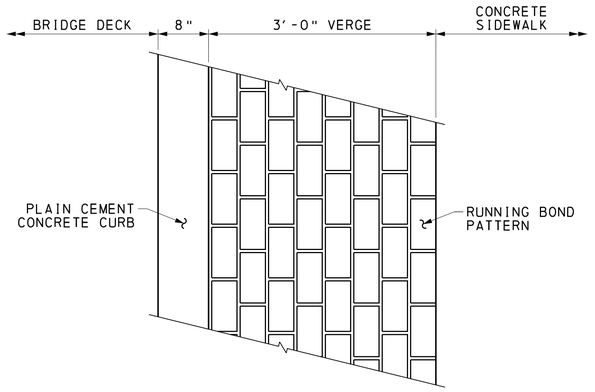
6 0 6 12 INCHES

NOTES:

1. BARRIER LAP SPLICE LENGTH:
   #5 BARS - 3'-7"
   #6 BARS - 4'-4"
2. PROVIDE ONE ADDITIONAL EC401 BAR ON EACH SIDE OF BARRIER LIGHTING BLOCKOUT (LAP WITH ES402). ADJUST REINFORCEMENT AS REQUIRED TO ACCOMMODATE PLACEMENT OF JUNCTION BOXES AND LIGHTING BLOCKOUTS. SEE HIGHWAY LIGHTING ALSO PLAN FOR PLACEMENT OF JUNCTION BOXES AND BARRIER LUMINAIRES.
3. SPLAY THE LAST FOUR EC401 BARS ADJACENT TO END OF BRIDGE DECK AS REQUIRED TO ACCOMMODATE PLACEMENT.
4. PROVIDE SPECIFIED 2" CONDUIT ALONG LEFT BARRIER ONLY. (RESERVED FOR FUTURE USE BY CITY OF HARRISBURG)
5. PROVIDE SPECIFIED 2" CONDUIT ALONG RIGHT BARRIER ONLY.
6. PROVIDE SIDEWALK STAMPED AND STAINED CONCRETE BRICK PATTERN FOR THE ENTIRE LENGTH OF RAISED SIDEWALK. SEE SPECIAL PROVISIONS FOR ADDITIONAL DETAILS.



BRICK DIMENSIONS



PLAN

STAMPED AND STAINED CEMENT CONCRETE SIDEWALK DETAILS

6 0 6 12 INCHES

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
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COMMONWEALTH OF PENNSYLVANIA
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PA BULB-TEE BEAM BRIDGE
BARRIER & SIDEWALK DETAILS

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — JUSTIN ROBERT MCCARTHY — ENGINEER — PE076998

REFERENCES:	SHEETS:
GENERAL PLAN	1
GENERAL NOTES	3 - 4
SLAB PLAN	39
BARRIER ARCHITECTURAL DETAILS	61
PROTECTIVE FENCE DETAILS	62

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

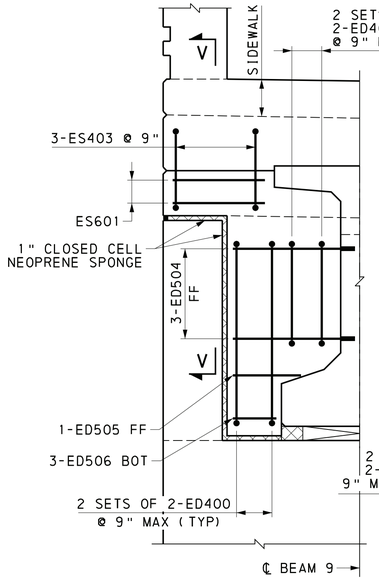
RECOMMENDED 12-6-2022

SHEET 41 OF 70

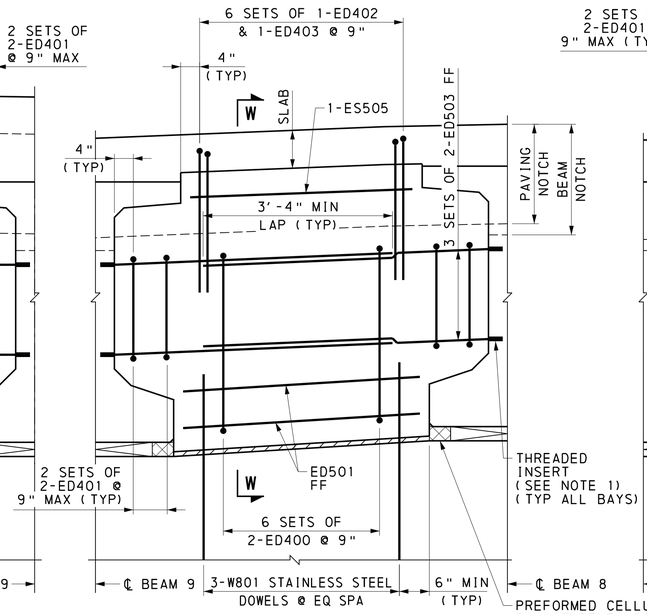
S-39452

7/22/2022
FILENAME: 63016-s-brB2-slb02.dgn

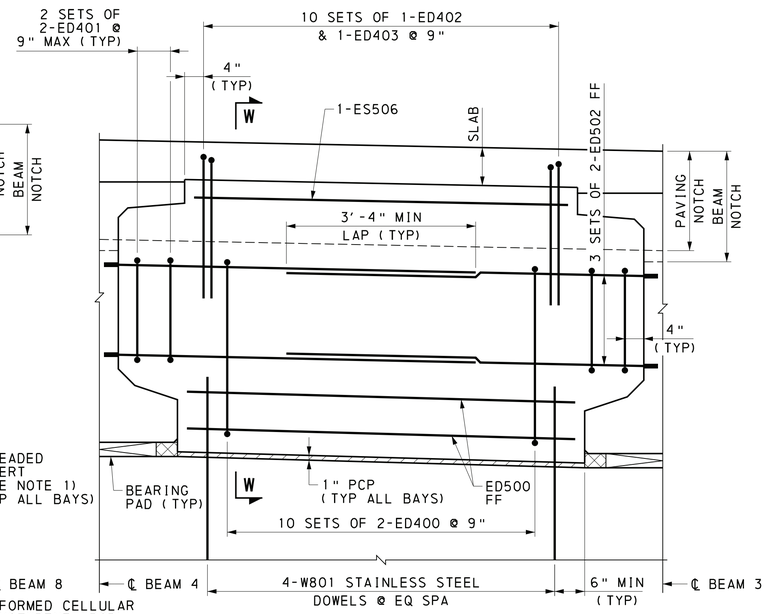
DES: MCA	DES CKD: JMA	DWG: SMZ	DWG CKD: JRM



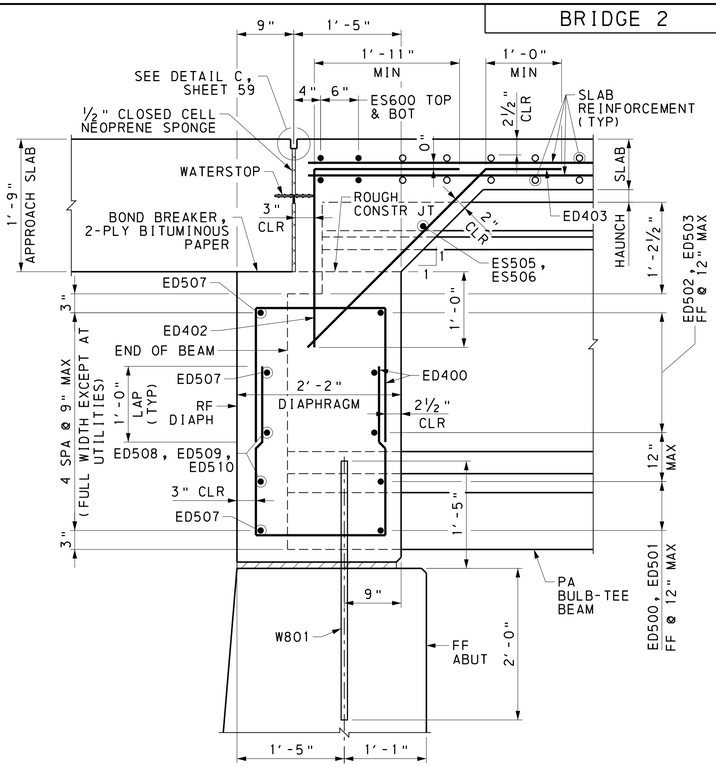
TYPICAL OVERHANG
(RIGHT OVERHANG SHOWN, LEFT OVERHANG SIMILAR)



TYPICAL 7'-3" BAY
(BAY 8 SHOWN, BAYS 2 AND 7 SIMILAR)



TYPICAL 9'-11" BAY
(BAY 3 SHOWN, BAYS 4 AND 6 SIMILAR)



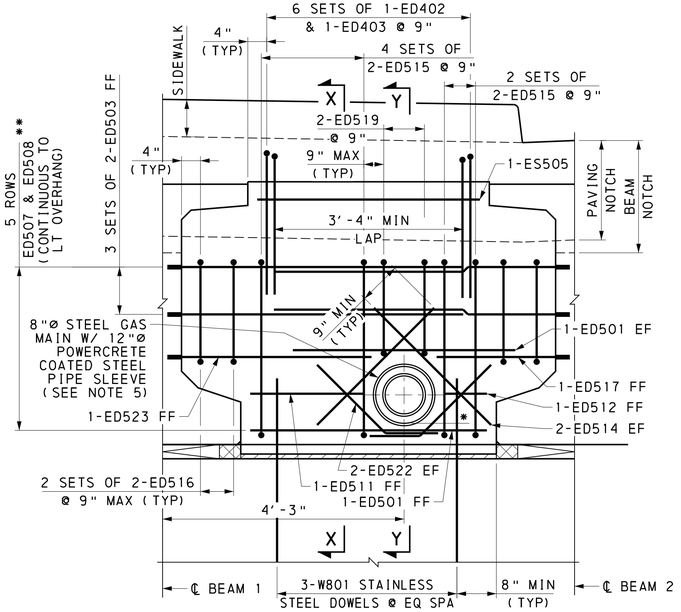
(FOR DRAINAGE AND WATERPROOFING DETAILS, SEE BC-751M AND ATTACHMENT BC-788 MODIFIED "SPRAY-ON WATERPROOFING DETAILS")

SECTION W-W

6 0 6 12 INCHES

NOTES:

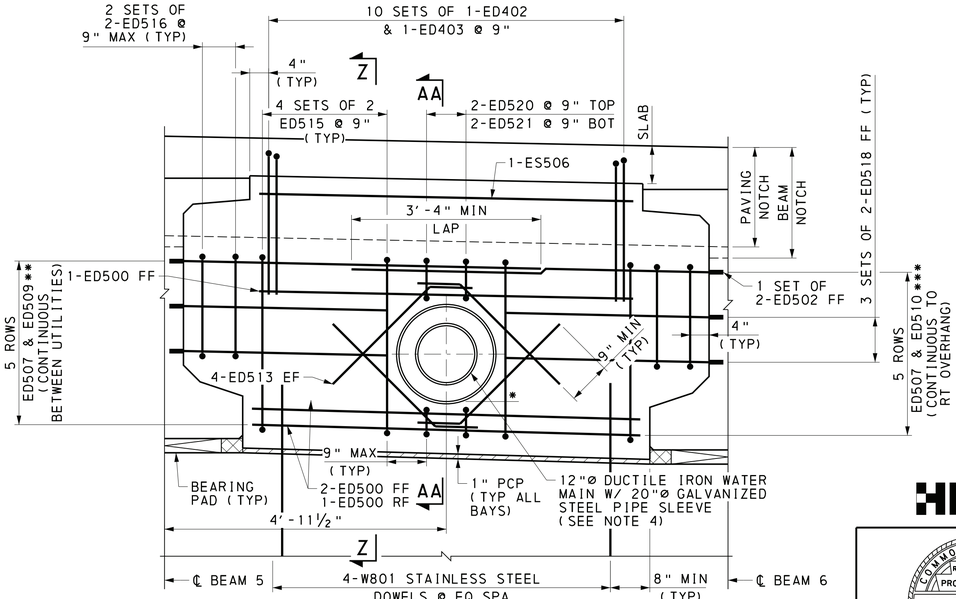
1. USE ONE SIZE SMALLER INSERT FOR DEFORMED BARS. THE MINIMUM LENGTH OF THE INSERT IS 3". INSERTS TO BE GALVANIZED OR COMPLETELY ZINC-ELECTROPLATED.
2. REFER TO SHEET 45 FOR SECTIONS V-V, X-X, AND Y-Y.
3. REFER TO SHEET 46 FOR SECTIONS Z-Z AND AA-AA.
4. COORDINATE WITH CAPITAL REGION WATER. SEE WATER UTILITY RELOCATION ALSO PLAN.
5. COORDINATE WITH UGI UTILITIES, INC. AND THEIR CONTRACTOR FOR THE GAS UTILITY RELOCATION. SEE GAS UTILITY RELOCATION ALSO PLAN.



BAY 1
(LOOKING STATIONS AHEAD)

* SLEEVE INVERT ELEV: 389.32'

** 3-ED507, 2-ED508



BAY 5
(LOOKING STATIONS AHEAD)

* SLEEVE INVERT ELEV: 390.36'

** 3-ED507, 2-ED509

*** 3-ED507, 2-ED510

DIAPHRAGM @ ABUTMENT 1

12 0 12 INCHES

(LOOKING STATIONS BACK UNO)
(SLAB REINFORCEMENT NOT SHOWN FOR CLARITY)

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0417 MPMS/ECMS PROJ: 97828 BRKEY: 67417

REFERENCES:	SHEETS:
GENERAL PLAN	1
GENERAL NOTES	3 - 4
FRAMING PLAN	35
BEAM DETAILS	36 - 37
SLAB PLAN	39
DIAPHRAGM DETAILS	42 - 48

HNTB

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL JUSTIN ROBERT MCCARTHY ENGINEER PE076998

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0417 SEG 0051 OFFSET 0417
SR 3007 (19TH STREET) STA 103+30.88
OVER NORFOLK SOUTHERN RAILWAY COMPANY
1-SPAN COMPOSITE PS CONCRETE
PA BULB-TEE BEAM BRIDGE
DIAPHRAGM DETAILS 1

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

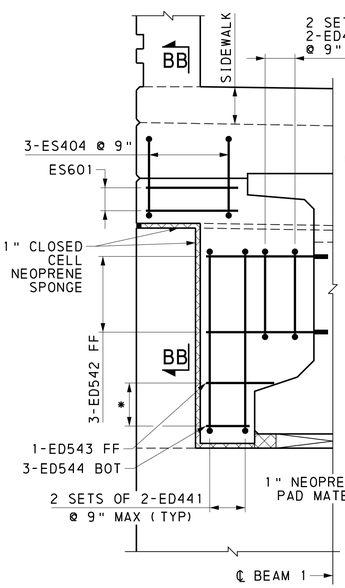
RECOMMENDED 12-6-2022

SHEET 42 OF 70

S-39452

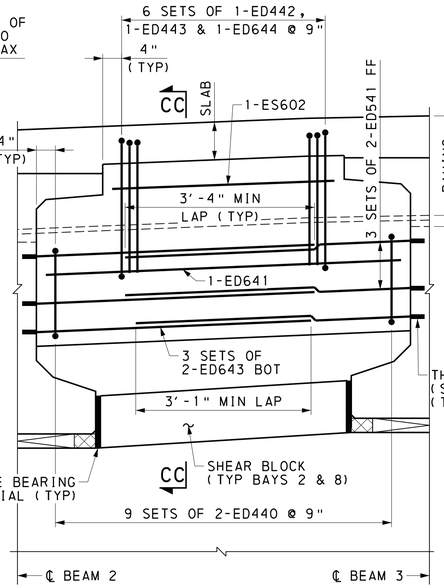
12/2/2022
FILENAME: 63016-s-br82-dia01.dgn

DES: MCA	DES CKD: JMA	DWG: JTM	DWG CKD: JRM

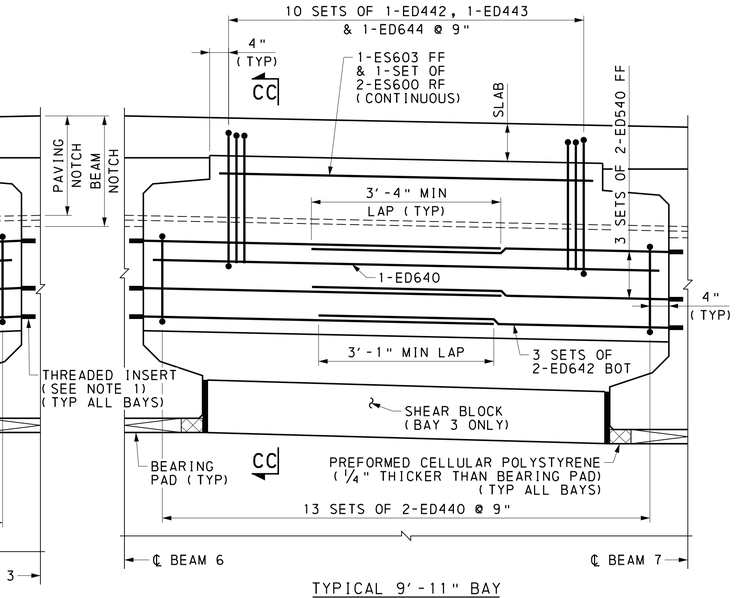


TYPICAL OVERHANG
(LEFT OVERHANG SHOWN, RIGHT OVERHANG SIMILAR)

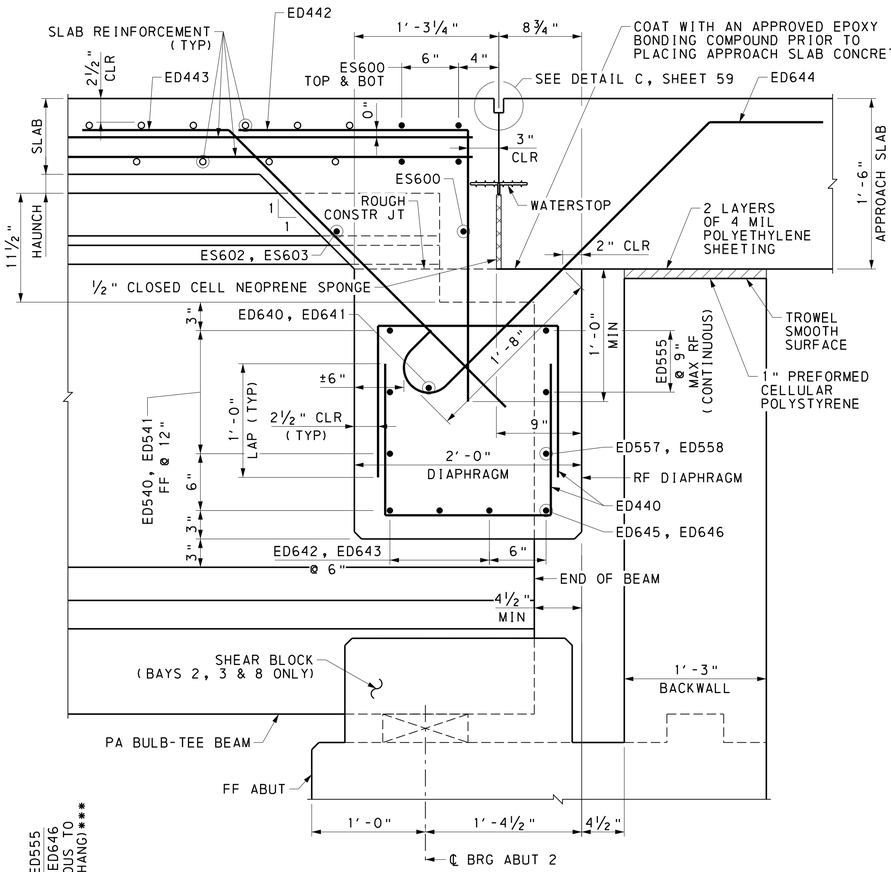
* 2-ED568 @ 12" MAX RF (RIGHT OVERHANG)



TYPICAL 7'-3" BAY
(BAY 2 SHOWN, BAYS 7 AND 8 SIMILAR)

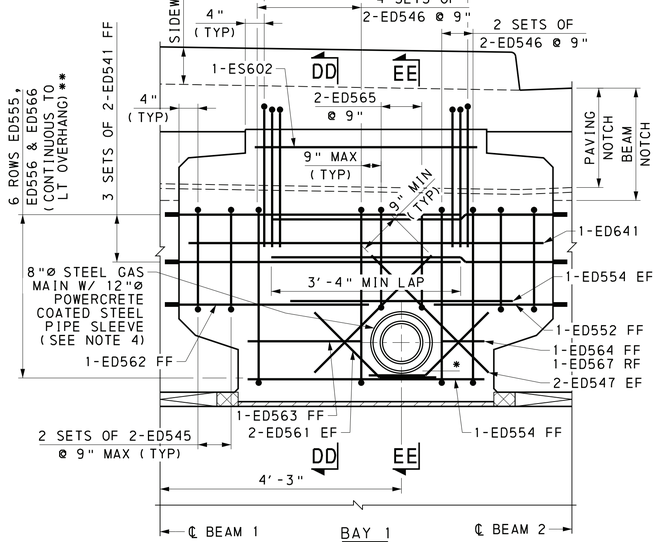


TYPICAL 9'-11" BAY
(BAY 6 SHOWN, BAYS 3 AND 4 SIMILAR)



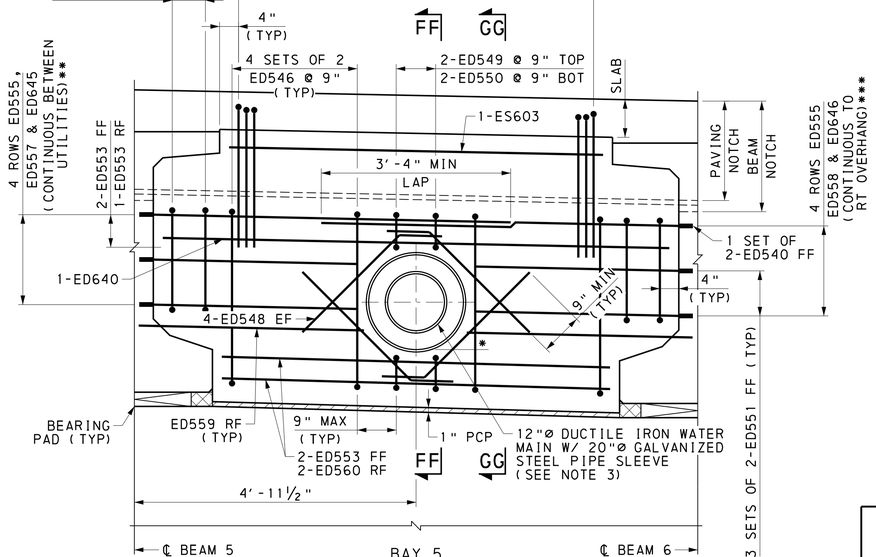
(FOR WATERPROOFING DETAILS, SEE ATTACHMENT BC-788 MODIFIED "SPRAY-ON WATERPROOFING DETAILS")

SECTION CC-CC
6 0 6 INCHES



BAY 1

* SLEEVE INVERT ELEV: 384.86'



BAY 5

* SLEEVE INVERT ELEV: 386.27'

** 2-ED555, 1-ED557, 1-ED645

*** 2-ED555, 1-ED558, 1-ED646

DIAPHRAGM @ ABUTMENT 2
12 0 12 INCHES
(LOOKING STATIONS AHEAD)
(SLAB REINFORCEMENT NOT SHOWN FOR CLARITY)

NOTES:

1. USE ONE SIZE SMALLER INSERT FOR DEFORMED BARS. THE MINIMUM LENGTH OF THE INSERT IS 3". INSERTS TO BE GALVANIZED OR COMPLETELY ZINC-ELECTROPLATED.
2. REFER TO SHEET 47 FOR SECTIONS BB-BB, DD-DD, AND EE-EE.
3. REFER TO SHEET 48 FOR SECTIONS FF-FF AND GG-GG.
4. COORDINATE WITH CAPITAL REGION WATER. SEE WATER UTILITY RELOCATION ALSO PLAN.
5. COORDINATE WITH UGI UTILITIES, INC. AND THEIR CONTRACTOR FOR THE GAS UTILITY RELOCATION. SEE GAS UTILITY RELOCATION ALSO PLAN.

REFERENCES:

	SHEETS:
GENERAL PLAN	1
GENERAL NOTES	3 - 4
FRAMING PLAN	35
BEAM DETAILS	36 - 37
SLAB PLAN	39
DIAPHRAGM DETAILS	42 - 48

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0417 MPMS/ECMS PROJ: 97828 BRKEY: 67417

HNTB

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0417 SEG 0051 OFFSET 0417
SR 3007 (19TH STREET) STA 103+30.88
OVER NORFOLK SOUTHERN RAILWAY COMPANY
1-SPAN COMPOSITE PS CONCRETE PA BULB-TEE BEAM BRIDGE
DIAPHRAGM DETAILS 2

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL JUSTIN ROBERT MCCARTHY ENGINEER PE076998

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

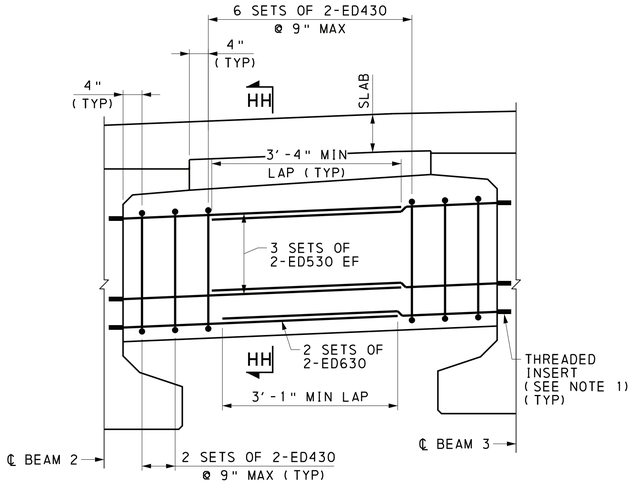
RECOMMENDED 12-6-2022

SHEET 43 OF 70

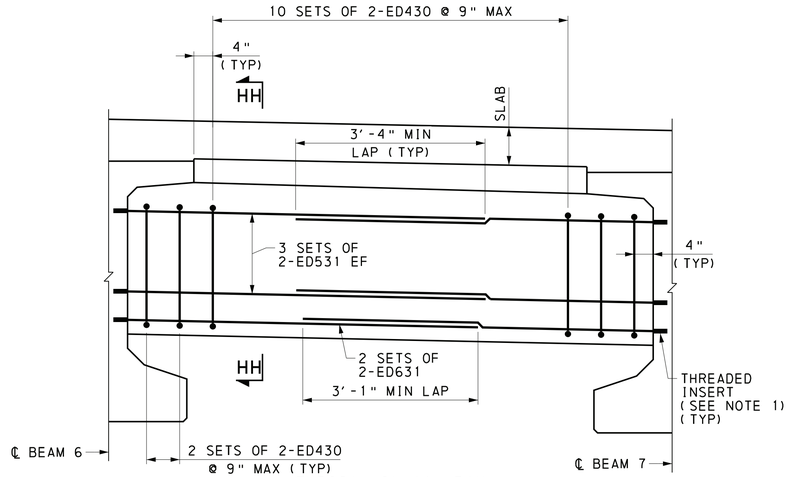
S-39452

12/2/2022
FILENAME: 63016-s-br82-dia02.dgn

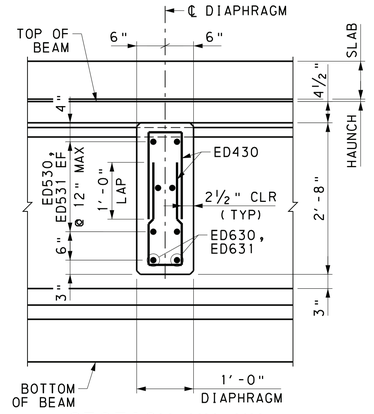
DES: MCA	DES CKD: JMA	DWG: JTM	DWG CKD: JRM



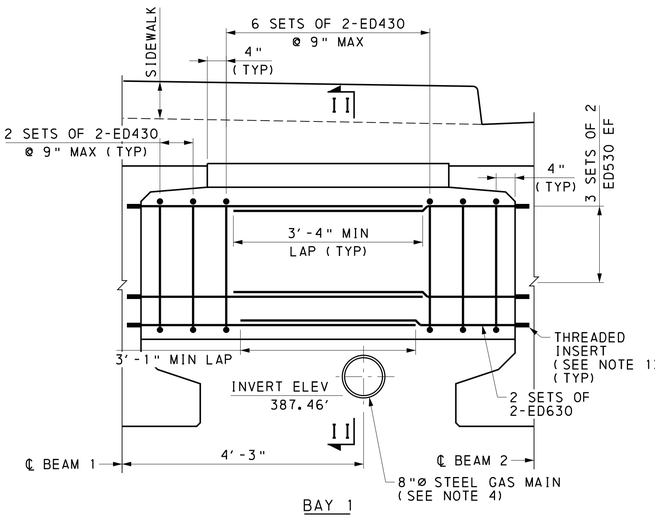
TYPICAL 7'-3" BAY
(BAY 2 SHOWN,
BAYS 7 AND 8 SIMILAR)



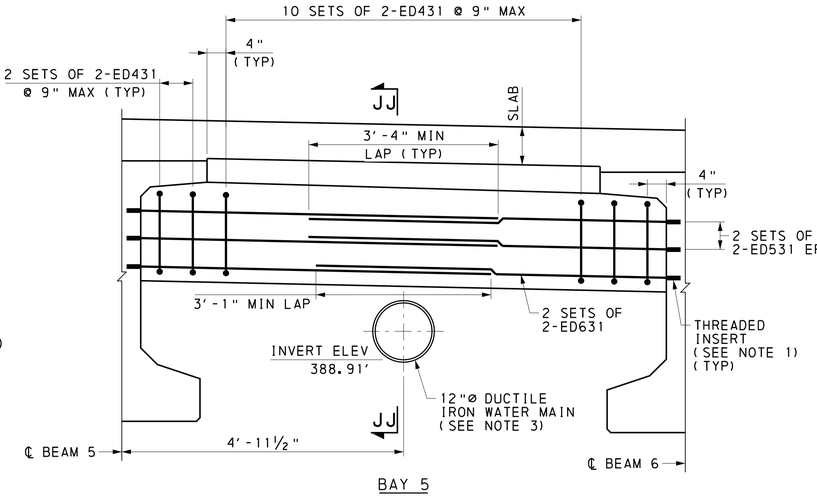
TYPICAL 9'-11" BAY
(BAY 6 SHOWN,
BAYS 3 AND 4 SIMILAR)



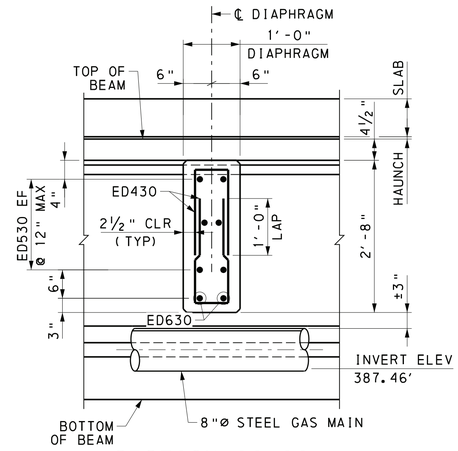
SECTION HH-HH
12 0 12 INCHES



BAY 1



BAY 5



SECTION II-II
12 0 12 INCHES

INTERMEDIATE DIAPHRAGM
12 0 12 INCHES
(LOOKING STATIONS AHEAD)
(SLAB REINFORCEMENT NOT SHOWN FOR CLARITY)

NOTES:

1. USE ONE SIZE SMALLER INSERT FOR DEFORMED BARS. THE MINIMUM LENGTH OF THE INSERT IS 3". INSERTS TO BE GALVANIZED OR COMPLETELY ZINC-ELECTROPLATED.
2. REFER TO SHEET 45 FOR SECTION JJ-JJ.
3. COORDINATE WITH CAPITAL REGION WATER. SEE WATER UTILITY RELOCATION ALSO PLAN.
4. COORDINATE WITH UGI UTILITIES, INC. AND THEIR CONTRACTOR FOR THE GAS UTILITY RELOCATION. SEE GAS UTILITY RELOCATION ALSO PLAN.

REFERENCES:	SHEETS:
GENERAL PLAN	1
GENERAL NOTES	3 - 4
FRAMING PLAN	35
BEAM DETAILS	36 - 37
SLAB PLAN	39
DIAPHRAGM DETAILS	42 - 48

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0417 MPMS/ECMS PROJ: 97828 BRKEY: 67417

HNTB

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0417 SEG 0051 OFFSET 0417
SR 3007 (19TH STREET) STA 103+30.88
OVER NORFOLK SOUTHERN RAILWAY COMPANY
1-SPAN COMPOSITE PS CONCRETE
PA BULB-TEE BEAM BRIDGE
DIAPHRAGM DETAILS 3

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
JUSTIN ROBERT MCCARTHY
ENGINEER
PE076998

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

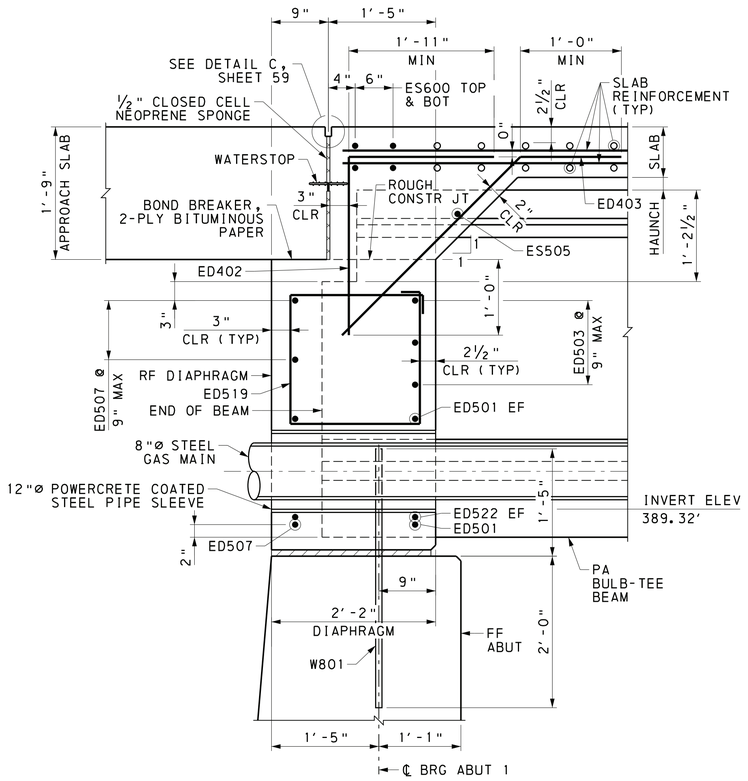
RECOMMENDED 12-6-2022

SHEET 44 OF 70

S-39452

7/22/2022
FILENAME: 63016-s-br-B2-d1a03.dgn

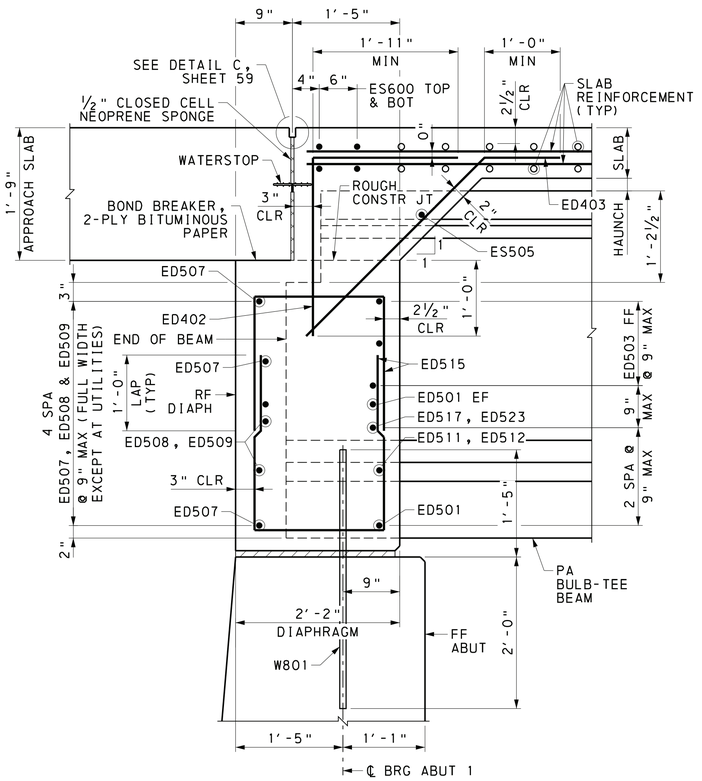
DES: MCA	DES CKD: JMA	DWG: JTM	DWG CKD: JRM



(FOR DRAINAGE AND WATERPROOFING DETAILS, SEE BC-751M AND ATTACHMENT BC-788 MODIFIED "SPRAY-ON WATERPROOFING DETAILS")

SECTION Y-Y

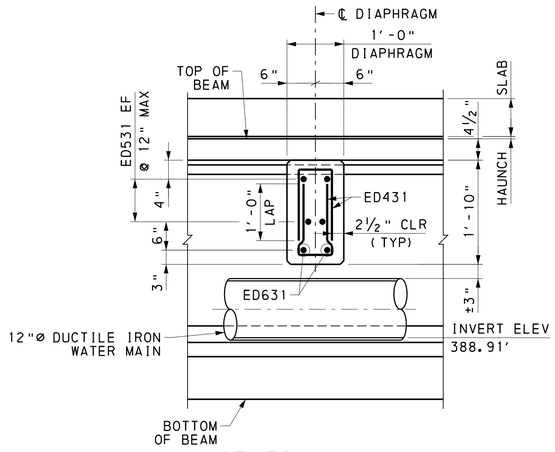
6 0 6 12 INCHES



(FOR DRAINAGE AND WATERPROOFING DETAILS, SEE BC-751M AND ATTACHMENT BC-788 MODIFIED "SPRAY-ON WATERPROOFING DETAILS")

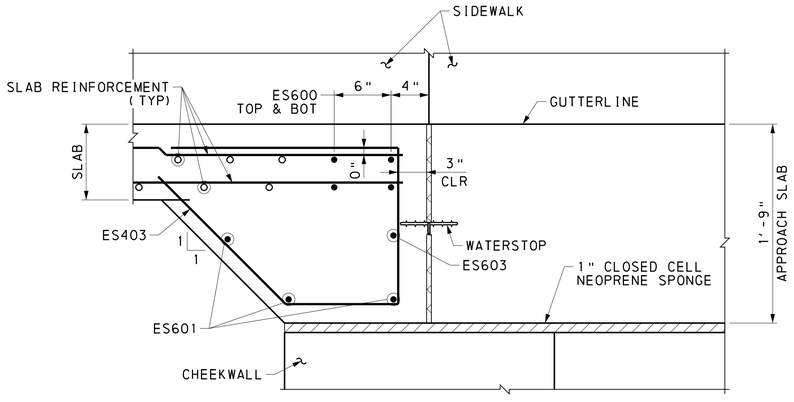
SECTION X-X

6 0 6 12 INCHES



SECTION JJ-JJ

12 0 12 INCHES



SECTION V-V

6 0 6 INCHES

(LEFT OVERHANG SHOWN, RIGHT OVERHANG SIMILAR)

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0417 MPMS/ECMS PROJ: 97828 BRKEY: 67417

HNTB

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0417 SEG 0051 OFFSET 0417
SR 3007 (19TH STREET) STA 103+30.88
OVER NORFOLK SOUTHERN RAILWAY COMPANY
1-SPAN COMPOSITE PS CONCRETE
PA BULB-TEE BEAM BRIDGE
DIAPHRAGM DETAILS 4

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL JUSTIN ROBERT MCCARTHY ENGINEER PE076998

REFERENCES:	SHEETS:
GENERAL PLAN	1
GENERAL NOTES	3 - 4
FRAMING PLAN	35
BEAM DETAILS	36 - 37
SLAB PLAN	39
DIAPHRAGM DETAILS	42 - 48

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

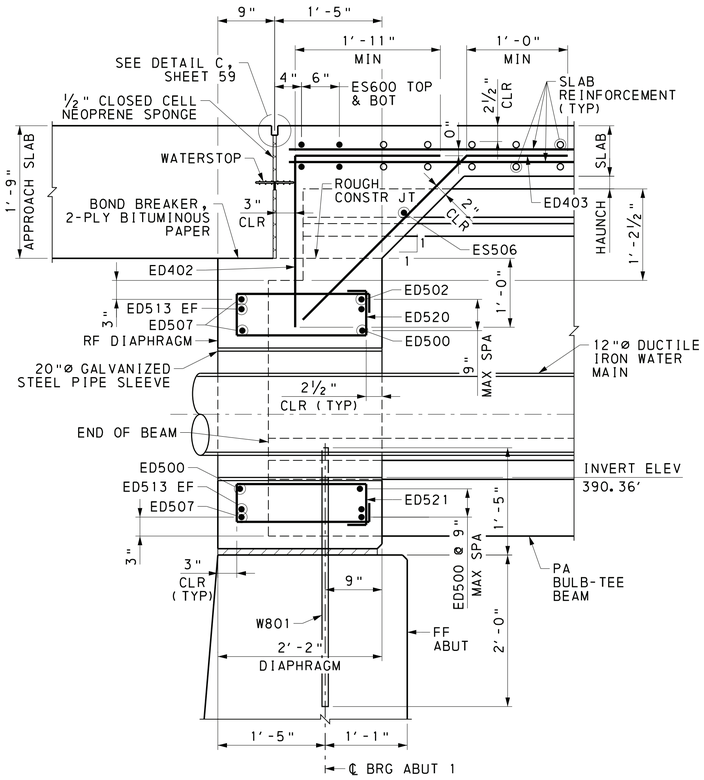
RECOMMENDED 12-6-2022

SHEET 45 OF 70

S-39452

12/2/2022
FILENAME: 63016-s-br-B2-d1d04.dgn

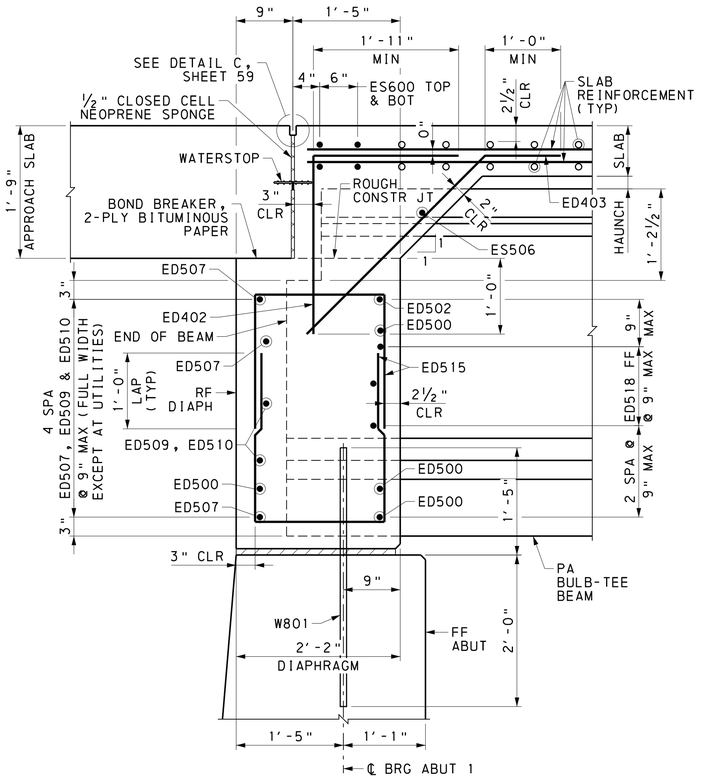
DES: MCA	DES CKD: JMA	DWG: JTM	DWG CKD: JRM



(FOR DRAINAGE AND WATERPROOFING DETAILS, SEE BC-751M AND ATTACHMENT BC-788 MODIFIED "SPRAY-ON WATERPROOFING DETAILS")

SECTION AA-AA

6 0 6 12 INCHES



(FOR DRAINAGE AND WATERPROOFING DETAILS, SEE BC-751M AND ATTACHMENT BC-788 MODIFIED "SPRAY-ON WATERPROOFING DETAILS")

SECTION Z-Z

6 0 6 12 INCHES

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0417 MPMS/ECMS PROJ: 97828 BRKEY: 67417

REFERENCES:	SHEETS:
GENERAL PLAN	1
GENERAL NOTES	3 - 4
FRAMING PLAN	35
BEAM DETAILS	36 - 37
SLAB PLAN	39
DIAPHRAGM DETAILS	42 - 48

HNTB

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — JUSTIN ROBERT MCCARTHY — ENGINEER PE076998

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0417 SEG 0051 OFFSET 0417
SR 3007 (19TH STREET) STA 103+30.88
OVER NORFOLK SOUTHERN RAILWAY COMPANY

1-SPAN COMPOSITE PS CONCRETE
PA BULB-TEE BEAM BRIDGE
DIAPHRAGM DETAILS 5

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

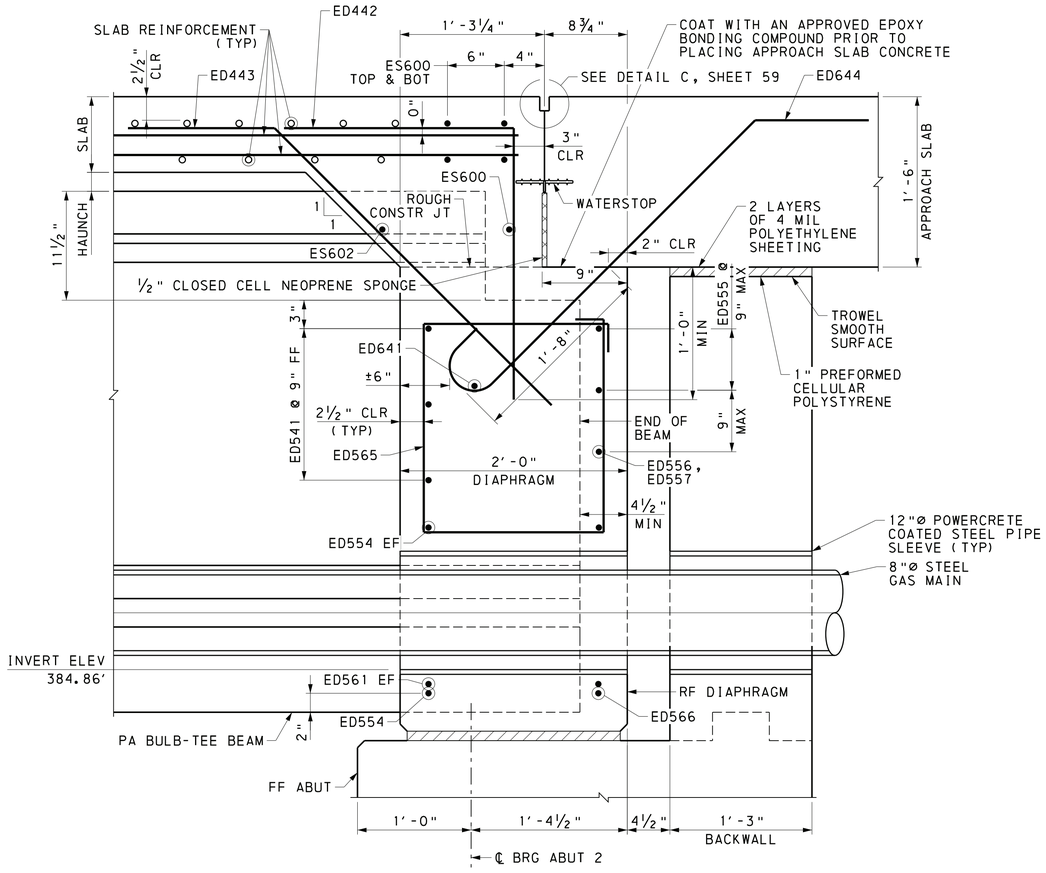
RECOMMENDED 12-6-2022

SHEET 46 OF 70

S-39452

12/2/2022
FILENAME: 63016-s-br82-di005.dgn

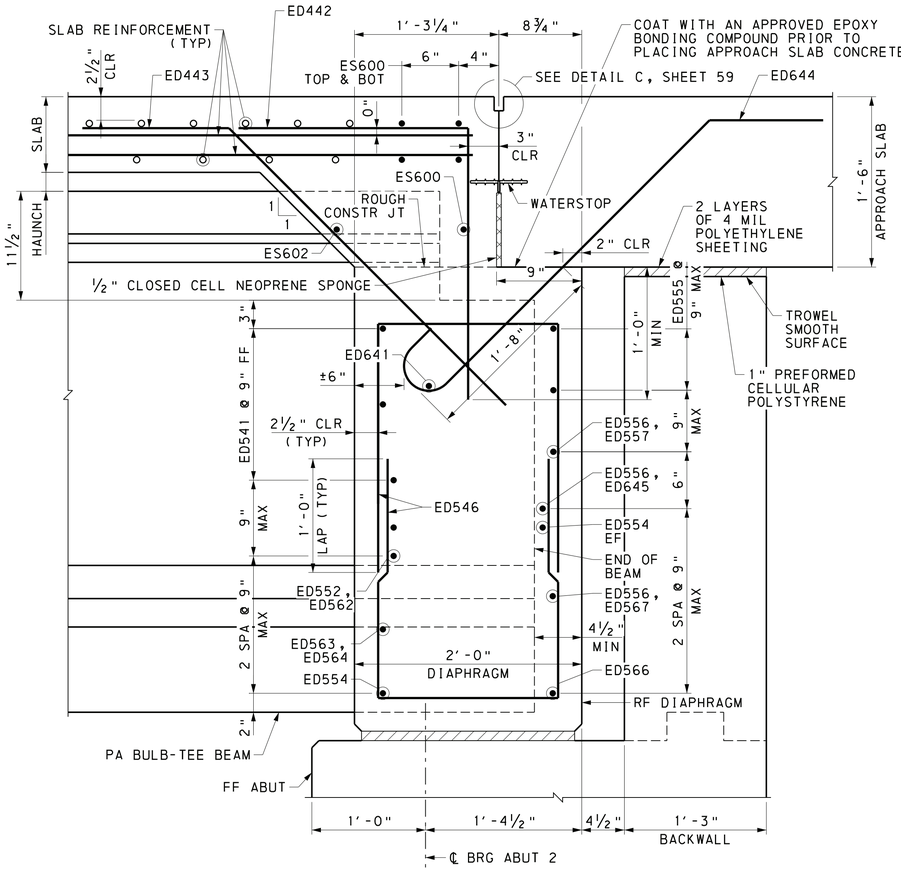
DES: MCA	DES CKD: JMA	DWG: JTM	DWG CKD: JRM



(FOR WATERPROOFING DETAILS, SEE ATTACHMENT BC-788 MODIFIED "SPRAY-ON WATERPROOFING DETAILS")

SECTION EE-EE

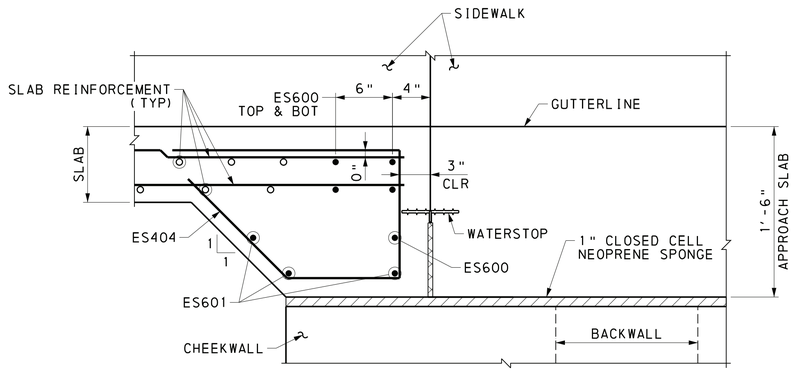
6 0 6 INCHES



(FOR WATERPROOFING DETAILS, SEE ATTACHMENT BC-788 MODIFIED "SPRAY-ON WATERPROOFING DETAILS")

SECTION DD-DD

6 0 6 INCHES



SECTION BB-BB

6 0 6 INCHES

(LEFT OVERHANG SHOWN, RIGHT OVERHANG SIMILAR)

REFERENCES:	SHEETS:
GENERAL PLAN	1
GENERAL NOTES	3 - 4
FRAMING PLAN	35
BEAM DETAILS	36 - 37
SLAB PLAN	39
DIAPHRAGM DETAILS	42 - 48

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0417 MPMS/ECMS PROJ: 97828 BRKEY: 67417

HNTB

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
JUSTIN ROBERT MCCARTHY
ENGINEER
PE076998

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

DAUPHIN COUNTY
SR 0083 SECTION 079

SEG 0050 OFFSET 0417 SEG 0051 OFFSET 0417
SR 3007 (19TH STREET) STA 103+30.88
OVER NORFOLK SOUTHERN RAILWAY COMPANY

1-SPAN COMPOSITE PS CONCRETE
PA BULB-TEE BEAM BRIDGE

DIAPHRAGM DETAILS 6

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

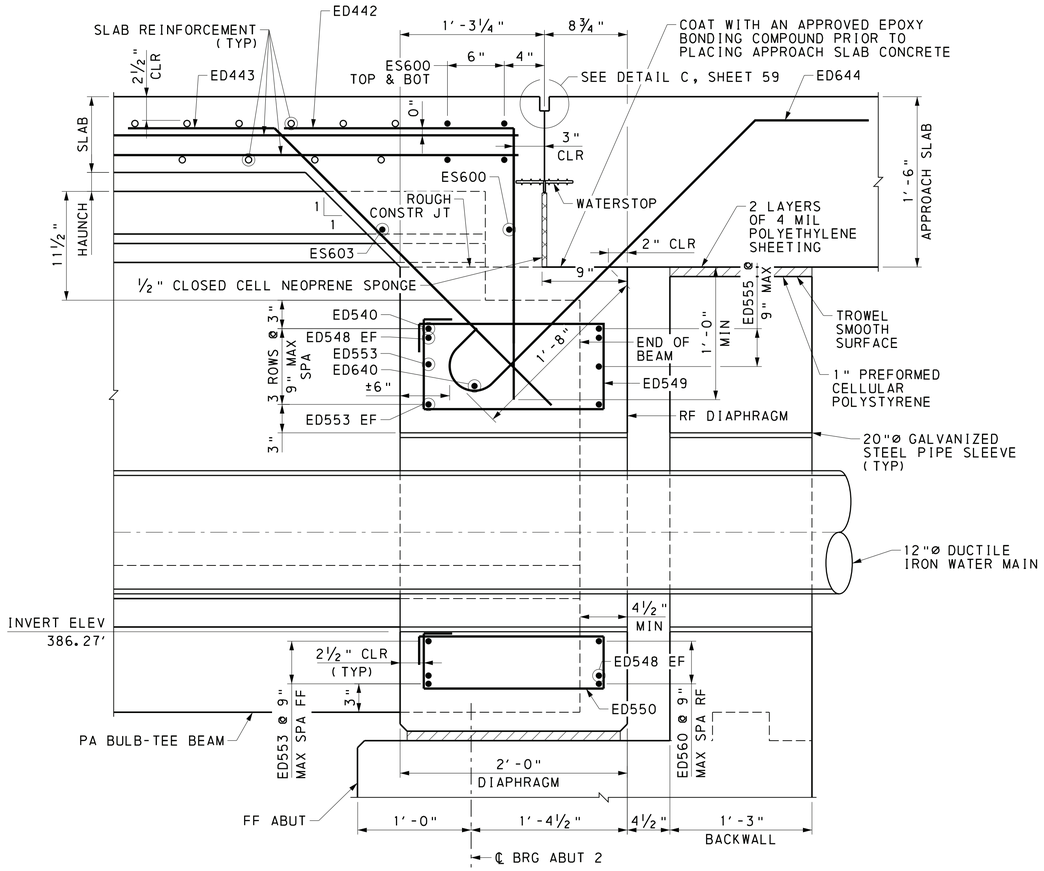
RECOMMENDED 12-6-2022

SHEET 47 OF 70

S-39452

12/2/2022
FILENAME: 63016-s-brB2-d1d06.dgn

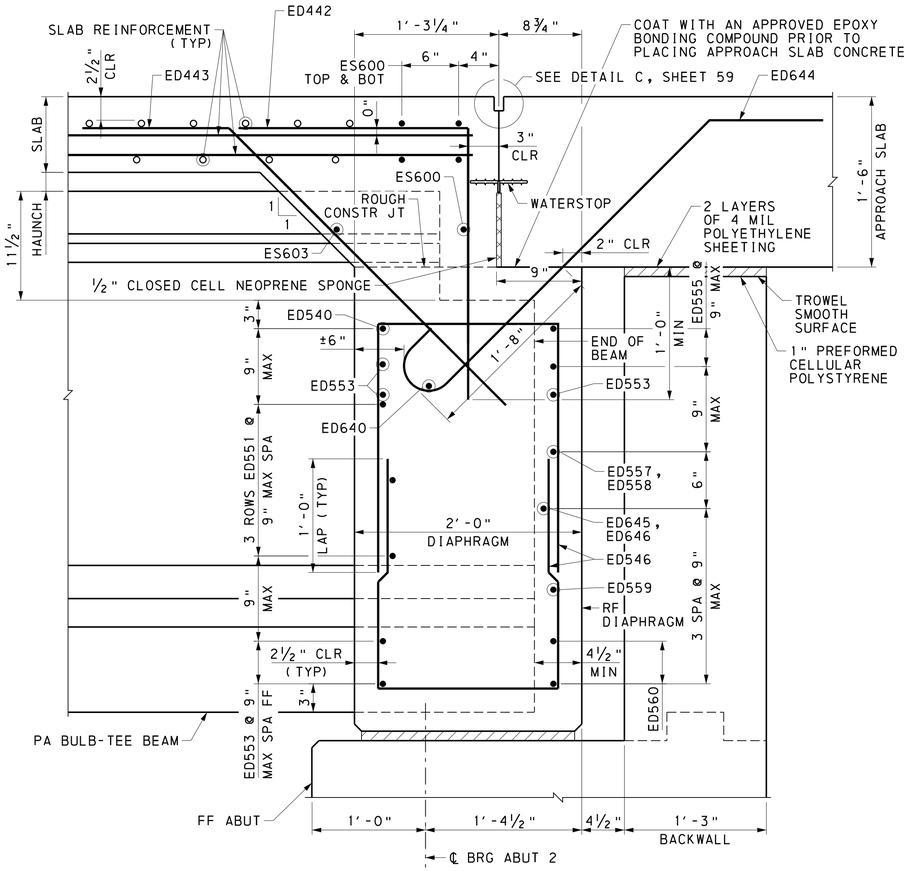
DES: MCA	DES CKD: JMA	DWG: JTM	DWG CKD: JRM



(FOR WATERPROOFING DETAILS, SEE ATTACHMENT BC-788 MODIFIED "SPRAY-ON WATERPROOFING DETAILS")

SECTION FF-FF

6 0 6 INCHES



(FOR WATERPROOFING DETAILS, SEE ATTACHMENT BC-788 MODIFIED "SPRAY-ON WATERPROOFING DETAILS")

SECTION GG-GG

6 0 6 INCHES

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0417 MPMS/ECMS PROJ: 97828 BRKEY: 67417

REFERENCES:	SHEETS:
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SLAB PLAN	39
DIAPHRAGM DETAILS	42 - 48

HNTB

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
JUSTIN ROBERT MCCARTHY
ENGINEER
PE076998

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

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0417 SEG 0051 OFFSET 0417
SR 3007 (19TH STREET) STA 103+30.88
OVER NORFOLK SOUTHERN RAILWAY COMPANY

1-SPAN COMPOSITE PS CONCRETE
PA BULB-TEE BEAM BRIDGE
DIAPHRAGM DETAILS 7

RECOMMENDED 12-6-2022

SHEET 48 OF 70

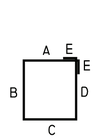
S-39452

DES: MCA	DES CKD: JMA	DWG: JTM	DWG CKD: JRM

12/2/2022
FILENAME: 63016-s-brB2-d1a07.dgn

MARK	SIZE	NO REQ'D	LENGTH	TYPE	A	B	C	D	E	REMARKS
DECK										
ES300	3	506	5'-9"	STR						BEND IN FIELD
ES400	4	324	30'-10"	STR						
ES401	4	392	7'-11"	65	6"	7'-5"				J = 4"
ES402	4	278	7'-8"	27	2'-6 1/2"	4"	3"	2'-4"	1'-6"	R = 2"
ES403	4	6	6'-9 1/2"	49	1'-10"	1'-1"	1'-4 1/2"	2'-6"	1'-3 1/2"	
ES404	4	6	6'-1"	49	1'-6"	11 1/2"	1'-1 1/2"	2'-6"	1'-0 3/4"	
ES405	4	4	37'-0"	STR						
ES406	4	12	25'-9"	STR						
ES407	4	4	27'-9"	STR						
ES408	4	8	30'-9"	STR						
ES409	4	4	35'-9"	STR						
ES500	5	250	36'-1"	STR						
ES501	5	250	40'-7"	STR						
ES502	5	176	59'-5"	STR						
ES503	5	392	41'-2"	65	7"	40'-7"				J = 5"
ES504	5	234	6'-11 1/2"	113	3'-0"	11 1/2"	3'-0"	1/2"	1 3/8"	F = 1 1/2"
ES505	5	4	4'-0"	STR						
ES506	5	4	6'-9"	STR						
ES600	6	18	40'-10"	STR						
ES601	6	12	1'-8"	STR						
ES602	6	4	4'-0"	STR						
ES603	6	4	6'-9"	STR						
EC400	4	88	30'-7"	STR						
EC401	4	278	7'-10"	10	2'-9"	4"	3"	2'-9"	5 1/2"	H = 3", R = 2"
EC500	5	234	9'-9"	STR						
EC501	5	24	59'-10"	STR						
EC600	6	24	41'-7"	STR						
ABUTMENT 1 DIAPHRAGMS										
ED400	4	104	6'-1"	31	2'-2"	1'-9"	2'-2"			
ED401	4	56	4'-11"	31	1'-7"	1'-9"	1'-7"			
ED402	4	64	4'-6"	77	2'-7"	1'-11"				
ED403	4	64	4'-8"	78	3'-8"	1'-0"	8 1/2"			
ED500	5	12	7'-0"	STR						
ED501	5	11	4'-3"	STR						
ED502	5	20	6'-10"	STR						THREAD ONE END 3"
ED503	5	24	5'-5"	STR						THREAD ONE END 3"
ED504	5	6	2'-2"	STR						THREAD ONE END 3"
ED505	5	2	1'-0"	STR						
ED506	5	6	7"	STR						
ED507	5	6	39'-6"	STR						
ED508	5	2	5'-11"	STR						
ED509	5	2	34'-5"	STR						
ED510	5	2	31'-7"	STR						
ED511	5	1	2'-0"	STR						
ED512	5	1	9"	STR						
ED513	5	8	3'-2"	78	2'-5"	9"	6 1/4"			
ED514	5	4	2'-11"	STR						
ED515	5	28	6'-1"	31	2'-2"	1'-9"	2'-2"			
ED516	5	16	4'-11"	31	1'-7"	1'-9"	1'-7"			
ED517	5	1	2'-3"	STR						THREAD ONE END 3"
ED518	5	6	4'-0"	STR						THREAD ONE END 3"
ED519	5	2	7'-8"	2	1'-9"	1'-7"	1'-9"	1'-7"	6"	
ED520	5	2	5'-8"	2	1'-9"	7"	1'-9"	7"	6"	
ED521	5	2	5'-6"	2	1'-9"	6"	1'-9"	6"	6"	
ED522	5	4	3'-0"	78	2'-0"	1'-0"	8 1/2"			
ED523	5	1	3'-7"	STR						THREAD ONE END 3"

MARK	SIZE	NO REQ'D	LENGTH	TYPE	A	B	C	D	E	REMARKS
INTERMEDIATE DIAPHRAGMS										
ED430	4	164	3'-11"	31	1'-8"	7"	1'-8"			
ED431	4	28	3'-1"	31	1'-3"	7"	1'-3"			
ED530	5	48	5'-5"	STR						THREAD ONE END 3"
ED531	5	44	6'-10"	STR						THREAD ONE END 3"
ED630	6	16	5'-4"	STR						THREAD ONE END 3"
ED631	6	16	6'-8"	STR						THREAD ONE END 3"
ABUTMENT 2 DIAPHRAGMS										
ED440	4	140	4'-5"	31	1'-5"	1'-7"	1'-5"			
ED441	4	8	6'-3"	31	2'-4"	1'-7"	2'-4"			
ED442	4	64	4'-4"	77	2'-4"	2'-0"				
ED443	4	64	4'-3"	78	3'-3"	1'-0"	8 1/2"			
ED540	5	20	6'-10"	STR						THREAD ONE END 3"
ED541	5	24	5'-5"	STR						THREAD ONE END 3"
ED542	5	6	2'-1"	STR						THREAD ONE END 3"
ED543	5	2	1'-0"	STR						
ED544	5	6	7"	STR						
ED545	5	16	4'-9"	31	1'-7"	1'-7"	1'-7"			
ED546	5	28	5'-11"	31	2'-2"	1'-7"	2'-2"			
ED547	5	4	2'-11"	STR						
ED548	5	8	3'-2"	78	2'-5"	9"	6 1/4"			
ED549	5	2	5'-10"	2	1'-7"	10"	1'-7"	10"	6"	
ED550	5	2	5'-2"	2	1'-7"	6"	1'-7"	6"	6"	
ED551	5	6	4'-0"	STR						THREAD ONE END 3"
ED552	5	1	2'-3"	STR						THREAD ONE END 3"
ED553	5	5	7'-0"	STR						
ED554	5	3	5'-10"	STR						
ED555	5	2	39'-6"	STR						
ED556	5	3	5'-10"	STR						
ED557	5	1	34'-5"	STR						
ED558	5	1	31'-7"	STR						
ED559	5	2	3'-10"	STR						
ED560	5	2	9'-11"	STR						
ED561	5	4	3'-0"	78	2'-0"	1'-0"	8 1/2"			
ED562	5	1	3'-7"	STR						THREAD ONE END 3"
ED563	5	1	2'-0"	STR						
ED564	5	1	9"	STR						
ED565	5	2	7'-10"	2	1'-7"	1'-10"	1'-7"	1'-10"	6"	
ED566	5	1	9'-6"	STR						
ED567	5	1	2'-2"	STR						
ED568	5	2	2'-0"	STR						
ED640	6	4	9'-3"	STR						
ED641	6	4	6'-5"	STR						
ED642	6	18	6'-8"	STR						THREAD ONE END 3"
ED643	6	18	5'-4"	STR						THREAD ONE END 3"
ED644	6	64	5'-2"	73	8"	3'-6"	1'-0"			
ED645	6	1	34'-5"	STR						
ED646	6	1	31'-7"	STR						



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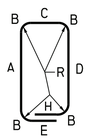

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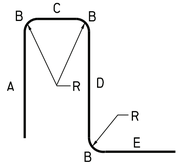

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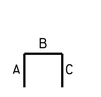
Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0417 MPMS/ECMS PROJ: 97828 BRKEY: 67417

NOTES:

1. "E" PREFIX IN BAR MARK DENOTES EPOXY COATED BARS.
2. ALL DIMENSIONS ARE OUT TO OUT OF BAR EXCEPT "A" & "C" ON STANDARD 135° AND 180° HOOKS, UNLESS NOTED.
3. FOR REINFORCEMENT BAR FABRICATION DETAILS, REFER TO STANDARD DRAWING BC-736M.
4. FIGURES IN CIRCLE REPRESENT BAR TYPES.
5. "J" DIMENSIONS ON 180° HOOKS ARE SHOWN ONLY WHERE NECESSARY TO RESTRICT HOOK SIZE, OTHERWISE STANDARD HOOKS ARE TO BE USED.
6. RADIUS, "R" IS TO THE INSIDE OF THE BAR.
7. REINFORCEMENT BAR SCHEDULE IS FOR INFORMATION ONLY. VERIFY INFORMATION BEFORE FABRICATION.



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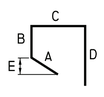

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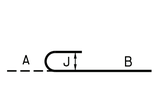

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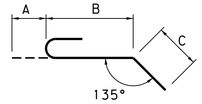

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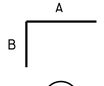

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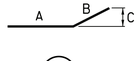

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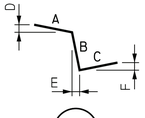

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REFERENCES:	SHEETS:
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HNTB

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0417 SEG 0051 OFFSET 0417
SR 3007 (19TH STREET) STA 103+30.88
OVER NORFOLK SOUTHERN RAILWAY COMPANY

1-SPAN COMPOSITE PS CONCRETE
PA BULB-TEE BEAM BRIDGE

SUPERSTRUCTURE REBAR SCHEDULE

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — JUSTIN ROBERT MCCARTHY — ENGINEER — PE076998

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

RECOMMENDED 12-6-2022

SHEET 49 OF 70

S-39452

DES: MCA | DES CKD: JRM | DWG: MCA | DWG CKD: JRM

7/22/2022
FILENAME 63016-s-br82-bar04.dgn

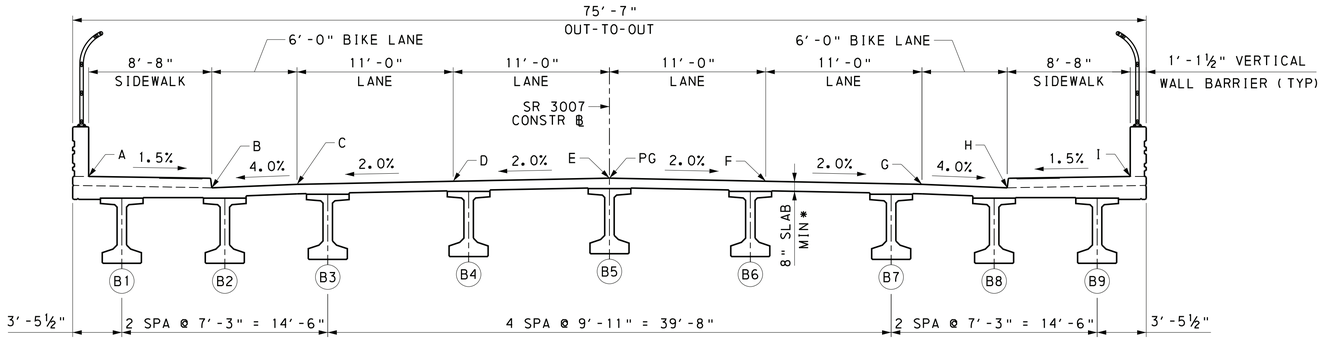
FINISHED DECK ELEVATIONS AT BREAK POINTS

STATION	A	B	C	D	E (PGL)	F	G	H	I
102+29.27	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	395.42
102+30.00	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	395.42
102+30.64	- - -	- - -	- - -	- - -	- - -	- - -	- - -	394.62	395.42
102+31.60	- - -	- - -	- - -	- - -	- - -	- - -	394.86	394.62	395.42
102+33.34	- - -	- - -	- - -	- - -	- - -	395.09	394.87	394.63	395.42
102+35.09	- - -	- - -	- - -	- - -	395.31	395.09	394.87	394.63	395.42
102+36.83	- - -	- - -	- - -	395.09	395.31	395.09	394.87	394.63	395.42
102+38.58	- - -	- - -	394.87	395.09	395.31	395.09	394.87	394.63	395.42
102+39.53	- - -	394.62	394.86	395.08	395.30	395.08	394.86	394.62	395.42
102+40.00	- - -	394.62	394.86	395.08	395.30	395.08	394.86	394.62	395.42
102+40.90	395.42	394.62	394.86	395.08	395.30	395.08	394.86	394.62	395.42
102+50.00	395.38	394.59	394.83	395.05	395.27	395.05	394.83	394.59	395.38
102+60.00	395.31	394.51	394.75	394.97	395.19	394.97	394.75	394.51	395.31
102+62.87	395.28	394.48	394.72	394.94	395.16	394.94	394.72	394.48	395.28
102+65.19	395.25	394.46	394.70	394.92	395.14	394.92	394.70	394.46	395.25
102+66.79	395.24	394.44	394.68	394.90	395.12	394.90	394.68	394.44	395.24
102+69.74	395.20	394.40	394.64	394.86	395.08	394.86	394.64	394.40	395.20
102+70.00	395.20	394.40	394.64	394.86	395.08	394.86	394.64	394.40	395.20
102+72.69	395.16	394.36	394.60	394.82	395.04	394.82	394.60	394.36	395.16
102+75.64	395.11	394.32	394.56	394.78	395.00	394.78	394.56	394.32	395.11
102+78.58	395.07	394.27	394.51	394.73	394.95	394.73	394.51	394.27	395.07
102+80.00	395.04	394.25	394.49	394.71	394.93	394.71	394.49	394.25	395.04
102+80.19	395.04	394.25	394.49	394.71	394.93	394.71	394.49	394.25	395.04
102+82.51	395.00	394.20	394.44	394.66	394.88	394.66	394.44	394.20	395.00
102+90.00	394.85	394.06	394.30	394.52	394.74	394.52	394.30	394.06	394.85
103+00.00	394.63	393.83	394.07	394.29	394.51	394.29	394.07	393.83	394.63
103+10.00	394.36	393.56	393.80	394.02	394.24	394.02	393.80	393.56	394.36
103+20.00	394.05	393.26	393.50	393.72	393.94	393.72	393.50	393.26	394.05
103+30.00	393.71	392.91	393.15	393.37	393.59	393.37	393.15	392.91	393.71
103+40.00	393.33	392.53	392.77	392.99	393.21	392.99	392.77	392.53	393.33
103+50.00	392.90	392.11	392.35	392.57	392.79	392.57	392.35	392.11	392.90
103+60.00	392.44	391.65	391.89	392.11	392.33	392.11	391.89	391.65	392.44
103+70.00	391.95	391.15	391.39	391.61	391.83	391.61	391.39	391.15	391.95
103+79.22	391.45	390.66	390.90	391.12	391.34	391.12	390.90	390.66	391.45
103+80.00	391.41	390.62	390.86	391.08	391.30	391.08	390.86	390.62	391.41
103+81.55	391.33	390.53	390.77	390.99	391.21	390.99	390.77	390.53	391.33
103+83.15	391.24	390.45	390.69	390.91	391.13	390.91	390.69	390.45	391.24
103+86.10	391.08	390.29	390.53	390.75	390.97	390.75	390.53	390.29	391.08
103+89.05	390.93	390.13	390.37	390.59	390.81	390.59	390.37	390.13	390.93
103+90.00	390.88	390.08	390.32	390.54	390.76	390.54	390.32	390.08	390.88
103+92.00	390.77	389.97	390.21	390.43	390.65	390.43	390.21	389.97	390.77
103+94.94	390.61	389.81	390.05	390.27	390.49	390.27	390.05	389.81	390.61
103+96.55	390.52	389.73	389.97	390.19	390.41	390.19	389.97	389.73	390.52
103+98.87	390.40	389.60	389.84	390.06	390.28	390.06	389.84	389.60	390.40
104+00.00	390.34	389.54	389.78	390.00	390.22	390.00	389.78	389.54	390.34
104+09.22	389.84	389.05	389.29	389.51	389.73	389.51	389.29	389.05	389.84
104+10.00	389.80	389.00	389.24	389.46	389.68	389.46	389.24	389.00	- - -
104+11.55	389.72	388.92	389.16	389.38	389.60	389.38	389.16	388.92	- - -
104+13.15	389.63	388.83	389.07	389.29	389.51	389.29	389.07	- - -	- - -
104+16.10	389.47	388.68	388.92	389.14	389.36	389.14	- - -	- - -	- - -
104+19.05	389.31	388.52	388.76	388.98	389.20	- - -	- - -	- - -	- - -
104+20.00	389.26	388.47	388.71	388.93	- - -	- - -	- - -	- - -	- - -
104+22.00	389.15	388.36	388.60	388.82	- - -	- - -	- - -	- - -	- - -
104+24.94	389.00	388.20	388.44	- - -	- - -	- - -	- - -	- - -	- - -
104+26.55	388.91	388.11	- - -	- - -	- - -	- - -	- - -	- - -	- - -
104+28.87	388.78	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -

ELEVATIONS GIVEN AT THE FIRST AND LAST STATIONS FOR EACH BREAK POINT ARE LOCATED AT THE BEGIN NEAR APPROACH SLAB AND END FAR APPROACH SLAB, RESPECTIVELY.

FINISHED DECK ELEVATIONS AT TENTH POINTS ON ℄ BEAM

LOCATION	BEAM B1		BEAM B2		BEAM B3		BEAM B4		BEAM B5		BEAM B6		BEAM B7		BEAM B8		BEAM B9	
	STATION	ELEV	STATION	ELEV	STATION	ELEV	STATION	ELEV	STATION	ELEV	STATION	ELEV	STATION	ELEV	STATION	ELEV	STATION	ELEV
℄ BRG ABUT 1	102+82.58	394.96	102+80.64	394.27	102+78.69	394.55	102+76.04	394.79	102+73.38	395.03	102+70.72	394.87	102+68.07	394.71	102+66.12	394.49	102+64.18	395.23
0.1L	102+94.08	394.73	102+92.14	394.05	102+90.19	394.34	102+87.54	394.59	102+84.88	394.84	102+82.22	394.69	102+79.57	394.54	102+77.62	394.32	102+75.68	395.08
0.2L	103+05.58	394.45	103+03.64	393.77	103+01.69	394.07	102+99.04	394.34	102+96.38	394.60	102+93.72	394.46	102+91.07	394.32	102+89.12	394.11	102+87.18	394.88
0.3L	103+17.08	394.11	103+15.14	393.45	103+13.19	393.75	103+10.54	394.03	103+07.88	394.30	103+05.22	394.18	103+02.57	394.05	103+00.62	393.85	102+98.68	394.62
0.4L	103+28.58	393.72	103+26.64	393.07	103+24.69	393.38	103+22.04	393.67	103+19.38	393.96	103+16.72	393.84	103+14.07	393.73	103+12.12	393.54	103+10.18	394.32
0.5L	103+40.08	393.29	103+38.14	392.64	103+36.19	392.96	103+33.54	393.26	103+30.88	393.56	103+28.22	393.46	103+25.57	393.35	103+23.62	393.17	103+21.68	393.96
0.6L	103+51.58	392.80	103+49.64	392.16	103+47.69	392.49	103+45.04	392.80	103+42.38	393.11	103+39.72	393.02	103+37.07	392.93	103+35.12	392.76	103+33.18	393.56
0.7L	103+63.08	392.26	103+61.14	391.63	103+59.19	391.97	103+56.54	392.29	103+53.88	392.61	103+51.22	392.54	103+48.57	392.45	103+46.62	392.29	103+44.68	393.10
0.8L	103+74.58	391.67	103+72.64	391.05	103+70.69	391.40	103+68.04	391.73	103+65.38	392.07	103+62.72	392.00	103+60.07	391.93	103+58.12	391.77	103+56.18	392.59
0.9L	103+86.08	391.05	103+84.14	390.43	103+82.19	390.78	103+79.54	391.12	103+76.88	391.47	103+74.22	391.41	103+71.57	391.35	103+69.62	391.21	103+67.68	392.03
℄ BRG ABUT 2	103+97.58	390.43	103+95.64	389.81	103+93.69	390.16	103+91.04	390.51	103+88.38	390.85	103+85.72	390.79	103+83.07	390.74	103+81.12	390.59	103+79.18	391.42



DECK ELEVATIONS DIAGRAM

2 0 2 4 6 FEET

* INCLUDES ½" INTEGRAL WEARING SURFACE

NOTES:

1. UTILITIES NOT SHOWN FOR CLARITY.

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0417 MPMS/ECMS PROJ: 97828 BRKEY: 67417

REFERENCES:	SHEETS:
GENERAL PLAN	1
GENERAL NOTES	3 - 4
FRAMING PLAN	35
SLAB PLAN	39
SLAB TYPICAL SECTION	40

HNTB

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
JUSTIN ROBERT MCCARTHY
ENGINEER
PE076998

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

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0417 SEG 0051 OFFSET 0417
SR 3007 (19TH STREET) STA 103+30.88
OVER NORFOLK SOUTHERN RAILWAY COMPANY

1-SPAN COMPOSITE PS CONCRETE
PA BULB-TEE BEAM BRIDGE
DECK ELEVATIONS

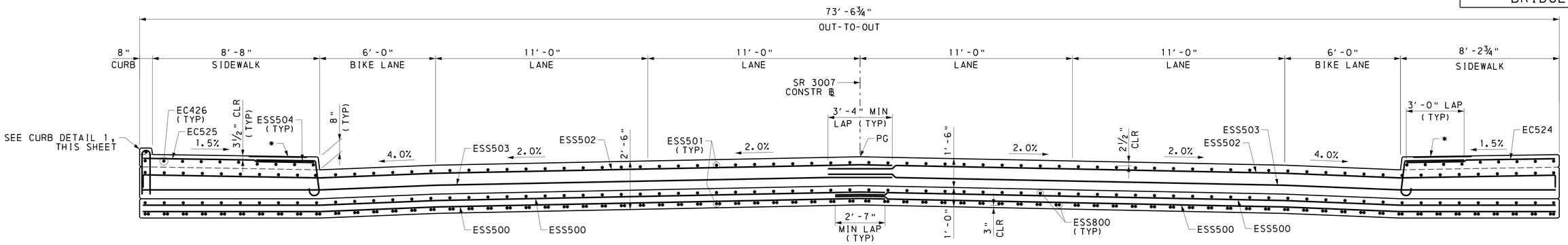
RECOMMENDED 12-6-2022

SHEET 50 OF 70

S-39452

7/22/2022
FILENAME: 63016-s-br82-dek01.dgn

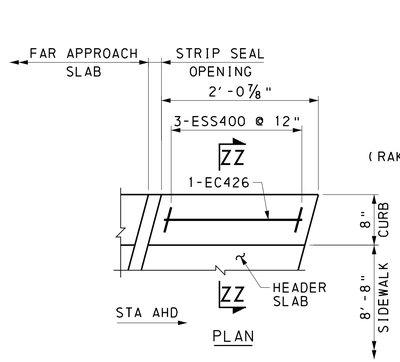
DES: MCA	DES CKD: CEK	DWG: SMZ	DWG CKD: JRM



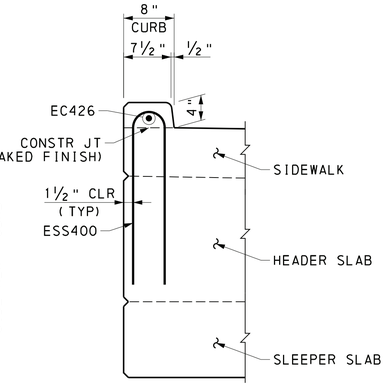
* 3′-0" STAMPED AND STAINED CONCRETE BRICK PATTERN (SEE SHEET 41)

SECTION KK-KK

1 0 1 2 3 FEET

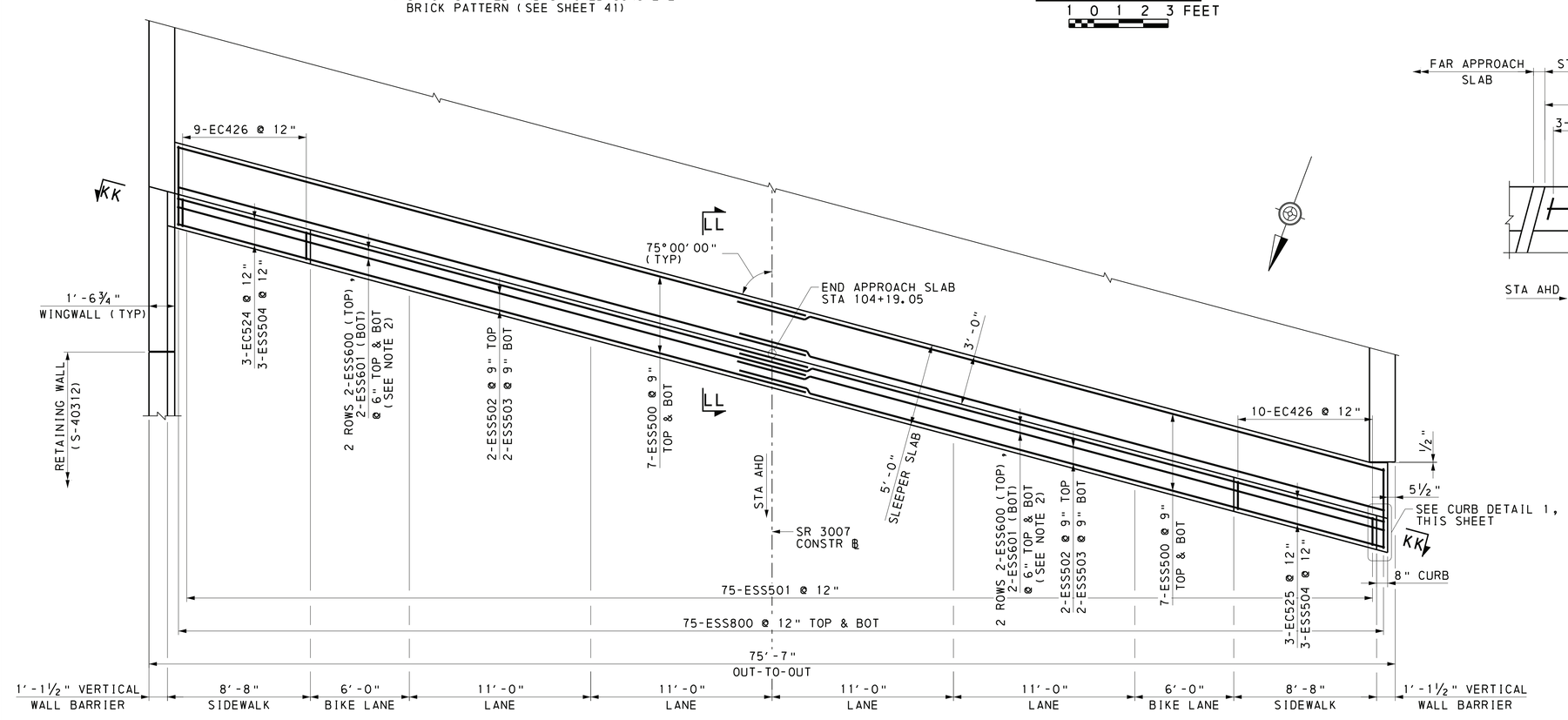


PLAN



SECTION ZZ-ZZ

(SLEEPER SLAB AND SIDEWALK REINFORCEMENT NOT SHOWN FOR CLARITY)



PLAN

2 0 2 4 FEET

(FAR APPROACH SLAB NOT SHOWN FOR CLARITY)

NOTES:

1. REFER TO SHEET 57 FOR SECTION LL-LL.
2. PROVIDE 3′-11" MINIMUM LAP FOR #6 SLEEPER SLAB BARS.

REFERENCES:	SHEETS:
GENERAL PLAN	1
GENERAL NOTES	3 - 4
FAR APPROACH SLAB PLAN	53
FAR APPROACH SLAB SECTIONS	55
APPROACH SLAB DETAILS	56 - 59

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0417 MPMS/ECMS PROJ: 97828 BRKEY: 67417

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COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0417 SEG 0051 OFFSET 0417
SR 3007 (19TH STREET) STA 103+30.88
OVER NORFOLK SOUTHERN RAILWAY COMPANY
1-SPAN COMPOSITE PS CONCRETE PA BULB-TEE BEAM BRIDGE
FAR SLEEPER SLAB PLAN

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — JUSTIN ROBERT MCCARTHY — ENGINEER — PE076998

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

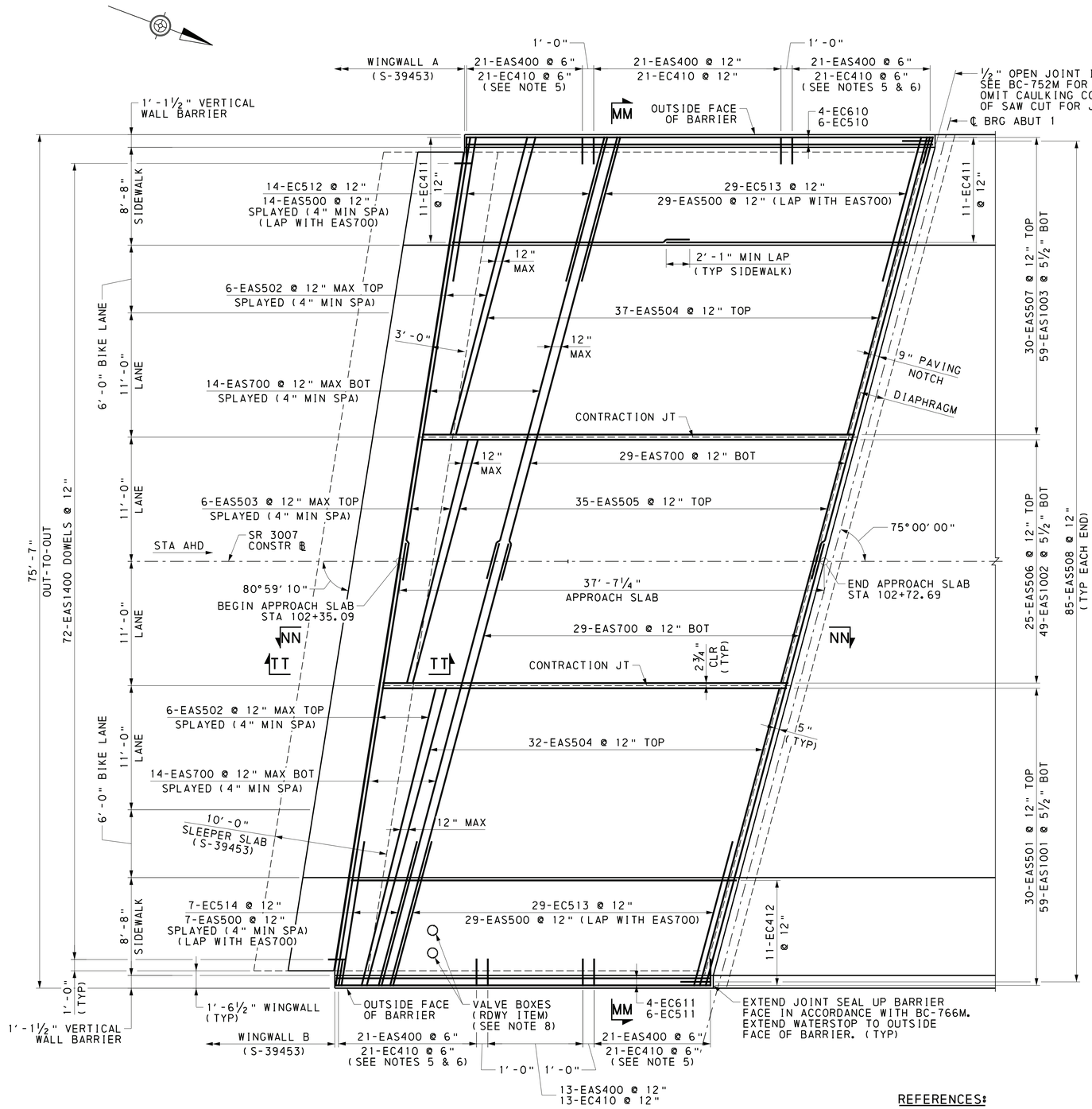
RECOMMENDED 12-6-2022

SHEET 51 OF 70

S-39452

7/22/2022
FILENAME: 63016-s-brB2-sps01.dgn

DES: MCA	DES CKD: CEK	DWG: JTM	DWG CKD: JRM



PLAN
2 0 2 4 6 FEET

NOTES:

1. CONSTRUCT BRIDGE APPROACH SLAB AFTER THE BRIDGE DECK IS CONSTRUCTED.
2. PLACE CONCRETE IN ONE CONTINUOUS OPERATION, UNLESS OTHERWISE INDICATED OR DIRECTED.
3. TRANSVERSE CONSTRUCTION JOINTS ARE NOT PERMITTED IN THE CONCRETE APPROACH SLAB OR SLEEPER SLAB, UNLESS OTHERWISE INDICATED.
4. BURN OFF, TO TOP OF BEAM, REINFORCEMENT AND/OR LIFTING DEVICES PROTRUDING INTO APPROACH SLAB.
5. PROVIDE ONE ADDITIONAL EC410 BAR ON EACH SIDE OF LIGHTING BLOCKOUT (LAP WITH EAS400). ADJUST REINFORCEMENT AS REQUIRED TO ACCOMMODATE PLACEMENT OF JUNCTION BOXES AND LIGHTING BLOCKOUTS.
6. SPLAY THE LAST FOUR (4) EAS410 BARS ADJACENT TO END OF APPROACH SLAB AS REQUIRED TO ACCOMMODATE PLACEMENT. MINIMUM ALLOWABLE SPLAYED SPACING IS 4".
7. SLEEPER SLAB AND S-39453 FAR APPROACH SLAB DETAILS ARE NOT INCLUDED AS PART OF THE S-39452 PLANS. REFER TO S-39453 PLANS FOR ADDITIONAL INFORMATION.
8. FIELD CUT AND/OR ADJUST APPROACH SLAB REINFORCEMENT AS REQUIRED TO ACCOMMODATE VALVE BOXES. SEE WATER UTILITY RELOCATION ALSO PLAN FOR ADDITIONAL INFORMATION.

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0417 MPMS/ECMS PROJ: 97828 BRKEY: 67417

REFERENCES:	SHEETS:
GENERAL PLAN	1
GENERAL NOTES	3 - 4
DIAPHRAGM DETAILS	42 - 48
NEAR APPROACH SLAB SECTIONS	54
APPROACH SLAB DETAILS	56 - 59

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COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL JUSTIN ROBERT MCCARTHY ENGINEER PE076998

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0417 SEG 0051 OFFSET 0417
SR 3007 (19TH STREET) STA 103+30.88
OVER NORFOLK SOUTHERN RAILWAY COMPANY

1-SPAN COMPOSITE PS CONCRETE
PA BULB-TEE BEAM BRIDGE

NEAR APPROACH SLAB PLAN

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

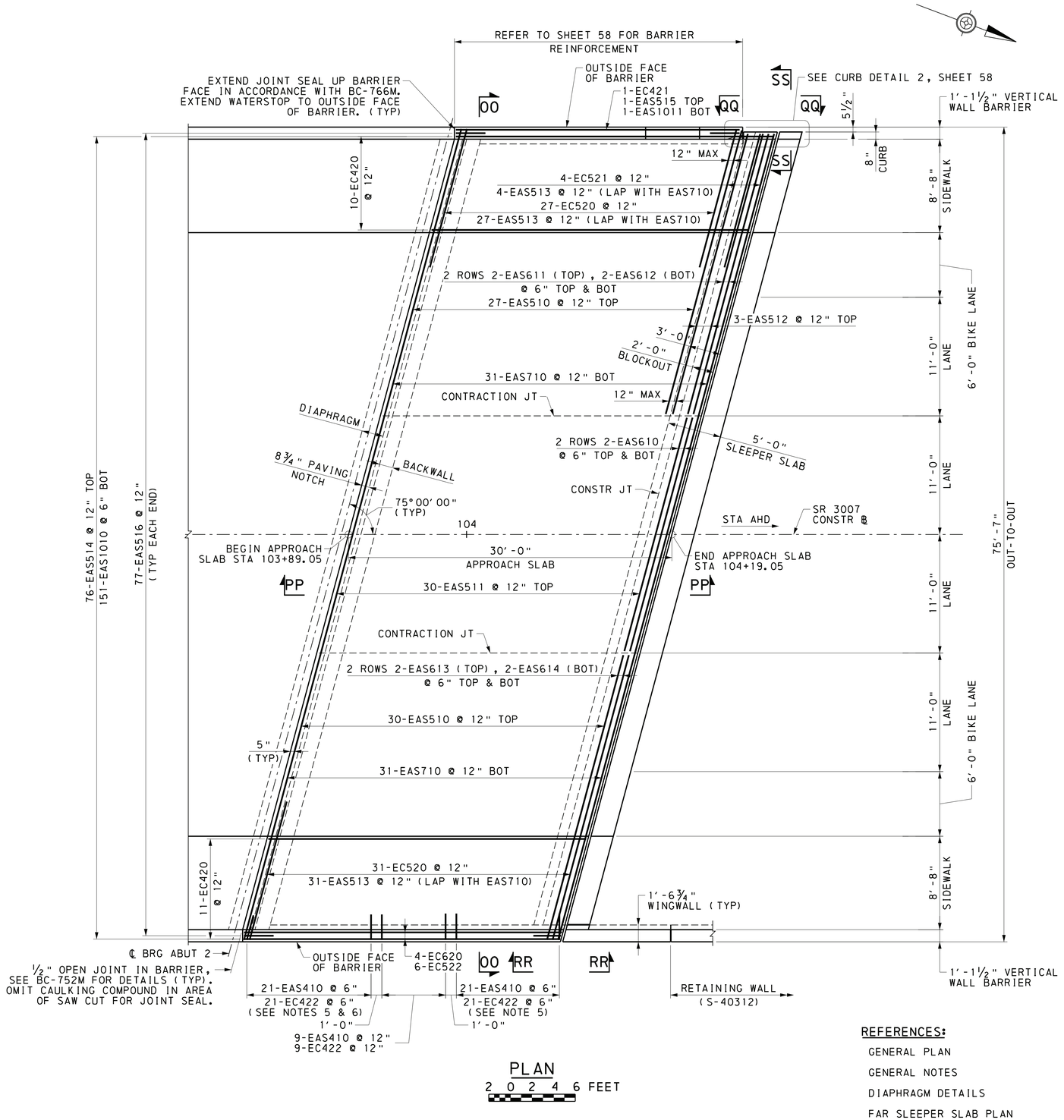
RECOMMENDED 12-6-2022

SHEET 52 OF 70

S-39452

DES: MCA	DES CKD: CEK	DWG: SMZ	DWG CKD: JRM

7/22/2022
FILENAME 63016-s-brB2-opa01.dgn



PLAN

2 0 2 4 6 FEET

NOTES:

1. CONSTRUCT BRIDGE APPROACH SLAB AFTER THE BRIDGE DECK IS CONSTRUCTED.
2. PLACE CONCRETE IN ONE CONTINUOUS OPERATION, UNLESS OTHERWISE INDICATED OR DIRECTED.
3. TRANSVERSE CONSTRUCTION JOINTS ARE NOT PERMITTED IN THE CONCRETE APPROACH SLAB OR SLEEPER SLAB, UNLESS OTHERWISE INDICATED.
4. BURN OFF, TO TOP OF BEAM, REINFORCEMENT AND/OR LIFTING DEVICES PROTRUDING INTO APPROACH SLAB.
5. PROVIDE ONE ADDITIONAL EC422 BAR ON EACH SIDE OF LIGHTING BLOCKOUT (LAP WITH EAS410). ADJUST REINFORCEMENT AS REQUIRED TO ACCOMMODATE PLACEMENT OF JUNCTION BOXES AND LIGHTING BLOCKOUTS.
6. SPLAY THE LAST FOUR (4) EAS410 BARS ADJACENT TO END OF APPROACH SLAB AS REQUIRED TO ACCOMMODATE PLACEMENT. MINIMUM ALLOWABLE SPLAYED SPACING IS 4".

REFERENCES:

GENERAL PLAN	1
GENERAL NOTES	3 - 4
DIAPHRAGM DETAILS	42 - 48
FAR SLEEPER SLAB PLAN	51
FAR APPROACH SLAB SECTIONS	55
APPROACH SLAB DETAILS	56 - 59

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0417 MPMS/ECMS PROJ: 97828 BRKEY: 67417

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COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0417 SEG 0051 OFFSET 0417
SR 3007 (19TH STREET) STA 103+30.88
OVER NORFOLK SOUTHERN RAILWAY COMPANY
1-SPAN COMPOSITE PS CONCRETE PA BULB-TEE BEAM BRIDGE
FAR APPROACH SLAB PLAN

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — JUSTIN ROBERT MCCARTHY — ENGINEER — PE076998

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

RECOMMENDED 12-6-2022

SHEET 53 OF 70

S-39452

7/22/2022
FILENAME: 63016-s-brB2-gps02.dgn

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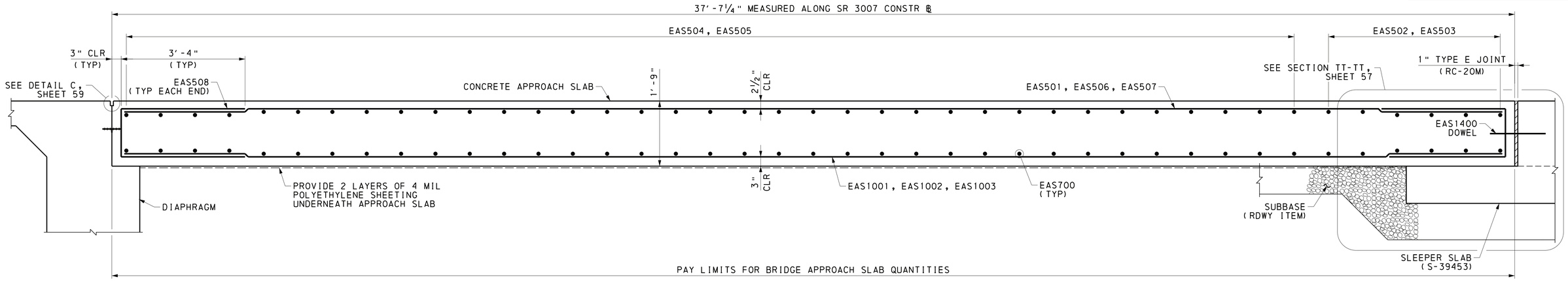
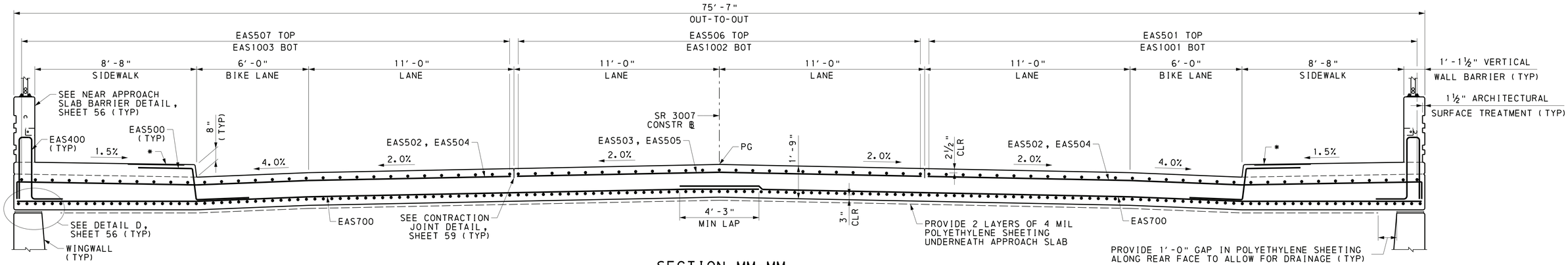


SECTION NN-NN

12 0 12 INCHES



* 3′-0" STAMPED AND STAINED CONCRETE BRICK PATTERN (SEE SHEET 41)

SECTION MM-MM

1 0 1 2 3 FEET

NOTE:

1. BARRIER AND SIDEWALK REINFORCEMENT NOT SHOWN FOR CLARITY.

REFERENCES:

	SHEETS:
GENERAL PLAN	1
GENERAL NOTES	3 - 4
DIAPHRAGM DETAILS	42 - 48
NEAR APPROACH SLAB PLAN	52
APPROACH SLAB DETAILS	56 - 59
BARRIER ARCHITECTURAL DETAILS	61

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0417 MPMS/ECMS PROJ: 97828 BRKEY: 67417

HNTB

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0417 SEG 0051 OFFSET 0417
SR 3007 (19TH STREET) STA 103+30.88
OVER NORFOLK SOUTHERN RAILWAY COMPANY
1-SPAN COMPOSITE PS CONCRETE PA BULB-TEE BEAM BRIDGE
NEAR APPROACH SLAB SECTIONS

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — JUSTIN ROBERT MCCARTHY — ENGINEER — PE076998

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

RECOMMENDED 12-6-2022

SHEET 54 OF 70

S-39452

7/22/2022
FILENAME 63016-s-brB2-ops03.dgn

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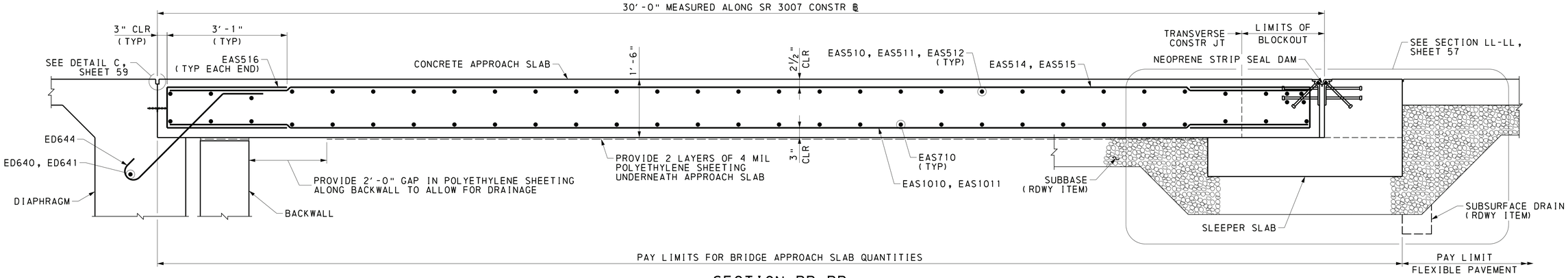
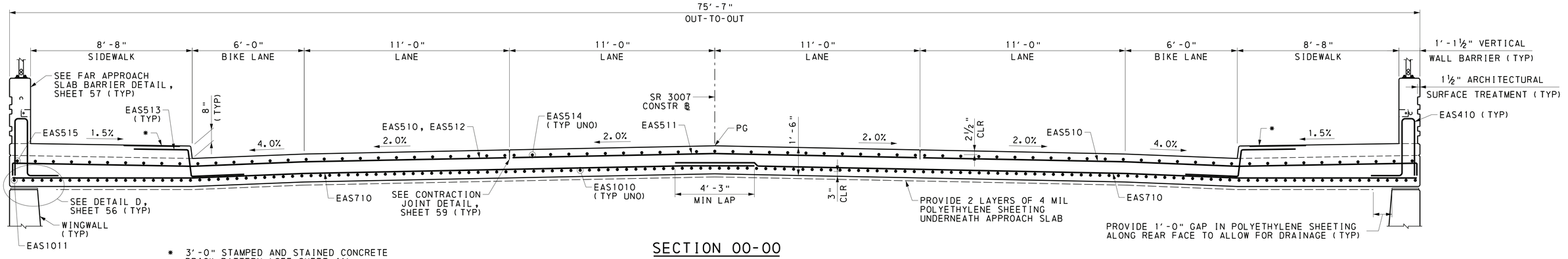


SECTION PP-PP

12 0 12 INCHES



* 3'-0" STAMPED AND STAINED CONCRETE BRICK PATTERN (SEE SHEET 41)

SECTION OO-OO

1 0 1 2 3 FEET

NOTE:

1. BARRIER AND SIDEWALK REINFORCEMENT NOT SHOWN FOR CLARITY.

REFERENCES:

	SHEETS:
GENERAL PLAN	1
GENERAL NOTES	3 - 4
DIAPHRAGM DETAILS	42 - 48
FAR SLEEPER SLAB PLAN	51
FAR APPROACH SLAB PLAN	53
APPROACH SLAB DETAILS	56 - 59
BARRIER ARCHITECTURAL DETAILS	61

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0417 MPMS/ECMS PROJ: 97828 BRKEY: 67417

HNTB

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0417 SEG 0051 OFFSET 0417
SR 3007 (19TH STREET) STA 103+30.88
OVER NORFOLK SOUTHERN RAILWAY COMPANY

1-SPAN COMPOSITE PS CONCRETE
PA BULB-TEE BEAM BRIDGE

FAR APPROACH SLAB SECTIONS

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL JUSTIN ROBERT MCCARTHY ENGINEER PE076998

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

RECOMMENDED 12-6-2022

SHEET 55 OF 70

S-39452

7/22/2022
FILENAME: 63016-s-brB2-qps04.dgn

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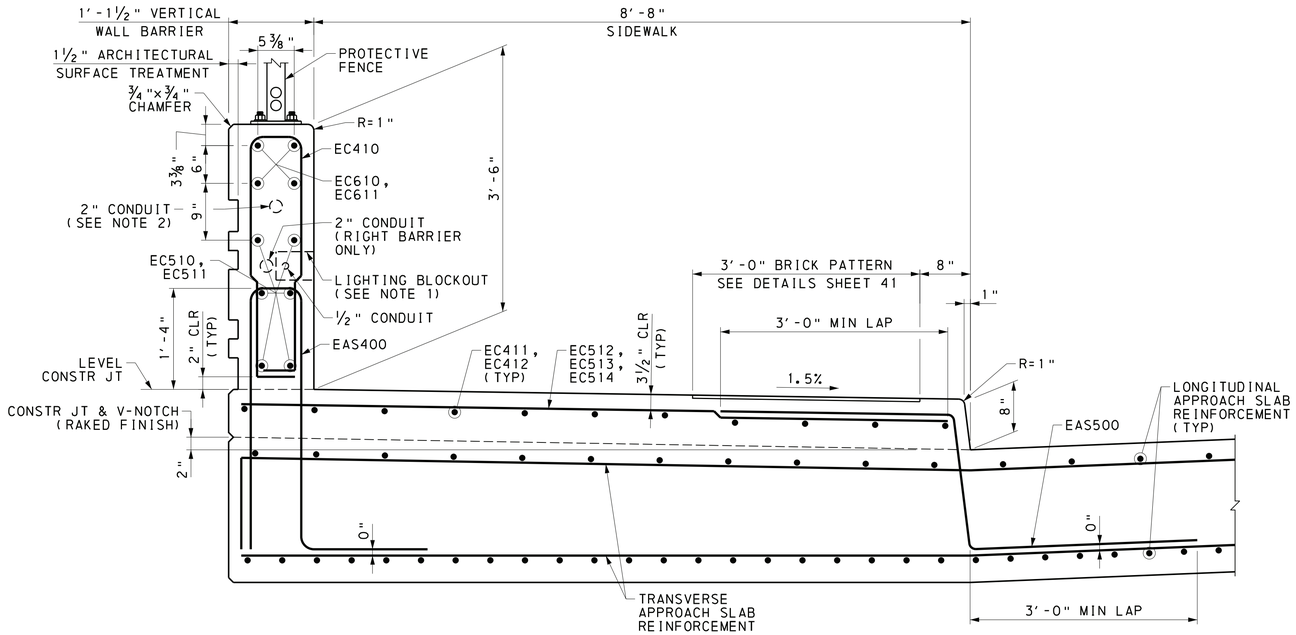
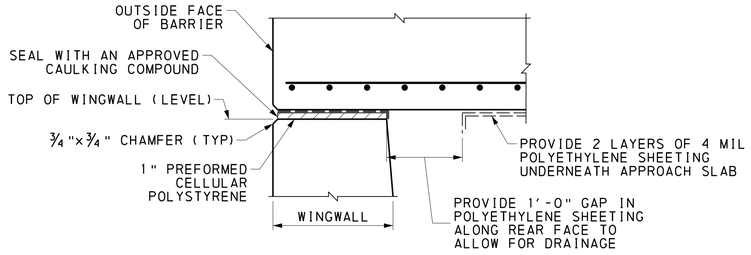


NEAR APPROACH SLAB BARRIER DETAIL

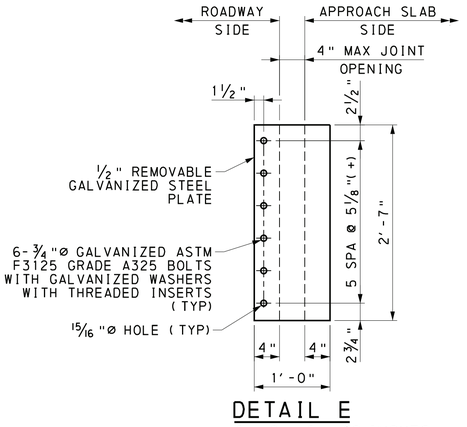
6 0 6 12 INCHES

(LEFT SIDEWALK SHOWN, RIGHT SIDEWALK SIMILAR BY OPPOSITE HAND)



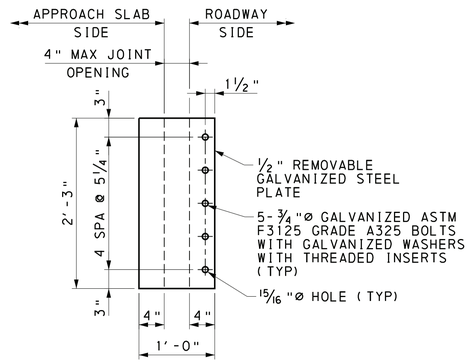
DETAIL D

6 0 6 12 INCHES



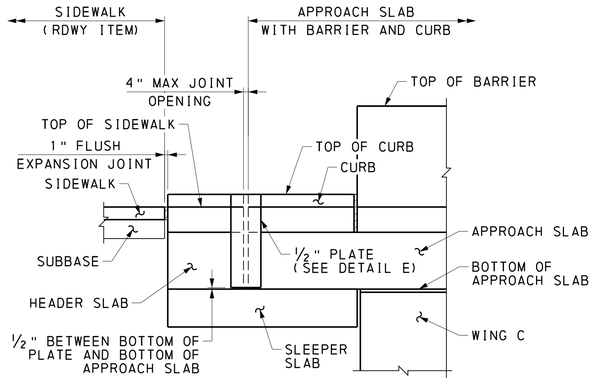
DETAIL E

6 0 6 12 INCHES



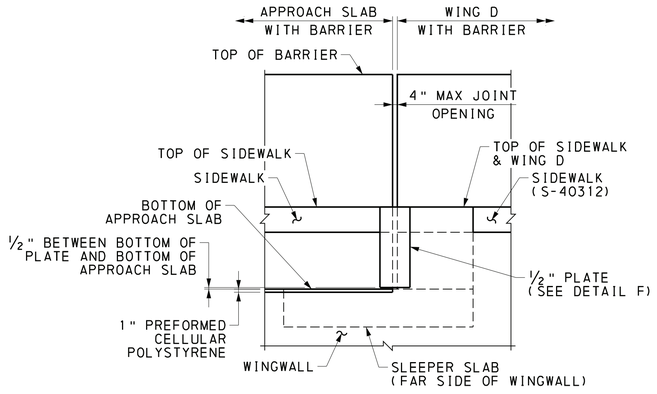
DETAIL F

6 0 6 12 INCHES



VIEW QQ-QQ

1 0 1 2 FEET



VIEW RR-RR

1 0 1 2 FEET

NOTES:

1. PROVIDE ONE ADDITIONAL EC410 BAR ON EACH SIDE OF BARRIER LIGHTING BLOCKOUT (LAP WITH EAS400). ADJUST REINFORCEMENT AS REQUIRED TO ACCOMMODATE PLACEMENT OF JUNCTION BOXES AND LIGHTING BLOCKOUTS. SEE HIGHWAY LIGHTING ALSO PLAN FOR PLACEMENT OF JUNCTION BOXES AND BARRIER LUMINAIRES.
2. PROVIDE SPECIFIED 2" CONDUIT ALONG LEFT BARRIER ONLY. (RESERVED FOR FUTURE USE BY CITY OF HARRISBURG)

REFERENCES:	SHEETS:
GENERAL PLAN	1
GENERAL NOTES	3 - 4
APPROACH SLAB PLANS	52 - 53
APPROACH SLAB SECTIONS	54 - 55
BARRIER ARCHITECTURAL DETAILS	61

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0417 MPMS/ECMS PROJ: 97828 BRKEY: 67417

HNTB

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0417 SEG 0051 OFFSET 0417
SR 3007 (19TH STREET) STA 103+30.88
OVER NORFOLK SOUTHERN RAILWAY COMPANY
1-SPAN COMPOSITE PS CONCRETE PA BULB-TEE BEAM BRIDGE
APPROACH SLAB DETAILS 1

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL JUSTIN ROBERT MCCARTHY ENGINEER PE076998

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

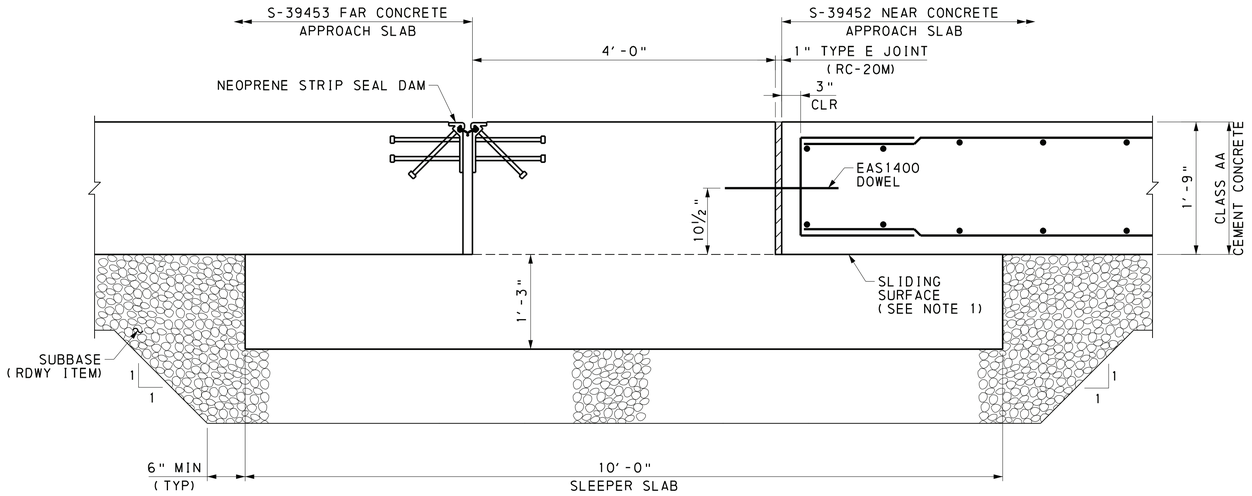
RECOMMENDED 12-6-2022

SHEET 56 OF 70

S-39452

7/22/2022
FILENAME 63016-s-brB2-opa05.dgn

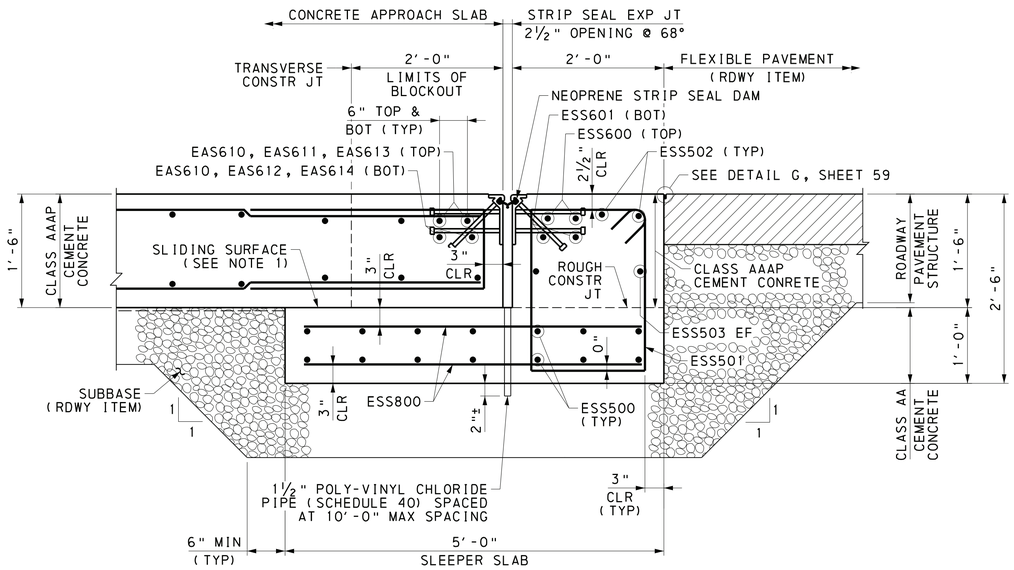
DES: MCA	DES CKD: JRM	DWG: SMZ	DWG CKD: JRM



NOTE:
SLEEPER SLAB AND S-39453 FAR APPROACH SLAB DETAILS ARE NOT INCLUDED AS PART OF THE S-39452 PLANS. REFER TO S-39453 PLANS FOR ADDITIONAL INFORMATION.

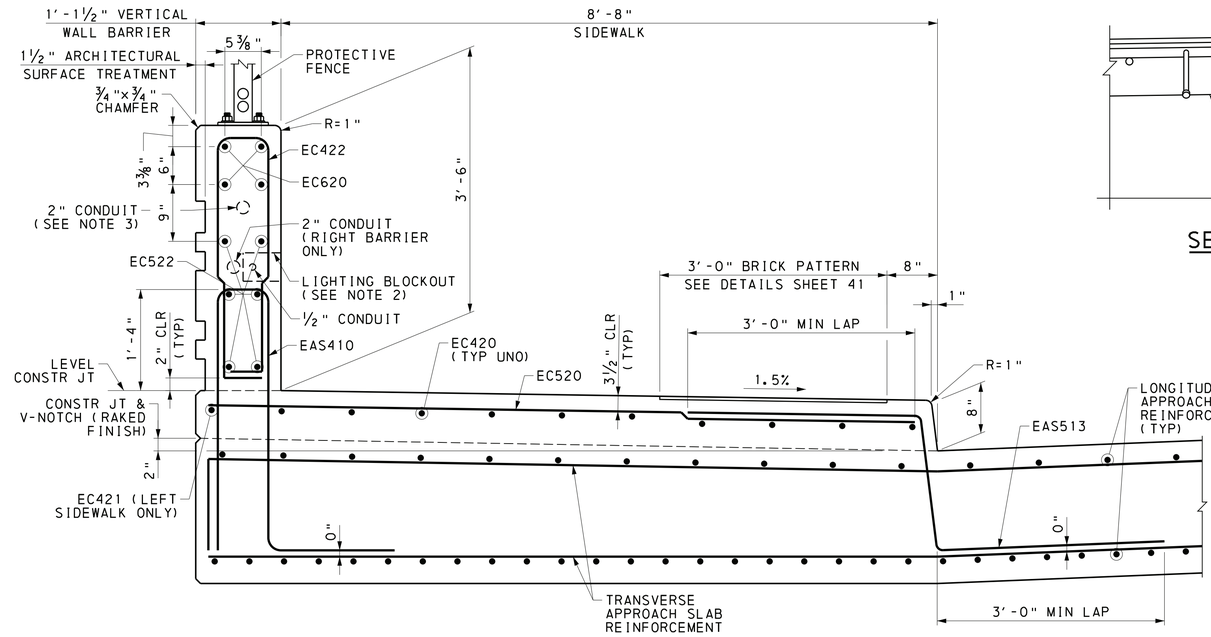
SECTION TT-TT

6 0 6 12 INCHES



SECTION LL-LL

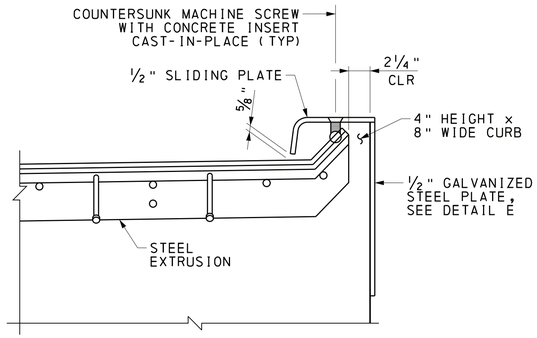
6 0 6 12 INCHES



FAR APPROACH SLAB BARRIER DETAIL

6 0 6 12 INCHES

(LEFT SIDEWALK SHOWN, RIGHT SIDEWALK SIMILAR BY OPPOSITE HAND)
(REFER TO APPROACH SLAB DETAILS 3 FOR LEFT BARRIER REINFORCEMENT. RIGHT BARRIER REINFORCEMENT SHOWN.)



SECTION SS-SS

6 0 6 INCHES

NOTES:

1. TROWEL SMOOTH AND PLACE 2 LAYERS OF 4 MIL POLYETHYLENE SHEETING AS BOND BREAKER.
2. PROVIDE ONE ADDITIONAL EC422 BAR ON EACH SIDE OF BARRIER LIGHTING BLOCKOUT (LAP WITH EAS410). ADJUST REINFORCEMENT AS REQUIRED TO ACCOMMODATE PLACEMENT OF JUNCTION BOXES AND LIGHTING BLOCKOUTS. SEE HIGHWAY LIGHTING ALSO PLAN FOR PLACEMENT OF JUNCTION BOXES AND BARRIER LUMINAIRES.
3. PROVIDE SPECIFIED 2" CONDUIT ALONG LEFT BARRIER ONLY. (RESERVED FOR FUTURE USE BY CITY OF HARRISBURG)
4. REFER TO SHEET 56 FOR DETAIL E.

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0417 MPMS/ECMS PROJ: 97828 BRKEY: 67417

REFERENCES:	SHEETS:
GENERAL PLAN	1
GENERAL NOTES	3 - 4
FAR SLEEPER SLAB PLAN	51
APPROACH SLAB PLANS	52 - 53
APPROACH SLAB SECTIONS	54 - 55
BARRIER ARCHITECTURAL DETAILS	61

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COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
JUSTIN ROBERT MCCARTHY
ENGINEER PE076998
PENNSYLVANIA

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0417 SEG 0051 OFFSET 0417
SR 3007 (19TH STREET) STA 103+30.88
OVER NORFOLK SOUTHERN RAILWAY COMPANY
1-SPAN COMPOSITE PS CONCRETE PA BULB-TEE BEAM BRIDGE
APPROACH SLAB DETAILS 2

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

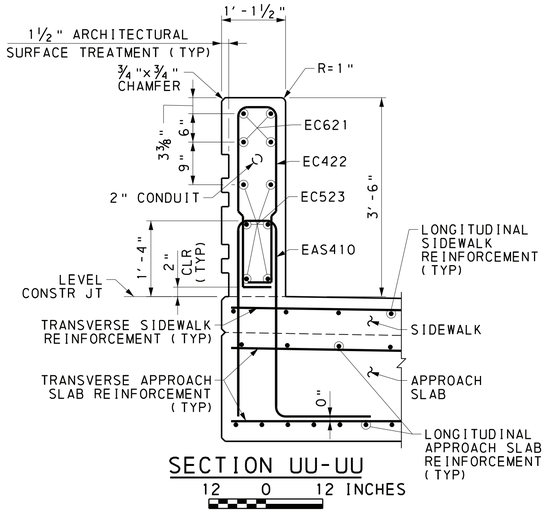
RECOMMENDED 12-6-2022

SHEET 57 OF 70

S-39452

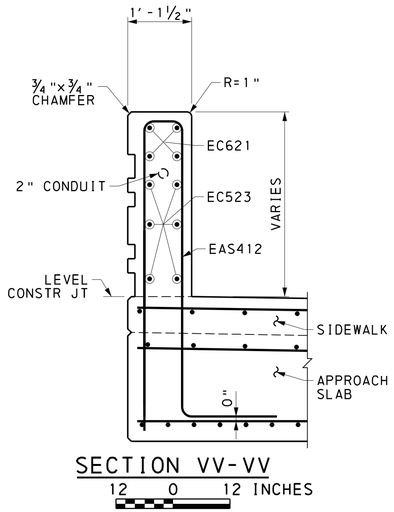
7/22/2022
FILENAME: 63016-s-br82-opa06.dgn

DES: MCA	DES CKD: JRM	DWG: SMZ	DWG CKD: JRM



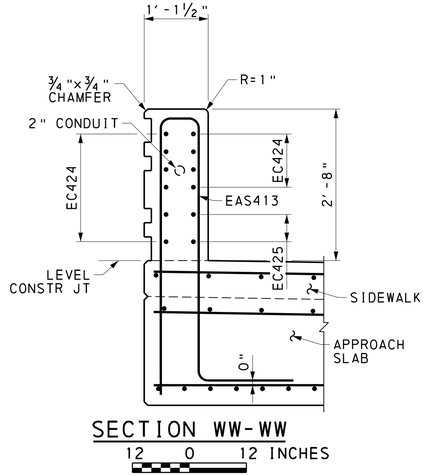
SECTION UU-UU

12 0 12 INCHES



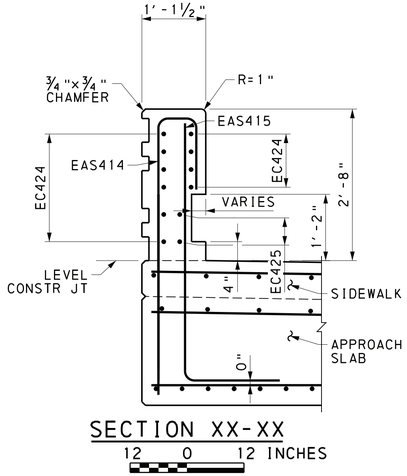
SECTION VV-VV

12 0 12 INCHES



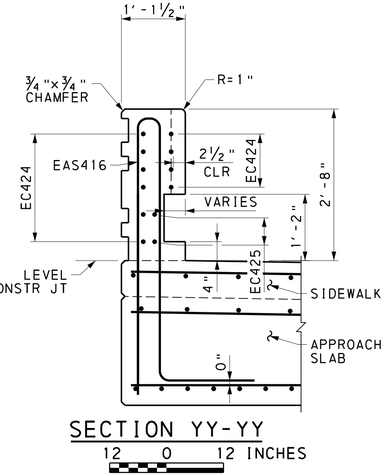
SECTION WW-WW

12 0 12 INCHES



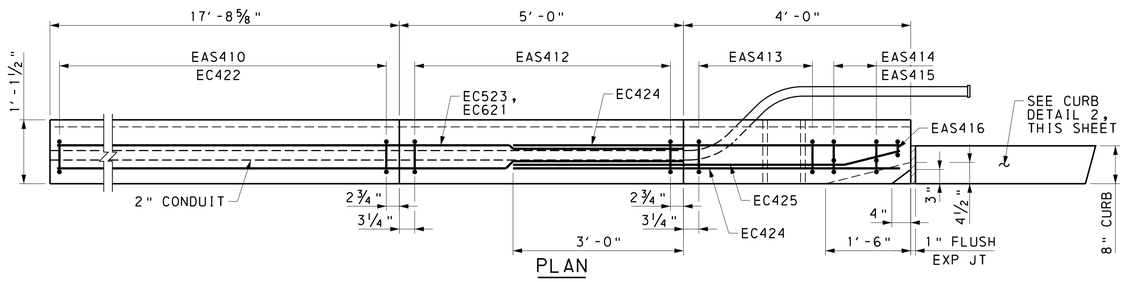
SECTION XX-XX

12 0 12 INCHES

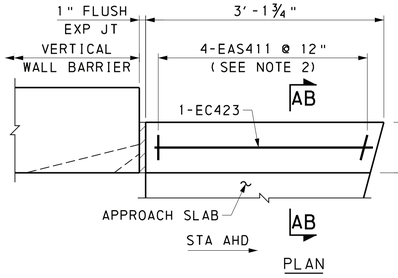


SECTION YY-YY

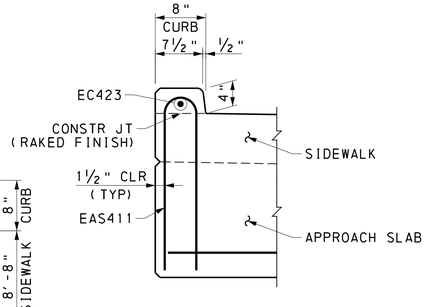
12 0 12 INCHES



PLAN

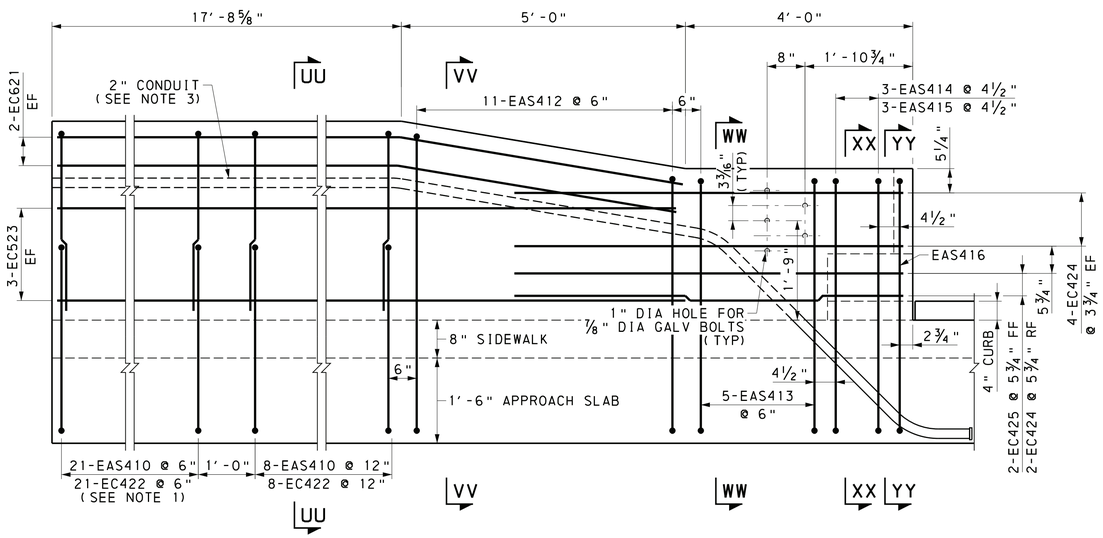


PLAN



SECTION AB-AB

(APPROACH SLAB AND SIDEWALK REINFORCEMENT NOT SHOWN FOR CLARITY)



(APPROACH SLAB AND SIDEWALK REINFORCEMENT NOT SHOWN FOR CLARITY)

ELEVATION

42" VERTICAL WALL CONCRETE BARRIER END TRANSITION

12 0 12 INCHES

CURB DETAIL 2

6 0 6 12 INCHES

NOTES:

1. PROVIDE ONE ADDITIONAL EC422 BAR ON EACH SIDE OF BARRIER LIGHTING BLOCKOUT (LAP WITH EAS410). ADJUST REINFORCEMENT AS REQUIRED TO ACCOMMODATE PLACEMENT OF JUNCTION BOXES AND LIGHTING BLOCKOUTS. SEE HIGHWAY LIGHTING ALSO PLAN FOR PLACEMENT OF JUNCTION BOXES AND BARRIER LUMINAIRES.
2. SPLAY ONE EAS411 BAR ADJACENT TO SLEEPER SLAB TO ACCOMMODATE PLACEMENT.
3. REFER TO BC-721M FOR ADDITIONAL INFORMATION.

REFERENCES:

	SHEETS:
GENERAL PLAN	1
GENERAL NOTES	3 - 4
FAR APPROACH SLAB PLAN	53
FAR APPROACH SLAB SECTIONS	55
BARRIER ARCHITECTURAL DETAILS	61

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0417 MPMS/ECMS PROJ: 97828 BRKEY: 67417

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COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0417 SEG 0051 OFFSET 0417
SR 3007 (19TH STREET) STA 103+30.88
OVER NORFOLK SOUTHERN RAILWAY COMPANY
1-SPAN COMPOSITE PS CONCRETE
PA BULB-TEE BEAM BRIDGE
APPROACH SLAB DETAILS 3

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL JUSTIN ROBERT MCCARTHY ENGINEER PE076998

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

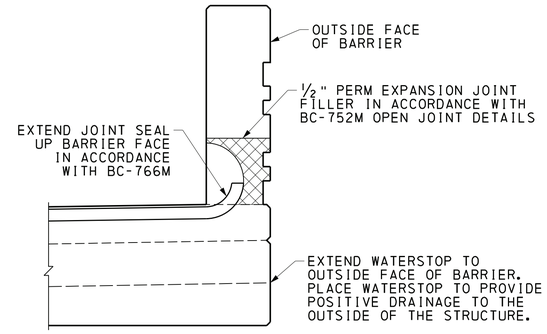
RECOMMENDED 12-6-2022

SHEET 58 OF 70

S-39452

7/22/2022
FILENAME 63016-s-brB2-opa07.dgn

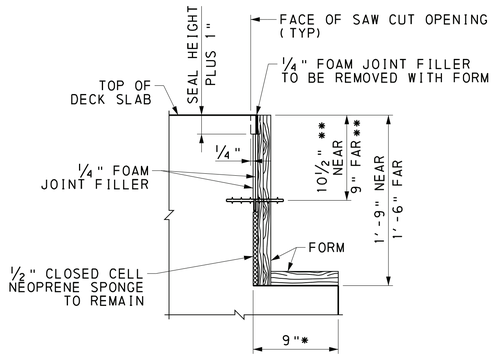
DES: MCA	DES CKD: JRM	DWG: JTM	DWG CKD: JRM



JOINT SEAL AND WATERSTOP TERMINATION DETAIL

12 0 12 INCHES

(RIGHT BARRIER SHOWN, LEFT BARRIER SIMILAR)

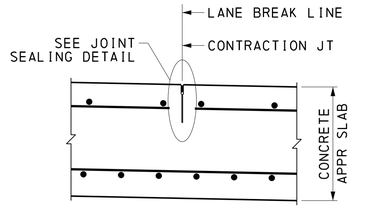


PAVING NOTCH FORMING DETAIL

NOT TO SCALE

* MEASURED NORMAL TO ABUTMENT

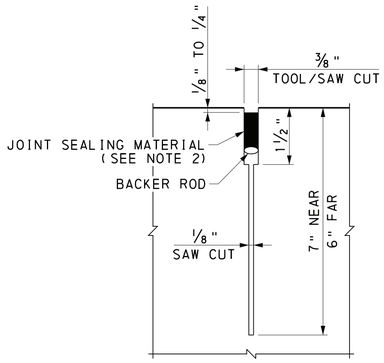
** AN EXPANSION WATERSTOP (TYPE E1 OR E2), IN ACCORDANCE WITH BC-735M, MUST BE INSTALLED AT MID-DEPTH OF APPROACH SLAB. PLACE WATERSTOP TO PROVIDE POSITIVE DRAINAGE TO THE OUTSIDE OF THE STRUCTURE.



CONTRACTION JOINT DETAIL

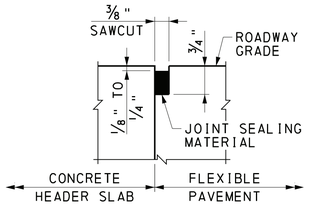
6 0 6 12 INCHES

NOTE: TOP REINFORCEMENT NOT CONTINUOUS THRU JOINT. BOTTOM REINFORCEMENT CONTINUOUS THRU JOINT.



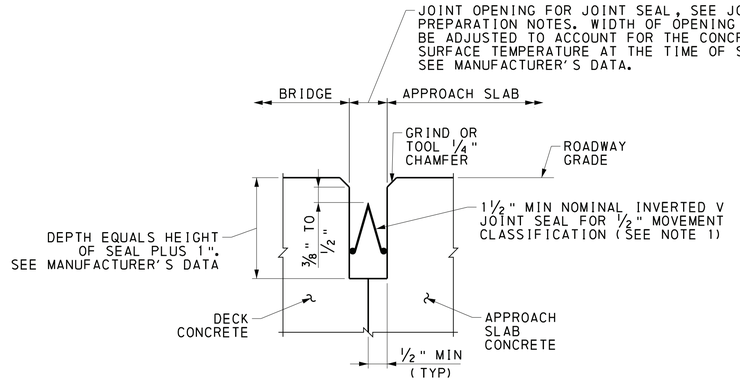
JOINT SEALING DETAIL

NOT TO SCALE



DETAIL G

NOT TO SCALE



DETAIL C

NOT TO SCALE

JOINT PREPARATION NOTES:

1. THE JOINT OPENING IS TO BE FORMED BY A TWO-STAGE SAWING OPERATION WHERE ACCESSIBLE. WHERE ACCESSIBILITY IS LIMITED, THE JOINT OPENING SHALL BE FORMED. THE FIRST SAW CUT IS DESIGNED TO CONTROL CRACKING. THE SECOND SAW CUT IS MADE USING A DOUBLE-BLADED WATER-COOLED SAW CAPABLE OF HOLDING A TOLERANCE OF ±1/16" TO CREATE THE PROPER OPENING FOR THE PREFORMED NEOPRENE COMPRESSION SEAL OR INVERTED V JOINT SEAL.
2. WATER BLAST OPENING IMMEDIATELY FOLLOWING SAW CUTTING OPERATION TO REMOVE ANY RESIDUAL SLURRY BEFORE IT DRIES.
3. THE DEPTH OF THE JOINT OPENING EQUALS THE HEIGHT OF THE SEAL PLUS 1". THE WIDTH OF THE SECOND SAW CUT SHOULD BE ADJUSTED TO ACCOUNT FOR THE CONCRETE SURFACE TEMPERATURE AT THE TIME OF SAWING, SEE MANUFACTURER'S PRODUCT INFORMATION.
4. BEFORE INSTALLING THE SEAL, ABRASIVE BLAST THE BONDING SURFACES TO THOROUGHLY CLEAN THE JOINT OPENING AND REMOVE FOREIGN MATERIAL, INCLUDING BROKEN CONCRETE. USE WATER AND OIL FREE COMPRESSED AIR TO BLOW OUT RESIDUE FROM THE SEAL GROOVE OPENING.
5. PREPARE BONDING SURFACES AND INSTALL JOINT SEAL IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
6. DO NOT EXCEED 3% ELONGATION OF THE SEAL, IF STRETCHING OCCURS.

NOTES:

1. USE ONLY APPROVED SEALS, AS LISTED IN BULLETIN 15. INSTALL JOINT SEALS TO A UNIFORM DEPTH WITH THE TOP OF THE SEAL FROM ¼" TO ½" BELOW THE LEVEL OF THE CHAMFER. MAKE THE TOP EDGES OF THE CONTACT SURFACES ON BOTH SIDES OF THE SEAL AT THE SAME ELEVATION.
2. FOR JOINT MATERIAL, REFER TO PUBLICATION 408 SECTIONS 501.2 AND 705.4(a), (b), OR (d).

REFERENCES:	SHEETS:
GENERAL PLAN	1
GENERAL NOTES	3 - 4
DIAPHRAGM DETAILS	42 - 48
FAR SLEEPER SLAB PLAN	51
APPROACH SLAB PLANS	52 - 53
APPROACH SLAB SECTIONS	54 - 55

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0417 MPMS/ECMS PROJ: 97828 BRKEY: 67417

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COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — JUSTIN ROBERT MCCARTHY — ENGINEER PE076998

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0417 SEG 0051 OFFSET 0417
SR 3007 (19TH STREET) STA 103+30.88
OVER NORFOLK SOUTHERN RAILWAY COMPANY
1-SPAN COMPOSITE PS CONCRETE PA BULB-TEE BEAM BRIDGE
APPROACH SLAB DETAILS 4

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

RECOMMENDED 12-6-2022

SHEET 59 OF 70

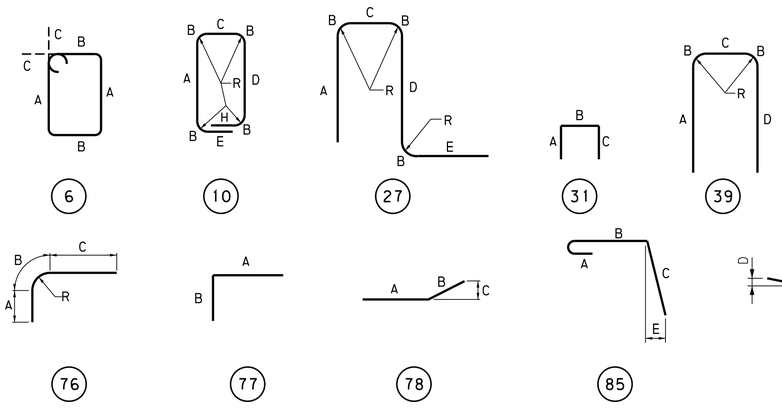
S-39452

7/22/2022
FILENAME: 63016-s-brB2-aps08.dgn

DES: MCA	DES CKD: JRM	DWG: SMZ	DWG CKD: JRM

MARK	SIZE	NO REQ'D	LENGTH	TYPE	A	B	C	D	E	REMARKS
NEAR APPROACH SLAB										
EC410	4	122	7'-10"	10	2'-9"	4"	3"	2'-9"	5 1/2"	H = 3", R = 2"
EC411	4	22	21'-9"	STR						
EC412	4	11	33'-2" TO	STR						VARY 1 1/8" EACH
			34'-1 1/4"							
EC510	5	6	41'-3"	STR						
EC511	5	6	33'-2"	STR						
EC512	5	14	9'-5 3/4" TO	STR						VARY 1/4" EACH
			9'-9"							
EC513	5	58	9'-9"	STR						
EC514	5	7	9'-6" TO	STR						VARY 1/2" EACH
			9'-9"							
EC610	6	4	41'-3"	STR						
EC611	6	4	33'-2"	STR						
EAS400	4	122	9'-9"	27	3'-7"	4"	3"	3'-5"	1'-6"	R = 2"
EAS500	5	79	7'-9 1/2"	113	3'-0"	1'-9 1/2"	3'-0"	1/2"	2 3/4"	F = 1 1/2"
EAS501	5	30	33'-0"	STR						
EAS502	5	12	28'-0" TO	77	26'-9" TO	1'-3"				VARY A 1 3/8" EACH
			28'-6 7/8"		27'-3 7/8"					
EAS503	5	6	21'-11 1/4" TO	STR						VARY 1 1/8" EACH
			22'-4 7/8"							
EAS504	5	69	28'-7"	77	27'-4"	1'-3"				
EAS505	5	35	22'-5"	STR						
EAS506	5	25	35'-11"	STR						
EAS507	5	30	38'-3"	STR						
EAS508	5	170	10'-11"	31	4'-10"	1'-3"	4'-10"			
EAS700	7	86	41'-2"	STR						
EAS1001	10	59	33'-0"	STR						
EAS1002	10	49	35'-11"	STR						
EAS1003	10	59	38'-3"	STR						
EAS1400	14	72	1'-6"	STR						DOWEL
FAR APPROACH SLAB										
EC420	4	21	29'-3"	STR						
EC421	4	1	26'-4"	STR						
EC422	4	83	7'-10"	10	2'-9"	4"	3"	2'-9"	5 1/2"	H = 3", R = 2"
EC423	4	1	2'-8"	STR						
EC424	4	10	6'-10"	STR						
EC425	4	2	6'-10 5/8"	78	5'-5 5/8"	1'-5"	4 1/8"			
EC426	4	20	1'-8"	STR						
EC520	5	58	9'-9"	STR						
EC521	5	4	9'-3"	STR						
EC522	5	6	29'-3"	STR						
EC523	5	6	22'-7"	STR						
EC524	5	3	8'-1"	STR						
EC525	5	3	9'-3"	STR						
EC620	6	4	29'-3"	STR						
EC621	6	4	22'-7"	78	17'-6"	5'-1"	10"			
EAS410	4	83	9'-3"	27	3'-4"	4"	3"	3'-2"	1'-6"	R = 2"
EAS411	4	4	3'-10"	39	1'-7"	4"	0"	1'-7"		R = 2"
EAS412	4	11	10'-11 1/8" TO	27	4'-3" TO	2 3/8"	5"	4'-2" TO	1'-6"	VARY A & D 1" EACH, R = 1"
			12'-7 1/8"		5'-1"			5'-0"		
EAS413	4	5	10'-11 1/8"	27	4'-3"	2 3/8"	5"	4'-2"	1'-6"	R = 1"
EAS414	4	3	6'-1 1/4"	39	4'-3"	2 3/8"	5"	1'-0 1/2"		R = 1"
EAS415	4	3	5'-11 3/8"	76	1'-6"	2 3/8"	4'-3"			R = 1"
EAS416	4	1	10'-7 3/8"	27	4'-3"	3 1/8"	0"	4'-1"	1'-6"	R = 1 1/2"

MARK	SIZE	NO REQ'D	LENGTH	TYPE	A	B	C	D	E	REMARKS
FAR APPROACH SLAB CONTINUED										
EAS510	5	57	28'-4"	77	27'-4"	1'-0"				
EAS511	5	30	22'-5"	STR						
EAS512	5	3	27'-11"	77	26'-11"	1'-0"				
EAS513	5	62	7'-6 1/2"	113	3'-0"	1'-6 1/2"	3'-0"	1/2"	2 1/4"	F = 1 1/2"
EAS514	5	76	29'-3"	STR						
EAS515	5	1	26'-4"	STR						
EAS516	5	77	7'-4"	31	3'-2"	1'-0"	3'-2"			
EAS610	6	4	22'-5"	STR						
EAS611	6	2	27'-11"	77	26'-11"	1'-0"				
EAS612	6	2	26'-11"	STR						
EAS613	6	2	28'-4"	77	27'-4"	1'-0"				
EAS614	6	2	27'-4"	STR						
EAS710	7	62	41'-2"	STR						
EAS1010	10	151	29'-3"	STR						
EAS1011	10	1	26'-4"	STR						
ESS400	4	3	3'-10"	39	1'-7"	4"	0"	1'-7"		R = 2"
ESS500	5	28	39'-3"	STR						
ESS501	5	75	8'-0"	6	2'-0 1/2"	1'-6"	5 1/2"			
ESS502	5	4	40'-9"	77	39'-8"	1'-1"				
ESS503	5	4	39'-8"	STR						
ESS504	5	6	5'-4"	85	7"	1'-9"	3'-0"		5"	
ESS600	6	4	41'-0"	77	39'-11"	1'-1"				
ESS601	6	4	39'-11"	STR						
ESS800	8	150	4'-8"	STR						



Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0417 MPMS/ECMS PROJ: 97828 BRKEY: 67417

NOTES:

1. "E" PREFIX IN BAR MARK DENOTES EPOXY COATED BARS.
2. ALL DIMENSIONS ARE OUT TO OUT OF BAR EXCEPT "A" & "C" ON STANDARD 135° AND 180° HOOKS, UNLESS NOTED.
3. FOR REINFORCEMENT BAR FABRICATION DETAILS, REFER TO STANDARD DRAWING BC-736M.
4. FIGURES IN CIRCLE REPRESENT BAR TYPES.
5. "J" DIMENSIONS ON 180° HOOKS ARE SHOWN ONLY WHERE NECESSARY TO RESTRICT HOOK SIZE, OTHERWISE STANDARD HOOKS ARE TO BE USED.
6. RADIUS, "R" IS TO THE INSIDE OF THE BAR.
7. REINFORCEMENT BAR SCHEDULE IS FOR INFORMATION ONLY. VERIFY INFORMATION BEFORE FABRICATION.

REFERENCES:

	SHEETS:
GENERAL NOTES	3 - 4
APPROACH SLAB DRAWINGS	51 - 59

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COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0417 SEG 0051 OFFSET 0417
SR 3007 (19TH STREET) STA 103+30.88
OVER NORFOLK SOUTHERN RAILWAY COMPANY

1-SPAN COMPOSITE PS CONCRETE
PA BULB-TEE BEAM BRIDGE

APPROACH SLAB REBAR SCHEDULE

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL
JUSTIN ROBERT MCCARTHY
ENGINEER
PE076998

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

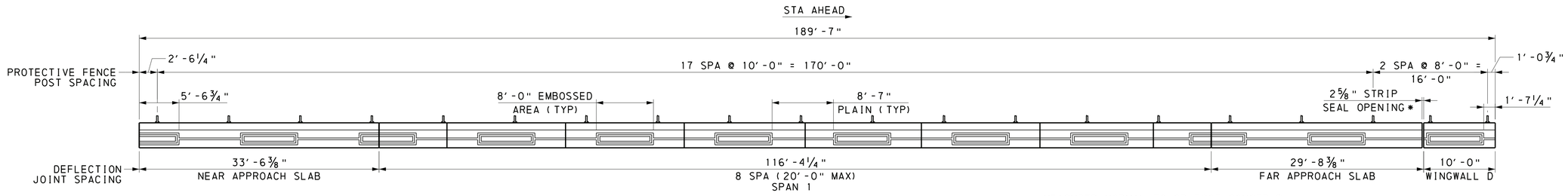
RECOMMENDED 12-6-2022

SHEET 60 OF 70

S-39452

7/22/2022
FILENAME: 63016-s-brB2-bar05.dgn

DES: MCA	DES CKD: JRM	DWG: SMZ	DWG CKD: JRM

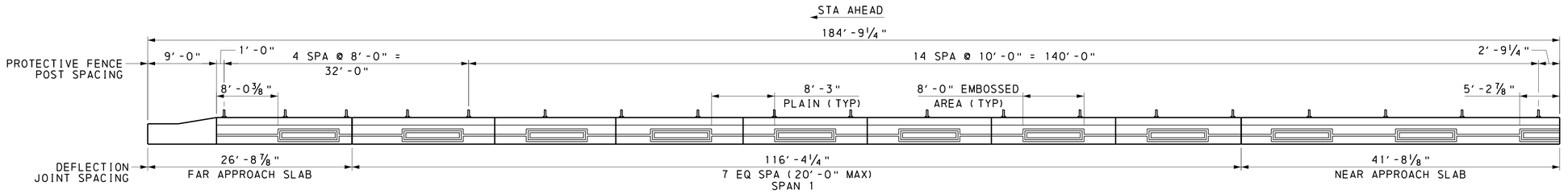


* MEASURED NORMAL TO SR 3007 CONSTR ℄

RIGHT BARRIER ELEVATION

2 0 4 8 FEET

(LOOKING AT OUTSIDE FACE OF BARRIER)



* MEASURED NORMAL TO SR 3007 CONSTR ℄

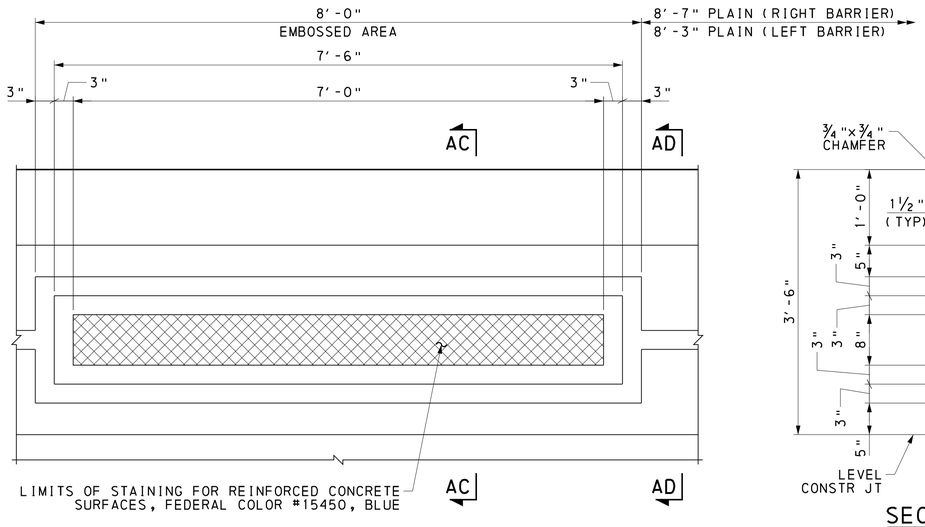
LEFT BARRIER ELEVATION

2 0 4 8 FEET

(LOOKING AT OUTSIDE FACE OF BARRIER)

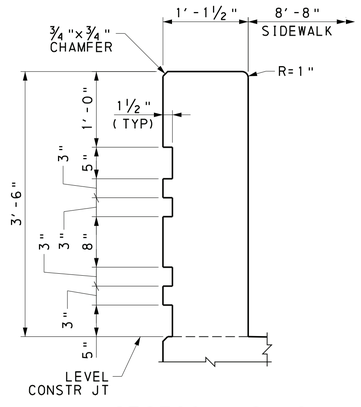
NOTES:

1. PROVIDE 9" MINIMUM DISTANCE BETWEEN CENTERLINE OF PROTECTIVE FENCE POST AND ADJACENT DEFLECTION JOINTS.



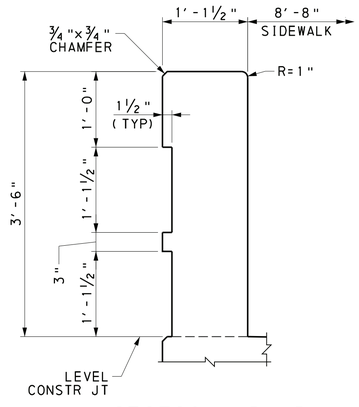
EMBOSSED SQUARE DETAIL

6 0 6 12 INCHES



SECTION AC-AC

6 0 6 12 INCHES



SECTION AD-AD

6 0 6 12 INCHES

(LEFT BARRIER SHOWN, RIGHT BARRIER SIMILAR BY OPPOSITE HAND)

REFERENCES:	SHEETS:
GENERAL NOTES	3 - 4
BARRIER & SIDEWALK DETAILS	41
APPROACH SLAB DETAILS	56 - 59
PROTECTIVE FENCE DETAILS	62

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0417 MPMS/ECMS PROJ: 97828 BRKEY: 67417

HNTB

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
JUSTIN ROBERT MCCARTHY
ENGINEER
PE076998

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0417 SEG 0051 OFFSET 0417
SR 3007 (19TH STREET) STA 103+30.88
OVER NORFOLK SOUTHERN RAILWAY COMPANY
1-SPAN COMPOSITE PS CONCRETE
PA BULB-TEE BEAM BRIDGE
BARRIER ARCHITECTURAL DETAILS

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

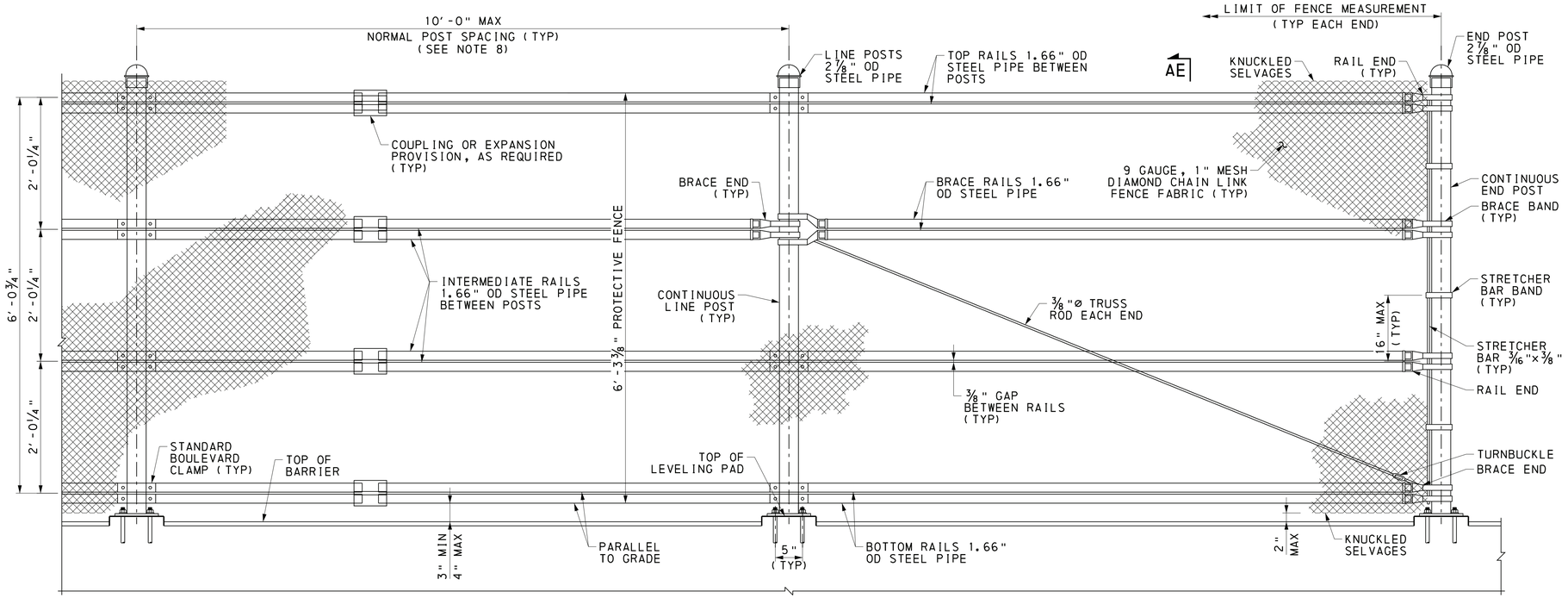
RECOMMENDED 12-6-2022

SHEET 61 OF 70

S-39452

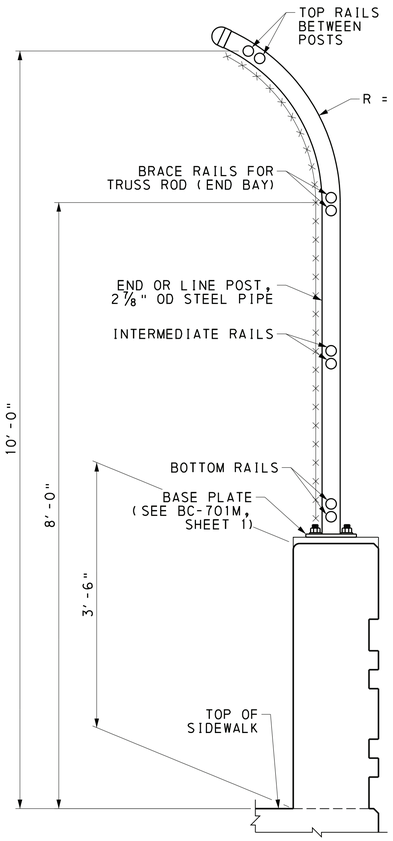
7/22/2022
FILENAME: 63016-s-brB2-s1b03.dgn

DES: MCA	DES CKD: JRM	DWG: SMZ	DWG CKD: JRM



PROTECTIVE FENCE ELEVATION

6 0 6 12 INCHES



SECTION AE-AE

6 0 6 12 INCHES

NOTES:

1. REFER TO BC-701M FOR ADDITIONAL DETAILS.
2. WEST PROTECTIVE FENCE TO INITIATE AT BEGINNING OF THE S-39453 STRUCTURE AND TERMINATE PRIOR TO S-39452 APPROACH SLAB BARRIER TRANSITION.
3. EAST PROTECTIVE FENCE TO INITIATE AT BEGINNING OF THE S-39453 STRUCTURE AND TERMINATE AT END OF S-39452 FAR APPROACH SLAB.
4. S-39452 LIMIT OF PROTECTIVE FENCE MEASUREMENT IS QUANTIFIED BETWEEN S-39452 BEGIN NEAR APPROACH SLAB AND S-39452 END FAR APPROACH SLAB.
5. INCLUDE ANTI-CLIMB SHIELD AT THE FAR APPROACH SLAB NORTHWEST AND NORTHEAST ENDS (2 TOTAL).
6. REFER TO SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION.
7. COORDINATE PROTECTIVE FENCE ANCHOR BOLT LOCATIONS WITH PROTECTIVE FENCE FABRICATOR, BARRIER LUMINAIRES, AND JUNCTION BOXES. SEE HIGHWAY LIGHTING ALSO PLAN FOR LOCATIONS OF BARRIER LUMINAIRES AND JUNCTION BOXES.
8. REFER TO SHEET 61 FOR PROTECTIVE FENCE POST LOCATIONS AND SPACING.

REFERENCES:	SHEETS:
GENERAL PLAN	1
TYPICAL SECTION & LOAD RATINGS	2
GENERAL NOTES	3 - 4
BARRIER & SIDEWALK DETAILS	41
APPROACH SLAB DETAILS	56 - 59
BARRIER ARCHITECTURAL DETAILS	61

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0417 MPMS/ECMS PROJ: 97828 BRKEY: 67417

HNTB

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
JUSTIN ROBERT MCCARTHY
ENGINEER
PE076998

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

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0417 SEG 0051 OFFSET 0417
SR 3007 (19TH STREET) STA 103+30.88
OVER NORFOLK SOUTHERN RAILWAY COMPANY
1-SPAN COMPOSITE PS CONCRETE
PA BULB-TEE BEAM BRIDGE
PROTECTIVE FENCE DETAILS

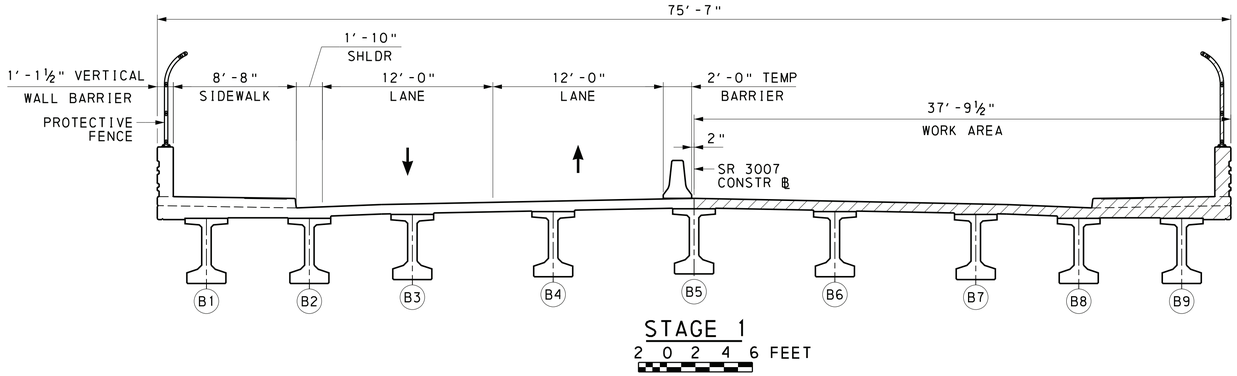
RECOMMENDED 12-6-2022

SHEET 62 OF 70

S-39452

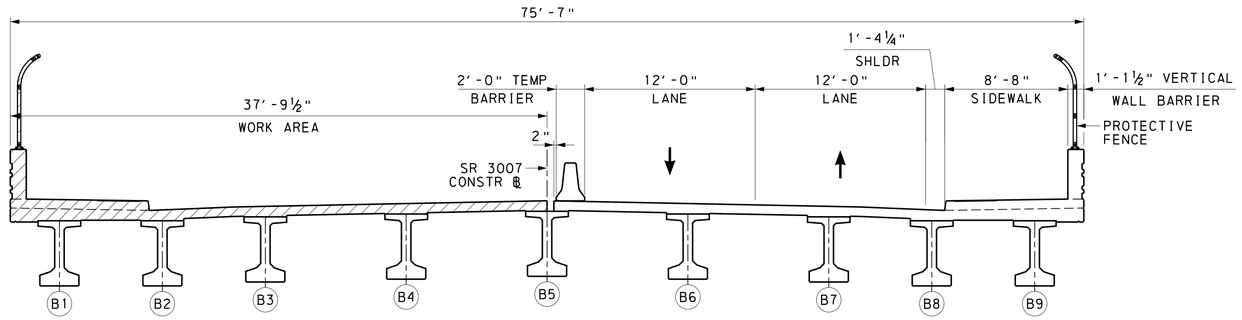
DES: MCA	DES CKD: JRM	DWG: SMZ	DWG CKD: JRM

7/22/2022
FILENAME: 63016-s-brB2-sib04.dgn



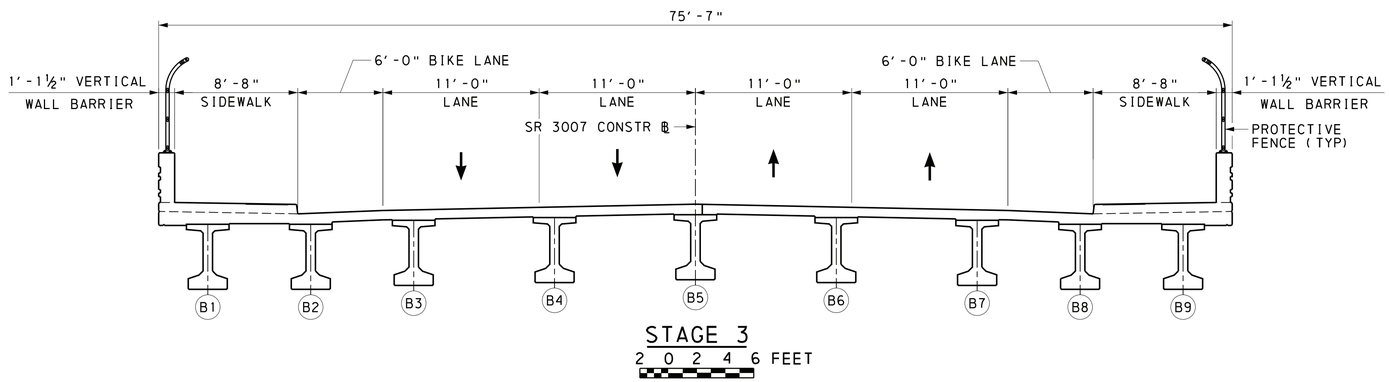
STAGE 1

2 0 2 4 6 FEET



STAGE 2

2 0 2 4 6 FEET



STAGE 3

2 0 2 4 6 FEET

NOTES:

1. THE INTENT OF THIS SHEET IS TO DESCRIBE AN AVAILABLE STAGING CONCEPT FOR FUTURE REDECKING OF THE BRIDGE. IT IS NOT TO BE USED FOR THE CONSTRUCTION DEPICTED IN THESE PLANS.
2. A FULL CLOSURE WITH A LOCAL DETOUR IS THE PREFERRED ALTERNATIVE COMPARED TO STAGED REDECKING.

SUGGESTED REDECKING SEQUENCE:

STAGE 1: PLACE TRAFFIC (BI-DIRECTIONAL) ON THE SOUTHBOUND SIDE OF THE BRIDGE. REMOVE AND REPLACE DECK AND BARRIER ON NORTHBOUND PORTION.

STAGE 2: PLACE TRAFFIC ON NEWLY CONSTRUCTED NORTHBOUND PORTION OF BRIDGE (BI-DIRECTIONAL). REMOVE AND REPLACE DECK AND BARRIER ON SOUTHBOUND PORTION.

STAGE 3: OPEN BRIDGE TO TRAFFIC.

LEGEND:

LIMITS OF REMOVAL & RECONSTRUCTION

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0417 MPMS/ECMS PROJ: 97828 BRKEY: 67417

HNTB

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL JUSTIN ROBERT MCCARTHY ENGINEER PE076998

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0417 SEG 0051 OFFSET 0417
SR 3007 (19TH STREET) STA 103+30.88
OVER NORFOLK SOUTHERN RAILWAY COMPANY
1-SPAN COMPOSITE PS CONCRETE
PA BULB-TEE BEAM BRIDGE
FUTURE REDECKING PLAN

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

RECOMMENDED 12-6-2022

SHEET 63 OF 70

S-39452

DES: MCA	DES CKD: JRM	DWG: SMZ	DWG CKD: JRM

7/22/2022
FILENAME: 63016-s-br82-typ03.dgn

GENERAL NOTES

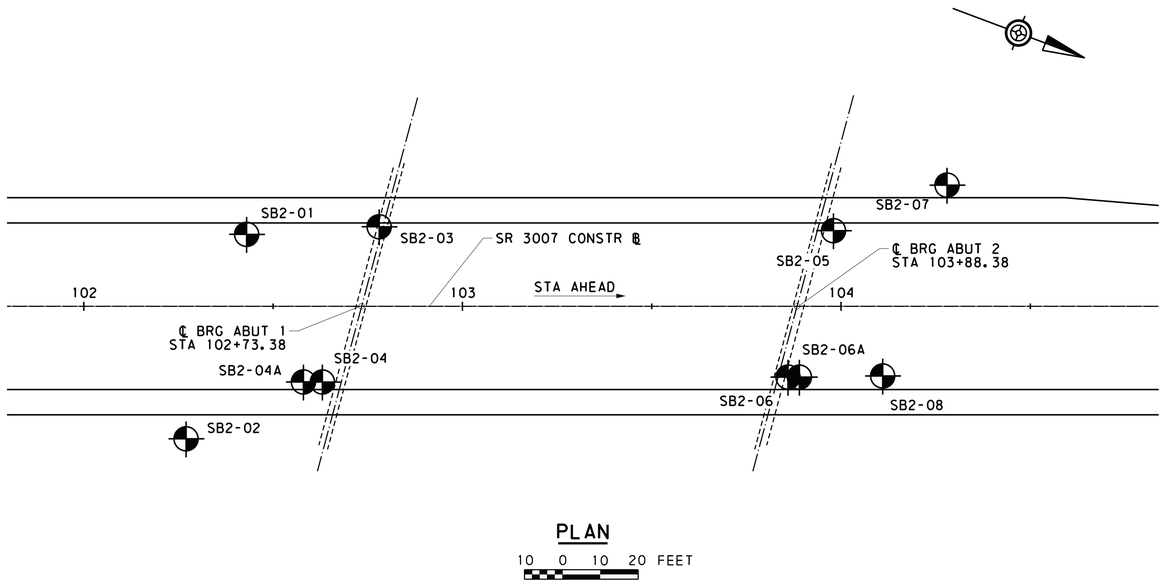
THIS SHEET IS INCLUDED FOR THE CONVENIENCE OF THE DEPARTMENT. REFER TO PUBLICATION 408 SECTION 102.05 FOR FURTHER INFORMATION.

FOR ADDITIONAL SOIL AND ROCK DESCRIPTIONS SEE PUBLICATION 222.

THE BORING LOGS AND RELATED INFORMATION DEPICT SUBSURFACE CONDITIONS ONLY AT THE SPECIFIC LOCATIONS AND DATES INDICATED. SUBSURFACE CONDITIONS MAY DIFFER FROM THE CONDITIONS REPORTED AT THE SPECIFIC LOCATIONS. ALSO, THE PASSAGE OF TIME MAY RESULT IN A CHANGE OF CONDITIONS AT THE BORING LOCATIONS.

LEGEND

PP	POCKET PENETROMETER
T	TORVANE
NTS	NOT TO SCALE
BOCC	BOTTOM OF CLASS C CONCRETE
BFE	BOTTOM OF FOOTING ELEVATION
BCA	BOTTOM OF COARSE AGGREGATE
TOR	ESTIMATED TOP OF ROCK ELEVATION



PLAN

10 0 10 20 FEET

THE DESCRIPTIONS OF THE MATERIALS ENCOUNTERED HAVE BEEN VERIFIED.

ME

THE SUBSURFACE EXPLORATION DATA THAT ARE PRESENTED ON THESE DRAWINGS (INCLUDING BORING LOGS, EARTH SAMPLES, ROCK CORES, CLASSIFICATION OF MATERIALS AND DEPTH OF BORINGS) ACCURATELY REPRESENT THE CONDITIONS ENCOUNTERED BY THE TEST BORING PROGRAM AT EACH BORING LOCATION.

GEOTECHNICAL ENGINEER/ENGINEERING GEOLOGIST — DATE: 6/24/2021

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0417 MPMS/ECMS PROJ: 97828 BRKEY: 67417

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0417 SEG 0051 OFFSET 0417
SR 3007 (19TH STREET) STA 103+30.88
OVER NORFOLK SOUTHERN RAILWAY COMPANY
1-SPAN COMPOSITE PS CONCRETE
PA BULB-TEE BEAM BRIDGE
STRUCTURE BORINGS - 1

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL MARK T. EVANS GEOLOGIST PG005251

\\fileserver\SCI-NET\01Projects\36002 (SR 83, Sec 079 - River to Eisenhower)\SR 83, Sec 079\GEOTECHNICAL\CADD\WORKING FILES\TEST BORING SHEETS\B2\36002-079_TB_B2.dgn
3/4/2022 11:33:25 AM rrichards

SUBSTRUCTURE UNIT:
WINGWALL B

LOG 1 OF 1

BORING NUMBER:	BORING LOCATION	START:	HAMMER:
SB2-01	STATION: 102+43.0 OFFSET: 19.0 FT. LT.	11/17/2020 9:15 AM FINISH: 11/17/2020 2:00 PM	AUTOMATIC EFFICIENCY: 0.8 ERa

DRILLING METHOD AND EQUIPMENT:	SIZE OF CORE:	VERTICAL SCALE:	TOP OF BORING ELEVATION:
DOUBLE TUBE WIRE LINE-NQ, AUTOMATIC, ACKER XLS TRACK MOUNT RIG	2.000 IN.	0 FT. 5 FT.	386.6 FT.

DRILLING INSPECTOR: JEREMY COOK
DRILLER & DRILLING COMPANY: JASON GROFT
NAVARRO & WRIGHT

▽ 0 HR. READING - ELAPSED TIME: El. 353.9 ft. - 0.0 hr.
▼ 24 HR. READING - ELAPSED TIME: El. 346.3 ft. - 190.3 hr.

ELEV.	GRAPHIC	MATERIAL DESCRIPTION	AASHTO/ USCS	SAMPLE DEPTH	SAMPLE NO.	BLOW COUNT / PP/T TSF	N 60 / %RQD	REC (ft.)	REC (%)	◇ RQD % ◇ ⊙ Soil/Rock Rec. % ⊙ ▲ SPT (N_{60}) ▲
385		**BITUMINOUS CONCRETE.** 0.8'/El. 385.8		1.5						20 40 60 80 / 10 20 30 40
		CEMENT CONCRETE. 1.2'/El. 385.4	a-1-b / gm	3.0	S-1	8-9-6	20	1.1	73	
		GRAVEL, some Sand, little Silt, loose to medium dense. dry to damp, homogeneous, poorly graded, angular, gray, fill. 7.5'/El. 379.1		4.5	S-2	6-3-9	16	0.7	47	
380				6.0	S-3	7-3-4	9	0.6	40	
				7.5	S-4	19-7-3	13	1.0	67	
		SILT, little Sand, very loose to medium dense, moist, homogeneous, orange brown, fill.	a-4 / ml	9.0	S-5	3-2-3	7	1.0	67	
				10.5	S-6	2-3-3	8	0.7	47	
				12.0	S-7	WOH-1.5	2	1.1	73	
				13.5	S-8	WOH-1-4	7	1.4	93	
		15.0'/El. 371.6		15.0	S-9	2-6-6	16	1.2	80	
375		**CLAY**, some Sand, little Gravel, stiff to hard, moist, homogeneous, poorly graded, angular, medium plastic fines, orange brown and black, fill.	a-6 / cl	16.5	S-10	3-6-8 / 2.00	19	1.4	93	
				18.0	S-11	9-13-15 / 4.00	37	1.3	87	
				19.5	S-12	8-9-15 / 4.50	32	1.4	93	
				21.0	S-13	7-10-12 / 4.50	29	1.4	93	
		24.0'/El. 362.6		22.5	S-14	9-8-14	29	1.5	100	
		CLAY, little Sand, little Silt, very stiff to hard, damp, homogeneous, poorly graded, sub-rounded to rounded, medium plastic fines, orange brown, residuum.	a-6 / cl	24.0	S-15	12-13-14	36	1.3	87	
				25.5	S-16	5-6-5	15	1.4	93	
				27.0	S-17	3-6-6	16	1.2	80	
				28.5	S-18	3-6-11 / 4.25	23	1.4	93	
		29.9'/El. 356.7		29.9	S-19	3-8-50/.4' / 4.00	77	1.1	79	
360		**LIMESTONE**, light gray, dull luster, weathered to slightly weathered, indistinct bedding, close to medium spacing, flat to sheer dip, open joints.		32.0	R-1		76%	2.0	95	
				36.0	R-2		88%	4.0	100	
				41.0	R-3		56%	4.9	98	
				46.0	R-4		60%	3.0	60	
355					R-5		90%	4.0	100	
350										
345										
340		50.0'/El. 336.6								

BFE 358.00
BOCC 356.70
TOR 356.70

SUBSTRUCTURE UNIT:
WINGWALL A

LOG 1 OF 1

BORING NUMBER:	BORING LOCATION	START:	HAMMER:
SB2-02	STATION: 102+27.0 OFFSET: 35.0 FT. RT.	11/23/2020 1:25 PM FINISH: 11/24/2020 10:38 AM	AUTOMATIC EFFICIENCY: 0.8 ERa

DRILLING METHOD AND EQUIPMENT:	SIZE OF CORE:	VERTICAL SCALE:	TOP OF BORING ELEVATION:
DOUBLE TUBE WIRE LINE-NQ, AUTOMATIC, ACKER XLS TRACK MOUNT RIG	2.000 IN.	0 FT. 5 FT.	387.6 FT.

DRILLING INSPECTOR: HUNTER FENK
DRILLER & DRILLING COMPANY: NICO RIZIO
NAVARRO & WRIGHT

▽ 0 HR. READING - ELAPSED TIME: Dry - 0.1 hr.
▼ 24 HR. READING - ELAPSED TIME: Dry - 23.5 hr.

ELEV.	GRAPHIC	MATERIAL DESCRIPTION	AASHTO/ USCS	SAMPLE DEPTH	SAMPLE NO.	BLOW COUNT / PP/T TSF	N 60 / %RQD	REC (ft.)	REC (%)	◇ RQD % ◇ ⊙ Soil/Rock Rec. % ⊙ ▲ SPT (N_{60}) ▲
385		**SAND**, some Clay, some Gravel, medium dense, dry to moist, homogeneous, angular to sub-angular, light orange brown, fill.	a-2-6 / sc	1.5	S-1	3-4-6 / 3.00	13	1.5	100	20 40 60 80 / 10 20 30 40
		0.0'-0.7': Topsoil, more organics.		3.0	S-2	3-9-10	25	1.5	100	
		6.0'-9.0' More gravel.		4.5	S-3	8-6-8	19	1.5	100	
		9.0'/El. 378.6		6.0	S-4	10-12-10	29	1.5	100	
				7.5	S-5	4-13-6	25	1.5	100	
				9.0	S-6	4-5-7	16	1.5	100	
		CLAY, some Sand, little Gravel, medium to stiff, moist, homogeneous, high plastic fines, orange brown, residuum.	a-6 / cl	10.5	S-7	7-8-8 / 2.00	21	1.5	100	
				12.0	S-8	3-4-4 / 0.75	11	1.5	100	
		S-9: Limestone fragments in sample.		13.5	S-9	3-5-6 / 0.75	15	1.5	100	
				15.0	S-10	3-5-7 / 1.00	16	1.5	100	
		16.5'/El. 371.1		15.7	S-11	12-50/.2' / 2.00	>67	0.7	100	
375				16.5	S-12	50/.0'	>67	0.0	0	
		TOR 371.10		16.5	R-1		60%	1.7	85	
370		**BFE 369.50**		18.5	R-2		68%	4.0	100	
		LIMESTONE, light gray, soft to medium hard, slightly weathered, indistinct bedding, Joint Set 1: jointed, close to medium spacing, shallow to steep dip, tight joints, Joint Set 2: random fractures, close to medium spacing, shallow to sheer dip, tight joints, *infilled with calcite.*		22.5	R-3		44%	5.0	100	
				27.5	R-4		74%	5.0	100	
365				32.5	R-5		72%	4.0	100	
360										
355		36.5'/El. 351.1								

GENERAL NOTES

THIS SHEET IS INCLUDED FOR THE CONVENIENCE OF THE DEPARTMENT. REFER TO PUBLICATION 408 SECTION 102.05 FOR FURTHER INFORMATION.

FOR ADDITIONAL SOIL AND ROCK DESCRIPTIONS SEE PUBLICATION 222.

THE BORING LOGS AND RELATED INFORMATION DEPICT SUBSURFACE CONDITIONS ONLY AT THE SPECIFIC LOCATIONS AND DATES INDICATED. SUBSURFACE CONDITIONS MAY DIFFER FROM THE CONDITIONS REPORTED AT THE SPECIFIC LOCATIONS. ALSO, THE PASSAGE OF TIME MAY RESULT IN A CHANGE OF CONDITIONS AT THE BORING LOCATIONS.

LEGEND

PP	POCKET PENETROMETER
T	TORVANE
NTS	NOT TO SCALE
BOCC	BOTTOM OF CLASS C CONCRETE
BFE	BOTTOM OF FOOTING ELEVATION
BCA	BOTTOM OF COARSE AGGREGATE
TOR	ESTIMATED TOP OF ROCK ELEVATION

THE DESCRIPTIONS OF THE MATERIALS ENCOUNTERED HAVE BEEN VERIFIED.

ME

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0417 MPMS/ECMS PROJ: 97828 BRKEY: 67417

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0417 SEG 0051 OFFSET 0417
SR 3007 (19TH STREET) STA 103+30.88
OVER NORFOLK SOUTHERN RAILWAY COMPANY
1-SPAN COMPOSITE PS CONCRETE
PA BULB-TEE BEAM BRIDGE
STRUCTURE BORINGS - 2

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL MARK T. EVANS GEOLOGIST PG005251

SHEET 65 OF 70

S - 39452

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3/4/2022 11:33:26 AM rrichards

SUBSTRUCTURE UNIT:
ABUTMENT 1

LOG 1 OF 2

BORING NUMBER:	BORING LOCATION	START: 11/17/2020 9:25 AM	HAMMER: AUTOMATIC
SB2-03	STATION: 102+78.0 OFFSET: 21.0 FT. LT.	FINISH: 11/17/2020 2:50 PM	EFFICIENCY: 0.8 ERa

DRILLING METHOD AND EQUIPMENT:	SIZE OF CORE:	VERTICAL SCALE:	TOP OF BORING ELEVATION:
DOUBLE TUBE WIRE LINE-NQ, AUTOMATIC, ACKER XLS TRACK MOUNT RIG	2.000 IN.	0 FT. 5 FT.	387.0 FT.

DRILLING INSPECTOR: HUNTER FENK
DRILLER & DRILLING COMPANY: NICO RIZIO
NAVARRO & WRIGHT

▽ 0 HR. READING - ELAPSED TIME: El. 339.5 ft. - 0.0 hr.
▼ 24 HR. READING - ELAPSED TIME: El. 336.4 ft. - 189.3 hr.

ELEV.	GRAPHIC	MATERIAL DESCRIPTION	AASHTO/ USCS	SAMPLE DEPTH	SAMPLE NO. **	BLOW COUNT / PP/T TSF	N 60 / %RQD	REC (ft.)	REC (%)	◇ RQD % ◇ ⊙ Soil/Rock Rec. % ⊙ ▲ SPT (N_{60}) ▲
385	UNS	**BITUMINOUS CONCRETE**. 0.6'/El. 386.4		1.5	S-1	5-10-14	32	1.5	100	
		UNSAMPLED. 1.5'/El. 385.5	a-1-b / gp-gm	3.0	S-2	14-10-10	27	1.5	100	
		GRAVEL, some Sand, little Silt, loose to dense, moist, heterogeneous, gap graded, sub-angular to angular, light gray to dark gray, fill. 6.0'/El. 381.0		4.5	S-3	7-3-4	9	1.0	67	
380		**SAND**, some Clay, some Gravel, loose to very dense, moist, heterogeneous, sub-angular to sub-rounded, gray brown to orange brown, fill. *S-5: Low recovery, gravel stuck in shoe tip.*	a-2-6 / sc	6.0	S-4	1-2-4 **1.50**	8	1.5	100	
				7.5	S-5	5-5-5	13	0.5	33	
				9.0	S-6	5-7-10	23	1.5	100	
				10.5	S-7	5-25-21	61	1.5	100	
		S-8: No recovery. 13.5'/El. 373.5		12.0	S-8	7-4-3	9	0.0	0	
375		**SILT**, some Clay, little Sand, little Gravel, very soft to stiff, moist to wet, heterogeneous, high plastic fines, orange brown with gray, fill. *S-10: No recovery.*		13.5	S-9	5-2-3 **0.75**	7	1.5	100	
				15.0	S-10	WOH-2-1	4	0.0	0	
				16.5	S-11	WOH-2-1 **0.50**	4	0.7	47	
				18.0	S-12	WOH-WOH-WOH	0	0.4	27	
				19.5	S-13	WOH-WOH-WOH **0.25**	0	1.0	67	
				21.0	S-14	2-3-2 **0.50**	7	1.5	100	
370		*S-15: Muck like consistency, low recovery sample fell out spoon.*		22.5	S-15	1-1-2	4	0.3	20	
				24.0	S-16	1-2-1 **0.25**	4	1.5	100	
			A-6 / CL	25.5	S-17	WOH-2-2 **0.25**	5	1.5	100	
				27.0	S-18	1-1-2 **2.00**	4	1.0	67	
		27.0': Stiffer clay.		28.5	S-19	1-1-1 **0.25**	3	1.5	100	
				30.0	S-20	1-5-18 **0.50**	31	1.5	100	
365		*S-20: Concrete in shoe tip.*		31.5	S-21	12-3-1 **0.25**	5	0.8	53	
				33.0	S-22	1-1-2	4	0.0	0	
		S-22: No recovery.		34.5	S-23	WOH-1-8/.5'	12	0.8	54	
		S-23: Sample is clayey gravel. 36.0'/El. 351.0		36.0	S-24	50/.0'	>67	0.0	0	
360		**CEMENT CONCRETE**. 40.3'/El. 346.7		36.0	R-1		80%	2.0	100	
		TOR 346.70		38.0	R-2		75%	2.0	100	
		LIMESTONE, dark gray, soft to medium hard, slightly weathered, thin to moderate bedding with moderate to steep dip, jointed, close to wide spacing, shallow to steep dip, tight joints.		40.0	R-3		55%	1.9	95	
355		**BFE 343.75**		42.0	R-4		74%	4.1	82	
		44.0'/El. 343.0								
	VOID	**VOID**. 44.9'/El. 342.1								
		LIMESTONE, dark gray, soft to medium hard, slightly weathered, thin to moderate bedding with moderate to steep dip, jointed, close to wide spacing, shallow to steep dip, tight joints.		47.0	R-5		90%	5.0	100	
350		*50.6' - 61.0': Highly fractured intact rock infilled with calcite.*		52.0	R-6		88%	5.0	100	
				57.0	R-7		100%	4.0	100	
		59.2': Mechanical break. *59.6': Mechanical break.* 61.0'/El. 326.0								
345										
340										
335										
330										

SUBSTRUCTURE UNIT:
ABUTMENT 1

LOG 1 OF 1

BORING NUMBER:	BORING LOCATION	START: 11/19/2020 9:10 AM	HAMMER: AUTOMATIC
SB2-04	STATION: 102+63.0 OFFSET: 20.0 FT. RT.	FINISH: 11/20/2020 2:45 PM	EFFICIENCY: 0.8 ERa

DRILLING METHOD AND EQUIPMENT:	SIZE OF CORE:	VERTICAL SCALE:	TOP OF BORING ELEVATION:
DOUBLE TUBE WIRE LINE-NQ, AUTOMATIC, ACKER XLS TRACK MOUNT RIG	2.000 IN.	0 FT. 5 FT.	387.6 FT.

DRILLING INSPECTOR: HUNTER FENK
DRILLER & DRILLING COMPANY: NICO RIZIO
NAVARRO & WRIGHT

▽ 0 HR. READING - ELAPSED TIME: Dry - 67.3 hr.
▼ 24 HR. READING - ELAPSED TIME: Dry - 115.4 hr.

ELEV.	GRAPHIC	MATERIAL DESCRIPTION	AASHTO/ USCS	SAMPLE DEPTH	SAMPLE NO.	BLOW COUNT / PP/T TSF	N 60 / %RQD	REC (ft.)	REC (%)	◇ RQD % ◇ ⊙ Soil/Rock Rec. % ⊙ ▲ SPT (N_{60}) ▲
385	UNS	**UNSAMPLED**. 1.5'/El. 386.1		1.5						
		GRAVEL, some Sand, trace Silt, loose to medium dense, moist, heterogeneous, gap graded, sub-angular to angular, light gray to dark gray, fill. 6.0'/El. 381.6	a-1-a / gp	3.0	S-1	7-10-12	29	1.0	67	
				4.5	S-2	10-9-9	24	1.5	100	
380		**GRAVEL**, some Clay, some Sand, loose to very dense, moist, heterogeneous, angular, light brown with orange brown, fill. 13.5'/El. 374.1	a-2-6 / gc	6.0	S-3	8-3-3	8	1.0	67	
				7.5	S-4	1-2-4 **0.25**	8	1.0	67	
				9.0	S-5	4-3-3	8	1.0	67	
				10.5	S-6	3-15-17	43	1.5	100	
				12.0	S-7	11-11-12	31	0.3	20	
				13.2	S-8	7-4-50/.2' **1.25**	72	1.2	100	
375		**CEMENT CONCRETE**, *with rebar.*		13.5	S-9	50/.0'	>67	0.0	0	
				13.5	R-1		40%	1.0	100	
		Boring terminated at 22.5' due to encountering significant amounts of rebar. Boring moved 5.0' back station and continued as SB2-04A.		14.5	R-2		84%	2.5	100	
				17.0	R-3		37%	2.0	57	
370		22.5'/El. 365.1		20.5	R-4		100%	2.0	100	

BFE 343.75 NTS

GENERAL NOTES

THIS SHEET IS INCLUDED FOR THE CONVENIENCE OF THE DEPARTMENT. REFER TO PUBLICATION 408 SECTION 102.05 FOR FURTHER INFORMATION.

FOR ADDITIONAL SOIL AND ROCK DESCRIPTIONS SEE PUBLICATION 222.

THE BORING LOGS AND RELATED INFORMATION DEPICT SUBSURFACE CONDITIONS ONLY AT THE SPECIFIC LOCATIONS AND DATES INDICATED. SUBSURFACE CONDITIONS MAY DIFFER FROM THE CONDITIONS REPORTED AT THE SPECIFIC LOCATIONS. ALSO, THE PASSAGE OF TIME MAY RESULT IN A CHANGE OF CONDITIONS AT THE BORING LOCATIONS.

LEGEND

PP	POCKET PENETROMETER
T	TORVANE
NTS	NOT TO SCALE
BOCC	BOTTOM OF CLASS C CONCRETE
BFE	BOTTOM OF FOOTING ELEVATION
BCA	BOTTOM OF COARSE AGGREGATE
TOR	ESTIMATED TOP OF ROCK ELEVATION

THE DESCRIPTIONS OF THE MATERIALS ENCOUNTERED HAVE BEEN VERIFIED.

ME

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0417 MPMS/ECMS PROJ: 97828 BRKEY: 67417

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0417 SEG 0051 OFFSET 0417
SR 3007 (19TH STREET) STA 103+30.88
OVER NORFOLK SOUTHERN RAILWAY COMPANY
1-SPAN COMPOSITE PS CONCRETE
PA BULB-TEE BEAM BRIDGE
STRUCTURE BORINGS - 3

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL MARK T. EVANS GEOLOGIST PG005251

SHEET 66 OF 70

S - 39452

\\fileserver\SCI-NET\01Projects\36002 (SR 83, Sec 079 - River to Eisenhower\SR 83, Sec 079\GEOTECHNICAL\CADD\WORKING FILES\TEST BORING SHEETS\B2\36002-079_TB_B2.dgn
3/4/2022 11:33:28 AM rrichards
PENNDOT STRUCTURE BORING LOG_PENNDOT_GINT_VERSION_1.2.3.9.2-21-2016.GDT - 11/2/21 08:59 - N:\01PROJECTS\36002 (SR 83, SEC 079 - RIVER TO EISENHOWER)\SR 83, SEC 079\GEOTECHNICAL\FIELD DATA\LOGS\079TYPED LOGS\GINTS B_ 0083 SEC 079_TYPED LOGS.GPJ

SUBSTRUCTURE UNIT:
ABUTMENT 1

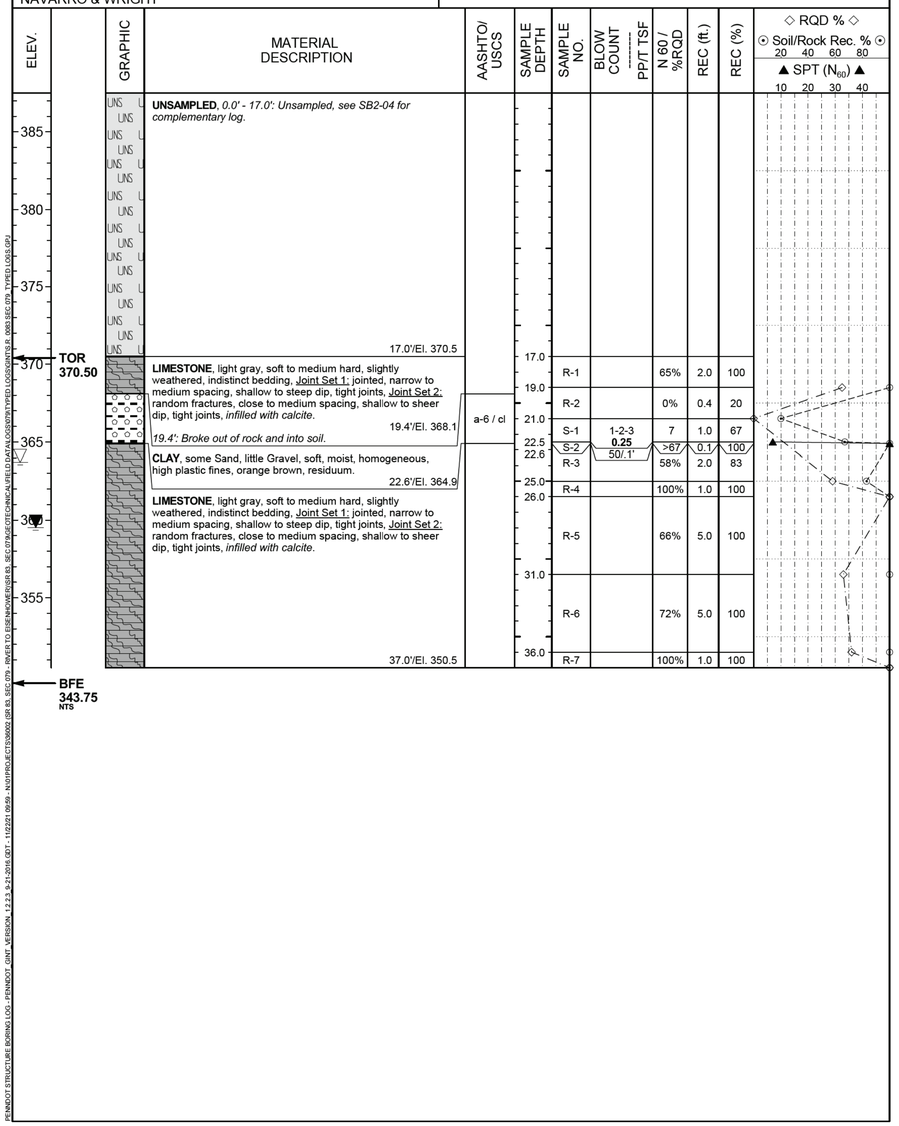
LOG 1 OF 1

BORING NUMBER:	BORING LOCATION	START: 11/23/2020 9:30 AM	HAMMER: AUTOMATIC
SB2-04A	STATION: 102+58.0 OFFSET: 20.0 FT. RT.	FINISH: 11/23/2020 12:51 PM	EFFICIENCY: 0.8 ERa

DRILLING METHOD AND EQUIPMENT:	SIZE OF CORE:	VERTICAL SCALE:	TOP OF BORING ELEVATION:
DOUBLE TUBE WIRE LINE-NQ, AUTOMATIC, ACKER XLS TRACK MOUNT RIG	2.000 IN.	0 FT. 5 FT.	387.5 FT.

DRILLING INSPECTOR: HUNTER FENK
DRILLER & DRILLING COMPANY: NICO RIZIO
NAVARRO & WRIGHT

▽ 0 HR. READING - ELAPSED TIME: El. 363.7 ft. - 0.2 hr.
▼ 24 HR. READING - ELAPSED TIME: El. 359.5 ft. - 45.4 hr.



SUBSTRUCTURE UNIT:
ABUTMENT 2

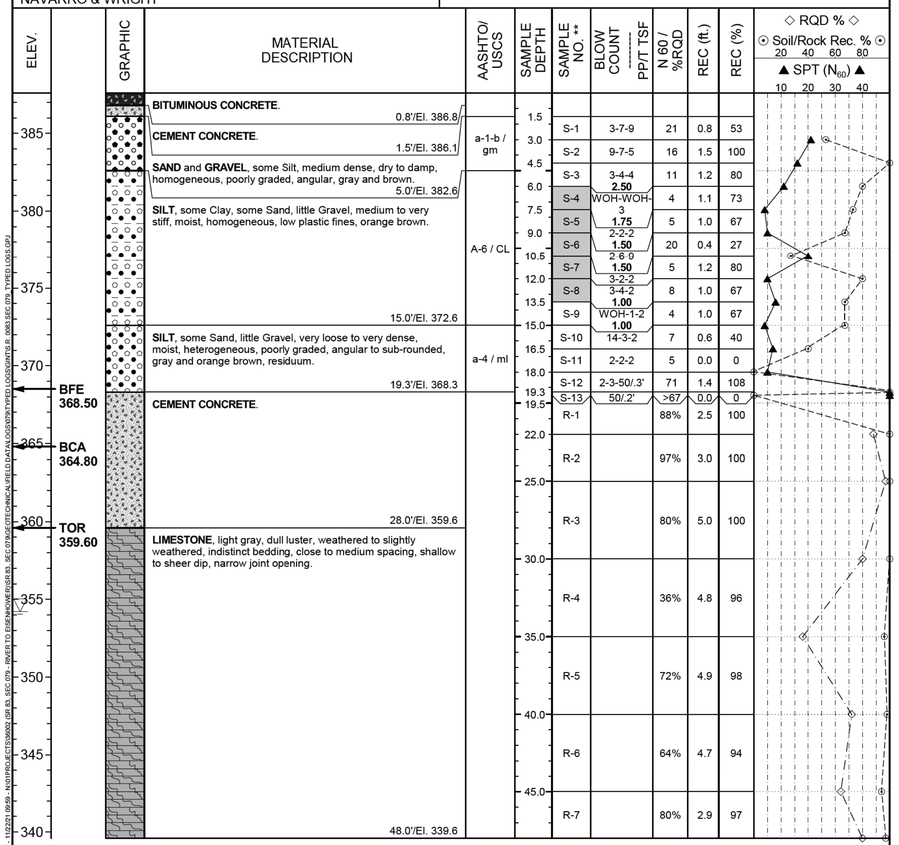
LOG 1 OF 1

BORING NUMBER:	BORING LOCATION	START: 11/16/2020 9:00 AM	HAMMER: AUTOMATIC
SB2-05	STATION: 103+98.0 OFFSET: 20.0 FT. LT.	FINISH: 11/16/2020 2:40 PM	EFFICIENCY: 0.8 ERa

DRILLING METHOD AND EQUIPMENT:	SIZE OF CORE:	VERTICAL SCALE:	TOP OF BORING ELEVATION:
DOUBLE TUBE WIRE LINE-NQ, AUTOMATIC, ACKER XLS TRACK MOUNT RIG	2.000 IN.	0 FT. 5 FT.	387.6 FT.

DRILLING INSPECTOR: JEREMY COOK
DRILLER & DRILLING COMPANY: JASON GROFT
NAVARRO & WRIGHT

▽ 0 HR. READING - ELAPSED TIME: El. 354.2 ft. - 0.0 hr.
▼ 24 HR. READING - ELAPSED TIME: Dry - 213.4 hr.



**SAMPLE NO. shading indicates lab testing performed.

GENERAL NOTES

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FOR ADDITIONAL SOIL AND ROCK DESCRIPTIONS SEE PUBLICATION 222.

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LEGEND

PP	POCKET PENETROMETER
T	TORVANE
NTS	NOT TO SCALE
BOCC	BOTTOM OF CLASS C CONCRETE
BFE	BOTTOM OF FOOTING ELEVATION
BCA	BOTTOM OF COARSE AGGREGATE
TOR	ESTIMATED TOP OF ROCK ELEVATION

THE DESCRIPTIONS OF THE MATERIALS ENCOUNTERED HAVE BEEN VERIFIED.

ME

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0417 MPMS/ECMS PROJ: 97828 BRKEY: 67417

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0417 SEG 0051 OFFSET 0417
SR 3007 (19TH STREET) STA 103+30.88
OVER NORFOLK SOUTHERN RAILWAY COMPANY
1-SPAN COMPOSITE PS CONCRETE
PA BULB-TEE BEAM BRIDGE
STRUCTURE BORINGS - 4

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL MARK T. EVANS GEOLOGIST PG005251

SHEET 67 OF 70

S - 39452

\\fileserver\SCI-NET\O\Projects\36002 (SR 83, Sec 079 - River to Eisenhower\SR 83, Sec 079\GEOTECHNICAL\CADD\WORKING FILES\TEST BORING SHEETS\B2\36002-079_TB_B2.dgn
3/4/2022 11:33:30 AM rrichards

SUBSTRUCTURE UNIT:
ABUTMENT 2

LOG 1 OF 1

BORING NUMBER:	BORING LOCATION	START: 11/20/2020 9:10 AM	HAMMER: AUTOMATIC
SB2-06	STATION: 103+86.0 OFFSET: 18.7 FT. RT.	FINISH: 11/20/2020 2:45 PM	EFFICIENCY: 0.8 ERa

DRILLING METHOD AND EQUIPMENT:	SIZE OF CORE:	VERTICAL SCALE:	TOP OF BORING ELEVATION:
DOUBLE TUBE WIRE LINE-NQ, AUTOMATIC, ACKER XLS TRACK MOUNT RIG	2.000 IN.	0 FT. 5 FT.	387.9 FT.

DRILLING INSPECTOR: JEREMY COOK
DRILLER & DRILLING COMPANY: JASON GROFT
NAVARRO & WRIGHT

▽ 0 HR. READING - ELAPSED TIME: El. 365.1 ft. - 0.0 hr.
▼ 24 HR. READING - ELAPSED TIME: Dry - 115.5 hr.

ELEV.	GRAPHIC	MATERIAL DESCRIPTION	AASHTO/ USCS	SAMPLE DEPTH	SAMPLE NO.	BLOW COUNT / PP/T TSF	N 60 / %RQD	REC (ft.)	REC (%)	◇ RQD % ◇ ⊙ Soil/Rock Rec. % ⊙ ▲ SPT (N_{60}) ▲
		BITUMINOUS CONCRETE. 0.9'/El. 387.0		1.5						20 40 60 80 / 10 20 30 40
385		**SAND** and **GRAVEL**, little Silt, medium dense, dry to damp, homogeneous, well graded, angular, gray, fill. 5.5'/El. 382.4	a-1-b / gw-gm	3.0	S-1	8-8-12	27	1.0	67	
				4.5	S-2	12-8-5	17	1.4	93	
				6.0	S-3	8-5-2	9	0.7	47	
		SILT, little Sand, medium to hard, damp to moist, homogeneous, poorly graded, sub-angular, low plastic fines, gray and orange brown, fill.		7.5	S-4	2-3-3	8	0.7	47	
380				9.0	S-5	3-3-3	8	1.2	80	
			a-4 / ml	10.5	S-6	WOH-3-3	8	0.9	60	
				12.0	S-7	2-4-3	9	1.0	67	
				13.5	S-8	2-2-3	7	0.9	60	
375				15.0	S-9	2-2-25 / 1.00	36	1.0	67	
		15.0'/El. 372.9		16.5	S-10	5-3-2	7	0.4	27	
		SILT, some Sand, medium to hard, moist to wet, homogeneous, poorly graded, angular to sub-angular, orange brown.	a-4 / ml	18.0	S-11	3-2-2	5	1.2	80	
		19.5'/El. 368.4		19.5	S-12	2-2-50	69	1.1	73	
		BFE 368.50 *Concrete Footing.* **CEMENT CONCRETE.** 22.5'/El. 365.4		22.0	R-1		84%	2.5	100	
365		**BCA 364.80** **CLAY**, little Sand, stiff, moist, homogeneous, medium plastic fines, orange brown.	a-6 / cl	24.0	R-2		25%	0.5	25	
				25.5	S-13	2-3-3 / 1.75	8	1.5	100	
				27.0	S-14	1-1-2 / 2.00	4	1.4	93	
		28.2'/El. 359.7		28.2	S-15	1-2-50/.2' / 1.25	69	1.1	92	
360	OTH C OTH	*Boring became crooked at approximately 15.0' when concrete was in shoe, tooling needed pulled to get barrel back at R-3, driller attempted to sink casing which also kicked off concrete (possibly) boring terminated at 30.2'.* 30.2'/El. 357.7			R-3		20%	0.7	35	

SUBSTRUCTURE UNIT:
ABUTMENT 2

LOG 1 OF 1

BORING NUMBER:	BORING LOCATION	START: 11/23/2020 9:30 AM	HAMMER: AUTOMATIC
SB2-06A	STATION: 103+89.0 OFFSET: 18.7 FT. RT.	FINISH: 11/23/2020 2:15 PM	EFFICIENCY: 0.8 ERa

DRILLING METHOD AND EQUIPMENT:	SIZE OF CORE:	VERTICAL SCALE:	TOP OF BORING ELEVATION:
DOUBLE TUBE WIRE LINE-NQ, AUTOMATIC, ACKER XLS TRACK MOUNT RIG	2.000 IN.	0 FT. 5 FT.	387.9 FT.

DRILLING INSPECTOR: JEREMY COOK
DRILLER & DRILLING COMPANY: JASON GROFT
NAVARRO & WRIGHT

▽ 0 HR. READING - ELAPSED TIME: El. 355.2 ft. - 0.0 hr.
▼ 24 HR. READING - ELAPSED TIME: Dry - 44.0 hr.

ELEV.	GRAPHIC	MATERIAL DESCRIPTION	AASHTO/ USCS	SAMPLE DEPTH	SAMPLE NO.	BLOW COUNT / PP/T TSF	N 60 / %RQD	REC (ft.)	REC (%)	◇ RQD % ◇ ⊙ Soil/Rock Rec. % ⊙ ▲ SPT (N_{60}) ▲
	UNS	**UNSAMPLED.**								20 40 60 80 / 10 20 30 40
385	UNS									
	UNS									
	UNS									
	UNS									
	UNS									
380	UNS									
	UNS									
	UNS									
	UNS									
375	UNS									
	UNS									
	UNS									
	UNS									
	UNS	20.5'/El. 367.4		20.5						
		BFE 368.50 **CEMENT CONCRETE.**			R-1		72%	1.9	76	
365		**BCA 364.80**		23.0	R-2		0%	0.0	0	
		26.6'/El. 361.3		26.0						
		TOR 361.30 **LIMESTONE**, light gray, dull luster, medium hard to hard, weathered to slightly weathered, indistinct bedding with shallow to sheer dip, close to medium spacing, open joints.		26.6	R-3		71%	1.3	93	
360				28.0	R-4		48%	3.8	76	
				33.0	R-5		52%	4.7	94	
355				38.0	R-6		64%	5.0	100	
				43.0	R-7		48%	2.7	68	
350										
345		47.0'/El. 340.9								

GENERAL NOTES

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LEGEND

PP	POCKET PENETROMETER
T	TORVANE
NTS	NOT TO SCALE
BOCC	BOTTOM OF CLASS C CONCRETE
BFE	BOTTOM OF FOOTING ELEVATION
BCA	BOTTOM OF COARSE AGGREGATE
TOR	ESTIMATED TOP OF ROCK ELEVATION

THE DESCRIPTIONS OF THE MATERIALS ENCOUNTERED HAVE BEEN VERIFIED.

ME

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0417 MPMS/ECMS PROJ: 97828 BRKEY: 67417

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0417 SEG 0051 OFFSET 0417
SR 3007 (19TH STREET) STA 103+30.88
OVER NORFOLK SOUTHERN RAILWAY COMPANY
1-SPAN COMPOSITE PS CONCRETE
PA BULB-TEE BEAM BRIDGE
STRUCTURE BORINGS - 5

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL MARK T. EVANS GEOLOGIST PG005251

SHEET 68 OF 70

S - 39452

\\fileserver\SCI-NET\01Projects\36002 (SR 83, Sec 079 - River to Eisenhower)\SR 83, Sec 079\GEOTECHNICAL\CADD\WORKING FILES\TEST BORING SHEETS\B2\36002-079_TB_B2.dgn
3/4/2022 11:33:32 AM rrichards
PENNDOT STRUCTURE BORING LOG - PENNDOT.GINT VERSION 1.2.3 8-21-2018.GDT - 11/22/21 10:00 - N:\01PROJECTS\36002 (SR 83, SEC 079 - RIVER TO EISENHOWER)\SR 83, SEC 079\GEOTECHNICAL\FIELD DATA\LOGS\079TYPED LOGS\GINTS B 0083 SEC 079_TYPED LOGS.GPJ

SUBSTRUCTURE UNIT:
WINGWALL C

LOG 1 OF 1

BORING NUMBER:	BORING LOCATION	START:	HAMMER:
SB2-07	STATION: 104+28.0 OFFSET: 32.0 FT. LT.	11/13/2020 10:00 AM FINISH: 11/13/2020 2:20 PM	AUTOMATIC EFFICIENCY: 0.8 ERa

DRILLING METHOD AND EQUIPMENT:	SIZE OF CORE:	VERTICAL SCALE:	TOP OF BORING ELEVATION:
DOUBLE TUBE WIRE LINE-NQ, AUTOMATIC, ACKER XLS TRACK MOUNT RIG	2.000 IN.	0 FT. 5 FT.	386.8 FT.

DRILLING INSPECTOR: JEREMY COOK
DRILLER & DRILLING COMPANY: JASON GROFT
NAVARRO & WRIGHT

▽ 0 HR. READING - ELAPSED TIME: El. 359.5 ft. - 0.0 hr.
▼ 24 HR. READING - ELAPSED TIME: El. 353.3 ft. - 285.7 hr.

ELEV.	GRAPHIC	MATERIAL DESCRIPTION	AASHTO/ USCS	SAMPLE DEPTH	SAMPLE NO.	BLOW COUNT / PP/T TSF	N 60 / %RQD	REC (ft.)	REC (%)
385		**GRAVEL**, some Sand, trace Silt, loose to medium dense, dry to damp, heterogeneous, poorly graded, angular, tan and black, fill.	a-1-a / gp	1.5	S-1	3-8-9	23	1.0	67
				3.0	S-2	4-3-4	9	0.7	47
				4.5	S-3	5-3-3	8	0.2	13
				6.0	S-4	3-2-2	5	0.8	53
				7.5	S-5	3-3-5	11	0.4	27
380				9.0	S-6	3-2-2	5	0.4	27
BFE 378.50									
BCA 376.50		**SAND**, some Gravel, little Silt, loose to medium dense, moist, heterogeneous, poorly graded, angular to sub-angular, orange brown and gray, fill.	a-1-b / gm	10.5	S-7	2-1-6	9	0.9	60
375				12.0	S-8	2-6-10	21	1.0	67
				13.5	S-9	5-5-4	12	1.1	73
		15.0'/El. 371.8		15.0	S-10	2-3-2	7	0.9	60
		CLAY, trace Sand, medium to very stiff, moist, homogeneous, medium plastic fines, orange brown, fill.	a-6 / cl	16.5	S-11	2-2-3	7	1.1	73
370				18.0	S-12	2-3-2 **3.00**	7	1.0	67
				19.5	S-13	3-4-5 **3.25**	12	1.3	87
		20.0'/El. 366.8		20.0	S-14	9-50/.0' **0.50**	>67	0.4	80
TOR 366.80		**LIMESTONE**, light gray, dull luster, medium hard to hard, highly weathered to slightly weathered, indistinct bedding, close to medium spacing, shallow to sheer dip, open joints.	a-6 / cl	22.0	R-1		35%	1.0	50
365		21.0'/El. 365.8		24.0	R-2		0%	0.0	0
		CLAY, trace Sand, very stiff, moist, homogeneous, medium plastic fines, orange brown, fill.		24.9	S-15	3-50/.4' **3.00**	>67	0.9	100
		24.9'/El. 361.9		28.0	R-3		13%	2.8	90
360		**LIMESTONE**, light gray, dull luster, medium hard to hard, highly weathered to slightly weathered, indistinct bedding, close to medium spacing, shallow to sheer dip, open joints.		31.0	R-4		40%	2.8	93
				36.0	R-5		46%	5.0	100
355 ▼					R-6		52%	4.1	82
				41.0	R-7		66%	4.9	98
350									
345		46.0'/El. 340.8							

SUBSTRUCTURE UNIT:
WINGWALL D

LOG 1 OF 1

BORING NUMBER:	BORING LOCATION	START:	HAMMER:
SB2-08	STATION: 104+11.0 OFFSET: 18.4 FT. RT.	11/24/2020 9:15 AM FINISH: 11/24/2020 1:30 PM	AUTOMATIC EFFICIENCY: 0.8 ERa

DRILLING METHOD AND EQUIPMENT:	SIZE OF CORE:	VERTICAL SCALE:	TOP OF BORING ELEVATION:
DOUBLE TUBE WIRE LINE-NQ, AUTOMATIC, ACKER XLS TRACK MOUNT RIG	2.000 IN.	0 FT. 5 FT.	387.4 FT.

DRILLING INSPECTOR: JEREMY COOK
DRILLER & DRILLING COMPANY: JASON GROFT
NAVARRO & WRIGHT

▽ 0 HR. READING - ELAPSED TIME: El. 354.3 ft. - 0.0 hr.
▼ 24 HR. READING - ELAPSED TIME: El. 352.7 ft. - 20.8 hr.

ELEV.	GRAPHIC	MATERIAL DESCRIPTION	AASHTO/ USCS	SAMPLE DEPTH	SAMPLE NO.	BLOW COUNT / PP/T TSF	N 60 / %RQD	REC (ft.)	REC (%)
385		**BITUMINOUS CONCRETE**. 0.7'/El. 386.7		1.5					
		SILT, little Sand, medium dense, damp, homogeneous, poorly graded, orange brown and gray, fill.	a-4 / ml	3.0	S-1	3-5-5	13	0.8	53
				4.5	S-2	5-5-5	13	0.7	47
		6.1'/El. 381.3		6.0	S-3	4-4-6	13	0.2	13
380 BFE 380.00		**CEMENT CONCRETE**.		6.1	S-4	50/.1'	>67	0.0	0
BCA 378.00					R-1		89%	1.9	100
375				8.0	R-2		78%	4.0	100
				12.0	R-3		88%	5.0	100
		23.0'/El. 364.4		17.0	R-4		60%	4.7	94
365 TOR 364.40		**LIMESTONE**, light gray, dull luster, medium hard, indistinct bedding, narrow to medium spacing, shallow to sheer dip, open joints.		22.0	R-5		34%	3.3	66
360				27.0	R-6		52%	4.8	96
				32.0	R-7		54%	5.0	100
355 ▼				37.0	R-8		66%	5.0	100
				42.0	R-9		72%	5.0	100
350									
345		47.0'/El. 340.4							

GENERAL NOTES

THIS SHEET IS INCLUDED FOR THE CONVENIENCE OF THE DEPARTMENT. REFER TO PUBLICATION 408 SECTION 102.05 FOR FURTHER INFORMATION.

FOR ADDITIONAL SOIL AND ROCK DESCRIPTIONS SEE PUBLICATION 222.

THE BORING LOGS AND RELATED INFORMATION DEPICT SUBSURFACE CONDITIONS ONLY AT THE SPECIFIC LOCATIONS AND DATES INDICATED. SUBSURFACE CONDITIONS MAY DIFFER FROM THE CONDITIONS REPORTED AT THE SPECIFIC LOCATIONS. ALSO, THE PASSAGE OF TIME MAY RESULT IN A CHANGE OF CONDITIONS AT THE BORING LOCATIONS.

LEGEND

PP	POCKET PENETROMETER
T	TORVANE
NTS	NOT TO SCALE
BOCC	BOTTOM OF CLASS C CONCRETE
BFE	BOTTOM OF FOOTING ELEVATION
BCA	BOTTOM OF COARSE AGGREGATE
TOR	ESTIMATED TOP OF ROCK ELEVATION

THE DESCRIPTIONS OF THE MATERIALS ENCOUNTERED HAVE BEEN VERIFIED.

ME

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0417 WPMS/ECMS PROJ: 97828 BRKEY: 67417

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0417 SEG 0051 OFFSET 0417
SR 3007 (19TH STREET) STA 103+30.88
OVER NORFOLK SOUTHERN RAILWAY COMPANY
1-SPAN COMPOSITE PS CONCRETE
PA BULB-TEE BEAM BRIDGE
STRUCTURE BORINGS - 6

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL MARK T. EVANS GEOLOGIST PG005251

SHEET 69 OF 70

S - 39452

\\fileserver\SCI-NETV0IProjects\36002 (SR 83, Sec 079 - River to Eisenhower)\SR 83, Sec 079\GEOTECHNICAL\CADD\WORKING FILES\TEST BORING SHEETS\B2\36002-079_TB.B2.dgn
3/4/2022 11:33:34 AM rrichards
PENNDOT STRUCTURE BORING LOG - PENNDOT_GINT_VERSION_12.2.3_9-21-2016.GDT - 11/22/21 10:00 - N:\PROJECTS\36002 (SR 83, SEC 079 - RIVER TO EISENHOWER)\SR 83, SEC 079\GEOTECHNICAL\FIELD DATA\LOGS\079TYPED LOGS\GINTS B_0083_SEC 079_TYPED LOGS.GPJ

LABORATORY TEST SUMMARY - SOILS

					% GRAIN SIZE DISTRIBUTION (AASHTO)							CLASSIFICATION			PLASTICITY PARAMETERS			SHEAR STRENGTH				
BORING NUMBER	STATION & OFFSET	SAMPLE #	TEST DEPTH (FT.)	NATURAL MOISTURE %	GRAVEL %	SAND %	COARSE SAND %	FINE SAND %	FINES %	SILT %	CLAY %	AASHTO	USCS	S.G.	LIQUID LIMIT	PLASTIC LIMIT	P. I.	C (TSF)	ϕ (DEG.)	C' (TSF)	ϕ' (DEG)	TEST METHOD
SB2-03	102+78.0 21 ft. LT.	S-16 to 20	24.0 to 31.5	16.5	14.9	16.6	6.0	10.6	68.6	39.9	28.7	A-6	CL		36	19	17					
SB2-05	103+98.0 20 ft. LT.	S-4 to 8	6.0 to 13.5	18.4	16.2	20.7	7.2	13.5	63.1	36.6	26.5	A-6	CL		35	19	16					

LABORATORY TEST SUMMARY - ELECTROCHEMICAL

BORING NUMBER	STATION & OFFSET	SAMPLE #	TEST DEPTH (FT.)	SAMPLE SOURCE	pH	MINIMUM RESISTIVITY (ohm-cm)	CHLORIDE CONTENT (ppm)	SULFATE CONTENT (ppm)	HIGH ORGANIC CONTENT?	CORROSIVE FOR CONCRETE?	CORROSIVE FOR STEEL?
SB2-03	102+78.0 21 ft. LT.	S-16 to 20	24.0 to 31.5	GROUNDWATER SOIL	6.6	2,877	343	132	No	No No	No Resist.w/Chlor.
SB2-05	103+98.0 20 ft. LT.	S-4 to 8	6.0 to 13.5	GROUNDWATER SOIL	7.8	2,480	534	39	No	No No	No Resist.w/Chlor.

LABORATORY TEST SUMMARY - ROCK CORE

BORING NUMBER	STATION & OFFSET	SAMPLE #	TEST DEPTH (FT.)	TEST	STRENGTH	JAR SLAKE TEST PERFORMED?	SLAKE DURABILITY INDEX & TYPE	ROCK RECOVERY %	RQD %	BEDROCK LITHOLOGY	STRATIGRAPHIC UNIT
SB2-01	102+43.0 19 ft. LT.	R-4	41.0 to 41.7	UNCONFINED COMPRESSIVE TEST	8492.8 PSI / 611.5 TSF	NO		60	60	LIMESTONE	
SB2-01	102+43.0 19 ft. LT.	R-4	45.6 to 46.0	UNCONFINED COMPRESSIVE TEST	22506.8 PSI / 1,620.5 TSF	NO		60	60	LIMESTONE	
SB2-02	102+27.0 35 ft. RT.	R-5	33.3 to 33.9	UNCONFINED COMPRESSIVE TEST	10786.9 PSI / 776.7 TSF	NO		100	72	LIMESTONE	
SB2-02	102+27.0 35 ft. RT.	R-5	35.3 to 36.5	UNCONFINED COMPRESSIVE TEST	8803.1 PSI / 633.8 TSF	NO		100	72	LIMESTONE	
SB2-03	102+78.0 21 ft. LT.	R-3	41.0 to 41.4	UNCONFINED COMPRESSIVE TEST	7863.9 PSI / 566.2 TSF	NO		95	55	LIMESTONE	
SB2-03	102+78.0 21 ft. LT.	R-4	46.5 to 47.0	UNCONFINED COMPRESSIVE TEST	33534.2 PSI / 2,414.5 TSF	NO		82	74	LIMESTONE	
SB2-04A	102+58.0 20 ft. RT.	R-6	33.4 to 34.0	UNCONFINED COMPRESSIVE TEST	18609.4 PSI / 1,339.9 TSF	NO		100	72	LIMESTONE	
SB2-04A	102+58.0 20 ft. RT.	R-7	36.1 to 37.0	UNCONFINED COMPRESSIVE TEST	18853.8 PSI / 1,357.5 TSF	NO		100	100	LIMESTONE	
SB2-05	103+98.0 20 ft. LT.	R-4	30.0 to 30.4	UNCONFINED COMPRESSIVE TEST	12285.2 PSI / 884.5 TSF	NO		96	36	LIMESTONE	
SB2-05	103+98.0 20 ft. LT.	R-4	31.0 to 31.5	UNCONFINED COMPRESSIVE TEST	9549.1 PSI / 687.5 TSF	NO		96	36	LIMESTONE	
SB2-06A	103+89.0 18.7 ft. RT.	R-3	26.6 to 27.7	UNCONFINED COMPRESSIVE TEST	12850.8 PSI / 925.3 TSF	NO		93	71	LIMESTONE	
SB2-06A	103+89.0 18.7 ft. RT.	R-4	28.2 to 28.6	UNCONFINED COMPRESSIVE TEST	19783.1 PSI / 1,424.4 TSF	NO		76	48	LIMESTONE	
SB2-07	104+28.0 32 ft. LT.	R-3	27.2 to 27.8	UNCONFINED COMPRESSIVE TEST	13082.5 PSI / 941.9 TSF	NO		90	13	LIMESTONE	
SB2-07	104+28.0 32 ft. LT.	R-4	28.0 to 28.8	UNCONFINED COMPRESSIVE TEST	17339.4 PSI / 1,248.4 TSF	NO		93	40	LIMESTONE	
SB2-08	104+11.0 18.4 ft. RT.	R-5	26.4 to 27.0	UNCONFINED COMPRESSIVE TEST	15345.5 PSI / 1,104.9 TSF	NO		66	34	LIMESTONE	
SB2-08	104+11.0 18.4 ft. RT.	R-6	30.7 to 31.2	UNCONFINED COMPRESSIVE TEST	9350.2 PSI / 673.2 TSF	NO		96	52	LIMESTONE	

GENERAL NOTES

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LEGEND

PP	POCKET PENETROMETER
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NTS	NOT TO SCALE
BOCC	BOTTOM OF CLASS C CONCRETE
BFE	BOTTOM OF FOOTING ELEVATION
BCA	BOTTOM OF COARSE AGGREGATE
TOR	ESTIMATED TOP OF ROCK ELEVATION

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0417 MPMS/ECMS PROJ: 97828 BRKEY: 67417

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0417 SEG 0051 OFFSET 0417
SR 3007 (19TH STREET) STA 103+30.88
OVER NORFOLK SOUTHERN RAILWAY COMPANY
1-SPAN COMPOSITE PS CONCRETE
PA BULB-TEE BEAM BRIDGE
STRUCTURE BORINGS - 7

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — MARK T. EVANS — GEOLOGIST PG005251

SHEET 70 OF 70

S - 39452

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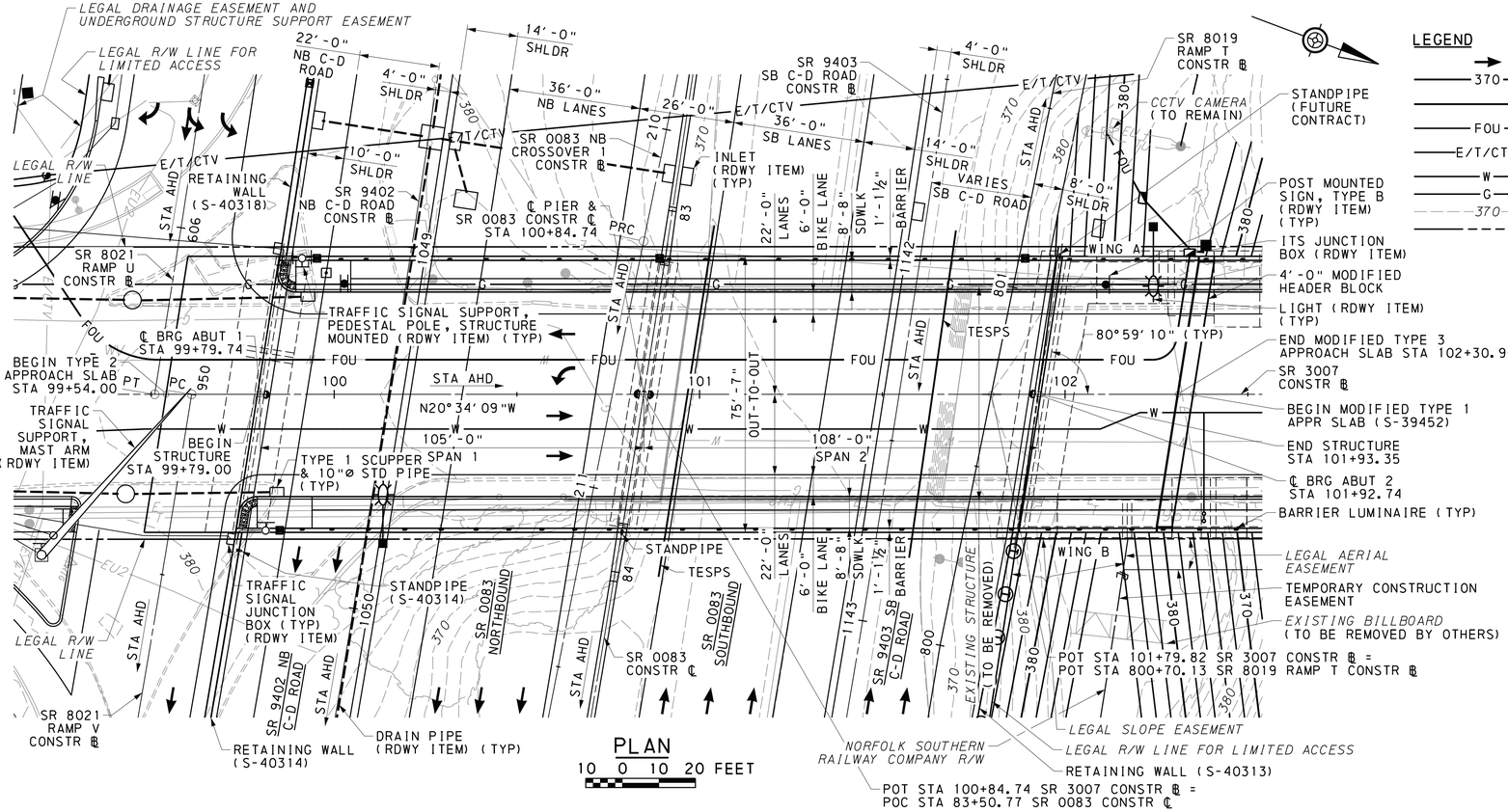


LEGEND

→	DIRECTION OF TRAFFIC
370	PROPOSED CONTOUR
	TEMPORARY EXCAVATION SUPPORT & PROTECTION SYSTEM (TESPS)
FOU	PROPOSED FIBER OPTIC UNDERGROUND
E/T/CTV	PROPOSED ELECTRIC, TELEPHONE, CABLE/TELEVISION
W	PROPOSED WATER
G	PROPOSED GAS
370	*EXISTING CONTOUR*
	LEGAL RIGHT-OF-WAY
CTV	*EXISTING CABLE/TELEVISION*
E	*EXISTING ELECTRIC*
EU	*EXISTING ELECTRIC UNDERGROUND*
W	*EXISTING WATER*
T	*EXISTING TELEPHONE*
TU	*EXISTING TELEPHONE UNDERGROUND*
G	*EXISTING GAS*
X	*EXISTING FENCE*
⊡	PT OF MIN VERT CLR

HORIZONTAL ALIGNMENT AND CURVE DATA

SR 3007 (19TH STREET)

STA 90+00.00
N20°34'09"W
STA 113+00.00

SR 0083

PRC STA 55+50.45
PI STA 74+20.66
PT STA 92+39.82
Δ = 23°09'10" RT
T = 1870.20'
D = 0°37'39"
L = 3689.37'
R = 9130.00'
E = 189.58'

SR 9402 (NB C-D ROAD)

PRC STA 1021+50.53
PI STA 1040+06.60
PT STA 1058+12.02
Δ = 23°09'10" RT
T = 1856.07'
D = 0°37'56"
L = 3661.49'
R = 9061.00'
E = 188.15'

SR 9403 (SB C-D ROAD)

PCC STA 1116+02.34
PI STA 1130+85.64
PT STA 1145+43.62
Δ = 18°19'11" RT
T = 1483.30'
D = 0°37'22"
L = 2941.28'
R = 9199.00'
E = 118.82'

SR 8019 (RAMP T)

STA 800+00.00
S80°57'19"W
STA 804+27.52

VERTICAL ALIGNMENT AND CURVE DATA

SR 3007 (19TH STREET)

STA 97+94.91
ELEV 377.66
+4.64%
STA 101+15.29
ELEV 392.52

SR 3007 (19TH STREET)

PVI STA 102+45.29
ELEV 398.55
VC 260.00'
MO -3.26'

+4.64% -5.38%

SR 0083

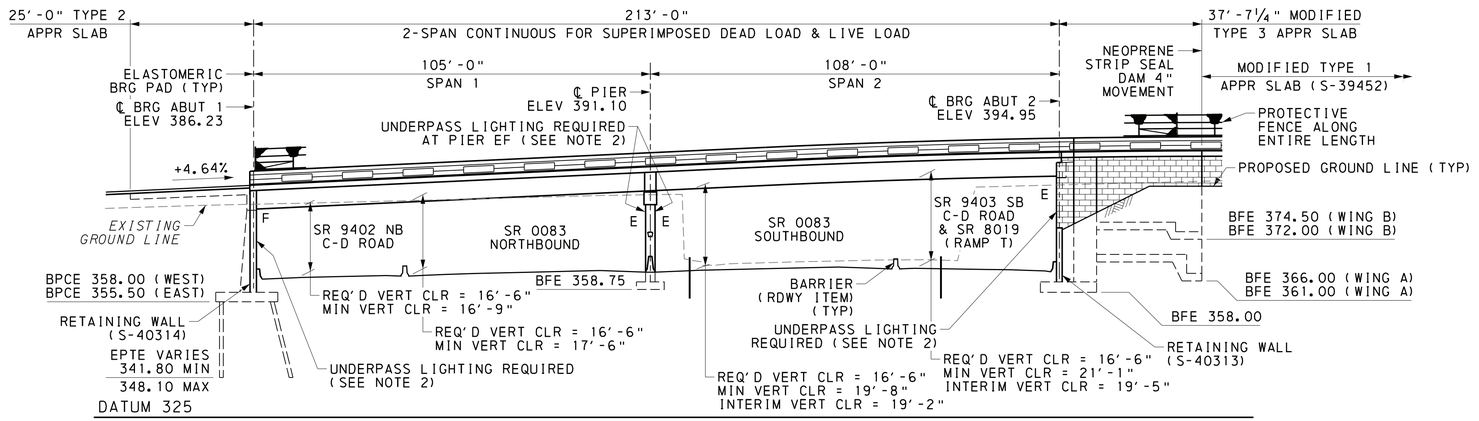
PVI STA 84+77.43
ELEV 352.73
VC 1060.00'
MO 9.28'

-4.75% +2.25%

SR 8019 (RAMP T)

PVI STA 801+86.00
ELEV 366.43
VC 372.00'
MO 1.07'

+1.61% +3.90%



ELEVATION
10 0 10 20 FEET

NOTES:

1. SR 0083 LANE CONFIGURATION SHOWN IS FOR FUTURE CONDITION. REFER TO SR 0083 SECTION 079 CONSTRUCTION PLANS FOR INTERIM LANE CONFIGURATION.
2. REFER TO HIGHWAY LIGHTING ALSO PLAN FOR UNDERPASS LIGHTING DETAILS.
3. SR 9403 (SB C-D ROAD) AND SR 8019 (RAMP T) GEOMETRY IS PROVIDED "FOR INFORMATION ONLY" AND WILL BE CONSTRUCTED IN A FUTURE CONTRACT.
4. FOR INDEX OF DRAWINGS, SEE SHEET 2.
5. FOR SUPPLEMENTAL DRAWINGS, SEE SHEET 3.

REFERENCES:	SHEETS:
TYPICAL SECTION & LOAD RATINGS	2
GENERAL NOTES	3 - 4
QUANTITIES	5
STAKE-OUT PLAN	8
STRUCTURE BORINGS	73 - 78

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0123 MPMS/ECMS PROJ: 97828 BRKEY: 67418

HNTB

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
JUSTIN ROBERT MCCARTHY
ENGINEER PE076998

Justin R. McCarthy
REG PROF ENGINEER
DATE 6/29/2022

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

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0123 SEG 0051 OFFSET 0123
SR 3007 (19TH STREET) STA 100+84.74
OVER SR 0083 AND SR 8019 (RAMP T)
2-SPAN CONTINUOUS COMPOSITE PS CONCRETE PA BULB-TEE BEAM BRIDGE
GENERAL PLAN & ELEVATION

RECOMMENDED 12-6-2022
Derek Mitch
DISTRICT 8-0 BRIDGE ENGINEER

SHEET 1 OF 78
+ SUPPLEMENTAL DRAWINGS
S-39453

DES: MCA	DES CKD: JRM	DWG: SMZ	DWG CKD: JRM

6/29/2022
FILENAME 63016-s-br83-gpe01.dgn

BRIDGE LOAD RATINGS WITHOUT FUTURE WEARING SURFACE

ADT: 4,985 (2050); ADTT: 265 (2050) (ONE-DIRECTIONAL)

SPANS 1 & 2		PA BULB-TEE BEAM, 33/61						
		H 20	HS 20	ML-80	TK527	PHL-93	P-82	P2016-13
INVENTORY RATING (IR)	DISTRIBUTION FACTOR	0.892	0.892	0.892	0.892	0.954	-	-
	LOCATION	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	-	-
	LIMIT STATE	SERV-IIIP	SERV-IIIP	SERV-IIIP	SERV-IIIP	SERV-III	-	-
	RATING FACTOR	1.85M	1.58M	1.41M	1.39M	1.18M	-	-
	RESISTANCE	0.300 KSI	0.300 KSI	0.300 KSI	0.300 KSI	0.300 KSI	-	-
	SPAN # / BEAM #	2 / 7	2 / 7	2 / 7	2 / 7	2 / 8	-	-
OPERATING RATING (OR)	DISTRIBUTION FACTOR	0.958	0.913	0.932	0.932	0.958	0.913	0.913
	LOCATION	0.00 L	0.24 L	0.60 L	0.60 L	0.00 L	0.24 L	0.24 L
	LIMIT STATE	STR-II	STR-II	STR-II	STR-II	STR-IA	STR-II	STR-II
	RATING FACTOR	2.69M	2.52V	2.29V	2.22V	1.63M	1.22V	1.13V
	RESISTANCE	-6,525 K-FT	306.7 KIPS	275.8 KIPS	275.8 KIPS	-6,525 K-FT	306.7 KIPS	306.7 KIPS
	SPAN # / BEAM #	2 / 8	1 / 8	1 / 8	1 / 8	2 / 8	1 / 8	1 / 8

CRITICAL MEMBER MAXIMUM FACTORED FLEXURAL RESISTANCE: 14,989.80 K-FT LOCATION: BEAM 8 (SPAN 2), 52'-1½"
CRITICAL MEMBER MAXIMUM FACTORED SHEAR RESISTANCE: 861.79 K LOCATION: BEAM 8 (SPAN 1), 94'-6"

BRIDGE LOAD RATINGS WITH FUTURE WEARING SURFACE

ADT: 4,985 (2050); ADTT: 265 (2050) (ONE-DIRECTIONAL)

SPANS 1 & 2		PA BULB-TEE BEAM, 33/61						
		H 20	HS 20	ML-80	TK527	PHL-93	P-82	P2016-13
INVENTORY RATING (IR)	DISTRIBUTION FACTOR	0.892	0.892	0.892	0.892	0.954	-	-
	LOCATION	0.50 L	0.50 L	0.50 L	0.50 L	0.50 L	-	-
	LIMIT STATE	SERV-IIIP	SERV-IIIP	SERV-IIIP	SERV-IIIP	SERV-III	-	-
	RATING FACTOR	1.61M	1.37M	1.23M	1.20M	1.05M	-	-
	RESISTANCE	0.300 KSI	0.300 KSI	0.300 KSI	0.300 KSI	0.300 KSI	-	-
	SPAN # / BEAM #	2 / 7	2 / 7	2 / 7	2 / 7	2 / 8	-	-
OPERATING RATING (OR)	DISTRIBUTION FACTOR	0.958	0.932	0.932	0.932	0.958	0.913	0.932
	LOCATION	0.00 L	0.60 L	0.60 L	0.60 L	0.00 L	0.24 L	0.60 L
	LIMIT STATE	STR-II	STR-II	STR-II	STR-II	STR-IA	STR-II	STR-II
	RATING FACTOR	2.43M	2.36V	2.13V	2.07V	1.47M	1.15V	1.06V
	RESISTANCE	-6,525 K-FT	241.7 KIP	241.7 KIP	241.7 KIP	-6,525 K-FT	299.7 KIP	241.7 KIP
	SPAN # / BEAM #	2 / 8	1 / 8	1 / 8	1 / 8	2 / 8	1 / 8	1 / 8

CRITICAL MEMBER MAXIMUM FACTORED FLEXURAL RESISTANCE: 14,989.80 K-FT LOCATION: BEAM 8 (SPAN 2), 54'-4½"
CRITICAL MEMBER MAXIMUM FACTORED SHEAR RESISTANCE: 840.15 K LOCATION: BEAM 8 (SPAN 1), 94'-6"

RATING NOTES:

1. RATINGS BASED ON LOAD AND RESISTANCE FACTOR (LRFD) METHOD.
2. DISTRIBUTION FACTORS ARE CORRESPONDING TO THE CONTROLLING LIMIT STATES.
3. DATA TAKEN FROM PENNDOT'S P/S CONCRETE GIRDER DESIGN AND RATING (PSLRFD) PROGRAM (v2.14.0.0)
4. FACTORED RESISTANCE TAKEN AT THE LOCATION ON THE CRITICAL MEMBER INDICATED.
5. M - MOMENT RATING FACTOR CONTROLS
   V - SHEAR RATING FACTOR CONTROLS
6. RATINGS WITH FUTURE WEARING SURFACE INCLUDES SURFACE AREA DENSITY OF 30 LB/SF FOR FUTURE WEARING SURFACE.
7. PHL-93 = PENNSYLVANIA DESIGN VEHICULAR LIVE LOAD
   ML-80 = PENNSYLVANIA MAXIMUM LEGAL LOAD
   TK527 = PENNSYLVANIA LEGAL LOAD CONFIGURATION
   P-82 = PENNSYLVANIA PERMIT LOAD
   P2016-13 = PENNSYLVANIA PERMIT LOAD
8. FOR THE STR-IP LIMIT STATE, THE VEHICULAR LOAD DISTRIBUTION FACTOR ACCOUNTS FOR THE PRESENCE OF PEDESTRIAN LOADS.
9. FOR BEAM PROPERTIES USED FOR RATINGS, SEE SHEET 35.
10. ALL BEAMS DESIGNED AS SIMPLE SPAN FOR NON-COMPOSITE DEAD LOAD AND AS CONTINUOUS SPANS WITH SIMPLE SPAN CHECKS FOR COMPOSITE DEAD LOAD AND LIVE LOAD.

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3	GENERAL NOTES 1
4	GENERAL NOTES 2
5	QUANTITIES
6	CONCEPTUAL ERECTION PLAN 1
7	CONCEPTUAL ERECTION PLAN 2
8	STAKE-OUT PLAN
9	ABUTMENT 1 FOOTING PLAN
10	ABUTMENT 1 PLAN
11	ABUTMENT 1 ELEVATION
12	ABUTMENT 1 SECTIONS & DETAILS
13	ABUTMENT 1 REBAR SCHEDULE
14	ABUTMENT 2 FOOTING PLAN
15	ABUTMENT 2 PLAN
16	ABUTMENT 2 ELEVATION
17	ABUTMENT 2 SECTION & DETAILS
18	WINGWALL A PLAN & ELEVATION
19	WINGWALL A SECTIONS 1
20	WINGWALL A SECTIONS 2
21	WINGWALL B PLAN & ELEVATION
22	WINGWALL B SECTIONS 1
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24	ABUTMENT 2 REBAR SCHEDULE 1
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26	MISCELLANEOUS ABUTMENT DETAILS
27	ABUTMENT ARCHITECTURAL DETAILS
28	PIER PLAN & FOOTING PLAN
29	PIER ELEVATION
30	PIER DETAILS 1
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37	BEAM DETAILS 3

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39	SLAB PLAN
40	SLAB TYPICAL SECTION 1
41	SLAB TYPICAL SECTION 2
42	SCUPPER LOCATIONS & DETAILS
43	BARRIER & SIDEWALK DETAILS 1
44	BARRIER & SIDEWALK DETAILS 2
45	ITS SUPPORT HANGER DETAILS
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51	DIAPHRAGM DETAILS 6
52	DIAPHRAGM DETAILS 7
53	DIAPHRAGM DETAILS 8
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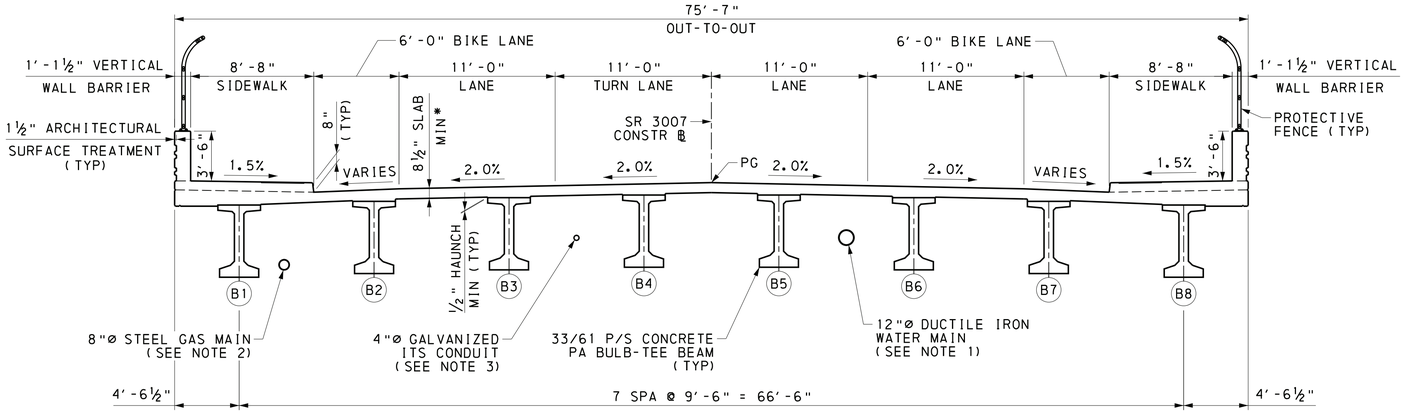
64	FAR APPROACH SLAB SECTIONS
65	APPROACH SLAB DETAILS 1
66	APPROACH SLAB DETAILS 2
67	APPROACH SLAB DETAILS 3
68	APPROACH SLAB REBAR SCHEDULE
69	BARRIER ARCHITECTURAL DETAILS
70	PROTECTIVE FENCE DETAILS
71	FUTURE REDECKING PLAN
72	STANDPIPE DETAILS
73-78	STRUCTURE BORINGS



TYPICAL SECTION
2 0 2 4 6 FEET

* INCLUDES ½" INTEGRAL WEARING SURFACE

NOTES:

1. COORDINATE WITH CAPITAL REGION WATER. SEE WATER UTILITY RELOCATION ALSO PLAN.
2. COORDINATE WITH UGI UTILITIES, INC. AND THEIR CONTRACTOR FOR THE GAS UTILITY RELOCATION. SEE GAS UTILITY RELOCATION ALSO PLAN.
3. SEE ITS ALSO PLAN.

REFERENCES:

	SHEETS:
GENERAL PLAN	1
GENERAL NOTES	3 - 4

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0123 MPMS/ECMS PROJ: 97828 BRKEY: 67418

HNTB

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0123 SEG 0051 OFFSET 0123
SR 3007 (19TH STREET) STA 100+84.74
OVER SR 0083 AND SR 8019 (RAMP T)

2-SPAN CONTINUOUS COMPOSITE PS CONCRETE PA BULB-TEE BEAM BRIDGE

TYPICAL SECTION & LOAD RATINGS

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — JUSTIN ROBERT MCCARTHY — ENGINEER PE076998

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

RECOMMENDED 12-6-2022

SHEET 2 OF 78

S-39453

6/28/2022
FILENAME: 63016-s-brB3-typ01.dgn

DES: MCA | DES CKD: JMA | DWG: SMZ | DWG CKD: JRM

GENERAL NOTES

DESIGN SPECIFICATIONS:

1. AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 8TH EDITION, 2017, AND AS SUPPLEMENTED BY DESIGN MANUAL, PART 4, DECEMBER 2019.
2. LIVE LOAD DISTRIBUTION TO GIRDERS IS BASED UPON DM-4 DISTRIBUTION FACTORS.
3. DESIGN IS IN ACCORDANCE WITH THE LRFD METHOD.

DESIGN LIVE LOADS:

1. PHL-93, P-82 AND P2016-13
2. FATIGUE DESIGN IS BASED ON THE FOLLOWING:

   PRESTRESSED CONCRETE: ADTT 265 (2050)(ONE-DIRECTIONAL)
3. MAXIMUM ALLOWABLE TENSILE STRESS IN PRECOMPRESSED TENSILE ZONE: 0.0948 $\sqrt{(f'c)}$

DEAD LOADS:

1. INCLUDES SURFACE AREA DENSITY OF 0.030 KSF FOR FUTURE WEARING SURFACE ON THE DECK SLAB.
2. INCLUDES A SURFACE AREA DENSITY OF 0.015 KSF FOR PERMANENT METAL DECK FORMS THAT TAKES INTO ACCOUNT THE WEIGHT OF THE FORM, PLUS THE WEIGHT OF THE CONCRETE IN THE VALLEYS OF THE FORMS.
3. BEAMS 3 - 6 INCLUDE 0.083 KIP/FT EACH FOR UTILITY AND SUPPORT.
4. BEAMS 1, 2, 7, AND 8 INCLUDE 0.020 KIP/FT EACH FOR UTILITY AND SUPPORT.

GENERAL:

1. PROVIDE MATERIALS AND PERFORM WORK IN ACCORDANCE WITH SPECIFICATIONS, PUBLICATION 408/2020, AASHTO/AWS D1.5M/D1.5: 2015 BRIDGE WELDING CODE, AND CONTRACT SPECIAL PROVISIONS.
2. PROVIDE 2" CONCRETE COVER ON REINFORCEMENT BARS, EXCEPT AS NOTED.
3. USE CLASS AAAP CEMENT CONCRETE IN DECK SLAB AND TYPE 3 APPROACH SLAB.

   USE CLASS AAAP CEMENT CONCRETE IN INTEGRAL SIDEWALK CAST MONOLITHICALLY WITH THE DECK SLAB WHEN SPECIFIED.

   USE CLASS AA CEMENT CONCRETE IN ALTERNATE SIDEWALK, BARRIERS, TYPE 2 APPROACH SLAB, CONCRETE DIAPHRAGMS, ABUTMENT 2 BACKWALL, CHEEK WALLS, SHEAR BLOCKS, U-WINGS ABOVE BRIDGE SEAT CONSTRUCTION JOINT, AND SLEEPER SLABS.

   USE CLASS A CEMENT CONCRETE IN PIER, ABUTMENTS BELOW BRIDGE SEAT, WINGWALLS, AND FOOTINGS.

   USE CLASS C CEMENT CONCRETE BELOW THE BOTTOM OF FOOTINGS WHEN SPECIFIED.
4. A HIGHER CLASS CONCRETE MAY BE SUBSTITUTED FOR A LOWER CLASS CONCRETE AT NO ADDITIONAL COST TO THE DEPARTMENT, IF APPROVED BY THE DISTRICT BRIDGE ENGINEER.
5. PROVIDE GRADE 60 REINFORCING STEEL BARS THAT MEET THE REQUIREMENTS OF ASTM A 615/A 615M, A 996/A 996M OR A 706/A 706M. DO NOT WELD GRADE 60 REINFORCING STEEL BARS UNLESS SPECIFIED. GRADE 40 REINFORCING STEEL BARS MAY BE SUBSTITUTED WITH A PROPORTIONAL INCREASE IN CROSS-SECTIONAL AREA, IF APPROVED BY THE CHIEF BRIDGE ENGINEER. DO NOT USE RAIL STEEL A 996/A 996M REINFORCEMENT BARS IN BRIDGE PIER, ABUTMENTS, SHEAR BLOCKS, BEAMS, FOOTINGS, PILES, BARRIERS OR WHERE BENDING OF THE REINFORCEMENT BARS IS INDICATED.
6. USE EPOXY-COATED REINFORCEMENT BARS EVERYWHERE.
7. GALVANIZED REINFORCING STEEL BARS MAY BE SUBSTITUTED FOR EPOXY-COATED REINFORCING STEEL BARS AT NO ADDITIONAL COST TO THE DEPARTMENT.
8. RAKE-FINISH ALL HORIZONTAL CONSTRUCTION JOINTS, EXCEPT AS INDICATED.
9. CONSTRUCT DECK SLAB TRANSVERSE CONSTRUCTION JOINTS PARALLEL TO BRIDGE CENTERLINE OF BEARINGS.
10. PLACE CHEEKWALL, CONCRETE SHEAR BLOCKS, AND BACKWALL CONCRETE AFTER BEAMS ARE SET IN POSITION.
11. CHAMFER EXPOSED CONCRETE EDGES ¾" BY ¾", EXCEPT AS NOTED.
12. ALL DIMENSIONS SHOWN ARE HORIZONTAL, EXCEPT AS NOTED.
13. USE PERMANENT METAL FORMS TO CONSTRUCT THE DECK SLAB.
14. DECK SLAB THICKNESS INCLUDES A ½" INTEGRAL WEARING SURFACE.
15. SUPERSTRUCTURE DIMENSIONS SHOWN ARE FOR A NORMAL TEMPERATURE OF 68°F.
16. PROVIDE MINIMUM EMBEDMENT AND SPLICE LENGTHS IN ACCORDANCE WITH STANDARD DRAWING BC-736M, UNLESS OTHERWISE INDICATED.
17. PREPARE BEARING AREAS AS SPECIFIED IN PUBLICATION 408, SECTION 1001.3(K)9.
18. BRIDGE IS NOT WEIGHT RESTRICTED. SEE PUBLICATION 408 SECTION 105.17 FOR CONSTRUCTION LOADING LIMITS.
19. PROVIDE A MINIMUM WIDTH OF 2½" AT 68°F FOR STRIP SEAL INSTALLATIONS UNLESS OTHERWISE INDICATED.
20. DO NOT USE ADHESIVE ANCHORS IN A TENSION APPLICATION FOR PERMANENT INSTALLATIONS.
21. DO NOT USE ADHESIVE ANCHORS IN A SUSTAINED TENSION APPLICATION FOR TEMPORARY INSTALLATIONS, INCLUDING DURING CONSTRUCTION.
22. LABORATORY ANALYSIS OF SAMPLES FROM CAULKING MATERIAL OBSERVED AT THE BASE PLATE OF EACH RAILING POST ATTACHED TO THE BRIDGE PARAPETS OF THE EXISTING STRUCTURE (S-2384) WAS CONFIRMED TO BE ASBESTOS CONTAINING MATERIAL. REFER TO THE ASBESTOS CONTAINING MATERIAL AND LEAD-BASED PAINT INSPECTION REPORT AND SPECIAL PROVISION.

DES: MCA	DES CKD: JRM	DWG: JTM	DWG CKD: JRM

12/2/2022
FILENAME: 63016-s-brB3-gen01.dgn

FOUNDATION NOTES:

GENERAL:

1. FOUNDATIONS MAY BE ORDERED BY THE REPRESENTATIVE AND DISTRICT GEOTECHNICAL SPECIALIST TO BE AT ANY ELEVATION OR OF ANY DIMENSIONS NECESSARY TO PROVIDE A PROPER FOUNDATION.
2. THE CONTRACTOR IS RESPONSIBLE FOR THE CONTROL OF DRAINAGE DURING CONSTRUCTION. DIRECT RUNOFF AWAY FROM THE PROPOSED FOUNDATION FOOTPRINT.
3. AT THE PIER AND AT ABUTMENT 2 AND ITS ASSOCIATED WINGWALLS, IF BEDROCK IS NOT ENCOUNTERED AT THE BOTTOM OF FOOTING ELEVATION, OVER-EXCAVATE TO TOP OF ROCK AND BACKFILL WITH CLASS C CEMENT CONCRETE TO THE BOTTOM OF FOOTING ELEVATION IN ACCORDANCE WITH OVEREXCAVATION AND BACKFILL WITH CLASS C CEMENT CONCRETE SPECIAL PROVISION.
4. EXISTING PEDESTALS WITHIN THE FOOTPRINT OF THE PROPOSED PIER FOOTING MAY BE REMOVED IN THEIR ENTIRETY OR AT A MINIMUM TO THE PROPOSED PIER BOTTOM OF FOOTING ELEVATION.
5. EXISTING PILES WITHIN THE FOOTPRINT OF THE PROPOSED PIER FOOTING ARE TO BE REMOVED IN THEIR ENTIRETY. EXISTING PILES OUTSIDE THE FOOTPRINT OF THE PROPOSED PIER FOOTING ARE TO BE REMOVED TO THE BOTTOM OF PROPOSED ROADWAY SUBGRADE.
6. EXCAVATE ACCORDING TO CURRENT OSHA OR OTHER APPLICABLE LOCAL, STATE, AND FEDERAL REGULATIONS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE STABILITY OF THE EXCAVATIONS.
7. NOTIFY THE DISTRICT GEOTECHNICAL SPECIALIST IF ANY DEVIATIONS FROM THE NOTED SUBSURFACE CONDITIONS ARE ENCOUNTERED DURING CONSTRUCTION.
8. CONSIDER THE SOIL ENVIRONMENT AS POTENTIALLY CORROSIVE, EPOXY COAT ALL REINFORCEMENT BARS.
9. SITE CLASS IS NOT CLASS E OR F.
10. ROCK EXCAVATION IS ANTICIPATED FOR THE CONSTRUCTION OF ABUTMENT 2, WINGWALL A AND WINGWALL B.

PILE FOOTINGS:

1. PROVIDE HEAVY-DUTY PILE TIP REINFORCEMENT IN ACCORDANCE WITH PUBLICATION 408, SECTION 1005.2(b).
2. PROVIDE ONE TEST PILE AT OPPOSITE ENDS AT ABUTMENT 1. PROVIDE DYNAMIC PILE LOAD TESTING IN ACCORDANCE WITH PUBLICATION 408, SECTION 1005.3(h).
3. ALL PILES MUST EXTEND A MINIMUM OF 10 FEET BELOW THE BOTTOM OF PILE CAP ELEVATION. IF UNFORESEEN OBSTRUCTIONS ARE ENCOUNTERED, PREDRILL IN ACCORDANCE WITH PUBLICATION 408, SECTION 1005.3(j).
4. MANDATORY PREDRILLING FOR DRIVEN PILES IS ANTICIPATED AT ABUTMENT 1 (SEE SHEET 9 FOR ANTICIPATED LOCATIONS). ALL PILES MUST EXTEND A MINIMUM OF 10 FEET BELOW THE BOTTOM OF PILE CAP ELEVATION. PREDRILL IN ACCORDANCE WITH PUBLICATION 408, SECTION 1005.3(j).
5. DRIVE ALL PILES TO ABSOLUTE REFUSAL IN ACCORDANCE WITH PUBLICATION 408, SECTION 1005.3(b)5.a CASE 1.
6. CONTROL PILE DRIVING BY THE WAVE EQUATION ANALYSIS. DRIVE TEST PILES TO ABSOLUTE REFUSAL. THE ENGINEER SHALL VERIFY, FROM THE TEST PILE DRIVING RESULTS, THE CAPABILITY OF THE PILE HAMMER SELECTED BY THE CONTRACTOR. DRIVE BEARING PILES TO ABSOLUTE REFUSAL INTO THE STRATUM DEFINED BY A TIP ELEVATION THAT IS PREDETERMINED BY THE ENGINEER FROM TEST PILES. THE ENGINEER SHALL DETERMINE THE ACCEPTABILITY OF THE BEARING PILES THAT ATTAIN ABSOLUTE REFUSAL ABOVE THE PREDETERMINED TIP ELEVATIONS.

PILE FOOTINGS CONTINUED:

7. CONSIDER THE SOIL ENVIRONMENT AS POTENTIALLY CORROSIVE. PILES DESIGNED WITH A 1/16" REDUCTION OF STEEL ON EXPOSED SURFACES.
8. PILE FOOTINGS DESIGNED WITH A STRENGTH AXIAL CAPACITY OF 259.0 KIPS.
9. ABUTMENT 1 IS DESIGNED SUCH THAT THE LATERAL LOADS ARE RESISTED BY THE BATTERED PILES ONLY.
10. FOR PILE INSTALLATION TABLE, SEE SHEET 9.

ARCHITECTURAL DETAIL NOTES:

1. PROVIDE FORMWORK TO CREATE THE RELIEF DETAILS ON THE OUTSIDE FACES OF BARRIERS AS INDICATED ON SHEET 69. THIS FORMWORK IS INCIDENTAL TO THE BARRIER CONCRETE.
2. PROVIDE FORMWORK TO CREATE AN EMBEDDED KEYSTONE PATTERN ON THE ENDS OF THE PIER AS INDICATED ON SHEET 32. THIS FORMWORK IS INCIDENTAL TO THE PIER CONCRETE.
3. APPLY AN ARCHITECTURAL SURFACE TREATMENT (FORMLINER) TO THE FRONT FACE OF ABUTMENTS, EXPOSED FACES OF WINGWALLS, AND FRONT FACES OF CHEEKWALLS AT THE ABUTMENTS AS INDICATED ON SHEET 27 AND IN ACCORDANCE WITH SPECIAL PROVISION - ARCHITECTURAL SURFACE TREATMENT, ½" RELIEF, SPLIT BLOCK, 14"x22".
4. PLACE 3" THICK PREFORMED CELLULAR POLYSTYRENE BETWEEN THE FRONT FACES OF ABUTMENT 2/WINGWALL A AND THE BACKFILL ALONG THE FRONT FACES OF WALLS. 3" THICK PREFORMED CELLULAR POLYSTYRENE SHALL EXTEND FROM THE FINISHED GROUND LINE TO THE BOTTOM OF THE ARCHITECTURAL SURFACE TREATMENT AS INDICATED ON SHEET 27 IN ORDER TO PROTECT THE WALL FINISHES FROM DAMAGE DURING EXCAVATION IN A FUTURE CONTRACT. 3" THICK PREFORMED CELLULAR POLYSTYRENE IS INCIDENTAL TO THE ITEM "ARCHITECTURAL SURFACE TREATMENT, ½" RELIEF, SPLIT BLOCK, 14x22"".
5. APPLY STAIN TO CONCRETE SURFACES TO THE LIMITS INDICATED AND IN ACCORDANCE WITH SPECIAL PROVISION - STAINING OF REINFORCED CONCRETE SURFACES. USE THE FOLLOWING COLORS:

   AREAS OF ARCHITECTURAL SURFACE TREATMENT, SPLIT BLOCK, 14"x22"

   BASE COLOR OF ENTIRE SURFACE AREA:
   FEDERAL COLOR #30372, BEIGE-SAND

   ACCENT BLOCK COLORS (THE NUMBER OF BLOCKS TO HAVE THE TWO ACCENT COLORS SHOULD EACH BE 4% OF THE TOTAL BLOCK SURFACE AREA, EACH ACCENT BLOCK SHOULD BE COMPLETELY COLORED):
   FEDERAL COLOR #30219, COCOA-TAN
   FEDERAL COLOR #30166, REDDISH-BROWN

   GROUT LINES:
   FEDERAL COLOR #26492, OFF-WHITE

   OTHER CONCRETE SURFACES

   BARRIER RECTANGULAR BLOCKS:
   FEDERAL COLOR #15450, BLUE

   KEYSTONE AT PIER ENDS:
   FEDERAL COLOR #24272, GREEN
6. BRIDGE BARRIER, SIDEWALK, BEAMS, AND PIER TO BE NATURAL COLOR, EXCEPT FOR AREAS INDICATED ABOVE.
7. PROVIDE A MODIFIED PROTECTIVE FENCE AS INDICATED ON SHEET 70 AND IN ACCORDANCE WITH SPECIAL PROVISIONS - BARRIER PROTECTIVE FENCE, VINYL-COATED STEEL, BLACK AND RAILROAD PROTECTIVE FENCE, CURVED TOP, VINYL-COATED STEEL, BLACK.
   FEDERAL COLOR #37031, BLACK
8. PAINT RETAINING WALL 2 (S-40313) BENT CONNECTION PLATE USING A TWO-COAT PAINT SYSTEM IN ACCORDANCE WITH SECTION 1060.2(f).
   FEDERAL COLOR #36176, GREY

* AS SUPPLEMENTED BY ATTACHMENT BC-788 MODIFIED "SPRAY-ON WATERPROOFING DETAILS"

DESCRIPTION	DWG. NO.	REC. DATE
CLASSIFICATION OF EARTHWORK FOR STRUCTURES	RC-11M	06/01/10
BACKFILL AT STRUCTURES	RC-12M	02/08/19
CONCRETE PAVEMENT JOINTS	RC-20M	11/30/21
CURB RAMPS AND SIDEWALKS	RC-67M	02/19/21
TRAFFIC SIGNAL SUPPORT	TC-8801	12/12/11
PROTECTIVE FENCE	BC-701M	02/19/21
ELECTRICAL DETAILS	BC-721M	02/19/21
PERMANENT METAL DECK FORMS	BC-732M	01/31/19
ANCHOR SYSTEMS	BC-734M	02/19/21
WALL CONSTRUCTION AND EXPANSION JOINT DETAILS	BC-735M	09/30/16
REINFORCEMENT BAR FABRICATION DETAILS	BC-736M	01/31/19
BRIDGE DRAINAGE	BC-751M	01/31/19
CONCRETE DECK SLAB DETAILS	BC-752M	02/19/21
BEARINGS	BC-755M	01/31/19
PREFORMED NEOPRENE COMPRESSION SEAL JOINT FOR APPROACH SLABS	BC-766M	01/31/19
NEOPRENE STRIP SEAL DAM FOR PRESTRESSED CONCRETE & STEEL I-BEAM BRIDGES	BC-767M	02/19/21
PRESTRESSED CONCRETE BEAM BRACING	BC-772M	09/30/16
MISCELLANEOUS PRESTRESS DETAILS	BC-775M	09/30/16
TYPICAL WATERPROOFING AND EXPANSION DETAILS *	BC-788M	01/31/19
UTILITY ATTACHMENT & SUPPORT DETAILS, PRESTRESSED BRIDGES	BC-794M	01/31/19

SUPPLEMENTAL DRAWINGS

Mark	Description	By	Chk'd	Recm'd	Date

REVISIONS

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0123 MPMS/ECMS PROJ: 97828 BRKEY: 67418

HNTB

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — JUSTIN ROBERT MCCARTHY — ENGINEER PE076998

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0123 SEG 0051 OFFSET 0123
SR 3007 (19TH STREET) STA 100+84.74
OVER SR 0083 AND SR 8019 (RAMP T)
2-SPAN CONTINUOUS COMPOSITE PS CONCRETE PA BULB-TEE BEAM BRIDGE
GENERAL NOTES 1

PREPARED BY:
HNTB CORPORATION
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SUITE 300
HARRISBURG, PA 17110

RECOMMENDED 12-6-2022

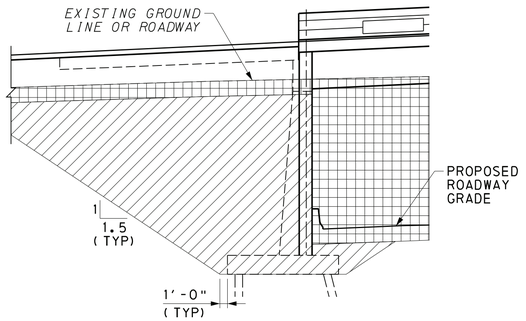
SHEET 3 OF 78

S-39453

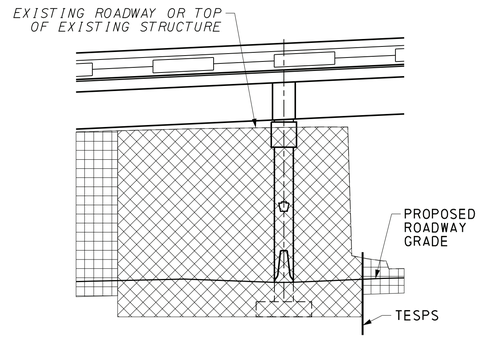
GENERAL NOTES

LEGEND OF ABBREVIATIONS:

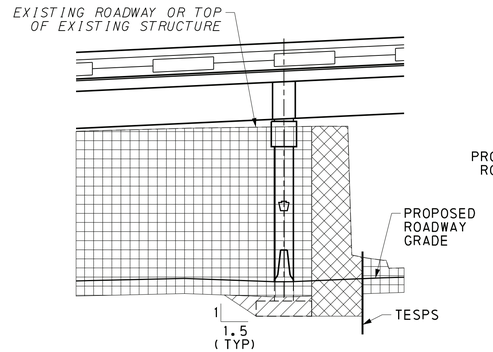
ABUT	=	ABUTMENT
ADT	=	AVERAGE DAILY TRAFFIC
ADTT	=	AVERAGE DAILY TRUCK TRAFFIC
ALT	=	ALTERNATE
APPR	=	APPROACH
APPROX	=	APPROXIMATE
AHD	=	AHEAD
AUX	=	AUXILIARY
℄	=	BASELINE
BRG	=	BEARING
BOT	=	BOTTOM
BFE	=	BOTTOM OF FOOTING ELEVATION
BPCE	=	BOTTOM OF PILE CAP ELEVATION
℄	=	CENTERLINE
CG	=	CENTER OF GRAVITY
CHK'D/CKD	=	CHECKED
CLR	=	CLEAR
CONSTR	=	CONSTRUCTION
∅/DIA	=	DIAMETER
DES	=	DESIGN
DWG	=	DRAWING
EA	=	EACH
EF	=	EACH FACE
ELEV	=	ELEVATION
EPTE	=	ESTIMATED PILE TIP ELEVATION
EQ	=	EQUAL
EXIST	=	EXISTING
E/EXP	=	EXPANSION
FF	=	FRONT FACE
F	=	FIXED
GALV	=	GALVANIZED
H/HORIZ	=	HORIZONTAL
INV	=	INVERT
JT	=	JOINT
LT	=	LEFT
MAINT	=	MAINTENANCE
MAX	=	MAXIMUM
MP	=	MILEPOST
MIN	=	MINIMUM
NB	=	NORTHBOUND
NE	=	NORTHEAST
NW	=	NORTHWEST
NS	=	NORFOLK SOUTHERN RAILWAY
NO.	=	NUMBER
OD	=	OUTSIDE DIAMETER
PED	=	PEDESTAL
ℙ	=	PLATE
POB	=	POINT OF BEGINNING
POE	=	POINT OF ENDING
POT	=	POINT OF TANGENCY
PCP	=	PREFORMED CELLULAR POLYSTYRENE
P/S	=	PRESTRESSED
PG/PGL	=	PROFILE GRADE LINE
PROV	=	PROVIDED
PUB	=	PUBLICATION
R	=	RADIUS
R/W	=	RIGHT-OF-WAY
RDWY	=	ROADWAY
RECM'D	=	RECOMMENDED
REINF	=	REINFORCEMENT
REQ'D	=	REQUIRED
RF	=	REAR FACE
RT	=	RIGHT
SCHED	=	SCHEDULE
SHLDR	=	SHOULDER
SB	=	SOUTHBOUND
SE	=	SOUTHEAST
SW	=	SOUTHWEST
SPA	=	SPACE
STD	=	STANDARD
SR	=	STATE ROUTE
STA	=	STATION
ST	=	STREET
TEMP	=	TEMPORARY
TESPS	=	TEMPORARY EXCAVATION SUPPORT & PROTECTION SYSTEM
TYP	=	TYPICAL
UNO	=	UNLESS NOTED OTHERWISE
V/VERT	=	VERTICAL
WING	=	WINGWALL
WP	=	WORK POINT



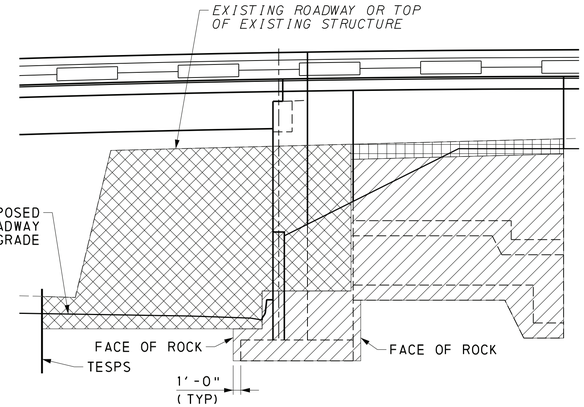
LIMITS OF EXCAVATION AT ABUTMENT 1
NOT TO SCALE



(EXISTING ABUTMENT, WINGWALLS, AND PILES/PEDESTALS NOT SHOWN FOR CLARITY)
LIMITS OF EXCAVATION AT PIER AT EXISTING WINGWALLS
NOT TO SCALE



(EXISTING ABUTMENT AND PILES/PEDESTALS NOT SHOWN FOR CLARITY)
LIMITS OF EXCAVATION AT PIER BETWEEN EXISTING WINGWALLS
NOT TO SCALE



(EXISTING ABUTMENT AND WINGWALLS NOT SHOWN FOR CLARITY)
(SEE SHEETS 18 & 21 FOR DETAILS OF CLASS C CEMENT CONCRETE BACKFILL AT WINGS A & B)
LIMITS OF EXCAVATION AT ABUTMENT 2 AND WINGS A & B
NOT TO SCALE

LEGEND

- CLASS 3 EXCAVATION
- CLASS 1 EXCAVATION
- REMOVAL OF EXISTING STRUCTURE

EXISTING STRUCTURE PLANS:

1. DO NOT CONSIDER ANY OF THE DATA ON THE EXISTING STRUCTURE SUPPLIED IN THE ORIGINAL DESIGN DRAWINGS OR MADE AVAILABLE TO YOU BY THE DEPARTMENT OR ITS AUTHORIZED AGENTS AS POSITIVE REPRESENTATIONS OF ANY OF THE CONDITIONS THAT YOU WILL ENCOUNTER IN THE FIELD.
2. THE INFORMATION SHOWN ON THE PLANS FOR THE EXISTING BRIDGE IS NOT PART OF THE PLANS, PROPOSAL OR CONTRACT AND IS NOT TO BE CONSIDERED A BASIS FOR COMPUTATION OF THE UNIT PRICES USED FOR BIDDING PURPOSES. THERE IS NO EXPRESSED OR IMPLIED AGREEMENT THAT INFORMATION IS CORRECTLY SHOWN. THE BIDDER IS NOT TO RELY ON THIS INFORMATION, BUT IS TO ASSUME THE POSSIBILITY THAT CONDITIONS AFFECTING THE COST AND/OR QUANTITIES OF WORK TO BE PERFORMED MAY DIFFER FROM THOSE INDICATED. SEE S-2384 (JUNE 1959) PLAN SHEETS FOR EXISTING STRUCTURE INFORMATION.
3. REMOVE EXISTING BRIDGE IN ACCORDANCE WITH THE TRAFFIC CONTROL PLANS AND SPECIAL PROVISIONS.

ITS SUPPORT HANGER NOTES:

1. PROVIDE STRUCTURAL STEEL CONFORMING TO AASHTO M270/M270M GRADE 36 (ASTM A709/A709M GRADE 36).
2. PROVIDE HIGH-STRENGTH BOLTS, INCLUDING NUTS AND WASHERS, CONFORMING TO AASHTO M164 (ASTM A325) DESIGNATION.
3. ALL STEEL MEMBERS AND HARDWARE ARE TO BE HOT-DIPPED GALVANIZED.
4. PRESTRESSED WEB INSERTS ARE TO BE GALVANIZED OR COMPLETELY ZINC-ELECTROPLATED. DRILLING IN THE BEAMS IS NOT PERMITTED. COST OF INSERTS IS INCIDENTAL TO THE PRESTRESSED BEAMS.
5. PRESTRESSED BEAMS ARE TO PROVIDE A MINIMUM PULLOUT STRENGTH OF 1.5 KIPS.
6. PLACE THE ITS SUPPORT ANGLES PERPENDICULAR TO THE BEAMS.
7. MAXIMUM SPACING BETWEEN HANGERS IS 12'-6".
8. ADJUST ATTACHMENT RODS, AS REQUIRED, TO PROVIDE PROPER CLEARANCE THROUGH DIAPHRAGM OPENINGS.
9. THE NUTS ON ALL RODS ARE TO BE TIGHTENED FOR A SNUG ASSEMBLY ONLY AND LOCKED.

UTILITY NOTES:

1. COORDINATE, LOCATE, AND CONDUCT ALL WORK RELATED TO PUBLIC AND PRIVATE UTILITIES IN ACCORDANCE WITH PUBLICATION 408, SECTIONS 105.06 AND 107.12.
2. COORDINATE WITH CAPITAL REGION WATER. SEE WATER UTILITY RELOCATION ALSO PLAN.
3. COORDINATE WITH UGI UTILITIES, INC. AND THEIR CONTRACTOR FOR THE GAS UTILITY RELOCATION. SEE GAS UTILITY RELOCATION ALSO PLAN.
4. COORDINATE WITH CAPITAL REGION WATER AND UGI UTILITIES, INC. PRIOR TO DEMOLITION OF THE EXISTING STRUCTURE (S-2384). THE EXISTING UTILITIES SHALL BE DISCONNECTED/ABANDONED AND TEMPORARY SERVICE PROVIDED BEFORE EXISTING BRIDGE REMOVAL.
5. PROTECT EXISTING CCTV CAMERA AND SERVICE POLE THAT ARE TO REMAIN IN OPERATION DURING CONSTRUCTION.
6. PROVIDE STRUCTURAL STEEL CONFORMING TO AASHTO M270/M270M GRADE 36 (ASTM A709/A709M GRADE 36) FOR THE ITS CONDUIT DIAPHRAGM SLEEVES AND DOWNSPOUT DIAPHRAGM SLEEVES. ALL SLEEVES ARE TO BE HOT-DIPPED GALVANIZED.

RETAINING WALL 2 (S-40313) CONNECTION NOTES:

1. PROVIDE STRUCTURAL STEEL CONFORMING TO AASHTO M270 (ASTM A709) GRADE 50.
2. PROVIDE WELDED STUD SHEAR CONNECTORS MANUFACTURED FROM STEEL CONFORMING TO ASTM A108.
3. GALVANIZE STEEL BENT PLATE IN ACCORDANCE WITH SECTION 1105.02(s).

Mark	Description	By	Chk'd	Recm'd	Date
	REVISIONS				

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0123 MPMS/ECMS PROJ: 97828 BRKEY: 67418

HNTB

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — JUSTIN ROBERT MCCARTHY — ENGINEER — PE076998

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0123 SEG 0051 OFFSET 0123
SR 3007 (19TH STREET) STA 100+84.74
OVER SR 0083 AND SR 8019 (RAMP T)
2-SPAN CONTINUOUS COMPOSITE PS CONCRETE PA BULB-TEE BEAM BRIDGE
GENERAL NOTES 2

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

RECOMMENDED 12-6-2022

SHEET 4 OF 78

S-39453

DES: MCA	DES CKD: JRM	DWG: JTM	DWG CKD: JRM

12/2/2022
FILENAME 63016-s-brB3-gen02.dgn

APPROXIMATE QUANTITIES - BRIDGE STRUCTURE, AS DESIGNED

ITEM NUMBER	DESCRIPTION	UNIT	NEAR APPR SLAB	ABUT 1	PIER	ABUT 2	FAR APPR SLAB	SUPER STRUCTURE	TOTAL
8030-0003	BRIDGE STRUCTURE, AS DESIGNED, S-39453 (2)	LS	- - -	- - -	- - -	- - -	- - -	- - -	LS
(1)	CLASS 3 EXCAVATION (13)	CY	- - -	2211	167	3552	- - -	- - -	5930
(1)	STRUCTURE BACKFILL (10)	CY	- - -	2126	- - -	2669	- - -	- - -	4795
(1)	ELASTOMER WATERPROOFING MEMBRANE ON OTHER SURFACES (2)(14)	SY	- - -	114	34	138	- - -	- - -	286
(1)	NO. 57 COARSE AGGREGATE (3)	CY	- - -	24	- - -	26	- - -	- - -	50
(1)	JUNCTION BOXES J.B.-25	EA	- - -	- - -	- - -	- - -	- - -	4	4
(1)	1/2" CONDUIT IN STRUCTURE (2)	LF	- - -	- - -	- - -	9	75	407	491
(1)	1-1/4" CONDUIT IN STRUCTURE	LF	- - -	- - -	- - -	- - -	- - -	196	196
(1)	2" CONDUIT IN STRUCTURE	LF	- - -	- - -	- - -	27	112	644	783
(1)	6" STRUCTURE FOUNDATION DRAIN	LF	- - -	177	- - -	212	- - -	- - -	389
(1)	MECHANICAL TEXTURING WITH LONGITUDINAL SAWED GROOVES	SY	- - -	- - -	- - -	- - -	223	1284	1507
(1)	CLASS AAAP CEMENT CONCRETE (7)	CY	- - -	- - -	- - -	- - -	206	523	729
(1)	CLASS AA CEMENT CONCRETE	CY	108	- - -	1	21	66	261	457
(1)	CLASS A CEMENT CONCRETE	CY	- - -	331	201	645	- - -	- - -	1177
(1)	STEEL HP14X117 TEST PILE (8)	EA	- - -	2	- - -	- - -	- - -	- - -	2
(1)	PROTECTIVE COATING FOR REINFORCED CONCRETE SURFACES (PENETRATING SEALERS, REINFORCED CONCRETE SUBSTRUCTURE SURFACES)	SY	- - -	57	493	134	- - -	- - -	684
(1)	PROTECTIVE COATING FOR REINFORCED CONCRETE SURFACES (PENETRATING SEALERS, BRIDGE SUPERSTRUCTURE)	SY	- - -	- - -	- - -	- - -	389	2001	2390
(1)	NEOPRENE STRIP SEAL DAM (4" MOVEMENT)	LF	- - -	- - -	- - -	- - -	85	- - -	85
(1)	FABRICATED STRUCTURAL STEEL, GALVANIZED (11)(12)	LB	- - -	- - -	- - -	768	- - -	1168	1936
(1)	SCUPPER, TYPE 1	EA	- - -	- - -	- - -	- - -	- - -	2	2
(1)	DOWNSPOUTING	LF	- - -	- - -	- - -	- - -	- - -	95	95
(1)	PRESTRESSED CONCRETE PA BULB-TEE BEAMS, 33/61 (5)	LF	- - -	- - -	- - -	- - -	- - -	1714	1714
(1)	BARRIER PROTECTIVE FENCE, VINYL-COATED STEEL, BLACK (2)	LF	- - -	- - -	- - -	- - -	- - -	11	11
(1)	RAILROAD PROTECTIVE FENCE, CURVED TOP, VINYL-COATED STEEL, BLACK (2)	LF	- - -	- - -	- - -	9	76	413	498
(1)	BARRIER LUMINAIRE (2)	EA	- - -	- - -	- - -	2	8	42	52
(1)	STAINING OF REINFORCED CONCRETE SURFACES (2)	SF	- - -	1577	5	3144	19	122	4867
(1)	STAMPED AND STAINED CEMENT CONCRETE SIDEWALK (2)	SF	- - -	- - -	- - -	- - -	250	1287	1537
(1)	ARCHITECTURAL SURFACE TREATMENT, ½" RELIEF, SPLIT BLOCK, 14"x22" (2)	SF	- - -	1577	- - -	3139	- - -	- - -	4716
AND									
1002-0190	REINFORCEMENT BARS, EPOXY COATED (4)(6)	LB	22120	37869	14988	68989	52860	210407	407233
AND									
1005-1423	PREDRILLING FOR UNFORESEEN OBSTRUCTIONS, EARTH DRILLING (4)	DOLLA	- - -	5500	- - -	- - -	- - -	- - -	5500
AND									
1005-1433	PREDRILLING FOR UNFORESEEN OBSTRUCTIONS, OBSTRUCTION DRILLING (4)	DOLLA	- - -	2750	- - -	- - -	- - -	- - -	2750
AND									
1005-1443	PILE EXTRACTION AND REDRIVING (4)	DOLLA	- - -	8250	- - -	- - -	- - -	- - -	8250
AND									
1005-1453	MOBILIZATION FOR PREDRILLING OF UNFORESEEN OBSTRUCTIONS (4)	DOLLA	- - -	8250	- - -	- - -	- - -	- - -	8250
AND									
1005-1853	STEEL HP14X117 PRODUCTION PILE (4)	LF	- - -	550	- - -	- - -	- - -	- - -	550
AND									
1005-2050	STEEL HP14X117 PILE TIP REINFORCEMENT (HEAVY DUTY) (4)	EA	- - -	42	- - -	- - -	- - -	- - -	42
1005-1410	MANDATORY PREDRILLING FOR DRIVEN PILES	LF	- - -	126	- - -	- - -	- - -	- - -	126
1005-1483	DYNAMIC PILE LOAD TEST (9)	EA	- - -	9	- - -	- - -	- - -	- - -	9
1018-0003	REMOVAL OF EXISTING BRIDGE, S-39453 (2)	LS	- - -	- - -	- - -	- - -	- - -	- - -	LS
9000-0506	OVEREXCAVATION AND BACKFILL WITH CLASS C CEMENT CONCRETE, S-39453 (2)	CY	- - -	- - -	216	81	- - -	- - -	297
9000-0508	STANDPIPE, S-39453 (2)	LS	- - -	- - -	- - -	- - -	- - -	- - -	LS
9000-0516	EXPLORATORY AIR TRACK DRILLING, S-39453 (2)	LF	- - -	900	- - -	- - -	- - -	- - -	900
9203-0103	TEMPORARY EXCAVATION SUPPORT AND PROTECTION SYSTEM, S-39453 (2)	LS	- - -	- - -	- - -	- - -	- - -	- - -	LS

(1) ITEMS IN BRIDGE STRUCTURE LUMP SUM ITEM 8030-0003 - GIVEN FOR INFORMATION ONLY.

(2) SEE SPECIAL PROVISIONS.

(3) GEOTEXTILE, CLASS 1 IS INCIDENTAL TO NO. 57 COARSE AGGREGATE.

(4) FOR AS DESIGNED STRUCTURE. FOR ALTERNATE DESIGNS INCLUDE IN BRIDGE STRUCTURE LUMP SUM BID ITEM.

(5) INCLUDES P/S CONCRETE PA BULB-TEE BEAMS DELIVERED AND SET IN PLACE WITH NEOPRENE BEARING PADS, DOWEL HOLES, GROUT, PREFORMED CELLULAR POLYSTYRENE, NEOPRENE PADS, THE WATERPROOFING SYSTEM AS PER BC-788M, AND ALL OTHER MATERIAL AND WORK FOR A COMPLETE INSTALLATION.

(6) INCLUDES 512 LBS OF STAINLESS STEEL DOWEL BARS.

(7) INCLUDES 30 CY OF CLASS AAAP CONCRETE IN THE VALLEYS OF SIP FORMS.

(8) INCLUDES ONE STEEL PILE TIP REINFORCEMENT (HEAVY DUTY) PER TEST PILE. LENGTH OF TEST PILES VARY PER LOCATION AND IS ESTIMATED AS FOLLOWS:
1 EA @ 11'-9"; 1 EA @ 13'-9".

(9) AS DESIGNATED BY THE DEPARTMENT REPRESENTATIVE.

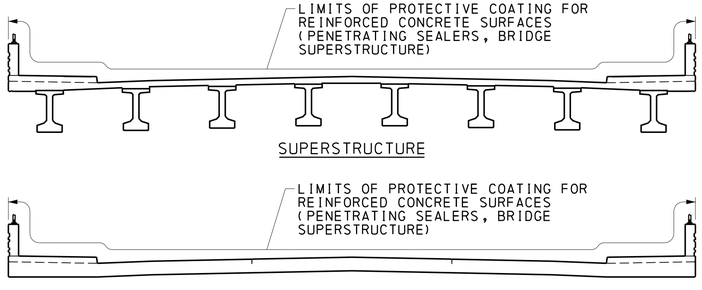
(10) ALL BACKFILL BELOW APPROACH SLAB SUBBASE AT ABUTMENT 2 IS CONSIDERED STRUCTURE BACKFILL.

(11) INCLUDES 17- ⅞"x8" SHEAR CONNECTORS (STUDS), ITS CONDUIT DIAPHRAGM SLEEVES, AND ABUTMENT 1 DOWNSPOUT DIAPHRAGM SLEEVES.

(12) GALVANIZING AND PAINTING ARE INCIDENTAL TO THIS ITEM.

(13) FOR EXCAVATION PAY LIMITS, SEE SHEET 4.

(14) SEE ATTACHMENT BC-788 MODIFIED "SPRAY-ON WATERPROOFING DETAILS".

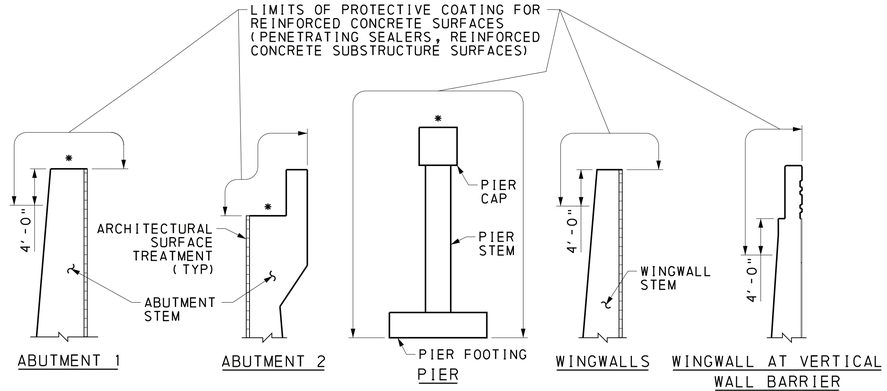


SUPERSTRUCTURE PROTECTIVE COATING LIMITS

NOT TO SCALE

ALTERNATE STRUCTURE ITEMS

ITEM NUMBER	DESCRIPTION	UNIT	TOTAL
8030-0003	BRIDGE STRUCTURE, AS DESIGNED, S-39453 (2)	LS	LUMP SUM
8000-0003	PRESTRESSED CONCRETE BRIDGE STRUCTURE (2)	LS	LUMP SUM
8100-0003	STEEL BRIDGE STRUCTURE (2)	LS	LUMP SUM



* DO NOT APPLY PROTECTIVE COATING WITHIN 2" OF BEARING PADS

SUBSTRUCTURE PROTECTIVE COATING LIMITS

NOT TO SCALE

Mark	Description	By	Chk'd	Recm'd	Date
	REVISIONS				

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0123 MPMS/ECMS PROJ: 97828 BRKEY: 67418

HNTB

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0123 SEG 0051 OFFSET 0123
SR 3007 (19TH STREET) STA 100+84.74
OVER SR 0083 AND SR 8019 (RAMP T)
2-SPAN CONTINUOUS COMPOSITE PS CONCRETE PA BULB-TEE BEAM BRIDGE
QUANTITIES

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL JUSTIN ROBERT MCCARTHY ENGINEER PE076998

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

RECOMMENDED 12-6-2022

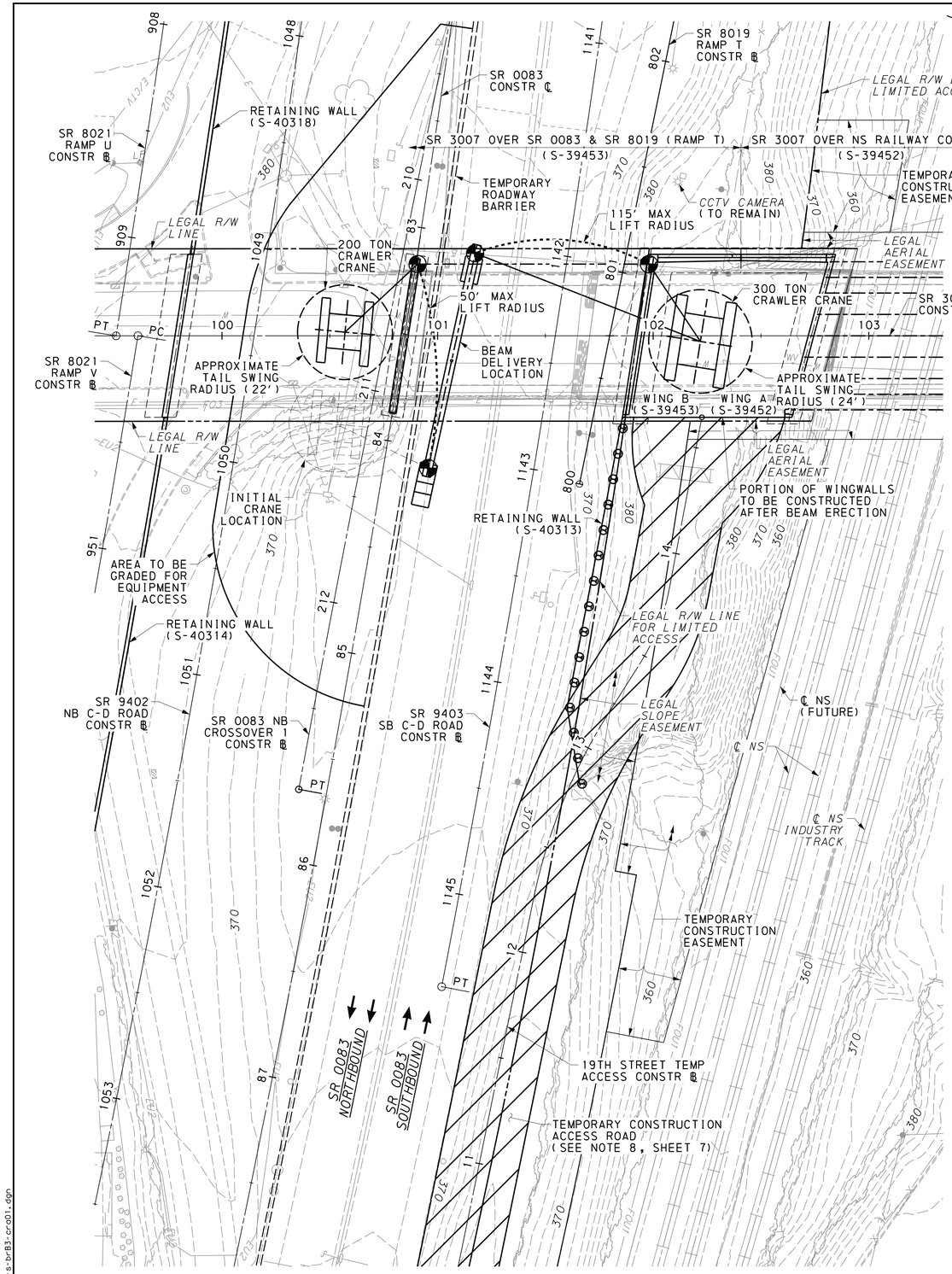
SHEET 5 OF 78

S-39453

12/2/2022
FILENAME: 63016-s-brB3-sum01.dgn

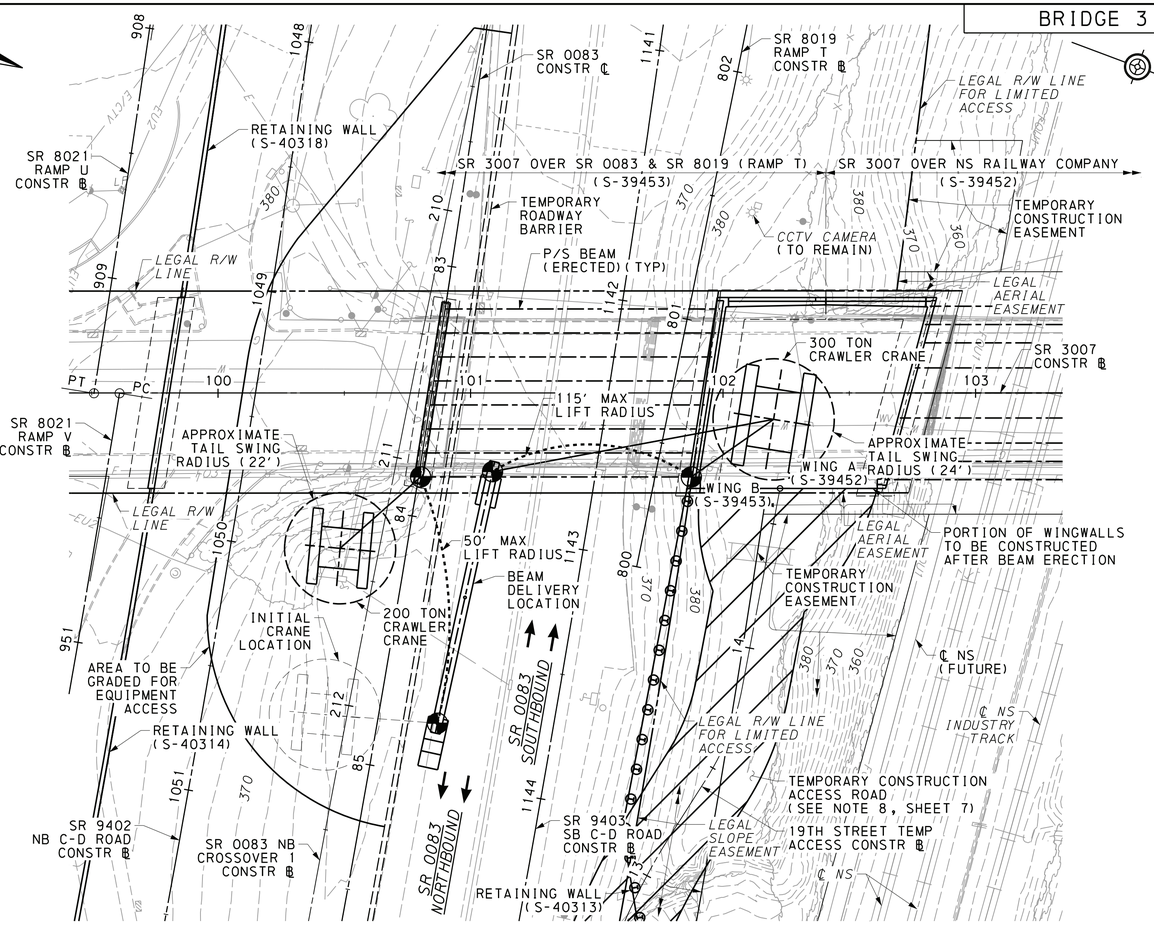
DES: MCA	DES CKD: JRM	DWG: SMZ	DWG CKD: JRM

BRIDGE 3



STAGE 8A (SPAN 2 - BEAM 1 PLACEMENT)

15 0 15 30 FEET



STAGE 8A (SPAN 2 - BEAM 8 PLACEMENT)

15 0 15 30 FEET

NOTES:

1. CONCEPTUAL ERECTION PLAN IS PROVIDED "FOR INFORMATION ONLY".
2. REFER TO CONCEPTUAL ERECTION PLAN 2 FOR SUGGESTED CONSTRUCTION SEQUENCE AND ADDITIONAL NOTES.

LEGEND:

PICK POINT

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0123 MPMS/ECMS PROJ: 97828 BRKEY: 67418

REFERENCES:

	SHEETS:
GENERAL PLAN	1
GENERAL NOTES	3 - 4
CONCEPTUAL ERECTION PLAN 2	7

HNTB

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL JUSTIN ROBERT MCCARTHY ENGINEER PE076998

DAUPHIN COUNTY
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2-SPAN CONTINUOUS COMPOSITE PS CONCRETE PA BULB-TEE BEAM BRIDGE
CONCEPTUAL ERECTION PLAN 1

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

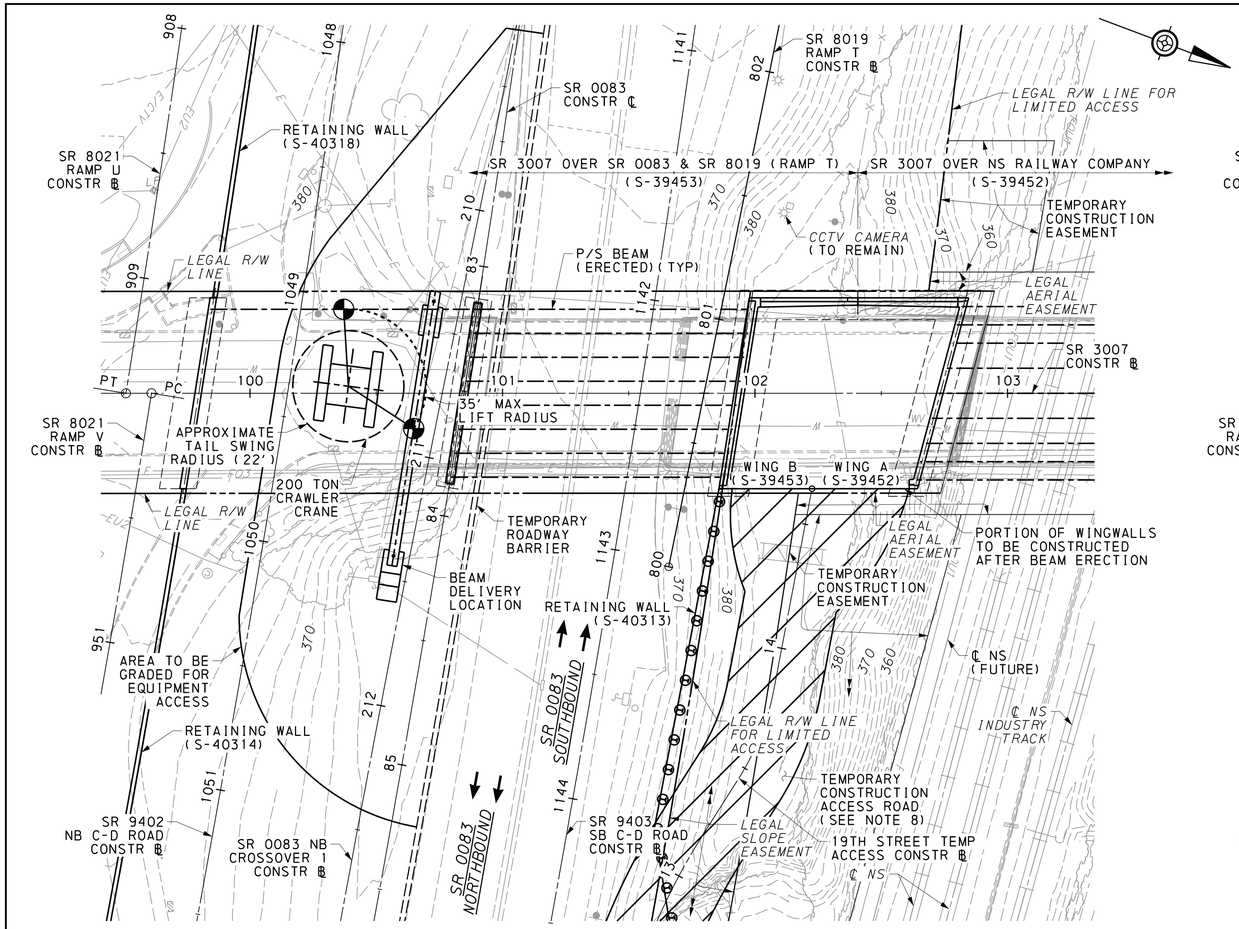
RECOMMENDED 12-6-2022

SHEET 6 OF 78

S-39453

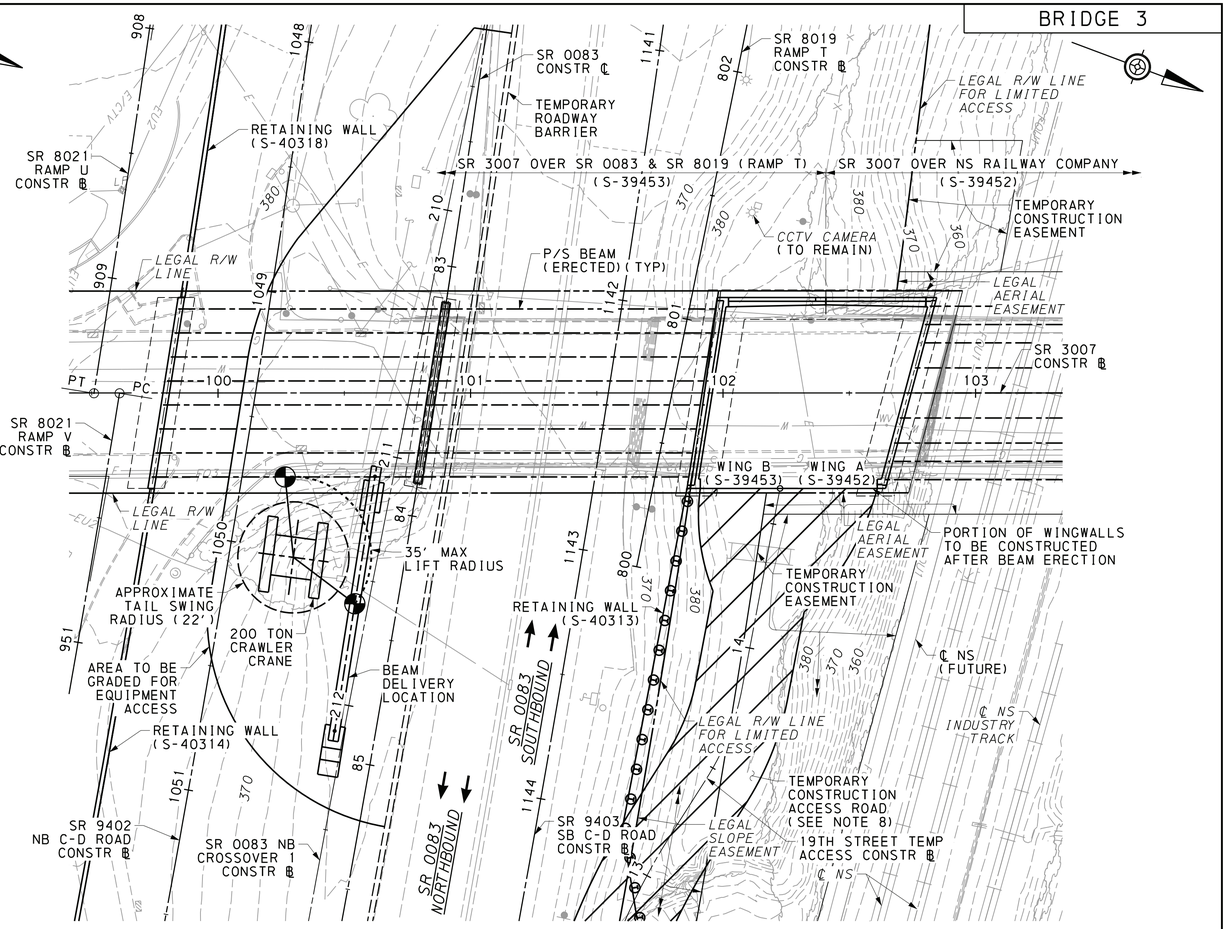
6/28/2022
FILENAME: 63016-s-brB3-crd01.dgn

DES: JMA	DES CKD: MCA	DWG: MCA	DWG CKD: JMA



STAGE 8B (SPAN 1 - BEAM 1 PLACEMENT)

15 0 15 30 FEET



STAGE 8B (SPAN 1 - BEAM 8 PLACEMENT)

15 0 15 30 FEET

NOTES:

1. CONCEPTUAL ERECTION PLAN IS PROVIDED "FOR INFORMATION ONLY".
2. AS REQUIRED, ADJUST TEMPORARY ROADWAY BARRIER TO FACILITATE ACCESS FOR THE CRAWLER CRANE AND BEAM DELIVERY DURING SPAN 1 BEAM ERECTION.
3. ESTIMATED PA BULB-TEE BEAM WEIGHTS:
   SPAN 1: 99.0 KIPS
   SPAN 2: 102.0 KIPS
4. CRANE SIZES SHOWN ARE THE ESTIMATED CRANE SIZES REQUIRED TO PERFORM THE CONCEPTUAL ERECTION PLAN. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE ACTUAL CRANE SIZES.
5. COORDINATE CONSTRUCTION OF S-39453 WITH CONSTRUCTION OF S-39452.
6. THE CONCEPTUAL ERECTION PLAN DEPICTED WITHIN THESE DRAWINGS REQUIRES THE S-39452 WINGWALL A AND S-39453 WINGWALL B FOOTINGS AND STEMS TO BE CONSTRUCTED AFTER PLACEMENT OF THE S-39453 SPAN 2 BEAMS AND S-39452 BEAMS.
7. NIGHT LANE CLOSURE REQUIRED FOR SPAN 2 BEAM DELIVERY AND ERECTION.
8. SEE ROADWAY CONSTRUCTION PLANS FOR ADDITIONAL INFORMATION ON TEMPORARY CONSTRUCTION ACCESS ROAD.
9. THE CONCEPTUAL ERECTION PLAN IS BASED ON THE FOLLOWING CONDITIONS AT S-39453 ABUTMENT 2. CONTRACTOR MUST SUBMIT CALCULATIONS CHECKING ABUTMENT STRENGTH AND STABILITY FOR ERECTION PLANS WHICH DEVIATE FROM THESE CONDITIONS:
   - S-39453 ABUTMENT 2 BACKFILL ELEVATION = 378.0 MAX
   - MAXIMUM TOTAL WEIGHT OF CRANE PLUS PICK = 750 KIPS
   - MAXIMUM LOAD ON THE CRANE TRACK NEAREST THE ABUTMENT = 675 KIPS

SUGGESTED CONSTRUCTION SEQUENCE:

STAGE 1: REMOVE EXISTING STRUCTURE.

STAGE 2: CONSTRUCT PROPOSED SUBSTRUCTURE. S-39452 WINGWALL A AND S-39453 WINGWALL B TO BE CONSTRUCTED AFTER S-39452 AND S-39453 BEAM ERECTION TO FACILITATE TEMPORARY CONSTRUCTION ACCESS ROAD.

STAGE 3: PERFORM CLEARING AND GRUBBING.

STAGE 4: CONSTRUCT TEMPORARY CONSTRUCTION ACCESS ROAD.

STAGE 5: INSTALL SKID BEAM (SEE S-39452 PLANS).

STAGE 6: ERECT S-39452 BEAMS (SEE S-39452 PLANS).

STAGE 7: REMOVE SKID BEAM (SEE S-39452 PLANS).

STAGE 8: ERECT S-39453 BEAMS.

STAGE 9: CONSTRUCT S-39452 WINGWALL A AND S-39453 WINGWALL B.

STAGE 10: CONSTRUCT S-40312 AND S-40313 RETAINING WALLS.

LEGEND:

PICK POINT

REFERENCES:

	SHEETS:
GENERAL PLAN	1
GENERAL NOTES	3 - 4
CONCEPTUAL ERECTION PLAN 1	6

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0123 MPMS/ECMS PROJ: 97828 BRKEY: 67418

HNTB

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — JUSTIN ROBERT MCCARTHY — ENGINEER — PE076998

DAUPHIN COUNTY
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2-SPAN CONTINUOUS COMPOSITE PS CONCRETE PA BULB-TEE BEAM BRIDGE
CONCEPTUAL ERECTION PLAN 2

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

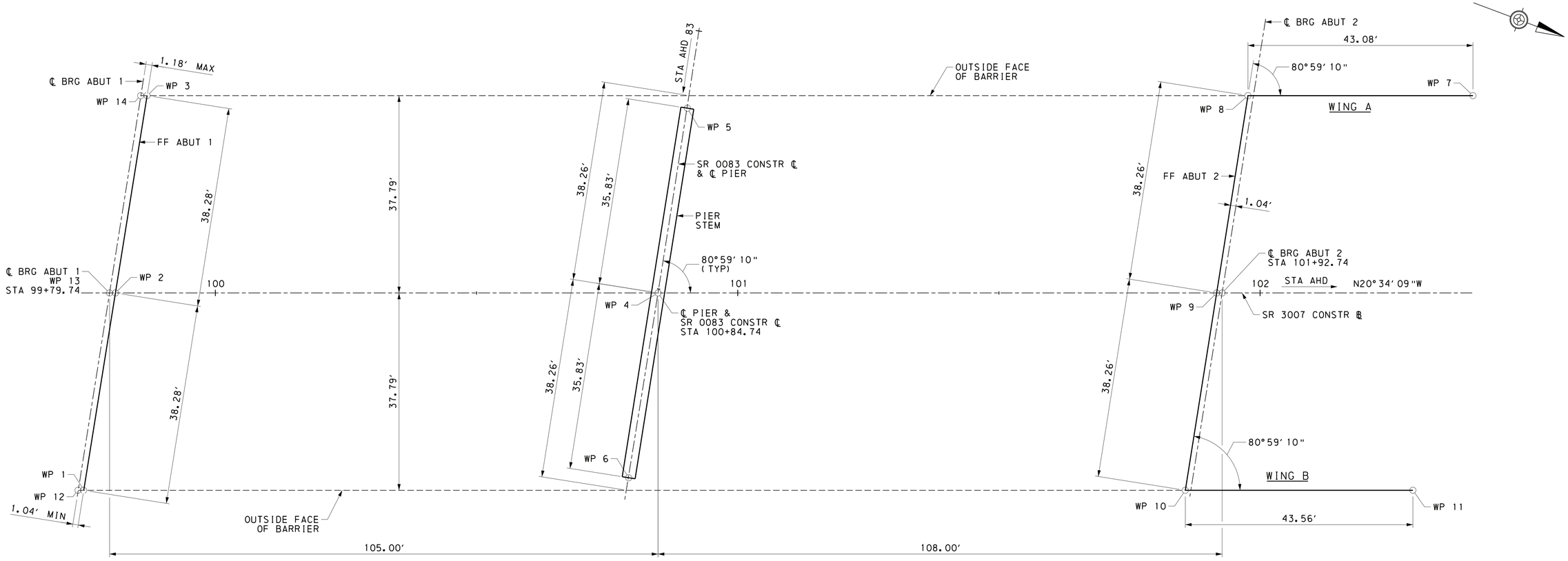
RECOMMENDED 12-6-2022

SHEET 7 OF 78

S-39453

6/28/2022
FILENAME 63016-s-brB3-cr002.dgn

DES: JMA	DES CKD: MCA	DWG: MCA	DWG CKD: JMA



STAKE-OUT PLAN

5 0 5 10 FEET

NOTES:

1. WORK POINTS ALONG FRONT FACE OF ABUTMENTS AND WINGS ARE LOCATED AT THE FRONT FACE OF THE ARCHITECTURAL SURFACE TREATMENT.
2. WORK POINTS AT THE PIER ARE LOCATED ALONG THE CENTERLINE OF PIER.

WORKING POINT COORDINATES				
WP	STATION	OFFSET	NORTHING	EASTING
1	99+74.79	37.79′ RT	337567.2847	2218159.3697
2	99+80.86	0.00′	337559.6853	2218121.8565
3	99+86.92	37.79′ LT	337552.0859	2218084.3433
4	100+84.74	0.00′	337656.9417	2218085.3602
5	100+90.35	35.39′ LT	337649.7638	2218050.2531
6	100+79.12	35.39′ RT	337664.1196	2218120.4672
7	102+40.75	37.79′ LT	337789.7335	2217995.1639
8	101+97.68	37.79′ LT	337749.4044	2218010.2978
9	101+91.68	0.00′	337757.0692	2218047.7865
10	101+85.69	37.79′ RT	337764.7340	2218085.2751
11	102+29.25	37.79′ RT	337805.5211	2218069.9694
12	99+73.74	37.79′ RT	337566.3003	2218159.7391
13	99+79.74	0.00′	337558.6355	2218122.2505
14	99+85.73	37.79′ LT	337550.9707	2218084.7618

FOUR PLACE COORDINATES ARE FOR COMPUTATIONAL PURPOSES ONLY AND DO NOT IMPLY A PRECISION BEYOND TWO DECIMAL POINTS.

WORKING POINT CLOSURE DISTANCES	
WP TO WP	DISTANCE
1 TO 8	235.35′
3 TO 10	212.65′

SR 3007 CONSTR ℬ COORDINATES				
POINT	STATION	NORTHING	EASTING	BEARING
POB	90+00.00	336641.3572	2218466.4673	N20°34′09"W
POE	113+00.00	338794.7310	2217658.3947	

REFERENCES:

	SHEETS:
GENERAL PLAN	1
GENERAL NOTES	3 - 4
ABUTMENT 1 PLAN	10
ABUTMENT 2 PLAN	15
PIER PLAN	28

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0123 MPMS/ECMS PROJ: 97828 BRKEY: 67418

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COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
JUSTIN ROBERT MCCARTHY
ENGINEER PE076998

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

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

DAUPHIN COUNTY
SR 0083 SECTION 079
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2-SPAN CONTINUOUS COMPOSITE PS CONCRETE
PA BULB-TEE BEAM BRIDGE
STAKE-OUT PLAN

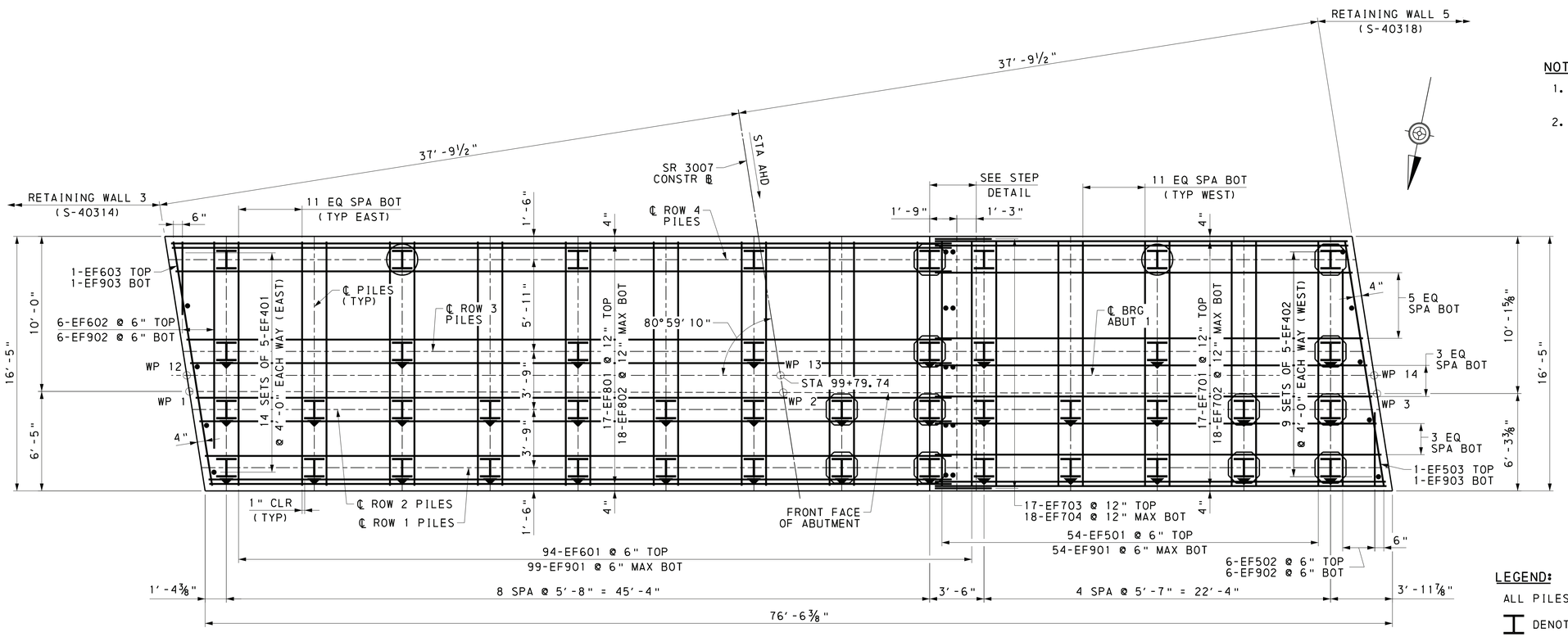
RECOMMENDED 12-6-2022

SHEET 8 OF 78

S-39453

6/28/2022
FILENAME: 63016-s-brB3-sop01.dgn

DES: MCA	DES CKD: JMA	DWG: SMZ	DWG CKD: JRM



FOOTING PLAN

2 0 2 4 FEET

NOTES:

1. WORK POINTS ARE LOCATED AT THE FRONT FACE OF THE ARCHITECTURAL SURFACE TREATMENT.
2. PERFORM EXPLORATORY AIR TRACK DRILLING IN ACCORDANCE WITH THE SPECIAL PROVISION.

LEGEND:

ALL PILES ARE HP 14x117 WITH PILE TIP REINFORCEMENT

- DENOTES VERTICAL PILES
- DENOTES BATTERED PILES, ALL PILES BATTERED 4H:12V
- DENOTES TEST PILES
- OR DENOTES MANDATORY PREDRILLING FOR DRIVEN PILES

FOUNDATION PARAMETERS - PILE FOOTINGS

LOCATION	AXIAL						LATERAL					
	LIMIT STATE	LOAD CASE	STAGE	(A) FACTORED MAX DESIGN AXIAL PILE LOAD (KIP)	(B) FACTORED AXIAL PILE RESISTANCE (KIP)	B/A AXIAL PERFORMANCE RATIO	LIMIT STATE	LOAD STATE	STAGE	(A) FACTORED MAX DESIGN LATERAL PILE LOAD (KIP)	(B) FACTORED LATERAL PILE RESISTANCE (KIP)	B/A LATERAL PERFORMANCE RATIO
TYPICAL - EAST	STR-I	MAX	FINAL	224.60	259.00	1.153	STR-I	MAX	FINAL	35.07	36.11	1.030
TYPICAL - WEST	STR-I	MAX	FINAL	233.60	259.00	1.109	STR-I	MAX	FINAL	30.40	36.69	1.207

PILE INSTALLATION TABLE

SUBSTRUCTURE UNIT	PILE TYPE	PILE TIP (NONE/NORMAL/HEAVY DUTY)	PILE TIP ELEVATION	FACTORED DESIGN LOAD (KIPS)	ULTIMATE PILE CAPACITY AT END OF DRIVING (KIPS)	WEAP OR PDA

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0123 MPMS/ECMS PROJ: 97828 BRKEY: 67418

REFERENCES: / SHEETS:

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REGISTERED PROFESSIONAL
JUSTIN ROBERT MCCARTHY
ENGINEER
PE076998

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

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0123 SEG 0051 OFFSET 0123
SR 3007 (19TH STREET) STA 100+84.74
OVER SR 0083 AND SR 8019 (RAMP T)
2-SPAN CONTINUOUS COMPOSITE PS CONCRETE PA BULB-TEE BEAM BRIDGE
ABUTMENT 1 FOOTING PLAN

RECOMMENDED 12-6-2022

SHEET 9 OF 78

S-39453

6/28/2022
FILENAME: 63016-s-br83-ab111.dgn

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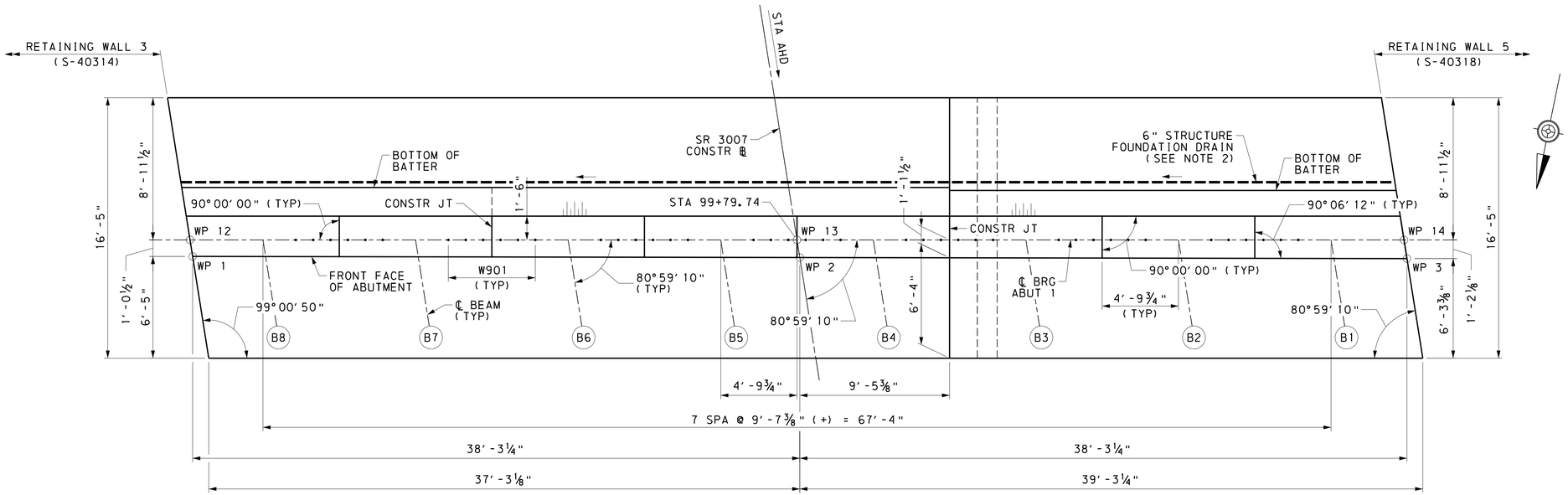

PLAN

2 0 2 4 FEET

NOTES:

1. WORK POINTS ARE LOCATED AT THE FRONT FACE OF THE ARCHITECTURAL SURFACE TREATMENT.
2. CONNECT TO RETAINING WALL 3 (S-40314) 6" STRUCTURE FOUNDATION DRAIN.

REFERENCES:	SHEETS:
GENERAL NOTES	3 - 4
STAKE-OUT PLAN	8
ABUTMENT 1 DRAWINGS	9 - 13

Mark	Description	By	Chk'd	Recm'd	Date

REVISIONS

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0123 MPMS/ECMS PROJ: 97828 BRKEY: 67418

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2-SPAN CONTINUOUS COMPOSITE PS CONCRETE
PA BULB-TEE BEAM BRIDGE

ABUTMENT 1 PLAN

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SHEET 10 OF 78

S-39453

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6/28/2022
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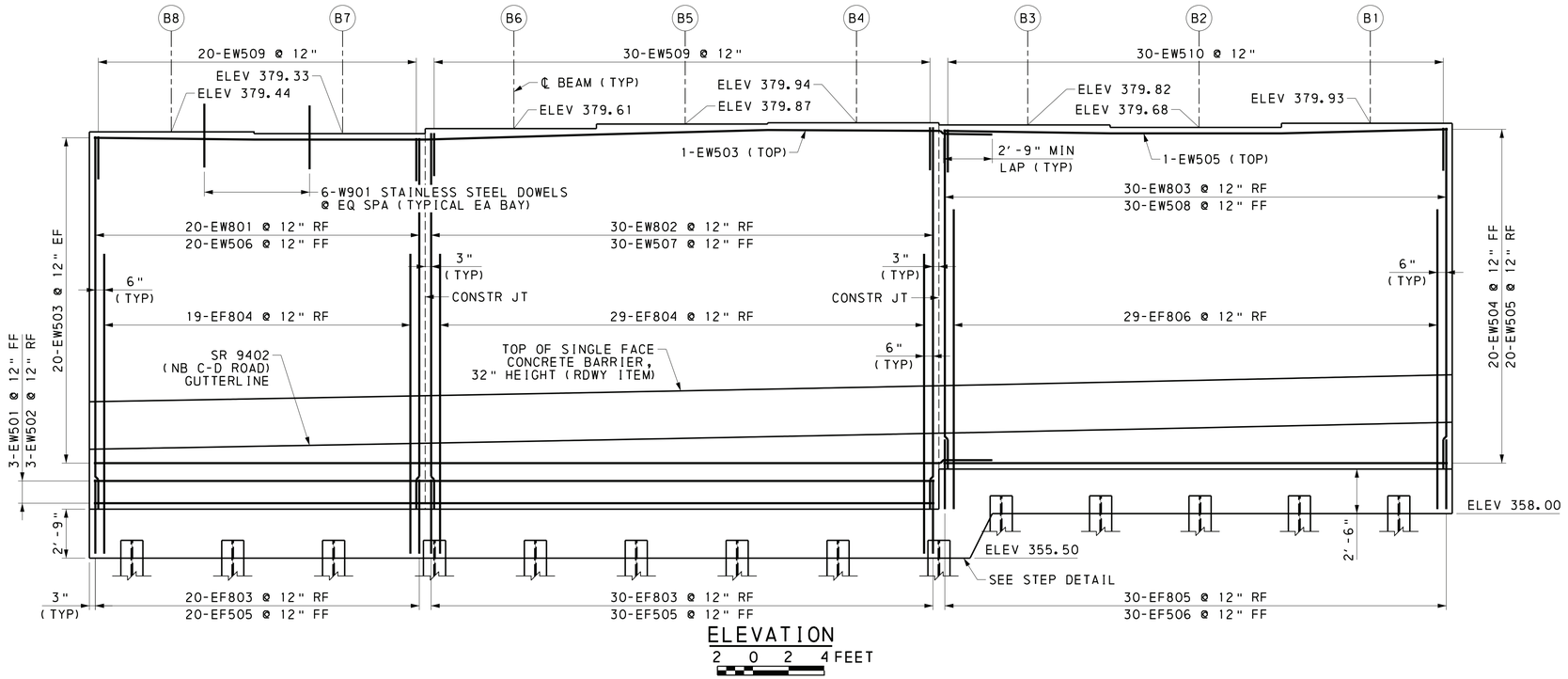

ELEVATION

2 0 2 4 FEET

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0123 MPMS/ECMS PROJ: 97828 BRKEY: 67418

NOTES:

1. UNDERPASS LIGHTING DETAILS NOT SHOWN FOR CLARITY.

REFERENCES:

GENERAL NOTES	3 - 4
ABUTMENT 1 DRAWINGS	9 - 13

SHEETS:

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2-SPAN CONTINUOUS COMPOSITE PS CONCRETE PA BULB-TEE BEAM BRIDGE
ABUTMENT 1 ELEVATION

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SHEET 11 OF 78

S-39453

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6/28/2022
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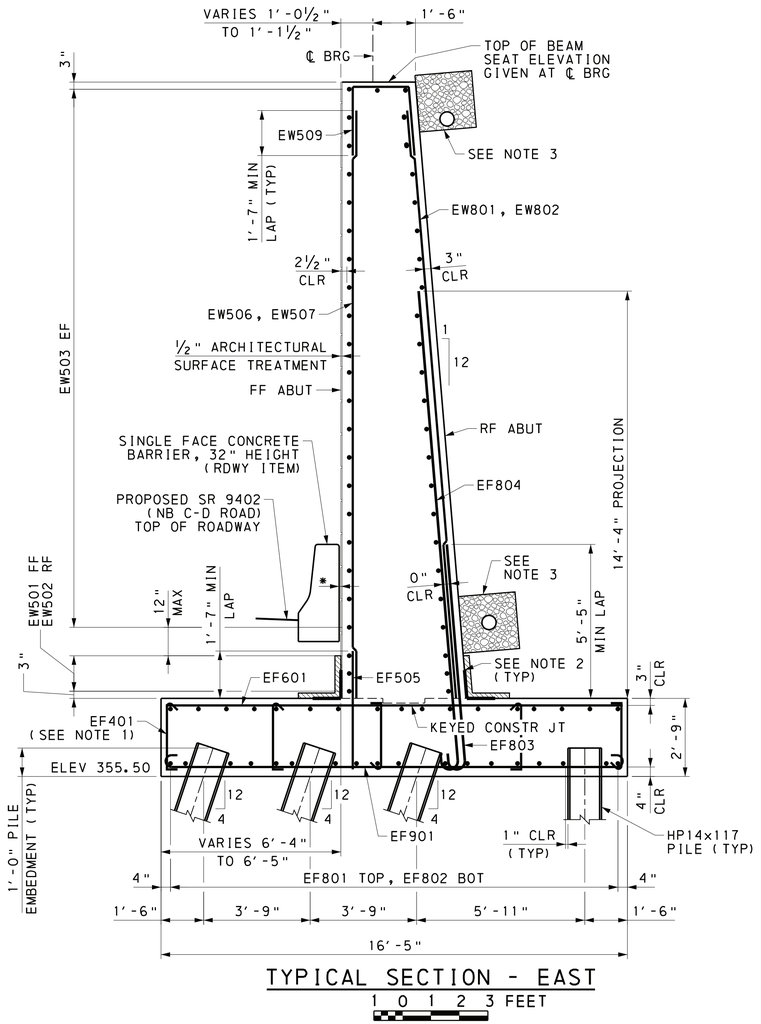
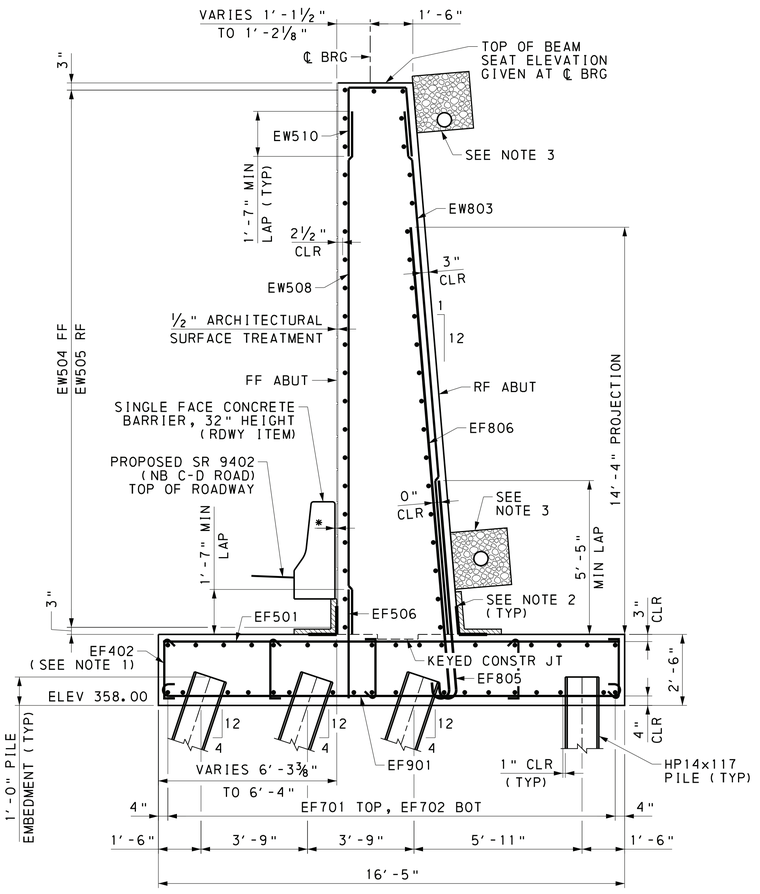


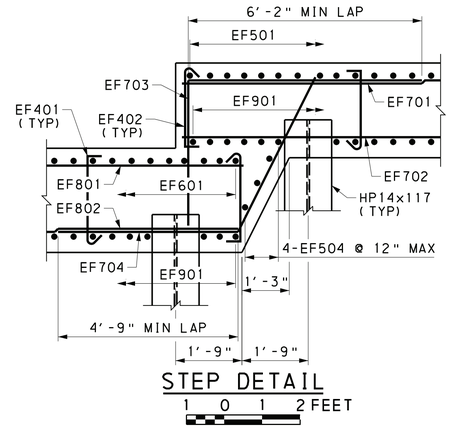
TYPICAL SECTION - EAST

1 0 1 2 3 FEET



TYPICAL SECTION - WEST

1 0 1 2 3 FEET



STEP DETAIL

1 0 1 2 FEET

* ¾" EXPANSION JOINT MATERIAL BETWEEN SINGLE FACE CONCRETE BARRIER AND FF WALL (RDWY ITEM).

NOTES:

1. TIE TOP & BOTTOM MATS OF REINFORCING STEEL WITH #4 TIE BARS AT A MAXIMUM SPACING OF 4'-0" IN BOTH DIRECTIONS. PROVIDE TIE BARS WITH 90° HOOK AT ONE END AND 135° HOOK AT THE OTHER END. ALTERNATE 90° AND 135° HOOKS AT TOP IN ALTERNATE TIES.
2. FOR WATERPROOFING DETAILS, SEE ATTACHMENT BC-788 MODIFIED "SPRAY-ON WATERPROOFING DETAILS".
3. 6" STRUCTURE FOUNDATION DRAIN WITHIN CONTINUOUS 2' x 2' OF NO. 57 COARSE AGGREGATE ENCASED IN GEOTEXTILE, CLASS 1. SEE PUB 408 SECTION 1001.3(d) AND BC-751M.
4. UNDERPASS LIGHTING DETAILS NOT SHOWN FOR CLARITY.

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0123 MPMS/ECMS PROJ: 97828 BRKEY: 67418

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DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0123 SEG 0051 OFFSET 0123
SR 3007 (19TH STREET) STA 100+84.74
OVER SR 0083 AND SR 8019 (RAMP T)
2-SPAN CONTINUOUS COMPOSITE PS CONCRETE PA BULB-TEE BEAM BRIDGE
ABUTMENT 1 SECTIONS & DETAILS

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RECOMMENDED 12-6-2022

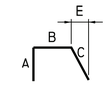
SHEET 12 OF 78

S-39453

12/2/2022
FILENAME: 63016-s-br83-ab114.dgn

DES: SMZ	DES CKD: CEK	DWG: SMZ	DWG CKD: CEK

MARK	SIZE	NO REQ'D	LENGTH	TYPE	A	B	C	D	E	REMARKS
						ABUTMENT 1				
EF401	4	70	2'-11"	63	4 1/2"	2'-2"	4 1/2"			
EF402	4	45	2'-8"	63	4 1/2"	1'-11"	4 1/2"			
EF501	5	54	16'-1"	STR						
EF502	5	6	3'-7" TO	STR						VARY EACH BY 2'-6"
			16'-1"							
EF503	5	1	16'-3"	STR						
EF504	5	4	16'-1"	STR						
EF505	5	50	4'-2"	STR						
EF506	5	30	3'-11"	STR						
EF601	6	94	16'-1"	STR						
EF602	6	6	3'-7" TO	STR						VARY EACH BY 2'-6"
			16'-1"							
EF603	6	1	16'-3"	STR						
EF701	7	17	26'-10" TO	STR						VARY EACH BY 1 7/8"
			29'-4"							
EF702	7	18	26'-10" TO	STR						VARY EACH BY 1 3/4"
			29'-3 3/4"							
EF703	7	17	10'-6"	77	6'-2"	4'-4"				
EF704	7	18	9'-6"	78	4'-9"	4'-9"	4'-3"			
EF801	8	17	48'-1" TO	STR						VARY EACH BY 1 7/8"
			50'-7"							
EF802	8	18	48'-1" TO	STR						VARY EACH BY 1 3/4"
			50'-6 3/4"							
EF803	8	50	8'-10"	65	11"	7'-11"				J = 8"
EF804	8	48	17'-11"	65	11"	17'-0"				J = 8"
EF805	8	30	8'-7"	65	11"	7'-8"				J = 8"
EF806	8	29	17'-8"	65	11"	16'-9"				J = 8"
EF901	9	153	18'-7"	68	1'-3"	16'-1"	1'-3"			J = 11 3/4"
EF902	9	12	6'-1" TO	68	1'-3"	3'-7" TO	1'-3"			J = 11 3/4"
			18'-7"			16'-1"				VARY B 2 EACH BY 2'-6"
EF903	9	2	18'-9"	68	1'-3"	16'-3"	1'-3"			J = 11 3/4"
EW501	5	3	47'-4 3/4"	STR						
EW502	5	3	48'-0 3/4"	STR						
EW503	5	41	51'-2"	STR						
EW504	5	20	28'-5 3/4"	STR						
EW505	5	21	27'-9 3/4"	STR						
EW506	5	20	20'-10"	STR						
EW507	5	30	21'-1"	STR						
EW508	5	30	18'-11"	STR						
EW509	5	50	6'-1 3/8" TO	33	2'-0"	2'-0 3/8" TO	2'-1"		2 1/8"	VARY B 10 EACH BY 1/4"
			6'-2 3/8"			2'-1 3/8"				
EW510	5	30	6'-0 3/8" TO	33	1'-11"	2'-1 3/8" TO	2'-0"		2"	VARY B 5 EACH BY 1/8"
			6'-1"			2'-2"				
EW801	8	20	20'-10"	STR						
EW802	8	30	21'-1"	STR						
EW803	8	30	18'-11"	STR						
W901	9	42	3'-7"	STR						STAINLESS STEEL DOWEL



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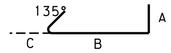

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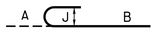

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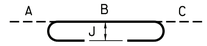

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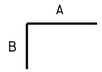

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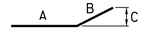

(78)

NOTES:

1. "E" PREFIX IN BAR MARK DENOTES EPOXY COATED BARS.
2. ALL DIMENSIONS ARE OUT TO OUT OF BAR EXCEPT "A" & "C" ON STANDARD 135° AND 180° HOOKS, UNLESS NOTED.
3. FOR REINFORCEMENT BAR FABRICATION DETAILS, REFER TO STANDARD DRAWING BC-736M.
4. FIGURES IN CIRCLE REPRESENT BAR TYPES.
5. "J" DIMENSIONS ON 180° HOOKS ARE SHOWN ONLY WHERE NECESSARY TO RESTRICT HOOK SIZE, OTHERWISE STANDARD HOOKS ARE TO BE USED.
6. RADIUS, "R" IS TO THE INSIDE OF THE BAR.
7. REINFORCEMENT BAR SCHEDULE IS FOR INFORMATION ONLY. VERIFY INFORMATION BEFORE FABRICATION.

Mark	Description	By	Chk'd	Recm'd	Date
	REVISIONS				

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0123 MPMS/ECMS PROJ: 97828 BRKEY: 67418

REFERENCES:

GENERAL NOTES
ABUTMENT 1 DRAWINGS

SHEETS:

3 - 4
9 - 13

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REGISTERED PROFESSIONAL
JUSTIN ROBERT MCCARTHY
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PE076998

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HARRISBURG, PA 17110

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0123 SEG 0051 OFFSET 0123
SR 3007 (19TH STREET) STA 100+84.74
OVER SR 0083 AND SR 8019 (RAMP T)
2-SPAN CONTINUOUS COMPOSITE PS CONCRETE
PA BULB-TEE BEAM BRIDGE
ABUTMENT 1 REBAR SCHEDULE

RECOMMENDED 12-6-2022

SHEET 13 OF 78

S-39453

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6/28/2022
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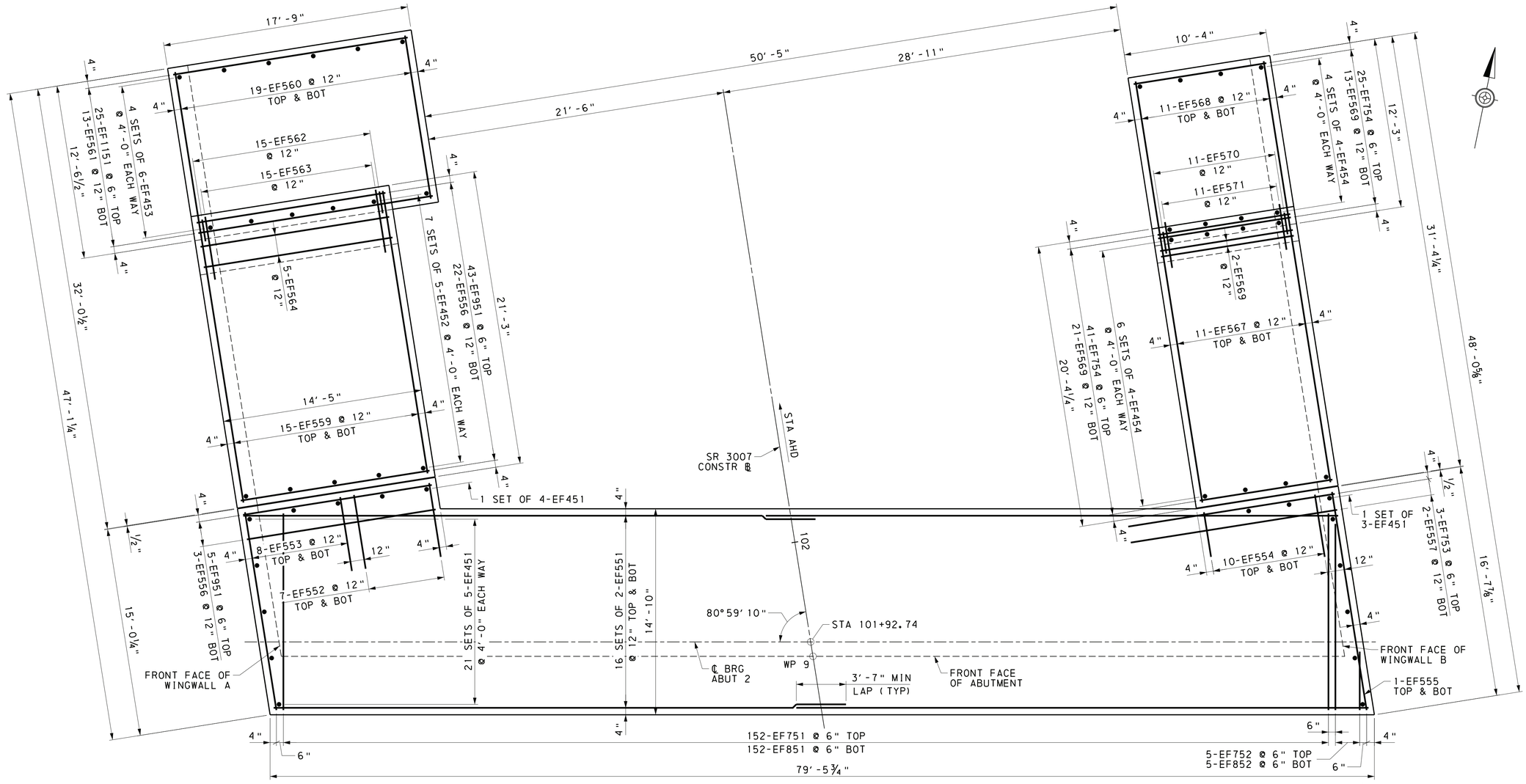

FOOTING PLAN

2 0 2 4 FEET

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0123 MPMS/ECMS PROJ: 97828 BRKEY: 67418

FOUNDATION PARAMETERS AT ABUTMENT 2				
BEARING CAPACITY	ABUTMENT 2	WING A (BFE 361.00)	WING A (BFE 366.00)	WING B (BFE 372.00) WING B (BFE 374.50)
SECTION	TYPICAL	TYPICAL	TYPICAL	TYPICAL
BEARING RESISTANCE	152.50 KSF	152.50 KSF	152.50 KSF	152.50 KSF
MAX BEARING PRESSURE	19.42 KSF	12.01 KSF	13.03 KSF	14.10 KSF
PERFORMANCE RATIO	7.852	12.697	11.703	10.819
LIMIT STATE	STR-I	STR-I	STR-I	STR-I
LOAD CASE	MIN	MAX	MAX	MIN
STAGE	FINAL	FINAL	FINAL	FINAL
SLIDING RESISTANCE	ABUTMENT 2	WING A (BFE 361.00)	WING A (BFE 366.00)	WING B (BFE 372.00) WING B (BFE 374.50)
SECTION	TYPICAL	TYPICAL	TYPICAL	TYPICAL
SLIDING RESISTANCE	36.99 K	44.39 K	63.79 K	25.47 K
MAX HORIZONTAL FORCE	30.18 K	30.18 K	40.57 K	20.33 K
PERFORMANCE RATIO	1.226	1.471	1.573	1.252
LIMIT STATE	STR-I	STR-I	STR-I	STR-I
LOAD CASE	MIN	MIN	MIN	MIN
CONDITION	TEMPORARY	TEMPORARY	TEMPORARY	TEMPORARY

SPREAD FOOTING ROCK PARAMETERS	
EMPIRICAL BEARING CAPACITY	305.0 KSF
ALLOWABLE SETTLEMENT	1.0 IN
BEARING CAPACITY PHI FACTOR	0.50
SLIDING PHI FACTOR	1.00
CONCRETE/ROCK FRICTION	35°
INTACT ELASTIC MODULUS	5700 KSI
POISSON'S RATIO	0.23
ROCK MASS MODULUS	1934 KSI

REFERENCES:	SHEETS:
GENERAL NOTES	3 - 4
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ABUTMENT 2 DRAWINGS	14 - 25

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DAUPHIN COUNTY
SR 0083 SECTION 079

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OVER SR 0083 AND SR 8019 (RAMP T)

2-SPAN CONTINUOUS COMPOSITE PS CONCRETE PA BULB-TEE BEAM BRIDGE

ABUTMENT 2 FOOTING PLAN

RECOMMENDED 12-6-2022

SHEET 14 OF 78

S-39453

6/28/2022
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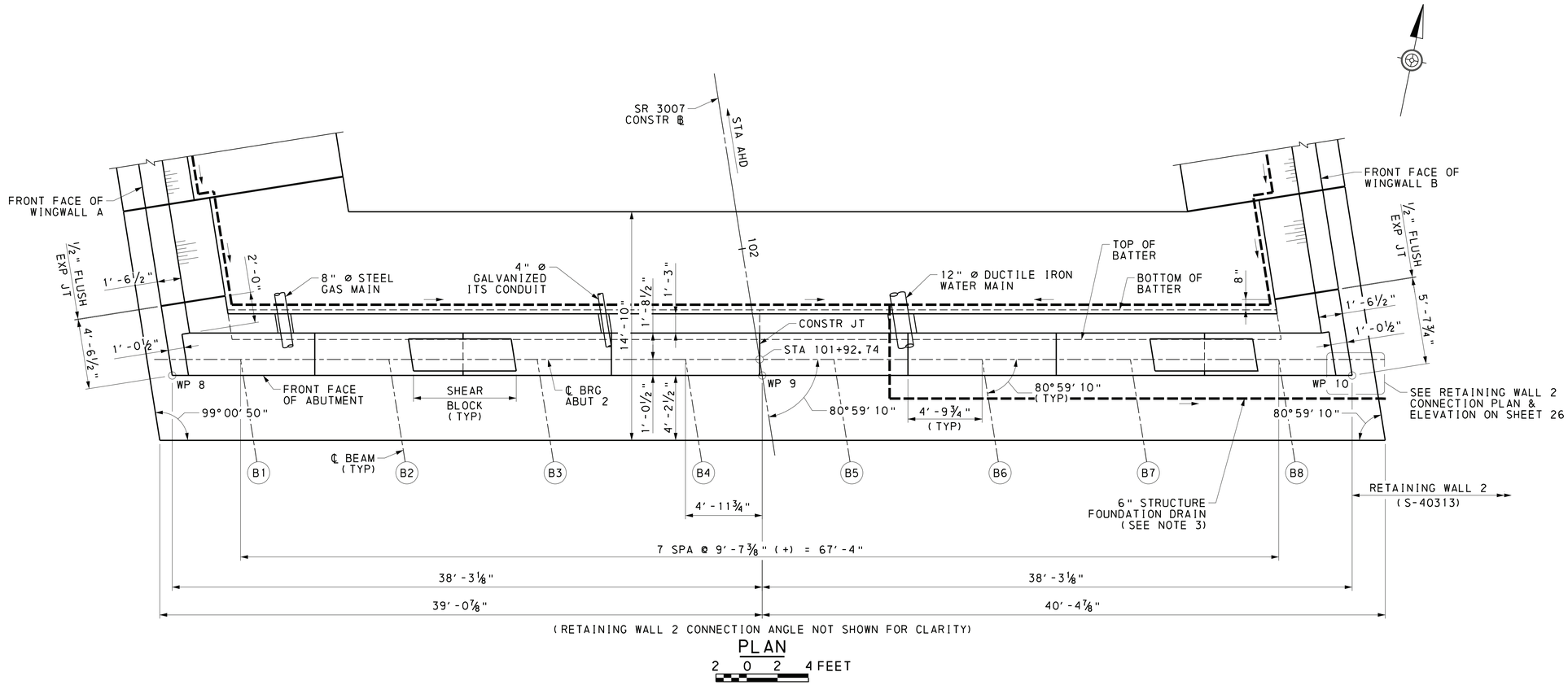

(RETAINING WALL 2 CONNECTION ANGLE NOT SHOWN FOR CLARITY)

PLAN

2 0 2 4 FEET

NOTES:

1. WORK POINTS ARE LOCATED AT THE FRONT FACE OF THE ARCHITECTURAL SURFACE TREATMENT.
2. STANDPIPE AND SUPPORT BRACKETS NOT SHOWN FOR CLARITY.
3. CONNECT TO RETAINING WALL 2 (S-40313) 12" DIA THERMOPLASTIC PIPE.

REFERENCES:	SHEETS:
GENERAL NOTES	3 - 4
STAKE-OUT PLAN	8
ABUTMENT 2 DRAWINGS	14 - 25
MISCELLANEOUS ABUTMENT DETAILS	26
STANDPIPE DETAILS	72

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0123 MPMS/ECMS PROJ: 97828 BRKEY: 67418

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DAUPHIN COUNTY
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2-SPAN CONTINUOUS COMPOSITE PS CONCRETE PA BULB-TEE BEAM BRIDGE
ABUTMENT 2 PLAN

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RECOMMENDED 12-6-2022

SHEET 15 OF 78

S-39453

6/28/2022
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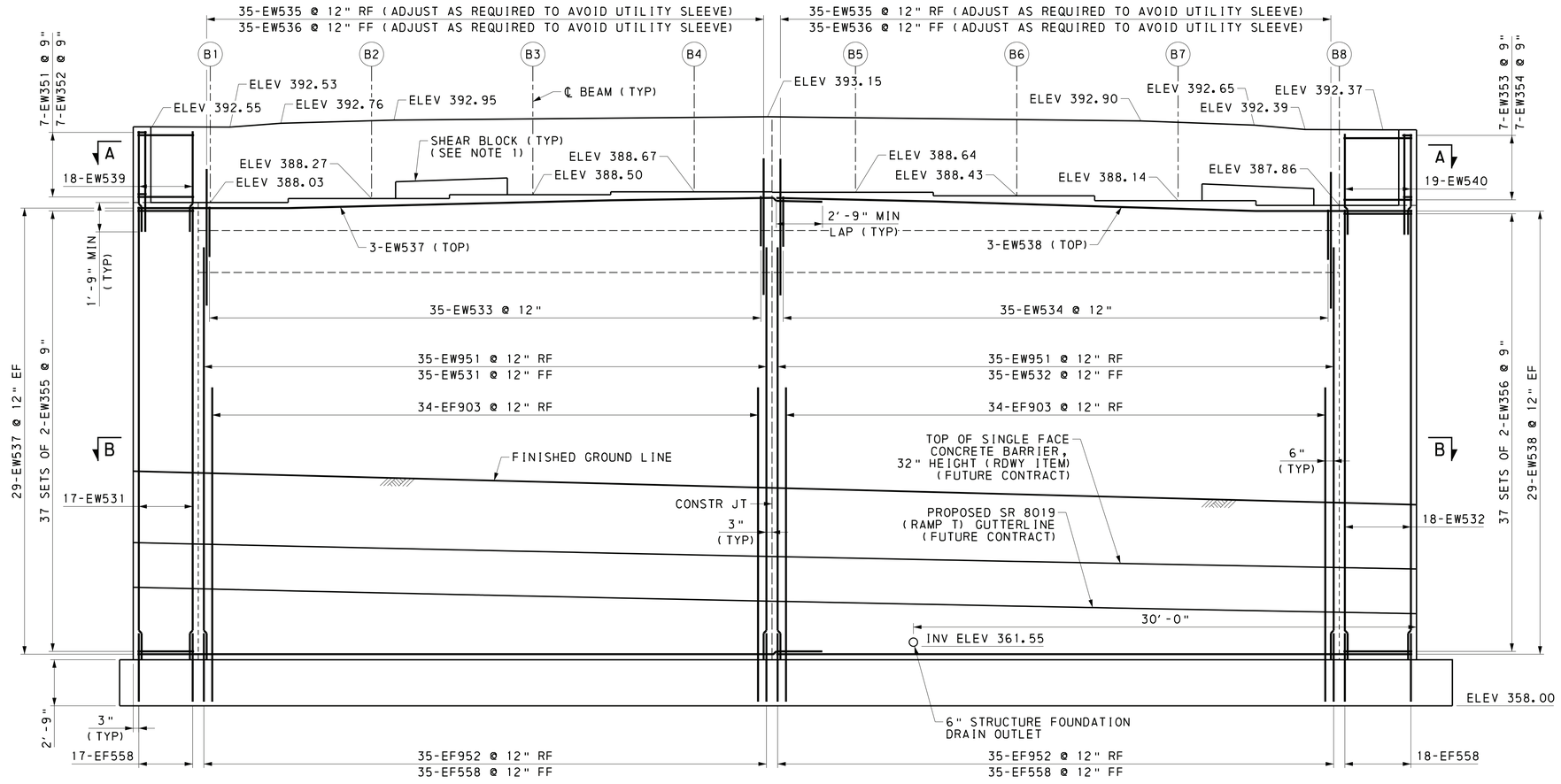
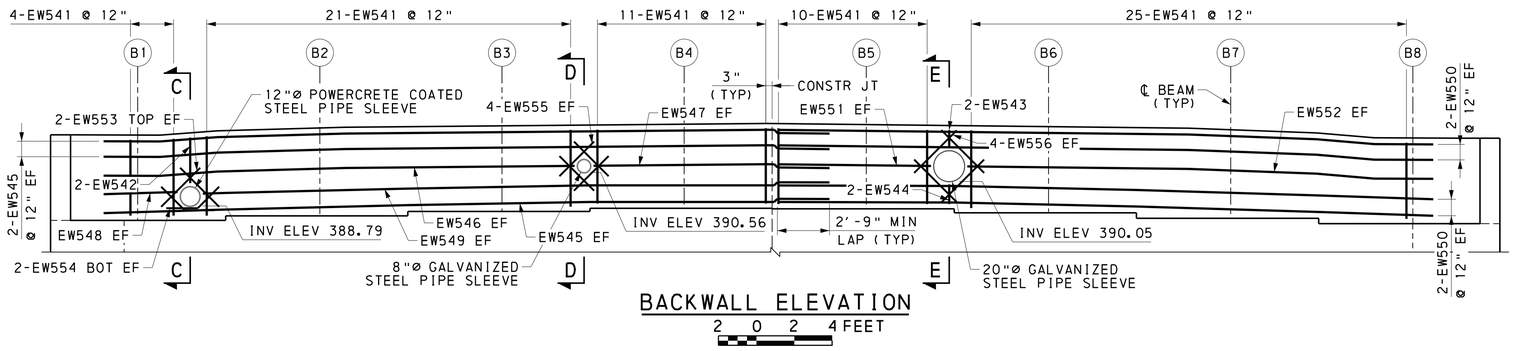


(BACKWALL REINFORCEMENT NOT SHOWN FOR CLARITY, SEE BACKWALL ELEVATION)

ELEVATION

2 0 2 4 FEET



BACKWALL ELEVATION

2 0 2 4 FEET

NOTES:

1. SHEAR BLOCK REINFORCEMENT NOT SHOWN FOR CLARITY.
2. BACKWALL ELEVATIONS GIVEN AT LOCATIONS OF SUPERSTRUCTURE BREAK POINTS.
3. UNDERPASS LIGHTING DETAILS NOT SHOWN FOR CLARITY.

REFERENCES:	SHEETS:
GENERAL NOTES	3 - 4
ABUTMENT 2 DRAWINGS	14 - 25
MISCELLANEOUS ABUTMENT DETAILS	26

Mark	Description	By	Chk'd	Recm'd	Date
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SR 3007 PREVIOUSLY KNOWN AS LR 509
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2-SPAN CONTINUOUS COMPOSITE PS CONCRETE
PA BULB-TEE BEAM BRIDGE

ABUTMENT 2 ELEVATION

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SHEET 16 OF 78

S-39453

6/28/2022
FILENAME: 63016-s-brB3-ab123.dgn

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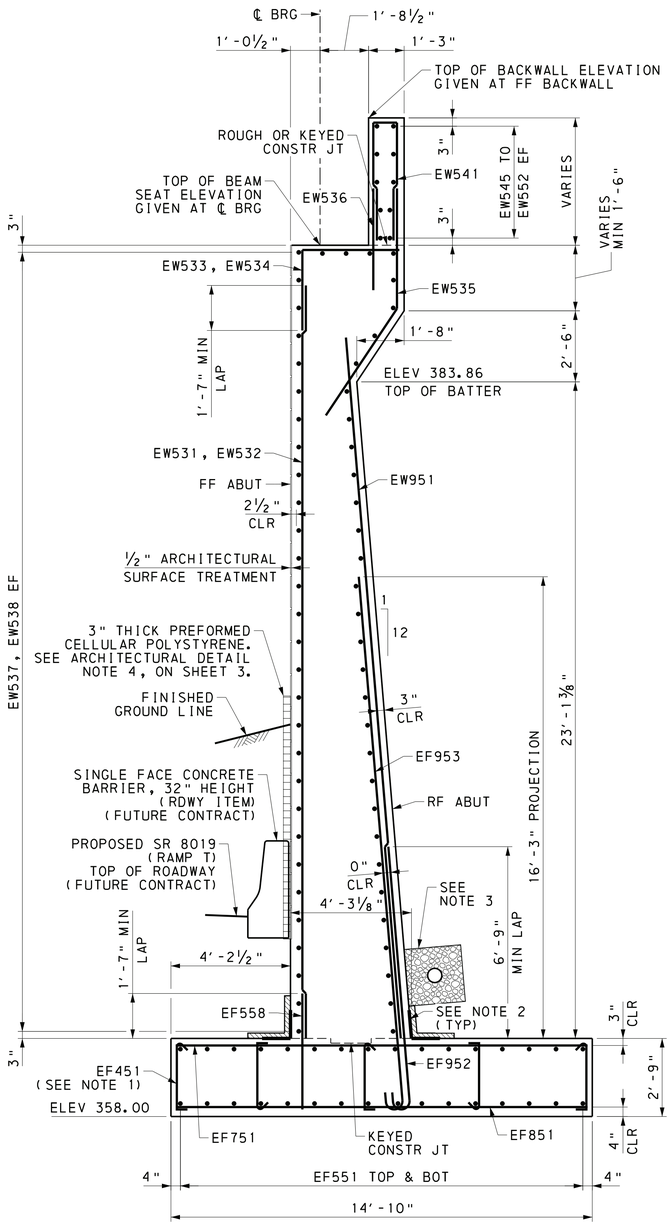

TYPICAL SECTION
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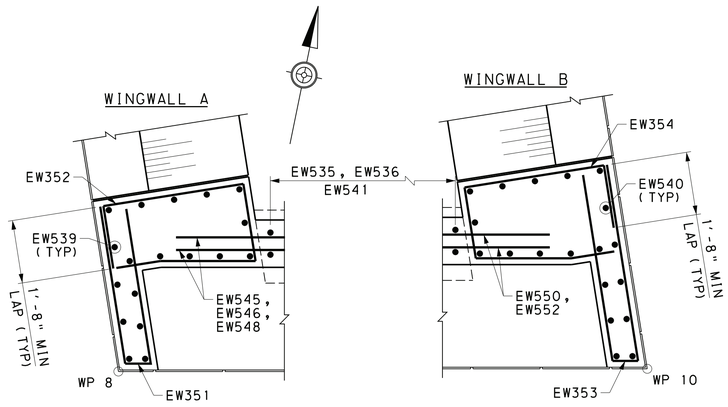
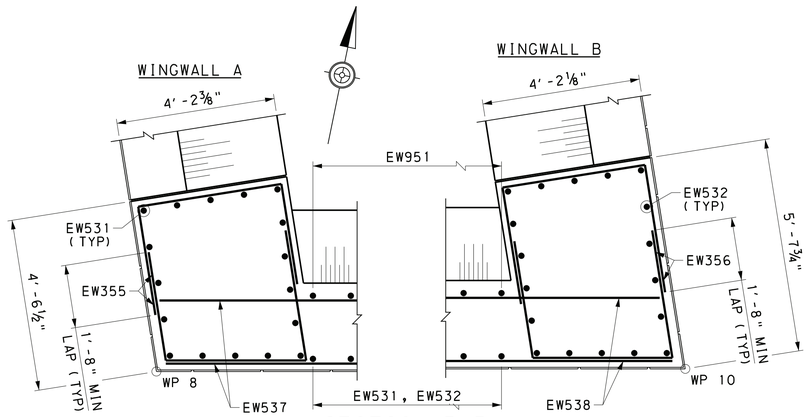
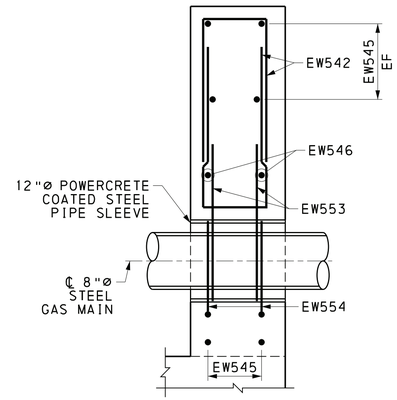


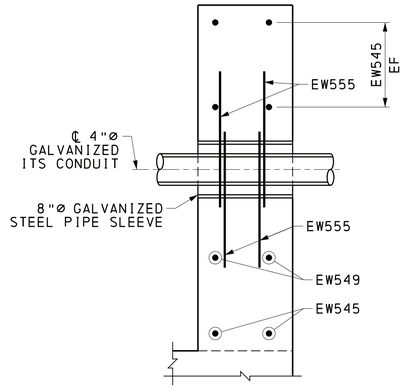
SECTION A-A
1 0 1 2 FEET



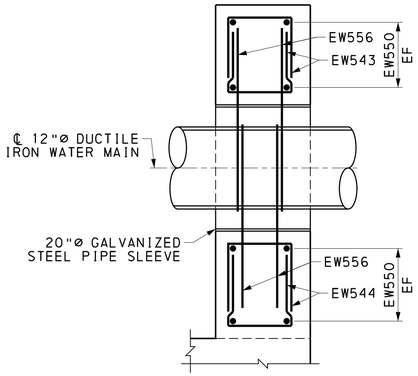
SECTION B-B
1 0 1 2 FEET



SECTION C-C
6 0 6 12 INCHES



SECTION D-D
6 0 6 12 INCHES



SECTION E-E
6 0 6 12 INCHES

NOTES:

1. TIE TOP & BOTTOM MATS OF REINFORCING STEEL WITH #4 TIE BARS AT A MAXIMUM SPACING OF 4'-0" IN BOTH DIRECTIONS. PROVIDE TIE BARS WITH 90° HOOK AT ONE END AND 135° HOOK AT THE OTHER END. ALTERNATE 90° AND 135° HOOKS AT TOP IN ALTERNATE TIES.
2. FOR WATERPROOFING DETAILS, SEE ATTACHMENT BC-788 MODIFIED "SPRAY-ON WATERPROOFING DETAILS".
3. 6" STRUCTURE FOUNDATION DRAIN WITHIN CONTINUOUS 2' x 2' OF NO. 57 COARSE AGGREGATE ENCASED IN GEOTEXTILE, CLASS 1. SEE PUB 408 SECTION 1001.3(d) AND BC-751M.
4. UNDERPASS LIGHTING DETAILS NOT SHOWN FOR CLARITY.

REFERENCES:	SHEETS:
GENERAL NOTES	3 - 4
ABUTMENT 2 DRAWINGS	14 - 25
MISCELLANEOUS ABUTMENT DETAILS	26
ABUTMENT ARCHITECTURAL DETAILS	27

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0123 MPMS/ECMS PROJ: 97828 BRKEY: 67418

HNTB

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0123 SEG 0051 OFFSET 0123
SR 3007 (19TH STREET) STA 100+84.74
OVER SR 0083 AND SR 8019 (RAMP T)
2-SPAN CONTINUOUS COMPOSITE PS CONCRETE PA BULB-TEE BEAM BRIDGE
ABUTMENT 2 SECTION & DETAILS

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL JUSTIN ROBERT MCCARTHY ENGINEER PE076998

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

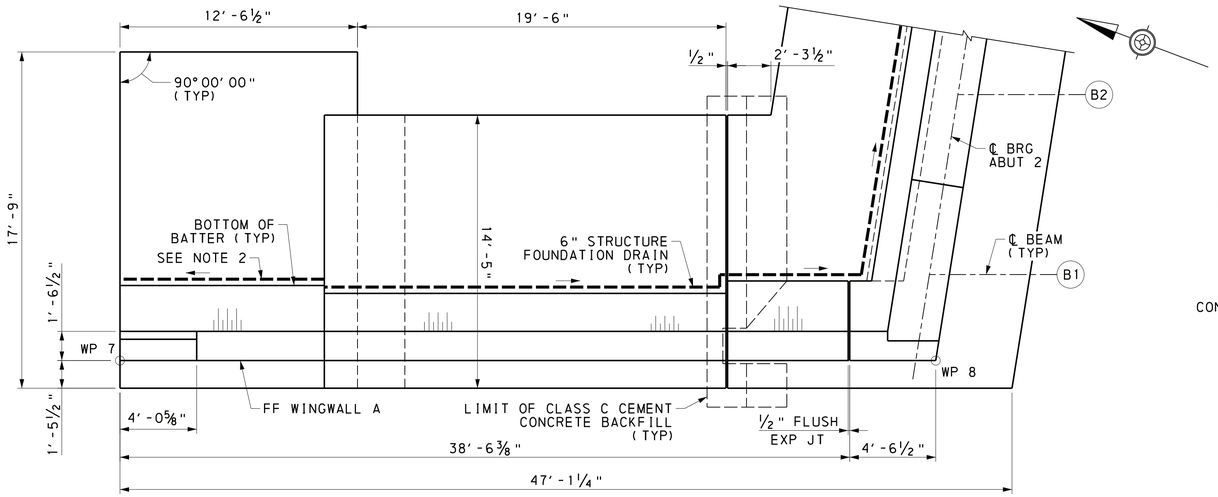
RECOMMENDED 12-6-2022

SHEET 17 OF 78

S-39453

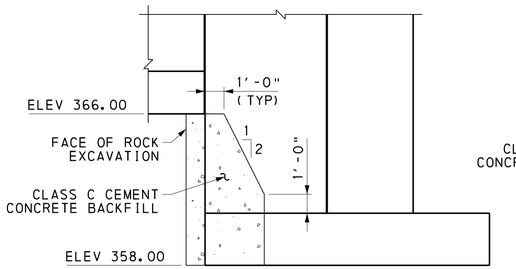
12/2/2022
FILENAME: 63016-s-brB3-ab124.dgn

DES: SMZ	DES CKD: CEK	DWG: SMZ	DWG CKD: CEK

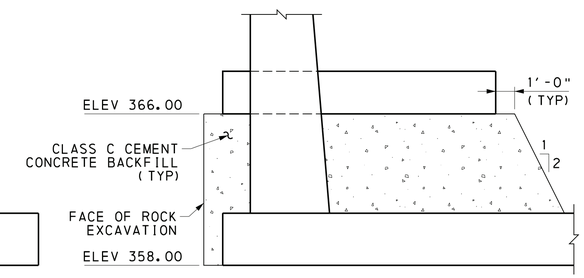


PLAN

2 0 2 4 FEET



WING A ELEVATION

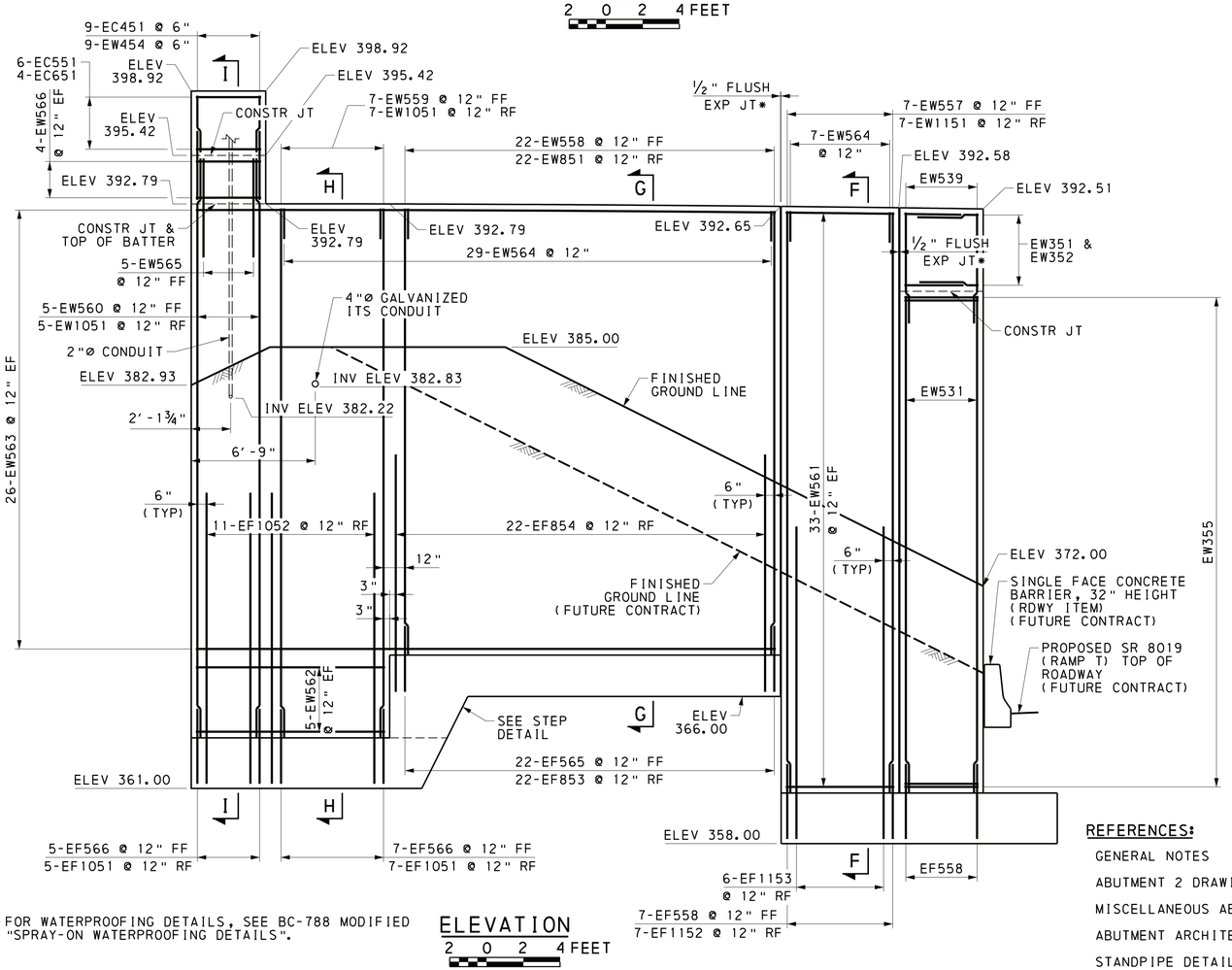


WING A SECTION

(WING A SHOWN, WING B SIMILAR)

CLASS C CEMENT CONCRETE BACKFILL DETAILS

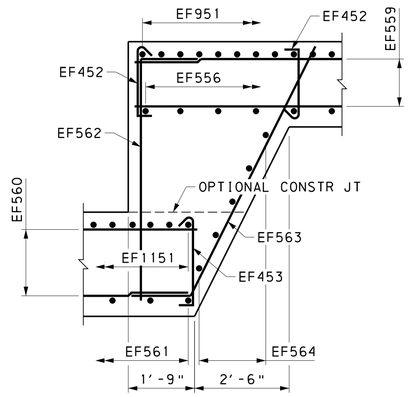
2 0 2 4 FEET



ELEVATION

2 0 2 4 FEET

* FOR WATERPROOFING DETAILS, SEE BC-788 MODIFIED "SPRAY-ON WATERPROOFING DETAILS".



STEP DETAIL

1 0 1 2 FEET

NOTES:

1. STANDPIPE AND SUPPORT BRACKETS NOT SHOWN FOR CLARITY.
2. CONNECT TO BRIDGE 2 (S-39452) 6" STRUCTURE FOUNDATION DRAIN.

REFERENCES:

	SHEETS:
GENERAL NOTES	3 - 4
ABUTMENT 2 DRAWINGS	14 - 25
MISCELLANEOUS ABUTMENT DETAILS	26
ABUTMENT ARCHITECTURAL DETAILS	27
STANDPIPE DETAILS	72

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0123 MPMS/ECMS PROJ: 97828 BRKEY: 67418

HNTB

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0123 SEG 0051 OFFSET 0123
SR 3007 (19TH STREET) STA 100+84.74
OVER SR 0083 AND SR 8019 (RAMP T)
2-SPAN CONTINUOUS COMPOSITE PS CONCRETE PA BULB-TEE BEAM BRIDGE
WINGWALL A PLAN & ELEVATION

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL JUSTIN ROBERT MCCARTHY ENGINEER PE076998

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

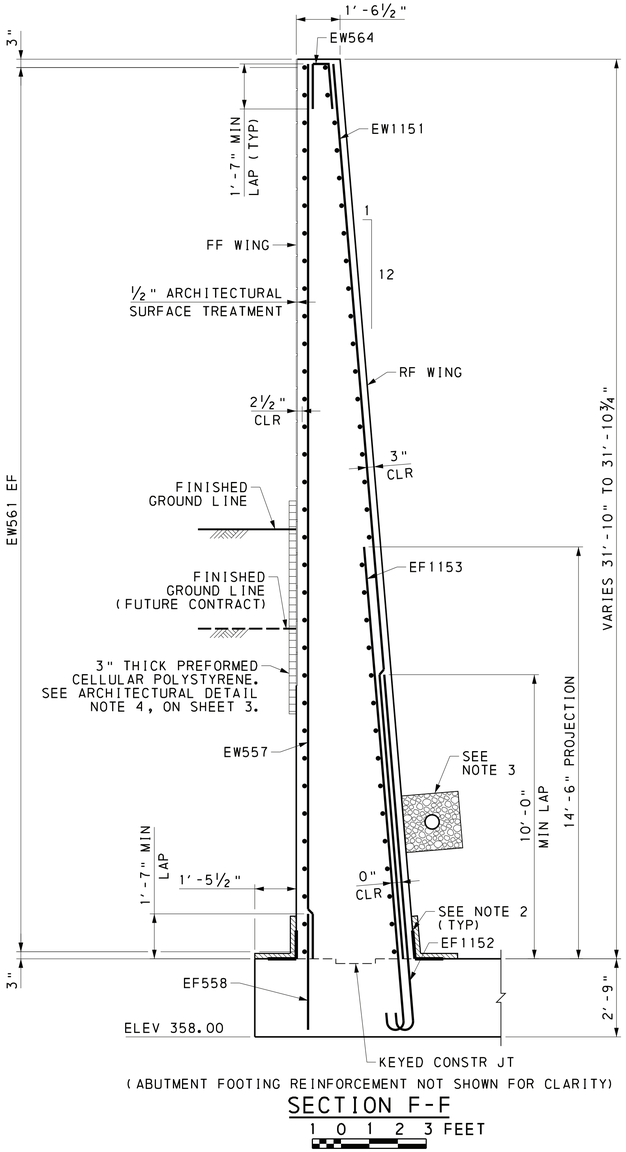
RECOMMENDED 12-6-2022

SHEET 18 OF 78

S-39453

12/2/2022
FILENAME: 63016-s-brB3-ob125.dgn

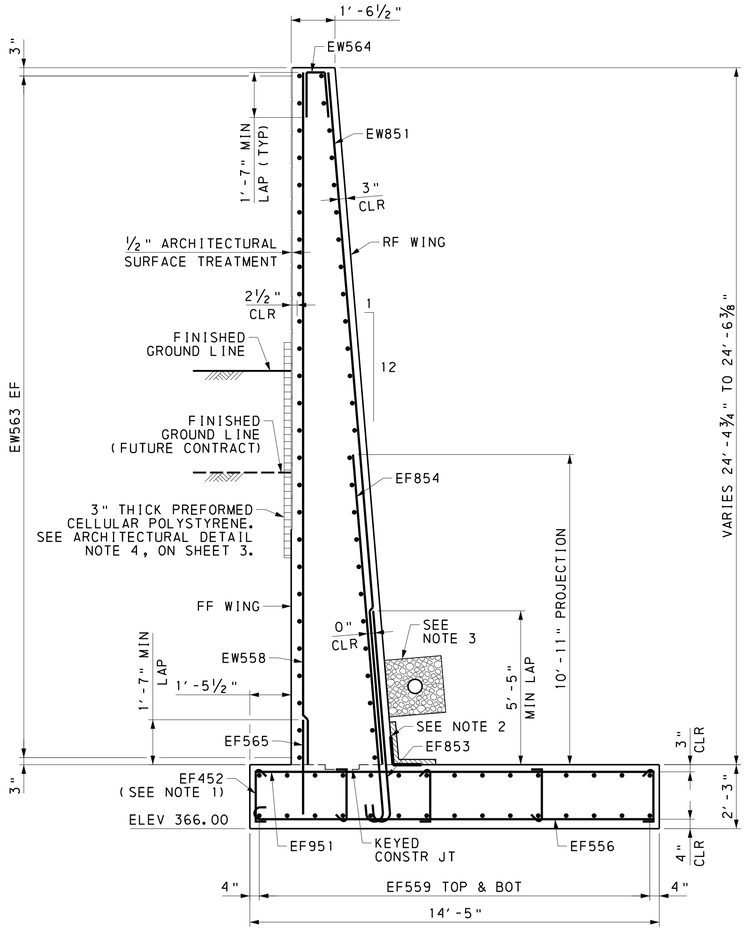
DES: SMZ	DES CKD: CEK	DWG: SMZ	DWG CKD: CEK



(ABUTMENT FOOTING REINFORCEMENT NOT SHOWN FOR CLARITY)

SECTION F-F

1 0 1 2 3 FEET



SECTION G-G

1 0 1 2 3 FEET

NOTES:

1. TIE TOP & BOTTOM MATS OF REINFORCING STEEL WITH #4 TIE BARS AT A MAXIMUM SPACING OF 4'-0" IN BOTH DIRECTIONS. PROVIDE TIE BARS WITH 90° HOOK AT ONE END AND 135° HOOK AT THE OTHER END. ALTERNATE 90° AND 135° HOOKS AT TOP IN ALTERNATE TIES.
2. FOR WATERPROOFING DETAILS, SEE ATTACHMENT BC-788 MODIFIED "SPRAY-ON WATERPROOFING DETAILS".
3. 6" STRUCTURE FOUNDATION DRAIN WITHIN CONTINUOUS 2' x 2' OF NO. 57 COARSE AGGREGATE ENCASED IN GEOTEXTILE, CLASS 1. SEE PUB 408 SECTION 1001.3(d) AND BC-751M.

REFERENCES:	SHEETS:
GENERAL NOTES	3 - 4
ABUTMENT 2 DRAWINGS	14 - 25
ABUTMENT ARCHITECTURAL DETAILS	27

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0123 MPMS/ECMS PROJ: 97828 BRKEY: 67418

HNTB

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
JUSTIN ROBERT MCCARTHY
ENGINEER
PE076998

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

DAUPHIN COUNTY
SR 0083 SECTION 079

SEG 0050 OFFSET 0123 SEG 0051 OFFSET 0123
SR 3007 (19TH STREET) STA 100+84.74
OVER SR 0083 AND SR 8019 (RAMP T)

2-SPAN CONTINUOUS COMPOSITE PS CONCRETE PA BULB-TEE BEAM BRIDGE

WINGWALL A SECTIONS 1

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

RECOMMENDED 12-6-2022

SHEET 19 OF 78

S-39453

12/2/2022
FILENAME: 63016-s-brB3-ab126.dgn

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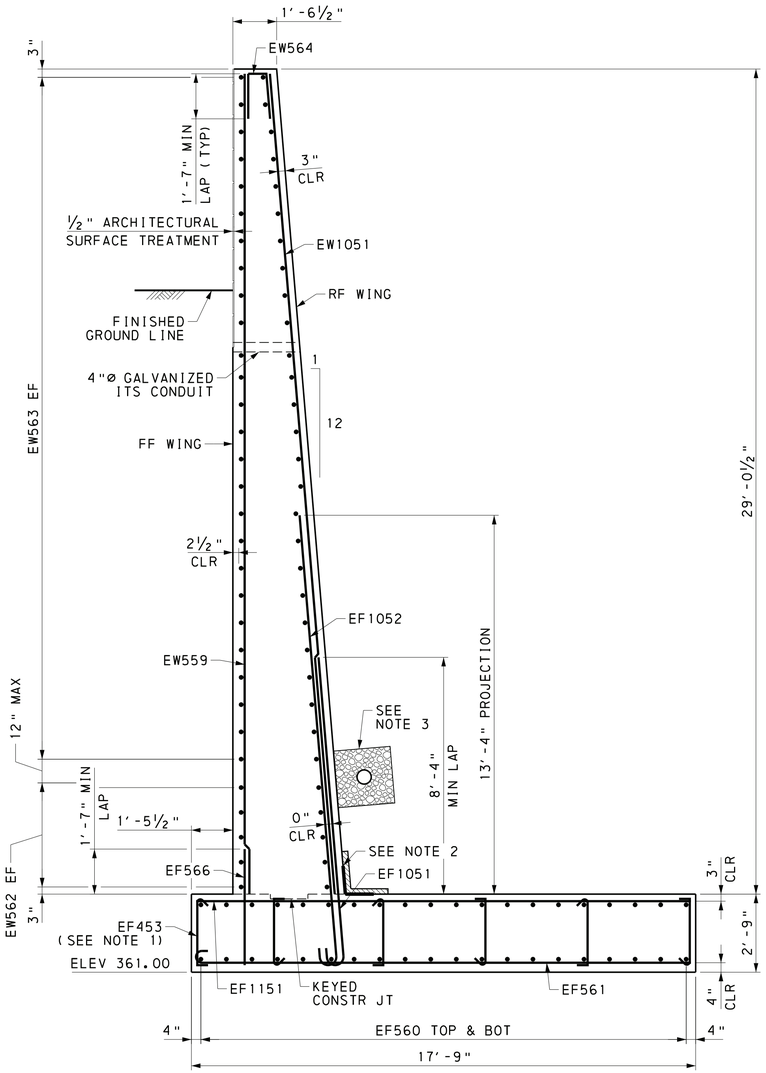
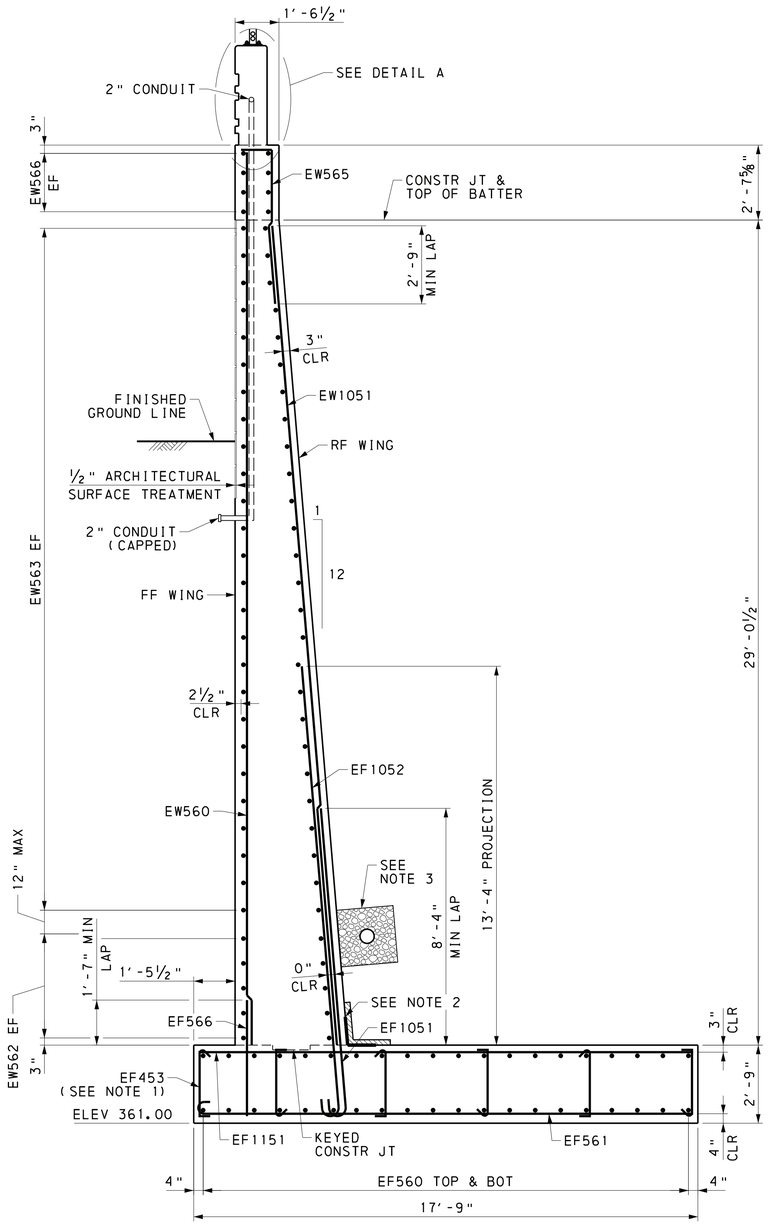


SECTION H-H

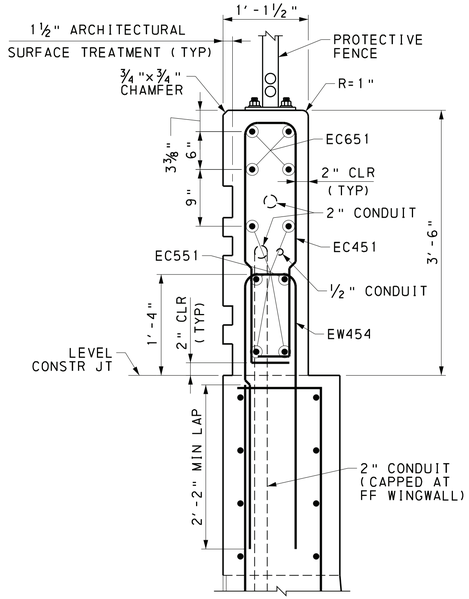
1 0 1 2 3 FEET



(VERTICAL WALL BARRIER REINFORCEMENT NOT SHOWN FOR CLARITY)

SECTION I-I

1 0 1 2 3 FEET



DETAIL A

6 0 6 12 INCHES

NOTES:

1. TIE TOP & BOTTOM MATS OF REINFORCING STEEL WITH #4 TIE BARS AT A MAXIMUM SPACING OF 4'-0" IN BOTH DIRECTIONS. PROVIDE TIE BARS WITH 90° HOOK AT ONE END AND 135° HOOK AT THE OTHER END. ALTERNATE 90° AND 135° HOOKS AT TOP IN ALTERNATE TIES.
2. FOR WATERPROOFING DETAILS, SEE ATTACHMENT BC-788 MODIFIED "SPRAY-ON WATERPROOFING DETAILS".
3. 6" STRUCTURE FOUNDATION DRAIN WITHIN CONTINUOUS 2' x 2' OF NO. 57 COARSE AGGREGATE ENCASED IN GEOTEXTILE, CLASS 1. SEE PUB 408 SECTION 1001.3(d) AND BC-751M.

REFERENCES:	SHEETS:
GENERAL NOTES	3 - 4
ABUTMENT 2 DRAWINGS	14 - 25
MISCELLANEOUS ABUTMENT DETAILS	26
ABUTMENT ARCHITECTURAL DETAILS	27

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0123 MPMS/ECMS PROJ: 97828 BRKEY: 67418

HNTB

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0123 SEG 0051 OFFSET 0123
SR 3007 (19TH STREET) STA 100+84.74
OVER SR 0083 AND SR 8019 (RAMP T)
2-SPAN CONTINUOUS COMPOSITE PS CONCRETE PA BULB-TEE BEAM BRIDGE
WINGWALL A SECTIONS 2

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — JUSTIN ROBERT MCCARTHY — ENGINEER — PE076998

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

RECOMMENDED 12-6-2022

SHEET 20 OF 78

S-39453

12/2/2022
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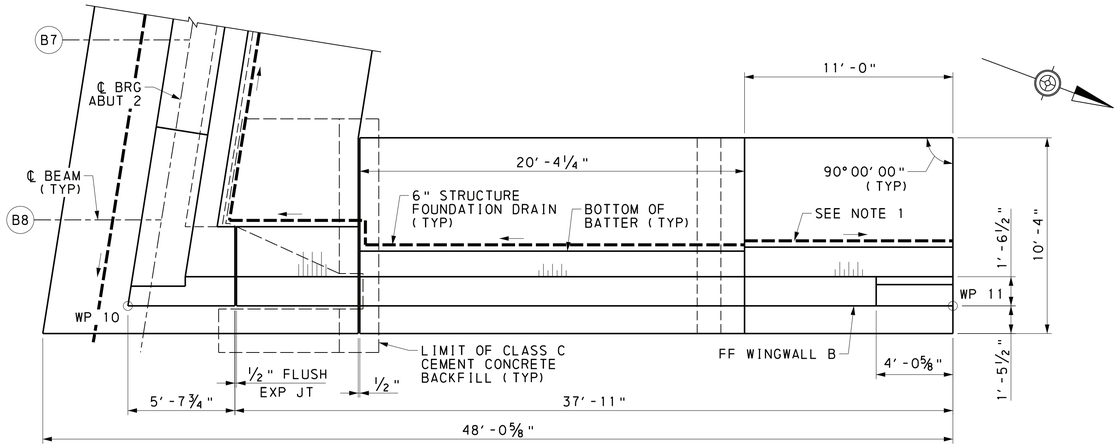
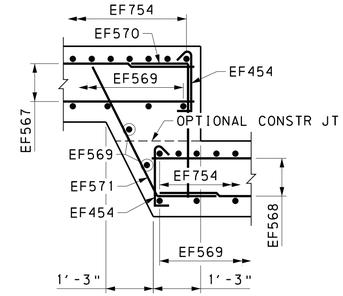
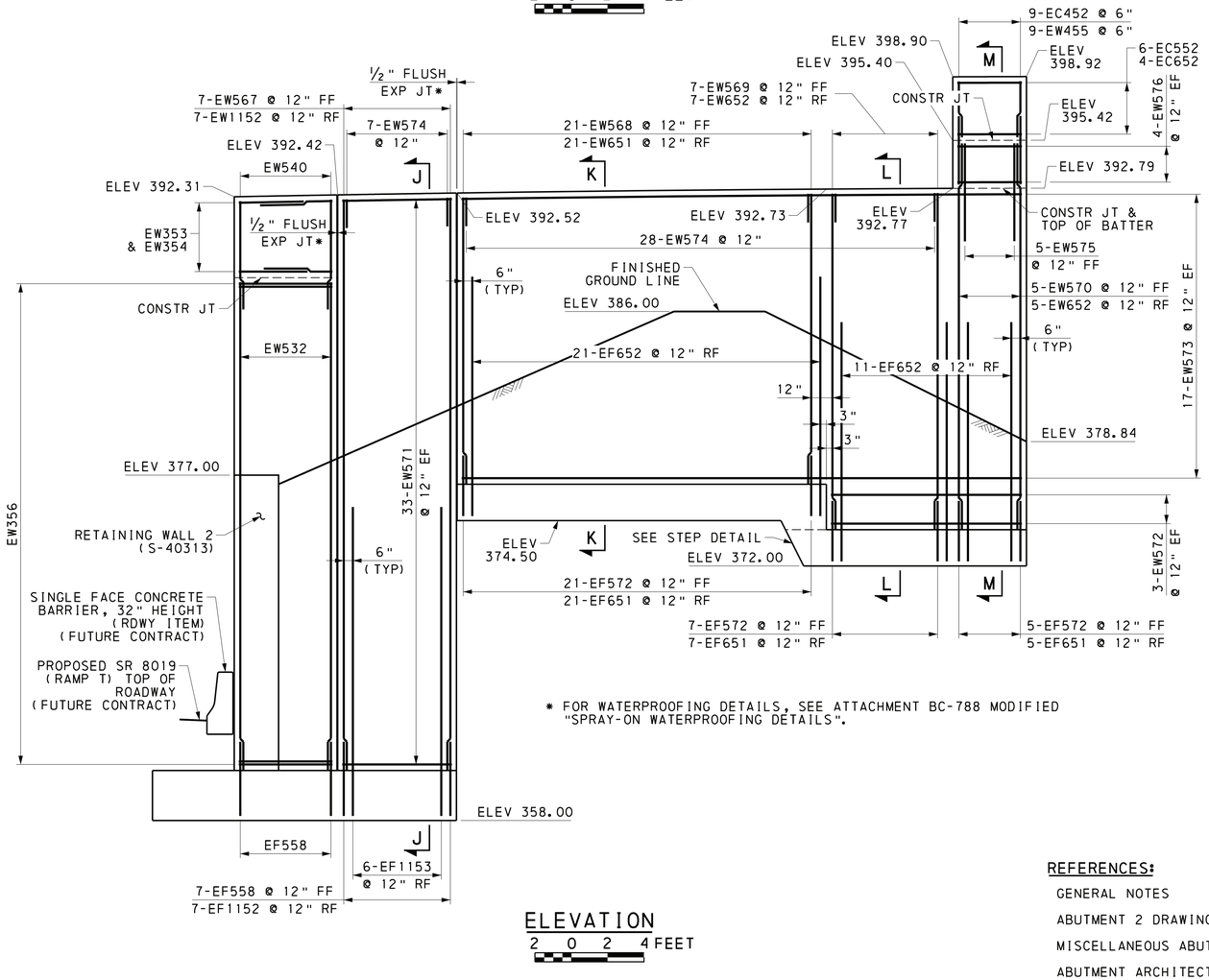


(RETAINING WALL 2 CONNECTION ANGLE NOT SHOWN FOR CLARITY)

PLAN
2 0 2 4 FEET



STEP DETAIL
1 0 1 2 FEET



* FOR WATERPROOFING DETAILS, SEE ATTACHMENT BC-788 MODIFIED "SPRAY-ON WATERPROOFING DETAILS".

ELEVATION
2 0 2 4 FEET

NOTES:

1. CONNECT TO BRIDGE 2 (S-39452) 6" STRUCTURE FOUNDATION DRAIN.

REFERENCES:	SHEETS:
GENERAL NOTES	3 - 4
ABUTMENT 2 DRAWINGS	14 - 25
MISCELLANEOUS ABUTMENT DETAILS	26
ABUTMENT ARCHITECTURAL DETAILS	27

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0123 MPMS/ECMS PROJ: 97828 BRKEY: 67418

HNTB

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0123 SEG 0051 OFFSET 0123
SR 3007 (19TH STREET) STA 100+84.74
OVER SR 0083 AND SR 8019 (RAMP T)
2-SPAN CONTINUOUS COMPOSITE PS CONCRETE PA BULB-TEE BEAM BRIDGE
WINGWALL B PLAN & ELEVATION

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — JUSTIN ROBERT MCCARTHY — ENGINEER PE076998

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

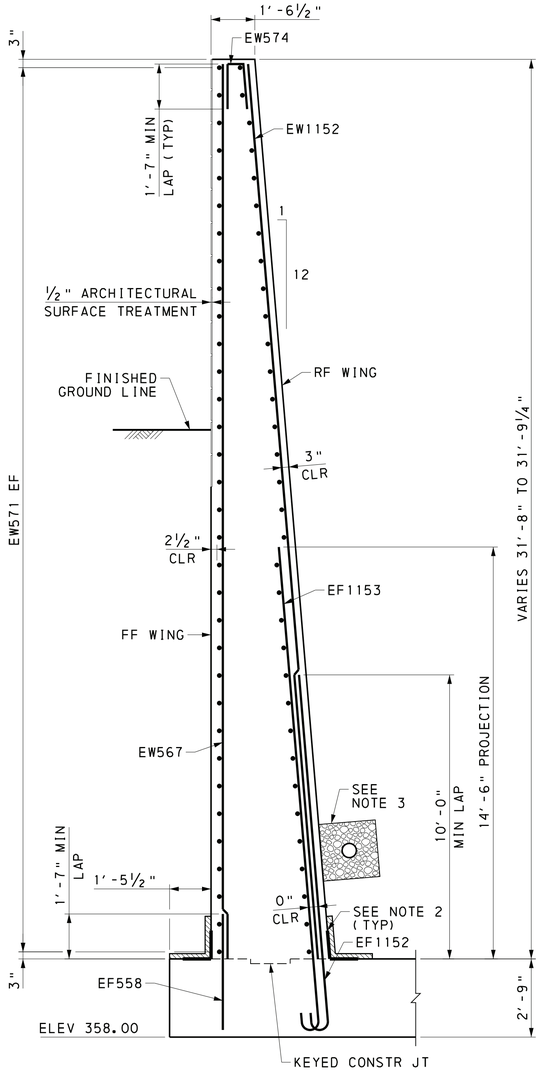
RECOMMENDED 12-6-2022

SHEET 21 OF 78

S-39453

12/2/2022
FILENAME: 63016-s-brB3-ab128.dgn

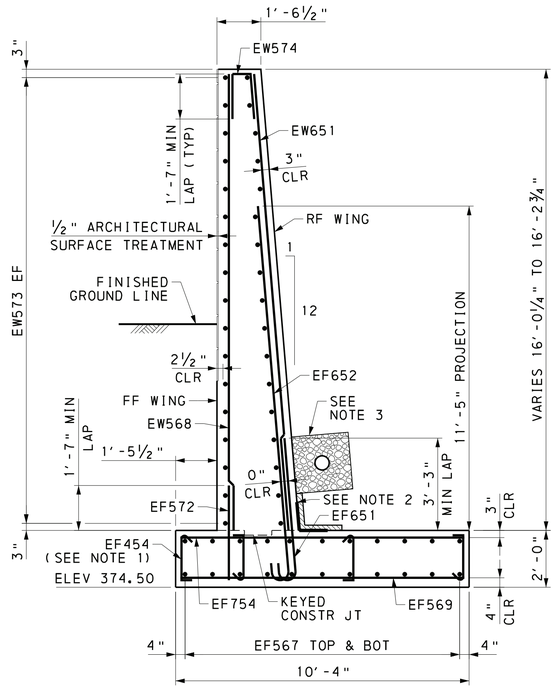
DES: SMZ	DES CKD: CEK	DWG: SMZ	DWG CKD: CEK



(ABUTMENT FOOTING REINFORCEMENT NOT SHOWN FOR CLARITY)

SECTION J-J

1 0 1 2 3 FEET



SECTION K-K

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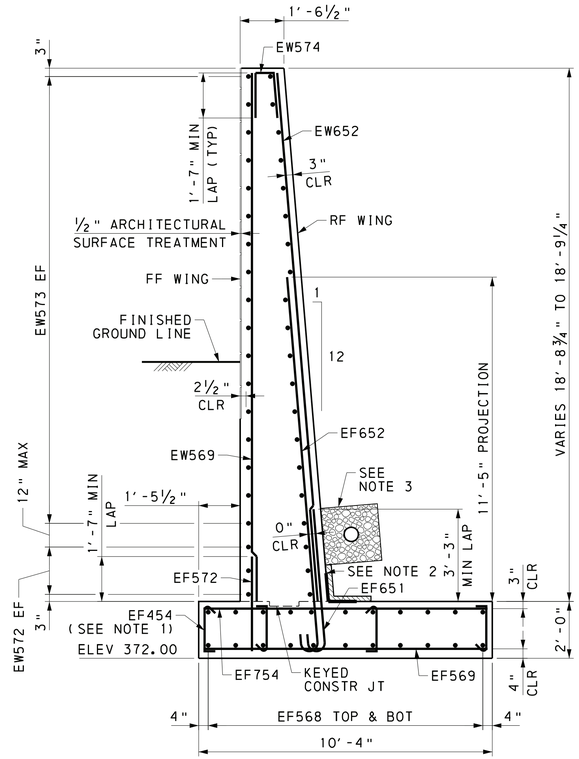


SECTION L-L

1 0 1 2 3 FEET

NOTES:

1. TIE TOP & BOTTOM MATS OF REINFORCING STEEL WITH #4 TIE BARS AT A MAXIMUM SPACING OF 4′-0" IN BOTH DIRECTIONS. PROVIDE TIE BARS WITH 90° HOOK AT ONE END AND 135° HOOK AT THE OTHER END. ALTERNATE 90° AND 135° HOOKS AT TOP IN ALTERNATE TIES.
2. FOR WATERPROOFING DETAILS, SEE ATTACHMENT BC-788 MODIFIED "SPRAY-ON WATERPROOFING DETAILS".
3. 6" STRUCTURE FOUNDATION DRAIN WITHIN CONTINUOUS 2′ x 2′ OF NO. 57 COARSE AGGREGATE ENCASED IN GEOTEXTILE, CLASS 1. SEE PUB 408 SECTION 1001.3(d) AND BC-751M.

REFERENCES:

	SHEETS:
GENERAL NOTES	3 - 4
ABUTMENT 2 DRAWINGS	14 - 25
ABUTMENT ARCHITECTURAL DETAILS	27

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0123 MPMS/ECMS PROJ: 97828 BRKEY: 67418

HNTB

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — JUSTIN ROBERT MCCARTHY — ENGINEER — PE076998

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0123 SEG 0051 OFFSET 0123
SR 3007 (19TH STREET) STA 100+84.74
OVER SR 0083 AND SR 8019 (RAMP T)
2-SPAN CONTINUOUS COMPOSITE PS CONCRETE PA BULB-TEE BEAM BRIDGE
WINGWALL B SECTIONS 1

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

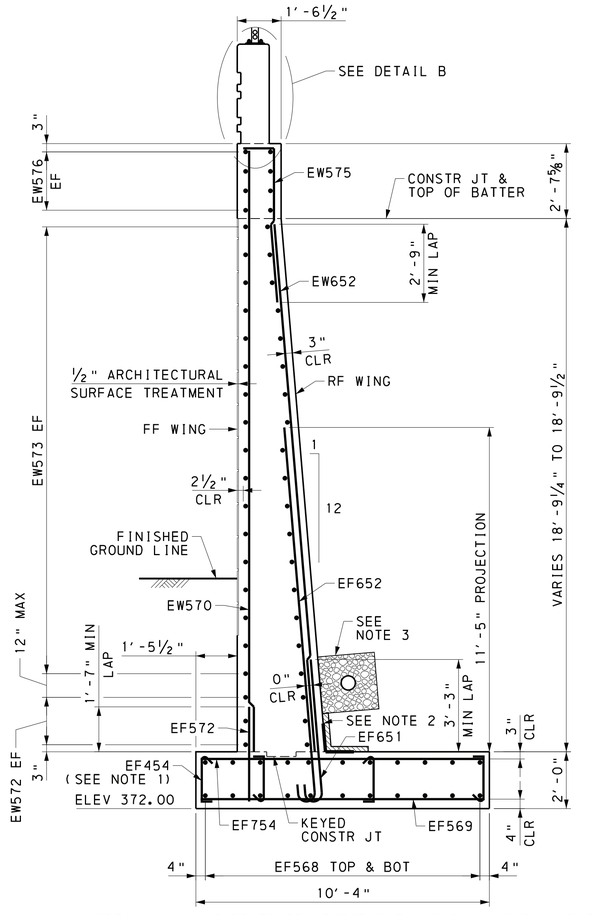
RECOMMENDED 12-6-2022

SHEET 22 OF 78

S-39453

12/2/2022
FILENAME: 63016-s-brB3-ab129.dgn

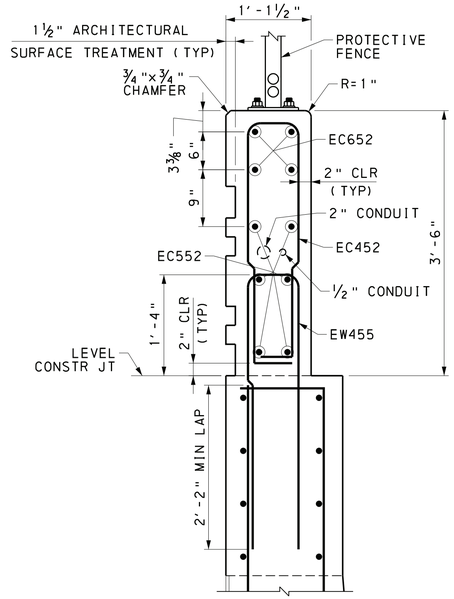
DES: SMZ	DES CKD: CEK	DWG: SMZ	DWG CKD: CEK



(VERTICAL WALL BARRIER REINFORCEMENT NOT SHOWN FOR CLARITY)

SECTION M-M

1 0 1 2 3 FEET



DETAIL B

6 0 6 12 INCHES

NOTES:

1. TIE TOP & BOTTOM MATS OF REINFORCING STEEL WITH #4 TIE BARS AT A MAXIMUM SPACING OF 4′-0" IN BOTH DIRECTIONS. PROVIDE TIE BARS WITH 90° HOOK AT ONE END AND 135° HOOK AT THE OTHER END. ALTERNATE 90° AND 135° HOOKS AT TOP IN ALTERNATE TIES.
2. FOR WATERPROOFING DETAILS, SEE ATTACHMENT BC-788 MODIFIED "SPRAY-ON WATERPROOFING DETAILS".
3. 6" STRUCTURE FOUNDATION DRAIN WITHIN CONTINUOUS 2′ x 2′ OF NO. 57 COARSE AGGREGATE ENCASED IN GEOTEXTILE, CLASS 1. SEE PUB 408 SECTION 1001.3(d) AND BC-751M.

REFERENCES:

GENERAL NOTES	3 - 4
ABUTMENT 2 DRAWINGS	14 - 25
ABUTMENT ARCHITECTURAL DETAILS	27

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0123 MPMS/ECMS PROJ: 97828 BRKEY: 67418

HNTB

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL JUSTIN ROBERT MCCARTHY ENGINEER PE076998

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0123 SEG 0051 OFFSET 0123
SR 3007 (19TH STREET) STA 100+84.74
OVER SR 0083 AND SR 8019 (RAMP T)
2-SPAN CONTINUOUS COMPOSITE PS CONCRETE PA BULB-TEE BEAM BRIDGE
WINGWALL B SECTIONS 2

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

RECOMMENDED 12-6-2022

SHEET 23 OF 78

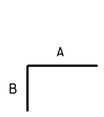
S-39453

12/2/2022
FILENAME: 63016-s-br83-ab130.dgn

DES: SMZ	DES CKD: CEK	DWG: SMZ	DWG CKD: CEK

MARK	SIZE	NO REQ'D	LENGTH	TYPE	A	B	C	D	E	REMARKS
ABUTMENT 2										
EF451	4	112	2'-11"	63	4 1/2"	2'-2"	4 1/2"			
EF551	5	64	41'-5"	STR						
EF552	5	14	5'-2"	STR						
EF553	5	16	5'-4" TO	STR						VARY 2 EACH BY 1'-4"
			14'-8"							
EF554	5	20	3'-0" TO	STR						VARY 2 EACH BY 2"
			4'-6"							
EF555	5	2	16'-3"	STR						
EF556	5	3	14'-8"	65	7"	14'-1"				J = 5"
EF557	5	2	13'-2"	STR						
EF558	5	105	4'-2"	STR						
EF751	7	152	14'-6"	STR						
EF752	7	5	3'-4" TO	STR						VARY EACH BY 2'-9"
			14'-4"							
EF753	7	3	15'-2"	STR						
EF851	8	152	14'-6"	STR						
EF852	8	5	3'-4" TO	STR						VARY EACH BY 2'-9"
			14'-4"							
EF951	9	5	14'-1"	STR						
EF952	9	70	10'-7"	65	1'-3"	9'-4"				J = 11 3/4"
EF953	9	68	20'-0"	65	1'-3"	18'-9"				J = 11 3/4"
EW351	3	7	9'-2"	STR						BEND IN FIELD
EW352	3	7	11'-8"	STR						BEND IN FIELD
EW353	3	7	11'-5"	STR						BEND IN FIELD
EW354	3	7	11'-5"	STR						BEND IN FIELD
EW355	3	74	10'-3"	STR						BEND IN FIELD
EW356	3	74	10'-8"	STR						BEND IN FIELD
EW451	4	4	3'-6"	STR						
EW452	4	4	3'-6"	78	1'-11"	1'-7"	1'- 1 3/8"			
EW531	5	52	27'-1"	STR						
EW532	5	53	26'-11"	STR						
EW533	5	35	5'-10"	77	3'-6"	2'-4"				
EW534	5	35	6'-0"	77	3'-6"	2'-6"				
EW535	5	70	9'-1"	78	4'-6"	4'-6"	2'-6"			
EW536	5	70	3'-6"	STR						
EW537	5	61	41'-4"	STR						
EW538	5	61	37'-6"	STR						
EW539	5	18	6'-2"	STR						
EW540	5	19	6'-2"	STR						
EW541	5	71	9'-0"	31	4'-1"	10"	4'-1"			
EW542	5	2	5'-0"	31	2'-1"	10"	2'-1"			
EW543	5	2	2'-8"	31	11"	10"	11"			
EW544	5	2	2'-10"	31	1'-0"	10"	1'-0"			
EW545	5	6	39'-2"	STR						
EW546	5	2	25'-7"	STR						
EW547	5	2	12'-5"	STR						
EW548	5	2	4'-7"	STR						
EW549	5	2	33'-0"	STR						
EW550	5	8	35'-5"	STR						
EW551	5	2	8'-2"	STR						
EW552	5	2	25'-3"	STR						
EW553	5	4	3'-0"	STR						
EW554	5	4	3'-4"	78	1'-10"	1'-6"	1'-0 3/4"			
EW555	5	8	2'-7"	STR						
EW556	5	8	3'-8"	STR						
EW951	9	70	24'-9"	STR						

MARK	SIZE	NO REQ'D	LENGTH	TYPE	A	B	C	D	E	REMARKS
WINGWALL A										
EF452	4	35	2'-5"	63	4 1/2"	1'-8"	4 1/2"			
EF453	4	24	2'-11"	63	4 1/2"	2'-2"	4 1/2"			
EF556	5	22	14'-8"	65	7"	14'-1"				J = 5"
EF558	5	7	4'-2"	STR						
EF559	5	30	20'-11"	STR						
EF560	5	38	12'-2 1/2"	STR						
EF561	5	13	18'-0"	65	7"	17'-5"				J = 5"
EF562	5	15	8'-3"	77	6'-8"	1'-7"				
EF563	5	15	9'-0"	78	7'-5"	1'-7"	1'-5"			
EF564	5	5	14'-1"	STR						
EF565	5	22	3'-8"	STR						
EF566	5	12	4'-2"	STR						
EF853	8	22	8'-6"	65	11"	7'-7"				J = 8"
EF854	8	22	13'-10"	65	11"	12'-11"				J = 8"
EF951	9	43	14'-1"	STR						
EF1051	10	12	12'-5"	65	1'-5"	11'-0"				J = 1'-1 1/4"
EF1052	10	11	17'-3"	65	1'-5"	15'-10"				J = 1'-1 1/4"
EF1151	11	25	17'-5"	STR						
EF1152	11	7	14'-3"	65	1'-7"	12'-8"				J = 1'-2 3/4"
EF1153	11	6	18'-7"	65	1'-7"	17'-0"				J = 1'-2 3/4"
EW453	4	8	3'-6"	STR						
EW454	4	9	7'-11"	39	3'-6"	4"	3"	3'-6"		
EW557	5	7	31'-8"	STR						
EW558	5	22	24'-2"	STR						
EW559	5	7	28'-10"	STR						
EW560	5	5	31'-6"	STR						
EW561	5	66	6'-0 3/4"	STR						
EW562	5	10	10'-5 1/2"	STR						
EW563	5	52	31'-8 1/2"	STR						
EW564	5	36	5'-1"	33	2'-0"	1'-1"	2'-0"		2"	
EW565	5	5	6'-6 1/2"	81	1'-1"	2'-5 1/2"	3'-0"	3"		
EW566	5	8	3'-8 1/2"	STR						
EW851	8	22	24'-2"	STR						
EW1051	10	12	28'-10"	STR						
EW1151	11	7	31'-8"	STR						
EC451	4	9	7'-10"	10	2'-9"	4"	3"	2'-9"	5 1/2"	H = 3", R = 2"
EC551	5	6	3'-8 1/2"	STR						
EC651	6	4	3'-8 1/2"	STR						



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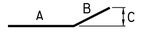

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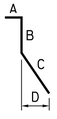

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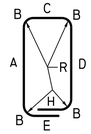
Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0123 MPMS/ECMS PROJ: 97828 BRKEY: 67418

NOTES:

1. "E" PREFIX IN BAR MARK DENOTES EPOXY COATED BARS.
2. ALL DIMENSIONS ARE OUT TO OUT OF BAR EXCEPT "A" & "C" ON STANDARD 135° AND 180° HOOKS, UNLESS NOTED.
3. FOR REINFORCEMENT BAR FABRICATION DETAILS, REFER TO STANDARD DRAWING BC-736M.
4. FIGURES IN CIRCLE REPRESENT BAR TYPES.
5. "J" DIMENSIONS ON 180° HOOKS ARE SHOWN ONLY WHERE NECESSARY TO RESTRICT HOOK SIZE, OTHERWISE STANDARD HOOKS ARE TO BE USED.
6. RADIUS, "R" IS TO THE INSIDE OF THE BAR.
7. REINFORCEMENT BAR SCHEDULE IS FOR INFORMATION ONLY. VERIFY INFORMATION BEFORE FABRICATION.



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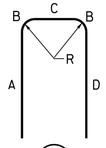

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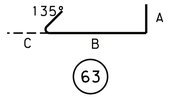

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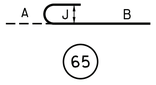

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REFERENCES:	SHEETS:
GENERAL NOTES	3 - 4
ABUTMENT 2 DRAWINGS	14 - 25

HNTB

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0123 SEG 0051 OFFSET 0123
SR 3007 (19TH STREET) STA 100+84.74
OVER SR 0083 AND SR 8019 (RAMP T)
2-SPAN CONTINUOUS COMPOSITE PS CONCRETE PA BULB-TEE BEAM BRIDGE
ABUTMENT 2 REBAR SCHEDULE 1

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
JUSTIN ROBERT MCCARTHY
ENGINEER
PE076998

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

RECOMMENDED 12-6-2022

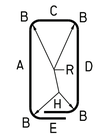
SHEET 24 OF 78

S-39453

DES: SMZ	DES CKD: CEK	DWG: SMZ	DWG CKD: CEK

6/28/2022
FILENAME: 63016-s-brB3-bar02.dgn

MARK	SIZE	NO REQ'D	LENGTH	TYPE	A	B	C	D	E	REMARKS
WINGWALL B										
EF454	4	40	2'-2"	63	4 1/2"	1'-5"	4 1/2"			
EF558	5	7	4'-2"	STR						
EF567	5	22	20'-0"	STR						
EF568	5	22	11'-11"	STR						
EF569	5	36	10'-0"	STR						
EF570	5	11	5'-6"	77	3'-11"	1'-7"				
EF571	5	11	5'-11"	78	4'-4"	1'-7"	1'-5"			
EF572	5	33	3'-5"	STR						
EF651	6	33	5'-9"	65	8"	5'-1"				J = 6"
EF652	6	32	13'-11"	65	8"	13'-3"				J = 6"
EF754	7	66	10'-0"	STR						
EF1152	11	7	14'-3"	65	1'-7"	12'-8"				J = 1'-2 3/4"
EF1153	11	6	18'-7"	65	1'-7"	17'-0"				J = 1'-2 3/4"
EW455	4	9	7'-11"	39	3'-6"	4"	3"	3'-6"		
EW567	5	7	31'-6"	STR						
EW568	5	21	15'-10"	STR						
EW569	5	7	18'-6"	STR						
EW570	5	5	21'-2"	STR						
EW571	5	66	6'-1 1/2"	STR						
EW572	5	6	10'-8"	STR						
EW573	5	34	31'-0"	STR						
EW574	5	35	5'-1"	33	2'-0"	1'-1"	2'-0"		2"	
EW575	5	5	6'-6 1/2"	81	1'-1"	2'-5 1/2"	3'-0"	3"		
EW576	5	8	3'-8 1/2"	STR						
EW651	6	21	15'-10"	STR						
EW652	6	12	18'-6"	STR						
EW1152	11	7	31'-6"	STR						
EC452	4	9	7'-10"	10	2'-9"	4"	3"	2'-9"	5 1/2"	H = 3", R = 2"
EC552	5	6	3'-8 1/2"	STR						
EC652	6	4	3'-8 1/2"	STR						
SHEAR BLOCKS										
EW597	5	3	10'-10"	42	2'-3"	6'-4"	2'-3"			H = 2 3/4"
EW598	5	3	10'-10"	42	2'-3"	6'-4"	2'-3"			H = 3 3/8"
EW599	5	16	6'-9"	31	2'-6"	1'-9"	2'-6"			



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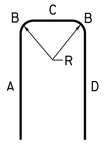

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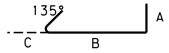

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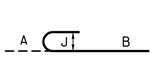

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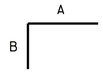

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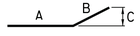

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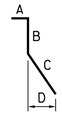

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NOTES:

1. "E" PREFIX IN BAR MARK DENOTES EPOXY COATED BARS.
2. ALL DIMENSIONS ARE OUT TO OUT OF BAR EXCEPT "A" & "C" ON STANDARD 135° AND 180° HOOKS, UNLESS NOTED.
3. FOR REINFORCEMENT BAR FABRICATION DETAILS, REFER TO STANDARD DRAWING BC-736M.
4. FIGURES IN CIRCLE REPRESENT BAR TYPES.
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6. RADIUS, "R" IS TO THE INSIDE OF THE BAR.
7. REINFORCEMENT BAR SCHEDULE IS FOR INFORMATION ONLY. VERIFY INFORMATION BEFORE FABRICATION.

REFERENCES:	SHEETS:
GENERAL NOTES	3 - 4
ABUTMENT 2 DRAWINGS	14 - 25

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0123 MPMS/ECMS PROJ: 97828 BRKEY: 67418

HNTB

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL JUSTIN ROBERT MCCARTHY ENGINEER PE076998

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0123 SEG 0051 OFFSET 0123
SR 3007 (19TH STREET) STA 100+84.74
OVER SR 0083 AND SR 8019 (RAMP T)
2-SPAN CONTINUOUS COMPOSITE PS CONCRETE PA BULB-TEE BEAM BRIDGE
ABUTMENT 2 REBAR SCHEDULE 2

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

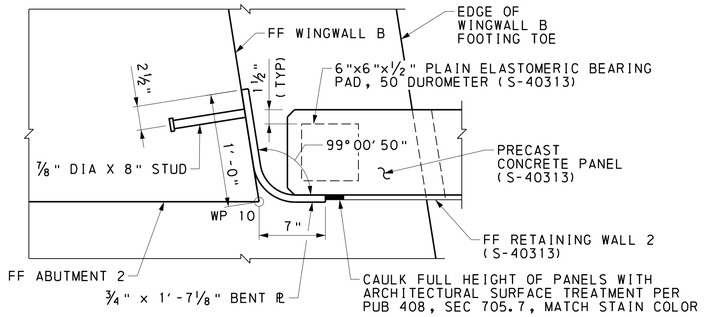
RECOMMENDED 12-6-2022

SHEET 25 OF 78

S-39453

6/28/2022
FILENAME: 63016-s-brB3-bar03.dgn

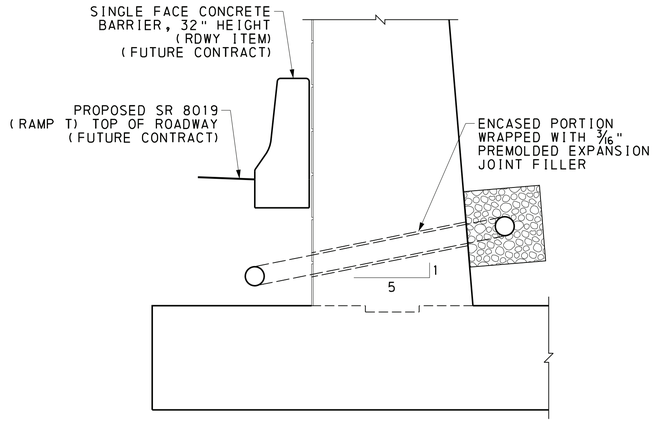
DES: SMZ	DES CKD: CEK	DWG: SMZ	DWG CKD: CEK



(ABUTMENT 2 REINFORCEMENT NOT SHOWN FOR CLARITY)

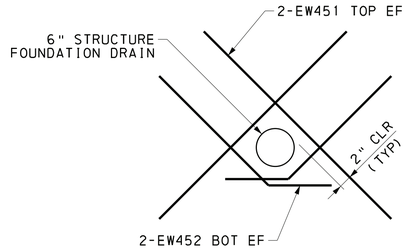
RETAINING WALL 2 CONNECTION PLAN

6 0 6 INCHES



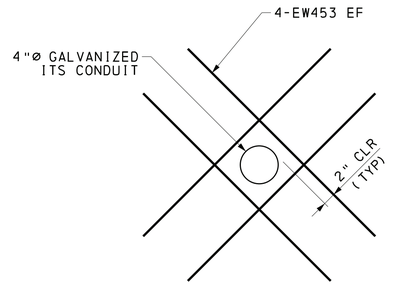
STRUCTURE FOUNDATION DRAIN OUTLET DETAIL

NOT TO SCALE



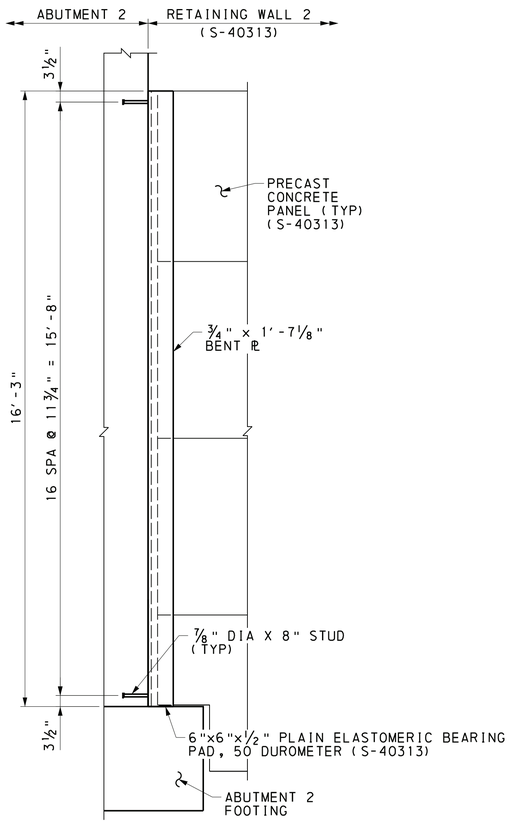
STRUCTURE FOUNDATION DRAIN REINFORCEMENT DETAIL

NOT TO SCALE



ITS CONDUIT REINFORCEMENT DETAIL

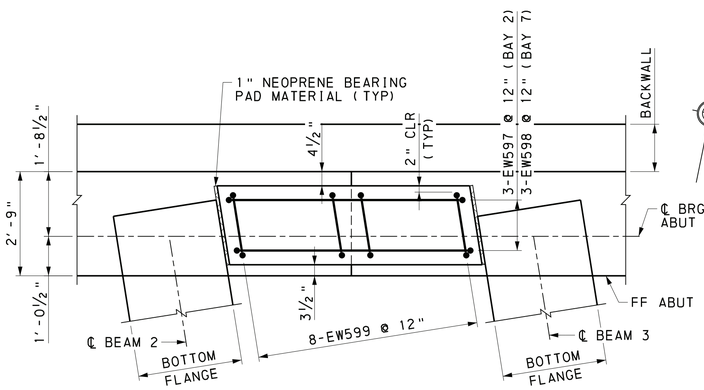
NOT TO SCALE



(ABUTMENT 2 REINFORCEMENT NOT SHOWN FOR CLARITY)

RETAINING WALL 2 CONNECTION ELEVATION

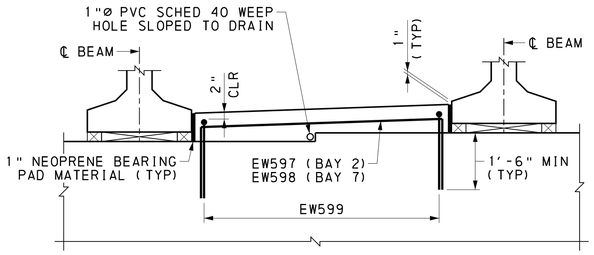
1 0 1 2 FEET



(ABUTMENT 2 BAY 2 SHOWN, ABUTMENT 2 BAY 7 SIMILAR)

SHEAR BLOCK PLAN

1 0 1 2 FEET



SHEAR BLOCK ELEVATION

1 0 1 2 FEET

REFERENCES:	SHEETS:
GENERAL NOTES	3 - 4
ABUTMENT 1 & 2 DRAWINGS	9 - 25

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0123 MPMS/ECMS PROJ: 97828 BRKEY: 67418

HNTB

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — JUSTIN ROBERT MCCARTHY — ENGINEER — PE076998

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0123 SEG 0051 OFFSET 0123
SR 3007 (19TH STREET) STA 100+84.74
OVER SR 0083 AND SR 8019 (RAMP T)
2-SPAN CONTINUOUS COMPOSITE PS CONCRETE PA BULB-TEE BEAM BRIDGE
MISCELLANEOUS ABUTMENT DETAILS

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

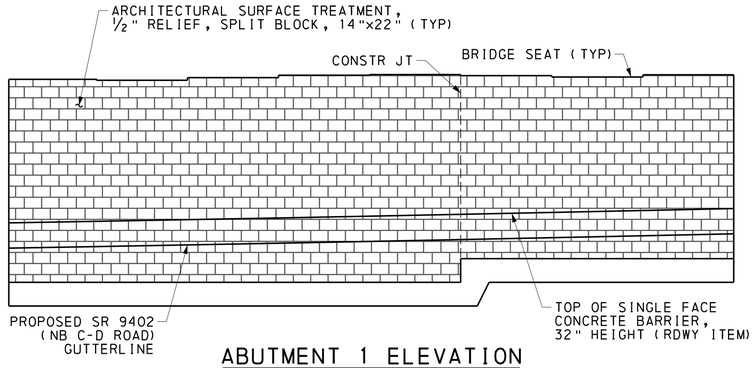
RECOMMENDED 12-6-2022

SHEET 26 OF 78

S-39453

6/28/2022
FILENAME: 63016-s-brB3-ab131.dgn

DES: SMZ	DES CKD: CEK	DWG: SMZ	DWG CKD: CEK

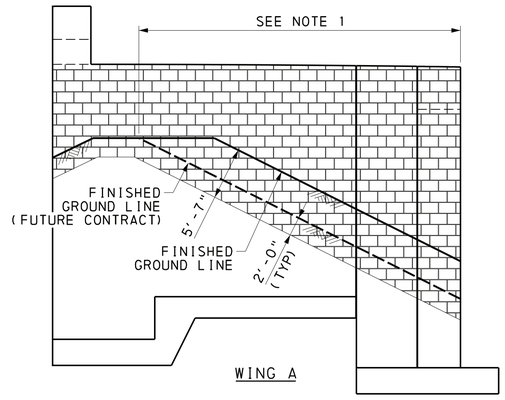


ABUTMENT 1 ELEVATION

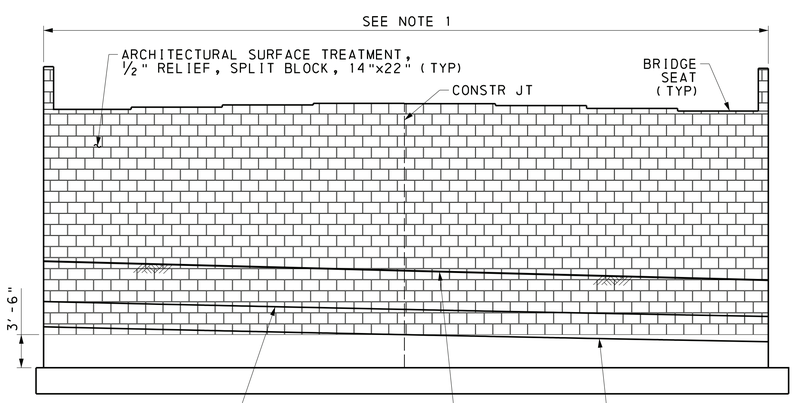
2 0 4 8 FEET

LEGEND:

LIMITS OF ARCHITECTURAL SURFACE TREATMENT

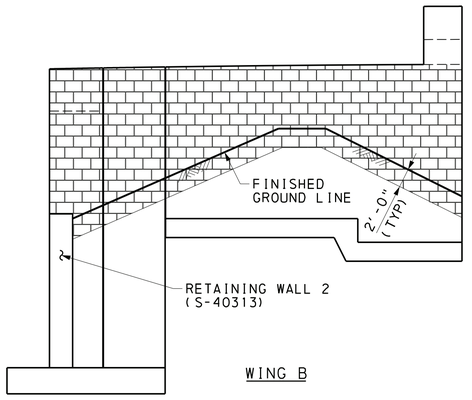


WING A



ABUTMENT 2 ELEVATION

2 0 4 8 FEET



WING B

NOTES:

1. PLACE 3" THICK PREFORMED CELLULAR POLYSTYRENE BETWEEN THE FRONT FACES OF ABUTMENT 2/WINGWALL A AND THE BACKFILL ALONG THE FRONT FACES OF WALLS. 3" THICK PREFORMED CELLULAR POLYSTYRENE SHALL EXTEND FROM THE FINISHED GROUND LINE TO THE BOTTOM OF THE ARCHITECTURAL SURFACE TREATMENT IN ORDER TO PROTECT THE WALL FINISHES FROM DAMAGE DURING EXCAVATION IN A FUTURE CONTRACT. 3" THICK PREFORMED CELLULAR POLYSTYRENE IS INCIDENTAL TO THE ITEM "ARCHITECTURAL SURFACE TREATMENT, ½" RELIEF, SPLIT BLOCK, 14x22"".

REFERENCES:

	SHEETS:
GENERAL NOTES	3 - 4
ABUTMENT 1 & 2 DRAWINGS	9 - 25

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0123 MPMS/ECMS PROJ: 97828 BRKEY: 67418

HNTB

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL JUSTIN ROBERT MCCARTHY ENGINEER PE076998

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0123 SEG 0051 OFFSET 0123
SR 3007 (19TH STREET) STA 100+84.74
OVER SR 0083 AND SR 8019 (RAMP T)
2-SPAN CONTINUOUS COMPOSITE PS CONCRETE PA BULB-TEE BEAM BRIDGE
ABUTMENT ARCHITECTURAL DETAILS

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

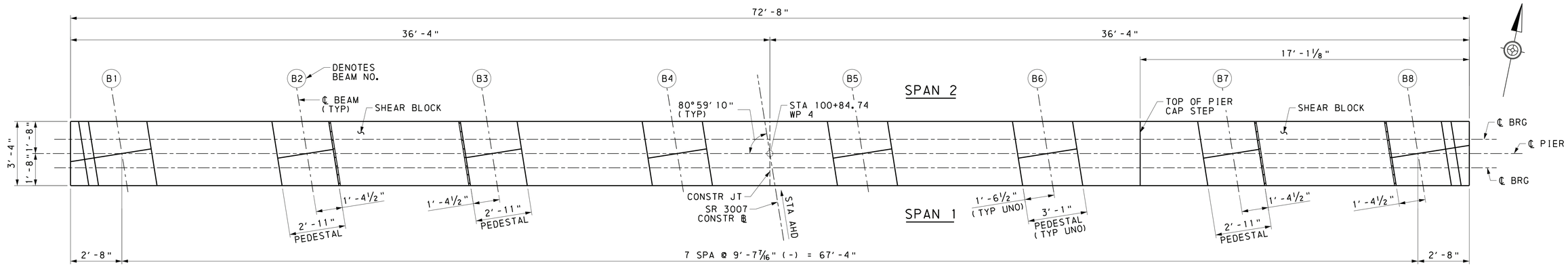
RECOMMENDED 12-6-2022

SHEET 27 OF 78

S-39453

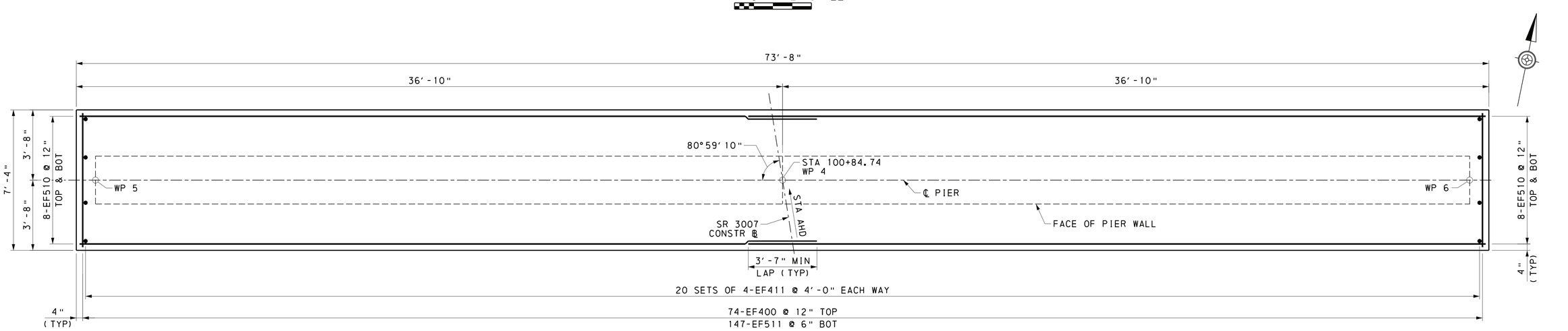
6/28/2022
FILENAME: 63016-s-brB3-ab132.dgn

DES: SMZ	DES CKD: CEK	DWG: SMZ	DWG CKD: CEK



PLAN

1 0 1 2 3 FEET



FOOTING PLAN

1 0 1 2 3 FEET

FOUNDATION PARAMETERS AT PIER	
EMPIRICAL ROCK BEARING CAPACITY (KSF)	305
BEARING RESISTANCE (KSF)	152.5
MAX BEARING PRESSURE (KSF)	14.87
LIMIT STATE	STR-I MAX FINAL
SLIDING RESISTANCE (KIP)	2143.3
MAX HORIZONTAL FORCE (KIP)	600

NOTES:

1. PROVIDE A NEAT VERTICAL CUT AROUND THE EDGE OF THE FOOTING EXCAVATION AND PLACE FOOTING AGAINST ROCK CUT SURFACE IF TOP OF ROCK IS ABOVE BOTTOM OF FOOTING ELEVATION.
2. STANDPIPE AND SUPPORT BRACKETS NOT SHOWN FOR CLARITY.

REFERENCES:	SHEETS:
GENERAL NOTES	3 - 4
STAKE-OUT PLAN	8
PIER DRAWINGS	28 - 33
STANDPIPE DETAILS	72

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0123 MPMS/ECMS PROJ: 97828 BRKEY: 67418

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COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL JUSTIN ROBERT MCCARTHY ENGINEER PE076998

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0123 SEG 0051 OFFSET 0123
SR 3007 (19TH STREET) STA 100+84.74
OVER SR 0083 AND SR 8019 (RAMP T)
2-SPAN CONTINUOUS COMPOSITE PS CONCRETE PA BULB-TEE BEAM BRIDGE
PIER PLAN & FOOTING PLAN

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

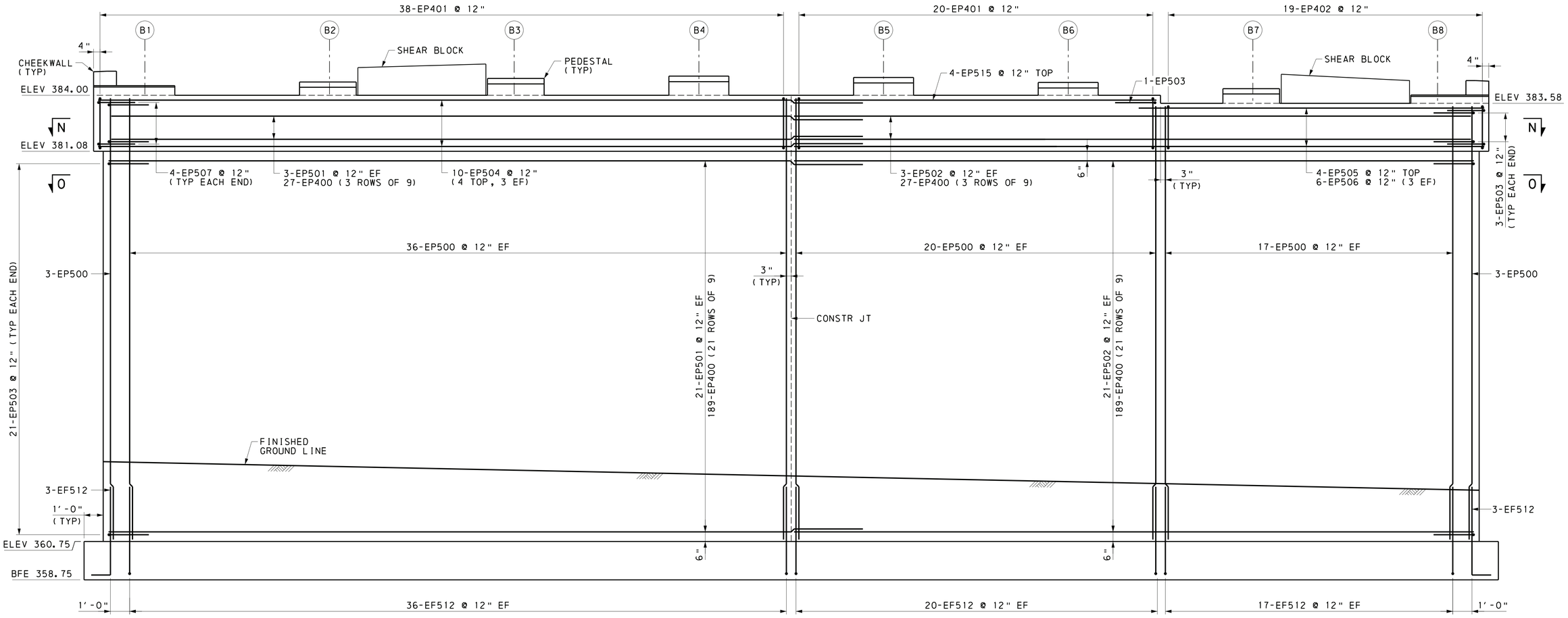
RECOMMENDED 12-6-2022

SHEET 28 OF 78

S-39453

6/28/2022
FILENAME 63016-s-brB3-prs11.dgn

DES: MCA	DES CKD: CEK	DWG: JTM	DWG CKD: CEK



ELEVATION

1 0 1 2 3 FEET

(PEDESTAL, CHEEKWALL, SHEAR BLOCK & FOOTING REINFORCEMENT NOT SHOWN FOR CLARITY)

BEAM SEAT ELEVATIONS								
	BEAM 1	BEAM 2	BEAM 3	BEAM 4	BEAM 5	BEAM 6	BEAM 7	BEAM 8
SPAN 1	384.44	384.42	384.59	384.71	384.64	384.38	384.07	383.95
SPAN 2	384.50	384.70	384.88	385.00	384.93	384.67	384.35	384.02

NOTES:

1. BEAM SEAT ELEVATIONS GIVEN AT INTERSECTION OF ℄ BEAM & ℄ BRG.
2. BEAM SEATS ARE LEVEL IN TRANSVERSE AND LONGITUDINAL DIRECTIONS.

NOTES:

1. UNDERPASS LIGHTING DETAILS NOT SHOWN FOR CLARITY.
2. STANDPIPE AND SUPPORT BRACKETS NOT SHOWN FOR CLARITY.

REFERENCES:	SHEETS:
GENERAL NOTES	3 - 4
STAKE-OUT PLAN	8
PIER DRAWINGS	28 - 33
STANDPIPE DETAILS	72

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0123 MPMS/ECMS PROJ: 97828 BRKEY: 67418

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COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0123 SEG 0051 OFFSET 0123
SR 3007 (19TH STREET) STA 100+84.74
OVER SR 0083 AND SR 8019 (RAMP T)

2-SPAN CONTINUOUS COMPOSITE PS CONCRETE PA BULB-TEE BEAM BRIDGE

PIER ELEVATION

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — JUSTIN ROBERT MCCARTHY — ENGINEER — PE076998

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

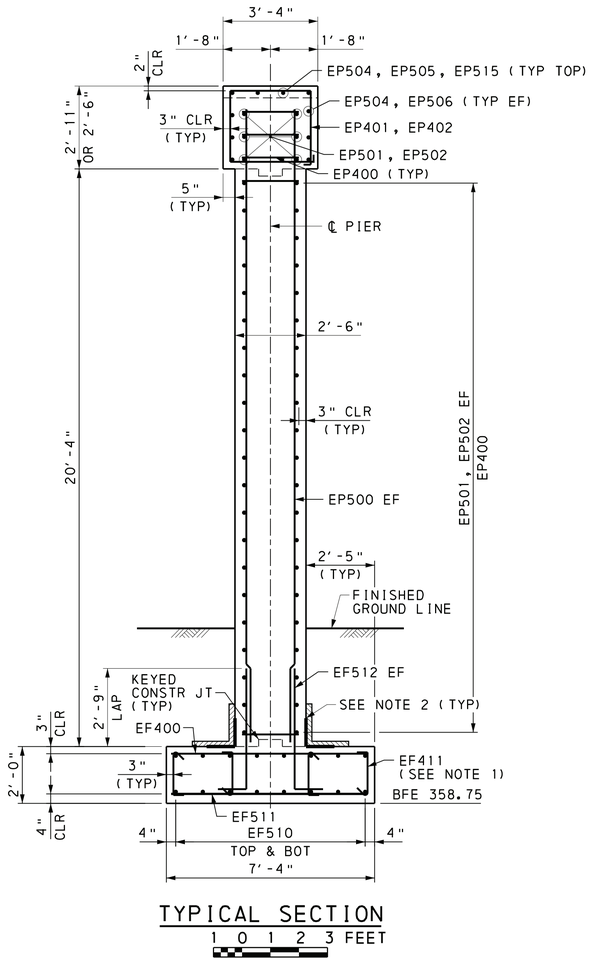
RECOMMENDED 12-6-2022

SHEET 29 OF 78

S-39453

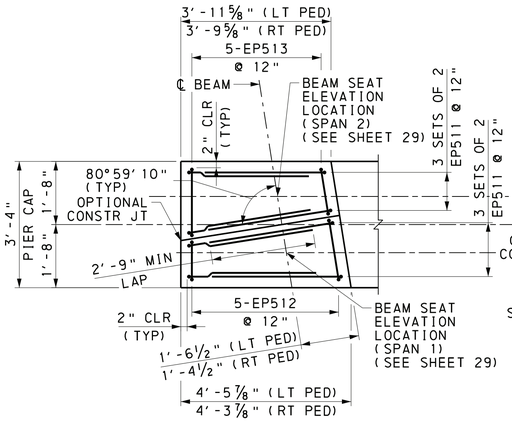
6/28/2022
FILENAME: 63016-s-brB3-prs12.dgn

DES: MCA	DES CKD: CEK	DWG: JTM	DWG CKD: CEK

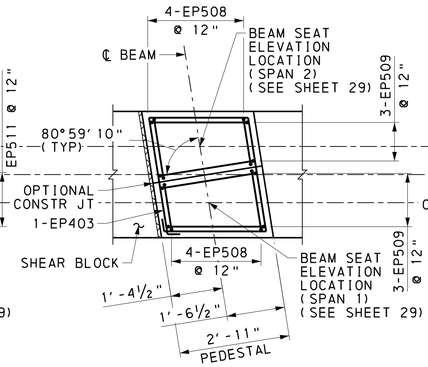


TYPICAL SECTION

1 0 1 2 3 FEET

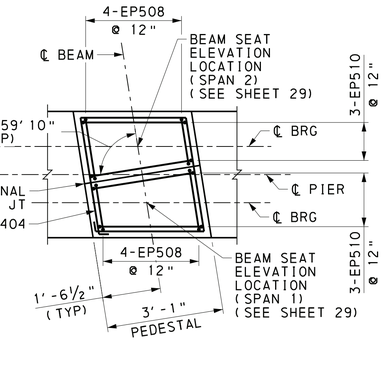


PLAN



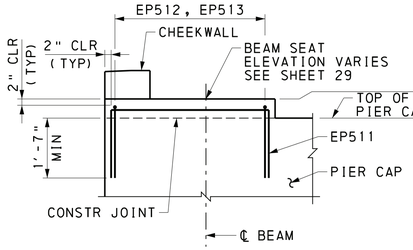
PLAN

(BEAM 3 SHOWN, BEAMS 2 & 7 SIMILAR BY OPPOSITE HAND)

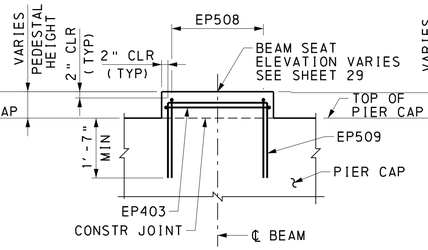


PLAN

(BEAMS 4, 5 & 6)

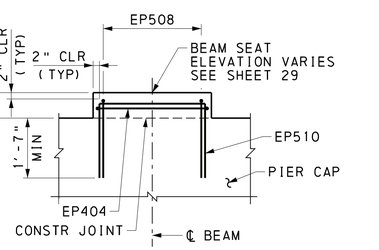


ELEVATION



ELEVATION

(BEAM 3 SHOWN, BEAMS 2 & 7 SIMILAR BY OPPOSITE HAND)



ELEVATION

(BEAMS 4, 5 & 6)

EXTERIOR PEDESTAL

1 0 1 2 FEET

(LEFT PEDESTAL SHOWN, RIGHT PEDESTAL SIMILAR BY OPPOSITE HAND AND AS NOTED)

INTERIOR PEDESTALS

1 0 1 2 FEET

NOTES:

1. TIE TOP AND BOTTOM MATS OF REINFORCING STEEL WITH #4 TIE BARS AT A MAXIMUM SPACING OF 4'-0" IN BOTH DIRECTIONS. PROVIDE TIE BARS WITH 90° HOOK AT ONE END AND 135° HOOK AT THE OTHER END. ALTERNATE 90° AND 135° HOOK AT TOP IN ALTERNATING TIES.
2. FOR WATERPROOFING DETAILS, SEE ATTACHMENT BC-788 MODIFIED "SPRAY-ON WATERPROOFING DETAILS".
3. UNDERPASS LIGHTING DETAILS NOT SHOWN FOR CLARITY.
4. STANDPIPE AND SUPPORT BRACKETS NOT SHOWN FOR CLARITY.

REFERENCES:	SHEETS:
GENERAL NOTES	3 - 4
STAKE-OUT PLAN	8
PIER DRAWINGS	28 - 33
STANDPIPE DETAILS	72

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0123 MPMS/ECMS PROJ: 97828 BRKEY: 67418

HNTB

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0123 SEG 0051 OFFSET 0123
SR 3007 (19TH STREET) STA 100+84.74
OVER SR 0083 AND SR 8019 (RAMP T)
2-SPAN CONTINUOUS COMPOSITE PS CONCRETE PA BULB-TEE BEAM BRIDGE
PIER DETAILS 1

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
JUSTIN ROBERT MCCARTHY
ENGINEER
PE076998

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

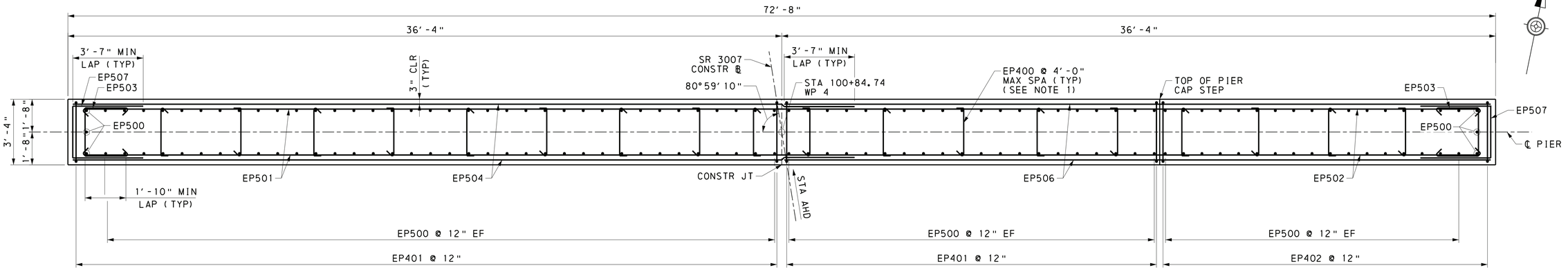
RECOMMENDED 12-6-2022

SHEET 30 OF 78

S-39453

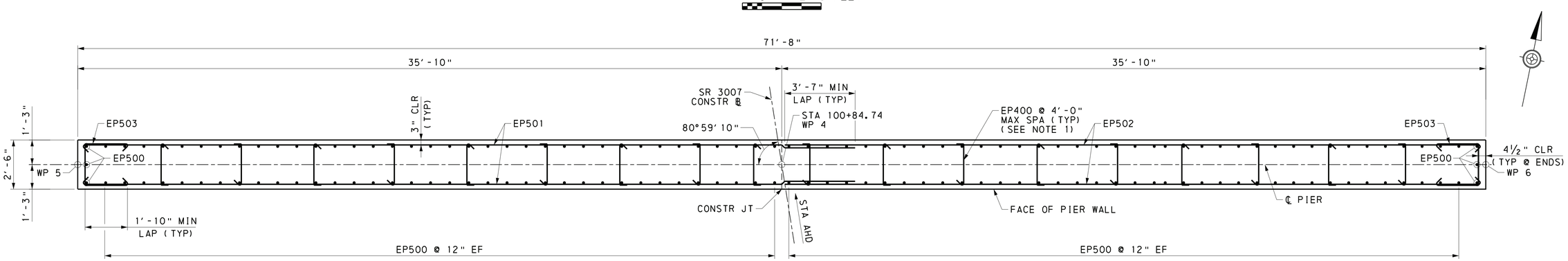
12/2/2022
FILENAME: 63016-s-brB3-prs13.dgn

DES: MCA	DES CKD: CEK	DWG: JTM	DWG CKD: CEK



SECTION N-N

1 0 1 2 3 FEET



SECTION O-O

1 0 1 2 3 FEET

NOTES:

1. ALL HOOKS ON TIES MUST ENGAGE VERTICAL COLUMN REINFORCING STEEL. ALTERNATE 90° & 135° HOOKS ON CROSS TIES BOTH VERTICALLY AND HORIZONTALLY.
2. UNDERPASS LIGHTING DETAILS NOT SHOWN FOR CLARITY.
3. STANDPIPE AND SUPPORT BRACKETS NOT SHOWN FOR CLARITY.

REFERENCES:	SHEETS:
GENERAL NOTES	3 - 4
STAKE-OUT PLAN	8
PIER DRAWINGS	28 - 33
STANDPIPE DETAILS	72

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0123 MPMS/ECMS PROJ: 97828 BRKEY: 67418

HNTB

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
JUSTIN ROBERT MCCARTHY
ENGINEER
PE076998

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

DAUPHIN COUNTY
SR 0083 SECTION 079

SEG 0050 OFFSET 0123 SEG 0051 OFFSET 0123
SR 3007 (19TH STREET) STA 100+84.74
OVER SR 0083 AND SR 8019 (RAMP T)

2-SPAN CONTINUOUS COMPOSITE PS CONCRETE PA BULB-TEE BEAM BRIDGE

PIER DETAILS 2

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

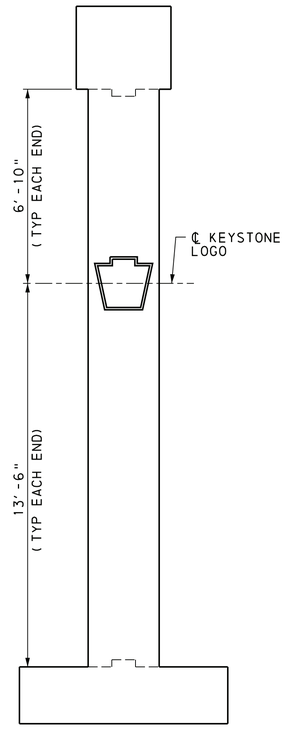
RECOMMENDED 12-6-2022

SHEET 31 OF 78

S-39453

DES: MCA	DES CKD: CEK	DWG: JTM	DWG CKD: CEK

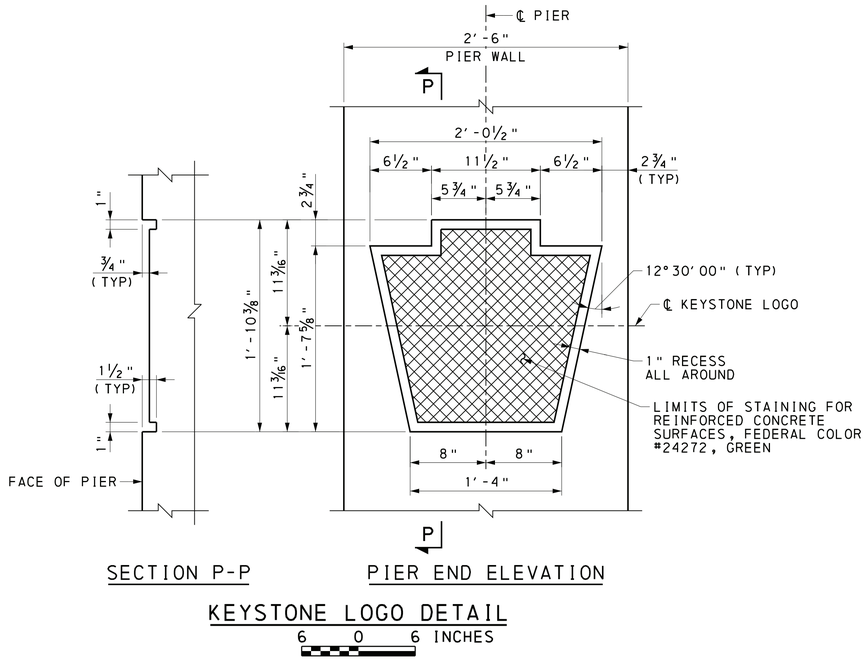
6/28/2022
FILENAME: 63016-s-brB3-prs14.dgn



PIER END VIEW

EAST END SHOWN, WEST END SIMILAR

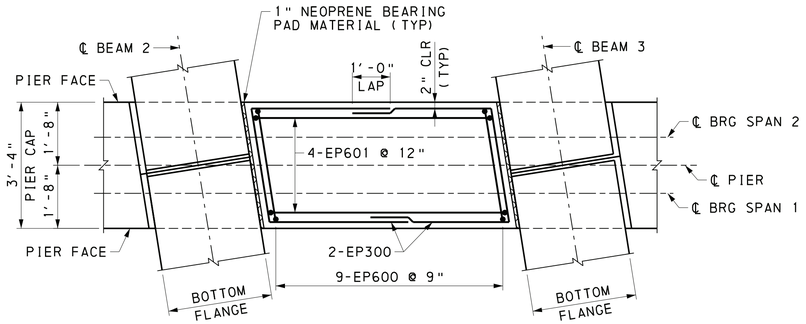
1 0 1 2 3 FEET



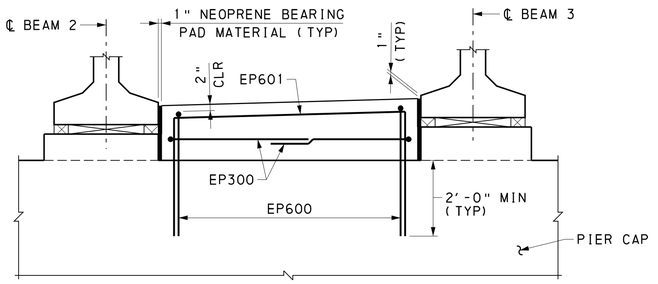
SECTION P-P PIER END ELEVATION

KEYSTONE LOGO DETAIL

6 0 6 INCHES



PLAN

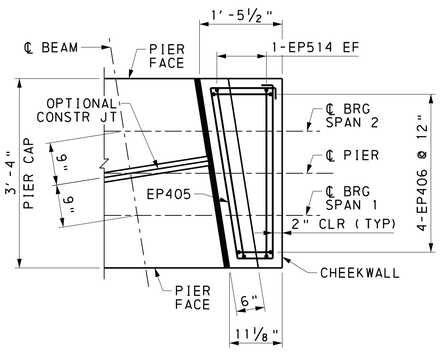


ELEVATION

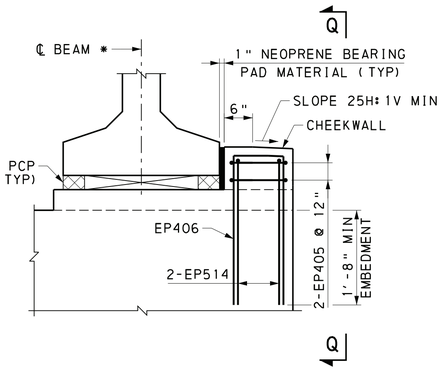
SHEAR BLOCK

1 0 1 2 FEET

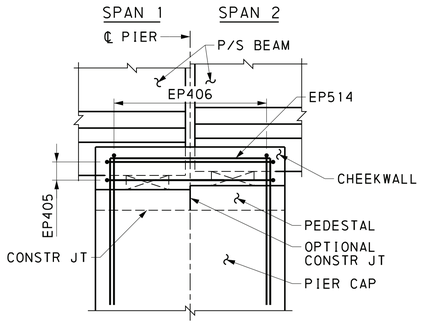
(BAY 2 SHOWN, BAY 7 SIMILAR)



PLAN



ELEVATION



SECTION Q-Q

* - SPAN 1 BEAM SHOWN, SPAN 2 BEAM NOT SHOWN FOR CLARITY

CHEEKWALL DETAILS

12 0 12 INCHES

(RIGHT CHEEKWALL SHOWN, LEFT CHEEKWALL SIMILAR BY OPPOSITE HAND)

NOTES:

1. SEE BC-788M FOR WATERPROOFING DETAILS.

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509

BMS STR ID: 22-3007-0050-0123 MPMS/ECMS PROJ: 97828 BRKEY: 67418

REFERENCES:	SHEETS:
GENERAL NOTES	3 - 4
STAKE-OUT PLAN	8
PIER DRAWINGS	28 - 33

HNTB

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
JUSTIN ROBERT MCCARTHY
ENGINEER PE076998

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0123 SEG 0051 OFFSET 0123
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2-SPAN CONTINUOUS COMPOSITE PS CONCRETE PA BULB-TEE BEAM BRIDGE
PIER DETAILS 3

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

RECOMMENDED 12-6-2022

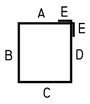
SHEET 32 OF 78

S-39453

DES: MCA	DES CKD: CEK	DWG: JTM	DWG CKD: CEK

6/28/2022
FILENAME: 63016-s-br83-prs15.dgn

MARK	SIZE	NO REQ'D	LENGTH	TYPE	A	B	C	D	E	REMARKS
						PIER				
EF410	4	74	6'-10"	STR						
EF411	4	80	2'-2"	63	4 1/2"	1'-5"	4 1/2"			
EF510	5	32	38'-5"	STR						
EF511	5	147	6'-10"	STR						
EF512	5	152	5'-3"	77	4'-5"	10"				
EP300	3	8	11'-6"	STR						BEND IN FIELD
EP400	4	432	2'-9"	63	4 1/2"	2'-0"	4 1/2"			
EP401	4	58	11'-7"	2	2'-10"	2'-7"	2'-10"	2'-7"	4 1/2"	
EP402	4	19	10'-9"	2	2'-10"	2'-2"	2'-10"	2'-2"	4 1/2"	
EP403	4	3	12'-0 3/4"	113	2'-7 3/8"	3'-0 1/2"	2'-7 3/8"	3'-0 1/2"	4 1/2"	F = 5 5/8", G = 5 5/8"
EP404	4	3	12'-4 3/4"	113	2'-9 3/8"	3'-0 1/2"	2'-9 3/8"	3'-0 1/2"	4 1/2"	F = 5 5/8", G = 5 5/8"
EP405	4	4	8'-6"	114	7 1/2"	3'-0 1/2"	1'-1"	3'-0"	4 1/2"	F = 5 3/4"
EP406	4	8	VARY 6'-2 1/2"	31	2'-10"	VARY 6 1/2"	2'-10"			VARY B 2 EACH BY 1 3/4"
			TO 6'-7 3/4"			TO 11 3/4"				
EP500	5	152	22'-6"	STR						
EP501	5	48	39'-8 1/2"	61	39'-3"	5 1/2"				
EP502	5	48	35'-8 1/2"	61	35'-3"	5 1/2"				
EP503	5	49	6'-7"	104	5 1/2"	1'-10"	2'-0"			
EP504	5	10	39'-10"	STR						
EP505	5	4	18'-0"	STR						
EP506	5	6	36'-5"	STR						
EP507	5	8	10'-0"	31	3'-7"	2'-10"	3'-7"			
EP508	5	48	VARY 5'-11 1/2"	31	2'-5"	VARY 1'-1 1/2"	2'-5"			VARY B 12 EACH BY 1 1/2"
			TO 6'-4"			TO 1'-6"				
EP509	5	18	7'-0"	31	2'-3"	2'-6"	2'-3"			
EP510	5	18	7'-6"	31	2'-5"	2'-8"	2'-5"			
EP511	5	24	5'-6"	77	2'-0"	3'-6"				
EP512	5	10	VARY 4'-11 1/4"	31	2'-0"	VARY 11 1/4"	2'-0"			VARY B 2 EACH BY 1 3/4"
			TO 5'-6 1/4"			TO 1'-6 1/4"				
EP513	5	10	VARY 5'-0"	31	1'-11"	VARY 1'-2"	1'-11"			VARY B 2 EACH BY 1 5/8"
			TO 5'-6 1/2"			TO 1'-8 1/2"				
EP514	5	4	VARY 8'-5"	31	2'-9"	VARY 2'-11"	2'-9"			VARY B 2 EACH BY 1/2"
			TO 8'-5 1/2"			TO 2'-11 1/2"				
EP515	5	4	19'-0"	STR						
EP600	6	18	10'-0"	31	3'-6"	3'-0"	3'-6"			
EP601	6	8	13'-3"	31	3'-6"	6'-3"	3'-6"			



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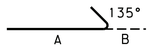
(31)



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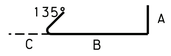

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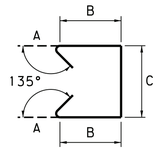
(77)



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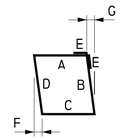

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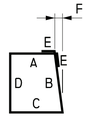


(114)

NOTES:

1. "E" PREFIX IN BAR MARK DENOTES EPOXY COATED BARS.
2. ALL DIMENSIONS ARE OUT TO OUT OF BAR EXCEPT "A" & "C" ON STANDARD 135° AND 180° HOOKS, UNLESS NOTED.
3. FOR REINFORCEMENT BAR FABRICATION DETAILS, REFER TO STANDARD DRAWING BC-736M.
4. FIGURES IN CIRCLE REPRESENT BAR TYPES.
5. "J" DIMENSIONS ON 180° HOOKS ARE SHOWN ONLY WHERE NECESSARY TO RESTRICT HOOK SIZE, OTHERWISE STANDARD HOOKS ARE TO BE USED.
6. RADIUS, "R" IS TO THE INSIDE OF THE BAR.
7. REINFORCEMENT BAR SCHEDULE IS FOR INFORMATION ONLY. VERIFY INFORMATION BEFORE FABRICATION.

REFERENCES:

GENERAL NOTES	3 - 4
PIER DRAWINGS	28 - 33

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0123 MPMS/ECMS PROJ: 97828 BRKEY: 67418

HNTB

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL JUSTIN ROBERT MCCARTHY ENGINEER PE076998

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0123 SEG 0051 OFFSET 0123
SR 3007 (19TH STREET) STA 100+84.74
OVER SR 0083 AND SR 8019 (RAMP T)
2-SPAN CONTINUOUS COMPOSITE PS CONCRETE PA BULB-TEE BEAM BRIDGE
PIER REBAR SCHEDULE

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

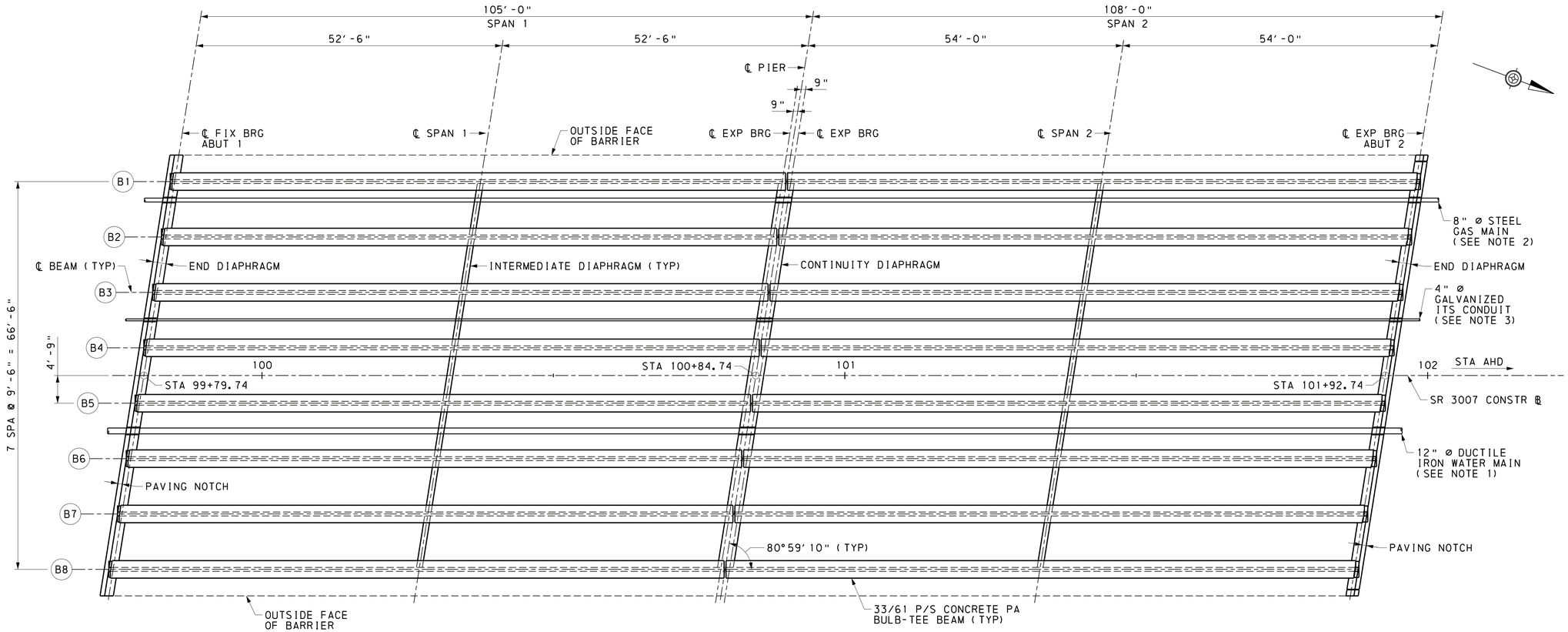
RECOMMENDED 12-6-2022

SHEET 33 OF 78

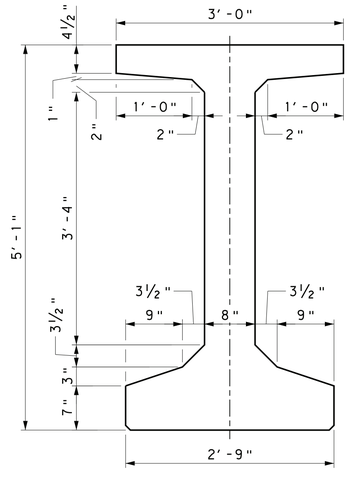
S-39453

6/28/2022
FILENAME: 63016-s-brB3-bar04.dgn

DES: MCA	DES CKD: CEK	DWG: JTM	DWG CKD: CEK



FRAMING PLAN
5 0 5 10 FEET



PA BULB-TEE BEAM, 33/61
6 0 6 12 INCHES

NOTES:

1. COORDINATE WITH CAPITAL REGION WATER. SEE WATER UTILITY RELOCATION ALSO PLAN.
2. COORDINATE WITH UGI UTILITIES, INC. AND THEIR CONTRACTOR FOR THE GAS UTILITY RELOCATION. SEE GAS UTILITY RELOCATION ALSO PLAN.
3. SEE ITS ALSO PLAN.

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0123 MPMS/ECMS PROJ: 97828 BRKEY: 67418

REFERENCES:

	SHEETS:
GENERAL PLAN	1
GENERAL NOTES	3 - 4
BEAM DETAILS	35 - 37
SLAB PLAN	39
SLAB TYPICAL SECTIONS	40 - 41
ITS SUPPORT HANGER DETAILS	45
DIAPHRAGM DETAILS	46 - 56

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COMMONWEALTH OF PENNSYLVANIA
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JUSTIN ROBERT MCCARTHY
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FRAMING PLAN

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

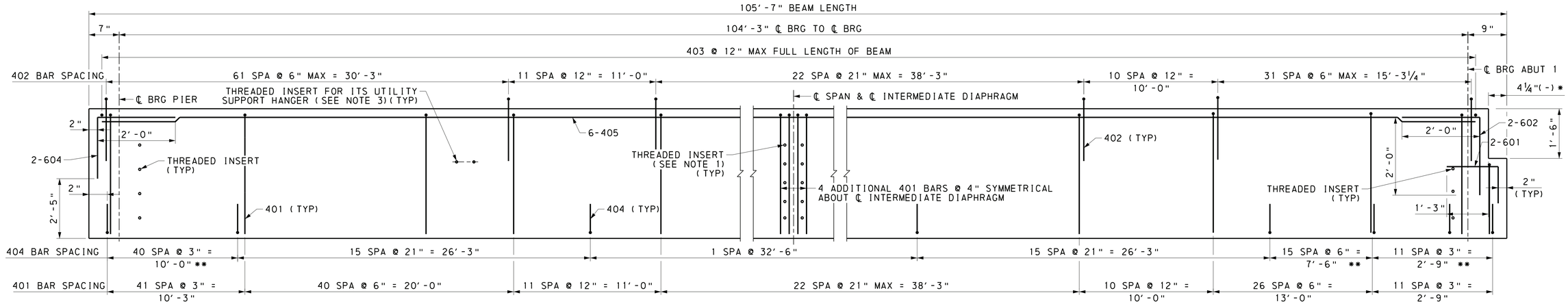
RECOMMENDED 12-6-2022

SHEET 34 OF 78

S-39453

6/28/2022
FILENAME: 63016-s-brB3-frp01.dgn

DES: MCA	DES CKD: JMA	DWG: SMZ	DWG CKD: JRM

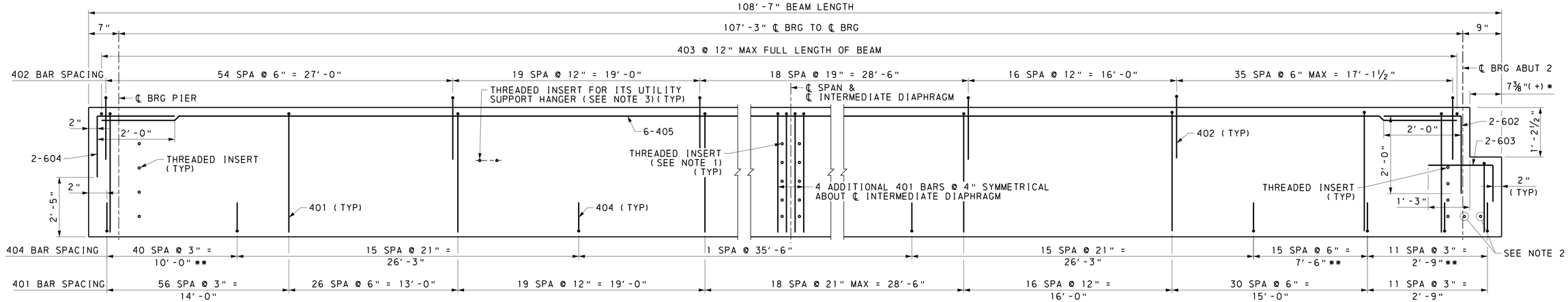


* VARIES, MEASURED ALONG ℄ BEAM
** MATCH BAR SPACING WITH 401

PA BULB-TEE BEAM ELEVATION (SPAN 1)

NOT TO SCALE

(REFER TO CLIPPED FLANGE REINFORCEMENT DETAIL ON SHEET 36 FOR ADDITIONAL BEAM END REINFORCEMENT)



* VARIES, MEASURED ALONG ℄ BEAM
** MATCH BAR SPACING WITH 401

PA BULB-TEE BEAM ELEVATION (SPAN 2)

NOT TO SCALE

(REFER TO CLIPPED FLANGE REINFORCEMENT DETAIL ON SHEET 36 FOR ADDITIONAL BEAM END REINFORCEMENT)

BEAM SECTION PROPERTIES

SECTION PROPERTY	BASIC BEAM	COMPOSITE BEAM, TRANSFORMED PROPERTIES*	
		BEAMS 1 & 8	BEAMS 2 - 7
AREA - IN²	869.25	-	-
EFF. WIDTH - IN	-	111.50	114.00
I - IN⁴	417,265	917,770	924,621
Y TOP SLAB - IN	-	27.88	27.69
Y TOP BEAM - IN	32.76	19.88	19.69
Y BOT BEAM - IN	28.24	41.12	41.31
S TOP SLAB - IN³	-	32,918	33,398
S TOP BEAM - IN³	12,737	46,165	46,970
S BOT BEAM - IN³	14,776	22,319	22,380

* PROPERTIES DO NOT INCLUDE THE HAUNCH HEIGHT. PROPERTIES TAKEN AT ℄ SPAN.

NOTES:

1. OMIT INTERMEDIATE DIAPHRAGM THREADED INSERTS ALONG BEAMS 1 & 8 FASCIA WEB. PROVIDE SIX (6) TOTAL INSERTS WITHIN BAY 5 AT INTERMEDIATE DIAPHRAGMS.
2. OMIT SPECIFIED THREADED INSERTS ALONG BEAMS 1 & 8 FASCIA WEB.
3. FOR LOCATIONS, SEE ITS SUPPORT HANGER DETAILS. BEAMS 3 AND 4 WITHIN BAY 3 ONLY.

REFERENCES:

	SHEETS:
GENERAL PLAN	1
GENERAL NOTES	3 - 4
FRAMING PLAN	34
BEAM DETAILS	35 - 37
SLAB PLAN	39
SLAB TYPICAL SECTIONS	40 - 41
ITS SUPPORT HANGER DETAILS	45
DIAPHRAGM DETAILS	46 - 56

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0123 MPMS/ECMS PROJ: 97828 BRKEY: 67418

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COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0123 SEG 0051 OFFSET 0123
SR 3007 (19TH STREET) STA 100+84.74
OVER SR 0083 AND SR 8019 (RAMP T)
2-SPAN CONTINUOUS COMPOSITE PS CONCRETE PA BULB-TEE BEAM BRIDGE
BEAM DETAILS 1

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL JUSTIN ROBERT MCCARTHY ENGINEER PE076998

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

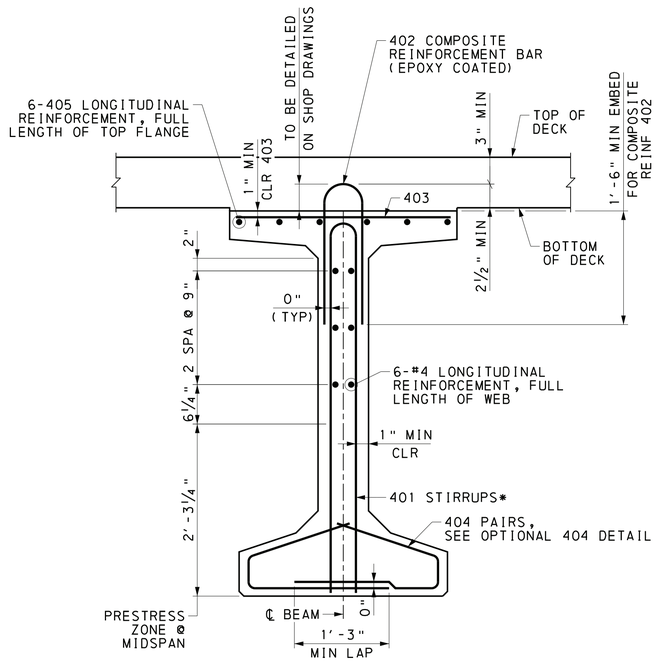
RECOMMENDED 12-6-2022

SHEET 35 OF 78

S-39453

6/28/2022
FILENAME: 63016-s-brB3-bem01.dgn

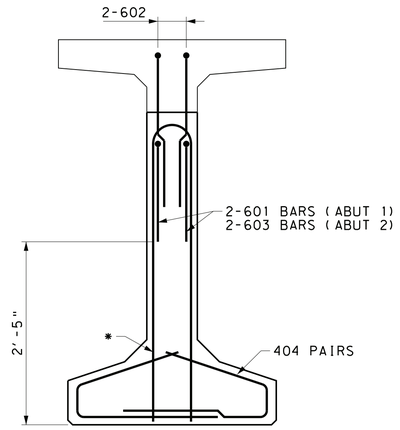
DES: MCA	DES CKD: JMA	DWG: SMZ	DWG CKD: JRM



* 401 MAY BE UTILIZED BY FABRICATOR TO REPLACE 402 COMPOSITE REINFORCEMENT. ALL 401 REINFORCEMENT BARS PROJECTING INTO THE DECK SLAB MUST BE EPOXY COATED FOR ENTIRE LENGTH.

PA BULB-TEE TYPICAL SECTION

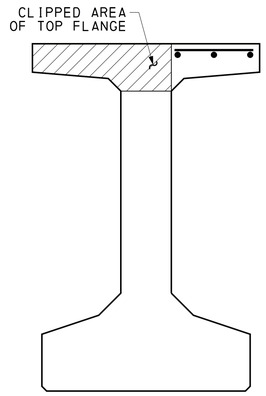
6 0 6 12 INCHES

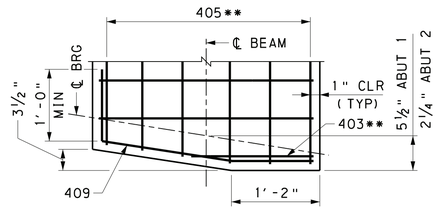


* MODIFY 401 BAR, AS REQUIRED, TO ACCOMMODATE BEAM NOTCH

PA BULB-TEE NOTCH REINFORCEMENT END VIEW

6 0 6 12 INCHES

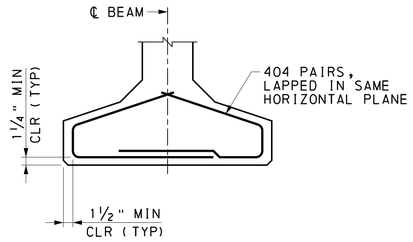




** MODIFY REINFORCEMENT BARS AS REQUIRED TO ACCOMMODATE CLIPPED FLANGE

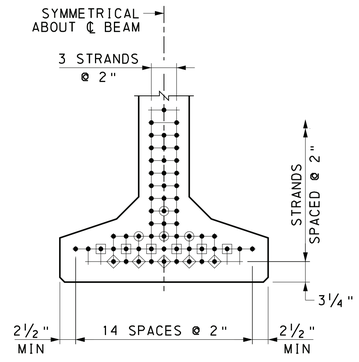
CLIPPED FLANGE REINFORCEMENT DETAIL

NOT TO SCALE



TYPICAL STRAND CONFINEMENT

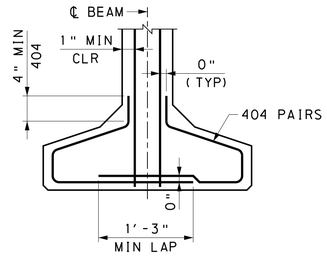
6 0 6 12 INCHES



- BONDED STRAND
- ⊙ DEBONDED STRAND FROM ℄ BRG TO 4'-0"
- ⊡ DEBONDED STRAND FROM ℄ BRG TO 8'-0"
- ◈ DEBONDED STRAND FROM ℄ BRG TO 12'-0"

TYPICAL STRAND PATTERN

6 0 6 12 INCHES



OPTIONAL 404 DETAIL

6 0 6 12 INCHES

REFERENCES:	SHEETS:
GENERAL PLAN	1
GENERAL NOTES	3 - 4
FRAMING PLAN	34
BEAM DETAILS	35 - 37
SLAB PLAN	39
SLAB TYPICAL SECTIONS	40 - 41
DIAPHRAGM DETAILS	46 - 56

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0123 MPMS/ECMS PROJ: 97828 BRKEY: 67418

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COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0123 SEG 0051 OFFSET 0123
SR 3007 (19TH STREET) STA 100+84.74
OVER SR 0083 AND SR 8019 (RAMP T)

2-SPAN CONTINUOUS COMPOSITE PS CONCRETE
PA BULB-TEE BEAM BRIDGE

BEAM DETAILS 2

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — JUSTIN ROBERT MCCARTHY — ENGINEER — PE076998

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

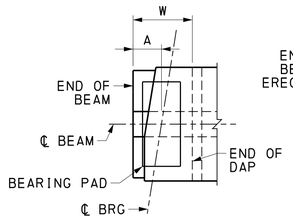
RECOMMENDED 12-6-2022

SHEET 36 OF 78

S-39453

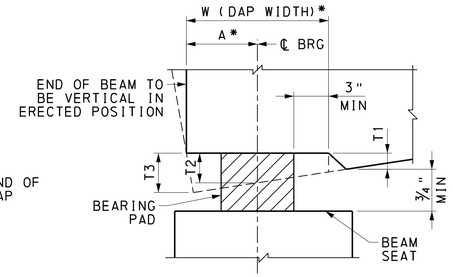
6/28/2022
FILENAME: 63016-s-brB3-bem02.dgn

DES: MCA	DES CKD: JMA	DWG: SMZ	DWG CKD: JRM



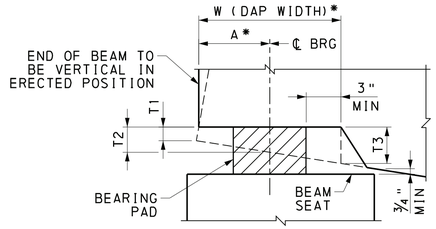
PLAN

(ABUTMENT 1 SHOWN, ABUTMENT 2 SIMILAR)
(PIER SIMILAR WITHOUT BEAM NOTCH)



SECTION AT LOW END OF BEAM

* MEASURED ALONG ℄ BEAM



SECTION AT HIGH END OF BEAM

* MEASURED ALONG ℄ BEAM

BEAM DAP DETAILS

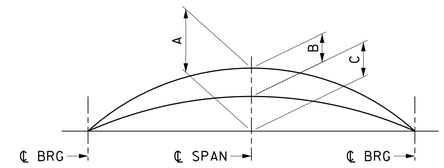
NOT TO SCALE

SPAN 1 DAP DIMENSIONS			
LOCATION/DIMENSION		BEAMS 1 & 8	BEAMS 2-7
ABUT 1 (LOW END)	W	17½"	17½"
	A	9"	9"
	T1	¼"	¼"
	T2	¾"	11/16"
	T3	1¼"	1 3/16"
PIER 1 NEAR (HIGH END)	W	15"	15"
	A	7"	7"
	T1	¼"	¼"
	T2	9/16"	½"
	T3	15/16"	13/16"

SPAN 2 DAP DIMENSIONS		
LOCATION/DIMENSION		BEAMS 1-8
PIER 1 FAR (LOW END)	W	15"
	A	7"
	T1	¼"
	T2	9/16"
	T3	⅞"
ABUT 2 (HIGH END)	W	19"
	A	9"
	T1	¼"
	T2	½"
	T3	13/16"

BEAM DAP NOTES:

1. T1 IS DAP THICKNESS AT END OF BEAM FOR HIGHER END OF BEAM AND DAP THICKNESS AT BEGINNING OF DAP FOR LOWER END OF BEAM. T1 MINIMUM IS ¼".
2. T2 IS DAP THICKNESS AT CENTERLINE OF BEARING.
3. T3 IS DEFINED AS THE DAP THICKNESS BASED ON THE SLOPE OF THE BEAM DUE TO THE GRADE AND CAMBER.
4. BEAM SEAT AND BOTTOM OF BEAM BEARING AREA REQUIREMENTS AS PER DESIGN MANUAL PART 4, SECTION 14.7.6.3.9dP.
5. MAXIMUM GRADE FOR USE OF DAPPING IS BASED ON LIMITING THE MAXIMUM DAP THICKNESS TO 1½" AND MAINTAINING 1" MINIMUM CONCRETE COVER ON CONFINEMENT REINFORCEMENT IN THE PROPOSED BEAM DAPPING AREA.
6. FOR BEAM DAPPING, A MINIMUM CLEARANCE OF ¾" MUST BE PROVIDED BETWEEN THE BOTTOM OF THE BEAM (WITHOUT CONSIDERATION OF THE DAP) AND THE TOP OF BEAM SEAT TO ENSURE INSPECTABILITY OF BEARING PAD.
7. PARTIAL-WIDTH BEAM DAPS ARE NOT PERMITTED.
8. THE MAXIMUM DAP THICKNESS IS 1½".
9. ENSURE THAT ALL CONCRETE COVER REQUIREMENTS ON STEEL CONFINEMENT REINFORCEMENT AND PRESTRESSING STRANDS ARE SATISFIED WHEN USING BEAM DAPS TO MODIFY THE BOTTOM OF BEAM AREA.



BEAM CAMBER DIAGRAM

A = ESTIMATED PRESTRESS CAMBER LESS DEFLECTION DUE TO DEAD LOAD OF BEAM TIMES CREEP FACTOR. (CHECK IN FIELD)

B = DEFLECTION DUE TO ALL DEAD LOAD EXCEPT BEAM WEIGHT AND FUTURE WEARING SURFACE.

C = A-B = NET FINAL CAMBER.

1. VARY THE THICKNESS OF THE CONCRETE HAUNCH TO COMPENSATE FOR ANY DEVIATIONS OF THE ACTUAL CAMBER FROM THE DESIGN CAMBER.
2. NEGATIVE HAUNCHES ARE NOT ALLOWED.
3. A, B AND C ARE THEORETICAL VALUES AND MAY VARY WITH ACTUAL CONCRETE STRENGTH (AGE), VARIOUS PRESTRESSING CONDITIONS, CREEP FACTOR AND PRESTRESS LOSSES.
4. A CREEP FACTOR EQUAL TO 1.6 AND P/S LOSS EQUAL TO 10% WAS USED.

CAMBER TABLE (INCHES)				
SPAN/BEAM		A	B	C
SPAN 1	BEAMS 1 & 8	4.02	2.18	1.84
	BEAMS 2 & 7	4.02	1.83	2.19
	BEAMS 3 - 6	4.02	1.47	2.55
SPAN 2	BEAMS 1 & 8	4.14	2.46	1.68
	BEAMS 2 & 7	4.14	2.08	2.06
	BEAMS 3 - 6	4.14	1.66	2.48

PRESTRESSING DATA:

PRESTRESSED BEAM SIZE = 33/61 PA BULB-TEE.

CONCRETE STRENGTH AT STRAND RELEASE = 8500 PSI.

CONCRETE STRENGTH AT 28 DAYS (F'C) = 10000 PSI.

USE ONLY 0.6" DIA OVERSIZED GRADE 270, LOW RELAXATION STRANDS FOR AS-DESIGNED BEAMS.

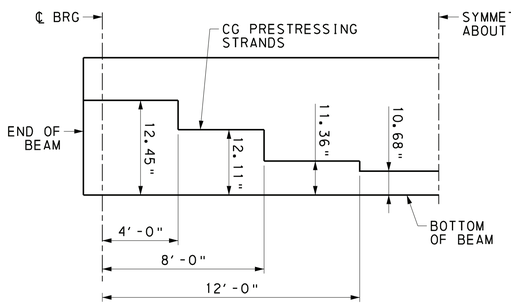
TOTAL NUMBER OF STRANDS = 60

JACKING PRESTRESS STRESS = 202500 PSI.

JACKING PRESTRESS FORCE PER BEAM = 2636.6 KIPS

BEAM NOTES:

1. PROVIDE MATERIAL AND WORK QUALITY IN ACCORDANCE WITH THE APPROPRIATE SPECIFICATIONS AS OUTLINED IN THE PENNSYLVANIA DEPARTMENT OF TRANSPORTATION PUBLICATION 408.
2. EPOXY COAT ALL REINFORCEMENT WHICH PROTRUDES INTO BRIDGE DECK FROM TOP OF BEAMS.
3. SHOW DESIGN LENGTH AND CASTING LENGTH ON SHOP DRAWINGS.
4. SHOW PLAN, ELEVATION, SECTIONS AND ALL REINFORCEMENT DETAILS ON SHOP DRAWINGS.
5. SHOW ANY MODIFICATIONS TO REINFORCEMENT SPLICE AND BENDING DETAILS ON SHOP DRAWINGS.
6. SHOW THE FOLLOWING DATA ON THE SHOP DRAWINGS:
   1) THE SIZE AND LOCATION OF THE TEMPORARY STORAGE SUPPORTS.
   2) THE TYPE AND LOCATION OF THE BRACING AND TEMPORARY SUPPORTS USED FOR THE TRANSPORTATION AND ERECTION OF THE BEAMS.
7. END ZONE REINFORCEMENT MAY BE INCREASED BY FABRICATOR TO REFLECT FABRICATOR'S EXPERIENCE AND/OR TO CONTROL CRACKING.
8. FABRICATOR TO CHECK STABILITY FOR HANDLING AND TRANSPORTING OF THE MEMBERS.
9. MIN COVER: STIRRUPS - 1" MIN
   ALL OTHERS - 1½" MIN



DEBONDING DIAGRAM

NOT TO SCALE

REFERENCES:

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BEAM DETAILS	35 - 37
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SR 3007 (19TH STREET) STA 100+84.74
OVER SR 0083 AND SR 8019 (RAMP T)
2-SPAN CONTINUOUS COMPOSITE PS CONCRETE PA BULB-TEE BEAM BRIDGE
BEAM DETAILS 3

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

RECOMMENDED 12-6-2022

SHEET 37 OF 78

S-39453

6/28/2022
FILENAME: 63016-s-brB3-bem03.dgn

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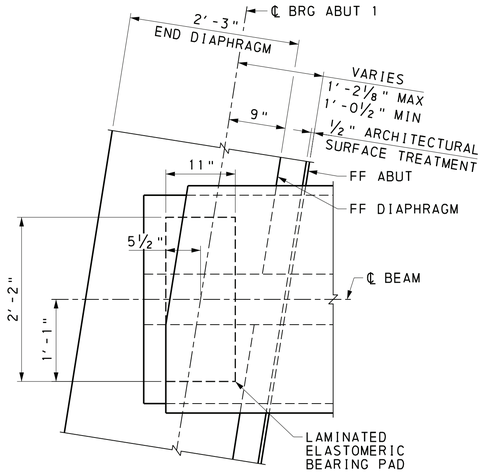
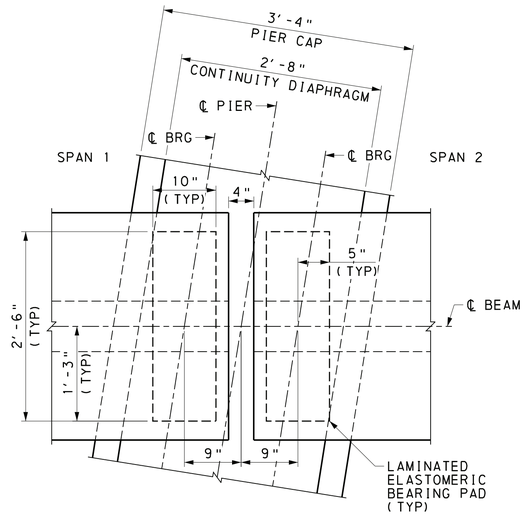
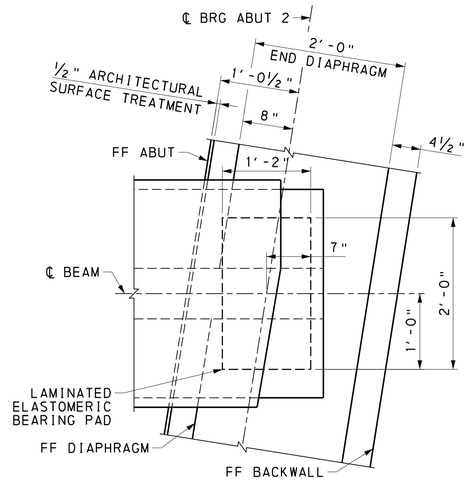


ABUTMENT 1



PIER

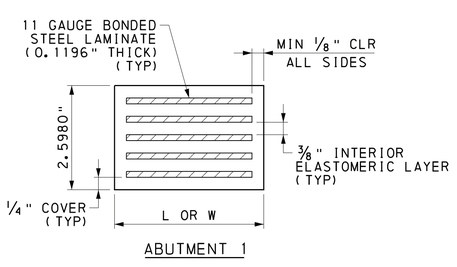
(PEDESTAL NOT SHOWN FOR CLARITY)



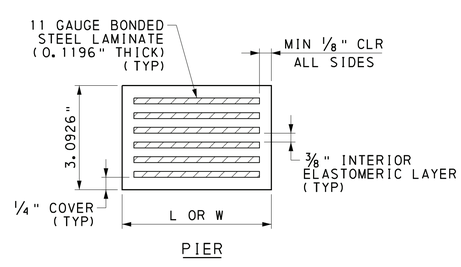
ABUTMENT 2

ELASTOMERIC BEARING PAD PLAN

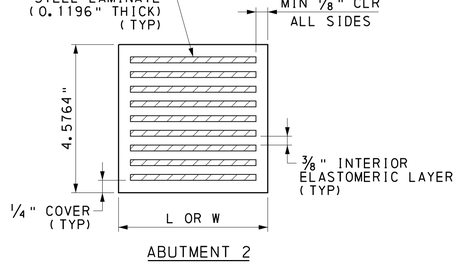
6 0 6 12 INCHES



ABUTMENT 1



PIER



ABUTMENT 2

ELASTOMERIC BEARING PAD TYPICAL SECTIONS

NOT TO SCALE

NOTES:

1. SMOOTH CUT AND DEBURR METAL SHIMS.
2. GRIT BLAST AND DEGREASE METAL SHIMS.
3. MANUFACTURE ALL BEARINGS IN ACCORDANCE WITH THE COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF TRANSPORTATION PLANS AND SPECIFICATIONS (PUB. 408) SECTION 1113.
4. ALL BEARING PADS ARE TO BE MOLDED TO DESIGN DIMENSIONS. CUTTING TO SIZE AFTER FABRICATION IS PROHIBITED.
5. PROVIDE NEOPRENE 50 +/-5 DUROMETER.
6. PROVIDE MINIMUM LOW-TEMPERATURE NEOPRENE GRADE 3.
7. PROVIDE INTERNAL SHIMS AS PER ASTM A36 GRADE 36.
8. VULCANIZE PATCH PIN GROOVES.
9. FABRICATOR MAY USE CONTRACT DRAWINGS TO FABRICATE BEARING PADS.
10. FOR ADDITIONAL BEARING PAD DETAILS AND STANDARD BEARING DETAILS AND NOTES, SEE BC-755M.
11. PAYMENT FOR BEARING PADS IS CONSIDERED INCIDENTAL TO THE PRESTRESSED CONCRETE PA BULB-TEE BEAMS.

DESIGN CRITERIA:

1. CONSTRUCTION TOLERANCE ABOUT TRANSVERSE AXIS OF PAD = 0.003 RADIANS
2. CONSTRUCTION TOLERANCE ABOUT LONGITUDINAL AXIS OF PAD = 0.003 RADIANS

ELASTOMERIC BEARING PADS

LOCATION	BEARING TYPE	ITEM DESCRIPTION	SIZE (T x L x W)	NUMBER REQUIRED
ABUT 1	FIXED	LAMINATED PADS	2.5980" x 11" x 2'-2"	8
PIER	EXPANSION	LAMINATED PADS	3.0926" x 10" x 2'-6"	16
ABUT 2	EXPANSION	LAMINATED PADS	4.5764" x 14" x 2'-0"	8

REFERENCES:	SHEETS:
GENERAL NOTES	3 - 4
FRAMING PLAN	34
BEAM DETAILS	35 - 37
DIAPHRAGM DETAILS	46 - 56

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0123 MPMS/ECMS PROJ: 97828 BRKEY: 67418

HNTB

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
JUSTIN ROBERT MCCARTHY
ENGINEER
PE076998

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0123 SEG 0051 OFFSET 0123
SR 3007 (19TH STREET) STA 100+84.74
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2-SPAN CONTINUOUS COMPOSITE PS CONCRETE PA BULB-TEE BEAM BRIDGE
BEARING DETAILS

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SUITE 300
HARRISBURG, PA 17110

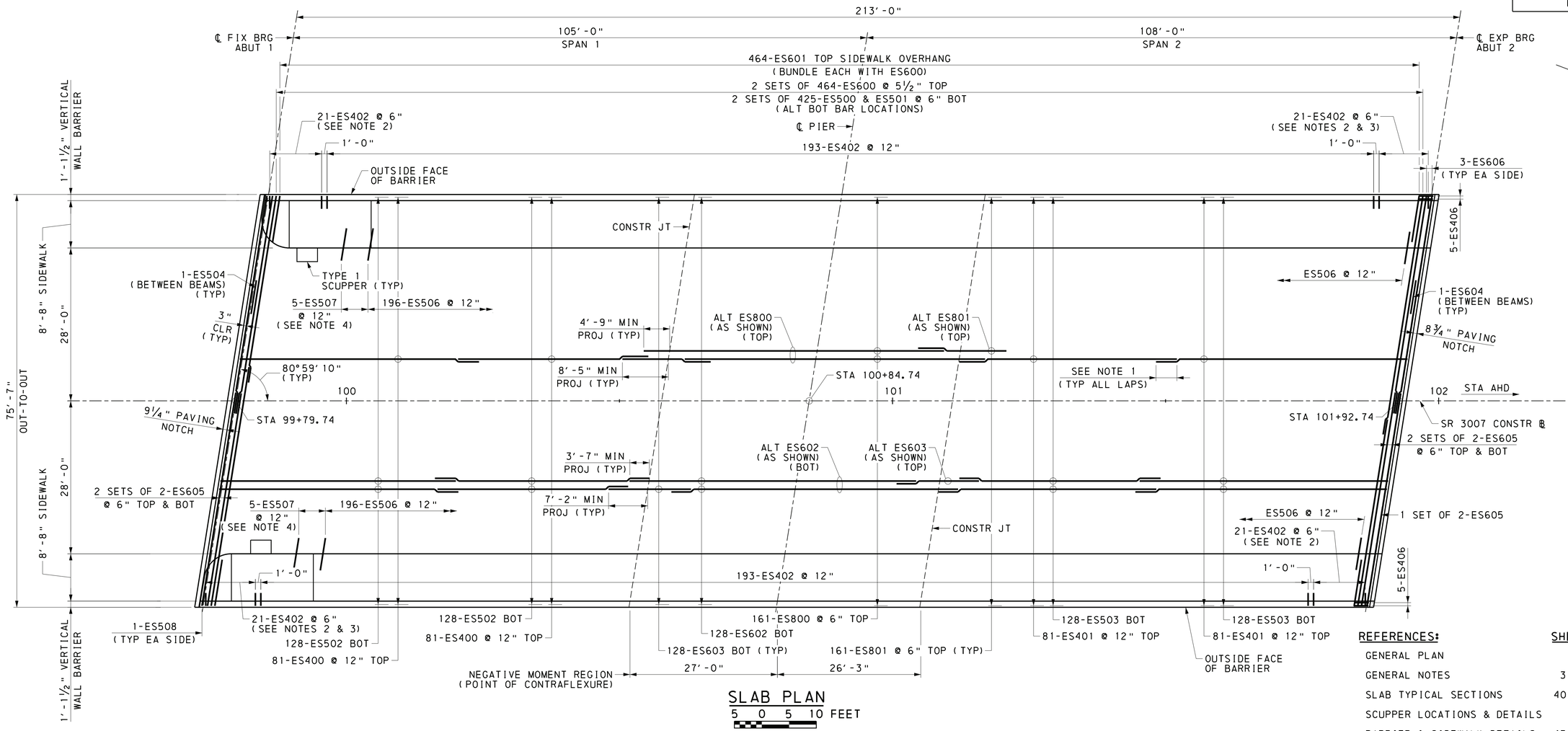
RECOMMENDED 12-6-2022

SHEET 38 OF 78

S-39453

6/28/2022
FILENAME: 63016-s-br83-brg01.dgn

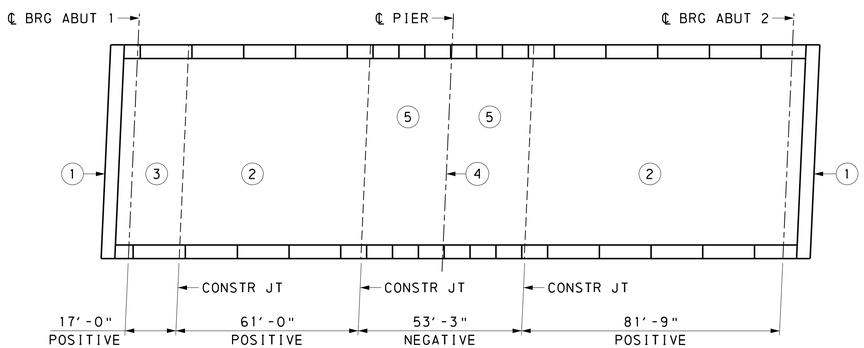
DES: MCA	DES CKD: JRM	DWG: SMZ	DWG CKD: JRM



SLAB PLAN

5 0 5 10 FEET

REFERENCES:	SHEETS:
GENERAL PLAN	1
GENERAL NOTES	3 - 4
SLAB TYPICAL SECTIONS	40 - 41
SCUPPER LOCATIONS & DETAILS	42
BARRIER & SIDEWALK DETAILS	43 - 44
DIAPHRAGM DETAILS	46 - 56



DECK PLACEMENT SEQUENCE

NOT TO SCALE

LEGEND:

(X) CONCRETE POUR SEQUENCE NUMBER

NOTES:

1. DECK SLAB LAP SPLICE LENGTH:
   #4 BARS - 2'-5"
   #5 BARS - 3'-0"
   #6 BARS - 3'-7"
   #8 BARS - 4'-9"
2. PROVIDE ONE ADDITIONAL ES402 BAR ON EACH SIDE OF BARRIER LIGHTING BLOCKOUT. ADJUST REINFORCEMENT AS REQUIRED TO ACCOMMODATE PLACEMENT OF JUNCTION BOXES AND LIGHTING BLOCKOUTS.
3. SPLAY THE LAST FOUR ES402 BARS ADJACENT TO END OF BRIDGE DECK AS REQUIRED TO ACCOMMODATE PLACEMENT.
4. FIELD VERIFY INITIAL ES507 BAR LOCATION TO PROVIDE MINIMUM REINFORCEMENT COVER.

DECK PLACEMENT SEQUENCE NOTES:

(1) CAST INTERMEDIATE DIAPHRAGMS, SHEAR BLOCKS BETWEEN BEAMS AND END DIAPHRAGMS AT ABUTMENTS.

(2) CAST SLAB IN POSITIVE MOMENT REGIONS.

(3) CAST SLAB AND RAISED SIDEWALKS IN POSITIVE MOMENT REGION USING MONOLITHIC POUR. SIDEWALKS SHALL BE HAND FINISHED.

(4) CAST CONTINUITY DIAPHRAGMS AT PIER.

(5) CAST SLAB IN NEGATIVE MOMENT REGIONS 2 HOURS MINIMUM AFTER THE PLACEMENT OF CONTINUITY DIAPHRAGM.

AN ALTERNATE DECK PLACEMENT SEQUENCE MAY BE USED IF PRIOR APPROVAL IS GRANTED BY THE REPRESENTATIVE.

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0123 MPMS/ECMS PROJ: 97828 BRKEY: 67418

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COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

DAUPHIN COUNTY
SR 0083 SECTION 079
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2-SPAN CONTINUOUS COMPOSITE PS CONCRETE PA BULB-TEE BEAM BRIDGE
SLAB PLAN

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL JUSTIN ROBERT MCCARTHY ENGINEER PE076998

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

RECOMMENDED 12-6-2022

SHEET 39 OF 78

S-39453

6/28/2022
FILENAME: 63016-sr-br-B3-slb01.dgn

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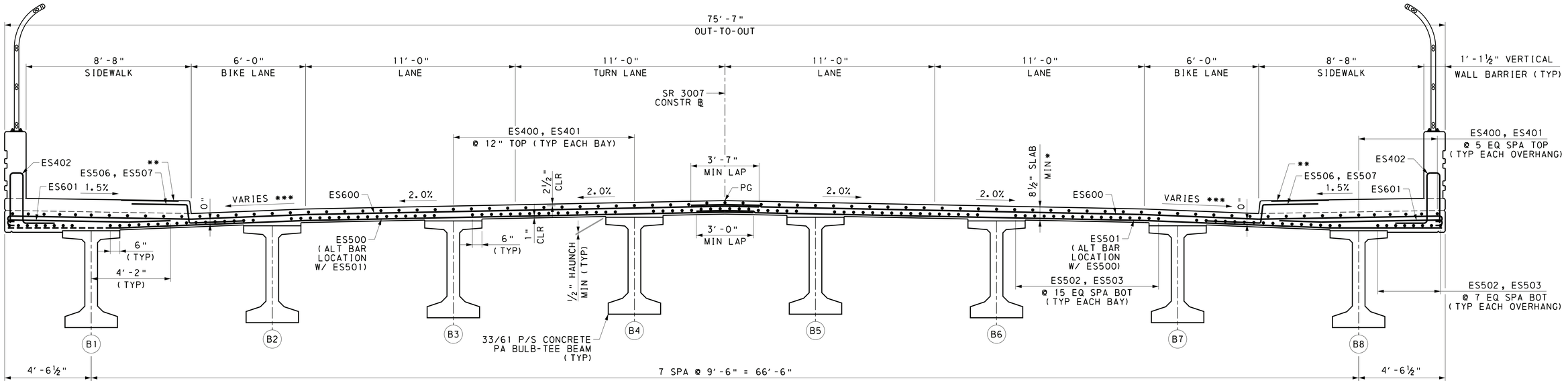


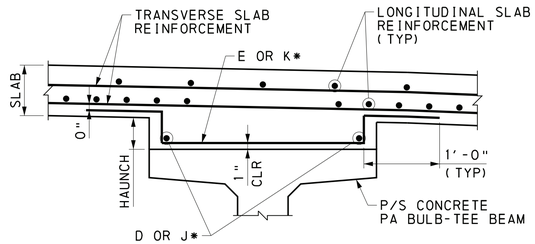
SLAB TYPICAL SECTION - POSITIVE MOMENT

1 0 1 2 3 FEET

* INCLUDES ½" INTEGRAL WEARING SURFACE

** 3'-0" STAMPED AND STAINED CONCRETE BRICK PATTERN (SEE SHEET 44)

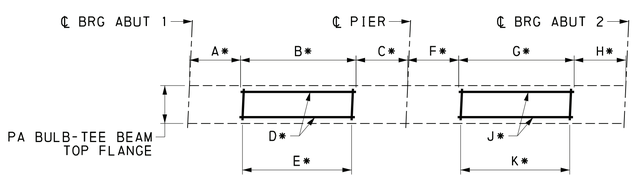
*** SEE SHEET 59 FOR BIKE LANE CROSS SLOPE INFORMATION



* SEE HAUNCH REINFORCEMENT TABLE

HAUNCH REINFORCEMENT DETAIL

6 0 6 12 INCHES



* SEE HAUNCH REINFORCEMENT TABLE

HAUNCH REINFORCEMENT PLAN

NOT TO SCALE

HAUNCH REINFORCEMENT TABLE

BEAM	A	B	C	D	E	F	G	H	J	K
BEAM 1	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
BEAM 2	- - -	- - -	- - -	- - -	- - -	36'-6"	45'-0"*	26'-6"	ES404	46-ES300 @ 12"
BEAM 3	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
BEAM 4	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
BEAM 5	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
BEAM 6	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
BEAM 7	- - -	- - -	- - -	- - -	- - -	47'-0"	30'-0"	31'-0"	ES405	31-ES300 @ 12"
BEAM 8	16'-6"	8'-0"	80'-6"	ES403	9-ES300 @ 12"	- - -	- - -	- - -	- - -	- - -

* DOES NOT INCLUDE 1'-11" MINIMUM LAP.

TOTAL DECK SLAB THICKNESS TABLE

BEAM	℄ BRG ABUT 1	℄ BRG PIER 1, SPAN 1	℄ BRG PIER 1, SPAN 2	℄ BRG ABUT 2
BEAM 1	9"	9"	9"	9"
BEAM 2	12⅛"	12⅛"	9¾"	9¾"
BEAM 3	11⅞"	11⅞"	9⅜"	9⅜"
BEAM 4	11⅞"	11⅞"	9⅜"	9⅜"
BEAM 5	11⅞"	11⅞"	9⅜"	9⅜"
BEAM 6	11⅞"	11⅞"	9⅜"	9⅜"
BEAM 7	12⅛"	12⅛"	9¾"	9¾"
BEAM 8	9"	9"	9"	9"

MEASURED AT ℄ BEAM. VALUES INCLUDE DECK THICKNESS, HAUNCH THICKNESS, AND EFFECT OF DECK CROSS SLOPE.

NOTES:

1. THE HAUNCH REINFORCEMENT QUANTITY SHOWN ON THE REINFORCEMENT BAR SCHEDULE PROVIDES THE AMOUNT NECESSARY TO COVER THE LIMITS SHOWN ON THE HAUNCH REINFORCEMENT PLAN. PROVIDE ADDITIONAL HAUNCH REINFORCEMENT IN OTHER REGIONS ALONG THE LENGTH OF THE BEAM WHERE ACTUAL HAUNCHES EXCEED THE THICKNESSES SPECIFIED IN BC-752M.
2. BARRIER AND SIDEWALK REINFORCEMENT NOT SHOWN FOR CLARITY.
3. EXTEND ONE HALF OF ES500 AND ES501 BARS ACROSS THE FULL WIDTH OF THE OVERHANG. THE ALTERNATE BARS WHICH DO NOT EXTEND INTO THE OVERHANG SHALL EXTEND 6" MINIMUM BEYOND THE INTERIOR EDGE OF THE FLANGE OF THE FASCIA BEAM.
4. UTILITIES NOT SHOWN FOR CLARITY.

REFERENCES:

	SHEETS:
GENERAL PLAN	1
GENERAL NOTES	3 - 4
BEAM DETAILS	35 - 37
SLAB PLAN	39
SLAB TYPICAL SECTION 2	41
BARRIER & SIDEWALK DETAILS	43 - 44
BARRIER ARCHITECTURAL DETAILS	69

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0123 MPMS/ECMS PROJ: 97828 BRKEY: 67418

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COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0123 SEG 0051 OFFSET 0123
SR 3007 (19TH STREET) STA 100+84.74
OVER SR 0083 AND SR 8019 (RAMP T)
2-SPAN CONTINUOUS COMPOSITE PS CONCRETE PA BULB-TEE BEAM BRIDGE
SLAB TYPICAL SECTION 1

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL JUSTIN ROBERT MCCARTHY ENGINEER PE076998

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

RECOMMENDED 12-6-2022

SHEET 40 OF 78

S-39453

6/28/2022
FILENAME: 63016-s-brB3-typ02.dgn

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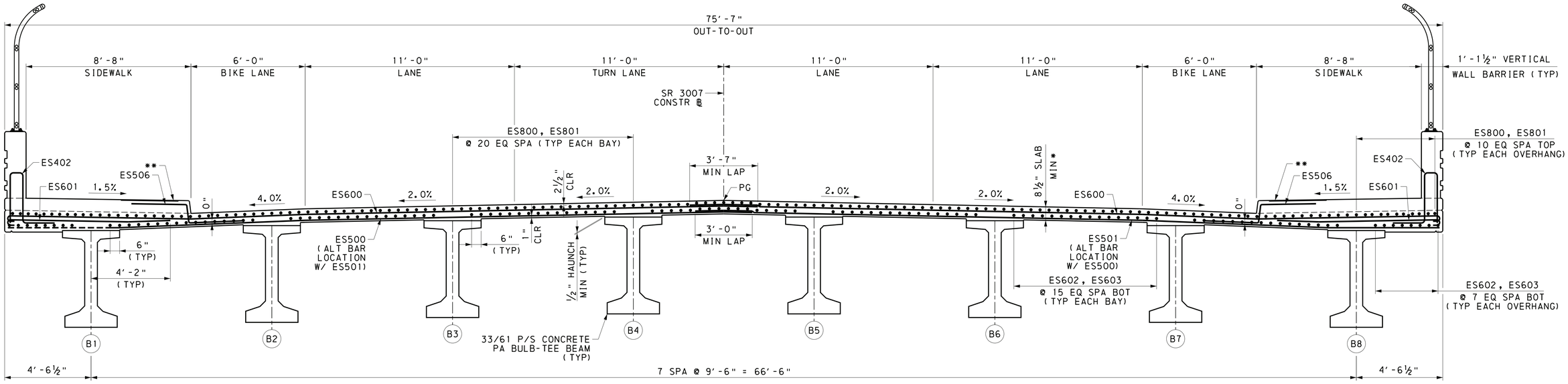

SLAB TYPICAL SECTION - NEGATIVE MOMENT

1 0 1 2 3 FEET

* INCLUDES ½" INTEGRAL WEARING SURFACE

** 3'-0" STAMPED AND STAINED CONCRETE BRICK PATTERN (SEE SHEET 44)

NOTES:

1. BARRIER AND SIDEWALK REINFORCEMENT NOT SHOWN FOR CLARITY.
2. EXTEND ONE HALF OF ES500 AND ES501 BARS ACROSS THE FULL WIDTH OF THE OVERHANG. THE ALTERNATE BARS WHICH DO NOT EXTEND INTO THE OVERHANG SHALL EXTEND 6" MINIMUM BEYOND THE INTERIOR EDGE OF THE FLANGE OF THE FASCIA BEAM.
3. UTILITIES NOT SHOWN FOR CLARITY.

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0123 MPMS/ECMS PROJ: 97828 BRKEY: 67418

REFERENCES:

	SHEETS:
GENERAL PLAN	1
GENERAL NOTES	3 - 4
BEAM DETAILS	35 - 37
SLAB PLAN	39
SLAB TYPICAL SECTION 1	40
BARRIER & SIDEWALK DETAILS	43 - 44
BARRIER ARCHITECTURAL DETAILS	69

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COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
JUSTIN ROBERT MCCARTHY
ENGINEER
PE076998

PREPARED BY:
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2-SPAN CONTINUOUS COMPOSITE PS CONCRETE
PA BULB-TEE BEAM BRIDGE
SLAB TYPICAL SECTION 2

RECOMMENDED 12-6-2022

SHEET 41 OF 78

S-39453

6/28/2022
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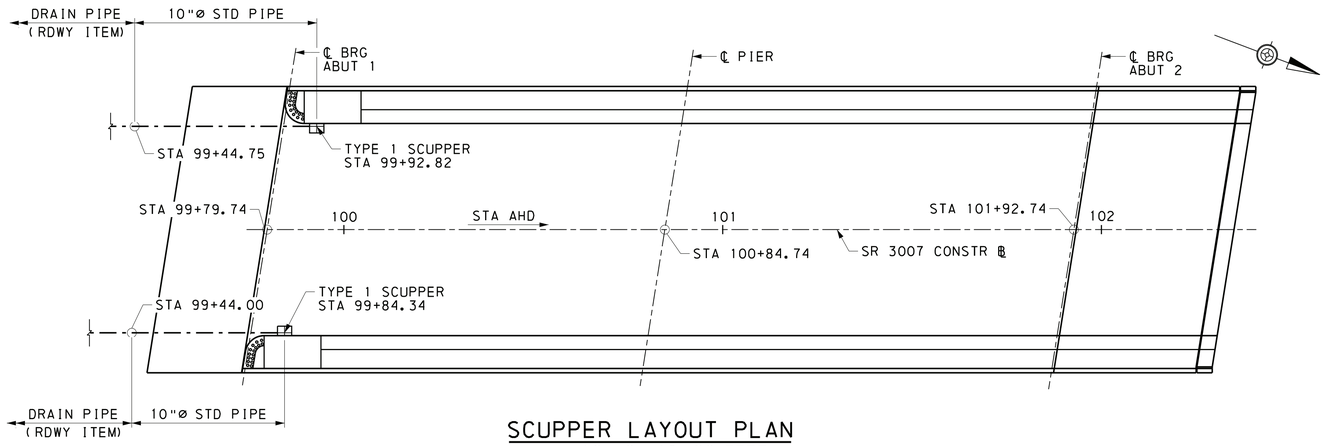
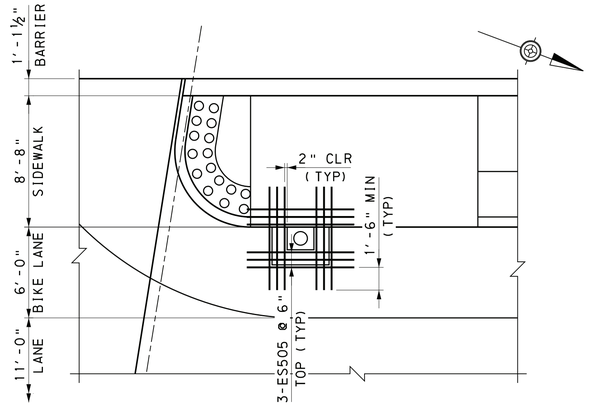


SCUPPER LAYOUT PLAN

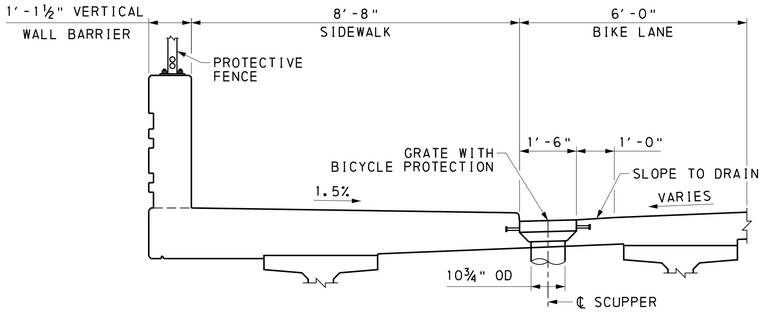
10 0 10 20 FEET



ADDITIONAL DECK REINFORCEMENT AT TYPE 1 SCUPPER

2 0 2 5 FEET

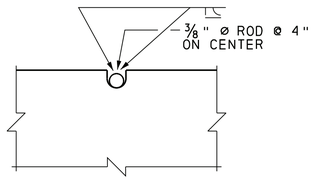
(LEFT SCUPPER SHOWN, RIGHT SCUPPER SIMILAR)
(CUT AND/OR REPOSITION DECK REINFORCEMENT TO ACCOMMODATE SCUPPERS)



TYPE 1 SCUPPER DETAIL AT GUTTERLINE

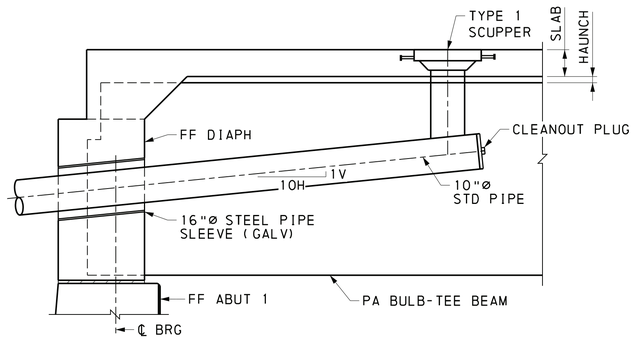
1 0 1 2 FEET

(LEFT SCUPPER SHOWN, RIGHT SCUPPER SIMILAR BY OPPOSITE HAND)



BICYCLE PROTECTION ROD DETAIL FOR TYPE 1 GRATE

NOT TO SCALE



DOWNSPOUT DETAIL

1 0 1 2 FEET

(LEFT SCUPPER SHOWN, RIGHT SCUPPER SIMILAR)

NOTES:

1. SEE BC-751M FOR SCUPPER AND DOWNSPOUT DETAILS, EXCEPT AS NOTED OTHERWISE.

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0123 MPMS/ECMS PROJ: 97828 BRKEY: 67418

REFERENCES:	SHEETS:
GENERAL PLAN	1
GENERAL NOTES	3 - 4
SLAB PLAN	39

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COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL JUSTIN ROBERT MCCARTHY ENGINEER PE076998

DAUPHIN COUNTY
SR 0083 SECTION 079
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2-SPAN CONTINUOUS COMPOSITE PS CONCRETE PA BULB-TEE BEAM BRIDGE
SCUPPER LOCATIONS & DETAILS

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

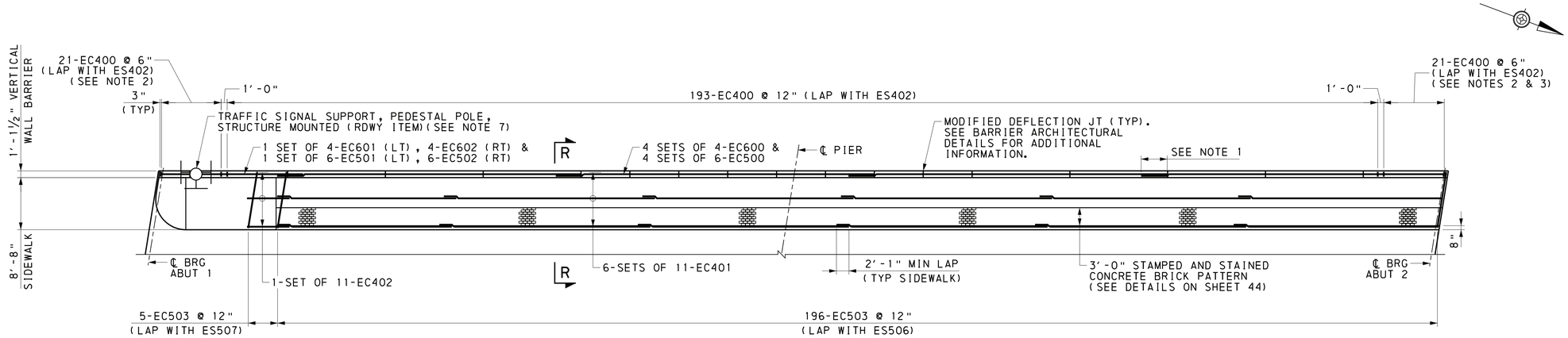
RECOMMENDED 12-6-2022

SHEET 42 OF 78

S-39453

6/28/2022
FILENAME: 63016-s-brB3-scp01.dgn

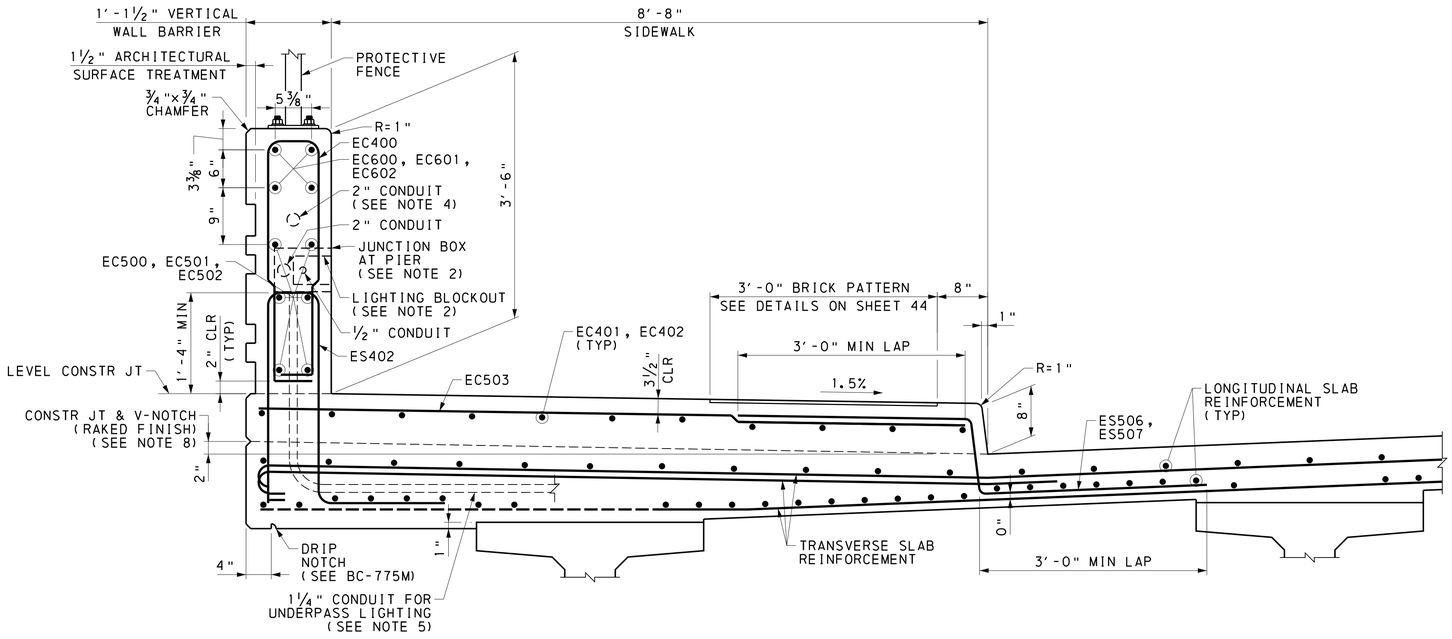
DES: MCA	DES CKD: EMG	DWG: MCA	DWG CKD: JRM



PLAN

5 0 5 10 FEET

(LEFT BARRIER/SIDEWALK SHOWN, RIGHT BARRIER/SIDEWALK SIMILAR BY OPPOSITE HAND)



SECTION R-R

6 0 6 12 INCHES

NOTES:

1. BARRIER LAP SPLICE LENGTH:
   #5 BARS - 3'-7"
   #6 BARS - 4'-4"
2. PROVIDE ONE ADDITIONAL EC400 BAR ON EACH SIDE OF BARRIER LIGHTING BLOCKOUT (LAP WITH ES402). ADJUST REINFORCEMENT AS REQUIRED TO ACCOMMODATE PLACEMENT OF JUNCTION BOXES AND LIGHTING BLOCKOUTS. SEE HIGHWAY LIGHTING ALSO PLAN FOR PLACEMENT OF JUNCTION BOXES AND BARRIER LUMINAIRES.
3. SPLAY THE LAST FOUR EC400 BARS ADJACENT TO END OF BRIDGE DECK AS REQUIRED TO ACCOMMODATE PLACEMENT.
4. PROVIDE SPECIFIED 2" CONDUIT ALONG LEFT BARRIER ONLY. CONDUIT CONTINUES INTO THE ADJACENT BARRIER FOR S-40318. (RESERVED FOR FUTURE USE BY CITY OF HARRISBURG)
5. REFER TO HIGHWAY LIGHTING ALSO PLAN FOR UNDERPASS LIGHTING DETAILS ON BOTH ABUTMENTS AND EACH SIDE OF THE PIER.
6. PROVIDE SIDEWALK STAMPED AND STAINED CONCRETE BRICK PATTERN FOR THE ENTIRE LENGTH OF RAISED SIDEWALK BEYOND THE CURB RAMPS. SEE SPECIAL PROVISIONS FOR ADDITIONAL DETAILS.
7. SEE TRAFFIC SIGNAL ALSO PLAN. REFER TO PENNDOT PUB 148, TC-8801 FOR BASE PLATE, ANCHOR BOLTS, AND BOLT CIRCLE. TRAFFIC SIGNAL SUPPORT AND ANCHORAGE ARE MEASURED AND PAID FOR UNDER ROADWAY ITEMS.
8. HORIZONTAL CONSTRUCTION JOINT IS NOT PERMITTED IN REGION WITH MONOLITHIC POUR SPECIFIED ON SHEET 39.
9. VERTICAL CONSTRUCTION JOINT IS NOT PERMITTED IN DECK SLAB AT GUTTERLINE WITH RAISED SIDEWALK.
10. TOP OF BRIDGE BARRIER SHALL FOLLOW LONGITUDINAL GRADE OF SIDEWALK CURB RAMP TRANSITION.

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0123 MPMS/ECMS PROJ: 97828 BRKEY: 67418

REFERENCES:	SHEETS:
GENERAL PLAN	1
GENERAL NOTES	3 - 4
SLAB PLAN	39
BARRIER & SIDEWALK DETAILS 2	44
BARRIER ARCHITECTURAL DETAILS	69
PROTECTIVE FENCE DETAILS	70

HNTB

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL JUSTIN ROBERT MCCARTHY ENGINEER PE076998

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0123 SEG 0051 OFFSET 0123
SR 3007 (19TH STREET) STA 100+84.74
OVER SR 0083 AND SR 8019 (RAMP T)
2-SPAN CONTINUOUS COMPOSITE PS CONCRETE PA BULB-TEE BEAM BRIDGE
BARRIER & SIDEWALK DETAILS 1

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

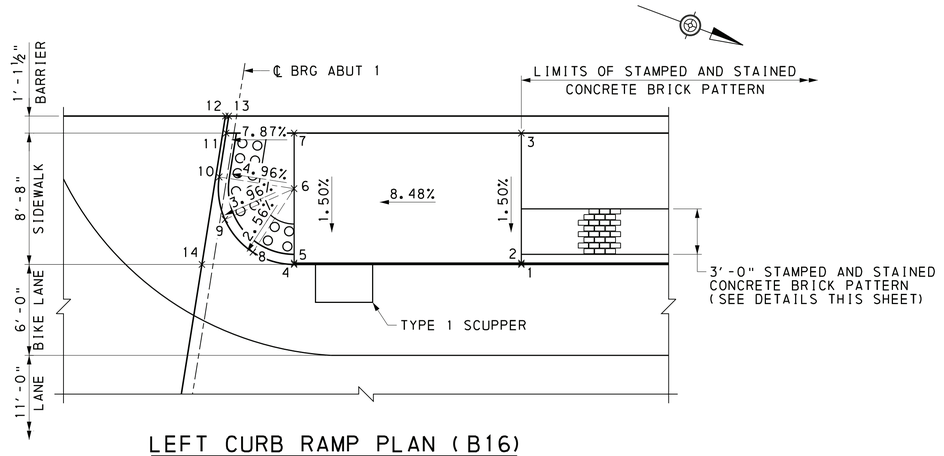
RECOMMENDED 12-6-2022

SHEET 43 OF 78

S-39453

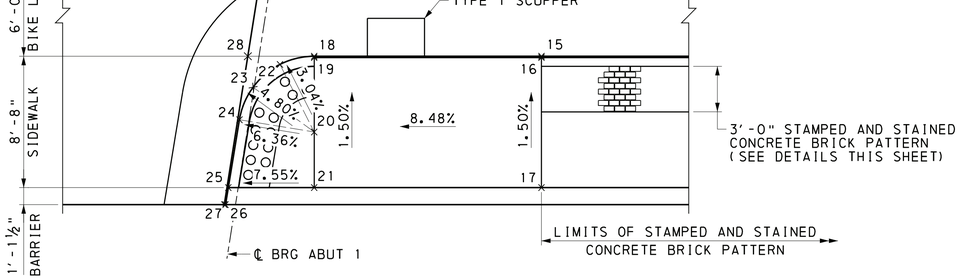
DES: MCA	DES CKD: JMA	DWG: MCA	DWG CKD: JRM

6/28/2022
FILENAME: 63016-s-br-B3-sl002.dgn



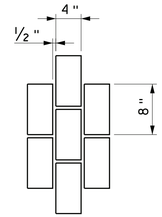
LEFT CURB RAMP PLAN (B16)

2 0 2 5 FEET

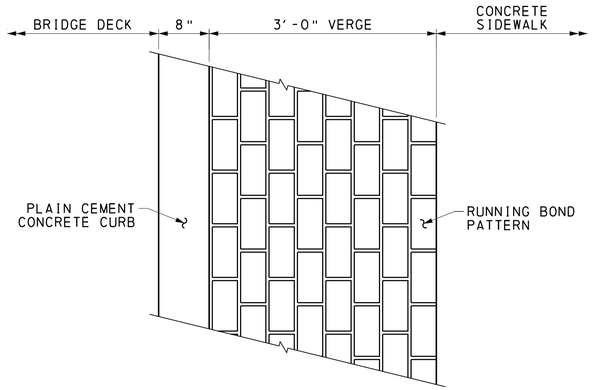


RIGHT CURB RAMP PLAN (B15)

2 0 2 5 FEET



BRICK DIMENSIONS



PLAN

STAMPED AND STAINED CEMENT CONCRETE SIDEWALK DETAILS

6 0 6 12 INCHES

LEFT CURB RAMP (B16) GEOMETRY				
ID	STATION	OFFSET	ELEVATION	BASELINE
1	100+04.53	28.00' LT	386.73	SR 3007 CONSTR ℄
2	100+04.53	28.08' LT	387.40	
3	100+04.53	36.67' LT	387.53	
4	99+89.53	28.00' LT	386.12	
5	99+89.53	28.08' LT	386.12	
6	99+89.53	33.00' LT	386.20	
7	99+89.53	36.67' LT	386.25	
8	99+86.81	28.81' LT	386.07	
9	99+84.96	30.96' LT	386.00	
10	99+84.59	33.77' LT	385.95	
11	99+85.04	36.67' LT	385.90	
12	99+84.99	37.79' LT	385.85	
13	99+85.22	37.79' LT	385.86	
14	99+83.44	28.00' LT	385.84	

RIGHT CURB RAMP (B15) GEOMETRY				
ID	STATION	OFFSET	ELEVATION	BASELINE
15	99+93.94	28.00' RT	386.24	SR 3007 CONSTR ℄
16	99+93.94	28.08' RT	386.91	
17	99+93.94	36.67' RT	387.03	
18	99+78.94	28.00' RT	385.63	
19	99+78.94	28.08' RT	385.63	
20	99+78.94	33.00' RT	385.71	
21	99+78.94	36.67' RT	385.76	
22	99+76.68	28.54' RT	385.56	
23	99+74.91	30.05' RT	385.47	
24	99+74.01	32.19' RT	385.39	
25	99+73.27	36.67' RT	385.33	
26	99+73.09	37.79' RT	385.28	
27	99+73.00	37.79' RT	385.28	
28	99+74.56	28.00' RT	385.43	

NOTES:

1. CONSTRUCT CURB RAMPS IN ACCORDANCE WITH THE RC-67M STANDARD DETAILS.
2. ELEVATIONS PROVIDED ARE FOR REFERENCE ONLY. FIELD VERIFY ALL SLOPES AND CONSTRUCT IN ACCORDANCE WITH RC-67M UNLESS INDICATED TO BE TECHNICALLY INFEASIBLE.
3. CONSTRUCTED RAMP SLOPES MUST NOT EXCEED THE MAXIMUM SLOPES SPECIFIED IN RC-67M UNLESS INDICATED TO BE TECHNICALLY INFEASIBLE.
4. PROVIDE SIDEWALK STAMPED AND STAINED CONCRETE BRICK PATTERN TO THE LIMITS INDICATED. THE PATTERN SHALL NOT BE APPLIED TO THE CURB RAMPS. SEE SPECIAL PROVISIONS FOR ADDITIONAL DETAILS.

LEGEND:

DETECTABLE WARNING SURFACE (RDWY ITEM)

REFERENCES:

REFERENCES:	SHEETS:
GENERAL PLAN	1
GENERAL NOTES	3 - 4
SLAB PLAN	39
BARRIER & SIDEWALK DETAILS 1	43
DECK ELEVATIONS	59

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0123 MPMS/ECMS PROJ: 97828 BRKEY: 67418

HNTB

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0123 SEG 0051 OFFSET 0123
SR 3007 (19TH STREET) STA 100+84.74
OVER SR 0083 AND SR 8019 (RAMP T)
2-SPAN CONTINUOUS COMPOSITE PS CONCRETE PA BULB-TEE BEAM BRIDGE
BARRIER & SIDEWALK DETAILS 2

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL JUSTIN ROBERT MCCARTHY ENGINEER PE076998

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

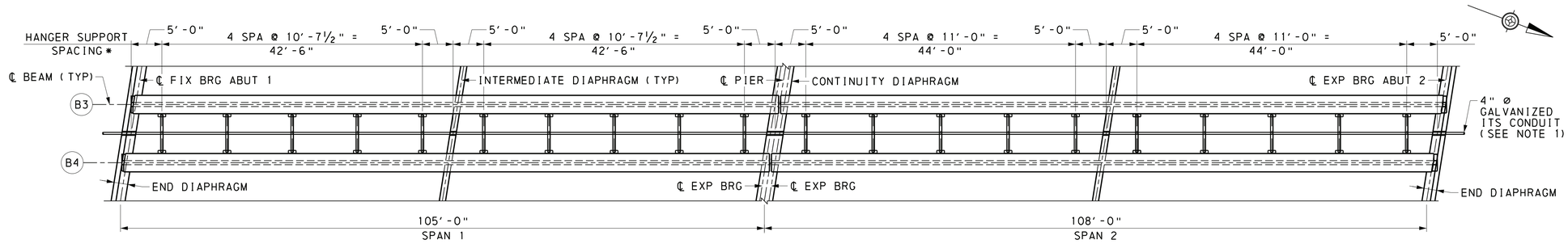
RECOMMENDED 12-6-2022

SHEET 44 OF 78

S-39453

6/28/2022
FILENAME 63016-s-brB3-sib03.dgn

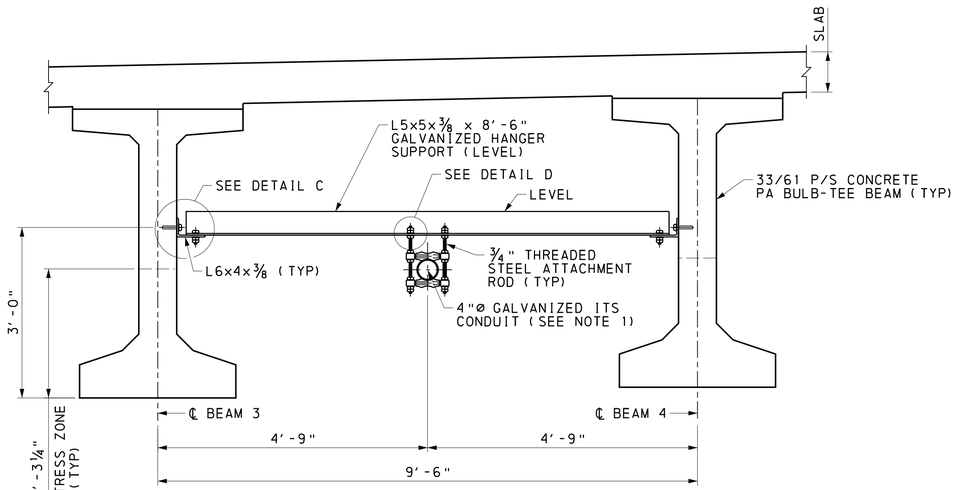
DES: MCA	DES CKD: JMA	DWG: MCA	DWG CKD: JRM



* MEASURED ALONG ℄ ITS CONDUIT

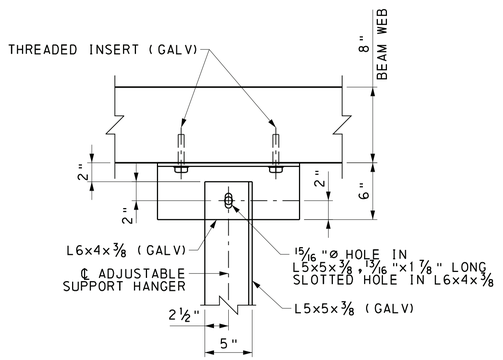
ITS HANGER SUPPORT PLAN

5 0 5 10 FEET



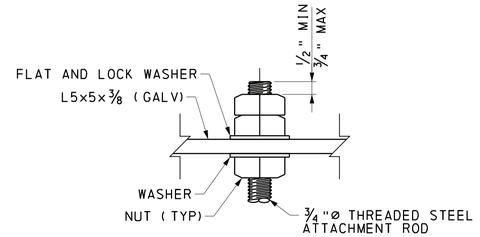
BAY 3 ITS CONDUIT SUPPORT HANGER

12 0 12 INCHES



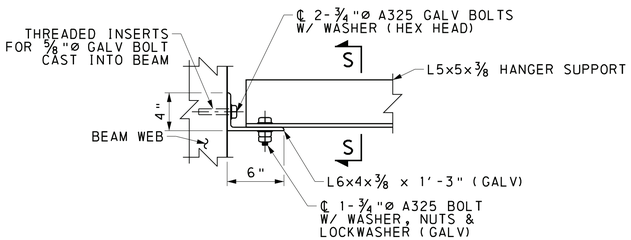
SECTION T-T

6 0 6 INCHES



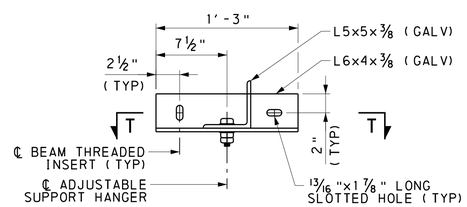
DETAIL D

NOT TO SCALE



DETAIL C

6 0 6 INCHES



SECTION S-S

6 0 6 INCHES

NOTES:

1. SEE ITS ALSO PLAN.

REFERENCES:	SHEETS:
GENERAL PLAN	1
GENERAL NOTES	3 - 4
FRAMING PLAN	34
SLAB TYPICAL SECTIONS	40 - 41
DIAPHRAGM DETAILS	46 - 56

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0123 MPMS/ECMS PROJ: 97828 BRKEY: 67418

HNTB

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL JUSTIN ROBERT MCCARTHY ENGINEER PE076998

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0123 SEG 0051 OFFSET 0123
SR 3007 (19TH STREET) STA 100+84.74
OVER SR 0083 AND SR 8019 (RAMP T)
2-SPAN CONTINUOUS COMPOSITE PS CONCRETE PA BULB-TEE BEAM BRIDGE
ITS SUPPORT HANGER DETAILS

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

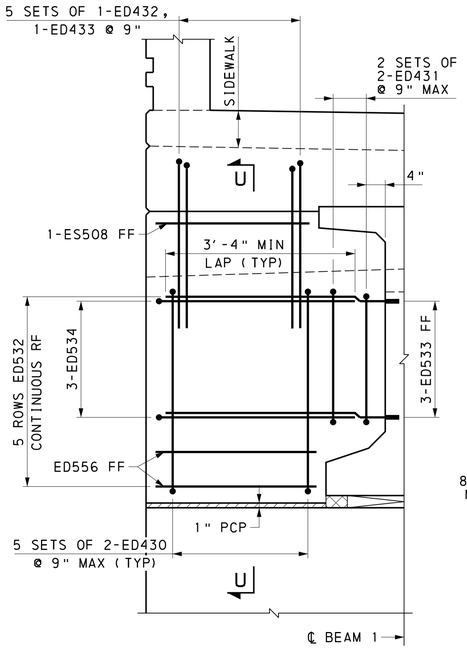
RECOMMENDED 12-6-2022

SHEET 45 OF 78

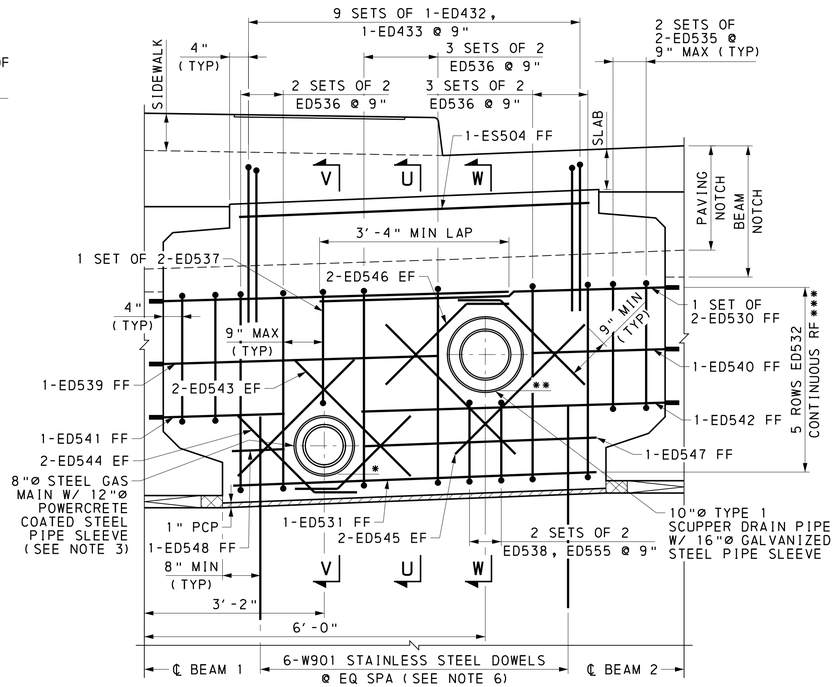
S-39453

6/28/2022
FILENAME: 63016-s-brB3-its01.dgn

DES: MCA	DES CKD: CEK	DWG: MCA	DWG CKD: CEK



TYPICAL OVERHANG
(LEFT OVERHANG SHOWN, RIGHT OVERHANG SIMILAR)

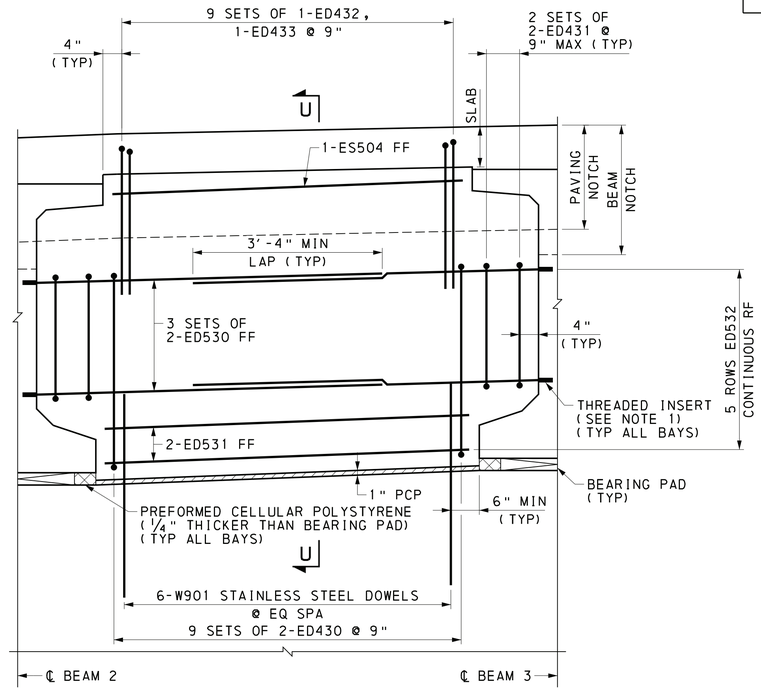


BAY 1

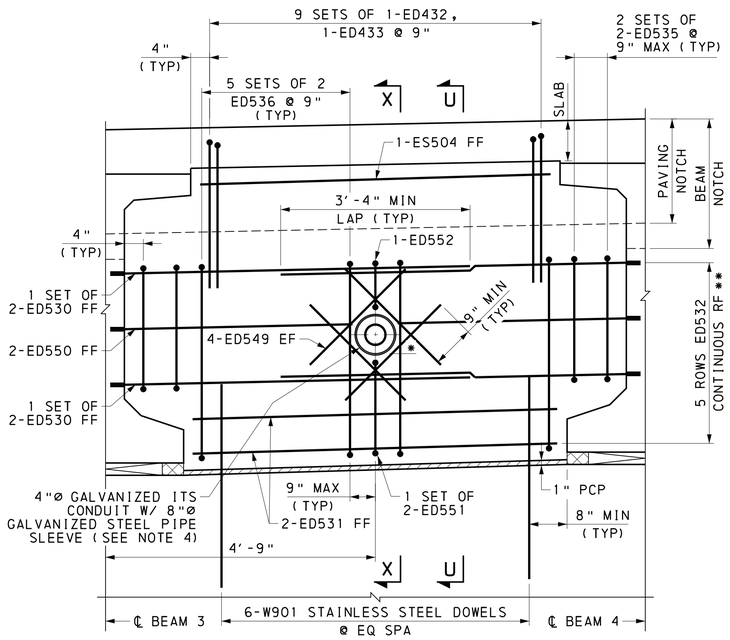
* SLEEVE INVERT ELEV: 380.68'

** SLEEVE INVERT ELEV: 381.99'

*** CUT IN FIELD TO ACCOMMODATE UTILITIES



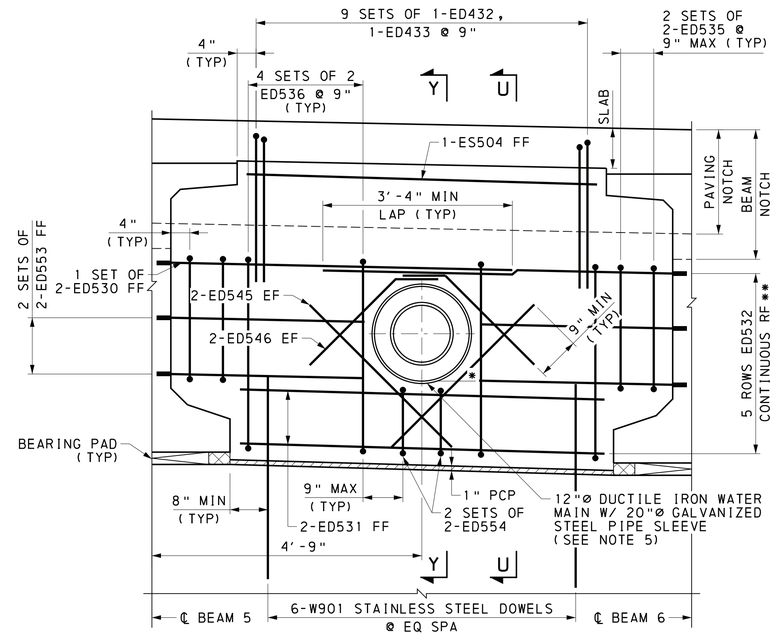
TYPICAL BAY
(BAY 2 SHOWN, BAYS 4 AND 6 SIMILAR)



BAY 3

* SLEEVE INVERT ELEV: 381.91'

** CUT IN FIELD TO ACCOMMODATE UTILITY



BAY 5

* SLEEVE INVERT ELEV: 381.36'

** CUT IN FIELD TO ACCOMMODATE UTILITY

DIAPHRAGM AT ABUTMENT 1
12 0 12 INCHES
(LOOKING STATIONS AHEAD)
(SLAB REINFORCEMENT NOT SHOWN FOR CLARITY)

NOTES:

1. USE ONE SIZE SMALLER INSERT FOR DEFORMED BARS. THE MINIMUM LENGTH OF THE INSERT IS 3". INSERTS TO BE GALVANIZED OR COMPLETELY ZINC-ELECTROPLATED.
2. REFER TO SHEET 51 FOR SECTIONS U-U AND V-V. REFER TO SHEET 52 FOR SECTIONS W-W, X-X AND Y-Y.
3. COORDINATE WITH UGI UTILITIES, INC. AND THEIR CONTRACTOR FOR THE GAS UTILITY RELOCATION. SEE GAS UTILITY RELOCATION ALSO PLAN.
4. SEE ITS ALSO PLAN.
5. COORDINATE WITH CAPITAL REGION WATER. SEE WATER UTILITY RELOCATION ALSO PLAN.
6. ADJUST DOWELS AS REQUIRED TO ACCOMMODATE THE GAS UTILITY.

REFERENCES:

GENERAL PLAN	1
GENERAL NOTES	3 - 4
ABUTMENT 1 DRAWINGS	9 - 12
FRAMING PLAN	34
BEAM DETAILS	35 - 37
SLAB PLAN	39
SCUPPER LOCATIONS & DETAILS	42
DIAPHRAGM DETAILS	46 - 56

SHEETS: 1

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0123 MPMS/ECMS PROJ: 97828 BRKEY: 67418

HNTB

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — JUSTIN ROBERT MCCARTHY — ENGINEER — PE076998

DAUPHIN COUNTY
SR 0083 SECTION 079

SEG 0050 OFFSET 0123 SEG 0051 OFFSET 0123
SR 3007 (19TH STREET) STA 100+84.74
OVER SR 0083 AND SR 8019 (RAMP T)

2-SPAN CONTINUOUS COMPOSITE PS CONCRETE PA BULB-TEE BEAM BRIDGE

DIAPHRAGM DETAILS 1

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

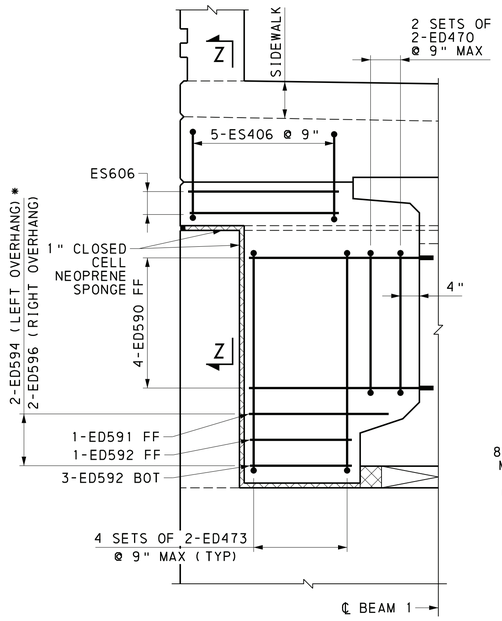
RECOMMENDED 12-6-2022

SHEET 46 OF 78

S-39453

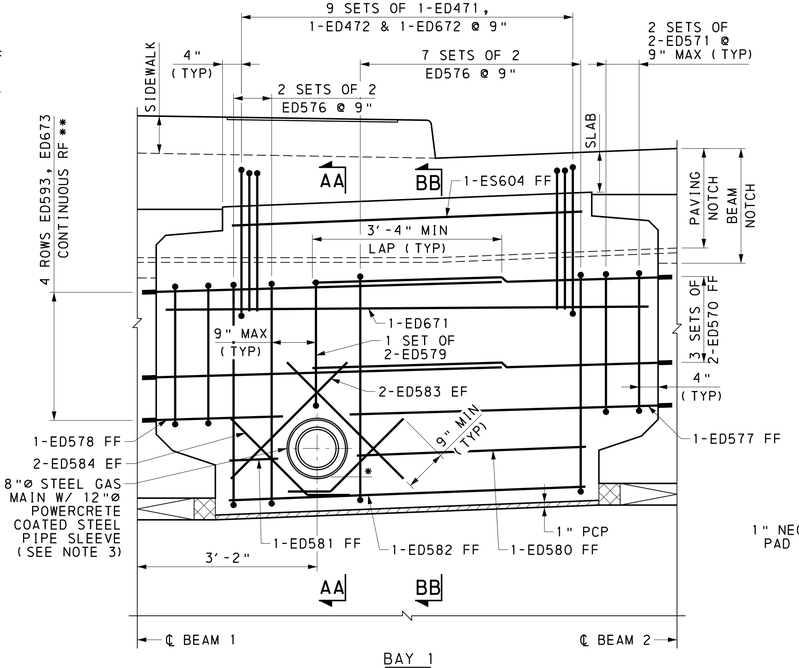
DES: MCA	DES CKD: JRM	DWG: JTM	DWG CKD: JRM

6/28/2022
FILENAME: 63016-s-br83-dia01.dgn



TYPICAL OVERHANG
(LEFT OVERHANG SHOWN,
RIGHT OVERHANG SIMILAR)

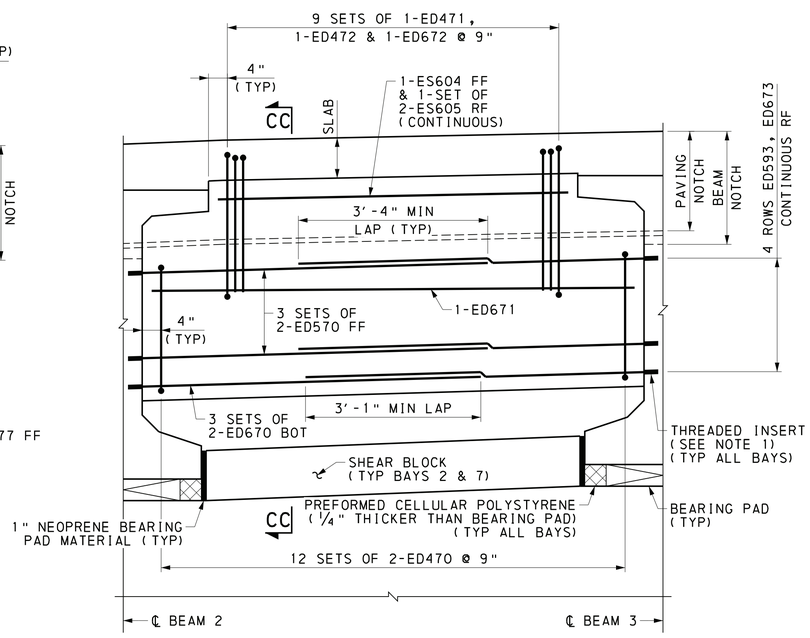
* CUT IN FIELD TO ACCOMMODATE UTILITY



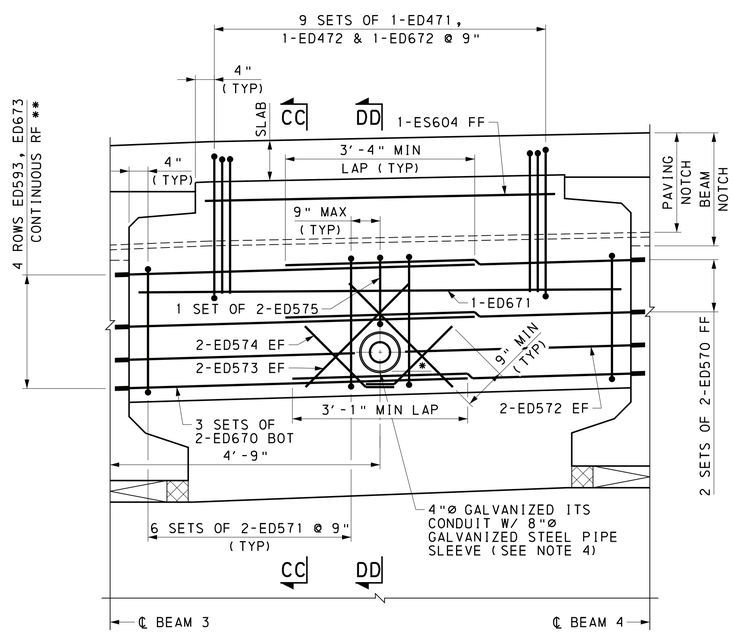
BAY 1

* SLEEVE INVERT ELEV: 388.77'

** 3-ED593, 1-ED673 (CUT IN FIELD TO ACCOMMODATE UTILITY)



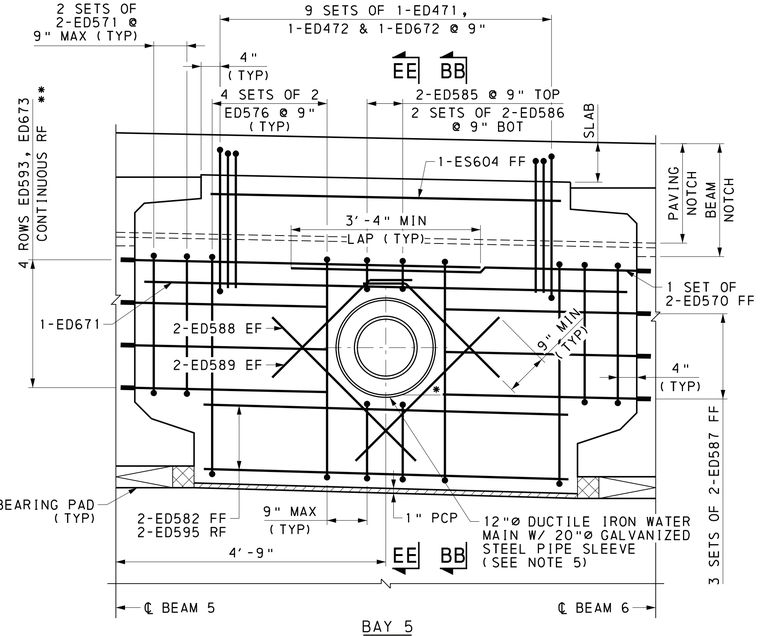
TYPICAL BAY
(BAY 2 SHOWN,
BAYS 4, 6 AND 7 SIMILAR)



BAY 3

* SLEEVE INVERT ELEV: 390.78'

** 3-ED593, 1-ED673
(CUT IN FIELD TO ACCOMMODATE UTILITY)



BAY 5

* SLEEVE INVERT ELEV: 390.01'

** 3-ED593, 1-ED673
(CUT IN FIELD TO ACCOMMODATE UTILITY)

DIAPHRAGM AT ABUTMENT 2

12 0 12 INCHES

(LOOKING STATIONS AHEAD)
(SLAB REINFORCEMENT NOT SHOWN FOR CLARITY)

NOTES:

1. USE ONE SIZE SMALLER INSERT FOR DEFORMED BARS. THE MINIMUM LENGTH OF THE INSERT IS 3". INSERTS TO BE GALVANIZED OR COMPLETELY ZINC-ELECTROPLATED.
2. REFER TO SHEET 53 FOR SECTIONS BB-BB AND CC-CC. REFER TO SHEET 54 FOR SECTIONS AA-AA AND DD-DD. REFER TO SHEET 55 FOR SECTIONS EE-EE AND Z-Z.
3. COORDINATE WITH UGI UTILITIES, INC. AND THEIR CONTRACTOR FOR THE GAS UTILITY RELOCATION. SEE GAS UTILITY RELOCATION ALSO PLAN.
4. SEE ITS ALSO PLAN.
5. COORDINATE WITH CAPITAL REGION WATER. SEE WATER UTILITY RELOCATION ALSO PLAN.

REFERENCES:	SHEETS:
GENERAL PLAN	1
GENERAL NOTES	3 - 4
ABUTMENT 2 DRAWINGS	14 - 17
FRAMING PLAN	34
BEAM DETAILS	35 - 37
SLAB PLAN	39
DIAPHRAGM DETAILS	46 - 56

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0123 MPMS/ECMS PROJ: 97828 BRKEY: 67418

HNTB

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0123 SEG 0051 OFFSET 0123
SR 3007 (19TH STREET) STA 100+84.74
OVER SR 0083 AND SR 8019 (RAMP T)
2-SPAN CONTINUOUS COMPOSITE PS CONCRETE
PA BULB-TEE BEAM BRIDGE
DIAPHRAGM DETAILS 2

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
JUSTIN ROBERT MCCARTHY
ENGINEER
PE076998

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

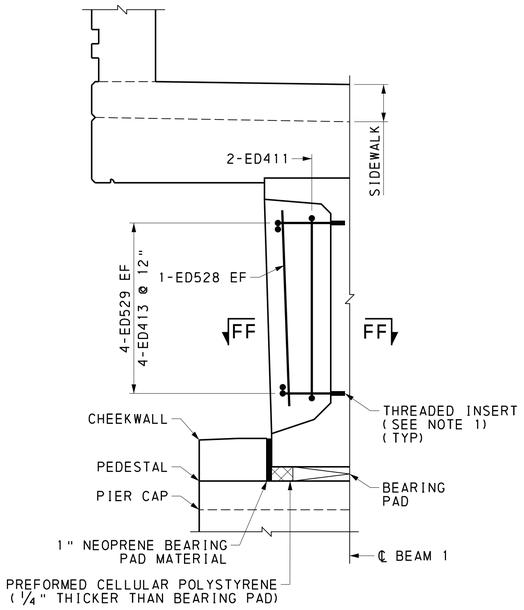
RECOMMENDED 12-6-2022

SHEET 47 OF 78

S-39453

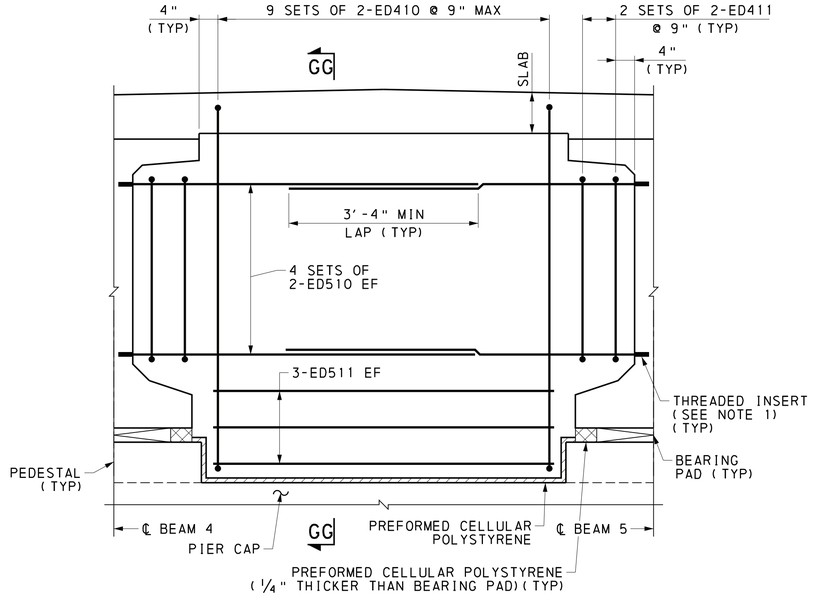
6/28/2022
FILENAME 63016-s-brB3-dia02.dgn

DES: MCA	DES CKD: JRM	DWG: JTM	DWG CKD: JRM



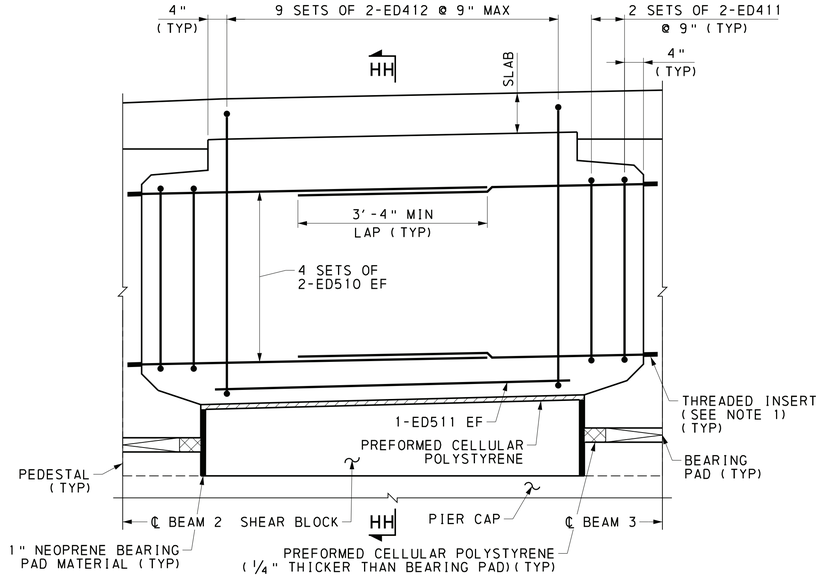
FASCIA DIAPHRAGM

(LEFT FASCIA SHOWN, RIGHT FASCIA SIMILAR)



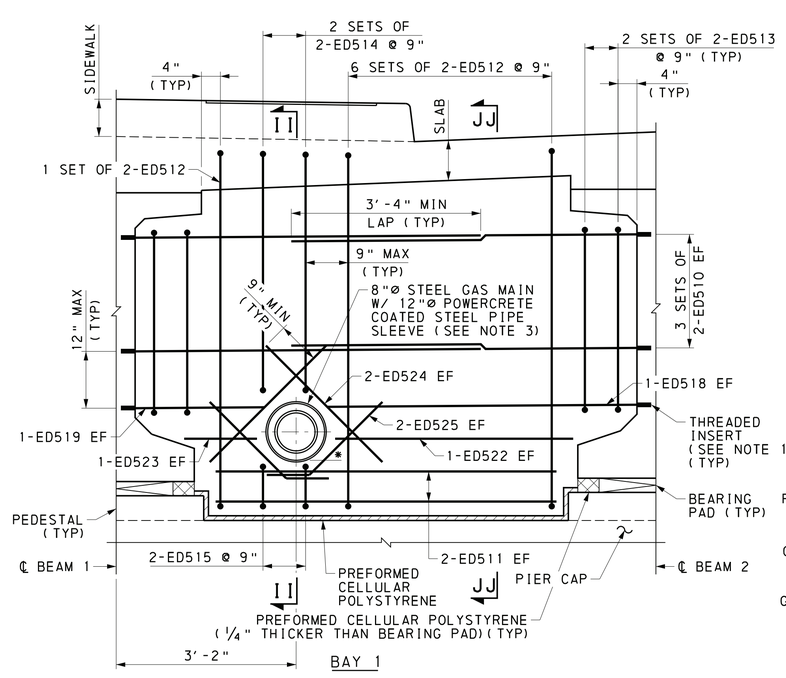
TYPICAL BAY

(BAY 4 SHOWN, BAY 6 SIMILAR)



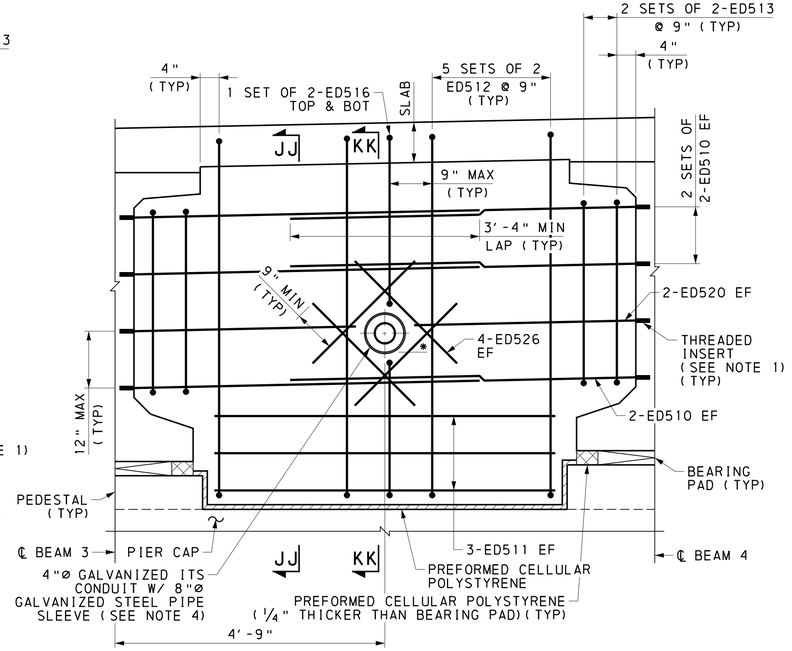
SHEAR BLOCK BAY

(BAY 2 SHOWN, BAY 7 SIMILAR)



BAY 1

* SLEEVE INVERT ELEV: 385.06'



BAY 3

* SLEEVE INVERT ELEV: 386.87'

CONTINUITY DIAPHRAGM @ PIER

12 0 12 INCHES

(LOOKING STATIONS AHEAD)

(SLAB REINFORCEMENT NOT SHOWN FOR CLARITY)

NOTES:

1. USE ONE SIZE SMALLER INSERT FOR DEFORMED BARS. THE MINIMUM LENGTH OF THE INSERT IS 3". INSERTS TO BE GALVANIZED OR COMPLETELY ZINC-ELECTROPLATED.
2. REFER TO SHEET 49 FOR SECTIONS GG-GG, HH-HH, II-II, AND KK-KK. REFER TO SHEET 56 FOR SECTIONS FF-FF AND JJ-JJ.
3. COORDINATE WITH UGI UTILITIES, INC. AND THEIR CONTRACTOR FOR THE GAS UTILITY RELOCATION. SEE GAS UTILITY RELOCATION ALSO PLAN.
4. SEE ITS ALSO PLAN.

REFERENCES:	SHEETS:
GENERAL PLAN	1
GENERAL NOTES	3 - 4
PIER DRAWINGS	28 - 32
FRAMING PLAN	34
BEAM DETAILS	35 - 37
SLAB PLAN	39
DIAPHRAGM DETAILS	46 - 56

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509

BMS STR ID: 22-3007-0050-0123 MPMS/ECMS PROJ: 97828 BRKEY: 67418

HNTB

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0123 SEG 0051 OFFSET 0123
SR 3007 (19TH STREET) STA 100+84.74
OVER SR 0083 AND SR 8019 (RAMP T)
2-SPAN CONTINUOUS COMPOSITE PS CONCRETE PA BULB-TEE BEAM BRIDGE
DIAPHRAGM DETAILS 3

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — JUSTIN ROBERT MCCARTHY — ENGINEER — PE076998

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

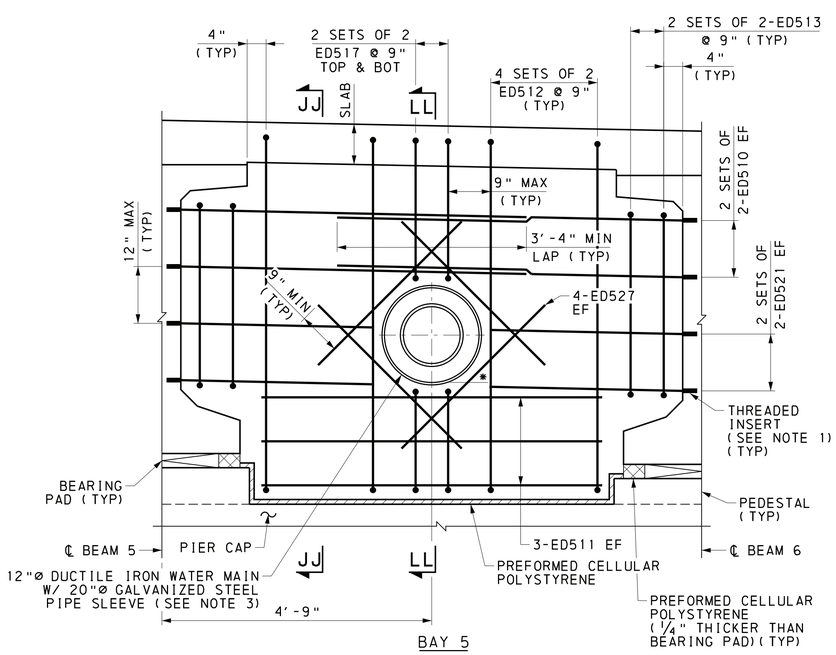
RECOMMENDED 12-6-2022

SHEET 48 OF 78

S-39453

6/28/2022
FILENAME 63016-s-brB3-dio03.dgn

DES: MCA	DES CKD: JRM	DWG: SMZ	DWG CKD: JRM

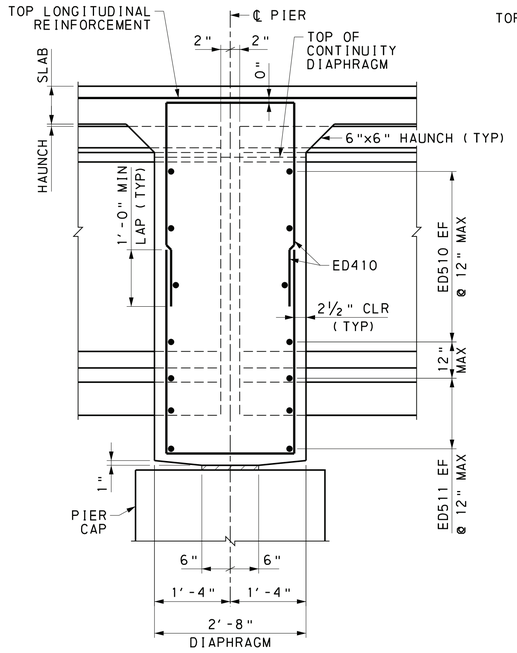


* SLEEVE INVERT ELEV: 386.16'

CONTINUITY DIAPHRAGM @ PIER

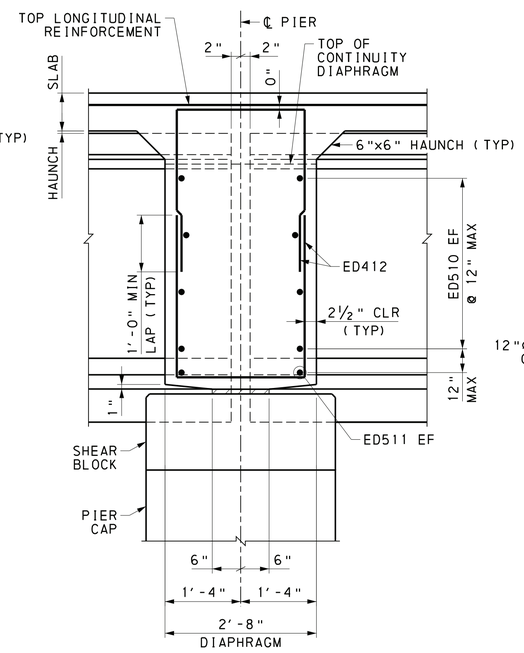
12 0 12 INCHES

(LOOKING STATIONS AHEAD)
(SLAB REINFORCEMENT NOT SHOWN FOR CLARITY)



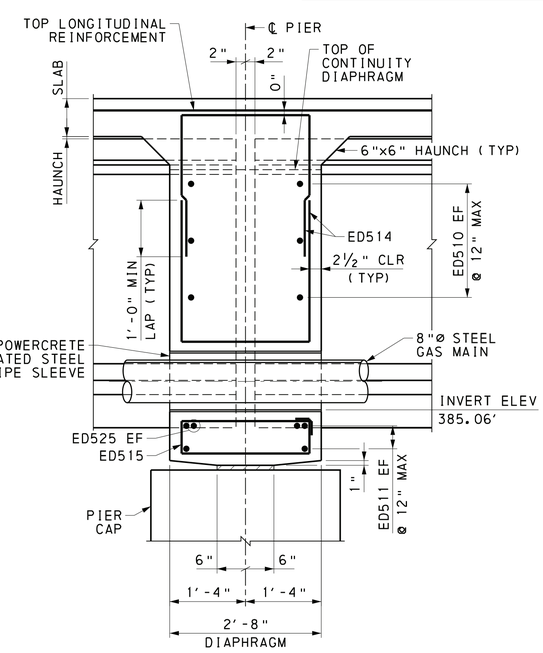
SECTION GG-GG

12 0 12 INCHES



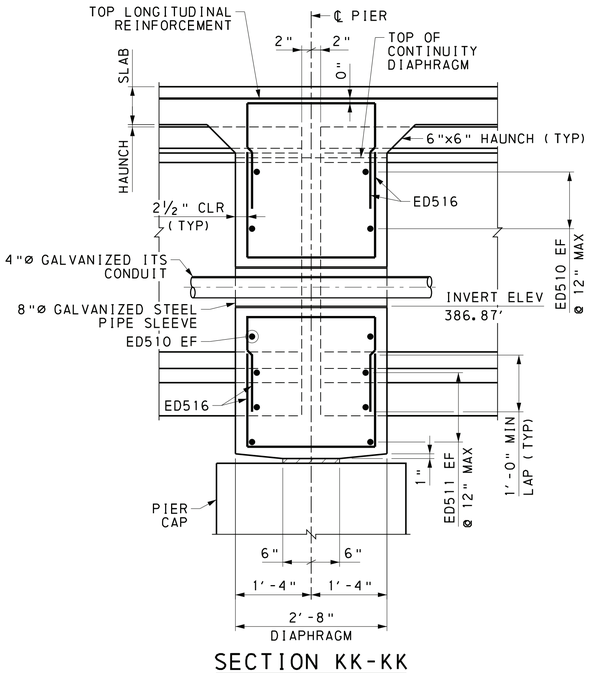
SECTION HH-HH

12 0 12 INCHES



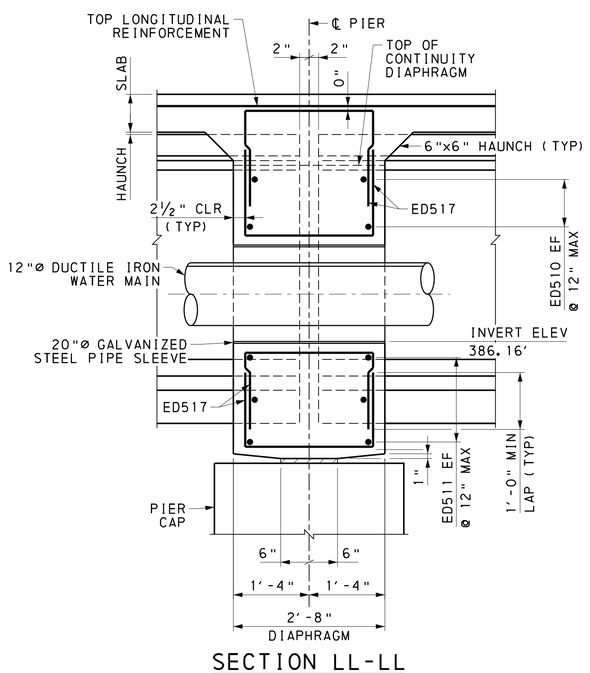
SECTION II-II

12 0 12 INCHES



SECTION KK-KK

12 0 12 INCHES



SECTION LL-LL

12 0 12 INCHES

NOTES:

1. USE ONE SIZE SMALLER INSERT FOR DEFORMED BARS. THE MINIMUM LENGTH OF THE INSERT IS 3". INSERTS TO BE GALVANIZED OR COMPLETELY ZINC-ELECTROPLATED.
2. REFER TO SHEET 56 FOR SECTION JJ-JJ.
3. COORDINATE WITH CAPITAL REGION WATER. SEE WATER UTILITY RELOCATION ALSO PLAN.

REFERENCES:	SHEETS:
GENERAL PLAN	1
GENERAL NOTES	3 - 4
PIER DRAWINGS	28 - 32
FRAMING PLAN	34
BEAM DETAILS	35 - 37
SLAB PLAN	39
DIAPHRAGM DETAILS	46 - 56

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0123 MPMS/ECMS PROJ: 97828 BRKEY: 67418

HNTB

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0123 SEG 0051 OFFSET 0123
SR 3007 (19TH STREET) STA 100+84.74
OVER SR 0083 AND SR 8019 (RAMP T)
2-SPAN CONTINUOUS COMPOSITE PS CONCRETE PA BULB-TEE BEAM BRIDGE
DIAPHRAGM DETAILS 4

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — JUSTIN ROBERT MCCARTHY — ENGINEER — PE076998

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

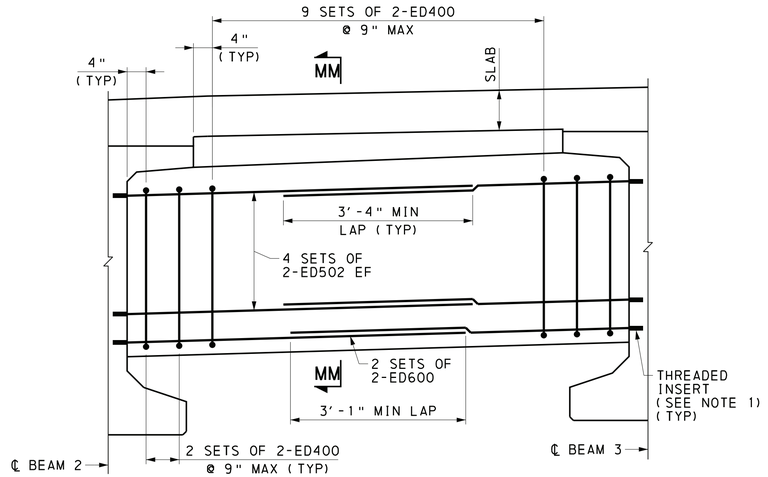
RECOMMENDED 12-6-2022

SHEET 49 OF 78

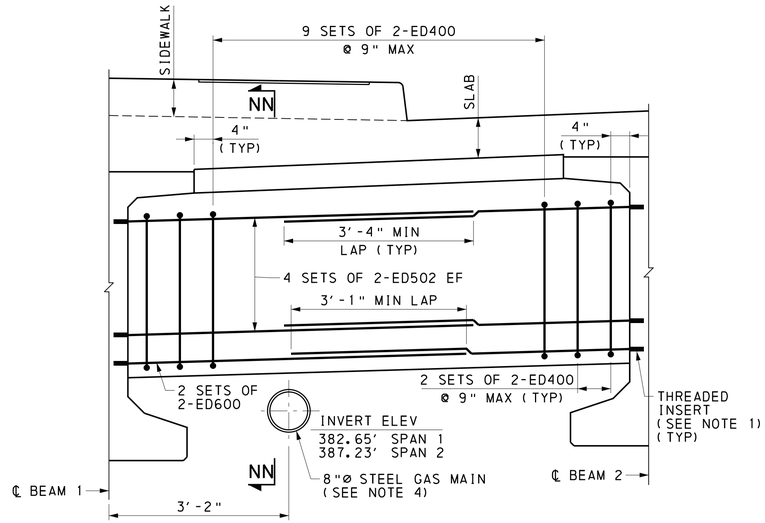
S-39453

6/28/2022
FILENAME: 63016-s-brB3-dia04.dgn

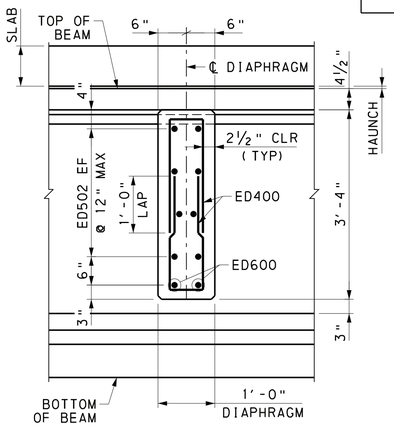
DES: MCA	DES CKD: JRM	DWG: MCA	DWG CKD: JRM



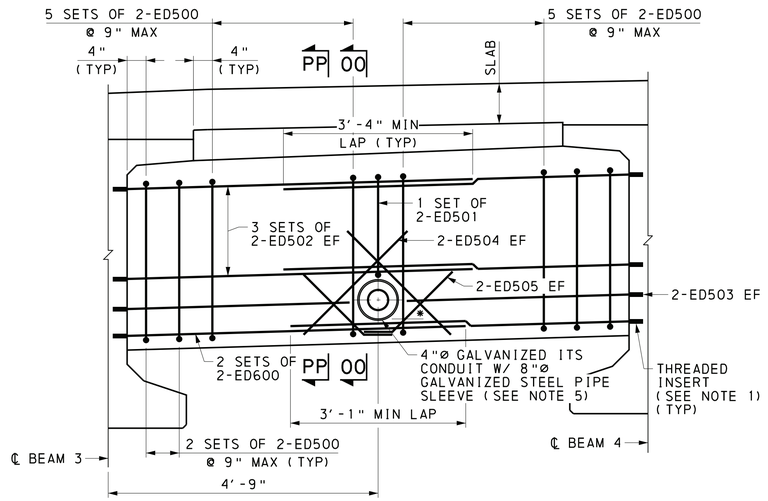
TYPICAL 9'-6" BAY
(BAY 2 SHOWN,
BAYS 4, 6 AND 7 SIMILAR)



BAY 1

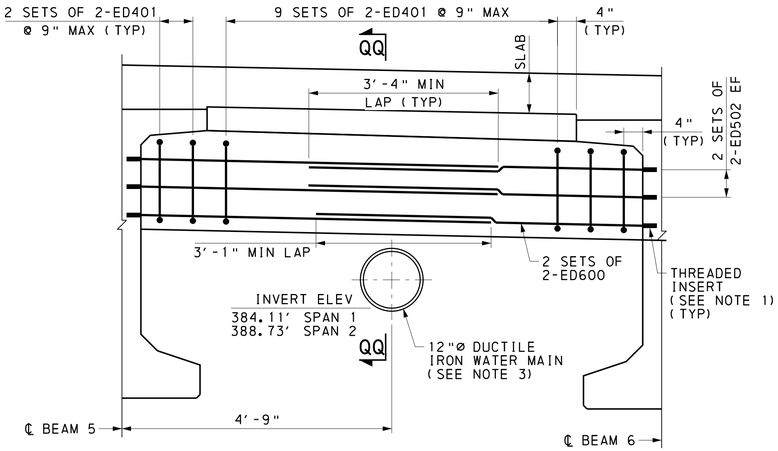


SECTION MM-MM
12 0 12 INCHES

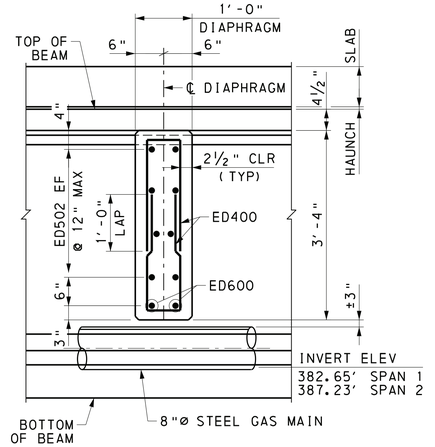


BAY 3

* SLEEVE INVERT ELEV: 384.48' SPAN 1, 389.06' SPAN 2



BAY 5



SECTION NN-NN
12 0 12 INCHES

INTERMEDIATE DIAPHRAGM
12 0 12 INCHES
(LOOKING STATIONS AHEAD)
(SLAB REINFORCEMENT NOT SHOWN FOR CLARITY)

NOTES:

1. USE ONE SIZE SMALLER INSERT FOR DEFORMED BARS. THE MINIMUM LENGTH OF THE INSERT IS 3". INSERTS TO BE GALVANIZED OR COMPLETELY ZINC-ELECTROPLATED.
2. REFER TO SHEET 56 FOR SECTIONS 00-00, PP-PP AND QQ-QQ.
3. COORDINATE WITH CAPITAL REGION WATER. SEE WATER UTILITY RELOCATION ALSO PLAN.
4. COORDINATE WITH UGI UTILITIES, INC. AND THEIR CONTRACTOR FOR THE GAS UTILITY RELOCATION. SEE GAS UTILITY RELOCATION ALSO PLAN.
5. SEE ITS ALSO PLAN.

REFERENCES:	SHEETS:
GENERAL PLAN	1
GENERAL NOTES	3 - 4
FRAMING PLAN	34
BEAM DETAILS	35 - 37
SLAB PLAN	39
DIAPHRAGM DETAILS	46 - 56

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0123 MPMS/ECMS PROJ: 97828 BRKEY: 67418

HNTB

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL JUSTIN ROBERT MCCARTHY ENGINEER PE076998

DAUPHIN COUNTY
SR 0083 SECTION 079

SEG 0050 OFFSET 0123 SEG 0051 OFFSET 0123
SR 3007 (19TH STREET) STA 100+84.74
OVER SR 0083 AND SR 8019 (RAMP T)

2-SPAN CONTINUOUS COMPOSITE PS CONCRETE PA BULB-TEE BEAM BRIDGE

DIAPHRAGM DETAILS 5

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

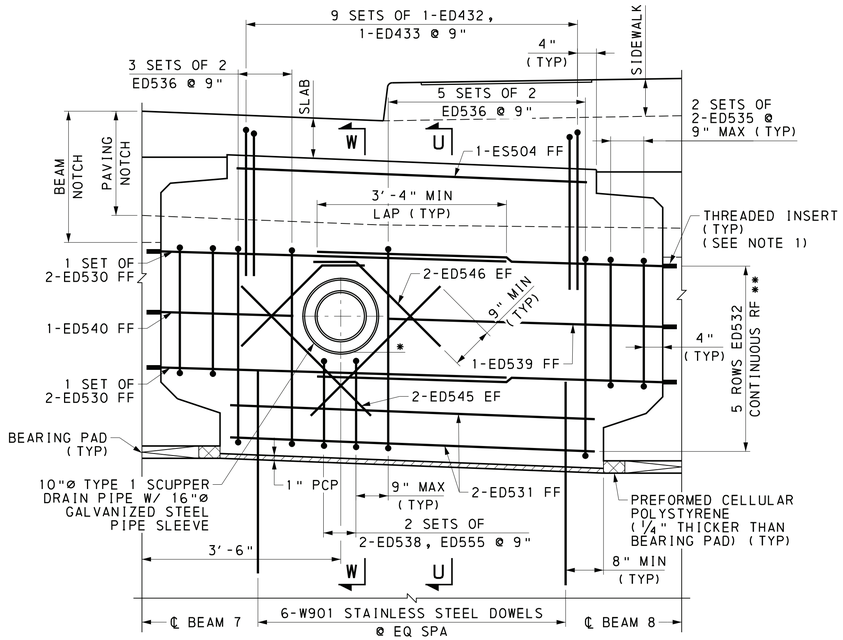
RECOMMENDED 12-6-2022

SHEET 50 OF 78

S-39453

6/28/2022
FILENAME: 63016-s-br83-di005.dgn

DES: MCA	DES CKD: JRM	DWG: MCA	DWG CKD: JRM



BAY 7

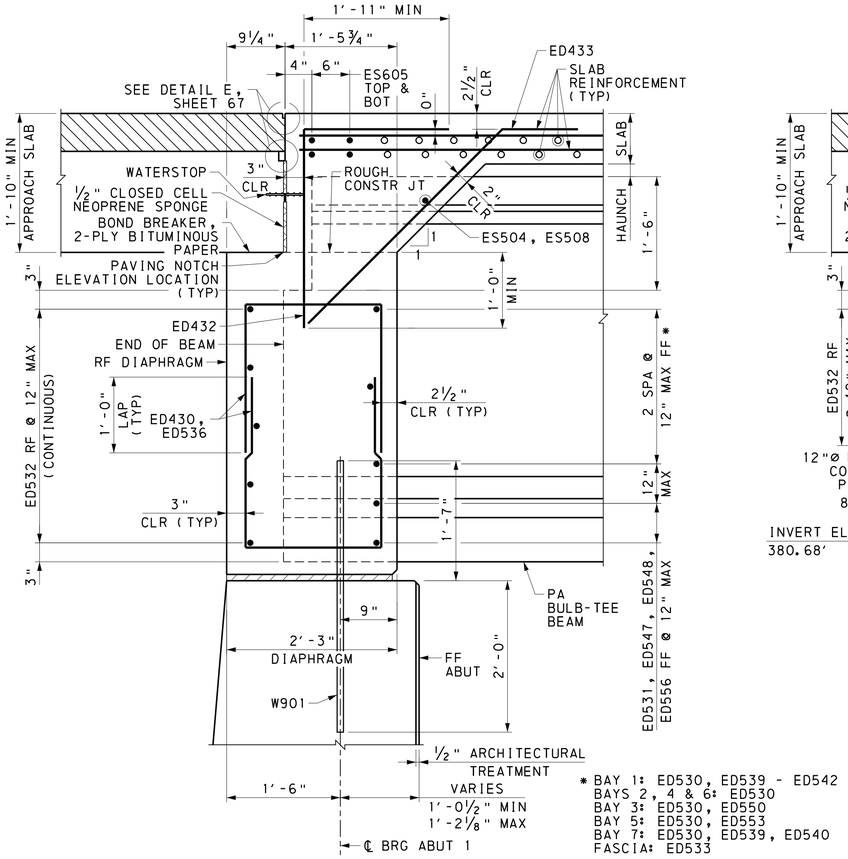
* SLEEVE INVERT ELEV: 381.57'

** CUT IN FIELD TO ACCOMMODATE UTILITY

DIAPHRAGM AT ABUTMENT 1

12 0 12 INCHES

(LOOKING STATIONS AHEAD)
(SLAB REINFORCEMENT NOT SHOWN FOR CLARITY)

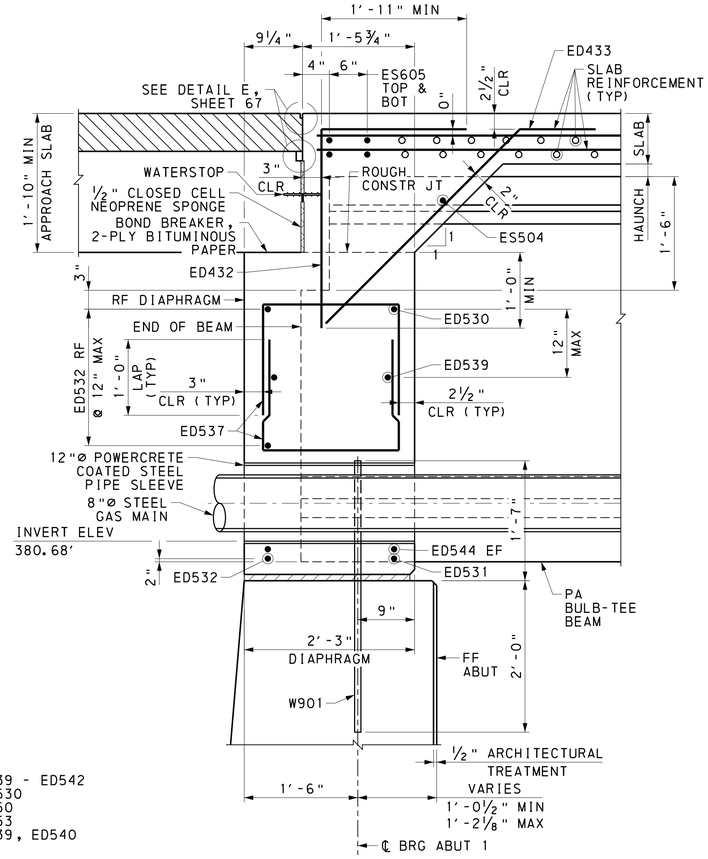


* BAY 1: ED530, ED539 - ED542
BAYS 2, 4 & 6: ED530
BAY 3: ED530, ED550
BAY 5: ED530, ED553
BAY 7: ED530, ED539, ED540
FASCIA: ED533

(FOR DRAINAGE AND WATERPROOFING DETAILS, SEE BC-751M AND ATTACHMENT BC-788 MODIFIED "SPRAY-ON WATERPROOFING DETAILS")

SECTION U-U

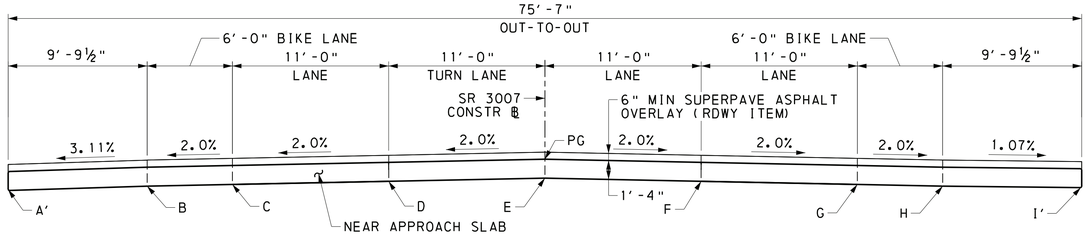
6 0 6 12 INCHES



(FOR DRAINAGE AND WATERPROOFING DETAILS, SEE BC-751M AND ATTACHMENT BC-788 MODIFIED "SPRAY-ON WATERPROOFING DETAILS")

SECTION V-V

6 0 6 12 INCHES



ABUTMENT 1 PAVING NOTCH ELEVATIONS

2 0 2 4 6 FEET

(REFER TO SECTION U-U FOR ELEVATION LOCATION AT PAVING NOTCH)

PAVING NOTCH ELEVATION TABLE	
LOCATION	ELEVATION
A'	383.78
B	384.01
C	384.08
D	384.22
E	384.36
F	384.06
G	383.76
H	383.60
I'	383.42

NOTES:

1. USE ONE SIZE SMALLER INSERT FOR DEFORMED BARS. THE MINIMUM LENGTH OF THE INSERT IS 3". INSERTS TO BE GALVANIZED OR COMPLETELY ZINC-ELECTROPLATED.
2. REFER TO SHEET 52 FOR SECTION W-W.

REFERENCES:

	SHEETS:
GENERAL PLAN	1
GENERAL NOTES	3 - 4
ABUTMENT 1 DRAWINGS	9 - 12
FRAMING PLAN	34
BEAM DETAILS	35 - 37
SLAB PLAN	39
SCUPPER LOCATIONS & DETAILS	42
DIAPHRAGM DETAILS	46 - 56

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0123 MPMS/ECMS PROJ: 97828 BRKEY: 67418

HNTB

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0123 SEG 0051 OFFSET 0123
SR 3007 (19TH STREET) STA 100+84.74
OVER SR 0083 AND SR 8019 (RAMP T)
2-SPAN CONTINUOUS COMPOSITE PS CONCRETE PA BULB-TEE BEAM BRIDGE
DIAPHRAGM DETAILS 6

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL
JUSTIN ROBERT MCCARTHY
ENGINEER PE076998

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

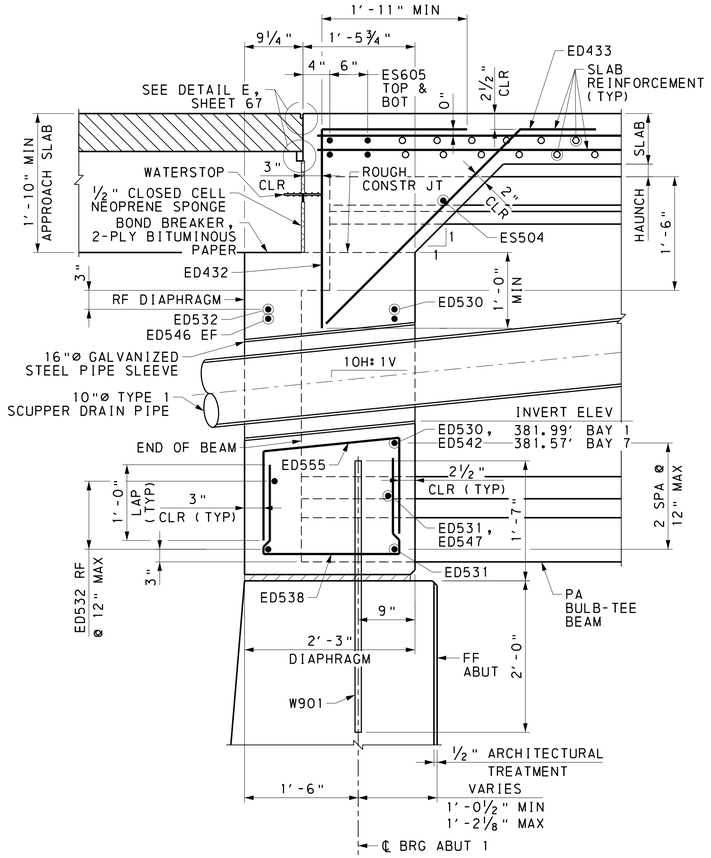
RECOMMENDED 12-6-2022

SHEET 51 OF 78

S-39453

12/2/2022
FILENAME 63016-s-brB3-dia06.dgn

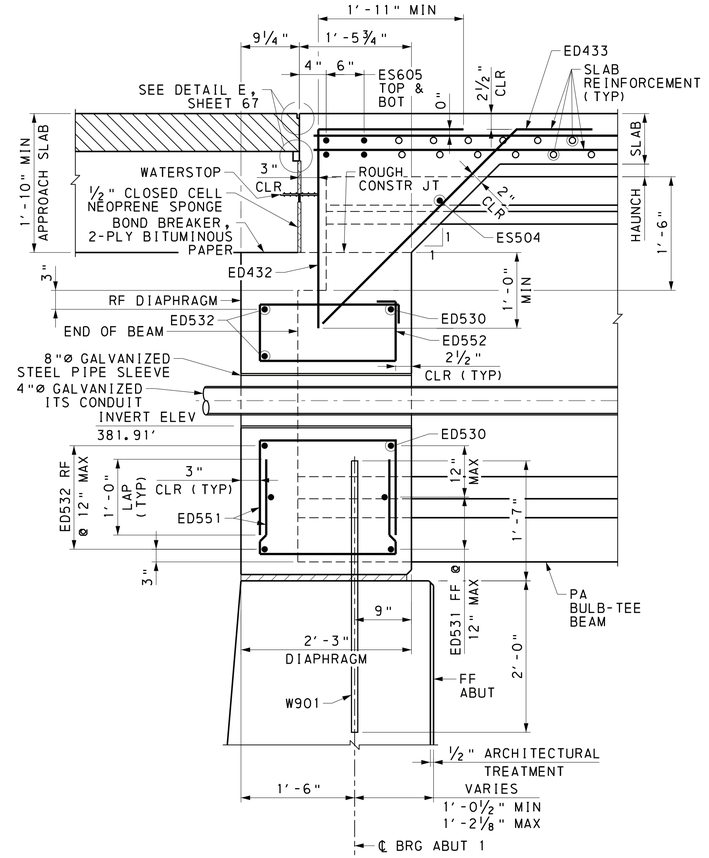
DES: MCA	DES CKD: JRM	DWG: JTM	DWG CKD: JRM



(FOR DRAINAGE AND WATERPROOFING DETAILS, SEE BC-751M AND ATTACHMENT BC-788 MODIFIED "SPRAY-ON WATERPROOFING DETAILS")

SECTION W-W

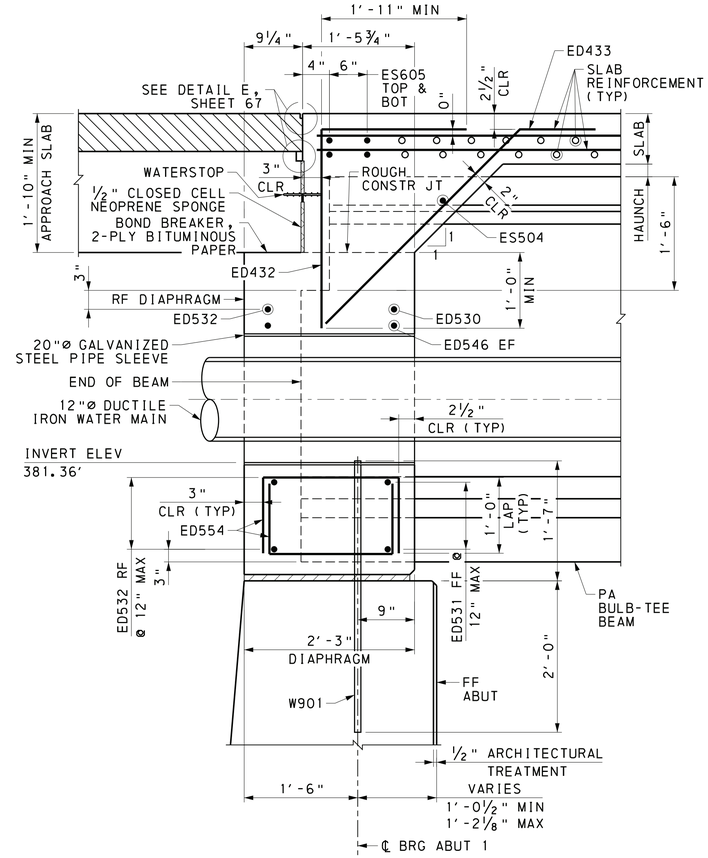
6 0 6 12 INCHES



(FOR DRAINAGE AND WATERPROOFING DETAILS, SEE BC-751M AND ATTACHMENT BC-788 MODIFIED "SPRAY-ON WATERPROOFING DETAILS")

SECTION X-X

6 0 6 12 INCHES



(FOR DRAINAGE AND WATERPROOFING DETAILS, SEE BC-751M AND ATTACHMENT BC-788 MODIFIED "SPRAY-ON WATERPROOFING DETAILS")

SECTION Y-Y

6 0 6 12 INCHES

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0123 MPMS/ECMS PROJ: 97828 BRKEY: 67418

REFERENCES:	SHEETS:
GENERAL PLAN	1
GENERAL NOTES	3 - 4
ABUTMENT 1 DRAWINGS	9 - 12
FRAMING PLAN	34
BEAM DETAILS	35 - 37
SLAB PLAN	39
SCUPPER LOCATIONS & DETAILS	42
DIAPHRAGM DETAILS	46 - 56

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COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
JUSTIN ROBERT MCCARTHY
ENGINEER
PE076998

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

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0123 SEG 0051 OFFSET 0123
SR 3007 (19TH STREET) STA 100+84.74
OVER SR 0083 AND SR 8019 (RAMP T)
2-SPAN CONTINUOUS COMPOSITE PS CONCRETE PA BULB-TEE BEAM BRIDGE
DIAPHRAGM DETAILS 7

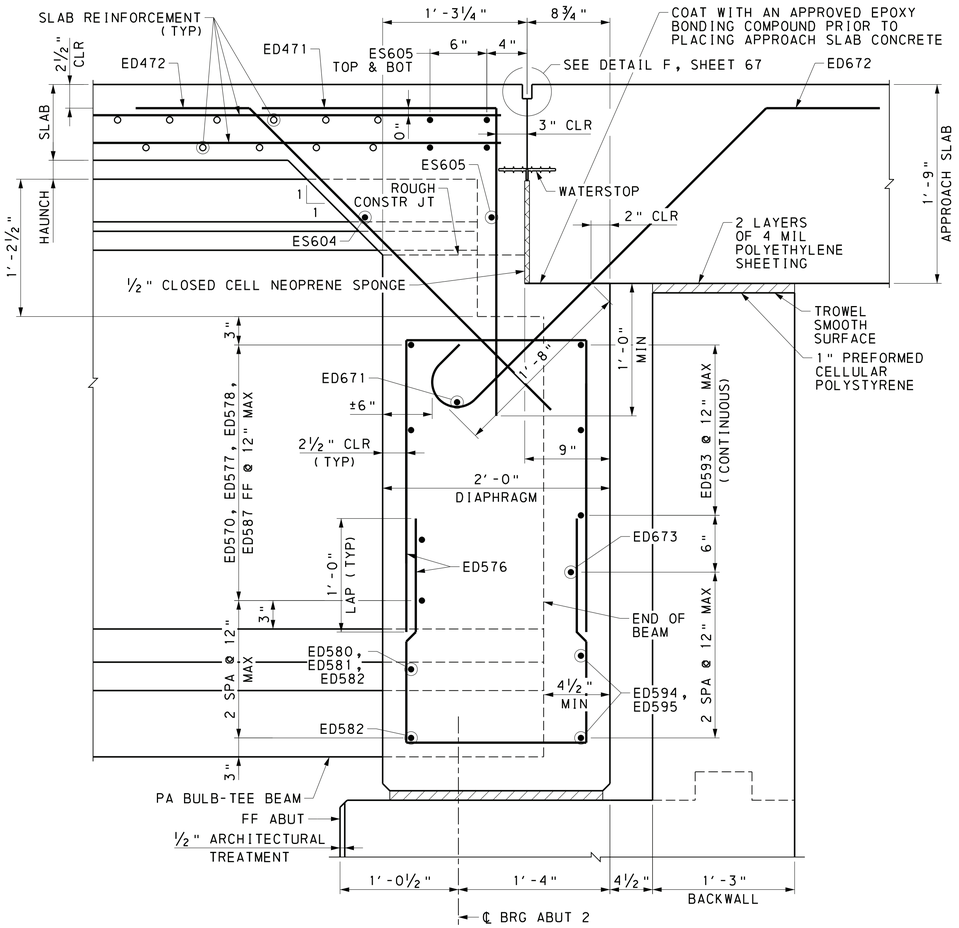
RECOMMENDED 12-6-2022

SHEET 52 OF 78

S-39453

DES: MCA	DES CKD: JRM	DWG: JTM	DWG CKD: JRM

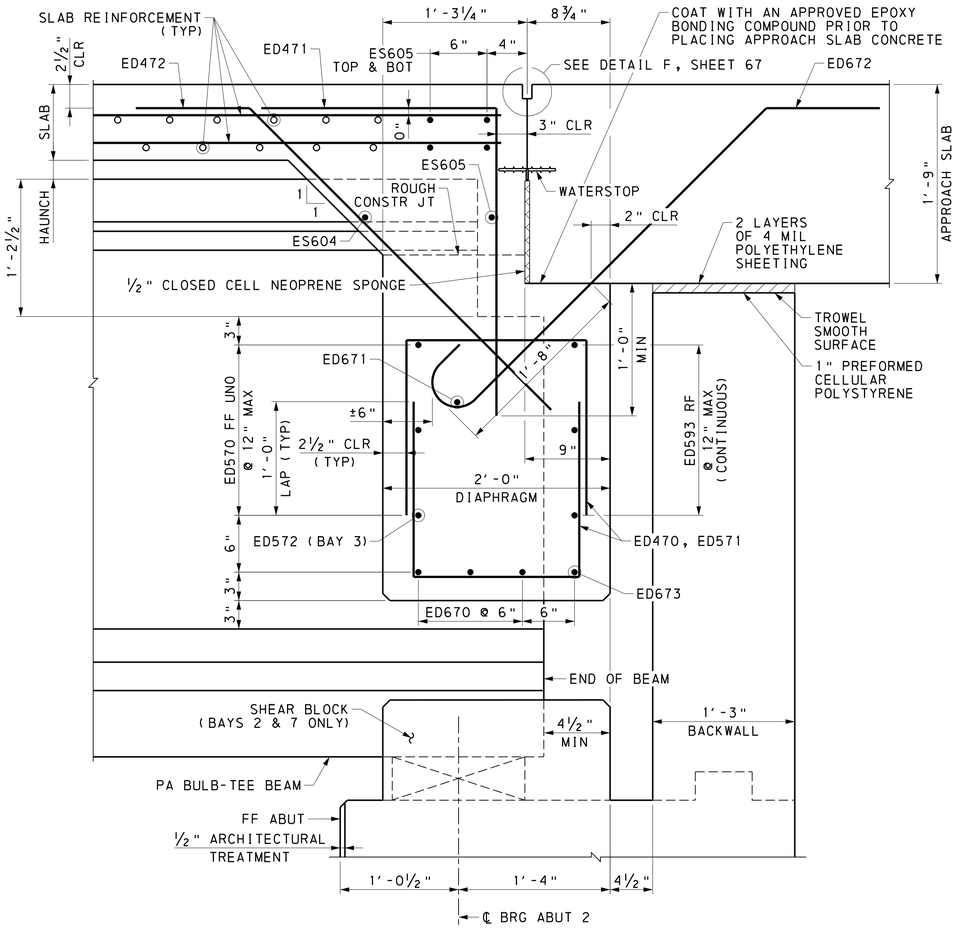
12/2/2022
FILENAME: 63016-s-brB3-d1a07.dgn



(FOR WATERPROOFING DETAILS, SEE ATTACHMENT BC-788 MODIFIED "SPRAY-ON WATERPROOFING DETAILS")

SECTION BB-BB

6 0 6 INCHES



(FOR WATERPROOFING DETAILS, SEE ATTACHMENT BC-788 MODIFIED "SPRAY-ON WATERPROOFING DETAILS")

SECTION CC-CC

6 0 6 INCHES

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0123 MPMS/ECMS PROJ: 97828 BRKEY: 67418

REFERENCES:	SHEETS:
GENERAL PLAN	1
GENERAL NOTES	3 - 4
ABUTMENT 2 DRAWINGS	14 - 25
FRAMING PLAN	34
BEAM DETAILS	35 - 37
SLAB PLAN	39
DIAPHRAGM DETAILS	46 - 56

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COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — JUSTIN ROBERT MCCARTHY — ENGINEER — PE076998

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0123 SEG 0051 OFFSET 0123
SR 3007 (19TH STREET) STA 100+84.74
OVER SR 0083 AND SR 8019 (RAMP T)

2-SPAN CONTINUOUS COMPOSITE PS CONCRETE PA BULB-TEE BEAM BRIDGE

DIAPHRAGM DETAILS 8

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

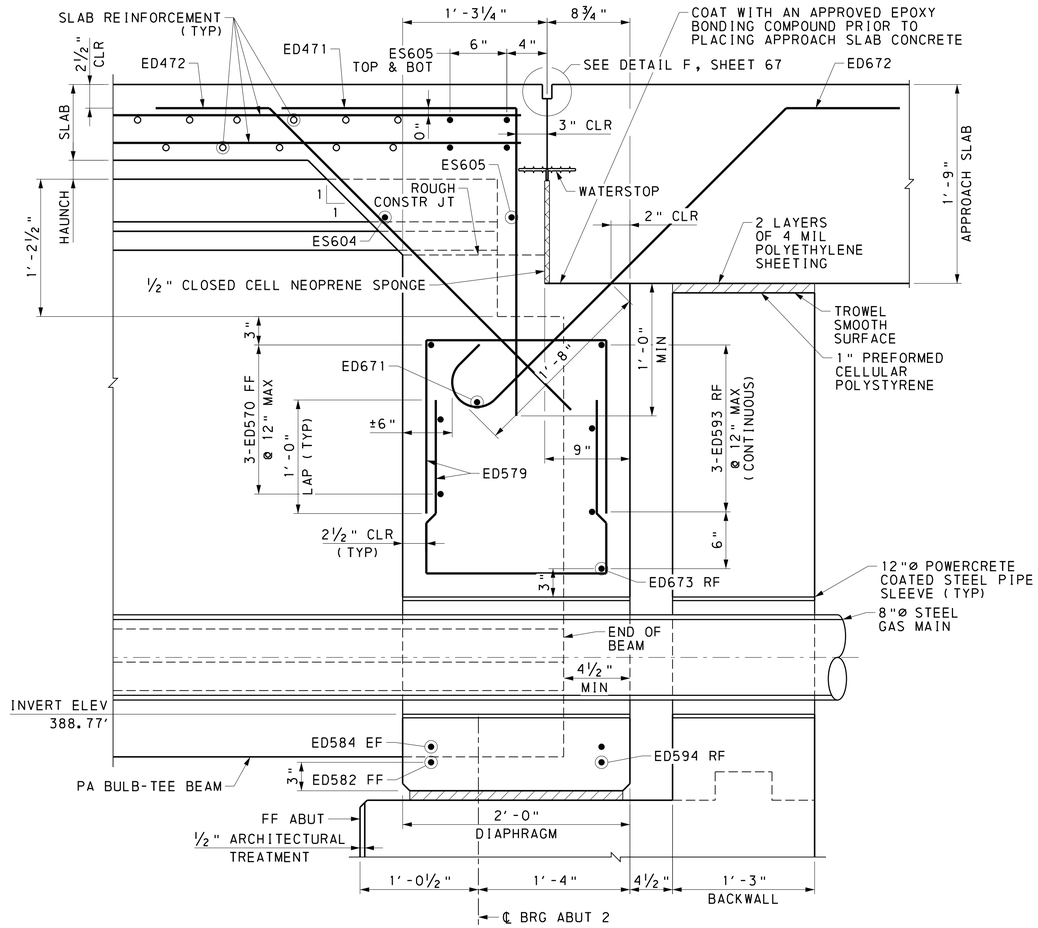
RECOMMENDED 12-6-2022

SHEET 53 OF 78

S-39453

12/2/2022
FILENAME: 63016-s-brB3-dia08.dgn

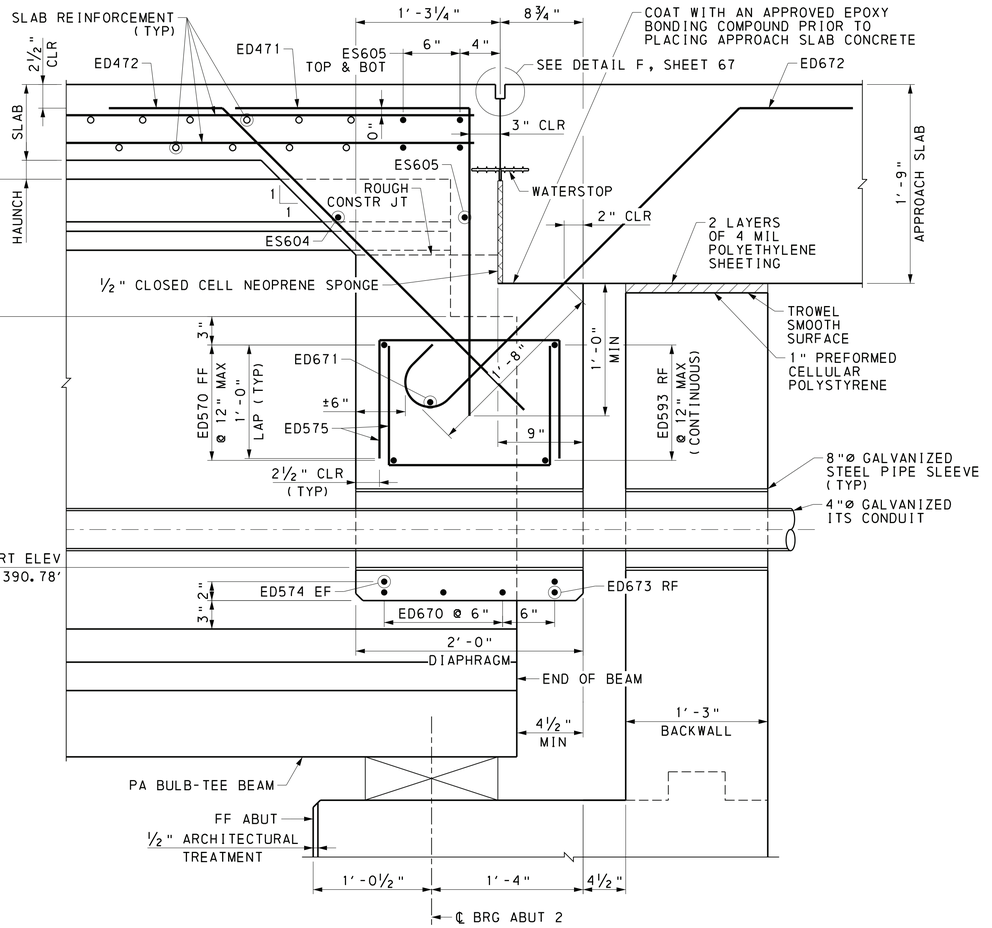
DES: MCA	DES CKD: JRM	DWG: JTM	DWG CKD: JRM



(FOR WATERPROOFING DETAILS, SEE ATTACHMENT BC-788 MODIFIED "SPRAY-ON WATERPROOFING DETAILS")

SECTION AA-AA

6 0 6 INCHES



(FOR WATERPROOFING DETAILS, SEE ATTACHMENT BC-788 MODIFIED "SPRAY-ON WATERPROOFING DETAILS")

SECTION DD-DD

6 0 6 INCHES

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0123 MPMS/ECMS PROJ: 97828 BRKEY: 67418

REFERENCES:	SHEETS:
GENERAL PLAN	1
GENERAL NOTES	3 - 4
ABUTMENT 2 DRAWINGS	14 - 25
FRAMING PLAN	34
BEAM DETAILS	35 - 37
SLAB PLAN	39
DIAPHRAGM DETAILS	46 - 56

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COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL JUSTIN ROBERT MCCARTHY ENGINEER PE076998

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0123 SEG 0051 OFFSET 0123
SR 3007 (19TH STREET) STA 100+84.74
OVER SR 0083 AND SR 8019 (RAMP T)
2-SPAN CONTINUOUS COMPOSITE PS CONCRETE PA BULB-TEE BEAM BRIDGE
DIAPHRAGM DETAILS 9

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

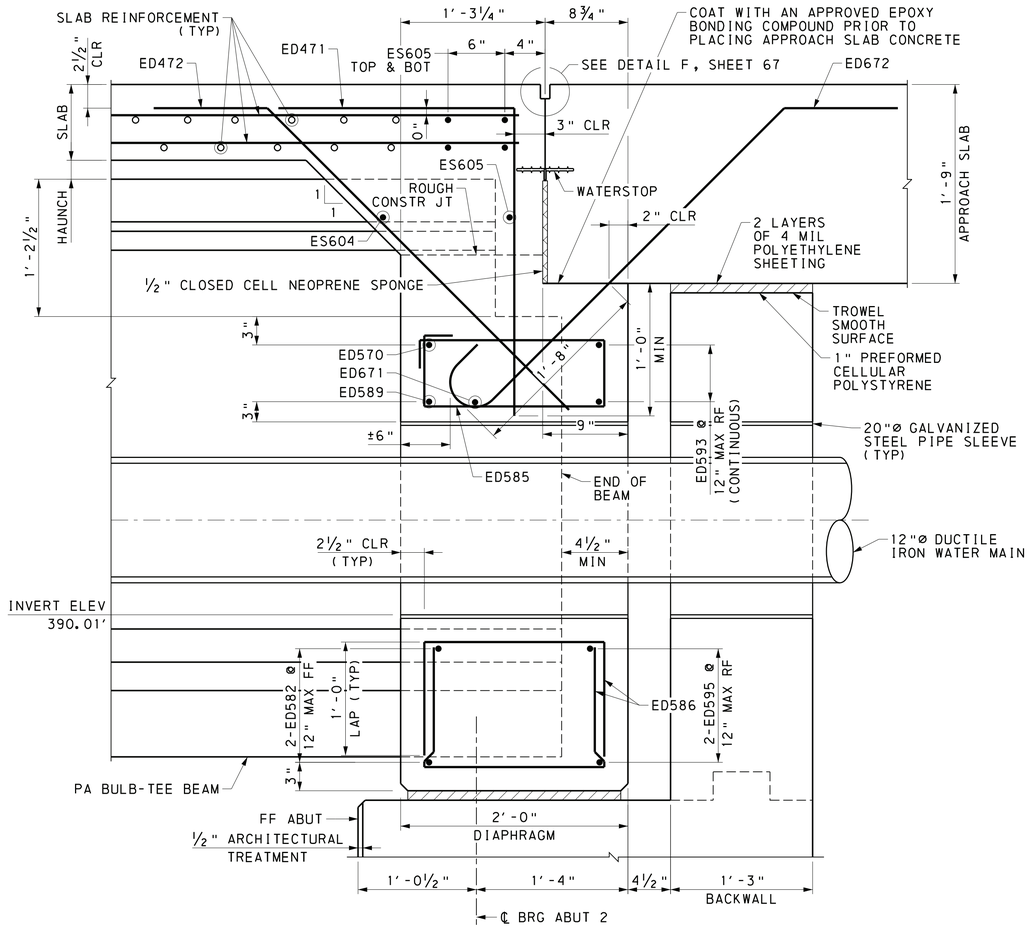
RECOMMENDED 12-6-2022

SHEET 54 OF 78

S-39453

DES: MCA	DES CKD: JRM	DWG: JTM	DWG CKD: JRM

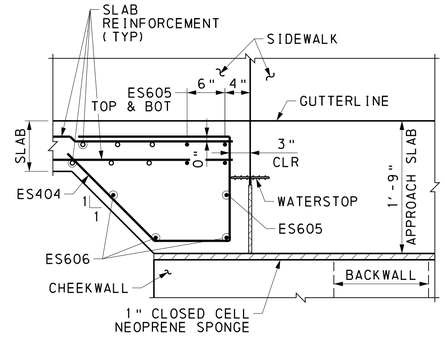
12/2/2022
FILENAME: 63016-s-br83-did09.dgn



(FOR WATERPROOFING DETAILS, SEE ATTACHMENT BC-788 MODIFIED "SPRAY-ON WATERPROOFING DETAILS")

SECTION EE-EE

6 0 6 INCHES



SECTION Z-Z

6 0 6 12 INCHES

Mark	Description	By	Chk'd	Recm'd	Date

REVISIONS

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0123 MPMS/ECMS PROJ: 97828 BRKEY: 67418

REFERENCES:	SHEETS:
GENERAL PLAN	1
GENERAL NOTES	3 - 4
ABUTMENT 2 DRAWINGS	14 - 25
FRAMING PLAN	34
BEAM DETAILS	35 - 37
SLAB PLAN	39
DIAPHRAGM DETAILS	46 - 56

HNTB

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
JUSTIN ROBERT MCCARTHY
ENGINEER
PE076998

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

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0123 SEG 0051 OFFSET 0123
SR 3007 (19TH STREET) STA 100+84.74
OVER SR 0083 AND SR 8019 (RAMP T)
2-SPAN CONTINUOUS COMPOSITE PS CONCRETE PA BULB-TEE BEAM BRIDGE
DIAPHRAGM DETAILS 10

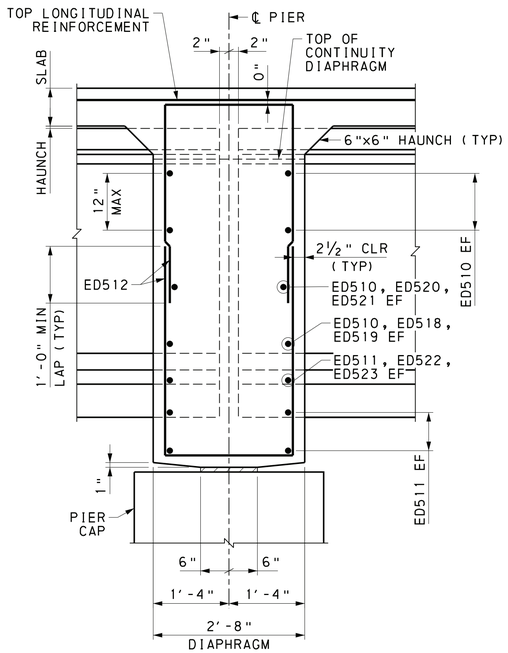
RECOMMENDED 12-6-2022

SHEET 55 OF 78

S-39453

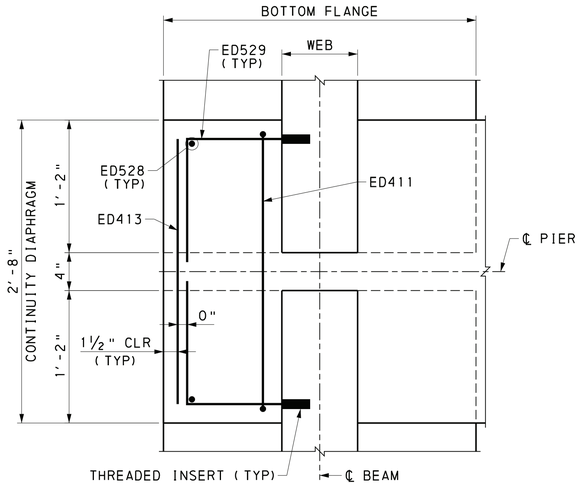
12/2/2022
FILENAME: 63016-s-br83-dia10.dgn

DES: MCA	DES CKD: JRM	DWG: JTM	DWG CKD: JRM



SECTION JJ-JJ

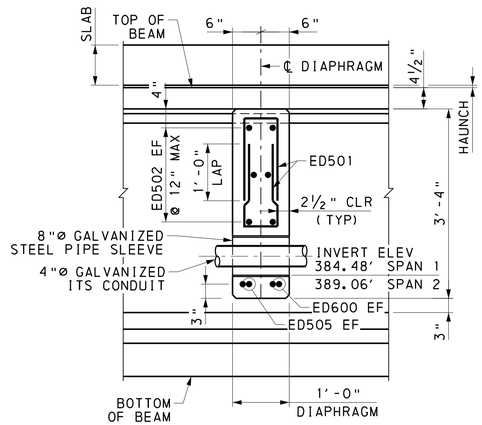
12 0 12 INCHES



SECTION FF-FF

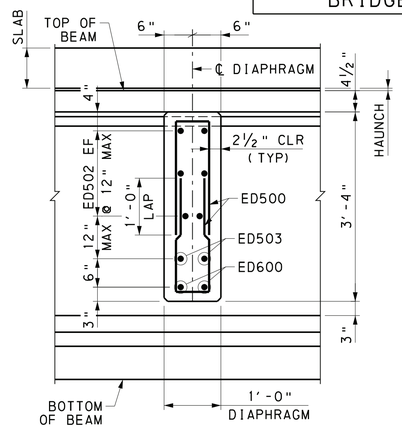
6 0 6 INCHES

(INTERIOR DIAPHRAGM REINFORCEMENT NOT SHOWN FOR CLARITY)



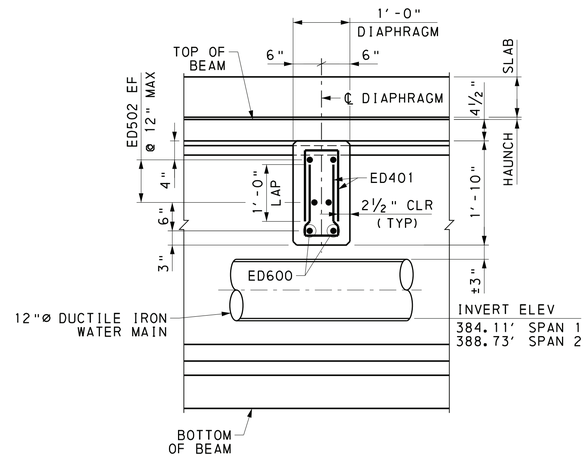
SECTION 00-00

12 0 12 INCHES



SECTION PP-PP

12 0 12 INCHES



SECTION QQ-QQ

12 0 12 INCHES

Mark	Description	By	Chk'd	Recm'd	Date

REVISIONS

SR 3007 PREVIOUSLY KNOWN AS LR 509

BMS STR ID: 22-3007-0050-0123 MPMS/ECMS PROJ: 97828 BRKEY: 67418

REFERENCES:	SHEETS:
GENERAL PLAN	1
GENERAL NOTES	3 - 4
PIER DRAWINGS	28 - 32
FRAMING PLAN	34
BEAM DETAILS	35 - 37
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DIAPHRAGM DETAILS	46 - 56

HNTB

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL JUSTIN ROBERT MCCARTHY ENGINEER PE076998

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0123 SEG 0051 OFFSET 0123
SR 3007 (19TH STREET) STA 100+84.74
OVER SR 0083 AND SR 8019 (RAMP T)
2-SPAN CONTINUOUS COMPOSITE PS CONCRETE PA BULB-TEE BEAM BRIDGE
DIAPHRAGM DETAILS 11

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

RECOMMENDED 12-6-2022

SHEET 56 OF 78

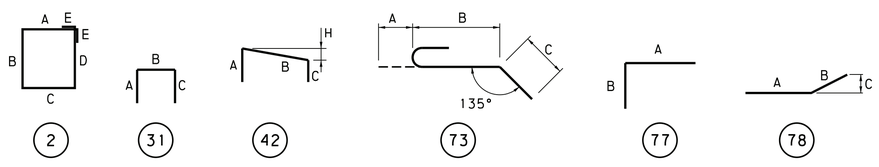
S-39453

6/28/2022
FILENAME: 63016-s-brB3-diall.dgn

DES: MCA	DES CKD: JRM	DWG: MCA	DWG CKD: JRM

MARK	SIZE	NO REQ'D	LENGTH	TYPE	A	B	C	D	E	REMARKS
					ABUTMENT 1 DIAPHRAGMS					
ED430	4	74	6'-4"	31	2'-3"	1'-10"	2'-3"			
ED431	4	32	5'-4"	31	1'-9"	1'-10"	1'-9"			
ED432	4	73	4'-10"	77	2'-11"	1'-11"				
ED433	4	73	5'-1"	78	4'-1"	1'-0"	2'-10 5/8"			
ED530	5	30	6'-5"	STR						THREAD ONE END 3"
ED531	5	13	6'-6"	STR						
ED532	5	10	39'-10"	STR						
ED533	5	6	4'-4"	STR						THREAD ONE END 3"
ED534	5	6	8'-6"	31	3'-4"	1'-10"	3'-4"			
ED535	5	32	5'-4"	31	1'-9"	1'-10"	1'-9"			
ED536	5	68	6'-4"	31	2'-3"	1'-10"	2'-3"			
ED537	5	2	4'-10"	31	1'-6"	1'-10"	1'-6"			
ED538	5	4	4'-6"	31	1'-4"	1'-10"	1'-4"			
ED539	5	2	5'-1"	STR						THREAD ONE END 3"
ED540	5	2	2'-7"	STR						THREAD ONE END 3"
ED541	5	1	2'-5"	STR						THREAD ONE END 3"
ED542	5	1	5'-7"	STR						THREAD ONE END 3"
ED543	5	4	2'-11"	STR						
ED544	5	4	2'-8"	78	9"	1'-11"	1'-4 1/4"			
ED545	5	12	3'-7"	STR						
ED546	5	12	3'-2"	78	9"	2'-5"	1'-8 1/2"			
ED547	5	1	4'-1"	STR						
ED548	5	1	11"	STR						
ED549	5	8	2'-7"	STR						
ED550	5	2	4'-2"	STR						THREAD ONE END 3"
ED551	5	2	4'-6"	31	1'-4"	1'-10"	1'-4"			
ED552	5	1	6'-2"	2	1'-10"	9"	1'-10"	9"	6"	
ED553	5	4	3'-8"	STR						THREAD ONE END 3"
ED554	5	4	4'-0"	31	1'-1"	1'-10"	1'-1"			
ED555	5	4	4'-6"	42	1'-4"	1'-10"	1'-4"			H = 2 1/4"
ED556	5	4	2'-10"	STR						
					ABUTMENT 2 DIAPHRAGMS					
ED470	4	104	4'-9"	31	1'-7"	1'-7"	1'-7"			
ED471	4	63	4'-7"	77	2'-7"	2'-0"				
ED472	4	63	4'-8"	78	3'-8"	1'-0"	8 1/2"			
ED473	4	16	6'-7"	31	2'-6"	1'-7"	2'-6"			
ED570	5	36	6'-5"	STR						THREAD ONE END 3"
ED571	5	40	4'-9"	31	1'-7"	1'-7"	1'-7"			
ED572	5	4	4'-2"	STR						THREAD ONE END 3"
ED573	5	4	2'-7"	STR						
ED574	5	4	2'-0"	78	6"	1'-6"	12 3/4"			
ED575	5	2	4'-1"	31	1'-3"	1'-7"	1'-3"			
ED576	5	34	6'-7"	31	2'-6"	1'-7"	2'-6"			
ED577	5	1	5'-7"	STR						THREAD ONE END 3"
ED578	5	1	2'-5"	STR						THREAD ONE END 3"
ED579	5	2	4'-9"	31	1'-7"	1'-7"	1'-7"			
ED580	5	1	4'-1"	STR						
ED581	5	1	11"	STR						
ED582	5	3	6'-6"	STR						
ED583	5	4	2'-11"	STR						
ED584	5	4	2'-8"	78	9"	1'-11"	1'-4 1/4"			
ED585	5	2	5'-4"	2	1'-7"	7"	1'-7"	7"	6"	
ED586	5	4	3'-9"	31	1'-1"	1'-7"	1'-1"			
ED587	5	6	3'-8"	STR						THREAD ONE END 3"
ED588	5	4	3'-7"	STR						
ED589	5	4	3'-2"	78	9"	2'-5"	1'-8 1/2"			
ED590	5	8	3'-2"	STR						THREAD ONE END 3"
ED591	5	2	2'-1"	STR						
ED592	5	8	1'-8"	STR						
ED593	5	6	38'-8"	STR						
ED594	5	2	12'-9"	STR						
ED595	5	2	9'-3"	STR						
ED596	5	2	3'-1"	STR						
ED670	6	30	6'-4"	STR						THREAD ONE END 3"
ED671	6	7	8'-7"	STR						
ED672	6	63	5'-6"	73	8"	3'-10"	1'-0"			
ED673	6	2	38'-7"	STR						

MARK	SIZE	NO REQ'D	LENGTH	TYPE	A	B	C	D	E	REMARKS
					CONTINUITY DIAPHRAGMS					
ED410	4	36	10'-3"	31	4'-0"	2'-3"	4'-0"			
ED411	4	36	6'-7"	31	2'-2"	2'-3"	2'-2"			
ED412	4	36	8'-5"	31	3'-1"	2'-3"	3'-1"			
ED413	4	8	2'-3"	STR						
ED510	5	96	6'-5"	STR						THREAD ONE END 3"
ED511	5	32	6'-0"	STR						
ED512	5	50	10'-3"	31	4'-0"	2'-3"	4'-0"			
ED513	5	24	6'-7"	31	2'-2"	2'-3"	2'-2"			
ED514	5	4	7'-9"	31	2'-9"	2'-3"	2'-9"			
ED515	5	2	6'-8"	2	2'-3"	7"	2'-3"	7"	6"	
ED516	5	4	6'-7"	31	2'-2"	2'-3"	2'-2"			
ED517	5	8	5'-11"	31	1'-10"	2'-3"	1'-10"			
ED518	5	2	5'-7"	STR						THREAD ONE END 3"
ED519	5	2	2'-5"	STR						THREAD ONE END 3"
ED520	5	4	4'-2"	STR						THREAD ONE END 3"
ED521	5	8	3'-8"	STR						THREAD ONE END 3"
ED522	5	2	4'-2"	STR						
ED523	5	2	1'-0"	STR						
ED524	5	4	2'-11"	STR						
ED525	5	4	2'-8"	78	9"	1'-11"	1'-4 1/4"			
ED526	5	8	2'-7"	STR						
ED527	5	8	3'-7"	STR						
ED528	5	4	3'-6"	STR						
ED529	5	16	2'-2"	77	1'-2"	1'-0"				THREAD "A" 3"
					INTERMEDIATE DIAPHRAGMS					
ED400	4	260	4'-7"	31	2'-0"	7"	2'-0"			
ED401	4	52	3'-1"	31	1'-3"	7"	1'-3"			
ED500	5	56	4'-7"	31	2'-0"	7"	2'-0"			
ED501	5	4	3'-7"	31	1'-6"	7"	1'-6"			
ED502	5	200	6'-5"	STR						THREAD ONE END 3"
ED503	5	8	4'-2"	STR						THREAD ONE END 3"
ED504	5	8	2'-7"	STR						
ED505	5	8	2'-0"	78	6"	1'-6"	12 3/4"			
ED600	6	56	6'-4"	STR						THREAD ONE END 3"



NOTES:

1. "E" PREFIX IN BAR MARK DENOTES EPOXY COATED BARS.
2. ALL DIMENSIONS ARE OUT TO OUT OF BAR EXCEPT "A" & "C" ON STANDARD 135° AND 180° HOOKS, UNLESS NOTED.
3. FOR REINFORCEMENT BAR FABRICATION DETAILS, REFER TO STANDARD DRAWING BC-736M.
4. FIGURES IN CIRCLE REPRESENT BAR TYPES.
5. "J" DIMENSIONS ON 180° HOOKS ARE SHOWN ONLY WHERE NECESSARY TO RESTRICT HOOK SIZE, OTHERWISE STANDARD HOOKS ARE TO BE USED.
6. RADIUS, "R" IS TO THE INSIDE OF THE BAR.
7. REINFORCEMENT BAR SCHEDULE IS FOR INFORMATION ONLY. VERIFY INFORMATION BEFORE FABRICATION.

REFERENCES:

	SHEETS:
GENERAL NOTES	3 - 4
DIAPHRAGM DRAWINGS	46 - 56

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0123 MPMS/ECMS PROJ: 97828 BRKEY: 67418

HNTB

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0123 SEG 0051 OFFSET 0123
SR 3007 (19TH STREET) STA 100+84.74
OVER SR 0083 AND SR 8019 (RAMP T)
2-SPAN CONTINUOUS COMPOSITE PS CONCRETE PA BULB-TEE BEAM BRIDGE
SUPERSTRUCTURE REBAR SCHEDULE 1

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — JUSTIN ROBERT MCCARTHY — ENGINEER PE076998

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

RECOMMENDED 12-6-2022

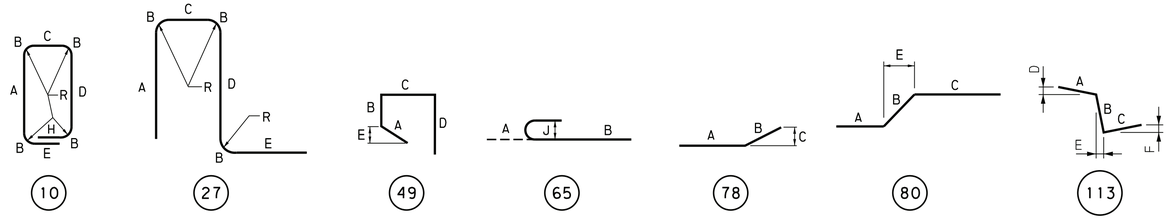
SHEET 57 OF 78

S-39453

6/28/2022
FILENAME 63016-s-brB3-bar05.dgn

DES: MCA	DES CKD: JRM	DWG: MCA	DWG CKD: JRM

MARK	SIZE	NO REQ'D	LENGTH	TYPE	A	B	C	D	E	REMARKS
DECK										
ES300	3	86	5'-8"	STR						BEND IN FIELD
ES400	4	162	40'-0"	STR						
ES401	4	162	40'-0"	STR						
ES402	4	474	7'-9"	27	2'-7"	4"	3"	2'-4 1/2"	1'-6"	R = 2"
ES403	4	2	8'-0"	STR						
ES404	4	4	23'-6"	STR						
ES405	4	2	30'-0"	STR						
ES406	4	10	6'-9 1/2"	49	1'-10"	1'-1"	1'-4 1/2"	2'-6"	1'-3 1/2"	
ES500	5	425	34'-3"	STR						
ES501	5	425	39'-8"	STR						
ES502	5	256	40'-9"	STR						
ES503	5	256	42'-7"	STR						
ES504	5	7	6'-3"	STR						
ES505	5	24	7'-2"	STR						
ES506	5	392	7'-0"	113	3'-0"	1'-0"	3'-0"	1/2"	1 1/2"	F = 1 1/2"
ES507	5	10	6'-10 1/2"	113	3'-0"	10 1/2" TO	3'-0"	1/2"	1 5/16" TO	VARY B 1/2" EACH,
			TO 7'-0 1/2"			1'-0 1/2"			1 9/16"	VARY E 1/16" EACH,
										F = 1 1/2"
ES508	5	2	2'-9"	STR						
ES600	6	928	40'-7"	65	8"	39'-11"				J = 6"
ES601	6	928	9'-4"	65	8"	8'-8"				J = 6"
ES602	6	128	52'-6"	STR						
ES603	6	128	15'-1"	STR						
ES604	6	7	6'-3"	STR						
ES605	6	18	39'-11"	STR						
ES606	6	6	2'-9"	STR						
ES800	8	161	55'-0"	STR						
ES801	8	161	16'-2"	STR						
EC400	4	474	7'-10"	10	2'-9"	4"	3"	2'-9"	5 1/2"	H = 3", R = 2"
EC401	4	132	34'-2"	STR						
EC402	4	22	6'-9"	78	4'-8"	2'-1"	2 1/2"			
EC500	5	48	51'-4"	STR						
EC501	5	6	22'-8 3/4"	80	4'-1 1/2"	15'-0 1/4"	3'-7"		15'-0"	
EC502	5	6	24'-0 3/4"	80	5'-5 1/2"	15'-0 1/4"	3'-7"		15'-0"	
EC503	5	402	9'-6"	STR						
EC600	6	32	51'-11"	STR						
EC601	6	4	23'-5 3/4"	80	4'-1 1/2"	15'-0 1/4"	4'-4"		15'-0"	
EC602	6	4	24'-9 3/4"	80	5'-5 1/2"	15'-0 1/4"	4'-4"		15'-0"	



NOTES:

1. "E" PREFIX IN BAR MARK DENOTES EPOXY COATED BARS.
2. ALL DIMENSIONS ARE OUT TO OUT OF BAR EXCEPT "A" & "C" ON STANDARD 135° AND 180° HOOKS, UNLESS NOTED.
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7. REINFORCEMENT BAR SCHEDULE IS FOR INFORMATION ONLY. VERIFY INFORMATION BEFORE FABRICATION.

REFERENCES:	SHEETS:
GENERAL NOTES	3 - 4
SLAB DRAWINGS	39 - 44

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0123 MPMS/ECMS PROJ: 97828 BRKEY: 67418

HNTB

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — JUSTIN ROBERT MCCARTHY — ENGINEER — PE076998

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0123 SEG 0051 OFFSET 0123
SR 3007 (19TH STREET) STA 100+84.74
OVER SR 0083 AND SR 8019 (RAMP T)
2-SPAN CONTINUOUS COMPOSITE PS CONCRETE PA BULB-TEE BEAM BRIDGE
SUPERSTRUCTURE REBAR SCHEDULE 2

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

RECOMMENDED 12-6-2022

SHEET 58 OF 78

S-39453

6/28/2022
FILENAME: 63016-s-brB3-bar06.dgn

DES: MCA	DES CKD: JRM	DWG: MCA	DWG CKD: JRM

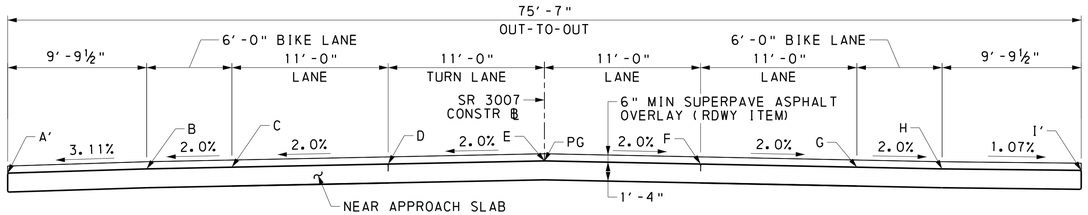
FINISHED DECK ELEVATIONS AT TENTH POINTS ON ℄ BEAM

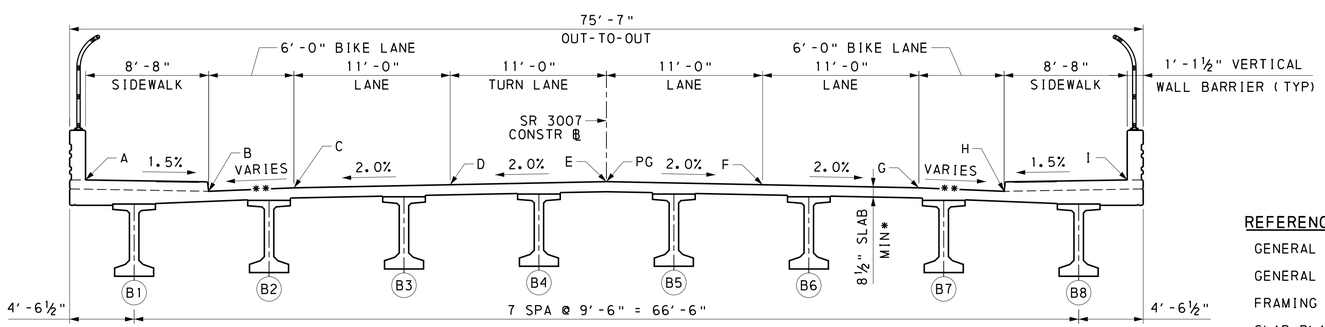
	LOCATION	BEAM B1		BEAM B2		BEAM B3		BEAM B4		BEAM B5		BEAM B6		BEAM B7		BEAM B8	
		STATION	ELEV	STATION	ELEV	STATION	ELEV	STATION	ELEV	STATION	ELEV	STATION	ELEV	STATION	ELEV	STATION	ELEV
SPAN 1	℄ BRG ABUT 1	99+85.01	385.98	99+83.50	385.93	99+82.00	386.05	99+80.49	386.17	99+78.98	386.10	99+77.48	385.84	99+75.97	385.58	99+74.46	385.42
	0.1L	99+95.44	386.70	99+93.93	386.41	99+92.42	386.53	99+90.92	386.65	99+89.41	386.58	99+87.90	386.32	99+86.39	386.05	99+84.89	386.22
	0.2L	100+05.86	387.53	100+04.35	386.87	100+02.85	387.02	100+01.34	387.14	99+99.83	387.07	99+98.33	386.81	99+96.82	386.52	99+95.31	387.04
	0.3L	100+16.29	387.99	100+14.78	387.35	100+13.27	387.50	100+11.77	387.62	100+10.26	387.55	100+08.75	387.29	100+07.24	387.00	100+05.74	387.50
	0.4L	100+26.71	388.47	100+25.20	387.83	100+23.70	387.98	100+22.19	388.10	100+20.68	388.03	100+19.18	387.77	100+17.67	387.48	100+16.16	387.98
	0.5L	100+37.14	388.96	100+35.63	388.31	100+34.12	388.47	100+32.62	388.59	100+31.11	388.52	100+29.60	388.26	100+28.09	387.96	100+26.59	388.47
	0.6L	100+47.56	389.44	100+46.05	388.80	100+44.55	388.95	100+43.04	389.07	100+41.53	389.00	100+40.03	388.74	100+38.52	388.45	100+37.01	388.95
	0.7L	100+57.99	389.92	100+56.48	389.28	100+54.97	389.43	100+53.47	389.55	100+51.96	389.48	100+50.45	389.22	100+48.94	388.93	100+47.44	389.43
	0.8L	100+68.41	390.41	100+66.90	389.76	100+65.40	389.92	100+63.89	390.04	100+62.38	389.97	100+60.88	389.71	100+59.37	389.41	100+57.86	389.92
	0.9L	100+78.84	390.89	100+77.33	390.25	100+75.82	390.40	100+74.32	390.52	100+72.81	390.45	100+71.30	390.19	100+69.79	389.90	100+68.29	390.40
	℄ BRG PIER	100+89.26	391.37	100+87.75	390.73	100+86.25	390.88	100+84.74	391.00	100+83.23	390.93	100+81.73	390.68	100+80.22	390.38	100+78.71	390.88
SPAN 2	℄ BRG PIER	100+90.76	391.44	100+89.25	390.80	100+87.75	390.95	100+86.24	391.07	100+84.73	391.00	100+83.23	390.74	100+81.72	390.45	100+80.21	390.95
	0.1L	101+01.49	391.94	100+99.98	391.30	100+98.47	391.45	100+96.97	391.57	100+95.46	391.50	100+93.95	391.24	100+92.44	390.95	100+90.94	391.45
	0.2L	101+12.21	392.44	101+10.70	391.79	101+09.20	391.95	101+07.69	392.07	101+06.18	392.00	101+04.68	391.74	101+03.17	391.44	101+01.66	391.95
	0.3L	101+22.94	392.92	101+21.43	392.28	101+19.92	392.44	101+18.42	392.56	101+16.91	392.50	101+15.40	392.24	101+13.89	391.94	101+12.39	392.45
	0.4L	101+33.66	393.37	101+32.15	392.73	101+30.65	392.90	101+29.14	393.03	101+27.63	392.96	101+26.13	392.71	101+24.62	392.42	101+23.11	392.93
	0.5L	101+44.39	393.77	101+42.88	393.14	101+41.37	393.31	101+39.87	393.44	101+38.36	393.39	101+36.85	393.14	101+35.34	392.86	101+33.84	393.37
	0.6L	101+55.11	394.12	101+53.60	393.50	101+52.10	393.68	101+50.59	393.82	101+49.08	393.77	101+47.58	393.53	101+46.07	393.25	101+44.56	393.77
	0.7L	101+65.84	394.43	101+64.33	393.82	101+62.82	394.00	101+61.32	394.15	101+59.81	394.10	101+58.30	393.87	101+56.79	393.60	101+55.29	394.13
	0.8L	101+76.56	394.70	101+75.05	394.09	101+73.55	394.28	101+72.04	394.43	101+70.53	394.40	101+69.03	394.17	101+67.52	393.90	101+66.01	394.44
	0.9L	101+87.29	394.92	101+85.78	394.32	101+84.27	394.51	101+82.77	394.67	101+81.26	394.64	101+79.75	394.42	101+78.24	394.16	101+76.74	394.70
	℄ BRG ABUT 2	101+98.01	395.10	101+96.50	394.50	101+95.00	394.70	101+93.49	394.87	101+91.98	394.85	101+90.48	394.63	101+88.97	394.38	101+87.46	394.92

FINISHED NEAR APPR SLAB ELEVATIONS AT BREAK POINTS

STATION	A′	B	C	D	E (PGL)	F	G	H	I′
99+48.00	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	383.59
99+49.56	- - -	- - -	- - -	- - -	- - -	- - -	- - -	383.77	383.67
99+50.00	- - -	- - -	- - -	- - -	- - -	- - -	- - -	383.79	383.69
99+50.51	- - -	- - -	- - -	- - -	- - -	- - -	383.93	383.81	383.71
99+52.25	- - -	- - -	- - -	- - -	- - -	384.24	384.02	383.90	383.79
99+54.00	- - -	- - -	- - -	- - -	384.54	384.32	384.10	383.98	383.87
99+55.74	- - -	- - -	- - -	384.40	384.62	384.40	384.18	384.06	383.95
99+57.49	- - -	- - -	384.26	384.48	384.70	384.48	384.26	384.14	384.03
99+58.44	- - -	384.18	384.30	384.52	384.74	384.52	384.30	384.18	384.08
99+59.99	383.95	384.25	384.37	384.59	384.81	384.59	384.37	384.25	384.15
99+60.00	383.95	384.25	384.37	384.59	384.81	384.59	384.37	384.25	384.15
99+70.00	384.41	384.72	384.84	385.06	385.28	385.06	384.84	384.72	384.61
99+73.00	384.55	384.86	384.98	385.20	385.42	385.20	384.98	384.86	384.75
99+74.56	384.63	384.93	385.05	385.27	385.49	385.27	385.05	384.93	- - -
99+75.51	384.67	384.97	385.09	385.31	385.53	385.31	385.09	- - -	- - -
99+77.25	384.75	385.06	385.18	385.40	385.62	385.40	- - -	- - -	- - -
99+79.00	384.83	385.14	385.26	385.48	385.70	- - -	- - -	- - -	- - -
99+80.00	384.88	385.18	385.30	385.52	- - -	- - -	- - -	- - -	- - -
99+80.74	384.91	385.22	385.34	385.56	- - -	- - -	- - -	- - -	- - -
99+82.49	384.99	385.30	385.42	- - -	- - -	- - -	- - -	- - -	- - -
99+83.44	385.04	385.34	- - -	- - -	- - -	- - -	- - -	- - -	- - -
99+84.99	385.11	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -

ELEVATIONS ARE PROVIDED ALONG THE TOP OF THE CONCRETE APPROACH SLAB.





DECK ELEVATIONS DIAGRAMS

2 0 2 4 6 FEET

* INCLUDES ½" INTEGRAL WEARING SURFACE

** SEE NOTES 2 AND 3

NOTES:

1. UTILITIES NOT SHOWN FOR CLARITY.
2. CONSTRUCT LEFT BIKE LANE CROSS SLOPE AS INDICATED BELOW:

   -2.0% STA 99+57.49 TO STA 99+89.53
   VARIES STA 99+89.53 TO STA 100+09.53
   -4.0% STA 100+09.53 TO STA 102+35.59

   PROVIDE A LINEAR TRANSITION WITHIN THE VARIED BIKE LANE CROSS SLOPE REGION.
3. CONSTRUCT RIGHT BIKE LANE CROSS SLOPE AS INDICATED BELOW:

   -2.0% STA 99+49.56 TO STA 99+78.94
   VARIES STA 99+78.94 TO STA 99+98.94
   -4.0% STA 99+98.94 TO STA 102+27.46

   PROVIDE A LINEAR TRANSITION WITHIN THE VARIED BIKE LANE CROSS SLOPE REGION.

REFERENCES:	SHEETS:
GENERAL PLAN	1
GENERAL NOTES	3 - 4
FRAMING PLAN	34
SLAB PLAN	39
SLAB TYPICAL SECTIONS	40 - 41

FINISHED DECK ELEVATIONS AT BREAK POINTS

STATION	A	B	C	D	E (PGL)	F	G	H	I
99+73.18	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	385.33
99+74.56	- - -	- - -	- - -	- - -	- - -	- - -	- - -	385.43	385.43
99+75.51	- - -	- - -	- - -	- - -	- - -	- - -	385.59	385.47	385.50
99+77.25	- - -	- - -	- - -	- - -	- - -	385.90	385.68	385.56	385.63
99+79.00	- - -	- - -	- - -	- - -	386.20	385.98	385.76	385.64	385.77
99+80.00	- - -	- - -	- - -	- - -	386.24	386.02	385.80	385.68	385.85
99+80.74	- - -	- - -	- - -	386.06	386.28	386.06	385.84	385.71	385.92
99+82.49	- - -	- - -	385.92	386.14	386.36	386.14	385.92	385.78	386.06
99+83.44	- - -	385.84	385.96	386.18	386.40	386.18	385.96	385.81	386.14
99+84.82	385.89	385.91	386.03	386.25	386.47	386.25	386.03	385.87	386.26
99+90.00	386.29	386.14	386.27	386.49	386.71	386.49	386.27	386.08	386.70
100+00.00	387.14	386.55	386.73	386.95	387.17	386.95	386.73	386.49	387.29
100+10.00	387.75	386.95	387.19	387.41	387.63	387.41	387.19	386.95	387.75
100+20.00	388.21	387.42	387.66	387.88	388.10	387.88	387.66	387.42	388.21
100+30.00	388.68	387.88	388.12	388.34	388.56	388.34	388.12	387.88	388.68
100+40.00	389.14	388.34	388.58	388.80	389.02	388.80	388.58	388.34	389.14
100+50.00	389.60	388.81	389.05	389.27	389.49	389.27	389.05	388.81	389.60
100+60.00	390.07	389.27	389.51	389.73	389.95	389.73	389.51	389.27	390.07
100+70.00	390.53	389.74	389.98	390.20	390.42	390.20	389.98	389.74	390.53
100+80.00	391.00	390.20	390.44	390.66	390.88	390.66	390.44	390.20	391.00
100+90.00	391.46	390.66	390.90	391.12	391.34	391.12	390.90	390.66	391.46
101+00.00	391.92	391.13	391.37	391.59	391.81	391.59	391.37	391.13	391.92
101+10.00	392.39	391.59	391.83	392.05	392.27	392.05	391.83	391.59	392.39
101+20.00	392.85	392.05	392.29	392.51	392.73	392.51	392.29	392.05	392.85
101+30.00	393.27	392.48	392.72	392.94	393.16	392.94	392.72	392.48	393.27
101+40.00	393.66	392.86	393.10	393.32	393.54	393.32	393.10	392.86	393.66
101+50.00	394.01	393.21	393.45	393.67	393.89	393.67	393.45	393.21	394.01
101+60.00	394.32	393.52	393.76	393.98	394.20	393.98	393.76	393.52	394.32
101+70.00	394.59	393.80	394.04	394.26	394.48	394.26	394.04	393.80	394.59
101+80.00	394.83	394.03	394.27	394.49	394.71	394.49	394.27	394.03	394.83
101+87.53	394.98	394.18	394.42	394.64	394.86	394.64	394.42	394.18	394.98
101+88.91	395.00	394.21	394.45	394.67	394.89	394.67	394.45	394.21	395.00
101+89.86	395.02	394.22	394.46	394.68	394.90	394.68	394.46	394.22	395.02
101+90.00	395.02	394.23	394.47	394.69	394.91	394.69	394.47	394.23	395.02
101+91.60	395.05	394.25	394.49	394.71	394.93	394.71	394.49	394.25	395.05
101+93.35	395.08	394.28	394.52	394.74	394.96	394.74	394.52	394.28	395.08
101+95.09	395.11	394.31	394.55	394.77	394.99	394.77	394.55	394.31	395.11
101+96.84	395.13	394.34	394.58	394.80	395.02	394.80	394.58	394.34	395.13
101+97.79	395.15	394.35	394.59	394.81	395.03	394.81	394.59	394.35	395.15
101+99.17	395.17	394.37	394.61	394.83	395.05	394.83	394.61	394.37	395.17
102+00.00	395.18	394.38	394.62	394.84	395.06	394.84	394.62	394.38	395.18
102+10.00	395.30	394.50	394.74	394.96	395.18	394.96	394.74	394.50	395.30
102+20.00	395.38	394.58	394.82	395.04	395.26	395.04	394.82	394.58	395.38
102+25.14	395.40	394.61	394.85	395.07	395.29	395.07	394.85	394.61	395.40
102+26.51	395.41	394.61	394.85	395.07	395.29	395.07	394.85	394.61	- - -
102+27.46	395.41	394.61	394.85	395.07	395.29	395.07	394.85	- - -	- - -
102+29.21	395.41	394.62	394.86	395.08	395.30	395.08	- - -	- - -	- - -
102+30.00	395.42	394.62	394.86	395.08	395.30	- - -	- - -	- - -	- - -
102+30.95	395.42	394.62	394.86	395.08	395.30	- - -	- - -	- - -	- - -
102+32.70	395.42	394.63	394.87	395.09	- - -	- - -	- - -	- - -	- - -
102+34.44	395.42	394.63	394.87	- - -	- - -	- - -	- - -	- - -	- - -
102+35.39	395.42	394.63	- - -	- - -	- - -	- - -	- - -	- - -	- - -
102+36.77	395.42	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -

ELEVATIONS GIVEN AT THE LAST STATION FOR EACH BREAK POINT ARE LOCATED AT THE END FAR APPROACH SLAB.

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0123 MPMS/ECMS PROJ: 97828 BRKEY: 67418

HNTB

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0123 SEG 0051 OFFSET 0123
SR 3007 (19TH STREET) STA 100+84.74
OVER SR 0083 AND SR 8019 (RAMP T)
2-SPAN CONTINUOUS COMPOSITE PS CONCRETE PA BULB-TEE BEAM BRIDGE
DECK ELEVATIONS

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL JUSTIN ROBERT MCCARTHY ENGINEER PE076998

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

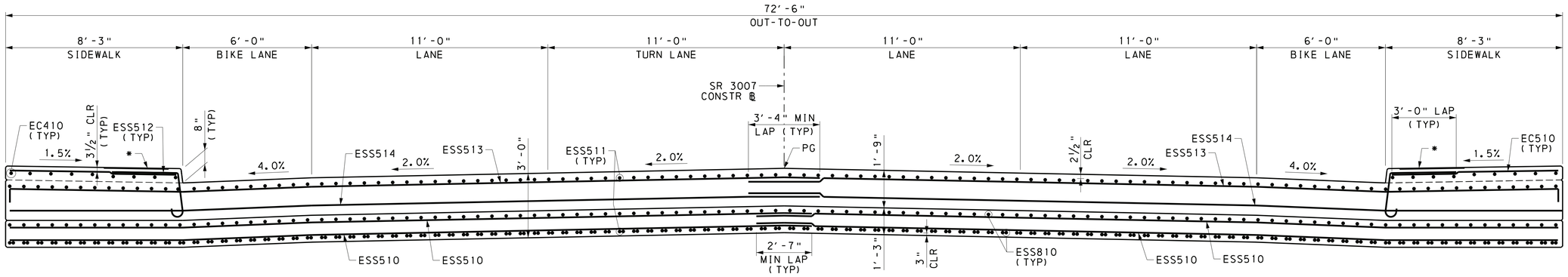
RECOMMENDED 12-6-2022

SHEET 59 OF 78

S-39453

6/28/2022
FILENAME: 63016-s-brB3-dek01.dgn

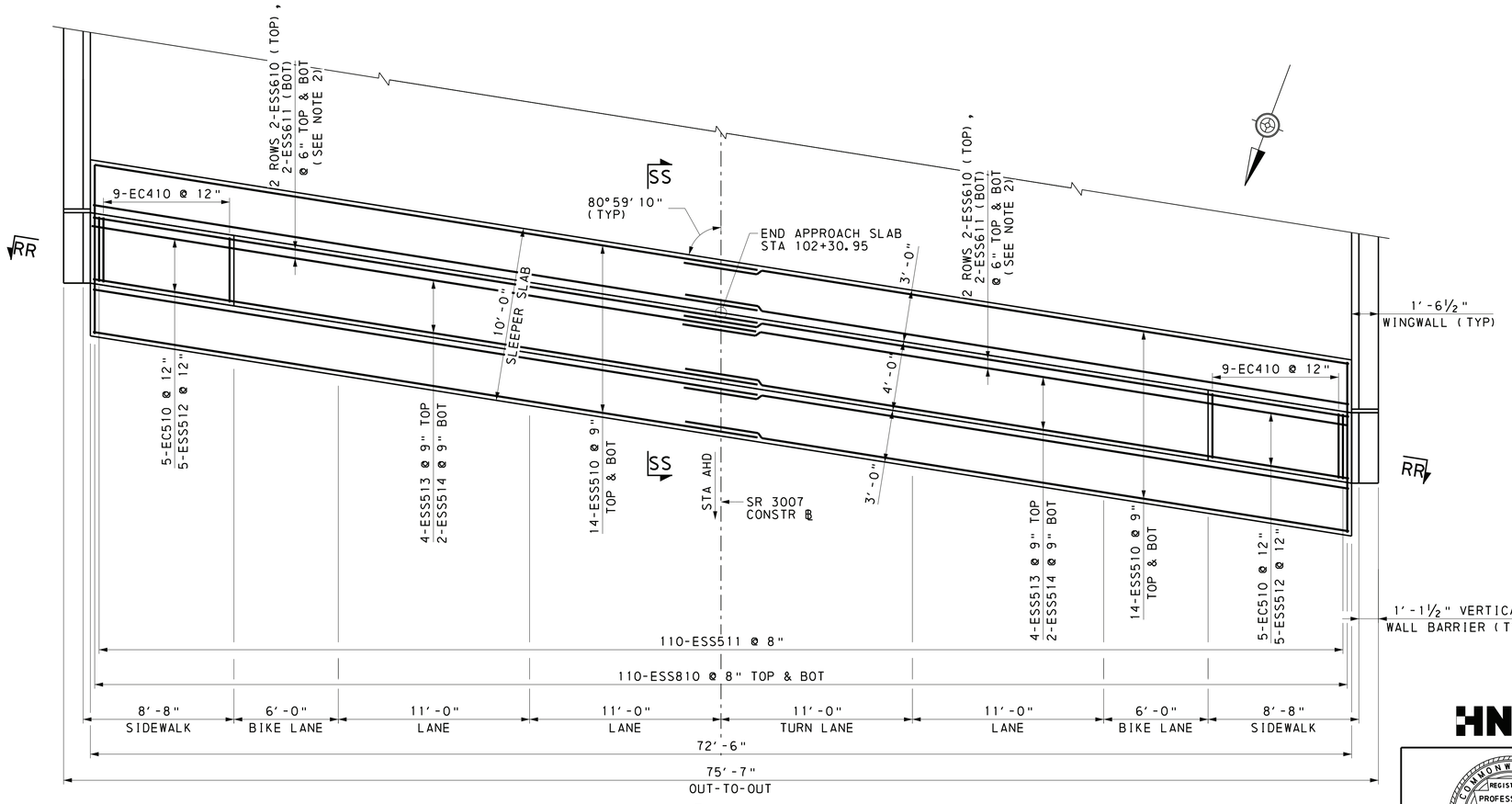
DES: MCA	DES CKD: JMA	DWG: SMZ	DWG CKD: JRM



* 3'-0" STAMPED AND STAINED CONCRETE BRICK PATTERN (SEE SHEET 44)

SECTION RR-RR

1 0 1 2 3 FEET



PLAN

2 0 2 4 FEET

(FAR APPROACH SLAB NOT SHOWN FOR CLARITY)

NOTES:

1. REFER TO SHEET 66 FOR SECTION SS-SS.
2. PROVIDE 3'-11" MINIMUM LAP FOR #6 SLEEPER SLAB BARS.

REFERENCES:

	SHEETS:
GENERAL PLAN	1
GENERAL NOTES	3 - 4
FAR APPROACH SLAB PLAN	62
FAR APPROACH SLAB SECTIONS	64
APPROACH SLAB DETAILS	65 - 67

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0123 MPMS/ECMS PROJ: 97828 BRKEY: 67418

HNTB

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL JUSTIN ROBERT MCCARTHY ENGINEER PE076998

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0123 SEG 0051 OFFSET 0123
SR 3007 (19TH STREET) STA 100+84.74
OVER SR 0083 AND SR 8019 (RAMP T)
2-SPAN CONTINUOUS COMPOSITE PS CONCRETE PA BULB-TEE BEAM BRIDGE
FAR SLEEPER SLAB PLAN

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

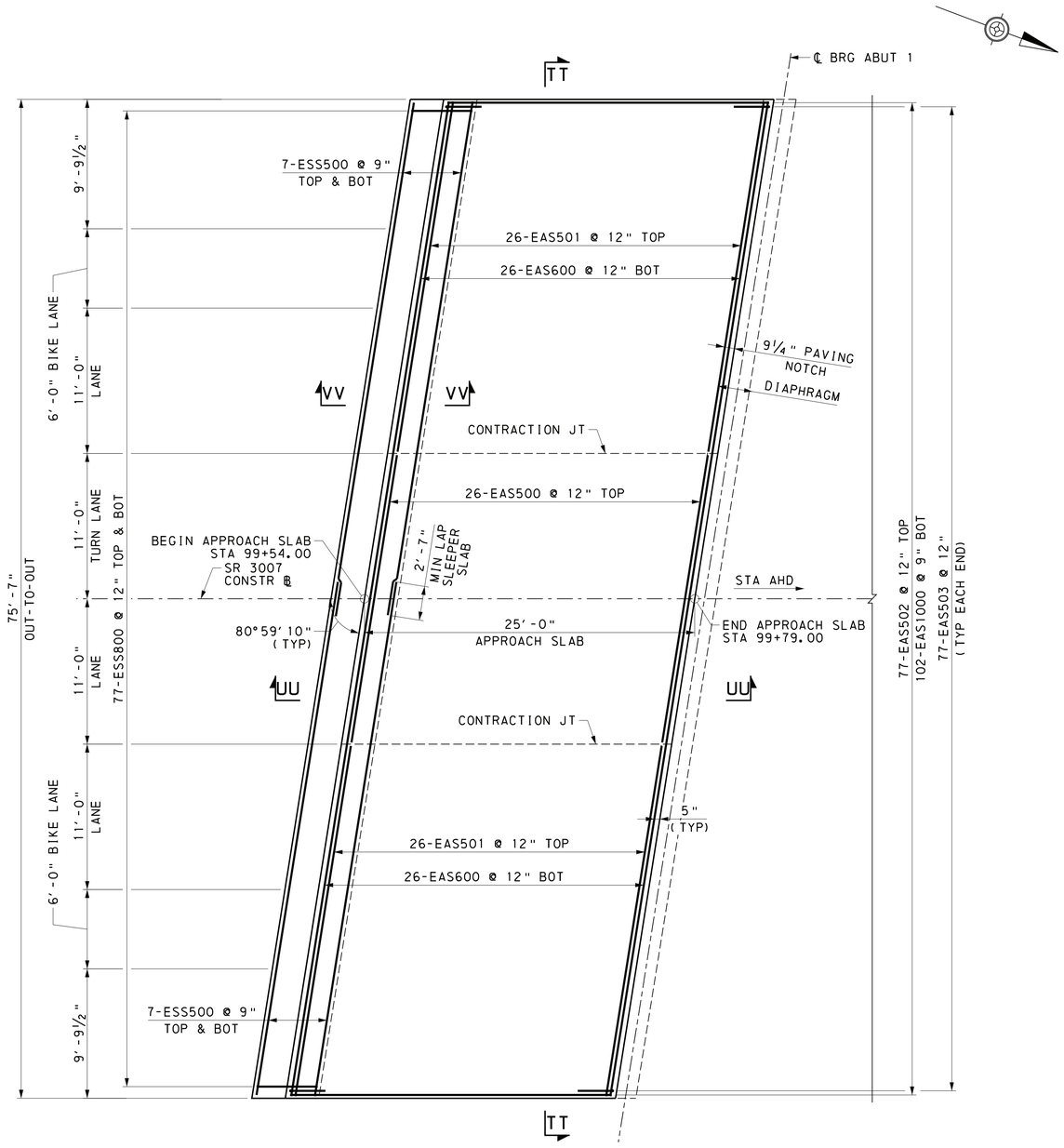
RECOMMENDED 12-6-2022

SHEET 60 OF 78

S-39453

6/28/2022
FILENAME 63016-s-brB3-spa01.dgn

DES: MCA	DES CKD: CEK	DWG: JTM	DWG CKD: JRM



PLAN
2 0 2 4 6 FEET

NOTES:

1. CONSTRUCT BRIDGE APPROACH SLAB AFTER THE BRIDGE DECK IS CONSTRUCTED.
2. PLACE CONCRETE IN ONE CONTINUOUS OPERATION, UNLESS OTHERWISE INDICATED OR DIRECTED.
3. TRANSVERSE CONSTRUCTION JOINTS ARE NOT PERMITTED IN THE CONCRETE APPROACH SLAB OR SLEEPER SLAB, UNLESS OTHERWISE INDICATED.
4. BURN OFF, TO TOP OF BEAM, REINFORCEMENT AND/OR LIFTING DEVICES PROTRUDING INTO APPROACH SLAB.

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0123 MPMS/ECMS PROJ: 97828 BRKEY: 67418

REFERENCES:	SHEETS:
GENERAL PLAN	1
GENERAL NOTES	3 - 4
DIAPHRAGM DETAILS	46, 51 - 52
NEAR APPROACH SLAB SECTIONS	63
APPROACH SLAB DETAILS	65 - 67

HNTB

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — JUSTIN ROBERT MCCARTHY — ENGINEER — PE076998

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0123 SEG 0051 OFFSET 0123
SR 3007 (19TH STREET) STA 100+84.74
OVER SR 0083 AND SR 8019 (RAMP T)
2-SPAN CONTINUOUS COMPOSITE PS CONCRETE PA BULB-TEE BEAM BRIDGE
NEAR APPROACH SLAB PLAN

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

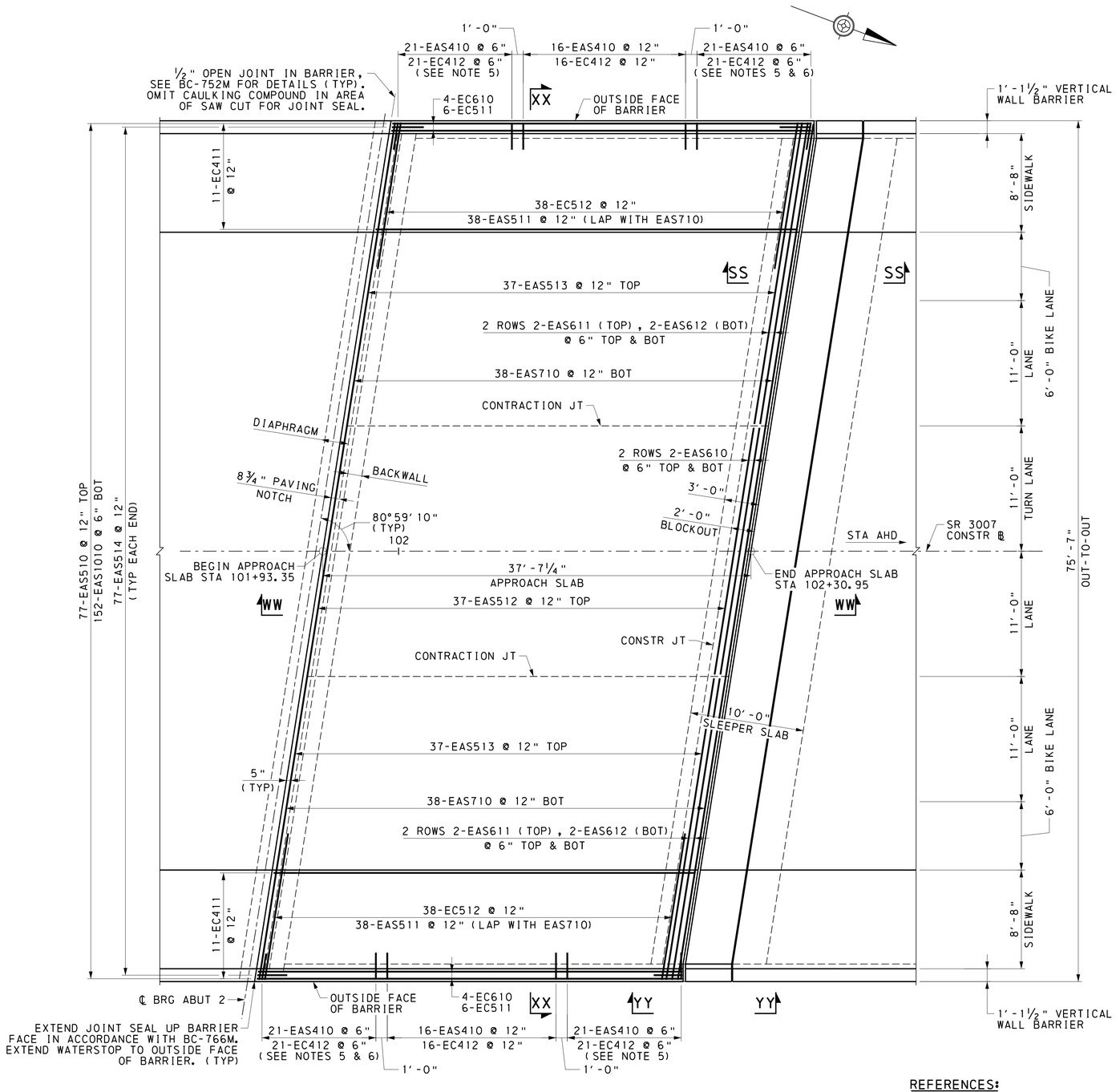
RECOMMENDED 12-6-2022

SHEET 61 OF 78

S-39453

6/28/2022
FILENAME 63016-s-brB3-ops01.dgn

DES: MCA	DES CKD: JRM	DWG: JTM	DWG CKD: JRM



PLAN
2 0 2 4 6 FEET

NOTES:

1. CONSTRUCT BRIDGE APPROACH SLAB AFTER THE BRIDGE DECK IS CONSTRUCTED.
2. PLACE CONCRETE IN ONE CONTINUOUS OPERATION, UNLESS OTHERWISE INDICATED OR DIRECTED.
3. TRANSVERSE CONSTRUCTION JOINTS ARE NOT PERMITTED IN THE CONCRETE APPROACH SLAB OR SLEEPER SLAB, UNLESS OTHERWISE INDICATED.
4. BURN OFF, TO TOP OF BEAM, REINFORCEMENT AND/OR LIFTING DEVICES PROTRUDING INTO APPROACH SLAB.
5. PROVIDE ONE ADDITIONAL EC412 BAR ON EACH SIDE OF LIGHTING BLOCKOUT (LAP WITH EAS410). ADJUST REINFORCEMENT AS REQUIRED TO ACCOMMODATE PLACEMENT OF JUNCTION BOXES AND LIGHTING BLOCKOUTS.
6. SPLAY THE LAST FOUR EAS410 BARS ADJACENT TO END OF APPROACH SLAB AS REQUIRED TO ACCOMMODATE PLACEMENT. MINIMUM ALLOWABLE SPLAYED SPACING IS 4".

REFERENCES:	SHEETS:
GENERAL PLAN	1
GENERAL NOTES	3 - 4
DIAPHRAGM DETAILS	47, 53 - 55
FAR SLEEPER SLAB PLAN	60
FAR APPROACH SLAB SECTIONS	64
APPROACH SLAB DETAILS	65 - 67

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0123 MPMS/ECMS PROJ: 97828 BRKEY: 67418

HNTB

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0123 SEG 0051 OFFSET 0123
SR 3007 (19TH STREET) STA 100+84.74
OVER SR 0083 AND SR 8019 (RAMP T)
2-SPAN CONTINUOUS COMPOSITE PS CONCRETE PA BULB-TEE BEAM BRIDGE
FAR APPROACH SLAB PLAN

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — JUSTIN ROBERT MCCARTHY — ENGINEER PE076998

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

RECOMMENDED 12-6-2022

SHEET 62 OF 78

S-39453

6/28/2022
FILENAME 63016-s-brB3-ops02.dgn

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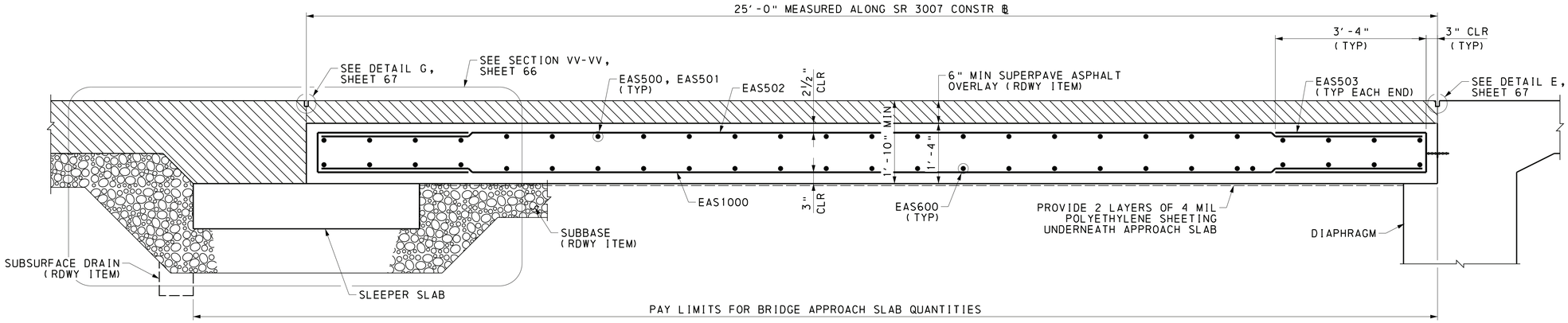
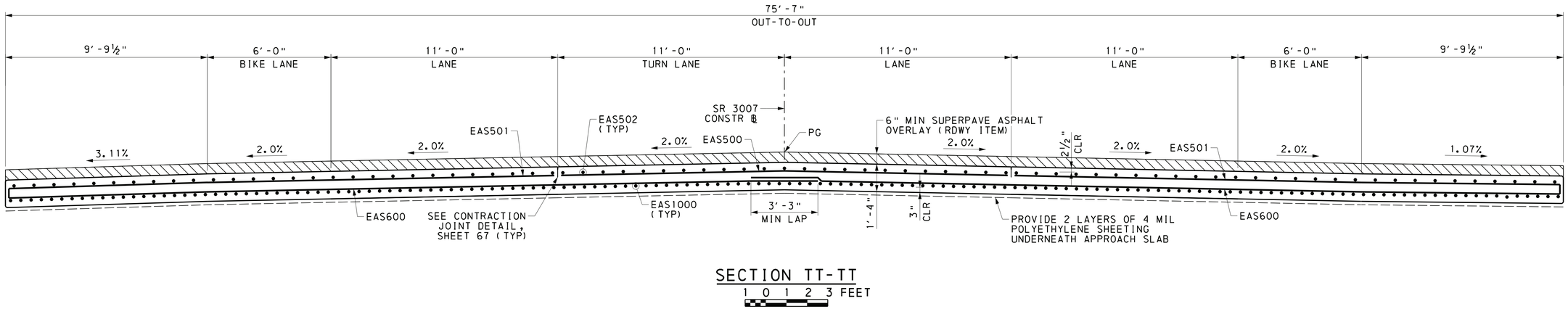


SECTION UU-UU

12 0 12 INCHES



SECTION TT-TT

1 0 1 2 3 FEET

REFERENCES:	SHEETS:
GENERAL PLAN	1
GENERAL NOTES	3 - 4
DIAPHRAGM DETAILS	46, 51 - 52
NEAR APPROACH SLAB PLAN	61
APPROACH SLAB DETAILS	65 - 67

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0123 MPMS/ECMS PROJ: 97828 BRKEY: 67418

HNTB

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
JUSTIN ROBERT MCCARTHY
ENGINEER
PE076998

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

DAUPHIN COUNTY
SR 0083 SECTION 079

SEG 0050 OFFSET 0123 SEG 0051 OFFSET 0123
SR 3007 (19TH STREET) STA 100+84.74
OVER SR 0083 AND SR 8019 (RAMP T)

2-SPAN CONTINUOUS COMPOSITE PS CONCRETE PA BULB-TEE BEAM BRIDGE

NEAR APPROACH SLAB SECTIONS

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

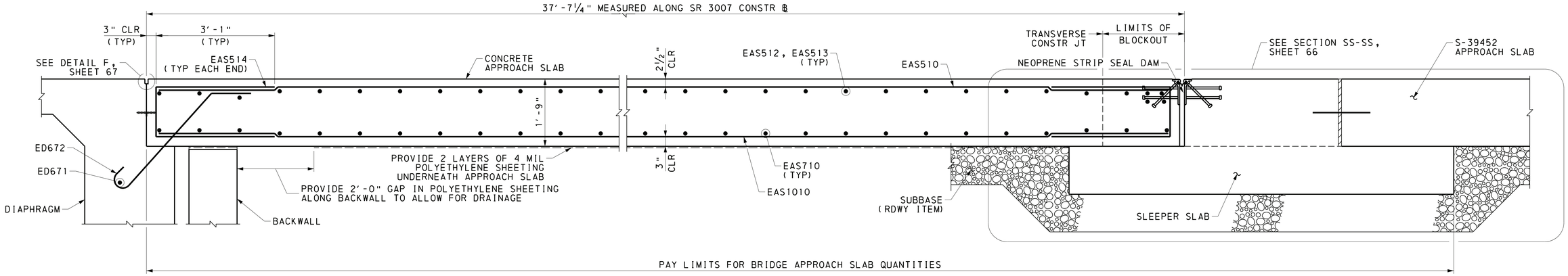
RECOMMENDED 12-6-2022

SHEET 63 OF 78

S-39453

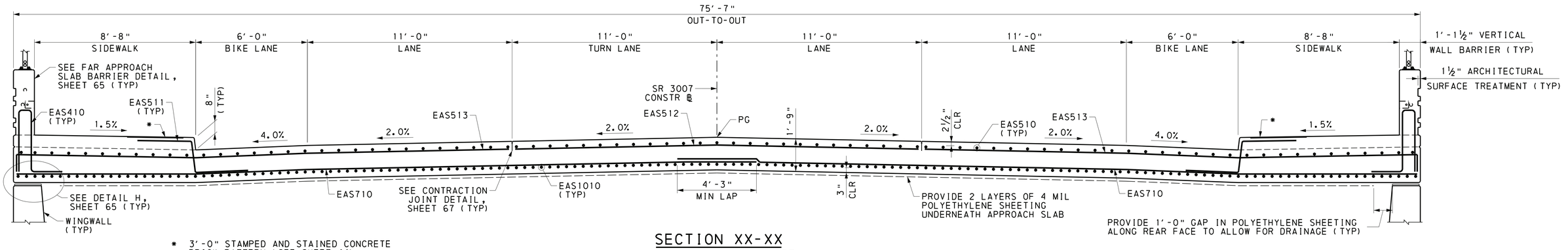
6/28/2022
FILENAME 63016-s-brB3-ops03.dgn

DES: MCA	DES CKD: JRM	DWG: JTM	DWG CKD: JRM



SECTION WW-WW

12 0 12 INCHES



* 3'-0" STAMPED AND STAINED CONCRETE BRICK PATTERN (SEE SHEET 44)

SECTION XX-XX

1 0 1 2 3 FEET

NOTE:

1. BARRIER AND SIDEWALK REINFORCEMENT NOT SHOWN FOR CLARITY.

REFERENCES:

	SHEETS:
GENERAL PLAN	1
GENERAL NOTES	3 - 4
DIAPHRAGM DETAILS	47, 53 - 55
FAR SLEEPER SLAB PLAN	60
FAR APPROACH SLAB PLAN	62
APPROACH SLAB DETAILS	65 - 67
BARRIER ARCHITECTURAL DETAILS	69

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0123 MPMS/ECMS PROJ: 97828 BRKEY: 67418

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COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL JUSTIN ROBERT MCCARTHY ENGINEER PE076998

DAUPHIN COUNTY
SR 0083 SECTION 079
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OVER SR 0083 AND SR 8019 (RAMP T)
2-SPAN CONTINUOUS COMPOSITE PS CONCRETE PA BULB-TEE BEAM BRIDGE
FAR APPROACH SLAB SECTIONS

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

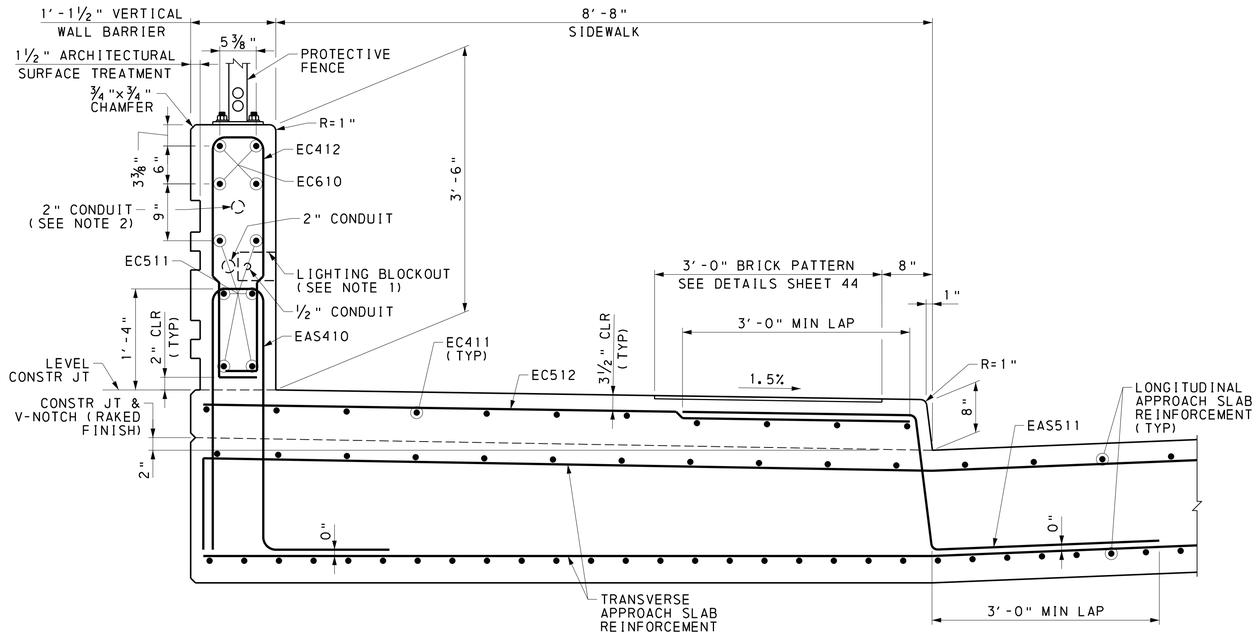
RECOMMENDED 12-6-2022

SHEET 64 OF 78

S-39453

6/28/2022
FILENAME 63016-s-brB3-ops04.dgn

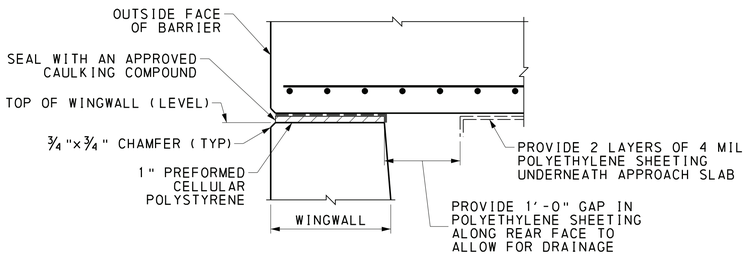
DES: MCA	DES CKD: CEK	DWG: JTM	DWG CKD: JRM



FAR APPROACH SLAB BARRIER DETAIL

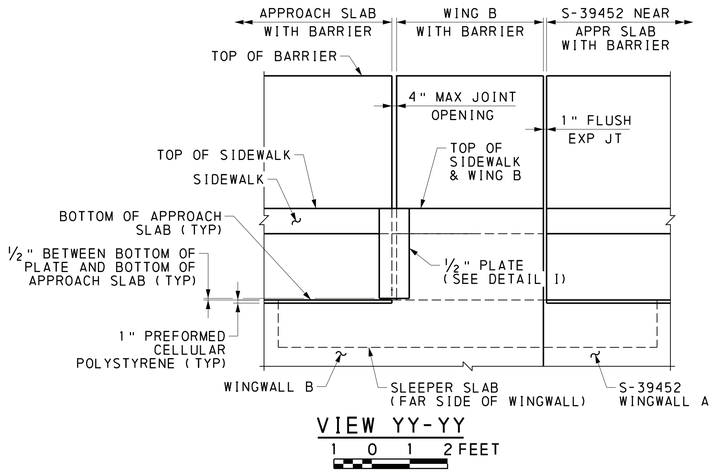
6 0 6 12 INCHES

(LEFT SIDEWALK SHOWN, RIGHT SIDEWALK SIMILAR BY OPPOSITE HAND)



DETAIL H

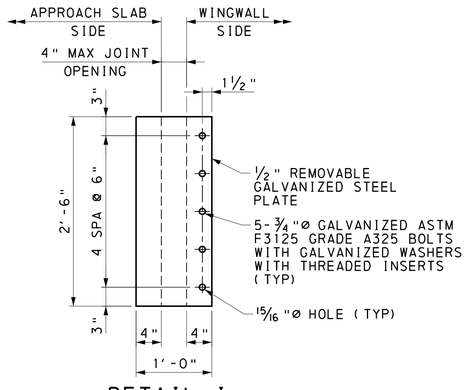
6 0 6 12 INCHES



VIEW YY-YY

1 0 1 2 FEET

(FAR RIGHT SHOWN, FAR LEFT SIMILAR BY OPPOSITE HAND)



DETAIL I

6 0 6 12 INCHES

NOTES:

1. PROVIDE ONE ADDITIONAL EC412 BAR ON EACH SIDE OF BARRIER LIGHTING BLOCKOUT (LAP WITH EAS410). ADJUST REINFORCEMENT AS REQUIRED TO ACCOMMODATE PLACEMENT OF JUNCTION BOXES AND LIGHTING BLOCKOUTS. SEE HIGHWAY LIGHTING ALSO PLAN FOR PLACEMENT OF JUNCTION BOXES AND BARRIER LUMINAIRES.
2. PROVIDE SPECIFIED 2" CONDUIT ALONG LEFT BARRIER ONLY. (RESERVED FOR FUTURE USE BY CITY OF HARRISBURG)

REFERENCES:	SHEETS:
GENERAL PLAN	1
GENERAL NOTES	3 - 4
APPROACH SLAB PLANS	61 - 62
APPROACH SLAB SECTIONS	63 - 64
BARRIER ARCHITECTURAL DETAILS	69

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0123 MPMS/ECMS PROJ: 97828 BRKEY: 67418

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COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — JUSTIN ROBERT MCCARTHY — ENGINEER — PE076998

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0123 SEG 0051 OFFSET 0123
SR 3007 (19TH STREET) STA 100+84.74
OVER SR 0083 AND SR 8019 (RAMP T)
2-SPAN CONTINUOUS COMPOSITE PS CONCRETE PA BULB-TEE BEAM BRIDGE
APPROACH SLAB DETAILS 1

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

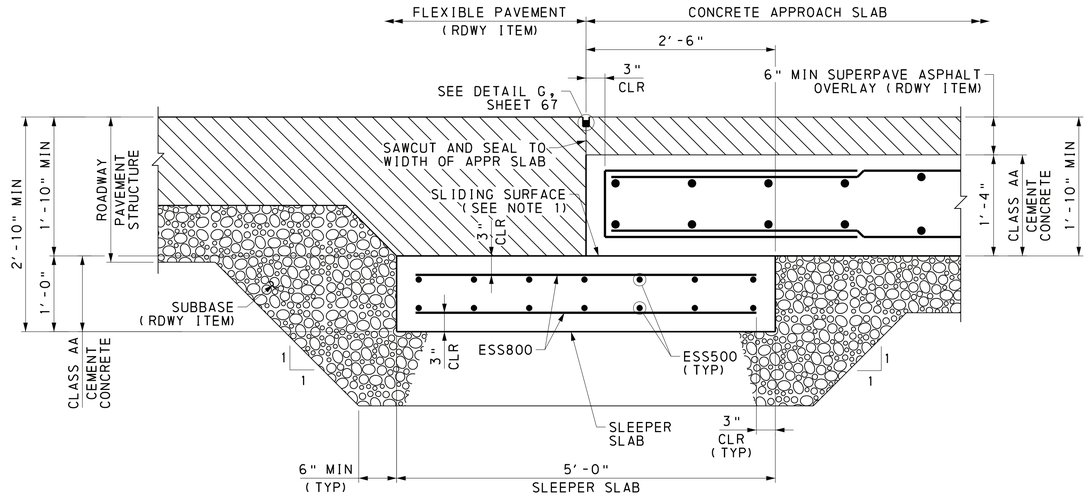
RECOMMENDED 12-6-2022

SHEET 65 OF 78

S-39453

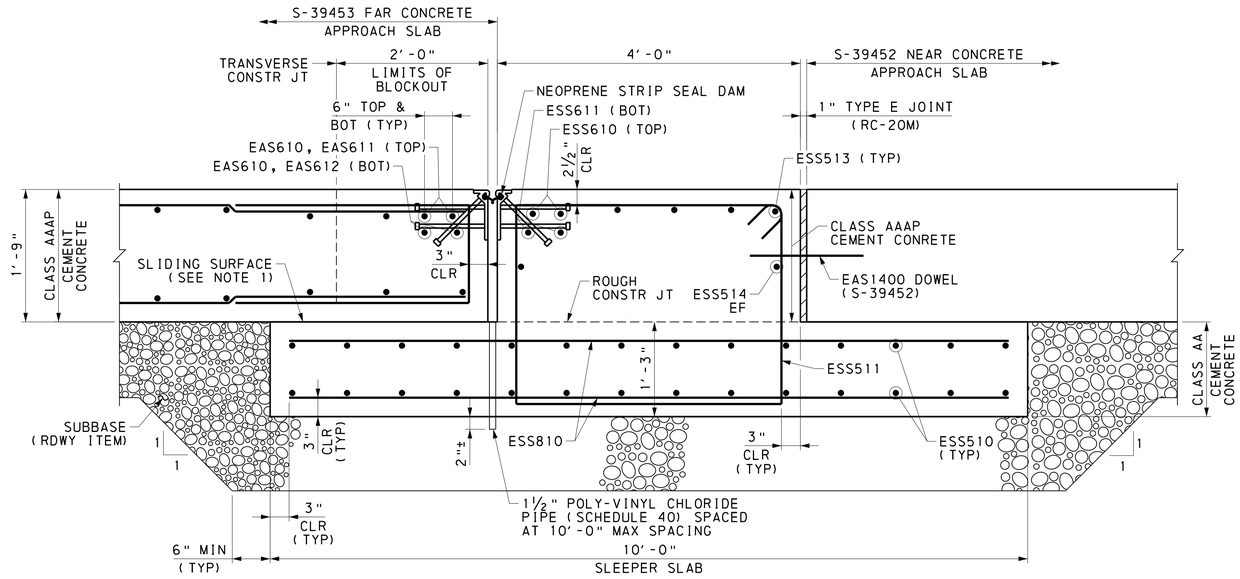
6/28/2022
FILENAME: 63016-s-br83-aps05.dgn

DES: MCA	DES CKD: CEK	DWG: JTM	DWG CKD: JRM



SECTION VV-VV

6 0 6 12 INCHES



SECTION SS-SS

6 0 6 12 INCHES

NOTES:

1. TROWEL SMOOTH AND PLACE 2 LAYERS OF 4 MIL POLYETHYLENE SHEETING AS BOND BREAKER.

REFERENCES:

	SHEETS:
GENERAL PLAN	1
GENERAL NOTES	3 - 4
FAR SLEEPER SLAB PLAN	60
APPROACH SLAB PLANS	61 - 62
APPROACH SLAB SECTIONS	63 - 64

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0123 MPMS/ECMS PROJ: 97828 BRKEY: 67418

HNTB

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0123 SEG 0051 OFFSET 0123
SR 3007 (19TH STREET) STA 100+84.74
OVER SR 0083 AND SR 8019 (RAMP T)
2-SPAN CONTINUOUS COMPOSITE PS CONCRETE
PA BULB-TEE BEAM BRIDGE
APPROACH SLAB DETAILS 2

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
JUSTIN ROBERT MCCARTHY
ENGINEER
PE076998

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

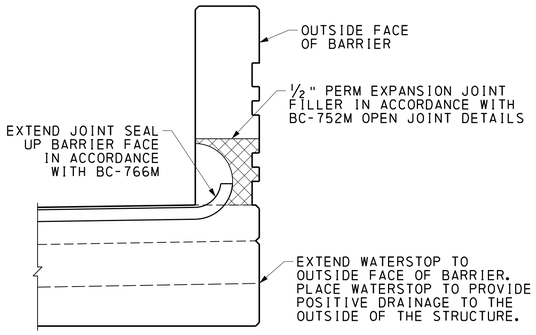
RECOMMENDED 12-6-2022

SHEET 66 OF 78

S-39453

6/28/2022
FILENAME: 63016-s-brB3-aps06.dgn

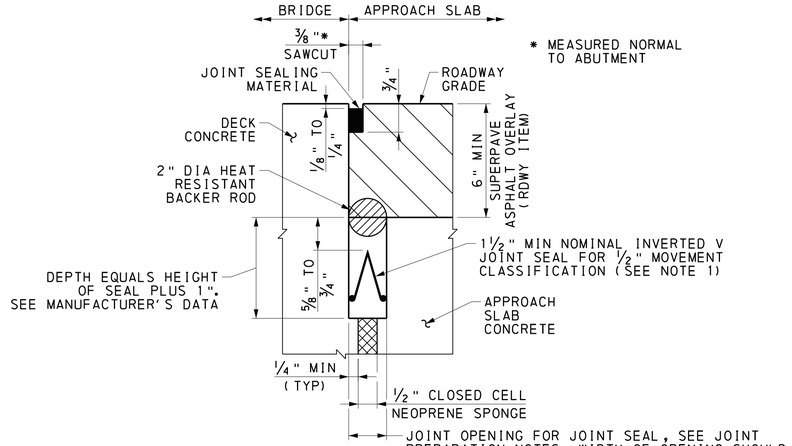
DES: MCA	DES CKD: CEK	DWG: JTM	DWG CKD: JRM



JOINT SEAL AND WATERSTOP TERMINATION DETAIL

12 0 12 INCHES

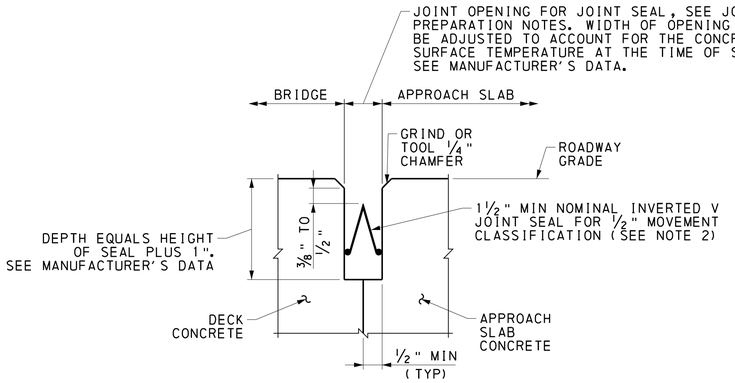
(RIGHT BARRIER SHOWN, LEFT BARRIER SIMILAR)



* MEASURED NORMAL TO ABUTMENT

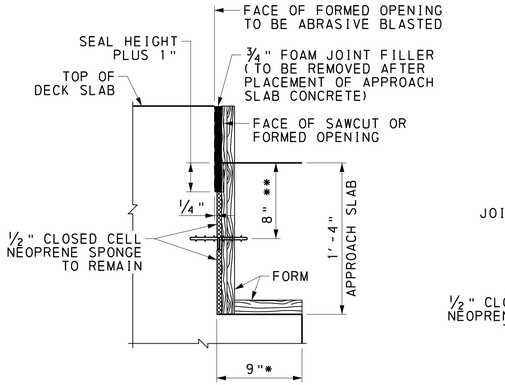
DETAIL E

NOT TO SCALE

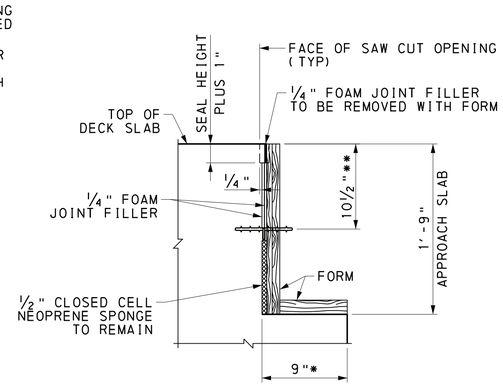


DETAIL F

NOT TO SCALE



NEAR APPROACH SLAB



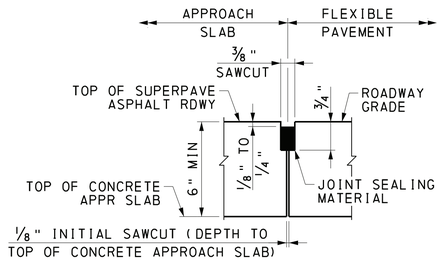
FAR APPROACH SLAB

PAVING NOTCH FORMING DETAIL

NOT TO SCALE

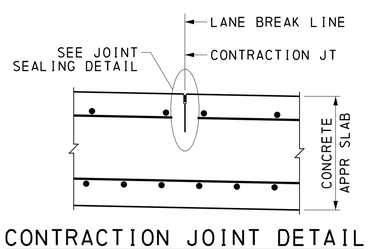
* MEASURED NORMAL TO ABUTMENT

** AN EXPANSION WATERSTOP (TYPE E1 OR E2), IN ACCORDANCE WITH BC-735M, MUST BE INSTALLED AT MID-DEPTH OF APPROACH SLAB. PLACE WATERSTOP TO PROVIDE POSITIVE DRAINAGE TO THE OUTSIDE OF THE STRUCTURE.



DETAIL G

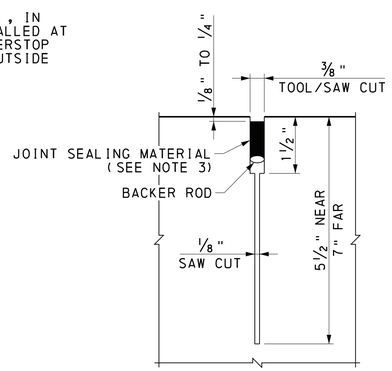
NOT TO SCALE



CONTRACTION JOINT DETAIL

6 0 6 12 INCHES

NOTE: TOP REINFORCEMENT NOT CONTINUOUS THRU JOINT. BOTTOM REINFORCEMENT CONTINUOUS THRU JOINT.



JOINT SEALING DETAIL

NOT TO SCALE

JOINT PREPARATION NOTES:

1. THE JOINT OPENING IS TO BE FORMED BY A TWO-STAGE SAWING OPERATION WHERE ACCESSIBLE. WHERE ACCESSIBILITY IS LIMITED, THE JOINT OPENING SHALL BE FORMED. THE FIRST SAW CUT IS DESIGNED TO CONTROL CRACKING. THE SECOND SAW CUT IS MADE USING A DOUBLE-BLADED WATER-COOLED SAW CAPABLE OF HOLDING A TOLERANCE OF ±1/16" TO CREATE THE PROPER OPENING FOR THE PREFORMED NEOPRENE COMPRESSION SEAL OR INVERTED V JOINT SEAL.
2. WATER BLAST OPENING IMMEDIATELY FOLLOWING SAW CUTTING OPERATION TO REMOVE ANY RESIDUAL SLURRY BEFORE IT DRIES.
3. THE DEPTH OF THE JOINT OPENING EQUALS THE HEIGHT OF THE SEAL PLUS 1". THE WIDTH OF THE SECOND SAW CUT SHOULD BE ADJUSTED TO ACCOUNT FOR THE CONCRETE SURFACE TEMPERATURE AT THE TIME OF SAWING, SEE MANUFACTURER'S PRODUCT INFORMATION.
4. BEFORE INSTALLING THE SEAL, ABRASIVE BLAST THE BONDING SURFACES TO THOROUGHLY CLEAN THE JOINT OPENING AND REMOVE FOREIGN MATERIAL, INCLUDING BROKEN CONCRETE. USE WATER AND OIL FREE COMPRESSED AIR TO BLOW OUT RESIDUE FROM THE SEAL GROOVE OPENING.
5. PREPARE BONDING SURFACES AND INSTALL JOINT SEAL IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
6. DO NOT EXCEED 3% ELONGATION OF THE SEAL, IF STRETCHING OCCURS.

NOTES:

1. USE ONLY APPROVED SEALS, AS LISTED IN BULLETIN 15. INSTALL JOINT SEALS TO A UNIFORM DEPTH WITH THE TOP OF THE SEAL FROM ½" TO ¾" BELOW THE LEVEL OF THE PAVEMENT SURFACE. MAKE THE TOP EDGES OF THE CONTACT SURFACES ON BOTH SIDES OF THE SEAL AT THE SAME ELEVATION.
2. USE ONLY APPROVED SEALS, AS LISTED IN BULLETIN 15. INSTALL JOINT SEALS TO A UNIFORM DEPTH WITH THE TOP OF THE SEAL FROM ¼" TO ½" BELOW THE LEVEL OF THE CHAMFER. MAKE THE TOP EDGES OF THE CONTACT SURFACES ON BOTH SIDES OF THE SEAL AT THE SAME ELEVATION.
3. FOR JOINT MATERIAL, REFER TO PUBLICATION 408 SECTIONS 501.2 AND 705.4(a), (b), OR (d).

REFERENCES:

	SHEETS:
GENERAL PLAN	1
GENERAL NOTES	3 - 4
DIAPHRAGM DETAILS	46, 47, 51 - 55
FAR SLEEPER SLAB PLAN	60
APPROACH SLAB PLANS	61 - 62
APPROACH SLAB SECTIONS	63 - 64

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0123 MPMS/ECMS PROJ: 97828 BRKEY: 67418

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COMMONWEALTH OF PENNSYLVANIA
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DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0123 SEG 0051 OFFSET 0123
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OVER SR 0083 AND SR 8019 (RAMP T)
2-SPAN CONTINUOUS COMPOSITE PS CONCRETE PA BULB-TEE BEAM BRIDGE
APPROACH SLAB DETAILS 3

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — JUSTIN ROBERT MCCARTHY — ENGINEER PE076998

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

RECOMMENDED 12-6-2022

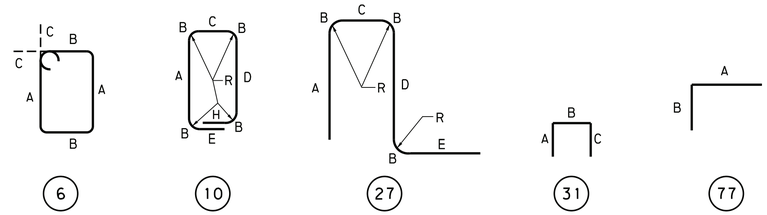
SHEET 67 OF 78

S-39453

6/28/2022
FILENAME: 63016-s-br83-aps07.dgn

DES: MCA	DES CKD: JRM	DWG: JTM	DWG CKD: JRM

MARK	SIZE	NO REQ'D	LENGTH	TYPE	A	B	C	D	E	REMARKS
NEAR APPROACH SLAB										
EAS500	5	26	21'-11"	STR						
EAS501	5	52	27'-6 1/2"	77	26'-9"	9 1/2"				
EAS502	5	77	24'-6"	STR						
EAS503	5	154	7'-6"	31	3'-4"	10"	3'-4"			
EAS600	6	52	39'-9"	STR						
EAS1000	10	102	24'-6"	STR						
ESS500	5	28	39'-5"	STR						
ESS800	8	154	4'-6"	STR						
FAR APPROACH SLAB										
EC410	4	18	3'-8"	STR						
EC411	4	22	36'-11"	STR						
EC412	4	120	7'-10"	10	2'-9"	4"	3"	2'-9"	5 1/2"	H = 3", R = 2"
EC510	5	10	8'-0"	STR						
EC511	5	12	37'-1"	STR						
EC512	5	76	9'-6"	STR						
EC610	6	8	37'-1"	STR						
EAS410	4	120	9'-9"	27	3'-7"	4"	3"	3'-5"	1'-6"	R = 2"
EAS510	5	77	37'-1"	STR						
EAS511	5	76	7'-9 1/2"	113	3'-0"	1'-9 1/2"	3'-0"	1/2"	2 3/4"	F = 1 1/2"
EAS512	5	37	21'-11"	STR						
EAS513	5	74	28'-0"	77	26'-9"	1'-3"				
EAS514	5	154	7'-5"	31	3'-1"	1'-3"	3'-1"			
EAS610	6	4	21'-11"	STR						
EAS611	6	4	28'-0"	77	26'-9"	1'-3"				
EAS612	6	4	26'-9"	STR						
EAS710	7	76	40'-3"	STR						
EAS1010	10	152	37'-1"	STR						
ESS510	5	56	37'-11"	STR						
ESS511	5	110	13'-0"	6	2'-6 1/2"	3'-6"	5 1/2"			
ESS512	5	10	5'-7"	85	7"	2'-0"	3'-0"		5"	
ESS513	5	8	39'-7"	77	38'-3"	1'-4"				
ESS514	5	4	38'-3"	STR						
ESS610	6	4	39'-11"	77	38'-7"	1'-4"				
ESS611	6	4	38'-7"	STR						
ESS810	8	220	9'-7"	STR						



NOTES:

1. "E" PREFIX IN BAR MARK DENOTES EPOXY COATED BARS.
2. ALL DIMENSIONS ARE OUT TO OUT OF BAR EXCEPT "A" & "C" ON STANDARD 135° AND 180° HOOKS, UNLESS NOTED.
3. FOR REINFORCEMENT BAR FABRICATION DETAILS, REFER TO STANDARD DRAWING BC-736M.
4. FIGURES IN CIRCLE REPRESENT BAR TYPES.
5. "J" DIMENSIONS ON 180° HOOKS ARE SHOWN ONLY WHERE NECESSARY TO RESTRICT HOOK SIZE, OTHERWISE STANDARD HOOKS ARE TO BE USED.
6. RADIUS, "R" IS TO THE INSIDE OF THE BAR.
7. REINFORCEMENT BAR SCHEDULE IS FOR INFORMATION ONLY. VERIFY INFORMATION BEFORE FABRICATION.

REFERENCES:

	SHEETS:
GENERAL NOTES	3 - 4
APPROACH SLAB DRAWINGS	60 - 67

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0123 MPMS/ECMS PROJ: 97828 BRKEY: 67418

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COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL JUSTIN ROBERT MCCARTHY ENGINEER PE076998

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0123 SEG 0051 OFFSET 0123
SR 3007 (19TH STREET) STA 100+84.74
OVER SR 0083 AND SR 8019 (RAMP T)
2-SPAN CONTINUOUS COMPOSITE PS CONCRETE PA BULB-TEE BEAM BRIDGE
APPROACH SLAB REBAR SCHEDULE

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

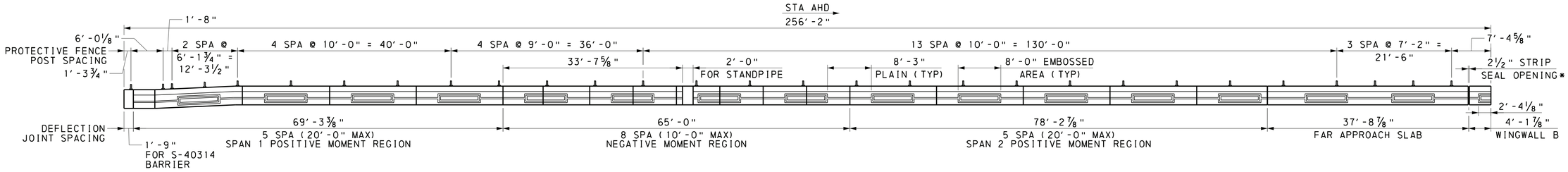
RECOMMENDED 12-6-2022

SHEET 68 OF 78

S-39453

6/28/2022
FILENAME: 63016-s-brB3-bar07.dgn

DES: MCA	DES CKD: CEK	DWG: MCA	DWG CKD: JRM

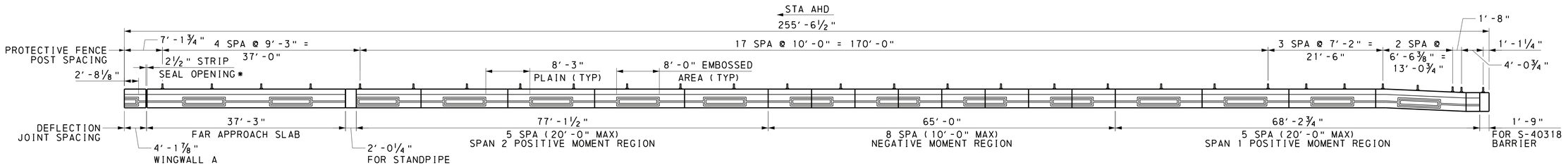


RIGHT BARRIER ELEVATION

5 0 5 10 FEET

(LOOKING AT OUTSIDE FACE OF BARRIER)

* MEASURED NORMAL TO SR 3007 CONSTR ℄



LEFT BARRIER ELEVATION

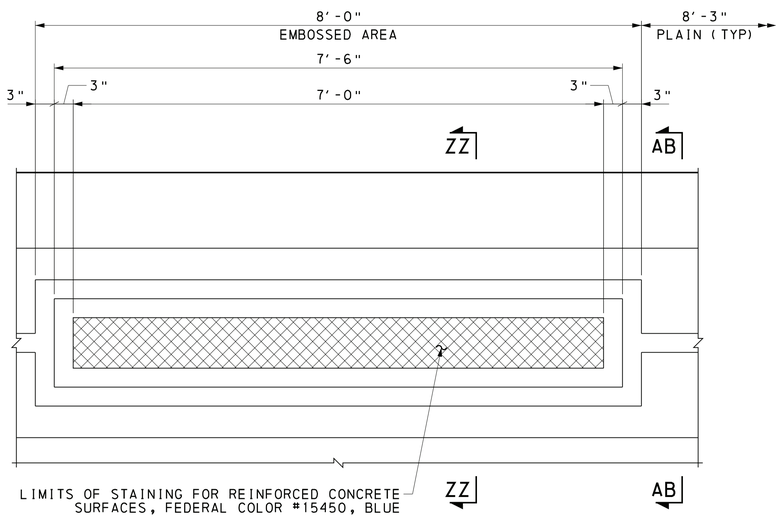
5 0 5 10 FEET

(LOOKING AT OUTSIDE FACE OF BARRIER)

* MEASURED NORMAL TO SR 3007 CONSTR ℄

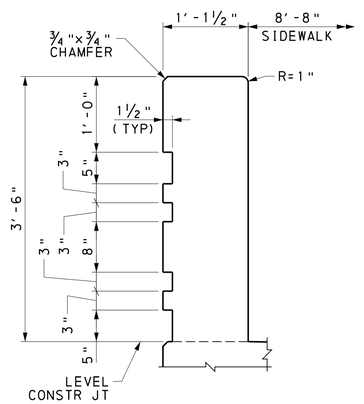
NOTES:

1. PROVIDE 9" MINIMUM DISTANCE BETWEEN CENTERLINE OF PROTECTIVE FENCE POST AND ADJACENT DEFLECTION JOINTS.



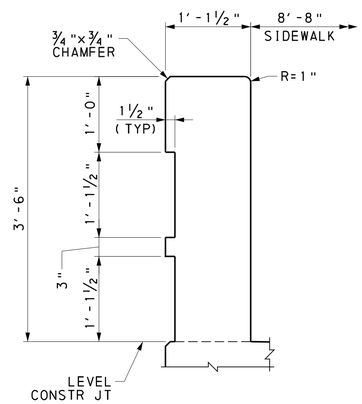
EMBOSSED SQUARE DETAIL

6 0 6 12 INCHES



SECTION ZZ-ZZ

6 0 6 12 INCHES



SECTION AB-AB

6 0 6 12 INCHES

(LEFT BARRIER SHOWN, RIGHT BARRIER SIMILAR BY OPPOSITE HAND)

REFERENCES:

	SHEETS:
GENERAL NOTES	3 - 4
BARRIER & SIDEWALK DETAILS	43 - 44
FAR APPROACH SLAB DETAILS	62, 64 - 65
PROTECTIVE FENCE DETAILS	70

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0123 MPMS/ECMS PROJ: 97828 BRKEY: 67418

HNTB

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0123 SEG 0051 OFFSET 0123
SR 3007 (19TH STREET) STA 100+84.74
OVER SR 0083 AND SR 8019 (RAMP T)
2-SPAN CONTINUOUS COMPOSITE PS CONCRETE PA BULB-TEE BEAM BRIDGE
BARRIER ARCHITECTURAL DETAILS

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL JUSTIN ROBERT MCCARTHY ENGINEER PE076998

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

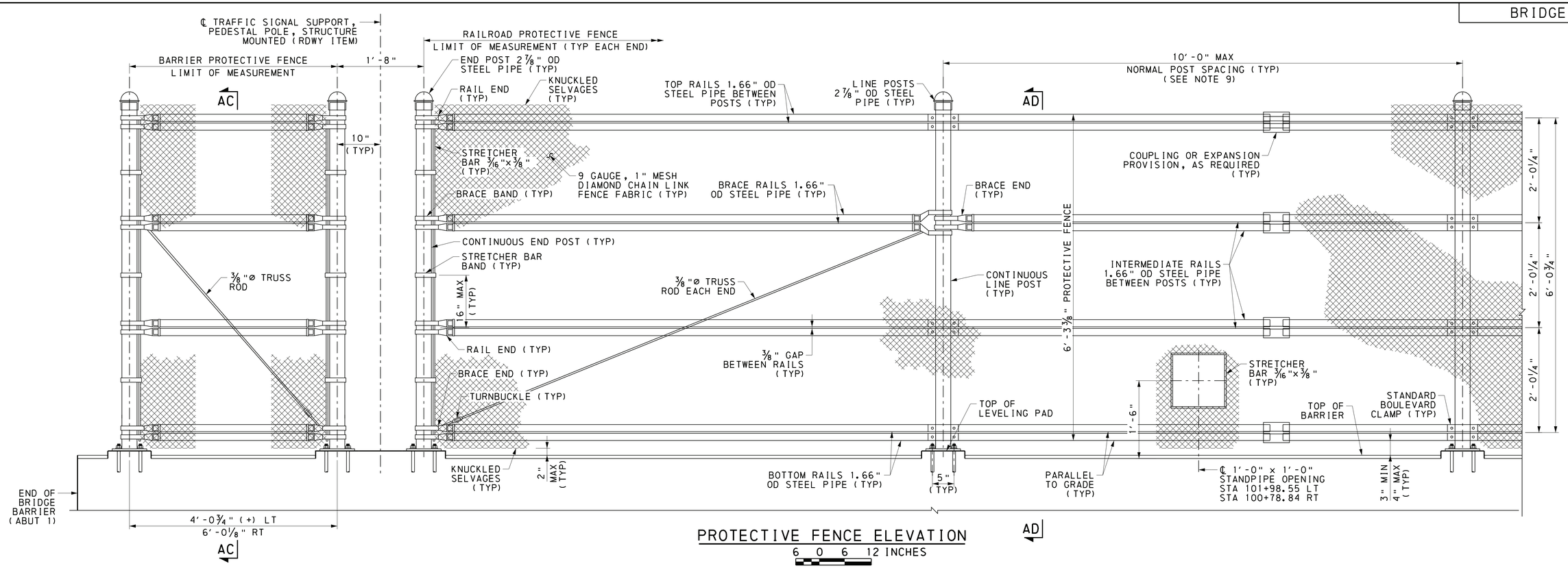
RECOMMENDED 12-6-2022

SHEET 69 OF 78

S-39453

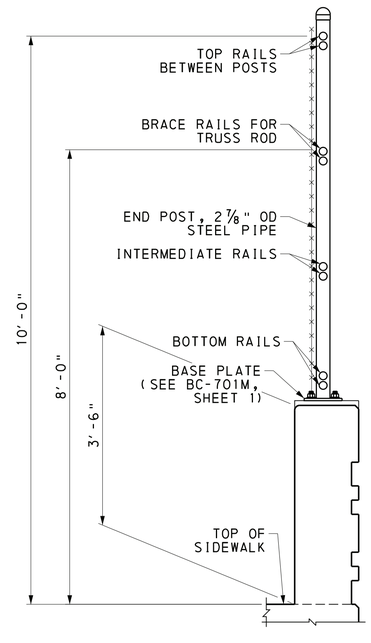
6/28/2022
FILENAME 63016-s-brB3-sib04.dgn

DES: MCA	DES CKD: JRM	DWG: MCA	DWG CKD: JRM



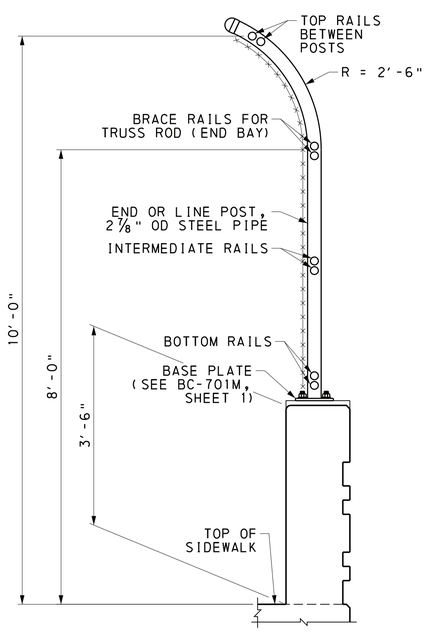
PROTECTIVE FENCE ELEVATION

6 0 6 12 INCHES



SECTION AC-AC

12 0 12 INCHES



SECTION AD-AD

12 0 12 INCHES

NOTES:

1. REFER TO BC-701M FOR ADDITIONAL DETAILS.
2. WEST PROTECTIVE FENCE TO INITIATE AT BEGINNING OF THE S-39453 STRUCTURE AND TERMINATE PRIOR TO S-39452 APPROACH SLAB BARRIER TRANSITION.
3. EAST PROTECTIVE FENCE TO INITIATE AT BEGINNING OF THE S-39453 STRUCTURE AND TERMINATE AT END OF S-39452 FAR APPROACH SLAB.
4. S-39453 RAILROAD PROTECTIVE FENCE LIMIT OF MEASUREMENT IS QUANTIFIED AS INDICATED ABOVE AND TERMINATES AT THE FREE END OF S-39453 WINGWALLS A AND B.
5. INCLUDE ANTI-CLIMB SHIELD AT SOUTHWEST AND SOUTHEAST CORNERS (2 TOTAL).
6. REFER TO SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION.
7. TOP OF BRIDGE BARRIER SHALL FOLLOW LONGITUDINAL GRADE OF SIDEWALK CURB RAMP TRANSITION.
8. COORDINATE PROTECTIVE FENCE ANCHOR BOLT LOCATIONS WITH PROTECTIVE FENCE FABRICATOR, BARRIER LUMINAIRES, AND JUNCTION BOXES. SEE HIGHWAY LIGHTING ALSO PLAN FOR LOCATIONS OF BARRIER LUMINAIRES AND JUNCTION BOXES.
9. REFER TO SHEET 69 FOR PROTECTIVE FENCE POST LOCATIONS AND SPACING.

REFERENCES:	SHEETS:
GENERAL PLAN	1
TYPICAL SECTION & LOAD RATINGS	2
GENERAL NOTES	3 - 4
BARRIER & SIDEWALK DETAILS	43 - 44
FAR APPROACH SLAB DETAILS	62, 64 - 65
BARRIER ARCHITECTURAL DETAILS	69

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0123 MPMS/ECMS PROJ: 97828 BRKEY: 67418

HNTB

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0123 SEG 0051 OFFSET 0123
SR 3007 (19TH STREET) STA 100+84.74
OVER SR 0083 AND SR 8019 (RAMP T)
2-SPAN CONTINUOUS COMPOSITE PS CONCRETE PA BULB-TEE BEAM BRIDGE
PROTECTIVE FENCE DETAILS

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL
JUSTIN ROBERT MCCARTHY
ENGINEER PE076998

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

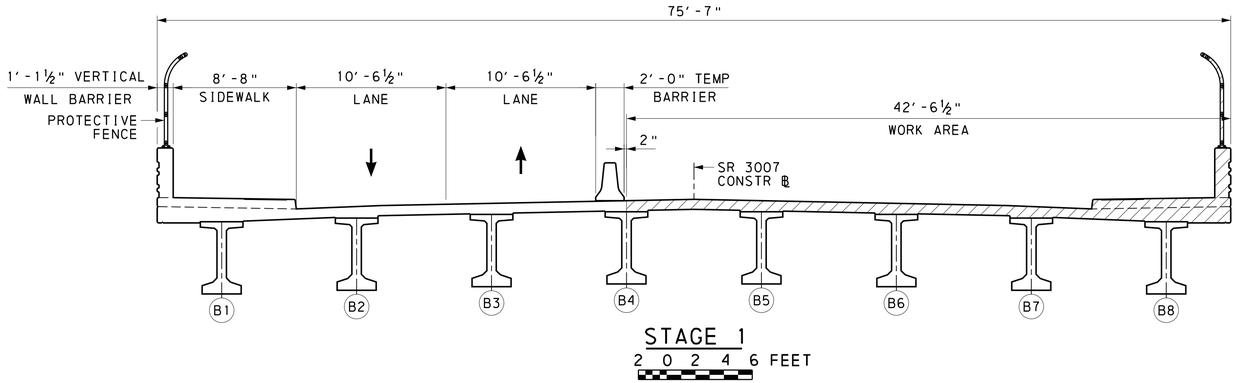
RECOMMENDED 12-6-2022

SHEET 70 OF 78

S-39453

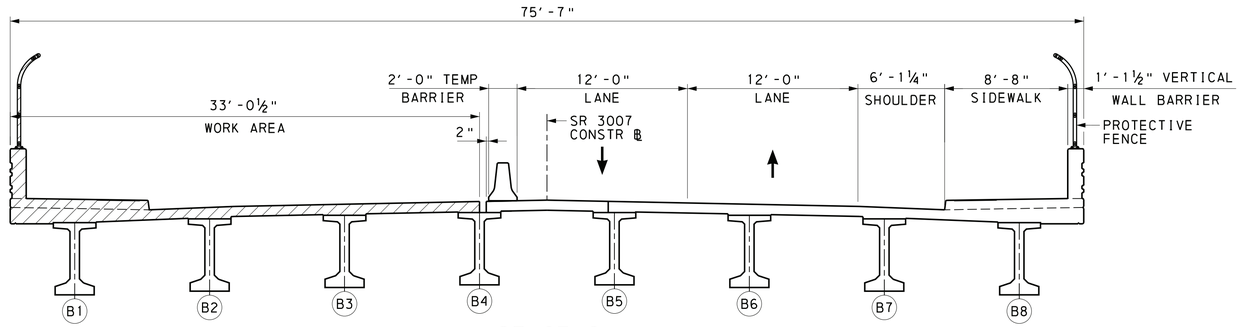
6/28/2022
FILENAME: 63016-s-brB3-sl005.dgn

DES: MCA	DES CKD: JRM	DWG: JTM	DWG CKD: JRM



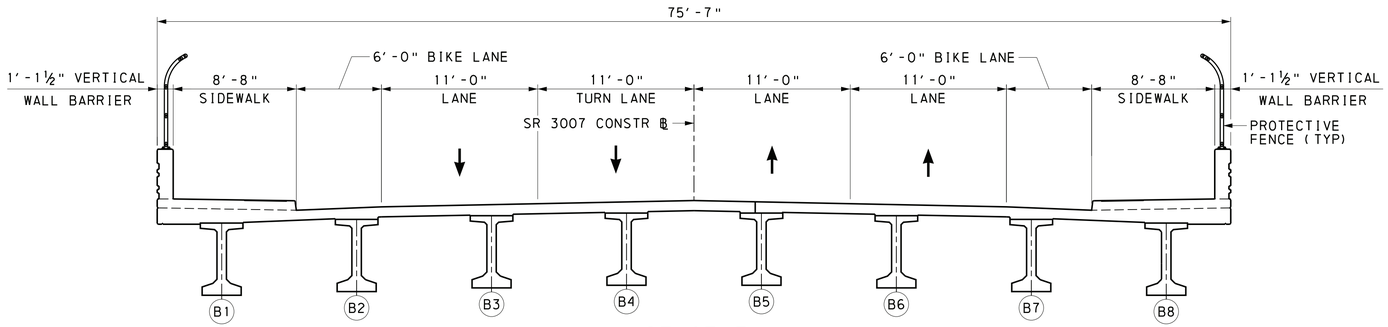
STAGE 1

2 0 2 4 6 FEET



STAGE 2

2 0 2 4 6 FEET



STAGE 3

2 0 2 4 6 FEET

NOTES:

1. THE INTENT OF THIS SHEET IS TO DESCRIBE AN AVAILABLE STAGING CONCEPT FOR FUTURE REDECKING OF THE BRIDGE. IT IS NOT TO BE USED FOR THE CONSTRUCTION DEPICTED IN THESE PLANS.
2. A FULL CLOSURE WITH A LOCAL DETOUR IS THE PREFERRED ALTERNATIVE COMPARED TO STAGED REDECKING.

SUGGESTED REDECKING SEQUENCE:

STAGE 1: PLACE TRAFFIC (BI-DIRECTIONAL) ON THE SOUTHBOUND SIDE OF THE BRIDGE. REMOVE AND REPLACE DECK AND BARRIER ON NORTHBOUND PORTION.

STAGE 2: PLACE TRAFFIC ON NEWLY CONSTRUCTED NORTHBOUND PORTION OF BRIDGE (BI-DIRECTIONAL). REMOVE AND REPLACE DECK AND BARRIER ON SOUTHBOUND PORTION.

STAGE 3: OPEN BRIDGE TO TRAFFIC.

LEGEND:

LIMITS OF REMOVAL & RECONSTRUCTION

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0123 MPMS/ECMS PROJ: 97828 BRKEY: 67418

HNTB

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL JUSTIN ROBERT MCCARTHY ENGINEER PE076998

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0123 SEG 0051 OFFSET 0123
SR 3007 (19TH STREET) STA 100+84.74
OVER SR 0083 AND SR 8019 (RAMP T)
2-SPAN CONTINUOUS COMPOSITE PS CONCRETE PA BULB-TEE BEAM BRIDGE
FUTURE REDECKING PLAN

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

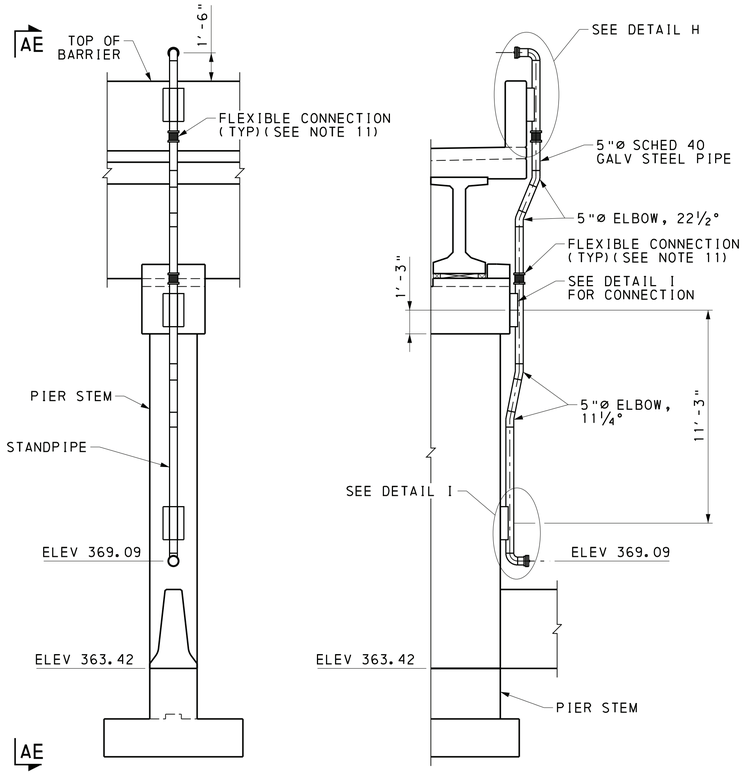
RECOMMENDED 12-6-2022

SHEET 71 OF 78

S-39453

6/28/2022
FILENAME: 63016-s-brB3-typ04.dgn

DES: MCA	DES CKD: JRM	DWG: SMZ	DWG CKD: JRM

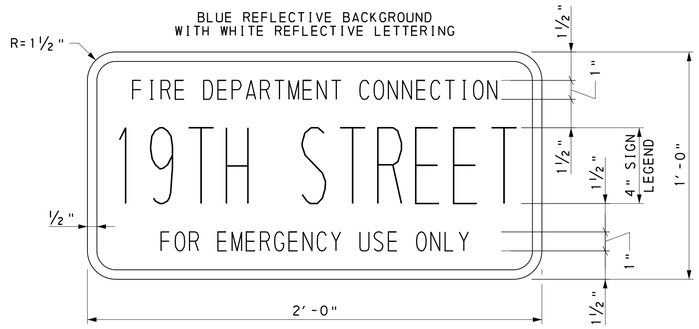


PIER EAST END VIEW

2 0 2 4 FEET

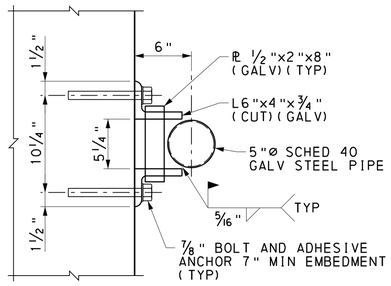
SECTION AE-AE

2 0 2 4 FEET



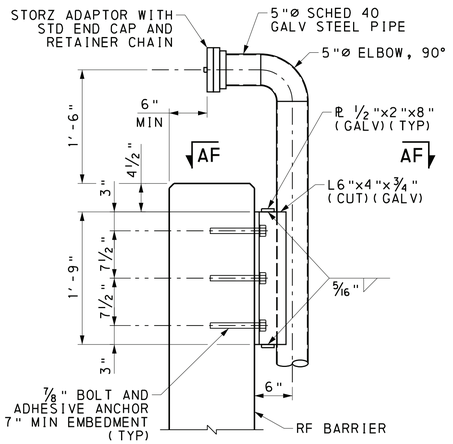
STANDPIPE SIGN

3 0 3 INCHES



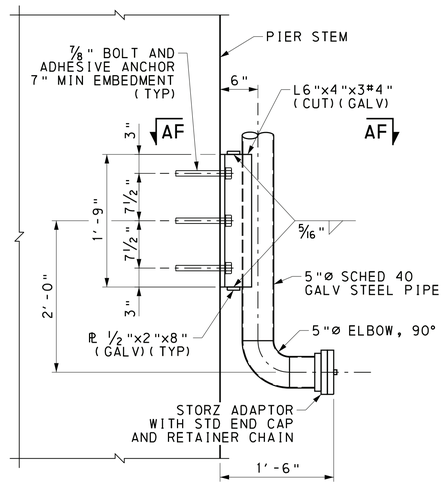
SECTION AF-AF

6 0 6 INCHES



DETAIL H

6 0 6 12 INCHES



DETAIL I

6 0 6 12 INCHES

NOTES:

1. PROVIDE MATERIALS AND PERFORM WORK IN ACCORDANCE WITH SPECIFICATIONS, PUBLICATION 408/2020, AASHTO/AWS D1.5M/D1.5 2008 BRIDGE WELDING CODE, AND THE CONTRACT SPECIAL PROVISIONS. (USE AASHTO/AWS D1.1/D1.1M:2008 FOR WELDING NOT COVERED IN AASHTO/AWS D1.5M/D1.5 2008).
2. PIPES ARE TO BE 5" DIAMETER SCHEDULE 40 IN ACCORDANCE WITH ASTM A53/A53M. PIPE DIAMETERS ARE NOMINAL SIZES FOR THE INSIDE DIAMETER OF THE PIPE. THE PIPE AND FITTINGS CAN HAVE THREADED, WELDED, FLANGED, AND/OR VICTAULIC, GRINNEL, OR EQUAL MECHANICAL COUPLINGS. THREADED COUPLINGS MAY BE USED PROVIDED THE PIPE OR FITTING DOES NOT HAVE TO RESIST TORSIONAL FORCES OR A SUPPORT IS PROVIDED TO RESIST THE TORSIONAL FORCES.
3. ALL FABRICATED STEEL MATERIAL IS TO BE GALVANIZED, AASHTO M270, GRADE 36 (ASTM A709, GRADE 36) EXCEPT WHERE NOTED OTHERWISE.
4. ALL STEEL MATERIALS ARE TO BE HOT-DIP GALVANIZED IN ACCORDANCE WITH PUB 408, SECTION 1105.02(s).
5. THE STANDPIPE SYSTEM IS DESIGNED FOR A MAXIMUM WORKING PRESSURE OF 250 PSI.
6. USE ADHESIVE ANCHOR SYSTEMS FOR PIPE SUPPORT ANCHOR BOLTS. INSTALL ANCHOR BOLTS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
7. PROVIDE STANDARD STORZ END CAPS AND RETAINING CHAINS AT ALL END CONNECTIONS.
8. PROVIDE A MINIMUM CLEARANCE OF 18" (RADIAL) FROM THE CENTER OF THE END CAP TO THE NEAREST OBSTRUCTION.
9. PROVIDE BLUE REFLECTIVE SIGNS AT BOTH ENDS OF STANDPIPE. ATTACH SIGNS TO FRONT FACE OF WINGWALL A, RIGHT SIDE FACE OF PIER, AND INTERIOR FACE OF THE VERTICAL WALL BARRIERS WITH APPROPRIATE ANCHORS AND HARDWARE AS DIRECTED BY THE ENGINEER. FABRICATE SIGNS IN ACCORDANCE WITH PUBLICATION 408 SECTIONS 935.2 AND 1103.04.
10. SUBMIT SHOP DRAWINGS TO THE ENGINEER FOR REVIEW AND APPROVAL. VERIFY ELEVATIONS AND DIMENSIONS OF THE STRUCTURE IN THE FIELD PRIOR TO THE SUBMISSION OF SHOP DRAWINGS. USE PACHOMETER TO LOCATE REINFORCEMENT PRIOR TO DRILLING HOLES FOR INSTALLATION OF ANCHOR BOLTS. ADJUST PIPE SUPPORT AND ANCHOR BOLT LOCATIONS AS NECESSARY TO CLEAR REINFORCEMENT.
11. PROVIDE A FLEXIBLE METAL HOSE CONNECTION WITH BRAIDED CONFINEMENT. THE CONNECTION IS TO BE ATTACHED WITH FLANGED ENDS AND CONSTRUCTED OF STAINLESS STEEL TYPE 304, TYPE 316L, OR TYPE 321. THE EXPANSION SYSTEM MUST BE ABLE TO PROVIDE 1¼" OF LATERAL MOVEMENT IN EITHER DIRECTION.
12. STANDPIPE AT WINGWALL A IS TO BE INSTALLED IN A FUTURE CONTRACT.

SUMMARY OF APPROXIMATE QUANTITIES (ITEM 9000-0508)

DESCRIPTION	UNIT	QUANTITY
		PIER
5"ø SCHED 40 GALV STEEL PIPE	LF	29
5"ø ELBOW, 90°	EA	2
5"ø ELBOW, 22½°	EA	2
5"ø ELBOW, 11¼°	EA	2
5"ø STORZ FITTING	EA	2
STORZ END CAP AND CHAIN	EA	2
FABRICATED STRUCTURAL STEEL	LB	262
⅞" ADHESIVE ANCHORS	EA	18
SIGN	EA	2

NOTE: QUANTITIES ARE FOR INFORMATION ONLY.

REFERENCES:

	SHEETS:
GENERAL PLAN	1
GENERAL NOTES	3 - 4

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0123 MPMS/ECMS PROJ: 97828 BRKEY: 67418

HNTB

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
JUSTIN ROBERT MCCARTHY
ENGINEER PE076998

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

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

DAUPHIN COUNTY
SR 0083 SECTION 079
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2-SPAN CONTINUOUS COMPOSITE PS CONCRETE PA BULB-TEE BEAM BRIDGE
STANDPIPE DETAILS

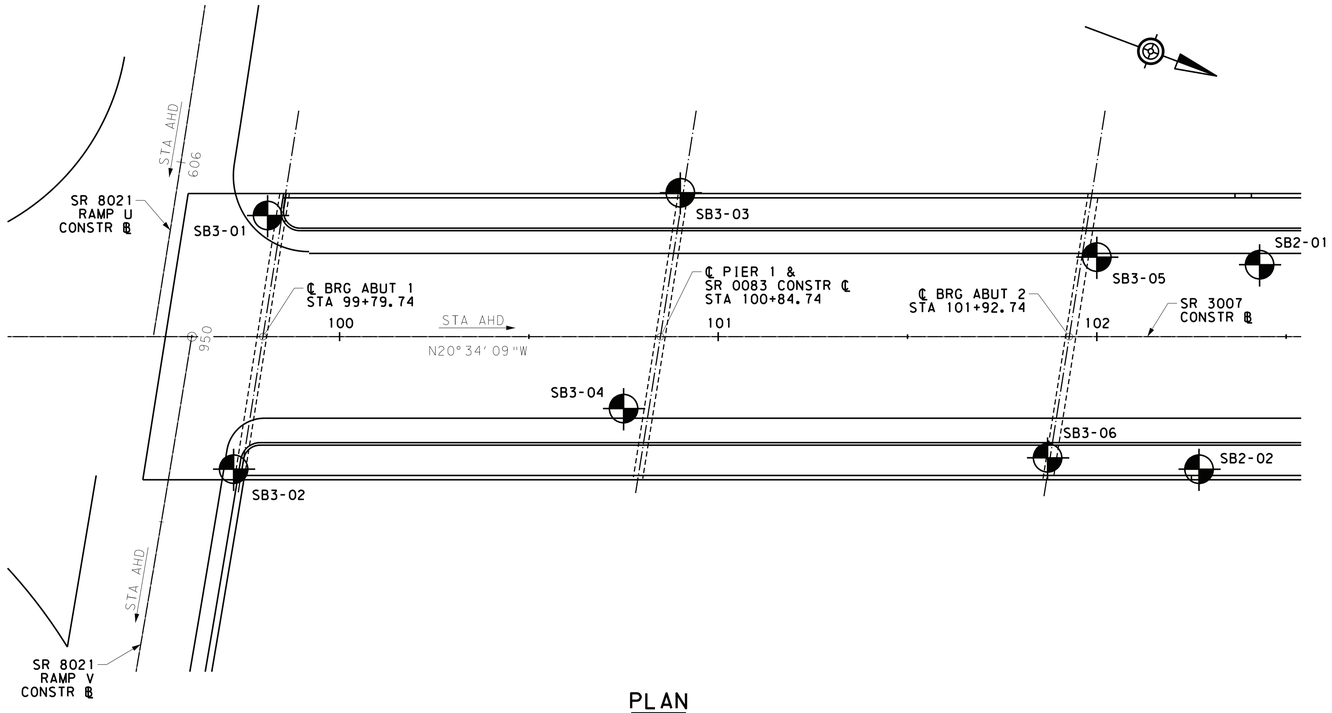
RECOMMENDED 12-6-2022

SHEET 72 OF 78

S-39453

6/28/2022
FILENAME: 63016-s-brB3-de101.dgn

DES: SMZ	DES CKD: CEK	DWG: SMZ	DWG CKD: CEK



PLAN
10 0 10 20 FEET

GENERAL NOTES

THIS SHEET IS INCLUDED FOR THE CONVENIENCE OF THE DEPARTMENT. REFER TO PUBLICATION 408 SECTION 102.05 FOR FURTHER INFORMATION.

FOR ADDITIONAL SOIL AND ROCK DESCRIPTIONS SEE PUBLICATION 222.

THE BORING LOGS AND RELATED INFORMATION DEPICT SUBSURFACE CONDITIONS ONLY AT THE SPECIFIC LOCATIONS AND DATES INDICATED. SUBSURFACE CONDITIONS MAY DIFFER FROM THE CONDITIONS REPORTED AT THE SPECIFIC LOCATIONS. ALSO, THE PASSAGE OF TIME MAY RESULT IN A CHANGE OF CONDITIONS AT THE BORING LOCATIONS.

LEGEND

PP	POCKET PENETROMETER
T	TORVANE
NTS	NOT TO SCALE
BOCC	BOTTOM OF CLASS C CONCRETE
BFE	BOTTOM OF FOOTING ELEVATION
BPCE	BOTTOM OF PILE CAP ELEVATION
EPTE	ESTIMATED PILE TIP ELEVATION
TOR	ESTIMATED TOP OF ROCK ELEVATION

THE DESCRIPTIONS OF THE MATERIALS ENCOUNTERED HAVE BEEN VERIFIED.

ME

THE SUBSURFACE EXPLORATION DATA THAT ARE PRESENTED ON THESE DRAWINGS (INCLUDING BORING LOGS, EARTH SAMPLES, ROCK CORES, CLASSIFICATION OF MATERIALS AND DEPTH OF BORINGS) ACCURATELY REPRESENT THE CONDITIONS ENCOUNTERED BY THE TEST BORING PROGRAM AT EACH BORING LOCATION.

GEOTECHNICAL ENGINEER/ENGINEERING GEOLOGIST — DATE: 6/15/2021

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0123 MPMS/ECMS PROJ: 97828 BRKEY: 67418

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0123 SEG 0051 OFFSET 0123
SR 3007 (19TH STREET) STA 100+84.74
OVER SR 0083 AND SR 8019 (RAMP T)
2-SPAN CONTINUOUS COMPOSITE PS CONCRETE
PA BULB-TEE BEAM BRIDGE
STRUCTURE BORINGS - 1

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
MARK T. EVANS
GEOLOGIST
PG005251

S - 39453

\\fileserver\SCI-NETV01Projects\36002 (SR 83, Sec 079 - River to Eisenhower)\SR 83, Sec 079\GEOTECHNICAL\CADD\WORKING FILES\TEST BORING SHEETS\B3\36002-079_TB_B3.dgn
3/4/2022 11:38:30 AM rrichards

SUBSTRUCTURE UNIT:
ABUTMENT 1

LOG 1 OF 1

BORING NUMBER:	BORING LOCATION	START: 12/22/2020 9:49 AM	HAMMER: AUTOMATIC
SB3-01	STATION: 99+81.0 OFFSET: 32.0 FT. LT.	FINISH: 12/22/2020 2:36 PM	EFFICIENCY: 0.8 ERa

DRILLING METHOD AND EQUIPMENT:	SIZE OF CORE:	VERTICAL SCALE:	TOP OF BORING ELEVATION:
DOUBLE TUBE WIRE LINE-NQ, AUTOMATIC, ACKER A2D TRUCK RIG	2.000 IN.	0 FT. 5 FT.	380.5 FT.

DRILLING INSPECTOR: RICK RICHARDS
DRILLER & DRILLING COMPANY: TIM MEHALICK
NAVARRO-WRIGHT

▽ 0 HR. READING - ELAPSED TIME: El. 331.1 ft. - 0.1 hr.
▼ 24 HR. READING - ELAPSED TIME: El. 342.9 ft. - 19.1 hr.

ELEV.	GRAPHIC	MATERIAL DESCRIPTION	AASHTO/ USCS	SAMPLE DEPTH	SAMPLE NO.	BLOW COUNT / PP/T TSF	N 60 / %RQD	REC (ft.)	REC (%)	◇ RQD % ◇ ⊙ Soil/Rock Rec. % ⊙ ▲ SPT (N_{60}) ▲
380		**CEMENT CONCRETE.** 0.5'/El. 380.0		1.5						
		subbase. 0.8'/El. 379.7		3.0	S-1	3-2-3	7	1.3	87	
		SILT, some Clay, soft to stiff, damp to moist, heterogeneous, low plastic fines, brown, fill. 7.5'/El. 373.0	a-4 / cl-ml	4.5	S-2	WOH-1-2 **0.50**	4	1.0	67	
375				6.0	S-3	3-4-6 **1.50**	13	1.5	100	
				7.5	S-4	5-6-8 **1.75**	19	1.3	87	
		CLAY, some Silt, trace Sand, stiff to very stiff, damp to moist, homogeneous, low plastic fines, brown to yellow brown, fill.		9.0	S-5	9-9-12 **3.00**	28	1.2	80	
370				10.5	S-6	3-5-6 **3.00**	15	1.5	100	
			a-6 / cl	12.0	S-7	8-9-10 **3.00**	25	1.5	100	
		Trace gravel below 12.0'.		13.5	S-8	7-5-7 **2.75**	16	1.4	93	
		15.0'/El. 365.5		15.0	S-9	3-5-7 **2.50**	16	1.5	100	
365		**CLAY**, some Silt, medium to very stiff, moist, homogeneous, medium plastic fines, brown to yellow brown.		16.5	S-10	6-7-8 **1.50**	20	1.5	100	
				18.0	S-11	4-3-5 **1.00**	11	0.9	60	
				20.0	ST-1			2.0	100	
360				21.5	S-12	2-3-6 **3.00**	12	1.5	100	
BPCE 358.00				23.0	S-13	8-7-8 **2.00**	20	1.5	100	
			a-6 / cl	24.5	S-14	8-7-9 **3.00**	21	1.5	100	
				26.0	S-15	8-4-4 **1.50**	11	1.5	100	
355				27.5	S-16	5-5-5 **1.25**	13	1.3	87	
				29.0	S-17	3-4-5 **1.50**	12	1.4	93	
				30.5	S-18	WOH-3-4 **2.00**	9	1.0	67	
				32.0	S-19	4-2-3 **1.25**	7	1.2	80	
EPTE 348.00		*Pinnacle enountered at 32.5'. S-20: 32.0'-33.5', Blows 1-5-7, Recovery 0.8'.* 32.5'/El. 348.0		32.5						
TOR 348.00		**LIMESTONE**, dark gray to gray, dull luster, hard, slightly weathered to weathered, thick to medium bedding with steep to sheer dip, random fractures, close to medium spacing, steep to sheer dip, narrow joint opening, *With calcite throughout stratum.*		34.5	R-1		55%	1.7	85	
345										
				39.5	R-2		100%	5.0	100	
340					R-3		72%	4.9	98	
				44.5						
					R-4		96%	5.0	100	
335				49.5						
					R-5		90%	3.0	100	
330		52.5'/El. 328.0								

SUBSTRUCTURE UNIT:
ABUTMENT 1

LOG 1 OF 1

BORING NUMBER:	BORING LOCATION	START: 11/24/2020 2:00 PM	HAMMER: SAFETY
SB3-02	STATION: 99+72.0 OFFSET: 35.0 FT. RT.	FINISH: 11/25/2020 2:55 PM	EFFICIENCY: 0.6 ERa

DRILLING METHOD AND EQUIPMENT:	SIZE OF CORE:	VERTICAL SCALE:	TOP OF BORING ELEVATION:
DOUBLE TUBE WIRE LINE-NQ, SAFETY, ACKER SCOUT TRACK RIG	2.000 IN.	0 FT. 5 FT.	380.7 FT.

DRILLING INSPECTOR: NEIL BODLEY
DRILLER & DRILLING COMPANY: DYLAN ONEIL
NAVRARRO & WRIGHT

▽ 0 HR. READING - ELAPSED TIME: El. 362.3 ft. - 24.1 hr.
▼ 24 HR. READING - ELAPSED TIME: El. 337.1 ft. - 336.8 hr.

ELEV.	GRAPHIC	MATERIAL DESCRIPTION	AASHTO/ USCS	SAMPLE DEPTH	SAMPLE NO. **	BLOW COUNT / PP/T TSF	N 60 / %RQD	REC (ft.)	REC (%)	◇ RQD % ◇ ⊙ Soil/Rock Rec. % ⊙ ▲ SPT (N_{60}) ▲
380	UNS	**CEMENT CONCRETE.** 0.4'/El. 380.3		1.5	S-1	7-5-5 **0.50**	10	1.2	80	
		UNSAMPLED. 1.5'/El. 379.2		3.0	S-2	13-6-5 **0.50**	11	1.5	100	
		SILT, some Clay, soft, moist, dark brown, fill. 7.5'/El. 373.2	a-4 / ml	4.5	S-3	3-3-4 **0.50**	7	1.5	100	
375				6.0	S-4	6-7-9 **0.50**	16	1.5	100	
				7.5	S-5	7-7-9 **1.50**	16	1.5	100	
		CLAY and **SILT**, little fine Sand, trace Gravel, stiff to very stiff, moist, brown to orange, residuum.		9.0	S-6	3-3-6 **1.75**	9	1.5	100	
370				10.5	S-7	4-6-9 **1.50**	15	1.5	100	
				12.0	S-8	7-14-14 **2.00**	28	1.5	100	
				13.5	S-9	4-7-10 **2.25**	17	1.5	100	
				15.0	S-10	9-11-13 **2.25**	24	1.5	100	
365				16.5	S-11	10-9-10 **2.25**	19	1.5	100	
				18.0	S-12	6-6-10 **2.00**	16	1.5	100	
				19.5	S-13	8-8-8 **2.25**	16	1.5	100	
360				21.0	S-14	9-10-10 **2.25**	20	1.5	100	
BPCE 355.50			A-7-6 / CH	22.5	S-15	3-4-4 **1.50**	8	1.5	100	
				24.0	S-16	3-3-4 **1.50**	7	1.5	100	
355				25.5	S-17	2-4-4	8	0.0	0	
				27.0	S-18	3-3-3 **1.50**	6	1.5	100	
				28.5	S-19	3-3-3 **1.50**	6	1.5	100	
				30.0	S-20	2-3-4 **1.50**	7	1.5	100	
350				31.5	S-21	3-2-3 **1.25**	5	1.5	100	
				33.0	S-22	1-1-2	3	0.0	0	
				34.5	S-23	2-2-2 **1.25**	4	1.5	100	
				36.0	S-24	4-2-4 **1.50**	6	1.5	100	
				37.5	S-25	1-50/.1'	>50	0.0	0	
345		38.9'/El. 341.8		38.1						
TOR 341.80		*Refusal at 38.9'.*		38.9	R-1		67%	1.9	90	
EPTE 341.80		**LIMESTONE**, blue gray, hard, slightly weathered, thin to narrow bedding with steep to very steep dip, Joint Set 1: bedding joints, moderate to medium spacing, steep to very steep dip, narrow joint opening, Joint Set 2: jointed, medium spacing, shallow to moderate dip, tight joints.		41.0	R-2		85%	1.8	90	
340										
				43.0	R-3		86%	5.0	100	
335				48.0	R-4		66%	4.8	96	
				53.0	R-5		58%	5.0	100	
330										
		59.3'/El. 321.4		58.0	R-6		85%	1.3	100	
325										

**SAMPLE NO. shading indicates lab testing performed.

GENERAL NOTES

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FOR ADDITIONAL SOIL AND ROCK DESCRIPTIONS SEE PUBLICATION 222.

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LEGEND

PP	POCKET PENETROMETER
T	TORVANE
NTS	NOT TO SCALE
BOCC	BOTTOM OF CLASS C CONCRETE
BFE	BOTTOM OF FOOTING ELEVATION
BPCE	BOTTOM OF PILE CAP ELEVATION
EPTE	ESTIMATED PILE TIP ELEVATION
TOR	ESTIMATED TOP OF ROCK ELEVATION

THE DESCRIPTIONS OF THE MATERIALS ENCOUNTERED HAVE BEEN VERIFIED.
ME

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0123 MPMS/ECMS PROJ: 97828 BRKEY: 67418

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0123 SEG 0051 OFFSET 0123
SR 3007 (19TH STREET) STA 100+84.74
OVER SR 0083 AND SR 8019 (RAMP T)
2-SPAN CONTINUOUS COMPOSITE PS CONCRETE
PA BULB-TEE BEAM BRIDGE
STRUCTURE BORINGS - 2

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL MARK T. EVANS GEOLOGIST PG005251

SHEET 74 OF 78

S - 39453

\\fileserver\SCI-NET\01Projects\36002 (SR 83, Sec 079 - River to Eisenhower)\SR 83, Sec 079\GEOTECHNICAL\CADD\WORKING FILES\TEST BORING SHEETS\B3\36002-079_TB_B3.dgn
3/4/2022 11:38:31 AM rrichards

SUBSTRUCTURE UNIT:
PIER

LOG 1 OF 1

BORING NUMBER:	BORING LOCATION	START: 11/18/2020 9:20 AM	HAMMER: AUTOMATIC
SB3-03	STATION: 100+90.0 OFFSET: 38.0 FT. LT.	FINISH: 11/18/2020 4:00 PM	EFFICIENCY: 0.8 ERa

DRILLING METHOD AND EQUIPMENT:	SIZE OF CORE:	VERTICAL SCALE:	TOP OF BORING ELEVATION:
DOUBLE TUBE WIRE LINE-NQ, AUTOMATIC, ACKER XLS TRACK MOUNT RIG	2.000 IN.	0 FT. 5 FT.	370.9 FT.

DRILLING INSPECTOR: JEREMY COOK
DRILLER & DRILLING COMPANY:JASON GROFT
NAVARRO & WRIGHT

▽ 0 HR. READING - ELAPSED TIME: El. 344.7 ft. - 0.0 hr.
▼ 24 HR. READING - ELAPSED TIME: El. 339.4 ft. - 164.6 hr.

ELEV.	GRAPHIC	MATERIAL DESCRIPTION	AASHTO/ USCS	SAMPLE DEPTH	SAMPLE NO.	BLOW COUNT / PP/T TSF	N 60 / %RQD	REC (ft.)	REC (%)	◇ RQD % ◇ Soil/Rock Rec. % ▲ SPT (N_{60}) ▲
370		**TOPSOIL**. 0.5'/El. 370.4	a-4 / ml	1.5	S-1	5-3-3	8	0.9	60	
		SILT, some Sand, trace Gravel, loose to medium dense, damp, homogeneous, poorly graded, sub-angular, dark brown, fill. 3.0'/El. 367.9		3.0	S-2	3-3-7	13	0.6	40	
365		**CLAY**, little Sand, very stiff, moist, homogeneous, medium plastic fines, orange brown, fill.	a-6 / cl	4.5	S-3	10-7-7	19	0.6	40	
		9.0'/El. 361.9		6.0	S-4	5-7-14	28	1.1	73	
TOR 361.90		*Casing refusal at 9.0' due to pinnacle. S-7: Depth = 9.0'-10.5', Rec = 1.0', Blows = 14-22-26.*		7.5	S-5	4.00 3-5-8	17	1.0	67	
360				9.0	S-6	3.50 8-11-11	29	1.3	87	
BFE 358.75		**LIMESTONE**, light gray, dull luster, medium hard, weathered, indistinct bedding with shallow to steep dip, narrow to medium spacing, open joints.		12.0	R-1	2.50	73%	2.9	97	
					R-2		70%	3.0	100	
355				15.0	R-3		54%	3.6	72	
		19.5'/El. 351.4								
		CLAY, trace Sand, stiff to very stiff, moist, homogeneous, medium plastic fines, orange brown.	a-6 / cl	20.0	S-8	3-3-3 2.25	8	1.0	67	
350				21.5	S-9	3-2-3 1.50	7	1.2	80	
		Rock encountered at 24.5'. S-11: Depth = 24.5'-26.0', Rec = 1.2', Blows = 5-3-2, PPT = 1.75. S-12: Depth = 26.0'-27.5', Rec = 1.5', Blows = 3-2-7. S-13: Depth = 27.5'-29.0', Rec = 1.5', Blows = 5-4-4.		23.0	S-10	4-2-2 1.50	5	1.3	87	
		24.5'/El. 346.4		24.5						
345		**LIMESTONE**, light gray, dull luster, medium hard, weathered, indistinct bedding with shallow to steep dip, narrow to medium spacing, open joints.		25.4	R-4		26%	3.7	80	
				30.0	R-5		42%	3.6	72	
340		35.0'/El. 335.9								

SUBSTRUCTURE UNIT:
PIER

LOG 1 OF 1

BORING NUMBER:	BORING LOCATION	START: 11/19/2020 10:00 AM	HAMMER: AUTOMATIC
SB3-04	STATION: 100+75.0 OFFSET: 19.0 FT. RT.	FINISH: 11/19/2020 2:00 PM	EFFICIENCY: 0.8 ERa

DRILLING METHOD AND EQUIPMENT:	SIZE OF CORE:	VERTICAL SCALE:	TOP OF BORING ELEVATION:
DOUBLE TUBE WIRE LINE-NQ, AUTOMATIC, ACKER XLS TRACK MOUNT RIG	2.000 IN.	0 FT. 5 FT.	382.9 FT.

DRILLING INSPECTOR: JEREMY COOK
DRILLER & DRILLING COMPANY:JASON GROFT
NAVARRO & WRIGHT

▽ 0 HR. READING - ELAPSED TIME: El. 364.2 ft. - 0.0 hr.
▼ 24 HR. READING - ELAPSED TIME: El. 343.7 ft. - 140.0 hr.

ELEV.	GRAPHIC	MATERIAL DESCRIPTION	AASHTO/ USCS	SAMPLE DEPTH	SAMPLE NO. **	BLOW COUNT / PP/T TSF	N 60 / %RQD	REC (ft.)	REC (%)	◇ RQD % ◇ Soil/Rock Rec. % ▲ SPT (N_{60}) ▲
380		**UNSAMPLED**. 0.7'/El. 382.2		1.5	S-1	12-15-12	36	1.1	73	
		SAND and **GRAVEL**, trace Silt, loose to dense, dry to damp, well graded, angular, gray and orange brown, fill.	a-1-b / gw	3.0	S-2	8-7-8	20	1.2	80	
375				4.5	S-3	8-6-5	15	1.2	80	
				6.0	S-4	3-4-5	12	0.5	33	
				7.5	S-5	5-3-3	8	0.4	27	
				9.0	S-6	7-3-4	9	0.7	47	
				10.5	S-7	3-3-7	13	0.4	27	
				12.0	S-8	12-6-5	15	0.4	27	
370		13.5'/El. 369.4		13.5	S-9	4-3-3 2.50	8	1.4	93	
		SILT, some Clay, some Gravel, little Sand, medium to very stiff, homogeneous, medium plastic fines, orange brown.	A-6 / CL	15.0	S-10	WOH-WOH-2 1.75	3	1.2	80	
365				16.5	S-11	WOH-1.5 2.50	2	0.9	60	
				18.0	S-12	1-2-2 2.50	5	1.0	67	
				19.5	S-13	WOH-1-2 2.50	4	1.2	80	
BFE 358.75				21.0	S-14	WOH-1.5 2.00	2	1.0	67	
TOR 357.60				22.5	S-15	WOH-2-2 1.00	5	1.1	73	
360 BOCC 357.60				24.0	S-16	1-1-50/.3"	68	1.1	85	
		LIMESTONE, light gray, dull luster, medium hard, weathered to slightly weathered, close to medium spacing, flat to sheer dip, open joints.		25.3	R-1		78%	2.2	81	
				28.0	R-2		17%	0.7	23	
355				31.0	R-3		68%	4.9	98	
				36.0	R-4		40%	4.9	98	
350				41.0	R-5		68%	5.0	100	
345										
340		46.0'/El. 336.9								

**SAMPLE NO. shading indicates lab testing performed.

GENERAL NOTES

THIS SHEET IS INCLUDED FOR THE CONVENIENCE OF THE DEPARTMENT. REFER TO PUBLICATION 408 SECTION 102.05 FOR FURTHER INFORMATION.

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LEGEND

PP	POCKET PENETROMETER
T	TORVANE
NTS	NOT TO SCALE
BOCC	BOTTOM OF CLASS C CONCRETE
BFE	BOTTOM OF FOOTING ELEVATION
BPCE	BOTTOM OF PILE CAP ELEVATION
EPTE	ESTIMATED PILE TIP ELEVATION
TOR	ESTIMATED TOP OF ROCK ELEVATION

THE DESCRIPTIONS OF THE MATERIALS ENCOUNTERED HAVE BEEN VERIFIED.
ME

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0123 MPMS/ECMS PROJ: 97828 BRKEY: 67418

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0123 SEG 0051 OFFSET 0123
SR 3007 (19TH STREET) STA 100+84.74
OVER SR 0083 AND SR 8019 (RAMP T)
2-SPAN CONTINUOUS COMPOSITE PS CONCRETE
PA BULB-TEE BEAM BRIDGE
STRUCTURE BORINGS - 3

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL MARK T. EVANS GEOLOGIST PG005251

SHEET 75 OF 78

S - 39453

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3/4/2022 11:38:33 AM rrichards
PENNDOT STRUCTURE BORING LOG - PENNDOT.GINT VERSION 12.2.3 2-21-2016.GDT 6/22/21 10:45 - N:\DIP\PROJECTS\36002 (SR 83, SEC 079 - RIVER TO EISENHOWER)\SR 83, SEC 079\GEOTECHNICAL\FIELD DATA\LOGS\079 TYPED LOGS\GINTS.R 0083 SEC 079 TYPED LOGS.GPJ

SUBSTRUCTURE UNIT:
ABUTMENT 2

LOG 1 OF 1

BORING NUMBER:	BORING LOCATION	START: 11/18/2020 10:20 AM	HAMMER: AUTOMATIC
SB3-05	STATION: 102+00.0 OFFSET: 21.0 FT. LT.	FINISH: 11/18/2020 2:30 PM	EFFICIENCY: 0.8 ERa

DRILLING METHOD AND EQUIPMENT:	SIZE OF CORE:	VERTICAL SCALE:	TOP OF BORING ELEVATION:
DOUBLE TUBE WIRE LINE-NQ, AUTOMATIC, ACKER XLS TRACK MOUNT RIG	2.000 IN.	0 FT. 5 FT.	386.0 FT.

DRILLING INSPECTOR: HUNTER FENK
DRILLER & DRILLING COMPANY: NICO RIZIO
NAVARRO & WRIGHT

▽ 0 HR. READING - ELAPSED TIME: NR - 0.0 hr. [1]
▼ 24 HR. READING - ELAPSED TIME: NR - 165.5 hr. [2]

ELEV.	GRAPHIC	MATERIAL DESCRIPTION	AASHTO/ USCS	SAMPLE DEPTH	SAMPLE NO.	BLOW COUNT / PP/T TSF	N 60 / %RQD	REC (ft.)	REC (%)	◇ RQD % ◇ Soil/Rock Rec. % (20 40 60 80) ▲ SPT (N_{60}) ▲ (10 20 30 40)
385		**BITUMINOUS CONCRETE.** 0.6'/El. 385.4		1.5						
		UNSAMPLED. 1.5'/El. 384.5		3.0	S-1	10-15-12	36	1.5	100	
		GRAVEL, some Sand, little Silt, very loose to medium dense, damp to moist, heterogeneous, gap graded, sub-angular to angular, dark brown, fill. *S-4: Recovery is piece of gravel.*		4.5	S-2	5-7-6	17	1.0	67	
				6.0	S-3	7-5-5	13	0.7	47	
380			a-1-a / gp-gm	7.5	S-4	3-1-1	3	0.1	7	
				9.0	S-5	1-2-2	5	0.4	27	
		S-6: Sample is a dark black gravel and sand perhaps old asphalt. S-7: Sample is a sandy silt.		10.5	S-6	7-7-3	13	1.5	100	
				12.0	S-7	WOH-WOH-3	4	1.5	100	
		S-8: Recovery is residual gravel.		12.4	S-8	**0.50**	>67	0.4	100	
375		13.5'/El. 372.5		13.5	S-9	50/.4'	>67	0.0	0	
TOR 372.50				13.5	R-1	50/.0'	35%	2.0	100	
		LIMESTONE, light gray, soft to medium hard, slightly weathered, narrow to moderate bedding with shallow to moderate dip, bedding joints, close to medium spacing, shallow to moderate dip, narrow joint opening.		15.5	R-2		45%	2.0	100	
		18.1': Clay filled joint, larger joint opening.		17.5	R-3		46%	4.4	88	
370										
				22.5	R-4		84%	5.0	100	
365										
				27.5	R-5		60%	5.0	100	
BFE 358.00										
360										
355		32.5'/El. 353.5								

[1] 0-hr. Water: Unable to obtain groundwater reading, tremmie pipe snapped in hole.
[2] 24-hr. Water: Unable to obtain groundwater reading, tremmie pipe snapped in hole.

SUBSTRUCTURE UNIT:
ABUTMENT 2

LOG 1 OF 1

BORING NUMBER:	BORING LOCATION	START: 11/24/2020 11:00 AM	HAMMER: AUTOMATIC
SB3-06	STATION: 101+87.0 OFFSET: 32.0 FT. RT.	FINISH: 11/24/2020 2:30 PM	EFFICIENCY: 0.8 ERa

DRILLING METHOD AND EQUIPMENT:	SIZE OF CORE:	VERTICAL SCALE:	TOP OF BORING ELEVATION:
DOUBLE TUBE WIRE LINE-NQ, AUTOMATIC, ACKER XLS TRACK MOUNT RIG	2.000 IN.	0 FT. 5 FT.	385.5 FT.

DRILLING INSPECTOR: HUNTER FENK
DRILLER & DRILLING COMPANY: NICO RIZIO
NAVARRO & WRIGHT

▽ 0 HR. READING - ELAPSED TIME: El. 362.6 ft. - 0.3 hr.
▼ 24 HR. READING - ELAPSED TIME: El. 363.6 ft. - 19.6 hr.

ELEV.	GRAPHIC	MATERIAL DESCRIPTION	AASHTO/ USCS	SAMPLE DEPTH	SAMPLE NO. **	BLOW COUNT / PP/T TSF	N 60 / %RQD	REC (ft.)	REC (%)	◇ RQD % ◇ Soil/Rock Rec. % (20 40 60 80) ▲ SPT (N_{60}) ▲ (10 20 30 40)
385		**GRAVEL**, some Silt, some Sand, loose to medium dense, damp, heterogeneous, angular to sub-angular, dark brown with black, fill. 3.0'/El. 382.5	a-1-b / gm	1.5	S-1	WOH-7-5	16	1.5	100	
		SILT and **CLAY**, little Sand, trace Gravel, loose to very dense, dry to moist, homogeneous, angular to sub-angular, light orange brown, fill.		3.0	S-2	3-4-3	9	1.5	100	
				4.5	S-3	4-4-6	13	1.5	100	
380			A-6 / CL	6.0	S-4	5-4-6	13	1.5	100	
				7.5	S-5	3-3-5	11	1.5	100	
		S-7: Limestone fragments in sample.		9.0	S-6	3-3-4	9	1.5	100	
		10.8'/El. 374.7		10.5	S-7	5-5-8	17	1.5	100	
375				10.8	S-8	50/.3'	>67	0.3	100	
TOR 374.70		**LIMESTONE**, light gray, soft to medium hard, slightly weathered, thin to medium bedding with shallow to very steep dip, Joint Set 1: foliation joints, close to medium spacing, shallow to steep dip, tight joints, Joint Set 2: random fractures, close to medium spacing, shallow to sheer dip, tight joints, *infilled with calcite.*		11.8	R-1		0%	1.0	100	
					R-2		40%	5.0	100	
				16.8						
370					R-3		16%	3.6	72	
				21.8						
					R-4		46%	4.8	96	
365				26.8						
					R-5		100%	4.0	100	
BFE 358.00		30.8'/El. 354.7								
360										
355										

**SAMPLE NO. shading indicates lab testing performed.

GENERAL NOTES

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LEGEND

PP	POCKET PENETROMETER
T	TORVANE
NTS	NOT TO SCALE
BOCC	BOTTOM OF CLASS C CONCRETE
BFE	BOTTOM OF FOOTING ELEVATION
BPCE	BOTTOM OF PILE CAP ELEVATION
EPTE	ESTIMATED PILE TIP ELEVATION
TOR	ESTIMATED TOP OF ROCK ELEVATION

THE DESCRIPTIONS OF THE MATERIALS ENCOUNTERED HAVE BEEN VERIFIED.
ME

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0123 MPMS/ECMS PROJ: 97828 BRKEY: 67418

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0123 SEG 0051 OFFSET 0123
SR 3007 (19TH STREET) STA 100+84.74
OVER SR 0083 AND SR 8019 (RAMP T)
2-SPAN CONTINUOUS COMPOSITE PS CONCRETE
PA BULB-TEE BEAM BRIDGE
STRUCTURE BORINGS - 4

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
MARK T. EVANS
GEOLOGIST PG005251

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3/4/2022 11:38:35 AM rrichards
PENNDOT STRUCTURE BORING LOG - PENNDOT_CONT_VERSION_12.2.3_9-27-2016.CDT - 6/9/21 14:04 - N:\01PROJECTS\36002 (SR 83, SEC 079 - RIVER TO EISENHOWER)\SR 83, SEC 079 - RIVER TO EISENHOWER\GEOTECHNICAL\CADD\WORKING FILES\TEST BORING SHEETS\B3\36002-079_TB_B3.dgn

SUBSTRUCTURE UNIT:
WINGWALL A

LOG 1 OF 1

BORING NUMBER:	BORING LOCATION	START: 11/17/2020 9:15 AM	HAMMER: AUTOMATIC
SB2-01	STATION: 102+43.0 OFFSET: 19.0 FT. LT.	FINISH: 11/17/2020 2:00 PM	EFFICIENCY: 0.8 ERa

DRILLING METHOD AND EQUIPMENT:	SIZE OF CORE:	VERTICAL SCALE:	TOP OF BORING ELEVATION:
DOUBLE TUBE WIRE LINE-NQ, AUTOMATIC, ACKER XLS TRACK MOUNT RIG	2.000 IN.	0 FT. 5 FT.	386.6 FT.

DRILLING INSPECTOR: JEREMY COOK
DRILLER & DRILLING COMPANY: JASON GROFT
NAVARRO & WRIGHT

▽ 0 HR. READING - ELAPSED TIME: El. 353.9 ft. - 0.0 hr.
▼ 24 HR. READING - ELAPSED TIME: El. 346.3 ft. - 190.3 hr.

ELEV.	GRAPHIC	MATERIAL DESCRIPTION	AASHTO/ USCS	SAMPLE DEPTH	SAMPLE NO.	BLOW COUNT / PP/T TSF	N 60 / %RQD	REC (ft.)	REC (%)	◇ RQD % ◇ ⊙ Soil/Rock Rec. % ⊙ ▲ SPT (N_{60}) ▲
385		**BITUMINOUS CONCRETE.** 0.8'/El. 385.8		1.5						
		CEMENT CONCRETE. 1.2'/El. 385.4		3.0	S-1	8-9-6	20	1.1	73	
		GRAVEL, some Sand, little Silt, loose to medium dense, dry to damp, homogeneous, poorly graded, angular, gray, fill. 7.5'/El. 379.1	a-1-b / gm	4.5	S-2	6-3-9	16	0.7	47	
				6.0	S-3	7-3-4	9	0.6	40	
380				7.5	S-4	19-7-3	13	1.0	67	
		SILT, little Sand, very loose to medium dense, moist, homogeneous, orange brown, fill. 15.0'/El. 371.6	a-4 / ml	9.0	S-5	3-2-3	7	1.0	67	
				10.5	S-6	2-3-3	8	0.7	47	
				12.0	S-7	WOH-1.5	2	1.1	73	
375				13.5	S-8	WOH-1-4	7	1.4	93	
				15.0	S-9	2-6-6	16	1.2	80	
		CLAY, some Sand, little Gravel, stiff to hard, moist, homogeneous, poorly graded, angular, medium plastic fines, orange brown and black, fill. 24.0'/El. 362.6	a-6 / cl	16.5	S-10	3-6-8 **2.00**	19	1.4	93	
370				18.0	S-11	9-13-15 **4.00**	37	1.3	87	
				19.5	S-12	8-9-15 **4.50**	32	1.4	93	
				21.0	S-13	7-10-12 **4.50**	29	1.4	93	
365				22.5	S-14	9-8-14	29	1.5	100	
				24.0	S-15	12-13-14	36	1.3	87	
		CLAY, little Sand, little Silt, very stiff to hard, damp, homogeneous, poorly graded, sub-rounded to rounded, medium plastic fines, orange brown, residuum. 29.9'/El. 356.7	a-6 / cl	25.5	S-16	5-6-5	15	1.4	93	
				27.0	S-17	3-6-6	16	1.2	80	
BFE 361.00				28.5	S-18	3-6-11 **4.25**	23	1.4	93	
360				29.9	S-19	3-8-50/.4' **4.00**	77	1.1	79	
BOCC 356.70				29.9	R-1		76%	2.0	95	
355 TOR 356.70		**LIMESTONE**, light gray, dull luster, weathered to slightly weathered, indistinct bedding, close to medium spacing, flat to sheer dip, open joints.		32.0	R-2		88%	4.0	100	
				36.0	R-3		56%	4.9	98	
350				41.0	R-4		60%	3.0	60	
▼ 345				46.0	R-5		90%	4.0	100	
340		50.0'/El. 336.6								

SUBSTRUCTURE UNIT:
WINGWALL B

LOG 1 OF 1

BORING NUMBER:	BORING LOCATION	START: 11/23/2020 1:25 PM	HAMMER: AUTOMATIC
SB2-02	STATION: 102+27.0 OFFSET: 35.0 FT. RT.	FINISH: 11/24/2020 10:38 AM	EFFICIENCY: 0.8 ERa

DRILLING METHOD AND EQUIPMENT:	SIZE OF CORE:	VERTICAL SCALE:	TOP OF BORING ELEVATION:
DOUBLE TUBE WIRE LINE-NQ, AUTOMATIC, ACKER XLS TRACK MOUNT RIG	2.000 IN.	0 FT. 5 FT.	387.6 FT.

DRILLING INSPECTOR: HUNTER FENK
DRILLER & DRILLING COMPANY: NICO RIZIO
NAVARRO & WRIGHT

▽ 0 HR. READING - ELAPSED TIME: Dry - 0.1 hr.
▼ 24 HR. READING - ELAPSED TIME: Dry - 23.5 hr.

ELEV.	GRAPHIC	MATERIAL DESCRIPTION	AASHTO/ USCS	SAMPLE DEPTH	SAMPLE NO.	BLOW COUNT / PP/T TSF	N 60 / %RQD	REC (ft.)	REC (%)	◇ RQD % ◇ ⊙ Soil/Rock Rec. % ⊙ ▲ SPT (N_{60}) ▲
385		**SAND**, some Clay, some Gravel, medium dense, dry to moist, homogeneous, angular to sub-angular, light orange brown, fill. *0.0'-0.7': Topsoil, more organics.* *6.0'-9.0' More gravel.* 9.0'/El. 378.6	a-2-6 / sc	1.5	S-1	3-4-6 **3.00**	13	1.5	100	
				3.0	S-2	3-9-10	25	1.5	100	
				4.5	S-3	8-6-8	19	1.5	100	
				6.0	S-4	10-12-10	29	1.5	100	
380				7.5	S-5	4-13-6	25	1.5	100	
				9.0	S-6	4-5-7	16	1.5	100	
		CLAY, some Sand, little Gravel, medium to stiff, moist, homogeneous, high plastic fines, orange brown, residuum. *S-9: Limestone fragments in sample.* 16.5'/El. 371.1	a-6 / cl	10.5	S-7	7-8-8 **2.00**	21	1.5	100	
				12.0	S-8	3-4-4 **0.75**	11	1.5	100	
				13.5	S-9	3-5-6 **0.75**	15	1.5	100	
				15.0	S-10	3-5-7 **1.00**	16	1.5	100	
BFE 372.00				15.7	S-11	12-50/.2'	>67	0.7	100	
BOCC 371.10				16.5	S-12	**2.00** 50/.0'	>67	0.0	0	
370 TOR 371.10				16.5	R-1		60%	1.7	85	
		LIMESTONE, light gray, soft to medium hard, slightly weathered, indistinct bedding, Joint Set 1: jointed, close to medium spacing, shallow to steep dip, tight joints, Joint Set 2: random fractures, close to medium spacing, shallow to sheer dip, tight joints, *infilled with calcite*.		18.5	R-2		68%	4.0	100	
				22.5	R-3		44%	5.0	100	
365				27.5	R-4		74%	5.0	100	
				32.5	R-5		72%	4.0	100	
360										
355		36.5'/El. 351.1								

GENERAL NOTES

THIS SHEET IS INCLUDED FOR THE CONVENIENCE OF THE DEPARTMENT. REFER TO PUBLICATION 408 SECTION 102.05 FOR FURTHER INFORMATION.

FOR ADDITIONAL SOIL AND ROCK DESCRIPTIONS SEE PUBLICATION 222.

THE BORING LOGS AND RELATED INFORMATION DEPICT SUBSURFACE CONDITIONS ONLY AT THE SPECIFIC LOCATIONS AND DATES INDICATED. SUBSURFACE CONDITIONS MAY DIFFER FROM THE CONDITIONS REPORTED AT THE SPECIFIC LOCATIONS. ALSO, THE PASSAGE OF TIME MAY RESULT IN A CHANGE OF CONDITIONS AT THE BORING LOCATIONS.

LEGEND

PP	POCKET PENETROMETER
T	TORVANE
NTS	NOT TO SCALE
BOCC	BOTTOM OF CLASS C CONCRETE
BFE	BOTTOM OF FOOTING ELEVATION
BPCE	BOTTOM OF PILE CAP ELEVATION
EPTE	ESTIMATED PILE TIP ELEVATION
TOR	ESTIMATED TOP OF ROCK ELEVATION

THE DESCRIPTIONS OF THE MATERIALS ENCOUNTERED HAVE BEEN VERIFIED.
ME

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0123 MPMS/ECMS PROJ: 97828 BRKEY: 67418

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0123 SEG 0051 OFFSET 0123
SR 3007 (19TH STREET) STA 100+84.74
OVER SR 0083 AND SR 8019 (RAMP T)
2-SPAN CONTINUOUS COMPOSITE PS CONCRETE
PA BULB-TEE BEAM BRIDGE
STRUCTURE BORINGS - 5

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL MARK T. EVANS GEOLOGIST PG005251

SHEET 77 OF 78

S - 39453

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LABORATORY TEST SUMMARY - SOILS

					% GRAIN SIZE DISTRIBUTION (AASHTO)							CLASSIFICATION			PLASTICITY PARAMETERS			SHEAR STRENGTH				
BORING NUMBER	STATION & OFFSET	SAMPLE #	TEST DEPTH (FT.)	NATURAL MOISTURE %	GRAVEL %	SAND %	COARSE SAND %	FINE SAND %	FINES %	SILT %	CLAY %	AASHTO	USCS	S.G.	LIQUID LIMIT	PLASTIC LIMIT	P. I.	C (TSF)	ϕ (DEG.)	C' (TSF)	ϕ' (DEG)	TEST METHOD
SB3-02	99+72.0 35 ft. RT.	S-18 to 21	27.0 to 33.0	31.6	0.9	14.8	3.9	11.0	84.3	39.1	45.3	A-7-6	CH		54	24	30					
SB3-04	100+75.0 19 ft. RT.	S-13 to 16	19.5 to 25.3	23.6	21.4	15.4	6.9	8.5	63.2	34.6	28.6	A-6	CL		37	19	18					
SB3-06	101+87.0 32 ft. RT.	S-4 to 7	4.5 to 10.5	17.5	2.6	14.7	3.7	11.0	82.7	46.9	35.8	A-6	CL		37	19	18					

LABORATORY TEST SUMMARY - ELECTROCHEMICAL

BORING NUMBER	STATION & OFFSET	SAMPLE #	TEST DEPTH (FT.)	SAMPLE SOURCE	pH	MINIMUM RESISTIVITY (ohm-cm)	CHLORIDE CONTENT (ppm)	SULFATE CONTENT (ppm)	HIGH ORGANIC CONTENT?	CORROSIVE FOR CONCRETE?	CORROSIVE FOR STEEL?
SB3-02	99+72.0 35 ft. RT.	S-18 to 21	27.0 to 33.0	GROUNDWATER SOIL	5.5	2,934	231	215	No	No No	No Resist.w/Sulf.,Resist.w/Chlor.
SB3-04	100+75.0 19 ft. RT.	S-13 to 16	19.5 to 25.3	GROUNDWATER SOIL	6.5	2,739	122	54	No	No No	No Resist.w/Chlor.
SB3-06	101+87.0 32 ft. RT.	S-4 to 7	4.5 to 10.5	GROUNDWATER SOIL	7.3	3,439	35	32	No	No No	No No

LABORATORY TEST SUMMARY - ROCK CORE

BORING NUMBER	STATION & OFFSET	SAMPLE #	TEST DEPTH (FT.)	TEST	STRENGTH	JAR SLAKE TEST PERFORMED?	SLAKE DURABILITY INDEX & TYPE	ROCK RECOVERY %	RQD %	BEDROCK LITHOLOGY	STRATIGRAPHIC UNIT
SB2-01	102+43.0 19 ft. LT.	R-4	41.0 to 41.7	UNCONFINED COMPRESSIVE TEST	8492.8 PSI / 611.5 TSF	NO		60	60	LIMESTONE	
SB2-01	102+43.0 19 ft. LT.	R-4	45.6 to 46.0	UNCONFINED COMPRESSIVE TEST	22506.8 PSI / 1,620.5 TSF	NO		60	60	LIMESTONE	
SB2-02	102+27.0 35 ft. RT.	R-5	33.3 to 33.9	UNCONFINED COMPRESSIVE TEST	10786.9 PSI / 776.7 TSF	NO		100	72	LIMESTONE	
SB2-02	102+27.0 35 ft. RT.	R-5	35.3 to 36.5	UNCONFINED COMPRESSIVE TEST	8803.1 PSI / 633.8 TSF	NO		100	72	LIMESTONE	
SB3-02	99+72.0 35 ft. RT.	R-1	40.1 to 41.0	UNCONFINED COMPRESSIVE TEST	15095.4 PSI / 1,086.9 TSF	NO		90	67	LIMESTONE	
SB3-02	99+72.0 35 ft. RT.	R-2	41.0 to 41.9	UNCONFINED COMPRESSIVE TEST	13042.9 PSI / 939.1 TSF	NO		90	85	LIMESTONE	
SB3-03	100+90.0 38 ft. LT.	R-1	9.5 to 10.0	UNCONFINED COMPRESSIVE TEST	12861.0 PSI / 926.0 TSF	NO		97	73	LIMESTONE	
SB3-03	100+90.0 38 ft. LT.	R-3	15.0 to 15.8	UNCONFINED COMPRESSIVE TEST	12958.4 PSI / 933.0 TSF	NO		72	54	LIMESTONE	
SB3-04	100+75.0 19 ft. RT.	R-2	28.1 to 28.6	UNCONFINED COMPRESSIVE TEST	15769.7 PSI / 1,135.4 TSF	NO		23	17	LIMESTONE	
SB3-04	100+75.0 19 ft. RT.	R-3	31.0 to 32.1	UNCONFINED COMPRESSIVE TEST	8882.4 PSI / 639.5 TSF	NO		98	68	LIMESTONE	
SB3-05	102+00.0 21 ft. LT.	R-5	27.5 to 28.3	UNCONFINED COMPRESSIVE TEST	8844.9 PSI / 636.8 TSF	NO		100	60	LIMESTONE	
SB3-05	102+00.0 21 ft. LT.	R-5	29.2 to 30.2	UNCONFINED COMPRESSIVE TEST	11793.2 PSI / 849.1 TSF	NO		100	60	LIMESTONE	
SB3-06	101+87.0 32 ft. RT.	R-5	26.9 to 28.0	UNCONFINED COMPRESSIVE TEST	13929.2 PSI / 1,002.9 TSF	NO		100	100	LIMESTONE	
SB3-06	101+87.0 32 ft. RT.	R-5	29.8 to 30.8	UNCONFINED COMPRESSIVE TEST	10898.9 PSI / 784.7 TSF	NO		100	100	LIMESTONE	

GENERAL NOTES

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LEGEND

PP	POCKET PENETROMETER
T	TORVANE
NTS	NOT TO SCALE
BCC	BOTTOM OF CLASS C CONCRETE
BFE	BOTTOM OF FOOTING ELEVATION
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EPTE	ESTIMATED PILE TIP ELEVATION
TOR	ESTIMATED TOP OF ROCK ELEVATION

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0050-0123 MPMS/ECMS PROJ: 97828 BRKEY: 67418

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0050 OFFSET 0123 SEG 0051 OFFSET 0123
SR 3007 (19TH STREET) STA 100+84.74
OVER SR 0083 AND SR 8019 (RAMP T)
2-SPAN CONTINUOUS COMPOSITE PS CONCRETE
PA BULB-TEE BEAM BRIDGE
STRUCTURE BORINGS - 6

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL MARK T. EVANS GEOLOGIST PG005251

SHEET 78 OF 78

S - 39453

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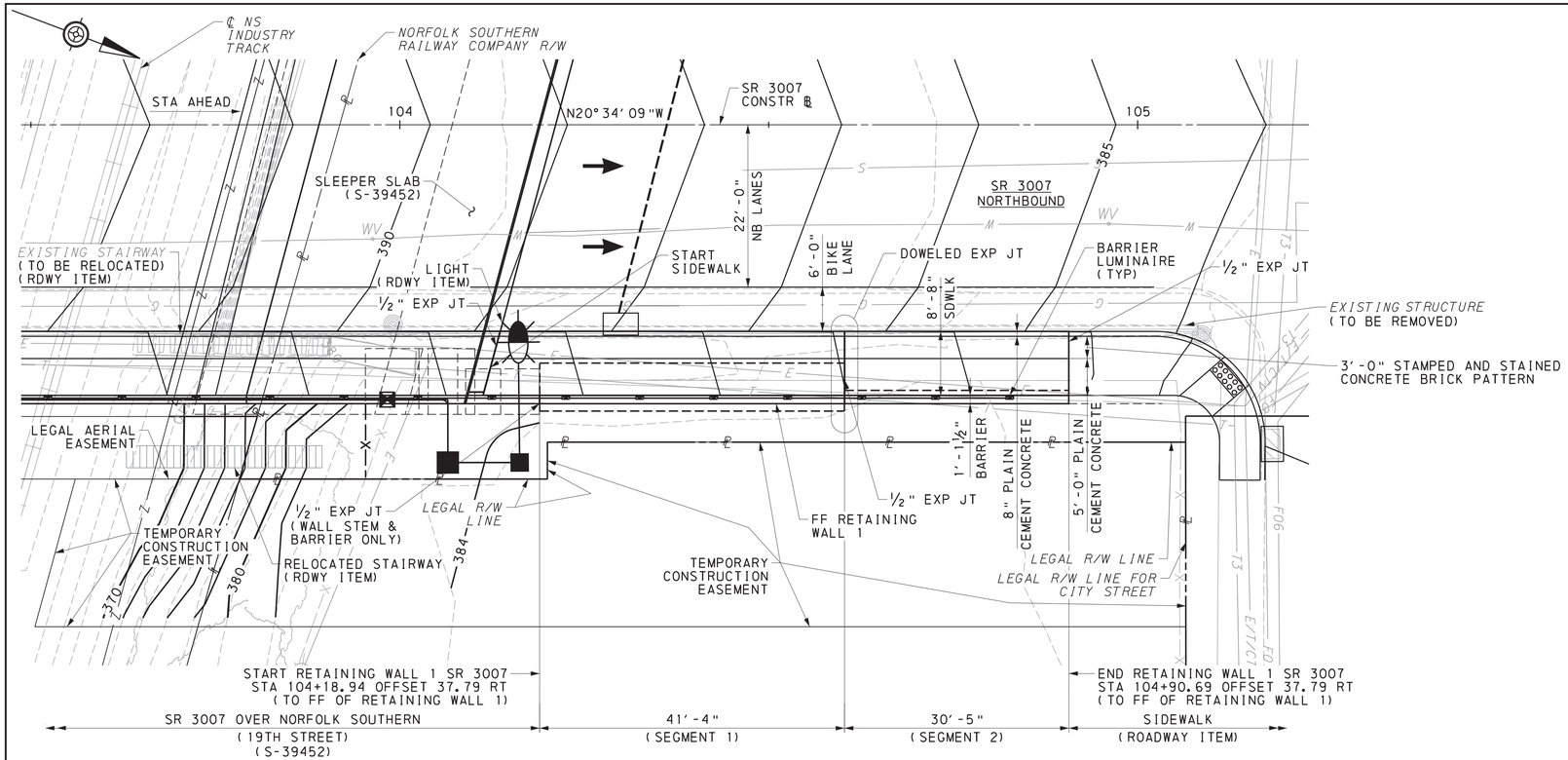
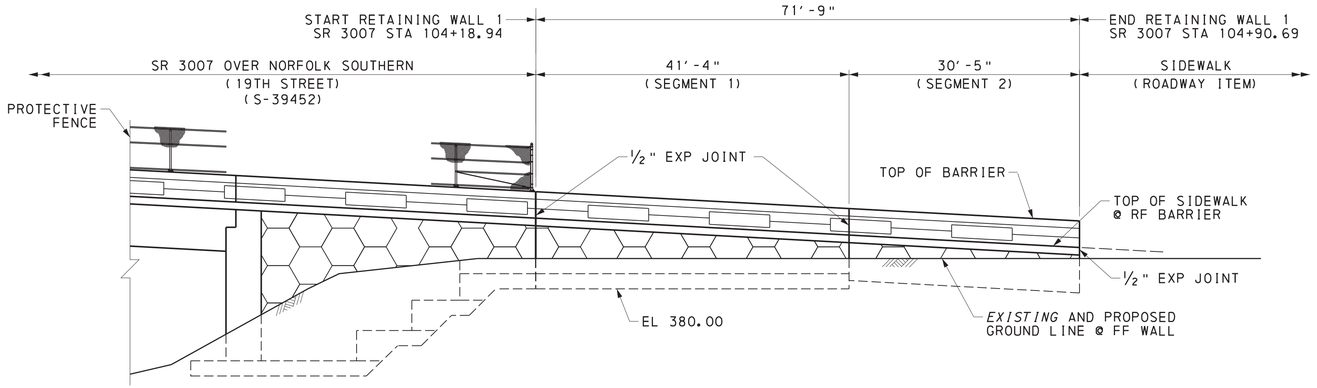


PLAN

5 0 5 10 FEET

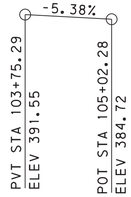


ELEVATION

5 0 5 10 FEET

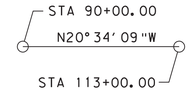
VERTICAL ALIGNMENT DATA

SR 3007 (19TH STREET)



HORIZONTAL ALIGNMENT DATA

SR 3007 (19TH STREET)



LEGEND

→	DIRECTION OF TRAFFIC
200	PROPOSED CONTOUR
200	EXISTING CONTOUR
	LEGAL RIGHT-OF-WAY
C	EXISTING CABLE
CTV	EXISTING CABLE TELEVISION
E	EXISTING ELECTRIC
FO	EXISTING FIBER OPTIC
W	EXISTING WATER
S	EXISTING SANITARY SEWER
T	EXISTING TELEPHONE
G	EXISTING GAS
X	EXISTING FENCE
X	PROPOSED FENCE
℄	EXISTING PROPERTY LINE
WV	EXISTING WATER VALVE

NOTES:

1. ALL DIMENSIONS MEASURED ALONG FRONT FACE OF RETAINING WALL UNLESS NOTED OTHERWISE.
2. SEE HIGHWAY LIGHTING ALSO PLAN FOR BARRIER LUMINAIRE PLACEMENT DETAILS.
3. FOR SUPPLEMENTAL DRAWINGS, SEE SHEET 3.

INDEX OF DRAWINGS

SHEET NUMBER	TITLE
1	GENERAL PLAN & ELEVATION
2	GENERAL NOTES
3	SUMMARY OF QUANTITIES
4	STAKE-OUT PLAN
5	FOOTING PLAN
6	ELEVATIONS
7	SECTIONS & DETAILS
8	SIDEWALK PLAN & DETAILS
9	REINFORCEMENT SCHEDULE
10	BARRIER ARCHITECTURAL DETAILS & STAMPED SIDEWALK DETAIL
11-13	STRUCTURE BORINGS

REFERENCES:

GENERAL NOTES
SECTIONS & DETAILS
STRUCTURE BORINGS

SHEETS:

2
7
11 - 13

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0070-0116 MPMS/ECMS PROJ: 97828 BRKEY: 68395

HNTB

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
JUSTIN ROBERT MCCARTHY
ENGINEER
PE076998

Justin R. McCarthy
REG PROF ENGINEER
DATE 3/7/2022

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

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0070 OFFSET 0116 TO SEG 0070 OFFSET 0188
SR 3007 ℄ STA 104+18.94 TO STA 104+90.69
SR 3007 (19TH STREET) NORTHEAST

REINFORCED CONCRETE RETAINING WALL

GENERAL PLAN & ELEVATION

RECOMMENDED March 18, 2022
Douglas E. Kraft, P.E.
DISTRICT 8-0 BRIDGE ENGINEER

SHEET 1 OF 13
+ SUPPLEMENTAL DRAWINGS

S-40312

3/7/2022
FILENAME: 63016-s-brRW1-gpa01.dgn

DES: MLA	DES CKD: ZAA	DWG: DAC	DWG CKD: MLA

GENERAL NOTES

DESIGN SPECIFICATIONS:

1. AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 8TH EDITION, 2017, AND AS SUPPLEMENTED BY DESIGN MANUAL, PART 4, DECEMBER 2019.
2. DESIGN IS IN ACCORDANCE WITH THE LRFD METHOD.

GENERAL:

1. PROVIDE MATERIALS AND PERFORM WORK IN ACCORDANCE WITH SPECIFICATIONS, PUBLICATION 408/2020 AND CONTRACT SPECIAL PROVISIONS.
2. DESIGN LIVE LOAD IS 3'-0" LIVE LOAD SURCHARGE LOADING.
3. STATIONS AND ELEVATIONS ARE GIVEN IN FEET UNLESS OTHERWISE NOTED.
4. PROVIDE 2" CONCRETE COVER ON REINFORCEMENT BARS, EXCEPT AS NOTED.
5. USE CLASS A CEMENT CONCRETE IN RETAINING WALL STEM AND FOOTING. USE CLASS AA CONCRETE IN BARRIER, SIDEWALK, MOMENT SLAB, AND TOE WALL.
6. A HIGHER CLASS CONCRETE MAY BE SUBSTITUTED FOR A LOWER CLASS CONCRETE AT NO ADDITIONAL COST TO THE DEPARTMENT.
7. PROVIDE GRADE 60 REINFORCING STEEL BARS THAT MEET THE REQUIREMENTS OF ASTM A 615/A 615M, A 996/A 996M OR A 706/A 706M. DO NOT WELD GRADE 60 REINFORCING STEEL BARS UNLESS SPECIFIED. GRADE 40 REINFORCING STEEL BARS MAY BE SUBSTITUTED WITH A PROPORTIONAL INCREASE IN CROSS-SECTIONAL AREA, IF APPROVED BY THE CHIEF BRIDGE ENGINEER. DO NOT USE RAIL STEEL A 996/A 996M REINFORCEMENT BARS IN RETAINING WALL STEM AND FOOTING, BARRIERS, SIDEWALK, MOMENT SLAB OR WHERE BENDING OR WELDING OF THE REINFORCEMENT BARS IS INDICATED.
8. EPOXY COAT ALL REINFORCEMENT BARS.
9. GALVANIZED REINFORCING STEEL BARS MAY BE SUBSTITUTED FOR EPOXY-COATED REINFORCING STEEL BARS AT NO ADDITIONAL COST TO THE DEPARTMENT.
10. RAKE-FINISH ALL HORIZONTAL CONSTRUCTION JOINTS, EXCEPT AS NOTED.
11. CHAMFER EXPOSED CONCRETE EDGES ¾" BY ¾", EXCEPT AS NOTED.
12. ALL DIMENSIONS SHOWN ARE HORIZONTAL, EXCEPT AS NOTED.
13. DIMENSIONS SHOWN ARE FOR A NORMAL TEMPERATURE OF 68 DEGREES F.
14. VERIFY ALL DIMENSIONS AND GEOMETRY IN THE FIELD AS NECESSARY FOR PROPER FIT OF THE PROPOSED CONSTRUCTION.
15. REFER TO ROADWAY CONSTRUCTION PLANS AND CROSS SECTIONS FOR INLET AND STORM DRAIN PIPE LOCATIONS AND ELEVATIONS.
16. SITE IS NOT CLASS E OR F.
17. PROVIDE MINIMUM EMBEDMENT AND SPLICE LENGTHS IN ACCORDANCE WITH STANDARD DRAWING BC-736M, UNLESS OTHERWISE INDICATED.
18. REMOVE EXISTING RETAINING WALL MINIMUM 3 FEET BELOW PROPOSED GRADE OR ANY PORTION OF THE EXISTING RETAINING WALL WHICH CONFLICTS WITH PROPOSED RETAINING WALL CONSTRUCTION. DOCUMENT THE CONDITION OF THE PORTION OF THE EXISTING RETAINING WALL TO REMAIN WITH PHOTOGRAPHS AND SURVEY NOTES. SUBMIT DOCUMENTATION TO THE DEPARTMENT.
19. SEE S-7173 (MAY 1964) PLAN SHEETS FOR EXISTING RETAINING WALL INFORMATION.

UTILITY NOTES:

1. COORDINATE, LOCATE, AND CONDUCT ALL WORK RELATED TO PUBLIC AND PRIVATE UTILITIES IN ACCORDANCE WITH PUBLICATION 408/2020, SECTIONS 105.06 AND 107.12.

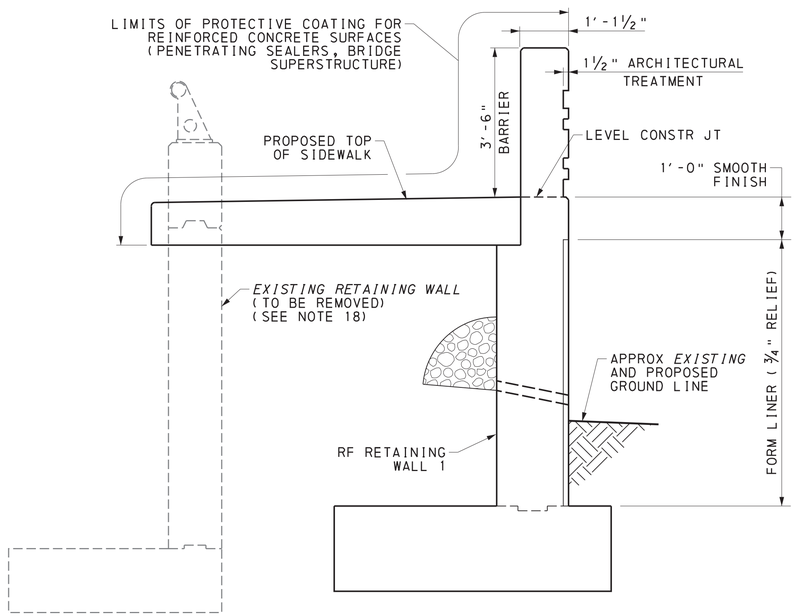
ARCHITECTURAL DETAIL NOTES:

1. PROVIDE AN ARCHITECTURAL SURFACE TREATMENT (FORMLINER) ON FRONT FACE OF THE RETAINING WALL TO THE LIMITS INDICATED AND IN ACCORDANCE WITH SPECIAL PROVISION - ARCHITECTURAL SURFACE TREATMENT, ¾" RELIEF, HEXAGON.
2. PROVIDE FORMWORK TO CREATE THE RELIEF DETAILS ON THE OUTSIDE FACE OF BARRIER AS INDICATED ON SHEET 10. THIS FORMWORK IS INCIDENTAL TO THE BARRIER CONCRETE.
3. PROVIDE A SMOOTH FINISH 1'-0" CAP ON THE TOP OF THE RETAINING WALL (BELOW BARRIER LEVEL CONSTRUCTION JOINT) AS INDICATED.
4. APPLY STAIN TO CONCRETE SURFACES TO THE LIMITS INDICATED AND IN ACCORDANCE WITH SPECIAL PROVISION - STAINING OF REINFORCED CONCRETE SURFACES. THE BARRIER RECTANGULAR BLOCKS ARE TO BE FEDERAL COLOR #15450, BLUE.
5. BARRIER, ARCHITECTURAL TREATMENT AREA, RETAINING WALL, SIDEWALK, AND MOMENT SLAB TO BE NATURAL COLOR, EXCEPT FOR AREAS INDICATED ABOVE.

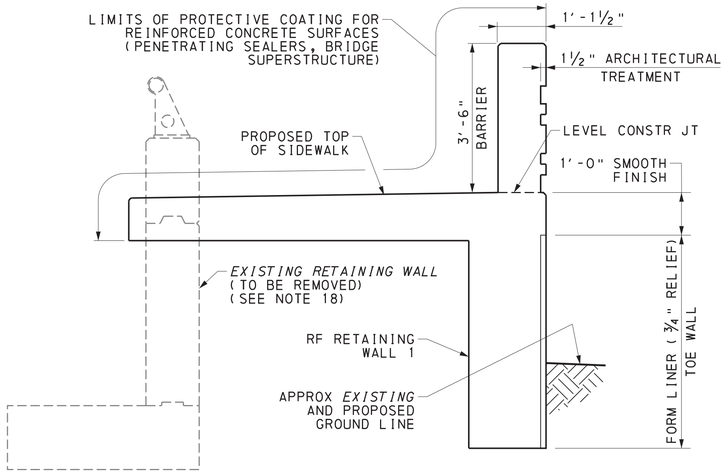
FOUNDATION NOTES

GENERAL

1. PROVIDE A MINIMUM EMBEDMENT DEPTH OF 36 INCHES FOR FROST PROTECTION.
2. EXCAVATE ACCORDING TO CURRENT OSHA OR OTHER APPLICABLE LOCAL, STATE, AND FEDERAL REGULATIONS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE STABILITY OF THE EXCAVATIONS.
3. DIVERT ALL SURFACE WATER AWAY FROM FOUNDATION EXCAVATIONS, OVER-EXCAVATION, AND FOUNDATION CONSTRUCTION TO PREVENT DEGRADATION OF FOUNDATION SOILS.
4. FOUNDATIONS MAY BE ORDERED BY THE REPRESENTATIVE AND DISTRICT GEOTECHNICAL SPECIALIST TO BE AT ANY ELEVATION OR OF ANY DIMENSIONS NECESSARY TO PROVIDE A PROPER FOUNDATION.
5. THE CONTRACTOR IS RESPONSIBLE FOR THE CONTROL OF DRAINAGE DURING CONSTRUCTION. DIRECT RUNOFF AWAY FROM THE PROPOSED FOUNDATION FOOTPRINT.
6. CONSIDER THE SOIL ENVIRONMENT AS POTENTIALLY CORROSIVE, EPOXY COAT ALL REINFORCEMENT BARS.



ARCHITECTURAL SURFACE TREATMENT LIMITS
(SEGMENT 1)
NOT TO SCALE



ARCHITECTURAL SURFACE TREATMENT LIMITS
(SEGMENT 2)
NOT TO SCALE

LEGEND ABBREVIATIONS

ADD'L	=	ADDITIONAL
APPROX	=	APPROXIMATE
AHD	=	AHEAD
ARCH TREAT	=	ARCHITECTURAL TREATMENT
℄	=	BASELINE
BTWN	=	BETWEEN
BOT	=	BOTTOM
℄	=	CENTERLINE
CCNS	=	CLOSED CELL NEOPRENE SPONGE
CONC	=	CONCRETE
CONSTR	=	CONSTRUCTION
CLR	=	CLEAR
DIA	=	DIAMETER
EA	=	EACH
EL/ELEV	=	ELEVATION
EF	=	EACH FACE
EQ	=	EQUAL
EXIST	=	EXISTING

LEGEND ABBREVIATIONS

EXP	=	EXPANSION
FF	=	FRONT FACE
FIX	=	FIXED
FTG	=	FOOTING
GALV	=	GALVANIZED
HORIZ	=	HORIZONTAL
JT	=	JOINT
INV	=	INVERT
MAX	=	MAXIMUM
MIN	=	MINIMUM
NB	=	NORTHBOUND
NTS	=	NOT TO SCALE
PCP	=	PREFORMED CELLULAR POLYSTYRENE
PGL	=	PROFILE GRADE LINE
PROP	=	PROPOSED
RDWY	=	ROADWAY
REINF	=	REINFORCEMENT
REQ'D	=	REQUIRED

LEGEND ABBREVIATIONS

RF	=	REAR FACE
SB	=	SOUTHBOUND
SHLDR	=	SHOULDER
SPA	=	SPACE/SPACED
STA	=	STATION
TYP	=	TYPICAL
UNO	=	UNLESS NOTED OTHERWISE
VERT	=	VERTICAL
WP	=	WORK POINT

FOUNDATION NOTES CONTINUED

GENERAL

7. PRIOR TO FOOTING CONSTRUCTION, ALLOW THE DISTRICT GEOTECHNICAL SPECIALIST TO INSPECT THE BOTTOM OF FOOTING EXCAVATION. AS DIRECTED, EXCAVATE SOFT OR UNSUITABLE MATERIAL BELOW THE BOTTOM OF FOOTING ELEVATION AND REPLACE WITH COARSE AGGREGATE.
8. PERFORM SPECIAL ROLLING WITHIN THE FOUNDATION FOOTPRINT PER PUBLICATION 408, SECTION 208. OVER-EXCAVATE TO COMPETENT MATERIAL WHERE UNSUITABLE AND/OR UNSTABLE MATERIALS ARE IDENTIFIED. BACKFILL WITH COARSE AGGREGATE IN ACCORDANCE WITH SPECIAL PROVISION - OVEREXCAVATION AND BACKFILL WITH AASHTO NO. 2A COARSE AGGREGATE.

SPREAD FOOTINGS

1. BLASTING IS NOT PERMITTED.
2. SPREAD FOOTINGS ON SOIL DESIGNED WITH A BEARING RESISTANCE OF 5.22 KSF.

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0070-0116 MPMS/ECMS PROJ: 97828 BRKEY: 68395

HNTB

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0070 OFFSET 0116 TO SEG 0070 OFFSET 0188
SR 3007 ℄ STA 104+18.94 TO STA 104+90.69
SR 3007 (19TH STREET) NORTHEAST
REINFORCED CONCRETE RETAINING WALL

GENERAL NOTES

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — JUSTIN ROBERT MCCARTHY — ENGINEER — PE076998

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

RECOMMENDED March 18, 2022

SHEET 2 OF 13

S-40312

3/7/2022
FILENAME: 63016-s-brRW1-gen01.dgn

DES: MLA	DES CKD: ZAA	DWG: DAC	DWG CKD: MLA

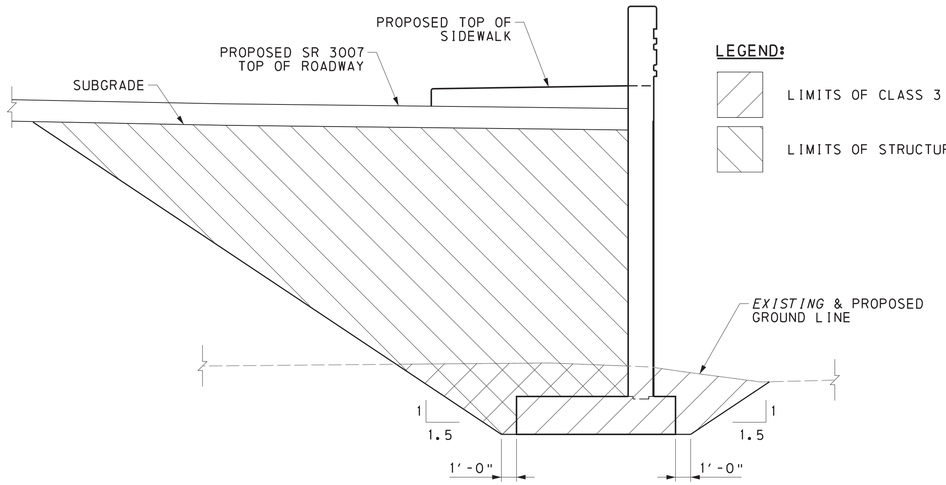
APPROXIMATE QUANTITIES - RETAINING WALL STRUCTURE, AS DESIGNED

ITEM NUMBER	DESCRIPTION	UNIT	QUANTITY
8610-0001	CONCRETE RETAINING WALL, AS DESIGNED, S-40312 (1)	LS	LS
	CLASS 3 EXCAVATION (8)	CY	132
	STRUCTURE BACKFILL	CY	106
	MEMBRANE WATERPROOFING SYSTEM INSTALLED ON OTHER SURFACES (2) (5)	SY	19
	NO. 57 COARSE AGGREGATE (3)	CY	2
	1/2" CONDUIT IN STRUCTURE (1)	LF	72
	CLASS AA CEMENT CONCRETE	CY	55
	CLASS A CEMENT CONCRETE	CY	35
	PROTECTIVE COATING FOR REINFORCED CONCRETE SURFACES (PENETRATING SEALERS, BRIDGE SUPERSTRUCTURE)	SY	126
	BARRIER LUMINAIRE (1)	EA	7
	STAINING OF REINFORCED CONCRETE SURFACES (1)	SF	19
	STAMPED AND STAINED CEMENT CONCRETE SIDEWALK (1)	SF	216
	ARCHITECTURAL SURFACE TREATMENT, 3/4" RELIEF, HEXAGON (1)	SF	309
"AND" 1002-0191	REINFORCEMENT BARS, EPOXY COATED (4) (7)	LB	10580
"AND" 9000-0503	OVEREXCAVATION AND BACKFILL WITH AASHTO NO. 2A COARSE AGGREGATE, S-40312 (1) (6)	CY	12

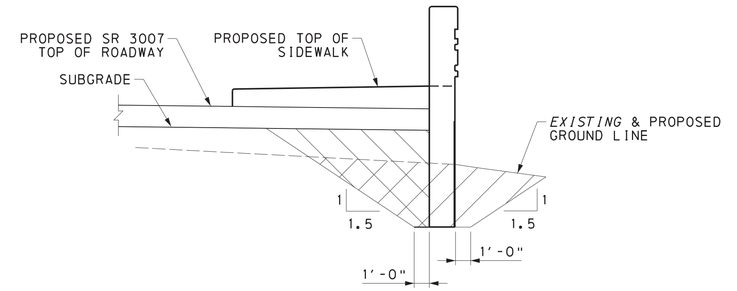
(1) SEE SPECIAL PROVISIONS.
(2) PREFORMED CELLULAR POLYSTYRENE IS INCIDENTAL TO MEMBRANE WATERPROOFING SYSTEM INSTALLED ON OTHER SURFACES.
(3) GEOTEXTILE, CLASS 1 IS INCIDENTAL TO NO. 57 COARSE AGGREGATE.
(4) FOR AS DESIGNED STRUCTURE, INCLUDE IN RETAINING WALL BID ITEMS. FOR ALTERNATE DESIGNS, INCLUDE IN RETAINING WALL STRUCTURE LUMP SUM BID ITEM.
(5) FOR WATERPROOFING DETAILS, SEE BC-788M.
(6) APPROXIMATE QUANTITY, GIVEN FOR INFORMATION ONLY.
(7) INCLUDES 37 LBS OF STAINLESS STEEL DOWEL BARS.
(8) REMOVAL OF EXISTING RETAINING WALL IS INCIDENTAL TO CLASS 3 EXCAVATION.

ALTERNATE STRUCTURE ITEMS

ITEM NUMBER	DESCRIPTION	UNIT	TOTAL
8610-0001	CONCRETE RETAINING WALL, AS DESIGNED, S-40312 (1)	LS	LUMP SUM
8622-0001	PRECAST MODULAR RETAINING WALL (1)	LS	LUMP SUM



EXCAVATION PAY LIMITS (SEGMENT 1)
NOT TO SCALE



EXCAVATION PAY LIMITS (SEGMENT 2)
NOT TO SCALE

Mark	Description	By	Chk'd	Recm'd	Date

REVISIONS

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0070-0116 MPMS/ECMS PROJ: 97828 BRKEY: 68395

ELECTRICAL DETAILS	BC-721M	02/19/2021
WALL CONSTRUCTION AND EXPANSION JOINT DETAILS	BC-735M	09/30/2016
REINFORCEMENT BAR FABRICATION DETAILS	BC-736M	01/31/2019
BRIDGE DRAINAGE	BC-751M	01/31/2019
TYPICAL WATERPROOFING AND EXPANSION DETAILS	BC-788M	01/31/2019
CLASSIFICATION OF EARTHWORK FOR STRUCTURES	RC-11M	06/01/2010
BACKFILL AT STRUCTURES	RC-12M	02/08/2019
DESCRIPTION	DWG. NO.	APP. DATE

SUPPLEMENTAL DRAWINGS

HNTB

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
JUSTIN ROBERT MCCARTHY
ENGINEER
PE076998

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

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0070 OFFSET 0116 TO SEG 0070 OFFSET 0188
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SR 3007 (19TH STREET) NORTHEAST
REINFORCED CONCRETE RETAINING WALL

SUMMARY OF QUANTITIES

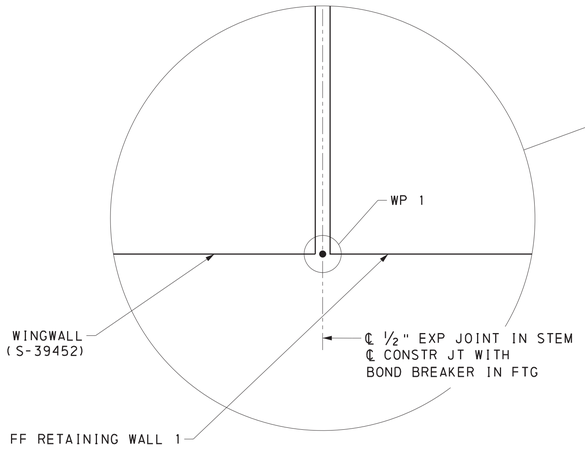
RECOMMENDED March 18, 2022

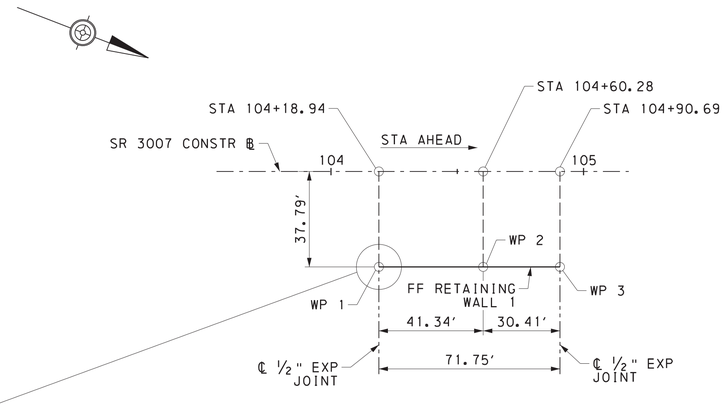
SHEET 3 OF 13

S-40312

DES: MLA	DES CKD: ZAA	DWG: DAC	DWG CKD: MLA

3/7/2022
FILENAME: 63016-s-brRW1-sum01.dgn





STAKE-OUT PLAN

NOT TO SCALE

STAKE-OUT COORDINATES

WP	NORTHING	EASTING	STATION	OFFSET	BASELINE
1	337983.1196	2218003.3240	104+18.94	37.79 RT	SR 3007 CONSTR ℄
2	338021.8179	2217988.8021	104+60.28	37.79 RT	SR 3007 CONSTR ℄
3	338050.2955	2217978.1156	104+90.69	37.79 RT	SR 3007 CONSTR ℄

NOTES:

FOUR PLACE COORDINATES ARE FOR COMPUTATIONAL PURPOSES ONLY AND DO NOT IMPLY A PRECISION BEYOND TWO DECIMAL POINTS.

REFERENCES:

	SHEETS:
GENERAL PLAN & ELEVATION	1
GENERAL NOTES	2
FOOTING PLAN	5
SIDEWALK PLAN & DETAILS	8

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
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COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

COMMONWEALTH OF PENNSYLVANIA
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JUSTIN ROBERT MCCARTHY
ENGINEER
PE076998

DAUPHIN COUNTY
SR 0083 SECTION 079
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SR 3007 (19TH STREET) NORTHEAST
REINFORCED CONCRETE RETAINING WALL

STAKE-OUT PLAN

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

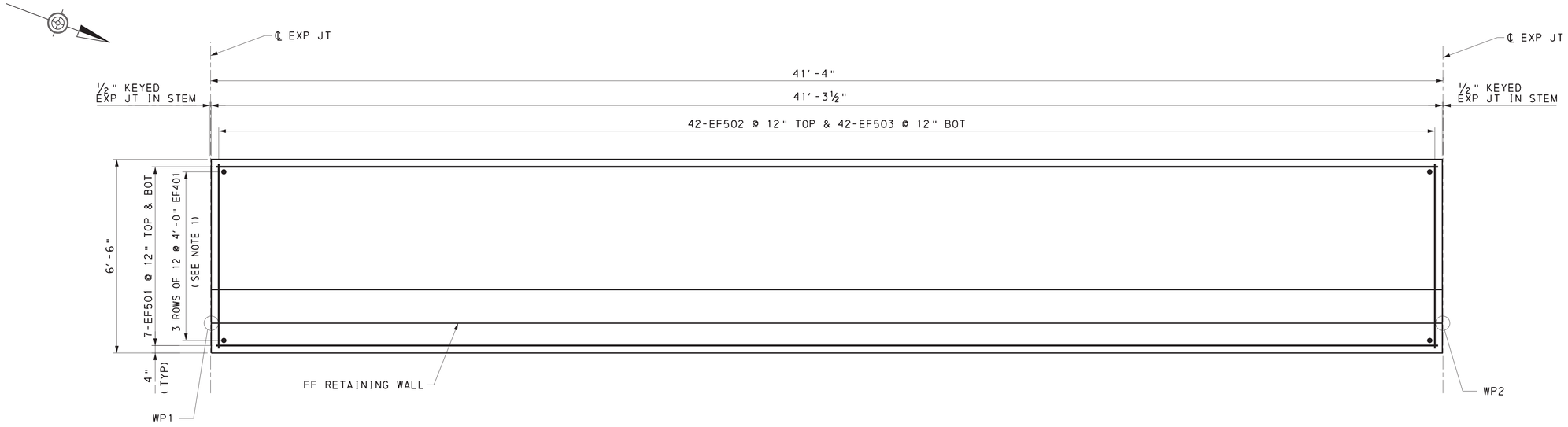
RECOMMENDED March 18, 2022

SHEET 4 OF 13

S-40312

3/7/2022
FILENAME: 63016-s-brRW1-sap01.dgn

DES: EZ	DES CKD: MLA	DWG: DAC	DWG CKD: ZAA



FOOTING PLAN

1 0 1 2 FEET

FOUNDATION PARAMETERS - SPREAD FOOTINGS	
BEARING RESISTANCE (KSF)	5.22
MAX BEARING PRESSURE (KSF)	2.67
LIMIT STATE	EXT-II MAX FINAL
SLIDING RESISTANCE (K)	3.97
MAXIMUM HORIZONTAL FORCE (K)	3.78
LIMIT STATE	STR-I MIN TEMP

NOTES:

1. TIE TOP AND BOTTOM MATS OF REINFORCING STEEL WITH EF401 TIE BARS AT A MAXIMUM SPACING OF 4'-0" IN BOTH DIRECTIONS. PROVIDE TIE BARS WITH 90° HOOK AT ONE END AND 135° HOOK AT THE OTHER END. ALTERNATE 90° AND 135° HOOKS AT THE TOP IN ALTERNATE TIES.

REFERENCES:

	SHEETS:
GENERAL PLAN & ELEVATION	1
GENERAL NOTES	2
STAKE-OUT PLAN	4
ELEVATIONS	6
SECTIONS & DETAILS	7
REINFORCEMENT SCHEDULE	9

Mark	Description	By	Chk'd	Recm'd	Date
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DAUPHIN COUNTY
SR 0083 SECTION 079
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REINFORCED CONCRETE RETAINING WALL

FOOTING PLAN

PREPARED BY:
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SUITE 300
HARRISBURG, PA 17110

RECOMMENDED March 18, 2022

SHEET 5 OF 13

S-40312

3/7/2022
FILENAME: 63016-s-brRW1-wap03.dgn

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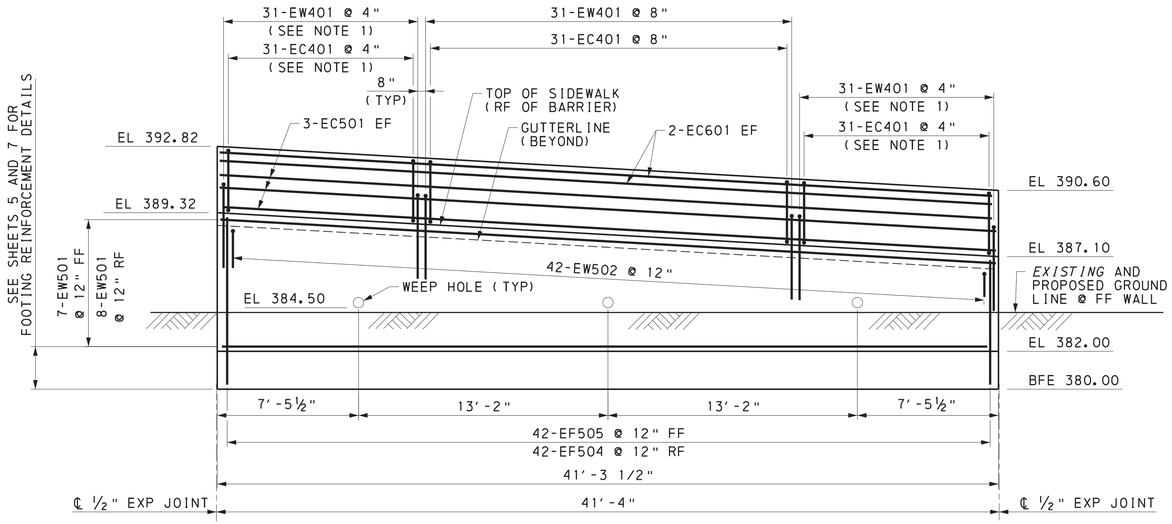
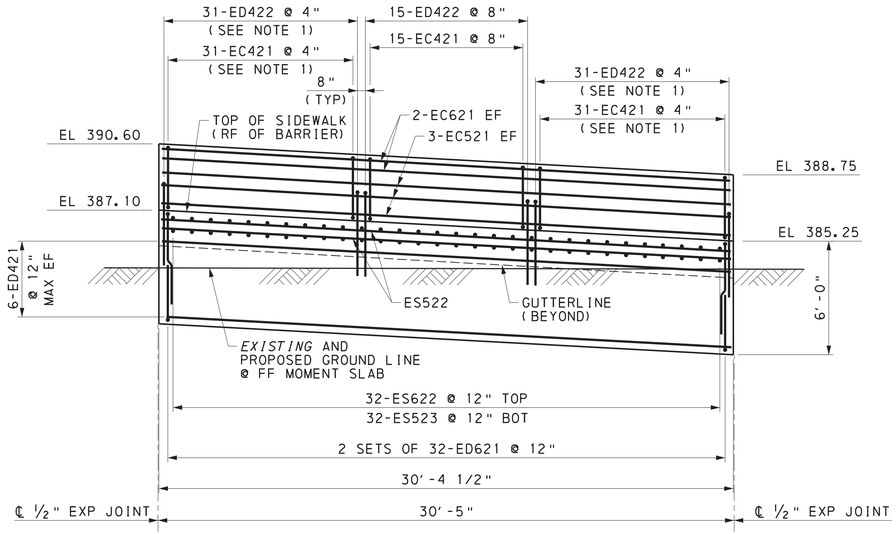


ELEVATION SEGMENT 1

2 0 2 4 FEET

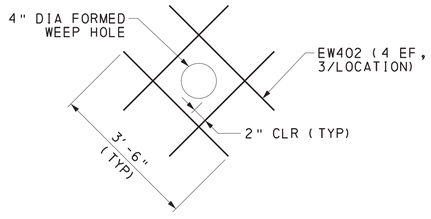


ELEVATION SEGMENT 2

2 0 2 4 FEET

NOTES:

1. PROVIDE ONE ADDITIONAL EW401/ED422 AND EC401/EC421 ON EACH SIDE OF BARRIER LIGHTING BLOCKOUT. ADJUST REINFORCEMENT AS REQUIRED TO ACCOMMODATE PLACEMENT OF LIGHTING BLOCKOUT WITHOUT CUTTING ANY OF EC501, EC521, EW401, OR ED422 BARS. SEE HIGHWAY LIGHTING ALSO PLAN FOR PLACEMENT OF BARRIER LUMINAIRES.



WEEP HOLE REINFORCEMENT

NOT TO SCALE

REFERENCES:

	SHEETS:
GENERAL PLAN & ELEVATION	1
GENERAL NOTES	2
FOOTING PLAN	5
SECTIONS & DETAILS	7
SIDEWALK PLAN & DETAILS	8
REINFORCEMENT SCHEDULE	9
BARRIER ARCHITECTURAL DETAILS & STAMPED SIDEWALK DETAIL	10

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

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COMMONWEALTH OF PENNSYLVANIA
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JUSTIN ROBERT MCCARTHY
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COMMONWEALTH OF PENNSYLVANIA
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SR 0083 SECTION 079
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REINFORCED CONCRETE RETAINING WALL

ELEVATIONS

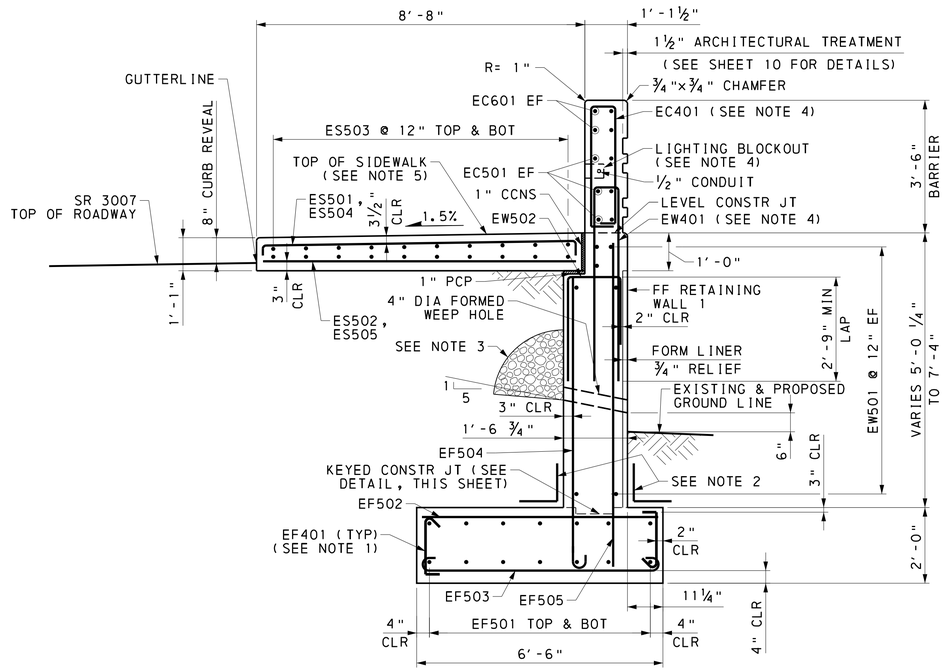
RECOMMENDED March 18, 2022

SHEET 6 OF 13

S-40312

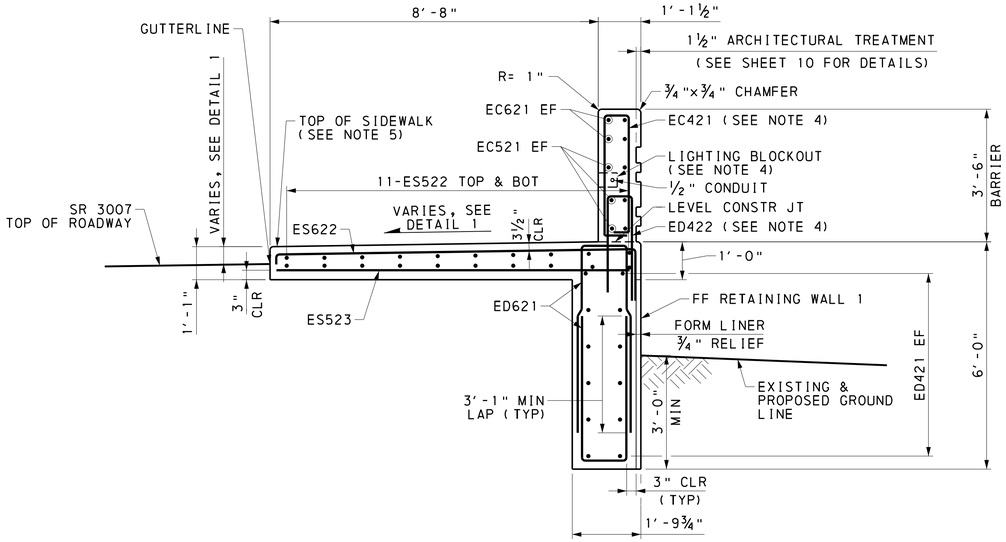
DES: MLA | DES CKD: ZAA | DWG: DAC | DWG CKD: ZAA

3/7/2022
FILENAME: 63016-s-brRW1-wgp02.dgn



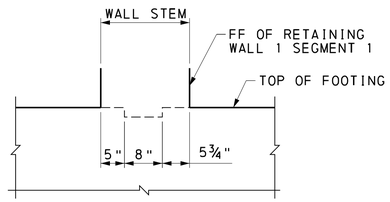
TYPICAL SECTION - SEGMENT 1

1 0 1 2 FEET



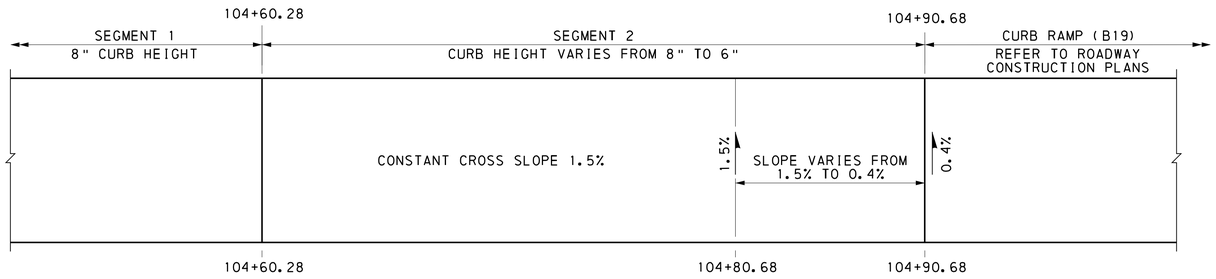
TYPICAL SECTION - SEGMENT 2

1 0 1 2 FEET



KEYED CONSTRUCTION JOINT DETAIL

12 0 12 INCHES



DETAIL 1 - SEGMENT 2 SIDEWALK CROSS SLOPE AND CURB REVEAL

NOT TO SCALE

NOTES:

1. TIE TOP AND BOTTOM MATS OF REINFORCING STEEL WITH EF401 TIE BARS AT A MAXIMUM SPACING OF 4'-0" IN BOTH DIRECTIONS. PROVIDE TIE BARS WITH 90° HOOK AT ONE END AND 135° HOOK AT THE OTHER END. ALTERNATE 90° AND 135° HOOKS AT THE TOP IN ALTERNATE TIES.
2. FOR STEM TO FOOTING WATERPROOFING DETAILS, SEE BC-788M.
3. 1/2 CY OF NO. 57 COARSE AGGREGATE ENCASED IN GEOTEXTILE MATERIAL AT EACH WEEP HOLE, CLASS 1, SEE PUB 408 SECTION 1001.3 (c).
4. PROVIDE ONE ADDITIONAL EW401/ED422 AND EC401/EC421 ON EACH SIDE OF BARRIER LIGHTING BLOCKOUT. ADJUST REINFORCEMENT AS REQUIRED TO ACCOMMODATE PLACEMENT OF LIGHTING BLOCKOUT WITHOUT CUTTING ANY OF EC501, EC521, EW401, OR ED422 BARS. SEE HIGHWAY LIGHTING ALSO PLAN FOR PLACEMENT OF BARRIER LUMINAIRES.
5. SIDEWALK STAMPED AND STAINED CONCRETE BRICK PATTERN NOT SHOWN. SEE SHEET 10 FOR DETAILS.

REFERENCES:

	SHEETS:
GENERAL PLAN & ELEVATION	1
GENERAL NOTES	2
FOOTING PLAN	5
ELEVATIONS	6
SIDEWALK PLAN & DETAILS	8
REINFORCEMENT SCHEDULE	9
BARRIER ARCHITECTURAL DETAILS & STAMPED SIDEWALK DETAIL	10

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0070-0116 MPMS/ECMS PROJ: 97828 BRKEY: 68395

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COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0070 OFFSET 0116 TO SEG 0070 OFFSET 0188
SR 3007 @ STA 104+18.94 TO STA 104+90.69
SR 3007 (19TH STREET) NORTHEAST

REINFORCED CONCRETE RETAINING WALL

SECTIONS & DETAILS

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — JUSTIN ROBERT MCCARTHY — ENGINEER PE076998

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

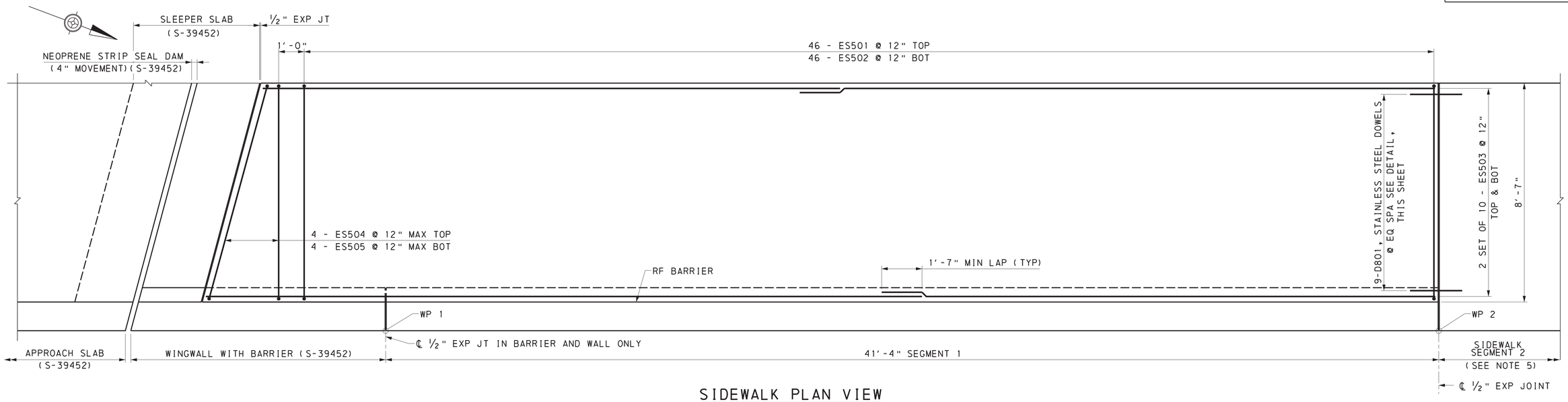
RECOMMENDED March 18, 2022

SHEET 7 OF 13

S-40312

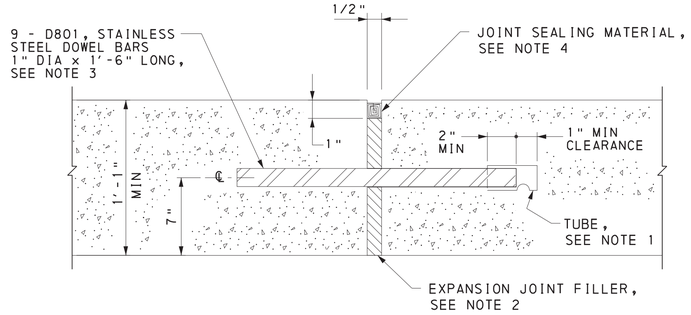
4/6/2022
FILENAME: 63016-s-brRW1-wad01.dgn

DES: AMM	DES CKD: ZAA	DWG: AMM	DWG CKD: MLA



SIDEWALK PLAN VIEW

1 0 1 2 FEET



DOWELED EXPANSION JOINT DETAIL

NOT TO SCALE

NOTES:

1. PLACE A TUBE FROM A MANUFACTURER LISTED IN BULLETIN 15 OVER THE LUBRICATED END OF ALL DOWEL BARS AND PROVIDE A MINIMUM 1" CLEARANCE POCKET ASSURED BY MEANS OF A POSITIVE SPACING DEVICE.
2. CUT EXPANSION JOINT FILLER MATERIAL TO CONFORM TO THE CROSS SECTION OF THE PAVEMENT AND FURNISH IN STRIPS EQUAL TO THE WIDTH OF THE PAVEMENT SLAB. MAKE THE TOP SURFACE SMOOTH AND HAVE HOLES PUNCHED FOR DOWEL BARS. PROVIDE A SNUG FIT WITHOUT LOSS OF THICKNESS IN MATERIAL.
3. PLACE DOWEL BARS PARALLEL TO THE CENTERLINE AND SURFACE OF THE SLAB. SPACE 9 DOWELS EQUALLY. MAINTAIN 6" EDGE DISTANCE.
4. MAKE THE TOP OF THE JOINT SEALING MATERIAL FROM ⅛" TO ¼" BELOW THE SURFACE OF THE PAVEMENT. USE HEAT RESISTANT JOINT BACKING MATERIAL FROM HOT POURED JOINTS.
5. FOR SEGMENT 2 REINFORCEMENT, SEE SHEETS 6 & 7.

REFERENCES:

	SHEETS:
GENERAL PLAN & ELEVATION	1
GENERAL NOTES	2
STAKE-OUT PLAN	4
ELEVATIONS	6
SECTIONS & DETAILS	7
REINFORCEMENT SCHEDULE	9

Mark	Description	By	Chk'd	Recm'd	Date
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DEPARTMENT OF TRANSPORTATION

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL JUSTIN ROBERT MCCARTHY ENGINEER PE076998

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0070 OFFSET 0116 TO SEG 0070 OFFSET 0188
SR 3007 ℄ STA 104+18.94 TO STA 104+90.69
SR 3007 (19TH STREET) NORTHEAST
REINFORCED CONCRETE RETAINING WALL

SIDEWALK PLAN & DETAILS

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

RECOMMENDED March 18, 2022

SHEET 8 OF 13

S-40312

3/7/2022
FILENAME: 63016-s-brRW1-wd02.dgn

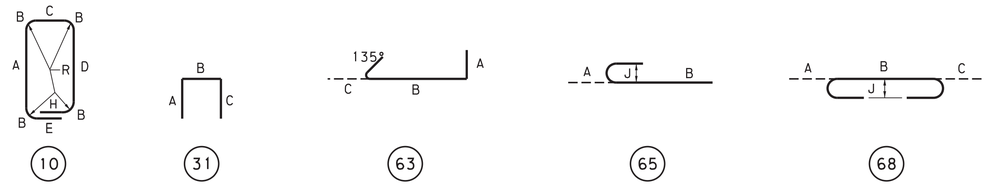
DES: MLA	DES CKD: ZAA	DWG: AMM	DWG CKD: ZAA

RETAINING WALL STRUCTURE - SEGMENT 1

MARK	SIZE	NO REQ'D	LENGTH	TYPE	A	B	C	D	E	REMARKS
EF401	4	36	2'-2"	63	4 1/2"	1'-5"	4 1/2"			
EF501	5	14	40'-11 1/2"	STR						
EF502	5	42	6'-2"	STR						
EF503	5	42	7'-4"	68	7"	6'-2"	7"			J=5"
EF504	5	42	5'-10 5/8" TO	65	7"	5'-3 5/8" TO				J=5"; VARY B BY 5/8"
			8'-2 1/4"			7'-7 1/4"				
EF505	5	42	6'-7 1/4" TO	STR						VARY LENGTH BY 5/8"
			8'-10 7/8"							
EW401	4	95	11'-4"	31	5'-4"	8"	5'-4"			
EW402	4	24	3'-6"	STR						
EW501	5	15	40'-11 1/2"	STR						
EW502	5	42	5'-1"	31	2'-0"	1'-1"	2'-0"			
EC401	4	95	7'-9 1/2"	10	2'-9"	4"	3"	2'-9"	5 1/2"	H=3"; R=2"
EC501	5	6	41'-1/4"	STR						
EC601	6	4	41'-1/4"	STR						
ES501	5	46	9'-8"	31	8"	8'-3"	9"			
ES502	5	46	8'-3"	STR						
ES503	5	40	25'-1"	STR						
ES504	5	4	9'-8" TO	31	8"	8'-3" TO	9"			VARY BY 7/8"
			9'-10 1/2"			8'-5 1/2"				
ES505	5	4	8'-3" TO	STR						VARY BY 7/8"
			8'-5 1/2"							
D801	8	9	1'-6"	STR						STAINLESS STEEL DOWEL

RETAINING WALL STRUCTURE - SEGMENT 2

MARK	SIZE	NO REQ'D	LENGTH	TYPE	A	B	C	D	E	REMARKS
ED421	4	12	30'-1"	STR						
ED422	4	79	8'-10"	31	4'-1"	8"	4'-1"			
ED621	6	64	9'-11"	31	4'-4"	1'-3"	4'-4"			
ES522	5	22	30'-1"	STR						FIELD BEND AS NEEDED
ES523	5	32	9'-4"	STR						
ES622	6	32	11'-4"	31	8"	9'-4"	1'-4"			
EC421	4	79	7'-9 1/2"	10	2'-9"	4"	3"	2'-9"	5 1/2"	H=3"; R=2"
EC521	5	6	30'-1"	STR						
EC621	6	4	30'-1"	STR						



Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0070-0116 MPMS/ECMS PROJ: 97828 BRKEY: 68395

NOTES:

1. "E" PREFIX IN BAR MARK DENOTES EPOXY COATED BARS.
2. ALL DIMENSIONS ARE OUT TO OUT OF BAR EXCEPT "A" & "C" ON STANDARD 135° AND 180° HOOKS, UNLESS NOTED.
3. FOR REINFORCEMENT BAR FABRICATION DETAILS, REFER TO STANDARD DRAWING BC-736M.
4. FIGURES IN CIRCLE REPRESENT BAR TYPES.
5. "J" DIMENSIONS ON 180° HOOKS ARE SHOWN ONLY WHERE NECESSARY TO RESTRICT HOOK SIZE, OTHERWISE STANDARD HOOKS ARE TO BE USED.
6. RADIUS, "R" IS TO THE INSIDE OF THE BAR.
7. REINFORCEMENT BAR SCHEDULE IS FOR INFORMATION ONLY. VERIFY INFORMATION BEFORE FABRICATION.

REFERENCES:

	SHEETS:
GENERAL PLAN & ELEVATION	1
GENERAL NOTES	2
FOOTING PLAN	5
ELEVATIONS	6
SECTIONS & DETAILS	7
SIDEWALK PLAN & DETAILS	8

HNTB

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
JUSTIN ROBERT MCCARTHY
ENGINEER
PE076998

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

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0070 OFFSET 0116 TO SEG 0070 OFFSET 0188
SR 3007 ℄ STA 104+18.94 TO STA 104+90.69
SR 3007 (19TH STREET) NORTHEAST
REINFORCED CONCRETE RETAINING WALL

REINFORCEMENT SCHEDULE

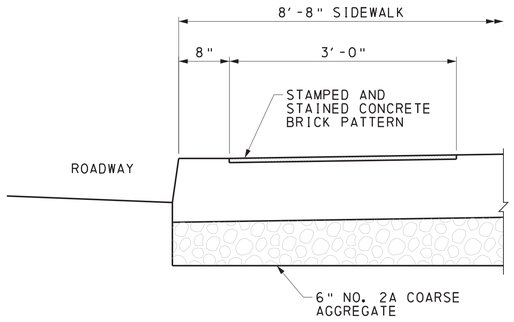
RECOMMENDED March 18, 2022

SHEET 9 OF 13

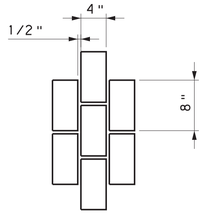
S-40312

3/7/2022
FILENAME: 63016-s-brRW1-sum02.dgn

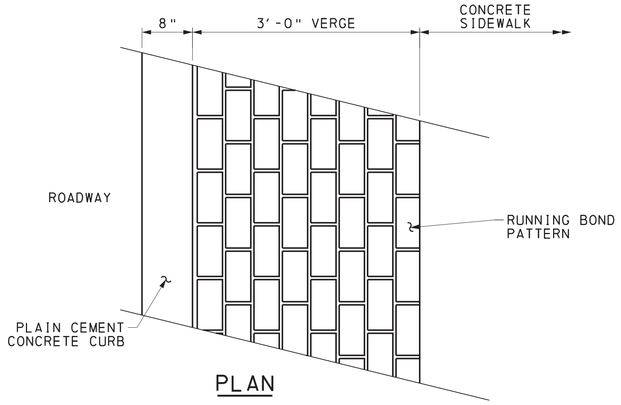
DES: EZ	DES CKD: ZAA	DWG: NTE	DWG CKD: ZAA



SECTION



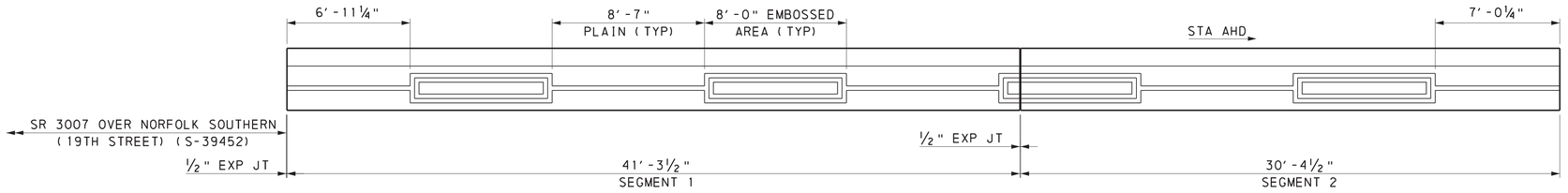
BRICK DIMENSIONS



PLAN

STAMPED AND STAINED CEMENT CONCRETE SIDEWALK DETAILS

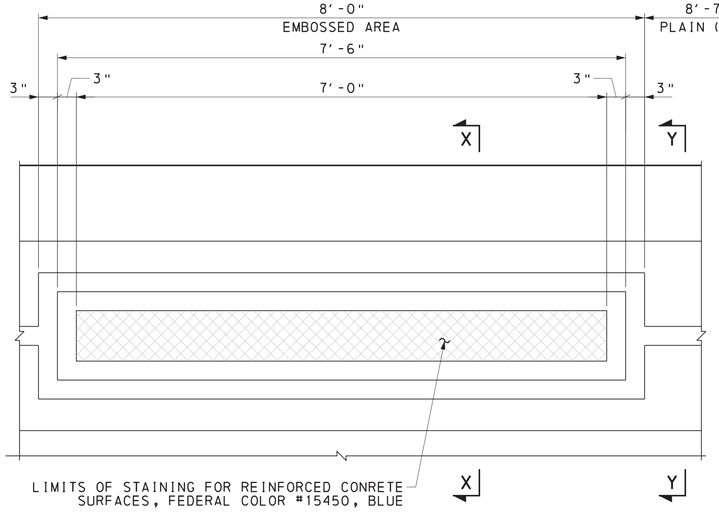
NOT TO SCALE



(LOOKING AT OUTSIDE FACE OF BARRIER)

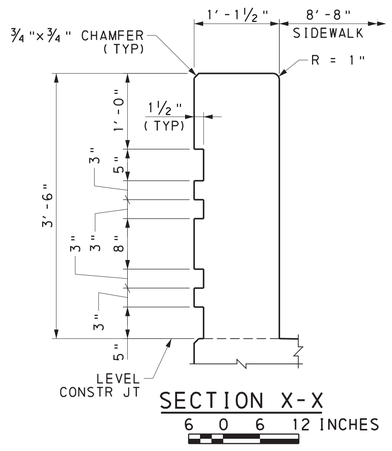
BARRIER ELEVATION

2 0 2 4 FEET



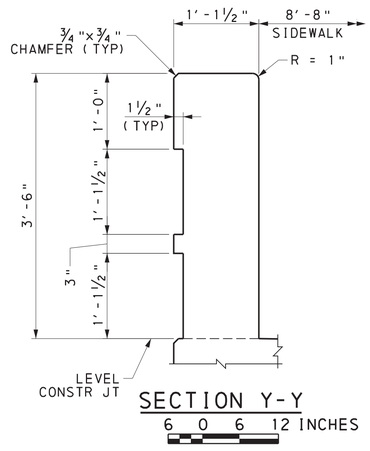
EMBOSSED SQUARE DETAIL

6 0 6 12 INCHES



SECTION X-X

6 0 6 12 INCHES



SECTION Y-Y

6 0 6 12 INCHES

NOTES:

1. BARRIER ARCHITECTURAL DETAIL WORK IS INCIDENTAL TO BARRIER CLASS AA CONCRETE.

REFERENCES:

	SHEETS:
GENERAL PLAN & ELEVATION	1
GENERAL NOTES	2
ELEVATIONS	6
SECTIONS & DETAILS	7
SIDEWALK PLAN & DETAILS	8

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0070-0116 MPMS/ECMS PROJ: 97828 BRKEY: 68395

HNTB

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0070 OFFSET 0116 TO SEG 0070 OFFSET 0188
SR 3007 ℄ STA 104+18.94 TO STA 104+90.69
SR 3007 (19TH STREET) NORTHEAST
REINFORCED CONCRETE RETAINING WALL
BARRIER ARCHITECTURAL DETAILS & STAMPED SIDEWALK DETAIL

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — JUSTIN ROBERT MCCARTHY — ENGINEER — PE076998

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

RECOMMENDED March 18, 2022

SHEET 10 OF 13

S-40312

3/7/2022
FILENAME: 63016-s-brRW1-wsp04.dgn

DES: AMM	DES CKD: ZAA	DWG: AMM	DWG CKD: MLA

GENERAL NOTES

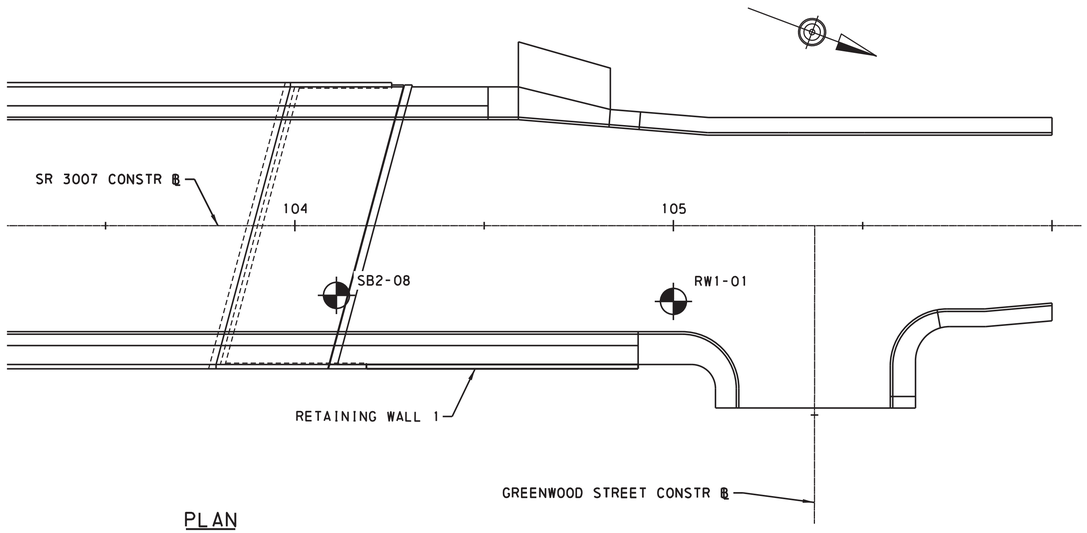
THIS SHEET IS INCLUDED FOR THE CONVENIENCE OF THE DEPARTMENT. REFER TO PUBLICATION 408 SECTION 102.05 FOR FURTHER INFORMATION.

FOR ADDITIONAL SOIL AND ROCK DESCRIPTIONS SEE PUBLICATION 222.

THE BORING LOGS AND RELATED INFORMATION DEPICT SUBSURFACE CONDITIONS ONLY AT THE SPECIFIC LOCATIONS AND DATES INDICATED. SUBSURFACE CONDITIONS MAY DIFFER FROM THE CONDITIONS REPORTED AT THE SPECIFIC LOCATIONS. ALSO, THE PASSAGE OF TIME MAY RESULT IN A CHANGE OF CONDITIONS AT THE BORING LOCATIONS.

LEGEND

PP	POCKET PENETROMETER
T	TORVANE
NTS	NOT TO SCALE
BFE	BOTTOM OF FOOTING ELEVATION
TOR	ESTIMATED TOP OF ROCK ELEVATION



PLAN

0 20 40 FEET

THE DESCRIPTIONS OF THE MATERIALS ENCOUNTERED HAVE BEEN VERIFIED.

ME

THE SUBSURFACE EXPLORATION DATA THAT ARE PRESENTED ON THESE DRAWINGS (INCLUDING BORING LOGS, EARTH SAMPLES, ROCK CORES, CLASSIFICATION OF MATERIALS AND DEPTH OF BORINGS) ACCURATELY REPRESENT THE CONDITIONS ENCOUNTERED BY THE TEST BORING PROGRAM AT EACH BORING LOCATION.

GEOTECHNICAL ENGINEER/ENGINEERING GEOLOGIST — DATE: 3/18/2021

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0070-0116 MPMS/ECMS PROJ: 97828 BRKEY: 68395

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0070 OFFSET 0116 TO SEG 0070 OFFSET 0188
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SR 3007 (19TH STREET) NORTHEAST
REINFORCED CONCRETE RETAINING WALL
STRUCTURE BORINGS - 1

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — MARK T. EVANS — GEOLOGIST PG005251

SHEET 11 OF 13

S - 40312

\\fileserver\SCI-NET\01Projects\36002 (SR 83, Sec 079 - River to Eisenhower)\SR 83, Sec 079\GEOTECHNICAL\CADD\WORKING FILES\TEST BORING SHEETS\RW1\36002_GT_EX_TB_RW1.dgn
3/4/2022 11:40:46 AM rrichards

SUBSTRUCTURE UNIT:
SEGMENT 1

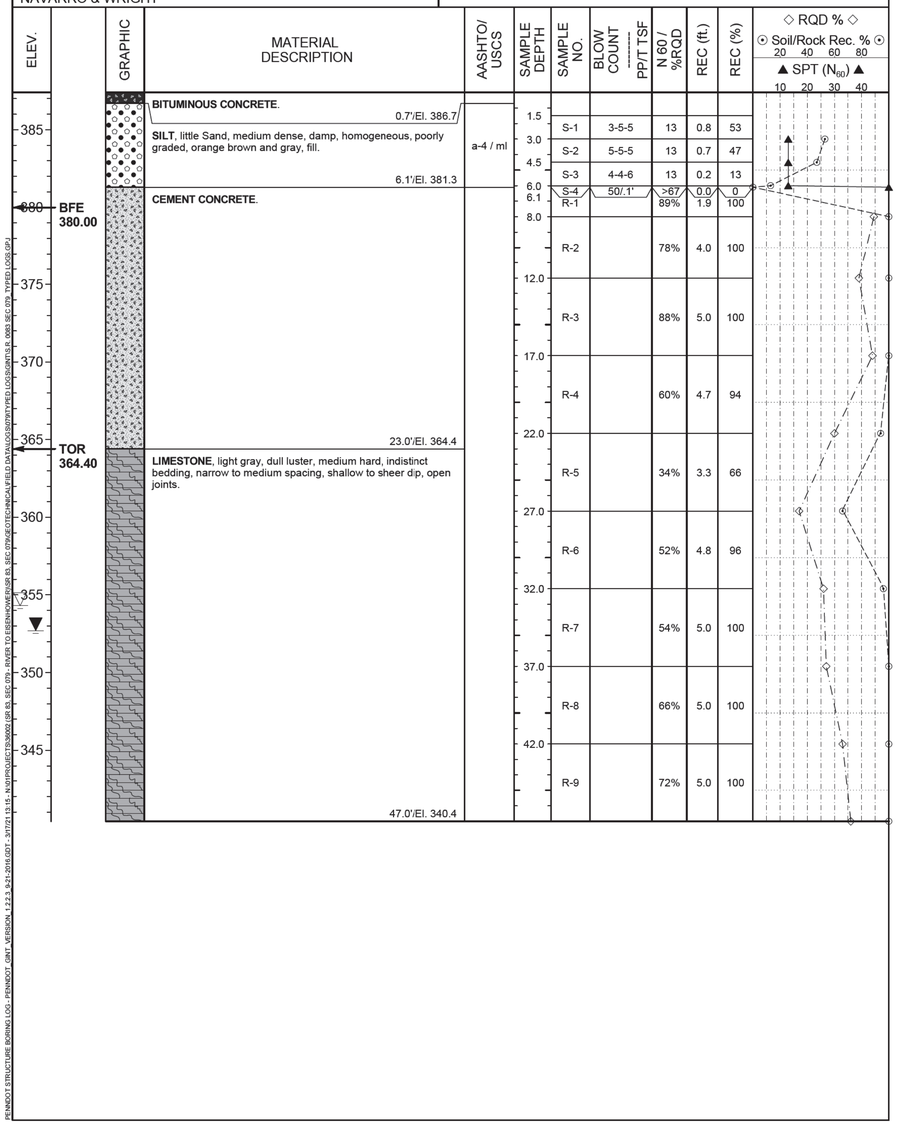
LOG 1 OF 1

BORING NUMBER:	BORING LOCATION	START: 11/24/2020 9:15 AM	HAMMER: AUTOMATIC
SB2-08	STATION: 104+11.0 OFFSET: 18.4 FT. RT.	FINISH: 11/24/2020 1:30 PM	EFFICIENCY: 0.8 ERa

DRILLING METHOD AND EQUIPMENT:	SIZE OF CORE:	VERTICAL SCALE:	TOP OF BORING ELEVATION:
DOUBLE TUBE WIRE LINE-NQ, AUTOMATIC, ACKER XLS TRACK MOUNT RIG	2.000 IN.	0 FT. 5 FT.	387.4 FT.

DRILLING INSPECTOR: JEREMY COOK
DRILLER & DRILLING COMPANY: JASON GROFT
NAVARRO & WRIGHT

▽ 0 HR. READING - ELAPSED TIME: El. 354.3 ft. - 0.0 hr.
▼ 24 HR. READING - ELAPSED TIME: El. 352.7 ft. - 20.8 hr.



SUBSTRUCTURE UNIT:
SEGMENT 2

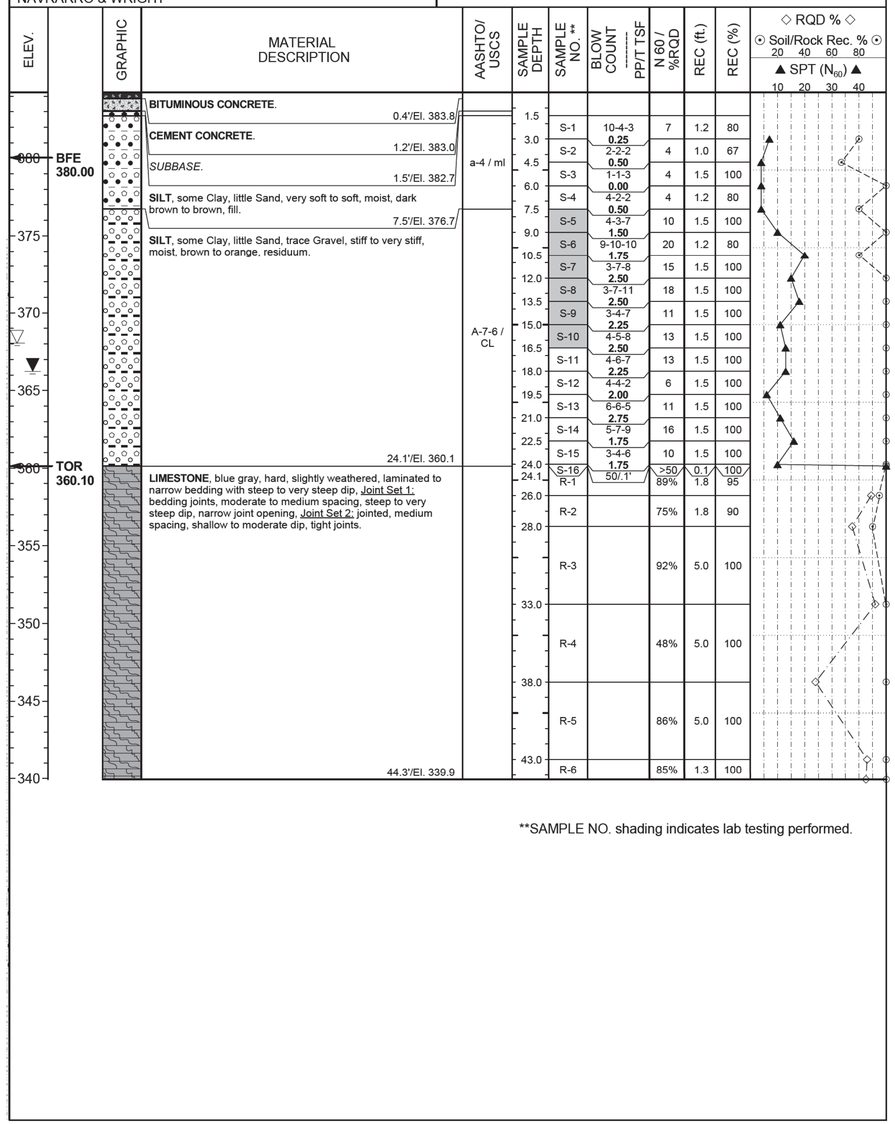
LOG 1 OF 1

BORING NUMBER:	BORING LOCATION	START: 11/24/2020 9:00 AM	HAMMER: SAFETY
RW1-01	STATION: 105+00.0 OFFSET: 20.0 FT. RT.	FINISH: 11/24/2020 1:30 PM	EFFICIENCY: 0.6 ERa

DRILLING METHOD AND EQUIPMENT:	SIZE OF CORE:	VERTICAL SCALE:	TOP OF BORING ELEVATION:
DOUBLE TUBE WIRE LINE-NQ, SAFETY, ACKER SOIL SCOUT TRACK RIG	2.000 IN.	0 FT. 5 FT.	384.2 FT.

DRILLING INSPECTOR: NEIL BODLEY
DRILLER & DRILLING COMPANY: DYLAN ONEIL
NAVRARRO & WRIGHT

▽ 0 HR. READING - ELAPSED TIME: El. 368.0 ft. - 0.0 hr.
▼ 24 HR. READING - ELAPSED TIME: El. 366.2 ft. - 20.9 hr.



**SAMPLE NO. shading indicates lab testing performed.

GENERAL NOTES

THIS SHEET IS INCLUDED FOR THE CONVENIENCE OF THE DEPARTMENT. REFER TO PUBLICATION 408 SECTION 102.05 FOR FURTHER INFORMATION.

FOR ADDITIONAL SOIL AND ROCK DESCRIPTIONS SEE PUBLICATION 222.

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LEGEND

PP	POCKET PENETROMETER
T	TORVANE
NTS	NOT TO SCALE
BFE	BOTTOM OF FOOTING ELEVATION
TOR	ESTIMATED TOP OF ROCK ELEVATION

THE DESCRIPTIONS OF THE MATERIALS ENCOUNTERED HAVE BEEN VERIFIED.
ME

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0070-0116 MPMS/ECMS PROJ: 97828 BRKEY: 68395

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0070 OFFSET 0116 TO SEG 0070 OFFSET 0188
SR 3007 ℄ STA 104+18.94 TO STA 104+90.69
SR 3007 (19TH STREET) NORTHEAST
REINFORCED CONCRETE RETAINING WALL
STRUCTURE BORINGS - 2

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL MARK T. EVANS GEOLOGIST PG005251

SHEET 12 OF 13

S - 40312

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3/4/2022 11:40:46 AM rrichards

LABORATORY TEST SUMMARY - SOILS

					% GRAIN SIZE DISTRIBUTION (AASHTO)							CLASSIFICATION			PLASTICITY PARAMETERS			SHEAR STRENGTH				
BORING NUMBER	STATION & OFFSET	SAMPLE #	TEST DEPTH (FT.)	NATURAL MOISTURE %	GRAVEL %	SAND %	COARSE SAND %	FINE SAND %	FINES %	SILT %	CLAY %	AASHTO	USCS	S.G.	LIQUID LIMIT	PLASTIC LIMIT	P. I.	C (TSF)	ϕ (DEG.)	C' (TSF)	ϕ' (DEG)	TEST METHOD
RW1-01	105+00.0 20 ft. RT.	S-5 to 10	7.5 to 16.5	31.8	6.6	16.8	4.6	16.8	76.5	42.5	34.0	A-7-6	CL		41	21	20	0.095	27.4			DIR. SHR.-CD

LABORATORY TEST SUMMARY - ELECTROCHEMICAL

BORING NUMBER	STATION & OFFSET	SAMPLE #	TEST DEPTH (FT.)	SAMPLE SOURCE	pH	MINIMUM RESISTIVITY (ohm-cm)	CHLORIDE CONTENT (ppm)	SULFATE CONTENT (ppm)	HIGH ORGANIC CONTENT?	CORROSIVE FOR CONCRETE?	CORROSIVE FOR STEEL?
RW1-01	105+00.0	S-5 to	7.5 to 16.5	GROUNDWATER						No	No
	20 ft. RT.	10		SOIL	4.8	1,552	337	31	No	No	pH,Resistivity

LABORATORY TEST SUMMARY - ROCK CORE

BORING NUMBER	STATION & OFFSET	SAMPLE #	TEST DEPTH (FT.)	TEST	STRENGTH	JAR SLAKE TEST PERFORMED?	SLAKE DURABILITY INDEX & TYPE	ROCK RECOVERY %	RQD %	BEDROCK LITHOLOGY	STRATIGRAPHIC UNIT
RW1-01	105+00.0 20 ft. RT.	R-1	24.1 to 24.9	UNCONFINED COMPRESSIVE TEST	22847.4 PSI / 1,645.0 TSF	NO		95	89	LIMESTONE	
RW1-01	105+00.0 20 ft. RT.	R-2	26.0 to 26.7	UNCONFINED COMPRESSIVE TEST	12256.9 PSI / 882.5 TSF	NO		90	75	LIMESTONE	
SB2-08	104+11.0 18.4 ft. RT.	R-5	26.4 to 27.0	UNCONFINED COMPRESSIVE TEST	15345.5 PSI / 1,104.9 TSF	NO		66	34	LIMESTONE	
SB2-08	104+11.0 18.4 ft. RT.	R-6	30.7 to 31.2	UNCONFINED COMPRESSIVE TEST	9350.2 PSI / 673.2 TSF	NO		96	52	LIMESTONE	

GENERAL NOTES

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FOR ADDITIONAL SOIL AND ROCK DESCRIPTIONS SEE PUBLICATION 222.

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LEGEND

PP	POCKET PENETROMETER
T	TORVANE
NTS	NOT TO SCALE
BFE	BOTTOM OF FOOTING ELEVATION
TOR	ESTIMATED TOP OF ROCK ELEVATION

SR 3007 PREVIOUSLY KNOWN AS LR 509
BMS STR ID: 22-3007-0070-0116 MPMS/ECMS PROJ: 97828 BRKEY: 68395

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

DAUPHIN COUNTY
SR 0083 SECTION 079
SEG 0070 OFFSET 0116 TO SEG 0070 OFFSET 0188
SR 3007 ℄ STA 104+18.94 TO STA 104+90.69
SR 3007 (19TH STREET) NORTHEAST
REINFORCED CONCRETE RETAINING WALL
STRUCTURE BORINGS - 3

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL MARK T. EVANS GEOLOGIST PG005251

SHEET 13 OF 13

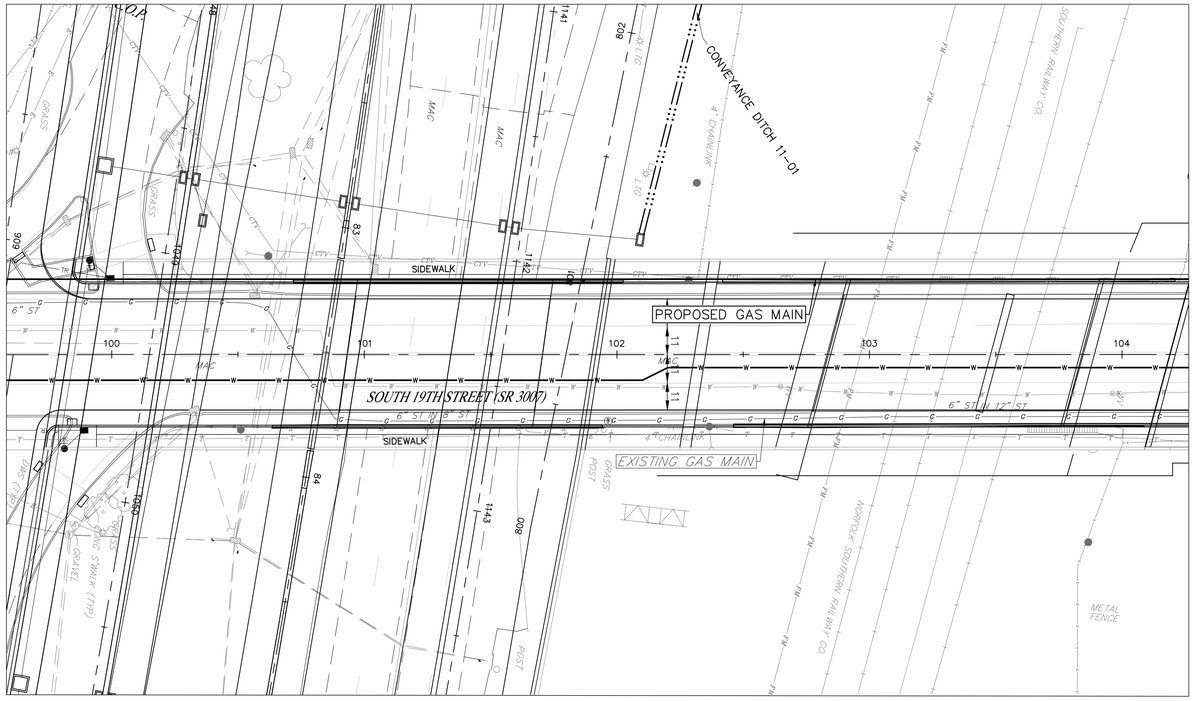
S - 40312

\\fileserver\SCI-NET\01Projects\36002 (SR 83, Sec 079 - River to Eisenhower)\SR 83, Sec 079\GEOTECHNICAL\CADD\WORKING FILES\TEST BORING SHEETS\RW1\36002_GT_EX_TB_RW1.dgn
3/4/2022 11:40:48 AM rrichards

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
8-0	DAUPHIN COUNTY	0083	079	1 OF 3
CITY OF HARRISBURG AND SWATARA TOWNSHIP				
REVISION NUMBER	REVISIONS		DATE	BY

NATURAL GAS UTILITY RELOCATION PLAN
UGI UTILITIES

30 15 0 30
SCALE IN FEET



OVERVIEW

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
CHRISTOPHER D. ANTONI
ENGINEER
No. PE-057385-E

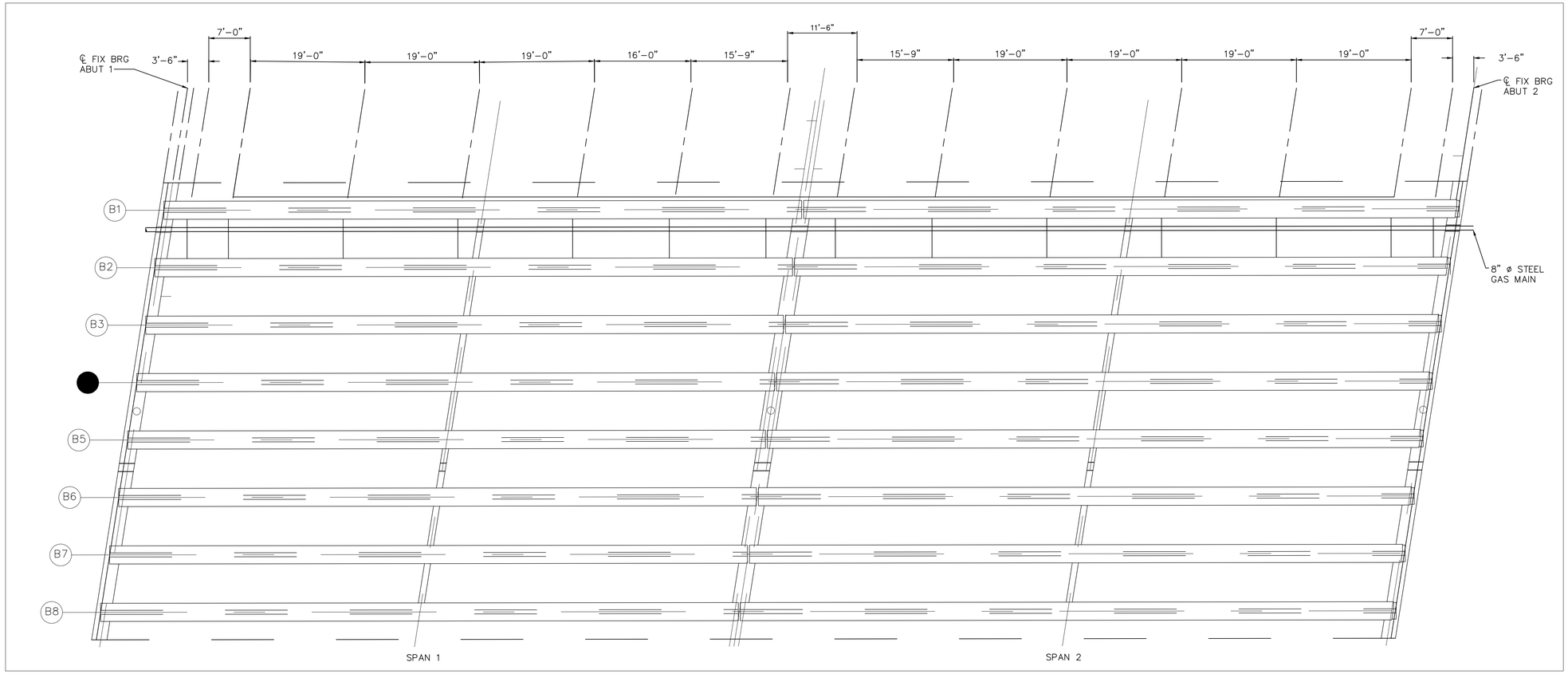
3/22/23

CHRISTOPHER D. ANTONI
PE-057385-E

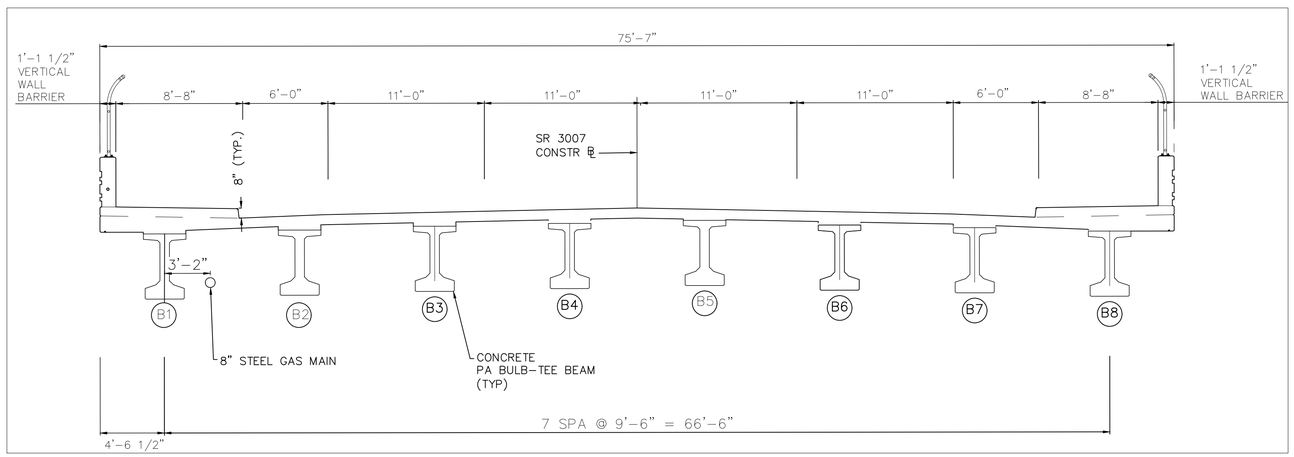
G:\ENG\001 West Region Engineering\PROJECTS\Harrisburg\Harrisburg\2021-09-24_ 19th St Bridge Relocation\CAD\Sheets\19th St Bridge Relocation.dwg

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
8-0	DAUPHIN COUNTY	0083	079	2 OF 3
CITY OF HARRISBURG AND SWATARA TOWNSHIP				
REVISION NUMBER	REVISIONS		DATE	BY

NATURAL GAS UTILITY RELOCATION PLAN
UGI UTILITIES

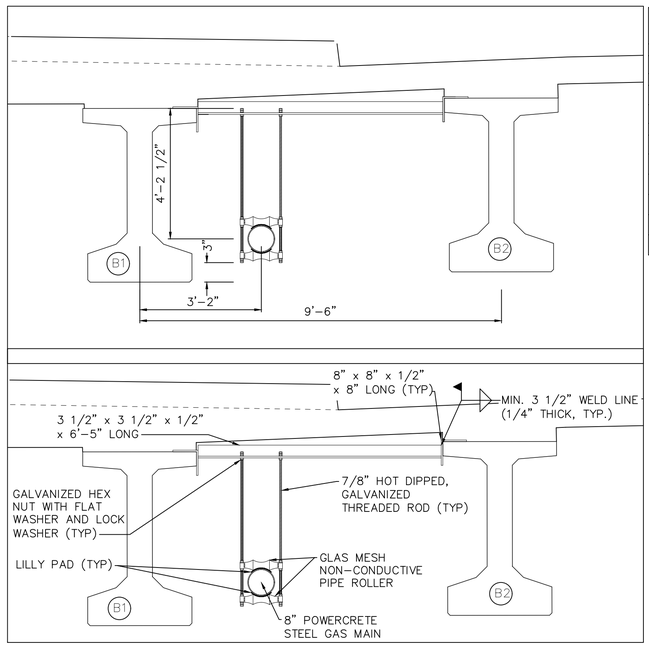


PIPE HANGER SPACING
OVER SR 0083
SCALE: 1"=10'

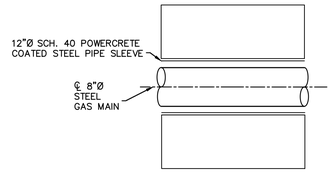


TYPICAL SECTION DETAIL
OVER SR 0083
SCALE: 3/16"=1'

	ROADWAY STATIONS	8" POWERCRETE STEEL CARRIER PIPE INVERT ELEVATION
C.L. BRG. ABUT 1	99+79.74	380.86'
C.L. PIER 1	100+84.74	385.24'
C.L. BRG ABUT 2	101+92.74	388.95'



HANGER DETAIL
SCALE: 1/2"=1'



GENERAL SECTION THROUGH DIAPHRAGM

ITEM 9000-1101 INSTALLATION OF UGI UTILITIES, INC. GAS FACILITIES ON BRIDGE

DESCRIPTION	UNIT	QTY.	PROVIDED BY	INSTALLED BY
GLAS MESH NON-CONDUCTIVE PIPE ROLLER	EA.	28	UTILITY	UTILITY
LILLY PAD	EA.	28	UTILITY	UTILITY
¾" THREADED ROD W/HEX NUT & WASHERS	EA.	28	UTILITY	UTILITY
12" SCHEDULE 40 POWERCRETE STEEL SLEEVE	EA.	3	UTILITY	CONTRACTOR
WATERPROOFING MODULAR SEAL	EA.	3	UTILITY	UTILITY
8" POWERCRETE STEEL CARRIER PIPE	L.F.	213	UTILITY	UTILITY
3 ½" X 3 ½" X ½" X LENGTH VARIES, HORIZ. MEMBER	EA.	14	CONTRACTOR	CONTRACTOR
8" X 8" X ½" X 0'-8" LONG, VERT. MEMBER	EA.	14	CONTRACTOR	CONTRACTOR
½" BENT - 0'-8" LONG	EA.	14	CONTRACTOR	CONTRACTOR
8" STEEL - PE TRANSITION FITTING	EA.	2	UTILITY	UTILITY
8" PE3408 CARRIER PIPE	L.F.	66	UTILITY	UTILITY

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
CHRISTOPHER D. ANTONI
ENGINEER
No. PE-057385-E

3/22/23

CHRISTOPHER D. ANTONI
PE-057385-E

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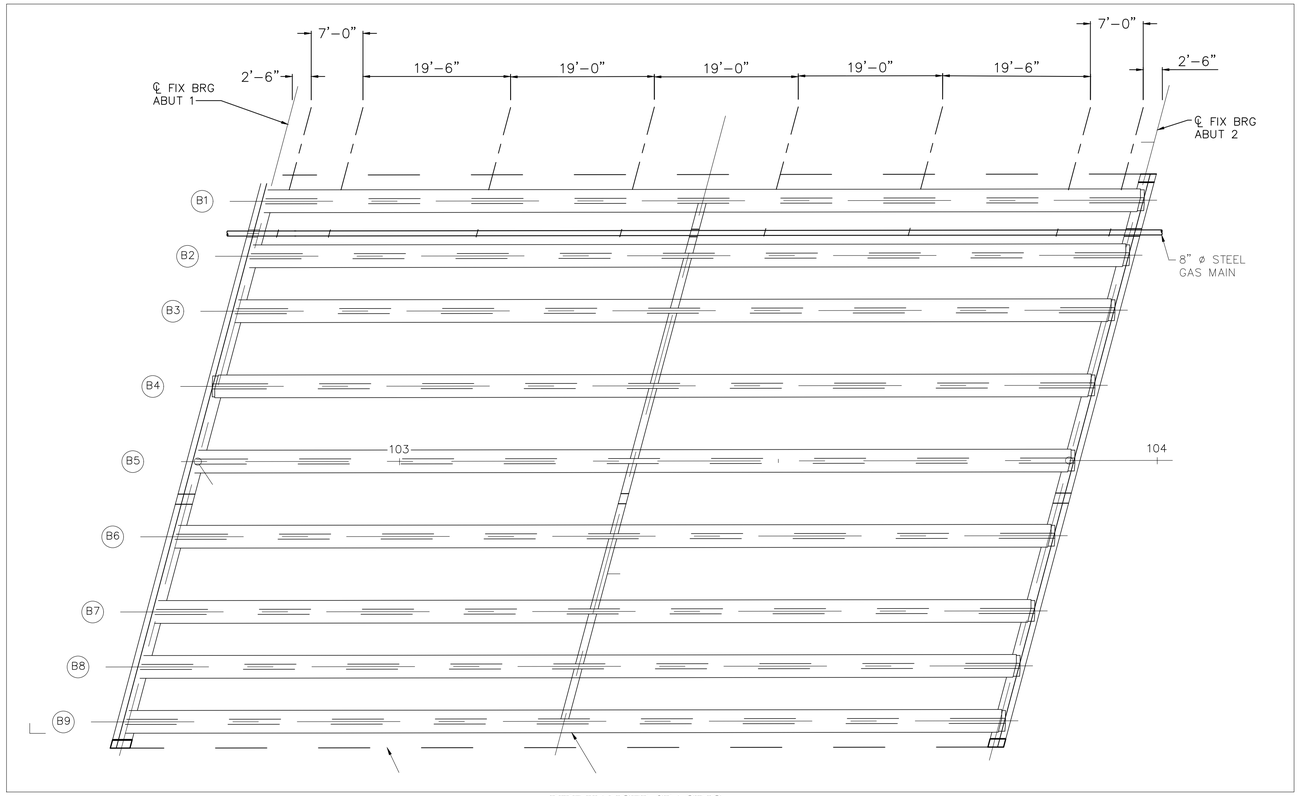
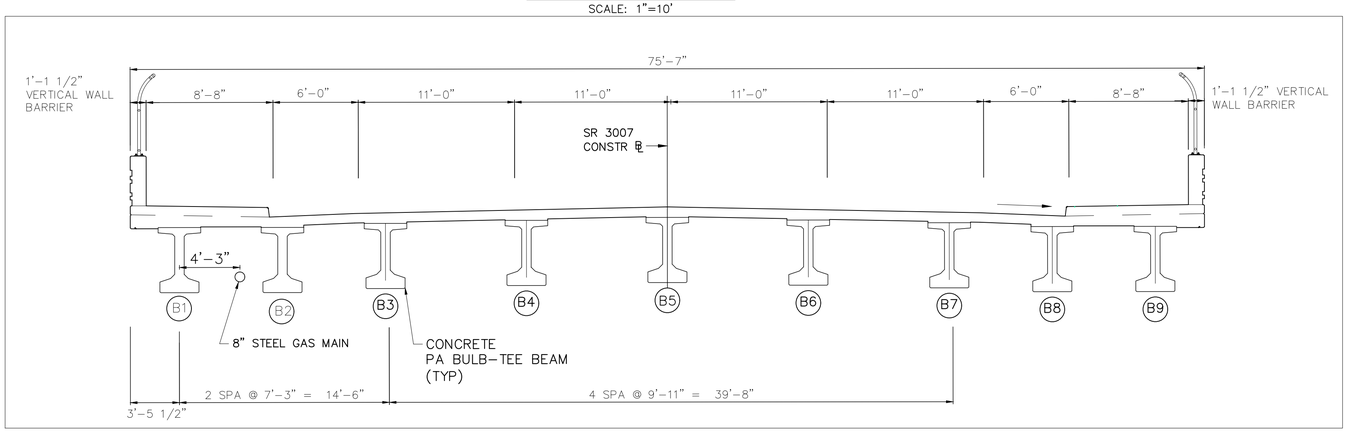
DISTRICT	COUNTY	ROUTE	SECTION	SHEET
8-0	DAUPHIN COUNTY	0083	079	3 OF 3
CITY OF HARRISBURG AND SWATARA TOWNSHIP				

REVISION NUMBER	REVISIONS	DATE	BY

NATURAL GAS UTILITY RELOCATION PLAN
UGI UTILITIES



PIPE HANGER SPACING
OVER NORFOLK SOUTHERN
SCALE: 1"=10'

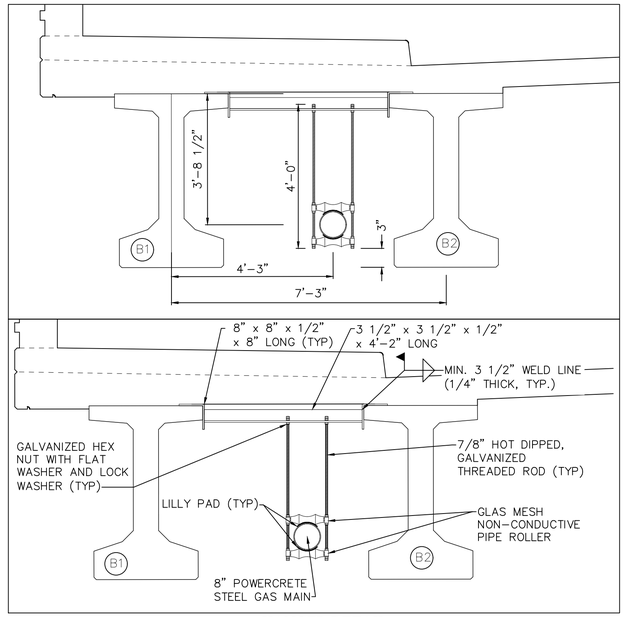


TYPICAL SECTION DETAIL
OVER NORFOLK SOUTHERN
SCALE: 3/16"=1'

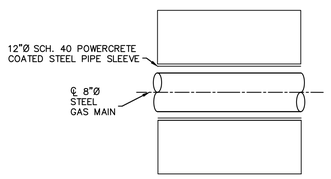
	ROADWAY STATIONS	8" POWERCRETE STEEL CARRIER PIPE INVERT ELEVATION
C.L. BRG ABUT 1	102+73.38	389.50'
C.L. BRG ABUT 2	103+88.38	385.04'

ITEM 9000-1100 INSTALLATION OF UGI UTILITIES, INC. GAS FACILITIES ON BRIDGE

DESCRIPTION	UNIT	QTY.	PROVIDED BY	INSTALLED BY
GLAS MESH NON-CONDUCTIVE PIPE ROLLER	EA.	16	UTILITY	UTILITY
LILLY PAD	EA.	16	UTILITY	UTILITY
7/8 " THREADED ROD W/HEX NUT & WASHERS	EA.	16	UTILITY	UTILITY
12" SCHEDULE 40 POWERCRETE STEEL SLEEVE	EA.	2	UTILITY	CONTRACTOR
WATERPROOFING MODULAR SEAL	EA.	2	UTILITY	UTILITY
8" POWERCRETE STEEL CARRIER PIPE	L.F.	115	UTILITY	UTILITY
3 1/2" x 3 1/2" x 1/2" x LENGTH VARIES, HORIZ. MEMBER	EA.	8	CONTRACTOR	CONTRACTOR
8" x 8" x 1/2" x 0'-8" LONG, VERT. MEMBER	EA.	8	CONTRACTOR	CONTRACTOR
½" BENT – 0'-8" LONG	EA.	8	CONTRACTOR	CONTRACTOR
8" STEEL – PE TRANSITION FITTING	EA.	2	UTILITY	UTILITY
8" PE3408 CARRIER PIPE	L.F.	75	UTILITY	UTILITY



HANGER DETAIL
SCALE: 1/2"=1'



GENERAL SECTION
THROUGH DIAPHRAGM

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
CHRISTOPHER D. ANTONI
ENGINEER
No. PE-057385-E

3/22/23

CHRISTOPHER D. ANTONI
PE-057385-E

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SHEET INDEX BLOCK	
DESCRIPTION	SHEET
INDEX MAP	1-3
GENERAL DETAILS	4-7
SIGNING TABS	8-33
PAVEMENT MARKING AND DELINEATION TABS	34-75
PLAN SHEETS	76-112
SIGN STRUCTURE PLANS	113-118
SIGN FABRICATION DETAILS	119-125

LEGEND

◯ - PLAN

NOTES

PER PENNDOT PUB 408 SECTION 901.3(h), RESET EXISTING SEGMENT MARKERS FROM EXISTING MILE MARKERS SIGN POSTS ON PROPOSED CORRESPONDING MILE MARKER POST.

PER PUBLICATION 236, ALL D10-5 SIGNS ARE TO USE NORTH OR SOUTH (IN THE APPROPRIATE DIRECTION) USING AN INTERSTATE 83 SHIELD.

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
8-0	DAUPHIN	0083	079	1 OF 125
		0230	045	
		3007	020	
		3013	009	
CITY OF HARRISBURG, SWATARA TWP, PAXTANG BOROUGH				

REVISION NUMBER	REVISIONS	DATE	BY

PLAN SHEETS LEGEND

- W/4" - WHITE LINE/WIDTH
- W/6" - WHITE LINE/WIDTH
- W/8" - WHITE LINE/WIDTH
- W/24" - WHITE LINE/WIDTH
- BW/6" - BROKEN WHITE LANE LINE/WIDTH
- AW/8" - AUXILIARY WHITE LANE LINE/WIDTH
- DEW/6" - DOTTED EXTENSION WHITE LINE/WIDTH
- DEY/4" - DOTTED EXTENSION YELLOW LINE/WIDTH
- Y/4" - YELLOW LINE/WIDTH
- Y/24" - YELLOW LINE/WIDTH
- DY/4" - DOUBLE YELLOW LINE/WIDTH
- BY/4" - BROKEN YELLOW LINE/WIDTH
- ■ - SNOWPLOWABLE RAISED PAVEMENT MARKER TWO WAY HOLDER WITH REFLECTOR (W/B)
- ▲ - SNOWPLOWABLE RAISED PAVEMENT MARKER TWO WAY HOLDER WITH REFLECTOR (W/R)
- ⬓ - SNOWPLOWABLE RAISED PAVEMENT MARKER TWO WAY HOLDER WITH REFLECTOR (Y/R)
- ◆ - SNOWPLOWABLE RAISED PAVEMENT MARKER TWO WAY HOLDER WITH REFLECTOR (Y/B)
- ◇ - SNOWPLOWABLE RAISED PAVEMENT MARKER TWO WAY HOLDER WITH REFLECTOR (Y/Y)
- ● - FLEXIBLE DELINEATOR POST, GROUND-MOUNT TYPE GM-1, RED POST WITH WHITE SHEETING
- ⊡ - FLEXIBLE DELINEATOR POST, GROUND-MOUNT TYPE GM-2, WHITE POST WITH WHITE/BLANK SHEETING
- ⊡ - FLEXIBLE DELINEATOR POST, GROUND-MOUNT TYPE GM-2, YELLOW POST WITH YELLOW/BLANK SHEETING
- ■ - FLEXIBLE DELINEATOR POST, GROUND-MOUNT TYPE GM-2, YELLOW POST WITH YELLOW/RED SHEETING
- ▨ - FLEXIBLE DELINEATOR POST, GROUND-MOUNT TYPE GM-2, WHITE POST WITH WHITE/RED SHEETING
- ○ - FLEXIBLE DELINEATOR POST, SURFACE-MOUNT TYPE SM-2, WHITE POST WITH WHITE/BLANK SHEETING
- ◨ - FLEXIBLE DELINEATOR POST, SURFACE-MOUNT TYPE SM-2, YELLOW POST WITH YELLOW/RED SHEETING
- □ - FLEXIBLE DELINEATOR POST, SURFACE-MOUNT TYPE SM-2, YELLOW POST WITH YELLOW/BLANK SHEETING
- ⋗ - TYPE B AND D W/R GUIDE RAIL MOUNT OR TYPE R W/R BARRIER MOUNT
- ⋗ - TYPE B AND D W/B GUIDE RAIL MOUNT OR TYPE R W/B BARRIER MOUNT
- ⚲ - BARRIER MOUNTED DELINEATOR, SIDE-MOUNT TYPE O, (Y/B)
- ⊟ - BARRIER MOUNTED DELINEATOR, SIDE-MOUNT TYPE R, (Y/R)
- ▷ - BARRIER MOUNTED DELINEATOR, SIDE-MOUNT TYPE R, (Y/Y)
- ● - PROPOSED GROUND MOUNTED SIGN
- ■ - PROPOSED HIGHWAY LIGHTING
- ⬭ - PROPOSED UNDERPASS LIGHTING
- 1 (1) SS-1 - DETAIL PLAN SHEET/ FAB SIGN NUMBER/ MOUNTING
- ▭ - PROPOSED OVERHEAD STRUCTURE MOUNTED SIGN
- ● - EXISTING GROUND MOUNTED SIGN
- ⇨ - TRAFFIC FLOW ARROW
- ▨ - BIKE LANE

LIMIT OF WORK
STA 46+24.39
SEG 0050 OFFSET 1103
SEG 0051 OFFSET 1115
SR 0230 B SEC 045
CITY OF HARRISBURG
DAUPHIN COUNTY

STOP WORK
STA 45+74.39
SEG 0050 OFFSET 1153
SEG 0051 OFFSET 1165
SR 0230 B SEC 045

POC STA 622+23.62 SR 8017 RAMP OP SPUR CONSTR ℄ =
POT STA 607+63.62 SR 8017 RAMP OP CONSTR ℄, 29.00' LT

POT STA 609+49.69 SR 8017 RAMP OP CONSTR ℄=
POT STA 32+60.07 SR 0230 B CONSTR ℄
POT STA 12+00.00 HANNA STREET CONSTR ℄

POC STA 653+09.85 SR 8017 RAMP P CONSTR ℄=
POC STA 50+86.02 SR 0083 CONSTR ℄, 104.14' LT

POC STA 620+00.00 SR 8017 RAMP OP SPUR CONSTR ℄ =
POT STA 30+89.52 SR 0230 B CONSTR ℄, 49.00' RT

LIMIT OF WORK
STA 39+50.00
SEG 0424 OFFSET 0974
SEG 0425 OFFSET 0974
SR 0083 SEC 079
CITY OF HARRISBURG
DAUPHIN COUNTY

START WORK
STA 40+00.00
SEG 0424 OFFSET 1024
SEG 0425 OFFSET 1024
SR 0083 SEC 079

POT STA 47+69.22 SR 0083 CONSTR ℄=
POT STA 27+80.77 SR 0230 B CONSTR ℄

POC STA 700+00.00 SR 8017 RAMP Q CONSTR ℄=
POC STA 50+51.80 SR 0083 CONSTR ℄, 102.00' RT

POT STA 722+35.06 SR 8017 RAMP QR SPUR CONSTR ℄=
POT STA 25+30.49 SR 0230 B CONSTR ℄, 44.00' RT

POT STA 707+63.09 SR 8017 RAMP QR CONSTR ℄=
POT STA 23+34.87 SR 0230 B CONSTR ℄

POT STA 17+63.91 SR 0230 A CONSTR ℄=
POT STA 17+63.91 SR 0230 B CONSTR ℄, 8.33' RT

POT STA 17+28.67 SR 0230 A CONSTR ℄=
POC STA 12+75.00 SYCAMORE STREET CONSTR ℄

POT STA 21+49.44 SR 3009 CONSTR ℄ =
POC STA 21+49.44 SR 3010 A CONSTR ℄=
POT STA 38+30.52 SR 0230 B CONSTR ℄

POC STA 650+00.00 SR 8017 RAMP P CONSTR ℄=
POC STA 604+25.32 SR 8017 RAMP OP CONSTR ℄, 22.00' LT
POC STA 604+25.32 SR 8017 RAMP O CONSTR ℄, 51.00' LT

POC STA 604+25.32 SR 8017 RAMP OP CONSTR ℄=
POC STA 650+00.00 SR 8017 RAMP P CONSTR ℄, 22.00' LT
POC STA 604+25.32 SR 8017 RAMP O CONSTR ℄, 29.00' RT

POC STA 604+25.32 SR 8017 RAMP O CONSTR ℄=
POC STA 604+25.32 SR 8017 RAMP OP CONSTR ℄, 29.00' LT
POC STA 650+00.00 SR 8017 RAMP P CONSTR ℄, 51.00' LT

POC STA 600+71.13 SR 8017 RAMP O CONSTR ℄=
POC STA 54+85.10 SR 0083 CONSTR ℄, 102.00' LT
POC STA 1116+02.34 SR 9403 SB C-D ROAD CONSTR ℄=
POC STA 1116+02.34 SR 9403 SB C-D ROAD CONSTR ℄, 11.00' RT

POC STA 41+47.18 SR 3010 B CONSTR ℄=
POC STA 63+71.81 SR 0083 CONSTR ℄

POC STA 753+87.41 SR 8017 RAMP R CONSTR ℄=
POC STA 54+83.15 SR 0083 CONSTR ℄, 108.00' RT

POC STA 750+00.00 SR 8017 RAMP R CONSTR ℄=
POC STA 703+19.47 SR 8017 RAMP QR CONSTR ℄, 35.00' LT
POC STA 703+19.47 SR 8017 RAMP Q CONSTR ℄, 57.00' LT

POC STA 703+19.47 SR 8017 RAMP QR CONSTR ℄=
POC STA 703+19.47 SR 8017 RAMP Q CONSTR ℄, 22.00' RT
POC STA 750+00.00 SR 8017 RAMP R CONSTR ℄, 35.00' LT

POC STA 703+19.47 SR 8017 RAMP Q CONSTR ℄=
POC STA 703+19.47 SR 8017 RAMP QR CONSTR ℄, 22.00' LT
POC STA 750+00.00 SR 8017 RAMP R CONSTR ℄, 57.00' LT

POC STA 720+00.00 SR 8017 RAMP QR SPUR CONSTR ℄=
POC STA 705+69.80 SR 8017 RAMP QR CONSTR ℄, 41.00' RT

PAXTON STREET
CAMPBELL STREET
13TH STREET NB & SB SURVEY ℄
13TH STREET SB SURVEY ℄
SYCAMORE STREET

SR 3010 A CONSTR ℄
SR 3010 B CONSTR ℄
SR 0230 B CONSTR ℄
SR 0230 A CONSTR ℄
SR 0083 CONSTR ℄
HANNA STREET CONSTR ℄
SR 8017 RAMP OP CONSTR ℄
SR 8017 RAMP OP SPUR CONSTR ℄
SR 8017 RAMP O CONSTR ℄
SR 8017 RAMP P CONSTR ℄
SR 8017 RAMP P TEMP CONSTR ℄
SR 8017 RAMP Q TEMP CONSTR ℄
SR 8017 RAMP Q CONSTR ℄
SR 8017 RAMP QR CONSTR ℄
SR 8017 RAMP QR SPUR CONSTR ℄
SR 8017 RAMP R CONSTR ℄
SR 8017 RAMP O TEMP CONSTR ℄
SR 8017 RAMP R TEMP CONSTR ℄
SR 9403 SB C-D ROAD CONSTR ℄
SR 9402 NB C-D ROAD CONSTR ℄
SYCAMORE STREET CONSTR ℄

MATCH TO RIGHT

MATCH TO INDEX MAP SHEET 2 OF 3

MATCH TO LEFT

START WORK
STA 07+42.42
SEG 0070 OFFSET 2509
SEG 0071 OFFSET 2516
SR 0230 A SEC 045

LIMIT OF WORK
STA 07+02.06
SEG 0080 OFFSET 0000
SEG 0081 OFFSET 0000
SR 0230 A SEC 045
CITY OF HARRISBURG
DAUPHIN COUNTY

SCALE
0 150 300 FEET

INDEX MAP SHEET 1 OF 3

SIGNING AND PAVEMENT MARKING PLAN

RECOMMENDED 02-13-2023
Christopher C. Flad, P.E.
2023.02.13 15:22:23 -05'00'
DISTRICT TRAFFIC ENGINEER

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

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL ENGINEER EVAN M. LIGDA PE-087865 (3/01/2022)

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

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL ENGINEER CHRISTOPHER DEATS PE079050 (2/01/22)

12/1/2022
FILENAME: 63016_079-s-cv-idx01.dgn

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
8-0	DAUPHIN	0083	079	109 OF 125
		0230	045	
		3007	020	
		3013	009	

CITY OF HARRISBURG

REVISION NUMBER	REVISIONS	DATE	BY

SEE SHEET 84 OF 125

SEE SHEET 110 OF 125

R3-8A(L-S) 30"x30" TYPE B

M2-1-1 21"x15" TYPE F
M1-1 24"x24" TYPE B

R3-9CP 30"x15" TYPE F
R3-17 30"x24" TYPE B
R8-3 12"x12" TYPE F

BEGIN BIKE LANE

(23) STRUCTURE MOUNTED NORTH (83) ONLY

R3-5A 30"x36" STRUCTURE MOUNTED ONLY

SPEED LIMIT 25

R2-1 24"x30" TYPE B

START WORK
STA 10+00.00
GREENWOOD STREET

R4-11 30"x30" TYPE B MAY USE FULL LANE

SR 3007 (19TH ST)

SR 3007 CONSTR

SIDEWALK

VERGE

DY/4"

BW/6"

AW/6"

W/4"

DEY/4"

W/24" @4' C-C

VERGE (TYP)

RW-1

GREENWOOD STREET CONSTR

19TH STREET TEMP ACCESS CONSTR

R3-9DP 30"x15" TYPE F
R3-17 30"x24" TYPE B

END BIKE LANE

Greenwood St PENNSYLVANIA

19th St USA

D3-1 54x9" TYPE B

D3-1 54x9" TYPE F

D3-1 (2) 30x9" TYPE F

4' PEDESTRIAN GATE
RELOCATE EXISTING NS ACCESS STAIRS

STOP WORK
STA 10+48.16
GREENWOOD STREET

STOP
RESET TYPE B

EXISTING SIGN TO REMAIN

SPEED LIMIT 25

SYNDICATE STREET

HETRICK STREET

T-627

FH

SCALE
0 25 50 FEET

SIGNING AND PAVEMENT MARKING PLAN (S 19TH ST)

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
EVAN M. LIGDA
ENGINEER
PE-087869

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
CHRISTOPHER DEATS
ENGINEER
PE079050

12/1/2022
FILENAME= 63016_079-s-cv-pln34.dgn

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
8-0	DAUPHIN	0083	079	1 OF 85
		0230	045	
		3007	020	
		3013	009	
CITY OF HARRISBURG, PAXTANG BOROUGH, SWATARA TWP				

REVISION NUMBER	REVISIONS	DATE	BY

CONSTRUCTION SEQUENCE

STAGE 1

1. SHIFT TRAFFIC TO THE LEFT AND CONSTRUCT SR 0230 (CAMERON STREET) NB WIDENING FROM STA 11+90 TO STA 44+50 RT AND INTERCHANGE RAMPS (RAMPS OP & QR) AS SHOWN. INSTALL TEMPORARY TRAFFIC SIGNAL AT THE INTERSECTION OF SR 0230 (CAMERON STREET) AND SR 3009 / 3010 (PAXTON STREET).

2. DETOUR SR 0083 FOR DEMOLITION AND CLEAN-UP OF THE SR 3013 (29TH STREET) BRIDGE.

   DETOUR SR 3013 (29TH STREET) AND CONSTRUCT SR 3013 (29TH STREET) BRIDGE AND FULL DEPTH ROADWAY FROM STA 34+50 TO STA 43+00. INSTALL TEMPORARY TRAFFIC SIGNAL AT THE INTERSECTION OF SR 3012 (DERRY STREET) AND SR 3013 (29TH STREET). WHILE DETOUR IS IN PLACE, MAINTAIN ACCESS TO ALL BUSINESSES DURING BUSINESS HOURS AND CONSTRUCT WIDENING AS FOLLOWS:

   STAGE 1A - SHIFT SR 3013 (29TH STREET) TRAFFIC AND CONSTRUCT WIDENING FROM STA 30+00 TO STA 34+50 LT
   STAGE 1B - RECONSTRUCT WAYNE STREET TIE-IN (RIGHT SIDE) BY MAINTAINING TRAFFIC IN ACCORDANCE WITH PUB. 213 GENERAL APPLICATION 6-46.
   STAGE 1C - RECONSTRUCT 8-FOOT SECTION OF SR 3013 RT FROM STA 32+50 TO STA 34+00.
   STAGE 1D - SHIFT SR 3013 (29TH STREET) TRAFFIC AND CONSTRUCT WIDENING FROM STA 30+00 TO STA 34+50 RT RECONSTRUCT WAYNE STREET TIE-IN (LEFT SIDE).

4. CLOSE THE EXISTING SR 0083 NB SHOULDER AND CONSTRUCT PROPOSED SR 0083 NB LANES FROM STA 97+00 TO STA 131+00.

   - CONSTRUCT NB SIGN STRUCTURE AT STA 99+85.
   - CONSTRUCT NB SIGN STRUCTURE AT STA 110+64.
   - CONSTRUCT NB OUTSIDE (RT) SHOULDER FOOTING AND BASE FOR SIGN STRUCTURE AT STA 122+23.

5. CONSTRUCT FULL DEPTH TEMPORARY SHOULDER FROM STA 121+73 TO STA 132+72 LT, SR 0083 SB IN ACCORDANCE WITH PATA 401-A

6. CONSTRUCT FULL DEPTH TEMPORARY PAVEMENT TIE-IN AT SR 0083 NB LIMIT OF WORK FROM STA 129+50 TO STA 133+50 RT

7. CONSRUCT FULL DEPTH WIDENING FOR TEMPORARY CROSSOVER FROM STA 98+20 TO STA 109+57 AS SHOWN IN THE DETAIL. COMPLETE TIE-IN OF TEMPORARY CROSSOVER TO THE EXISTING SR 0083 NB LANES IN ACCORDANCE WITH PATA 401-A.

STAGE 2

1. SHIFT TRAFFIC TO THE RIGHT AND CONSTRUCT SR 0230 (CAMERON STREET) SB WIDENING FROM STA 11+90 TO STA 44+50 LT REVISE TEMPORARY TRAFFIC SIGNAL AT THE INTERSECTION OF SR 0230 (CAMERON STREET) AND SR 3009 / 3010 (PAXTON STREET) AND INSTALL TEMPORARY TRAFFIC SIGNAL AT THE INTERSECTION OF SR 0230 AND SYCAMORE STREET

2. AFTER SR 3013 (29TH STREET) IS OPEN TO TRAFFIC, DETOUR SR 0083 FOR DEMOLITION AND CLEAN-UP OF THE SR 3007 (19TH STREET) BRIDGE.

3. DETOUR AND CONSTRUCT SR 3007 (19TH STREET) BRIDGE, SR 8021 INTERCHANGE, ALL RETAINING WALLS, AND FULL DEPTH ROADWAY FROM STA 93+40 TO STA 106+00. INSTALL TEMPORARY TRAFFIC SIGNAL AT THE INTERSECTION OF SR 3010 (PAXTON STREET) AND SR 3007 (19TH STREET).

4. DURING DETOUR OF SR 8021 INTERCHANGE, CONSTRUCT PROPOSED SR 0083 NB LANES STA 77+20 TO STA 97+00 AND TEMPORARY RAMP U TIE-IN.

5. TRANSITION SR 0083 NB TRAFFIC ONTO PROPOSED LANES USING THE TEMPORARY CROSSOVER.

6. SHIFT SR 0083 SB TRAFFIC ONTO RECONSTRUCTED SHOULDER AND CONSTRUCT REMAINING SR 0083 NB AND PARTIAL SB LANES FROM STA 97+00 TO STA 131+00.
   - CONSTRUCT MEDIAN FOOTING AND BASE OF SB SIGN STRUCTURE AT STA 118+17.
   - CONSTRUCT MEDIAN FOOTING AND COMPLETE NB SIGN STRUCTURE AT STA 122+23.
   - PARTIALLY DEMOLISH ABANDONED RAILROAD BRIDGE UNDER SR 0083 (STA 120+00 TO STA 122+00) IN ACCORDANCE WITH THE BRIDGE REMOVAL PLAN IN THE CONSTRUCTION PLAN DETAILS.

7. REMOVE EXISTING SR 0083 MEDIAN BARRIER AND CONSTRUCT FULL DEPTH TEMPORARY PAVEMENT IN THE EXISTING MEDIAN FOR TEMPORARY CROSSOVER FROM STA 90+75 TO STA 98+50 IN ACCORDANCE WITH THE DETAIL AND PATA 401-B.

STAGE 3

1. COMPLETE FINAL OVERLAY AND PAVEMENT MARKINGS ON SR 0230 (CAMERON STREET) AND SHIFT TRAFFIC INTO PROPOSED LANE LOCATIONS. CLOSE TURN LANES ONTO RAMPS AS SHOWN.

2. CLOSE AND DETOUR 13TH STREET SB RAMPS AND COMPLETE CONSTRUCTION OF SB RAMPS TO SR 0230 (CAMERON STREET)

3. CONSTRUCT NB RAMPS TO SR 0230 (CAMERON STREET) AS FOLLOWS:

   STAGE 3A - COMPLETE CONSTRUCTION AND TIE-IN OF NB EXIT RAMP TO SR 0230 WHILE 13TH STREET NB INTERCHANGE REMAINS OPEN TO TRAFFIC.

   STAGE 3B - OPEN NB EXIT RAMP TO SR 0230 AND CLOSE NB EXIT RAMP TO 13TH STREET. COMPLETE CONSTRUCTION OF NB ENTRANCE RAMP FROM SR 0230 WHILE ENTRANCE RAMP FROM 13TH STREET REMAINS OPEN. COMPLETE FINAL SECTION OF RAMP FOLLOWING OPENING RAMP R TO TRAFFIC AND CLOSING EXISTING RAMP C.

4. SHIFT SR 0083 NB TRAFFIC ONTO PROPOSED NB LANES BETWEEN STA 75+00 AND STA 82+00.

5. REMOVE SECTION OF EXISTING MEDIAN BARRIER AND COMPLETE PAVING AND INSTALLATION OF PROPOSED TEMPORARY BARRIER FOR CROSSOVER 1 (SR 0083 STA 73+50 TO STA 83+00).

6. OPEN SR 8021 (19TH STREET) INTERCHANGE AND SR 3007 TO TRAFFIC. SR 3007 BRIDGE CAN BE COMPLETED IN STAGE 3, IF NECESSARY, BUT INTERCHANGE RAMPS AND CONNECTION TO SR 3010 (PAXTON STREET) MUST BE OPENED TO TRAFFIC.

7. CONSTRUCT REMAINING SR 0083 NB SHOULDER STA 88+00 TO STA 98+00.

8. SHIFT SR 0083 SB TRAFFIC ONTO NEW SR 0083 NB ROADWAY STA 108+00 TO STA 131+00. UTILIZE THE EXISTING CROSSOVER (STA 97+00 TO STA 108+00) USED FOR NB TRAFFIC IN STAGE 2.

9. COMPLETE CONSTRUCTION OF SR 0083 SB LANES STA 113+30 TO STA 131+00. COMPLETE DEMOLITION AND REMOVAL OF ABANDONED RAILROAD BRIDGE UNDER SR 0083 (STA 120+00 TO STA 122+00) IN ACCORDANCE WITH THE BRIDGE REMOVAL PLAN IN THE CONSTRUCTION PLAN DETAILS.

STAGE 4

1. SHIFT SR 0083 SB TRAFFIC INTO PROPOSED LANE LOCATIONS. MAINTAIN PATTERN FOR SR 0083 NB TRAFFIC AND CONSTRUCT REMAINING PORTION OF SR 0083 NB IN THE AREA OF THE TEMPORARY CROSSOVER (STA 98+00 TO STA 109+57).

2. PLACE FINAL OVERLAY AND PAVEMENT MARKINGS ON SR 0083.

TRAFFIC CONTROL PLAN

SHEET INDEX

DESCRIPTION	SHEET
GENERAL NOTES	1
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DETOUR PLAN SHEETS	10 - 25
TRAFFIC CONTROL PLAN SHEETS	26 - 70
TEMPORARY TRAFFIC SIGNAL PLANS	71 - 85

GENERAL NOTES

THIS WORK CONSISTS OF THE MAINTENANCE OF TRAFFIC AND THE PROTECTION OF THE TRAVELING PUBLIC APPROACHING THE CONSTRUCTION AREA AND WITHIN THE LIMITS OF CONSTRUCTION.

FURNISH, ERECT, PLACE AND MAINTAIN TRAFFIC CONTROL SIGNS AND DEVICES AND MAINTAIN TRAFFIC DURING HOURS OF CONSTRUCTION AND AT ALL OTHER TIMES IN ACCORDANCE WITH THE METHODS INDICATED ON THESE DRAWINGS AND,

1. THE SPECIAL PROVISIONS OF THE CONTRACT.
2. PA CODE, TITLE 67, CHAPTER 212, OFFICIAL TRAFFIC CONTROL DEVICES.
3. PDT PUBLICATION 213, TEMPORARY TRAFFIC CONTROL GUIDELINES.
4. PDT PUBLICATION 35, APPROVED CONSTRUCTION MATERIALS (BULLETIN 15).
5. PDT PUBLICATION 408, SPECIFICATIONS.
6. FEDERAL HIGHWAY ADMINISTRATION MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
7. PDT PUBLICATION 236, HANDBOOK OF APPROVED SIGNS.
8. PDT PUBLICATION 111, TRAFFIC CONTROL PAVEMENT MARKING AND SIGNING STANDARDS.

IMMEDIATELY UPON COMPLETION OF THE WORK, REMOVE THE DEVICES. THE DEPARTMENT WILL REMOVE ANY TRAFFIC CONTROL DEVICES ERECTED BY DEPARTMENT FORCES.

COVER OR REMOVE ALL SIGNS NOT IN USE.

ALL SIGNS SHOWN ON PLANS ARE TO REMAIN UNLESS OTHERWISE STATED.

RECOMMENDED MARCH 8 20 23
Christopher C. Flad, P.E.
2023.03.08 16:55:33 -05'00'
DISTRICT TRAFFIC ENGINEER

RECOMMENDED March 13, 20 23
ADE - CONSTRUCTION

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

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
DREW F. DALLAM
ENGINEER
PE-054775-E

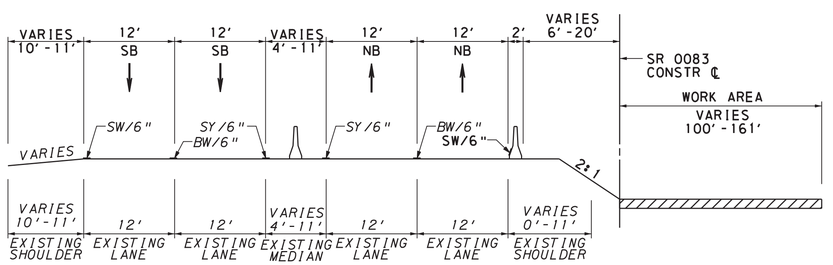
28 November 2022

11/28/2022
FILENAME: 63016-s-tr-tcp-079-gen

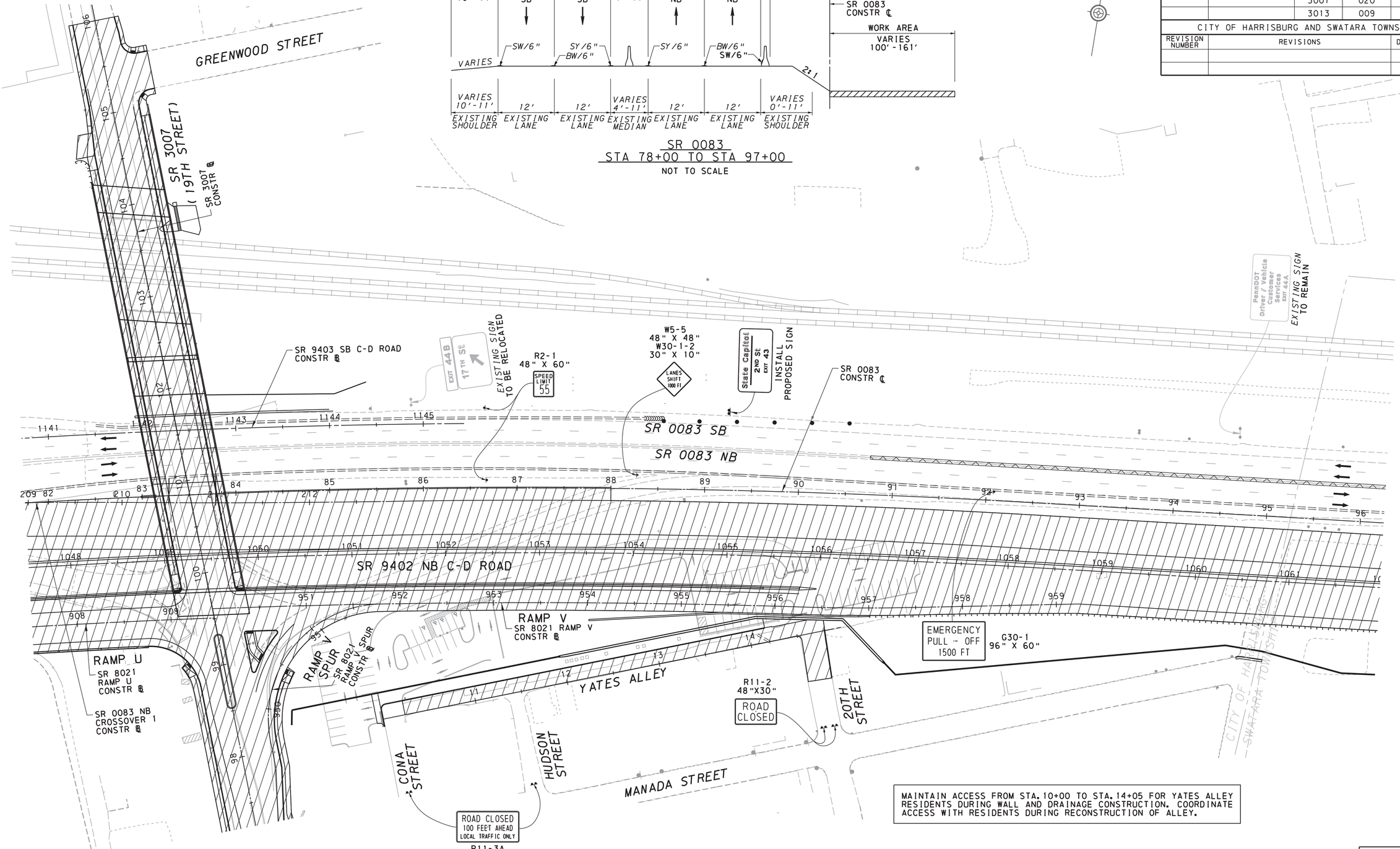
DISTRICT	COUNTY	ROUTE	SECTION	SHEET
8-0	DAUPHIN	0083	079	43 OF 85
		0230	045	
		3007	020	
		3013	009	

CITY OF HARRISBURG AND SWATARA TOWNSHIP

REVISION NUMBER	REVISIONS	DATE	BY



SR 0083
STA 78+00 TO STA 97+00
NOT TO SCALE



MAINTAIN ACCESS FROM STA. 10+00 TO STA. 14+05 FOR YATES ALLEY RESIDENTS DURING WALL AND DRAINAGE CONSTRUCTION. COORDINATE ACCESS WITH RESIDENTS DURING RECONSTRUCTION OF ALLEY.

SCALE
0 50 100 FEET

TRAFFIC CONTROL PLAN
STAGE 2

SEE SHEET 42 OF 85
SEE SHEET 44 OF 85
SEE SHEET 50 OF 85

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL ENGINEER
DREW F. DALLAM
PE-054775-E

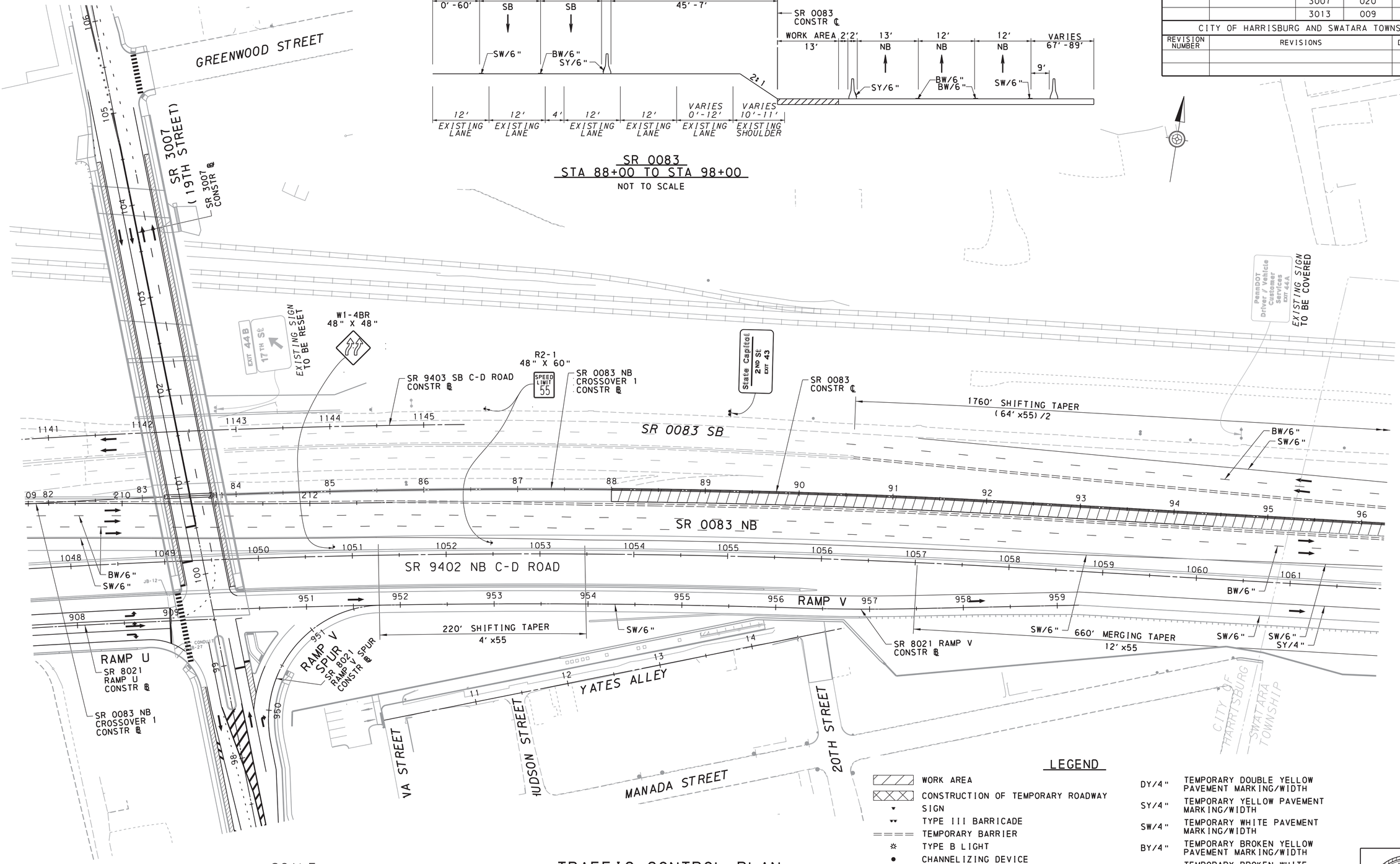
11/28/2022
FILENAME: 63016-s-tr-tcp02-07.dgn

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
8-0	DAUPHIN	0083	079	54 OF 85
		0230	045	
		3007	020	
		3013	009	

CITY OF HARRISBURG AND SWATARA TOWNSHIP

REVISION NUMBER	REVISIONS	DATE	BY

SR 0083
STA 88+00 TO STA 98+00
NOT TO SCALE



SCALE
0 50 100 FEET

TRAFFIC CONTROL PLAN
STAGE 3

LEGEND

	WORK AREA
	CONSTRUCTION OF TEMPORARY ROADWAY
	SIGN
	TYPE III BARRICADE
	TEMPORARY BARRIER
	TYPE B LIGHT
	CHANNELIZING DEVICE
	TEMPORARY IMPACT ATTENUATING DEVICE, TYPE V (REUSABLE), TEST LEVEL 3
	LANE FLOW ARROW
	ARROW PANEL
PCMS	PORTABLE CHANGEABLE MESSAGE SIGN

DY/4"	TEMPORARY DOUBLE YELLOW PAVEMENT MARKING/WIDTH
SY/4"	TEMPORARY YELLOW PAVEMENT MARKING/WIDTH
SW/4"	TEMPORARY WHITE PAVEMENT MARKING/WIDTH
BY/4"	TEMPORARY BROKEN YELLOW PAVEMENT MARKING/WIDTH
BW/6"	TEMPORARY BROKEN WHITE PAVEMENT MARKING/WIDTH
AW/8"	TEMPORARY AUXILIARY WHITE PAVEMENT MARKING/WIDTH
WDE/4"	TEMPORARY WHITE DOTTED EXTENSION PAVEMENT MARKING/WIDTH

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
DREW F. DALLAM
ENGINEER
PE-054775-E

FOR STAGE 3A, SEE SHEET 53 OF 85
SEE SHEET 55 OF 85

11/28/2022
FILENAME: 63016-s-tr-tcp03-07.dgn

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
8-0	DAUPHIN	0083	079	68 OF 85
		0230	045	
		3007	020	
		3013	009	

CITY OF HARRISBURG AND SWATARA TOWNSHIP

REVISION NUMBER	REVISIONS	DATE	BY

SEE SHEET 67 OF 85

SEE SHEET 69 OF 85

SR 3007
(19TH STREET)

SR 3007 CONSTR ℄

EXIT 44B
17TH St

EXISTING SIGN TO REMAIN

W1-4BR
48" X 48"

SR 9403 SB C-D ROAD CONSTR ℄

R2-1
48" X 60"
SPEED LIMIT 55

SR 0083 NB CROSSOVER 1 CONSTR ℄

State Capitol
2ND St
EXIT 43

SR 0083 CONSTR ℄

SR 0083 SB

SR 0083 NB

SR 9402 NB C-D ROAD

RAMP V

PennDOT Driver / Vehicle Customer Services Service A

EXISTING SIGN TO REMAIN

BW/6"

BW/6"
SW/6"

JB-12

CONDUIT 1-27

RAMP U

SR 8021 RAMP U CONSTR ℄

SR 0083 NB CROSSOVER 1 CONSTR ℄

RAMP V SPUR

SR 8021 RAMP V SPUR CONSTR ℄

220' SHIFTING TAPER
4' x55

SR 8021 RAMP V CONSTR ℄

SY/4"
SW/4"

660' MERGING TAPER
12' x55

BW/6"
SW/6"

YATES ALLEY

CONA STREET

HUDSON STREET

MANADA STREET

20TH STREET

CITY OF HARRISBURG

SWATARA TOWNSHIP

SCALE

0 50 100 FEET

TRAFFIC CONTROL PLAN
STAGE 4

LEGEND

	WORK AREA
	CONSTRUCTION OF TEMPORARY ROADWAY
	SIGN
	TYPE III BARRICADE
====	TEMPORARY BARRIER
	TYPE B LIGHT
	CHANNELIZING DEVICE
	TEMPORARY IMPACT ATTENUATING DEVICE, TYPE V (REUSABLE), TEST LEVEL 3
	LANE FLOW ARROW
	ARROW PANEL
PCMS	PORTABLE CHANGEABLE MESSAGE SIGN

DY/4"	TEMPORARY DOUBLE YELLOW PAVEMENT MARKING/WIDTH
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AW/8"	TEMPORARY AUXILIARY WHITE PAVEMENT MARKING/WIDTH
WDE/4"	TEMPORARY WHITE DOTTED EXTENSION PAVEMENT MARKING/WIDTH

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL ENGINEER
DREW F. DALLAM
PE-054775-E

11/28/2022
FILENAME: 63016-s-tr-tcp04-07.dgn

PLOTTED: Oct 14, 2022–7:19am
OPERATOR: stocht
FILE NAME: P:\0043\004379_0485\C3D\Plan Sets\WW\W0043790485–DT–W.dwg Layout:GN

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
8–0	DAUPHIN COUNTY	0083	079	1 OF 27
CITY OF HARRISBURG AND SWATARA TOWNSHIP				

REVISION NUMBER	REVISIONS	DATE	BY

DRAWING INDEX

SCALE: 1" = 500'

RESTORATION NOTES

1. CONTRACTOR SHALL REFER TO THE TYPICAL SECTIONS WITHIN THE ROADWAY CONSTRUCTION PLANS FOR PAVEMENT DETAIL REQUIREMENTS AND LIMITS.
2. PAVEMENT RESTORATION OF WATER MAIN INSTALLED WITHIN MILL AND OVERLAY LIMITS REQUIRES FULL DEPTH RESTORATION (SUBBASE, BASE, BINDER, AND WEARING COURSES) WITH ONE FOOT CUTBACKS ON EITHER SIDE OF THE TRENCH.
3. PAVEMENT RESTORATION OF WATER MAIN INSTALLED WITHIN FULL DEPTH RESTORATION LIMITS REQUIRES PAVEMENT RESTORATION IN ACCORDANCE WITH THE TEMPORARY PAVEMENT DETAIL.
4. ASPHALT SHALL BE USED FOR SIDEWALK AND CURB RESTORATION WITHIN AREAS WHERE FULL RECONSTRUCTION IS OCCURRING AND SHALL MATCH EXISTING GRADES. RESTORATION SHALL IN BE ACCORDANCE WITH THE TEMPORARY PAVEMENT DETAIL. SIDEWALK AND CURB RESTORATION OUTSIDE OF AREAS WHERE FULL RECONSTRUCTION IS OCCURRING SHALL BE REPLACED WITH CONCRETE IN ACCORDANCE WITH PENNDOT RC–67M SIDEWALK TYPICAL SECTION DETAIL AND PENNDOT RC–64M APPLICABLE CONCRETE CURB DETAILS.

GENERAL NOTES

THE GENERAL NOTES APPLY TO ALL CONSTRUCTION UNDER THIS CONTRACT.

1. THE AREAS IN WHICH WATER LINES, STRUCTURES AND APPURTENANCES ARE TO BE CONSTRUCTED UNDER THIS CONTRACT MAY CONTAIN EXISTING UNDERGROUND AND ABOVE GROUND UTILITIES AND STRUCTURES WHICH ARE NOT SHOWN ON THESE DRAWINGS. THE DATA PERTAINING TO THE MATERIAL, SIZE, LOCATION AND DEPTH OF EXISTING UTILITIES THAT ARE SHOWN ON THESE DRAWINGS ARE FOR GENERAL INFORMATION AND GUIDANCE ONLY. THE EXACT LOCATION, DEPTH, SIZE, MATERIAL AND TYPE OF EXISTING UNDERGROUND UTILITIES WITHIN THE LIMITS OF THE WORK SHALL BE DETERMINED BY THE CONTRACTOR PRIOR TO CONSTRUCTION IN ACCORDANCE WITH THE CONDITIONS CONTAINED IN THE CONTRACT.
2. THE CONTRACTOR SHALL EXERCISE EXTREME CARE IN EXCAVATION FOR ALL UNDERGROUND PIPELINES AND FACILITIES TO PREVENT ACCIDENTAL DAMAGE TO EXISTING UTILITIES AND ADJACENT BUILDINGS AND STRUCTURES. THE CONTRACTOR SHALL PROTECT AND SUPPORT ALL EXPOSED LINES, OR OTHER FACILITIES AND SHALL SUPPORT AND MAINTAIN THE SAFETY AND STRUCTURAL INTEGRITY OF ADJACENT BUILDINGS AND STRUCTURES WITHIN OR DIRECTLY ADJACENT TO THE RIGHTS–OF–WAY INDICATED. RESTORATION OF DAMAGED BUILDINGS, STRUCTURES, PIPING, CABLES, CONDUITS, WIRING AND APPURTENANCES SHALL BE AT NO COST TO THE OWNERS OF SAID BUILDINGS, STRUCTURES AND UTILITIES, OWNER OR THE REPRESENTATIVE.
3. THE CONTRACTOR WILL AT TIMES THROUGHOUT THE WORK, COOPERATE FULLY WITH THE OWNER IN MAINTAINING ALL NECESSARY UTILITY SERVICES TO THE PUBLIC. THE PROPOSED WORK IS TO BE COMPLETED ON AN EXISTING WATER SYSTEM. THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN WATER SERVICE DURING CONSTRUCTION. THE CONTRACTOR SHALL COORDINATE TEMPORARY SHUT–DOWNS IN SERVICE WITH THE OWNER.
4. IN THE EVENT OF DAMAGE TO UTILITIES, BUILDINGS OR STRUCTURES THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE UTILITY, STRUCTURE OR BUILDING OWNER AND THE ENGINEER, AND BE PREPARED TO IMMEDIATELY MAKE COMPLETE RESTORATION AND REPAIR OF THE DAMAGED FACILITY TO THE SATISFACTION OF THE UTILITY, STRUCTURE OR BUILDING OWNER. NO REPAIR OF THE UTILITY IS TO COMMENCE UNLESS AUTHORIZED BY THE UTILITY, STRUCTURE OR BUILDING OWNER OR THREAT OF DAMAGE TO PROPERTY OR PERSONS IS IMMINENT.
5. THE CONTRACTOR IS NOTIFIED THAT OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA) CLEARANCES MUST BE MAINTAINED TO OVERHEAD POWER LINES FROM ANY CONSTRUCTION EQUIPMENT. THE CONTRACTOR IS RESPONSIBLE FOR MAINTENANCE OF OSHA STANDARDS IN THIS REGARD.
6. OSHA EXCAVATION STANDARDS SHALL APPLY TO THIS CONTRACT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY OF THE PROJECT SITE.
7. THE CONTRACTOR SHALL ENDEAVOR TO MINIMIZE DAMAGE TO EXISTING STRUCTURES, MAILBOXES, SHEDS, SIGNS, TREES, ETC. WHEN SUCH ITEMS CANNOT BE AVOIDED DURING CONSTRUCTION, THE CONTRACTOR SHALL REPAIR OR REPLACE AT NO ADDITIONAL EXPENSE TO OWNER OR ENGINEER. THE MAIL SERVICE IS TO BE MAINTAINED AT ALL TIMES.
8. CONTRACTOR MUST COORDINATE AND COMPLY WITH THE POWER COMPANY (OVERHEAD POWER LINES) REQUIREMENTS.
9. ALL STRUCTURES, DRIVEWAYS AND DRAINAGE FACILITIES DISTURBED DURING THE WORK SHALL BE REPLACED IN KIND.
10. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE REGULATIONS OF ACT 287 (1974) AS AMENDED PRIOR TO CONSTRUCTION.
11. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING TRAFFIC FLOW WITHIN THE WORK AREA AT ALL TIMES. CONTRACTOR SHALL PROVIDE FOR EMERGENCY VEHICLE ACCESS AT ALL TIMES.
12. NO BLASTING WILL BE PERMITTED.
13. THE CONTRACTOR SHALL FIELD VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AT THE PROJECT SITE.
14. UNLESS OTHERWISE INDICATED, ALL FINISHED GRADES SHALL MATCH EXISTING GRADES.
15. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING UTILITY SERVICE DURING CONSTRUCTION UNLESS WRITTEN AUTHORIZATION HAS BEEN OBTAINED BY THE OWNER OF THE FACILITY.
16. PROVIDE A MINIMUM OF 18" VERTICAL SEPARATION WHERE NEW WATER MAINS CROSS ABOVE SANITARY SEWERS OR STORM SEWER. IN AREAS WHERE THIS SEPARATION IS NOT OBTAINABLE THE SEWER LINE SHALL BE CONCRETE ENCASED 10 FEET ON EITHER SIDE OF THE WATER MAIN. IN LOCATIONS WHERE THE NEW WATER MAIN MUST CROSS BELOW THE SEWER MAIN, THE NEW WATER MAIN SHALL BE CONCRETE ENCASED 10 FEET ON EITHER SIDE OF THE SEWER MAIN.
17. LOCATIONS OF EXISTING AND PROPOSED SERVICE CONNECTIONS ARE SHOWN FOR BIDDING PURPOSES ONLY. THE ACTUAL LOCATIONS OF EXISTING SERVICE CONNECTIONS SHALL BE DETERMINED IN FIELD BY THE CONTRACTOR. THE FINAL LOCATIONS OF PROPOSED CONNECTIONS SHALL BE DETERMINED IN THE FIELD, BY THE OWNER OR ENGINEER.
18. THE CONTRACTOR SHALL MAINTAIN POTABLE WATER SERVICE TO ALL EXISTING CUSTOMERS AND COORDINATE ALL SERVICE INTERRUPTIONS WITH OWNER THROUGHOUT THE CONSTRUCTION SEQUENCE.
19. ALL NEW WATER MAINS AND SERVICES SHALL HAVE A MINIMUM OF 4' COVER UNLESS OTHERWISE SHOWN ON THE PROFILES.
20. PROVIDE THRUST RESTRAINT ON ALL WATER MAINS AND FITTINGS IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. CONTRACTOR MAY CHOOSE TO UTILIZE EITHER RESTRAINED JOINTS OR THRUST BLOCKS, UNLESS ONE TYPE IS SPECIFICALLY IDENTIFIED ON THE PLAN SHEETS.
21. SECTIONS OF REMOVED WATER MAINS AND TAPPING "COUPONS" SHALL BE PROVIDED TO THE OWNER WHEN REQUESTED.
22. THE CONTRACTOR MUST DECHLORINATE ALL WATER DISCHARGED FROM THE WATER FACILITIES, AND COMPLETE A CHLORINATED WATER DISCHARGE – INCIDENT REPORT FORM FOR EACH RELEASE.
23. CONTACT KRISTEN OSNICK OF UGI (570) 592–3017 1 WEEK IN ADVANCE OF REMOVING RETIRED GAS UTILITY PIPE FROM ROADWAY.
24. CONTACT UGI AT 1–800–276–2722 FOR SPECIAL REQUIREMENTS FOR EXPOSING CAST IRON GAS MAINS.
25. CONTACT FRED HUBLER OF UGI (717) 228–9779 PRIOR TO EXPOSING STEEL GAS MAINS AND SERVICES.

DES: SAH	DWG: RSF	CKD:

WATER UTILITY RELOCATION PLAN
CAPITAL REGION WATER

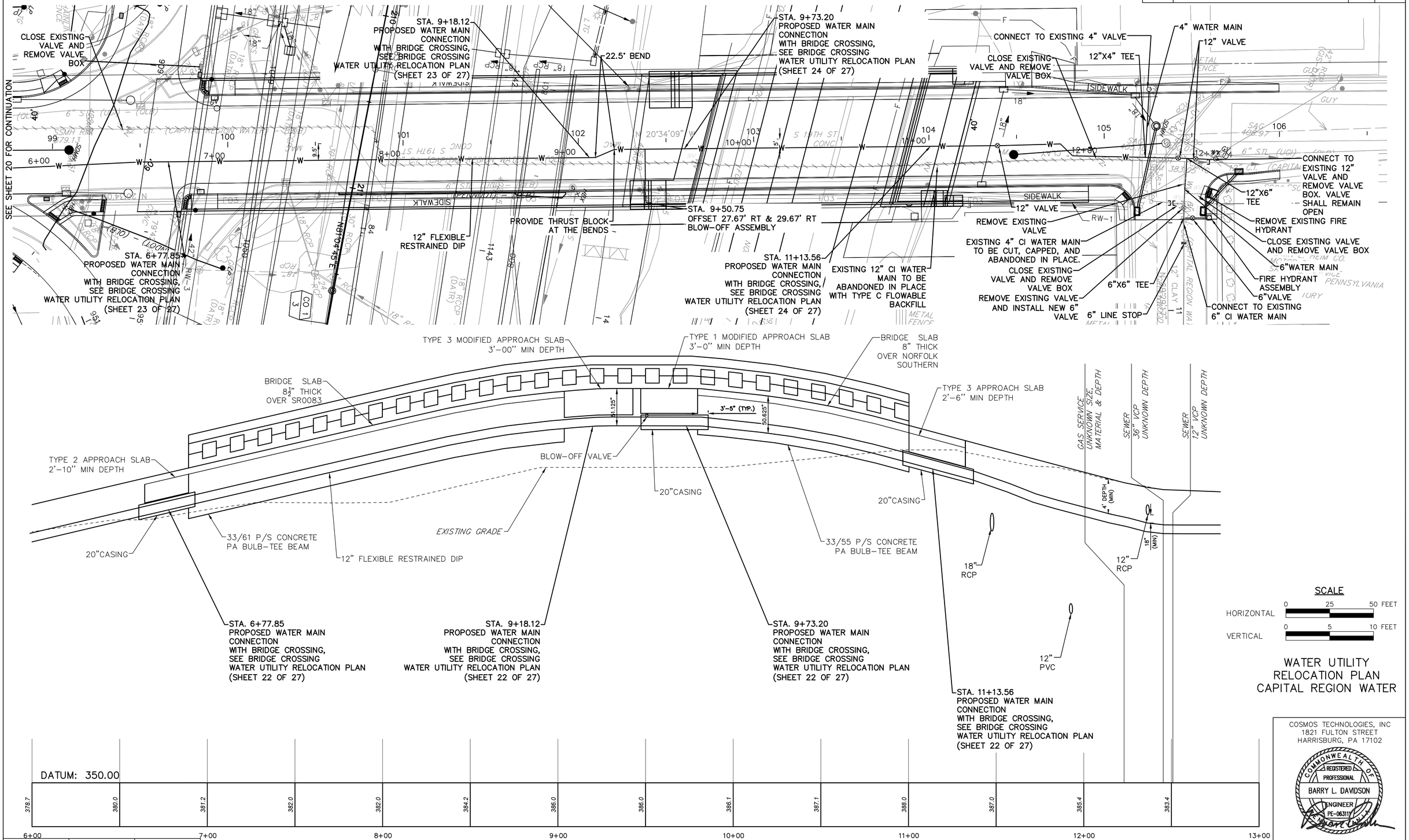
HERBERT, ROWLAND & GRUBIC, INC.
369 EAST PARK DRIVE
HARRISBURG, PA 17111

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL ENGINEER
SARAH ANN HARTZ
No. PE085623

10/28/2022

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
8-0	DAUPHIN COUNTY	0083	079	21 OF 27
	CITY OF HARRISBURG			

REVISION NUMBER	REVISIONS	DATE	BY



SCALE

HORIZONTAL 0 25 50 FEET

VERTICAL 0 5 10 FEET

WATER UTILITY RELOCATION PLAN CAPITAL REGION WATER

COSMOS TECHNOLOGIES, INC
1821 FULTON STREET
HARRISBURG, PA 17102

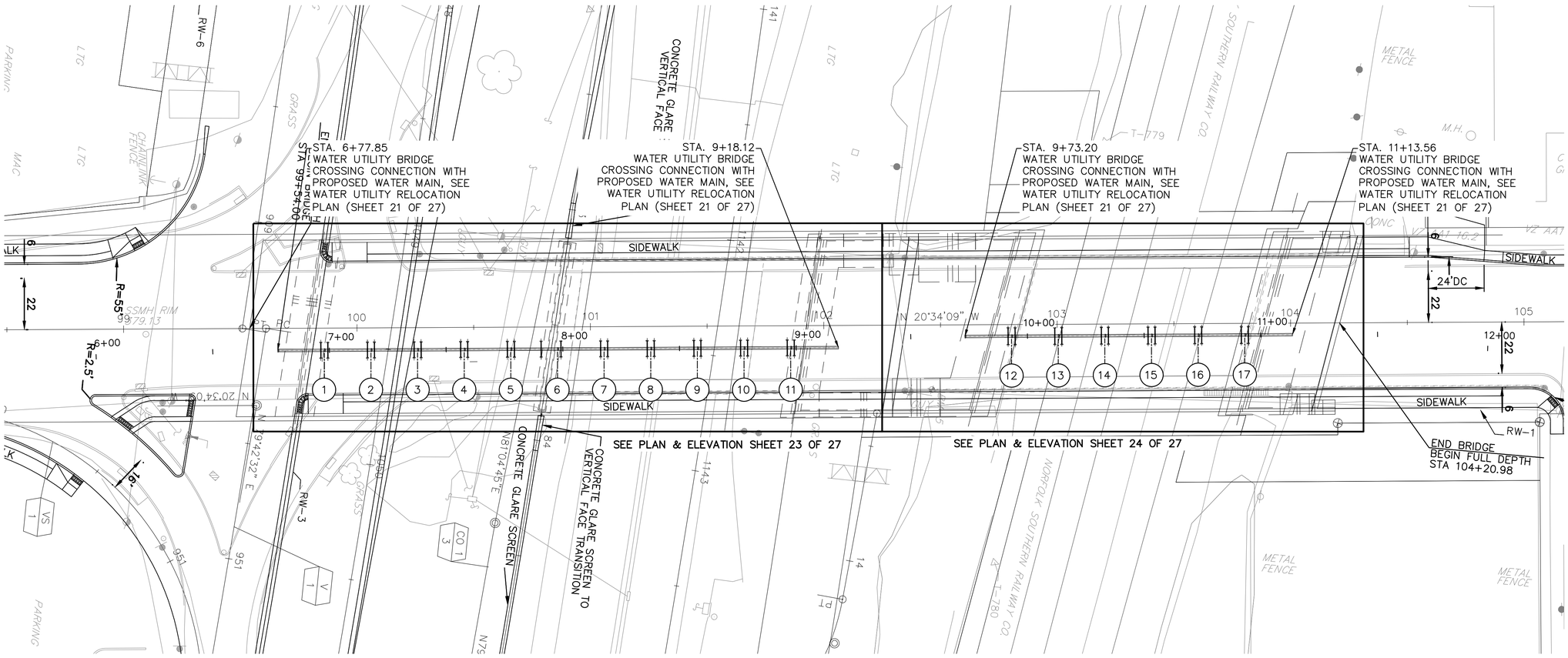
COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
BARRY L. DAVIDSON
ENGINEER
PE-063111

DES: BL	DWG: BL	CKD: JJB

OPERATOR: Bldo
FILE NAME: Y:\Y PROJECTS (New Contracts-System)\ACTIVE PROJECTS\HRG\349-01-2020 HRG CRW I-83 Expansion\CADD\Plan Sheet\Water\19TH ST COSMOS.dwg Layout:19th 2 PLOTTED: Oct 28, 2022-11:32am

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
8-0	DAUPHIN COUNTY	0083	079	22 OF 27
CITY OF HARRISBURG				

REVISION NUMBER	REVISIONS	DATE	BY



LEGEND

PIPE JOINT NUMBER

INSET DETAIL BOUNDARY

BRIDGE CROSSING NOTES:

1. TWO (2) BRIDGE CROSSING SUPPORTS PER LENGTH OF PIPE ARE SPECIFIED TO SUPPORT THE PROPOSED OPERATIONAL WEIGHT OF THE 12" NOMINAL DIAMETER DUCTILE IRON PIPE WATERLINE. IN ADDITION TO PROVIDING THE PIPE WITH SUFFICIENT SUPPORT TO HANDLE THE SYSTEM LOADS, THIS SUPPORT METHOD WILL FACILITATE CONSTRUCTION OF THE WATERLINE BY PROVIDING TWO (2) SUPPORT LOCATIONS PER INDIVIDUAL PIPE SEGMENT DURING THE ASSEMBLY OF THE BRIDGE CROSSING.
2. THE BRIDGE CROSSING PIPE SHALL BE ORDERED WITH 20-FOOT LAY LENGTHS AND FIELD ADJUSTED AS NECESSARY TO LOCATE THE CENTERLINE OF THE BELL FACE IN THE POSITIONS NOTED ON THE DRAWINGS. THE BELL FACE SHALL BE POSITIONED BETWEEN THE INSTALLED PIPE ROLLER SUPPORTS SUCH THAT THE BOUNDING SUPPORTS ARE AT A DISTANCE NO GREATER THAN 1'-6" AND NO LESS THAN SIX (6) INCHES FROM THE CENTERLINE OF PIPE JOINT. THE ONLY EXCEPTION IS AT THE LOCATION OF THE PIER, WHERE THE SPIGOT END SUPPORT SHALL BE MOVED AS NECESSARY TO BE OUT OF CONFLICT WITH THE DIAPHRAGM AT THE PIER, THUS SHALL BE MOVED FURTHER FROM STATION 8+00 AND CLOSER TO STATION 7+00.
3. THE PIPE ROLLER SUPPORT SHALL BE COMPATIBLE WITH THE OUTSIDE DIAMETER OF THE DUCTILE IRON PIPE AND SHALL BE CONSTRAINED BY ROLLERS ON BOTH THE TOP AND BOTTOM OF THE PIPE AT EACH SUPPORT.
4. THE MAIN COMPONENTS OF THE BRIDGE CROSSING PIPELINE SUPPORT SYSTEM CONSIST OF TWO (2) TOP FLANGE ANGLES, A MAIN SUPPORT ANGLE, TWO (2) DIAGONAL BRACE ANGLES, AND AN ADJUSTABLE, NON-CONDUCTIVE DOUBLE ROLLER GUIDE. THE TWO (2) TOP FLANGE ANGLES SHALL BE INSTALLED ON THE TOP FLANGE OF THE ADJACENT PRE-STRESSED BEAMS AT THE LOCATIONS INDICATED, PRIOR TO THE INSTALLATION OF THE BRIDGE DECK/HAUNCHES. THE MAIN SUPPORT ANGLE SHALL BE FIELD WELDED TO THE TOP FLANGE ANGLES SO THE ENTIRE PIPE SUPPORT SYSTEM IS PERPENDICULAR TO THE PIPE ALIGNMENT IN BOTH THE HORIZONTAL AND VERTICAL DIRECTIONS AT THE POINT OF INSTALLATION.
5. A MINIMUM VERTICAL CLEARANCE OF THREE (3) INCHES MUST BE MAINTAINED BETWEEN THE LOWEST MEMBER OF THE PIPE SUPPORT SYSTEM AND THE BOTTOM OF THE ADJACENT BEAMS.
6. THE PIPE TYPE SHALL REMAIN CONSISTENT ACROSS THE LENGTH OF THE BRIDGE CROSSINGS WITH TRANSITIONS TO A NON-FLEXIBLE RESTRAINED JOINTED PIPE OCCURRING UNDERGROUND OUTSIDE OF THE BRIDGE CROSSING LIMITS.
7. TO AVOID EXCESSIVE THRUST LOADS, THE BRIDGE CROSSING PIPE ALIGNMENT INCLUDES NO HORIZONTAL OR VERTICAL BENDS. ALL WATER MAIN BENDS SHOULD BE CONSTRUCTED UNDERGROUND, OUTSIDE OF THE BRIDGE CROSSING LIMITS, AND RESTRAINED BY THRUST BLOCKING AS NECESSARY.
8. THE PROPOSED DUCTILE IRON PIPE SHALL HAVE FLEXIBLE RESTRAINED JOINTS CAPABLE OF ACCOMMODATING THE THERMAL EXPANSION OF THE BRIDGE CROSSING WATER MAIN AND ANY DIFFERENTIAL EXPANSION BETWEEN THE PRE-STRESSED CONCRETE BRIDGE AND THE DUCTILE IRON PIPE.
9. THE MAXIMUM DUCTILE IRON PIPE JOINT ASSEMBLY DEFLECTION IS LIMITED TO 5 DEGREES OR LESS AS SPECIFIED BY THE MANUFACTURER – THE DESIGNED PIPE ASSEMBLY DEFLECTION IS BELOW THIS MAXIMUM AND GENERALLY ALIGNS WITH THE INSTALLED CAMBER OF THE PROPOSED PRE-STRESSED BRIDGE BEAMS (AS MEASURED AT EACH PIPE SEGMENT).
10. ALL ATTACHED SUPPORT DETAIL MEMBERS TO BE GALVANIZED.

SCALE

HORIZONTAL 0 25 50 FEET

VERTICAL 0 25 50 FEET

EARTHSPAN, LLC
P.O. BOX 15270
PITTSBURGH, PA 15237

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL TRACY PUCCIARELLI BORNE ENGINEER PE073381

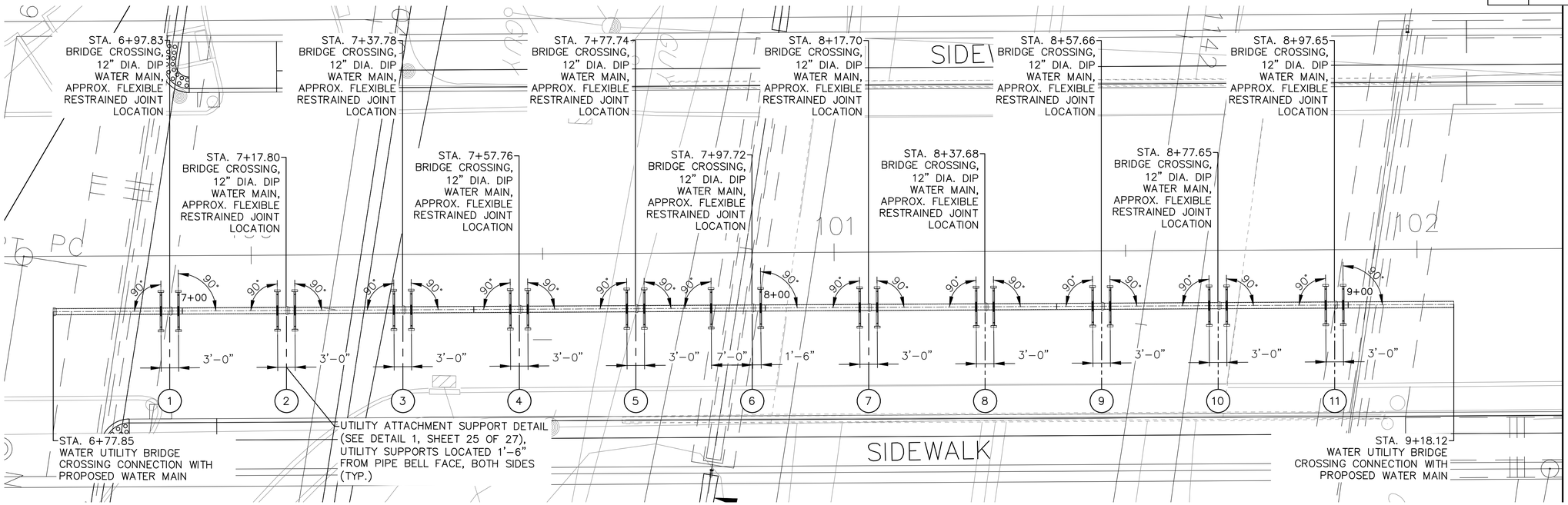
UTILITY BRIDGE CROSSING
WATER UTILITY RELOCATION PLAN
CAPITAL REGION WATER

DES: TPB	DWG: TPB	CKD: JJB

FILE NAME: Z:\ PROJECTS (New Contracts-System)\ACTIVE PROJECTS\HRG\349-01-2020 HRG CRW I-83 Expansion\CADD\CRW I-83 Bridge Crossing Drawings_Earthspan_FINAL\CRW I-83 Bridge Crossing Drawings_Earthspan_FINAL.dgn Oct 21, 2022 - 14:55pm

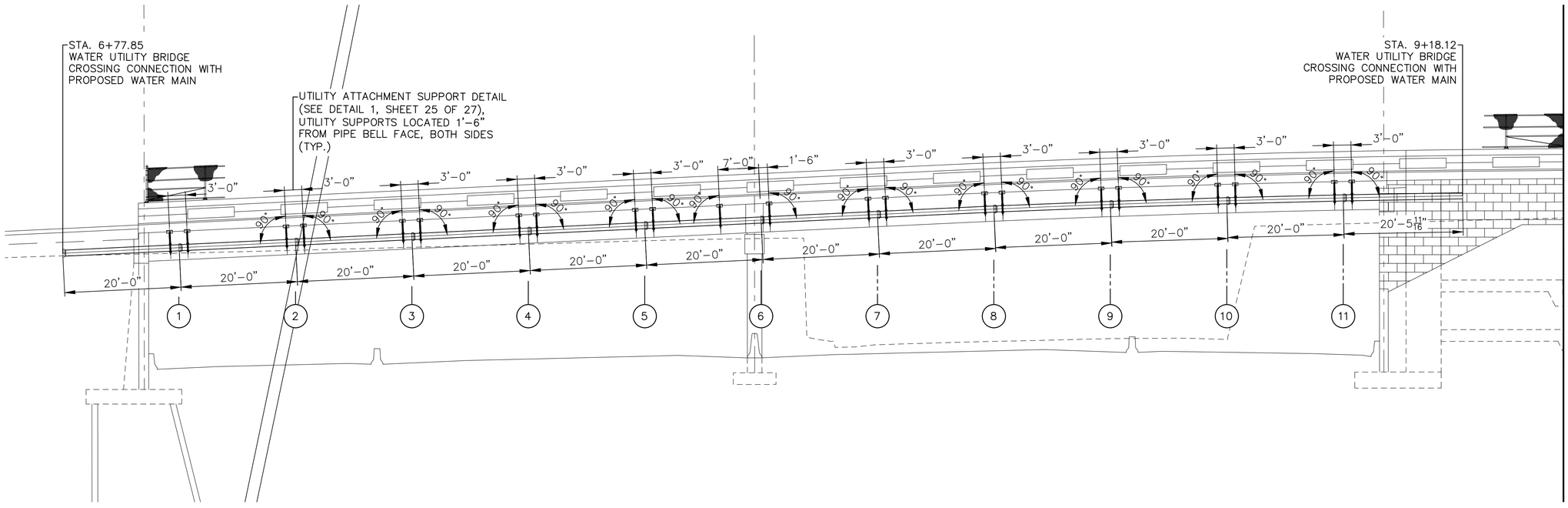
DISTRICT	COUNTY	ROUTE	SECTION	SHEET
8-0	DAUPHIN COUNTY	0083	079	23 OF 27
CITY OF HARRISBURG				

REVISION NUMBER	REVISIONS	DATE	BY



PLAN – BRIDGE CROSSING UTILITY SUPPORT SPACING (SR 3007 BRIDGE OVER SR 0083)

SCALE: 1" = 10'



ELEVATION – BRIDGE CROSSING UTILITY SUPPORT SPACING (SR 3007 BRIDGE OVER SR 0083)

SCALE: 1" = 10'

SCALE

HORIZONTAL 0 10 20 FEET

VERTICAL 0 10 20 FEET

EARTHSPAN, LLC
P.O. BOX 15270
PITTSBURGH, PA 15237

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL TRACY PUCCIARELLI BORNE ENGINEER PE073381

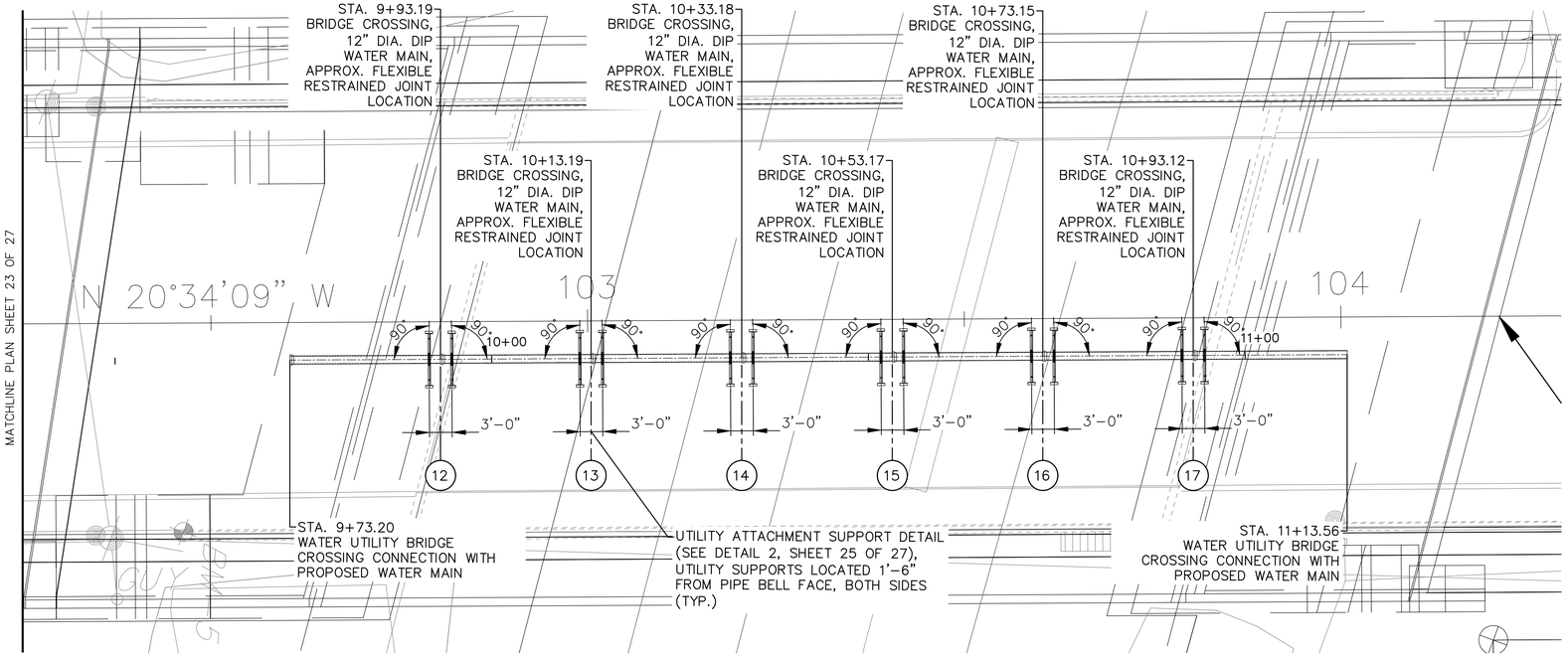
UTILITY BRIDGE CROSSING
WATER UTILITY RELOCATION DETAILS
CAPITAL REGION WATER

DES: TPB	DWG: TPB	CKD: JJB

FILE NAME: Z:\ PROJECTS (New Contracts-System)\ACTIVE PROJECTS\HRG\349-01-2020 HRG CRW I-83 Expansion\CADD\CRW I-83 Bridge Crossing Drawings_Earthspan_FINAL\CRW I-83 Bridge Crossing Drawings_Earthspan_FINAL.dgn Oct 9, 2020 - 4:49pm

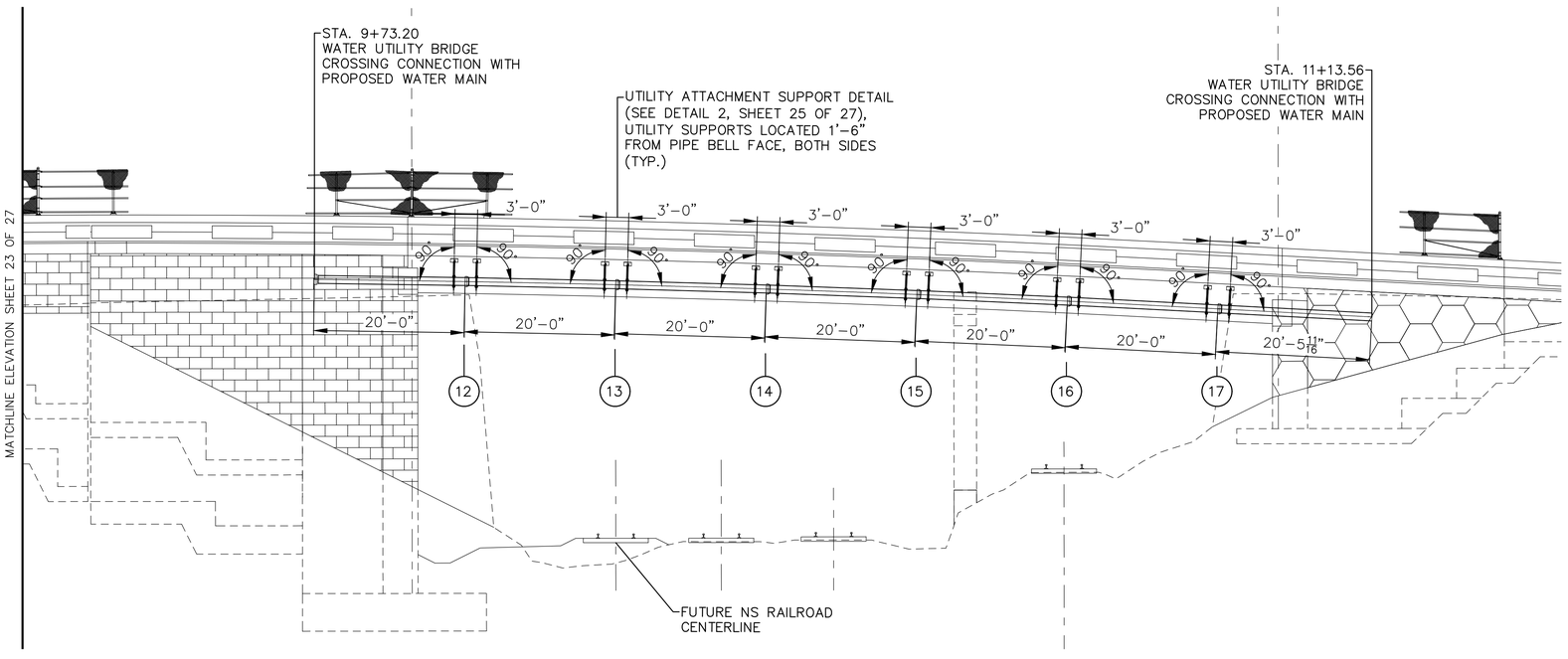
DISTRICT	COUNTY	ROUTE	SECTION	SHEET
8-0	DAUPHIN COUNTY	0083	079	24 OF 27
CITY OF HARRISBURG				

REVISION NUMBER	REVISIONS	DATE	BY



PLAN – BRIDGE CROSSING UTILITY SUPPORT SPACING (SR 3007 BRIDGE OVER NS RAILROAD)

SCALE: 1" = 10'



ELEVATION – BRIDGE CROSSING UTILITY SUPPORT SPACING (SR 3007 BRIDGE OVER NS RAILROAD)

SCALE: 1" = 10'

SCALE

HORIZONTAL 0 10 20 FEET

VERTICAL 0 10 20 FEET

EARTHSPAN, LLC
P.O. BOX 15270
PITTSBURGH, PA 15237

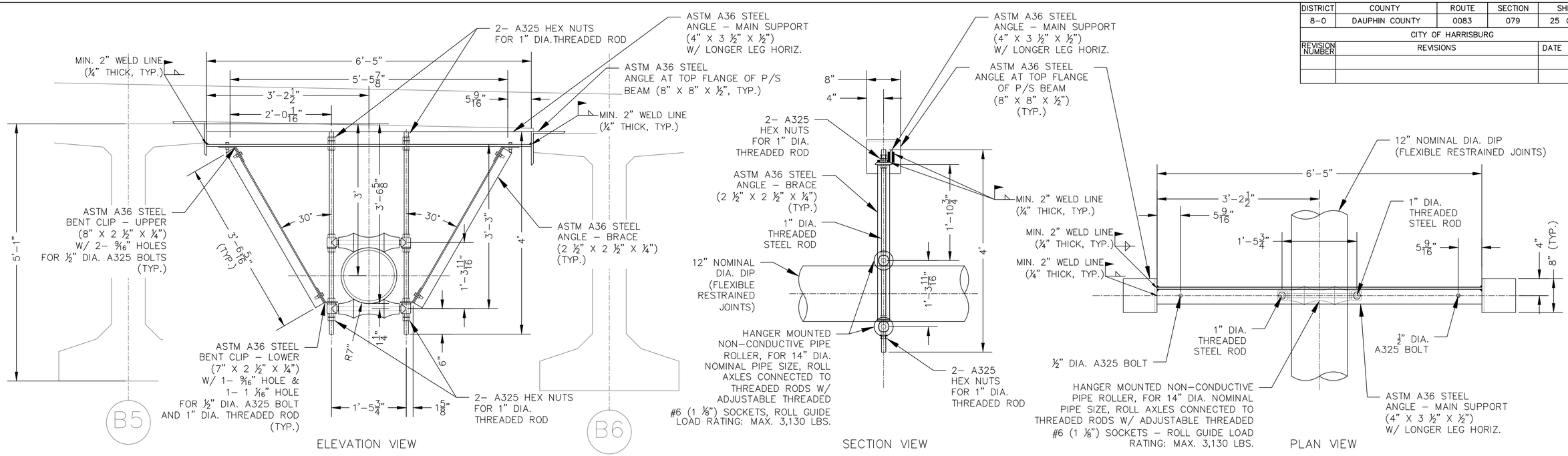
COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL TRACY PUCCIARELLI BORNE ENGINEER PE073381

UTILITY BRIDGE CROSSING
WATER UTILITY RELOCATION DETAILS
CAPITAL REGION WATER

DES: TPB	DWG: TPB	CKD: JJB

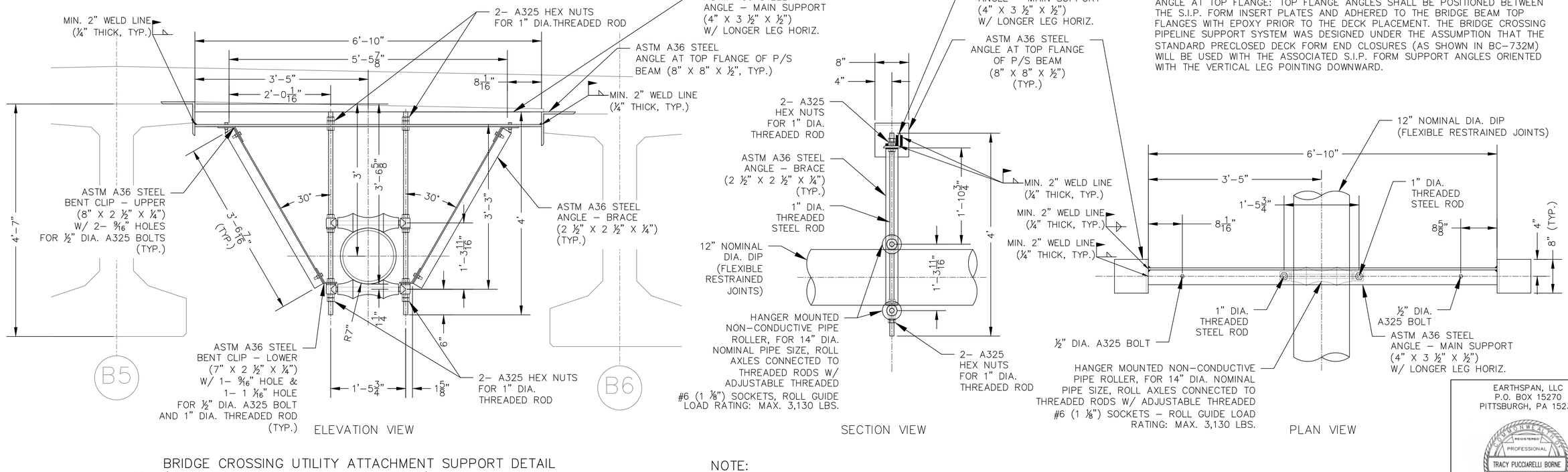
FILE NAME: Z:\ PROJECTS (New Contracts-System)\ACTIVE PROJECTS\HRG\349-01-2020 HRG CRW I-83 Expansion\CADD\CRW I-83 Bridge Crossing Drawings_Earthspan_FINAL\CRW I-83 Bridge Crossing Drawings_Earthspan_FINAL.dwg, Qatyah, 2/7/2021 5:00:0pm

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
8-0	DAUPHIN COUNTY	0083	079	25 OF 27
CITY OF HARRISBURG				
REVISION NUMBER	REVISIONS		DATE	BY



1 BRIDGE CROSSING UTILITY ATTACHMENT SUPPORT DETAIL
(SR 3007 BRIDGE OVER SR 0083)

SCALE: 1" = 1'



2 BRIDGE CROSSING UTILITY ATTACHMENT SUPPORT DETAIL
(SR 3007 BRIDGE OVER NS RAILROAD)

SCALE: 1" = 1'

WELDS: E60 OR HIGHER, EITHER SAW OR SMAW MAY BE USED

ANGLE AT TOP FLANGE: TOP FLANGE ANGLES SHALL BE POSITIONED BETWEEN THE S.I.P. FORM INSERT PLATES AND ADHERED TO THE BRIDGE BEAM TOP FLANGES WITH EPOXY PRIOR TO THE DECK PLACEMENT. THE BRIDGE CROSSING PIPELINE SUPPORT SYSTEM WAS DESIGNED UNDER THE ASSUMPTION THAT THE STANDARD PRECLOSED DECK FORM END CLOSURES (AS SHOWN IN BC-732M) WILL BE USED WITH THE ASSOCIATED S.I.P. FORM SUPPORT ANGLES ORIENTED WITH THE VERTICAL LEG POINTING DOWNWARD.

NOTE:
1.ALL ATTACHMENT SUPPORT DETAIL MEMBERS SHOULD BE GALVANIZED.

DES: TPB	DWG: TPB	CKD: JJB

UTILITY BRIDGE CROSSING
WATER UTILITY RELOCATION DETAILS
CAPITAL REGION WATER

EARTHSPAN, LLC
P.O. BOX 15270
PITTSBURGH, PA 15237

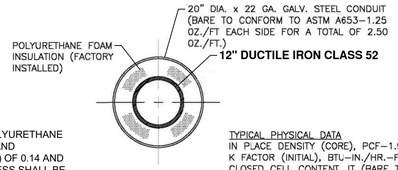
COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL TRACY PUCCIARELLI BORNE ENGINEER PE073381

FILE NAME: Z:\ PROJECTS (New Contracts-System)\ACTIVE PROJECTS\HRG\349-01-2020 HRG CRW I-83 Expansion\CADD\CRW I-83 Bridge Crossing Drawings_Earthspan_FINAL\CRW I-83 Bridge Crossing Drawings_Earthspan_FINAL.dwg Oct 31, 2020 - 7:36pm

PLOTTED: Oct 21, 2022-4:27pm
OPERATOR: blala
FILE NAME: Z:\1 PROJECTS (New Contracts-System)\ACTIVE PROJECTS\HRG\349-01-2020 HRG CRW I-83 Expansion\CADD\Plan Sheet\Water\26 OF 27.dwg Layout:Detail-1

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
8-0	DAUPHIN COUNTY	0083	079	26 OF 27
CITY OF HARRISBURG				

REVISION NUMBER	REVISIONS	DATE	BY



TYPICAL PHYSICAL DATA
IN PLACE DENSITY (CORE), PCF-1.9-2.1
K FACTOR (INITIAL), BTU-IN./HR.-FT2-F-11
CLOSED CELL CONTENT, IT (BARE TO CONFORM TO ASTN A653/A653M-1.25 OZ./FT EACH SIDE FOR A TOTAL OF 2.50 OZ./FT.

NOTE:

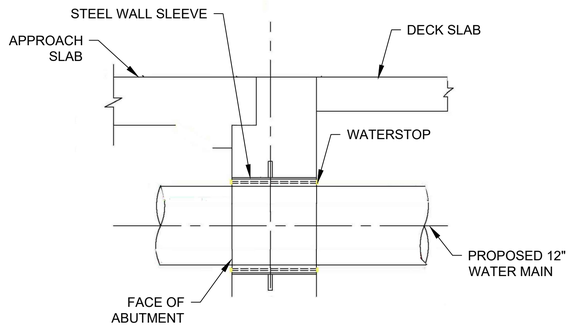
1. INSULATION SHALL BE RIGID ,90-95% CLOSED CELL POLYURETHANE WITH A 2.0 TO 3.0 POUNDS PER CUBIC FOOT DENSITY AND COEFFICIENT OF THERMAL CONDUCTIVITY (K- FACTOR) OF 0.14 AND SHALL CONFORM TO ASTM C-591. INSULATION THICKNESS SHALL BE AS FOLLOWS:

   A) A MINIMUM OF 3.5" FOR 12.75" O.D. STEEL PIPE
   B) A MINIMUM OF 3" FOR 16 O.D. STEEL PIPE

2. PIPE INSULATION AND PROTECTIVE GALVANIZED STEEL SPLIT CONDUIT SHALL NOT INTERFERE WITH UTILITY ATTACHMENT SUPPORT STRUCTURE OR FLEXIBLE RESTRAINED JOINT MOVEMENT. HALT INSULATION AND PROTECTIVE CONDUIT WITHIN 6" OF UTILITY SUPPORT STRUCTURE AND DIP BELL FACE. CASING SHOULD ALIGN WITH EXTENTS OF INSULATION.

1 12" Ø PIPE INSULATION DETAIL

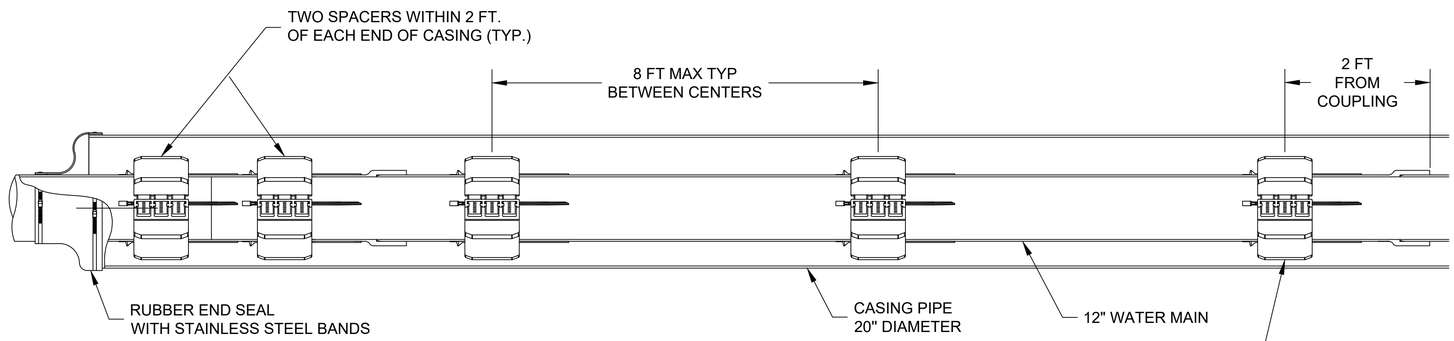
SCALE:NOT TO SCALE



NOTE:
1. DIMENSIONS ARE TO BE REFERRED FROM BRIDGE DIMENSION.
2. SLEEVE THROUGH BOTH ABUTMENT DIAPHRAGM AND ABUTMENT BACKWALL.
3. SLEEVE THROUGH PIER CONTINUITY DIAPHRAGM.

2 SLEEVE FOR WATER MAIN DETAIL

SCALE:NOT TO SCALE



	Roadway Stations	Water Line Stations	OD 12" Class 52 DI Pipe Invert Elevation
C.L BRG. Abut 1	99+79.74	6+90.061	381.70
Begin Type2.Approach Slab	99+54.00	6+64.32	380.51
Begin of Structure	99+79.00	6+89.32	381.68
C.L. Pier 1	100+84.74	7+95.08	386.53
C.L BRG. Abut 2	101+92.74	9+03.061	390.38
End Structure	101+93.26	9+03.60	390.37
End Type 3 Approach Slab	102+30.91	9+42.859	390.74
Begin Type 1 approach slab	102+35.04	9+46.911	390.74
Begin Structure	102+72.68	9+84.085	390.72
C.L Bridge Abut 1	102+73.38	9+84.789	390.70
C.L Bridge Abut 2	103+88.38	10+99.787	386.60
End Structure	103+88.91	11+00.315	386.57
End type 3 Approach Slab	104+18.91	11+30.317	384.96

3 WATER LINE PIPE INVERT ELEVATION

SCALE:NOT TO SCALE

NON-METALIC CASING SPACER & END SEAL SPECIFICATION FOR CARRIER PIPE.

A. CASING SPACERS
UPON COMPLETION OF THE INSTALLATION OF THE STEEL PIPE ENCASEMENT, THE CONTRACTOR SHALL FURNISH AND INSTALL A BOLTLESS CASING SPACER ON THE CARRIER PIPE AS DESCRIBED BELOW. CASING SPACERS SHALL BE SPACED A MAXIMUM OF EIGHT (8) FEET APART ALONG THE LENGTH OF THE CARRIER PIPE WITH ONE CASING SPACER WITHIN TWO (2) FEET OF EACH SIDE OF A PIPE JOINT AND THE REST EVENLY SPACED. WOOD SKIDS ARE NOT AN ACCEPTABLE METHOD OF SUPPORTING THE CARRIER PIPE.

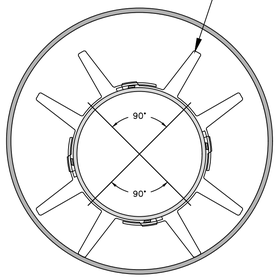
1. CASING SPACERS SHALL BE ALL NON-METALLIC (POLYPROPYLENE), MOLDED IN SEGMENTS FOR FIELD ASSEMBLY WITHOUT ANY SPECIAL TOOLS. SPACER SEGMENTS SHALL BE SECURED AROUND CARRIER PIPE. THE CASING SPACER POLYMER SHALL CONTAIN ULTRAVIOLET INHIBITORS AND SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI, AN 800 VOLTS/MIL DIELECTRIC STRENGTH AND IMPACT STRENGTH OF 1.5 FT-LBS./INCH. EACH CASING SPACER SHALL HAVE FULL LENGTH, INTEGRALLY MOLDED SKIDS EXTENDING BEYOND THE BELL OR MECHANICAL JOINT OF THE CARRIER PIPE. CASING SPACERS SHALL BE SPECIFIED TO "CLEAR BELL ONLY" OR "CENTERED/RESTRAINED".

2. SPACERS SHALL BE AT LEAST AS WIDE AS LISTED BELOW.

CARRIER PIPE DIAMETER INCHES	(MM)	LENGTH INCHES	(MM)
0.83 TO 3.07"	(21 TO 78)	2.13"	(54)
2.48 TO 5.51"	(63 TO 140)	3.15"	(80)
5.51 TO 16.65"	(140 TO 423)	5.12"	(130)
16.77 TO 25.98"	(426 TO 660)	8.86"	(225)

B. AFTER INSERTION OF THE CARRIER PIPE INTO THE CASING, THE ENDS OF THE CASING SHALL BE CLOSED BY INSTALLING 1/8" THICK SYNTHETIC RUBBER END SEALS.
ISO 9000 REGISTRATION
EACH CASING SPACER AND END SEAL SHALL BE MANUFACTURED AT A FACILITY THAT HAS A REGISTERED ISO 9001:2000 QUALITY MANAGEMENT SYSTEM. COPY OF CURRENT ISO 9001:2000 REGISTRATION SHALL BE PROVIDED WITH MATERIAL SUBMITTAL.

END VIEW



4 CASING SPACER DETAIL

SCALE:NOT TO SCALE

WATER UTILITY RELOCATION PLAN
CAPITAL REGION WATER

COSMOS TECHNOLOGIES INC.
1821 FULTON STREET
HARRISBURG, PA 17102

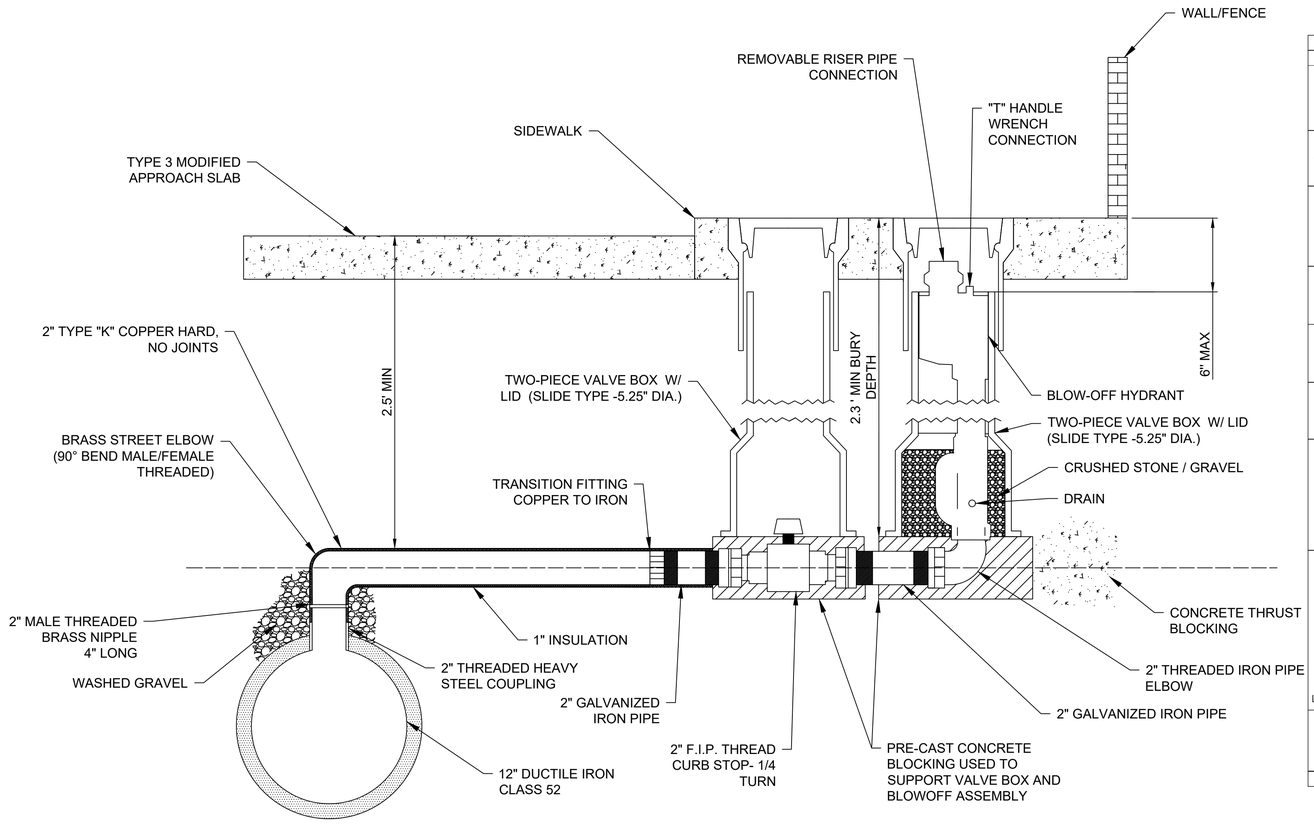
COMMONWEALTH OF
REGISTERED PROFESSIONAL
BARRY L. DAVIDSON
ENGINEER
PE-063111

DES: BL	DWG: CM	CKD: JJB

PLOTTED: Oct 21, 2022–4:30pm
OPERATOR: blala
FILE NAME: Z:\ PROJECTS (New Contracts–System)\ACTIVE PROJECTS\HRG\349–01–2020 HRG CRW I–83 Expansion\CADD\Plan Sheet\Water\27 OF 27.dwg Layout:26 of 26

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
8–0	DAUPHIN COUNTY	0083	079	27 OF 27
CITY OF HARRISBURG				

REVISION NUMBER	REVISIONS	DATE	BY



5 BLOW-OFF ASSEMBLY
SCALE:NOT TO SCALE

ITEM - INSTALLATION OF (UTILITY) FACILITIES (SR 3007 Bridge Over SR 0083)				
MATERIALS	FURNISH BY	INSTALL BY	UNIT	AMOUNT
ASTM A36 STEEL ANGLE - MAIN SUPPORT (4" X 3 1/2" X 1/2") W/ LONGER LEG HORIZ.	CONTRACTOR	CONTRACTOR	EA	22
ASTM A36 STEEL ANGLE AT TOP FLANGE OF P/S BEAM (8" X 8" X 1/2")	CONTRACTOR	CONTRACTOR	EA	44
ASTM A36 STEEL BENT CLIP - UPPER (8" X 2 1/2" X 1/4") W/ 2- 9/16" HOLES FOR 1/2" DIA. A325 BOLTS	CONTRACTOR	CONTRACTOR	EA	44
A325 HEX NUTS FOR 1" DIA.THREADED ROD	CONTRACTOR	CONTRACTOR	EA	352
1" DIA. THREADED STEEL ROD (48" LONG)	CONTRACTOR	CONTRACTOR	EA	44
ASTM A36 STEEL ANGLE - BRACE (2 1/2" X 2 1/2" X 1/4")	CONTRACTOR	CONTRACTOR	EA	44
ASTM A36 STEEL BENT CLIP - LOWER (7" X 2 1/2" X 1/4") W/ 1- 9/16" HOLE & 1- 1 1/16" HOLE FOR 1/2" DIA. A325 BOLT AND 1" DIA. THREADED ROD	CONTRACTOR	CONTRACTOR	EA	44
HANGER MOUNTED NON-CONDUCTIVE PIPE ROLLER, FOR 14" DIA. NOMINAL PIPE SIZE, ROLL AXLES CONNECTED TO THREADED RODS W/ ADJUSTABLE THREADED #6 (1 1/8") SOCKETS, ROLL GUIDE LOAD RATING: MAX. 3,130 LBS.	CONTRACTOR	CONTRACTOR	EA	44
1/2" DIA. A325 BOLTS	CONTRACTOR	CONTRACTOR	EA	132
20" CASING	CONTRACTOR	CONTRACTOR	LF	32

ITEM - INSTALLATION OF (UTILITY) FACILITIES (SR 3007 Bridge Over NS Railroad)				
MATERIALS	FURNISH BY	INSTALL BY	UNIT	AMOUNT
ASTM A36 STEEL ANGLE - MAIN SUPPORT (4" X 3 1/2" X 1/2") W/ LONGER LEG HORIZ	CONTRACTOR	CONTRACTOR	EA	12
ASTM A36 STEEL ANGLE AT TOP FLANGE OF P/S BEAM (8" X 8" X 1/2")	CONTRACTOR	CONTRACTOR	EA	24
ASTM A36 STEEL BENT CLIP - UPPER (8" X 2 1/2" X 1/4") W/ 2- 9/16" HOLES FOR 1/2" DIA. A325 BOLTS	CONTRACTOR	CONTRACTOR	EA	24
A325 HEX NUTS FOR 1" DIA.THREADED ROD	CONTRACTOR	CONTRACTOR	EA	192
1" DIA. THREADED STEEL ROD (48" LONG)	CONTRACTOR	CONTRACTOR	EA	24
ASTM A36 STEEL ANGLE - BRACE (2 1/2" X 2 1/2" X 1/4")	CONTRACTOR	CONTRACTOR	EA	24
ASTM A36 STEEL BENT CLIP - LOWER (7" X 2 1/2" X 1/4") W/ 1- 9/16" HOLE & 1- 1 1/16" HOLE FOR 1/2" DIA. A325 BOLT AND 1" DIA. THREADED ROD	CONTRACTOR	CONTRACTOR	EA	24
HANGER MOUNTED NON-CONDUCTIVE PIPE ROLLER, FOR 14" DIA. NOMINAL PIPE SIZE, ROLL AXLES CONNECTED TO THREADED RODS W/ ADJUSTABLE THREADED #6 (1 1/8") SOCKETS, ROLL GUIDE LOAD RATING: MAX. 3,130 LBS.	CONTRACTOR	CONTRACTOR	EA	24
1/2" DIA. A325 BOLTS	CONTRACTOR	CONTRACTOR	EA	72
20" CASING	CONTRACTOR	CONTRACTOR	LF	81

COSMOS TECHNOLOGIES INC.
1821 FULTON STREET
HARRISBURG, PA 17102

COMMONWEALTH OF
REGISTERED
PROFESSIONAL
BARRY L. DAVIDSON
ENGINEER
PE-063111

WATER UTILITY RELOCATION PLAN
CAPITAL REGION WATER

DES: BL	DWG: CM	CKD: JJB

SEE SHEET 52 OF 95

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
8-0	DAUPHIN	0083	079	35 OF 95
CITY OF HARRISBURG				

REVISION NUMBER	REVISIONS	DATE	BY

LEGEND

415 EXISTING LIDAR CONTOURS	LOD LIMIT OF DISTURBANCE
415 EXISTING CONTOURS	NPDES NPDES BOUNDARY
415 PROPOSED CONTOURS	SOIL BOUNDARY
PROPOSED PIPE AND INLET	Cy SOIL TYPE
EXISTING PIPE AND INLET	PROPOSED CHANNEL
C TOP OF CUT	PROPOSED SWALE
F TOE OF FILL	RCE ROCK CONSTRUCTION ENTRANCE
BMP ACCESS ROAD	COMPOST SOCK WASHOUT FACILITY
ROCK OUTFALL PROTECTION	IP INLET PROTECTION
RB ROCK BARRIER	CF COMPOST FILTER SOCK
SEDIMENT CLEAN OUT STAKE	RUMBLE PAD CONSTRUCTION ENTRANCE
1138 ACTIVE WORK ZONE	

SEE SHEET 34 OF 95

SEE SHEET 36 OF 95

LEGAL RIGHT-OF-WAY LINE FOR LIMITED ACCESS
TEMPORARY CONSTRUCTION EASEMENT
E/T/CTV
NORFOLK SOUTHERN RAILWAY CO.
LEGAL AERIAL EASEMENT
19TH STREET TEMP ACCESS CONSTR ℄
LEGAL SLOPE EASEMENT
UG
GMH
OVERHEAD UTILITY (BY OTHERS)
SR 0083 NB CROSSOVER 1 CONSTR ℄
SR 0083 CONSTR ℄
24"x24" RCP SQ OPENING
UNK DIA. AND MAT. (DATR) 26
UNK DIA. AND MAT. (DATR) 23
UNABLE TO LOCATE INLET IN THIS AREA
SOUTH 19TH STREET
SR 3007 CONSTR ℄
I-83 SOUTHBOUND
I-83 NORTHBOUND
SR 9402 NB C-D ROAD CONSTR ℄
SR 8021 RAMP U CONSTR ℄
SR 8021 RAMP V CONSTR ℄
SR 8021 RAMP V SPUR CONSTR ℄
SSWH RIM 374.13
YATES ALLEY
LEGAL DRAINAGE EASEMENT AND UNDERGROUND STRUCTURE SUPPORT EASEMENT
LEGAL RIGHT-OF-WAY LINE FOR CITY STREET
LEGAL RIGHT-OF-WAY LINE FOR LIMITED ACCESS
LEGAL RIGHT-OF-WAY LINE

NOTE:
PLACE EROSION AND SEDIMENT CONTROL DEVICES A MINIMUM 13'-0" FROM THE CENTERLINE OF THE NEAREST TRACK OR INLINE WITH EXISTING BRIDGE ABUTMENTS.

EROSION AND SEDIMENT POLLUTION CONTROL PLANS STAGE 1

NO PROPOSED ROADWAY IMPROVEMENTS BEING CONSTRUCTED IN THIS STAGE

SCALE
0 25 50 FEET

SEE SHEET 51 OF 95

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

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL MATTHEW TODD SMITH ENGINEER PE087202

3/15/2023
FILENAME: 63016_079-s-es-pln02_Stage1.dgn

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
8-0	DAUPHIN	0083	079	59 OF 95
CITY OF HARRISBURG				

REVISION NUMBER	REVISIONS	DATE	BY

SEE SHEET 35 OF 95

SEE SHEET 60 OF 95

LEGEND

415 EXISTING LIDAR CONTOURS	LOD LIMIT OF DISTURBANCE
415 EXISTING CONTOURS	NPDES NPDES BOUNDARY
415 PROPOSED CONTOURS	SOIL BOUNDARY
PROPOSED PIPE AND INLET	Cy SOIL TYPE
EXISTING PIPE AND INLET	PROPOSED CHANNEL
C TOP OF CUT	PROPOSED SWALE
F TOE OF FILL	RCE ROCK CONSTRUCTION ENTRANCE
BMP ACCESS ROAD	COMPOST SOCK WASHOUT FACILITY
ROCK OUTFALL PROTECTION	IP INLET PROTECTION
RB ROCK BARRIER	CF COMPOST FILTER SOCK
SEDIMENT CLEAN OUT STAKE	RUMBLE PAD CONSTRUCTION ENTRANCE
ACTIVE WORK ZONE	

LEGAL RIGHT-OF-WAY LINE FOR LIMITED ACCESS
NORFOLK SOUTHERN RAILWAY CO.
LEGAL RIGHT-OF-WAY LINE
TEMPORARY CONSTRUCTION EASEMENT
LEGAL AERIAL EASEMENT
SR 3007 CONSTR
SOUTH 19TH STREET
GREENWOOD STREET CONSTR
LEGAL RIGHT-OF-WAY LINE FOR CITY STREET
GREENWOOD STREET
LEGAL SLOPE EASEMENT
19TH STREET TEMP ACCESS CONSTR
SYNDICATE STREET
HETRICK STREET
GATE
SSMH RIM 387.96
18" RCP
36" RCP
42" RCP
12" PVC
6" PE
4" ST (ABANDONED)
LOD NPDES EU E/T/CTV G W M S FO3 SSCO SSCO SSCO

EROSION AND SEDIMENT POLLUTION CONTROL PLANS STAGE 1

NOTE:
PLACE EROSION AND SEDIMENT CONTROL DEVICES A MINIMUM 13'-0" FROM THE CENTERLINE OF THE NEAREST TRACK OR INLINE WITH EXISTING BRIDGE ABUTMENTS

SCALE
0 25 50 FEET

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

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
MATTHEW TODD SMITH
ENGINEER
PE081202

3/15/2023
FILENAME: 63016_079-s-es-pln19_Stage1.dgn

SEE SHEET 81 OF 95

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
8-0	DAUPHIN	0083	079	64 OF 95
CITY OF HARRISBURG				

REVISION NUMBER	REVISIONS	DATE	BY
01	NPDES PERMIT MINOR MODIFICATION - 01		

LEGEND

415	EXISTING LIDAR CONTOURS	LOD	LIMIT OF DISTURBANCE
415	EXISTING CONTOURS	NPDES	NPDES BOUNDARY
415	PROPOSED CONTOURS		SOIL BOUNDARY
	PROPOSED PIPE AND INLET	Cy	SOIL TYPE
	EXISTING PIPE AND INLET		PROPOSED CHANNEL
C	TOP OF CUT		PROPOSED SWALE
F	TOE OF FILL	RCE	ROCK CONSTRUCTION ENTRANCE
	BMP ACCESS ROAD		COMPOST SOCK WASHOUT FACILITY
	ROCK OUTFALL PROTECTION	IP	INLET PROTECTION
RB	ROCK BARRIER	CF	COMPOST FILTER SOCK
	SEDIMENT CLEAN OUT STAKE		RUMBLE PAD CONSTRUCTION ENTRANCE
	ACTIVE WORK ZONE		

NOTE:
PLACE EROSION AND SEDIMENT CONTROL DEVICES A MINIMUM 13'-0" FROM THE CENTERLINE OF THE NEAREST TRACK OR INLINE WITH EXISTING BRIDGE ABUTMENTS

EROSION AND SEDIMENT POLLUTION CONTROL PLANS STAGE 2

SCALE
0 25 50 FEET

SEE SHEET 63 OF 95
SEE SHEET 65 OF 95
SEE SHEET 80 OF 95

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

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL MATTHEW TODD SMITH ENGINEER PE087202

3/15/2023
FILENAME: 63016_079-s-es-pln02_Stage2.dgn

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
8-0	DAUPHIN	0083	079	81 OF 95
CITY OF HARRISBURG				

REVISION NUMBER	REVISIONS	DATE	BY

SEE SHEET 64 OF 95

SEE SHEET 82 OF 95

LEGEND

- 415 — EXISTING LIDAR CONTOURS
- 415 — EXISTING CONTOURS
- 415 — PROPOSED CONTOURS
- PROPOSED PIPE AND INLET
- EXISTING PIPE AND INLET
- C — TOP OF CUT
- F — TOE OF FILL
- BMP ACCESS ROAD
- RR — ROCK OUTFALL PROTECTION
- ROCK BARRIER
- SEDIMENT CLEAN OUT STAKE
- ACTIVE WORK ZONE
- LOD — LIMIT OF DISTURBANCE
- NPDES — NPDES BOUNDARY
- SOIL BOUNDARY
- Cy — SOIL TYPE
- PROPOSED CHANNEL
- PROPOSED SWALE
- RCE — ROCK CONSTRUCTION ENTRANCE
- COMPOST SOCK WASHOUT FACILITY
- IP — INLET PROTECTION
- CF — COMPOST FILTER SOCK
- RUMBLE PAD CONSTRUCTION ENTRANCE

TEMPORARY CONSTRUCTION EASEMENT
REQUIRED AERIAL EASEMENT
REQUIRED RIGHT-OF-WAY LINE
15' WIDE VEHICULAR GATE
TEMPORARY CONSTRUCTION EASEMENT
REQUIRED AERIAL EASEMENT
REQUIRED RIGHT-OF-WAY LINE
4' PEDESTRIAN GATE
REMOVE, MODIFY AND REINSTALL STAIRS
TEMPORARY CONSTRUCTION EASEMENT
19TH STREET TEMP ACCESS CONSTR
GREENWOOD STREET CONSTR
SR 3007 CONSTR
NORFOLK SOUTHERN RAILWAY CO.
GREENWOOD STREET
SYNDICATE STREET
HETRICK STREET
PR-12000
PR-12001
PR-12003
PR-13028
SIDEWALK
VERGE (TYP)
RW-1
GATE
SSMH RIM 387.96

EROSION AND SEDIMENT POLLUTION CONTROL PLANS STAGE 2

NOTE:
PLACE EROSION AND SEDIMENT CONTROL DEVICES A MINIMUM 13'-0" FROM THE CENTERLINE OF THE NEAREST TRACK OR INLINE WITH EXISTING BRIDGE ABUTMENTS

SCALE
0 25 50 FEET

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

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
MATTHEW TODD SMITH
ENGINEER
PE087202

3/15/2023
FILENAME: 63016_079-s-esp1n19_Stage2.dgn

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
8-0	DAUPHIN	0083	079	1 OF 340
		0230	045	
		3007	020	
		3013	009	

CITY OF HARRISBURG, SWATARA TWP, PAXTANG BOROUGH

REVISION NUMBER	REVISIONS	DATE	BY

DAUPHIN COUNTY

SR 0083 SECTION 079

SR 0083 STA 39+50.00 TO STA 140+00.00 (LIMITS OF WORK)
TOTAL SHEETS 340

CROSS SECTIONS

SR 0083 NB CROSSOVER 1 - STA 200+68.00 TO STA 212+88.00 (SHEETS 2 THRU 18)
SR 0083 - STA 85+67.00 TO STA 118+25.00 (SHEETS 19 THRU 63)
SR 0083 NB CROSSOVER 2 - STA 300+00.00 TO STA 312+73.00 (SHEETS 64 THRU 81)
SR 0083 - STA 131+25.00 TO STA 136+00.00 (SHEETS 82 THRU 88)
BUNDLE 1 OF 3

CROSS SECTIONS

SR 0230 A - STA 7+02.00 TO STA 17+64.00 (SHEETS 90 THRU 104)
SR 0230 B - STA 17+64.00 TO STA 44+50.00 (SHEETS 105 THRU 142)
SR 8017 RAMP O TEMP - STA 598+77.00 TO STA 602+25.00 (SHEETS 143 THRU 147)
SR 8017 RAMP O - STA 602+41.00 TO STA 604+25.00 (SHEETS 148 THRU 150)
SR 8017 RAMP OP - STA 604+25.00 TO STA 609+00.00 (SHEETS 151 THRU 160)
SR 8017 RAMP OP SPUR - STA 620+00.00 TO STA 622+24.00 (SHEETS 161 THRU 164)
SR 8017 RAMP P - STA 650+00.00 TO STA 652+37.00 (SHEETS 165 THRU 170)
SR 8017 RAMP P TEMP - STA 652+37.00 TO STA 653+50.00 (SHEETS 171 THRU 173)
SR 8017 RAMP Q TEMP - STA 699+00.00 TO STA 701+24.00 (SHEETS 174 THRU 179)
SR 8017 RAMP Q - STA 701+24.00 TO STA 703+19.00 (SHEETS 180 THRU 186)
SR 8017 RAMP QR - STA 703+19.00 TO STA 706+25.00 (SHEETS 187 THRU 198)
SR 8017 RAMP QR SPUR - STA 720+00.00 TO STA 722+35.00 (SHEETS 199 THRU 203)
SR 8017 RAMP R - STA 750+00.00 TO STA 753+36.00 (SHEETS 204 THRU 212)
SR 8017 RAMP R TEMP - STA 753+36.00 TO STA 762+56.00 (SHEETS 213 THRU 226)
BUNDLE 2 OF 3

CROSS SECTIONS

SR 3007 - STA 93+25.00 TO STA 106+00.00 (SHEETS 228 THRU 246)
SR 3007 TEMP ACCESS - STA 10+00.00 TO STA 14+64.00 (SHEETS 247 THRU 253)
SR 8021 RAMP U TEMP - STA 899+07.00 TO STA 902+91.00 (SHEETS 254 THRU 259)
SR 8021 RAMP U - STA 902+91.00 TO STA 909+00.00 (SHEETS 260 THRU 268)
SR 8021 RAMP V - STA 950+50.00 TO STA 959+23.00 (SHEETS 269 THRU 281)
SR 8021 RAMP V SPUR - STA 949+66.00 TO STA 951+00.00 (SHEETS 282 THRU 284)
SR 9402 NB C-D ROAD - STA 1029+50.00 TO STA 1039+00.00 (SHEETS 285 THRU 303)
SR 9402 NB C-D ROAD - STA 1059+00.00 TO STA 1065+38.00 (SHEETS 304 THRU 312)
YATES ALLEY - STA 10+00.00 TO STA 14+75.00 (SHEETS 313 THRU 319)
SR 3013 - STA 29+92.00 TO STA 43+50.00 (SHEETS 320 THRU 338)
16TH STREET A - STA 23+25.00 TO 24+00.00 (SHEETS 339 THRU 340)
BUNDLE 3 OF 3

SCALE
0 10 20 FEET

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

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
CHRISTOPHER M. DEATS
ENGINEER
PE079050

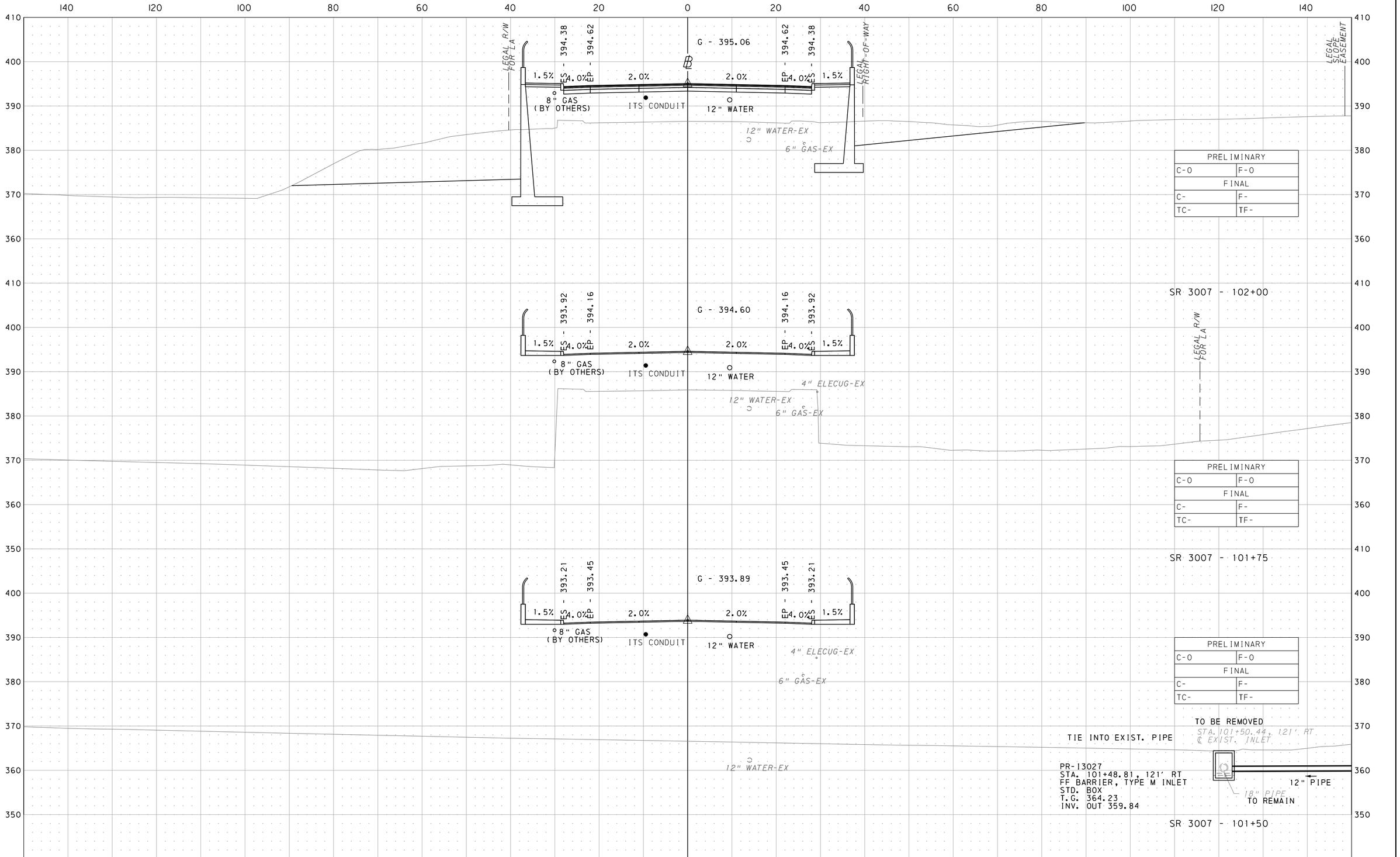
DATE: 3/21/23

3/21/2023
FILENAME: 63016_079-s-cv-xs03.1

PENNSYLVANIA DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS

DISTRICT	COUNTY	ROUTE	SECTION	Prelim. Bk. No.	Final Bk. No.	SHEET
8-0	DAUPHIN	0083	079			239 OF 340

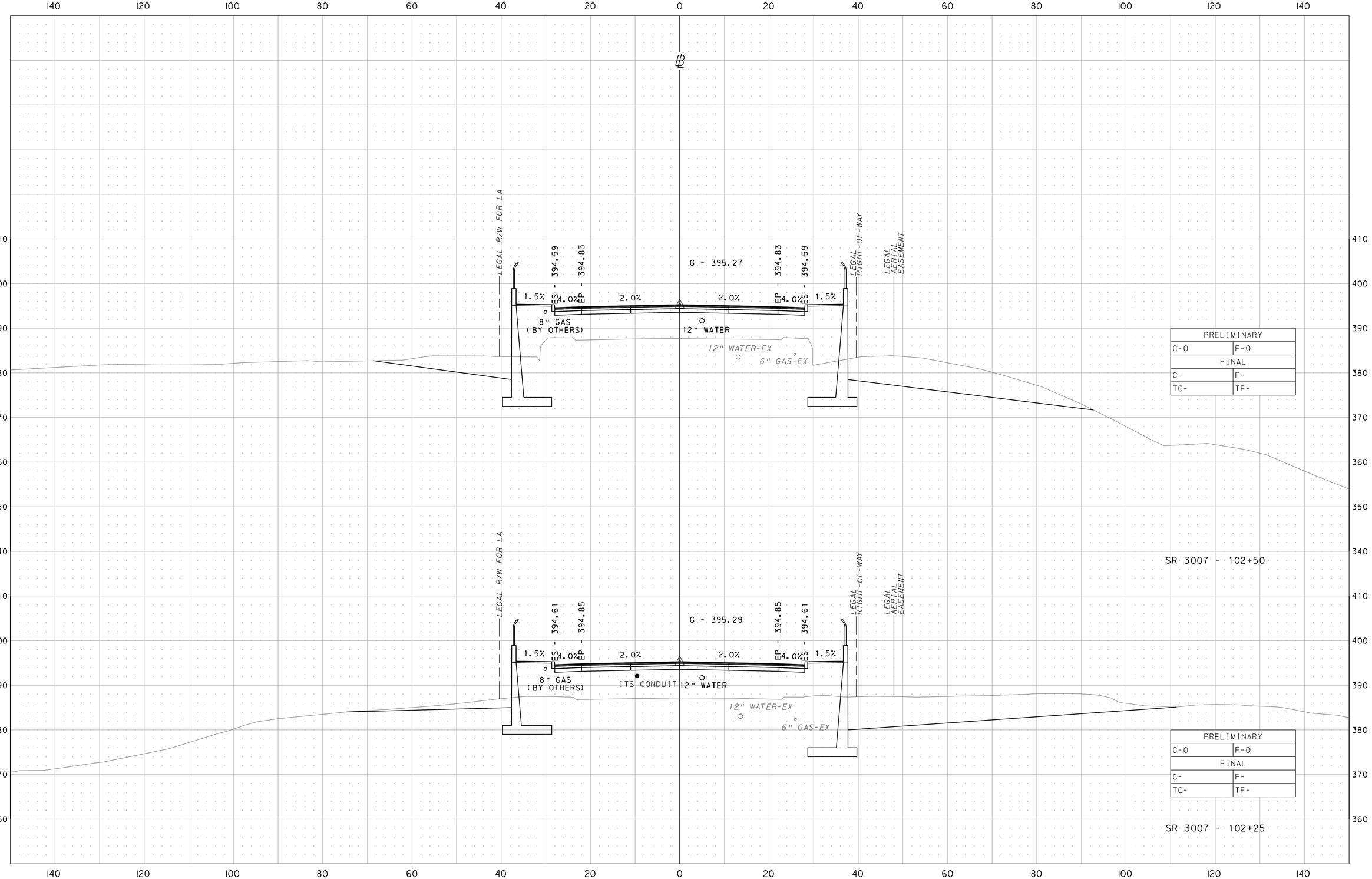


3/20/2023
FILENAME: 63016_079-s-cv-xs04

PENNSYLVANIA DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS

DISTRICT	COUNTY	ROUTE	SECTION	Prelim. Bk. No.	Final Bk. No.	SHEET
8-0	DAUPHIN	0083	079			240 OF 340



SCALE: 1 INCH = 10 FEET

3/20/2023
FILENAME: 63016_079-s-cv-xs04

PENNSYLVANIA DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS

DISTRICT	COUNTY	ROUTE	SECTION	Prelim. Bk. No.	Final Bk. No.	SHEET
8-0	DAUPHIN	0083	079			241 OF 340

SR 3007 - 103+00

G - 394.51

ES - 393.83 | EP - 394.07 | EP - 394.07 | ES - 393.83

1.5% | 4.0% | 2.0% | 2.0% | 4.0% | 1.5%

8" GAS (BY OTHERS)

12" WATER

6" GAS-EX

PRELIMINARY	
C-0	F-0
FINAL	
C-	F-
TC-	TF-

SR 3007 - 102+75

G - 395.01

ES - 394.33 | EP - 394.57 | EP - 394.57 | ES - 394.33

1.5% | 4.0% | 2.0% | 2.0% | 4.0% | 1.5%

8" GAS (BY OTHERS)

12" WATER

4" WATER-EX

6" GAS-EX

PRELIMINARY	
C-0	F-0
FINAL	
C-	F-
TC-	TF-

LEGAL R/W FOR LA

LEGAL AERIAL EASEMENT

LEGAL RIGHT-OF-WAY

TEMPORARY CONSTRUCTION EASEMENT

LEGAL AERIAL EASEMENT

LEGAL AERIAL EASEMENT

TEMPORARY CONSTRUCTION EASEMENT

410 400 390 380 370 360 350 340

140 120 100 80 60 40 20 0 20 40 60 80 100 120 140

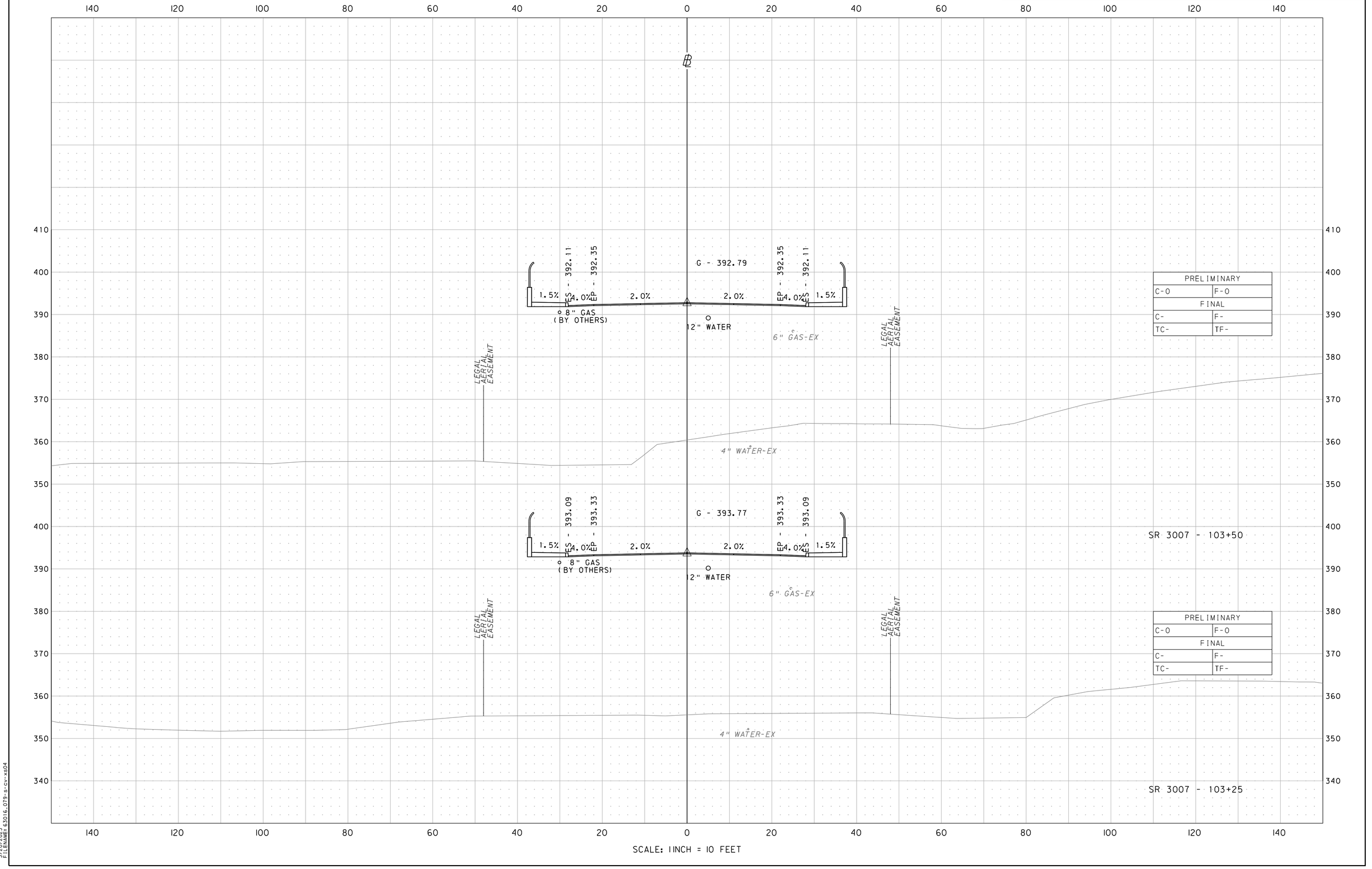
SCALE: 1 INCH = 10 FEET

3/20/2023
FILENAME: 63016_079-s-cv-xs04

PENNSYLVANIA DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS

DISTRICT	COUNTY	ROUTE	SECTION	Prelim. Bk. No.	Final Bk. No.	SHEET
8-0	DAUPHIN	0083	079			242 OF 340



3/20/2023
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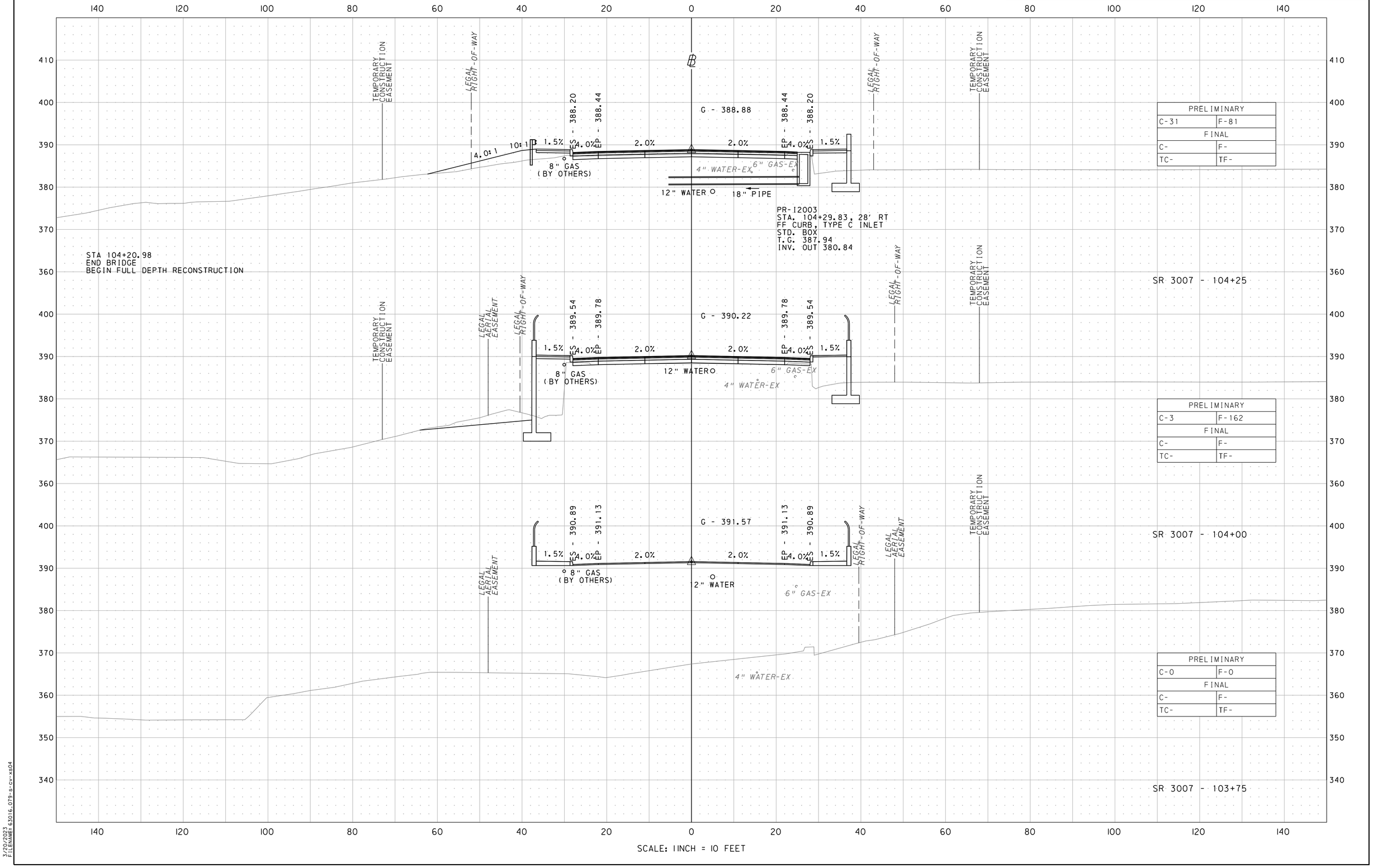
PENNSYLVANIA DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS

DISTRICT	COUNTY	ROUTE	SECTION	Prelim. Bk. No.	Final Bk. No.	SHEET
8-0	DAUPHIN	0083	079			243 OF 340



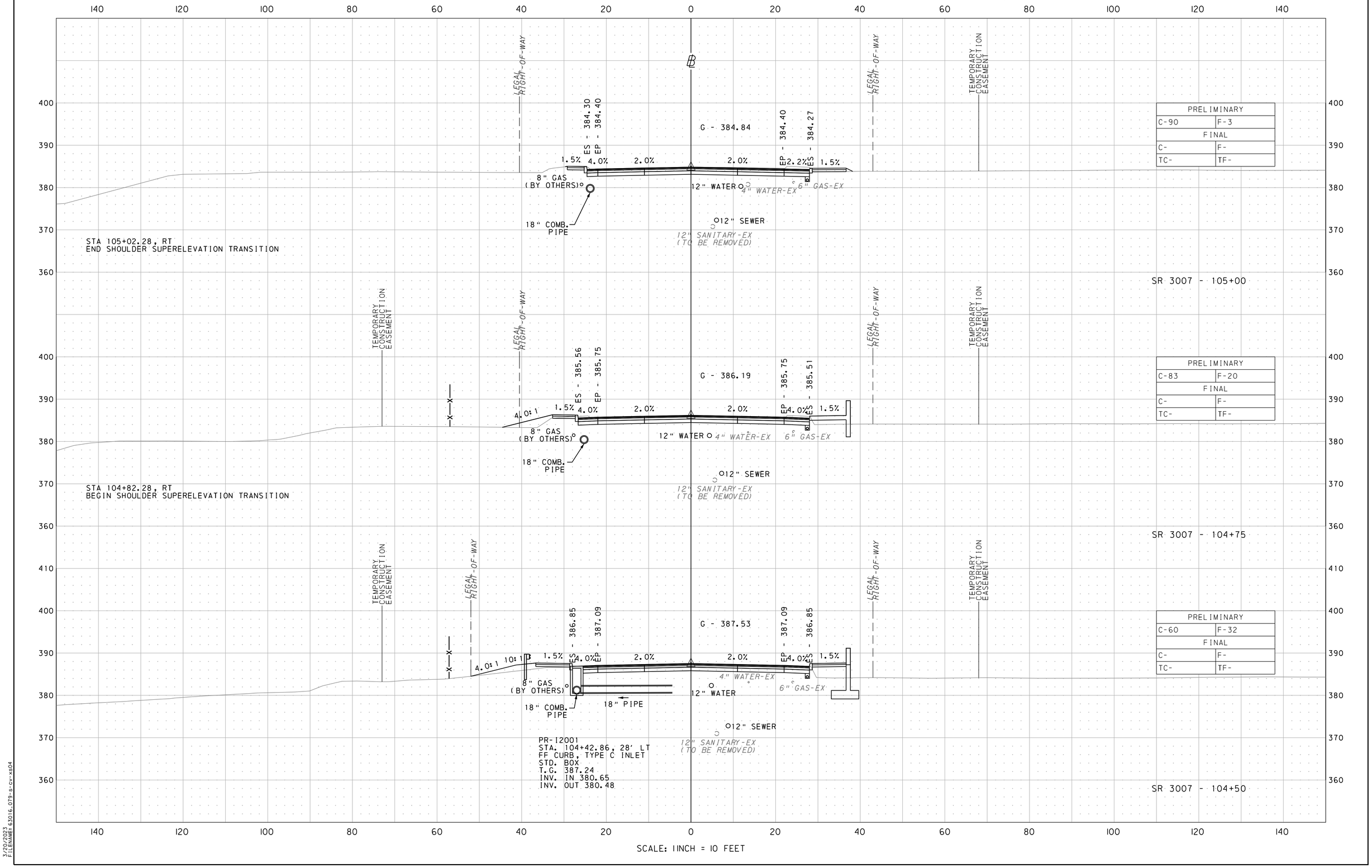
SCALE: 1INCH = 10 FEET

3/20/2023
FILENAME: 63016_079-s-cv-xs04

PENNSYLVANIA DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS

DISTRICT	COUNTY	ROUTE	SECTION	Prelim. Bk. No.	Final Bk. No.	SHEET
8-0	DAUPHIN	0083	079			244 OF 340



3/20/2023
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PENNSYLVANIA DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS

DISTRICT	COUNTY	ROUTE	SECTION	Prelim. Bk. No.	Final Bk. No.	SHEET
8-0	DAUPHIN	0083	079			245 OF 340

140 120 100 80 60 40 20 0 20 40 60 80 100 120 140

400 390 380 370 360

LEGAL RIGHT-OF-WAY

℄

STA 105+72.28
BEGIN LANE SUPERELEVATION TRANSITION

ES - 382.48
EP - 382.55
1.5%
2.2%
1.9%
2.0%
2.1%
1.5%
EP - 382.55
GG - 382.88
TO REMAIN
12" PIPE
18" PIPE
TO REMAIN
8" GAS
(BY OTHERS)
STA. 105+64.20, 24' LT
℄ EXIST. INLET
TO REMAIN
12" WATER-EX
12" SANITARY-EX
STA. 105+76.70, 22' RT
℄ EXIST. INLET
TO REMAIN, GRATE ADJUSTMENT
12" PIPE
TO REMAIN

PRELIMINARY
C-1 F-0
FINAL
C- F-
TC- TF-

SR 3007 - 105+75

ES - 382.58
EP - 382.66
1.5%
2.0%
2.0%
EP - 382.54
1.2%
1.0%
GG - 383.01
8" GAS
(BY OTHERS)
18" PIPE
TO REMAIN
10" SANITARY-EX
12" PIPE
TO REMAIN
6" GAS-EX
12" WATER-EX
12" WATER
10" SANITARY-EX
12" SANITARY-EX
STA. 105+56.03, 44' RT
℄ EXIST. INLET
TO REMAIN, GRATE ADJUSTMENT
12" PIPE
TO REMAIN

PRELIMINARY
C-34 F-0
FINAL
C- F-
TC- TF-

SR 3007 - 105+50

ES - 383.20
EP - 383.27
1.5%
2.0%
2.0%
EP - 383.15
0.5%
5.8%
GG - 383.67
18" COMB. PIPE
8" GAS
(BY OTHERS)
18" PIPE
TO REMAIN
18" PIPE
6" GAS-EX
12" WATER-EX
12" WATER
TO REMAIN
12" PIPE
4" WATER
12" SEWER
12" SANITARY-EX
(TO BE REMOVED)
STA. 105+29.61, 5' LT
℄ CIRCULAR EXISTING
STANDARD MANHOLE
TO REMAIN
STA. 105+17.23, 43' RT
℄ EXIST. INLET
TO REMAIN, GRATE ADJUSTMENT

PRELIMINARY
C-32 F-0
FINAL
C- F-
TC- TF-

SR 3007 - 105+25

STA 105+17.32, RT/LT
END FULL DEPTH RECONSTRUCTION
BEGIN MILL AND OVERLAY

PR-12000
STA. 105+17.89, 24' LT
FF CURB, TYPE C INLET
STD. BOX, BICYCLE SAFE GRATE
T.G. 383.47
INV. IN 378.63
INV. OUT 378.36

SCALE: 1INCH = 10 FEET

3/20/2023
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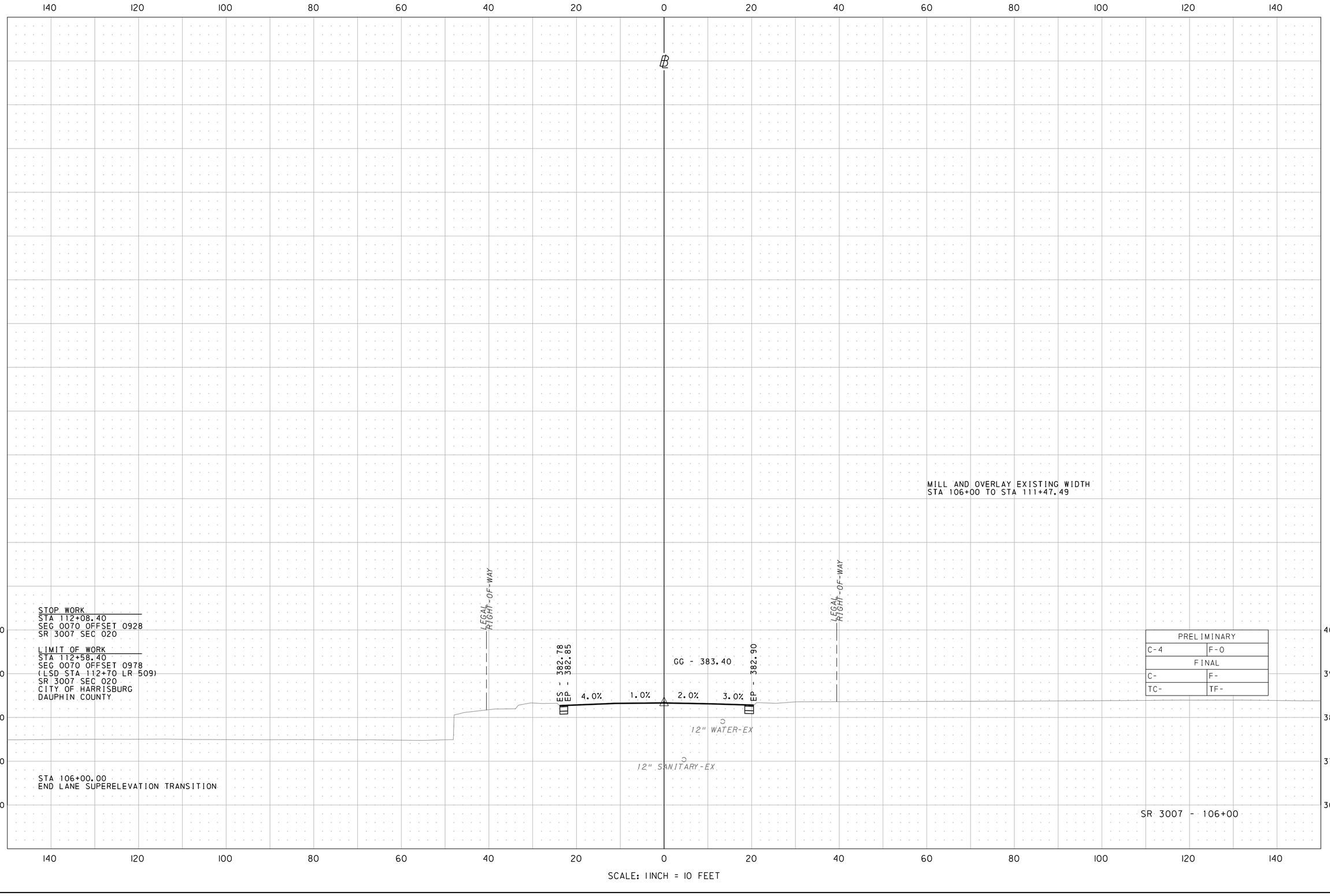
PENNSYLVANIA DEPARTMENT OF TRANSPORTATION
CROSS SECTIONS

DISTRICT	COUNTY	ROUTE	SECTION	Prelim. Bk. No.	Final Bk. No.	SHEET
8-0	DAUPHIN	0083	079			246 OF 340



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